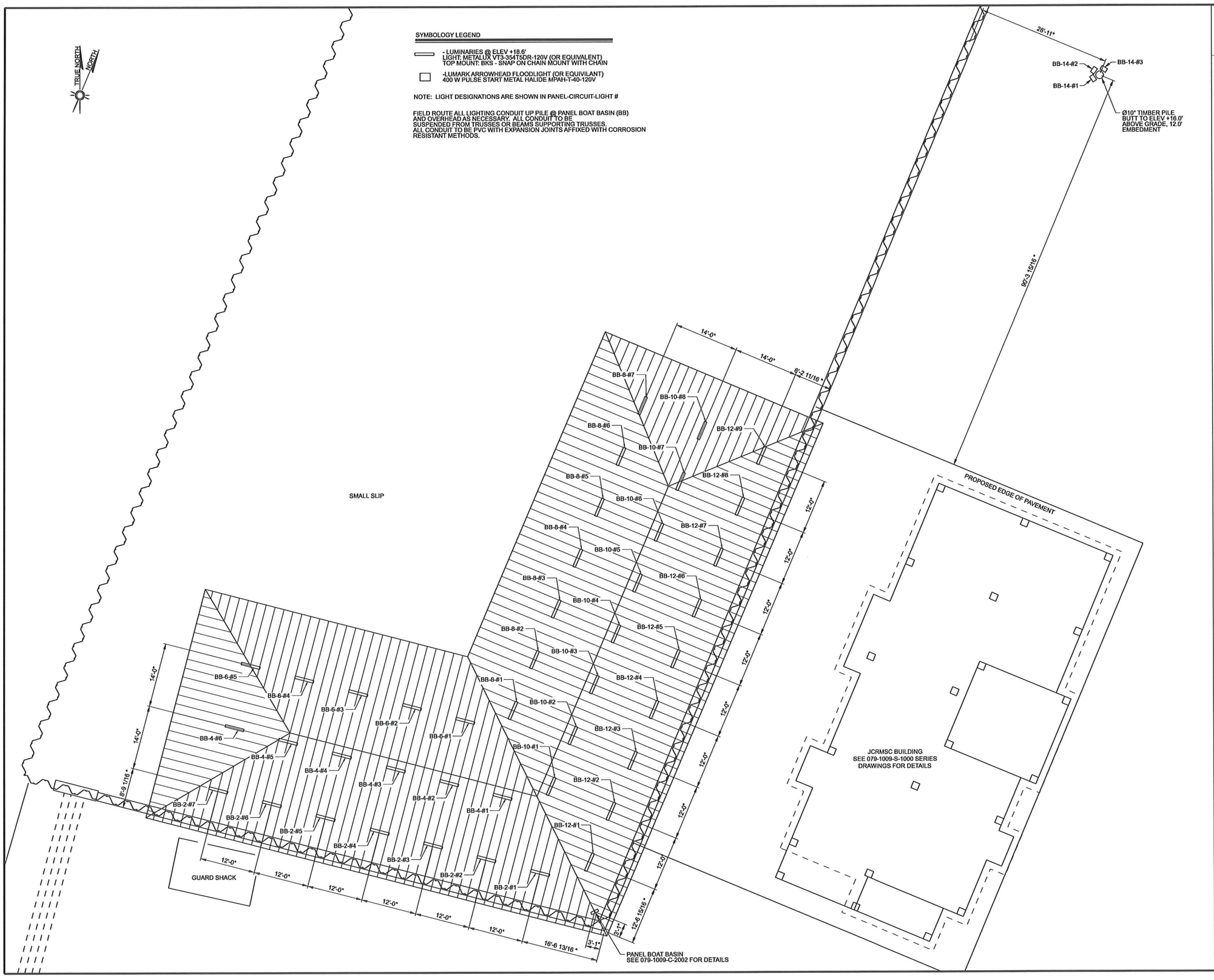

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Beaumont, Texas 77701
Tel: (409) 813-1862
Fax: (409) 813-1916
Texas Registered Engineering Firm F-2601

STATE OF TEXAS
DAWN M. GREENWOOD
102078
LICENSED PROFESSIONAL ENGINEER

DAWN M. GREENWOOD, P.E. #102078

ISSUE	DATE	BY	DESCRIPTION	CHK'D	APP'D
1	11/21/11	JWB	REVISED LIGHTING CIRCUIT CALLOUT	HER	DMG
0	10/17/11	DMG	ISSUED FOR CONSTRUCTION	HER	RCH

