SPECIAL, 3/18/2019 1:30:00 PM

BE IT REMEMBERED that on March 18, 2019, there was begun and holden a SPECIAL session of the Commissioners Court of Jefferson County, Texas, with the following members and officers present and participating except those absent as indicated:

Honorable Jeff Branick, County Judge

Commissioner Eddie Arnold, Commissioner Pct. No. 1 (absent)

Commissioner Brent Weaver, Commissioner Pct. No. 2

Commissioner Michael Sinegal, Commissioner Pct. No. 3

Commissioner Everette D. Alfred, Commissioner Pct. No. 4

Honorable Zena Stephens, Sheriff

Honorable Carolyn L. Guidry , County Clerk

When the following proceedings were had and orders made, to-wit:

Jeff R. Branick, County Judge
Eddie Arnold, Commissioner, Precinct One
Brent A. Weaver, Commissioner, Precinct Two
Michael S. Sinegal, Commissioner, Precinct Three
Everette "Bo" Alfred, Commissioner, Precinct Four

NOTICE OF MEETING AND AGENDA OF COMMISSIONERS' COURT OF JEFFERSON COUNTY, TEXAS March 18, 2019

Notice is hereby given that the Commissioners' Court of Jefferson County, Texas, willmeet at **1:30 PM,** on the **18th** day of **March 2019** at its regular meeting place in the Commissioners' Courtroom, 4th Floor, Jefferson County Courthouse, 1149 Pearl Street, Beaumont, Texas.

Said meeting will be a **Special** for the purpose of transacting the routine business of the County. Persons with disabilities requiring auxiliary aids for services who wish to attend this meeting should contact the County Judge's Office to arrange for assistance.

In addition to the routine business of the County, the subject of said meeting will be the following:

11:00 a.m.-Announcement of an executive (closed) session pursuant to Texas Government Code Section § 551.071 for the purpose of receiving information from its counsel regarding pending or anticipated litigation with the County.

INVOCATION: Everette "Bo" Alfred, Commissioner, Precinct Four

PLEDGE OF ALLEGIANCE: Brent A. Weaver, Commissioner, Precinct Two

PURCHASING:

1. Consider and approve specifications for Invitation for Bid (IFB 19-021/JW), Ford Fields Concession Stand.

SEE ATTACHMENTS ON PAGES 14 - 581

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judeg Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

2. Consider and approve a proposal due date extension for Request for Proposal (RFP 19-014/JW), Design and Installation of Exterior LED Message Center & Indoor LED Video Board/Replay Panel for Ford Park Entertainment Complex from 11:00 am CT, Tuesday, March 26, 2019 to 11:00 am CT, Tuesday, April 2, 2019.

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

3. Consider and approve, execute, receive and file a contract extension for (RFP 15-015/JW), Emergency Disaster Assistance Recovery for Jefferson County with DRC Emergency Services, LLC for an additional eight (8) weeks, to expire June 5, 2019.

SEE ATTACHMENTS ON PAGES 582 - 582

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

4. Consider and approve, execute, receive and file a contract amendment for (IFB 15-011/JW), Term Contract for Trash and Biomedical Waste Container Service for Jefferson County to add Standard Waste Containers (10 yards and under) service for Jack Brooks Regional Airport, Hangar #7, 4605 3rd Street, Beaumont TX, 77705, at $72.60 per container, per month, one day per week service frequency.

SEE ATTACHMENTS ON PAGES 583 - 583

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

5. Consider and approve, execute, receive and file a contract amendment for (IFB 17-006/YS), Term Contract for Insecticides, Herbicides, Spray Adjuvants, and Adulticides for Jefferson County Mosquito Control. This amendment will assign pricing to Nutrien Ag Solutions as Crop Production Services has rebranded.

SEE ATTACHMENTS ON PAGES 584 - 584

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

6. Discuss and possibly approve the County Purchasing Agent to enter into contract negotiations for (RFP 18-044/YS), FEMA Grant Management and Insurance Advisory Services for Jefferson County.

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

7. Consider and approve, execute, receive and file an Offer in the amount of $242,000.00 from Mr. Clark C. Shofner to purchase Jefferson County land located on Viterbo Road (Known as "Precinct No. 2 Rock Yard"); in response to (RFQ 17-014/JW), Commercial Realtor Brokerage Services for Land Located on Viterbo Road (Known as "Precinct No. 2 Rock Yard").

SEE ATTACHMENTS ON PAGES 585 - 601

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

8. Consider and approve, execute, receive and file (JOC 19-023/DC) with SETEX Construction Corp. for electrical services at the Jack Brooks Regional Airport/Jerry Ware Terminal, in the amount of $63,451.16. This is in accordance with Choice Partners JOC Texas Contract 15/041JN-11-2015.

SEE ATTACHMENTS ON PAGES 602 - 603

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

9. Consider and approve, execute, receive and file a Performance Contract for the work relating to the installation of the improvement measures with Johnson Controls, Inc. in accordance with (RFQ 18-023/JW), Energy Performance Contracting Services for Jefferson County.

SEE ATTACHMENTS ON PAGES 604 - 752

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

10. Consider and approve disposition of salvage property as authorized by Local Government Code §263.152 (3), for broken or obsolete items.

SEE ATTACHMENTS ON PAGES 753 - 754

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

COUNTY AGRILIFE EXTENSION:

11. Receive a presentation from the Jefferson County Extension Agent for 4-H and Youth Development to introduce Ms. Corena Fitzgerald as the finalist for County Extension Agent- Coastal Marine Resources position that serves both Jefferson and Chambers Counties.

Motion by: Commissioner Alfred
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

COUNTY AIRPORT:

12. Consider, possibly approve, and authorize the County Judge to execute a Private Hangar Lease between Jefferson County and ACS Executive Air, LLC for property at the Jack Brooks Regional Airport.

SEE ATTACHMENTS ON PAGES 755 - 778

Motion by: Commissioner Weaver
Second by: Commissioner Sinegal
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

COUNTY AUDITOR:

13. Consider and approve budget transfer - Road & Bridge Pct.4 - additional cost for rental equipment.

114-0402-431-5053	RENT-EQUIPMENT	$15,000.00	
114-0402-431-3079	CRUSHED STONE		$15,000.00

SEE ATTACHMENTS ON PAGES 779 - 779

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

14. Consider and approve budget transfer - Road & Bridge Pct.1 - purchase of 2 laptops and camera.

111-0109-431-6002	COMPUTER EQUIPMENT	$6,000.00	
111-0109-431-6011	ROAD MACHINERY		$6,000.00

SEE ATTACHMENTS ON PAGES 780 - 781

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

15. Consider and approve budget amendment - Port Arthur Maintenance - additional cost for water & sewer.

120-6084-416-4057	WATER AND SEWER	$7,000.00	
120-9999-415-9999	CONTINGENCY APPROPRIATION		$7,000.00

SEE ATTACHMENTS ON PAGES 782 - 782

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

16. Receive and file the Jefferson County Comprehensive Annual Financial Report (CAFR) for the Fiscal Year Ended September 30, 2018.

SEE ATTACHMENTS ON PAGES 783 - 970

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

17. Receive and file SAS 114 Letter from Whitley Penn LLP for the Fiscal Year Ended September 30, 2018

SEE ATTACHMENTS ON PAGES 971 - 973

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

18. Receive and file Ford Park – Operations Audited Financial Statements for the period ending September 30, 2018.

SEE ATTACHMENTS ON PAGES 974 - 982

Action: TABLED

19. Receive and file the Ford Park – Operations SAS 114 Letter from Whitley Penn LLP for the Fiscal Year Ended September 30, 2018

SEE ATTACHMENTS ON PAGES 983 - 985

Action: TABLED

20. Receive and file the Passenger Facility Charge Audit Guide for Public Agencies for the Year Ended September 30, 2018

SEE ATTACHMENTS ON PAGES 986 - 995

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

21. Receive and file Single Audit for Jefferson County, Texas for the Fiscal Year Ended September 30, 2018.

SEE ATTACHMENTS ON PAGES 996 - 1012

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

22. Consider and approve electronic disbursement to Texas Department for $624.82 to Texas Department of Criminal Justice for March insurance reimbursement

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

23. Consider and approve electronic disbursement for $1,011,858.04 to LaSalle for revenue received from entities for inmate housing

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

24. Receive and file Financial & Operating Statements – County Funds Only for the Three Months Ending December 31, 2018.

SEE ATTACHMENTS ON PAGES 1013 - 1029

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

25. Receive and file Financial & Operating Statements – County Funds Only for the Month Ending January 31, 2019

SEE ATTACHMENTS ON PAGES 1030 - 1044

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

26. Consider and approve revised public defender contract agreement for the 252nd District Court with Brittanie Holmes effective February 01, 2019.

SEE ATTACHMENTS ON PAGES 1045 - 1048

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

27. Consider and approve Modification No.12 of Intergovernmental Agreement between Jefferson County, Texas and the U.S. Marshals Service to incorporate Department of Labor Determination 2015-5217 Revision 10 dated 12/26/2018.

SEE ATTACHMENTS ON PAGES 1049 - 1049

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

28. Consider and ratify application to Rebuild Texas Fund for window hardening project at jerry Ware Terminal. Estimated cost is $80,000.

Motion by: Commissioner Sinegal
Second by: Commissioner Weaver
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

29. Regular County Bills - check #456696 through checks #456949 (03/11/19) and check #456950 through checks #457216 (03/18/19).

SEE ATTACHMENTS ON PAGES 1050 - 1068

Motion by: Commissioner Weaver
Second by: Commissioner Alfred
In favor: Judge Branick, Commissioner Weaver, Commissioner Alfred
Opposed: Commissioner Sinegal
Action: APPROVED

COUNTY CLERK:

30. Consider, approve, receive and file the Election Services Agreement with the City of Beaumont, Port of Beaumont, and Beaumont Independent School District for services and equipment per the attached Agreement.

SEE ATTACHMENTS ON PAGES 1069 - 1085

Motion by: Commissioner Sinegal
Second by: Commissioner Alfred
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

COUNTY COMMISSIONERS:

31. Consider and possibly approve a Proclamation for Gift of Life Program 2019 Champagne &; Ribs Event.

SEE ATTACHMENTS ON PAGES 1086 - 1087

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

32. Consider and possibly approve a Proclamation for YMBL South Texas State Fair Days.

SEE ATTACHMENTS ON PAGES 1088 - 1088

Motion by: Commissioner Weaver
Second by: Commissioner Sinegal
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

33. Consider and possibly approve a Resolution titled: RESOLUTION OF THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS APPROVING THE ISSUANCE OF JEFFERSON COUNTY INDUSTRIAL DEVELOPMENT CORPORATION INDUSTRIAL DEVELOPMENT REVENUE BONDS (TRP CRUDE MARKETING, LLC PROJECT), SERIES 2019 AND THE TERMS OF THE RESOLUTION OF THE ISSUER RELATING THERETO; APPROVING A LOAN AGREEMENT AND INDENTURE OF TRUST TO BE EXECUTED BY THE CORPORATION; AND APPROVING OTHER MATTERS RELATING THERETO.

Motion by: Commissioner Weaver **See Attached Pages 1101-1113**
Second by: Commissioner Alfred
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

34. Consider, possibly approve, authorize the County Judge to execute, an Inter-local Agreement between Jefferson County and the City of Port Arthur for repairs of streets pursuant to the City's request to Precinct 2 and Sec.791.014, Texas Government Code.

SEE ATTACHMENTS ON PAGES 1089 - 1093

Motion by: Commissioner Weaver
Second by: Commissioner Alfred
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

35. Consider, possibly approve, authorize the County Judge to execute, an Inter-local Agreement between Jefferson County and Jefferson County Drainage District No.7 for repairs of streets pursuant to the City's request to Precinct 2 and Sec.791.014, Texas Government Code.

SEE ATTACHMENTS ON PAGES 1094 - 1099

Motion by: Commissioner Weaver
Second by: Commissioner Alfred
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

HUMAN RESOURCES:

36. Consider and possibly approve hiring Michael Shannon as the Building Maintenance Supervisor for Beaumont Maintenance at 104% of the salary range.

SEE ATTACHMENTS ON PAGES 1100 - 1100

Motion by: Commissioner Alfred
Second by: Commissioner Sinegal
In favor: Judge Branick, Commissioner Weaver, Commissioner Sinegal, Commissioner Alfred
Action: APPROVED

Other Business:

Receive reports from Elected Officials and staff on matters of community interest without taking action.

***DISCUSSION ON ANY OTHER ITEM NOT ON AGENDA WITHOUT TAKING ACTION.

_____

Jeff R. Branick
County Judge

JEFFERSON COUNTY PURCHASING DEPARTMENT

Deborah L. Clark, Purchasing Agent

1149 Pearl Street, 1st Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

LEGAL NOTICE
Advertisement for Invitation for Bids

March 18, 2019

Notice is hereby given that sealed bids will be accepted by the Jefferson County Purchasing Department for IFB 19-021/JW, Ford Fields Concession Stand. **Construction Documents for this project may be obtained from the office of The LaBiche Architectural Group, Inc. by calling 409-860-0197 for access to the online drawings and specifications.**

Bids are to be sealed and addressed to the Purchasing Agent with the bid number and name marked on the outside of the envelope or box. Bidders shall forward an original and three (3) copies of their bid to the address shown below. Jefferson County does not accept bids submitted electronically. Late bids will be rejected as non-responsive. Bids will be publicly opened and read aloud in the Jefferson County Commissioners' Courtroom at the time and date below. Bidders are invited to attend the sealed bid opening.

BID NAME:	**Ford Fields Concession Stand**
BID NO:	**IFB 19-021/JW**
DUE DATE/TIME:	**11:00 AM CT, Tuesday, April 23, 2019**
MAIL OR DELIVER TO:	**Jefferson County Purchasing Department** **1149 Pearl Street, 1st Floor** **Beaumont, Texas 77701**

There will be a pre-bid conference and walk-through at 9:00 AM CDT on Tuesday, April 2, 2019 at the Ford Park Ball Fields, 5115 IH10 South, Beaumont, Texas 77705.

The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

Any questions relating to these requirements should be directed to Jamey West, Assistant Purchasing Agent, at 409-835-8593 or jwest@co.jefferson.tx.us

Jefferson County encourages Disadvantaged Business Enterprises to participate in the bidding process. Jefferson County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provisions of services. Individuals requiring special accommodations are requested to contact our office at 409-835-8593 to make arrangements no later than seven (7) calendar days prior to the submittal deadline. Jefferson County reserves the right to accept or reject any or all proposals, to waive technicalities and to take whatever action is in the best interest of Jefferson County.

All interested firms are invited to submit a bid in accordance with the terms and conditions stated in this bid.

RESPONDENTS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION.

Deborah L. Clark, Purchasing Agent
Jefferson County, Texas

Publish: Beaumont Enterprise & Port Arthur News – March 20, 2019 & March 27, 2019

IFB 19-021/JW
Ford Fields Concession Stand
Bids due: 11:00 AM CT, Tuesday, April 23, 2019

Table of Contents

Table of Contents 1
Instructions to Bidders 2
General Conditions of Bidding and Terms of Contract 6
Special Requirements/Instructions 16
Minimum Specifications 20
Bidder Information Form 21
Offer to Contract Form 22
Acceptance of Offer Form 23
Bid Form 24
Vendor References 25
Signature Page 26
Conflict of Interest Questionnaire 27
Local Government Officer Conflict Disclosure Statement Forms (OFFICE USE ONLY) 28
Good Faith Effort Determination Checklist 29
Notice of Intent 30
HUB Subcontracting Participation Declaration Form 31
Residence Certification/Tax Form 35
House Bill 89 Verification 36
Senate Bill 252 Certification 37
Bid Affidavit 38
TECHNICAL SPECIFICATIONS MANUAL 39

Bid Submissions:

Bidder is responsible for submitting:

- One (1) *original* bid copy to include a completed copy of this specifications packet, in its entirety.
- Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

Additionally, Bidder must monitor the Jefferson County Purchasing Department Website (below) to see if addenda or additional instructions have been posted. Failure to return all required forms could result in a response being declared as non-responsive.

https://www.co.jefferson.tx.us/Purchasing/

Instructions to Bidders

1. Bid Submission

Bids must be submitted in complete original form by mail or messenger to the following address:

Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor
Beaumont, TX 77701

Bids will be accepted at the above address until the time and date specified herein, and immediately after will be publicly opened and read aloud.

Bidder shall submit bid in a tightly sealed opaque envelope or box, plainly marked "SEALED BID." The outside of the envelope of box shall also include the Bid Number, Bid Name, Bid Due Date, and the Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Late bids will not be accepted and will be returned unopened to the bidder.

All bids submitted in response to this invitation shall become the property of Jefferson County and will be a matter of public record available for review.

2. Bid Submissions During Time of Inclement Weather, Disaster, or Emergency

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a bid/proposal/statement of qualifications submission deadline, the closing will automatically be postponed until the next business day that County offices are open to the public. Should inclement weather conditions or any other unforeseen event cause delays in courier service operations, the County may issue an addendum to all known vendors interested in the project to extend the deadline. It will be the responsibility of the vendor to notify the county of their interest in the project should these conditions impact their ability to submit a bid/proposal/statement of qualifications submission before the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

Should an emergency or unanticipated event interrupt normal County processes, and bid/proposal/statement of qualifications submissions cannot be received by the Jefferson County Purchasing Department's office by the exact time specified in the IFB and urgent County requirements preclude amendment to the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first business day on which normal County processes resume.

3. Courthouse Security

Bidders are advised that all visitors to the Courthouse must pass through Security. **Bidders planning to hand deliver bids must allow time to get through Security, as a delay in entering the Courthouse will not be accepted as an excuse for late submittal.** Mondays and Tuesdays are particularly heavy days. Bidders are strongly urged to plan accordingly.

4. Preparation of Bids

The bid shall be legibly printed in ink or typed.

The County requests that bid submissions NOT be bound by staples or glued spines.

If a unit price or extension already entered is to be altered, it shall be crossed out and initialed in ink by the bidder.

The bid shall be legally signed and shall include the complete address of the bidder.

Jefferson County is exempt from Federal and State Sales Taxes, and such taxes shall not be included in bid prices.

5. Signatures

All bids, notifications, claims, and statements must be signed by an individual authorized to bind the bidder. The individual signing certifies, under penalty of perjury, that he or she has the legal authorization to bind the bidder.

6. <u>County Holidays – 2019:</u>

January 1	Tuesday	New Year's
January 21	Monday	Martin Luther King, Jr. Day
February 18	Monday	President's Day
April 19	Friday	Good Friday
May 27	Monday	Memorial Day
July 4	Thursday	Independence Day
September 2	Monday	Labor Day
November 11	Monday	Veteran's Day
November 28 & 29	Thursday & Friday	Thanksgiving
December 24 & 25	Tuesday & Wednesday	Christmas
January 1, 2020	Wednesday	New Year's

7. Rejection or Withdrawal

Submission of additional terms, conditions or agreements with the bid document are grounds for deeming a bid non-responsive and may result in bid rejection. Jefferson County reserves the right to reject any and all bids and to waive any informalities and minor irregularities or defects in bids. Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the time set for receipt of bids. Bids are an irrevocable offer and may not be withdrawn within 90 days after opening date.

8. Emergency/Declared Disaster Requirements

In the event of an emergency or if Jefferson County is declared a disaster area, by the County, State, or Federal Government, this Acceptance of Offer may be subjected to unusual usage. Contractor shall service the county during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing as specified in this Acceptance of Offer shall apply to serving the County's needs regardless of the circumstances. If Contractor is unable to supply the services under the terms of the Acceptance of Offer, then Contractor shall provide proof of such disruption and a copy of the invoice from Contractor's supplier(s). Additional profit margin as a result of supplying services during an emergency or declared disaster shall not be permitted. In the event that additional equipment, supplies, and materials are required during the declared disaster, additional shipping, handling and drayage fees may apply.

9. Award

The bid will be awarded to the responsible, responsive bidder(s) whose bid, conforming to the solicitation, will be most advantageous to Jefferson County – price and other factors considered. Unless otherwise specified in this IFB, Jefferson County reserves the right to accept a bid in whole or in part, and to award by item or by group, whichever is deemed to be in the best interest of Jefferson County. Any bidder who is in default to Jefferson County at the time of submittal of the bid shall have that bid rejected. Jefferson County reserves the right to clarify any contractual terms with the concurrence of the Contractor; however, any substantial nonconformity in the offer, as determined by Jefferson County, shall be deemed non-responsive and the offer rejected.

In evaluating bids, Jefferson County shall consider the qualifications of the bidders, and, where applicable, operating costs, delivery time, maintenance requirements, performance data, and guarantees of materials and equipment. In addition, Jefferson County may conduct such investigation as it deems necessary to

assist in the evaluation of a bid and to establish the responsibility, qualifications, and financial ability of the bidders to fulfill the contract.

Jefferson County reserves the right to award this contract on the basis of **lowest and best bid** in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, and/or to reject any or all bids. In the event the lowest dollar offeror meeting specifications is not a awarded a contract, Offeror may appear before the Commissioners' Court and present evidence concerning Offeror responsibility after officially notifying the Office of the Purchasing Agent of Offeror's intent to appear.

10. Contract

A response to an IFB is an offer to contract with Jefferson County based upon the terms, conditions, and specifications contained in the IFB. Bids do not become contracts unless and until they are executed by Jefferson County, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the IFB, unless any of the terms and conditions is modified by an IFB Amendment, a Contract Amendment, or by mutually agreed terms and conditions in the contract documents.

11. Waiver of Subrogation

Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Jefferson County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.

12. Fiscal Funding

A multi-year contract (if requested by the specifications) continuing as a result of an extension option must include fiscal funding out. If, for any reason, funds are not appropriated to continue the contract, said contract shall become null and void.

13. Bid Results

Bid results are not provided in response to telephone inquiries. A preliminary tabulation of bids received will be posted on the Purchasing web page (http://co.jefferson.tx.us/ purchasing/main.htm) as soon as possible following bid opening. A final tabulation will be posted following bid award, and will also be available for review in the Purchasing Department.

14. Changes and Addenda to Bid Documents

Each change or addendum issued in relation to this IFB document will be on file in the Office of the Purchasing Agent, and will be posted on the Purchasing web site as soon as possible. It shall be the bidder's responsibility to make inquiry as to change or addenda issued, and to monitor the web site. All such changes or addenda shall become part of the contract and all bidders shall be bound by such addenda. Information on all changes or addenda issued will be available at the Office of the County Purchasing Agent.

15. Specifications

Unless otherwise stated by the bidder, the bid will be considered as being in accordance with Jefferson County's applicable standard specifications, and any special specifications outlined in the bid document. References to a particular trade name, manufacturer's catalogue, or model number are made for descriptive purposes to guide the bidder in interpreting the requirements of Jefferson County, and should not be construed as excluding bids on other types of materials, equipment, and supplies. However, the bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless departure or substitution is clearly noted and described in the bid. Jefferson County reserves the right to determine if equipment/ product being bid is an acceptable alternate. All goods shall be new unless otherwise so stated in the bid. Any unsolicited alternate bid, or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of the bid, may be considered non-responsive.

16. Delivery

Bids shall include all charges for delivery, packing, crating, containers, etc. Unless otherwise stated by the bidder (<u>in writing on the included Bid Form</u>), prices bid will be considered as being based on F.O.B. destination/delivered freight included.

17. Interpretation of Bid and/or Contract Documents

All inquiries shall be made within a reasonable time prior to the date and time fixed for the bid opening, in order that a written response in the form of an addendum, if required, can be processed before the bids are opened. Inquiries received that are not made in a timely fashion may or may not be considered.

18. Currency

Prices calculated by the bidder shall be stated in U.S. dollars.

19. Pricing

Prices shall be stated in units of quantity specified in the bid documents. In case of discrepancy in computing the amount of the bid, the unit price shall govern.

20. Notice to Proceed/Purchase Order

The successful bidder may not commence work under this contract until authorized to do so by the Purchasing Agent.

21. Certification

By signing the offer section of the Offer and Acceptance page, bidder certifies:

- The submission of the offer did not involve collusion or other anti-competitive practices.
- The bidder has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to any public servant in connection with the submitted offer.
- The bidder hereby certifies that the individual signing the bid is an authorized agent for the bidder and has the authority to bind the bidder to the contract.

22. Definitions

"County" – Jefferson County, Texas.

"Contractor" – The bidder whose proposal is accepted by Jefferson County.

23. Minority-Women Business Enterprise Participation

It is the desire of Jefferson County to increase the participation of Minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the County does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms.

General Conditions of Bidding and Terms of Contract

By execution of this document, the vendor accepts all general and special conditions of the contract as outlined below and in the specifications and plans.

1. Bidding

1.1 Bids. All bids must be submitted on the bid form furnished in this package.

1.2 Authorized Signatures. The bid must be executed personally by the vendor, duly authorized partner of the partnership, or duly authorized officer of the corporation. If executed by an agent, a power of attorney or other evidence of authority to act on behalf of the vendor shall accompany the bid to become a valid bid.

1.3 Late Bids. Bids must be in the office of the Jefferson County Purchasing Agent before or at the specified time and date bids are due. Bids received after the submission deadline shall be rejected as non-responsive and returned unopened.

1.4 Withdrawal of Bids Prior to Bid Opening. A bid may be withdrawn before the opening date by submitting a written request to the Purchasing Agent. If time allows, the bidder may submit a new bid. Bidder assumes full responsibility for submitting a new bid before or at the specified time and date bids are due. Jefferson County reserves the right to withdraw a request for bids before the opening date.

1.5 Withdrawal of Bids after Bid Opening. Bidder agrees that its offer may not be withdrawn or cancelled by the vendor for a period of ninety (90) days following the date and time designated for the receipt of bids unless otherwise stated in the bid and/or specifications.

1.6 Bid Amounts. Bids shall show net prices, extensions where applicable and net total. In case of conflict between unit price and extension, the unit price will govern. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be interpreted in the favor of Jefferson County.

1.7 Exceptions and/or Substitutions. All bids meeting the intent of the specifications and plans will be considered for award. Vendors taking exception to the specifications and plans, or offering substitutions, shall state these exceptions in the section provided. If bid is made on an article other than the one specified, which a bidder considers comparable, the name and grade of said article must be specified in the bid and sufficient specifications and descriptive data must accompany same to permit thorough evaluation. The absence of stated exceptions and/or substitutions shall indicate that the vendor has not taken any exceptions to the specifications and shall be responsible to perform in strict accordance with the specifications. As a matter of practice, Jefferson County rejects exception(s) and /or substitutions as non-responsive but reserves the right to accept any and/or all of the exception(s) and/or substitution(s) deemed to be in the best interest of Jefferson County.

1.8 Alternates. The Invitation for Bid and/or specifications may expressly allow bidder to submit an alternate bid. Presence of such an offer shall not be considered an indication of non-responsiveness.

1.9 Descriptions. Unless otherwise specified, any reference to make, manufacturer and/or model used in the bid specifications is merely descriptive and not restrictive, and is used only to indicate type, style, or quality of material desired.

1.10 Bid Alterations. Bids cannot be altered or amended after submission deadline. Any interlineations, alterations, or erasures made before opening time must be initialed by the signer of the bid, guaranteeing authenticity.

1.11 Tax Exempt Status. Jefferson County is exempt from federal excise tax and state sales tax. Unless the bid form or specifications specifically indicate otherwise, the bid price must be net, exclusive of above-mentioned taxes and will be so construed. Therefore, the bid price shall not include taxes.

1.12 Quantities. Quantities indicated are estimated quantities only and are not a commitment to buy. Approximate usage does not constitute an order, but only implies the probable quantity that will be used. Commodities will be ordered on an as-needed basis. Bidder is responsible for accurate final counts.

1.13 Bid Award. Award of contract shall be made to the most responsible, responsive bidder, whose offer is determined to be the best value, taking into consideration the relative importance of price. Jefferson County reserves the right to be the sole judge as to whether items bid will serve the purpose intended.

Jefferson County reserves the right to accept or reject in part or in whole any bid submitted, and to waive any technicalities or informalities for the best interest of the County. Jefferson County reserves the right to award based upon individual line items, sections or total bid.

1.14 Silence of Specifications for Complete Units. All materials, equipment and/or parts that will become a portion of the completed work, including items not specifically stated herein but, necessary to render the service(s) complete and operational per the specifications, are to be included in the bid price. Vendor may be required to furnish evidence that the service, as bid, will meet or exceed these requirements.

1.15 Addenda. Any interpretations, corrections or changes to the specifications and plans will be made by addenda no later than forty-eight (48) hours prior to the bid opening. Addenda will be posted on the Purchasing web site. Vendors are responsible for monitoring the web site in order to remain informed on addenda. Vendors shall acknowledge receipt of all addenda with submission of bid.

1.16 General Bid Bond/Surety Requirements. Failure to furnish bid bond/surety, if requested, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.17 General Insurance Requirements. Failure to furnish Affidavit of Insurance, if required in these specifications, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.18 Responsiveness. A responsive bid shall substantially conform to the requirements of this Invitation to Bid and/or specifications contained herein. Bidders who substitute any other terms, conditions, specifications and/or requirements or who qualify their bids in such a manner as to nullify or limit their liability to the contracting entity shall have their bids deemed non-responsive. Also, bids containing any clause that would limit contracting authority shall be considered non-responsive. Examples of non-responsive bids include but shall not be limited to: a) bids that fail to conform to required delivery schedules as set forth in the bid request; b) bids with prices qualified in such a manner that the bid price cannot be determined, such as with vague wording that may include “price in effect at the time of delivery,” and c) bids made contingent upon award of other bids currently under consideration.

1.19 Responsible Standing of Bidder. To be considered for award, bidder must at least: have the ability to obtain adequate financial resources, be able to comply with required or proposed delivery/completion schedule, have a satisfactory record of performance; have a satisfactory record of integrity and ethics, and be otherwise qualified and eligible to receive award.

1.20 Confidential/Proprietary Information

If any material in the bid submission is considered by Bidder to be confidential or proprietary information (including manufacturing and/or design processes exclusive to the Bidder), Bidder **must** clearly mark the applicable pages of Bidder’s bid submission to indicate each claim of confidentiality. Additionally, Bidder must include a statement on company letterhead identifying all Bid Submission section(s) and page(s) that have been marked as confidential. Jefferson County will protect from public disclosure such portions of a bid, unless directed otherwise by legal authority, including existing open records acts. Merely making a blanket claim that the entire bid submission is protected from disclosure because it contains some proprietary information is not acceptable, and will make the entire bid submission subject to release under the Texas Public Information Act.

By submitting a bid, Bidder agrees to reproduction by Jefferson County, without cost or liability, of any copyrighted portions of Bidder’s bid submission or other information submitted by Bidder.

1.21 Public Bid Opening. Bidders are invited to be present at the opening of bids. After the official opening of bids, a period of not less than one week is necessary to evaluate bids. The amount of time necessary for bid evaluation may vary and is determined solely by the County. Following the bid evaluation, all bids submitted are available for public review.

2. Performance

2.1 Design, Strength, and Quality. Design, strength, and quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practices. The apparent silence of specifications and/or plans as to any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications and/or plans shall be made on the basis of this statement.

2.2 Age and Manufacture. All tangible goods being bid must be new and unused, unless otherwise specified, in first-class condition, of current manufacture, and furnished ready to use. All items not specifically mentioned that are required for a complete unit shall be furnished.

2.3 Delivery Location. All deliveries will be made to the address(es) specified on the purchase order during normal working hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, unless otherwise authorized by the Purchasing Agent or designee.

2.4 Delivery Schedule. Delivery time may be an important consideration in the evaluation of best value. The maximum number of days necessary for delivery ARO shall be stated in the space, if provided, on the bid form.

2.5 Delivery Charges. All delivery and freight charges, F.O.B. destination shown on Jefferson County purchase order, as necessary to perform contract are to be included in the bid price.

2.6 Installation Charges. All charges for assembly, installation and set-up shall be included in the bid price. Unless otherwise stated, assembly, installation and set-up will be required.

2.7 Operating Instructions and Training. Clear and concise operating instructions and descriptive literature will be provided in English, if requested. On-site detailed training in the safe and efficient use and general maintenance of item(s) purchased shall be provided as needed at the request of Jefferson County. Instructions and training shall be at no additional cost to the County.

2.8 Storage. Bidder agrees to provide storage of custom ordered materials, if requested, for up to thirty (30) calendar days.

2.9 Compliance with Federal, State, County, and Local Laws. Bids must comply with all federal, state, county and local laws, including, but not limited to, all applicable standard safety, emission, and noise control requirements. Any vehicles or equipment shall contain all standard safety, emission, and noise control requirements required for the types and sizes of equipment at the time of their manufacture. The contractor agrees, during the performance of work or service, to comply with all applicable codes and ordinances of Jefferson County or the State of Texas as they may apply, as these laws may now read, or as they may hereafter be changed or amended.

2.10 OSHA. The bidder will certify all equipment complies with all regulations and conditions stipulated under the Williams-Steiger Occupational Safety and Health Act of 1971, as amended. The successful bidder will further certify that all items furnished under this project will conform and comply with federal and State of Texas OSHA standards. The successful bidder will agree to indemnify and hold harmless Jefferson County for any and all damages that may be assessed against the County.

2.11 Patents and Copyrights. The successful vendor agrees to protect the County from claims involving infringements of patents and/or copyrights.

2.12 Samples, Demonstrations and Testing. At Jefferson County's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested at any point prior to or following bid award. Samples, demonstrations and/or testing may be requested upon delivery and/or any point during the term of resulting contract. All samples (including return thereof), demonstrations, and/or testing shall be at the expense of the bidder/vendor.

2.13 Acceptability. All articles enumerated in the bid shall be subject to inspection by an officer designated for that purpose by Jefferson County. If found inferior to the quality called for, or not equal in value to the specifications, deficient in workmanship or otherwise, this fact shall be certified to the Purchasing Agent, who shall have the right to reject the whole or any part of the same. Items and/or work determined to be contrary to specifications must be replaced at the vendor's expense. Inferior items not retrieved by the vendor within thirty (30) calendar days, or an otherwise agreed upon time, shall become the property of the County. If disposal of such items warrants an expense, an amount equal to the disposal expense will be deducted from amounts payable to the vendor.

2.14 Maintenance. Maintenance required for equipment bid should be available in Jefferson County by a manufacturer authorized maintenance facility. Cost for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Jefferson County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

2.15 Material Safety Data Sheets. Under the "Hazardous Communications Act," common known as the "Texas Right to Know Act," a bidder must provide the user department, with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the bidder to furnish this documentation, will be cause to reject any bid applying thereto.

2.16 Evaluation. Evaluation shall be used as a determinant as to which services are the most efficient and/or most economical for the County. It shall be based on all factors having a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Jefferson County Purchasing Department and recommendation to Jefferson County Commissioners' Court. Compliance with all bid requirements and needs of the using department are considered in evaluating bids. Pricing is not the only criteria for making a recommendation. The Jefferson County Purchasing Department reserves to right to contact any bidder, at any time, to clarify, verify or requirement information with regard to this bid.

3. Purchase Orders and Payment

3.1 Purchase Orders. A purchase order(s) shall be generated by the Jefferson County Purchasing Agent to the successful vendor. The purchase order number must appear on all itemized invoices and packing slips. The County will not be held responsible for any work orders placed and/or performed without a valid current purchase order number. Payment will be made for all services rendered and accepted by the contract administrator for which a valid invoice has been received.

3.2 Invoices. All invoices shall reference the Purchase Order number. Invoices shall reference the bid item number or a detailed description for each item invoiced. If an item purchased and itemized on the invoice does not correspond to an item in any of the categories awarded to the vendor, invoice shall reference the item as "N/C" to indicate that it is a non-contract item. This requirement is to assist the County in verifying contract pricing on all invoices. Payment will be made under terms of net thirty (30) days unless otherwise agreed upon by seller and the purchasing department.

3.3 Prompt Payment. In accordance with the State of Texas Prompt Payment Act, Article 601f V.T.C.S., payment will be made after receive and acceptance by the County of the merchandise ordered and of a valid invoice. Successful bidder(s) is required to pay subcontractors within ten (10) days after the successful bidder receives payment from the County.

3.4 Funding. Jefferson County is operated and funded on an October 1 to September 30 basis; accordingly, the County reserves the right to terminate, without liability to the County, any contract for which funding is not available.

4. Contract

4.1 Contract Definition. The General Conditions of Bidding and Terms of Contract, Specifications, Plans, Bidding Forms, Addenda, and any other documents made a part of this bid shall constitute the complete bid. This bid, when duly accepted by Jefferson County, shall constitute a contract equally binding between the successful bidder and Jefferson County.

4.2 Change Order. No different or additional terms will become part of this contract with the exception of a change order. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing and at the discretion and approval of Jefferson County. No change order will be binding unless signed by an authorized representative of the County and the vendor.

4.3 Price Re-determination. A price re-determination may be requested at the time of annual renewal. All requests for price re-determination shall be in written form. Cause for such request, i.e., manufacturer's direct cost, postage rates, Railroad Commission rates, Federal/State minimum wage law, Federal/State unemployment taxes, F.I.C.A, Insurance Coverage Rates, etc., shall be substantiated in writing by the source of the cost increase. The bidder's past experience of honoring contracts at the bid price will be an important consideration in the evaluation of the lowest and best bid. Jefferson County reserves the right to accept or reject any/all requests for price re-determination as it deems to be in the best interest of the County.

4.4 Termination. Jefferson County reserves the right to terminate the contract for default if the bidder breached any of the terms therein, including warranties of bidder or if the bidder becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which Jefferson County may have in law or equity. Default may be construed as, but not limited to, failure

to deliver the proper goods and/or service within the proper amount of time, and/or to properly perform any and all services required to Jefferson County's satisfaction and/or to meet all other obligations and requirements. Contracts may be terminated without cause upon thirty (30) days' written notice to either party unless otherwise specified. Jefferson County reserves the right to award canceled contract to the next lowest bidder. Bidder, in submitting this bid, agrees that Jefferson County shall not be liable to prosecution for damages in the event that the County declares the bidder in default.

4.5 Conflict of Interest. Employees of the County are not permitted to maintain financial interest in, or receive payment, directly or indirectly, borrow from, lend to, invest in, or engage in any substantial financial transaction with any individual, organization, supplier, or subcontractor who does business with the County without disclosure. When conflict of interest is discovered, it shall be grounds for termination of contract.

4.6 Injuries or Damages Resulting from Negligence. Successful vendor shall defend, indemnify and save harmless Jefferson County and all its officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful vendor, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful vendor shall pay any judgment with cost which may be obtained against Jefferson County growing out of such injury or damages.

4.7 Interest by Public Officials. No public official shall have interest in this contract, in accordance with Texas Local Government Code.

4.8 Warranty. The successful vendor shall warrant that all materials utilized in the performance of this contract shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship and title.

4.9 Uniform Commercial Code. The successful vendor and Jefferson County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

4.10 Venue. This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in the County of Jefferson, Texas.

4.11 Sale, Assignment, or Transfer of Contract. The successful vendor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written consent of Jefferson County.

4.12 Silence of Specifications. The apparent silence of these specifications as to any detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

5. Federal Emergency Management Agency (FEMA) Mandated Contract Clauses

If applicable to the work and services being performed by CONTRACTOR under the parties' AGREEMENT, the following provisions are adopted and form part of this AGREEMENT:

(A) DAMAGES, 2 CFR §200.326 Appendix II to Part 200 (A)

(1) All work to be performed under this AGREEMENT shall be timely commenced. A breach of this AGREEMENT by Contractor would cause substantial delay in the completion of the required services affecting the safety and welfare of the public.

(2) In the event of Contractor's breach of its performance obligations, County shall have all rights and remedies against Contractor as provided by law.

(B) TERMINATION RIGHTS, 2 CFR §200.326 Appendix II to Part 200 (B)

Termination for Convenience: Whenever the interests of the County so require, County may terminate the parties' Agreement, in whole or in part, for the convenience of the County. County shall give Contractor thirty (30) days prior written notice of termination specifying the portions of the Agreement to be terminated and when such termination will become effective. If only portions of the parties' agreement are terminated, Contractor has the right to withdraw from the parties' Agreement, without adverse action or claims. In the event of a termination for convenience by County, Contractor shall be entitled to payment for all work and services performed by it up to the effective date of such termination.

Termination for Cause: The County may, by written notice of default to Contractor, terminate the parties' Agreement, in whole or in part, if the Contractor fails to satisfactorily perform any provisions of the parties' agreement after a period of ten (10) following Contractor's receipt of a Notice of Deficiency provided by County.

(C) EQUAL EMPLOYMENT OPPORTUNITY CLAUSE (2 CFR §200.326 Appendix II to Part 200 (C))

If applicable to the work and services performed by CONTRACTOR under the AGREEMENT, during the performance of the AGREEMENT, CONTRACTOR shall comply with the Equal Employment Opportunity Clause (41 CFR 60-1.4(b)):

(1) CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. AGREEMENTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) CONTRACTOR will send to each labor union or representative of workers with which it has a collective bargaining agreement or other agreement or understanding, a notice to be provided advising the said labor union or workers' representatives of the CONTRACTOR'S commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor for purpose of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the CONTRACTOR'S noncompliance with the nondiscrimination clauses of this AGREEMENT or with any of the said rules, regulations or orders, this AGREEMENT may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) CONTRACTOR will include the portion of the sentence immediately preceding paragraph (1) and the provisions of subparagraphs 1 through 7 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or contractor. CONTRACTOR will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or contractor as a result of such direction by the administering agency the CONTRACTOR may request the United States to enter into such litigation to protect the interest of the United States.

D. DAVIS-BACON ACT AND COPELAND "ANTI-KICKBACK" ACT, 2 CFR §200.326 Appen. II to Part 200 (D)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(1) Bacon-Davis Act: Applicable to construction or repair of public buildings or public works. see FEMA Public Assistance Program and Policy Guide, Ch.2(V)(G)(2), page 32 (FP 104-009-2/January 2016);

(2) Copeland "Anti-Kickback" Act: In contracts subject to the Davis-Bacon Act, CONTRACTOR shall comply with the Copeland "Anti-Kickback" Act (40 U.S.C. §3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that the contractor and subcontractor must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The GOVERNMENT must report all suspected or reported violations to the appropriate Federal agency.

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(a) CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this AGREEMENT.

(b) CONTRACTOR or subcontractor shall insert in any subcontract the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The CONTRACTOR shall be responsible for the compliance by any subcontractor or lower tier subcontract with all of these contract clauses.

(c) A breach of the AGREEMENT clause above may be grounds for termination of the AGREEMENT, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. §5.12.

E. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 2 CFR §200.326 Appendix II to Part 200 (E) (40 U.S.C. 3701-3708)

Contracts in excess of $100,000 that involve the employment of mechanics or laborers shall comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor and its subcontractors shall compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-halftimes the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation: liability for unpaid wages: liquidated damages. In the event of any violation of the clause set forth in paragraph (I) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (I) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (I) of this section.

(3) Withholding for unpaid wages and liquidated damages. The GOVERNMENT shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) The contractor and subcontractor shall insert in any subcontract the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.

F. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT, 2 CFR §200.326 Appendix II to Part 200 (F)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT and if the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the GOVERNMENT wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the GOVERNMENT must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business."

G. CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT, 2 CFR §200.326 Appendix II to Part 200 (G)

CONTRACTOR shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

CONTRACTOR shall include the foregoing requirements in each subcontract exceeding $100,000.

H. ENERGY EFFICIENCY AND CONSERVATION, 2 CFR §200.326 Appendix II to Part 200 (H)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT, CONTRACTOR shall comply with the mandatory standards and policies of the state regulation promulgated in accordance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).

I. DEBARMENT AND SUSPENSION, 2 CFR §200.326 Appendix II to Part 200 (I)

(1) This AGREEMENT is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by GOVERNMENT. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to GOVERNMENT, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C AGREEMENT is valid and throughout the period of performance. The CONTRACTOR further agrees to include a provision requiring such compliance in its lower tier covered transactions.

J. BYRD ANTI-LOBBYING AMENDMENT, 2 CFR §200.326 Appendix II to Part 200 (J)

CONTRACTOR must file with the GOVERNMENT the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. If not provided with the bid response, CONTRACTOR must complete and submit the Certification Regarding Lobbying Form.

K. PROCUREMENT OF RECOVERED MATERIALS, 2 CFR §200.326 Appendix II to Part 200 (K) and 2 CFR §200.322)

(1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired-

(a) Competitively within a timeframe providing for compliance with the contract performance schedule;
(b) Meeting contract performance requirements; or
(c) At a reasonable price.

(2) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, http://www.epa.gov/cpg/. The list of EPA-designate items is available at http://www.epa.gov/cpg/products/htm.

L. AGREEMENTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS (2 CFR §200.321)

Should the CONTRACTOR subcontract any of the work under this AGREEMENT, CONTRACTOR shall take the following affirmative steps: place qualified small and minority businesses and women's business enterprises on solicitation lists; assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources; divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises; establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

M. ACCESS TO RECORDS

(1) CONTRACTOR agrees to provide GOVERNMENT, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives' access to any books, documents, papers, and records of the Contractor which are directly pertinent to this AGREEMENT for the purposes of making audits, examinations, excerpts, and transcriptions.

(2) CONTRACTOR agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(3) CONTRACTOR agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

N. SEAL, LOGO AND FLAGS

CONTRACTOR shall not use the U.S. Department of Homeland Security's seal(s), logos, crests, or reproductions of flags or likenesses of the U.S. Department of Homeland Security's agency officials without specific FEMA preapproval.

O. COMPLIANCE WITH FEDERAL LAW, REGULATIONS AND EXECUTIVE ORDERS

This is an acknowledgement that FEMA financial assistance will be used to fund the AGREEMENT only. CONTRACTOR will comply will all federal law, regulations, executive orders, FEMA policies, procedures, and directives.

P. NO OBLIGATION BY FEDERAL GOVERNMENT

The Federal Government is not a party to this AGREEMENT and is not subject to any obligations or liabilities to GOVERNMENT, CONTRACTOR, or any other party pertaining to any matter resulting from the contract.

Q. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR'S actions pertaining to this contract.

Special Requirements/Instructions

The following requirements and instructions supersede General Requirements where applicable.

1. Bid Requirement

Each bidder shall ensure that required parts of the bid are completed with accuracy and submitted as per the requirements within this specifications packet, including any addenda.

Bidder is responsible for submitting one (1) *original* bid copy to include a completed copy of this specifications packet in its entirety; and Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

All bids shall be tightly sealed in an opaque envelope or box and plainly marked "SEALED BID." The outside of the envelope or box shall also include: Bid Number, Bid Name, Bid Due Date, Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Jefferson County shall not be responsible for any effort or cost expended in the preparation of a response to this IFB. All protests should be coordinated through the Purchasing Office prior to award recommendation to Commissioners' Court.

2. Vendor Registration: SAM (System for Award Management).

Vendors doing business with Jefferson County are **required** to be registered with The System for Award Management (SAM), with an "active" status. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS. There is NO fee to register for this site. Entities may register at no cost directly from the SAM website at: https://www.sam.gov

Bidders are strongly encouraged to review their firm's SAM (System for Award Management) status prior to Bid Submission.

3. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission)

In accordance with House Bill 1295 (passed January 1, 2016), Vendors entering into contracts and professional agreements with Jefferson County will be required to complete a Certificate of Interested Parties (FORM 1295), **unless contract is considered exempt as described below.**

In 2017, the Texas legislature amended the law to require Form 1295 to include an "unsworn declaration" which includes, among other things, the date of birth and address of the authorized representative signing the form. The unsworn declaration, including the date of birth and address of the signatory, replaces the notary requirement that applied to contracts entered into before January 1, 2018. The TEC filing application does not capture the date of birth or street address of the signatory and it will not appear on forms that are filed using the TEC filing application.

Changes to the law requiring certain businesses to file a Form 1295 are in effect for contracts entered into or amended on or after January 1, 2018. The changes exempt businesses from filing a Form 1295 for certain types of contracts and replace the need for a completed Form 1295 to be notarized. Instead, the person filing a 1295 needs to complete an "unsworn declaration."

FORM 1295 Exemptions: What type of contracts are exempt from the Form 1295 filing requirement under the amended law? The amended law adds to the list of types of contract exempt from the Form 1295 filing requirement. A completed Form 1295 is not required for:

- a sponsored research contract of an institution of higher education
- an interagency contract of a state agency or an institution of higher education
- a contract related to health and human services if: the value of the contract cannot be determined at the time the contract is executed; and o any qualified vendor is eligible for the contract
- a contract with a publicly traded business entity, including a wholly owned subsidiary of the business entity
- a contract with an electric utility, as that term is defined by Section 31.002, Utilities Code
- a contract with a gas utility, as that term is defined by Section 121.001, Utilities Code

3. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission) – CONTINUED

Upon entering into a contract or professional agreement, the Jefferson County Purchasing Department will submit a request to the Vendor to both:

1. Submit a FORM 1295 online via the Texas Ethics Commission website link below.
Vendors must enter the required information on Form 1295, and print a copy of the completed form.
The form will include a certification of filing that will contain a unique certification number.

2. Submit a FORM 1295 hard copy (completed & signed by an Authorized Agent of the Awarded Vendor), to the Jefferson County Purchasing Department.

FORM 1295, Completion Instructions, and Login Instructions are available via the Texas Ethics Commission Website at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

4. Multiple Vendor Award

Jefferson County reserves the right to award this contract to more than one vendor at the County's discretion.

5. Delivery

If delivery is required, all items must be packaged so as to be protected from damage during shipping and handling. Any item(s) damaged in shipping must be replaced in kind, or repaired, by the contractor, at the discretion of, and at no additional charge to, Jefferson County.

6. Payment

Jefferson County will pay original invoices that clearly itemize the goods and/or services provided as to quantity, part number, description, price, applicable discount (if any), labor charges showing time differential, if applicable and if previously agreed to, and delivery, installation, and set-up costs, if applicable and if previously agreed to. Only charges as stated on the Bid Form(s) submitted as a part of the bid will be considered.

Invoices must indicate Jefferson County as applicable, the address to which the product(s) and/or service(s) were delivered, and the applicable purchase order number. Invoices will be matched to delivery tickets prior to payment; therefore, all delivery tickets should have an accurate description of the product(s) and/or service(s).

Invoices shall be submitted to: Jefferson County Auditing Department, Attention: Accounts Payable, 1149 Pearl Street, 7th floor, Beaumont, TX 77701.

7. Usage Reports

Jefferson County reserves the right to request, and receive at no additional cost, up to two (2) times during the contract period, a usage report detailing the products and/or services furnished to date under a contract resulting from this IFB. The reports must be furnished no later than five (5) working days after written request and itemize all purchases to date by Jefferson County department, description of each item purchased, including manufacturer, quantity of each item purchased, per unit and extended price of each item purchased, and total amount and price of all items purchased.

8. Insurance

The contractor (including any and all subcontractors as defined in Section 9.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured and will provide the actual policy wording or endorsement showing as such.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements:

Public Liability, including Products & Completed Operations	$1,000,000
Excess Liability	$1,000,000

Property Insurance (policy below that is applicable to this project):
Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
Builder's Risk Policy: Structural Coverage for Construction Projects
Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation Statutory Coverage (See Section 9 Below)

9. Workers' Compensation Insurance

9.1 Definitions:

9.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

9.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

9.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

9.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

9.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 8 above.

9.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

9.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

9.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

9.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

9.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

9.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

9.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

9.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

9.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

9.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

9.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

9.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

9.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

9.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

9.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

9.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

9.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 9.1. – 9.7., with the certificates of coverage to be provided to the person for whom they are providing services.

9.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

9.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

Minimum Specifications

The following requirements and specifications supersede General Requirements where applicable.

Questions or comments relating to bid submission requirements should be directed to Jamey West, Assistant Purchasing Agent at 409-835-8593 or jwest@co.jefferson.tx.us
Please reference bid number **IFB 19-021/JW**.

Questions or comments relating to plans and specifications should be directed to Dohn H. LaBiche, FAIA at 409-860-0197 or dlabiche@labiche.com
Please reference bid number **IFB 19-021/JW**.

Scope

Furnish all materials and labor for the construction of a new concession stand to be located at Ford Fields.

Bidder Information Form

Instructions: Complete the form below. Please provide legible, accurate, and complete contact information. PLEASE PRINT.

Bid Number & Name: (IFB 19-021/JW), Ford Fields Concession Stand

Bidder's Company/Business Name: _____

Bidder's TAX ID Number: _____

Contact Person: _____ **Title:** _____

Phone Number (with area code): _____

Alternate Phone Number if available (with area code):_____

Fax Number (with area code):_____

Email Address: _____

Mailing Address (Please provide a physical address for bid bond return, if applicable):

_____
Address

_____
City, State, Zip Code

OFFER AND ACCEPTANCE FORM

OFFER TO CONTRACT

To Jefferson County:

We hereby offer and agree to furnish the materials or service in compliance with all terms, conditions, specifications, and amendments in the Invitation for Bid and any written exceptions in the offer. We understand that the items in this Invitation for Bid, including, but not limited to, all required certificates are fully incorporated herein as a material and necessary part of the contract.

The undersigned hereby states, under penalty of perjury, that all information provided is true, accurate, and complete, and states that he/she has the authority to submit this bid, which will result in a binding contract if accepted by Jefferson County.

We acknowledge receipt of the following amendment(s): _____, _____, _____, _____.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder:

_____
Company Name

_____
Address

_____
City State Zip

_____
Signature of Person Authorized to Sign

_____
Printed Name

_____
Title

For clarification of this offer, contact:

_____
Name

_____
Phone Fax

_____
E-mail

Bidder Shall Return Completed Form with Offer.

Acceptance of Offer

The Offer is hereby accepted for Jefferson County Invitation for Bid (IFB 19-021/JW), Ford Fields Concession Stand.

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the Invitation for Bid, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by Jefferson County.

This contract shall henceforth be referred to as Contract No. 19-021/JW, Ford Fields Concession Stand. The Contractor has not been authorized to commence any billable work or to provide any material or service under this contract until Contractor receives a purchase order and/or a notice to proceed from the Jefferson County Purchasing Agent.

Countersigned:

Jeff R. Branick
County Judge

Date

Attest:

Carolyn L. Guidry
County Clerk

Bidder Shall Return Completed Form with Offer.

Bid Form

Bidder proposes to furnish all labor, material and equipment, and to perform all work necessary to construct the **Ford Fields Concession Stand** including Mechanical, Plumbing and Electrical Work, in accordance with drawings and specifications prepared by The LaBiche Architectural Group, Inc., for the following sum:

Materials Bid Amount: $_____._____

Materials Bid Amount Written in Words:

_____dollars and _____ /100

Labor Bid Amount: $_____._____

Labor Bid Amount Written in Words:

_____dollars and _____ /100

Total Base Bid Amount: $_____._____

Total Base Bid Amount Written in Words:

_____dollars and _____ /100

Bidder has examined the site of the Work and the nature and kind of work to be performed and has informed themselves of all local conditions and other things that might affect the cost or difficulty of performing the Work, and Bidder represents and warrants that they have experience in the use of materials and methods of performance specified, and that they can and will do the Work and construct the improvements with the specified materials as contemplated and indicated by the Drawings and Specifications.

Upon receipt of notice of acceptance of our bid, Bidder agrees to execute the Contract within 10 (ten) days after such notice, deliver Performance and Payment Bonds for the faithful performance of the Work, to begin work on or before the date of commencement of the Work established in the Notice to Proceed, and to complete the Work in _____ calendar days.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written “Notice to Proceed” of the Owner and to fully complete the project on or before the date of completion shown on the “Notice to Proceed”. Bidder further agrees to pay as liquidated damages, the sum of **$300.00** for each consecutive calendar day thereafter.

Acknowledgment of Addenda (if any):

Addendum 1 _____ Date Received_____

Addendum 2 _____ Date Received_____

Addendum 3 _____ Date Received_____

Bidder Shall Return Completed Form with Offer.

Vendor References

Please list at least three (3) companies or governmental agencies (preferably a municipality) where the same or similar products and/or services as contained in this specification package were recently provided.

THIS FORM MUST BE RETURNED WITH YOUR BID.

REFERENCE ONE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE TWO

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE THREE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

Bidder Shall Return Completed Form with Offer.

Signature Page

As permitted under Article 4413 (32c) V.A.C.S., other governmental entities may wish to participate under the same terms and conditions contained in this contract (i.e., piggyback). In the event any other entity participates, all purchase orders will be issued directly from and shipped directly to the entity requiring supplies/services. Jefferson County shall not be held responsible for any orders placed, deliveries made or payment for supplies/services ordered by another entity. Each entity reserves the right to determine their participation in this contract.

Would bidder be willing to allow other governmental entities to piggyback off this contract, if awarded, under the same terms and conditions?..... **Yes** ☐ **No** ☐

This bid shall remain in effect for ninety (90) days from bid opening and shall be exclusive of federal excise and state and local sales tax (exempt).

The undersigned agrees, if this bid is accepted, to furnish any and all items upon which prices are offered, at the price and upon the terms and conditions contained in the Invitation for Bid, Conditions of Bidding, Terms of Contract, and Specifications and all other items made a part of the accepted contract.

The undersigned affirms that they are duly authorized to execute the contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that neither the bidder nor their employees nor agents have been for the past six (6) months directly nor indirectly concerned in any pool or agreement or combination to control the price of goods or services on, nor to influence any person to bid or not to bid thereon.

Bidder (Entity Name)	Signature
Street & Mailing Address	Print Name
City, State & Zip	Date Signed
Telephone Number	Fax Number
E-mail Address	

Bidder Shall Return Completed Form with Offer.

Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE

FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information in this section is being disclosed.**

_____
Name of Officer

This section (item 3 including subparts A, B, C, & D) must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more?

☐ Yes ☐ No

D. Describe each employment or business and family relationship with the local government officer named in this section.

4

_____ _____
Signature of vendor doing business with the governmental entity Date

Adopted 8/7/2015

Bidder Shall Return Completed Form with Offer.

Local Government Officer
Conflicts Disclosure Statement - OFFICE USE ONLY

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This is the notice to the appropriate local governmental entity that the following local government officer has become aware of facts that require the officer to file this statement in accordance with Chapter 176, Local Government Code.

OFFICE USE ONLY

Date Received

1 **Name of Local Government Officer**

2 **Office Held**

3 **Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code**

4 **Description of the nature and extent of employment or other business relationship with vendor named in item 3**

5 **List gifts accepted by the local government officer and any family member, if aggregate value of the gifts accepted from vendor named in item 3 exceeds $100 during the 12-month period described by Section 176.003(a)(2)(B).**

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

(attach additional forms as necessary)

6 **AFFIDAVIT**

I swear under penalty of perjury that the above statement is true and correct. I acknowledge that the disclosure applies to each family member (as defined by Section 176.001(2), Local Government Code) of this local government officer. I also acknowledge that this statement covers the 12-month period described by Section 176.003(a)(2)(B), Local Government Code.

_____
Signature of Local Government Officer

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20 _____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

Adopted 8/7/2015

Good Faith Effort (GFE) Determination Checklist

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/sub-consultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions: In order to determine if a "Good Faith Effort" was made in soliciting HUBs for subcontracting opportunities, the following checklist and supporting documentation shall be completed by the Prime Contractor/Consultant, and returned with the Prime Contractor/ Consultant's bid. This list contains the **minimum** efforts that should be put forth by the Prime Contractor/Consultant when attempting to achieve or exceed the goals of HUB Subcontractor participation. The Prime Contractor/Consultant may extend his/her efforts in soliciting HUB Subcontractor participation beyond what is listed below.

Did the Prime Contractor/Consultant . . .

☐ Yes ☐ No 1. To the extent practical, and consistent with standard and prudent industry standards, divide the contract work into the smallest feasible portions, to allow for maximum HUB Subcontractor participation?

☐ Yes ☐ No 2. **Notify** in writing a reasonable number of HUBs, allowing sufficient time for effective participation of the planned work to be subcontracted?

☐ Yes ☐ No 3. **Provide** HUBs that were genuinely interested in bidding on a subcontractor, adequate information regarding the project (i.e., plans, specifications, scope of work, bonding and insurance requirements, and a point of contract within the Prime Contractor/Consultant's organization)?

☐ Yes ☐ No 4. **Negotiate** in good faith with interested HUBs, and not reject bids from HUBs that qualify as lowest and responsive bidders?

☐ Yes ☐ No 5. **Document** reasons HUBs were rejected? Was a written rejection notice, including the reason for rejection, provided to the rejected HUBs?

☐ Yes ☐ No 6. If Prime Contractor/Consultant has zero (0) HUB participation, **please explain the reasons why.**

If "No" was selected, please explain and include any pertinent documentation with your bid.
If necessary, please use a separate sheet to answer the above questions.

Printed Name of Authorized Representative	Signature
Title	Date

Bidder Shall Return Completed Form with Offer.

Notice of Intent (NOI) to Subcontract with Historically Underutilized Business (HUB)

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/sub-consultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions for Prime Contractor/Consultant: Bidder shall submit this form with the bid; however, the information below may be submitted after contract award, but prior to beginning performance on the contract. Please submit one form for each HUB Subcontractor/Sub-consultant with proper signatures, per the terms and conditions of your contract.

Contractor Name: _____ HUB: p Yes p No

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Project Title & No.: _____

Prime Contract Amount: $ _____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

Printed Name of Contractor Representative	Signature of Representative	Date
Printed Name of HUB	Signature of Representative	Date

NOTE: NOTHING ON THIS NOTICE OF INTENT FORM IS INTENDED TO CONFER ANY RIGHTS, EXPRESSED OR IMPLIED, TO ANY THIRD PARTIES.

Pre-Approval for Subcontractor Substitutions must be obtained from the Jefferson County Purchasing Agent's Representative. The "HUB Subcontractor/Sub-consultant Change Form" must be completed and faxed to 409-835-8456.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

PAGE 1 OF 4

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/sub-consultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Prime Contractor: _____ HUB: ☐ Yes ☐ No

HUB Status (Gender & Ethnicity): _____

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Project Title & No.: _____ IFB/RFP No.: _____

Total Contract: $ _____ Total HUB Subcontract(s): $ _____

Construction HUB Goals: 12.8% MBE:: _____ % 12.6% WBE: _____ %

Sub-goals: 1.7 African-American, 9.7% Hispanic, 0.7% Native American, 0.8% Asian American.
Use these goals as a guide to diversify.

FOR HUB OFFICE USE ONLY:

Verification date HUB Program Office reviewed and verified HUB Sub information Date: _____ Initials: _____

PART I. HUB SUCONTRACTOR DISCLOSURE

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Texas Bldg & Procurement Comm. ☐ Texas Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

HUB SUBCONTRACTOR DISCLOSURE

PART I: Continuation Sheet **(Duplicate as Needed)**

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

All HUB Subcontractor Participation may be verified with the HUB Subcontractor(s) listed on Part I.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

PART II: STATEMENT OF NON-COMPLIANCE FOR NOT MEETING HUB SUBCONTRACTING GOALS

Please complete Good Faith Effort (GFE) Checklist and attach any supporting documentation.

Our firm was unable to meet the HUB goals for this project for the following reasons:

- ☐ All subcontractors to be utilized are "Non-HUBs." *(Complete Part III)*
- ☐ HUBs were solicited but did not respond.
- ☐ HUBs solicited were not competitive.
- ☐ HUBs were unavailable for the following trade(s):
- ☐ Other: _____

Was the Jefferson County HUB Office contacted for assistance in locating HUBs? ☐ Yes ☐ No

PART III: DISCLOSURE OF OTHER "NON-HUB" SUBCONTRACTS

The bidder shall use this area to provide a listing of all "Non-HUB" Subcontractors, including suppliers, that will perform under this project. A list of those "Non-HUB" Subcontractors the bidder selects, after bid submission, shall be provided to the Purchasing Office not later than five (5) calendar days after being notified that bidder is the apparent low bidder. A list of those "Non-HUB" Subcontractors that are selected after contract award must be provided **immediately** after their selection.

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

PAGE 4 OF 4

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

I hereby certify that I have read the *HUB Program Instructions and Information*, truthfully completed all applicable parts of this form, and **attached any necessary support documentation as required**. I fully understand that intentionally falsifying information on this document may result in my not receiving a contract award or termination of any resulting contract.

Name (print or type): _____

Title: _____

Signature: _____

Date: _____

E-mail address: _____

Contact person that will be in charge of invoicing for this project:

Name (print or type): _____

Title: _____

Date: _____

E-mail address: _____

Bidder Shall Return Completed Form with Offer.

Residence Certification/Tax Form

Pursuant to Texas Government Code §2252.001 *et seq*., as amended, Jefferson County requests Resident Certification. §2252.001 *et seq*. of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

☐ I certify that _____ [company name] is a Resident Bidder of Texas as defined in Government Code §2252.001.

☐ I certify that _____ [company name] is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____ _____ (city and state).

Taxpayer Identification Number (T.I.N.):	
Company Name submitting bid/proposal:	
Mailing address:	
If you are an individual, list the names and addresses of any partnership of which you are a general partner:	

Property: List all taxable property owned by you or above partnerships in Jefferson County.

Jefferson County Tax Acct. No.*	Property address or location**

* This is the property amount identification number assigned by the Jefferson County Appraisal District.

** For real property, specify the property address or legal description. For business property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored as a warehouse or other location.

Bidder Shall Return Completed Form with Offer.

House Bill 89 Verification

I, _____, the undersigned representative of (company or business name)_____
(heretofore referred to as company) being an adult over the age of eighteen (18) years of age, after being duly sworn by the undersigned notary, do hereby depose and verify under oath that the company named above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

1. Does not boycott Israel currently; and

2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made ordinary business purposes; and

2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or an limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business association that exist to make a profit.

_____
Signature of Company Representative

_____
Date

On this _____ day of _____, 20____, personally appeared

_____, the above named person, who after by me being duly sworn, did swear and confirm that the above is true and correct.

Notary Seal

_____
Notary Signature

_____
Date

Bidder Shall Return Completed Form with Offer.

Senate Bill 252 Certification

On this day, I, Deborah L. Clark, Purchasing Agent for Jefferson County, Texas, pursuant to Texas Government Code, Chapter 2252, Section 2252.152 and Section 2252.153, certify that I did review the website of the Comptroller of the State of Texas concerning the listing of companies that is identified under Section 806.051, Section 807.051, or Section 2253.253 and I have ascertained that the below named company is not contained on said listing of companies which do business with Iran, Sudan, or any Foreign Terrorist Organization.

_____
Company Name

_____
IFB/RFP/RFQ number

Certification check performed by:

_____
Purchasing Representative

_____
Date

Bidder Shall Return Completed Form with Offer.

Bid Affidavit

The undersigned certifies that the bid prices contained in this bid have been carefully reviewed and are submitted as correct and final. Bidder further certifies and agrees to furnish any and/or all commodities upon which prices are extended at the price offered, and upon the conditions contained in the specifications and the Notice to Bidders.

STATE OF_____ COUNTY OF_____

BEFORE ME, the undersigned authority, a Notary Public in and for the State of _____,

on this day personally appeared _____, who
(name)
after being by me duly sworn, did depose and say:

"I, _____ am a duly authorized officer of/agent
(name)
for _____ and have been duly authorized to execute the
(name of firm)
foregoing on behalf of the said_____.
(name of firm)

I hereby certify that the foregoing bid has not been prepared in collusion with any other bidder or other person or persons engaged in the same line of business prior to the official opening of this bid. Further, I certify that the bidder is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool or agreement or combination, to control the price of services/commodities bid on, or to influence any person or persons to bid or not to bid thereon."

Name and address of bidder:_____

_____

Fax: _____ Telephone#_____

by: _____ Title:_____
(print name)

Signature:_____

SUBSCRIBED AND SWORN to before me by the above-named
_____ on

this the _____ day of_____, 20___.

_____
Notary Public in and for
the State of _____

Bidder Shall Return Completed Form with Offer.

CONSTRUCTION MANUAL

Ford Fields

FORD FIELDS

CONCESSION STAND

5115 IH-10 South, Beaumont, Texas

PROJECT #15036

The LaBiche
ARCHITECTURAL GROUP, INC.

7999 Gladys Ave., Suite 101
Beaumont, Texas 77706
409-860-0197

REGISTERED ARCHITECT
JOHN H. LaBICHE
11592
STATE OF TEXAS

3/15/19

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

TABLE OF CONTENTS

BIDDING REQUIREMENTS

TABLE OF CONTENTS
LEGAL NOTICE
INSTRUCTIONS TO BIDDERS
GENERAL TERMS AND CONDITIONS OF BIDDING AND TERMS OF CONTRACT
SPECIAL REQUIREMENTS / INSTRUCTIONS
MINIMUM SPECIFICATIONS
OFFER AND ACCEPTANCE FORM / OFFER TO CONTRACT
BIDDER INFORMATION FORM
ACCEPTANCE OF OFFER
BID FORM
VENDOR REFERENCES
SIGNATURE PAGE
CONFLICT OF INTEREST QUESTIONNAIRE
GOOD FAITH EFFORT (GFE) DETERMINATION CHECKLIST
NOTICE OF INTENT TO SUBCONTRACT WITH HUB
HUB SUBCONTRACTING PARTICIPATION DECLARATION FORM
RESIDENT CERTIFICATION / TAX FORM
BID AFFIDAVIT
HOUSE BILL 89 VERIFICATION
SENATE BILL 252 CERTIFICATION
BID BOND
INDEX OF DRAWINGS

Division	Section Title	Pages
DIVISION 1 - GENERAL REQUIREMENTS		
010100	SUMMARY OF WORK	4
010300	SPECIAL CONDITIONS	3
010410	PROJECT COORDINATION	2
010450	CUTTING AND PATCHING	3
011200	ALTERATION PROJECT PROCEDURES	3
012500	SUBSTITUTION PROCEDURES	3
012600	CONTRACT MODIFICATION PROCEDURES	3
012900	PAYMENT PROCEDURES	4
013000	SUBMITTALS	5
013100	PROJECT MANAGEMENT AND COORDINATION	7
013200	CONSTRUCTION PROGRESS DOCUMENTATION	4
013300	SUBMITTAL PROCEDURES	10
014000	QUALITY REQUIREMENTS	7
014200	REFERENCES	13
016000	PRODUCT REQUIREMENTS	7
017300	EXECUTION	6
017700	CLOSEOUT PROCEDURES	5
017823	OPERATION AND MAINTENANCE DATA	5
017839	PROJECT RECORD DOCUMENTS	4

REGISTERED ARCHITECT
JOHN H. LaBICHE
11592
STATE OF TEXAS
3/15/19

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

DIVISION 2 - SITE CONSTRUCTION
NOT APPLICABLE

DIVISION 3 - CONCRETE
033000 CAST-IN-PLACE CONCRETE 9

DIVISION 4 – 5
NOT APPLICABLE

DIVISION 6 – WOOD, PLASTICS AND COMPOSITES
061000 ROUGH CARPENTRY 4
066400 PLASTIC PANELING 2

DIVISION 7 - THERMAL AND MOISTURE PROTECTION
072100 THERMAL INSULATION 2
079200 JOINT SEALANTS 7

DIVISION 8 - DOORS AND WINDOWS
081113 HOLLOW METAL DOORS AND FRAMES 8

DIVISION 9 – FINISHES
092216 NON-STRUCTURAL METAL FRAMING 6
095113 ACOUSTICAL PANEL CEILINGS 3
096513 RESILIANT BASE AND ACCESSORIES 3
099113 EXTERIOR PAINTING 6
099123 INTERIOR PAINTING 22

DIVISION 10 – SPECIALTIES
104416 FIRE EXTINGUISHERS 3

DIVISION 11 - 12
NOT APPLICABLE

DIVISION 13 – SPECIAL CONSTRUCTION
133419 METAL BUILDING SYSTEMS 16

Facility Services Subgroup

DIVISION 22 – PLUMBING
220500 GENERAL PROVISIONS FOR PLUMBING 15
220503 BASIC MATERIALS AND METHODS FOR PLUMBING 8
220593 SYSTEM TESTING AND BALANCING FOR PLUMBING 2
220700 PLUMBING INSULATION 2
221000 PLUMBING 3
221100 WATER SUPPLY 1
221300 WASTE WATER DISPOSAL 2
221600 NATURAL GAS PIPING/DISTRIBUTION 7

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

DIVISION 23 – HEATING VENTILATING AND AIR CONDITIONING

230500	GENERAL PROVISIONS FOR HVAC	14
230503	BASIC MATERIALS AND METHODS FOR HVAC	5
230593	TESTING, ADJUSTING, AND BALANCING FOR HVAC	9
230700	MECHANICAL INSULATION	2
230900	TEMERATURE CONTROLS FOR HVAC	5
232813	COMMERCIAL KITCHEN HOODS	5
233000	AIR DISTRIBUTION FOR HVAC	6
237000	AIR CONDITIONING FOR HVAC	7

DIVISION 24 - 25
NOT APPLICABLE

DIVISION 26 – ELECTRICAL

260519	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES	4
260526	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS	4
260529	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS	4
260533	RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS	8
260553	INDENTIFICATION FOR ELECTRICAL SYSTEMS	5
262200	LOW-VOLTAGE TRANSFORMERS	4
262416	PANELBOARDS	5
262726	WIRING DEVICES	6
262813	FUSES	2
262816	ENCLOSED SWITCHES AND CIRCUIT BREAKERS	4
262913	ENCLOSED CONTROLERS	6
264313	SURGE PROTECTION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS	3
265119	LED INTERIOR LIGHTING	4

DIVISION 27 - COMMUNICATIONS
NOT APPLICABLE

DIVISION 28 – ELECTRONIC SAFETY AND SECURITY

283111	DIGITAL ADDRESSABLE FIRE-ALARM SYSTEM	11

DIVISION 29 – 30
NOT APPLICABLE

DIVISION 31 – EARTHWORK

310000	GEO-TECHNICAL INVESTIGATION REPORT	11
311000	SITE CLEARING	4
312000	EARTH MOVING	8
313116	TERMITE CONTROL	3
316329	DRILLED CONCRETE PIERS AND SHAFTS	4

DIVISION 32 – EXTERIOR IMPROVEMENTS

321313	CONCRETE PAVING	6
321373	CONCRETE PAVING JOING SEALANTS	3
323113	CHAIN LINK FENCES AND GATES	6

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

DIVISION 33 – UTILITIES
NOT APPLICABLE

END OF TABLE OF CONTENTS

JEFFERSON COUNTY PURCHASING DEPARTMENT

Deborah L. Clark, Purchasing Agent

1149 Pearl Street, 1st Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

LEGAL NOTICE
Advertisement for Invitation for Bids

March 18, 2019

Notice is hereby given that sealed bids will be accepted by the Jefferson County Purchasing Department for IFB 19-021/JW, Ford Fields Concession Stand. **Construction Documents for this project may be obtained from the office of The LaBiche Architectural Group, Inc. by calling 409-860-0197 for access to the online drawings and specifications.**

Bids are to be sealed and addressed to the Purchasing Agent with the bid number and name marked on the outside of the envelope or box. Bidders shall forward an original and three (3) copies of their bid to the address shown below. Jefferson County does not accept bids submitted electronically. Late bids will be rejected as non-responsive. Bids will be publicly opened and read aloud in the Jefferson County Commissioners' Courtroom at the time and date below. Bidders are invited to attend the sealed bid opening.

BID NAME:	**Ford Fields Concession Stand**
BID NO:	**IFB 19-021/JW**
DUE DATE/TIME:	**11:00 AM CT, Tuesday, April 23, 2019**
MAIL OR DELIVER TO:	**Jefferson County Purchasing Department 1149 Pearl Street, 1st Floor Beaumont, Texas 77701**

There will be a pre-bid conference and walk-through at 9:00 AM CDT on Tuesday, April 2, 2019 at the Ford Park Ball Fields, 5115 IH10 South, Beaumont, Texas 77705.

The County shall require the bidder to furnish a bid security in the amount of five percent (5%) of the total contract cost. The bid bond must be executed with a surety company authorized to do business in the State of Texas. Within ten (10) days after the date of the signing of a contract, the bidder shall furnish a performance bond to the County for the full amount of the contract, if the contract exceeds one hundred thousand dollars ($100,000). If the contract is for one hundred thousand dollars ($100,000) or less, the County may provide that no money be paid to the contractor until completion and acceptance of the work or the fulfillment of the purchase obligation to the County.

Any questions relating to these requirements should be directed to Jamey West, Assistant Purchasing Agent, at 409-835-8593 or jwest@co.jefferson.tx.us

Jefferson County encourages Disadvantaged Business Enterprises to participate in the bidding process. Jefferson County does not discriminate on the basis of race, color, national origin, sex, religion, age or disability in employment or the provisions of services. Individuals requiring special accommodations are requested to contact our office at 409-835-8593 to make arrangements no later than seven (7) calendar days prior to the submittal deadline. Jefferson County reserves the right to accept or reject any or all proposals, to waive technicalities and to take whatever action is in the best interest of Jefferson County.

All interested firms are invited to submit a bid in accordance with the terms and conditions stated in this bid.

RESPONDENTS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION.

Deborah Clark

Deborah L. Clark, Purchasing Agent
Jefferson County, Texas

Publish: Beaumont Enterprise & Port Arthur News – March 20, 2019 & March 27, 2019

IFB 19-021/JW
Ford Fields Concession Stand
Bids due: 11:00 AM CT, Tuesday, April 23, 2019

Table of Contents

Table of Contents 1
Instructions to Bidders 2
General Conditions of Bidding and Terms of Contract 6
Special Requirements/Instructions 16
Minimum Specifications 20
Bidder Information Form 21
Offer to Contract Form 22
Acceptance of Offer Form 23
Bid Form 24
Vendor References 25
Signature Page 26
Conflict of Interest Questionnaire 27
Local Government Officer Conflict Disclosure Statement Forms (OFFICE USE ONLY) 28
Good Faith Effort Determination Checklist 29
Notice of Intent 30
HUB Subcontracting Participation Declaration Form 31
Residence Certification/Tax Form 35
House Bill 89 Verification 36
Senate Bill 252 Certification 37
Bid Affidavit 38
TECHNICAL SPECIFICATIONS MANUAL 39

Bid Submissions:

Bidder is responsible for submitting:

- One (1) *original* bid copy to include a completed copy of this specifications packet, in its entirety.
- Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

Additionally, Bidder must monitor the Jefferson County Purchasing Department Website (below) to see if addenda or additional instructions have been posted. Failure to return all required forms could result in a response being declared as non-responsive.

https://www.co.jefferson.tx.us/Purchasing/

Instructions to Bidders

1. Bid Submission

Bids must be submitted in complete original form by mail or messenger to the following address:

Jefferson County Purchasing Department
1149 Pearl Street, 1st Floor
Beaumont, TX 77701

Bids will be accepted at the above address until the time and date specified herein, and immediately after will be publicly opened and read aloud.

Bidder shall submit bid in a tightly sealed opaque envelope or box, plainly marked "SEALED BID." The outside of the envelope of box shall also include the Bid Number, Bid Name, Bid Due Date, and the Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Late bids will not be accepted and will be returned unopened to the bidder.

All bids submitted in response to this invitation shall become the property of Jefferson County and will be a matter of public record available for review.

2. Bid Submissions During Time of Inclement Weather, Disaster, or Emergency

In case of inclement weather or any other unforeseen event causing the County to close for business on the date of a bid/proposal/statement of qualifications submission deadline, the closing will automatically be postponed until the next business day that County offices are open to the public. Should inclement weather conditions or any other unforeseen event cause delays in courier service operations, the County may issue an addendum to all known vendors interested in the project to extend the deadline. It will be the responsibility of the vendor to notify the county of their interest in the project should these conditions impact their ability to submit a bid/proposal/statement of qualifications submission before the stated deadline. The County reserves the right to make the final judgement call to extend any deadline.

Should an emergency or unanticipated event interrupt normal County processes, and bid/proposal/statement of qualifications submissions cannot be received by the Jefferson County Purchasing Department's office by the exact time specified in the IFB and urgent County requirements preclude amendment to the IFB, the time specified for receipt of bids will be deemed to be extended to the same time of day specified in the solicitation on the first business day on which normal County processes resume.

3. Courthouse Security

Bidders are advised that all visitors to the Courthouse must pass through Security. **Bidders planning to hand deliver bids must allow time to get through Security, as a delay in entering the Courthouse will not be accepted as an excuse for late submittal.** Mondays and Tuesdays are particularly heavy days. Bidders are strongly urged to plan accordingly.

4. Preparation of Bids

The bid shall be legibly printed in ink or typed.

The County requests that bid submissions NOT be bound by staples or glued spines.

If a unit price or extension already entered is to be altered, it shall be crossed out and initialed in ink by the bidder.

The bid shall be legally signed and shall include the complete address of the bidder.

Jefferson County is exempt from Federal and State Sales Taxes, and such taxes shall not be included in bid prices.

5. Signatures

All bids, notifications, claims, and statements must be signed by an individual authorized to bind the bidder. The individual signing certifies, under penalty of perjury, that he or she has the legal authorization to bind the bidder.

6. County Holidays – 2019:

January 1	Tuesday	New Year's
January 21	Monday	Martin Luther King, Jr. Day
February 18	Monday	President's Day
April 19	Friday	Good Friday
May 27	Monday	Memorial Day
July 4	Thursday	Independence Day
September 2	Monday	Labor Day
November 11	Monday	Veteran's Day
November 28 & 29	Thursday & Friday	Thanksgiving
December 24 & 25	Tuesday & Wednesday	Christmas
January 1, 2020	Wednesday	New Year's

7. Rejection or Withdrawal

Submission of additional terms, conditions or agreements with the bid document are grounds for deeming a bid non-responsive and may result in bid rejection. Jefferson County reserves the right to reject any and all bids and to waive any informalities and minor irregularities or defects in bids. Bids may be withdrawn in person by a bidder or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the time set for receipt of bids. Bids are an irrevocable offer and may not be withdrawn within 90 days after opening date.

8. Emergency/Declared Disaster Requirements

In the event of an emergency or if Jefferson County is declared a disaster area, by the County, State, or Federal Government, this Acceptance of Offer may be subjected to unusual usage. Contractor shall service the county during such an emergency or declared disaster under the same terms and conditions that apply during non-emergency/disaster conditions. The pricing as specified in this Acceptance of Offer shall apply to serving the County's needs regardless of the circumstances. If Contractor is unable to supply the services under the terms of the Acceptance of Offer, then Contractor shall provide proof of such disruption and a copy of the invoice from Contractor's supplier(s). Additional profit margin as a result of supplying services during an emergency or declared disaster shall not be permitted. In the event that additional equipment, supplies, and materials are required during the declared disaster, additional shipping, handling and drayage fees may apply.

9. Award

The bid will be awarded to the responsible, responsive bidder(s) whose bid, conforming to the solicitation, will be most advantageous to Jefferson County – price and other factors considered. Unless otherwise specified in this IFB, Jefferson County reserves the right to accept a bid in whole or in part, and to award by item or by group, whichever is deemed to be in the best interest of Jefferson County. Any bidder who is in default to Jefferson County at the time of submittal of the bid shall have that bid rejected. Jefferson County reserves the right to clarify any contractual terms with the concurrence of the Contractor; however, any substantial nonconformity in the offer, as determined by Jefferson County, shall be deemed non-responsive and the offer rejected.

In evaluating bids, Jefferson County shall consider the qualifications of the bidders, and, where applicable, operating costs, delivery time, maintenance requirements, performance data, and guarantees of materials and equipment. In addition, Jefferson County may conduct such investigation as it deems necessary to

assist in the evaluation of a bid and to establish the responsibility, qualifications, and financial ability of the bidders to fulfill the contract.

Jefferson County reserves the right to award this contract on the basis of **lowest and best bid** in accordance with the laws of the State of Texas, to waive any formality or irregularity, to make awards to more than one offeror, and/or to reject any or all bids. In the event the lowest dollar offeror meeting specifications is not a awarded a contract, Offeror may appear before the Commissioners' Court and present evidence concerning Offeror responsibility after officially notifying the Office of the Purchasing Agent of Offeror's intent to appear.

10. Contract

A response to an IFB is an offer to contract with Jefferson County based upon the terms, conditions, and specifications contained in the IFB. Bids do not become contracts unless and until they are executed by Jefferson County, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the IFB, unless any of the terms and conditions is modified by an IFB Amendment, a Contract Amendment, or by mutually agreed terms and conditions in the contract documents.

11. Waiver of Subrogation

Bidder and bidder's insurance carrier waive any and all rights whatsoever with regard to subrogation against Jefferson County as an indirect party to any suit arising out of personal or property damages resulting from bidder's performance under this agreement.

12. Fiscal Funding

A multi-year contract (if requested by the specifications) continuing as a result of an extension option must include fiscal funding out. If, for any reason, funds are not appropriated to continue the contract, said contract shall become null and void.

13. Bid Results

Bid results are not provided in response to telephone inquiries. A preliminary tabulation of bids received will be posted on the Purchasing web page (http://co.jefferson.tx.us/ purchasing/main.htm) as soon as possible following bid opening. A final tabulation will be posted following bid award, and will also be available for review in the Purchasing Department.

14. Changes and Addenda to Bid Documents

Each change or addendum issued in relation to this IFB document will be on file in the Office of the Purchasing Agent, and will be posted on the Purchasing web site as soon as possible. It shall be the bidder's responsibility to make inquiry as to change or addenda issued, and to monitor the web site. All such changes or addenda shall become part of the contract and all bidders shall be bound by such addenda. Information on all changes or addenda issued will be available at the Office of the County Purchasing Agent.

15. Specifications

Unless otherwise stated by the bidder, the bid will be considered as being in accordance with Jefferson County's applicable standard specifications, and any special specifications outlined in the bid document. References to a particular trade name, manufacturer's catalogue, or model number are made for descriptive purposes to guide the bidder in interpreting the requirements of Jefferson County, and should not be construed as excluding bids on other types of materials, equipment, and supplies. However, the bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless departure or substitution is clearly noted and described in the bid. Jefferson County reserves the right to determine if equipment/ product being bid is an acceptable alternate. All goods shall be new unless otherwise so stated in the bid. Any unsolicited alternate bid, or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of the bid, may be considered non-responsive.

16. Delivery

Bids shall include all charges for delivery, packing, crating, containers, etc. Unless otherwise stated by the bidder (in writing on the included Bid Form), prices bid will be considered as being based on F.O.B. destination/delivered freight included.

17. Interpretation of Bid and/or Contract Documents

All inquiries shall be made within a reasonable time prior to the date and time fixed for the bid opening, in order that a written response in the form of an addendum, if required, can be processed before the bids are opened. Inquiries received that are not made in a timely fashion may or may not be considered.

18. Currency

Prices calculated by the bidder shall be stated in U.S. dollars.

19. Pricing

Prices shall be stated in units of quantity specified in the bid documents. In case of discrepancy in computing the amount of the bid, the unit price shall govern.

20. Notice to Proceed/Purchase Order

The successful bidder may not commence work under this contract until authorized to do so by the Purchasing Agent.

21. Certification

By signing the offer section of the Offer and Acceptance page, bidder certifies:

- The submission of the offer did not involve collusion or other anti-competitive practices.
- The bidder has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to any public servant in connection with the submitted offer.
- The bidder hereby certifies that the individual signing the bid is an authorized agent for the bidder and has the authority to bind the bidder to the contract.

22. Definitions

"County" – Jefferson County, Texas.

"Contractor" – The bidder whose proposal is accepted by Jefferson County.

23. Minority-Women Business Enterprise Participation

It is the desire of Jefferson County to increase the participation of Minority (MBE) and women-owned (WBE) businesses in its contracting and procurement programs. While the County does not have any preference or set aside programs in place, it is committed to a policy of equitable participation for these firms.

General Conditions of Bidding and Terms of Contract

By execution of this document, the vendor accepts all general and special conditions of the contract as outlined below and in the specifications and plans.

1. Bidding

1.1 Bids. All bids must be submitted on the bid form furnished in this package.

1.2 Authorized Signatures. The bid must be executed personally by the vendor, duly authorized partner of the partnership, or duly authorized officer of the corporation. If executed by an agent, a power of attorney or other evidence of authority to act on behalf of the vendor shall accompany the bid to become a valid bid.

1.3 Late Bids. Bids must be in the office of the Jefferson County Purchasing Agent before or at the specified time and date bids are due. Bids received after the submission deadline shall be rejected as non-responsive and returned unopened.

1.4 Withdrawal of Bids Prior to Bid Opening. A bid may be withdrawn before the opening date by submitting a written request to the Purchasing Agent. If time allows, the bidder may submit a new bid. Bidder assumes full responsibility for submitting a new bid before or at the specified time and date bids are due. Jefferson County reserves the right to withdraw a request for bids before the opening date.

1.5 Withdrawal of Bids after Bid Opening. Bidder agrees that its offer may not be withdrawn or cancelled by the vendor for a period of ninety (90) days following the date and time designated for the receipt of bids unless otherwise stated in the bid and/or specifications.

1.6 Bid Amounts. Bids shall show net prices, extensions where applicable and net total. In case of conflict between unit price and extension, the unit price will govern. Any ambiguity in the bid as a result of omission, error, unintelligible or illegible wording shall be interpreted in the favor of Jefferson County.

1.7 Exceptions and/or Substitutions. All bids meeting the intent of the specifications and plans will be considered for award. Vendors taking exception to the specifications and plans, or offering substitutions, shall state these exceptions in the section provided. If bid is made on an article other than the one specified, which a bidder considers comparable, the name and grade of said article must be specified in the bid and sufficient specifications and descriptive data must accompany same to permit thorough evaluation. The absence of stated exceptions and/or substitutions shall indicate that the vendor has not taken any exceptions to the specifications and shall be responsible to perform in strict accordance with the specifications. As a matter of practice, Jefferson County rejects exception(s) and /or substitutions as non-responsive but reserves the right to accept any and/or all of the exception(s) and/or substitution(s) deemed to be in the best interest of Jefferson County.

1.8 Alternates. The Invitation for Bid and/or specifications may expressly allow bidder to submit an alternate bid. Presence of such an offer shall not be considered an indication of non-responsiveness.

1.9 Descriptions. Unless otherwise specified, any reference to make, manufacturer and/or model used in the bid specifications is merely descriptive and not restrictive, and is used only to indicate type, style, or quality of material desired.

1.10 Bid Alterations. Bids cannot be altered or amended after submission deadline. Any interlineations, alterations, or erasures made before opening time must be initialed by the signer of the bid, guaranteeing authenticity.

1.11 Tax Exempt Status. Jefferson County is exempt from federal excise tax and state sales tax. Unless the bid form or specifications specifically indicate otherwise, the bid price must be net, exclusive of above-mentioned taxes and will be so construed. Therefore, the bid price shall not include taxes.

1.12 Quantities. Quantities indicated are estimated quantities only and are not a commitment to buy. Approximate usage does not constitute an order, but only implies the probable quantity that will be used. Commodities will be ordered on an as-needed basis. Bidder is responsible for accurate final counts.

1.13 Bid Award. Award of contract shall be made to the most responsible, responsive bidder, whose offer is determined to be the best value, taking into consideration the relative importance of price. Jefferson County reserves the right to be the sole judge as to whether items bid will serve the purpose intended.

Jefferson County reserves the right to accept or reject in part or in whole any bid submitted, and to waive any technicalities or informalities for the best interest of the County. Jefferson County reserves the right to award based upon individual line items, sections or total bid.

1.14 Silence of Specifications for Complete Units. All materials, equipment and/or parts that will become a portion of the completed work, including items not specifically stated herein but, necessary to render the service(s) complete and operational per the specifications, are to be included in the bid price. Vendor may be required to furnish evidence that the service, as bid, will meet or exceed these requirements.

1.15 Addenda. Any interpretations, corrections or changes to the specifications and plans will be made by addenda no later than forty-eight (48) hours prior to the bid opening. Addenda will be posted on the Purchasing web site. Vendors are responsible for monitoring the web site in order to remain informed on addenda. Vendors shall acknowledge receipt of all addenda with submission of bid.

1.16 General Bid Bond/Surety Requirements. Failure to furnish bid bond/surety, if requested, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.17 General Insurance Requirements. Failure to furnish Affidavit of Insurance, if required in these specifications, will result in bid being declared non-responsive. Non-responsive bids will not be considered for award.

1.18 Responsiveness. A responsive bid shall substantially conform to the requirements of this Invitation to Bid and/or specifications contained herein. Bidders who substitute any other terms, conditions, specifications and/or requirements or who qualify their bids in such a manner as to nullify or limit their liability to the contracting entity shall have their bids deemed non-responsive. Also, bids containing any clause that would limit contracting authority shall be considered non-responsive. Examples of non-responsive bids include but shall not be limited to: a) bids that fail to conform to required delivery schedules as set forth in the bid request; b) bids with prices qualified in such a manner that the bid price cannot be determined, such as with vague wording that may include "price in effect at the time of delivery," and c) bids made contingent upon award of other bids currently under consideration.

1.19 Responsible Standing of Bidder. To be considered for award, bidder must at least: have the ability to obtain adequate financial resources, be able to comply with required or proposed delivery/completion schedule, have a satisfactory record of performance; have a satisfactory record of integrity and ethics, and be otherwise qualified and eligible to receive award.

1.20 Confidential/Proprietary Information

If any material in the bid submission is considered by Bidder to be confidential or proprietary information (including manufacturing and/or design processes exclusive to the Bidder), Bidder **must** clearly mark the applicable pages of Bidder's bid submission to indicate each claim of confidentiality. Additionally, Bidder must include a statement on company letterhead identifying all Bid Submission section(s) and page(s) that have been marked as confidential. Jefferson County will protect from public disclosure such portions of a bid, unless directed otherwise by legal authority, including existing open records acts. Merely making a blanket claim that the entire bid submission is protected from disclosure because it contains some proprietary information is not acceptable, and will make the entire bid submission subject to release under the Texas Public Information Act.

By submitting a bid, Bidder agrees to reproduction by Jefferson County, without cost or liability, of any copyrighted portions of Bidder's bid submission or other information submitted by Bidder.

1.21 Public Bid Opening. Bidders are invited to be present at the opening of bids. After the official opening of bids, a period of not less than one week is necessary to evaluate bids. The amount of time necessary for bid evaluation may vary and is determined solely by the County. Following the bid evaluation, all bids submitted are available for public review.

2. Performance

2.1 Design, Strength, and Quality. Design, strength, and quality of materials and workmanship must conform to the highest standards of manufacturing and engineering practices. The apparent silence of specifications and/or plans as to any detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications and/or plans shall be made on the basis of this statement.

2.2 Age and Manufacture. All tangible goods being bid must be new and unused, unless otherwise specified, in first-class condition, of current manufacture, and furnished ready to use. All items not specifically mentioned that are required for a complete unit shall be furnished.

2.3 Delivery Location. All deliveries will be made to the address(es) specified on the purchase order during normal working hours of 8:00 a.m. to 4:00 p.m., Monday through Friday, unless otherwise authorized by the Purchasing Agent or designee.

2.4 Delivery Schedule. Delivery time may be an important consideration in the evaluation of best value. The maximum number of days necessary for delivery ARO shall be stated in the space, if provided, on the bid form.

2.5 Delivery Charges. All delivery and freight charges, F.O.B. destination shown on Jefferson County purchase order, as necessary to perform contract are to be included in the bid price.

2.6 Installation Charges. All charges for assembly, installation and set-up shall be included in the bid price. Unless otherwise stated, assembly, installation and set-up will be required.

2.7 Operating Instructions and Training. Clear and concise operating instructions and descriptive literature will be provided in English, if requested. On-site detailed training in the safe and efficient use and general maintenance of item(s) purchased shall be provided as needed at the request of Jefferson County. Instructions and training shall be at no additional cost to the County.

2.8 Storage. Bidder agrees to provide storage of custom ordered materials, if requested, for up to thirty (30) calendar days.

2.9 Compliance with Federal, State, County, and Local Laws. Bids must comply with all federal, state, county and local laws, including, but not limited to, all applicable standard safety, emission, and noise control requirements. Any vehicles or equipment shall contain all standard safety, emission, and noise control requirements required for the types and sizes of equipment at the time of their manufacture. The contractor agrees, during the performance of work or service, to comply with all applicable codes and ordinances of Jefferson County or the State of Texas as they may apply, as these laws may now read, or as they may hereafter be changed or amended.

2.10 OSHA. The bidder will certify all equipment complies with all regulations and conditions stipulated under the Williams-Steiger Occupational Safety and Health Act of 1971, as amended. The successful bidder will further certify that all items furnished under this project will conform and comply with federal and State of Texas OSHA standards. The successful bidder will agree to indemnify and hold harmless Jefferson County for any and all damages that may be assessed against the County.

2.11 Patents and Copyrights. The successful vendor agrees to protect the County from claims involving infringements of patents and/or copyrights.

2.12 Samples, Demonstrations and Testing. At Jefferson County's request and direction, bidder shall provide product samples and/or testing of items bid to ensure compliance with specifications. Samples, demonstrations and/or testing may be requested at any point prior to or following bid award. Samples, demonstrations and/or testing may be requested upon delivery and/or any point during the term of resulting contract. All samples (including return thereof), demonstrations, and/or testing shall be at the expense of the bidder/vendor.

2.13 Acceptability. All articles enumerated in the bid shall be subject to inspection by an officer designated for that purpose by Jefferson County. If found inferior to the quality called for, or not equal in value to the specifications, deficient in workmanship or otherwise, this fact shall be certified to the Purchasing Agent, who shall have the right to reject the whole or any part of the same. Items and/or work determined to be contrary to specifications must be replaced at the vendor's expense. Inferior items not retrieved by the vendor within thirty (30) calendar days, or an otherwise agreed upon time, shall become the property of the County. If disposal of such items warrants an expense, an amount equal to the disposal expense will be deducted from amounts payable to the vendor.

2.14 Maintenance. Maintenance required for equipment bid should be available in Jefferson County by a manufacturer authorized maintenance facility. Cost for this service shall be shown on the bid sheet as requested or on a separate sheet, as required. If Jefferson County opts to include maintenance, it shall be so stated in the purchase order and said cost will be included. Service will commence only upon expiration of applicable warranties and should be priced accordingly.

2.15 Material Safety Data Sheets. Under the "Hazardous Communications Act," common known as the "Texas Right to Know Act," a bidder must provide the user department, with each delivery, material safety data sheets which are applicable to hazardous substances defined in the Act. Failure of the bidder to furnish this documentation, will be cause to reject any bid applying thereto.

2.16 Evaluation. Evaluation shall be used as a determinant as to which services are the most efficient and/or most economical for the County. It shall be based on all factors having a bearing on price and performance of the items in the user environment. All bids are subject to tabulation by the Jefferson County Purchasing Department and recommendation to Jefferson County Commissioners' Court. Compliance with all bid requirements and needs of the using department are considered in evaluating bids. Pricing is not the only criteria for making a recommendation. The Jefferson County Purchasing Department reserves to right to contact any bidder, at any time, to clarify, verify or requirement information with regard to this bid.

3. Purchase Orders and Payment

3.1 Purchase Orders. A purchase order(s) shall be generated by the Jefferson County Purchasing Agent to the successful vendor. The purchase order number must appear on all itemized invoices and packing slips. The County will not be held responsible for any work orders placed and/or performed without a valid current purchase order number. Payment will be made for all services rendered and accepted by the contract administrator for which a valid invoice has been received.

3.2 Invoices. All invoices shall reference the Purchase Order number. Invoices shall reference the bid item number or a detailed description for each item invoiced. If an item purchased and itemized on the invoice does not correspond to an item in any of the categories awarded to the vendor, invoice shall reference the item as "N/C" to indicate that it is a non-contract item. This requirement is to assist the County in verifying contract pricing on all invoices. Payment will be made under terms of net thirty (30) days unless otherwise agreed upon by seller and the purchasing department.

3.3 Prompt Payment. In accordance with the State of Texas Prompt Payment Act, Article 601f V.T.C.S., payment will be made after receive and acceptance by the County of the merchandise ordered and of a valid invoice. Successful bidder(s) is required to pay subcontractors within ten (10) days after the successful bidder receives payment from the County.

3.4 Funding. Jefferson County is operated and funded on an October 1 to September 30 basis; accordingly, the County reserves the right to terminate, without liability to the County, any contract for which funding is not available.

4. Contract

4.1 Contract Definition. The General Conditions of Bidding and Terms of Contract, Specifications, Plans, Bidding Forms, Addenda, and any other documents made a part of this bid shall constitute the complete bid. This bid, when duly accepted by Jefferson County, shall constitute a contract equally binding between the successful bidder and Jefferson County.

4.2 Change Order. No different or additional terms will become part of this contract with the exception of a change order. No oral statement of any person shall modify or otherwise change, or affect the terms, conditions or specifications stated in the resulting contract. All change orders to the contract will be made in writing and at the discretion and approval of Jefferson County. No change order will be binding unless signed by an authorized representative of the County and the vendor.

4.3 Price Re-determination. A price re-determination may be requested at the time of annual renewal. All requests for price re-determination shall be in written form. Cause for such request, i.e., manufacturer's direct cost, postage rates, Railroad Commission rates, Federal/State minimum wage law, Federal/State unemployment taxes, F.I.C.A, Insurance Coverage Rates, etc., shall be substantiated in writing by the source of the cost increase. The bidder's past experience of honoring contracts at the bid price will be an important consideration in the evaluation of the lowest and best bid. Jefferson County reserves the right to accept or reject any/all requests for price re-determination as it deems to be in the best interest of the County.

4.4 Termination. Jefferson County reserves the right to terminate the contract for default if the bidder breached any of the terms therein, including warranties of bidder or if the bidder becomes insolvent or commits acts of bankruptcy. Such right of termination is in addition to and not in lieu of any other remedies which Jefferson County may have in law or equity. Default may be construed as, but not limited to, failure

to deliver the proper goods and/or service within the proper amount of time, and/or to properly perform any and all services required to Jefferson County's satisfaction and/or to meet all other obligations and requirements. Contracts may be terminated without cause upon thirty (30) days' written notice to either party unless otherwise specified. Jefferson County reserves the right to award canceled contract to the next lowest bidder. Bidder, in submitting this bid, agrees that Jefferson County shall not be liable to prosecution for damages in the event that the County declares the bidder in default.

4.5 Conflict of Interest. Employees of the County are not permitted to maintain financial interest in, or receive payment, directly or indirectly, borrow from, lend to, invest in, or engage in any substantial financial transaction with any individual, organization, supplier, or subcontractor who does business with the County without disclosure. When conflict of interest is discovered, it shall be grounds for termination of contract.

4.6 Injuries or Damages Resulting from Negligence. Successful vendor shall defend, indemnify and save harmless Jefferson County and all its officers, agents and employees from all suits, actions, or other claims of any character, name and description brought for or on account of any injuries or damages received or sustained by any person, persons, or property on account of any negligent act or fault of the successful vendor, or of any agent, employee, subcontractor or supplier in the execution of, or performance under, any contract which may result from bid award. Successful vendor shall pay any judgment with cost which may be obtained against Jefferson County growing out of such injury or damages.

4.7 Interest by Public Officials. No public official shall have interest in this contract, in accordance with Texas Local Government Code.

4.8 Warranty. The successful vendor shall warrant that all materials utilized in the performance of this contract shall conform to the proposed specifications and/or all warranties as stated in the Uniform Commercial Code and be free from all defects in material, workmanship and title.

4.9 Uniform Commercial Code. The successful vendor and Jefferson County agree that both parties have all rights, duties, and remedies available as stated in the Uniform Commercial Code.

4.10 Venue. This agreement will be governed and construed according to the laws of the State of Texas. This agreement is performable in the County of Jefferson, Texas.

4.11 Sale, Assignment, or Transfer of Contract. The successful vendor shall not sell, assign, transfer or convey this contract, in whole or in part, without the prior written consent of Jefferson County.

4.12 Silence of Specifications. The apparent silence of these specifications as to any detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail. All interpretations of these specifications shall be made on the basis of this statement.

5. Federal Emergency Management Agency (FEMA) Mandated Contract Clauses

If applicable to the work and services being performed by CONTRACTOR under the parties' AGREEMENT, the following provisions are adopted and form part of this AGREEMENT:

(A) DAMAGES, 2 CFR §200.326 Appendix II to Part 200 (A)

(1) All work to be performed under this AGREEMENT shall be timely commenced. A breach of this AGREEMENT by Contractor would cause substantial delay in the completion of the required services affecting the safety and welfare of the public.

(2) In the event of Contractor's breach of its performance obligations, County shall have all rights and remedies against Contractor as provided by law.

(B) TERMINATION RIGHTS, 2 CFR §200.326 Appendix II to Part 200 (B)

Termination for Convenience: Whenever the interests of the County so require, County may terminate the parties' Agreement, in whole or in part, for the convenience of the County. County shall give Contractor thirty (30) days prior written notice of termination specifying the portions of the Agreement to be terminated and when such termination will become effective. If only portions of the parties' agreement are terminated, Contractor has the right to withdraw from the parties' Agreement, without adverse action or claims. In the event of a termination for convenience by County, Contractor shall be entitled to payment for all work and services performed by it up to the effective date of such termination.

Termination for Cause: The County may, by written notice of default to Contractor, terminate the parties' Agreement, in whole or in part, if the Contractor fails to satisfactorily perform any provisions of the parties' agreement after a period of ten (10) following Contractor's receipt of a Notice of Deficiency provided by County.

(C) EQUAL EMPLOYMENT OPPORTUNITY CLAUSE (2 CFR §200.326 Appendix II to Part 200 (C))

If applicable to the work and services performed by CONTRACTOR under the AGREEMENT, during the performance of the AGREEMENT, CONTRACTOR shall comply with the Equal Employment Opportunity Clause (41 CFR 60-1.4(b)):

(1) CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, or national origin. Such action shall include, but not be limited to the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. AGREEMENTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

(2) CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, state that all qualified applicants will receive considerations for employment without regard to race, color, religion, sex, or national origin.

(3) CONTRACTOR will send to each labor union or representative of workers with which it has a collective bargaining agreement or other agreement or understanding, a notice to be provided advising the said labor union or workers' representatives of the CONTRACTOR'S commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) CONTRACTOR will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) CONTRACTOR will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor for purpose of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the CONTRACTOR'S noncompliance with the nondiscrimination clauses of this AGREEMENT or with any of the said rules, regulations or orders, this AGREEMENT may be canceled, terminated, or suspended in whole or in part and the CONTRACTOR may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) CONTRACTOR will include the portion of the sentence immediately preceding paragraph (1) and the provisions of subparagraphs 1 through 7 in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or contractor. CONTRACTOR will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: provided, however, that in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a subcontractor or contractor as a result of such direction by the administering agency the CONTRACTOR may request the United States to enter into such litigation to protect the interest of the United States.

D. DAVIS-BACON ACT AND COPELAND "ANTI-KICKBACK" ACT, 2 CFR §200.326 Appen. II to Part 200 (D)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(1) Bacon-Davis Act: Applicable to construction or repair of public buildings or public works. see FEMA Public Assistance Program and Policy Guide, Ch.2(V)(G)(2), page 32 (FP 104-009-2/January 2016);

(2) Copeland "Anti-Kickback" Act: In contracts subject to the Davis-Bacon Act, CONTRACTOR shall comply with the Copeland "Anti-Kickback" Act (40 U.S.C. §3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that the contractor and subcontractor must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The GOVERNMENT must report all suspected or reported violations to the appropriate Federal agency.

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT:

(a) CONTRACTOR shall comply with 18 U.S.C. § 874, 40 U.S.C. § 3145, and the requirements of 29 C.F.R. pt. 3 as may be applicable, which are incorporated by reference into this AGREEMENT.

(b) CONTRACTOR or subcontractor shall insert in any subcontract the clause above and such other clauses as FEMA may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The CONTRACTOR shall be responsible for the compliance by any subcontractor or lower tier subcontract with all of these contract clauses.

(c) A breach of the AGREEMENT clause above may be grounds for termination of the AGREEMENT, and for debarment as a contractor and subcontractor as provided in 29 C.F.R. §5.12.

E. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT, 2 CFR §200.326 Appendix II to Part 200 (E) (40 U.S.C. 3701-3708)

Contracts in excess of $100,000 that involve the employment of mechanics or laborers shall comply with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor and its subcontractors shall compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-halftimes the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation: liability for unpaid wages: liquidated damages. In the event of any violation of the clause set forth in paragraph (I) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (I) of this section, in the sum of $10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (I) of this section.

(3) Withholding for unpaid wages and liquidated damages. The GOVERNMENT shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) The contractor and subcontractor shall insert in any subcontract the clauses set forth in paragraphs (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts.

F. RIGHTS TO INVENTIONS MADE UNDER A CONTRACT OR AGREEMENT, 2 CFR §200.326 Appendix II to Part 200 (F)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT and if the Federal award meets the definition of "funding agreement" under 37 CFR §401.2 (a) and the GOVERNMENT wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the GOVERNMENT must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business."

G. CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT, 2 CFR §200.326 Appendix II to Part 200 (G)

CONTRACTOR shall comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q.) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

CONTRACTOR shall include the foregoing requirements in each subcontract exceeding $100,000.

H. ENERGY EFFICIENCY AND CONSERVATION, 2 CFR §200.326 Appendix II to Part 200 (H)

If applicable to the work and services performed by CONTRACTOR under the parties' AGREEMENT, CONTRACTOR shall comply with the mandatory standards and policies of the state regulation promulgated in accordance with the Energy Policy and Conservation Act (42 U.S.C. § 6201).

I. DEBARMENT AND SUSPENSION, 2 CFR §200.326 Appendix II to Part 200 (I)

(1) This AGREEMENT is a covered transaction for purposes of 2 C.F.R. pt. 180 and 2 C.F.R. pt. 3000. As such, the CONTRACTOR is required to verify that none of the contractor, its principals (defined at 2 C.F.R. § 180.995), or its affiliates (defined at 2 C.F.R. § 180.905) are excluded (defined at 2 C.F.R. § 180.940) or disqualified (defined at 2 C.F.R. § 180.935).

(2) The CONTRACTOR must comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C and must include a requirement to comply with these regulations in any lower tier covered transaction it enters into.

(3) This certification is a material representation of fact relied upon by GOVERNMENT. If it is later determined that the CONTRACTOR did not comply with 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C, in addition to remedies available to GOVERNMENT, the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

(4) The CONTRACTOR agrees to comply with the requirements of 2 C.F.R. pt. 180, subpart C and 2 C.F.R. pt. 3000, subpart C AGREEMENT is valid and throughout the period of performance. The CONTRACTOR further agrees to include a provision requiring such compliance in its lower tier covered transactions.

J. BYRD ANTI-LOBBYING AMENDMENT, 2 CFR §200.326 Appendix II to Part 200 (J)

CONTRACTOR must file with the GOVERNMENT the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. If not provided with the bid response, CONTRACTOR must complete and submit the Certification Regarding Lobbying Form.

K. PROCUREMENT OF RECOVERED MATERIALS, 2 CFR §200.326 Appendix II to Part 200 (K) and 2 CFR §200.322)

(1) In the performance of this contract, the Contractor shall make maximum use of products containing recovered materials that are EPA-designated items unless the product cannot be acquired-

(a) Competitively within a timeframe providing for compliance with the contract performance schedule;
(b) Meeting contract performance requirements; or
(c) At a reasonable price.

(2) Information about this requirement is available at EPA's Comprehensive Procurement Guidelines web site, http://www.epa.gov/cpg/. The list of EPA-designate items is available at http://www.epa.gov/cpg/products/htm.

L. AGREEMENTING WITH SMALL AND MINORITY BUSINESSES, WOMEN'S BUSINESS ENTERPRISES, AND LABOR SURPLUS AREA FIRMS (2 CFR §200.321)

Should the CONTRACTOR subcontract any of the work under this AGREEMENT, CONTRACTOR shall take the following affirmative steps: place qualified small and minority businesses and women's business enterprises on solicitation lists; assure that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources; divide total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises; establish delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and use the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

M. ACCESS TO RECORDS

(1) CONTRACTOR agrees to provide GOVERNMENT, the FEMA Administrator, the Comptroller General of the United States, or any of their authorized representatives' access to any books, documents, papers, and records of the Contractor which are directly pertinent to this AGREEMENT for the purposes of making audits, examinations, excerpts, and transcriptions.

(2) CONTRACTOR agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.

(3) CONTRACTOR agrees to provide the FEMA Administrator or his authorized representatives' access to construction or other work sites pertaining to the work being completed under the contract.

N. SEAL, LOGO AND FLAGS

CONTRACTOR shall not use the U.S. Department of Homeland Security's seal(s), logos, crests, or reproductions of flags or likenesses of the U.S. Department of Homeland Security's agency officials without specific FEMA preapproval.

O. COMPLIANCE WITH FEDERAL LAW, REGULATIONS AND EXECUTIVE ORDERS

This is an acknowledgement that FEMA financial assistance will be used to fund the AGREEMENT only. CONTRACTOR will comply will all federal law, regulations, executive orders, FEMA policies, procedures, and directives.

P. NO OBLIGATION BY FEDERAL GOVERNMENT

The Federal Government is not a party to this AGREEMENT and is not subject to any obligations or liabilities to GOVERNMENT, CONTRACTOR, or any other party pertaining to any matter resulting from the contract.

Q. PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

CONTRACTOR acknowledges that 31 U.S.C. Chap. 38 (Administrative Remedies for False Claims and Statements) applies to the CONTRACTOR'S actions pertaining to this contract.

Special Requirements/Instructions

The following requirements and instructions supersede General Requirements where applicable.

1. Bid Requirement

Each bidder shall ensure that required parts of the bid are completed with accuracy and submitted as per the requirements within this specifications packet, including any addenda.

Bidder is responsible for submitting one (1) *original* bid copy to include a completed copy of this specifications packet in its entirety; and Three (3) numbered bid *copies* to include at a minimum all pages requiring completion and/or marked with instructions to be returned with bid submission and any other documentation requested within these specifications.

All bids shall be tightly sealed in an opaque envelope or box and plainly marked "SEALED BID." The outside of the envelope or box shall also include: Bid Number, Bid Name, Bid Due Date, Bidder's Name and Address; and shall be addressed to the Purchasing Agent.

Jefferson County shall not be responsible for any effort or cost expended in the preparation of a response to this IFB. All protests should be coordinated through the Purchasing Office prior to award recommendation to Commissioners' Court.

2. Vendor Registration: SAM (System for Award Management).

Vendors doing business with Jefferson County are **required** to be registered with The System for Award Management (SAM), with an "active" status. The System for Award Management (SAM) is the Official U.S. Government system that consolidated the capabilities of CCR/FedReg, ORCA, and EPLS. There is NO fee to register for this site. Entities may register at no cost directly from the SAM website at: https://www.sam.gov

Bidders are strongly encouraged to review their firm's SAM (System for Award Management) status prior to Bid Submission.

3. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission)

In accordance with House Bill 1295 (passed January 1, 2016), Vendors entering into contracts and professional agreements with Jefferson County will be required to complete a Certificate of Interested Parties (FORM 1295), **unless contract is considered exempt as described below.**

In 2017, the Texas legislature amended the law to require Form 1295 to include an "unsworn declaration" which includes, among other things, the date of birth and address of the authorized representative signing the form. The unsworn declaration, including the date of birth and address of the signatory, replaces the notary requirement that applied to contracts entered into before January 1, 2018. The TEC filing application does not capture the date of birth or street address of the signatory and it will not appear on forms that are filed using the TEC filing application.

Changes to the law requiring certain businesses to file a Form 1295 are in effect for contracts entered into or amended on or after January 1, 2018. The changes exempt businesses from filing a Form 1295 for certain types of contracts and replace the need for a completed Form 1295 to be notarized. Instead, the person filing a 1295 needs to complete an "unsworn declaration."

FORM 1295 Exemptions: What type of contracts are exempt from the Form 1295 filing requirement under the amended law? The amended law adds to the list of types of contract exempt from the Form 1295 filing requirement. A completed Form 1295 is not required for:

- a sponsored research contract of an institution of higher education
- an interagency contract of a state agency or an institution of higher education
- a contract related to health and human services if: the value of the contract cannot be determined at the time the contract is executed; and o any qualified vendor is eligible for the contract
- a contract with a publicly traded business entity, including a wholly owned subsidiary of the business entity
- a contract with an electric utility, as that term is defined by Section 31.002, Utilities Code
- a contract with a gas utility, as that term is defined by Section 121.001, Utilities Code

3. Awarded Vendor(s): Submission of FORM 1295 (Texas Ethics Commission) – CONTINUED

Upon entering into a contract or professional agreement, the Jefferson County Purchasing Department will submit a request to the Vendor to both:

1. Submit a FORM 1295 online via the Texas Ethics Commission website link below.
Vendors must enter the required information on Form 1295, and print a copy of the completed form. The form will include a certification of filing that will contain a unique certification number.

2. Submit a FORM 1295 hard copy (completed & signed by an Authorized Agent of the Awarded Vendor), to the Jefferson County Purchasing Department.

FORM 1295, Completion Instructions, and Login Instructions are available via the Texas Ethics Commission Website at: https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm

4. Multiple Vendor Award

Jefferson County reserves the right to award this contract to more than one vendor at the County's discretion.

5. Delivery

If delivery is required, all items must be packaged so as to be protected from damage during shipping and handling. Any item(s) damaged in shipping must be replaced in kind, or repaired, by the contractor, at the discretion of, and at no additional charge to, Jefferson County.

6. Payment

Jefferson County will pay original invoices that clearly itemize the goods and/or services provided as to quantity, part number, description, price, applicable discount (if any), labor charges showing time differential, if applicable and if previously agreed to, and delivery, installation, and set-up costs, if applicable and if previously agreed to. Only charges as stated on the Bid Form(s) submitted as a part of the bid will be considered.

Invoices must indicate Jefferson County as applicable, the address to which the product(s) and/or service(s) were delivered, and the applicable purchase order number. Invoices will be matched to delivery tickets prior to payment; therefore, all delivery tickets should have an accurate description of the product(s) and/or service(s).

Invoices shall be submitted to: Jefferson County Auditing Department, Attention: Accounts Payable, 1149 Pearl Street, 7th floor, Beaumont, TX 77701.

7. Usage Reports

Jefferson County reserves the right to request, and receive at no additional cost, up to two (2) times during the contract period, a usage report detailing the products and/or services furnished to date under a contract resulting from this IFB. The reports must be furnished no later than five (5) working days after written request and itemize all purchases to date by Jefferson County department, description of each item purchased, including manufacturer, quantity of each item purchased, per unit and extended price of each item purchased, and total amount and price of all items purchased.

8. Insurance

The contractor (including any and all subcontractors as defined in Section 9.1.3 below) shall, at all times during the term of this contract, maintain insurance coverages with not less than the type and requirements shown below. Such insurance is to be provided at the sole cost of the contractor. These requirements do not establish limits of the contractor's liability.

All policies of insurance shall waive all rights of subrogation against the County, its officers, employees and agents; a copy of the policy wording or endorsement is required.

Contractor shall furnish Jefferson County with Certificate of Insurance naming Jefferson County as additional insured and will provide the actual policy wording or endorsement showing as such.

All insurance must be written by an insurer licensed to conduct business in the State of Texas.

Minimum Insurance Requirements:

Public Liability, including Products & Completed Operations	$1,000,000
Excess Liability	$1,000,000

Property Insurance (policy below that is applicable to this project):
Improvements & Betterments Policy: Improvements/Remodeling (for Lease Tenants)
Builder's Risk Policy: Structural Coverage for Construction Projects
Installation Floater Policy: Improvements/Alterations to Existing Structure

Workers' Compensation	Statutory Coverage (See Section 9 Below)

9. Workers' Compensation Insurance

9.1 Definitions:

9.1.1 **Certificate of coverage ("Certificate")** – A copy of a certificate of insurance, a certificate of authority to self-insure issued by the commission, or a coverage agreement, DWC-81, DWC-82, DWC-83, or DWC-84 showing statutory workers' compensation insurance coverage for the person's or entity's employees providing services on a project, for the duration of the project.

9.1.2 **Duration of the project** – Includes the time from the beginning of the work on the project until the contractor's/person's work on the project has been completed and accepted by the governmental entity.

9.1.3 **Persons providing services on the project ("subcontractor") in article 406.096** – Includes all persons or entities performing all or part of the services under the contractor has undertaken to perform on the project, regardless of whether that person contracted directly with the contractor and regardless of whether that person has employees. This includes, without limitation, independent contractors, subcontractor, leasing companies, motor carriers, owner-operators, employees of any such entity, or employees of any entity which furnishes persons to provide services on the project. "Services" includes, without limitation, providing, hauling or delivering equipment or materials, or providing labor, transportation, or other service related to a project. "Services" does not include activities unrelated to the project, such as food/beverage vendors, office supply deliveries, and delivery of portable toilets.

9.2 The Contractor shall provide coverage, based on proper reporting of classification code and payroll amounts and filing any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all employees of the contractor providing services on the project, for the duration of the project.

9.3 The Contractor must provide a certificate of coverage to the governmental entity prior to being awarded the contract – refer to Section 8 above.

9.4 If the coverage period shown on the Contractor's current certificate of coverage ends during the duration of the project, the Contractor must, prior to the end of the coverage period, file a new certificate of coverage with the governmental entity showing that coverage has been extended.

9.5 The Contractor shall obtain from each person providing services on a project, and provide to the governmental entity:

9.5.1 A certificate of coverage, prior to that person beginning work on the project, so the governmental entity will have on file certificates of coverage showing coverage for all persons providing services on the project; and

9.5.2 No later than seven (7) days after receipt by the Contractor, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate ends during the duration of the project.

9.6 The Contractor shall retain all required certificates of coverage for the duration of the project and for one (1) year thereafter.

9.7 The Contractor shall notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the contractor knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project.

9.8 The Contractor shall post on each project site a notice, in the text, form and manner prescribed by the Texas Department of Workers' Compensation, informing all persons providing services on the project that they are required to be covered, and stating how a person may verify coverage and report lack of coverage.

9.9 The Contractor shall contractually require each person with whom it contracts to provide services on a project to:

9.9.1 Provide coverage, based on reporting of classification codes and payroll amounts and filing of any coverage agreements, which meets the statutory requirements of Texas Labor Code, Section 401.011(44) for all its employees providing services on the project, for the duration of the project.

9.9.2 Provide to the Contractor, prior to that person beginning work on the project a certificate of coverage showing that coverage is being provided for all employees of the person providing services on the project, for the duration of the project.

9.9.3 Provide the Contractor, prior to the end of coverage period, a new certificate of coverage showing extension of coverage, if the coverage period shown on the current certificate of coverage ends during the duration of the project.

9.9.4 Obtain from each person with whom it contracts, and provide to the Contractor:

9.9.4.1 A certificate of coverage, prior to the other person beginning work on the project; and

9.9.4.2 the coverage period, if the coverage period shown on the current certificate of a new certificate of coverage showing extension of coverage, prior to the end of coverage ends during the duration of the project.

9.9.5 Retain all required certificates of coverage on file for the duration of the project and for one (1) year thereafter.

9.9.6 Notify the governmental entity in writing by certified mail or personal delivery, within ten (10) days after the person knew or should have known, of any change that materially affects the provision of coverage of any person providing services on the project; and

9.9.7 Contractually require each person with whom it contracts to perform as required by paragraphs 9.1. – 9.7., with the certificates of coverage to be provided to the person for whom they are providing services.

9.10 By signing this contract or providing or causing to be provided a certificate of coverage, the Contractor is representing to the governmental entity that all employees of the contractor who will provide services of the project will be covered by workers' compensation coverage for the duration of the project, that the coverage will be based on proper reporting of classification codes and payroll amounts, and that all coverage agreements will be filed with the appropriate insurance carrier or, in the case of a self-insured, with the commission's Division of Self-Insurance Regulation. Providing false or misleading information may subject the contractor to administrative penalties, criminal penalties, civil penalties, or other civil actions.

9.11 The Contractor's failure to comply with any of these provisions is a breach of contract by the Contractor which entitles the governmental entity to declare the contract void if the Contractor does not remedy the breach within ten (10) days after receipt of notice of breach from the governmental entity.

Minimum Specifications

The following requirements and specifications supersede General Requirements where applicable.

Questions or comments relating to bid submission requirements should be directed to Jamey West, Assistant Purchasing Agent at 409-835-8593 or jwest@co.jefferson.tx.us
Please reference bid number **IFB 19-021/JW**.

Questions or comments relating to plans and specifications should be directed to Dohn H. LaBiche, FAIA at 409-860-0197 or dlabiche@labiche.com
Please reference bid number **IFB 19-021/JW**.

Scope

FURNISH ALL MATERIALS AND LABOR FOR THE CONSTRUCTION OF A NEW CONCESSION STAND TO BE LOCATED AT FORD FIELDS.

OFFER AND ACCEPTANCE FORM

OFFER TO CONTRACT

To Jefferson County:

We hereby offer and agree to furnish the materials or service in compliance with all terms, conditions, specifications, and amendments in the Invitation for Bid and any written exceptions in the offer. We understand that the items in this Invitation for Bid, including, but not limited to, all required certificates are fully incorporated herein as a material and necessary part of the contract.

The undersigned hereby states, under penalty of perjury, that all information provided is true, accurate, and complete, and states that he/she has the authority to submit this bid, which will result in a binding contract if accepted by Jefferson County.

We acknowledge receipt of the following amendment(s): _____, _____, _____, _____.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder:

_____
Company Name

_____
Address

_____
City State Zip

_____
Signature of Person Authorized to Sign

_____
Printed Name

_____
Title

For clarification of this offer, contact:

_____
Name

_____
Phone Fax

_____
E-mail

Bidder Shall Return Completed Form with Offer.

Bidder Information Form

Instructions: Complete the form below. Please provide legible, accurate, and complete contact information. PLEASE PRINT.

Bid Number & Name: (IFB 19-021/JW), Ford Fields Concession Stand

Bidder's Company/Business Name: _____

Bidder's TAX ID Number: _____

Contact Person: _____ **Title:** _____

Phone Number (with area code): _____

Alternate Phone Number if available (with area code): _____

Fax Number (with area code): _____

Email Address: _____

Mailing Address (Please provide a physical address for bid bond return, if applicable):

_____
Address

_____
City, State, Zip Code

Acceptance of Offer

The Offer is hereby accepted for Jefferson County Invitation for Bid (IFB 19-021/JW), Ford Fields Concession Stand.

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the Invitation for Bid, including all terms, conditions, specifications, amendments, etc., and the Contractor's Offer as accepted by Jefferson County.

This contract shall henceforth be referred to as Contract No. 19-021/JW, Ford Fields Concession Stand. The Contractor has not been authorized to commence any billable work or to provide any material or service under this contract until Contractor receives a purchase order and/or a notice to proceed from the Jefferson County Purchasing Agent.

Countersigned:

Jeff R. Branick
County Judge

Date

Attest:

Carolyn L. Guidry
County Clerk

Bidder Shall Return Completed Form with Offer.

Bid Form

Bidder proposes to furnish all labor, material and equipment, and to perform all work necessary to construct the **Ford Fields Concession Stand** including Mechanical, Plumbing and Electrical Work, in accordance with drawings and specifications prepared by The LaBiche Architectural Group, Inc., for the following sum:

Materials Bid Amount: $_____.____

Materials Bid Amount Written in Words:

_____dollars and _____ /100

Labor Bid Amount: $_____.____

Labor Bid Amount Written in Words:

_____dollars and _____ /100

Total Base Bid Amount: $_____.____

Total Base Bid Amount Written in Words:

_____dollars and _____ /100

Bidder has examined the site of the Work and the nature and kind of work to be performed and has informed themselves of all local conditions and other things that might affect the cost or difficulty of performing the Work, and Bidder represents and warrants that they have experience in the use of materials and methods of performance specified, and that they can and will do the Work and construct the improvements with the specified materials as contemplated and indicated by the Drawings and Specifications.

Upon receipt of notice of acceptance of our bid, Bidder agrees to execute the Contract within 10 (ten) days after such notice, deliver Performance and Payment Bonds for the faithful performance of the Work, to begin work on or before the date of commencement of the Work established in the Notice to Proceed, and to complete the Work in _____ calendar days.

Bidder hereby agrees to commence work under this contract on or before a date to be specified in a written "Notice to Proceed" of the Owner and to fully complete the project on or before the date of completion shown on the "Notice to Proceed". Bidder further agrees to pay as liquidated damages, the sum of **$300.00** for each consecutive calendar day thereafter.

Acknowledgment of Addenda (if any):

Addendum 1 _____ Date Received_____

Addendum 2 _____ Date Received_____

Addendum 3 _____ Date Received_____

Bidder Shall Return Completed Form with Offer.

Vendor References

Please list at least three (3) companies or governmental agencies (preferably a municipality) where the same or similar products and/or services as contained in this specification package were recently provided.

THIS FORM MUST BE RETURNED WITH YOUR BID.

REFERENCE ONE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE TWO

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

REFERENCE THREE

Government/Company Name: _____

Address: _____

Contact Person and Title: _____

Phone: _____ Fax: _____

Email Address: _____ Contract Period: _____

Scope of Work: _____

Bidder Shall Return Completed Form with Offer.

Signature Page

As permitted under Article 4413 (32c) V.A.C.S., other governmental entities may wish to participate under the same terms and conditions contained in this contract (i.e., piggyback). In the event any other entity participates, all purchase orders will be issued directly from and shipped directly to the entity requiring supplies/services. Jefferson County shall not be held responsible for any orders placed, deliveries made or payment for supplies/services ordered by another entity. Each entity reserves the right to determine their participation in this contract.

Would bidder be willing to allow other governmental entities to piggyback off this contract, if awarded, under the same terms and conditions?..... **Yes** ☐ **No** ☐

This bid shall remain in effect for ninety (90) days from bid opening and shall be exclusive of federal excise and state and local sales tax (exempt).

The undersigned agrees, if this bid is accepted, to furnish any and all items upon which prices are offered, at the price and upon the terms and conditions contained in the Invitation for Bid, Conditions of Bidding, Terms of Contract, and Specifications and all other items made a part of the accepted contract.

The undersigned affirms that they are duly authorized to execute the contract, that this company, corporation, firm, partnership or individual has not prepared this bid in collusion with any other bidder, and that the contents of this bid as to prices, terms or conditions of said bid have not been communicated by the undersigned nor by any employee or agent to any other bidder or to any other person(s) engaged in this type of business prior to the official opening of this bid. And further, that neither the bidder nor their employees nor agents have been for the past six (6) months directly nor indirectly concerned in any pool or agreement or combination to control the price of goods or services on, nor to influence any person to bid or not to bid thereon.

Bidder (Entity Name)	Signature
Street & Mailing Address	Print Name
City, State & Zip	Date Signed
Telephone Number	Fax Number
E-mail Address	

Bidder Shall Return Completed Form with Offer.

Conflict of Interest Questionnaire

CONFLICT OF INTEREST QUESTIONNAIRE — FORM CIQ

For vendor doing business with local governmental entity

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This questionnaire is being filed in accordance with Chapter 176, Local Government Code, by a vendor who has a business relationship as defined by Section 176.001(1-a) with a local governmental entity and the vendor meets requirements under Section 176.006(a).

By law this questionnaire must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the vendor becomes aware of facts that require the statement to be filed. *See* Section 176.006(a-1), Local Government Code.

A vendor commits an offense if the vendor knowingly violates Section 176.006, Local Government Code. An offense under this section is a misdemeanor.

OFFICE USE ONLY

Date Received

1 **Name of vendor who has a business relationship with local governmental entity.**

2 ☐ **Check this box if you are filing an update to a previously filed questionnaire.**

(The law requires that you file an updated completed questionnaire with the appropriate filing authority not later than the 7th business day after the date on which you became aware that the originally filed questionnaire was incomplete or inaccurate.)

3 **Name of local government officer about whom the information in this section is being disclosed.**

_____
Name of Officer

This section (item 3 including subparts A, B, C, & D) must be completed for each officer with whom the vendor has an employment or other business relationship as defined by Section 176.001(1-a), Local Government Code. Attach additional pages to this Form CIQ as necessary.

A. Is the local government officer named in this section receiving or likely to receive taxable income, other than investment income, from the vendor?

☐ Yes ☐ No

B. Is the vendor receiving or likely to receive taxable income, other than investment income, from or at the direction of the local government officer named in this section AND the taxable income is not received from the local governmental entity?

☐ Yes ☐ No

C. Is the filer of this questionnaire employed by a corporation or other business entity with respect to which the local government officer serves as an officer or director, or holds an ownership interest of one percent or more?

☐ Yes ☐ No

D. Describe each employment or business and family relationship with the local government officer named in this section.

4

_____ _____
Signature of vendor doing business with the governmental entity Date

Adopted 8/7/2015

Bidder Shall Return Completed Form with Offer.

Local Government Officer
Conflicts Disclosure Statement - OFFICE USE ONLY

LOCAL GOVERNMENT OFFICER CONFLICTS DISCLOSURE STATEMENT

FORM CIS

This questionnaire reflects changes made to the law by H.B. 23, 84th Leg., Regular Session.

This is the notice to the appropriate local governmental entity that the following local government officer has become aware of facts that require the officer to file this statement in accordance with Chapter 176, Local Government Code.

OFFICE USE ONLY

Date Received

1 **Name of Local Government Officer**

2 **Office Held**

3 **Name of vendor described by Sections 176.001(7) and 176.003(a), Local Government Code**

4 **Description of the nature and extent of employment or other business relationship with vendor named in item 3**

5 **List gifts accepted by the local government officer and any family member, if aggregate value of the gifts accepted from vendor named in item 3 exceeds $100 during the 12-month period described by Section 176.003(a)(2)(B).**

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

Date Gift Accepted _____ Description of Gift _____

(attach additional forms as necessary)

6 **AFFIDAVIT**

I swear under penalty of perjury that the above statement is true and correct. I acknowledge that the disclosure applies to each family member (as defined by Section 176.001(2), Local Government Code) of this local government officer. I also acknowledge that this statement covers the 12-month period described by Section 176.003(a)(2)(B), Local Government Code.

_____
Signature of Local Government Officer

AFFIX NOTARY STAMP / SEAL ABOVE

Sworn to and subscribed before me, by the said _____, this the _____ day of _____, 20_____, to certify which, witness my hand and seal of office.

_____ _____ _____
Signature of officer administering oath | Printed name of officer administering oath | Title of officer administering oath

Adopted 8/7/2015

Good Faith Effort (GFE) Determination Checklist

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/sub-consultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions: In order to determine if a "Good Faith Effort" was made in soliciting HUBs for subcontracting opportunities, the following checklist and supporting documentation shall be completed by the Prime Contractor/Consultant, and returned with the Prime Contractor/ Consultant's bid. This list contains the **minimum** efforts that should be put forth by the Prime Contractor/Consultant when attempting to achieve or exceed the goals of HUB Subcontractor participation. The Prime Contractor/Consultant may extend his/her efforts in soliciting HUB Subcontractor participation beyond what is listed below.

Did the Prime Contractor/Consultant . . .

☐ Yes ☐ No 1. To the extent practical, and consistent with standard and prudent industry standards, divide the contract work into the smallest feasible portions, to allow for maximum HUB Subcontractor participation?

☐ Yes ☐ No 2. **Notify** in writing a reasonable number of HUBs, allowing sufficient time for effective participation of the planned work to be subcontracted?

☐ Yes ☐ No 3. **Provide** HUBs that were genuinely interested in bidding on a subcontractor, adequate information regarding the project (i.e., plans, specifications, scope of work, bonding and insurance requirements, and a point of contract within the Prime Contractor/Consultant's organization)?

☐ Yes ☐ No 4. **Negotiate** in good faith with interested HUBs, and not reject bids from HUBs that qualify as lowest and responsive bidders?

☐ Yes ☐ No 5. **Document** reasons HUBs were rejected? Was a written rejection notice, including the reason for rejection, provided to the rejected HUBs?

☐ Yes ☐ No 6. If Prime Contractor/Consultant has zero (0) HUB participation, **please explain the reasons why.**

If "No" was selected, please explain and include any pertinent documentation with your bid. If necessary, please use a separate sheet to answer the above questions.

Printed Name of Authorized Representative	Signature
Title	Date

Bidder Shall Return Completed Form with Offer.

101

Notice of Intent (NOI) to Subcontract with Historically Underutilized Business (HUB)

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/sub-consultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Instructions for Prime Contractor/Consultant: Bidder shall submit this form with the bid; however, the information below may be submitted after contract award, but prior to beginning performance on the contract. Please submit one form for each HUB Subcontractor/Sub-consultant with proper signatures, per the terms and conditions of your contract.

Contractor Name: _____ HUB: ☐ Yes ☐ No

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Project Title & No.: _____

Prime Contract Amount: $ _____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

_____ _____ _____
Printed Name of Contractor Representative Signature of Representative Date

_____ _____ _____
Printed Name of HUB Signature of Representative Date

NOTE: NOTHING ON THIS NOTICE OF INTENT FORM IS INTENDED TO CONFER ANY RIGHTS, EXPRESSED OR IMPLIED, TO ANY THIRD PARTIES.

Pre-Approval for Subcontractor Substitutions must be obtained from the Jefferson County Purchasing Agent's Representative. The "HUB Subcontractor/Sub-consultant Change Form" must be completed and faxed to 409-835-8456.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

This information must be submitted with your bid.

Bidder intends to utilize subcontractors/sub-consultants in the fulfillment of this contract (if awarded).
☐ Yes ☐ No

Prime Contractor: _____ HUB: ☐ Yes ☐ No

HUB Status (Gender & Ethnicity): _____

Address: _____
Street City State Zip

Phone (with area code): _____ Fax (with area code): _____

Project Title & No.: _____ IFB/RFP No.: _____

Total Contract: $ _____ Total HUB Subcontract(s): $ _____

Construction HUB Goals: 12.8% MBE:: _____ % 12.6% WBE: _____ %

Sub-goals: 1.7 African-American, 9.7% Hispanic, 0.7% Native American, 0.8% Asian American.
Use these goals as a guide to diversify.

FOR HUB OFFICE USE ONLY:

Verification date HUB Program Office reviewed and verified HUB Sub information Date: _____ Initials: _____

PART I. HUB SUCONTRACTOR DISCLOSURE

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Texas Bldg & Procurement Comm. ☐ Texas Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB) Subcontracting Participation Declaration Form

HUB SUBCONTRACTOR DISCLOSURE

PART I: Continuation Sheet **(Duplicate as Needed)**

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

HUB Subcontractor Name: _____

HUB Status (Gender & Ethnicity): _____

Certifying Agency: ☐ Tx. Bldg & Procurement Comm. ☐ Jefferson County ☐ Tx Unified Certification Prog.

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

All HUB Subcontractor Participation may be verified with the HUB Subcontractor(s) listed on Part I.

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB) Subcontracting Participation Declaration Form

PART II: STATEMENT OF NON-COMPLIANCE FOR NOT MEETING HUB SUBCONTRACTING GOALS

Please complete Good Faith Effort (GFE) Checklist and attach any supporting documentation.

Our firm was unable to meet the HUB goals for this project for the following reasons:

- ☐ All subcontractors to be utilized are "Non-HUBs." *(Complete Part III)*
- ☐ HUBs were solicited but did not respond.
- ☐ HUBs solicited were not competitive.
- ☐ HUBs were unavailable for the following trade(s):
- ☐ Other: _____

Was the Jefferson County HUB Office contacted for assistance in locating HUBs? ☐ Yes ☐ No

PART III: DISCLOSURE OF OTHER "NON-HUB" SUBCONTRACTS

The bidder shall use this area to provide a listing of all "Non-HUB" Subcontractors, including suppliers, that will perform under this project. A list of those "Non-HUB" Subcontractors the bidder selects, after bid submission, shall be provided to the Purchasing Office not later than five (5) calendar days after being notified that bidder is the apparent low bidder. A list of those "Non-HUB" Subcontractors that are selected after contract award must be provided **immediately** after their selection.

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $ _____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

Bidder Shall Return Completed Form with Offer.

Historically Underutilized Business (HUB)
Subcontracting Participation Declaration Form

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $_____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

Subcontractor Name: _____

Address: _____
Street City State Zip

Contact person: _____ Title: _____

Phone (with area code): _____ Fax (with area code): _____

Proposed Subcontract Amount: $_____ Percentage of Prime Contract: _____ %

Description of Subcontract Work to be Performed: _____

_____

I hereby certify that I have read the *HUB Program Instructions and Information*, truthfully completed all applicable parts of this form, and **attached any necessary support documentation as required**. I fully understand that intentionally falsifying information on this document may result in my not receiving a contract award or termination of any resulting contract.

Name (print or type): _____

Title: _____

Signature: _____

Date: _____

E-mail address: _____

Contact person that will be in charge of invoicing for this project:

Name (print or type): _____

Title: _____

Date: _____

E-mail address: _____

Bidder Shall Return Completed Form with Offer.

Residence Certification/Tax Form

Pursuant to Texas Government Code §2252.001 *et seq.*, as amended, Jefferson County requests Resident Certification. §2252.001 *et seq.* of the Government Code provides some restrictions on the awarding of governmental contracts; pertinent provisions of §2252.001 are stated below:

(3) "Nonresident bidder" refers to a person who is not a resident.

(4) "Resident bidder" refers to a person whose principal place of business is in this state, including a contractor whose ultimate parent company or majority owner has its principal place of business in this state.

I certify that _____ [company name] is a Resident Bidder of Texas as defined in Government Code §2252.001.

I certify that _____ [company name] is a Nonresident Bidder as defined in Government Code §2252.001 and our principal place of business is _____ _____ (city and state).

Taxpayer Identification Number (T.I.N.):	
Company Name submitting bid/proposal:	
Mailing address:	
If you are an individual, list the names and addresses of any partnership of which you are a general partner:	

Property: List all taxable property owned by you or above partnerships in Jefferson County.

Jefferson County Tax Acct. No.*	Property address or location**

* This is the property amount identification number assigned by the Jefferson County Appraisal District.

** For real property, specify the property address or legal description. For business property, specify the address where the property is located. For example, office equipment will normally be at your office, but inventory may be stored as a warehouse or other location.

Bidder Shall Return Completed Form with Offer.

Bid Affidavit

The undersigned certifies that the bid prices contained in this bid have been carefully reviewed and are submitted as correct and final. Bidder further certifies and agrees to furnish any and/or all commodities upon which prices are extended at the price offered, and upon the conditions contained in the specifications and the Notice to Bidders.

STATE OF_____ COUNTY OF_____

BEFORE ME, the undersigned authority, a Notary Public in and for the State of _____,

on this day personally appeared _____, who
(name)
after being by me duly sworn, did depose and say:

"I, _____ am a duly authorized officer of/agent
(name)
for _____ and have been duly authorized to execute the
(name of firm)
foregoing on behalf of the said_____.
(name of firm)

I hereby certify that the foregoing bid has not been prepared in collusion with any other bidder or other person or persons engaged in the same line of business prior to the official opening of this bid. Further, I certify that the bidder is not now, nor has been for the past six (6) months, directly or indirectly concerned in any pool or agreement or combination, to control the price of services/commodities bid on, or to influence any person or persons to bid or not to bid thereon."

Name and address of bidder:_____

_____

Fax: _____ Telephone#_____

by: _____ Title:_____
(print name)

Signature:_____

SUBSCRIBED AND SWORN to before me by the above-named

_____ on

this the _____ day of_____, 20___.

_____
Notary Public in and for
the State of _____

Bidder Shall Return Completed Form with Offer.

111

House Bill 89 Verification

I, _____, the undersigned representative of (company or business name)_____
(heretofore referred to as company) being an adult over the age of eighteen (18) years of age, after being duly sworn by the undersigned notary, do hereby depose and verify under oath that the company named above, under the provisions of Subtitle F, Title 10, Government Code Chapter 2270:

1. Does not boycott Israel currently; and

2. Will not boycott Israel during the term of the contract.

Pursuant to Section 2270.001, Texas Government Code:

1. "Boycott Israel" means refusing to deal with, terminating business activities with, or otherwise taking any action that is intended to penalize, inflict economic harm on, or limit commercial relations specifically with Israel, or with a person or entity doing business in Israel or in an Israeli-controlled territory, but does not include an action made ordinary business purposes; and

2. "Company" means a for-profit sole proprietorship, organization, association, corporation, partnership, joint venture, limited partnership, limited liability partnership, or an limited liability company, including a wholly owned subsidiary, majority-owned subsidiary, parent company or affiliate of those entities or business association that exist to make a profit.

_____
Signature of Company Representative

_____
Date

On this _____ day of _____, 20____, personally appeared

_____, the above named person, who after by me being duly sworn, did swear and confirm that the above is true and correct.

Notary Seal

_____
Notary Signature

_____
Date

Bidder Shall Return Completed Form with Offer.

Senate Bill 252 Certification

On this day, I, Deborah L. Clark, Purchasing Agent for Jefferson County, Texas, pursuant to Texas Government Code, Chapter 2252, Section 2252.152 and Section 2252.153, certify that I did review the website of the Comptroller of the State of Texas concerning the listing of companies that is identified under Section 806.051, Section 807.051, or Section 2253.253 and I have ascertained that the below named company is not contained on said listing of companies which do business with Iran, Sudan, or any Foreign Terrorist Organization.

_____
Company Name

_____
IFB/RFP/RFQ number

Certification check performed by:

_____
Purchasing Representative

_____
Date

Bidder Shall Return Completed Form with Offer.

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we the undersigned,_____
_____
as PRINCIPAL, AND_____
_____,

as SURETY are held and firmly bound unto Commissioners' Court of Jefferson County hereinafter called the "Owner," in the penal sum of_____
_____Dollars, ($_____),
lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that Whereas the Principal has submitted the Accompanying Bid, dated _____, 20___, for FORD FIELDS CONCESSION STAND, BEAUMONT, TEXAS.

NOW, THEREFORE, if the Principal shall not withdraw said Bid within the period specified therein after the opening of the same, or, if no period be specified, within thirty (30) days after the said opening, and shall within the period specified therefore, or if no period be specified, within ten (10) days after the prescribed forms are presented to him for signature, enter into a written Contract with the Owner in accordance with the Bid as accepted, and give bond with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such contract; or in the event of the withdrawal of said Bid within the period specified, or the failure to enter into such Contract and give such bond within the time specified, if the Principal shall pay the Owner the difference between the amount specified in said Bid and the amount for which the Owner may procure the required work or supplies or both, if the latter be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and virtue.

IN WITNESS THEREOF, the above-bounded parties have executed this instrument under their several seals this _____ day of _____, 20__, the name and corporate seal of each corporate party being hereto affixed and these present signed by its undersigned representative, pursuant to authority of its governing body.

_____ (SEAL)

_____

_____ _____ (SEAL)

_____

Attest: By: _____

_____ _____

_____

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

By: _____ Affix Corporate Seal

_____ _____

Attest:

_____ _____

By: _____ Affix Corporate Seal

Countersigned

by _____

*Attorney-in-Fact, State of _____

CERTIFICATE AS TO CORPORATE PRINCIPAL

I, _____ , certify that I am the_____,

_____ , Secretary of the Corporation named as

Principal in the within bond; that_____,
who signed the said bond on behalf of the Principal was then _____ of said corporation; that I know his signature, and his signature thereto is genuine; and that said bond was duly signed, sealed, and attested to for and in behalf of said corporation by authority of this governing body.

_____ (Corporate Seal)

Title _____

* Power-of-attorney for person signing for surety company must be attached to bond.

117

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

INDEX OF DRAWINGS

ARCHITECTURAL

A0.0	COVER SHEET
A0.1	SITE PLAN
A1.0	FLOOR PLAN
A1.1	EQUIPMENT PLAN
A2.0	SCHEDULES
A2.1	INTERIOR ELEVATIONS
A3.0	EXTERIOR ELEVATIONS
A4.0	BUILDING SECTIONS
A5.0	WALL SECTIONS
A6.0	DETAILS
A7.0	REFLECTED CEILING PLAN
AH.1	ACCESSIBILITY STANDARDS

STRUCTURAL

S1	GENERAL NOTES
S2	FOUNDATION PLAN, DETAILS, & ROOF SCHEMATIC FRAMING PLAN

CIVIL

C2.1	GRADING & DIMENSIONAL PLAN
C3.1	UTILITY PLAN AND DETAILS

MECHANICAL, PLUMBING & ELECTRICAL

ME-1.0	ELECTRICAL SITE PLAN
ME-2.0	PLUMBING PLAN
ME-2.1	PLUMBING SCHEDULES & DETAILS
ME-2.2	PLUMBING RISERS
ME-3.0	MECHANICAL PLAN
ME-3.1	MECHANICAL DETAILS
ME-3.2	MECHANICAL SCHEDULES
ME-4.0	ELECTRICAL POWER & EQUIPMENT PLANS
ME-4.1	ELECTRICAL HVAC PLAN & PANEL SCHEDULES
ME-4.2	ELECTRICAL LIGHTING & SPECIAL SYSTEM PLANS

END OF INDEX OF DRAWINGS

SECTION 010100 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. The project is located at 5115 IH-10 South, in Beaumont, Texas.

B. The Work of this Contract consists of the furnishing of all labor, materials, services, equipment and appliances as indicated in the Drawings and Specifications.

1. **Base Bid:** Construct a new concession stand on the grounds of Ford Park Fields.

C. The Drawings and Specifications do not necessarily indicate or describe all Work required for completion of the Project. Contractor shall provide and install all incidentals reasonably inferable from the Contract Documents that are required for a complete Project.

D. These documents describe the essential elements sufficiently to determine the scope of the Project.

E. Provide all items required for complete operating systems including items not necessarily shown in these documents, but that can be reasonably inferred as being required for the complete operating system.

F. The Drawings and Specifications indicate the basic quality of materials and quality of construction required for the entire project.

G. Site Inspection: Offers' can access the site at any day and time. Access to the Sub Courthouse requires contacting County Maintenance Supervisor Mark Bernard at (409) 466-1790.

H. Inquiries Concerning Proposal and Contract Documents: Prior to submitting a proposal, technical questions concerning the proposal documents shall be directed to:

The LaBiche Architectural Group, Inc.
7999 Gladys Avenue, Suite 101
Beaumont, Texas 77706
dlabiche@labiche.com
Tel: 409/860-0197
Fax: 409/860-0198

1.02 RELATED DOCUMENTS

General Conditions, Supplementary General Conditions, Forms, Specification Sections found in Division 01 through Division 16, and all Drawings apply to Work specified in this Section.

1.03 CONTRACT

A. The Contract will be executed as a lump-sum agreement on the forms provided.

B. Employ subcontractors for the disconnection, re-connection and installation of all mechanical and electrical Work in conjunction with all Work required, or implied, to be performed by licensed mechanics of these disciplines:
   1. Subcontractors of Contractor shall furnish to Contractor bonds covering faithful performance of subcontract Work and payment of all obligations there under, when Contractor is required to furnish such bonds to the Owner.
   2. Subcontractors of Contractor shall purchase and maintain liability insurance as will protect him from claims, for not less than limits of liability which Contractor is required to provide to Owner.
   3. The Contractor shall include in Contract Amount costs of supervision, coordination and monitoring Work of his selected Subcontractors.

1.04 CONTRACTOR'S USE OF PREMISES

A. Bidders are notified of the following days and hours of operation for all construction activities associated with the construction of the Concession Stand:
   a. Monday – no restrictions on work hours.
   b. Tuesday, Wednesday, Thursday & Friday – no work after 5:00 PM.
   c. Saturday & Sunday - no work without permission of the owner.
   d. Any power outages required for construction shall be coordinated with the owner one week prior to the scheduled outage.

B. Contractor shall be responsible for monitoring the use of premises by Contractor's employees and Subcontractors.

C. Access routes for delivery of materials and equipment shall be as indicated by Owner. Do not use access routes other than those indicated without written permission of the Owner.

D. Assume full responsibility for the protection and safekeeping of Products under this Contract, stored on the site. Store materials and products only in those areas indicated for staging.

E. Protect existing lawns, sidewalks, pavements, curbs and utilities subject to damage by Work under this Contract. Repair or replace any existing Work damaged by the Contractor.

F. Parking areas for Contractor's personnel shall be on the project site to the extent it does not interfere with on-going contract Work and in areas designated by the Owner.

1.05 WORK ON PROPERTY

A. Obtain and pay all fees required applicable governing authorities, prior to commencing Work on this Project.

B. Post all notices and warning signs required by applicable governing authorities.

C. Perform Work on this Project in accordance with local codes and ordinance and utility company requirements.

1.06 WORK SEQUENCE AND CLAIMS FOR ADDITIONAL TIME

A. Construct Work in phases to accommodate Owner's occupancy requirements. During the construction period, coordinate construction schedule and operation with the Architect.

B. Claims for additional time as a result of adverse weather conditions will be considered only for weather conditions which are abnormal and if such weather conditions had an adverse effect on the scheduled construction: Rain Day claims for day(s) when Contractor is normally not on site are not legitimate. The Contractor shall document rain delays on a regular basis and submit an itemized listing to the Owner at each payment application meeting. Only requests for extra time, which prevents Work on critical activities for fifty percent (50%) or more of a scheduled workday will be considered. If no request is submitted for a given month, it will be assumed that no time was lost and the contract time shall not be adjusted.

C. No extension of time shall be deemed as waiver by the Owner of its right to terminate the contract for abandonment or delay by the Contractor. Once the Work has begun the contractor shall properly man the project in a continuous manner and proceed with all diligence to complete the project within the contract time. The Contractor must Work continuously and will not be allowed to stop activity on any weekday unless due to adverse weather of to reason pre-approved in writing by the Owner.

1.07 OWNER OCCUPANCY

A. The Owner may occupy all portions of the building and conduct normal operations during the Work. Owner occupancy shall be during the course of the normal Work day and not include evenings. Owner activities may occur on weekends. The Contractor shall fully clean the site and remove all debris and materials from the grounds on days when scheduled Owner's activities will conflict with the Work.

B. Cooperate with the Owner and schedule the Work to minimize conflicts, and to facilitate Owner's normal operations.

C. All electrical, HVAC units and controls shall remain in operation during times the building is occupied.

1.08 OWNER'S OPERATIONS

A. The Contractor shall conduct its Work in a manner to provide minimal interruption of the school campus during all construction Work. The Work shall be done at such times and in such manner and locations as to cause a minimum of inconvenience for the students, instructors, and staff. Limit operations to specific Work areas. A system of barricades, fences and enclosures shall be used by the Contractor to avoid conflict between construction and operations of the facility.

1.09 HAZARDOUS MATERIALS

A. If, during the progress of the Work, Contractor uncovers work which he believes contains asbestos or other hazardous materials, he shall immediately cease operations in the area of such discovery and notify the both the Architect and the Owner's Representative in writing.

B. Owner will arrange with the Abatement Contractor to perform necessary testing, barricades, enclosures, filtering, and ventilation in areas containing hazardous materials; decontamination, or removal and disposal of hazardous materials in accordance with requirements of authorities having jurisdiction.

C. Owner's Abatement Consultant will notify Owner's Representative and Architect in writing when it is safe to resume construction operations in the areas in question.

D. Contractor shall identify potential lead containing material hazards at the Site and oversee appropriate protective measures, including protection of persons, establishing

END OF SECTION 01010

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 010300 - SPECIAL CONDITIONS

PART 1 - GENERAL

1.01 REFERENCES

A. References to known standard specifications shall mean and shall refer to the latest edition of such specifications adopted and published at date of invitation to submit proposals.

B. Reference to technical society, organization or body is made in these Specifications in accordance with the following abbreviations:

AIA	American Institute of Architects
AIEE	American Institute of Electrical Engineers
ANAAMM	National Association Architectural Metals Manufacturers
ASA	American Standards Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing Materials
FS	Federal Specifications
NBS	National Bureau of Standards
NEC	National Electric Code
NFPA	National Fire Protection Association
NRCA	National Roofing Contractors Association
UL	Underwriters' Laboratories, Inc.

1.02 CONDITIONS

A. "General Conditions" apply with equal force to the General Contractor, Subcontractors, Work, extra Work, and the like that may be specified herein or performed in or about the building or site under this Contract.

B. For convenience of reference and to facilitate letting of subcontracts, these Specifications are separated into sections. Such separation shall not operate to make Owner an arbitrator to establish subcontract limits between subcontractors.

C. Execute Work as per Contract Documents. Make no changes therefore without having first received written permission. Where detailed information is lacking before proceeding with Work, refer matter to Architect for clarification.

D. All Work shall be executed by mechanics skilled in their respective trades. Mechanics whose Work is unsatisfactory to the Owner and/or Architect, or who are considered by the Owner to be careless, incompetent, unskilled, or otherwise objectionable, are to be dismissed from Work upon notice from the Owner.

E. The Owner will provide temporary water and electrical power required for the Work at no cost to the Contractor. The Contractor shall make necessary connections to existing fireplugs and/or tap the existing water service, and to power transformer or

other power sources at each building or site as required for performance of his Work. Coordinate all connections with the Owner's Maintenance Department.

F. Contractor shall be responsible for furnishing storage trailers, temporary security fencing, temporary fire protection, telephones, etc., as required to carry out construction operations.

G. Construction related access to the site, shall be limited to areas permitted by the Owner and/or as shown on the Drawings. It shall be the responsibility of the Contractor to prevent damage to the existing paving, to repair all damage, and to recognize and respect all traffic safety requirements and signage. Any loss or damage to the Owner's property caused by the Contractor or his workmen shall be repaired or replaced at no cost to the Owner. Restore the grounds to original condition at the completion of the Project. Remove all fences, barricades, etc. Replace all vegetation damaged by construction operations, including grass, shrubs, and trees, to the satisfaction of the Owner.

H. Work hours in general are between 7:00 am and 6:00 pm, Monday through Friday, unless an exception is granted by the Owner and Architect, or as otherwise defined by various Section of these Specifications.

I. The Contractor shall remove trash and rubbish from the Owner's premises at the end of each Workday. This shall mean that these materials shall be cleaned from the grounds and shall not be left in areas or locations other that containers specified for this purpose. Burning of combustibles will not be permitted.

1.03 RELATED DOCUMENTS

General Conditions, Supplementary General Conditions, Forms, Specification Sections found in Division 01 through Division 16, and all Drawings apply to Work specified in this Section.

1.04 PROJECT SUPERINTENDENT

A. In addition to other duties imposed by these Specifications the Project Superintendent shall meet the following requirements:

B. Show prior to the start of Work references from Owners of a minimum of five (5) previously completed jobs of similar size, complexity and construction cost.

C. Show proficiency prior to the start of the Work that the Superintendent is fluent in the English language, or if not, provide a competent and approved interpreter for such purposes. The purpose of this clause is to assure adequate communications with all parties involved in the Work.

D. The Project Superintendent shall be present at the project site at all times that any Work of this contract is underway. In the case that the Project Superintendent must be away from the project site the Contractor shall first file written documentation of the absence with the Architect at least 48-hours in advance of the new replacement. The replacement, or acting Project Superintendent, shall meet the minimum requirements defined above and elsewhere in the Specifications for the Project Superintendent. The only exception to this shall be when the Contractor, an officer of the company with

a majority share of ownership, shall be permitted to act as the Project Superintendent. A majority owner of the contracting company may act as the Project Superintendent for the entirety of the project.

E. No Work shall be performed and no subcontractor(s) shall be permitted to Work at any time when the Project Superintendent is not present.

1.05 INSURANCE CLAIMS FOR PROPERTY DAMAGES

A. In the event that any damage is incurred to the Owner's or employees property due to any act of the Contractor, the Contractor shall make payment of the claim through its own resources or via its insurance carrier within thirty (30) days of the claim occurrence.

1.06 ADDITIONAL INSPECTIONS BY ARCHITECT

A. In the event that the Contractor exceeds the completion date for whatever reason he/she shall be responsible for reimbursing the Owner through authorized change order for all costs of the Architect's staff and expenses to carry on inspection duties at the rate performed during the project before the completion date.

B. The rate of reimbursement shall be as follows:

Construction Observer	$ 65.00 per hour
Architect / Roofing Consultant	$135.00 per hour
Re-Inspection Following Substantial or Final Completion	$135.00 per hour
Mileage	$ 0.45 per mile
Other Expenses	Cost plus 10%

END OF SECTION 010300

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 010410 - PROJECT COORDINATION

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

Coordinate Work with that of other contractors and trades and on-going Work by Owner under administration of the Architect.

1.02 RELATED DOCUMENTS

General Conditions, Supplementary General Conditions, Forms, Specification Sections found in Division 01 through Division 16, and all Drawings apply to Work specified in this Section.

1.03 VISIT TO SITE

A. Prior to submitting his quotation for Work under this project, the Contractor shall visit the site to examine all conditions related to his Work, and to acquaint himself with these conditions. FIELD MEASUREMENTS ARE REQUIRED FOR THIS PROJECT.

B. The Contractor shall verify that existing facilities, utilities and/or conditions are adequate and if equipment, utilities, facilities or conditions are such that other items and services, in addition to those specified, are required to achieve operational systems as described herein, the Contractor shall advise the Architect of the scope and costs of necessary additional Work or services at the time of proposal submittal.

1.04 CONSTRUCTION MOBILIZATION

A. The Contractor shall attend the scheduled pre-construction conference as directed by the Architect and Owner for the purpose of project coordination.

B. Cooperate with the Owner and Architect in location of mobilization areas on site for access, traffic, and parking facilities. During construction coordinate use of site and facilities through the Architect and Owner.

C. Comply with the Architect's procedures for intra-project communications: Submittals, reports and records, schedules, coordination drawings, and recommendations; and resolution of ambiguities and conflicts.

D. Comply with instructions of the Architect for use of temporary facilities.

E. Coordinate field and layout Work under instructions of the Architect.

1.05 SUBMITTALS TO THE ARCHITECT

A. All submittals for this project will be required to be submitted at the same time and shall be in accordance with requirements of Section 010300. The Contractor shall provide submittals covering all materials specified in the Specifications. Any changes from the existing Work or sheet metal profiles shown in the Drawings will be forwarded in the

form of shop drawings to the Architect by facsimile prior to beginning fabrication or installation. Update and provide revised schedules at each pay application meeting.

B. Deliver submittals to the Architect for transmittal to all required parties. The office of the Architect is located as follows:

The LaBiche Architectural Group, Inc.
7999 Gladys Avenue, Suite 101
Beaumont, Texas 77706
Tel: 409/860-0197
Fax: 409/860-0198

C. Submit written requests for interpretation of Contract Documents and obtain instructions through the Architect.

1.06 COORDINATION DRAWINGS

A. Provide information required by the Architect for preparation of coordination drawings.

B. Review Drawings carefully prior to submission of all submittals to the Architect.

1.07 CLOSEOUT PROCEDURES

Submit in accordance with Section 017000.

PART 2 - PRODUCTS

NOT USED

PART 3 - EXECUTION

NOT USED

END OF SECTION 010410

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 010450 - CUTTING AND PATCHING

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Requirements and limitations for cutting and patching of Work.

B. Definition: "Cutting and patching" includes cutting into existing construction to provide for the installation or performance of other Work, and subsequent fitting and patching required for restoration of surfaces to their original condition.
   1. "Cutting and patching" is performed for coordination of the Work, to uncover Work for access or inspection, to obtain samples for testing, to permit alterations to be performed or for other similar purposes.

1.02 RELATED REQUIREMENTS

General Conditions, Supplementary General Conditions, Forms, Specification Sections found in Division 01 through Division 16, and all Drawings apply to Work specified in this Section.

1.03 SUBMITTALS

A. Submit written request in advance of cutting or alteration, which affects:
   1. Structural integrity of any element of Project.
   2. Integrity of weather-exposed or moisture-resistant element.
   3. Efficiency, maintenance, or safety of any operational equipment.
   4. Visual qualities of sight-exposed elements.
   5. Work of Owner or separate contractor.

B. Include in request:
   1. Identification of Project.
   2. Location and description of affected Work.
   3. Necessity for cutting or alteration.
   4. Description of proposed Work, and products to be used.
      a. Scope of cutting, patching, alteration, or excavation.
      b. Trades who will execute the Work.
      c. Products proposed to be used.
      d. Extent of re-finishing.
      e. Cost proposal when applicable.
      f. Alternatives to cutting and patching.
   5. Effect on Work of Owner or separate contractor, if any
   6. Written permission of affected separate contractor, if any.
   7. Date and time Work will be executed.

1.04 QUALITY ASSURANCE

Requirements for Structural Work: Do not cut or alter any structural Work in a manner that would result in a reduction of load-carrying capacity or of load-deflection ratio.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Except as otherwise indicated, or as directed by the Owner, use materials for cutting and patching that are identical to existing materials. If identical materials are not available, or cannot be used, use materials that match existing adjacent surfaces to the fullest extent possible with regard to visual effect. Use materials for cutting and patching that will result in equal-or-better performance characteristics.

B. Those required for original installation.

C. No substitutions of materials will be accepted after proposals are submitted.

PART 3 - EXECUTION

3.01 GENERAL

A. Execute cutting, fitting and patching including excavation and fill, to complete Work and to:
   1. Fit the several parts together, to integrate with other Work.
   2. Uncover Work to install ill-timed Work.
   3. Remove and replace defective and non-conforming Work.
   4. Remove samples of installed Work for testing.
   5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

3.02 INSPECTION

A. Before cutting, examine the surfaces to be cut and patched and the conditions under which the Work is to be performed. If unsafe or otherwise unsatisfactory conditions are encountered, take corrective action before proceeding with the Work.

B. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.

C. After uncovering, inspect conditions affecting performance of Work.

D. Beginning of cutting or patching means acceptance of existing conditions.

3.03 PREPARATION

A. Provide supports to assure structural integrity of surroundings, devices and methods to protect other portions of Work from damage.

B. Provide protection from elements for areas, which may be exposed by uncovering Work; maintain excavations and openings free of water.

C. Prevent debris from entering facility; do not permit product contamination.

3.04 PERFORMANCE

A. Employ skilled workers to perform cutting and patching Work. Except as otherwise indicated or as approved by the Architect, proceed with cutting and patching at the earliest feasible time and complete without delay.

B. Cut the Work using methods that are least likely to damage Work to be retained or adjoining Work. Where possible review proposed procedures with the original installer and comply with its recommendations.

C. In general, where cutting is required use hand or small power tools designed for sawing or grinding, not hammering and chopping. Cut through concrete and masonry using a cutting machine, such as a carborundum saw, or core drill, to ensure a neat hole. Cut holes and slots neatly to size required with a minimum disturbance of adjacent Work. To avoid marring existing finished surfaces, cut or drill from exposed or finished side into concealed surfaces. Temporarily cover unused openings.

D. Patch with seams, which are durable and as invisible as possible. Comply with specified tolerances for the Work. Where feasible, inspect and test patched areas to demonstrate integrity of Work. Restore exposed finishes of patched areas and where necessary extend finish restoration into retained adjoining Work in a manner which will eliminate evidence of patching and re-finishing.

E. Where removal of walls or partitions extends from one finished area into another finished area, patch and repair floor and wall surfaces in the new space to provide an even surface of uniform color and appearance. If necessary to achieve uniform color and appearance, remove existing floor and wall covering; replace with new materials.

F. Where patch occurs in a smooth painted surface, extend final paint coat over entire unbroken surface of wall or ceiling containing patch, after patched area has received prime and base coat. Patch, repair or re-hang existing ceilings as necessary to provide an even plane surface of uniform appearance.

G. Fit Work airtight to pipes, sleeves, ducts, conduit, and other penetrations through roof, wall, floor or other surfaces.

H. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire rated material, full thickness of the construction element.

I. Do not leave facility open to contamination or rain; close off at end of each Work day.

J. Thoroughly clean areas and spaces where Work is performed or used as access to Work. Remove completely paint, mortar, oils, putty and items of similar nature. Thoroughly clean piping, conduit and similar features before painting or other finishing is applied.

END OF SECTION 010450

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 011200 - ALTERATION PROJECT PROCEDURES

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Procedural requirements

B. Rehabilitation and renovations of existing spaces and materials.

C. Installation of products removed in Sections as specified.

1.02 RELATED REQUIREMENTS

General Conditions, Supplementary General Conditions, Forms, Specification Sections and all Drawings apply to Work specified in this Section.

PART 2 - PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

A. New Materials shall be as specified in individual Sections

B. Match existing products and Work for patching and extending Work.

C. Determine type and quality of existing products by inspection and any necessary testing, and workmanship by use of existing as a standard. Presence of a product, finish or type of Work requires that patching, extending or matching shall be performed as necessary to make Work complete and consistent with the Specifications.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that demolition is complete and areas are ready for installation of new Work.

B. Beginning of restoration Work means acceptance of existing conditions.

3.02 PREPARATION

A. Cut, move or remove items as necessary for access to alteration and renovation Work; replace and restore at completion.

B. Remove unsuitable material not marked for salvage, such as rotted wood, rusted metals, and deteriorated masonry and concrete: replace materials as specified for finished Work.

C. Remove debris and abandoned items from area and from concealed spaces.

D. Prepare surfaces and remove surface finishes to provide for proper installation of new Work and new finishes.

E. Close openings in exterior surfaces to protect existing Work and salvage items from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

3.03 INSTALLATION

A. Coordinate Work of alterations and renovations to expedite completion sequentially and to accommodate Owner occupancy.

B. Designated areas, rooms and spaces and finishes shall be complete in all respects, including operational mechanical and electrical systems.

C. Remove, cut and patch Work in a manner to minimize damage and to provide means to minimize products and finishes to specified condition.

D. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent new finishes.

E. In addition to specified replacement of equipment and fixtures, restore existing plumbing, heating, ventilation, air conditioning, and electrical systems to full operational condition.

F. Install products as specified in individual sections.

3.04 TRANSITIONS

A. Where new Work abuts or aligns with existing make a smooth and even transition. Patched Work shall match existing adjacent Work in texture and appearance.

B. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to the Architect for completion.

3.05 ADJUSTMENTS

Fit Work at penetrations of surfaces as specified in Section 01045.

3.06 REPAIR OF DAMAGED SURFACES

A. Patch or replace portions of existing surfaces, which are damaged, lifted, discolored or showing other imperfections.

B. Repair substrate prior to patching finish.

3.07 FINISHES

A. Finish surfaces as specified in individual Sections.

B. Finish patches to produce uniform texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersection or natural termination point.

3.08 CLEANING

In addition to cleaning specified in Section 01500, clean Owner-occupied areas of Work as required.

END OF SECTION 011200

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes administrative and procedural requirements for substitutions.

B. Related Section:

1. Division 01 Section "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.2 DEFINITIONS

A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

1.3 SUBMITTALS

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a. Statement indicating why specified product or fabrication or installation cannot be provided, if applicable.
b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Include annotated copy of applicable specification section. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. Certificates and qualification data, where applicable or requested.

g. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
h. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
j. Detailed comparison of Contractor's construction schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
k. Cost information, including a proposal of change, if any, in the Contract Sum.
l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents except as indicated in substitution request, is compatible with related materials, and is appropriate for applications indicated.
m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

2. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.

a. Forms of Acceptance: Change Order, Construction Change Directive, or Architect's Supplemental Instructions for minor changes in the Work.
b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.4 QUALITY ASSURANCE

A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage qualified testing agency to perform compatibility tests recommended by manufacturers.

PART 2 - PRODUCTS

2.1 SUBSTITUTIONS

A. Substitutions for Cause: Submit requests for substitution immediately upon discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied:

    a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    b. Requested substitution will not adversely affect Contractor's construction schedule.
    c. Requested substitution has received necessary approvals of authorities having jurisdiction.
    d. Requested substitution is compatible with other portions of the Work.
    e. Requested substitution has been coordinated with other portions of the Work.
    f. Requested substitution provides specified warranty.
    g. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

B. Substitutions for Convenience: Architect will consider requests for substitution if received within 60 days after the Notice to Proceed.

1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied:

    a. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
    b. Requested substitution does not require extensive revisions to the Contract Documents.
    c. Requested substitution is consistent with the Contract Documents and will produce indicated results.
    d. Requested substitution will not adversely affect Contractor's construction schedule.
    e. Requested substitution has received necessary approvals of authorities having jurisdiction.
    f. Requested substitution is compatible with other portions of the Work.
    g. Requested substitution has been coordinated with other portions of the Work.
    h. Requested substitution provides specified warranty.
    i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements for handling and processing Contract modifications.

B. See Division 01 Section "Allowances" for procedural requirements for handling and processing allowances.

C. See Division 01 Section "Unit Prices" for administrative requirements for using unit prices.

1.2 MINOR CHANGES IN THE WORK

A. Architect will issue supplemental instructions authorizing Minor Changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on AIA Document G710, "Architect's Supplemental Instructions."

1.3 PROPOSAL REQUESTS

A. Owner-Initiated Proposal Requests: Architect will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.

1. Proposal Requests issued by Architect are for information only. Do not consider them instructions either to stop work in progress or to execute the proposed change.
2. Within time specified in Proposal Request after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.

    a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
    b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
    c. Include costs of labor and supervision directly attributable to the change.
    d. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

B. Contractor-Initiated Proposals: If latent or unforeseen conditions require modifications to the Contract, Contractor may propose changes by submitting a request for a change to Architect.

1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
4. Include costs of labor and supervision directly attributable to the change.
5. Include an updated Contractor's Construction Schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
6. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.

C. Proposal Request Form: Use AIA Document G709 for Proposal Requests.

1.4 ALLOWANCES

A. Allowance Adjustment: To adjust allowance amounts, base each Change Order proposal on the difference between purchase amount and the allowance, multiplied by final measurement of work-in-place. If applicable, include reasonable allowances for cutting losses, tolerances, mixing wastes, normal product imperfections, and similar margins.

1. Include installation costs in purchase amount only where indicated as part of the allowance.
2. If requested, prepare explanation and documentation to substantiate distribution of overhead costs and other margins claimed.
3. Submit substantiation of a change in scope of work, if any, claimed in Change Orders related to unit-cost allowances.
4. Owner reserves the right to establish the quantity of work-in-place by independent quantity survey, measure, or count.

B. Submit claims for increased costs because of a change in scope or nature of the allowance described in the Contract Documents, whether for the Purchase Order amount or Contractor's handling, labor, installation, overhead, and profit. Submit claims within 7 days of receipt of the Change Order or Construction Change Directive authorizing work to proceed. Owner will reject claims submitted later than 21 days after such authorization.

1. Do not include Contractor's or subcontractor's indirect expense in the Change Order cost amount unless it is clearly shown that the nature or extent of work has

changed from what could have been foreseen from information in the Contract Documents.

2. No change to Contractor's indirect expense is permitted for selection of higher- or lower-priced materials or systems of the same scope and nature as originally indicated.

1.5 CHANGE ORDER PROCEDURES

A. On Owner's approval of a Proposal Request, Architect will issue a Change Order for signatures of Owner and Contractor on AIA Document G701.

1.6 CONSTRUCTION CHANGE DIRECTIVE

A. Construction Change Directive: Architect may issue a Construction Change Directive on AIA Document G714. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.

1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.

B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.

1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.2 SCHEDULE OF VALUES

A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Construction Schedule.

1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including Application for Payment forms with Continuation Sheets, Submittals Schedule and Contractor's Construction Schedule.
2. Submit the Schedule of Values to Architect at earliest possible date but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.

B. Format and Content: Use the Project Manual table of contents as a guide to establish line items for the Schedule of Values. Provide at least one line item for each Specification Section.

1. Identification: Include the following Project identification on the Schedule of Values:

    a. Project name and location.
    b. Name of Architect.
    c. Architect's project number.
    d. Contractor's name and address.
    e. Date of submittal.

2. Submit draft of AIA Document G703 Continuation Sheets.
3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Manual table of contents. Provide several line items for principal subcontract amounts, where appropriate.
4. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.

6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
7. Allowances: Provide a separate line item in the Schedule of Values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
8. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.

    a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.

9. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders or Construction Change Directives result in a change in the Contract Sum.

1.3 APPLICATIONS FOR PAYMENT

A. Each Application for Payment shall be consistent with previous applications and payments as certified by Architect and paid for by Owner.

    1. Initial Application for Payment, Application for Payment at time of Substantial Completion, and final Application for Payment involve additional requirements.

B. Payment Application Times: The date for each progress payment is indicated in the Agreement between Owner and Contractor. The period of construction Work covered by each Application for Payment is the period indicated in the Agreement.

C. Payment Application Times: Progress payments shall be submitted to Architect by the 23rd of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.

D. Payment Application Forms: Use AIA Document G702 and AIA Document G703 Continuation Sheets as form for Applications for Payment.

E. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect will return incomplete applications without action.

    1. Entries shall match data on the Schedule of Values and Contractor's Construction Schedule. Use updated schedules if revisions were made.
    2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.

F. Transmittal: Submit 3 signed and notarized original copies of each Application for Payment to Architect by a method ensuring receipt within 24 hours. One copy shall include waivers of lien and similar attachments if required.

1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.

G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from every entity who is lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.

1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
2. When an application shows completion of an item, submit final or full waivers.
3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
4. Waiver Forms: Submit waivers of lien on forms, executed in a manner acceptable to Owner.

H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:

1. List of subcontractors.
2. Schedule of Values.
3. Contractor's Construction Schedule (preliminary if not final).
4. Schedule of unit prices.
5. Submittals Schedule (preliminary if not final).
6. List of Contractor's staff assignments.
7. List of Contractor's principal consultants.
8. Copies of building permits.
9. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
10. Initial progress report.
11. Report of preconstruction conference.
12. Certificates of insurance and insurance policies.

I. Application for Payment at Substantial Completion: After issuing the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.

1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.
2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.

J. Final Payment Application: Submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:

1. Evidence of completion of Project closeout requirements.

2. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
3. Updated final statement, accounting for final changes to the Contract Sum.
4. AIA Document G706, "Contractor's Affidavit of Payment of Debts and Claims."
5. AIA Document G706A, "Contractor's Affidavit of Release of Liens."
6. AIA Document G707, "Consent of Surety to Final Payment."
7. Evidence that claims have been settled.
8. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
9. Final, liquidated damages settlement statement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 013000 - SUBMITTALS

PART 1 - GENERAL

1.01 REQUIREMENTS INCLUDED

A. Procedures
B. Construction Progress Schedule
C. Shop Drawings
D. Product Data
E. Samples
F. Manufacturer's Instructions
G. Manufacturer's Certificates
H. Schedule of Required Submittals
I. Request for Substitution Form

1.02 RELATED REQUIREMENTS

General Conditions, Supplementary General Conditions, Forms, Specification Sections and all Drawings apply to Work specified in this Section.

1.03 PROCEDURES - BEFORE PROPOSAL OPENING

No substitute systems or materials will be considered prior to proposal opening.

1.04 PROCEDURES - AFTER PROPOSAL OPENING

A. Deliver submittals to: The LaBiche Architectural Group, Inc.
7999 Gladys Avenue, Suite 101
Beaumont, Texas 77706

B. All submittals required for the project shall be submitted at the same time.

C. Transmit each item under form acceptable to the Architect in this document. Identify Project, Contractor, Subcontractor and major suppliers. Identify pertinent drawing sheet and detail number, and specification section number as appropriate. Identify any and all deviations from Contract Documents. Provide 3-inch x 5-inch space each for Contractor and Architect review stamps. Provide certification stamp on all submittal sets.

D. Submit Submittal Schedule at the same time as all other submittals.

E. All submittals including shop drawings, product data and samples for this project will be submitted at the same time to the Architect and within ten (10) days after receipt of the Notice to Proceed.

F. After Architect's review of submittal, revise and re-submit as required, identifying changes made since previous submittal.

G. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to

promptly report any inability to comply with provisions.

H. Bind sets of submittals in labeled three-ring binders identified on the outside with the project title, date, Contractor's, Architect's and Owner's names, and including a table of contents corresponding to the Specification format, with all contents correlated.

1.05 CONSTRUCTION PROGRESS SCHEDULES

A. Submit horizontal bar chart with separate bar for each major trade or operation, identifying first Workday of each week.

B. Show submittal dates required for Shop Drawings product data and samples and product delivery dates including those, if any, identified to be furnished by the Owner.

1.06 SHOP DRAWINGS

A. Submit a minimum of four (4) sets, and a maximum of seven (7) sets of all shop drawings on opaque reproductions.

B. Present in a clear and thorough manner. Title each Drawing with Project Name and the same information indicated for 1.04.H above. Identify each element of Drawings by reference to sheet number and detail of the Contract Documents.

C. Identify field dimensions. Show relation to adjacent or critical features or Work or products.

1.07 PRODUCT DATA

A. Submit a minimum of four (4) sets, and a maximum of seven (7) sets of all product data.

B. Submit only pages that are pertinent. Mark each copy of standard printed data with yellow hi-liter to identify pertinent products, reference to Specification Section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.

C. Modify manufacturer standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work. Delete or cross-out information not applicable.

D. Any deviation from the Contract Documents must be clearly identified when submitted. Any items not identified will be deemed to be the items exactly as specified in the Contract Documents.

1.08 MANUFACTURER'S INSTRUCTIONS

When required in individual Specification Section, submit manufacturer's printed instructions for delivery, storage, assembly, installation, start-up, adjusting and finishing in quantities specified for product data.

1.09 SAMPLES

A. Submit full range of manufacturer's standard colors, textures, and patterns for Owner's selection. Submit a minimum of four (4) sets, and a maximum of seven (7) sets of all samples unless otherwise indicated by these Specifications.

B. Submit samples to illustrate functional characteristics of the product, with integral parts and attachment devices. Coordinate submittal of different categories for interfacing Work.

C. Include identification on each sample, giving full information.

D. Submit the number specified in respective Specification Section: Two (2) will be retained by the Architect. Reviewed samples that may be used in the Work are indicated in the Specification Section.

1.10 FIELD SAMPLES

Provide field samples of finishes at the project site as required by individual Specification Sections. Install sample complete and finished. Acceptable samples in place may be retained in completed Work.

1.11 CONTRACTOR REVIEW

A. Review submittals prior to transmittal. Determine and verify field measurements, field construction criteria, manufacturer's catalog numbers and conformance of submittal with requirements of Contract Documents.

B. Coordinate submittals with requirements of Work and of Contract Documents.

C. Apply Contractor's stamp on each section of Shop Drawings and Product Data, and each sample label to certify compliance with requirements of Contract Documents. Notify Architect in writing at time of submittal, of any deviations from requirements of Contract Documents.

D. The Contractor is encouraged not to fabricate products or begin Work which requires submittals until return of reviewed submittal with Architect's review stamp. Fabrication of items and beginning of Work when submittals have not been reviewed will be at the Contractor's risk.

1.12 SUBMITTAL REQUIREMENTS

A. Transmit submittals in such sequence to avoid delay in the Work or Work of other contracts.

B. Coordinate submittals into logical groupings to facilitate interrelation of the several items.

C. Submit under Architect approved transmittal letter. Identify Project by title and number. Identify Work and product by Specification Section and Article Number.

1.13 RE-SUBMITTAL REQUIREMENTS

A. Make re-submittals under procedures specified for initial submittals. Identify changes made since previous submittal.

B. Re-submittals beyond the initial and a second will be reviewed by the Architect and/or his consultants at the Contractor's expense.

1.14 ARCHITECT AND OWNER REVIEW

A. The Architect and Owner and/or other authorized representative will review all submittals. Submittals will be returned to the Contractor with the Architect's review stamp affixed, and/or with the indication of any changes, which may need to be made, shown thereon, or with disapproval.

B. The Architect's review of any such Submittal shall not relieve the Contractor from responsibility for deviations from Drawings or Specifications, nor shall it relieve him from responsibility for errors of any sort in the Submittal, nor shall it in any way diminish the Contractor's obligation to conduct the Work in accordance with the Contract Documents.

C. Approval of samples shall be for design and appearance only, and such approval shall not relieve Contractor from any obligation as provided in the Contract Documents.

REQUEST FOR SUBSTITUTION
(Attach Additional Sheets As Necessary)

From: _____
_____
To: _____
_____

Date of Request: _____
Project: Project Name
Location: Project Location
Architect's Project No.: 09015

References: Specification Section: _____ Part: _____ Paragraph: _____ Subparagraph: _____
Specified Product Name: _____ Model No.: _____
Drawing Sheet(s): _____ De tail(s): _____

Description of Proposed Substitution:
Substitute Product Name: _____ Model No.: _____
Manufacturer: _____ Address: _____ Phone: _____
Installer: _____ Address: _____ Phone: _____
Reason for not providing specified item: _____
_____
Differences between proposed substitution and specified product: _____
_____
_____
☐ Point-by-point comparative data attached (Required for analysis and review by Architect)

Substitution Product History: ☐ New Product ☐ 2 to 5 Years Old ☐ 5 to 10 Years Old ☐ More than 10 Years Old
Similar Installations of Proposed Product:
Project: _____ Architect: _____ Phone: _____
Project Address: _____ Owner: _____ Phone: _____
_____ Date Product Installed: _____

Effect of Proposed Substitution:
Acceptance of proposed substitute will require the following change in Contract Sum and Contract Time:
☐ No Change in Contract Sum ☐ No Change in Contract Time
☐ Increase Contract Sum By $ _____ ☐ Increase Contract Time By _____ Calendar Days
☐ Decrease Contract Sum By $ _____ ☐ Decrease Contract Time By _____ Calendar Days.
Effect of proposed request for substitution on (Attach additional sheets if necessary):
a. Change in Construction Progress Schedule: ☐ No Effect ☐ _____
_____
b. Changes required in details and construction of related work: ☐ No Change ☐ Yes, Explain: _____
_____
c. Change in warranty requirements: ☐ No Change ☐ _____

Representations by Contractor: (1) Substitute item is equivalent or superior to that specified in quality and durability, design, appearance, function, finish, performance, is of size and weight that will permit installation in spaces provided, and that will allow adequate service access; (2) Substitute item is compatible with other portions of the Work; (3) Substitute item has been coordinated with other portions of the Work; (4) Substitute item has received necessary approvals from authorities having jurisdiction; (5) Substitute item is consistent with the Contract Documents and will produce the intended results; (6) Substitute item provides specified warranty; and (7) If requested substitution involves more than one contractor, or subcontractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors, or subcontractors involved.

_____ _____ _____
(Signature) (Typed or Printed Name and Title) (Date)

END OF SECTION 013000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 013100 - PROJECT MANAGEMENT AND COORDINATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:

1. Coordination Drawings.
2. Project meetings.
3. Requests for Interpretation (RFIs).

B. See Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.2 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Documents.

1.3 COORDINATION

A. Coordination: Coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections, that depend on each other for proper installation, connection, and operation.

1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service, and repair.
3. Make adequate provisions to accommodate items scheduled for later installation.
4. Where availability of space is limited, coordinate installation of different components to ensure maximum performance and accessibility for required maintenance, service, and repair of all components, including mechanical and electrical.

B. Prepare memoranda for distribution to each party involved, outlining special procedures required for coordination. Include such items as required notices, reports, and list of attendees at meetings.

1. Prepare similar memoranda for Owner and separate contractors if coordination of their Work is required.

C. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:

1. Preparation of Contractor's Construction Schedule.
2. Preparation of the Schedule of Values.
3. Installation and removal of temporary facilities and controls.
4. Delivery and processing of submittals.
5. Progress meetings.
6. Preinstallation conferences.
7. Project closeout activities.
8. Startup and adjustment of systems.
9. Project closeout activities.

1.4 SUBMITTALS

A. Coordination Drawings: Prepare Coordination Drawings if limited space availability necessitates maximum utilization of space for efficient installation of different components or if coordination is required for installation of products and materials fabricated by separate entities.

1. Content: Project-specific information, drawn accurately to scale. Do not base Coordination Drawings on reproductions of the Contract Documents or standard printed data. Include the following information, as applicable:

   a. Indicate functional and spatial relationships of components of architectural, structural, civil, mechanical, and electrical systems.
   b. Indicate dimensions shown on the Contract Drawings and make specific note of dimensions that appear to be in conflict with submitted equipment and minimum clearance requirements. Provide alternate sketches to Architect for resolution of such conflicts. Minor dimension changes and difficult installations will not be considered changes to the Contract.

2. Sheet Size: At least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).
3. Number of Copies: Submit six opaque copies of each submittal. Architect will return four copies.
4. Refer to individual Sections for Coordination Drawing requirements for Work in those Sections.

1.5 PROJECT MEETINGS

A. General: Schedule and conduct meetings and conferences at Project site, unless otherwise indicated.

1. Attendees: Inform participants and others involved, and individuals whose presence is required, of date and time of each meeting. Notify Owner and Architect of scheduled meeting dates and times.

2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned, including Owner and Architect, within three days of the meeting.

B. Preconstruction Conference: Schedule a preconstruction conference before starting construction, at a time convenient to Owner and Architect, but no later than 15 days after execution of the Agreement. Hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.

1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
2. Agenda: Discuss items of significance that could affect progress, including the following:

    a. Tentative construction schedule.
    b. Phasing.
    c. Critical work sequencing and long-lead items.
    d. Designation of key personnel and their duties.
    e. Procedures for processing field decisions and Change Orders.
    f. Procedures for RFIs.
    g. Procedures for testing and inspecting.
    h. Procedures for processing Applications for Payment.
    i. Distribution of the Contract Documents.
    j. Submittal procedures.
    k. LEED requirements.
    l. Preparation of Record Documents.
    m. Use of the premises.
    n. Work restrictions.
    o. Owner's occupancy requirements.
    p. Responsibility for temporary facilities and controls.
    q. Construction waste management and recycling.
    r. Parking availability.
    s. Office, work, and storage areas.
    t. Equipment deliveries and priorities.
    u. First aid.
    v. Security.
    w. Progress cleaning.
    x. Working hours.

3. Minutes: Record and distribute meeting minutes.

C. Preinstallation Conferences: Conduct a preinstallation conference at Project site before each construction activity that requires coordination with other construction.

1. Attendees: Installer and representatives of manufacturers and fabricators involved in or affected by the installation and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Architect of scheduled meeting dates.
2. Agenda: Review progress of other construction activities and preparations for the particular activity under consideration, including requirements for the following:

    a. The Contract Documents.
    b. Options.
    c. Related RFIs.
    d. Related Change Orders.
    e. Purchases.
    f. Deliveries.
    g. Submittals.
    h. Review of mockups.
    i. Possible conflicts.
    j. Compatibility problems.
    k. Time schedules.
    l. Weather limitations.
    m. Manufacturer's written recommendations.
    n. Warranty requirements.
    o. Compatibility of materials.
    p. Acceptability of substrates.
    q. Temporary facilities and controls.
    r. Space and access limitations.
    s. Regulations of authorities having jurisdiction.
    t. Testing and inspecting requirements.
    u. Installation procedures.
    v. Coordination with other work.
    w. Required performance results.
    x. Protection of adjacent work.
    y. Protection of construction and personnel.

3. Record significant conference discussions, agreements, and disagreements, including required corrective measures and actions.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.
5. Do not proceed with installation if the conference cannot be successfully concluded. Initiate whatever actions are necessary to resolve impediments to performance of the Work and reconvene the conference at earliest feasible date.

D. Progress Meetings: Conduct progress meetings at monthly intervals in conjunction with the review of the month's payment request. Coordinate dates of meetings with preparation of payment requests.

1. Attendees: In addition to representatives of Owner and Architect, each contractor, subcontractor, supplier, and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.

2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.

    a. Contractor's Construction Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Construction Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.

        1) Review schedule for next period.

    b. Review present and future needs of each entity present, including the following:

        1) Interface requirements.
        2) Sequence of operations.
        3) Status of submittals.
        4) Deliveries.
        5) Off-site fabrication.
        6) Access.
        7) Site utilization.
        8) Temporary facilities and controls.
        9) Work hours.
        10) Hazards and risks.
        11) Progress cleaning.
        12) Quality and work standards.
        13) Status of correction of deficient items.
        14) Field observations.
        15) RFIs.
        16) Status of proposal requests.
        17) Pending changes.
        18) Status of Change Orders.
        19) Pending claims and disputes.
        20) Documentation of information for payment requests.

3. Minutes: Record the meeting minutes.
4. Reporting: Distribute minutes of the meeting to each party present and to parties who should have been present.

    a. Schedule Updating: Revise Contractor's Construction Schedule after each progress meeting where revisions to the schedule have been made or recognized. Issue revised schedule concurrently with the report of each meeting.

1.6 REQUESTS FOR INTERPRETATION (RFIs)

A. Procedure: Immediately on discovery of the need for interpretation of the Contract Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.

1. RFIs shall originate with Contractor. RFIs submitted by entities other than Contractor will be returned with no response.
2. Coordinate and submit RFIs in a prompt manner so as to avoid delays in Contractor's work or work of subcontractors.

B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:

1. Project name.
2. Date.
3. Name of Contractor.
4. Name of Architect.
5. RFI number, numbered sequentially.
6. Specification Section number and title and related paragraphs, as appropriate.
7. Drawing number and detail references, as appropriate.
8. Field dimensions and conditions, as appropriate.
9. Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract Time or the Contract Sum, Contractor shall state impact in the RFI.
10. Contractor's signature.
11. Attachments: Include drawings, descriptions, measurements, photos, Product Data, Shop Drawings, and other information necessary to fully describe items needing interpretation.

C. Hard-Copy RFIs:

1. Identify each page of attachments with the RFI number and sequential page number.

D. Architect's Action: Architect will review each RFI, determine action required, and return it. Allow seven working days for Architect's response for each RFI. RFIs received after 1:00 p.m. will be considered as received the following working day.

1. The following RFIs will be returned without action:

a. Requests for approval of submittals.
b. Requests for approval of substitutions.
c. Requests for coordination information already indicated in the Contract Documents.
d. Requests for adjustments in the Contract Time or the Contract Sum.
e. Requests for interpretation of Architect's actions on submittals.
f. Incomplete RFIs or RFIs with numerous errors.

2. Architect's action may include a request for additional information, in which case Architect's time for response will start again.

3. Architect's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Proposal according to Division 01 Section "Contract Modification Procedures."

    a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Architect in writing within 10 days of receipt of the RFI response.

E. On receipt of Architect's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Architect within seven days if Contractor disagrees with response.

F. RFI Log: Prepare, maintain, and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:

1. Project name.
2. Name and address of Contractor.
3. Name and address of Architect.
4. RFI number including RFIs that were dropped and not submitted.
5. RFI description.
6. Date the RFI was submitted.
7. Date Architect's response was received.
8. Identification of related Minor Change in the Work, Construction Change Directive, and Proposal Request, as appropriate.
9. Identification of related Field Order, Work Change Directive, and Proposal Request, as appropriate.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013100

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 013200 - CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:

1. Contractor's Construction Schedule.
2. Submittals Schedule.
3. Daily construction reports.
4. Field condition reports.

B. See Division 01 Section "Payment Procedures" for submitting the Schedule of Values.

1.2 DEFINITIONS

A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring, and controlling the construction project. Activities included in a construction schedule consume time and resources.

1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
2. Predecessor Activity: An activity that precedes another activity in the network.
3. Successor Activity: An activity that follows another activity in the network.

B. CPM: Critical path method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.

C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.

D. Float: The measure of leeway in starting and completing an activity.

1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.

E. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.

F. Major Area: A story of construction, a separate building, or a similar significant construction element.

1.3 SUBMITTALS

A. Submittals Schedule: Submit three copies of schedule. Arrange the following information in a tabular format:

1. Scheduled date for first submittal.
2. Specification Section number and title.
3. Submittal category (action or informational).
4. Name of subcontractor.
5. Description of the Work covered.
6. Scheduled date for Architect's final release or approval.

B. Contractor's Construction Schedule: Submit three opaque copies of initial schedule, large enough to show entire schedule for entire construction period.

1. Submit an electronic copy of schedule, using software indicated, on CD-R, and labeled to comply with requirements for submittals. Include type of schedule (Initial or Updated) and date on label.

C. Daily Construction Reports: Submit three copies at monthly intervals.

D. Field Condition Reports: Submit three copies at time of discovery of differing conditions.

1.4 COORDINATION

A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.

B. Coordinate Contractor's Construction Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.

1. Secure time commitments for performing critical elements of the Work from parties involved.
2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 - PRODUCTS

2.1 SUBMITTALS SCHEDULE

A. Preparation: Submit a schedule of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication, and delivery when establishing dates.

1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Construction Schedule.

2. Submit concurrently with the first complete submittal of Contractor's Construction Schedule.

2.2 CONTRACTOR'S CONSTRUCTION SCHEDULE, GENERAL

A. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.

1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.

B. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:

1. Activity Duration: Define activities so no activity is longer than 20 days, unless specifically allowed by Architect.
2. Procurement Activities: Include procurement process activities for the following long lead items and major items, requiring a cycle of more than 60 days, as separate activities in schedule. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication, and delivery.
3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Construction Schedule with Submittals Schedule.
4. Startup and Testing Time: Include not less than seven days for startup and testing.
5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.

C. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in schedule, and show how the sequence of the Work is affected.

1. Phasing: Arrange list of activities on schedule by phase.
2. Work under More Than One Contract: Include a separate activity for each contract.
3. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
4. Work Restrictions: Show the effect of the following items on the schedule:

a. Coordination with existing construction.
b. Limitations of continued occupancies.
c. Uninterruptible services.
d. Partial occupancy before Substantial Completion.
e. Use of premises restrictions.
f. Provisions for future construction.
g. Seasonal variations.
h. Environmental control.

5. Work Stages: Indicate important stages of construction for each major portion of the Work.

6. Milestones: Include milestones indicated in the Contract Documents in schedule, including, but not limited to, the Notice to Proceed, Substantial Completion, and Final Completion.

D. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

PART 3 - EXECUTION

3.1 CONTRACTOR'S CONSTRUCTION SCHEDULE

A. Contractor's Construction Schedule Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule one week before each regularly scheduled progress meeting.

1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
3. As the Work progresses, indicate Actual Completion percentage for each activity.

B. Distribution: Distribute copies of approved schedule to Architect Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.

1. Post copies in Project meeting rooms and temporary field offices.
2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 013200

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples, and other submittals.

B. See Division 01 Section "Construction Progress Documentation" for submitting schedules and reports, including Contractor's Construction Schedule.

C. See Division 01 Section "Quality Requirements" for submitting test and inspection reports.

D. See Division 01 Section "Closeout Procedures" for submitting warranties.

E. See Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

F. See Division 01 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.

G. See Division 01 Section "Demonstration and Training" for submitting videotapes of demonstration of equipment and training of Owner's personnel.

1.2 DEFINITIONS

A. Action Submittals: Written and graphic information that requires Architect's responsive action.

B. Informational Submittals: Written information that does not require Architect's responsive action. Submittals may be rejected for not complying with requirements.

1.3 SUBMITTAL PROCEDURES

A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.

1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.

    a. Architect reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

B. Submittals Schedule: Comply with requirements in Division 01 Section "Construction Progress Documentation" for list of submittals and time requirements for scheduled performance of related construction activities.

C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

1. Initial Review: Allow 15 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
3. Resubmittal Review: Allow 15 days for review of each resubmittal.

D. Identification: Place a permanent label or title block on each submittal for identification.

1. Indicate name of firm or entity that prepared each submittal on label or title block.
2. Provide a space approximately 6 by 8 inches (150 by 200 mm) on label or beside title block to record Contractor's review and approval markings and action taken by Architect.
3. Include the following information on label for processing and recording action taken:

    a. Project name.
    b. Date.
    c. Name and address of Architect.
    d. Name and address of Contractor.
    e. Name and address of subcontractor.
    f. Name and address of supplier.
    g. Name of manufacturer.
    h. Submittal number or other unique identifier, including revision identifier.

        1) Submittal number shall use Specification Section number followed by a decimal point and then a sequential number (e.g., 061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., 061000.01.A).

    i. Number and title of appropriate Specification Section.
    j. Drawing number and detail references, as appropriate.
    k. Location(s) where product is to be installed, as appropriate.
    l. Other necessary identification.

E. Deviations: Highlight, encircle, or otherwise specifically identify deviations from the Contract Documents on submittals.

F. Additional Copies: Unless additional copies are required for final submittal, and unless Architect observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.

1. Additional copies submitted for maintenance manuals will be marked with action taken and will be returned.

G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Architect will return submittals, without review, received from sources other than Contractor.

1. Transmittal Form: Use AIA Document G810 or approved Contractor Transmittal Form.

H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.

1. Note date and content of previous submittal.
2. Note date and content of revision in label or title block and clearly indicate extent of revision.
3. Resubmit submittals until they are marked approved on Architect's Submittal review form attached at the end of this section.

I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.

J. Use for Construction: Use only final submittals with mark indicating approval taken by Architect.

1.4 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:

1. Approval by the Architect and Owner.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

A. General: Prepare and submit Action Submittals required by individual Specification Sections.

B. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.

1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
2. Mark each copy of each submittal to show which products and options are applicable.

3. Include the following information, as applicable:

   a. Manufacturer's written recommendations.
   b. Manufacturer's product specifications.
   c. Manufacturer's installation instructions.
   d. Manufacturer's catalog cuts.
   e. Wiring diagrams showing factory-installed wiring.
   f. Printed performance curves.
   g. Operational range diagrams.
   h. Compliance with specified referenced standards.
   i. Testing by recognized testing agency.

4. Number of Copies: Submit seven copies of Product Data, unless otherwise indicated. Architect will return five copies. Mark up and retain two returned copies as Project Record Documents.

C. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data.

1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:

   a. Dimensions.
   b. Identification of products.
   c. Fabrication and installation drawings.
   d. Roughing-in and setting diagrams.
   e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
   f. Shopwork manufacturing instructions.
   g. Templates and patterns.
   h. Schedules.
   i. Notation of coordination requirements.
   j. Notation of dimensions established by field measurement.
   k. Relationship to adjoining construction clearly indicated.
   l. Seal and signature of professional engineer if specified.
   m. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.

2. Sheet Size: Except for templates, patterns, and similar full-size drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm) but no larger than 30 by 40 inches (750 by 1000 mm).
3. Number of Copies: Submit six opaque (bond) copies of each submittal. Architect will return one copy.

D. Samples: Submit Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.

1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.

2. Identification: Attach label on unexposed side of Samples that includes the following:

    a. Generic description of Sample.
    b. Product name and name of manufacturer.
    c. Sample source.
    d. Number and title of appropriate Specification Section.

3. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures, and patterns available.

    a. Number of Samples: Submit one full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.

5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.

    a. Number of Samples: Submit three sets of Samples. Architect will retain two Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a Project Record Sample.

E. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.

    1. Number of Copies: Submit seven copies of product schedule or list, unless otherwise indicated. Architect will return five copies.

F. Submittals Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

G. Application for Payment: Comply with requirements specified in Division 01 Section "Payment Procedures."

H. Schedule of Values: Comply with requirements specified in Division 01 Section "Payment Procedures."

I. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.

1. Number of Copies: Submit three copies of subcontractor list, unless otherwise indicated. Architect will return two copies.

2.2 INFORMATIONAL SUBMITTALS

A. General: Prepare and submit Informational Submittals required by other Specification Sections.

1. Number of Copies: Submit two copies of each submittal, unless otherwise indicated. Architect will not return copies.
2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
3. Test and Inspection Reports: Comply with requirements specified in Division 01 Section "Quality Requirements."

B. Coordination Drawings: Comply with requirements specified in Division 01 Section "Project Management and Coordination."

C. Contractor's Construction Schedule: Comply with requirements specified in Division 01 Section "Construction Progress Documentation."

D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.

E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.

F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.

G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.

H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.

I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.

J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.

K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.

L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

M. Preconstruction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.

N. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.

O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.

P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 Section "Operation and Maintenance Data."

Q. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.

R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address, and telephone number of manufacturer.

S. Manufacturer's Field Reports: Prepare written information documenting factory-authorized service representative's tests and inspections. Include the following, as applicable:

1. Statement on condition of substrates and their acceptability for installation of product.
2. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.

3. Results of operational and other tests and a statement of whether observed performance complies with requirements.

T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.

U. Material Safety Data Sheets (MSDSs): Submit information directly to Owner; do not submit to Architect.

1. Architect will not review submittals that include MSDSs and will return them for resubmittal.

2.3 DELEGATED DESIGN

A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.

1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Architect.

B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit three copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.

1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

PART 3 - EXECUTION

3.1 CONTRACTOR'S REVIEW

A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect.

B. Approval Stamp: Stamp each submittal with a uniform, approval stamp. Include Project name and location, submittal number, Specification Section title and number, name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.

3.2 ARCHITECT'S ACTION

A. General: Architect will not review submittals that do not bear Contractor's approval stamp and will return them without action.

B. Action Submittals: Architect will review each submittal, make marks to indicate corrections or modifications required, and return it. Architect will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken, as follows:

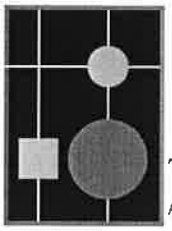
1. See sample of Architect's Shop Drawing Review Sheet at the end of this section.

C. Informational Submittals: Architect will review each submittal and will not return it, or will return it if it does not comply with requirements. Architect will forward each submittal to appropriate party.

D. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.

Submittals not required by the Contract Documents may not be reviewed and may be discarded.

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS



The LaBiche
ARCHITECTURAL GROUP, INC.

Dohn H. LaBiche, FAIA - Principal
Greg Wall, AIA - Principal

7999 Gladys Avenue, Suite 101
Beaumont, Texas 77706
(409) 860-0197 • Fax (409) 860-0198

SHOP DRAWING REVIEW

Project Name: XX

Project Number: XX

Submittal For: **XX**

	No Exception		Exceptions Noted		Rejected
	Revise & Resubmit		Submit Specified Item		

NOTE:
Our checking is only to determine general conformance with the design concept of the project and general compliance with the Contract Documents. The Contractor is solely responsible for confirming and correlating dimensions at the job site; for information which pertains to fabrication processes or construction techniques, and for coordinating the work of all trades. Our checking of shop drawings and submittals shall not relieve the Contractor of responsibility for deviation from the requirements of the Contract Documents nor for errors or emissions in the shop drawings and submittals.

By: Dohn H. LaBiche, FAIA Date:

Remarks:

END OF SECTION 013300

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 014000 - QUALITY REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for quality assurance and quality control.

B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.

1. Specified tests, inspections, and related actions do not limit Contractor's other quality-assurance and -control procedures that facilitate compliance with the Contract Document requirements.
2. Requirements for Contractor to provide quality-assurance and -control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.

C. See Divisions 02 through 49 Sections for specific test and inspection requirements.

1.2 DEFINITIONS

A. Quality-Assurance Services: Activities, actions, and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.

B. Quality-Control Services: Tests, inspections, procedures, and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Architect.

C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing, or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.

D. Laboratory Mockups: Full-size, physical assemblies that are constructed at testing facility to verify performance characteristics.

E. Preconstruction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

F. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.

G. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory, or shop.

H. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.

I. Testing Agency: An entity engaged to perform specific tests, inspections, or both. Testing laboratory shall mean the same as testing agency.

J. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Sub-subcontractor, to perform a particular construction operation, including installation, erection, application, and similar operations.

1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to trades people of the corresponding generic name.

K. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of five previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.3 CONFLICTING REQUIREMENTS

A. General: If compliance with two or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Architect for a decision before proceeding.

B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Architect for a decision before proceeding.

1.4 SUBMITTALS

A. Qualification Data: For testing agencies specified in "Quality Assurance" Article to demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.

B. Reports: Prepare and submit certified written reports that include the following:

1. Date of issue.
2. Project title and number.
3. Name, address, and telephone number of testing agency.
4. Dates and locations of samples and tests or inspections.
5. Names of individuals making tests and inspections.
6. Description of the Work and test and inspection method.
7. Identification of product and Specification Section.
8. Complete test or inspection data.
9. Test and inspection results and an interpretation of test results.
10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
12. Name and signature of laboratory inspector.
13. Recommendations on retesting and re-inspecting.

C. Permits, Licenses, and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records, and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.5 QUALITY ASSURANCE

A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.

B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design, and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.

C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly, or product that are similar to those indicated for this Project in material, design, and extent.

F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those

operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.

1. Requirement for specialists shall not supersede building codes and regulations governing the Work.

G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.

1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.

H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design, and extent to those indicated for this Project.

I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:

1. Build mockups in location and of size indicated or, if not indicated, as directed by Architect.
2. Notify Architect seven days in advance of dates and times when mockups will be constructed.
3. Demonstrate the proposed range of aesthetic effects and workmanship.
4. Obtain Architect's approval of mockups before starting work, fabrication, or construction.
5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
6. Demolish and remove mockups when directed, unless otherwise indicated.

J. Laboratory Mockups: Comply with requirements of preconstruction testing and those specified in individual Sections in Divisions 02 through 49.

1.6 QUALITY CONTROL

A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.

1. Owner will furnish Contractor with names, addresses, and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor, and the Contract Sum will be adjusted by Change Order.

B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.

1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.

a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

2. Notify testing agencies at least 24 hours in advance of time when Work that requires testing or inspecting will be performed.
3. Where quality-control services are indicated as Contractor's responsibility, submit a certified written report, in duplicate, of each quality-control service.
4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.

C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 Section "Submittal Procedures."

D. Retesting/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including retesting and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.

E. Testing Agency Responsibilities: Cooperate with Architect and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.

1. Notify Architect and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
2. Determine the location from which test samples will be taken and in which situations tests are conducted.
3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
4. Submit a certified written report, in duplicate, of each test, inspection, and similar quality-control service through Contractor.
5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
6. Do not perform any duties of Contractor.

F. Associated Services: Cooperate with agencies performing required tests, inspections, and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:

1. Access to the Work.
2. Incidental labor and facilities necessary to facilitate tests and inspections.
3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
4. Facilities for storage and field curing of test samples.
5. Delivery of samples to testing agencies.
6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
7. Security and protection for samples and for testing and inspecting equipment at Project site.

G. Coordination: Coordinate sequence of activities to accommodate required quality-assurance and -control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.

1. Schedule times for tests, inspections, obtaining samples, and similar activities.

1.7 SPECIAL TESTS AND INSPECTIONS

A. Special Tests and Inspections: Owner will engage a qualified testing agency to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:

B. Special Tests and Inspections: Conducted by a qualified testing agency required by authorities having jurisdiction, as indicated in individual Specification Sections, and as follows:

1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
2. Notifying Architect and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
3. Submitting a certified written report of each test, inspection, and similar quality-control service to Architect with copy to Contractor and to authorities having jurisdiction.
4. Submitting a final report of special tests and inspections at Substantial Completion, which includes a list of unresolved deficiencies.
5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
6. Retesting and re-inspecting corrected work.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 REPAIR AND PROTECTION

A. General: On completion of testing, inspecting, sample taking, and similar services, repair damaged construction and restore substrates and finishes.

1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
2. Comply with the Contract Document requirements for Division 01 Section "Cutting and Patching."

B. Protect construction exposed by or for quality-control service activities.

C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 014000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 014200 - REFERENCES

PART 1 - GENERAL

1.1 DEFINITIONS

A. General: Basic Contract definitions are included in the Conditions of the Contract.

B. "Approved": When used to convey Architect's action on Contractor's submittals, applications, and requests, "approved" is limited to Architect's duties and responsibilities as stated in the Conditions of the Contract.

C. "Directed": A command or instruction by Architect. Other terms including "requested," "authorized," "selected," "required," and "permitted" have the same meaning as "directed."

D. "Indicated": Requirements expressed by graphic representations or in written form on Drawings, in Specifications, and in other Contract Documents. Other terms including "shown," "noted," "scheduled," and "specified" have the same meaning as "indicated."

E. "Regulations": Laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the Work.

F. "Furnish": Supply and deliver to Project site, ready for unloading, unpacking, assembly, installation, and similar operations.

G. "Install": Operations at Project site including unloading, temporarily storing, unpacking, assembling, erecting, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning, and similar operations.

H. "Provide": Furnish and install, complete and ready for the intended use.

I. "Project Site": Space available for performing construction activities. The extent of Project site is shown on Drawings and may or may not be identical with the description of the land on which Project is to be built.

1.2 INDUSTRY STANDARDS

A. Applicability of Standards: Unless the Contract Documents include more stringent requirements, applicable construction industry standards have the same force and effect as if bound or copied directly into the Contract Documents to the extent referenced. Such standards are made a part of the Contract Documents by reference.

B. Publication Dates: Comply with standards in effect as of date of the Contract Documents unless otherwise indicated.

C. Copies of Standards: Each entity engaged in construction on Project should be familiar with industry standards applicable to its construction activity. Copies of applicable standards are not bound with the Contract Documents.

1. Where copies of standards are needed to perform a required construction activity, obtain copies directly from publication source.

1.3 ABBREVIATIONS AND ACRONYMS

A. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities indicated in Thomson Gale's "Encyclopedia of Associations" or in Columbia Books' "National Trade & Professional Associations of the U.S."

B. Industry Organizations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

AA	Aluminum Association, Inc. (The)
AAADM	American Association of Automatic Door Manufacturers
AABC	Associated Air Balance Council
AAMA	American Architectural Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
AATCC	American Association of Textile Chemists and Colorists (The)
ABAA	Air Barrier Association of America
ABMA	American Bearing Manufacturers Association
ACI	ACI International (American Concrete Institute)
ACPA	American Concrete Pipe Association
AEIC	Association of Edison Illuminating Companies, Inc. (The)
AF&PA	American Forest & Paper Association
AGA	American Gas Association
AGC	Associated General Contractors of America (The)
AHA	American Hardboard Association (Now part of CPA)
AHAM	Association of Home Appliance Manufacturers

AI	Asphalt Institute
AIA	American Institute of Architects (The)
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ALCA	Associated Landscape Contractors of America (Now PLANET - Professional Landcare Network)
ALSC	American Lumber Standard Committee, Incorporated
AMCA	Air Movement and Control Association International, Inc.
ANSI	American National Standards Institute
AOSA	Association of Official Seed Analysts, Inc.
APA	Architectural Precast Association
APA	APA - The Engineered Wood Association
APA EWS	APA - The Engineered Wood Association; Engineered Wood Systems
API	American Petroleum Institute
ARI	Air-Conditioning & Refrigeration Institute
ARMA	Asphalt Roofing Manufacturers Association
ASCE	American Society of Civil Engineers
ASCE/SEI	American Society of Civil Engineers/Structural Engineering Institute (See ASCE)
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers
ASME	ASME International (The American Society of Mechanical Engineers International)
ASSE	American Society of Sanitary Engineering
ASTM	ASTM International (American Society for Testing and Materials International)
AWCI	AWCI International (Association of the Wall and Ceiling Industry International)

AWCMA	American Window Covering Manufacturers Association (Now WCSC)
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWS	American Welding Society
AWWA	American Water Works Association
BHMA	Builders Hardware Manufacturers Association
BIA	Brick Industry Association (The)
BICSI	BICSI
BIFMA	BIFMA International (Business and Institutional Furniture Manufacturer's Association International)
BISSC	Baking Industry Sanitation Standards Committee
CCC	Carpet Cushion Council
CDA	Copper Development Association
CEA	Canadian Electricity Association
CFFA	Chemical Fabrics & Film Association, Inc.
CGA	Compressed Gas Association
CIMA	Cellulose Insulation Manufacturers Association
CISCA	Ceilings & Interior Systems Construction Association
CISPI	Cast Iron Soil Pipe Institute
CLFMI	Chain Link Fence Manufacturers Institute
CRRC	Cool Roof Rating Council
CPA	Composite Panel Association
CPPA	Corrugated Polyethylene Pipe Association
CRI	Carpet & Rug Institute (The)
CRSI	Concrete Reinforcing Steel Institute

CSA	Canadian Standards Association
CSA	CSA International (Formerly: IAS - International Approval Services)
CSI	Cast Stone Institute
CSI	Construction Specifications Institute (The)
CSSB	Cedar Shake & Shingle Bureau
CTI	Cooling Technology Institute (Formerly: Cooling Tower Institute)
DHI	Door and Hardware Institute
EIA	Electronic Industries Alliance
EIMA	EIFS Industry Members Association
EJCDC	Engineers Joint Contract Documents Committee
EJMA	Expansion Joint Manufacturers Association, Inc.
ESD	ESD Association
FIBA	Federation Internationale de Basketball (The International Basketball Federation)
FIVB	Federation Internationale de Volleyball (The International Volleyball Federation)
FM Approvals	FM Approvals
FM Global	FM Global (Formerly: FMG - FM Global)
FMRC	Factory Mutual Research (Now FM Global)
FRSA	Florida Roofing, Sheet Metal & Air Conditioning Contractors Association, Inc.
FSA	Fluid Sealing Association
FSC	Forest Stewardship Council
GA	Gypsum Association
GANA	Glass Association of North America
GRI	(Now GSI)

GS	Green Seal
GSI	Geosynthetic Institute
HI	Hydraulic Institute
HI	Hydronics Institute
HMMA	Hollow Metal Manufacturers Association (Part of NAAMM)
HPVA	Hardwood Plywood & Veneer Association
HPW	H. P. White Laboratory, Inc.
IAS	International Approval Services (Now CSA International)
IBF	International Badminton Federation
ICEA	Insulated Cable Engineers Association, Inc.
ICRI	International Concrete Repair Institute, Inc.
IEC	International Electrotechnical Commission
IEEE	Institute of Electrical and Electronics Engineers, Inc. (The)
IESNA	Illuminating Engineering Society of North America
IEST	Institute of Environmental Sciences and Technology
IGCC	Insulating Glass Certification Council
IGMA	Insulating Glass Manufacturers Alliance
ILI	Indiana Limestone Institute of America, Inc.
ISO	International Organization for Standardization
ISSFA	International Solid Surface Fabricators Association
ITS	Intertek Testing Service NA
ITU	International Telecommunication Union
KCMA	Kitchen Cabinet Manufacturers Association
LMA	Laminating Materials Association (Now part of CPA)

LPI	Lightning Protection Institute
MBMA	Metal Building Manufacturers Association
MFMA	Maple Flooring Manufacturers Association, Inc.
MFMA	Metal Framing Manufacturers Association, Inc.
MH	Material Handling (Now MHIA)
MHIA	Material Handling Industry of America
MIA	Marble Institute of America
MPI	Master Painters Institute
MSS	Manufacturers Standardization Society of The Valve and Fittings Industry Inc.
NAAMM	National Association of Architectural Metal Manufacturers
NACE	NACE International (National Association of Corrosion Engineers International)
NADCA	National Air Duct Cleaners Association
NAGWS	National Association for Girls and Women in Sport
NAIMA	North American Insulation Manufacturers Association
NBGQA	National Building Granite Quarries Association, Inc.
NCAA	National Collegiate Athletic Association (The)
NCMA	National Concrete Masonry Association
NCPI	National Clay Pipe Institute
NCTA	National Cable & Telecommunications Association
NEBB	National Environmental Balancing Bureau
NECA	National Electrical Contractors Association
NeLMA	Northeastern Lumber Manufacturers' Association
NEMA	National Electrical Manufacturers Association
NETA	InterNational Electrical Testing Association

NFHS	National Federation of State High School Associations
NFPA	NFPA (National Fire Protection Association)
NFRC	National Fenestration Rating Council
NGA	National Glass Association
NHLA	National Hardwood Lumber Association
NLGA	National Lumber Grades Authority
NOFMA	NOFMA: The Wood Flooring Manufacturers Association (Formerly: National Oak Flooring Manufacturers Association)
NRCA	National Roofing Contractors Association
NRMCA	National Ready Mixed Concrete Association
NSF	NSF International (National Sanitation Foundation International)
NSSGA	National Stone, Sand & Gravel Association
NTMA	National Terrazzo & Mosaic Association, Inc. (The)
NTRMA	National Tile Roofing Manufacturers Association (Now TRI)
NWWDA	National Wood Window and Door Association (Now WDMA)
OPL	Omega Point Laboratories, Inc. (Now ITS)
PCI	Precast/Prestressed Concrete Institute
PDCA	Painting & Decorating Contractors of America
PDI	Plumbing & Drainage Institute
PGI	PVC Geomembrane Institute
PLANET	Professional Landcare Network (Formerly: ACLA - Associated Landscape Contractors of America)
PTI	Post-Tensioning Institute
RCSC	Research Council on Structural Connections

RFCI	Resilient Floor Covering Institute
RIS	Redwood Inspection Service
SAE	SAE International
SDI	Steel Deck Institute
SDI	Steel Door Institute
SEFA	Scientific Equipment and Furniture Association
SEI/ASCE	Structural Engineering Institute/American Society of Civil Engineers (See ASCE)
SGCC	Safety Glazing Certification Council
SIA	Security Industry Association
SIGMA	Sealed Insulating Glass Manufacturers Association (Now IGMA)
SJI	Steel Joist Institute
SMA	Screen Manufacturers Association
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association
SMPTE	Society of Motion Picture and Television Engineers
SPFA	Spray Polyurethane Foam Alliance (Formerly: SPI/SPFD - The Society of the Plastics Industry, Inc.; Spray Polyurethane Foam Division)
SPIB	Southern Pine Inspection Bureau (The)
SPRI	Single Ply Roofing Industry
SSINA	Specialty Steel Industry of North America
SSPC	SSPC: The Society for Protective Coatings
STI	Steel Tank Institute
SWI	Steel Window Institute
SWRI	Sealant, Waterproofing, & Restoration Institute
TCA	Tile Council of America, Inc.

TIA/EIA	Telecommunications Industry Association/Electronic Industries Alliance
TMS	The Masonry Society
TPI	Truss Plate Institute, Inc.
TPI	Turfgrass Producers International
TRI	Tile Roofing Institute
UL	Underwriters Laboratories Inc.
UNI	Uni-Bell PVC Pipe Association
USAV	USA Volleyball
USGBC	U.S. Green Building Council
USITT	United States Institute for Theatre Technology, Inc.
WASTEC	Waste Equipment Technology Association
WCLIB	West Coast Lumber Inspection Bureau
WCMA	Window Covering Manufacturers Association (Now WCSC)
WCSC	Window Covering Safety Council (Formerly: WCMA - Window Covering Manufacturers Association)
WDMA	Window & Door Manufacturers Association (Formerly: NWWDA - National Wood Window and Door Association)
WI	Woodwork Institute (Formerly: WIC - Woodwork Institute of California)
WIC	Woodwork Institute of California (Now WI)
WMMPA	Wood Moulding & Millwork Producers Association
WSRCA	Western States Roofing Contractors Association
WWPA	Western Wood Products Association

C. Code Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

BOCA	BOCA International, Inc. (See ICC)

IAPMO	International Association of Plumbing and Mechanical Officials
ICBO	International Conference of Building Officials (See ICC)
ICBO ES	ICBO Evaluation Service, Inc. (See ICC-ES)
ICC	International Code Council
ICC-ES	ICC Evaluation Service, Inc.
SBCCI	Southern Building Code Congress International, Inc. (See ICC)
UBC	Uniform Building Code (See ICC)

D. Federal Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

CE	Army Corps of Engineers
CPSC	Consumer Product Safety Commission
DOC	Department of Commerce
DOD	Department of Defense
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FDA	Food and Drug Administration
GSA	General Services Administration
HUD	Department of Housing and Urban Development
LBL	Lawrence Berkeley National Laboratory
NCHRP	National Cooperative Highway Research Program (See TRB)

NIST	National Institute of Standards and Technology
OSHA	Occupational Safety & Health Administration
PBS	Public Building Service (See GSA)
PHS	Office of Public Health and Science
RUS	Rural Utilities Service (See USDA)
SD	State Department
TRB	Transportation Research Board
USDA	Department of Agriculture
USPS	Postal Service

E. Standards and Regulations: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the standards and regulations in the following list.

ADAAG	Americans with Disabilities Act (ADA) Architectural Barriers Act (ABA)
CFR	Code of Federal Regulations
DOD	Department of Defense Military Specifications and Standards
DSCC	Defense Supply Center Columbus (See FS)
FED-STD	Federal Standard (See FS)
FS	Federal Specification
FTMS	Federal Test Method Standard (See FS)
MIL	(See MILSPEC)
MIL-STD	(See MILSPEC)
MILSPEC	Military Specification and Standards
UFAS	Uniform Federal Accessibility Standards

F. State Government Agencies: Where abbreviations and acronyms are used in Specifications or other Contract Documents, they shall mean the recognized name of the entities in the following list.

CBHF	State of California, Department of Consumer Affairs Bureau of Home Furnishings and Thermal Insulation
CCR	California Code of Regulations
CPUC	California Public Utilities Commission
TFS	Texas Forest Service Forest Resource Development

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 014200

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.

B. See Division 01 Section "Closeout Procedures" for submitting warranties for Contract closeout.

C. See Divisions 02 through 49 Sections for specific requirements for warranties on products and installations specified to be warranted.

1.2 DEFINITIONS

A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.

1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature, that is current as of date of the Contract Documents.
2. New Products: Items that have not previously been incorporated into another project or facility. Products salvaged or recycled from other projects are not considered new products.
3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.

B. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor.

C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.3 SUBMITTALS

A. Substitution Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Substitution Request Form: type written letter on company stationary.
2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:

a. Statement indicating why specified material or product cannot be provided.
b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, that will be necessary to accommodate proposed substitution.
c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
e. Samples, where applicable or requested.
f. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
i. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
j. Cost information, including a proposal of change, if any, in the Contract Sum.
k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
l. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.

3. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within 7 days of receipt of a request for substitution. Architect will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Acceptance: Change Order.

b. Use product specified if Architect cannot make a decision on use of a proposed substitution within time allocated.

B. Comparable Product Requests: Submit three copies of each request for consideration. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.

1. Architect's Action: If necessary, Architect will request additional information or documentation for evaluation within one week of receipt of a comparable product request. Architect will notify Contractor of approval or rejection of proposed comparable product request within 15 days of receipt of request, or 7 days of receipt of additional information or documentation, whichever is later.

a. Form of Approval: As specified in Division 01 Section "Submittal Procedures."
b. Use product specified if Architect cannot make a decision on use of a comparable product request within time allocated.

C. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.4 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.5 PRODUCT DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.

C. Storage:

1. Store products to allow for inspection and measurement of quantity or counting of units.
2. Store materials in a manner that will not endanger Project structure.
3. Store products that are subject to damage by the elements, under cover in a weather tight enclosure above ground, with ventilation adequate to prevent condensation.
4. Store cementitious products and materials on elevated platforms.
5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.

1.6 PRODUCT WARRANTIES

A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

1. Manufacturer's Warranty: Preprinted written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.
2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.

B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Submit a draft for approval before final execution.

1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
3. Refer to Divisions 2 through 16 Sections for specific content requirements and particular requirements for submitting special warranties.

C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.

1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
4. Where products are accompanied by the term "as selected," Architect will make selection.
5. Where products are accompanied by the term "match sample," sample to be matched is Architect's.
6. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

B. Product Selection Procedures:

1. Product: Where Specifications name a single product and manufacturer, provide the named product that complies with requirements.
2. Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements.
3. Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed that complies with requirements.
4. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements.
5. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one of the products listed, or an unnamed product, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
6. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product.
7. Product Options: Where Specifications indicate that sizes, profiles, and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
8. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with provisions in Part 2 "Comparable Products" Article for consideration of an unnamed product by the other named manufacturers.
9. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.

a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.

10. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns, textures" or a similar phrase, select a product that complies with other specified requirements.

    a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that does not include premium items.
    b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Architect will select color, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

A. Timing: Architect will consider requests for substitution if received within 7days of the Bid date. Requests received after that time may be considered or rejected at discretion of Architect. In no case will substitutions submitted more than 30 days after the Notice to Proceed be reviewed.

B. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner, and similar considerations.
2. Requested substitution does not require extensive revisions to the Contract Documents.
3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
4. Substitution request is fully documented and properly submitted.
5. Requested substitution will not adversely affect Contractor's Construction Schedule.
6. Requested substitution has received necessary approvals of authorities having jurisdiction.
7. Requested substitution is compatible with other portions of the Work.
8. Requested substitution has been coordinated with other portions of the Work.
9. Requested substitution provides specified warranty.

2.3 COMPARABLE PRODUCTS

A. Conditions: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:

1. Evidence that the proposed product does not require extensive revisions to the Contract Documents, that it is consistent with the Contract Documents and will produce the indicated results, and that it is compatible with other portions of the Work.
2. Detailed comparison of significant qualities of proposed product with those named in the Specifications. Significant qualities include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
3. Evidence that proposed product provides specified warranty.
4. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners, if requested.
5. Samples, if requested.

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:

1. Construction layout.
2. Field engineering and surveying.
3. General installation of products.
4. Progress cleaning.
5. Starting and adjusting.
6. Protection of installed construction.
7. Correction of the Work.

B. See Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.2 SUBMITTALS

A. Certificates: Submit certificate signed by professional engineer certifying that location and elevation of improvements comply with requirements.

B. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.

1.3 QUALITY ASSURANCE

A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Existing Conditions: The existence and location of site improvements, utilities, and other construction indicated as existing are not guaranteed. Before beginning work,

investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work.

1. Before construction, verify the location and points of connection of utility services.

B. Existing Utilities: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities and other construction affecting the Work.

1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; and underground electrical services.
2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.

C. Acceptance of Conditions: Examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.

1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
3. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
4. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.

B. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

D. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Architect. Include a detailed description of problem encountered, together with recommendations for changing the Contract Documents.

3.3 CONSTRUCTION LAYOUT

A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Architect promptly.

B. General: Engage a professional engineer to lay out the Work using accepted surveying practices.

1. Establish benchmarks and control points to set lines and levels at each story of construction and elsewhere as needed to locate each element of Project.
2. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
3. Inform installers of lines and levels to which they must comply.
4. Check the location, level and plumb, of every major element as the Work progresses.
5. Notify Architect when deviations from required lines and levels exceed allowable tolerances.
6. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.

C. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and invert elevations.

D. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by Architect.

3.4 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

B. Benchmarks: Establish and maintain a minimum of two permanent benchmarks on Project site, referenced to data established by survey control points. Comply with authorities having jurisdiction for type and size of benchmark.

1. Record benchmark locations, with horizontal and vertical data, on Project Record Documents.

C. Certified Survey: On completion of foundation walls, major site improvements, and other work requiring field-engineering services, prepare a certified survey showing dimensions, locations, angles, and elevations of construction and sitework.

D. Final Property Survey: Prepare a final property survey showing significant features (real property) for Project. Include on the survey a certification, signed by professional engineer, that principal metes, bounds, lines, and levels of Project are accurately positioned as shown on the survey.

1. Recording: At Substantial Completion, have the final property survey recorded by or with authorities having jurisdiction as the official "property survey."

