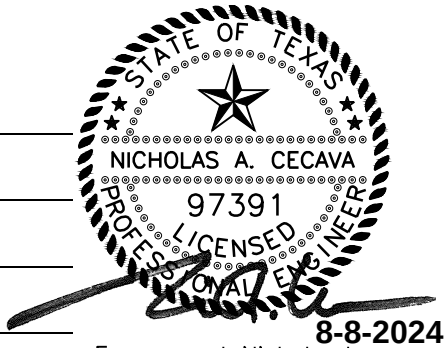
Sabine River Authority of Texas

ADDENDUM NO. 2

Owner:	Sabine River Authority of Texas
Project:	Sabinetown Recreation Area - RFB 25-1202
Project No.:	SRA23985
Addendum No.	2
Addendum Date:	August 8, 2024



Freese and Nichols, Inc.
Texas Registered
Engineering Firm F-2144

The following additions, deletions, changes, or clarifications to the proposal documents are hereby made a part of the originally issued documents for the above referenced project as fully and as completely as though the same were included therein. Offerors must acknowledge receipt of this Addendum in the space provided on the Bid Form, Article 5.03.

WRITTEN BIDDER QUESTIONS:

1. Question: Can the bid date and question cutoff be pushed to the following week? The question deadline is tomorrow and so is the pre-bid. Given the scope and size of the project, we need at least another week to review plans, ask questions, etc.
    a. **ANSWER: YES, THE DEADLINE EXTENSION FOR BOTH Q/A AS WELL AS THE BID CLOSING HAVE BEEN EXTENDED. REFER TO ADDENDUM NO. 1.**
2. Question: Can the time of completion be extended to at least 365 calendar days? Given the overall scope of work and the fact that only "abnormal" weather days can be requested, it is unlikely this project can be completed in 270 calendar days.
    a. **ANSWER: THE CONTRACT TIME FOR THE BASE BID WILL REMAIN THE SAME (270 DAYS TO SUBSTANTIAL AND ANOTHER 30 DAYS TO FINAL. IF THE AUTHORITY ELECTS TO TAKE ALTERNATE NO. 1, THEN THE AUTHORITY WILL EXTEND THE CONTRACT DAYS TO 300 DAYS TO SUBSTANTIAL AND 30 DAYS TO FINAL. NO OTHER ALTERNATE TAKING WILL RESULT IN A CONTRACT TIME EXTENSION. THE AUTHORITY WILL APPROVE RAIN/WET DAYS AS LONG AS THE CONTRACTOR PROVIDES SUFFICIENT DOCUMENTATION AND THOSE DAYS ARE REQUESTED IN THE SAME MONTH AS THE CORRESPONDING PAY APPLICATION.**
3. Question: Flex Base cubic yard quantity is based on 6" thickness. The pavement edges and along the boat dock, etc. the flex base is thicker. Are these thicker areas going to be factored into the cubic yard quantity?
    a. **ANSWER: YES, THE QUANTITY HAS BEEN UPDATED IN THE REVISED EXHIBIT A - BID FORM ATTACHED TO THIS ADDENDUM.**
4. Question: There is curb and gutter shown in several areas, but there is no bid item shown. Can you add this to the bid form?
    a. **ANSWER: YES, A BID ITEM HAS BEEN ADDED FOR *6" CURB AND GUTTER*. SEE REVISED EXHIBIT A - BID FORM ATTACHED TO THIS ADDENDUM.**