JEFFERSON COUNTY

JEFFERSON COUNTY REGIONAL MARINE SECURITY CENTER
AT SABINE PASS PORT AUTHORITY
LIGHTING PLAN

DRAWN BY	DATE	SCALE	CHK'D / APP'VD
JLG	6/1/10	1" = 10'	HER / DMG

DRAWING NO. 079-1009-C-2001

ISSUE NO. 1

ITEM	MIN WIRE SIZE	AMP/ POLE	CIRCUIT #		ITEM	MIN WIRE SIZE	AMP/ POLE
PEDESTAL 1	#6	50/2	1	2	LIGHTING CIRCUIT 1	#6	15/1
———	--	---	3	4	LIGHTING CIRCUIT 2	#6	15/1
PEDESTAL 2	#8	50/2	5	6	LIGHTING CIRCUIT 3	#6	15/1
———	--	---	7	8	LIGHTING CIRCUIT 4	#6	20/1
PEDESTAL 3	#8	50/2	9	10	LIGHTING CIRCUIT 5	#6	20/1
———	--	---	11	12	LIGHTING CIRCUIT 6	#6	20/1
PEDESTAL 4	#6	50/2	13	14	LIGHTING CIRCUIT 7-FLD	#6	20/1
———	--	---	15	16	LIFT 4	#12	30/3*
PEDESTAL 5	#3	50/2	17	18	———	--	---
———	--	---	19	20	———	--	---
LIFT 1	#8	30/3*	21	22	LIFT 5	#10	30/3*
———	--	---	23	24	———	--	---
———	--	---	25	26	———	--	---
LIFT 2	#10	30/3*	27	28	LIFT 6	#8	30/3*
———	--	---	29	30	———	--	---
———	--	---	31	32	———	--	---
LIFT 3	#12	30/3*	33	34	SPARE		
———	--	---	35	36	SPARE		
———	--	---	37	38	SPARE		
SPARE			39	40	SPARE		
SPARE			41	42	SPARE		