3.5 INSTALLATION

A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.

1. Make vertical work plumb and make horizontal work level.
2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
3. Conceal pipes, ducts, and wiring in finished areas, unless otherwise indicated.

B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.

C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.

D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.

E. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.

F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.

G. Anchors and Fasteners: Provide anchors and fasteners as required to anchor each component securely in place, accurately located and aligned with other portions of the Work.

1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Architect.
2. Allow for building movement, including thermal expansion and contraction.
3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.

I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.6 PROGRESS CLEANING

A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully.

1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
2. Do not hold materials more than 7 days during normal weather or 3 days if the temperature is expected to rise above 80 deg F (27 deg C).
3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.

B. Site: Maintain Project site free of waste materials and debris.

C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.

1. Remove liquid spills promptly.
2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.

D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.

E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.

F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.

G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.

H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.

I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.

B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.

C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 01 Section "Quality Requirements."

3.8 PROTECTION OF INSTALLED CONSTRUCTION

A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.

B. Comply with manufacturer's written instructions for temperature and relative humidity.

3.9 CORRECTION OF THE WORK

A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 Section "Cutting and Patching."

1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials, and properly adjusting operating equipment.

B. Restore permanent facilities used during construction to their specified condition.

C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.

D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.

E. Remove and replace chipped, scratched, and broken glass or reflective surfaces.

END OF SECTION 017300

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 017700 - CLOSEOUT PROCEDURES

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:

1. Inspection procedures.
2. Warranties.
3. Final cleaning.

B. See Division 01 Section "Payment Procedures" for requirements for Applications for Payment for Substantial and Final Completion.

C. See Division 01 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.

D. See Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

E. See Division 01 Section "Demonstration and Training" for requirements for instructing Owner's personnel.

F. See Divisions 02 through 49 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.2 SUBSTANTIAL COMPLETION

A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.

1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
2. Advise Owner of pending insurance changeover requirements.
3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
4. Obtain and submit releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
5. Prepare and submit Project Record Documents, operation and maintenance manuals, Final Completion construction photographs, damage or settlement surveys, property surveys, and similar final record information.

6. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
8. Complete startup testing of systems.
9. Submit test/adjust/balance records.
10. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements.
11. Advise Owner of changeover in heat and other utilities.
12. Submit changeover information related to Owner's occupancy, use, operation, and maintenance.
13. Complete final cleaning requirements, including touchup painting.
14. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.

B. Inspection: Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
2. Results of completed inspection will form the basis of requirements for Final Completion.

1.3 FINAL COMPLETION

A. Preliminary Procedures: Before requesting final inspection for determining date of Final Completion, complete the following:

1. Submit a final Application for Payment according to Division 01 Section "Payment Procedures."
2. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
3. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
4. Submit pest-control final inspection report and warranty.
5. Instruct Owner's personnel in operation, adjustment, and maintenance of products, equipment, and systems.

B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.

1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.

1.4 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.

1. Organize list of spaces in sequential order, starting with exterior areas first and proceeding from lowest floor to highest floor.
2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.

1.5 WARRANTIES

A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.

1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch (215-by-280-mm) paper.
2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer.
3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor.

C. Provide additional copies of each warranty to include in operation and maintenance manuals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.

PART 3 - EXECUTION

3.1 FINAL CLEANING

A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.

B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:

a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
c. Rake grounds that are neither planted nor paved to a smooth, even-textured surface.
d. Remove tools, construction equipment, machinery, and surplus material from Project site.
e. Remove snow and ice to provide safe access to building.
f. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
g. Remove debris and surface dust from limited access spaces, including roofs, plenums, shafts, trenches, equipment vaults, manholes, attics, and similar spaces.
h. Sweep concrete floors broom clean in unoccupied spaces.
i. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
j. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
k. Remove labels that are not permanent.
l. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.

1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.

m. Wipe surfaces of mechanical and electrical equipment, elevator equipment, and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
n. Replace parts subject to unusual operating conditions.
o. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
p. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
q. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
r. Leave Project clean and ready for occupancy.

C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.

D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

END OF SECTION 017700

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 017823 - OPERATION AND MAINTENANCE DATA

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:

1. Emergency manuals.
2. Operation manuals for systems, subsystems, and equipment.
3. Maintenance manuals for the care and maintenance of products, materials, and finishes, systems and equipment.

B. See Divisions 02 through 49 Sections for specific operation and maintenance manual requirements for the Work in those Sections.

1.2 SUBMITTALS

A. Manual: Submit one copy of each manual in final form at least 15 days before final inspection. Architect will return copy with comments within 15 days after final inspection.

1. Correct or modify each manual to comply with Architect's comments. Submit 3 copies of each corrected manual within 15 days of receipt of Architect's comments.

PART 2 - PRODUCTS

2.1 MANUALS, GENERAL

A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents, and manual contents.

B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:

1. Subject matter included in manual.
2. Name and address of Project.
3. Name and address of Owner.
4. Date of submittal.
5. Name, address, and telephone number of Contractor.
6. Name and address of Architect.
7. Cross-reference to related systems in other operation and maintenance manuals.

C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.

D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem, and equipment. If possible, assemble instructions for subsystems, equipment, and components of one system into a single binder.

1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch (215-by-280-mm) paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.

    a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.

2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.

    a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
    b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents, and drawing locations.

2.2 EMERGENCY MANUALS

A. Content: Organize manual into a separate section for type of emergency, emergency instructions, and emergency procedures.

B. Type of Emergency: Where applicable for each type of emergency indicated below, include instructions and procedures for each system, subsystem, piece of equipment, and component for fire, flood, water leak, power failure, water outage, equipment failure and chemical release or spill.

C. Emergency Instructions: Describe and explain warnings, trouble indications, error messages, and similar codes and signals. Include responsibilities of Owner's operating personnel for notification of Installer, supplier, and manufacturer to maintain warranties.

D. Emergency Procedures: Include instructions on stopping, shutdown instructions for each type of emergency, operating instructions for conditions outside normal operating limits, and required sequences for electric or electronic systems.

2.3 OPERATION MANUALS

A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.

B. Descriptions: Include the following:

1. Product name and model number.
2. Manufacturer's name.
3. Equipment identification with serial number of each component.
4. Equipment function.
5. Operating characteristics.
6. Limiting conditions.
7. Performance curves.
8. Engineering data and tests.
9. Complete nomenclature and number of replacement parts.

C. Operating Procedures: Include start-up, break-in, and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal, and weekend operating instructions; and required sequences for electric or electronic systems.

D. Systems and Equipment Controls: Describe the sequence of operation, and diagram controls as installed.

E. Piped Systems: Diagram piping as installed, and identify color-coding where required for identification.

2.4 PRODUCT MAINTENANCE MANUAL

A. Content: Organize manual into a separate section for each product, material, and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.

B. Source Information: List each product included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Product Information: Include the following, as applicable:

1. Product name and model number.
2. Manufacturer's name.
3. Color, pattern, and texture.

4. Material and chemical composition.
5. Reordering information for specially manufactured products.

D. Maintenance Procedures: Include manufacturer's written recommendations and inspection procedures, types of cleaning agents, methods of cleaning, schedule for cleaning and maintenance, and repair instructions.

E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.

F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

2.5 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

A. Content: For each system, subsystem, and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.

B. Source Information: List each system, subsystem, and piece of equipment included in manual, identified by product name and arranged to match manual's table of contents. For each product, list name, address, and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.

C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including maintenance instructions, drawings and diagrams for maintenance, nomenclature of parts and components, and recommended spare parts for each component part or piece of equipment:

D. Maintenance Procedures: Include test and inspection instructions, troubleshooting guide, disassembly instructions, and adjusting instructions, and demonstration and training videotape if available, that detail essential maintenance procedures:

E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.

F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.

G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.

H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 - EXECUTION

3.1 MANUAL PREPARATION

A. Emergency Manual: Assemble a complete set of emergency information indicating procedures for use by emergency personnel and by Owner's operating personnel for types of emergencies indicated.

B. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material, and finish incorporated into the Work.

C. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem, and piece of equipment not part of a system.

D. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data include more than one item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.

E. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.

1. Do not use original Project Record Documents as part of operation and maintenance manuals.

F. Comply with Division 01 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

END OF SECTION 017823

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 017839 - PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:

1. Record Drawings.
2. Record Specifications.
3. Record Product Data.

B. See Division 01 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.

C. See Divisions 02 through 49 Sections for specific requirements for Project Record Documents of the Work in those Sections.

1.2 SUBMITTALS

A. Record Drawings: Comply with the following:

1. Number of Copies: Submit two set(s) of marked-up Record Prints.
2. Number of Copies: Submit copies of Record Drawings as follows:

a. Initial Submittal: Submit one set of corrected Record Transparencies and two set(s) of marked-up Record Prints. Architect will initial and date each transparency and mark whether general scope of changes, additional information recorded, and quality of drafting are acceptable. Architect will return transparencies and prints for organizing into sets, printing, binding, and final submittal.

b. Final Submittal: Submit two set(s) of marked-up Record Prints, and the following:

1) Record Transparencies: One (1) set.
2) Copies printed from Record Transparencies: Two (2). Print each Drawing, whether or not changes and additional information were recorded.
3) Scanned PDF document record set.

B. Record Specifications: Submit two copies of Project's Specifications, including addenda and contract modifications.

C. Record Product Data: Submit two copies of each Product Data submittal.

PART 2 - PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one set of blue- or black-line white prints of the Contract Drawings and Shop Drawings.

1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor, or similar entity, to prepare the marked-up Record Prints.

a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.

2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
4. Note Construction Change Directive numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.

B. Record Transparencies: Immediately before inspection for Certificate of Substantial Completion, review marked-up Record Prints with Architect. When authorized, prepare a full set of corrected transparencies of the Contract Drawings and Shop Drawings.

1. Incorporate changes and additional information previously marked on Record Prints. Erase, redraw, and add details and notations where applicable.
2. Refer instances of uncertainty to Architect for resolution.
3. Owner will furnish Contractor one set of transparencies of the Contract Drawings for use in recording information.
4. Print the Contract Drawings and Shop Drawings for use as Record Transparencies. Architect will make the Contract Drawings available to Contractor's print shop.

C. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.

1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
2. Record Transparencies: Organize into unbound sets matching Record Prints. Place transparencies in durable tube-type drawing containers with end caps. Mark end cap of each container with identification. If container does not include a complete set, identify Drawings included.

3. Record CAD Drawings: Organize CAD information into separate electronic files that correspond to each sheet of the Contract Drawings. Name each file with the sheet identification. Include identification in each CAD file.
4. Identification: As follows:

    a. Project name.
    b. Date.
    c. Designation "PROJECT RECORD DRAWINGS."
    d. Name of Architect.
    e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda, and contract modifications.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
3. Record the name of manufacturer, supplier, Installer, and other information necessary to provide a record of selections made.
4. Note related Change Orders, Record Product Data, and Record Drawings where applicable.

2.3 RECORD PRODUCT DATA

A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.

1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.
3. Note related Change Orders, Record Specifications, and Record Drawings where applicable.

2.4 MISCELLANEOUS RECORD SUBMITTALS

A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.

PART 3 - EXECUTION

3.1 RECORDING AND MAINTENANCE

A. Recording: Maintain one copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.

B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Architect's reference during normal working hours.

END OF SECTION 017839

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 033000 - CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. This Section specifies cast-in place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Design Mixtures: For each concrete mixture.

C. Shop Drawings: For steel reinforcement. Material test reports and certificates.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."

B. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:

1. ACI 301, "Specification for Structural Concrete".

2. ACI 318, "Building Code Requirements for Reinforced Concrete".
3. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
4. CRSI, "Manual of Standard Practice".

C. Preinstallation Conference: Conduct conference with Architect and Testing Laboratory representative at Project site.

PART 2 - PRODUCTS

2.1 FORM-FACING MATERIALS

A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.

B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.

2.2 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.

B. Plain-Steel Welded Wire Reinforcement: ASTM A 185, plain, fabricated from as-drawn steel wire into flat sheets.

C. Deformed-Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.

D. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice."

2.3 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:

1. Portland Cement: ASTM C 150, Type I.

a. Fly Ash: ASTM C 618.

B. Normal-Weight Aggregates: ASTM C 33, graded, 1-inch (25-mm) nominal maximum coarse-aggregate size.

1. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Lightweight Aggregate: ASTM C 330, 3/4-inch (19-mm) nominal maximum aggregate size.

D. Water: ASTM C 94/C 94M and potable.

E. Air-Entraining Admixture: ASTM C 260.

F. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
2. Retarding Admixture: ASTM C 494/C 494M, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.

6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.

G. Synthetic Fiber: Polypropylene fibers engineered and designed for use in concrete pavement, complying with ASTM C 1116, Type III.

2.4 CURING MATERIALS

A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.

B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.

C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

D. Water: Potable.

E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

F. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, nondissipating.

2.5 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.

2.6 CONCRETE MIXTURES

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.

B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of portland cement, which would otherwise be used, by not less than 40 percent.

C. Proportion normal-weight concrete mixture as follows:

1. Minimum Compressive Strength: 3000 psi (20.7 MPa) at 28 days.
2. Maximum Water-Cementitious Materials Ratio: 0.45.
3. Slump Limit: 5 inches maximum.
4. Air Content: Do not allow air content of troweled finished floors to exceed 3 percent.

2.7 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.8 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.

1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.

PART 3 - EXECUTION

3.1 FORMWORK

A. Design, erect, shore, brace, and maintain formwork according to ACI 301 to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.

B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.

C. Chamfer exterior corners and edges of permanently exposed concrete.

3.2 EMBEDDED ITEMS

A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.

3.3 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.

1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.4 JOINTS

A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.

B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.

C. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:

1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch (3.2 mm). Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch- (3.2-mm-) wide joints into concrete when cutting action will not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.

D. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.

3.5 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.

B. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.

1. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.

C. Cold-Weather Placement: Comply with ACI 306.1.

D. Hot-Weather Placement: Comply with ACI 301.

3.6 FINISHING FORMED SURFACES

A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces not exposed to public view.

B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.

1. Apply to concrete surfaces exposed to public view, to receive a rubbed finish, to be covered with a coating or covering material applied directly to concrete.

C. Rubbed Finish: Apply the following to smooth-formed finished as-cast concrete where indicated:

1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
2. Grout-Cleaned Finish: Wet concrete surfaces and apply grout of a consistency of thick paint to coat surfaces and fill small holes. Mix one part portland cement to one and one-half parts fine sand with a 1:1 mixture of bonding admixture and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Scrub grout into voids and remove excess grout. When grout whitens, rub surface with clean burlap and keep surface damp by fog spray for at least 36 hours.
3. Cork-Floated Finish: Wet concrete surfaces and apply a stiff grout. Mix one part portland cement and one part fine sand with a 1:1 mixture of bonding agent and water. Add white portland cement in amounts determined by trial patches so color of dry grout will match adjacent surfaces. Compress grout into voids by grinding surface. In a swirling motion, finish surface with a cork float.

D. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces, unless otherwise indicated.

3.7 FINISHING FLOORS AND SLABS

A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.

B. Scratch Finish: While still plastic, texture concrete surface that has been screeded and bull-floated or darbied. Use stiff brushes, brooms, or rakes to produce a profile amplitude of 1/4 inch (6 mm) in 1 direction.

1. Apply scratch finish to surfaces to receive mortar setting beds for bonded cementitious floor finishes.

C. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.

1. Apply float finish to surfaces to receive trowel finish.

D. Trowel Finish: After applying float finish, apply first troweling and consolidate concrete by hand or power-driven trowel. Continue troweling passes and restraighten until surface is free of trowel marks and uniform in texture and appearance. Grind smooth any surface defects that would telegraph through applied coatings or floor coverings.

1. Apply a trowel finish to surfaces exposed to view or to be covered with resilient flooring, carpet, ceramic or quarry tile set over a cleavage membrane, paint, or another thin-film-finish coating system.
2. Finish and measure surface so gap at any point between concrete surface and an unleveled, freestanding, 10-foot- (3.05-m-) long straightedge resting on 2 high spots and placed anywhere on the surface does not exceed 1/8 inch (3.2 mm).

E. Trowel and Fine-Broom Finish: Apply a first trowel finish to surfaces where ceramic or quarry tile is to be installed by either thickset or thin-set method. While concrete is still plastic, slightly scarify surface with a fine broom.

1. Comply with flatness and levelness tolerances for trowel finished floor surfaces.

F. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, and ramps, and elsewhere as indicated.

3.8 CONCRETE PROTECTING AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.

B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Cure concrete according to ACI 308.1, by one or a combination of the following methods:

1. Moisture Curing: Keep surfaces continuously moist for not less than seven days.
2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches (300 mm), and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.

   a. After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.

4. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after

initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.9 CONCRETE SURFACE REPAIRS

A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.

3.10 FIELD QUALITY CONTROL

A. Testing and Inspecting: Owner will engage a qualified independent testing and inspecting agency to perform field tests and inspections and prepare test reports.

1. Testing Services: Tests shall be performed according to ACI 301.

2. Sampling Fresh Concrete: ASTM C 172, except modified for slump to comply with ASTM C 94.

3. Slump: ASTM C 143, one test at point of discharge for each day's pour of each type of concrete; additional tests when concrete consistency seems to have changed.

4. Air Content: ASTM C 173, volumetric method for lightweight or normal weight concrete; ASTM C 231, pressure method for normal weight concrete; one for each day's pour of each type of air-entrained concrete.

5. Concrete Temperature: ASTM C 1064; one test hourly when air temperature is 40 degrees F (4 deg. C) and below; when 80 degrees F (27 deg. C) and above, and one test for each set of compressive-strength specimens.

6. Compression Test Specimen: ASTM C 31, one set of four standard cylinders for each compressive-strength test, unless otherwise directed. Mold and store cylinders for laboratory-cured test specimens except when field-cured test specimens are required.

7. Compressive-Strength Tests: ASTM C 39, one set for each day's pour exceeding 5 cubic yards plus additional sets for 50 cu. yd. more than the first 25 cu. yd. of each concrete class placed in any one day; one specimen tested at 7 days, two specimens tested at 28 days, and one specimen retained in reserve for later testing if required.

B. When frequency of testing will provide fewer than five strength tests for a given class of concrete, conduct testing from at least five randomly selected batches or from each batch if fewer than five are used.

C. When strength of field-cured cylinders is less than 85 percent of companion laboratory-cured cylinders, evaluate current operations and provide corrective procedures for protecting and curing the in-place concrete.

D. Strength level of concrete will be considered satisfactory if averages of sets of three consecutive strength test results equal or exceed specified compressive strength and no individual strength test results falls below specified compressive strength by more than 500 psi.

E. Test Results will be reported in writing to Architect, Structural Engineer, ready-mix producer, and Contractor within 24 hours after tests. Reports of compressive strength tests shall contain the Project identification name and number, date of concrete placement, name of concrete testing service, concrete type and class, location of concrete batch in structure, design compressive strength at 28 days, concrete mix proportions and materials, compressive breaking strength, and type of break for each of the 7-day tests and 28-day tests.

F. Additional Tests: The testing agency will make additional tests of in-place concrete, as directed by Architect, when test results indicate specified concrete strengths and other characteristics have not been attained in the structure. Testing agency may conduct tests to determine adequacy of concrete by cored cylinders complying with ASTM C 42, or by other methods as directed by Architect.

END OF SECTION 033000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 061000 - ROUGH CARPENTRY

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Wood blocking, cants, and nailers.
   2. Wood furring and grounds.
   3. Wood sleepers.
   4. Plywood backing panels.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product.

   1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements
   2. Include data for fire-retardant treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements.

1.3 INFORMATIONAL SUBMITTALS

A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.

B. Evaluation Reports: For the following, from ICC-ES:

   1. Wood-preservative-treated wood.
   2. Fire-retardant-treated wood.
   3. Engineered wood products.
   4. Power-driven fasteners.
   5. Powder-actuated fasteners.
   6. Expansion anchors.
   7. Metal framing anchors.

PART 2 - PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, provide lumber that complies with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Provide lumber graded by an

agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.

1. Factory mark each piece of lumber with grade stamp of grading agency.
2. For exposed lumber indicated to receive a stained or natural finish, mark grade stamp on end or back of each piece.
3. Provide dressed lumber, S4S, unless otherwise indicated.

B. Maximum Moisture Content of Lumber: 15 percent for 2-inch nominal thickness or less, 19 percent for more than 2-inch nominal thickness unless otherwise indicated.

C. Engineered Wood Products: Provide engineered wood products acceptable to authorities having jurisdiction and for which current model code research or evaluation reports exist that show compliance with building code in effect for Project.

1. Allowable Design Stresses: Provide engineered wood products with allowable design stresses, as published by manufacturer, that meet or exceed those indicated. Manufacturer's published values shall be determined from empirical data or by rational engineering analysis and demonstrated by comprehensive testing performed by a qualified independent testing agency.

2.2 FIRE-RETARDANT-TREATED MATERIALS

A. General: Where fire-retardant-treated materials are indicated, use materials complying with requirements in this article, that are acceptable to authorities having jurisdiction, and with fire-test-response characteristics specified as determined by testing identical products per test method indicated by a qualified testing agency.

B. Fire-Retardant-Treated Lumber and Plywood by Pressure Process: Products with a flame spread index of 25 or less when tested according to ASTM E 84, and with no evidence of significant progressive combustion when the test is extended an additional 20 minutes, and with the flame front not extending more than 10.5 feet beyond the centerline of the burners at any time during the test.

1. Exterior Type: Treated materials shall comply with requirements specified above for fire-retardant-treated lumber and plywood by pressure process after being subjected to accelerated weathering according to ASTM D 2898. Use for exterior locations and where indicated.
2. Interior Type A: Treated materials shall have a moisture content of 28 percent or less when tested according to ASTM D 3201 at 92 percent relative humidity. Use where exterior type is not indicated.

C. Kiln-dry plywood after treatment to a maximum moisture content of 15 percent.

D. Identify fire-retardant-treated wood with appropriate classification marking of qualified testing agency.

E. Application: Treat items indicated on Drawings, and the following:
1. Plywood backing panels.

2.3 PLYWOOD BACKING PANELS

A. Equipment Backing Panels: DOC PS 1, Exterior, AC in thickness indicated or, if not indicated, not less than 3/4-inch nominal thickness.

1. Plywood shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

B. Plastic Wall Panel Backing Panels: Interior grade CD in thickness indicated or, if not indicated, not less than 3/4-inch nominal thickness.

2.4 FASTENERS

A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.

1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.

B. Power-Driven Fasteners: NES NER-272.

C. Bolts: Steel bolts complying with ASTM A 307, Grade A (ASTM F 568M, Property Class 4.6); with ASTM A 563 (ASTM A 563M) hex nuts and, where indicated, flat washers.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry to other construction; scribe and cope as needed for accurate fit. Locate furring, nailers, blocking, grounds, and similar supports to comply with requirements for attaching other construction.

B. Install fire-retardant treated plywood backing panels with classification marking of testing agency exposed to view.

C. Metal Framing Anchors: Install metal framing anchors to comply with manufacturer's written instructions. Install fasteners through each fastener hole.

D. Do not splice structural members between supports unless otherwise indicated.

E. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.

F. Securely attach rough carpentry work to substrate by anchoring and fastening as indicated, complying with the following:

1. NES NER-272 for power-driven fasteners.
2. Table 2304.9.1, "Fastening Schedule," in ICC's International Building Code.
3. Table R602.3(1), "Fastener Schedule for Structural Members," and Table R602.3(2), "Alternate Attachments," in ICC's International Residential Code for One- and Two-Family Dwellings.

3.2 PROTECTION

A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes sufficiently wet that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

END OF SECTION 061000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 066400 - PLASTIC PANELING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes plastic sheet paneling.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For plastic paneling and trim accessories.

1.3 QUALITY ASSURANCE

A. Testing Agency: Acceptable to authorities having jurisdiction.

PART 2 - PRODUCTS

2.1 PLASTIC SHEET PANELING

A. Glass-Fiber-Reinforced Plastic Paneling: Gelcoat-finished, glass-fiber-reinforced plastic panels complying with ASTM D 5319.

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

    a. Crane Composites, Inc.
    b. Glasteel.
    c. Marlite.
    d. Newcourt, Inc.
    e. Nudo Products, Inc.
    f. Parkland Plastics, Inc.

2. Nominal Thickness: Not less than 0.12 inch.
3. Surface Finish: As selected by Architect from manufacturer's full range.
4. Color: As selected by Architect from manufacturer's full range.

2.2 ACCESSORIES

A. Trim Accessories: Manufacturer's standard one-piece vinyl extrusions designed to retain and cover edges of panels. Provide division bars, inside corners, outside corners, and caps as needed to conceal edges.

1. Color: As selected by Architect from manufacturer's full range.

B. Adhesive: As recommended by plastic paneling manufacturer and with a VOC content of 50g/L or less.

C. Sealant: Mildew-resistant, single-component, neutral-curing silicone sealant recommended by plastic paneling manufacturer and complying with requirements in Section 079200 "Joint Sealants."

1. Sealant shall have a VOC content of 250 g/L or less.

PART 3 - EXECUTION

3.1 PREPARATION

A. Clean substrates of substances that could impair adhesive bond, including oil, grease, dirt, and dust.

B. Condition panels by unpacking and placing in installation space before installation according to manufacturer's written recommendations.

C. Lay out paneling before installing. Locate panel joints so that trimmed panels at corners are not less than 12 inches (300 mm) wide.

3.2 INSTALLATION

A. Install plastic paneling according to manufacturer's written instructions.

B. Install panels in a full spread of adhesive.

C. Install trim accessories with adhesive. Do not fasten through panels.

D. Fill grooves in trim accessories with sealant before installing panels, and bed inside corner trim in a bead of sealant.

E. Maintain uniform space between panels and wall fixtures. Fill space with sealant.

F. Remove excess sealant and smears as paneling is installed. Clean with solvent recommended by sealant manufacturer and then wipe with clean dry cloths until no residue remains.

END OF SECTION 066400

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 072100 - THERMAL INSULATION

1.1 SUMMARY

A. Section Includes:
   1. Polyisocyanurate foam-plastic board.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 INFORMATIONAL SUBMITTALS

A. Product test reports.

B. Research reports.

PART 2 - PRODUCTS

2.1 POLYISOCYANURATE FOAM-PLASTIC BOARD

A. Polyisocyanurate Board, Foil Faced: ASTM C1289, foil faced, Type I, Class 1 or 2.

   1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

      a. Atlas Roofing Corporation.
      b. Carlisle Coatings & Waterproofing Inc.
      c. Dow Chemical Company (The).
      d. Firestone Building Products.
      e. Johns Manville; a Berkshire Hathaway company.
   2. Basis of design: Similar to Dow, Thermax Sheathing.
   3. Insulation Thickness: Minimum 1inch producing an R-value of 6.5 or greater.
   4. Fire Propagation Characteristics: Passes NFPA 285 testing as part of an approved assembly.

2.2 ACCESSORIES

A. Insulation for Miscellaneous Voids:
   1. Spray Polyurethane Foam Insulation: ASTM C1029, Type II, closed cell, with maximum flame-spread and smoke-developed indexes of 75 and 450, respectively, per ASTM E84.

B. Insulation Anchors, Spindles, and Standoffs: As recommended by manufacturer.

C. Adhesive for Bonding Insulation: Product compatible with insulation and air and water barrier materials, and with demonstrated capability to bond insulation securely to substrates without damaging insulation and substrates.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Comply with insulation manufacturer's written instructions applicable to products and applications.

B. Install insulation that is undamaged, dry, and unsoiled and that has not been left exposed to ice, rain, or snow at any time.

C. Extend insulation to envelop entire area to be insulated. Fit tightly around obstructions and fill voids with insulation. Remove projections that interfere with placement.

D. Provide sizes to fit applications and selected from manufacturer's standard thicknesses, widths, and lengths. Apply single layer of insulation units unless multiple layers are otherwise shown or required to make up total thickness or to achieve R-value.

END OF SECTION 072100

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 079200 - JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Silicone joint sealants.
2. Urethane joint sealants.
3. Latex joint sealants.
4. Acoustical joint sealants.

1.2 PRECONSTRUCTION TESTING

A. Preconstruction Compatibility and Adhesion Testing: Submit to joint-sealant manufacturers four samples of materials that will contact or affect joint sealants. Use ASTM C 1087 to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

B. Preconstruction Field-Adhesion Testing: Before installing sealants, field test their adhesion to Project joint substrates. Test joint sealants according to Method A, Field-Applied Sealant Joint Hand Pull Tab, in Appendix X1 in ASTM C 1193 or Method A, Tail Procedure, in ASTM C 1521.

1.3 SUBMITTALS

A. Product Data: For each joint-sealant product indicated.

B. Samples: For each kind and color of joint sealant required.

C. Joint-Sealant Schedule: Include the following information:

1. Joint-sealant application, joint location, and designation.
2. Joint-sealant manufacturer and product name.
3. Joint-sealant formulation.
4. Joint-sealant color.

D. Product test reports.

E. Preconstruction compatibility and adhesion test reports.

F. Preconstruction field-adhesion test reports.

G. Field-adhesion test reports.

H. Warranties.

1.4 WARRANTY

A. Special Installer's Warranty: Manufacturer's standard form in which Installer agrees to repair or replace joint sealants that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Two years from date of Substantial Completion.

B. Special Manufacturer's Warranty: Manufacturer's standard form in which joint-sealant manufacturer agrees to furnish joint sealants to repair or replace those that do not comply with performance and other requirements specified in this Section within specified warranty period.

1. Warranty Period: Minimum Two years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. VOC Content of Interior Sealants: Provide sealants and sealant primers for use inside the weatherproofing system that comply with the following limits for VOC content when calculated according to 40 CFR 59, Part 59, Subpart D (EPA Method 24):

1. Architectural Sealants: 250 g/L.
2. Sealant Primers for Nonporous Substrates: 250 g/L.
3. Sealant Primers for Porous Substrates: 775 g/L.

B. Liquid-Applied Joint Sealants: Comply with ASTM C 920 and other requirements indicated for each liquid-applied joint sealant specified, including those referencing ASTM C 920 classifications for type, grade, class, and uses related to exposure and joint substrates.

1. Suitability for Immersion in Liquids. Where sealants are indicated for Use I for joints that will be continuously immersed in liquids, provide products that have undergone testing according to ASTM C 1247. Liquid used for testing sealants is deionized water, unless otherwise indicated.

C. Stain-Test-Response Characteristics: Where sealants are specified to be nonstaining to porous substrates, provide products that have undergone testing according to ASTM C 1248 and have not stained porous joint substrates indicated for Project.

D. Suitability for Contact with Food: Where sealants are indicated for joints that will come in repeated contact with food, provide products that comply with 21 CFR 177.2600.

2.2 SILICONE JOINT SEALANTS

A. Mildew-Resistant Silicone Joint Sealant: ASTM C 920.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. BASF Building Systems.
b. Dow Corning Corporation.
c. GE Advanced Materials - Silicones.
d. May National Associates, Inc.
e. Pecora Corporation.
f. Polymeric Systems, Inc.
g. Schnee-Morehead, Inc.
h. Sika Corporation; Construction Products Division.
i. Tremco Incorporated.

2. Type: Single component (S).
3. Grade: Nonsag (NS).
4. Class: 100/50.
5. Uses Related to Exposure: Nontraffic (NT).

2.3 URETHANE JOINT SEALANTS

A. Urethane Joint Sealant: ASTM C 920.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. BASF Building Systems.
b. Bostik, Inc.
c. Lymtal, International, Inc.
d. May National Associates, Inc.
e. Pacific Polymers International, Inc.
f. Pecora Corporation.
g. Polymeric Systems, Inc.
h. Schnee-Morehead, Inc.
i. Sika Corporation; Construction Products Division.
j. Tremco Incorporated.

2. Type: Single component (S) or multicomponent (M).
3. Grade: Pourable (P) or nonsag (NS).
4. Class: 100/50.
5. Uses Related to Exposure: Traffic (T).

2.4 LATEX JOINT SEALANTS

A. Latex Joint Sealant: Acrylic latex or siliconized acrylic latex, ASTM C 834, Type OP, Grade NF.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. BASF Building Systems.
    b. Bostik, Inc.
    c. May National Associates, Inc.
    d. Pecora Corporation.
    e. Schnee-Morehead, Inc.
    f. Tremco Incorporated.

2.5 ACOUSTICAL JOINT SEALANTS

A. Acoustical Joint Sealant: Manufacturer's standard nonsag, paintable, nonstaining latex sealant complying with ASTM C 834. Product effectively reduces airborne sound transmission through perimeter joints and openings in building construction as demonstrated by testing representative assemblies according to ASTM E 90.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Pecora Corporation.
    b. USG Corporation.

2.6 JOINT SEALANT BACKING

A. Cylindrical Sealant Backings: ASTM C 1330, Type C (closed-cell material with a surface skin), Type O (open-cell material), Type B (bicellular material with a surface skin) or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer.

2.7 MISCELLANEOUS MATERIALS

A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Cleaners for Nonporous Surfaces: Chemical cleaners acceptable to manufacturers of sealants and sealant backing materials.

C. Masking Tape: Nonstaining, nonabsorbent material compatible with joint sealants and surfaces adjacent to joints.

PART 3 - EXECUTION

3.1 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.

1. Remove laitance and form-release agents from concrete.
2. Clean nonporous joint substrate surfaces with chemical cleaners or other means that do not stain, harm substrates, or leave residues capable of interfering with adhesion of joint sealants.

B. Joint Priming: Prime joint substrates where recommended by joint-sealant manufacturer or as indicated by preconstruction joint-sealant-substrate tests or prior experience. Apply primer to comply with joint-sealant manufacturer's written instructions. Confine primers to areas of joint-sealant bond; do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant or primer with adjoining surfaces that otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.2 INSTALLATION

A. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

B. Install sealant backings of kind indicated to support sealants during application and at position required to produce cross-sectional shapes and depths of installed sealants relative to joint widths that allow optimum sealant movement capability.

1. Do not leave gaps between ends of sealant backings.
2. Do not stretch, twist, puncture, or tear sealant backings.
3. Remove absorbent sealant backings that have become wet before sealant application and replace them with dry materials.

C. Install bond-breaker tape behind sealants where sealant backings are not used between sealants and backs of joints.

D. Install sealants using proven techniques that comply with the following and at the same time backings are installed:

1. Place sealants so they directly contact and fully wet joint substrates.
2. Completely fill recesses in each joint configuration.
3. Produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

E. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants according to requirements specified in subparagraphs below to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

1. Remove excess sealant from surfaces adjacent to joints.
2. Use tooling agents that are approved in writing by sealant manufacturer and that do not discolor sealants or adjacent surfaces.
3. Provide concave joint profile per Figure 8A in ASTM C 1193, unless otherwise indicated.

F. Acoustical Sealant Installation: Comply with ASTM C 919 and with manufacturer's written recommendations.

G. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved in writing by manufacturers of joint sealants and of products in which joints occur.

3.3 JOINT-SEALANT SCHEDULE

A. Joint-Sealant Application: Exterior joints in horizontal traffic surfaces.

1. Joint Locations:
   a. Isolation and contraction joints in cast-in-place concrete slabs.
   b. Tile control and expansion joints.
   c. Joints between different materials listed above.

2. Joint Sealant: Urethane.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

B. Joint-Sealant Application: Exterior joints in vertical surfaces and horizontal nontraffic surface.

1. Joint Locations:
   a. Control and expansion joints in unit masonry.
   b. Joints between metal panels.
   c. Joints between different materials listed above.
   d. Perimeter joints between materials listed above and frames of doors, windows, and louvers.
   e. Control and expansion joints in ceilings and other overhead surfaces.
2. Joint Sealant: Urethane.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

C. Joint-Sealant Application: Interior joints in horizontal traffic surfaces.

1. Joint Locations:

   a. Isolation joints in cast-in-place concrete slabs.

b. Control and expansion joints in tile flooring.

2. Joint Sealant: Urethane.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

D. Joint-Sealant Application: Interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Locations:

a. Control and expansion joints on exposed interior surfaces of exterior walls.
b. Perimeter joints of exterior openings.
c. Tile control and expansion joints.
d. Vertical joints on exposed surfaces of interior unit masonry, concrete, walls and partitions.
e. Perimeter joints between interior wall surfaces and frames of interior doors, windows and elevator entrances.

2. Joint Sealant: Latex.

3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

E. Joint-Sealant Application: Mildew-resistant interior joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Sealant Location:

a. Joints between plumbing fixtures and adjoining walls, floors, and counters.
b. Tile control and expansion joints where indicated.

2. Joint Sealant: Silicone.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range of colors.

F. Joint-Sealant Application: Interior acoustical joints in vertical surfaces and horizontal nontraffic surfaces.

1. Joint Location:

a. Acoustical joints.

2. Joint Sealant: Acoustical.
3. Joint-Sealant Color: As selected by Architect from manufacturer's full range.

END OF SECTION 079200

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 081113 - HOLLOW METAL DOORS AND FRAMES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Standard hollow metal doors and frames to be supplied by metal building manufacturer.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: Include elevations, door edge details, frame profiles, metal thicknesses, preparations for hardware, and other details.

C. Samples for Initial Selection: For units with factory-applied color finishes.

D. Samples for Verification: For each type of exposed finish required.

E. Schedule: Prepared by or under the supervision of supplier, using same reference numbers for details and openings as those on Drawings.

1.3 QUALITY ASSURANCE

A. Fire-Rated Door Assemblies: Assemblies complying with NFPA 80 that are listed and labeled by a qualified testing agency, for fire-protection ratings indicated, based on testing at as close to neutral pressure as possible according to NFPA 252.

1. Temperature-Rise Limit: At vertical exit enclosures and exit passageways, provide doors that have a maximum transmitted temperature end point of not more than 450 deg F (250 deg C) above ambient after 30 minutes of standard fire-test exposure.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Metal Building manufacturer's standard.

2.2 MATERIALS

A. Cold-Rolled Steel Sheet: ASTM A 1008/A 1008M, CS, Type B; suitable for exposed applications.

B. Hot-Rolled Steel Sheet: ASTM A 1011/A 1011M, CS, Type B.

C. Metallic-Coated Steel Sheet: ASTM A 653/A 653M, Commercial Steel (CS), Type B; with minimum G60 (Z180) or A60 (ZF180) metallic coating.

D. Frame Anchors: ASTM A 591/A 591M, Commercial Steel (CS), 40Z (12G) coating designation; mill phosphatized.

1. For anchors built into exterior walls, steel sheet complying with ASTM A 1008/A 1008M or ASTM A 1011/A 1011M, hot-dip galvanized according to ASTM A 153/A 153M, Class B.

E. Inserts, Bolts, and Fasteners: Hot-dip galvanized according to ASTM A 153/A 153M.

F. Grout: ASTM C 476, except with a maximum slump of 4 inches (102 mm), as measured according to ASTM C 143/C 143M.

G. Mineral-Fiber Insulation: ASTM C 665, Type I.

H. Glazing: Division 08 Section "Glazing."

I. Bituminous Coating: Cold-applied asphalt mastic, SSPC-Paint 12, compounded for 15-mil (0.4-mm) dry film thickness per coat.

2.3 STANDARD HOLLOW METAL DOORS

A. General: Comply with ANSI/SDI A250.8.

1. Design: Flush panel.
2. Core Construction: Manufacturer's standard kraft-paper honeycomb, polystyrene, polyurethane, polyisocyanurate, mineral-board, or vertical steel-stiffener core.
   a. Thermal-Rated (Insulated) Doors: R-value of not less than 12.3 deg F x h x sq. ft./Btu (2.166 K x sq. m/W) when tested according to ASTM C 1363.
3. Vertical Edges for Single-Acting Doors: Manufacturer's standard.
4. Top and Bottom Edges: Closed with flush or inverted 0.042-inch-thick, end closures or channels of same material as face sheets.
5. Tolerances: SDI 117, "Manufacturing Tolerances for Standard Steel Doors and Frames."

B. Exterior Doors: Face sheets fabricated from metallic-coated steel sheet. Comply with ANSI/SDI A250.8 for level and model and ANSI/SDI A250.4 for physical performance level:

1. Level 2 and Physical Performance Level B (Heavy Duty), Model 1 (Full Flush).

   a. Width: 1-3/4 inches (44.5 mm).

   b. Fabricate of metallic-coated sheet.

C. Hardware Reinforcement: ANSI/SDI A250.6.

2.4 STANDARD HOLLOW METAL FRAMES

A. General: Comply with ANSI/SDI A250.8.

B. Exterior Frames: Fabricated from metallic-coated steel sheet.

1. Fabricate frames with mitered or coped corners.
2. Fabricate frames as full profile welded unless otherwise indicated.
3. Frames for Level 2 Steel Doors: 0.053-inch- (1.3-mm-) thick steel sheet.

C. Interior Frames: Fabricated from cold-rolled steel sheet.

1. Fabricate frames with mitered or coped corners.
2. Fabricate frames as full profile welded unless otherwise indicated.
3. Fabricate knocked-down, drywall slip-on frames for in-place gypsum board partitions.
4. Frames for Level 1 Steel Doors: 0.042-inch- (1.0-mm-) thick steel sheet.
5. Frames for Level 2 Steel Doors: 0.053-inch- (1.3-mm-) thick steel sheet.
6. Frames for Wood Doors: 0.053-inch- (1.3-mm-) thick steel sheet.
7. Frames for Borrowed Lights: 0.053-inch- (1.3-mm-) thick steel sheet.

D. Hardware Reinforcement: ANSI/SDI A250.6.

2.5 FRAME ANCHORS

A. Jamb Anchors:

1. Masonry Type: Adjustable strap-and-stirrup or T-shaped anchors to suit frame size, not less than 0.042 inch (1.0 mm) thick, with corrugated or perforated straps not less than 2 inches (50 mm) wide by 10 inches (250 mm) long; or wire anchors not less than 0.177 inch (4.5 mm) thick.

B. Floor Anchors: Formed from same material as frames, not less than 0.042 inch (1.0 mm) thick, and as follows:

1. Monolithic Concrete Slabs: Clip-type anchors, with two holes to receive fasteners.

2.6 STOPS AND MOLDINGS

A. Moldings for Glazed Lites in Doors: Minimum 0.032 inch (0.8 mm) thick, same material as door face sheet.

B. Fixed Frame Moldings: Formed integral with hollow metal frames, a minimum of 5/8 inch (16 mm) high unless otherwise indicated.

C. Loose Stops for Glazed Lites in Frames: Minimum 0.032 inch (0.8 mm) thick, same material as frames.

D. Terminated Stops: Where indicated, terminate stops 6 inches (152 mm) above finish floor with a 45-degree angle cut, and close open end of stop with steel sheet closure. Cover opening in extension of frame with welded-steel filler plate, with welds ground smooth and flush with frame.

2.7 ACCESSORIES

A. Mullions and Transom Bars: Join to adjacent members by welding or rigid mechanical anchors.

B. Grout Guards: Formed from same material as frames, not less than 0.016 inch (0.4 mm) thick.

2.8 FABRICATION

A. Tolerances: Fabricate hollow metal work to tolerances indicated in SDI 117.

B. Hollow Metal Doors:

1. Exterior Doors: Provide weep-hole openings in bottom of exterior doors. Seal joints in top edges of doors against water penetration.
2. Glazed Lites: Factory cut openings in doors.
3. Astragals: Provide overlapping astragal on one leaf of pairs of doors where required by NFPA 80 for fire-performance rating or where indicated.

C. Hollow Metal Frames: Where frames are fabricated in sections, provide alignment plates or angles at each joint, fabricated of same thickness metal as frames.

1. Welded Frames: Weld flush face joints continuously; grind, fill, dress, and make smooth, flush, and invisible.

2. Sidelight and Transom Bar Frames: Provide closed tubular members with no visible face seams or joints, fabricated from same material as door frame. Fasten members at crossings and to jambs by butt welding.
3. Provide countersunk, flat- or oval-head exposed screws and bolts for exposed fasteners unless otherwise indicated.
4. Grout Guards: Weld guards to frame at back of hardware mortises in frames to be grouted.
5. Floor Anchors: Weld anchors to bottom of jambs and mullions with at least four spot welds per anchor.
6. Jamb Anchors: Provide number and spacing of anchors as follows:

    a. Stud-Wall Type: Locate anchors not more than 18 inches (457 mm) from top and bottom of frame. Space anchors not more than 32 inches (813 mm) o.c. and as follows:

        1) Three anchors per jamb up to 60 inches (1524 mm) high.
        2) Four anchors per jamb from 60 to 90 inches (1524 to 2286 mm) high.
        3) Five anchors per jamb from 90 to 96 inches (2286 to 2438 mm) high.
        4) Five anchors per jamb plus 1 additional anchor per jamb for each 24 inches (610 mm) or fraction thereof above 96 inches (2438 mm) high.
        5) Two anchors per head for frames more than 42 inches (1066 mm) wide and mounted in metal-stud partitions.

    b. Compression Type: Not less than two anchors in each jamb.
    c. Postinstalled Expansion Type: Locate anchors not more than 6 inches (152 mm) from top and bottom of frame. Space anchors not more than 26 inches (660 mm) o.c.

7. Door Silencers: Except on weather-stripped doors, drill stops to receive door silencers.

    a. Single-Door Frames: Three door silencers.
    b. Double-Door Frames: Two door silencers.

D. Hardware Preparation: Factory prepare hollow metal work to receive templated mortised hardware according to the Door Hardware Schedule and templates furnished as specified in Division 08 Section "Door Hardware."

1. Locate hardware as indicated, or if not indicated, according to ANSI/SDI A250.8.
2. Reinforce doors and frames to receive nontemplated, mortised and surface-mounted door hardware.
3. Comply with applicable requirements in ANSI/SDI A250.6 and ANSI/DHI A115 Series specifications for preparation of hollow metal work for hardware.
4. Coordinate locations of conduit and wiring boxes for electrical connections with Division 26 electrical Sections.

E. Stops and Moldings: Provide stops and moldings around glazed lites where indicated. Form corners of stops and moldings with butted or mitered hairline joints.

1. Single Glazed Lites: Provide fixed stops and moldings welded on secure side of hollow metal work.
2. Multiple Glazed Lites: Provide fixed and removable stops and moldings so that each glazed lite is capable of being removed independently.
3. Provide fixed frame moldings on outside of exterior and on secure side of interior doors and frames.
4. Provide loose stops and moldings on inside of hollow metal work.
5. Coordinate rabbet width between fixed and removable stops with type of glazing and type of installation indicated.

2.9 STEEL FINISHES

A. Prime Finish: Apply manufacturer's standard primer immediately after cleaning and pretreating.

1. Shop Primer: ANSI/SDI A250.10.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Hollow Metal Frames: Comply with ANSI/SDI A250.11.

1. Set frames accurately in position, plumbed, aligned, and braced securely until permanent anchors are set. After wall construction is complete, remove temporary braces, leaving surfaces smooth and undamaged.

    a. At fire-protection-rated openings, install frames according to NFPA 80.
    b. Where frames are fabricated in sections because of shipping or handling limitations, field splice at approved locations by welding face joint continuously; grind, fill, dress, and make splice smooth, flush, and invisible on exposed faces.
    c. Install frames with removable glazing stops located on secure side of opening.
    d. Install door silencers in frames before grouting.
    e. Remove temporary braces necessary for installation only after frames have been properly set and secured.
    f. Check plumbness, squareness, and twist of frames as walls are constructed. Shim as necessary to comply with installation tolerances.
    g. Field apply bituminous coating to backs of frames that are filled with grout containing antifreezing agents.

2. Floor Anchors: Provide floor anchors for each jamb and mullion that extends to floor, and secure with postinstalled expansion anchors.

    a. Floor anchors may be set with powder-actuated fasteners instead of postinstalled expansion anchors if so indicated and approved on Shop Drawings.

3. In-Place Concrete: Secure frames in place with postinstalled expansion anchors. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
4. In-Place Gypsum Board Partitions: Secure frames in place with postinstalled expansion anchors through floor anchors at each jamb. Countersink anchors, and fill and make smooth, flush, and invisible on exposed faces.
5. Installation Tolerances: Adjust hollow metal door frames for squareness, alignment, twist, and plumb to the following tolerances:

    a. Squareness: Plus or minus 1/16 inch (1.6 mm), measured at door rabbet on a line 90 degrees from jamb perpendicular to frame head.
    b. Alignment: Plus or minus 1/16 inch (1.6 mm), measured at jambs on a horizontal line parallel to plane of wall.
    c. Twist: Plus or minus 1/16 inch (1.6 mm), measured at opposite face corners of jambs on parallel lines, and perpendicular to plane of wall.
    d. Plumbness: Plus or minus 1/16 inch (1.6 mm), measured at jambs at floor.

B. Hollow Metal Doors: Fit hollow metal doors accurately in frames, within clearances specified below. Shim as necessary.

1. Non-Fire-Rated Standard Steel Doors:

    a. Jambs and Head: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
    b. Between Edges of Pairs of Doors: 1/8 inch (3 mm) plus or minus 1/16 inch (1.6 mm).
    c. Between Bottom of Door and Top of Threshold: Maximum 3/8 inch (9.5 mm).
    d. Between Bottom of Door and Top of Finish Floor (No Threshold): Maximum 3/4 inch (19 mm).

2. Fire-Rated Doors: Install doors with clearances according to NFPA 80.

C. Glazing: Comply with installation requirements in Division 08 Section "Glazing" and with hollow metal manufacturer's written instructions.

1. Secure stops with countersunk flat- or oval-head machine screws spaced uniformly not more than 9 inches (230 mm) o.c. and not more than 2 inches (50 mm) o.c. from each corner.

3.2 ADJUSTING AND CLEANING

A. Final Adjustments: Check and readjust operating hardware items immediately before final inspection. Leave work in complete and proper operating condition. Remove and replace defective work, including hollow metal work that is warped, bowed, or otherwise unacceptable.

B. Prime-Coat Touchup: Immediately after erection, sand smooth rusted or damaged areas of prime coat and apply touchup of compatible air-drying, rust-inhibitive primer.

C. Metallic-Coated Surfaces: Clean abraded areas and repair with galvanizing repair paint according to manufacturer's written instructions.

END OF SECTION 081113

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 092216 - NON-STRUCTURAL METAL FRAMING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes non-load-bearing steel framing members for the following applications:

1. Interior framing systems (e.g., supports for partition walls, framed soffits, furring, etc.).
2. Interior suspension systems (e.g., supports for ceilings, suspended soffits, etc.).

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

1.3 QUALITY ASSURANCE

A. Fire-Test-Response Characteristics: For fire-resistance-rated assemblies that incorporate non-load-bearing steel framing, provide materials and construction identical to those tested in assembly indicated according to ASTM E 119 by an independent testing agency.

B. Sound Transmission Characteristics: For STC-rated assemblies that incorporate non-load-bearing steel framing, provide materials and construction identical to those tested in assembly indicated according to ASTM E 90 and classified according to ASTM E 413 by an independent testing agency.

PART 2 - PRODUCTS

2.1 NON-LOAD-BEARING STEEL FRAMING, GENERAL

A. Framing Members, General: Comply with ASTM C 754 for conditions indicated.

1. Steel Sheet Components: Comply with ASTM C 645 requirements for metal, unless otherwise indicated.
2. Protective Coating: manufacturer's standard corrosion-resistant zinc coating, unless otherwise indicated.

2.2 SUSPENSION SYSTEM COMPONENTS

A. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.0625-inch- (1.59-mm-) diameter wire, or double strand of 0.0475-inch- (1.21-mm-) diameter wire.

B. Hanger Attachments to Concrete:

1. Anchors: Fabricated from corrosion-resistant materials with holes or loops for attaching wire hangers and capable of sustaining, without failure, a load equal to 5 times that imposed by construction as determined by testing according to ASTM E 488 by an independent testing agency.

a. Type: Post installed, chemical anchor or Post installed, expansion anchor.

2. Powder-Actuated Fasteners: Suitable for application indicated, fabricated from corrosion-resistant materials with clips or other devices for attaching hangers of type indicated, and capable of sustaining, without failure, a load equal to 10 times that imposed by construction as determined by testing according to ASTM E 1190 by an independent testing agency.

C. Wire Hangers: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.162-inch (4.12-mm) diameter.

D. Flat Hangers: Steel sheet, 1 by 3/16 inch (25.4 by 4.76 mm) by length indicated.

E. Carrying Channels: Cold-rolled, commercial-steel sheet with a base-metal thickness of 0.0538 inch (1.37 mm) and minimum 1/2-inch- (12.7-mm-) wide flanges.

1. Depth: 1-1/2 inches (38 mm).

F. Furring Channels (Furring Members):

1. Cold-Rolled Channels: 0.0538-inch (1.37-mm) bare-steel thickness, with minimum 1/2-inch- (12.7-mm-) wide flanges, 3/4 inch (19.1 mm) deep.
2. Steel Studs: ASTM C 645.

a. Minimum Base-Metal Thickness: 0.0312 inch (0.79 mm).
b. Depth: 1-5/8 inches (41.3 mm).

3. Hat-Shaped, Rigid Furring Channels: ASTM C 645, 7/8 inch (22.2 mm) deep.

a. Minimum Base Metal Thickness: 0.0312 inch (0.79 mm).

4. Resilient Furring Channels: 1/2-inch- (12.7-mm-) deep members designed to reduce sound transmission.

a. Configuration: Asymmetrical or hat shaped.

G. Grid Suspension System for Ceilings: ASTM C 645, direct-hung system composed of main beams and cross-furring members that interlock.

1. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
2. Products: Subject to compliance with requirements, provide one of the following:

a. Armstrong World Industries, Inc.; Drywall Grid Systems.
b. Chicago Metallic Corporation; Drywall Furring System.

c. USG Corporation; Drywall Suspension System.

2.3 STEEL FRAMING FOR FRAMED ASSEMBLIES

A. Steel Studs and Runners: ASTM C 645.

1. Minimum Base-Metal Thickness: As indicated on Drawings.

B. Slip-Type Head Joints: Where indicated, provide one of the following:

1. Single Long-Leg Runner System: ASTM C 645 top runner with 2-inch- (50.8-mm-) deep flanges in thickness not less than indicated for studs, installed with studs friction fit into top runner and with continuous bridging located within 12 inches (305 mm) of the top of studs to provide lateral bracing.
2. Double-Runner System: ASTM C 645 top runners, inside runner with 2-inch- (50.8-mm-) deep flanges in thickness not less than indicated for studs and fastened to studs, and outer runner sized to friction fit inside runner.
3. Deflection Track: Steel sheet top runner manufactured to prevent cracking of finishes applied to interior partition framing resulting from deflection of structure above; in thickness not less than indicated for studs and in width to accommodate depth of studs.

a. Available Products: Subject to compliance with requirements, products that may be incorporated into the Work include, but are not limited to, the following:
b. Products: Subject to compliance with requirements, provide one of the following:

1) Steel Network Inc. (The); VertiClip SLD Series.
2) Superior Metal Trim; Superior Flex Track System (SFT).

C. Firestop Track: As specified in Division 07 Section "Fire-Resistive Joint Systems."

D. Flat Strap and Backing Plate: Steel sheet for blocking and bracing in length and width indicated.

1. Minimum Base-Metal Thickness: 0.027 inch (0.7 mm).

E. Cold-Rolled Channel Bridging: 0.0538-inch (1.37-mm) bare-steel thickness, with minimum 1/2-inch- (12.7-mm-) wide flanges.

1. Depth: 1-1/2 inches (38.1 mm).
2. Clip Angle: Not less than 1-1/2 by 1-1/2 inches (38.1 by 38.1 mm), 0.068-inch- (1.73-mm-) thick, galvanized steel.

F. Hat-Shaped, Rigid Furring Channels: ASTM C 645.

1. Minimum Base Metal Thickness: As indicated on Drawings.
2. Depth: 1-1/2 inches (38.1 mm).

G. Resilient Furring Channels: 1/2-inch- (12.7-mm-) deep, steel sheet members designed to reduce sound transmission.

1. Configuration: Asymmetrical or hat shaped.

H. Cold-Rolled Furring Channels: 0.0538-inch (1.37-mm) bare-steel thickness, with minimum 1/2-inch- (12.7-mm-) wide flanges.

1. Depth: As indicated on Drawings.
2. Furring Brackets: Adjustable, corrugated-edge type of steel sheet with minimum bare-steel thickness of 0.0312 inch (0.79 mm).
3. Tie Wire: ASTM A 641/A 641M, Class 1 zinc coating, soft temper, 0.0625-inch- (1.59-mm-) diameter wire, or double strand of 0.0475-inch- (1.21-mm-) diameter wire.

I. Z-Shaped Furring: With slotted or non-slotted web, face flange of 1-1/4 inches (31.8 mm), wall attachment flange of 7/8 inch (22.2 mm), minimum bare-metal thickness of 0.0179 inch (0.45 mm), and depth required to fit insulation thickness indicated.

2.4 AUXILIARY MATERIALS

A. Fasteners for Metal Framing: Of type, material, size, corrosion resistance, holding power, and other properties required to fasten steel members to substrates.

B. Isolation Strip at Exterior Walls: Provide one of the following:

1. Asphalt-Saturated Organic Felt: ASTM D 226, Type I (No. 15 asphalt felt), non-perforated.
2. Foam Gasket: Adhesive-backed, closed-cell vinyl foam strips that allow fastener penetration without foam displacement, 1/8 inch (3.2 mm) thick, in width to suit steel stud size.

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

A. Installation Standard: ASTM C 754.
1. Gypsum Board Assemblies: Also comply with requirements in ASTM C 840 that apply to framing installation.

3.2 INSTALLING SUSPENSION SYSTEMS

A. Isolate suspension systems from building structure where they abut or are penetrated by building structure to prevent transfer of loading imposed by structural movement.

B. Suspend hangers from building structure as follows:

1. Install hangers plumb and free from contact with insulation or other objects within ceiling plenum that are not part of supporting structural or suspension system.

    a. Splay hangers only where required to miss obstructions and offset resulting horizontal forces by bracing, countersplaying, or other equally effective means.

2. Where width of ducts and other construction within ceiling plenum produces hanger spacings that interfere with locations of hangers required to support standard suspension system members, install supplemental suspension members and hangers in the form of trapezes or equivalent devices.

    a. Size supplemental suspension members and hangers to support ceiling loads within performance limits established by referenced installation standards.

3. Do not attach hangers to steel roof deck.
4. Do not attach hangers to permanent metal forms. Furnish cast-in-place hanger inserts that extend through forms.
5. Do not attach hangers to rolled-in hanger tabs of composite steel floor deck.
6. Do not connect or suspend steel framing from ducts, pipes, or conduit.

C. Fire-Resistance-Rated Assemblies: Wire tie furring channels to supports.

D. Grid Suspension Systems: Attach perimeter wall track or angle where grid suspension systems meet vertical surfaces. Mechanically join main beam and cross-furring members to each other and butt-cut to fit into wall track.

E. Installation Tolerances: Install suspension systems that are level to within 1/8 inch in 12 feet (3 mm in 3.6 m) measured lengthwise on each member that will receive finishes and transversely between parallel members that will receive finishes.

3.3 INSTALLING FRAMED ASSEMBLIES

A. Where studs are installed directly against exterior masonry walls or dissimilar metals at exterior walls, install isolation strip between studs and exterior wall.

B. Install tracks (runners) at floors and overhead supports. Extend framing full height to structural supports or substrates above suspended ceilings, except where partitions are indicated to terminate at suspended ceilings. Continue framing around ducts penetrating partitions above ceiling.

1. Slip-Type Head Joints: Where framing extends to overhead structural supports, install to produce joints at tops of framing systems that prevent axial loading of finished assemblies.
2. Door Openings: Screw vertical studs at jambs to jamb anchor clips on door frames; install runner track section (for cripple studs) at head and secure to jamb studs.

    a. Install two studs at each jamb, unless otherwise indicated.

b. Install cripple studs at head adjacent to each jamb stud, with a minimum 1/2-inch (12.7-mm) clearance from jamb stud to allow for installation of control joint in finished assembly.
c. Extend jamb studs through suspended ceilings and attach to underside of overhead structure.

3. Other Framed Openings: Frame openings other than door openings the same as required for door openings, unless otherwise indicated. Install framing below sills of openings to match framing required above door heads.
4. Fire-Resistance-Rated Partitions: Install framing to comply with fire-resistance-rated assembly indicated and support closures and to make partitions continuous from floor to underside of solid structure.

a. Firestop Track: Where indicated, install to maintain continuity of fire-resistance-rated assembly indicated.

C. Direct Furring:

1. Screw to wood framing.
2. Attach to concrete or masonry with stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (610 mm) o.c.

D. Z-Furring Members:

1. Erect insulation (specified in Division 07 Section "Thermal Insulation") vertically and hold in place with Z-furring members spaced 24 inches (610 mm) o.c.
2. Except at exterior corners, securely attach narrow flanges of furring members to wall with concrete stub nails, screws designed for masonry attachment, or powder-driven fasteners spaced 24 inches (600 mm) o.c.
3. At exterior corners, attach wide flange of furring members to wall with short flange extending beyond corner; on adjacent wall surface, screw-attach short flange of furring channel to web of attached channel. At interior corners, space second member no more than 12 inches (300 mm) from corner and cut insulation to fit.

E. Installation Tolerance: Install each framing member so fastening surfaces vary not more than 1/8 inch (3 mm) from the plane formed by faces of adjacent framing.

END OF SECTION 092216

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 095113 - ACOUSTICAL PANEL CEILINGS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes acoustical panels and exposed suspension systems for ceilings.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Coordination Drawings: Drawn to scale and coordinating acoustical panel ceiling installation with hanger attachment to building structure and ceiling mounted items:

C. Samples: For each exposed finish.

D. Product test reports.

E. Research/evaluation reports.

F. Maintenance data.

1.3 QUALITY ASSURANCE

A. Acoustical Testing Agency Qualifications: An independent testing laboratory or an NVLAP-accredited laboratory.

PART 2 - PRODUCTS

2.1 ACOUSTICAL PANEL CEILINGS, GENERAL

A. Acoustical Panel Standard: Comply with ASTM E 1264.

B. Metal Suspension System Standard: Comply with ASTM C 635.

C. Attachment Devices: Size for five times the design load indicated in ASTM C 635, Table 1, "Direct Hung," unless otherwise indicated. Comply with seismic design requirements.

1. Anchors in Concrete: Expansion or Bonded anchors fabricated from corrosion-resistant materials, with holes or loops for attaching hangers of type indicated and with capability to sustain, without failure, a load equal to five times that imposed by ceiling construction, as determined by testing per ASTM E 488 or

ASTM E 1512 as applicable, conducted by a qualified testing and inspecting agency.

2. Power-Actuated Fasteners in Concrete: Fastener system of type suitable for application indicated, fabricated from corrosion-resistant materials, with clips or other accessory devices for attaching hangers of type indicated, and with capability to sustain, without failure, a load equal to 10 times that imposed by ceiling construction, as determined by testing per ASTM E 1190, conducted by a qualified testing and inspecting agency.

D. Wire Hangers, Braces, and Ties: Zinc-coated carbon-steel wire; ASTM A 641/A 641M, Class 1 zinc coating, soft temper.

1. Size: Select wire diameter so its stress at 3 times hanger design load (ASTM C 635, Table 1, "Direct Hung") will be less than yield stress of wire, but provide not less than 0.106-inch- (2.69-mm-) diameter wire.

E. Metal Edge Moldings and Trim: Type and profile indicated or, if not indicated, manufacturer's standard moldings for edges and penetrations that comply with seismic design requirements; formed from sheet metal of same material, finish, and color as that used for exposed flanges of suspension system runners.

2.2 ACOUSTICAL PANELS FOR ACOUSTICAL PANEL CEILING

A. Products: Subject to compliance with requirements, provide the following:

1. Armstrong World Industries, Inc.; “Clean Room VL”, unperforated square lay-in.

B. Classification: Provide panels complying with ASTM E 1264 for type and form as follows:

1. Type and Form: Type IV, Form 2, Pattern E, Fire Class A. Wet-formed mineral fiber, vinyl-faced membrane.

C. Color: White.

D. NRC: Not less than 0.50- 0.60, Type E-400 mounting per ASTM E 795.

E. Edge/Joint Detail: Square.

F. Thickness: 5/8 inch (15 mm).

G. Modular Size: 24 by 24 inches (610 by 610 mm).

2.3 METAL SUSPENSION SYSTEM FOR ACOUSTICAL PANEL CEILING

A. Products: Subject to compliance with requirements, provide the following:

1. Armstrong World Industries, Inc.; Prelude Plus XL, AL7200 Series, Non-rated.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with ASTM C 636 and seismic design requirements indicated, per manufacturer's written instructions and CISCA's "Ceiling Systems Handbook."

B. Measure each ceiling area and establish layout of acoustical panels to balance border widths at opposite edges of each ceiling. Avoid using less-than-half-width panels at borders.

C. Suspend ceiling hangers from building's structural members, plumb and free from contact with insulation or other objects within ceiling plenum. Splay hangers only where required to miss obstructions; offset resulting horizontal forces by bracing, counters playing, or other equally effective means. Where width of ducts and other construction within ceiling plenum produces hanger spacing that interfere with location of hangers, use trapezes or equivalent devices. When steel framing does not permit installation of hanger wires at spacing required, install carrying channels or other supplemental support for attachment of hanger wires.

1. Do not support ceilings directly from permanent metal forms or floor deck; anchor into concrete slabs.
2. Do not attach hangers to steel deck tabs.

D. Install edge moldings and trim of type indicated at perimeter of acoustical ceiling area and where necessary to conceal edges of acoustical panels. Screw attach moldings to substrate at intervals not more than 16 inches (400 mm) o.c. and not more than 3 inches (75 mm) from ends, leveling with ceiling suspension system to a tolerance of 1/8 inch in 12 feet (3.2 mm in 3.6 m). Miter corners accurately and connect securely.

E. Install suspension system runners so they are square and securely interlocked with one another. Remove and replace dented, bent, or kinked members.

F. Install acoustical panels with undamaged edges and fit accurately into suspension system runners and edge moldings. Scribe and cut panels at borders and penetrations to provide a neat, precise fit.

END OF SECTION 095113

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 096513 - RESILIENT BASE AND ACCESSORIES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Resilient base.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Samples: For each exposed product and for each color and texture specified, not less than 12 inches (300 mm) long.

PART 2 - PRODUCTS

2.1 THERMOSET-RUBBER BASE

A. Roppe Corporation.

B. Product Standard: ASTM F 1861, Type TS (rubber, vulcanized thermoset), Group I (solid, homogeneous).

1. Style and Location:
   a. Style C, Butt to: Provide in areas indicated.

C. Thickness: 0.125 inch (3.2 mm).

D. Height: 6 inches.

E. Lengths: Cut lengths 48 inches (1219 mm) long or coils in manufacturer's standard length.

F. Outside Corners: Job formed or preformed.

G. Inside Corners: Job formed or preformed.

H. Colors: As selected by Architect from full range of industry colors.

2.2 INSTALLATION MATERIALS

A. Trowelable Leveling and Patching Compounds: Latex-modified, portland cement based or blended hydraulic-cement-based formulation provided or approved by resilient-product manufacturer for applications indicated.

B. Adhesives: Water-resistant type recommended by resilient-product manufacturer for resilient products and substrate conditions indicated.

PART 3 - EXECUTION

3.1 PREPARATION

A. Prepare substrates according to manufacturer's written instructions to ensure adhesion of resilient products.

B. Concrete Substrates for Resilient Stair Accessories: Prepare horizontal surfaces according to ASTM F 710.

1. Verify that substrates are dry and free of curing compounds, sealers, and hardeners.
2. Remove substrate coatings and other substances that are incompatible with adhesives and that contain soap, wax, oil, or silicone, using mechanical methods recommended by manufacturer. Do not use solvents.
3. Alkalinity and Adhesion Testing: Perform tests recommended by manufacturer. Proceed with installation only after substrate alkalinity falls within range on pH scale recommended by manufacturer in writing, but not less than 5 or more than 9pH.
4. Moisture Testing: Proceed with installation only after substrates pass testing according to manufacturer's written recommendations, but not less stringent than the following:

    a. Perform anhydrous calcium chloride test according to ASTM F 1869. Proceed with installation only after substrates have maximum moisture-vapor-emission rate of 3 lb of water/1000 sq. ft. (1.36 kg of water/92.9 sq. m) in 24 hours.
    b. Perform relative humidity test using in situ probes according to ASTM F 2170. Proceed with installation only after substrates have maximum 75 percent relative humidity level.

C. Fill cracks, holes, and depressions in substrates with trowelable leveling and patching compound; remove bumps and ridges to produce a uniform and smooth substrate.

D. Do not install resilient products until they are the same temperature as the space where they are to be installed.

E. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

3.2 RESILIENT BASE INSTALLATION

A. Comply with manufacturer's written instructions for installing resilient base.

B. Apply resilient base to walls, columns, pilasters, casework and cabinets in toe spaces, and other permanent fixtures in rooms and areas where base is required.

C. Install resilient base in lengths as long as practical without gaps at seams and with tops of adjacent pieces aligned.

D. Tightly adhere resilient base to substrate throughout length of each piece, with base in continuous contact with horizontal and vertical substrates.

E. Do not stretch resilient base during installation.

F. On masonry surfaces or other similar irregular substrates, fill voids along top edge of resilient base with manufacturer's recommended adhesive filler material.

G. Preformed Corners: Install preformed corners before installing straight pieces.

H. Job-Formed Corners:

1. Outside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches (76 mm) in length.

    a. Form without producing discoloration (whitening) at bends.

2. Inside Corners: Use straight pieces of maximum lengths possible and form with returns not less than 3 inches (76 mm) in length.

    a. Miter or cope corners to minimize open joints.

3.3 CLEANING AND PROTECTION

A. Comply with manufacturer's written instructions for cleaning and protecting resilient products.

B. Cover resilient products subject to wear and foot traffic until Substantial Completion.

END OF SECTION 096513

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 099113 - EXTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes surface preparation and the application of paint systems on exterior substrates.

1. Concrete.
2. Clay masonry.
3. Concrete masonry units (CMU).
4. Steel.
5. Galvanized metal.
6. Aluminum (not anodized or otherwise coated)

1.2 DEFINITIONS

A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.

B. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.

C. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.

D. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.

E. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.

F. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.

B. Samples: For each type of paint system and each color and gloss of topcoat.

C. Product List: For each product indicated. Include printout of current "MPI Approved Products List" for each product category specified, with the proposed product highlighted.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

1.5 QUALITY ASSURANCE

A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.

a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft. (9 sq. m).
b. Other Items: Architect will designate items or areas required.

2. Final approval of color selections will be based on mockups.

a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles for the paint category indicated.

B. Acceptable Manufacturers:
1. ICI
2. Pittsburgh Paint
3. Sherwin Williams

2.2 PAINT, GENERAL

A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."

B. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

C. VOC Content: Provide materials that comply with VOC limits of authorities having jurisdiction.

D. Colors: As indicated in Finish Schedule.

2.3 BLOCK FILLERS

A. Block Filler, Latex, Interior/Exterior:

1. SW: Loxon Block Surfacer.

2.4 PRIMERS/SEALERS

A. Primer, Alkali Resistant, Water Based:[MPI #3.]

1. Sherwin Williams, Loxon Exterior Concrete and Masonry Primer, #A24W8300.

2.5 METAL PRIMERS

A. Primer, Alkyd, Anti-Corrosive for all Metal: [MPI #79]

1. Sherwin Williams, Water Based Rust Inhibited Primer, Pro Industrial Pro-Cryl Universal Metal Primer.

2.6 WOOD PRIMERS

A. Primer, Latex for Exterior Plywood:

1. Sherwin Williams, Exterior Latex Wood Primer, B42W8041

B. Primer, Oil for Exterior Wood:[MPI #7]
1. ICI: #2110-1200.
2. Pittburgh: Speedhide exterior oil based primer.
3. SW: A-100 Exterior oil wood primer, Y24W8020.

2.7 WATER-BASED PAINTS

A. Latex, Exterior Flat (Gloss Level 1):[MPI #10.]

1. ICI:#2416
2. Pittsburgh: Speedhide exterior semi-gloss latex, 6-900 Series.
3. SW: A-100 Exterior latex.

B. Latex, Exterior Semi-Gloss (Gloss Level 5):[MPI #11]
1. ICI:#2416
2. Pittsburgh: Speedhide exterior semi-gloss latex, 6-900 Series.
3. SW: A-100 Exterior latex.

C. Light Industrial Coating, Exterior, Water Based, Semi-Gloss (Gloss Level 5):[MPI #163.]

1. Sherwin Williams, DTM Acrylic

2.8 SOLVENT-BASED PAINTS

A. Alkyd, Exterior Gloss (Gloss Level 6) for metal handrails, doors and bollards:[MPI #9.]

1. Sherwin Williams, Pro Industrial Urethane Alkyd, #B54W151.

2.9 ALUMINUM PAINT

A. Aluminum Paint, 100% Acrylic D.T.M.: [MPI#1]
1. ICI: Devflex 4208 Series.
2. Pittsburgh: 90-Line Finish.
3. SW: Bondplex Waterbased Acrylic Aluminum, B71S200.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Concrete: 12 percent.
2. Masonry (Clay and CMU): 12 percent.
3. Wood: 15 percent.
4. Portland Cement Plaster: 12 percent.
5. Gypsum Board: 12 percent.

C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

D. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates and paint systems indicated.

B. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

3.3 APPLICATION

A. Apply paints according to manufacturer's written instructions and recommendations in "MPI Manual."

B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 CLEANING AND PROTECTION

A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 EXTERIOR PAINTING SCHEDULE

A. Concrete Substrates, Nontraffic Surfaces:

1. Latex System:

a. Prime Coat: Latex, exterior, matching topcoat.
b. Intermediate Coat: Latex, exterior, matching topcoat.
c. Topcoat: Latex, exterior gloss (Gloss Level 6)[, MPI #119].

B. Concrete Substrates, Traffic Surfaces:

1. Alkyd Floor Enamel System:

a. Prime Coat: Floor enamel, alkyd, gloss (Gloss Level 6)[, MPI #27].
b. Intermediate Coat: Floor enamel, alkyd, gloss (Gloss Level 6)[, MPI #27].
c. Topcoat: Floor enamel, alkyd, gloss (Gloss Level 6)[, MPI #27].
d. Additive: Manufacturer's standard additive to increase skid resistance of painted surface.

2. Solvent-Based Clear Sealer System:

a. Prime Coat: Sealer, solvent based, for concrete floors[, MPI #104].
b. Intermediate Coat: Sealer, solvent based, for concrete floors[, MPI #104].
c. Topcoat: Sealer, solvent based, for concrete floors[, MPI #104].

C. CMU Substrates:

1. Latex over Alkali-Resistant Primer System:

a. Prime Coat: Primer, alkali resistant, water based[, MPI #3].
b. Intermediate Coat: Latex, exterior, matching topcoat.
c. Topcoat: Latex, exterior semi-gloss (Gloss Level 5)[, MPI #11].

D. Steel Substrates:

1. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, alkyd, anti-corrosive for metal[, MPI #79].
b. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
c. Topcoat: Light industrial coating, exterior, water based, semi-gloss (Gloss Level 5)[, MPI #163].

2. Aluminum Paint System:

a. Prime Coat: Primer, alkyd, anti-corrosive for metal[, MPI #79].
b. Intermediate Coat: Aluminum paint[, MPI #1].
c. Topcoat: Aluminum paint[, MPI #1].

E. Galvanized-Metal Substrates:

1. Latex System:

2. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, galvanized, water based[, MPI #79].
b. Intermediate Coat: Light industrial coating, exterior, water based, matching topcoat.
c. Topcoat: Light industrial coating, exterior, water based, semi-gloss (Gloss Level 5)[, MPI #163].

END OF SECTION 099113

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 099123 - INTERIOR PAINTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes surface preparation and the application of paint systems on the following interior substrates:

1. Concrete.
2. Clay masonry.
3. Concrete masonry units (CMU).
4. Steel.
5. Cast iron.
6. Galvanized metal.
7. Aluminum (not anodized or otherwise coated).
8. Wood.
9. Gypsum board

1.2 DEFINITIONS

A. Gloss Level 1: Not more than 5 units at 60 degrees and 10 units at 85 degrees, according to ASTM D 523.

B. Gloss Level 2: Not more than 10 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.

C. Gloss Level 3: 10 to 25 units at 60 degrees and 10 to 35 units at 85 degrees, according to ASTM D 523.

D. Gloss Level 4: 20 to 35 units at 60 degrees and not less than 35 units at 85 degrees, according to ASTM D 523.

E. Gloss Level 5: 35 to 70 units at 60 degrees, according to ASTM D 523.

F. Gloss Level 6: 70 to 85 units at 60 degrees, according to ASTM D 523.

G. Gloss Level 7: More than 85 units at 60 degrees, according to ASTM D 523.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product. Include preparation requirements and application instructions.

B. Samples: For each type of paint system and in each color and gloss of topcoat.

C. Product List: For each product indicated. Include printout of current "MPI Approved Products List" for each product category specified in Part 2, with the proposed product highlighted.

1.4 MAINTENANCE MATERIAL SUBMITTALS

A. Furnish extra materials, from the same product run, that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.

1. Paint: 5 percent, but not less than 1 gal. of each material and color applied.

1.5 QUALITY ASSURANCE

A. Mockups: Apply mockups of each paint system indicated and each color and finish selected to verify preliminary selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Architect will select one surface to represent surfaces and conditions for application of each paint system specified in Part 3.

a. Vertical and Horizontal Surfaces: Provide samples of at least 100 sq. ft.
b. Other Items: Architect will designate items or areas required.

2. Final approval of color selections will be based on mockups.

a. If preliminary color selections are not approved, apply additional mockups of additional colors selected by Architect at no added cost to Owner.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide product by one of the following:

1. Sherwin Williams
2. Pittsburgh Paint
3. ICI

2.2 PAINT, GENERAL

A. MPI Standards: Provide products that comply with MPI standards indicated and that are listed in its "MPI Approved Products List."

B. Material Compatibility:

1. Provide materials for use within each paint system that are compatible with one another and substrates indicated, under conditions of service and application as demonstrated by manufacturer, based on testing and field experience.
2. For each coat in a paint system, provide products recommended in writing by manufacturers of topcoat for use in paint system and on substrate indicated.

C. VOC Content: Products shall comply with VOC limits of authorities having jurisdiction and, for interior paints and coatings applied at Project site, the following VOC limits, exclusive of colorants added to a tint base, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

1. Flat Paints and Coatings: 50 g/L.
2. Nonflat Paints and Coatings: 150 g/L.
3. Dry-Fog Coatings: 400 g/L.
4. Primers, Sealers, and Undercoaters: 200 g/L.
5. Anticorrosive and Antirust Paints Applied to Ferrous Metals: 250 g/L.
6. Zinc-Rich Industrial Maintenance Primers: 340 g/L.
7. Pretreatment Wash Primers: 420 g/L.
8. Floor Coatings: 100 g/L.
9. Shellacs, Clear: 730 g/L.
10. Shellacs, Pigmented: 550 g/L.

D. Low-Emitting Materials: Interior paints and coatings shall comply with the testing and product requirements of the California Department of Health Services' "Standard Practice for the Testing of Volatile Organic Emissions from Various Sources Using Small-Scale Environmental Chambers."

E. Colors: As indicated on Finish Schedule.

2.3 BLOCK FILLERS

A. Block Filler, Latex, Interior/Exterior:[MPI #4.]

1. Sherwin Williams Pro Mar Block Filler, B25W25.

2.4 PRIMERS/SEALERS

A. Primer Sealer, Latex, Interior:[MPI #50.]

1. Sherwin Williams Pro Mar 200 Latex Primer.

B. Primer, Alkali Resistant, Water Based:[MPI #3.]

1. Sherwin Williams Loxon Concrete & Masonry Primer, A24W8300.

C. Primer Sealer, Interior, Institutional Low Odor/VOC:[MPI #149.]

1. Sherwin Williams Pro Mar 200 Zero VOC Primer, B28W2600.

D. Primer, Latex, for Interior Wood:[MPI #39.]

1. Sherwin Williams Multi Purpose Latex Primer, B31W8020.

E. Primer Sealer, Alkyd, Interior:[MPI #45.]

1. Sherwin Williams Pro Block Alkyd Primer, B79W8810.

F. Primer, Bonding, Water Based:[MPI #17.]

1. Sherwin Williams Adhesion Primer, B51W8050.

2.5 METAL PRIMERS

A. Primer, Rust-Inhibitive, Water Based:[MPI #107.]

1. Sherwin Williams Pro Industrial Pro-Cryl Universal Primer, B66W310.

B. Primer, Alkyd, Anti-Corrosive, for Metal:[MPI #79.]

1. Sherwin Williams Kem Kromik Primer, B50NZ2.

C. Primer, Galvanized, Water Based:[MPI #107.]

1. Sherwin Williams Pro Industrial Pro-Cryl Universal Primer, B66W310.

D. Primer, Quick Dry, for Aluminum:[MPI #107.]

1. Sherwin Williams Pro Industrial Pro-Cryl Universal Primer, B66W310.

2.6 WATER-BASED PAINTS

A. Latex, Interior, Institutional Low Odor/VOC, Flat (Gloss Level 1):[MPI #143.]

1. Sherwin Williams Pro Mar 200 Zero VOC Latex Flat, B30W2600.

B. Latex, Interior, Institutional Low Odor/VOC, (Gloss Level 2):[MPI #144.]

1. Sherwin Williams Pro Mar 200 Zero VOC Latex Low Sheen, B24W2600.

C. Latex, Interior, Institutional Low Odor/VOC, (Gloss Level 3):[MPI #145.]

1. Sherwin Williams Pro Mar 200 Zero VOC Latex Eg-Shel, B20W2600.

D. Latex, Interior, Institutional Low Odor/VOC, Semi-Gloss (Gloss Level 5):[MPI #147.]

1. Sherwin Williams Pro Mar 200 Zero VOC Latex Semi-Gloss, B31W2600.

E. Latex, Interior, High Performance Architectural, (Gloss Level 2):[MPI #138.]

1. Sherwin Williams Pro Mar 200 Zero VOC Latex Gloss, B21W2251.

F. Latex, Interior, High Performance Architectural, Semi-Gloss (Gloss Level 5):[MPI #141.]

1. Sherwin Williams Pro Industrial Zero VOC Semi-Gloss, B66W600 Series.

G. Light Industrial Coating, Interior, Water Based (Gloss Level 3):[MPI #151.]

1. Sherwin Williams Pro Industrial Pre-Catalyzed Epoxy Eg-Shel, K45.

H. Light Industrial Coating, Interior, Water Based, Semi-Gloss (Gloss Level 5):[MPI #153.]

1. Sherwin Williams Pro Industrial Pre-Catalyzed Epoxy Semi-Gloss, K46.

I. Light Industrial Coating, Interior, Water Based, Gloss (Gloss Level 6):[MPI #154.]

1. Sherwin Williams Pro Industrial Zero VOC Gloss, B66W600 Series.

2.7 DRY FOG/FALL COATINGS

A. Dry Fall, Latex, Flat:[MPI #118.]

1. Sherwin Williams Waterborne Acrylic Dryfall, B42.

B. Dry Fall, Water Based, for Galvanized Steel, Flat (Gloss Level 1):[MPI #118.]

1. Sherwin Williams Waterborne Acrylic Dryfall, B42.

2.8 FLOOR COATINGS

A. Floor Epoxy (Water Based), Gloss (Gloss Level 6):[MPI #212.]

1. Sherwin Williams Armor Seal 8100 Water Based Epoxy.

2. Florock Polymer Flooring, Florock MVT & FloroThane MC/HT. www.florock.net

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine substrates and conditions, with Applicator present, for compliance with requirements for maximum moisture content and other conditions affecting performance of the Work.

B. Maximum Moisture Content of Substrates: When measured with an electronic moisture meter as follows:

1. Concrete: 12 percent.
2. Masonry (Clay and CMU): 12 percent.
3. Wood: 15 percent.
4. Gypsum Board: 12 percent.
5. Plaster: 12 percent.

C. Verify suitability of substrates, including surface conditions and compatibility with existing finishes and primers.

D. Proceed with coating application only after unsatisfactory conditions have been corrected.

1. Application of coating indicates acceptance of surfaces and conditions.

3.2 PREPARATION

A. Comply with manufacturer's written instructions and recommendations in "MPI Manual" applicable to substrates indicated.

B. Remove hardware, covers, plates, and similar items already in place that are removable and are not to be painted. If removal is impractical or impossible because of size or weight of item, provide surface-applied protection before surface preparation and painting.

1. After completing painting operations, use workers skilled in the trades involved to reinstall items that were removed. Remove surface-applied protection if any.

C. Clean substrates of substances that could impair bond of paints, including dust, dirt, oil, grease, and incompatible paints and encapsulants.

1. Remove incompatible primers and reprime substrate with compatible primers or apply tie coat as required to produce paint systems indicated.

3.3 APPLICATION

A. Apply paints according to manufacturer's written instructions and to recommendations in "MPI Manual."

B. Apply paints to produce surface films without cloudiness, spotting, holidays, laps, brush marks, roller tracking, runs, sags, ropiness, or other surface imperfections. Cut in sharp lines and color breaks.

3.4 CLEANING AND PROTECTION

A. Protect work of other trades against damage from paint application. Correct damage to work of other trades by cleaning, repairing, replacing, and refinishing, as approved by Architect, and leave in an undamaged condition.

B. At completion of construction activities of other trades, touch up and restore damaged or defaced painted surfaces.

3.5 INTERIOR PAINTING SCHEDULE

A. Concrete Substrates, Nontraffic Surfaces:

1. Latex System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Prime Coat: Latex, interior, matching topcoat.
c. Intermediate Coat: Latex, interior, matching topcoat.
d. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
e. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
f. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
g. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
h. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
i. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Latex over Latex Aggregate System:

a. Prime Coat: Textured coating, latex, flat[, MPI #42].
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

3. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer sealer, interior, institutional low odor/VOC[, MPI #149].
b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

4. High-Performance Architectural Latex System:

a. Prime Coat: Primer, alkali resistant, water based[, MPI #3].

b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

5. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, alkali resistant, water based[, MPI #3].
b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

6. Alkyd System:

a. Prime Coat: Primer, alkali resistant, water based[, MPI #3].
b. Intermediate Coat: Alkyd, interior, matching topcoat.
c. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
d. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
e. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
f. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

B. Concrete Substrates, Traffic Surfaces:

1. Water Based Epoxy Floor Enamel System:

a. Prime Coat: Floor enamel, alkyd, gloss (Gloss Level 6).
b. Topcoat: Floor enamel, alkyd, gloss (Gloss Level 6).
c. Embed in top coat: non-sip floor addative.

C. Clay-Masonry Substrates:

1. Latex System:

a. Prime Coat: Latex, interior, matching topcoat.
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].

h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Latex Aggregate System:

a. Prime Coat: Primer for textured coating, latex, flat[, as recommended in writing by topcoat manufacturer].
b. Intermediate Coat: Intermediate coat for textured coating, latex, flat[, as recommended in writing by topcoat manufacturer].
c. Topcoat: Textured coating, latex, flat[, MPI #42].

3. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer sealer, interior, institutional low odor/VOC[, MPI #149].
b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

4. High-Performance Architectural Latex System:

a. Prime Coat: Primer, alkali resistant, water based[, MPI #3].
b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

5. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, alkali resistant, water based[, MPI #3].
b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

6. Alkyd System:

   a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
   b. Intermediate Coat: Alkyd, interior, matching topcoat.
   c. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
   d. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
   e. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
   f. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

D. CMU Substrates:

1. Latex System:

   a. Block Filler: Block filler, latex, interior/exterior[, MPI #4].
   b. Intermediate Coat: Latex, interior, matching topcoat.
   c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
   d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
   e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
   f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
   g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
   h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Institutional Low-Odor/VOC Latex System:

   a. Block Filler: Block filler, latex, interior/exterior[, MPI #4].
   b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
   c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
   d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
   e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
   f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

3. High-Performance Architectural Latex System:

   a. Block Filler: Block filler, latex, interior/exterior[, MPI #4].
   b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
   c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
   d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
   e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
   f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

4. Water-Based Light Industrial Coating System:

   a. Block Filler: Block filler, latex, interior/exterior[, MPI #4].
   b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
   c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
   d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
   e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

5. Alkyd System:

   a. Block Filler: Block filler, latex, interior/exterior[, MPI #4].
   b. Sealer Coat: Primer sealer, latex, interior[, MPI #50].
   c. Intermediate Coat: Alkyd, interior, matching topcoat.
   d. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
   e. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
   f. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
   g. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

E. Steel Substrates:

1. Latex over Alkyd Primer System:

   a. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79].
   b. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
   c. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79] or primer, alkyd, quick dry, for metal[, MPI #76].
   d. Prime Coat: Shop primer specified in Section where substrate is specified.
   e. Intermediate Coat: Latex, interior, matching topcoat.
   f. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
   g. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
   h. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
   i. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
   j. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
   k. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Water-Based Dry-Fall System:

   a. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79].
   b. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
   c. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79] or primer, alkyd, quick dry, for metal[, MPI #76].
   d. Prime Coat: Shop primer specified in Section where substrate is specified.
   e. Topcoat: Dry fall, latex, flat[, MPI #118].
   f. Topcoat: Dry fall, water based, for galvanized steel, flat (Gloss Level 1)[, MPI #133].

3. Institutional Low-Odor/VOC Latex System:

    a. Prime Coat: Primer, rust-inhibitive, water based[MPI #107].
    b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
    c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
    d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
    e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
    f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

4. High-Performance Architectural Latex System:

    a. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79].
    b. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
    c. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79] or primer, alkyd, quick dry, for metal[, MPI #76].
    d. Prime Coat: Shop primer specified in Section where substrate is specified.
    e. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
    f. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
    g. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
    h. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
    i. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

5. Water-Based Light Industrial Coating System:

    a. Prime Coat: Primer, rust-inhibitive, water based[MPI #107].
    b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
    c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
    d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
    e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

6. Alkyd System:

    a. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79].
    b. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
    c. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79] or primer, alkyd, quick dry, for metal[, MPI #76].
    d. Prime Coat: Shop primer specified in Section where substrate is specified.

e. Intermediate Coat: Alkyd, interior, matching topcoat.
f. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
g. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
h. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
i. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

7. Quick-Drying Enamel System:

a. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
b. Intermediate Coat: Alkyd, quick dry, matching topcoat.
c. Topcoat: Alkyd, quick dry, semi-gloss (Gloss Level 5)[, MPI #81].
d. Topcoat: Alkyd, quick dry, gloss (Gloss Level 7)[, MPI #96].

8. Alkyd Dry-Fall System:

a. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79].
b. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
c. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79] or primer, alkyd, quick dry, for metal[, MPI #76].
d. Prime Coat: Shop primer specified in Section where substrate is specified.
e. Topcoat: Dry fall, alkyd, flat[, MPI #55].

9. Aluminum Paint System:

a. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79].
b. Prime Coat: Primer, alkyd, quick dry, for metal[, MPI #76].
c. Prime Coat: Primer, alkyd, anti-corrosive, for metal[, MPI #79] or primer, alkyd, quick dry, for metal[, MPI #76].
d. Prime Coat: Shop primer specified in Section where substrate is specified.
e. Intermediate Coat: Aluminum paint[, MPI #1].
f. Topcoat: Aluminum paint[, MPI #1].

F. Galvanized-Metal Substrates:

1. Latex over Waterborne Primer System:

a. Prime Coat: Primer, galvanized, water based[, MPI #134].
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Water-Based Dry-Fall System:

a. Prime Coat: Dry fall, water based, for galvanized steel, flat (Gloss Level 1)[, MPI #133].

b. Topcoat: Dry fall, water based, for galvanized steel, flat (Gloss Level 1)[, MPI #133].

3. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer, galvanized, water based[, MPI #134].
b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

4. High-Performance Architectural Latex System:

a. Prime Coat: Primer, galvanized, water based[, MPI #134].
b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

5. Water-Based Light Industrial Coating Over Waterborne Primer System:

a. Prime Coat: Primer, galvanized, water based[, MPI #134].
b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

6. Aluminum Paint System:

a. Prime Coat: Primer, galvanized metal, as recommended in writing by topcoat manufacturer for use on galvanized-metal substrates with topcoat indicated.
b. Intermediate Coat: Aluminum paint[, MPI #1].
c. Topcoat: Aluminum paint[, MPI #1].

G. Aluminum (Not Anodized or Otherwise Coated) Substrates:

1. Latex System:

a. Prime Coat: Primer, quick dry, for aluminum[, MPI #95].
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer, quick dry, for aluminum[, MPI #95].
b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

3. High-Performance Architectural Latex System:

a. Prime Coat: Primer, quick dry, for aluminum[, MPI #95].
b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

4. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer, quick dry, for aluminum[, MPI #95].
b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].

e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

5. Alkyd System:

a. Prime Coat: Primer, vinyl wash[, MPI #80].
b. Prime Coat: Primer, quick dry, for aluminum[, MPI #95].
c. Intermediate Coat: Alkyd, interior, matching topcoat.
d. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
e. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
f. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
g. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

6. Aluminum Paint System:

a. Prime Coat: Primer, vinyl wash[, MPI #80].
b. Intermediate Coat: Aluminum paint[, MPI #1].
c. Topcoat: Aluminum paint[, MPI #1].

H. Wood Substrates: Including wood trim, architectural woodwork, doors, windows, wood-based panel products, glued-laminated construction, exposed joists and exposed beams.

1. Latex System:

a. Prime Coat: Primer, latex, for interior wood[, MPI #39].
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Latex over Alkyd Primer System:

a. Prime Coat: Primer sealer, alkyd, interior[, MPI #45].
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

3. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer, latex, for interior wood[, MPI #39].

b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

4. High-Performance Architectural Latex System:

a. Prime Coat: Primer, latex, for interior wood[, MPI #39].
b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

5. Alkyd System:

a. Prime Coat: Primer sealer, alkyd, interior[, MPI #45].
b. Intermediate Coat: Alkyd, interior, matching topcoat.
c. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
d. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
e. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
f. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

I. Wood Substrates, Traffic Surfaces:

1. Latex Floor Paint System:

a. Prime Coat: Primer sealer, alkyd, interior[, MPI #45].
b. Intermediate Coat: Floor paint, latex, low gloss (maximum Gloss Level 3)[, MPI #60].
c. Topcoat: Floor paint, latex, low gloss (maximum Gloss Level 3)[, MPI #60].

2. Alkyd Floor Enamel System:

a. Prime Coat: Floor enamel, alkyd, gloss (Gloss Level 6)[, MPI #27].
b. Intermediate Coat: Floor enamel, alkyd, gloss (Gloss Level 6)[, MPI #27].
c. Topcoat: Floor enamel, alkyd, gloss (Gloss Level 6)[, MPI #27].

J. Fiberglass and Plastic Substrates:

1. Latex System:

    a. Prime Coat: Primer, bonding, water based[, MPI #17].
    b. Prime Coat: Primer, bonding, solvent based[, MPI #69].
    c. Intermediate Coat: Latex, interior, matching topcoat.
    d. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
    e. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
    f. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
    g. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
    h. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
    i. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Institutional Low-Odor/VOC Latex System:

    a. Prime Coat: Primer, bonding, water based[, MPI #17].
    b. Prime Coat: Primer, bonding, solvent based[, MPI #69].
    c. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
    d. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
    e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
    f. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
    g. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

3. High-Performance Architectural Latex System:

    a. Prime Coat: Primer, bonding, water based[, MPI #17].
    b. Prime Coat: Primer, bonding, solvent based[, MPI #69].
    c. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
    d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].
    e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
    f. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
    g. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

4. Water-Based Light Industrial Coating System:

    a. Prime Coat: Primer, bonding, water based[, MPI #17].
    b. Prime Coat: Primer, bonding, solvent based[, MPI #69].
    c. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
    d. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].

e. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
f. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

5. Alkyd System:

a. Prime Coat: Primer, bonding, water based[, MPI #17].
b. Prime Coat: Primer, bonding, solvent based[, MPI #69].
c. Intermediate Coat: Alkyd, interior, matching topcoat.
d. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
e. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
f. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
g. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

K. Gypsum Board & Plaster Substrates:

1. Latex System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Prime Coat: Latex, interior, matching topcoat.
c. Intermediate Coat: Latex, interior, matching topcoat.
d. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
e. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
f. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
g. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
h. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
i. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer sealer, interior, institutional low odor/VOC[, MPI #149].
b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

3. High-Performance Architectural Latex System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Latex, interior, high performance architectural, matching topcoat.
c. Topcoat: Latex, interior, high performance architectural, (Gloss Level 2)[, MPI #138].

d. Topcoat: Latex, interior, high performance architectural, (Gloss Level 3)[, MPI #139].
e. Topcoat: Latex, interior, high performance architectural, (Gloss Level 4)[, MPI #140].
f. Topcoat: Latex, interior, high performance architectural, semi-gloss (Gloss Level 5)[, MPI #141].

4. Water-Based Light Industrial Coating System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Light industrial coating, interior, water based, matching topcoat.
c. Topcoat: Light industrial coating, interior, water based (Gloss Level 3)[, MPI #151].
d. Topcoat: Light industrial coating, interior, water based, semi-gloss (Gloss Level 5)[, MPI #153].
e. Topcoat: Light industrial coating, interior, water based, gloss (Gloss Level 6)[, MPI #154].

5. Alkyd over Latex Primer System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Alkyd, interior, matching topcoat.
c. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
d. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
e. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
f. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

L. Spray-Textured Ceiling Substrates:

1. Latex (Flat) System: Spray applied.

a. Prime Coat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
b. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].

2. Latex System: Spray applied.

a. Prime Coat: Latex, interior, matching topcoat.
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

3. Latex over Alkyd Primer System:

a. Prime Coat: Primer sealer, alkyd, interior[, MPI #45].
b. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].

c. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
d. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
e. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
f. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
g. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

4. Alkyd (Flat) System:

a. Prime Coat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
b. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].

5. Alkyd System:

a. Prime Coat: Primer sealer, alkyd, interior[, MPI #45].
b. Intermediate Coat: Alkyd, interior, matching topcoat.
c. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
d. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
e. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
f. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

M. Cotton or Canvas and ASJ Insulation-Covering Substrates: Including pipe and duct coverings.

1. Latex System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Latex, interior, matching topcoat.
c. Topcoat: Latex, interior, flat, (Gloss Level 1)[, MPI #53].
d. Topcoat: Latex, interior, (Gloss Level 2)[, MPI #44].
e. Topcoat: Latex, interior, (Gloss Level 3)[, MPI #52].
f. Topcoat: Latex, interior, (Gloss Level 4)[, MPI #43].
g. Topcoat: Latex, interior, semi-gloss, (Gloss Level 5)[, MPI #54].
h. Topcoat: Latex, interior, gloss, (Gloss Level 6, except minimum gloss of 65 units at 60 degrees)[, MPI #114].

2. Institutional Low-Odor/VOC Latex System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Latex, interior, institutional low odor/VOC, matching topcoat.
c. Topcoat: Latex, interior, institutional low odor/VOC, flat (Gloss Level 1)[, MPI #143].
d. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 2)[, MPI #144].
e. Topcoat: Latex, interior, institutional low odor/VOC, (Gloss Level 3)[, MPI #145].
f. Topcoat: Latex, interior, institutional low odor/VOC, semi-gloss (Gloss Level 5)[, MPI #147].

3. Alkyd over Latex Primer System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Alkyd, interior, matching topcoat.
c. Topcoat: Alkyd, interior, flat (Gloss Level 1)[, MPI #49].
d. Topcoat: Alkyd, interior, (Gloss Level 3)[, MPI #51].
e. Topcoat: Alkyd, interior, semi-gloss (Gloss Level 5)[, MPI #47].
f. Topcoat: Alkyd, interior, gloss (Gloss Level 6)[, MPI #48].

4. Aluminum Paint System:

a. Prime Coat: Primer sealer, latex, interior[, MPI #50].
b. Intermediate Coat: Aluminum paint[, MPI #1].
c. Topcoat: Aluminum paint[, MPI #1].

END OF SECTION 099123

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 104416 - FIRE EXTINGUISHERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes portable, hand-carried fire extinguishers and mounting brackets for fire extinguishers.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Operation and maintenance data.

C. Warranty: Sample of special warranty.

1.3 QUALITY ASSURANCE

A. NFPA Compliance: Fabricate and label fire extinguishers to comply with NFPA 10, "Portable Fire Extinguishers."

B. Fire Extinguishers: Listed and labeled for type, rating, and classification by an independent testing agency acceptable to authorities having jurisdiction.

C. Coordinate type and capacity of fire extinguishers with fire protection cabinets to ensure fit and function.

1.4 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace fire extinguishers that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, the following:

a. Failure of hydrostatic test according to NFPA 10.
b. Faulty operation of valves or release levers.

2. Warranty Period: Six years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PORTABLE, HAND-CARRIED FIRE EXTINGUISHERS

A. Fire Extinguishers: Type, size, and capacity for each fire protection cabinet and mounting bracket indicated.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following

a. Amerex Corporation.
b. Ansul Incorporated; Tyco International Ltd.
c. Badger Fire Protection; a Kidde company.
d. Buckeye Fire Equipment Company.
e. Fire End & Croker Corporation.
f. J. L. Industries, Inc.; a division of Activar Construction Products Group.
g. Kidde Residential and Commercial Division; Subsidiary of Kidde plc.
h. Larsen's Manufacturing Company.
i. Moon-American.
j. Pem All Fire Extinguisher Corp.; a division of PEM Systems, Inc.
k. Potter Roemer LLC.
l. Pyro-Chem; Tyco Safety Products.

2. Instruction Labels: Include pictorial marking system complying with NFPA 10, Appendix B.

B. Multipurpose Dry-Chemical Type : UL-rated 2-A:10:B:C 10-lb. nominal capacity, with monoammonium phosphate-based dry chemical in manufacturer's standard enameled container.

2.2 MOUNTING BRACKETS

A. Mounting Brackets: Manufacturer's standard steel, designed to secure fire extinguisher to wall or structure, of sizes required for types and capacities of fire extinguishers indicated, with plated or red baked-enamel finish.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Amerex Corporation.
b. Ansul Incorporated; Tyco International Ltd.
c. Badger Fire Protection; a Kidde company.
d. Buckeye Fire Equipment Company.
e. Fire End & Croker Corporation.
f. J. L. Industries, Inc.; a division of Activar Construction Products Group.
g. Larsen's Manufacturing Company.
h. Potter Roemer LLC.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Examine fire extinguishers for proper charging and tagging.

1. Remove and replace damaged, defective, or undercharged fire extinguishers.

B. Install fire extinguishers and mounting brackets in locations indicated and in compliance with requirements of authorities having jurisdiction.

1. Mounting Brackets: In cabinets.

C. Mounting Brackets: Fasten mounting brackets to surfaces, square and plumb, at locations indicated.

END OF SECTION 104416

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 133419 - METAL BUILDING SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Structural-steel framing.
2. Metal roof panels.
3. Metal wall panels.
4. Metal soffit panels.
5. Thermal insulation.
6. Personnel doors and frames.
7. Accessories.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of metal building system component.

B. Shop Drawings: Indicate components by others. Include full building plan, elevations, sections, details and attachments to other work.

C. Samples: For units with factory-applied finishes.

D. Delegated-Design Submittal: For metal building systems.

1. Include analysis data indicating compliance with performance requirements and design data signed and sealed by the qualified professional engineer responsible for their preparation.

1.3 INFORMATIONAL SUBMITTALS

A. Welding certificates.

B. Letter of Design Certification: Signed and sealed by a qualified professional engineer. Include the following:

1. Name and location of Project.
2. Order number.
3. Name of manufacturer.
4. Name of Contractor.
5. Building dimensions including width, length, height, and roof slope.
6. Indicate compliance with AISC standards for hot-rolled steel and AISI standards for cold-rolled steel, including edition dates of each standard.
7. Governing building code and year of edition.

8. Design Loads: Include dead load, roof live load, collateral loads, roof snow load, deflection, wind loads/speeds and exposure, seismic design category or effective peak velocity-related acceleration/peak acceleration, and auxiliary loads (cranes).
9. Load Combinations: Indicate that loads were applied acting simultaneously with concentrated loads, according to governing building code.
10. Building-Use Category: Indicate category of building use and its effect on load importance factors.

C. Material test reports.

D. Source quality-control reports.

E. Field quality-control reports.

F. Sample warranties.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer.

1. Accreditation: Manufacturer's facility accredited according to the International Accreditation Service's AC472, "Accreditation Criteria for Inspection Programs for Manufacturers of Metal Building Systems."
2. Engineering Responsibility: Preparation of comprehensive engineering analysis and Shop Drawings by a professional engineer who is legally qualified to practice in jurisdiction where Project is located.

B. Erector Qualifications: An experienced erector who specializes in erecting and installing work similar in material, design, and extent to that indicated for this Project and who is acceptable to manufacturer.

C. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
2. AWS D1.3, "Structural Welding Code - Sheet Steel."

1.6 WARRANTY

A. Special Warranty on Metal Panel Finishes: Manufacturer agrees to repair finish or replace metal panels that show evidence of deterioration of factory-applied finishes within specified warranty period.

1. Finish Warranty Period: **20** years from date of Substantial Completion.

B. Special Weathertightness Warranty for Standing-Seam Metal Roof Panels: Manufacturer agrees to repair or replace standing-seam metal roof panel assemblies that leak or otherwise fail to remain weathertight within specified warranty period.

1. Warranty Period: **20** years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. ACI Building Systems, Inc.
2. Alliance Steel, Inc.
3. Mid-West Steel Building Company; an NCI company.
4. Mueller Building Systems.
5. Varco-Pruden Buildings; a division of BlueScope Buildings North America, Inc.
6. Whirlwind Building Systems.

2.2 PERFORMANCE REQUIREMENTS

A. Delegated Design: Engage a qualified professional engineer, as defined in Section 014000 "Quality Requirements," to design metal building system.

B. Structural Performance: Metal building systems shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to procedures in MBMA's "Metal Building Systems Manual."

1. Design Loads: **As indicated on Drawings**.
2. Deflection and Drift Limits: Design metal building system assemblies to withstand serviceability design loads without exceeding deflections and drift limits recommended in AISC Steel Design Guide No. 3 "Serviceability Design Considerations for Steel Buildings."
3. Deflection and Drift Limits: No greater than the following:

    a. Purlins and Rafters: Vertical deflection of **1/240** of the span.
    b. Girts: Horizontal deflection of **1/240** of the span.
    c. Metal Roof Panels: Vertical deflection of **1/240** of the span.
    d. Metal Wall Panels: Horizontal deflection of **1/240** of the span.
    e. Design secondary-framing system to accommodate deflection of primary framing and construction tolerances, and to maintain clearances at openings.
    f. Lateral Drift: Maximum of **1/400** of the building height.

C. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental

effects. Base calculations on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.

1. Temperature Change: **120 deg F (67 deg C), ambient; 180 deg F (100 deg C), material surfaces**.

D. Fire-Resistance Ratings: Where assemblies are indicated to have a fire-resistance rating, provide metal panel assemblies identical to those of assemblies tested for fire resistance per ASTM E119 or ASTM E108 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1. Indicate design designations from UL's "Fire Resistance Directory," FM Global's "Approval Guide," or from the listings of another qualified testing agency.

E. Structural Performance for Metal Roof **and Wall** Panels: Provide metal panel systems capable of withstanding the effects of the following loads, based on testing according to ASTM E1592:

1. Wind Loads: As indicated on Drawings.

F. Air Infiltration for Metal Roof Panels: Air leakage of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) when tested according to ASTM E1680 at the following test-pressure difference:

1. Test-Pressure Difference: **1.57 lbf/sq. ft. .**

G. Air Infiltration for Metal Wall Panels: Air leakage of not more than 0.06 cfm/sq. ft. (0.3 L/s per sq. m) when tested according to ASTM E283 at the following test-pressure difference:

1. Test-Pressure Difference: **1.57 lbf/sq. ft. .**

H. Water Penetration for Metal Roof Panels: No water penetration when tested according to ASTM E1646[**or ASTM E331**] at the following test-pressure difference:

1. Test-Pressure Difference: **2.86 lbf/sq. ft..**

I. Water Penetration for Metal Wall Panels: No water penetration when tested according to ASTM E331 at the following test-pressure difference:

1. Test-Pressure Difference: **2.86 lbf/sq. ft. .**

J. Wind-Uplift Resistance: Provide metal roof panel assemblies that comply with UL 580 for wind-uplift-resistance class indicated.

1. Uplift Rating: **UL 90**.

K. Energy Performance: Provide roof panels according to one of the following when tested according to CRRC-1:

1. Three-year, aged, solar reflectance of not less than **0.55** and emissivity of not less than **0.75**.

L. Thermal Performance for Opaque Elements: Provide the following maximum U-factors and minimum R-values when tested according to ASTM C1363 or ASTM C518:

1. Roof:
   a. R-Value: R19 plus R11 Liner system.

2. Walls:
   a. R-Value: R13 plus R6.5 continuous insulation.

2.3 STRUCTURAL-STEEL FRAMING

A. Structural Steel: Comply with AISC 360, "Specification for Structural Steel Buildings."

B. Bolted Connections: Comply with RCSC's "Specification for Structural Joints Using High-Strength Bolts."

C. Cold-Formed Steel: Comply with AISI's "North American Specification for the Design of Cold-Formed Steel Structural Members" for design requirements and allowable stresses.

D. Primary Framing: Manufacturer's standard primary-framing system, designed to withstand required loads and specified requirements. Primary framing includes transverse and lean-to frames; rafters and rake beams; sidewall, intermediate, end-wall, and corner columns; and wind bracing.

1. General: Provide frames with attachment plates, bearing plates, and splice members. Factory drill for field-bolted assembly. Provide frame span and spacing indicated.

   a. Slight variations in span and spacing may be acceptable if necessary to comply with manufacturer's standard, as approved by Architect.

2. Frame Configuration: **One-directional, sloped**.
3. Exterior Column: **Uniform depth.**
4. Rafter: **Tapered**.

E. End-Wall Framing: Manufacturer's standard primary end-wall framing fabricated for field-bolted assembly to comply with the following:

F. Secondary Framing: Manufacturer's standard secondary framing, including purlins, girts, eave struts, flange bracing, base members, gable angles, clips, headers, jambs, and other miscellaneous structural members. Unless otherwise indicated, fabricate framing from either cold-formed, structural-steel sheet or roll-formed, metallic-coated steel sheet, prepainted with coil coating, to comply with the following:

G. Anchor Rods: Headed anchor rods as indicated in Anchor Rod Plan for attachment of metal building to foundation.

2.4 METAL ROOF PANELS

A. Standing-Seam, **Vertical-Rib**, Metal Roof Panels: Formed with interlocking ribs at panel edges and **intermediate stiffening ribs symmetrically spaced** between ribs; designed for sequential installation by mechanically attaching panels to supports using concealed clips located under one side of panels and engaging opposite edge of adjacent panels.

1. Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, **0.024-inch** nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A755/A755M.

    a. Exterior Finish: **Two-coat fluoropolymer**.
    b. Color: **As selected by Architect from manufacturer's full range**.

2. Clips: **Two-piece floating** to accommodate thermal movement.
3. Joint Type: **Mechanically seamed**.
4. Panel Coverage: **24 inches.**
5. Panel Height: **2 inches .**

2.5 METAL WALL PANELS

A. Exposed-Fastener, Tapered-Rib, Metal Wall Panels: Formed with raised, trapezoidal major ribs and **intermediate stiffening ribs symmetrically spaced** between major ribs; designed to be installed by lapping side edges of adjacent panels and mechanically attaching panels to supports using exposed fasteners in side laps.

1. Material: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, **0.024-inch** nominal uncoated steel thickness. Prepainted by the coil-coating process to comply with ASTM A755/A755M.

    a. Exterior Finish: **Two-coat fluoropolymer**.
    b. Color: **As selected by Architect from manufacturer's full range**.

2. Major-Rib Spacing: **12 inches** o.c.
3. Panel Coverage: **36 inches .**
4. Panel Height: **1.5 inches.**

B. General: Provide factory-formed metal soffit panels designed to be installed by lapping and interconnecting side edges of adjacent panels and mechanically attaching through panel to supports using concealed fasteners in side laps. Include accessories required for weathertight installation.

C. Metal Soffit Panels: Match profile and material of metal **roof** panels.

1. Finish: As selected by Architect from manufacturer's full range.

2.6 THERMAL INSULATION

A. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to the following:

1. Bay Insulation Systems; a division of Bay Industries.

B. Faced Metal Building Insulation: ASTM C991, Type II, glass-fiber-blanket insulation; 0.5-lb/cu. ft. (8-kg/cu. m) density; 2-inch- (51-mm-) wide, continuous, vapor-tight edge tabs; with a flame-spread index of 25 or less.

C. Retainer Strips: For securing insulation between supports, 0.025-inch (0.64-mm) nominal-thickness, formed, metallic-coated steel or PVC retainer clips colored to match insulation facing.

2.7 PERSONNEL DOORS AND FRAMES

A. Swinging Personnel Doors and Frames: Metal building system manufacturer's standard doors and frames; prepared and reinforced at strike and at hinges to receive factory- and field-applied hardware according to BHMA A156 Series.

1. Hardware:

a. Provide hardware for each door leaf, as follows:

1) Hinges: BHMA A156.1. Three [**plain**] [**antifriction**]-bearing, standard-weight, full-mortise, stainless-steel or bronze, template-type hinges; 4-1/2 by 4-1/2 inches (114 by 114 mm), with nonremovable pin.
2) Lockset: BHMA A156.2. **Key-in-lever cylindrical** type.
3) Exit Device: BHMA A156.3. Touch- or push-bar type.
4) Threshold: BHMA A156.21. Extruded aluminum.
5) Silencers: Pneumatic rubber; three silencers on strike jambs of single door frames and two silencers on heads of double door frames.
6) Closer: BHMA A156.4. Surface-applied, standard-duty hydraulic type.
7) Weather Stripping: Vinyl applied to head and jambs, with vinyl sweep at sill.

B. Finishes for Personnel Doors and Frames:

1. Prime Finish: Factory-apply manufacturer's standard primer immediately after cleaning and pretreating.

2.8 ACCESSORIES

A. General: Provide accessories as standard with metal building system manufacturer and as specified. Fabricate and finish accessories at the factory to greatest extent

possible, by manufacturer's standard procedures and processes. Comply with indicated profiles and with dimensional and structural requirements.

1. Form exposed sheet metal accessories that are without excessive oil-canning, buckling, and tool marks and that are true to line and levels indicated, with exposed edges folded back to form hems.

B. Roof Panel Accessories: Provide components required for a complete metal roof panel assembly including copings, fasciae, corner units, ridge closures, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal roof panels unless otherwise indicated.

C. Wall Panel Accessories: Provide components required for a complete metal wall panel assembly including copings, fasciae, mullions, sills, corner units, clips, sealants, gaskets, fillers, closure strips, and similar items. Match material and finish of metal wall panels unless otherwise indicated.

D. Flashing and Trim: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match adjacent metal panels.

E. Gutters: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match roof fascia and rake trim. Match profile of gable trim, complete with end pieces, outlet tubes, and other special pieces as required. Fabricate in minimum 96-inch- (2438-mm-) long sections, sized according to SMACNA's "Architectural Sheet Metal Manual."

1. Gutter Supports: Fabricated from same material and finish as gutters.
2. Strainers: Bronze, copper, or aluminum wire ball type at outlets.

F. Downspouts: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.018-inch (0.46-mm) nominal uncoated steel thickness, prepainted with coil coating; finished to match metal wall panels. Fabricate in minimum 10-foot- (3-m-) long sections, complete with formed elbows and offsets.

1. Mounting Straps: Fabricated from same material and finish as gutters.

G. Roof Curbs: Zinc-coated (galvanized) or aluminum-zinc alloy-coated steel sheet, 0.048-inch (1.21-mm) nominal uncoated steel thickness prepainted with coil coating; finished to match metal roof panels; with welded top box and bottom skirt, and integral full-length cricket; capable of withstanding loads of size and height indicated.

H. Pipe Flashing: Premolded, EPDM pipe collar with flexible aluminum ring bonded to base.

2.9 FABRICATION

A. General: Design components and field connections required for erection to permit easy assembly.

1. Mark each piece and part of the assembly to correspond with previously prepared erection drawings, diagrams, and instruction manuals.
2. Fabricate structural framing to produce clean, smooth cuts and bends. Punch holes of proper size, shape, and location. Members shall be free of cracks, tears, and ruptures.

B. Tolerances: Comply with MBMA's "Metal Building Systems Manual" for fabrication and erection tolerances.

C. Primary Framing: Shop fabricate framing components to indicated size and section, with baseplates, bearing plates, stiffeners, and other items required for erection welded into place. Cut, form, punch, drill, and weld framing for bolted field assembly.

D. Secondary Framing: Shop fabricate framing components to indicated size and section by roll forming or break forming, with baseplates, bearing plates, stiffeners, and other plates required for erection welded into place. Cut, form, punch, drill, and weld secondary framing for bolted field connections to primary framing.

E. Metal Panels: Fabricate and finish metal panels at the factory to greatest extent possible, by manufacturer's standard procedures and processes, as necessary to fulfill indicated performance requirements. Comply with indicated profiles and with dimensional and structural requirements.

1. Provide panel profile, including major ribs and intermediate stiffening ribs, if any, for full length of metal panel.

2.10 SOURCE QUALITY CONTROL

A. Special Inspection: Owner will engage a qualified special inspector to perform source quality control inspections and to submit reports.

1. Accredited Manufacturers: Special inspections will not be required if fabrication is performed by an IAS AC472-accredited manufacturer approved by authorities having jurisdiction to perform such Work without special inspection.

B. Product will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

PART 3 - EXECUTION

3.1 ERECTION OF STRUCTURAL FRAMING

A. Erect metal building system according to manufacturer's written instructions and drawings.

B. Do not field cut, drill, or alter structural members without written approval from metal building system manufacturer's professional engineer.

C. Set structural framing accurately in locations and to elevations indicated, according to AISC specifications referenced in this Section. Maintain structural stability of frame during erection.

D. Base and Bearing Plates: Clean concrete- and masonry-bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates. Clean bottom surface of plates.

1. Set plates for structural members on wedges, shims, or setting nuts as required.
2. Tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
3. Promptly pack grout solidly between bearing surfaces and plates so no voids remain. Neatly finish exposed surfaces; protect grout and allow to cure. Comply with manufacturer's written installation instructions for shrinkage-resistant grouts.

E. Align and adjust structural framing before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that will be in permanent contact with framing. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.

1. Level and plumb individual members of structure.
2. Make allowances for difference between temperature at time of erection and mean temperature when structure will be completed and in service.

F. Primary Framing and End Walls: Erect framing level, plumb, rigid, secure, and true to line. Level baseplates to a true even plane with full bearing to supporting structures, set with double-nutted anchor bolts. Use grout to obtain uniform bearing and to maintain a level base-line elevation. Moist-cure grout for not less than seven days after placement.

1. Make field connections using high-strength bolts installed according to RCSC's "Specification for Structural Joints Using High-Strength Bolts" for bolt type and joint type specified.

    a. Joint Type: Snug tightened or pretensioned as required by manufacturer.

G. Secondary Framing: Erect framing level, plumb, rigid, secure, and true to line. Field bolt secondary framing to clips attached to primary framing.

1. Provide rake or gable purlins with tight-fitting closure channels and fasciae.
2. Locate and space wall girts to suit openings such as doors and windows.
3. Provide supplemental framing at entire perimeter of openings, including doors, windows, ventilators, and other penetrations of roof and walls.

H. Steel Joists: Install joists and accessories plumb, square, and true to line; securely fasten to supporting construction according to SJI's "Standard Specifications and Load Tables for Steel Joists and Joist Girders," joist manufacturer's written instructions, and requirements in this Section.

1. Before installation, splice joists delivered to Project site in more than one piece.

2. Space, adjust, and align joists accurately in location before permanently fastening.
3. Install temporary bracing and erection bridging, connections, and anchors to ensure that joists are stabilized during construction.
4. Joist Installation: Bolt joists to supporting steel framework using carbon-steel bolts unless otherwise indicated.
5. Joist Installation: Bolt joists to supporting steel framework using high-strength structural bolts unless otherwise indicated. Comply with RCSC's "Specification for Structural Joints Using High-Strength Bolts" for high-strength structural bolt installation and tightening requirements.
6. Joist Installation: Weld joist seats to supporting steel framework.
7. Install and connect bridging concurrently with joist erection, before construction loads are applied. Anchor ends of bridging lines at top and bottom chords if terminating at walls or beams.

I. Bracing: Install bracing in roof and sidewalls where indicated on erection drawings.

1. Tighten rod and cable bracing to avoid sag.
2. Locate interior end-bay bracing only where indicated.

J. Framing for Openings: Provide shapes of proper design and size to reinforce openings and to carry loads and vibrations imposed, including equipment furnished under mechanical and electrical work. Securely attach to structural framing.

K. Erection Tolerances: Maintain erection tolerances of structural framing within AISC 303.

3.2 METAL PANEL INSTALLATION, GENERAL

A. General: Anchor metal panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Field cut metal panels as required for doors, windows, and other openings. Cut openings as small as possible, neatly to size required, and without damage to adjacent metal panel finishes.

    a. Field cutting of metal panels by torch is not permitted unless approved in writing by manufacturer.

2. Install metal panels perpendicular to structural supports unless otherwise indicated.
3. Flash and seal metal panels with weather closures at perimeter of openings and similar elements. Fasten with self-tapping screws.
4. Locate and space fastenings in uniform vertical and horizontal alignment.
5. Locate metal panel splices over structural supports with end laps in alignment.
6. Lap metal flashing over metal panels to allow moisture to run over and off the material.

B. Lap-Seam Metal Panels: Install screw fasteners using power tools with controlled torque adjusted to compress EPDM washers tightly without damage to washers, screw threads, or metal panels. Install screws in predrilled holes.

1. Arrange and nest side-lap joints so prevailing winds blow over, not into, lapped joints. Lap ribbed or fluted sheets one full rib corrugation. Apply metal panels and associated items for neat and weathertight enclosure. Avoid "panel creep" or application not true to line.

C. Metal Protection: Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by metal roof panel manufacturer.

D. Joint Sealers: Install gaskets, joint fillers, and sealants where indicated and where required for weatherproof performance of metal panel assemblies. Provide types of gaskets, fillers, and sealants indicated; or, if not indicated, provide types recommended by metal panel manufacturer.

1. Seal metal panel end laps with double beads of tape or sealant the full width of panel. Seal side joints where recommended by metal panel manufacturer.
2. Prepare joints and apply sealants to comply with requirements in Section 079200 "Joint Sealants."

3.3 METAL ROOF PANEL INSTALLATION

A. General: Provide metal roof panels of full length from eave to ridge unless otherwise indicated or restricted by shipping limitations.

1. Install ridge caps as metal roof panel work proceeds.
2. Flash and seal metal roof panels with weather closures at eaves and rakes. Fasten with self-tapping screws.

B. Standing-Seam Metal Roof Panels: Fasten metal roof panels to supports with concealed clips at each standing-seam joint, at location and spacing and with fasteners recommended by manufacturer.

1. Install clips to supports with self-drilling or self-tapping fasteners.
2. Install pressure plates at locations indicated in manufacturer's written installation instructions.
3. Snap Joint: Nest standing seams and fasten together by interlocking and completely engaging factory-applied sealant.
4. Seamed Joint: Crimp standing seams with manufacturer-approved motorized seamer tool so that clip, metal roof panel, and factory-applied sealant are completely engaged.
5. Rigidly fasten eave end of metal roof panels and allow ridge end free movement for thermal expansion and contraction. Predrill panels for fasteners.
6. Provide metal closures at **[peaks]** [**rake edges**] [**rake walls**] [**and**] each side of ridge[**and hip**] caps.

C. Metal Fascia Panels: Align bottom of metal panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws. Flash and seal metal panels with weather closures where fasciae meet soffits, along lower panel edges, and at perimeter of all openings.

3.4 METAL WALL PANEL INSTALLATION

A. General: Install metal wall panels in orientation, sizes, and locations indicated on Drawings. Install panels perpendicular to girts, extending full height of building, unless otherwise indicated. Anchor metal wall panels and other components of the Work securely in place, with provisions for thermal and structural movement.

1. Unless otherwise indicated, begin metal panel installation at corners with center of rib lined up with line of framing.
2. Shim or otherwise plumb substrates receiving metal wall panels.
3. When two rows of metal panels are required, lap panels 4 inches (102 mm) minimum.
4. When building height requires two rows of metal panels at gable ends, align lap of gable panels over metal wall panels at eave height.
5. Rigidly fasten base end of metal wall panels and allow eave end free movement for thermal expansion and contraction. Predrill panels.
6. Flash and seal metal wall panels with weather closures at eaves and rakes, and at perimeter of all openings. Fasten with self-tapping screws.
7. Install screw fasteners in predrilled holes.
8. Install flashing and trim as metal wall panel work proceeds.
9. Apply elastomeric sealant continuously between metal base channel (sill angle) and concrete, and elsewhere as indicated on Drawings; if not indicated, as necessary for waterproofing.
10. Align bottom of metal wall panels and fasten with blind rivets, bolts, or self-drilling or self-tapping screws.
11. Provide weatherproof escutcheons for pipe and conduit penetrating exterior walls.

B. Metal Wall Panels: Install metal wall panels on exterior side of girts. Attach metal wall panels to supports with fasteners as recommended by manufacturer.

3.5 METAL SOFFIT PANEL INSTALLATION

A. Provide metal soffit panels the full width of soffits. Install panels perpendicular to support framing.

B. Flash and seal metal soffit panels with weather closures where panels meet walls and at perimeter of all openings.

3.6 THERMAL INSULATION INSTALLATION

A. General: Install insulation concurrently with metal panel installation, in thickness indicated to cover entire surface, according to manufacturer's written instructions.

1. Set vapor-retarder-faced units with vapor retarder toward warm side of construction unless otherwise indicated. Do not obstruct ventilation spaces except for firestopping.
2. Tape joints and ruptures in vapor retarder, and seal each continuous area of insulation to the surrounding construction to ensure airtight installation.
3. Install factory-laminated, vapor-retarder-faced blankets straight and true in one-piece lengths, with both sets of facing tabs sealed, to provide a complete vapor retarder.
4. Install blankets straight and true in one-piece lengths. Install vapor retarder over insulation, with both sets of facing tabs sealed, to provide a complete vapor retarder.

B. Blanket Roof Insulation: Comply with the following installation method:

1. Over-Framing Installation: Extend insulation and vapor retarder over and perpendicular to top flange of secondary framing. Hold in place by metal roof panels fastened to secondary framing.
2. Between-Purlin Installation: Extend insulation and vapor retarder between purlins. Carry vapor-retarder-facing tabs up and over purlin, overlapping adjoining facing of next insulation course and maintaining continuity of retarder. Hold in place with bands and crossbands below insulation.
3. Over-Purlin-with-Spacer-Block Installation: Extend insulation and vapor retarder over and perpendicular to top flange of secondary framing. Install layer of filler insulation over first layer to fill space formed by metal roof panel standoffs. Hold in place by panels fastened to standoffs.

    a. Thermal Spacer Blocks: Where metal roof panels attach directly to purlins, install thermal spacer blocks.

4. Two-Layers-between-Purlin-with-Spacer-Block Installation: Extend insulation and vapor retarder between purlins. Carry vapor-retarder-facing tabs up and over purlin, overlapping adjoining facing of next insulation course and maintaining continuity of retarder. Install layer of filler insulation over first layer to fill space between purlins formed by thermal spacer blocks. Hold in place with bands and crossbands below insulation.

    a. Thermal Spacer Blocks: Where metal roof panels attach directly to purlins, install thermal spacer blocks.

5. Retainer Strips: Install retainer strips at each longitudinal insulation joint, straight and taut, nesting with secondary framing to hold insulation in place.

C. Blanket Wall Insulation: Extend insulation and vapor retarder over and perpendicular to top flange of secondary framing. Hold in place by metal wall panels fastened to secondary framing.

1. Retainer Strips: Install retainer strips at each longitudinal insulation joint, straight and taut, nesting with secondary framing to hold insulation in place.

3.7 DOOR AND FRAME INSTALLATION

A. General: Install doors and frames plumb, rigid, properly aligned, and securely fastened in place according to manufacturers' written instructions. Coordinate installation with wall flashings and other components. Seal perimeter of each door frame with elastomeric sealant used for metal wall panels.

B. Personnel Doors and Frames: Install doors and frames according to NAAMM-HMMA 840.

1. At fire-rated openings, install frames according to, and doors with clearances specified in, NFPA 80.

C. Field Glazing: Comply with installation requirements in Section 088000 "Glazing."

D. Door Hardware:

1. Install surface-mounted items after finishes have been completed at heights indicated in DHI's "Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames."
2. Set units level, plumb, and true to line and location. Adjust and reinforce attachment substrates as necessary for proper installation and operation.
3. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.
4. Set thresholds for exterior doors in full bed of sealant complying with requirements for concealed mastics specified in Section 079200 "Joint Sealants."

3.8 ACCESSORY INSTALLATION

A. General: Install accessories with positive anchorage to building and weathertight mounting, and provide for thermal expansion. Coordinate installation with flashings and other components.

1. Install components required for a complete metal roof panel assembly, including trim, copings, ridge closures, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
2. Install components for a complete metal wall panel assembly, including trim, copings, corners, seam covers, flashings, sealants, gaskets, fillers, closure strips, and similar items.
3. Where dissimilar metals contact each other or corrosive substrates, protect against galvanic action by painting contact surfaces with corrosion-resistant coating, by applying rubberized-asphalt underlayment to each contact surface, or by other permanent separation as recommended by manufacturer.

B. Flashing and Trim: Comply with performance requirements, manufacturer's written installation instructions, and SMACNA's "Architectural Sheet Metal Manual." Provide concealed fasteners where possible, and set units true to line and level. Install work with laps, joints, and seams that will be permanently watertight and weather resistant.

1. Install exposed flashing and trim that is without excessive oil-canning, buckling, and tool marks and that is true to line and levels indicated, with exposed edges folded back to form hems. Install sheet metal flashing and trim to fit substrates and to result in waterproof and weather-resistant performance.
2. Expansion Provisions: Provide for thermal expansion of exposed flashing and trim. Space movement joints at a maximum of 10 feet (3 m) with no joints allowed within 24 inches (600 mm) of corner or intersection. Where lapped or bayonet-type expansion provisions cannot be used or would not be sufficiently weather resistant and waterproof, form expansion joints of intermeshing hooked flanges, not less than 1 inch (25 mm) deep, filled with mastic sealant (concealed within joints).

C. Gutters: Join sections with riveted-and-soldered or lapped-and-sealed joints. Attach gutters to eave with gutter hangers spaced as required for gutter size, but not more than 36 inches (914 mm) o.c. using manufacturer's standard fasteners. Provide end closures and seal watertight with sealant. Provide for thermal expansion.

D. Downspouts: Join sections with 1-1/2-inch (38-mm) telescoping joints. Provide fasteners designed to hold downspouts securely 1 inch (25 mm) away from walls; locate fasteners at top and bottom and at approximately 60 inches (1524 mm) o.c. in between.

1. Provide elbows at base of downspouts to direct water away from building.
2. Tie downspouts to underground drainage system indicated.

E. Roof Curbs: Install curbs at locations indicated on Drawings. Install flashing around bases where they meet metal roof panels.

F. Pipe Flashing: Form flashing around pipe penetration and metal roof panels. Fasten and seal to panel as recommended by manufacturer.

3.9 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform field quality control special inspections and to submit reports.

B. Product will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

END OF SECTION 133419

CERTIFICATION OF RESPONSIBILITY FOR

DOCUMENT PREPARATION

FORD PARK-FORD FIELDS CONCESSION STAND
RCE Project No.: 150021

MECHANICAL SPECIFICATIONS

THE FOLLOWING SPECIFICATION SECTIONS INCLUDED IN THIS PROJECT MANUAL WERE PREPARED BY OR UNDER THE RESPONSIBLE SUPERVISION OF THE COMPANY LISTED BELOW:

22 05 00	GENERAL PROVISIONS FOR PLUMBING
22 05 03	BASIC MATERIALS AND METHODS FOR PLUMBING
22 05 93	SYSTEM TESTING AND BALANCING FOR PLUMBING
22 07 00	PLUMBING INSULATION
22 10 00	PLUMBING
22 11 00	WATER SUPPLY
22 13 00	WASTE WATER DISPOSAL
22 16 00	NATURAL GAS PIPING/DISTRIBUTION

Ervin L. Ritter 1/22/2016

Ervin L. Ritter, P.E.
Ritter Consulting Engineers Ltd.

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 05 00 - GENERAL PROVISIONS FOR PLUMBING

PART 1 - GENERAL

1.1 DIVISION OF SPECIFICATIONS

A. For Bidder's convenience only, this Division of the Specifications is divided into the following parts:

22 05 00	GENERAL PROVISIONS FOR PLUMBING
22 05 03	BASIC MATERIALS AND METHODS FOR PLUMBING
22 05 93	SYSTEM TESTING AND BALANCING FOR PLUMBING
22 07 00	PLUMBING INSULATION
22 10 00	PLUMBING
22 11 00	WATER SUPPLY
22 13 00	WASTE WATER DISPOSAL
22 16 00	GAS DISTRIBUTION

1.2 GENERAL CONDITIONS

A. The General Conditions of the Architectural Specifications along with supplementary conditions, special conditions, information to bidders, and any other pertinent information and documents shall apply the same as if repeated herein. The contractor shall review Architectural General Conditions. Where the requirements of Architectural General Conditions and these specs conflict for the contractor, the most stringent shall be applied.

B. Plumbing subcontractor shall be the sole source responsible party to furnish and install the plumbing system. Plumbing contractor shall be properly licensed to perform this work.

C. Wherever the word contractor is mentioned in Division 22 of these specifications, it is intended to mean the Plumbing Contractor as appropriate. These are sub contractors to the General Contractor who has the contract with the owner. It is the General contractor who bears the responsibility to fulfill this part of the project (Division 22 – Plumbing) under the contract with the owner. The General Contractor shall be responsible for all costs associated with any and all bidding errors and omissions of the sub-contractor.

1.3 SCOPE OF WORK

A. Furnish labor, materials and equipment necessary to provide and install the complete plumbing portion of this contract, as called for herein and on accompanying drawings. Parts of the plumbing division may be bid separately or in combination at the contractor's option; however, it shall be the responsibility of the General Contractor to assure himself that all items covered in the Plumbing Division have been included if he chooses to accept separate bids.

B. Contractor shall refer to the Architectural, Structural, Mechanical and Electrical drawings and install all equipment, piping, etc., to meet building and space requirements. **No equipment shall be bid on or submitted for approval if it will not fit in space provided or coordinated with other trades involved on the project**.

C. It is the intention of these Specifications that all plumbing systems shall be furnished complete with all necessary valves, controls, insulation, piping, devices, equipment, etc., necessary to provide a satisfactory installation in working order and in accordance with all Federal, State, and local codes and ordinances.

D. Contractor shall visit the site and acquaint himself thoroughly with all existing facilities and conditions which would affect his portion of the work. Failure to do so shall not relieve the contractor from the responsibility of installing his work to meet conditions.

E. Lack of coordination shall not be acceptable and shall not be a reason for poorly installed work or additional cost to this trade or others on the project. All associated extra cost shall be borne by the contractor. The General Contractor shall be responsible for all costs, time, and liquidated damages associated with lack of coordination or poor coordination.

1.4 LOCAL CONDITIONS

A. Location and elevation of all services is based on information obtained from the Owner. However, this shall serve as a general guide only and the contractor shall visit the site and verify the location and elevation of this service to his own satisfaction in order to determine the amount of work required for the execution of the contract.

B. Contractor shall contact the various utility companies, determine the extent of their requirements and cooperate with the utility company in reaching a finished product. Contractor shall pay charges by Utility Company for extensions, connections, meter fees, street patching, etc.

C. In case major changes are required, this fact, together with the reasons therefore, shall be submitted to the Architect, in writing, not less than 7 days before the date of bidding. Failure to comply with this requirement will make the contractor liable for any changes, additions and expenses necessary for the successful completion of the project.

1.5 CUTTING AND PATCHING

A. Initial cutting and patching shall be the responsibility of the General Contractor with the Plumbing Contractor responsible for laying out and marking any and all holes required for the reception of his work. No structural beams or joists shall be cut or thimbled without first receiving the approval of the Architect. After initial surfacing has been done, any further cutting, patching and painting shall be done at this contractor's expense.

B. Cutting and patching shall be done in such a manner that the surrounding work will be restored to its original condition.

C. The plumbing piping shall be run at proper slopes and without conflicts with other trades. It may be necessary to penetrate beams, grade beams, footings, and foundations. Install thimbles as required and as approved by the Structural Engineer and Architect.

1.6 CODES AND STANDARDS

A. The entire plumbing work shall comply with the rules and regulations of the City, Parish and State in which this project is being constructed including the State Fire Marshal and State Board of Health. All modifications required by these authorities shall be made without additional charge to the Owners. The Mechanical Contractor shall report these changes to the Architect and secure his approval before work is started.

B. In addition to the codes mentioned, all plumbing work and equipment shall conform to the applicable portions of the following Specifications, codes and regulations:

1. National Electric Code
2. National Fire Protection Association
3. American Society of Mechanical Engineers
4. Underwriters's Laboratories
5. American Gas Association
6. Energy Code for Commercial and High Rise Residential Buildings
7. International Energy Conservation Code
8. International Building Code
9. International Plumbing Code

C. Materials, equipment and accessories installed under this contract shall conform to all rules, codes, etc., as recommended by National Associations governing the manufacturer, rating and testing of such materials, equipment and accessories. Materials shall be new and of the best quality and first class in every respect. Whenever directed by the Architect, contractor shall submit a sample for approval before proceeding.

D. Where laws or local regulations provide that certain accessories such as gauges, thermometers, relief valves and parts be installed on equipment, it shall be understood that such equipment be furnished complete with the necessary accessories whether or not called for in these Specifications.

E. Unfired pressure vessels shall be built in accordance with the ASME Code and so stamped. Furnish shop certificates for each vessel.

F. Material and equipment furnished or installed as part of these construction documents shall be installed and operated in strict accordance with the respective manufacturer's guidelines for installation and operating instructions. The manufacturer's guidelines shall become part of the construction documents.

1.7 MINOR DEVIATIONS

A. Plans and detail sketches are submitted to limit, explain and define conditions, specified requirements, pipe sizes and manner of erecting work. Structural or other conditions may require certain modifications from the manner of installation shown and such deviations are permissible and shall be made as required, but, specified sizes and requirements necessary for satisfactory operation shall remain unchanged. It may be necessary to shift pipes or to change the shape of and these changes shall be made as required. All such changes shall be referred to the Architect/Engineer for approval before proceeding. Extra charges shall not be allowed for these changes.

B. No structural beams or joists (concrete or steel) shall be cut or thimbled without first receiving the approval of the Architect/Structural Engineer. After initial surfacing has been done, any further cutting, patching and painting shall be done at the Plumbing Contractor's own expense.

C. Contractor shall realize that the drawings could delve into every step, sequence or operation necessary for the completion of the project without drawing on the contractor's experience or ingenuity. However, only typical details are shown on the plans. In cases where the contractor is not certain about the method of installation of his work, he shall ask for details. Lack of details shall not be an excuse for improper installation. Submit installation shop drawings with manufacturer's details for review prior to installation.

D. In general, the drawings are diagrammatic and the contractor shall install his work in a manner so that interferences between the various trades are avoided. In cases where interferences do occur, the Architect/Engineer is to state which equipment, piping, etc., is to be relocated regardless of which item was first installed.

1.8 WORKMANSHIP

A. Workmanship shall be of highest grade, highest quality and all construction shall be done according to the best practice of the trade. Work shall be completed to satisfaction of the Architect/Engineer.

1.9 COORDINATION

A. Coordinate work of the different trades to avoid interferences between plumbing and all other work. All piping, ductwork, etc., shall be installed in lines as required to accomplish this end whether or not shown on the plans.

B. There will be a certain amount of work which must be coordinated with the Owner. This contractor shall coordinate required work with the Owner through the General Contractor using procedures acceptable to the Architect and Owner. The contractor shall maintain documentation of coordinated work.

C. This contractor shall coordinate and confirm that all equipment requiring electric service will be adequately and properly serviced by Electrical Contractor. Any conflicts shall be brought to the attention of the Architect/Engineer prior to ordering the equipment.

D. This contractor shall coordinate the space clearances required for the sprinkler system with the structure, ceilings, lights, ductwork, etc. In some cases, due to space limitations, it may be necessary to reroute piping to meet the conditions of the project. Any rerouting required shall be part of this project and done without any additional cost to the Owner. **DO NOT MAKE PIPING WITHOUT COORDINATION. Avoid conflicts with other trades.**

E. This contractor shall coordinate the installation of sewer lines with all parts of the structural foundation system and structural building systems. Provide sleeves through graded beams or concrete beams at all conflicts. All points of penetration of foundation shall be reviewed by the Architect/Engineer prior to rough-in. All sleeves shall be installed per the instructions and details of structural engineer.

F. All piping shall be run as high as possible with sleeves through concrete beams to avoid conflicts. This means the piping shall run in or through the structure unless approved otherwise by the Architect/Engineer.

1.10 REVIEW OF MATERIALS

A. Whenever manufacturers or trade names are mentioned in these plans or Specifications, the words "or approved equivalent" shall be assumed to follow whether or not so stated. Manufacturers or trade names are used to establish a standard of quality only and should not be construed to infer a preference. Equivalent products which meet the Architect's approval will be accepted; however, these requests for acceptance of products must be received by the Architect a minimum of 10 days prior to bid date. Submission shall include manufacturer's name, model number, rating table and construction features. Upon receipt and checking of this submittal, the Architect will issue an addendum listing items which are approved as equivalent to those specified. The contractor shall base his bid solely on those items specified or included in the "Prior Approval Addendum" as no other item will be acceptable. Prior approval of a particular piece of equipment does not mean automatic final acceptance and will not relieve the contractor of the responsibility of assuring himself that this equipment is in complete accord with plans and Specifications and will fit into the space provided. Submit shop drawings on all items of equipment for approval as hereinafter specified.

B. Should a substitution or variation occur, the better quality or greater quantity of material or work shall be furnished. This also does not preclude other manufacturers if they meet the following criteria:

1. Product proposed for substitution shall be equal or superior to that specified in construction, efficiency, utility and function.
2. Physical size of substitute brand shall not be greater than space provided for it.
3. Profile of substitution shall be same concerning size, shape, indentations, recesses, etc.

4. Complete illustrations, specifications and description of substitution shall be submitted for approval.
5. Availability and proximity of manufacturer's service representative shall be factors considered in substitution approval.
6. Substitution and/or variations shall be reviewed and allowed when there is no change in cost to the project and shall be made at the discretion of the Engineer.

1.11 SHOP DRAWINGS

A. The General Contractor shall submit all submittals within 30 days of the date of the contract between owner and contractor or the date of notice to proceed as issued by the Owner to the General Contractor. The submittals shall have been submitted to the General Contractor within 30 days after the construction contract has been signed. The General Contractor and his sub-contractors shall bear all responsibility for any extra costs or delays to late submittals of shop drawings.

B. Drawings shall be presented in a clear and thorough manner.

C. Details shall be identified by reference to sheet detail, schedule or room numbers shown on contract and drawings.

D. Drawings shall contain the following information:

1. Date.
2. Number of the drawing or revision.
3. Name of project or facility.
4. Name of contractor and subcontractor.
5. Clear identification of contents and location of work.

E. Preparation:

1. Clearly mark each copy to identify pertinent products or models.
2. Show performance characteristics and capacities.
3. Show dimensions and clearances required.
4. Show wiring or piping diagrams and controls.
5. Show weights and mounting data.
6. Provide letter documentation confirming that all coordination with other trades effected have been done. This is especially necessary with the electrical requirements and rough-in requirements.

F. Manufacturer's standard schematic drawings and diagrams:

1. Modify drawings and diagrams to delete information which is not applicable to the work.
2. Supplement standard information to provide information specifically applicable to the work.

G. Office samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integral related parts and attachment devices.
2. Full range of color, texture and pattern.

H. Equipment shop drawing shall be prepared by the contractor/supplier. These shop drawing shall include the manufacturer's performance data and installation manuals. In addition, the shop drawings shall show the installation specific to this project.

I. Assemble certificates, executed by each of the respective manufacturers, suppliers, and subcontractors.

J. All submittals shall be submitted prepaid and in ample time for review before installation.

K. Six (6) copies of each submittal shall be submitted to the Architect.

L. These shop drawings shall be supplied as part of this contractor's contract. Any drawings not approved shall be resubmitted until approved. **Submit all shop drawings at the same time. No separate items will be accepted.**

M. Time necessary for review of samples, certificates, test reports, and shop drawings is at least 30 calendar days after receipt of the item. All materials installed in the work shall match the reviewed submittals. After a submission has been reviewed, no substitutions will be permitted without written approval by the Architect.

N. The Architect's/Engineer's review of shop drawings shall not relieve the contractor from the responsibility of incorrectly figured dimensions or any other errors that may be contained in these drawings. The omission from the shop drawings or specifications, even though approved by the Architect, shall not relieve the contractor from furnishing and erecting same.

O. Any delays caused by contractor not submitting shop drawings within a timely manner shall be the problem of the responsible subcontractor and the General Contractor.

1.12 UTILITIES

A. Connect all utilities at the points indicated on the drawings and extend such utilities to the building and to equipment or facilities requiring same.

B. Contractor shall pay all service and connection charges required by utility companies and/or site conditions (offsets, conflict boxes, etc.).

C. Contractor shall include all costs required by utility companies to extend utilities to the site. It is the responsibility of the contractor to obtain these fees from the utility companies and include those costs in the bid.

1.13 REPAIRING ROADWAYS AND WALKS

A. Where this contractor cuts or breaks roadways or walks to lay the piping, he shall repair or replace these sections to meet the Architect's approval. Repair of public roadways and highways shall be done per the Federal, State or Local agencies having jurisdiction. Contractor shall obtain and pay for all permits.

1.14 EXCAVATION AND BACK FILL

A. Trench and excavation work shall include excavating, preparing of trenches, and backfilling as specified. Contractor shall install caution tape 12 inches above all piping, conduit, etc., as backfilling processes.

B. Trench and excavation work shall not include pavement breaking, cutting of holes through foundation walls and floors, removal of obstructions, relaying and/or repairing of floors, and repaving, which work shall be the responsibility of the General Contractor.

C. Contractor shall do all necessary trenching, excavation and backfilling for the proper installation of his work. Care shall be taken not to excavate below depth required, that trench beds are well rounded and that ground under pipe line is firm and secure before any pipe is laid. Trenches shall be excavated where bells of pipe occur in order to insure a pipe resting on the entire length of the bottom of the trench.

D. Unless otherwise noted, minimum cover over underground lines shall be 2-1/2 feet, except under streets and parking lots where minimum cover shall be 3 feet.

E. The width of the trench shall be sufficient to permit thorough compaction of the backfill under and around the pipe but not exceeding the external diameter of the pipe by more than 12 inches. Excavation for pipes shall be by hand and/or machine and as specified herein and shall confirm to the lines and elevations indicated on the plans.

F. The pipe shall be placed on a uniformly firm and compacted bed of sand, carefully shaped to support the pipe at the desired grade and so that any reaction will be distributed as nearly uniform as possible over a horizontal width of not less than six-tenths (6/10) of the outside diameter and all possibility of concentration of the reaction at or near the vertical diameter eliminated. The bed shall be shaped as to fit the lower part of the pipe exterior for at least 10 percent of its overall height.

G. The pipe shall be placed on a firm foundation. Any muck or other objectionable material found during excavation and preparation of the bed shall be removed and replaced with suitable bed material directed by the Architect.

H. All trenches and excavation shall be backfilled in a reasonable time after the pipes are installed unless otherwise directed by the Architect. Special care shall be taken in placing the backfill and extra care shall be used to obtain compaction under and along sides to the top of the pipe.

I. The backfill shall be placed in loose layers not exceeding 6 inches in depth under and around the pipe and not exceeding 8 inches over the pipe. Each layer shall be compacted to the compaction requirements as specified by the Architect.

J. Compaction shall be by hand and pneumatic tampers and the successive layers shall be added and compacted until the trench is completely filled and brought to elevation as directed. Back-filling shall be done in such a manner as to avoid injurious top or side pressures on the pipe.

K. Improper backfilling and compacting shall be cause to have the trench opened to expose the pipe for inspection then properly backfilled and compacted with fill material.

L. Where trenching is for piping, the bottom of the trench shall have minimum 95 percent compaction and shall be bedded with a minimum 12 inches compacted sand, crushed stone or shell on undisturbed soil (minimum 95 percent compaction).

1.15 MATERIALS

A. Work materials shall be new and the best of their respective kinds, and shall bear the label of NFPA, ASME Code, AGA, and UL where such standard has been established for the particular item of equipment used.

1.16 MATERIAL STORAGE

A. General: Provide space for storage of material and equipment at ground level. Roof surfaces shall not be used for storage of materials or equipment. Any storage within the building shall be approved by the Architect prior to use of the space.

B. Exterior: Pipe, fitting, or other materials stored outside of building shall be set on wood or steel racks or platforms inside storage container units. All necessary provisions shall be made to keep water and debris away from such stored material. Ends of pipes and valves shall be kept sealed until used.

C. Warehousing: Equipment subject to rusting shall be kept warehoused until just prior to setting. If necessary the warehouse shall have climate controlled conditions.

D. Offsite warehousing shall be approved by the Architect and Owner only.

E. Any warehousing used shall be approved by the Owner and an insurance certificate naming the Owner as insured shall be provided to the Owner.

1.17 GROUNDS AND CHASES

A. Contractor shall see that all required chases, sleeves, grounds, holes and accessories necessary for the installation of his work are properly built in as the work progresses; otherwise he shall bear the cost of providing them.

1.18 MACHINERY GUARDS

A. Contractor shall provide v-belt guards for each v-belt drive or other hazardous drive. Guard shall enclose the drive entirely and shall have a hole for taking tachometer reading.

1.19 SPECIAL TOOLS

A. Special tools required for proper operation or maintenance of any equipment provided under this contract shall be delivered to the Owner at the completion of the project.

1.20 FILL AND CHARGES FOR EQUIPMENT

A. Fill and charge with materials or chemicals all devices or equipment as required to comply with the manufacturer's guarantee or as required for proper operation of the equipment.

B. This contractor shall flush systems as required per local and state jurisdictions and equipment/material manufacturer's guideline. (Chlorination, chemical treatment, etc.)

1.21 EQUIPMENT ACCESS

A. Large equipment to be installed in building, which is too large to permit access through doorways, shall be brought to the job by the contractor and placed before enclosing structure. Equipment shall be cribbed up from the floor by the contractor and covered where necessary or directed.

1.22 EQUIPMENT IDENTIFICATION

A. Stenciling: All items of major plumbing equipment (water heaters, pumps, starters, mixing valves, etc.) shall be neatly and clearly stenciled in letters not less than 1 inch high, with the same designation as appears on drawing. Location and color of such stenciling shall be appropriate for ready identification and/or as directed by the Architect. One set of compatible metal interlocking stencil letters and numbers shall be turned over to the Owner at the completion of the job. At contractor's option engraved plastic adhesive tags may be used. Tags used outdoors shall be listed for such use.

B. Pipe Coding: All piping, etc., both insulated and bare, shall be color coded with a general purpose pipe marker for interior locations and a 6 inch enamel painted ban for exterior locations, and stenciled as to service and characteristics on the 10 foot centers and/or as directed. Directional arrows not less than 1/2 inch wide and not less than 6 inches long shall be permanently stenciled on each line at each stencil location. Stenciling shall be located such that it is clearly visible from floor or adjacent service platform. Coding shall be as per schedule approved by Owner through submittal to

Architect. At contractor's option, pre-manufactured vinyl pipe labels and directional arrows may be used but shall be banded on either end to secure to pipe.

C. Valve tags shall be installed on all valves controlling building zones, areas, or equipment. Valve tags shall be 2 inch diameter brass stenciled with valve number. A framed list of valves with associated numbers, sizes and locations shall be mounted in the building as directed by Architect.

1.23 TEMPORARY USE OF EQUIPMENT

A. The permanent equipment installation shall not be used for temporary purposes by the contractor for temporary conditioning of the building during construction.

B. Acceptable Use Without Specific Authorization: Temporary use shall not be construed to mean "bumping" of electric motors on equipment to verify rotation direction nor short time operation of systems for test purposes.

1.24 CLEANING AND ADJUSTING

A. Upon completion of his work, the contractor shall clean and adjust all equipment, controls, valves, etc. Clean all piping, etc., and leave entire installation in good working order.

1.25 PAINTING

A. This contractor shall obtain the services of a painting sub-contractor as part of his contract with the General Contractor for all painting.

B. General: Except for standard factory finishes, all pipe, pipe covering, equipment, supports, hangers, etc., exposed inside and outside building or in equipment room shall be painted. This contractor shall prepare surface of material to receive first coat of paint. All subsequent coatings shall be prepared by Painting Subcontractor. Requirements covering paints, workmanship and preparation of surfaces as stated in Architectural Specifications shall govern. Color coding shall be approved by Architect (submit color samples). All submittals for review shall be through Architect.

C. Damage: Where standard equipment factory finishes have been damaged or scratched, the damaged area shall be repaired or replaced by the contractor to match the original finish.

D. Preparation: Thoroughly clean surfaces of all rust, scale, cement, and dirt from all equipment, piping or other work installed and leave ready for finish painting.

E. All exposed piping shall be painted. Paint with two (2) coats of paint. The color shall be industry standard color coding. Submit color code chart with sample color chips to Architect for review prior to starting work.

1.26 FIRESTOPPING

A. Penetrations through rated construction shall be sealed with a material capable of preventing the passage of flames and hot gases when tested in accordance with ASTM-EB14.

B. Notify Architect for inspection of all completed fire and/or smoke barrier walls before any construction is installed that may conceal the firestopping material installation.

C. Access to random selected areas may be required by the architect at the time of final inspection should notification not be given.

D. Provide detailed instructive cutsheets of fire penetration sealing system (firestopping) used to the architect at the time of inspection. Random selective sampling by the contractor will be observed by the architect and State Fire Marshal.

1.27 NOISE VIBRATION

A. General: Take the utmost precautions in the installation of the equipment, piping, and duct systems to prevent noise and vibration transmission. Noise levels determined by octave band analysis with all components of the mechanical system operating and the building completely furnished shall not exceed NC-35 in operations and office areas, and shall not exceed NC-45 in equipment areas. Where equipment and installations do not meet these limits, the contractor must provided necessary attenuation to reduce net noise levels to the above requirements.

B. Isolation of equipment: Equipment that would tend to cause noise or vibration shall be isolated to prevent noise transmission to the building or to other equipment.

C. Equipment Connections: Piping, conduit, or other connections to equipment shall be isolated. The contractor shall be responsible for the prevention of noise and vibration transmission through these connections to equipment.

1.28 PERMITS, INSPECTIONS AND TESTS

A. Contractor shall obtain and pay for permits, fees, etc., for the installation, inspection, service connections, verifying location or construction of the work which are required by any authority and/or agencies having jurisdiction.

B. Contractor shall arrange and pay for inspections, examinations and tests required to obtain complete and final acceptance of all plumbing systems. Contractor shall deliver certificates of all such inspections to the Architect.

C. Contractor shall notify Architect and local governing authorities before any tests are made and tests are not to be drawn off a line covered or insulated until examined and approved by the authorities. In the event defects are found, these shall be corrected and the work shall be retested.

D. Prior to requesting final inspection by the Architect, the contractor shall have a complete coordination and adjustment meeting of all of his subcontractors directly responsible for the operation of any portion of the system. At the time of this meeting, each and every sequence of operation shall be checked to assure proper operation. Notify the Architect in writing 10 days prior to this meeting instructing him of the time, date and whom you are requesting be present. This project shall not be accepted until the above provisions are met to the satisfaction of the Architect.

1.29 TRAINING OF MAINTENANCE PERSONNEL

A. Contractor shall provide on the job training for Owner's personnel upon completion of the work including testing and adjustment. Minimum 20 hours of onsite training shall include maintenance checks, lubrication of components, adjustment of control set points, and troubleshooting techniques.

B. Contractor shall use factory start-up personnel to train the Owner's maintenance personnel.

1.30 OPERATION AND MAINTENANCE INSTRUCTIONS

A. Provide Owner with four (4) copies of printed instructions indicating various pieces of equipment by name and model number complete with parts lists and maintenance and repair instructions. This information shall be bound in plastic covered notebooks. Submit the manuals to the Architect for approval.

B. Include all warranty certificates or statements in a separate section of the manuals. Provide all materials and test certificates for the final inspections.

C. Provide three (3) sets of DVDs of the operation and maintenance manuals.

1.31 GUARANTEE

A. Contractor shall guarantee all materials, equipment and workmanship for a period of one year from the date of final acceptance of the project. This guarantee shall include furnishing of all labor and material necessary to make any repairs, adjustments or replacement of any equipment, parts, etc., necessary to restore the project to first class condition. This guarantee shall exclude only the changing or cleaning of filters.

B. If the contractor's office is in excess of a 50 mile radius of the project, he shall appoint a local qualified contractor to perform any emergency repairs or adjustments required during the guarantee period. The contractor appointed to provide emergency services shall be submitted to the Architect for his approval.

1.32 WARRANTIES

A. Assemble warranties executed by each of the respective manufacturers, suppliers, and subcontractors into a warranty book and prepare a table of contents.

B. Two (2) original signed copies of each warranty are required.

C. Provide complete information for each item including:

1. Product and work item.
2. Local supplying firm or manufacturer's dealer, with name of principal, address and telephone number.
3. Scope of warranty.
4. Date of beginning of warranty.
5. Duration of warranty.
6. Provide information for Owner:
   a. Proper procedure to evoke the warranty in case of failure.
   b. Instances which might affect the validity of the warranty.
   c. Contractor, name of responsible principal, address and telephone number.
   d. All contractors and manufacturers equipment warranties shall start at the acceptance of the project by the Owner.
   e. Provide owner with contact information for warranties which extend beyond one year.

1.33 RECORD DRAWINGS

A. Contractor shall maintain two (2) sets of drawings of the original construction documents to utilize as markup sets to record field modifications from original construction documents. Once approval has been gained from the Architect, the contractor shall record these variances on the two (2) sets in a neat and readable manner. Noted shall be sizes, locations, changes in directions, etc. with distances dimensioned from columns, walls, inverts, etc. The maintenance and cost of these documents shall be the responsibility of the contractor.

1.34 DEMOLITION

A. This contractor shall do all demolition as shown on the plans. The contractor shall make the areas ready for the new construction work. All demolition debris, piping, equipment, etc., shall be removed from the site by this contractor. All demolition work shall be scheduled through the General Contractor to prevent interruption of any existing services. Do not start any demolition which would interrupt the building operation without scheduling with the Owner (schedule through the General Contractor).

B. The Owner shall retain first salvage rights to anything within the demolition area. If the Owner selected an item to be retained, then this contractor shall remove it with care and deliver the item to the Owner designated location on site. Anything not retained by the Owner shall become the property of the contractor and be removed from the site.

1.35 MATERIALS CONTAINING HAZARDOUS SUBSTANCES OR COMPONENTS

A. This contractor shall not provide any material or component of equipment which contains asbestos, lead based paint or PCBs. The contractor shall provide certificates or manufacturer's statements/letters to show that the products and/or building materials do not contain asbestos, lead based paint or PCBs.

B. If any product or building material is found to contain asbestos, lead based paint or PCBs, the contractor shall bear all cost for removal, abatement, and disposal of materials in accordance with all state and federal regulations. The contractor shall install replacement materials to the satisfaction of the Architect at no additional cost to the project.

C. During the construction, if the contractor suspects that any material in the building contains or is a hazard material (asbestos, lead, PCB, mercury, etc.) work shall be stopped to prevent disturbance and the Owner shall be notified immediately.

END OF SECTION 22 05 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 05 03 - BASIC MATERIALS AND METHODS FOR PLUMBING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Type of piping for various systems shall be as specified herein.

B. All pipe shall be true and straight without sags or traps.

PART 2 - MATERIALS

2.1 SANITARY SEWER WASTE AND VENT LINES

A. All sanitary sewer waste and vent lines above and below building slab shall be constructed of service weight bell and spigot cast iron pipe and fittings. Where space requirements do not allow the use of the above materials, government type DWV copper pipe shall be used. All cast iron pipes shall comply with Commercial Standards CS 188-59 coated with tar inside and out and marked with manufacturer's identification and proper weight classification. Joints shall be made with neoprene gaskets.

B. At contractor's option, all sanitary sewer waste and vent lines **excluding grease waste piping** may be Schedule 40 PVC plastic lines and fittings with solvent weld joints (solid core allowed only; foam or cell core not acceptable). Grease waste piping shall remain cast iron.

C. Sanitary sewer lines exterior of building (5 feet from building) **excluding grease waste piping** shall be constructed of ABS or PVC Schedule 40 type "DWV" plastic pipe and fittings (solid core allowed only; foam or cell core not acceptable). Do not mix PVC and ABS materials. Grease waste piping shall remain cast iron.

D. At contractor's option, sanitary sewer vent lines above grade may be constructed of "no hub" service weight cast iron pipe with neoprene/stainless steel clamp couplings.

2.2 DOMESTIC WATER PIPE/WATER HEATER RELIEF PIPE/EQUIPMENT DRAIN PIPE/TRAP PRIMER

A. All domestic cold water lines/hot water lines within building, water heater relief lines and equipment drain piping shall be government type "L" hard copper water tube of standard weight and thickness, unless indicated otherwise. Use 95-5 "lead free" solder on all piping above slab. Use Silfos 1000 degrees Fahrenheit solder on all piping beneath slabs. "Press-Fit" or "Pro-Press" piping is not acceptable.

B. Site water piping (beyond 5 feet of building footprint) shall be Schedule 40 PVC pipe and fittings solvent weld joints (solid core allowed only; foam or cell core not acceptable).

2.3 PIPE FITTINGS

A. All pipe fittings shall be same as piping specified unless indicated otherwise.

B. Fittings for domestic water lines shall be solder type wrought copper, Nibco or equivalent.

2.4 PIPE SPECIALTIES

A. Dielectric unions shall be used between copper and iron pipe.

2.5 PIPE HANGERS AND SUPPORTS

A. This contractor shall furnish and install all foundations and supports required for his equipment unless indicated otherwise on the drawings.

B. This contractor shall furnish and install all escutcheons, inserts, thimbles, hangers, etc., required for the proper support and installation of his equipment and piping. Cooperate with other trades in locating and placing these items.

C. Provide sleeves for all pipes passing through walls, floors, beams, etc. Sleeves passing through structural members shall be of cast iron or Schedule 40 steel pipe unless other material is approved by the Structural Engineer. Sleeves passing through nonstructural walls or floors shall be of Schedule 10 galvanized iron. Joints between sleeves and pipes passing through floors shall be made watertight with plastic materials. Where pipes pass through floors shall be made watertight with plastic materials. Where pipes pass through waterproofing membrane, flashing sleeves shall be installed.

D. Provide malleable iron split ring hangers with rod supports throughout. Strap hangers or wire will not be accepted. Maximum spacing of hangers for cast iron pipes shall be 5 feet; for other than soil, use 10 feet.

E. Provide galvanized iron shields between hangers and pipe covering.

F. Provide chrome plated brass escutcheons wherever pipes pass through floors, walls or ceilings in exposed or finished areas.

G. All piping projecting from chases shall be rigidly supported in the wall or chase. Loosely supported piping or accessories will not be accepted.

2.6 VALVES AND UNIONS

A. Furnish and install all valves, unions, stops, connections, etc., shown on plans and necessary to make a complete system in working order. Provide valves on inlet and outlet of all equipment and fixtures and on branch lines to fixtures or groups of fixtures.

B. Valves and unions shall be as follows:

COPPER PIPE	2" AND LESS	MV	OVER 2"	MV
Gate Valve	Crane 1320	115	Crane 461	M-2882
Globe Valve	Crane 1310	1590T	Crane 359	F-2981
Unions	Crane 633		Crane Std. Gal.	
Check Valve	Crane 1303	1509	Crane 373	2974M

IRON PIPE	2" AND LESS	MV	OVER 2"	MV
Gate Valve	Crane 440	148	Crane 461	F2882-M
Globe Valve	Crane 7	590	Crane 359	F
Unions	Crane 633			
Check Valve	Crane 1303	1509	Crane 373	2974M

C. The following valves are considered equal to Crane Company:

CRANE	POWELL	NIBCO	HAMMOND	STOCKHAM	MV
7	150	T-235-Y	1B413T	B-22	590T
359	301	F-718-Y	1R126	G514	F2981
373	559	F918B	1R1124	G931	M2974
440	500	T113	1B640	B114	148
461	1787	F619	1R1138	G612	M-2882
1303	1825	S413(BWY)	1B943	B309	1509
1310	1823	S211(YW)	424	B14	1502
1320	1822	S113	1B647	B112	115

D. All valves, unions, etc., where pipe is chrome plated shall have similar finish. All exposed supplies to plumbing fixtures shall be chrome plated.

E. Ball valves shall be as manufactured by Milwaukee Valve (MV), Watts, Stockham, Powell, NIBCO, Neles-Jamesbury or Hammond.

	2" and Smaller	2-1/2 to 4"	Over 4"
Watts	Series B-6800	Series G-4000	Series G-4000
Neles-Jamesbury	Series 4000	Full Port Series	Full Port Series
Milwaukee Valve	BA-300	F-20CS	F-20CS

F. All valves over 2 inches shall be flanged type and full port type. All valves 2 inches and smaller shall be screw type, sweat type or flanged type as appropriate for type of pipe.

2.7 MOTORS STARTERS AND ELECTRICAL WORK

A. The Plumbing Contractor shall furnish to Electrical Contractor for installation, all motor starters, start-stop push buttons and pilot lights for each piece of motor driven equipment unless shown otherwise.

B. The Electrical Contractor shall install all motor starters, start-stop push buttons and pilot lights as furnished by the Plumbing Contractor. The Electrical Contractor shall do all power wiring required for the installation of all equipment including equipment interlocking power wiring, etc. All work shall be done in accordance with the National Electrical Code requirements and with wiring workmanship, etc., as called for in the Electrical Specifications. The Plumbing Contractor shall provide approved wiring diagrams of all equipment, controls, etc., to the Electrical Contractor for his installation. Coordinate all work to provide a complete system in working order. All wiring shall be plenum rated.

C. All electrical equipment shall have UL label or ETL label and shall meet the standards of the National Electrical Code and NEMA.

D. Plumbing contractor shall provide and install transformers and low voltage wiring (below 120-1-60) from transformer to equipment. Electrical contractor shall provide and install power wiring to transformers.

2.8 ACCESS PANELS

A. Furnish and install access panels where valves, dampers, etc., are concealed in walls, ceilings, floors or otherwise inaccessible. Panels shall be Milcor Babcock, Larsen, MIFAB, Acudor, Nystrom or equivalent. All access panels shall be minimum 18 inches X 18 inches hinged with flush latch and lock. The panels shall be constructed of minimum 18 gauge stainless steel. Frame flange shall be minimum 1-1/2 inches wide. Rated panels shall have U.L. rating for type wall or ceiling where located.

B. Access panels located in rated walls, floors, ceilings, shall be so rated and installed per manufacturer's recommendations to maintain rated integrity.

PART 3 - EXECUTION

3.1 SANITARY SEWER PIPE

A. Pipe ends shall be square cut. Ends of pipes shall be reamed and shall be wiped clean to remove cuttings. Before installation, pipe shall be stood on end and tapped sharply to remove cuttings and other foreign materials from interior. Pipe shall be thoroughly cleaned inside and outside. Bending or springing of pipe shall not be permitted.

B. Various service pipes, valves, fittings, etc., running parallel with each other and near together shall be in line with each other and shall be kept at a sufficient distance from

each other and other work to permit no less than 1/2 inch between finished coverings on different services.

C. Each contractor shall furnish all foundations, structural or pipe supports indicated, called for specifically or that may be required to support his particular equipment and material unless hangers are definitely indicated as being furnished by others. Sewer waste and vent lines shall be supported every 4 feet.

D. Perforated strap hangers shall not be allowed for any part of the hangers.

E. Drainage and vent pipes: Horizontal soil and waste pipes 3 inches and smaller shall have a grade of 1/4 inch per foot and line 4 inches and larger shall have a grade of 1/8 inch per foot unless otherwise specified. The main vertical soil and waste vent shall be extended full size through the wall. Cast-iron pipe inside the building shall be extended 6 inches above the floor.

F. Fittings: Changes in pipe size on soil, waste, and drain lines shall be made with reducing fittings of recessed reducers. All changes in direction shall be made by the appropriate use of 45 degree wyes, long or short sweep 1/4 bends, 1/6, 1/8, or 1/16 bends, or by a combination of those or equivalent fitting, except that single and double sanitary tees may be used in drainage lines only where the direction of flow is from horizontal to vertical. Short sweeps not less than 3 inches in diameter may be used where the change in direction of flow is either from horizontal to vertical or from vertical to horizontal.

G. Pipe sleeve, hangers, and fixture supports: These items shall be furnished and set and the contractor shall be responsible for their proper and permanent location.

1. Pipe sleeves - Install sleeves for all pipes passing through footings, floors, and walls. Clearance between sleeves and pipe covering and/or pipes shall be approximately 1/4 inch. Construction shall not be cut except where approved by the Architect. Where cutting of construction is permitted, the construction shall be repaired to match its original condition. Sleeves shall not be installed in structural members except where indicated. Sleeves are not required for wall hydrants.
   a. Install sleeves for pipes that pass through walls. Sleeves that pass through walls shall be cut flush with surfaces. The space between sleeves and pipe or covering shall be sealed with graphite packing and synthetic rubber caulking compound.
   b. Install sleeves where pipes pass through waterproofing membrane. The sleeves shall be provided with an integral flashing flange or a clamping device to which a 4 pound lead flashing shield shall be clamped or soldered. The shield shall extend 12 inches from the pipe and shall be thoroughly mopped into the membrane. The space between the sleeve and pipe shall be made watertight by inserting an oakum gasket, filling the remaining space with lead, and thoroughly caulking.
2. Threaded pipe - Support pipes at 4 foot intervals.
3. Copper tubing - Support tubing at not more than 5 foot intervals. Hangers for copper tubing except where protective shields are installed shall have proper size rings to suit outside diameter of tubing and the hangers or supports shall be copper or copper plated at contact surfaces.

4. Underground piping - Lay pipe on a firm bed for its entire length, except where support is otherwise provided.
5. Vertical piping - Supports shall be at each floor. Horizontal piping - Hangers and supports shall be installed at locations not more than 3 feet from the end of each run out. A hanger shall be installed not over 1 foot from each change in direction of piping.

H. Make connections to equipment and branch mains with unions.

I. Provide drain valves at main shutoff valves, low points of piping and apparatus.

J. Install each fixture with trap, easily removable for servicing and cleaning. Each trap shall be placed as near the fixture as possible, and no fixture shall be double trapped. At completion thoroughly clean plumbing fixtures and equipment.

K. Fixture connections: Connections between earthenware fixtures and flanges on soil pipes shall be made absolutely gas tight and water tight with a closet-setting compound or gasket. Bolts shall be not less than 1/4 inch in diameter and shall be equipped with chromium-plated nuts and washers.

L. Test sanitary drainage, condensate drains and vent systems with water or air in accordance with requirements of the State Sanitary Code, International Plumbing Code and all applicable local codes. Water test may be applied to entire drainage systems or sections of systems. All openings shall be tightly closed in section to be tested except at highest opening. All portions of systems shall be subject to a minimum of 10 feet head of water. Water must have been in the system two hours prior to inspection. Air test in accordance with the Plumbing Code may be used at contractor's option.

M. Sanitary sewer or storm drain pipe penetrating concrete slabs shall be wrapped with foam insulation tape.

3.2 DOMESTIC WATER PIPE

A. Perforated strap hangers shall not be allowed for any part of the hangers.

B. Mains, branches, and run outs: Piping shall be installed as indicated on the drawings. Pipe shall be cut accurately to measurements established at the building and shall be worked into place without springing or forcing. Care shall be taken not to weaken structural portions of the building. Above ground piping shall be run parallel with the lines of the building unless otherwise shown or noted on the drawings. Branch pipes from service lines may be taken from top, bottom, side or main, using such crossover fittings as may be required by structural or installation conditions. Service pipes, valves, and fittings shall be kept a sufficient distance from other work and other services to permit not less than 1/2 inch between finished covering and other work and not 1/2 inch between finished covering on the different services. No water pipe shall be made with reducing fittings. Use of long screws and bushings will not be permitted. Slope water pipe 1 inch in 40 feet and arrange to drain at low point.

C. Expansion and contraction of piping: Allowance for expansion and contraction shall be made throughout. Sufficient flexibility shall be provided on all branch run outs from mains to risers to provide for expansion and contraction of piping. Flexibility shall be provided by installing one or more turns in the line so that the piping will spring enough to allow for expansion without straining.

D. Joints: Tubing shall be cut square, and butts shall be removed. Both inside of fittings and outside of tubing shall be well cleaned with steel wool before sweating. Care shall be taken to prevent annealing of fittings and hard drawn tubing when making connections. Installation shall be made by competent workmen in accordance with manufacturer's recommendation. Mitering of joints for elbows and notching of straight runs of pipe for tees will not be permitted. Joints for soldered fittings shall be made with a noncorrosive paste flux and solid string of wire solder. Cored solder will not be permitted.

E. Valves: Valves shall be provided on all supplies to fixtures as specified under type of fixture and fixture trimmings. Valves indicated in connection with run outs, risers, branches, and mains shall be in accordance with this specification. No valve shall be installed on any lines with its stem below the horizontal. All valves shall be gate valves unless otherwise specified or indicated. Provide drain valves at main shut-off valves, low points of piping and apparatus.

F. Pipe sleeve, hangers, and fixture supports: These items shall be furnished and set and the contractor shall be responsible for their proper and permanent location.

1. Pipe sleeves - Install sleeves for all pipes passing through footings, floors, and walls. Clearance between sleeves and pipe covering and/or pipes shall be approximately 1/4 inch. Construction shall not be cut except where approved by the Architect. Where cutting of construction is permitted, the construction shall be repaired to match its original condition. Sleeves shall not be installed in structural members except where indicated. Sleeves are not required for wall hydrants.
   a. Install sleeves for pipes that pass through walls. Sleeves that pass through walls shall be cut flush with surfaces. The space between sleeves and pipe or covering shall be sealed with graphite packing and synthetic rubber caulking compound.
   b. Install sleeves where pipes pass through waterproofing membrane. The sleeves shall be provided with an integral flashing flange or a clamping device to which a 4 pound lead flashing shield shall be clamped or soldered. The shield shall extend 12 inches from the pipe and shall be thoroughly mopped into the membrane. The space between the sleeve and pipe shall be made watertight by inserting an oakum gasket, filling the remaining space with lead, and thoroughly caulking.
2. Threaded pipe - Support pipes at 4 foot intervals.
3. Copper tubing - Support tubing at not more than 5 foot intervals. Hangers for copper tubing except where protective shields are installed shall have proper size rings to suit outside diameter of tubing and the hangers or supports shall be copper or copper plated at contact surfaces.
4. Underground piping - Lay pipe on a firm bed for its entire length, except where support is otherwise provided.

5. Vertical piping - Supports shall be at each floor. Horizontal piping - Hangers and supports shall be installed at locations not more than 3 feet from the end of each run out. A hanger shall be installed not over 1 foot from each change in direction of piping.

G. Unions: Make connections to equipment and branch mains with unions. Provide non-conducting type connections wherever jointing dissimilar metals in open systems. Brass adapters and valves are acceptable.

H. Domestic cold water lines penetrating concrete slabs shall be wrapped with vinyl flexible tube. Domestic hot or return water piping penetrating concrete slabs shall be insulated at all penetrations through slab (refer to insulation specifications).

I. Provide drain valves at main shutoff valves, low points of piping and apparatus.

J. Hydrostatically test entire domestic water system to 200 psig or 2-1/2 times normal working pressure.

K. Cleaning and Disinfectant: Domestic water piping system shall be cleaned and disinfected. All equipment, temporary piping and chemicals, as required shall be furnished by the contractor. All system piping and equipment shall be thoroughly and completely flushed with cold domestic water. Completely drain the systems and fill with a solution of Sodium or Calcium Hypochlorite, 100 parts per million, completely relieving the system of all air. Allow the solution to stand for eight hours and then drain and follow with clear water flush for a sufficient period of time to remove all traces of hypochlorite odor. Disinfecting chemicals shall not be introduced into existing piping systems.

L. Sealing or flashing the building envelope due to penetrations in building shall be the responsibility of the general contractor.

M. Water service to fixtures or groups of fixtures shall have 12 inch long air chambers at the same diameter as header or service pipe on both hot and cold water lines. Air chamber shall be installed close to fixture. Provide and install shock arrestors on sterilizer water supplies or supplies with quick closing valves such as flush valves, dishwashers, tempering valves, etc. Location and size of shock arrestor shall be as per manufacturer's instructions.

END OF SECTION 22 05 03

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 05 93 - SYSTEM TESTING AND BALANCING FOR PLUMBING

PART 1 - GENERAL

1.1 SCOPE

A. Includes But Not Limited To -

1. Witnessing of all plumbing system testing required of Plumbing Subcontractor.
2. Test and Balance agency shall be present for factory start-up of equipment when factory start-up is required.

B. Related Work Specified Elsewhere -

1. The plumbing subcontractor shall address all issues as recommended by Air Balance and Testing Agency at no additional cost to Owner.

1.2 QUALITY ASSURANCE

A. Testing Agency -

1. **General Contractor shall procure services of an independent AABC or NEBB Air Balance and Testing Agency which specializes in balancing and testing of heating, ventilating, and cooling systems. These services shall not be provided by the installing Plumbing Contractor on the project but shall be direct subcontractor of the general contractor. This shall be the same contractor providing Air Balance and Testing services as indicated in Division 23.**
2. Agency shall provide proof of having successfully completed at least five projects of similar size and scope. Work by this Agency shall be done under direct supervision of a qualified Technician employed by Agency.
3. Instruments used by Agency shall be accurately calibrated and maintained in good working order.
4. If requested, conduct tests in presence of Engineer.
5. Agency shall be approved in writing by Engineer. Plumbing Contractor shall not be permitted to do this work. Submit qualifications for review.

B. **Balancing agency shall be represented at final inspection meeting by qualified testing personnel with balancing equipment and two (2) copies of balancing test report.**

1.3 SCHEDULING

A. General Contractor shall award test and balance contract to approved agency upon receipt of his contract to proceed to allow Agency to schedule this work in cooperation with other Sections involved and comply with completion date.

PART 2 - EXECUTION

2.1 Begin balance and testing upon completion of plumbing systems including installation of all specialties and devices.

A. General Contractor shall put systems and equipment into full operation and continue their operation during each working day of testing and balancing.

B. Balance and Testing Agency shall perform tests specified, compile test data, and submit four (4) copies of complete test data to contractor for forwarding to Engineer for evaluation and approval.

1. Approved copies of report shall be bound in Operations and Maintenance Manuals.

C. System shall be completely balanced and all reports submitted to Engineer prior to prefinal inspection.

2.2 STANDARDS

A. Perform testing and balancing in complete accordance with the Associated Air Balance Council Standards for Field Measurement and Instructions, Form P1266, Volume I. Record test data on AABC standard forms or facsimile thereof.

2.3 TESTING PROCEDURE

A. Balance and Testing Agency shall perform following tests and balance system in accordance with following requirements.

1. **Make periodic inspections of the installation of the systems. Provide reports of each inspection. Inspections should be monthly when piping installation begins.**

B. The following minimum information shall be included in the finished report:

1. Plumbing:
The Test and Balance Contractor shall observe witness and record all plumbing tests required by these specs. The Plumbing Contractor shall contact the Test and Balance Contractor when testing is done. FAILURE TO DO SO WILL REQUIRE TESTING OF THE ENTIRE SYSTEM.

END OF SECTION 22 05 93

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 07 00 – PLUMBING INSULATION

PART 1 - GENERAL

1.1 DESCRIPTION

A. Pipe insulation installation shall not begin until all work has been tested and found to be tight. All insulation shall be UL listed and have a flame spread of less than 25 and a developed smoke rating less than 50. All insulation shall be banded with aluminum bands, three per section. All insulation shall be continuous through walls, floors, ceilings, etc.

PART 2 - MATERIALS

2.1 DOMESTIC WATER PIPING

A. Cover cold water lines above ceilings and in exterior walls with 1 inch thick and all hot water lines with 1-1/2 inch thick closed cell rubber type insulation. At contractor's option, fiberglass insulation with white universal jacket may be used. All flanges, valves and fittings shall be insulated with closed cell rubber type molded fittings insulation, fabricated mitered segments of pipe insulation or closed cell rubber type insulation equivalent in thickness to insulation of adjoining pipe.

B. All water lines exposed in mechanical rooms shall be covered with 0.020 color coded PVC jacket with solvent welded seams and joints.

C. All water lines outside of building exposed to the weather shall have 1 inch thick closed cell rubber type insulation covered with 0.016 smooth aluminum jacket and elbows.

D. All water lines below building slab shall be insulated with 1 inch thick closed cell insulation with two (2) coats of mastic.

2.2 HORIZONTAL WASTE PIPING

A. All horizontal waste lines and traps above first floor slab which receive condensate from air conditioning equipment, shall be insulated with 2 inch thick, 3/4 pound density fiberglass insulation with aluminum foil vapor barrier or closed cell rubber insulation.

2.3 INSULATION BANDS

A. All pipe insulation shall be banded with nylon tie-wrap bands, three to a section, and with one band on each side of each fitting, valve, etc.

2.4 FLANGES, VALVES AND FITTINGS

A. All flanges, valves and fittings shall be insulated with fabricated fiberglass molded fitting insulation, using factory fabricated fittings up to 3 inches and fabricated mitered segments of pipe insulation equal in thickness to the insulation to the adjoining pipe. All fabricated mitered segments shall be covered with matching embossed vapor barrier laminate.

PART 3 - INSTALLATION

3.1 Provide clearance for installation of insulation and for access to valves, air vents, drains and unions.

A. Insulation Installation:

1. Do not install covering before piping has been tested and approved.
2. Ensure piping surface is clean and dry prior to installation.
3. Ensure insulation is dry before and during application.
4. Insulation shall be continuous through walls, floors and ceiling. Pack around pipes with fire proof self-supporting insulation material, fully sealed.
5. Insulate fittings and valves. The end of the insulation shall be fitted with a metal escutcheon plate with set screw or taped neatly with pressure sensitive fiberglass reinforcing cloth.
6. All joints shall be sealed with 3 inch wide fiberglass reinforcing cloth with pressure sensitive adhesive.
7. Pipe insulation at Hangers and Supports: Pipe insulation at hanger and support shall be protected with a half circular shield of the size of the insulation and 12 inches long constructed from 20 gauge galvanized steel. The shield shall be held in place with the fiberglass reinforcing cloth and pressure sensitive adhesive. Where pipes pass through walls, ceiling and floor in finished areas, escutcheon plates shall be installed to encompass pipe and insulation. Escutcheon plates shall be chromed brass or stainless steel and shall be either solid or the clamp on split type.
8. Painting of fiberglass pipe jacket is not required. Piping shall be painted colors as standard in this facility.

END OF SECTION 22 07 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 10 00 - PLUMBING

PART 1 - GENERAL

1.1 DESCRIPTION

A. Furnish all labor and materials as hereinbefore specified, indicated or reasonably implied for the complete installation of the following systems:

1. Cold Water
2. Hot Water System
3. Sanitary Drainage System

PART 2 - MATERIALS

2.1 FLOOR DRAINS

A. All floor drains shall be constructed of cast iron and shall be complete with clamping devices as required.

B. Floor drains (Marked "FD"): shall be bottom outlet with duracoated cast iron body with clamping collar and 6 inch diameter nickel bronze strainer adjustable vertically to floor level, with square perforations and vandal proof screws. Refer to fixture schedule for specific types.

2.2 CLEANOUTS

A. Cleanouts shall be provided where shown on plans, at each change of direction of the building drain greater than 45 degrees and at or near the foot of each vertical waste or soil stack. Location of all cleanouts shall be same size as piping up to 4 inches. Larger pipes shall have 4 inch cleanouts unless noted otherwise. Every cleanout shall be installed so that the cleanout opens in the direction of flow of the drainage line or at right angles thereto. Floor cleanouts shall be adjustable type, double drainage flange, clamping collar (above ground installations), 2 pound lead flashing, nickel bronze cover. Top of cleanout shall be level with top of finished floor so there is a continuous surface. Floor cleanouts shall be Jay R. Smith, Josam or Wade. Wall cleanouts shall be nickel bronze access frame and cover Zurn, Jay R. Smith, Josam or Wade. Outside cleanouts shall be installed with cover, set flush with finished grade, or as detailed on plans.

2.3 FLASHING

A. Flash around all pipes passing through roof in connection with this contract with sheet lead, not less than 2-1/2 pound to the square foot, built 6 inches into the waterproofing, running 10 inches up the pipe and turned over into the pipe cavity. Flashing around roof

drains shall be not less than 2-1/2 pound lead extending at least 12 inches from the drain rim into membrane waterproofing. Fasten flashing to drain clamp device making watertight durable joint.

2.4 EQUIPMENT FURNISHED BY OWNER AND/OR BY OTHER TRADES

A. This equipment and other miscellaneous equipment shall be furnished and set in place under other sections of these Specifications and/or by the Owner, unless specified otherwise.

B. Plumbing Contractor shall provide necessary rough-in required for the equipment and shall completely connect all plumbing services for this equipment providing cut-off valves and unions for each plumbing supply service to each piece of equipment. It is the obligation of the Plumbing Contractor to obtain correct rough-in dimension plans for this equipment as well as the equipment furnished under this contractor.

C. The various Equipment Contractors shall provide access holes for service lines that enter his equipment. This work to be performed on the job site, as necessary. Plumbing Contractor shall furnish and install escutcheons, locknut type, at these locations.

2.5 PLUMBING FIXTURES

A. Plumbing Contractor shall furnish and install all plumbing fixtures shown on accompanying drawings. Refer to both plumbing and architectural drawings and provide all fixtures shown on either. Fixtures shall be complete with all necessary brass and accessories required for a complete installation including traps, escutcheons, angle supplies, basin cocks, etc. All fixtures shall be new and must be delivered to the building properly crated in perfect condition.

B. All brass must be of the best quality, lightweight goods will not be accepted. All brass pipe shall be seamless brass tubing and nipples shall be extra heavy. All fittings and trim shall be chromium plated heavy brass unless otherwise specified. "P" traps shall be cast brass with cleanouts. All exposed piping shall be chromium plated. Provide cutoff valves at each fixture in both hot and cold water piping.

C. For the purpose of establishing type and class of fixtures required, the scheduled plate numbers have been taken from the indicated catalog. Approved equals shall be as follows: Fixtures: Kohler, Briggs, American Standard, Crane, Eljer, Elkay, Dayton, Just or Universal Rundle. Flush Valves: Sloan, Zurn. Faucets: Elkay, Just, Chicago, Kohler, American Standard, Delta Commercial, Zurn, Speakman. Water Heaters: A.O. Smith, Ruud/Rheem, State, Bradford White. Drains: Wade, J.R. Smith, Zurn, Josam. Hose Bibbs: Josam, Woodford, J.R. Smith, Wade, Zurn.

D. All vitreous china plumbing fixtures shall be manufactured in the United States, Canada or Mexico.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A. Inspection:

1. Prior to all work of this section, carefully inspect the installed work of adjacent trades and verify that all such work is complete to the point where fixture installation may properly commence.
2. Verify that all hangers and fixture supports are properly installed to receive plumbing fixtures.

3.2 PLUMBING FIXTURE

A. Each plumbing fixture shall be fitted with all necessary and proper fittings, trimmings and operating devices, and shall be in perfect operating condition.

B. Refer to architectural drawings for any other information that may be necessary or required in connection with plumbing installation.

C. Before setting any fixtures, obtain the exact mounting height, as desired, from the Architect.

D. Wall mounted water closets, urinals, and lavatories shall have a floor anchored carrier to fit in available wall space (coordinate requirements in drawings).

END OF SECTION 22 10 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 11 00 - WATER SUPPLY

PART 1 - GENERAL

1.1 DESCRIPTION

A. Install water supply piping as indicated on plans.

PART 2 - MATERIALS

2.1 PIPING

A. All water supply piping shall be of materials hereinbefore specified.

B. All water lines shall be disinfected in accordance with the State Sanitary Code.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Water lines run underground shall have a minimum of 24 inches cover to finished grade.

B. Make up complete water supply system. Connect to all fixtures and outlets requiring water.

C. At each fixture or group of fixtures furnish and install a 12 inch high air chamber of same size as branch feed line except at fixtures with quick closing valves such as flush valves, dishwashers, etc., in which cases provide "Shock Arrester" properly sized for each unit.

3.2 TESTING

A. All lines shall be tested in accordance with requirements listed in construction documents and International Plumbing Code.

END OF SECTION 22 11 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 13 00 - WASTE WATER DISPOSAL

PART 1 - GENERAL

1.1 DESCRIPTION

A. Extend sanitary sewer lines to the location as shown on the plans.

PART 2 - MATERIALS

2.1 PIPING

A. The system of sewage and drainage shall be of materials as hereinbefore specified except where space requirements necessitate the use of Type "DWV" copper.

PART 3 - EXECUTION

3.1 INSTALLATION

A. All work shall be in strict conformity with the International Plumbing Code and in accordance with all local codes. Piping shall be routed as shown on plans or in acceptable manner to meet building conditions. Venting shall be as shown on plumbing riser diagrams.

B. Connections between traps and cast iron pipes are to be made with heavy brass ferrules.

C. Provide reducers, increasers, special flanges, and fittings where required between piping work and fixtures in order to connect and complete work and render it ready for use. Make any offsets required to avoid construction.

D. All lines 3 inches and smaller shall be sloped 1/4 inch per foot, lines 4 inches shall be sloped 1/8 inch per foot, lines 6 inches shall be sloped 1/16 inch per foot and all lines 8 inches and larger shall be sloped 0.4 percent. Piping shall be laid so slope is continuous.

E. All vents shall extend 10 inches above roof and terminate in an appropriate flashing collar. No vents shall penetrate roof within 48 inches of an exterior wall. Offset in ceiling as required. All back vents shall be taken off as near trap as possible.

3.2 TESTING

A. All lines shall be tested in accordance with requirements listed in construction documents and International Plumbing Code.

END OF SECTION 22 13 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 22 16 00 – NATURAL GAS PIPING/DISTRIBUTION

PART 1 - GENERAL

1.1 DESCRIPTION

A. Fuel gas systems, including piping, equipment and all necessary accessories as designated in this section. Fuel gas piping to equipment shall be routed as shown on plans.

1.2 RELATED WORK

A. FIRESTOPPING: Penetrations in rated enclosures.

B. PAINTING: Preparation and finish painting and identification of piping systems.

C. COMMON WORK RESULTS FOR PLUMBING.

D. GENERAL DUTY VALVES FOR PLUMBING PIPING

1.3 SUBMITTALS

A. Submit SHOP DRAWINGS, PRODUCT DATA, and SAMPLES.

B. Manufacturer's Literature and Data:

1. Pipe & Fittings.
2. Valves.
3. Strainers.
4. All items listed in Part 2 - Products.

C. Detailed shop drawing of clamping device and extensions when required in connection with the waterproofing membrane.

1.4 APPLICABLE PUBLICATIONS

A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only. Use the edition listed or most recent edition adopted by Local, State or Federal agencies having jurisdiction.

B. Federal Specifications (Fed. Spec.):
A-A-59617 ..... Unions, Brass or Bronze Threaded, Pipe Connections and Solder-Joint Tube Connections

C. American National Standards Institute (ANSI):
American Society of Mechanical Engineers (ASME): (Copyrighted Society)

A13.1-(2007)	Scheme for Identification of Piping Systems
B16.3-(2006)	Malleable Iron Threaded Fittings: Classes 150 and 300 ANSI/ASME
B16.9-2007	Factory-Made Wrought Steel Buttwelding Fittings ANSI/ASME
B16.11-2009	Forged Steel Fittings, Socket-Welding and Threaded ANSI/ASME
B16.15-2006	Cast Copper Alloy Threaded Fittings: Classes 125 and 250 ANSI/ASME
B31.8-2010	Gas Transmission and Distribution Piping Systems ANSI/ASME

D. American Society for Testing and Materials (ASTM):

A47-99(2009)	Standard Specification for Ferritic Malleable Iron Castings
A53-10	Standard Specification for Pipe, Steel, Black And Hot-Dipped, Zinc- coated Welded and Seamless
A183-09	Standard Specification for Carbon Steel Track Bolts and Nuts
A536-09	Standard Specification for Ductile Iron Castings
A733-03(2009)e1	Standard Specification for Welded and Seamless Carbon Steel and Austenitic Stainless Steel Pipe Nipples
B687-99(2005)e1	Standard Specification for Brass, Copper, and Chromium-Plated Pipe Nipples

E. National Fire Protection Association (NFPA):

54-2009	National Fuel Gas Code

F. International Code Council

IPC 2009	International Plumbing Code
IFGC 2009	International Fuel Gas Code

G. International Association of Plumbing and Mechanical Officials (IAPMO):
Uniform Plumbing Code – 2009

IS6-06	Installation Standard

H. Manufacturers Standardization Society of the Valve and Fittings Industry, Inc. (MSS):

SP-72-2010	Ball Valves with Flanged or Butt-Welding For General Service
SP-110-2010	Ball Valve Threaded, Socket-Welding, Solder Joint, Grooved and Flared Ends

1.5 SYSTEM PRESSURE

A. Natural gas systems, unless otherwise noted are designed and materials and equipment selected to prevent failure under gas pressure at downstream side of pressure regulator.

PART 2 - MATERIALS

2.1 FUEL GAS SERVICE CONNECTIONS TO BUILDING (UNDERGROUND AND/OR EXPOSED TO WEATHER)

A. From inside face of exterior wall (outside of building), use coated piping as herein before and/or herein after specified.

B. Pipe: Black Steel, ASTM A53, Schedule 40. Shop-applied pipe coating shall be one of the following types:

1. Coal Tar Enamel Coating: Exterior of pipe and fittings shall be cleaned, primed with Type B primer and coated with hot-applied coal tar enamel with bonded layer of felt wrap in accordance with AWWA C203. **Asbestos felt shall not be used**; felt material shall be fibrous glass mat as specified in Appendix Section A2.1 of AWWA C203.
2. Adhesive-thermoplastic Resin Coating: Fed. Spec. L-C-530, Type I
3. Thermosetting Epoxy Coating: Fed. Spec. L-C-530, Type II
4. Field-applied plastic tape material used on pipe joints and for repairing damaged areas of shop-applied coatings, Fed. Spec. L-T-1512, Type I, 10 mils nominal thickness for pipe joints, and Type II, 20 mils nominal thickness for coating repairs.

C. Holiday Inspections: Procedure for holiday inspection: Holiday Inspection shall be conducted on all coatings to determine the presence and number of discontinuities in those coatings referenced in 2.6/B - 1, 2, 3, and 4 using a Tinker & Rasor model AP/W Holiday Detector. Holiday inspection shall be performed in a manner spelled out in the Tinker & Rasor operating instructions and at a voltage level recommended by the coating manufacturer or applicable NACE International Standard such as RPO 274-93 or RPO 490-90 in the case thermosetting epoxy coating. Holiday Detectors shall be calibrated and supplied with a certificate of calibration from the factory. A calibration of the Holiday Detector shall be performed once every 6 months to verify output voltages are true and correct.

D. Fittings:

1. Butt weld fittings, wrought steel, ANSI B16.9.
2. Socket weld and threaded fittings forged steel, ANSI B16.11.
3. Grooved End: Ductile iron (ASTM A536, Grade 65-45-12), malleable iron (ASTM A47, Grade 32510), or steel (ASTM A53, Type F or Type E or S, Grade B).

E. Joints: Welded, ANSI B31.8.

2.2. FUEL GAS PIPING

A. Pipe: Black steel, ASTM A53, Schedule 40.

B. Nipples: Steel, ASTM A733, Schedule 40.

C. Fittings:

1. Sizes 2 inches under ANSI B 16.3 threaded malleable iron.
2. Over 2 inches and up to 4 inches ANSI B16.11 socket welded.
3. Over 4 inches ANSI 16.9 butt welded.

D. Joints: Provide welded or threaded joints.

2.3 EXPOSED FUEL GAS PIPING

A. Finished Room: Use full iron pipe size chrome plated brass piping for exposed fuel gas piping connecting fixtures, casework, cabinets, equipment and reagent racks when not concealed by apron including those furnished by the Government or specified in other sections.

1. Pipe: Fed. Spec. WW-P-351, standard weight
2. Fittings: ANSI B16.15 cast bronze threaded fittings with chrome finish, (125 and 250).
3. Nipples: ASTM B 687, Chromium-plated.
4. Unions: 2 inches and smaller Mss SP-72, SP-110, Brass or Bronze threaded with chrome finish. Unions 2-1/2 inches and larger shall be flange type with approved gaskets.
5. Valves: Mss SP-72, SP-110, Brass or bronze with chrome finish.

B. Unfinished Rooms, Mechanical Rooms and Kitchens: Chrome-plated brass piping is not required. Paint piping systems as specified in Section PAINTING.

2.4 VALVES

A. Ball Valve: Bronze body, rated for 1025 kPA at 185°C (150 psi at 365°F), 1725 kPa at 121°C (250 psi at 250°F), reinforced TFE seat, stem seal and thrust washer; end entry, threaded ends, UL-listed for natural or LP gas shut off service when used on those services.

B. Gas Vent Cocks: Type 701: Bronze body, tee handle, rated for 205 kPa at 38°C (30 psi at 100°F), ground plug, rated for tight shut-off on fuel gas service.

2.5. WATERPROOFING

A. Provide at points where pipes pass through membrane waterproofed floors or walls in contact with earth.

B. Floors: Provide cast iron stack sleeve with flashing device and a underdeck clamp. After stack is passed through sleeve, provide a waterproofed caulked joint at top hub.

C. Walls: See detail shown on drawings.

2.6 STRAINERS

A. Provide on high pressure side of pressure reducing valves, on inlet side of indicating and control instruments and equipment subject to sediment damage and where shown on drawings. Strainer element shall be removable without disconnection of piping.

B. Gas Lines: "Y" type with removable mesh lined brass strainer sleeve.

C. Body: Smaller than 3 inches, brass or bronze; 3 inches and larger, cast iron or semi-steel.

2.7 DIELECTRIC FITTINGS

A. Provide dielectric couplings or unions between ferrous and non-ferrous pipe.

2.8 GAS EQUIPMENT CONNECTORS

A. Flexible connectors with teflon core, interlocked galvanized steel protective casing, AGA certified design.

2.9 REGULATORS

A. Provide all pressure regulators for the project. Contractor shall be responsible for providing regulators properly selected for pressure, flow, and location. All regulators shall be field adjustable. All regulators shall be vented type. Regulators installed inside buildings shall have vent piping extended to the exterior of the building.

PART 3 - EXECUTION

3.1 INSTALLATION

A. General: Comply with the International Fuel Gas Code and the following:

1. Install branch piping for fuel gas and connect to all fixtures, valves, cocks, outlets, casework, cabinets and equipment, including those furnished by the Government or specified in other sections.
2. Pipe shall be round and straight. Cutting shall be done with proper tools. Pipe, shall be reamed to full size after cutting.
3. All pipe runs shall be laid out to avoid interference with other work.
4. Install valves with stem in horizontal position whenever possible. All valves shall be easily accessible.
5. Install union and shut-off valve on pressure piping at connections to equipment.
6. Pipe Hangers, Supports and Accessories:
   a. All piping shall be supported per the International Fuel Gas Code, Chapter No. 4.
   b. Shop Painting and Plating: Hangers, supports, rods, inserts and accessories used for Pipe supports shall be shop coated with zinc Chromate primer paint. Electroplated copper hanger rods, hangers and accessories may be used with copper tubing.
   c. Floor, Wall and Ceiling Plates, Supports, Hangers:
      1) Solid or split unplated cast iron, chrome plated in finished areas.
      2) All plates shall be provided with set screws.
      3) Pipe Hangers: Height adjustable clevis type.
      4) Adjustable Floor Rests and Base Flanges: Steel.
      5) Concrete Inserts: "Universal" or continuous slotted type.
      6) Hanger Rods: Mild, low carbon steel, fully threaded or Threaded at each end with two removable nuts at each end for positioning rod and hanger and locking each in place.
      7) Riser Clamps: Malleable iron or steel.
      8) Rollers: Cast iron.
      9) Self-drilling type expansion shields shall be "Phillips" type, with case hardened steel expander plugs.
      10) Miscellaneous Materials: As specified, required, directed or as noted on the drawings for proper installation of hangers, supports and accessories.
7. Install cast chrome plated escutcheon with set screw at each wall, floor and ceiling penetration in exposed finished locations and within cabinets and millwork.
8. Penetrations:
   a. Fire Stopping: Where pipes pass through fire partitions, fire walls, smoke partitions, or floors, install a fire stop that provides an effective barrier against the spread of fire, smoke and gases. Completely fill and seal clearances between piping and openings with the fire stopping materials.
   b. Waterproofing: At floor penetrations, completely seal clearances around the pipe and make watertight with appropriate sealant.

B. Piping shall conform to the following:

1. Fuel Gas:
   a. Entire fuel gas piping installation shall be in accordance with requirements of NFPA 54.
   b. Provide fuel gas piping with plugged drip pockets at low points.

3.2. CLEANING OF SYSTEM AFTER INSTALLATION

A. Clean all piping systems to remove all dirt, coatings and debris.

3.3 TESTING

A. General: Test system either in its entirety or in sections after system is installed and cleaned.

B. Test shall be made in accordance with Section 406 of the International Fuel Gas Code. The system shall be tested at a minimum of 1.5 times maximum working pressure, but not less than 30 psig (20 kPa) gage).

END OF SECTION 22 16 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

CERTIFICATION OF RESPONSIBILITY FOR

DOCUMENT PREPARATION

FORD PARK-FORD FIELDS CONCESSION STAND
RCE Project No.: 150021

MECHANICAL SPECIFICATIONS

THE FOLLOWING SPECIFICATION SECTIONS INCLUDED IN THIS PROJECT MANUAL WERE PREPARED BY OR UNDER THE RESPONSIBLE SUPERVISION OF THE COMPANY LISTED BELOW:

23 05 00	GENERAL PROVISIONS FOR HVAC
23 05 03	BASIC MATERIALS AND METHODS FOR HVAC
23 05 93	TESTING, ADJUSTING, AND BALANCING FOR HVAC
23 07 00	MECHANICAL INSULATION
23 09 00	TEMPERATURE CONTROLS FOR HVAC
23 28 13	COMMERCIAL KITCHEN HOODS
23 30 00	AIR DISTRIBUTION FOR HVAC
23 70 00	AIR CONDITIONING FOR HVAC

Ervin L. Ritter 1/22/2016

Ervin L. Ritter, P.E.
Ritter Consulting Engineers Ltd.

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 05 00 - GENERAL PROVISIONS FOR HVAC

PART 1 - GENERAL

1.1 DIVISION OF SPECIFICATIONS

A. For Bidder's convenience only, this Division of the Specifications is divided into the following parts:

23 05 00	GENERAL PROVISIONS FOR HVAC
23 05 03	BASIC MATERIALS AND METHODS FOR HVAC
23 05 93	TESTING, ADJUSTING, AND BALANCING FOR HVAC
23 07 00	MECHANICAL INSULATION
23 09 00	TEMPERATURE CONTROLS FOR HVAC
23 28 13	COMMERCIAL KITCHEN HOODS
23 30 00	AIR DISTRIBUTION FOR HVAC
23 70 00	AIR CONDITIONING FOR HVAC

1.2 GENERAL CONDITIONS

A. The General Conditions of the Architectural Specifications along with supplementary conditions, special conditions, information to bidders, and any other pertinent information and documents shall apply the same as if repeated herein. The contractor shall review Architectural General Conditions. Where the requirements of Architectural General Conditions and these specs conflict for the contractor, the most stringent shall be applied.

B. Mechanical subcontractor shall be the sole source responsible party to furnish and install the mechanical system. Mechanical contractor shall be properly licensed to perform this work.

C. Wherever the word contractor is mentioned in Division 23 of these specifications, it is intended to mean the Mechanical Contractor as appropriate. These are sub-contractors to the General Contractor who has the contract with the owner. It is the General contractor who bears the responsibility to fulfill this part of the project (Division 23 – Mechanical) under the contract with the owner. The General contractor shall be responsible for all costs associated with any and all bidding errors and omissions of the sub-contractor.

1.3 SCOPE OF WORK

A. Furnish labor, materials and equipment necessary to provide and install the complete mechanical portion of this contract, including air conditioning, heating, and ventilating systems as called for herein and on accompanying drawings. Parts of the mechanical division may be bid separately or in combination at the contractor's option; however, it shall be the responsibility of the General Contractor to assure himself that all items

covered in the Mechanical Division have been included if he chooses to accept separate bids.

B. Contractor shall refer to the Architectural, Structural, Plumbing and Electrical drawings and install all equipment, piping, etc., to meet building and space requirements. **No equipment shall be bid on or submitted for approval if it will not fit in space provided or coordinated with other trades involved on the project**.

C. It is the intention of these Specifications that all mechanical systems shall be furnished complete with all necessary valves, controls, insulation, piping, devices, equipment, etc., necessary to provide a satisfactory installation in working order and in accordance with all Federal, State, and local codes and ordinances.

D. Contractor shall visit the site and acquaint himself thoroughly with all existing facilities and conditions which would affect his portion of the work. Failure to do so shall not relieve the contractor from the responsibility of installing his work to meet conditions.

E. Lack of coordination shall not be acceptable and shall not be a reason for poorly installed work or additional cost to this trade or others on the project. All associated extra cost shall be borne by the contractor. The General Contractor shall be responsible for all costs, time, and liquidated damages associated with lack of coordination or poor coordination.

1.4 LOCAL CONDITIONS

A. Location and elevation of all services is based on information obtained from the Owner. However, this shall serve as a general guide only and the contractor shall visit the site and verify the location and elevation of this service to his own satisfaction in order to determine the amount of work required for the execution of the contract.

B. Contractor shall contact the various utility companies, determine the extent of their requirements and cooperate with the utility company in reaching a finished product. Contractor shall pay charges by Utility Company for extensions, connections meter fees, street patching, etc.

C. In case major changes are required, this fact, together with the reasons therefore, shall be submitted to the Architect, in writing, not less than seven days before the date of bidding. Failure to comply with this requirement will make the contractor liable for any changes, additions and expenses necessary for the successful completion of the project.

1.5 CUTTING AND PATCHING

A. Initial cutting and patching shall be the responsibility of the General Contractor with the Mechanical Contractor responsible for laying out and marking any and all holes required for the reception of his work. No structural beams or joists shall be cut or thimbled without first receiving the approval of the Architect/Engineer. After initial surfacing has

been done, any further cutting, patching and painting shall be done at this contractor's expense.

B. Cutting and patching shall be done in such a manner that the surrounding work will be restored to its original condition.

C. The HVAC piping shall be run in such a manner as to avoid conflicts with other trades. It may be necessary to penetrate beams, grade beams, footings, and foundations. Install thimbles as required and as approved by the Structural Engineer and Architect.

1.6 CODES AND STANDARDS

A. The entire mechanical work shall comply with the rules and regulations of the City, Parish and State in which this project is being constructed including the State Fire Marshal and State Board of Health. All modifications required by these authorities shall be made without additional charge to the Owners. The Mechanical Contractor shall report these changes to the Architect and secure his approval before work is started.

B. In addition to the codes mentioned, all mechanical work and equipment shall conform to the applicable portions of the following Specifications, codes and regulations:

1. American Society of Heating, Refrigeration and Air Conditioning Engineers
2. National Electric Code
3. National Fire Protection Association
4. American Society of Mechanical Engineers
5. Underwriters's Laboratories
6. American Gas Association
7. Energy Code for Commercial and High Rise Residential Buildings
8. International Energy Conservation Code
9. International Building Code
10. International Mechanical Code
11. SMACNA Guidelines

C. Materials, equipment and accessories installed under this contract shall conform to all rules, codes, etc., as recommended by National Associations governing the manufacturer, rating and testing of such materials, equipment and accessories. Materials shall be new and of the best quality and first class in every respect. Whenever directed by the Architect, contractor shall submit a sample for approval before proceeding.

D. Where laws or local regulations provide that certain accessories such as gauges, thermometers, relief valves and parts be installed on equipment, it shall be understood that such equipment be furnished complete with the necessary accessories whether or not called for in these Specifications.

E. Unfired pressure vessels shall be built in accordance with the ASME Code and so stamped. Furnish shop certificates for each vessel.

F. Material and equipment furnished or installed as part of these construction documents shall be installed and operated in strict accordance with the respective manufacturer's guidelines for installation and operating instructions. The manufacturer's guidelines shall become part of the construction documents.

1.7 MINOR DEVIATIONS

A. Plans and detail sketches are submitted to limit, explain and define conditions, specified requirements, pipe sizes and manner of erecting work. Structural or other conditions may require certain modifications from the manner of installation shown and such deviations are permissible and shall be made as required, but, specified sizes and requirements necessary for satisfactory operation shall remain unchanged. It may be necessary to shift ducts or pipes or to change the shape of ducts and these changes shall be made as required. All such changes shall be referred to the Architect for approval before proceeding. Extra charges shall not be allowed for these changes.

B. No structural beams or joists (concrete or steel) shall be cut or thimbled without first receiving the approval of the Architect/Structural Engineer. After initial surfacing has been done, any further cutting, patching and painting shall be done at the Mechanical Contractor's own expense.

C. Contractor shall realize that the drawings could delve into every step, sequence or operation necessary for the completion of the project without drawing on the contractor's experience or ingenuity. However, only typical details are shown on the plans. In cases where the contractor is not certain about the method of installation of his work, he shall ask for details. Lack of details shall not be an excuse for improper installation. Submit installation shop drawings with manufacturer's details for review prior to installation.

D. In general, the drawings are diagrammatic and the contractor shall install his work in a manner so that interferences between the various trades are avoided. In cases where interferences do occur, the Architect is to state which equipment, piping, etc., is to be relocated regardless of which item was first installed.

E. Materials and equipment furnished or installed as part of these construction documents shall be installed and operated in strict accordance with the respective manufacturer's guidelines for installation and operating instructions. The manufacturer's guidelines shall become part of the construction documents.

1.8 WORKMANSHIP

A. Workmanship shall be of highest grade, and all construction shall be done according to the best practice of the trade. Work shall be completed to satisfaction of the Architect/Engineer.

1.9 COORDINATION

A. Coordinate work of the different trades to avoid interferences between mechanical and all other work. All piping, ductwork, etc., shall be installed in lines as required to accomplish this end whether or not shown on the plans.

B. There will be a certain amount of work which must be coordinated with the Owner. This contractor shall coordinate required work with the Owner through the General Contractor using procedures acceptable to the Architect and Owner. The contractor shall maintain documentation of coordinated work.

C. This contractor shall coordinate and confirm that all equipment requiring electric service will be adequately and properly serviced by Electrical Contractor. Any conflicts shall be brought to the attention of the Architect/Engineer prior to ordering the equipment.

D. This contractor shall coordinate the space clearances required for the HVAC ductwork with the structure, ceilings, lights, sprinklers, etc. In some cases, due to space limitations, it may be necessary to re-size ductwork to meet the conditions of the project. **Any resizing required shall be part of this project and done without any additional cost to the Owner. DO NOT MAKE DUCTWORK WITHOUT COORDINATION. Avoid conflicts with other trades.**

E. This contractor shall coordinate the installation of HVAC piping with all parts of the structural foundation system and structural building systems. Provide sleeves through graded beams at all conflicts. All points of penetration of foundation shall be reviewed by the Architect/Engineer prior to rough-in. All sleeves shall be installed per instructions and details of the structural engineer.

F. All pipng shall be run as high as possible with sleeves through concrete beams to avoid conflicts. This means the piping shall run in or through the structure unless approved otherwise by the Architect/Engineer.

1.10 REVIEW OF MATERIALS

A. Whenever manufacturers or trade names are mentioned in these plans or Specifications, the words "or approved equivalent" shall be assumed to follow whether or not so stated. Manufacturers or trade names are used to establish a standard of quality only and should not be construed to infer a preference. Equivalent products which meet the Architect's approval will be accepted; however, these requests for acceptance of products must be received by the Architect a minimum of 10 days prior to bid date. Submission shall include manufacturer's name, model number, rating table and construction features. Upon receipt and checking of this submittal, the Architect will issue an addendum listing items which are approved as equivalent to those specified. The contractor shall base his bid solely on those items specified or included in the "Prior Approval Addendum" as no other item will be acceptable. Prior approval of a particular piece of equipment does not mean automatic final acceptance and will not relieve the contractor of the responsibility of assuring himself that this equipment is in complete accord with plans and Specifications and will fit into the space provided. Submit shop drawings on all items of equipment for approval as hereinafter specified.

B. Should a substitution or variation occur, the better quality or greater quantity of material or work shall be furnished. This also does not preclude other manufacturers if they meet the following criteria:

1. Product proposed for substitution shall be equal or superior to that specified in construction, efficiency, utility and function.
2. Physical size of substitute brand shall not be greater than space provided for it.
3. Profile of substitution shall be same concerning size, shape, indentations, recesses, etc.
4. Complete illustrations, specifications and description of substitution shall be submitted for approval.
5. Availability and proximity of manufacturer's service representative shall be factors considered in substitution approval.
6. Substitution and/or variations shall be reviewed and allowed when there is no change in cost to the project and shall be made at the discretion of the Engineer.

1.11 SHOP DRAWINGS

A. The General Contractor shall submit all submittals within 30 days of the date of the contract between owner and contractor or the date of notice to proceed as issued by the owner to the General Contractor. The submittals shall have been submitted to the General Contractor within 30 days after the construction contract has been signed. The General Contractor and his sub-contractors shall bear all responsibility for any extra costs or delays to late submittals of shop drawings.

B. Drawings shall be presented in a clear and thorough manner.

C. Details shall be identified by reference to sheet detail, schedule or room numbers shown on contract and drawings.

D. Drawings shall contain the following information:

1. Date.
2. Number of the drawing or revision.
3. Name of project or facility.
4. Name of contractor and subcontractor.
5. Clear identification of contents and location of work.

E. Preparation:

1. Clearly mark each copy to identify pertinent products or models.
2. Show performance characteristics and capacities.
3. Show dimensions and clearances required.
4. Show wiring or piping diagrams and controls.
5. Show weights and mounting data.
6. Provide letter documentation confirming that all coordination with other trades effected have been done. This is especially necessary with the electrical requirements and rough-in requirements.

F. Manufacturer's standard schematic drawings and diagrams:

1. Modify drawings and diagrams to delete information which is not applicable to the work.
2. Supplement standard information to provide information specifically applicable to the work.

G. Office samples shall be of sufficient size and quantity to clearly illustrate:

1. Functional characteristics of the product, with integral related parts and attachment devices.
2. Full range of color, texture and pattern.

H. **HVAC ductwork shop drawings shall be prepared showing all conditions of installation coordinated with structure, lights, sprinklers, ceiling, etc. These shop drawings shall be prepared within 45 days of the award of the general contract for the project. Drawings shall be done at minimum 1/8 inch scale on 24 inch x 36 inch sheets.**

I. Equipment shop drawing shall be prepared by the contractor/supplier. These shop drawing shall include the manufacturer's performance data and installation manuals. In addition, the shop drawings shall show the installation specific to this project.

J. Assemble certificates, executed by each of the respective manufacturers, suppliers, and subcontractors.

K. All submittals shall be submitted prepaid and in ample time for review before installation.

L. Six (6) copies of each submittal shall be submitted to the Architect.

M. These shop drawings shall be supplied as part of this contractor's contract. Any drawings not approved shall be resubmitted until approved. **Submit all shop drawings at the same time. No separate items will be accepted (except in the case of the HVAC ductwork shop drawings).**

N. Time necessary for review of samples, certificates, test reports, and shop drawings is at least 30 calendar days after receipt of the item. All materials installed in the work shall match the reviewed submittals. After a submission has been reviewed, no substitutions will be permitted without written approval by the Architect.

O. The Architect's/Engineer's review of shop drawings shall not relieve the contractor from the responsibility of incorrectly figured dimensions or any other errors that may be contained in these drawings. The omission from the shop drawings or specifications, even though approved by the Architect, shall not relieve the contractor from furnishing and erecting same.

P. Any delays caused by contractor not submitting shop drawings within a timely manner shall be the problem of the responsible subcontractor and the General Contractor.

1.12 REPAIRING ROADWAYS AND WALKS

A. Where this contractor cuts or breaks roadways or walks to lay the piping, he shall repair or replace these sections to meet the Architect's approval. Repair of public roadways and highways shall be done as per the Federal, State of Local agencies having jurisdiction. Contractor shall obtain and pay for all permits.

1.13 MATERIALS

A. Work materials shall be new and the best of their respective kinds, and shall bear the label of NFPA, ASME Code, AGA, and UL where such standard has been established for the particular item of equipment used.

1.14 MATERIAL STORAGE

A. General: Provide space for storage of material and equipment at ground level. Roof surfaces shall not be used for storage of materials or equipment. Any storage within the building shall be approved by the Architect/Engineer prior to use of the space.

B. Exterior: Pipe, fitting, or other materials stored outside of building shall be set on wood or steel racks or platforms inside storage container units. All necessary provisions shall be made to keep water and debris away from such stored material. Ends of pipes and valves shall be kept sealed until used.

C. Warehousing: Equipment subject to rusting shall be kept warehoused until just prior to setting. If necessary the warehouse shall have climate controlled conditions.

D. Offsite warehousing shall be approved by the Architect and Owner only.

E. Any warehousing used shall be approved by the Owner and an insurance certificate naming the Owner as insured shall be provided to the Owner.

1.15 GROUNDS AND CHASES

A. Contractor shall see that all required chases, sleeves, grounds, holes and accessories necessary for the installation of his work are properly built in as the work progresses; otherwise he shall bear the cost of providing them.

1.16 MACHINERY GUARDS

A. Contractor shall provide v-belt guards for each v-belt drive or other hazardous drive. Guard shall enclose the drive entirely and shall have a hole for taking tachometer reading.

1.17 SPECIAL TOOLS

A. Special tools required for proper operation or maintenance of any mechanical equipment provided under this contract shall be delivered to the Owner at the completion of the project.

1.18 FILL AND CHARGES FOR EQUIPMENT

A. Fill and charge with materials or chemicals all devices or equipment as required to comply with the manufacturer's guarantee or as required for proper operation of the equipment.

B. This contractor shall flush systems as required per local and state jurisdictions and equipment/material manufacturer's guidelines (chlorination, chemical treatment, etc.).

1.19 EQUIPMENT ACCESS

A. Large equipment to be installed in building, which is too large to permit access through doorways, shall be brought to the job by the contractor and placed before enclosing structure. Equipment shall be cribbed up from the floor by the contractor and covered where necessary or directed.

1.20 EQUIPMENT IDENTIFICATION

A. Stenciling: All items of major mechanical equipment (pumps, AHUs, starters, valves, etc.) shall be neatly and clearly stenciled in letters not less than 1 inch high, with the same designation as appears on drawing. Location and color of such stenciling shall be appropriate for ready identification and/or as directed by the Architect. One set of compatible metal interlocking stencil letters and numbers shall be turned over to the Owner at the completion of the job. At contractor's option engraved plastic adhesive tags may be used. Tags used outdoors shall be listed for such use.

B. Pipe Coding: All piping, etc., both insulated and bare, shall be color coded with a general purpose pipe marker for interior locations and a 6 inch enamel painted ban for exterior locations, and stenciled as to service and characteristics on the 10 foot centers and/or as directed. Directional arrows not less than 1/2 inch wide and not less than 6 inches long shall be permanently stenciled on each line at each stencil location. Stenciling shall be located such that it is clearly visible from floor or adjacent service platform. Coding shall be as per schedule approved by Owner through submittal to Architect. At contractor's option, pre-manufactured vinyl pipe labels and directional arrows may be used but shall be banded on either end to secure to pipe.

C. Valve tags shall be installed on all valves controlling building zones, areas, or equipment. Valve tags shall be 2 inch diameter brass stenciled with valve number. A framed list of valves with associated numbers, sizes and locations shall be mounted in the building as directed by Architect.

1.21 TEMPORARY USE OF EQUIPMENT

A. The permanent equipment installation shall not be used for temporary purposes by the contractor for temporary conditioning of the building during construction. **Contractor shall provide temporary dehumidification and drying equipment as required to maintain clean, dry air during construction.**

B. Acceptable Use Without Specific Authorization: Temporary use shall not be construed to mean "bumping" of electric motors on equipment to verify rotation direction nor short time operation of systems for test purposes, operation of refrigeration and heating system for short periods to adjust controls and temperature regulation, or the operation of fans for air balance.

1.22 CLEANING AND ADJUSTING

A. Upon completion of his work, the contractor shall clean and adjust all equipment, controls, valves, etc. Clean all piping, ductwork, etc., and leave entire installation in good working order.

1.23 PAINTING

A. This contractor shall obtain the services of a painting sub-contractor as part of the contract with the General Contractor for all painting.

B. General: Except for standard factory finishes, all pipe, pipe covering, ducts, equipment, supports, hangers, etc., exposed inside and outside building or in equipment room shall be painted. This contractor shall prepare surface of material to receive first coat of paint. All subsequent coatings shall be prepared by Painting Subcontractor. Requirements covering paints, workmanship and preparation of surfaces as stated in Architectural Specifications shall govern. Color coding shall be approved by Architect (submit color sample). All submittals for review shall be through Architect.

C. Damage: Where standard equipment factory finishes have been damaged or scratched, the damaged area shall be repaired or replaced by the contractor to match the original finish.

D. Preparation: Thoroughly clean surfaces of all rust, scale, cement, and dirt from all equipment, piping or other work installed and leave ready for finish painting.

E. All exposed piping shall be painted. Paint with two (2) coats of paint. The color shall be industry standard color coding. Submit color code chart with sample color chips to Architect for review prior to starting work.

1.24 FIRESTOPPING

A. Penetrations through rated construction shall be sealed with a material capable of preventing the passage of flames and hot gases when tested in accordance with ASTM-EB14.

B. Notify Architect for inspection of all completed fire and/or smoke barrier walls before any construction is installed that may conceal the firestopping material installation.

C. Access to random selected areas may be required by the architect at the time of final inspection should notification not be given.

D. Provide detailed instructive cutsheets of fire penetration sealing system (firestopping) used to the architect at the time of inspection. Random selective sampling by the contractor will be observed by the architect and State Fire Marshal.

1.25 NOISE VIBRATION

A. General: Take the utmost precautions in the installation of the equipment, piping, and duct systems to prevent noise and vibration transmission. Noise levels determined by octave band analysis with all components of the mechanical system operating and the building completely furnished shall not exceed NC-35 in operations and office areas, and shall not exceed NC-45 in equipment areas. Where equipment and installations do not meet these limits, the contractor must provided necessary attenuation to reduce net noise levels to the above requirements.

B. Isolation of equipment: Equipment that would tend to cause noise or vibration shall be isolated to prevent noise transmission to the building or to other equipment.

C. Equipment Connections: Piping, conduit, or other connections to equipment shall be isolated. The contractor shall be responsible for the prevention of noise and vibration transmission through these connections to equipment.

1.26 PERMITS, INSPECTIONS AND TESTS

A. Contractor shall obtain and pay for permits, fees, etc., for the installation, inspection, service connections, verifying location or construction of the work which are required by any authority and/or agencies having jurisdiction.

B. Contractor shall arrange and pay for inspections, examinations and tests required to obtain complete and final acceptance of all mechanical systems. Contractor shall deliver certificates of all such inspections to the Architect.

C. Contractor shall notify Architect and local governing authorities before any tests are made and tests are not to be drawn off a line covered or insulated until examined and approved by the authorities. In the event defects are found, these shall be corrected and the work shall be retested.

D. Prior to requesting final inspection by the Architect, the contractor shall have a complete coordination and adjustment meeting of all of his subcontractors directly responsible for the operation of any portion of the system. At the time of this meeting, each and every sequence of operation shall be checked to assure proper operation. Notify the Architect in writing 10 days prior to this meeting instructing him of the time, date and whom you are requesting be present. This project shall not be accepted until the above provisions are met to the satisfaction of the Architect.

1.27 TRAINING OF MAINTENANCE PERSONNEL

A. Contractor shall provide on the job training for Owner's personnel upon completion of the work including testing and adjustment. Minimum 20 hours of onsite training shall include maintenance checks, lubrication of components, adjustment of control set points, and troubleshooting techniques of the air conditioning unit.

B. Contractor shall use factory start-up personnel to train the owner's maintenance personnel.

1.28 OPERATION AND MAINTENANCE INSTRUCTIONS

A. Provide Owner with four (4) copies of printed instructions indicating various pieces of equipment by name and model number complete with parts lists and maintenance and repair instructions. This information shall be bound in plastic covered notebooks. Submit the manuals to the Architect for approval.

B. Include all warranty certificates or statements in a separate section of the manuals. Provide all materials and test certificates for the final inspection.

C. Provide three (3) sets of DVDs of the operation and maintenance manuals.

1.29 GUARANTEE

A. Contractor shall guarantee all materials, equipment and workmanship for a period of one year from the date of final acceptance of the project. This guarantee shall include furnishing of all labor and material necessary to make any repairs, adjustments or replacement of any equipment, parts, etc., necessary to restore the project to first class condition. This guarantee shall exclude only the changing or cleaning of filters. Additional warranties beyond the above shall be furnished as specified elsewhere in these specifications.

B. If the contractor's office is in excess of a 50 mile radius of the project, he shall appoint a local qualified contractor to perform any emergency repairs or adjustments required during the guarantee period. The contractor appointed to provide emergency services shall be submitted to the Architect for his approval.

1.30 WARRANTIES

A. Assemble warranties executed by each of the respective manufacturers, suppliers, and subcontractors into a warranty book and prepare a table of contents.

B. Two (2) original signed copies of each warranty are required.

C. Provide complete information for each item including:

1. Product and work item.
2. Local supplying firm or manufacturer's dealer, with name of principal, address and telephone number.
3. Scope of warranty.
4. Date of beginning of warranty.
5. Duration of warranty.
6. Provide information for Owner:
   a. Proper procedure to evoke the warranty in case of failure.
   b. Instances which might affect the validity of the warranty.
7. Contractor, name of responsible principal, address and telephone number.
8. All contractors and manufacturers equipment warranties shall start at the acceptance of the project by the Owner.
9. Provide owner with contact information for warranties which extend beyond one year.

1.31 RECORD DRAWINGS

A. Contractor shall maintain two (2) sets of drawings of the original construction documents to utilize as markup sets to record field modifications from original construction documents. Once approval has been gained from the Architect, the contractor shall record these variances on the two (2) sets in a neat and readable manner. Noted shall be sizes, locations, changes in directions, etc. with distances dimensioned from columns, walls, inverts, etc. The maintenance and cost of these documents shall be the responsibility of the contractor.

1.32 DEMOLITION

A. This contractor shall do all demolition as shown on the plans. The contractor shall make the areas ready for the new construction work. All demolition debris, piping, equipment, etc., shall be removed from the site by this contractor. All demolition work shall be scheduled through the General Contractor to prevent interruption of any existing services. Do not start any demolition which would interrupt the building operation without scheduling with the Owner (schedule through the General Contractor).

B. The Owner shall retain first salvage rights to anything within the demolition area. If the Owner selected an item to be retained, then this contractor shall remove it with care and deliver the item to the Owner designated location on site. Anything not retained by the Owner shall become the property of the contractor and be removed from the site.

1.33 MATERIALS CONTAINING HAZARDOUS SUBSTANCES OR COMPONENTS

A. This contractor shall not provide any material or component of equipment which contains asbestos, lead based paint or PCBs. The contractor shall provide certificates or manufacturer's statements/letters to show that the products and/or building materials do not contain asbestos, lead based paint or PCBs.

B. If any product or building material is found to contain asbestos, lead based paint or PCBs, the contractor shall bear all cost for removal, abatement, and disposal of materials in accordance with all state and federal regulations. The contractor shall install replacement materials to the satisfaction of the Architect at no additional cost to the project.

C. During the construction, if the contractor suspects that any material in the building contains or is a hazard material (asbestos, lead, PCB, mercury, etc.) work shall be stopped to prevent disturbance and the Owner shall be notified immediately.

END OF SECTION 23 05 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 05 03 - BASIC MATERIALS AND METHODS FOR HVAC

PART 1 - GENERAL

1.1 DESCRIPTION

A. Type of piping for various systems shall be as specified herein.

B. All pipe shall be true and straight without sags or traps.

PART 2 - MATERIALS

2.1 REFRIGERANT PIPING/EQUIPMENT DRAIN PIPING

A. All refrigerant and equipment drain piping shall be government type "L" hard copper tube standard weight and thickness as made by Mueller, Chase, Anaconda or equivalent, unless indicated otherwise. Use Silfos 1000 degrees Fahrenheit solder on all joints.

B. Tubing shall be brought to the site with ends sealed.

2.2 A/C CONDENSATE DRAIN PIPING

A. All A/C condensate drain piping shall be government type "L" hard copper water tube of standard weight and thickness. Fittings shall be compatible with pipe. Use Silfos 1000 degrees Fahrenheit solder on all joints.

2.3 PIPE FITTINGS

A. All pipe fittings shall be same as piping specified unless indicated otherwise.

B. Fittings for refrigerant piping and other copper lines shall be solder type wrought copper, Nibco or equivalent.

2.4 PIPE SPECIALTIES

A. Dielectric unions shall be used between copper and iron pipe.

2.5 PIPE HANGERS AND SUPPORTS

A. This contractor shall furnish and install all foundations and supports required for his equipment unless indicated otherwise on the drawings.