5. Question: What is supposed to be included in 12" Compacted Subgrade bid item for the paving? Is this related to proof rolling? The placement/compaction of the dirt will be done as we perform the earthwork which is covered in different items.
    a. **ANSWER: The 12" COMPACTED SUBGRADE BID ITEM INCLUDES THE PROOF ROLLING OF THE SUBGRADE. THE PLACEMENT AND COMPACTION OF THE SUBGRADE IS COVERED BY THE EMBANKMENT BID ITEM.**
6. Question: The plans show 80-foot-tall aluminum flag poles. Can you add this item to the bid form?
    a. **ANSWER: YES, REFER TO THE REVISED EXHIBIT A - BID FORM ATTACHED TO THIS ADDENDUM.**
7. Question: Are there any specific requirements for the cofferdam to be constructed at the boat ramp?
    a. **ANSWER: PLEASE REFER TO AMENDED SPECIFICATION *31 23 19.01 – CARE OF WATER DURING CONSTRUCTION* ATTACHED TO THIS ADDENDUM.**
8. Question: On Page L1 Detail 3 shows 4" flag stone slab & Detail 6 shows 4" cast stone slab. Can you clarify and give specs and details?
    a. **ANSWER: DETAIL 3/L1 SHOULD READ – "CASTSTONE", NOT FLAGSTONE. SPECIFICATION *04 72 00 – CAST STONE MASONRY* IS ATTACHED TO THIS ADDENDUM.**
9. Question: 1. Article 24 Equal Opportunity, do we submit with bid a complete Good Faith Effort HUB Plane? 2. Provide specification for all signage & monument letters. 3. All misc. metals, handrails, trench drains, etc. are to be Stainless steel? 4. Provide floor finish schedule for Pavilion.
    a. **ANSWER: 1) A HUB PLAN IS NOT REQUIRED TO BE SUBMITTED. THERE IS AN AREA ON THE BID OPENING FORM (ARTICLE 2 – DIVERSE BUSINESS CERTIFICATION) WHERE A BIDDER CAN CHECK IF THEY HOLD ANY DISADVANTAGED STATUS. 2) MONUMENT SIGNAGE WILL CONSIST OF PAINTED ALUMINUM PIN-MOUNTED LETTERFORMS (1/4" THICKNESS). REFER TO DETAIL FOR SIZES. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A SHOP DRAWING TO CONFIRM FINAL DETAILS SUCH AS LETTER SPACING, COLOR AND FONT. 3) HANDRAILS (2/S7) WILL BE GALVANIZED, PRIMED AND PAINTED. CABLE RAILING (3/L5) IS TO BE STAINLESS STEEL. 4) THE PAVILION SLAB FINISH IS TO BE A MEDIUM BROOM FINISH WITH SAW CUT CONTROL JOINTS IN THE PATTERN INDICATED ON THE PLANS.**
10. Question: Will Aquafin or a similar product be used in concrete for waterproofing at the boat ramp or any other areas?
    a. **ANSWER: NO.**
11. Question: On the boat ramp are you wanting plate dowels at the saw joints? Where is the saw joint detail for the boat ramp? Where does it specify reinforcing in the flat part of the boat ramp?
    a. **ANSWER: 1) NO PLATE DOWELS AT THE SAW JOINTS. 2) A NEW SAW JOINT DETAIL WAS ADDED TO SHEET S5 AS PART OF ADDENDUM NO. 2. 3) THE BOAT RAMP REINFORCING WAS ADDED TO SHEET S5 AS PART OF ADDENDUM NO. 2.**
12. Question: 1. Drawing C1 alternate #4 reference sheet L7 for details, clarify L9 is correct detail page? 2. Will the treated wood structure require any finish coat?

   a. **ANSWER: 1) CORRECT, IT SHOULD REFER TO L9. 2) NO FINISH COAT OR OTHER APPLIED TREATMENT IS REQUIRED.**

13. Question: There is only laydown curb shown at the median in the entrance drive which does not total a quantity 233 LF. Is there is laydown curb somewhere else? If not the quantity should be adjusted.
    a. **ANSWER: THIS QUANTITY HAS BEEN REVISED. REFER TO THE REVISED EXHIBIT A - BID FORM ATTACHED TO THIS ADDENDUM.**

PRE-BID CONFERENCE DISCUSSION:

1. Question: Who is responsible for material testing?
   a. **ANSWER: SRA WILL CONTRACT WITH TERRACON FOR CONSTRUCTION MATERIALS TESTING AND WILL PAY FOR ALL TESTING. RE-TESTS FOR FAILED TESTS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.**
2. Question: Will there be an on-site inspector for the project?
   a. **ANSWER: FNI WILL PROVIDE PERIODIC CONSTRUCTION MANAGEMENT SERVICES AS NEEDED (APPROXIMATELY 2-3 TIMES PER MONTH). THERE WILL NOT BE A RESIDENT INSPECTOR.**
3. Question: When was the topo survey for the site performed, before or after the clearing?
   a. **ANSWER: AFTER**
4. Question: You stated that SRA will allow the contractor all the lake water that they want during construction? Will SRA provide the pumps and are there any restrictions on where we can draw water from?
   a. **ANSWER: THE CONVEYANCE OF THE WATER OUT OF THE LAKE TO THE SITE IS THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR CAN DRAW WATER FROM ANYWHERE ON SRA'S PROPERTY. THE CONTRACTOR SHALL NOT ENTER THE U.S. FOREST SERVICE PROPERTY ON THE NORTHERN LIMITS OF THE SITE. PUMPING WATER OUT OF THE LAKE IS PREFERRED, SINCE THE WATERLINE IN VANTAGE POINT IS ONLY A 2" LINE.**
5. Question: How long after the boat ramp concrete is poured before the cofferdam can be dismantled?
   a. **ANSWER: IF A MIN. 80% COMPRESSIVE STRENGTH IS ACHIEVED ON THE 7-DAY CYLINDER BREAKS, THE COFFERDAM CAN BE REMOVED. OTHERWISE, IT WILL NEED TO REMAIN UNTIL FULL DESIGN COMPRESSIVE STRENGTH IS ACHIEVED.**
6. Question: If the alternate for the stone veneer is not taken, how will the cable guard rail be affixed?
   a. **ANSWER: THE BASE PLATES FOR THE GUARD RAIL WILL BE MOUNTED DIRECTLY TO THE TOP OF THE CONCRETE WALL.**

7. Question: Can vegetation be burned on site?
   a. **ANSWER: YES, WITH THE EXCEPTION OF IF SABINE COUNTY IS UNDER A BURN BAN. TREE DEBRIS CAN BE STOCKPILED AND BURNED AT A LATER TIME IN THIS INSTANCE.**

Sabine River Authority of Texas

UNDER NO CIRCUMSTANCES MAY THE CONTRACTOR BURY RESIDUAL DEBRIS AFTER BURNING ON-SITE.