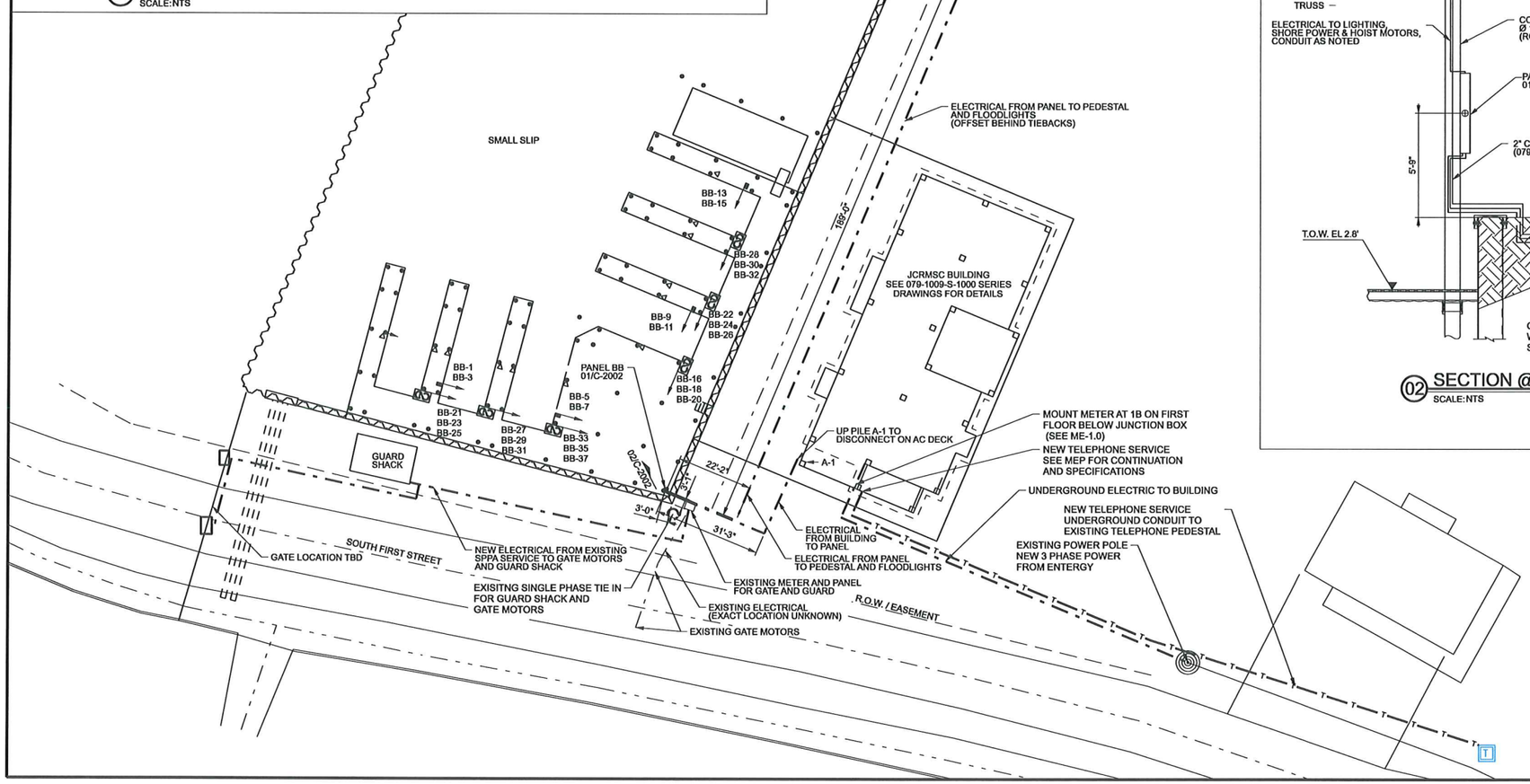
*CONFIRM OVERVOLATAGE PROTECTION WITH MANUFACTURER ON 208V 3 PHASE MOTORS

PANEL BOAT BASIN SPECIFICATIONS:

MANUFACTURER: SQUARE D (OR EQUIVALENT)
TYPE: 208V/120V 3PH 4W PANELBOARD, NQOD
MAINS: 225 AMP BREAKER
MOUNTING: SURFACE
BRANCH BREAKERS: BOLT ON
NEMA RATING: 1
NEUTRAL BUS: 100%
GROUND BUS: EQUIP
IER: 42000
MODIFICATIONS: TYPE 4X INDOOR/OUTDOOR RESISTS CORROSION/HOSE-DIRECTED WATER