B. This contractor shall furnish and install all escutcheons, inserts, thimbles, hangers, etc., required for the proper support and installation of his equipment and piping. Cooperate with other trades in locating and placing these items.

C. Provide sleeves for all pipes passing through walls, floors, beams, etc. Sleeves passing through structural members shall be of cast iron or Schedule 40 steel pipe. Sleeves passing through nonstructural walls or floors shall be of Schedule 10 galvanized iron. Joints between sleeves and pipes passing through floors shall be made watertight with plastic materials. Where pipes pass through floors shall be made watertight with plastic materials. Where pipes pass through waterproofing membrane, flashing sleeves shall be installed.

D. Provide malleable iron split ring hangers with rod supports throughout. Strap hangers or wire will not be accepted. Maximum spacing of hangers shall be 5 feet.

E. Provide galvanized iron shields between hangers and pipe covering.

F. Provide chrome plated brass escutcheons wherever pipes pass through floors, walls or ceilings in exposed or finished areas.

G. All piping projecting from chases shall be rigidly supported in the wall or chase. Loosely supported fixtures or accessories will not be accepted.

2.6 VALVES AND UNIONS

A. Furnish and install all valves, unions, stops, connections, etc., shown on plans and necessary to make a complete system in working order. Provide valves on inlet and outlet of all equipment and fixtures and on branch lines to fixtures or groups of fixtures, refer to Division 22.

2.7 MOTORS STARTERS AND ELECTRICAL WORK

A. The Mechanical Contractor shall furnish to Electrical Contractor for installation, all motor starters, start-stop push buttons and pilot lights for each piece of motor driven equipment unless shown otherwise.

B. The Electrical Contractor shall install all motor starters, start-stop push buttons and pilot lights as furnished by the Mechanical Contractor. The Electrical Contractor shall do all power wiring required for the installation of all mechanical equipment including equipment interlocking power wiring, etc. Temperature control wiring shall be furnished and installed by the Mechanical Contractor. All work shall be done in accordance with the National Electrical Code requirements and with wiring workmanship, etc., as called for in the Electrical Specifications. The Mechanical Contractor shall provide approved wiring diagrams of all equipment, controls, etc., to the Electrical Contractor for his installation. Coordinate all work to provide a complete system in working order. All wiring shall be plenum rated.

C. All motors for the mechanical equipment shall be of the 40 degrees Celsius rise type and shall be furnished and installed by the Mechanical Contractor. All motors shall be wound for +/- 10 percent of the specified voltage. Motors shall be voltages indicated on drawings. All motors shall have copper windings, Class F insulation and shall be rated for continuous duty service. All three-phase motors shall be inverter-duty type motors.

D. All electrical equipment shall have UL label or ETL label and shall meet the standards of the National Electrical Code and NEMA.

E. Starters for single phase motors 1/2 HP and below shall be furnished with pilot light and "hand-off-auto" selector switch where required.

F. Starters for three-phase, single speed motors shall be stepless solid state soft starter with "hand-off-auto" selector switch, three overload relays and auxiliary contacts as required. The starter shall operate at manufacturers ratings with 10 percent and -15 percent applied voltage tolerance and be capable of operating continuously under ambient temperatures of 0 to 50 degrees Celsius. The starter control circuitry shall be designed for current ramp operation and utilize current feedback for closed loop operation to minimize variation of acceleration time with varying load conditions. The starter shall use metal oxide varistors to clip transient voltage spikes on incoming power lines with protection to limit the rate of rise of voltage spikes to protect the SCR's from damage. The starter shall provide electronic motor overload protection. The starter shall shut down (or shall not start) to protect itself from either phase loss or phase rotation. The starter shall have adjustments for initial torque, pulse, ramp up time, ramp down time, and current limit. The starter shall have a main trip breaker to act as a disconnect and necessary contactors. The starter shall have contacts for remote starting from a building energy management system.

G. Mechanical contractor shall provide and install all smoke dampers and smoke or duct detectors. The electrical contractor shall provide and install all wiring/interlocks with fire alarm.

2.8 ACCESS PANELS

A. Furnish and install access panels where valves, dampers, etc., are concealed in walls, ceilings, floors or otherwise inaccessible. Panels shall be Milcor, Babcock, Larsen, MIFAB, Acudor, Nystrom or equivalent. All access panels shall be minimum 18 inches X 18 inches hinged with flush latch and lock. The panels shall be constructed of minimum 18 gauge stainless steel. Frame flange shall be minimum 1-1/2 inches wide. Rated panels shall have U.L. rating for type wall of ceiling where located.

B. Access panels located in rated walls, floors, or ceilings shall be so rated and installed per manufacturer's recommendations to maintain rated integrity.

PART 3 - EXECUTION

3.1 PIPING

A. Perforated strap hangers shall not be allowed for any part of the hangers.

B. Mains, branches, and run outs: Piping shall be installed as indicated on the drawings. Pipe shall be cut accurately to measurements established at the building and shall be worked into place without springing or forcing. Care shall be taken not to weaken structural portions of the building. Above ground piping shall be run parallel with the lines of the building unless otherwise shown or noted on the drawings. Branch pipes from service lines may be taken from top, bottom, side or main, using such crossover fittings as may be required by structural or installation conditions. Service pipes, valves, and fittings shall be kept a sufficient distance from other work and other services to permit not less than 1/2 inch between finished covering and other work and not 1/2 inch between finished covering on the different services. No water pipe shall be made with reducing fittings. Use of long screws and bushings will not be permitted. Slope water pipe 1 inch in 40 feet and arrange to drain at low point.

C. Expansion and contraction of piping: Allowance for expansion and contraction shall be made throughout. Sufficient flexibility shall be provided on all branch run outs from mains to risers to provide for expansion and contraction of piping. Flexibility shall be provided by installing one or more turns in the line so that the piping will spring enough to allow for expansion without straining.

D. Joints: Tubing shall be cut square, and butts shall be removed. Both inside of fittings and outside of tubing shall be well cleaned with steel wool before sweating. Care shall be taken to prevent annealing of fittings and hard drawn tubing when making connections. Installation shall be made by competent workmen in accordance with manufacturer's recommendation. Mitering of joints for elbows and notching of straight runs of pipe for tees will not be permitted. Joints for soldered fittings shall be made with a noncorrosive paste flux and solid string of wire solder. Cored solder will not be permitted.

E. Valves: Valves shall be provided on all supplies to fixtures as specified under type of fixture and fixture trimmings. Valves indicated in connection with run outs, risers, branches, and mains shall be in accordance with this specification. No valve shall be installed on any lines with its stem below the horizontal. All valves shall be gate valves unless otherwise specified or indicated. Provide drain valves at main shut-off valves, low points of piping and apparatus.

F. Pipe sleeve, hangers, and fixture supports: These items shall be furnished and set and the contractor shall be responsible for their proper and permanent location.

1. Pipe sleeves - Install sleeves for all pipes passing through footings, floors, and walls. Clearance between sleeves and pipe covering and/or pipes shall be approximately 1/4 inch. Construction shall not be cut except where approved by the Architect. Where cutting of construction is permitted, the construction shall be

repaired to match its original condition. Sleeves shall not be installed in structural members except where indicated. Sleeves are not required for wall hydrants.

a. Install sleeves for pipes that pass through walls. Sleeves that pass through walls shall be cut flush with surfaces. The space between sleeves and pipe or covering shall be sealed with graphite packing and synthetic rubber caulking compound.
b. Install sleeves where pipes pass through waterproofing membrane. The sleeves shall be provided with an integral flashing flange or a clamping device to which a 4 pound lead flashing shield shall be clamped or soldered. The shield shall extend 12 inches from the pipe and shall be thoroughly mopped into the membrane. The space between the sleeve and pipe shall be made watertight by inserting an oakum gasket, filling the remaining space with lead, and thoroughly caulking.

2. Threaded pipe - Support pipes at 4 foot intervals.
3. Copper tubing - Support tubing at not more than 5 foot intervals. Hangers for copper tubing except where protective shields are installed shall have proper size rings to suit outside diameter of tubing and the hangers or supports shall be copper or copper plated at contact surfaces.
4. Underground piping - Lay pipe on a firm bed for its entire length, except where support is otherwise provided.
5. Vertical piping - Supports shall be at each floor. Horizontal piping - Hangers and supports shall be installed at locations not more than 3 feet from the end of each run out. A hanger shall be installed not over 1 foot from each change in direction of piping.

G. Unions: Make connections to equipment and branch mains with unions. Provide nonconducting type connections wherever jointing dissimilar metals in open systems. Brass adapters and valves are acceptable.

H. Provide drain valves at main shutoff valves, low points of piping and apparatus.

I. Provide and install air vents with shutoff valve at all high points in the system.

J. Cleaning and Disinfectant: Domestic water piping system shall be cleaned and disinfected. All equipment, temporary piping and chemicals, as required shall be furnished by the contractor. All system piping and equipment shall be thoroughly and completely flushed with cold domestic water. Completely drain the systems and fill with a solution of Sodium or Calcium Hypochlorite, 100 parts per million, completely relieving the system of all air. Allow the solution to stand for eight hours and then drain and follow with clear water flush for a sufficient period of time to remove all traces of hypochlorite odor. Disinfecting chemicals shall not be introduced into existing piping systems.

END OF SECTION 23 05 03

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 05 93 - TESTING, ADJUSTING, AND BALANCING FOR HVAC

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. All Division 23 Specification Sections, drawings, and general provisions of the contract apply to work of this section, as do other documents referred to in this section.

1.2 SCOPE OF WORK

A. The General Contractor shall obtain the services of an independent test and balance company which specializes in the testing and balancing of heating, ventilating and air conditioning (HVAC) systems to test, adjust and balance all HVAC systems in the building(s). These services shall not be provided by the installing mechanical contractor on the project but shall be a direct subcontractor of the general contractor.

1. Agency shall provide proof of having successfully completed at least five projects of similar size and scope. Work by this Agency shall be done under direct supervision of a qualified Heating and Ventilating Technician employed by Agency.
2. Instruments used by Agency shall be accurately calibrated and maintained in good working order.
3. If requested, conduct tests in presence of Engineer.
4. Agency shall be approved in writing by Engineer. Mechanical Contractor shall not be permitted to do this work. Submit qualifications for review.

B. The work included in this section consists of furnishing labor, instruments, and tools required in testing, adjusting and balancing the HVAC systems, as described in these Specifications or shown on accompanying drawings. Services shall include checking equipment performance, taking the specified measurements, and recording and reporting the results. Refer to Plumbing Division 22 for additional work required of Air System Test and Balance agency.

C. **Test and Balance agency shall be present for factory start-up of equipment when factory startup is required**.

D. Representatives of the test and balance company shall visit the job site at 60 percent and 90 percent completion of installation of the HVAC equipment, piping and ductwork to review the installation. After each site visit, the test and balance company shall report to the Architect any items that are not installed properly, are missing from the Contract Documents or items that are required to enable him to perform the testing and balancing of the HVAC systems as per normal standard practice. After review, the Architect shall instruct the contractor to implement the recommendations at no additional cost to the Owner if these items were specified in the original scope of the project.

E. Upon completion of the HVAC system installation, the test and balance company shall perform all testing and balancing with the full cooperation of the contractor and his

subcontractors. The contractor shall make changes and/or adjustments to the HVAC system components that are required by the test and balance company to accomplish proper balancing. The TAB agency shall not supply or install any materials or balancing devices such as pulleys, drives, belts, etc. All of this work by the contractor shall be performed at no additional cost to the Owner.

F. **Balancing agency shall be represented at final inspection meeting by qualified testing personnel with balancing equipment and two (2) copies of air balancing test report.**

G. Engineer will choose and direct spot balancing of one zone. Differences between the spot balance and test report will be justification for requiring repeat of testing and balancing for entire building.

1. Be prepared to spot smoke test one ducted system as directed by Architect's Engineer.
2. Rebalancing shall be done in presence of Architect and subject to his approval.
3. Spot balance and rebalance shall be performed at no additional cost to Owner.

H. The test and balance report shall be submitted to the Architect for review by his Mechanical Engineer. If the Mechanical Engineer agrees with the report, he shall sign it and return it to the Architect. If he does not concur with the report, he shall meet with the Test and Balance Company to determine what needs to be done to obtain a properly balanced system.

I. After the Mechanical Engineer signs the testing and balancing report, the Test and Balance Company shall supply four (4) copies of the final and complete report to the Architect for inclusion in the Operation and Maintenance Manuals.

1.3 The items requiring testing, adjusting, and balancing include (but are not restricted to) the following:

A. AIR SYSTEMS:
Air Handling Units
Fans
Zone Branch and Main Ducts
Diffusers, Registers, Grilles and Dampers
Coils (Air Temperatures)
Valves
Vibration Isolators
Duct Smoke/Pressure Leak Testing

1.4 SCHEDULING

A. General Contractor shall award test and balance contract to approved agency upon receipt of his contract to proceed to allow Agency to schedule this work in cooperation with other Sections involved and comply with completion date.

1.5 DEFINITIONS, REFERENCES, STANDARDS

A. All work shall be in accordance with the latest edition of the Associated Air Balance Council (AABC) National Standards or the latest standards of the National Environmental Balancing Bureau (NEBB). If these contract documents set forth more stringent requirements than the AABC National Standards or the NEBB Standards, these contract documents shall prevail.

1.6 QUALIFICATIONS

A. Agency Qualifications: The TAB agency shall be a current member of the AABC,NEBB or TABB.

B. Prior to working on this project, the technicians shall attend training provided by the manufacturer of the various equipment on this project on the specific aspects of balancing the equipment. Include letters or certificates from the manufacturer on attendance and satisfactory completion of the factory training. These certifications may be used for continuing education. At a minimum, the technicians shall receive training from the air distribution equipment manufacturer, air unit manufacturer, and temperature controls manufacturer. This should be done prior to any equipment start-ups.

1.7 SUBMITTALS

A. Qualifications: The TAB agency shall submit a company resume listing personnel and project experience in air and hydronic system balancing and a copy of the agency's test and balance engineer (TBE) or technician certificate.

B. Procedures and Agenda: The TAB agency shall submit the TAB procedures and agenda proposed to be used.

C. Sample Forms: The TAB agency shall submit sample forms, which shall include the minimum data required by the AABC National Standards or the NEBB Standards.

D. Submit continuing educations training on each lead technician working on the project.

1.8 TAB PREPARATION AND COORDINATION

A. Shop drawings, submittal data, up-to-date revisions, change orders, and other data required for planning, preparation, and execution of the TAB work shall be provided when available and no later than 30 days prior to the start of TAB work.

B. System installation and equipment startup shall be complete prior to the TAB agency's being notified to begin.

C. The building control system (BCS) contractor shall provide and install the control system, including all temperature, pressure and humidity sensors. These shall be calibrated for accurate control. If applicable, the BCS contractor shall install all

necessary computers and computer programs, and make these operational. Assistance shall be provided as required for reprogramming, coordination, and problem resolution. The BCA contractor shall provide all necessary software to the TAB Agency at no additional cost.

D. All test points, balancing devices, identification tags, etc., shall be accessible and clear of insulation and other obstructions that would impede TAB procedures.

E. Qualified installation or startup personnel shall be readily available for the operation and adjustment of the systems. Assistance shall be provided as required for coordination and problem resolution.

F. If, upon commencing the work, the TAB contractor finds that the systems are not ready, or if a dispute occurs as to the readiness of the systems, the TAB contractor may request an inspection to be made by the Designer's Mechanical Engineer. This inspection shall establish to the satisfaction of the represented parties whether or not the systems meet the basic requirements for testing and balancing. Items that are determined to be not ready for testing and balancing shall be completed by the Mechanical Contractor and placed in operational readiness before TAB services are again requested.

1.9 TAB REPORTS

A. Final TAB Report: The TAB agency shall submit the final TAB report for review by the Engineer. On plans provided, all outlets, devices, HVAC equipment, etc., shall be identified, along with a numbering system corresponding to report unit identification. The TAB agency shall submit an AABC or NEBB "National Project Performance Guaranty" assuring that the project systems were tested, adjusted and balanced in accordance with the project Specifications and AABC or NEBB National Standards.

B. Submit four (4) copies of the final TAB report to the Architect for inclusion in the Operation and Maintenance Manuals.

PART 2 - INSTRUMENTATION

2.1 All instruments used for measurements shall be accurate and calibrated. Calibration and maintenance of all instruments shall be in accordance with the requirements of AABC or NEBB National Standards.

PART 3 - EXECUTION

3.1 GENERAL

A. General Contractor with Mechanical Contractor shall put heating, ventilating, and cooling systems and equipment into full operation and continue their operation during each working day of testing and balancing.

B. Air Balance and Testing Agency shall perform tests specified, compile test data, and submit four (4) copies of complete test data to contractor for forwarding to Engineer for evaluation and approval.

1. Approved copies of report shall be bound in Operations and Maintenance manuals.

C. System shall be completely balanced and all reports submitted to Engineer prior to prefinal inspection.

D. The specified systems shall be reviewed and inspected for conformance to design documents. Testing, adjusting and balancing on each identified system shall be performed. The accuracy of measurements shall be in accordance with AABC or NEBB National Standards. Adjustment tolerances shall be + or -10 percent unless otherwise stated.

E. Equipment settings, including manual damper quadrant positions, valve indicators, fan speed control levers, and similar controls and devices shall be marked to show final settings.

F. All information necessary to complete a proper TAB project and report shall be per AABC or NEBB standards unless otherwise noted. The descriptions of work required, as listed in this section, are a guide to the minimum information needed.

G. TAB contractor shall cut insulation, ductwork and piping for installation of test probes to the minimum extent necessary to allow adequate performance of procedures. Upon completion, patch insulation, ductwork and housings using materials identical to those removed. Seal insulation to reestablish integrity of the vapor barrier.

H. TAB work shall include additional inspection and adjustment of components during the season following the initial balance to include re-balance of any items influenced by seasonal changes or as directed by the Owner.

3.2 AIR SYSTEMS

A. **TESTING PROCEDURE**
Air Balance and Testing Agency shall perform following tests and balance system in accordance with following requirements. Perform the following tests at high and low speeds of multi-speed systems and single speed system.

1. **Make periodic inspections of the installation of the systems. Provide reports of each inspection. Inspections should be monthly when ductwork installation begins. Coordinate and verify the installation of all balancing dampers, fire dampers, etc.**
2. Smoke test or pressure test each low pressure steel duct system to test for air tightness. Use zinc chloride smoke candles or titanium tetrachloride ampules (sticks) to generate smoke.

a. If ducted systems leak, do not continue with air balance. Report findings to Engineer in writing and begin testing again after Mechanical Contractor has repaired ducts or applied duct sealers.
b. If ducted systems appear air tight, proceed with air balance procedure as outlined below.
c. Include in air balance report a letter indicating smoke testing has been accomplished and a report of findings regarding airtightness of each ducted system.
d. Maximum leakage loss shall not exceed 2 percent. If losses are greater, the Mechanical Contractor shall correct the leakage, then the test and balance agency shall retest the ductwork.

3. Test and adjust blower rpm to design requirements.
4. Test and record motor full load amperes.
5. Make Pitot Tube traverse of main supply and return and obtain design cfm.
6. Test and record system static pressures, suction, and discharge.
7. Test and adjust system for design cfm air.
8. Test and adjust system for design cfm outside air.
9. Test and record entering air temperatures (db heating and cooling).
10. Test and record entering air temperatures (wb cooling).
11. Test and record leaving air temperatures (db heating and cooling).
12. Test and record leaving air temperatures (wb cooling).
13. Adjust main supply and return air ducts to proper design cfm.
14. Adjust zones to proper design cfm, supply and return.
15. Test and adjust each diffuser, grille, and register to within 10 percent of design requirements.
16. Identify each diffuser, grille, and register to location and area.
17. Identify and list size, type, and Manufacturer of diffusers, grilles, registers, and testing equipment. Use Manufacturer's rating on equipment to make required calculations.
18. In readings and tests of diffusers, grilles, and registers, include required fpm velocity and test fpm velocity and required cfm and test cfm after adjustments.
19. In cooperation with Mechanical Contractor, set adjustments of automatically operated dampers to operate as specified, indicated, or noted.
20. Adjust diffusers, grilles, and registers to minimize drafts.
21. Verify the calibration of temperature control devices, thermostats, etc.
22. Verify all control sequences with specifications.
23. Include manufacturer's performance data with reports.
24. Schedule three inspections to verify original test and balance of systems within 90 days of acceptance by Owner. Make opposite season adjustment and inspection of systems at one year after acceptance by Owner. Submit reports after each inspection. Submit schedule as part of initial report.

B. Where systems supplied to job site provides over 5 percent more air than schedule requirements, rooms supplied by that system shall have their supply air quantities increased by the ratio of the actual total air quantity supplied to the minimum air quantity required by the schedule.

C. The TAB agency shall verify that all ductwork, splitters, extractors, dampers, grilles, registers, and diffusers have been installed per design, are functional and set full open. Any leakage in the ductwork shall be repaired prior to the test. The TAB agency shall

perform the following TAB procedures in accordance with the AABC National Standards or NEBB Standards:

1. Fans
   a. Fan Speeds--Test and adjust fan RPM to achieve design cfm requirements.
   b. Current and Voltage--Test and record motor voltage and amperage, and compare data with the nameplate limits to ensure fan motor is not in or above the service factor.
   c. Pitot-Tube Traverse--Perform pitot-tube traverse of the main exhaust ducts to obtain total CFM. If a pitot-tube traverse is not practical, an explanation of why a traverse was not made must appear on the appropriate data sheet.
   d. Static Pressure--Test and record system static pressure, including the static pressure profile of each exhaust fan.
2. Zone, Branch, and Main Ducts
   a. Adjust ducts to within design cfm requirements. As applicable, at least one zone balancing damper shall be completely open. Multi-diffuser branch ducts shall have at least one outlet or inlet volume damper completely open.
3. Diffusers, Registers, and Grilles
   a. Tolerances--Test, adjust, and balance each diffuser, grille, and register to within 10 percent of design requirements. Minimize drafts.
   b. Identification--Identify the type, location, and size of each grille, diffuser and register. This information shall be recorded on air outlet data sheets.
4. Coils
   a. Air Temperature--Once air flow are set to acceptable limits, take wet bulb and dry bulb air temperatures on the entering and leaving side of each cooling coil. Dry bulb temperature shall be taken on the entering and leaving side of each heating coil.
5. Air Handling Units:
   a. Location, manufacturer, model number, serial number, motor manufacturer, fan and motor sheaves, belts. Required and test data with unit operating at full air flow conditions (all space thermostats calling for cooling) for each of following: total CFM, return and outside air CFM, total static pressure, suction and discharge static pressures across unit fan, HP, amperage, voltage, fan RPM. Verify performance of static pressure controls, vane operators, dampers and controls. Adjust and/or change pulleys and belts as required to obtain delivery of system specified or required full load air quantities.
6. Diffusers and Grilles:
   a. Space served; type and size of diffuser or grille, specified CFM, initial test CFM and final test CFM. Each air outlet shall be adjusted for +/- 5 percent of required quantity as shown on plans.
7. Control Systems:
   a. Verify all control sequences and calibration of all thermostats and sensors.
8. Equipment Start-up:
   a. The Test and Balance Contractor shall be on site to witness and record all factory start-up of mechanical equipment. Include start-up reports in final balancing report.
9. Plumbing:
   a. Refer to Plumbing Division 22 for additional work required by the Air System Testing and Balancing Agency.

3.3 INDOOR AIR QUALITY VERIFICATION:

A. The TAB agency shall take measurements at minimum outside air. It shall measure temperature and humidity uniformity throughout the space, check filter installation for proper fit, seal and operation and verify condensate drain operation. The TAB agency shall note any water damage or obvious contamination sources from inside or outside.

B. The TAB agency shall prepare a short report showing the results and location of each test, a summary of the HVAC operating conditions, and a listing of any discrepancies.

3.4 ADDITIONAL TAB SERVICES:

A. Job Site Inspections:
During construction, the TAB agency shall inspect the installation of pipe systems, sheet metal work, temperature controls, and other component parts of the HVAC systems. Inspections shall be conducted a minimum of two times. (Typically, these are performed when 60 percent of the total system is installed and again when 90 percent of the total system is installed, prior to insulation of the duct and piping.) The TAB agency shall submit a written report of each inspection to the Architect.

B. Duct Leakage Testing:
The Installing Contractor shall isolate and seal sections of ductwork for testing. The pressurization fan and test apparatus shall be connected to the test section and the test performed. The test pressure required and the amount of duct to be tested shall be described by the engineer in the appropriate duct classification section. All testing shall be based on one test per section.

C. Verification of HVAC Controls:

1. The TAB agency shall be assisted by the building control Systems Contractor in verifying the operation and calibration of all HVAC and temperature control systems. The following tests shall be conducted:
2. Verify that all control components are installed in accordance with project requirements and are functional, including all electrical interlocks, damper sequences, air and water resets, fire and freeze stats, and other safety devices.
3. Verify that all controlling instruments are calibrated and set for design operating conditions.

D. Temperature Testing:
To verify system control and operation, a series of three temperature tests shall be taken at approximately two hour intervals in each separately controlled zone. The resulting temperatures shall not vary more than 2 degrees Fahrenheit from the thermostat or control set point during the tests. Outside temperature and humidity shall also be recorded during the testing periods.

E. TAB Report Verification:
At the time of final inspection, the TAB agency may be required to recheck, in the presence of the Owner's representative, specific and random selections of data, air

quantities, and air motion recorded in the certified report. Points and areas for recheck shall be selected by the Owner's representative. Measurements and test procedures shall be the same as approved for the initial work for the certified report. Selections for recheck, specific plus random, will not exceed 10 percent of the total number tabulated in the report.

F. Kitchen Hood Testing:
The TAB agency shall test and adjust kitchen hood total air flow by duct pitot-tube traverse if applicable under local code. If a pitot-tube traverse is not practical, an explanation of why a traverse was not made must appear on the appropriate data sheet. All sealing of test holes in the exhaust duct to be by others per local code requirements. The TAB agency shall test and record face velocities in accordance with design requirements. It shall test and adjust makeup air flow (if included) to meet design face velocities and pressurization and to minimize turbulence.

G. Building/Zone Pressurization:
The TAB agency shall test and adjust building/zone pressurization by setting the design flows to meet the required flow direction and pressure differential. For positive pressure areas, it shall set the supply air to design flow, and gradually reduce the exhaust air rate to obtain the required flow or pressure difference. For negative pressure areas, it shall set the supply air to design flow, and gradually increase the exhaust air rate to obtain the required flow or pressure difference.

END OF SECTION 25 05 93

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 07 00 - MECHANICAL INSULATION

PART 1 - GENERAL

1.1 DESCRIPTION

A. Pipe insulation installation shall not begin until all work has been tested and found to be tight. All insulation shall be UL listed and have a flame spread of less than 25 and a developed smoke rating less than 50. All insulation shall be banded with aluminum bands, three per section. All insulation shall be continuous through walls, floors, ceilings, etc.

PART 2 - MATERIALS

2.1 CONDENSATE DRAIN PIPING

A. Insulate condensate drain piping with 3/4 inch thick closed cell rubber type insulation.

2.2 REFRIGERANT LINES

A. Insulate all refrigerant suction lines with 1 inch thick closed cell rubber insulation. Apply two (2) coats of black mastic where the lines are exposed to the weather. Refrigerant piping below grade shall be installed in watertight PVC sleeve.

2.3 AIR CONDITIONING DUCTWORK

A. Insulate all ducts above ceiling with one layer of 3 inch thick, 3/4 pound density flexible Fiberglass duct insulation with aluminum foil facing. Duct insulation to be applied with 2 inches lap of facing sealed with tape and outward clinch staples. Seal all joints with 2 inch wide vapor barrier tape. An additional band of tape shall be applied between the circumferential joints for a maximum 2 foot spacing of taped bands.

B. The ductwrap shall have a minimum installed R-value of 8.5 and shall comply with Energy Code requirements..

2.4 HORIZONTAL WASTE PIPING

A. All horizontal waste lines and traps above first floor slab which receive condensate from air conditioning equipment, roof drain bodies, shall be insulated same with 2 inch thick, 3/4 pound density fiberglass insulation with aluminum foil vapor barrier or closed cell rubber insulation.

2.5 KITCHEN HOOD EXHAUST DUCTWORK

A. Refer to Kitchen Hood specifications section.

2.6 INSULATION BANDS

A. All pipe insulation shall be banded with nylon tie-wrap bands, three to a section, and with one band on each side of each fitting, valve, etc.

2.7 FLANGES, VALVES AND FITTINGS

A. All flanges, valves and fittings shall be insulated with fabricated fiberglass molded fitting insulation, using factory fabricated fittings up to 3 inches and fabricated mitered segments of pipe insulation equal in thickness to the insulation to the adjoining pipe. All fabricated mitered segments shall be covered with matching embossed vapor barrier laminate.

PART 3 - INSTALLATION

3.1 Provide clearance for installation of insulation and for access to valves, air vents, drains and unions.

A. Insulation Installation:

1. Do not install covering before piping has been tested and approved.
2. Ensure piping surface is clean and dry prior to installation.
3. Ensure insulation is dry before and during application.
4. Insulation shall be continuous through walls, floors and ceiling. Pack around pipes with fire proof self-supporting insulation material, fully sealed.
5. Insulate fittings and valves. The end of the insulation shall be fitted with a metal escutcheon plate with set screw or taped neatly with pressure sensitive fiberglass reinforcing cloth.
6. All joints shall be sealed with 3 inch wide fiberglass reinforcing cloth with pressure sensitive adhesive.
7. Pipe insulation at Hangers and Supports: Pipe insulation at hanger and support shall be protected with a half circular shield of the size of the insulation and 12 inches long constructed from 20 gauge galvanized steel. The shield shall be held in place with the fiberglass reinforcing cloth and pressure sensitive adhesive. Where pipes pass through walls, ceiling and floor in finished areas, escutcheon plates shall be installed to encompass pipe and insulation. Escutcheon plates shall be chromed brass or stainless steel and shall be either solid or the clamp on split type.
8. Painting of fiberglass pipe jacket is not required. Piping shall be painted colors as standard in this facility.

END OF SECTION 23 07 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 09 00 - TEMPERATURE CONTROLS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

A. Refer to Section 23 05 00, Section 23 05 03, Section 23 30 00 and Section 23 70 00, provisions of which apply to work under this Section.

B. All control systems shall be furnished complete and functioning.

C. Coordinate all control work with the mechanical and electrical contractors. Contact the Test and Balance Contractor and notify them as to when controls work shall be installed. Test and Balance controller shall verify controls systems installation and proper operations.

1.2 DESCRIPTION OF WORK

A. Provide a complete system of "hard-wired" automatic controls (wireless unacceptable) as indicated herein. Control system shall consist of all thermostats, sensors, actuators, operators, wiring, switches, relays and control panels necessary to accomplish the control sequence specified herein.

1.3 RELATED WORK IN OTHER SECTIONS

A. For extent of power wiring and connection to mechanical equipment under Electrical Work, refer to Division 26.

B. For control devices furnished with equipment, refer to equipment specifications and schedules. Any controls equipment not specifically called for elsewhere shall be provided by controls contractor. All control wiring shall be done by controls contractor.

C. All power for control devices such as actuators, operators, fire/smoke dampers, control dampers, etc. shall be furnished, installed and wired by the Controls Contractor. Controls Contractor may use 24 VAC or 120 VAC for the control system. The controls contractor shall be responsible for obtaining the necessary power and pay all costs associated with obtaining power to controls and controls equipment.

D. All interior control wiring shall be installed in galvanized EMT conduit. The last 6 inches at connection to equipment shall be flexible metal conduit. All control wiring on exterior of building shall be in Seal-Tite conduit and/ or Liquid Tight flexible conduit.

E. All control wiring shall be furnished and installed by this contractor.

1.4 SERVICE

A. Installing Contractor (Mechanical Contractor or subcontractor under the Mechanical Contractor) shall maintain adequate automatic control personnel on his payroll to provide back-up project control service on the automatic control system provided under this contract.

1.5 WARRANTY

A. Contractor shall warranty all work performed under this contract to be free of any defects in workmanship or material for a period of one year after final acceptance by the Owner's representative. The installing controls contractor shall include a second year of extended warranty to cover all parts and labor. The warranty and extended warranty shall include quarterly calibration and set-up checks of all controls. THIS WARRANTY DOES NOT START ON DATE THAT THE MECHANICAL EQUIPMENT IS STARTED.

1.6 SUBMITTAL

A. Submit shop drawings and product data sheets indicating configuration, general assembly, and materials used in fabrication.

B. Submit manufacturer's installation instructions. Instructions shall include complete wiring diagrams drawn specifically for this project.

1.7 OPERATION AND MAINTENANCE

A. Include manufacturer's descriptive literature, operating instructions, and maintenance data.

1.8 QUALITY ASSURANCE

A. Manufacturer shall be a company specializing in products of the type specified in this section. All components shall be Class A quality commercial or industrial grade for installation in locations or environments shown on plans.

1.9 SYSTEM RESPONSIBILITY

A. The entire control system, shall be furnished by a single source manufacturer who shall be responsible for the entire system. The installations shall be by technicians employed by the controls system manufacturer.

PART 2 - PRODUCTS

2.1 FIRESTATS AND SMOKE DETECTORS

A. Duct smoke detectors shall be furnished and installed by mechanical contractor. Install a smoke detector in the supply air section/duct and return air section/ duct of each unit delivering over 2000 cfm to stop the fan and close the outside air dampers in the event of excessive temperature or smoke. Firestats to be provided in the return air units of all units over 600 cfm.

B. Smoke detectors shall be addressable and compatible with the fire alarm system.

C. Where and when the building does not have a fire alarm system, provide a remote annunciator with remote reset for each detector.

D. All smoke detectors shall have remote reset.

2.2 TEMPERATURE CONTROLLER

A. Refer to Section 23 70 00, Packaged Outside Air Unit for controller.

2.3 WIRING

A. Factory mount and wire controls. Mount electrical components in control box with removable cover. Provide clearance for access to controls (36 inch clearance).

B. Provide terminal strip(s) for field wiring of thermostat, communications and power source. DO NOT USE WIRE NUTS IN JUNCTION BOX.

C. All wiring shall comply with local and national electric codes and the manufacturer's published installation manual.

D. Provide terminal strip(s) for field wiring of air conditioning unit input connections, duct temperature sensor, velocity sensor, static pressure sensor, communications, start/stop devices, VFD controls, time clock, bypass damper motor and power wiring, etc. Do not use wire nuts on loose wire. All wire shall be in conduit, flexible conduit or wiring harness.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Division 26, ELECTRICAL, shall be responsible for point to point wiring of all starters and starting switches not factory installed in the HVAC equipment.

B. Install all components of control systems under this Section using experienced control mechanics, all in the regular employ of the Installing Contractor, or the apparatus manufacturer.

3.2 WIRING

A. Install all control, pilot circuit and interlock wiring, including wiring through interposed safety or other auxiliary control devices within the confines of the mechanical equipment only. Wiring of thermostats shall be by the Mechanical Contractor.

B. All wiring shall conform to the Local and National Electrical Codes.

C. All control and interlock wiring shall be fused at conductor capacity as shown in the National Electrical Code.

D. No splices will be allowed except at junction boxes and control centers.

E. All wires to each control device must be different colors. All wires to each device must be laced or tied at point of entry into control panel and tagged as to its point of origin.

F. All wires shall be run directly from controller or controlled device to control center. There shall be no looping of wires from one device to another external to the control centers.

G. Control voltage shall be a maximum of 120-volt, unless otherwise indicated herein.

H. Control or interlock wiring shall not be run in conduit with any power wiring other than that serving the equipment controlled.

I. Refer to Division 26, ELECTRICAL, for extent of work under that Division. Provide other wiring systems required to accomplish the work of this Section, following requirements of Division 26 for products and execution.

J. Wiring connection to terminal posts shall be made by means of compression type lugs. Wire splices shall be made with sketch locks.

K. Safety devices in motor control circuits shall be wired to interrupt the holding coil circuit regardless of the position of any selector switches in the circuit.

L. Control circuit conductors shall be sized for a maximum voltage drop of 10 percent of the circuit voltage.

M. All electrical power wiring shall conform in all respects with the provisions of the National Electrical Code and Division 26, ELECTRICAL, of the Specifications.

N. Provide all necessary contactors, switches, transformers to accomplish operating sequences.

3.3 SYSTEM CHECK-OUT

A. Check-out each system for control function through entire sequence, check calibration of instruments, reset instruments control points.

B. Owner maintenance personnel shall be made thoroughly familiar, by the contractor, with the operation and service of the project automatic temperature control circuits.

3.4 SOFTWARE FOR CONTROLS SYSTEMS

A. All software required for the operation of the temperature control system shall be furnished with the control system. The temperature controls manufacturer/contractor shall furnish the software plus two years of software updates.

B. The software shall be provided in original sealed packaging with all written/printed documentation to the Test and Balance Contractor for use in balancing the project. The temperature controls contractor shall turn the software over to the owner upon completion of the project.

END OF SECTION 23 09 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 28 13 - COMMERCIAL KITCHEN HOODS

PART 1 - GENERAL

1.1 GENERAL

A. The General Section the Mechanical Specification is a part of the Commercial Kitchen Hood Specification and applies same as if herein specified.

1.2 SCOPE OF WORK

A. Furnish and install all materials, labor, tools, equipment and working plans as required to install and place in operation the complete Kitchen Hood System.

1.3 WORK INCLUDED

A. The work shall include but not be limited to the following:

1. All exhaust/make-up air ductwork
2. Fan packages
3. Kitchen hoods (Existing)
4. Insulation and controls

1.4 PLANS AND DIAGRAM

A. Working plans (drawings) shall be prepared by the contractor before commencing hood installation. The working drawings (plans) shall be detailed and submitted by the contractor to the following for approval:

1. State Fire Marshal/AHJ

B. Drawings must first be submitted to the Mechanical Engineer (POR) for approval. POR will then forward the plans to the State Fire Marshal/AHJ. Drawings must be submitted in conjunction with hood Fire Suppression Drawings. Refer to the State Fire Marshal's website for all fees, checklists, forms and requirements for submittal.

1.5 PERMITS, INSPECTIONS AND TESTS

A. All permits, fees, etc., for the installation, inspection, review or construction of the work which are required by any authority and/or agencies having jurisdiction, shall be obtained and paid for by the contractor.

B. All inspections, examinations and tests required shall be arranged and paid for by the contractor as necessary to obtain complete and final acceptance.

PART 2 - MATERIALS

2.1 KITCHEN HOOD EXHAUST DUCTWORK

A. All kitchen hood exhaust ductwork shall be constructed of 16 gauge black iron with weld seams and joints. All seams and joints shall be liquid tight. All construction of ductwork shall be in compliance with NFPA 96.

B. Cover the kitchen exhaust with a flexible wrap system listed and labeled (labeling on scrim shall include product name and certification mark) by a NRTL, Nationally Recognized Testing Laboratory. System shall be tested per internal fire test ASTM E 2336 and per ASTM E 119 engulfment test and achieve a 2 hour fire resistance rating. Wrap system shall be fully encapsulated to resist moisture absorption. System shall provide zero clearance to combustible protection at all locations on the system surface. Access doors shall be installed per the manufacturer's instructions to comply with local code. A listed and labeled firestop system must be available to seal the opening where the protected grease duct penetrates a fire rated floor or wall. The field applied grease duct enclosure system must be mechanically attached to the duct using steel banding and/or weld pins per manufacturer's instructions. System shall be NFPA 96 approved. Material shall be Unifrax FryeWrap® Elite® 1.5 3M Fire Barrier 615+ or prior approved equivalent.

2.2 KITCHEN HOOD FAN PACKAGE

A. Provide roof top pre-engineered exhaust and supply fan package(s) in sizes and quantities as shown on plans. The fan packages shall be a complete system manufactured and assembled by Greenheck, (Accurex) or prior approved equal.

B. The exhaust fan shall be constructed of heavy gauge aluminum. The fan wheel and cone shall be aluminum and of the high performance, centrifugal blower type, statically and dynamically balanced. The exhaust fan shall be constructed as to include a built-in grease drain. Motor and drives shall be isolated from the exhaust airstream and shall be located in a chamber cooled by air brought in through a tube from a location free of discharge contaminates. The entire drive assembly and wheel as unit shall be serviceable and removable through the support structure without dismantling the fan housing. The wheel shaft shall be mounted in heavy duty ball bearings. Drives shall be sized for 165 percent of driven horsepower. Motor pulleys shall be of the adjustable type for final system balancing made of cast iron and be keyed to motor and wheel shafts. The entire drive assembly shall be mounted in rubber vibration isolators. The exhaust fan assembly shall also include a rigid bird screen mounted within the discharge perimeter and a thermal barrier insulating the wheel compartment from the drive compartment. The fan shall be AMCA approved for sound and air performance and also shall be U.L. listed for grease removal in accordance with Underwriters Laboratories standards.

C. The supply fan unit shall be of the belt-driven, double width, double inlet, forward curved centrifugal blower type. The blower assembly shall be mounted on vibration isolators. Drives shall be sized for a minimum of 165 percent of driven horsepower. All exterior housing components of the supply unit shall be constructed of minimum 18 gauge galvanized steel, painted with a weatherproof finish that has been baked for durability. Heavy gauge adjustable angle iron support legs shall be furnished as required. The inlet of the unit shall contain bird screen and a bank of washable, removable air filters. Filters shall be of 1 inch aluminum mesh type, coated with filter adhesive compound and shall be U.L. Classified. The total fan package shall be furnished with a pre-wired control center which shall include, but not be limited to, a master-fused disconnect for main power. Connection, magnetic motor starters with thermal overloads and manual reset, fused 24-volt control transformer and distribution terminal strip for control wiring connection. All electrical components shall be U.L. Listed, Approved or Classified where applicable and wired in compliance with the National Electrical Code. Wiring shall be complete, requiring only one-point field connection for power service (exception: electric heater) and one-point field connection for low-voltage control harness.

D. Furnish motorized backdraft damper as integral part of supply unit. Damper unit shall open upon energization of supply fan and close upon shut-off of supply fan.

E. Furnish pre-fabricated roof curbs constructed of minimum 18 gauge galvanized steel with integral wood nailer, run-off cant and 1 inch rigid insulation. Provide curb extensions as required for exhaust fan to meet N.F.P.A. requirements for discharge height.

2.3 KITCHEN HOOD

A. Kitchen hoods are existing. Installation of existing hoods shall be by Mechanical Contractor. Furnish all hangers and stainless steel wrappers for a complete installation.

B. Contractor shall submit hood shop drawings along with hood suppression system for submittal to the Fire Marshal. Contractor shall obtain a copy of the required checklist for all requirements and shall pay all fees required.

2.4 FIRE PROTECTION SYSTEM - KITCHEN HOODS

A. GENERAL

1. The General Section of the Mechanical Specifications is a part of the Fire Protection System Specification and applies same as if herein included.

B. SCOPE OF WORK

1. Furnish all materials, labor, tools, equipment and working plans to install and place in operation the complete Hood Fire Protection System for the kitchen hood as herein specified. The contractor shall be responsible for preparing the plans, calculations, fees and Fire Marshal review of the system layout.

C. WORK INCLUDED

1. The work shall include providing hood fire protection system and shall include but not be limited to the following: all piping and fittings; automatic systems; alarm system; testing and approval; and service fees and installation cost.

D. PLAN AND DIAGRAM

1. Working plans (drawings) shall be prepared by the contractor before commencing fire protection installation. The working drawings (plans) shall be detailed and submitted by the contractor to the following for approval:

   a. State Fire Marshal.

E. HOOD FIRE PROTECTION SYSTEM

1. Furnish and install a fire protection system for the commercial type cooking hood as listed in these specs. The system shall be installed to meet the requirements of NFPA 96, NFPA 17A and UL 300. The Installing Contractor shall also prepare shop drawings for submittal to the State Fire Marshal for review. The Installing Contractor shall be responsible for paying all fees required for submittal to the state and local review agencies. The system shall be installed by all licensed hood fire protection contractor. The Installing Contractor shall be responsible for providing all certificates for Owner's records. The Installing Contractor shall make two (2) inspections of the system during the first year after acceptance by the Owner.
2. The fire protection system shall utilize a wet type fire suppression agent. The liquid agent shall be a potassium carbonate-based solution designed to suppress fires by its saponifying and cooling effects. The agent shall not require periodic replacement. For rapid fire knockdown, the agent shall have an expansion ratio of approximately 2200 to 1. It shall not have an adverse effect on stainless steel appliance, hoods and ducts.
3. The cylinder shall be manufactured and tested in accordance with DOT specifications. It shall be under coated with zinc chromate or red oxide and over coated with white high gloss enamel. The cylinder shall be pressurized to 175 psi to ensure rapid discharge at temperatures as low as 1 degree Fahrenheit. A highly polished metal enclosure shall be provided to conceal the cylinder.
4. The valve shall be heavy duty forged brass, chrome-plated. It shall incorporate an oil-filled bourdon tube gauge to indicate cylinder pressure.
5. The nozzles shall be heavy duty brass, chrome-plated. It shall incorporate a stainless steel strainer to remove scale and foreign matter from pipe or stainless steel tubing. A pure tin foil seal shall protect the nozzle orifice from grease build up. This seal shall be kept tightly in position by a threaded nut to ensure its permanence through the continuous heating-cooling cycle.
6. The system shall be designed for automatic operation with provision for remote and/or local manual control(s). Automatic operation shall be initiated by fusible metallic links, glass bulb links, or electric detectors. The links and glass bulbs are to be utilized with stainless steel cable and corner pulleys employing stainless steel ball bearings. All cable and wiring shall be enclosed in conduit. Where used, the electric detectors are to be utilized with a control panel and an electro-thermal link

that are UL listed for use with the system. All electrical work shall comply with the National Electric Code.

7. Where gas-fired appliances exist, a gas shut-off valve of either the mechanical or electrical type shall be automatically closed upon system actuation. The mechanical type shall be shut-off though the mechanical actuator or a pneumatic release installed in the discharge line. The electric type shall be wired through a manual reset relay to either micro-switch or pressure switch wired through a magnetic contactor. All work shall comply with the National Electric Code.
8. Pipe shall be black steel, stainless steel, or brass standard weight (Schedule 40). Fittings shall be malleable, ductile, or cast iron, steel, stainless steel, or brass and may be standard weight. Stainless steel tubing incorporating bends or stainless steel fittings may also be used. Fittings may be chrome-plated and piping chrome-plated or sleeved. All pipe runs shall be rigidly secured with suitable straps or hangers. Wherever possible, multiple cylinder systems shall be manifolded to minimize pipe.
9. The system shall be installed by an authorized factory trained contractor. The Installing Contractor shall visit the project to take all field measurements and verify the conditions. The Installing Contractor shall acquire and submit all plans, permits and approvals necessary for proper installation and final acceptance. Upon completion, the Installing Contractor shall conduct any and all tests required. The installation shall comply with the manufacturer's installation manual, Underwriters Laboratories listing, National Fire Protection Association Pamphlets 96 and 17A and all applicable regulatory and insurance requirements.

PART 3 - INSTALLATION

3.1 DUCTS

A. Refer to specification section 23 30 00 for any additional comments regarding general duct construction or layout.

PART 4 - EXECUTION

4.1 INSTALLATION

A. The Installing Contractor shall install to meet the manufacturer's instructions.

END OF SECTION 23 28 13

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 30 00 - AIR DISTRIBUTION

PART 1 - GENERAL

1.1 GENERAL

A. Furnish and install all ducts for Air Conditioning, Heating, and Ventilating Systems as shown on the plans and as may be required to provide complete system. Ductwork shall be complete with grilles, vanes, flashings, hangers, flexible connections, splitters, manual dampers, fresh air inlets, louvers, reinforcing angles, etc. All ductwork shall be concealed and insulated as hereinafter specified.

1.2 COORDINATION

A. The General Contractor and Mechanical Contractor shall coordinate the space clearances required for ductwork with the structure, ceilings, lights, sprinklers, etc. In some cases, due to space limitations, it may be necessary to re-size ductwork to meet the conditions of the project. Any re-sizing required shall be part of this project and done without any additional cost to the project. DO NOT MAKE DUCTWORK WITHOUT COORDINATION.

1.3 DUCTWORK SHOP DRAWINGS

A. The Mechanical Contractor/ Sheetmetal Contractor shall prepare complete sheetmetal ductwork shop drawings showing coordination with all trades on the project. The shop drawings shall show all offsets, transitions, size changes to resolve conflict, dampers, fire dampers, grilles, air units, etc. These shop drawings shall be submitted prior to starting work and ductwork fabrication.

1.4 Sealing or flashing the building envelope due to penetrations in the building shall be the responsibility of the general contractor.

PART 2 - MATERIALS

2.1 DUCT HANGERS AND SUPPORTS

A. All ductwork shall be properly braced to prevent rattling, breathing, or other unnecessary noise. No sharp edges or obstructions shall project into air stream.

2.2 LOW PRESSURE DUCTWORK

A. All ductwork shall be galvanized steel and shall be of gauges and construction as recommended by ASHRAE Guide and Data Book and SMACNA guidelines. Gauges are as follows with longest side governing.

Dimension of longest side	Low Pressure Ductwork Sheet Metal Gauge
0"-12"	26 gauge
13"-30"	24 gauge
31"-54"	22 gauge
55"-84"	20 gauge

B. Low pressure ductwork shall be all exhaust ducts, return air ducts, fresh air ducts and supply ducts.

C. Joints and reinforcing shall be as per ASHRAE Guide and Data Book and all slips shall be installed without edge of internal part of slip facing downstream.

D. Construction standard of Article 110, of the National Board of Fire Underwriters Bulletin 90, latest edition, shall apply throughout.

E. Flashings shall be of sheet copper and shall be furnished and installed around all outside openings used for ducts of fans and wherever required. Roof flashings shall extend at least 8 inches above roof.

F. All ducts shall be straight and true and installed in a neat and workmanlike manner.

G. All edges shall be straight and true and all bends shall be made with veined turns. Where long radius turns cannot be used, the contractor shall use square turns and use air splitters spaced not more than 3 inches center to center, and of a length so air will be properly distributed over ducts.

H. All ducts shown are metal to metal dimensions.

I. Mastic shall be applied to both male and female connections (all seams and joints) to make all duct joints air tight (applies to all ductwork; round or rectangular). Surplus mastic shall be removed. Tape and re-mastic joints if necessary. Mastic (hard-cast or equivalent duct sealer : tape not acceptable) shall be applied to the joints during assembly so that sealant is on all mating surfaces of the joint.

2.3 DUCT LINERS

A. Low pressure rectangular supply ductwork shall not be lined. All supply and return air ductwork shall be wrapped with same insulation as specified for round ductwork. Exhaust ductwork shall not be insulated. LINED DUCTWORK IS NOT PERMITTED IN THIS PROJECT. WRAP ALL DUCTWORK.

2.4 FILTERS--PRIMARY

A. Units shall be equipped with low velocity filter section with 30 percent efficient 2 inches thick pleated type (Continental air filters "cono pleat" FARR 3030, American Air Filter or equal) throwaway filters.

B. Provide and install one set of filters as called for in these Specifications for initial testing and start-up and another complete set upon completion of the project.

2.5 DUCT ACCESSORIES

A. Dampers of the fusible link operated type shall be provided in all ductwork passing through floor or fire walls.

B. Provide quadrant or adjustable splitters and mark shaft to give position of splitter damper in duct.

C. Provide vanes behind every supply grille or diffuser. Splitters shall be provided where shown on plans and where located in concealed non-accessible space provided Young Regulators to operate splitter. Vanes shall be Tuttle and Bailey "Ducturns", Barber-Coleman, Uniflo, or equivalent. Shop fabricated vanes will be acceptable. All dampers shall be constructed of 14 gauge steel.

2.6 REGISTERS, GRILLES AND DIFFUSERS

A. Ceiling supply outlets, unless otherwise indicated on plans shall be Titus, Price, Nailor or approved equal. Outlets shall be mounted tight to the construction, and shall have frame suitable for type of ceiling used unless otherwise noted.

B. Return air grilles shall be as manufactured by Titus, Price, Nailor or approved equivalent and shall be of style called for on plans.

C. All supply outlets shall have sponge rubber gaskets.

D. All grilles, diffusers, and registers shall be of sizes indicated on plans or scheduled on drawings.

E. Unless otherwise shown on drawings, all grilles installed in the ceiling shall be furnished with white baked-on enamel finish.

2.7 FIRE DAMPERS

A. Furnish and install, at locations shown on plans, fire dampers constructed and tested in accordance with UL Safety Standard 555. Each fire damper shall have a 1-1/2 hour fire protection rating, 212 degrees Fahrenheit fusible link, and shall include a UL label in accordance with established UL labeling procedures. Damper manufacturer's literature

submitted for approval prior to installation shall include comprehensive performance data developed from testing in accordance with AMCA Standard 500 and shall illustrate pressure drops for all sizes of dampers required at all anticipated air flow rates. Fire dampers shall be equipped for vertical or horizontal installation as required by the location shown. Fire dampers shall be installed in wall and floor openings utilizing steel sleeves, angles, other materials, and practices required to provide an installation equivalent to that utilized by the manufacturer when dampers were tested at UL. Installation shall be in accordance with the damper manufacturer's instructions. Fire dampers shall be Ruskin type IBD, Arrow, Cesco, Pref-Co, or equal.

B. Fire dampers installed within 10 feet of the air handling unit or where velocities exceed 2000 fpm. Dampers shall be static type for systems with duct smoke detectors, dynamic for systems without duct detector fan shut down.

1. Furnish and install at locations within 10 feet of the air handling unit multi blade fire dampers constructed and tested in accordance with UL safety standard 555 (dynamic) that meet or exceed the following specifications:
   a. Frame shall be a minimum of 16 gauge galvanized (1.52) steel formed into a structural hat and tabbed with tabbed corners for reinforcement. The blades shall be air foil-shaped double skin with 14 gauge (1.90) equivalent thickness. Bearing shall be stainless steel sleeve turning in an extruded hole in the frame.
   b. Each fire damper shall have a 1-1/2 hour fire protected rating, 212 degree fusible link and shall include a UL label in accordance with established labeling procedure.
   c. Damper manufacturers' literature submitted for approval prior to installation shall include comprehensive performance data developed from testing in accordance with the UL 555 standard.
   d. Fire dampers shall have been tested to close under dynamic air flow conditions with pressures up to 4 inches w.g. and to 4,000 fpm air velocity.
   e. Fire dampers shall be equipped for vertical or horizontal installation as required by location shown.
   f. Fire dampers shall be installed in a wall or floor opening using steel sleeves, angles and other materials and practices required to provide an installation equivalent used by manufacturer when damper was tested at UL. Installation shall be in accordance with the damper manufacturers' instructions.

C. Fire dampers installed beyond 10 feet of the air handling unit and where velocities are under 2000 fpm.

1. Furnish and install at locations shown on plan fire dampers constructed and tested in accordance with UL safety standard 555.
   a. Fire dampers shall have been tested to close under dynamic air flow conditions and be labeled as a dynamic fire damper (static fire dampers are not allowed).
   b. Each fire damper shall have a 1-1/2 hour fire protected rating, 212 degree fusible link and shall include a UL label in this specification accordance with UL 555 standards, and a dynamic label that shall illustrate maximum allowable cfm at 8 inches static pressure for in-duct mounted and maximum allowable cfm at 8 inches static pressure for in-duct mounted and maximum allowable at 4 inches static pressure for un-ducted, in-wall mounting.

c. Fire dampers shall be equipped for vertical or horizontal installation as required by location shown.
d. Fire dampers shall be installed in wall and floor openings using steel sleeves, angles and other materials and practices required to provide an installation equivalent to that used by the manufacturer when dampers were tested at UL. Installation shall be in accordance with damper manufacturers' instructions.

D. Round fire dampers: All systems with pressures to 6 inches w.q. and velocities to 4000 fpm.

1. Furnish and install at locations shown on plans, or as described in schedules, round fire dampers meeting or exceeding the following specifications.
   a. Frame shall be a minimum of 20 gauge galvanized steel and blade shall be two piece equivalent to 14 gauge minimum galvanized. Bearings shall be stainless steel sleeve with grooves to receive the 20 gauge retaining plate for damper mounting.
   b. Each round fire damper shall be 1-1/2 hour fire rated under UL standard 555, and bear a UL label attesting to same.
   c. Each round fire damper shall be equipped with a Fuse Link which shall activate at (specifier select one) 165 degrees, 212 degrees, causing damper to close in a locked position.
   d. Manufacturer must provide UL installation instructions for both masonry walls and metal stud drywall partitions.

2.8 PRE-INSULATED FLEXIBLE DUCT

A. Flexible duct shall be rated for a maximum pressure of 16 inches (4-10 inches I.D.) or 10 inches (12-16 inches I.D.) water column positive pressure and 2 inches water column maximum negative pressure and 6000 FPM maximum velocity and listed by Underwriters Laboratories, Inc. under UL Standard 181 as a Class 1 air duct complying with NFPA Standards 90A and 90B. Flexible air duct shall be factory-made and composed of an inner duct of woven and coated fiber glass fabric providing an air seal and permanently bonded to coated steel wire helix, a fiber glass insulating blanket with minimum R-8.0 value (minimum 2 inch thickness) and low permeability outer vapor barrier of fiberglass reinforced metalized film laminate. Flexible air ducts shall be Thermaflex M-KC or Flexmaster type 4M with minimum R-8.0 insulation to meet ASHRAE 90.1 energy code. Maximum installed length shall not exceed 3 feet-0 inches without approval.

PART 3 - INSTALLATION

3.1 DUCTS

A. Ductwork shall be constructed and installed as follows:

1. Straight and smooth on inside with joints neatly finished unless otherwise directed.

2. Duct panels through 48 inch dimension having acoustic duct liner need not be crossbroken or beaded.
3. Crossbreak unlined ducts and duct panels larger than 48 inches or bead 12 inches on center.
4. Securely anchor ducts to building structure with specified duct hangers attached with screws.
5. Brace and install ducts so they shall be free of vibration under all conditions of operation.
6. Ducts shall not bear on the top of structural member.
7. Make duct take-offs to branches, registers, grilles, and diffusers as detailed on Drawings.
8. Properly flash where ducts protrude above roof.
9. Install internal ends of slip joints in direction of flow. Make joints air tight using specified duct sealer.

B. Install flexible duct connections to each air handling unit.

C. Provide each take-off with an adjustable volume damper to balance that branch.

1. Anchor dampers securely to duct.
2. Install dampers in main ducts within insulation.
3. Dampers in branch ducts shall fit against sheet metal walls, bottom and top of duct, and be securely fastened.
4. Where concealed ceiling damper regulators are installed, provide a cover plate.

D. Install grilles, registers, and diffusers.

3.2 AIR TURNS

A. Permanently installed, consisting of curved metal blades or vanes arranged to permit air to make abrupt turn without appreciable turbulence, in elbows of supply and above ground return ductwork.

B. Air turns shall be quiet and free from vibration when system is in operation.

END OF SECTION 23 30 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 23 70 00 - AIR CONDITIONING

PART 1 - GENERAL

1.1 DESCRIPTION

A. The Air Conditioning System, in general, shall be for the entire building providing cooling and dehumidification in summer and heating in winter. A constant amount of fresh air shall be taken into the system and all air shall be filtered.

B. The General Contractor (Prime Contractor) who has the contracts with the Owner shall be responsible for installing the mechanical systems using qualified subcontractors and/or employees. Any incorrect or improper work shall be corrected by the General Contractor.

C. The General Contractor shall be the sole source responsible party to furnish and install the mechanical system. General Contractor shall be properly licensed to perform this work.

1.2 STANDARDS

A. All air conditioning equipment shall comply with the requirements of applicable ARI standards and shall be tested, rated, labeled, and listed accordingly.

1.3 SPACE REQUIREMENTS

A. General Contractor and Mechanical Contractor shall refer to architectural, structural and electrical drawings and install all equipment, piping, etc. to meet building and space requirements. No equipment shall be bid on or submitted for approval if it will not fit into the space provided or coordinate with other trades involved on the project.

1.4 COMPRESSOR WARRANTIES

A. On all packaged and/or split system DX equipment 5 tons and below, the manufacturer shall provide a full 10 year labor and material warranty for any and all compressor failures during the warranty period. This warranty is for labor, materials and refrigerant for the compressor replacement.

B. On all packaged and/or split system DX equipment 6 tons and larger, the manufacturer shall provide a full 5 year labor and material warranty for any and all compressor failures during the warranty period. This warranty is for labor, materials and refrigerant for the compressor replacement.

C. The manufacturer shall warranty all parts, labor and refrigerant systems on the entire unit for the warranty period. In addition, annually, the manufacturer's service technicians

shall make a warranty check inspection of the unit with report to the Owner. This warranty shall not include any equipment maintenance; all equipment maintenance is the responsibility of the Owner. The manufacturer shall have full access to the units during the construction period.

D. If a longer warranty period is required elsewhere in these specs, the longer warranty period shall apply.

PART 2 - MATERIALS

2.1 PIPING

A. All piping shall be of materials as hereinbefore specified.

2.2 PACKAGED OUTSIDE AIR UNIT (100% OUTSIDE AIR)

A. Packaged air-cooled condenser units shall be certified in accordance with ANSI/AHRI Standard 340/360 performance rating of commercial and industrial unitary air-conditioning and heat pump equipment.

1. Unit shall be certified in accordance with UL Standard 1995/CSA C22.2 No. 236, Safety Standard for Heating and Cooling Equipment.
2. Unit and refrigeration system shall comply with ASHRAE 15, Safety Standard for Mechanical Refrigeration.
3. Unit shall be certified in accordance with ANSI Z21.47b/CSA 2.3b and ANSI Z83.8/CSA 2.6, Safety Standard Gas-Fired Furnaces.
4. Unit Energy Efficiency Ratio (EER) shall be equal to or greater that prescribed by ASHRAE 90.1, Energy Efficient Design of New Buildings except Low-Rise Residential Buildings.
5. Unit shall be safety certified by ETL and ETL US listed. Unit nameplate shall include the ETL/ETL Canada label.
6. Unit shall be approved for use in and outside High Velocity Hurricane Zones (HVHZ) by the Florida Building Code (FL# 15031), when using the required steel rooftop curb and attachment methods. Maximum allowable lateral wind pressure is +100psf/-100psf. Maximum allowable uplift is +50psf/-50psf. Positive and negative required design pressures calculated for use with this system shall be determined by others on a job specific basis, in accordance with the governing code. Site specific pressures shall be less than or equal to the listed positive or negative allowable lateral wind design pressure and allowable uplift values for the product.

B. Manufacturer shall provide a limited "parts only" warranty for a period of 24 months from the date of equipment startup or 30 months from the date of original equipment shipment from the factory, whichever is less. Warranty shall cover material and workmanship that prove defective, within the specified warranty period, provided manufacturer's written instructions for Installation, Operation, and maintenance have been followed. Warranty excludes parts associated with routine maintenance, such as belts and filters.

C. Products shall be provided by the following manufacturers:

1. AAON, Addison or approved Equal
2. Substitute equipment may be considered for approval that includes at a minimum:
   a. R-410A refrigerant
   b. Variable capacity compressor with 10-100% capacity control
   c. Direct drive supply fans
   d. Double wall cabinet construction
   e. Insulation with a minimum R-value of 13
   f. Stainless steel drain pans
   g. Hinged access doors with lockable handles
   h. All other provisions of the specifications must be satisfactorily addressed

D. General Description

1. Packaged rooftop unit shall include compressors, evaporator coils, filters, supply fans, dampers, air-cooled condenser coils, condenser fans, reheat coil, gas heaters, and unit controls.
2. Unit shall be factory assembled and tested including leak testing of the DX coils, pressure testing of the refrigeration circuit, and run testing of the completed unit. Run test report shall be supplied with the unit in the service compartment's literature pocket.
3. Unit shall have decals and tags to indicate lifting and rigging, service areas and caution areas for safety and to assist service personnel.
4. Unit components shall be labeled, including refrigeration system components and electrical and controls components.
5. Estimated sound power levels (dB) shall be shown on the unit ratings sheet.
6. Installation, Operation, and Maintenance manual shall be supplied within the unit.
7. Laminated color-coded wiring diagram shall match factory installed wiring and shall be affixed to the interior of the control compartment's hinged access door.
8. Unit nameplate shall be provided in two locations on the unit, affixed to the exterior of the unit and affixed to the interior of the control compartment's hinged access door.

E. Construction

1. All cabinet walls, access doors, and roof shall be fabricated of double wall, impact resistant, rigid polyurethane foam panels.
2. Unit insulation shall have a minimum thermal resistance R-value of 13. Foam insulation shall have a minimum density of 2 pounds/cubic foot and shall be tested in accordance with ASTM D1929-11 for a minimum flash ignition temperature of 610°F.
3. Unit construction shall be double wall with G90 galvanized steel on both sides and a thermal break. Double wall construction with a thermal break prevents moisture accumulation on the insulation, provides a cleanable interior, prevents heat transfer through the panel, and prevents exterior condensation on the panel.
4. Unit shall be designed to reduce air leakage and infiltration through the cabinet. Cabinet leakage shall not exceed 1% of total airflow when tested at 3 times the minimum external static pressure provided in AHRI Standard 340/360. Panel

deflection shall not exceed L/240 ratio at 125% of design static pressure, at a maximum 8 inches of positive or negative static pressure, to reduce air leakage. Deflection shall be measured at the midpoint of the panel height and width. Continuous sealing shall be included between panels and between access doors and openings to reduce air leakage. Piping and electrical conduit through cabinet panels shall include sealing to reduce air leakage.

5. Roof of the air tunnel shall be sloped to provide complete drainage. Cabinet shall have rain break overhangs above access doors.
6. Access to filters, dampers, cooling coils, reheat coil, heaters, compressors, and electrical and controls components shall be through hinged access doors with quarter turn, zinc cast, lockable handles. Full length stainless steel piano hinges shall be included on the doors.
7. Exterior paint finish shall be capable of withstanding at least 2,500 hours, with no visible corrosive effects, when tested in a salt spray and fog atmosphere in accordance with ASTM B 117-95 test procedure.
8. Units with cooling coils shall include double sloped 304 stainless steel drain pans.
9. Unit shall be provided with base discharge and return air openings. All openings through the base pan of the unit shall have upturned flanges of at least 1/2 inch in height around the opening.
10. Unit shall include lifting lugs on the top of the unit.
11. Unit base pan shall be provided with 1/2 inch thick foam insulation.

F. Electrical

1. Unit shall be provided with factory installed and factory wired, non-fused disconnect switch.
2. Unit shall be provided with a factory installed and factory wired 115V, 13 amp GFI outlet disconnect switch in the unit control panel.

G. Supply Fans

1. Unit shall include direct drive, unhoused, backward curved, plenum supply fans.
2. Blowers and motors shall be dynamically balance and mounted on rubber isolators.
3. Motors shall be premium efficiency ODP with ball bearings rated for 200,000 hours service with external lubrication points.
4. Variable frequency drives shall be factory wired and mounted in the unit. Fan motors shall be premium efficiency.

H. Cooling Coils

1. Evaporator Coils
   a. Coils shall be designed for use with R-410A refrigerant and constructed of copper tubes with aluminum fins mechanically bonded to the tubes and galvanized steel end casings. Fin design shall be sine wave rippled.
   b. Coils shall have interlaced circuitry and shall be 6 row high capacity.
   c. Coils shall be hydrogen or helium leak tested.
   d. Coils shall be furnished with factory installed expansion valves.

I. Refrigeration System

1. Unit shall be factory charged with R-410A refrigerant.
2. Compressors shall be scroll type with thermal overload protection and carry a 10 year non-prorated warranty, from the date of original equipment shipment from the factory.
3. Compressors shall be mounted in an isolated service compartment which can be accessed without affecting unit operation. Lockable hinged compressor access doors shall be fabricated of double wall, rigid polyurethane foam injected panels to prevent the transmission of noise outside the cabinet.
4. Compressors shall be isolated from the base pan with the compressor manufacturer's recommended rubber vibration isolators, to reduce any transmission of noise from the compressors into the building area.
5. Each refrigeration circuit shall be equipped with expansion valve type refrigerant flow control.
6. Each refrigeration circuit shall be equipped with automatic reset low pressure and manual reset high pressure refrigerant safety controls, Schrader type service fittings on both the high pressure and low pressure sides and a factory installed replaceable core liquid line filter driers.
7. Unit shall include a variable capacity scroll compressor on the lead refrigeration circuit which shall be capable of modulation from 10-100% of its capacity.
8. Lead refrigeration circuit shall be provided with hot gas reheat coil, modulating valves, electronic controller, supply air temperature sensor and a control signal terminal which allow the unit to have a dehumidification mode of operation, which includes supply air temperature control to prevent supply air temperature swings and overcooling of the space.
9. Each refrigeration circuit shall be equipped with a liquid line sight glass.
10. Each refrigeration circuit shall be equipped with suction and discharge compressor isolation valves.

J. Condensers

1. Air-Cooled Condenser
   a. Condenser fans shall be a vertical discharge, axial flow, direct drive fans.
   b. Coils shall be designed for use with R-410A refrigerant. Coils shall be multi-pass and fabricated from aluminum microchannel tubes.
   c. Coils shall be designed for a minimum of 10°F of refrigerant sub-cooling.
   d. Coils shall be hydrogen or helium leak tested.
   e. Condenser fans shall be high efficiency electrically commutated motor driven with factory installed head pressure control module. Condenser airflow shall continuously modulate based on head pressure and cooling operation shall be allowed down to 35°F with adjustable compressor lockout.

K. Gas Heating

1. Stainless steel heat exchanger furnace shall carry a 25 year non-prorated warranty, from the date of original equipment shipment from the factory.
2. Gas furnace shall consist of stainless steel heat exchangers with multiple concavities, an induced draft blower and an electronic pressure switch to lockout the gas valve until the combustion chamber is purged and combustion airflow is established.
3. Furnace shall include a gas ignition system consisting of an electronic igniter to a

pilot system, which will be continuous when the heater is operating, but will shut off the pilot when heating is not required.

4. Unit shall include a single gas connection and have gas supply piping entrances in the unit base for through-the-curb gas piping and in the outside cabinet wall for across the roof gas piping.
5. Natural gas furnace shall be equipped with modulating gas valves, adjustable speed combustion blowers, stainless steel tubular heat exchangers, and electronic controller. Combustion blowers and gas valves shall be capable of modulation. Electronic controller includes a factory wired, field installed supply air temperature sensor. Sensor shall be field installed in the supply air ductwork. Supply air temperature setpoint shall be adjustable on the electronic controller within the controls compartment.

L. Filters

1. Unit shall include 2 inch thick, pleated panel filters with an ASHRAE efficiency of 30% and MERV rating of 8, upstream of the cooling coil.
2. Unit shall include 1 inch aluminum mesh pre filters upstream of the outside air opening.

M. Outside Air/Economizer

1. Unit shall include 100% motor operated outside air damper assembly constructed of extruded aluminum, hollow core, airfoil blades with rubber edge and end seals. Damper blades shall be gear driven and designed to have no more than 20 cfm of leakage per sq ft. at 4 in. w.g. air pressure differential across the damper. Low leakage dampers shall be Class 2 AMCA certified, in accordance with AMCA Standard 511. Damper assembly shall be controlled by spring return, 2 position actuator. Unit shall include outside air opening bird screen and outside air hood.

N. Controls

1. Factory Installed and Factory Provided Controller
   a. Unit controller shall be capable of controlling all features and options of the unit. Controller shall be factory installed in the unit controls compartment and factory tested. Controller shall be capable of standalone operation with unit configuration, setpoint adjustment, sensor status viewing, unit alarm viewing, and occupancy scheduling available without dependence on a building management system.
   b. Controller shall have an onboard clock and calendar functions that allow for occupancy scheduling.
   c. Controller shall include non-volatile memory to retain all programmed values without the use of a battery, in the event of a power failure.
   d. Makeup Air Controller
      1) Unit shall modulate cooling with constant airflow to meet ventilation outside air loads. Cooling capacity shall modulate based on supply air temperature.
      2) With modulating hot gas reheat, unit shall modulate cooling and hot gas reheat as efficiently as possible, to meet outside air humidity loads and prevent supply air temperature swings and overcooling of the space.

3) Unit shall modulate heating with constant airflow to meet ventilation outside air loads. Heating capacity shall modulate based on supply air temperature.

e. Unit configuration, setpoint adjustment, sensor status viewing, unit alarm viewing, and occupancy scheduling shall be accomplished with connection to interface module with LCD screen and input keypad, interface module with touch screen, or with connection to PC with free configuration software. Controller shall be capable of connection with other factory installed and factory provided unit controllers with individual unit configuration, setpoint adjustment, sensor status viewing, and occupancy scheduling available from a single unit. Connection between unit controllers shall be with a modular cable. Controller shall be capable of communicating and integrating with a LonWorks or BACnet network.

O. Curbs shall to be fully gasketed between the curb top and unit bottom with the curb providing full perimeter support, cross structure support and air seal for the unit. Curb gasket shall be furnished within the control compartment of the rooftop unit to be mounted on the curb immediately before mounting of the rooftop unit.

P. Installation, Operation, and Maintenance manual shall be supplied with the unit. Installing contractor shall install unit, including field installed components, in accordance with Installation, Operation, and Maintenance manual instructions. Start up and maintenance requirements shall be complied with to ensure safe and correct operation of the unit.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install air conditioning systems in accordance with Section 23 05 00.

B. Mount equipment complete with piping system, roof curbs and air distribution system, and provide for power connection.

C. Complete structural, mechanical, and electrical connections in accordance with manufacturer's installation instructions.

3.2 TESTING

A. Refrigerant lines shall be tested under 200 psi carbon dioxide pressure for 5 hours using soap suds at joints to test for leaks. Evacuate system and charge with refrigerant.

B. All line testing shall be witnessed by the Test and Balance Agency (TAB). TAB Agency shall record results and include in final TAB report.

END OF SECTION 23 70 00

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

Table of Contents Generated by MasterWorks: 12/10/2015

Division	Section Title
DIVISION 26 - ELECTRICAL	
260519	LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES
260526	GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
260529	HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS
260533	RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS
260553	IDENTIFICATION FOR ELECTRICAL SYSTEMS
262200	LOW-VOLTAGE TRANSFORMERS
262416	PANELBOARDS
262726	WIRING DEVICES
262813	FUSES
262816	ENCLOSED SWITCHES AND CIRCUIT BREAKERS
262913	ENCLOSED CONTROLLERS
264313	SURGE PROTECTION FOR LOW-VOLTAGE ELECTRICAL POWER CIRCUITS
265119	LED INTERIOR LIGHTING
DIVISION 28 - ELECTRONIC SAFETY AND SECURITY	
283111	DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

END OF TABLE OF CONTENTS

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Building wires and cables rated 600 V and less.
2. Connectors, splices, and terminations rated 600 V and less.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

PART 2 - PRODUCTS

2.1 CONDUCTORS AND CABLES

A. Copper Conductors: Comply with NEMA WC 70/ICEA S-95-658.

B. Conductor Insulation: Comply with NEMA WC 70/ICEA S-95-658 for Type THHN-2-THWN-2 , Type XHHW-2 and Type SO.

C. Multiconductor Cable: Comply with NEMA WC 70/ICEA S-95-658 for metal-clad cable, Type MC and Type SO with ground wire.

2.2 CONNECTORS AND SPLICES

A. Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated.

2.3 SYSTEM DESCRIPTION

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

PART 3 - EXECUTION

3.1 CONDUCTOR MATERIAL APPLICATIONS

A. Feeders: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger.

B. Branch Circuits: Copper. Solid for No. 10 AWG and smaller; stranded for No. 8 AWG and larger, except VFC cable, which shall be extra flexible stranded.

3.2 CONDUCTOR INSULATION AND MULTICONDUCTOR CABLE APPLICATIONS AND WIRING METHODS

A. Exposed Feeders: Type THHN-2-THWN-2, single conductors in raceway.

B. Feeders Concealed in Ceilings, Walls, Partitions, and Crawlspaces: Type THHN-2-THWN-2, single conductors in raceway.

C. Feeders Concealed, below Slabs-on-Grade, and Underground: Type THHN-2-THWN-2, single conductors in raceway.

D. Exposed Branch Circuits, Including in Crawlspaces: Type THHN-2-THWN-2, single conductors in raceway.

E. Branch Circuits Concealed in Ceilings, Walls, and Partitions: Type THHN-2-THWN-2, single conductors in raceway.

F. Branch Circuits Concealed, below Slabs-on-Grade, and Underground: Type THHN-2-THWN-2, single conductors in raceway.

G. Cord Drops and Portable Appliance Connections: Type SO, hard service cord with stainless-steel, wire-mesh, strain relief device at terminations to suit application.

H. Flexible Connections to Lighting Fixtures: Type MC cable with maximum length of six feet.

3.3 INSTALLATION OF CONDUCTORS AND CABLES

A. Conceal cables in finished walls, ceilings, and floors unless otherwise indicated.

B. Complete raceway installation between conductor and cable termination points according to Section 260533 "Raceways and Boxes for Electrical Systems" prior to pulling conductors and cables.

C. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values.

D. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

E. Install exposed cables parallel and perpendicular to surfaces of exposed structural members, and follow surface contours where possible.

F. Support cables according to Section 260529 "Hangers and Supports for Electrical Systems."

3.4 CONNECTIONS

A. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

B. Make splices, terminations, and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors.

C. Wiring at Outlets: Install conductor at each outlet, with at least 12 inches of slack.

3.5 IDENTIFICATION

A. Identify and color-code conductors and cables according to Section 260553 "Identification for Electrical Systems."

B. Identify each spare conductor at each end with identity number and location of other end of conductor, and identify as spare conductor.

3.6 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

3.7 FIRESTOPPING

A. Apply firestopping to electrical penetrations of fire-rated floor and wall assemblies to restore original fire-resistance rating of assembly according to Section 078413 "Penetration Firestopping."

3.8 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. After installing conductors and cables and before electrical circuitry has been energized, test service entrance and feeder conductors for compliance with requirements.

2. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
3. Infrared Scanning: After Substantial Completion, but not more than 60 days after Final Acceptance, perform an infrared scan of each splice in conductors No. 3 AWG and larger. Remove box and equipment covers so splices are accessible to portable scanner. Correct deficiencies determined during the scan.

   a. Follow-up Infrared Scanning: Perform an additional follow-up infrared scan of each splice 11 months after date of Substantial Completion.
   b. Instrument: Use an infrared scanning device designed to measure temperature or to detect significant deviations from normal values. Provide calibration record for device.
   c. Record of Infrared Scanning: Prepare a certified report that identifies splices checked and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

B. Test and Inspection Reports: Prepare a written report to record the following:

1. Procedures used.
2. Results that comply with requirements.
3. Results that do not comply with requirements and corrective action taken to achieve compliance with requirements.

C. Cables will be considered defective if they do not pass tests and inspections.

END OF SECTION 260519

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes grounding and bonding systems and equipment.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product indicated.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Burndy; Part of Hubbell Electrical Systems.
2. ERICO International Corporation.
3. ILSCO.
4. O-Z/Gedney; an EGS Electrical Group brand; an Emerson Industrial Automation business.

2.2 SYSTEM DESCRIPTION

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with UL 467 for grounding and bonding materials and equipment.

2.3 CONDUCTORS

A. Insulated Conductors: Copper wire or cable insulated for 600 V unless otherwise required by applicable Code or authorities having jurisdiction.

B. Bare Copper Conductors:

1. Solid Conductors: ASTM B 3.
2. Stranded Conductors: ASTM B 8.
3. Tinned Conductors: ASTM B 33.
4. Bonding Conductor: No. 4 or No. 6 AWG, stranded conductor.

2.4 CONNECTORS

A. Listed and labeled by an NRTL acceptable to authorities having jurisdiction for applications in which used and for specific types, sizes, and combinations of conductors and other items connected.

B. Bolted Connectors for Conductors and Pipes: Copper or copper alloy.

C. Welded Connectors: Exothermic-welding kits of types recommended by kit manufacturer for materials being joined and installation conditions.

D. Bus-Bar Connectors: Mechanical type, cast silicon bronze, solderless compression-type wire terminals, and long-barrel, two-bolt connection to ground bus bar.

2.5 GROUNDING ELECTRODES

A. Ground Rods: Copper-clad steel; 3/4 inch by 10 feet.

PART 3 - EXECUTION

3.1 APPLICATIONS

A. Conductors: Install solid conductor for No. 8 AWG and smaller, and stranded conductors for No. 6 AWG and larger unless otherwise indicated.

B. Underground Grounding Conductors: Install bare copper conductor, No. 2/0 AWG minimum.

1. Bury at least 24 inches below grade.

C. Conductor Terminations and Connections:

1. Pipe and Equipment Grounding Conductor Terminations: Bolted connectors.
2. Underground Connections: Welded connectors except at test wells and as otherwise indicated.
3. Connections to Ground Rods at Test Wells: Bolted connectors.
4. Connections to Structural Steel: Welded connectors.

3.2 GROUNDING AT THE SERVICE

A. Equipment grounding conductors and grounding electrode conductors shall be connected to the ground bus. Install a main bonding jumper between the neutral and ground buses.

3.3 GROUNDING UNDERGROUND DISTRIBUTION SYSTEM COMPONENTS

A. Comply with IEEE C2 grounding requirements.

B. Pad-Mounted Transformers and Switches: Install two ground rods around the pad. Ground pad-mounted equipment and noncurrent-carrying metal items associated with substations by connecting them to underground cable and grounding electrodes. Install tinned-copper conductor not less than No. 2 AWG for taps to equipment grounding terminals.

3.4 EQUIPMENT GROUNDING

A. Install insulated equipment grounding conductors with all feeders and branch circuits.

B. Install insulated equipment grounding conductors with the following items, in addition to those required by NFPA 70:

1. Feeders and branch circuits.
2. Lighting circuits.
3. Receptacle circuits.
4. Single-phase motor and appliance branch circuits.
5. Three-phase motor and appliance branch circuits.
6. Flexible raceway runs.

C. Air-Duct Equipment Circuits: Install insulated equipment grounding conductor to duct-mounted electrical devices operating at 120 V and more, including air cleaners, heaters, dampers, humidifiers, and other duct electrical equipment. Bond conductor to each unit and to air duct and connected metallic piping.

D. Water Heater: Install a separate insulated equipment grounding conductor to each electric water heater. Bond conductor to heater units, piping, connected equipment, and components.

3.5 INSTALLATION

A. Grounding Conductors: Route along shortest and straightest paths possible unless otherwise indicated or required by Code. Avoid obstructing access or placing conductors where they may be subjected to strain, impact, or damage.

B. Ground Rods: Drive rods until tops are 2 inches below finished floor or final grade unless otherwise indicated.

1. Interconnect ground rods with grounding electrode conductor below grade and as otherwise indicated. Make connections without exposing steel or damaging coating if any.
2. For grounding electrode system, install at least three rods spaced at least one-rod length from each other and located at least the same distance from other grounding electrodes, and connect to the service grounding electrode conductor.

C. Test Wells: Ground rod driven through drilled hole in bottom of handhole. Handholes are specified in Section 260543 "Underground Ducts and Raceways for Electrical Systems," and shall be at least 12 inches deep, with cover.

1. Test Wells: Install at least one test well for each service unless otherwise indicated. Install at the ground rod electrically closest to service entrance. Set top of test well flush with finished grade or floor.

D. Bonding Straps and Jumpers: Install in locations accessible for inspection and maintenance except where routed through short lengths of conduit.

1. Bonding to Structure: Bond straps directly to basic structure, taking care not to penetrate any adjacent parts.
2. Bonding to Equipment Mounted on Vibration Isolation Hangers and Supports: Install bonding so vibration is not transmitted to rigidly mounted equipment.
3. Use exothermic-welded connectors for outdoor locations; if a disconnect-type connection is required, use a bolted clamp.

E. Grounding and Bonding for Piping:

1. Metal Water Service Pipe: Install insulated copper grounding conductors, in conduit, from building's main service equipment, or grounding bus, to main metal water service entrances to building. Connect grounding conductors to main metal water service pipes; use a bolted clamp connector or bolt a lug-type connector to a pipe flange by using one of the lug bolts of the flange. Where a dielectric main water fitting is installed, connect grounding conductor on street side of fitting. Bond metal grounding conductor conduit or sleeve to conductor at each end.
2. Water Meter Piping: Use braided-type bonding jumpers to electrically bypass water meters. Connect to pipe with a bolted connector.
3. Bond each aboveground portion of gas piping system downstream from equipment shutoff valve.

3.6 FIELD QUALITY CONTROL

A. Perform tests and inspections. Inspect physical and mechanical condition. Verify tightness of accessible, bolted, electrical connections with a calibrated torque wrench according to manufacturer's written instructions.

END OF SECTION 260526

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Hangers and supports for electrical equipment and systems.
2. Construction requirements for concrete bases.

1.2 PERFORMANCE REQUIREMENTS

A. Design supports for multiple raceways capable of supporting combined weight of supported systems and its contents.

B. Design equipment supports capable of supporting combined operating weight of supported equipment and connected systems and components.

C. Rated Strength: Adequate in tension, shear, and pullout force to resist maximum loads calculated or imposed for this Project, with a minimum structural safety factor of five times the applied force.

PART 2 - PRODUCTS

2.1 SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

A. Steel Slotted Support Systems: Comply with MFMA-4, factory-fabricated components for field assembly.

1. Metallic Coatings: Hot-dip galvanized after fabrication and applied according to MFMA-4.
2. Channel Dimensions: Selected for applicable load criteria.

B. Raceway and Cable Supports: As described in NECA 1 and NECA 101.

C. Conduit and Cable Support Devices: Steel and malleable-iron hangers, clamps, and associated fittings, designed for types and sizes of raceway or cable to be supported.

D. Support for Conductors in Vertical Conduit: Factory-fabricated assembly consisting of threaded body and insulating wedging plug or plugs for non-armored electrical conductors or cables in riser conduits. Plugs shall have number, size, and shape of conductor gripping pieces as required to suit individual conductors or cables supported. Body shall be malleable iron.

E. Structural Steel for Fabricated Supports and Restraints: ASTM A 36/A 36M, steel plates, shapes, and bars; black and galvanized.

F. Mounting, Anchoring, and Attachment Components: Items for fastening electrical items or their supports to building surfaces include the following:

1. Powder-Actuated Fasteners: Threaded-steel stud, for use in hardened portland cement concrete, steel, or wood, with tension, shear, and pullout capacities appropriate for supported loads and building materials where used.

2. Mechanical-Expansion Anchors: Insert-wedge-type, [**zinc-coated**] [**stainless**] steel, for use in hardened portland cement concrete with tension, shear, and pullout capacities appropriate for supported loads and building materials in which used.

3. Concrete Inserts: Steel or malleable-iron, slotted support system units similar to MSS Type 18; complying with MFMA-4 or MSS SP-58.
4. Clamps for Attachment to Steel Structural Elements: MSS SP-58, type suitable for attached structural element.
5. Through Bolts: Structural type, hex head, and high strength. Comply with ASTM A 325.
6. Toggle Bolts: All-steel springhead type.
7. Hanger Rods: Threaded steel.

2.2 FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES

A. Description: Welded or bolted, structural-steel shapes, shop or field fabricated to fit dimensions of supported equipment.

B. Materials: Comply with requirements in Section 055000 "Metal Fabrications" for steel shapes and plates.

PART 3 - EXECUTION

3.1 APPLICATION

A. Comply with NECA 1 and NECA 101 for application of hangers and supports for electrical equipment and systems except if requirements in this Section are stricter.

B. Maximum Support Spacing and Minimum Hanger Rod Size for Raceway: Space supports for EMT and RMC as scheduled in NECA 1, where its Table 1 lists maximum spacings less than stated in NFPA 70. Minimum rod size shall be 1/4 inch in diameter.

C. Multiple Raceways or Cables: Install trapeze-type supports fabricated with steel slotted or other support system, sized so capacity can be increased by at least 25 percent in future without exceeding specified design load limits.

1. Secure raceways and cables to these supports with single-bolt conduit clamps using spring friction action for retention in support channel.

D. Spring-steel clamps designed for supporting single conduits without bolts may be used for 1-1/2-inch and smaller raceways serving branch circuits and communication systems above suspended ceilings and for fastening raceways to trapeze supports.

3.2 SUPPORT INSTALLATION

A. Comply with NECA 1 and NECA 101 for installation requirements except as specified in this Article.

B. Raceway Support Methods: In addition to methods described in NECA 1, EMT and RMC may be supported by openings through structure members, as permitted in NFPA 70.

C. Strength of Support Assemblies: Where not indicated, select sizes of components so strength will be adequate to carry present and future static loads within specified loading limits. Minimum static design load used for strength determination shall be weight of supported components plus 200 lb.

D. Mounting and Anchorage of Surface-Mounted Equipment and Components: Anchor and fasten electrical items and their supports to building structural elements by the following methods unless otherwise indicated by code:

1. To Wood: Fasten with lag screws or through bolts.
2. To New Concrete: Bolt to concrete inserts.
3. To Masonry: Approved toggle-type bolts on hollow masonry units and expansion anchor fasteners on solid masonry units.
4. To Existing Concrete: Expansion anchor fasteners.
5. Instead of expansion anchors, powder-actuated driven threaded studs provided with lock washers and nuts may be used in existing standard-weight concrete 4 inches thick or greater. Do not use for anchorage to lightweight-aggregate concrete or for slabs less than 4 inches thick.
6. To Steel: Welded threaded studs complying with AWS D1.1/D1.1M, with lock washers and nuts or Beam clamps (MSS Type 19, 21, 23, 25, or 27) complying with MSS SP-69.
7. To Light Steel: Sheet metal screws.
8. Items Mounted on Hollow Walls and Nonstructural Building Surfaces: Mount cabinets, panelboards, disconnect switches, control enclosures, pull and junction boxes, transformers, and other devices on slotted-channel racks attached to substrate by means that meet seismic-restraint strength and anchorage requirements.

E. Drill holes for expansion anchors in concrete at locations and to depths that avoid reinforcing bars.

3.3 INSTALLATION OF FABRICATED METAL SUPPORTS

A. Comply with installation requirements in Section 055000 "Metal Fabrications" for site-fabricated metal supports.

B. Cut, fit, and place miscellaneous metal supports accurately in location, alignment, and elevation to support and anchor electrical materials and equipment.

C. Field Welding: Comply with AWS D1.1/D1.1M.

3.4 CONCRETE BASES

A. Construct concrete bases of dimensions indicated but not less than 4 inches larger in both directions than supported unit, and so anchors will be a minimum of 10 bolt diameters from edge of the base.

B. Use 3000-psi, 28-day compressive-strength concrete. Concrete materials, reinforcement, and placement requirements are specified in Section 033000 "Cast-in-Place Concrete."

C. Anchor equipment to concrete base.

1. Place and secure anchorage devices. Use supported equipment manufacturer's setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
2. Install anchor bolts to elevations required for proper attachment to supported equipment.
3. Install anchor bolts according to anchor-bolt manufacturer's written instructions.

3.5 PAINTING

A. Touchup: Clean field welds and abraded areas of shop paint. Paint exposed areas immediately after erecting hangers and supports. Use same materials as used for shop painting. Comply with SSPC-PA 1 requirements for touching up field-painted surfaces.

1. Apply paint by brush or spray to provide minimum dry film thickness of 2.0 mils.

B. Galvanized Surfaces: Clean welds, bolted connections, and abraded areas and apply galvanizing-repair paint to comply with ASTM A 780.

END OF SECTION 260529

SECTION 260533 - RACEWAYS AND BOXES FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Metal conduits, tubing, and fittings.
2. Nonmetal conduits, tubing, and fittings.
3. Metal wireways and auxiliary gutters.
4. Nonmetal wireways and auxiliary gutters.
5. Surface raceways.
6. Boxes, enclosures, and cabinets.

B. Related Requirements:

1. Section 260543 "Underground Ducts and Raceways for Electrical Systems" for exterior ductbanks, manholes, and underground utility construction.

1.2 ACTION SUBMITTALS

A. Product Data: For surface raceways, wireways and fittings, floor boxes, hinged-cover enclosures, and cabinets.

B. Shop Drawings: For custom enclosures and cabinets. Include plans, elevations, sections, and attachment details.

PART 2 - PRODUCTS

2.1 METAL CONDUITS, TUBING, AND FITTINGS

A. Listing and Labeling: Metal conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. GRC: Comply with ANSI C80.1 and UL 6.

C. EMT: Comply with ANSI C80.3 and UL 797.

D. LFMC: Flexible steel conduit with PVC jacket and complying with UL 360.

E. Fittings for Metal Conduit: Comply with NEMA FB 1 and UL 514B.

1. Fittings for EMT:

a. Material: die cast.
b. Type: compression.

2. Expansion Fittings: PVC or steel to match conduit type, complying with UL 651, rated for environmental conditions where installed, and including flexible external bonding jumper.

F. Joint Compound for GRC: Approved, as defined in NFPA 70, by authorities having jurisdiction for use in conduit assemblies, and compounded for use to lubricate and protect threaded conduit joints from corrosion and to enhance their conductivity.

2.2 NONMETALLIC CONDUITS, TUBING, AND FITTINGS

A. Listing and Labeling: Nonmetallic conduits, tubing, and fittings shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. RNC: Type EPC-40-PVC, complying with NEMA TC 2 and UL 651 unless otherwise indicated.

C. Continuous HDPE: Comply with UL 651B.

D. Fittings for RNC: Comply with NEMA TC 3; match to conduit type and material.

E. Solvent cements and adhesive primers shall have a VOC content of 510 and 550 g/L or less, respectively, when calculated according to 40 CFR 59, Subpart D (EPA Method 24).

2.3 METAL WIREWAYS AND AUXILIARY GUTTERS

A. Description: Sheet metal, complying with UL 870 and NEMA 250, Type 1 or Type 3R unless otherwise indicated, and sized according to NFPA 70.

1. Metal wireways installed outdoors shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Fittings and Accessories: Include covers, couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.

2.4 SURFACE RACEWAYS

A. Listing and Labeling: Surface raceways and tele-power poles shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Surface Metal Raceways: Galvanized steel with snap-on covers complying with UL 5.

C. Tele-Power Poles:

1. Material: Aluminum with clear anodized finish.
2. Fittings and Accessories: Dividers, end caps, covers, cutouts, wiring harnesses, devices, mounting materials (top and bottom), and other fittings shall match and mate with tele-power pole as required for complete system. This project uses both sides for power raceways.

2.5 BOXES, ENCLOSURES, AND CABINETS

A. General Requirements for Boxes, Enclosures, and Cabinets: Boxes, enclosures, and cabinets installed in wet locations shall be listed for use in wet locations.

B. Sheet Metal Outlet and Device Boxes: Comply with NEMA OS 1 and UL 514A.

C. Cast-Metal Outlet and Device Boxes: Comply with NEMA FB 1, ferrous alloy, Type FD, with gasketed cover.

D. Nonmetallic Outlet and Device Boxes: Comply with NEMA OS 2 and UL 514C.

E. Metal Floor Boxes:

1. Material: Cast metal.
2. Type: Fully adjustable.
3. Shape: Square.
4. Listing and Labeling: Metal floor boxes shall be listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

F. Luminaire Outlet Boxes: Nonadjustable, designed for attachment of luminaire weighing 50 lb. Outlet boxes designed for attachment of luminaires weighing more than 50 lb shall be listed and marked for the maximum allowable weight.

G. Small Sheet Metal Pull and Junction Boxes: NEMA OS 1.

H. Cast-Metal Access, Pull, and Junction Boxes: Comply with NEMA FB 1 and UL 1773, cast aluminum with gasketed cover.

I. Box extensions used to accommodate new building finishes shall be of same material as recessed box.

J. Device Box Dimensions: 4 inches square by 2-1/8 inches deep.

K. Gangable boxes are prohibited.

L. Hinged-Cover Enclosures: Comply with UL 50 and NEMA 250, Type 1 or Type 3R with continuous-hinge cover with flush latch unless otherwise indicated.

1. Metal Enclosures: Steel, finished inside and out with manufacturer's standard enamel.
2. Interior Panels: Steel; all sides finished with manufacturer's standard enamel.

M. Cabinets:

1. NEMA 250, Type 1 or Type 3R galvanized-steel box with removable interior panel and removable front, finished inside and out with manufacturer's standard enamel.
2. Hinged door in front cover with flush latch and concealed hinge.
3. Key latch to match panelboards.
4. Metal barriers to separate wiring of different systems and voltage.
5. Accessory feet where required for freestanding equipment.

PART 3 - EXECUTION

3.1 RACEWAY APPLICATION

A. Outdoors: Apply raceway products as specified below unless otherwise indicated:

1. Exposed Conduit: GRC.
2. Concealed Conduit, Aboveground: GRC or RNC, Type EPC-40-PVC.
3. Underground Conduit: RNC, Type EPC-40-PVC, direct buried or concrete encased.
4. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
5. Boxes and Enclosures, Aboveground: NEMA 250, Type 3R.

B. Indoors: Apply raceway products as specified below unless otherwise indicated.

1. Exposed, Not Subject to Physical Damage: EMT.
2. Exposed, Not Subject to Severe Physical Damage: EMT.
3. Exposed and Subject to Severe Physical Damage: GRC.
4. Concealed in Ceilings and Interior Walls and Partitions: EMT.
5. Connection to Vibrating Equipment (Including Transformers and Hydraulic, Pneumatic, Electric Solenoid, or Motor-Driven Equipment): LFMC.
6. Damp or Wet Locations: GRC.
7. Boxes and Enclosures: NEMA 250, Type 1.

C. Minimum Raceway Size: 3/4-inch trade size.

D. Raceway Fittings: Compatible with raceways and suitable for use and location.

1. Rigid Steel Conduit: Use threaded rigid steel conduit fittings unless otherwise indicated. Comply with NEMA FB 2.10.
2. EMT: Use compression, cast-metal fittings. Comply with NEMA FB 2.10.
3. Flexible Conduit: Use only fittings listed for use with flexible conduit. Comply with NEMA FB 2.20.

E. Install surface raceways only where indicated on Drawings.

F. Do not install nonmetallic conduit where ambient temperature exceeds 120 deg F.

3.2 INSTALLATION

A. Comply with NECA 1 and NECA 101 for installation requirements except where requirements on Drawings or in this article are stricter. Comply with NECA 102 for aluminum conduits. Comply with NFPA 70 limitations for types of raceways allowed in specific occupancies and number of floors.

B. Keep raceways at least 6 inches away from parallel runs of flues and steam or hot-water pipes. Install horizontal raceway runs above water and steam piping.

C. Comply with requirements in Section 260529 "Hangers and Supports for Electrical Systems" for hangers and supports.

D. Arrange stub-ups so curved portions of bends are not visible above finished slab.

E. Install no more than the equivalent of three 90-degree bends in any conduit run except for control wiring conduits, for which fewer bends are allowed. Support within 12 inches of changes in direction.

F. Conceal conduit and EMT within finished walls, ceilings, and floors unless otherwise indicated. Install conduits parallel or perpendicular to building lines.

G. Support conduit within 12 inches of enclosures to which attached.

H. Raceways Shall not be Embedded in Slabs:

I. Threaded Conduit Joints, Exposed to Wet, Damp, Corrosive, or Outdoor Conditions: Apply listed compound to threads of raceway and fittings before making up joints. Follow compound manufacturer's written instructions.

J. Raceway Terminations at Locations Subject to Moisture or Vibration: Use insulating bushings to protect conductors including conductors smaller than No. 4 AWG.

K. Terminate threaded conduits into threaded hubs or with locknuts on inside and outside of boxes or cabinets. Install bushings on conduits up to 1-1/4-inch trade size and insulated throat metal bushings on 1-1/2-inch trade size and larger conduits terminated with locknuts. Install insulated throat metal grounding bushings on service conduits.

L. Install pull wires in empty raceways. Use polypropylene or monofilament plastic line with not less than 200-lb tensile strength. Leave at least 12 inches of slack at each end of pull wire. Cap underground raceways designated as spare above grade alongside raceways in use.

M. Surface Raceways:

1. Install surface raceway with a minimum 2-inchradius control at bend points.
2. Secure surface raceway with screws or other anchor-type devices at intervals not exceeding 48 inches and with no less than two supports per straight raceway section. Support surface raceway according to manufacturer's written instructions. Tape and glue are not acceptable support methods.

N. Install raceway sealing fittings at accessible locations according to NFPA 70 and fill them with listed sealing compound. For concealed raceways, install each fitting in a flush steel box with a blank cover plate having a finish similar to that of adjacent plates or surfaces.

O. Install devices to seal raceway interiors at accessible locations. Locate seals so no fittings or boxes are between the seal and the following changes of environments. Seal the interior of all raceways at the following points:

1. Where conduits pass from warm to cold locations, such as boundaries of refrigerated spaces.
2. Where an underground service raceway enters a building or structure.
3. Where otherwise required by NFPA 70.

P. Flexible Conduit Connections: Comply with NEMA RV 3. Use a maximum of 72 inches of flexible conduit for recessed and semirecessed luminaires, equipment subject to vibration, noise transmission, or movement; and for transformers and motors.

1. Use LFMC in damp or wet locations subject to severe physical damage.
2. Use LFMC in damp or wet locations not subject to severe physical damage.

Q. Mount boxes at heights indicated on Drawings. If mounting heights of boxes are not individually indicated, give priority to ADA requirements. Install boxes with height measured to center of box unless otherwise indicated.

R. Recessed Boxes in Masonry Walls: Saw-cut opening for box in center of cell of masonry block, and install box flush with surface of wall. Prepare block surfaces to provide a flat surface for a raintight connection between the box and cover plate or the supported equipment and box.

S. Horizontally separate boxes mounted on opposite sides of walls so they are not in the same vertical channel.

T. Locate boxes so that cover or plate will not span different building finishes.

U. Support boxes of three gangs or more from more than one side by spanning two framing members or mounting on brackets specifically designed for the purpose.

V. Fasten junction and pull boxes to or support from building structure. Do not support boxes by conduits.

W. Set metal floor boxes level and flush with finished floor surface.

3.3 INSTALLATION OF UNDERGROUND CONDUIT

A. Direct-Buried Conduit:

1. Excavate trench bottom to provide firm and uniform support for conduit.
2. Install backfill as specified in Section 312000 "Earth Moving."

3. After installing conduit, backfill and compact. Start at tie-in point, and work toward end of conduit run, leaving conduit at end of run free to move with expansion and contraction as temperature changes during this process. Firmly hand tamp backfill around conduit to provide maximum supporting strength. After placing controlled backfill to within 12 inches of finished grade, make final conduit connection at end of run and complete backfilling with normal compaction as specified in Section 312000 "Earth Moving."
4. Install manufactured duct elbows for stub-up at poles and equipment and at building entrances through floor unless otherwise indicated. Encase elbows for stub-up ducts throughout length of elbow.
5. Install manufactured rigid steel conduit elbows for stub-ups at poles and equipment and at building entrances through floor.

    a. Couple steel conduits to ducts with adapters designed for this purpose, and encase coupling with 3 inches of concrete for a minimum of 12 inches on each side of the coupling.
    b. For stub-ups at equipment mounted on outdoor concrete bases and where conduits penetrate building foundations, extend steel conduit horizontally a minimum of 60 inches from edge of foundation or equipment base. Install insulated grounding bushings on terminations at equipment.

6. Underground Warning Tape: Comply with requirements in Section 260553 "Identification for Electrical Systems."

3.4 INSTALLATION OF UNDERGROUND HANDHOLES AND BOXES

A. Install handholes and boxes level and plumb and with orientation and depth coordinated with connecting conduits to minimize bends and deflections required for proper entrances.

B. Unless otherwise indicated, support units on a level bed of crushed stone or gravel, graded from 1/2-inch sieve to No. 4 sieve and compacted to same density as adjacent undisturbed earth.

C. Elevation: In paved areas, set so cover surface will be flush with finished grade. Set covers of other enclosures 1 inch above finished grade.

D. Install handholes with bottom below frost line.

E. Field-cut openings for conduits according to enclosure manufacturer's written instructions. Cut wall of enclosure with a tool designed for material to be cut. Size holes for terminating fittings to be used, and seal around penetrations after fittings are installed.

3.5 SLEEVE AND SLEEVE-SEAL INSTALLATION FOR ELECTRICAL PENETRATIONS

A. Install sleeves and sleeve seals at penetrations of exterior floor and wall assemblies. Comply with requirements in Section 260544 "Sleeves and Sleeve Seals for Electrical Raceways and Cabling."

3.6 FIRESTOPPING

A. Install firestopping at penetrations of fire-rated floor and wall assemblies. Comply with requirements in Section 078413 "Penetration Firestopping."

3.7 PROTECTION

A. Protect coatings, finishes, and cabinets from damage and deterioration.

1. Repair damage to galvanized finishes with zinc-rich paint recommended by manufacturer.
2. Repair damage to PVC coatings or paint finishes with matching touchup coating recommended by manufacturer.

END OF SECTION 260533

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Identification for conductors.
2. Warning labels and signs.
3. Equipment identification labels.
4. Miscellaneous identification products.

1.2 ACTION SUBMITTALS

A. Product Data: For each electrical identification product indicated.

1.3 QUALITY ASSURANCE

A. Comply with ANSI A13.1.

B. Comply with NFPA 70.

C. Comply with 29 CFR 1910.144 and 29 CFR 1910.145.

D. Comply with ANSI Z535.4 for safety signs and labels.

E. Adhesive-attached labeling materials, including label stocks, laminating adhesives, and inks used by label printers, shall comply with UL 969.

PART 2 - PRODUCTS

2.1 CONDUCTOR IDENTIFICATION MATERIALS

A. Color-Coding Conductor Tape: Colored, self-adhesive vinyl tape not less than 3 mils thick by 1 to 2 inches wide.

2.2 WARNING LABELS AND SIGNS

A. Comply with NFPA 70 and 29 CFR 1910.145.

B. Self-Adhesive Warning Labels: Factory-printed, multicolor, pressure-sensitive adhesive labels, configured for display on front cover, door, or other access to equipment unless otherwise indicated.

C. Warning label and sign shall include, but are not limited to, the following legends:

1. Multiple Power Source Warning: "DANGER - ELECTRICAL SHOCK HAZARD - EQUIPMENT HAS MULTIPLE POWER SOURCES."
2. Workspace Clearance Warning: "WARNING - OSHA REGULATION - AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 INCHES."

2.3 INSTRUCTION SIGNS

A. Engraved, laminated acrylic or melamine plastic, minimum 1/16 inch thick for signs up to 20 sq. inches and 1/8 inch thick for larger sizes.

1. Engraved legend with black letters on white face.
2. Punched or drilled for mechanical fasteners.
3. Framed with mitered acrylic molding and arranged for attachment at applicable equipment.

B. Adhesive Film Label with Clear Protective Overlay: Machine printed, in black, by thermal transfer or equivalent process. Minimum letter height shall be 3/8 inch. Overlay shall provide a weatherproof and UV-resistant seal for label.

2.4 EQUIPMENT IDENTIFICATION LABELS

A. Self-Adhesive, Engraved, Laminated Acrylic or Melamine Label: Adhesive backed, with white letters on a dark-gray background. Minimum letter height shall be 3/8 inch.

2.5 MISCELLANEOUS IDENTIFICATION PRODUCTS

A. Paint: Comply with requirements in painting Sections for paint materials and application requirements. Select paint system applicable for surface material and location (exterior or interior).

B. Fasteners for Labels and Signs: Self-tapping, stainless-steel screws or stainless-steel machine screws with nuts and flat and lock washers.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Location: Install identification materials and devices at locations for most convenient viewing without interference with operation and maintenance of equipment.

B. Apply identification devices to surfaces that require finish after completing finish work.

C. Self-Adhesive Identification Products: Clean surfaces before application, using materials and methods recommended by manufacturer of identification device.

D. Attach signs and plastic labels that are not self-adhesive type with mechanical fasteners appropriate to the location and substrate.

E. System Identification Color-Coding Bands for Raceways and Cables: Each color-coding band shall completely encircle cable or conduit. Place adjacent bands of two-color markings in contact, side by side. Locate bands at changes in direction, at penetrations of walls and floors, at 50-foot maximum intervals in straight runs, and at 25-foot maximum intervals in congested areas.

F. Painted Identification: Comply with requirements in painting Sections for surface preparation and paint application.

3.2 IDENTIFICATION SCHEDULE

A. Accessible Raceways and Cables within Buildings: Identify the covers of each junction and pull box of the following systems with self-adhesive vinyl labels with the wiring system legend and system voltage. System legends shall be as follows:
   1. Power.

B. Power-Circuit Conductor Identification, 600 V or Less: For conductors in vaults, pull and junction boxes, manholes, and handholes, use color-coding conductor tape to identify the phase.

   1. Color-Coding for Phase and Voltage Level Identification, 600 V or Less: Use colors listed below for ungrounded service, feeder, and branch-circuit conductors.

      a. Color shall be factory applied or field applied for sizes larger than No. 8 AWG, if authorities having jurisdiction permit.
      b. Colors for 208/120-V Circuits:

         1) Phase A: Black.
         2) Phase B: Red.
         3) Phase C: Blue.

      c. Colors for 480/277-V Circuits:

         1) Phase A: Brown.
         2) Phase B: Orange.
         3) Phase C: Yellow.

      d. Field-Applied, Color-Coding Conductor Tape: Apply in half-lapped turns for a minimum distance of 6 inches from terminal points and in boxes where splices or taps are made. Apply last two turns of tape with no tension to prevent possible unwinding. Locate bands to avoid obscuring factory cable markings.

C. Install instructional sign including the color-code for grounded and ungrounded conductors using adhesive-film-type labels.

D. Conductors to Be Extended in the Future: Attach marker tape to conductors and list source.

E. Auxiliary Electrical Systems Conductor Identification: Identify field-installed alarm, control, and signal connections.

1. Identify conductors, cables, and terminals in enclosures and at junctions, terminals, and pull points. Identify by system and circuit designation.
2. Use system of marker tape designations that is uniform and consistent with system used by manufacturer for factory-installed connections.
3. Coordinate identification with Project Drawings, manufacturer's wiring diagrams, and the Operation and Maintenance Manual.

F. Locations of Underground Lines: Identify with underground-line warning tape for power, lighting, communication, and control wiring and optical fiber cable.

1. Install underground-line warning tape for both direct-buried cables and cables in raceway.

G. Workspace Indication: Install floor marking tape to show working clearances in the direction of access to live parts. Workspace shall be as required by NFPA 70 and 29 CFR 1926.403 unless otherwise indicated. Do not install at flush-mounted panelboards and similar equipment in finished spaces.

H. Warning Labels for Indoor Cabinets, Boxes, and Enclosures for Power and Lighting: Self-adhesive warning labels.

1. Comply with 29 CFR 1910.145.
2. Identify system voltage with black letters on an orange background.
3. Apply to exterior of door, cover, or other access.
4. For equipment with multiple power or control sources, apply to door or cover of equipment including, but not limited to, the following:

a. Power transfer switches.
b. Controls with external control power connections.

I. Operating Instruction Signs: Install instruction signs to facilitate proper operation and maintenance of electrical systems and items to which they connect. Install instruction signs with approved legend where instructions are needed for system or equipment operation.

J. Emergency Operating Instruction Signs: Install instruction signs with white legend on a red background with minimum 3/8-inch- high letters for emergency instructions at equipment used for power transfer and load shedding.

K. Equipment Identification Labels: On each unit of equipment, install unique designation label that is consistent with wiring diagrams, schedules, and the Operation and Maintenance Manual. Apply labels to disconnect switches and protection equipment, central or master units, control panels, control stations, terminal cabinets, and racks of each system. Systems include power, lighting, control, communication, signal, monitoring, and alarm systems unless equipment is provided with its own identification.

1. Labeling Instructions:

   a. Indoor Equipment: Engraved, laminated acrylic or melamine label. Unless otherwise indicated, provide a single line of text with 1/2-inch- high letters on 1-1/2-inch- high label; where two lines of text are required, use labels 2 inches high.
   b. Outdoor Equipment: Engraved, laminated acrylic or melamine label.
   c. Elevated Components: Increase sizes of labels and letters to those appropriate for viewing from the floor.
   d. Unless provided with self-adhesive means of attachment, fasten labels with appropriate mechanical fasteners that do not change the NEMA or NRTL rating of the enclosure.

END OF SECTION 260553

SECTION 262200 - LOW-VOLTAGE TRANSFORMERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: Distribution, dry-type transformers rated 600 V and less, with capacities up to 1500 kVA.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings:

1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
2. Vibration Isolation Base Details: Detail fabrication including anchorages and attachments to structure and to supported equipment.
3. Include diagrams for power, signal, and control wiring.

1.3 INFORMATIONAL SUBMITTALS

A. Source quality-control reports.

B. Field quality-control reports.

1.4 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Temporary Heating: Apply temporary heat according to manufacturer's written instructions.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. General Electric Company.
2. Square D; by Schneider Electric.

2.2 GENERAL TRANSFORMER REQUIREMENTS

A. Description: Factory-assembled and -tested, air-cooled units for 60-Hz service.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Transformers Rated 15 kVA and Larger: Comply with NEMA TP 1 energy-efficiency levels as verified by testing according to NEMA TP 2.

1. Coil Material: Copper.

D. Encapsulation: Transformers smaller than 30 kVA shall have core and coils completely resin encapsulated.

2.3 DISTRIBUTION TRANSFORMERS

A. Comply with NFPA 70, and list and label as complying with UL 1561.

B. Cores: One leg per phase.

C. Enclosure: Ventilated.

1. NEMA 250, Type 3R: Core and coil shall be encapsulated within resin compound utilizing a vacuum pressure impregnation process to seal out moisture and air.

D. Transformer Enclosure Finish: Comply with NEMA 250.

1. Finish Color: NSF/ANSI 49 gray.

E. Taps for Transformers 3 kVA and Smaller: One 5 percent tap above normal full capacity.

F. Taps for Transformers 7.5 to 24 kVA: One 5 percent tap above and one 5 percent tap below normal full capacity.

G. Taps for Transformers 25 kVA and Larger: Two 2.5 percent taps above and four 2.5 percent taps below normal full capacity.

H. Insulation Class, Smaller than 30 kVA: 185 deg C, UL-component-recognized insulation system with a maximum of 115-deg C rise above 40-deg C ambient temperature.

I. Insulation Class, 30 kVA and Larger: 220 deg C, UL-component-recognized insulation system with a maximum of 115-deg C rise above 40-deg C ambient temperature.

2.4 IDENTIFICATION DEVICES

A. Nameplates: Engraved, laminated-plastic or metal nameplate for each distribution transformer, mounted with corrosion-resistant screws. Nameplates and label products are specified in Section 260553 "Identification for Electrical Systems."

2.5 SOURCE QUALITY CONTROL

A. Test and inspect transformers according to IEEE C57.12.01 and IEEE C57.12.91.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Verify that ground connections are in place and requirements in Section 260526 "Grounding and Bonding for Electrical Systems" have been met. Maximum ground resistance shall be 5 ohms at location of transformer.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. Install transformers level and plumb on a concrete base with vibration-dampening supports. Locate transformers away from adjacent wall surface.

D. Construct concrete bases according to Section 033000 "Cast-in-Place Concrete" and anchor floor-mounted transformers according to manufacturer's written instructions and requirements in Section 260529 "Hangers and Supports for Electrical Systems."

1. Coordinate size and location of concrete bases with actual transformer provided. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.

E. Secure transformer to concrete base according to manufacturer's written instructions.

F. Secure covers to enclosure and tighten all bolts to manufacturer-recommended torques to reduce noise generation.

G. Remove shipping bolts, blocking, and wedges.

3.2 CONNECTIONS

A. Ground equipment according to Section 260526 "Grounding and Bonding for Electrical Systems."

B. Connect wiring according to Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

C. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

D. Provide flexible connections at all conduit and conductor terminations and supports to eliminate sound and vibration transmission to the building structure.

3.3 FIELD QUALITY CONTROL

A. Perform tests and inspections and prepare test reports.

1. Perform each visual and mechanical inspection and electrical test stated in NETA ATS for dry-type, air-cooled, low-voltage transformers. Certify compliance with test parameters.

B. Remove and replace units that do not pass tests or inspections and retest as specified above.

C. Infrared Scanning: Two months after Substantial Completion, perform an infrared scan of transformer connections.

1. Use an infrared-scanning device designed to measure temperature or detect significant deviations from normal values. Provide documentation of device calibration.
2. Perform two follow-up infrared scans of transformers, one at four months and the other at 11 months after Substantial Completion.
3. Prepare a certified report identifying transformer checked and describing results of scanning. Include notation of deficiencies detected, remedial action taken, and scanning observations after remedial action.

3.4 ADJUSTING

A. Record transformer secondary voltage at each unit for at least 48 hours of typical occupancy period. Adjust transformer taps to provide optimum voltage conditions at secondary terminals. Optimum is defined as not exceeding nameplate voltage plus 5 percent and not being lower than nameplate voltage minus 3 percent at maximum load conditions. Submit recording and tap settings as test results.

B. Connect buck-boost transformers to provide nameplate voltage of equipment being served, plus or minus 5 percent, at secondary terminals.

C. Output Settings Report: Prepare a written report recording output voltages and tap settings.

END OF SECTION 262200

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 262416 - PANELBOARDS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes distribution panelboards and lighting and appliance branch-circuit panelboards.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Shop Drawings: For each panelboard and related equipment.

1. Include dimensioned plans, elevations, sections, and details. Show tabulations of installed devices, equipment features, and ratings.
2. Detail enclosure types and details for types other than NEMA 250, Type 1.
3. Detail bus configuration, current, and voltage ratings.
4. Short-circuit current rating of panelboards and overcurrent protective devices.
5. Detail features, characteristics, ratings, and factory settings of individual overcurrent protective devices and auxiliary components.
6. Include wiring diagrams for power, signal, and control wiring.
7. Include time-current coordination curves for each type and rating of overcurrent protective device included in panelboards.

C. Field quality-control reports.

D. Panelboard schedules for installation in panelboards.

E. Operation and maintenance data.

1.3 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NEMA PB 1.

C. Comply with NFPA 70.

1.4 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace transient voltage suppression devices that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GENERAL REQUIREMENTS FOR PANELBOARDS

A. Fabricate and test panelboards according to IEEE 344 to withstand seismic forces defined in Division 26 Section "Vibration and Seismic Controls for Electrical Systems."

B. Enclosures: Flush- and surface-mounted cabinets.

1. Rated for environmental conditions at installed location.

a. Indoor Dry and Clean Locations: NEMA 250, Type 1 or Type 12. See drawings.
b. Outdoor Locations: NEMA 250, Type 3R.

2. Hinged Front Cover: Entire front trim hinged to box and with standard door within hinged trim cover.
3. Directory Card: Inside panelboard door, mounted in transparent card holder.

C. Incoming Mains Location: Top and bottom.

D. Phase, Neutral, and Ground Buses: Hard-drawn copper, 98 percent conductivity.

E. Conductor Connectors: Suitable for use with conductor material and sizes.

1. Material: Hard-drawn copper, 98 percent conductivity.
2. Main and Neutral Lugs: Mechanical type.
3. Ground Lugs and Bus Configured Terminators: Mechanical type.
4. Feed-Through Lugs: Mechanical type, suitable for use with conductor material. Locate at opposite end of bus from incoming lugs or main device.
5. Subfeed (Double) Lugs: Mechanical type suitable for use with conductor material. Locate at same end of bus as incoming lugs or main device.

F. Future Devices: Mounting brackets, bus connections, filler plates, and necessary appurtenances required for future installation of devices.

G. Panelboard Short-Circuit Current Rating: Rated for series-connected system with integral or remote upstream overcurrent protective devices and labeled by an NRTL. Include size and type of allowable upstream and branch devices, and listed and labeled for series-connected short-circuit rating by an NRTL.

H. Panelboard Short-Circuit Current Rating: Fully rated to interrupt symmetrical short-circuit current available at terminals.

2.2 DISTRIBUTION PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Square D; a brand of Schneider Electric.

B. Panelboards: NEMA PB 1, power and feeder distribution type.

C. Doors: Secured with vault-type latch with tumbler lock; keyed alike.

D. Mains: Circuit breaker, as indicated on plans.

E. Branch Overcurrent Protective Devices: For Circuit-Breaker Frame Sizes 125 A and Smaller: Bolt-on circuit breakers.

F. Branch Overcurrent Protective Devices: For Circuit-Breaker Frame Sizes Larger Than 125 A: Bolt-on circuit breakers; plug-in circuit breakers where individual positive-locking device requires mechanical release for removal.

2.3 LIGHTING AND APPLIANCE BRANCH-CIRCUIT PANELBOARDS

A. Manufacturers: Subject to compliance with requirements, [provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Square D; a brand of Schneider Electric.

B. Panelboards: NEMA PB 1, lighting and appliance branch-circuit type.

C. Mains: Circuit breaker or lugs as indicated on plans.

D. Branch Overcurrent Protective Devices: Bolt-on circuit breakers, replaceable without disturbing adjacent units.

E. Doors: Concealed hinges; secured with flush latch with tumbler lock; keyed alike.

2.4 DISCONNECTING AND OVERCURRENT PROTECTIVE DEVICES

A. Manufacturers: Subject to compliance with requirements, [provide products by one of the following:

1. Eaton Electrical Inc.; Cutler-Hammer Business Unit.
2. General Electric Company; GE Consumer & Industrial - Electrical Distribution.
3. Square D; a brand of Schneider Electric.

B. Molded-Case Circuit Breaker (MCCB): Comply with UL 489, with interrupting capacity to meet available fault currents.

1. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads, and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.
2. GFCI Circuit Breakers: Single- and two-pole configurations with Class A ground-fault protection (6-mA trip).
3. Molded-Case Circuit-Breaker (MCCB) Features and Accessories:

a. Standard frame sizes, trip ratings, and number of poles.
b. Lugs: Mechanical style, suitable for number, size, trip ratings, and conductor materials.

c. Application Listing: Appropriate for application; Type SWD for switching fluorescent lighting loads; Type HID for feeding fluorescent and high-intensity discharge (HID) lighting circuits.
d. Ground-Fault Protection: Integrally mounted relay and trip unit with adjustable pickup and time-delay settings, push-to-test feature, and ground-fault indicator.
e. Shunt Trip: 120-V trip coil energized from separate circuit, set to trip at 55 percent of rated voltage.
f. Handle Padlocking Device: Fixed attachment, for locking circuit-breaker handle in on or off position.
g. Handle Lock Device: Loose attachment, for holding circuit-breaker handle in on position.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Receive, inspect, handle, store and install panelboards and accessories according to NEMA PB 1.1.

B. Mount top of trim 90 inches above finished floor unless otherwise indicated.

C. Mount panelboard cabinet plumb and rigid without distortion of box. Mount recessed panelboards with fronts uniformly flush with wall finish and mating with back box.

D. Install overcurrent protective devices and controllers not already factory installed.

1. Set field-adjustable, circuit-breaker trip ranges.

E. Install filler plates in unused spaces.

F. Stub four 1-inch empty conduits from panelboard into accessible ceiling space or space designated to be ceiling space in the future.

G. Arrange conductors in gutters into groups and bundle and wrap with wire ties.

H. Comply with NECA 1.

3.2 IDENTIFICATION

A. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs complying with Section 260553 "Identification for Electrical Systems."

B. Create a directory to indicate installed circuit loads and incorporating Owner's final room designations. Obtain approval before installing. Use a computer or typewriter to create directory; handwritten directories are not acceptable.

C. Panelboard Nameplates: Label each panelboard with a nameplate complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

D. Device Nameplates: Label each branch circuit device in distribution panelboards with a nameplate complying with requirements for identification specified in Division 26 Section "Identification for Electrical Systems."

3.3 FIELD QUALITY CONTROL

A. Perform tests and inspections.

B. Acceptance Testing Preparation:

1. Test insulation resistance for each panelboard bus, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.

C. Tests and Inspections:

1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

D. Panelboards will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports, including a certified report that identifies panelboards included and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

END OF SECTION 262416

SECTION 262726 - WIRING DEVICES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Receptacles, receptacles with integral GFCI, and associated device plates.
2. Weather-resistant receptacles.
3. Snap switches and wall-box dimmers.
4. Solid-state fan speed controls.
5. Wall-switch and exterior occupancy sensors.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Coordination:

1. Receptacles for Owner-Furnished Equipment: Match plug configurations.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

B. Shop Drawings: List of legends and description of materials and process used for premarking wall plates.

1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain each type of wiring device and associated wall plate from single source from single manufacturer.

2.2 GENERAL WIRING-DEVICE REQUIREMENTS

A. Wiring Devices, Components, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

C. Devices that are manufactured for use with modular plug-in connectors may be substituted under the following conditions:

1. Connectors shall comply with UL 2459 and shall be made with stranding building wire.
2. Devices shall comply with the requirements in this Section.

2.3 STRAIGHT-BLADE RECEPTACLES

A. Convenience Receptacles, 125 V, 20 A: Comply with NEMA WD 1, NEMA WD 6 Configuration 5-20R, UL 498, and FS W-C-596.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Cooper Wiring Devices, Inc.
b. Hubbell.
c. Leviton Manufacturing Co., Inc.

2.4 GFCI RECEPTACLES

A. General Description:

1. Straight blade, feed-through type.
2. Comply with NEMA WD 1, NEMA WD 6, UL 498, UL 943 Class A, and FS W-C-596.
3. Include indicator light that shows when the GFCI has malfunctioned and no longer provides proper GFCI protection.

B. Duplex GFCI Convenience Receptacles, 125 V, 20 A:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Cooper Wiring Devices, Inc.
b. Hubbell.
c. Leviton Manufacturing Co., Inc.

2.5 TOGGLE SWITCHES

A. Comply with NEMA WD 1, UL 20, and FS W-S-896.

B. Switches, 120/277 V, 20 A:

1. Products: Subject to compliance with requirements, provide one of the following:

a. Single Pole:

1) Cooper; AH1221.
2) Hubbell; HBL1221.
3) Leviton; 1221-2.
4) Pass & Seymour; CSB20AC1.

b. Two Pole:

1) Cooper; AH1222.
2) Hubbell; HBL1222.
3) Leviton; 1222-2.
4) Pass & Seymour; CSB20AC2.

c. Three Way:

1) Cooper; AH1223.
2) Hubbell; HBL1223.
3) Leviton; 1223-2.
4) Pass & Seymour; CSB20AC3.

d. Four Way:

1) Cooper; AH1224.
2) Hubbell; HBL1224.
3) Leviton; 1224-2.
4) Pass & Seymour; CSB20AC4.

C. Pilot-Light Switches, 20 A:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Cooper Wiring Devices, Inc.
b. Hubbell.
c. Leviton Manufacturing Co., Inc.

2. Description: Single pole, with neon-lighted handle, illuminated when switch is "on."

2.6 WALL-BOX DIMMERS

A. Dimmer Switches: Modular, full-wave, solid-state units with integral, quiet on-off switches, with audible frequency and EMI/RFI suppression filters.

B. Control: Continuously adjustable slider; with single-pole or three-way switching. Comply with UL 1472.

C. Fluorescent Lamp and LED Dimmer Switches: Modular; compatible with dimmer ballasts; trim potentiometer to adjust low-end dimming; dimmer-ballast combination capable of consistent dimming with low end not greater than 5 percent of full brightness.

2.7 WALL PLATES

A. Single and combination types shall match corresponding wiring devices.

1. Plate-Securing Screws: Metal with head color to match plate finish.
2. Material for Finished Spaces: Smooth, high-impact thermoplastic.
3. Material for Unfinished Spaces: Smooth, high-impact thermoplastic.
4. Material for Damp Locations: Cast aluminum with spring-loaded lift cover, and listed and labeled for use in wet and damp locations.

B. Wet-Location, Weatherproof Cover Plates: NEMA 250, complying with Type 3R, weather-resistant, die-cast aluminum with in-use, lockable cover.

2.8 FINISHES

A. Device Color:

1. Wiring Devices Connected to Normal Power System: As selected by Architect on a room by room basis unless otherwise indicated or required by NFPA 70 or device listing.
2. Wiring Devices Connected to Emergency Power System: Red.

B. Wall Plate Color: For plastic covers, match device color.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1, including mounting heights listed in that standard, unless otherwise indicated.

B. Coordination with Other Trades:

1. Protect installed devices and their boxes. Do not place wall finish materials over device boxes and do not cut holes for boxes with routers that are guided by riding against outside of boxes.
2. Keep outlet boxes free of plaster, drywall joint compound, mortar, cement, concrete, dust, paint, and other material that may contaminate the raceway system, conductors, and cables.
3. Install device boxes in brick or block walls so that the cover plate does not cross a joint unless the joint is troweled flush with the face of the wall.
4. Install wiring devices after all wall preparation, including painting, is complete.

C. Conductors:

1. Do not strip insulation from conductors until right before they are spliced or terminated on devices.
2. Strip insulation evenly around the conductor using tools designed for the purpose. Avoid scoring or nicking of solid wire or cutting strands from stranded wire.
3. The length of free conductors at outlets for devices shall meet provisions of NFPA 70, Article 300, without pigtails.

D. Device Installation:

1. Replace devices that have been in temporary use during construction and that were installed before building finishing operations were complete.
2. Keep each wiring device in its package or otherwise protected until it is time to connect conductors.
3. Do not remove surface protection, such as plastic film and smudge covers, until the last possible moment.
4. Connect devices to branch circuits using pigtails that are not less than 6 inches in length.
5. When there is a choice, use side wiring with binding-head screw terminals. Wrap solid conductor tightly clockwise, two-thirds to three-fourths of the way around terminal screw.
6. Use a torque screwdriver when a torque is recommended or required by manufacturer.
7. When conductors larger than No. 12 AWG are installed on 15- or 20-A circuits, splice No. 12 AWG pigtails for device connections.
8. Tighten unused terminal screws on the device.
9. When mounting into metal boxes, remove the fiber or plastic washers used to hold device-mounting screws in yokes, allowing metal-to-metal contact.

E. Receptacle Orientation:

1. Install ground pin of vertically mounted receptacles up, and on horizontally mounted receptacles to the right.

F. Device Plates: Do not use oversized or extra-deep plates. Repair wall finishes and remount outlet boxes when standard device plates do not fit flush or do not cover rough wall opening.

G. Dimmers:

1. Install dimmers within terms of their listing.
2. Verify that dimmers used for fan speed control are listed for that application.
3. Install unshared neutral conductors on line and load side of dimmers according to manufacturers' device listing conditions in the written instructions.

H. Arrangement of Devices: Unless otherwise indicated, mount flush, with long dimension vertical and with grounding terminal of receptacles on top. Group adjacent switches under single, multigang wall plates.

3.2 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. Test Instruments: Use instruments that comply with UL 1436.
2. Test Instrument for Convenience Receptacles: Digital wiring analyzer with digital readout or illuminated digital-display indicators of measurement.

B. Tests for Convenience Receptacles:

1. Line Voltage: Acceptable range is 105 to 132 V.
2. Percent Voltage Drop under 15-A Load: A value of 6 percent or higher is unacceptable.
3. Ground Impedance: Values of up to 2 ohms are acceptable.
4. GFCI Trip: Test for tripping values specified in UL 1436 and UL 943.
5. Using the test plug, verify that the device and its outlet box are securely mounted.
6. Tests shall be diagnostic, indicating damaged conductors, high resistance at the circuit breaker, poor connections, inadequate fault current path, defective devices, or similar problems. Correct circuit conditions, remove malfunctioning units and replace with new ones, and retest as specified above.

C. Wiring device will be considered defective if it does not pass tests and inspections.

D. Prepare test and inspection reports.

END OF SECTION 262726

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 262813 - FUSES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Cartridge fuses rated 600 V ac and less for use in the following:

a. Control circuits.
b. Enclosed switches.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Cooper Bussmann; a division of Cooper Industries.
2. Edison; a brand of Cooper Bussmann; a division of Cooper Industries.
3. Littelfuse, Inc.

2.2 CARTRIDGE FUSES

A. Characteristics: NEMA FU 1, current-limiting, nonrenewable cartridge fuses with voltage ratings consistent with circuit voltages.

1. Type RK-1: 250 or 600-V, zero- to 600-A rating, 200 kAIC, time delay.
2. Type RK-5: 250 or 600-V, zero- to 600-A rating, 200 kAIC, time delay.
3. Type J: 600-V, zero- to 600-A rating, 200 kAIC, time delay.

B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

C. Comply with NEMA FU 1 for cartridge fuses.

D. Comply with NFPA 70.

E. Coordinate fuse ratings with utilization equipment nameplate limitations of maximum fuse size and with system short-circuit current levels.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install fuses in fusible devices. Arrange fuses so rating information is readable without removing fuse.

B. Fuse rating shall be in accordance with equipment nameplate.

3.2 IDENTIFICATION

A. Install labels complying with requirements for identification specified in Section 260553 "Identification for Electrical Systems" and indicating fuse replacement information inside of door of each fused switch and adjacent to each fuse block, socket, and holder.

END OF SECTION 262813

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 262816 - ENCLOSED SWITCHES AND CIRCUIT BREAKERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Fusible switches.
2. Nonfusible switches.
3. Molded-case circuit breakers (MCCBs).
4. Enclosures.

1.2 DEFINITIONS

A. NC: Normally closed.

B. NO: Normally open.

C. SPDT: Single pole, double throw.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of enclosed switch, circuit breaker, accessory, and component indicated.

B. Shop Drawings: For enclosed switches and circuit breakers. Include plans, elevations, sections, details, and attachments to other work.

1. Wiring Diagrams: For power, signal, and control wiring.

1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

1.6 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 FUSIBLE SWITCHES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Sector; Eaton Corporation.
2. General Electric Company.
3. Square D.

B. Type HD, Heavy Duty, Single Throw, 600-V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, with clips or bolt pads to accommodate indicated fuses, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

C. Accessories:

1. Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
3. Class R Fuse Kit: Provides rejection of other fuse types when Class R fuses are specified.
4. Lugs: Suitable for number, size, and conductor material.

2.2 NONFUSIBLE SWITCHES

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Sector; Eaton Corporation.
2. General Electric Company.
3. Square D.

B. Type HD, Heavy Duty, Single Throw, 600-V ac, 1200 A and Smaller: UL 98 and NEMA KS 1, horsepower rated, lockable handle with capability to accept three padlocks, and interlocked with cover in closed position.

C. Accessories:

1. Equipment Ground Kit: Internally mounted and labeled for copper and aluminum ground conductors.
2. Neutral Kit: Internally mounted; insulated, capable of being grounded and bonded; labeled for copper and aluminum neutral conductors.
3. Lugs: Suitable for number, size, and conductor material.

2.3 MOLDED-CASE CIRCUIT BREAKERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Sector; Eaton Corporation.
2. General Electric Company.
3. Square D.

B. General Requirements: Comply with UL 489, NEMA AB 1, and NEMA AB 3, with interrupting capacity to comply with available fault currents.

C. Thermal-Magnetic Circuit Breakers: Inverse time-current element for low-level overloads and instantaneous magnetic trip element for short circuits. Adjustable magnetic trip setting for circuit-breaker frame sizes 250 A and larger.

D. Features and Accessories:

1. Standard frame sizes, trip ratings, and number of poles.
2. Lugs: Suitable for number, size, trip ratings, and conductor material.
3. Ground-Fault Protection: Comply with UL 1053; integrally mounted, self-powered type with mechanical ground-fault indicator; relay with adjustable pickup and time-delay settings, push-to-test feature, internal memory, and shunt trip unit; and three-phase, zero-sequence current transformer/sensor.
4. Shunt Trip: Trip coil energized from separate circuit, with coil-clearing contact.

2.4 ENCLOSURES

A. Enclosed Switches and Circuit Breakers: NEMA AB 1, NEMA KS 1, NEMA 250, and UL 50, to comply with environmental conditions at installed location.

1. Indoor, Dry and Clean Locations: NEMA 250, Type 1.
2. Outdoor Locations: NEMA 250, Type 3R.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install individual wall-mounted switches and circuit breakers with tops at uniform height unless otherwise indicated.

B. Install fuses in fusible devices. Verify exact fuse rating with equipment nameplate.

C. Comply with NECA 1.

3.2 IDENTIFICATION

A. Comply with requirements in Section 260553 "Identification for Electrical Systems."

1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
2. Label each enclosure with engraved metal or laminated-plastic nameplate.

3.3 FIELD QUALITY CONTROL

A. Perform tests and inspections.

B. Acceptance Testing Preparation:

1. Test insulation resistance for each enclosed switch and circuit breaker, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.

C. Tests and Inspections:

1. Perform each visual and mechanical inspection and electrical test stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
2. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.

D. Enclosed switches and circuit breakers will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports, including a certified report that identifies enclosed switches and circuit breakers and that describes scanning results. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

END OF SECTION 262816

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 262913 - ENCLOSED CONTROLLERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes the following enclosed controllers rated 600 V and less:

1. Full-voltage manual.
2. Full-voltage magnetic.

1.2 DEFINITIONS

A. CPT: Control power transformer.

B. MCCB: Molded-case circuit breaker.

C. MCP: Motor circuit protector.

D. N.C.: Normally closed.

E. N.O.: Normally open.

F. OCPD: Overcurrent protective device.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of enclosed controller.

B. Shop Drawings: For each enclosed controller. Include dimensioned plans, elevations, sections, details, and required clearances and service spaces around controller enclosures.

1. Wiring Diagrams: For power, signal, and control wiring.

1.4 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

1.5 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

1.6 QUALITY ASSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

PART 2 - PRODUCTS

2.1 FULL-VOLTAGE CONTROLLERS

A. General Requirements for Full-Voltage Controllers: Comply with NEMA ICS 2, general purpose, Class A.

B. Motor-Starting Switches: "Quick-make, quick-break" toggle or push-button action; marked to show whether unit is off or on.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Eaton Electrical Sector; Eaton Corporation.
b. General Electric Company.
c. Square D.

2. Configuration: Nonreversing.
3. Surface mounting.
4. Pilot light.

C. Fractional Horsepower Manual Controllers: "Quick-make, quick-break" toggle or push-button action; marked to show whether unit is off, on, or tripped.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

a. Eaton Electrical Sector; Eaton Corporation.
b. General Electric Company.
c. Square D.

2. Configuration: Two speed.
3. Overload Relays: Inverse-time-current characteristics; NEMA ICS 2, Class 10 tripping characteristics; heaters matched to nameplate full-load current of actual protected motor; external reset push button; bimetallic type.
4. Surface mounting.
5. Pilot light.

D. Integral Horsepower Manual Controllers: "Quick-make, quick-break" toggle or push-button action; marked to show whether unit is off, on, or tripped.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Eaton Electrical Sector; Eaton Corporation.
    b. General Electric Company.
    c. Square D.

2. Configuration: Nonreversing.
3. Overload Relays: Inverse-time-current characteristics; NEMA ICS 2, Class 10 tripping characteristics; heaters and sensors in each phase, matched to nameplate full-load current of actual protected motor and having appropriate adjustment for duty cycle; external reset push button; bimetallic type.
4. Surface mounting.
5. Pilot light.

E. Magnetic Controllers: Full voltage, across the line, electrically held.

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Eaton Electrical Sector; Eaton Corporation.
    b. General Electric Company.
    c. Square D.

2. Configuration: Nonreversing.
3. Contactor Coils: Pressure-encapsulated type.

    a. Operating Voltage: Depending on contactor NEMA size and line-voltage rating, manufacturer's standard matching control power or line voltage.

4. Power Contacts: Totally enclosed, double-break, silver-cadmium oxide; assembled to allow inspection and replacement without disturbing line or load wiring.
5. Control Circuits: 120-V ac; obtained from integral CPT, with primary and secondary fuses, with CPT of sufficient capacity to operate integral devices and remotely located pilot, indicating, and control devices. (100VA extra minimum.)

6. Solid-State Overload Relay:

    a. Switch or dial selectable for motor running overload protection.
    b. Sensors in each phase.
    c. Class 10/20 selectable tripping characteristic selected to protect motor against voltage and current unbalance and single phasing.

7. External overload reset push button.

F. Combination Magnetic Controller: Factory-assembled combination of magnetic controller, OCPD, and disconnecting means.

G. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Eaton Electrical Sector; Eaton Corporation.
2. General Electric Company.
3. Square D.

4. MCP Disconnecting Means:

   a. UL 489, NEMA AB 1, and NEMA AB 3, with interrupting capacity to comply with available fault currents, instantaneous-only circuit breaker with front-mounted, field-adjustable, short-circuit trip coordinated with motor locked-rotor amperes.
   b. Lockable Handle: Accepts three padlocks and interlocks with cover in closed position.
   c. Auxiliary contacts "a" arranged to activate with MCP handle.

2.2 ENCLOSURES

A. Enclosed Controllers: NEMA ICS 6, to comply with environmental conditions at installed location.

1. Dry and Clean Indoor Locations: Type 1.
2. Outdoor Locations: Type 3R.

2.3 ACCESSORIES

A. Push Buttons, Pilot Lights, and Selector Switches: NEMA ICS 5; heavy-duty type; factory installed in controller enclosure cover unless otherwise indicated. (Start-Stop, HOA, Red Pilot Light)

B. Control Relays: Auxiliary and adjustable time-delay relays.

C. Phase-Failure, Phase-Reversal, and Undervoltage and Overvoltage Relays: Solid-state sensing circuit with isolated output contacts for hard-wired connections. Provide adjustable undervoltage, overvoltage, and time-delay settings.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Wall-Mounted Controllers: Install enclosed controllers on walls with tops at uniform height, and with disconnect operating handles not higher than 79 inches above finished floor, unless otherwise indicated, and by bolting units to wall or mounting on lightweight structural-steel channels bolted to wall. For controllers not at walls, provide freestanding racks complying with Section 260529 "Hangers and Supports for Electrical Systems."

B. Install fuses in each fusible-switch enclosed controller.

C. Install fuses in control circuits if not factory installed. Comply with requirements in Section 262813 "Fuses."

D. Install heaters in thermal overload relays. Select heaters based on actual nameplate full-load amperes after motors have been installed.

E. Comply with NECA 1.

3.2 IDENTIFICATION

A. Identify enclosed controllers, components, and control wiring. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

1. Identify field-installed conductors, interconnecting wiring, and components; provide warning signs.
2. Label each enclosure with engraved nameplate.
3. Label each enclosure-mounted control and pilot device.

3.3 CONTROL WIRING INSTALLATION

A. Install wiring between enclosed controllers and remote devices and facility's central control system. Comply with requirements in Section 260523 "Control-Voltage Electrical Power Cables."

B. Bundle, train, and support wiring in enclosures.

C. Connect selector switches and other automatic-control selection devices where applicable.

1. Connect selector switches to bypass only those manual- and automatic-control devices that have no safety functions when switch is in manual-control position.
2. Connect selector switches with enclosed-controller circuit in both manual and automatic positions for safety-type control devices such as low- and high-pressure cutouts, high-temperature cutouts, and motor overload protectors.

3.4 FIELD QUALITY CONTROL

A. Perform tests and inspections.

B. Acceptance Testing Preparation:

1. Test insulation resistance for each enclosed controller, component, connecting supply, feeder, and control circuit.
2. Test continuity of each circuit.

C. Tests and Inspections:

1. Inspect controllers, wiring, components, connections, and equipment installation. Test and adjust controllers, components, and equipment.
2. Test insulation resistance for each enclosed-controller element, component, connecting motor supply, feeder, and control circuits.
3. Test continuity of each circuit.
4. Verify that voltages at controller locations are within plus or minus 10 percent of motor nameplate rated voltages. If outside this range for any motor, notify Engineer before starting the motor(s).
5. Test each motor for proper phase rotation.
6. Perform each electrical test and visual and mechanical inspection stated in NETA Acceptance Testing Specification. Certify compliance with test parameters.
7. Correct malfunctioning units on-site, where possible, and retest to demonstrate compliance; otherwise, replace with new units and retest.
8. Test and adjust controls, remote monitoring, and safeties. Replace damaged and malfunctioning controls and equipment.

D. Enclosed controllers will be considered defective if they do not pass tests and inspections.

E. Prepare test and inspection reports. Include notation of deficiencies detected, remedial action taken, and observations after remedial action.

3.5 ADJUSTING

A. Set field-adjustable switches and overload-relay pickup and trip ranges.

B. Adjust the trip settings of MCPs and thermal-magnetic circuit breakers with adjustable instantaneous trip elements. Initially adjust to six times the motor nameplate full-load ampere ratings and attempt to start motors several times, allowing for motor cooldown between starts. If tripping occurs on motor inrush, adjust settings in increments until motors start without tripping. Do not exceed eight times the motor full-load amperes (or 11 times for NEMA Premium Efficient motors if required). Where these maximum settings do not allow starting of a motor, notify Engineer before increasing settings.

3.6 DEMONSTRATION

A. Train Owner's maintenance personnel to adjust, operate, and maintain enclosed controllers.

END OF SECTION 262913

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 264313 - SURGE PROTECTION FOR LOW-VOLTAGE POWER CIRCUITS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes field-mounted SPDs for low-voltage (120 to 600 V) power distribution and control equipment.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Include rated capacities, operating characteristics, electrical characteristics, and furnished specialties and accessories.
2. Copy of UL Category Code VZCA certification, as a minimum, listing the tested values for VPRs, Inominal ratings, MCOVs, type designations, OCPD requirements, model numbers, system voltages, and modes of protection.

1.3 INFORMATIONAL SUBMITTALS

A. Field quality-control reports.

B. Sample Warranty: For manufacturer's special warranty.

1.4 CLOSEOUT SUBMITTALS

A. Maintenance data.

1.5 WARRANTY

A. Manufacturer's Warranty: Manufacturer agrees to replace or replace SPDs that fail in materials or workmanship within specified warranty period.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 GENERAL SPD REQUIREMENTS

A. SPD with Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Comply with NFPA 70.

C. Comply with UL 1449.

D. MCOV of the SPD shall be the nominal system voltage.

2.2 PANEL SUPPRESSORS

A. SPDs: Comply with UL 1449, Type 2.

1. Include LED indicator lights for power and protection status.
2. Internal thermal protection that disconnects the SPD before damaging internal suppressor components.

B. Peak Surge Current Rating: The minimum single-pulse surge current withstand rating per phase shall not be less than 100 kA. The peak surge current rating shall be the arithmetic sum of the ratings of the individual MOVs in a given mode.

C. Protection modes and UL 1449 VPR for grounded wye circuits with 208Y/120 V, three-phase, four-wire circuits shall not exceed the following:

1. Line to Neutral: 700 V for 208Y/120 V.
2. Line to Ground: 700 V for 208Y/120 V.
3. Neutral to Ground: 700 V for 208Y/120 V.
4. Line to Line: 1200 V for 208Y/120 V

D. SCCR: Equal or exceed 100 kA.

E. Inominal Rating: 20 kA.

2.3 ENCLOSURES

A. Indoor Enclosures: NEMA 250, Type 1.

B. Outdoor Enclosures: NEMA 250, Type 3R.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1.

B. Install an OCPD or disconnect as required to comply with the UL listing of the SPD.

C. Install SPDs with conductors between suppressor and points of attachment as short and straight as possible, and adjust circuit-breaker positions to achieve shortest and straightest leads. Do not splice and extend SPD leads unless specifically permitted by manufacturer. Do not exceed manufacturer's recommended lead length. Do not bond neutral and ground.

D. Use crimped connectors and splices only. Wire nuts are unacceptable.

E. Complete startup checks according to manufacturer's written instructions. Energize SPDs after power system has been energized, stabilized, and tested.

3.2 FIELD QUALITY CONTROL

A. Perform the following tests and inspections with the assistance of a factory-authorized service representative.

1. Compare equipment nameplate data for compliance with Drawings and Specifications.
2. Inspect anchorage, alignment, grounding, and clearances.
3. Verify that electrical wiring installation complies with manufacturer's written installation requirements.

B. An SPD will be considered defective if it does not pass tests and inspections.

C. Prepare test and inspection reports.

3.3 DEMONSTRATION

A. Train Owner's maintenance personnel to operate and maintain SPDs.

END OF SECTION 264313

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 265119 - LED INTERIOR LIGHTING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Interior solid-state luminaires that use LED technology.
2. Lighting fixture supports.

1.2 DEFINITIONS

A. CCT: Correlated color temperature.

B. CRI: Color Rendering Index.

C. Fixture: See "Luminaire."

D. IP: International Protection or Ingress Protection Rating.

E. LED: Light-emitting diode.

F. Lumen: Measured output of lamp and luminaire, or both.

G. Luminaire: Complete lighting unit, including lamp, reflector, and housing.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product, arranged by designation.

B. Shop Drawings: For nonstandard or custom luminaires.

1. Include plans, elevations, sections, and mounting and attachment details.
2. Include details of luminaire assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
3. Include diagrams for power, signal, and control wiring.

C. Product Schedule: For luminaires and lamps. See Drawings.

1.4 INFORMATIONAL SUBMITTALS

A. Product Certificates: For each type of luminaire.

B. Sample warranty.

1.5 CLOSEOUT SUBMITTALS

A. Operation and maintenance data.

1.6 WARRANTY

A. Warranty: Manufacturer and Installer agree to repair or replace components of luminaires that fail in materials or workmanship within specified warranty period.

B. Warranty Period: Five year(s) from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 LUMINAIRE REQUIREMENTS

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

B. Recessed Fixtures: Comply with NEMA LE 4.

C. CRI of minimum 80. CCT of 4100 K.

D. Rated lamp life of 50,000 hours.

E. Lamps dimmable from 100 percent to 0 percent of maximum light output.

F. Internal driver.

G. Nominal Operating Voltage: 120 V ac or 277 V ac. See Drawings.

1. Lens Thickness: At least 0.125 inch minimum unless otherwise indicated.

H. Housings:

1. Extruded-aluminum housing and heat sink.
2. White, painted finish.

2.2 MATERIALS

A. Metal Parts:

1. Free of burrs and sharp corners and edges.
2. Sheet metal components shall be steel unless otherwise indicated.
3. Form and support to prevent warping and sagging

B. Doors, Frames, and Other Internal Access: Smooth operating, free of light leakage under operating conditions, and designed to permit relamping without use of tools.

Designed to prevent doors, frames, lenses, diffusers, and other components from falling accidentally during relamping and when secured in operating position.

C. Diffusers, and Globes:

1. Clear, UV-stabilized acrylic.
2. Acrylic: One hundred percent virgin acrylic plastic, with high resistance to yellowing and other changes due to aging, exposure to heat, and UV radiation.
3. Lens Thickness: At least 0.125 inch minimum unless otherwise indicated.

D. Housings:

1. Extruded-aluminum housing and heat sink.
2. Clear per plan, powder-coat finish.

2.3 METAL FINISHES

A. Variations in finishes are unacceptable in the same piece. Variations in finishes of adjoining components are acceptable if they are within the range of approved Samples and if they can be and are assembled or installed to minimize contrast.

2.4 LUMINAIRE SUPPORT COMPONENTS

A. Comply with requirements in Section 260529 "Hangers and Supports for Electrical Systems" for channel and angle iron supports and nonmetallic channel and angle supports.

B. Single-Stem Hangers: 1/2-inch steel tubing with swivel ball fittings and ceiling canopy. Finish same as luminaire.

C. Wires: ASTM A 641/A 641 M, Class 3, soft temper, zinc-coated steel, 12 gage.

D. Rod Hangers: 3/16-inch minimum diameter, cadmium-plated, threaded steel rod.

E. Hook Hangers: Integrated assembly matched to luminaire, line voltage, and equipment with threaded attachment, cord, and locking-type plug.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Comply with NECA 1.

B. Install luminaires level, plumb, and square with ceilings and walls unless otherwise indicated.

C. Install lamps in each luminaire.

D. Supports: Sized and rated for luminaire weight.

E. Flush-Mounted Luminaire Support: Secured to outlet box.

F. Wall-Mounted Luminaire Support:

1. Attached to structural members in walls.
2. Do not attach luminaires directly to gypsum board.

G. Ceiling-Mounted Luminaire Support:

1. Ceiling mount with two 5/32-inch diameter aircraft cable supports adjustable to 120 inches in length.

H. Ceiling-Grid-Mounted Luminaires:

1. Secure to any required outlet box.
2. Secure luminaire using approved fasteners in a minimum of four locations, spaced near corners of luminaire.

I. Comply with requirements in Section 260519 "Low-Voltage Electrical Power Conductors and Cables" for wiring connections.

J. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

3.2 FIELD QUALITY CONTROL

A. Perform the following tests and inspections:

1. Operational Test: After installing luminaires, switches, and accessories, and after electrical circuitry has been energized, test units to confirm proper operation.
2. Test for Emergency Lighting: Interrupt power supply to demonstrate proper operation. Verify transfer from normal power to battery power and retransfer to normal.

B. Luminaire will be considered defective if it does not pass operation tests and inspections.

C. Prepare test and inspection reports.

END OF SECTION 265119

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 283111 - DIGITAL, ADDRESSABLE FIRE-ALARM SYSTEM

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Fire-alarm control unit.
2. Manual fire-alarm boxes.
3. System smoke detectors.
4. Heat detectors.
5. Notification appliances.
6. Addressable interface device.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product, including furnished options and accessories.

B. Shop Drawings: For fire-alarm system.

1. Comply with recommendations and requirements in the "Documentation" section of the "Fundamentals" chapter in NFPA 72.
2. Include plans, elevations, sections, details, and attachments to other work.
3. Include details of equipment assemblies. Indicate dimensions, weights, loads, required clearances, method of field assembly, components, and locations. Indicate conductor sizes, indicate termination locations and requirements, and distinguish between factory and field wiring.
4. Detail assembly and support requirements.
5. Include voltage drop calculations for notification-appliance circuits.
6. Include battery-size calculations.
7. Include input/output matrix.
8. Include statement from manufacturer that all equipment and components have been tested as a system and meet all requirements in this Specification and in NFPA 72.
9. Include performance parameters and installation details for each detector.
10. Verify that each duct detector is listed for complete range of air velocity, temperature, and humidity possible when air-handling system is operating.
11. Include plans, sections, and elevations of heating, ventilating, and air-conditioning ducts, drawn to scale; coordinate location of duct smoke detectors and access to them.

    a. Show critical dimensions that relate to placement and support of sampling tubes, detector housing, and remote status and alarm indicators.
    b. Show field wiring required for HVAC unit shutdown on alarm.
    c. Locate detectors according to manufacturer's written recommendations.

12. Include floor plans to indicate final outlet locations showing address of each addressable device. Show size and route of cable and conduits and point-to-point wiring diagrams.

C. General Submittal Requirements:

1. Submittals shall be approved by authorities having jurisdiction prior to submitting them to Architect.
2. Shop Drawings shall be prepared by persons with the following qualifications:

a. Trained and certified by manufacturer in fire-alarm system design.
b. NICET-certified, fire-alarm technician; Level III minimum.
c. Licensed or certified by authorities having jurisdiction.

1.3 INFORMATIONAL SUBMITTALS

A. Qualification Data: For Installer.

B. Field quality-control reports.

C. Sample warranty.

1.4 CLOSEOUT SUBMITTALS

A. Operation and Maintenance Data: For fire-alarm systems and components to include in emergency, operation, and maintenance manuals.

1. In addition to items specified in Section 017823 "Operation and Maintenance Data," include the following:

a. Comply with the "Records" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
b. Provide "Fire Alarm and Emergency Communications System Record of Completion Documents" according to the "Completion Documents" Article in the "Documentation" section of the "Fundamentals" chapter in NFPA 72.
c. Complete wiring diagrams showing connections between all devices and equipment.
d. Riser diagram.
e. Record copy of site-specific software.
f. Provide "Inspection and Testing Form" according to the "Inspection, Testing and Maintenance" chapter in NFPA 72, and include the following:

1) Equipment tested.
2) Frequency of testing of installed components.
3) Frequency of inspection of installed components.
4) Requirements and recommendations related to results of maintenance.
5) Manufacturer's user training manuals.

g. Manufacturer's required maintenance related to system warranty requirements.
h. Abbreviated operating instructions for mounting at fire-alarm control unit and each annunciator unit.

B. Software and Firmware Operational Documentation:

1. Software operating and upgrade manuals.
2. Program Software Backup: On magnetic media or compact disk, complete with data files.
3. Device address list.
4. Printout of software application and graphic screens.

1.5 QUALITY ASSURANCE

A. Installer Qualifications: Personnel shall be trained and certified by manufacturer for installation of units required for this Project.

B. Installer Qualifications: Installation shall be by personnel certified by NICET as fire-alarm Level III technician.

1.6 WARRANTY

A. Special Warranty: Manufacturer agrees to repair or replace fire-alarm system equipment and components that fail in materials or workmanship within specified warranty period.

1. Warranty Extent: All equipment and components not covered in the Maintenance Service Agreement.
2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 SYSTEM DESCRIPTION

A. Source Limitations for Fire-Alarm System and Components: Components shall be compatible with, and operate as an extension of, existing system. Provide system manufacturer's certification that all components provided have been tested as, and will operate as, a system.

B. Noncoded, UL-certified addressable system, with multiplexed signal transmission and horn/strobe evacuation.

C. Automatic sensitivity control of certain smoke detectors.

D. All components provided shall be listed for use with the selected system.

E. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, by a qualified testing agency, and marked for intended location and application.

2.2 SYSTEMS OPERATIONAL DESCRIPTION

A. Fire-alarm signal initiation shall be by one or more of the following devices and systems:

1. Manual stations.
2. Heat detectors.
3. Smoke detectors.
4. Duct smoke detectors.
5. Fire-extinguishing system operation.

B. Fire-alarm signal shall initiate the following actions:

1. Continuously operate alarm notification appliances.
2. Identify alarm and specific initiating device at fire-alarm control unit and remote annunciators.
3. Transmit an alarm signal to the remote alarm receiving station.
4. Switch heating, ventilating, and air-conditioning equipment controls to fire-alarm mode.
5. Record events in the system memory.

C. Supervisory signal initiation shall be by one or more of the following devices and actions:
1. Loss of communication with any panel on the network.

D. System trouble signal initiation shall be by one or more of the following devices and actions:

1. Open circuits, shorts, and grounds in designated circuits.
2. Opening, tampering with, or removing alarm-initiating and supervisory signal-initiating devices.
3. Loss of communication with any addressable sensor, input module, relay, control module, or remote annunciator.
4. Loss of primary power at fire-alarm control unit.
5. Ground or a single break in internal circuits of fire-alarm control unit.
6. Abnormal ac voltage at fire-alarm control unit.
7. Break in standby battery circuitry.
8. Failure of battery charging.
9. Abnormal position of any switch at fire-alarm control unit or annunciator.

E. System Supervisory Signal Actions:

1. Initiate notification appliances.
2. Identify specific device initiating the event at fire-alarm control unit and remote annunciators.
3. After a time delay of 200 seconds, transmit a trouble or supervisory signal to the remote alarm receiving station.

2.3 FIRE-ALARM CONTROL UNIT

A. The Fire Alarm Control Unit is an existing system and this project shall provide the additional components to expand system to include the new facility..

2.4 MANUAL FIRE-ALARM BOXES

A. General Requirements for Manual Fire-Alarm Boxes: Comply with UL 38.

1. Dual-action mechanism, pull-lever type; with integral addressable module arranged to communicate manual-station status (normal, alarm, or trouble) to fire-alarm control unit.
2. Station Reset: Key- or wrench-operated switch.

2.5 SYSTEM SMOKE DETECTORS

A. General Requirements for System Smoke Detectors:

1. Comply with UL 268; operating at 24-V dc, nominal.
2. Detectors shall be two-wire type.
3. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.
4. Base Mounting: Detector and associated electronic components shall be mounted in a twist-lock module that connects to a fixed base. Provide terminals in the fixed base for connection to building wiring.
5. Self-Restoring: Detectors do not require resetting or readjustment after actuation to restore them to normal operation.
6. Integral Visual-Indicating Light: LED type, indicating detector has operated and power-on status.
7. Remote Control: Unless otherwise indicated, detectors shall be digital-addressable type, individually monitored at fire-alarm control unit for calibration, sensitivity, and alarm condition.

    a. Rate-of-rise temperature characteristic of combination smoke- and heat-detection units shall be selectable at fire-alarm control unit for 15 or 20 deg F per minute.
    b. Fixed-temperature sensing characteristic of combination smoke- and heat-detection units shall be independent of rate-of-rise sensing and shall be settable at fire-alarm control unit to operate at 135 or 155 deg F.
    c. Multiple levels of detection sensitivity for each sensor.
    d. Sensitivity levels based on time of day.

B. Photoelectric Smoke Detectors:

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

    a. Primary status.

b. Device type.
c. Present average value.
d. Present sensitivity selected.
e. Sensor range (normal, dirty, etc.).

C. Ionization Smoke Detector:

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

a. Primary status.
b. Device type.
c. Present average value.
d. Present sensitivity selected.
e. Sensor range (normal, dirty, etc.).

D. Duct Smoke Detectors: Photoelectric type complying with UL 268A.

1. Detector address shall be accessible from fire-alarm control unit and shall be able to identify the detector's location within the system and its sensitivity setting.
2. An operator at fire-alarm control unit, having the designated access level, shall be able to manually access the following for each detector:

a. Primary status.
b. Device type.
c. Present average value.
d. Present sensitivity selected.
e. Sensor range (normal, dirty, etc.).

3. Weatherproof Duct Housing Enclosure: NEMA 250, Type 4X; NRTL listed for use with the supplied detector for smoke detection in HVAC system ducts.
4. Each sensor shall have multiple levels of detection sensitivity.
5. Sampling Tubes: Design and dimensions as recommended by manufacturer for specific duct size, air velocity, and installation conditions where applied.
6. Relay Fan Shutdown: Fully programmable relay rated to interrupt fan motor-control circuit.

2.6 HEAT DETECTORS

A. General Requirements for Heat Detectors: Comply with UL 521.

1. Temperature sensors shall test for and communicate the sensitivity range of the device.

B. Heat Detector, Combination Type: Actuated by either a fixed temperature or a rate of rise.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.

2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

C. Heat Detector, Fixed-Temperature Type: Actuated by temperature that exceeds a fixed temperature.

1. Mounting: Twist-lock base interchangeable with smoke-detector bases.
2. Integral Addressable Module: Arranged to communicate detector status (normal, alarm, or trouble) to fire-alarm control unit.

2.7 NOTIFICATION APPLIANCES

A. General Requirements for Notification Appliances: Connected to notification-appliance signal circuits, zoned as indicated, equipped for mounting as indicated, and with screw terminals for system connections.

1. Combination Devices: Factory-integrated audible and visible devices in a single-mounting assembly, equipped for mounting as indicated, and with screw terminals for system connections.

B. Horns: Electric-vibrating-polarized type, 24-V dc; with provision for housing the operating mechanism behind a grille. Comply with UL 464.

C. Visible Notification Appliances: Xenon strobe lights complying with UL 1971, with clear or nominal white polycarbonate lens mounted on an aluminum faceplate. The word "FIRE" is engraved in minimum 1-inch- high letters on the lens.

1. Mounting: Wall mounted unless otherwise indicated.
2. Flashing shall be in a temporal pattern, synchronized with other units.
3. Strobe Leads: Factory connected to screw terminals.
4. Mounting Faceplate: Factory finished, red.

2.8 REMOTE ANNUNCIATOR

A. Description: Annunciator functions shall match those of fire-alarm control unit for alarm, supervisory, and trouble indications. Manual switching functions shall match those of fire-alarm control unit, including acknowledging, silencing, resetting, and testing.

1. Mounting: Flush cabinet, NEMA 250, Type 1.

B. Display Type and Functional Performance: Alphanumeric display and LED indicating lights shall match those of fire-alarm control unit. Provide controls to acknowledge, silence, reset, and test functions for alarm, supervisory, and trouble signals.

2.9 ADDRESSABLE INTERFACE DEVICE

A. General:

1. Include address-setting means on the module.

2. Store an internal identifying code for control panel use to identify the module type.

B. Monitor Module: Microelectronic module providing a system address for alarm-initiating devices for wired applications with normally open contacts.

1. Operate notification devices.
2. Operate solenoids for use in sprinkler service.

PART 3 - EXECUTION

3.1 EQUIPMENT INSTALLATION

A. Comply with NFPA 72, NFPA 101, and requirements of authorities having jurisdiction for installation and testing of fire-alarm equipment. Install all electrical wiring to comply with requirements in NFPA 70 including, but not limited to, Article 760, "Fire Alarm Systems."

B. Connecting to Existing Equipment: Verify that existing fire-alarm system is operational before making changes or connections.

C. Install wall-mounted equipment, with tops of cabinets not more than 78 inches above the finished floor.

D. Manual Fire-Alarm Boxes:

1. Install manual fire-alarm box in the normal path of egress within 60 inches of the exit doorway.
2. Mount manual fire-alarm box on a background of a contrasting color.
3. The operable part of manual fire-alarm box shall be between 42 inches and 48 inches above floor level. All devices shall be mounted at the same height unless otherwise indicated.

E. Smoke- or Heat-Detector Spacing: Comply with NFPA 72.

F. Duct Smoke Detectors: Comply with NFPA 72 and NFPA 90A. Install sampling tubes so they extend the full width of duct. Tubes more than 36 inches long shall be supported at both ends.

G. Remote Status and Alarm Indicators: Install in a visible location near each smoke detector, sprinkler water-flow switch, and valve-tamper switch that is not readily visible from normal viewing position.

H. Audible Alarm-Indicating Devices: Install not less than 6 inches below the ceiling. Install horns on flush-mounted back boxes with the device-operating mechanism concealed behind a grille. Install all devices at the same height unless otherwise indicated.

I. Visible Alarm-Indicating Devices: Install adjacent to each alarm bell or alarm horn and at least 6 inches below the ceiling. Install all devices at the same height unless otherwise indicated.

J. Device Location-Indicating Lights: Locate in public space near the device they monitor.

3.2 PATHWAYS

A. Pathways above recessed ceilings and in nonaccessible locations may be routed exposed.

1. Exposed pathways located less than 96 inches above the floor shall be installed in EMT.

2. Exposed pathways conductors shall be red.

B. Pathways shall be installed in EMT.

C. Exposed EMT junction boxes shall be painted red enamel.

3.3 CONNECTIONS

A. For fire-protection systems related to doors in fire-rated walls and partitions and to doors in smoke partitions, comply with requirements in Section 087100 "Door Hardware." Connect hardware and devices to fire-alarm system.

1. Verify that hardware and devices are listed for use with installed fire-alarm system before making connections.

B. Make addressable connections with a supervised interface device to the following devices and systems. Install the interface device less than 36 inches from the device controlled. Make an addressable confirmation connection when such feedback is available at the device or system being controlled.

1. Smoke dampers in air ducts of designated HVAC duct systems.
2. Magnetically held-open doors.
3. Electronically locked doors and access gates.
4. Alarm-initiating connection to elevator recall system and components.
5. Supervisory connections at valve supervisory switches.
6. Supervisory connections at elevator shunt-trip breaker.

3.4 IDENTIFICATION

A. Identify system components, wiring, cabling, and terminals. Comply with requirements for identification specified in Section 260553 "Identification for Electrical Systems."

B. Install framed instructions in a location visible from fire-alarm control unit.

3.5 GROUNDING

A. Ground fire-alarm control unit and associated circuits; comply with IEEE 1100. Install a ground wire from main service ground to fire-alarm control unit.

B. Ground shielded cables at the control panel location only. Insulate shield at device location.

3.6 FIELD QUALITY CONTROL

A. Field tests shall be witnessed by Architect and authorities having jurisdiction.

B. Perform the following tests and inspections with the assistance of a factory-authorized service representative:

1. Visual Inspection: Conduct visual inspection prior to testing.

a. Inspection shall be based on completed record Drawings and system documentation that is required by NFPA 72 in its "Completion Documents, Preparation" table in the "Documentation" section of the "Fundamentals" chapter.
b. Comply with the "Visual Inspection Frequencies" table in the "Inspection" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72; retain the "Initial/Reacceptance" column and list only the installed components.

2. System Testing: Comply with the "Test Methods" table in the "Testing" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.
3. Factory-authorized service representative shall prepare the "Fire Alarm System Record of Completion" in the "Documentation" section of the "Fundamentals" chapter in NFPA 72 and the "Inspection and Testing Form" in the "Records" section of the "Inspection, Testing and Maintenance" chapter in NFPA 72.

C. Reacceptance Testing: Perform reacceptance testing to verify the proper operation of added or replaced devices and appliances.

D. Fire-alarm system will be considered defective if it does not pass tests and inspections.

E. Prepare test and inspection reports.

F. Maintenance Test and Inspection: Perform tests and inspections listed for weekly, monthly, quarterly, and semiannual periods. Use forms developed for initial tests and inspections.

G. Annual Test and Inspection: One year after date of Substantial Completion, test fire-alarm system complying with visual and testing inspection requirements in NFPA 72. Use forms developed for initial tests and inspections.

3.7 SOFTWARE SERVICE AGREEMENT

A. Comply with UL 864.

B. Technical Support: Beginning at Substantial Completion, service agreement shall include software support for two years.

C. Upgrade Service: At Substantial Completion, update software to latest version. Install and program software upgrades that become available within two years from date of Substantial Completion. Upgrading software shall include operating system and new or revised licenses for using software.

1. Upgrade Notice: At least 30 days to allow Owner to schedule access to system and to upgrade computer equipment if necessary.

3.8 DEMONSTRATION

A. Train Owner's maintenance personnel to adjust, operate, and maintain fire-alarm system.

END OF SECTION 283111

SECTION 310000 - GEO-TECHNICAL INVESTIGATION REPORTS

GENERAL

A. The report reproduced on the following pages is an exact copy of the original Subsurface Investigation Report for the Ford Park Multi-Sports Facility, Beaumont, Texas, prepared by Science Engineering, Inc.

B. Procedures and precautions recommended in the following Subsurface Investigation Report and attachments are to be strictly followed by the contractor. Where the technical sections of these specifications differ from the recommendations of the Subsurface Investigation Report, the more stringent requirement shall govern.

C. The Contractor is responsible for examining the site and determining the nature of the materials to be excavated.

D. Contractor shall be responsible for paying for all failed tests. Geo-Technical inspection service will bill all failed tests directly to the Contractor. Evidence of payment shall be a requirement for substantial completion.

SUBSURFACE SOILS INVESTIGATION REPORT FOLLOWS IN ITS ENTIRETY AND COMPLETES SECTION 310000.

508

SCIENCE ENGINEERING, LTD.

GEOTECHNICAL, ENVIRONMENTAL, MATERIALS TESTING

GEOTECHNICAL INVESTIGATION

FOR

FORD PARK MULTI-SPORTS FACILITY

IN

BEAUMONT, TEXAS

REPORT NUMBER 14260

REPORTED TO:

AMERICAN BUILDERS
9405 COLLEGE STREET
BEAUMONT, TEXAS 77707

NOVEMBER 2014

PREPARED BY:
SCIENCE ENGINEERING, LTD.

P.O. Box 2048 / Nederland, Texas 77627 / Tel.:(409) 982-0686 or (409)727-2218
Fax: (409) 982-0619 / E-Mail: yousef@science-engineer.com

GEOTECHNICAL INVESTIGATION
Multi-Sports Facility
Beaumont, Texas

INTRODUCTION

The study reported herein is a preliminary investigation of subsurface conditions for the new Ford Park Multi-Sports Facility in Beaumont, Texas.

AUTHORIZATION

This investigation was authorized by Mr. Don King, P.E. by e-mail dated November 5, 2014.

SUBSURFACE EXPLORATION

The subsurface exploration at the site was accomplished by means of two (2) undisturbed sample core borings drilled to depths of approximately twenty (20) feet below existing ground surface. Approximate locations of the borings are shown on the attached boring plan.

SUBSURFACE INVESTIGATION

The subsurface investigation consisted of drilling three-inch nominal diameter core borings. Undisturbed samples of the cohesive soils were obtained from the borings by means of thin-wall, seamless steel Shelby tube samplers, in accordance with the ASTM D-1587 method. The shear strength of the cohesive soil samples was estimated by hand pentrometer in the field.

All undisturbed samples were extracted mechanically from the core barrels in the field, classified, wrapped in aluminum foil, and sealed in airtight plastic bags to prevent moisture loss and disturbance. The samples were transported to our laboratory for testing and further study.

LABORATORY INVESTIGATIONS

All samples from borings were examined and classified in the laboratory by a soil engineer, according to procedures outlined in ASTM D-2488. Laboratory tests were performed on selected soil samples in order to evaluate the engineering properties of the soil in accordance with the indicated standard procedures.

510

LABORATORY TESTS	STANDARD TESTS
Atterberg Limits (L.L., P. L., P.I.)	ASTM D-4318
Soil Moisture Content	ASTM D-2216
Unconfined Compressive Strength	ASTM D-2266
Soils Classification	ASTM D-2487

Undrained shear strength of selective cohesive soils was determined by unconfined compression tests. Water content and dry unit weight of the foundation soils were determined as routine parts of the unconfined compression tests. Atterberg limits tests were performed on appropriate cohesive samples. The results of these tests are shown on the attached boring logs.

SUBSURFACE CONDITIONS

Specific types and depths of subsurface strata encountered on the site are shown on the attached boring logs. Review of the boring logs indicates that generalized stratography is approximately as follows:

Stratum No.	Average Depth, feet	Description of Strata
I	0.00 - 6.00	Dark Gray CLAY (CH)
II	6.00 - 17.00	Tan and Gray CLAY (CH) with ferrous nodules and slickensides
III	17.00 - 20.00	Tan and Gray SANDY CLAY (CL)

The near surface soils are "CH" type soils when classified by the unified soils classification system. This type soil normally exhibits high swell potential during seasonal moisture variations.

Hydrostatic water was not encountered at the time of drilling.

CONSTRUCTION VARIATIONS

The information contained in this report summarizes conditions found on the date that the borings was drilled. The depth to the static water table may be expected to vary with the environmental variations, such as frequency and magnitude of precipitation and the time of year that construction begins.

511

DESIGN ANALYSIS AND RECOMMENDATIONS

Information available to this office indicates that the proposed construction at the site will consist of a new multi-sports facility.

DRILLED FOOTINGS (UNDERREAMS)

From analysis of the borings logs and laboratory tests results, it is recommended that the structural loads be transmitted to the foundation soils by the use of drilled and underreamed type footings. Footings should extend to a depth of nine feet (9') below existing ground surface to be located in Tan and Gray Clay. Utilizing a minimum factor of safety of three for dead load, or a minimum factor of two for total load, the allowable bearing capacity of the foundation soils for circular type footings is given as follows. **2,500** Pounds per square foot (PSF) for dead load, plus long term live loads and **3,700** PSF for total load. Whichever is critical should be used. The allowable loads given can be increased by thirty percent (30%) for wind or temporary lateral loading.

Due to the presence of slickensides at the recommended depth, we suggest that the bell to shaft ratio for the footings be limited to one to two (1:2).

There is potential for upward movement of the plastic clays in contact with the sides of the piers; the pier shafts should be well reinforced throughout their length resist tensional force.

STRUCTURE FOUNDATION

Each footing excavation should be inspected by the project's Engineer, Architect or Owner's representative prior to placing concrete to insure that (a) the footing has been constructed at the correct depth and the correct formation established by previously mentioned criteria, (b) the footing is concentric with the pier shaft or column, and (c) excessive cuttings, build-up or any soft-compressible material(s) have been removed from the bottom of the excavation.

Placement of concrete should be accomplished as soon as possible to prevent changes in the state of stress and the caving of the foundation soils. No footings should be poured without the prior approval of the projects' Engineer, Architect or Owner's representative.

FOUNDATION SETTLEMENT

A detailed settlement analysis was not within the scope of this study. It is anticipated that the footings designed, using the recommended allowable bearing pressures, will experience small settlements that will be well within the tolerable limit for the proposed structure.

FLOOR SLABS AND GRADE BEAMS

Review of the Atterberg Limits determinations indicates that the surface soils are "CH" type soils, with high plasticity, which may exhibit expansion during seasonal wetting and drying cycles. We believe that conventional "slab-on-fill" construction may be used for the interior portion of the structures built at the site. Select fill, a minimum of thirty-six-inch (36") thickness should be used to bring the structure to grade.

Prior to placement of select fill, strip site sufficiently to remove all topsoil, existing vegetation and roots larger than ½" in diameter to an approximate depth of twelve (12) inches. Then scarify the subgrade, add moisture, if necessary, and recompact to 95% of the maximum dry density as determined by ASTM D-698 (Standard Proctor). The moisture content at the time of compaction of subgrade soils should be within +1 to +3% of the proctor optimum value.

Select fill should then be placed, under laboratory control, in no greater than eight-inch (8") loose layers, and compacted to a minimum of 95% of the maximum dry unit weight, as obtained in the laboratory by means ASTM D-698 procedure. Moisture content of ±2% optimum should be maintained during placement of the select fill material. A vapor barrier consisting of six (6) mil Polyethylene shall be placed between the select fill and concrete slab.

The material used as select fill should consist of a non-active sandy clay or clayey sand type substance, having a Liquid Limit of 36 or less and Plasticity Index (P.I.) varying from 10 to 20.

SITE PREPARATION

In order to remedy construction problems, which may develop if attempts are made to work the surface materials following prolonged periods of rainfall which are common to this area, it is recommended that prior to starting any work at the site that proper construction drainage is to be provided to maintain a relatively dry construction site. (Use a minimum slope of 5% within 10 feet of the foundation).

513

LIMITATIONS

The conclusions and recommendations given in this report are based on the analysis of the data collected for this project. Additive conclusions or recommendations made from this data by others are their responsibility.

Our study is based on the data obtained from soil borings made at the locations shown on borings plan. The nature and extent of variations between borings may become evident during construction. We should be requested to observe exposed conditions. After making these observations, and noting the engineering significance of variations, we will advise you of any changes in recommendations believed appropriate.

We appreciate this opportunity to provide our services to this project. Please let us know if you require additional information. Thank you.

Respectfully submitted for the firm,
TBPE Registration No. 4060

Yousef Rahmani, P.E.
President

Encl.: Boring Plan
Boring Logs 1 and 2
Geotechnical Chart/Symbols

Copies: 2 – Client
1- Fittz & Shipman, Inc.
1- SEL File 14260

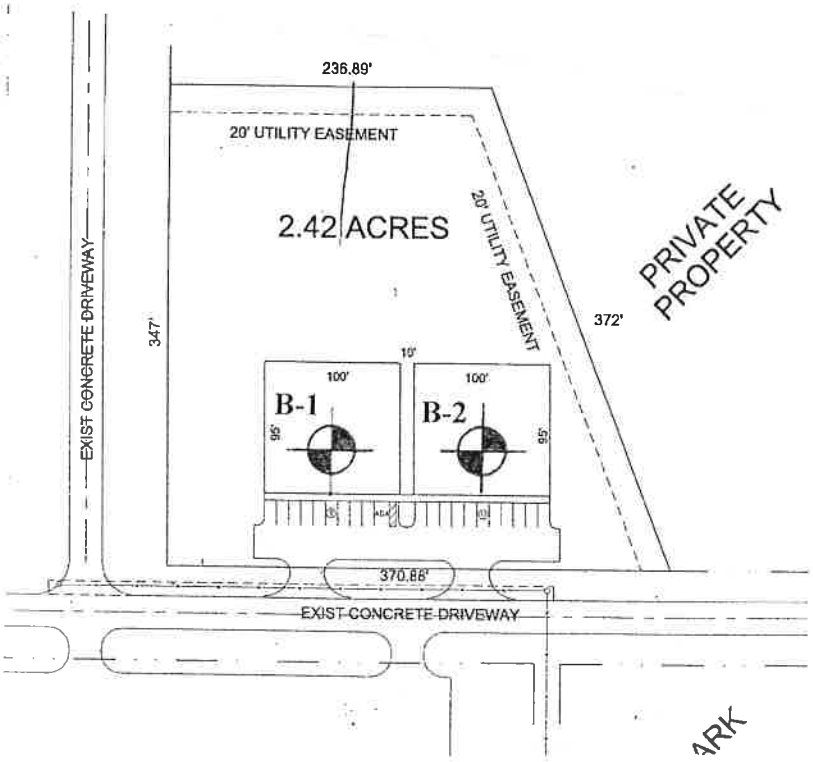
YR/nb

514

SCIENCE ENGINEERING, LTD.

GEOTECHNICAL, ENVIRONMENTAL, MATERIALS TESTING

Report Number 14260



FORD PARK MULTI-SPORTS FACILTIY
BEAUMONT, TEXAS

BORING PLAN

NOVEMBER 2014

NOT TO SCALE

P.O. Box 2048 / Nederland, Texas 77627 / Tel.:(409) 982-0686 or (409)727-2218
Fax: (409) 982-0619 / E-Mail: yousef@science-engineer.com

515

SCIENCE ENGINEERING, LTD.

GEOTECHNICAL, ENVIRONMENTAL, MATERIALS TESTING

LOG OF BORING

Project: Ford Park Multi-Sports Facility
Beaumont, Texas

Boring Number: B-1
Location: See Boring Plan
Dry Auger: 0 to 20 Feet

Project No: 14260
Date of Report: 11/13/2014
Date of Boring: 11/11/2014
Authorization: Mr. Don King, P.E.

DEPTH, FEET	SYMBOL	SAMPLE	BLOWS PER FOOT	STRATUM DESCRIPTION	WATER CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	PERCENT PASSING NO. 200 SIEVE	SHEAR STRENGTH: POCKET PENETROMETER (TSF)	SHEAR STRENGTH: UNCONFINED COMPRESSIVE STRENGTH (TSF)
				Dark Gray CLAY								
							71	26	45		0.75	
											0.25	
5				CH	33	80	91	32	59		0.25	0.30
				Gray and Tan CLAY with ferrous nodules								
											0.25	
				tan and gray with slickensides	36	89	90	31	59		0.75	0.90
10												
					38	78	109	36	73		0.75	0.43
					42	81	112	40	72		0.75	0.51
15												
				CH								
				Gray SANDY CLAY								
				CL	22	99	39	19	20		0.50	0.30
20												
				Bottom at 20 feet								
				1. Water was not encountered during drilling.								
				2. Bore hole dry upon completion.								

P.O. Box 2048 / Nederland, Texas 77627 / Tel.:(409) 982-0686 or (409)727-2218
Fax: (409) 982-0619 / E-Mail: yousef@science-engineer.com

516

SCIENCE ENGINEERING, LTD.

GEOTECHNICAL, ENVIRONMENTAL, MATERIALS TESTING

LOG OF BORING

Project: Ford Park Multi-Sports Facility
Beaumont, Texas

Project No: 14260
Boring Number: B-2
Date of Report: 11/13/2014
Location: See Boring Plan
Date of Boring: 11/11/2014
Dry Auger: 0 to 20 Feet
Authorization: Mr. Don King, P.E.

DEPTH, FEET	SYMBOL	SAMPLE	BLOWS PER FOOT	STRATUM DESCRIPTION	WATER CONTENT (%)	DRY DENSITY (PCF)	LIQUID LIMIT	PLASTIC LIMIT	PLASTICITY INDEX (PI)	PERCENT PASSING NO. 200 SIEVE	SHEAR STRENGTH: POCKET PENETROMETER (TSF)	SHEAR STRENGTH: UNCONFINED COMPRESSIVE STRENGTH (TSF)
				Dark Gray CLAY								
											0.50	
					34	85	100	33	67		0.25	0.37
5				CH							0.25	
				Tan and Gray CLAY with ferrous nodules and slickensides								
					32	91	87	26	61		0.35	0.40
					29	88					0.65	0.60
10												
					39	78	108	34	74		0.75	0.50
15												
				CH								
				Tan and Gray SANDY CLAY								
				CL	22	107					1.00	0.85
20												
				Bottom at 20 feet								
				1. Water was not encountered during drilling.								
				2. Bore hole dry upon completion.								

P.O. Box 2048 / Nederland, Texas 77627 / Tel.:(409) 982-0686 or (409)727-2218
Fax: (409) 982-0619 / E-Mail: yousef@science-engineer.com

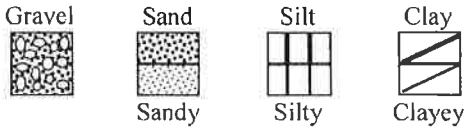
517

SCIENCE ENGINEERING, LTD.

GEOTECHNICAL, ENVIRONMENTAL, MATERIALS TESTING

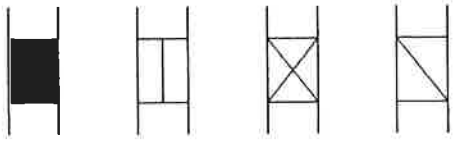
KEY TO SOIL CLASSIFICATION AND SYMBOLS

SOIL TYPE



Predominant type shown heavy

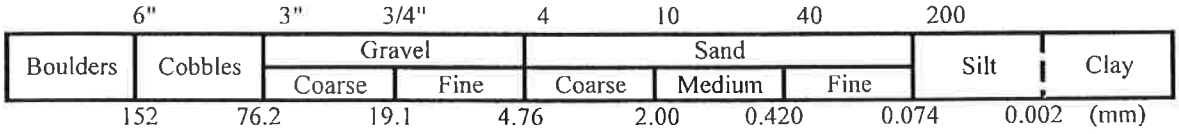
SAMPLE TYPE



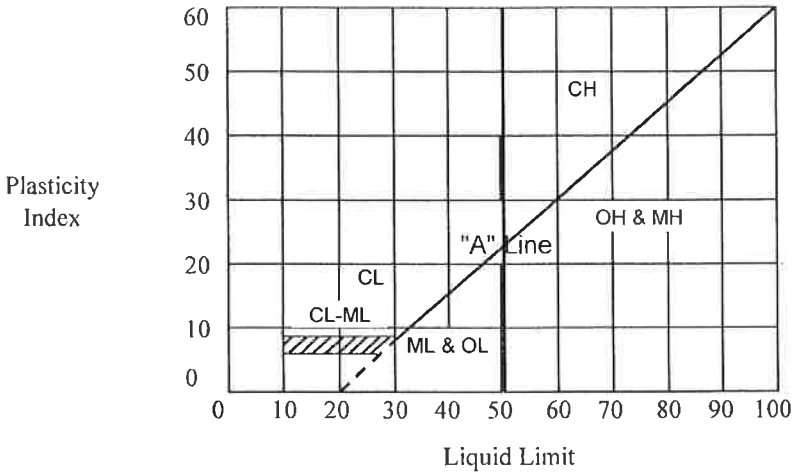
Un-Disturbed | Rock Core | Split Spoon | No Recovery

SOIL GRAIN SIZE

U.S. Standard Sieve



PLASTICITY CHART



CONSISTENCY OF COHESIVE SOILS

Penetration Resistance, blows per foot	Consistency	Cohesion TSF	Plasticity Index	Degree of Plasticity
0 - 2	Very Soft	0 - 0.125	0 - 5	None
2 - 4	Soft	0.125 - 0.25	5 - 10	Low
4 - 8	Firm	0.25 - 0.5	10 - 20	Moderate
8 - 15	Stiff	0.5 - 1.0	20 - 40	Plastic
15 -30	Very Stiff	1.0 - 2.0	> 40	Highly Plastic
> 30	Hard	> 2.0		

RELATIVE DENSITY OF COHESIONLESS SOILS

Penetration Resistance, blows per foot	Relative Density
0 - 4	Very Loose
4 - 10	Loose
10 - 30	Medium Dense
30 - 50	Dense
> 50	Very Dense

P.O. Box 2048 / Nederland, Texas 77627 / Tel.:(409) 982-0686 or (409)727-2218

Fax: (409) 982-0619 / E-Mail: yousef@science-engineer.com

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Protecting existing vegetation to remain.
2. Removing existing vegetation.
3. Clearing and grubbing.
4. Stripping and stockpiling topsoil.
5. Removing above- and below-grade site improvements.
6. Disconnecting, capping or sealing site utilities.
7. Temporary erosion- and sedimentation-control measures.

1.2 MATERIAL OWNERSHIP

A. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

1.3 PROJECT CONDITIONS

A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.

1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
2. Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.

B. Utility Locator Service: Notify utility locator service for area where Project is located before site clearing.

C. Do not commence site clearing operations until temporary erosion- and sedimentation-control and plant-protection measures are in place.

D. The following practices are prohibited within protection zones:

1. Storage of construction materials, debris, or excavated material.
2. Parking vehicles or equipment.
3. Foot traffic.
4. Erection of sheds or structures.
5. Impoundment of water.
6. Excavation or other digging unless otherwise indicated.

7. Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Division 31 Section "Earth Moving."

1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect and maintain benchmarks and survey control points from disturbance during construction.

B. Locate and clearly identify trees, shrubs, and other vegetation to remain or to be relocated.

C. Protect existing site improvements to remain from damage during construction.

1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.

B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.

C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.

D. Remove erosion and sedimentation controls and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

A. General: Protect trees and plants remaining on-site according to requirements in Division 01 Section "Temporary Tree and Plant Protection."

B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, in a manner approved by Architect.

3.4 EXISTING UTILITIES

A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.

1. Arrange with utility companies to shut off indicated utilities.

B. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:

1. Notify Architect not less than two days in advance of proposed utility interruptions.
2. Do not proceed with utility interruptions without Architect's written permission.

C. Removal of underground utilities is included in Division 22 and Division 26 Sections.

3.5 CLEARING AND GRUBBING

A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.

1. Grind down stumps and remove roots, obstructions, and debris to a depth of 18 inches (450 mm) below exposed subgrade.
2. Use only hand methods for grubbing within protection zones.

B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.

1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches (200 mm), and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

A. Remove sod and grass before stripping topsoil.

B. Strip topsoil to depth of 6 inches in a manner to prevent intermingling with underlying subsoil or other waste materials.

C. Stockpile topsoil away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.

3.7 SITE IMPROVEMENTS

A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.

END OF SECTION 311000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 312000 - EARTH MOVING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Preparing subgrades for slabs-on-grade, walks, pavements, lawns and grasses and.
2. Excavating and backfilling for buildings and structures.
3. Drainage course for slabs-on-grade.
4. Subbase course for concrete walks, pavements.
5. Excavating and backfilling for utility trenches.

1.2 DEFINITIONS

A. Backfill: Soil material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Course placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Course placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Course supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by Architect. Authorized additional excavation and replacement material will be paid for according to Contract provisions changes in the Work.
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by Architect. Unauthorized excavation, as well as remedial work directed by Architect, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I. Subbase Course: Course placed between the subgrade and base course for hot-mix asphalt pavement, or course placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

J. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.

K. Utilities: On-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.

1.3 PROJECT CONDITIONS

A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Architect and then only after arranging to provide temporary utility services according to requirements indicated.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

B. Satisfactory Soils: ASTM D 2487 Soil Classification Groups GW, GP, GM, SW, SP, and SM, or a combination of these groups; free of rock or gravel larger than 3 inches (75 mm) in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.

C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487 or a combination of these groups.

1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.

E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 95 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; with at least 90 percent passing a 1-1/2-inch (37.5-mm) sieve and not more than 12 percent passing a No. 200 (0.075-mm) sieve.

G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch (25-mm) sieve and not more than 8 percent passing a No. 200 (0.075-mm) sieve.

H. Drainage Course: Narrowly graded mixture of [washed]crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch (37.5-mm) sieve and 0 to 5 percent passing a No. 8 (2.36-mm) sieve.

2.2 ACCESSORIES

A. Warning Tape: Acid- and alkali-resistant polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches (150 mm) wide and 4 mils (0.1 mm) thick, continuously inscribed with a description of the utility.

PART 3 - EXECUTION

3.1 PREPARATION

A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

B. Preparation of subgrade for earthwork operations including removal of vegetation, topsoil, debris, obstructions, and deleterious materials from ground surface is specified in Division 31 Section "Site Clearing."

C. Protect and maintain erosion and sedimentation controls, which are specified in Division 31 Section "Site Clearing." during earthwork operations.

3.2 EXCAVATION

A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.3 EXCAVATION FOR STRUCTURES

A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch (25 mm). If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.

1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.

3.4 EXCAVATION FOR WALKS AND PAVEMENTS

A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.5 EXCAVATION FOR UTILITY TRENCHES

A. Excavate trenches to indicated gradients, lines, depths, and elevations.

B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches (300 mm) higher than top of pipe or conduit, unless otherwise indicated.

1. Clearance: 12 inches (300 mm) each side of pipe or conduit or as indicated.

C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

1. Excavate trenches 6 inches (150 mm) deeper than elevation required in rock or other unyielding bearing material, 4 inches (100 mm) deeper elsewhere, to allow for bedding course.

3.6 SUBGRADE INSPECTION

A. Proof-roll subgrade below the building slabs and pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

B. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Architect, without additional compensation.

3.7 UNAUTHORIZED EXCAVATION

A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation or footing to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi (17.2 MPa), may be used when approved by Architect.

1. Fill unauthorized excavations under other construction or utility pipe as directed by Architect.

3.8 STORAGE OF SOIL MATERIALS

A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.

1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.9 UTILITY TRENCH BACKFILL

A. Place backfill on subgrades free of mud, frost, snow, or ice.

B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.

C. Backfill trenches excavated under footings and within 18 inches (450 mm) of bottom of footings with satisfactory soil; fill with concrete to elevation of bottom of footings. Concrete is specified in Division 03 Section "Cast-in-Place Concrete".

D. Provide 4-inch- (100-mm-) thick, concrete-base slab support for piping or conduit less than 30 inches (750 mm) below surface of roadways. After installing and testing, completely encase piping or conduit in a minimum of 4 inches (100 mm) of concrete before backfilling or placing roadway subbase.

E. Place and compact initial backfill of subbase material, free of particles larger than 1 inch (25 mm) in any dimension, to a height of 12 inches (300 mm) over the utility pipe or conduit.

1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of utility piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.

F. Place and compact final backfill of satisfactory soil to final subgrade elevation.

G. Install warning tape directly above utilities, 12 inches (300 mm) below finished grade, except 6 inches (150 mm) below subgrade under pavements and slabs.

3.10 SOIL FILL

A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.

B. Place and compact fill material in layers to required elevations as follows:

1. Under grass and planted areas, use satisfactory soil material.
2. Under walks and pavements, use satisfactory soil material.
3. Under steps and ramps, use engineered fill.
4. Under building slabs, use engineered fill.
5. Under footings and foundations, use engineered fill.

3.11 SOIL MOISTURE CONTROL

A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.

1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
2. Remove and replace, or scarify and air dry otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.12 COMPACTION OF SOIL BACKFILLS AND FILLS

A. Place backfill and fill soil materials in layers not more than 8 inches (200 mm) in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches (100 mm) in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.

C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 1557:

1. Under structures, building slabs, steps, and pavements, scarify and recompact top 12 inches (300 mm) of existing subgrade and each layer of backfill or fill soil material at 95 percent.
2. Under walkways, scarify and recompact top 6 inches (150 mm) below subgrade and compact each layer of backfill or fill soil material at 92 percent.
3. Under lawn or unpaved areas, scarify and recompact top 6 inches (150 mm) below subgrade and compact each layer of backfill or fill soil material at 85 percent.
4. For utility trenches, compact each layer of initial and final backfill soil material at 85 percent.

3.13 GRADING

A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.

B. Site Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:

1. Lawn or Unpaved Areas: Plus or minus 1 inch (25 mm).
2. Walks: Plus or minus 1 inch (25 mm).
3. Pavements: Plus or minus 1/2 inch (13 mm).

C. Grading inside Building Lines: Finish subgrade to a tolerance of 1/2 inch (13 mm) when tested with a 10-foot (3-m) straightedge.

3.14 SUBBASE AND BASE COURSES

A. Place subbase and base course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place subbase and base course under pavements and walks as follows:

1. Shape subbase and base course to required crown elevations and cross-slope grades.
2. Compact subbase and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 1557.

3.15 DRAINAGE COURSE

A. Place drainage course on subgrades free of mud, frost, snow, or ice.

B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:

1. Place drainage course that exceeds 6 inches (150 mm) in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches (150 mm) thick or less than 3 inches (75 mm) thick.
2. Compact each layer of drainage course to required cross sections and thicknesses to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.16 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified independent geotechnical engineering testing agency to perform field quality-control testing.

B. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earthwork only after test results for previously completed work comply with requirements.

C. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.

D. Testing agency will test compaction of soils in place according to ASTM D 1556, ASTM D 2167, ASTM D 2922, and ASTM D 2937, as applicable.

E. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil to depth required; recompact and retest until specified compaction is obtained.

3.17 PROTECTION

A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.

B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.

C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.

1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

END OF SECTION 312000

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 313116 - TERMITE CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Soil treatment with termiticide.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated. Include the EPA-Registered Label.

B. Product certificates.

C. Soil Treatment Application Report: Include the following:

1. Date and time of application.
2. Moisture content of soil before application.
3. Brand name and manufacturer of termiticide.
4. Quantity of undiluted termiticide used.
5. Dilutions, methods, volumes, and rates of application used.
6. Areas of application.
7. Water source for application.

1.3 QUALITY ASSURANCE

A. Installer Qualifications: A specialist who is licensed according to regulations of authorities having jurisdiction to apply termite control treatment and products in jurisdiction where Project is located.

B. Regulatory Requirements: Formulate and apply termiticides according to the EPA-Registered Label.

1.4 WARRANTY

A. Special Warranty: Manufacturer's standard form, signed by Applicator and Contractor certifying that termite control work, consisting of applied soil termiticide treatment, will prevent infestation of subterranean termites. If subterranean termite activity or damage is discovered during warranty period, re-treat soil and repair or replace damage caused by termite infestation.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:

1. Termiticides:

a. Aventis Environmental Science USA LP; Termidor.
b. Bayer Corporation; Premise 75.
c. Dow AgroSciences LLC; Dursban TC.
d. FMC Corporation, Agricultural Products Group; Prevail FT.
e. Syngenta; Demon TC.

2.2 SOIL TREATMENT

A. Termiticide: Provide an EPA-registered termiticide complying with requirements of authorities having jurisdiction, in an aqueous solution formulated to prevent termite infestation. Provide quantity required for application at the label volume and rate for the maximum termiticide concentration allowed for each specific use, according to product's EPA-Registered Label.

PART 3 - EXECUTION

3.1 PREPARATION

A. General: Remove all extraneous sources of wood cellulose and other edible materials such as wood debris, tree stumps and roots, stakes, formwork, and construction waste wood from soil within and around foundations.

B. Soil Treatment Preparation: Loosen, rake, and level soil to be treated except previously compacted areas under slabs and footings. Termiticides may be applied before placing compacted fill under slabs if recommended in writing by termiticide manufacturer.

3.2 APPLYING SOIL TREATMENT

A. Application: Mix soil treatment termiticide solution to a uniform consistency. Provide quantity required for application at the label volume and rate for the maximum specified concentration of termiticide, according to manufacturer's EPA-Registered Label, to the following so that a continuous horizontal and vertical termiticidal barrier or treated zone is established around and under building construction. Distribute treatment evenly.

1. Slabs-on-Grade: Underground-supported slab construction, including footings, building slabs, and attached slabs as an overall treatment. Treat soil materials before concrete footings and slabs are placed.
2. Foundations: Adjacent soil including soil along the entire inside perimeter of foundation walls, along both sides of interior partition walls, around plumbing pipes and electric conduit penetrating the slab, and around interior column footers, piers, and chimney bases; also along the entire outside perimeter, from grade to bottom of footing. Avoid soil washout around footings.
3. Penetrations: At expansion joints, control joints, and areas where slabs will be penetrated.

B. Avoid disturbance of treated soil after application. Keep off treated areas until completely dry.

C. Protect termiticide solution, dispersed in treated soils and fills, from being diluted until ground-supported slabs are installed. Use waterproof barrier according to EPA-Registered Label instructions.

D. Post warning signs in areas of application.

E. Reapply soil treatment solution to areas disturbed by subsequent excavation, grading, landscaping, or other construction activities following application.

END OF SECTION 313116

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 316329 - DRILLED CONCRETE PIERS AND SHAFTS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes dry-installed drilled piers.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Design Mixtures: For each concrete mixture.

C. Shop Drawings: For concrete reinforcement.

D. Welding certificates.

E. Material certificates & test reports.

1.3 QUALITY ASSURANCE

A. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.1/D1.1M, "Structural Welding Code - Steel."
2. AWS D1.4, "Structural Welding Code - Reinforcing Steel."

B. Drilled-Pier Standard: Comply with ACI 336.1 unless modified in this Section.

1.4 PROJECT CONDITIONS

A. Project-Site Information: A geotechnical report has been prepared for this Project and is available for information only. The opinions expressed in this report are those of geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by geotechnical engineer. Owner will not be responsible for interpretations or conclusions drawn from this data.

1. Make additional test borings and conduct other exploratory operations necessary for drilled piers.
2. The geotechnical report is included in Section 310000 – Geotechnical Investigation elsewhere in the Project Manual.

B. Survey Work: Engage a qualified land surveyor or professional engineer to perform surveys, layouts, and measurements for drilled piers. Before excavating, lay out each drilled pier to lines and levels required. Record actual measurements of each drilled

pier's location, shaft diameter, bottom and top elevations, deviations from specified tolerances, and other specified data.

1. Record and maintain information pertinent to each drilled pier and cooperate with Owner's testing and inspecting agency to provide data for required reports.

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615, Grade 60, deformed.

2.2 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of same type, brand, and source, throughout Project:

1. Portland Cement: ASTM C 150, Type I. Supplement with the following:

a. Fly Ash: ASTM C 618, Class C or F.

B. Normal-Weight Aggregate: ASTM C 33, graded, 1-inch nominal maximum coarse-aggregate size.

1. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.

C. Water: ASTM C 94 and potable.

D. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494, Type A.
2. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
3. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
4. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.

2.3 CONCRETE MIXTURES AND MIXING

A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.

B. Cementitious Materials: Limit percentage, by weight, of cementitious materials other than portland cement according to ACI 301 limits as if concrete were exposed to deicing chemicals.

C. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

D. Proportion normal-weight concrete mixture as follows:

1. Compressive Strength (28 Days): 3000 psi.
2. Air Content: Do not air entrain concrete.

E. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94, and furnish batch ticket information.

PART 3 - EXECUTION

3.1 EXCAVATION

A. Classified Excavation: Excavation is classified as standard excavation, special excavation, and obstruction removal and includes excavation to bearing elevations as follows:

1. Standard excavation includes excavation accomplished with conventional augers fitted with soil or rock teeth, drilling buckets, or underreaming tools attached to drilling equipment of size, power, torque, and downthrust necessary for the Work.
2. Special excavation includes excavation that requires special equipment or procedures above or below indicated depth of drilled piers where drilled-pier excavation equipment used in standard excavation, operating at maximum power, torque, and downthrust, cannot advance the shaft.
3. Obstructions: Payment for removing unanticipated boulders, concrete, masonry, or other subsurface obstructions that cannot be removed by conventional augers fitted with soil or rock teeth, drilling buckets, or underreaming tools attached to drilling equipment of size, power, torque, and downthrust necessary for the Work will be according to Contract provisions for changes in the Work.

B. Excavate shafts for drilled piers to indicated elevations. Remove loose material from bottom of excavation.

C. Notify and allow testing and inspecting agency to test and inspect bottom of excavation. If unsuitable bearing stratum is encountered, make adjustments to drilled piers as determined by Architect.

1. Do not excavate shafts deeper than elevations indicated unless approved by Architect.
2. Payment for additional authorized excavation will be according to Contract provisions for changes in the Work.

D. Temporary Casings: Install watertight steel casings of sufficient length and thickness to prevent water seepage into shaft; to withstand compressive, displacement, and withdrawal stresses; and to maintain stability of shaft walls.

1. Remove temporary casings, maintained in plumb position, during concrete placement and before initial set of concrete.

E. Bells: Excavate bells for drilled piers to shape, base thickness, and slope angle indicated. Excavate bottom of bells to level plane and remove loose material before placing concrete.

F. Tolerances: Construct drilled piers to remain within ACI 336.1 tolerances.

3.2 INSTALLATION

A. Comply with recommendations in CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

B. Place concrete in continuous operation and without segregation immediately after inspection and approval of shaft by Owner's independent testing and inspecting agency.

C. Place concrete to fall vertically down the center of drilled pier without striking sides of shaft or steel reinforcement. Vibrate top 60 inches of concrete.

D. Coordinate withdrawal of temporary casings with concrete placement to maintain at least a 60-inch head of concrete above bottom of casing. Vibrate top 60 inches of concrete after withdrawal of temporary casing.

3.3 FIELD QUALITY CONTROL

A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:

1. Drilled piers.
2. Excavation.
3. Concrete.
4. Steel reinforcement welding.

B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

C. Drilled-Pier Tests and Inspections: For each drilled pier, before concrete placement.

1. Soil Testing: Bottom elevations, bearing capacities, and lengths of drilled piers indicated have been estimated from available soil data. Actual elevations and drilled-pier lengths and bearing capacities will be determined by testing and inspecting agency. Final evaluations and approval of data will be determined by Architect.

D. Concrete Tests and Inspections: ACI 301.

END OF SECTION 316329

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes exterior cement concrete pavement for the following:

1. Driveways and roadways.
2. Walkways.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Design Mixtures: For each concrete pavement mixture.

1.3 QUALITY ASSURANCE

A. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products who complies with ASTM C 94/C 94M requirements for production facilities and equipment.

B. ACI Publications: Comply with ACI 301, "Specification for Structural Concrete," unless modified by requirements in the Contract Documents.

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

A. Plain-Steel Welded Wire Reinforcement: ASTM A 185, fabricated from as-drawn steel wire into flat sheets.

B. Deformed-Steel Welded Wire Reinforcement: ASTM A 497, flat sheet.

C. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed.

D. Plain Steel Wire: ASTM A 82, as drawn.

E. Deformed-Steel Wire: ASTM A 496.

F. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice."

2.2 CONCRETE MATERIALS

A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source throughout the Project:

1. Portland Cement: ASTM C 150, Type I/II. Supplement with the following:]

a. Fly Ash: ASTM C 618, Class C or F.
b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.

B. Normal-Weight Aggregates: ASTM C 33, uniformly graded, from a single source coarse aggregate, uniformly graded. Provide aggregates from a single source.

C. Water: ASTM C 94/C 94M.

D. Air-Entraining Admixture: ASTM C 260.

E. Chemical Admixtures: ASTM C 494/C 494M, of type suitable for application, certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

2.3 FIBER REINFORCEMENT

A. Synthetic Fiber: Monofilament or fibrillated polypropylene fibers engineered and designed for use in concrete pavement, complying with ASTM C 1116, Type III, 1/2 to 1-1/2 inches (13 to 38 mm) long.

2.4 CURING MATERIALS

A. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth.

B. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.

C. Water: Potable.

D. Evaporation Retarder: Waterborne, monomolecular film forming; manufactured for application to fresh concrete.

E. Clear Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.

F. White Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B.

2.5 RELATED MATERIALS

A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.

2.6 CONCRETE MIXTURES

A. Prepare design mixtures, proportioned according to ACI 301, with the following properties:

1. Compressive Strength (28 Days): 3000 psi (20.7 MPa).
2. Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.45.
3. Slump Limit: 4 inches (100 mm) plus or minus 1 inch (25 mm).
4. Air Content: 4-1/2 percent plus or minus 1.5 percent.

B. Synthetic Fiber: Uniformly disperse in concrete mix at manufacturer's recommended rate, but not less than 1.0 lb/cu. yd. (0.60 kg/cu. m).

C. Color Pigment: Add color pigment to concrete mixture according to manufacturer's written instructions.

2.7 CONCRETE MIXING

A. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M and ASTM C 1116. Furnish batch certificates for each batch discharged and used in the Work.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Proof-roll prepared subbase surface below concrete pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding.

3.2 EDGE FORMS AND SCREED CONSTRUCTION

A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.

B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.3 STEEL REINFORCEMENT

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

3.4 JOINTS

A. General: Form construction, isolation, and contraction joints and tool edgings true to line with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline, unless otherwise indicated.

B. Construction Joints: Set construction joints at side and end terminations of pavement and at locations where pavement operations are stopped for more than one-half hour unless pavement terminates at isolation joints.

C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, walks, other fixed objects, and where indicated.

D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness to match jointing of existing adjacent concrete pavement.

E. Edging: Tool edges of pavement, gutters, curbs, and joints in concrete after initial floating with an edging tool to a 1/4-inch (6-mm) radius. Repeat tooling of edges after applying surface finishes. Eliminate tool marks on concrete surfaces.

3.5 CONCRETE PLACEMENT

A. Moisten subbase to provide a uniform dampened condition at time concrete is placed.

B. Comply with ACI 301 requirements for measuring, mixing, transporting, and placing concrete.

C. Deposit and spread concrete in a continuous operation between transverse joints. Do not push or drag concrete into place or use vibrators to move concrete into place.

D. Screed pavement surfaces with a straightedge and strike off.

E. Commence initial floating using bull floats or darbies to impart an open textured and uniform surface plane before excess moisture or bleed water appears on the surface. Do not further disturb concrete surfaces before beginning finishing operations or spreading surface treatments.

3.6 FLOAT FINISHING

A. General: Do not add water to concrete surfaces during finishing operations.

B. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. Float surface with power-driven floats, or by hand floating if area is small or inaccessible to power units. Finish surfaces to true planes. Cut down high spots and fill low spots. Refloat surface immediately to uniform granular texture.

1. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture.
2. Medium-to-Fine-Textured Broom Finish: Draw a soft bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.
3. Medium-to-Coarse-Textured Broom Finish: Provide a coarse finish by striating float-finished concrete surface 1/16 to 1/8 inch (1.6 to 3 mm) deep with a stiff-bristled broom, perpendicular to line of traffic.

C. Slip-Resistive Aggregate Finish: Before final floating, spread slip-resistive aggregate finish on pavement surface according to manufacturer's written instructions.

1. Cure concrete with curing compound recommended by slip-resistive aggregate manufacturer. Apply curing compound immediately after final finishing.
2. After curing, lightly work surface with a steel wire brush or abrasive stone and water to expose nonslip aggregate.

3.7 CONCRETE PROTECTION AND CURING

A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.

B. Comply with ACI 306.1 for cold-weather protection.

C. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

D. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.

E. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound or a combination of these methods.

3.8 PAVEMENT TOLERANCES

A. Comply with tolerances of ACI 117 and as follows:

1. Elevation: 1/4 inch (6 mm).
2. Thickness: Plus 3/8 inch (10 mm), minus 1/4 inch (6 mm).
3. Surface: Gap below 10-foot- (3-m-) long, unleveled straightedge not to exceed 1/4 inch (6 mm).
4. Joint Spacing: 3 inches (75 mm).
5. Contraction Joint Depth: Plus 1/4 inch (6 mm), no minus.
6. Joint Width: Plus 1/8 inch (3 mm), no minus.

B. wheel stop.

3.9 REPAIRS AND PROTECTION

A. Remove and replace concrete pavement that is broken, damaged, or defective or that does not comply with requirements in this Section.

B. Protect concrete from damage. Exclude traffic from pavement for at least 14 days after placement.

C. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 321373 - CONCRETE PAVING JOINT SEALANTS

PART 1 - GENERAL

1.1 SUMMARY

A. This Section includes the following:

1. Expansion and contraction joints within cement concrete pavement.

1.2 SUBMITTALS

A. Product Data: For each type of product indicated.

B. Samples: For each type and color of joint sealant required.

C. Product certificates & test reports.

D. Compatibility and Adhesion Test Reports: From sealant manufacturer.

1.3 QUALITY ASSURANCE

A. Preconstruction Compatibility and Adhesion Testing: Submit samples of materials that will contact or affect joint sealants to joint-sealant manufacturers for testing according to ASTM C 1087 to determine whether priming and other specific joint preparation techniques are required to obtain rapid, optimum adhesion of joint sealants to joint substrates.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Products: Subject to compliance with requirements, provide one of the products listed in other Part 2 articles.

2.2 MATERIALS, GENERAL

A. Compatibility: Provide joint sealants, backing materials, and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by joint-sealant manufacturer based on testing and field experience.

1. Primers: Product recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.

B. Colors of Exposed Joint Sealants: As selected by Architect from manufacturer's full range.

2.3 COLD-APPLIED JOINT SEALANTS

A. Single-Component Jet-Fuel-Resistant Urethane Sealant for Concrete: Single-component, pourable, coal-tar-modified, urethane formulation complying with ASTM C 920 for Type S; Grade P; Class 25; Uses T, M, and, as applicable to joint substrates indicated, O.

1. Products:

a. Sonneborn, Div. of ChemRex, Inc.; Sonomeric SL-1.

2.4 JOINT-SEALANT BACKER MATERIALS

A. General: Provide joint-sealant backer materials that are nonstaining; are compatible with joint substrates, sealants, primers, and other joint fillers; and are approved for applications indicated by joint-sealant manufacturer based on field experience and laboratory testing.

B. Round Backer Rods for Cold- and Hot-Applied Sealants: ASTM D 5249, Type 1, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

C. Backer Strips for Cold- and Hot-Applied Sealants: ASTM D 5249; Type 2; of thickness and width required to control sealant depth, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.

D. Round Backer Rods for Cold-Applied Sealants: ASTM D 5249, Type 3, of diameter and density required to control sealant depth and prevent bottom-side adhesion of sealant.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealants to comply with joint-sealant manufacturer's written instructions.

B. Joint Priming: Prime joint substrates where indicated or where recommended in writing by joint-sealant manufacturer, based on preconstruction joint-sealant-substrate tests or prior experience.

C. Sealant Installation Standard: Comply with recommendations in ASTM C 1193 for use of joint sealants as applicable to materials, applications, and conditions indicated.

D. Install backer materials to support sealants during application and at position required to produce optimum sealant movement capability. Do not leave gaps between ends of backer materials. Do not stretch, twist, puncture, or tear backer materials. Remove absorbent backer materials that have become wet before sealant application and replace them with dry materials.

E. Install sealants at the same time backings are installed to completely fill recesses provided for each joint configuration and to produce uniform, cross-sectional shapes and depths relative to joint widths that allow optimum sealant movement capability.

F. Tooling of Nonsag Sealants: Immediately after sealant application and before skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated; to eliminate air pockets; and to ensure contact and adhesion of sealant with sides of joint.

G. Clean off excess sealants or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials approved by manufacturers of joint sealants and of products in which joints occur.

END OF SECTION 321373

FORD FIELDS CONCESSION STAND
BEAUMONT, TEXAS

SECTION 323113 - CHAIN LINK FENCES AND GATES

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes the following:
   1. Chain-Link Fences: Industrial
   2. Gates: Motor operated, horizontal slide (two required)

1.2 PERFORMANCE REQUIREMENTS

A. Structural Performance: Chain-link fence and gate framework shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated according to ASCE/SEI 7:

   1. Minimum Post Size and Maximum Spacing: Determine according to CLFMI WLG 2445, based on mesh size and pattern specified and on the following:

      a. Wind Loads: 120 MPH.
      b. Fence Height: to match existing.
      c. Material Group: IA, ASTM F 1043, Schedule 40 steel pipe.

1.3 SUBMITTALS

A. Product Data: For each type of product indicated

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

   1. Gate Operator: Show locations and details for installing operator components, switches, and controls. Indicate motor size, electrical characteristics, drive arrangement, mounting, and grounding provisions.

C. Product Certificates: For each type of chain-link fence and gate, from manufacturer.

D. Product Test Reports: For framing strength according to ASTM F 1043.

E. Operation and maintenance data.

1.4 QUALITY INSURANCE

A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70. Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

B. UL Standard: Provide gate operators that comply with UL 325.

C. Emergency Access Requirements: Comply with requirements of authorities having jurisdiction for automatic gate operators serving as a required means of access.

1.5 WARRANTY

F. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, deterioration of metals, metal finishes, and other materials beyond normal weathering.
2. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 CHAIN-LINK FENCE FABRIC

A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist. Comply with CLFMI Product Manual and with requirements indicated below:

1. Fabric Height: to match existing w/ inserts.
2. Steel Wire Fabric: 0.148 inch (3.76 mm)

a. Mesh Size: 2 inches (50 mm).

b. Zinc-Coated Fabric: ASTM A 392, Type II

3. Selvage: Knuckled at both selvages.

2.2 FENCE FRAMING

A. Posts and Rails: Comply with ASTM F 1043 for framing, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:

1. Fence Height: to match existing.

2. Heavy Industrial Strength: Material Group IA, round steel pipe, Schedule 40.

   a. Line Post: 2.25 by 1.70 inches..
   b. End, Corner and Pull Post: 2.375 inches in diameter.

3. Horizontal Framework Members: Top and bottom rails complying with ASTM F 1043.

4. Horizontal-Slide Gate Post: According to ASTM F 1184.
5. Brace Rails: Comply with ASTM F 1043.
6. Metallic Coating for Steel Framing:

   a. Type B zinc with organic overcoat.

2.3 TENSION WIRE

A. Metallic-Coated Steel Wire: 0.177-inch- (4.5-mm-) diameter, marcelled tension wire complying with ASTM A 817 and ASTM A 824, with the following metallic coating:

1. Type III, Zn-5-Al-MM alloy with minimum coating weight matching chain-link fabric coating weight

2.4 INDUSTRIAL HORIZONTAL-SLIDE GATES

A. General: Comply with ASTM F 1184 for single slide gated types (two required)
   1. Classification: Type II Cantilever Slide, Class 1 with external roller assemblies.
   2. Metal Pipe and Tubing: Galvanized steel. Comply with ASTM F 1184 for materials and protective coatings.
   3. Metal Pipe and Tubing Aluminum. Comply with ASTM F 699 for materials and protective coatings.

B. Frames and Bracing: Fabricate members from round, aluminum tubing with outside dimension and weight according to ASTM F 1184 and the following:
   1. Gate Fabric Height: As indicated.
   2. Gate Opening Width: As indicated.
   3. Frame Members:
      a) Tubular Aluminum: 2 inches rectangular.

   4. Bracing Members:
      a.) Tubular Aluminum: 2 inches rectangular.

C. Frame Corner Construction:
   1. Welded frame with panels assembled with bolted or riveted corner

Fitting and 5/16" diameter, adjustable truss rods for panels 5 feet wide or wider.

D. Extended Gate Posts and Frame Members: Extend gate posts and frame end members above top of chain-link fabric at both ends of gate frame as indicated as required to attach barbed wire assemblies.
E. Overhead Track Assembly: Manufacture's standard track, with overhead framing supports, bracing, and accessories, engineered to support size, weight, width, operation, and design of gate and roller assemblies.
F. Roller Guards: As required per ASTM F 1184 for Type II, Class 2 gates.
G. Hardware: Latches permitting operation from both sides of gate, locking devices, hangers, roller assemblies and stops fabricated from mill-finished Grade 319 aluminum-alloy casting with stainless-steel fastners.

2.4 FITTINGS

A. General: Comply with ASTM F 626.

B. Finish:

1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz. /sq. ft. (366 g /sq. m) zinc.

a. Polymer coating over metallic coating.

2. Aluminum: Mill finish.

2.5 BARBED WIRE

A. Steel Barbed Wire: Comply with ASTM A 121, for two-strand barbed wire, 0.099-inch- (2.51-mm-) diameter line wire with 0.080-inch- (2.03-mm-) diameter, four-point round barbs spaced not more than 5 inches (127 mm) o.c.

1. Zinc Coating: Type Z, Class 3.

2.6 GROUT AND ANCHORING CEMENT

A. Nonshrink, Nonmetallic Grout: Premixed, factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout, recommended in writing by manufacturer, for exterior applications.

B. Erosion-Resistant Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with potable water at

Project site to create pourable anchoring, patching, and grouting compound. Provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended in writing by manufacturer, for exterior applications.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for a verified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.

1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

C. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

D. Install chain-link fencing to comply with ASTM F 567 and more stringent requirements indicated.

E. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.

F. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

G. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment.

H. Line Posts: Space line posts uniformly at 10 feet o.c.

I. Tension Wire: Install according to ASTM F 567, maintaining plumb position and alignment of fencing.

J. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 1 inch between finish grade or surface and bottom selvage unless otherwise indicated.

K. Barbed Wire: Install barbed wire uniformly spaced, angled toward security side of fence. Pull wire taut, install securely to extension arms, and secure to end post or terminal arms.

L. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

M. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

END OF SECTION 323113

FORD FIELDS CONCESSION STAND

FORD PARK

CODE ANALYSIS

APPLICABLE CODES:
INTERNATIONAL BUILDING CODE 2015
INTERNATIONAL ENERGY CONSERVATION CODE 2015
INTERNATIONAL PLUMBING CODE 2015
INTERNATIONAL MECHANICAL CODE 2015
NATIONAL ELECTRICAL CODE 2015
INTERNATIONAL FIRE CODE 2015
TEXAS ACCESSIBILITY STANDARDS 2012

OCCUPANCY CLASSIFICATIONS:
M - MERCANTILE, *IBC 309.1*

BUILDING AREA:
1,525 SF

OCCUPANT LOAD:
M - MERCANTILE: RETAIL AREA, 300 GROSS: 1,525/ 300 = 5 *IBC TABLE 1004.1.2*

CONSTRUCTION TYPE
TYPE II - NON-SPRINKLERED *IBC 602.2*

SPRINKLER SYSTEM:
NOT REQUIRED IN M-MERCANTILE IF FIRE AREA DOES NOT EXCEED 12,000 SF, *IBC 903.2.7*

EXIT ACCESS TRAVEL DISTANCE:
200' WITHOUT SPRINKLER SYSTEM, *IBC TABLE 1017.2*

NUMBER OF EXITS REQUIRED:
MINIMUM 1 EXITSREQUIRED, *IBC TABLE 1006.2.1*

ENERGY CODE REQUIREMENTS:

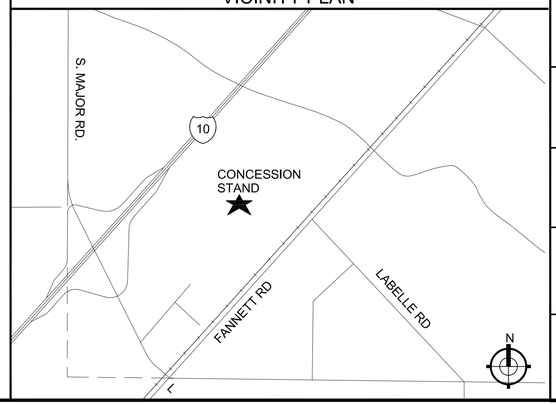
CLIMATE ZONE:
(2) IECC 2015 FIGURE C301.1 CLIMATE ZONES

ROOF INSULATION REQUIREMENTS:
METAL BUILDINGS: R-19 + R-11 LS
IECC 2015 TABLE C402.1.3

WALLS ABOVE GRADE INSULATION REQUIREMENTS:
METAL BUILDINGS: R-13 + R-6.5 CI

LS = LINER SYSTEM
CI = CONTINUOUS INSULATION

VICINITY PLAN



INDEX OF DRAWINGS

ARCHITECTURAL:

A0.0 COVER SHEET
A0.1 SITE PLAN
A1.0 FLOOR PLAN
A1.1 EQUIPMENT PLAN
A2.0 SCHEDULES
A2.1 INTERIOR ELEVATIONS
A3.0 ELEVATIONS
A4.0 BUILDING SECTIONS
A5.0 WALL SECTIONS
A6.0 DETAILS
A7.0 REFLECTED CEILING PLAN
AH.1 ACCESSIBILITY STANDARDS

STRUCTURAL:

S1.0 GENERAL NOTES
S2.0 FOUNDATION AND FRAMING PLAN

CIVIL:

C2.1 GRADING AND DIMENSIONAL PLAN
C3.1 UTILITY PLAN AND DETAILS

MEP:

ME-1.0 ELECTRICAL SITE PLAN
ME-2.0 PLUMBING PLAN
ME-2.1 PLUMBING SCHEDULES AND DETAILS
ME-2.2 PLUMBING RISERS
ME-3.0 MECHANICAL PLAN
ME-3.1 MECHANICAL DETAILS
ME-3.2 MECHANICAL SCHEDULES
ME-4.0 ELECTRICAL POWER AND EQUIPMENT PLANS
ME-4.1 ELECTRICAL HVAC PLAN AND PANEL SCHEDULES
ME-4.2 ELECTRICAL LIGHTING AND SPECIAL SYSTEM PLANS

DESIGN TEAM

The LaBiche Architectural Group, Inc.
Dohn H. LaBiche, FAIA-President — Greg Wall, AIA-Vice President
7999 Gladys Avenue, Suite 101 — Beaumont, Texas 77706
Tel: (409) 860-0197 — Fax: (409) 860-0198

Fittz and Shipman, Inc.
Structural and Civil Engineers
1405 Cornerstone Court — Beaumont, Texas 77706
Tel: (409) 832-7238 — Fax: (409) 832-7303

Lechtenberg Consulting
Mechanical and Electrical Engineers
Branch Office:
7999 Gladys Avenue, Suite 101B — Beaumont, Texas 77706
Tel: (409) 860-9226 — Fax: (409) 860-0198

SYMBOLS AND LEGEND

ENLARGED DETAIL — BUBDETL; DWG. NO.; SHEET NO.

INTERIOR ELEVATION — DWG. NO.; SHEET NO.; INTELEV

CABINET DETAIL — SECT_A; SHEET NO.; DWG. NO.

DOOR DESIGNATION — DOORNO; DOOR NUMBER; HARDWARE SET

WINDOW TYPE — WINDOW NUMBER; WINTAG

PARTITION TYPE — WALL TYPE U, D, L, R

EQUIPMENT TAG — EQUIPMENT NUMBER; EQUIPTAG

BUILDING SECTION — BUBARW; BUBDETL; DWG. NO.; SHEET NO.

WALL SECTION — DWG. NO.; BUBSECT; SHEET NO.; BUBDETL

EXTERIOR ELEVATION — BUBARW; DWG. NO.; SHEET NO.; BUBDETL

DRAWING TITLE — DWG. NO.; DWG. NAME; SCALE; SHEET NO.; SCALE1; BUBDETL

KEY NOTE — ARROW

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED

12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT — DOHN H. LABICHE — 11592 — STATE OF TEXAS

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER A0.0
FILENAME 15036A0.0

DRAWN BY: CMM
PROJECT NUMBER: 15036
DOCUMENT RELEASE DATES:

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019 THE LaBICHE ARCHITECTURAL GROUP, INC.

EXISTING PARKING LOT TO REMAIN

EXISTING PARKING LOT TO REMAIN

EXISTING RESTROOM BUILDING TO REMAIN

EXISTING MEN'S RESTROOM

EXISTING MEN'S RESTROOM

EXISTING UMPIRE MEETING ROOM

EXISTING JANITOR

EXISTING BUILDING TO REMAIN

EXISTING TICKET OFFICE

EXISTING MECHANICAL / ELECTRICAL

EXISTING STORAGE

EXISTING MEDICAL

EXISTING CONCESSIONS

NEW COVERED CANOPY

13'-0"

13'-0"

48'-3"

±10'-0" V.I.F. EXISTING TO BE REMOVED FOR CONSTRUCTION AND THEN REPLACED

EXISTING FENCE SHALL BE REMOVED

NEW FENCE LOCATION WITH 4'-0" GATE TO MATCH EXISTING.

NEW CONCESSION STAND BUILDING

6'-2 3/4"

±11'-10 3/8" V.I.F.

8'-11 1/4"

8'-6"

6'-0"

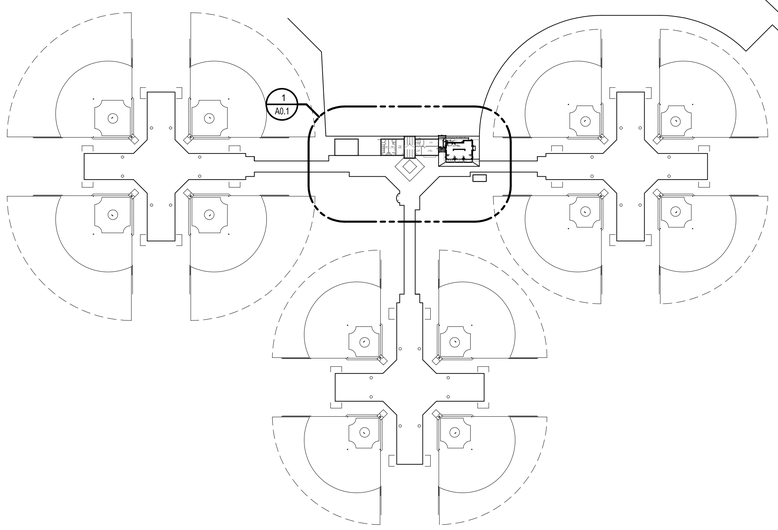
6'-9 3/4"

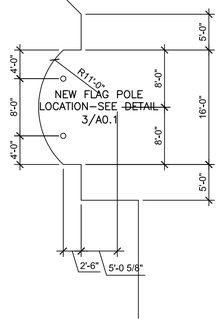
DS

EXISTING FLAG POLE LOCATION – SHALL BE RELOCATED

1 / A0.1 SITE PLAN

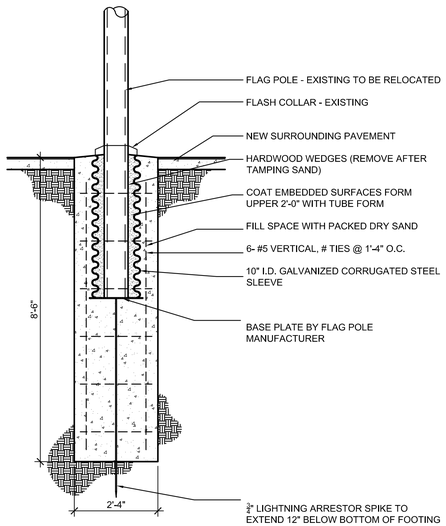
SCALE: 1" = 10'-0"





2 / A0.1 OVERALL SITE PLAN

SCALE: N.T.S.