CONTRACT REQUIREMENTS:

1. Exhibit A – Bid Form – Replace in its entirety. **(ATTACHMENT 1)**

TECHNICAL SPECIFICATIONS:

1. 04 72 00 – CAST STONE MASONRY – has been added. **(ATTACHMENT 2)**
2. 31 23 19.01 – CARE OF WATER DURING CONSTRUCITON - has been amended, replace in its entirety. **(ATTACHMENT 3)**

DRAWINGS:

Replace the following drawings in their entirety. **(ATTACHMENT 4)**

1. G3 – Replace in its entirety
2. C6 – Replace in its entirety
3. S1 – Replace in its entirety
4. S2 - Replace in its entirety
5. S5 – Replace in its entirety
6. S6 – Replace in its entirety
7. S7 – Replace in its entirety
8. S9 – Replace in its entirety
9. L1 – Replace in its entirety
10. L5 – Replace in its entirety
11. E4.00 – Replace in its entirety
12. E8.00 – Replace in its entirety

***Offerors must acknowledge receipt of this Addendum in the space provided on the Bid Form, Article* 5.03.**

END OF ADDENDUM NO. 2

EXHIBIT A - BID FORM

ADDENDUM 2
ATTACHMENT 1
SHEET 1 OF 4

Project Name:	Sabinetown Recreation Area
Project Number:	RFB 25-1202
Owner:	Sabine River Authority of Texas
Designer:	Freese and Nichols, Inc.

Basis of Bid

Item	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
Part A - Site Work					
A1	MOBILIZATION (5% MAX, BASE BID)	1	LS		
A2	EXCAVATION	30500	CY		
A3	EMBANKMENT (TY D) (FINAL)	35000	CY		
A4	CLEARING AND GRUBBING	4363	SY		
A5	EROSION CONTROL BLANKET	5638	SY		
A6	HYDROMULCH	45575	SY		
A7	SODDING	6204	SY		
A8	4" TOPSOIL	6204	SY		
A9	INSTALL NEW SILT FENCE	500	LF		
A10	REMOVE SILT FENCE	4626	LF		
A11	STORM WATER POLLUTION PREVENTION PLAN	1	LS		
A12	**EXCAVATION AND DISPOSAL OF OBJECTIONABLE MATERIAL (AS DIRECTED BY OWNER)**	**1000**	**CY**		
SUBTOTAL PART A - Site Work (Items A1 thru A12)					
Part B - Parking Area					
B1	12" COMPACTED SUBGRADE	31423	SY		
B2	GEOGRID (TXDOT, TYPE II)	31423	SY		
B3	6" LIMESTONE FLEXIBLE BASE, TYPE A, GRADE 1-2	**5271**	CY		
B4	PRIME COAT (0.15 GAL/SY)	4591	GAL		
B5	2" HMAC, TYPE C	30610	SY		
B6	PAVEMENT MARKING, TYPE 2, (W) (4")	15397	LF		
B7	PAVEMENT MARKING, TYPE 2, (Y) (4")	3750	LF		
B8	PAVEMENT MARKING, TYPE 2, (Y) (4") (DBL)	369	LF		
B9	PAVEMENT MARKING, TYPE 2, (RED) (4")	335	LF		
B10	PAVEMENT MARKINGS (RED) (FIRST RESPONDER PARKING)	2	EA		
B11	PAVEMENT MARKING, TYPE 2, (W) (24")	254	LF		
B12	PAVEMENT MARKINGS (W)(NO PARKING)	4	EA		
B13	PAVEMENT MARKINGS (W) (ARROW)	30	EA		
B14	PAVEMENT MARKINGS (W) (WORD)	1	EA		
B15	24" LAYDOWN CURB	**107**	LF		
B16	CONCRETE VALLEY GUTTER	52	LF		
B17	SMALL RDSD SIGN ASSM	6	EA		
B18	ACCESSIBLE PAINTED SYMBOL	7	EA		
B19	ACCESSIBLE PARKING SIGN	7	EA		
B20	PRECAST WHEEL STOPS	7	EA		
B21	**6" CURB AND GUTTER**	**301**	**LF**		
SUBTOTAL PART B - Parking Area (Items B1 thru B21)					
Part C - Vantage Point Roadway Extension					
C1	EXCAVATION	150	CY		
C2	EMBANKMENT (TY A) (FINAL)	50	CY		
C3	GEOGRID (TXDOT, TYPE II)	903	SY		
C4	6" LIMESTONE FLEXIBLE BASE, TYPE A, GRADE 1-2	151	CY		
C5	PRIME COAT (0.15 GAL/SY)	118	GAL		
C6	2" HMAC, TYPE C	783	SY		
SUBTOTAL PART C - Vantage Point Roadway Extension (Items C1 thru C6)					