01 PANEL BOAT BASIN (BB) DETAILS

SCALE:NTS



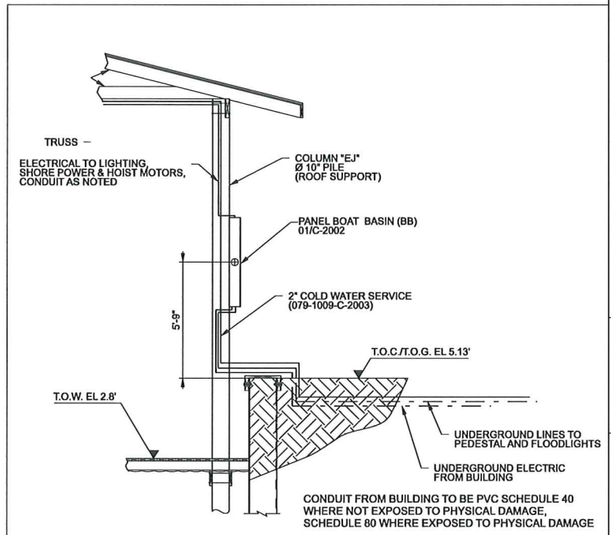
SYMBOLOGY LEGEND

- LUMINARIES @ ELEV +18.6' LIGHT: METALUX VT3-354T5DR-120V (OR EQUIVALENT) TOP MOUNT: BKS - SNAP ON CHAIN MOUNT WITH CHAIN
- LUMARK ARROWHEAD FLOODLIGHT (OR EQUIVILANT) 400 W PULSE START METAL HALIDE MPAH-T-40-120V
- QUALITY BOAT LIFT ALUM-A-HOIST 16,000 BOAT LIFT , 208V 3PH MOTORS MOTOR LOCATION, MOUNTED TO COLUMN LINES "C" AND "H" C.L. OF MOTOR @ ELEV +8.8' (6.0' ABOVE DECK)
- QUALITY BOAT LIFT MOTOR CONTROL, MOUNTED TO COLUMN LINES "D" AND "I" AT ELEV. +5.0' ABOVE DECK
- EATON NEWPORT HARBOR MATE 3PH PILING MOUNT NPUEE10B0 (OR EQUIVALENT) MOUNTED TO COLUMN LINES "D" AND "I" AT ELEV +4.0' ABOVE DOCK (UNMETERED) CONTAINS: (2) 30A/125V RECEPTACLES - CONFIRM PLUG WITH OWNER (1) 20A GFI DUPLEX RECEPTACLE
- EATON LIGHTHOUSE 3PH MODEL LHUEE770002B (OR EQUIVALENT) ELECTRICAL AND WATER PEDESTAL @ ELEV +6.0' AT BASE OF PEDESTAL CONTAINS: (2) 30A/125V RECEPTACLES (2) 20A GFI DUPLEX RECEPTACLE (2) 3/4" HOSE BIBS

PNL#-CKT# HOME RUN TO PANEL AND CIRCUIT INDICATED

FIELD ROUTE ALL ELECTRICAL AND CONTROL CONDUIT UP PILE @ PANEL B AND OVERHEAD AS NECESSARY. ALL CONDUIT TO BE SUSPENDED FROM TRUSSES OR BEAMS SUPPORTING TRUSSES.

CONDUIT SHALL BE PVC PIPE WITH EXPANSION JOINTS INSTALLED PER CODE WITH CORROSION RESISTANT HANGERS.



02 SECTION @ PANEL BB

SCALE:NTS

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RELEVANT TERMS

BOC	BOTTOM OF CONCRETE
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TOW	TOP OF WOOD
TOG	TOP OF GRADE
FL	FLOWLINE
OC	ON CENTER
OCEW	ON CENTER EACH WAY

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DAWN M. GREENWOOD, P.E. #102078

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1	11/21/11	JWB	ELECTRICAL PANEL UPDATES	HER	DMG
0	10/17/11	DMG	ISSUED FOR CONSTRUCTION	HER	RCH