3 / A0.1 FLAG POLE DETAIL

SCALE: 1/2" = 1'-0"

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019 DATE SIGNED

12.31.2019 REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DONNIE H. LaBICHE 11592 STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT , TEXAS 77706
PHONE (409) 860-0197
FAX (409) 866-0198
WWW.LABICHE.COM

THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION

FORD FIELDS CONCESSION STAND

5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER A0.1

FILENAME 15036A0.1

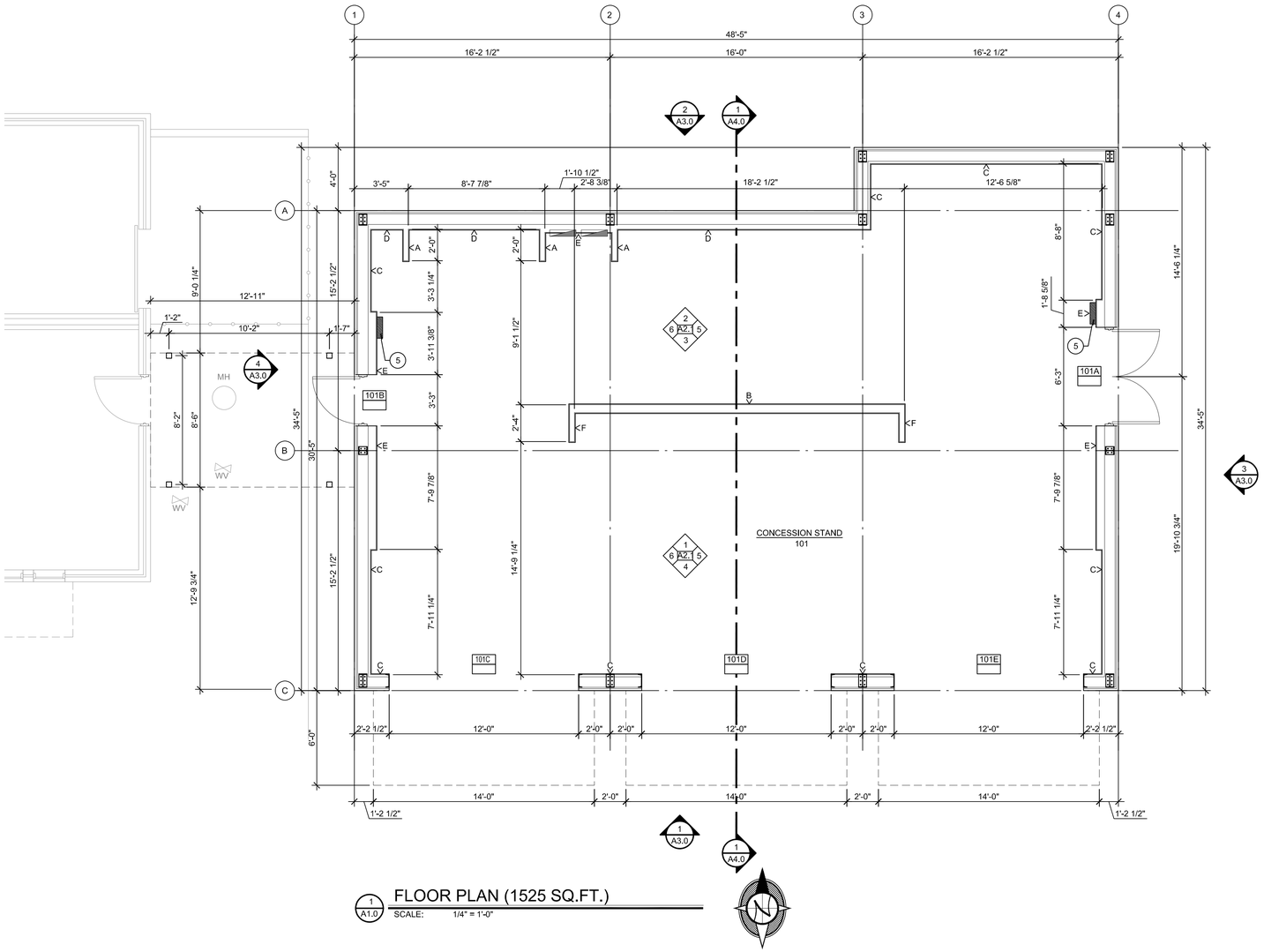
DRAWN BY CMM

PROJECT NUMBER 15036

DOCUMENT RELEASE DATES

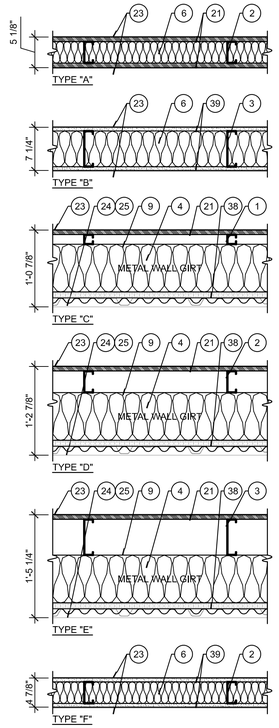
1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019 THE LaBICHE ARCHITECTURAL GROUP, INC.



FLOOR PLAN (1525 SQ.FT.)

1 / A1.0 SCALE: 1/4" = 1'-0"



WALL TYPES

2 / A1.0 SCALE: 1" = 1'-0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT. 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019 DATE SIGNED

12.31.2019 REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DONN H. LaBICHE 11592 STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT , TEXAS 77706
PHONE (409) 860-0197
FAX (409) 866-0198
WWW.LABICHE.COM

THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION

FORD FIELDS CONCESSION STAND

5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER A1.0

FILENAME 15036A1.0

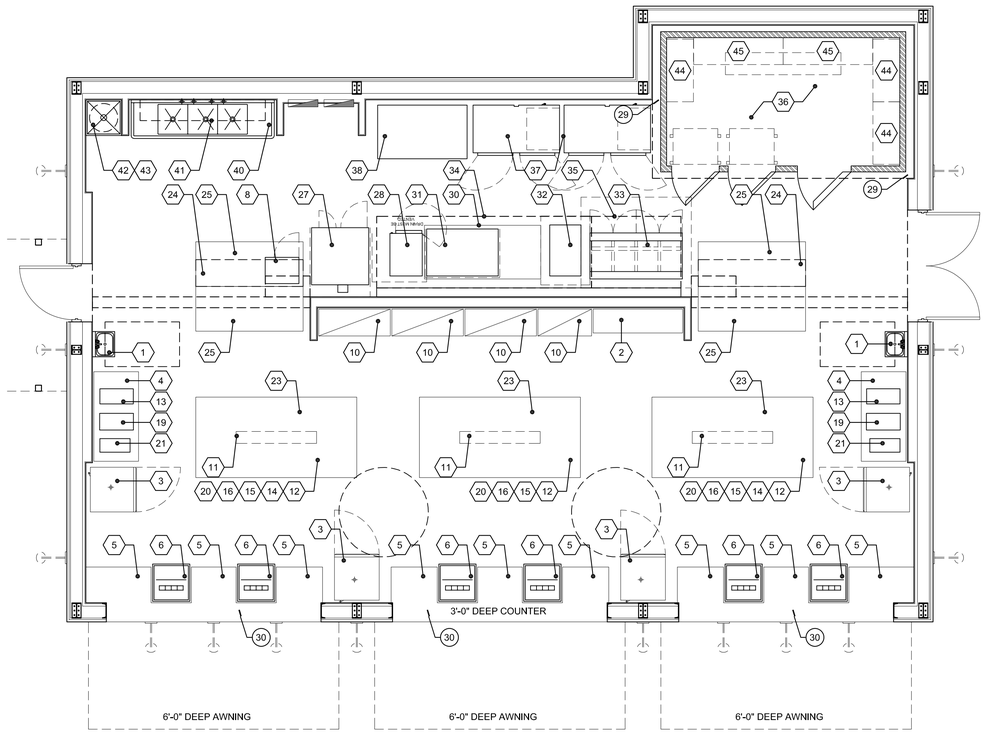
DRAWN BY CMM

PROJECT NUMBER 15036

DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019 THE LaBICHE ARCHITECTURAL GROUP, INC.



1 A1.1 EQUIPMENT PLAN

SCALE: 1/4" = 1'-0"

FIXTURE AND EQUIPMENT SCHEDULE

MARK	QUANTITY	ITEM	MANUFACTURER	MODEL NUMBER	UTILITIES											NOTES
					GAS				PLUMBING				BAG-IN-BOX	ELECTRICAL			
						BTU'S	HOSE CONNECTION	W.C.	CW	HW	W	VT		VOLTAGE /PHASE	AMPS	CONNECTION	
1	2	HANDSINK	ADVANCE TABCO	7-PS-23					1/2"	1/2"	1-1/2"						SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
2	1	BAG-IN-BOX	-	-									●	-	-	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
3	4	VENDOR DISPLAY REFRIDGERATOR	(EXISTING)	-													SUPPLIED BY OWNER, INSTALLED BY OWNER
4	2	S/S TABLE 30"X60"	METRO SHELVING	WT306US													SUPPLIED BY OWNER, INSTALLED BY OWNER
5	9	POINT OF SALE	-	-										-	-	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
6	6	SODA DISPENSER	LANCER	2306					-	-	-	-	●	24V/1P	6A	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
7	-	--	-	-													
8	1	MICROWAVE	SOLWAVE (EXISTING)	180MW1200T										120V	10A	NEMA 5-20P	SUPPLIED BY OWNER, INSTALLED BY OWNER
9	-		-	-													
10	5	S/S WIRE SHELF	METRO SHELVING	1848NS													SUPPLIED BY OWNER, INSTALLED BY OWNER
11	3	TV	VIZIO	55"										-	-	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
12	3	NACHO CHEESE DISPENSER	GEHL'S (EXISTING)	HT2-04										120V	1.7A	-	SUPPLIED BY OWNER, INSTALLED BY OWNER
13	2	TEA BREWER	BUNN	ITB-DBC					-	-	-	-		120V/1P	14A	NEMA 5-15P	SUPPLIED BY OWNER, INSTALLED BY VENDOR
14	2	SUPER PRETZEL DISPLAY	WISCO INDUSTRIES	JJ850-B										120V	12A	-	SUPPLIED BY OWNER, INSTALLED BY OWNER
15	3	DISPLAY WARMER	HATCO (EXISTING)	GR2SDS-48D										120/208V	10.2A	NEMA L14-20P	SUPPLIED BY OWNER, INSTALLED BY OWNER
16	3	GRAVY WARMER	AVANTCO	177W300SS										110V	2.7A	NEMA 5-15P	SUPPLIED BY OWNER, INSTALLED BY OWNER
17	-	-	-	-													
18	-	-	-	-													
19	2	WARM BEVERAGE	BUNN	FMD-3 BLACK					-	-	-	-		120V/1P	15A	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
20	6	UNDER COUNTER DRAWER WARMER	WITTCO	200-2-SL										120V	20A	NEMA 5-15P	SUPPLIED BY OWNER, INSTALLED BY OWNER
21	2	COFFEE BREWER	CURTIS	GEM TS					-	-	-	-		-	-	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
22	-	-	-	-													SUPPLIED BY OWNER, INSTALLED BY OWNER
23	3	54"X108" S/S TABLE	-	-													SUPPLIED BY OWNER, INSTALLED BY OWNER
24	2	S/S SHELF	ADVANCE TABCO	CU-18-72-2													SUPPLIED BY OWNER, INSTALLED BY OWNER
25	4	S/S TABLE 30"X72"	METRO SHELVING	WT307US													SUPPLIED BY OWNER, INSTALLED BY OWNER
26	-	-	-	-													
27	1	CONVECTION OVEN	GARLAND	SCO-ES-20S										208V/1P	50	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
28	1	STEAMER	VULCAN (EXISTING)		●	90,000	-	3.5"	-	-	-	-		120V/1P	1.5A	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
29	-	-	-	-													
30	1	S/S EQUIPMENT TABLE	METRO SHELVING	36X78													SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
31	1	48" GRIDDLE	VULCAN (EXISTING)		●	108,000	-							-	-	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
32	1	FLOOR FRYER	ADVANCO	FF518	●	150,000	3/4"							-	-	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
33	1	4 COMP FRYER	VULCAN	4GR45MF	●	480,000	-	-						120V/60HZ	6.0A	NEMA 5-15P	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
34	1	12' HOOD W/ ANSUL	GREENHECK (EXISTING)	GHEW-12.00-S										-	-	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
35	1	5' HOOD W/ ANSUL	GREENHECK (EXISTING)	GHEW-5.00-S										-	-	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
36	1	WALK-IN FREEZER	AMERIKOOLER	8'X14' FREEZER		-	-		-	-	-	-		-	-	-	SUPPLIED BY OWNER, INSTALLED BY VENDOR
37	2	REACH-IN COOLERS	TRAULSEN (EXISTING)											115V/1	-	NEMA 5-15P	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
38	1	ICE MACHINE	HOSHIZAKI	KM-2600SRJ3										208/230V	20.6A	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
39	-	-	-	-													
40	1	3 COMP SINK	DUKE (EXISTING)	203S-218					-	-	-	-					SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
41	1	POT RACK	(EXISTING)														SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
42	1	MOP SINK	(EXISTING)						-	-	-	-					SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
43	1	HOT WATER HEATER	PALOMA (EXISTING)	PH-24M-DN	●	-	-		-	-	-	-		-	-	-	SUPPLIED BY OWNER, INSTALLED BY CONTRACTOR
44	3	S/S SHELF	NORLAKE SHELVING	18X42													SUPPLIED BY OWNER, INSTALLED BY VENDOR
45	2	S/S SHELF	NORLAKE SHELVING	18X60													SUPPLIED BY OWNER, INSTALLED BY VENDOR

2 A1.1 EQUIPMENT SCHEDULE

SCALE: N.T.S.

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED

12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DORAN H. LaBICHE 11592 STATE OF TEXAS

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM

NEW CONSTRUCTION

FORD FIELDS CONCESSION STAND

5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER A1.1

FILENAME 15036A1.1

DRAWN BY: CMM

PROJECT NUMBER: 15036

DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019 THE LaBICHE ARCHITECTURAL GROUP, INC.

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR: PAINT	FLOOR: BASE: RUBBER BASE	WALL: RUBBER REINFORCED PLASTIC (FRP)	CEILING: 2X2 SUSPENDED CEILING	CEILING: HT AFF: 8'-0" 2.44 cm	CEILING: HT AFF: 7'-6" 2.29 cm	SEE FINISH NOTES
101	CONCESSION STAND	•	•	•	•	•	•	1,2,3,4

FINISH NOTES

NO.1: ALL PLYWOOD BACKING PANELS SHALL BE PAINTED ON ALL SIDES PRIOR TO INSTALLATION.
NO.2: VERTICAL SURFACES (WALLS) SHALL BE FRP AND COLOR SHALL BE DETERMINED BY ARCHITECT.
NO.3: HORIZONTAL SURFACES (COUNTERTOPS) SHALL BE STAINLESS STEEL.

GENERAL NOTES

NO.1: COLOR FOR ELECTRICAL & SENSOR COVERS SHALL BE AS FOLLOWS:
IF LOCATED ON FRP – MATCH FRP
IF LOCATED ON SUSPENDED CIELING – WHITE.
NO.2: ALL COUNTERTOP SUPPORT ANGLES COLOR SHALL BE AS FOLLOWS:
LOCATED ON FRP– PAINT TO MATCH FRP.

RUBBER BASE

NO.1: ROPPE WALL BASE: 700 SERIES– TYPE TPR RUBBER
⅛"–STANDARD TOE BASE ⅝": –COLOR NUMBER–TO BE DETERMINED BY ARCHITECT FROM STANDARD COLORS– HEIGHT–6".

PAINT

NO.1: COLOR TO BE DETERMINED BY ARCHITECT

FIBERGLASS REINFORCED PLASTIC (FRP)

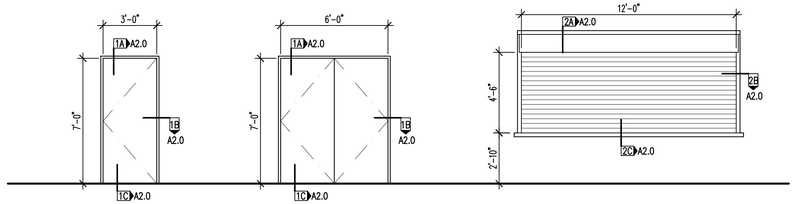
NO.1: PANOLAM INDUSTRIES FRP WITH ALL TRIM ACCESSORIES – COLOR SHALL BE DETERMINED BY ARCHITECT

EXTERIOR NOTES:

NO.1: DOOR NO.101A, 101B, & FRAME SHALL BE PAINTED – COLOR SHALL BE DETERMINED BY ARCHITECT

DOOR SCHEDULE / FRAME SCHEDULE

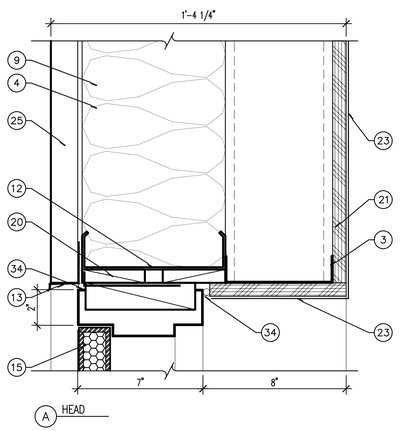
NO.	DOOR SIZE: WIDTH	HEIGHT	THICKNESS	TYPE	MATERIAL	FINISH	NO.	MATERIAL	FRAME DETAILS: HEAD	JAMB	SILL	NO.
101A	3'–0"	7'–0"	1–3/4"	A	ALUMINUM	ANODIZED	101A	ALUMINUM	1A/A2.0	1B/A2.0	1C/A2.0	101A
101B	2@ 3'–0"	7'–0"	1–3/4"	B	ALUMINUM	ANODIZED	101B	ALUMINUM	1A/A2.0	1B/A2.0	1C/A2.0	101B
101C,D,E	12'–0"	4'–6"	–	C	ALUMINUM	ANODIZED	101C,D,E	ALUMINUM	2A/A2.0	2B/A2.0	2C/A2.0	101C,D,E



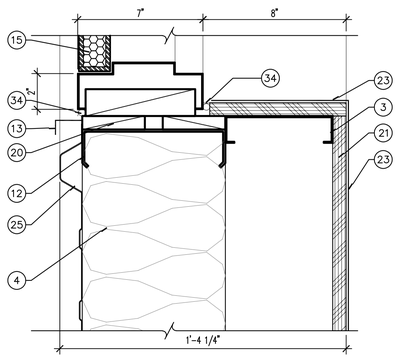
TYPE "A"
HOLLOW METAL DOOR
PAINT (EXTERIOR)

TYPE "B"
HOLLOW METAL DOOR
PAINT (EXTERIOR)

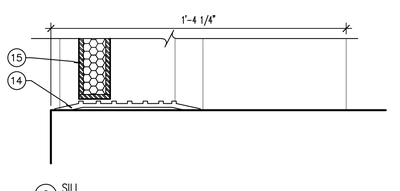
TYPE "C"
OVERHEAD COUNTER DOOR
MANUFACTURERS FINISH (EXTERIOR)



A HEAD

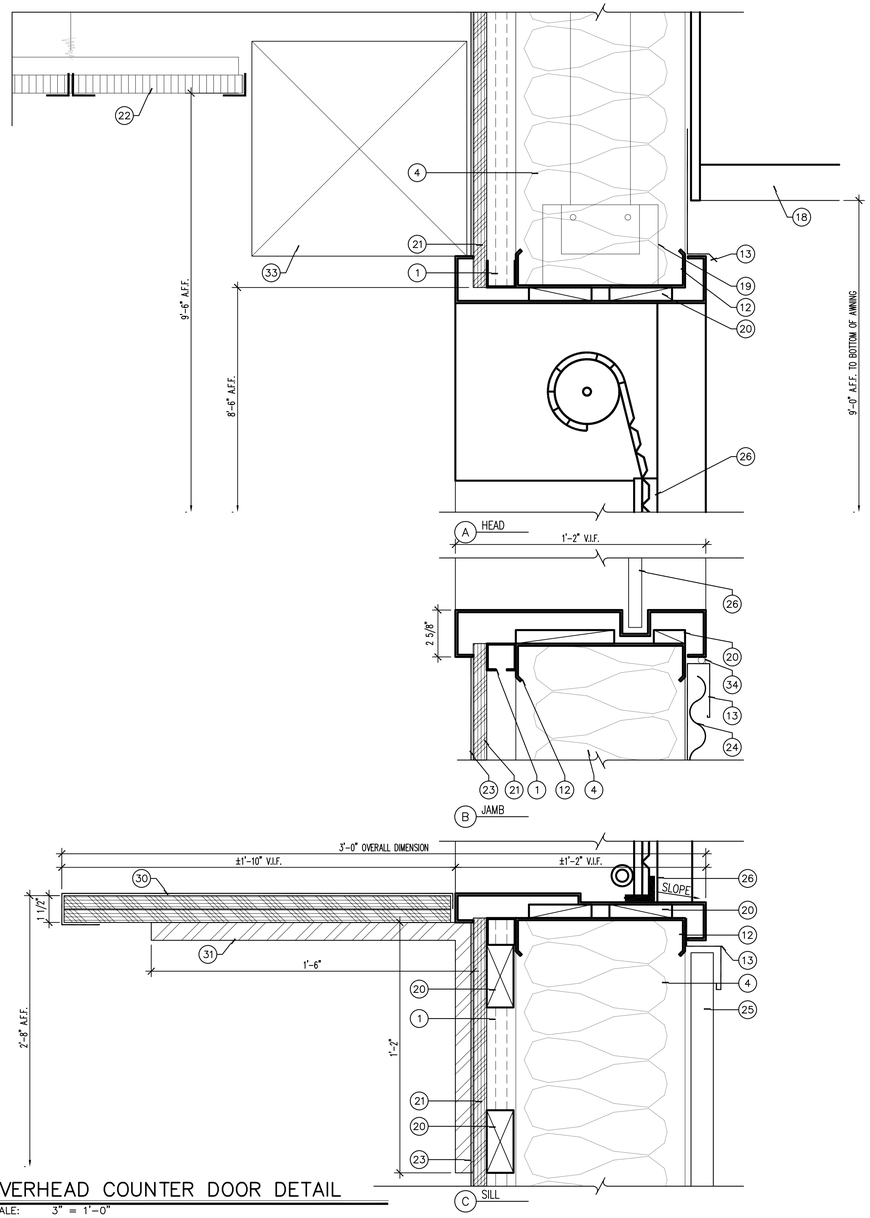


B JAMB



C SILL

1 / A2.0 DOOR DETAIL
SCALE: 3" = 1'–0"

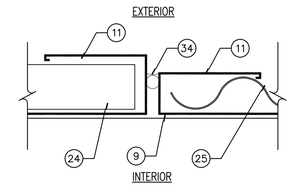


A HEAD

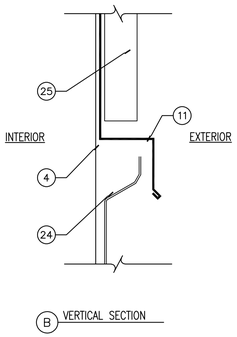
B JAMB

C SILL

2 / A2.0 OVERHEAD COUNTER DOOR DETAIL
SCALE: 3" = 1'–0"



A HORIZONTAL SECTION



B VERTICAL SECTION

3 / A2.0 WALL PANEL TRANSITION FLASHING
SCALE: 6" = 1'–0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT. 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LABICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED
12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DONN H. LABICHE 11592 STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT , TEXAS 77706
PHONE (409) 860-0197
FAX (409) 866-0198
WWW.LABICHE.COM

THE LABICHE ARCHITECTURAL GROUP, INC.

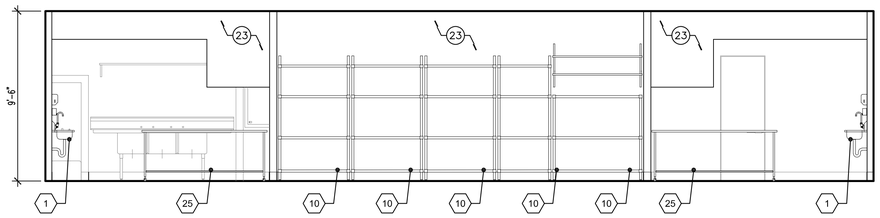
NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

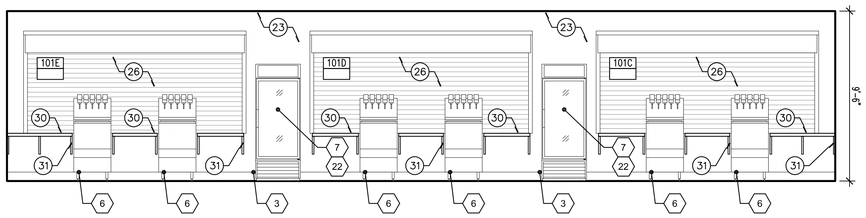
SHEET NUMBER A2.0
FILENAME 15036A2.0

DRAWN BY: CMM
PROJECT NUMBER: 15036
DOCUMENT RELEASE DATES:
1 | 03.15.2019 BIDS & CONSTRUCTION

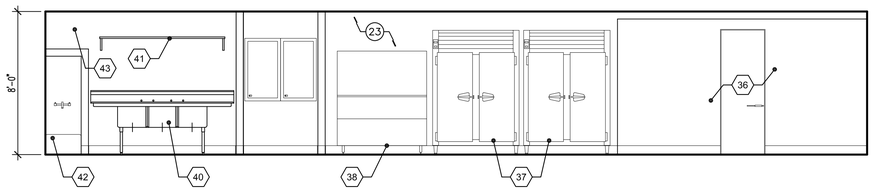
COPYRIGHT © 2019
THE LABICHE ARCHITECTURAL GROUP, INC.



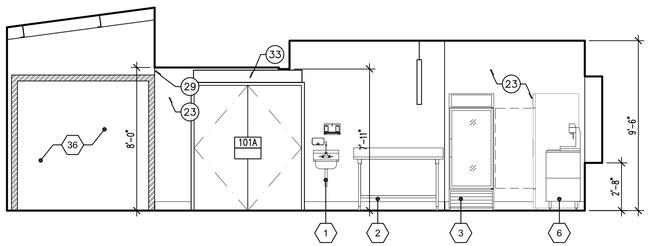
1 / A2.1 INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



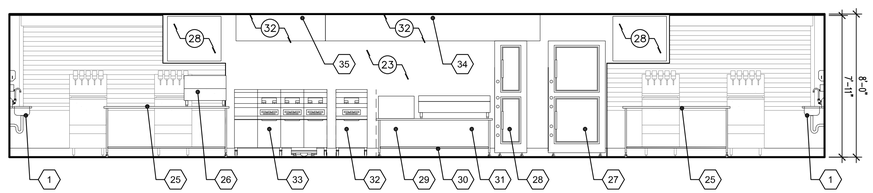
4 / A2.1 INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



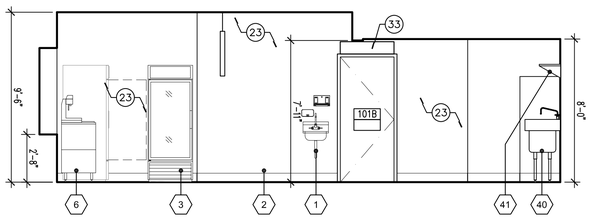
2 / A2.1 INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



5 / A2.1 INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



3 / A2.1 INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"



6 / A2.1 INTERIOR ELEVATION
SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT. 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED
12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT
DONN H. LaBICHE
11592
STATE OF TEXAS

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM

FORD FIELDS CONCESSION STAND

NEW CONSTRUCTION
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

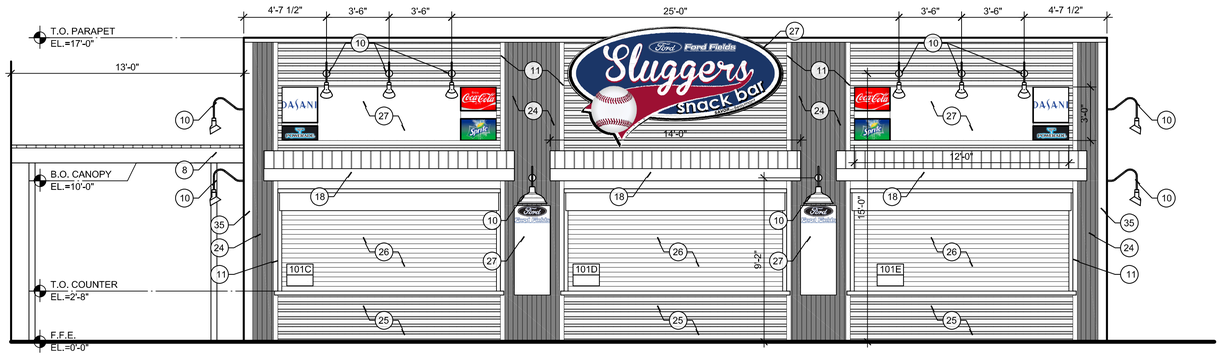
SET NO.

SHEET NUMBER
A2.1
FILENAME
15036A2.1

DRAWN BY
CMM
PROJECT NUMBER
15036
DOCUMENT RELEASE DATES

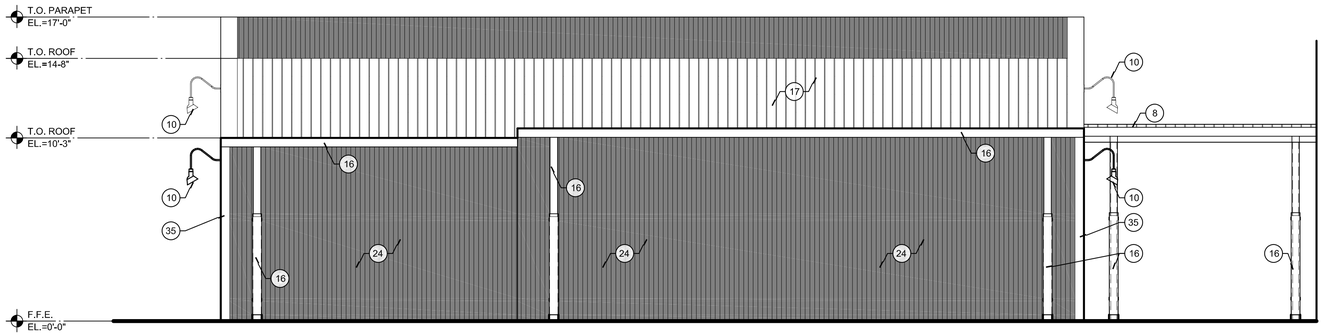
1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019
THE LaBICHE ARCHITECTURAL GROUP, INC.



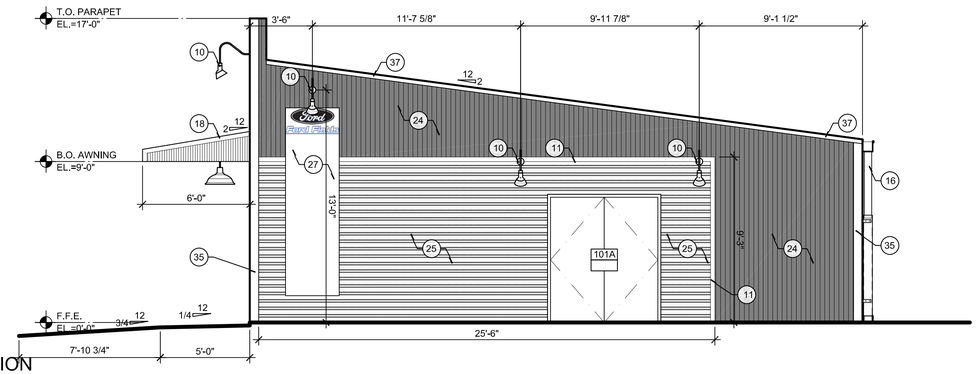
1 A3.0 SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



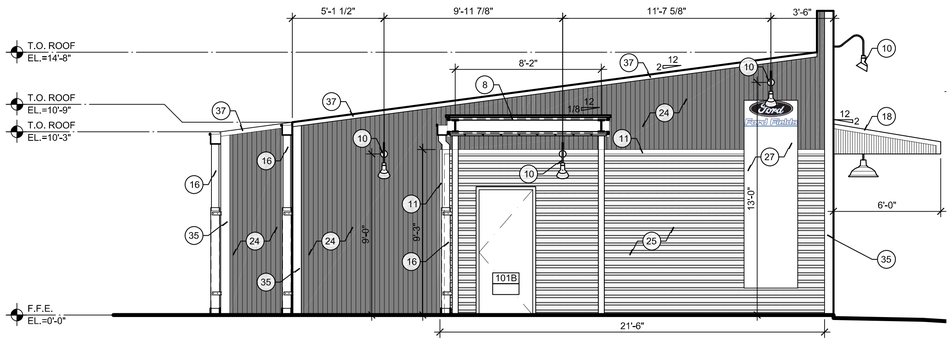
2 A3.0 NORTH ELEVATION

SCALE: 1/4" = 1'-0"



3 A3.0 EAST ELEVATION

SCALE: 1/4" = 1'-0"



4 A3.0 WEST ELEVATION

SCALE: 1/4" = 1'-0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT. 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED

12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT
DONN H. LaBICHE
11592
STATE OF TEXAS

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT , TEXAS 77706
PHONE (409) 860-0197
FAX (409) 866-0198
WWW.LABICHE.COM

FORD FIELDS CONCESSION STAND

NEW CONSTRUCTION
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
A3.0
FILENAME
15036A3.0

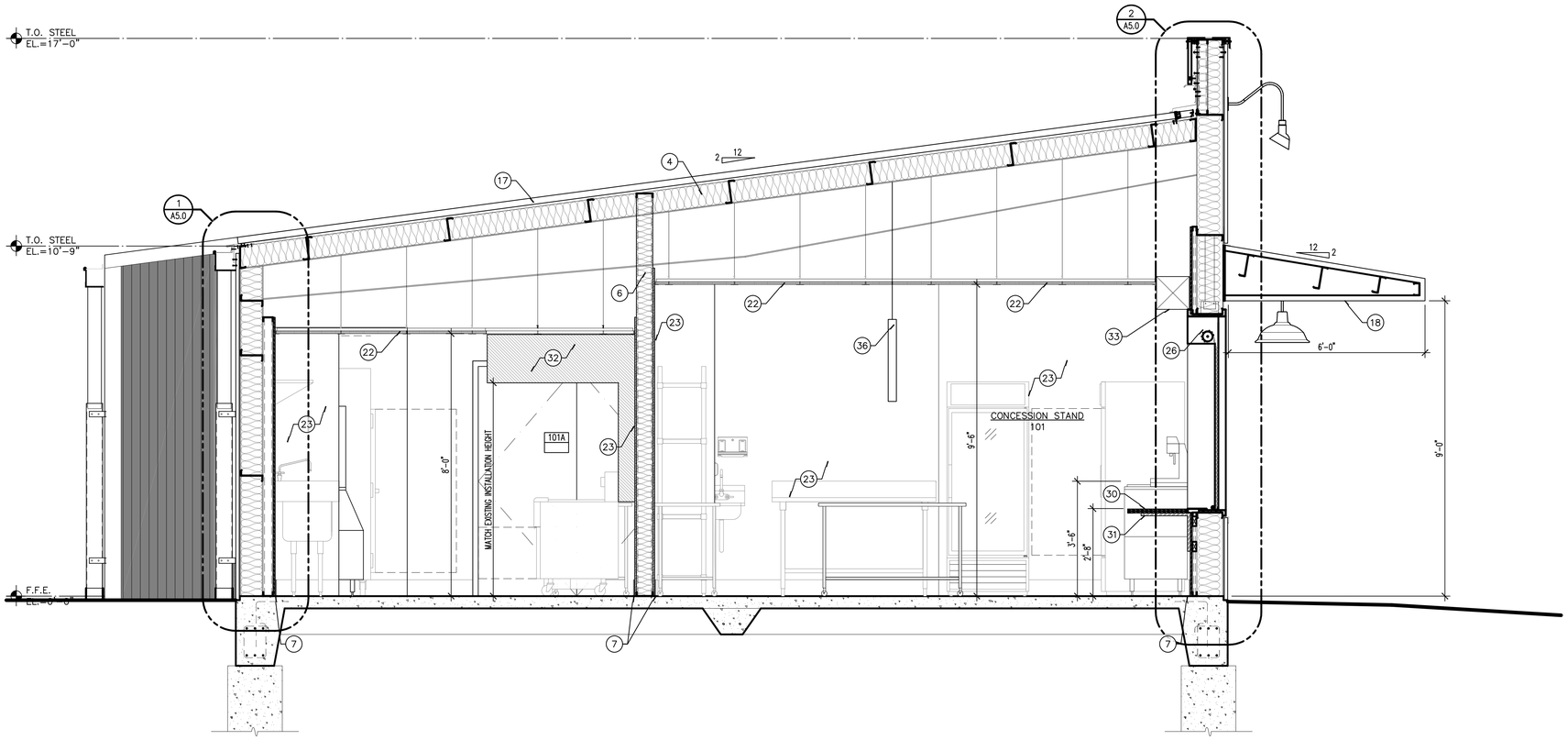
DRAWN BY
CMM

PROJECT NUMBER
15036

DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019
THE LaBICHE ARCHITECTURAL GROUP, INC.



1 A4.0 BUILDING SECTION
SCALE: 1/2" = 1'-0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT, 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED

12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT
DONALD H. LaBICHE
11592
STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 866-0198
WWW.LABICHE.COM

THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION

FORD FIELDS CONCESSION STAND

5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
A4.0
15036A4.0
FILENAME

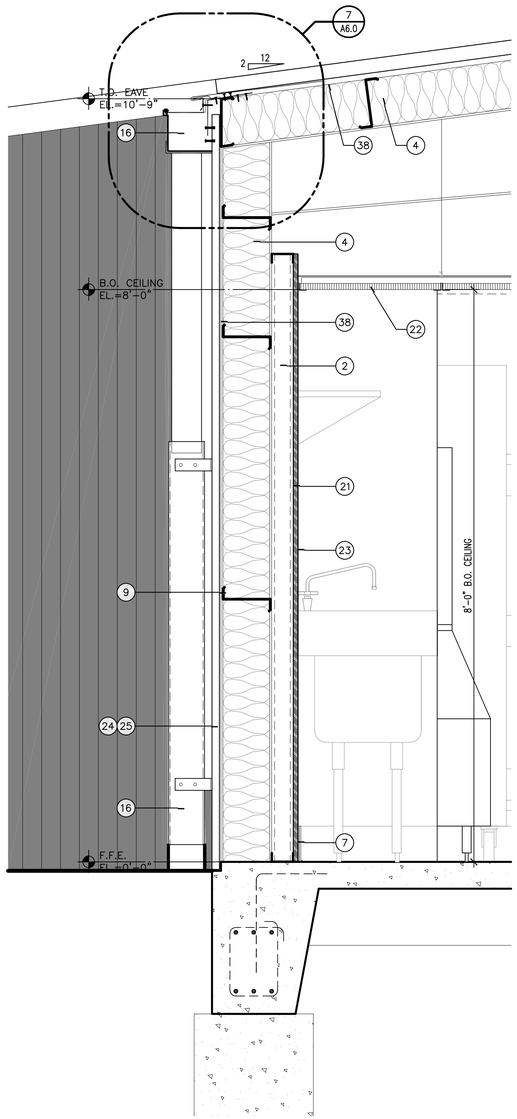
DRAWN BY
CMM

PROJECT NUMBER
15036

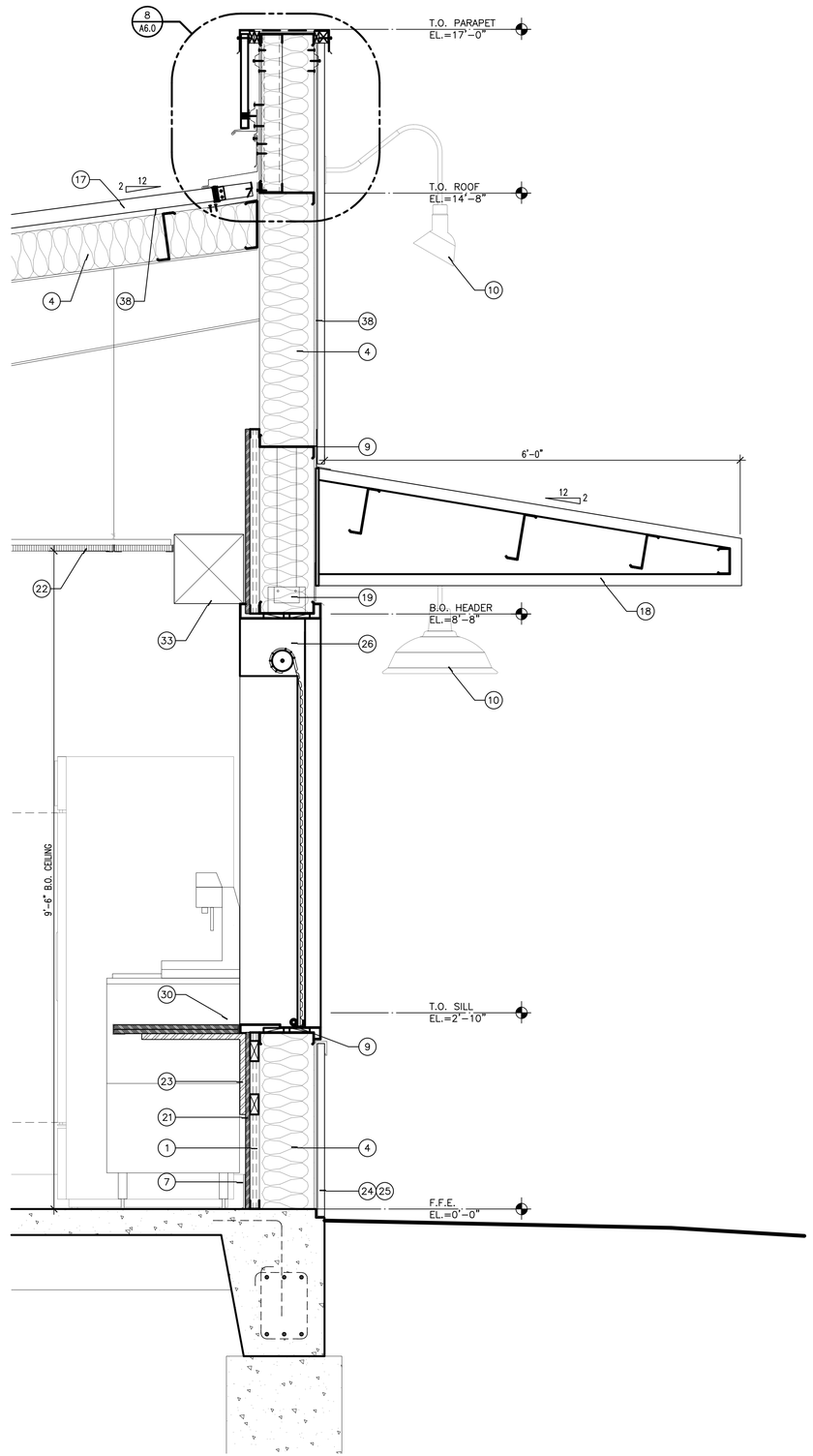
DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019
THE LaBICHE ARCHITECTURAL GROUP, INC.



1 A5.0 WALL SECTION
SCALE: 1" = 1'-0"



2 A5.0 WALL SECTION
SCALE: 1" = 1'-0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT. 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED

12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT
DORIS H. LaBICHE
11592
STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT , TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM

THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION

FORD FIELDS CONCESSION STAND

5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
A5.0
15036A5.0
FILENAME

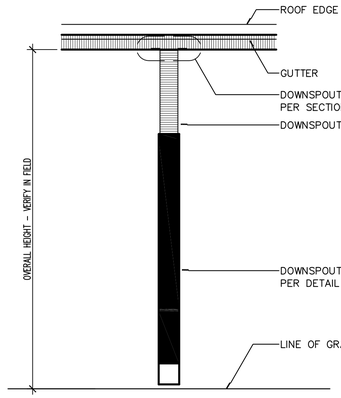
DRAWN BY
CMM

PROJECT NUMBER
15036

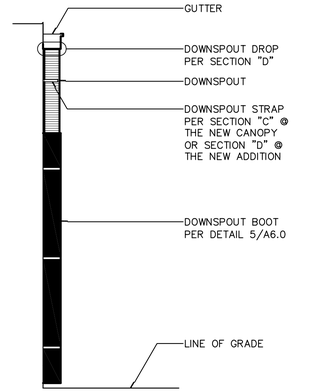
DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019
THE LaBICHE ARCHITECTURAL GROUP, INC.

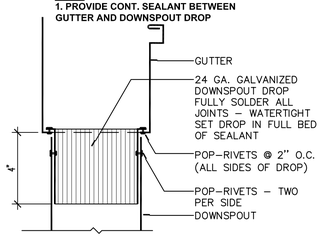


1A A6.0 TYPICAL FRONT ELEVATION
SCALE: N.T.S.

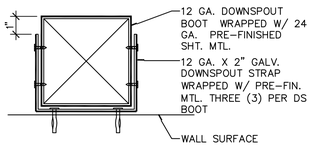


1B A6.0 TYPICAL SIDE ELEVATION
SCALE: N.T.S.

NOTE:
1. PROVIDE CONT. SEALANT BETWEEN GUTTER AND DOWNSPOUT DROP

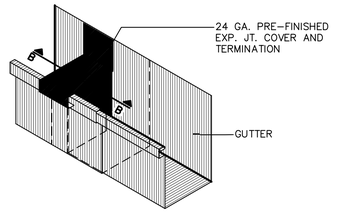


1C A6.0 DOWNSPOUT STRAP
SCALE: N.T.S.

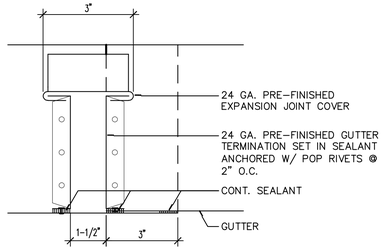


1D A6.0 DOWNSPOUT DROP
SCALE: N.T.S.

1 A6.0 TYPICAL DOWNSPOUT SECTION
SCALE: N.T.S.



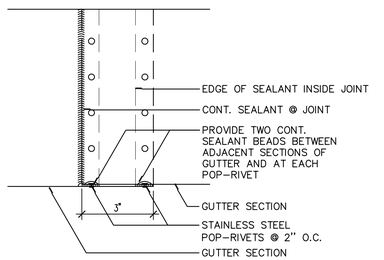
2A A6.0 ISOMETRIC
SCALE: 3" = 1'–0"



2B A6.0 SECTION
SCALE: 3" = 1'–0"

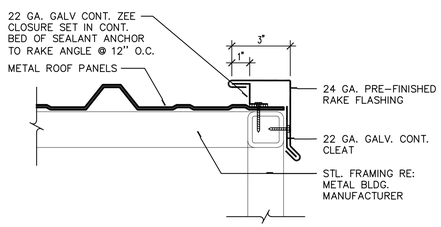
2 A6.0 GUTTER EXPANSION JOINT
SCALE: AS NOTED

3A A6.0 ISOMETRIC
SCALE: 3" = 1'–0"

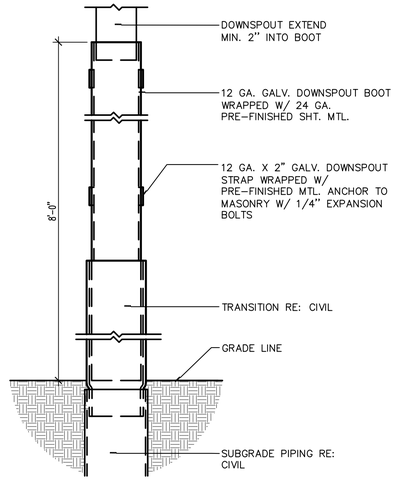


3B A6.0 SECTION
SCALE: 3" = 1'–0"

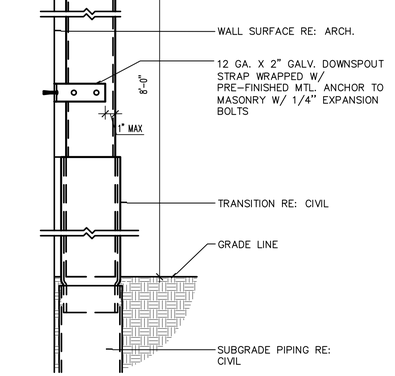
3 A6.0 GUTTER JOINT
SCALE: AS NOTED



4 A6.0 RAKE FLASHING @ CANOPY/AWNING
SCALE: 3" = 1'–0"



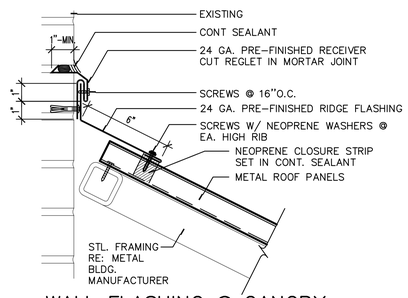
5A A6.0 FRONT ELEVATION
SCALE: N.T.S.



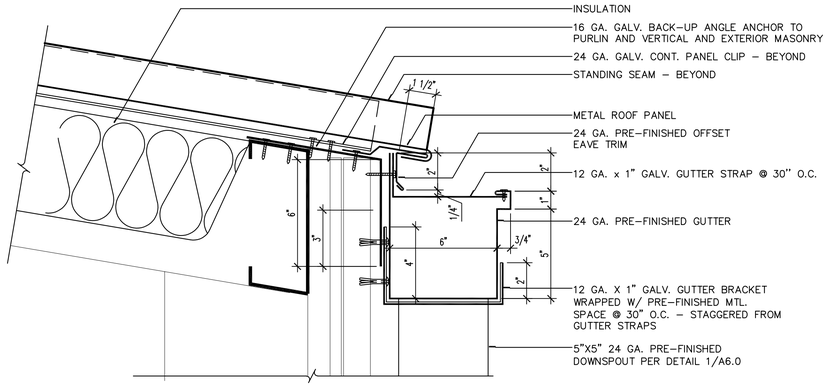
5B A6.0 SIDE ELEVATION
SCALE: N.T.S.

5 A6.0 DOWNSPOUT BOOT (SUB–GRADE)
SCALE: N.T.S.

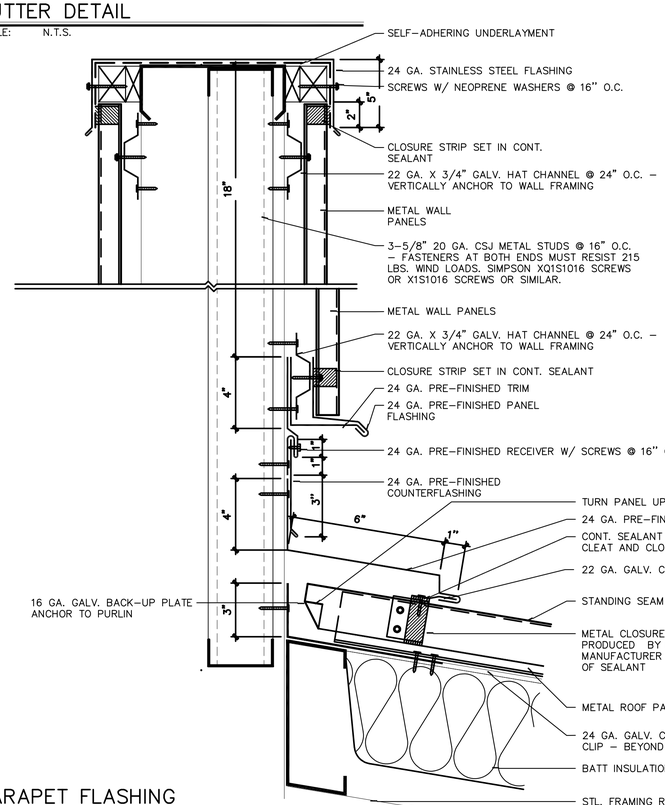
NOTE:
1. ANCHOR RECEIVER IN SAW-CUT REGLET W/ LEAD WEDGES @ 12" O.C.
2. PROVIDE CLOSED CELL BACKER ROD BETWEEN LEAD WEDGES



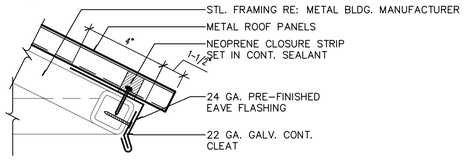
6 A6.0 WALL FLASHING @ CANOPY
SCALE: 3" = 1'–0"



7 A6.0 GUTTER DETAIL
SCALE: N.T.S.

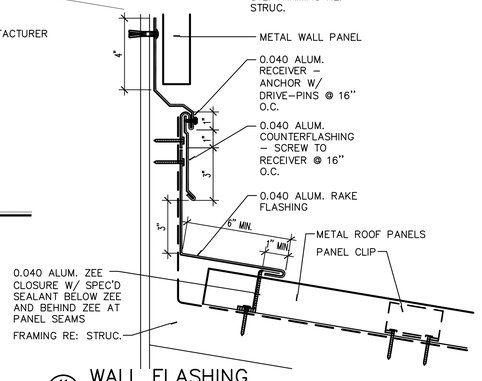


8 A6.0 PARAPET FLASHING
SCALE: N.T.S.



9 A6.0 LOW EAVE @ CANOPY/AWNING
SCALE: 3" = 1'–0"

10 A6.0 NOT USED
SCALE: N.T.S.



11 A6.0 WALL FLASHING
SCALE: 3" = 1'–0"

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED
12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DORAN H. LaBICHE 11592 STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM

THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

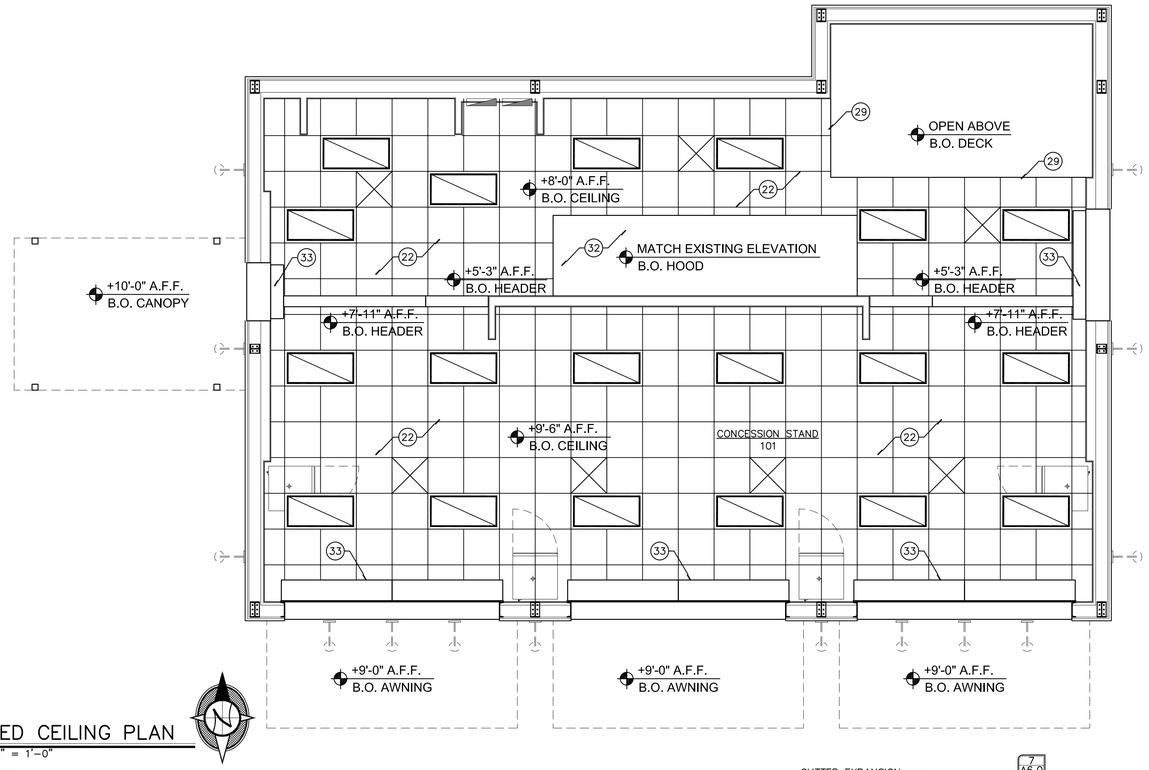
SET NO.

SHEET NUMBER A6.0
FILENAME 15036A6.0

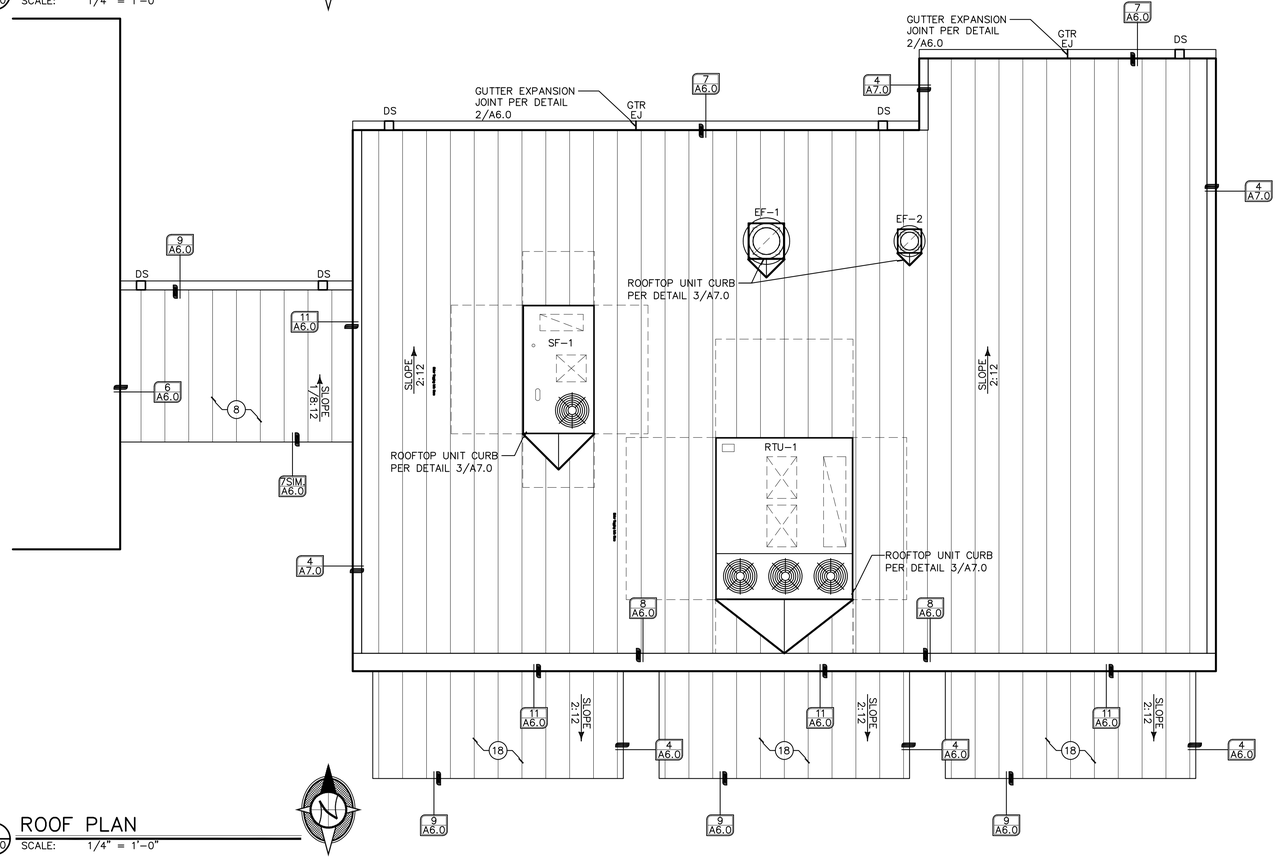
DRAWN BY: CMM
PROJECT NUMBER: 15036
DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019
THE LABICHE ARCHITECTURAL GROUP, INC.

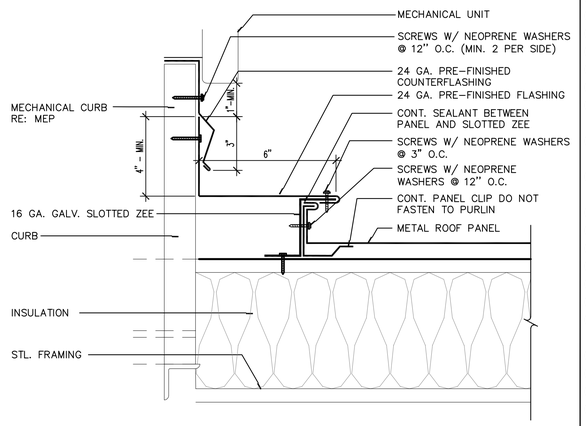


1 A7.0 REFLECTED CEILING PLAN
SCALE: 1/4" = 1'-0"

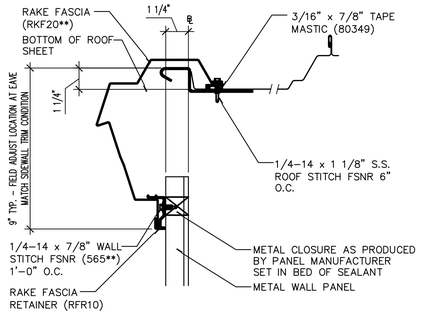


2 A7.0 ROOF PLAN
SCALE: 1/4" = 1'-0"

NOTE:
1. ROOFING CONTRACTOR SHALL COORDINATE THE REQUIRED CURB HEIGHT WITH THE MECHANICAL CONTRACTOR PRIOR TO ORDERING CURB.
2. MINIMUM HEIGHT TO BOTTOM OF LIFTING RAIL SHALL BE 18".
3. PROVIDE TAPERED CRICKETS ON HIGH SIDE OF CURBED PENETRATIONS 24" or WIDER



3 A7.0 ROOFTOP UNIT CURB
SCALE: 3" = 1'-0"



4 A7.0 RAKE FLASHING
SCALE: 3" = 1'-0"

KEYED NOTES:

1. 25 GAUGE, 1 5/8" METAL STUDS @ 16" O.C.
2. 25 GAUGE, 3 5/8" METAL STUDS @ 16" O.C.
3. 20 GAUGE, 6" METAL STUDS @ 16" O.C.
4. FACED METAL BUILDING INSULATION
5. FIRE EXTINGUISHER AND CABINET–INSTALL @36" AF.F. TO BOT. OF CABINET
6. SOUND INSULATION
7. 6" COVED RUBBER BASE
8. METAL BUILDING MANUFACTURER'S METAL CANOPY SYSTEM
9. MANUFACTURER'S 8" METAL WALL GIRT
10. DECORATIVE LIGHTING FIXTURE
11. METAL WALL PANEL TRANSITION FLASHING - SEE DETAIL ON SHEET A2.0
12. 8" "C" CHANNEL
13. MANUFACTURER'S CLOSURE PANEL
14. THRESHOLD SET IN SEALANT
15. INSULATED CORE METAL DOOR–PAINTED
16. GUTTER AND DOWNSPOUT
17. METAL ROOF SYSTEM
18. METAL BUILDING MANUFACTURER'S METAL AWNING SYSTEM
19. METAL BUILDING MANUFACTURER'S CLIP ATTACHED TO GIRT ABOVE
20. SOLID WOOD BLOCKING - PLYWOOD IS NOT A SUITABLE BLOCKING MATERIAL
21. 3/4" PLYWOOD BACKING PANEL
22. 2X2 VINYL COVERED ACOUSTICAL CEILING SYSTEM
23. FIBERGLASS REINFORCED PLASTIC (FRP)
24. TAPERED RIB PROFILE METAL WALL PANEL TYPE "A"
25. CORRUGATED PROFILE METAL WALL PANEL TYPE "B"
26. OVERHEAD COUNTER DOOR
27. SIGNAGE PROVIDED BY OWNER - INSTALLED BY CONTRACTOR
28. ANSUL SYSTEM
29. FREEZER MANUFACTURER TRIM
30. 14 GA. STAINLESS STEEL COUNTERTOP
31. STEEL ANGLE SUPPORT. 3'-0" MAX SPACING. PAINT TO MATCH FRP.
32. EXISTING HOOD - SEE EQUIPMENT SCHEDULE
33. AIR CURTAIN
34. BACKER ROD AND SEALANT
35. METAL BUILDING MANUFACTURER'S STANDARD CORNER TRIM
36. CEILING MOUNTED TV - MOUNT TO STRUCTURE ABOVE
37. METAL BUILDING MANUFACTURER'S STANDARD RAKE TRIM
38. THERMAL INSULATION
39. 5/8" GYPSUM BOARD, TAPE AND FLOAT

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED
12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DORAN H. LaBICHE 11592 STATE OF TEXAS

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER A7.0
FILENAME 15036A7.0

DRAWN BY	CMM
PROJECT NUMBER	15036
DOCUMENT RELEASE DATES	
1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019 THE LaBICHE ARCHITECTURAL GROUP, INC.

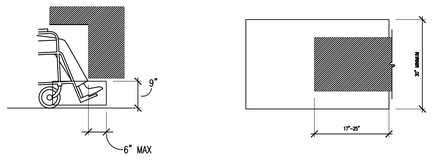


FIGURE 306.2 TOE CLEARANCE

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 75

1 AH.1 TOE CLEARANCE
SCALE: 1/2" = 1'-0"

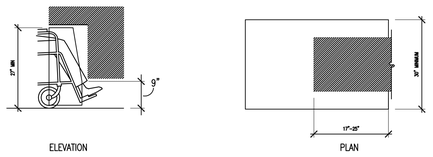


FIGURE 306.3 KNEE CLEARANCE

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 76

2 AH.1 KNEE CLEARANCE
SCALE: 1/2" = 1'-0"

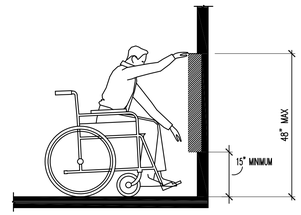


FIGURE 308.3 UNOBSTRUCTED FORWARD REACH

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 78

3 AH.1 UNOBSTRUCTED REACH
SCALE: 1/2" = 1'-0"

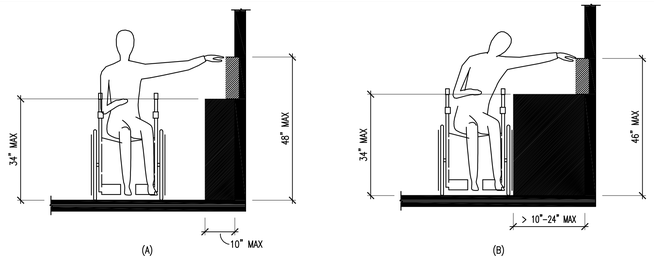


FIGURE 308.3.2 OBSTRUCTED HIGH SIDE REACH

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 80

4 AH.1 OBSTRUCTED REACH
SCALE: 1/2" = 1'-0"

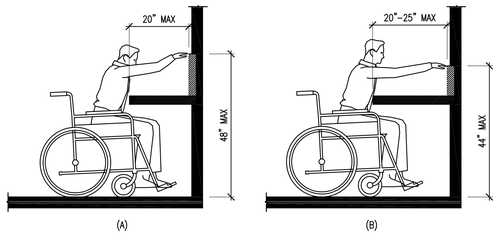


FIGURE 308.2.2 OBSTRUCTED HIGH FORWARD REACH

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 79

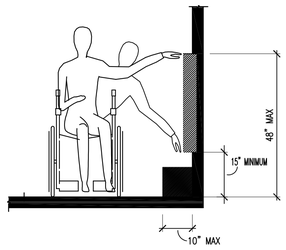


FIGURE 308.3.1 UNOBSTRUCTED SIDE REACH

5 AH.1 OBSTRUCTED/UNOBSTRUCTED REACH
SCALE: 1/2" = 1'-0"

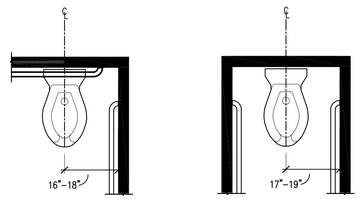


FIGURE 604.2 WATER CLOSET LOCATION

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 121

6 AH.1 WATER CLOSETS
SCALE: 1/2" = 1'-0"

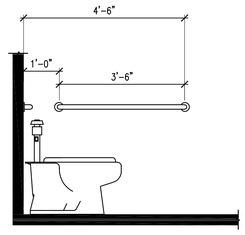


FIGURE 604.5.1 SIDE WALL GRAB BAR AT WATER CLOSET

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 123

7 AH.1 WATER CLOSETS
SCALE: 1/2" = 1'-0"

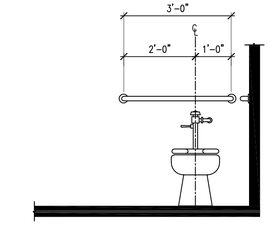


FIGURE 604.5.2 REAR WALL GRAB BAR AT WATER CLOSET

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 124

8 AH.1 WATER CLOSETS
SCALE: 1/2" = 1'-0"

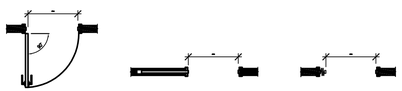


FIGURE 404.2.3 CLEAR WIDTH OF DOORWAYS

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 84

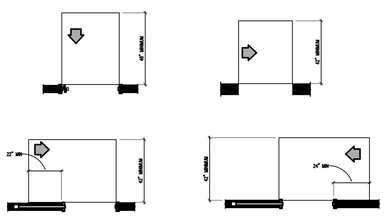


FIGURE 404.2.4.2 MANEUVERING CLEARANCES AT MANUAL DOORWAYS WITHOUT DOORS

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 87

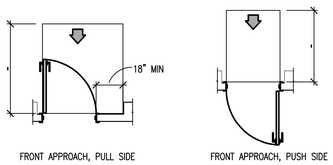


FIGURE 404.2.4.3 MANEUVERING CLEARANCES AT RECESSED DOORS AND GATES

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 88

9 AH.1 DOOR CLEARANCES
SCALE: 1/4" = 1'-0"

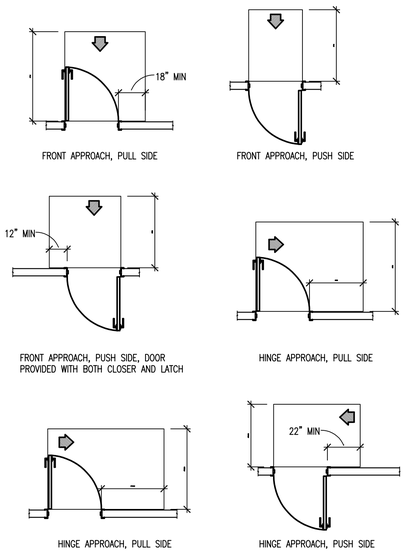


FIGURE 404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 85

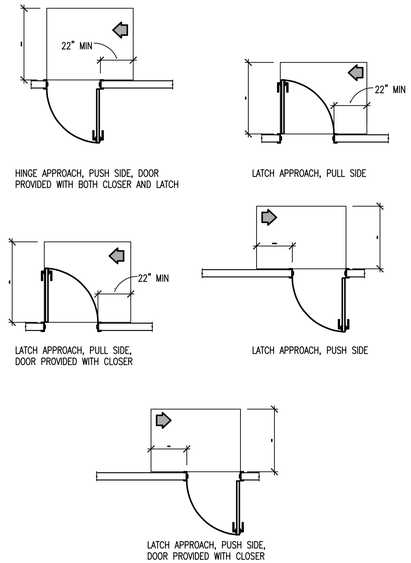
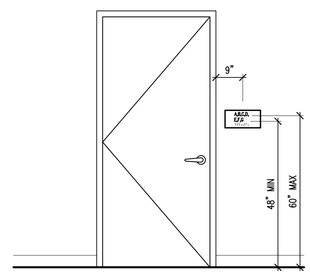


FIGURE 404.2.4.1 MANEUVERING CLEARANCES AT MANUAL SWINGING DOORS AND GATES CONTINUED

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 86



ROOM IDENTIFICATION SHALL BE LOCATED ON THE LATCH SIDE OF DOOR.

REFER TO TEXAS ACCESSIBILITY STANDARDS PAGE 148

10 AH.1 SIGNAGE
SCALE: 1/2" = 1'-0"

THIS DOCUMENT , AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

03.15.2019
DATE SIGNED

12.31.2019
REGISTRATION EXPIRATION DATE

REGISTERED ARCHITECT DORIS H. LaBICHE 11592 STATE OF TEXAS

7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 866-0198
WWW.LABICHE.COM

THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION

FORD FIELDS CONCESSION STAND

5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
AH.1
FILENAME
15036AH.1

DRAWN BY
CMM

PROJECT NUMBER
15036

DOCUMENT RELEASE DATES

1	03.15.2019 BIDS & CONSTRUCTION
2	
3	
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2019
THE LaBICHE ARCHITECTURAL GROUP, INC.

GENERAL NOTES

BUILDING CODE

BUILDING CODE USED ..... IBC 2015

DESIGN LIVE LOADS

ROOF ..... 20 P.S.F.
COLLATERAL LOAD ..... 10 P.S.F.

WIND SPEED (3 SEC GUST, EXP. C, CAT. II) ..... 138 M.P.H. (IBC 2015 ASD NOMINAL)
WIND PRESSURES - MWFRS TRANSVERSE DIRECTION
INTERIOR ZONES ..... WALLS ..... 18.1 P.S.F.
ROOF ..... -6.0 P.S.F.
END ZONE ..... WALL ..... 27.3 P.S.F.
ROOF ..... -10.5 P.S.F.
WIND PRESSURES - MWFRS LONGITUDINAL DIRECTION
INTERIOR ZONE ..... WALL ..... 15.4 P.S.F.
END ZONE ..... WALL ..... 23.2 P.S.F.
COMPONENTS AND CLADDING
ZONE 1 ..... -28.6 P.S.F.
ZONE 2 ..... -30.8 P.S.F.
ZONE 2 OVERHANG ..... -10.0 P.S.F.
ZONE 3 ..... -48.7 P.S.F.
ZONE 3 OVERHANG ..... -10.0 P.S.F.
ZONE 4 ..... -28.6 P.S.F.
ZONE 5 ..... -35.3 P.S.F.

CONCRETE

CONCRETE FOR FOOTINGS SHALL TEST 2500 P.S.I. AT 28 DAYS. ALL OTHER CONCRETE SHOWN AND CALLED FOR ON S SHEETS SHALL TEST 3000 P.S.I. AT 28 DAYS. FOOTINGS AND BEAM CONCRETE SHALL NOT CONTAIN MORE THAN 20% FLYASH BY WEIGHT. CONCRETE FOR SLAB-ON-GRADE AND SLAB ABOVE GRADE (IF ANY) SHALL CONTAIN NO FLYASH.

REINFORCING STEEL

ALL REINFORCING STEEL SHALL BE GRADE 60 (#2 AND #3 BARS AND ALL STIRRUPS AND TIES SHALL BE GRADE 40) AND SHALL CONFORM TO THE ASTM SPECIFICATIONS A615. DETAILING OF REINFORCING STEEL SHALL CONFORM TO THE AMERICAN CONCRETE INSTITUTE DETAILING MANUAL. PROVIDE 1-#6 X 4'-0" ($\frac{1}{4}$) TOP AND BOTTOM IN EXTERIOR FACE OF GRADE BEAMS AT CORNERS.

PROVIDE STANDARD PLASTIC BAR CHAIRS WITH ROUND FEET AT 4'-0" MAXIMUM CENTERS EACH WAY FOR ALL TOP REINFORCING FOR SLABS ON GRADE. DEPTH OF CHAIRS SHALL PROVIDE FOR 1" TOP COVER TO REINFORCING.

LAP CONTINUOUS UNSCHEDULED REINFORCING BARS AS FOLLOWS: BOTTOM BARS IN MEMBERS SUPPORTED BY COLUMNS OR FOOTINGS - 12" AT SUPPORTS ONLY, ALL OTHERS - 50 BAR DIAMETERS.

REINFORCING STEEL COVERAGE SHALL BE AS FOLLOWS:

GRADE BEAMS ..... 1 1/2" TOP, 3" BOTTOM, 2" SIDES (OUTSIDE FACE SHALL BE FULLY BOARD FORMED 3" COVER SHALL BE PROVIDED ON SIDES POURED AGAINST AND IN CONTACT WITH EARTH)

MISCELLANEOUS

FOOTINGS SHALL BE POURED IMMEDIATELY AFTER EXCAVATION.

PRINCIPAL OPENINGS THROUGH THE FRAMING ARE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR REQUIRED OPENINGS AS HE SHALL PROVIDE FOR ALL OPENINGS WHETHER SHOWN ON THESE DRAWINGS OR NOT, AND SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH MECHANICAL DRAWINGS. NOMINAL PIPE SLEEVES THROUGH THE DECK WILL NOT REQUIRE FRAMING UNLESS THE OPENING EXCEEDS 10" IN DIAMETER.

SEE ARCHITECTURAL DRAWINGS FOR FLOOR ELEVATIONS, SLOPES, AND THE LOCATION OF DEPRESSED FLOOR AREAS.

THE CONTRACTOR SHALL COMPARE STRUCTURAL SECTIONS WITH ARCHITECTURAL SECTIONS AND REPORT ANY DISCREPANCY TO THE ARCHITECT PRIOR TO FABRICATION OR INSTALLING STRUCTURAL MEMBERS.

STRUCTURAL STEEL

ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION (SQUARE OR RECTANGULAR TUBE SHAPES SHALL CONFORM TO ASTM A500, GRADE B). STRUCTURAL STEEL DETAILS AND CONNECTIONS SHALL CONFORM TO THE STANDARDS OF THE AISC. FIELD CONNECTIONS SHALL BE EQUIVALENT TO STANDARD BOLTED CONNECTIONS USING 3/4" ASTM A307 BOLTS UNLESS OTHERWISE SHOWN. CONNECTIONS SHALL BE BOLTED OR WELDED - SEE DETAILS. PROVIDE WEB CONNECTIONS FOR STEEL BEAMS AT COLUMNS AND BEAMS UNLESS OTHERWISE NOTED. IF CONNECTIONS BOLTS ARE IN SINGLE SHEAR, BOLTS SHALL BE DOUBLE ROW, DOUBLE COLUMN (TWO COLUMNS MAXIMUM). SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ARCHITECT AS TO LOCATION AND TYPE OF SPLICE TO BE MADE. ANY MEMBER HAVING SPLICE NOT SHOWN AND DETAILED ON SHOP DRAWINGS WILL BE REJECTED. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE. WHEN CAMBER OF STEEL MEMBERS IS REQUIRED BY THE DRAWINGS, THE CONTRACTOR SHALL VERIFY THE REQUIRED CAMBER IN THE FIELD PRIOR TO ERECTION OF EACH MEMBER. CONTINUOUS SHOP WELD ALL CAP PLATES, BASE PLATES AND JOIST SEATS TO COLUMNS.

EXPOSED FASCIA CONNECTIONS ARE TO BE WELDED AND ABRASIONS GROUND SMOOTH, ERECTION MATERIAL USED IN FIELD CONNECTIONS SHALL BE REMOVED, HOLES FILLED, AND ABRASIONS GROUND SMOOTH. (a) COAT WELDS WITH GALVOWELD.

EXAMINE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL ITEMS REQUIRED TO BE HOT-DIP GALVANIZED AFTER FABRICATION.

STRUCTURAL STEEL SHALL BE PUNCHED FOR WOOD BLOCKING AND NAILERS IN ACCORDANCE WITH ARCHITECTURAL DETAILS.

PRE-ENGINEERED BUILDING

SEE PREFABRICATED BUILDING MANUFACTURERES DRAWINGS FOR STEEL FRAMING. THE GENERAL CONTRACTOR SHALL PROVIDE AND SET ANCHOR BOLTS AS PER THE PREFABRICATED BUILDING MANUFACTURER'S DRAWINGS. THE PREFABRICATED BUILDING SHALL BE DESIGNED FOR LOADS PREVIOUSLY LISTED.

THE MAXIMUM DRIFT AND LATERAL DEFLECTION DUE TO WIND LOADS SHALL NOT EXCEED L/400 OF THE BUILDING HEIGHT.

THE PRE-ENGINEERED BUILDING MANUFACTURER SHALL DESIGN ANCHOR BOLTS AND SHALL PROVIDE AN ANCHOR BOLT SETTING PLAN. THE GENERAL CONTRACTOR SHALL PURCHASE AND SET ANCHOR BOLTS AS PER PRE-ENGINEERING BUILDING MANUFACTURER'S DRAWINGS.

ALL PRE-ENGINEERED BUILDING SHOP DRAWINGS SHALL BEAR THE SEAL OF AN ENGINEER CURRENTLY REGISTERED IN THE STATE OF TEXAS.

THE PRE-ENGINEERED BUILDING MANUFACTURERES ENGINEER OF RECORD SHALL SUPPLY A WP1-2D SIGNED AND SEALED.

DESIGN CALUCLATIONS SHALL BE SUPPLIED. THE CALCULATIONS SHALL BE SEALED AND SIGNED BY THE ENGINEER OF RECORD AND SHALL BE INDEXED AND TABED FOR EASY REVIEW.

SUBGRADE / FILL / SITE PREPARATION

THE BUILDING AREA SHALL BE STRIPPED OF ALL VEGETATION, TOPSOIL, CONCRETE AND UNDERLYING POOR-QUALITY FILL. ANY ROOTS LARGER THAN ONE-HALF INCH IN DIAMETER SHALL BE GRUBBED. ALL SOFT SPOTS IN THE SUBGRADE SHALL BE EXCAVATED TO FIRM SOIL. THE EXPOSED SUBGRADE SHALL BE SCARIFIED TO A MINIMUM DEPTH OF TWELVE INCHES AND MOISTURE CONDITIONED TO NOT LESS THAN THE OPTIMUM MOISTURE CONTENT. THE SUBGRADE SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM STANDARD PROCTOR DENSITY AS DETERMINED BY ASTM D 698.

A MINIMUM OF THIRTY SIX INCHES (36-INCHES) OF COMPACTED SELECT FILL SHALL BE PLACED BELOW THE FLOOR SLAB FROM THE PREPARED SUBGRADE TO THE BOTTOM OF THE SLAB. SELECT FILL SHALL BE COMPOSED OF A CLEAN, INACTIVE CLAY SOIL (NOT A SILT) WITH A PLASTICITY INDEX BETWEEN 10 AND 20. THE FILL SHALL BE PLACED IN THIN LIFTS NOT EXCEEDING EIGHT INCHES, LOOSE MEASURE, MOISTURE CONDITIONED TO ABOVE OPTIMUM MOISTURE CONTENT, AND COMPACTED TO A MINIMUM OF 95 PERCENT OF THE MAXIMUM STANDARD PROCTOR DENSITY. TOTAL FILL THICKNESS MIGHT EXCEED THE MINIMUM AMOUNT OF FILL DEPENDING ON FINISH FLOOR ELEVATION AND EXISTING GRADES. REFER TO SITE SURVEY AND SITE DRAWINGS.

SHAPE THE SITE AROUND THE STRUCTURE TO INSURE THAT WATER WILL NOT POND AROUND THE BUILDING DURING AND AFTER CONSTRUCTION.

SOIL BEARING PRESSURE

A SOIL BEARING PRESSURE OF 3700 P.S.F. FOR DEAD LOAD PLUS TOTAL LIVE LOAD AND 2500 P.S.F. FOR DEAD LOAD PLUS 1/2 LIVE LOAD WAS USED TO SIZE FOOTINGS IN ACCORDANCE WITH T & N LABPRATORIES & ENGINEERING'S GEOTECHNICAL ENGINEERING REPORT PROJECT NO. 14260 DATED NOVEMBER 2014.

INSURANCE CERTIFICATES

CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING WINDSTORM INSURANCE CERTIFICATE FROM THE STATE BOARD OF INSURANCE AND SHALL COORDINATE WITH THE ENGINEER OF RECORD IN PERFORMING THE REQUIRED WINDSTORM FIELD INSPECTIONS. PRE-ENGINEERED BUILDING MANUFACTURE SHALL DESIGN THE BUILDING PER THE PREVIOUSLY OUTLINED LIVE, SNOW, LATERAL, AND SEISMIC LOAD REQUIREMENTS. ROOF LIVE LOADS SHALL NOT BE REDUCED PER FM GLOBAL REQUIREMENTS.

REPRODUCTION NOTE

THE USE OF THESE CONTRACT DRAWINGS IN LIEU OF PREPARATION OF SHOP DRAWINGS CONSTITUTES ACCEPTANCE THAT ALL INFORMATION SHOWN HEREON IS CORRECT, AND CONSTITUTES ACCEPTANCE OF ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO THEIR USE. SHOP DRAWINGS MAY NOT BE PRODUCED BY USING REPRODUCTIONS OF THESE CONTRACT DRAWINGS. ANY SHOP DRAWINGS SUBMITTED FOR APPROVAL, WHICH WERE PRODUCED IN THIS MANNER, WILL BE REJECTED.

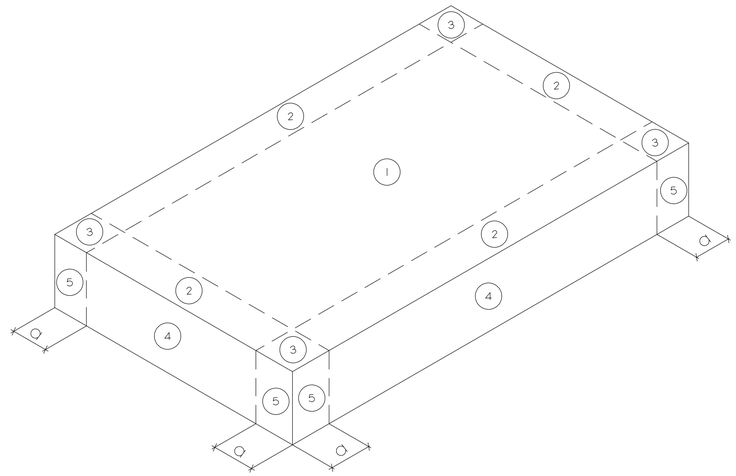
USE OF CADD FILES

UPON THE SIGNING OF A RELEASE, FITTZ & SHIPMAN, INC. WILL PROVIDE CADD FILES STRIPED OF TITLE BLOCKS AND SEALS. A FEE WILL BE ACCESSED IN ACCORDANCE WITH THE FOLLOWING FEE SCHEDULE:

MINIMUM CHARGE FOR OF $100 FOR THE FIRST SHEET AND $50 FOR EACH ADDITIONAL SHEET.

SALES TAX WILL BE ADDED TO THE ABOVE FEES UNLESS A SALES TAX EXEMPT CERTIFICATE IS PROVIDED.

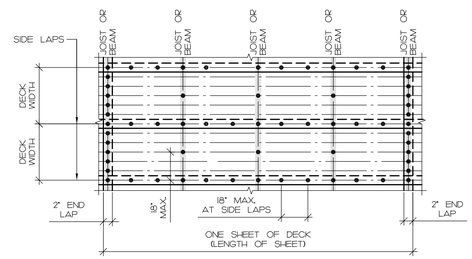
WHEN PLAN SHEETS ARE PRINTED ON MULTIPLE SHEETS THE FEE WILL BE ACCESSED PER PRINTED SHEET BUT ONE CADD FILE WILL BE PRESENTED.



LOCATION OF WIND PRESSURE ZONES

SCALE: N.T.S.

(COMPONENTS & CLADDING)
(OTHER TWO PHASES HAVE SAME ZONES)
a = 3.4'

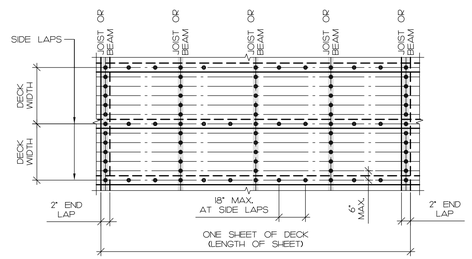


ROOF DECK ATTACHMENT

ZONE #1:
PROVIDE #12 TEK 5 X 1 1/2" SELF TAPPING SCREWS AT 6" O.C. AT END LAPS, AT SIDE LAPS, PROVIDE ONE SCREW AT 18" O.C. EACH INTERMEDIATE SUPPORT & AT 18" O.C. MAXIMUM BETWEEN INTERMEDIATE SUPPORTS FOR PRESSURE'S OF 50 P.S.F. OR LESS

TYPICAL ROOF DECK ATTACHMENT

N.T.S.



ROOF DECK ATTACHMENT

ZONE #2 & #3:
PROVIDE #12 TEK 5 X 1 1/2" SELF TAPPING SCREWS AT 6" O.C. AT END LAPS, AT SIDE LAPS, PROVIDE ONE SCREW AT 18" O.C. EACH INTERMEDIATE SUPPORT & AT 6" O.C. MAXIMUM BETWEEN INTERMEDIATE SUPPORTS FOR PRESSURE'S OF 150 P.S.F. OR LESS

TYPICAL ROOF DECK ATTACHMENT

N.T.S.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LABICHE ARCHITECTURAL GROUP, INC.

xxxxxxxx
DATE SIGNED
12.12.2016
REGISTRATION EXPIRATION DATE

1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-8151
FAX (409) 860-8158
WWW.LABICHE.COM
THE LABICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
8115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
S1
FILENAME

STATE OF TEXAS
DANIEL A. DOTSON
109833
LICENSED PROFESSIONAL ENGINEER
Mar 07, 2019

DRAWN BY: CMM
PROJECT NUMBER: 15036
DOCUMENT RELEASE DATES:

1	CLIENT REVIEW 10/13/2015
2	CLIENT REVIEW 10/21/2015
3	BIDS+CONSTRUCTION 03/15/2019
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016
THE LABICHE ARCHITECTURAL GROUP, INC.

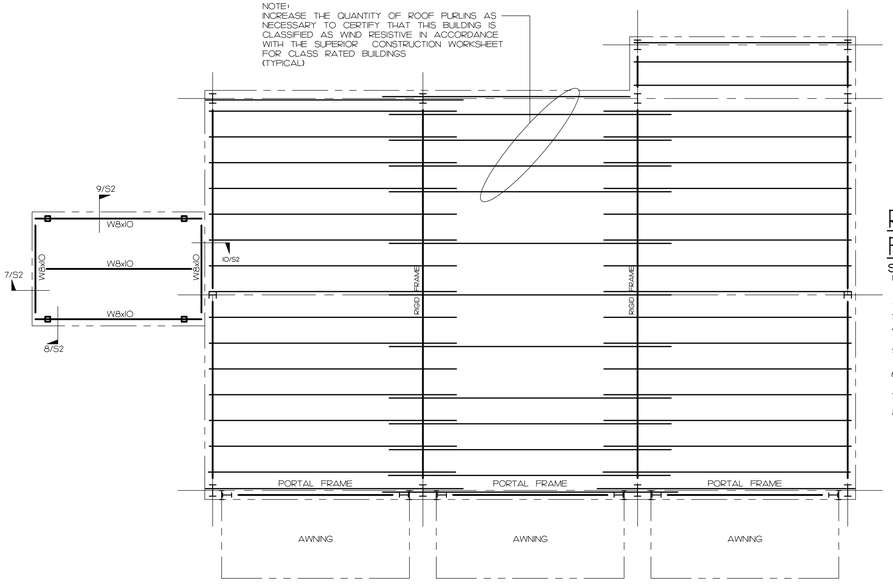
FILE # 1527-Details/SI PROJECT # 1527

OWNERSHIP OF DOCUMENTS
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF FITTZ & SHIPMAN, INC., AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF FITTZ & SHIPMAN, INC.
COPYRIGHT 2016 FITTZ & SHIPMAN, INC.

Fittz & Shipman INC.
Consulting Engineers and Land Surveyors
1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832-7238 FAX (409)832-7303
TBPE FIRM #950 TX-LS FIRM #10084

569

NOTE:
INCREASE THE QUANTITY OF ROOF PURLINS AS NECESSARY TO CERTIFY THAT THIS BUILDING IS CLASSIFIED AS WIND RESISTIVE IN ACCORDANCE WITH THE SUPERIOR CONSTRUCTION WORKSHEET FOR CLASS RATED BUILDINGS (TYPICAL)

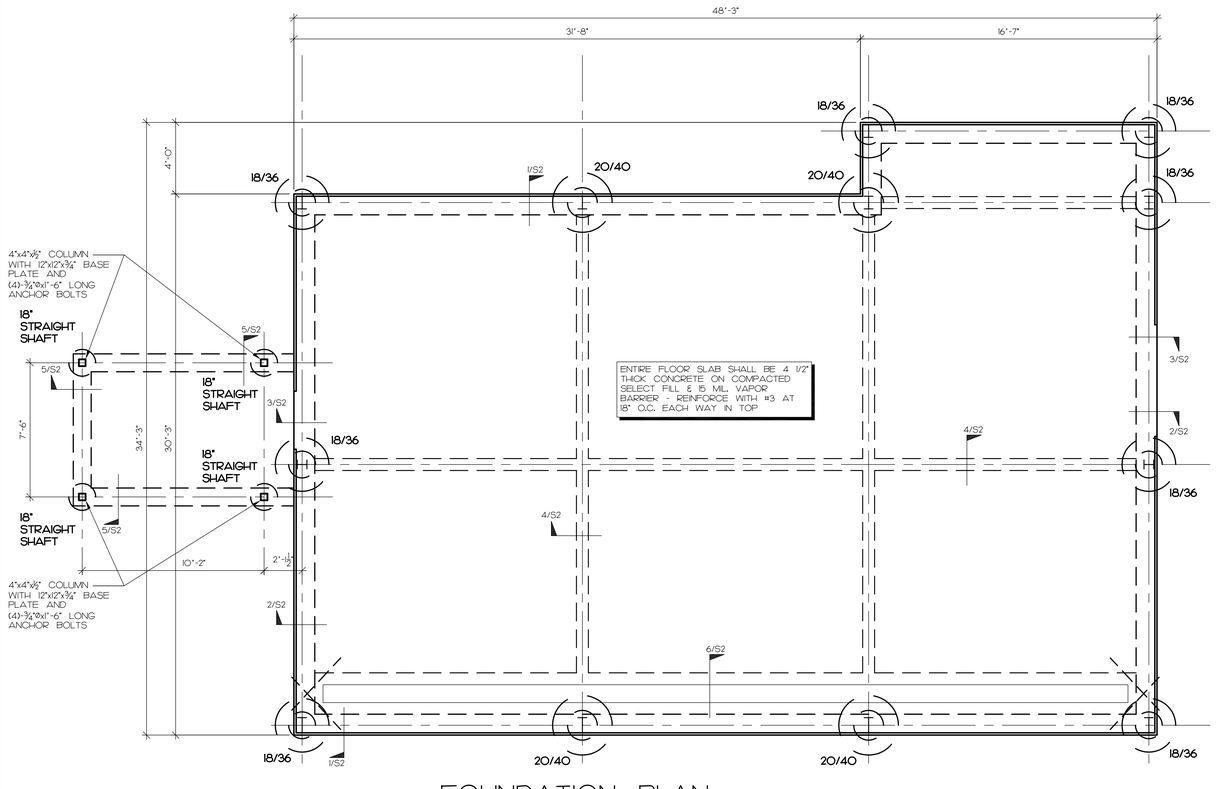


ROOF SCHEMATIC FRAMING PLAN

SCALE: N.T.S.

NOTE:
1. FRAMING SHALL BE DESIGNED FOR THE LOADS LISTED IN THE GENERAL NOTES.
2. CONTACT FITTZ & SHIPMAN IF CHANGES ARE MADE TO THE FRAMING CONCEPT.
3. LATERAL DRIFT SHALL BE LIMITED AS STATED IN THE GENERAL NOTES.
4. MAXIMUM SPACING OF ROOF PURLINS SHALL BE 4'-0" ON SLOPE. NUMBER OF PURLINS MIGHT VARY FROM WHAT IS SHOWN IN ROOF FRAMING SCHEMATIC.
5. PRE-ENGINEERED BUILDING MANUFACTURER TO PROVIDE WIND BRACING AS REQUIRED.
6. SEE ARCHITECTURAL DRAWINGS FOR DETAILS AND DIMENSIONS NOT SHOWN.
7. SEE GENERAL NOTES SHEET S1 FOR WIND LOAD REQUIREMENTS.
8. ROOF PURLINS SHALL BE DESIGNED TO ACCOMODATE R.T.U.'s SEE ARCH. DWGS. FOR ADDITIONAL INFO AND DETAILS.

NOTE:
INCREASE THE QUANTITY OF ROOF PURLINS AS NECESSARY TO CERTIFY THAT THIS BUILDING IS CLASSIFIED AS WIND RESISTIVE IN ACCORDANCE WITH THE SUPERIOR CONSTRUCTION WORKSHEET FOR CLASS RATED BUILDINGS (TYPICAL)



FOUNDATION PLAN

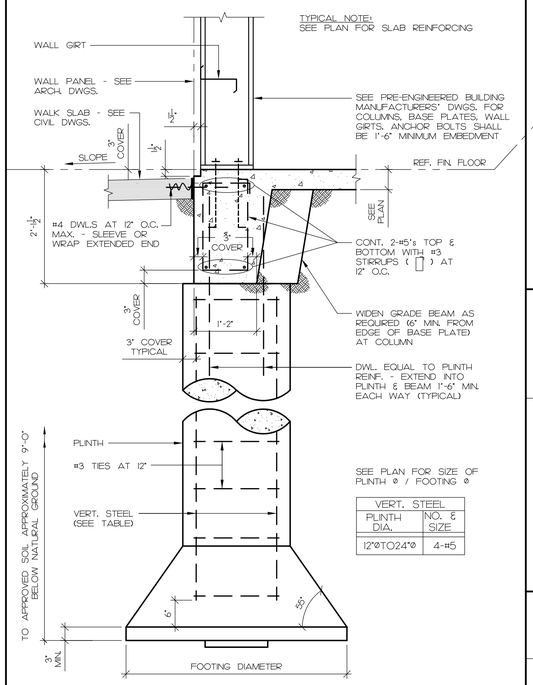
SCALE: 1/4" = 1'-0"

NOTES:
1. XX/XX ON PLAN INDICATES PLINTH DIAMETER IN INCHES / FOOTING DIAMETER IN INCHES. SEE 1/S2 FOR FOOTING REINFORCEMENT.
2. FOOTINGS ARE CENTERED UNDER GRADE BEAM UNLESS OTHERWISE NOTED.
3. MAXIMUM SLAB SLOPE TO FLOOR DRAIN SHALL NOT EXCEED 1/4" PER FOOT.
4. SEE ARCHITECTURAL AND MEP DRAWINGS FOR FLOOR DRAINS NOT SHOWN.
5. SEE ARCHT. DWGS. FOR DIMENSIONS NOT SHOWN.
6. VERIFY ALL BRICK LEDGES WITH ARCHITECTURAL DRAWINGS.
7. F.D. ON PLAN INDICATES FLOOR DRAINS SEE ARCHITECTURAL DRAWINGS FOR LOCATION & DETAILS.

NOTE:
WALK SLAB - SEE ARCHT./CIVIL DWGS. FOR DETAILS

NOTE:
PRIOR TO CONSTRUCTION, CONTRACTOR SHALL VERIFY ALL DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS WITH ALL DIMENSIONS SHOWN ON ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL TIMELY REPORT ANY DISCREPANCIES TO ARCHITECT.

TYPICAL NOTE:
SEE PLAN FOR SLAB REINFORCING

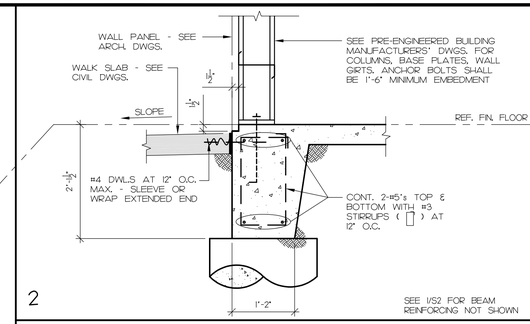


SEE PLAN FOR SIZE OF PLINTH Ø / FOOTING Ø

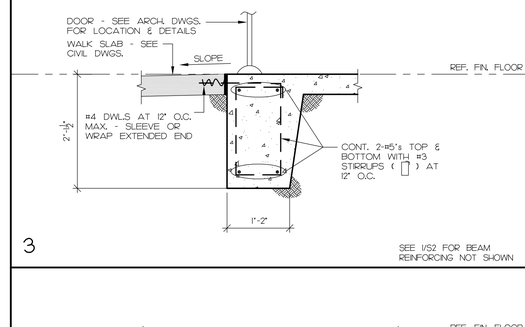
VERT. STEEL	
PLINTH DIA.	NO. & SIZE
12"Ø TO 24"Ø	4-#5

55° ANGLE MAY BE OBTAINED USING A LESSER ANGLE TOOL WITH STOPS

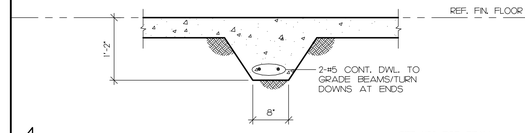
1
TYPICAL NOTE:
SCALE: ¾" = 1'-0"



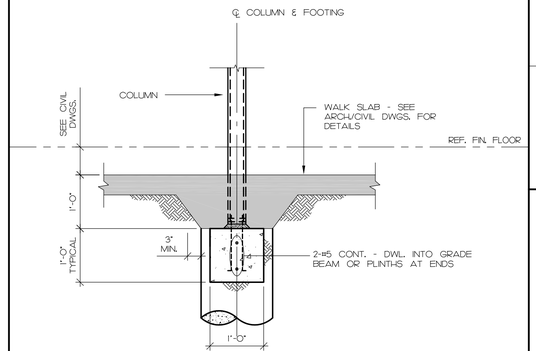
2



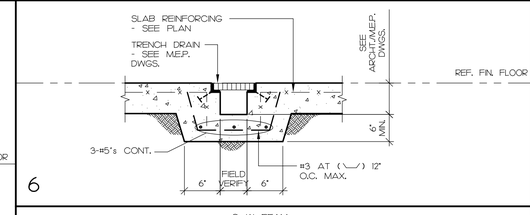
3



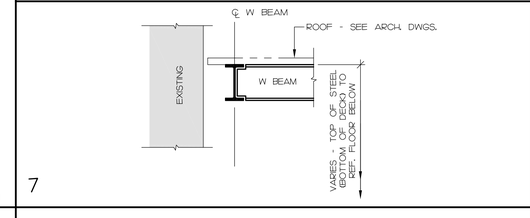
4



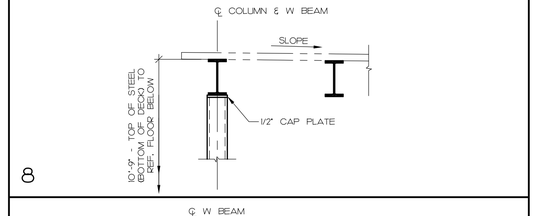
5



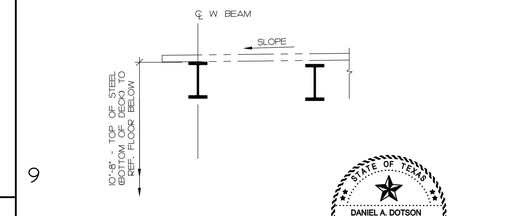
6



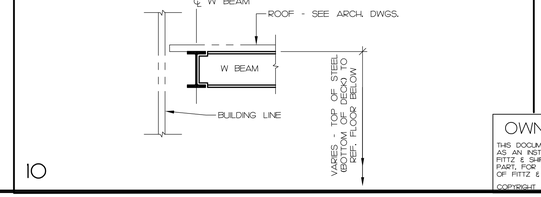
7



8



9



10

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

XX/XX/XXXX
DATE SIGNED
12/31/2016
REGISTRATION EXPIRATION DATE

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-8181
FAX (409) 860-8183
WWW.LABICHE.COM

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
BTB, I-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
S2
FILENAME

DRAWN BY
CMM
PROJECT NUMBER
15036
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10/31/2016
2	CLIENT REVIEW 12/1/2016
3	BID/CONSTRUCTION 03/31/2017
4	
5	
6	
7	
8	

COPYRIGHT © 2016
THE LaBICHE ARCHITECTURAL GROUP, INC.

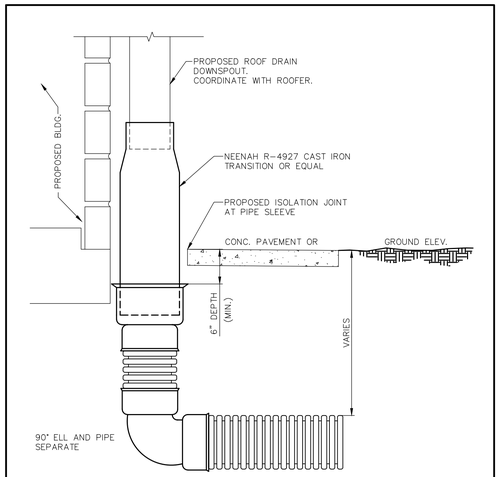
STATE OF TEXAS
DANIEL A DOTSON
109833
LICENSED PROFESSIONAL ENGINEER
Mar 07, 2019

FILE = 15127-Foundation/S2
PROJECT # 15127

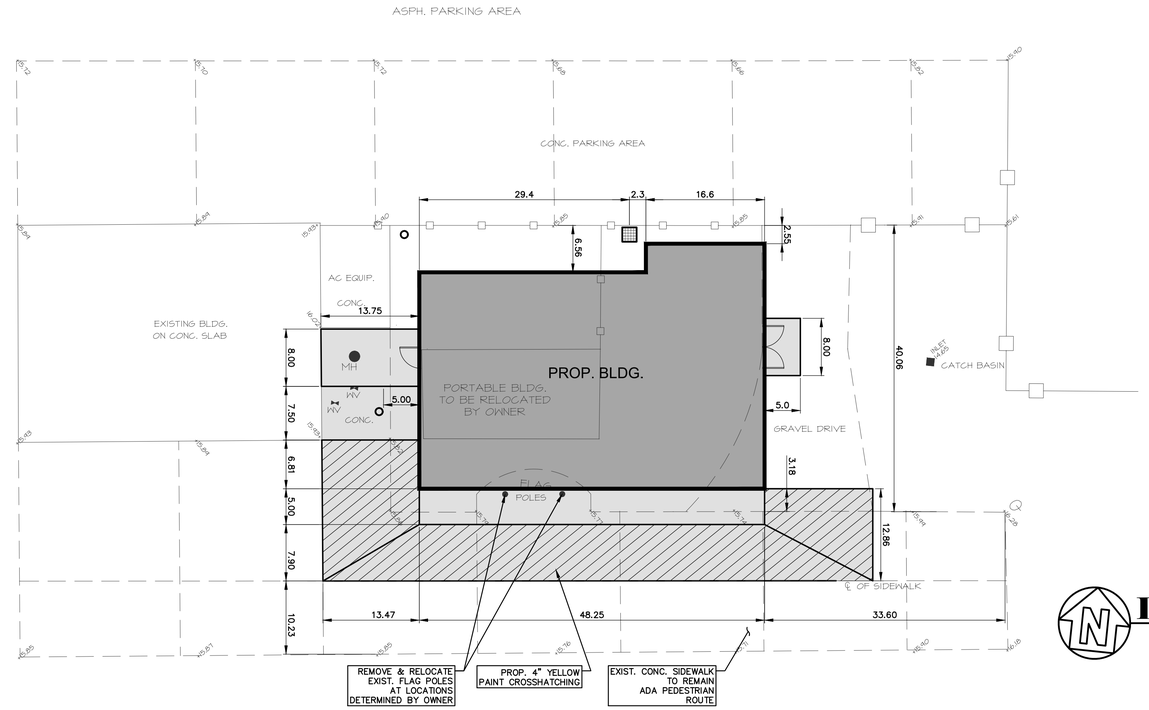
OWNERSHIP OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF FITTZ & SHIPMAN, INC., AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF FITTZ & SHIPMAN, INC.
COPYRIGHT 2016 FITTZ & SHIPMAN, INC.

Fittz & Shipman INC.
Consulting Engineers and Land Surveyors
1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832-7238 FAX (409)832-7303
TBPE FIRM #1140 TX.L.S. FIRM #100186

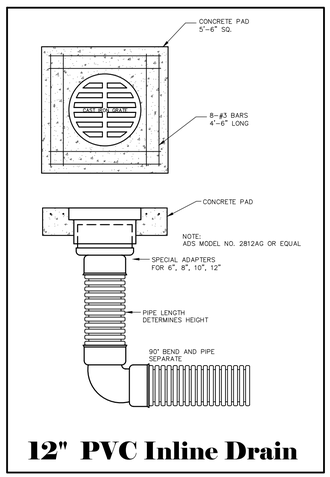


Roof Downspout Connection Type B

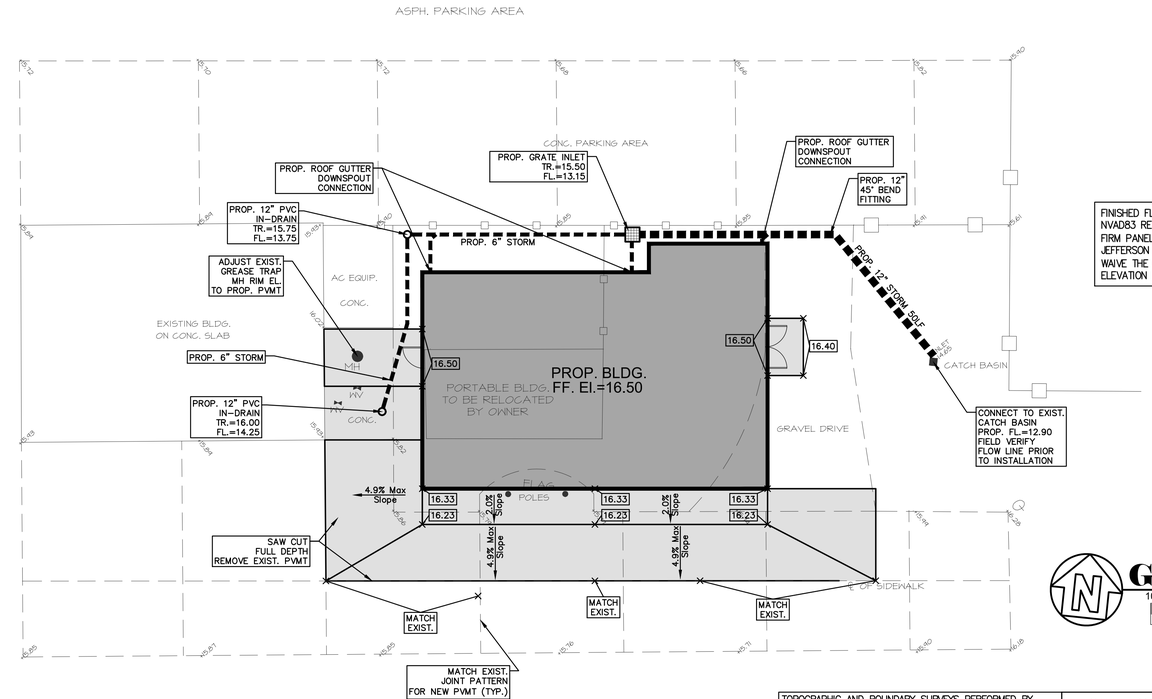


Dimensional Plan

Scale 1" = 10'



12" PVC Inline Drain



FINISHED FLOOR OF PROPOSED BUILDING SHALL BE ELEVATION 16.50, NVAD83 REFERENCE BENCHMARK, AS ACCORDING TO FEMA FIRM PANEL MAP 48245C0145E (8/30/12). JEFFERSON COUNTY ENGINEERING DEPARTMENT AGREES TO WAIVE THE COUNTY'S REQUIREMENT OF 12" ABOVE THAT ELEVATION FOR THIS PROPOSED BUILDING.

Grading Plan

Scale 1" = 10'

TOPOGRAPHIC AND BOUNDARY SURVEYS PERFORMED BY JEFFERSON COUNTY SURVEYORS, INC. FITTZ & SHIPMAN, INC. DOES NOT WARRANT NOR SUBSCRIBE TO THE ACCURACY OR SCALE OF SAID INFORMATION.

OWNERSHIP OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF FITTZ & SHIPMAN, INC., AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF FITTZ & SHIPMAN, INC.

COPYRIGHT 2016 FITTZ & SHIPMAN, INC.

15127C300 15127

Fittz & Shipman INC.

Consulting Engineers and Land Surveyors

1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832-7238 FAX (409)832-7303
T.B.P.E. FIRM #1160 T.X.L.S. FIRM #100186

STATE OF TEXAS
BERNARDINO D. TRISTAN
117017
LICENSED PROFESSIONAL ENGINEER
Bernardino D. Tristan
Mar 08, 2019

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LABICHE ARCHITECTURAL GROUP, INC.

XX/XX/XXXX
DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

THE LABICHE ARCHITECTURAL GROUP, INC.
1998 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 892-0051
FAX (409) 892-0193
WWW.LABICHE.COM

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

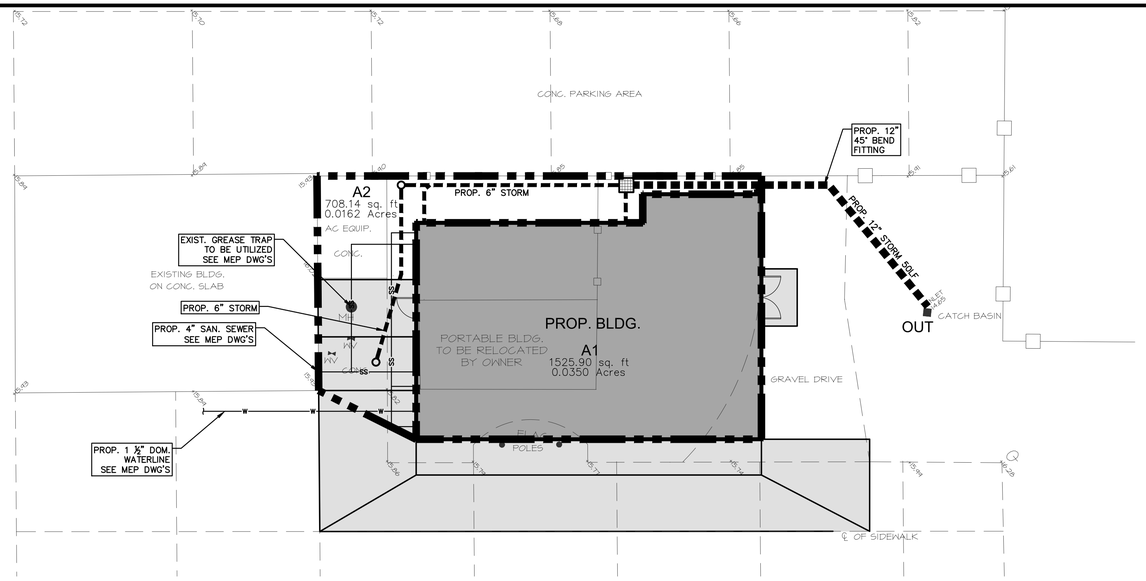
SHEET NUMBER C2.1
15127C300
FILENAME

DRAWN BY CMM
PROJECT NUMBER 15036
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10/13/2015
2	CLIENT REVIEW 10/21/2015
3	BID/CONSTRUCTION 03/15/2019
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016 THE LABICHE ARCHITECTURAL GROUP, INC.

Q:\PROJECTS\15127 - Ford Park Concession Stand\Civil\Drawings\15127C300.dwg Mar 08, 2019 11:51am



DRAINAGE AREA COMPUTATIONS

I=b/(t+d)e — Des. Freq. 2: b= 74.00, d= 9.20, e= 0.799; 5: b= 65.00, d= 7.50, e= 0.733

DRAINAGE AREA NO.	TOTAL AREA (Ac.)	Building C 0.97	Pavement C 0.90	Grass C 0.25	Combined C A	Time of Concent. (min.)	I2 (in./hr.)	Q2 (c.f.s.)	I5 (in./hr.)	Q5 (c.f.s.)
Post-Construction Conditions										
A1	0.035	0.035	0.000	0.000	0.034	10.0	6.98	0.24	7.98	0.27
A2	0.016	0.000	0.016	0.000	0.015	10.0	6.98	0.10	7.98	0.12

STORM COMPUTATIONS

Freq = 5; b= 65.00, d= 7.50, e= 0.733; I=b/(t+d)e; n= 0.011 HDPE pipe; n= 0.030 earth ditch

FROM NO.	TO NO.	Drainage Areas	TOTAL DA (Ac.)	TOTAL CA	LNGTH (ft.)	Time of Concentration Along sewer line	Inlet Time	Used in Design	I (in/hr)	Freq = Q (cfs)	No. (#)	Dia. (in.)	DESIGN Slope %	Cap. (cfs)	Vel. (ft/sec)	REMARKS +/- ∕\ Q
A1	A2	A1	0.04	0.03	33	+ 33 / 2.5 (60)=	0.2	10.0	10.0	7.98	0.27	3	6	0.50	1.41	2.39	1.14
A2	OUT	A1+A2	0.05	0.05	105	10.0 + 33 / 2.4 (60)=	10.2	10.0	10.2	7.90	0.38	1	12	0.40	2.67	3.40	2.28

Utility Plan

10 0 10 20

Scale 1" = 10'

GENERAL CONSTRUCTION NOTES:
1.) PROPOSED SITE UTILITIES, WATER, SANITARY, & ELECT, ARE SHOWN FOR INFORMATIONAL PURPOSE ONLY. REF MEP SHTS FOR MORE INFORMATION.
2.) CONTRACTOR TO VERIFY ALL FLOWLINES ON M.E.P. SITEPLAN & GRADING/DRAINAGE PLANS TO AVOID ANY PIPE CONFLICTS
3.) CONTRACTOR TO VERIFY FLOWLINES AT ALL TIE-IN POINTS AT THE BUILDING WITH M.E.P. DRAWINGS.
4.) THE LOCATION OF ALL EXIST. SERVICE LINES SHOWN ARE APPROXIMATE. FIELD VERIFY ALL ELEVATIONS.
5.) EXISTING UTILITIES TO REMAIN. DO NOT DAMAGE, REPAIRS AT CONTRACTOR'S EXPENSE.

SPECIFICATION DATA

PAVING & DRAINAGE

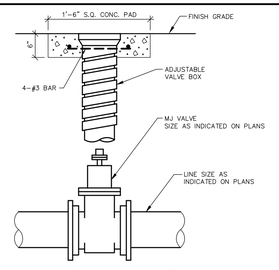
1. ALL CONCRETE FOR PAVING TO BE 3000 PSI COMPRESSIVE STRENGTH @ 28 DAYS. SAWING OF JOINTS SHALL BEGIN AS SOON AS WORKABLE AND SHALL BE COMPLETED BEFORE 24 HOURS HAVE ELAPSED. ANY RANDOM CRACKING OF THE PAVEMENT DUE TO INCOMPLETE SAWING OPERATIONS SHALL REQUIRE THE REMOVAL AND REPLACEMENT OF THE DAMAGED SECTION AT THE CONTRACTOR'S EXPENSE. BEAM SAMPLES SHALL BE MADE FOR CONCRETE PAVEMENT TESTING.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION OF CONCRETE PAVEMENTS TO PROPER THICKNESS AS PROVIDED IN THE CONSTRUCTION PLANS AND SPECIFICATIONS. INSPECTION OF FORMS AND GRADING WILL BE CONDUCTED PRIOR TO PLACEMENT OF CONCRETE AND RANDOM CORE SAMPLES WILL BE CONDUCTED AFTER COMPLETION PER SPECIFICATIONS TO MEASURE THICKNESS. CONTRACTOR WILL HAVE ULTIMATE RESPONSIBILITY FOR PROPER CONCRETE PAVEMENTS.
3. EXPANSION JOINTS TO BE PLACED @ ALL RADIUS RETURNS AND WHEN TYING INTO EXISTING PAVEMENTS.
4. STORM SEWER & CULVERT PIPE SHALL BE OF THE FOLLOWNG MATERIALS:
   A. AASHTO M294 SMOOTH WALL CORRUGATED POLYETHYLENE PIPE WITH LOCKING PUSH ON JOINTS SMOOTH INTERIOR WALL CORRUGATED POLYETHYLENE PIPE INSTALLED WITH BEDDING ACCORDING TO MANUFACTURERS RECOMMENDATIONS (8" – 42").
5. BACKFILL ALL HDPE PIPE ON SAME DAY AS INSTALLATION.
6. ALL EXPOSED CONCRETE CORNERS OF MANHOLES, INLETS, OR OTHER STRUCTURES SHALL BE CHAMFERED 1".
7. CONTRACTOR SHALL BACKFILL AROUND ALL MANHOLES, INLETS, AND CATCH BASINS, WITH CEMENT STABILIZED SAND COMPACTED TO FILL ALL VOID CEMENT STABILIZED SAND SHALL NOT CONTAIN LESS THAN 1 1/2 SACKS CEMENT PER TON OF TOTAL MIXTURE.
8. CONTRACTOR SHALL INCLUDE BACKFILL BEHIND CURB AND PROVIDE TOPSOIL FOR AREAS DISTURBED. THIS WORK WILL NOT BE PAID FOR DIRECTLY BUT SHALL BE SUBSIDIARY TO THE VARIOUS BID ITEMS.
9. EROSION CONTROL DEVICES TO CONTROL/CONTAIN SEDIMENT RUNOFF AND TO PREVENT TRACKING ONTO PUBLIC STREETS MUST BE PROPERLY INSTALLED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION AND MUST REMAIN IN PLACE UNTIL BUILDING ERECTION AND/OR PAVING WORK IS COMPLETE AND/OR ADEQUATE VEGETATION IS ESTABLISHED TO PREVENT EROSION OF SOILS INTO STREETS OR DRAINAGE SYSTEMS.
10. CONTRACTOR SHALL PROVIDE A MINIMUM OF 1 (ONE) SET OF COMPRESSIVE STRENGTH TEST RESULT FOR EACH 100 CY. OF CONCRETE OR A FRACTION THEREOF. ALL TESTING TO BE AT CONTRACTORS EXPENSE.

WATER

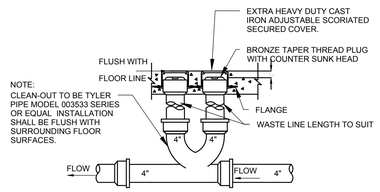
1. ALL WATER MAINS AND APPURTENANCES SHALL CONFORM TO THE CITY OF NEDERLAND SPECIFICATIONS AND STANDARDS
2. SPACING OF WATER LINES AND SANITARY SEWERS WILL BE IN ACCORDANCE WITH THE FOLLOWING:
   30 T.A.C. SECTION 217.53 (d)(e) TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
   30 T.A.C. SECTION 290.44 TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
3. WATER MAINS 4 INCH DIAMETER AND LARGER SHALL BE PVC PIPE AND SHALL CONFORM TO AWWA C-900, CLASS 150. WATER LINES LESS THAN 4 INCH DIAMETER SHALL BE PVC SDR-26 CLASS 160. WATER SERVICE LINES SHALL BE CLASS 200 PE TUBING.
4. VALVES SHALL BE AWWA C500 IRON –BODY GATE VALVES WITH NON–RISING STEM.
5. FITTINGS SHALL BE DUCTILE IRON AND CONFORM TO AWWA C110.
6. PRESSURE RATING OF VALVES, FITTINGS AND APPURTENANCES IS TO EQUAL OR EXCEED PRESSURE RATING OF ADJACENT WATER LINE.
7. PROVIDE ADEQUATE THRUST BLOCKING TO WITHSTAND TEST PRESSURES. CONCRETE SHALL BE 5 SACK/C.Y. MIN 3,000 PSI @ 28 DAYS.
8. PRESSURE TESTING AND STERILIZATION OF WATER MAINS SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF NEDERLAND ITEM 809 AND AWWA C651 UNDER SUPERVISION OF THE CITY OF NEDERLAND. CONTRACTOR SHALL GIVE MIN. 24 HOURS NOTICE TO THE CITY OF NEDERLAND AND SHALL PERFORM PRESSURE TESTS AND STERILIZATION AND FURNISH ALL MATERIALS AND EQUIPMENT FOR SAME. THE CONTRACTOR WILL BE RESPONSIBLE FOR BACTERIOLOGICAL SAMPLES AND TESTING.
9. ALL WATER TRENCHES CROSSING BENEATH THE PAVING SHALL BE BACKFILLED WITH A CEMENT STABILIZED BACKFILL MATERIAL FROM TOP OF SAND ENVELOPE ENCASEMENT TO THE BOTTOM OF PAVEMENT GRADE. CEMENT STABILIZED SAND SHALL NOT CONTAIN LESS THAN 2 SACKS PER CUBIC YARD OF TOTAL MIXTURE.
10. PLUMBER TO MAKE FINAL TIE–IN TO METER.
11. ALL WATER AND SANITARY SEWER LINES WILL BE TESTED PRIOR TO CITY ACCEPTANCE.
12. ALL SERVICE LINES TO BE INSTALLED PER CITY OF NEDERLAND BUILDING CODES.
13. FIRE HYDRANTS TO BE AMERICAN DARLING B–84–B.
14. WATER METER PROVIDED AND INSTALLED BY CITY OF NEDERLAND AT CONTRACTORS EXPENSE. CONTRACTOR SHALL STAKE LOCATION OF WATER METERS AS REQUIRED BY CITY OF NEDERLAND PRIOR TO INSTALLATION.

WASTEWATER

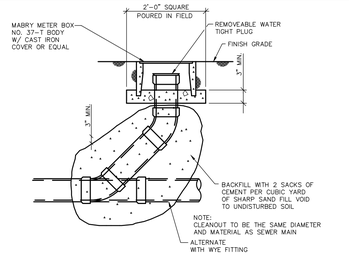
1. ALL SANITARY SEWER PIPE, MANHOLES, APPURTENANCES AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH BUILDING CODE REQUIREMENT OF THE CITY OF NEDERLAND.
2. AN AIR PRESSURE TEST OF ALL SANITARY SEWER LINES WILL BE PERFORMED IN ACCORDANCE WITH THE CITY OF NEDERLAND SPECIFICATIONS. THE ENGINEER SHALL BE GIVEN 24 HOURS ADVANCE NOTICE OF THE PRESSURE TESTS AND SHALL OBSERVE THE TESTS TO MEET THE REQUIREMENTS OF THE CITY OF NEDERLAND SPECIFICATIONS BEFORE SANITARY SEWER LINE IS CONSIDERED ACCEPTABLE.
3. ALL SANITARY SEWER TRENCHES CROSSING BENEATH ROAD PAVING SHALL BE BACKFILLED WITH CEMENT STABILIZED BACKFILL MATERIAL FROM THE BOTTOM OF TRENCH TO THE BOTTOM OF PAVEMENT GRADE. CEMENT STABILIZED SAND SHALL NOT CONTAIN LESS THAN 2 SACKS CEMENT PER CUBIC YARD
4. ALL CITY OF NEDERLAND COLLECTOR GRAVITY SEWER PIPE LINES SHALL BE ASTM D–3034, SDR–26 PVC. ALL SERVICE LINES SHALL BE SCH 40 PVC
5. ALL CONCRETE SHALL BE CLASS "A" (5 SACK, 3000 PSI @ 28
6. ALL REINFORCING SHALL BE GRADE 60
7. 24 HOURS NOTICE IS REQUIRED PRIOR TO ANY INSTALLATIONS OR INSPECTIONS.



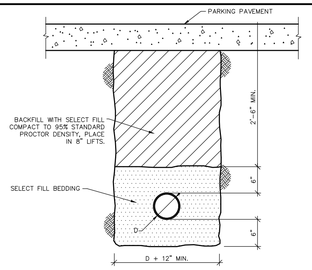
Water Valve & Valve Box 1



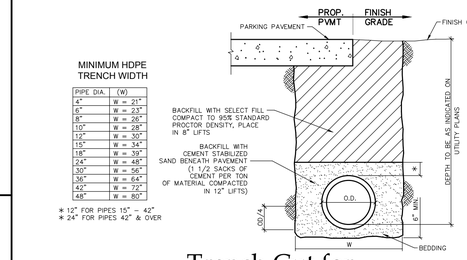
2-way Yard Clean Out Detail 2



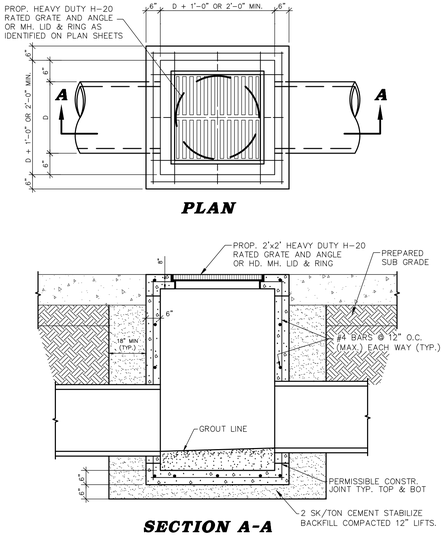
Sanitary Sewer Cleanout 3



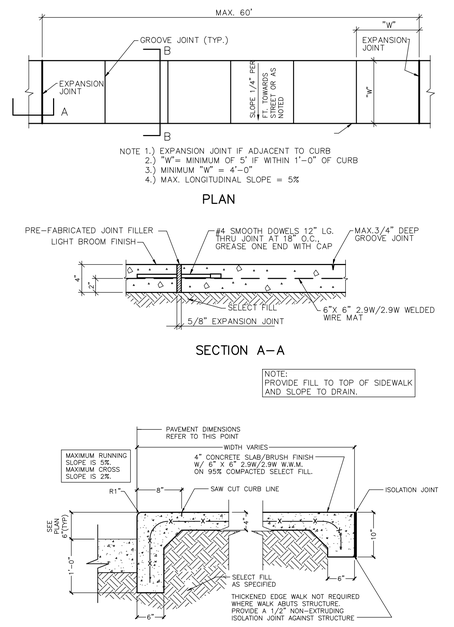
Trench Cut For Water & Sanitary Under Parking lots 4



Trench Cut for HDPE Storm Sewer Lines 5



Storm Sewer Inlet / Junction Box 6



Sidewalk Detail 7

TOPOGRAPHIC AND BOUNDARY SURVEYS PERFORMED BY JEFFERSON COUNTY SURVEYORS, INC. FITTZ & SHIPMAN, INC. DOES NOT WARRANT NOR SUBSCRIBE TO THE ACCURACY OR SCALE OF SAID INFORMATION.

OWNERSHIP OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF FITTZ & SHIPMAN, INC., AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF FITTZ & SHIPMAN, INC.

COPYRIGHT 2016 FITTZ & SHIPMAN, INC.

15127C300 15127

Fittz & Shipman INC.
Consulting Engineers and Land Surveyors
1405 CORNERSTONE COURT BEAUMONT, TEXAS
(409)832–7238 FAX (409)832–7303
T.B.P.E. FIRM #1160 T.X.L.S. FIRM #100186

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

xxxxxxxxx
DATE SIGNED
12120%
REGISTRATION EXPIRATION DATE

THE LaBICHE ARCHITECTURAL GROUP, INC.
1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 892-1551
FAX (409) 892-2193
WWW.LABICHE.COM

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

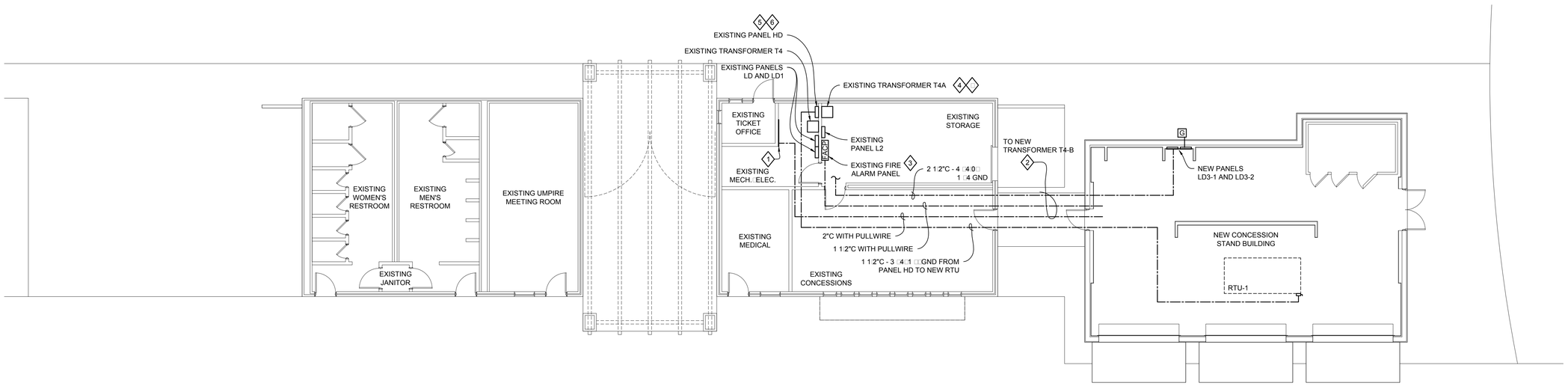
SHEET NUMBER C3.1
15127C300
FILENAME

STATE OF TEXAS
BERNARDINO D. TRISTAN
117017
LICENSED PROFESSIONAL ENGINEER
Mar 08, 2019

DRAWN BY	CMM
PROJECT NUMBER	15036
DOCUMENT RELEASE DATES	
1	CLIENT REVIEW 10/3/2015
2	CLIENT REVIEW 10/21/2015
3	BID&CONSTRUCTION 03/3/2019
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016 THE LaBICHE ARCHITECTURAL GROUP, INC.

Q:\PROJECTS\15127 – Ford Park Concession Stand\Civil\Drawings\15127C300.dwg Mar 08, 2019 11:51am



1 ELECTRICAL SITE PLAN

SCALE: 1 " = 1'-0"

N

1 EXISTING TELEPHONE DATA BACKBOARD. RUN 2"C FROM BACKBOARD TO CEILING SPACE OF NEW BUILDING. PROVIDE PULLWIRE IN CONDUIT.

2 RUN ON TOP OF CANOPY AND SEAL ENTRANCES AT EACH BUILDING.

3 EXISTING FIRE ALARM PANEL. EXPAND SYSTEM TO COVER NEW BUILDING. SEE SHEET E-4.2.

4 DISCONNECT EXISTING TRANSFORMER T4A AND PANEL LD2. USE 0A 3P BREAKER SERVING T4-A TO FEED NEW AHU. TURN SALVAGED MATERIAL OVER TO OWNER.

5 FURNIS AND INSTALL NEW 110 AMP BREAKER IN EXISTING PANEL HD TO SERVE NEW TRANSFORMER.

6 RUN 2"C - 3 1 0 1 6 GND TO SERVE NEW TRANSFORMER T4-B.

FURNISH AND INSTALL NEW 5KVA 4 0-20 120 3 φ 4W TRANSFORMER TO SERVE NEW BUILDING. PROVIDE 200A 3P NF DISCONNECT AT TRANSFORMER FOR SERVICE DISCONNECT.

2 KEY NOTES

SCALE: NONE

1. THE SCOPE OF WORK FOR THIS PROJECT IS REPRESENTED THROUGHOUT THESE DRAWINGS. THE CONTRACTOR SHALL REVIEW THE ARCHITECTURAL CIVIL STRUCTURAL PLUMBING MECHANICAL AND ELECTRICAL DRAWINGS FOR ITEMS OF WORK TO BE INCLUDED.THE CONTRACTOR SHALL OBTAIN CLARIFICATION FROM THE ARCHITECT PRIOR TO ANY ROUGH-IN. FAILURE TO OBTAIN CLARIFICATION SHALL NOT RELIEVE THE CONTRACTOR FROM PROVIDING THE NECESSARY SERVICES AT THE REQUIRED LOCATION AT NO ADDITIONAL COST TO THE OWNER.

2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OR THE EDITION ENFORCED BY THE JURISDICTION IN WHICH THE PROJECT IS CONSTRUCTED. OF THE FOLLOWING CODES AND STANDARDS:
   - THE NATIONAL ELECTRICAL CODE NFPA 0
   - NATIONAL FIRE ALARM CODE NFPA 2
   - LIFE SAFETY CODE NFPA 101
   - THE INTERNATIONAL BUILDING CODE
   - THE INTERNATIONAL FIRE CODE.
   - STATE AND LOCAL CODES AND ORDINANCES COMPLETE WITH ANY MODIFICATIONS TO THE ABOVE CODES.

   WHERE CONFLICT BETWEEN THE CODES AND CONSTRUCTION DOCUMENTS OCCURS THE MORE STRINGENT REQUIREMENTS WILL BE ENFORCED. ALL REQUIRED INSPECTIONS SHALL BE PERFORMED BY THE AUTHORITY HAVING JURISDICTION AND PAID FOR BY THE CONTRACTOR CERTIFICATES OF INSPECTION SHALL BE FURNISHED TO THE ARCHITECT.

3. ALL EQUIPMENT NECESSARY FOR A COMPLETE AND OPERABLE ELECTRICAL SYSTEM SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR. CONTRACTOR SHALL COORDINATE AND VERIFY THE REQUIREMENTS FOR THE CONCESSION EQUIPMENT BEING FURNISHED UNDER THIS CONTRACT AND OR FURNISHED AND INSTALLED BY OTHERS OUTSIDE OF THIS CONTRACT. NOTIFY ARCHITECT AND ENGINEER OF ANY DISCREPANCIES AFFECTING THE WORK.

4. APPLICATION AND INSTALLATION OF MATERIALS AND EQUIPMENT SHALL BE STRICTLY IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. SHOULD THERE BY ANY DIFFERENCE BETWEEN SUCH RECOMMENDATIONS AND THE REQUIREMENTS OF THE DRAWINGS THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF SUCH DIFFERENCES AND OBTAIN THE ARCHITECT'S INTERPRETATION PRIOR TO INSTALLATION. DIFFERENCES BROUGHT TO THE ARCHITECT'S ATTENTION AFTER INSTALLATION SHALL BE CORRECTED TO THE ARCHITECT'S INTERPRETATION BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.

5. ALL TIE-IN LOCATIONS SHOWN ARE GENERAL LOCATIONS. CONTRACTOR SHALL ESTABLISH EXACT LOCATIONS IN FIELD PRIOR TO ANY ROUGH-IN.

3 ELECTRICAL LEGEND

SCALE: NONE

- 1 2" 6'-0" LONG FLEXIBLE METAL RACEWAY WITH CONDUCTORS REQUIRED FOR SWITCHED CONDUCTORS UNSWITCHED CONDUCTORS NEUTRAL AND GROUND.
- UNDERGROUND WIRING.
- CONCEALED WIRING.
- EXPOSED WIRING.
- PNL-CKT — HOME RUN TO PANEL AND CIRCUIT INDICATED.
- 20A 125V DUPLEX SPECIFICATION GRADE RECEPTACLE WITH THERMOPLASTIC HIGH-IMPACT RESISTANT WALL PLATE. MOUNT BOTTOM AT 16" A.F.F. UNLESS OTHERWISE NOTED.
  - CT = COUNTERTOP MOUNTED HORIZONTALLY
  - UC = UNDER COUNTER
  - GFCI = GROUND FAULT CIRCUIT INTERRUPTER FEED THRU TYPE
  - WP = WEATHER PROOF COVER
- 2 EA. 20A 125V DUPLEX SPECIFICATION GRADE RECEPTACLE WITH THERMOPLASTIC HIGH-IMPACT RESISTANT WALL PLATE. MOUNT BOTTOM AT 16" A.F.F. UNLESS OTHERWISE NOTED.
- SPECIAL RECEPTACLE. SEE EQUIPMENT SCHEDULE FOR REQUIREMENTS. FIELD VERIFY EXACT EQUIPMENT REQUIREMENTS.
- ALUMINUM TELEPOWER POLE WITH 2 EA. 20A 125V DUPLEX RECEPTACLES ON EACH SIDE AS INDICATED. VERIFY POLE HEIGHT WITH ROOM CEILING HEIGHT. RECEPTACLE HEIGHTS TO BE 42" TO BOTTOM RECEPTACLE.
- $ — 20A 120 2 SPECIFICATION GRADE HUBBELL SERIES 1221 TOGGLE SWITCH WITH THERMOPLASTIC HIGH-IMPACT RESISTANT COVER PLATE TO MATCH RECEPT. COVER PLATE COLOR SELECTED BY ARCHITECT ON ROOM-BY-ROOM BASIS. MOUNT BOTTOM AT 44" A.F.F. UNLESS OTHERWISE NOTED.
  - 2 = 2 POLE
  - 3 = THREE WAY
  - 4 = FOUR WAY
- $M — MANUAL MOTOR STARTER 30A WITHOUT OVERLOAD USED FOR MOTOR DISCONNECT.
- 4" SQ. SHEET METAL JUNCTION BOX DEPTH AS REQUIRED.
- X — EQUIPMENT SINGLE OR THREE PHASE MOTOR HORSEPOWER NOTED.
- HEAVY DUTY DISCONNECT SWITCH.
  - FDS = FUSED
  - NFDS = NONFUSED
- EXIT LIGHT SINGLE FACE - SEE LIGHT FIXTURE SCHEDULE.
- GE — 3 4" 10' COPPER CLAD GROUND ROD WITH TOP EXPOSED 6" ABOVE FINISHED GRADE.
- G — 3 4" 10' COPPER CLAD GROUND ROD IN QUAZITE PC060 WITH PC060 CA00 COVER MARKED "GROUND".
- FACP — ADDRESSABLE FIRE ALARM CONTROL PANEL. EXISTING
- COMPUTER JUNCTION BOX 4" SQ. 2-1 " D. WITH 2 EACH 1"C CONDUIT STUB-UP INTO ACCESSIBLE CEILING SPACE 12" ABOVE CEILING UNLESS OTHERWISE NOTED. PROVIDE MATCHING COVER PLATE TO WIRING DEVICES WITH ORANGE DATA JACKS. MOUNT BOTTOM AT 15" A.F.F. UNLESS OTHERWISE NOTED.
  - W = 44" ABOVE FINISHED FLOOR
  - CT = COUNTERTOP
  - UC = UNDER COUNTER
- CABLE TV AND DATA JUNCTION BOX 4" SQ. 2-1 " D. WITH 1"C EACH CONDUIT STUB-UP INTO ASSESSABLE CEILING SPACE 12" ABOVE CEILING UNLESS OTHERWISE NOTED. WALL PLATE AND JACK TO MATCH WIRING DEVICES.
  - C = CEILING MOUNTED

4 GENERAL ELECTRICAL NOTES

SCALE: NONE

ME-1.0 ELECTRICAL SITE PLAN

ME-2.0 PLUMBING PLAN
ME-2.1 PLUMBING SCHEDULES AND DETAILS
ME-2.2 PLUMBING RISERS

ME-3.0 MECHANICAL PLAN
ME-3.1 MECHANICAL DETAILS
ME-3.2 MECHANICAL SCHEDULES

ME-4.0 ELECTRICAL POWER AND EQUIPMENT PLANS
ME-4.1 ELECTRICAL HVAC PLAN AND PANEL SCHEDULES
ME-4.2 ELECTRICAL LIGHTING AND SPECIAL SYSTEM PLANS

5 INDEX TO ME DRAWINGS

SCALE: NONE

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LEBICHE ARCHITECTURAL GROUP, INC.

XX/XX/XXXX
DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

THE LeBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0151
FAX (409) 860-0153

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
815 I-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER ME-1.0
FILENAME

DRAWN BY MWCG1.COM
PROJECT NUMBER 15036
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10/13/2015
2	CLIENT REVIEW 12/21/2015
3	BIDS-CONSTRUCTION 01/22/2016
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016 THE LeBICHE ARCHITECTURAL GROUP, INC.

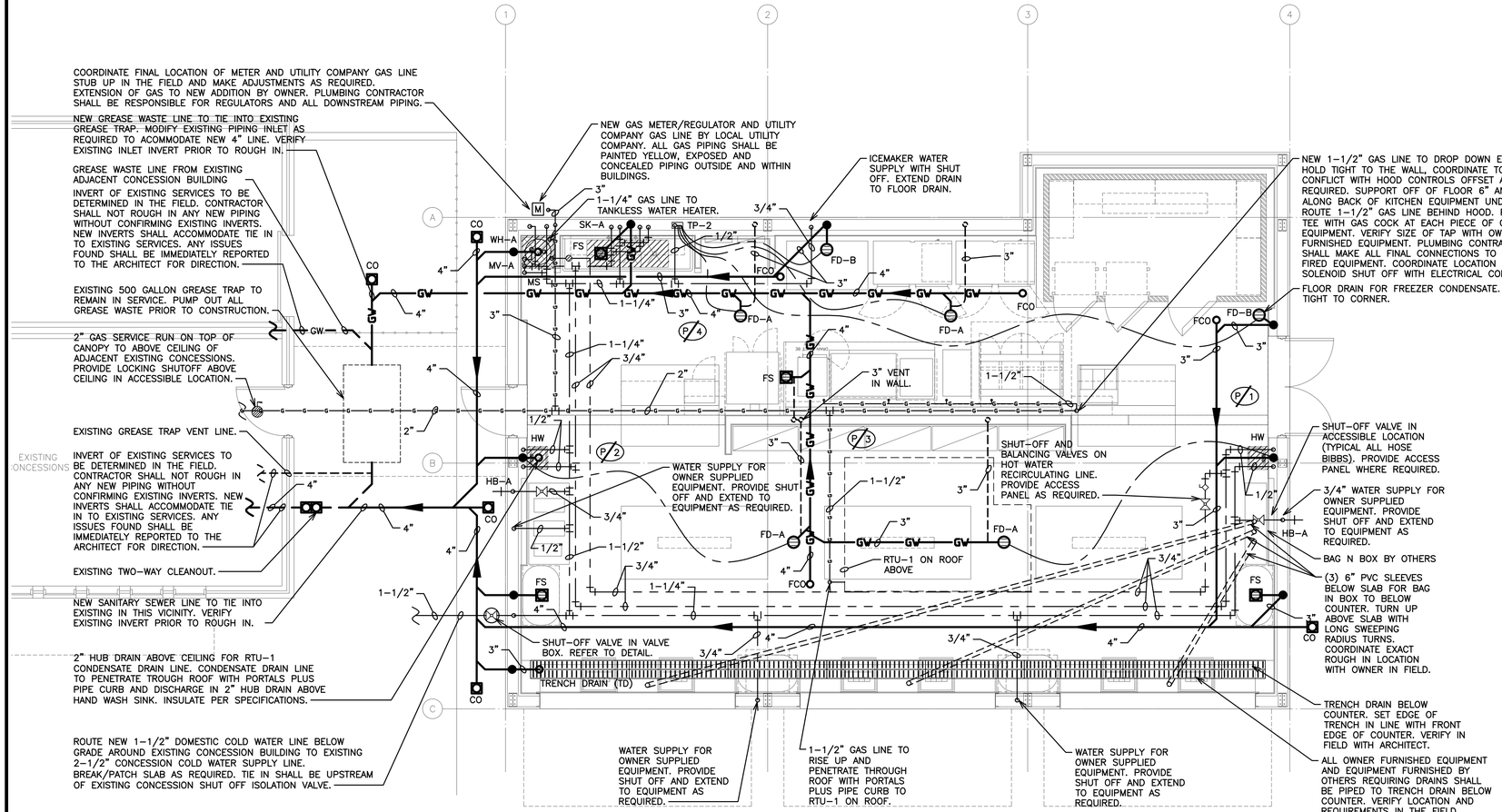
COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of the architect and is not to be used in whole or in part for any other project, without the written authorization of the Lechtenberg Consulting, Inc.

STATE OF TEXAS
W. J. LECHTENBERG, JR.
74898
REGISTERED
PROFESSIONAL ENGINEER

Graphic Scale
0 1" D 1" 2" 1:10" D 3"
NOTE: These graphic scale drawings were reduced from full size drawings. ADJUST MEASUREMENTS ACCORDINGLY

LECHTENBERG ELECTRICAL MECHANICAL PROJECT ENGINEERING
Consulting Inc.
Home Office
P.O. Box 64 3 Lane Carter LA 0606
Phone 33 4 4.364
Fax 33 4 4.5 5
Branch Office
Glad Ave Suite 101B Beaumont TX 06 40 60 226
Fax Fl Lane 322

Project Number: XX-XXX



PLUMBING FLOOR PLAN

1 / ME-2.0

SCALE: 1/4" = 1'-0"

0 .5'1' 2' 4' 8'

GRAPHIC SCALE:1/4"=1'-0"

NOTE:
THE CONTRACTOR MAY SCALE THESE DRAWINGS. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, PLAN SCALE, AND SITE CONDITIONS BEFORE BIDDING AND DURING CONSTRUCTION.

GENERAL PLUMBING NOTES:

THE FOLLOWING IS A BRIEF DESCRIPTION OF WORK SPECIFIC TO CERTAIN ASPECTS OF THIS PROJECT. THIS IS NOT INTENDED TO BE A COMPREHENSIVE SUMMARY OF WORK. PROSPECTIVE BIDDERS/CONTRACTORS SHALL REVIEW ALL CONSTRUCTION DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS AND MAKE ALLOWANCES FOR ALL WORK INCLUDED HEREIN AND ANY ADDITIONAL WORK REQUIRED TO COMPLETE THIS PROJECT.

1. FURNISH AND INSTALL ALL EQUIPMENT/PLUMBING FIXTURES AS INDICATED BY THESE DRAWINGS. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS AS REQUIRED.
2. CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS OF ALL EXISTING SERVICES IN FIELD PRIOR TO MAKING ROUGH-INS.
3. CONTRACTOR SHALL VERIFY THE EXISTING INVERTS OF ALL EXISTING SERVICES IN FIELD TO ASSURE THAT ALL PIPING IS RUN AT THE PROPER SLOPE.
4. THE ROUTING OF ALL PIPING SHALL BE COORDINATED WITH ALL THE OTHER TRADES TO AVOID POSSIBLE CONFLICTS.
5. ALL DOMESTIC WATER PIPING SHALL BE RUN ABOVE THE CEILING AND/OR CONCEALED IN WALLS UNLESS OTHERWISE NOTED.
6. CONTRACTOR SHALL COORDINATE SPACE REQUIREMENTS AND SERVICE CLEARANCES FOR ALL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS.
7. CONTRACTOR SHALL CONSOLIDATE VENTS TO MINIMIZE PENETRATIONS THROUGH ROOF. DO NOT LOCATE VENTS WITHIN 10FT OF HVAC FRESH AIR INTAKES, COORDINATE WITH MECHANICAL CONTRACTOR.
8. AT EACH FIXTURE OR GROUP OF FIXTURES (WITHIN SAME CHASE), FURNISH AND INSTALL A 12" HIGH AIR CHAMBER OF SAME SIZE AS BRANCH FEED LINE. PROVIDE "SHOCK ARRESTOR" AT ALL FIXTURES WITH QUICK CLOSING VALVES SUCH AS FLUSH VALVES, ETC.
9. PROVIDE CHROME PLATED BRASS ESCUTCHEONS WHERE PIPES PENETRATE FINISHED SURFACES.
10. CONTRACTOR SHALL SEAL ALL PENETRATIONS THROUGH EXTERIOR WALLS WEATHER TIGHT. SEALANT SHALL BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER.
11. NO WATER OR DRAIN LINES MAY BE RUN ABOVE ELECTRICAL PANELS OR COMMUNICATION PANELS. COORDINATE WITH ELECTRICAL PLANS AND OFFSET PIPING IN THE FIELD AS REQUIRED.
12. PROVIDE REGULATOR AT EACH PIECE OF NEW GAS FIRED EQUIPMENT.

BRIEF PROJECT SCOPE:

THE FOLLOWING IS A BRIEF DESCRIPTION OF WORK SPECIFIC TO CERTAIN ASPECTS OF THIS PROJECT. THIS IS NOT INTENDED TO BE A COMPREHENSIVE SUMMARY OF WORK. PROSPECTIVE BIDDERS/CONTRACTORS SHALL REVIEW ALL CONSTRUCTION DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS AND MAKE ALLOWANCES FOR ALL WORK INCLUDED HEREIN AND ANY ADDITIONAL WORK REQUIRED TO COMPLETE THIS PROJECT.

1. THE CONTRACTOR SHALL VISIT THE PROJECT SITE TO DETERMINE THE EXACT CONDITIONS WHICH WILL AFFECT THE SCOPE OF HIS WORK. THE CONTRACTOR SHALL INCLUDE ALL LABOR AND MATERIALS IN HIS WORK AS REQUIRED TO INSTALL WORK SHOWN ON THIS PLAN.
2. THE CONTRACTOR SHALL REVIEW THE PLUMBING PLANS TO DETERMINE THE EXTENT OF THE WORK REQUIRED TO INSTALL THE SYSTEM(S) AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL REALIZE THAT THE PLANS ARE DIAGRAMMATIC AND AS SUCH THE CONTRACTOR SHALL INSTALL ALL SYSTEMS COMPLETE AS RECOMMENDED BY THE MANUFACTURES OF PLUMBING FIXTURES AND EQUIPMENT. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND MATERIAL/EQUIPMENT SUBMITTALS PER THE SPECIFICATIONS.
3. THE CONTRACTOR SHALL REVIEW THE MECHANICAL PLANS (HVAC) TO DETERMINE THE EXTENT OF THE WORK REQUIRED TO INSTALL THE HVAC SYSTEM(S) AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL REALIZE THESE PLANS ARE DIAGRAMMATIC AND AS SUCH INSTALL ALL SYSTEM(S) COMPLETE WHERE INDICATED ON THE PLANS. THE PLANS ATTEMPT TO SHOW ALL CONDITIONS FOR INSTALLATION, HOWEVER, THE CONTRACTOR SHALL ACCOMMODATE ALL CONDITIONS WHICH AFFECT THE INSTALLATION WHETHER OR NOT SHOWN. THE CONTRACTOR SHALL SUBMIT EQUIPMENT SUBMITTALS FOR REVIEW FOR ORDERING PURPOSES AND SHALL SUBMIT INSTALLATION SUBMITTAL DRAWINGS, FOR ALL EQUIPMENT SHOWING THE CONDITIONS OF INSTALLATION PER ALL DRAWINGS AND TRADE.
4. WHEN QUESTIONS ARISE DURING THE PROJECT THE CONTRACTOR SHALL SUBMIT A REQUEST FOR INFORMATION (RFI). THE CONTRACTORS SHOULD REALIZE THAT RFI'S CANNOT AND WILL NOT BE ANSWERED INSTANTLY DUE TO THE TIME OF ROUTING FROM THE POINT OF THE QUESTION TO THE POINT OF THE ANSWER AND BACK (MINIMUM OF 14 WORKING DAYS). THEREFORE RFI'S SHOULD BE SENT WHEN THE QUESTION IS NOT TIME SENSITIVE. TIME SENSITIVE QUESTIONS SHOULD BE HANDLED BY PHONE CALL FOR IMMEDIATE RESPONSE AND FOLLOWED WITH APPROPRIATE DOCUMENTATION OF THE QUESTION AND ANSWER GIVEN.
5. THE SUB-CONTRACTOR(S) FOR THE PLUMBING AND MECHANICAL SYSTEMS SHALL SUBMIT ALL SHOP DRAWINGS PER THE MECHANICAL SPECIFICATIONS IN DIVISIONS 22 AND 23 GENERAL PROVISIONS SECTION. ALL SHOP DRAWINGS SHALL BE SUBMITTED WITHIN 30 DAYS OF THE GENERAL CONTRACTOR RECEIVING THE CONTRACTORS CONTRACT FROM THE OWNER (EXCEPT DUCTWORK SHOP DRAWINGS-45 DAYS). SUBMITTALS TAKE APPROXIMATE 30 WORKING DAYS FOR REVIEW AND RETURN BACK TO THE SUBMITTING SUB-CONTRACTOR . ON LONG LEAD TIME, EQUIPMENT SUBMITTAL, THE SUBMITTALS WILL BE EXPEDITED BY SPECIAL PROCEDURE TO BE DETERMINED AT TIME OF SUBMITTAL.
6. THE SUB-CONTRACTOR SHALL BE AWARE THAT PAINTING OF PIPE AND EQUIPMENT IS CALLED FOR IN THE PLANS AND IN THE SPECIFICATIONS. IT IS THE RESPONSIBILITY OF THE SUB-CONTRACTORS INSTALLING THE SYSTEMS ON THESE PLANS TO HAVE THE PAINTING PROVIDED. REFER TO SPECIFICATIONS.
7. THE SUB-CONTRACTORS FOR THE SYSTEMS ON THESE PLANS SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL TRADES AND TO AVOID CONFLICT. COORDINATE ALL ELECTRICAL REQUIREMENTS PRIOR TO MAKING THE SHOP DRAWING SUBMITTALS. WHEN CONFLICTS OCCUR AND THE CONFLICT IS NOT RESOLVED BY THE GENERAL CONTRACTOR OR BETWEEN THE SUB-CONTRACTORS, THE ARCHITECT/ENGINEER SHALL ADVISE ON THE RESOLUTION OF THE CONFLICT WITHOUT ADDITIONAL COST TO THE OWNER. CONFLICTS ARE AVOIDED BY PROPER COORDINATION OF WORK.

MECHANICAL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
——►	SANITARY SEWER LINE	A.F.G.	ABOVE FINISHED GRADE
----------	SANITARY SEWER VENT LINE	FD	FLOOR DRAIN
—— - ——	DOMESTIC COLD WATER LINE	HD	HUB DRAIN
—— - - ——	DOMESTIC HOT WATER LINE (110°)	FS	FLOOR SINK
—— 140° ——	DOMESTIC HOT WATER LINE (140°)	MS	MOP SINK
——- - - ——	HOT WATER RETURN LINE	HW	HAND WASH
——G——	NATURAL GAS LINE (LOW PRESS.)	SK-	SINK
——UG——	UTILITY CO. GAS LINE	T	THERMOSTAT
——▷◁——	GATE VALVE	S	REMOTE SENSOR
——▷◁——	BALL VALVE	C	CONDENSATE DRAIN LINE
——S——	BALANCING COCK	GW	GREASE WASTE
——⊣⊢——	UNION	FCO	FLOOR CLEANOUT
——S——	GAS COCK	HB-	HOSE BIBB
A.F.F.	ABOVE FINISHED FLOOR		

COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
This design and drawing is the property of Lechtenberg Consulting, Inc. It is not to be used in any way without the written permission of Lechtenberg Consulting, Inc.

STATE OF TEXAS
E. L. RITTER JR.
49343
REGISTERED
PROFESSIONAL ENGINEER
1-22-16
REC:150021

0 1" Drawing 1" Graphic Scale 2" 1'-0" Drawing 3"
NOTE: If the graphic scale does not read 1" adjust measurements accordingly

Consulting Inc.
ELECTRICAL MECHANICAL PROJECT ENGINEERING
Home Office
P.O. Box 64-3 Lake Charles, LA. 70606
Fax 337.474.4364
Lafayette Office
Glad Ave Suite 101B Beaumont, TX. 77706 409.860.2198
Texas Firm License 3222
Project No. 15-030

THE LABICHE ARCHITECTURAL GROUP, INC.
1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-2197
FAX (409) 860-2198
WWW.LABICHE.COM

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LABICHE ARCHITECTURAL GROUP, INC.

DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5118 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER ME-2.0
FILENAME

DRAWN BY DV
PROJECT NUMBER 15036
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10/12/2015
2	CLIENT REVIEW 10/21/2015
3	BID/CONSTRUCTION 01/22/2016
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016
THE LABICHE ARCHITECTURAL GROUP, INC.

DRAWING NAME:150021 - ME-2.0 - PLUMBING FLOOR PLAN.dwg
SAVED:Wednesday, January 13, 2016 4:46:08 PM

574

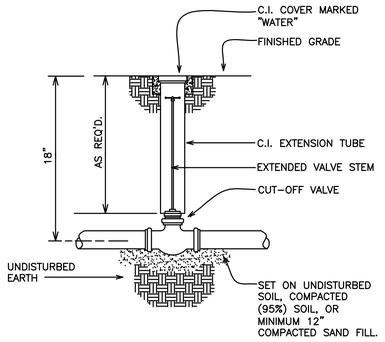
PLUMBING FIXTURE SCHEDULE

NO.	FIXTURE	PIPE SIZE					A.D.A. COMPLIANT	REMARKS
		TRAP	WASTE	VENT	C.W.	H.W.		
FD–A	AREA DRAIN	3"	3"	2"	---	---	---	ZURN Z415B FLOOR DRAIN, FURNISH WITH 6" ROUND TOP, FLANGE, INT. REVERSIBLE CLAMPING COLLAR AND NICKEL BRONZE STRAINER. TOP SHALL BE FLUSH WITH FINISHED FLOOR. COORDINATE WITH ARCHITECTURAL PLANS FOR FLOORING REQUIREMENTS. FURNISH WITH TRAP PRIMER CONNECTION.
FD–B	INDIRECT WASTE DRAIN	3"	3"	2"	---	---	---	ZURN Z415I FLOOR DRAIN WITH RAISED FLANGE. FURNISH WITH 6" ROUND TOP, FLANGE, INT. REVERSIBLE CLAMPING COLLAR AND NICKEL BRONZE STRAINER. PROVIDE 1" AIR GAP AT EQUIPMENT DRAIN DISCHARGE. SET TOP OF EXTENDED RIM FLUSH WITH FINISHED FLOOR. FURNISH WITH TRAP PRIMER CONNECTION.
FS	FLOOR SINK	3"	3"	2"	---	---	---	ZURN Z1920 CAST IRON FLOOR SINK. FURNISH WITH A.R.E. INTERIOR, ALUMINUM DOME STRAINER AND NICKEL BRONZE FRAME. TOP OF DRAIN SHALL BE FLUSH WITH FINISHED FLOOR. PROVIDE INDIRECT CONNECTION AT DISCHARGE TO FLOOR SINK. FURNISH WITH FULL GRATE WITH SQUARE CENTER OPENING. EXTEND DRAIN LINES FROM OWNER FURNISHED EQUIPMENT AS REQUIRED.
MS	MOP SINK	2"	2"	2"	3/4"	3/4"	---	SINK AND FAUCET FURNISHED BY OWNER SET IN PLACE BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. CONTRACTOR SHALL FURNISH WITH CAST BRASS PTRAP, 3/8" ANGLE STOPS, ESCUTCHEONS, ETC REQUIRED FOR A COMPLETE INSTALLATION. FURNISH WITH ASSE 1070 TEMPERATURE CONTROL DEVICE TO CONTROL DOMESTIC HOT WATER TEMPERATURE TO 110dF.
HB–A	HOSE BIBB	---	---	---	3/4"	---	---	ZURN Z1335 BOX TYPE WALL HYDRANT WITH VACUUM BREAKER AND METAL WHEEL HANDLE. COORDINATE BOX FINISH WITH ARCHITECT.
WH–A	TANKLESS GAS WATER HEATER	---	---	---	3/4"	3/4"	---	WATER HEATER FURNISHED BY OWNER, INSTALLED BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS. FURNISH WITH P/T RELIEF VALVE AND PIPE PER MANUFACTURERS INSTALLATION INSTRUCTIONS. EXTEND FLUE THROUGH ROOF TO EXTERIOR.
HW	HANDWASH	1–1/2"	2"	2"	1/2"	1/2"	YES	SINK AND FAUCET FURNISHED BY OWNER SET IN PLACE BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. CONTRACTOR SHALL FURNISH WITH CAST BRASS PTRAP, 3/8" ANGLE STOPS, ESCUTCHEONS, ETC REQUIRED FOR A COMPLETE INSTALLATION. FURNISH WITH ASSE 1070 TEMPERATURE CONTROL DEVICE TO CONTROL DOMESTIC HOT WATER TEMPERATURE TO A MAX OF 110°F. SET AT HEIGHT PER ARCHITECTURAL PLANS.
C–A	HOT WATER RECIRC PUMP	---	---	---	---	3/4"	---	BELL AND GOSSETT NBF–25 LEAD FREE WET ROTOR CIRCULATOR OR APPROVED EQUAL WITH AUTOMATIC TIMER KIT AND AQUASTAT AND CHECK–TROL FLOW CONTROL FLANGE KIT, 120–1–60 ELECTRICAL SERVICE. UNIT SHALL PRODUCE A MINIMUM OF 1.0 GPM AT 15 FT OF HEAD.
MV–A	MIXING VALVE	---	---	---	1"	1"	---	LEONARD, POWERS OR APPROVED EQUAL THERMOSTATIC MIXING VALVE IN STAINLESS STEEL BOX WITH BALL VALVE AND DIAL THERMOMETER SET TO MAINTAIN DESIRED WATER TEMPERATURE, 0.5 GPM MINIMUM FLOW CAPACITY AND ASSE 1017 CERTIFIED. STARTUP FROM MANUFACTURER APPROVED TECHNICIAN FOR ALL MIXING VALVES.
SK–A	3 COMPARTMENT SINK	---	3"	---	3/4"	3/4"	NO	SINK AND FAUCET FURNISHED BY OWNER SET IN PLACE BY PLUMBING CONTRACTOR. PLUMBING CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS TO EQUIPMENT. CONTRACTOR SHALL FURNISH WITH CAST BRASS PTRAP, 3/8" ANGLE STOPS, ESCUTCHEONS, ETC REQUIRED FOR A COMPLETE INSTALLATION. FURNISH WITH ASSE 1070 TEMPERATURE CONTROL DEVICE TO CONTROL DOMESTIC HOT WATER TEMPERATURE TO OWNER DESIRED OUTPUT TEMPERATURE. DISCHARGE AT FLOOR SINK.
TP–1	WATER SAVER TRAP PRIMER	---	---	---	1/2"	---	---	PPP INC LTP–1500 WATER SAVER TAIL PIECE TRAP PRIMER ASSEMBLY. EXTEND 1/2" TRAP PRIMER LINE TO FLOOR DRAIN AS INDICATED.
TP–2	ELECTRIC TRAP PRIMER	---	---	---	1/2"	---	---	PPP INC, PTS–4 PRIME–TIME ELECTRONIC TRAP PRIMER, 120–1–60 ELECTRIC SERVICE. FURNISH WITH AIR GAP FITTING AND DU DISTRIBUTION UNIT TO SERVE UP TO (4) FLOOR DRAINS. CAP ANY UNUSED OUTLETS.
TD	TRENCH DRAIN	3"	3"	2"	---	---	---	WADE "2920" CAST IRON MULTIPLE SECTION TRENCH DRAIN WITH INSIDE CAULK OUTLET AND FLANGE. FURNISH WITH SPECIAL DUTY (OVER 10,000 LBS) DUCTILE IRON LOOSE SET GRATES AND END CAPS. ALT. TRENCH DRAIN MANUFACTURER: J.R. SMITH. TOTAL LENGTH: 45FT.

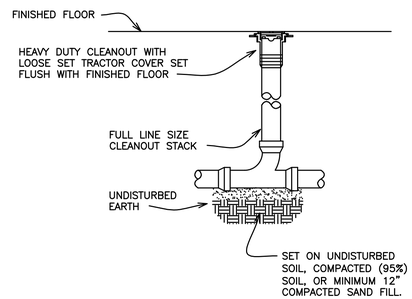
NOTES:

1. INSULATE ALL EXPOSED P–TRAPS AND ANGLE SUPPLIES ON HANDICAPPED LAVATORIES AND SINKS WITH TRUEBRO HANDI LAV–GUARD OR EQUAL.
2. PROVIDE AND INSTALL PISTON TYPE WATER HAMMER ARRESTORS AT ALL DOMESTIC WATER STUB–OUTS.
3. PROVIDE AND INSTALL 6" DEEP SEAL P–TRAPS FOR ALL FLOOR DRAINS, HUB DRAINS AND FLOOR SINKS.
4. ALL PLUMBING FIXTURES THAT REQUIRE VACUUM BREAKERS SUCH AS SERVICE SINKS, HOSE BIBBS, AND/OR SPECIAL EQUIP. SHALL BE SO EQUIPPED.
5. ALL HANDICAPPED PLUMBING FIXTURES SHALL BE SET TO "ADA" HEIGHT REQUIREMENTS. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT HEIGHTS.
6. ALL WATER HEATERS WITH 200,000 BTUH INPUT OR GREATER SHALL HAVE AN "A.S.M.E." RATED TANK.
7. CONTRACTOR SHALL VERIFY THAT ALL WATER HEATERS SHALL FIT IN THE SPACE PROVIDED AND THAT THE MANUF. RECOMMENDED SERVICE CLEARANCES ARE MAINTAINED.
8. PLUMBING CONTRACTOR SHALL CONFIRM ALL WATER AND DRAIN REQUIREMENTS FOR OWNER FURNISHED EQUIPMENT PRIOR TO ROUGH IN. EXTEND SERVICES AS REQUIRED.

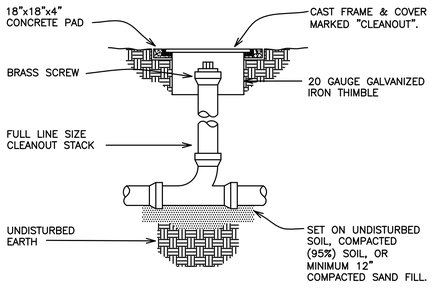
1 ME–2.1 **PLUMBING SCHEDULE**
NO SCALE



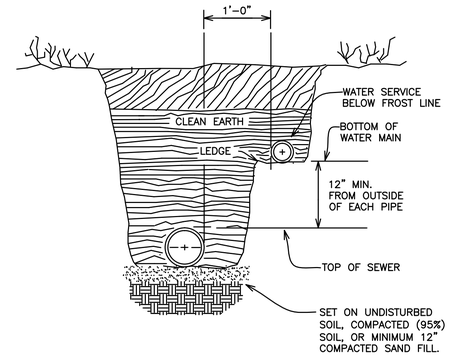
2 ME–2.1 **VALVE BOX DETAIL**
NO SCALE



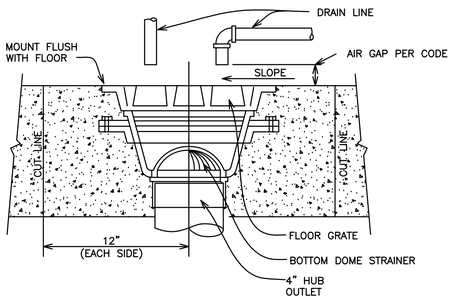
4 ME–2.1 **FLOOR CLEANOUT DETAIL**
NO SCALE



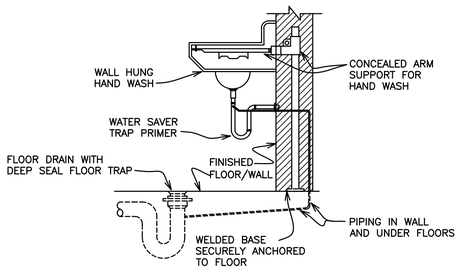
3 ME–2.1 **OUTSIDE CLEANOUT DETAIL**
NO SCALE



5 ME–2.1 **PIPE TRENCH DETAIL**
NO SCALE

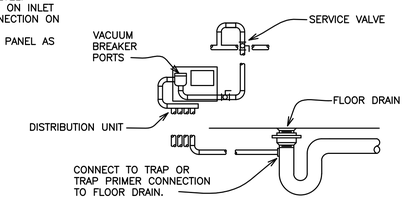


6 ME–2.1 **FLOOR SINK DETAIL**
NO SCALE

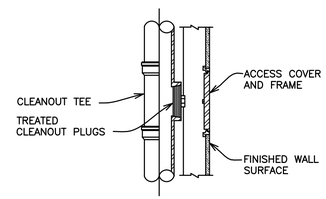


7 ME–2.1 **PRIME-EZE WATER SAVER TRAP PRIMER DETAIL (TP-1)**
NO SCALE

NOTES:
1. MINIMUM 12" OFF FLOOR.
2. TRAP PRIMER LINE CONTINUOUS SLOPE TO DRAIN.
3. INSTALL VALVE LEVEL.
4. SHUT–OFF VALVE ON INLET AND UNION CONNECTION ON OUTLET SIDE.
5. PROVIDE ACCESS PANEL AS REQUIRED.



8 ME–2.1 **PRIME-EZE COLD WATER TRAP PRIMER DETAIL (TP-2)**
NO SCALE



HUB AND SPIGOT WITH COVER PLATE

9 ME–2.1 **WALL CLEANOUT DETAIL**
NO SCALE

COPYRIGHT © 2015 - Lechtenberg Consulting, Inc.
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of the Architect and is not to be used in whole or in part for any other project, without the written authorization of Lechtenberg Consulting, Inc.

STATE OF TEXAS · E. L. RITTER JR. · 49343 · REGISTERED · PROFESSIONAL ENGINEER
1-22-16
REC:150021

0 1/8" Detail 1" Graphic Scale 2" 1/10" Detail 3"
NOTE: If the graphic scale does not read as indicated the drawing is not scaled. ADJUST MEASUREMENTS ACCORDINGLY

Lechtenberg Consulting Inc.
ELECTRICAL MECHANICAL PROJECT ENGINEERING
Project Number 15-030
Home Office
P.O. Box 543 Lake Charles, LA. 70606
Fax 337.474.4364
Fax 337.474.5515
Branch Office
1001 Gladys Ave Suite 101B Beaumont, TX. 77706
409.860.2191
Fax 409.860.2198

COPYRIGHT © 2016
THE LeBICHE ARCHITECTURAL GROUP, INC.

THE LeBICHE ARCHITECTURAL GROUP, INC.
1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-2191
FAX (409) 860-2198
WWW.LABICHE.COM

DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

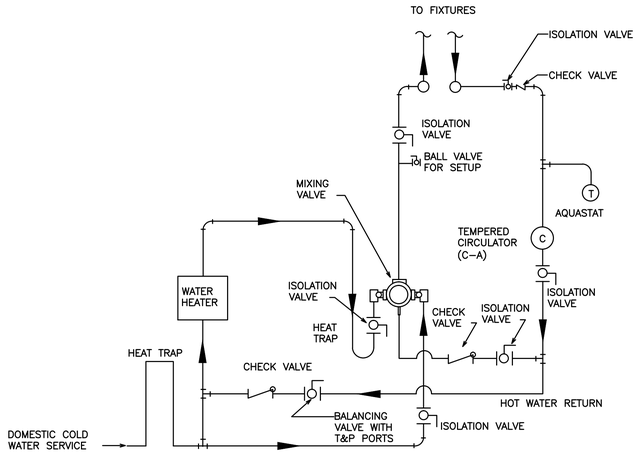
NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

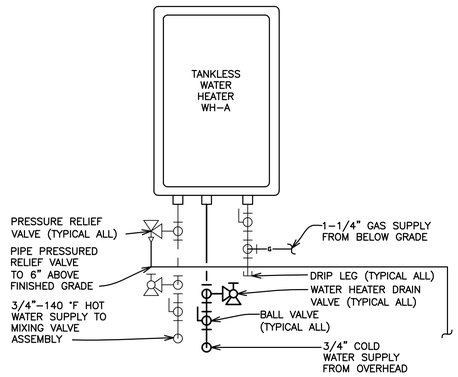
SHEET NUMBER ME-2.1
FILENAME

DRAWN BY DV
PROJECT NUMBER 15-036
DOCUMENT RELEASE DATES
1 CLIENT REVIEW 10/13/2015
2 CLIENT REVIEW 10/21/2015
3 BID&CONSTRUCTION 01/22/2016
4
5
6
7
8
9

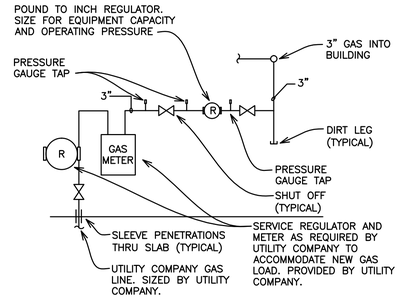
DRAWING NAME:150021 – ME–2.1 – PLUMBING SCHEDULE & DETAILS.dwg SAVED:Monday, December 21, 2015 2:34:06 PM



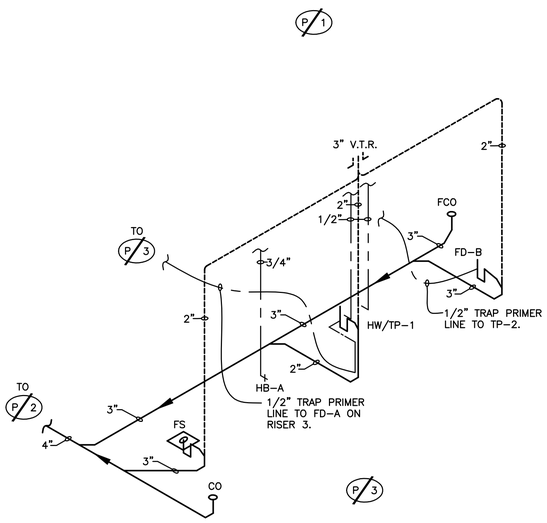
1 ME-2.2 MIXING VALVE DETAIL
NO SCALE



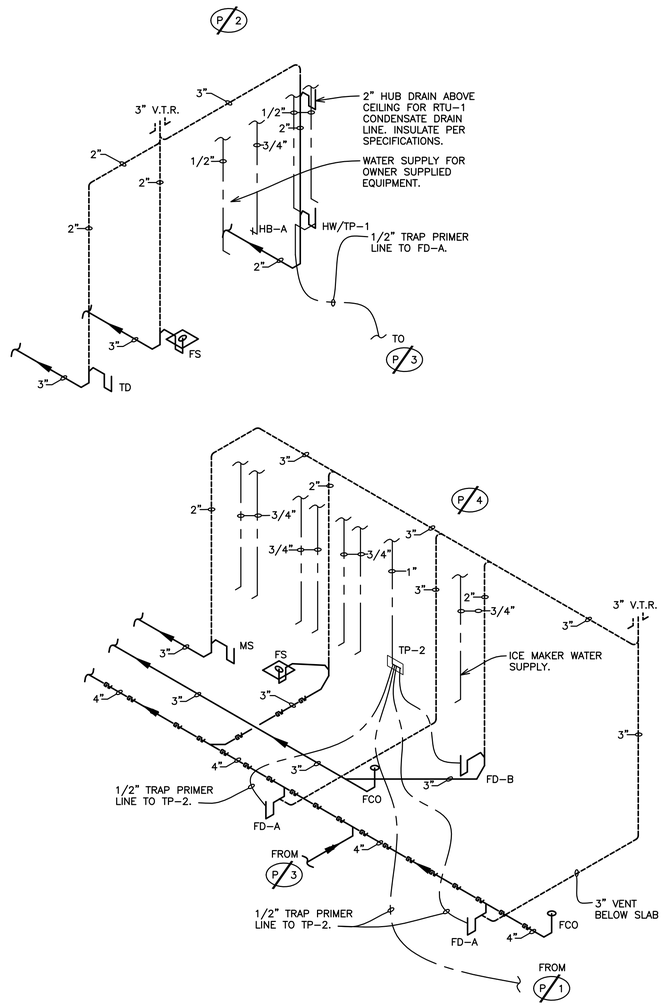
2 ME-2.2 WATER HEATER DETAIL (WH-A)
NO SCALE



3 ME-2.2 GAS METER DETAIL
NO SCALE



4 ME-2.2 PLUMBING RISERS
NO SCALE



DRAWING NAME:150021 - ME-2.2 - PLUMBING DETAILS.dwg
SAVED:Wednesday, January 13, 2016 8:46:39 AM

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LaBICHE ARCHITECTURAL GROUP, INC.

DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77705
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM
THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
ME-2.2
FILENAME

DRAWN BY
DV
PROJECT NUMBER
15036
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10/13/2015
2	CLIENT REVIEW 12/21/2015
3	BID/CONSTRUCTION 01/22/2016
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of the Architect and is not to be used in whole or in part for any other project, without the written authorization of the LaBiche Architectural Group, Inc.

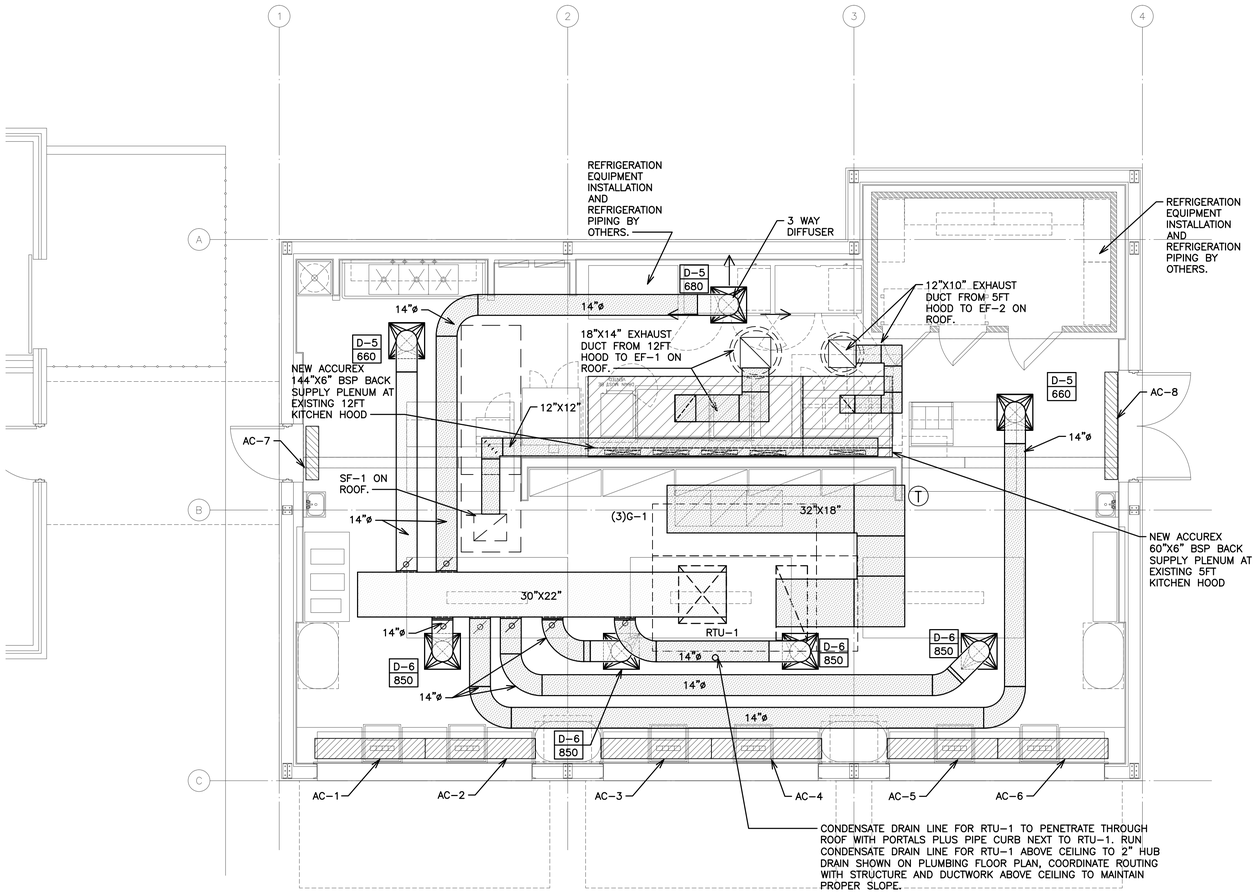
STATE OF TEXAS
E. L. RITTER JR.
49343
REGISTERED
PROFESSIONAL ENGINEER
1-22-16
REC:150021

NOTE: If this bar is not 1" Graphic Scale 2" 1:10" Drawing 3" adjust measurements accordingly

ELECTRICAL MECHANICAL PROJECT ENGINEERING
Lechtenberg Consulting, Inc.
Home Office
P.O. Box 54323 Lake Charles, LA 70606
Phone 337.474.4364
Fax 337.474.4535
Branch Office
1999 Gladys Ave Suite 101B Beaumont, TX 77706
Phone 409.860.0226
Fax 409.860.0197

Project Number 15-030

COPYRIGHT © 2016
THE LaBICHE ARCHITECTURAL GROUP, INC.



1 ME-3.0 MECHANICAL FLOOR PLAN

SCALE: 1/4" = 1'-0"

0 .5'1' 2' 4' 8'

GRAPHIC SCALE:1/4"=1'-0"

NOTE:
THE CONTRACTOR MAY SCALE THESE DRAWINGS. HOWEVER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS, PLAN SCALE, AND SITE CONDITIONS BEFORE BIDDING AND DURING CONSTRUCTION.

MECHANICAL GENERAL NOTES:

THE FOLLOWING IS A BRIEF DESCRIPTION OF WORK SPECIFIC TO CERTAIN ASPECTS OF THIS PROJECT. THIS IS NOT INTENDED TO BE A COMPREHENSIVE SUMMARY OF WORK. PROSPECTIVE BIDDERS/CONTRACTORS SHALL REVIEW ALL CONSTRUCTION DRAWINGS, SPECIFICATIONS AND SITE CONDITIONS AND MAKE ALLOWANCES FOR ALL WORK INCLUDED HEREIN AND ANY ADDITIONAL WORK REQUIRED TO COMPLETE THIS PROJECT. MEANS AND METHODS FOR THE PROPER INSTALLATION OF THIS WORK IS STRICTLY THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND HIS SUB-CONTRACTORS.

1. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE ROUTING OF ALL DUCTWORK WITH THE STRUCTURE AND OTHER TRADES AS CONDITIONS ALLOW. RE-ROUTE DUCTWORK AS NECESSARY TO AVOID CONFLICT. TRANSITION UP/DOWN TO AVOID OTHER TRADES AS NECESSARY.
2. INSTALL AT EACH DUCT TAKEOFF AN ADJUSTABLE VOLUME DAMPER IN AN ACCESSIBLE LOCATION.
3. CONTRACTOR SHALL COORDINATE SPACE REQUIREMENTS AND SERVICE CLEARANCES FOR ALL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS.
4. MECHANICAL CONTRACTOR SHALL PROCURE THE SERVICES OF AN INDEPENDENT AABC, TABB OR NEBB CERTIFIED TEST AND BALANCE AGENCY. TAB AGENCY SHALL PERFORM AN INITIAL SMOKE/ PRESSURE LEAK TEST ON ALL DUCTWORK ONCE ALL SHEETMETAL DUCTWORK HAS BEEN INSTALLED. A FINAL BALANCE REPORT OF ALL HVAC SYSTEMS (INCLUDING SUPPLY/ RETURN TRAVERSES) AND EXHAUST FANS SHALL BE PROVIDED TO ARCHITECT/ ENGINEER UPON COMPLETION OF PROJECT. ALL REPORTS SHALL MEET AABC/NEBB STANDARDS. REFER TO SPECIFICATIONS FOR COMPLETE TEST AND BALANCE REQUIREMENTS.
5. COORDINATE FRESH AIR INLETS WITH EXHAUST OUTLETS AND PLUMBING VENTS TO MAINTAIN A 10'-0" SEPARATION.
6. TRANSITION SUPPLY AND RETURN DUCTWORK TO FANS AND ROOFTOP UNITS WITH SMOOTH TRANSITIONS PER SMACNA STANDARDS AS NECESSARY. DUCTWORK CONNECTIONS TO EQUIPMENT SHALL BE MADE WITH FLEXIBLE CONNECTIONS.
7. ALL EXPOSED PIPING, DUCTS, HANGERS, SUPPORTS, ETC RUN THROUGH FINISHED SPACES OR EXPOSED AT EXTERIOR SHALL BE PRIMED AND PAINTED COLOR AS SELECTED BY ARCHITECT.
8. FURNISH AND INSTALL ACCESS PANELS WHERE VALVES, DAMPERS, EQUIPMENT, ETC. ARE CONCEALED OR INACCESSIBLE. ACCESS PANELS SHALL BE PRIMED AND PAINTED COLOR AS SELECTED BY ARCHITECT.
9. ALL CONCEALED HVAC DUCTWORK SHALL BE GALVANIZED STEEL, GAUGE PER SMACNA GUIDELINES. SNAP LOCK PIPE IS ACCEPTABLE. SEAL ALL SEAMS AND JOINTS WITH MASTIC. FLEX DUCT SHALL BE LIMITED TO 5FT, REFERS TO SPECIFICATIONS. EXPOSED DUCTWORK SHALL BE DOUBLE WALL SPIRAL REFER TO SPECIFICATIONS.
10. PROVIDE ONE SET OF CLEAN FILTERS AT COMPLETION OF PROJECT PRIOR TO TURNING OVER TO OWNER. CONSTRUCTION FILTERS SHALL BE USED DURING DURATION OF PROJECT TO PROTECT DUCTWORK AND EQUIPMENT. DO NOT OPERATE EQUIPMENT UNLESS BUILDING HAS BEEN THOROUGHLY CLEANED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING SUBMITTAL PACKAGE (INCLUDING CHECK) FOR KITCHEN HOOD SUBMITTAL TO THE STATE FIRE MARSHAL. SUBMIT THROUGH PROFESSIONAL OF RECORD (MECHANICAL ENGINEER).
12. ALL KITCHEN HOOD EXHAUST DUCTWORK SHALL BE 16 GAUGE BLACK IRON WITH WELDED SEAMS AND JOINTS PER NFPA 96. INSULATE EXHAUST DUCT FOR 0" CLEARANCE TO COMBUSTIBLES.
13. COORDINATE ALL ROOF PENETRATIONS WITH ROOFING CONTRACTOR FOR A WATERTIGHT INSTALLATION.
14. DUCTWORK SHALL RUN WITHIN STRUCTURE WHERE THERE IS SPACE AVAILABLE WHEN CROSSING OVER OTHER DUCTWORK.

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LeBICHE ARCHITECTURAL GROUP, INC.

DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0191
FAX (409) 860-0198
WWW.LABICHE.COM
THE LaBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER ME-3.0

FILENAME

DRAWN BY: DV
PROJECT NUMBER: 15036
DOCUMENT RELEASE DATES:
1 CLIENT REVIEW 10.19.2015
2 CLIENT REVIEW 10.21.2015
3 BID&CONSTRUCTION 01.22.2016

COPYRIGHT © 2016 THE LeBICHE ARCHITECTURAL GROUP, INC.

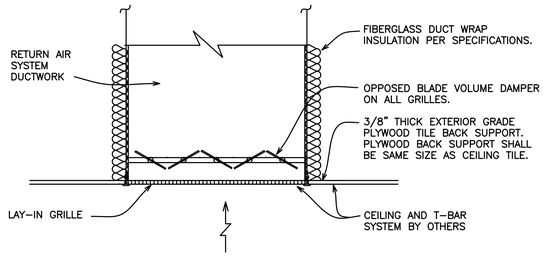
COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
The ideas and designs incorporated herein, as an instrument of Professional Service, is the property of the Architect and is not to be used in whole or in part for any other project, without the written authorization of the Lechtenberg Consulting, Inc.

STATE OF TEXAS
E. L. RITTER JR.
49343
REGISTERED
PROFESSIONAL ENGINEER
1-22-16
REC:150021

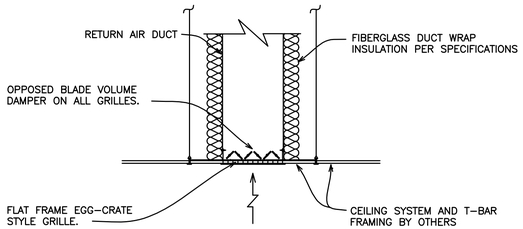
Graphic Scale 0 1" 2" 1:10" 3"
NOTE: If the area of the scale drawing is reduced the drawing will be scaled. ADJUST MEASUREMENTS ACCORDINGLY

Lechtenberg Consulting Inc.
ELECTRICAL MECHANICAL PROJECT ENGINEERING
Home Office
P.O. Box 543 Lake Charles, LA. 70606
Fax 337.474.4545
Branch Office
2000 Gladys Ave Ste 101B Beaumont, TX. 77706 409.860.2261
Project Number 15-030

DRAWING NAME:150021 - ME-3.0 - MECHANICAL FLOOR PLAN.dwg
SAVED:Tuesday, January 19, 2016 7:23:27 AM



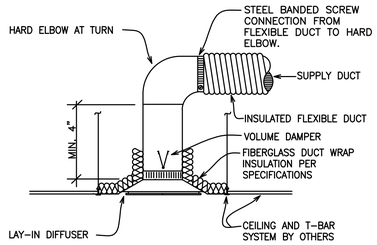
CEILING GRILLE INSTALLATION FOR LAY-IN CEILINGS



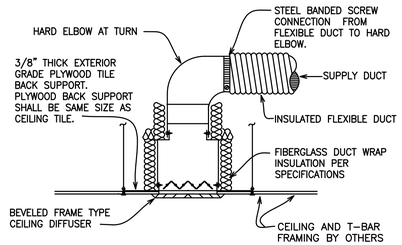
CEILING GRILLE INSTALLATION FOR SOLID CEILINGS

NOTE:
ALL CEILING GRILLES SHALL BE MOUNTED TIGHT TO THE CEILING AND BE FURNISHED WITH SUITABLE FRAMES FOR TYPE OF CEILING USED.

1 ME-3.1 CEILING GRILLE INSTALLATION DETAIL
NO SCALE



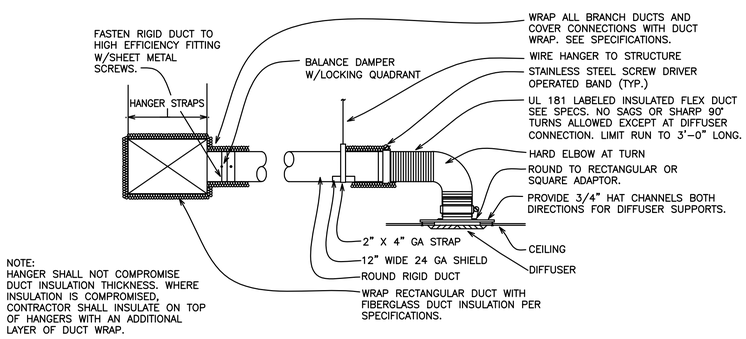
INSTALLATION FOR LAY-IN CEILINGS



INSTALLATION FOR SOLID CEILINGS

NOTE:
ALL OUTLETS SHALL BE MOUNTED TIGHT TO THE CEILING AND SHALL BE FURNISHED WITH A SUITABLE FRAME FOR THE TYPE OF CEILING USED.

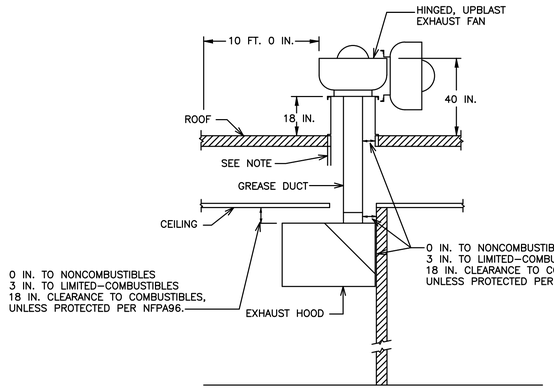
2 ME-3.1 SUPPLY AIR DIFFUSER DETAIL
NO SCALE



NOTE:
HANGER SHALL NOT COMPROMISE DUCT INSULATION THICKNESS. WHERE INSULATION IS COMPROMISED, CONTRACTOR SHALL INSULATE ON TOP OF HANGERS WITH AN ADDITIONAL LAYER OF DUCT WRAP.

NOTES:
1. IN AREAS WHERE FIRE DAMPERS ARE REQUIRED, PROVIDE DEEP ROUND TO RECTANGULAR OR SQUARE ADAPTER AND BUILD GYPSUM BOARD ENCLOSURE.
2. NO POP RIVETS ALLOWED.
3. PROVIDE SUPPORT ON ALL BRANCH DUCT RUNOUTS. MINIMUM OF TWO SUPPORTS ON BRANCH DUCTS OVER 6'-0" IN LENGTH.
4. DO NOT LINE DUCTWORK.

3 ME-3.1 TYPICAL DIFFUSER CONNECTION DETAIL
NO SCALE



NOTE: ENCLOSURE IS NOT REQUIRED IN ONE STORY BUILDING WHERE ROOF-CEILING ASSEMBLY DOES NOT HAVE A FIRE RESISTANCE RATING.

4 ME-3.1 TYPICAL HOOD DETAIL
NO SCALE

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LeBICHE ARCHITECTURAL GROUP, INC.

DATE SIGNED
12.31.2015
REGISTRATION EXPIRATION DATE

1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77705
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM
THE LeBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
BIS IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER ME-3.1

FILENAME

DRAWN BY
DV
PROJECT NUMBER
1502
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10.19.2015
2	CLIENT REVIEW 10.21.2015
3	BID&CONSTRUCTION 01.22.2016
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016
THE LeBICHE ARCHITECTURAL GROUP, INC.

COPYRIGHT © 2015 - Lechtenberg Consulting, Inc.
This document and the ideas and designs incorporated herein, as an instrument of professional service, is the property of the Architect and is not to be used in whole or in part for any other project, without the written authorization of the LeBiche Architectural Group, Inc.

STATE OF TEXAS
E. L. RITTER JR.
49343
REGISTERED
PROFESSIONAL ENGINEER
1-22-16

REC:150021

0 1/2" Drawing Scale 1" 2" 1/10" D 3"
NOTE: If the above scale does not read as indicated this drawing is not to scale.
ADJUST MEASUREMENTS ACCORDINGLY

Consulting Inc.
ELECTRICAL MECHANICAL PROJECT ENGINEERING
Home Office
P.O. Box 543 La Porte, TX. 77572-0606
Phone 281-471-4364 Fax 281-471-5515
Branch Office
1999 Gladys Ave. Suite 101B Beaumont, TX. 77706 409-860-0197
Telephone 409-860-0198

Project No. 15-030

DRAWING NAME:150021 - ME-3.1 - MECHANICAL DETAILS.dwg
SAVED:Tuesday, December 15, 2015 1:59:54 PM

PACKAGED ROOFTOP UNIT SCHEDULE

NO.	SERVICE	FAN MIN. CFM	FAN CFM F.A.	FAN EXT. S.P.	FAN NOMINAL TONNAGE	FAN FAN H.P.	FAN ELECTRICAL SERVICE	COOLING NOMINAL OUTPUT CAPACITY BTUH	COOLING ENTERING AIR TEMP DB (°F)	COOLING ENTERING AIR TEMP WB (°F)	COOLING LEAVE AIR (°F) COIL	COOLING LEAVE AIR (°F) UNIT	COOLING MIN EER/ SEER	COOLING AMB. TEMP. (°F)	HEATING TYPE	HEATING ENT. AIR (°F)	HEATING LEAVE AIR (°F) UNIT	HEATING NO. STAGES	HEATING BTUH INPUT	HEATING BTUH OUTPUT	UNIT ELECTRICAL UNIT FLA	UNIT ELECTRICAL ELECTRICAL SERVICE	APPROVED MANUFACTURERS
RTU-1	CONCESSIONS	5400	1600	0.95	19.8	3	480-3-60	238,000	81	68	53.2	54.4	12.3	95	NAT. GAS	58	96	MODULATING	270,000	218,700	42.0	480-3-60	AAON OR APPROVED EQUAL.

NOTES:
1. PACKAGED EQUIPMENT SHALL BE FURNISHED WITH CONTROLLER, FURNISHED BY MANUFACTURER.
2. PACKAGED ROOFTOP UNIT SHALL HAVE DUCT SMOKE DETECTOR IN SUPPLY AND RETURN AIR DUCTWORK. INTERLOCK WITH FIRE ALARM SYSTEM WHERE FIRE ALARM IS PRESENT. WHERE NO FIRE ALARM EXISTS PROVIDE REMOTE AUDIBLE/VISUAL ANNUNCIATOR ON WALL IN CONTINUOUSLY OCCUPIED SPACE.
3. MECHANICAL CONTRACTOR AND MANUFACTURER SHALL PREPARE AN INSTALLATION SHOP DRAWING (AT 1/4"=1'-0" SCALE) FOR PACKAGED UNIT INDICATING REQUIRED CLEARANCES, ASSOCIATED PIPING AND DUCTWORK.
4. ALL PACKAGED ROOFTOP EQUIPMENT: PROVIDE AND INSTALL AIRFLOW MEASURING STATION (EBTRON GTX116 TRANSMITTER AND SENSOR) IN SUPPLY AND RETURN AIR OF EACH AIR HANDLING UNIT. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR IN THE FIELD. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONTROL CIRCUITS AND MECHANICAL CONTRACTOR SHALL EXTEND AND CONNECT ALL CONTROL WIRING.
5. ROOFTOP UNIT SHALL BE FURNISHED WITH MOTORIZED OUTSIDE AIR DAMPER INTERLOCKED TO UNIT OPERATION.
6. ALL UNITS SHALL BE FURNISHED WITH LOW AMBIENT CONTROL.
7. PROVIDE WITH FACTORY MOUNTED THROUGH THE CURB UTILITIES.
8. PROVIDE WITH FACTORY NON-FUSED DISCONNECTS FOR UNIT SERVICING PURPOSES.
9. PROVIDE STAINLESS STEEL HEAT EXCHANGER FOR ALL GAS FIRED HEAT.
10. ALL PACKAGED EQUIPMENT TO BE FURNISHED WITH HOT GAS REHEAT DEHUMIDIFICATION OPTION.
11. PROVIDE ALL EQUIPMENT WITH LOUVERED HAIL GUARDS.
12. CURB INSTALLATION/ASSEMBLY SHALL MEET THE PROJECT WIND LOAD REQUIREMENTS PER IBC AS FURNISHED BY THE ARCHITECT/STRUCTURAL ENGINEER.

GRILLE/LOUVER SCHEDULE

SYMBOL	SIZE	SERVICE	LOCATION	CONSTRUCTION MATERIAL	FINISH	REMARKS
G-1	24"X24"	RETURN/ TRANSFER	CEILING	ALUMINUM	WHITE	NAILOR 51EC-0, PRICE OR TITUS.

NOTES:
1. ALL GRILLES SHALL BE FURNISHED WITH OPPOSED BLADE DAMPERS.
2. TRANSITION DUCTWORK TO FULL FACE OF GRILLE.
3. FRAME STYLE SHALL MATCH ADJACENT CONSTRUCTION.

CEILING DIFFUSER SCHEDULE

MARK	DIFFUSER SIZE	CFM RANGE	CONSTRUCTION MATERIAL	FINISH	REMARKS
D-1	6"Ø	0-95	ALUMINUM	WHITE	NAILOR 6200-0, PRICE OR TITUS.
D-2	8"Ø	100-190	ALUMINUM	WHITE	NAILOR 6200-0, PRICE OR TITUS.
D-3	10"Ø	195-300	ALUMINUM	WHITE	NAILOR 6200-0, PRICE OR TITUS.
D-4	12"Ø	305-420	ALUMINUM	WHITE	NAILOR 6200-0, PRICE OR TITUS.
D-5	14"Ø	425-640	ALUMINUM	WHITE	NAILOR 6200-0, PRICE OR TITUS.
D-6	16"Ø	645-860	ALUMINUM	WHITE	NAILOR 6200-0, PRICE OR TITUS.

NOTES:
1. FURNISH AND INSTALL ALL DIFFUSERS WITH OPPOSED BLADE DAMPERS.
2. FRAME STYLE SHALL BE AS REQUIRED FOR CEILING TYPE; LAY-IN FOR LAY-IN CEILINGS, BEVELED FRAME FOR HARD CEILINGS.
3. BACK SIDE OF DIFFUSER SHALL BE INSULATED SAME AS DUCTWORK.
4. ALL DIFFUSERS ON PLANS SHALL BE FOUR WAY DIFFUSERS UNLESS OTHERWISE NOTED.

FAN SCHEDULE

MARK	SERVICE	MIN. CFM	EXT. S.P.	MAX RPM	MAX FAN HP	TYPE	DRIVE	ELECTRICAL SERVICE	APPROVED MANUFACTURERS
EF-1	HOOD EXHAUST 12FT HOOD	3000	1.1	1340	1.5	CENT	BELT	208-3-60	ACCUREX OR APPROVED EQUAL.
EF-2	HOOD EXHAUST 5FT HOOD	1250	1.1	1340	0.75	CENT	BELT	208-3-60	ACCUREX OR APPROVED EQUAL.
SF-1	HOOD SUPPLY	3400	0.550	628	1.5	CENT	BELT	208-3-60	ACCUREX OR APPROVED EQUAL.

NOTES:
1. EXISTING 12FT AND 5FT LONG KITCHEN HOODS FURNISHED BY OWNER, INSTALLED BY CONTRACTOR. PROVIDE NEW DUCTWORK, SUPPLY PLENUM AND EXHAUST/MAKEUP AIR FANS.
2. ALL ROOF MOUNTED FANS SHALL BE FURNISHED WITH ROOF CURB. ALL FANS AND CURBS SHALL BE WIND RATED.
3. KITCHEN HOOD FAN SWITCH MOUNTED TO FACE OF HOOD. EXHAUST AND SUPPLY FANS SHALL OPERATE SIMULTANEOUSLY.

AIR CURTAIN SCHEDULE

MARK	LOCATION	CFM OUTPUT	MOTOR HP	ELECTRICAL SERVICE	REMARKS
AC-1	COUNTER	2072	1/5	208-1-60	BERNER SERIES ALC08-1072A OR APPROVED EQUAL.
AC-2	COUNTER	2072	1/5	208-1-60	BERNER SERIES ALC08-1072A OR APPROVED EQUAL.
AC-3	COUNTER	2072	1/5	208-1-60	BERNER SERIES ALC08-1072A OR APPROVED EQUAL.
AC-4	COUNTER	2072	1/5	208-1-60	BERNER SERIES ALC08-1072A OR APPROVED EQUAL.
AC-5	COUNTER	2072	1/5	208-1-60	BERNER SERIES ALC08-1072A OR APPROVED EQUAL.
AC-6	COUNTER	2072	1/5	208-1-60	BERNER SERIES ALC08-1072A OR APPROVED EQUAL.
AC-7	DOOR	1020	1/5	208-1-60	BERNER SERIES SLC07-1036A OR APPROVED EQUAL.
AC-8	DOOR	2031	1/5	208-1-60	BERNER SERIES SLC07-1072A OR APPROVED EQUAL.

NOTES:
1. COORDINATE MOUNTING OF AIR CURTAINS AC-1 THROUGH AC-6 WITH CONCESSION WINDOW COILING MECHANISM.
2. ALL AIR CURTAINS SHALL BE HUNG PER MANUFACTURER. FURNISH ALL HANGERS, BRACKETS, ETC FOR A COMPLETE INSTALLATION.
3. AIR CURTAIN AC-1 THROUGH AC-6 SHALL BE FURNISHED WITH CONTROL PACKAGE TO INCLUDE TIME DELAY SHUTDOWN. UNIT SHALL HAVE 10 FAN SPEED ADJUSTMENTS. ALL LOW VOLTAGE CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTROLS CONTRACTOR. REFER TO ELECTRICAL PLANS FOR WALL SWITCHING REQUIREMENTS DOOR SWITCH TO BE FURNISHED WITH AIR CURTAIN FOR FUTURE, NOT INSTALLED AT THIS TIME.
4. AIR CURTAIN AC-7 AND AC-8 SHALL BE FURNISHED WITH CONTROL PACKAGE TO INCLUDE DOOR SWITCH AND TIME DELAY SHUTDOWN. UNIT SHALL HAVE SINGLE SPEED FAN ADJUSTMENT. ALL LOW VOLTAGE CONTROL WIRING SHALL BE THE RESPONSIBILITY OF THE MECHANICAL CONTROLS CONTRACTOR.

1 ME-3.2 MECHANICAL SCHEDULES
NO SCALE

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LeBICHE ARCHITECTURAL GROUP, INC.

DATE SIGNED
12.31.2016
REGISTRATION EXPIRATION DATE

1999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0197
FAX (409) 860-0198
WWW.LABICHE.COM
THE LeBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
915 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER ME-3.2
FILENAME

COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
This drawing and the Mechanical and Electrical Design Principal Service and all copies thereof are the property of Lechtenberg Consulting, Inc. and all rights reserved under the Federal Copyright Laws. Lechtenberg Consulting, Inc.

STATE OF TEXAS
E. L. RITTER JR.
49343
REGISTERED
PROFESSIONAL ENGINEER
12-6

Graphic Scale 0 1/2" 1" 2" 1:10" 3"
NOTE: If the above graphic scale does not measure as indicated then drawing is not scaled.
ADJUST MEASUREMENTS ACCORDINGLY

Lechtenberg Consulting Inc.
ELECTRICAL MECHANICAL PROJECT ENGINEERING
Home Office
P.O. Box 4643 Lake Charles LA. 70606
Louisiana Firm License 26100
Branch Office
5000 Gladys Ave. Suite 101B Beaumont TX. 77706 409.860.2260
Texas Firm License 3227
Phone 337.474.3644
Fax 337.474.5151

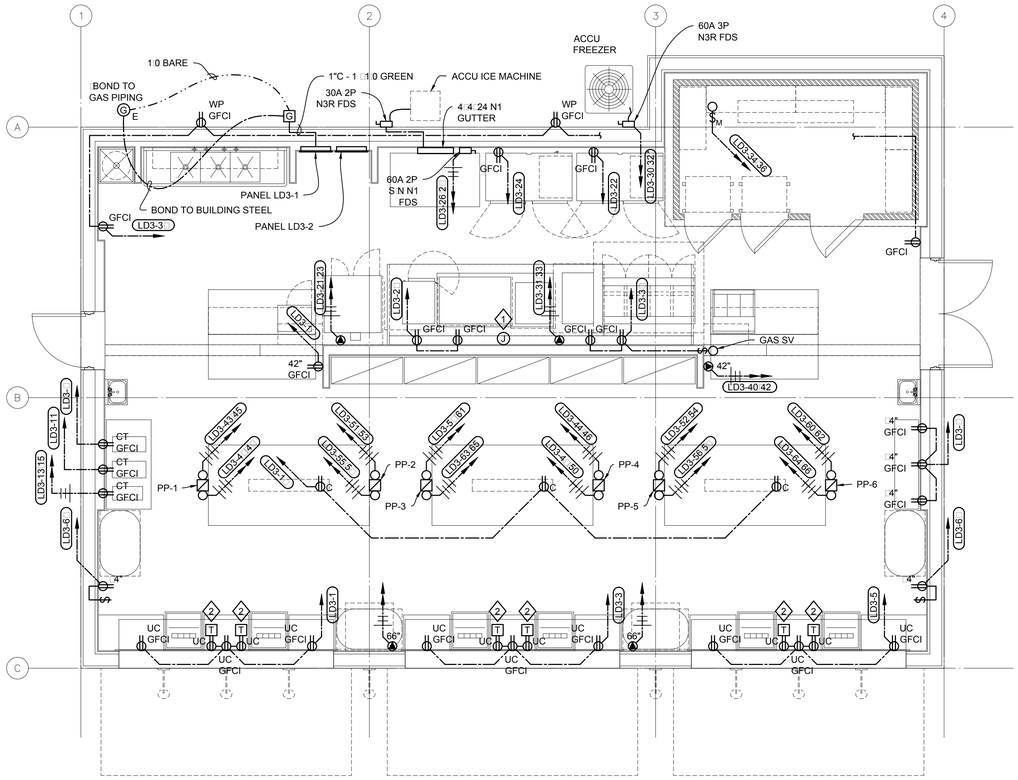
Project Number 15-030
REC:150021

DRAWN BY
DV
PROJECT NUMBER
1536
DOCUMENT RELEASE DATES

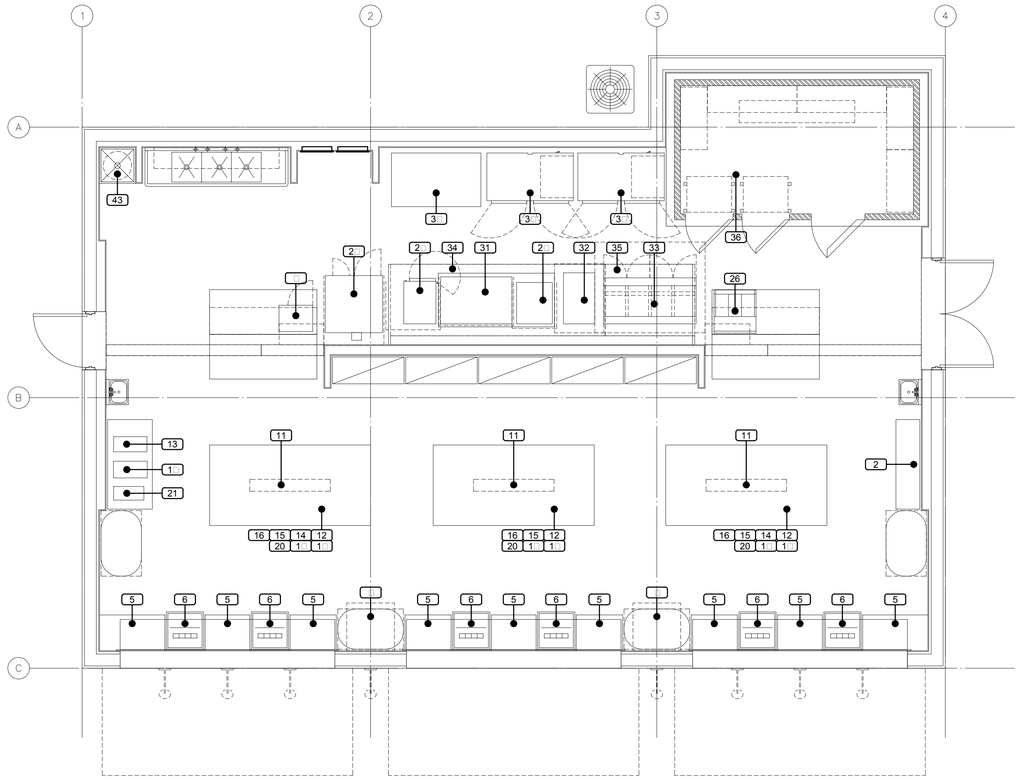
1	CLIENT REVIEW 10.13.2015
2	CLIENT REVIEW 10.21.2015
3	BIDS&CONSTRUCTION 01.22.2016
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016
THE LeBICHE ARCHITECTURAL GROUP, INC.

DRAWING NAME:150021 - ME-3.2 - MECHANICAL SCHEDULES.dwg
SAVED:Wednesday, January 13, 2016 9:09:29 AM



1 POWER PLAN
SCALE: 1/4" = 1'-0"



3 EQUIPMENT PLAN
SCALE: 1/4" = 1'-0"

◇1 PROVIDE 4-11/16" SQUARE x 2-1/8" DEEP JUNCTION BOX WITH 2 EACH 1"C RUN TO PANEL LD3-2 FOR FUTURE.

◇2 PROVIDE RECEPTACLE FOR DRINK DISPENSER PLUG IN TRANSFORMER.

2 KEY NOTES
SCALE: NONE

EQUIPMENT SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL NUMBER	VOLT/PH.	AMP.	CONNECTION	REMARKS
2	BAG-IN-BOX						SUPPLIED BY OWNER/INSTALLED BY VENDOR
5	POINT OF SALE						SUPPLIED BY OWNER/INSTALLED BY VENDOR
6	SODA DISPENSER	LANCER	2306	24V/1P	6A		SUPPLIED BY OWNER/INSTALLED BY VENDOR
□	ICEE DISPENSER		VIPER - 3 BARREL	230V/1P	30A	NEMA L6-30R	SUPPLIED BY OWNER/INSTALLED BY VENDOR
□	MICROWAVE	SOLWAVE (EXISTING)	1□0MW1200T	120V	10A	NEMA 5-20P	SUPPLIED BY OWNER/INSTALLED BY OWNER
11	TV	VIZIO	55"				SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
12	NACHO CHEESE DISPENSER	GEHL'S (EXISTING)	HT2-04	120V	1.□A		SUPPLIED BY OWNER/INSTALLED BY OWNER
13	TEA BREWER	BUNN	ITB-DBC	120V/1P	14A	NEMA 5-15P	SUPPLIED BY OWNER/INSTALLED BY VENDOR
14	SUPER PRETZEL DISPLAY	WISCO INDUSTRIES	JJ□50-B	120V	12A		SUPPLIED BY OWNER/INSTALLED BY OWNER
15	DISPLAY WARMER	HATCO (EXISTING)	GR2SDS-4□D	120/20□V	10.2A	NEMA L14-20P	SUPPLIED BY OWNER/INSTALLED BY OWNER
16	GRAVY WARMER	AVANTCO	1□□W300SS	110V	2.□A	NEMA 5-15P	SUPPLIED BY OWNER/INSTALLED BY OWNER
1□	PANINI PRESS	AVANTCO	P□5SG	120V	14.6A	NEMA 5-15P	SUPPLIED BY OWNER/INSTALLED BY OWNER
1□	PIZZA/SNACK OVEN	AVANTCO	1□□CP012	120V	14.6A		SUPPLIED BY OWNER/INSTALLED BY OWNER
1□	WARM BEVERAGE	BUNN	FMD-3 BLACK	120V/1P	15A		SUPPLIED BY OWNER/INSTALLED BY VENDOR
20	UNDER COUNTER DRAWER WARMER	WITTCO	200-2-SL	120V	20A	NEMA 5-15P	SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
21	COFFEE BREWER	CURTIS	GEM TS				SUPPLIED BY OWNER/INSTALLED BY VENDOR
26	CRISP N HOLD	PITCO	PCC2□	20□V	14	NEMA 6-20P	SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
2□	CONVECTION OVEN	GARLAND	SCO-ES-20S	20□V/1P	50		SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
2□	STEAMER	VULCAN (EXISTING)		120V/115V	1.5A		SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
2□	FUNNEL CAKE FRYER	GOLD MEDIA PRODUCTS	□0□□E-FC-4	240V	24	NEMA 6-30P	SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
31	4□" GRIDDLE	VULCAN (EXISTING)					SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
32	FLOOR FRYER	ADVANCO	FF51□				SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
33	3 COMP FRYER	VULCAN (EXISTING)	4GRD45F	120V/□115V	0.□A/□5.4A		SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
34	12" HOOD W/ANSUL	GREENHECK (EXISTING)	GHEW-12.00-S				SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
35	5' HOOD W/ANSUL	GREENHECK (EXISTING)	GHEW-5.00-S				SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
36	□' X 14' WALK-IN FREEZER	AMERIKOOLER	□' X 14' FREEZER				SUPPLIED BY OWNER/INSTALLED BY VENDOR
3□	REACH-IN COOLERS	TRAULSEN (EXISTING)		115V/1		NEMA 5-15P	SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
3□	ICE MACHINE	ICE-O-MATIC	ICE1406HA5	20□230V	26.1A		SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR
43	HOT WATER HEATER	PALOMA (EXISTING)	PH-24M-DN				SUPPLIED BY OWNER/INSTALLED BY CONTRACTOR

4 EQUIPMENT SCHEDULE
SCALE: 1/4" = 1'-0"

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LeBISCHE ARCHITECTURAL GROUP, INC.

XXXXXXXX
DATE SIGNED
12/31/2016
REGISTRATION EXPIRATION DATE

7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0151
FAX (409) 860-0153
THE LeBISCHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
BIB I-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
ME-4.0
FILENAME

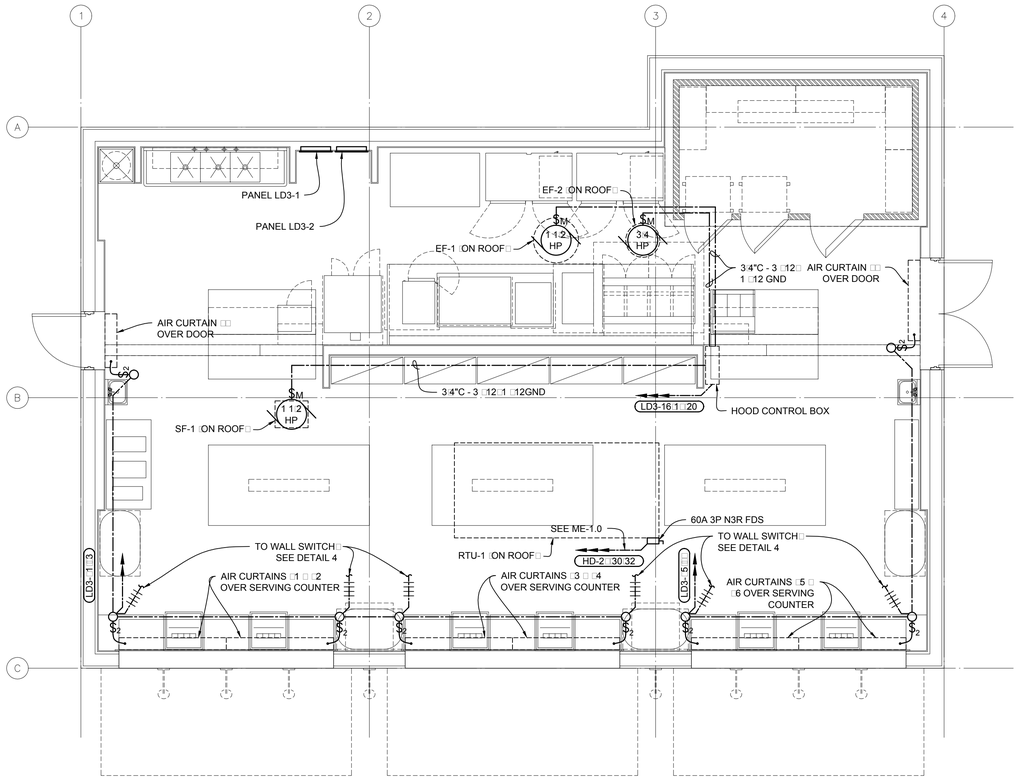
DRAWN BY
MWCGI.COM
PROJECT NUMBER
16036
DOCUMENT RELEASE DATES
1 CLIENT REVIEW 10/12/2015
2 CLIENT REVIEW 12/11/2015
3 BID&CONSTRUCTION 01/22/2016
4
5
6
7
8
9

COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
T□□d□c□□e□a□d□e Mec□a□cal a□d Elec□cal De□□□□□c□n□□a□ed□ere□□□a□l□□r□□e□□□ Pr□□e□□□al Ser□ce a□d a□□□c□□□e□n□er□□□ Lec□te□er□C□□□□□□□c.

Gra□□c Scale
0 1/2" D□□□□□ 1" 2" 1'-10" D□□□□□ 3"
NOTE: I□□e a□□e□ra□□c□cale d□e□□□□ea□re a□□□ed□□e dra□□□ □□□□□□ed □□cale. ADJUST MEASUREMENTS ACCORDINGLY

LECHTENBERG Consulting Inc. ELECTRICAL□MECHANICAL□□PROJECT ENGINEERING
Pr□ec□N□□□er: XX-XXX
Home Office
P.O. B□□64□3 La□e C□arle□□LA. □0606
L□□□a□a Fr□ L□□e□e 261□
33□4□4.364□
Fa□33□4□4.5□5□
Branch Office
□□□ Glad□□A□e. S□□a 101B□Bea□□□□TX. □□06 40□□60□226
Te□a□Fr□ L□□e□e 322□

COPYRIGHT © 2016
THE LeBISCHE ARCHITECTURAL GROUP, INC.



1 HVAC POWER PLAN
SCALE: 1/4" = 1'-0"

4 COUNTER AIR CURTAIN SWITCHES
SCALE: 3/4" = 1'-0"

MAINS 225 AMP: BREAKER
MOUNTING: FLUSH
NEMA RATING: 1
GROUND BUS: EQUIP
NEUTRAL BUS: 100%
IER: 10,000

PANEL: LD3-1 TYPE: PANELBOARD
MFGR: Sq D TYPE: NQ
208/120 V 3 PH 4 W
BRANCH BREAKERS: BOLT ON
MODIFICATIONS: FEED THRU LUGS

ITEM	WIRE SIZE	AMP/ POLE	CIR NO	CIR NO	AMP/ POLE	WIRE SIZE	ITEM
COUNTER 1 ITEM 5 & ITEM 6	#12	20/1	1	2	20/1	#12	OUTSIDE LIGHTS
COUNTER 2 ITEM 5 & ITEM 6	#12	20/1	3	4	20/1	#12	CONCESSION LIGHTS
COUNTER 3 ITEM 5 & ITEM 6	#12	20/1	5	6	20/1	#12	HOOD LIGHTS
RECPT ITEM 2	#12	20/1	7	8	ST	--	------
RECPT ITEM 13	#12	20/1	9	10	20/1	#12	COOLER LIGHTS & HEATERS
RECPT ITEM 19	#10	20/1	11	12	20/1	#12	COOLER LIGHTS & HEATERS
RECPT ITEM 21	#10	30/2	13	14	20/1		SPARE
------	--	--	15	16	30/3	#10	KITCHEN HOOD PANEL
RECPT TV MONITORS	#12	20/1	17	18	--	--	------
RECPT ITEM 8	#10	20/1	19	20	--	--	------
RECPT ITEM 27	#6	50/2	21	22	20/1	#12	RECPT ITEM 37
------	--	ST	23	24	20/1	#12	RECPT ITEM 37
------	--	--	25	26	60/2	#6	ICE MACHINE AND ACCU
RECPT ITEM 28	#12	20/1	27	28	--	--	------
------	--	ST	29	30	60/2	#6	FREEZER ACCU
RECPT ITEM 29	#10	30/2	31	32	--	--	------
------	--	ST	33	34	20/2	#10	FREEZER EVAP
------	--	--	35	36	--	--	------
RECPT ITEM 33 & GAS SV	#12	20/1	37	38	20/1	#12	RECPT BUILDING & OD
------	--	ST	39	40	20/2	#12	RECPT ITEM 26
SHUNT TRIP POWER	#12	20/1	41	42	--	--	------

NOTES TO PANEL LD3-1
1 STUB 3 EACH SPARE 1" CONDUITS INTO ACCESSABLE CEILING SPACE FOR FUTURE.
2 INTERLOCK SHUNT TRIP BREAKERS WITH HOOD EXTINGUISHING SYSTEM FIRE ALARM INTERFACE.

2 PANEL LD3-1
SCALE: NONE

MAINS 225 AMP: LUGS
MOUNTING: FLUSH
NEMA RATING: 1
GROUND BUS: EQUIP
NEUTRAL BUS: 100%
IER: 10,000

PANEL: LD3-2 TYPE: PANELBOARD
MFGR: Sq D TYPE: NQ
208/120 V 3 PH 4 W
BRANCH BREAKERS: BOLT ON
MODIFICATIONS:

ITEM	WIRE SIZE	AMP/ POLE	CIR NO	CIR NO	AMP/ POLE	WIRE SIZE	ITEM
POWER POLE 1 - ITEM 12	#12	20/1	43	44	20/1	#12	POWER POLE 4 - ITEM 16
POWER POLE 1 - ITEM 15	#12	20/1	45	46	20/1	#12	POWER POLE 4 - ITEM 17
POWER POLE 1 - ITEM 18	#12	20/1	47	48	20/1	#12	POWER POLE 4 - ITEM 20
POWER POLE 1 - SPARE RECEPTACLE	#12	20/1	49	50	20/1	#12	POWER POLE 4 - SPARE RECEPTACLE
POWER POLE 2 - ITEM 14	#12	20/1	51	52	20/1	#12	POWER POLE 5 - ITEM 12
POWER POLE 2 - ITEM 16	#12	20/1	53	54	20/1	#12	POWER POLE 5 - ITEM 15
POWER POLE 2 - ITEM 17	#12	20/1	55	56	20/1	#12	POWER POLE 5 - ITEM 18
POWER POLE 2 - ITEM 20	#12	20/1	57	58	20/1	#12	#REF!
POWER POLE 3 - ITEM 12	#12	20/1	59	60	20/1	#12	POWER POLE 5 - SPARE RECEPTACLE
POWER POLE 3 - ITEM 15	#12	20/1	61	62	20/1	#12	POWER POLE 6 - ITEM 16
POWER POLE 3 - ITEM 18	#12	20/1	63	64	20/1	#12	POWER POLE 6 - ITEM 17
POWER POLE 3 - SPARE RECEPTACLE	#12	20/1	65	66	20/1	#12	POWER POLE 6 - ITEM 20
RECPT FUTURE WALL FAN	#12	20/1	67	68	20/1		SPARE
RECPT FUTURE WALL FAN	#12	20/1	69	70	20/1		SPARE
AIR CURTAINS #1, #2, #3, #4, & #7	#12	20/2	71	72	20/1		SPARE
------	--	--	73	74	20/1		SPARE
AIR CURTAINS #5, #6, & #9	#12	20/2	75	76	20/1		SPARE
------	--	--	77	78	20/1		SPARE
SPARE		20/1	79	90	20/1		SPARE
SPARE		20/1	81	82	20/1		SPARE
SPARE		20/1	83	84	20/1		SPARE

NOTES TO PANEL LD3-2
1 STUB 3 EACH SPARE 1" CONDUITS INTO ACCESSABLE CEILING SPACE FOR FUTURE.
2 PANELBOARD SCHEDULE SHALL IDENTIFY EQUIPMENT BY NAME RATHER THAN BY ITEM NUMBER. COORDINATE EXACT NAME WITH OWNER.
3 PROVIDE 2 EACH 2" NIPPLES BETWEEN PANELS LD3-1 AND LD3-2.

3 PANEL LD3-2
SCALE: NONE

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LeBICHE ARCHITECTURAL GROUP, INC.

XXXXXXXX
DATE SIGNED
12/31/2016
REGISTRATION EXPIRATION DATE

7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0151
FAX (409) 860-0153
THE LeBICHE ARCHITECTURAL GROUP, INC.