EXHIBIT A - BID FORM

ADDENDUM 2
ATTACHMENT 1
SHEET 2 OF 4

Item	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
Part D - Waterline					
D1	2" WATER SERVICE LINE	1540	LF		
D2	3/4" HOSE BIB AND VALVE BOX	1	EA		
D3	2" GATE VALVE AND VALVE BOX	3	EA		
SUBTOTAL PART D - Waterline (D1 THRU D3)					
Part E - Storm Sewer					
E1	15" CLASS III RCP	93	LF		
E2	15" S.E.T.	2	EA		
SUBTOTAL PART E - Storm Sewer (E1 THRU E2)					
Part F - Boat Ramp					
F1	DEWATERING (COFFERDAMMING)	1	LS		
F2	SHORELINE EXCAVATION	4500	CY		
F3	FILTER FABRIC	2950	SY		
F4	BOAT RAMP 8" GRAVEL BASE	685	CY		
F5	CIP CONCRETE BOAT RAMP SLAB	675	CY		
SUBTOTAL PART F - Boat Ramp (F1 thru F5)					
Part G - Site Facilities					
G1	PREFABRICATED RESTROOM BUILDING	1	LS		
G2	EXCAVATION FOR RESTROOM BUILDING FOUNDATION	252	CY		
G3	SELECT FILL FOR RESTROOM BUILDING FOUNDATION	272	CY		
G4	GRAVEL BASE FOR RESTROOM BUILDING FOUNDATION	10	CY		
G5	ONSITE SEWAGE FACILITY	1	LS		
G6	PAVILION	1	LS		
G7	PAVILLION FOUNDATION	1	LS		
G8	6" CONCRETE DRIVEWAY	167	SY		
G9	PARK ENTRY SIGNAGE	1	LS		
G10	CONCRETE LOW RETAINING WALL	**85**	LF		
G11	4" CONCRETE SIDEWALK AROUND PAVILION AND RESTROOM	891	SY		
G12	CONCRETE RETAINING WALL AND STAIRS	**320**	CY		
G13	RETAINING WALL DRAINAGE	360	LF		
G14	CABLE GUARD RAIL AT TOP OF RETAINING WALL AND STAIRS	270	LF		
G15	**TRASH RECEPTACLES**	**7**	**EA**		
G16	**FLAG POLE AND FOUNDATION**	**2**	**EA**		
SUBTOTAL PART G - Site Facilities (G1 THRU G16)					
Part H - Electrical and Illumination					
H1	SITE PRIMARY POWER	1	LS		
H2	SITE BRANCH POWER/CIRCUITS	1	LS		
H3	FIXTURES	1	LS		
H4	GEAR AND EQUIPMENT	1	LS		
H5	**CONCRETE ELECTRICAL ENCLOSURE PAD**	**1**	**LS**		
SUBTOTAL PART H - Electrical and Illumination (H1 THRU H5)					
Part I - Alternate #1 - Overflow Parking Lot Expansion					
I1	MOBILIZATION (5% MAX, PART I)	1	LS		
I2	12" COMPACTED SUBGRADE	13500	SY		
I3	GEOGRID (TXDOT, TYPE II)	13500	SY		
I4	6" LIMESTONE FLEXIBLE BASE, TYPE A, GRADE 1-2	2170	CY		
I5	PRIME COAT (0.15 GAL/SY)	1950	GAL		
I6	2" HMAC, TYPE C	13000	SY		
I7	PAVEMENT MARKING, TYPE 2, (W) (4")	5000	LF		
I8	SITE ELECTRICAL & ILLUMINATION (OVERFLOW PARKING AREA)	1	LS		
I9	DEDUCT: HYDROMULCH (ITEM A6)	(13500)	SY		
SUBTOTAL PART I - Alternate #1 - Overflow Parking Lot Expansion (I1 THRU I9)					

EXHIBIT A - BID FORM

ADDENDUM 2
ATTACHMENT 1
SHEET 3 OF 4

Item	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
Part J - Alternate #2 - ADA Walkway and Floating Dock (North)					
J1	MOBILIZATION (5% MAX, PART J)	1	LS		
J2	PERMATRAK PRECAST ADA CONCRETE BOARDWALK	1	LS		
J3	DRILL SHAFT (24") FOR BOARDWALK	578	LF		
J4	CONCRETE PIER CAPS FOR BOARDWALK	15	CY		
J5	HANDRAILS FOR CONCRETE BOARDWALK	670	LF		
J6	ROCK RIPRAP (LABOR ONLY)	104	CY		
J7	ACCUDOCK ADA ALUMINUM GANGWAY W/ ALL HARDWARE	1	LS		
J8	ACCUDOCK FLOATING DOCK W/ ALL HARDWARE	1	LS		
J9	12" DIA. TREATED TIMBER DRIVEN PILES	5	EA		
SUBTOTAL PART J - Alternate #2 - ADA Walkway and Floating Dock (North) (J1 THRU J9)					
Part K - Alternate #3 - Floating Dock (South)					
K1	MOBILIZATION (5% MAX, PART K)	1	LS		
K2	6" CONCRETE WALKWAY (MATCH BOAT RAMP SLOPE)	120	SY		
K3	ACCUDOCK ALUMINUM GANGWAY W/ ALL HARDWARE	1	LS		
K4	ACCUDOCK FLOATING DOCK W/ ALL HARDWARE	1	LS		
K5	12" DIA. TREATED TIMBER DRIVEN PILES	5	EA		
K6	ROCK RIPRAP (LABOR ONLY)	109	CY		
K7	ADDITIONAL CLEARING AT SHORELINE	1	LS		
SUBTOTAL PART K - Alternate #3 - Floating Dock (South) (K1 THRU K7)					
Part L - Alternate #4 - Transfer Platform					
L1	MOBILIZATION (5% MAX, PART L)	1	LS		
L2	TIMBER LOADING RAMP	1	LS		
L3	6" CONCRETE WALKWAY	5	SY		
SUBTOTAL PART L - Alternate #4 - Transfer Platform (L1 THRU L3)					
Part M - Alternate #5 - Decorative Stone Veneer					
M1	MOBILIZATION (5% MAX, PART M)	1	LS		
M2	4" STONE VENEER ON RETAINING WALLS	3000	SF		
SUBTOTAL PART M - Alternate #5 - Decorative Stone Veneer (M1 THRU M2)					
Part N - Alternate #6 - Wood Framed Alternative Design					
N1	DEDUCT: WOOD FRAMED ALTERNATIVE DESIGN	(1)	LS		
SUBTOTAL PART N - Alternate #6 - Wood Framed Alternative Design (N1)					