JEFFERSON COUNTY

JEFFERSON COUNTY REGIONAL MARINE SECURITY CENTER
AT SABINE PASS PORT AUTHORITY
ELECTRICAL PLAN

DRAWN BY	DATE	SCALE	CHK'D / APP'D
JLG	6/1/10	1" = 20'	HER / DMG

DRAWING NO. 079-1009-C-2002 — ISSUE NO. 1

SYMBOLOGY LEGEND

- FIRE HYDRANT -- SPEC TO BE DETERMINED

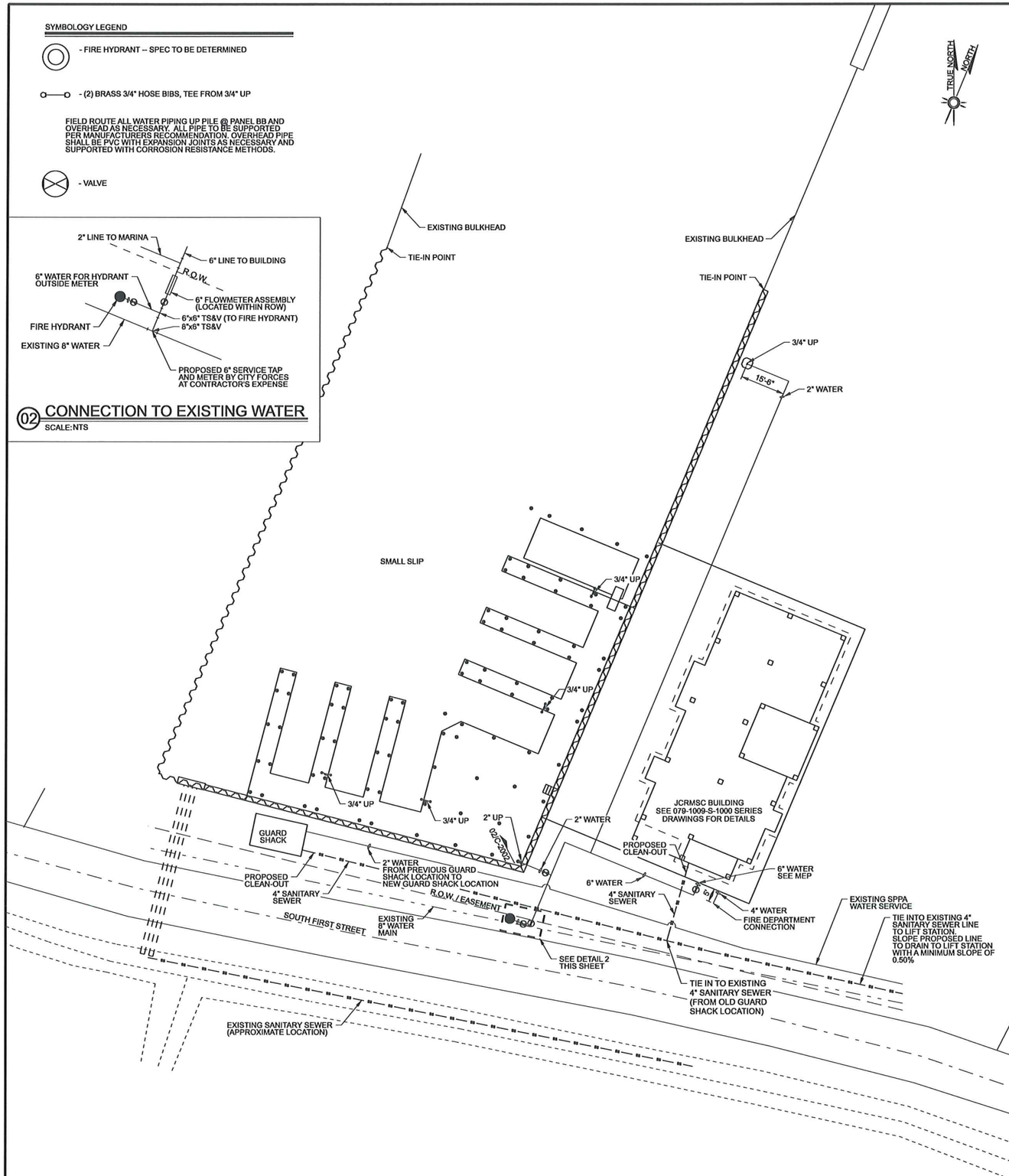
- (2) BRASS 3/4" HOSE BIBS, TEE FROM 3/4" UP

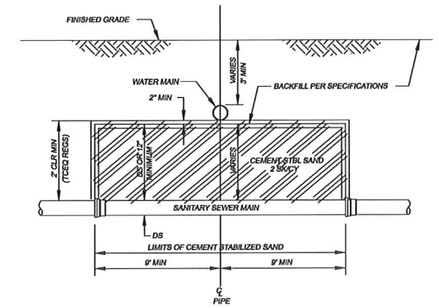
FIELD ROUTE ALL WATER PIPING UP PILE @ PANEL BB AND OVERHEAD AS NECESSARY. ALL PIPE TO BE SUPPORTED PER MANUFACTURERS RECOMMENDATION. OVERHEAD PIPE SHALL BE PVC WITH EXPANSION JOINTS AS NECESSARY AND SUPPORTED WITH CORROSION RESISTANCE METHODS.

- VALVE

02 CONNECTION TO EXISTING WATER

SCALE:NTS





PROTECTION REQUIREMENTS AT WATER LINE - SANITARY SEWER CROSSINGS

PRIMARY CONDITION	PROPOSED WATER EXISTING SANITARY				PROPOSED WATER PROPOSED SANITARY OR EXISTING WATER PROPOSED SANITARY			
SECONDARY CONDITIONS	WATER OVER SANITARY		WATER UNDER SANITARY		WATER OVER SANITARY		WATER UNDER SANITARY	
IF THE CLEARANCE IS	LESS THAN 2'	Greater than or equal to 2' but less than 9'	LESS THAN 2'	Greater than or equal to 2' but less than 9'	LESS THAN 2'	Greater than or equal to 2' but less than 9'	LESS THAN 2'	Greater than or equal to 2' but less than 9'
*PROTECTION REQUIREMENT	1,2,3	2	6	4	1,3,5	2	1,3,5	5