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
5115 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
ME-4.1
FILENAME

DRAWN BY
MWCGI.COM
PROJECT NUMBER
16036
DOCUMENT RELEASE DATES
1 CLIENT REVIEW 10/13/2015
2 CLIENT REVIEW 12/21/2015
3 BID/CONSTRUCTION 01/22/2016
4
5
6
7
8
9

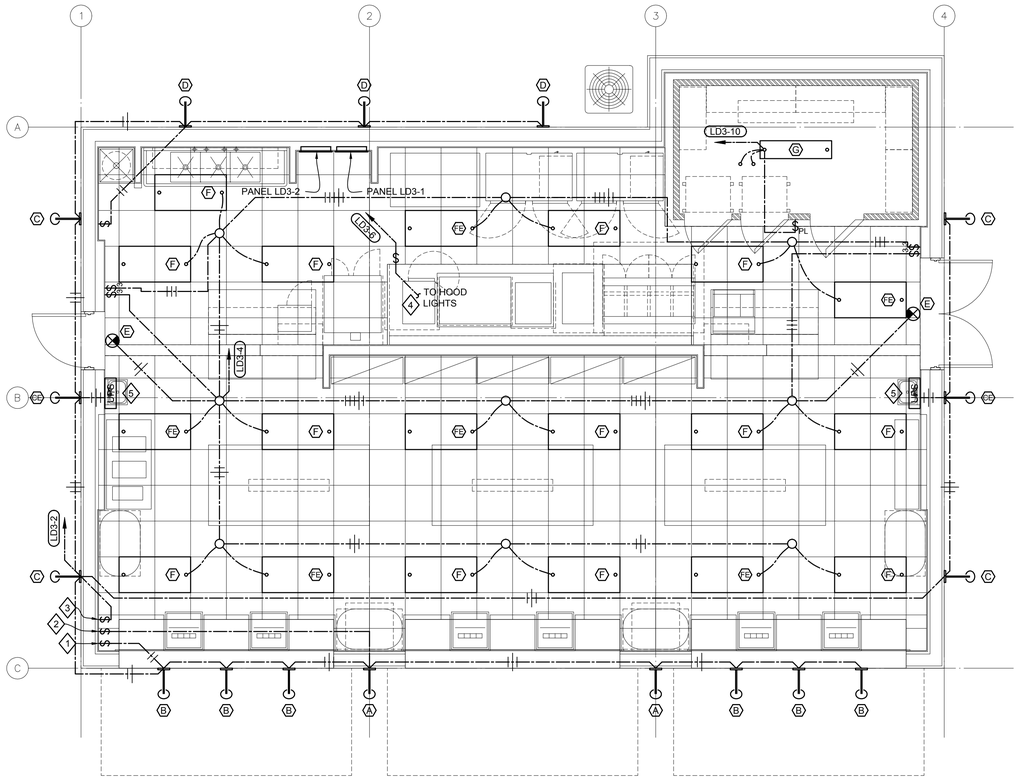
COPYRIGHT © 2016 THE LeBICHE ARCHITECTURAL GROUP, INC.

COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
This document, and the ideas and designs incorporated herein, as an instrument of Professional Service, is the property of the Architect and is not to be used in whole or in part for any other project, without the written authorization of Lechtenberg Consulting, Inc. All rights reserved throughout the world. Unpublished rights reserved under International Copyright Laws and Conventions.

STATE OF TEXAS
WILLIAM J. LECHTENBERG JR.
74998
REGISTERED
PROFESSIONAL
ENGINEER

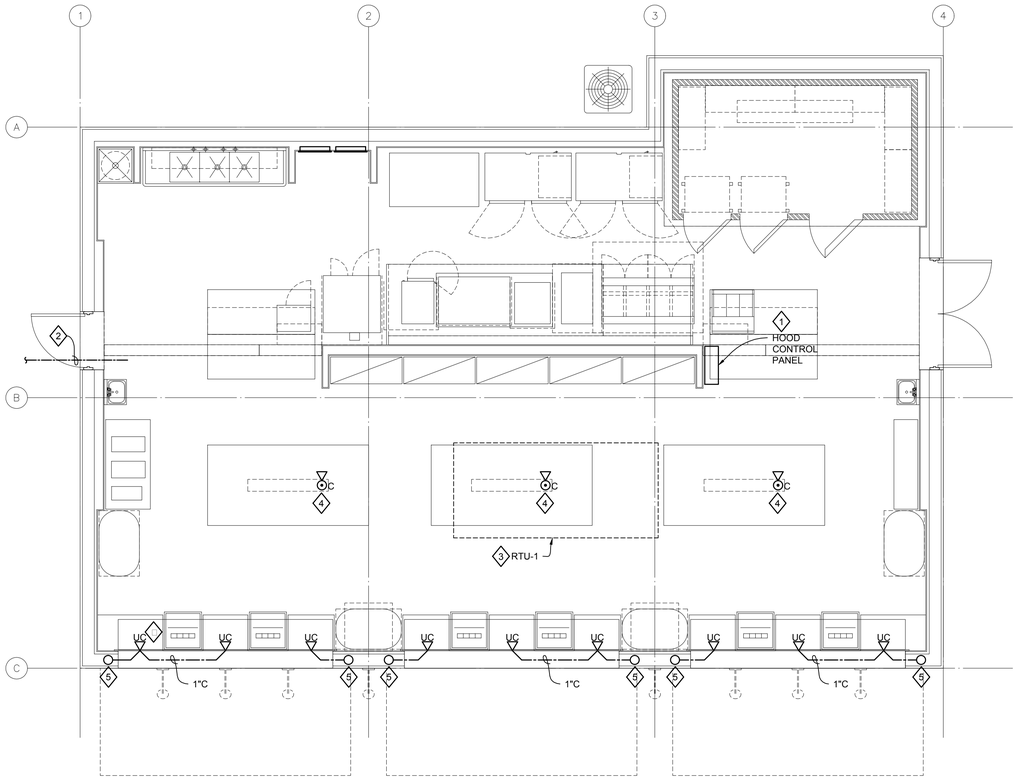
0 1/2" Drawing Scale 1" 2" 1:10" Drawing 3"
NOTE: If the graphic scale does not measure as indicated the drawing is not scaled. ADJUST MEASUREMENTS ACCORDINGLY

LECHTENBERG Consulting Inc.
ELECTRICAL, MECHANICAL, PROJECT ENGINEERING
Home Office
P.O. Box 3364, Lake Charles, LA. 70606
Phone 337.474.4364
Fax 337.474.5515
Branch Office
7999 Gladys Ave. Suite 101B, Beaumont, TX. 77706
Phone 409.860.0151
Fax 409.860.0153
Project Number: XX-XXX



1 LIGHTING PLAN

SCALE: 1/4" = 1'-0"



5 SPECIAL SYSTEMS PLAN

SCALE: 1/4" = 1'-0"

1. SWITCH FOR OUTDOOR MENU BOARD LIGHTS
2. SWITCH FOR OUTDOOR BUILDING LIGHTS
3. SWITCH FOR BUILDING WALL PACKS
4. INTERLOCK SHUNT TRIP BREAKER WITH HOOD EXTINGUISHING INTERLOCK
5. INSTALL GRID MOUNTED UPS IN CEILING TO SERVE FIXTURE CE

2 LIGHTING PLAN KEY NOTES

SCALE: NONE

1. SEE SHEET ME-1.0 FOR LEGEND.
2. WIRE COUNTS ARE INDICATED TO PROVIDE THE CONTRACTOR AN IDEA OF THE INTENDED SWITCHING OF CIRCUIT. THEY DO NOT INCLUDE THE EQUIPMENT GROUNDING CONDUCTOR. CONTRACTOR HOWEVER IS RESPONSIBLE FOR PROVIDING THE WIRING REQUIRED TO CONTROL THE CIRCUITS. CONTACT THE ENGINEER WITH ANY QUESTIONS.

3 LIGHTING NOTES

SCALE: NONE

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION		LAMPS	NOTES
A	TROY RLM	#3RA12-LED18-GA / 3 SL23 GA	LED	1
B	TROY RLM	#3RH16-LED18-GA FGWC / 3 SL23 GA	LED	1
C	TROY RLM	#3RH14-LED18-GA FGWC / 3 SL23 GA	LED	4
D	LUMARK	#XTORSARL-N-PC1-	LED	5
E	SURE-LITES	#TPX70-R	LED	3
F	METALUX	#24GR-FA-LD4-38-A19/156-UNV-L835-SD1-G1	LED	2
G		VAPOR PROOF FIXTURE PROVIDED WITH FREEZER		6

NOTES:

1. SEE ARCHITECTURAL DETAILS FOR MOUNTING HEIGHT AND LOCATION.
2. PROVIDE 1100 LUMIN EMERGENCY BATTERY PACK AND CONNECT TO UNSWITCHED CONDUCTOR FROM BRANCH BREAKER ON UNITS NOTED WITH AN "E".
3. FACES, CHERVON DIRECTIONAL ARROWS, AND MOUNTING AS REQUIRED BY PLAN AND FIELD CONDITIONS.
4. MOUNT AT 10' AFF +/- ON SIDE OF BUILDING. FIELD VERIFY EXACT LOCATION IN FIELD WITH ARCHITECT.
5. MOUNT AT 9' +/- ON BACK WALL.
6. CONNECT TO CIRCUIT AS INDICATED ON DRAWINGS.

4 LIGHT FIXTURE SCHEDULE

SCALE: NONE

1. PROVIDE FA SYSTEM INTERFACE FOR MONITORING HOOD EXTINGUISHING SYSTEM AND CONTROL OF HOOD SUPPLY FAN AND LIGHTS.
2. RUN A 2"C WITH PULLWIRE FROM CEILING SPACE OF NEW CONCESSION STAND TO BACKBOARD SHOWN ON SHEET ME-1.0. CONDUIT TO BE ROUTED ON THE TOP OF THE CONNECTING CANOPY. SEAL BOTH WALLS AT ENTRY POINTS.
3. PROVIDE FA SYSTEM INTERFACE FOR MONITORING THE DUCT DETECTORS IN SUPPLY AND RETURN AIR DUCTS OF RTU-1.
4. PROVIDE 2 GANG STAINLESS STEEL PLATE IN CEILING FOR MONITOR DATA .COM WIRING. COORDINATE EXACT DEVICE CONNECTOR TYPES AND LOCATIONS IN PLATES WITH OWNER IN FIELD.
5. RUN 1"C TO WALL AND UP TO ACCESSIBLE CEILING SPACE FOR DATA.COM WIRING. EXTEND RACEWAY BEYOND AIR CURTAINS IN CEILING SPACE.

6 KEY NOTES

SCALE: NONE

1. ALL DATA COMMUNICATION AND CATV WIRING WORK SHALL BE DONE BY THE OWNER UNDER SEPARATE CONTRACT. CONTRACTOR SHALL PROVIDE RACEWAYS WITH PULLWIRES JUNCTION BOXES ETC. CONTRACTOR SHALL COORDINATE THE FINAL LOCATION OF JUNCTION BOXES WITH EQUIPMENT AND BUILT-IN SHOP DRAWINGS AND ARCHITECT IN FIELD.
2. THE BUILDING IS TO BE PROTECTED BY AN AUTOMATIC FIRE ALARM SYSTEM EXTENDED FROM THE EXISTING FIRE ALARM PANEL FACP SEE SHEET ME-1.0 FOR LOCATION.
3. THE EXTENSION OF THE EXISTING FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED BY A LICENSED FIRE ALARM CONTRACTOR IN THE JURISDICTION OF THE PROJECT. THE FIRE ALARM SYSTEM DESIGN SHALL BE APPROVED BY THE AHJ ARCHITECT AND ENGINEER PRIOR TO ANY WORK BEING DONE. CONTRACTOR SHALL PAY ALL AHJ REVIEW FEES FOR SUBMITTAL AND ANY RESUBMITTALS.
4. ALL EXPOSED CABLE IN CEILING SPACE SHALL BE PROPERLY SUPPORTED FROM STRUCTURE WITH SUPPORTS DESIGNED FOR THE PURPOSE. DO NOT LAY CABLE ACROSS CEILING GRIDS.
5. PROVIDE BLANK COVERS TO MATCH WIRING DEVICES ON ALL UNUSED BOXES.
6. SEE SHEET ME-1.0 FOR LEGEND.

SPECIAL SYSTEMS NOTES

SCALE: NONE

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND IS NOT TO BE USED IN WHOLE OR IN PART FOR ANY OTHER PROJECT, WITHOUT THE WRITTEN AUTHORIZATION OF THE LEBICHE ARCHITECTURAL GROUP, INC.

XXXXXXXX
DATE SIGNED
12312016
REGISTRATION EXPIRATION DATE

THE LaBICHE ARCHITECTURAL GROUP, INC.
7999 GLADYS AVENUE - SUITE 101
BEAUMONT, TEXAS 77706
PHONE (409) 860-0151
FAX (409) 860-0153

NEW CONSTRUCTION
FORD FIELDS CONCESSION STAND
515 IH-10 SOUTH
BEAUMONT, TEXAS 77705
FORD PARK

SET NO.

SHEET NUMBER
ME-4.2
FILENAME

DRAWN BY
MWCGI.COM
PROJECT NUMBER
16036
DOCUMENT RELEASE DATES

1	CLIENT REVIEW 10/3/2016
2	CLIENT REVIEW 10/21/2016
3	BID/CONSTRUCTION 10/27/2016
4	
5	
6	
7	
8	
9	

COPYRIGHT © 2016 THE LeBICHE ARCHITECTURAL GROUP, INC.

COPYRIGHT © 2016 - Lechtenberg Consulting, Inc.
This document, and the ideas and designs incorporated herein, as an instrument of professional service, is the property of the Lechtenberg Consulting, Inc. and all rights reserved in the event of its unauthorized reuse.

STATE OF TEXAS
WILLIAM L. LECHTENBERG JR.
14998
REGISTERED
PROFESSIONAL
ENGINEER

0 1/8" Graphic Scale 2" 1'-10" 3"
NOTE: These graphic scale dependent features are printed to the drawing scale noted.
ADJUST MEASUREMENTS ACCORDINGLY

LECHTENBERG Consulting Inc.
ELECTRICAL MECHANICAL PROJECT ENGINEERING
Project Number: XX-XXX
Home Office
P.O. Box 3364 Beaumont, Texas 77704
Branch Office
7999 Gladys Ave. Suite 101B Beaumont, TX. 77706
Phone 409.860.0151
Fax 409.860.0153

JEFFERSON COUNTY PURCHASING DEPARTMENT

Deborah L. Clark, Purchasing Agent

1149 Pearl Street, First Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

CONTRACT EXTENSION REQUEST

March 5, 2019

DRC Emergency Services, LLC
5851 San Felipe Street, Suite 425
Houston TX 77057
Attention: Ms. Lisa Garcia

Re: (RFP 15-015/JW), Emergency Disaster Assistance Recovery for Jefferson County

Dear Ms. Garcia:

Please be advised the above-referenced contract for Jefferson County will expire on **April 10, 2019**. It is requested that your company extend your current contract for an additional eight weeks, to expire June 5, 2019.

Please sign the acknowledgment below to indicate your agreement and return to our office by Friday, March 8, 2019. Jefferson County appreciates your cooperation with this extension.

Best regards,

Sincerely,

Deborah Clark

Deborah L. Clark
Purchasing Agent
Jefferson County, Texas

DC: ys

Price Extension Received and Accepted: 3/6/2019
Date

Project Number: RFP 15-015/JW

Contractor: DRC Emergency Services, LLC

Signature: Kristy Fuentes

Print Name and Title: Kristy Fuentes, Vice President, Secretary & Treasurer

ATTEST:

Carolyn L. Guidry

Carolyn L. Guidry, County Clerk

JEFFERSON COUNTY, TEXAS

Jeff R. Branick, County Judge

JEFFERSON COUNTY PURCHASING DEPARTMENT
Deborah Clark, Purchasing Agent

1149 Pearl Street, First Floor, Beaumont, TX 77701 409-835-8593 Fax 409-835-8456

AMENDMENT IX TO CONTRACT

April 23, 2018

Republic Services of Beaumont
6425 Highway 347
Beaumont TX 77705
Attention: Mr. Bill Voigtman

Dear Mr. McMorries:

This letter will serve as Amendment IX (nine) to contract IFB 15-011/JW, Term Contract for Trash and Biomedical Waste Container Service for Jefferson County.

Amendment IX (nine) will add Standard Waste Containers (10 yards and under) service for Jack Brooks Regional Airport, Hangar #7, 4605 3rd Street, Beaumont TX, 77705, at $72.60 per container per month, one day per week service frequency.

Please sign below, and return to me via fax (409) 835-8456 or email (ysauer@co.jefferson.tx.us).

Bill Voigtman
Republic Services of Beaumont

3/6/18
Date

Jeff R. Branick
Jefferson County Judge

March 18, 2018
Date

IFB 17-002/YS

Nutrien
Ag Solutions™

July 1, 2018

This week, we're excited to announce that Crop Production Services (CPS) will officially be rebranding as Nutrien Ag Solutions™—a change that will allow us stay ahead of your needs as they evolve and your operation grows. It's a pleasure to partner with you, and we're excited to be able to offer you even greater access to solutions through expanded resources and a more integrated customer experience.

While our international footprint becomes more connected, the heart of our business is and will always be the relationships we have with our local customers and the solutions we help provide. We'll continue to serve as your day-to-day partner, advisor and support team because, at the end of the day, you remain our priority.

Along with a new name, we're also unveiling a new digital platform that will give you an easier, more effective way to manage your operational needs from one integrated online hub. This platform will be rolling out in phases over the following year and we're excited to share the features with you as they become available.

Likewise, our full rebranding process will kick off in stages, which we anticipate will be completed within the next six months. Throughout this period, you'll continue to see information from our team with ongoing progress updates. The same team you know and trust will always be here to answer any questions you may have.

As always, I thank you for your partnership. Please feel free to reach out with any questions.

Sincerely,

Virginia Van Dee
Contracts Manager
Nutrien Ag Solutions, Inc.

JEFFERSON COUNTY, TEXAS

Jeff Branick, County Judge

ATTEST:
Carolyn L. Guidry, County Clerk

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS

TEXAS ASSOCIATION OF REALTORS®

COMMERCIAL CONTRACT - UNIMPROVED PROPERTY

USE OF THIS FORM BY PERSONS WHO ARE NOT MEMBERS OF THE TEXAS ASSOCIATION OF REALTORS® IS NOT AUTHORIZED.
©Texas Association of REALTORS®, Inc. 2018

1. PARTIES: Seller agrees to sell and convey to Buyer the Property described in Paragraph 2. Buyer agrees to buy the Property from Seller for the sales price stated in Paragraph 3. The parties to this contract are:

Seller: **Jefferson County Texas**

Address: **1149 Pearl Street, 1st FL, Beaumont, TX 77701**
Phone: **(409)835-8593** E-mail: **jwest@co.jefferson.tx.us**
Fax: _____ Other: _____

Buyer: **Clark C. Shofner**

Address: **14103 FM 777, Jasper, TX 75951-7377**
Phone: **(409)489-2758** E-mail: **clarkshofner@yahoo.com**
Fax: _____ Other: _____

2. PROPERTY:

A. "Property" means that real property situated in **Jefferson** County, Texas at **17.97 Acres on Viterbo Road** *(address)* and that is legally described on the attached Exhibit **A** or as follows:

B. Seller will sell and convey the Property together with:
(1) all rights, privileges, and appurtenances pertaining to the Property, including Seller's right, title, and interest in any minerals, utilities, adjacent streets, alleys, strips, gores, and rights-of-way;
(2) Seller's interest in all leases, rents, and security deposits for all or part of the Property; and
(3) Seller's interest in all licenses and permits related to the Property.

(Describe any exceptions, reservations, or restrictions in Paragraph 12 or an addendum.)
(If mineral rights are to be reserved an appropriate addendum should be attached.)

3. SALES PRICE:

A. At or before closing, Buyer will pay the following sales price for the Property:

(1) Cash portion payable by Buyer at closing . . . . . $ **242,000.00**

(2) Sum of all financing described in Paragraph 4 . . . . . $ _____

(3) Sales price (sum of 3A(1) and 3A(2)) . . . . . $ **242,000.00**

B. Adjustment to Sales Price: *(Check (1) or (2) only.)*

[X] (1) The sales price will not be adjusted based on a survey.
[ ] (2) The sales price will be adjusted based on the latest survey obtained under Paragraph 6B.

(a) The sales price is calculated on the basis of $ _____ per:
[ ] (i) square foot of [ ] total area [ ] net area.
[ ] (ii) acre of [ ] total area [ ] net area.

(b) "Total area" means all land area within the perimeter boundaries of the Property. "Net area" means total area less any area of the Property within:
[ ] (i) public roadways;
[ ] (ii) rights-of-way and easements other than those that directly provide utility services to the Property; and
[ ] (iii) _____
_____.

(c) If the sales price is adjusted by more than _____ % of the stated sales price, either party may terminate this contract by providing written notice to the other party within _____ days after the terminating party receives the survey. If neither party terminates this contract or if the variance is less than the stated percentage, the adjustment to the sales price will be made to the cash portion of the sales price payable by Buyer.

4. FINANCING: Buyer will finance the portion of the sales price under Paragraph 3A(2) as follows:

[ ] A. Third Party Financing: One or more third party loans in the total amount of $ _____ .
This contract:
[ ] (1) is not contingent upon Buyer obtaining third party financing.
[ ] (2) is contingent upon Buyer obtaining third party financing in accordance with the attached Commercial Contract Financing Addendum (TAR-1931).

[ ] B. Assumption: In accordance with the attached Commercial Contract Financing Addendum (TAR-1931), Buyer will assume the existing promissory note secured by the Property, which balance at closing will be $ _____ .

[ ] C. Seller Financing: The delivery of a promissory note and deed of trust to Seller under the terms of the attached Commercial Contract Financing Addendum (TAR-1931) in the amount of $ _____ .

5. EARNEST MONEY:

A. Not later than 3 days after the effective date, Buyer must deposit $ **$2,500.00** as earnest money with **Texas Regional Title Company** (title company) at **7675 Folsom, Bldg 100, Beaumont, TX 77706** (address) **Molly Mallet** (closer). If Buyer fails to timely deposit the earnest money, Seller may terminate this contract or exercise any of Seller's other remedies under Paragraph 15 by providing written notice to Buyer before Buyer deposits the earnest money.

B. Buyer will deposit an additional amount of $ _____ with the title company to be made part of the earnest money on or before:
[ ] (i) _____ days after Buyer's right to terminate under Paragraph 7B expires; or
[ ] (ii) _____ .
Buyer will be in default if Buyer fails to deposit the additional amount required by this Paragraph 5B within 3 days after Seller notifies Buyer that Buyer has not timely deposited the additional amount.

C. Buyer may instruct the title company to deposit the earnest money in an interest-bearing account at a federally insured financial institution and to credit any interest to Buyer.

6. TITLE POLICY AND SURVEY:

A. Title Policy:

(1) Seller, at Seller's expense, will furnish Buyer an Owner's Policy of Title Insurance (the title policy) issued by any underwriter of the title company in the amount of the sales price, dated at or after closing, insuring Buyer against loss under the title policy, subject only to:
(a) those title exceptions permitted by this contract or as may be approved by Buyer in writing; and
(b) the standard printed exceptions contained in the promulgated form of title policy unless this contract provides otherwise.

(2) The standard printed exception as to discrepancies, conflicts, or shortages in area and boundary lines, or any encroachments or protrusions, or any overlapping improvements:
[X] (a) will not be amended or deleted from the title policy.
[ ] (b) will be amended to read "shortages in areas" at the expense of [ ] Buyer [ ] Seller.

(3) Within **20** days after the effective date, Seller will furnish Buyer a commitment for title insurance (the commitment) including legible copies of recorded documents evidencing title exceptions. Seller authorizes the title company to deliver the commitment and related documents to Buyer at Buyer's address.

B. Survey: Within **45** days after the effective date:

[X] (1) Buyer will obtain a survey of the Property at Buyer's expense and deliver a copy of the survey to Seller. The survey must be made in accordance with the: (i) ALTA/NSPS Land Title Survey standards, or (ii) Texas Society of Professional Surveyors' standards for a Category 1A survey under the appropriate condition. Seller will reimburse Buyer **50%** *(insert amount)* of the cost of the survey at closing, if closing ~~occurs~~. **does not occur.**

[ ] (2) Seller, at Seller's expense, will furnish Buyer a survey of the Property dated after the effective date. The survey must be made in accordance with the: (i) ALTA/NSPS Land Title Survey standards, or (ii) Texas Society of Professional Surveyors' standards for a Category 1A survey under the appropriate condition.

[ ] (3) Seller will deliver to Buyer and the title company a true and correct copy of Seller's most recent survey of the Property along with an affidavit required by the title company for approval of the existing survey. If the existing survey is not acceptable to the title company, [ ] Seller [ ] Buyer (updating party), will, at the updating party's expense, obtain a new or updated survey acceptable to the title company and deliver the acceptable survey to the other party and the title company within 20 days after the title company notifies the parties that the existing survey is not acceptable to the title company. The closing date will be extended daily up to 20 days if necessary for the updating party to deliver an acceptable survey within the time required. The other party will reimburse the updating party _____ *(insert amount or percentage)* of the cost of the new or updated survey at closing, if closing occurs.

C. Buyer's Objections to the Commitment and Survey:

(1) Within **5** days after Buyer receives the last of the commitment, copies of the documents evidencing the title exceptions, and any required survey, Buyer may object in writing to matters disclosed in the items if: (a) the matters disclosed are a restriction upon the Property or constitute a defect or encumbrance to title other than those permitted by this contract or liens that Seller will satisfy at closing or Buyer will assume at closing; or (b) the items show that any part of the Property lies in a special flood hazard area (an "A" or "V" zone as defined by FEMA). If the commitment or survey is revised or any new document evidencing a title exception is delivered, Buyer may object to any new matter revealed in such revision or new document. Buyer's objection must be made within the same number of days stated in this paragraph, beginning when the revision or new

document is delivered to Buyer. If Paragraph 6B(1) applies, Buyer is deemed to receive the survey on the earlier of: (i) the date of Buyer's actual receipt of the survey; or (ii) of the deadline specified in Paragraph 6B.

(2) Seller may, but is not obligated to, cure Buyer's timely objections within 15 days after Seller receives the objections. The closing date will be extended as necessary to provide such time to cure the objections. If Seller fails to cure the objections by the time required, Buyer may terminate this contract by providing written notice to Seller within 5 days after the time by which Seller must cure the objections. If Buyer terminates, the earnest money, less any independent consideration under Paragraph 7B(1), will be refunded to Buyer.

(3) Buyer's failure to timely object or terminate under this Paragraph 6C is a waiver of Buyer's right to object except that Buyer will not waive the requirements in Schedule C of the commitment.

7. PROPERTY CONDITION:

A. Present Condition: Buyer accepts the Property in its present condition except that Seller, at Seller's expense, will complete the following before closing: _____

_____

_____

_____

_____.

B. Feasibility Period: Buyer may terminate this contract for any reason within **60** days after the effective date (feasibility period) by providing Seller written notice of termination.

(1) Independent Consideration. *(Check only one box and insert amounts.)*

[X] (a) If Buyer terminates under this Paragraph 7B, the earnest money will be refunded to Buyer less $ **1,000.00** that Seller will retain as independent consideration for Buyer's unrestricted right to terminate. Buyer has tendered the independent consideration to Seller upon payment of the amount specified in Paragraph 5A to the title company. The independent consideration is to be credited to the sales price only upon closing of the sale. If no dollar amount is stated in this Paragraph 7B(1) or if Buyer fails to deposit the earnest money, Buyer will not have the right to terminate under this Paragraph 7B.

[ ] (b) Not later than 3 days after the effective date, Buyer must pay Seller $ _____ as independent consideration for Buyer's right to terminate by tendering such amount to Seller or Seller's agent. If Buyer terminates under this Paragraph 7B, the earnest money will be refunded to Buyer and Seller will retain the independent consideration. The independent consideration will be credited to the sales price only upon closing of the sale. If no dollar amount is stated in this Paragraph 7B(2) or if Buyer fails to pay the independent consideration, Buyer will not have the right to terminate under this Paragraph 7B.

(2) Feasibility Period Extension: Prior to the expiration of the initial feasibility period, Buyer may extend the feasibility period for a single period of an additional _____ days by depositing additional earnest money in the amount of $_____ with the title company. If no dollar amount is stated in this Paragraph or if Buyer fails to timely deposit the additional earnest money, the extension of the feasibility period will not be effective.

C. Inspections, Studies, or Assessments:

(1) During the feasibility period, Buyer, at Buyer's expense, may complete or cause to be completed any and all inspections, studies, or assessments of the Property (including all improvements and fixtures) desired by Buyer.

(2) Buyer must:
(a) employ only trained and qualified inspectors and assessors;
(b) notify Seller, in advance, of when the inspectors or assessors will be on the Property;
(c) abide by any reasonable entry rules or requirements of Seller;
(d) not interfere with existing operations or occupants of the Property; and
(e) restore the Property to its original condition if altered due to inspections, studies, or assessments that Buyer completes or causes to be completed.

(3) Except for those matters that arise from the negligence of Seller or Seller's agents, Buyer is responsible for any claim, liability, encumbrance, cause of action, and expense resulting from Buyer's inspections, studies, or assessments, including any property damage or personal injury. Buyer will indemnify, hold harmless, and defend Seller and Seller's agents against any claim involving a matter for which Buyer is responsible under this paragraph. This paragraph survives termination of this contract.

D. Property Information:

(1) Delivery of Property Information: Within _____ days after the effective date, Seller will deliver to Buyer: *(Check all that apply.)*
☐ (a) copies of all current leases, including any mineral leases, pertaining to the Property, including any modifications, supplements, or amendments to the leases;
☐ (b) copies of all notes and deeds of trust against the Property that Buyer will assume or that Seller will not pay in full on or before closing;
☐ (c) copies of all previous environmental assessments, geotechnical reports, studies, or analyses made on or relating to the Property;
☐ (d) copies property tax statements for the Property for the previous 2 calendar years;
☐ (e) plats of the Property;
☐ (f) copies of current utility capacity letters from the Property's water and sewer service provider; and
☐ (g) _____
_____
_____.

(2) Return of Property Information: If this contract terminates for any reason, Buyer will, not later than 10 days after the termination date: *(Check all that apply.)*
☐ (a) return to Seller all those items described in Paragraph 7D(1) that Seller delivered to Buyer in other than an electronic format and all copies that Buyer made of those items;
☐ (b) delete or destroy all electronic versions of those items described in Paragraph 7D(1) that Seller delivered to Buyer or Buyer copied in any format; and
☒ (c) deliver to Seller copies of all inspection and assessment reports related to the Property that Buyer completed or caused to be completed.
This Paragraph 7D(2) survives termination of this contract.

E. Contracts Affecting Operations: Until closing, Seller: (1) will operate the Property in the same manner as on the effective date under reasonably prudent business standards; and (2) will not transfer or dispose of any part of the Property, any interest or right in the Property, or any of the personal property or other items described in Paragraph 2B or sold under this contract. After the feasibility period ends, Seller may not enter into, amend, or terminate any other contract that affects the operations of the Property without Buyer's written approval.

8. LEASES:

A. Each written lease Seller is to assign to Buyer under this contract must be in full force and effect according to its terms. Seller may not enter into any new lease, fail to comply with any existing lease, or make any amendment or modification to any existing lease without Buyer's written consent. Seller

must disclose, in writing, if any of the following exist at the time Seller provides the leases to the Buyer or subsequently occur before closing:
(1) any failure by Seller to comply with Seller's obligations under the leases;
(2) any circumstances under any lease that entitle the tenant to terminate the lease or seek any offsets or damages;
(3) any advance sums paid by a tenant under any lease;
(4) any concessions, bonuses, free rents, rebates, brokerage commissions, or other matters that affect any lease; and
(5) any amounts payable under the leases that have been assigned or encumbered, except as security for loan(s) assumed or taken subject to under this contract.

B. Estoppel Certificates: Within _____ days after the effective date, Seller will deliver to Buyer estoppel certificates signed not earlier than _____ by each tenant that leases space in the Property. The estoppel certificates must include the certifications contained in the current version of TAR Form 1938 - Commercial Tenant Estoppel Certificate and any additional information requested by a third party lender providing financing under Paragraph 4 if the third party lender requests such additional information at least 10 days prior to the earliest date that Seller may deliver the signed estoppel certificates.

9. BROKERS:

A. The brokers to this sale are:

Principal Broker: KenWheel, Inc. dba Wheeler Commercial	**Cooperating Broker:**
Agent: Lee Y. Wheeler, III	Agent:
Address: 400 Neches Beaumont, TX. 77701	Address:
Phone & Fax: (409)899-3300	Phone & Fax:
E-mail: lwheeler@wheeler-commercial.com	E-mail:
License No.: 579943	License No.:

Principal Broker: *(Check only one box)*
[X] represents Seller only.
[ ] represents Buyer only.
[ ] is an intermediary between Seller and Buyer.

Cooperating Broker represents Buyer.

B. Fees: *(Check only (1) or (2) below.)*
(Complete the Agreement Between Brokers on page 14 only if (1) is selected.)

[ ] (1) Seller will pay Principal Broker the fee specified by separate written commission agreement between Principal Broker and Seller. Principal Broker will pay Cooperating Broker the fee specified in the Agreement Between Brokers found below the parties' signatures to this contract.

[X] (2) At the closing of this sale, Seller will pay:

Principal Broker a total cash fee of:
[X] 4.000 % of the sales price.
[ ] _____ .

Cooperating Broker a total cash fee of:
[ ] _____ % of the sales price.
[ ] _____ .

The cash fees will be paid in Jefferson County, Texas. Seller authorizes the title company to pay the brokers from the Seller's proceeds at closing.

NOTICE: Chapter 62, Texas Property Code, authorizes a broker to secure an earned commission with a lien against the Property.

C. The parties may not amend this Paragraph 9 without the written consent of the brokers affected by the amendment.

10. CLOSING:

A. The date of the closing of the sale (closing date) will be on or before the later of:
(1) [X] **14** days after the expiration of the feasibility period.
[ ] _____ *(specific date)*.
[ ] _____ .
(2) 7 days after objections made under Paragraph 6C have been cured or waived.

B. If either party fails to close by the closing date, the non-defaulting party may exercise the remedies in Paragraph 15.

C. At closing, Seller will execute and deliver, at Seller's expense, a [ ] general [X] special warranty deed. The deed must include a vendor's lien if any part of the sales price is financed. The deed must convey good and indefeasible title to the Property and show no exceptions other than those permitted under Paragraph 6 or other provisions of this contract. Seller must convey the Property:
(1) with no liens, assessments, or other security interests against the Property which will not be satisfied out of the sales price, unless securing loans Buyer assumes;
(2) without any assumed loans in default; and
(3) with no persons in possession of any part of the Property as lessees, tenants at sufferance, or trespassers except tenants under the written leases assigned to Buyer under this contract.

D. At closing, Seller, at Seller's expense, will also deliver to Buyer:
(1) tax statements showing no delinquent taxes on the Property;
(2) an assignment of all leases to or on the Property;
(3) to the extent assignable, an assignment to Buyer of any licenses and permits related to the Property;
(4) evidence that the person executing this contract is legally capable and authorized to bind Seller;
(5) an affidavit acceptable to the title company stating that Seller is not a foreign person or, if Seller is a foreign person, a written authorization for the title company to: (i) withhold from Seller's proceeds an amount sufficient to comply with applicable tax law; and (ii) deliver the amount to the Internal Revenue Service (IRS) together with appropriate tax forms; and
(6) any notices, statements, certificates, affidavits, releases, and other documents required by this contract, the commitment, or law necessary for the closing of the sale and issuance of the title policy, all of which must be completed by Seller as necessary.

E. At closing, Buyer will:
(1) pay the sales price in good funds acceptable to the title company;
(2) deliver evidence that the person executing this contract is legally capable and authorized to bind Buyer;
(3) sign and send to each tenant in a lease for any part of the Property a written statement that:
(a) acknowledges Buyer has received and is responsible for the tenant's security deposit; and
(b) specifies the exact dollar amount of the security deposit;
(4) sign an assumption of all leases then in effect; and
(5) execute and deliver any notices, statements, certificates, or other documents required by this contract or law necessary to close the sale.

F. Unless the parties agree otherwise, the closing documents will be as found in the basic forms in the current edition of the State Bar of Texas Real Estate Forms Manual without any additional clauses.

11. POSSESSION: Seller will deliver possession of the Property to Buyer upon closing and funding of this sale in its present condition with any repairs Seller is obligated to complete under this contract, ordinary wear and tear excepted. Any possession by Buyer before closing or by Seller after closing that is not authorized by a separate written lease agreement is a landlord-tenant at sufferance relationship between the parties.

12. SPECIAL PROVISIONS: The following special provisions apply and will control in the event of a conflict with other provisions of this contract. *(If special provisions are contained in an Addendum, identify the Addendum here and reference the Addendum in Paragraph 22D.)*

13. SALES EXPENSES:

A. Seller's Expenses: Seller will pay for the following at or before closing:
(1) releases of existing liens, other than those liens assumed by Buyer, including prepayment penalties and recording fees;
(2) release of Seller's loan liability, if applicable;
(3) tax statements or certificates;
(4) preparation of the deed;
(5) one-half of any escrow fee;
(6) costs to record any documents to cure title objections that Seller must cure; and
(7) other expenses that Seller will pay under other provisions of this contract.

B. Buyer's Expenses: Buyer will pay for the following at or before closing:
(1) all loan expenses and fees;
(2) preparation of any deed of trust;
(3) recording fees for the deed and any deed of trust;
(4) premiums for flood insurance as may be required by Buyer's lender;
(5) one-half of any escrow fee;
(6) other expenses that Buyer will pay under other provisions of this contract.

14. PRORATIONS:

A. Prorations:
(1) Interest on any assumed loan, taxes, rents, and any expense reimbursements from tenants will be prorated through the closing date.
(2) If the amount of ad valorem taxes for the year in which the sale closes is not available on the closing date, taxes will be prorated on the basis of taxes assessed in the previous year. If the taxes for the year in which the sale closes vary from the amount prorated at closing, the parties will adjust the prorations when the tax statements for the year in which the sale closes become available. This Paragraph 14A(2) survives closing.
(3) If Buyer assumes a loan or is taking the Property subject to an existing lien, Seller will transfer all reserve deposits held by the lender for the payment of taxes, insurance premiums, and other charges to Buyer at closing and Buyer will reimburse such amounts to Seller by an appropriate adjustment at closing.

B. Rollback Taxes: If Seller's use or change in use of the Property before closing results in the assessment of additional taxes, penalties, or interest (assessments) for periods before closing, the assessments will be the obligation of the Seller. If this sale or Buyer's use of the Property after closing results in additional assessments for periods before closing, the assessments will be the obligation of Buyer. This Paragraph 14B survives closing.

C. Rent and Security Deposits: At closing, Seller will tender to Buyer all security deposits and the following advance payments received by Seller for periods after closing: prepaid expenses, advance rental payments, and other advance payments paid by tenants. Rents prorated to one party but received by the other party will be remitted by the recipient to the party to whom it was prorated within 5 days after the rent is received. This Paragraph 14C survives closing.

15. DEFAULT:

A. If Buyer fails to comply with this contract, Buyer is in default and Seller, as Seller's sole remedy(ies), may terminate this contract and receive the earnest money, as liquidated damages for Buyer's failure except for any damages resulting from Buyer's inspections, studies or assessments in accordance with Paragraph 7C(3) which Seller may pursue; or
(Check if applicable)
[X] enforce specific performance, or seek such other relief as may be provided by law.

B. If, without fault, Seller is unable within the time allowed to deliver the estoppel certificates, survey or the commitment, Buyer may:
(1) terminate this contract and receive the earnest money, less any independent consideration under Paragraph 7B(1), as liquidated damages and as Buyer's sole remedy; or
(2) extend the time for performance up to 15 days and the closing will be extended as necessary.

C. Except as provided in Paragraph 15B, if Seller fails to comply with this contract, Seller is in default and Buyer may:
(1) terminate this contract and receive the earnest money, less any independent consideration under Paragraph 7B(1), as liquidated damages and as Buyer's sole remedy; or
(2) enforce specific performance, or seek such other relief as may be provided by law, or both.

16. CONDEMNATION: If before closing, condemnation proceedings are commenced against any part of the Property, Buyer may:

A. terminate this contract by providing written notice to Seller within 15 days after Buyer is advised of the condemnation proceedings and the earnest money, less any independent consideration paid under Paragraph 7B(1), will be refunded to Buyer; or

B. appear and defend in the condemnation proceedings and any award will, at Buyer's election, belong to:
(1) Seller and the sales price will be reduced by the same amount; or
(2) Buyer and the sales price will not be reduced.

17. ATTORNEY'S FEES: If Buyer, Seller, any broker, or the title company is a prevailing party in any legal proceeding brought under or with relation to this contract or this transaction, such party is entitled to recover from the non-prevailing parties all costs of such proceeding and reasonable attorney's fees. This Paragraph 17 survives termination of this contract.

18. ESCROW:

A. At closing, the earnest money will be applied first to any cash down payment, then to Buyer's closing costs, and any excess will be refunded to Buyer. If no closing occurs, the title company may require payment of unpaid expenses incurred on behalf of the parties and a written release of liability of the title company from all parties.

B. If one party makes written demand for the earnest money, the title company will give notice of the demand by providing to the other party a copy of the demand. If the title company does not receive written objection to the demand from the other party within 15 days after the date the title company sent the demand to the other party, the title company may disburse the earnest money to the party making demand, reduced by the amount of unpaid expenses incurred on behalf of the party receiving the earnest money and the title company may pay the same to the creditors.

C. The title company will deduct any independent consideration under Paragraph 7B(1) before disbursing any earnest money to Buyer and will pay the independent consideration to Seller.

D. If the title company complies with this Paragraph 18, each party hereby releases the title company from all claims related to the disbursal of the earnest money.

E. Notices under this Paragraph 18 must be sent by certified mail, return receipt requested. Notices to the title company are effective upon receipt by the title company.

F. Any party who wrongfully fails or refuses to sign a release acceptable to the title company within 7 days after receipt of the request will be liable to the other party for: (i) damages; (ii) the earnest money; (iii) reasonable attorney's fees; and (iv) all costs of suit.

G. ☐ Seller ☐ Buyer intend(s) to complete this transaction as a part of an exchange of like-kind properties in accordance with Section 1031 of the Internal Revenue Code, as amended. All expenses in connection with the contemplated exchange will be paid by the exchanging party. The other party will not incur any expense or liability with respect to the exchange. The parties agree to cooperate fully and in good faith to arrange and consummate the exchange so as to comply to the maximum extent feasible with the provisions of Section 1031 of the Internal Revenue Code. The other provisions of this contract will not be affected in the event the contemplated exchange fails to occur.

19. MATERIAL FACTS: To the best of Seller's knowledge and belief: *(Check only one box.)*

☐ A. Seller is not aware of any material defects to the Property except as stated in the attached Commercial Property Condition Statement (TAR-1408).

☒ B. Except as otherwise provided in this contract, Seller is not aware of:
(1) any subsurface: structures, pits, waste, springs, or improvements;
(2) any pending or threatened litigation, condemnation, or assessment affecting the Property;
(3) any environmental hazards or conditions that materially affect the Property;
(4) whether the Property is or has been used for the storage or disposal of hazardous materials or toxic waste, a dump site or landfill, or any underground tanks or containers;
(5) whether radon, asbestos containing materials, urea-formaldehyde foam insulation, lead-based paint, toxic mold (to the extent that it adversely affects the health of ordinary occupants), or other pollutants or contaminants of any nature now exist or ever existed on the Property;
(6) any wetlands, as defined by federal or state law or regulation, on the Property;
(7) any threatened or endangered species or their habitat on the Property;
(8) any present or past infestation of wood-destroying insects in the Property's improvements;
(9) any contemplated material changes to the Property or surrounding area that would materially and detrimentally affect the ordinary use of the Property;
(10) any condition on the Property that violates any law or ordinance.

(Describe any exceptions to (1)-(10) in Paragraph 12 or an addendum.)

20. NOTICES: All notices between the parties under this contract must be in writing and are effective when hand-delivered, mailed by certified mail return receipt requested, or sent by facsimile transmission to the parties addresses or facsimile numbers stated in Paragraph 1. The parties will send copies of any notices to the broker representing the party to whom the notices are sent.

☒ A. Seller also consents to receive any notices by e-mail at Seller's e-mail address stated in Paragraph 1.
☒ B. Buyer also consents to receive any notices by e-mail at Buyer's e-mail address stated in Paragraph 1.

21. DISPUTE RESOLUTION: The parties agree to negotiate in good faith in an effort to resolve any dispute related to this contract that may arise. If the dispute cannot be resolved by negotiation, the parties will submit the dispute to mediation before resorting to arbitration or litigation and will equally share the costs of a mutually acceptable mediator. This paragraph survives termination of this contract. This paragraph does not preclude a party from seeking equitable relief from a court of competent jurisdiction.

22. AGREEMENT OF THE PARTIES:

A. This contract is binding on the parties, their heirs, executors, representatives, successors, and permitted assigns. This contract is to be construed in accordance with the laws of the State of Texas. If any term or condition of this contract shall be held to be invalid or unenforceable, the remainder of this contract shall not be affected thereby.

B. This contract contains the entire agreement of the parties and may not be changed except in writing.

C. If this contract is executed in a number of identical counterparts, each counterpart is an original and all counterparts, collectively, constitute one agreement.

D. Addenda which are part of this contract are: *(Check all that apply.)*

[X] (1) Property Description Exhibit identified in Paragraph 2;
[ ] (2) Commercial Contract Financing Addendum (TAR-1931);
[ ] (3) Commercial Property Condition Statement (TAR-1408);
[ ] (4) Commercial Contract Addendum for Special Provisions (TAR-1940);
[ ] (5) Notice to Purchaser of Real Property in a Water District (MUD);
[ ] (6) Addendum for Coastal Area Property (TAR-1915);
[ ] (7) Addendum for Property Located Seaward of the Gulf Intracoastal Waterway (TAR-1916);
[ ] (8) Information About Brokerage Services (TAR-2501);
[X] (9) Information About Mineral Clauses in Contract Forms (TAR-2509); and
[X] (10) **Drainage District 7 Notice**

(Note: Counsel for the Texas Association of REALTORS® (TAR) has determined that any of the foregoing addenda which are promulgated by the Texas Real Estate Commission (TREC) or published by TAR are appropriate for use with this form.)

E. Buyer [X] may [ ] may not assign this contract. If Buyer assigns this contract, Buyer will be relieved of any future liability under this contract only if the assignee assumes, in writing, all obligations and liability of Buyer under this contract.

23. TIME: Time is of the essence in this contract. The parties require strict compliance with the times for performance. If the last day to perform under a provision of this contract falls on a Saturday, Sunday, or legal holiday, the time for performance is extended until the end of the next day which is not a Saturday, Sunday, or legal holiday.

24. EFFECTIVE DATE: The effective date of this contract for the purpose of performance of all obligations is the date the title company receipts this contract after all parties execute this contract.

25. ADDITIONAL NOTICES:

A. Buyer should have an abstract covering the Property examined by an attorney of Buyer's selection, or Buyer should be furnished with or obtain a title policy.

B. If the Property is situated in a utility or other statutorily created district providing water, sewer, drainage, or flood control facilities and services, Chapter 49, Texas Water Code, requires Seller to deliver and Buyer to sign the statutory notice relating to the tax rate, bonded indebtedness, or standby fees of the district before final execution of this contract.

C. Notice Required by §13.257, Water Code: “The real property, described below, that you are about to purchase may be located in a certificated water or sewer service area, which is authorized by law to provide water or sewer service to the properties in the certificated area. If your property is located in a certificated area there may be special costs or charges that you will be required to pay before you can receive water or sewer service. There may be a period required to construct lines or other facilities necessary to provide water or sewer service to your property. You are advised to determine if the property is in a certificated area and contact the utility service provider to determine the cost that you

will be required to pay and the period, if any, that is required to provide water or sewer service to your property. The undersigned purchaser hereby acknowledges receipt of the foregoing notice at or before the execution of a binding contract for the purchase of the real property described in the notice or at closing of purchase of the real property." The real property is described in Paragraph 2 of this contract.

D. If the Property adjoins or shares a common boundary with the tidally influenced submerged lands of the state, §33.135 of the Texas Natural Resources Code requires a notice regarding coastal area property to be included as part of this contract *(the Addendum for Coastal Area Property (TAR-1915) may be used).*

E. If the Property is located seaward of the Gulf Intracoastal Waterway, §61.025, Texas Natural Resources Code, requires a notice regarding the seaward location of the Property to be included as part of this contract *(the Addendum for Property Located Seaward of the Gulf Intracoastal Waterway (TAR-1916) may be used).*

F. If the Property is located outside the limits of a municipality, the Property may now or later be included in the extra-territorial jurisdiction (ETJ) of a municipality and may now or later be subject to annexation by the municipality. Each municipality maintains a map that depicts its boundaries and ETJ. To determine if the Property is located within a municipality's ETJ, Buyer should contact all municipalities located in the general proximity of the Property for further information.

G. Brokers are not qualified to perform property inspections, surveys, engineering studies, environmental assessments, or inspections to determine compliance with zoning, governmental regulations, or laws. Buyer should seek experts to perform such services. Buyer should review local building codes, ordinances and other applicable laws to determine their effect on the Property. Selection of experts, inspectors, and repairmen is the responsibility of Buyer and not the brokers. Brokers are not qualified to determine the credit worthiness of the parties.

H. NOTICE OF WATER LEVEL FLUCTUATIONS: If the Property adjoins an impoundment of water, including a reservoir or lake, constructed and maintained under Chapter 11, Water Code, that has a storage capacity of at least 5,000 acre-feet at the impoundment's normal operating level, Seller hereby notifies Buyer: "The water level of the impoundment of water adjoining the Property fluctuates for various reasons, including as a result of: (1) an entity lawfully exercising its right to use the water stored in the impoundment; or (2) drought or flood conditions."

I. LICENSE HOLDER DISCLOSURE: Texas law requires a real estate license holder who is a party to a transaction or acting on behalf of a spouse, parent, child, business entity in which the license holder owns more than 10%, or a trust for which the license holder acts as a trustee or of which the license holder or the license holder's spouse, parent or child is a beneficiary, to notify the other party in writing before entering into a contract of sale. Disclose if applicable: _____.

26. CONTRACT AS OFFER: The execution of this contract by the first party constitutes an offer to buy or sell the Property. Unless the other party accepts the offer by 5:00 p.m., in the time zone in which the Property is located, on _____ , the offer will lapse and become null and void.

Commercial Contract - Unimproved Property concerning 17.97 Acres on Viterbo Road

READ THIS CONTRACT CAREFULLY. The brokers and agents make no representation or recommendation as to the legal sufficiency, legal effect, or tax consequences of this document or transaction. CONSULT your attorney BEFORE signing.

Seller: Jefferson County Texas

By: _____
By (signature): _____
Printed Name: Jeff R. Branick
Title: County Judge

By: _____
By (signature): _____
Printed Name: _____
Title: _____

Buyer: Clark C. Shofner

By: _____
By (signature): DocuSigned by: Clark C. Shofner
Printed Name: Clark C. Shofner
Title: _____

By: _____
By (signature): _____
Printed Name: _____
Title: _____

ATTEST Carolyn L. Gundy
DATE 3/18/19

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS

AGREEMENT BETWEEN BROKERS

(use only if Paragraph 9B(1) is effective)

Principal Broker agrees to pay _____ (Cooperating Broker) a fee when the Principal Broker's fee is received. The fee to be paid to Cooperating Broker will be:

- ☐ $ _____, or
- ☐ _____ % of the sales price, or
- ☐ _____ % of the Principal Broker's fee.

The title company is authorized and directed to pay Cooperating Broker from Principal Broker's fee at closing. This Agreement Between Brokers supersedes any prior offers and agreements for compensation between brokers.

Principal Broker: _____ Cooperating Broker: _____

By: _____ By: _____

ATTORNEYS

Seller's attorney: _____ Buyer's attorney: _____

Address: _____ Address: _____

Phone & Fax: _____ Phone & Fax: _____

E-mail: _____ E-mail: _____

Seller's attorney requests copies of documents, notices, and other information:

- ☐ the title company sends to Seller.
- ☐ Buyer sends to Seller.

Buyer's attorney requests copies of documents, notices, and other information:

- ☐ the title company sends to Buyer.
- ☐ Seller sends to Buyer.

ESCROW RECEIPT

The title company acknowledges receipt of:

- ☐ A. the contract on this day _____ (effective date);
- ☐ B. earnest money in the amount of $ _____ in the form of _____ on _____.

Title company: _____ Address: _____

By: _____ Phone & Fax: _____

Assigned file number (GF#): _____ E-mail: _____

DocuSign Envelope ID: 64981CF5-CA91-4B2D-A1AC-A52F07402CD3

Tract 1-A out of:

TRACT 1-A and 1-B

24.61 (CALLED 24.440) ACRES OF LAND OUT OF BLOCK 18, RANGE "M"

PORT ARTHUR LAND COMPANY SUBDIVISION IN THE WILLIAM McFADDIN SURVEY,

SECTION NO. 4, ABSTRACT NO. 420, JEFFERSON COUNTY, TEXAS

BEING 24.61 (Called 24.440) acres of land out of and a part of Lots 1, 2, 3 & 7, Block 18, Range "M", Port Arthur Land Company Subdivision of the William McFaddin Survey, Section No. 4, Abstract No. 420, recorded in Volume 1, Page 22, Map Records, Jefferson County, Texas; being the same tract of land conveyed to Jefferson County, Texas, recorded in Volume 1753, Page 146, Deed Records, Jefferson County, Texas; said 24.61 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a ½" steel rod, capped and marked "SOUTEX", set on the North right of way line of a dedicated road named Viterbo Road; said ½" steel rod being the Southwest corner of a (Called 42.47) acre tract of land conveyed to Third Coast Equity, LLC, recorded in File No. 2015007896, Official Public Records, Jefferson County, Texas; having a State Plane Coordinate of N: 13926442.72, E: 3540803.94;

THENCE, South 36 deg., 39 min., 32 sec., West (Called South 40 deg., 17 min., 00 sec., West), on the North right of way line of said Viterbo Road, a distance of 1626.10' to a 5/8" steel rod found on the East line of a 100' wide Southern Pacific Railroad right of way; said 5/8" steel rod being the Southwest corner of the herein described tract;

THENCE, North 30 deg., 56 min., 44 sec., West (Called North 27 deg., 10 min., 00 sec., West), on the East line of said Southern Pacific Railroad right of way, a distance of 1410.16' (Called 1410.46') to a ½" steel rod, capped and marked "MARK WHITELEY", found for the Southwest corner of a (Called 30.6127) acre tract of land conveyed to Valero Partners Lucas, LLC, recorded in File No. 2013039467, Official Public Records, Jefferson County, Texas; said ½" steel rod being the Northwest corner of the herein described tract;

THENCE, North 86 deg., 47 min., 34 sec., East (Called North 89 deg., 44 min., 00 sec., East), a distance of 900.96' passing a 5/8" steel rod found for the Southwest corner of the (Called 42.47) acre tract, same being the Southeast corner of a (Called 10.499) acre tract of land conveyed to Building Materials Investment Corp., recorded in File No. 2007006475, Official Public Records, Jefferson County, Texas; continuing for a total distance of 1698.66' to the POINT OF BEGINNING and containing 24.61 acres of land, more or less.

DS
US

DocuSign Envelope ID: 64981CF5-CA91-4B2D-A1AC-A52F07402CD3

11/2/2015

EQUAL HOUSING OPPORTUNITY

Information About Brokerage Services

Texas law requires all real estate licensees to give the following information about brokerage services to prospective buyers, tenants, sellers and landlords.

600

TYPES OF REAL ESTATE LICENSE HOLDERS:

- **A BROKER** is responsible for all brokerage activities, including acts performed by sales agents sponsored by the broker.
- **A SALES AGENT** must be sponsored by a broker and works with clients on behalf of the broker.

A BROKER'S MINIMUM DUTIES REQUIRED BY LAW (A client is the person or party that the broker represents):

- Put the interests of the client above all others, including the broker's own interests;
- Inform the client of any material information about the property or transaction received by the broker;
- Answer the client's questions and present any offer to or counter-offer from the client; and
- Treat all parties to a real estate transaction honestly and fairly.

A LICENSE HOLDER CAN REPRESENT A PARTY IN A REAL ESTATE TRANSACTION:

AS AGENT FOR OWNER (SELLER/LANDLORD): The broker becomes the property owner's agent through an agreement with the owner, usually in a written listing to sell or property management agreement. An owner's agent must perform the broker's minimum duties above and must inform the owner of any material information about the property or transaction known by the agent, including information disclosed to the agent or subagent by the buyer or buyer's agent.

AS AGENT FOR BUYER/TENANT: The broker becomes the buyer/tenant's agent by agreeing to represent the buyer, usually through a written representation agreement. A buyer's agent must perform the broker's minimum duties above and must inform the buyer of any material information about the property or transaction known by the agent, including information disclosed to the agent by the seller or seller's agent.

AS AGENT FOR BOTH - INTERMEDIARY: To act as an intermediary between the parties the broker must first obtain the written agreement of each party to the transaction. The written agreement must state who will pay the broker and, in conspicuous bold or underlined print, set forth the broker's obligations as an intermediary. A broker who acts as an intermediary:

- Must treat all parties to the transaction impartially and fairly;
- May, with the parties' written consent, appoint a different license holder associated with the broker to each party (owner and buyer) to communicate with, provide opinions and advice to, and carry out the instructions of each party to the transaction.
- Must not, unless specifically authorized in writing to do so by the party, disclose:
  - that the owner will accept a price less than the written asking price;
  - that the buyer/tenant will pay a price greater than the price submitted in a written offer; and
  - any confidential information or any other information that a party specifically instructs the broker in writing not to disclose, unless required to do so by law.

AS SUBAGENT: A license holder acts as a subagent when aiding a buyer in a transaction without an agreement to represent the buyer. A subagent can assist the buyer but does not represent the buyer and must place the interests of the owner first.

TO AVOID DISPUTES, ALL AGREEMENTS BETWEEN YOU AND A BROKER SHOULD BE IN WRITING AND CLEARLY ESTABLISH:

- The broker's duties and responsibilities to you, and your obligations under the representation agreement.
- Who will pay the broker for services provided to you, when payment will be made and how the payment will be calculated.

LICENSE HOLDER CONTACT INFORMATION: This notice is being provided for information purposes. It does not create an obligation for you to use the broker's services. Please acknowledge receipt of this notice below and retain a copy for your records.

KenWheel, Inc. dba Wheeler Commercial	579943	lwheeler@wheeler-commercial.com	(409)899-3300
Licensed Broker /Broker Firm Name or Primary Assumed Business Name	License No.	Email	Phone
Lee Y. Wheeler, III	467055	lwheeler@wheeler-commercial.com	(409)899-3300
Designated Broker of Firm	License No.	Email	Phone
Licensed Supervisor of Sales Agent/ Associate	License No.	Email	Phone
Sales Agent/Associate's Name	License No.	Email	Phone

DS
US
Buyer/Tenant/Seller/Landlord Initials

2/26/2019 | 15:02 CST
Date

DocuSign Envelope ID: 64981CF5-CA91-4B2D-A1AC-A52F07402CD3

NOTICE TO PURCHASER

The real property, described below, which you are about to purchase is located in the Jefferson County Drainage District No. 7. The District has taxing authority separate from any other taxing authority, and may, subject to voter approval, issue an unlimited amount of bonds and levy an unlimited rate of tax in payment of such bonds. As of this date, the most recent rate of taxes levied by the District on real property located in the District is $0.165305 on each $100.00 of assessed evaluation. The total amount of bonds which has been approved by the voters and which have been or may, at this date, be issued is $0.00, and the aggregate initial principal amounts of all bonds issued for one or more of the specified facilities of the District and payable in whole or in part from property taxes is $0.00. The District has $19,480,000 in aggregate principal amount of maintenance notes which are payable from any lawfully available funds of the District, including the proceeds of maintenance taxes.

The District is located, in part, in the cities of Port Arthur, Nederland, Groves, and Port Neches, Texas, and their extraterritorial jurisdictions.

The purpose of this District is to provide drainage and flood control facilities and services within the District through the issuance of bonds payable in whole or in part from property taxes. The cost of these utility facilities is not included in the purchase price of your property, and these utility facilities are owned or to be owned by the District. The legal description of the property you are acquiring is as follows:

See Exhibit "A" attached hereto and incorporated herein for all purposes.

PURCHASERS ARE ADVISED THAT THE INFORMATION ON THIS FORM IS SUBJECT TO CHANGE BY THE DISTRICT AT ANY TIME. THE DISTRICT ROUTINELY ESTABLISHES TAX RATES DURING THE MONTHS OF SEPTEMBER THROUGH DECEMBER OF EACH YEAR, EFFECTIVE FOR THE YEAR IN WHICH THE TAX RATES ARE APPROVED BY THE DISTRICT. PURCHASERS ARE ADVISED TO CONTACT THE DISTRICT TO DETERMINE THE STATUS OF ANY CURRENT OR PROPOSED CHANGES TO THE INFORMATION SHOWN ON THIS FORM.

Date: March 18, 2019

Jefferson County, Texas

"Sellers"

The undersigned purchasers hereby acknowledge receipt of the foregoing notice at or prior to execution of a binding contract for the purchase of the real property described in such notice or at closing of purchase of the real property.

Date: 2/26/2019 | 15:02 CST

DocuSigned by:
Clark C. Shofner
F0E6F15225704A6...

"Purchasers"

SETEX
FACILITIES & MAINTENANCE
"Strength in Construction"

Mailing Address:
P.O. Box 20658
Beaumont, Texas 77720-0658

(409) 842-8181
(409) 842-2274
setex@setexconstruction.com
setexconstruction.com

General Contracting

Job Order Contracting

Facilities Maintenance

Commercial

Industrial

Government

Healthcare

Infrastructure

Corporate

Education

Performing Arts

Historical

March 5, 2019

Alex Rupp
Jefferson County
6000 Air Line Dr.
Beaumont, TX77705

Project: ***"Jerry Ware Terminal Electrical"***

Subject: ***"Proposal"***

Dear Mr. Rupp

We are pleased to submit our Rough Order of Magnitude proposal to utilize our 15/041JN-11-2015 Choice Partners JOC Texas Contract based on local CCI and our coefficient of .89.

Proposal Recap:

- Disconnect and remove existing panels
- Disconnect and remove existing main breaker
- Furnish and install (2) new panels rated for voltage required
- Furnish and install (1) main breaker in a separate enclosure
- Run new wire from Entergy transformers, in vault, to new panels
- Clean up of jobsite daily, and final clean upon completion

Sub Total	**$**	**61,903.58**
Bond	**$**	**1,547.58**
Total Price	**$**	**63,451.16**

Exclusions:

Utility company charges

We will need Entergy to shut down the vault to accommodate working on panels.

All efforts have been made to work with Entergy on this. We are not responsible for any extra charges Entergy may require

Unforeseen items beyond specified scope listed above and liquidated damages.

Plans will have to be signed off from the customer before any work can begin

We estimate approximately Three (3) working days to complete upon material delivery

This pricing is based on overtime work hours of Friday thru Sunday 7:00 am to 9:00 pm. Once accepted this proposal turns into a lump sum contract. Please contact us at 409-842-8181 at your convenience to discuss this estimate.

SETEX
FACILITIES & MAINTENANCE
"Strength in Construction"

Mailing Address:
P.O. Box 20658
Beaumont, Texas 77720-0658

(409) 842-8181
(409) 842-2274
setex@setexconstruction.com
setexconstruction.com

Respectfully submitted,
SETEX Facilities & Maintenance

Matthew Ueding
18-0222

General Contracting

Job Order Contracting

Facilities Maintenance

Commercial

Industrial

Government

Healthcare

Infrastructure

Corporate

Education

Performing Arts

Historical

JEFFERSON COUNTY, TEXAS

Jeff Branick, County Judge

ATTEST:

Carolyn L. Guidry, County Clerk

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS

PERFORMANCE CONTRACT

This Performance Contract (this "Agreement") is made this 18th day of March, 2019 between:

PARTIES

JOHNSON CONTROLS, INC. ("JCI")
3021 West Bend Drive
Irving, TX 75063

and

Jefferson County ("Customer")
1149 Pearl Street
Beaumont, TX 77701

RECITALS

WHEREAS, Customer desires to retain JCI to perform the work specified in Schedule 1 (Scope of Work) hereto (the "Work") relating to the installation of the improvement measures (the "Improvement Measures") described therein; and

WHEREAS, Customer is authorized and empowered under applicable Laws (as defined below) to enter into this Agreement, and has taken all necessary action under applicable Laws to enter into this Agreement; and

WHEREAS, Customer has selected JCI to perform the Work after it determined JCI's proposal was the most advantageous to Customer in accordance with all applicable procurement and other Laws.

NOW, THEREFORE, in consideration of the mutual promises set forth herein, the parties agree as follows:

AGREEMENT

1. **SCOPE OF THE AGREEMENT.** JCI shall perform the Work set forth in Schedule 1. After the Work is Substantially Complete (as defined below) and the Certificate of Substantial Completion is executed by Customer and JCI, JCI shall provide the assured performance guarantee (the "Assured Performance Guarantee") and the measurement and verification services (the "M&V Services") set forth in Schedule 2 (Assured Performance Guarantee). Customer shall make payments to JCI for the Work and the M&V Services in accordance with Schedule 4 (Price and Payment Terms).

2. **AGREEMENT DOCUMENTS:** In addition to the terms and conditions of this Agreement, the following Schedules are incorporated into and shall be deemed an integral part of this Agreement:

   Schedule 1 – Scope of Work
   Schedule 2 – Assured Performance Guarantee
   Schedule 3 – Customer Responsibilities
   Schedule 4 – Price and Payment Terms

© 2008 Johnson Controls, Inc.

3. **NOTICE TO PROCEED; SUBSTANTIAL COMPLETION; M&V SERVICES.** This Agreement shall become effective on the date of the last signature on the signature page below. JCI shall commence performance of the Work within ten (10) business days of receipt of Customer's Notice to Proceed, a form of which is attached hereto as Attachment 1, and shall achieve Substantial Completion of the Work by the Substantial Completion date, which shall be the earlier of:

   (a) the date on which Customer executes a Certificate of Substantial Completion substantially in the form attached hereto as Attachment 3;

   or

   (b) sixteen months after JCI's receipt of Customer's Notice to Proceed, subject to adjustments set forth in Section 4 and Section 5 below.

   For purposes of this Agreement, "Substantial Completion" means that JCI has provided sufficient materials and services to permit Customer to operate the Improvement Measures. The M&V Services shall commence on the first day of the month following the month in which Customer executes a Certificate of Substantial Completion and shall continue throughout the Guarantee Term, subject to earlier termination of the Assured Performance Guarantee as provided herein. Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of Customer's responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, the Assured Performance Guarantee shall automatically terminate and JCI shall have no liability thereunder.

4. **DELAYS AND IMPACTS.** If JCI is delayed in the commencement, performance, or completion of the Work and/or M&V Services by causes beyond its control and without its fault, including but not limited to inability to access property; concealed or unknown conditions encountered at the project, differing from the conditions represented by Customer in the bid documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work; a Force Majeure (as defined below) condition; failure by Customer to perform its obligations under this Agreement; or failure by Customer to cooperate with JCI in the timely completion of the Work, JCI shall provide written notice to Customer of the existence, extent of, and reason for such delays and impacts. Under such circumstances, an equitable adjustment in the time for performance, price and payment terms, and the Assured Performance Guarantee shall be made.

5. **ACCESS.** Customer shall provide JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties in Customer's control that are subject to the Work and M&V Services. Customer further agrees to assist JCI, its subcontractors, and its agents to gain access to facilities and properties that are not controlled by Customer but are necessary for JCI to complete the Work and provide the M&V Services. An equitable adjustment in the time for performance, price and payment terms, and Assured Performance Guarantee shall be made as a result of any failure to grant such access.

6. **PERMITS, TAXES, AND FEES.** Unless otherwise specified in Schedule 3 (Customer Responsibilities), JCI shall be responsible for obtaining all building permits required for it to perform the Work. Unless otherwise specified in Schedule 1 (Scope of Work), Customer shall be responsible for obtaining all other permits, licenses, approvals, permissions and certifications, including but not limited to, all zoning and land use changes or exceptions required for the provision of the Work or the ownership and use of the Improvement Measures. JCI shall not be obligated to provide any changes to or improvement of the facilities or any portion thereof required under any applicable building, fire, safety, sprinkler or other applicable code, standard, law, regulation, ordinance or other requirement unless the same expressly regulates the installation of the Improvement Measures. Without limiting the foregoing, JCI's obligations with respect to the Work is not intended to encompass any changes or improvements that relate to any compliance matters (whether known or unknown) that are not directly related to the installation of the Improvement Measures or which have been imposed or enforced because of the occasion or opportunity of review by any governmental authority. Customer shall be responsible for and shall pay when due all assessments, charges and sales, use, property, excise, or other taxes now or hereafter imposed by any governmental body or agency upon the provision of the Work or the M&V Services, implementation or presence of the Improvement Measures, the use of the Improvement Measures or payments due to JCI under this Agreement, other than taxes upon the net income of JCI. Customer shall also be responsible for real or personal property taxes relating to equipment or material

© 2008 Johnson Controls, Inc.

included in the Improvement Measures. Any fees, taxes, or other lawful charges paid by JCI on account of Customer shall become immediately due from Customer to JCI.

7. **WARRANTY.** JCI will perform the Work in a professional, workmanlike manner. JCI will promptly re-perform any non-conforming Work for no charge, as long as Customer provides written notice to JCI within one (1) year following Substantial Completion or such other period identified in Schedule 1. If JCI installs or furnishes goods or equipment under this Agreement, and such goods or equipment are covered by an end-user warranty from their manufacturer, JCI will transfer the benefits of such warranty to Customer. The foregoing remedy with respect to the Work, together with any remedy provided by goods or equipment manufacturers, shall be Customer's sole and exclusive remedies for warranty claims. Customer agrees that the one (1) year period following Substantial Completion, or such other period identified in Schedule 1, shall be a reasonable time for purposes of submitting valid warranty claims with respect to the Work. These exclusive remedies shall not have failed of their essential purpose so long as JCI transfers the benefits of any goods or equipment end-user warranty to Customer and remains willing to re-perform any non-conforming Work for no charge within the one (1) year period described above or such other period identified in Schedule 1. NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE PROVIDED BY JCI. This warranty does not extend to any Work that has been abused, altered, or misused, or repaired by Customer or third parties without the supervision or prior written approval of JCI. Except with respect to goods or equipment manufactured by JCI and furnished to Customer hereunder, for which JCI shall provide its express written manufacturer's warranty, JCI shall not be considered a merchant or vendor of goods or equipment.

8. **CLEANUP.** JCI shall keep the premises and the surrounding area free from accumulation of waste materials or rubbish caused by the Work and, upon completion of the Work, JCI shall remove all waste materials, rubbish, tools, construction equipment, machinery, and surplus materials.

9. **SAFETY; COMPLIANCE WITH LAWS.** JCI shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Work and M&V Services. Each of JCI and Customer shall comply with all applicable laws, ordinances, rules, regulations, and lawful orders of public authorities (collectively, "Laws") in connection with its performance hereunder.

10. **ASBESTOS-CONTAINING MATERIALS AND OTHER HAZARDOUS MATERIALS.**

Asbestos-Containing Materials: Neither party desires to or is licensed to undertake direct obligations relating to the identification, abatement, cleanup, control, removal or disposal of asbestos-containing materials (ACM). Consistent with applicable Laws, Customer shall supply JCI with any information in its possession relating to the presence of ACM in areas where JCI undertakes any Work or M&V Services that may result in the disturbance of ACM. It is JCI's policy to seek certification for facilities constructed prior to 1982 that no ACM is present, and Customer shall provide such certification for buildings it owns, or aid JCI in obtaining such certification from facility owners in the case of buildings that Customer does not own, if JCI will undertake Work or M&V Services in the facility that could disturb ACM. If either Customer or JCI becomes aware of or suspects the presence of ACM that may be disturbed by JCI's Work or M&V Services, it shall promptly stop the Work or M&V Services in the affected area and notify the other. As between Customer and JCI, Customer shall be responsible at its sole expense for addressing the potential for or the presence of ACM in conformance with all applicable Laws and addressing the impact of its disturbance before JCI continues with its Work or M&V Services, unless JCI had actual knowledge that ACM was present and acted with intentional disregard of that knowledge, in which case (i) JCI shall be responsible at is sole expense for remediating areas impacted by the disturbance of the ACM, and (ii) Customer shall resume its responsibilities for the ACM after JCI's remediation has been completed.

Other Hazardous Materials: JCI shall be responsible for removing or disposing of any Hazardous Materials (as defined below) that it uses in providing Work or M&V Services ("JCI Hazardous Materials") and for the remediation of any areas impacted by the release of JCI Hazardous Materials. For other Hazardous Materials that may be otherwise present at Customer's facilities ("Non-JCI Hazardous Materials"), Customer shall supply JCI with any information in its possession relating to the presence of such materials if their presence may affect JCI's performance of the Work or M&V Services. If either Customer or JCI becomes aware of or suspects the presence of Non-JCI Hazardous Materials that may interfere with JCI's Work or M&V Services, it shall promptly

© 2008 Johnson Controls, Inc.

stop the Work or M&V Services in the affected area and notify the other. As between Customer and JCI, Customer shall be responsible at its sole expense for removing and disposing of Non-JCI Hazardous Materials from its facilities and the remediation of any areas impacted by the release of Non-JCI Hazardous Materials, unless JCI had actual knowledge that Non-JCI Hazardous Materials were present and acted with intentional disregard of that knowledge, in which case (i) JCI shall be responsible at its sole expense for the remediation of any areas impacted by its release of such Non-JCI Hazardous Materials, and (ii) Customer shall remain responsible at its sole expense for the removal of Non-JCI Hazardous Materials that have not been released and for releases not resulting from JCI's performance of the Work or M&V Services. For purposes of this Agreement, "Hazardous Materials" means any material or substance that, whether by its nature or use, is now or hereafter defined or regulated as a hazardous waste, hazardous substance, pollutant or contaminant under applicable Law relating to or addressing public or employee health and safety and protection of the environment, or which is toxic, explosive, corrosive, flammable, radioactive, carcinogenic, mutagenic or otherwise hazardous or which is or contains petroleum, gasoline, diesel, fuel, another petroleum hydrocarbon product, or polychlorinated biphenyls. "Hazardous Materials" specifically includes mold and lead-based paint and specifically excludes ACM. JCI shall have no obligations relating to the identification, abatement, cleanup, control, removal, or disposal of mold, regardless of the cause of the mold.

11. **CHANGE ORDERS.** The parties, without invalidating this Agreement, may request changes in the Work to be performed under this Agreement, consisting of additions, deletions, or other revisions to the Work ("Change Orders"). The price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted in accordance with the Change Order. Such adjustments shall be determined by mutual agreement of the parties. JCI may delay performance until adjustments arising out of the Change Order are clarified and agreed upon. Any Change Order must be signed by an authorized representative of each party. If concealed or unknown conditions are encountered at the project, differing from the conditions represented by Customer in the bid documents or otherwise disclosed by Customer to JCI prior to the commencement of the Work, price and payment terms, time for performance and, if necessary, the Assured Performance Guarantee, shall be equitably adjusted. Claims for equitable adjustment may be asserted in writing within a reasonable time from the date a party becomes aware of a change to the Work by written notification. Failure to promptly assert a request for equitable adjustment, however, shall not constitute a waiver of any rights to seek any equitable adjustment with respect to such change.

12. **CUSTOMER FINANCING; TREATMENT; TAXES.** The parties acknowledge and agree that JCI is not making any representation or warranty to Customer with respect to matters not expressly addressed in this Agreement, including, but not limited to:

    (a) Customer's ability to obtain or make payments on any financing associated with paying for the Improvement Measures, related services, or otherwise;
    (b) Customer's proper legal, tax, accounting, or credit rating agency treatment relating to this Agreement; and
    (c) the necessity of Customer to raise taxes or seek additional funding for any purpose.

    Customer is solely responsible for its obligations and determinations with respect to the foregoing matters. In addition, the parties acknowledge and agree that Customer shall be responsible to comply, at its cost and expense, with all Laws that may be applicable to it relating to performance contracting, including, without limitation, any requirements relating to the procurement of goods and/or services and any legal, accounting, or engineering opinions or reviews required or obtained in connection with this Agreement.

© 2008 Johnson Controls, Inc.

13. **INSURANCE.** JCI shall maintain insurance in amounts no less than those set forth below in full force and effect at all times until the Work has been completed, and shall provide a certificate evidencing such coverage promptly following Customer's request therefor.

COVERAGES	LIMITS OF LIABILITY
Workmen's Compensation Insurance or self insurance, including Employer's Liability	Statutory
Commercial General Liability Insurance	$5,000,000 Per Occurrence $5,000,000 Aggregate
Comprehensive Automobile Liability Insurance	$5,000,000 Combined Single Limit

The above limits may be obtained through primary and excess policies, and may be subject to self-ensured retentions.

Customer shall all times be responsible for any loss or casualty to the Improvement Measures to the extent not caused by the negligence of JCI. Customer shall also maintain insurance coverage, of the types and in the amounts customary for the conduct of its business, throughout the term of this Agreement.

14. **INDEMNIFICATION.** To the fullest extent permitted by applicable Law, JCI shall indemnify the Customer with respect to any third-party claim alleging bodily injury, including death, or property damage to the extent such injury or damage is caused by the negligence or willful misconduct of JCI. A condition precedent to any obligation of JCI to indemnify the Customer pursuant to this Section 14 shall be for the Customer to promptly advise JCI of the claim pursuant to the notice provision of this Agreement.

15. **LIMITATION OF LIABILITY.** NEITHER JCI NOR CUSTOMER WILL BE RESPONSIBLE TO THE OTHER FOR ANY SPECIAL, INDIRECT, CONSEQUENTIAL, REMOTE, PUNITIVE, EXEMPLARY, LOSS OF PROFITS OR REVENUE, LOSS OF USE, OR SIMILAR DAMAGES, REGARDLESS OF HOW CHARACTERIZED AND REGARDLESS OF A PARTY HAVING BEEN ADVISED OF THE POSSIBILITY OF SUCH POTENTIAL LOSSES OR RELIEF, ARISING IN ANY MANNER FROM THIS AGREEMENT, THE WORK, THE IMPROVEMENT MEASURES, THE PREMISES, THE M&V SERVICES, OR OTHERWISE. WITHOUT LIMITING JCI'S EXPRESS OBLIGATIONS UNDER THE ASSURED PERFORMANCE GUARANTEE, JCI'S LIABILITY UNDER THIS AGREEMENT, REGARDLESS OF THE FORM OF ACTION, SHALL IN NO EVENT EXCEED THE TOTAL PRICE FOR THE WORK SET FORTH ON SCHEDULE 4. If this Agreement covers fire safety or security equipment or services, Customer understands that JCI is not an insurer, and the amounts JCI charges are based on the value of the equipment and services and are unrelated to the value of Customer's property or any risk of loss on Customer's premises. JCI shall not be liable for any damage or loss arising from or due to, directly or indirectly, the occurrences or consequences that the fire safety or security equipment and services are intended to detect, avert or record (collectively, a "Detection Event"). Customer agrees to waive all right of recovery against JCI arising by way of subrogation. Any obligation of JCI to indemnify Customer under the Agreement will not apply to claims arising from or due to a Detection Event. The foregoing waivers and limitations are fundamental elements of the basis for this Agreement between JCI and Customer, and each party acknowledges that JCI would not be able to provide the work and services contemplated by this Agreement on an economic basis in the absence of such waivers and limitations, and would not have entered into this Agreement without such waivers and limitations.

16. **FORCE MAJEURE.** Neither party will be responsible to the other for damages, loss, injury, or delay caused by conditions that are beyond the reasonable control, and without the intentional misconduct or negligence of that party. Such conditions (each, a "Force Majeure") include, but are not limited to: acts of God; acts of government agencies; strikes; labor disputes; fires; explosions or other casualties; thefts; vandalism; riots or war; acts of terrorism; electrical power outages; interruptions or degradations in telecommunications, computer, or electronic communications systems; changes in Laws; or unavailability of parts, materials or supplies.

17. **JCI'S PROPERTY.** All materials furnished or used by JCI personnel and/or JCI subcontractors or agents at the installation-site, including documentation, schematics, test equipment, software and associated media remain the exclusive property of JCI or such other third-party. Customer agrees not to use such materials for any

© 2008 Johnson Controls, Inc.

purpose at any time without the express authorization of JCI. Customer agrees to allow JCI personnel and/or JCI subcontractors or agents to retrieve and to remove all such materials remaining after installation or maintenance operations have been completed. Customer acknowledges that any software furnished in connection with the Work and/or M&V Services is proprietary and subject to the provisions of any software license agreement associated with such software.

18. **DISPUTES.** JCI and Customer will attempt to settle any controversy, dispute, difference, or claim between them concerning the performance, enforcement, or interpretation of this Agreement (collectively, "Dispute") through direct discussion in good faith, but if unsuccessful, will submit any Dispute to non-binding mediation in the nearest major metropolitan area of the state where the project is performed. If the parties are unable to agree on a mediator or a date for mediation, either party may request JAMS, Inc. to appoint a mediator and designate the time and procedure for mediation. Such mediator shall be knowledgeable, to each party's reasonable satisfaction, with respect to matters concerning construction law. Neither JCI nor Customer will file a lawsuit against the other until not less than sixty (60) days after the mediation referred to herein has occurred, unless one or both parties is genuinely and reasonably concerned that any applicable statute of limitations is on the verge of expiring. JCI AND CUSTOMER HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL AND AGREE TO SUBMIT TO A BENCH TRIAL AS TO ANY CLAIM OR CAUSE OF ACTION BASED UPON, ARISING OUT OF OR DIRECTLY OR INDIRECTLY RELATED TO THIS AGREEMENT, INCLUDING CONTRACT, TORT AND STATUTORY CLAIMS, AND EACH OF THE PARTIES HERETO ACKNOWLEDGES THAT THIS WAIVER IS A MATERIAL INDUCEMENT TO ENTER INTO A BUSINESS RELATIONSHIP, THAT EACH HAS RELIED ON THIS WAIVER IN ENTERING INTO THIS AGREEMENT, AND THAT EACH WILL CONTINUE TO RELY ON THIS WAIVER IN THEIR RELATED FUTURE DEALINGS UNDER THIS AGREEMENT.

19. **GOVERNING LAW.** This Agreement and the construction and enforceability thereof shall be interpreted in accordance with the laws of the state of Texas.

20. **CONSENTS; APPROVALS; COOPERATION**. Whenever Customer's consent, approval, satisfaction or determination shall be required or permitted under this Agreement, and this Agreement does not expressly state that Customer may act in its sole discretion, such consent, approval, satisfaction or determination shall not be unreasonably withheld, qualified, conditioned or delayed, whether or not such a "reasonableness" standard is expressly stated in this Agreement. Whenever Customer's cooperation is required by JCI in order to carry out JCI's obligations hereunder, Customer agrees that it shall act in good faith and reasonably in so cooperating with JCI and/or JCI's designated representatives or assignees or subcontractors. Customer shall furnish decisions, information, and approvals required by this Agreement in a timely manner so as not to delay the performance of the Work or M&V Services.

21. **FURTHER ASSURANCES.** The parties shall execute and deliver all documents and perform all further acts that may be reasonably necessary to effectuate the provisions of this Agreement.

22. **INDEPENDENT CONTRACTOR.** The relationship of the parties hereunder shall be that of independent contractors. Nothing in this Agreement shall be deemed to create a partnership, joint venture, fiduciary, or similar relationship between the parties.

23. **POWER AND AUTHORITY.** Each party represents and warrants to the other that (i) it has all requisite power and authority to execute and deliver this Agreement and perform its obligations hereunder, (ii) all corporate, board, body politic, or other approvals necessary for its execution, delivery, and performance of this Agreement have been or will be obtained, and (iii) this Agreement constitutes its legal, valid, and binding obligation.

23. **SEVERABILITY.** In the event that any clause, provision, or portion of this Agreement or any part thereof shall be declared invalid, void, or unenforceable by any court having jurisdiction, such invalidity shall not affect the validity or enforceability of the remaining portions of this Agreement unless the result would be manifestly inequitable or materially impair the benefits intended to inure to either party under this Agreement.

24. **COMPLETE AGREEMENT.** It is understood and agreed that this Agreement contains the entire agreement between the parties relating to all issues involving the subject matter of this Agreement. No binding understandings, statements, promises or inducements contrary to this Agreement exist. This Agreement

© 2008 Johnson Controls, Inc.

supersedes and cancels all previous agreements, negotiations, communications, commitments and understandings with respect to the subject matter hereof, whether made orally or in writing. Each of the parties to this Agreement expressly warrants and represents to the other that no promise or agreement which is not herein expressed has been made to the other, and that neither party is relying upon any statement or representation of the other that is not expressly set forth in this Agreement. Each party hereto is relying exclusively on the terms of this Agreement, its own judgment, and the advice of its own legal counsel and/or other advisors in entering into this Agreement. Customer acknowledges and agrees that any purchase order issued by Customer associated with this Agreement is intended only to establish payment authority for Customer's internal accounting purposes. No purchase order shall be considered a counteroffer, amendment, modification, or other revision to the terms of this Agreement.

25. **HEADINGS.** The captions and titles in this Agreement are for convenience only and shall not affect the interpretation or meaning of this Agreement.

26. **COUNTERPARTS.** This Agreement may be executed in any number of counterparts, all of which when taken together shall constitute one single agreement between the parties.

27. **NOTICES.** All notices or communications related to this Agreement shall be in writing and shall be deemed served if and when sent by facsimile or mailed by certified or registered mail: to Johnson Controls, Inc. at the address listed on the first page of this Agreement, ATTN: Regional Solutions Manager, with a copy to Johnson Controls, Inc., ATTN: General Counsel – Building Efficiency Americas, 507 East Michigan Street, Milwaukee, Wisconsin, 53202: and to Customer at the address listed on the first page of this Agreement.

JOHNSON CONTROLS, INC.

Signature: _____

Printed Name: Maureen G. Blase

Title: Regional General Manager

Date: March 14, 2019

JEFFERSON COUNTY, TEXAS

Signature: _____

Printed Name: Jeff R. Branick

Title: Jefferson County Judge

Date: March 14, 2019

ATTEST:

_____

Carolyn L. Guidry, County Clerk

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS

© 2008 Johnson Controls, Inc.

Schedule 1

SCOPE OF WORK

I. SUMMARY OF THE SCOPE OF WORK

JCI will provide the Customer with the scope of work (Work) identified on this Schedule. JCI shall supervise and direct the Work and shall be responsible for construction means, methods, techniques, sequences, and procedures for coordinating the Work under this Agreement. JCI shall be responsible to pay for labor, materials, equipment, tools, construction equipment and machinery, transportation, and other facilities and services necessary for the proper execution and completion of the Work. Completed work will be functional and installed in accordance with local governing codes at the time of execution of this Agreement.

General Work:

- Conduct a pre-construction conference with JCI Project Manager and Customer.
- Final engineering work for each Facility Improvement Measure (FIM) as required under the Agreement. Once final engineering work is complete, some minor modifications to outlined Scope of Work may be required. No modifications shall be made to the Work without prior approval of Customer.
- Three (3) electronic copies of the Operation and Maintenance ("O&M") manuals of equipment shall be submitted to Customer at completion of the construction phase of the project.
- One (1) hard copy and three (3) electronic copies of as-built construction drawings for applicable FIMs will be submitted to the Customer at completion of the construction phase.
- JCI shall provide an as-built lighting table with updated fixture counts to reflect actual lamps/ballasts/fixtures installed.
- JCI shall provide an as-built water conservation table with updated fixture counts to reflect actual fixtures installed.
- Customer retains the right to keep any removed equipment or material, unless specified differently in other areas of this Scope of Work. Customer has within 14 days of contract signing to notify JCI of intent to keep equipment.
- Work will be coordinated with Customer personnel to minimize interruptions and delays.
- Materials being installed shall be new unless otherwise specified in this Scope of Work.
- Necessary protection will be provided to avoid damage to adjacent services in the surrounding work areas.
- The Johnson Controls Safety Specifications will be followed at all times. Any safety violations will be addressed immediately. Work will not continue until any unsafe conditions are corrected.

General Exclusions:

- Any structural modifications to existing equipment and infrastructure that is required due to previously unknown deficient structural conditions.
- Code upgrades for existing infrastructure and equipment scheduled to remain.
- Repair or replacement of defective mechanical, electrical or controls equipment, except the equipment described to be replaced in the Scope of Work (JCI will identify the location of defective equipment and notify Customer personnel).
- Test and Balance of existing air or water systems, unless specified in the Scope of Work.
- Existing building ventilation conditions and indoor air quality issues not included in this Scope of Work.
- Engineering services, studies, and analysis associated with any exclusions or work clearly outside of the scope definition.
- Repairs or upgrades to bring the existing systems up to code, including egress and American's with Disabilities Act (ADA) code compliance issues.
- Escorts
  - Customer shall provide escorts for Work in the correctional facilities.
  - JCI shall have the right to adjust project duration due to lack of escorts provided in the correctional facilities by Customer.

© 2008 Johnson Controls, Inc.

Schedule 1

The following table summarizes the FIMs to be implemented for this project:

Number	Description
FIM 1	LED Lighting Upgrades (interior-exterior)
FIM 2	Water Conservation Upgrades
FIM 3	DDC Building Automation System Upgrades
FIM 4	Air-Cooled DX Air-conditioning Replacements – 11 buildings
FIM 5	Air-Cooled HHW/DX Systems Replacements – Minnie Rogers
FIM 6	CHW/HHW Air-Handling Unit Replacements
FIM 7	Chiller Replacements and Piping Upgrades
FIM 8	Walk-in Freezer/ Cooler Upgrades
FIM 9	Pressure Washing / Reseal Downtown Jail Exercise Area
FIM 10	N/A (Removed from scope)
FIM 11	Gate Access and Cameras Upgrades
FIM 12	Al Phone System and Security Cameras Upgrades
FIM 13	Smoke Purge Fan Upgrades

© 2008 Johnson Controls, Inc.

Schedule 1

DESCRIPTION OF THE SCOPE OF WORK

FIM 1 LED Lighting Upgrades

General

This FIM scope consists of retrofitting existing fluorescent T8 and HID fixtures with new latest LED tubular lamps, retrofit kits, and fixtures. Existing incandescent and compact fluorescent lamps will be replaced with high efficiency LED lamps or LED retrofit kits.

Refer to Attachment 5 for scope of work line-by-line.

All work to be in accordance with prevailing industry practice, state and local codes in effect at the time of contract signing. Professional performance by licensed, insured and certified personnel skilled in lighting retrofit services.

Inclusions

- Material, labor, engineering, design and recycling/disposal to perform the lighting system improvements detailed in Attachment 5.
- All work shall be performed in accordance with industry standards and approved safety practices.
- Lamps and ballasts removed as part of the work shall be recycled and/or disposed of in compliance with applicable regulations in effect at the time of contract signing.
- All circuit breakers, contactors, switches/controls, existing fixtures, and the electrical system in general are assumed to be operational working order and compliant with current National Electric Code (NEC) requirements.
- Maintenance stock of 1.5% is included in this proposal (LED tubes and LED lamps only).
- If specified materials become either temporarily or permanently unavailable for reasons beyond the control of Johnson Controls, then the expected time for performance of the work will be extended. Johnson Controls reserves the right to provide equivalent substitutions at no price increase.
- Where ULC listed tubular LED lamp (TLED) retrofits are proposed, external drivers will be utilized where noted in the line-by-line scope of work. Existing ballasts will be removed.
- Where ULB listed tubular LED lamp (TLED) retrofits are proposed, the tubes will be direct wired and the existing ballast will be removed.
- Where retrofits of existing fixtures are proposed, the scope includes wiping down prismatic lenses with dry cloth.
- Design illumination levels: In the absence of code-mandated lighting requirements, industry standards have been used as a guide, primarily the most recent edition of the Illuminating Engineering Society of North America (IESNA), IESNA Recommended Practice documents and IESNA Design Guides.
- Existing lighting systems were presumed to be designed based on IESNA recommended practices. In the event current light levels are above IESNA recommendations for the space type (i.e., over-lit), light levels will be reduced. In the event light levels are below IESNA recommendations for the space type, JCI will meet or exceed current light levels. If the space is under-lit due to an inadequate spacing or quantity of fixtures from initial design, which requires adding fixtures, adding circuits, reconfiguration or new construction, this will be brought to the attention of the customer. LED fixtures or components specified for the project are based on comparable original lumen outputs of existing equipment rather than depreciated light output values.
- Existing and post-retrofit illumination levels have been/will be measured in accordance with procedures recommended by IESNA using a calibrated light meter.
- Warranties
  - Labor Warranty – 1 year workmanship guarantee in accordance with the terms and conditions of the Agreement from the date of acceptance by the customer.
  - Material Warranties - Manufacturer warranties of lamps, retrofit kits, and fixtures installed as part of the project are covered by the individual manufacturer's published documentation listed in the tables below. Johnson Controls will furnish contact information for each manufacturer. Alleged defective product may be required for return to factory for analysis.

© 2008 Johnson Controls, Inc.

Schedule 1

Lamps

Proposed Lamp Type	Lamp Mfr	Mfr Part Number	Warranty (Yrs)
20LEDTBX	REMPHOS	RPT-LEDBIAX-2000LM-4000K-2G11	5
24LEDT-T5	REMPHOS	RPT-B-INTDRIVE-T5-G3-4FT-840-A	5
24LEDT-T5	REMPHOS	RPT-B-INTDRIVE-T5-G3-4FTHO-840-A	5
12LEDT	JAMES LIGHTING	ZY-T8-12W1200 BIXX 4000K	5
10LEDT	JAMES LIGHTING	ZY-T8-10W600 BIXX 4000K	5
12LEDT	JAMES LIGHTING	ZY-T8-12W900 BIXX 4000K	5
65LEDSI	GREEN CREATIVE	65HIBHB/840/BYP/EX39	5
54LEDSI	GREEN CREATIVE	54HID/840/277V/EX39	5
14LEDSI	GREEN CREATIVE	14PAR38DIM/830FL40	3
14LEDSI	GREEN CREATIVE	14A21DIM/840	3
16.5LED4P	GREEN CREATIVE	16.5PLV/840/BYP	3
16.5LEDSI	GREEN CREATIVE	16.5A21/840/277V	3
19.5LEDSI	GREEN CREATIVE	19.5PAR30HO/940FL40/277V	5
25LEDSI	GREEN CREATIVE	25HID/840/277V/EX39	5
4.5LEDSI	GREEN CREATIVE	5.5B11/DIM/827/E26	3
4.5LEDSI	GREEN CREATIVE	5FG40DIM/827	3
5.5LED2P	GREEN CREATIVE	5.5PLS/840/HYB/GX23	5
6LEDMR	GREEN CREATIVE	6MR16DIM/840FL35	3
6LEDSI	GREEN CREATIVE	6A19DIM/830	3
6LEDSI	GREEN CREATIVE	6G25DIM/827	3
6LED4P	GREEN CREATIVE	6PLH/840/BYP/R	5
8LED4P	GREEN CREATIVE	8PLH/840/HYBM	5
8LEDSI	GREEN CREATIVE	8PAR20DIM/940FL40	3
8LEDSI	GREEN CREATIVE	8A19DIM/840	3
8LEDSI	GREEN CREATIVE	8BR30DIM/840	3
3.5LED2P	GREEN CREATIVE	3.5PLS/840/HYB/G23	5

Fixtures

Proposed Fixture	Fixture Mfr	Mfr Part Number	Warranty (Yrs)
POLEFL	ILP	FLL-85WLED-UNIV-40-SD480V	5
HB	ILP	HHB-135WLED-UNIV-40-FRL-FIOS	5
LB	ILP	HHB-135-UNIV-40-FIOS	5
HB	ILP	DHB-150WLED-UNIV-40-AD22-HUB 3/4	5
HB	ILP	HHB-178WLED-UNIV-40-FRL-FIOS	5
HB	ILP	DHB-200WLED-UNIV-40-AD22-HUB 3/4	5
LB	ILP	UFO-75WLED-UNIV-40-LB	5

© 2008 Johnson Controls, Inc.

Schedule 1

WP	ILP	WPCM-105WLED-UNIV-40-T3-WHT	5
WP	ILP	WPLO-135WLED-UNIV-40-PC120	5
WP	ILP	WPLO-135WLED-UNIV-40-PC277	5
WP	ILP	WPSP-20WLED-UNIV-4000K	5
WP	ILP	WPCM-28WLED-UNIV-40-T3	5
WP	ILP	WPSO-30WLED-UNIV-40	5
WP	ILP	WPSO-30WLED-UNIV-40-PC277	5
WP	ILP	WPSO-30WLED-UNIV-40-PC120	5
WP	ILP	WPMO-45WLED-UNIV-40	5
WP	ILP	WPMO-45WLED-UNIV-40-PC120	5
WP	ILP	WPMO-70WLED-UNIV-40	5
WP	ILP	WPMO-70WLED-UNIV-40-PC277	5
POLESB	ILP	AL-100WLED-UNIV-40-T3-ARM6-S-SD480V	5
SB	ILP	AL-100WLED-UNIV-40-T3-ARM6-S	5
POLESB	ILP	AL-140WLED-UNIV-40-T3-ARM6-S	5
POLESB	ILP	AL-140WLED-UNIV-40-T3-ARM6-S-SD480V	5
FL	ILP	FML-55WLED-UNIV-40-PC120	5
FL	ILP	FML-55WLED-UNIV-40-TMB	5
GMFL	ILP	FML-55WLED-UNIV-40	5
POLEFL	ILP	FLL-85WLED-UNIV-40-PC277-TMB	5
POLEFL	ILP	FLL-85WLED-UNIV-40-PC277	5
FL	ILP	FDL-155LED-UNIV-40	5
FL	ILP	FDL-155LED-UNIV-40-PC277	5
LB	ILP	HHB-90WLED-UNIV-40-FRL-FIOS	5
FL	ILP	CFS-36W-U-40K-BRZ	5
CPY	ILP	UFO-75WLED-UNIV-40	5
DD	ILP	D2D-50WLED-UNIV-40	5
CPY	ILP	UFO-40WLED-UNIV-40	5
CPY	ILP	UFO-28WLED-UNIV-40	5
FL	EPHESUS	AN-550-3-VH-57-BLK-AM	5
FL	EPHESUS	AN-550-4-VH-57-BLK-AM	5
POLEFL	EATON	NFFLD-L-C150-D-480-66-S-CB	5
POLEFL	EATON	NFFLD-L-C150-D-480-66-T-CB	5
GMFL	EATON	NFFLD-L-C150-D-UNV-66-S-CB	5
FL	EATON	NFFLD-L-C150-D-UNV-66-T-CB	5
12DR	EATON	FM11WR30R	5

Kits

Proposed Fixture/Kit	Fixture/Kit Mfr	Mfr Part Number	Warranty (Yrs)
RC8-	GREEN CREATIVE	27CDLA8/840/277V	5

© 2008 Johnson Controls, Inc.

RC6-	GREEN CREATIVE	21CDLA6/840/277V	5
RC9.5-	GREEN CREATIVE	45CDLA9.5/840/277V	5

Sensors

Proposed Sensor Type	Sensor Mfr	Mfr Part Number	Warranty (Yrs)
WSOC-2P	LUTRON	MS-A202-WH	5
WSOC	LUTRON	MS-A102-WH	5
WLOC-WM-1	LUTRON	LRF2-OWLB-P-WH	5
WLOC-WM	LUTRON	LRF2-OHLB-P-WH	5
WLOC-CM	LUTRON	LRF2-OCR2B-P-WH	5
WALL SWITCH RELAY	LUTRON	PD-5S-DV-WH	5
RELAY	LUTRON	RMJ-5R-DV-B	5

Exclusions

- Replacement or repair of concrete pole footings or rusted bolts on footings.
- Existing light poles will be re-used. Repair of wiring to poles, if required, is not included.
- Pole mounted lighting is reusing existing poles. Customer is responsible for pole maintenance, repair and replacement throughout the term of the guarantee.
- Lighting Poles will be checked for contact voltage. If any hazardous voltage is noted, work on that pole will be stopped and the customer and/or the utility company be notified immediately to correct the fault before any work will be performed.
- Existing task lighting and table type light fixtures unless specified in Attachment 5, room by room description of work.
- Removal or replacement of ceiling tiles.
- Existing decorative and stage light fixtures unless noted in Attachment 5, room by room description of work.
- The addition of lighting fixtures in areas with existing illumination deficiencies is not covered under this scope of work unless otherwise noted in Attachment 5, room by room description of work. If foot-candle levels do not meet minimum standards, the customer will be notified.
- Existing fluorescent dimming systems or fixtures will remain "as is" unless otherwise noted in Attachment 5, room by room description of work.
- Reconfiguration of existing fixture layout unless otherwise noted in Attachment 5, room by room description of work.
- Replacement of existing wiring and/or electrical issues in exterior fixtures.
- Existing fixtures that are not in a well-maintained condition including, but not limited to, rusted or embrittled in a manner which would impede retrofit.
- Any electrical wiring other than that required for the retrofit or replacement within the existing lighting fixtures, the installation of new fixtures as scheduled, the installation of occupancy sensors and other controls.
- Double or bi-level switching of in-board and out-board sockets is not included unless specified in Attachment 5, room by room description of work.
- Repair, replacement and adjustments of existing sensors, time clocks, switches or energy management systems unless otherwise noted in Attachment 5, room by room description of work.
- Calibration or adjustment of the lighting control devices post-retrofit. JCI will set controls to the agreed upon settings at time of installation only.
- Repair or replacement of louvers or other components unless denoted in Attachment 5 room by room description of work.

© 2008 Johnson Controls, Inc.

- Repair or replacement of yellowed, cracked, damaged or missing fixture lenses, louvers or other components unless denoted on the Johnson Controls line-by-line scope of work.
- Repair or replacement of the existing Emergency and Egress Lighting Systems unless otherwise noted in Attachment 5, room by room description of work.
- Replacement of defective emergency battery back-up ballast unless otherwise noted in Attachment 5, room by room description of work.
- Unless specified in the scope of work, no previsions are made to ensure that the light levels will comply with existing surveillance camera requirements. Proposed light levels will meet or exceed the current light levels of the exterior fixtures.
- Replacement of existing lighting sockets and ballast unless otherwise noted.
- Correction or repair of electrical system deficiencies or any NFPA, NEC, or Local Code deficiencies unless provided for in the scope.
- Painting, plastering or any other type of repair to existing mounting surfaces after the removal or replacement of fixtures, unless otherwise noted.
- Scope of Work that could not be reasonably documented during the audit (i.e. concealed locations or hidden conditions).
- Work in buildings or areas not specifically indicated on the line-by-line scope of work is excluded.

© 2008 Johnson Controls, Inc.

FIM 2 Water Conservation Upgrades

General

This FIM includes the following water conservation improvements:

- Domestic Plumbing Retrofits
- Pre-Rinse Sprayer Replacements
- Dish Machine Replacements
- Ozone Laundry Support Systems

Scope of Work

- Labor and materials to perform the plumbing fixture improvements as listed in the room by room scope of Work in Attachment 6.
- JCI will remove and dispose of existing toilets, flush valves, faucet modulators, and other materials generated during the installation of this FIM in accordance with Federal, State, and Local regulations in effect at the time of contract signing.
- It is intended that existing angle stop valves are re-used in the implementation of this scope of work. If failed stop valves are encountered, isolated or full building water shutdowns may be required. These will be coordinated in advance with facility personnel.
- For installation of ICON controls on Combi fixtures in correction facilities partial water shutdowns may be necessary. Any temporary utility shutdowns will be coordinated with facility management and building staff.
- The installation (parts and labor) are under warranty from one year after date of installation.
- Minor leak repairs and replacement of various PVC fittings with Cast Iron. The scope includes 40 sanitary Tees, 1 ten foot section of pipe, and 20 leak repairs. The leaking showers are excluded from this Work.
- JCI shall provide 4 hours of training on the use of the ICON control system.

Exclusions

- Fixtures not included in Attachment 6
- Repair or replacement of defective equipment, other than the equipment specifically described in this section. JCI will identify the location of defective equipment and notify the customer.
- Broken toilet flanges repairs in quantities over 5%.
- Broken carriers for wall mount toilets and urinals.
- Labor and materials to replace shutoff valves or repair main water valves that do not close completely or that will not fully reopen.
- Labor and materials to repair previously deteriorated plumbing not associated with the work defined in this scope.
- Johnson Controls will not repair or replace corroded wall-hung toilet drain pipes unless specified.
- Painting, tile work, and wall repair outside of footprint related patching. Pre-existing damage to walls or flooring will be brought to the attention of customer and the best course of action will be determined. Any damages caused by our installations shall be repaired. Where unique tile or paint is present it may require the owner to supply material.

© 2008 Johnson Controls, Inc.

- Operation, repair, or replacement of existing cold and hot water isolation valves and risers associated with existing toilets, urinals, and faucets.
- Any and all ADA bathroom partitions, grab bars, extensions, sink faucet actuators, piping insulation, or other ADA requirements. JCI does not take responsibility for any existing or future ADA compliance issues, and, if required to modify bathrooms or fixtures to meet an ADA code this will be completed for an additional cost.
- It is the owner's responsibility to provide water pressure to all plumbing fixtures in the rage of 25 to 85 psi. Deviations from this range will require installation of booster pumps or pressure reducing valves external to the scope of work provided.
- It is the responsibility of the customer to utilize the new laundry programming operating sequences and formulas. Johnson Controls is not responsible for shortfalls due to non-use of the new operating sequences and formulas.

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 3 DDC Building Automation System Upgrades

General

This FIM shall include a new building automation system which shall be a Johnson Controls Metasys automation system. The new Metasys automation system shall be BACnet compliant and will communicate on the existing county network. Replace existing electronic/pneumatic HVAC controls with new direct digital controls (DDC).

Demolition and Removal Work

- Remove existing pneumatic controls as detailed below. Remove existing visible pneumatic tubing back to the nearest junction box and cap. Unexposed pneumatic tubing within walls will be abandoned in place.
- Existing electric and mechanical thermostats and devices that are to be replaced will be disconnected and wiring preserved for use with new control system components. Wherever HVAC equipment is replaced, existing support systems, mounting struts, conduit and cabling will be preserved and re-used, if possible. If existing wiring and/or control tubing is not suitable for re-use, it will be removed to above ceiling level and abandoned in place.

New Installation Work

- Furnish and install a Metasys ADX Central server – 25 user, with Metasys software in location to be determined by Customer. Includes (1) new Main Operator Work Station with 19" monitor and (1) alarm printer.
- Graphics: Includes floor plan graphics with equipment locations, system graphics for each type of impacted equipment and library of standard graphics for use by Customer in creating future graphics. Customer to provide existing floor plans and drawings for graphics.
- Startup and checkout.
- Furnish and install control items by building detailed below.

Inclusions:

- New control wiring will be installed in plenum rated wiring in concealed accessible areas.
- New control wiring installed in cable trays will be plenum rated.
- JCI will utilize existing special systems cable trays for any applicable control wiring.
- New conduit in exposed areas will extend from cable tray to the equipment.
- Required DDC programming, checkout, and testing.
- Application engineering and submittals.
- Three (4 hour) on-site operator training sessions.
- One (1) year warranty for parts and labor. Warranty starts at system acceptance.

Exclusions:

- Repair or replacement of defective mechanical, electrical and/or controls equipment, other than the equipment specifically described in the FIM description. Johnson Controls will identify the location of defective equipment and notify the owner.
- Repair or upgrades required to bring the any systems or equipment up to code, including the HVAC, electrical and mechanical, other than the specifically described in this scope of work.

© 2008 Johnson Controls, Inc.

- Resolution of existing design, service, and or distribution conditions known or unknown.
- Temporary space conditioning, unless otherwise specified.
- Engineering services, studies and analysis associated with any exclusions or work clearly outside of the scope definition. Resolution of existing HVAC design, service and/or distribution conditions, known or unknown.
- Does not include providing or installing any fire alarm modules and duct smoke detectors. No fire alarm devices of any kind are included.
- Does not include interlock wiring or monitoring of Fire / Smoke Dampers. Fire/smoke dampers are not being supplied by JCI.
- Installation of valves, dampers, or other in-line devices.
- Starters, disconnects, or their installation.
- Access doors and/or panels.
- Neutralizers or sound attenuators.
- Thermometers and gauges.
- Any work associated with the motorized actuation for Auto Door Controls.
- Variable Volume Air-handling Units (AHUs) Outside, Return and Exhaust Air Dampers.
- AHU Supply Smoke Isolation Dampers, Smoke, Fire, Combination Fire/Smoke Dampers.
- 120 VAC power to Fire/Smoke Dampers and control of Fire/Smoke Dampers.
- Smoke Control.

Acronyms & Definitions:

Acronym	Definition
AHU	Air Handling Unit
AFMS	Air Flow Measuring Station
BLRx-S	Boiler-x Status
BLRx-A	Boiler-x Alarm Status
BLRx-ENA	Boiler-x Enable/Disable Command
BAS	Building Automation System
BACnet	Communication Protocol for Building Automation and Control (BAC) networks that utilize ASHRAE/ANSI Standard 135 protocol
BACnet/IP	BACnet protocol applied over IP local and wide area networks
BACnet MS/TP	BACnet protocol applied over a master-slave token passing subnet that utilizes an EIA-485 physical layer
BLRHWP-C	Boiler Hot Water Pump Command
BLDHWP-C	Building Hot Water Pump Command
BTU	British Thermal Unit, a standardized measurement of thermal energy.
Cabling Nomenclature	e.g. 3c/#22/tw/shd/pln = 3 conductor/22 AWG/Twisted/Shielded/Plenum cable
Cat5, Cat6	Standardized twisted pair cables for Ethernet and other network physical layers

© 2008 Johnson Controls, Inc.

Schedule 1

Acronym	Definition
CDWPx-C	Condenser Water Pump-x Command
CDWS-T	Condenser Water Supply Temperature
CDWR-T	Condenser Water Return Temperature
CHWV	Chilled Water Valve
CHx-SET	Chiller-x Chilled Water Setpoint Adjustment
CHx-A	Chiller-x Alarm Status
CHx-S	Chiller-x Status
CHx-ENA	Chiller-x Enable/Disable Command
CHxCDWS-T	Chiller-x Condenser Water Supply Temperature
CHW-DP	Chilled Water Differential Pressure Sensor
CHWV-O	Chilled Water Valve Control Signal
CHWS-T	Chilled Water Supply Temperature
CHWR-T	Chilled Water Return Temperature
CHxCDWBYPV-O	Chiller-x Condenser Water Bypass Valve Control Signal
CHWPx-C	Chilled Water Pump-x Command
CKT-x	Circuit number
ComCDWS-T	Common Condenser Water Supply Temperature
CSR	Current Sensing Status Relay – Digital output switch designed to detect current flowing through a wire and typically used to provide on and off status of motors driving fans and pumps. These devices can be provided with an optional internal relay to start and stop the motor as well.
CTx-S	Cooling Tower-x Fan Status
CTBYPV-O	Cooling Tower Bypass Valve Control Signal
CUP_EXT_LTS-C	Central Utility Plant Exterior Lighting Command
DA-T	Discharge Air Temperature Sensor
DDC	Direct Digital Control
DX1-C	Direct Expansion Coil #1 Staging Command
EDHx-C	Electric Duct Heater-x Command
EMERGEN-S	Emergency Generator Status
EF-x	Exhaust Fan
EFINTLK-C	Exhaust Fan Interlock Command
FAC	Advanced Application Field Equipment Controller – Series of Metasys programmable controllers (utilizing BACnet MS/TP or BACnet/IP or N2 protocols) having a real time clock for control of HVAC systems.
FCU	Fan Coil Unit
FEC	Field Equipment Controller – Series of Metasys programmable controllers (utilizing BACnet MS/TP or N2 protocols) for the control of HVAC systems.
FILT-S	Filter Status Switch
FRZ-S	Temperature Low Limit (Freezestat) Status

© 2008 Johnson Controls, Inc.

Schedule 1

Acronym	Definition
GPM	Gallons Per Minute
HWRH	Hot Water Reheat
HWV-O	Hot Water Valve Control Signal
HWS-T	Hot Water Supply Temperature
HWR-T	Hot Water Return Temperature
IOM	Input/Output Module – Series of hardware input and output expansion modules having integral BACnet MS/TP communications for integration into a Metasys network.
MAXOA-O	Maximum Outside Air Damper Control Signal
MA-T	Mixed Air Temperature Sensor
MCC	Motor Control Center
MINCHWV-O	Minimum Flow Chilled Water Bypass Valve Control Signal
MINOA-O	Minimum Outside Air Damper Control Signal
MIXD-C	Mixing Damper Command
MZU	Multi-zone Air Handling Unit
NEW_CH	New Courthouse
NETSTAT	Series of Metasys BACnet Network Sensors designed to function directly with FEC, IOM and VMA controllers to monitor room temperature and/or humidity and/or CO2
NAE	Network Automation Engine – Metasys network engine that provides network management and system-wide control coordination over one or more networks of equipment controllers
NCE	Network Control Engine – Metasys network engine that combines network management and system-wide control coordination with I/O point connectivity and direct digital control capabilities.
N2	A Johnson Controls, Inc. local network that links controllers to a network controller using a master/slave protocol using EIA-485 physical layer
OAD-O	Outside Air Damper Control Signal
OAD-S	Outside Air Damper End Switch Status
OA-T	Outside Air Temperature
OLD_CH	Old Courthouse
PCHWP-x	Primary Chilled Water Pump - x
PHWS-T	Primary Hot Water Supply Temperature
PHWR-T	Primary Hot Water Return Temperature
PRICHWS-T	Primary Chilled Water Supply Temperature
RAD-O	Return Air Damper Control Signal
RA-T	Return Air Temperature Sensor
RA-T/H	Return Air Temperature/Humidity Sensor
RFx-S	Return Fan Status
RFx-C	Return Fan Command
RH HWC	Reheat Hot Water Coil
RIB	Relay In A Box – Relay assembly with contacts and coils enclosed in a housing.

© 2008 Johnson Controls, Inc.

Schedule 1

Acronym	Definition
SCHWS-T	Secondary Chilled Water Supply Temperature Sensor
SCHW-F	Secondary Chilled Water Flow
SCHWPx-C	Secondary Chilled Water Pump-x Command
STATIC	Duct Static Pressure Transmitter
SF-O	Supply Fan Control Signal
SA-T	Supply Air Temperature Sensor
SF-S	Supply Fan Status
SF-C	Supply Fan Command
SFx-F	Supply Fan Airflow Measurement
SF-A	Supply Fan VFD Alarm Status
SPHL-S	Duct Static Pressure High Limit Switch Status
TEC	Terminal Equipment Controller – Series of Metasys Temperature and Humidity controllers, available in both network and standalone configurations for the control of DX split system A/C units, rooftop units, heatpumps, fan coils, etc.
UH	Unit Heater
UNT	An electronic N2 controller for digital control of packaged air handling units, unit ventilators, fan coils, heat pumps and other terminal units serving a single zone
VFD	Variable Frequency Drive
VMA	Variable Air Volume Modular Assembly Controller – Series of Metasys programmable controllers (utilizing BACnet MS/TP and N2 protocols) for the control of VAV Terminal Box systems.

© 2008 Johnson Controls, Inc.

Schedule 1

Old Courthouse Building

Overview:

The Old Courthouse is presently served by an Automated Logic BACnet Building Automation System (BAS) (Basement and Floor-1) that was installed in 2014 and an Alerton BACnet BAS (Floors-2, 3, 4, 5, 6, 7, 8) that was installed in 2003. The Automated Logic system serving the basement and Floor-1 is in very good condition and will be preserved and integrated into Metasys via BACnet/IP. The Alerton BACnet controllers will be replaced with Metasys BACnet controllers as described herein. The existing Alerton BACnet MS/TP trunks (2c/#22/shd) will be replaced with new 3c/#22/shd BACnet MS/TP trunks (JCI design standard).

Basement:

- Furnish new NAE55 panel on wall of Maintenance Supervisor's Office to serve as a BACnet/IP system integrator for the Automated Logic system serving the basement and Floor-1 systems.
- Furnish new NAE55 in the Building Maintenance Supervisor's Office to replace the existing Alerton BTI supervisory controller. Re-use existing 24VAC control power, enclosure, control cabling and re-terminate. Replace existing BACnet MS/TP trunks and terminate to the new NAE55.
- Replace the existing Alerton VLC1616C3 lighting controller with two (2) new IOM3731 Modules to control existing lighting control circuits. Re-use existing enclosure, 24VAC power and control relays.

Floor-1:

- No work this floor. Existing Automated Logic controls to remain.

Floor-2:

The existing Alerton controls serving Floor-2 are to be replaced with Metasys controls as follows:

- Dual Duct Terminal Box Retrofit: (8 Thus)
  - Furnish new Metasys VMA controller on cold deck damper and new M9104-AGP-2S (Actuator with V sensor) on hot deck damper. Connect to BACnet MS/TP, to 24VAC power circuit and connect existing flow rings to new velocity pressure sensors.
  - Furnish new new discharge air temp sensor in ductwork downstream of the terminal box.
  - Replace existing Alerton zone temperature sensor with new Metasys zone NETSTAT.
- Single Duct Terminal Box Retrofit: (11 Thus)
  - Furnish new VMA controller on existing terminal box damper. Connect to BACnet MS/TP, to 24VAC power circuit and connect existing cold deck flow ring to integral velocity pressure sensor.
  - Furnish new new discharge air temp sensor in ductwork downstream of the terminal box.
  - Replace existing Alerton zone temperature sensor with new Metasys zone NETSTAT.
- Electric Radiant Heater Controls Retrofit: (3 Thus)
  - Replace existing Alerton zone temperature sensor with new Metasys TEC network zone thermostat for control of existing heater staging relays. Terminate the new MS/TP cabling to the new thermostat.
- Heating Only Fan Coil Unit (FCU) Retrofit: (2 Thus: FC-1, 3.6 gpm HW and FC-2, 3.2 gpm HW)
  - Furnish new electronic, hot water control valve to replace existing pneumatic hot water control valve serving FCU.
  - Furnish new TEC network thermostat on FCU housing and new discharge air temperature sensor and connect to new BACnet MS/TP trunk and to existing source of 24VAC power.

© 2008 Johnson Controls, Inc.

- Furnish Current Sensing Status Relay (CSR) in FCU housing to monitor run status of FCU fan.
- Re-use existing FCU fan start/stop RIB relay and cabling. Terminate cable to TEC.

Floor-3:

The existing Alerton controls serving Floor-3 are to be replaced with Metasys controls as follows:

Mechanical Room-310 (South Mech serving AHUs-9, 10, 13 and 15):

- Panel EN-3S
  - Furnish new Metasys FEC controllers (qty=4) for AHU System Retrofits and terminate to new MSTP trunk. Re-use existing enclosures, end devices, control cabling and re-terminate.
- AHU-9 (serves Courtroom 239 on Floor 2):
  - Furnish new NETSTAT zone sensor (for AHU-9) in Courtroom 239.
  - Furnish new electronic ball valves to replace existing pneumatic HW value (10.1 gpm) and CHW valve (22.8 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.
  - Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.
- AHU-10 (serves Courtroom 231 on Floor 2):
  - Furnish new NETSTAT zone sensor (for AHU-10) in Courtroom 231.
  - Furnish new electronic ball valves to replace existing pneumatic HWV (15.1 gpm) and CHWV (30.6 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.
  - Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.
- AHU-13 (serves Courtroom 409 on Floor 4):
  - Furnish new electronic ball valves to replace existing pneumatic HWV (12.4 gpm) and CHWV (31 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T/H sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.
  - Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.
- AHU-15 (serves Rooms 309, 311, 314):
  - Furnish new NETSTAT zone sensor (for AHU-15) in Rm.314 to replace existing zone sensor.

© 2008 Johnson Controls, Inc.

- Furnish new electronic ball valves to replace existing pneumatic HWV (6.3 gpm) and CHWV (11.7 gpm).
- Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
- Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
- Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
- Re-use existing filter DP switch and associated cabling and raceway.
- Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.

Mechanical Rooms-336 (North Mechanical serving AHUs-14, 19, 20):

- Panel EN-14/20
  - Furnish new Metasys FEC controllers (qty=2) for AHU System Retrofits and terminate to new MSTP trunk. Re-use existing enclosures, end devices, control cabling and re-terminate.
- Panel EN-19
  - Furnish new Metasys FEC controller (qty=1) for AHU System Retrofit and terminate to new MSTP trunk. Re-use existing enclosures, end devices, control cabling and re-terminate.
- AHU-14 (serves Rooms 327, 338, 307):
  - Furnish new NETSTAT zone sensor (for AHU-14) in Rm.327 to replace existing zone sensor.
  - Furnish new electronic ball valves to replace existing pneumatic HWV (6.5 gpm) and CHWV (11 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.
  - Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.
- AHU-20 (serves Floor-4 Variable Air Volume [VAV] Boxes):
  - Furnish new electronic ball valves to replace existing pneumatic HWV (13 gpm) and CHWV (45 gpm).
  - Mechanically lock existing inlet vane in open position.
  - Furnish new Variable Frequency Drive (VFD) (10HP, 480VAC/3Ph, VFD-20, BACnet SA, furnished by JCI).
    - Furnish new SA Bus (2 pair/#22/tw/shd/pln) from VFD-20 to the new AHU-20 FEC controller in panel EN-14/20 and terminate.
    - Furnish new speed control cable (2c/#18/shd) cable in raceway from the new VFD-20 to the new AHU-20 FEC controller in panel EN-14/20 and terminate.
    - Furnish new Current Sensing Command Relay (CSR) in new VFD-20 along with new 4c#18/pln cable in raceway from the new VFD-20 to the new AHU-20 FEC controller in panel EN-14/20 and terminate to provide SF-C and SF-S functions.
    - Furnish new static pressure high limit switch in AHU-20 supply duct. Wire to existing AHU-20 safety circuit to shut down unit on alarm condition.
    - Preserve existing safety devices (e.g., duct smoke detectors, freezestats) presently terminating to the AHU-20 motor starter (at MCC in the North Mechanical Room) and re-route/re-terminate the existing safety circuit to new VFD-20 safety circuit terminals.

© 2008 Johnson Controls, Inc.

- Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
- Furnish new duct static pressure transmitter (located at 2/3 longest run) to replace existing. Re-use existing raceway and cabling.
- Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
- Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
- Re-use existing filter DP switch and associated cabling and raceway.

- AHU-19 (serves Floor-2 VAV Boxes):
  - Furnish new electronic ball valves to replace existing pneumatic HWV (22 gpm) and CHWV (96.4 gpm).
  - Mechanically lock existing inlet vane in open position.
  - Furnish new VFD (15HP, 480VAC/3Ph, VFD-19, BACnet SA, furnished by JCI).
    - Furnish new SA Bus (2 pair/#22/tw/shd/pln) from VFD-19 to the new AHU-19 FEC controller in panel EN-19 and terminate.
    - Furnish new speed control cable (2c/#18/shd) cable in raceway from the new VFD-19 to the new AHU-19 FEC controller in panel EN-19 and terminate.
    - Furnish new Current Sensing Command Relay (CSR) in new VFD-19 along with new 4c#18/pln cable in raceway from the new VFD-19 to the new AHU-19 FEC controller in panel EN-19 and terminate to provide SF-C and SF-S functions.
    - Furnish new Static pressure high limit switch in AHU-19 supply duct. Wire to existing AHU-19 safety circuit to shut down unit on alarm condition.
    - Preserve existing safety devices (e.g., duct smoke detectors, freezestats) presently terminating to the AHU-19 motor starter (at MCC in the North Mechanical Room) and re-route/re-terminate the existing safety circuit to new VFD-19 safety circuit terminals.
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new duct static pressure transmitter (located at 2/3 longest run) to replace existing. Re-use existing raceway and cabling.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.

Mechanical Rooms-334 (North Mechanical serving AHU-21):

- Panel EN-21
  - Furnish new Metasys FEC controller (qty=1) for AHU System Retrofit and terminate to new MSTP trunk. Re-use existing enclosures, end devices, control cabling and re-terminate.
- AHU-21 (serves Floor-3 VAV Boxes):
  - Furnish new electronic ball valves to replace existing pneumatic HWV (4.6 gpm) and CHWV (18 gpm).
  - Mechanically lock existing inlet vane in open position.
  - Furnish new VFD (3HP, 480VAC/3Ph, VFD-21, BACnet SA).
    - Furnish new SA Bus (2 pair/#22/tw/shd/pln) from VFD-21 to the new AHU-21 FEC controller in panel EN-21 and terminate.
    - Furnish new speed control cable (2c/#18/shd) cable in raceway from the new VFD-21 to the new AHU-21 FEC controller in panel EN-21 and terminate.

© 2008 Johnson Controls, Inc.

- Furnish new Current Sensing Command Relay (CSR) in new VFD-21 along with new 4c#18/pln cable in raceway from the new VFD-21 to the new AHU-21 FEC controller in panel EN-21 and terminate to provide SF-C and SF-S functions.
- Furnish new static pressure high limit switch in AHU-21 supply duct. Wire to existing AHU-21 safety circuit to shut down unit on alarm condition.
- Preserve existing safety devices (e.g., duct smoke detectors, freezestats, etc.) presently terminating to the AHU-21 motor starter (at MCC in the North Mechanical Room) and re-route/re-terminate the existing safety circuit to new VFD-21 safety circuit terminals.

- Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
- Furnish new duct static pressure transmitter (located at 2/3 longest run) to replace existing. Re-use existing raceway and cabling.
- Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
- Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
- Re-use existing filter DP switch and associated cabling and raceway.

- AHU-21 Terminal Boxes and Radiant Heater panels
  - Single Duct Terminal Box Retrofit: (4 Thus: VVB-36, 37, 38, 39)
    - Furnish new VMA controller on existing terminal box damper. Connect to BACnet MS/TP, to 24VAC power circuit and connect existing cold deck flow ring to integral velocity pressure sensor.
    - Furnish new discharge air temp sensor in ductwork downstream of the terminal box.
    - Replace existing Alerton zone temperature sensor with new Metasys zone NETSTAT.
    - Note: VVB-36 and VVB-37 each have an electric duct heater located downstream of the terminal box. Install cabling from each of the two (2) new VMAs to their associated electric duct heaters and terminate.
  - Electric Radiant Heater Controls Retrofit: (2 Thus, Serving Rooms 319 and 320)
    - Replace existing Alerton zone temperature sensor with new Metasys TEC Network zone thermostat for control of existing heater staging relays. Terminate the new MS/TP cabling to the new thermostat.
  - EF-7 Start/Stop and Status: (1 Thus)
    - Furnish new CSR at EF-7 Starter and terminate to nearest Metasys controller via new cable to provide EF7-C and EF7-S functions.

Mechanical Rooms-335 (North Mech serving AHU-11, 12, 16):

- Panel EN-11/12/16
  - Furnish new Metasys FEC controllers (qty=3) for AHU System Retrofits and terminate to new MSTP trunk. Re-use existing enclosures, end devices, control cabling and re-terminate.
- AHU-11 (serves Courtroom 267):
  - Furnish new NETSTAT zone sensor (for AHU-11) in Rm.267 to replace existing zone sensor.
  - Furnish new electronic ball valves to replace existing pneumatic HWV (10.8 gpm) and CHWV (21.6 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.

© 2008 Johnson Controls, Inc.

- Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.

- AHU-12 (serves Courtroom 264):
  - Furnish new NETSTAT zone sensor (for AHU-12) in Rm.264 to replace existing zone sensor.
  - Furnish new electronic ball valves to replace existing pneumatic HWV (12.1 gpm) and CHWV (23.8 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.
  - Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.
- AHU-16 (serves Courtroom 206):
  - Furnish new NETSTAT zone sensor (for AHU-16) in Rm.206 to replace existing zone sensor.
  - Furnish new electronic ball valves to replace existing pneumatic HWV (8.3 gpm) and CHWV (21.3 gpm).
  - Furnish new electronic outside air damper actuator to replace existing pneumatic outside air damper actuator.
  - Furnish new SA-T sensor to replace existing. Re-use cabling and raceway.
  - Furnish new RA-T sensor to replace existing. Re-use cabling and raceway.
  - Re-use existing filter DP switch and associated cabling and raceway.
  - Re-use existing SF-C (RIB Relay) and SF-S fan status and associated cabling and raceway.

Floor-4: *(Floor-4 has 12 terminal boxes receiving air from AHU-20 on Floor-3. Dual Duct Boxes receive hot air from FC-3 or FC-4 on this floor)*

The existing Alerton controls serving Floor-4 are to be replaced with Metasys controls as follows:

- Dual Duct Terminal Box Retrofit: (8 Thus)
  - Furnish new Metasys VMA controller on cold deck damper and new M9104-AGP-2S (Actuator with VP sensor) on hot deck damper. Connect to BACnet MS/TP, to 24VAC power circuit and connect existing flow rings to new velocity pressure sensors.
  - Furnish new discharge air temp sensor in ductwork downstream of the terminal box.
  - Replace existing Alerton zone temperature sensor with new Metasys zone NETSTAT.
- Single Duct Terminal Box Retrofit: (4 Thus)
  - Furnish new VMA controller on existing terminal box damper. Connect to BACnet MS/TP, to 24VAC power circuit and connect existing cold deck flow ring to integral velocity pressure sensor.
  - Furnish new discharge air temp sensor in ductwork downstream of the terminal box.
  - Replace existing Alerton zone temperature sensor with new Metasys zone NETSTAT.
- Heating Only FCU Retrofit: (2 Thus: FC-3, 5.2gpm HW and FC-4, 4gpm HW)
  - Furnish new electronic, ball valve to replace existing pneumatic HWV serving FCU.
  - Furnish new TEC network thermostat on FCU housing and new discharge air temperature sensor and connect to new BACnet MS/TP trunk and to existing source of 24VAC power.
  - Furnish Current Sensing Status Relay (CSR) in FCU housing to monitor run status of FCU fan.

© 2008 Johnson Controls, Inc.

- Re-use existing FCU fan start/stop RIB relay and cabling. Terminate cable to TEC.

Floor-5: *(Floor-5 is served by the two multizone units located on Floor-8, AHU-25 and AHU-26)*

The existing Alerton controls serving Floor-5 are to be replaced with Metasys controls as follows:

- Typical of 5: Furnish new Metasys NETSTAT to replace existing Alerton zone temperature sensors.
  - ZN5-1-T: Located in Rm.518. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
  - ZN5-2-T: Located in Rm.514. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
  - ZN5-3-T: Located in Rm.502. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.
  - ZN5-4-T: Located in Rm.507. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
  - ZN5-5-T: Located in Rm.509. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.

Floor-6: *(Floor-6 is served by the two multizone units located on Floor-8, AHU-25 and AHU-26)*

The existing Alerton controls serving Floor-6 are to be replaced with Metasys controls as follows:

- Typical of 4: Furnish new Metasys NETSTAT to replace existing Alerton zone temperature sensors.
  - ZN6-1-T: Located in Rm.618. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
  - ZN6-2-T: Located in Rm.604. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.
  - ZN6-3-T: Located in Rm.610. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.
  - ZN6-4-T: Located in Rm.607. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
- PAC-1: Furnish new BACnet/MSTP TEC thermostat to replace existing Alerton VAVSDC3 controller and Alerton zone temp sensor. Terminate TEC to new BACnet/MSTP trunk and to existing fan, heating and cooling relays. Install new CSR to provide fan run status of indoor blower. This unit has 1-stage of cooling and 2-stage electric reheat and serves room 615/616.

Floor-7: *(Floor-7 is served by the two multizone units located on Floor-8, AHU-25 and AHU-26)*

The existing Alerton controls serving Floor-7 are to be replaced with Metasys controls as follows:

- Typical of 6: Furnish new Metasys NETSTAT to replace existing Alerton zone temperature sensors.
  - ZN7-1-T: Located in Rm.712. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.
  - ZN7-2-T: Located in Rm.721. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
  - ZN7-3-T: Located in Rm.703. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.
  - ZN7-4-T: Located in Rm.710. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.
  - ZN7-5-T: Located in Rm.709. This zone is served from AHU-25 on Floor-8. Terminate to EN-25Z.
  - ZN7-6-T: Located in Rm.704. This zone is served from AHU-26 on Floor-8. Terminate to EN-26Z.

© 2008 Johnson Controls, Inc.

Schedule 1

Floor-8: *(Existing AHU-25 and AHU-26 Multizone Systems are to be REPLACED with new VAV Systems)*

- Panel EN-25
  - Furnish new Metasys FEC/IOM control panel (qty=1) for AHU System and terminate to new MSTP trunk. Re-use existing raceway where suitable for re-use. Re-connect to existing 120VAC power source. Terminate FEC controller to new BACnet MS/TP trunk.
- AHU-25 (presently serves the following zones: 5-2, 5-3, 5-5, 6-2, 6-3, 7-1, 7-4, 7-5)
  - Replace existing AHU-25 (8 zone MZU) with a new mixed air, single path VAV AHU having a CHW coil (assuming 48.9gpm) and a factory mounted VFD. Existing duct smoke detector(s) serving old AHU-25 multizone unit are to be preserved and re-installed on new AHU-25 VAV unit. Existing fire alarm shutdown contact (addressable module) serving old AHU-25 starter safety circuit is to be re-used for shutdown of new AHU-25 VFD safety circuit.
  - Replace existing hot water coil located in each of the eight (8) existing zone discharge ducts with a new VAV terminal box having a new HW reheat coil. The new VAV boxes and reheat coils are to be located in the existing exposed ceiling spaces of the Floor-8 mechanical room. The approximate zone HW coil sizes are:
    - Zone 5-2 New VAV with HWRH coil to replace existing RH HWC-29 (4.3 gpm)
    - Zone 5-3 New VAV with HWRH coil to replace existing RH HWC-34 (1.8 gpm)
    - Zone 5-5 New VAV with HWRH coil to replace existing RH HWC-32 (3.7 gpm)
    - Zone 6-2 New VAV with HWRH coil to replace existing RH HWC-31 (1.3 gpm)
    - Zone 6-3 New VAV with HWRH coil to replace existing RH HWC-20 (3.4 gpm)
    - Zone 7-1 New VAV with HWRH coil to replace existing RH HWC-30 (4.4 gpm)
    - Zone 7-4 New VAV with HWRH coil to replace existing RH HWC-33 (2.5 gpm)
    - Zone 7-5 New VAV with HWRH coil to replace existing RH HWC-19 (0.9 gpm)
  - Furnish new Metasys controls to be field installed on new VAV AHU-25:
    - SA-T 2c/#18/shd/pln New 8ft avg temp sensor across SA duct
    - MA-T 2c/#18/shd/pln New 8ft avg temp sensor across MA plenum
    - RA-T/H 4c/#18/shd/pln New Temp/Humidity Sensor in RA Duct
    - CHW-DP 3c/#18/shd/pln New CHW DPT to replace existing
    - SF-C, S 4c/#18/pln New CSR inside of VFD
    - FILT-S 2c/#18/pln New DP switch across filter section
    - CHWV-O 4c/#18/shd/pln New CHW Control Valve
    - OAD-O 3c/#18/shd/pln New Electronic Actuator on outside air Damper
    - RAD-O 3c/#18/shd/pln New Electronic Actuator on RA Damper
    - STATIC 3c/#18/shd/pln New DPT in Zone 5-2 ductwork on Floor-8
    - SF-O 2c/#18/shd/pln New VFD Speed Control cable
    - SF-C, S 4c/#18/pln New CSR in new AHU-25 VFD to provide start/stop and status
    - SF-A 2c/#18/tw/pln New cable to monitor VFD fault contact
    - FRZ-S 2c/#18/pln New Freeze Stat in mixed air section. Monitor one contact of freeze stat via Metasys. Interlock second contact to VFD safety circuit
    - SPHL-S 2c#18/pln New Discharge Static Pressure High Limit Safety Switch. Monitor one contact of SPHL switch via Metasys. Interlock second contact to VFD safety circuit
    - VFD BACnet Connection Furnish new 2 pair/#22/shd SA bus cable from new FEC controller to the new VFD to provide Metasys communication with new VFD

© 2008 Johnson Controls, Inc.

- New VAV Box Controls – Furnish new Metasys VMA1630 terminal box controller (qty-8 total, factory mounted controllers) at the new terminal boxes installed in the AHU-25 discharge ductwork. Furnish the following field installed controls associated with the new terminal boxes:
  - Furnish 24VAC power from EN-25 to the (qty-8) new VMA controllers using 2c/#14/pln cable.
  - Furnish new BACnet/MSTP cabling (3c/#22/shd) cable to the (qty-8) new VMA controllers and terminate in daisy-chain fashion.
  - Furnish new discharge air temp sensor (qty-8) and terminate to VMAs.
  - Furnish new Cat3 cable from each new NETSTAT (see Floors-5, 6 and 7 scope descriptions, above) to its respective new VMA controller.
  - Furnish new 4c/#18/shd cable from the VMA controller to its associated new hot water reheat control valve.

- Panel EN-26
  - Furnish new Metasys FEC/IOM control panel (qty=1) for AHU System and terminate to new MSTP trunk. Re-use existing raceway where suitable for re-use. Re-connect to existing 120VAC power source. Terminate FEC controller to new BACnet MS/TP trunk.

- AHU-26 (presently serves the following zones: 5-1, 5-4, 6-1, 6-4, 7-2, 7-3, 7-6)
  - Replace existing AHU-26 (7 zone MZU) with a new mixed air, single path VAV AHU having a CHW coil and a factory mounted VFD. Existing duct smoke detector(s) serving old AHU-26 multizone unit are to be preserved and re-installed on new AHU-26 VAV unit. Existing fire alarm shutdown contact (addressable module) serving old AHU-26 starter safety circuit is to be re-used for shutdown of new AHU-26 VFD safety circuit.
  - Replace existing hot water coil located in each of the seven (7) existing zone discharge ducts with a new VAV terminal box having a new HW reheat coil. The new VAV boxes and reheat coils are to be located in the existing exposed ceiling spaces of the Floor-8 mechanical room. The approximate zone HW coil sizes are:
    - Zone 5-1 New VAV with HWRH to replace existing RH Coil HWC-26 (4.4 gpm)
    - Zone 5-4 New VAV with HWRH to replace existing RH Coil HWC-24 (2.5 gpm)
    - Zone 6-1 New VAV with HWRH to replace existing RH Coil HWC-27 (4.2 gpm)
    - Zone 6-4 New VAV with HWRH to replace existing RH Coil HWC-22 (1.3 gpm)
    - Zone 7-2 New VAV with HWRH to replace existing RH Coil HWC-28 (6.0 gpm)
    - Zone 7-3 New VAV with HWRH to replace existing RH Coil HWC-25 (3.2 gpm)
    - Zone 7-6 New VAV with HWRH to replace existing RH Coil HWC-23 (1.4 gpm)
  - Furnish new Metasys controls to be field installed on new VAV AHU-26:
    - SA-T 2c/#18/shd/pln (new) New 8ft avg temp sensor across SA duct
    - MA-T 2c/#18/shd/pln (new) New 8ft avg temp sensor across MA plenum
    - RA-T/H 4c/#18/shd/pln (new) New Temp/Humidity Sensor in RA Duct
    - SF-C, S 4c/#18/pln (new) New CSR inside of new VFD
    - FILT-S 2c/#18/pln (new) New DP switch across filter section
    - CHWV-O 4c/#18/shd/pln New CHW Control Valve
    - OAD-O 3c/#18/shd/pln New Electronic Actuator on AHU factory outside air Damper
    - RAD-O 3c/#18/shd/pln New Electronic Actuator on AHU factory RA Damper
    - STATIC 3c/#18/shd/pln (new) New DPT with poly twin tube to static sample location in Zone 7-6 ductwork on Floor-8, upstream of new VAV box
    - SF-O 2c/#18/shd/pln New VFD Speed Control cable
    - SF-C, S 4c/#18/pln New CSR in new AHU-26 VFD to provide start/stop and status

© 2008 Johnson Controls, Inc.

- SF-A 2c/#18/tw/pln New cable to monitor VFD fault contact
- FRZ-S 2c/#18/pln New Freeze Stat in mixed air section. Monitor one contact of freeze stat via Metasys. Interlock second contact to VFD safety circuit
- SPHL-S 2c#18/pln New Discharge Static Pressure High Limit Safety Switch. Monitor one contact of SPHL switch via Metasys. Interlock second contact to VFD safety circuit
- VFD BACnet Connection Furnish new 2 pair/#22/shd SA bus cable from new FEC controller to the new VFD to provide Metasys communication with new VFD

- New VAV Box Controls – Furnish new Metasys VMA1630 terminal box controller (qty-7 total, factory mounted controllers) at the new terminal boxes installed in the AHU-26 discharge ductwork. Furnish the following field installed controls associated with the new terminal boxes:
  - Furnish 24VAC power from EN-26 to the (qty-7) new VMA controllers using 2c/#14/pln cable.
  - Furnish new BACnet/MSTP cabling (3c/#22/shd) cable to the (qty-7) new VMA controllers and terminate in daisy-chain fashion.
  - Furnish new discharge air temp sensor (qty-7) and terminate to VMAs.
  - Furnish new Cat3 cable from each new NETSTAT (see Floors-5, 6 and 7 scope descriptions, above) to its respective new VMA controller.
  - Furnish new 4c/#18/shd cable from the VMA controller to its associated new hot water reheat control valve.

- Floor-8 Hot Water Unit Heaters (qty-2):
  - Furnish new On/Off 24VAC Electric valve (4.4 gpm) to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat to replace existing UH thermostat. Note: These new TEC thermostats will also be used to control fresh air fan SF-4 (see below) that serves Floor-8 mechanical room.

- SF-4 Floor-8 Fresh Air Fan:
  - Furnish new CSR in existing MCC panel. Install new cable from MCC to panel EN-26 and terminate to FEC controller to provide SF4-C and SF4-S.
  - At SF-4, furnish new 120VAC, spring return actuator to replace existing pneumatic damper actuator at fan inlet that is interlocked to open whenever fan is energized.

- SF-6 Floor-8 Stairwell Pressurization Fan:
  - This fan is controlled by the fire alarm system. No BAS work included.

Old Courthouse Exhaust Fans:

- Furnish new Current Sensing Status Command Relay (CSR) for each of the existing fans and install new 4c/#18/pln cable from the CSR back to the nearest AHU control panel to provide Start/Stop and Status for each fan listed.
  - EF-1 Provide software interlock of this fan to AHU-25 and AHU-26
  - EF-2 Provide software interlock of this fan to AHU-24
  - EF-3 Provide software interlock of this fan to AHU-19
  - EF-4 Provide software interlock of this fan to AHU-20
  - EF-5 Provide software interlock of this fan to AHU-20
  - EF-7 Provide software interlock of this fan to AHU-23
  - EF-8 Provide software interlock of this fan to AHU-14
  - EF-9 Provide software interlock of this fan to AHU-25 and AHU-26
  - EF-10 Provide software interlock of this fan to AHU-19

© 2008 Johnson Controls, Inc.

- EF-11 Provide software interlock of this fan to AHU-23
- EF-12 Provide software interlock of this fan to AHU-23
- EF-14 Provide software interlock of this fan to AHU-19
- SF-1 Provide software interlock of this fan to AHU-22
- SF-2 Provide software interlock of this fan to AHU-23
- SF-3 Provide software interlock of this fan to AHU-24
- SF-5 Provide software interlock of this fan to EF-15

© 2008 Johnson Controls, Inc.

Schedule 1

Courthouse Addition and Jail/Sheriff's Office

Overview:

The New Courthouse, Sheriff's Office and Jail Buildings are presently served by Alerton BACnet DDC controls. These controls are to be replaced with new Metasys BACnet controllers as described herein. The existing Alerton BACnet MS/TP trunks (2c/#22/shd) will be replaced with new 3c/#22/shd BACnet MS/TP trunks.

Courthouse Addition Penthouse (AHU-1 and AHU-2) Summary:

- AHU-1 serves the Courthouse Addition. It is a VAV unit having three (3) large supply fans with VFDs, one (1) large return fan with VFD, economizer dampers and a single large CHW coil. The existing Alerton controls serving this unit are to be replaced with new Metasys.
- AHU-2 serves the Jail/Sheriff's Office building. It is large CV unit having a CHW coil and a HW coil. The existing Alerton controls serving this unit are to be replaced with Metasys.

Network:

The existing Alerton supervisory controllers serving the Courthouse Addition and Jail/Sheriff's Office are located in the Courthouse Addition Penthouse and are to be replaced with new Metasys BACnet NAE supervisory controller(s).

AHU-1 (serving Courthouse Addition):

- Panel EN-AH1
  - Furnish new Metasys NCE controller (qty=1) for AHU System Retrofit and terminate to new MSTP trunk. Re-use existing enclosure (EN-AH1), end devices, control cabling and re-terminate.
  - Furnish new 3c/#22/tw/shd/pln MSTP cable in EMT from panel EN-AH1 to panel EN-AH2 in adjoining electrical room and then over to the (qty-4) existing VFDs (serving SF-1, SF-2, SF-3, RF-1, in same electrical room and terminate to the VFDs in daisy-chain fashion.
- Furnish new Metasys controls to be field installed on existing VAV AHU-1:

AI-1	RA-T	New RA-T sensor to replace existing
AI-2	SA-T	New SA-T sensor to replace exisitng
AI-3	SF1-F	Re-use exist AFMS. Furnish new DP XMTTR
AI-4	SF2-F	Re-use exist AFMS. Furnish new DP XMTTR
AI-5	SF3-F	Re-use exist AFMS. Furnish new DP XMTTR
AI-6	RF1-F	Re-use exist AFMS. Furnish new DP XMTTR
AI-7	RA-H	New RA-H sensor to replace existing
AI-8	CHW-DP	New DPT to replace existing
AI-9	CHWS-T	New TE sensor to replace existing. Re-use existing well
AI-10	CHWR-T	New TE sensor to replace existing. Re-use existing well
AI-11	STATIC1A	Furnish new DPT to replace existing on Floor-1A
AI-12	STATIC1B	Furnish new DPT to replace existing on Floor-1B
AI-13	STATIC2A	Furnish new DPT to replace existing on Floor-2A
AI-14	STATIC2B1	Furnish new DPT to replace existing on Floor-2B1
AI-15	STATIC2B2	Furnish new DPT to replace existing on Floor-2B2
AI-16	STATIC3A	Furnish new DPT to replace existing on Floor-3A

© 2008 Johnson Controls, Inc.

AI-17	STATIC3B	Furnish new DPT to replace existing on Floor-3B
AI-18	MA-T	Furnish new MA-T sensor
BI-1	SF1-S	Re-use exist status contact
BI-2	SF2-S	Re-use exist status contact
BI-3	SF3-S	Re-use exist status contact
BI-4	RF1-S	Re-use exist status contact
BI-5	FILT-S	Furnish new DP Switch to replace existing
BI-6	FRZ-S	Furnish new Freezestat. Wire 2nd contact in series w/ exist safe circuit
AO-1	MINOA-O	Furnish new electronic actuator (qty-1) to replace existing pneumatic
AO-2	MAXOA-O	Furnish new electronic actuator (qty-1) to replace existing pneumatic
AO-3	RLF-O	Furnish new electronic actuator (qty-2) to replace existing pneumatic
AO-4	RAD-O	Furnish new electronic actuator (qty-4) to replace existing pneumatic
AO-5	SF1-O	Re-use existing speed control cable serving SF-1 VFD
AO-6	SF2-O	Re-use existing speed control cable serving SF-2 VFD
AO-7	SF3-O	Re-use existing speed control cable serving SF-3 VFD
AO-8	RF1-O	Re-use existing speed control cable serving RF-1 VFD
AO-9	CHWV-OI	Furnish 2-way Electronic CHWV to replace existing pneumatic 3-way
BO-1	SF1-C	Re-use existing RIB Start/Stop Relay
BO-2	SF2-C	Re-use existing RIB Start/Stop Relay
BO-3	SF3-C	Re-use existing RIB Start/Stop Relay
BO-4	RF1-C	Re-use existing RIB Start/Stop Relay
BO-5	EFA-C	Relay Board in Rm. B317 serves EF-29, 30, 31, 32 to remain
BO-6	EFB-C	Relay Board in Rm. A331 serves EF-30, 35, 26, 27, 33 to remain
BO-7	EFC-C	Relay Board in Rm. A303 serves EF-21, 22, 23, 24, 28 to remain

- Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits
- Furnish new Static Press Low Limit switch (qty-1) serving SF-1, 2, 3 suction plenum and wire to existing VFD safety circuits
- Furnish new Static Press Hi limit switch (qty-1) serving RA plenum and wire to existing VFD safety circuits

AHU-2 (serving Jail/Sheriff's Office):

- Panel EN-AH2
  - Furnish new FEC controller in existing enclosure EN-AH2 to replace the Alerton controller.
  - Terminate new FEC to new BACnet MS/TP cable originating at the new NCE controller in panel EN-AH1.
- Furnish new 2-way characterized electronic ball valve to replace existing 3-way electronic CHWV (270 gpm) located at AHU-2.
- Furnish new 3-way electronic HW control valve (130 gpm) to replace existing 3-way electronic valve located at AHU-2.
- Furnish new Metasys controls to be field installed on existing AHU-2:

© 2008 Johnson Controls, Inc.

- AI-1 RA-T Furnish new RA-T/H sensor to replace existing RA-T Sensor
- AI-2 SA-T Furnish new SA-T sensor to replace existing
- AI-3 RA-H See RA-T (above)
- AI-4 CHWS-T Furnish new Temp Sensor to replace existing. Re-use well
- AI-5 CHWR-T Furnish new Temp Sensor to replace existing. Re-use well
- AI-6 MA-T Furnish new MA-T sensor across filters at MA intake
- BI-1 SF-S Re-use exist status contact
- BI-2 FILT-S Furnish new DP Switch to replace existing
- BI-6 FRZ-S Furnish new Freezestat at MA intake. Wire 2nd contact to safety circuit
- AO-1 CHWV-O Furnish new CHWV to replace existing
- AO-2 HWV-O Furnish new CHWV to replace existing
- BO-1 SF-C Re-use existing RIB Start/Stop Relay
- BO-2 MINOA-C Re-use existing Electric damper actuator
- BO-3 MIXD-C Re-use existing Electric damper actuators
- Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits

Floor-1, Side-A:

The existing Alerton controls serving Floor-1 Side-A are to be replaced with Metasys controls as follows:

- **Single Duct Terminal Box Retrofit: (21 Thus)**
- Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
- Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
- Note:
  - VV-60 has three (3) existing duct-mounted HW reheat coils downstream of the terminal box. This terminal box will be treated differently than the other terminal boxes.
  - Furnish new electronic valves (HWC-1: 2.5 GMP, HWC-2: 3.3 gpm, HWC-3: 3.3 gpm) to replace existing pneumatic HWV's.
  - Furnish (qty-3) addressable NETSTATs to serve the existing reheat coils.
  - The VMA controller will modulate VV-60 in cooling mode to satisfy the zone with the greatest demand for cooling. Each of the 3 NETSTAT's will independently modulate respective HWV to maintain local heating setpoint.
- Perimeter Heating FCU Retrofit: (4 Thus: FC-17, 5.6 gpm HW; FC-18, 3.5 gpm HW; FC-19, 5 gpm; FC-20, 5 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

© 2008 Johnson Controls, Inc.

Floor-1, Side-B:

- The existing Alerton controls serving Floor-1 Side-B are to be replaced with Metasys controls as follows:
- **Single Duct Terminal Box Retrofit: (11 Thus)**
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
- Perimeter Heating FCU Retrofit: (3 Thus: FC-21, 5.6 gpm HW; FC-22, 3.5 gpm HW; FC-23, 5 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

Floor-2, Side-A:

- The existing Alerton controls serving Floor-2 Side-A are to be replaced with Metasys controls as follows:
- **Single Duct Terminal Box Retrofit: (23 Thus)**
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
  - Note:
    - VV-106 has an existing duct-mounted HW reheat coil downstream of the terminal box.
    - Furnish new electronic valve (HWC-4: 2.5 gpm) to replace existing pneumatic HWV and to be controlled by new VMA controller.
- Perimeter Heating FCU Retrofit: (5 Thus: FC-8, 2.4 gpm HW; FC-9, 4.9 gpm HW; FC-10, 2.7 gpm; FC-11, 4.1 gpm; FC-12, 4.4 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

© 2008 Johnson Controls, Inc.

Floor-2, Side-B:

- The existing Alerton controls serving Floor-2 Side-B are to be replaced with Metasys controls as follows:
- **Single Duct Terminal Box Retrofit: (28 Thus)**
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
- Perimeter Heating FCU Retrofit: (4 Thus: FC-13, 2.1 gpm HW; FC-14, 5 gpm HW; FC-15, 3.5 gpm; FC-16, 1.7 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

Floor-3, Side-A:

- The existing Alerton controls serving Floor-3 Side-A are to be replaced with Metasys controls as follows:
- Single Duct Terminal Box Retrofit: (22 Thus)
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
- Perimeter Heating FCU Retrofit: (7 Thus: FC-1, 3.6 gpm HW; FC-2, 3.2 gpm HW; FC-3, 5.2 gpm; FC-4, 4 gpm; FC-29, 4 gpm; FC-32, 4 gpm; FC-34, 13 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

Floor-3, Side-B:

- The existing Alerton controls serving Floor-3 Side-B are to be replaced with Metasys controls as follows:
- Single Duct Terminal Box Retrofit: (19 Thus)
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.

© 2008 Johnson Controls, Inc.

- Perimeter Heating FCU Retrofit: (6 Thus: FC-5, 6.9 gpm HW; FC-6, 4.5 gpm HW; FC-7, 5.8 gpm; FC-30, 4 gpm; FC-31, 4 gpm; FC-33, 13 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

Miscellaneous New Courthouse Lighting Controls

- (12 Thus) The existing Alerton System is presently controlling selected lighting circuits throughout the facility. These lighting control points are presently terminated to existing Alerton field controllers serving terminal boxes, AHUs, FCUs, etc. As the existing Alerton controllers are replaced with new Metasys controllers, the existing lighting control circuits will be re-terminated to the new Metasys controllers.
  - CKT-01: Lighting Contactor Floor-1 Building A and B New Courthouse
  - CKT-02: Lighting Contactor Floor-1 Building A and B New Courthouse
  - CKT-03: Lighting Contractor Floor-2 Building B New Courthouse
  - CKT-04: Lighting Contactor Floor-2 Building A and B New Courthouse
  - CKT-05: Lighting Contactor Floor-3 Building A and B New Courthouse
  - CKT-06: Lighting Contactor Floor-3 Stair and Atrium New Courthouse
  - CKT-07: Lighting Contactor Floor-1 Building B County Clerk New Courthouse
  - CKT-08: Lighting Contactor County Clerk New Courthouse
  - CKT-09: Lighting Contactor Law Library Building B New Courthouse
  - CKT-10: Lighting Contactor Law Library Building B New Courthouse
  - CKT-17: Lighting Contactor County Clerk Exterior New Courthouse
  - CKT-18: Lighting Contactor County Clerk Exterior New Courthouse

New Jail/Sheriff's Office Summary:

- The Jail/Sheriff's Office is served by 7 AHUs.
  - AHU-2 is located in the New Courthouse Penthouse and serves the new Jail Floors-1, 2 and 3 spaces and was included in the previous section.
  - AHU-3 and AHU-4 are 4-pipe single zone constant volume AHUs located in the 4th Floor Jail mechanical room and serve 4th Floor spaces. These two (2) AHUs are to be replaced (under a separate FIM) with two (2) new 4-pipe constant volume Rooftop Units (RTUs).
  - AHU-5, 6 and 7 are VAV air-handlers that are located on Floor-1 of the Jail Building and serve the Sheriff's Floor-1 offices. These units are presently constant volume with a supply air bypass control damper providing duct static pressure control. A new VFD is to be installed for each of these units to replace the existing motor starter and eliminate the need for the supply air bypass control damper.
  - AHU-8 is a VAV air-handler located on Floor-2 of the Jail Building that serves the Sheriff's Floor-2 Offices. This unit is presently constant volume with a supply air bypass control damper providing duct static pressure control. A new VFD is to be installed to replace the existing motor starter and eliminate the need for the supply air bypass control damper.

© 2008 Johnson Controls, Inc.

AHU-3 (Existing AHU serving Floor-4 Inmate Areas to be replaced with new AHU):

- Panel EN-AH3
  - Furnish new Metasys FEC2611 control panel on wall adjacent to new AHU to replace existing Alerton controller.
- Furnish new CHWV (2-way electronic ball valve) to replace existing 3-way pneumatic CHWV (65 gpm).
- Furnish new HWV (3-way electronic ball valve) to replace existing 3-way pneumatic HWV (33 gpm).
- Furnish new Metasys controls to be field installed on existing AHU-3:
  - AI-1 RA-T Furnish new RA-T sensor to replace existing
  - AI-2 SA-T Furnish new SA-T sensor to replace existing
  - AI-3 RA-H Furnish new RA-H sensor to replace existing
  - AI-4 MA-T Furnish new MA-T sensor at MA plenum
  - BI-1 SF-S Re-use exist status contact
  - BI-2 FILT-S Furnish new DP Switch to replace existing
  - BI-3 FRZ-S Furnish new Freezestat at MA intake. Wire 2nd contact to safety circuit
  - BI-4 RF-S Furnish new CSR for fan status in RF starter
  - AO-1 CHWV-O Furnish new electronic CHWV to replace existing
  - AO-2 HWV-O Furnish new electronic HWV to replace existing
  - BO-1 SF-C Re-use existing RIB Start/Stop Relay
  - BO-2 RF-C Re-use existing RIB Start/Stop Relay
  - BO-3 MINOA-C Re-use existing Electric 2-Pos damper actuator
  - BO-4 MIXD-C Re-use existing Electric 2-Pos damper actuators
  - Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits

AHU-4 (Existing AHU serving Floor-4 Kitchen Areas to be replaced with new AHU):

- Panel EN-AH4
  - Furnish new Metasys FEC2611 control panel on wall adjacent to new AHU to replace existing Alerton controller.
- Furnish new CHWV (2-way electronic ball valve) to replace existing 3-way pneumatic CHWV (100 gpm).
- Furnish new HWV (3-way electronic ball valve) to replace existing 3-way pneumatic HWV (44 gpm).
- Furnish new Metasys controls to be field installed on existing AHU-4:
  - AI-1 RA-T Furnish new RA-T sensor to replace existing
  - AI-2 SA-T Furnish new SA-T sensor to replace existing
  - AI-3 RA-H Furnish new RA-H sensor to replace existing
  - AI-4 MA-T Furnish new MA-T sensor at MA plenum
  - BI-1 SF-S Re-use exist status contact
  - BI-2 FILT-S Furnish new DP Switch to replace existing
  - BI-3 FRZ-S Furnish new Freezestat at MA intake. Wire 2nd contact to safety circuit
  - BI-4 RF-S Furnish new CSR for fan status in RF starter

© 2008 Johnson Controls, Inc.

- AO-1 CHWV-O Furnish new electronic CHWV to replace existing
- AO-2 HWV-O Furnish new electronic HWV to replace existing
- BO-1 SF-C Re-use existing RIB Start/Stop Relay
- BO-2 RF-C Re-use existing RIB Start/Stop Relay
- BO-3 MINOA-C Re-use existing Electric 2-Pos damper actuator
- BO-4 MIXD-C Re-use existing Electric 2-Pos damper actuators
- BO-5 EFS-C Re-use existing RIB Start/Stop Relays
- Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits

AHU-5 (serving Floor-1 Sheriff's Office West Side):

- Panel EN-AH5 (located in Mechanical Rm. C181)
  - Furnish new Metasys FEC2611 controller to replace existing Alerton controllers.
  - Re-use existing 24VAC available in existing control transformer panel that is to remain.
- AHU-5 (serves qty-4 Floor-1 West VAV Boxes):
  - Furnish new CHWV (2-way electronic ball valve) to replace existing 3-way pneumatic CHWV (22 gpm).
  - Remove existing supply air bypass damper and seal insulate the former bypass duct.
  - Furnish new VFD (3HP, 480VAC/3Ph, VFD-5, BACnet SA) to replace existing AHU-5 motor starter.
- Furnish new Metasys controls to be field installed on existing AHU-5:
  - AI-1 RA-T Furnish new RA-T sensor to replace existing
  - AI-2 SA-T Furnish new SA-T sensor to replace existing
  - AI-3 RA-H Furnish new RA-H sensor
  - AI-4 MA-T Furnish new MA-T sensor at MA plenum
  - AI-5 STATIC Install new duct static pressure DP transmitterin panel EN-AH5
  - BI-1 SF-S Furnish new CSR in new VFD
  - BI-2 FILT-S Furnish new Filter DP Switch to replace existing
  - BI-3 OAF-S Furnish new CSR for fan status in OAF starter
  - AO-1 CHWV-O Furnish new electronic CHWV to replace existing
  - AO-2 SF-O Furnish new SF VFD speed control cable
  - BO-1 SF-C Furnish new CSR in new VFD
  - BO-2 OA-C Furnish new Electric 2-Pos damper actuator
  - BO-3 OAF-C Re-use existing Start/Stop Relay
  - BO-4 EF-C Re-use existing RIB Start/Stop Relay
  - Furnish new SA Bus (2 Pair/#22/shd/pln) between new VFD and new FEC controller in panel EN-AH5
  - Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits. Relocate the existing safety circuit from the supply fan motor starter to the new VFD safety circuit terminals.

© 2008 Johnson Controls, Inc.

AHU-6 (serving Floor-1 Sheriff's Office North Side):

- Panel EN-AH6 (located in Mechanical Rm. C136)
  - Furnish new Metasys FEC2611 controller to replace existing Alerton controllers.
  - Re-use existing 24VAC available in existing control transformer panel that is to remain.
- AHU-6 (serves qty-5 Floor-1 Sheriff's Office North VAV Boxes):
  - Furnish new CHWV (2-way electronic ball valve) to replace existing 3-way pneumatic CHWV (37 gpm).
  - Remove existing supply air bypass damper and seal insulate the former bypass duct.
  - Furnish new VFD (5HP, 480VAC/3Ph, VFD-6, BACnet SA) to replace existing AHU-6 motor starter.
- Furnish new Metasys controls to be field installed on existing AHU-6:
  - AI-1 RA-T Furnish new RA-T sensor to replace existing
  - AI-2 SA-T Furnish new SA-T sensor to replace existing
  - AI-3 RA-H Furnish new RA-H sensor
  - AI-4 MA-T Furnish new MA-T sensor at MA plenum
  - AI-5 STATIC Install new duct static pressure DP transmitter in panel EN-AH6
  - BI-1 SF-S Furnish new CSR in new VFD
  - BI-2 FILT-S Furnish new Filter DP Switch to replace existing
  - BI-3 OAF-S Furnish new CSR for fan status in OAF starter
  - AO-1 CHWV-O Furnish new electronic CHWV to replace existing
  - AO-2 SF-O Furnish new SF VFD speed control cable
  - BO-1 SF-C Furnish new CSR in new VFD
  - BO-2 OA-C Furnish new Electric 2-Pos damper actuator
  - BO-3 OAF-C Re-use existing Start/Stop Relay
  - BO-4 EF-C Re-use existing RIB Start/Stop Relay
  - Furnish new SA Bus (2 Pair/#22/shd/pln) between new VFD and new FEC controller in panel EN-AH6
  - Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits. Relocate the existing safety circuit from the supply fan motor starter to the new VFD safety circuit terminals.

AHU-7 (serving Floor-1 Sheriff's Office South Side):

- Panel EN-AH7 (located in Mechanical Rm. C163)
  - Furnish new Metasys FEC2611 controller to replace existing Alerton controllers.
  - Re-use existing 24VAC available in existing control transformer panel that is to remain.
- AHU-7 (serves qty-5 Floor-1 Sheriff's Office South VAV Boxes):
  - Furnish new CHWV (2-way electronic ball valve) to replace existing 3-way pneumatic CHWV (29 gpm).
  - Remove existing supply air bypass damper and seal insulate the former bypass duct.
  - Furnish new VFD (3HP, 480VAC/3Ph, VFD-7, BACnet SA) to replace existing AHU-7 motor starter.
- Furnish new Metasys controls to be field installed on existing AHU-7:
  - AI-1 RA-T Furnish new RA-T sensor to replace existing
  - AI-2 SA-T Furnish new SA-T sensor to replace existing

© 2008 Johnson Controls, Inc.

AI-3	RA-H	Furnish new RA-H sensor
AI-4	MA-T	Furnish new MA-T sensor at MA plenum
AI-5	STATIC	Install new duct static pressure DP transmitter in panel EN-AH7
BI-1	SF-S	Furnish new CSR in new VFD
BI-2	FILT-S	Furnish new Filter DP Switch to replace existing
BI-3	OAF-S	Furnish new CSR for fan status in OAF starter
AO-1	CHWV-O	Furnish new electronic CHWV to replace existing
AO-2	SF-O	Furnish new SF VFD speed control cable
BO-1	SF-C	Furnish new CSR in new VFD
BO-2	OA-C	Furnish new Electric 2-Pos damper actuator
BO-3	OAF-C	Re-use existing Start/Stop Relay
BO-4	EF-C	Re-use existing RIB Start/Stop Relay

- Furnish new SA Bus (2 Pair/#22/shd/pln) between new VFD and new FEC controller in panel EN-AH7
- Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits. Relocate the existing safety circuit from the supply fan motor starter to the new VFD safety circuit terminals.

AHU-8 (serving Floor-2 Sheriff's Office):

- Panel EN-AH8 (located in Mechanical Rm. C260)
  - Furnish new Metasys FEC2611 controller to replace existing Alerton controllers.
  - Re-use existing 24VAC available in existing control transformer panel that is to remain.
- AHU-8 (serves qty-6 Floor-2 Sheriff's Office South VAV Boxes):
  - Furnish new CHWV (2-way electronic ball valve) to replace existing 3-way pneumatic CHWV (43 gpm).
  - Remove existing supply air bypass damper and seal insulate the former bypass duct.
  - Furnish new VFD (5HP, 480VAC/3Ph, VFD-8, BACnet SA) to replace existing AHU-8 motor starter.
- Furnish new Metasys controls to be field installed on existing AHU-8:

AI-1	RA-T	Furnish new RA-T sensor to replace existing
AI-2	SA-T	Furnish new SA-T sensor to replace existing
AI-3	RA-H	Furnish new RA-H sensor
AI-4	MA-T	Furnish new MA-T sensor at MA plenum
AI-5	STATIC	Install new duct static pressure DP transmitter in panel EN-AH8
AI-6	CHW-DP	Furnish new CHW DPT to replace existing
BI-1	SF-S	Furnish new CSR in new VFD
BI-2	FILT-S	Furnish new Filter DP Switch to replace existing
AO-1	CHWV-O	Furnish new electronic CHWV to replace existing
AO-2	SF-O	Furnish new SF VFD speed control cable
BO-1	SF-C	Furnish new CSR in new VFD
BO-2	OA-C	Furnish new Electric 2-Position damper actuator
BO-3	OAF-C	Re-use existing Start/Stop Relay
BO-4	EF-C	Re-use existing RIB Start/Stop Relay

© 2008 Johnson Controls, Inc.

- BO-5 SF6-C Re-use existing RIB Start/Stop Relay for perimeter heat fan
- Furnish new SA Bus (2 Pair/#22/shd/pln) between new VFD and new FEC controller in panel EN-AH8
- Preserve existing safety devices (duct smoke detectors, fire alarm shutdowns, duct hi/lo limits, etc) and existing safety circuits. Relocate the existing safety circuit from the supply fan motor starter to the new VFD safety circuit terminals.

Floor-1, Side-C (Sheriff's Office):

- The existing Alerton controls serving Floor-1 Side-C are to be replaced with Metasys controls as follows:
- Single Duct Terminal Box Retrofit: (15 Thus)
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
- Perimeter Heating FCU Retrofit: (5 Thus: FC-24, 6.3 gpm; FC-25, 4 gpm; FC-26, 1 gpm; FC-27, 1 gpm; FC-28, 2.3 gpm)
  - Furnish new electronic, 2-way, modulating, HWV to replace existing pneumatic HW control valve.
  - Furnish new TEC network thermostat installed on FCU housing. Connect to BACnet MS/TP and to existing source of 24VAC power.
  - Furnish new discharge air temp sensor in ductwork downstream of the FCU.
  - Furnish new FILT-S switch at each FCU and terminate to new TEC controller.
  - Furnish new Current Sensing Status Relay (CSR) to replace existing in FCU housing to monitor run status of FCU fan.
  - Re-use existing FCU fan start/stop RIB relay.

Floor-2, Side-C (Sheriff's Office):

- The existing Alerton controls serving Floor-2 Side-C are to be replaced with Metasys controls as follows:
- Single Duct Terminal Box Retrofit: (6 Thus)
  - Furnish new VMA controller for existing terminal box. Connect to new BACnet MS/TP, connect to 24VAC power circuit and connect existing flow ring to integral velocity pressure sensor on VMA.
  - Furnish new Metasys NETSTAT zone sensor to replace existing Alerton zone temperature sensor.
  - Note: There are three (3) existing duct hot water coils (HWC-5, 1 gpm; HWC-6, 3 gpm and HWC-7, 3.5 gpm). Furnish new electronic, ball Hot Water Valves to replace existing pneumatic control valves. Furnish new control cabling from each new HWV and terminate to appropriate terminal box controller (i.e., HWC-5 valve to terminate to VV-6, HWC-6 valve to terminate to VV-3, HWC-7 valve to terminate to VV-2).

Miscellaneous Jail/Sheriff's Office Lighting Controls

- (6 Thus) The existing Alerton System is presently controlling selected lighting circuits throughout the facility. These lighting control points are presently terminated to existing Alerton field controllers serving terminal boxes, AHUs, FCUs, etc. As the existing Alerton controllers are replaced with new Metasys controllers, the existing lighting control circuits are to be re-terminated to the new Metasys controllers.
  - CKT-11: Lighting Contactor Building-C Sheriff's Department Exterior Lights
  - CKT-12: Lighting Contactor Spare
  - CKT-13: Lighting Contactor Floor-2 Guard Walkway Building-C Jail
  - CKT-14: Lighting Contactor Floor-3 Guard Walkway Building-C Jail

© 2008 Johnson Controls, Inc.

- CKT-15: Lighting Contactor Building-C Sheriff's Department Exterior Lights
- CKT-16: Lighting Contactor Building-C Sheriff's Department Exterior Lights

Courthouse Complex Central Plant

Overview:

The existing Courthouse Complex Central Plant is presently served by Alerton BACnet DDC controls that are to be replaced by new Metasys controls as described herein. There are 6 VFDs located on floor-2 of the plant that do not appear to be functioning properly and will be replaced as described herein. Under a separate FIM, the existing primary chilled water pumps (PCHWP-1 and PCHWP-2) are to be replaced with new larger 125HP pumps, motors and VFDs to serve in a primary variable flow chilled water configuration. Under this same FIM, existing CDWPs are to be replaced with new pumps, motors and VFDs for chiller plant optimization and the existing Cooling Tower Fan-1 and Cooling Tower Fan-2 motors are to be equipped with new VFDs. A new chilled water minimum flow bypass control valve is to be installed by the on floor-2 of the plant. The three (3) existing secondary CHW pumps will be removed and replaced with manual isolation valves. New chilled water flow meters are to be furnished for the new primary loop and each of the three (3) building loops to monitor chilled water Btu consumption.

Floor-1 of Plant:

- Furnish new Refrigerant Monitoring Panel to replace existing. Re-use existing 120VAC and re-connect existing purge fan and damper interlocks, chiller shutdown interlocks, etc.
- Furnish new Audio/Visual notification appliances device outside of both chiller plant entrances and interlock to new RMP.
- Furnish new manual chiller plant shutdown switch with break-glass cover at main chiller plant entrance.

Panel EN-CHW on Floor-2 of Plant:

- Panel EN-CHW
  - Furnish new factory-fabricated NCE/IOM control panel (EN-CHW) on North wall of plant to replace existing Honeywell panels (qty-6) located on the North wall of plant.
  - Furnish new BACnet MS/TP trunk from new NCE in panel EN-CHW to new panel EN-HW, new VFDs and new Chiller-2 to be located on Floor-1.
- Furnish new Metasys controls to be field installed and terminated to new panel EN-CHW:
  - AI CH1CHWS-T Replace Temp Sensor, Re-use exist well
  - AI CH1CHWR-T Replace Temp Sensor, Re-use exist well
  - AI CH2CHWR-T Replace Temp Sensor, Re-use exist well
  - AI CH2CHWR-T Replace Temp Sensor, Re-use exist well
  - AI NEW_CH-CHWR-T Replace Temp Sensor, Re-use exist well
  - AI NEW_CH-CHWS-T Replace Temp Sensor, Re-use exist well
  - AI OLD_CH-CHWR-T Replace Temp Sensor, Re-use exist well
  - AI OLD_CH-CHWS-T Replace Temp Sensor, Re-use exist well
  - AI JAIL_CHWR-T Replace Temp Sensor, Re-use exist well
  - AI JAIL_CHWS-T Replace Temp Sensor, Re-use exist well
  - AI PRICHWS-T Replace Temp Sensor, Re-use exist well
  - BI PCHWP1-S Install new CSR in new VFD located on wall near pump
  - BI PCHWP2-S Install new CSR in new VFD located on wall near pump

© 2008 Johnson Controls, Inc.

BI PCHWP1-A	Monitor Alarm Status of new VFD serving pump
BI PCHWP2-A	Monitor Alarm Status of new VFD serving pump
BO PCHWP1-C	Install new CSR in new VFD located on wall near pump
BO PCHWP2-C	Install new CSR in new VFD located on wall near pump
AO PCHWP1-O	For speed control to new VFD on wall near pump
AO PCHWP2-O	For speed control to new VFD on wall near pump
BI LO_AIR_P-A	Re-use existing alarm contact
BI HI_AIR_P-A	Re-use existing alarm contact
BI DRYER1-A	Re-use existing alarm contact
BI DRYER2-A	Re-use existing alarm contact
BI REFRMON-A	Re-use existing alarm contact
AI CH1CDWS-T	Replace Temp Sensor, Re-use exist well
AI CH1CDWR-T	Replace Temp Sensor, Re-use exist well
AI CH2CDWS-T	Replace Temp Sensor, Re-use exist well
AI CH2CDWR-T	Replace Temp Sensor, Re-use exist well
AI PRICHW-F	Furnish new Turbine Flow Meter to repl existing
BI CT1-S	Install new CSR in new VFD
BI CT2-S	Install new CSR in new VFD
BI CT1-A	Monitor Alarm Status of new VFD serving CT-1
BI CT2-A	Monitor Alarm Status of new VFD serving CT-2
BO CT1-C	Install new CSR in new VFD
BO CT2-C	Install new CSR in new VFD
AO CT1-O	For speed control to new VFD
AO CT2-O	For speed control to new VFD
BO CUP_EXT_LTS-C	Re-use existing lighting control relay
AI OA-T	Replace existing OA-T sensor with new OA-T/H sensor
AI OA-H	Replace existing OA-T sensor with new OA-T/H sensor
AI PRICHWR-T	Replace Temp Sensor, Re-use exist well
BI PHOTOCELL-S	Re-use existing Photocell contact
BO MECH_EF17/18-C	Re-use existing Relays
BO MECH-DPRS-C	Furnish electronic actuators to replace existing pneu
AO CH1CDWBYPV-O	Furnish new 3-way Butterfly Valve to replace existing
AO CH2CDWBYPV-O	Furnish new 3-way Butterfly Valve to replace existing
BI CDWP1-S	Install new CSR in new VFD located on Floor-2 Rack
BI CDWP2-S	Install new CSR in new VFD located on Floor-2 Rack
BI CDWP1-A	Monitor Alarm Status of new VFD serving CDWP-1
BI CDWP2-A	Monitor Alarm Status of new VFD serving CDWP-2
BO CDWP1-C	Install new CSR in new VFD located on Floor-2 Rack
BO CDWP2-C	Install new CSR in new VFD located on Floor-2 Rack
AO CDWP1-O	For speed control to new VFD on Floor-2 Rack

© 2008 Johnson Controls, Inc.

- AO CDWP2-O For speed control to new VFD on Floor-2 Rack
- AO MINCHWV-O Furnish new Min Flow 4" CHW Bypass Ball Valve
- AI OLD_CH-CHW-F Furnish new flow meter in CHW to Courthouse Addn
- AI NEW_CH-CHW-F Furnish new flow meter in CHW to Old Courthouse
- AI JAIL-CHW-F Furnish new flow meter in CHW to Jail/Sheriff's

EN-HW on Floor-2 of Plant:

- Panel EN-HW
  - Furnish new FEC2611/IOM control panel (EN-HW) on wall of Floor-2 plant for monitoring/control of the existing hot water system.
  - Furnish new BACnet MS/TP trunk from new NCE in panel EN-CHW to the new FEC2611 in panel EN-HW and terminate in daisy-chain fashion. Extend this BACnet MS/TP trunk to the new VFDs on Floor-2 and then down to Floor-1 to the Chiller-2 factory panel and to the new BACnet MS/TP power meter in Chiller-1.
- The following hot water heating system points are presently monitored/controlled from Alerton panel CP-2. These points to be terminated to the new EN-HW panel:
  - AI NEW_CH-HWR-T Replace Temp Sensor, Re-use exist well
  - AI NEW_CH-HWS-T Replace Temp Sensor, Re-use exist well
  - AI OLD_CH-HWR-T Replace Temp Sensor, Re-use exist well
  - AI OLD_CH-HWS-T Replace Temp Sensor, Re-use exist well
  - AI JAIL_CH-HWR-T Replace Temp Sensor, Re-use exist well
  - AI JAIL_CH-HWS-T Replace Temp Sensor, Re-use exist well
  - BI BLR1-S Replace Temp Sensor, Re-use exist status contact
  - BI BLR2-S Replace Temp Sensor, Re-use exist status contact
  - AO BLRSYS-O New Boiler Setpoint Adjust Cable
  - BO HWP2-C Re-use existing CSR at MCC Starter
  - BO HWP3-C Re-use existing CSR at MCC Starter
  - BO HWP4-C Re-use existing CSR at MCC Starter
  - BO BLRSYS-ENA Re-use existing Relay
  - BI HWP2-S Re-use existing CSR at MCC Starter
  - BI HWP3-S Re-use existing CSR at MCC Starter
  - BI HWP4-S Re-use existing CSR at MCC Starter
  - BI BLR1-A New Boiler Alarm Point
  - BI BLR2-A New Boiler Alarm Point
  - BI BLR3-A New Boiler Alarm Point
  - AI PHWS-T Replace Temp Sensor, Re-use exist well
  - AI PHWR-T Replace Temp Sensor, Re-use exist well
  - BI BLR3-S Replace Temp Sensor, Re-use exist well
  - BI BLRSYS-A Re-use existing alarm contact

© 2008 Johnson Controls, Inc.

Panel CP-3 on Floor-1 of Plant:

- Panel CP-3
  - Furnish (qty-1) IOM4711 controller to replace existing Alerton controller located in panel CP-3 on Floor-1 and terminate the new IOM controller to the SA Bus originating at EN-CHW on Floor-2.
- The following chilled water system points are to be terminated to CP-3:

◆	BO	CH1-C	Re-use existing enable/disable relay
◆	BO	CH2-C	Re-use existing enable/disable relay
◆	UI	CH1-A	Monitor CH-1 alarm contact in chiller factory PNL
◆	UI	CH2-A	Monitor CH-2 alarm contact in chiller factory PNL
◆	BI	CH1-S	Re-use existing status contact
◆	BI	CH2-S	Re-use existing status contact
◆	MSTP	CH1-PWR	Furnish new BACnet power meter in Chiller-1 factory panel

VFD Installations in Central Plant:

- **PCHWP-1**: The existing PCHWP-1 is constant volume 25HP, 460VAC that is served from the MCC on Floor-2 of the chiller plant. Under this project, the pump and motor will be upsized to 125HP, 460VAC/3Ph to serve in a variable flow primary configuration and a new 125HP, 460VAC/3Ph VFD will be furnished and installed on the Floor-2 wall adjacent to the new pump.

  The new VFD is to be connected to the Metasys BACnet MS/TP trunk and control cabling originating at the NCE in panel EN-CHW.

- **PCHWP-2**: The existing PCHWP-2 is constant volume 25HP, 460VAC that is served from the MCC on Floor-2 of the chiller plant. Under this project, the pump and motor will be upsized to 125HP, 460VAC/3Ph to serve in a variable flow primary configuration and a new 125HP, 460VAC/3Ph VFD will be furnished and installed on the Floor-2 wall adjacent to the new pump.

  The new VFD is to be connected to the Metasys BACnet MS/TP trunk and control cabling originating at the NCE in panel EN-CHW.

- **CDWP-1:** The existing CDWP-1 is variable volume 40HP, 480VAC that is served from an existing VFD located in the rack on Floor-2 of the chiller plant. Under this project, the old pump, motor and VFD will be replaced with a new pump, motor and 30HP, 480VAC VFD, with the VFD to be installed on the existing Floor-2 rack.

  The new VFD is to be connected to the Metasys BACnet MS/TP trunk and control cabling originating at the NCE in panel EN-CHW.

- **CDWP-2:** The existing CDWP-2 is variable volume 40HP, 480VAC that is served from an existing VFD located in the rack on Floor-2 of the chiller plant. Under this project, the old pump, motor and VFD will be replaced with a new pump, motor and 30HP, 480VAC VFD, with the VFD to be installed on the existing Floor-2 rack.

  The new VFD is to be connected to the Metasys BACnet MS/TP trunk and control cabling originating at the NCE in panel EN-CHW.

- **CT-1 Fan:** The existing CT-1 Fan is served by a 2-speed motor with starter and disconnect located outside on the fan deck of the cooling tower. Under this project, a new VFD (40HP, 480VAC, 3Ph, BACnet MS/TP) is to be installed on Floor-2 of the chiller plant on the existing VFD rack. The new VFD is to be wired to the Hi Speed winding of the existing fan motor. Re-use existing CT-1 Fan motor disconnect located on the roof deck near the fan.

  The new VFD is to be connected to the Metasys BACnet MS/TP trunk and control cabling originating at the NCE in panel EN-CHW.

© 2008 Johnson Controls, Inc.

- **CT-2 Fan:** The existing CT-2 Fan is served by a 2-speed motor with starter and disconnect located outside on the fan deck of the cooling tower. Under this project, a new VFD (40HP, 480VAC, 3Ph, BACnet MS/TP) is to be installed on Floor-2 of the chiller plant on the existing VFD rack. The new VFD is to be wired to the Hi Speed winding of the existing fan motor. Re-use existing CT-2 Fan motor disconnect located on the roof deck near the fan.

  The new VFD is to be connected to the Metasys BACnet MS/TP trunk and control cabling originating at the NCE in panel EN-CHW.

New AHU-1 to be installed in Central Plant:

- **AHU-1:** The following new Metasys BACnet controls are to be furnished to monitor/control this new system:
  - Furnish new BACnet MS/TP TEC zone thermostat on column or unistrut near the VFD rack.
  - Terminate the existing BACnet MS/TP trunk from adjacent VFDs to new TEC thermostat.
  - Furnish new modulating characterized ball control valves (HWV and CHWV) at the new AHU-1 hot and chilled water coils.
  - Furnish new Current Sensing Command Relay (CSR) in AHU-1 factory cabinet to provide supply fan start/stop and run status.
  - Furnish new discharge air temperature sensor in supply duct of new AHU-1.

Minnie Rogers Juvenile Justice Center

Overview:

The existing Juvenile Justice Center is served by Automated Logic WebCTRL 500 Ver 4.1 BACnet DDC controls. The existing Automated Logic trunk is Arcnet 156, which is 2c/#22/shd. The spaces are served by split system DX "Fan Coil" units having hot water reheat coils. These DX FCUs are to be replaced with new DX FCUs under this project. The existing 2c/shd Arcnet156 cable will be replaced with new 3c/#22/shd/pln BACnet MS/TP (which is the JCI design standard). A new NCE will be installed to serve the existing HW boiler system (to remain) and new FEC controllers will replace the existing Automated Logic controllers presently serving the building FCUs and AHUs. Existing control enclosures and I/O cabling to be re-used. Existing FCU and AHU modulating hot water control valves to be replaced with new.

Automated Logic BAS to be replaced with new Metasys BAS

Hot Water System

- Furnish new (qty-1) NCE2560 controller to replace existing Alerton HW system controller. Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable out from the new NCE to each of the existing control panels to terminate to the new Metasys controllers throughout the building.
- Furnish new Cat6 cable from NCE to nearest IT/Tele Closet for termination to Owner LAN.
- The following heating hot water system points are to be monitored/controlled by the new Metasys NCE:
  - UI HWS-T — Replace Temp Sensor, Re-use exist well
  - UI HWR-T — Replace Temp Sensor, Re-use exist well
  - UI OA-T — Replace Temp Sensor w/ new combi OA-T/H
  - UI OA-H — See new combination OA-T/H above
  - UI COOLER-T — Replace Temp Sensor with new
  - UI FREEZER-T — Replace Temp Sensor with new

© 2008 Johnson Controls, Inc.

- BI BLR1-S Re-use exist status contact in blr factory pnl
- BI BLR2-S Re-use exist status contact in blr factory pnl
- BI BLR1-A Use exist alarm contact in blr factory panel
- BI BLR2-A Use exist alarm contact in blr factory panel
- BI EMERGEN-S Use exist contact in GenSet factory panel
- BI HWP1-S Re-use existing CSR at Starter
- BO HWP1-C Re-use existing CSR at Starter
- BO BLR1-ENA Re-use existing Relay at boiler factory panel
- BO BLR2-ENA Re-use existing Relay at boiler factory panel

AHU-1

- Furnish new Metasys FEC controller to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI RA-T Replace Temp Sensor
  - UI Spare
  - BI SF-S Re-use exist CSR at Starter
  - BO SF-C Re-use exist CSR at Starter
  - BO DX1-C Re-use exist DX staging relay
  - BO OAD-C Replace exist actuator w/ new 2-pos S.R.
  - CO HWV-O Furnish new electronic HWV
  - CO EF11-C Re-use exist Interlock relay
  - CO Spare
  - CO Spare
  - NETSTAT New NETSTAT to replace exist Logistat.

AHU-2

- Furnish new Metasys FEC controller to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI RA-T Replace Temp Sensor
  - UI Spare
  - BI SF-S Re-use exist CSR at Starter
  - BO SF-C Re-use exist CSR at Starter
  - BO DX1-C Re-use exist DX staging relay
  - BO OAD-C Replace exist actuator w/ new 2-pos S.R.
  - CO HWV-O Furnish new electronic HWV

© 2008 Johnson Controls, Inc.

- CO EF12-C Re-use exist Interlock relay
- CO Spare
- CO Spare
- NETSTAT New NETSTAT to replace exist Logistat.

AHU-3

- Furnish new Metasys FEC controller to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI RA-T Replace Temp Sensor
  - UI RA-H Replace RH Sensor
  - BI SF-S Re-use exist CSR at Starter
  - BO SF-C Re-use exist CSR at Starter
  - BO DX1-C Re-use exist DX staging relay
  - BO DX2-C Re-use exist DX staging relay
  - CO HWV-O Furnish new electronic HWV
  - CO OAD1-O Re-use exist actuator
  - CO OAD2-O Re-use exist actuator
  - CO RAD-O Re-use exist actuator
  - NETSTAT New NETSTAT to replace exist Logistat.

AHU-4

- Furnish new Metasys FEC/IOM controllers to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI RA-T Replace Temp Sensor
  - UI DA-T Replace Temp Sensor
  - UI OA-T Replace Temp Sensor
  - UI Spare
  - UI Spare
  - UI Spare
  - BI SF-S Re-use exist CSR at Starter
  - BI Spare
  - AO HWV-O Furnish new electronic HWV
  - AO Spare
  - BO SF-C Re-use exist CSR at Starter
  - BO DX1-C Re-use exist DX staging relay

© 2008 Johnson Controls, Inc.

- BO DX2-C Re-use exist DX staging relay
- CO DX3-C Re-use exist DX staging relay
- CO DX4-C Re-use exist DX staging relay
- CO DX5-C Re-use exist DX staging relay
- CO DX6-C Re-use exist DX staging relay
- NETSTAT New NETSTAT to replace exist Logistat
- UI Spare
- UI Spare
- UO Spare
- UO Spare
- RO EFINTLK-C Re-use exist EF control relays
- RO Spare

DX Fan Coil FC-x (Typical of 17: FC-01, 02, 03, 04, 05A, 05B, 06, 07, 08, 09, 10, 11, 12A, 12B, 12C, 13, 14)

- Furnish new Metasys FEC controller to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI RA-T (FC-07, 08, 14 Only)
  - UI Spare (FC-07 Only)
  - BI SF-S Re-use exist CSR at Starter
  - BO SF-C Re-use exist CSR at Starter
  - BO DX1-C Re-use exist DX staging relay
  - BO DX2-C (FC-07 Only)
  - CO HWV-O Furnish new electronic HWV
  - CO OAD-C Replace exist actuator w/ new 2-pos S.R.
  - CO EFx-C Re-use existing Command Relay
  - CO Spare
  - NETSTAT New NETSTAT to replace exist Logistat

Kitchen SF

- Furnish new Metasys FEC controller to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI DA-T Replace Temp Sensor
  - UI OAD-S Re-use existing end-switch
  - BI SF-S Re-use exist CSR at Starter
  - BO SF-C Re-use exist CSR at Starter

© 2008 Johnson Controls, Inc.

- BO Spare
- BO Spare
- CO HWV-O Furnish new electronic HWV
- CO Spare
- CO EF23-C Re-use exist Intlk relays serving EF-23
- CO Spare

DX Packaged A/C Unit, PAC-x (Typical of 3: PAC-01, 02, 03)

- Furnish new Metasys FEC controller to replace existing Automated Logic controller.
- Re-use existing 24VAC available from existing control transformer that is to remain.
- Furnish new BACnet MS/TP cable (originating at new NCE) to new Metasys FEC controller.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI RA-T Replace Temp Sensor
  - UI Spare
  - BI SF-S Re-use exist CSR at Starter
  - BO SF-C Re-use exist CSR at Starter
  - BO DX1-C Re-use exist DX staging relay
  - BO DX2-C Re-use exist DX staging relay
  - CO HWV-O Furnish new electronic HWV
  - CO Spare
  - CO Spare
  - CO Spare
  - NETSTAT New NETSTAT to replace exist Logistat

Ford Arena and Exhibit Hall

Overview:

The Ford Arena and Exhibit Hall is served by an existing Metasys N2 BAS system that is to remain, but be upgraded. As part of this project, all existing DX-9100 controllers serving the existing AHU systems will be replaced with new FAC3611 controllers using the DX-FAC-ADAPTER, which allows the existing DX-9100 to be removed off of its existing termination base frame and be replaced with a new FAC3611 controller with minimal re-termination of field wiring. Existing UNT controllers serving existing AHU systems will be replaced with new FEC2611 controllers. N2 communications between Metasys and existing Triad lighting control panels are to be re-established and lighting control schedules adjusted and verified.

Selected field sensors are to be replaced with new devices as indicated below. These are mostly active type sensors (e.g. CO_2, Humidity, CO) that are at the end of their useful lifespans. Existing control valves are to be replaced with new valves as indicated below. The new valves are to be re-terminated to existing control cabling.

The existing Metasys terminal box controllers are to remain in service.

Electrical Related Scope of WorkNetwork (NAE inside of IT Room 1044)

- Replace existing NAE55 with current model
- Replace existing workstation with new browser workstation and printer

© 2008 Johnson Controls, Inc.

Schedule 1

AHU-01 (Located on Roof of Exhibit Hall)

- Replace existing UNT controller with new FEC2611 and re-terminate
- Install new discharge air temperature sensor
- Install new mixed air temperature sensor
- Replace existing zone Metastat with new zone temp/humidity NETSTAT
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation

AHU-02A, AHU-02B, AHU-02C, AHU-02D (Located on Roof of Exhibit Hall)

- Replace existing DX-9100 controllers with new FAC3611 controller
- INSTALL new discharge air temperature sensor
- Install new mixed air temperature sensor
- Install new exhaust air temperature sensor
- Replace existing zone Metastat with new zone temp/humidity NETSTAT
- Replace existing return air CO_2 sensor with new return air CO_2 sensor
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Install new chilled water DP transmitter (AHU-02A only)
- Install new hot water DP transmitter (AHU-02A only)
- Verify system operation and control sequence

AHU-03 (Located on Roof of Exhibit Hall)

- Replace existing UNT controller with new FEC2611 controller
- Install new mixed air temperature sensor
- Replace existing supply duct static pressure transmitter with new
- Replace existing return air temperature sensor with new combination temp/humidity sensor
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-04 (Located in Mech. 1059)

- Replace existing DX-9100 controller with new FAC3611 controller
- Replace existing supply duct static pressure transmitter with new
- Replace existing return air temperature sensor with new combination temp/humidity sensor
- Replace existing outside air chilled water control valve with new

© 2008 Johnson Controls, Inc.

- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-05 (Located in Mech.1059)

- Replace existing UNT controller with new FEC2611 controller
- Install new discharge air temperature sensor
- Install new return air temperature/humidity sensor
- Replace existing zone Metastat with new zone NETSTAT
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-06 (Located in Mech. 1148)

- Replace existing DX-9100 controller with new FAC3611 controller
- Install new discharge air temperature sensor
- Install new return air temperature/humidity sensor
- Replace existing zone metastat with new zone netstat
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-07 (Located in Mech.1049)

- Replace existing UNT controller with new FEC2611 controller
- Install new discharge air temperature sensor
- Install new return air temperature/humidity sensor
- Replace existing zone Metastat with new zone NETSTAT
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new

© 2008 Johnson Controls, Inc.

- Verify system operation and control sequence

AHU-08 (Located in Mech. 1047)

- Replace existing DX-9100 controller with new FAC3611 controller
- Replace existing supply duct static pressure transmitter with new
- Replace existing return air temperature sensor with new combination temp/humidity sensor
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-09 (Located on Roof of Exhibit Hall)

- Replace existing DX-9100 controller with new FAC3611 controller
- Install new mixed air temperature sensor
- Install new exhaust air temperature/humidity sensor
- Replace existing zone Metastat with new zone temp/humidity NETSTAT
- Replace existing return air CO_2 sensor with new return air CO_2 sensor
- Replace existing supply duct static pressure transmitter with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-10 (Located in Mech. 1047)

- Replace existing DX-9100 controller with new FAC3611 controller
- Install new discharge air temperature sensor
- Install new return air temperature/humidity sensor
- Replace existing zone Metastat with new zone NETSTAT
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-11 (Located in Mech. 1047)

- Replace existing DX-9100 controller with new FAC3611 controller
- Replace existing supply duct static pressure transmitter with new

© 2008 Johnson Controls, Inc.

- Replace existing return air CO_2 sensor with new return air CO_2 sensor
- Replace existing return air temperature sensor with new combination temp/humidity sensor
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-12 (Located in Mech. 1059)

- Replace existing DX-9100 controller with new FAC3611 controller
- Replace existing supply duct static pressure transmitter with new
- Replace existing return air CO_2 sensor with new return air CO_2 sensor
- Replace existing return air temperature sensor with new combination temp/humidity sensor
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-13A (Located in Mech. 1139), AHU-13B (Located in Mech. 1059), AHU-13C (Located in Mech. 1049), AHU-13D (Mech. 1049)

- Replace existing DX-9100 controller and XT/XP Modules with new FAC3611 controller and IOM4711 Expansion Module
- Install new mixed air temperature sensor
- Install new heat recovery leaving temperature sensor
- Install new heat recovery entering temperature sensor
- Replace existing zone carbon monoxide (co) sensor with new
- Replace existing zone temperature/humidity metastat with new temperature/humidity NETSTAT
- Replace existing return air CO_2 sensor with new Return Air CO_2 sensor
- Replace existing chilled water control valve 1a with new
- Replace existing chilled water control valve 1b with new
- Replace existing hot water reheat control valve with new
- Verify system operation and control sequence

AHU-14 (Located in Mech.1148)

- Replace existing UNT controller with new FEC2611 controller
- Install new Discharge Air Temperature Sensor

© 2008 Johnson Controls, Inc.

- Install new Return Air Temperature/Humidity Sensor
- Replace existing zone Metastat with new zone NETSTAT
- Replace existing outside air chilled water control valve with new
- Replace existing outside air pre-hot water control valve with new
- Replace existing chilled water control valve with new
- Replace existing Hot Water Reheat Control Valve with new
- Verify system operation and control sequence

VAV Terminal Box with HW Reheat (Qty=52)

- Existing Metasys N2 Controls to Remain
- Verify system operation and control sequence

Lighting Controls

- Re-establish communication between Metasys and existing Triad N_2 lighting control panels.
- Adjust/Re-program existing lighting control schedules and verify system operation.

Ford Amphitheater

Overview:

The existing Ford Amphitheater is served by an existing Metasys N2 BAS system that is to remain, but be upgraded. Presently, the existing Metasys controls are not communicating with the Metasys server. A new NCE controller will be installed to replace the existing NAE45 supervisory controller and connected to an available Owner LAN port in the Dressing and Production (Green Room) Building to restore communication of the Amphitheater controls with the Metasys server. Some of the HVAC equipment serving the Amphitheater is no longer in service (air-cooled chiller, OAHU-1, OAHU-2, Stage CHW FCU, CHW Pump). This HVAC equipment and associated Metasys controls will not be restored to operation as part of this project.

Existing UNT controllers serving selected functioning HVAC systems will be replaced with new FEC2611 controllers as detailed below. Selected field sensors will be replaced with new devices as detailed below. These are mostly active type sensors (e.g. CO_2, Humidity) that are at the end of their useful lifespans.

The existing terminal box controllers will remain in service.

Network (NCE to replace existing NAE45)

- Furnish new factory-fabricated NCE2510 Control panel in the Dressing and Production (Green Room) Building to replace existing NAE45.
- Install new Cat6 cable from location of new NCE panel to nearest IT closet in the Green Room Building and terminate to Owner LAN.
- Re-terminate existing N2 Trunk-1 and N2 Trunk-2 serving the Amphitheater buildings to new NCE controller.

AHU-1 DX Constant Volume (Located in Mech Rm. 102 of Food and Beverage Building #1)

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and eight (8) existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing zone Metastat with new zone NETSTAT.

© 2008 Johnson Controls, Inc.

Schedule 1

AHU-2 DX Constant Volume (Located in Mech Rm. 101 of Food and Beverage Building #2)

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and six (6) existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing zone Metastat with new zone NETSTAT.

AHU-3 DX Constant Volume (Located in Mech Rm. 104 of Food and Beverage Building #3)

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and eight (8) existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing zone Metastat with new zone NETSTAT.

DXFC-1 Constant Volume (Located in Admin/Box Office Building) and DXFC-2 Constant Volume (Located in Food and Beverage Building #1)

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and six (6) existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing zone Metastat with new zone NETSTAT.

RTAHU-1 DX Rooftop Unit (Located on Roof of Dressing/Production (Green Room))

- Replace existing wall-mounted programmable thermostat with new network TEC thermostat and connect to existing N2 Trunk (3c/#18/shd) from nearest terminal box.
- Install new Current Sensing Status Relay (CSR) in the RTU blower to provide fan run status.
- Install new RA-T duct sensor in main return air trunk to serve as the new control point for the unit and terminate this new sensor to the new TEC.
- Re-program and re-commission the existing six (6) Fan Powered Terminal Units with Electric Reheat to operate as constant volume boxes. Existing VMA Box controllers to remain in service.

© 2008 Johnson Controls, Inc.

Ford Visitor Center

Overview:

The Ford Visitor Center is served by an existing Metasys N2 BAS system that is to remain, but be upgraded. Presently, the existing Metasys controls are not communicating with the Metasys server. A new NCE controller will be installed to replace the existing NAE45 supervisory controller and connected to an available Owner LAN port to restore communication of the Visitor Center with the Metasys server.

Existing UNT controllers serving HVAC systems will be replaced with new FEC2611 controllers.

Selected field devices will be replaced with new devices as detailed below. These are mostly active type sensors (e.g. CO_2, Humidity) that are at the end of their useful lifespans.

Network (NCE to replace existing NAE45)

- Furnish new factory-fabricated NCE2510 Control panel to replace existing NAE45.
- Install new Cat6 cable from new NCE panel to nearest IT closet in the Visitor Center and terminate to Owner LAN.
- Re-terminate existing N2 Trunk serving the Visitor Center building to the new NCE controller.

DX Split FCUs - 1, 4, 5

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing zone Metastat with new zone NETSTAT.

DX Split FCU with Energy Wheel, FCU – 2, 3

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing zone Metastat with new zone NETSTAT.
- Install new zone CO_2 sensor on wall adjacent to new NETSTAT and extend SA Bus from NETSTAT to ZN-CO_2 sensor and terminate.
- Replace three (3) existing damper actuators serving the FCU and Heat Wheel with new actuators and re-terminate using existing cabling.
- Replace existing duct Return Air Temperature/Humidity sensor with new and re-terminate.

DX Split AHU-1

- Replace existing UNT controller with new FEC2611 and re-terminate 24VAC, N2 Trunk and existing inputs/outputs. Re-use existing cabling and raceway.
- Replace existing duct return air temperature sensor with new combination return air temperature/humidity sensor.

© 2008 Johnson Controls, Inc.

Schedule 1

Ford Central Plant

Overview:

The existing Ford Visitor Center is served by an existing Carel Local DDC system that is to be replaced by Metasys BACnet. A new NCE control panel (EN-CHW) will be installed in the chiller plant and connected to an available Owner LAN port for communication with the Metasys server.

Under this project, existing Chiller-2 will be replaced with a new chiller. The three (3) existing primary CHW pumps will be abandoned/bypassed and existing secondary CHW pumps P-4 and P-5 will be upsized and converted to primary pumps. Additional VFDs and controls will be added as described herein to implement variable flow primary CHW pumping.

The existing Carel panel located in the back corner of the boiler room will be replaced with a new FEC/IOM control panel (EN-HW) for control of the heating hot water system.

Selected field devices will be replaced with new devices as detailed below. These are mostly active type sensors (e.g. CO_2, Humidity) that are at the end of their useful lifespans.

Selected new control devices will be installed in existing systems as detailed below.

Chilled Water / Condenser Water Plant

- Furnish new JCI factory-built NCE control panel (EN-CHW) in the chiller plant to serve the chilled and condenser water systems.
- Extend new BACnet MS/TP trunk from the new NCE out to all new VFDs, to chiller factory panels, to new AHU-1 zone thermostat and to new boiler room control panel EN-HW.
- Furnish qty=3 new evaporator isolation valves and interlock to open/close with chiller start/stop sequence:
  - Chiller-1 10" (to be field verified)
  - Chiller-2 10" (to be field verified)
  - Chiller-3 8" (to be field verified)
- Furnish new 2-way modulating minimum flow CHW bypass valve (8" butterfly)
- Furnish qty=2 new cooling tower bypass control valves to replace existing (2-way Butterfly, 10") – One will serve CH-1 and other will serve Chillers CH-2 and CH-3
- Furnish qty=2 new flow meters for Btu monitoring of the Arena/Exhibit Hall and minimum flow CHW control
- Under FIM 7, Chiller-2 is to be replaced with a new chiller having a factory BACnet MS/TP interface board that is to be terminated to the new BACnet MS/TP trunk that originates at panel EN-CHW
- Since CH-1 and CH-3 do not have BACnet interface boards, a new Veris kW meter is to be installed in each. These are BACnet MS/TP devices that are to be connected to the new BACnet MS/TP trunk serving the plant
- Furnish qty=3 chiller chilled water supply temperature sensors to replace existing
- Furnish qty=3 chiller chilled water return temperature sensors to replace existing
- Furnish qty=3 condenser water supply temperature sensors to replace existing
- Furnish qty=3 condenser water return temperature sensors to replace existing
- Furnish qty=1 primary chilled water supply temperature sensor
- Furnish qty=1 primary chilled water return temperature sensor
- Furnish qty=1 Outside air temperature/humidity sensor

© 2008 Johnson Controls, Inc.

- Furnish qty=5 new VFDs for the chiller plant:
  - CHW Pump P-4: New 125HP, 480VAC, 3 Phase VFD to serve this variable flow primary pump. Terminate new VFD to BACnet MS/TP trunk and install new Current Sensing Status Command Relay (CSR) to provide start/stop and status and new cable to provide speed control.
  - CHW Pump P-5: New 125HP, 480VAC, 3 Phase VFD to serve this variable flow primary pump. Terminate new VFD to BACnet MS/TP trunk and install new Current Sensing Status Command Relay (CSR) to provide start/stop and status and new cable to provide speed control.
  - CDW Pump P-11: New 40HP, 480VAC, 3 Phase VFD to serve this condenser water pump for balancing purposes. Terminate new VFD to BACnet MS/TP trunk and install new Current Sensing Status Command Relay (CSR) to provide start/stop and status.
  - CDW Pump P-12: New 40HP, 480VAC, 3 Phase VFD to serve this condenser water pump for balancing purposes. Terminate new VFD to BACnet MS/TP trunk and install new Current Sensing Status Command Relay (CSR) to provide start/stop and status.
  - Cooling Tower-2: New 60HP, 480VAC, 3 Phase to replace old VFD. Terminate new VFD to BACnet MS/TP trunk and install new Current Sensing Status Command Relay (CSR) to provide start/stop and status and new cable to provide speed control.
- Furnish new 4-Zone refrigerant monitoring panel to replace existing.
  - Existing copper sample tubes (4) to be re-used. New filter to be installed on each sample tube.
  - Re-terminate existing power and Interlock wiring to new Refrigerant Monitoring Panel.
  - Replace existing horn/strobes (qty=2) located on front of central plant building with new devices (re-use existing wiring and raceway).
  - Furnish new horn/strobe on wall of boiler room outside of chiller room.
  - Furnish new horn/strobe on exterior wall of central plant building at back door.

Hot Water Plant

- Furnish new JCI Factory-built FEC/IOM control panel (EN-HW) in the boiler room to replace the existing Carel DDC panel. Connect this panel to new BACnet MS/TP trunk originating at the new NCE located in panel EN-CHW.
- Existing VFDs serving HWP-9 and 10 are to be re-used.
- Furnish qty=1 Primary Hot Water Supply Temperature Sensor to replace existing.
- Furnish qty=1 Primary Hot Water Return Temperature Sensor to replace existing.
- Furnish qty=1 Secondary Hot Water Supply Temperature Sensor to replace existing.
- Furnish qty=1 Secondary Hot Water Return Temperature Sensor to replace existing.
- Furnish qty=2 Boiler Enable/Disable.
- Furnish qty=2 Boiler Run Status.
- Furnish qty=2 Boiler Alarm Status.
- Furnish qty=2 Boiler Setpoint Adjustment.
- Furnish qty=4 Hot Water Pump Start/Stop, Status.
- Furnish qty=2 Secondary Hot Water Pump Speed Control.
- Furnish qty=1 new flow meter for hot water Btu monitoring of the Arena/Exhibit Hall.

© 2008 Johnson Controls, Inc.

AHU-1 Serving Chiller Plant

- Replace existing programmable thermostat serving this AHU with a new BACnet TEC thermostat and connect BACnet MS/TP trunk originating at the new NCE located in panel EN-CHW.
- Furnish new Current Sensing Command Status Relay (CSR) at the AHU-1 starter to provide start/stop and status.
- Furnish new Hot Water and Chilled Water control valves to replace existing.
- Preserve existing safety devices and safety circuits.
- Furnish new Discharge Air Temperature (DA-T) sensor and wire to new TEC thermostat.

Port Arthur Sub Courthouse

Overview:

The existing Port Arthur Sub Courthouse building is served by an Alerton BACnet DDC system. The existing Alerton trunk is 2-wire BACnet MS/TP. The majority of spaces are served by (9) split system DX A/C units (AHU-1, 2, 3, 4, 6, 7, 8, 9) having hot water reheat coils. There are two (2) split system DX units (AHU-11 and AHU-12) having electric reheat that serve the Floor-1 east wing spaces. There is a packaged DX RTU with electric heat (RTU-5) that serves the Floor-3 Jail level. A hot water boiler located in the Attic provides heating HW to the nine (9) AHUs having HW heat.

Scope of Work:

Network

- Furnish new NCE2560 controller to replace existing Alerton BTI-100 board in the Floor-1 IT closet. Re-use the existing enclosure, 24VAC and Cat5 Ethernet cable. This control panel is to be designated EN-NET.
- Replace the existing Alerton BACnet trunk with new JCI BACnet trunk. The new trunk is to be enclosed in conduit in exposed locations such as mechanical rooms, basement areas, crawlspaces, but is to be run exposed in concealed accessible locations such as above suspended ceilings and inside of drywall partitions.

DX AHU with HW Heating [Typ. of 9: AHU-1, 2, 3, 4, 6, 7, 8, 9, 10]

- Replace existing Alerton enclosure with new factory-fabricated JCI FEC control enclosure and terminate to new BACnet MS/TP trunk.
- Where applicable, replace existing outside air damper actuator with new 24VAC, rotary, spring return actuator and interlock to open on AHU startup.
- The following system points are to be monitored/controlled by the new FEC controller:
  - UI DA-T — Replace Temp Sensor
  - BI SF-S — Replace exist CSR at Starter with new
  - BO SF-C — Replace exist CSR at Starter with new
  - BO DX1-C — Re-use exist DX staging relay
  - BO OAD-C — Replace exist actuator w/ new 2-pos spring return
  - CO HWV-O — Replace existing HWV with new
  - CO EFx-C — Re-use exist Interlock relay
  - NETSTAT — New NETSTAT to replace exist Microstat
- Replace the existing Alerton Microstat (zone temp sensor) with new Metasys NETSTAT.

© 2008 Johnson Controls, Inc.

- **Note:** AHU-1, 2 and 3 are located in crawlspace under Floor-1 in areas that are very difficult to access. A single large control panel (24x36) containing qty=4 FEC controllers will be installed in the AHU-4 basement Mech Rm to serve AHU-1, 2, 3 and 4.

DX AHU having Electric Heating [Typ. of 3: AHU-5, 11, 12]

- Replace existing Alerton enclosure with new factory-fabricated JCI FEC control enclosure and terminate to new BACnet MS/TP trunk.
- Where applicable, replace existing outside air damper actuator with new 24VAC, rotary, spring return actuator and interlock to open on AHU startup.
- The following system points will be monitored/controlled (See SC-6-01A). Terminate these points to the new FEC as per final JCI engineered control drawings:
  - UI DA-T Replace Temp Sensor
  - BI SF-S Replace exist CSR at Starter with new
  - BO SF-C Replace exist CSR at Starter with new
  - BO DX1-C Re-use exist DX staging relay
  - BO OAD-C Replace exist actuator w/ new 2-pos S.R.
  - CO EDH1-C Re-use existing heat staging relay
  - CO EDH2-C Re-use existing heat staging relay
  - CO EFx-C Re-use exist Interlock relay
  - NETSTAT New NETSTAT to replace exist Microstat
- Replace the existing Alerton Microstat (zone temp sensor) with new Metasys NETSTAT.

Hot Water System

- Replace existing Alerton enclosure with new factory-fabricated JCI FEC control enclosure and terminate to new BACnet MS/TP trunk.
- The following hot water heating system points are to be monitored/controlled:
  - UI HWS-T Replace Temp Sensor, install new well
  - UI HWR-T Replace Temp Sensor, Re-use exist well
  - UI BLRHWP-S Install new CSR at Starter
  - UI BLDHWP-S Install new CSR at Starter
  - BI BLR-S Re-use exist status contact in boiler factory pnl
  - BI BLR-A Re-use exist alarm contact in boiler factory pnl
  - BO BLR-ENA Install new RIB Relay at Boiler
  - BO BLRHWP-C Install new CSR at Starter
  - BO BLDHWP-C Install new CSR at Starter

© 2008 Johnson Controls, Inc.

Schedule 1

Smaller Sites having DX HVAC Equipment

Overview:

Many of the Jefferson County buildings included in this project are relatively small with unitary DX equipment. At locations served by only a few DX A/C units or at locations having no Jefferson County LAN connectivity, replace existing A/C thermostats with new standalone programmable thermostats.

Networked BACnet TEC Thermostats:

- At designated locations (detailed below) having existing Jefferson County LAN connectivity and several pieces of Unitary DX HVAC equipment, install new Metasys BACnet TEC network thermostats (that communicate to the central Metasys ADX server via a BACnet/IP to MSTP router) to replace the existing thermostats.
- At designated locations, furnish a small enclosure (approx. 16x16) housing a BACnet/IP to MSTP router and terminate to Owner LAN at the nearest IT closet via new Cat6 cable.
- Furnish new BACnet MS/TP trunk from the router out to each of the new TEC thermostats connected in daisy-chain fashion.
- Furnish a new Current Sensing Status Relay (CSR) at the blower of each A/C unit to provide run status indication to the TEC thermostat.
- Where existing blower units are equipped with a motorized outside air damper, the existing damper actuator is to be field replaced with a new actuator that will be interlocked to the TEC thermostat so that the outside air damper will open whenever the blower is energized during occupied hours. At the Jefferson County Public Health and Adult Probation Building, the (qty=6) RTUs are equipped with economizer dampers. Replace the existing economizer damper actuators with new modulating damper actuators and interlock to the TECs economizer terminals.

Precinct-1 (20205 Hwy 90)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=3) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=3) new Current Sensing Status Relay (CSR), to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
  - Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Precinct-2 (7759 Viterbo Rd.)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=5) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.

© 2008 Johnson Controls, Inc.

- Furnish (qty=5) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
- Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Precinct-3 (5700 Jade Ave.)

- NETWORK: No Work.
- THERMOSTATS: Replace one (qty=1) existing zone thermostat with new Standalone Programmable TEC thermostat.

Precinct-4 (7780 Boyt Rd.)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=5) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=5) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
  - Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Courthouse Annex-1 (1225 Pearl Street.)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=14) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=14) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
  - Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Courthouse Annex-2 (1295 Pearl Street)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=7) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=7) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.

© 2008 Johnson Controls, Inc.

- Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Courthouse Annex-4 (820 Neches Street)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=12) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=12) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
  - Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Mid-County Tax Office (4605 Jerry Ware Drive)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=1) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=1) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
  - Where applicable, replace existing outside air damper actuator with new and interlock to new TEC thermostat to open of A/C startup during occupied hours.

Jefferson County Public Health and Adult Probation Building (860 4th Street)

- NETWORK:
  - Furnish (qty=1) BACnet/IP to MSTP router enclosure and terminate via Cat6 cable to a Jefferson County LAN port.
- THERMOSTATS:
  - Replace (qty=6) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate to new BACnet MS/TP trunk in daisy-chain fashion.
  - Furnish (qty=6) new Current Sensing Status Relay (CSR), one to be installed at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
  - Where applicable, replace existing outside air damper actuator with new modulating damper actuator and interlock to new TEC thermostat to operate under "Economizer" mode.

© 2008 Johnson Controls, Inc.

Schedule 1

Jefferson County Correctional Facility

Overview:

The Jefferson County Correctional Facility is presently served by an existing Alerton BACnet DDC system. The site has three (3) sources of chilled water: an air-cooled chiller dedicated to Youth Dorms S, U, V, X, Y and Z, an air-cooled chiller serving Dorms – M, N, P and Q, and two (2) 120Ton water-cooled chillers serving the remainder of the facility. Most the facility is served by electric heat, although some of the dormitories have small local boilers to provide hot water heating (Dorms –A, C, D, E, M, N, S, U, V, X, Y, Z).

At this facility, the existing Alerton control system will be replaced by Metasys BACnet. The existing Alerton enclosures and much of the existing conduit, cabling and devices will be re-used. However, the existing Alerton DDC controllers will be replaced with Metasys controllers. The existing Alerton BACnet trunks will be replaced with new JCI BACnet cabling.

Selected field devices will be replaced with new devices as indicated below. These are mostly temperature sensors and active sensors (e.g. CO_2, Humidity) that are at the end of their useful lifespans. Selected new control devices will be installed in existing systems as indicated below.

Chilled Water / Condenser Water Plant

- In the main chiller plant control panel (AP-1), replace existing Alerton 16160 controller with a new NCE controller, IOM4711 and IOM3731. Extend new BACnet MS/TP trunk cable from the new NCE out to all new VFDs, and to the two (2) new TEC thermostats to be installed in the Warehouse Building
- Furnish the following input/output points in the main chiller plant:
  - CT1A-C, S Furnish new CSR
  - CT1A-O Furnish new speed control cable
  - CT1A-ALM Furnish new Alarm cable
  - CT1B-C, S Furnish new CSR
  - CT1B-O Furnish new speed control cable
  - CT1B-ALM Furnish new alarm cable
  - CH1CHWS-T Replace existing temp sensor with new
  - CH2CHWS-T Replace existing temp sensor with new
  - CH1CDWS-T Replace existing temp sensor with new
  - CH2CDWS-T Replace existing temp sensor with new
  - ComCDWS-T Replace existing temp sensor with new
  - ComCDWR-T Replace existing temp sensor with new
  - PCHWS-T Install new well and temp sensor
  - PCHWR-T Install new well and temp sensor
  - SCHWS-T Install new well and temp sensor
  - SCHWR-T Install new well and temp sensor
  - PCHWP1-C, S Furnish new CSR
  - PCHWP2-C, S Furnish new CSR
  - SCHWP1-C, S Furnish new CSR
  - SCHWP2-C, S Furnish new CSR
  - SCHWP1-O Furnish new speed control cable
  - SCHWP2-O Furnish new speed control cable

© 2008 Johnson Controls, Inc.

- SCHWP1-A Furnish new alarm cable
- SCHWP2-A Furnish new alarm cable
- CDWP1-C, S Furnish new CSR
- CDWP2-C, S Furnish new CSR
- SCHW-F Furnish new flow transmitter
- OA-T/H Furnish new Temperature/humidity sensor
- CH1-ENA Re-use existing chiller Ena/Dis relay
- CH2-ENA Re-use existing chiller Ena/Dis relay
- CH1-S Re-use existing chiller Status contact
- CH2-S Re-use existing chiller Status contact
- CH1-A Re-use existing chiller alarm contact
- CH2-A Re-use existing chiller alarm contact
- CH1-SET Furnish new setpoint adjust cable
- CH2-SET Furnish new setpoint adjust cable
- CTBYPV-O Furnish new CT bypass valve, 6"

- Furnish (qty=2) condenser water isolation valves (6", 2-way, Butterfly, 120VAC) and interlock to their respective chiller factory panels to open as part of the factory chiller start sequence.
- Furnish (qty=1) new 3-way modulating CDW bypass (6", Butterfly, 120VAC, NEMA4, 0-10VDC).
- Furnish (qty=4) new VFDs:
  - SCHWP-1 and SCHWP-2 (qty=2, each 40HP, 480VAC/3Ph) to provide variable flow secondary pumping. These pumps are presently constant volume with starters located in the chiller plant MCC. Mount the new drives on the wall adjacent to the associated pump and extend load/line wiring as required. Connect VFD to BACnet MS/TP, install new CSR to provide start/stop and status and install new speed control cable and alarm cable.
  - CT-1 and CT-2 (qty=2, each 10HP, 480VAC/3Ph) to provide variable speed control for each of the two (2) existing cooling tower fans. These fans are presently constant volume with starters located in the chiller plant MCC. Mount the new drives on the wall adjacent to the MCC and extend load/line wiring as required. Connect VFD to BACnet MS/TP, install new CSR to provide start/stop and status and install new speed control cable and alarm cable.

Warehouse Building

- There are two (2) A/C units in the Warehouse Building serving a break room and office area. Replace the existing thermostats with new TEC BACnet thermostats. Connect to BACnet MS/TP trunk originating at the NCE in panel AP-1 in the chiller plant. Install new CSR at each A/C blower to monitor run status.

Administration Building

VAV Air-handler AHU-3 with CHW Coil located in AHU-3 Mech. Rm.

- In existing panel AP-12, remove the existing Alerton AHU controller and BTI-100 Router and replace with a new NCE. Connect to existing source of 24VAC.
- Re-connect to existing Cat5 cable existing in panel and install new BACnet MS/TP trunk to serve this building.
- Re-terminate existing input/output control cabling to new NCE.
- Replace existing DPT inside of panel with new and re-terminate.

© 2008 Johnson Controls, Inc.

- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (5HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Furnish new CSR inside of new VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.
- For AHU-3 only, install new CHW-DP Transmitter on wall adjacent to AHU-3 and pipe to the CHWS/CHWR lines for this unit to monitor End-of-line Chilled Water Differential Pressure.

VAV Air-handler AHU-2 with CHW Coil located in AHU-2 Mech. Rm.

- In existing panel AP-11, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-12 (AHU-3).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (5HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

VAV Air-handlers AHU-1 with CHW Coil located in AHU-1/4/5/6 Mech. Rm.

- In existing panel AP-13, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-12 (AHU-3).

© 2008 Johnson Controls, Inc.

- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve (the existing coil is uncontrolled) and terminate to new FEC controller.
- Replace existing wall-mounted motor starter with new VFD (3HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

VAV Air-handlers AHU-4 with CHW Coil located in AHU-1/4/5/6 Mech. Rm.

- In existing panel AP-13, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-12 (AHU-3).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (5HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

VAV Air-handler AHU-5 with CHW Coil located in AHU-1/4/5/6 Mech. Rm.

- In existing panel AP-14, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.

© 2008 Johnson Controls, Inc.

- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-12 (AHU-3).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (3HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety ckt terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

CV Air-handler AHU-6 with CHW Coil and electric duct heater located in AHU-1/4/5/6 Mech. Rm.

- In existing panel AP-14, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-12 (AHU-3).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct RA-T sensor with new and re-terminate.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Preserve existing safety devices and safety circuits.

Qty=11 VAV Terminal Boxes:

- Demo existing Alerton controller and terminal box damper actuator.
- Replace existing Alerton controller with new VMA controller.
- Re-use existing 24VAC and terminate to VMA.
- Terminate new BACnet MS/TP trunk (originating at panel AP-12) to new terminal boxes in daisy-chain fashion.
- Replace existing Alerton zone temp sensors with new NETSTATs.
- Re-terminate existing heater staging relays to new VMA.
- Replace existing fan start/stop relay with new CSR and 4c/#18/pln cable to provide SF-C and SF-S.
- Furnish new DA-T sensor (with factory 10ft plenum whip) and terminate to VMA controller.

© 2008 Johnson Controls, Inc.

Visitation Building

(Qty=2) CV Air-handler AHU-1 and 2 with CHW Coil and electric duct heater located in AHU-1 and AHU-2 Visitation Building Mech. Rms.

- In existing panels AP-8 and AP-9, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-12 (AHU-3) in the Administration Building There is an existing Alerton trunk between these buildings that is to be used to pull in new BACnet MS/TP.
- Re-terminate existing input/output control cabling to new FECs.
- Replace existing duct RA-T sensor with new RA-T/H sensors.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Re-use existing heater staging relays.
- Preserve existing safety devices and safety circuits.

B.I.D. Building

VAV Air-handler AHU-4 with CHW Coil located in AHU-4 Mech. Rm.

- In existing panel AP-5, remove the existing Alerton AHU controller and BTI Router and replace with a new NCE. Connect to existing source of 24VAC.
- Re-connect to existing Cat5 cable existing in panel and install new BACnet MS/TP trunk to serve this building.
- Re-terminate existing input/output control cabling to new NCE.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (5HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

VAV Air-handler AHU-1 with CHW Coil located in AHU-1/2 Mech. Rm.

- In existing panel AP-4, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.

© 2008 Johnson Controls, Inc.

- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-5 (AHU-4).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (7.5HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

VAV Air-handler AHU-2 with CHW Coil located in AHU-1/2 Mech. Rm.

- In existing panel AP-4, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-5 (AHU-4).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (5HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

© 2008 Johnson Controls, Inc.

VAV Air-handler AHU-3 with CHW Coil located in AHU-3 Mech. Rm.

- In existing panel AP-3, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in panel AP-5 (AHU-4).
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing DPT inside of panel with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Replace existing wall-mounted motor starter with new VFD (3HP, 480VAC/3Ph). Connect to existing line/load wiring.
- Preserve existing safety devices and safety circuits and connect to new VFDs safety circuit terminals.
- Install new CSR in VFD housing. Provide control raceway and control cabling for following:
  - SF-C Supply Fan Command
  - SF-S Supply Fan Run Status
  - SF-O Supply Fan Speed Control
  - SF-ALM Supply Fan VFD Fault Status
  - BACnet MS/TP Trunk Connection
- Demo existing supply air bypass damper actuator, control cabling and conduit and manually lock this damper shut.

Qty=11 VAV Terminal Boxes:

- Demo existing Alerton controller and terminal box damper actuator.
- Replace existing Alerton controller with new VMA controller.
- Re-use existing 24VAC and terminate to VMA.
- Terminate new BACnet MS/TP trunk (originating at panel AP-5) to new terminal boxes in daisy-chain fashion.
- Replace existing Alerton zone temp sensors with new NETSTATs.
- Re-terminate existing heater staging relays to new VMA.
- Replace existing fan start/stop relay with new CSR to provide SF-C and SF-S.
- Furnish new DA-T sensor (with factory 10ft plenum whip) and terminate to VMA controller.

Activities Building

CV Air-handler AHU-1 with CHW Coil and electric duct heater located in Activities Building Mech. Rm.

- In existing panel AP-6, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE in same panel serving AHU-2.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct RA-T sensor with new RA-T sensor and re-terminate.

© 2008 Johnson Controls, Inc.

- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Re-use existing heater staging relays.
- Preserve existing safety devices and safety circuits.

CV Air-handler AHU-2 with CHW Coil and electric duct heater located in Activities Building Mech. Rm.

- In existing panel AP-6, remove the existing Alerton AHU controller and replace with a new NCE. Connect to existing source of 24VAC.
- Install new Cat6 cable to nearest IT Closet and install new BACnet MS/TP trunk to serve this building and Dorms-G, A, H, J, C, K, D, L and E.
- Re-terminate existing input/output control cabling to new NCE.
- Replace existing duct RA-T sensor with new RA-T sensor and re-terminate.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Re-use existing heater staging relays.
- Preserve existing safety devices and safety circuits.

Dorms – F, G, H, J, K, L (6 Thus)

Qty=2 per Dorm Building, CV Air-handler AHU-1 and AHU-2 with CHW Coil and electric duct heater located in Dorm Building Classroom.

- In existing panel AP-x, remove the existing Alerton AHU controller and replace with a new FE1611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE the Activities Building.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct RA-T sensor with new RA-T sensor and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve. (Note: In G-Dorm and H-Dorm, existing CHWV are new and will be re-used).
- Re-use existing heater staging relays.
- Preserve existing safety devices and safety circuits.
- For L-Dorm Only, furnish new CHW-DP Transmitter on wall adjacent to AHU-1 and pipe to the CHWS/CHWR lines for this unit and terminate to new FEC controller.

Dorms – A, C, D, E, S, U, V, X, Y, Z (10 Thus)

Qty=1 per Dorm Building, CV Air-handler AHU-1 with CHW Coil and HW heat located in Dorm Building on mechanical loft.

- In existing panel AP-x, remove the existing Alerton AHU controller and replace with a new FE2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at the NCE the Activities Building Re-use existing building-to-building raceway for this new BACnet trunk. (Note: S, U, V, X, Y and Z-Dorm panels will be served from a BACnet MS/TP trunk originating at panel in Q-Dorm.)

© 2008 Johnson Controls, Inc.

- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct RA-T sensor with new RA-T sensor and re-terminate.
- Replace existing CSR at HWP-2 with new CSR and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Furnish new 3-way, modulating, characterized ball HW control valve to replace existing control valve.
- Preserve existing safety devices and safety circuits.

Dorms – M and N (Max Security)

CV Air-handler AHU-2 (Serves Medical Area) with PHW Coil, CHW Coil and RHW coil located in mechanical room in crossover area between Dorms-M and N.

- In existing panel AP-30, remove the existing Alerton AHU controller and replace with a new NCE. Connect to existing source of 24VAC.
- Install new Cat6 cable to nearest IT Closet and install new BACnet MS/TP trunk to serve Dorms-M and N.
- Extend new BACnet MS/TP cable from the NCE to the other AHU control panels in the M and N Dorms and terminate in daisy-chain fashion.
- Re-terminate existing input/output control cabling to new NCE.
- Replace existing duct MA-T sensor with new MA-T sensor and re-terminate.
- Replace existing filter DP switch with new. Re-use existing wiring and tubing.
- Install new Cooling Coil Discharge Temp sensor(CC-T) at unit.
- Install new Discharge Air Temp sensor (DA-T) at unit.
- Replace existing CSR at AHU-2 motor starter with new and re-terminate existing cabling.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve. Re-use existing cable.
- Furnish new 3-way, modulating, characterized ball HWV to replace existing preheat coil HWV and re-terminate to existing cable.
- Furnish new 3-way, modulating, characterized ball HWV to replace existing reheat coil HWV and re-terminate to existing cable.
- Re-use existing supply, exhaust and purge fan relays.
- Preserve existing Purge system controls and existing fire alarm system interlocks.
- Preserve existing safety devices and safety circuits.

Qty=2, CV Air-handler AHU-1 (Dorm-M) and AHU-4 (Dorm-N) 4-Pipe AHUs (Serve Segregation Unit Areas)

- In existing panel AP-x located in the AHU mechanical room, remove the existing Alerton AHU controller and replace with an FEC2611. Connect to existing source of 24VAC.
- Terminate to new BACnet MS/TP trunk originating at AHU-2 panel NCE.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing filter DP switch with new. Re-use existing wiring and tubing.

© 2008 Johnson Controls, Inc.