ADDENDUM 2
ATTACHMENT 1
SHEET 4 OF 4

Item	DESCRIPTION	ESTIMATED QUANTITY	UNIT	UNIT PRICE	EXTENDED AMOUNT
BID SUMMARY					
SUBTOTAL PART A - Site Work (Items A1 thru A12)					
SUBTOTAL PART B - Parking Area (Items B1 thru B21)					
SUBTOTAL PART C - Vantage Point Roadway Extension (Items C1 thru C6)					
SUBTOTAL PART D - Waterline (Items D1 thru D3)					
SUBTOTAL PART E - Storm Sewer (Items E1 thru E2)					
SUBTOTAL PART F - Boat Ramp (Items F1 thru F5)					
SUBTOTAL PART G - Site Facilities (Items G1 thru G16)					
SUBTOTAL PART H - Electrical and Illumination (Items H1 thru H5)					
BASE BID TOTAL (PARTS A THRU H)					
SUBTOTAL PART I - Alternate #1 - Overflow Parking Lot Expansion (Items I1 thru I9)					
SUBTOTAL PART J - Alternate #2 - ADA Walkway and Floating Dock (North) (Items J1 thru J9)					
SUBTOTAL PART K - Alternate #3 - Floating Dock (South) (Items K1 thru K7)					
SUBTOTAL PART L - Alternate #4 - Transfer Platform (Items L1 thru L3)					
SUBTOTAL PART M - Alternate #5 - Decorative Stone Veneer (Items M1 thru M2)					
SUBTOTAL PART N - Alternate #6 - Wood Framed Alternative Design (Item N1)					

ADDENDUM 2
ATTACHMENT 2
SHEET 1 OF 7

04 72 00 CAST STONE MASONRY

1.00 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section Includes:

1. Cast-stone trim including the following:

a. Window sills.

b. Belt courses.

2. Cast stone signage panels.

3. Base caps.

B. Related Sections:

1. Section 04 20 00 “Unit Masonry” for installing cast-stone units in unit masonry.

1.03 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. For cast-stone units, include construction details, material descriptions, dimensions of individual components and profiles, and finishes.

B. Shop Drawings: Show fabrication and installation details for cast-stone units. Include dimensions, details of reinforcement and anchorages if any, and indication of finished faces.

1. Include building elevations showing layout of units and locations of joints and anchors.

C. Samples for Verification:

1. For each color and texture of cast stone required, 10 inches square in size.

2. For each trim shape required, 10 inches in length.

3. For colored mortar, make Samples using same sand and mortar ingredients to be used on Project. Label Samples to indicate types and amounts of pigments used.

D. Full-Size Samples: For each shape of cast-stone unit required.

1. Make available for Architect’s review at Project Site .

2. Approved Samples may be installed in the Work.

1.04 INFORMATIONAL SUBMITTALS

A. Qualification Data: For manufacturer testing agency.

1. Include copies of material test reports for completed projects, indicating compliance of cast stone with ASTM C1364.

2. Provide test reports based on testing within previous 2 years.

1.05 QUALITY ASSURANCE

A. Manufacturer Qualifications: A qualified manufacturer of cast-stone units similar to those indicated for this Project, that has sufficient production capacity to manufacture required units, and is a plant certified by the Cast Stone Institute.

B. Testing Agency Qualifications: Qualified according to ASTM E329 for testing indicated.

C. Mockups: Furnish cast stone for installation in mockups specified in Section 04 20 00 “Unit Masonry.”

D. Mockups: Build mockups to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.

1. Build mockup of typical wall area as shown on Drawings.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Coordinate delivery of cast stone with unit masonry work to avoid delaying the Work.

B. Pack, handle, and ship cast-stone units in suitable packs or pallets.

1. Lift with wide-belt slings; do not use wire rope or ropes that might cause staining. Move cast-stone units if required, using dollies with wood supports.

2. Store cast-stone units on wood skids or pallets with non-staining, waterproof covers, securely tied. Arrange to distribute weight evenly and to prevent damage to units. Ventilate under covers to prevent condensation.