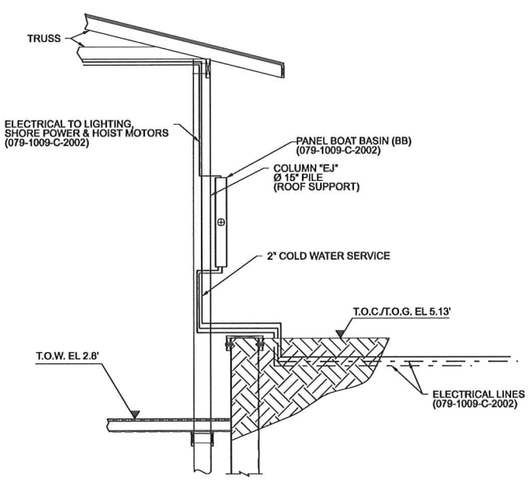
PROTECTION REQUIREMENTS FOR SANITARY SEWER CROSSINGS

(UNLESS VARIANCE IS GRANTED BY TCEQ)
(ALL CLEARANCES SHALL BE MEASURED FROM OUTSIDE WALL TO OUTSIDE WALL)

1. PLACE ONE FULL SECTION OF APPROVED RESTRAINED JOINT WATER LINE CENTERED AT SANITARY SEWER. NOT APPLICABLE FOR EXISTING WATER.
2. IF NO EVIDENCE OF SANITARY SEWER LEAKAGE, PLACE ONE FULL SECTION OF WATER LINE CENTERED OVER SANITARY SEWER; IF THERE IS EVIDENCE OF LEAKAGE, USE NOTE 4 BELOW.
3. ONE FOOT MINIMUM CLEARANCE.
4. AUGER 9' MINIMUM EACH SIDE OF SANITARY SEWER. PLACE ONE FULL SECTION OF WATER LINE, CENTERED UNDER SANITARY SEWER. FILL AUGERED HOLE WITH BENTONITE/CLAY MIXTURE. IF SEWER LINE IS LEAKING, SEWER LINE SHALL BE REPLACED WITH 150 PSI LINED DUCTILE IRON OR PVC PIPE WITH APPROPRIATE ADAPTERS ON ALL PORTIONS OF THE SANITARY SEWER WITHIN 9' OF WATER LINE. PROVIDE RESTRAINED JOINTS FOR BOTH WATER AND SANITARY SEWER LINES AT EACH END OF PIPE SECTION. WATER LINE MUST PASS A PRESSURE AND LEAKAGE TEST AS SPECIFIED IN TECHNICAL SPECIFICATIONS. SEWER LINE SHALL PASS INFILTRATION, EXFILTRATION LOW PRESSURE AIR TEST OR LEAKAGE TEST AS SPECIFIED IN TCEQ CHAPTER 317.2 DESIGN CRITERIA FOR SEWERAGE SYSTEMS.
5. PLACE MINIMUM ONE FULL SECTION OF SANITARY SEWER, 150 PSI LINED DUCTILE IRON OR PVC PIPE CENTERED AT THE WATER LINE AND PROVIDE RESTRAINED JOINTS FOR BOTH WATER AND SANITARY SEWER LINES AT EACH END OF PROPOSED PIPE SECTION. USE CEMENT-STABILIZED SAND BACKFILL FOR ALL PORTIONS OF THE SANITARY SEWER WITHIN 9' OF THE WATER LINE, AS MEASURED PERPENDICULARLY FROM ANY POINT ON THE WATER LINE TO THE SANITARY SEWER (MIN. 2.5 SACK CEMENT/CU. YD. SAND). THE CEMENT-STABILIZED SAND BEDDING WILL START AT A POINT 6" BELOW THE BOTTOM OF SANITARY SEWER TO 6" ABOVE THE TOP OF SANITARY SEWER AND ONE-QUARTER OF THE PIPE DIAMETER OR 6", WHICHEVER IS GREATER, ON THE SIDE OF THE SANITARY SEWER.
6. NOT ALLOWED.

02 TYPICAL WATER AND SANITARY SEWER MAIN CROSSING DETAIL

SCALE:NTS



01 SECTION @ PANEL BB

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JEFFERSON COUNTY

JEFFERSON COUNTY REGIONAL MARINE SECURITY CENTER
AT SABINE PASS PORT AUTHORITY
SANITARY SEWER & POTABLE WATER SERVICE

DRAWN BY	DATE	SCALE	CHK'D / APP'D
DTC	7/19/11	1" = 20'	HER / DMG

DRAWING NO. 079-1009-C-2003 — ISSUE NO. 1