- Install new mixed air temp sensor at unit.
- Install new cooling coil discharge temp (CC-T) at unit.
- Install new discharge temp (DA-T) at unit.
- Replace existing CHWS-T sensor with new.
- Replace existing CHWR-T sensor with new.
- Replace existing RA-T/H sensors with a new combination RA-T/H sensor.
- Replace existing CSR at AHU-x motor starter with new.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Furnish new 3-way, modulating, characterized ball HW Reheat control valve to replace existing control valve.
- Re-use existing supply, exhaust and purge fan relays.
- Preserve existing Purge system controls and existing fire alarm system interlocks.
- Preserve/re-use existing smoke damper actuators and interlocks.
- Preserve existing safety devices and safety circuits.

Qty=2, Ceiling Hung CV Air-handler AHU-3 (Dorm-M) and AHU-5 (Dorm-N) CHW AHUs (Serve Guard Room)

- In existing panel AP-x located in the Guard Room, remove the existing Alerton AHU controller and replace with an FEC2611. Connect to existing source of 24VAC and terminate to new BACnet MS/TP trunk originating at AHU-2 panel NCE.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Replace existing CSR at AHU-x motor starter with new and re-terminate existing cabling.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve. Re-use existing cable.
- Re-use existing supply, exhaust and purge fan relays.
- Preserve existing Purge system controls and existing fire alarm system interlocks.
- Preserve/re-use existing smoke damper actuators and interlocks.
- Preserve existing safety devices and safety circuits.

Qty=2, Hot Water Boilers Serving Dorms-M and N

- In existing panel AP-x located in the AHU-1 and AHU-4 mechanical rooms, remove the existing Alerton boiler controllers and replace with an FEC2611. Connect to existing source of 24VAC and terminate to new BACnet MS/TP trunk originating at AHU-2 panel NCE.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing CSR at HWP motor starter with new and re-terminate existing cabling.
- Replace existing HWS-T and HWR-T immersion sensors.
- Re-use existing boiler staging relays.

© 2008 Johnson Controls, Inc.

- Install two (2) new cables from DDC control panel to boiler factory panel to monitor boiler run status and boiler alarm status.
- Preserve existing safety devices and safety circuits.

Dorm – P (Medium Security)

CV Air-handler AHU-1A with CHW Coil located in Floor-1 mechanical room.

- In existing panel, remove the existing Alerton AHU controller and replace with a new NCE. Connect to existing source of 24VAC.
- Install new Cat6 cable to IT Closet located adjacent to Floor-1 stairwell and install new BACnet MS/TP trunk to serve Dorm-P.
- Extend new BACnet MS/TP cable (3c/#22/shd) from the NCE to the other AHU control panels and heater panels in the P-Dorm and terminate in daisy-chain fashion.
- Re-terminate existing input/output control cabling to new NCE.
- Replace existing duct DA-T sensor with new DA-T sensor and re-terminate.
- Replace existing filter DP switch with new. Re-use existing wiring and tubing.
- Replace existing outside air damper actuator with new. Re-use existing wiring.
- Install new mixed air temp at unit. Install new cabling and conduit as required.
- Replace existing CSR at AHU motor starter with new and re-terminate existing cabling.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Preserve existing safety devices and safety circuits.

Qty=3, CV Air-handlers AHU-2A (Floor-2 Mech), AHU-1B and AHU-2B located on Floor-2 Mech Mezz

- In existing panel, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Extend new BACnet MS/TP cable from the NCE (at AHU-1A) to the other AHU control panels and heater panels in the P-Dorm and terminate in daisy-chain fashion.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct DA-T sensor with new DA-T sensor.
- Replace existing filter DP switch with new. Re-use existing wiring and tubing.
- Replace existing outside air damper actuator with new.
- Install new mixed air temp at unit. Install new cabling and conduit as required.
- Replace existing CSR at AHU motor starter with new and re-terminate existing cabling.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve. Re-use existing cable.
- Preserve existing safety devices and safety circuits.

© 2008 Johnson Controls, Inc.

Qty=8 EDH Duct Reheat:

- Demo existing Alerton controller and replace with new VMA1628 controller.
- Re-use existing 24VAC and terminate to VMA.
- Terminate new BACnet MS/TP trunk (originating at panel at AHU-1A) to new EDH controllers in daisy-chain fashion.
- Replace existing Alerton zone temp sensors with new NETSTATs.
- Re-terminate existing heater staging relays to new VMA controllers.

Dorm – Q (Medium Security, Controls are identical to Dorm-P)

CV Air-handler AHU-1A with CHW Coil located in Floor-1 mechanical room.

- In existing panel, remove the existing Alerton AHU controller and replace with a new NCE. Connect to existing source of 24VAC.
- Install new Cat6 cable from new NCE to IT Closet located adjacent to Floor-1 stairwell and install new BACnet MS/TP trunk to serve Dorm-P.
- Extend new BACnet MS/TP cable from the NCE to the other AHU control panels and heater panels in the P-Dorm and terminate in daisy-chain fashion.
- Re-terminate existing input/output control cabling to new NCE.
- Replace existing duct DA-T sensor with new DA-T sensor and re-terminate.
- Replace existing filter DP switch with new. Re-use existing wiring and tubing.
- Replace existing outside air damper actuator with new. Re-use existing wiring.
- Install new mixed air temp at unit. Install new cabling and conduit as required.
- Replace existing CSR at AHU motor starter with new. Re-terminate existing cabling.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve. Re-use existing cable.
- Preserve existing safety devices and safety circuits.

Qty=3, CV Air-handlers AHU-2A (Floor-2 Mech), AHU-1B and AHU-2B located in Floor-2 Mech Mezz

- In existing panel, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Extend new BACnet MS/TP cable from the NCE (at AHU-1A) to the other AHU control panels and heater panels in the P-Dorm and terminate in daisy-chain fashion.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct DA-T sensor with new DA-T sensor and re-terminate.
- Replace existing filter DP switch with new. Re-use existing wiring and tubing.
- Replace existing outside air damper actuator with new. Re-use existing wiring.
- Install new mixed air temp at unit. Install new cabling and conduit as required.
- Replace existing CSR at AHU motor starter with new and re-terminate existing cabling.
- Furnish new 2-way, modulating, characterized ball CHW control valve to replace existing control valve. Re-use existing cable.

© 2008 Johnson Controls, Inc.

- Preserve existing safety devices and safety circuits.

Qty=8 EDH Duct Reheat:

- Demo existing Alerton controller and replace with new VMA1628 controller.
- Re-use existing 24VAC and terminate to VMA.
- Terminate new BACnet MS/TP trunk (originating at panel at AHU-1A) to new EDH controllers in daisy-chain fashion.
- Replace existing Alerton zone temp sensors with new NETSTATs.
- Re-terminate existing heater staging relays to new VMA controllers.

Air-Cooled Chiller System Serving Dorms-M, N, P, Q

- In existing panel AP-18 located inside the generator room next to the air-cooled chiller, field replace existing Alerton controller with a new FEC controller.
- Re-use existing source of 24VAC and terminate to new FEC.
- Extend new BACnet MS/TP trunk cable from the new NCE originating in the main chiller plant at the new NCE in panel AP-1 and terminate to the new FEC controller.
- Re-terminate existing cables to new FEC.
- Replace existing CHWS-T and CHWR-T temp sensors with new. Re-use existing immersion wells.
- Replace existing outside air temperature sensor with new. Re-use wiring.
- Replace existing CSR at chilled water pumps motor starter with new. Re-terminate existing cabling.
- Install new cable from control panel AP-18 to chiller factory panel to monitor CHLR-ALM.

Air-Cooled Chiller System Serving Dorms - S, U, V, X, Y, Z

- In existing NEMA4 panel AP-x located at the air-cooled chiller, field replace existing Alerton controller with a new FEC controller.
- Re-use existing source of 24VAC and terminate to new FEC.
- Extend new BACnet MS/TP trunk cable from Dorm-Z and terminate to the new FEC controller. Raceway between Dorm-Z and chiller is existing.
- Re-terminate existing cables to new FEC.
- Replace existing CHWS-T and CHWR-T temp sensors with new. Re-use existing immersion wells.
- Replace existing CSR at chilled water pumps motor starter with new and re-terminate existing cabling.
- Install new cable from control panel AP-x to chiller factory panel to monitor CHLR-ALM.

© 2008 Johnson Controls, Inc.

Jefferson County Airport

Overview:

Old Airport Terminal (Jerry Ware terminal): This building is served by DX equipment having electric heat. Presently, there is no BAS system serving this building. The existing zone thermostats are to be replaced with new BACnet TEC thermostats and install a new BACnet MS/TP trunk to connect them in daisy-chain fashion. Install a new NCE in the Floor-1 mechanical room.

Hangars: There are three (3) hangars having DX equipment served by conventional thermostats. The existing zone thermostats are to be replaced with new standalone programmable TEC thermostats having PIR sensors. These hangars do not have existing LAN, so the new thermostats will not be networked to the Metasys system.

New Airport Terminal: This facility is controlled by a Delta BACnet control system that is to be replaced by Metasys under this project. Two air-cooled chillers operate in a variable flow primary configuration and heating is provided by a constant volume hot water heating plant. There are seven (7) existing VAV 4-Pipe RTUs serving the facility. Three of the seven (7) are presently out of service, but will be replaced with new units. There are also five (5) constant volume AHUs, two of which use DX cooling. Of the 7 VAV RTUs, RTUs-1, 2, 3 and 4 serve 32 terminal boxes presently controlled by the Delta system. The other RTUs (RTUs-5, 6 and 7) serve spaces that have not yet been renovated where approximately 15 terminal boxes with hot water reheat exist. These old boxes have Alerton controls that will be replaced by Metasys.

Old Airport Terminal (5000 Jerry Ware Drive)

- NETWORK: Furnish (qty=1) JCI factory-fabricated NCE panel (20x16) on wall of the mechanical room where AHU Tag-32 is located. Install new Cat6 cable from this NCE to the nearest IT closet for connection to a Jefferson County LAN port.
- THERMOSTATS: Replace three (3) existing zone thermostats with new Metasys BACnet TEC thermostats and terminate in daisy-chain fashion to a new BACnet MS/TP trunk originating at the new NCE panel.
- Furnish a new Current Sensing Status Relay (CSR) at the blower of each A/C unit to provide supply fan run status indication to the TEC thermostat.
- Where applicable, replace the existing outside air damper actuator with a new 2-position, 24VAC, electronic, spring return damper actuator and interlock to the TEC thermostat to open on fan startup during occupied hours.

Hangars

- Hangar-2 (4840 Parker Drive)
  - NETWORK: No Work.
  - THERMOSTATS: Replace (qty=1) existing zone thermostat with new Standalone Programmable TEC thermostat having a PIR sensor.
- Hangar-7 (4605 Airport 3rd Street)
  - NETWORK: No Work.
  - THERMOSTATS: Replace (qty=4) existing zone thermostat with new Standalone Programmable TEC thermostat having a PIR sensor.
- Sheriff's Hangar (4640 Hangar Drive)
  - NETWORK: No Work.
  - THERMOSTATS: Replace (qty=4) existing zone thermostat with new Standalone Programmable TEC thermostat having a PIR sensor.

© 2008 Johnson Controls, Inc.

Schedule 1

New Airport Terminal (6000 Airline Drive)

NETWORK: An existing Delta control panel (24x24) located in the boiler room contains a BACnet MS/TP router, a CHW system controller and a HW system controller. These three (3) components are to be replaced with two (2) new field installed Metasys NCE controllers and a small network switch. There are presently two (2) BACnet MS/TP trunks connected to the Delta Router. Connect one of these MSTP trunks to the new NCE that will serve the chilled water system and the other MSTP trunk to the NCE that will serve the HW system.

- **Chilled Water System NCE:** Re-terminate existing input/output cables to the new NCE serving the CHW system
  - Furnish new CH1CHWS-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new CH2CHWS-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new Building CHWS-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new Building CHWR-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new CHW-DP transmitter to replace existing DP transmitter near end-of-line. Re-use existing sample tubing, raceway and cable.
  - Replace existing chilled water flow meter with new. Re-use existing insertion port, cabling, raceway.
  - Extend BACnet MS/TP trunk in raceway to the existing York chiller and connect to TB1 of the York Micropanel Control Board.
  - The existing Minimum Flow CHW Bypass control valve is to be re-used.
  - Replace existing Chilled Water Pump VFDs:
    - Replace the two (2) ABB VFDs located in the electrical room (accessible from chiller area) with new VFDs (7.5HP, 480VAC/3Ph). Preserve existing safety circuits and control wiring to VFDs.
    - Connect the two (2) new VFDs to BACnet MS/TP available in the same electrical room at the existing Delta lighting control panel.
- **Hot Water System NCE:** Re-terminate existing input/output cables to the new NCE serving the HW system
  - Furnish new Common HWS-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new Common HWR-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new RTU HWS-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new FPTU HWS-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new RTU HWR-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Furnish new FPTU HWR-T sensor to replace existing. Re-use existing well, raceway and cable.
  - Re-use two (2) existing HW bypass control valves. Preserve wiring.
  - Furnish new OA-T sensor to replace existing. Re-use existing raceway and cable.
- **Existing Lighting Controller:** In the electrical room near the chilled water pumps VFDs is located an existing Delta lighting control panel. This BACnet MS/TP panel will remain on the BACnet network. The points in this panel will be integrated as a third-party VND device into one of the NCE panels located in the boiler room panel.
- **Existing OWS:** The existing OWS serving the Delta control system will remain and be used as a browser for the new Metasys controls.

Qty=4, Rooftop Air-handlers RTU-1, 2, 3, 4: An existing Delta control panel is located at each of these AHUs and is to be re-used.

- For each of these existing 4-Pipe VAV Air-handlers:
  - In existing control panel, remove the existing Delta AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.

© 2008 Johnson Controls, Inc.

- Connect FEC to existing BACnet MS/TP trunk originating at one of the NCEs in the boiler room control panel.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct static pressure DPT serving the AHU with new and re-terminate.
- Replace existing duct DA-T sensor with new and re-terminate.
- Furnish new 2-way, modulating, characterized ball CHW control valve with weatherproof enclosure to replace existing control valve. Re-use existing cable.
- Furnish new 3-way, modulating, characterized ball HW control valve with weatherproof enclosure to replace existing control valve. Re-use existing cable.
- Re-use existing RTU VFD. Preserve existing VFD control cabling.
- Preserve existing safety devices and safety circuits.
- Replace existing Mixing Damper Actuator with new. Re-use existing control cabling.

Qty=32 VAV Terminal Boxes (10 serving RTU-1, 7 serving RTU-2, 8 serving RTU-3, 7 serving RTU-4):

- Furnish new Metasys BACnet VMA terminal box controller to replace existing Delta controller.
- Re-use existing 24VAC and terminate to VMA.
- Terminate existing BACnet MS/TP trunk to new VMAs in daisy-chain fashion.
- Replace existing Delta zone temp sensors with new NETSTATs.
- Re-terminate existing hot water control valves to new VMA controller.
- Re-use existing fan start/stop relay.
- Install new DA-T sensor (with factory 10ft plenum whip) and terminate to VMA controller.

Qty=3, Rooftop Air-handlers RTU-5, 6 and 7: These rooftop AHUs are to be replaced with new units having factory mounted VFDs.

- For each of the new 4-Pipe VAV Air-handlers:
- Install new JCI factory-fabricated FEC control panel (24x24) inside of supply plenum of new RTU. Connect to 120VAC.
- Connect FEC and VFD to existing BACnet MS/TP trunk originating at one of the NCEs in the boiler room control panel.
- Install the following input/output control cabling to the new FEC:

SF-C	Install new CSR in factory VFD
SF-S	Terminate to same CSR in the VFD cabinet
SF-O	Terminate to VFD speed control terminals
SF-ALM	Terminate to VFD fault terminals
CHWV-O	Terminate to new 2-way, modulating, characterized ball CHW control valve
HWV-O	Terminate to new 3-way, modulating, characterized ball CHW control valve
STATIC	Install new DPT in RTU control panel
DA-T	Install new DA-T sensor inside of RTU supply plenum
RA-T/H	Install new RA-T/H sensor inside of RTU return duct
MA-T	Install new MA-T sensor (8ft avg) across mixed air section
HC-T	Install new HC-T sensor (8 ft avg) across HW coil discharge

© 2008 Johnson Controls, Inc.

- MIXD-O — Install new Rotary Actuator on mixing dampers.

- Install the following safety devices in the new RTU:
  - Freezestat — Install downstream of HW coil. Terminate to VFD safety circuit.
  - Static HL safety circuit. — Install static pressure high limit switch inside of control panel. Terminate to VFD
  - R-install duct smoke detector(s) and fire alarm shutdown modules.

Qty=15 VAV Terminal Boxes (Assume 4 serving RTU-5, 5 serving RTU-6, 6 serving RTU-7):

- Furnish new Metasys BACnet VMA terminal box controller to replace existing Alerton terminal box controls.
- Re-use existing 24VAC and terminate to VMA.
- Terminate existing BACnet MS/TP trunk to new VMAs in daisy-chain fashion.
- Replace existing Alerton zone temp sensors with new NETSTATs.
- Furnish new 3-way, modulating, characterized ball HW reheat control valve to replace existing.
- Re-use existing fan start/stop relay.
- Furnish new DA-T sensor (with factory 10ft plenum whip) and terminate to VMA controller.

Constant Volume AHU controls

(Qty=2) CV 4-Pipe Air-Handling Units

- In existing control panel, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at one of the NCEs in boiler room control panel.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct DA-T sensor with new and re-terminate.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new, 2-way, modulating, characterized ball CHW control valve to replace existing control valve.
- Furnish new, 3-way, modulating, characterized ball HW control valve to replace existing control valve.
- Replace existing outside air damper actuator with new electronic, rotary, spring return actuator.
- Preserve existing safety devices and safety circuits.

(Qty=1) CV CHW Air-Handling Units

- In existing control panel, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at one of the NCEs in boiler room control panel.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct DA-T sensor with new and re-terminate.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new, 2-way, modulating, characterized, ball CHW control valve to replace existing control valve.
- Replace existing outside air damper actuator with new, electronic, rotary, spring return actuator.

© 2008 Johnson Controls, Inc.

- Preserve existing safety devices and safety circuits.

(Qty=2) CV DX AHU with HW Heating

- In existing control panel, remove the existing Alerton AHU controller and replace with a new FEC2611. Connect to existing source of 24VAC.
- Connect FEC to new BACnet MS/TP trunk originating at one of the NCEs in boiler room control panel.
- Re-terminate existing input/output control cabling to new FEC.
- Replace existing duct DA-T sensor with new and re-terminate.
- Replace existing Alerton zone temp sensor with new NETSTAT.
- Furnish new, 3-way, modulating, characterized ball HW control valve to replace existing control valve.
- Replace existing outside air damper actuator with new electronic, rotary, spring return actuator.
- Preserve existing safety devices and safety circuits.

Metasys ADX System Graphics

Metasys Graphics Additions and Modifications:

- Provide new, dynamic, color graphics on the new Metasys ADX server to reflect the new Metasys BAS additions included in this project.
- The new graphics will include a county map identifying all included Metasys system locations, a site map for each Metasys facility, floorplan graphics detailing primary HVAC system locations, primary HVAC system flow diagram graphics and terminal box summary graphics.

Equipment Maintenance & Management Function

- Equipment operational status, maintenance status and maintenance tracking reported for user information.

EXCLUSIONS/CLARIFICATIONS:

- Excludes IT infrastructure (understood to be existing and functioning properly) — Customer IT department to provide properly configured Ethernet LAN ports located within each building as required by JCI. Johnson Controls, Inc. to provide Cat6 cabling from new IP level controllers to nearest data closet.
- Wherever existing control devices (e.g., pneumatic thermostats, electric thermostats) are to be replaced with new DDC controls, the existing electrical conduit system (e.g., tubing, wiring, raceway) serving the existing devices will be demolished (if not suitable for re-use) back to ceiling spaces and walls, capped and abandoned in place.
- Excludes new controls for systems (e.g., Unit Heaters, FCUs, Baseboard Heaters, Radiant Heaters, humidifiers) other than those systems specifically noted as part of the Work.
- Excludes repair or replacement of any high voltage electrical service, starters, VFDs and/or disconnects, unless specifically noted otherwise as part of the Work.
- Excludes repair or replacement of defective mechanical, electrical and/or controls equipment, other than the equipment specifically included in the FIM description. Johnson Controls will identify the location of defective equipment and notify the owner.
- Excludes repair or replacement of any existing mechanical safety devices (e.g., firestats, freezestats, duct smoke detectors) unless specifically noted otherwise as part of the Work. It is assumed that existing safety devices are in good operating condition and will be re-used.

© 2008 Johnson Controls, Inc.

- Where included in the Work, new VFDs will be installed on existing motors with existing line and load side wiring re-used wherever possible. Motor replacements are not included in the Work, unless specifically noted otherwise as part of the Work.
- Excludes repair or upgrades required to bring the HVAC, electrical and mechanical systems up to code, unless specifically noted otherwise as part of the Work.
- Excludes air and water balance of the existing HVAC and mechanical systems, unless otherwise specified in the scope of work.
- Excludes modification of existing building ventilation conditions and/or indoor air quality monitoring/control, unless specifically noted otherwise as part of the Work.
- Excludes repair, replacement, re-calibration or recommissioning of third-party laboratory controls and/or fume hood equipment and controls.
- Excludes temporary space conditioning, unless otherwise specified.
- Excludes painting of electrical raceway systems, junction boxes, pneumatic tubing, etc.
- Excludes engineering services, studies and analysis associated with any exclusions or work clearly outside of the Work definition.
- Excludes resolution of existing HVAC design, service and/or distribution conditions, known or unknown.
- Excludes Duct and coil cleaning.
- Excludes any controllers required for future capacity.
- Excludes refrigerant monitoring system and/or associated exhaust fan interlocks and SCUBA equipment, unless specifically noted otherwise as part of the Work.
- Where existing thermostats are replaced by new Metasys thermostats, existing thermostat guards will be preserved and re-used.
- Excludes the provision and/or installation of access doors and/or panels, neutralizers or sound attenuators, thermometers or gauges.
- Excludes provision and installation of any new fire alarm system modules and/or duct smoke detectors. No new fire alarm devices of any kind are included.
- Note: Relocation, re-termination and recertification of existing fire alarm system modules associated with the existing downtown Jail facility smoke controls (AHU-2, AHU-3 and AHU-4 only) are included in the Work.
- Excludes interlock wiring and/or monitoring of Fire / Smoke Dampers, Fire/Smoke dampers except where specifically noted otherwise to be part of the Work.
- Excludes any new UL864 UUKL Smoke Control System Components and/or control sequences. Smoke control sequences (where existing) are executed by the building fire alarm systems.
- New Metasys controls that are installed as part of the Work will be mapped to the new Johnson Controls ADX server to be located in the basement Maintenance Office of the Old Courthouse.
- New local browser Operator Workstations with inkjet printers and LCD monitors, where specifically noted herein as part of the Work, will be provided for selected locations.
- Excludes replacement of any existing field devices, sensors, and controls except as explicitly stated herein.
- Excludes demolition and/or removal of any air compressors and/or air compressor accessories that may no longer be required following the control system upgrades that are included in the Work. No guarantee is given or implied that all pneumatic control devices will be removed/replaced as part of the Work at any

© 2008 Johnson Controls, Inc.

given site. It is expected that some existing pneumatic end devices will remain (e.g., pneumatic smoke dampers, pneumatic thermostats) and will require existing air compressor systems.

- Customer shall provide access to non-lay-in/ACT ceilings where required.
- Excludes provision of labor and materials to execute Test and Balance services, except where specifically noted otherwise as part of the Work.
- New control wiring will be installed exposed using plenum rated cabling in concealed accessible areas, such as above suspended ceilings and inside of drywall partitions. New control cabling installed in existing cable tray will also be plenum rated. In exposed locations, such as in electrical rooms and mechanical rooms, new control wiring will be installed in EMT raceway. In exterior locations, control cabling will be installed in rigid conduit and/or sealtite conduit.
- Includes required Metasys programming, system commissioning and system testing.
- Includes application engineering, control drawing submittals and product data submittals for the new Metasys system.
- Includes 40 hours (total) of on-site operator training to be distributed amongst various sites following completion of construction.
- Includes (1) year warranty for parts and labor. Warranty starts at system acceptance for each site.

© 2008 Johnson Controls, Inc.

FIM 4 Air-Cooled DX Air-conditioning Replacements

General

This FIM includes replacement of existing air-cooled DX air-conditioning equipment.

This work will include replacing condensers, furnaces and evaporator sections and packaged units for a total of 46 systems at the following 11 locations:

- 112 Airport Jerry Ware Terminal - Old Airport (8 units)
- 113 Airport Jerry Ware Annex - Old Airport (2 units)
- 114 Airport Firehouse (1 unit)
- 115 Airport Hangar 2 (1 unit)
- 175 Courthouse Annex 1 (8 units)
- 176 Courthouse Annex 2 (3 units)
- 177 Courthouse Annex 4 (12 units)
- 181 Sub Courthouse - Port Arthur (6 units)
- 188 Mid-County Tax Office (2 units)
- 237 Precinct 1 (1 unit)
- 254 Precinct 4 (2 units)

Scope of Work

Existing Equipment to be replaced

Site	ID Tag	Manuf.	Model	Serial	Cooling Tons
112 Airport Jerry Ware Terminal - Old Airport	24	Unreadable			5
112 Airport Jerry Ware Terminal - Old Airport	25	Unreadable			5
112 Airport Jerry Ware Terminal - Old Airport	26	Carrier	50DK501445D		12
112 Airport Jerry Ware Terminal - Old Airport	27	Carrier	50DK501445D		12
112 Airport Jerry Ware Terminal - Old Airport	28	Carrier	50DK500672D		5.5
112 Airport Jerry Ware Terminal - Old Airport	29	Whirlpool	W2C348B-1A	4606E58405	4
112 Airport Jerry Ware Terminal - Old Airport	30	No Tag			3.5
112 Airport Jerry Ware Terminal - Old Airport	31	Carrier	38CKC048	3297E15379	4
113 Airport Jerry Ware Annex - Old Airport	33	Goodman	GSC130603AC	907055293	5
113 Airport Jerry Ware Annex - Old Airport	34	Goodman	GSC130603AC	610126330	5
114 Airport Firehouse		York	H1RA042S06G	W0H5775352	3.5
115 Airport Hangar 2	37	Unreadable		**04F03276	5
175 Courthouse Annex 1	96	Trane	TTA036C300A1	P5142X13F	3
175 Courthouse Annex 1	97	Trane	TTA036C300A1	P51420M3F	3
175 Courthouse Annex 1	98	Trane	TTA060D300A0	R025N8N2F	5

© 2008 Johnson Controls, Inc.

Schedule 1

Site	ID Tag	Manuf.	Model	Serial	Cooling Tons
175 Courthouse Annex 1	99	Trane	TTA048D300A0	P305YK2FF	4
175 Courthouse Annex 1	100	Trane	TTA060D300A0	R025N8R2F	5
175 Courthouse Annex 1	101	Trane	TTA060D300A0	R025PUD2F	5
175 Courthouse Annex 1	102	Trane	TTA048D300A0	P305YKSFF	4
175 Courthouse Annex 1	103	Trane	TTA048D300A0	P493JM02F	4
176 Courthouse Annex 2	117	Lennox	unreadable		20
176 Courthouse Annex 2	120	Tempstar	TCA018AKA1	L012**	1.5
176 Courthouse Annex 2	121	No Tag			3
177 Courthouse Annex 4	122	Trane	TTA060D300A0	P024PX4FF	5
177 Courthouse Annex 4	123	Trane	TTA060D300A0	P133S6AFF	5
177 Courthouse Annex 4	124	Carrier	24ABS360A0050010	3808E18018	3
177 Courthouse Annex 4	125	Trane	2TTA3060A3000AA	11314PHX4F	5
177 Courthouse Annex 4	126	Trane	2TTA0060A3000AA	6015J933F	5
177 Courthouse Annex 4	127	Goodman	GSX130241BA	1005667473	2
177 Courthouse Annex 4	128	Trane	2TTA0060A3000AA	601484G3F	5
177 Courthouse Annex 4	129	Trane	2TTA0060A3000AA	601483E3F	5
177 Courthouse Annex 4	130	Trane	TTA080D3000A0	P15**	6.5
177 Courthouse Annex 4	131	Trane	2TTA0048A3000AA	5445MKH3F	4
177 Courthouse Annex 4	132	Trane	2TTA00060A3000AA	6063NS23F	5
177 Courthouse Annex 4	133	Trane	2TTA00060A3000AA	6063NT33F	5
181 Sub Courthouse - Port Arthur	2	York	HDHB-T090AC	SNBKM021598	7.5
181 Sub Courthouse - Port Arthur	4	Rheem	RAWD-076CAZ	6416 M15599 19839	7.5
181 Sub Courthouse - Port Arthur	5	Carrier	50TH-085-**	4603**	7
181 Sub Courthouse - Port Arthur	8	Carrier	38CKC042550	4403E05753	3.5
181 Sub Courthouse - Port Arthur	10	York	HABA-T036SG	W0D6107076	3
181 Sub Courthouse - Port Arthur	11	Carrier	38ARS012	4703G30014	10
188 Mid-County Tax Office	146	Bryant	563CN042-C	3998E22473	3.5
188 Mid-County Tax Office	147	Bryant	563CN042-C	3998E22496	3.5
237 Precinct 1	137	Nordyne	FS3BC-048KA	FSA030416846	4
254 Precinct 4	148	Trane	2TTB0060A1000AA	318XT53F	5
254 Precinct 4	152	Trane	TCC024F100BA	K11165432	2

© 2008 Johnson Controls, Inc.

Schedule 1

New Equipment Efficiency

Split Systems

Up to 5 tons: 14.25 SEER or 11.9 EER (at ARI)

Above 5 tons: 11.2 EER (at ARI)

Packaged Units

Up to 5 tons: 16 SEER or 12.8 EER

Above 5 tons: 11.7 EER

Provide labor, supervision, tools, transportation, product storage and staging, equipment, and materials necessary to remove and replace outdoor condensing units, indoor blower/furnace units, and packaged units as indicated above.

The Work shall include the following:

- Pump-down and recover the refrigerant (R-22) from the outside units, inside units and refrigerant lines. The recovered refrigerant shall remain the property of JC and shall be transported to the JC Physical Plant facility in permanent storage cylinders.
- Disconnect, de-pipe, detach and remove the existing indoor and outdoor sections, as indicated in the attached equipment tables. Dispose of old equipment at an off-site disposal site or recycling center in compliance with State and Local ordinances in effect at the time of contract signing.
- Provide and install a new matched R410a system in the same general locations as the current. The systems shall be the York Affinity and LX Series or approved equal. Provide factory electro fin condenser coil coating.
- Install condenser and AHU sections with adequate operating and service clearances, per manufacturer's requirements.
- Provide new housekeeping pad for condensing unit locations when required to accommodate new condensing unit dimensions.
- Provide new condensate drain traps and Safe-T-Switches where required.
- Provide new liquid/suction line sets if existing lines sizes are not in compliance with manufacturer's requirements.
- Pressure test existing liquid/suction line sets with dry nitrogen, to 150 psig, for a period of one (1) hour. Line pressure shall remain constant for entire test period, in order to verify piping integrity.
- Provide new liquid/suction line sections (approx. 3-6 feet) at the condenser and evaporator units, where necessary to provide for a quality installation.
- Provide necessary modifications to the existing duct work to accommodate new AHU/furnace dimensions, including transitions, flange sets, and canvas connections. Seal new duct connections (per SMACNA Standards).
- Verify that new furnace installations have proper combustion air, per manufacture's requirements.
- Provide and/or connect necessary piping, electrical conduit and wiring, controls, ductwork, condensate, insulations and necessary appurtenances. Install new liquid line filter drier and site-glass (if not included with unit and/or required by manufacturer), and re-insulate suction line piping completely.
- Replace 208-230/3/60 and 208-230/1/60 service disconnect switches serving existing condensing units and packaged units with new NEMA 4 rated disconnect switches. Provide new flex connections from disconnect to condenser. New wiring shall be in accordance with the NEC and local codes.
- The units shall have a manufacturer's parts and defects warranty from date of installation:
  - 1st Year whole unit replacement parts warranty – labor and refrigerant excluded
  - 2nd thru 5th Year replacement compressor parts warranty – labor and refrigerant excluded
- Project related debris and packaging shall be properly disposed of to an off-site disposal site or recycling center in compliance with State and Local ordinances in effect at the time of contract signing.
- Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to customer before

© 2008 Johnson Controls, Inc.

it is disturbed. Material and workmanship used in restoring work shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.

- All Work will be coordinated with Customer personnel to minimize interruptions, delays, or safety violations.
- All materials being installed shall be new.
- Work will be performed in accordance with all with prevailing industry practice, state and local codes and standards.
- Protection of existing finishes and or structures will be provided. Match patchwork and finishing like-for-like.
- Any doors, wall, ceiling tiles and grid, floor finishes, louvers, etc. that need to be removed for equipment access must be returned to original condition. Ceiling tiles will be removed at the start of the Work, and re-installed at the completion of the Work. (This will avoid unnecessary handling and potential damage).
- Refrigeration / condensate piping to be installed so that it does not interfere with the removal of existing mechanical, electrical, lighting, controls or IT installations.
- Refrigerant / condensate piping, electrical and controls shall be supported such that it is independently supported from structure.
- Electrical / controls wiring will either be run above false ceilings or on the roof as the schedule and site conditions permit. In many cases, this work will need to start out of hours prior to the summer holidays. In many cases home runs will be run in corridors and the ceiling tiles left out during the installation Work.
- Gravity condensate drains will be installed where feasible. Where condensate pumps are required, the condensate pump shall be provided with an audible alarm. Condensate pumps shall be installed such that where possible they are integral to the unit.
- Customer will have first right of refusal to keep all removed equipment. JCI will be responsible of the removal and disposal of all equipment upon refusal.
- New equipment is to be installed such that it does not compromise access to the existing equipment for replacement and maintenance.
- All necessary ductwork, transitions, insulation, gas lines, condensate lines, structural work, roof work, curbs and adaptors required will be provided.
- Most ductwork system will remain "as is". New duct connections will only be provided to accommodate installation of new equipment. New required ductwork shall meet or exceed ductwork installation as qualified by SMACNA.
- Duct work repair and/or replacement for units will be limited to the confines of the mechanical room unless otherwise identified in a FIM Scope of Work.
- Repairs/replacement of insulation, piping or ductwork found to be corroded or rusted and unacceptable for installation of components or fittings required for installation other than what is specified in the Scope of Work is excluded
- Clean up the work area at the end of each day's work, and at completion of the project.

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 5 Air-Cooled HHW/DX Air-conditioning Replacements at Minnie Rogers

General

This FIM includes replacement of air-cooled HHW/DX Air-conditioning equipment that has gone past its useful life. This work will include replacing 22 DX systems (condensers, furnaces and evaporator sections) and three (3) self-contained packaged units for a total of 25 systems at Minnie Rogers Juvenile Detention Center:
Existing Equipment to be replaced:

Scope of Work

Self-Contained Package Units

ID Tag	Manuf.	Model	Serial	Cooling Tons
66	Carrier	50BYN01261	1601B42891	7
67	Carrier	50BYN0146	2096B15953	11
69	Carrier	50BYN0146	2096B15954	11

DX Split Systems

ID Tag	Manuf.	Model	Serial	Cooling Tons
70	Carrier	38CKC048	5000E12884	4
71	Carrier	38CKC048	0701E03588	4
72	Carrier	38CKC036	3200E08855	3
73	Carrier	38CKC036	3000E04277	3
74	Carrier	38AKS009	3500G00028	9
75	Carrier	38AK-007	1301G04108	7
76	Carrier	38CKC036610	3200E08869	3
77	Carrier	38CKC036610	3200E08866	3
78	Carrier	38CKC036610	3200E08876	3
79	Carrier	38CKC036610	3200E08868	3
80	Carrier	38AKS016	1001F62391	16
81	Carrier	unreadable		20
82	Carrier	38CKC048-611	3801E15123	4
83	Carrier	38CKC060-671	1801E27352	5
84	Carrier	38CKC048-611	0202E16450	4
85	Carrier	38CKC042-611	2700E29759	3.5
86	Carrier	38CKC060-671	0202E01885	5
87	Carrier	38CKC060-671	5201E15138	5
88	Carrier	38CKC042-611	2901E18501	3.5

© 2008 Johnson Controls, Inc.

Schedule 1

ID Tag	Manuf.	Model	Serial	Cooling Tons
89	Carrier	38AK-008-611	1801G01646	8
90	Carrier	38AK-007-611	1301G00106	7
91	Carrier	38AK-007	0501G04073	7

Equipment Efficiency

Split Systems

Up to 5 tons: 14.25 SEER or 11.9 EER (at ARI)

Above 5 tons: 11.2 EER (at ARI)

Packaged Units

Up to 5 tons: 16 SEER or 12.8 EER

Above 5 tons: 11.7 EER

Provide labor, supervision, tools, transportation, product storage and staging, equipment, and materials necessary to remove and replace outdoor condensing units, indoor blower/furnace units, and packaged units as indicated above.

The Work shall include the following:

- Pump-down and recover the refrigerant (R-22) from the outside units, inside units and refrigerant lines. The recovered refrigerant shall remain the property of JC and shall be transported to the JC Physical Plant facility in permanent storage cylinders.
- Disconnect, de-pipe, detach and remove the existing indoor and outdoor sections, as indicated in the attached equipment tables. Dispose of old equipment at an off-site disposal site or recycling center in compliance with State and Local ordinances in effect at the time of contract signing.
- Provide and install a new matched R410a system in the same general locations as the current. The systems shall be the York Affinity and LX Series or approved equal. Provide factory electro fin condenser coil coating.
- Install condenser and AHU sections with adequate operating and service clearances, per manufacturer's requirements.
- Provide new housekeeping pad for condensing unit locations when required to accommodate new condensing unit dimensions.
- Provide new condensate drain traps and Safe-T-Switches where required.
- Provide new liquid/suction line sets if existing lines sizes are not in compliance with manufacturer's requirements.
- Pressure test existing liquid/suction line sets with dry nitrogen, to 150 psig, for a period of one (1) hour. Line pressure shall remain constant for entire test period, in order to verify piping integrity.
- Provide new liquid/suction line sections (approx. 3-6 feet) at the condenser and evaporator units, where necessary to provide for a quality installation.
- Provide necessary modifications to the existing duct work to accommodate new AHU/furnace dimensions, including transitions, flange sets, and canvas connections. Seal new duct connections (per SMACNA Standards).
- Verify that new furnace installations have proper combustion air, per manufacture's requirements.
- Provide and/or connect necessary piping, electrical conduit and wiring, controls, ductwork, condensate, insulations and necessary appurtenances. Install new liquid line filter drier and site-glass (if not included with unit and/or required by manufacturer), and re-insulate suction line piping completely.

© 2008 Johnson Controls, Inc.

- Replace 208-230/3/60 and 208-230/1/60 service disconnect switches serving existing condensing units and packaged units with new NEMA 4 rated disconnect switches. Provide new flex connections from disconnect to condenser. New wiring shall be in accordance with the NEC and local codes.
- The units shall have a manufacturer's parts and defects warranty from date of installation:
  - 1st Year whole unit replacement parts warranty – labor and refrigerant excluded
  - 2nd thru 5th Year replacement compressor parts warranty – labor and refrigerant excluded
- Project related debris and packaging shall be properly disposed of to an off-site disposal site or recycling center in compliance with State and Local ordinances in effect at the time of contract signing.
- Remove, cut, alter, replace, patch and repair existing work as necessary to install new work. Existing work to be altered or extended and that is found to be defective in any way, shall be reported to customer before it is disturbed. Material and workmanship used in restoring work shall conform in type and quality to that of original existing construction, except as otherwise shown or specified.
- All Work will be coordinated with Customer personnel to minimize interruptions, delays, or safety violations.
- All materials being installed shall be new.
- Work will be performed in accordance with all with prevailing industry practice, state and local codes and standards.
- Protection of existing finishes and or structures will be provided. Match patchwork and finishing like-for-like.
- Any doors, wall, ceiling tiles and grid, floor finishes, louvers, etc. that need to be removed for equipment access must be returned to original condition. Ceiling tiles will be removed at the start of the Work, and re-installed at the completion of the Work. (This will avoid unnecessary handling and potential damage).
- Refrigeration / condensate piping to be installed so that it does not interfere with the removal of existing mechanical, electrical, lighting, controls or IT installations.
- Refrigerant / condensate piping, electrical and controls shall be supported such that it is independently supported from structure.
- Electrical / controls wiring will either be run above false ceilings or on the roof as the schedule and site conditions permit. In many cases, this work will need to start out of hours prior to the summer holidays. In many cases home runs will be run in corridors and the ceiling tiles left out during the installation Work.
- Gravity condensate drains will be installed where feasible. Where condensate pumps are required, the condensate pump shall be provided with an audible alarm. Condensate pumps shall be installed such that where possible they are integral to the unit.
- Customer will have first right of refusal to keep all removed equipment. JCI will be responsible of the removal and disposal of all equipment upon refusal.
- New equipment is to be installed such that it does not compromise access to the existing equipment for replacement and maintenance.
- All necessary ductwork, transitions, insulation, gas lines, condensate lines, structural work, roof work, curbs and adaptors required will be provided.
- Most ductwork system will remain "as is". New duct connections will only be provided to accommodate installation of new equipment. New required ductwork shall meet or exceed ductwork installation as qualified by SMACNA.
- Duct work repair and/or replacement for units will be limited to the confines of the mechanical room unless otherwise identified in a FIM Scope of Work.
- Repairs/replacement of insulation, piping or ductwork found to be corroded or rusted and unacceptable for installation of components or fittings required for installation other than what is specified in the Scope of Work is excluded
- Clean up the work area at the end of each day's work, and at completion of the project.

© 2008 Johnson Controls, Inc.

FIM 6 CHW/HHW Air-Handling Unit Replacements

General

This scope of work includes the replacement of seven (7) Air Handling Units (AHUs) listed in the table below. Two of which will be changed from Multizone AHUs to Variable Air Volume (VAV).

Demolition and Removal Work

- Disconnect, remove, and properly dispose of chilled water and heating hot water piping to nearest isolation valves or as required for new installation.
- Disconnect, remove, and properly dispose of seven (7) existing AHUs listed in the table below.
- Disconnect, remove, and properly dispose of other materials or debris related to this project.
- Disconnect and secure the energy management control system connections. Refer to FIM 3 DDC scope in this schedule for scope details on the AHUs.
- Disconnect and secure electrical connections to the AHUs.

New Installation Work

Provide and install each new AHU as listed in the table below.

Air Handling Units to be replaced

Facility Name		JCI Tag	Qty.	Make	Model #	Nominal Capacity (tons)
Airport Main Terminal	Existing>	43	1	Trane	TSCB010	17
	Proposed>		1	York	XT 39 x 63	17
	Existing>	44	1	Trane	TSCB017	29
	Proposed>		1	York	XT 51 x 81	29
	Existing>	45	1	Trane	TSCB017	29
	Proposed>		1	York	XT 51 x 81	29
Old Courthouse	Existing>	182	1	Trane	CCBB17BE0C0	19
	Proposed>		1	York	XT 42 x 66	19
	Existing>	183	1	Trane	CCBB14BE0C0	21
	Proposed>		1	York	XT 51 x 57	21
Old Jail/Sheriff's Office	Existing>	312	1	Carrier	39ED21	30
	Proposed>		1	York	XT 57 x 72	30
	Existing>	313	1	Carrier	39ED21	42
	Proposed>		1	York	XT 57 x 66	42

- Each AHU shall be located in the existing location with chilled water piping and heating hot water piping extended as required for connection.
- Insulate new piping and control valves to match existing.
- Provide new copper condensate piping to nearest floor drain.

© 2008 Johnson Controls, Inc.

- For AHUs with JCI Tab numbers 182 and 183.
  - Remove existing heating hot water coils from seven (7) zones ducts per AHU.
  - Install new VAV terminal boxes, with heating hot water coil, in each zone, for a total of seven (7) VAV terminal boxes per AHU.
  - Provide and install new Variable Frequency Drive (VFD) on each unit.
- Connect power to new AHUs. Re-use existing electrical devices and wiring. If devices and wiring are found to be of insufficient size, insufficient length, or in poor condition, then replace.

Exclusions:

- Resolution of existing design, service, and or distribution conditions known or unknown.
- All work will be performed during normal work hours unless stated otherwise, there is no premium time included unless otherwise noted in the FIM Scope of Work.
- Correction of any existing applicable building code violations and Federal Americans with Disabilities Act (ADA) violations identified by JCI during the execution of the Work. Such violations will be brought to the attention of the Customer for remedy.
- Temporary space conditioning unless otherwise identified in a FIM Scope of Work.
- Duct cleaning and coil cleaning unless otherwise identified in a FIM Scope of Work.
- Duct work repair and/or replacement for the units will be limited to the confines of the mechanical room unless otherwise identified in a FIM Scope of Work.
- Any building system design issues not related to the FIM Scope of Work is the responsibility of the Customer unless noted otherwise in the FIM Scope of Work.
- Repair or replacement of defective mechanical and electrical equipment and electrical distribution system, except the equipment described in the Scope of Work (Defective equipment identified by JCI during implementation of the Scope of Work will be brought to the attention of the Customer).
- Repairs/replacement of insulation, piping or ductwork found to be corroded or rusted and unacceptable for installation of components or fittings required for installation other than what is specified in the Scope of Work.

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 7 Chiller Replacements and Piping Upgrades

General

This scope of work includes the replacement of the chillers and pumps listed in the tables below as well as the conversion of the chilled water system at the Old Courthouse and Ford Arena Chiller Plants to variable flow pumping.

Demolition and Removal Work

- Disconnect, remove and properly dispose of chilled water and condenser water piping to nearest isolation valves or as required for new installation.
- Disconnect, remove and properly dispose of existing chillers, chilled water pumps, and condensing water pumps listed in the tables below.
- Disconnect, remove, and properly dispose of other materials or debris related to this project.
- Remove and properly dispose of old refrigerant and oils in accordance associated with the Federal, State and Local laws and regulations in effect at the time of contract execution.
- Disconnect and secure the energy management control system connection.
- Disconnect and secure electrical connections to the chillers.

New Installation Work

Provide and install each new chiller as listed in the table below.

Chillers to be replaced

Facility Name		JCI Tag	Qty.	Make	Model #	Nominal Capacity (tons)
Old Courthouse	Existing>	164	1	Carrier	19XR-4142354CMH64	400
	Proposed>		1	York	YMC2-S1758ABS	500
Ford Arena	Existing>	NA	1	Trane	CVHF-770	700
	Proposed>		1	York	YMC2-S2462AB	700

- Refrigerant HFC-134A
- Each new chiller will have:
  - Chiller Management System.
  - BACnet capability for operation verification only by energy management control system.
  - Factory installed VSD.
- Each new chiller and controls to comply with applicable regulations in effect at the time of contract signing
- The water cooled chillers shall have a ten (10) year warranty for parts, labor and refrigerant from date of original installation.

- Each chiller shall be located in the existing location with chilled water piping, condenser water piping and other piping extended as required for connection.
- Connect chilled water piping to each new chiller. Match the existing pipe size.
- Connect condenser water piping to each new chiller. Match the existing pipe size.

© 2008 Johnson Controls, Inc.

- Insulate new piping, valves and fittings.
- Extend existing housekeeping pad dimensions if the existing pad is inadequate.
- Provide and install new refrigerant monitor as required to comply with new refrigerant type.
- Startup, checkout and verification of operation.
- Re-use existing piping, pipe fittings, pipe hangars, isolation valves, strainers, check valves, thermal wells, and pressure sensor wells where feasible and serviceable.
- Connect factory mounted and wired controls.
- Disconnect and re-connect to existing controls and control valves. Replace "failed" valves as needed.
- Provide interface with existing energy management control system.
- Flush new water pipe and chilled water lines and bleed air from the system.
- Install new minimum flow bypass piping and control valves for a proper operating variable primary flow chilled water pumping system. Line sizes for Courthouse chiller plant are 4"-6" and Ford chiller plant is 6"-8".
- Provide, install, and insulate new chilled water and condenser water pumps listed in the table below. Existing pumps shall be removed and disposed of by JCI.

Facility		Tag	Type	Location	Motor Size
Old Courthouse	Existing>	CHWP-1	Primary Chilled Water	Chiller Plant	25 HP
	Proposed>	P-1A	Variable Primary		125 HP
	Existing>	CHWP5	Primary Chilled Water		25 HP
	Proposed>	P-1B	Variable Primary		125 PH
	Existing>	CHWP-3	Secondary Chilled Water		30 HP
	Proposed>	Permanently Removed			NA
	Existing>	CHWP-4	Secondary Chilled Water		30 HP
	Proposed>	Permanently Removed			NA
	Existing>	CHWP-2	Secondary Chilled Water		40 HP
	Proposed>	Permanently Removed			NA
	Existing>	CWP-1	Condenser Water		40 HP
	Proposed>	CWP-1	Condenser Water		30 HP
	Existing>	CWP-2	Condenser Water		40 HP
	Proposed>	CWP-2	Condenser Water		30 HP
Ford Arena	Existing>	CHWP-4	Secondary Chilled Water	Chiller Plant	40 HP
	Proposed>	CHWP-4	Variable Primary		125 HP
	Existing>	CHWP-5	Secondary Chilled Water		40 HP
	Proposed>	CHWP-4	Variable Primary		125 HP

- Connect power to new chillers and pumps. Re-use existing electrical devices and wiring. If devices and wiring are found to be of insufficient size, insufficient length, or in poor condition, then replace.

© 2008 Johnson Controls, Inc.

Exclusions:

- Temporary cooling during transition.
- Repair or replacement of defective mechanical equipment, except the equipment described in the FIM description. Johnson Controls will identify the location of defective equipment and notify the customer.
- Repair or upgrades required due to bring adjacent electrical and mechanical systems up to code.
- Water balance of existing systems, unless specified in the scope of work.
- Replacement or repair of water treatment system.
- Engineering services, studies and analysis associated with any exclusions or work clearly outside of the scope definition.
- Repairs/replacement of insulation and piping found to be corroded or rusted and unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 8 Walk-In Freezer/Cooler Upgrades

General

Bldgs. 141 County Correctional, 172 County Courthouse, 216 Ford Arena, 139 Minnie Rogers Juvenile Center – Walk-in Cooler/Freezer Upgrades

The intent of this scope is to provide energy efficient upgrades to the existing walk-in coolers/freezers by replacing the existing evaporator motors with new Electronically Commutated Motors (ECM) and install new motor controllers.

- Disconnect and remove existing cooler and freezer evaporator fan motors. Remove from site.
- Install new ICE 59sp ECM motors and verify proper operation. Quantity to match existing.
- Install new ArtikControl WIC/WIF refrigeration controller. The controller will provide integrated evaporator control, adaptive defrost control, alarm features and predictive diagnostics.
- The table below lists the systems and locations in this scope.

FORD ARENA
Ford Arena - Margarita - Stand 5
Ford Arena - Keg Cooler- 2nd Fl
Ford Arena-Suite Cooler
Ford Arena Main Kitchen
Ford Arena-Pavilion-Bldg 3
Ford Arena - Pavilion - Bldg 2
Ford Arena - Pavilion - Bldg 1
COURTHOUSE
Court House Old Court Cafeteria
MINNIE ROGERS & COUNTY CORRECTIONAL
Jefferson County Juvenile Kitchen
Jefferson County Juvenile Kitchen
Jefferson County Correctional Facility
Jefferson County Correctional Facility
Jefferson County Juvenile Commissary

Exclusions:

- Emptying the walk-in coolers/freezers.
- Temporary cooling
- Repair or replacement of the walk-in coolers/freezers, other than as described above.
- Repair/replacement/upgrades to the electrical system.

© 2008 Johnson Controls, Inc.

FIM 9 Pressure Wash/Reseal Downtown Jail Exercise Area

General

Bldg. 174 – Downtown Jail / Sheriff Office
Outdoor exercise area water leak repair and re-seal, and exterior door replacement.

The intent of this scope is to repair the wall and floor sections to eliminate water leakage form rain events. This scope will also replace existing exterior doors that have deteriorated over time.

- Replace the two (2) exterior metal doors, like-for-like, and the existing window opening, steel framing, per jail standards.
- Reuse existing locking mechanisms.
- Replace the existing window enclosure at exercise area guard shack. Provide safety glass to match existing and provide flashing for water shed.
- Pressure wash floor and reseal with new epoxy. Color to match existing.
- Pressure wash walls.
- Sealant shall be applied up the wall approximately 12 inches high.
- Install new base cove to match existing.
- Court area shall be re-striped for Basketball play.

Exclusions:

- Repair or replacement of existing exterior doors and windows is excluded in this scope of work other than as described in scope. If any doors are found to be inoperable, or windows are found to be broken, JCI will report the deficiency to the customer for repair or replacement.
- Repair or replacement of existing brick, masonry block or split face block is excluded in this scope of work.
- Modifications required to due to existing code violations, including but not limited to the Americans with Disabilities Act (ADA) and egress, are the responsibility of the customer.
- The scope of work does not include repair or adjustment of any springs or opening mechanisms except as described above.

© 2008 Johnson Controls, Inc.

FIM 10 – N/A (Removed from scope)

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 11 Gate Access and Camera Upgrades

General

Buildings 111 and 112 – Air Main Terminal and Jerry Ware Terminal

The intent of this scope is to replace an existing access gate that was previously damaged beyond repair and to install new surveillance cameras.

The system will be a gate entry security system consisting of integration with cameras, access control and electric gates. When someone swipes their card, the camera will pan over to the gate entry to view the gate entry area. Cameras will be programmed to then go back to a tour viewing status after about 30 seconds.

Johnson Controls will replace the current system that includes cameras, access control system. Gate work is as follows:

- Gate #20
  - Install approximately 40 LF of #50 chain on existing gate.
  - Reset and adjust limits in existing VMAG gate operator.
- Gate #1
  - Adjust gate speed in existing VMAG gate operator.
  - Check bounce back beam.
- Gate #3
  - Remove damaged cantilever gate and VMAG gate operator.
  - Install (1) new 20' wide x 6+1' tall cantilever gate with 4" support post and nylon rollers with safety covers.
  - Install (1) Liftmaster SL595 commercial slide gate operator. Operator comes with 5 year manufacturer's warranty.
  - Install (1) photoelectric beam with support posts for UL 325 entrapment protection.
  - Install (2) loop detector modules. Connect to existing safety loops.
  - Electrical/Data conduits and wiring to gate operator is provided.
- Provide programing for the access control to integrate with the new cameras and three (3) entry gates.
- Re-use and wiring where necessary. Pull new wire from pole to box for gate #20.
- Replace box enclosures due to the current ones having no ventilation.
- Provide customer training on how to view, operate and save videos on the camera system. Train the customer on how to enroll new users, delete users, program door/gate schedules, view alarm events, set user access levels and general reports on the access control system.

Customer Responsibilities / Exclusions:

- Access to the facility during normal business hours.
- Access to all areas of the facility needed to complete the installation.
- All 120VAC power and outlets needed at the head-end equipment location and switch location.
- Suitable mounting surface or racking for the provided NVR and POE switches.
- Provide for an internet connection if off-site viewing is required.
- Provide client workstations for remote viewing of the system.
- Provide access to the workstations will be used for programming and viewing. An administrative level login to the customer's provided workstations will be provided to JCI personnel providing the programming service, for the duration of the installation of the system.
- Provide a network connection from the customer's internal network to the NVR.
- Provide a static IP address for the NVR at the time of installation for the internal network.
- Have personnel available to troubleshoot any connectivity issues on the customer's corporate network and provided network equipment.

© 2008 Johnson Controls, Inc.

- Have personnel available authorized to view and verify the scene of each camera. Any readjustments or relocation of cameras after the final adjust of the cameras will be provided at an additional cost to the customer.
- Have personnel available for training on the use and programming of the system, at the time of installation.
- Johnson Controls is not responsible for damages caused by unauthorized access to the spaces.

Description of equipment and materials in this scope are listed in the table below.

Product Number	Product Display Name	Quantity
INTEVO-ADV-3TB	INTEVO Harware Platform: EntraPass CE Software and IP, Video for up to 32, IP cameras, 3TB, HDD	1
KT-1-PCB	One Door IP Controller, PCB Including Connector Board (Compatible, With KT-1-CAB-M	3
P10SHL	ioProx card, 26-bit Wiegand, standard (Increment qty 50)	100
IPS02P6OCWTT	Illustra Pro, 2MP PTZ, 30X, Outdoor,Vandal, Clear, WhitE, TDN, TWDR	3
RHOWPA	Pole Strap Adapter	3
RHOSW	Mount, Wall, For Ultra and Optima Outdoor Dome, 11 inches	3
NSM365	Nanostationm, 3.65GHZ, 2X2, Airmax	4
J9982A	Switch Managed 4 X 10/100/1000 POE	3
	4 X 10/100/1000	
710648DB	CAT 6 23/4pr, SOL, Unshielded, DB, Outdoor, Black, 1000' Box	500
710648DB	CAT 6 23/4pr, SOL, Unshielded, DB, Outdoor, Black, 1000' Box	500
180040L	18/6c, SOL, Unshielded, DB, Outdoor, Black,500' Reel	500
Miscellaneous Hardware	RJ-45 Connectors	16
NB181608-00V/Anixter Inc.	18X16X8 Inch, Weatherproof, Vented, Enclosure, FRP	3
Fence	Commercial Fence	1
Programming	Programming	1
Install Training	Install Training	1

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 12 AI Phone System and Security Camera Upgrades

Scope of Work

County Correctional Facility

- Building 142 – Book-in and Infirmary
- Building 160 – Dorm-M
- Building 161 – Dorm-N

Replacement/Upgrade of Existing AI Phone System and Intercom

- Johnson Controls will install a new Aiphone intercom system to replace the existing Aiphone system, which is antiquated in technology. The new system will integrate with the existing cell door locking system.
- Devises to be installed:
  - Detention/Book-in
    - 1 Master Station
    - 8 Intercom Stations
  - Detention/Infirmary
    - 1 Master Station
    - 10 Intercom Stations
  - Maximum Security Housing Unit "N"
    - 1 Master Station
    - 62 Intercom Stations
  - Maximum Security Housing Unit "M"
    - 1 Master Station
    - 62 Intercom Stations
- The new system shall be programed and configured to operate with the cell locking system. The system shall be programed to communicate with each door/cell.
- Johnson Controls will re-use existing lock and intercom wire. This scope assumes that all wire to be re-used is in good working order. All existing wire to be re-used will be tested and inspected to ensure proper working order.
- Johnson Controls will replace existing intercom field devices and associated wire for those devices only. Existing field device count is:
  - 146 Intercom Stations
  - 3 Master Stations
- Provide one time customer training on complete new system.
- Provide new software, manual and specification sheets for new equipment installed.
- Provide new complete list of IP addresses for new devices in scope.

© 2008 Johnson Controls, Inc.

Schedule 1

Description of equipment and materials in this scope are listed in the table below.

Qty	Device#	Description
2	EX17162A/ANIXTER INC.	Etherwan 16 Port POE and 2 Port Combo Gigabit And SFP - Anixter Quote #05338
6	EX17242/ANIXTER INC.AXIS	Etherwan POE Switch
4	IX-MV7-HB/Other_Anixter	MASTER 7" HS BLK
146	LS-NVP/C	3-Gang Flush Mount Vandal Resistant Sub Station
13	IX-10AS/AIPHONE.	IX-10AS 10-STA LE/NE IX Adptr
12	IX-1AS	IX-1AS 1-STA LE/NE IX Adaptor
LOT	710636WH	CAT 6 23/4pr, SOL, Unshielded, CMP, Plenum, White, 1000' Box
8	71053307BK	RJ45 CAT5e, 24/4pr, SOL, Unshielded, CMP, Plenum, Black, 7' Jumper Cable
300	Miscellaneous Hardware	RJ45 CONNECTORS
1	Labor Adjustments	Inspect Existing Infrastructure
1	Programming	Programming

Buildings 141 thru 169 – County Correctional Facility

Video Surveillance System Upgrades

The intent of this scope is to install a Video Surveillance System that will monitor the prison grounds and specific locations in some buildings as indicated by Owner. The system will include new cameras and video recorders. The recorders will be strategically located, in collaboration with the County, where access is available in climate controlled areas.

- Install new field devices as listed in the table below
- Johnson Controls will re-use existing camera wire. This scope assumes that all wire to be re-used is in good working order. Any wire that is found not to be in good working order will be repaired and/or replaced.
- Provide customer training on how to view live and retrieve archived images, adjust images per second and motion detection. Customer is to also be instructed on how to view remotely if requested.

The following are Customer Responsibilities and Johnson Controls Exclusions:

- Access to the facility during normal business hours.
- Access to all areas of the facility needed to complete the installation.
- All 120VAC power and outlets needed at the head-end equipment location and switch location.
- Suitable mounting surface or racking for the Tyco provided NVR and POE switches.
- Provide a POE switch rated to provide a minimum of 15 watts of power to each of the (8) provided cameras.
- Provide for an internet connection if off-site viewing is required.
- Provide client workstation for remote viewing of the system.
- Provide access to the workstations will be used for programming and viewing. An administrative level login to the customer's provided workstations will be provided to JCI personnel providing the programming service, for the duration of the installation of the system.
- Provide a network connection from the customer's internal network to the NVR.

© 2008 Johnson Controls, Inc.

- Provide a static IP address for the NVR at the time of installation for the internal network.
- Have personnel available to troubleshoot any connectivity issues on the customer's corporate network and provided network equipment.
- Have personnel available authorized to view and verify the scene of each camera. Any readjustments or relocation of cameras after the final adjust of the cameras will be provided at an additional cost to the customer.
- Have personnel available for training on the use and programming of the system, at the time of installation.
- Johnson Controls is not responsible for damages caused by unauthorized access to the spaces.

Description of equipment and materials in this scope are listed in the table below.

Qty	Device#	Description
	New Equipment To Be Installed:	To Be Installed:
1	6408-16T-R4A	HVR, 64AN64IP, 16 TB, Rack
9	1608-08T-R2A	HVR, 16AN64IP, 8 TB, Rack
1	3208-16T-R4A	HVR, 32AN64IP, 16 TB, Rack
61	EVIP-01	EXACQ Vision Camera License
2	EX17242	Etherwan POE Switch
8	EX17162A	Etherwan 16 Port POE and 2 Port Combo Gigabit And SFP - Anixter Quote #05338
105	VHW-HWPS-C	Ethernet + POE Over Coax RCVR
105	VHW-HWPS-B	Ethernet + POE Over Coax TRMTR
2	IPS02P6OCWTT	Illustra PRO 2MP PTZ, 30X, Outdoor, Vandal, Clear, White, TDN, TWDR
2	DTK-MRJPOE	Power Over Ethernet Surge Protection-Rj45 Connection, Cat5e
50	ADLOMARM	Mount, wall arm, for NV LookOut, no plate, use w/ ADLOMA
55	IPS02D2ISWTT	Indoor Cameras
48	IPS05D2OSWTY	Outdoor Cameras
220	71053307BK	RJ45 CAT5e, 24/4pr, SOL, Unshielded, CMP, Plenum, Black, 7' Jumper Cable
1	Programming	Programming
	Existing Equipment To Be Removed/Replaced with Above	
12	Digital Video Recorder	DVR
105	Cameras	Cameras

© 2008 Johnson Controls, Inc.

Schedule 1

FIM 13 Smoke Purge Fan Upgrades

General

Building 174 – Downtown Jail/Sheriff's Office

Existing Purge Fan Replacements for the Inmate Area

The intent of this scope of work is to replace the existing purge fans in order to meet design requirements.

- Remove existing PF-1 through PF-8 and lower to the ground and store in location designated by the owner.
- Provide and install new Loren Cook Purge Fans 1 through 8 as selected by the design engineer E&C Engineers and Consultants.
- Provide and install new equipment supports for PF-1 and PF -3.
- Provide and install guy-wire tie down supports for the stacks for PF-1 and PF-3.
- Provide and install Vibration Isolators for PF-1 and PF-3.
- PF 1 and PF 3 provide and install ductwork, curbs adaptors, stacks, guide wires and seal and make water tight.
- Provide and install new curb adaptors for PF-2, PF-4, PF-5, PF-6, PF-7 and PF-8.
- Provide crane services for removal of existing fans and installation of new fans and supports.
- Provide startup on new fans.
- Balance new fans PF-1 through PF-8 to the design cfm.
- Profile new fans PF-1 through PF-8.
- Upon completion of balancing, a report of recorded data will be furnished on NEBB forms.
- Use stainless steel welded seams and connections for new ductwork and stainless steel curb adaptors.
- Provide structural members for added fan weight.
- Provide necessary roof work for new fan curbs.
- All electrical work shall be performed by County's in-house Electricians at no cost to Johnson Controls.

Exclusions:

- Repair or replacement of defective mechanical or electrical equipment, except the equipment described in above. Johnson Controls will identify the location of defective equipment and notify the customer.
- Repair or upgrades required due to bringing adjacent electrical and mechanical systems up to code.
- Repairs/replacement of wiring and piping found to be corroded or rusted and unacceptable for installation of components or fittings required for installation other than what is specified in the scope of work.

© 2008 Johnson Controls, Inc.

Schedule 2

ASSURED PERFORMANCE GUARANTEE

I. PROJECT BENEFITS

A. Certain Definitions. For purposes of this Agreement, the following terms have the meanings set forth below:

Annual Project Benefits are the portion of the projected Total Project Benefits to be achieved in any one year of the Guarantee Term.

Annual Project Benefits Realized are the Project Benefits actually realized for any one year of the Guarantee Term.

Annual Project Benefits Shortfall is the amount by which the Annual Project Benefits exceed the Annual Project Benefits Realized in any one year of the Guarantee Term.

Annual Project Benefits Surplus is the amount by which the Annual Project Benefits Realized exceed the Annual Project Benefits in any one year of the Guarantee Term.

Baseline is the mutually agreed upon data and/or usage amounts that reflect conditions prior to the installation of the Improvement Measures as set forth in Section IV below.

Guarantee Term will commence on the first day of the month next following the Substantial Completion date and will continue through the duration of the M&V Services, subject to earlier termination as provided in this Agreement.

Installation Period is the period beginning on JCI's receipt of Customer's Notice to Proceed and ending on the commencement of the Guarantee Term.

Measured Project Benefits are the utility savings and Cost Avoidance calculated in accordance with the methodologies set forth in Section III below.

Project Benefits are the Measured Project Benefits to be achieved for a particular period during the term of this Agreement.

Total Project Benefits are the projected Project Benefits to be achieved during the entire term of this Agreement.

B. Project Benefits Summary. Subject to the terms and conditions of this Agreement, JCI guarantees that Customer will achieve a total of $14,838,858 in Measured Project Benefits during the term of this Agreement. Customer agrees to contribute $10,210,742 out of their Operations & Maintenance and Capital Budget for Total Project Benefit of $25,049,600, as set forth in the Total Project Benefits table below.

© 2008 Johnson Controls, Inc.

Schedule 2

Total Project Benefits

Year	Utility Cost Avoidance*	Customer Contribution**	Annual Project Benefits
Installation	$143,238	$0	$143,238
1	$546,908	$380,000	$926,908
2	$563,315	$391,400	$954,715
3	$580,215	$403,142	$983,357
4	$597,621	$415,236	$1,012,857
5	$615,550	$427,693	$1,043,243
6	$634,016	$440,524	$1,074,540
7	$653,037	$453,740	$1,106,776
8	$672,628	$467,352	$1,139,980
9	$692,807	$481,373	$1,174,179
10	$713,591	$495,814	$1,209,405
11	$734,998	$510,688	$1,245,687
12	$757,048	$526,009	$1,283,057
13	$779,760	$541,789	$1,321,549
14	$803,153	$558,043	$1,361,195
15	$827,247	$574,784	$1,402,031
16	$852,065	$592,028	$1,444,092
17	$877,627	$609,788	$1,487,415
18	$903,955	$628,082	$1,532,037
19	$931,074	$646,925	$1,577,999
20	$959,006	$666,332	$1,625,339
Total	**$14,838,858**	**$10,210,742**	**$25,049,600**

*Utility Cost Avoidance is a Measured Project Benefit. Utility Cost Avoidance figures in the table above are based on anticipated increases in unit energy costs as set forth in the table in Section IV below.

**The Customer Contribution figures in the table above are based on a mutually agreed fixed annual escalation rate of three (3.0%). Customer has agreed to make annual cash payments out of their Operations & Maintenance and Capital Budgets. These payments are outlined in the Total Projects Benefits table above and are in addition to the Guaranteed Utility Cost Avoidance.

© 2008 Johnson Controls, Inc.

Within sixty (60) days of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved during the Installation Period and advise Customer of same. Any Project Benefits achieved during the Installation Period may, at JCI's discretion, be allocated to the Annual Project Benefits for the first year of the Guarantee Term. Within sixty (60) days of each anniversary of the commencement of the Guarantee Term, JCI will calculate the Measured Project Benefits achieved for the applicable year and advise Customer of same.

Customer acknowledges and agrees that if, for any reason, it (i) cancels or terminates receipt of M&V Services, (ii) fails to pay for M&V Services in accordance with Schedule 4, (iii) fails to fulfill any of its responsibilities necessary to enable JCI to complete the Work and provide the M&V Services, or (iv) otherwise cancels, terminates or materially breaches this Agreement, the Assured Performance Guarantee shall automatically terminate and JCI shall have no liability hereunder.

C. Project Benefits Shortfalls or Surpluses.

(i) *Project Benefits Shortfalls*. If an Annual Project Benefits Shortfall occurs for any one year of the Guarantee Term, JCI shall, at its discretion and in any combination, (a) set off the amount of such shortfall against any unpaid balance Customer then owes to JCI, (b) where permitted by applicable law, increase the next year's amount of Annual Project Benefits by the amount of such shortfall, (c) pay to Customer the amount of such shortfall, or (d) subject to Customer's agreement, provide to Customer additional products or services, in the value of such shortfall, at no additional cost to Customer.*

(ii) *Project Benefits Surpluses*. If an Annual Project Benefits Surplus occurs for any one year of the Guarantee Term, JCI may, at its discretion and in any combination, (a) apply the amount of such surplus to set off any subsequent Annual Project Benefit Shortfall during the Guarantee Term, or (b) bill Customer for the amount of payments made pursuant to Section C(i)(c) above and/or the value of the products or services provided pursuant to clause C(i)(d) above, in an amount not to exceed the amount of such surplus.*

(iii) *Additional Improvements*. Where an Annual Project Benefits Shortfall has occurred, JCI may, subject to Customer's approval (which approval shall not be unreasonably withheld, conditioned, or delayed), implement additional Improvement Measures, at no cost to Customer, which may generate additional Project Benefits in future years of the Guarantee Term.

II. Customer Contribution

Customer has agreed to make annual cash payments out of their Operations & Maintenance and Capital Budgets. These payments are outlined in the Total Projects Benefits table above and are in addition to the Guaranteed Utility Cost Avoidance. These figures in the table above are based on a mutually agreed fixed annual escalation rate of three (3.0%).

Operations & Maintenance Budget	Capital Budget
$150,000	$230,000

© 2008 Johnson Controls, Inc.

III. MEASUREMENT AND VERIFICATION METHODOLOGIES

The following is a brief overview of the measurement and verification methodologies applicable to the Improvement Measures set forth below. JCI shall apply these methodologies, as more fully detailed in the guidelines and standards of the International Measurement and Verification Protocol (IPMVP), in connection with the provision of M&V Services hereunder.

Option A
Retrofit Isolation: Key Parameter Measurement

Measured Project Benefits are determined by partial field measurement of the energy use of the system(s) to which an Improvement Measure was applied separate from the energy use of the rest of the facility.

Partial measurement means that some but not all parameters will be measured. Careful review of the design and installation of Improvement Measures is intended to demonstrate that the stipulated values fairly represent the probable actual values. Agreed upon values will be shown in the measurement and verification plan. Engineering calculations using measurements and stipulations are used to calculate Measured Project Benefits for the duration of the Guarantee Term.

Measured Project Benefits from the following Improvement Measures will be calculated using Option A as summarized in the table below:

FIM Number	FIM Description	M&V Protocol	Frequency
FIM 1	LED Lighting Upgrades	Option A	One-time
FIM 2	Water Conservation Upgrades	Option A	One-time
FIM 3	DDC Building Automation System Upgrades	Option A	Annual
FIM 4	DX Air-conditioning Replacements	Option A	One-time
FIM 5	HHW/DX Systems Upgrades	Option A	One-time
FIM 6	Air-handling Unit Replacements	Option A	One-time
FIM 7	Chiller Replacements and Piping Upgrades	Option A	Annual
FIM 8	Walk-in Freezer/ Cooler Upgrades	Option A	One-time

© 2008 Johnson Controls, Inc.

Schedule 2

FIM 1 – LED Lighting Upgrades

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. The savings for this FIM are generated through a reduction in energy used by the lighting system; therefore, the measurement boundary is the lighting system itself.

Key Parameter	Measurement Frequency	Measurement Description
Pre- and Post-Retrofit Fixture Power Draw (kW)	One-time Pre-, One-time Post-Retrofit	The pre-retrofit power draw on a sample of fixtures meeting the 80/20 sampling plan will be measured with a true Real Mean Square (RMS) meter during construction. The power draw on a sample of fixtures meeting the 80/20 sampling plan will be measured with a true RMS meter after construction. The savings will be updated to reflect actual pre- and post-retrofit measurements.
Estimated Parameters	**Assumed Value**	**Justification, Source and Description**
Burn Hours	See Attachment 5	The lighting system annual run hours by space type are agreed to be as shown in the table below. These run hours are based on logged data and interviews during development. These values will not be measured again.
Coincidence Factor	0.1 - 0.9	The coincidence factor is estimated based on the number of fixtures in a space type expected to be operating at the same time during the on peak period and is agreed to remain at the same value after the retrofit. The factor is based on its respective usage group type. This factor is agreed upon and will only be lowered in the post-retrofit with sensor application. This estimate is based on overall operation and studies from similar area types. This value will not be measured.

© 2008 Johnson Controls, Inc.

Schedule 2

Equations for Calculating Lighting Retrofit Savings (Option A)

Demand (kW)

$kW\ Savings = \sum [(kW/Fixture_{pre} \times Quantity_{pre} \times Diversity\ Factor_{pre} - kW/Fixture_{post} \times Quantity_{post} \times Diversity\ Factor_{post})]_u$

where:

$kW/fixture_{pre}$ =	lighting baseline demand per fixture for usage group u
$kW/fixture_{post}$ =	lighting demand per fixture during post-retrofit period for usage group
$Quantity_{pre}$ =	quantity of affected fixtures before the lighting retrofit for usage group u
$Quantity_{post}$ =	quantity of affected fixtures after the lighting retrofit for usage group u
Diversity $Factor_u$ =	*Diversity* Factor is a multiplier to account for peak demand of each specific usage group u.

Energy (kWh)

$kWh\ Savings_{Lighting} = \sum_u [kW\ Savings_u \times Burn\ Hours]_u$

where:

$kW\ Savings_u$ =	kilowatt savings realized during the post-retrofit time for usage group *u*
Burn Hours =	number of operating hours during the time period *t* for the usage group *u*

Equations for Calculating Lighting Retrofit HVAC Savings

HVAC savings associated with the lighting retrofits are due to the new lighting fixtures emitting less waste heat into the interior spaces of the buildings. The reduction in heat emissions decreases the cooling requirements of the interior zones, but it also increases the heating requirements during the heating season. To properly account for this, JCI has used a methodology published by Robert A. Rundquist, "Calculating lighting and HVAC interactions", in the ASHRAE Journal, November 1993 in the ASHRAE Journal.

The Rundquist methodology determines the total HVAC impact (either positive or negative) by determining both the cooling energy saved and the additional heating energy required and subtracting the additional heating energy from the cooling energy saved.

The cooling energy saved is determined by calculating the fraction of the lighting savings that occur during the cooling season and using the efficiency of the cooling system to calculate the subsequent cooling kWh savings. To monetize the value, the utility rate detailed in Section IV of Schedule 2 is applied to the kWh savings to determine the annual dollar savings for cooling.

The additional heating required is determined in the same manner. The fraction of the lighting savings that occur during the heating season is determined. Using the efficiency of the heating system and converting the kWh requirements to Btu, the subsequent heating energy requirements are determined. The heating fuel rate (in this case natural gas) is also applied to monetize the heating energy requirements.

The total HVAC savings is then determined by subtracting the additional heating costs from the annual cooling cost savings. The resulting value is the HVAC savings (or penalty if the heating requirements are greater than the cooling savings). For the Customer, the HVAC savings is a positive value.

© 2008 Johnson Controls, Inc.

Schedule 2

Below is the calculation methodology for calculating the annual HVAC savings associated with the lighting retrofits. Lighting HVAC savings are shown in the table below and the kWh savings will be updated based on the measured kWh savings above.

Rundquist Method for Calculating HVAC Savings/ Penalty

HVAC Savings = Cooling Savings - Heating Penalty

Variable	Definition	Value	Source
A	Fraction of Year of Cooling Season	0.81	Weather Bin Data
B	Fraction of Lighting Load met by Mechanical Cooling	90%	Assumed
C	Cooling System Coefficient of Performance	2.7	Assumed
D	Fraction of Year of Heating Season	0.19	1 - A
E	Fraction of Lighting Reduction that has to be made up by Heating	20%	Assumed
F	Annual BTU equivalent of lighting kWh savings	BTU Saved	kWh Saved x 3414 btu/kWh
G	Seasonal Heating Efficiency	80%	Assumed

H	Fraction of Lighting Savings as Air Cooling Savings	A x B / C
J	Extra Heating Energy Required	D x E x F / G

K	Cooling Savings = H x Annual kWh $ Saved
L	Heating Penalty = J x Fuel Rate per btu
M	HVAC Savings/ Penalty = K - L

The expected savings are 8,606 kW and 4,270,108 kWh at the rates and escalations as shown in Schedule 2 Section IV. The expected heating penalty is 4,282 ccf at the rates and escalations as shown in Schedule 2 Section IV.

JCI Responsibilities:

Measurements for this FIM consist of pre-retrofit and post-retrofit fixture wattages of a sample of fixtures, based on a 80% level of confidence with a 20% level of precision (80/20) and an assumed coefficient of variation of 0.5. Sample populations will be chosen by fixture type. Pre-installation measurements will be conducted during the construction phase of this project, prior to the demolition of existing fixtures. Post-installation measurements will be conducted after installation of the fixtures is complete. Once the pre-retrofit and post-retrofit measurements have been conducted, JCI will update the savings tables with the actual measured data to calculate the actual energy savings for this FIM. No annual measurements will be conducted for this FIM. The pre-retrofit burn hours for this FIM have been determined based on building occupancy, interviews with County Staff, and observations made during the lighting audits. It is agreed upon that the post-retrofit burn hours are to be the same as the pre-retrofit burn hours, as described Attachment 7. It is also agreed upon that these burn hours are reasonable and accurately reflect each facility's operations. The coincident factor is estimated based on the number of fixtures in a given space type assumed to be operating at the same time during the on peak period and is agreed to remain at the same value after the retrofit.

Customer's Responsibilities:

Customer assumes all operational and maintenance requirements for this FIM. They will maintain the new fixtures as per manufacturer's guidelines. They will also ensure that all replacement ballasts and bulbs are like-for-like replacements.

© 2008 Johnson Controls, Inc.

FIM 2 – Water Conservation Upgrades

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. The savings for this FIM are generated through a reduction in water usage at the fixture; therefore, the measurement boundary is the fixture itself. Upgrades includes: domestic plumbing (i.e. sinks, toilets, urinals, etc.), dish machines, pre-rinse sprayers, and ozone laundry.

Key Parameter	Measurement Frequency	Measurement Description
Pre- and Post-Retrofit Fixture gallons/flush gallons/minute	One-time Pre-, One-time Post-Retrofit	The pre-retrofit gallons per flush and gallons per minute on a sample of toilets, urinals, and faucets meeting the 80/20 sampling plan will be measured during construction. The post-retrofit gallons per flush and gallons per minute on a sample of toilets, urinals, and faucets meeting the 80/20 sampling plan will be measured after construction. The savings will be updated to reflect actual pre- and post-retrofit measurements.
Flowrates – Dish Machines	One-time Pre-, One-time Post-Retrofit	The average flowrates based on manufacture's performance data. Pre-measurement 3.90 GPM verified by reviewing manufacture's performance data. Post measurements will be verified by reviewing manufacture's performance data and visual inspection. These values will not be measured. The savings will be updated to reflect verified pre- and post-retrofit flow rates.
Estimated Parameters	**Assumed Value**	**Justification, Source and Description**
Population	See table	The population is agreed to be as shown in the table below. The population counts are based on staff interviews and engineering judgment. These values will not be measured.
Usage Factors	Attachment 7	The usage factors (flushes/day/person, seconds/handwashing/usage, etc.) are shown in the table below. These values are based on engineering judgment and tuning to utility bills. These values will not be measured.
Temphot	72; 85; 106; and 120 °F	The hot water temperature is the typical temperature for faucet, kitchen/general purpose sinks, shower, and pre-rinse, respectively. These values will not be measured.
Temperature	120 °F	The average hot water temperature is the typical temperature existing laundry equipment. These values will not be measured.
Tempcold	66° F	The cold water temperature is the average annual ground water temperature. These values will not be measured.
Heating Efficiency	98 / 78 %	Electric/Gas heating efficiency of the domestic hot water heater, and will not be measured.

The following table describes the population statistics for each facility.

Site / Building List	Day Correctional Staff	All Hours Correctional Staff	Inmates	Prison Visitors	Staff	Court Visitors / Participants	Visitors
Downtown Jail/Sheriff Office	40	20	189	10	15	20	n/a

© 2008 Johnson Controls, Inc.

Schedule 2

Site / Building List	Day Correctional Staff	All Hours Correctional Staff	Inmates	Prison Visitors	Staff	Court Visitors / Participants	Visitors
County Correctional Facility	60	35	720	36	n/a	n/a	20
Minnie Rogers Juvenile Justice Center	30	11	36	60	25	150	20

The savings will then be calculated according to the following formulas:

Equations for Calculating Water Conservation Project Benefits for Sinks and Showers – All Buildings

The Project Benefits associated with the sink and shower upgrades include water and sewer savings, along with a reduction in hot water heating fuel.

Water/Sewer Project Benefits

Water Project Benefits =

$$\Sigma_{type} [(Usage\ Rate_{baseline} - Usage\ Rate_{post}) \times AAUF_{type} \times Quantity_{type}] / 1000$$

where:

Water Project Benefits =	water savings realized in kilogallons (kgal). These savings will result in water and sewer dollars saved
$Usage\ Rate_{baseline}$ =	baseline fixture use rate in gpm
$Usage\ Rate_{post}$ =	post-retrofit fixture use rate in gpm
AAUF =	average annual use per fixture; faucets or showers in minutes per year=average people using x minutes/use found in Attachment 7
Quantity =	quantity of affected fixtures

Equations for Calculating Hot Water Heating Fuel Savings – All Buildings

Energy Project Benefits =

$$Water\ savings \times (Temp_{hot} - Temp_{cold}) \times Specific\ Heat / (Efficiency)$$

where:

Energy Project Benefits =	Fuel savings realized in Btu
$WaterProject\ Benefits_{f\text{-}sh}$ =	water savings for faucets and showers in kgal
$Temp_{hot}$ =	average hot water temperature
$Temp_{cold}$ =	average cold water temperature
Specific Heat =	8.34 Btu / (kgal) (°F) for water
Efficiency =	Water heater efficiency expressed as a fraction

Equations for Calculating Water Conservation Project Benefits for Toilets and Urinals – All Buildings

The Project Benefits associated with the toilet and urinal upgrades include water and sewer savings.

Water/Sewer Project Benefits

Water Project Benefits =

$$\Sigma_{type} [(Usage\ Rate_{baseline} - Usage\ Rate_{post}) \times AAUF_{type} \times Quantity_{type}] / 1000$$

© 2008 Johnson Controls, Inc.

where:

Water Project Benefits =	water savings realized in kilogallons (kgal). These savings will result in water and sewer dollars saved
$Usage\ Rate_{baseline}$ =	baseline fixture use rate in gpf
$Usage\ Rate_{post}$ =	post-retrofit fixture use rate in gpf
AAUF =	average annual flushes per fixture per year = average people using x use/day x days/year found in Attachment 7
Quantity =	quantity of affected fixtures

Equations for Calculating Water Conservation Project Benefits for Dish Machine Replacements – County Corrections Facility

The Project Benefits associated with the dish machine upgrade include water, sewer, and thermal savings for the County Corrections Facility.

Water/Sewer Project Benefits

Water Project Benefits =

$$\Sigma_{type}\ [\ (Usage\ Rate_{baseline} - Usage\ Rate_{post})\ x\ AAU_{type}\ x\ Quantity_{type}]\ /\ 1000$$

where:

Water Project Benefits =	water savings realized in kilogallons (kgal). These savings will result in water and sewer dollars saved
$Usage\ Rate_{baseline}$ =	baseline flowrate in gpm
$Usage\ Rate_{post}$ =	post-retrofit flowrate in gpm
AAU =	average annual use; daily operations in hours per year = 365 days/year x 12 hours/day x 60 min/hour
Quantity =	quantity of affected fixtures

Thermal Energy Project Benefits

Energy Project Benefits =

$$Water\ savings\ x\ (Temp_{hot} - Temp_{cold})\ x\ Specific\ Heat\ x\ HW\%\ /\ (Efficiency)$$

where:

Energy Project Benefits =	Fuel savings realized in Btu
$WaterProject\ Benefits_{f\text{-}sh}$ =	water savings for faucets and showers in kgal
$Temp_{hot}$ =	average hot water temperature °F
$Temp_{cold}$ =	average cold water temperature ≈ 66 °F
Specific Heat =	8.34 Btu / (kgal) (°F) for water
HW % =	The percentage of water used by the sprayer that is hot
Efficiency =	Water heater efficiency expressed as a fraction

Equations for Calculating Water Conservation Project Benefits for Pre-Rinse Sprayer Replacements – County Corrections Facility and Minnie Rogers

The Project Benefits associated with the pre-rinse sprayers upgrade include water, sewer, and thermal savings for the County Corrections Facility and Minnie Rogers Justice Center.

Water/Sewer Project Benefits

© 2008 Johnson Controls, Inc.

Water Project Benefits =
Σ_{type} [(*Usage Rate*$_{baseline}$ - *Usage Rate*$_{post}$) x *AAU*$_{type}$ x *Quantity*$_{type}$] / *1000*

where:

Water Project Benefits = water savings realized in kilogallons (kgal). These savings will result in water and sewer dollars saved
Usage Rate$_{baseline}$ = baseline flowrate in gpm
Usage Rate$_{post}$ = post-retrofit flowrate in gpm
AAU = average annual use; daily operations in hours per year = 365 days/year x 1 hours/day x 60 min/hour
Quantity = quantity of affected fixtures

Thermal Energy Project Benefits

Energy Project Benefits =
Water savings x (Temp$_{hot}$ - *Temp*$_{cold}$) *x Specific Heat x HW% / (Efficiency)*

where:

Energy Project Benefits = Fuel savings realized in Btu
WaterProject Benefits$_{f\text{-}sh}$ = water savings for faucets and showers in kgal
Temp$_{hot}$ = average hot water temperature ≈ 120 °F
Temp$_{cold}$ = average cold water temperature ≈ 66 °F
Specific Heat = 8.34 Btu / (kgal) (°F) for water
HW % = The percentage of water used by the sprayer that is hot ≈ 50%
Efficiency = Water heater efficiency expressed as a fraction

Equations for Calculating Water Conservation Project Benefits for Ozone Systems for Commercial Laundry – All Buildings

The Project Benefits associated with the ozone laundry system upgrade include water, sewer, and thermal savings.

Water/Sewer Project Benefits

Water Project Benefits =
Σ_{type} [(*Usage Rate*$_{baseline}$ - *Usage Rate*$_{post}$) x *AAUF*$_{type}$ x *Quantity*$_{type}$] / *1000*

Water Project Benefits = water savings realized in kilogallons (kgal). These savings will result in water and sewer dollars saved
Usage Rate$_{baseline}$ = baseline water/load rate
Usage Rate$_{post}$ = post-retrofit water/load rate
AAUF = average annual loads per year = average number of loads/day x days/year found in Attachment 7
Quantity = quantity of washers

Operational Energy Project Benefits

Water Project Benefits =
Σ_{type} [(*Usage Rate*$_{baseline}$ - *Usage Rate*$_{post}$) x *AAUF*$_{type}$ x *Quantity*$_{type}$] / *1000*

Water Project Benefits = water savings realized in electrical consumption (kWh).

© 2008 Johnson Controls, Inc.

Usage Rate$_{baseline}$ = baseline energy/load rate
Usage Rate$_{post}$ = post-retrofit energy/load rate
AAUF = average annual loads per year = average number of loads/day x days/year found in Attachment 7
Quantity = quantity of washers

Thermal Energy Project Benefits

Energy Project Benefits =
Water savings x (Temp$_{hot}$ - Temp$_{cold}$) x Specific Heat x HW% / (Efficiency)

where:

Energy Project Benefits = Fuel savings realized in Btu
WaterProject Benefits$_{f\text{-}sh}$ = water savings for faucets and showers in kgal
Temp$_{hot}$ = average hot water temperature ≈ 120 °F
Temp$_{cold}$ = average cold water temperature ≈ 66 °F
Specific Heat = 8.34 Btu / (kgal) (°F) for water
HW % = The percentage of water used by the sprayer that is hot
Efficiency = Water heater efficiency expressed as a fraction

JCI will verify the operation of the ozone laundry system based on manufacture's operational data. No measurements will be taken for the ozone laundry system portion of this FIM.

The expected savings are 7,527 kgal, 94,018 kWh, and 31,130 ccf at the rates and escalations as shown Schedule 2 Section IV.

JCI Responsibilities:

As part of the M&V activities for this FIM, JCI will verify proper installation of the water fixtures installed as part of this FIM. JCI will also conduct flow measurements of the installed fixtures.

Measurements for domestic plumbing and pre-rinse sprayers will consist of post-retrofit fixture flowrates for a sample of fixtures, based on an 80% level of confidence with a 20% level of precision (80/20) and an assumed coefficient of variation of 0.5. Sample populations will be chosen by fixture type. Pre-installation measurements will be conducted during the construction phase of this project, prior to the demolition of the existing fixtures. Post-installation measurements will be conducted after installation of the fixtures is complete. Once the pre-retrofit and post-retrofit measurements have been conducted, JCI will update the water usage and domestic hot water related savings with the actual measured data to calculate the actual energy savings for this FIM. Each annual report will reflect water unit savings measured during installation, with the rates detailed in Section IV.

As part of the M&V activities for the dish machine and ozone laundry, JCI will visual inspect the installation and verify the performance data. No measurements will be taken for the dish machine and ozone laundry system. JCI is not responsible for lack of savings due to inefficiencies arising from improper operation or lack of maintenance of the system.

The average annual use per fixture (AAUF) were extrapolated based on the industry standard data, on-site survey, and customer interview for each usage group. The AAUF will not be measured and are agreed upon by the Customer. It is agreed upon that the post-retrofit AAUF for each usage group be the same as the pre-retrofit AAUF as part of this FIM.

Customer Responsibilities:

Customer assumes all operational and maintenance requirements for this FIM. Customer will maintain the new fixtures as per manufacturer's guidelines. As part of the laundry ozone support system, chemicals must be changed to ozone compatible types (resulting in a lower volume of chemicals used, but no change in cost). The procurement of proper chemicals will be the responsibility of the customer. Washer and dryer formulas shall be modified as part of FIM 2 to accommodate true cold water washing with ozone. The laundry staff will be trained on operating sequences and formulas.

© 2008 Johnson Controls, Inc.

Schedule 2

FIM 3 – DDC Building Automation System Upgrades

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. JCI will set the control schedules for HVAC equipment based on the schedules and temperature set-points agreed upon with the Customer documented in Schedule 2 Section V, which will reduce run time when the area is unoccupied. Buildings included are:

Building	Schedule Setback	Supply Air Reset	Chill Water Reset
Old Courthouse	x	x	x
Courthouse Addition	x	x	
Sheriff's Office	x	x	
Airport Firehouse	x		
Airport Hangar 2	x		
Airport Hangar 7	x		
Airport Sheriff Hangar	x		
Minnie Rogers Juvenile Justice Center	x		
Courthouse Annex 1	x		
Courthouse Annex 2	x		
Courthouse Annex 4	x		
Sub Courthouse - Port Arthur	x		
Mid-County Tax Office	x		
Ford Park Visitor Center	x		
Precinct 1	x		
Precinct 2	x		
Precinct 3 - Port Arthur	x		
Precinct 4	x		
Ford Park Arena			x

© 2008 Johnson Controls, Inc.

HVAC Control Savings

Key Parameter	Measurement Frequency	Measurement Description
Pre and Post-Retrofit HVAC Schedules	One-time Pre, Annually Post	The pre-retrofit HVAC schedules were determined through on-site inspections, multiple remote surveys, and customer interviews which are summarized in Schedule 2, Section V and in this section below. The post-retrofit run hours were determined by the schedules agreed upon in Schedule 2, Section V and in this section below. JCI will verify the contractual schedule is being implemented and operating properly using instantaneous observations and short-term trending reports throughout the year. JCI will review and identify variances in the schedule and control strategies in comparison with contractual agreements. JCI will work with the Customer's maintenance staff to reduce equipment run hours even further than contract required limits. JCI will update the DOE2 model for equipment scheduling based on actual schedules and control strategies. However, JCI is not responsible for loss of savings resulting from customer-directed changes in schedules, temperature reset schedules, adverse weather conditions, system overrides, or lack of maintenance that result in schedules run hours beyond contract agreed upon values. The savings will be updated to reflect actual pre- and post-retrofit measurements.
Pre and Post-Retrofit Supply Air Temperature Setpoint	One-time Pre, Annually Post	The pre-retrofit supply air temperature controls were determined through on-site inspections, multiple remote surveys, and customer interviews which are summarized in Schedule 2, Section V and in this section below. JCI will verify the contractual supply air temperature control is being implemented and operating properly using instantaneous observations and short-term trending reports throughout the year. JCI will review and identify variances in the supply air control strategies in comparison with contractual agreements. JCI will update the DOE2 model for supply air temperature control based on actual control strategies. However, JCI is not responsible for loss of savings resulting from customer-directed changes in temperature reset schedules, adverse weather conditions, system overrides, or lack of maintenance that result in schedules run hours beyond contract agreed upon values. The savings will be updated to reflect actual pre- and post-retrofit measurements.
Pre and Post-Retrofit Supply Chilled Water Temperature Setpoint	One-time Pre, Annually Post	The pre-retrofit supply chilled water temperature controls were determined through on-site inspections, multiple remote surveys, and customer interviews which are summarized in Schedule 2, Section V and in this section below. JCI will verify the contractual supply chilled water temperature control is being implemented and operating properly using instantaneous observations and short-term trending reports throughout the year. JCI will review and

© 2008 Johnson Controls, Inc.

Key Parameter	Measurement Frequency	Measurement Description
		identify variances in the supply chilled water temperature strategies in comparison with contractual agreements. JCI will update the Excel model for supply chilled water temperature control based on actual control strategies. However, JCI is not responsible for loss of savings resulting from customer-directed changes in temperature reset schedules, adverse weather conditions, system overrides, or lack of maintenance that result in schedules run hours beyond contract agreed upon values. The savings will be updated to reflect actual pre- and post-retrofit measurements.

Scheduled Temperature Setback

The savings associated with this measure will be verified by confirming through the BAS trends that the zone temperature is setback according to the schedules and temperature setpoints agreed to with the Customer. Detailed schedules for each building are found in Section V of Schedule 2. The following will be reviewed; the zone temperature will float during unoccupied hours while maintaining its upper and lower limits for heating and cooling. The actual control points are subject to change based availability. A sample of the trends will be analyzed throughout the year.

Supply Air Temperature Reset

The savings associated with this measure will be verified by confirming through the BAS trends that the supply air temperature is being reset according to the schedules agreed to with the Customer. Detailed reset schedules for each building are found in Section V of Schedule 2. The following will be reviewed through trend data; the actual AHU supply air temperature along with coincident ambient drybulb temperature. A sample of the trends will be analyzed throughout the year.

Chilled Water Temperature Set-point Adjustment

The savings associated with this measure will be verified by confirming through the building automation system's trends that the supply chilled water temperature is being adjusted according to the schedules agreed to with the Customer. Detailed set-point adjustments are found in Section V of Schedule 2. The chilled water set-point and temperature will be reviewed through trend data. A sample of the trends will be analyzed throughout the year.

Equations for Calculating Energy Management Controls Savings (Option A)

JCI created DOE2 models to determine the savings for the facilities. See Attachment 7 for the DOE2 input and output files.

JCI created Excel based models to determine the savings related to the chill water reset control strategy. See Attachment 7 for detailed calculations.

The expected savings are 1,782,568 kWh and 17,725 ccf at the rates and escalations as shown in Schedule 2 Section IV. JCI is not responsible for lack of savings due to inefficiencies arising from improper operation or lack of maintenance of the HVAC system or control system.

JCI Responsibilities:

As part of the M&V activities for this FIM, JCI will verify proper installation of the controls components installed as part of this FIM. JCI will also verify contractual setpoints and schedules are established within Metasys. As part of the one-time, Post-Installation M&V activities for this FIM, JCI will verify proper installation of the controls components installed as part of this FIM. JCI will also verify contractual setpoints and schedules are established within Metasys.

During the installation of this FIM, equipment schedules and zone temperature setpoints will be set for each of the affected units and zones. JCI will verify that these schedules, as detailed in Section V, are established within Metasys prior to final acceptance. Once the schedules and setpoints are proven operational within Metasys,

© 2008 Johnson Controls, Inc.

Customer will assume full responsibility for maintaining the control system and keeping schedules and setpoints within agreed upon contract parameters. JCI will not be responsible for changes to setpoints or schedules that are customer-driven or are outside of the scope of work for this FIM.

In order to ensure that the Customer is aware of on-going maintenance and operational issues, JCI will monitor the system throughout the year and notify Customer of any issues that may affect the efficiency of the system. Trends and operational reports will be established to record equipment operation and zone temperatures for HVAC equipment associated with this FIM. During the performance period, trend data will reviewed throughout the year and reported to the Customer annually.

Customer Responsibilities:

Customer assumes all operational and maintenance responsibilities for this FIM. Customer is responsible for ensuring all strategies, schedules, setpoints, and sequences established during the installation of this FIM remain in place. JCI will not be responsible for customer-driven changes to schedules and setpoints, overrides, or lack of maintenance affecting controls performance.

© 2008 Johnson Controls, Inc.

FIM 4 – Air-cooled DX Conditioning Replacements / FIM 5 – HHW/DX Systems Upgrades – Minnie Rogers

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. JCI will install high efficiency HVAC systems listed in Schedule 1. Buildings as part of this FIM and the quantity of units are summarized below:

Building	Qty
Airport Jerry Ware Terminal - Old Airport	8
Airport Jerry Ware Annex - Old Airport	2
Airport Firehouse 1	1
Airport Hangar 2	1
Courthouse Annex 1	8
Courthouse Annex 2	3
Courthouse Annex 4	12
Sub Courthouse - Port Arthur	6
Mid-County Tax Office	2
Precinct 1	1
Precinct 4	2
Minnie Rogers Juvenile Justice Center – FIM 5	25

JCI will start/stop unitary HVAC systems based on the schedules and temperature setpoints agreed upon with the Customer documented in Schedule 2 Section V, which will reduce the runtime of these systems.

Estimated Parameters	Assumed Value	Justification, Source and Description
Baseline Cooling Efficiency	See Attachment 7	The baseline cooling efficiency of each unit are based on product data, observed conditions, and engineering judgment.
Baseline Heating Efficiency	See Attachment 7	The baseline heating efficiency for each unit are based on product data, observed conditions, and engineering judgment.
Post-Installation Cooling Efficiency	See Attachment 7	The post-retrofit cooling efficiency for each unit has been determined by utilizing the manufacturer's EER rating for each new unit.
Cooling Diversity Factor	See Attachment 7	The diversity factor accounts for loads being less than the installed capacity on an annual basis. The diversity factor is based on engineering judgment and is used to ensure baseline energy is not greater than utility bills. These values are agreed to by the Customer and JCI, and will not be measured.

© 2008 Johnson Controls, Inc.

Estimated Parameters	Assumed Value	Justification, Source and Description
Heat Diversity Factor	See Attachment 7	The diversity factor accounts for loads being less than the installed capacity on an annual basis. The diversity factor is based on engineering judgment and is used to ensure baseline energy is not greater than utility bills. Separate diversity factors are used for furnaces, heat pumps, electric heat, and boilers as shown in the table below. These values are agreed to by the Customer and JCI, and will not be measured.
Pre-Retrofit and Post-Retrofit Cooling Setback Factor	See Attachment 7	Setback Factor accounts for increased consumption when a unit is first activated after a setback. These values are agreed to by the Customer and JCI, and will not be measured.
Pre-Retrofit and Post-Retrofit Heating Setback Factor	See Attachment 7	Setback Factor accounts for increased consumption when a unit is first activated after a setback. These values are agreed to by the Customer and JCI, and will not be measured.
Heating and Cooling Duty Cycle	See Attachment 7	Duty Cycle is a factor applied to a specific weather bin which relates the dry bulb temperature to a unit load. The individual Duty Cycles are shown in the calculations. These values are agreed to by the Customer and JCI, and will not be measured.
Pre and Post-Retrofit Unit Run Hours	See table below	The HVAC run hours are determined by building. The pre-retrofit run hours are based on logger data, BAS trend data, an energy balance with the utility bills as well as staff interviews and site observations. The values are shown in Attachment 7 and are agreed to by the Customer and JCI for the term of the Agreement. The post-retrofit run hours were determined by the schedules agreed upon in Schedule 2 Section V. The run hours are shown in Attachment 7. As JCI works with the Customer's maintenance staff to reduce equipment run hours even further than contract required limits, JCI will update the savings calculations for equipment scheduling based on actual schedules. However, JCI is not responsible for loss of savings resulting from customer-directed changes in schedules, adverse weather conditions, system overrides, or lack of maintenance that result in schedules run hours beyond contract agreed upon values. The savings will be updated to reflect actual pre- and post-retrofit performance data.

© 2008 Johnson Controls, Inc.

Schedule 2

The table below shows the cooling and heating Full Load Hours (FLH) used to determine kWh and ccf savings. These values are based on estimated FLH.

Group	EXISTING		POST-RETROFIT	
	Cooling FLH	Heating FLH	Cooling FLH	Heating FLH
112 Airport Jerry Wade Terminal - Old Airport	2588	30	2588	30
113 Airport Jerry Wade Annex - Old Airport	2588	30	2588	30
114 Airport Firehouse	3785	55	2588	55
115 Airport Hangar 2	3785	55	2001	21
121 Airport Hangar 7	3785	55	2001	21
123 Airport Sheriff Hangar	3785	55	2001	21
139 Minnie Rogers Juvenile Justice Center	3785	55	2551	28
175 Courthouse Annex 1	2588	30	2001	21
176 Courthouse Annex 2	2588	30	2001	21
177 Courthouse Annex 4	2588	30	2001	21
181 Sub Courthouse - Port Arthur	3785	55	2001	21
188 Mid-County Tax Office	3785	55	2001	21
207 Ford Park Visitor Center	3785	55	2159	21
237 Precinct 1	3785	55	2001	21
244 Precinct 2	3785	55	2001	21
248-250 Precinct 3 - Port Arthur	3785	55	2001	21
254 Precinct 4	3785	55	2001	21

Equations for Calculating Energy Management Controls Savings (Option A)
Demand (kW)

kW Saving = Design Capacity x Cooling Demand Diversity Factor x { Exist. EER – Prop. EER} x 12

Energy (kWh)

Existing Cooling kWh = Design Capacity x 12000 x Cooling Diversity Factor x (1 - (Cooling Setup Factor - 1)) x (1 / Exist. EER) x (1 / 1000) x Cooling FLH

Future Cooling kwh = Design Capacity x 12000 x Cooling Diversity Factor x (1 - (Cooling Setup Factor - 1)) x (1 /Prop. EER) x (1 / 1000) x Cooling FLH

Existing Heating kwh = Electric Heat kW x Heat Diversity Factor x (1 - (Heating Setback Factor - 1)) x FLH

Future Heating kwh = Electric Heat kW x Heat Diversity Factor x (1 - (Heating Setback Factor - 1)) x Heating FLH

Total kWh Saved = (Existing Cooling kWh - Future Cooling kwh) + (Existing Heating kwh - Future Heating kwh)

© 2008 Johnson Controls, Inc.

where:

Cooling Diversity Factor =	0.6
Heat Diversity Factor =	0.4
Cooling Demand Diversity Factor =	0.85
Design Capacity =	Total cooling capacity in tons
Cooling FLH =	Cooling equivalent full-load hours shown in Table above.
Heating FLH =	Heating equivalent full-load hours shown in Table above.

Energy (CCF)

Existing Heating CCF = Gas Heating Output x (1 / Exist. Gas Heating Eff) x Heating Diversity Factor x (1 - (Heating Setback Factor - 1)) x Heating FLH x (1/1030000)

Future Heating CCF = Gas Heating Output x (1 / Prop. Gas Heating Eff) x Heating Diversity Factor x (1 - (Heating Setback Factor - 1)) x Heating FLH x (1/1030000)

Total CCF Saved = Future Heating CCF - Future Heating CCF

where:

Heating Diversity Factor =	0.4
Gas Heating Output =	Gas heating capacity in kBtu/hr
Heating FLH =	Heating equivalent full-load hours shown in Table above.

The expected savings for FIM 4 are 125,906 kWh and 445 kW at the rates and escalations as shown in Schedule 2 Section IV. The expected savings for FIM 5 are 121,312 kWh and 234 kW at the rates and escalations as shown in Schedule 2 Section IV. Refer to Attachment 7 for the calculations. ESCO is not responsible for lack of savings due to inefficiencies arising from improper operation or lack of maintenance of the HVAC system.

JCI Responsibilities:

This FIM consists of verifying performance data of the installed equipment. A sample of the post installed equipment performance data will be reviewed and visually inspected. JCI shall not be responsible for changes to those equipment as they are turned over to the Customer. Detailed calculations can be found in Attachment 7.

Customer Responsibilities:

Customer assumes all operational and maintenance responsibilities for this FIM. They are responsible for ensuring all strategies, schedules (per Schedule 2 Section V), setpoints (per Schedule 2 Section V), and sequences established during the installation of this FIM remain in place. JCI will not be responsible for customer-driven changes to schedules and setpoints, overrides, or lack of maintenance affecting controls performance

© 2008 Johnson Controls, Inc.

FIM 6 – Air-Handling Unit Replacements

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. JCI will replace the existing AHUs on the HVAC systems and convert the VAV units as listed in Schedule 1. The savings for this FIM are generated through a reduction in motor power draw; therefore, the measurement boundary is the motor itself.

Buildings included:

- Old Courthouse
- Mail Airport Terminal
- Downtown Jail

VAV Conversion Savings

Key Parameter	Measurement Frequency	Measurement Description
Pre- and Post-Retrofit kW	One-time Pre, and One-time Post	The existing power draw will be measured using a true RMS meter on during construction. The post-retrofit motor power draw will be measured one-time at various VFD speeds. These values will be used with the trended VFD speed to verify the energy used by the motor/drive combination. On an on-going basis, the savings strategy will be verified by utilizing the capabilities of the control system to verify that the VFD is controlling the motor speed as required to generate the savings. These data will be reviewed at least throughout the year by Johnson Controls. JCI will verify the savings strategy by utilizing the capabilities of the control system to verify that the VFD is controlling the motor speed as required to generate the savings. JCI will work with the Customer's maintenance staff to reduce equipment run hours even further than contract required limits. JCI will update the DOE2 model for equipment scheduling based on actual measurements. However, JCI is not responsible for loss of savings resulting from customer-directed changes in schedules, adverse weather conditions, system overrides, or lack of maintenance. The savings will be updated to reflect actual pre- and post-retrofit measurements.
Estimated Parameters	**Assumed Value**	**Justification, Source and Description**
Run Hours – Pre- and Post-Retrofit	See Attachment 7	It is agreed that the motor operates 8760 hours a year before the retrofit. The post-retrofit run hours were determined by the schedules agreed upon in Schedule 2, Section V Based on the DOE2 models, the VFD speed will vary over a year. Trends of VFD speed with be reviewed throughout the performance period by Johnson Controls to ensure that the VFD is operating as designed.

© 2008 Johnson Controls, Inc.

Schedule 2

Equations for Calculating AHU Replacement Savings (Option A)

JCI created DOE2 models to determine the savings for the facilities. See Attachment 7 for the DOE2 input and output files.

The expected savings are 141,494 kWh and 6,272 ccf at the rates and escalations as shown in Schedule 2 Section IV. JCI is not responsible for lack of savings due to inefficiencies arising from improper operation or lack of maintenance of the HVAC system or control system

JCI Responsibilities:

As part of the M&V activities for this FIM, JCI will verify proper installation of the VAV system installed as part of this FIM. JCI will also conduct power measurements at various speeds and on-going monitoring.

During installation of this FIM, power measurements will be taken at different frequencies. A visual inspection will also be conducted.

During the performance period, JCI will verify the VAV system is operating properly using instantaneous observations and short-term trending reports throughout the year. JCI will review and identify variances between the installation c. JCI will update the DO2 model based on the equipment's operation.

Customer Responsibilities:

Customer assumes all operational and maintenance responsibilities for this FIM. Customer is responsible for performing preventative maintenance on the equipment as per manufacturer's guidelines. In the event that the equipment fails or needs repairs, Customer is responsible for repairing/replacing the equipment, either by use of its own maintenance staff or through a separate contract with either JCI or a third-party mechanical repair contractor. Customer is also responsible for ensuring all strategies and sequences established during the installation of this FIM remain in place.

© 2008 Johnson Controls, Inc.

FIM 7 – Chiller Replacements and Piping Upgrades

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. The savings for this FIM are generated through a gain in efficiency in the new equipment compared to the existing equipment; therefore, the measurement boundary is the chilled water system (chillers, pumps, and cooling tower) itself.

Buildings included:

- Old Courthouse Plant

Key Parameter	Measurement Frequency	Measurement Description
Post-installation Cooling Load Delivered (ton-hours)	Annually	The post-retrofit ton-hours delivered will be measured on an hourly basis.
Post-installation kWh consumption of the central plant	Annually	The post-retrofit kWh consumed will be measured on an hourly basis.
Post-installation Chilled Water System Efficiency (kw/ton_{post})	Calculated Based on Measurements	The post-retrofit chilled water system efficiency will be calculated based on the measured Btu (or tons) delivered and kWh consumed. The kWh used by the chilled water system and the Btu delivered will be totalized, and the totalized value will be recorded on an hourly basis. At least throughout the year, this data will be reviewed by Johnson Controls. The average annual kW/ton will then be determined by: $$\frac{kW}{ton_{post}} = \frac{annual\ kWh}{\left(\frac{annual\ Btu}{12000\frac{Btu}{ton-Hour}}\right)}$$
Estimated Parameters	**Assumed Value**	**Justification, Source and Description**
Baseline Cooling Load Delivered (ton-hours)	See Table Below	The existing chilled water system loads for the central plant were modeled based on logger data, equipment capacities, and employee interviews. The model was created by correlating the data to outside air temperature and utility bills. It is agreed that the minimum annual chilled water usage will never be less than this modeled value of 3,676,700. The baseline annual chilled water Btu is converted to ton-hours using the following conversion: $$TonHours_{base} = \frac{Btu_{base}}{12000\frac{Btu}{ton-Hours}}$$
Baseline Chilled Water System Efficiency (η) (kw/ton_{pre})	See Table Below	The baseline chilled water system efficiency (annual average kW/ ton) is based on spot measurements taken during the baseline period which were modeled in an Excel Workbook in order to calibrate the performance curves to actual data. This data includes manufacturer's data, the age of the equipment, measurements of chiller % load, power draw, chilled water supply temperature, condenser water supply temperature, and pump power draws. This value is stipulated and shown in the table below.

© 2008 Johnson Controls, Inc.

Equations for Calculating Chilled Water Upgrades Savings:

The savings for this FIM are from the increased efficiency of the new chillers. The savings were modeled in an Excel Workbook. The Workbook was calibrated to existing utility bills. Detailed Excel outputs are available in Attachment 7.

Plant	Annual Chilled Water Load	Baseline Chilled Water System Efficiency	Post-Retrofit Plant Efficiency
	[ton-hours]	[kW/Ton]	[kW/Ton]
Courthouse	3,676,700	0.826	0.660

The expected savings are 608,601 kWh and 316 kW at the rates and escalations as shown in Schedule 2 Section IV.

JCI Responsibilities:

The annual chilled water system efficiencies (kW/ton) and annual chilled water loads (ton-hours) will be calculated based on continuous trending through the new BAS. During the Installation Period, the following trends will be established in the BAS to provide measured data necessary for performance period M&V activities:

- Average kW draw for chillers and pumps controlled by VFD
- Run time for constant speed pumps and fans. These items are assumed to consume constant power when running as detailed in Attachment 7.
- Average Chilled water supply temp, return temp, and flow (gpm) every 15 minutes
- Average Btu delivered every 15 minutes
- Average outside air temperature every 15 minutes

The annual kWh savings will be calculated according to:

$$kWh_{Savings} = TonHours\left(kW/ton_{pre} - kW/ton_{post}\right)$$

Where ton-hours is the greater of the baseline extrapolated ton-hours or the actual annual measured ton-hours from the BAS.

Customer's Responsibilities:

Customer assumes all operational and maintenance responsibilities for this FIM. Customer is responsible for performing preventative maintenance on the equipment as per manufacturer's guidelines. In the event that the equipment fails or needs repairs, Customer is responsible for repairing/replacing the equipment, either by use of its own maintenance staff or through a separate contract with either JCI or a third-party mechanical repair contractor. Customer is also responsible for ensuring all strategies and sequences established during the installation of this FIM remain in place.

© 2008 Johnson Controls, Inc.

FIM 8 – Walk-in Freezer/ Cooler Upgrades

The savings for this FIM will be verified using IPMVP Option A, Retrofit Isolation with Key Parameter Measurement. The savings for this FIM are generated through the installation of ECM motors and upgraded controls compared to the existing equipment; therefore, the measurement boundary is the freezers/ coolers itself. The buildings associated with the FIM are:

- Old Courthouse – Cafeteria
- Minnie Rogers Juvenile Facility
- County Correctional
- Ford Arena

HVAC Control Savings

Key Parameter	Measurement Frequency	Measurement Description
Pre and Post-Retrofit Power Consumption	One-time Pre, One-time Post	The pre-retrofit power reading will be based on short term power measurements. These readings will be collected during construction. The post-retrofit power reading will be based on short term power measurements. These readings will be collected during construction. JCI will update the savings calculations based on actual performance. However, JCI is not responsible for loss of savings resulting from customer-directed changes, or lack of maintenance that result in additional usage. The savings will be updated to reflect actual pre- and post-retrofit measurements.

Equations for Calculating Energy Management Controls Savings (Option A)

The calculation methodology used to determine savings for the ECM motors and controls for the evaporator fans and defrost usage are based on the Texas Technical Reference Manual, Vol. 3 Section 2.5.2 – 2.5.4. See Attachment 7 for the savings summary.

The expected savings are 110,289 kWh at the rates and escalations as shown in Schedule 2 Section IV. JCI is not responsible for lack of savings due to inefficiencies arising from improper operation or lack of maintenance of the refrigeration system or control system.

JCI Responsibilities:

As part of the M&V activities for this FIM, JCI will verify proper installation of the freezer/cooler motors installed as part of this FIM. JCI will also conduct power consumption measurements. The savings associated with this measure will be verified by demonstrating a reduction in power consumption and runtime. The following will be reviewed; pre and post power consumption for a freezer and a cooler. A sample of short term trends will be analyzed during construction.

During installation of this FIM, JCI will perform onetime power consumption measurements will be taken during both pre and post retrofit. A visual inspection will also be conducted. JCI will verify the freezers/coolers are operating properly using instantaneous observations and short-term trending reports. JCI will update the model based on equipment operations; and account for adjustments resulting from customer-directed changes, or lack of maintenance.

During performance of this FIM, JCI will conduct visual inspection once a year to verify operation. No annual measurements will be conducted for this FIM.

© 2008 Johnson Controls, Inc.

Schedule 2

Customer Responsibilities:

Customer assumes all operational and maintenance responsibilities for this FIM. Customer is responsible for performing preventative maintenance on the equipment as per manufacturer's guidelines. In the event that the equipment fails or needs repairs, Customer is responsible for repairing/replacing the equipment, either by use of its own maintenance staff or through a separate contract with either JCI or a third-party mechanical repair contractor. Customer is also responsible for ensuring all strategies and sequences established during the installation of this FIM remain in place.

© 2008 Johnson Controls, Inc.

Schedule 2

Installation Period Savings

Installation period savings are estimated using a simple Microsoft Excel® spreadsheet based on anticipated substantial completion and/or percent complete for each FIM and each site on a monthly basis. The monthly FIM savings are calculated using the Year 1 FIM savings divided by 12 months. The installation period savings estimate will be updated to reflect actual substantial completion dates and measured FIM savings including energy, water, O&M, and material savings. The actual installation period savings will be documented in the post-installation report.

© 2008 Johnson Controls, Inc.

Schedule 2

CHANGES IN USE OR CONDITION; ADJUSTMENT TO BASELINE AND/OR ANNUAL PROJECT BENEFITS

Customer agrees to notify JCI, within fourteen (14) days, of (i) any actual or intended change, whether before or during the Guarantee Term, in the use of any facility, equipment, or Improvement Measure to which this Schedule applies; (ii) any proposed or actual expansions or additions to the premises or any building or facility at the premises; (iii) a change to utility services to all or any portion of the premises; or (iv) any other change or condition arising before or during the Guarantee Term that reasonably could be expected to change the amount of Project Benefits realized under this Agreement.

Such a change, expansion, addition, or condition would include, but is not limited to: (a) changes in the primary use of any facility, Improvement Measure, or portion of the premises; (b) changes to the hours of operation of any facility, Improvement Measure, or portion of the premises; (c) changes or modifications to the Improvement Measures or any related equipment; (d) changes to the M&V Services provided under this Agreement; (e) failure of any portion of the premises to meet building codes; (f) changes in utility suppliers, utility rates, method of utility billing, or method of utility purchasing; (g) insufficient or improper maintenance or unsound usage of the Improvement Measures or any related equipment at any facility or portion of the premises (other than by JCI); (h) changes to the Improvement Measures or any related equipment or to any facility or portion of the premises required by building codes or any governmental or quasi-governmental entity; or (i) additions or deletions of Improvement Measures or any related equipment at any facility or portion of the premises.

Such a change or condition need not be identified in the baseline in order to permit JCI to make an adjustment to the baseline and/or the Annual Project Benefits. If JCI does not receive the notice within the time period specified above or travels to either Customer's location or the project site to determine the nature and scope of such changes, Customer agrees to pay JCI, in addition to any other amounts due under this Agreement, the applicable hourly consulting rate for the time it took to determine the changes and to make any adjustments and/or corrections to the project as a result of the changes, plus all reasonable and documented out-of pocket expenses, including travel costs. Upon receipt of such notice, or if JCI independently learns of any such change or condition, JCI shall calculate and send to Customer a notice of adjustment to the baseline and/or Annual Project Benefits to reflect the impact of such change or condition, and the adjustment shall become effective as of the date the change or condition first arose. Should Customer fail to promptly provide JCI with notice of any such change or condition, JCI may make reasonable estimates as to the impact of such change or condition and as to the date on which such change or condition first arose in calculating the impact of such change or condition, and such estimates shall be conclusive.

© 2008 Johnson Controls, Inc.

Schedule 2

IV. BASELINE CALCULATIONS AND UTILITY RATES

The unit utility costs for the baseline period are set forth below as "Base Utility Cost" and shall be used for all calculations made under this Schedule. The Base Utility Cost shall be escalated annually by the actual utility cost escalation but such escalation shall be no less than the mutually agreed "floor" escalation rate of three percent (3%). The Base Utility Cost for each type of utility represents the 12 month average utility costs from October 2017 through September 2018.

Building	Electric		NG	Water/ Sewer
	kWh	kW	ccf	kgal
Courthouse, Courthouse Addition & Downtown Jail/Sheriff Office	$0.035	$13.12	$0.74	$7.44
Courthouse Annex 1	$0.061	$6.58		
Courthouse Annex 2	$0.057	$6.58		
Courthouse Annex 4	$0.060	$6.58		
County Correctional Facility	$0.035	$13.12	$0.37	$8.54
Ford Park Arena & Exhibit Hall	$0.060	$6.58	$0.51	
Ford Park Visitor's Center	$0.064	$6.58		
Minnie Rogers Juvenile Justice Center	$0.058	$6.58	$0.79	$8.54
Precinct No. 1	$0.060	$6.58		
Precinct No. 2	$0.061	$6.58	$1.14	
Precinct No. 3	$0.062	$6.58	$2.13	
Precinct No. 4	$0.059	$6.58		
Sub Courthouse	$0.062	$6.58	$1.72	
Airport Main Terminal	$0.058	$6.58	$0.78	
Airport Jerry Ware Terminal	$0.058	$6.58	$0.84	
Airport Jerry Ware Annex	$0.055	$6.58		
Airport Hangars 2	$0.068	$6.58		
Airport Hangars 7	$0.067	$6.58		
Sheriff Hangar	$0.059	$6.58		
Airport Firehouse	$0.097			
Mid-County Tax Office	$0.059	$6.58		
Marine Operations	$0.060	$6.58		

© 2008 Johnson Controls, Inc.

V. PRIMARY OPERATIONS SCHEDULE PRE & POST-RETROFIT

Pre-Retrofit Facility/Area

Building	Baseline Building Hours	
	Operating Hours	Standard HVAC Operating Hours
Old Courthouse	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
MZU to VAV	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
MZU	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
VAV IGV to VFD	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
SZU	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
Courthouse Addition	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
Sheriff's Office	7:00 a.m. to 5:00 p.m. Mon thru Fri	24 / 7 / 365
Jail	24 / 7 / 365	24 / 7 / 365
Courthouse Annex 1	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	6:00 a.m. to 7:00 p.m. Mon thru Fri
Courthouse Annex 2	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	6:00 a.m. to 7:00 p.m. Mon thru Fri
Courthouse Annex 4	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	6:00 a.m. to 7:00 p.m. Mon thru Fri
Ford Park Visitor's Center	8:00 a.m. to 5:00 p.m. Mon thru Sun	24 / 7 / 365
Minnie Rogers Juvenile Justice Center	7:00 a.m. to 5:00 p.m. Mon thru Sat; 7:00 a.m. to 6:00 p.m. Sun	24 / 7 / 365
Precinct No. 1	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Precinct No. 2	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Precinct No. 3	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Precinct No. 4	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Sub Courthouse	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Airport Jerry Ware Terminal	6:00 a.m. to 7:00 p.m. Mon thru Sun	6:00 a.m. to 7:00 p.m. Mon thru Sun
Airport Jerry Ware Annex	6:00 a.m. to 7:00 p.m. Mon thru Sun	6:00 a.m. to 7:00 p.m. Mon thru Sun
Airport Hangars 2	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Airport Hangars 7	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Sheriff Hangar	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365
Airport Firehouse	24 / 7 / 365	24 / 7 / 365

© 2008 Johnson Controls, Inc.

Schedule 2

Building	Baseline Building Hours	
	Operating Hours	Standard HVAC Operating Hours
Mid-County Tax Office	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	24 / 7 / 365

Occupied Room Temperature During Heating Season: 70 degrees F or less

Unoccupied Low Temperature Limit During Heating Season: 65 degrees F or less

Occupied Room Temperature During Cooling Season: 72 degrees F or greater

Unoccupied High Temperature Limit During Cooling Season: 85 degrees F or greater

Post-Retrofit Facility/Area

Building	Post Building Hours	
	Operating Hours	Standard HVAC Operating Hours
Old Courthouse	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
MZU to VAV	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
MZU	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
VAV IGV to VFD	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
SZU	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
Courthouse Addition	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
Sheriff's Office	7:00 a.m. to 5:00 p.m. Mon thru Fri	7:00 a.m. to 5:00 p.m. Mon thru Fri
Jail	24 / 7 / 365	24 / 7 / 365
Courthouse Annex 1	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Courthouse Annex 2	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Courthouse Annex 4	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Ford Park Visitor's Center	8:00 a.m. to 5:00 p.m. Mon thru Sun	8:00 a.m. to 5:00 p.m. Mon thru Sun
Minnie Rogers Juvenile Justice Center	7:00 a.m. to 5:00 p.m. Mon thru Sat; 7:00 a.m. to 6:00 p.m. Sun	8:00 a.m. to 8:00 p.m. Mon thru Sat; 7:00 a.m. to 6:00 p.m. Sun
Precinct No. 1	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Precinct No. 2	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Precinct No. 3	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Precinct No. 4	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun

© 2008 Johnson Controls, Inc.

Schedule 2

Building	Post Building Hours	
	Operating Hours	Standard HVAC Operating Hours
Sub Courthouse	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Airport Jerry Ware Terminal	6:00 a.m. to 7:00 p.m. Mon thru Sun	6:00 a.m. to 7:00 p.m. Mon thru Sun
Airport Jerry Ware Annex	6:00 a.m. to 7:00 p.m. Mon thru Sun	6:00 a.m. to 7:00 p.m. Mon thru Sun
Airport Hangars 2	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Airport Hangars 7	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Sheriff Hangar	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun
Airport Firehouse	24 / 7 / 365	24 / 7 / 365
Mid-County Tax Office	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun	7:00 a.m. to 5:00 p.m. Mon thru Sat; 8:00 a.m. to 2:00 p.m. Sun

Occupied Room Temperature During Heating Season: 70 degrees F or less

Unoccupied Low Temperature Limit During Heating Season: 65 degrees F or less

Occupied Room Temperature During Cooling Season: 72 degrees F or greater

Unoccupied High Temperature Limit During Cooling Season: 85 degrees F or greater

Supply Air Reset Schedule

Outside Air Temperature (deg F)	Supply Air Temperature (deg F)
75	55
60	58

Chilled Water Set-Point Adjustment

Building	Baseline/Proposed	Supply Chill Water Temperature (deg F)
Ford Arena	Baseline	41.8
	Proposed	45.0
County Correctional	Baseline	41.3
	Proposed	45.0

© 2008 Johnson Controls, Inc.

VI. MEASUREMENT & VERIFICATION SERVICES

JCI will provide the M&V Services set forth below in connection with the Assured Performance Guarantee.

1. During the Installation Period, a JCI Performance Assurance Specialist will track Measured Project Benefits. JCI will report the Measured Project Benefits achieved during the Installation Period to Customer within 60 days of the commencement of the Guarantee Term.
2. Within 60 days of each anniversary of the commencement of the Guarantee Term, JCI will provide Customer with an annual report containing:
   a. an executive overview of the project's performance and Project Benefits achieved to date;
   b. a summary analysis of the Measured Project Benefits accounting; and
   c. depending on the M&V Option, a detailed analysis of the Measured Project Benefits calculations.
3. During the Guarantee Term, a JCI Performance Assurance Specialist will monitor the on-going performance of the Improvement Measures, as specified in this Agreement, to determine whether anticipated Measured Project Benefits are being achieved. In this regard, the Performance Assurance Specialist will periodically assist Customer, on-site or remotely, with respect to the following activities:
   a. review of information furnished by Customer from the facility management system to confirm that control strategies are in place and functioning;
   b. advise Customer's designated personnel of any performance deficiencies based on such information;
   c. coordinate with Customer's designated personnel to address any performance deficiencies that affect the realization of Measured Project Benefits; and
   d. inform Customer of opportunities to further enhance project performance and of opportunities for the implementation of additional Improvement Measures.
4. For specified Improvement Measures, JCI will:
   a. conduct pre and post-retrofit measurements required under this Agreement;
   b. conduct on-site surveys and visual inspections as required under Section III;
   c. confirm the building management system employs the control strategies and setpoints specified in this Agreement; and
   d. analyze actual as-built information and adjust the baseline and/or Measured Project Benefits to conform to actual installation conditions (e.g., final lighting and water benefits calculations will be determined from the as-built information to reflect the actual mix of retrofits encountered during installation).
   e. confirm that the appropriate metering and data points required to track the variables associated with the applicable Improvement Measures' benefits calculation formulas are established; and
   f. set up appropriate data capture systems (e.g., trend and totalization data on the facility management system) necessary to track and report Measured Project Benefits for the applicable Improvement Measure.
   g. Trend data records maintained in the ordinary course of system operation shall be used and relied upon by Johnson Controls to in connection with Project Benefit calculations. JCI will use commercially reasonable efforts to ensure the integrity of the data collected to calculate the required savings. In the event data are lost due to equipment failure, power failure or other interruption in data collection, transmission or storage, JCI will use reasonable engineering methods to estimate the impact of the lost data.

© 2008 Johnson Controls, Inc.

Schedule 3

CUSTOMER RESPONSIBILITIES

In order for JCI to perform its obligations under this Agreement with respect to the Work, the Assured Performance Guarantee, and the M&V Services, Customer shall be responsible for:

1. Providing JCI, its subcontractors, and its agents reasonable and safe access to all facilities and properties that are subject to the Work and/or M&V Services;
2. Providing for shut down and scheduling of affected locations during installation, including timely shutdowns of chilled water and hot water systems as needed to accomplish the Work and/or M&V Services;
3. Providing timely reviews and approvals of design submissions, proposed change orders, and other project documents;
4. Providing the following information with respect to the project and project site as soon as practicable following JCI's request:
    A. surveys describing the property, boundaries, topography and reference points for use during construction, including existing service and utility lines;
    B. geotechnical studies describing subsurface conditions, and other surveys describing other latent or concealed physical conditions at the project site;
    C. temporary and permanent easements, zoning and other requirements and encumbrances affecting land use, or necessary to permit the proper design and construction of the project and enable JCI to perform the Work;
    D. a legal description of the project site;
    E. as-built and record drawings of any existing structures at the project site; and
    F. environmental studies, reports and impact statement describing the environmental conditions, including hazardous conditions or materials, in existence at the project site.
5. Securing and executing all necessary agreements with adjacent land or property owners that are necessary to enable JCI to perform the Work;
6. Providing assistance to JCI in obtaining any permits, approvals, and licenses that are JCI's responsibility to obtain as set forth in Schedule 1;
7. Obtaining any permits, approvals, and licenses that are necessary for the performance of the Work and are not JCI's responsibility to obtain as set forth in Schedule 1;
8. Properly maintaining, and performing appropriate preventative maintenance on, all equipment and building systems affecting the Assured Performance Guarantee in accordance with manufacturers' standards and specifications;
9. Providing the utility bills, reports, and similar information reasonably necessary for administering JCI's obligations under the Assured Performance Guarantee within five (5) days of Customer receipt and/or generation or JCI's request therefor;
10. Providing all records relating to energy and/or water usage and related maintenance of the premises and relevant equipment requested by JCI;
11. Providing and installing utility sub-meters on all new construction and/or additions built during the Guarantee Term as recommended by JCI or, alternatively, paying JCI's applicable fees for calculating necessary adjustments to the Assured Performance Guarantee as a result of the new construction;

© 2008 Johnson Controls, Inc.

12. Providing and maintaining a dedicated telephone line and/or TCP/IP remote connection to facilitate remote monitoring of relevant equipment;
13. Promptly notifying JCI of any change in use or condition described in Section III of Schedule 2 or any other matter that may impact the Assured Performance Guarantee;
14. If any equipment under control is changed out it is the responsibility of the customer to move the controls and the control programming to the new equipment
15. Laydown area to accommodate (4) connexes, (1) office trailer, (1) dumpster.
16. New Ozone Laundry Support System (FIM 2):
    A. Chemicals used must be changed to ozone compatible types (resulting in a lower volume of chemicals used, but no change in cost). The procurement of proper chemicals will be the responsibility of the customer.
    B. Washer and dryer formulas shall be modified as part of this scope of work to accommodate true cold water washing with ozone. The laundry staff will be trained on operating sequences and formulas.

© 2008 Johnson Controls, Inc.

Schedule 4

PRICE AND PAYMENT TERMS

Customer shall make payments to JCI pursuant to this Schedule 4.

1. *Work.* The price to be paid by Customer for the Work shall be $16,212,295. Payments from customer to JCI shall include a $4,053,074 initial payment, which shall be made by Customer to JCI promptly following Customer's receipt of financing for the Work and consistent with Texas Prompt Pay law. Additional payments shall be made by Customer throughout Construction Period as billed by JCI. JCI shall bill Customer for the purchase of equipment as equipment arrives, as well as monthly for percentage of work completed.
2. *M&V Services*. The total price for JCI's M&V Services, as detailed on Schedule 2 of this Agreement, is $1,225,175. This amount will be paid to JCI in quarterly installments. These payments will be due and payable when Customer receives JCI's invoice and in advance of the services JCI is to provide, and shall be made throughout the Guarantee Term.

Period	Annual M&V Service Payment
Year 1	$45,596
Year 2	$46,964
Year 3	$48,373
Year 4	$49,824
Year 5	$51,318
Year 6	$52,858
Year 7	$54,444
Year 8	$56,077
Year 9	$57,759
Year 10	$59,492
Year 11	$61,277
Year 12	$63,115
Year 13	$65,009
Year 14	$66,959
Year 15	$68,968
Year 16	$71,037
Year 17	$73,168
Year 18	$75,363
Year 19	$77,624
Year 20	$79,952

© 2008 Johnson Controls, Inc.

Attachment 1

NOTICE TO PROCEED

Johnson Controls, Inc.
3021 West Bend Drive
Irving, TX 75063

ATTN: Ken Morris & Tony Cloud

Re: Notice to Proceed for _____ Performance Contract

Dear Mr. Morris and Mr. Cloud:

This Notice to Proceed is being issued by Jefferson County ("Customer") to Johnson Controls, Inc. ("JCI") pursuant to that certain Performance Contract entered into between Customer and JCI for the purpose of notifying JCI to commence work under such contract.

In the event that this Notice to Proceed is delivered by Customer prior to the execution of the Performance Contract by Customer and JCI, Customer understands and expects JCI will incur significant costs and expenses in complying with this Notice to Proceed. In the event the Performance Contract is not executed by the parties, for any reason, Customer agrees to pay JCI for its costs and fees incurred in complying with this Notice to Proceed on a time and material basis. Customer also agrees JCI shall be entitled to a reasonable mark-up thereon for profit and overhead. Customer agrees to pay amounts billed by JCI no later than five (5) days after Customer receives JCI's payment application. JCI will continue to submit payment applications to Customer until the Performance Contract is executed. Once the Performance Contract is executed, JCI will begin submitting its payment applications to Customer in accordance with the terms and conditions set forth therein. Any amounts already paid by Customer will be credited towards the Performance Contract price.

By signing and dating this Notice to Proceed, the parties hereto agree to these terms and represent and warrant they have the authority to execute this Notice to Proceed on behalf of their respective organizations.

Jefferson County

Signature:_____

Printed Name:_____

Title:_____

Date:_____

ACKNOWLEDGED & AGREED TO:
JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

Date:_____

© 2008 Johnson Controls, Inc.

Attachment 2

CHANGE ORDER

Performance Contract dated , 20 between Johnson Controls, Inc. and Customer	Change Order No.		Date (mo/day/yr)
Customer Jefferson County			

The above referenced Performance Contract is hereby modified to the extent described below in accordance with the Terms and Conditions of the CHANGE ORDERS section thereof.

Scope of Work changed as follows:

Total amount of this Change Order	$
Total Performance Contract amount as revised by this Change Order	$
The time for completion is: ☐ increased, ☐ decreased, ☐ unchanged. The new completion date resulting from this Change Order is:	(mo, day, yr)

[check if applicable] Assured Performance Guarantee changed as follows:

Unless specifically changed by this Change Order, all terms, conditions and provisions of the above referenced Performance Contract remain unchanged and in full effect.

JOHNSON CONTROLS, INC.	**JEFFERSON COUNTY**
Signature:	Signature:
Printed Name:	Printed Name:
Title:	Title:

© 2008 Johnson Controls, Inc.

Attachment 3

CERTIFICATE OF SUBSTANTIAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
3021 West Bend Drive
Irving, TX 75063

Jefferson County ("Customer")
1149 Pearl Street
Beaumont, TX 77701

PROJECT: [Insert Project Name]; Performance Contract dated _____ __, 20__ between JCI and Customer

By executing this Certificate of Substantial Completion, Customer acknowledges the following:

a. The work set forth in the Performance Contract is substantially complete.

b. Customer has received the manuals, warranty information, and training required under the Performance Contract.

c. The following punch list items must be completed by JCI (check as applicable):

☐ punch list attached
☐ punch list complete

d. Upon completion of the punch list items, or if such punch list items are complete, JCI and Customer shall sign the Certificate of Final Completion attached hereto.

Dated , 20 .

JEFFERSON COUNTY:

Signature:_____

Printed Name:_____

Title:_____

JOHNSON CONTROLS, INC.

Signature:_____

Printed Name:_____

Title:_____

© 2008 Johnson Controls, Inc.

Attachment 3

CERTIFICATE OF FINAL COMPLETION

PARTIES: JOHNSON CONTROLS, INC. ("JCI")
3021 West Bend Drive
Irving, TX 75063

Jefferson County ("Customer")
1149 Pearl Street
Beaumont, TX 77701

PROJECT: [Insert Project Name]; Performance Contract dated _____ __, 20__ between JCI and Customer

By executing this Certificate of Final Completion, Customer acknowledges the following:

a. The work set forth in the Performance Contract has been reviewed and determined by Customer to be fully complete.

b. Customer accepts the work as complete and hereby releases JCI's obligations under any performance and payment bonds posted for the project as of the date set forth below.

Dated , 20 .

CUSTOMER:	**JOHNSON CONTROLS, INC.**
Signature:_____	Signature:_____
Printed Name:_____	Printed Name:_____
Title:_____	Title:_____

© 2008 Johnson Controls, Inc.

Attachment 4

Attachment 4 is omitted.

© 2008 Johnson Controls, Inc.

JEFFERSON COUNTY PURCHASING DEPARTMENT

Deborah Clark, Purchasing Agent

1149 Pearl Street, Beaumont, TX 77701 Phone: 409-835-8593 Fax: 409-835-8456

MEMORANDUM

To: Commissioners' Court

From: Deborah Clark
Purchasing Agent

Date: March 13, 2019

Re: Disposal of Salvage Property

Consider and possibly approve disposition of salvage property as authorized by Local Government Code §263.152 (3), for broken or obsolete items.

Thank you.

JEFFERSON COUNTY, TEXAS
1149 PEARL STREET
BEAUMONT, TX 77701

DISPOSAL OF SALVAGE PROPERTY
March 18, 2019

DEPARTMENT	DESCRIPTION OF PROPERTY	SERIAL NO.	ASSET NO.
COUNTY CLERK	(5) CHAIRS		
COUNTY CLERK	IBM TYPEWRITER		
contact: Gabriela De Los Santos			
J.P. PCT 1 PL. 2	SECRETARY CHAIR - MARON		13679
J.P. PCT 1 PL. 2	SECRETARY CHAIR - MARON		13683
J.P. PCT 1 PL. 2	SECRETARY CHAIR - MARON		14021
J.P. PCT 1 PL. 2	SECRETARY CHAIR - MARON		14026
J.P. PCT 1 PL. 2	BLACK CHAIR		28735
J.P. PCT 1 PL. 2	BLACK CHAIR		28736
J.P. PCT 1 PL. 2	BLACK CHAIR		28737
J.P. PCT 1 PL. 2	BLACK CHAIR		28738
J.P. PCT 1 PL. 2	BROTHER TYPEWRITER EM605		5446
J.P. PCT 1 PL. 2	LOUNGE CHAIR		13995
J.P. PCT 1 PL. 2	CHALKBOARD		13694
J.P. PCT 1 PL. 2	BROTHER EM-530 TYPEWRITER		30081
J.P. PCT 1 PL. 2	TABLE/WOOD CABINET W/WHEELS		14005
contact person: Penny Nguyen			
SHERIFF	FELLOWS SHREDDER	CRC38250	
contact person: Crystal Holmes			
TAX OFFICE - BEAUMONT	IBM PERSONAL WHEELWRITER III	11-VDH90	
contact person: Cheryl Ellis			

Approved by Commissioners' Court: _____

AGENDA ITEM **March 18, 2019**

Consider, possibly approve, and authorize the County Judge to execute a Private Hangar Lease between Jefferson County and ACS Executive Air, LLC for property at the Jack Brooks Regional Airport.

Jack Brooks Regional Airport
5000 Jerry Ware Drive Suite 100, Beaumont TX 77705
Tel 409.719.4900 Fax 409.722.2830
Flysetx.com

Commissioners Court

March 12, 2019

RE: Agenda Item – Land Lease Agreement

Commissioners,

I have requested an item to go on the Court's agenda to consider and possibly authorize the County Judge to execute a ground lease with ACS Executive Air, LLC, a group of local individuals who wish to erect a new private aircraft hangar to house their large private jet. The location on the airfield for this lease is what is currently known as Hangar #4.

The lease is similar to the lease executed in 2014 with Tertiary Holdings. The main differences between this lease and the Tertiary lease, is this lessee will have to pay to demolish the hangar and slab at their expense. Tertiary leased the space known as the Hangar 1 pad site. In 2009 the County demolished the Hangar 1 structure and left the slab. When Tertiary began designing their hangar, it was determined, they would have to demolish the slab as well due to engineering requirements. Also, the starting rate per square foot for Tertiary was $0.20, whereas this lease begins at $0.24 per square foot.

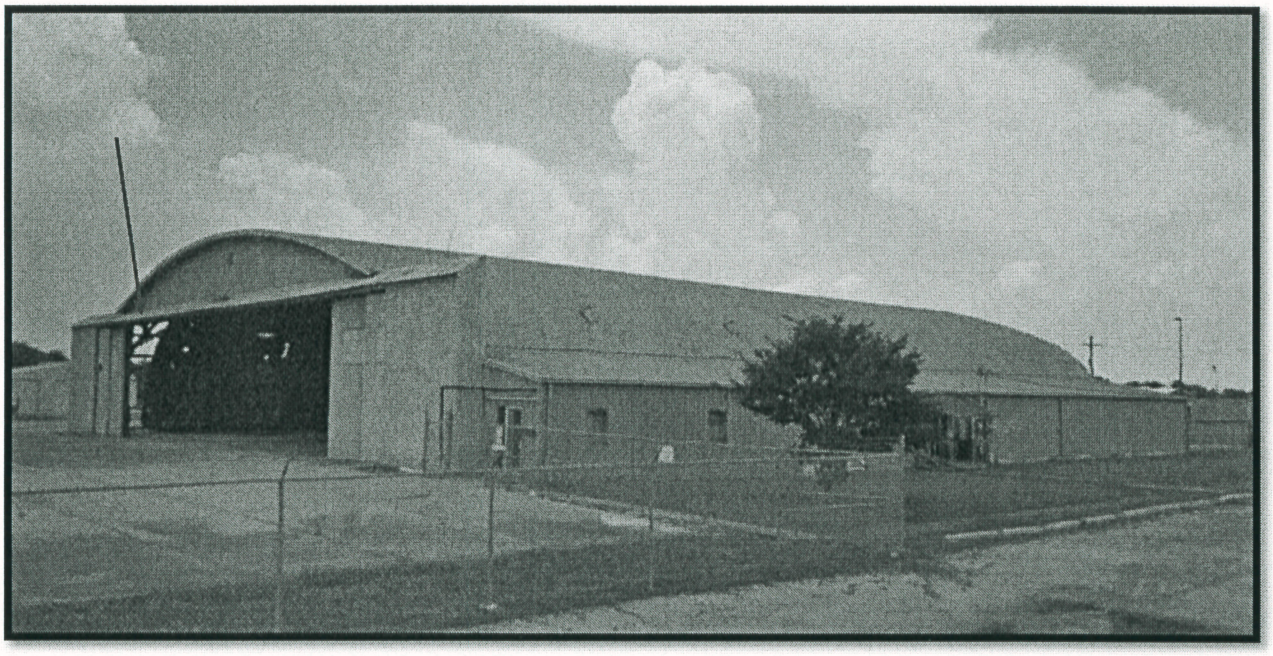
Hangar #4 was severely damaged in Hurricanes Rita and Ike. The Hangar is a quanset hut design with a semicircle cross section, erected at the airport sometime in the late 1940s making it around 70 years old. The current design is an inefficient use of space since the walls immediately curve inward from the ground limiting the use of the space against the walls.

We currently have a few tenants who keep their aircraft in hangar 4 who can move their aircraft into Hangar 2 or into any available T-Hangars if their aircraft will fit. If either of those options are not suitable for the tenants, they have the option to move into one of the Hangars KUSA has leased from the Airport.

Since we are currently in the process of demolishing Hangar 3 due to the substantial damage caused by the military, there will be no damaged, un-repaired, and unsightly hangars on the Airport once the lessee's construction is complete. The skyline of the airport will be much cleaner, the potential hazards from further deterioration will be eliminated, and the leased property and improvements will be on the tax rolls.

This will result in Hangar 2 being the only open span hangar left on the airfield, which we anticipate will be at capacity due to aircraft moving from Hangars 3 and 4.

Hangar 4 – View from Road



As you can see from the picture above, Hangar 4 is in bad shape.

There are numerous holes in the roof are a large section of the roof panel is missing. Rehab of the hangar is cost prohibitive. The lead paint and asbestos would have to be abated, estimate for that is around $225,000. New steel on the structure is required to be windstorm certified, however the unknown structural conditions and whether or not the structure itself would sustain the added steel make it extremely difficult to certify for windstorm.

Please let me know if there are any questions.

Respectfully,

Alex Rupp
Airport Director

The State of Texas	§	Private Hangar Development
County of Jefferson	§	Land Lease Agreement

This is a lease agreement, made as of March 18, 2019, by and between Jefferson County, Texas, a political subdivision of the State of Texas, ("LESSOR"), and ACS Executive Air, LLC., ("LESSEE") being a person, partnership or corporation authorized to do business in Jefferson County, Texas.

1. Premises. LESSOR is the owner and operator of the Jack Brooks Regional Airport ("Airport"). LESSOR hereby lets to LESSEE and LESSEE hereby leases from LESSOR the tract of land generally described as the Hangar 4 Location of Jack Brooks Regional Airport Hangar Park, in Exhibit "A" attached, containing approximately 22,750 sq. ft., more or less, located at the Airport; together with the right to use and enjoy all improvements thereon, whether existing or constructed or to be constructed, referred to herein as the "premises" or "leased premises."

As of the execution of this lease Hangar 4 is still erected, however severely dilapidated, and still in use. In consideration for the terms of this lease, LESSEE agrees to demolish Hangar 4, structure and slab, and rebuild a Hangar of similar size, at the sole cost of the LESSEE.

2. Right of Flight. LESSOR, for itself, its LESSEEs, permittees, successors and assigns, reserves the right of flight for the passage of all types of aircraft now in existence or hereafter created above the leased premises. LESSOR, its consignees, LESSEEs, permittees, licensees, successors and assigns shall likewise be entitled to cause such noise, smoke, vapors, sound effects and other distractions as may be reasonably inherent in landing at, taking off from, or operating aircrafts on the Airport.

3. Effective Date. The effective date of this lease shall be on the date the LESSEE delivers a fully signed lease after Jefferson County has executed the lease agreement. Lessee shall notify Lessor, in writing, of the construction completion date.

4. Term. The initial term of this lease shall be for a period of 468 calendar months (39 years),

plus the partial month, if any, following the effective date of this lease, unless sooner terminated or extended by virtue of a provision herein.

5. Rent. As rent for the premises and the Lessee's right and privileges hereunder, the Lessee agrees to pay the Lessor in accordance with the following schedule:

Years	Annual Base Rent
1-5	$0.24 per sq. ft.
6-10	$0.25 per sq. ft.
11-15	$0.26 per sq. ft.
16-20	$0.27 per sq. ft.
21-25	$0.28 per sq. ft.
26-30	$0.29 per sq. ft.
31-35	$0.30 per sq. ft.
36-39	$0.31 per sq. ft.

for the exclusive use of approximately 22,750 square feet of land. Rents shall be paid in monthly installments, in advance, on the first day of each month, in a sum equal to 1/12 of such annual base rent. Rental installments not paid by the fifteenth (15th) day of the month in which due shall bear interest from the fifteenth day of the month due until paid at the rate of 10% per annum.

6. Commencement of Rent. Rental payments as provided above shall be payable on the effective date of this lease as determined in Section 3 hereof.

7. Adjustment of Rent. The rent shall be adjusted as set forth in Section 5 above.

8. Taxes. Lessee agrees to pay any taxes or special assessments that may be levied against the leased premises, or against the leasehold interest, or against the Airport because of these leased premises, by any taxing unit or entity, whether levied against Lessor or Lessee, and Lessee further agrees to hold Lessor harmless from any claims or liens in connection with any such tax or special assessment attributable to the leased premises. Taxes payable by Lessee pursuant to this Section shall be subject to proration to account for the term of this Lease and the taxable value of the leased premises as compared to the taxable value of the larger

legal parcel of which the leased premises is a part, if applicable. If the Lessor is assessed taxes on the larger legal parcel which includes the leased premises, then Lessor shall pay such taxes and assessments to the taxing authority and Lessee shall reimburse Lessor for the taxes assessed on the taxable value of the leased premises within thirty (30) days of receipt of an invoice therefore and proof of payment by Lessor. If taxes are assessed on the premises made the subject of this lease, Lessee shall pay such taxes directly to the taxing authorities assessing the taxes.

9. Plans and Specifications. Attached hereto as Exhibit "B" is an artist's rendering of the improvements that LESSEE proposes to build on the premises. Execution of this agreement constitutes the acceptance by LESSOR of the appearance of the proposed improvements and LESSEE covenants to erect any improvements in substantial compliance with the appearance represented in Exhibit "B". Prior to any construction, plans and specifications for buildings and parking as required by Section 18, shall be submitted to LESSOR for approval which approval shall not be unreasonably withheld. All architectural and color schemes shall be consistent with airport requirements.

10. Building Setbacks To be determined by the parties after a survey is performed.

11. Construction Requirements. LESSEE shall include in all construction contracts entered into by it, in connection with any or all of the construction work, a provision requiring the contractor to indemnify, hold harmless, defend and insure Jefferson County, its officials, agents and employees against the risk of death, injury, or damage to persons or property, arising out of or in connection with the performance of any or all of such construction work.

LESSEE shall require the contractor to furnish liability insurance including contractual indemnity coverage in an amount not less than the maximum dollar amount of recovery permitted against a county by the Texas Tort Claims Act as it now exists or may be hereafter amended. LESSEE shall provide evidence to LESSOR of its compliance with this section prior to commencement of any construction. LESSEE covenants and agrees to hold LESSOR free and harmless from loss from each and every claim and demand of whatever nature, including but not limited to fines, assessments, and fees, made on behalf of or by any third person or

persons, for any wrongful act or omission on the part of LESSEE, his agents, servants, officers, directors, and employees, and from all loss and damages to any third person or persons by reason of such acts or omissions.

12. Workmanship. The LESSEE further covenants that all construction work to be performed by it or its contractor, including all workmanship or materials shall be of first class quality.

13. Utility Connections. LESSEE, at its own expense, shall construct utility connections such as it may desire from utility lines or pipelines in existence on the airport property or from outside the Airport, following existing roads or easements, unless express authority for deviation from existing roads or easements is given to it by the Commissioners' Court. LESSEE will be responsible for the installation of a sanitary sewer grinder pump system. In addition, should the pump system fail in the future for any reason, LESSEE will be responsible for the cost of maintenance and/or replacement of such pump. The deviation authority and additional easements will be granted by LESSOR, if needed by the LESSEE to achieve economy or convenience. If other property is subsequently leased by LESSOR to other tenants in the vicinity who choose to extend existing utility lines provided by this LESSEE to other property so leased, the subsequent tenants shall have the right to do so at their sole cost and expense, but LESSOR covenants that it will require each subsequent tenant, as a condition to the extension of the utility lines, to pay to present LESSEE a pro rata share of the original cost of extending utilities from present utility lines to the premises. However, the right of any subsequent tenant to extend utility lines is further conditioned that the extension will not impair the capability and capacity of the line as used by the present LESSEE.

14. Certificate of Completion. When the construction hereinabove provided for has been completed, the LESSEE shall, within a reasonable time thereafter, deliver to the LESSOR a certificate of LESSEE'S architect that the construction has been completed in compliance with all laws, ordinances and governmental rules, regulations and orders. LESSEE will also deliver to LESSOR two (2) copies of final construction documents, also called "As-builts", which will be included as part of this lease agreement as Exhibit C.

15. Proof of Payment. All improvements shall be free and clear of all mechanics' and other

liens and from liability arising from the construction of said improvements, and no later than 30 days after completion of construction LESSEE shall furnish to LESSOR full and satisfactory evidence in writing of the area of such improvements, the actual cost of such improvements and of the payment thereof, the value of such improvements immediately after construction, and that said improvements are free and clear of all mechanics' and other liens and from liability thereto arising from the construction.

16. Refuse and Trash. No refuse or trash shall be kept, stored or allowed to accumulate on the premises. LESSEE shall provide, at its sole cost and expense, necessary arrangements for adequate sanitation, handling and disposal from the airport of all trash, garbage and other refuse which results from tenants' business operations, including receptacles for the deposit of such trash, garbage, and other refuse.

17. Outside Storage Prohibited. Storage of vehicles, equipment, supplies or any other items outside of the building(s) is prohibited. For the purpose of this provision, the term "storage" shall mean the placing of vehicles, equipment, supplies or any other items outside the building and which vehicles, equipment, supplies or any other items do not serve as an actual day-to-day business function. LESSOR agrees not to store any items near LESSEE's premises.

18. Off-Street Parking. The LESSEE shall make provision for automobile parking for its employees, visitors, and other invitees on the premises. No parking shall be permitted on the streets immediately adjacent to the premises. The LESSEE further agrees to pave its on-premise parking facilities in order to provide a dust-free, all-weather surface. Pavement plans shall be approved by LESSOR prior to construction.

19. Permitted Uses. The LESSEE shall have the privilege of using, subject to the terms and conditions herein, the premises for the operation of an airplane hangar and any other lawful commercial activities including all services normally connected therewith.

20. Prohibited Uses. Without first obtaining LESSOR'S written consent, LESSEE shall not use the premises for

a. the sale of aircraft fuels, lubricants or propellants;

b. storage of items and equipment not normally associated with aircraft storage

c. the operation of any public restaurant, cafeteria, or kitchen stand

21. Quiet Enjoyment. LESSOR covenants and agrees that at the granting and delivery of this lease it has good title, free and clear of all liens and encumbrances; and that LESSOR has full right and authority to lease the premises as herein set forth. LESSOR further covenants that all things have happened and been done to make its granting of this lease effective, and LESSOR warrants to LESSEE peaceful possession and quiet enjoyment of the premises during the term hereof, upon performance of LESSEE'S covenants herein.

22. LESSEE's Estate. Title to all improvements constructed by LESSEE shall vest and remain in LESSEE during the term of this lease and LESSEE shall be entitled to any and all investment tax credits generated by reason of construction, installation, and operations on the premises. Subject to the rights of LESSEE'S mortgage (as provided in this Section and elsewhere herein) and to LESSEE'S right of reimbursement to the extent set out in this agreement, title to improvements shall pass to and vest in the LESSOR upon the effective date of a cancellation or termination of this lease. LESSEE shall have the right at any time prior to or subsequent to the construction of improvements to mortgage its leasehold estate in the premises and the improvements; and to assign its interest in this lease to any mortgagee who shall have advanced funds to the LESSEE under any loan, the proceeds of which have been used for the construction of the improvements or to refinance loans for the construction of improvements. Any mortgagee claiming under the LESSEE shall have the rights and privileges hereinafter set forth.

At the expiration or termination of this Lease, LESSEE agrees to: (1) surrender possession of the entire leased premises to LESSOR; (2) remove at LESSEE's expense any assets that LESSEE is entitled to remove as set forth below; and (3) otherwise return the leased premises to LESSOR. All fixed buildings, fencing, utilities, and other improvements placed on the leased premises shall remain on the leased premises upon the termination of this Lease and become

the sole property of LESSOR. Exceptions to the above are LESSEE's trade fixtures and personal property that can be removed from the leased premises without substantially altering or damaging other property.

23. LESSEE's Mortgagee. In the event LESSEE shall mortgage the leasehold estate and the improvements or assign this lease to any mortgagee who shall have advanced funds for the purposes described in the preceding Section 22, such mortgagee may give written notice of its mortgagee's interest to the LESSOR at LESSOR'S address shown herein.

Thereafter, LESSOR, prior to taking any action to cancel or terminate the lease, shall give to the mortgagee the same notices that are required to be given to the LESSEE prior to cancellation or termination, and if no notice is required to be given to the LESSEE, then a written notice to the mortgagee shall be given of the event or events which are alleged to be the basis of the right to cancel or terminate. The mortgagee shall have the right (a) to cure the default of the LESSEE, and (b) at its election, to foreclose its lien or security interest in the leasehold estate and improvements and this lease and to sell such leasehold estate and improvements (and LESSEE'S interest in this lease) at public or private sale, whereupon the purchaser shall succeed to all rights of the LESSEE hereunder. The mortgagee shall be accorded to a reasonable period of time in which to cure the default, taking into account the nature of the LESSEE'S default, and a reasonable period of time in which to effect foreclosure, taking into account the statutory requirements for foreclosure of its lien or security interest. Further, if LESSEE shall default under the terms of its mortgage, the mortgagee shall likewise have the rights and power of foreclosure and sale as are set out in the preceding portions of this Section. The LESSOR agrees to execute such documents as may be requested by the LESSEE or the LESSEE'S mortgagee to provide LESSEE with the ability to meet requirements for obtaining secured financing, provided that such documents do not render LESSOR liable for the payment of LESSEE'S indebtedness or encumber LESSOR'S remainder interest.

24. Fire Insurance. LESSEE shall procure from a company authorized to do business in the State of Texas and keep in force fire insurance, with extended coverage, upon the buildings located on the premises to the full insurable value thereof, as determined by the insurer, LESSOR shall be named as additional loss payee and LESSEE shall furnish LESSOR with

evidence that such coverage has been provided and is being maintained.

In the event of an insured damage to the premises, the insurance proceeds will be used for the purpose of restoring and reconstructing the improvements. However, if the improvements are more than 50% destroyed at any time during the term of this lease, the LESSEE may elect to terminate this lease by giving written notice thereof to LESSOR within 90 days after such destruction. If LESSEE so elects to terminate, insurance proceeds, to the extent necessary, shall be used to remove the damaged improvements, unless LESSOR shall notify LESSEE in writing that LESSOR wishes the damaged improvements to remain upon the land. If LESSEE shall fail to restore the improvements and shall also fail to terminate the lease in the manner aforesaid, LESSOR may, upon written notice to the LESSEE after such 90-day period, terminate the lease and remove damaged improvements at LESSEE'S expense.

25. Indemnification. LESSOR shall stand indemnified by LESSEE as herein provided. LESSEE is and shall be deemed to be an independent contractor and operator responsible to all parties for its respective acts or omissions, and LESSOR shall in no way be responsible therefore. In the use of the premises, in the erection or construction of any improvements thereon, and in the exercise or enjoyment of the privileges herein granted, LESSEE shall indemnify and save harmless LESSOR from any and all damages that may proximately result to any third person because of any negligence on the part of LESSEE.

26. Liability Insurance. LESSEE shall promptly, after the execution of this lease, obtain public liability insurance for personal injuries/death growing out of any one accident or other cause in the minimum sum of Three Hundred Thousand Dollars ($300,000.00) for one person and Five Hundred Thousand Dollars ($500,000.00) for two or more persons; and in addition shall provide property damage liability insurance in a minimum sum of Five Hundred Thousand Dollars ($500,000.00) for property damage growing out of any accident or other cause. The amounts of minimum coverage herein specified may be modified from time to time in compliance with Jefferson County standard requirements.

All policies shall name LESSOR, its officers, servants, agents, and employees as additional insureds. LESSEE shall furnish LESSOR with a certificate from the insurance carrier showing

such insurance to be in full force and effect or shall deposit with LESSOR copies of said policies. Each policy or certificate shall contain a provision that written notice of cancellation or any material change in the policy by the insurer shall be delivered to LESSOR, thirty (30) days in advance of the effective date thereof.

27. Licenses. The LESSEE shall procure from all governmental authorities having jurisdiction of the operations of the LESSEE hereunder, all licenses, franchises, certificates, permits or other authorizations as may be necessary for the conduct of its operations. LESSOR will cooperate with LESSEE in this endeavor.

28. LESSOR's Remainder Interest. The LESSEE agrees that it shall not enter into any contracts of a type which would permit a lien or liens to become attached to the remainder interest of Jefferson County, or suffer or permit a lien or liens to be imposed or attached to the leasehold interest, provided, LESSEE shall have the right, upon posting security satisfactory to the County, to contest the amount or legality of any lien attached to or levied against the leasehold interest.

29. Airport Regulations. The LESSEE covenants and agrees to observe and obey the rules and regulations of the Airport, Federal Aviation Administration, Transportation Security Administration, State of Texas, and any other entities having jurisdiction as promulgated by governmental authority, in the conduct of its operations at the premises.

30. Air Operations Area Security. LESSEE shall provide for the security of the Air Operations Area (AOA) to prevent ground entry or movement of unauthorized persons from or through the leased premises in accordance with any regulations imposed upon LESSOR by the Federal Aviation Administration. LESSEE will indemnify and hold harmless LESSOR, its officers and employees, from any charges, fines, or penalties that may be levied by any agency of the United States or the State of Texas by reason of LESSEE's failure to comply with this requirement.

31. Airport Hazard. The LESSEE and its successors and assigns, will not make or permit any use of the property which would interfere with landing or taking off of aircraft at the Airport, or otherwise constitute an airport hazard including such items as electrical and electronic

interference with communications, electrical or electronic equipment, creation of dust or glaring or misleading lights. Exterior hangar lights will be required to shine towards the ground, not horizontal or skyward.

32. Certification. LESSEE shall observe all applicable rules and regulations of the Federal Aviation Administration including requirements for Airport certification and safety codes.

33. Non-Discrimination. The LESSEE assures that it will undertake an affirmative action program as required by 14 Code of Federal Regulations (CFR) Part 152, Subpart E, to ensure that no person shall on the grounds of race, creed, color, national origin, or sex be excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. The LESSEE assures that no person shall be excluded on these grounds from participating in or receiving the services or benefits of any program or activity covered by this subpart. The LESSEE assures that it will require that its covered sub-organizations provide assurance to the LESSEE that they similarly will undertake affirmative action programs and that they will require assurances from their sub-organizations, as required by 14 CFR Part 152, Subpart E, to the same effect.

34. LESSEE's Maintenance Obligations. LESSEE shall at all times keep in a clean and orderly condition and appearance the premises and improvements thereon, equipment and personal property. LESSEE shall maintain, repair, replace and paint all or any part of the improvements on the premises including therein, without limitations thereto, walls, partitions, floors, ceilings, columns, windows, doors, glass of every kind, fixtures, systems for the furnishing of a fire alarm, fire protection, sprinkler, sewage, drainage and telephone service, including lines, pipes, mains, wires, conduits, and other equipment connected with or appurtenant to all such systems at its own expense as necessary. LESSOR shall have the right to enter upon the premises at reasonable times, in a manner that does not materially interrupt LESSEE's business, for the purpose of inspection, to determine LESSEE's compliance with LESSEE's obligation under this Section 34 and or Section 35.

35. Enforcement Rights. If LESSEE fails to perform its obligations under Section 34, LESSOR shall have the right to give written notice to the LESSEE specifying the deficiencies in

maintenance. If within 30 days after receipt of such notice, LESSOR does not make arrangements for the curing of such deficiencies in maintenance, LESSOR shall have the right to enter the premises and perform the necessary maintenance, the cost of which shall be borne by the LESSEE.

36. LESSEE shall pay all costs and charges for utility services requested by and furnished to the LESSEE during the term hereof. LESSEE shall, however, have the right to connect to any and all storm and sanitary sewers and water and utility outlets located on or adjoining property of the LESSOR. The LESSEE shall pay for all cost and expense attendant to such connections, but no charge shall be assessed by the LESSOR for the right to make such connections.

37. Ingress and Egress. LESSEE and approved sub-lessee, and their contractors, suppliers of materials and furnishers of services, and employees and invitees, shall have the right of ingress and egress between the premises and the public rights-of-way outside the Airport by means of existing access roads, the same to be used in common with others having rights of passage within the Airport, provided that the Airport may from time to time substitute other means of ingress and egress which shall be reasonably equivalent to the means now provided. The use of such roadways shall be subject to reasonable rules and regulations established by the Airport.

38. LESSEE's Right to Cancel. This lease shall be subject to cancellation, at the option of LESSEE, upon the default of LESSOR in the performance of any covenant or agreement herein required to be performed by LESSOR and the failure of LESSOR to remedy such default for a period of thirty (30) days after receipt from LESSEE or written notice to remedy the same. LESSEE may exercise its right of cancellation by written notice to LESSOR at any time after the lapse of the applicable periods of time. This lease shall then terminate as of the termination date specified by LESSOR in such notice.

39. Amounts Payable Upon Cancellation by LESSEE. In the event this lease is canceled by LESSEE pursuant to LESSEE's rights under this lease, rental due shall be payable only to the date of termination, and the LESSOR shall pay to LESSEE liquidated damages computed as

follows:

a. The liquidated damages shall be the actual construction cost of the fixed improvements less 2% of the cost for each year or partial year elapsed since the substantial completion of the improvements.

b. Actual construction cost shall be certified by LESSEE and approved in writing by the LESSOR within 30 days after construction is completed. Upon payment by LESSOR to LESSEE of liquidated damages, as computed above, LESSEE shall have no further estate in the improvements and LESSOR shall have exclusive right thereto.

40. LESSEE's Option to Remove. In lieu of liquidated damages provided in Section 39 hereof, LESSEE may, at its option, remove the improvements.

41. Events of Cancellation. This lease shall be subject to cancellation at the option of the LESSOR upon occurrence of any of the following events:

a. Failure of LESSEE to pay rent as herein provided within thirty (30) days after LESSOR shall have given LESSEE written notice of such default.

b. The permanent abandonment of the premises by the LESSEE.

c. Default by LESSEE in the performance of any of the covenants and conditions required herein (except rental payments) to be kept and performed by the LESSEE, if such default continues, without a good faith attempt by LESSEE to remedy the default, for a period of thirty (30) days after receipt of written notice from LESSOR specifying the default.

d. Any other event specifically named in this lease which affords LESSOR the right to cancel.

42. Method of Cancellation. LESSOR may exercise such right to cancellation by written notice to LESSEE at any time after the lapse of the applicable periods of time and this lease shall terminate as of the termination date specified by LESSOR in such notice.

43. LESSOR's Rights Upon Cancellation. In the event LESSOR cancels this lease in the manner

set out of this section LESSOR shall take possession of the premises and terminate LESSEE's rights therein. In any action brought by either party against the other for enforcement of the terms of this lease, the prevailing party shall be entitled to recover reasonable attorney's fees in addition to such other relief as may be awarded.

44. Airport Expansion. In the event LESSOR requires the premises for expansion or development of the Airport, LESSOR reserves the right, upon six (6) months' written notice to LESSEE, to relocate or replace LESSEE's improvements in substantially the same form acceptable to the LESSEE at another comparable location on the Airport acceptable to the LESSEE. The replacement facility shall be completed prior to relocation so that there is no interruption of LESSEE's business operation. All costs and expenses associated with the relocation shall be borne by the LESSOR.

45. Governmental Agreements. This lease shall not impair any existing or future agreement between LESSOR and the United States relative to the operation or maintenance of the Airport, the execution of which has been or may be required as a condition precedent to the expenditure of Federal Funds for the development of the Airport. Should the effect of such agreement with the United States Government be to take any of the property under the lease, or substantially destroy the commercial value of the improvements, or to materially impair LESSEE's operations, LESSOR shall relocate the improvements in the manner described in Section 44.

46. Option in Event of Relocation. In the event a relocation of improvements is required by the LESSEE under Section 44, or necessitated under Section 45 above, LESSEE shall have the option, in lieu of accepting such relocated premises, to cancel this lease prior to the commencement of construction of relocation facilities, in which event, LESSEE shall be entitled to the liquidated damages provided in Section 39.

47. LESSEE shall not assign this lease or sublet all or any portion of the premises without the prior written consent of LESSOR, which consent shall not be unreasonably withheld. The LESSEE's sub-lessee shall be entitled to all of the same rights as the LESSEE (including but not limited to fuel purchase rights as set forth herein) and subjected to all of the same restrictions

as set forth herein. However, LESSOR's consent shall not be required for any (a) assignment of subletting to an affiliate or subsidiary of the LESSEE, or (b) the assignment or subletting to any mortgagee or to a purchaser from any mortgagee at foreclosure.

48. Other Instruments. Upon the request of either party, the LESSOR and the LESSEE will execute a recordable short form lease evidencing that the premises have been demised to the LESSEE and a recordable instrument evidencing the term of this lease and its commencement date, when commencement date shall have been determined.

49. Paragraph Headings. The paragraph headings contained herein are for convenience and reference and are not intended to define or limit the scope of any provision of this lease.

50. Notices. Notices to LESSOR provided for herein shall be sufficient if sent by Registered or Certified Mail, postage prepaid, addressed to:

Airport Manager
Jack Brooks Regional Airport
5000 Jerry Ware Drive
Beaumont, TX 77705

and notices to said LESSEE, if sent by Registered or Certified Mail, postage prepaid addressed to:

ACS Executive Air, LLC
350 Pine St, Suite 800
Beaumont, TX 77701

and/or to such other addresses as the parties may designate to each other in writing from time to time.

51. Successors and Assigns. All of the terms, covenants and agreements herein contained shall be binding upon and shall inure to the benefit of successors and assigns of the respective parties hereto.

52. Termination of Lease. This lease shall terminate at the end of the full term hereof. Upon such termination, LESSEE shall have no further right or interest in any of the land hereby demised or in any of the improvements thereon.

53. Fueling. LESSEE may NOT install and operate its own fueling facility for any use. LESSEE shall not sell fuel to the public or operate a fueling operation as a fixed base operator in competition with the LESSOR or any other fixed base operator assigned by the LESSOR. Lessee may purchase fuel "into plane" from the County owned and operated fixed base operation at 10% of the County's lowest negotiated price for fuel plus the County's lowest negotiated price for fuel, or $0.35 per gallon plus County's lowest negotiated price for fuel, or whichever is less. The amount will be rounded up to the next penny if the amount is at .005 or above; or, the amount will be rounded down if the amount is below .005. In other words, if the County purchases fuel for $1.01 per gallon, Lessee shall pay $1.11 per gallon. It is understood/agreed by LESSEE that the County's cost of fuel per gallon can increase and decrease weekly. If LESSEE pays the Airport for fuel purchases with a check in a timely manner, LESSEE will receive an additional $0.05 per gallon discount.

The parties agree that the fueling can commence on the same effective date described in Section 3. If for any reason LESSEE is unable to complete substantial construction on improvements within 360 days of the execution of this agreement, LESSEE agrees to refund Airport for the difference in the based price of fuel and the price of fuel paid under this lease agreement, for all fuel sold under this lease agreement.

54. Attornment. Should Lessor sell, convey or transfer its interest in the premises, then Lessee shall attorn to such succeeding party as its Lessor under this lease promptly upon any such succession, provided that such succeeding party assumes all of Lessor's duties and obligations under this lease and agrees not to disturb Lessee's leasehold interest hereunder in accordance with this Section as long as Lessee is not in material default beyond any cure period hereunder.

55. Entire Agreement, Amendment and Binding Effect. This lease constitutes the entire agreement between Lessor and Lessee relating to the subject matter hereof and all prior agreements relative hereto which are not contained herein are terminated. This lease may be amended only by a written document duly executed by Lessor and Lessee, and any alleged amendment which is not so documented shall not be effective as to either party.

56. Severability. This lease is intended to be performed in accordance with and only to the extent permitted by the law. If any provision of this lease or the application thereof to any person or circumstance shall, for any reason and to any extent, be invalid or unenforceable, but the extent of the invalidity or unenforceability does not destroy the basis of the bargain between the parties as contained herein, the remainder of this lease and the application of such provision to other persons or circumstances shall not be affected thereby, but rather shall be enforced to the greatest extent permitted by law.

57. Construction. Unless the context of this lease clearly requires otherwise, (a) pronouns, wherever used herein, and of whatever gender, shall include natural persons and corporations and associations of every kind and character; (b) the singular shall include the plural wherever and as often as may be appropriate; (c) the term "includes" or including" shall mean including without limitation; and (d) the words "hereof" or "herein" refer to this entire lease and not merely the Section or Article number in which such words appear. Article and Section headings in this lease are for convenience of reference and shall not affect the construction or interpretation of this lease. Any reference to a particular "Article" or Section" shall be construed as referring to the indicated article or section of this lease.

58. Force Majeure. Lessee shall be entitled to rely upon force majeure as an excuse for timely

performance hereunder only as expressly provided herein and shall not be entitled to rely upon force majeure as an excuse for timely performance unless Lessee (a) uses its best efforts to overcome the effects of the event of force majeure, (b) gives written notice to Lessor within twenty (20) days after the occurrence of the event describing with reasonable particularity the nature thereof, (c) commences performance of its obligation hereunder immediately upon the cessation of the event and (d) gives written notice to Lessor within twenty (20) days after the cessation of the event advising Lessor of the date upon which the event ceased to constitute an event of force majeure.

Force majeure shall mean:

(a) acts of God, landslides, lightning, earthquakes, hurricanes, tornadoes, blizzards and other adverse and inclement weather, fires, explosions, floods, acts of public enemy, wars, blockades, insurrections, riots or civil disturbances;

(b) labor disputes, strikes, work slowdowns, or work stoppages but nothing herein contained shall require the party subject to such labor disputes, strikes, work slowdowns, or work stoppages to settle or otherwise resolve same;

(c) orders or judgments of any federal, state or local court, administrative agency or governmental body, if not the result of willful or negligent action of the party relying thereon;

(d) power failure and outages affecting the leased premises; and

(e) any other similar cause or event, provided that the foregoing is beyond the reasonable control of the party claiming force majeure.

59. Interpretation. Both Lessor and Lessee and their respective legal counsel have reviewed

and have participated in the preparation of this lease.

60. Multiple Counterparts. This lease may be executed in two or more counterparts, each of which shall be an original, but all of which shall constitute but one instrument.

EXECUTED in triplicate originals as of the date first above written.

LESSOR:

BY:_____

Jeff Branick

Jefferson County Judge

ATTEST:

BY:_____

Carolyn Guidry

Jefferson County Clerk

LESSEE:

BY:_____

ACS Executive Air, LLC

Authorized Representative– ACS Executive Air, LLC

Exhibit A – Lease Location

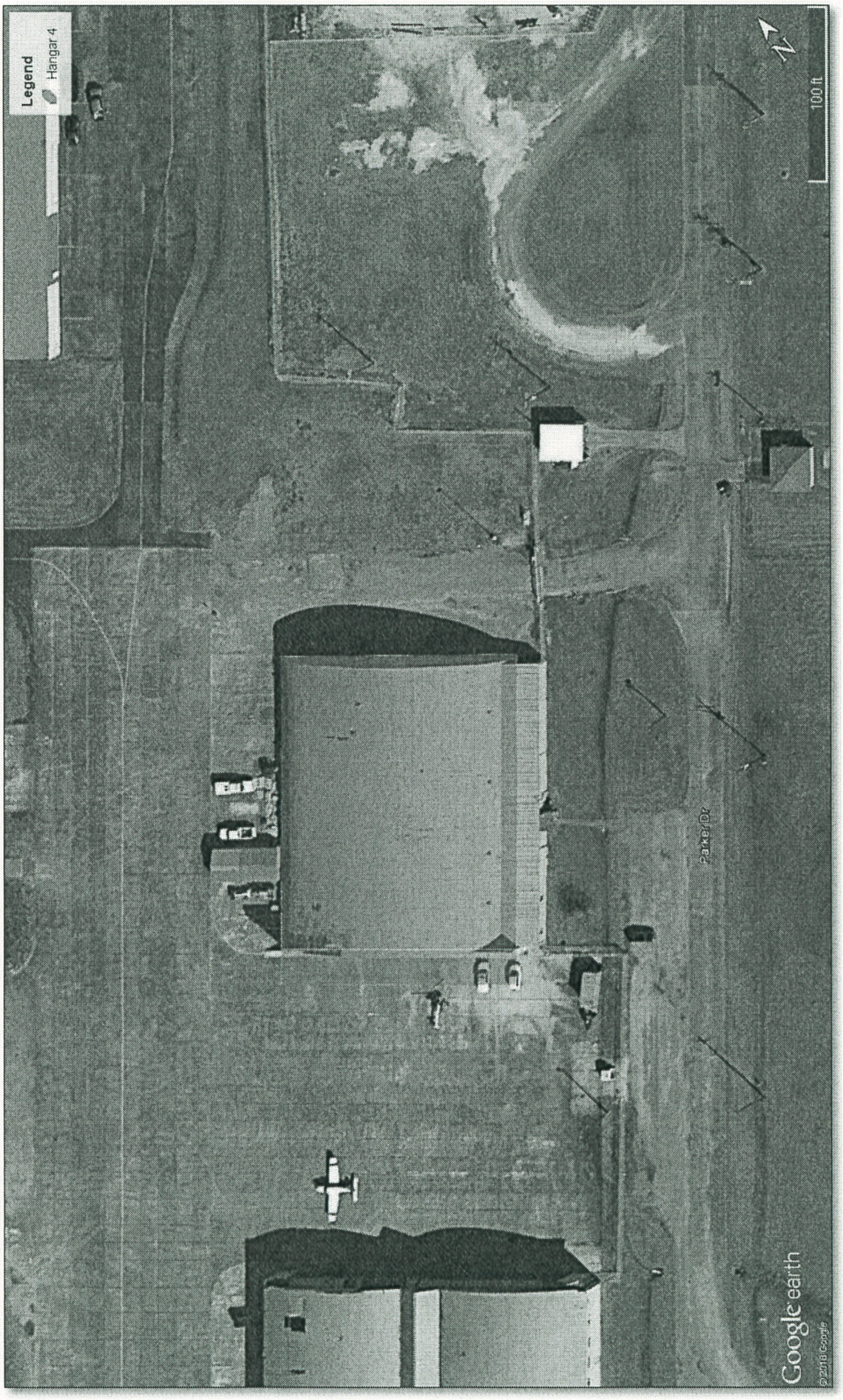


Exhibit B – Artist Rendering

(Attach behind this page)

Exhibit C – Final Construction Documents "As Builts"

(Attach behind this page)

MEMO

TO: Ms. Fran Lee, Auditing

FROM: Commissioner Everette Alfred

DATE: March 8, 2019

RE: **Transfer Funds**

Please transfer **$15,000** from account # 114-0402-431.30-79 (~~Contractual Service~~ Crushed Stone) into account # 114-0402-431.50-53 (Equipment Rental) for additional cost of renting equipment.

Thank you.

EA/nr

Jefferson County Courthouse
P.O. Box 4025
Beaumont, Texas 77704

Office (409) 835-8442
Fax (409) 835-8628
eddiearnold@co.jefferson.tx.us

Eddie Arnold
Jefferson County
Commissioner Pct. #1

MEMORANDUM

TO: **Fran Lee, Auditing**

FROM: **Ann Shorts, Pct. #1 Road and Bridge**

DATE: **3-6-19**

RE: **Transfer**

We are requesting a budget transfer as follows:

$6,000.00 from Account #111-0109-431.60-11

Move the above amounts to Account #111-0109-431.60-02

The transfer is requested for purchase of 2-Toughbook laptop and 1-GoPro.

Please put this on the Monday March 11, 2019 agenda for Court's approval.

Thank you,

Pct. #1 Road and Bridge

QUOTE CONFIRMATION

PEOPLE WHO GET IT

DEAR VANESSA LACHNEY,

Thank you for considering CDW•G for your computing needs. The details of your quote are below. Click here to convert your quote to an order.

QUOTE #	QUOTE DATE	QUOTE REFERENCE	CUSTOMER #	GRAND TOTAL
1BXW06C	3/5/2019	PCT 1-ANN	2735480	$3,028.07

QUOTE DETAILS

ITEM	QTY	CDW#	UNIT PRICE	EXT. PRICE
Tripp Lite 150W Compact Car Inverter 12V 120V 2-Port USB Charging 1 Outlet Mfg. Part#: PV150USB UNSPSC: 39121006 Contract: Texas IT HW Peripherals -Tripp Lite - DIR-TSO-3865 (DIR-TSO-3865)	2	4445286	$27.82	$55.64
Panasonic Toughbook 54 Lite - 14" - Core i5 6300U - 4 GB RAM - 500 GB HDD Mfg. Part#: CF-54D2900VM UNSPSC: 43211503	2	4219274	$1,251.29	$2,502.58
GoPro HERO7 Black - action camera Mfg. Part#: CHDHX-701 UNSPSC: 45121516 Contract: NIPA ESCR4 Tech & IWB Solutions Products/Services (R160201)	1	5280869	$432.35	$432.35

PURCHASER BILLING INFO		
Billing Address: JEFFERSON COUNTY 1149 PEARL ST FL 6 MIS DEPT BEAUMONT, TX 77701-3638 **Phone:** (409) 835-8447 **Payment Terms:**	**SUBTOTAL**	$2,990.57
	SHIPPING	$37.50
	SALES TAX	$0.00
	GRAND TOTAL	**$3,028.07**
DELIVER TO	**Please remit payments to:**	
Shipping Address: JEFFERSON COUNTY ATTN:VANESSA LACHNEY 1149 PEARL STREET FLOOR 6TH BEAUMONT, TX 77701 **Phone:** (409) 835-8447 **Shipping Method:** FEDEX Ground	CDW Government 75 Remittance Drive Suite 1515 Chicago, IL 60675-1515	

Need Assistance? CDW•G SALES CONTACT INFORMATION

Dave Kriedemann | (866) 815-7582 | davekri@cdwg.com

This quote is subject to CDW's Terms and Conditions of Sales and Service Projects at http://www.cdwg.com/content/terms-conditions/product-sales.aspx
For more information, contact a CDW account manager

Fran Lee

From: Shenita Keyes <skeyes@co.jefferson.tx.us>
Sent: Wednesday, March 6, 2019 3:03 PM
To: 'Fran Lee'
Subject: Water Billing for Sub-Courthouse

Port Arthur Maintenance requesting additional funding in the amount of $7,000 for Water and Sewer to cover the current billing issue.

120-6084-416.4057 $ 7,000
120-9999.415.9999 $ 7,000

Thanks
Shenita Keyes
Maintenance Port Arthur TX
409-983-8323

JEFFERSON COUNTY, TEXAS

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For The Fiscal Year Ended
September 30, 2018

JEFFERSON COUNTY, TEXAS

COMPREHENSIVE ANNUAL

FINANCIAL REPORT

FOR THE FISCAL YEAR ENDED

SEPTEMBER 30, 2018

Prepared by:
Jefferson County
Auditor's Office
1149 Pearl Street
Beaumont, Texas 77701

JEFFERSON COUNTY, TEXAS
COMPREHENSIVE ANNUAL FINANCIAL REPORT
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

TABLE OF CONTENTS

PAGE

INTRODUCTORY SECTION

County Auditor's Letter of Transmittal I
Certificate of Achievement for Excellence in Financial Reporting VII
Organization Chart IX
Schedule of Elected and Selected Appointed Officials X

FINANCIAL SECTION

Independent Auditors' Report 1
Management's Discussion and Analysis 5

BASIC FINANCIAL STATEMENTS:

Government-wide Financial Statements:

Statement of Net Position 19
Statement of Activities 20

Fund Financial Statements:

Balance Sheet – Governmental Funds 22
Reconciliation of the Governmental Funds Balance Sheet to the Statement of Net Position 23
Statement of Revenues, Expenditures, and Changes in Fund Balances – Governmental Funds 24
Reconciliation of the Statement of Revenues, Expenditures, And Changes in Fund Balances of Governmental Funds to the Statement of Activities 25
Statement of Net Position - Proprietary Funds 26
Statement of Revenues, Expenses, and Changes in Net Position - Proprietary Funds 27
Statement of Cash Flows - Proprietary Funds 28
Statement of Fiduciary Net Position - Agency Funds 29

Notes to the Financial Statements:

Note 1: Summary of Significant Accounting Policies 30
Note 2: Deposits and Investments 42
Note 3: Property Taxes and Other Receivables 43
Note 4: Interfund Receivables, Payables, and Transfers 44
Note 5: Capital Assets 45

TABLE OF CONTENTS

PAGE

Note 6: Operating Leases 47
Note 7: Long-Term Debt 48
Note 8: Defined Benefit Pension Plan 51
Note 9: Other Post-Employment Benefits 57
Note 10: Deferred Compensation Plan 60
Note 11: Individual Funds Deficit Equity Balances 61
Note 12: Risk Management 61
Note 13: Public Entity Risk Pool 62
Note 14: Construction and Other Significant Commitments 63
Note 15: Contingent Liabilities 64
Note 16: Tax Abatements 64
Note 17: Prior Period Adjustments 65
Note 18: Restatements and Reclassifications 65
Note 19: Recent Accounting Pronouncements 65

REQUIRED SUPPLEMENTARY INFORMATION:

Schedule of Revenues, Expenditures and Changes in Fund Balances - Budget and Actual (GAAP) - General Fund 67
Notes to the Required Supplementary Information 68
Schedule of Changes in Net Pension Liability and Related Ratios 69
Texas County and District Retirement System – Schedule of Employer Contributions 70
Notes to Schedule of Employer Contributions 71
Schedule of Changes in Total OPEB Liability and Related Ratios 72

COMBINING AND INDIVIDUAL FUND INFORMATION AND OTHER SUPPLEMENTARY INFORMATION:

General Fund - Schedule of Expenditures - Budget and Actual (GAAP) 73
Nonmajor Governmental Funds:
Combining Balance Sheet - Nonmajor Governmental Funds - Summary 75
Combining Statement of Revenues, Expenditures, and Changes in Fund Balances - Nonmajor Governmental Funds - Summary 76
Special Revenue Funds:
Combining Balance Sheet - Nonmajor Governmental Funds - Special Revenue 78

TABLE OF CONTENTS

PAGE

Combining Statement of Revenues, Expenditures, and Changes in Fund Balances - Nonmajor Governmental Funds - Special Revenue 84
Combining Balance Sheet - Nonmajor Governmental Funds - Special Revenue - Probation Department Funds 91
Combining Statement of Revenues, Expenditures, and Changes in Fund Balances - Nonmajor Governmental Funds - Special Revenue - Probation Department Funds 95
Combining Balance Sheet - Nonmajor Governmental Funds - Special Revenue - Grant Funds 98
Combining Statement of Revenues, Expenditures, and Changes in Fund Balances - Nonmajor Governmental Funds - Special Revenue - Grant Funds 102
Capital Project Funds:
Combining Balance Sheet - Nonmajor Governmental Funds - Capital Projects 108
Combining Statement of Revenues, Expenditures, and Changes in Fund Balances - Nonmajor Governmental Funds - Capital Projects 110
Debt Service Funds:
Combining Balance Sheet - Nonmajor Governmental Funds - Debt Service 113
Combining Statement of Revenues, Expenditures, and Changes in Fund Balances - Nonmajor Governmental Funds - Debt Service Funds 114
Combined Schedule of Revenues, Expenditures and Changes in Fund Balances - Budget and Actual (GAAP)- Debt Service Funds 115
Schedule of Revenues, Expenditures, and Changes in Fund Balances - Budget and Actual (GAAP) - Debt Service – 2012 Refunding Bond 116
Schedule of Revenues, Expenditures, and Changes in Fund Balances - Budget and Actual (GAAP) - Debt Service – 2013 Refunding Bond 117
Internal Service Funds:
Combining Statement of Net Position - Internal Service Funds 119
Combining Statement of Revenues, Expenses, and Changes in Net Position - Internal Service Funds 120
Combining Statement of Cash Flows - Internal Service Funds 121

Fiduciary Funds:
Combining Statement of Fiduciary Assets and Liabilities - Agency Funds 124

TABLE OF CONTENTS

PAGE

STATISTICAL SECTION

Table 1 -	Net Position by Component	129
Table 2 -	Changes in Net Position	130
Table 3 -	Governmental Activities Tax Revenues by Source	132
Table 4 -	Fund Balances of Governmental Funds	133
Table 5 -	Changes in Fund Balances of Governmental Funds	134
Table 6 -	Assessed Value and Estimated Actual Value of Taxable Property	136
Table 7 -	Property Tax Rates - Direct and Overlapping Governments	137
Table 8 -	Principal Taxpayers	138
Table 9 -	Property Tax Levies and Collections	139
Table 10 -	Ratio of Outstanding Debt by Type	140
Table 11 -	Ratio of General Bonded Debt Outstanding	141
Table 12 -	Direct and Overlapping Governmental Activities Debt	142
Table 13 -	Legal Debt Margin Information	143
Table 14 -	Demographic and Economic Statistics	144
Table 15 -	Principal Employers	145
Table 16 -	Full-time Equivalent County Employees by Function	146
Table 17 -	Operating Indicators by Function	147
Table 18 -	Capital Asset Statistics by Function	148

INTRODUCTORY

SECTION

PATRICK SWAIN
COUNTY AUDITOR
(409) 835-8500

1149 PEARL ST. - 7TH FLOOR
BEAUMONT, TEXAS 77701

March 8, 2019

Citizens of Jefferson County, Texas:

Honorable District Judges:
Kent Walston, Presiding Judge, 58th District Court
John Stevens, Jr., Judge, Criminal District Court
Justin Sanderson, 60th District Court
Baylor Wortham, Judge, 136th District Court
Mitch Templeton, Judge, 172nd District Court
Raquel West, Judge, 252nd District Court
Randy Shelton, Judge, 279th District Court
Larry Thorne, Judge, 317th District Court

Honorable Commissioners' Court:
Jeff Branick, County Judge
Eddie Arnold, Commissioner, Precinct No. 1
Brent Weaver, Commissioner, Precinct No. 2
Michael "Shane" Sinegal, Commissioner, Precinct No. 3
Everette "Bo" Alfred, Commissioner, Precinct No. 4

The County Auditor's Office ("the Auditor's Office") is pleased to present the Comprehensive Annual Financial Report ("CAFR") of Jefferson County, Texas (the "County") for the fiscal year ended September 30, 2018. This report is submitted in accordance with Section 114.025 of the Texas Local Government Code and has been prepared by the County Auditor's staff.

Management assumes full responsibility for the completeness and reliability of the information contained in this report, based upon a comprehensive framework of internal controls that it has established for this purpose. Because the cost of internal controls should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements.

Whitley Penn, LLP, Certified Public Accountants, has issued an unmodified ("clean") opinion on the County's financial statements for the year ended September 30, 2018. The independent auditors' report is located at the front of the financial section of this report.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview, and analysis of the basic financial statements. MD&A complements this letter of transmittal and should be read in conjunction with it.

PROFILE OF THE GOVERNMENT

Jefferson County was created in 1836 and organized in 1837 as one of the original counties of the Republic of Texas. It is a 954 square mile county that is located on the upper Texas Coast and is a component of the Beaumont-Port Arthur-Orange Metropolitan Statistical Area. According to the U.S. Department of Commerce-Bureau of the Census, the 2018 population of the County was 256,299. The County is empowered to levy a property tax on both real and personal property located within its boundaries.

Jefferson County is a political subdivision of the State of Texas and the Commissioners' Court is the governing body of the County. It is composed of the County Judge elected from the County at large, and four Commissioners, each elected from a separate precinct, all elected for four-year terms. The County Judge is the presiding officer of the Commissioners' Court.

The County (primary government) solely or in cooperation with other local governmental entities provides a full range of services authorized by the Texas Constitution and Statutes that includes construction and maintenance of roads and bridges, health and housing services, assistance to indigents, juvenile and adult justice programs, economic development, recreation and cultural enrichment, an airport, an entertainment complex, and general administration.

The combined financial statements of the County as a financial reporting entity report all activities, organizations, and functions of the County, both as the primary government and its legally separate components units for which (1) the elected officials of the County are financially accountable and/or (2) exclusion of component units activities would cause the County's financial statements to be misleading or incomplete. The County's component units have been reported as blended with the County as the primary government or as discrete (separate) component unit, as appropriate. Criteria used by the County for including activities in preparing these financial statements are in conformity with GASB 14, *The Financial Reporting Entity,* GASB 39, *Determining Whether Certain Organizations are Component Units,* GASB 61, *The Financial Reporting Entity: Omnibus- an amendment of GASB Statements No. 14 and No 34*, and GASB 80, *Blending Requirements for Certain Component Units*. Based on the requirements of these accounting standards, the County reports the Southeast Texas Government Employee Benefits Pool as a blended component unit.

The County is required to adopt a final budget no later than close of the fiscal year. This annual budget serves as the foundation for the County's financial planning and control. The level of budgetary control is the department within the individual funds. The County maintains an encumbrance accounting system as a method to accomplish budgetary control. Department heads

may transfer resources within a department as needed. Transfers between departments, however, require approval by Commissioners' Court.

FACTORS AFFECTING FINANCIAL CONDITIONS

Local economy

The information presented in the financial statements is perhaps best understood when it is considered from the broader perspective of the specific environment within which the County operates.

The area is served by deep-water ports located at Beaumont, Port Arthur, Orange, and Sabine Pass. The Sabine Neches Waterway provides deep-water access to ocean-going vessels, which are served by public ports within the County. The waterway is the 3rd largest port in the U.S. by tonnage, the largest U.S. exporter of crude oil, LNG, and home to over 60% of the U.S. strategic petroleum reserves.

The County is traversed by Interstate Highway 10, U.S. Highways 90 and 69-96-287, State Highways 73, 87, and 105 and three farm-to-market roads. Rail and motor freight carriers also provide freight service to the County. The Jack Brooks Regional Airport located between Beaumont and Port Arthur provides passenger and freight service and is currently serviced by one commercial commuter passenger air carrier.

The economy of the County is based primarily on petroleum refining; the production and processing of petrochemicals, bio-fuels other chemicals, and synthetic rubber; the fabrication of steel and steel products; shipping activity; the manufacture of wood, pulp, food and feed products; agriculture; and health care services. The County continues to diversify its economic base as evidenced by the increase of jobs in the services and government sectors. The County is also home to the largest military off-load port in the world. Jefferson County is home to Lamar University, Lamar Institute of Technology, and Lamar State College – Port Arthur. Lamar is recognized nationally as one of the premier institutions for providing engineering, business, education, and pre-med degrees at a very cost-competitive value. Lamar Institute of Technology along with industry and union training organization are providing the preparation for tomorrow's careers in our ever expanding industrial base.

Several large projects are in construction, permitting, and development for the area and the County continues to work with other taxing entities to create a business environment conducive to this growth. These include such notables as Lucite, Air Products, Vitol, Golden Pass Products, OCI, Exxon Mobil, Golden Pass LNG, Sempra Energy, Valero, Total/BASF, Phillips 66, Entergy Transfer Partners, and American Ethane.

Petrochemical expansions at the Motiva, Total, and Valero facilities located in Jefferson County represent approximately $15 billion in project improvements. In addition, hundreds of millions of

dollars are being spent on terminal and pipeline facilities to support these projects. Construction of the Trans-Canada Keystone XL pipeline which will deliver Canadian tar sands crude to Jefferson County and help in relieving our dependence on oil from more politically volatile regions has received federal permit approval. In addition, recent rail terminal facility expansions and new construction has significantly increased the transportation of Canadian tar sands oil and bitumen to our area for processing by area refineries.

Cheniere, one of two companies with Liquefied Natural Gas Terminals on the border of the Texas/Louisiana Coast, is completing construction of a $10 billion liquefaction facility. Golden Pass LNG opened their terminal in mid-2011. With their opening, our ship channel is now home to over 40% of the nation's LNG capacity. Golden Pass LNG received the permits allowing it to build a $10 billion gas liquefaction facility in Jefferson County and is expected to begin construction in early 2019. Sempra Energy is still waiting on a permit from federal authorities and is expected very soon.

The County has participated in a study by the U.S. Army Corps of Engineers into the feasibility of deepening the Sabine-Neches waterway. This will allow ports in Southeast Texas, the third largest in the nation, to accommodate newer deep draft vessels and thus remain competitive with other ports on the Gulf Coast. Recently, the U.S. Army Corps of Engineers issued their "Chief's Report" which paves the way for federal funding of this project. The U.S. House and Senate recently passed legislation which was signed by the President authorizing the construction of the waterway improvements at a cost in excess of $1 billion. Congressional appropriations for the project have been made and construction will begin in 2019.

The County continues to work with industry leaders, the Texas Workforce Commission, Lamar Institute of Technology, Lamar University and non-profit groups to supply a workforce able to handle the growing labor needs of the County. This is especially critical given the interest of the international community in locating facilities in our county.

The resurgence in U. S. oil and gas exploration and production has made the County the place of choice for those industrial sectors seeking to exploit opportunities to profit from historically low priced energy commodities. Our excellent water bound, rail, highway, and pipeline infrastructure, the readily availability of water resources, and our business-friendly governmental environment, coupled with a lower than average tax environment, has caught the attention of energy and manufacturing companies worldwide. As a result, the County fully expects a significant increase in industrial and commercial ad valorem values over the next ten years.

Long-term financial planning & relevant financial policies

Commissioners' Court continues to follow their policy guideline for budgetary and planning purposes of building and maintaining an unassigned fund balance in the general fund of at least 15% of total general fund expenditures and transfers. The County ended the fiscal year with an unassigned fund balance of 29.5% of total general fund expenditures and transfers. This falls within the policy guidelines.

Major Initiatives

The Commissioners' Court set the property tax rate at $ .364977 per $100 of assessed property valuation to provide funds for services and debt service for fiscal year 2018. Budget initiatives for fiscal year 2018 included:

- Slightly reduce the property tax rate equal to the effective tax rate.
- Provide a 3% salary increase for all employees.
- Identified budget cuts where available to help offset increase in the employees' retirement rate as set by TCDRS and a 10% increase in employee health insurance rates for both active and retirees.
- Commissioners' Court utilized previously transferred funds to complete outstanding capital projects.
- Maintained capital expenditures for durable goods to replace needed equipment to necessary levels.

AWARDS

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to Jefferson County, Texas for its comprehensive annual financial report (CAFR) for the fiscal year ended September 30, 2017. This was the twentieth consecutive year that the government has achieved this prestigious award.

In order to be awarded a Certificate of Achievement, a government unit must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe our current report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to GFOA to determine its eligibility for another certificate.

ACKNOWLEDGEMENTS

The preparation of this report could not have been accomplished without the dedicated services of the staff of the County Auditor's Office. I express my sincere appreciation to all the members of this office who contributed to its preparation. Also, I express my appreciation to the members of the Commissioners' Court, their staff, and all other County officials and employees who have given their

support in planning and conducting the financial operations of Jefferson County, Texas in a responsible manner.

REQUEST FOR INFORMATION

This financial report is designed to provide an overview of the County's finances for individuals who are interested in this information. Questions concerning any of the data provided in this report or requests for additional information should be addressed to the County Auditor's Office, 1149 Pearl Street 7th Floor, Beaumont, Texas 77701.

Patrick Swain, C.P.A.
County Auditor
Jefferson County, Texas

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Jefferson County

Texas

For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

September 30, 2017

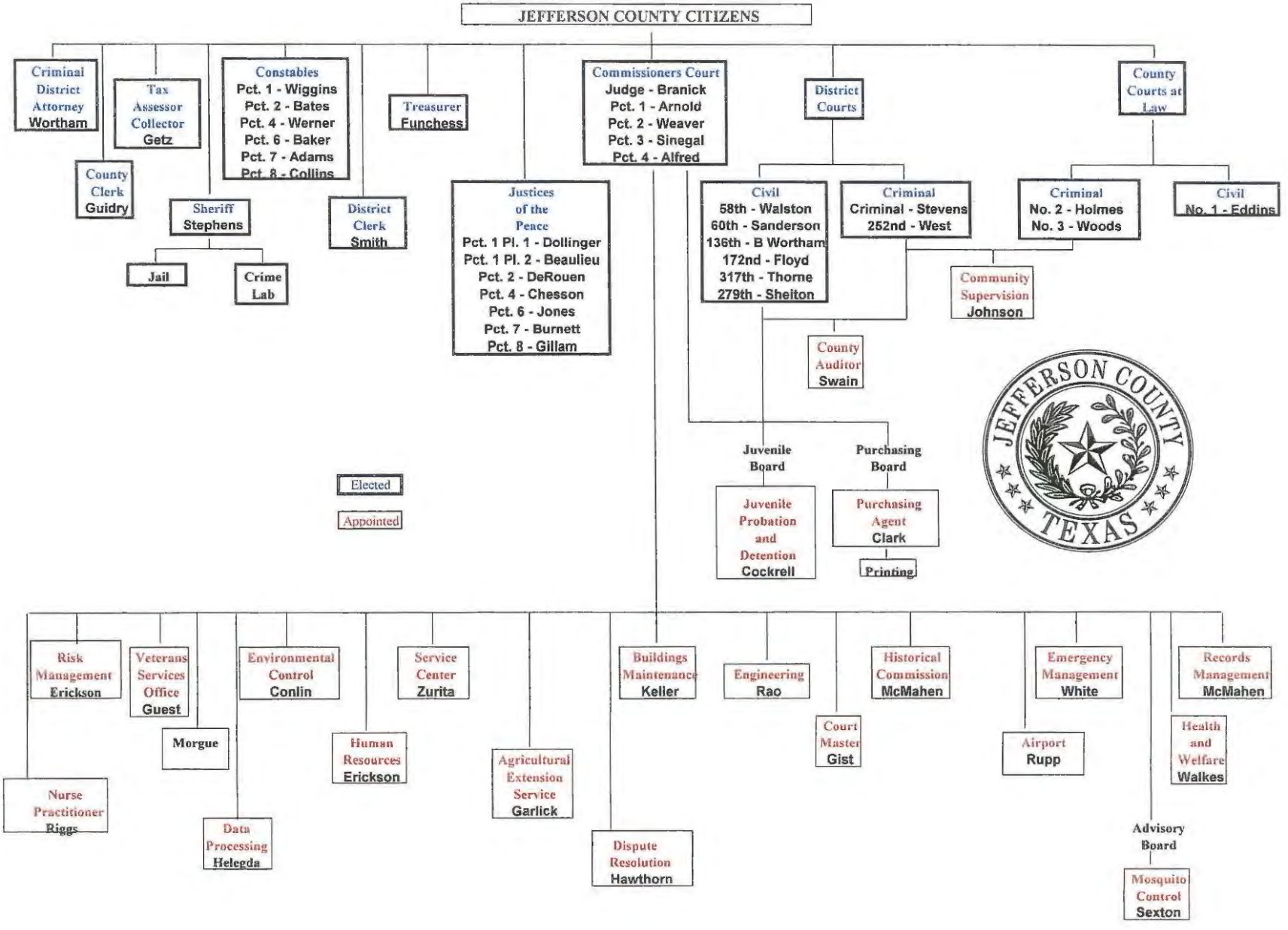
Christopher P. Morrill

Executive Director/CEO

JEFFERSON COUNTY
TEXAS

ORGANIZATION CHART OF JEFFERSON COUNTY

As of September 30, 2018



ELECTED OFFICIALS

As of September 30, 2018

COMMISSIONERS' COURT	
County Judge	Jeff Branick
Commissioner Pct. 1	Eddie Arnold
Commissioner Pct. 2	Brent Weaver
Commissioner Pct. 3	Michael Sinegal
Commissioner Pct. 4	Bo Alfred
SHERIFF	Zena Stephens
TAX ASSESSOR - COLLECTOR	Allison Getz
DISTRICT CLERK	Jamie Smith
COUNTY CLERK	Carolyn Guidry
COUNTY TREASURER	Tim Funchess
JUSTICES OF THE PEACE	
J.P. Pct. 1 Pl. 1	Kenneth Dollinger
J.P. Pct. 1 Pl. 2	Nancy Beaulieu
J.P. Pct. 2	Marcus DeRouen
J.P. Pct. 4	Ray Chesson
J.P. Pct. 6	Duce Jones
J.P. Pct. 7	Brad Burnett
J.P. Pct. 8	Tom Gillam
CONSTABLES	
Constable Pct. 1	Charles Wiggins, Jr
Constable Pct. 2	Christopher Bates
Constable Pct. 4	Bryan Werner
Constable Pct. 6	Dana Baker
Constable Pct. 7	Bobby Adams
Constable Pct. 8	Eddie Collins
COUNTY COURTS AT LAW	
County Court at Law No. 1	Gerald Eddins
County Court at Law No. 2	Terrence Holmes
County Court at Law No. 3	Clint Woods
DISTRICT JUDGES	
Criminal Court	John Stevens, Jr.
252nd District Court	Raquel West
58th District Court	Kent Walston
60th District Court	Justin Sanderson
136th District Court	Baylor Wortham
172nd District Court	Donald Floyd
279th District Court	Randy Shelton
317th District Court	Larry Thorne
DISTRICT ATTORNEY	Bob Wortham

APPOINTED OFFICIALS

As of September 30, 2018

Agricultural Extension Service	Starla Garlick
Airport	Alex Rupp
Auditor	Patrick Swain
Auto Service Center	Jose Zurita
Buildings Maintenance	Greg Keller
Community Supervision	Jerry Johnson
Court Master	Larry Gist
Data Processing	Paul Helegda
Dispute Resolution Center	Kara Hawthorn
Emergency Management	Mike White
Engineering	Don Rao
Environmental Control	Ronda Conlin
Health and Welfare	Dr. Cecil Walkes
Human Resources	Cary Erickson
Juvenile Probation & Detention	Edward Cockrell
Mosquito Control	Kevin Sexton
Nurse Practitioner	Leslie Riggs
Purchasing Agent\Printing	Deborah Clark
Risk Management	Cary Erickson
Veterans Services Office	Hilary Guest

JEFFERSON COUNTY
TEXAS

FINANCIAL

SECTION

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

INDEPENDENT AUDITORS' REPORT

To the Honorable County Judge
and Commissioners Court
Jefferson County, Texas

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Jefferson County (the "County"), as of and for the year ended September 30, 2018, and the related notes to the financial statements, which collectively comprise the County's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due fraud or error.

Anditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

To the Honorable County Judge
and Commissioners Court
Jefferson County, Texas

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the County, as of September 30, 2018, the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 9 and Note 17 to the financial statements, the County adopted the provisions of Government Accounting Standards Board ("GASB") Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, as of September 30, 2018. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, budgetary comparison schedules, pension system information, and other post-employment benefit system information be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of the financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the County's basic financial statements. The introductory section, combining and individual nonmajor fund financial statements and schedules, and statistical section are presented for the purposes of additional analysis and are not a required part of the basic financial statements.

The combining and individual nonmajor fund financial statements and schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, combining and individual nonmajor fund financial statements are fairly stated in all material respects in relation to the basic financial statements as a whole.

To the Honorable County Judge
and Commissioners Court
Jefferson County, Texas

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated March 8, 2019, on our consideration of the County's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the County's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the County's internal control over financial reporting and compliance.

Whitley Penn LLP

Houston, Texas
March 8, 2019

JEFFERSON COUNTY
TEXAS

As management of Jefferson County, we offer readers of the Jefferson County's financial statements this narrative overview and analysis of the financial activities of the county for the fiscal year ended September 30, 2018. Please read it in conjunction with the additional information that we have furnished in our letter of transmittal, which can be found in the introductory section of this report.

Financial Highlights

- The assets and deferred outflows of resources of Jefferson County were exceeded by its liabilities and deferred inflows of resources at the close of fiscal year 2018 by $75,972,154 (net position), a decrease of $7,422,602 in net position from the previous year. As a result, the county's overall financial position has deteriorated from the previous year.

- The County implemented Governmental Accounting Standards Board Statement No. 75, *Accounting and Financial Reporting for Post-Employment Benefits Other Than Pensions* ("GASB No. 75") and as a result reported a prior period adjustment to decrease net position in the governmental activities by $120,307,190.

- Of the net position, $141,614,471 is net investment in capital assets, $22,333,791 is restricted for specific uses, and $(239,920,416) is unrestricted.

- As of the close of fiscal year 2018, Jefferson County's governmental funds reported combined ending fund balances of $71,111,456, a decrease of $390,018 in comparison with the prior year. About 49% of the total amount, $35,193,017 is available for spending at the county's discretion (unassigned fund balance).

- At the end of fiscal year 2018, unassigned fund balance for the General Fund was $35,632,532, or 29.5% of total General Fund expenditures and transfers. In addition, the General Fund had a nonspendable fund balance of $926,860 and assigned fund balance of $12,736,699.

- The FEMA Emergency fund is classified as a major fund. It had a restricted fund balance of $2,682,350.

- The County's total bonds payable decreased by $4,017,508 during the current fiscal year.

Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the County's basic financial statements, which are comprised of the following three components: 1) Government-wide financial statements; 2) Fund financial statements and 3) Notes to the basic financial statements. This report also contains other supplementary information which is included in addition to the basic financial statements themselves.

Government-wide Financial Statements are designed to provide readers with a broad overview of County finances, in a manner similar to a private-sector business.

The Statement of Net Position presents information on all County assets, deferred outflows of resources, liabilities, and deferred inflows of resources, with the difference representing net position. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the County is improving or deteriorating.

The Statement of Activities presents information that indicates how net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported in this statement for some items that will result in cash flows in future fiscal periods.

Both of these government-wide financial statements distinguish functions of the County that are principally supported by taxes and intergovernmental revenues (governmental activities) from other functions that are intended to recover all or in part a portion of their costs through user fees and charges (business-type activities). The governmental activities of the County include general government, judicial and law enforcement, education and recreation, health and welfare, and maintenance of equipment and structures. The business-type activities of the County include an airport and an entertainment complex.

Component units are included in our basic financial statements and consist of legally separate entities for which the County is financially accountable and they have substantially the same board as the County or provide services entirely to the County. The County's component unit, Southeast Texas Government Employee Benefits Pool, has been reported as blended with the County as the primary government. For more detailed information on this component unit refer to Note 1A and Note 13 of the basic financial statements.

Fund Financial Statements are groupings of related accounts that are used to maintain control over resources that have been segregated for specific activities or objectives. The County, like other state and local governments, uses fund accounting to ensure and demonstrate finance-related legal compliance. All of the funds of the County can be divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental funds financial statements focus on near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. Such information may be useful in evaluating the County's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for governmental funds with similar information presented for governmental activities in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. Both the governmental funds balance sheet and the governmental funds statement of revenues, expenditures, and changes in fund balance provide a reconciliation to facilitate this comparison between governmental funds and governmental activities.

The County maintains 62 individual governmental funds. Information is presented separately in the governmental funds balance sheet and in the governmental funds statement of revenues, expenditures, and changes in fund balances for the major governmental funds. Data from other governmental funds are combined into a single, aggregated presentation. Individual fund data for each of these non-major governmental funds is provided in the form of combining statements elsewhere in this report.

Proprietary funds are maintained two ways. An enterprise fund is used to report the same functions presented as business-type activities in the government-wide financial statements. The County uses enterprise funds to account for the operations of an airport and entertainment complex. Internal service funds are an accounting device used to accumulate and allocate costs internally among the County's various functions. The County uses internal service funds to account for its liability activities, workers' compensation, and the public entity risk pool that provides health insurance benefits. Because these services predominantly benefit governmental rather than business-type functions, they have been included within governmental activities in the government-wide financial statements.

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. Both of the enterprise funds are considered to be major funds of the County. The County's internal service funds are combined into a single, aggregated presentation in the proprietary funds financial statements. Individual fund data for the internal service funds is provided in the form of combining statements elsewhere in this report.

Fiduciary funds are used to account for resources held for the benefit of parties outside the government. Fiduciary funds are not reflected in the government-wide financial statements because the resources of those funds are not available to support the County's own programs. The County's only fiduciary funds are 11 agency funds. Agency funds are purely custodial (assets equal liabilities) and thus do not involve measurement of results of operations.

Notes to the Basic Financial Statements provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements. The notes can be found starting on page 30 of this report.

Required Supplementary Information is presented concerning the County's General Fund budgetary schedule. The County adopts an annual budget for this fund. A budgetary comparison schedule, which includes the original and final amended budget and actual figures, has been provided to demonstrate compliance with this budget. Also included are schedules for pensions and other post-employment benefits. As part of the section are a schedule showing the changes in net pension liability and related ratios, a schedule of employer contributions to the retirement system with notes about these contributions, and a schedule of the changes in total other post-employment benefits liability and related ratios. Required supplementary information can be found starting on page 67 of this report.

The combining and individual fund statements and schedules referred to earlier provide information for non-major governmental funds and internal service funds and are presented immediately following the required supplementary information.

Government-Wide Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of the County, assets and deferred outflows of resources were exceeded by its liabilities and deferred inflows of resources by $75,972,154. For fiscal year 2017, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $51,757,638.

The largest portion of the County's current fiscal year net position ($141,614,471) reflects its investments in capital assets (e.g. land, improvements, buildings, equipment, and infrastructure); less any related debt used to acquire those assets that is still outstanding plus any unspent bond proceeds. The main use of these capital assets is to provide services to citizens; consequently, these assets are not available for future spending. Although the County's investment in its capital assets is reported net of related debt, it should be noted that resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities. Another portion of the County's current fiscal year net position ($22,333,791) represents resources that are subject to external restrictions on how they may be used. The County's current fiscal year net position is reduced by ($239,920,416) for the negative unrestricted net position. Unrestricted net position may be negative when entities incur long-term liabilities which are not offset by corresponding assets or when it covers post-retirement benefits on a pay-as-you-go basis rather than advance-funding such costs in a trust account.

Condensed Statement of Net Position
September 30, 2018
Primary Government

	Governmental Activities	Business-type Activities	Reclassifications	Total
Current and other assets	$ 90,340,021	$ 2,656,455	$ -	$ 92,996,476
Capital Assets	92,091,253	79,849,183	-	171,940,436
Total Assets	$ 182,431,274	$ 82,505,638	$ -	$264,936,912
Deferred Outflows of Resources				
Deferred Loss on Refunding	$ 704,523	$ -	$ -	$ 704,523
Deferred Outflows Related to Pensions	12,454,988	228,299	-	12,683,287
Total Deferred Outflows of Resources	$ 13,159,511	$ 228,299	$ -	$ 13,387,810
Current and other liabilities	$ 10,541,198	$ 1,647,771	$ -	$ 12,188,969
Long-term liabilities	315,684,997	1,087,667	-	316,772,664
Total Liabilities	$ 326,226,195	$ 2,735,438	$ -	$328,961,633
Deferred Inflows of Resources				
Deferred Inflows Related to Pensions	$ 9,243,555	$ 169,434	$ -	$ 9,412,989
Deferred Inflows Related to OPEB	15,922,254	-	-	15,922,254
Total Deferred Inflows of Resources	$ 25,165,809	$ 169,434	$ -	$ 25,335,243
Net Position:				
Net investment in capital assets	$ 91,380,403	$ 79,849,183	$ (29,615,115)	$141,614,471
Restricted net position	22,333,791	-	-	22,333,791
Unrestricted net position	(269,515,413)	(20,118)	29,615,115	(239,920,416)
Total Net Position	$(155,801,219)	$ 79,829,065	$ -	$(75,972,154)

Condensed Statement of Net Position
September 30, 2017
Primary Government

	Governmental Activities	Business-type Activities	Reclassifications	Total
Current and other assets	$ 90,120,650	$ 2,933,993	$ -	$ 93,054,643
Capital Assets	92,682,655	81,842,002	-	174,524,657
Total Assets	$ 182,803,305	$ 84,775,995	$ -	$267,579,300
Deferred Outflows of Resources				
Deferred Loss on Refunding	$ 818,541	$ -	$ -	$ 818,541
Deferred Outflows Related to Pensions	32,146,333	589,240	-	32,735,573
Total Deferred Outflows of Resources	$ 32,964,874	$ 589,240	$ -	$ 33,554,114
Current and other liabilities	$ 10,109,314	$ 1,822,345	$ -	$ 11,931,659
Long-term liabilities	232,385,466	1,541,375	-	233,926,841
Total Liabilities	$ 242,494,780	$ 3,363,720	$ -	$245,858,500
Deferred Inflows of Resources				
Deferred Inflows Related to Pensions	$ 3,453,965	$ 63,311	$ -	$ 3,517,276
Total Deferred Inflows of Resources	$ 3,453,965	$ 63,311	$ -	$ 3,517,276
Net Position:				
Net investment in capital assets	$ 91,366,714	$ 81,842,002	$ (33,254,522)	$139,954,194
Restricted net position	24,514,807	-	-	24,514,807
Unrestricted net position	(146,062,087)	96,202	33,254,522	(112,711,363)
Total Net Position	$ (30,180,566)	$ 81,938,204	$ -	$ 51,757,638

At the end of the fiscal year 2018 and the 2017 fiscal year, the County reported positive net position in two of the three categories as a whole. The County reported positive balances in two of the three categories of net position for its governmental activities for fiscal year 2018 and fiscal year 2017. Business-type activities had positive balances in one of two of the categories of net position for fiscal year 2018 and in two categories for fiscal year 2017.

The County had a reclassification of $29,615,115 in fiscal year 2018 and $33,254,522 in in the prior fiscal year to move the debt associated with the construction of Ford Park from Unrestricted net position to Net investment in capital assets. The capital assets are reported in the business-type activities and the debt is reported in the governmental activities.

The County's net position decreased by $7,422,602 during the current fiscal year. The following table indicates changes in net position for governmental and business-type activities:

Statement of Activities
For the Year Ended September 30, 2018

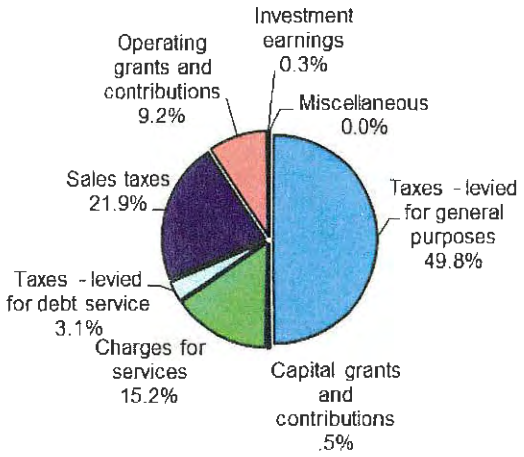
	Governmental Activities	Business-type Activities	Total
Revenues:			
Program revenues:			
Charges for services	$ 23,163,323	$ 6,810,090	$ 29,973,413
Operating grants and contributions	13,995,269	50,000	14,045,269
Capital grants and contributions	703,625	1,360,827	2,064,452
General revenues:			
Taxes - levied for general purposes	75,739,303	-	75,739,303
Taxes - levied for debt service	4,748,164	-	4,748,164
Sales Taxes	33,352,357	-	33,352,357
Investment earnings	425,510	4,318	429,828
Miscellaneous	24,062	15,900	39,962
Total revenues	152,151,613	8,241,135	160,392,748
Expenses:			
General government	36,877,298	-	36,877,298
Judicial and law enforcement	82,243,174	-	82,243,174
Education and recreation	1,232,840	-	1,232,840
Health and welfare	20,779,392	-	20,779,392
Maintenance - equipment and structures	12,446,937	-	12,446,937
Interest and charges on long-term debt	1,016,850	-	1,016,850
Airport	-	5,703,795	5,703,795
Entertainment Complex	-	7,515,064	7,515,064
Total expenses	154,596,491	13,218,859	167,815,350
Excess (deficiency) before transfers	(2,444,878)	(4,977,724)	(7,422,602)
Transfers	(2,868,585)	2,868,585	-
Change in net position	(5,313,463)	(2,109,139)	(7,422,602)
Net position - beginning	(30,180,566)	81,938,204	51,757,638
Prior period adjustment	(120,307,190)	-	(120,307,190)
Net position - beginning - restated	(150,487,756)	81,938,204	(68,549,552)
Net position - ending	$(155,801,219)	$ 79,829,065	$ (75,972,154)

Statement of Activities
For the Year Ended September 30, 2017

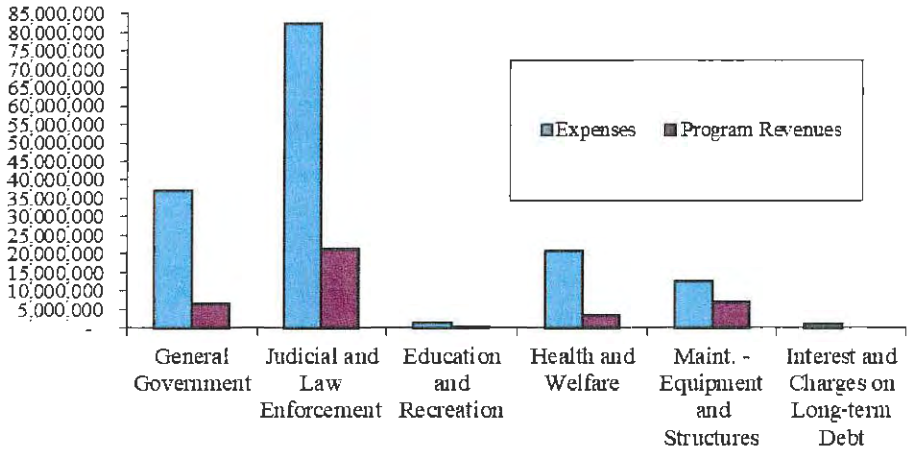
	Governmental Activities	Business-type Activities	Total
Revenues:			
Program revenues:			
Charges for services	$ 22,513,267	$ 6,503,011	$ 29,016,278
Operating grants and contributions	14,563,279	50,000	14,613,279
Capital grants and contributions	5,432,451	2,382,339	7,814,790
General revenues:			
Taxes - levied for general purposes	72,529,539	-	72,529,539
Taxes - levied for debt service	6,198,918	-	6,198,918
Sales Taxes	26,861,335	-	26,861,335
Investment earnings	238,304	1,516	239,820
Miscellaneous	33,113	521	33,634
Total revenues	148,370,206	8,937,387	157,307,593
Expenses:			
General government	44,626,177	-	44,626,177
Judicial and law enforcement	85,700,169	-	85,700,169
Education and recreation	1,275,949	-	1,275,949
Health and welfare	17,478,616	-	17,478,616
Maintenance - equipment and structures	18,698,878	-	18,698,878
Interest and charges on long-term debt	1,181,005	-	1,181,005
Airport	-	5,492,750	5,492,750
Entertainment Complex	-	7,286,876	7,286,876
Total expenses	168,960,794	12,779,626	181,740,420
Excess (deficiency) before transfers	(20,590,588)	(3,842,239)	(24,432,827)
Transfers	(3,430,561)	3,430,561	-
Change in net position	(24,021,149)	(411,678)	(24,432,827)
Net position - beginning	(906,103)	82,349,882	81,443,779
Prior period adjustment	(5,253,314)	-	(5,253,314)
Net position - beginning - restated	(6,159,417)	82,349,882	76,190,465
Net position – ending	$(30,180,566)	$ 81,938,204	$ 51,757,638

Governmental activities

Revenues by Source - Governmental Activities
Year Ended September 30, 2018



Expenses and Program Revenues - Governmental Activities
Year Ended September 30, 2018



Governmental activities decreased the County's net position by $5,313,463.

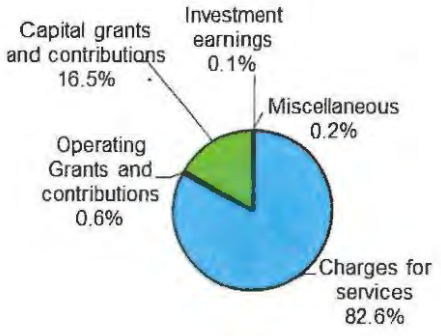
This decrease is due to the increase in the Deferred inflows related to OPEB (Other Post-Employment Benefits) of about $16 million with a partial offset of about $6.5 million in the reduction of the Total OBEB Liability. Commissioners' Court has decided to continue funding OPEB on the pay-as-you-go basis. More discussion on OPEB can be found in Note 9 starting on page 57. Decrease in total bonds payables of about $4 million also help offset this decrease in the County's net position.

For the most part, other changes (increases/decreases) in expenses typically had corresponding changes in revenues as programs or projects ramp up or wind down.

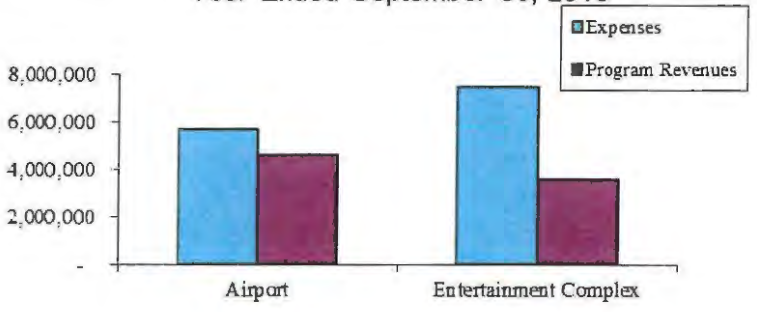
Business-type activities

Business-type activities decreased the County's net position by $2,109,139. The largest area of decline is reduction in Net Investment in Capital Assets due to depreciation of assets. The County continues to look for additional revenues sources as well as cost saving measures to have these business-type activities self-supporting without having to rely on transfers from the General Fund to subsidize operations.

Revenue by Source - Business-type Activities
Year Ended September 30, 2018



Expenses and Program Revenues - Business-type Activities
Year Ended September 30, 2018



Financial Analysis of the Government's Funds

Governmental Funds. The focus of the County's governmental funds is to provide information on near-term inflows, outflows, and balances of spendable resources. Such information is useful in assessing the County's financing requirements. In particular,

unreserved fund balance may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year.

As of the end of the current fiscal year, Jefferson County's governmental funds reported combined ending fund balances of $71,111,456 a decrease of $390,018 in comparison with the prior year. About 44% of this total amount ($35,193,017) constitutes unassigned fund balance, which is available for spending at the County's discretion. The remainder of fund balance is nonspendable, committed, restricted, or assigned to indicate that it is not available for new spending.

The General Fund is the chief operating fund of the County. At the end of the current fiscal year, unassigned fund balance of the general fund was $35,632,532, while total fund balance reached $49,296,091. As a measure of the general fund's liquidity, it may be useful to compare both unassigned fund balance and total fund balance to total fund expenditures and transfers. Unassigned fund balance represents 29.5 percent of total General Fund expenditures and transfers, while total fund balances represents 40.8 percent of that same amount.

The fund balance of the County's General Fund increased by $3,818,401 during the current fiscal year. This increase is in mostly due to increase sales tax revenue during the recovery phase during the aftermath of Tropical Storm Harvey.

The FEMA Emergency Fund has a total fund balance of $2,682,350, all of which is restricted for health and welfare. The net fund balance decrease in the FEMA Emergency fund was $8,015,273. This decrease was in large part due to costs associated with Tropical Storm Harvey. The County will continue working with FEMA to receive grant funds for eligible costs and continue working on recovery efforts.

Proprietary Funds. The County's proprietary fund statements provide the same type of information found in the business type activities of the government-wide financial statements, but in more detail.

The Jack Brooks Regional Airport Fund is used to account for the day-to-day operation of the County airport. As of September 30, 2018, unrestricted net position is negative $812,793, an increase of $302,969 from the prior year negative unrestricted net position. This decrease is mostly due to a reduction in the subsidy received by the County's general fund.

The Ford Park Fund is used to account for the day-to-day operation of Ford Park. As of September 30, 2018, unrestricted net position is $792,675, an increase of $186,649 from the prior year. This increase is mostly due to decrease in the balance for accounts receivable.

General Fund Budgetary Highlights

The total original budget adopted on September 18, 2017 did not have to be amended during the year. Budget transfers were done during the year to adjust departments as needed.

During the year actual revenues and transfers in were more than budgetary estimates by $10,434,698. Actual expenditures and transfers out were less than budgetary estimates by $6,306,222. The budget had a projected reduction of $12,922,519 to the fund balance. The net effect of over-realization of revenues and under-utilization of appropriations resulted in a positive variance of $16,740,920 thus increasing the existing fund balance of $3,818,401 on a budgetary basis.

The largest positive variance of $7,655,505 is due to an increase in Sales Tax revenue. The area continues recovery from Tropical Storm Harvey and due to several large industrial expansions.

Revenue from Property Taxes had the largest negative variance of $70,390 due to adjustments to property valuations after the adoption of the budget.

Many departments achieved savings over the fiscal year mostly due to unfilled staff positions and moving employees through their salary ranges whereby leaving unspent funds. The total amount of savings for salary and fringe benefits was about $6 million. Departments also did well in controlling their spending in other budgetary areas.

Budget variances are not expected to impact future services or liquidity.

Capital Assets and Debt Administration

Capital Assets. The County's investment in capital assets for its governmental and business-type activities as of September 30, 2018, amounted to $171,940,436 (net of accumulated depreciation). This investment in capital assets includes land, improvements, structures, park improvements and facilities, infrastructure, equipment, vehicles, machinery, other tangible and intangible assets, and construction in progress.

Major capital asset events during the current fiscal year included the following:

- The County had a variety of building improvements, purchases of equipment, roads and bridges construction, and construction of airport facilities.

- At September 30, 2018, the ending fund balance for all capital projects funds was $5.34 million.

For further information regarding capital assets, see Note 5.