1.07 PROJECT CONDITIONS

A. Refer to Unit Masonry Specifications, 04 20 00

2.00 PRODUCTS

2.01 MANUFACTURERS

A. Source Limitations for Cast Stone: Obtain cast-stone units from single source from single manufacturer.

B. Source Limitations for Mortar Materials: Obtain mortar ingredients of a uniform quality, including color, from one manufacturer for each cementitious component and from one source or producer for each aggregate.

2.02 CAST-STONE MATERIALS

A. General: Comply with ASTM C1364.

B. Portland Cement: ASTM C150/C150M, Type I or Type III, containing not more than 0.60 percent total alkali when tested according to ASTM C114. Provide natural color or white cement as required to produce cast-stone color indicated.

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C. Coarse Aggregates: Granite, quartz, or limestone complying with ASTM C33/C33M; gradation and colors as needed to produce required cast-stone textures and colors.

D. Fine Aggregates: Natural sand or crushed stone complying with ASTM C33/C33M, gradation and colors as needed to produce required cast-stone textures and colors.

E. Color Pigment: ASTM C979/C979M, synthetic mineral-oxide pigments or colored water-reducing admixtures; color stable, free of carbon black, nonfading, and resistant to lime and other alkalis.

F. Admixtures: Use only admixtures specified or approved in writing by Architect.

1. Do not use admixtures that contain more than 0.1 percent water-soluble chloride ions by mass of cementitious materials. Do not use admixtures containing calcium chloride.

2. Use only admixtures that are certified by manufacturer to be compatible with cement and other admixtures used.

3. Water-Reducing Admixture: ASTM C494/C494M, Type A.

4. Water-Reducing, Retarding Admixture: ASTM C494/C494M, Type D.

5. Water-Reducing, Accelerating Admixture: ASTM C494/C494M, Type E.

G. Reinforcement: Deformed steel bars complying with ASTM A615/A615M, Grade 60. Use galvanized or epoxy-coated reinforcement when covered with less than 1-1/2 inches of cast-stone material.

1. Epoxy Coating: ASTM A775/A775M.

2. Galvanized Coating: ASTM A767/A767M.

H. Embedded Anchors and Other Inserts: Fabricated from stainless steel complying with ASTM A240/A240M, ASTM A276, or ASTM A666, Type 304.

2.03 CAST-STONE UNITS

A. Subject to compliance with requirements, provide the following:

1. Siteworks Architectural Cast Stone

B. Cast-Stone Units: Comply with ASTM C1364.

1. Units shall be manufactured using the vibrant dry tamp method.

C. Fabricate units with sharp arris and accurately reproduced details, with indicated texture on all exposed surfaces unless otherwise indicated.

1. Slope exposed horizontal surfaces 1:12 to drain unless otherwise indicated.

2. Provide raised fillets at backs of sills and at ends indicated to be built into jambs.

3. Provide drips on projecting elements unless otherwise indicated.

D. Fabrication Tolerances:

1. Variation in Cross Section: Do not vary from indicated dimensions by more than 1/8 inch.

2. Variation in Length: Do not vary from indicated dimensions by more than 1/360 of the length of unit or 1/8 inch, whichever is greater, but in no case by more than 1/4 inch.
3. Warp, Bow, and Twist: Not to exceed 1/360 of the length of unit or 1/8 inch, whichever is greater.
4. Location of Grooves, False Joints, Holes, Anchorages, and Similar Features: Do not vary from indicated position by more than 1/8 inch on formed surfaces of units and 3/8 inch on unformed surfaces.

E. Cure Units as Follows:

1. Cure units in enclosed, moist curing room at 95 to 100 percent relative humidity and temperature of 100 deg F for 12 hours or 70 deg F for 16 hours.
2. Keep units damp and continue curing to comply with one of the following:
   a. No fewer than 5 days at mean daily temperature of 70 deg F or above.
   b. No fewer than 6 days at mean daily temperature of 60 deg F or above.
   c. No fewer than 7 days at mean daily temperature of 50 deg F or above.
   d. No fewer than 8 days at mean daily temperature of 45 deg F or above.

F. Acid etch units after curing to remove cement film from surfaces to be exposed to view.

G. Colors and Textures: As selected by Architect from manufacturer's full range.

H. Colors and Textures: Provide units with fine-grained texture and buff color resembling sand-rubbed Indiana limestone.

2.04 MORTAR MATERIALS

A. Provide mortar materials that comply with Section 04 20 00 "Unit Masonry."

2.05 ACCESSORIES

A. Anchors: Type and size indicated, fabricated from Type 304 stainless steel complying with ASTM A240/A240M, ASTM A276, or ASTM A666.

B. Dowels: 1/2-inch- diameter round bars, fabricated from Type 304 stainless steel complying with ASTM A240/A240M, ASTM A276, or ASTM A666.

2.06 MORTAR MIXES

A. Comply with requirements in Section 04 20 00 "Unit Masonry" for mortar mixes.

B. Comply with ASTM C270, Proportion Specification.

1. For setting mortar, use Type N.
2. For pointing mortar, use Type N.

C. Pigmented Mortar: Use colored cement product or select and proportion pigments with other ingredients to produce color required. Do not add pigments to colored cement products.

1. Pigments shall not exceed 10 percent of portland cement by weight.

2. Pigments shall not exceed 5 percent of masonry cement or mortar cement by weight.
3. Mix to match Architect's sample.
4. Application: Use pigmented mortar for exposed mortar joints.

D. Colored-Aggregate Mortar: Produce required mortar color by using colored aggregates and natural color or white cement as necessary to produce required mortar color.

1. Mix to match Architect's sample.
2. Application: Use colored-aggregate mortar for exposed mortar joints.

2.07 SOURCE QUALITY CONTROL

A. Engage a qualified independent testing agency to sample and test cast-stone units according to ASTM C1364.

3.00 EXECUTION

3.01 EXAMINATION

A. Examine substrates and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 SETTING CAST STONE IN MORTAR

A. Install cast-stone units to comply with requirements in Section 04 20 00 "Unit Masonry."

B. Set cast stone as indicated on Drawings. Set units accurately in locations indicated, with edges and faces aligned according to established relationships and indicated tolerances.

1. Install anchors, supports, fasteners, and other attachments indicated or necessary to secure units in place.
2. Coordinate installation of cast stone with installation of flashing specified in other Sections.

C. Wet joint surfaces thoroughly before applying mortar or setting in mortar.

D. Set units in full bed of mortar with full head joints unless otherwise indicated.

1. Set units with joints 3/8 to 1/2 inch wide unless otherwise indicated.
2. Build anchors and ties into mortar joints as units are set.
3. Fill dowel holes and anchor slots with mortar.
4. Build concealed flashing into mortar joints as units are set.
5. Keep head joints in copings and between other units with exposed horizontal surfaces open to receive sealant.
6. Keep joints at shelf angles open to receive sealant.

E. Rake out joints for pointing with mortar to depths of not less than 3/4 inch. Rake joints to uniform depths with square bottoms and clean sides. Scrub faces of units to remove excess mortar as joints are raked.

F. Point mortar joints by placing and compacting mortar in layers not greater than 3/8 inch. Compact each layer thoroughly and allow it to become thumbprint hard before applying next layer.

G. Tool exposed joints slightly concave when thumbprint hard. Use a smooth plastic jointer larger than joint thickness.

H. Rake out joints for pointing with sealant to depths of not less than 3/4 inch. Scrub faces of units to remove excess mortar as joints are raked.

I. Point joints with sealant to comply with applicable requirements in Section 07 92 00 “Joint Sealants.”

1. Prime cast-stone surfaces to receive sealant and install compressible backer rod in joints before applying sealant unless otherwise indicated.

J. Provide sealant joints at head joints of copings and other horizontal surfaces; at expansion, control, and pressure-relieving joints; and at locations indicated.

1. Keep joints free of mortar and other rigid materials.
2. Build in compressible foam-plastic joint fillers where indicated.
3. Form joint of width indicated, but not less than 3/8 inch.
4. Prime cast-stone surfaces to receive sealant and install compressible backer rod in joints before applying sealant unless otherwise indicated.
5. Prepare and apply sealant of type and at locations indicated to comply with applicable requirements in Section 07 92 00 “Joint Sealants.”

3.03 SETTING ANCHORED CAST STONE WITH SEALANT-FILLED JOINTS

A. Set cast stone as indicated on Drawings. Set units accurately in locations indicated, with edges and faces aligned according to established relationships and indicated tolerances.

1. Install anchors, supports, fasteners, and other attachments indicated or necessary to secure units in place.
2. Shim and adjust anchors, supports, and accessories to set cast stone in locations indicated with uniform joints.

B. Keep cavities open where unfilled space is indicated between back of cast-stone units and backup wall; do not fill cavities with mortar or grout.

C. Fill anchor holes with sealant.

1. Where dowel holes occur at pressure-relieving joints, provide compressible material at ends of dowels.

D. Set cast stone supported on clip or continuous angles on resilient setting shims. Use material of thickness required to maintain uniform joint widths. Hold shims back from face of cast stone a distance at least equal to width of joint.

E. Keep joints free of mortar and other rigid materials. Remove temporary shims and spacers from joints after anchors and supports are secured in place and cast-stone units are anchored. Do not begin sealant installation until temporary shims and spacers are removed.

1. Form open joint of width indicated, but not less than 3/8 inch.

F. Prime cast-stone surfaces to receive sealant and install compressible backer rod in joints before applying sealant unless otherwise indicated.

G. Prepare and apply sealant of type and at locations indicated to comply with applicable requirements in Section 07 92 00 “Joint Sealants.”

3.04 ADJUSTING AND CLEANING

A. Remove and replace stained and otherwise damaged units and units not matching approved Samples. Cast stone may be repaired if methods and results are approved by Architect.

B. Replace units in a manner that results in cast stone matching approved Samples, complying with other requirements, and showing no evidence of replacement.

1. Protect adjacent surfaces from contact with cleaner by covering them with liquid strippable masking agent or polyethylene film and waterproof masking tape.