Governmental Activities:	Balance September 30, 2018	Balance September 30, 2017
Land	$ 3,840,787	$ 3,840,787
Construction in progress	273,240	2,790,211
Infrastructure	65,282,231	62,731,452
Buildings & Improvements	120,995,282	120,384,112
Equipment	49,721,633	44,515,373
	240,113,173	234,261,935
Less: Accumulated depreciation	(148,021,920)	(141,579,280)
Total governmental activities	$ 92,091,253	$ 92,682,655
Business-type Activities:		
Land	$ 5,154,600	$ 5,154,600
Construction in progress	6,498,043	5,063,774
Buildings & Improvements	134,313,582	134,233,904
Equipment	10,697,009	10,391,809
	156,663,234	154,844,087
Less: Accumulated depreciation	(76,814,051)	(73,002,085)
Total business-type activities	$ 79,849,183	$ 81,842,002

Long-Term Debt. At September 30, 2018, the County had a total long-term debt outstanding of $316,772,664. Refer to Note 7 for further information on the County's long-term debt. County officials, citizens, and investors will find the ratio of net bonded debt to assessed valuation and the amount of bonded debt per capita as useful indicators of the County's debt position. This information is presented in the statistical section of this report.

Governmental Activities:	Outstanding at September 30, 2018	Outstanding at September 30, 2017 - Restated
Bonds Payable	$ 30,319,638	$ 34,337,146
Capital leases	710,850	1,051,858
Claims & Judgments	2,083,283	4,226,140
Compensated Absences	11,514,338	11,275,457
Pension Liability	48,586,238	72,777,544
Total OPEB Liability	222,470,650	229,024,511
Total governmental activities	$ 315,684,997	$ 352,692,656
Business-type Activities:		
Compensated Absences	$ 197,084	$ 207,368
Pension Liability	890,583	1,334,007
Total business-type activities	$ 1,087,667	$ 1,541,375

The bond rating services of Moody's Investors Services, Inc. and Standard & Poor's Ratings services have assigned the County's long term bond ratings of Aa2 and AA- respectively.

Economic Factors and Next Year's Budgets and Rates

The Commissioner's Court adopted the County's 2018-2019 budget on September 24, 2018 for the General Fund and Debt Service funds. The budget was adopted based on estimated balances that would be available at the end of fiscal year 2018 and estimated revenues to be received in fiscal year 2019. The total resources for all funds for fiscal year 2019 are estimated to be $173.3 million. The budget was adopted with estimated expenditures in the amount of $136.4 million. The 2018-2019 budget forecast utilizing $12,736,699 of fund balance.

For 2018-2019, the property tax rate will remain $.364977 per $100 of taxable assessed value and taxable assessed property values are anticipated to decrease slightly of just .2% for the 2018-2019 budget year.

The average unemployment rate for Jefferson County for September 2018 was 6.2%; this is a decrease from the prior year rate of 8.5%. The state's average unemployment rate for September 2018 was 3.7%.

Request for Information

This financial report is designed to provide a general overview of the County's finances for all those with an interest in the County finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the County Auditor's Office, 1149 Pearl St. – 7th Floor, Beaumont, Texas 77701.

BASIC

FINANCIAL STATEMENTS

JEFFERSON COUNTY, TEXAS
STATEMENT OF NET POSITION
SEPTEMBER 30, 2018

	PRIMARY GOVERNMENT			
	GOVERNMENTAL ACTIVITIES	BUSINESS-TYTE ACTIVITIES	RECLASSIFICATIONS	TOTAL
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 37,231,206	2,073,608	-	39,304,814
INVESTMENTS	31,048,776	-	-	31,048,776
INTEREST RECEIVABLE	151,563	466	-	152,029
ACCOUNTS RECEIVABLE, Net	742,473	234,811	-	977,284
DUE FROM OTHER GOVERNMENTAL ENTITIES	11,458,382	61,553	-	11,519,935
INVENTORIES, At Cost	612,744	232,579	-	845,323
PREPAID ITEMS	377,791	53,438	-	431,229
DELINQUENT TAXES RECEIVABLE, Net	3,802,645	-	-	3,802,645
PENALTY AND INTEREST RECEIVABLE, Net	2,193,745	-	-	2,193,745
OTHER RECEIVABLES, Net	2,568,096	-	-	2,568,096
DEPOSITS	152,600	-	-	152,600
CAPITAL ASSETS:				
LAND	3,840,787	5,154,600	-	8,995,387
CONSTRUCTION IN PROGRESS	273,240	6,498,043	-	6,771,283
OTHER CAPITAL ASSETS, Net of depreciation	87,977,226	68,196,540	-	156,173,766
TOTAL ASSETS	$ 182,431,274	82,505,638	-	264,936,912
DEFERRED OUTFLOWS OF RESOURCES:				
DEFERRED LOSS ON BOND REFUNDING	$ 704,523	-	-	704,523
DEFERRED OUTFLOWS RELATED TO PENSIONS	12,454,988	228,299	-	12,683,287
TOTAL DEFERRED OUTFLOWS OF RESOURCES	$ 13,159,511	228,299	-	13,387,810
LIABILITIES:				
ACCOUNTS PAYABLE	$ 9,533,908	985,592	-	10,519,500
INTEREST PAYABLE	193,000	-	-	193,000
DUE TO OTHER GOVERNMENTAL ENTITIES	151,242	-	-	151,242
UNEARNED REVENUE	663,048	637,179	-	1,300,227
CUSTOMER DEPOSITS	-	25,000	-	25,000
LONG-TERM LIABILITIES				
DUE WITHIN ONE YEAR	6,850,990	42,406	-	6,893,396
DUE IN MORE THAN ONE YEAR	308,834,007	1,045,261	-	309,879,268
TOTAL LIABILITIES	$ 326,226,195	2,735,438	-	328,961,633
DEFERRED INFLOWS OF RESOURCES:				
DEFERRED INFLOWS RELATED TO PENSIONS	$ 9,243,555	169,434	-	9,412,989
DEFERRED INFLOWS RELATED TO OPEB	15,922,254	-	-	15,922,254
TOTAL DEFERRED INFLOWS OF RESOURCES	$ 25,165,809	169,434	-	25,335,243
NET POSITION				
NET INVESTMENT IN CAPITAL ASSETS	$ 91,380,403	79,849,183	(29,615,115)	141,614,471
RESTRICTED FOR:				
DEBT SERVICE	550,264	-	-	550,264
ENVIRONMENTAL PROJECTS	1,734,648	-	-	1,734,648
PUBLIC INTEREST	3,929,465	-	-	3,929,465
JUDICAL & LAW ENFORCEMENT	6,640,505	-	-	6,640,505
EDUATION & RECREATION	2,333,260	-	-	2,333,260
HEALTH & WELFARE	3,146,949	-	-	3,146,949
MAINTENANCE OF STRUCTURES & EQUIPMENT	3,998,700	-	-	3,998,700
UNRESTRICTED	(269,515,413)	(20,118)	29,615,115	(239,920,416)
TOTAL NET POSITION	$ (155,801,219)	79,829,065	-	(75,972,154)

The reclassification is for the debt associated with the construction of Ford Park. The asset is accounted for in the Business-type activities column and the debt is accounted for in the Governmental Activities column.

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED SEPTEMBER 30, 2018

FUNCTIONS/PROGRAMS	EXPENSES	PROGRAM REVENUES: CHARGES FOR SERVICES	PROGRAM REVENUES: OPERATING GRANTS AND CONTRIBUTIONS	PROGRAM REVENUES: CAPITAL GRANTS AND CONTRIBUTIONS
PRIMARY GOVERNMENT				
GOVERNMENTAL ACTIVITIES:				
GENERAL GOVERNMENT	$ 36,877,298	$ 5,672,872	$ 2,055	$ 664,348
JUDICIAL AND LAW ENFORCEMENT	82,243,174	10,545,334	10,673,263	-
EDUCATION AND RECREATION	1,232,840	61,387	7	-
HEALTH AND WELFARE	20,779,392	589,599	2,905,950	-
MAINTENANCE - EQUIPMENT AND STRUCTURES	12,446,937	6,294,131	413,994	39,277
INTEREST AND CHARGES ON LONG-TERM DEBT	1,016,850	-	-	-
TOTAL GOVERNMENTAL ACTIVITIES	$ 154,596,491	$ 23,163,323	$ 13,995,269	$ 703,625
BUSINESS-TYPE ACTIVITIES:				
AIRPORT	5,703,795	3,281,881	50,000	1,290,828
ENTERTAINMENT COMPLEX	7,515,064	3,528,209	-	69,999
TOTAL BUSINESS-TYPE ACTIVITIES	$ 13,218,859	$ 6,810,090	$ 50,000	$ 1,360,827
TOTAL PRIMARY GOVERNMENT	$ 167,815,350	$ 29,973,413	$ 14,045,269	$ 2,064,452

GENERAL REVENUES	
TAXES:	
PROPERTY TAXES LEVIED FOR GENERAL PURPOSES	
PROPERTY TAXES LEVIED FOR DEBT SERVICE	
SALES TAXES	
UNRESTRICTED INVESTMENT EARNINGS	
MISCELLANEOUS	
TRANSFERS	
TOTAL GENERAL REVENUE AND TRANSFERS	
CHANGE IN NET POSITION	
NET POSITION - BEGINNING	
PRIOR PERIOD ADJUSTMENT	
NET POSITION - BEGINNING, Restated	
NET POSITION - ENDING	

The notes to the financial statements are an integral part of this statement.

NET (EXPENSES) REVENUES AND CHANGES IN NET POSITION		
PRIMARY GOVERNMENT		
GOVERNMENTAL ACTIVITIES	BUSINESS-TYPE ACTIVITIES	TOTAL
$ (30,538,023)	$ -	$ (30,538,023)
(61,024,577)	-	(61,024,577)
(1,171,446)	-	(1,171,446)
(17,283,843)	-	(17,283,843)
(5,699,535)	-	(5,699,535)
(1,016,850)	-	(1,016,850)
$ (116,734,274)	$ -	$ (116,734,274)
-	(1,081,086)	(1,081,086)
-	(3,916,856)	(3,916,856)
$ -	$ (4,997,942)	$ (4,997,942)
$ (116,734,274)	$ (4,997,942)	$ (121,732,216)
$ 75,739,303	$ -	$ 75,739,303
4,748,164	-	4,748,164
33,352,357	-	33,352,357
425,510	4,318	429,828
24,062	15,900	39,962
(2,868,585)	2,868,585	-
$ 111,420,811	$ 2,888,803	$ 114,309,614
$ (5,313,463)	$ (2,109,139)	$ (7,422,602)
(30,180,566)	81,938,204	51,757,638
(120,307,190)	-	(120,307,190)
(150,487,756)	81,938,204	(68,549,552)
$ (155,801,219)	$ 79,829,065	$ (75,972,154)

JEFFERSON COUNTY, TEXAS
BALANCE SHEET
GOVERNMENTAL FUNDS
SEPTEMBER 30, 2018

	GENERAL	FEMA EMERGENCY	NONMAJOR GOVERNMENTAL FUNDS	TOTAL GOVERNMENTAL FUNDS
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 11,697,861	3,502,035	20,561,012	35,760,908
INVESTMENTS	31,048,776	-	-	31,048,776
ACCOUNTS RECEIVABLE, Net	211,939	45,723	131,474	389,136
INTEREST RECEIVABLE	70,316	4,938	21,916	97,170
DUE FROM OTHER FUNDS	6,478,353	-	1	6,478,354
DUE FROM OTHER GOVERNMENTAL ENTITIES	9,266,748	765,312	1,264,976	11,297,036
DELINQUENT TAXES RECEIVABLE, Net	3,727,898	-	74,747	3,802,645
PENALTY AND INTEREST RECEIVABLE, Net	2,150,570	-	43,175	2,193,745
INVENTORIES, At Cost	549,456	41,646	21,642	612,744
PREPAID ITEM	377,404	-	387	377,791
TOTAL ASSETS	$ 65,579,321	4,359,654	22,119,330	92,058,305
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE				
LIABILITIES:				
ACCOUNTS PAYABLE	$ 6,826,203	1,353,996	1,333,778	9,513,977
COMPENSATED ABSENCES PAYABLE	48,241	-	9,130	57,371
DUE TO OTHER FUNDS	-	-	652,923	652,923
DUE TO OTHER GOVERNMENTAL ENTITIES	151,242	-	-	151,242
UNEARNED REVENUE	-	-	663,048	663,048
TOTAL LIABILITIES	$ 7,025,686	1,353,996	2,658,879	11,038,561
DEFERRED INFLOWS OF RESOURCES:				
UNAVAILABLE REVENUE- PROPERTY TAXES	$ 5,636,687	-	104,141	5,740,828
UNAVAILABLE REVENUE- INMATE HOUSING	3,620,857	-	-	3,620,857
UNAVAILABLE REVENUE- GRANTS	-	323,308	223,295	546,603
TOTAL DEFERRED INFLOWS OF RESOURCES	$ 9,257,544	323,308	327,436	9,908,288
FUND BALANCES:				
NONSPENDABLE FOR:				
INVENTORY	$ 549,456	-	21,642	571,098
PREPAID ITEMS	377,404	-	387	377,791
RESTRICTED FOR:				
DEBT SERVICE	-	-	571,837	571,837
CONSTRUCTION	-	-	1,734,648	1,734,648
PUBLIC INTEREST	-	-	3,929,465	3,929,465
JUDICIAL & LAW ENFORCEMENT	-	-	6,632,828	6,632,828
EDUCATION & RECREATION	-	-	2,333,260	2,333,260
HEALTH & WELFARE	-	2,682,350	90,629	2,772,979
MAINTENANCE OF STRUCTURES & EQUIPMENT	-	-	3,998,700	3,998,700
COMMITTED FOR:				
CONSTRUCTION CONTRACTS	-	-	259,134	259,134
ASSIGNED FOR ADOPTED BUDGET				
UTILIZATION OF FUND BALANCE	12,736,699	-	-	12,736,699
UNASSIGNED (DEFICIT)	35,632,532	-	(439,515)	35,193,017
TOTAL FUND BALANCES	$ 49,296,091	2,682,350	19,133,015	71,111,456
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$ 65,579,321	4,359,654	22,119,330	92,058,305

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
RECONCILIATION OF THE GOVERNMENTAL FUNDS BALANCE SHEET
TO THE STATEMENT OF NET POSITION
SEPTEMBER 30, 2018

Total fund balances for governmental funds		$ 71,111,456
Total net position reported for governmental activities in the statement of net position is different because:		
Capital assets used in governmental activities are not financial resources and therefore are not reported in the funds. Those assets consist of:		
Land	$ 3,840,787	
Construction in progress	273,240	
Infrastructure, net of $44,070,151 accumulated depreciation	21,212,080	
Buildings, net of $70,171,025 accumulated depreciation	50,824,257	
Equipment, net of $33,780,744 accumulated depreciation	15,940,889	
Total capital assets		92,091,253
Long-term assets are not recognized in the current period and accordingly are not reported as fund assets. Balances as of September 30, 2018 were:		
Accrued interest receivable	$ 52,891	
		52,891
Long-term liabilities applicable to Jefferson County's activities are not due and payable in the current period and accordingly are not reported as fund liabilities. Interest on long-term debt is not accrued in governmental funds, but rather is recognized as an expenditure when due. All liabilities - both current and long-term are reported in the Statement of Net Position. Balances as of September 30, 2018 were:		
Accrued interest on bonds and loans	$ (193,000)	
Bonds payable	(27,740,000)	
OPEB Obligations	(222,470,650)	
Pension Liability	(48,586,238)	
Capital leases	(710,850)	
Compensated absences	(11,456,967)	
Pensions - Contributions after 12/31/2017	9,366,581	
Pensions - Economic/demographic (gains)	(3,050,023)	
Pensions - Economic/demographic losses	190,587	
Pensions - Investment (gains) or losses	(6,193,532)	
Pensions - Changes in Assumption	2,897,820	
OPEB - Changes in Assumption	(15,922,254)	
Gain/Loss on Refunding Bonds	704,523	
Premium/Discounts on Bonds	(2,579,638)	
		(325,743,641)
Internal service funds are used by the County. The assets and liabilities of the internal service funds are included in the governmental activities in the Statement of Net Position. Internal service fund net position are:		(5,789,562)
Some of the County's receivables are classified as long-term and therefore are not reported in the funds. Receivable reported net of $2,166,282 allowance for uncollectible accounts.		2,568,096
Some of the County's revenues will be collected after year-end but are not available soon enough to pay for the current period's expenditures and therefore are reported as unavailable resources in the funds.		9,908,288
Total net position of governmental activities		$ (155,801,219)

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
GOVERNMENTAL FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	GENERAL	FEMA EMERGENCY	NONMAJOR GOVERNMENTAL FUNDS	TOTAL GOVERNMENTAL FUNDS
REVENUES:				
PROPERTY TAXES	$ 75,917,335	-	4,787,447	80,704,782
SALES TAXES	31,655,505	-	1,696,852	33,352,357
FEES	10,274,120	-	4,428,397	14,702,517
LICENSES	875,585	-	-	875,585
INTERGOVERNMENTAL	1,524,742	2,072,155	10,531,423	14,128,320
SALES, RENTAL & SERVICES	2,136,982	149,795	1,005,436	3,292,213
FINES AND FORFEITURES	1,937,526	-	886,851	2,824,377
INTEREST	199,283	45,949	150,192	395,424
MISCELLANEOUS	24,062	-	-	24,062
CONTRIBUTIONS AND DONATIONS	365	-	3,997	4,362
TOTAL REVENUES	$ 124,545,505	2,267,899	23,490,595	150,303,999
EXPENDITURES:				
CURRENT				
GENERAL GOVERNMENT	$ 23,738,042	-	477,083	24,215,125
JUDICIAL AND LAW ENFORCEMENT	67,214,120	-	14,957,999	82,172,119
EDUCATION AND RECREATION	318,509	-	998,989	1,317,498
HEALTH AND WELFARE	10,194,194	10,283,172	251,533	20,728,899
MAINTENANCE OF STRUCTURES AND EQUIPMENT	12,491,343	-	247	12,491,590
CAPITAL OUTLAY	-	-	1,987,390	1,987,390
DEBT SERVICE				
PRINCIPAL	-	-	3,981,008	3,981,008
INTEREST AND COMMISSION	-	-	1,298,050	1,298,050
TOTAL EXPENDITURES	$ 113,956,208	10,283,172	23,952,299	148,191,679
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ 10,589,297	(8,015,273)	(461,704)	2,112,320
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$ -	-	4,800,783	4,800,783
TRANSFERS OUT	(6,770,896)	-	(532,225)	(7,303,121)
TOTAL OTHER FINANCING SOURCES (USES)	$ (6,770,896)	-	4,268,558	(2,502,338)
NET CHANGE IN FUND BALANCES	$ 3,818,401	(8,015,273)	3,806,854	(390,018)
FUND BALANCES, BEGINNING	$ 45,477,690	10,697,623	15,326,161	71,501,474
FUND BALANCES, ENDING	$ 49,296,091	2,682,350	19,133,015	71,111,456

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES
SEPTEMBER 30, 2018

Net change in fund balances - total governmental funds		$ (390,018)
Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of these assets is allocated over their estimated useful lives and reported as depreciation expense.		
Capital Expenditures	$ 7,101,110	
Capital asset donations to Business type activities	(366,247)	
Net adjustment for sale or disposal of capital assets	(7,472)	
Depreciation Expense	(7,318,793)	
Net adjustment		(591,402)
Debt proceeds are reported as financing sources in governmental funds and thus contribute to the change in fund balance. In the statement of net position, however, issuing debt increases long-term liabilities and does not affect the Statement of Activities. Similarly, repayment of principal is an expenditure in the governmental funds but reduces the liability in the Statement of Net Position.		
Repayments:		
To paying agent for bond principal	$ 3,640,000	
Capital Lease principal	341,008	
Net adjustment		3,981,008
Under the modified accrual basis of accounting used in the governmental funds, expenditures are not recognized for transactions that are not normally paid with expendable available financial resources. In the statement of activities, however, which is presented on the accrual basis, expenses and liabilities are reported regardless of when financial resources are available. In addition, interest on long-term debt is not recognized under the modified accrual basis of accounting until due, rather as it accrues. The adjustment combines the net changes of ten balances.		
Compensated absences	$ (191,755)	
OPEB Obligations	6,553,861	
Pension Liability	24,191,306	
Pensions - Economic/demographic (gains)	403,942	
Pensions - Economic/demographic losses	(190,586)	
Pensions - Change in assumptions	283,121	
Pensions - Investmeut (gains) of losses	(26,333,657)	
Pensions - Difference in Contributions	356,245	
OPEB - Change in assumptions	(15,922,254)	
Amortization of bond premium	377,508	
Amortization of refunding difference	(114,018)	
Accrued interest on debt	17,710	
Combined adjustment		(10,568,577)
Internal service funds are used by the County. The net change in position of the internal service funds are reported with governmental activities.		1,679,297
Some of the County's receivables are classified as long-term and therefore the net of revenue and bad debt expense associated with theses receivables are not reported in the funds.		(193,339)
Because some revenues will not be collected for several months after the County's fiscal year end, they do not provide current financial resources and they are not reported as revenues in the funds.		769,568
Total change in net position of governmental activities		$ (5,313,463)

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
STATEMENT OF NET POSITION -
PROPRIETARY FUNDS
SEPTEMBER 30, 2018

	ENTERPRISE FUNDS			
	JACK BROOKS REGIONAL AIRPORT	FORD PARK	TOTAL	INTERNAL SERVICE FUNDS
ASSETS:				
CURRENT ASSETS:				
CASH AND CASH EQUIVALENTS	$ 364,229	1,709,379	2,073,608	1,470,298
ACCOUNTS RECEIVABLE, Net	39,992	194,819	234,811	353,337
INTEREST RECEIVABLE	146	320	466	1,502
DUE FROM OTHER GOVERNMENTAL ENTITIES	61,553	-	61,553	161,346
PREPAID ITEMS	-	53,438	53,438	-
INVENTORY, At Cost	145,733	86,846	232,579	-
DEPOSITS	-	-	-	152,600
TOTAL CURRENT ASSETS	$ 611,653	2,044,802	2,656,455	2,139,083
NONCURRENT ASSETS:				
CAPITAL ASSETS:				
LAND	3,024,815	2,129,785	5,154,600	-
CONSTRUCTION IN PROGRESS	6,479,713	18,330	6,498,043	-
OTHER CAPITAL ASSETS, NET OF DEPRECIATION	23,810,923	44,385,617	68,196,540	-
TOTAL NONCURRENT ASSETS	$ 33,315,451	46,533,732	79,849,183	-
TOTAL ASSETS	$ 33,927,104	48,578,534	82,505,638	2,139,083
DEFERRED OUTFLOWS OF RESOURCES:				
DEFERRED OUTFLOWS RELATED TO PENSIONS	$ 228,299	-	228,299	-
TOTAL DEFERRED OUTFLOWS OF RESOURCES	$ 228,299	-	228,299	-
LIABILITIES:				
CURRENT LIABILITIES:				
ACCOUNTS PAYABLE	$ 330,918	823,611	1,154,529	19,931
CLAIMS LIABILITY	-	-	-	2,083,283
DUE TO OTHER FUNDS	-	-	-	5,825,431
CURRENT PORTION - COMPENSATED ABSENCES	19,409	22,997	42,406	-
UNEARNED REVENUE	62,723	405,519	468,242	-
CUSTOMER DEPOSITS	25,000	-	25,000	-
TOTAL CURRENT LIABILITIES	$ 438,050	1,252,127	1,690,177	7,928,645
NONCURRENT LIABILITIES:				
NONCURRENT PORTION - COMPENSATED ABSENCES	154,678	-	154,678	-
PENSION LIABILITY	890,583	-	890,583	-
TOTAL NONCURRENT LIABILITIES	$ 1,045,261	-	1,045,261	-
TOTAL LIABILITIES	$ 1,483,311	1,252,127	2,735,438	7,928,645
DEFERRED INFLOWS OF RESOURCES:				
DEFERRED INFLOWS RELATED TO PENSIONS	$ 169,434	-	169,434	-
TOTAL DEFERRED INFLOWS OF RESOURCES	$ 169,434	-	169,434	-
NET POSITION:				
NET INVESTMENT IN CAPITAL ASSETS	$ 33,315,451	46,533,732	79,849,183	-
UNRESTRICTED	(812,793)	792,675	(20,118)	(5,789,562)
TOTAL NET POSITION	$ 32,502,658	47,326,407	79,829,065	(5,789,562)

The notes to financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION - PROPRIETARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	ENTERPRISE FUNDS			
	JACK BROOKS REGIONAL AIRPORT	FORD PARK	TOTAL	INTERNAL SERVICE FUNDS
OPERATING REVENUES:				
CHARGES FOR SERVICES	$ 3,281,881	3,528,209	6,810,090	19,645,112
EMPLOYEE CONTRIBUTIONS	-	-	-	2,578,515
TOTAL OPERATING REVENUES	$ 3,281,881	3,528,209	6,810,090	22,223,627
OPERATING EXPENSES:				
SALARIES & BENEFITS	$ 1,821,391	1,510,758	3,332,149	-
MATERIALS AND SUPPLIES	96,965	28,259	125,224	-
MAINTENANCE AND REPAIRS	195,385	272,955	468,340	-
UTILITIES	181,309	710,574	891,883	-
COST OF GOODS SOLD	1,483,366	1,799,965	3,283,331	-
MISCELLANEOUS	291,518	210,052	501,570	-
ADMINISTRATIVE	-	618,509	618,509	1,689,978
INCURRED & ESTIMATED CLAIMS	-	-	-	19,721,590
DEPRECIATION	1,633,861	2,363,008	3,996,869	-
TOTAL OPERATING EXPENSES	$ 5,703,795	7,514,080	13,217,875	21,411,568
OPERATING INCOME (LOSS)	$ (2,421,914)	(3,985,871)	(6,407,785)	812,059
NONOPERATING REVENUES:				
INTEREST REVENUE	$ 3,620	698	4,318	7,073
GAIN/(LOSS) ON SALE OF CAPITAL ASSETS	-	(984)	(984)	-
REFUNDS AND RECOVERIES	65,900	-	65,900	860,165
TOTAL NONOPERATING REVENUES	$ 69,520	(286)	69,234	867,238
INCOME (LOSS) BEFORE TRANSFERS	$ (2,352,394)	(3,986,157)	(6,338,551)	1,679,297
CAPITAL CONTRIBUTIONS	1,290,828	436,246	1,727,074	-
TRANSFER IN	700,000	1,802,338	2,502,338	-
CHANGE IN NET POSITION	$ (361,566)	(1,747,573)	(2,109,139)	1,679,297
NET POSITION, BEGINNING	32,864,224	49,073,980	81,938,204	(7,468,859)
NET POSITION, ENDING	$ 32,502,658	47,326,407	79,829,065	(5,789,562)

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
STATEMENT OF CASH FLOWS -
PROPRIETARY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	ENTERPRISE FUNDS			
	JACK BROOKS REGIONAL AIRPORT	FORD PARK	TOTAL	INTERNAL SERVICE FUNDS
CASH FLOWS FROM OPERATING ACTIVITIES:				
RECEIPTS FROM CUSTOMERS AND USERS	$ 3,302,286	3,883,937	7,186,223	2,219,022
RECEIPTS FROM EMPLOYEES	-	-	-	2,570,707
PAYMENTS TO SUPPLIERS	(1,805,573)	(3,344,366)	(5,149,939)	(1,766,855)
PAYMENTS TO EMPLOYEES	(2,609,135)	(1,513,143)	(4,122,278)	-
INTERNAL ACTIVITY-RECEIPTS(PAYMENTS) FROM (TO) OTHER FUNDS	-	-	-	17,124,878
CLAIMS PAID	-	-	-	(21,864,447)
OTHER RECEIPTS	65,900	-	65,900	1,778,061
NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES	$ (1,046,522)	(973,572)	(2,020,094)	61,366
CASH FLOWS FROM NONCAPITAL FINANCING ACTIVITIES:				
TRANSFERS (TO) FROM OTHER FUNDS	$ 700,000	1,802,338	2,502,338	-
NET CASH PROVIDED (USED) BY NONCAPITAL FINANCING ACTIVITIES	$ 700,000	1,802,338	2,502,338	-
CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:				
CAPITAL GRANTS FROM FEDERAL ENTITIES	$ 1,694,152	-	1,694,152	-
ACQUISITION AND CONSTRUCTION OF CAPITAL ASSETS	(1,925,380)	(63,532)	(1,988,912)	-
NET CASH PROVIDED (USED) BY CAPITAL FINANCING ACTIVITIES	$ (231,228)	(63,532)	(294,760)	-
CASH FLOWS FROM INVESTMENT ACTIVITIES:				
RECEIPTS OF INTEREST	3,534	416	3,950	5,754
NET CASH PROVIDED BY INVESTMENT ACTIVITIES	$ 3,534	416	3,950	5,754
NET INCREASE (DECREASE) IN CASH	$ (574,216)	765,650	191,434	67,120
CASH AND CASH EQUIVALENTS - BEGINNING	938,445	943,729	1,882,174	1,403,178
CASH AND CASH EQUIVALENTS - ENDING	$ 364,229	1,709,379	2,073,608	1,470,298
RECONCILIATION OF OPERATING INCOME(LOSS) TO NET CASH PROVIDED(USED) BY OPERATING ACTIVITIES:				
OPERATING INCOME(LOSS)	$ (2,421,914)	(3,985,871)	(6,407,785)	812,059
ADJUSTMENTS TO RECONCILE OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES:				
DEPRECIATION	1,633,861	2,363,008	3,996,869	-
OTHER NON-OPERATING REVENUES (EXPENSES)	65,900	-	65,900	862,119
CHANGES IN ASSETS AND LIABILITIES:				
ACCOUNTS RECEIVABLE	20,525	152,863	173,388	908,134
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	-	94,595
INSURANCE DEPOSITS	-	-	-	(77,100)
PREPAID ITEMS	77	(28,009)	(27,932)	-
INVENTORY	(26,456)	(52,976)	(79,432)	-
DEFERRED OUTFLOWS RELATED TO PENSIONS	360,941	-	360,941	-
CUSTOMER DEPOSITS	(1,166)	(19,042)	(20,208)	-
ACCOUNTS PAYABLE	(334,136)	348,924	14,788	223
CLAIMS LIABILITY	-	-	-	(2,142,857)
DEFERRED INFLOWS RELATED TO PENSIONS	106,123	-	106,123	-
DUE TO OTHER FUNDS	-	-	-	(395,807)
OTHER LIABILITIES	(450,277)	247,531	(202,746)	-
NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES	$ (1,046,522)	(973,572)	(2,020,094)	61,366
NON-CASH OPERATING, CAPITAL AND RELATED FINANCING, AND INVESTING ACTIVITIES				
CAPITAL CONTRIBUTIONS	$ -	436,246	436,246	-

The notes to the financial statements are an integral part of this statement.

JEFFERSON COUNTY, TEXAS
STATEMENT OF FIDUCIARY NET POSITION
AGENCY FUNDS
SEPTEMBER 30, 2018

	TOTALS
ASSETS	
CASH AND CASH EQUIVALENTS	$ 15,828,969
ACCOUNTS RECEIVABLE, Net	6,729
DUE FROM OTHER GOVERNMENTAL ENTITIES	417,622
TOTAL ASSETS	$ 16,253,320
LIABILITIES	
ACCOUNTS PAYABLE	$ 13,696,192
DUE TO OTHER GOVERNMENTAL ENTITIES	903,787
OTHER PAYABLES	1,653,341
TOTAL LIABILITIES	$ 16,253,320

The notes to the financial statements are an integral part of this statement.

Note 1 - Summary of Significant Accounting Policies

The financial statements of Jefferson County, Texas ("County") have been prepared in conformity with generally accepted accounting principles ("GAAP") as applied to governmental units. The Governmental Accounting Standards Board ("GASB") is the accepted standard setting body for establishing governmental and financial reporting principles. The most significant accounting and reporting policies of the County are described in the following notes to the financial statements.

A. Reporting Entity

The County is a public corporation and a political subdivision of the State of Texas. The County is governed by Commissioners' Court, composed of four County Commissioners and the County Judge, all of whom are elected officials.

The County provides a vast array of services, which include public safety, administration of justice, health and human services, recreation services, public improvements, and general administration.

As required by GAAP, the financial statements of the reporting entity include those of the County (the primary government) and its component units in conformity with GASB Statement No. 14, *The Financial Reporting Entity* ("GASB 14"), GASB Statement No. 39, *Determining Whether Certain Organizations are Component Units* ("GASB 39"), GASB Statement No. 61, *The Financial Reporting Entity: Omnibus-an amendment of GASB Statements No. 14 and No. 34*, ("GASB 61"), GASB Statement No. 80, *Blending Requirements for Certain Component Units*, clarifies the financial statement presentation requirements for certain component units which are incorporated as not-for-profit entities.

In accordance with these standards, a financial reporting entity consists of the primary government and its components units. Component units are legally separate organizations for which the elected officials of the County are financially accountable, or the relationship to the County is such that exclusion would cause the County's financial statements to be misleading or incomplete. Blended component units, although legally separate entities, are, in substance, part of the County's operations, and so data from these units are combined with data of the County.

The criteria used to determine whether an organization is a component unit of the County and whether it is a discretely or a blended component unit includes: financial accountability of Jefferson County for the component unit, appointment of a voting majority, ability to impose the County's will on the component unit, fiscal dependency criterion, whether there is a financial benefit to or burden to the County or if operational responsibility for the component unit rests with management of the County, and whether services are provided entirely or almost entirely to the primary government.

Blended Component Units:

For financial reporting purposes, the Southeast Texas Government Employee Benefits Pool (The Pool) is included in the operations and activities of the County as a blended component unit. The

Note 1 - Summary of Significant Accounting Policies (continued)

Pool is a public entity risk pool (see Note 13), which the County is the sponsor government. The Pool provides services almost entirely to the County. The Pool is accounted for as an internal service fund.

Excluded from the reporting entity:

The following agencies were considered in the determination of component units of the County's financial reporting entity. It was determined that these entities should not be included as component units of the primary government: Jefferson County Navigation District, Drainage District #3, Drainage District #6, Drainage District #7, Foreign Trade Zone, Pleasure Island Park Board, Jefferson County Health Facilities Development Corporation, Jefferson County Housing Finance Corporation, Local Emergency Planning Committee (LEPC), and Jefferson County Industrial Development Corporation.

B. Implementation of New Standards

In the current year the County implemented the following new standards:

GASB Statement 75, *Accounting and Financial Reporting for Postemployment Benefit Plans Other than Pension Plans* ("GASB 75"), replaces the requirements of GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. GASB 75 require governments to report a liability on the face of the financial statements for the OPEB that they provide. Implementation of GASB 75 is reflected in the County's financial statements.

GASB Statement 81, *Irrevocable Split-Interest Agreements* ("GASB 81"), establishes recognition and measurement requirements for irrevocable split-interest agreements. Implementation of GASB 81 did not have an impact in the County's financial statements.

GASB Statement 85, *Omnibus 2017* ("GASB 85"), addresses practice issues that have been identified during implementation and application of certain GASB Statements. This Statement addresses a variety of topics including issues related to blending components units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits [OPEB]). Implementation of GASB 85 is reflected in the County's financial statements.

GASB Statement 86, *Certain Debt Extinguishment Issues* ("GASB 86"), improves consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources—resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of extinguishing debt. Implementation of GASB 86 did not have an impact in the County's financial statements.

Note 1 - Summary of Significant Accounting Policies (continued)

C. Financial Statement Presentation, Measurement Focus and Basis of Accounting

Government-wide Statements

Government-wide financial statements consist of the Statement of Net Position and the Statement of Activities. These statements report information on all of the non-fiduciary activities of the primary government and its component units. For the most part, the effect of interfund activity has been removed from these statements. However, interfund services provided and used are not eliminated in the process of consolidation. Governmental activities, which normally are supported by taxes and intergovernmental revenues, are reported separately from business-type activities, which rely to a significant extent on fees and charges for support. Likewise, the primary government is financially accountable.

The government-wide financial statements are prepared using the economic resources measurement focus and the accrual basis of accounting. Under this measurement focus, revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of the timing of cash flows. Property taxes are recognized as revenues in the year for which they are levied. Fines and forfeitures are recognized when they have been assessed and adjudicated and earned. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

The Statement of Activities demonstrates the degree to which the direct expenses of the County's programs are offset by those programs' revenues. Program revenues include; 1) charges to customers or applicants who purchase, use, or directly benefit from goods, services, or privileges provided by the program and; 2) grants and contributions that are restricted to meeting the operational and/or capital requirements of a particular program. Program revenues include those generated from General Government, Judicial and Law Enforcement, Education and Recreation, Health and Welfare, Contract Services, and Maintenance of Equipment and Structures. Taxes and other items not included among program revenues are reported instead as general revenues.

Miscellaneous general revenues consist of non-program specific contributions.

Agency funds are excluded in the government-wide presentation of the financial statements.

Fund-level Statements

All governmental funds use the modified accrual basis of accounting. Under the modified accrual basis of accounting, revenues are recognized when susceptible to accrual (i.e., when they become both measurable and available). "Measurable" means the amount of the transaction can be determined and "available" means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. The County considers property taxes and other revenues as available if they are collected within 60 days after year-end. Expenditures are recorded when the related fund liability is incurred. Principal and interest on governmental long-term debt are recorded as fund liabilities when due or when amounts have been accumulated in the debt service

Note 1 - Summary of Significant Accounting Policies (continued)

fund for payments to be made early in the following year. Grant and entitlement revenues are also susceptible to accrual. Encumbrances are used during the year and any remaining encumbrances are liquidated at fiscal year end. These funds are accounted for on a spending "financial flow" measurement focus. This means that only current assets, deferred outflows (inflows) of resources, and current liabilities are generally included on their balance sheets. Their reported fund balance (net position) is considered a measure of "available spendable resources." Governmental fund operating statements present increases (revenues and other financing sources) and decreases (expenditures and other financing uses) in net current assets. Accordingly, they are said to present a summary of sources and uses of "available spendable resources" during a period.

All proprietary funds, including the enterprise funds and internal service funds, and fiduciary funds, including agency funds, are accounted for using the accrual basis of accounting. Revenues are recognized when earned, and expenses when they are incurred. Claims incurred but not reported are included in payables and expenses. These funds are accounted for using a cost of service or "capital maintenance" measurement focus. This means that all assets and liabilities (whether current or non-current) associated with their activity are included in the funds' balance sheets. The Agency funds are custodial in nature and involve no measurement of results of operations.

The accounts of the County are organized and operated on the basis of funds, each of which is considered a separate accounting entity. The operations of each fund are accounted for with a separate set of self-balancing accounts that comprise its assets, deferred outflows of resources, liabilities, deferred inflows of resources, fund equity, revenues, and expenditures/expenses. Government resources are allocated to and accounted for in individual funds based on the purpose for which they are to be spent and the means by which spending activities are controlled.

Funds are classified into three categories: Governmental, Proprietary, and Fiduciary. The County reports the following major funds:

GOVERNMENTAL FUNDS: Used to account for all or most of a government's general activity.

General Fund – used to account for the general operations of the County.

FEMA Emergency Fund – used to account for the grants from the Federal Emergency Management Agency (FEMA) for disasters.

PROPRIETARY FUNDS: Used to account for operations that are financed in a manner similar to those in the private sector, where the determination of net income is appropriate for sound financial administration.

Jack Brooks Regional Airport – used to account for the day-to-day operation of the County airport. These facilities are financed primarily through user charges.

Note 1 - Summary of Significant Accounting Policies (continued)

Ford Park – used to account for the day-to-day operation of Ford Park. These facilities are financed primarily through user charges.

Additionally, the County reports the following fund types:

Internal Service Funds – used to account for the financing of goods and services provided by one department or agency of the County to other County departments or agencies on a cost reimbursement basis. The County reports three internal service fund: 1) Liability Insurance – to account for the County's contribution and payment for liability claims, 2) Workers' Compensation – to account for County's contribution and payment for workers' compensation claims, and 3) Southeast Texas Government Employee Benefits Pool - to account for the County's Public Entity Risk Pool, which provides group health insurance programs for member governments including comprehensive major medical and dental care.

FIDUCIARY FUNDS: Used to report assets held in a trustee or agency capacity for others and therefore cannot be used to support the government's own programs.

Agency Funds are used to account for assets held by the County as an agent on behalf of a third party. The County reports eleven agency funds held for various third parties outside the primary government: Treasurer Maintained Fund, County Clerk Fund, District Clerk Fund, Sheriff's Fund, Justice of the Peace Fund, Tax Assessor/Collector Fund, District Attorney's Seizure Fund, Community Supervision Trust Fund, Juvenile Probation Trust Fund, Flexible Spending, and Women's Center Trust Fund.

Proprietary funds distinguish operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing goods in connection with the proprietary fund's principal operations. The principal operating revenues of the Jack Brooks Regional Airport and Ford Park are user fees. Operating revenues in the Internal Service Funds consist primarily of charges to the various County departments. Operating expenses in the enterprise and internal service funds include the cost of sales and services, administrative expenses, incurred and estimated claims, salaries & benefits, materials and supplies, maintenance and repairs, utilities, miscellaneous, and depreciation on capital assets. All revenues and expenses not meeting these definitions are reported as non-operating revenues and expenses.

When both restricted and unrestricted resources are available for use, it is the County's policy to use restricted resources first, then unrestricted resources to the extent they are needed.

D. Budgets

The County follows these procedures in establishing the budgetary data reflected in the financial statements.

Note 1 - Summary of Significant Accounting Policies (continued)

- Department annual budget requests are submitted by the Department or Agency Head to the County Auditor's office during the third quarter of the fiscal year for the upcoming fiscal year to begin October 1.

- The County Auditor's office prepares an estimate of available resources for the upcoming fiscal year.

- The County Auditor's office prepares the proposed annual operating budget to be presented to the Commissioners' Court for their consideration. The budget represents the financial plan for the new fiscal year.

- Public hearings are held on the proposed budget.

- The Commissioners' Court must adopt an annual operating budget by a majority vote of the Commissioners' Court before October 1. The adopted budget must be balanced; that is, available resources must be sufficient to support annual appropriations.

- The department is the legal level of budgetary control. Commissioners' Court approval is necessary to transfer appropriations between departments. Transfers may not increase the total budget.

- The Commissioners' Court may approve expenditures as an amendment to the budget in an emergency situation that could not have been foreseen at the time the original budget was approved.

- Annual budgets are legally adopted for the General Fund and Debt Service Funds. Budgets for Grant Funds are established pursuant to grant awards and budgets for Capital Projects are established on a project basis.

- Appropriations lapse at year-end for all budgeted funds.

- Budgets are prepared on a basis consistent with GAAP.

E. Deposits and Investments

The County's cash and cash equivalents are considered to be cash on hand, demand deposits, certificates of deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

State statute authorizes the County to invest in obligations of the U.S. Treasury and Federal Agencies, commercial paper, repurchase agreements, Bankers' acceptances, money market mutual funds, and direct obligations of the State of Texas.

Note 1 - Summary of Significant Accounting Policies (continued)

Investments for the County are stated at fair value, which is based on quoted market prices with the difference between the purchase price and market price being recorded as earnings on investments.

F. Encumbrances

Encumbrances represent commitments related to unperformed contracts for goods and services. Encumbrance accounting, under which purchase orders, contracts, and other commitments for the expenditure of funds are recorded in order to reserve that portion of the applicable appropriation, is employed. All encumbrances are liquidated at fiscal year end.

G. Receivables and Payables

Property taxes are levied based on taxable value at January 1 prior to September 30 and become due October 1, 2017 and past due after January 31, 2018. Accordingly, receivables and revenues for property taxes are reflected on the government-wide statement based on the full accrual method of accounting. Property tax receivables for prior year's levy are shown net of an allowance for uncollectible.

Receivables from other governments include amount due from grantors for approved grants for specific programs and reimbursements for services performed by the County. Program grants are recorded as receivables and revenues at the time all eligibility requirements established by the provider have been met.

Reimbursements for services performed are recorded as receivables and revenues when they are earned in the government-wide statements. Included are fines and costs assessed by court action and billable services for certain contracts. Revenues received in advance of the costs being incurred are recorded as unearned revenue in the fund statements. Receivables are shown net of an allowance for uncollectible.

Lending or borrowing between funds is reflected as "due to" or "due from" (current portion) or "advances to/from other funds" (non-current). Advances between funds, as reported in the fund financial statements, are offset by a fund balance reserve account in applicable governmental funds to indicate that they are not available for appropriation and are not expendable available financial resources. Interfund activity reflected in "due to" or "due from" is eliminated on the government-wide statements.

H. Interfund Transactions

During the course of normal operations, the County has many transactions between funds. The accompanying fund level financial statements reflect as transfers the resources provided and the expenditures used to provide services, construct assets, and meet debt service requirements. The

Note 1 - Summary of Significant Accounting Policies (continued)

effect of interfund activity has been eliminated in the Government-Wide financial statements, except for transactions between governmental and business-type activities.

I. Inventories and Prepaid Items

Inventories are valued at cost, which approximates market, using the "first-in/first-out" method. Reported inventories in the governmental funds are offset by a fund balance reserve, which indicates they are unavailable for appropriations even though they are a component of net current assets. Inventory policy on government-wide statements is consistent with fund statements.

Certain payments to vendors reflect cost applicable to future accounting periods and are recorded as prepaid items in both government-wide and fund financial statements and in the fund financial statements are offset by a fund balance reserve, which indicates they are unavailable for appropriations even though they are a component of net current assets.

The cost of governmental fund type inventories and prepaid items are recorded as expenditures when consumed rather than when they are purchased (consumption method).

J. Capital Assets and Infrastructure

Capital assets include: land, land improvements, buildings and building improvements, park improvements and facilities, equipment, machinery, vehicles, other tangible and intangible assets, and infrastructure that are used in the County's operations and benefits more than a single fiscal year. Infrastructure assets are long-lived assets that are generally stationary in nature and can typically be preserved for a significantly greater number of years than other capital assets. Infrastructure assets of the County include roads and bridges.

Capital assets of the County are defined as assets with individual costs of $10,000 or more and estimated useful lives in excess of one year. All capital assets are stated at historical cost or estimated historical cost if actual cost is not available. Donated capital assets are recorded at acquisition cost, which is the price that would be paid to acquire an asset with equivalent service potential at the acquisition date.

It is the County's policy not to capitalize interest on construction for capital assets reported in the governmental activities of the government-wide financial statements.

Capital assets are depreciated in the government-wide financial statements using the straight-line method over the following useful lives:

Note 1 - Summary of Significant Accounting Policies (continued)

Asset	Years
Runways	20-35
Buildings	40
Building Improvements	15-25
Equipment	3-7
Machinery	15
Vehicles	4-15
Other tangible assets	7-10
Computer software	3-5
Infrastructure:	
Bridges	25
Roads	40

K. Compensated Absences

Accumulated compensatory leave, vacation and sick leave that have matured (reimbursable leave still outstanding following an employee's resignation or retirement) are reported as expenditures in the respective governmental funds. Accumulated compensated absences that have not matured are reported as long-term liabilities in the governmental activities column of the government-wide Statement of Net Position. The majority of these have typically been liquidated from the General Fund in previous years. Accumulated compensated absences of Proprietary Funds are recorded as an expense and liability in the respective fund and the business-type activities column of the government-wide Statement of Activities as the benefit accrues for the employee.

Employees are allowed to accrue 13 days of sick leave per year. Sick leave benefits are recognized as expenditures as they are used by the employees. Employees may accumulate up to 1,440 hours of sick leave. For employees with 8 years of service and hired prior to October 1, 2002, unused sick leave benefits are paid at 50% at termination. For employees with 8 years of service and hired after October 1, 2002, unused sick leave benefits are paid at 10% at termination.

Employees with more than one year of service accrue from two to five weeks of vacation per year, depending on years of service. Unused vacation benefits lapse on March 15 for the previous calendar year. Upon termination from County employment, an employee shall be entitled to payment for total accrued but unused hours of vacation.

Non-exempt employees earn compensatory time at one and one-half times their full rate of pay times the excess of 40 hours per week worked. The compensatory time balance for non-exempt employees may not exceed 80 hours except for law enforcement employees, which may accumulate up to 480 hours. Hours in excess of the maximum must be paid to the non-exempt employee at the rate of one and a half times the regular rate. Upon termination, non-exempt employees will be paid for compensatory time at their wage rate at time of termination. Compensatory time is carried forward indefinitely.

Note 1 - Summary of Significant Accounting Policies (continued)

L. Long-Term Obligations

In the government-wide financial statements, and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type statement of net position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. In the fund financial statements, governmental fund types recognize bond premiums and discounts during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financial sources while discounts on debt issuances are reported as other financing uses.

M. Deferred outflows/inflows of resources

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then. The County has two items that qualify for reporting in this category. The first is deferred loss on refunding bonds reported in the government-wide statement of net position. A deferred loss on refunding bonds results from the difference in the carrying value of refunded debt and its reacquisition price. This amount is deferred and amortized over the shorter of the life of the refunded or refunding debt. The second is deferred outflows related to pensions.

In addition to liabilities in the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The County has three items that qualify for reporting in this category. The first arises only under a modified accrual basis of accounting, which qualifies for reporting in this category. Accordingly, that item, *unavailable revenue*, is reported only in the governmental funds balance sheet. The governmental funds report unavailable revenues from property taxes, grants, and inmate housing. These amounts are deferred and recognized as an inflow of resources in the period that the amounts become available. The second item is deferred inflows related to pensions and is only recorded in the government-wide financials. The third item is deferred inflows related to OPEB and is only recorded in the government-wide financials.

N. Pensions

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expenses, information about the Fiduciary Net Position of the Texas County and District Retirement System (TCDRS) and additions to/deductions

Note 1 - Summary of Significant Accounting Policies (continued)

from TCDRS's Fiduciary Net Position have been determined on the same basis as they are reported by TCDRS. For this purpose, plan contributions are legally due. Benefit payments and refunds are recognized when due and payable in accordance with the benefits terms. Investments are reported at fair value.

O. Other Post-employment benefits

For purposes of measuring the total OPEB liability, deferred inflows of resources related to OPEB, and OPEB expenses, the amounts have been determined by an actuary under GASB Statements No. 75. The County does not pre-fund benefits and the current funding policy is to pay benefits directly from general assets on a pay-as-you-go basis. The total OPEB liability is the portion of actuarial present value of projects benefit payments that is attributable to past periods of member service using the Entry Age Normal cost method. The deferred inflows of resources represent the portion of changes in total OPEB liability that is not immediately recognized in OPEB expense, which can include differences between expected and actual experience, changes in assumptions, and differences between expected and actual earnings on plan investments.

P. Net Position and Fund Balances

Net Position Classifications

Net position represents the difference between assets, deferred outflows (inflows) of resources, and liabilities.

Net position in the proprietary fund financial statements and the government-wide financial statements are classified in three categories: 1) Net investment in capital assets, 2) Restricted net position, and 3) Unrestricted net position.

In the proprietary fund financial statements and in the government-wide financial statements, restricted net position is reported for amounts that are externally restricted by 1) creditors (eg. bond covenants), grantors, contributions, or laws and regulations of other governments, or 2) law through constitutional provision or enabling legislation.

Fund Balance Classification

The governmental fund financial statements present fund balances based on classifications that comprise a hierarchy that is based primarily on the extent to which the County is bound to honor constraints on the specific purposes for which amounts in the respective governmental funds can be spent. The classifications used in the governmental fund financial statements are as follows:

- Nonspendable: This classification includes amounts that cannot be spent because they are either (a) not in spendable form or (b) are legally or contractually required to be maintained

Note 1 - Summary of Significant Accounting Policies (continued)

intact. Nonspendable items are not expected to be converted to cash or not expected to be converted to cash within the next year.

- Restricted: This classification includes amounts for which constraints have been placed on the use of the resources either (a) externally imposed by creditors, grantors, contributions, or laws or regulations of other governments, or (b) imposed by law through constitutional provisions or enabling legislation.

- Committed: This classification includes amounts that can be used only for specific purposes pursuant to constraints imposed by court resolution of the Commissioners' Court, the County's highest level of decision making authority. These amounts cannot be used for any other purpose unless the Commissioners' Court removes or changes the specified use by taking the same type of action that was employed when the funds were initially committed. This classification also includes contractual obligations to the extent that existing resources have been specifically committed for use in satisfying those contractual requirements.

- Assigned: This classification includes amounts that are constrained by the County's intent to be used for a specific purpose but are neither restricted nor committed. When it is appropriate for fund balance to be assigned, the Commissioners' Court retains the responsibility to assign funds. Assignments may occur subsequent to fiscal year end.

- Unassigned: This classification includes the residual fund balances for the General Fund. The unassigned classification also includes negative residual fund balance of any other governmental fund that cannot be eliminated by offsetting of assigned fund balance amounts.

When expenditure is incurred for purposes for which both restricted and unrestricted fund balance is available, the County considers restricted fund to have been spent first. When expenditure is incurred for which committed, assigned, or unassigned fund balances are available, the County considers amounts to have been spent first out of committed funds, then assigned funds, and finally unassigned.

Q. Statement of Cash Flows

For purposes of cash flows, the County considers all highly liquid investments (including restricted) with a maturity of three months or less when purchased to be cash equivalents.

R. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at

Note 2 - Deposits and Investments

the date of financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The County categorizes its fair value measurements within the fair value hierarchy established by general accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs. As of September 30, 2018, the County held the following fair value measurements:

Investments by fair value level	Balance 9/30/2018	Level 1	Level 2	Level 3	Weighted Average Maturity (days)
U. S. Agency Securities	$30,049,005	$ -	$ 30,049,005	$ -	586
Money Market Account	7,771	-	7,771	-	30
Certificates of Deposit	992,000	-	992,000	-	67
	$31,048,776	$ -	$ 31,048,776	$ -	569

Of the County's investments carried at fair value, $31,041,005 (U S Agency Securities and Certificates of Deposits) were priced using documented trade history in exact security, option-adjusted discount cash flow model, and present value of expected cash flow model.

Interest Rate Risk – Fair value fluctuates with interest rates and increasing rates may cause fair value to decline below cost. In compliance with the County's Investment Policy, the County minimized interest rate risk by limiting the weighted average maturity of the portfolio to 1,096 days with a stated final maturity date not to exceed 3 years from the date of purchase. In addition, the portfolio is structured so that securities mature to meet cash flow requirements, thereby avoiding the need to sell securities prior to maturity and below the original cost.

Credit Risk – In compliance with the County's investment policy, as of September 30, 2018, all of the County's purchased investments in U.S. Agency Securities were rated AA+ and Aaa by Standard & Poor's and Moody's respectively.

Concentration Risk – The County's investment policy is to diversify its portfolio to eliminate the risk of loss resulting from over concentration of assets in a specific maturity, a specific issuer, or a specific class of investment. As of September 30, 2018, the County had five investments that were with Federal National Mortgage Association (FNMA), six investments that were with Federal Home Loan Mortgage Corporation (FHLMC), two investments that were with Federal Home Loan Bank (FHLB), and one investment that was with Federal Farm Credit Bank (FFCB).

Note 2 - Deposits and Investments (continued)

Custodial credit risk - deposits – In the case of deposits, this is the risk that in the event of a bank failure, the County's deposits may not be returned to it. The County's investment policy is to have all checking accounts placed at the County Depository Bank under a depository contract. The $54,580,124 bank balance and the Money Market account were covered by federal depository insurance or collateralized with securities held by the Bank of New York Mellon Trust Company. All of the certificates of deposits are covered by federal depository insurance.

Note 3 - Property Taxes and Other Receivables

Property taxes attach as an enforceable lien on property as of January 1. Taxes are levied on October 1 and payable by January 31 of the following year. The County bills and collects its own property taxes and it also bills and collects taxes for Jefferson County Navigation District, Jefferson County Drainage District #3, #6, and #7, Port of Beaumont, Port of Port Arthur, Water District #10, Nederland Independent School District, Northwest Forest Municipal Utility District, Emergency Services District #1, #2, #3, #4, Trinity Bay Conservation District, Port of Sabine Pass, Sabine Pass Independent School District, Port Arthur Independent School District, City of Port Arthur, Hamshire Fannett Independent School District, Port Neches-Groves Independent School District, Beaumont Independent School District, City of Beaumont, City of Groves, City of Nederland, City of Port Neches, City of Bevil Oaks, and City of Taylor Landing. Collections of these taxes and remittance of them to the various districts are accounted for in the Tax Assessor - Collector Agency Fund. The County is permitted by the State Constitution to levy taxes up to $.80 per $100 of assessed valuation for general government services and the payment of principal and interest on Long-Term Debt. In addition to its taxes subject to the $.80 tax limitation, the County's voters have authorized the levy of a special tax of $.15 per $100 assessed valuation solely for road maintenance expenses. The County is also authorized by the voters to levy the Farm to Market and Lateral Road Tax of $.30 per $100 of assessed value for the purpose of maintaining roads and bridges.

For the year ended September 30, 2018, the combined tax rate to finance general government services and the payment of principal and interest on long-term debt was $.364977.

On February 1 of the following calendar year the tax bill becomes delinquent and penalty and interest is assessed by the County. The County Commissioners issue a tax levy for the County's General and Debt Service Funds. The levy and collections are restricted to the funds they are allocated for. The delinquent tax receivables and penalty and interest receivables represent the past thirty years of uncollected tax levies. The allowance for uncollectible was set at forty percent of the gross tax receivable and sixty percent on penalty and interest as of September 30, 2018. The allowance has been recorded for property taxes and Penalty and Interest, which are estimated to be uncollectible as required by generally accepted accounting.

Property tax receivables of $3,802,645 as of September 30, 2018 are reported net of an allowance for uncollectible taxes of $2,527,232.

Note 3 - Property Taxes and Other Receivables (continued)

Penalty and Interest receivables of $2,193,745 as of September 30, 2018 are reported net of an allowance for uncollectible accounts of $3,290,618.

Receivables as of September 30, 2018 consist of the following:

	General	FEMA Emergency	Non Major Funds	Jack Brooks Regional Airport	Ford Park	Internal Service Funds	Agency Funds	Total
Receivables:								
Accounts	$ 199,313	$ 45,723	$ 128,834	$ 39,992	$ 234,345	$ 353,337	$ 6,729	$ 1,008,273
Employee	12,626	-	2,640	-	-	-	-	15,266
Interest	70,316	4,938	21,916	146	320	1,502	-	99,138
Taxes	6,205,299	-	124,578	-	-	-	-	6,329,877
Penalty & Interest	5,376,425	-	107,938	-	-	-	-	5,484,363
Inter-governmental	9,266,748	765,312	1,264,976	61,553	-	161,346	417,622	11,937,557
Gross Receivables	$ 21,130,727	$ 815,973	$ 1,650,882	$ 101,691	$ 234,665	$ 516,185	$ 424,351	$ 24,874,474
Less: Allowance for Uncollectibles	5,703,256	-	114,594	-	39,526	-	-	5,857,376
Net total receivables	$ 15,427,471	$ 815,973	$ 1,536,288	$ 101,691	$ 195,139	$ 516,185	$ 424,351	$ 19,017,098

As of September, 30, 2018, the various components of unearned revenue reported in the governmental funds were as follows:

	Unearned
Advanced Funding (Non-major Special Revenue Funds)	$ 663,048
Total Unearned Revenue for Governmental Funds	$ 663,048

Note 4 – Interfund Receivables, Payables, and Transfers

In the fund financial statements, interfund balances are the result of normal transactions between funds and will be liquidated in the subsequent fiscal year. Balances between individual governmental funds and between governmental funds and internal services funds are eliminated in the government-wide financial statements.

The composition of interfund balances as of September 30, 2018, is as follows:

Note 4 – Interfund Receivables, Payables, and Transfers (continued)

Due to/from other funds:

Receivable Fund	Payable Fund	Amount
General Fnnd	Non-major governmental funds	$ 652,922
	Internal Service funds	5,825,431
Non-major governmental funds	Non-major governmental funds	1
	Total	$ 6,478,354

All of the due to/from transactions are routine in nature.

The following is a summary of the County's transfers for the year ended September 30, 2018:

	Transfers Out:		
	General Fund	Non-major Governmental	Total
Transfers In:			
General	$ -	$ -	$ -
Non-major Funds	4,268,558	532,225	4,800,783
Jack Brooks Regional Airport	700,000	-	700,000
Ford Park	1,802,338	-	1,802,338
	$ 6,770,896	$ 532,225	$ 7,303,121

Transfers in the amount of $700,000 from the General Fund to the Jack Brooks Regional Airport were to subsidize operations at the airport. Transfers in the amount of $1,802,338 to Ford Park were to subsidize operations of the complex. All other transfers are routine in nature such as grant matches, ongoing capital projects, and residual fund balance transfers for close out of funds.

Transfers in the amount of $366,247 for Ford Park were made between governmental activities and business-type activities for capital assets purchases which were donated to business-type activities in the government wide statements.

Note 5 – Capital Assets

Capital asset activity for the year ended September 30, 2018 was as follows:

Note 5 – Capital Assets (continued)

	Balance October 1, 2017	Additions	Deletions	Transfer	Balance September 30, 2018
Governmental Activities:					
Land	$ 3,840,787	$ -	$ -	$ -	$ 3,840,787
Construction work in progress	2,790,211	607,994	-	(3,124,965)	273,240
Total capital assets not depreciated	$ 6,630,998	$ 607,994	$ -	$ (3,124,965)	$ 4,114,027
Infrastructure	62,731,452	-	-	2,550,779	65,282,231
Buildings & Improvements	120,384,112	36,984		574,186	120,995,282
Equipment	44,515,373	6,089,885	(883,625)		49,721,633
Total capital assets depreciated	$ 227,630,937	$ 6,126,869	$ (883,625)	$ 3,124,965	$ 235,999,146
Less accumulated depreciation for:					
Infrastructure	(42,532,929)	(1,537,222)	-	-	(44,070,151)
Buildings & Improvements	(67,606,472)	(2,564,553)	-	-	(70,171,025)
Equipment	(31,439,879)	(3,217,018)	876,153	-	(33,780,744)
Total accumulated depreciation	$ (141,579,280)	$ (7,318,793)	$ 876,153	$ -	$ (148,021,920)
Total capital assets depreciated, net	$ 86,051,657	$ (1,191,924)	$ (7,472)	$ 3,124,965	$ 87,977,226
Governmental activities capital assets, net	$ 92,682,655	$ (583,930)	$ (7,472)	$ -	$ 92,091,253

	Balance October 1, 2017	Additions	Deletions	Transfer	Balance September 30, 2018
Business-type Activities:					
Land	$ 5,154,600	$ -	$ -	$ -	$ 5,154,600
Construction work in progress	5,063,774	1,434,269	-	-	6,498,043
Total capital assets not depreciated	$ 10,218,374	$ 1,434,269	$ -	$ -	$ 11,652,643
Buildings & Improvements	134,233,904	80,928	(1,250)	-	134,313,582
Equipment	10,391,809	489,845	(184,645)	-	10,697,009
Total capital assets depreciated	$ 144,625,713	$ 570,773	$ (185,895)	$ -	$ 145,010,591
Less accumulated depreciation for:					
Buildings & Improvements	(65,015,902)	(3,517,190)	1,250	-	(68,531,842)
Equipment	(7,986,183)	(479,679)	183,653	-	(8,282,209)
Total accumulated depreciation	$ (73,002,085)	$ (3,996,869)	$ 184,903	$ -	$ (76,814,051)
Total capital assets depreciated, net	$ 71,623,628	$ (3,426,096)	$ (992)	$ -	$ 68,196,540
Business-type activities capital assets, net	$ 81,842,002	$ (1,991,827)	$ (992)	$ -	$ 79,849,183

Note 5 – Capital Assets (continued)

Depreciation expense was charged to the programs of the primary government as follows:

Governmental activities:	
General Government	$ 661,039
Judicial & Law Enforcement	2,670,085
Health & Welfare	161,794
Maintenance - Equipment & Structures	3,825,875
Total depreciation expense - governmental activities	$7,318,793
Business-type activities:	
Jack Brooks Regional Airport	$1,633,861
Ford Park	2,363,008
Total depreciation expense - business-type activities	$3,996,869

Note 6 - Operating Leases

County as Lessor

The County has entered into various operating leases of County-owned property to others as described below:

The County's airport conducts a major part of its operations from leased facilities, which include office and parking lot spaces for car rental agencies, terminal space for one airline, a travel agency, and hanger space. All leases are classified as operating leases. The rental payments under the leases for the car rental agencies are based on a minimum rental plus a percentage of sales. The rental payments under the leases for the hanger spaces and travel agent are based on a fixed amount per square foot of space leased. All of the operating leases are month to month and will expire over the next two years and include 30-day cancellation clauses. In most cases, the County expects that in the normal course of business, leases will be renewed or replaced by other leases.

The County's airport has nine leases for land located either in the Private Hangar Park or surrounding the Airport. These leases are classified as operating leases. The rental payments under the leases for the land are a fixed amount ranging five, ten, twenty-five or thirty-year period. These leases are noncancellable.

Note 6 - Operating Leases (continued)

The following schedule provides an analysis of the County's investment in property on operating leases and property held for lease by major classes as of September 30, 2018:

Airport Terminal & Buildings	$	12,317,015
Airport Private Hangar Park and Land		3,249,396
	$	15,566,411
Less: accumulated depreciation		(5,316,384)
	$	10,250,027

The following is a schedule by years of minimum future rentals on noncancellable operating leases as of September 30, 2018:

Fiscal Year Ending September 30		
2019	$	375,019
2020		351,528
2021		335,930
2022		328,731
2023		250,331
2024-2028		482,064
2029-2033		331,240
2034-2038		325,405
2039-2043		335,941
2044		39,337
Total	$	3,155,526

Minimum future rentals do not include contingent rentals, which may be received as stipulated in the lease contracts. These contingent rental payments occur only if the use exceeds a certain level of activity each year. There were no contingent rentals on Airport cancellable operating leases for the year ended September 30, 2018.

Note 7 - Long-Term Debt

General Obligation Bonds

The County issues general obligation bonds to provide funds for the acquisition and construction of major capital facilities. All of the 2012 Refunding Bonds funded and benefited business-type activities, though resources of the governmental activities are being used to liquidate the debt. The original amount of general obligation bonds issued in prior years was $47,305,000.

Note 7 - Long-Term Debt (continued)

General obligation bonds are direct obligation and pledge the full faith and credit on the government. General obligation bonds currently outstanding are as follows:

$47,305,000 2012 Refunding Bonds due in annual installments from $780,000 to $4,465,000 through August 1, 2025; interest rates ranging from 2.0% to 5.0%.	$27,740,000
Total General Obligation Bonds	$27,740,000

Annual debt service requirements to maturity for general obligation bonds are as follows:

	Governmental Activities		
Fiscal Year Ended September 30	Principal	Interest	Total
2019	$ 3,450,000	$ 1,158,000	$ 4,608,000
2020	3,620,000	1,020,000	4,640,000
2021	3,745,000	857,700	4,602,700
2022	3,965,000	670,450	4,635,450
2023	4,170,000	472,200	4,642,200
2024-2025	8,790,000	397,650	9,187,650
Total	$ 27,740,000	$ 4,576,000	$ 32,316,000

There is currently $571,837 available in the Debt Service Funds to service the general obligation bonds. The County has no authorized but unissued bonds at September 30, 2018.

There are a number of limitations and restrictions contained in the various bond debentures regarding authorized uses of bond proceeds. The County is in compliance with all significant limitations and restrictions.

Capital Lease Obligations:

The County has entered into lease agreement for financing the acquisition of electronic election system hardware and software. This lease agreement qualifies as a capital lease for accounting purposes and, therefore, has been recorded at the present value of their future minimum lease payments as of the inception date. The asset acquired through capital leases is recorded at $1,707,363 for governmental funds. The future minimum lease obligations and the net present value of these minimum lease payments as of September 30, 2018, were as follows:

Note 7 - Long-Term Debt (continued)

Year Ending September 30	Governmental Activities
2019	$ 369,835
2020	369,836
Total minimum lease payments	$ 739,671
Less: amount representing interest	(28,821)
Present value of minimum lease payments	$ 710,850

Conduit Debt Obligations

The County has issued Housing Finance Corporation Bonds and Industrial Development Corporation Bonds to provide financial assistance to private-sector entities for the acquisition and construction of facilities deemed to be in the public interest. The bonds are secured by the property financed and are payable solely from payments received on the underlying loans. Upon repayment of the bonds, ownership of the acquired facilities transfers to the private-sector entity serviced by the bond issuance. Neither the County, the State, nor any political subdivision thereof is obligated in any manner for repayment of the bonds. Accordingly, the bonds are not reported as liabilities in the accompanying financial statements. As of September 30, 2018, there was one series of Jefferson County Housing Finance Corporation Bonds with an aggregate principal amount payable of $3,431,960, and one series of Jefferson Industrial Development Bonds with an aggregate principal amount payable of $41,220,000.

Arbitrage Rebate Liability

The Tax Reform Act of 1986 established regulations for the rebate to the federal government of arbitrage earnings on certain local government bonds issued after December 31, 1985, and all local governmental bonds issued after August 31, 1986. Issuing governments must calculate any rebate due and remit the amount due at least every five years. As of September 30, 2018, there are no estimated liabilities for arbitrage rebate on governmental debt. The Debt Service Fund and the residual balance in the Capital Project Fund have typically been used to liquidate the arbitrage liability in previous years.

Changes in long-term liabilities

Long-term liability activity for the year ended September 30, 2018 was as follows:

Note 7 - Long-Term Debt (continued)

	Beginning Balance - Restated	Additions	Reductions	Ending Balance	Due within One Year
Governmental Activities:					
Bonds Payable					
General obligation bonds	$ 31,380,000	$ -	$ (3,640,000)	$ 27,740,000	$ 3,450,000
Less deferred amounts:					
Premiums	2,957,146	-	(377,508)	2,579,638	-
Total bonds payable	$ 34,337,146	$ -	$ (4,017,508)	$ 30,319,638	$ 3,450,000
Capital Leases	1,051,858	-	(341,008)	710,850	369,835
Claims and Judgments	4,226,140	21,418,969	(23,561,826)	2,083,283	2,083,283
Compensated Absences	11,275,457	946,353	(707,472)	11,514,338	947,872
Pension Liability	72,777,544	1,045,702	(25,237,008)	48,586,238	-
Total OPEB Liability	229,024,511	18,161,890	(24,715,751)	222,470,650	-
Governmental Activities					
Long-term liabilities	$ 352,692,656	$ 41,572,914	$(78,580,573)	$ 315,684,997	$ 6,850,990
Business-type Activities:					
Compensated Absences	$ 207,368	$ 45,287	$ (55,571)	$ 197,084	$ 42,406
Pension Liability	1,334,007	19,168	(462,592)	890,583	-
Business-type Activities					
Long-term liabilities	$ 1,541,375	$ 64,455	$ (518,163)	$ 1,087,667	$ 42,406

Compensated absences liabilities are normally liquidated by the general fund for governmental activities and by the corresponding enterprise fund for business type activities. Claims and judgments of governmental funds are normally paid from the corresponding internal service fund. Claims and judgments of the public entity risk pool are normally paid from the corresponding internal service fund. Pension liabilities are normally liquidated by the General Fund with a small portion in non-major special revenue funds that have employees and the Jack Brooks Airport fund for business type activities. Total OPEB liability are normally liquidated by the General Fund.

Note 8 – Defined Benefit Pension Plan

Plan Description. The County participates in a nontraditional defined benefit pension plan in the statewide Texas County and District Retirement System ("TCDRS"). The Board of Trustees of TCDRS is responsible for the administration of the statewide agent, multiple-employer, public employee retirement system consisting of nontraditional defined benefit pension plans. TCDRS issues a publicly available comprehensive annual financial report (CAFR) that can be obtained at *www.tcdrs.org*.

All full and part-time non-temporary employees participate in the plan, regardless of the number of hours they work in a year. Employees in a temporary position are not eligible for membership.

Note 8 – Defined Benefit Pension Plan (continued)

Benefits Provided. TCDRS provides retirement, disability and death benefits for all eligible employees. Benefit terms are established by the TCDRS act. The benefit terms may be amended as of January 1, each year, bust must remain in conformity with the Act.

Members can retire at age 60 and above with 8 or more years of service, with 20 years of service regardless of age, or when the sum of their age and years of service equals 75 or more. Members are vested after eight years of service, but must leave their accumulated contributions in the plan to receive any employer-financed benefit. Members who withdraw their personal contributions in a lump sum are not entitled to any amounts contributed by their employer.

Benefit amounts are determined by the sum of the employee's contributions to the plan, with interest, and employer-financed monetary credits. The level of these monetary credits is adopted by the Commissioners' Court, within the actuarial constraints imposed by the TCDRS Act so that the resulting benefits can be expected to be adequately financed by the employer's commitment to contribute. By law, employee accounts earn 7% interest. At retirement, death or disability, the benefit is calculated by converting the sum of the employee's accumulated contributions and the employer-financed monetary credits to a monthly annuity using annuity purchase rates prescribed by the TCDRS Act. The County's current match is 200%.

Employees covered by benefit terms

At the December 31, 2017 valuation and measurement date, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	861
Inactive employees entitled to but not yet receiving benefits	679
Active employees	1,181
	2,721

Contributions. The contribution rates for employees in TCDRS are either 4%, 5%, 6%, or 7% of employee gross earnings, as adopted by the employer's governing body. Participating employers are required to contribute at actuarially determined rates to ensure adequate funding for each employer's plan. Under the state law governing TCDRS, the contribution rate for each entity is determined annually by the actuary and approved by the TCDRS Board of Trustees. The replacement life entry age actuarial cost method is used in determining the contribution rate. The actuarially determined rate is the estimated amount necessary to fund benefits in an orderly manner for each participate over his or her career so that sufficient funds are accumulated by the time benefit payments begin, with an additional amount to finance any unfunded accrued liability.

Employees for the County were required to contribute 7% of their annual gross earnings during the fiscal year. The contribution rates for the County were 17.20% and 18.50% in calendar years 2017

Note 8 – Defined Benefit Pension Plan (continued)

and 2018, respectively. The County's contributions to TCDRS for the year ended September 30, 2018, were $11,920,980, and were equal to the required contributions.

Net Pension Liability. The County's Net Pension Liability (NPL) was measured as of December 31, 2017, and the Total Pension Liability (TPL) used to calculate the Net Pension Liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions

The Total Pension Liability in the December 31, 2017, actuarial valuation was determined using the following actuarial assumptions:

Inflation	2.75% per year
Overall payroll growth	3.25% per year
Investment rate of return	8.1%, net of pension plan investment expense, including inflation

The plan does not have an automatic cost-of-living adjustment ("COLA") and one in not considered to be substantively automatic under GASB No. 68. Therefore, no assumption for future cost-of-living adjustments is included in the GASB calculation or in the funding valuation. Each year, the plans may elect an ad-hoc COLA for its retirees.

Mortality rates for active members, retirees, and beneficiaries were based on the following:

Depositing members	90% of the RP-2014 Active Employee Mortality Table for males and 90% of the RP-2014 Active Employee Mortality Table for females, projected with 110% of the MP-2014 Ultimate scale after 2014.
Service retirees, beneficiaries and non-depositing members	130% of the RP-2014 Health Annuitant Mortality Table for males and 110% of the RP-2014 Health Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale after 2014.
Disabled retirees	130% of the RP-2014 disabled Annuitant Mortality Table for males and 115% of the RP-2014 Disabled Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale after 2014.

The actuarial cost method was Entry Age Normal, as required by GASB No. 68. Straight-line amortization over Expected Working Life with a 5 year smoothing period, and a non-asymptotic recognition method with no corridor were utilized in the actuarial calculation.

Note 8 – Defined Benefit Pension Plan (continued)

The actuarial assumptions that determined the total pension liability as of December 31, 2017, were based on the results of an actuarial experience study for the period January 1, 2013 through December 31, 2016.

The long-term expected rate of return on pension plan investments is 8.10%. The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the TCDRS Board of Trustees. The long-term expected rate of return on TCDRS is determined by adding inflation to expected long-term real returns, and reflecting expected volatility and correlation. The capital market assumptions and information below are based on January 2018 information for a 10-year time horizon. The valuation assumption for long-term expected return is re-assessed at a minimum of every four years, and is set based on a 30-year time horizon; the most recent analysis was performed in 2017. The target allocation and best estimates of geometric real rates return for each major assets class are summarized in the following table:

Asset Class	Benchmark	Target Allocation [1]	Geometric Real Rate of Return (Expected minus Inflation) [2]
US Equities	Dow Jones U.S. Total Stock Market Index	11.50%	4.55%
Private Equity	Cambridge Associates Global Private Equity & Venture Capital Index [3]	16.00%	7.55%
Global Equities	MSCI World (net) Index	1.50%	4.85%
International Equities - Developed	MSCI World Ex USA (net)	11.00%	4.55%
International Equities - Emerging	MSCI Emerging Markets (net) Index	8.00%	5.55%
Investment-Grade Bonds	Bloomberg Barclays Capital Aggregate Bond Index	3.00%	.75%
Strategic Credit	FTSE High-Yield Cash-Pay Capped Index	8.00%	4.12%
Direct Lending	S&P/LSTA Leveraged Loan Index	10.00%	8.06%
Distressed Debt	Cambridge Associates Distressed Securities Index [4]	2.00%	6.30%
REIT Equities	67% FTSE NAREIT Equity REITs Index + 33% S&P Global REIT (net) Index	2.00%	4.05%
Master Limited Partnerships (MLPs)	Alerian MLP Index	3.00%	6.00%
Private Real Estate Partnerships	Cambridge Associates Real Estate Index [5]	6.00%	6.25%
Hedge Funds	Hedge Fund Research, Inc. (HFRI) Fund of Funds Composite Index	18.00%	4.10%

[1] Target asset allocation adopted at the April 2018 TCDRS Board meeting.
[2] Geometric real rates of return equal the expected return minus the assumed inflation rate of 1.95% per Cliffwater's 2018 capital market assumptions.
[3] Includes vintage years 2006-present of Quarter Pooled Horizon IRRs.
[4] Includes vintage years 2005-present of Quarter Pooled Horizon IRRs.
[5] Includes vintage years 2007-present of Quarter Pooled Horizon IRRs.

Note 8 – Defined Benefit Pension Plan (continued)

Discount Rate

The discount rate used to measure the Total Pension Liability was 8.1%. The projection of cash flows used to determine the discount rate assumed that employee and employer contributions will be made at the rates specified in statue. Based on that assumption, the pension plan's Fiduciary Net Position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all period of projected benefit payments to determine the Total Pension Liability.

Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) - (b)
Balance at 12/31/2016	$ 452,330,622	$ 378,219,071	$ 74,111,551
Changes for the year:			
Service cost	9,240,166	-	9,240,166
Interest on total pension liability [1]	36,386,446	-	36,386,446
Effect on plan changes [2]	-	-	-
Effect of economic/demographic gains or losses	(699,117)	-	(699,117)
Effect of assumptions changes or inputs	1,469,816	-	1,469,816
Refund of contributions	(1,092,112)	(1,092,112)	-
Benefit payments	(24,109,339)	(24,109,339)	-
Administrative expenses	-	(282,006)	282,006
Member contributions	-	4,758,530	(4,758,530)
Net investment income	-	55,064,738	(55,064,738)
Employer contributions	-	11,611,789	(11,611,789)
Other [3]	-	(121,010)	121,010
Balance at 12/31/2017	$ 473,526,482	$ 424,049,661	$ 49,476,821

[1] Reflects the change in the liability due to the time value of money. TCDRS does not charge fees or interest.

[2] No plan changes valued.

[3] Relates to allocation of system-wide items.

Sensitivity Analysis

The following presents the net pension liability of the County, calculated using the discount rate of 8.1%, as well as what the County's net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (7.1%) or 1-percentage-higher (9.1%) than the current rate:

Note 8 – Defined Benefit Pension Plan (continued)

	1% Decrease 7.1%	Current Discount Rate 8.1%	1% Increase 9.1%
Total pension liability	$ 531,676,244	$ 473,526,482	$ 424,177,074
Fiduciary net position	424,049,661	424,049,661	424,049,661
Net pension liability/(asset)	$ 107,626,583	$ 49,476,821	$ 127,413

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's Fiduciary Net Position is available in a separately-issued TCDRS financial report. The report may be obtained on the Internet at *www.tcdrs.org*.

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended September 30, 3018, the County recognized pension expense of $13,287,834.

At September 30, 2018, the County reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual economic experience	$ 3,105,930	$ 194,080
Changes in actuarial assumptions	-	2,950,937
Net difference between projected and actual investment earnings	6,307,059	-
Contributions subsequent to the measurement date	-	9,538,270
Total	$ 9,412,989	$ 12,683,287

$9,538,270 reported as deferred outflows of resources related to pension resulting from contributions made after the measurement date but before the end of the County's fiscal year ending September 30, 2018 will be recognized as a reduction of the net pension liability in the subsequent fiscal year. Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expenses as follows:

For the Year Ended December 31,	
2018	$ 2,285,778
2019	1,205,733
2020	(4,954,484)
2021	(4,804,999)
	$ (6,267,972)

Note 9 – Other Post-Employment Benefits

Plan Description. The County sponsors a single-employer defined benefit post-employment benefit (OPEB) plan for health and dental care benefits.

Benefits Provided.

Retirees Benefits

The County provides post-retirement health and dental care benefits to all employees who retired on or after April 9, 1990. Effective January 1, 1997, Commissioners' Court adopted the following policy detailing eligibility requirements for participation in this benefit:

A) employee must have retired under the Texas County and District Retirement System (TCDRS) guidelines described in Note 8; and

B) employee must have at least 8 years of TCDRS credible service with Jefferson County.

For retirees prior to February 1, 2003, the County pays 100 percent of health insurance premiums for those retirees that qualify. After February 1, 2003, the County will pay on the following scale for retirees that qualify:

Years of Service	Percentage Paid by Retiree	Percentage Paid by County
8-11	30%	70%
12-15	20%	80%
16-19	10%	90%
20+	0%	100%

Effective January 1, 2016, all new employees will not be eligible for County paid post-retirement health care benefits.

Retiree Spouse Benefits

The employee's spouse is eligible for County paid health and dental insurance benefits following the employee's retirement if:

A) employee met the above requirements A and B; hired prior to January 1, 2016 and,

B) employee's spouse was enrolled in the health plan either as a dependent or an active County employee.

Spouse participation will end in the event of a divorce, at which time COBRA continuation will be offered as described below.

Note 9 – Other Post-Employment Benefits (continued)

For retirees prior to February 1, 2003, the County pays 100 percent of health and dental insurance premiums for those retirees' spouses that qualify. For retirees between February 1, 2003 and February 28, 2005, the County will pay the same scale as described above for retirees' spouses that qualify. For retirees after February 28, 2005, the County requires the following premiums to be paid for retirees' spouses that qualify:

Age of Spouse	Premium Amount Due
Less than 65 during ten year maximum	Equal to the active employee contribution made for a spouse
Less than 65 after ten year maximum	Full Premium
Over 65	Same percentage as retiree see table above

Individuals covered by benefits terms

At the October 1, 2016 valuation date, the following individuals were covered by the benefits terms:

Active employees hired prior to January 1, 2016	946
Retirees	461
Spouses & Beneficiaries	51
	1,458

Contributions. The Plan is funded on a pay-as-go basis and is not administered through an irrevocable trust. The County does not make contributions as defined by GASB 75. For the fiscal year 2018, the County did make payments as established by Commissioners' Court under the Plan based on the combination of premiums and prior year costs of the self-funded portion of the plan of $5,544,058.

Total OBEP Liability. The County's Total OPEB liability of $222,470,650 was measured as of September 30, 2018 and was determined by an actuarial valuation as of the valuation date, calculated based on the discount rate and actuarial assumptions below, and was then projected forward to the measurement date. Any significant changes during this period have been reflected as prescribed by GASB 74 and 75.

Actuarial Assumptions and Other Inputs

The Total OPEB Liability in the October 1, 2016, actuarial valuation was determined using the following actuarial assumptions:

Discount Rate	4.18%
20 Year Tax-Exempt Municipal Bond Yield	4.18%
Inflation	2.30%
Salary increases included inflation	3.00%

Note 9 – Other Post-Employment Benefits (continued)

The discount rate was based on the Bond Buyer General Obligation 20-Bond Municipal Index.

The actuarial cost method was Entry Age normal. The trend rates for medical of 6.8% for pre-65, 5.1% for post-65, and 7% for dental rates for 2016. These rates slowly grade downward yearly to ultimately reaching trend medical rates of 4.0% for pre-65, 4.2% for post-65, and dental rates of 3.9 for years 2099 and beyond.

There has not been a separate, audited GAAP-basis postemployment benefit plan report issued.

Changes in the Total OPEB Liability

	Increase (Decrease) Total OBEB Liability
Balance at 9/30/2017	$ 229,024,511
Changes for the year:	
Service cost	9,576,801
Interest on total OPEB liability	8,585,089
Effect on plan changes	-
Effect of economic/demographic gains or losses	-
Effect of assumptions changes or inputs	(19,171,693)
Benefit payments	(5,544,058)
Balance at 9/30/2018	$ 222,470,650

Sensitivity Analysis

The following presents the total OPEB liability of the County, calculated using the discount rate of 4.18%, as well as what the County's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (3.18%) or 1-percentage-higher (5.18%) than the current rate:

	1% Decrease 3.18%	Current Discount Rate 4.18%	1% Increase 5.18%
Total OPEB liability	$ 259,941,800	$ 222,470,650	$ 192,475,882

The following presents the total OPEB liability of the County, calculated using the current healthcare cost trends as well as what the County's total OPEB liability would be if it were calculated using trend rates that are 1-percentage-point lower or 1-percentage-higher than the current rate:

Note 9 – Other Post-Employment Benefits (continued)

	1% Decrease	Current Trend Rate	1% Increase
Total OPEB liability	$ 184,891,076	$ 222,470,650	$ 271,366,393

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended September 30, 3018, the County recognized OPEB expense of $14,912,451.

At September 30, 2018, the County reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Inflows of Resources	Deferred Outflows of Resources
Differences between expected and actual economic experience	$ -	$ -
Change in actuarial assumptions	15,922,254	-
Total	$ 15,922,254	$ -

Amounts reported as deferred outflows and inflows of resources related to other postemployment benefits will be recognized in OPEB expenses as follows:

For the Year Ended September 30,	
2019	$ (3,249,439)
2020	(3,249,439)
2021	(3,249,439)
2023	(3,249,439)
2023	(2,924,498)
	$ (15,922,254)

Note 10 - Deferred Compensation Plan

Employees of Jefferson County, Texas may participate in a deferred compensation plan adopted under the provisions of Internal Revenue Code Section 457 (Deferred Compensation Plans with Respect to Service for State and Local Governments).

The deferred compensation plan is administered by an unrelated financial institution. Amendments to the laws governing Section 457 deferred compensation plans substantially became effective January 1, 1997. The County approved plan amendments such that plan assets are held in trust by a third party custodian, for the exclusive benefit of the plan participants and their beneficiaries. The assets will not be diverted to any other purpose. The County's beneficial ownership of plan assets

Note 10 - Deferred Compensation Plan (continued)

will be held for the further exclusive benefit of the plan for the exclusive benefit of participants and beneficiaries.

Accordingly, the County performs minimal administrative functions and does not perform any investment functions for the plan. Consequently, the assets held by the custodian are not included in the financial statements as of September 30, 2018.

Note 11 - Individual Funds Deficit Equity Balances

The following funds had deficit equity balances as of September 30, 2018:

Governmental Activities	
JAG Grant	$ 13,397
Port Security Grants	121,559
Auto Theft Grant	28,966
Drug Intervention Grant	1,336
Cheek Water and Sewer Phase 5	9
ORA Capital Grants	15,114
Total for Governmental Activities	$ 180,381
Business-type Activities	
Southeast Texas Government Employee Benefits Pool Fund	$6,541,403
Total for Business-type Activities	$6,541,403

If funding does not become available to cover these deficit fund balances from other governmental entities, the County plans to transfer funds to cover the deficit fund balance.

Note 12 - Risk Management

The Liability Insurance Fund was established to account for the contributions from the General Fund for payment of general liability claims. Under the laws of the State of Texas, claims for torts are limited to $100,000 per person and $300,000 per incident. The Liability Fund records a claim as payable when information prior to the issuance of the financial statements indicates that it is probable that a liability has been incurred at the date of the financial statements and the amount of the loss can be reasonably estimated. Liabilities of the fund are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Claim liabilities are calculated considering recent claim settlement trends. Changes in the Liability Insurance Fund's claims liability (including an estimate for claims incurred but not reported) were:

Note 12 - Risk Management (continued)

	2018	2017
Liability for claims, beginning of fiscal year	$367,731	$365,586
Incurred claims and changes in estimates	301,113	289,181
Claim payments	(287,083)	(287,036)
Liability for claims, end of fiscal year	$381,761	$367,731

The Workers' Compensation Fund was established to account for the County's workers' compensation claims. Contributions are made from the General, Special Revenue, and Enterprise Funds for employees covered under the County's workers' compensation policy. Contributions to the fund are determined by position class code within each department. From October 1, 1999, to February 14, 2005 the County was fully insured for workers' compensation claims and employers' liability. As of February 15, 2005, the County is self insured for workers' compensation claims and employers' liability. The County has excess coverage for workers' compensation claims and employers' liability claims limiting the County's liability to $500,000 per occurrence for losses occurring prior to October 1, 1999 and after February 15, 2005. Settled claims have not exceeded commercial coverages in any of the past three fiscal years. Liabilities of the fund are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Claim liabilities are calculated considering recent claim settlement trends. Changes in the Worker's Compensation Fund's claims liability (including an estimate for claims incurred but not reported) were:

	2018	2017
Liability for claims, beginning of fiscal year	$298,433	$244,893
Incurred claims and changes in estimates	818,957	668,089
Claim payments	(703,692)	(614,549)
Liability for claims, end of fiscal year	$413,698	$298,433

Note 13 – Public Entity Risk Pool

On November 27, 2000, the Jefferson County Commissioners' Court pursuant to Texas Local Government Code Ann. Sec. 172.001 organized the Southeast Texas Government Employee Benefits Pool (The Pool). The Pool was organized for the benefit of Texas Political Subdivisions and Special Districts to make available accident, life, and health benefits for Pool member employees. Twelve trustees govern the Pool. Five of these trustees are the Jefferson County Auditor, Jefferson County Insurance and Benefits Manager, Jefferson County Human Resources Director, Jefferson County Purchasing Agent, and the Jefferson County Assistant District Attorney. Two of the trustees are members of Commissioners' Court. The remaining five trustees are appointed by Commissioners' Court.

The Pool is responsible for adopting underwriting standards, qualifications for membership in the pool, and establishing the types of benefits to be provided and associated fees for these benefits. The members of the Pool are responsible for their members' eligibility in the pool and payment of

Note 13 – Public Entity Risk Pool (continued)

monthly contributions for participation in the Pool. The Pool members are not subject to supplemental assessments in the event of deficiencies. If the assets of the Pool were to be exhausted, members would not be responsible for the Pool's liabilities. Pool members currently include Jefferson County, Texas (reporting entity), Jefferson County Drainage District #3, and Jefferson County Drainage District #6. The total number of members in the Pool is 1,722. Operations of the Pool are accounted for as an internal service fund.

The Pool uses reinsurance agreements to reduce its exposure to large losses on medical and prescription claims. For the fiscal year ended September 30, 2017, the Pool had stop loss insurance contracts to limit the medical and prescription claims per individual member to $125,000 in a calendar year with a $300,000 aggregating group deductible. The Pool exceeded these limits by $25,314 during fiscal year 2018 and $1,212,349 during fiscal year 2017 but did not exceed these limits during fiscal year 2016.

Liabilities of the Pool are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Liabilities include an amount for claims that have been incurred but not reported. Claim liabilities are calculated considering recent claim settlements trends.

Changes in the Pool's claims liability (including an estimate of claims incurred but not reported and claim adjustment expenses) were:

	2018	2017
Liability for claims, beginning of fiscal year	$3,559,976	$1,271,822
Incurred claims and changes in estimates	18,601,520	24,904,837
Claim payments	(20,873,672)	(22,616,683)
Liability for claims, end of fiscal year	$1,287,824	$3,559,976

Additional information including ten-year revenue and claim development are addressed in a separate annual report. The annual report may be obtained from Southeast Texas Governmental Employee Benefits Pool, 215 Franklin Street Suite 200, Beaumont, Texas 77701.

Note 14 - Construction and Other Significant Commitments

As of September 30, 2018, the County had the following commitments with respect to unfinished capital projects:

Note 14 - Construction and Other Significant Commitments (continued)

Capital Project	Remaining Construction Commitment	Expected Date of Completion
Annex IV – Elevator Pit Rehabilitation	$ 105,379	02/28/2019
Port Arthur Building Generator	181,018	02/28/2019
Jerry Ware Terminal Rehabilitation	237,500	09/30/2019
Taxiway D Rehabilitation	2,107,523	09/30/2019
	$ 2,631,420	

Note 15 - Contingent Liabilities

Amounts received or receivable from grantor agencies are subject to audit and adjustment by grantor agencies, principally the State of Texas. Any disallowed expenditures or claims, including amounts already collected, may constitute a liability of the applicable funds. The amount, if any, of expenditures which may be disallowed by the grantor cannot be determined at this time although the County expects such amounts, if any, to be immaterial.

The County is involved in lawsuits and other claims in the ordinary course of operations. The outcome of these lawsuits and other claims are not presently determinable and the resolutions of these matters are not expected to have a material effect on the financial condition of the County.

Note 16 – Tax Abatements

The County enters into property tax abatement agreements with local businesses under the state Property Redevelopment and Tax Abatement Act, Chapter 312 of the Texas Tax Code, as well as its own guidelines and criteria, which is required under the Act. Under the Act, including its guidelines and criteria, the County may grant property tax abatements for creation of additional value to eligible facilities. The creation must be made subsequent to and specified in an abatement agreement between the County and the property owner or lessee. In addition, the County requires the following economic qualifications in order to grant the tax abatement:

(1) Must create an increased appraised ad valorem tax value based upon the Jefferson County Appraisal District's assessment of the eligible property; and

(2) Must prevent the loss of payroll or retain, increase or create payroll (full-time employment) on a permanent basis in the County.

Note 16 – Tax Abatements (continued)

(3) Must not have the effect of displacing workers or transferring employment from one part of the County to another.

(4) Must demonstrate by an independent economic impact analysis that the local economic benefit will be substantially in excess of the amount of anticipated foregone tax revenues resulting from the abatement.

The County's guidelines and criteria focus on creating new wealth to the community rather than recirculating dollars within the community, and attracting industries that have demonstrated a commitment to protecting our environment—all without creating a substantial adverse effect on the competitive position of existing companies operating in the County. The agreement used for this purpose provides for termination of the agreement in the event its counterparty discontinues producing product as well as recapturing property taxes abated in that calendar year. These abatements may be granted for up to ten years.

The County has also entered into two agreements under the state County Development and Growth, Chapter 381 of the Texas Local Government code that will rebate a percentage of property taxes for up to twenty years. One agreement was granted for ten years while the second was granted for twenty years.

For the fiscal year ended September 30, 2018, the County abated property tax revenue totaling $8,064,464 based on property tax values of $2,209,308,680 for 13 entities. In addition, the County made chapter 381 property tax revenue rebates of $7,740,042 based on property tax values of $2,120,693,085 for two entities.

Note 17 – Prior Period Adjustments

The County has decreased beginning net position as of October 1, 2017 by $120,307,190 for governmental activities for the implementation of GASB Statement 75 with the increase to the OPEB liability.

Note 18 - Restatements and Reclassifications

Certain restatements have been made to the prior year financial statements in order to conform to the presentation of the current year financial statements.

Note 19 – Recent Accounting Pronouncements

GASB Statement 83, *Certain Assets Retirement Obligations* ("GASB 83"), addresses accounting and financial reporting for certain asset retirement obligations (AROs). This statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. GASB 83 will be implemented by the County in fiscal year 2019 and the impact has not yet been determined.

Note 19 – Recent Accounting Pronouncements (continued)

GASB Statement 84, *Fiduciary Activities* ("GASB 84"), establishes criteria for identifying fiduciary activities of all state and local governments. An activity meeting the criteria should be reported in a fiduciary fund in the basic financial statements. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (2) private-purpose trust funds, and (4) custodial funds. GASB 84 will be implemented by the County in fiscal year 2020 and the impact has not yet been determined.

GASB Statement 87, *Leases* ("GASB 87"), require recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. GASB 87 will be implemented by the County in fiscal year 2021 and the impact has not yet been determined.

GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements* ("GASB 88"), This Statement requires additional essential information related to debt be disclosed in notes to financial statements, including unused lines of credit; assets pledged as collateral for the debt; and terms specified in debt agreements related to significant events of default with finance-related consequences, significant termination events with finance-related consequences, and significant subjective acceleration clauses. For notes to financial statements related to debt, it also requires that existing and additional information be provided for direct borrowings and direct placements of debt separately from other debt. GASB 88 will be implemented by the County in fiscal year 2019 and the impact has not yet been determined.

GASB Statement No. 89, *Accounting for Interest Cost Incurred Before the End of a Construction Period* ("GASB 89"), This Statement requires that interest cost incurred before the end of a construction period be recognized as an expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. As a result, interest cost incurred before the end of a construction period will not be included in the historical cost of a capital asset reported in a business-type activity or enterprise fund. This statement also reiterates that in financial statements prepared using the current financial resources measurement focus, interest cost incurred before the end of a construction period should be recognized as an expenditure on a basis consistent with governmental fund accounting principles. GASB 89 will be implemented by the County in fiscal year 2021 and the impact has not yet been determined.

GASB Statement No. 90, M*ajority Equity Interest – An Amendment of GASB Statements No. 14 and 61* ("GASB 90"). The Statement defines a majority equity interest and provides guidance on the reporting requirements for the presentation of the majority equity interest in legally separate organizations. In addition, the Statement requires that a component unit in which a government has a 100 percent equity interest account for its assets, deferred outflows of resources, liabilities, and deferred inflows of resources at acquisition value at the date the government acquired a 100 percent equity interest in the component unit. GASB 90 will be implemented by the County in fiscal year 2020 and the impact has not yet been determined.

REQUIRED SUPPLEMENTARY INFORMATION

JEFFERSON COUNTY, TEXAS
REQUIRED SUPPLEMENTARY INFORMATION
GENERAL FUND
SCHEDULE OF REVENUES, EXPENDITURES, AND
CHANGES IN FUND BALANCES - BUDGET AND ACTUAL (GAAP)
FOR THE FISCAL YEARS ENDED SEPTEMBER 30, 2018

	BUDGETED AMOUNTS		ACTUAL	VARIANCE WITH
	ORIGINAL	FINAL	AMOUNT	FINAL BUDGET
REVENUES:				
TAXES:				
PROPERTY	$ 75,987,725	75,987,725	75,917,335	(70,390)
SALES TAX	24,000,000	24,000,000	31,655,505	7,655,505
FEES	8,903,116	8,903,116	10,274,120	1,371,004
LICENSES	426,700	426,700	875,585	448,885
SALES, RENTALS, AND SERVICES	1,743,300	1,743,300	2,136,982	393,682
INTERGOVERNMENTAL	1,215,791	1,215,791	1,524,742	308,951
FINES AND FORFEITURES	1,625,000	1,625,000	1,937,526	312,526
INTEREST	185,000	185,000	199,283	14,283
MISCELLANEOUS	24,000	24,000	24,062	62
CONTRIBUTIONS AND DONATIONS	175	175	365	190
TOTAL REVENUES	$ 114,110,807	114,110,807	124,545,505	10,434,698
EXPENDITURES:				
GENERAL GOVERNMENT	$ 25,413,254	24,932,757	23,738,042	1,194,715
JUDICIAL AND LAW ENFORCEMENT	71,762,097	70,230,213	67,214,120	3,016,093
EDUCATION AND RECREATION	424,338	354,338	318,509	35,829
HEALTH AND WELFARE	10,923,158	10,812,885	10,194,194	618,691
MAINTENANCE - EQUIPMENT AND STRUCTURES	13,934,232	13,905,115	12,491,343	1,413,772
CAPITAL OUTLAY	-	-	-	-
TOTAL EXPENDITURES	$ 122,457,079	120,235,308	113,956,208	6,279,100
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ (8,346,272)	(6,124,501)	10,589,297	16,713,798
OTHER FINANCING SOURCES (USES):				
TRANSFERS OUT	$ (4,576,247)	(6,798,018)	(6,770,896)	27,122
TOTAL OTHER FINANCING SOURCES (USES)	$ (4,576,247)	(6,798,018)	(6,770,896)	27,122
NET CHANGE IN FUND BALANCES	$ (12,922,519)	(12,922,519)	3,818,401	16,740,920
FUND BALANCES, BEGINNING	$ 45,477,690	45,477,690	45,477,690	-
FUND BALANCES, ENDING	$ 32,555,171	32,555,171	49,296,091	16,740,920

1. Budgetary Basis

- Budgets are prepared on a basis consistent with GAAP.
- The department is the legal level of budgetary control. Commissioners' Court approval is necessary to transfer appropriations between departments. Transfers may not increase the total budget.
- Annual budgets are legally adopted for the General Fund and the Debt Service Funds.
- The FEMA Emergency Fund – Special Revenue Fund which is considered a major fund does not have a legally adopted budget.

2. Analysis of Significant Expenditure Variances from Original Budget

Commissioners' Court approved $3,000,000 in budget transfers over the original budget for Transfer Out for additional funding to make a transfer to the Capital Projects Fund in the Capital Projects type funds for ongoing and upcoming needed projects.

In addition, the Court approved approximately $730,000 in budget transfers over the original budget for multiple vehicles and other equipment for various departments. The Court also approved about $100,000 in budget transfers for increased cost for indigent defense.

These transfers were not part of the original budget. The above budget transfers were funded with the savings from various departments. Commissioners' Court was able to achieve $6,306,222 in actual savings from the total budget, with the assistance from all County departments.

JEFFERSON COUNTY, TEXAS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS
LAST TEN FISCAL YEARS

Plan Year Ended December 31	2014	2015	2016	2017
Total Pension Liability				
Service Cost	$ 8,802,884	$ 9,087,096	$ 10,064,449	$ 9,240,166
Interest total pension liability	31,100,211	32,905,759	34,577,662	36,386,446
Effect of plan changes	-	(1,753,160)	-	-
Effect of assumption changes or inputs	-	4,437,711	-	1,469,816
Effect of economic/demographic (gains) or losses	970,401	(1,826,418)	(3,026,782)	(699,117)
Benefit payments/refunds of contributions	(19,372,249)	(20,730,737)	(22,041,227)	(25,201,451)
Net change in total pension liability	$ 21,501,247	$ 22,120,251	$ 19,574,102	$ 21,195,860
Total pension liability - beginning	389,135,022	410,636,269	432,756,520	452,330,622
Total pension liability - ending (a)	$ 410,636,269	$ 432,756,520	$ 452,330,622	$ 473,526,482
Plan Fiduciary Net Position				
Employer contributions	$ 11,131,001	$ 12,012,562	$ 11,654,736	$ 11,611,789
Member contributions	4,514,879	4,761,495	4,632,780	4,758,530
Investment income net of investment expenses	23,395,891	1,207,991	26,503,470	55,064,738
Benefit payments refunds of contributions	(19,372,249)	(20,730,737)	(22,041,227)	(25,201,451)
Administrative expenses	(270,923)	(259,107)	(288,421)	(282,006)
Other	445,436	72,744	(1,075,190)	(121,010)
Net change in plan fiduciary net position	$ 19,844,035	$(2,935,052)	$ 19,386,148	$ 45,830,590
Plan fiduciary net position - beginning	341,923,940	361,767,975	358,832,923	378,219,071
Plan fiduciary net position - ending (b)	$ 361,767,975	$ 358,832,923	$ 378,219,071	$ 424,049,661
Net pension liability - ending (a) - (b)	$ 48,868,294	$ 73,923,597	$ 74,111,551	$ 49,476,821
Fiduciary net position as a percentage of total pension liability	88.10%	82.92%	83.62%	89.55%
Pensionable covered payroll	$ 63,934,561	$ 68,021,353	$ 66,182,567	$ 67,510,440
Net pension liability as a percentage of covered payroll	76.43%	108.68%	111.98%	73.29%

* Reporting began in fiscal year 2015.

JEFFERSON COUNTY, TEXAS
REQUIRED SUPPLEMENTARY INFORMATION
TEXAS COUNTY AND DISTRICT RETIREMENT SYSTEM
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Fiscal Year Ended	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Pensionable Covered Payroll (1)	Actual Contribution as a % of Covered Payroll
2014	$ 10,889,473	$ 10,889,473	$ -	$ 63,521,999	17.1%
2015	11,476,313	11,476,313	-	65,197,649	17.6%
2016	11,644,582	11,644,582	-	66,074,018	17.6%
2017	11,699,132	11,699,132	-	67,589,717	17.3%
2018	11,920,988	11,920,988	-	65,695,117	18.1%

(1) Payroll is calculated based on contributions as reported to TCDRS.

* Reporting began in FY 2014.

JEFFERSON COUNTY, TEXAS
REQUIRED SUPPLEMENTARY INFORMATION
NOTES TO SCHEDULE OF EMPLOYER CONTRIBUTIONS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

Valuation Date	Actuarially determined contribution rates are calculated each December 31, two years prior to the end of the fiscal year in which the contributions are reported.

Methods and assumptions used to determine contribution rates:

Actuarial Cost Method	Entry Age
Amortization Method	Level percentage of payroll, closed
Remaining Amortization Period	12.0 years (based on contribution rate calculated in12/31/2017 valuation)
Asset Valuation Method	5-year smoothed market
Inflation	2.75%
Salary Increases	Varies by age and service. 4.9% average over career including inflation.
Investment Rate of Return	8.0%, net of investment expenses, including inflation
Retirement Age	Members who are eligible for service retirement are assumed to commence receiving benefit payments based on age. The average age at service retirement for recent retirees is 61.
Mortality	130% of the RP-2014 Health Annuitant Mortality Table for males and 110% of the RP-2014 Health Annuitant Mortality Table for females, both projected with 110% of the MP-2014 Ultimate scale after 2014.
Changes in Assumptions and Methods Reflected in the Schedule of Employer Contributions*	2015: New inflation, mortality and other assumptions were reflected. 2017: New mortality assumptions were reflected
Changes in Plan Provisions Reflected in the Schedule*	2015: No changes in plan provisions. 2016: No changes in plan provisions. 2017: New Annuity Purchase Rates were reflected for benefits earned after 2017

* Only changes effective 2015 and later are shown in the Notes in Schedule.

JEFFERSON COUNTY, TEXAS
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN TOTAL OPEB LIABILITY AND RELATED RATIOS
LAST TEN FISCAL YEARS

Plan Year Ended September 30	**2018**
Total OPEB Liability	
Service Cost	$ 9,576,801
Interest total OPEB liability	8,585,089
Effect of plan changes	-
Effect of assumption changes or inputs	(19,171,693)
Effect of economic/demographic (gains) or losses	-
Benefit payments/refunds of contributions	(5,544,058)
Net change in total pension liability	$(6,553,861)
Total OPEB liability - beginning	229,024,511
Total OPEB liability - ending	$ 222,470,650
OPEB covered payroll	$ 55,723,780
Total OPEB liability as a percentage of covered payroll	399.24%

* Reporting began in fiscal year 2018.

COMBINING AND INDIVIDUAL FUND INFORMATION AND OTHER SUPPLEMENTARY INFORMATION

JEFFERSON COUNTY, TEXAS
GENERAL FUND
SCHEDULE OF EXPENDITURES - BUDGET AND ACTUAL (GAAP)
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	BUDGETED AMOUNTS ORIGINAL	BUDGETED AMOUNTS FINAL	ACTUAL AMOUNT	VARIANCE WITH FINAL BUDGET
GENERAL GOVERNMENT:				
TAX ASSESSOR-COLLECTOR	$ 4,015,207	4,015,207	3,853,432	161,775
HUMAN RESOURCES	446,431	446,431	435,620	10,811
COUNTY AUDITOR	1,524,752	1,524,752	1,331,933	192,819
COUNTY CLERK	2,364,127	2,364,127	2,215,134	148,993
COUNTY JUDGE	921,974	921,974	763,799	158,175
RISK MANAGEMENT	258,592	258,592	258,349	243
COUNTY TREASURER	395,842	395,842	388,744	7,098
PRINTING DEPARTMENT	173,275	171,275	157,016	14,259
PURCHASING AGENT	571,359	573,359	557,558	15,801
GENERAL SERVICES	11,255,229	10,774,732	10,549,605	225,127
DATA PROCESSING	2,180,603	2,180,603	2,044,177	136,426
VOTERS REGISTRATION DEPARTMENT	158,956	158,956	140,954	18,002
ELECTIONS DEPARTMENT	840,254	840,254	736,862	103,392
VETERANS SERVICE	306,653	306,653	304,859	1,794
TOTAL GENERAL GOVERNMENT	$ 25,413,254	24,932,757	23,738,042	1,194,715
JUDICIAL AND LAW ENFORCEMENT:				
DISTRICT ATTORNEY	$ 6,894,201	6,894,201	6,495,957	398,244
DISTRICT CLERK	1,956,148	1,962,204	1,958,394	3,810
CRIMINAL DISTRICT COURT	1,530,482	1,530,482	1,455,756	74,726
58TH DISTRICT COURT	305,645	305,645	274,787	30,858
60TH DISTRICT COURT	302,717	302,717	300,143	2,574
136TH DISTRICT COURT	308,347	308,347	293,466	14,881
172ND DISTRICT COURT	306,186	306,186	280,181	26,005
252ND DISTRICT COURT	1,160,612	1,230,612	1,201,145	29,467
279TH DISTRICT COURT	406,909	426,909	423,837	3,072
317TH DISTRICT COURT	808,245	808,245	747,226	61,019
JURY	650,474	520,474	433,981	86,493
J.P. PRECINCT NO. 1 - PLACE NO. 1	382,394	382,394	368,893	13,501
J.P. PRECINCT NO. 1 - PLACE NO. 2	381,038	381,038	344,238	36,800
J.P. PRECINCT NO. 2	354,110	354,110	287,830	66,280
J.P. PRECINCT NO. 4	375,490	375,490	354,826	20,664
J.P. PRECINCT NO. 6	383,911	389,111	364,298	24,813
J.P. PRECINCT NO. 7	379,034	379,034	345,909	33,125
J.P. PRECINCT NO. 8	372,025	372,025	337,653	34,372
COUNTY COURT AT LAW NO. 1	486,260	486,260	477,335	8,925
COUNTY COURT AT LAW NO. 2	631,471	631,471	571,048	60,423
COUNTY COURT AT LAW NO 3	736,035	736,035	712,997	23,038
COURT MASTER	643,372	493,372	457,526	35,846
DISPUTE RESOLUTION CENTER	266,260	266,260	220,647	45,613
JUVENILE ALTERNATIVE SCHOOL	413,246	414,108	413,483	625
COMMUNITY SUPERVISION	19,082	19,082	17,989	1,093
SHERIFF	13,713,696	13,617,696	13,086,417	531,279
CRIME LABORATORY	1,434,162	1,434,162	1,252,670	181,492
JAIL	28,340,933	27,220,933	26,613,183	607,750
JUVENILE CORRECTIONAL PROBATION	1,651,152	1,451,152	1,289,490	161,662
JUVENILE DETENTION HOME	2,169,233	2,069,233	1,872,623	196,610
CONSTABLE PRECINCT NO. 1	779,226	779,226	720,289	58,937
CONSTABLE PRECINCT NO. 2	463,423	526,423	501,286	25,137
CONSTABLE PRECINCT NO. 4	497,948	497,948	462,070	35,878
CONSTABLE PRECINCT NO. 6	569,104	602,602	562,437	40,165
CONSTABLE PRECINCT NO. 7	448,389	448,389	430,814	17,575
CONSTABLE PRECINCT NO. 8	456,137	491,637	472,954	18,683
COUNTY MORGUE	785,000	815,000	810,342	4,658
TOTAL JUDICIAL AND LAW ENFORCEMENT	$ 71,762,097	70,230,213	67,214,120	3,016,093

[CONTINUED]

JEFFERSON COUNTY, TEXAS
GENERAL FUND
SCHEDULE OF EXPENDITURES - BUDGET AND ACTUAL (GAAP)
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	BUDGETED AMOUNTS		ACTUAL	VARIANCE WITH
	ORIGINAL	FINAL	AMOUNT	FINAL BUDGET
EDUCATION AND RECREATION:				
AGRICULTURAL EXTENSION SERVICE	$ 424,338	354,338	318,509	35,829
TOTAL EDUCATION AND RECREATION	$ 424,338	354,338	318,509	35,829
HEALTH AND WELFARE:				
PUBLIC HEALTH UNIT 1	$ 1,290,638	1,290,638	1,201,144	89,494
PUBLIC HEALTH UNIT 2	1,282,065	1,282,065	1,158,066	123,999
NURSE PRACTITIONER	316,395	316,395	304,306	12,089
CHILD WELFARE	120,000	120,000	102,579	17,421
ENVIRONMENTAL CONTROL	402,460	422,187	399,353	22,834
INDIGENT MEDICAL SERVICE	4,907,433	4,777,433	4,689,571	87,862
MOSQUITO CONTROL	2,260,280	2,260,280	2,020,783	239,497
EMERGENCY MANAGEMENT	243,887	243,887	218,392	25,495
TOBACCO SETTLEMENT FUND	100,000	100,000	100,000	-
TOTAL HEALTH AND WELFARE	$ 10,923,158	10,812,885	10,194,194	618,691
MAINTENANCE - EQUIPMENT & STRUCTURES:				
COURTHOUSE & ANNEXES	$ 2,882,567	2,885,471	2,746,830	138,641
PORT ARTHUR BUILDINGS	742,916	742,916	683,176	59,740
MID-COUNTY BUILDINGS	224,218	224,218	187,029	37,189
ROAD & BRIDGE PCT. 1	1,743,419	1,743,419	1,609,849	133,570
ROAD & BRIDGE PCT. 2	2,016,500	1,983,500	1,861,137	122,363
ROAD & BRIDGE PCT. 3	1,992,224	1,992,224	1,732,065	260,159
ROAD & BRIDGE PCT. 4	2,086,225	1,947,454	1,538,365	409,089
ENGINEERING	1,031,055	1,031,055	904,238	126,817
PARKS & RECREATION	180,731	180,731	100,175	80,556
SERVICE CENTER	1,034,377	1,174,127	1,128,479	45,648
TOTAL MAINTENANCE - EQUIPMENT & STRUCTURES	$ 13,934,232	13,905,115	12,491,343	1,413,772
CAPITAL OUTLAY:	$ -	-	-	-
TOTAL OPERATING EXPENDITURES	$ 122,457,079	120,235,308	113,956,208	6,279,100
OTHER FINANCING USES:				
TRANSFERS OUT	$ 4,576,247	6,798,018	6,770,896	27,122
TOTAL OTHER FINANCING USES	$ 4,576,247	6,798,018	6,770,896	27,122
TOTAL GENERAL FUND EXPENDITURES	$ 127,033,326	127,033,326	120,727,104	6,306,222

NONMAJOR GOVERNMENTAL FUNDS

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS - SUMMARY
SEPTEMBER 30, 2018

		SPECIAL REVENUE	CAPITAL PROJECTS	DEBT SERVICE	TOTAL NONMAJOR GOVERNMENTAL FUNDS
ASSETS:					
CASH AND CASH EQUIVALENTS	$	14,380,757	5,622,978	557,277	20,561,012
ACCOUNTS RECEIVABLE, Net		131,474	-	-	131,474
INTEREST RECEIVABLE		16,386	4,751	779	21,916
DUE FROM OTHER FUNDS		1	-	-	1
DUE FROM OTHER GOVERNMENTAL ENTITIES		1,221,271	43,705	-	1,264,976
DELINQUENT TAXES RECEIVABLE, Net		-	-	74,747	74,747
PENALTY AND INTEREST RECEIVABLE, Net		-	-	43,175	43,175
INVENTORY, At Cost		21,642	-	-	21,642
PREPAID ITEM		387	-	-	387
TOTAL ASSETS	$	15,771,918	5,671,434	675,978	22,119,330
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE					
LIABILITIES:					
ACCOUNTS PAYABLE	$	1,061,175	272,603	-	1,333,778
COMPENSATED ABSENCES		9,130	-	-	9,130
DUE TO OTHER FUNDS		637,809	15,114	-	652,923
UNEARNED REVENUE		663,048	-	-	663,048
TOTAL LIABILITIES	$	2,371,162	287,717	-	2,658,879
DEFERRED INFLOWS OF RESOURCES:					
UNAVAILABLE REVENUE- PROPERTY TAXES	$	-	-	104,141	104,141
UNAVAILABLE REVENUE- GRANTS		179,590	43,705	-	223,295
TOTAL DEFERRED INFLOWS OF RESOURCES	$	179,590	43,705	104,141	327,436
FUND BALANCES:					
NONSPENDABLE FOR:					
INVENTORY	$	21,642	-	-	21,642
PREPAID ITEMS		387	-	-	387
RESTRICTED FOR:					
DEBT SERVICE		-	-	571,837	571,837
ENVIRONMENTAL PROJECTS		-	1,734,648	-	1,734,648
PUBLIC INTEREST		3,929,465	-	-	3,929,465
JUDICIAL & LAW ENFORCEMENT		6,632,828	-	-	6,632,828
EDUCATION & RECREATION		2,333,260	-	-	2,333,260
HEALTH & WELFARE		90,629	-	-	90,629
MAINTENANCE OF STRUCTURES & EQUIPMENT		378,222	3,620,478	-	3,998,700
COMMITTED FOR:					
CONSTRUCTION CONTRACTS		78,116	181,018	-	259,134
UNASSIGNED (DEFICIT)		(243,383)	(196,132)	-	(439,515)
TOTAL FUND BALANCES	$	13,221,166	5,340,012	571,837	19,133,015
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$	15,771,918	5,671,434	675,978	22,119,330

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS - SUMMARY
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

		SPECIAL REVENUE	CAPITAL PROJECTS	DEBT SERVICE	TOTAL NONMAJOR GOVERNMENTAL FUNDS
REVENUES:					
PROPERTY TAXES	$	-	-	4,787,447	4,787,447
SALES TAXES		1,696,852	-	-	1,696,852
FEES		4,428,397	-	-	4,428,397
INTERGOVERNMENTAL		9,867,075	664,348	-	10,531,423
SALES, RENTAL & SERVICES		1,005,436	-	-	1,005,436
FINES AND FORFEITURES		886,851	-	-	886,851
CONTRIBUTIONS AND DONATIONS		3,997	-	-	3,997
INTEREST		108,379	23,904	17,909	150,192
TOTAL REVENUES	$	17,996,987	688,252	4,805,356	23,490,595
EXPENDITURES:					
CURRENT					
GENERAL GOVERNMENT	$	477,083	-	-	477,083
JUDICIAL AND LAW ENFORCEMENT		14,957,999	-	-	14,957,999
EDUCATION AND RECREATION		998,989	-	-	998,989
HEALTH AND WELFARE		251,533	-	-	251,533
MAINTENANCE OF STRUCTURES AND EQUIPMENT		247	-	-	247
CAPITAL OUTLAY		-	1,987,390	-	1,987,390
DEBT SERVICE					
PRINCIPAL		-	341,008	3,640,000	3,981,008
INTEREST AND COMMISSION		-	28,827	1,269,223	1,298,050
TOTAL EXPENDITURES	$	16,685,851	2,357,225	4,909,223	23,952,299
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$	1,311,136	(1,668,973)	(103,867)	(461,704)
OTHER FINANCING SOURCES (USES):					
TRANSFERS IN	$	1,256,072	3,535,053	9,658	4,800,783
TRANSFERS OUT		(159,285)	(363,282)	(9,658)	(532,225)
TOTAL OTHER FINANCING SOURCES (USES)	$	1,096,787	3,171,771	-	4,268,558
NET CHANGE IN FUND BALANCES	$	2,407,923	1,502,798	(103,867)	3,806,854
FUND BALANCES, BEGINNING	$	10,813,243	3,837,214	675,704	15,326,161
FUND BALANCES, ENDING	$	13,221,166	5,340,012	571,837	19,133,015

SPECIAL REVENUE FUNDS

SPECIAL REVENUE FUNDS

The Special Revenue Funds are used to account for the proceeds of specific revenue sources other than expendable trusts, or major capital projects that are legally restricted to expenditures for specified purposes. Included in this heading are the following individual funds:

Lateral Road Fund - This fund is used to account for expenditures of materials incurred in the maintenance of the lateral roads of the County. Financing is provided by contributions from the State.

Breath Alcohol Testing Fund - This fund is used to account for fees collected by the courts on D.W.I. convictions and the expenditure of those funds.

Law Library Fund - This fund is used to account for the maintenance of the County Law Library. Financing is provided by fees from law suits filed in the District Courts and County Courts-at-Law.

Juvenile Probation and Detention Fund - This fund is used to account for receipts specifically designated for use in juvenile programs.

County Clerk Records Management and Preservation Fund - This fund is used to account for fees collected by the County Clerk for the maintenance of their records and the expenditure of those funds.

County Clerk Records Archive Fund - This fund is used to account for fees collected by the County Clerk for the preservation of records prior to 1990 and the expenditure of those funds.

ASAP Constable Pct 2 Program - This fund is used to account for fees collected from the Port Arthur Independent School for the administration of the Absent Student Assistance Program (ASAP) by the Constable Pct. 2 and the expenditure of those funds for the program.

County Records Management and Preservation Fund - This fund is used to account for fees collected by the County Clerk, District Clerk, and Sheriff for the maintenance of County records and the expenditure of those funds.

Justice Court Building Security - This fund is used to account for fees collected by the justice courts to finance security services and equipment for justice courts not located in the County courthouse.

Hotel Occupancy Tax Fund - This fund is used to account for the collection of a 2% Hotel/Motel Occupancy tax. Revenues collected from this tax are to be used for tourism projects in the County.

County and District Court Technology Fund – This fund is used to account for fees collected from defendants convicted in a County, Statutory County, or District court and the expenditures of those funds on technological enhancements for the previously mentioned courts.

Sheriff and Constable Education Fund - This fund is used to account for the expenditures associated with the education of Sheriff's deputies and Constables of the County.

Tax Office Auto Dealer Fund - This fund is used to account for taxes collected from Local Auto Dealerships to be used by the County's Tax Office.

Unclaimed Funds Management Fund - This fund is used to account for Unclaimed Funds for all County departments.

Family Protection Fund - This fund is used to account for fees collected by the District Clerk for family violence prevention or intervention and the expenditure of this money.

District Attorney Forfeiture Fund - This fund is used to account for forfeitures received by the District Attorney from criminal convictions and the expenditure of those funds.

Hot Check Fund - This fund is used to account for fees received by the District Attorney for the prosecution of hot check offenders and the expenditure of those funds.

Justice of the Peace Courtroom Technology Fund – This fund is used to account for the fees collected by the Justices of the Peace on misdemeanor convictions and the expenditure of those funds on technological enhancements for the justices' courts.

District Clerk Records Management Fund - This fund is used to account for fees collected by the District Clerk for the maintenance of their records and the expenditure of those funds.

County Clerk Election Contracts - This fund is used to account for fees collected by the County Clerk for election contracts with local governments and the expenditure of those funds.

Child Abuse Prevention - This fund is used to account for fees collected for certain child sexual assault and related convictions and the expenditure of those funds.

Sheriff's Special Revenue Funds - This fund is used to account for fees, forfeitures, and other revenue received by the Sheriff in association with Security Fees, Law Officer Training fees, D.A.R.E. Contributions, Sheriff's Forfeitures, Sheriff's Commissary, Sheriff – Spindletop Grant, and the Marine Division reimbursements, and the expenditure of those funds.

Guardianship Fee Fund - This fund is used to account for fees collected by the County Clerk to supplement the support of the judiciary in cases involving guardianships.

Juvenile Delinquency Prevention - This fund is used to account for fees collected by the courts for certain offenses and the expenditures associated with juvenile delinquency prevention and graffiti eradication measures.

District Court Records Technology - This fund is used to account for fees collected by the District Clerk for the preservation and restoration of District Court records.

Probation Department Funds - These funds are used to account for the expenditures of maintaining probation services as authorized by the County and District Courts. Financing is provided by State grant and probationary fees. Included in this heading are the following individual funds:

Juvenile Probation and Detention - State Aid
Pretrial Diversion Programs
IV-E Foster Care Fund
Juvenile Grant A – State Aid
Mentally Impaired Offenders
Community Supervision

Women's Center
Community Corrections
DWI Pretrial Diversion
Drug Diversion Program

Grant Funds - These funds are used to account for receipts of Federal and State grants designated for special projects or services. Included in this heading are the following individual funds:

Family Group Conferencing
Sheriff Training Grant
JAG Grant
Sheriff Dept Grants
SCAAP Grant
Crime Victims Clearing - 1
Regional Communication
Crime Victims Clearing - 2
EMPG Grant
Crime Lab CJD Grant
Port Security Grants
Auto Theft Grant
Drug Intervention Grant
Violence Against Women - 1
Violence Against Women - 2
Family Treatment Court
Body Armor Protection Grants
Cheek Water and Sewer Phase 5
CJD Sheriff Grants

JEFFERSON COUNTY
TEXAS

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE
SEPTEMBER 30, 2018

	LATERAL ROAD FUNDS	BREATH ALCOHOL TESTING FUND	LAW LIBRARY FUND	JUVENILE PROBATION & DETENTION FUND
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 377,690	20,352	8,182	527,841
ACCOUNTS RECEIVABLE, Net	-	-	62	-
INTEREST RECEIVABLE	532	28	5	969
DUE FROM OTHER FUNDS	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	-	68,154
INVENTORY, At Cost	-	-	-	-
PREPAID ITEMS	-	-	-	-
TOTAL ASSETS	$ 378,222	20,380	8,249	596,964
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE				
LIABILITIES:				
ACCOUNTS PAYABLE	$ -	-	6,392	20,629
COMPENSATED ABSENCES	-	-	-	-
DUE TO OTHER FUNDS	-	-	-	-
UNEARNED REVENUE - GRANTS	-	-	-	-
TOTAL LIABILITIES	$ -	-	6,392	20,629
DEFERRED INFLOWS OF RESOURCES:				
UNAVAILABLE REVENUE-GRANTS	$ -	-	-	-
TOTAL DEFERRED INFLOWS OF RESOURCES	$ -	-	-	-
FUND BALANCES:				
NONSPENDABLE FOR:				
INVENTORY	$ -	-	-	-
PREPAID ITEMS	-	-	-	-
RESTRICTED FOR:				
PUBLIC INTEREST	-	-	-	-
JUDICIAL & LAW ENFORCEMENT	-	20,380	-	576,335
EDUCATION & RECREATION	-	-	1,857	-
HEALTH & WELFARE	-	-	-	-
MAINTENANCE OF STRUCTURES & EQUIPMENT	378,222	-	-	-
COMMITTED FOR:				
CONSTRUCTION CONTRACTS	-	-	-	-
UNASSIGNED (DEFICIT)	-	-	-	-
TOTAL FUND BALANCES	$ 378,222	20,380	1,857	576,335
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$ 378,222	20,380	8,249	596,964

COUNTY CLERK RECORDS MGMT. AND PRESERVATION FUND	COUNTY CLERK RECORDS ARCHIVE FUND	ASAP CONSTABLE PCT 2 PROGRAM	COUNTY RECORDS MGMT. AND PRESERVATION FUND
1,386,342	1,305,983	-	771,010
-	-	-	-
1,910	1,795	-	1,073
-	-	-	-
-	-	104,932	-
-	-	-	-
-	-	-	-
1,388,252	1,307,778	104,932	772,083
-	4,203	43,462	1,803
-	-	-	-
-	-	61,470	-
-	-	-	-
-	4,203	104,932	1,803
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
1,388,252	1,303,575	-	770,280
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
1,388,252	1,303,575	-	770,280
1,388,252	1,307,778	104,932	772,083

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE
SEPTEMBER 30, 2018

	JUSTICE COURT BUILDING SECURITY	HOTEL OCCUPANCY TAX FUND	COUNTY & DISTRICT COURT TECHNOLOGY FUND
ASSETS:			
CASH AND CASH EQUIVALENTS	$ 126,479	2,236,812	19,461
ACCOUNTS RECEIVABLE, Net	-	125,531	-
INTEREST RECEIVABLE	177	3,001	27
DUE FROM OTHER FUNDS	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	-
INVENTORY, At Cost	-	-	-
PREPAID ITEMS	-	-	-
TOTAL ASSETS	$ 126,656	2,365,344	19,488
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE			
LIABILITIES:			
ACCOUNTS PAYABLE	$ 858	31,684	266
COMPENSATED ABSENCES	-	2,257	-
DUE TO OTHER FUNDS	-	-	-
UNEARNED REVENUE - GRANTS	-	-	-
TOTAL LIABILITIES	$ 858	33,941	266
DEFERRED INFLOWS OF RESOURCES:			
UNAVAILABLE REVENUE-GRANTS	-	-	-
TOTAL DEFERRED INFLOWS OF RESOURCES	-	-	-
FUND BALANCES:			
NONSPENDABLE FOR:			
INVENTORY	$ -	-	-
PREPAID ITEMS	-	-	-
RESTRICTED FOR:			
PUBLIC INTEREST	-	-	-
JUDICIAL & LAW ENFORCEMENT	125,798	-	19,222
EDUCATION & RECREATION	-	2,331,403	-
HEALTH & WELFARE	-	-	-
MAINTENANCE OF STRUCTURES & EQUIPMENT	-	-	-
COMMITTED FOR:			
CONSTRUCTION CONTRACTS	-	-	-
UNASSIGNED (DEFICIT)	-	-	-
TOTAL FUND BALANCES	$ 125,798	2,331,403	19,222
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$ 126,656	2,365,344	19,488

SHERIFF AND CONSTABLE EDUCATION FUND	TAX OFFICE AUTO DEALER FUND	UNCLAIMED FUNDS MANAGEMENT FUND	FAMILY PROTECTION FUND	DISTRICT ATTORNEY FORFEITURE FUND	HOT CHECK FUND	JP COURTROOM TECHNOLOGY FUND
41,124	182,930	26,422	15,303	487,109	77,968	627,722
-	-	-	-	-	-	-
58	258	-	20	-	-	881
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
41,182	183,188	26,422	15,323	487,109	77,968	628,603
1,047	-	26,384	-	1,005	-	637
-	-	-	-	-	-	-
-	-	-	-	250	-	-
-	-	-	-	-	-	-
1,047	-	26,384	-	1,255	-	637
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	183,188	38	-	-	-	-
40,135	-	-	15,323	485,854	77,968	627,966
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
40,135	183,188	38	15,323	485,854	77,968	627,966
41,182	183,188	26,422	15,323	487,109	77,968	628,603

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE
SEPTEMBER 30, 2018

	DISTRICT CLERK RECORDS MANAGEMENT	COUNTY CLERK ELECTION CONTRACTS	CHILD ABUSE PREVENTION	SHERIFF'S SPECIAL REVENUE FUNDS
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 13,862	32,409	13,678	2,371,928
ACCOUNTS RECEIVABLE, Net	-	-	-	-
INTEREST RECEIVABLE	17	46	19	925
DUE FROM OTHER FUNDS	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	-	632,350
INVENTORY, At Cost	-	-	-	11,396
PREPAID ITEMS	-	-	-	-
TOTAL ASSETS	$ 13,879	32,455	13,697	3,016,599
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE				
LIABILITIES:				
ACCOUNTS PAYABLE	$ 865	18,232	-	188,974
COMPENSATED ABSENCES	-	-	-	-
DUE TO OTHER FUNDS	-	-	-	492,385
UNEARNED REVENUE - GRANTS	-	-	-	-
TOTAL LIABILITIES	$ 865	18,232	-	681,359
DEFERRED INFLOWS OF RESOURCES:				
UNAVAILABLE REVENUE-GRANTS	-	-	-	-
TOTAL DEFERRED INFLOWS OF RESOURCES	-	-	-	-
FUND BALANCES:				
NONSPENDABLE FOR:				
INVENTORY	$ -	-	-	11,396
PREPAID ITEMS	-	-	-	-
RESTRICTED FOR:				
PUBLIC INTEREST	-	14,223	-	-
JUDICIAL & LAW ENFORCEMENT	13,014	-	13,697	2,323,844
EDUCATION & RECREATION	-	-	-	-
HEALTH & WELFARE	-	-	-	-
MAINTENANCE OF STRUCTURES & EQUIPMENT	-	-	-	-
COMMITTED FOR:				
CONSTRUCTION CONTRACTS	-	-	-	-
UNASSIGNED (DEFICIT)	-	-	-	-
TOTAL FUND BALANCES	$ 13,014	14,223	13,697	2,335,240
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$ 13,879	32,455	13,697	3,016,599

GUARDIANSHIP FEE FUND	JUVENILE DELINQUENCY PREVENTION	DISTRICT COURT RECORDS TECHNOLOGY	PROBATION DEPARTMENT FUNDS	GRANT FUNDS	TOTAL
269,532	-	36,075	3,257,114	147,429	14,380,757
-	-	-	5,881	-	131,474
377	-	46	4,073	149	16,386
-	-	-	1	-	1
-	-	-	118,123	297,712	1,221,271
-	-	-	10,246	-	21,642
-	-	-	387	-	387
269,909	-	36,121	3,395,825	445,290	15,771,918
-	-	10	500,599	214,125	1,061,175
-	-	-	6,873	-	9,130
-	-	-	1	83,703	637,809
-	-	-	663,048	-	663,048
-	-	10	1,170,521	297,828	2,371,162
-	-	-	-	179,590	179,590
-	-	-	-	179,590	179,590
-	-	-	10,246	-	21,642
-	-	-	387	-	387
269,909	-	-	-	-	3,929,465
-	-	36,111	2,214,671	42,510	6,632,828
-	-	-	-	-	2,333,260
-	-	-	-	90,629	90,629
-	-	-	-	-	378,222
-	-	-	-	78,116	78,116
-	-	-	-	(243,383)	(243,383)
269,909	-	36,111	2,225,304	(32,128)	13,221,166
269,909	-	36,121	3,395,825	445,290	15,771,918

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	LATERAL ROAD FUND	BREATH ALCOHOL TESTING FUND	LAW LIBRARY FUND	JUVENILE PROBATION & DETENTION FUND
REVENUES:				
TAXES	$ -	-	-	-
FEES	-	6,002	56,163	26,909
FINES AND FORFEITURES	-	-	-	-
SALES, RENTAL & SERVICES	-	-	-	-
INTERGOVERNMENTAL	29,244	-	-	137,432
INTEREST	3,234	180	5	6,927
CONTRIBUTIONS AND DONATIONS	-	-	-	-
TOTAL REVENUES	$ 32,478	6,182	56,168	171,268
EXPENDITURES:				
GENERAL GOVERNMENT	$ -	-	-	-
JUDICIAL AND LAW ENFORCEMENT	-	13,141	-	283,893
EDUCATION AND RECREATION	-	-	54,818	-
HEALTH AND WELFARE	-	-	-	-
MAINTENANCE OF STRUCTURES AND EQUIPMENT	247	-	-	-
CAPITAL OUTLAY	-	-	-	-
TOTAL EXPENDITURES	$ 247	13,141	54,818	283,893
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ 32,231	(6,959)	1,350	(112,625)
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$ -	-	-	71,340
TRANSFERS OUT	-	-	-	(4,576)
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	-	66,764
NET CHANGE IN FUND BALANCES	$ 32,231	(6,959)	1,350	(45,861)
FUND BALANCES, BEGINNING	$ 345,991	27,339	507	622,196
FUND BALANCES, ENDING	$ 378,222	20,380	1,857	576,335

COUNTY CLERK RECORDS MGMT. AND PRESERVATION FUND	COUNTY CLERK RECORDS ARCHIVE FUND	ASAP CONSTABLE PCT 2 PROGRAM	COUNTY RECORDS MGMT. AND PRESERVATION FUND
-	-	-	-
457,461	469,756	-	125,331
-	-	-	-
-	-	-	-
-	-	844,319	-
10,749	10,515	-	6,398
-	-	-	-
468,210	480,271	844,319	131,729
141,724	221,750	-	90,792
-	-	844,319	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
141,724	221,750	844,319	90,792
326,486	258,521	-	40,937
-	-	-	-
-	-	-	-
-	-	-	-
326,486	258,521	-	40,937
1,061,766	1,045,054	-	729,343
1,388,252	1,303,575	-	770,280

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES, AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	JUSTICE COURT BUILDING SECURITY	HOTEL OCCUPANCY TAX FUND	COUNTY & DISTRICT COURT TECHNOLOGY FUND
REVENUES:			
TAXES	$ -	1,696,852	-
FEES	10,550	-	6,324
FINES AND FORFEITURES	-	-	-
SALES, RENTAL & SERVICES	-	5,224	-
INTERGOVERNMENTAL	-	-	-
INTEREST	1,047	15,679	162
CONTRIBUTIONS AND DONATIONS	-	7	-
TOTAL REVENUES	$ 11,597	1,717,762	6,486
EXPENDITURES:			
GENERAL GOVERNMENT	$ -	-	-
JUDICIAL AND LAW ENFORCEMENT	858	-	4,462
EDUCATION AND RECREATION	-	944,171	-
HEALTH AND WELFARE	-	-	-
MAINTENANCE OF STRUCTURES AND EQUIPMENT	-	-	-
CAPITAL OUTLAY	-	-	-
TOTAL EXPENDITURES	$ 858	944,171	4,462
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ 10,739	773,591	2,024
OTHER FINANCING SOURCES (USES):			
TRANSFERS IN	$ -	-	-
TRANSFERS OUT	-	-	-
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	-
NET CHANGE IN FUND BALANCES	$ 10,739	773,591	2,024
FUND BALANCES, BEGINNING	$ 115,059	1,557,812	17,198
FUND BALANCES, ENDING	$ 125,798	2,331,403	19,222

SHERIFF AND CONSTABLE EDUCATION FUND	TAX OFFICE AUTO DEALER FUND	UNCLAIMED FUNDS MANAGEMENT FUND	FAMILY PROTECTION FUND	DISTRICT ATTORNEY FORFEITURE FUND	HOT CHECK FUND	JP COURTROOM TECHNOLOGY FUND
-	-	-	-	-	-	-
-	5,361	-	14,775	-	8,466	42,312
-	-	-	-	82,423	-	-
-	-	-	-	-	-	-
28,857	-	-	-	-	-	-
378	4,469	-	85	2,118	-	5,240
-	-	-	-	-	-	-
-						
29,235	9,830	-	14,860	84,541	8,466	47,552
-	-	-	-	-	-	-
26,303	-	-	15,000	90,008	2,872	3,787
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
26,303	-	-	15,000	90,008	2,872	3,787
2,932	9,830	-	(140)	(5,467)	5,594	43,765
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
2,932	9,830	-	(140)	(5,467)	5,594	43,765
37,203	173,358	38	15,463	491,321	72,374	584,201
40,135	183,188	38	15,323	485,854	77,968	627,966

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	DISTRICT CLERK RECORDS MANAGEMENT	COUNTY CLERK ELECTION CONTRACTS	CHILD ABUSE PREVENTION	SHERIFF'S SPECIAL REVENUE FUNDS
REVENUES:				
TAXES	$ -	-	-	-
FEES	18,320	-	2,693	349,519
FINES AND FORFEITURES	-	-	-	804,428
SALES, RENTAL & SERVICES	-	9,113	-	991,099
INTERGOVERNMENTAL	-	-	-	2,147,647
INTEREST	92	190	107	11,839
CONTRIBUTIONS AND DONATIONS	-	-	-	3,900
TOTAL REVENUES	$ 18,412	9,303	2,800	4,308,432
EXPENDITURES:				
GENERAL GOVERNMENT	$ -	18,917	-	-
JUDICIAL AND LAW ENFORCEMENT	13,113	-	-	4,032,717
EDUCATION AND RECREATION	-	-	-	-
HEALTH AND WELFARE	-	-	-	-
MAINTENANCE OF STRUCTURES AND EQUIPMENT	-	-	-	-
CAPITAL OUTLAY	-	-	-	-
TOTAL EXPENDITURES	$ 13,113	18,917	-	4,032,717
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ 5,299	(9,614)	2,800	275,715
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$ -	-	-	564,553
TRANSFERS OUT	-	-	-	(121,714)
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	-	442,839
NET CHANGE IN FUND BALANCES	$ 5,299	(9,614)	2,800	718,554
FUND BALANCES, BEGINNING	$ 7,715	23,837	10,897	1,616,686
FUND BALANCES, ENDING	$ 13,014	14,223	13,697	2,335,240

GUARDIANSHIP FEE FUND	JUVENILE DELINQUENCY PREVENTION	DISTRICT COURT RECORDS TECHNOLOGY	PROBATION DEPARTMENT FUNDS	GRANT FUNDS	TOTAL
-	-	-	-	-	1,696,852
28,760	-	36,475	2,763,220	-	4,428,397
-	-	-	-	-	886,851
-	-	-	-	-	1,005,436
-	-	-	5,431,081	1,248,495	9,867,075
2,216	102	259	25,064	1,324	108,379
-	-	-	-	90	3,997
30,976	102	36,734	8,219,365	1,249,909	17,996,987
3,900	-	-	-	-	477,083
-	25,504	24,245	7,721,738	1,856,039	14,957,999
-	-	-	-	-	998,989
-	-	-	-	251,533	251,533
-	-	-	-	-	247
-	-	-	-	-	-
3,900	25,504	24,245	7,721,738	2,107,572	16,685,851
27,076	(25,402)	12,489	497,627	(857,663)	1,311,136
-	4,576	-	32,995	582,608	1,256,072
-	-	-	(32,995)	-	(159,285)
-	4,576	-	-	582,608	1,096,787
27,076	(20,826)	12,489	497,627	(275,055)	2,407,923
242,833	20,826	23,622	1,727,677	242,927	10,813,243
269,909	-	36,111	2,225,304	(32,128)	13,221,166

JEFFERSON COUNTY
TEXAS

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET - NONMAJOR GOVERNMENTAL FUNDS -
SPECIAL REVENUE - PROBATION DEPARTMENT FUNDS
SEPTEMBER 30, 2018

	JUVENILE PROBATION AND DETENTION--STATE AID	PRETRIAL DIVERSION PROGRAMS	IV-E FOSTER CARE FUND	JUVENILE GRANT A - STATE AID
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 27,818	20,913	504,901	133,620
ACCOUNTS RECEIVABLE, Net	-	-	-	-
INTEREST RECEIVABLE	-	28	712	-
DUE FROM OTHER FUNDS	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	4,559	-	-	113,564
INVENTORY, At Cost	-	-	-	-
PREPAID ITEMS	-	-	-	-
TOTAL ASSETS	$ 32,377	20,941	505,613	247,184
LIABILITIES AND FUND BALANCES				
LIABILITIES:				
ACCOUNTS PAYABLE	$ 3,214	-	-	141,277
COMPENSATED ABSENCES	-	-	-	-
DUE TO OTHER FUNDS	-	-	-	-
UNEARNED REVENUE	-	-	-	-
TOTAL LIABILITIES	$ 3,214	-	-	141,277
FUND BALANCES:				
NONSPENDABLE FOR:				
INVENTORY	$ -	-	-	-
PREPAID ITEMS	-	-	-	-
RESTRICTED FOR: JUDICIAL & LAW ENFORCEMENT	29,163	20,941	505,613	105,907
UNASSIGNED (DEFICIT)	-	-	-	-
TOTAL FUND BALANCES	$ 29,163	20,941	505,613	105,907
TOTAL LIABILITIES AND FUND BALANCES	$ 32,377	20,941	505,613	247,184

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET - NONMAJOR GOVERNMENTAL FUNDS -
SPECIAL REVENUE - PROBATION DEPARTMENT FUNDS
SEPTEMBER 30, 2018

	MENTALLY IMPAIRED OFFENDERS PROGRAM	COMMUNITY SUPERVISION	WOMEN'S CENTER
ASSETS:			
CASH AND CASH EQUIVALENTS	$ 57,418	1,269,837	554,171
ACCOUNTS RECEIVABLE, Net	-	2,640	3,241
INTEREST RECEIVABLE	-	2,954	-
DUE FROM OTHER FUNDS	-	1	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	-
INVENTORY, At Cost	-	-	10,246
PREPAID ITEMS	-	387	-
TOTAL ASSETS	$ 57,418	1,275,819	567,658
LIABILITIES AND FUND BALANCES			
LIABILITIES:			
ACCOUNTS PAYABLE	$ 6,911	219,520	79,783
COMPENSATED ABSENCES	-	6,873	-
DUE TO OTHER FUNDS	-	-	1
UNEARNED REVENUE	23,361	230,598	241,103
TOTAL LIABILITIES	$ 30,272	456,991	320,887
FUND BALANCES:			
NONSPENDABLE FOR INVENTORY	$ -	-	10,246
PREPAID ITEMS	-	387	-
RESTRICTED FOR: JUDICIAL & LAW ENFORCEMENT	27,146	818,441	236,525
UNASSIGNED (DEFICIT)	-	-	-
TOTAL FUND BALANCES	$ 27,146	818,828	246,771
TOTAL LIABILITIES AND FUND BALANCES	$ 57,418	1,275,819	567,658

COMMUNITY CORRECTIONS	DWI PRETRIAL DIVERSION	DRUG DIVERSION PROGRAM	TOTAL
250,490	271,537	166,409	3,257,114
-	-	-	5,881
-	379	-	4,073
-	-	-	1
-	-	-	118,123
-	-	-	10,246
-	-	-	387
250,490	271,916	166,409	3,395,825
20,792	-	29,102	500,599
-	-	-	6,873
-	-	-	1
93,610	-	74,376	663,048
114,402	-	103,478	1,170,521
-	-	-	10,246
-	-	-	387
136,088	271,916	62,931	2,214,671
-	-	-	-
136,088	271,916	62,931	2,225,304
250,490	271,916	166,409	3,395,825

JEFFERSON COUNTY
TEXAS

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - NONMAJOR GOVERNMENTAL FUNDS -
SPECIAL REVENUE - PROBATION DEPARTMENT FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	JUVENILE PROBATION AND DETENTION-- STATE AID	PRETRIAL DIVERSION PROGRAMS	IV-E FOSTER CARE FUND	JUVENILE GRANT A - STATE AID
REVENUES:				
FEES	$ -	33,908	-	-
INTERGOVERNMENTAL	53,184	-	-	1,250,438
INTEREST	-	119	4,324	-
TOTAL REVENUES	$ 53,184	34,027	4,324	1,250,438
EXPENDITURES:				
JUDICIAL AND LAW ENFORCEMENT	$ 56,687	25,989	1,550	1,281,289
CAPITAL OUTLAY	-	-	-	-
TOTAL EXPENDITURES	$ 56,687	25,989	1,550	1,281,289
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ (3,503)	8,038	2,774	(30,851)
OTHER FINANCIAL SOURCES (USES):				
TRANSFERS IN	$ -	-	-	-
TRANSFERS OUT	-	-	-	-
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	-	-
NET CHANGE IN FUND BALANCES	$ (3,503)	8,038	2,774	(30,851)
FUND BALANCES, BEGINNING	32,666	12,903	502,839	136,758
FUND BALANCES, ENDING	$ 29,163	20,941	505,613	105,907

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - NONMAJOR GOVERNMENTAL FUNDS -
SPECIAL REVENUE - PROBATION DEPARTMENT FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	MENTALLY IMPAIRED OFFENDERS PROGRAM	COMMUNITY SUPERVISION	WOMEN'S CENTER
REVENUES:			
FEES	$ -	2,353,018	212,142
INTERGOVERNMENTAL	140,164	1,540,282	1,446,621
INTEREST	-	18,448	-
TOTAL REVENUES	$ 140,164	3,911,748	1,658,763
EXPENDITURES:			
JUDICIAL AND LAW ENFORCEMENT	$ 116,339	3,860,977	1,447,359
CAPITAL OUTLAY	-	-	-
TOTAL EXPENDITURES	$ 116,339	3,860,977	1,447,359
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ 23,825	50,771	211,404
OTHER FINANCIAL SOURCES (USES):			
TRANSFERS IN	$ 893	-	10,657
TRANSFERS OUT	-	-	-
TOTAL OTHER FINANCING SOURCES (USES)	$ 893	-	10,657
NET CHANGE IN FUND BALANCES	$ 24,718	50,771	222,061
FUND BALANCES, BEGINNING	2,428	768,057	24,710
FUND BALANCES, ENDING	$ 27,146	818,828	246,771

COMMUNITY CORRECTIONS	DWI PRETRIAL DIVERSION	DRUG DIVERSION PROGRAM	TOTAL
-	86,452	77,700	2,763,220
554,138	-	446,254	5,431,081
-	2,173	-	25,064
554,138	88,625	523,954	8,219,365
399,260	43,097	489,191	7,721,738
-	-	-	-
399,260	43,097	489,191	7,721,738
154,878	45,528	34,763	497,627
-	-	21,445	32,995
(32,995)	-	-	(32,995)
(32,995)	-	21,445	-
121,883	45,528	56,208	497,627
14,205	226,388	6,723	1,727,677
136,088	271,916	62,931	2,225,304

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET - NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE - GRANT FUNDS
SEPTEMBER 30, 2018

	FAMILY GROUP CONFERENCING PROJECT	SHERIFF TRAINING GRANT	JAG GRANT	SHERIFF DEPT GRANTS
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 30,684	-	-	-
INTEREST RECEIVABLE	43	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	1,107	13,397	6,859
TOTAL ASSETS	$ 30,727	1,107	13,397	6,859
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE				
LIABILITIES:				
ACCOUNTS PAYABLE	$ -	751	13,397	2,031
DUE TO OTHER FUNDS	-	356	-	4,828
TOTAL LIABILITIES	$ -	1,107	13,397	6,859
DEFERRED INFLOWS OF RESOURCES:				
UNAVAILABLE REVENUE-GRANTS	$ -	-	13,397	-
TOTAL DEFERRED INFLOWS OF RESOURCES	$ -	-	13,397	-
FUND BALANCES:				
RESTRICTED FOR:				
JUDICIAL & LAW ENFORCEMENT	$ 30,727	-	-	-
HEALTH & WELFARE	-	-	-	-
COMMITTED FOR:				
CONSTRUCTION CONTRACTS	-	-	-	-
UNASSIGNED (DEFICIT)	-	-	(13,397)	-
TOTAL FUND BALANCES	$ 30,727	-	(13,397)	-
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$ 30,727	1,107	13,397	6,859

SCAAP GRANT	CRIME VICTIMS CLEARING - 1	REGIONAL COMMUNICATION	CRIME VICTIMS CLEARING - 2	EMPG GRANT	CRIME LAB CJD GRANT
8,402	-	2,808	-	64,106	-
12	-	4	-	90	-
5,316	20,344	-	-	36,065	-
13,730	20,344	2,812	-	100,261	-
-	17,478	-	-	616	-
-	2,866	-	-	-	-
-	20,344	-	-	616	-
5,316	-	-	-	9,016	-
5,316	-	-	-	9,016	-
8,414	-	2,812	-	-	-
-	-	-	-	90,629	-
-	-	-	-	-	-
-	-	-	-	-	-
8,414	-	2,812	-	90,629	-
13,730	20,344	2,812	-	100,261	-

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET - NONMAJOR GOVERNMENTAL FUNDS - SPECIAL REVENUE - GRANT FUNDS
SEPTEMBER 30, 2018

	PORT SECURITY GRANTS	AUTO THEFT GRANT	DRUG INTERVENTION GRANT	VIOLENCE AGAINST WOMEN - 1
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 40,520	-	-	909
INTEREST RECEIVABLE	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES	128,961	28,966	17,662	8,178
TOTAL ASSETS	$ 169,481	28,966	17,662	9,087
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE				
LIABILITIES:				
ACCOUNTS PAYABLE	$ 162,079	6,125	1,336	9,087
DUE TO OTHER FUNDS	7,402	22,841	16,326	-
TOTAL LIABILITIES	$ 169,481	28,966	17,662	9,087
DEFERRED INFLOWS OF RESOURCES:				
UNAVAILABLE REVENUE-GRANTS	$ 121,559	28,966	1,336	-
TOTAL DEFERRED INFLOWS OF RESOURCES	$ 121,559	28,966	1,336	-
FUND BALANCES:				
RESTRICTED FOR:				
JUDICIAL & LAW ENFORCEMENT	$ -	-	-	-
HEALTH & WELFARE	-	-	-	-
COMMITTED FOR:				
CONSTRUCTION CONTRACTS	-	-	-	-
UNASSIGNED (DEFICIT)	(121,559)	(28,966)	(1,336)	-
TOTAL FUND BALANCES	$ (121,559)	(28,966)	(1,336)	-
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$ 169,481	28,966	17,662	9,087

VIOLENCE AGAINST WOMEN - 2	FAMILY TREATMENT COURT	BODY ARMOR PROTECTION GRANT	CHEEK WATER AND SEWER PHASE 5	CJD SHERIFF GRANTS	GRANT TOTALS
-	-	-	-	-	147,429
-	-	-	-	-	149
-	10,559	20,298	-	-	297,712
-	10,559	20,298	-	-	445,290
-	1,225	-	-	-	214,125
-	8,777	20,298	9	-	83,703
-	10,002	20,298	9	-	297,828
-	-	-	-	-	179,590
-	-	-	-	-	179,590
-	557	-	-	-	42,510
-	-	-	-	-	90,629
-	-	-	44,876	33,240	78,116
-	-	-	(44,885)	(33,240)	(243,383)
-	557	-	(9)	-	(32,128)
-	10,559	20,298	-	-	445,290

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - NONMAJOR GOVERNMENTAL FUNDS -
SPECIAL REVENUE - GRANT FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	FAMILY GROUP CONFERENCING PROJECT	SHERIFF TRAINING GRANT	JAG GRANT	SHERIFF DEPT GRANTS
REVENUES:				
INTERGOVERNMENTAL	$ -	42,416	17,229	28,211
INTEREST	266	-	-	-
CONTRIBUTIONS AND DONATIONS	-	-	-	-
TOTAL REVENUES	$ 266	42,416	17,229	28,211
EXPENDITURES:				
JUDICIAL AND LAW ENFORCEMENT	$ 1,073	42,416	13,397	35,459
HEALTH & WELFARE	-	-	-	-
CAPITAL OUTLAY	-	-	-	-
TOTAL EXPENDITURES	$ 1,073	42,416	13,397	35,459
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ (807)	-	3,832	(7,248)
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$ -	-	-	7,248
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	-	7,248
NET CHANGE IN FUND BALANCES	$ (807)	-	3,832	-
FUND BALANCES, BEGINNING	31,534	-	(17,229)	-
FUND BALANCES, ENDING	$ 30,727	-	(13,397)	-

SCAAP GRANT	CRIME VICTIMS CLEARING - 1	REGIONAL COMMUNICATION	CRIME VICTIMS CLEARING - 2	EMPG GRANT	CRIME LAB CJD GRANT
-	88,921	-	1,403	65,556	29,854
72	-	35	-	617	-
-	90	-	-	-	-
72	89,011	35	1,403	66,173	29,854
-	342,487	1,562	2,159	-	29,854
-	-	-	-	45,069	-
-	-	-	-	-	-
-	342,487	1,562	2,159	45,069	29,854
72	(253,476)	(1,527)	(756)	21,104	-
-	253,476	-	756	-	-
-	253,476	-	756	-	-
72	-	(1,527)	-	21,104	-
8,342	-	4,339	-	69,525	-
8,414	-	2,812	-	90,629	-

[CONTINUED]

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - NONMAJOR GOVERNMENTAL FUNDS -
SPECIAL REVENUE - GRANT FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

		PORT SECURITY GRANTS	AUTO THEFT GRANT	DRUG INTERVENTION GRANT
REVENUES:				
INTERGOVERNMENTAL	$	527,301	55,444	60,808
INTEREST		334	-	-
CONTRIBUTIONS AND DONATIONS		-	-	-
TOTAL REVENUES	$	527,635	55,444	60,808
EXPENDITURES:				
JUDICIAL AND LAW ENFORCEMENT	$	979,075	119,224	61,544
HEALTH & WELFARE		-	-	-
CAPITAL OUTLAY		-	-	-
TOTAL EXPENDITURES	$	979,075	119,224	61,544
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$	(451,440)	(63,780)	(736)
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$	182,450	36,653	-
TOTAL OTHER FINANCING SOURCES (USES)	$	182,450	36,653	-
NET CHANGE IN FUND BALANCES	$	(268,990)	(27,127)	(736)
FUND BALANCES, BEGINNING		147,431	(1,839)	(600)
FUND BALANCES, ENDING	$	(121,559)	(28,966)	(1,336)

VIOLENCE AGAINST WOMEN - 1	VIOLENCE AGAINST WOMEN - 2	FAMILY TREATMENT COURT	BODY ARMOR PROTECTION GRANT	CHEEK WATER AND SEWER PHASE 5	CJD SHERIFF GRANTS	GRANT TOTALS
8,179	70,688	38,032	20,298	194,155	-	1,248,495
-	-	-	-	-	-	1,324
-	-	-	-	-	-	90
8,179	70,688	38,032	20,298	194,155	-	1,249,909
12,748	155,844	38,899	20,298	-	-	1,856,039
-	-	-	-	206,464	-	251,533
-	-	-	-	-	-	-
12,748	155,844	38,899	20,298	206,464	-	2,107,572
(4,569)	(85,156)	(867)	-	(12,309)	-	(857,663)
4,569	85,156	-	-	12,300	-	582,608
4,569	85,156	-	-	12,300	-	582,608
-	-	(867)	-	(9)	-	(275,055)
-	-	1,424	-	-	-	242,927
-	-	557	-	(9)	-	(32,128)

JEFFERSON COUNTY
TEXAS

CAPITAL PROJECTS FUNDS

CAPITAL PROJECTS FUNDS

The Capital Projects Funds are used to account for all resources used for the acquisition or construction of capital facilities except those financed by Enterprise Funds or Internal Service Funds. Included in this heading are the following individual funds:

Coastal Restoration Projects - This fund is used to account for the proceeds received related to Coastal Restoration projects including the BP Deepwater Horizon lawsuit settlement and the Gulf of Mexico Energy Security Act. Planned expenditures for these proceeds will be for the County shoreline and dune restoration project starting in Sabine Pass to High Island.

Capital Projects Fund - This fund is used to account for all other capital projects of the County for which a separate fund has not been established.

TCEQ – First Time Sewer - This fund is used to account for the expenditures for the installation of a low pressure sewer system to approximately 81 low income residential customers in the Candlelight and Martel subdivisions. Funds for this project are from penalties assessed by the Texas Commission on Environmental Quality.

ORA Capital Grants – This fund is used to account for the grants from the Office of Rural Affairs (ORA) and Community Development Block Grants for Disaster Recovery Programs.

JEFFERSON COUNTY
TEXAS

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS - CAPITAL PROJECTS
SEPTEMBER 30, 2018

		COASTAL RESTORATION PROJECTS	CAPITAL PROJECTS FUND
ASSETS:			
CASH AND CASH EQUIVALENTS	$	1,683,814	3,880,790
INTEREST RECEIVABLE		2,374	2,377
DUE FROM OTHER GOVERNMENTAL ENTITIES		-	-
TOTAL ASSETS	$	1,686,188	3,883,167
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCE			
LIABILITIES:			
ACCOUNTS PAYABLE	$	9,914	262,689
DUE TO OTHER FUNDS		-	-
TOTAL LIABILITIES	$	9,914	262,689
DEFERRED INFLOWS OF RESOURCES:			
UNAVAILABLE REVENUE- GRANTS	$	-	-
TOTAL DEFERRED INFLOWS OF RESOURCES	$	-	-
FUND BALANCES:			
RESTRICTED FOR ENVIRONMENTAL PROJECTS	$	1,676,274	-
RESTRICTED FOR MAINTENANCE OF STRUCTURES & EQUIPMENT		-	3,620,478
COMMITTED FOR CONSTRUCTION CONTRACTS	$	-	-
UNASSIGNED (DEFICIT)		-	-
TOTAL FUND BALANCES	$	1,676,274	3,620,478
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$	1,686,188	3,883,167

TCEQ - FIRST TIME SEWER	ORA CAPITAL GRANTS	TOTAL
58,374	-	5,622,978
-	-	4,751
-	43,705	43,705
58,374	43,705	5,671,434
-	-	272,603
-	15,114	15,114
-	15,114	287,717
-	43,705	43,705
-	43,705	43,705
58,374	-	1,734,648
-	-	3,620,478
-	181,018	181,018
-	(196,132)	(196,132)
58,374	(15,114)	5,340,012
58,374	43,705	5,671,434

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS - CAPITAL PROJECTS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

		COASTAL RESTORATION PROJECTS	CAPITAL PROJECTS FUND
REVENUES:			
INTERGOVERNMENTAL	$	664,348	-
INTEREST		10,259	13,449
TOTAL REVENUES	$	674,607	13,449
EXPENDITURES:			
CAPITAL OUTLAY	$	869,914	1,073,771
DEBT SERVICE			
PRINCIPAL		-	341,008
INTEREST AND COMMISSION		-	28,827
TOTAL EXPENDITURES	$	869,914	1,443,606
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$	(195,307)	(1,430,157)
OTHER FINANCING SOURCES (USES):			
TRANSFERS IN	$	363,282	3,171,771
TRANSFERS OUT		-	(363,282)
TOTAL OTHER FINANCING SOURCES (USES)	$	363,282	2,808,489
NET CHANGE IN FUND BALANCES	$	167,975	1,378,332
FUND BALANCES, BEGINNING		1,508,299	2,242,146
FUND BALANCES, ENDING	$	1,676,274	3,620,478

TCEQ - FIRST TIME SEWER	ORA CAPITAL GRANTS	TOTAL
-	-	664,348
-	196	23,904
-	196	688,252
-	43,705	1,987,390
-	-	341,008
-	-	28,827
-	43,705	2,357,225
-	(43,509)	(1,668,973)
-	-	3,535,053
-	-	(363,282)
-	-	3,171,771
-	(43,509)	1,502,798
58,374	28,395	3,837,214
58,374	(15,114)	5,340,012

JEFFERSON COUNTY
TEXAS

DEBT SERVICE FUNDS

DEBT SERVICE FUNDS

The Debt Service Funds are used to account for each specific long -term debt. These funds account for the accumulation of resources and subsequent disbursement of such resources to pay principal, interest, and commissions. Included in this heading are the following individual funds:

2012 Refunding Bond - This fund is used to account for the revenues and expenditures associated with the $47,305,000 General Obligation Refunding Bonds issued in May 2012.

2013 Refunding Bond - This fund is used to account for the revenues and expenditures associated with the $1,340,000 General Obligation Refunding Bonds issued in October 2013.

JEFFERSON COUNTY, TEXAS
COMBINING BALANCE SHEET
NON MAJOR GOVERNMENTAL FUNDS - DEBT SERVICE
SEPTEMBER 30, 2018

		2012 REFUNDING BOND	2013 REFUNDING BOND	TOTAL
ASSETS:				
CASH AND CASH EQUIVALENTS	$	557,277	-	557,277
INTEREST RECEIVABLE		779	-	779
DELINQUENT TAXES RECEIVABLE, Net		74,747	-	74,747
PENALTY AND INTEREST RECEIVABLE, Net		43,175	-	43,175
TOTAL ASSETS	$	675,978	-	675,978
LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES				
DEFERRED INFLOWS OF RESOURCES				
UNAVAILABLE REVENUE-PROPERTY TAXES	$	104,141	-	104,141
TOTAL DEFERRED INFLOWS OF RESOURCES	$	104,141	-	104,141
FUND BALANCES:				
RESTRICTED FOR DEBT SERVICE	$	571,837	-	571,837
TOTAL FUND BALANCES	$	571,837	-	571,837
TOTAL LIABILITIES, DEFERRED INFLOWS OF RESOURCES, AND FUND BALANCES	$	675,978	-	675,978

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS - DEBT SERVICE FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

		2012 REFUNDING BOND	2013 REFUNDING BOND	TOTAL
REVENUES:				
PROPERTY TAXES	$	4,526,446	261,001	4,787,447
INTEREST		16,963	946	17,909
TOTAL REVENUES	$	4,543,409	261,947	4,805,356
EXPENDITURES:				
DEBT SERVICE:				
PRINCIPAL	$	3,365,000	275,000	3,640,000
INTEREST AND COMMISSION		1,261,415	7,808	1,269,223
TOTAL EXPENDITURES	$	4,626,415	282,808	4,909,223
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$	(83,006)	(20,861)	(103,867)
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$	9,658	-	9,658
TRANSFERS OUT		-	(9,658)	(9,658)
TOTAL OTHER FINANCING SOURCES (USES)	$	9,658	(9,658)	-
NET CHANGE IN FUND BALANCES	$	(73,348)	(30,519)	(103,867)
FUND BALANCES, BEGINNING		645,185	30,519	675,704
FUND BALANCES, ENDING	$	571,837	-	571,837

JEFFERSON COUNTY, TEXAS
COMBINED SCHEDULE OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL (GAAP)
DEBT SERVICE FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	BUDGETED AMOUNTS ORIGINAL	BUDGETED AMOUNTS FINAL	ACTUAL AMOUNTS	VARIANCE WITH FINAL BUDGET
REVENUES:				
PROPERTY TAXES	$ 4,633,192	4,633,192	4,787,447	154,255
INTEREST	7,600	7,600	17,909	10,309
TOTAL REVENUES	$ 4,640,792	4,640,792	4,805,356	164,564
EXPENDITURES:				
DEBT SERVICE:				
PRINCIPAL	$ 3,640,000	3,640,000	3,640,000	-
INTEREST AND COMMISSION	1,269,258	1,269,258	1,269,223	35
TOTAL EXPENDITURES	$ 4,909,258	4,909,258	4,909,223	35
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ (268,466)	(268,466)	(103,867)	164,599
OTHER FINANCING SOURCES (USES):				
TRANSFERS IN	$ -	-	9,658	9,658
TRANSFERS OUT	-	-	(9,658)	(9,658)
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	-	-
NET CHANGE IN FUND BALANCES	$ (268,466)	(268,466)	(103,867)	164,599
FUND BALANCES, BEGINNING	675,704	675,704	675,704	-
FUND BALANCES, ENDING	$ 407,238	407,238	571,837	164,599

JEFFERSON COUNTY, TEXAS
SCHEDULE OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL (GAAP)
DEBT SERVICE - 2012 REFUNDING BONDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	BUDGETED AMOUNTS		ACTUAL	VARIANCE WITH FINAL
	ORIGINAL	FINAL	AMOUNTS	BUDGET
REVENUES:				
PROPERTY TAXES	$ 4,380,597	4,380,597	4,526,446	145,849
INTEREST	7,000	7,000	16,963	9,963
TOTAL REVENUES	$ 4,387,597	4,387,597	4,543,409	155,812
EXPENDITURES:				
DEBT SERVICE:				
PRINCIPAL	$ 3,365,000	3,365,000	3,365,000	-
INTEREST AND COMMISSION	1,261,450	1,261,450	1,261,415	35
TOTAL EXPENDITURES	$ 4,626,450	4,626,450	4,626,415	35
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ (238,853)	(238,853)	(83,006)	155,847
OTHER FINANCING SOURCES (USES)				
TRANSFERS IN	$ -	-	9,658	9,658
TOTAL OTHER FINANCING SOURCES (USES)	$ -	-	9,658	9,658
NET CHANGE IN FUND BALANCE	$ (238,853)	(238,853)	(73,348)	165,505
FUND BALANCES, BEGINNING	645,185	645,185	645,185	-
FUND BALANCES, ENDING	$ 406,332	406,332	571,837	165,505

JEFFERSON COUNTY, TEXAS
SCHEDULE OF REVENUES, EXPENDITURES,
AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL (GAAP)
DEBT SERVICE - 2013 REFUNDING BOND
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	BUDGETED AMOUNTS		ACTUAL	VARIANCE WITH FINAL
	ORIGINAL	FINAL	AMOUNTS	BUDGET
REVENUES:				
PROPERTY TAXES	$ 252,595	252,595	261,001	8,406
INTEREST	600	600	946	346
TOTAL REVENUES	$ 253,195	253,195	261,947	8,752
EXPENDITURES:				
DEBT SERVICE:				
PRINCIPAL	$ 275,000	275,000	275,000	-
INTEREST AND COMMISSION	7,808	7,808	7,808	-
TOTAL EXPENDITURES	$ 282,808	282,808	282,808	-
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	$ (29,613)	(29,613)	(20,861)	8,752
OTHER FINANCING SOURCES (USES):				
TRANSFERS OUT	$ -	-	(9,658)	(9,658)
TOTAL OTHER FINANCING SOURCES (USES)	-	-	(9,658)	(9,658)
NET CHANGE IN FUND BALANCE	$ (29,613)	(29,613)	(30,519)	(906)
FUND BALANCES, BEGINNING	30,519	30,519	30,519	-
FUND BALANCES, ENDING	$ 906	906	-	(906)

JEFFERSON COUNTY
TEXAS

INTERNAL SERVICE FUNDS

INTERNAL SERVICE FUNDS

The Internal Service Funds are used to account for the financing of goods and services provided by one department or agency to other agencies of the government and to other government units, on a cost reimbursement basis. Included in this heading are the following individual funds:

Liability Insurance Fund - This fund is used to account for the County's contribution and payment for liability claims.

Workers' Compensation Fund - This fund is used to account for the County's contribution and payment for workers' compensation claims.

Southeast Texas Government Employee Benefits Pool – This fund is used to account for the County's group health insurance program, which includes comprehensive major medical and dental care.

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF NET POSITION -
INTERNAL SERVICE FUNDS
SEPTEMBER 30, 2018

	LIABILITY INSURANCE FUND	WORKERS' COMPENSATION FUND	SOUTHEAST TEXAS GOVERNMENT EMPLOYEE BENEFITS POOL FUND	TOTAL
ASSETS:				
CASH AND CASH EQUIVALENTS	$ 801,299	668,999	-	1,470,298
ACCOUNTS RECEIVABLE	-	-	353,337	353,337
INTEREST RECEIVABLE	864	638	-	1,502
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	161,346	161,346
INSURANCE DEPOSIT	-	75,500	77,100	152,600
TOTAL ASSETS	$ 802,163	745,137	591,783	2,139,083
LIABILITIES:				
ACCOUNTS PAYABLE	$ -	-	19,931	19,931
CLAIMS LIABILITY	381,761	413,698	1,287,824	2,083,283
DUE TO OTHER FUNDS	-	-	5,825,431	5,825,431
TOTAL LIABILITIES	$ 381,761	413,698	7,133,186	7,928,645
NET POSITION:				
UNRESTRICTED	$ 420,402	331,439	(6,541,403)	(5,789,562)
TOTAL NET POSITION	$ 420,402	331,439	(6,541,403)	(5,789,562)

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF REVENUES, EXPENSES,
AND CHANGES IN NET POSITION -
INTERNAL SERVICE FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	LIABILITY INSURANCE FUND	WORKERS' COMPENSATION FUND	SOUTHEAST TEXAS GOVERNMENT EMPLOYEE BENEFITS POOL FUND	TOTAL
OPERATING REVENUES:				
EMPLOYEE CONTRIBUTIONS	$ -	-	2,578,515	2,578,515
CHARGES FOR SERVICES	250,000	800,000	18,595,112	19,645,112
TOTAL OPERATING REVENUES	$ 250,000	800,000	21,173,627	22,223,627
OPERATING EXPENSES:				
ADMINISTRATIVE	$ -	-	1,689,978	1,689,978
INCURRED & ESTIMATED CLAIMS	301,113	818,957	18,601,520	19,721,590
TOTAL OPERATING EXPENSES	$ 301,113	818,957	20,291,498	21,411,568
OPERATING INCOME (LOSS)	$ (51,113)	(18,957)	882,129	812,059
NONOPERATING REVENUES:				
INTEREST	$ 5,274	1,799	-	7,073
REFUNDS AND RECOVERIES	-	187	859,978	860,165
TOTAL NONOPERATING REVENUES	$ 5,274	1,986	859,978	867,238
CHANGE IN NET POSITION	$ (45,839)	(16,971)	1,742,107	1,679,297
NET POSITION, BEGINNING	466,241	348,410	(8,283,510)	(7,468,859)
NET POSITION, ENDING	$ 420,402	331,439	(6,541,403)	(5,789,562)

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF CASH FLOWS -
INTERNAL SERVICE FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

	LIABILITY INSURANCE FUND	WORKERS' COMPENSATION FUND	SOUTHEAST TEXAS GOVERNMENT EMPLOYEE BENEFITS POOL FUND	TOTAL
CASH FLOWS FROM OPERATING ACTIVITIES:				
RECEIPTS FROM CUSTOMERS AND USERS	$ -	-	2,219,022	2,219,022
RECEIPTS FROM EMPLOYEES	-	-	2,570,707	2,570,707
PAYMENTS TO SUPPLIERS	-	-	(1,766,855)	(1,766,855)
INTERNAL ACTIVITY-RECEIPTS(PAYMENTS) FROM (TO) OTHER FUNDS	250,000	800,000	16,074,878	17,124,878
CLAIMS PAID	(287,083)	(703,692)	(20,873,672)	(21,864,447)
OTHER RECEIPTS	-	2,141	1,775,920	1,778,061
NET CASH PROVIDED (USED) BY OPERATING ACTIVITIES	$ (37,083)	98,449	-	61,366
CASH FLOWS FROM INVESTMENT ACTIVITIES:				
INTEREST	$ 4,515	1,239	-	5,754
NET CASH PROVIDED BY INVESTMENT ACTIVITIES	$ 4,515	1,239	-	5,754
NET INCREASE (DECREASE) IN CASH	$ (32,568)	99,688	-	67,120
CASH AND CASH EQUIVALENTS - BEGINNING	833,867	569,311	-	1,403,178
CASH AND CASH EQUIVALENTS - ENDING	$ 801,299	668,999	-	1,470,298
RECONCILIATION OF OPERATING INCOME(LOSS) TO NET CASH PROVIDED(USED) BY OPERATING ACTIVITIES:				
OPERATING INCOME(LOSS)	$ (51,113)	(18,957)	882,129	812,059
ADJUSTMENTS TO RECONCILE OPERATING INCOME (LOSS) TO NET CASH PROVIDED BY OPERATING ACTIVITIES:				
OTHER NON-OPERATING REVENUES	-	2,141	859,978	862,119
CHANGES IN ASSETS AND LIABILITIES:				
ACCOUNTS RECEIVABLE	-	-	908,134	908,134
INSURANCE DEPOSIT	-	-	(77,100)	(77,100)
DUE FROM OTHER GOVERNMENTAL ENTITIES	-	-	94,595	94,595
ACCOUNTS PAYABLE	-	-	223	223
DUE TO OTHER FUNDS	-	-	(395,807)	(395,807)
CLAIMS LIABILITY	14,030	115,265	(2,272,152)	(2,142,857)
NET CASH PROVIDED BY OPERATING ACTIVITIES	$ (37,083)	98,449	-	61,366

JEFFERSON COUNTY
TEXAS

FIDUCIARY FUNDS

FIDUCIARY FUNDS

The Fiduciary Funds are used to account for assets held by the County as a trustee or agent for individuals, private organizations, and other units of government. Such funds are operated by carrying out specific terms of trust indentures, ordinances, grant requirements, or other governing regulations. Included in this heading are the following individual funds:

Treasurer Maintained Fund - This fund is used to account for various monies deposited with the County Treasurer for distribution to other individuals and/or government entities.

County Clerk Fund - This fund is used to account for the collection and distribution of money held in trust by the Clerk of the County Courts.

District Clerk Fund - This fund is used to account for the collection and distribution of the money held in trust by the Clerk of the District Courts.

Sheriff's Fund - This fund is used to account for the collection and distribution of money held in trust by the Sheriff.

Justice of the Peace Fund - This fund is used to account for the collection and distribution of money held in trust by the Justices of the Peace.

Tax Assessor/Collector Fund - This fund is used to account for the collection and distribution of money held in trust by the Tax Assessor/Collector .

District Attorney's Seizure Fund - This fund is used to account for the seizure and subsequent distribution of seized personal property.

Community Supervision Trust Fund - This fund is used to account for the collection and distribution of money held in trust by the Community Supervision Department.

Juvenile Probation Trust Fund - This fund is used to account for the collection and distribution of money held in trust by the Juvenile Probation Department.

Flexible Spending - This fund is used to account for the collection and distribution of money collected under the Internal Revenue Code Section 125 benefit plan.

Women's Center Trust Fund - This fund is used to account for the collection and distribution of money held in trust by the Women's Center .

JEFFERSON COUNTY
TEXAS

JEFFERSON COUNTY, TEXAS
COMBINING STATEMENT OF FIDUCIARY ASSETS AND LIABILITIES
AGENCY FUNDS
FOR THE FISCAL YEAR ENDED SEPTEMBER 30, 2018

		TREASURER MAINTAINED FUND	COUNTY CLERK FUND	DISTRICT CLERK FUND	SHERIFF'S FUND	JUSTICE OF THE PEACE FUND
TOTAL AGENCY FUNDS						
ASSETS - OCTOBER 1, 2017						
CASH AND CASH EQUIVALENTS	$	329,501	1,769,046	8,910,674	211,092	147,042
ACCOUNTS RECEIVABLE, Net		3,510	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES		293,739	-	135,555	-	-
TOTAL	$	626,750	1,769,046	9,046,229	211,092	147,042
ADDITIONS						
CASH AND CASH EQUIVALENTS	$	2,122,398	4,499,970	42,243,079	5,136,976	3,615,962
ACCOUNTS RECEIVABLE, Net		6,791	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES		405,007	-	36,928	-	-
TOTAL	$	2,534,196	4,499,970	42,280,007	5,136,976	3,615,962
DELETIONS						
CASH AND CASH EQUIVALENTS	$	2,044,647	4,122,012	44,460,889	5,108,934	3,572,981
ACCOUNTS RECEIVABLE, Net		3,572	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES		320,480	-	135,555	-	-
TOTAL	$	2,368,699	4,122,012	44,596,444	5,108,934	3,572,981
ASSETS - SEPTEMBER 30, 2018						
CASH AND CASH EQUIVALENTS	$	407,252	2,147,004	6,692,864	239,134	190,023
ACCOUNTS RECEIVABLE, Net		6,729	-	-	-	-
DUE FROM OTHER GOVERNMENTAL ENTITIES		378,266	-	36,928	-	-
TOTAL ASSETS	$	792,247	2,147,004	6,729,792	239,134	190,023
LIABILITIES - OCTOBER 1, 2017						
ACCOUNTS PAYABLE	$	216,086	279,298	8,969,385	181,116	22,145
DUE TO OTHER GOVERNMENTAL ENTITIES		410,664	62,022	76,844	29,976	124,897
OTHER PAYABLES		-	1,427,726	-	-	-
TOTAL	$	626,750	1,769,046	9,046,229	211,092	147,042
ADDITIONS						
ACCOUNTS PAYABLE	$	113,165	240,824	40,390,640	1,928,213	365,793
DUE TO OTHER GOVERNMENTAL ENTITIES		2,084,456	79,262	91,073	40,749	167,182
OTHER PAYABLES		-	866,384	-	-	-
TOTAL	$	2,197,621	1,186,470	40,481,713	1,968,962	532,975
DELETIONS						
ACCOUNTS PAYABLE	$	62,525	105,721	42,721,306	1,910,944	365,097
DUE TO OTHER GOVERNMENTAL ENTITIES		1,969,599	62,022	76,844	29,976	124,897
OTHER PAYABLES		-	640,769	-	-	-
TOTAL	$	2,032,124	808,512	42,798,150	1,940,920	489,994
LIABILITIES - SEPTEMBER 30, 2018						
ACCOUNTS PAYABLE	$	266,726	414,401	6,638,719	198,385	22,841
DUE TO OTHER GOVERNMENTAL ENTITIES		525,521	79,262	91,073	40,749	167,182
OTHER PAYABLES		-	1,653,341	-	-	-
TOTAL LIABILITIES	$	792,247	2,147,004	6,729,792	239,134	190,023

TAX ASSESSOR COLLECTOR FUND	DISTRICT ATTORNEY'S SEIZURE FUND	COMMUNITY SUPERVISION TRUST FUND	JUVENILE PROBATION TRUST FUND	FLEXIBLE SPENDING FUND	WOMEN'S CENTER TRUST FUND	TOTAL AGENCY FUNDS
5,621,791	394,257	427,057	5,125	22,998	8,522	17,847,105
-	-	-	-	31	-	3,541
-	-	-	-	2,469	-	431,763
5,621,791	394,257	427,057	5,125	25,498	8,522	18,282,409
620,171,898	255,679	4,388,774	11,080	382,263	463,492	683,291,571
-	-	-	-	-	-	6,791
-	-	-	-	2,428	-	444,363
620,171,898	255,679	4,388,774	11,080	384,691	463,492	683,742,725
620,450,406	280,022	4,403,439	10,721	399,562	456,094	685,309,707
-	-	-	-	31	-	3,603
-	-	-	-	2,469	-	458,504
620,450,406	280,022	4,403,439	10,721	402,062	456,094	685,771,814
5,343,283	369,914	412,392	5,484	5,699	15,920	15,828,969
-	-	-	-	-	-	6,729
-	-	-	-	2,428	-	417,622
5,343,283	369,914	412,392	5,484	8,127	15,920	16,253,320
5,621,791	394,257	427,057	5,125	25,498	8,522	16,150,280
-	-	-	-	-	-	704,403
-	-	-	-	-	-	1,427,726
5,621,791	394,257	427,057	5,125	25,498	8,522	18,282,409
621,077,807	255,679	4,396,720	12,783	516,763	463,492	669,761,879
-	-	-	-	-	-	2,462,722
-	-	-	-	-	-	866,384
621,077,807	255,679	4,396,720	12,783	516,763	463,492	673,090,985
621,356,315	280,022	4,411,385	12,424	534,134	456,094	672,215,967
-	-	-	-	-	-	2,263,338
-	-	-	-	-	-	640,769
621,356,315	280,022	4,411,385	12,424	534,134	456,094	675,120,074
5,343,283	369,914	412,392	5,484	8,127	15,920	13,696,192
-	-	-	-	-	-	903,787
-	-	-	-	-	-	1,653,341
5,343,283	369,914	412,392	5,484	8,127	15,920	16,253,320

JEFFERSON COUNTY
TEXAS

STATISTICAL SECTION

STATISTICAL SECTION

This part of the Jefferson County, Texas comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the County's overall financial health.

Contents **Page**

Financial Trends 129

These schedules contain trend information to help the reader understand how the County's financial performance and well-being have changed over time.

Revenue Trends 136

These schedules contain information to help the reader assess the County's most significant local revenue source, the property tax.

Debt Capacity 140

These schedules present information to help the reader access the affordability of the County's current levels of outstanding debt and the County's ability to issue additional debt in the future.

Demographic and Economic Information 144

These schedules offer demographic and economic indicators to help the reader understand the environment within which the County's financial activities take place.

Operating Information 146

These schedules contain service and infrastructure data to help the reader understand how the information in the County's financial report relates to the services the County provides and the activities it performs.

Sources: Unless otherwise noted, the information in these schedules is derived from the comprehensive annual financial reports for the relevant year.

JEFFERSON COUNTY
TEXAS

JEFFERSON COUNTY, TEXAS
NET POSITION BY COMPONENT
LAST TEN FISCAL YEARS
(accrual basis of accounting)

	Fiscal Year									
	2009	2010	2011^	2012	2013	2014	2015	2016	2017	2018
Governmental activities:										
Net Investment in capital assets	$ 68,242,040	$ 71,336,466	$ 81,583,824	$ 82,640,727	$ 84,123,857	$ 85,095,478	$ 93,814,603	$ 96,137,672	$ 91,366,714	$ 91,380,403
Restricted	10,615,478	13,851,538	18,910,796	18,017,919	25,433,198	28,919,622	24,695,909	25,282,712	24,514,807	22,333,791
Unrestricted	(21,890,574)	(35,286,048)	(48,931,222)	(43,402,923)	(53,259,615)	(64,427,876)	(106,962,928)	(122,326,487)	(146,062,087)	(269,515,413)
Total governmental activities net position	$ 56,966,944	$ 49,901,956	$ 51,563,398	$ 57,255,723	$ 56,297,440	$ 49,587,224	$ 11,547,584	$ (906,103)	$ (30,180,566)	$ (155,801,219)
Business-type activities:										
Net Investment in capital assets	$ 93,237,299	$ 91,674,403	$ 90,465,368	$ 90,441,044	$ 87,043,444	$ 84,297,573	$ 83,107,097	$ 82,294,523	$ 81,842,002	$ 79,849,183
Unrestricted	1,425,854	2,114,066	377,046	620,635	592,300	479,535	(634,858)	55,359	96,202	(20,118)
Total business-type activities net position	$ 94,663,153	$ 93,788,469	$ 90,842,414	$ 91,061,679	$ 87,635,744	$ 84,777,108	$ 82,472,239	$ 82,349,882	$ 81,938,204	$ 79,829,065
Reclassifications:										
Net Investment in capital assets	$ (61,855,720)	$ (60,663,707)	$ (57,637,497)	$ (50,438,282)	$ (46,786,666)	$ (43,072,050)	$ (39,220,834)	$ (37,614,654)	$ (33,254,522)	$ (29,615,115)
Unrestricted	61,855,720	60,663,707	57,637,497	50,438,282	46,786,666	43,072,050	39,220,834	37,614,654	33,254,522	29,615,115
Total reclassifications	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
Primary government:										
Net Investment in capital assets	$ 99,623,619	$ 102,347,162	$ 114,411,695	$ 122,643,489	$ 124,380,635	$ 126,321,001	$ 137,700,866	$ 140,817,541	$ 139,954,194	$ 141,614,471
Restricted	10,615,478	13,851,538	18,910,796	18,017,919	25,433,198	28,919,622	24,695,909	25,282,712	24,514,807	22,333,791
Unrestricted	41,391,000	27,491,725	9,083,321	7,655,994	(5,880,649)	(20,876,291)	(68,376,952)	(84,656,474)	(112,711,363)	(239,920,416)
Total primary government net position	$ 151,630,097	$ 143,690,425	$ 142,405,812	$ 148,317,402	$ 143,933,184	$ 134,364,332	$ 94,019,823	$ 81,443,779	$ 51,757,638	$ (75,972,154)

Note: The reclassification is for the debt associated with the construction of Ford Park. The assets are accounted for in the Business-type activities column and the debt is accounted for in the Governmental activities column.

^ GASB 54 was implemented.

TABLE 2

JEFFERSON COUNTY, TEXAS
CHANGES IN NET POSITION
LAST TEN FISCAL YEARS
(accrual basis of accounting)

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Expenses										
Governmental activities:										
General Government	$ 34,940,366	$ 33,344,391	$ 34,710,153	$ 32,862,570	$ 37,253,918	$ 42,933,889	$ 40,203,444	$ 40,583,261	$ 44,626,177	$ 36,877,298
Judicial and Law Enforcement	74,059,745	75,939,112	76,819,206	81,522,130	85,995,590	82,058,360	80,018,632	84,656,946	85,700,169	82,243,174
Education and Recreation	1,611,435	1,637,026	1,313,440	1,315,819	1,369,159	1,416,537	1,425,539	1,214,705	1,275,949	1,232,840
Health and Welfare	11,205,583	10,824,644	9,704,323	17,758,075	10,917,065	10,570,568	10,362,461	10,490,353	17,478,616	20,779,392
Maintenance - Equipment and Structures	35,000,580	18,724,938	13,365,410	15,552,976	17,162,873	14,859,687	14,076,436	14,693,137	18,698,878	12,446,937
Interest and Charges on Long-term Debt	3,715,282	3,587,860	3,388,354	1,936,302	1,762,428	1,611,661	1,423,776	1,320,790	1,181,005	1,016,850
Total governmental activities expenses	$ 160,532,991	$ 144,057,971	$ 139,300,886	$ 150,947,872	$ 154,461,033	$ 153,450,702	$ 147,510,288	$ 152,959,192	$ 168,960,794	$ 154,596,491
Business-type activities:										
Airport	$ 4,710,467	$ 5,095,941	$ 5,506,746	$ 6,618,247	$ 7,386,238	$ 6,943,749	$ 5,894,518	$ 5,478,254	$ 5,492,750	$ 5,703,795
Entertainment Complex	7,977,002	7,889,891	6,866,792	10,248,457	9,771,707	9,760,675	7,752,545	7,510,076	7,286,876	7,515,064
Total Business-type expenses	$ 12,687,469	$ 12,985,832	$ 12,373,538	$ 16,866,704	$ 17,157,945	$ 16,704,424	$ 13,647,063	$ 12,988,330	$ 12,779,626	$ 13,218,859
Total primary government expenses	$ 173,220,460	$ 157,043,803	$ 151,674,424	$ 167,814,576	$ 171,618,978	$ 170,155,126	$ 161,157,351	$ 165,947,522	$ 181,740,420	$ 167,815,350
Program Revenues										
Governmental activities:										
Charges for services:										
General Government	$ 8,741,944	$ 7,612,696	$ 8,218,241	$ 9,076,015	$ 7,279,674	$ 6,234,887	$ 4,697,503	$ 5,219,872	$ 6,211,869	$ 5,672,872
Judicial and Law Enforcement	10,434,533	9,376,938	9,679,128	9,859,550	9,234,538	10,067,596	10,602,406	10,307,890	9,322,352	10,545,334
Education and Recreation	208,036	101,907	86,010	74,005	84,613	66,517	73,649	13,428	37,096	61,387
Health and Welfare	370,557	575,343	401,929	369,503	392,612	430,032	411,006	401,391	1,471,797	589,599
Maintenance - Equipment and Structures	8,447,195	6,328,641	4,047,555	5,362,121	5,837,681	5,535,713	5,482,157	5,612,682	5,470,153	6,294,131
Operating grants and contributions	30,927,086	15,607,904	16,494,833	18,243,076	19,150,824	13,417,014	10,935,535	11,359,382	14,563,279	13,995,269
Capital grants and contributions	937,390	2,336,880	8,991,187	11,938,532	5,222,624	4,287,420	8,711,241	4,246,945	5,432,451	703,625
Total governmental activities program revenues	$ 60,066,741	$ 41,940,309	$ 47,918,883	$ 54,922,802	$ 47,202,566	$ 40,039,179	$ 40,913,497	$ 37,161,590	$ 42,508,997	$ 37,862,217
Business-type activities:										
Charges for services:										
Airport	$ 2,999,857	$ 2,897,411	$ 3,088,666	$ 3,712,848	$ 3,978,820	$ 4,526,324	$ 3,493,616	$ 2,780,094	$ 3,253,212	$ 3,281,881
Entertainment Complex	3,716,433	3,684,655	2,943,861	6,274,380	5,536,308	5,564,686	3,445,635	3,288,418	3,249,799	3,528,209
Operating grants and contributions	43,397	-	-	-	-	-	-	50,000	50,000	50,000
Capital grants and contributions	8,278,928	2,145,711	1,100,366	1,960,880	943,357	231,418	2,442,839	3,012,750	2,382,339	1,360,827
Total business-type activities program revenues	$ 15,038,615	$ 8,727,777	$ 7,132,893	$ 11,948,108	$ 10,458,485	$ 10,322,428	$ 9,382,090	$ 9,131,262	$ 8,935,350	$ 8,220,917
Total primary government program revenues	$ 75,105,356	$ 50,668,086	$ 55,051,776	$ 66,870,910	$ 57,661,051	$ 50,361,607	$ 50,295,587	$ 46,292,852	$ 51,444,347	$ 46,083,134
Net (expense)/revenue										
Governmental activities	$ (100,466,250)	$ (102,117,662)	$ (91,382,003)	$ (96,025,070)	$ (107,258,467)	$ (113,411,523)	$ (106,596,791)	$ (115,797,602)	$ (126,451,797)	$ (116,734,274)
Business-type activities	2,351,146	(4,258,055)	(5,240,645)	(4,918,596)	(6,699,460)	(6,381,996)	(4,264,973)	(3,857,068)	(3,844,276)	(4,997,942)
Total primary government net expense	$ (98,115,104)	$ (106,375,717)	$ (96,622,648)	$ (100,943,666)	$ (113,957,927)	$ (119,793,519)	$ (110,861,764)	$ (119,654,670)	$ (130,296,073)	$ (121,732,216)

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
General Revenues and Other Changes in Net Position										
Governmental activities:										
Taxes:										
Property taxes	$ 75,616,097	$ 75,407,511	$ 73,158,156	$ 79,416,013	$ 83,036,649	$ 84,616,538	$ 83,122,853	$ 80,099,108	$ 78,728,457	$ 80,487,467
Sales taxes	30,410,633	21,361,596	20,961,453	23,864,675	24,695,194	24,064,857	23,047,286	24,595,048	24,984,470	30,911,766
Alcoholic Beverage Tax	614,474	575,928	547,605	484,988	475,162	614,384	656,678	673,135	689,240	743,739
Hotel Occupancy Tax	1,294,063	893,234	981,619	1,064,165	1,015,651	1,150,383	1,291,716	1,211,569	1,187,625	1,696,852
Investment earnings	842,485	402,735	266,118	541,703	281,672	311,546	468,561	353,495	238,304	425,510
Miscellaneous	29,275	26,095	24,164	25,206	35,918	30,355	29,686	27,589	33,113	24,062
Transfers	(3,687,832)	(3,330,199)	(2,271,146)	(4,183,564)	(3,223,628)	(3,470,353)	(2,594,492)	(3,733,600)	(3,430,561)	(2,868,585)
Total governmental activities	$ 105,119,195	$ 95,336,900	$ 93,667,969	$ 101,213,186	$ 106,316,618	$ 107,317,710	$ 106,022,288	$ 103,226,344	$ 102,430,648	$ 111,420,811
Business-type activities:										
Investment earnings	$ 2,369	$ 3,338	$ 2,979	$ 935	$ 269	$ 550	$ 788	$ 1,111	$ 1,516	$ 4,318
Miscellaneous	6,192	49,834	20,465	71,950	49,628	52,457	52,260	-	521	15,900
Transfers	3,687,832	3,330,199	2,271,146	4,183,564	3,223,628	3,470,353	2,594,492	3,733,600	3,430,561	2,868,585
Total business-type activities	$ 3,696,393	$ 3,383,371	$ 2,294,590	$ 4,256,449	$ 3,273,525	$ 3,523,360	$ 2,647,540	$ 3,734,711	$ 3,432,598	$ 2,888,803
Total primary government	$ 108,815,588	$ 98,720,271	$ 95,962,559	$ 105,469,635	$ 109,590,143	$ 110,841,070	$ 108,669,828	$ 106,961,055	$ 105,863,246	$ 114,309,614
Changes in Net Position										
Governmental activities	$ 4,652,945	$ (6,780,762)	$ 2,285,966	$ 5,188,116	$ (941,849)	$ (6,093,813)	$ (574,503)	$ (12,571,258)	$ (24,021,149)	$ (5,313,463)
Business-type activities	6,047,539	(874,684)	(2,946,055)	(662,147)	(3,425,935)	(2,858,636)	(1,617,433)	(122,357)	(411,678)	(2,109,139)
Total primary government	$ 10,700,484	$ (7,655,446)	$ (660,089)	$ 4,525,969	$ (4,367,784)	$ (8,952,449)	$ (2,191,936)	$ (12,693,615)	$ (24,432,827)	$ (7,422,602)

TABLE 3

JEFFERSON COUNTY, TEXAS
GOVERNMENTAL ACTIVITIES TAX REVENUES BY SOURCE
LAST TEN FISCAL YEARS
(accrual basis of accounting)

Fiscal Year	Property Tax	Sales Tax	Alcoholic Beverage Tax	Hotel Occupancy Tax	Total
2009	$ 75,616,097	$ 30,410,633	$ 614,474	$ 1,294,063	$ 98,040,207
2010	75,407,511	21,361,596	575,928	893,234	107,935,267
2011	73,158,156	20,961,453	547,605	981,619	98,238,269
2012	79,416,013	23,864,675	484,988	1,064,165	95,648,833
2013	83,036,649	24,695,194	475,162	1,015,651	104,829,841
2014	84,616,538	24,064,857	614,384	1,150,383	110,446,162
2015	83,122,853	23,047,286	656,678	1,291,716	108,118,533
2016	80,099,108	24,595,048	673,135	1,211,569	106,578,860
2017	78,728,457	24,984,470	689,240	1,187,625	105,589,792
2018	80,487,467	30,911,766	743,739	1,696,852	113,839,824

TABLE 4

JEFFERSON COUNTY, TEXAS
FUND BALANCES OF GOVERNMENTAL FUNDS
LAST TEN FISCAL YEARS
(modified accrual basis of accounting)

	Fiscal Year									
	2009	2010	2011^	2012	2013	2014	2015	2016	2017	2018
General Fund:										
Reserved	$ 1,247,682	$ 1,107,057								
Unreserved	37,639,200	34,899,538								
Nonspendable			1,023,855	898,536	1,043,407	897,102	873,260	889,865	903,116	926,860
Assigned			3,482,075	2,295,347	4,312,676	10,082,383	9,952,977	12,478,022	12,922,519	12,736,699
Unassigned			31,886,947	39,034,450	41,269,536	36,284,915	37,054,620	34,142,140	31,652,055	35,632,532
Total general fund	$ 38,886,882	$ 36,006,595	$ 36,392,877	$ 42,228,333	$ 46,625,619	$ 47,264,400	$ 47,880,857	$ 47,510,027	$ 45,477,690	$ 49,296,091
All other governmental funds:										
Reserved	$ 10,617,541	$ 13,853,088								
Unreserved, reported in:										
Special revenue funds	14,975,902	15,625,403								
Capital project funds	-	-								
Debt service funds	376,688	186,623								
Nonspendable			9,130	58,197	41,047	49,781	56,535	32,858	16,396	22,029
Restricted			17,397,567	18,116,476	25,561,948	28,846,726	24,613,120	25,229,322	24,490,362	21,973,717
Committed			5,150,723	3,047,323	1,902,675	2,919,885	6,649,085	532,034	-	259,134
Assigned			4,867,061	8,499,277	2,064,217	1,697,319	1,799,539	1,664,791	1,536,694	-
Unassigned (Deficit)			(4,832,614)	(2,670,874)	(787,118)	(2,925,831)	(4,489,815)	(583,320)	(19,668)	(439,515)
Total all other governmental funds	$ 25,970,131	$ 29,665,114	$ 22,591,867	$ 27,050,399	$ 28,782,769	$ 30,587,880	$ 28,628,464	$ 26,875,685	$ 26,023,784	$ 21,815,365

^ GASB Statement 54 was implementated for fiscal year 2011 which changed the classification of fund balance amounts.
Prior year amounts have not been restated for the implementation of Statement 54.

JEFFERSON COUNTY, TEXAS
CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS
LAST TEN FISCAL YEARS
(modified accrual basis of accounting)

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
REVENUES:										
Property Taxes	$ 75,912,693	$ 75,995,020	$ 72,959,364	$ 79,446,316	$ 82,593,407	$ 84,262,722	$ 82,850,758	$ 80,400,650	$ 78,856,965	$ 80,704,782
Sales Taxes	32,319,170	22,830,758	22,490,677	25,413,828	26,186,007	25,829,624	24,995,680	26,479,752	26,861,335	33,352,357
Fees	13,372,000	13,247,758	13,176,331	13,056,182	13,101,871	13,811,818	14,337,616	14,111,539	13,562,054	14,702,517
Licenses	487,856	453,002	407,512	465,720	590,148	480,386	459,198	502,532	437,175	875,585
Intergovernmental	30,549,286	17,890,178	23,206,710	30,138,180	23,807,603	18,488,048	16,668,364	16,558,057	17,962,425	14,128,320
Sales, Rental & Services	5,585,920	3,073,201	2,837,483	3,819,630	3,369,016	3,053,808	4,754,414	3,085,858	3,850,471	3,292,213
Fines and Forfeitures	2,076,417	2,199,528	2,072,725	2,130,801	2,074,656	1,900,630	2,120,860	2,081,063	1,905,652	2,824,377
Interest	1,250,787	692,129	273,177	536,993	254,207	307,434	478,763	332,235	222,285	395,424
Miscellaneous	29,275	26,095	24,164	25,206	35,918	30,355	29,495	27,589	33,113	24,062
Contributions and Donations	1,315,190	31,727	4,041	1,412,098	4,700	184,819	57,842	12,123	31,970	4,362
Total Revenues	$ 162,898,594	$ 136,439,396	$ 137,452,184	$ 156,444,954	$ 152,017,533	$ 148,349,644	$ 146,752,990	$ 143,591,398	$ 143,723,445	$ 150,303,999
EXPENDITURES:										
General Government	$ 20,335,453	$ 20,853,875	$ 20,474,698	$ 20,252,981	$ 21,237,703	$ 22,666,968	$ 23,786,927	$ 22,470,110	$ 24,286,380	$ 24,215,125
Judicial and Law Enforcement	69,656,955	72,502,150	73,081,968	79,934,077	84,561,028	80,101,133	80,546,836	81,871,609	79,315,978	82,172,119
Education and Recreation	1,579,264	1,614,588	1,298,502	1,304,505	1,361,048	1,409,870	1,439,979	1,264,975	1,919,925	1,317,498
Health and Welfare	10,600,245	10,576,843	9,538,311	10,345,286	10,622,898	10,416,839	10,479,518	10,267,776	14,208,718	20,728,899
Maintenance of Structures and Equipment	36,379,418	17,123,159	12,543,110	12,115,480	11,792,372	12,677,678	12,178,205	11,850,940	11,674,025	12,491,590
Capital Outlay	4,076,087	7,218,487	17,434,755	11,913,277	6,777,118	8,270,112	12,829,173	7,818,394	6,039,315	1,987,390
Debt Services										
Principal	3,660,000	3,760,000	4,942,070	55,731,843	4,344,169	4,498,094	4,420,000	4,913,395	5,022,110	3,981,008
Interest and Commission	3,671,261	3,538,141	3,530,237	4,123,025	1,976,429	1,922,689	1,695,044	1,586,336	1,453,179	1,298,050
Total Expenditures	$ 149,958,683	$ 137,187,243	$ 142,843,651	$ 195,720,474	$ 142,672,765	$ 141,963,383	$ 147,375,682	$ 142,043,535	$ 143,919,630	$ 148,191,679
Excess (Deficiency) of Revenues Over Expenditures	$ 12,939,911	$ (747,847)	$ (5,391,467)	$ (39,275,520)	$ 9,344,768	$ 6,386,261	$ (622,692)	$ 1,547,863	$ (196,185)	$ 2,112,320

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
OTHER FINANCING SOURCES (USES):										
Transfer In	$ 10,267,060	$ 8,491,580	$ 2,851,000	$ 6,709,370	$ 6,590,699	$ 5,310,045	$ 1,598,717	$ 1,498,879	$ 1,521,015	$ 4,800,783
Transfer Out	(13,954,892)	(11,821,779)	(3,648,785)	(9,523,951)	(9,789,377)	(8,167,733)	(4,064,677)	(5,169,565)	(4,250,626)	(7,303,121)
Proceeds from Sale of Capital Assets	-	2,111,000	-	-	-	-	-	-	-	-
Capital Lease Obligations	-	1,751,957	-	-	-	-	1,707,363	-	-	-
Insurance Proceeds	2,556,532	1,314,011	-	-	-	-	-	-	-	-
Issuance of Debt	-	-	5,550,000	47,305,000	-	1,340,000	-	-	-	-
Premium on Debt Issued	-	-	249,283	4,970,522	-	-	-	-	-	-
Payment to Refunding Bond Escrow Agent	-	-	(5,672,472)	-	-	(1,298,192)	-	-	-	-
Total Other Financing Sources (Uses)	$ (1,131,300)	$ 1,846,769	$ (670,974)	$ 49,460,941	$ (3,198,678)	$ (2,815,880)	$ (758,597)	$ (3,670,686)	$ (2,729,611)	$ (2,502,338)
Net Change In Fund Balances	$ 11,808,611	$ 1,098,922	$ (6,062,441)	$ 10,185,421	$ 6,146,090	$ 3,570,381	$ (1,381,289)	$ (2,122,823)	$ (2,925,796)	$ (390,018)
Debt Service As A Percentage of Noncapital Expenditures	5.3%	5.8%	6.6%	32.0%	4.6%	4.7%	4.6%	4.9%	4.7%	3.7%

JEFFERSON COUNTY, TEXAS
GENERAL GOVERNMENTAL TAX REVENUES BY SOURCE
LAST TEN FISCAL YEARS
(modified accrual basis of accounting)

Fiscal Year	Property Tax	Sales Tax	Alcoholic Beverage Tax	Hotel Occupancy Tax	Total
2009	$ 75,912,693	$ 30,410,633	$ 614,474	$ 1,294,063	108,231,863
2010	75,995,020	21,361,596	575,928	893,234	98,825,778
2011	72,959,364	20,961,453	547,605	981,619	95,450,041
2012	79,446,316	23,864,675	484,988	1,064,165	104,860,144
2013	82,593,407	24,695,194	475,162	1,015,651	108,779,414
2014	84,262,722	24,064,857	614,384	1,150,383	110,092,346
2015	82,850,758	23,047,286	656,678	1,291,716	107,846,438
2016	80,400,650	24,595,048	673,135	1,211,569	106,880,402
2017	78,856,965	24,984,470	689,240	1,187,625	105,718,300
2018	80,704,782	30,911,766	743,739	1,696,852	114,057,139

JEFFERSON COUNTY, TEXAS
ASSESSED VALUE AND ESTIMATED ACTUAL VALUE OF TAXABLE PROPERTY
LAST TEN FISCAL YEARS

Fiscal Year Ended September 30	Real Property		Personal Property		Less: Tax Exempt Real Property	Total Taxable Assessed Value	Total Direct Tax Rate	Estimated Actual Taxable Value	Assessed Value (a) as a Percentage of Actual Value
	Residential Property	Commercial Property	Motor Vehicles	Other					
2009	$ 7,717,517,403	$ 12,524,372,020	$ 63,467,330	$ 4,907,849,539	$ 4,416,709,776	$ 20,796,496,516	0.365000	$ 21,244,031,039	84.26%
2010	7,848,755,180	11,452,048,660	59,394,290	4,831,378,530	3,053,531,674	21,138,044,986	0.365000	21,337,887,316	88.20%
2011	8,042,282,874	12,128,893,349	47,961,490	4,820,689,110	2,904,361,132	22,135,465,691	0.365000	22,248,999,610	88.85%
2012	7,989,089,195	12,510,887,710	51,129,790	5,421,135,950	2,819,185,882	23,153,056,763	0.365000	23,199,553,509	89.32%
2013	7,912,100,439	14,408,052,759	62,242,770	6,068,922,220	3,198,328,907	25,252,989,281	0.365000	25,274,550,281	88.83%
2014	7,974,453,458	17,857,917,342	66,248,570	6,675,937,170	6,667,443,764	25,907,112,776	0.365000	25,914,410,662	79.55%
2015	8,081,673,579	16,701,727,909	68,532,930	6,926,838,120	6,385,170,071	25,393,602,467	0.365000	25,404,515,574	79.94%
2016	8,279,899,361	17,082,882,495	75,061,930	5,867,214,193	6,399,625,866	24,905,432,113	0.365000	24,916,084,230	79.59%
2017	8,568,478,324	16,366,360,029	79,893,490	5,363,369,718	6,033,364,824	24,344,736,737	0.365000	24,362,151,992	80.20%
2018	8,832,117,978	17,460,393,802	79,433,190	5,725,297,404	7,709,373,774	24,387,868,600	0.364977	24,399,250,958	76.02%

Source: Jefferson County Appraisal District

Note: Property in the county is reassessed annually. The county assesses property at 100% of actual value for all types of real and personal property. However, each homestead residential property can only increase by a maximum of 10% in any given year. Estimated actual value is calculated by adding back the loss to the limit on homestead residential properties to the total taxable assessed value. Tax rates are per $100 of assessed value.

(a) Includes tax-exempt property.

JEFFERSON COUNTY, TEXAS
PROPERTY TAX RATES
DIRECT AND OVERLAPPING (a) GOVERNMENTS
LAST TEN FISCAL YEARS

				Overlapping Rates							
				Cities			School Districts				
Fiscal Year	Operating Rate	Debt Service Rate	Total County Rate	Operating Rate	Debt Service Rate	Total City Rate	Operating Rate	Debt Service Rate	Total School Rate	Special Districts	Total Direct & Overlapping Rates
2009	$0.331	$0.034	$0.365	$0.385	$0.202	$0.587	$1.058	$0.186	$1.244	$0.217	$2.413
2010	0.330	0.035	0.365	0.394	0.199	0.593	1.073	0.220	1.293	0.226	2.477
2011	0.331	0.034	0.365	0.394	0.197	0.591	1.058	0.226	1.284	0.192	2.432
2012	0.336	0.029	0.365	0.401	0.185	0.586	1.059	0.230	1.289	0.193	2.433
2013	0.340	0.025	0.365	0.412	0.182	0.594	1.059	0.217	1.276	0.194	2.429
2014	0.341	0.024	0.365	0.419	0.189	0.608	1.058	0.235	1.293	0.193	2.459
2015	0.340	0.025	0.365	0.430	0.186	0.616	1.059	0.244	1.303	0.203	2.487
2016	0.342	0.023	0.365	0.441	0.175	0.616	1.059	0.259	1.318	0.206	2.505
2017	0.339	0.026	0.365	0.422	0.147	0.569	1.059	0.267	1.326	0.203	2.463
2018	0.345	0.020	0.365	0.426	0.150	0.576	1.099	0.238	1.337	0.201	2.479

Source: Jefferson County Tax Assessor Collector

(a) Overlapping rates are those of local governments that apply to property owners within Jefferson County. Not all overlapping rates apply to all Jefferson County property owners. (e.g., the rates for special districts apply only to the proportion of the County's property owners whose property is located within the geographic boundaries of the special district.)

Note: Rates are per $100 of taxable value. Rates for overlapping entities are an average tax rate of all cities (7), school districts (7), and special districts (14) located within Jefferson County. For fiscal year 2018, total rates ranged between .2301 and .7920 for cities, 1.15 and 1.481 for school districts, and .0264 and .5901 for special districts.

TABLE 8

JEFFERSON COUNTY, TEXAS
PRINCIPAL TAXPAYERS
CURRENT YEAR AND NINE YEARS AGO

	2018			2009		
Taxpayers	Taxable Assessed Value (b)	Rank	Percentage of Total Taxable Assessed Value	Taxable Assessed Value (b)	Rank	Percentage of Total Taxable Assessed Value
Motiva Refinery	$ 4,278,815,410	1	17.54%	$ 2,018,481,780	2	9.71%
ExxonMobil Oil Corporation	1,974,313,022	2	8.10%	2,645,724,170	1	12.72%
Premcor Refining Group Inc	859,688,998	3	3.53%	1,095,677,060	3	5.27%
Total Petrochemicals USA	522,451,770	4	2.14%	662,436,710	4	3.19%
Sunoco Partners Mktg & Term LP	464,311,937	5	1.90%	-		-
Huntsman Petrochemical Corp	420,278,577	6	1.72%	442,982,990	5	2.13%
Golden Pass Pipeline LLC	379,516,490	7	1.56%	-		-
Entergy Texas Inc.	348,844,780	8	1.43%	276,420,620	7	-
Enterprise Texas Pipeline LP	332,738,550	9	1.36%	-		-
Chevron Phillips Chemical Co	309,493,060	10	1.27%	227,387,640	10	1.09%
Goodyear Tire & Rubber Co.	-		-	275,282,930	8	1.32%
Samson Lone Star LP	-		-	232,522,660	9	1.12%
Flint Hills Resources LP	-		-	284,426,760	6	1.37%
TOTAL	$9,890,452,594		40.55%	$8,161,343,320		37.92%

Source: Jefferson County Appraisal District.

(b) Amounts shown for these taxpayers do not include assessed values attributable to certain subsidiaries and affiliates which are not grouped on the tax roll with the taxpayers shown.

TABLE 9

JEFFERSON COUNTY, TEXAS
PROPERTY TAX LEVIES AND COLLECTIONS
LAST TEN FISCAL YEARS

Fiscal Year Ended September 30	Total Tax Levy for Fiscal Year	Collected within the Fiscal Year of the Levy		Collections in Subsequent Years	Total Collections to Date	
		Amount	Percentage of Levy		Amount	Percentage of Levy
2009	$74,706,832	$73,704,158	98.66%	$761,307	$74,465,465	99.68%
2010	74,387,803	73,446,110	98.73%	687,705	74,133,815	99.66%
2011	79,135,993	77,966,579	98.52%	872,184	78,838,763	99.62%
2012	83,519,234	82,381,734	98.64%	820,484	83,202,218	99.62%
2013	89,386,795	88,220,195	98.69%	786,643	89,006,838	99.57%
2014	92,584,795	91,329,673	98.64%	832,338	92,162,011	99.54%
2015	90,464,235	89,246,776	98.65%	708,288	89,955,064	99.44%
2016	88,911,995	87,788,574	98.74%	484,176	88,272,750	99.28%
2017	87,425,910	86,272,257	98.68%	365,444	86,637,701	99.10%
2018	88,097,585	86,900,639	98.64%	-	86,900,639	98.64%

TABLE 10

JEFFERSON COUNTY, TEXAS
RATIO OF OUTSTANDING DEBT BY TYPE
LAST TEN FISCAL YEARS

Fiscal Year	General Obligation Bonds	Notes Payable	Capital Leases	Total Primary Government	Percentage of Personal Income (a)	Per Capita (a)
2009	$68,290,426	$1,669,086	$ -	$69,959,512	0.85%	$ 289
2010	64,553,045	1,322,435	1,144,977	67,020,457	0.74%	$ 266
2011	60,664,579	965,267	585,075	62,214,921	0.66%	$ 247
2012	56,704,005	597,263	-	57,301,268	0.59%	$ 227
2013	52,482,467	218,094	-	52,700,561	0.55%	$ 209
2014	49,281,192	-	-	49,281,192	0.49%	$ 195
2015	44,444,323	-	1,707,363	46,151,686	0.46%	$ 183
2016	39,437,454	-	1,383,968	40,821,422	0.38%	$ 161
2017	34,337,146	-	1,051,858	35,389,004	0.31%	$ 139
2018	30,319,638	-	710,850	31,030,488	0.27%	$ 121

Note: Details regarding the County's outstanding debt can be found in the notes to the financial statements.

(a) See the Schedule of Demographic and Economics Statistics in Table 14 for personal income and population data.

TABLE 11

JEFFERSON COUNTY, TEXAS
RATIO OF GENERAL BONDED DEBT OUTSTANDING
LAST TEN FISCAL YEARS

Fiscal Year	General Obligation Bonds	Less: Amounts Available in Debt Fund	Total	Percentage of Estimated Actual Taxable Value (a) of Property	Per Capita (b)
2009	$ 68,290,426	$ 176,339	$ 68,114,087	0.32%	$ 281
2010	64,553,045	330,833	64,222,212	0.30%	255
2011	60,664,579	354,241	60,310,338	0.28%	239
2012	56,704,005	716,106	55,987,899	0.25%	221
2013	52,482,467	1,071,014	51,411,453	0.22%	204
2014	49,281,192	1,010,241	48,270,951	0.19%	191
2015	44,444,323	1,096,051	43,348,272	0.17%	172
2016	39,437,454	602,071	38,835,383	0.15%	153
2017	34,337,146	700,149	33,636,997	0.14%	132
2018	30,319,638	550,264	29,769,374	0.12%	116

Note: Details regarding the County's outstanding debt can be found in the notes to the financial statements.

(a) See the Schedule of Assessed Value and Estimated Actual Value of Taxable Property in Table 6 for property value data.

(b) See the Schedule of Demographic and Economics Statistics in Table 14 for population data.

TABLE 12

JEFFERSON COUNTY, TEXAS
DIRECT AND OVERLAPPING GOVERNMENTAL ACTIVITIES DEBT
AS OF SEPTEMBER 30, 2018

Governmental Unit	Debt Outstanding	Estimated Percentage Applicable (a)	Estimated Share of Overlapping Debt
JEFFERSON COUNTY DIRECT DEBT	$31,030,488	100.0%	$31,030,488
Total Direct Debt			**$31,030,488**
OVERLAPPING DEBT REPAID WITH PROPERTY TAXES:			
CITIES:			
BEAUMONT	208,180,000	100.0%	208,180,000
BEVIL OAKS	1,705,000	100.0%	1,705,000
GROVES	5,405,000	100.0%	5,405,000
NEDERLAND	15,110,000	100.0%	15,110,000
PORT ARTHUR	41,900,000	100.0%	41,900,000
PORT NECHES	15,070,000	100.0%	15,070,000
TAYLOR LANDING	-	100.0%	-
SCHOOL DISTRICTS:			
BEAUMONT	332,680,000	100.0%	332,680,000
HAMSHIRE FANNETT	21,460,000	100.0%	21,460,000
HARDIN JEFFERSON	34,330,000	50.6%	17,370,980
NEDERLAND	26,008,333	100.0%	26,008,333
PORT ARTHUR	350,685,000	100.0%	350,685,000
PORT NECHES	89,239,998	100.0%	89,239,998
SABINE PASS	23,132,925	100.0%	23,132,925
PORT DISTRICTS:			
BEAUMONT	48,655,000	100.0%	48,655,000
PORT ARTHUR	107,050,000	100.0%	107,050,000
SABINE PASS	7,030,000	100.0%	7,030,000
DRAINAGE DISTRICTS:			
DRAINAGE DISTRICTS #3	-	100.0%	-
DRAINAGE DISTRICTS #6	-	100.0%	-
DRAINAGE DISTRICTS #7	16,960,000	100.0%	16,960,000
NAVIGATION DISTRICTS:			
SABINE NECHES	10,365,000	100.0%	10,365,000
MUNICIPAL UTILITY DISTRICTS:			
NORTHWEST FOREST	-	100.0%	-
WATER DISTRICTS:			
WATER DISTRICT #10	9,800,000	100.0%	9,800,000
EMERGENCY SERVICE DISTRICTS:			
EMERGENCY SERVICE DISTRICT #1	-	100.0%	-
EMERGENCY SERVICE DISTRICT #2	-	100.0%	-
EMERGENCY SERVICE DISTRICT #3	-	100.0%	-
CONSERVATION DISTRICTS:			
TRINITY BAY	-	100.0%	-
IMPROVEMENT DISTRICT:			
CARDINAL MEADOWS	-	100.0%	-
Total Overlapping Debt			**$1,347,807,236**
TOTAL DIRECT AND OVERLAPPING DEBT			**$1,378,837,724**

Sources: Debt outstanding data was provided by each of the taxing entities.

Note: Overlapping governments are those that coincide, at least in part, with the geographic boundaries of the county. This schedule estimates the portion of the outstanding debt of those overlapping governments that is borne by the residents and businesses of Jefferson County. This process recognizes that, when considering the County's ability to issue and repay long-term debt, the entire debt burden borne by the residents and businesses should be taken into account. However, this does not imply that every taxpayer is a resident, and therefore responsible for repaying the debt, of each overlapping government.

(a) The percentage of overlapping debt applicable is estimated using taxable assessed property values. Applicable percentages were estimated by determining the portion of taxing entity that is within the County's boundaries and dividing it by the taxing entity's total taxable assessed value.

JEFFERSON COUNTY, TEXAS
LEGAL DEBT MARGIN INFORMATION
LAST TEN FISCAL YEARS
(amounts expressed in thousands)

	Fiscal Year									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Debt limit	$ 5,060,472	$ 4,825,201	$ 5,042,794	$ 5,124,994	$ 5,580,038	$ 6,458,093	$ 6,195,850	$ 6,340,696	$ 6,233,710	$ 6,573,128
Total net debt applicable to limit	68,149	64,234	60,416	60,416	48,404	44,070	39,564	35,468	30,680	27,190
Legal debt margin	$ 4,992,323	$ 4,760,967	$ 4,982,378	$ 5,064,578	$ 5,531,634	$ 6,414,023	$ 6,156,286	$ 6,305,228	$ 6,203,030	$ 6,545,938
Total net debt applicable to the limit as a percentage of debt limit	1.35%	1.33%	1.20%	1.18%	0.87%	0.68%	0.64%	0.56%	0.49%	0.41%

Legal Debt Margin Calculation for Fiscal Year 2018

Assessed Value of Real Property	$ 26,292,512
Debt limit (25% of assessed value of real property)	6,573,128
Debt applicable to limit:	
General obligation bonds	27,740
Less: Amount set aside for repayment of general obligation debt	550
Total net debt applicable to limit	$ 27,190
Legal debt margin	$ 6,545,938

Note: Under Article III, Section 52 of the State Constitution , Jefferson County's outstanding general obligation debt should not exceed 25% of assessed valuation of real property. By law, the general obligation debt subject to the limitation may be offset by amounts set aside for repaying general obligation bonds.

TABLE 14

JEFFERSON COUNTY, TEXAS
DEMOGRAPHIC AND ECONOMIC STATISTICS
LAST TEN FISCAL YEARS

Fiscal Year	Population (a)	Personal Income (amounts expressed in thousands)	Per Capita Personal Income (b)	Median Age (a)	School Enrollment (a)	Unemployment Rate (b)
2009	242,142	$ 8,183,189	$ 33,795	36.5	61,721	10.7%
2010	252,273	$ 9,099,739	$ 36,071	35.6	62,433	10.6%
2011	252,273	$ 9,369,167	$ 37,139	36.0	63,371	11.7%
2012	252,802	$ 9,786,471	$ 38,712	35.9	63,371	10.2%
2013	251,813	$ 9,658,791	$ 38,357	36.0	63,433	10.1%
2014	252,358	$ 10,083,721	$ 39,958	35.9	63,350	7.8%
2015	252,235	$ 9,971,354	$ 39,532	35.9	61,768	6.6%
2016	254,308	$ 10,809,362	$ 42,505	35.9	60,809	7.4%
2017	254,679	$ 11,451,641	$ 44,965	36.0	59,927	8.5%
2018	256,299	$ 11,524,485	$ 44,965	36.0	59,927	6.2%

Data sources
(a) Bureau of Census
(b) Texas Workforce Commission

TABLE 15

JEFFERSON COUNTY, TEXAS
PRINCIPAL EMPLOYERS
CURRENT YEAR AND NINE YEARS AGO

	2018			2009		
Employer	Employees	Rank	Percentage of Total County Employment	Employees	Rank	Percentage of Total County Employment
State of Texas	4,258	1	4.33%	2,756	2	2.64%
Beaumont ISD	2,357	2	2.40%	3,000	1	2.87%
ExxonMobil Oil Corporation	2,189	3	2.23%	2,000	4	1.92%
Christus Health Southeast Texas	1,932	4	1.97%	2,348	3	2.25%
Motiva Enterprises	1,540	5	1.57%	1,058	10	1.01%
Memorial Hermann Baptist Hospital	1,664	6	1.69%	1,809	5	1.73%
City of Beaumont	1,250	8	1.27%	1,510	6	1.45%
Port Arthur ISD	1,199	7	1.22%	1,336	7	1.28%
Jefferson County	1,176	9	1.20%	1,262	9	1.21%
Valero	802	10	0.82%	-		-
Wal-Mart Associates	-		-	1,270	8	1.22%
TOTAL	18,367		18.70%	18,349		17.58%

Source: Employment numbers provided by each entity

TABLE 16

JEFFERSON COUNTY, TEXAS
FULL-TIME EQUIVALENT COUNTY EMPLOYEES BY FUNCTION
LAST TEN FISCAL YEARS

	Full-time Equivalent Employees as of September 30									
Function	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
General Government	180	170	166	164	166	165	165	168	155	161
Judicial & Law Enforcement										
Deputies	131	134	131	134	138	138	143	146	148	145
Detention Officers	240	242	239	238	241	238	237	237	231	232
Others	441	444	440	442	436	443	440	439	415	419
Education & Recreation	18	20	14	15	15	15	15	15	12	14
Health & Welfare	63	63	59	60	60	60	60	61	52	59
Maintenance - Equipment & Structures										
Road & Bridges	69	68	67	66	64	64	60	64	61	64
Engineering	10	9	10	10	10	10	10	10	9	10
Maintenance	30	29	28	28	30	27	28	28	25	26
Jack Brooks Regional Airport	23	25	25	23	24	25	24	24	24	24
Ford Park	22	23	19	20	23	21	20	21	22	22
TOTAL	1,227	1,227	1,198	1,200	1,207	1,206	1,202	1,213	1,154	1,176

Sources: County and Ford Park payroll records

JEFFERSON COUNTY, TEXAS
OPERATING INDICATORS BY FUNCTION
LAST TEN FISCAL YEARS

Function	FISCAL YEAR 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Judicial & Law Enforcement										
Courts										
Number of Indigent Cases Heard	2,945	2,945	2,490	2,413	3,249	3,392	3,727	3,969	3,252	2,944
Number of Justice of Peace Cases	43,326	43,488	44,642	48,363	43,205	41,359	33,717	28,130	31,835	33,428
Sheriff										
Number of Arrests	6,404	6,573	6,099	6,023	5,898	5,517	5,730	5,337	4,644	5,227
Number of Citations	1,112	1,043	1,241	1,081	915	1,558	1,615	1,861	2,231	2,240
Jail										
Average Daily Population of Inmates	899	910	926	815	767	855	830	819	731	713
Constables										
Number of Papers Served	15,954	16,967	16,860	15,344	15,472	17,348	18,276	16,618	16,561	1,531
Education & Recreation										
Library										
Number of Patron Visits	4,002	1,536	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^
Health & Welfare										
Health & Welfare										
Number of Patients Seen in Clinic	9,375	11,531	11,968	11,644	7,433	11,314	10,508	10,401	11,937	8,508
Mosquito Control										
Number of Acreage Sprayed	2,175,872	1,070,464	818,972	1,328,128	700,672	1,048,256	563,520	839,680	594,148	789,504
Maintenance - Equipment & Structures										
Road & Bridge										
Road Miles Maintained	370	370	370	369	370	370	369	369	366	366
Airport										
Number of Aircraft Operations	27,891	26,332	22,602	22,515	20,351	19,109	15,462	14,842	15,757	17,755
Number of Enplaned	22,174	17,957	18,098	5,666	24,669	36,605	34,879	27,245	24,934	25,514
Number of Deplaned	21,588	17,997	18,207	5,328	24,351	35,340	34,517	28,098	24,467	24,705
Health Insurance Risk Pool										
Number of Participants in Plan	1,541	1,568	1,550	1,581	1,612	1,807	1,652	1,667	1,702	1,722
Entertainment Complex										
Number of Events	183	198	188	185	176	174	170	183	40	102
Total Attendance	658,337	647,207	629,123	712,688	668,718	650,089	303,562	336,555	348,710	361,468

Sources: Various county departments
Note: Indicators are not available for the general government functions.

^ Library was closed 12/31/10.

TABLE 18

JEFFERSON COUNTY, TEXAS
CAPITAL ASSET STATISTICS BY FUNCTION
LAST TEN FISCAL YEARS

Function	FISCAL YEAR 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Judicial & Law Enforcement										
Sheriff										
Patrol Units	116	120	122	122	126	121	123	141	132	142
Aviation Units	3	3	3	4	4	3	3	3	4	4
Marine Units	9	9	11	11	11	11	11	10	10	10
Jail										
Dorms	23	23	23	23	23	23	23	23	23	23
Bed Capacity	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268	1,268
Constables										
Patrol Units	31	32	27	24	29	32	32	34	28	33
Education & Recreation										
Library Holdings (ie books, audio, video)	35,549	36,038	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^	n/a ^
Health & Welfare										
Mosquito Control										
Mosquito Spray Trucks	8	8	8	8	8	8	8	8	8	8
Weed Control Trucks	2	2	2	2	2	2	2	2	2	2
Aviation Units	3	3	3	3	3	3	3	3	3	3
Maintenance - Equipment & Structures										
Road (miles)	370	370	370	369	370	370	369	369	366	366
Bridges	65	65	65	65	65	65	65	65	65	65
Airport										
Runways (linear feet)	11,820	11,820	11,820	11,820	11,820	11,820	11,820	11,820	11,820	11,820
T-Hangar & Open Span Hangars (square feet)	123,076	123,076	150,470	150,470	150,470	150,470	150,470	150,470	150,470	150,470
Office Space (square feet)	14,426	14,426	18,885	18,885	43,850	43,850	43,850	45,850	45,850	45,850
Entertainment Complex										
Number of venues	5	5	5	5	5	5	5	5	5	5
Softball Fields	12	12	12	12	12	12	12	12	12	12
Exhibit Floor Space (square feet)	142,000	142,000	142,000	142,000	142,000	142,000	142,000	142,000	142,000	142,000
Seating Capacity	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500	23,500

Sources: Various county departments
Note: Indicators are not available for the general government function.

^ Library was closed 12/31/10.

JEFFERSON COUNTY
TEXAS

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

To the Honorable County Judge
and Commissioners Court
Jefferson County, Texas

We have audited the financial statements of Jefferson County as of and for the year ended September 30, 2018, and have issued our report thereon dated March 8, 2019. Professional standards require that we advise you of the following matters relating to our audit.

Our Responsibility in Relation to the Financial Statement Audit

As communicated in our engagement letter dated July 23, 2018, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of your respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control over financial reporting. Accordingly, as part of our audit, we considered the internal control of the County solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

Planned Scope and Timing of the Audit

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

Compliance with All Ethics Requirements Regarding Independence

The engagement team, others in our firm, as appropriate, our firm, and our network firms have complied with all relevant ethical requirements regarding independence.

Qualitative Aspects of the Entity's Significant Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by the County is included in Note 1 to the financial statements. During fiscal year 2018 the County implemented Government Accounting Standards Board ("GASB") Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments. The most sensitive accounting estimates affecting the financial statements are:

> Management's estimate of depreciation expense is based on the useful lives of its capital assets. We evaluated the key factors and assumptions used to develop the depreciation expense estimate in determining that it is reasonable in relation to the financial statements taken as a whole.
>
> Management's estimate of the allowance for uncollectible accounts is based on historical collection data. We evaluated the key factors and assumptions used to develop the allowance for uncollectible accounts estimate in determining that it is reasonable in relation to the financial statements taken as a whole.
>
> Management's estimate of the net pension liability, pension-related deferred outflows and inflows of resources, and pension expense is based on information provided by the Texas County & District Retirement System (TCDRS). We evaluated the County's application of the information provided by TCDRS in determining that it is reasonable in relation to the financial statements taken as a whole.
>
> Management's estimate of the net other post-employment benefit (OPEB) liability, OPEB-related deferred outflows an inflows of resources, and OPEB expense is based on information provided by a third-party actuary. We evaluated the County's application of the information provided by the third-party actuary in determining that it is reasonable in relation to the financial statements taken as a whole.

Financial Statement Disclosures

The financial statement disclosures are neutral, consistent, and clear.

Significant Difficulties Encountered during the Audit

We encountered no significant difficulties in dealing with management relating to the performance of the audit.

Uncorrected and Corrected Misstatements

For purposes of this communication, professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole and each applicable opinion unit. We did not note any such misstatements.

In addition, professional standards require us to communicate to you all material, corrected misstatements that were brought to the attention of management as a result of our audit procedures. We did not identify any material misstatements as a result of our audit procedures.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the County's financial statements or the auditor's report. No such disagreements arose during the course of the audit.

Representations Requested from Management

We have requested certain written representations from management, which are included in a separate letter dated March 8, 2019.

Management's Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

Other Significant Matters, Findings, or Issues

In the normal course of our professional association with the County, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, operating and regulatory conditions affecting the entity, and operational plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as the County's auditors.

Whitley Penn LLP

Houston, Texas
March 8, 2019

FORD PARK - OPERATIONS

AUDITED FINANCIAL STATEMENTS

September 30, 2018

FORD PARK – OPERATIONS
TABLE OF CONTENTS
September 30, 2018

	Page Number
Independent Auditors' Report	1
Statement of Net Position	3
Statement of Revenues, Expenses and Changes in Net Position	4
Statement of Cash Flows	5
Notes to Financial Statements	6

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

INDEPENDENT AUDITORS' REPORT

To the Management of
Ford Park – Operations
Beaumont, Texas

Report on the Financial Statements

We have audited the accompanying financial statements of Ford Park - Operations as of and for the year ended September 30, 2018, and the related notes to the financial statements, as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Ford Park - Operations as of September 30, 2018, and the changes in financial position and cash flows thereof, for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

Emphasis of Matter

As discussed in Note 1, the financial statements present only the operations managed by Ford Park - Operations, and do not purport to, and do not, present fairly the financial position of Jefferson County, Texas, as of September 30, 2018, the changes in its financial position, or, where applicable, its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Houston, Texas
March 8, 2019

FORD PARK - OPERATIONS

STATEMENT OF NET POSITION

September 30, 2018

Assets	
Current assets:	
Cash and investments	$ 1,482,461
Accounts receivable (note 2)	194,140
Prepaid expenses	53,439
Inventory, at cost	86,844
Total assets	1,816,884
Liabilities	
Current liabilities:	
Accounts payable	241,832
Accrued expenses	404,790
Unearned revenue (note 3)	114,855
Customer deposits	19,268
Total liabilities	780,745
Net Position	
Unrestricted	1,036,139
Total Net Position	$ 1,036,139

The accompanying notes to the financial statements are an integral part of the statement.

FORD PARK - OPERATIONS

STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION

For the Fiscal Year Ended September 30, 2018

Operating Revenues	
Charges for services	$ 3,568,693
Total operating revenues	3,568,693
Operating Expenses	
Administrative	184,342
Contracted services	18,000
Insurance	346,357
Event expenses	1,799,965
Maintenance and repairs	272,954
Management fees	224,319
Materials and supplies	28,260
Operations expenses	55,542
Salaries and benefits	1,510,759
Utilities	710,574
Total operating expenses	5,151,072
Operating income before transfers	(1,582,379)
Transfers	1,933,941
Change in net position	351,562
Net Position, beginning	684,577
Net Position, ending	$ 1,036,139

The accompanying notes to the financial statements are an integral part of the statement.

FORD PARK - OPERATIONS

STATEMENT OF CASH FLOWS

For the Fiscal Year Ended September 30, 2018

Cash Flows From Operating Activities	
Receipts from customers and users	$ 3,625,933
Payments to employees	(1,753,078)
Payments to suppliers	(3,201,821)
Net cash used by operating activities	(1,328,966)
Cash Flows From Noncapital Financing Activities	
Transfers in	1,933,941
Net cash provided by noncapital financing activities	1,933,941
Net increase in cash	604,975
Cash and Cash Equivalents, Beginning	877,486
Cash and Cash Equivalents, Ending	$ 1,482,461
Reconciliation of Operating Loss to Net Cash Used by Operating Activities	
Operating loss	$ (1,582,379)
Net cash used by operating activities:	
Changes in assets and liabilities:	
Accounts receivable	153,433
Prepaid expenses	(28,010)
Inventory	(52,973)
Customer deposits	227
Accounts payable	64,585
Accrued expenses	212,571
Deferred revenue	(96,420)
Total changes in assets and liabilities	253,413
Net Cash Used by Operating Activities	$ (1,328,966)

The accompanying notes to the financial statements are an integral part of the statement.

FORD PARK – OPERATIONS
NOTES TO FINANCIAL STATEMENTS
September 30, 2018

Note 1 - Summary of Significant Accounting Policies

Jefferson County, Texas (the "County") was created in 1836 and organized in 1837 as one of the original counties of the Republic of Texas. The County operates under a Commissioners' Court form of government. Some of the services of the County include operation of a detention system, construction and maintenance of roads, various levels of civil and criminal courts, a district attorney's office, a county sheriff's department, juvenile probation and detention, a mosquito control, a library, and other public health and social welfare services. The following is a summary of the most significant accounting and reporting policies and practices used by the County.

A. Reporting Entity

The accompanying financial statements include only the revenue and expenditures related to operations at Ford Park.

B. Special Purpose Financial Statements

The County owns Ford Park, which consists of an amphitheater, arena, midway, exhibition hall, agricultural barns, and softball diamonds. The operations of Ford Park are under the management of Spectra. The County engaged the company to manage, operate, and promote the facilities which comprise Ford Park. The management company is responsible for paying the operating expenses at Ford Park from revenues generated by the facilities at Ford Park. In the event operating expenses exceed operating revenues, the County is required to fund this excess.

C. Basis of Presentation - Fund Accounting

Jefferson County uses funds and account groups to report its financial position and results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities.

D. Basis of Accounting

The financial statements are presented on the accrual basis of accounting. Revenues are recognized when earned, and expenses when they are incurred. The operations are accounted for using a cost of service or "capital maintenance" measurement focus. This means that all assets and liabilities (whether current or non-current) associated with their activity are included in the fund's statement of net position.

E. Capital Assets

Jefferson County has decided that all the capital assets relating to Ford Park should be accounted for by the County in order to maintain proper accountability and control.

Note 1 - Summary of Significant Accounting Policies (continued)

F. Statement of Cash Flows

For purposes of the statement of cash flows, all highly liquid investments with a maturity of three months or less when purchased are considered to be cash equivalents.

G. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Note 2 - Accounts Receivable

Accounts receivable consisted of the following as of September 30, 2018:

Billed settlement charges:	
Rent and other event expenses	$ 233,666
Allowance	(39,526)
Total	$ 194,140

Note 3 - Unearned Revenue

Unearned revenue consists of income not yet earned on suites sold for Ford Park Arena, advanced ticket sales, and boxes sold for the amphitheater. It also includes unearned sponsorship income and naming rights.

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

To the Management of
Ford Park - Operations
Beaumont, Texas

We have audited the financial statements of Ford Park - Operations as of and for the year ended September 30, 2018, and have issued our report thereon dated March 8, 2019. Professional standards require that we advise you of the following matters relating to our audit.

Our Responsibility in Relation to the Financial Statement Audit

As communicated in our engagement letter dated September 6, 2018, our responsibility, as described by professional standards, is to form and express an opinion about whether the financial statements that have been prepared by management with your oversight are presented fairly, in all material respects, in accordance with accounting principles generally accepted in the United States of America. Our audit of the financial statements does not relieve you or management of your respective responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform our audit to obtain reasonable, rather than absolute, assurance about whether the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control over financial reporting. Accordingly, as part of our audit, we considered the internal control of the Ford Park - Operations solely for the purpose of determining our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures for the purpose of identifying other matters to communicate to you.

Planned Scope and Timing of the Audit

We conducted our audit consistent with the planned scope and timing we previously communicated to you.

Compliance with All Ethics Requirements Regarding Independence

The engagement team, others in our firm, as appropriate, our firm, and our network firms have complied with all relevant ethical requirements regarding independence.

Qualitative Aspects of the Entity's Significant Accounting Practices

Significant Accounting Policies

Management has the responsibility to select and use appropriate accounting policies. A summary of the significant accounting policies adopted by Ford Park - Operations is included in Note 1 to the financial statements. There have been no initial selection of accounting policies and no changes in significant accounting policies or their application during 2018. No matters have come to our attention that would require us, under professional standards, to inform you about (1) the methods used to account for significant unusual transactions and (2) the effect of significant accounting policies in controversial or emerging areas for which there is a lack of authoritative guidance or consensus.

Significant Accounting Estimates

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's current judgments. Those judgments are normally based on knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ markedly from management's current judgments.

Financial Statement Disclosures

The financial statement disclosures are neutral, consistent, and clear.

Significant Difficulties Encountered during the Audit

We encountered no significant difficulties in dealing with management relating to the performance of the audit.

Uncorrected and Corrected Misstatements

For purposes of this communication, professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that we believe are trivial, and communicate them to the appropriate level of management. Further, professional standards require us to also communicate the effect of uncorrected misstatements related to prior periods on the relevant classes of transactions, account balances or disclosures, and the financial statements as a whole and each applicable opinion unit. We did not note any such misstatements.

In addition, professional standards require us to communicate to you all material, corrected misstatements that were brought to the attention of management as a result of our audit procedures. We did not identify any material misstatements as a result of our audit procedures.

Disagreements with Management

For purposes of this letter, professional standards define a disagreement with management as a matter, whether or not resolved to our satisfaction, concerning a financial accounting, reporting, or auditing matter, which could be significant to the County's financial statements or the auditor's report. No such disagreements arose during the course of the audit.

Representations Requested from Management

We have requested certain written representations from management, which are included in a separate letter dated March 8, 2019.

Management's Consultations with Other Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters. Management informed us that, and to our knowledge, there were no consultations with other accountants regarding auditing and accounting matters.

Other Significant Matters, Findings, or Issues

In the normal course of our professional association with the Ford Park - Operations, we generally discuss a variety of matters, including the application of accounting principles and auditing standards, operating and regulatory conditions affecting the entity, and operational plans and strategies that may affect the risks of material misstatement. None of the matters discussed resulted in a condition to our retention as the auditors of Ford Park - Operations.

Whitley Penn LLP

Houston, Texas
March 8, 2019

JEFFERSON COUNTY, TEXAS

Independent Auditors' Report on Compliance with Requirements Applicable to the Passenger Facility Charge Program and on Internal Control Over Compliance

Schedule of Expenditures of Passenger Facility Charges

For the Year Ended September 30, 2018

JEFFERSON COUNTY, TEXAS

TABLE OF CONTENTS

	Page
Independent Auditors' Report on Compliance with Requirements Applicable to the Passenger Facility Charge Program and on Internal Control over Compliance	1
Passenger Facility Charges Audit Summary	3
Schedule of Findings and Questions Costs	4
Revenue and Disbursement Schedule of Passenger Facility Charges	5
Notes to Schedule of Expenditures of Passenger Facility Charges	6
Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*	7

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

REPORT OF INDEPENDENT AUDITORS ON COMPLIANCE WITH REQUIREMENTS APPLICABLE TO THE PASSENGER FACILITY CHARGE PROGRAM AND ON INTERNAL CONTROL OVER COMPLIANCE

The Honorable County Judge and
Commissioners Court
Jefferson County, Texas

Compliance

We have audited Jefferson County, Texas with the compliance requirements described in the Passenger Facility Charge Audit Guide for Public Agencies, issued by the Federal Aviation Administration (Guide), for its passenger facility charge program for the year ended September 30, 2018. Compliance with the requirements of laws and regulations applicable to its passenger facility charge program is the responsibility of Jefferson County, Texas' management. Our responsibility is to express an opinion on Jefferson County, Texas' compliance based on our audit.

Auditor's Responsibility

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and the Guide. Those standards and the Guide require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on the passenger facility charge program occurred. An audit includes examining, on a test basis, evidence about Jefferson County, Texas' compliance with those requirements and performing such other procedures, as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion. Our audit does not provide a legal determination on Jefferson County, Texas' compliance with those requirements.

Opinion

In our opinion, Jefferson County, Texas complied, in all material respects, with the requirements referred to above that are applicable to its Passenger Facility Charge Program for the year ended September 30, 2018.

The Honorable County Judge and
Commissioners Court

Internal Control Over Compliance

The Management of Jefferson County is responsible for establishing and maintaining effective internal control over compliance with requirements of laws and regulations applicable to the passenger facility charge program. In planning and performing our audit of compliance, we considered Jefferson County, Texas' internal control over compliance with requirements that could have a direct and material effect on its passenger facility charge program in order to determine our auditing procedures for the purpose of expressing our opinion on compliance and to test and report on internal control over compliance in accordance with the Guide.

Our consideration of the internal control over compliance would not necessarily disclose all matters in the internal control that might be material weaknesses. A material weakness is a condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that noncompliance with applicable requirements of laws and regulations that would be material in relation to the passenger facility charge program being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We noted no matters involving the internal control over compliance and its operation that we consider to be material weaknesses.

Schedule of Expenditures of Passenger Facility Charges

We have audited the financial statements of Jefferson County, Texas as of and for the year ended September 30, 2018, and have issued our report thereon date March 8, 2019. Our audit was performed for the purpose of forming an opinion on the financial statements taken as a whole. The accompanying Schedule of Expenditures of Passenger Facility Charges is presented for purposes of additional analysis as specified by the Guide and is not a required part of the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion is fairly stated, in all material respects, in relation to the financial statements taken as a whole.

This report is intended solely for the information and use of the Commissioners' Court, management and the Federal Aviation Administration and is not intended to be and should not be used by anyone other than these specified parties.

Whitley Penn LLP

Houston, Texas
March 8, 2019

JEFFERSON COUNTY, TEXAS

PASSENGER FACILITY CHARGES AUDIT SUMMARY

FISCAL YEAR ENDED SEPTEMBER 30, 2018

1.	Type of report issued on PFC financial statements	√	Unqualified		Qualified
2.	Type of report on PFC compliance	√	Unqualified		Qualified
3.	Quarterly Revenue and Disbursements reconcile with submitted quarterly reports.	√	Yes		No
4.	PFC Revenue and Interest is accurately reported on FAA Form 5100-127.	√	Yes		No
5.	The Public Agency maintains a separate financial accounting record for each application.	√	Yes		No
6.	Funds disbursed were for PFC eligible items as identified in the FAA. Decision to pay only for the allowable costs of the projects.	√	Yes		No
7.	Monthly carrier receipts were reconciled with quarterly carrier reports.	√	Yes		No
8.	PFC revenues were maintained in a separate interest-bearing capital account or commingled only with other interest-bearing airport capital funds.	√	Yes		No
9.	Serving carriers were notified of PFC program actions/changes approved by the FAA.	√	Yes		No
10.	Quarterly Reports were transmitted (or available via website) to remitting carriers.	√	Yes		No
11.	The Public Agency is in compliance with Assurances 5, 6, 7 and 8.	√	Yes		No
12.	Project administration is carried out in accordance with Assurance 10.	√	Yes		No
13.	For those public agencies with excess revenue, a plan for the use of this revenue has been submitted to the FAA for review and concurrence.		Yes		No
		√	N/A		

JEFFERSON COUNTY, TEXAS

PASSENGER FACILITY CHARGES
SCHEDULE OF FINDINGS AND QUESTIONS COSTS
FISCAL YEAR ENDED SEPTEMBER 30, 2018

Findings and Questioned Cost

None noted.

JEFFERSON COUNTY, TEXAS

REVENUE AND DISBURSEMENT SCHEDULE
OF PASSENGER FACILITY CHARGES

FISCAL YEAR ENDED SEPTEMBER 30, 2018

	Fiscal Year 2017 Program Total	Quarter 1 October - December	Quarter 2 January - March	Quarter 3 April - June	Quarter 4 July - September	Fiscal Year 2018 Total	Fiscal Year 2018 Program Total
Revenue							
Passenger Facility Collections	$ 1,241,515	$ 24,238	$ 23,622	$ 26,795	$ 31,130	$ 105,785	$ 1,347,300
Interest	15,943	461	466	874	1,328	3,129	19,072
	1,257,458	24,699	24,088	27,669	32,458	108,914	$ 1,366,372
Application 07-06-C-00-CBPT							
I - Airfield Equipment	36,317	-	-	-	-	-	36,317
II - Apron "F" Rehabilitation	28,746	-	-	-	-	-	28,746
III - Airfield Pavement Joint Rehab	9,458	-	-	-	-	-	9,458
IV - Runway 12/30 Rehab	14,751	-	-	-	-	-	14,751
V - Airfield Drainage Improvements	9,228	-	-	-	-	-	9,228
VI - Airfield Electrical Upgrades	-	-	-	-	-	-	-
VII - Administrative Costs	25,675	-	-	-	-	-	25,675
VIII - Pavement Maintenance Plan	5,717	-	-	-	-	-	5,717
	129,892	-	-	-	-	-	129,892
Application 11-07-C-00-CBPT							
I - Planning - Road, WHA, Geom	16,537	-	-	-	-	-	16,537
II - Apron Rehab - Phase I	29,528	-	-	-	-	-	29,528
III - Airfield Sweeper	10,431	-	-	-	-	-	10,431
V - Airfield Pavement Marking	205,368	-	-	-	-	-	205,368
VI - AOA Security Improvement	44,713	-	-	-	-	-	44,713
VII - Apron Rehab - Phase II	129,484	-	-	-	-	-	129,484
VIII - Administrative Costs	29,828	-	-	-	-	-	29,828
	465,889	-	-	-	-	-	465,889
Application 18-08-C-00-BPT							
I - Runway 12-30 Design and Recon	-	-	-	-	-	-	-
II - 2015 PFC Application and Admin Cost	-	-	-	-	19,000	19,000	19,000
III - Taxiway D - Design and Recon	-	-	-	-	-	-	-
IV - Update Airport Master Plan	-	-	-	-	-	-	-
V - Runway Safety Area	-	-	-	-	2,220	2,220	2,220
VI - Runway 16-34 Rehab	-	-	-	-	-	-	-
VII - ARFF Equipment	-	-	-	-	22,698	22,698	22,698
	-	-	-	-	43,918	43,918	43,918
Total Disbursements	595,781	-	-	-	43,918	43,918	639,699
Excess (Deficiency)	$ 661,677	$ 24,699	$ 24,088	$ 27,669	$ (11,460)	$ 64,996	$ 726,673

See accompanying note to Schedule of Expenditures of Passenger Facility Charges.

JEFFERSON COUNTY, TEXAS

NOTE TO SCHEDULE OF EXPENDITURES OF PASSENGER FACILITY CHARGES

YEAR ENDED SEPTEMBER 30, 2018

BASIS OF PRESENTATION

The accompanying Schedule of Expenditures of Passenger Facility Charges includes the Passenger Facility Charge (PFC) activity of the Southeast Texas Regional Airport of Jefferson County, Texas, (the County). The information in this schedule is presented in accordance with the requirements of 14 Code of Federal Regulations Part 158.67 and the Passenger Facility Charge Audit Guide for Public Agencies issued by the Federal Aviation Administration. Therefore, some amounts presented in this schedule may differ from amounts presented in, or used in the preparation of, the financial statements.

The County reports expenditures on the Schedule of Expenditures of Passenger Facility Charges collected and expended as reimbursements (to the extent of PFC's actually collected) of costs incurred by the County during the current and prior fiscal years.

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

REPORT OF INDEPENDENT AUDITORS ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

The Honorable County Judge and
Commissioners Court
Jefferson County, Texas

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Jefferson County, Texas (the "County"), as of and for the year ended September 30, 2018, and the related notes to the financial statements, which collectively comprise County's basic financial statements, and have issued our report thereon dated March 8, 2019.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered County's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of County's internal control. Accordingly, we do not express an opinion on the effectiveness of County's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of County's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The Honorable County Judge and
Commissioners Court

Compliance and Other Matters

As part of obtaining reasonable assurance about whether Jefferson County, Texas' financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of County's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Jefferson County, Texas' internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Houston, Texas
March 8, 2019

JEFFERSON COUNTY, TEXAS

FEDERAL AND STATE
SINGLE AUDIT REPORT

For the Year Ended September 30, 2018

(This page intentionally left blank.)

JEFFERSON COUNTY, TEXAS
TABLE OF CONTENTS

	Page
Report of Independent Auditors on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance With *Government Auditing Standards*	1
Report of Independent Auditors on Compliance for Each Major Federal Program and Report on Internal Control over Compliance in Accordance with the *Uniform Guidance* and the State of Texas *Uniform Grant Management Standards*	3
Schedule of Findings and Questioned Costs	6
Schedule of Expenditures of Federal and State Awards	8
Notes to Schedule of Expenditures of Federal and State Awards	11
Summary Schedule of Prior Audit Findings	12
Corrective Action Plan	13

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

REPORT OF INDEPENDENT AUDITORS ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

The Honorable County Judge and
Commissioners Court
Jefferson County, Texas

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of Jefferson County, Texas (the "County"), as of and for the year ended September 30, 2018, and the related notes to the financial statements, which collectively comprise County's basic financial statements, and have issued our report thereon dated March 8, 2018.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered County's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of County's internal control. Accordingly, we do not express an opinion on the effectiveness of County's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of County's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The Honorable County Judge and
Commissioners Court

Compliance and Other Matters

As part of obtaining reasonable assurance about whether County's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of County's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering County's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Whitley Penn LLP

Houston, Texas
March 8, 2019

whitleypenn

Houston Office
3737 Buffalo Speedway
Suite 1600
Houston, Texas 77098
713.621.1515 Main

whitleypenn.com

REPORT OF INDEPENDENT AUDITORS ON COMPLIANCE FOR EACH MAJOR FEDERAL AND STATE PROGRAM AND REPORT ON INTERNAL CONTROL OVER COMPLIANCE REQUIRED BY THE *UNIFORM GUIDANCE* AND THE STATE OF TEXAS *UNIFORM GRANT MANAGEMENT STANDARDS*

The Honorable County Judge and
Commissioners Court
Jefferson County, Texas

Report on Compliance for Each Major Federal and State Program

We have audited Jefferson County, Texas' (the "County") compliance with the types of compliance requirements described in the *OMB Compliance Supplement* and the *State of Texas Uniform Grant Management Standards* that could have a direct and material effect on each of County's major federal and state programs for the year ended September 30, 2018. County's major federal and state programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with federal and state statutes, regulations and the terms and conditions of its federal and state awards applicable to its federal and state programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of County's major federal and state programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance), and the *State of Texas Uniform Grant Management Standards.* Those standards, the Uniform Guidance and the *State of Texas Uniform Grant Management Standards* require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal or state program occurred. An audit includes examining, on a test basis, evidence about County's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal and state program. However, our audit does not provide a legal determination of County's compliance.

Opinion on Each Major Federal and State Program

In our opinion, County complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal and state programs for the year ended September 30, 2018.

Report on Internal Control Over Compliance

Management of County is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered County's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal and state program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal and state program and to test and report on internal control over compliance in accordance with the Uniform Guidance and the *State of Texas Uniform Grant Management Standards*, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of County's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal or state program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal or state program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal or state program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance and the *State of Texas Uniform Grant Management Standards*. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal and State Awards

We have audited the financial statements of the governmental activities, the business-type activities, each major fund, and the aggregate remaining fund information of the County as of and for the year ended September 30, 2018, and the related notes to the financial statements, which collectively comprise the County's basic financial statements. We have issued our report thereon dated March 8, 2019, which contained unmodified opinions on those financial statements. Our audit was performed for the purpose of forming our opinions on the financial statements that collectively comprise the basic financial statements.

The Honorable County Judge and
Commissioners Court

The accompanying Schedule of Expenditures of Federal and State Awards is presented for purposes of additional analysis as required by the *Uniform Guidance* and the State of Texas *Uniform Grant Management Standards* and is not a required part of the basic financial statements.

Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain other procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Expenditures of Federal and State Awards is fairly stated, in all material respects in relation to the basic financial statements taken as a whole.

Whitley Penn LLP

Houston, Texas
March 8, 2019

JEFFERSON COUNTY, TEXAS
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
For the Year Ended September 30, 2018

A. SUMMARY OF AUDIT RESULTS

I. Summary of Auditors' Results	
Financial Statements	
Type of auditors' report issued:	Unmodified
Internal control over financial reporting:	
Material weakness(es) identified?	No
Significant deficiencies identified that are not considered to be material weaknesses?	None reported
Noncompliance material to financial statements noted?	No
Federal Awards	
Internal control over major programs:	
Material weakness(es) identified?	No
Significant deficiencies identified that are not considered to be material weaknesses?	None reported
Type of auditors' report issued on compliance for major federal programs:	Unmodified
Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	None
Identification of major programs:	
Name of Federal Program or Cluster	**CFDA Numbers**
[2015/2016/2017] Port Security Grant FEMA Emergency Hurricane Harvey	97.116 97.036
1. Dollar Threshold Considered Between Type A and Type B Federal Programs	$750,000
2. Federal Single Audit - Auditee qualified as low-risk auditee?	Yes

JEFFERSON COUNTY, TEXAS
SCHEDULE OF FINDINGS AND QUESTIONED COSTS (continued)
For the Year Ended September 30, 2018

I. Summary of Auditors' Results (continued)	
State Awards:	
Internal control over major programs:	
Material weakness(es) identified?	No
Significant deficiencies identified that are not considered to be material weaknesses?	None reported
Type of auditors' report issued on compliance for major state programs:	Unmodified
Any audit findings disclosed that are required to be reported in accordance with *State of Texas Uniform Grant Management Standards* Section 510(a)?	None
Identification of major programs:	
Name of State Program or Cluster	**Grant/Contract Numbers**
FEMA Hurricane Harvey Supplement	PA-06-TX-4332
1. Dollar Threshold Considered Between Type A and Type B Programs	$300,000
2. State Single Audit - Auditee qualified as low-risk auditee?	Yes

II. Financial Statement Findings

There were no current year findings.

III. Federal and State Award Findings and Questioned Costs.

There were no current year findings or questioned costs.

JEFFERSON COUNTY, TEXAS
SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS
For the year ended September 30, 2018

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Pass-Through Entity Identifying Number	Federal Expenditures
FEDERAL AWARDS:			
U.S. Department of Agriculture			
Passed through the Texas Department of Agriculture:			
Summer Food Service Program	10.559	01602	$ 9,777
Total Passed through the Texas Department of Agriculture			9,777
Total U.S. Department of Agriculture			**9,777**
U.S. Department of Housing and Urban Development			
Passed through the Texas General Land Office:			
Community Development Block Grant/States program - IKE Round 1	14.228	DRS-010219	43,705
Total Passed through the Texas General Land Office			43,705
Passed through the Texas Department of Agriculture:			
Check Step Sewer Improvement, Phase #5	14.228	TDCP-7216231	194,155
Total Passed through the Texas Department of Agriculture			194,155
Total U.S. Department of Housing and Urban Development			**237,860**
U.S. Department of the Interior			
Passed through Bureau Ocean Energy Management Regulation and Enforcement:			
Gulf of Mexico Energy Security Act (GOMESA)	15.435	N/A	664,349
Total Passed through Bureau Ocean Energy Management Regulation and Enforcement			664,349
Total U.S. Department of the Interior			**664,349**
U.S. Department of Justice			
Passed through the City of Beaumont:			
Edward Byrne Memorial Formula Grant Program	16.579	2017DJBX0332	13,397
Total Passed through the City of Beaumont			13,397
Passed through the Office of the Governor, Criminal Justice Division:			
Crime Victim Assistance - Crime Victim's Clearinghouse	16.575	21032-07	1,403
Crime Victim Assistance - Crime Victim's Clearinghouse	16.575	21032-08	88,921
Violence Against Women Formula Grants	16.588	13466-20	70,687
Violence Against Women Formula Grants	16.588	13466-21	8,178
Paul Coverdell Forensic Sciences Improvement Grant Program	16.742	34195-01	29,854
Total Passed through the Office of the Governor, Criminal Justice Division			199,043
Direct Program:			
State Criminal Alien Assistance Program (SCAAP)	16.606	2019-AP-BX-0641	5,316
Total Direct Program			5,316
Total U.S. Department of Justice			**217,756**
U.S. Department of Transportation			
Passed through Federal Aviation Administration:			
Design and Construction of Rehabilitation of Taxiway Delta (Phase III), Design Taxiway Delta (Phase IV), and Replacement of Rotating Beacon	20.106	3-48-0018-032-2016	141,983
Rehabilitate Taxiway Delta (Phase IV)	20.106	3-48-0018-033-2017	1,148,845
Total Passed through Federal Aviation Administration			1,290,828
Highway Safety Cluster			
Passed through Texas Department of Transportation:			
Selective Traffic Enforcement Program - Impaired Driver Mobilization	20.601	2018-Jefferson-S-IYG-0054	28,211
Violent Offender Task Force	20.601	25302 - TFO	5,194
Total Passed through Texas Department of Transportation			33,405
Direct Programs:			
Organized Crime Drug Enforcement Task Force	20.601	SW-TXE-0345	25,000
ATF Overtime Funding	20.601	N/A	12,222
Total Direct Programs			37,222

JEFFERSON COUNTY, TEXAS

SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS (continued)

For the year ended September 30, 2018

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Pass-Through Entity Identifying Number	Federal Expenditures
FEDERAL AWARDS (continued):			
Total U.S. Department of Transportation			**1,361,455**
U.S. Department of Health and Human Services			
Passed through Texas Department of Family & Protective Services:			
Foster Care - Title IV-E Child Welfare Services	93.658	23939002	21,561
Foster Care - Title IV-E Legal Services	93.658	23939003	50,073
Total Passed through Texas Department of Family & Protective Services			71,634
Total U.S. Department of Health and Human Services			**71,634**
U.S. Department of Homeland Security			
Passed through the Texas Division of Emergency Management:			
Emergency Management Performance Grant	97.042	18TX-EMPG-0389	36,065
FEMA Emergency Hurricane Harvey	97.036	FEMA-4332-DR-Hurricane Harvey	5,697,020
Total Passed through the Texas Division of Emergency Management			5,733,085
Direct Programs:			
2015 Port Security Grant	97.116	EMW2015PU00143	235,798
2016 Port Security Grant	97.116	EMW2016PU00351	195,864
2017 Port Security Grant	97.116	EMW2017PU00103	217,199
Total Direct Programs			648,861
Passed through the Office of the Governor, Criminal Justice Divison			
Rifle-Resistant Body Armor Grant	97.067	34418-01	20,298
Total Passed through the Office of the Governor, Criminal Justice Divison			20,298
Total U.S. Department of Homeland Security			**6,402,244**
General Services Administration			
Donation of Federal Surplus Personal Property	39.003	N/A	7,076
Total General Services Administration			**7,076**
Total Expenditures of Federal Awards			**$ 8,972,151**

JEFFERSON COUNTY, TEXAS

SCHEDULE OF EXPENDITURES OF FEDERAL AND STATE AWARDS (continued)

For the year ended September 30, 2018

State Grantor/Pass-Through Grantor/Program Title	Grantor or Pass-Through Entity Identifying Number	State Expenditures
STATE AWARDS:		
Texas Department of Motor Vehicles		
Motor Vehicle Salvage/Theft Reduction Program	308-18-1230100	78,476
Motor Vehicle Salvage/Theft Reduction Program	608-19-1230100	$ 5,934
Total Texas Department of Motor Vehicles		**84,410**
Texas Department of Transportation		
Routine Airport Maintenance Grant	M1720BMPT	50,000
Total Department of Transportation		**50,000**
Texas Department of Criminal Justice		
Family Treatment Drug Court	1869012	35,142
Family Treatment Drug Court	1869013	2,890
Drug Court	1604516	60,208
Drug Court	1604517	1,336
Total Department of Criminal Justice		**99,576**
Texas Indigent Defense Commission		
Indigent Defense Formula Grant FY 18	N/A	192,421
Total Indigent Defense Commission		**192,421**
Texas Commission on Law Enforcement		
Law Enforcement Officer Standards and Education	N/A	29,768
Total Texas Commission on Law Enforcement		**29,768**
Texas Attorney General's Office		
Crime Victims Compensation Fund - Sexual Assault Exam	N/A	9,967
Total Texas Attorney General's Office		**9,967**
Office of the Governor, Emergency Management Division		
Solid Waste Disposal Fees - Hurricane Harvey	PA-06-TX-4332	325,000
Total Office of the Governor, Emergency Management Division		**325,000**
Total Expenditures of State Awards		**$ 791,142**
Total Expenditures of Federal and State Awards		**$ 9,763,293**

JEFFERSON COUNTY, TEXAS
NOTES TO SCHEDULES OF EXPENDITURES OF FEDERAL AND STATE AWARDS
For the Year Ended September 30, 2018

1. Basis of Presentation

The accompanying schedule of expenditures of federal and state awards (the "Schedules") includes the federal and state grant activity of County under programs of the federal and state government for the year ended September 30, 2018. The information in these Schedules is presented in accordance with the requirements of Office of Management and Budget (OMB) Uniform Guidance and the *State of Texas Uniform Grant Management Standards*. Because these Schedules present only a selected portion of the operations of County, they are not intended to and do not present the financial position and changes in net position of County.

2. Summary of Significant Accounting Policies

County accounts for all federal and state awards under programs of the federal and state governments in special revenue funds and capital project funds. These programs are accounted for using a current financial resources measurement focus. With this measurement focus, only current assets and current liabilities are generally included on the balance sheet. Operating statements of these funds present increases (i.e. revenues and other financing sources) and decreases (i.e. expenditures and other financing uses) in net current assets.

Expenditures reported on this schedule are reported on the modified accrual basis of accounting. Such expenditures are recognized following the cost principles contained in *Title 2 U.S. Code of Federal Regulations Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirement for Federal Awards (Uniform Guidance).* This basis of accounting recognizes revenues in the accounting period in which they become susceptible to accrual, i.e. both measurable and available, and expenditures in the accounting period in which the liability is incurred, if measurable, except for certain compensated absences and claims and judgments, which are recognized when the obligations are expected to be liquidated with expendable available financial resources.

Federal and state grant funds for governmental funds are considered to be earned to the extent of expenditures made under the provisions of the grant. When such funds are advanced to County, they are recorded as unearned revenues until earned. Otherwise, federal and state grant funds are received on a reimbursement basis from the respective federal or state program agencies. Generally, unused balances are returned to the grantor at the close of specified project periods. County has elected not to use the 10 percent de minimis indirect cost rate allowed under the *Uniform Guidance*.

JEFFERSON COUNTY, TEXAS
SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS
For the Year Ended September 30, 2018

Federal regulations, Title 2 U.S. Code of Federal Regulations Section 200.511 states, "The auditee is responsible for follow-up and corrective action on all audit findings. As part of this responsibility, the auditee must prepare a summary schedule of prior audit findings." The summary schedule of prior audit findings must report the status of the following:

- All audit findings included in the prior audit's schedule of findings and questioned costs and
- All audit findings reported in the prior audit's summary schedule of prior audit findings except audit findings listed as corrected.

I. Prior Audit Findings

None Noted

JEFFERSON COUNTY, TEXAS
CORRECTIVE ACTION PLAN
For the Year Ended September 30, 2018

Federal regulations, Title 2 U.S. Code of Federal Regulations §200.511 states, "At the completion of the audit, the auditee must prepare, in a document separate from the auditor's findings described in §200.516 Audit findings, a corrective action plan to address each audit finding included in the current year auditor's reports."

I. Corrective Action Plan

Not Applicable

JEFFERSON COUNTY, TEXAS

FINANCIAL & OPERATING STATEMENTS - COUNTY FUNDS ONLY

For the Three Months Ending December 31, 2018

Patrick Swain - County Auditor

PATRICK SWAIN
COUNTY AUDITOR
(409) 835-8500

1149 PEARL ST. - 7TH FLOOR
BEAUMONT, TEXAS 77701

March 1, 2019

Honorable Commissioners Court:
Judge Jeff R. Branick
Commissioner Eddie Arnold
Commissioner Brent Weaver
Commissioner Michael "Shane" Sinegal
Commissioner Everette "Bo" Alfred

Gentlemen:

In compliance with Section 114.023 of the Local Government Code, I herewith present the monthly report of the financial condition of Jefferson County as of December 31, 2018 together with the results of operations of the budget for the third period then ended.

Revenue:

Total budgeted revenue collected for the three months ending December 31, 2018 is $22,136,566. Budgeted Revenues are $123,459,183 leaving $101,322,617 in revenue to be collected in order to meet our budgetary revenue goals. Highlights of revenues are as follows:

Property Taxes:

Property tax collections are $15,362,929 for the first three months of the year. This amount represents 18.27% of the budgeted amount of $84,107,182.

Sales Taxes:

Twelve percent of budgeted revenue for sales taxes has been collected. Sales Tax revenue is budgeted to be $24,650,000.

Licenses & Permits:

Seventeen percent of budgeted revenue from Licenses & Permits has been collected. Licenses & Permits are budgeted to be $420,850 for the year.

Intergovernmental:

Twelve percent of Intergovernmental Revenue has been collected. Intergovernmental Revenue is budgeted to be $1,238,611.

Fees:

Twenty-five percent of the budgeted revenue for Fees has been collected. Revenue from Fees is budgeted to be $10,873,040 for the year.

Fines and Forfeitures:

Sixteen percent of Fines and Forfeitures have been collected. Revenues from Fines and Forfeitures are budgeted to be $1,750,000.

Interest:

Revenues from Interest have exceeded the budgeted amount of $392,500 by $135,930.

Other Revenues:

Five percent of Other Revenues have been collected. Revenues from Other Revenues are budgeted to be $27,000 for the year.

Expenditures:

Overall for the County's budgeted funds, twenty-six percent of the expenditures have been spent.

Page Three

Expenditures are budgeted to be $131,743,632, which includes General Funds and debt service funds, excluding budgeted transfers of $4,612,656 for the fiscal year ending September 30, 2019.

Please call me if you have any questions on the enclosed report.

Sincerely,

Patrick Swain
County Auditor

JEFFERSON COUNTY, TEXAS
FINANCIAL & OPERATING
STATEMENTS - COUNTY FUNDS ONLY
FOR THE THREE MONTHS ENDING DECEMBER 31, 2018
TABLE OF CONTENTS

	PAGE
Consolidated Balance Sheet	1
Statement of Changes in Fund Balances	2
Statement of Revenues by Category - Compared with Budget Allocation	3
Statement of Revenues - Compared with Budget Allocation	4-5
Statement of Expenditures - Compared with Budget Allocation – 25% Budget Expended	6
Statement of Expenditures - Compared with Budget Allocation	7-8
Statement of Bonded Indebtedness	9
Statement of Transfers In and Out	10
Statement of Comp Time Liability	11-12

Jefferson County, Texas
Consolidated Balance Sheet
For the Three Months Ending December 31, 2018

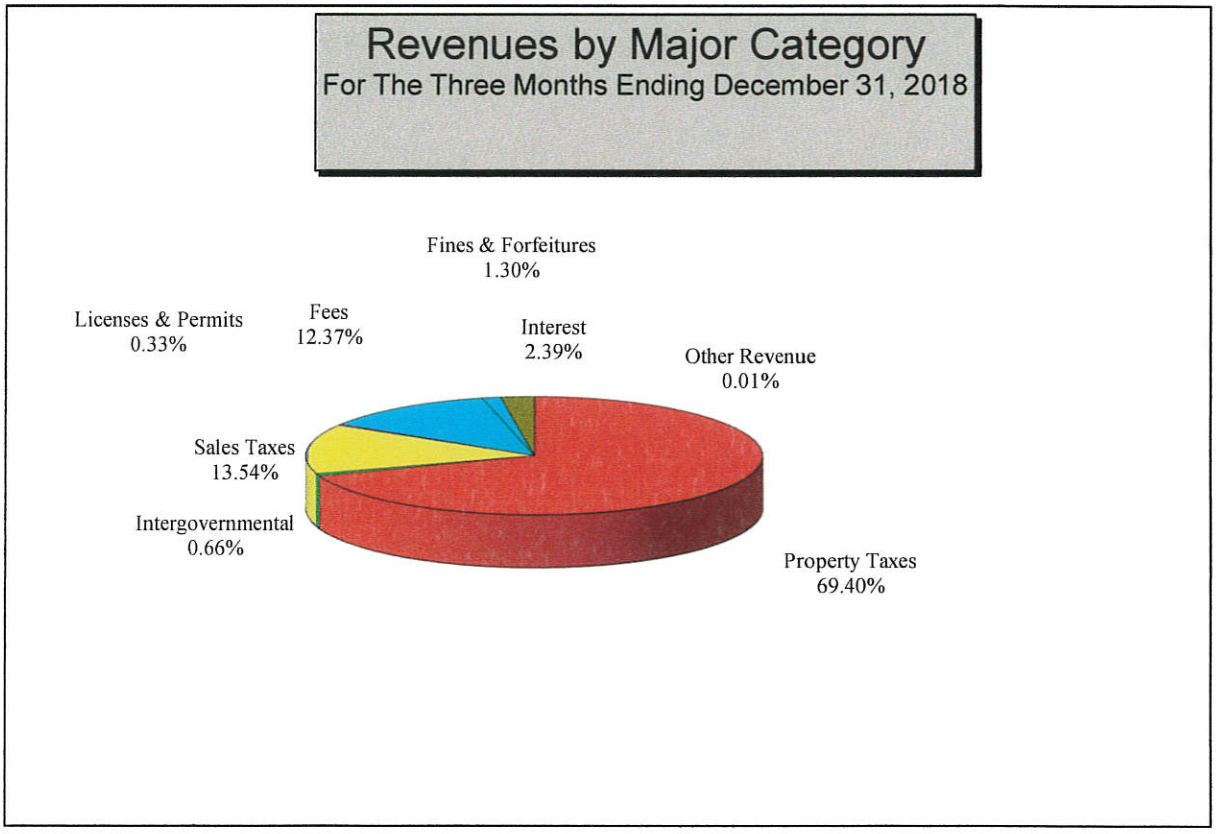
	General Funds	Special Revenue Funds	Capital Project Funds	Debt Service Funds	Enterprise Funds	Internal Service Funds	Total
ASSETS							
Cash and Cash Equivalents	$ 43,897,747	15,850,441	5,278,079	1,359,586	(384,693)	(4,612,443)	$ 61,388,717
Receivables & Prepaids	5,918,921	57,697	-	117,922	71,257	-	6,165,797
Intergovernmental Receivables	3,794,712	-	-	-	-	-	3,794,712
Due From Other Funds	150,000	-	-	-	-	-	150,000
Inventory	549,456	63,288	-	-	145,733	-	758,477
Other Assets	-	-	-	-	80,077,482	-	80,077,482
Total Assets	$ 54,310,836	$ 15,971,426	$ 5,278,079	$ 1,477,508	$ 79,909,779	$ (4,612,443)	$ 152,335,185
LIABILITIES AND FUND BALANCE/EQUITY							
Payables	$ 4,450,656	631,034	-	-	984,369	1,806,043	$ 7,872,102
Intergovernmental Payables	360	-	-	-	193	-	553
Due To Other Funds	-	-	-	-	-	-	-
Other Liabilities	9,284,640	663,048	-	104,141	721,318	-	10,773,147
Fund Balance/Equity	40,575,180	14,677,344	5,278,079	1,373,367	78,203,899	(6,418,486)	133,689,383
Total Liabilities and Fund Balance/Equity	$ 54,310,836	$ 15,971,426	$ 5,278,079	$ 1,477,508	$ 79,909,779	$ (4,612,443)	$ 152,335,185

Jefferson County, Texas
Statement of Changes in Fund Balances
For The Three Months Ending December 31, 2018

	10/01/2018	Three Months Ending December 31, 2018				12/31/2018
	Fund Balance	Receipts	Disbursements	Transfers In(/Out)	Prior Period Adjustment	Fund Balance
Jury Fund	$ 320,274	$ 53,491	$ 115,063	$ -	$ -	$ 258,702
Road & Bridge Pct. 1	3,557,291	271,695	439,896	-	-	3,389,090
Road & Bridge Pct. 2	1,109,909	252,581	772,969	-	-	589,521
Road & Bridge Pct. 3	741,566	232,782	443,552	-	-	530,796
Road & Bridge Pct. 4	2,541,421	302,546	348,594	-	-	2,495,373
Engineering Fund	130,515	163,054	255,482	-	-	38,087
Parks & Recreation	108,959	26,857	17,421	-	-	118,395
General Fund	36,597,298	19,674,735	26,472,883	(474,259)	-	29,324,891
Mosquito Control Fund	583,222	348,634	563,263	-	-	368,593
Tobacco Settlement Fund	3,605,636	6,096	150,000	-	-	3,461,732
Total General Funds	49,296,091	21,332,471	29,579,123	(474,259)	-	40,575,180
Total Special Revenue Funds	15,888,402	3,130,041	4,414,490	73,391	-	14,677,344
Total Capital Project Funds	5,355,126	9,294	86,341	-	-	5,278,079
Total Debt Service Funds	571,837	804,095	2,565	-	-	1,373,367
Total Enterprise Funds	78,792,927	751,326	1,741,222	400,868	-	78,203,899
Total Internal Service Funds	(5,789,562)	5,600,929	6,229,853	-	-	(6,418,486)
Total Balances	$ 144,114,821	$ 31,628,156	$ 42,053,594	$ -	$ -	$ 133,689,383

Jefferson County Texas
Statement of Revenues by Category - Compared with Budget Allocation
For The Three Months Ending December 31, 2018

Category	Cumulative Actual	Annual Budget	Unrealized Balance	Percentage Unrealized
Property Taxes	$ 15,362,929	$ 84,107,182	$ 68,744,253	81.73%
Sales Taxes	2,997,978	24,650,000	21,652,022	87.84%
Licenses & Permits	71,673	420,850	349,177	82.97%
Intergovernmental	147,053	1,238,611	1,091,558	88.13%
Fees	2,739,224	10,873,040	8,133,816	74.81%
Fines & Forfeitures	287,830	1,750,000	1,462,170	83.55%
Interest	528,430	392,500	(135,930)	-34.63%
Other Revenue	1,449	27,000	25,551	94.63%
	$ 22,136,566	$ 123,459,183	$ 101,322,617	82.07%



Jefferson County, Texas

Statement of Revenues - Compared With Budget Allocation

For The Three Months Ending December 31, 2018

	October 2018 -December	Cumulative Total	Annual Budget	Unrealized Balance
Jury Fund				
Current Taxes	$ 21,880	$ 21,880	$ 126,936	$ 105,056
Delinquent Taxes	483	483	1,731	1,248
Jury Fees	10,796	10,796	50,000	39,204
Other Revenue	20,332	20,332	200,000	179,668
Road & Bridge Pct. 1				
Current Taxes	104,573	104,573	606,663	502,090
Delinquent Taxes	2,030	2,030	7,281	5,251
Intergovernmental Revenue	-	-	-	-
Auto Registration Fees	-	-	617,280	617,280
Road & Bridge Fees	119,634	119,634	559,410	439,776
Sales, Rentals & Services	-	-	-	-
Fines and Forfeitures	45,458	45,458	244,340	198,882
Road & Bridge Pct. 2				
Current Taxes	97,092	97,092	563,262	466,170
Delinquent Taxes	1,908	1,908	6,844	4,936
Intergovernmental Revenue	-	-	-	-
Auto Registration Fees	-	-	573,120	573,120
Road & Bridge Fees	111,076	111,076	519,390	408,314
Sales, Rentals & Services	300	300	-	(300)
Fines and Forfeitures	42,205	42,205	226,860	184,655
Road & Bridge Pct. 3				
Current Taxes	89,367	89,367	518,447	429,080
Delinquent Taxes	1,741	1,741	6,246	4,505
Intergovernmental Revenue	-	-	-	-
Auto Registration Fees	-	-	527,520	527,520
Road & Bridge Fees	102,238	102,238	478,065	375,827
Sales, Rentals & Services	588	588	-	(588)
Fines and Forfeitures	38,848	38,848	208,810	169,962
Road & Bridge Pct. 4				
Current Taxes	115,551	115,551	670,348	554,797
Delinquent Taxes	2,225	2,225	7,981	5,756
Intergovernmental Revenue	-	-	1,200	1,200
Auto Registration Fees	-	-	682,080	682,080
Road & Bridge Fees	132,193	132,193	618,135	485,942
Sales, Rentals & Services	2,348	2,348	-	(2,348)
Fines and Forfeitures	50,229	50,229	269,990	219,761
Other Revenue	-	-	-	-

Jefferson County, Texas

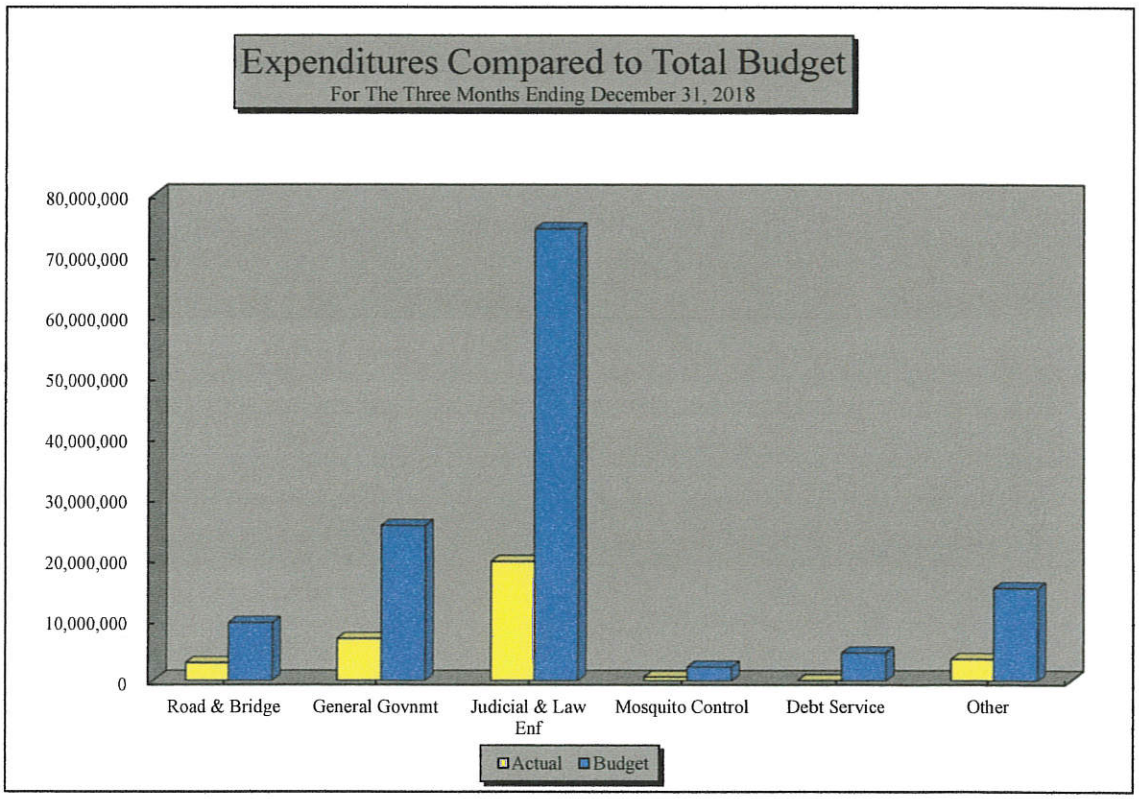
Statement of Revenues - Compared With Budget Allocation

For The Three Months Ending December 31, 2018

	October 2018 -December	Cumulative Total	Annual Budget	Unrealized Balance
Engineering Fund				
Current Taxes	$ 159,682	$ 159,682	$ 926,371	$ 766,689
Delinquent Taxes	3,172	3,172	11,378	8,206
Licenses and Permits	-	-	800	800
Sales, Rentals & Services	200	200	400	200
Parks & Recreation				
Current Taxes	9,975	9,975	57,868	47,893
Delinquent Taxes	164	164	588	424
Sales, Rentals & Services	16,718	16,718	65,175	48,457
General Fund				
Current Taxes	13,330,610	13,330,610	73,172,590	59,841,980
Delinquent Taxes	271,738	271,738	974,562	702,824
Sales Taxes	2,997,978	2,997,978	24,650,000	21,652,022
Other Taxes	1,449	1,449	27,000	25,551
Licenses and Permits	71,673	71,673	420,050	348,377
Intergovernmental Revenue	126,721	126,721	1,037,411	910,690
Fees of Office	953,371	953,371	4,008,165	3,054,794
Other Sales, Rentals & Svcs.	1,289,762	1,289,762	2,174,300	884,538
Fines & Forfeitures	111,090	111,090	800,000	688,910
Interest	520,343	520,343	360,000	(160,343)
Other Revenue	-	-	-	-
Mosquito Control Fund				
Current Taxes	341,385	341,385	1,980,492	1,639,107
Delinquent Taxes	7,249	7,249	26,000	18,751
Sales, Rentals & Services	-	-	-	-
Tobacco Settlement Fund				
Interest	6,096	6,096	22,500	16,404
Debt Service				
Current Taxes	780,540	780,540	4,384,205	3,603,665
Delinquent Taxes	21,564	21,564	57,389	35,825
Interest	1,991	1,991	10,000	8,009
Other, Sales, Rentals & Svcs.	-	-	-	-
Total	$ 22,136,566	$ 22,136,566	$ 123,459,183	$ 101,322,617

Jefferson County, Texas
Statement of Expenditures - Compared With Budget Allocation - 25% of Budget Expended
For The Three Months Ending December 31, 2018

	Cumulative Actual	Annual Budget	Unencumbered Balance	Percentage Unencumbered
Jury Fund	$ 124,416	$ 657,877	$ 533,461	81.09%
Road & Bridge Funds	2,658,863	8,310,549	5,651,686	68.01%
Engineering Fund	259,199	1,063,911	804,712	75.64%
Parks & Recreation Fund	22,289	213,945	191,656	89.58%
General Fund:				
General Government	6,929,853	25,590,527	18,660,674	72.92%
Judicial	4,763,657	19,880,321	15,116,664	76.04%
Law Enforcement	14,831,238	53,841,358	39,010,120	72.45%
Education	79,984	434,358	354,374	81.59%
Health & Welfare	1,444,072	8,719,033	7,274,961	83.44%
Maintenance	1,283,760	4,043,874	2,760,114	68.25%
Other	579,709	1,971,809	1,392,100	70.60%
Mosquito Control Fund	575,093	2,254,070	1,678,977	74.49%
Tobacco Settlement	150,000	150,000	-	-
Debt Service Funds	2,565	4,612,000	4,609,435	99.94%
	$ 33,704,698	$ 131,743,632	$ 98,038,934	74.42%



Jefferson County, Texas

Statement of Expenditures - Compared With Budget Allocation

For The Three Months Ending December 31, 2018

	October 2018 December	Encumbrances	Cumulative Total	Annual Budget	Unencumbered Balance
Jury Fund	$ 115,063	$ 9,353	$ 124,416	$ 657,877	$ 533,461
Road & Brdg Pct. 1	439,896	163,415	603,311	1,892,766	1,289,455
Road & Brdg Pct. 2	772,969	218,707	991,676	2,241,040	1,249,364
Road & Brdg Pct. 3	443,552	111,209	554,761	2,021,606	1,466,845
Road & Brdg Pct. 4	348,594	160,521	509,115	2,155,137	1,646,022
Engineering	255,482	3,717	259,199	1,063,911	804,712
Parks & Recreation	17,421	4,868	22,289	213,945	191,656
Tax Assessor/Coll.	1,104,057	10,906	1,114,963	4,174,897	3,059,934
Human Resources	116,799	3,280	120,079	460,967	340,888
County Auditor	409,892	-	409,892	1,573,079	1,163,187
County Clerk	595,459	62,987	658,446	2,444,618	1,786,172
County Judge	226,340	55	226,395	954,780	728,385
Risk Management	71,924	650	72,574	268,173	195,599
County Treasurer	104,594	611	105,205	408,461	303,256
Printing Department	36,059	17,803	53,862	176,944	123,082
Purchasing Department	143,006	18,443	161,449	585,517	424,068
General Services	2,909,343	115,761	3,025,104	11,295,480	8,270,376
MIS	553,581	69,138	622,719	2,262,912	1,640,193
Voter's Registration	24,956	845	25,801	127,337	101,536
Elections	312,927	20,437	333,364	857,362	523,998
District Attorney	1,756,524	17,374	1,773,898	7,096,198	5,322,300
District Clerk	528,753	14,411	543,164	2,040,426	1,497,262
Criminal Dist. Court	302,189	72	302,261	1,556,924	1,254,663
58th Dist. Court	61,218	465	61,683	316,083	254,400
60th Dist. Court	81,040	273	81,313	311,180	229,867
136th Dist. Court	79,685	-	79,685	328,942	249,257
172nd Dist. Court	77,306	263	77,569	322,037	244,468
252nd Dist. Court	225,346	521	225,867	1,171,756	945,889
279th Dist. Court	108,170	191	108,361	436,139	327,778
317th Dist. Court	202,388	700	203,088	823,557	620,469
J.P. Pct. 1 Pl 1	101,271	-	101,271	395,346	294,075
J.P. Pct. 1 Pl 2	93,908	765	94,673	395,465	300,792
J.P. Pct. 2	77,734	263	77,997	364,007	286,010
J.P. Pct. 4	97,797	-	97,797	394,148	296,351
J.P. Pct. 6	97,054	60	97,114	396,643	299,529
J.P. Pct. 7	95,646	-	95,646	398,847	303,201
J.P. Pct. 8	91,209	260	91,469	384,659	293,190
Cnty. Court at Law 1	127,515	-	127,515	499,418	371,903
Cnty. Court at Law 2	152,080	47	152,127	643,390	491,263
Cnty. Court at Law 3	196,806	-	196,806	751,572	554,766
Court Master	110,625	-	110,625	577,802	467,177

Jefferson County, Texas

Statement of Expenditures - Compared With Budget Allocation

For The Three Months Ending December 31, 2018

	October 2018 December	Encumbrances	Cumulative Total	Annual Budget	Unencumbered Balance
Dispute Resolution	$ 58,495	$ 5,233	$ 63,728	$ 275,782	$ 212,054
Alternative School	112,635	-	112,635	433,728	321,093
Comm. Supervision	1,073	-	1,073	13,232	12,159
Sheriff's Dept.	3,501,300	54,289	3,555,589	14,070,190	10,514,601
Crime Lab	340,876	15,689	356,565	1,426,809	1,070,244
Jail	7,231,241	1,656,444	8,887,685	29,636,166	20,748,481
Juvenile Probation	357,932	2,762	360,694	1,705,101	1,344,407
Juvenile Detention	459,011	133,864	592,875	2,255,823	1,662,948
Constable Pct. 1	214,437	3,861	218,298	814,752	596,454
Constable Pct. 2	118,837	-	118,837	493,896	375,059
Constable Pct. 4	115,168	-	115,168	477,706	362,538
Constable Pct. 6	151,691	200	151,891	586,116	434,225
Constable Pct. 7	113,429	-	113,429	478,379	364,950
Constable Pct. 8	122,301	-	122,301	479,460	357,159
County Morgue	119,937	4,261	124,198	970,000	845,802
Agriculture Ext.	76,379	3,605	79,984	434,358	354,374
Public Health # 1	303,846	1,088	304,934	1,347,416	1,042,482
Public Health # 2	289,477	1,110	290,587	1,327,304	1,036,717
Nurse Practitioner	89,020	329	89,349	326,697	237,348
Child Welfare	28,018	-	28,018	120,000	91,982
Env. Control	104,543	-	104,543	418,204	313,661
Ind. Medical Svcs.	256,661	318,119	574,780	4,926,459	4,351,679
Emergency Mgmt.	51,861	-	51,861	252,953	201,092
Beaumont Maintenance	459,088	492,064	951,152	2,971,815	2,020,663
Port Arthur Maint.	162,381	81,122	243,503	822,373	578,870
Mid-County Maint.	45,089	44,016	89,105	249,686	160,581
Service Center	231,967	264,753	496,720	1,139,973	643,253
Veteran Service	82,989	-	82,989	318,121	235,132
Mosquito Control	563,263	11,830	575,093	2,254,070	1,678,977
Tobacco Settlement	150,000	-	150,000	150,000	-
Debt Service Funds	2,565	-	2,565	4,612,000	4,609,435
Contingency	-	-	-	513,715	513,715
Total	$ 29,581,688	$ 4,123,010	$ 33,704,698	$ 131,743,632	$ 98,038,934

Jefferson County, Texas
Statement of Bonded Indebtedness
For The Three Months Ending December 31, 2018

Issue	Beginning Amount Outstanding	2018-2019 Requirements				2018-2019 Payments				Ending Amount Outstanding
		Principal	Interest	Fees	Total	Principal	Interest	Fees	Total	
2012 Refunding Bonds	$ 27,740,000	$ 3,450,000	$ 1,158,000	$ 4,000	$ 4,612,000	$ -	$ -	$ 2,565	$ 2,565	$ 27,740,000
	$ 27,740,000	$ 3,450,000	$ 1,158,000	$ 4,000	$ 4,612,000	$ -	$ -	$ 2,565	$ 2,565	$ 27,740,000

Jefferson County, Texas
Statement of Transfers In and Out
For The Three Months Ending December 31, 2018

	Fund	Transfers In		Transfers Out	
120	General Fund	-		400,868	(a)
120	General Fund	-		73,391	(b)
231	Women's Center	19,180	(a)	-	
233	Mentally Impaired Offender	1,830	(a)	-	
237	Community corrections Progeam	-		21,010	(a)
241	Sheriff Department Grants	1,883	(b)	-	
248	Crime Victim's Clearing	51,772	(b)	-	
248	Auto Theft Grant	5,604	(b)	-	
263	VAWA Fund	12,557	(b)	-	
265	Check Water & Sewer Phase 5	1,575	(b)	-	
550	SETEC Fund	400,868	(a)	-	
		$495,269		$495,269	

(a) Budgeted Transfer
(b) Grant Match

Jefferson County, Texas
Statement of Comp-Time Liability
For The First Quarter - December 31, 2018

Department	Cumulative Hours	Current Liability
Road & Bridge # 1	395.52	$ 9,690.72
Road & Bridge # 2	480.95	12,473.72
Road & Bridge # 3	482.95	11,619.86
Road & Bridge # 4	13.62	301.43
Engineering	79.51	2,387.84
Tax Assessor/Collector	366.79	7,994.71
Human Resources	16.25	354.00
County Auditor	101.01	3,025.84
County Clerk	370.10	7,809.47
County Judge	72.64	1,940.68
Treasurer	0.01	0.10
Printing	0.55	13.96
Purchasing Department	8.75	190.09
MIS	385.48	11,626.00
Voter Registration	41.00	1,127.22
Elections Department	273.72	6,493.84
District Attorney	0.08	1.77
District Clerk	624.14	12,769.37
Criminal District Court	65.00	1,725.25
58th District Court	1.63	43.13
172nd District Court	-	-
252nd District Court	50.37	2,011.18
279th District Court	0.01	0.13
Justice of Peace Pct. 1 Pl. 1	73.88	1,898.84
Justice of Peace Pct. 1 Pl. 2	-	-
Justice of Peace Pct. 2	-	-
Justice of Peace Pct. 4	0.01	0.13
Justice of Peace Pct. 6	3.62	89.18
Justice of Peace Pct. 7	50.63	1,300.60
Justice of Peace Pct. 8	-	-
County Court at Law #2	123.75	3,372.32
Court Master	11.88	250.38
Dispute Resolution Center	116.75	2,130.85
Alternative School	32.50	1,036.01
Sheriff's Department	12,248.30	417,579.14
Crime Lab	169.23	6,472.68
Correctional Facility	9,378.10	244,757.46
Juvenile Probation	175.91	3,630.26
Juvenile Detention Home	273.49	5,182.45
Constable Pct. 1	164.14	4,182.10

Jefferson County, Texas
Statement of Comp-Time Liability
For The First Quarter - December 31, 2018

Department	Cumulative Hours	Current Liability
Constable Pct. 2	69.50	$ 2,801.08
Constable Pct. 4	101.50	4,030.53
Constable Pct. 6	55.20	1,882.90
Constable Pct. 7	49.79	1,983.49
Constable Pct. 8	24.00	507.33
Public Health No. 1	89.56	1,662.32
Public Health No. 2	104.76	2,041.97
Environmental Control	-	-
Indigent Health	-	-
Emergency Management	12.50	378.88
Mosquito Control	642.63	15,513.93
Maintenance - Beaumont	203.88	3,844.31
Maintenance - Port Arthur	245.75	4,913.18
Maintenance- Mid County	28.00	576.80
Service Center	10.50	260.77
Veterans' Services Office	0.62	15.24
Airport	821.24	16,829.44
Visitors' Center	34.55	540.43
Grant A Basic Probation	18.50	359.96
Grant A Mental Health Service	19.61	551.94
Grant A Community Programs	71.20	1,367.90
Grant A Pre and Post Ajudication	2.00	31.93
Misdemeanor Pre-Trial	-	-
Community Supervision	399.04	9,365.06
Women's Center	700.62	10,353.38
Adult Surveillance Program	-	-
Community Corrections	24.01	415.71
High Need Program	6.87	144.36
TJPC Grant Contract M	11.50	210.57
Drug Diversion	57.00	1,016.94
Juvenile Probation and Detention	86.75	1,152.36
Mentally Impaired Offender	10.50	225.78
Auto Theft	30.75	1,147.69
Sheriff Mental Health Liason	11.25	321.65
ASAP	348.63	10,175.57
Marine Division	2,831.99	91,743.05
Courthouse Security	200.25	6,708.99
Total	33,976.72	$ 978,558.15
Comp-Time Liability at 12/31/17	33,318.23	$939,454.97

JEFFERSON COUNTY, TEXAS

FINANCIAL & OPERATING STATEMENTS - COUNTY FUNDS ONLY

For the Month Ending January 31, 2019

Patrick Swain - County Auditor

PATRICK SWAIN
COUNTY AUDITOR
(409) 835-8500

1149 PEARL ST. - 7TH FLOOR
BEAUMONT, TEXAS 77701

March 7, 2019

Honorable Commissioners Court:
Judge Jeff R. Branick
Commissioner Eddie Arnold
Commissioner Brent Weaver
Commissioner Michael "Shane" Sinegal
Commissioner Everette "Bo" Alfred

Gentlemen:

In compliance with Section 114.023 of the Local Government Code, I herewith present the monthly report of the financial condition of Jefferson County as of January 31, 2019 together with the results of operations of the budget for the fourth period then ended.

Revenue:

Total budgeted revenue collected for the four months ending January 31, 2019 is $78,167,061. Budgeted Revenues are $123,459,183 leaving $45,292,122 in revenue to be collected in order to meet our budgetary revenue goals. Highlights of revenues are as follows:

Property Taxes:

Property tax collections are $67,118,858 for the first four months of the year. This amount represents 79.8% of the budgeted amount of $84,107,182.

Sales Taxes:

Twenty-three percent of budgeted revenue for sales taxes has been collected. Sales Tax revenue is budgeted to be $24,650,000.

Licenses & Permits:

Twenty-five percent of budgeted revenue from Licenses & Permits has been collected. Licenses & Permits are budgeted to be $420,850 for the year.

Intergovernmental:

Thirteen percent of Intergovernmental Revenue has been collected. Intergovernmental Revenue is budgeted to be $1,238,611.

Fees:

Thirty-seven percent of the budgeted revenue for Fees has been collected. Revenue from Fees is budgeted to be $10,873,040 for the year.

Fines and Forfeitures:

Twenty-three percent of Fines and Forfeitures have been collected. Revenues from Fines and Forfeitures are budgeted to be $1,750,000.

Interest:

Revenues from Interest have exceeded the budgeted amount of $392,500 by $201,308.

Other Revenues:

Five percent of Other Revenues have been collected. Revenues from Other Revenues are budgeted to be $27,000 for the year.

Expenditures:

Overall for the County's budgeted funds, thirty-three percent of the expenditures have been spent.

Page Three

Expenditures are budgeted to be $131,743,632, which includes General Funds and debt service funds, excluding budgeted transfers of $4,612,656 for the fiscal year ending September 30, 2019.

Please call me if you have any questions on the enclosed report.

Sincerely,

Patrick Swain
County Auditor

JEFFERSON COUNTY, TEXAS
FINANCIAL & OPERATING
STATEMENTS - COUNTY FUNDS ONLY
FOR THE MONTH ENDING JANUARY 31, 2019
TABLE OF CONTENTS

	PAGE
Consolidated Balance Sheet	1
Statement of Changes in Fund Balances	2
Statement of Revenues by Category - Compared with Budget Allocation	3
Statement of Revenues - Compared with Budget Allocation	4-5
Statement of Expenditures - Compared with Budget Allocation – 33% Budget Expended	6
Statement of Expenditures - Compared with Budget Allocation	7-8
Statement of Bonded Indebtedness	9
Statement of Transfers In and Out	10

Jefferson County, Texas
Consolidated Balance Sheet
For the Month Ending January 31, 2019

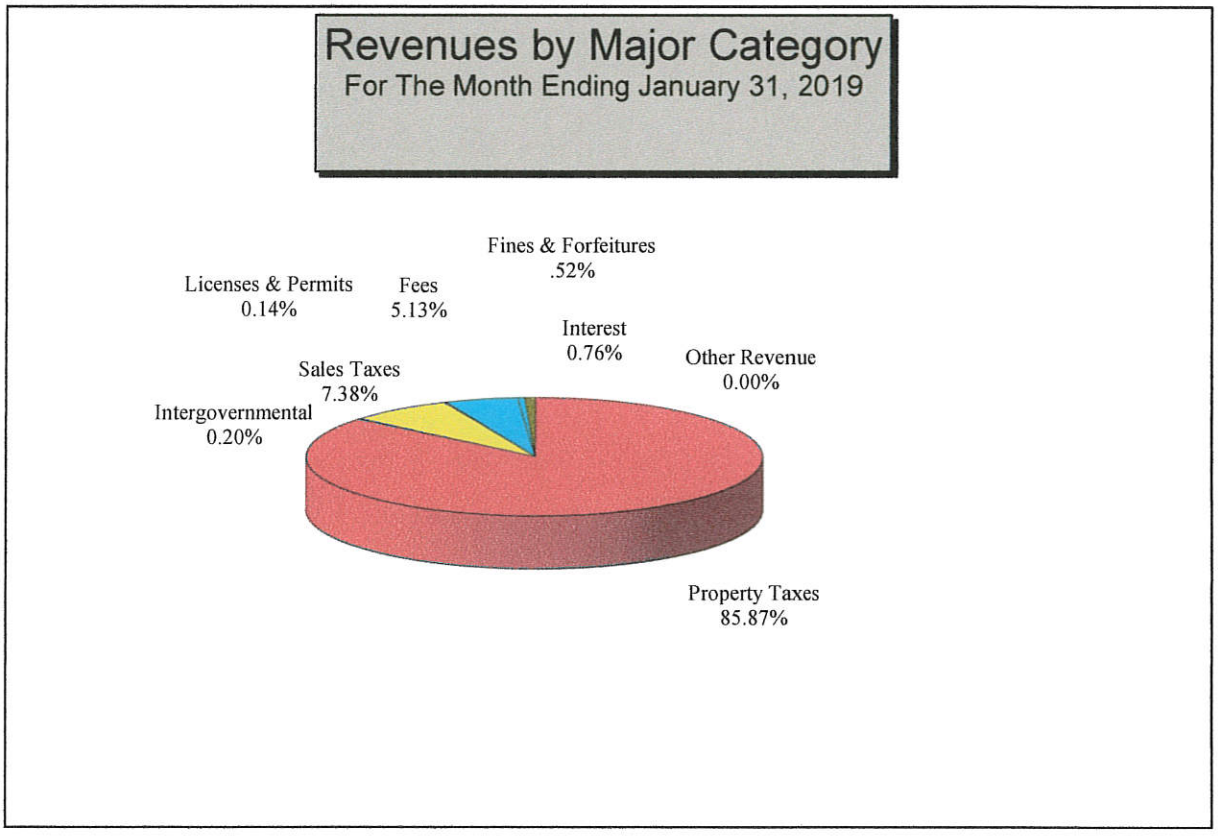
	General Funds	Special Revenue Funds	Capital Project Funds	Debt Service Funds	Enterprise Funds	Internal Service Funds	Total
ASSETS							
Cash and Cash Equivalents	$ 86,913,279	16,140,967	4,793,073	3,468,732	(338,119)	(4,484,262)	$ 106,493,670
Receivables & Prepaids	5,905,457	46,526	-	117,922	71,257	-	6,141,162
Intergovernmental Receivables	3,834,586	-	-	-	-	-	3,834,586
Due From Other Funds	150,000	-	-	-	-	-	150,000
Inventory	549,456	63,288	-	-	145,733	-	758,477
Other Assets	-	-	-	-	80,077,482	-	80,077,482
Total Assets	$ 97,352,778	$ 16,250,781	$ 4,793,073	$ 3,586,654	$ 79,956,353	$ (4,484,262)	$ 197,455,377
LIABILITIES AND FUND BALANCE/EQUITY							
Payables	$ 4,450,652	631,034	-	-	984,369	1,806,043	$ 7,872,098
Intergovernmental Payables	360	-	-	-	-	-	360
Other Liabilities	9,284,640	663,048	-	104,141	721,318	-	10,773,147
Fund Balance/Equity	83,617,126	14,956,699	4,793,073	3,482,513	78,250,666	(6,290,305)	178,809,772
Total Liabilities and Fund Balance/Equity	$ 97,352,778	$ 16,250,781	$ 4,793,073	$ 3,586,654	$ 79,956,353	$ (4,484,262)	$ 197,455,377

Jefferson County, Texas
Statement of Changes in Fund Balances
For The Month Ending January 31, 2019

	12/31/2018	Month Ending January 31, 2019				1/31/2019
	Fund Balance	Receipts	Disbursements	Transfers In(/Out)	Prior Period Adjustment	Fund Balance
Jury Fund	$ 258,702	$ 78,804	$ 26,311	$ -	$ -	$ 311,195
Road & Bridge Pct. 1	3,389,090	495,050	102,709	-	-	3,781,431
Road & Bridge Pct. 2	589,521	460,475	115,185	-	-	934,811
Road & Bridge Pct. 3	530,796	423,066	128,724	-	-	825,138
Road & Bridge Pct. 4	2,495,373	546,066	110,333	-	-	2,931,106
Engineering Fund	38,087	549,068	77,787	-	-	509,368
Parks & Recreation	118,395	37,886	6,892	-	-	149,389
General Fund	29,324,891	49,575,425	9,533,012	(30,435)	-	69,336,869
Mosquito Control Fund	368,593	1,174,011	169,015	-	-	1,373,589
Tobacco Settlement Fund	3,461,732	2,498	-	-	-	3,464,230
Total General Funds	40,575,180	53,342,349	10,269,968	(30,435)	-	83,617,126
Total Special Revenue Funds	14,677,344	1,446,305	1,166,950	-	-	14,956,699
Total Capital Project Funds	5,278,079	3,414	488,420	-	-	4,793,073
Total Debt Service Funds	1,373,367	2,688,146	579,000	-	-	3,482,513
Total Enterprise Funds	78,203,899	441,781	425,449	30,435	-	78,250,666
Total Internal Service Funds	(6,418,486)	2,244,306	2,116,125	-	-	(6,290,305)
Total Balances	$ 133,689,383	$ 60,166,301	$ 15,045,912	$ -	$ -	$ 178,809,772

Jefferson County Texas
Statement of Revenues by Category - Compared with Budget Allocation
For The Month Ending January 31, 2019

Category	Cumulative Actual	Annual Budget	Unrealized Balance	Percentage Unrealized
Property Taxes	$ 67,118,858	$ 84,107,182	$ 16,988,324	20.20%
Sales Taxes	5,768,436	24,650,000	18,881,564	76.60%
Licenses & Permits	107,100	420,850	313,750	74.55%
Intergovernmental	155,328	1,238,611	1,083,283	87.46%
Fees	4,013,717	10,873,040	6,859,323	63.09%
Fines & Forfeitures	408,365	1,750,000	1,341,635	76.66%
Interest	593,808	392,500	(201,308)	-51.29%
Other Revenue	1,449	27,000	25,551	94.63%
	$ 78,167,061	$ 123,459,183	$ 45,292,122	36.69%



Jefferson County, Texas

Statement of Revenues - Compared With Budget Allocation

For The Month Ending January 31, 2019

	October 2018 -December	January	Cumulative Total	Annual Budget	Unrealized Balance
Jury Fund					
Current Taxes	$ 21,880	$ 75,093	$ 96,973	$ 126,936	$ 29,963
Delinquent Taxes	483	159	642	1,731	1,089
Jury Fees	10,796	3,552	14,348	50,000	35,652
Other Revenue	20,332	-	20,332	200,000	179,668
Road & Bridge Pct. 1					
Current Taxes	104,573	358,888	463,461	606,663	143,202
Delinquent Taxes	2,030	671	2,701	7,281	4,580
Intergovernmental Revenue	-	-	-	-	-
Auto Registration Fees	-	79,803	79,803	617,280	537,477
Road & Bridge Fees	119,634	37,530	157,164	559,410	402,246
Sales, Rentals & Services	-	-	-	-	-
Fines and Forfeitures	45,458	18,158	63,616	244,340	180,724
Road & Bridge Pct. 2					
Current Taxes	97,092	333,213	430,305	563,262	132,957
Delinquent Taxes	1,908	631	2,539	6,844	4,305
Intergovernmental Revenue	-	-	-	-	-
Auto Registration Fees	-	74,927	74,927	573,120	498,193
Road & Bridge Fees	111,076	34,845	145,921	519,390	373,469
Sales, Rentals & Services	300	-	300	-	(300)
Fines and Forfeitures	42,205	16,859	59,064	226,860	167,796
Road & Bridge Pct. 3					
Current Taxes	89,367	306,702	396,069	518,447	122,378
Delinquent Taxes	1,741	575	2,316	6,246	3,930
Intergovernmental Revenue	-	-	-	-	-
Auto Registration Fees	-	68,199	68,199	527,520	459,321
Road & Bridge Fees	102,238	32,072	134,310	478,065	343,755
Sales, Rentals & Services	588	-	588	-	(588)
Fines and Forfeitures	38,848	15,518	54,366	208,810	154,444
Road & Bridge Pct. 4					
Current Taxes	115,551	396,563	512,114	670,348	158,234
Delinquent Taxes	2,225	735	2,960	7,981	5,021
Intergovernmental Revenue	-	-	-	1,200	1,200
Auto Registration Fees	-	87,347	87,347	682,080	594,733
Road & Bridge Fees	132,193	41,469	173,662	618,135	444,473
Sales, Rentals & Services	2,348	(112)	2,236	-	(2,236)
Fines and Forfeitures	50,229	20,064	70,293	269,990	199,697
Other Revenue	-	-	-	-	-

Jefferson County, Texas

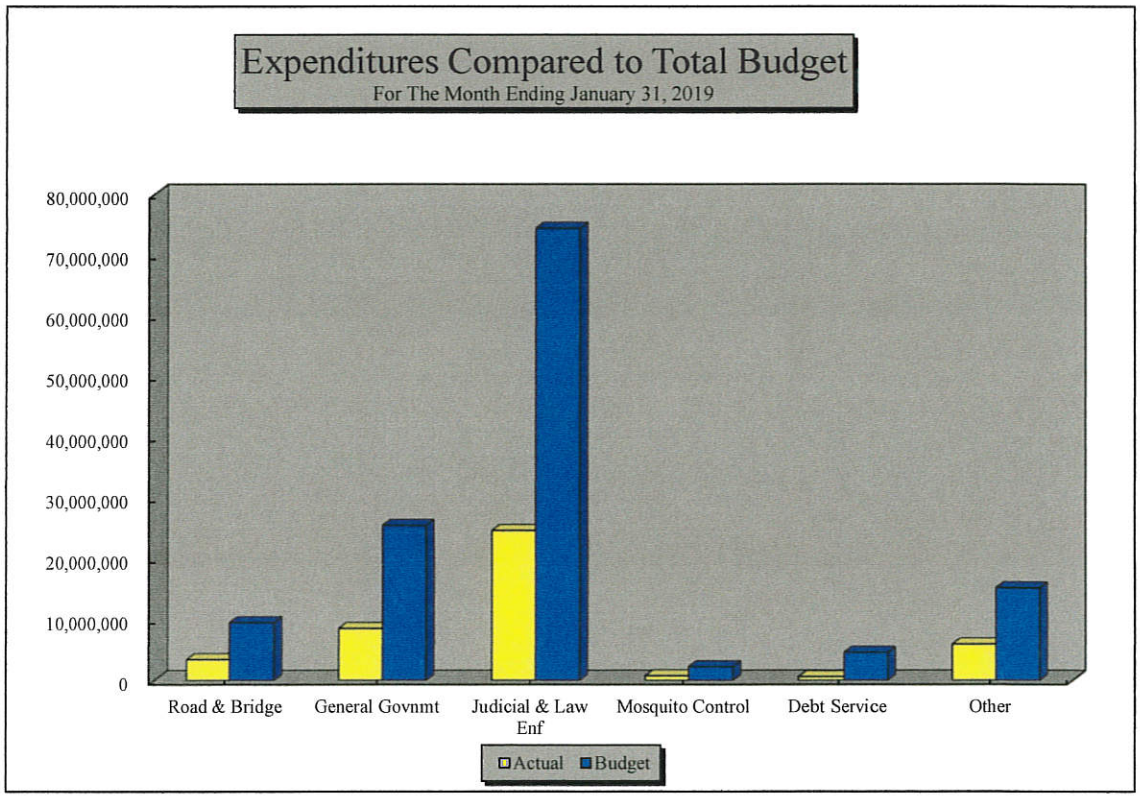
Statement of Revenues - Compared With Budget Allocation

For The Month Ending January 31, 2019

	October 2018 -December	January	Cumulative Total	Annual Budget	Unrealized Balance
Engineering Fund					
Current Taxes	$ 159,682	$ 548,020	$ 707,702	$ 926,371	$ 218,669
Delinquent Taxes	3,172	1,048	4,220	11,378	7,158
Licenses and Permits	-	-	-	800	800
Sales, Rentals & Services	200	-	200	400	200
Parks & Recreation					
Current Taxes	9,975	34,233	44,208	57,868	13,660
Delinquent Taxes	164	54	218	588	370
Sales, Rentals & Services	16,718	3,599	20,317	65,175	44,858
General Fund					
Current Taxes	13,330,610	45,749,896	59,080,506	73,172,590	14,092,084
Delinquent Taxes	271,738	89,792	361,530	974,562	613,032
Sales Taxes	2,997,978	2,770,458	5,768,436	24,650,000	18,881,564
Other Taxes	1,449	-	1,449	27,000	25,551
Licenses and Permits	71,673	35,427	107,100	420,050	312,950
Intergovernmental Revenue	126,721	8,275	134,996	1,037,411	902,415
Fees of Office	953,371	278,450	1,231,821	4,008,165	2,776,344
Other Sales, Rentals & Svcs.	1,289,762	532,812	1,822,574	2,174,300	351,726
Fines & Forfeitures	111,090	49,936	161,026	800,000	638,974
Interest	520,343	60,379	580,722	360,000	(220,722)
Other Revenue	-	-	-	-	-
Mosquito Control Fund					
Current Taxes	341,385	1,171,615	1,513,000	1,980,492	467,492
Delinquent Taxes	7,249	2,396	9,645	26,000	16,355
Sales, Rentals & Services	-	-	-	-	-
Tobacco Settlement Fund					
Interest	6,096	2,498	8,594	22,500	13,906
Debt Service					
Current Taxes	780,540	2,678,769	3,459,309	4,384,205	924,896
Delinquent Taxes	21,564	6,876	28,440	57,389	28,949
Interest	1,991	2,501	4,492	10,000	5,508
Other, Sales, Rentals & Svcs.	-	-	-	-	-
Total	$ 22,136,566	$ 56,030,495	$ 78,167,061	$ 123,459,183	$ 45,292,122

Jefferson County, Texas
Statement of Expenditures - Compared With Budget Allocation - 33% of Budget Expended
For The Month Ending January 31, 2019

	Cumulative Actual	Annual Budget	Unencumbered Balance	Percentage Unencumbered
Jury Fund	$ 150,021	$ 657,877	$ 507,856	77.20%
Road & Bridge Funds	3,092,874	8,310,549	5,217,675	62.78%
Engineering Fund	335,878	1,063,911	728,033	68.43%
Parks & Recreation Fund	32,848	213,945	181,097	84.65%
General Fund:				
General Government	8,579,749	25,590,527	17,010,778	66.47%
Judicial	6,205,607	19,880,321	13,674,714	68.79%
Law Enforcement	18,390,071	53,841,358	35,451,287	65.84%
Education	103,771	434,358	330,587	76.11%
Health & Welfare	3,576,580	8,719,033	5,142,453	58.98%
Maintenance	1,494,941	4,043,874	2,548,933	63.03%
Other	660,126	1,971,809	1,311,683	66.52%
Mosquito Control Fund	745,496	2,254,070	1,508,574	66.93%
Tobacco Settlement	150,000	150,000	-	0.00%
Debt Service Funds	581,565	4,612,000	4,030,435	87.39%
	$ 44,099,527	$ 131,743,632	$ 87,644,105	66.53%



Jefferson County, Texas

Statement of Expenditures - Compared With Budget Allocation

For The Month Ending January 31, 2019

	October 2018 December	January	Encumbrances	Cumulative Total	Annual Budget	Unencumbered Balance
Jury Fund	$ 115,063	$ 26,311	$ 8,647	$ 150,021	$ 657,877	$ 507,856
Road & Brdg Pct. 1	439,896	102,709	150,322	692,927	1,892,766	1,199,839
Road & Brdg Pct. 2	772,969	115,185	214,593	1,102,747	2,241,040	1,138,293
Road & Brdg Pct. 3	443,552	128,724	110,627	682,903	2,021,606	1,338,703
Road & Brdg Pct. 4	348,594	110,333	155,370	614,297	2,155,137	1,540,840
Engineering	255,482	77,787	2,609	335,878	1,063,911	728,033
Parks & Recreation	17,421	6,892	8,535	32,848	213,945	181,097
Tax Assessor/Coll.	1,104,057	297,786	9,840	1,411,683	4,174,897	2,763,214
Human Resources	116,799	34,038	2,955	153,792	460,967	307,175
County Auditor	409,892	108,207	617	518,716	1,573,079	1,054,363
County Clerk	595,459	183,304	48,474	827,237	2,444,618	1,617,381
County Judge	226,340	69,000	1,026	296,366	954,780	658,414
Risk Management	71,924	20,955	-	92,879	268,173	175,294
County Treasurer	104,594	29,965	2,426	136,985	408,461	271,476
Printing Department	36,059	8,568	17,803	62,430	176,944	114,514
Purchasing Department	143,006	41,281	16,727	201,014	585,517	384,503
General Services	2,909,343	676,725	109,372	3,695,440	11,295,480	7,600,040
MIS	553,581	144,498	78,087	776,166	2,262,912	1,486,746
Voter's Registration	24,956	8,557	57	33,570	127,337	93,767
Elections	312,927	56,332	4,212	373,471	857,362	483,891
District Attorney	1,756,524	515,048	22,609	2,294,181	7,096,198	4,802,017
District Clerk	528,753	153,989	17,524	700,266	2,040,426	1,340,160
Criminal Dist. Court	302,189	114,216	3,462	419,867	1,556,924	1,137,057
58th Dist. Court	61,218	17,784	240	79,242	316,083	236,841
60th Dist. Court	81,040	24,155	428	105,623	311,180	205,557
136th Dist. Court	79,685	23,134	105	102,924	328,942	226,018
172nd Dist. Court	77,306	21,632	668	99,606	322,037	222,431
252nd Dist. Court	225,346	84,315	470	310,131	1,171,756	861,625
279th Dist. Court	108,170	31,770	-	139,940	436,139	296,199
317th Dist. Court	202,388	55,614	700	258,702	823,557	564,855
J.P. Pct. 1 Pl 1	101,271	30,172	356	131,799	395,346	263,547
J.P. Pct. 1 Pl 2	93,908	28,280	1,509	123,697	395,465	271,768
J.P. Pct. 2	77,734	22,762	175	100,671	364,007	263,336
J.P. Pct. 4	97,797	28,263	281	126,341	394,148	267,807
J.P. Pct. 6	97,054	27,972	75	125,101	396,643	271,542
J.P. Pct. 7	95,646	28,120	772	124,538	398,847	274,309
J.P. Pct. 8	91,209	26,253	713	118,175	384,659	266,484
Cnty. Court at Law 1	127,515	37,457	20	164,992	499,418	334,426
Cnty. Court at Law 2	152,080	43,313	47	195,440	643,390	447,950
Cnty. Court at Law 3	196,806	55,958	-	252,764	751,572	498,808
Court Master	110,625	40,364	271	151,260	577,802	426,542

Jefferson County, Texas

Statement of Expenditures - Compared With Budget Allocation

For The Month Ending January 31, 2019

	October 2018 December	January	Encumbrances	Cumulative Total	Annual Budget	Unencumbered Balance
Dispute Resolution	$ 58,495	$ 19,538	$ 2,314	$ 80,347	$ 275,782	$ 195,435
Alternative School	112,635	24,510	-	137,145	433,728	296,583
Comm. Supervision	1,073	358	-	1,431	13,232	11,801
Sheriff's Dept.	3,501,300	1,037,068	53,137	4,591,505	14,070,190	9,478,685
Crime Lab	340,876	90,617	21,924	453,417	1,426,809	973,392
Jail	7,231,241	2,148,781	1,357,447	10,737,469	29,636,166	18,898,697
Juvenile Probation	357,932	104,128	2,729	464,789	1,705,101	1,240,312
Juvenile Detention	459,011	152,919	114,381	726,311	2,255,823	1,529,512
Constable Pct. 1	214,437	64,112	5,252	283,801	814,752	530,951
Constable Pct. 2	118,837	34,465	1,181	154,483	493,896	339,413
Constable Pct. 4	115,168	33,491	424	149,083	477,706	328,623
Constable Pct. 6	151,691	43,747	1,267	196,705	586,116	389,411
Constable Pct. 7	113,429	34,106	-	147,535	478,379	330,844
Constable Pct. 8	122,301	35,381	90	157,772	479,460	321,688
County Morgue	119,937	68,633	55	188,625	970,000	781,375
Agriculture Ext.	76,379	23,894	3,498	103,771	434,358	330,587
Public Health # 1	303,846	93,726	18,850	416,422	1,347,416	930,994
Public Health # 2	289,477	100,488	3,554	393,519	1,327,304	933,785
Nurse Practitioner	89,020	24,327	8,247	121,594	326,697	205,103
Child Welfare	28,018	13,777	-	41,795	120,000	78,205
Env. Control	104,543	29,927	349	134,819	418,204	283,385
Ind. Medical Svcs.	256,661	1,881,545	263,425	2,401,631	4,926,459	2,524,828
Emergency Mgmt.	51,861	14,939	-	66,800	252,953	186,153
Beaumont Maintenance	459,088	206,905	432,140	1,098,133	2,971,815	1,873,682
Port Arthur Maint.	162,381	59,988	72,920	295,289	822,373	527,084
Mid-County Maint.	45,089	18,059	38,371	101,519	249,686	148,167
Service Center	231,967	60,340	261,160	553,467	1,139,973	586,506
Veteran Service	82,989	23,456	214	106,659	318,121	211,462
Mosquito Control	563,263	169,015	13,218	745,496	2,254,070	1,508,574
Tobacco Settlement	150,000	-	-	150,000	150,000	-
Debt Service Funds	2,565	579,000	-	581,565	4,612,000	4,030,435
Contingency	-	-	-	-	513,715	513,715
Total	$ 29,581,688	$ 10,848,968	$ 3,668,871	$ 44,099,527	$ 131,743,632	$ 87,644,105

Jefferson County, Texas
Statement of Bonded Indebtedness
For The Month Ending January 31, 2019

Issue	Beginning Amount Outstanding	2018-2019 Requirements				2018-2019 Payments				Ending Amount Outstanding
		Principal	Interest	Fees	Total	Principal	Interest	Fees	Total	
2012 Refunding Bonds	$ 27,740,000	$ 3,450,000	$ 1,158,000	$ 4,000	$ 4,612,000	$ -	$ 579,000	$ 2,565	$ 581,565	$ 27,740,000
	$ 27,740,000	$ 3,450,000	$ 1,158,000	$ 4,000	$ 4,612,000	$ -	$ 579,000	$ 2,565	$ 581,565	$ 27,740,000

Jefferson County, Texas
Statement of Transfers In and Out
For The Month Ending January 31, 2019

Fund		Transfers In		Transfers Out	
120	General Fund	-		431,303	(a)
120	General Fund	-		73,391	(b)
231	Women's Center	19,180	(a)	-	
233	Mentally Impaired Offender	1,830	(a)	-	
237	Community corrections Progeam	-		21,010	(a)
241	Sheriff Department Grants	1,883	(b)	-	
248	Crime Victim's Clearing	51,772	(b)	-	
248	Auto Theft Grant	5,604	(b)	-	
263	VAWA Fund	12,557	(b)	-	
265	Check Water & Sewer Phase 5	1,575	(b)	-	
550	SETEC Fund	431,303	(a)	-	
		$525,704		$525,704	

(a) Budgeted Transfer
(b) Grant Match

PUBLIC DEFENDER CONTRACT
252nd DISTRICT COURT

CONTRACT AGREEMENT

This contract is agreed upon and entered into by the following parties: the 252nd District Court of Jefferson County, Texas ("Court") [appointing authority], Brittanie A. Holmes, ("Attorney") [contractor], and Jefferson County, Texas ("County") [contracting authority] for the purpose of providing legal representation and services to indigent defendants who appear before the Court.

In compliance with the Jefferson County Criminal District Courts Indigent Representation Plan ("Plan"), which is incorporated herein and expressly made a part hereof for all purposes, Attorney agrees to serve as a Contract Public Defender in the Court and to comply with all applicable Plan provisions.

Attorney certifies that he meets all the qualifications required to serve as a Contract Public Defender pursuant to the Plan.

Cases Covered: Attorney agrees to represent indigent defendants in all cases assigned to Attorney in the Court for all pre-trial matters which have not been assigned to indigent defendant trial counsel.

Compensation: Attorney agrees to accept $8750.00 per month to serve as Contract Public Defender. In addition, Attorney agrees to accept an additional compensation amount not to exceed $3000.00 annually to pay for required and reasonable Continuing Legal Education requirements, registrations, and travel expenses related thereto.

Investigators and Experts Compensation: Attorney may access investigator and expert services on a case by case basis. Attorney shall be reimbursed for reasonable and necessary expenses, including expenses for licensed investigators and mental health providers and other experts pursuant to Article 26.05, Texas Code of Criminal Procedure, upon showing of good cause. Prior Court approval for these expenses should be obtained whenever possible.

Term of Contract: This contract is in full force and effect on a **month-to-month basis** unless terminated by Attorney or by the Court. If this contract is terminated, Attorney will be relieved of all pending appointments and will not be required to continue representation in any case previously assigned.

Contract Termination: This contract may be terminated at-will by either Attorney or by the Court.

Independent Contractor: Attorney is not an employee of Jefferson County, but is an independent contractor who shall complete the requirements of this contract by Attorney's own means and methods of work, and in accordance with Attorney's professional legal judgment. In the course of representing any indigent criminal defendant, Attorney shall be in exclusive control of his professional legal judgment and shall freely and independently exercise same in the best interests of his client, and Attorney shall not be subject to the control of or supervision by the Court, unless otherwise specified in this contract. The indigent criminal defendant is the Attorney's client, not Jefferson County and not the Court. Attorney shall provide reasonably competent, zealous legal services to each indigent criminal defendant in accordance with Attorney's responsibilities under the Texas Disciplinary Rules of Professional Conduct and the Texas Code of Criminal Procedure.

Caseload/workload limitation: The maximum caseload allowed Attorney pursuant to their contract should not exceed 150 felony cases per year. The term "Case" referred to herein mean a single charge or set of charges concerning a defendant in one court in one proceeding.

Standards of Representation:

(a) Attorney shall provide all services required by Senate Bill 7 as passed by the 77th General Session of the Texas Legislature in 2001, as it amends the Texas Code of Criminal Procedure.

(b) Attorney shall ensure continuity of representation of each indigent criminal defendant unless relieved or replaced in accordance with Article 26.04(j)(2), Texas Code Criminal Procedure.

(c) Attorney shall not assign, subcontract, or delegate any part of the services to be provided by Attorney under this contract unless first obtaining the approval of the Court. Any substitution of attorneys under this provision shall be made from the approved indigent appointment list for the Jefferson County Criminal District Courts.

(d) Attorney must submit a monthly invoice to be approved by the Court for payment.

(e) Attorney must maintain at least the minimum qualifications and requirements listed in the Plan.

(f) Attorney agrees to indemnify and hold harmless Jefferson County from any and all claims arising from the delivery of professional services under this contract.

(g) Attorney shall maintain an office in Jefferson county and the ability to receive facsimile and telephone communications 24 hours a day, 7 days a week.

(h) Attorney is prohibited from accepting any payments from any indigent criminal defendant, or any third party, for legal services provided in an assigned case.

(i) Attorney is prohibited from releasing confidential attorney-client information or work product related to any case covered by this contract except as permitted by the Texas Disciplinary Rules of Professional Conduct.

Conflict: In the event of a conflict of interest between Attorney and any indigent criminal defendant, Attorney shall immediately present such evidence to the Court and, if allowed, be permitted to withdraw from further representation. Such withdrawal shall not affect the other terms of this contract.

Administration: The Court will provide oversight and monitoring to assure that Attorney performs in accordance with the terms of this contract.

Forum Selection With Regard to Disputes Between the Parties: Venue of any proceedings arising under or with regards to this contract shall be in a court of competent jurisdiction in Jefferson County, Texas.

Additional Terms and Conditions:

(a) The cases handled under this contract shall all be non-capital.

(b) A determination that Attorney has provided false information in the materials submitted to the Court in response to, or as required under, the terms of the Plan will be grounds for immediate cancellation of this contract by the Court.

(c) Falsification of any report, invoice, or other documentation submitted by Attorney will be grounds for immediate cancellation of this contract by the Court.

Contract Public Defender [contractor]

24064020
SBOT Number

3/8/19
Date

Approved and Accepted:

252nd District Court Judge
[appointing authority]

3/8/19
Date

County Judge,
Jefferson County, Texas
[contracting authority]

Date

pw Contract effective as of 2/1/19.

U. S. Department of Justice
United States Marshals Service

Modification of Intergovernmental Agreement

1. Agreement No.	2. Effective Date	3. Facility Code(s)	4. Modification No.	5. DUNS No.
78-01-0077	2-1-2019	6DH	12	010807-535

6. Issuing Federal Agency	7. Local Government
United States Marshals Service Prisoner Operations Division Intergovernmental Agreements Branch CG-3, Suite 3000 Washington, DC 20530-0001	Jefferson County Jail 1001 Pearl Street Beaumont, Texas 77701

8. Appropriation Data	9. *Per-Diem* Rate	10. Guard/Transportation Hourly Rate
15X1020	$83.40	$27.75

11. EXCEPT AS PROVIDED SPECIFICALLY HEREIN, ALL TERMS AND CONDITIONS OF THE IGA DOCUMENT REFERRED TO IN BLOCK 1, REMAIN UNCHANGED. TERMS OF THIS MODIFICATION:

The purpose of this modification is to adjust the current per diem rate of $82.70 to $83.40 and guard/transportation rate from $27.30 to $27.75 to reflect the Department of Labor Wage Determination 2015-5217 Revision 10, dated 12/26/2018.

NO OTHER TERMS OR CONDITIONS, TO INCLUDE PRICE, ARE AFFECTED BY THIS CHANGE

12. INSTRUCTIONS TO LOCAL GOVERNMENT FOR EXECUTION OF THIS MODIFICATION:

A.	B.
☐ LOCAL GOVERNMENT IS NOT REQUIRED TO SIGN THIS DOCUMENT	☒ LOCAL GOVERNMENT IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN ALL COPIES TO U. S. MARSHAL

13. APPROVALS

A. LOCAL GOVERNMENT	B. FEDERAL GOVERNMENT
_____ *Signature*	_____ *Signature*
_____ _____ TITLE DATE	Grants Specialist _____ TITLE DATE

NAME	AMOUNT	CHECK NO.	TOTAL
JURY FUND			
TRI-CITY COFFEE SERVICE	388.50	457040	
			388.50**
ROAD & BRIDGE PCT.#1			
COASTAL WELDING SUPPLY	485.10	456974	
ENTERGY	504.39	456986	
M&D SUPPLY	229.48	457000	
SOUTHEAST TEXAS WATER	28.00	457023	
NORTHERN TOOL AND EQUIPMENT	412.95	457117	
			1,659.92**
ROAD & BRIDGE PCT.#2			
A&A EQUIPMENT	136.00	456952	
CHEMAX CORP.	413.10	456968	
CITY OF NEDERLAND	52.98	456972	
ENTERGY	427.47	456986	
MUNRO'S	20.00	457003	
MUNRO'S	40.00	457004	
PHILPOTT MOTORS, INC.	141.52	457009	
RITTER @ HOME	8.48	457014	
S.E. TEXAS BUILDING SERVICE	346.66	457021	
AT&T	102.36	457025	
VULCAN MATERIALS CO.	49,861.88	457042	
WEAVER, FALGOUT, & CARRUTH, INC.	66.86	457043	
PATHMARK TRAFFICE PRODUCTS OF TEXAS	577.05	457078	
NEW WAVE WELDING TECHNOLOGY	6.16	457099	
GCR TIRES & SERVICE	137.50	457144	
			52,338.02**
ROAD & BRIDGE PCT. # 3			
CITY OF PORT ARTHUR - WATER DEPT.	38.55	456970	
MUNRO'S	23.15	457003	
MUNRO'S	1,078.40	457004	
PHILPOTT MOTORS, INC.	32.92	457009	
WALMART COMMUNITY BRC	167.74	457060	
TEXAS GAS SERVICE	190.30	457077	
UNDERGROUND INC.	605.00	457080	
CENTERPOINT ENERGY RESOURCES CORP	43.75	457085	
PRO CHEM INC	438.51	457121	
			2,618.32**
ROAD & BRIDGE PCT.#4			
BEAUMONT TRACTOR COMPANY	1,654.29	456966	
ENTERGY	20.69	456986	
KAY ELECTRONICS, INC.	121.10	456996	
MUNRO'S	115.73	457003	
SOUTHEAST TEXAS WATER	12.95	457023	
AT&T	78.92	457025	
TRIANGLE AIR CARE, INC.	95.00	457037	
US POSTAL SERVICE	165.00	457069	
EVERETT D ALFRED	558.30	457076	
ON TIME TIRE	107.70	457119	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	367.86	457135	
			3,297.54**
ENGINEERING FUND			
VERIZON WIRELESS	251.69	457058	
CANON SOLUTIONS AMERICA INC	120.00	457127	
			371.69**
PARKS & RECREATION			
ENTERGY	876.87	456986	
SUPERIOR SUPPLY & STEEL	1,660.00	457054	
ATM MACHINE WORKS	320.00	457059	
LONE STAR RIGGING LLP	45.96	457087	
			2,902.83**
GENERAL FUND			
TAX OFFICE			
OFFICE DEPOT	299.04	457007	

NAME	AMOUNT	CHECK NO.	TOTAL
ACE IMAGEWEAR	21.55	457018	
TAC - TEXAS ASSN. OF COUNTIES	1,000.00	457029	
UNITED STATES POSTAL SERVICE	665.60	457062	
COASTAL BUSINESS FORMS	746.00	457128	
			2,732.19*
COUNTY HUMAN RESOURCES			
MOORMAN & ASSOCIATES, INC.	1,200.00	457002	
PINNACLE EMPLOYEE TESTING	660.00	457010	
SETHRA	130.00	457022	
UNITED STATES POSTAL SERVICE	13.39	457062	
SOUTHEAST TEXAS OCCUPATIONAL MEDICI	370.00	457163	
			2,373.39*
AUDITOR'S OFFICE			
UNITED STATES POSTAL SERVICE	11.98	457062	
			11.98*
COUNTY CLERK			
OFFICE DEPOT	123.20	457007	
UNITED STATES POSTAL SERVICE	188.62	457062	
RICOH USA INC	251.94	457125	
			563.76*
COUNTY JUDGE			
LAIRON DOWDEN, JR.	500.00	456979	
UNITED STATES POSTAL SERVICE	8.24	457062	
HARVEY L WARREN III	500.00	457108	
SNIDER LAW FIRM PLLC	500.00	457134	
JAN GIROUARD & ASSOCIATES LLC	200.00	457161	
			1,708.24*
COUNTY TREASURER			
UNITED STATES POSTAL SERVICE	157.44	457062	
			157.44*
PRINTING DEPARTMENT			
OLMSTED-KIRK PAPER	385.80	457008	
			385.80*
PURCHASING DEPARTMENT			
PORT ARTHUR NEWS, INC.	1,309.50	457011	
UNITED STATES POSTAL SERVICE	93.95	457062	
			1,403.45*
GENERAL SERVICES			
B&L MAIL PRESORT SERVICE	1,845.75	456964	
CASH ADVANCE ACCOUNT	60.00	456995	
TIME WARNER COMMUNICATIONS	2,442.76	457032	
TRIANGLE COMPUTER & TELEPHONE	25.00	457038	
ADVANCED STAFFING	97.50	457048	
SAM'S CLUB DIRECT	32.88	457123	
			4,503.89*
DATA PROCESSING			
CDW COMPUTER CENTERS, INC.	5,348.00	457050	
TODD L. FREDERICK	330.12	457068	
			5,678.12*
VOTERS REGISTRATION DEPT			
UNITED STATES POSTAL SERVICE	161.25	457062	
			161.25*
ELECTIONS DEPARTMENT			
UNITED STATES POSTAL SERVICE	140.00	457062	
SIERRA SPRING WATER CO. - BT	49.43	457064	
			189.43*
DISTRICT ATTORNEY			
COTTON CARGO	507.75	456976	
GT DISTRIBUTORS, INC.	1,105.80	456981	
CASH ADVANCE ACCOUNT	1,817.00	456995	
JOHN NELSON	889.16	457005	

NAME	AMOUNT	CHECK NO.	TOTAL
UNITED STATES POSTAL SERVICE	228.40	457062	
SUMMER TANNER	32.40	457089	
THOMSON REUTERS-WEST	2,856.43	457130	
CONFERENCE ON CRIMES AGAINST WOMEN	475.00	457172	
HAWK ANALYTICS, INC	4,995.00	457207	
			12,906.94*
DISTRICT CLERK			
UNITED STATES POSTAL SERVICE	473.92	457062	
			473.92*
CRIMINAL DISTRICT COURT			
DOUGLAS M. BARLOW, ATTORNEY AT LAW	6,809.46	456965	
EDWARD B. GRIPON, M.D., P.A.	1,190.00	456983	
BRUCE N. SMITH	800.00	457020	
RENE MULHOLLAND	4,025.50	457041	
JOHN D WEST	900.00	457055	
UNITED STATES POSTAL SERVICE	15.35	457062	
DUSTIN R. GALMOR	4,135.00	457112	
ALEX BILL III	800.00	457115	
			18,675.31*
58TH DISTRICT COURT			
SOUTHEAST TEXAS WATER	29.95	457023	
LOWE'S HOME CENTERS, INC.	304.00	457073	
			333.95*
60TH DISTRICT COURT			
SIERRA SPRING WATER CO. - BT	66.90	457064	
			66.90*
136TH DISTRICT COURT			
UNITED STATES POSTAL SERVICE	.41	457062	
			.41*
252ND DISTRICT COURT			
DOUGLAS M. BARLOW, ATTORNEY AT LAW	250.00	456965	
EDWARD B. GRIPON, M.D., P.A.	595.00	456983	
UNITED STATES POSTAL SERVICE	77.47	457062	
LANGSTON ADAMS	700.00	457074	
			1,622.47*
279TH DISTRICT COURT			
DAVID GROVE	200.00	456956	
ALISA RAUMAKER, CSR	121.95	456958	
PHILLIP DOWDEN	1,350.00	456960	
ANITA F. PROVO	100.00	457012	
NATHAN REYNOLDS, JR.	200.00	457013	
TEXAS ASSN. FOR COURT ADMINISTRATIO	75.00	457030	
CHARLES ROJAS	1,700.00	457052	
UNITED STATES POSTAL SERVICE	1.00	457062	
TONYA CONNELL TOUPS	300.00	457093	
JONATHAN L. STOVALL	400.00	457113	
ALICIA K HALL	300.00	457118	
BRITTANIE HOLMES	400.00	457124	
WILLIAM FORD DISHMAN	200.00	457132	
TARA SHELANDER	200.00	457141	
MELANIE AIREY	500.00	457151	
GORDON D FRIESZ	500.00	457157	
LAW OFFICE OF SOLOMON FREIMUTH	150.00	457182	
			6,697.95*
317TH DISTRICT COURT			
RAY COXE, PH.D.	500.00	456977	
UNITED STATES POSTAL SERVICE	2.50	457062	
			502.50*
JUSTICE COURT-PCT 1 PL 1			
UNITED STATES POSTAL SERVICE	47.56	457062	
LEXISNEXIS- ACCURINT	93.73	457107	
			141.29*
JUSTICE COURT-PCT 1 PL 2			

NAME	AMOUNT	CHECK NO.	TOTAL
OFFICE DEPOT	268.40	457007	
UNITED STATES POSTAL SERVICE	231.00	457062	
LEXISNEXIS- ACCURINT	93.73	457107	
			593.13*
JUSTICE COURT-PCT 2			
TAC - TEXAS ASSN. OF COUNTIES	35.00	457028	
			35.00*
JUSTICE COURT-PCT 4			
AT&T	78.92	457025	
			78.92*
JUSTICE COURT-PCT 6			
UNITED STATES POSTAL SERVICE	56.63	457062	
LEXISNEXIS- ACCURINT	93.73	457107	
			150.36*
JUSTICE COURT-PCT 7			
LEXISNEXIS- ACCURINT	93.73	457107	
			93.73*
JUSTICE OF PEACE PCT. 8			
CASH ADVANCE ACCOUNT	378.95	456995	
OFFICE DEPOT	912.86	457007	
TEXAS STATE UNIVERSITY SAN MARS	150.00	457024	
CDW COMPUTER CENTERS, INC.	247.79	457050	
LEXISNEXIS- ACCURINT	93.73	457107	
			1,783.33*
COUNTY COURT AT LAW NO.1			
UNITED STATES POSTAL SERVICE	3.74	457062	
SIERRA SPRING WATER CO. - BT	78.43	457066	
			82.17*
COUNTY COURT AT LAW NO. 2			
EDWARD B. GRIPON, M.D., P.A.	1,190.00	456983	
UNITED STATES POSTAL SERVICE	11.54	457062	
JOEL WEBB VAZQUEZ	250.00	457083	
ANTOINE FREEMAN	250.00	457094	
			1,701.54*
COUNTY COURT AT LAW NO. 3			
UNITED STATES POSTAL SERVICE	7.50	457062	
SAMUEL & SON LAW FIRM PLLC	250.00	457145	
			257.50*
COURT MASTER			
UNITED STATES POSTAL SERVICE	.50	457062	
			.50*
MEDIATION CENTER			
UNITED STATES POSTAL SERVICE	10.83	457062	
			10.83*
SHERIFF'S DEPARTMENT			
CITY OF NEDERLAND	186.99	456971	
COTTON CARGO	183.00	456976	
ENTERGY	654.22	456986	
INTERSTATE BATTERIES OF BEAUMONT/PA	599.80	456991	
KAY ELECTRONICS, INC.	346.33	456996	
KIRKSEY'S SPRINT PRINTING	59.25	456997	
AT&T	129.84	457025	
TEXAS DEPT OF STATE HEALTH SERVICES	40.00	457036	
UNITED STATES POSTAL SERVICE	1,972.67	457062	
BEAUMONT OCCUPATIONAL SERVICE, INC.	34.95	457070	
CHRISTUS HOSPITAL	854.00	457072	
TRANSUNION RISK AND ALTERNATIVE	634.56	457149	
AC-U-KWIK	56.67	457153	
GALLS LLC	1,684.27	457155	
3L PRINTING COMPANY	50.00	457160	
TND WORKWEAR CO LLC	38.00	457168	
FANNETT VETERINARY CLINIC	141.99	457192	
			7,666.54*
CRIME LABORATORY			

NAME	AMOUNT	CHECK NO.	TOTAL
SIGMA-ALDRICH, INC.	83.08	456954	
KIRKSEY'S SPRINT PRINTING	24.95	456997	
LYNN PEAVEY CO., INC.	406.50	456999	
OFFICE DEPOT	140.56	457007	
SOUTHEAST TEXAS WATER	129.85	457023	
CAYMAN CHEMICAL COMPANY	133.00	457109	
TRI-TECH FORENSICS	150.00	457159	
			1,067.94*
JAIL - NO. 2			
AAA LOCK & SAFE	439.00	456950	
A&A EQUIPMENT	2,084.92	456952	
BEAUMONT TRACTOR COMPANY	87.12	456966	
CITY OF BEAUMONT - WATER DEPT.	26.00	456969	
HERNANDEZ OFFICE SUPPLY, INC.	57.78	456990	
JACK BROOKS REGIONAL AIRPORT	599.78	456994	
KOMMERCIAL KITCHENS	310.49	456998	
M&D SUPPLY	587.84	457000	
SANITARY SUPPLY, INC.	2,943.55	457017	
AT&T	1,399.94	457025	
WALMART COMMUNITY BRC	171.14	457060	
FIRETROL PROTECTION SYSTEMS, INC.	1,190.00	457103	
WORLD FUEL SERVICES	212.40	457106	
INDUSTRIAL & COMMERCIAL MECHANICAL	2,076.36	457120	
DRAGONFLY INTERPRETING SERVICES	110.00	457122	
MATERA PAPER COMPANY INC	5,082.99	457129	
24 HR SAFETY LLC	377.55	457139	
GALLS LLC	182.16	457155	
TEXAS PRISONER TRANSPORTATION SERVI	3,143.00	457164	
TND WORKWEAR CO LLC	89.90	457168	
FOOD MARKETING CONCEPTS INC	9,082.77	457175	
CORRHEALTH LLC	78,900.85	457186	
CORRHEALTH LLC	78,900.85	457187	
			188,056.39*
JUVENILE PROBATION DEPT.			
TEXAS PROBATION ASSOCIATION	600.00	457035	
CHERYL TARVER	81.20	457047	
UNITED STATES POSTAL SERVICE	7.16	457062	
SHARON STREETMAN	40.60	457088	
BRIA LYNCH	71.34	457100	
ROXANA MITCHELL	203.58	457156	
CHRISTAL CHANNELL	176.32	457158	
SUMMER KENNERSON	178.64	457166	
KAYLAN BURTON	262.16	457176	
EDWIN JAY FRANK	432.10	457188	
TRISH DAVIS	99.18	457203	
			2,152.28*
JUVENILE DETENTION HOME			
EPS	2,672.16	456980	
SANITARY SUPPLY, INC.	107.36	457017	
S.E. TEXAS BUILDING SERVICE	2,600.00	457021	
FLOWERS FOODS	56.56	457081	
BEN E KEITH FOODS	4,045.14	457082	
KAREN ROBERTS	400.00	457104	
ATTABOY TERMITE & PEST CONTROL	80.00	457105	
WASTEWATER TRANSPORT SERVICES LLC	918.00	457140	
BIG THICKET PLUMBING INC	280.53	457189	
STERICYCLE, INC	35.00	457194	
			11,194.75*
CONSTABLE PCT 1			
UNITED STATES POSTAL SERVICE	33.30	457062	
LEXISNEXIS- ACCURINT	93.73	457107	
			127.03*
CONSTABLE-PCT 2			
LEXISNEXIS- ACCURINT	93.72	457107	
			93.72*
CONSTABLE-PCT 4			
AT&T	39.46	457025	

NAME	AMOUNT	CHECK NO.	TOTAL
DISH NETWORK	72.57	457091	
TRANSUNION RISK AND ALTERNATIVE	70.00	457150	
			182.03*
CONSTABLE-PCT 6			
UNITED STATES POSTAL SERVICE	29.05	457062	
LEXISNEXIS- ACCURINT	93.73	457107	
			122.78*
AGRICULTURE EXTENSION SVC			
DAVID OATES	33.06	457162	
			33.06*
HEALTH AND WELFARE NO. 1			
BROUSSARD'S MORTUARY	4,424.90	456967	
CLAYBAR FUNERAL HOME, INC.	2,997.00	456973	
ENTERGY	63.52	456989	
MCKESSON MEDICAL-SURGICAL INC	608.17	457051	
UNITED STATES POSTAL SERVICE	41.78	457062	
LEXISNEXIS- ACCURINT	140.60	457107	
			8,275.97*
HEALTH AND WELFARE NO. 2			
LEXISNEXIS- ACCURINT	140.60	457107	
STERICYCLE, INC	35.00	457194	
			175.60*
NURSE PRACTITIONER			
MCKESSON MEDICAL-SURGICAL INC	455.55	457051	
SIERRA SPRING WATER CO. - BT	16.47	457065	
LESLIE RIGGS	150.00	457146	
			622.02*
CHILD WELFARE UNIT			
PUBLICDATA.COM.AI	500.00	457067	
BEAUMONT OCCUPATIONAL SERVICE, INC.	556.30	457070	
J.C. PENNEY'S	620.65	457071	
FATIMA ZAVALA	20.00	457137	
TYRE A WELLS	20.00	457138	
TYTIANNA WELLS SIGARST	20.00	457143	
SHAWN MOUTON	50.00	457165	
LARRY DOYLE JR	20.00	457169	
JOHNATHAN ROBINSON	20.00	457170	
FAITH DOYLE	20.00	457171	
JAYCEON MOORE	15.00	457173	
STACY VELASQUEZ	20.00	457178	
ETHAN WILTURNER	20.00	457179	
DAYSI VELASQUEZ	20.00	457180	
ASHTON EMERSON	20.00	457181	
AMIR LANES	15.00	457185	
KAITLIN VAZQUES	20.00	457190	
CHRISTIAN O'TOOLE	20.00	457191	
CAPRIE DAVIS	20.00	457193	
JAZIN BENOIT	20.00	457195	
ROBIN JOHNSON	20.00	457197	
MAKAYLA ANTOINE	20.00	457198	
STARLA DURMAN	20.00	457204	
ADELAIDA COLEMAN	50.00	457205	
ESPERANZ LEVINE	15.00	457209	
SERENITY ARTMORE	15.00	457210	
HARMONY HASELDEN	15.00	457211	
KIARA LEVINE	15.00	457212	
LILLIE MOORMAN	15.00	457213	
ELIJAH SEMIEN	15.00	457214	
JATAZIA EVANS	20.00	457215	
			2,256.95*
INDIGENT MEDICAL SERVICES			
KING'S PHARMACY	75.96	456957	
LOCAL GOVERNMENT SOLUTIONS LP	3,773.00	457095	
CARDINAL HEALTH 110 INC	83,468.64	457131	
			87,317.60*
MAINTENANCE-BEAUMONT			

NAME	AMOUNT	CHECK NO.	TOTAL
CITY OF BEAUMONT - LANDFILL	154.00	456961	
W.W. GRAINGER, INC.	313.17	456982	
RALPH'S INDUSTRIAL ELECTRONICS	434.18	457015	
SANITARY SUPPLY, INC.	1,278.02	457017	
ACE IMAGEWEAR	176.82	457018	
S.E. TEXAS BUILDING SERVICE	25,381.80	457021	
TRIANGLE COMPUTER & TELEPHONE	380.00	457038	
WORTH HYDROCHEM	265.00	457045	
NORTHERN TOOL AND EQUIPMENT	229.98	457117	
BK INDUSTRIAL SOLUTIONS LLC	2,367.63	457154	
			30,980.60*
MAINTENANCE-PORT ARTHUR			
COBURN'S GROVES (5)	331.41	456975	
ENTERGY	2,846.13	456986	
RALPH'S INDUSTRIAL ELECTRONICS	25.57	457015	
SHERWIN-WILLIAMS	615.48	457019	
S.E. TEXAS BUILDING SERVICE	8,774.98	457021	
LOWE'S HOME CENTERS, INC.	40.83	457073	
			12,634.40*
MAINTENANCE-MID COUNTY			
CITY OF NEDERLAND	12.52	456972	
ENTERGY	1,773.64	456986	
ISI COMMERCIAL REFRIGERATION	579.33	456992	
ACE IMAGEWEAR	66.16	457018	
S.E. TEXAS BUILDING SERVICE	4,008.33	457021	
TIME WARNER COMMUNICATIONS	42.31	457034	
W. JEFFERSON COUNTY M.W.D.	27.14	457044	
FRED MILLER'S OUTDOOR EQUIPMENT LLC	11.90	457152	
			6,521.33*
SERVICE CENTER			
SPIDLE & SPIDLE	7,814.22	456955	
J.K. CHEVROLET CO.	2,561.81	456993	
PHILPOTT MOTORS, INC.	185.49	457009	
RITTER @ HOME	188.49	457014	
SANITARY SUPPLY, INC.	179.71	457017	
AT&T	64.92	457025	
FASTENAL	503.74	457049	
JEFFERSON CTY. TAX OFFICE	7.50	457056	
JEFFERSON CTY. TAX OFFICE	7.50	457057	
VOYAGER FLEET SYSTEM, INC.	16,882.12	457079	
BUMPER TO BUMPER	596.30	457084	
AMERICAN TIRE DISTRIBUTORS	987.19	457101	
MIGHTY OF SOUTHEAST TEXAS	403.09	457116	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	190.35	457135	
1800RADIATOR & AC	179.00	457147	
THE GOODYEAR TIRE & RUBBER COMPANY	5,505.40	457196	
			36,256.83*
VETERANS SERVICE			
HILARY GUEST	106.60	457075	
			106.60*
			461,922.01**
MOSQUITO CONTROL FUND			
W.W. GRAINGER, INC.	.00	456982	
ENTERGY	482.44	456986	
MUNRO'S	104.87	457003	
MUNRO'S	77.46	457004	
TRIANGLE ENGINE DIST.	50.50	457039	
TEXAS AGRILIFE EXTENSION SERVICE	85.00	457098	
PARKER LUMBER	80.24	457110	
PRO PEST AND LAWN STORE	5,346.00	457177	
O'REILLY AUTO PARTS	303.66	457199	
			6,530.17**
FEMA EMERGENCY			
SILSBEE FORD INC	160,214.22	457133	
MOBILE MODULAR MANAGEMENT CORP	412.70	457200	
			160,626.92**
J.C. FAMILY TREATMENT			

NAME	AMOUNT	CHECK NO.	TOTAL
BEAUMONT OCCUPATIONAL SERVICE, INC.	803.35	457070	
			803.35**
LAW LIBRARY FUND			
LEXIS-NEXIS	802.00	457063	
			802.00**
JUVENILE PROB & DET. FUND			
VERIZON WIRELESS	26.22	457058	
			26.22**
GRANT A STATE AID			
OFFICE DEPOT	584.69	457007	
BI INCORPORATED	934.70	457053	
VICTORIA COUNTY JUVENILE SERVICES	10,348.72	457097	
GRAYSON COUNTY DEPT OF JUVENILE	14,764.67	457148	
			26,632.78**
COMMUNITY SUPERVISION FND			
CASH ADVANCE ACCOUNT	849.25	456995	
OFFICE DEPOT	57.17	457007	
TIME WARNER COMMUNICATIONS	98.72	457033	
UNITED STATES POSTAL SERVICE	71.36	457062	
LOCAL GOVERNMENT SOLUTIONS LP	6,965.00	457095	
JCCSC	1,016.67	457111	
STERICYCLE, INC	245.00	457194	
			9,303.17**
JEFF. CO. WOMEN'S CENTER			
A&A ELECTRIC CO OF BEAUMONT INC	97.71	456953	
M&D SUPPLY	65.78	457000	
KIM MCKINNEY, LPC, LMFT	375.00	457001	
OFFICE DEPOT	455.91	457007	
SYSCO FOOD SERVICES, INC.	1,140.10	457027	
TIME WARNER COMMUNICATIONS	37.95	457031	
BEN E KEITH FOODS	1,191.88	457082	
SAM'S CLUB DIRECT	110.16	457123	
STERICYCLE, INC	35.00	457194	
			3,509.49**
COMMUNITY CORRECTIONS PRG			
CASH ADVANCE ACCOUNT	451.13	456995	
			451.13**
DRUG DIVERSION PROGRAM			
TISH JONES	60.68	457136	
			60.68**
LAW OFFICER TRAINING GRT			
DELL MARKETING L.P.	217.26	456978	
			217.26**
COUNTY CLERK - RECORD MGT			
FILEX SYSTEMS, INC.	1,144.00	457114	
			1,144.00**
DRUG INTERVENTION COURT			
SAM HOUSTON STATE UNIVERSITY	1,500.00	457016	
			1,500.00**
COUNTY RECORDS MANAGEMENT			
UNITED STATES POSTAL SERVICE	.50	457062	
			.50**
UNCLAIMED FUNDS MGMT FUND			
JEROME RAY GOODMAN	47.70	457216	
			47.70**
HOTEL OCCUPANCY TAX FUND			
ALL STAR PLUMBING	1,191.58	456959	
CASH ADVANCE ACCOUNT	475.94	456995	
M&D SUPPLY	36.94	457000	
MUNRO'S	135.82	457003	

NAME	AMOUNT	CHECK NO.	TOTAL
AT&T	371.41	457026	
TRI-CITY COFFEE SERVICE	80.65	457040	
UNITED STATES POSTAL SERVICE	24.15	457062	
DISH NETWORK	133.58	457092	
SAM'S CLUB DIRECT	227.66	457123	
MATERA PAPER COMPANY INC	61.76	457129	
VECTOR SECURITY	90.64	457174	
			2,830.13**
CRIME LAB FUNDING CJD			
LEEDS PRECISION INSTRUMENTS, INC.	60,085.10	457206	
			60,085.10**
CAPITAL PROJECTS FUND			
THE LABICHE ARCHITECTURAL GROUP	1,837.50	456962	
			1,837.50**
AIRPORT FUND			
AAAE / DEPT.	275.00	456951	
ENTERGY	10,241.41	456988	
AT&T	620.22	457025	
BUBBA'S AIR CONDITIONING	3,265.50	457046	
UNITED STATES POSTAL SERVICE	4.53	457062	
LOWE'S HOME CENTERS, INC.	44.27	457073	
DISH NETWORK	113.08	457090	
CRAWFORD ELECTRIC SUPPLY COMPANY	117.60	457126	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	33.71	457135	
PETROLEUM MATERIALS LLC	333.49	457142	
TITAN AVIATION FUELS	20,163.37	457201	
			35,212.18**
AIRPORT IMPROVE. GRANTS			
GULF COAST	80,972.49	457167	
			80,972.49**
SE TX EMP. BENEFIT POOL			
EXPRESS SCRIPTS INC	78,691.83	457183	
UNITEDHEALTHCARE INSURANCE COMPANY	1,043.12	457184	
			79,734.95**
LIABILITY CLAIMS ACCOUNT			
DAWN POLK & HER ATTORNEYS LAURENCE	95,000.00	457208	
			95,000.00**
WORKER'S COMPENSATION FD			
TRISTAR RISK MANAGEMENT	24,562.53	457086	
			24,562.53**
SHERIFF'S FORFEITURE FUND			
CASH ADVANCE ACCOUNT	2,361.00	456995	
			2,361.00**
APPELLATE JUDICIAL SYSTEM			
9TH COURT OF APPEALS	4,045.00	457096	
			4,045.00**
MARINE DIVISION			
AUDILET TRACTOR SALES	32.50	456963	
COASTAL WELDING SUPPLY	115.15	456974	
GULF COAST SCREW & SUPPLY	1,480.45	456984	
ENTERGY	591.10	456986	
RITTER @ HOME	609.48	457014	
AT&T	84.44	457025	
C & I OIL COMPANY INC	10,435.46	457102	
TRIUMPH ENGINE CONTROL SYSTEMS, LLC	42,746.00	457202	
			56,094.58**
SHERIFF-SPINDLETOP GRANT			
GALLS LLC	199.00	457155	
			199.00**
			1,180,088.66***

NAME	AMOUNT	CHECK NO.	TOTAL
JURY FUND			
TRI-CITY COFFEE SERVICE	76.85	456803	
DAWN DONUTS	91.00	456920	
			167.85**
ROAD & BRIDGE PCT.#1			
GULF COAST SCREW & SUPPLY	5.39	456751	
M&D SUPPLY	28.55	456764	
MUNRO'S	31.35	456768	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
ADVANCE AUTO PARTS	21.67	456897	
REPUBLIC SERVICES	175.27	456919	
GULF COAST	1,132.40	456927	
BLACKTOP INDUSTRIES	1,441.65	456933	
			2,906.28**
ROAD & BRIDGE PCT.#2			
SPIDLE & SPIDLE	5,027.30	456722	
ENTERGY	156.43	456752	
MUNRO'S	20.00	456768	
VULCAN MATERIALS CO.	7,716.13	456806	
BUMPER TO BUMPER	127.95	456848	
DE LAGE LANDEN PUBLIC FINANCE	90.00	456885	
REPUBLIC SERVICES	122.69	456919	
			13,260.50**
ROAD & BRIDGE PCT. # 3			
ADAMS BACKHOE SERVICE	89.50	456720	
SPIDLE & SPIDLE	2,113.44	456722	
FARM & HOME SUPPLY	36.54	456746	
W.W. GRAINGER, INC.	66.38	456749	
ENTERGY	270.11	456752	
MUNRO'S	157.30	456768	
OFFICE DEPOT	92.83	456771	
MATHESON TRI-GAS	175.70	456804	
W. JEFFERSON COUNTY M.W.D.	18.36	456808	
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
REPUBLIC SERVICES	45.00	456919	
			3,205.16**
ROAD & BRIDGE PCT.#4			
SPIDLE & SPIDLE	4,344.44	456722	
BEAUMONT TRACTOR COMPANY	50.64	456730	
COASTAL WELDING SUPPLY	58.80	456738	
KAY ELECTRONICS, INC.	139.80	456762	
M&D SUPPLY	151.98	456764	
MUNRO'S	142.46	456768	
PHILPOTT MOTORS, INC.	619.07	456776	
UNITED STATES POSTAL SERVICE	.82	456832	
DE LAGE LANDEN PUBLIC FINANCE	229.79	456885	
LESTER SMITH INSURANCE	71.00	456901	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	352.40	456905	
GCR TIRES & SERVICE	875.00	456909	
REPUBLIC SERVICES	214.79	456919	
O'REILLY AUTO PARTS	165.33	456939	
RUSH TRUCK CENTERS	734.52	456941	
			8,150.84**
ENGINEERING FUND			
DE LAGE LANDEN PUBLIC FINANCE	460.94	456885	
			460.94**
PARKS & RECREATION			
CITY OF PORT ARTHUR - WATER DEPT.	62.90	456733	
ENTERGY	8.76	456752	
AT&T	29.38	456792	
W. JEFFERSON COUNTY M.W.D.	54.28	456808	
			155.32**
GENERAL FUND			

NAME	AMOUNT	CHECK NO.	TOTAL
CALEB FENTER	150.00	456947	
			150.00*
TAX OFFICE			
POSTMASTER	1,240.00	456777	
SOUTHEAST TEXAS WATER	265.50	456790	
AT&T	109.38	456792	
UNITED STATES POSTAL SERVICE	573.86	456832	
UNITED STATES POSTAL SERVICE	40.85	456833	
DE LAGE LANDEN PUBLIC FINANCE	370.00	456885	
			2,599.59*
COUNTY HUMAN RESOURCES			
UNITED STATES POSTAL SERVICE	.82	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			70.82*
AUDITOR'S OFFICE			
GOVERNMENT FINANCE OFFICERS ASSOC.	1,145.00	456724	
LYNDON B. JOHNSON SCHOOL OF PUBLIC	960.00	456727	
SOUTHEAST TEXAS WATER	29.95	456790	
TEXAS ASSN. OF COUNTY AUDITORS	415.00	456801	
UNITED STATES POSTAL SERVICE	4.45	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			2,624.40*
COUNTY CLERK			
CURTIS 1000, INC.	405.31	456739	
OFFICE DEPOT	114.26	456771	
UNITED STATES POSTAL SERVICE	211.38	456832	
UNITED STATES POSTAL SERVICE	57.00	456833	
DE LAGE LANDEN PUBLIC FINANCE	1,052.82	456885	
			1,840.77*
COUNTY JUDGE			
LAIRON DOWDEN, JR.	500.00	456741	
CATHERINE BRUNEY	500.00	456755	
OFFICE DEPOT	173.33	456771	
UNITED STATES POSTAL SERVICE	3.12	456832	
ROCKY LAWDERMILK	500.00	456840	
THE YOES LAW FIRM, LLP	500.00	456853	
JEFF R BRANICK	27.07	456861	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
JOSHUA C HEINZ	500.00	456891	
KENDALL COCKRELL	500.00	456906	
JAN GIROUARD & ASSOCIATES LLC	400.00	456923	
			3,673.52*
RISK MANAGEMENT			
UNITED STATES POSTAL SERVICE	507.74	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			577.74*
COUNTY TREASURER			
OFFICE DEPOT	332.32	456771	
UNITED STATES POSTAL SERVICE	116.66	456832	
DE LAGE LANDEN PUBLIC FINANCE	331.89	456885	
			780.87*
PRINTING DEPARTMENT			
OLMSTED-KIRK PAPER	1,546.75	456772	
DE LAGE LANDEN PUBLIC FINANCE	1,200.00	456885	
			2,746.75*
PURCHASING DEPARTMENT			
BEAUMONT ENTERPRISE	1,163.00	456745	
OFFICE DEPOT	156.60	456771	
UNITED STATES POSTAL SERVICE	57.32	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			1,446.92*
GENERAL SERVICES			
JEFFERSON CTY. APPRAISAL DISTRICT	217,457.55	456758	

NAME	AMOUNT	CHECK NO.	TOTAL
CASH ADVANCE ACCOUNT	25.00	456759	
TEXAS WILDLIFE DAMAGE MGMT FUND	2,700.00	456802	
INTERFACE EAP	1,351.35	456813	
ADVANCED STAFFING	78.00	456815	
VERIZON WIRELESS	303.92	456829	
JEFFERSON COUNTY CREDIT CARDS	46.30	456877	
SPOK INC	3.00	456910	
			221,965.12*
DATA PROCESSING			
DELL MARKETING L.P.	151.00	456740	
CDW COMPUTER CENTERS, INC.	1,696.06	456819	
JEFFERSON COUNTY CREDIT CARDS	2,545.71	456877	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
SPOK INC	12.09	456910	
			4,474.86*
VOTERS REGISTRATION DEPT			
UNITED STATES POSTAL SERVICE	196.81	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			266.81*
ELECTIONS DEPARTMENT			
CUMULUS BROADCASTING, INC.	1,777.00	456821	
JEFFERSON COUNTY CREDIT CARDS	84.56	456877	
DE LAGE LANDEN PUBLIC FINANCE	271.65	456885	
			2,133.21*
DISTRICT ATTORNEY			
FED EX	21.84	456747	
GT DISTRIBUTORS, INC.	264.18	456748	
HERNANDEZ OFFICE SUPPLY, INC.	1,371.90	456753	
KIRKSEY'S SPRINT PRINTING	24.95	456763	
OFFICE DEPOT	790.13	456771	
STATE BAR OF TEXAS	105.00	456793	
TDCAA BOOK ORDERS	134.00	456795	
CDW COMPUTER CENTERS, INC.	42.70	456819	
UNITED STATES POSTAL SERVICE	155.21	456832	
SCANSTAT TECHNOLOGIES	599.98	456876	
DE LAGE LANDEN PUBLIC FINANCE	480.00	456885	
THOMSON REUTERS-WEST	423.90	456899	
TRANSUNION RISK AND ALTERNATIVE	111.00	456912	
HIGGINBOTHAM INSURANCE AGENCY INC	71.00	456913	
MARCELO MOLFINO	164.58	456925	
CIOX HEALTH	106.42	456929	
BETH JONES	16.48	456949	
			4,883.27*
DISTRICT CLERK			
COUNTY & DISTRICT CLERK ASSN. OF TX	50.00	456811	
UNITED STATES POSTAL SERVICE	353.07	456832	
JEFFERSON COUNTY CREDIT CARDS	399.96	456877	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
TINA CLUBB	18.00	456918	
			891.03*
CRIMINAL DISTRICT COURT			
DAVID GROVE	8,750.00	456723	
DAVID W BARLOW	4,375.00	456729	
DONALD W. DUESLER & ASSOC.	8,750.00	456743	
MARSHA NORMAND	8,750.00	456769	
KEVIN PAULA SEKALY PC	8,750.00	456787	
KEVIN S. LAINE	2,437.50	456817	
UNITED STATES POSTAL SERVICE	7.36	456832	
DE LAGE LANDEN PUBLIC FINANCE	441.64	456885	
			42,261.50*
58TH DISTRICT COURT			
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			70.00*
60TH DISTRICT COURT			
OFFICE DEPOT	133.78	456771	

NAME	AMOUNT	CHECK NO.	TOTAL
UNITED STATES POSTAL SERVICE	4.94	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			208.72*
136TH DISTRICT COURT			
UNITED STATES POSTAL SERVICE	23.81	456832	
LEXIS-NEXIS	69.00	456834	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			162.81*
172ND DISTRICT COURT			
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			70.00*
252ND DISTRICT COURT			
DAVID W BARLOW	4,375.00	456729	
OFFICE DEPOT	189.20	456771	
MIKE VAN ZANDT	8,750.00	456805	
KEVIN S. LAINE	2,437.50	456817	
UNITED STATES POSTAL SERVICE	29.30	456832	
SUMMER TANNER	499.55	456862	
ALLEN PARKER	8,750.00	456875	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
BRITTANIE HOLMES	8,750.00	456894	
M.K. HAMZA, PHD, P.A.	1,200.00	456895	
SAMUEL & SON LAW FIRM PLLC	6,772.50	456911	
THOMAS WILLIAM KELLEY	8,750.00	456946	
			50,573.05*
279TH DISTRICT COURT			
LEXIS-NEXIS	76.00	456834	
KIMBERLY PHELAN, P.C.	750.00	456856	
RONALD PLESSALA	1,050.00	456870	
JONATHAN L. STOVALL	100.00	456880	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
REALTIME REPORTING SERVICES INC.	1,251.90	456886	
ALICIA K HALL	2,030.00	456890	
WILLIAM FORD DISHMAN	400.00	456902	
TARA SHELANDER	200.00	456908	
MELANIE AIREY	175.00	456914	
			6,102.90*
317TH DISTRICT COURT			
MARVA PROVO	325.00	456779	
ANITA F. PROVO	600.00	456780	
KEVIN S. LAINE	650.00	456816	
CHARLES ROJAS	500.00	456820	
UNITED STATES POSTAL SERVICE	.50	456832	
GLEN M. CROCKER	810.00	456837	
JUDY PAASCH	2,465.42	456849	
KIMBERLY PHELAN, P.C.	325.00	456856	
TONYA CONNELL TOUPS	150.00	456867	
JONATHAN L. STOVALL	1,500.00	456880	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
BRITTANIE HOLMES	300.00	456893	
TARA SHELANDER	300.00	456908	
			7,995.92*
JUSTICE COURT-PCT 1 PL 1			
UNITED STATES POSTAL SERVICE	55.27	456832	
DE LAGE LANDEN PUBLIC FINANCE	90.00	456885	
			145.27*
JUSTICE COURT-PCT 1 PL 2			
KIRKSEY'S SPRINT PRINTING	49.90	456763	
OFFICE DEPOT	1,316.36	456771	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			1,436.26*
JUSTICE COURT-PCT 4			
DE LAGE LANDEN PUBLIC FINANCE	90.00	456885	
			90.00*
JUSTICE COURT-PCT 6			

NAME	AMOUNT	CHECK NO.	TOTAL
UNITED STATES POSTAL SERVICE	40.52	456832	
SIERRA SPRING WATER CO. - BT	62.89	456835	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			173.41*
JUSTICE COURT-PCT 7			
OFFICE DEPOT	224.84	456771	
			224.84*
JUSTICE OF PEACE PCT. 8			
UNITED STATES POSTAL SERVICE	105.75	456833	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			175.75*
COUNTY COURT AT LAW NO.1			
UNITED STATES POSTAL SERVICE	.82	456832	
DE LAGE LANDEN PUBLIC FINANCE	245.92	456885	
			246.74*
COUNTY COURT AT LAW NO. 2			
DONALD W. DUESLER & ASSOC.	250.00	456742	
ELIZABETH PARKS	1,285.25	456773	
UNITED STATES POSTAL SERVICE	6.18	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			1,611.43*
COUNTY COURT AT LAW NO. 3			
JACK LAWRENCE	250.00	456725	
CHARLES ROJAS	250.00	456820	
UNITED STATES POSTAL SERVICE	.41	456832	
ANTOINE FREEMAN	250.00	456868	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			820.41*
COURT MASTER			
LEXIS-NEXIS	68.00	456834	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			138.00*
MEDIATION CENTER			
OFFICE DEPOT	51.85	456771	
SOUTHEAST TEXAS WATER	29.80	456790	
UNITED STATES POSTAL SERVICE	6.18	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			157.83*
COMMUNITY SUPERVISION			
DE LAGE LANDEN PUBLIC FINANCE	280.00	456885	
			280.00*
SHERIFF'S DEPARTMENT			
FED EX	780.36	456747	
GT DISTRIBUTORS, INC.	21.43	456748	
OFFICE DEPOT	102.99	456771	
AT&T	342.78	456792	
UNITED STATES POSTAL SERVICE	1,418.16	456832	
BEAUMONT OCCUPATIONAL SERVICE, INC.	34.95	456838	
JEFFERSON COUNTY CREDIT CARDS	738.00	456877	
DE LAGE LANDEN PUBLIC FINANCE	800.00	456885	
COBAN TECHNOLOGIES INC	15,592.78	456887	
RITA HURT	550.00	456888	
GALLS LLC	322.27	456915	
REPUBLIC SERVICES	45.00	456919	
			20,748.72*
CRIME LABORATORY			
AGILENT TECHNOLOGIES	450.04	456726	
FED EX	44.87	456747	
MCNEILL INSURANCE AGENCY	71.00	456767	
HENRY SCHEIN, INC.	78.06	456786	
CDW COMPUTER CENTERS, INC.	97.60	456819	
JEFFERSON COUNTY CREDIT CARDS	61.70	456877	
DE LAGE LANDEN PUBLIC FINANCE	90.00	456885	
			893.27*
JAIL - NO. 2			

NAME	AMOUNT	CHECK NO.	TOTAL
JOEY HILL	18.32	456721	
AVIALL	5,555.94	456728	
W.W. GRAINGER, INC.	49.08	456749	
ENTERGY	31,190.13	456752	
JACK BROOKS REGIONAL AIRPORT	748.44	456757	
AT&T	987.60	456792	
MARK ELLIS	17.00	456860	
WORLD FUEL SERVICES	238.80	456874	
DE LAGE LANDEN PUBLIC FINANCE	1,280.00	456885	
CONSTELLATION NEWENERGY - GAS DIVIS	2,643.18	456898	
ERIC WILLIAMS	9.72	456900	
REPUBLIC SERVICES	3,249.70	456919	
KENYA DODD	5.08	456938	
			45,992.99*
JUVENILE PROBATION DEPT.			
FED EX	165.08	456747	
CASH ADVANCE ACCOUNT	112.00	456759	
LARONDA TURNER	91.64	456774	
SAM HOUSTON STATE UNIVERSITY	530.00	456784	
UNITED STATES POSTAL SERVICE	13.83	456832	
LYNN BIERHALTER	139.20	456858	
SHARON STREETMAN	21.80	456859	
BRIA LYNCH	8.02	456869	
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
SHERONDA WHEELER	173.42	456935	
CHARITY HIGHTOWER	77.60	456937	
			1,472.59*
JUVENILE DETENTION HOME			
ENTERGY	4,343.71	456752	
AT&T	693.28	456792	
FLOWERS FOODS	120.38	456845	
BEN E KEITH FOODS	3,463.63	456847	
VANSCHECA SANDERS-CHEVIS	400.00	456863	
DE LAGE LANDEN PUBLIC FINANCE	229.79	456885	
REPUBLIC SERVICES	704.70	456919	
			9,955.49*
CONSTABLE PCT 1			
TEXAS STATE UNIVERSITY SAN MARS	300.00	456791	
UNITED STATES POSTAL SERVICE	13.18	456832	
JEFFERSON COUNTY CREDIT CARDS	608.60	456877	
DE LAGE LANDEN PUBLIC FINANCE	323.13	456885	
			1,244.91*
CONSTABLE-PCT 4			
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			70.00*
CONSTABLE-PCT 6			
KARL J. HOLMES	6.00	456754	
KIRKSEY'S SPRINT PRINTING	59.80	456763	
UNITED STATES POSTAL SERVICE	17.90	456832	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			153.70*
CONSTABLE PCT. 8			
DE LAGE LANDEN PUBLIC FINANCE	322.93	456885	
FRANCES L. GRIFFIN	150.00	456944	
			472.93*
COUNTY MORGUE			
FORENSIC MEDICAL	66,600.00	456943	
			66,600.00*
AGRICULTURE EXTENSION SVC			
OFFICE DEPOT	62.94	456771	
DISTRICT 9 AFCS	104.00	456812	
DE LAGE LANDEN PUBLIC FINANCE	200.00	456885	
DAVID OATES	83.52	456924	
			450.46*
HEALTH AND WELFARE NO. 1			

NAME	AMOUNT	CHECK NO.	TOTAL
BROUSSARD'S MORTUARY	1,500.00	456731	
CLAYBAR FUNERAL HOME, INC.	3,996.00	456737	
JOURNAL WATCH, INC.	79.50	456761	
PETTY CASH - N C WELFARE	141.00	456775	
AUSTIN CECIL WALKES MD PA	2,932.58	456807	
UNITED STATES POSTAL SERVICE	82.64	456832	
ESSLINE KNOX	77.14	456881	
DE LAGE LANDEN PUBLIC FINANCE	372.43	456885	
			9,181.29*
HEALTH AND WELFARE NO. 2			
GRAMMIER-OBERLE FUNERAL HOME	1,500.00	456750	
JOURNAL WATCH, INC.	79.50	456761	
TIME WARNER COMMUNICATIONS	129.92	456797	
AUSTIN CECIL WALKES MD PA	2,932.58	456807	
UNITED STATES POSTAL SERVICE	150.65	456833	
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
			4,932.65*
NURSE PRACTITIONER			
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			70.00*
ENVIRONMENTAL CONTROL			
OFFICE DEPOT	191.50	456771	
AT&T	32.46	456792	
DE LAGE LANDEN PUBLIC FINANCE	323.13	456885	
			547.09*
INDIGENT MEDICAL SERVICES			
TDS OPERATING INC	235.00	456936	
			235.00*
MAINTENANCE-BEAUMONT			
AAA LOCK & SAFE	74.40	456718	
ECOLAB	209.95	456744	
ENTERGY	387.77	456752	
RALPH'S INDUSTRIAL ELECTRONICS	40.80	456782	
SANITARY SUPPLY, INC.	905.36	456785	
ACE IMAGEWEAR	204.41	456789	
AT&T	1,066.76	456792	
TIME WARNER COMMUNICATIONS	66.91	456799	
SERVICE GRAPHICS	725.89	456814	
ACADIAN HARDWOODS, BEAUMONT	659.63	456841	
OTIS ELEVATOR COMPANY	32,808.46	456844	
CENTERPOINT ENERGY RESOURCES CORP	6,011.51	456850	
JEFFERSON COUNTY CREDIT CARDS	80.00	456877	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
EMERGENCY POWER SERVICE	1,976.80	456889	
REPUBLIC SERVICES	2,114.10	456919	
AT&T	12,847.94	456922	
AUTOMATED LOGIC CONTRACTING SRV,INC	328.00	456945	
			60,578.69*
MAINTENANCE-PORT ARTHUR			
CITY OF PORT ARTHUR - WATER DEPT.	278.72	456733	
CITY OF PORT ARTHUR - WATER DEPT.	697.91	456734	
TEXAS GAS SERVICE	605.83	456843	
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
			1,722.46*
MAINTENANCE-MID COUNTY			
CITY OF NEDERLAND	73.82	456735	
ENTERGY	339.21	456752	
JIFFY TROPHIES	17.00	456760	
RITTER @ HOME	31.98	456781	
ACE IMAGEWEAR	75.32	456789	
AT&T	711.37	456792	
W. JEFFERSON COUNTY M.W.D.	50.46	456808	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
REPUBLIC SERVICES	92.10	456919	
			1,461.26*
SERVICE CENTER			

NAME	AMOUNT	CHECK NO.	TOTAL
MUNRO'S	45.90	456768	
OFFICE DEPOT	119.99	456771	
FASTENAL	212.01	456818	
JEFFERSON CTY. TAX OFFICE	7.50	456822	
JEFFERSON CTY. TAX OFFICE	7.50	456823	
JEFFERSON CTY. TAX OFFICE	7.50	456824	
JEFFERSON CTY. TAX OFFICE	7.50	456825	
JEFFERSON CTY. TAX OFFICE	7.50	456826	
JEFFERSON CTY. TAX OFFICE	7.50	456827	
BUMPER TO BUMPER	118.17	456848	
ROBERT'S TEXACO XPRESS LUBE	77.00	456871	
AMERICAN TIRE DISTRIBUTORS	310.80	456872	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
REPUBLIC SERVICES	122.69	456919	
DENNIS LOWE	119.95	456926	
			1,241.51*
VETERANS SERVICE			
UNITED STATES POSTAL SERVICE	2.10	456833	
HILARY GUEST	106.60	456842	
DE LAGE LANDEN PUBLIC FINANCE	240.00	456885	
			348.70*
			592,444.23**
MOSQUITO CONTROL FUND			
W.W. GRAINGER, INC.	860.44	456749	
MUNRO'S	53.73	456768	
OFFICE DEPOT	109.98	456771	
AT&T	32.46	456792	
TIME WARNER COMMUNICATIONS	87.46	456796	
WYLIE MANUFACTURING CO.	318.18	456809	
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
REPUBLIC SERVICES	122.69	456919	
			1,654.94**
FEMA EMERGENCY			
M&D SUPPLY	82.36	456765	
DANIELS BUILDING & CONSTRUCTION INC	49,606.53	456828	
MARTIN MARIETTA MATERIALS	312.34	456917	
GULF COAST	728.80	456928	
			50,730.03**
FAMILY GROUP CONFERENCING			
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
			70.00**
J.C. FAMILY TREATMENT			
BEAUMONT OCCUPATIONAL SERVICE, INC.	34.95	456838	
PATRICIA PETERS	1,241.00	456921	
			1,275.95**
LAW LIBRARY FUND			
DE LAGE LANDEN PUBLIC FINANCE	70.00	456885	
THOMSON REUTERS-WEST	205.27	456899	
			275.27**
EMPG GRANT			
TIME WARNER COMMUNICATIONS	100.50	456798	
JEFFERSON COUNTY CREDIT CARDS	4,179.08	456877	
			4,279.58**
GRANT A STATE AID			
HAYS COUNTY JUVENILE CENTER	167.84	456864	
			167.84**
COMMUNITY SUPERVISION FND			
OFFICE DEPOT	1,157.17	456771	
SAM HOUSTON STATE UNIVERSITY	275.00	456783	
TEXAS PROBATION ASSOCIATION	900.00	456800	
UNITED STATES POSTAL SERVICE	91.37	456832	
UNITED STATES POSTAL SERVICE	245.00	456833	
JCCSC	660.00	456879	
			3,328.54**
JEFF. CO. WOMEN'S CENTER			

NAME	AMOUNT	CHECK NO.	TOTAL
A&A ELECTRIC CO OF BEAUMONT INC	325.84	456719	
ISI COMMERCIAL REFRIGERATION	91.50	456756	
KIM MCKINNEY, LPC, LMFT	75.00	456766	
PREMIUM PLUMBING	700.00	456778	
SYSCO FOOD SERVICES, INC.	1,027.61	456794	
PETTY CASH - RESTITUTION I	20.41	456810	
TOWER COMMUNICATIONS, INC.	60.00	456830	
BEN E KEITH FOODS	1,095.54	456847	
CENTERPOINT ENERGY RESOURCES CORP	359.70	456850	
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
SAM'S CLUB DIRECT	211.76	456892	
WASTEWATER TRANSPORT SERVICES LLC	275.00	456907	
SPOK INC	16.44	456910	
REPUBLIC SERVICES	150.26	456919	
			4,549.06**
MENTALLY IMPAIRED OFFEND.			
TRAINING STRATEGIES, INC.	300.00	456846	
			300.00**
COMMUNITY CORRECTIONS PRG			
M&D SUPPLY	157.56	456764	
TEXAS PROBATION ASSOCIATION	150.00	456800	
DE LAGE LANDEN PUBLIC FINANCE	90.00	456885	
TDCJ CJAD CONFERENCE FUND	200.00	456948	
			597.56**
DRUG DIVERSION PROGRAM			
DE LAGE LANDEN PUBLIC FINANCE	80.00	456885	
			80.00**
LAW OFFICER TRAINING GRT			
GALLS LLC	37.06	456915	
			37.06**
COUNTY CLERK - RECORD MGT			
DELL MARKETING L.P.	2,019.24	456740	
			2,019.24**
HOTEL OCCUPANCY TAX FUND			
CITY OF BEAUMONT - WATER DEPT.	112.84	456732	
CASH ADVANCE ACCOUNT	450.06	456759	
SHI GOVERNMENT SOLUTIONS, INC.	527.16	456836	
DE LAGE LANDEN PUBLIC FINANCE	315.00	456885	
REPUBLIC SERVICES	122.69	456919	
			1,527.75**
DISTRICT CLK RECORDS MGMT			
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
			140.00**
CAPITAL PROJECTS FUND			
THE BEST GRANITE & QUARTZ	1,800.00	456940	
			1,800.00**
COASTAL RESTORATION PRJCT			
TIM RICHARDSON	10,500.00	456903	
			10,500.00**
AIRPORT FUND			
SPIDLE & SPIDLE	1,307.28	456722	
CITY OF NEDERLAND	398.21	456735	
CITY OF NEDERLAND	20.65	456736	
LOWE'S HOME CENTERS, INC.	99.97	456839	
PAX SUPPLY	348.33	456865	
UNIFIRST HOLDINGS INC	165.21	456873	
DE LAGE LANDEN PUBLIC FINANCE	140.00	456885	
CRAWFORD ELECTRIC SUPPLY COMPANY	47.36	456896	
SOUTHEAST TEXAS PARTS AND EQUIPMENT	30.53	456905	
SUPPLYWORKS	654.26	456916	
REPUBLIC SERVICES	919.37	456919	
TITAN AVIATION FUELS	18,160.82	456942	
			22,291.99**
SE TX EMP. BENEFIT POOL			

NAME	AMOUNT	CHECK NO.	TOTAL
STANDARD INSURANCE COMPANY	7,893.28	456854	
STANDARD INSURANCE COMPANY	14,854.95	456855	
RELIANCE STANDARD LIFE INSURANCE	5,564.39	456857	
GROUP ADMINISTRATIVE CONCEPTS INC	898.00	456878	
EXPRESS SCRIPTS INC	79,438.67	456934	
			108,649.29**
SETEC FUND			
REPUBLIC SERVICES	1,935.21	456919	
			1,935.21**
LIABILITY CLAIMS ACCOUNT			
STEVENS BALDO & LIGHTY PLLC	5,013.12	456932	
			5,013.12**
WORKER'S COMPENSATION FD			
TRISTAR RISK MANAGEMENT	1,278.03	456851	
TRISTAR RISK MANAGEMENT	16,628.50	456852	
			17,906.53**
SHERIFF'S FORFEITURE FUND			
SILSBEE FORD INC	391.38	456904	
AXON ENTERPRISE INC	6,222.00	456930	
			6,613.38**
PAYROLL FUND			
JEFFERSON CTY. - FLEXIBLE SPENDING	13,998.00	456696	
CLEAT	342.00	456697	
JEFFERSON CTY. TREASURER	13,672.17	456698	
RON STADTMUELLER - CHAPTER 13	157.50	456699	
INTERNAL REVENUE SERVICE	208.00	456700	
JEFFERSON CTY. ASSN. OF D.S. & C.O.	4,080.00	456701	
JEFFERSON CTY. COMMUNITY SUP.	9,703.25	456702	
JEFFERSON CTY. TREASURER - HEALTH	533,701.52	456703	
JEFFERSON CTY. TREASURER - GENERAL	25.00	456704	
JEFFERSON CTY. TREASURER - PAYROLL	1,740,490.66	456705	
JEFFERSON CTY. TREASURER - PAYROLL	612,857.15	456706	
MONY LIFE INSURANCE OF AMERICA	100.34	456707	
POLICE & FIRE FIGHTERS' ASSOCIATION	2,111.33	456708	
TGSLC	336.06	456709	
JEFFERSON CTY. TREASURER - TCDRS	663,168.87	456710	
OPPENHEIMER FUNDS DISTRIBUTOR, INC	1,484.99	456711	
JEFFERSON COUNTY TREASURER	2,683.28	456712	
JEFFERSON COUNTY - TREASURER -	7,023.92	456713	
NECHES FEDERAL CREDIT UNION	42,538.40	456714	
JEFFERSON COUNTY - NATIONWIDE	53,143.80	456715	
JOHN TALTON	1,835.38	456716	
BELINDA M ZURITA	230.77	456717	
			3,703,892.39**
GUARDIANSHIP FEE			
LAIRON DOWDEN, JR.	200.00	456741	
			200.00**
MARINE DIVISION			
CITY OF NEDERLAND	20.65	456735	
RITTER @ HOME	913.38	456781	
SETZER HARDWARE, INC.	217.32	456788	
BUMPER TO BUMPER	332.71	456848	
THE DINGO GROUP-PETE JORGENSON MARI	373.86	456866	
VECTOR SECURITY	135.00	456931	
			1,992.92**
SHERIFF-SPINDLETOP GRANT			
GT DISTRIBUTORS, INC.	30.42	456748	
			30.42**
			4,572,609.19***

ELECTION SERVICES CONTRACT AND LEASE AGREEMENT
BETWEEN JEFFERSON COUNTY CLERK
AND
City of Beaumont, Beaumont Independent School District and
The Port of Beaumont

This agreement made and entered into, by and between Jefferson County, hereinafter referred to as "County", acting herein by and through its **County Election Officer, Carolyn Guidry, County Clerk**, and **City of Beaumont, Beaumont Independent School** District and The Port of Beaumont hereinafter referred to as "Political Subdivision", acting herein by and through its Boards.
WHEREAS, Political Subdivision is required to conduct an election on **May 4, 2019**;

THIS CONTRACT is made this 18th day of March, 2019 by and between the Political Subdivision of **City of Beaumont, Beaumont Independent School** District and the Port of Beaumont , hereinafter called "Political Subdivision" and Jefferson County, Texas, by its County Elections Officer, **Carolyn Guidry**, hereinafter called "Contracting Officer," pursuant to Texas Election Code Section 31.092. The parties agree to enter into an election services agreement with each other in accordance with Chapter 271 of the Texas Election Code and this Agreement. This Agreement is entered into in consideration of the mutual covenants and promises hereinafter set out:

1. **RECITALS.** Contracting Officer is the County Clerk of Jefferson County, Texas, and is the County Officer in charge of election duties. Political Subdivision is a political entity situated wholly or partially within Jefferson County, Texas. Political Subdivision and Contracting Officer have determined that it is in the public interest of Jefferson County voters that the following contract be made and entered into for the purpose of having Contracting Officer furnish to Political Subdivision(s) certain election services and equipment needed by Political Subdivision(s) in connection with the holding of its May 4, 2019, Election. Jefferson County's certified Hart InterCivic electronic voting equipment is to be used in this Political Subdivision(s) Election.

2. **DUTIES AND SERVICES OF CONTRACTING OFFICER.** Contracting Officer shall be responsible for performing the following duties and shall furnish the following services and equipment:

(a) Prepare and test all electronic voting equipment, format ballot styles, secure audio, oversee all equipment and voter registration database programming, assure compliance with equipment security requirements. Arrange for transport of equipment to and from polling locations.

(b) Procure election kits and supplies and distribute to the precinct judges and early voting clerks. Obtain from the Tax -Assessor /Voter Registrar lists of registered voters to be used in conducting the election in conformity with the boundaries of Political Subdivision and the election precincts established for the election. Provide an updated voter registration database on Election Day with all voters from Early Voting marked voted.

(c) Publish legal notice of the date, time and place of the public logic and accuracy test. Prepare test materials and conduct internal election testing, public logic and accuracy test, and tests of tabulation equipment.

(d) Arrange for tabulation personnel, and all equipment and supplies needed at central counting station. Tabulate early voting, election night, paper mail ballots and provisional ballots. Tabulate unofficial returns and assist in preparing the tabulation for the official canvass. Provide Political Subdivision its entire election database and records for retention.

(e) Arrange for the use of Early Voting locations and Election Day polling locations. If emergency replacement polling locations are needed, Political Subdivision shall make necessary alternate arrangements to locate another public place (or if unavailable, a private building).

(f) Serve as Early Voting Clerk for this Joint Election and process, print, mail, and tabulate ballots for any eligible voter, who applies for a ballot by mail including all eligible FPCA applicants. Supervise the conduct of early voting in person and appoint sufficient personnel to serve as deputy early voting clerks. Provide lists of early voters as provided by law if requested by Political Subdivision.

(g) Maintain accurate records of all expenses incurred in connection with the responsibilities under this Agreement and provide Political Subdivision a final invoice after the conduct of the election. Provide any detailed backup to such invoice, if requested, reflecting the charges or components of the costs set forth on the invoice submitted to Political Subdivision.

(h) The Contracting Office is responsible for Counting Station staffing and payroll. The Contracting Officer will also pay the aforementioned for their services and time in accordance with their rate of pay policy.

(i) Contracting Officer shall conduct a manual count as prescribed by Section 127.201 of the Texas Election Code, unless waived by the Secretary of State. A written report shall be submitted to the Secretary of State as required by Section 127.201(E) of the aforementioned Election Code. If requested, Contracting Officer shall provide a written report to Political Subdivision in a timely manner.

(j) The Contracting Officer shall place the funds paid by Political Subdivision hereunder in a "contract fund" as prescribed by Section 31.100 of the Texas Election Code.

3. **DUTIES AND SERVICES OF POLITICAL SUBDIVISION**. Political Subdivision shall be responsible for performing the following duties:

(a) Prepare all election orders, resolutions, notices, and other pertinent documents for adoption and execution by the appropriate Political Subdivision officer or body. Take all actions necessary for calling the Political Subdivision Election which are required by the Texas Election Code and/or the Political Subdivision's governing body, charter, ordinances, or other applicable laws. Execute an Election Services Contract Agreement with Jefferson County Clerk for the purpose

of election administration. Serve as temporary Custodian of Records for all election records in its possession during the course of the election.

(b) Political Subdivision shall be responsible for the legal sufficiency of any order calling their election. Political Subdivision shall be responsible for all substantive and procedural legal issues governing the conduct of their election. Political Subdivision understands and agrees that Contracting Officer provides no legal advice to Political Subdivision.

(c) Adopt the county voting precincts for this election. Political Subdivision shall adopt any of the early voting locations used by the county located in the Political Subdivision's jurisdictional boundaries and may add any additional locations and adopt all early voting dates, and hours recommended by the Contracting Officer in accordance with the Texas Election Code as listed on **Exhibit A – Early Voting Locations**. Political Subdivision shall adopt the Election Day Vote Center polling locations on the attached **Exhibit B – Election Day Vote Centers** for each county voting precinct that is within its jurisdictional boundaries. All nineteen (19) locations must be adopted in order to maintain status as Vote Centers. Political Subdivision shall confirm the accuracy of its jurisdictional boundaries and precincts.

(d) Notify and coordinate presiding judges, alternate judges, and all other election clerks required to administer the Election Day duties. Retrieve compensation sheets and pay the aforementioned at a rate of $10 per hour times the number of hours worked plus the delivery fee applicable.

(e) Arrange for poll worker training through a third party or conduct necessary training. Notify all Early Voting and Election Day officials of the date, time and place thereof.

(f) Make the appointment for the members of the Signature Committee and furnish names, addresses and contact numbers to the Contracting Officer.

(g) Prepare, post and publish all required election notices for Political Subdivision. In addition, if this election's polling locations are different than Political Subdivision's previous election, Political Subdivision shall post notice at the entrance to any previous polling places in its jurisdiction stating that the location has changed and provide the polling location and address for those voters for this election, pursuant to Texas Election Code Section 43.062. Educate the voters in Political Subdivision on early voting times and places and Election Day polling locations.

(h) Political Subdivision shall confirm with Tax-Assessor/Voter Registrar its boundaries, county voting precincts and street details within those boundaries. Political Subdivision will validate all boundaries are defined properly within Jefferson County voter registration database, maps and street lists with block ranges and odd/even/both indicators before the coding and programming of the ballot begins. If changes are necessary after programming has begun, the Political Subdivision responsible will incur the cost of re-programming for all entities involved. Political Subdivision must proof and approve all programming work done for the jurisdiction according to the attached **Exhibit C- CALENDAR**

(j) Deliver to Contracting Officer, according to the attached **Exhibit C - CALENDAR,** ballot language with Spanish translations, candidate names or measures, the order in which they are to

be printed on the ballot with the exact form and spelling. Provide pronunciation for difficult names or words to use on the audio recording. Timely review and sign off on ballot proofs.

(k) Provide information services for voters and election officers.

(l) Pay prorated additional costs incurred by Contracting Officer if a recount for said election is required, the election is contested in any manner, or a runoff is required.

(m) Canvass the returns and declare the election results for Political Subdivision. Political Subdivision is responsible for filing any precinct reports required by the Secretary of State.

(n) Serve as Custodian of Records for election records and provide for the retention of said election records as provided by law.

(o) The deposit will be waived for this Election Agreement for all Political Subdivisions. All costs will be assessed according to attached schedule on **Exhibit D – Contract Costs** and a detailed billed will be rendered within 30 days after the canvassing of the election or the receipt of all invoices needed to validate the billing. Any discrepancies in billing should be addressed immediately.

(p) **City of Beaumont and Beaumont Independent School District** agree to enter into a Joint Election Agreement in compliance with SECTION 11.0581. Subchapter C, Chapter 11, Education Code if said entities call for an election on May 4, 2019.

4. **COST OF SERVICES.** Political Subdivision shall share some expenses for the above services, supplies and equipment. Only the actual expenses directly attributable to this Agreement and any prorated shared expenses may be charged to Political Subdivision, plus a 10% administrative fee.

5. GENERAL CONDITIONS.

(a) The parties agree that the timing is critical on all duties in this Agreement. Lack of adherence to any deadline in the CALENDAR without prior agreement of Contracting Officer may result in cancellation of Contracting Officer's duties and obligations to conduct Political Subdivision's election under this Agreement or, at the discretion of Contracting Officer, a late penalty surcharge in an amount not to exceed 10% of the final election cost. Adherence to the CALENDAR is critical because of Jefferson County's obligation to complete all programming and testing and to process, and print/order the mail military and overseas ballots by state/federal deadlines to be provided to the Early Voting Clerk.

(b) In accordance with Section 31.098 of the Texas Election Code, Contracting Officer is authorized to contract with third persons for election services and supplies and is authorized to hire necessary temporary personnel to perform contracted duties. Part-time personnel will be compensated at the hourly rate set by Jefferson County.

(c) Political Subdivision acknowledges that electronic voting equipment is highly technical and it is conceivable that, despite the best effort of the parties and technical assistance, it might fail during the election. Contracting Officer will do whatever is possible to remedy the situation, but Political Subdivision agrees that should such equipment fail, it will not make any claim for damages of any kind.

(d) Any qualified voter in the Joint Election may vote early by personal appearance at any of the joint early voting locations or at any Vote Center/Polling Location on Election Day.

(e) Jefferson County Elections Department may contract with numerous political entities for the Joint Election, and the parties agree that all ballot styles will be programmed into one electronic voting system. Each voter will receive one ballot which contains all races and issues in the Joint Election for which the voter is eligible at the address and in the precinct in which the voter is currently registered. One joint voter sign-in process consisting of a common list of registered voters and common signature rosters shall be used in precincts in which the county polling locations are used.

(f) The Contracting Officer shall file copies of this Agreement with the Auditor and Treasurer of Jefferson County not later than the 10th day from receipt of the fully executed contract by Contracting Officer.

(g) Jefferson County is self-insured for personal liability issues. Should Political Subdivision desire insurance for injuries during this election or other liabilities, entity shall make such arrangements separate from this Agreement.

(h) In the event that the performance by Contracting Officer of any of its obligations hereunder shall be interrupted or delayed by any occurrence not occasioned by its own conduct, whether such occurrence be an act of God or the result of war, riot, civil commotion, sovereign conduct, or the act or condition of any persons not a party thereof, then it shall be excused from such performance for such period of time as is reasonably necessary after such occurrence to remedy the effects thereof.

(i) The parties to this Agreement agree that Political Subdivision may cancel this Agreement in the event that it has no need to conduct an election by 60th day before Election Day. If Political Subdivision's election is cancelled after deadline, a $200 contract preparation and processing fee will be due in addition to any costs incurred by Contracting Officer on behalf of Political Subdivision prior to said cancellation.

(j) The Political Subdivision has the option of extending the terms of this Agreement through its runoff election, if applicable. Political Subdivision may reduce the number of the adopted early voting locations and/or Election Day voting locations in which precincts are not involved in a runoff election. In the event of a runoff which Political Subdivision wants Contracting Officer to conduct, Political Subdivision agrees to attempt to coordinate the date with other entities participating in this Joint Election. If Political Subdivision elects to have Contracting Officer conduct a runoff election, the cost will be determined by the number of entities participating and the actual costs plus administrative fees. Political Subdivision will be responsible for all orders,

notices, and publications required for their runoff except the publication of the public logic and accuracy test which Contracting Officer will publish.

6. DISPUTE RESOLUTION PROCEDURE

The parties agree to use dispute resolution process provided for in Chapter 2260 of the Texas Government Code to attempt to resolve all disputes arising under this Agreement. Either party must give written notice to the other party of a claim for breach of this Agreement not later than the 180th day after the date of the event, giving rise to the claim. By their execution of their Agreement, the parties acknowledge and knowingly and voluntarily agree that neither the execution of this Agreement; nor the conduct, act or inaction by any person in the execution, administration, or performance of this Agreement constitutes or is intended to constitute a waiver of the party's immunity from suit with respect to claims of third parties.

7. ENTIRE AGREEMENT/AMENDMENT

This Agreement constitutes the entire agreement between the **City of Beaumont, Beaumont Independent School District** ,**the Port of Beaumont** and the Contracting Officer. This Agreement may be amended only in writing and signed by the parties.

8. NOTICES

Except as otherwise provided in this section, all notices, consents, approvals, demands, request, or other communications provided for or permitted to be given under any of the provisions of this Agreement shall be in writing and shall be deemed to have duly given or served when delivered by hand delivery or when deposited in the U.S. mail by registered or certified mail, return receipt requested, postage prepaid, and addressed as set forth below or to such other person or address as may be given in writing by either party to the other in accordance with this section:

City of Beaumont, Texas**:**

Tina Broussard, City Clerk
801 main Beaumont
Beaumont, Texas 77701

Beaumont Independent School District:

Georgia Antoine
3395 Harrison
Beaumont, Texas 77706

Port of Beaumont:

Ashley Sanders
1225 Main Street
Beaumont, Texas 77701

JEFFERSON COUNTY: Carolyn L. Guidry, County Clerk
P. O. Box 1151
Beaumont, TX 77704

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 6th day of March, 2019.

City of Beaumont, Texas

By: _____
Name: Kyle Hayes
Title: City Manager

Attest: Tina Broussard

THE CITY OF BEAUMONT, JEFFERSON COUNTY, TEXAS
BEAUMONT, TEXAS

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 18th day of MARCH, 2019.

Jefferson County, Texas

By _____
Name: Jeff Branick
Title: County Judge

Attest Carolyn L Guidry

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS
(seal)

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 18th day of MARCH, 2019.

Jefferson County, Texas

By: Carolyn L Guidry
Name: Carolyn L. Guidry
Title: County Clerk

Attest: M-Good-, Chief Deputy

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS
(seal)

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 28th day of February, 2019.

Beaumont Independent School District

By: _____
Name: A.B. Bernard
Title: Board President

Attest: _____

GEORGIA C. ANTOINE
NOTARY PUBLIC, JEFFERSON COUNTY, TEXAS
COMM. EXPIRES 08/03/2022
NOTARY ID # 2553695

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 18th day of March, 2019.

Jefferson County, Texas

By _____
Name: Jeff Branick
Title: County Judge

Attest _____

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS
(seal)

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 18th day of March, 2019.

Jefferson County, Texas

By: _____
Name: Carolyn L. Guidry
Title: County Clerk

Attest: _____, Chief Deputy

(seal)

COMMISSIONERS COURT
JEFFERSON COUNTY, TEXAS

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 22 day of February, 2019.

Port of Beaumont

By: _____
Name: David C. Fisher
Title: Port Director & CEO

Attest: _____

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 18TH day of MARCH, 2019.

Jefferson County, Texas

By _____
Name: Jeff Branick
Title: County Judge

Attest _____ (seal)

IN WITNESS WHEREOF, each of the parties agrees to the terms of this Agreement and has caused this Agreement to be executed on the 18TH day of MARCH, 2019.

Jefferson County, Texas

By: _____
Name: Carolyn L. Guidry
Title: County Clerk

Attest: _____, Chief Deputy (seal)

EXHIBIT A

NOTICE OF EARLY VOTING LOCATIONS
FOR MAY 4, 2019, JOINT GENERAL ELECTION
[City of Beaumont, Beaumont Independent School District & Port of Beaumont]

(AVISO de LOCALIZACIONES Y de HORAS de VOTACIÓN ADELANTADA
PARA EL 04 DE MAYO DE 2019, ELECCIÓN GENERAL CONJUNTA)

[*Incluye la ciudad de Beaumont y Escuela Independiente del Distrito Beaumont y Puerto de Beaumont]*

EARLY VOTING LOCATIONS:
(Localizaciones de Votaciones Adelantada):

Jefferson County Courthouse - Main	**1085 Pearl., Beaumont, Texas**
Rogers Park Recreation Center	**6540 Gladys, Beaumont, Texas**
Theodore Johns Library	**4255 Fannett Rd., Beaumont, Texas**
John Paul Davis Community Center	**3580 E Lucas, Beaumont, Texas**
BISD Administration Bldg.	**3395 Harrison, Beaumont, Texas**

DATES AND HOURS FOR ALL ABOVE LOCATIONS:
(Fechas y Horas para todas las localizaciones):

April 22 – 26 *(Abril 22 – 26)*	Monday - Friday *(Lunes - Viernes)*	8:00 a.m. - 5:00 p.m. *8:00 a.m. – 5:00 p.m.*
April 27 *(Abril 27)*	*Saturday* *(Sábado)*	7:00 a.m. - 7:00 p.m. *7:00 a.m. - 7:00 p.m.*
April 29– 30 *(Abril 29 – 30)*	Monday - Tuesday *(Lunes - Martes)*	7:00 a.m. - 7:00 p.m. *7:00 a.m. - 7:00 p.m*

EXHIBIT B

Precincts Voting at Location *(Precintos de votación en el Localizacion)*	Election Day Polling Places *(Localizaciones)*	ADDRESS *(Dirección)*	City, State, Zip code *(Ciudad, Estado, Código postal)*
ALL (todos)	Amelia Elementary School	565 S. Major Dr	Beaumont, TX 77707
ALL (todos)	Beaumont Municipal Airport	455 Keith Rd.	Beaumont, TX 77713
ALL (todos)	Bevil Oaks City Hall	13560 River Oaks Blvd.	Bevil Oaks, TX 77713
ALL (todos)	BISD Administration Building	3395 Harrison Ave.	Beaumont, TX 77706
ALL (todos)	Calvary Baptist Church	3550 Dowlen Rd.	Beaumont, TX 77706
ALL (todos)	Dishman Elementary	3475 Champions Dr.	Beaumont, TX 77707
ALL (todos)	O.C. Mike Taylor Career Center	2330 North St.	Beaumont, TX 77702
ALL (todos)	Rogers Park Community Center	6540 Gladys Ave.	Beaumont, TX 77706
ALL (todos)	Roy Guess Elementary	8055 Voth Rd.	Beaumont, TX 77708
ALL (todos)	Jerry Ware Airport Terminal	5000 Jerry Ware Dr.	Beaumont, TX 77705
ALL (todos)	Alice Keith Park Recreation Center	4075 Highland Ave.	Beaumont, TX 77705
ALL (todos)	Charlton-Pollard Elementary	825 Jackson St.	Beaumont, TX 77701
ALL (todos)	Dr. Mae Jones-Clark Elementary	3525 Cleveland St.	Beaumont, TX 77703
ALL (todos)	Jefferson County Courthouse	1001 Pearl St.	Beaumont, TX 77701
ALL (todos)	MLK Middle School	1400 Avenue A	Beaumont, TX 77701
ALL (todos)	John Paul Davis Community Center	3580 E. Lucas Dr.	Beaumont, TX 77703
ALL (todos)	Precinct 4 Service Center	7780 Boyt Rd.	Beaumont, TX 77713
ALL (todos)	Sterling Pruitt Center	2930 Gulf St.	Beaumont, TX 77703
ALL (todos)	Theodore Johns Library	4255 Fannett Rd.	Beaumont, TX 77705

EXHIBIT C
CALENDAR

The Political Subdivision agrees that timing is critical, and lack of adherence to this CALENDAR without prior agreement of Contracting Officer may result in additional charges or cancellation of Contracting Officer's duties and obligations to conduct Political Subdivision's election under this Contract.

School Districts must adhere to all deadlines, even if on Spring Break.

Please refer to the Texas Secretary of State's website for a complete calendar of events including citations to the Texas Election Code and for information specific to entity type. Confer with your attorney on any statutes that govern your entity. Please comply with all orders, postings and notices as required for your Political Subdivision. Contracting Officer will provide the publication of one Notice of Public Test in English and Spanish.

JANUARY 1, 2019

Prior to January 1, 2017, each Political Subdivision is responsible for validating with the Voter Registrar that the boundaries for their voting precincts are correct and supplying the Contracting Officer with a map of such boundaries.

Monday, February 25, 2019
68th day before Election Day

Recommended date to conduct ballot position drawing
Notice of ballot position drawing must be posted for 72 hours immediately preceding time of drawing.
**Please schedule ballot drawing as soon as possible and email the BALLOT FORMAT AND ORDER OF CANDIDATES ON BALLOT to Contracting Officer at guidry@co.jefferson.tx.us. AND CC ndoyle@co.jefferson.tx.us **

Tuesday, March 5, 2019
60th day before Election Day

Last day for the governing body of a political subdivision to deliver notice of the election to the county clerk/elections administrator and voter registrar of each county in which the political subdivision is wholly or partly located (Sec. 4.008)

Deadline to notify Contracting Officer via email of the following items:

- if Political Subdivision has a **contested election**.
- **candidate names**, including **write-in candidates**.
- any **candidate withdrawals** or **election cancellation**.
- **order of candidates on ballot**. (We prefer to receive it sooner if it is available.)
- **Spanish translations** of all ballot titles, contests, and ballot language.

- **phonetic pronunciations** of all candidate names which will be used for the ballot audio recording.

Tuesday, March 5, 2019
60th day before Election Day - Continued

Deadline to **cancel election** and incur **no fees** under the Election Services Agreement

Deadline to receive executed **Election Services Agreement** by mail, personal delivery, or email.

Deadline to receive copy of **Order of Election**

Contracting Officer contact information:	
Email:	guidry@co.jefferson.tx.us
Mail:	P. O. Box 1151, Beaumont, TX 77704-1151
Hand Delivery:	1085 Pearl Street, First Floor, Beaumont, Texas 77701

If additional time is needed because of meeting schedules, please notify us.

****Deadlines for ballot proofing and ballot approval will be emailed with ballot proofs. The parties must adhere to deadlines of 24 hour turnaround time, even if they occur during Spring Break, in order for our office to meet the State and Federal deadlines to produce mail military and overseas ballots for the Early Voting Clerk.****

Wednesday, March 20, 2019
45th day before Election Day
Deadline to mail ballots to military or overseas voters who submitted their ballot request via a federal postcard application (FPCA) or via a standard application for ballot by mail and indicated that they are outside the United States. Ballots must be mailed by this date or the 7th day after the clerk receives the application. If the early voting clerk cannot meet this 45th-day deadline, the clerk must notify the Secretary of State within 24 hours. (Sec. 86.004(b)).

Thursday, April 4, 2019
30th day before Election Day
Last day to register to vote or make a change of address effective for the May 7, 2016 election (Secs. 13.143, 15.025)
First day of period during which notice of election must be published if the method of giving notice is **not** specified by a law outside the Election Code, and **publication** is the selected method of giving notice. (Sec. 4.003(a)(1)). The notice of election ordered by an authority of a city or school district must be given by publication in a newspaper in addition to any other method specified. (Secs. 4.003(c) and (d))

Monday, April 15, 2019
19th day before Election Day
Last day to post notice of election on bulletin board used for posting notices of meetings of governing body (Sec. 4.003(b)). A Record of Posting Notice of Election (PDF) should be completed at the time of posting. (Sec. 4.005)

Monday, April 22, 2019
12th day before Election Day
First day to vote early in person (Sec. 85.001(a))

NOTE - Political Subdivisions Other than Cities and Counties: Early voting in person must be conducted at least eight (8) hours each weekday that is not a legal state holiday unless the political subdivision has fewer than 1,000 registered voters, in which case early voting in person must be conducted at least three (3) hours per day. (Sec. 85.005(b)).
NOTE – Cities and counties: Early voting in person must be conducted on the weekdays of the early voting period and during the hours that the county clerk's or city secretary's main business office is regularly open for business. (Sec. 85.005(a)). However, because cities and counties must have office hours for election-related business at least three (3) hours every business day for this type of election, we harmonize these requirements with the result that, if a city or county is not regularly open for business on one or more weekdays, on those "closed" days, a city or county must conduct early voting for at least three (3) hours a day at the main early voting location (except for a city's two 12-hour days, when it must be open for the full 12 hours).
NOTE - Cities: Cities **must** choose two (2) weekdays for the main early voting polling place location to be open for 12 hours during the regular early voting period. City council must choose the two weekdays. (Sec. 85.005(d)).
NOTE - Independent School Districts: Despite the change in state law that allows an ISD to be closed on school holidays during the mandatory office hours period, you are **required** to be open during the entire early voting period, except on legal state and national holidays.
NOTE - Joint Elections: If entities are conducting early voting by personal appearance jointly, we *recommend* a unified schedule covering all requirements; i.e., no entity's requirements should be neglected or subtracted as a result of a joint agreement.

Wednesday, April 24, 2019
10th day before Election Day
Last day of period during which notice of election must be published if method of giving notice is not specified by a law outside the Election Code and publication is the selected method of giving notice. (Sec. 4.003(a)(1)). The notice of election ordered by a commissioners court or by an authority of a city or school district, must be given by publication in a newspaper in addition to any other method specified. (Secs. 4.003(c) and (d))

Last day to mail a copy of the notice of election to each registered voter in the county if method of giving notice is not specified by a law outside the Election Code and this method of giving notice is selected. (Secs. 1.006, 4.003(a)(3)).

Cities and Counties – Weekend Early Voting Hours - Notice Requirement: Last day to post notice on bulletin board used for posting notice of city council or commissioners court, if early voting

will be conducted on Saturday (Sec. 85.007). Notice must be posted at least 72 hours before early voting begins on a Saturday or Sunday. Notice must also be posted to the political subdivision's website, if one is maintained.

NOTE - NEW LAW: Section 85.007, as amended by House Bill 2721 (2015), requires that the election notice, which includes the days and hours of early voting be posted on the political subdivision's website, if the political subdivision maintains a website.

Tuesday, April 30, 2019
4th day before Election Day
Last day to vote early by personal appearance (Sec. 85.001(a)).

Saturday, May 4, 2019
Election Day

NOTE - NEW LAW – House Bill 2354 (2015) changed the date of the May uniform election from the second Saturday in May to the first Saturday in May.

30 days from date of final invoice
Pay balance due for election services. Please make checks payable to:

Jefferson County Treasurer
P O Box 1151,
Beaumont, Texas 77704-1151

EXHIBIT D

CONTRACT COSTS

Voting Equipment	
Judge's Booth Controller	$330.00
eSlate	$330.00
Disable Access Unit (DAU)	$396.00
Ballot Box	$5.00

Communication Devices	
EA Tablet + WIFI	$119.50
Cell Phone	$30.00

Mandatory Signs	
Large A-Frame (ID Required)	$10.00
Large A-Frame (Notices)	$10.00

PROGRAMMING	COUNTY COST
1 - 5 RACES	$1,125.00
6 - 10 RACES	$1,898.00
11-20 RACES	$2,475.00
21-40 RACES	$3,135.00
41-75 RACES	$3,960.00
76-100 RACES	$4,704.00

BALLOT PRINTING	COUNTY COST
8.5 X 11	$0.23
8.5 X 14	$0.25
8.5 X 17	$0.28
Sample Ballots	$0.06

SUPPLIES	
ELECTION KITS / w Seals EV & ED	$40.00
Mail Ballots (Per Set)	$0.75
Supply Bag Consumables (per location)	$20.00

REVISED 07/19/16

PROCLAMATION

STATE OF TEXAS	§	COMMISSIONERS' COURT
	§	
COUNTY OF JEFFERSON	§	OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 18th day of March, 2019, on motion made by Everette D. Alfred, Commissioner of Precinct No. 4, and seconded by Michael S. Sinegal, Commissioner of Precinct No. 3, the following Proclamation was adopted:

Gift of Life Program
2019 Champagne & Ribs Proclamation
Jefferson County

WHEREAS, Gift of Life is hosting the 14th Annual Champagne & Ribs event benefiting its Men's Health and Prostate Cancer Program that provides vital healthcare for Southeast Texas men who cannot afford insurance or high deductibles; and

WHEREAS, the Survivor-themed event will be held on **Thursday, April 4** at the Beaumont Civic Center and recognize four outstanding program advocates, physician Todd Clarke, MD; attorney The Honorable Jimmy Mehaffy; Jefferson County Commissioner Michael Shane Sinegal; and business leader Tim Sudela; and

WHEREAS, Gift of Life annually screens nearly **600** medically at-risk men and augments its initiatives through regional healthcare and disaster recovery partnerships to provide free prostate cancer screenings, a battery of vital primary care tests and essential educational outreach at designated strategic sites in Beaumont, Port Arthur and Orange; and

WHEREAS, the Gift of Life pays for all medical costs including prostate cancer screenings, diagnostic tests and cancer treatment; and

WHEREAS, statistics reflect that early detection is the best protection against prostate cancer, with the five-year survival rate for men who are diagnosed early with localized prostate cancer being nearly 100 percent; and

WHEREAS, the Gift of Life, through its Health Consortium stakeholders that include local physicians and medical entities, along with other dedicated program ambassadors ensures comprehensive resources and direct care are made available to advance the health and well-being of Southeast Texas men and their families; and

WHEREAS, since 2000, the Gift of Life has made available nearly 10,000 free prostate cancer screenings and helped extend the lives of 77 men who have been diagnosed with prostate cancer; and

NOW, THEREFORE, BE IT RESOLVED, that the Commissioners Court of Jefferson County does hereby proclaim March 18th as the Gift of Life Men's Health Awareness Day in Jefferson County, and we urge all men in our community to pursue preventive health practices and early detection efforts.

Signed this 18th day of March, 2019.

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

PROCLAMATION

STATE OF TEXAS	§	COMMISSIONERS COURT
	§	
COUNTY OF JEFFERSON	§	OF JEFFERSON COUNTY, TEXAS

BE IT REMEMBERED at a meeting of Commissioners' Court of Jefferson County, Texas, held on the 18th day of March, 2019, on motion made by Brent Weaver, Commissioner of Precinct No. 2, and seconded by Michael S. Sinegal, Commissioner of Precinct No. 3, the following Proclamation was adopted:

YMBL SOUTH TEXAS STATE FAIR DAYS IN JEFFERSON COUNTY

WHEREAS, the Annual YMBL South Texas Fair is slated for **March 21st** through **March 31st, 2019** in Ford Park; and

WHEREAS, revenue from the Fair is used by the YMBL to help fund and support various charitable groups and in the past many years the YMBL has been able to provide them millions of dollars; and

WHEREAS, this is a once a year opportunity for Southeast Texans to enjoy world-class fun and entertainment fit for the entire family; and

WHEREAS, the fair is the only project that actually brings in revenue for the YMBL to grow their ability to serve our area's various charitable groups;

NOW, THEREFORE, BE IT RESOLVED that the Commissioners' Court of Jefferson County, Texas, hereby proclaims the days of **March 21 – March 31, 2019**, as **YMBL SOUTH TEXAS STATE FAIR DAYS IN JEFFERSON COUNTY** and we urge all citizens to attend and partake of the fun.

SIGNED this 18th day of March, **2019.**

JUDGE JEFF R. BRANICK
County Judge

ABSENT
COMMISSIONER EDDIE ARNOLD
Precinct No. 1

COMMISSIONER MICHAEL S. SINEGAL
Precinct No. 3

COMMISSIONER BRENT A. WEAVER
Precinct No. 2

COMMISSIONER EVERETTE D. ALFRED
Precinct No. 4

AGENDA ITEM **March 18, 2019**

Consider, possibly approve, authorize the County Judge to execute, an Inter-local Agreement between Jefferson County and the City of Port Arthur for repairs of streets pursuant to the City's request to Precinct 2 and Sec.791.014, Texas Government Code.

STATE OF TEXAS)(
)(INTERLOCAL AGREEMENT
COUNTY OF JEFFERSON)(

WHEREAS, Jefferson County, Texas, by and through its Commissioners' Court as authorized by Chapter 791 of the Government Code and the City of Port Arthur, a body politic of the State of Texas, for the mutual benefit of the citizens they serve, desire to enter into a contract to provide certain services to each other, and;

WHEREAS, Jefferson County, Texas through Commissioner Precinct Two has, from time to time, capacity to provide labor and equipment suitable for the repair of roadways, and;

WHEREAS, the City of Port Arthur, has, from time to time, the need to maintain and repair streets and roadways which it owns, and;

WHEREAS, the city of Port Arthur requires assistance and does not have the sufficient labor or equipment suited for such construction and/or maintenance, and;

Now, therefore, know all men by these presents:

City of Port Arthur and Jefferson County hereby agree as follows:

1. Jefferson County shall furnish labor and equipment to remix road base (bomag) the Port Arthur city limits section of Viterbo road; which connects to the Precinct 2 section of Viterbo road that is a County maintained section of roadway-listed on Exhibit A City Limits distance of Viterbo road 0.66 tenths of a mile incorporated herein when and as determined at the discretion of the Commissioner for Jefferson County Precinct Two, subject to the requirements of Section 791.014 of the Government Code. All shoulder prep and drainage work must be completed by the City of Port Arthur prior to starting on road rebuild by the County.
2. The City of Port Arthur shall furnish Precinct Two, with all materials needed for the City road project. The City of Port Arthur will provide Jefferson County Precinct 2 with 4,000 gallons of CRS-2 in exchange for the labor and equipment.
3. Consideration for the repairs herein contemplated shall be determined and mutually agreed from time to time depending on the scope of the repair needed.
4. This agreement shall be effective on the date of its execution and may be terminated at the will of either party.
5. This agreement shall be construed according to the laws of the State of Texas.
6. Nothing in this agreement shall be construed to create the existence of an agency relationship between the parties.
7. Any employee of a party performing services pursuant to this agreement shall not be deemed to be the agent of the party receiving services under this agreement.
8. The City of Port Arthur shall be liable for damage caused by road work whether done by City employees/equipment or County Employees/equipment.
9. The parties further agree, pursuant to Sec. 791.015, Texas Government Code, that any dispute regarding the terms of this agreement will be submitted to an agreed upon mediator for resolution.

Executed on the _____ day of _____, 2019.

_____
Jeff R. Branick
Jefferson County Judge

_____
Derrick Freeman, Mayor
City of Port Arthur

Exhibit A Port Arthur City Limits distance of Viterbo road 0.66 tenths

Jefferson County shall furnish labor and equipment to remix road base (bomag) the Port Arthur city limits section of Viterbo road; which connects to the Precinct 2 section of Viterbo road that is a County maintained section of roadway-listed on Exhibit A City Limits distance of Viterbo road 0.66 tenths of a mile incorporated herein. **All drainage and prep work shall be completed before road work begins. This includes cleaning, recutting all ditches and cutting all shoulder and roadway edges along project section of Viterbo road. Additionally, the work and time line shall be determined by Precinct 2 staff depending on staffing and equipment availability. All schedules and work timelines are subject to change.**

Scope of work for City of Port Arthur:

1. Set up traffic control signs in advance of the project limits during shoulder and drainage work flaggers posted
2. Cut all road way edges and shoulder areas and Blade back any grass or built up material on pavement edges and haul off
3. Re-cut all ditches on both sides of roadway and open up all drainage and flow in and around drainage culverts located along roadway. Haul off all material cut from ditch

Scope of work for Precinct 2:

1. Bomag/Scarify or remix existing pavement and base material (depends on equipment, 2 to 4 days) If areas of subgrade repair are needed, windrow base to expose subgrade and make corrections (replace/treat then recompact)
2. Spread existing base and add additional base (limestone provided by City of Port Arthur) if required to provide a uniform layer thickness (2 or 3 days)
3. Apply water to base material to bring moisture level up above the optimum amount, blade mix base to uniformly distribute the moisture. (2 days)
4. Compact base by blading and rolling the material in thin lifts across the roadway (lift thickness is dependent on equipment and total depth) (4 days) Allow base to cure until the moisture level is slightly below optimum, then tight blade the surface to provide a smooth uniform surface (2 days depending on weather) (Continue to maintain the moisture content near optimum until the prime coat/top seal is applied) Top seal provided by City of Port Arthur (some people like to allow the base to set for an extended period before tight blading and priming, the thinking is that this allows soft spots to be located and repaired but isn't necessary if all spots are corrected prior to compaction)
5. Sweep off all loose material, dampen the surface and apply prime coat (one day), allow to cure until all liquid has been absorbed (generally 3 days) or an alternative is it cover with sand, or mix the prime into the material and compact
6. Shoot first course of CRS-2 Oil and rock aggregate at specified rate and temperature, apply aggregate at specified rate and roll to set aggregate into the asphalt (one day). (if a second course of oil and aggregate is planned, allow first course to cure for 3 to 7 days before second course) All materials including rock and oil provided by city of Port Arthur. Rock aggregate, Limestone,Top seal prime and CRS-2 oil provided by City of Port Arthur and delivered to the Viterbo yard near worksite- Cover stone Rock aggregate needed:250 tons- Limestone needed:760 tons- Top seal:110 gallons
   CRS-2 oil: 5,640 Gallons

Estimated Summary of Viterbo Road Project:

Reclaim and chip seal 3485 feet of Viterbo road located inside the City limits of Port Arthur. Pct-2 will recycle/reclaim/mix and reshape/reset Viterbo road, starting just east of the rail road tracks, off of W Port Arthur road east 3485 feet to Jefferson County Pct-2 Line County road mark.

We will add 4 inches of limestone base from the rail road tracks 1500 feet east that will be mixed into the existing road base material. This will add extra road base materials in the road where truck traffic utilizes roadway in that area therefore protecting the roadway.

Estimated Approximate Materials needed:

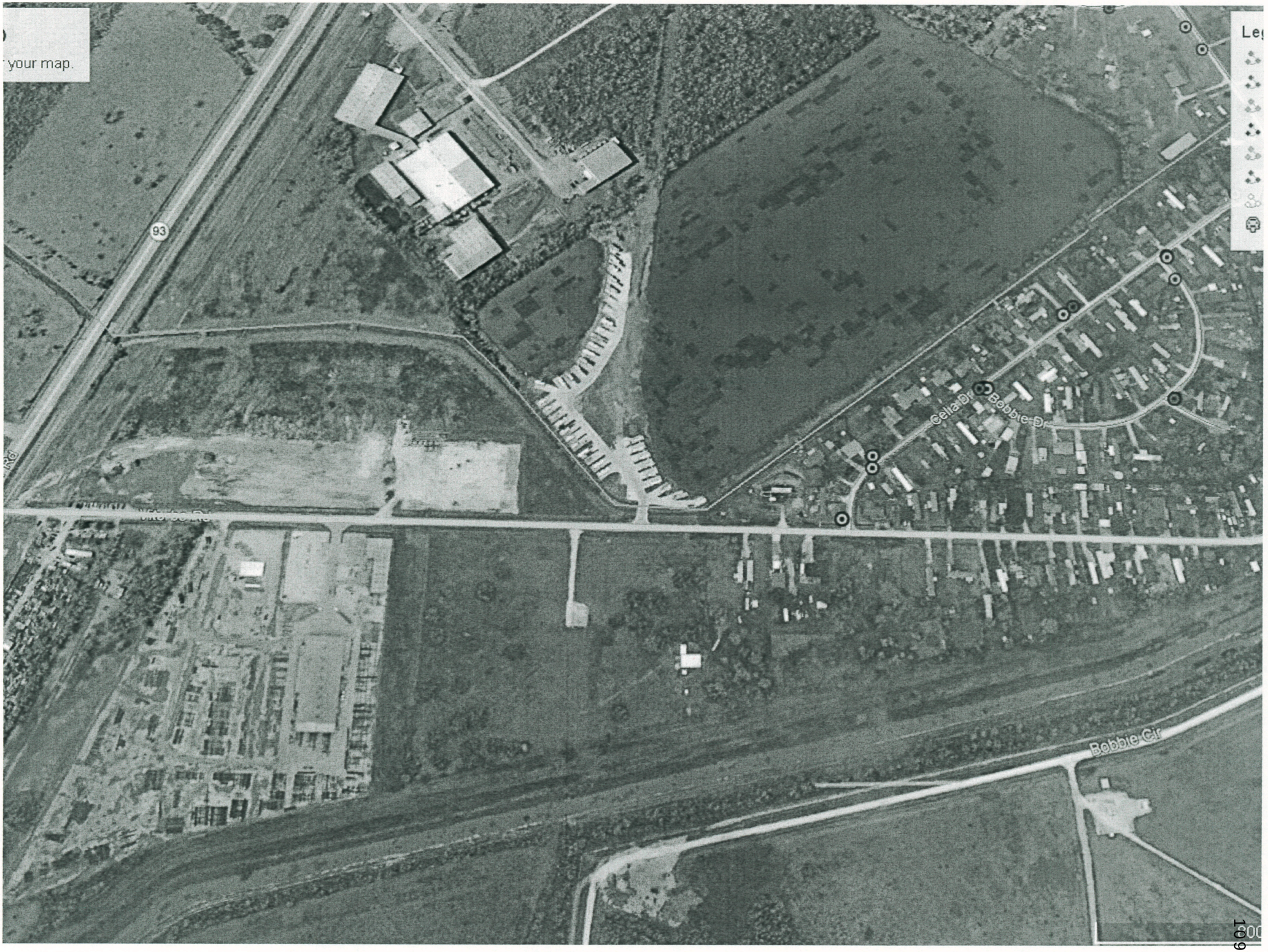
Double Chip Seal

Crs-2 Oil ---------- 5640 Gallons

Cover Stone ---------- 250 Tons

Top Shield Primer --------- 110 Gallons

Lime Stone Base ---------- 760 Tons



1093

AGENDA ITEM **March 18, 2019**

Consider, possibly approve, authorize the County Judge to execute, an Inter-local Agreement between Jefferson County and Jefferson County Drainage District No.7 for repairs of streets pursuant to the City's request to Precinct 2 and Sec.791.014, Texas Government Code.

STATE OF TEXAS)(
)(INTERLOCAL AGREEMENT
COUNTY OF JEFFERSON)(

WHEREAS, Jefferson County, Texas, by and through its Commissioners' Court as authorized by Chapter 791 of the Government Code and Jefferson County Drainage District No.7, a body politic of the State of Texas, for the mutual benefit of the citizens they serve, desire to enter into a contract to provide certain services to each other, and;

WHEREAS, Jefferson County, Texas through Commissioner Precinct Two has, from time to time, capacity to provide labor and equipment suitable for the repair of roadways, and;

WHEREAS, the Jefferson County Drainage District No.7, has, from time to time, the need to maintain and repair Levee roads along it's Levee system which it owns or maintains, and;

WHEREAS, the Jefferson County Drainage District No.7 requires assistance and does not have the sufficient labor or equipment suited for such construction and/or maintenance, and;

Now, therefore, know all men by these presents:

Jefferson County Drainage District No.7 and Jefferson County hereby agree as follows:

1. Jefferson County shall furnish labor and equipment to repair certain Levee roads along the Levee system, listed on Exhibits A during phases of work incorporated herein when and as determined at the discretion of the Commissioner for Jefferson County Precinct Two, subject to the requirements of Section 791.014 of the Government Code.
2. The Jefferson County Drainage District No.7 shall furnish Precinct Two, with all materials needed for the Levee road project additionally in exchange for the labor and equipment the Drainage District No.7 will provide 4,000 gallons of CRS-2 to Jefferson County Precinct 2.
3. Consideration for the repairs herein contemplated shall be determined and mutually agreed from time to time depending on the scope of the repair needed.
4. This agreement shall be effective on the date of its execution and may be terminated at the will of either party.
5. This agreement shall be construed according to the laws of the State of Texas.
6. Nothing in this agreement shall be construed to create the existence of an agency relationship between the parties.
7. Any employee of a party performing services pursuant to this agreement shall not be deemed to be the agent of the party receiving services under this agreement.
8. The Jefferson County Drainage District No.7 shall be liable for damage caused by road work whether done by DD7 employees/equipment or County Precinct 2 Employees/equipment.
9. The parties further agree, pursuant to Sec. 791.015, Texas Government Code, that any dispute regarding the terms of this agreement will be submitted to an agreed upon mediator for resolution.

Executed on the _____ day of _____, 2019.

_____
Jeff R. Branick
Jefferson County Judge

_____
Jefferson County Drainage District No. 7

Exhibit A Jefferson County Drainage District 7 Levee road repair distance total 4.5 miles

THESE ARE ONLY APPROXIMATE ESTIMATES ON MATERIALS NEEDED. **DD 7 will need to determine cost of materials based on their guidelines and policy.** No materials for any phase of the project should be ordered for DD7 Levee road project until the inter-local agreement is approved by both Jefferson County Pct 2 and Jefferson County DD7 and a planning meeting is conducted by DD7 and Pct 2 regarding construction details pertaining to that phase of work. All Materials purchased, ordered and delivered by DD7.

DD7 has requested our assistance through an inter-local agreement to repair and reconstruct sections of the DD7 Levee system roadway located on top of the Levee system. Pct-2 will recycle/reclaim/mix and reshape/reset sections of the Levee road where determined by DD7 staff. **DD7 will pay for and provide and coordinate delivery logistics of all road materials needed for the DD7 Project. It is understood that due to the amount of work it may take 2 road seasons to complete all road work on the levee system. This work will be provided in phases by Precinct 2 crews as schedule permits. The schedule of work is subject to change at the discretion of Precinct 2 staff.**

ALL MATERIALS PROVIDED BY DD7: This is an estimate on materials, timeline and construction process.

For areas identified as Exhibit A as it relates to Inter-local it is as follows: .8 tenths distance TOTAL for reconstruction - .2 for the area near proctor extension pump station ---- .4 for area off west port Arthur road ---- .2 for area near lakeview pump station- This will be done in phases as equipment and staff are available from Precinct 2.

Phase 1----------Estimated Approximate Materials needed: Hot Mix Asphalt Level ups

The process is as follows for these areas:

1. **Prep and sweep road**

2. **Apply tack oil to road surface and lay asphalt where determined areas for level ups throughout Levee road system Complete asphalt level up of areas designated – Areas between WPTA Road to Hwy 365 we estimate using approximately 40 tons of asphalt to complete the level ups in that area estimated cost for that area 2,700 ---From Hwy 365 to Hwy 73 we estimate using approximately 40 tons estimated cost for that area 2,700 ---From Pinetop to Pump station we estimate using 8 tons cost of 68 dollars a ton and from Hwy 73 to Lakeview pump station we estimate using 40 tons of asphalt to complete the last section of level ups estimated cost for that area 2,700.once level ups cure next road season cover with single chip seal with CRS-2 Oil and rock aggregate at specified rate and temperature, apply aggregate at specified rate and roll to set aggregate into the asphalt.**

Asphalt Hot Mix----------100 Tons

Tack Oil ----------100 Gallons

Total Estimate MATERIALS NEEDED Asphalt Level ups

Phase 2----------For areas identified for only a single chip seal it is as follows: 3.7 miles distance total for single chip seal this area designated for single chip seal with also have some asphalt level ups completed throughout the levee system road top. The plan is once we complete asphalt level ups in designed areas we will come back and top off with a single chip seal over those areas and tie into the double chip seal areas for a total distance re-surfaced of 4.5 miles

Estimated Approximate Materials needed: SINGLE CHIP SEAL

The process is as follows for these areas:

1. Prep and sweep road

2. Shoot first course of CRS-2 Oil and rock aggregate at specified rate and temperature, apply aggregate at specified rate and roll to set aggregate into the asphalt

CRS-2 Oil----------14,760 Gallons

Cover Stone ----------655 Tons

Total Estimate MATERIALS NEEDED

Phase 3----------The process is as follows for Double chip reconstruct areas:

1. Bomag/Scarify or remix existing pavement and base material (depends on equipment, 2 to 4 days) If areas of subgrade repair are needed, windrow base to expose subgrade and make corrections (replace/treat then recompact)

2. Spread existing base and add additional base (limestone provided by DD7) if required to provide a uniform layer thickness (2 or 3 days)

3. Apply water to base material to bring moisture level up above the optimum amount, blade mix base to uniformly distribute the moisture. (2 days)

4. Compact base by blading and rolling the material in thin lifts across the roadway (lift thickness is dependant on equipment and total depth) (4 days) Allow base to cure until the moisture level is slightly below optimum, then tight blade the surface to provide a smooth uniform surface (2 days depending on weather) (Continue to maintain the moisture content near optimum until the prime coat/top seal is applied) Top seal provided by DD7 (some people like to allow the base to set for an extended period before tight blading and priming, the thinking is that this allows soft spots to be located and repaired but isn't necessary if all spots are corrected prior to compaction)

5. Sweep off all loose material, dampen the surface and apply prime coat (one day), allow to cure until all liquid has been absorbed (generally 3 days) or an alternative is it cover with sand, or mix the prime into the material and compact

6. Shoot first course of CRS-2 Oil and rock aggregate at specified rate and temperature, apply aggregate at specified rate and roll to set aggregate into the asphalt (one day). (if a second course of oil and aggregate is planned, allow first course to cure for 3 to 7 days before second course)

Estimated Summary of MATERIALS NEEDED FOR DD7 Levee DOUBLE CHIP SEAL Road Project:

Reclaim and double chip seal .8 tenths of a mile of designated Double chip seal areas of Levee system.

We recommend adding limestone base in areas where failures are noted and will be mixed into the existing road base material. This will add extra road base materials in the road where road failures are identified.
Observations -Most damage is occurring on the edges of the levee road system due to bush hog and tractor damage.

Estimated Approximate Materials needed: DOUBLE CHIP SEAL

.8 tenths distance Double Chip Seal

Crs-2 Oil ---------- 4,790 Gallons

Cover Stone ---------- 220 Tons

Top Shield Primer --------- 110 Gallons

Lime Stone Base ----------Amount to be determined approximately 26 dollars a ton

Total Estimate MATERIALS NEEDED

your map.
Levee road work
iles total
le chip seal 3.7 miles using 655 tons
ver stone and 14,760 gallons of
2 Oil
onstruct .8 miles of levee road
ag remix reset double chip seal
220 tons of cover stone and
gallons of CRS-2 Oil
ne
ck
Port Acres
Jade Ave
W Port Arthur Rd
365
93
73
Tiger Bayou
H-O-Mills-Hwy
Hot mix asphalt level ups
throughout project in areas
100 tons approximate and
100 gallons of tack oil.
Legend
Access RV Pa
Blockbuster E
Church
DD6 Boundary
Feature 1
Feature 2
Feature 3
Feature 4
Feature 5
Feature 6
Feature 7
Feature 8
Feature 9
Five Star Feed
Garner Enviro
Holiday Inn
Jack Brooks R
Main
Port Acres
Port Arthur Ne
Port Arthur Uti
School
Starbucks
SUBWAY® Re
5000 f

1099

From: Eddie Arnold [mailto:eddiearnold@co.jefferson.tx.us]
Sent: Tuesday, March 5, 2019 5:36 PM
To: 'Cary Erickson' <cerickson@co.jefferson.tx.us>
Subject: RE: Agenda Item for the new hire of Micheal Shannon for the position of Beaumont Building Maintenance Supervisor

To Whom it may concern:
This memo is my recommendation that the above mentioned new hire be approved at **104%** of the target range rate for the position of Beaumont Building Maintenance Supervisor.

Justification:
Mr. Shannon has over 30 years as a HVAC mechanic, electrical assist., and as a Maintenance Supv. in the private sector. He comes highly recommended by his former employer and was willing to hire on with the County for considerably less than he was currently making. His previous employer/owner sold his interest in several fast food locations (18 +) of which, Mr. Shannon managed their maintenance crew for all. He applied, passed all requirements and was hired on as a Beaumont Building Maintenance Supervisor, working as the Asst. to the Director of Building Maintenance. This position has been vacant for several months. An error was made in calculating his starting salary and inadvertently he accepted a salary that is 4% above the normal 100% new hire rate. Thus, requiring Commissioner's Court approval.

I personally believe he will be a valuable asset to the County and we are lucky to hire such a highly qualified individual.

Please consider approving the additional 4% salary which equates to 104% of the range.

His resume' is on file with our HR dept. if needed.
Thanks for your consideration.

Eddie Arnold
Jefferson Co. Commissioner Pct. #1
Offc. 409 835-8442
Cell: 409 201-3633
Fax : 409 835-8628
email: eddiearnold@co.jefferson.tx.us
mail: *1149 Pearl St. Fourth Flr.*
Beaumont, TX 77701

AGENDA ITEM March 18, 2019

Consider and possibly approve a Resolution titled: RESOLUTION OF THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS APPROVING THE ISSUANCE OF JEFFERSON COUNTY INDUSTRIAL DEVELOPMENT CORPORATION INDUSTRIAL DEVELOPMENT REVENUE BONDS (TRP CRUDE MARKETING, LLC PROJECT), SERIES 2019 AND THE TERMS OF THE RESOLUTION OF THE ISSUER RELATING THERETO; APPROVING A LOAN AGREEMENT AND INDENTURE OF TRUST TO BE EXECUTED BY THE CORPORATION; AND APPROVING OTHER MATTERS RELATING THERETO.

No. 3

CERTIFICATE FOR RESOLUTION

THE STATE OF TEXAS §
§
COUNTY OF JEFFERSON §

The undersigned officers of the Commissioners Court of Jefferson County, Texas ("Commissioners Court"), hereby certify as follows:

1. The Commissioners Court convened in Regular Meeting ("Meeting") on the 11th day of March, 2019, at the Jefferson County Commissioners Courtroom, Jefferson County Courthouse, 1149 Pearl, 4th Floor, Beaumont, TX 77701, and the roll was called of the duly constituted officers and members of said Commissioners Court, to-wit:

Jeff R. Branick	County Judge
Eddie Arnold	Precinct 1
Brent Weaver	Precinct 2
Michael Sinegal	Precinct 3
Everett "Bo" Alfred	Precinct 4

and all of such persons participated in the Meeting, except the following EDDIE ARNOLD thus constituting a quorum. Whereupon, among other business transactions at said Meeting, a written

RESOLUTION OF THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS APPROVING THE ISSUANCE OF JEFFERSON COUNTY INDUSTRIAL DEVELOPMENT CORPORATION INDUSTRIAL DEVELOPMENT REVENUE BONDS (TRP CRUDE MARKETING, LLC PROJECT), SERIES 2019 AND THE TERMS OF THE RESOLUTION OF THE ISSUER RELATING THERETO; APPROVING A LOAN AGREEMENT AND INDENTURE OF TRUST TO BE EXECUTED BY THE CORPORATION; AND APPROVING OTHER MATTERS RELATING THERETO

was duly introduced for the consideration of said Commissioners Court and read in full. It was then duly moved and seconded that said Resolution be passed; and after due discussion, said motion, carrying with it the passage of said Resolution, prevailed and carried by the following vote:

AYES: 4 ABSTENTIONS: 0 NOES: 0

2. That a true, full, and correct copy of the aforesaid Resolution passed at the Meeting described in the above and foregoing paragraph is attached to and follows this Certificate; that said Resolution has been duly recorded in said Commissioner Courts minutes of the Meeting; that the above and foregoing paragraph is a true, full, and correct excerpt from said Commissioner Courts minutes of said Meeting pertaining to the passage of said Resolution; that the persons named in the above and foregoing paragraph are duly chosen, qualified, and acting

members of said Commissioners Court as indicated therein; that each of the officers and members of said Commissioners Court was duly and sufficiently notified officially and personally, in advance, of the time, place, and purpose of the aforesaid Meeting; and that said Resolution would be introduced and considered for passage at said Meeting; and each of said officers and members consented, in advance, to the holding of said Meeting for such purpose; and that said Meeting was open to the public and public notice of the time, place and purpose of said Meeting was given, all as required by Chapter 551, Texas Government Code.

SIGNED AND SEALED THIS 18th day of March, 2019.

Carolyn Guidry, County Clerk
Jefferson County, Texas

Jeff Branick, County Judge
Jefferson County, Texas

(SEAL)

RESOLUTION OF THE COMMISSIONERS COURT OF JEFFERSON COUNTY, TEXAS APPROVING THE ISSUANCE OF JEFFERSON COUNTY INDUSTRIAL DEVELOPMENT CORPORATION INDUSTRIAL DEVELOPMENT REVENUE BONDS (TRP CRUDE MARKETING, LLC PROJECT), SERIES 2019 AND THE TERMS OF THE RESOLUTION OF THE ISSUER RELATING THERETO; APPROVING A LOAN AGREEMENT AND INDENTURE OF TRUST TO BE EXECUTED BY THE CORPORATION; AND APPROVING OTHER MATTERS RELATING THERETO

WHEREAS, pursuant to the authority granted by Chapter 501, Texas Local Government Code, as amended (the "Act"), this Commissioners Court has authorized the creation of a nonprofit public corporation to act on its behalf to finance, under the Act, "projects" thereunder; and

WHEREAS, by resolution dated October 28, 1985, this Commissioners Court authorized the creation of such a corporation, known as the Jefferson County Industrial Development Corporation, pursuant to the Act (the "Corporation"); and

WHEREAS, the Corporation has authorized or intends to authorize the issuance of its Industrial Development Revenue Bonds (TRP CRUDE MARKETING, LLC Project) SERIES 2019 (the "Bonds"), in amount of $10,000,000, the proceeds of which will be used by the Corporation to make a loan to TRP Crude Marketing, LLC, a limited liability company duly organized and validly existing under the laws of the State of Delaware (the "User"), pursuant to a written loan agreement between the Corporation and the User (the "Loan Agreement") to finance or refinance (i) the costs of acquiring, constructing, rehabilitating, developing, improving and equipping capital improvements, equipment, land and infrastructure and pay related financing costs with respect to solvent manufacturing facilities located on approximately 20 acres of land at 29565 Highway 124, Winnie, Texas 77665, including approximately 8,000 square feet of office facilities, 10,000 square feet of maintenance facilities, loading and unloading racks, and a 15,000 square foot central facility, including a centrifuge and other real and personal property, (ii) to fund the Debt Service Reserve Fund (as defined in the herein-described Indenture), (iii) to fund capitalized interest on the such bonds, and (iv) and to pay costs of issuance for such bonds and such other costs permitted under the Act (collectively, the "Project"), as more fully described in the Issuer's Resolution (hereinafter defined); and

WHEREAS, the Corporation will enter into an Indenture of Trust (the "Indenture") between the Corporation and UMB Bank, National Association (or any affiliate thereof), as trustee ("Trustee") dated as of the first day of the month in which the Bonds are delivered to the initial purchaser thereof, for the purpose of issuing and securing the Bonds; and

WHEREAS, the form of the Loan Agreement between the Corporation and the Borrower has been presented for consideration by this Commissioners Court; and

WHEREAS, the Bonds are to be initially sold by the Corporation to Green Square Capital Advisors, LLC (the "Purchaser") which sale shall be by private placement at the price set out in and pursuant to the terms of a Bond Purchase Agreement (the "Bond Purchase Agreement") between the Corporation and the Purchaser, the form of which has been presented for consideration by this Commissioners Court, and the proceeds of such sale will be used as set forth in the Indenture;

WHEREAS, the actions of the Corporation as described herein were taken pursuant to a resolution of the Corporation adopted by its Board of Directors on February 19, 2019, a copy of which is attached hereto, (the "Issuer's Resolution") and pursuant to an Approval Certificate executed or to be executed by the Executive Committee in accordance with the terms of the Issuer's Resolution;

WHEREAS, this meeting is open to the public as required by law, and public notice of the time, place and purpose of this meeting was given as required by Chapter 551, Texas Government Code;

NOW, THEREFORE, BE IT ORDERED BY THE COMMISSIONER'S COURT OF JEFFERSON COUNTY, TEXAS:

Section 1. That the findings and declarations contained in the preambles of this resolution are incorporated herein as part of this resolution.

Section 2. The resolution authorizing the creation of the Corporation adopted by the Commissioners Court on October 28, 1985,is hereby ratified and confirmed; the determination of this Commissioners Court that it is in the public interest and to the benefit of the County's residents and citizens of the State of Texas that the Corporation be created to finance, refinance or provide the costs of public facilities of the County is hereby ratified and confirmed; and the approval of the Articles of Incorporation of the Corporation is hereby ratified and confirmed.

Section 3. That the Corporation is authorized to issue one or more series or issues of revenue bonds that are payable from the loan payments to be made by the Borrower pursuant to the Loan Agreement and such other sources described in the Indenture or the Loan Agreement. Such revenue bonds shall never constitute a debt or pledge of the faith and credit or the taxing power of the State of Texas, the County or the Corporation, and such revenue bonds shall state on their face that neither the faith nor credit nor the taxing power of the State of Texas, nor of the County or any other political subdivision of the State of Texas is pledged to the payment of the principal of or the interest on such revenue bonds.

Section 4. That this Commissioners Court, following a public hearing after reasonable published notice, as the applicable elected legislative body of the County, having jurisdiction over the entire area in which facilities to be financed with the proceeds of the Bon ds is located, hereby approves (i) the issuance of the Bonds and (ii) the terms of the Indenture of Trust between the Corporation and UMB Bank, National Association (or any affiliate thereof) as Trustee (the "Trust Indentures) and the Loan Agreement, each in substantially the form and substantially to the effect presented to this Commissioners Court with such changes therein as

the officers of the Corporation executing same may approve their execution thereof being considered conclusive evidence of such approval.

Section 5. That it is intended that the Corporation act as a duly constituted authority and instrumentality of the County, with the power to act on its behalf and to accomplish the public purposes of the State of Texas within the meaning of regulations and revenue rulings of the Treasury Department of the Internal Revenue Service of the United States promulgated under Sections 103 and 115 of the Internal Revenue Code of 1986, as amended.

Section 9. The adoption of the Issuer's Resolution by the Corporation and the actions described therein are hereby authorized and approved.

Section 10. That the County Judge, any Commissioner and any officer or employee of the County is authorized to take such action and execute and deliver such document, certificate or agreement as may be necessary to effect the substance of this Resolution, in form and substance acceptable to the persons so executing, their execution being conclusive evidence of such acceptance, and any such action heretofore taken is hereby approved and ratified.

Section 11. That this resolution is adopted to comply with the Act.

Section 12. That this resolution shall take effect immediately from and after its adoption.

PASSED AND APPROVED this 18th day of March, 2019.

County Judge

ATTEST:

County Clerk and Ex-Officio Clerk of the
Commissioners Court of JEFFERSON County, Texas

(SEAL)

EXHIBIT A

SUBSTANTIALLY FINAL FORM OF ISSUER'S RESOLUTION

(SEE ATTACHED)

RESOLUTION APPROVING AND AUTHORIZING THE ISSUANCE OF THE JEFFERSON COUNTY INDUSTRIAL DEVELOPMENT CORPORATION INDUSTRIAL DEVELOPMENT REVENUE BONDS (TRP CRUDE MARKETING, LLC PROJECT) SERIES 2019, APPROVING THE FORM AND SUBSTANCE AND AUTHORIZING THE EXECUTION OF AN INDENTURE OF TRUST, A LOAN AGREEMENT, A BOND PURCHASE AGREEMENT AND RELATED FINANCING DOCUMENTS; APPROVAL OF A PRIVATE PLACEMENT MEMORANDUM; AUTHORIZING AND RATIFYING OTHER ACTIONS OF THE CORPORATION; MAKING CERTAIN FINDINGS AND CONTAINING OTHER MATTERS IN CONNECTION THEREWITH

WHEREAS, the Jefferson County Industrial Development Corporation (the "Corporation") is an industrial development corporation created and existing under Chapter 501, Texas Local Government Code (the "Act"); and

WHEREAS, TRP Crude Marketing, LLC, a limited liability company duly organized and validly existing under the laws of the State of Delaware (the "Company") has requested the Corporation issue its revenue bonds and loan the proceeds thereof to the Company, pursuant to a Loan Agreement between the Corporation and the Company (the "Loan Agreement"), the form of which has been presented to the Corporation, to be applied, together with other available moneys, (i) to finance or refinance the costs of acquiring, constructing, rehabilitating, developing, improving and equipping capital improvements, equipment, land and infrastructure and pay related financing costs with respect to solvent manufacturing facilities located on approximately 20 acres of land at 29565 Highway 124, Winnie, Texas 77665, including approximately 8,000 square feet of office facilities, 10,000 square feet of maintenance facilities, loading and unloading racks, and a 15,000 square foot central facility, including a centrifuge and other real and personal property, (ii) to fund the Debt Service Reserve Fund (as defined in the herein-described Indenture), (iii) to fund capitalized interest on the such bonds, and (iv) and to pay costs of issuance for such bonds and such other costs permitted under the Act (collectively, the "Project"); and

WHEREAS, the Corporation deems it necessary and advisable to issue its Industrial Development Revenue Bonds (TRP Crude Marketing, LLC Project) Series 2019 (the "Bonds") pursuant to the laws of the State of Texas, including Texas Local Government Code, Title 12, Subtitle C1, as amended, and an Indenture of Trust (the "Indenture"), between the Corporation and UMB Bank, National Association, as trustee (the "Trustee"), the form of which has been presented to the Corporation, and loan the proceeds thereof to the Company pursuant to the Loan Agreement; and

WHEREAS, the Bonds will be special limited obligations of the Corporation payable solely from the "Trust Estate" (as defined in the Indenture) and the Bonds shall never constitute an indebtedness or general obligation of the Corporation, Jefferson County, Texas, the State of Texas or any other political subdivision of the State of Texas, within the meaning of any constitutional provision or statutory limitation whatsoever; and

WHEREAS, the Bonds are to be sold by private placement to Green Square Capital Advisors, LLC (the "Purchaser") at the prices set out in and pursuant to the terms of a Bond

Purchase Agreement (the "Bond Purchase Agreement") between the Corporation and the Purchaser, the form of which has been presented to the Corporation, and the proceeds of such sale will be used as set forth in the Indenture; and

WHEREAS, the form of a Private Placement Memorandum relating to the Bonds (the "Private Placement Memorandum") has been presented to the Corporation; and

WHEREAS, substantially final copies of the above-described proposed instruments previously have been made available to each member of this Board and presented for its consideration at this meeting, and the material provisions of such documents have been described to this Board and fully discussed at this meeting.

WHEREAS, the meeting at which this Resolution was adopted was open to the public and notice of such meeting of the time, place and purpose was given, all as required by Chapter 551 of the Texas Government Code, as amended.

BE IT THEREFORE:

RESOLVED, that all of the facts recited in the preamble hereto are found and declared to be true and correct and the preamble is incorporated into, and made a part of, these Resolutions;

RESOLVED, that this Board hereby approves the issuance and sale of each series of Bonds, provided that:

(1) the aggregate principal amount of the Bonds shall not exceed $10,000,000;

(2) the maximum term of the Bonds shall be 35 years;

(3) the maximum interest rate that any series of Bonds shall bear shall not exceed, and the net effective interest rate (as such term is used in Section 1204 Texas Government Code) shall not exceed, 15% per annum;

(4) the Bonds shall be sold to the Purchaser in a private negotiated sale pursuant to the Bond Purchase Agreement; and

(5) the Bonds shall be paid solely from the sources described in the Indenture.

and this Board hereby appoints the President and Secretary of the Board or in their absence, any other two members of the Board of Directors to a committee (the "Executive Committee") pursuant to the Act with full power and authority of the Board to negotiate and approve the final forms of the Loan Agreement, Indenture, the Bond Purchase Agreement, and all other financing documents and closing documents and instruments necessary or appropriate to complete the sale and issuance of the Bonds, within these such sale parameters and to negotiate any further terms of the Bonds and/or any other documents authorized hereby;

RESOLVED, that this Board hereby approves the terms of the Loan Agreement, the Indenture, and the Bond Purchase Agreement in substantially the forms and substantially to the

effect presented to this Board with such changes therein as shall be approved by the Executive Committee or by officers executing same their execution thereof being conclusive evidence of such approval;

RESOLVED, that the President and any other member of the Board of Directors, or any of them, and the Secretary are authorized and directed to execute and deliver and authorized to attest the Loan Agreement, the Indenture, the Bond Purchase Agreement and any and all certificates and other instruments described herein or therein;

RESOLVED, that the Bonds, in substantially the form and substance set forth in the Indenture, are hereby approved and the President or in his absence any other member of the Board and the Secretary are hereby authorized and directed to execute, attest and deliver the Bonds; authentication of the Bonds upon the terms and conditions and in the manner described in the Indenture, as the same may be modified as authorized by this Resolution, and the delivery thereof, are hereby authorized;

RESOLVED, that this Board hereby appoints the President or in his absence any other member of the Board of Directors to approve the distribution of the Private Placement Memorandum, and that this Board further authorizes the President (and, in the event of the absence or disability of such officer, any Vice President) to approve the final Private Placement Memorandum to be distributed in connection with the sale of the Bonds;

RESOLVED, that UMB Bank, National Association (or any affiliate thereof) is hereby appointed as Trustee under the Indenture, thereby serving as registrar and paying agent under the terms of the Indenture;

RESOLVED, that a Letter of Representation for Depository Trust Company of New York ("DTC") is authorized to be executed and delivered to DTC if necessary;

RESOLVED, Creighton, Fox, Johnson & Mills, PLLC ("Bond Counsel") is hereby approved as bond counsel for the Corporation in connection with the issuance of the Bonds and is hereby authorized to submit a transcript of legal proceedings relating to the issuance, sale and delivery of the Bonds to the Attorney General of Texas for approval and Bond Counsel is further authorized to deliver or cause to be delivered the Bonds to be initially issued to the Attorney General of Texas for approval and to the Comptroller of Public Accounts of the State of Texas for registration;

RESOLVED, that the officers or members of the Board, or any of them, are authorized to take any and all action and execute all documents, certificates and agreements necessary to carry out and consummate the transactions described in or contemplated by the instruments approved thereby or otherwise to give effect to the actions authorized hereby and the intent hereof, including, but not limited to the execution and delivery of a tax certificate relating to the tax exemption of the Bonds in form and substance acceptable to the officers executing same, their execution being conclusive evidence of such acceptance, and each of them shall be and they are expressly authorized, empowered and directed from time to time and at any time to do and perform all such acts and things and to execute, acknowledge and deliver in the name and under the corporate seal and on behalf of the Corporation all such instruments, whether or not herein

mentioned, as may be necessary or desirable in order to carry out the terms and provisions of this Resolution. In addition, prior to the initial delivery of the Bonds, the President and Vice President of the Board, and the District's Special Counsel and Bond Counsel related to the Bonds are each hereby authorized and directed to approve any technical changes or correction to this Resolution or the Financing Documents necessary in order to (i) correct any ambiguity or mistake or properly or more completely document the transactions contemplated and approved by this Resolution and (ii) obtain the approval of the Bonds and any of the Financing Documents by the Attorney General of Texas, as required by law.

RESOLVED, that all action (not inconsistent with provisions of this Resolution) heretofore taken by this Corporation directed toward the issuance of the Bonds shall be and the same hereby is ratified, approved, and confirmed;

RESOLVED, that after any of the Bonds are issued, this Resolution shall be and remain irrepealable until the Bonds and interest thereon shall have been fully paid or provisions for payment shall have been made pursuant to the Indenture; and

RESOLVED, that if any section, paragraph, clause, or provisions of this Resolution shall be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause, or provision shall not affect any of the remaining provisions of this Resolution. In case any obligation of the Corporation authorized or established by this Resolution or the Bonds is held to be in violation of law as applied to any person or in any circumstance, such obligation shall be deemed to be the obligation of the Corporation to the fullest extent permitted by law.

PASSED AND APPROVED this 19th day of February, 2019.

Secretary

President

(SEAL)

Special, March 18, 2019

There being no further business to come before the Court at this time, same is now here adjourned on this date, March 18, 2019