2. Wet surfaces with water before applying cleaners; remove cleaners promptly by rinsing thoroughly with clear water.

3. Clean cast stone with proprietary acidic cleaner applied according to manufacturer’s written instructions.

END OF SECTION

ADDENDUM 2
ATTACHMENT 3
SHEET 1 OF 3

31 23 19.01 CARE OF WATER DURING CONSTRUCTION

1.00 GENERAL

1.01 WORK INCLUDED

A. Furnish labor, materials, equipment and incidentals necessary to operate pumps, piping and other facilities to assist in the removal of surface water, stormwater runoff, and ground water, and provide protection of the work site from water of any source. Build and maintain the necessary temporary cofferdams, berms, diversions, impounding works, channels and ditches to protect the work site from lake levels and spillway discharges, streamflow, and stormwater runoff. Remove the temporary works, equipment, and materials after completion in accordance with this Section and the applicable Drawings.

1.02 SUBMITTALS

A. Submittals shall be in accordance with the Contract Documents and shall include:

1. **Cofferdam plans and details specific for this construction sealed by a Professional Engineer registered in the state of Texas.**

2. Plans and procedures for handling flood flows, stormwater runoff, and dewatering excavations for approval by the Engineer. Modifications to these plans shall also be submitted for approval by the Engineer.

3. Plans shall include a demonstration that any cofferdams or diversions provide at least 10-year flood protection for protected structures under construction.

B. Approval of submittals does not relieve the Contractor of full responsibility and liability for care of water during construction.

2.00 PRODUCTS (NOT APPLICABLE)

3.00 EXECUTION

3.01 FLOOD FLOWS AND OTHER SURFACE WATER

A. The Contractor is responsible for handling and diverting any flood flows, stormwater runoff, stream flows, or any other water, including groundwater encountered during the progress of the work. Build, maintain, and operate cofferdams, channels, flumes, sumps, berms, ditches, and other temporary works as needed to pass spillway discharge and divert stream flow or stormwater runoff water through or around the construction site and away from construction work while it is in progress. The handling of stormwater runoff should be coordinated with the erosion control plan. Unless otherwise approved by the Owner, a diversion must discharge into the same natural watercourse in which its headworks are located. Construct permanent Work in areas free from water. Full responsibility for the successful dewatering of the work areas rests with the Contractor. Remove protective works, after they have served their purpose, in a manner satisfactory to the Owner or its representative.

3.02 DEWATERING EXCAVATED AND OTHER FOUNDATION AREAS

A. Contractor is responsible for dewatering foundations for all areas during construction of the Project, including areas of required backfills. Lower the water table as needed to keep work areas free of standing water or excessively muddy conditions as needed for proper performance of the construction work. Furnish, prepare, and maintain drains, sumps, casings, well points, and other equipment needed to dewater areas for required construction work. Any dewatering method that causes a loss of fines from foundation areas shall not be permitted. Keep available standby equipment to ensure the proper and continuous operation of the dewatering system. Provide continuous monitoring (24 hours per day) of the dewatering system to ensure continuous operation.

B. Construction modifications in the dewatering system may be required by the Engineer to provide adequate performance. In the event of failure of the system, flooding of the excavation may be ordered by the Engineer until the system is operative.

3.03 DEWATERING BORROW AREAS

A. Unless otherwise specified on the Drawings, maintain the borrow areas in drainable condition or otherwise provide for timely removal of surface waters that accumulate, for any reason, within the borrow areas.

END OF SECTION

APPENDIX A

A1.00 MEASUREMENT AND PAYMENT

A1.01 MEASUREMENT

A. No measurements are required.

A1.02 PAYMENT

A. Payment for the work covered under this Section will be made at the lump sum price bid for "Dewatering (Cofferdamming)", which payment shall constitute full compensation for all costs of furnishing the labor, equipment, and materials for any temporary diversions and drainage channels, installing pumps and other dewatering equipment as required, maintaining the work area free from water, and removing the temporary protective works as needed to comply with this Section. Partial payments will be made based upon the number of days **bid** for the Contract and the number of contract days completed. If the contract term is changed by Change Order, the remaining portion of the lump sum will be divided over the remaining term of the Contract for partial payments.

END OF APPENDIX A

BASE BID - ESTIMATED QUANTITIES			
ITEM	DESCRIPTION	QUANTITY	UNIT
	PART A - SITE WORK		
A1	MOBILIZATION (5% MAX, BASE BID)	1	LS
A2	EXCAVATION	30500	CY
A3	EMBANKMENT (TY D) (FINAL)	35000	CY
A4	CLEARING AND GRUBBING	4363	SY
A5	EROSION CONTROL BLANKET	5638	SY
A6	HYDROMULCH	45575	SY
A7	SODDING	6204	SY
A8	4" TOPSOIL	6204	SY
A9	INSTALL NEW SILT FENCE	500	LF
A10	REMOVE SILT FENCE	4626	LF
A11	STORM WATER POLLUTION PREVENTION PLAN	1	LS
A12	EXCAVATION AND DISPOSAL OF OBJECTIONABLE MATERIAL (AS DIRECTED BY OWNER)	1000	CY
	PART B - PARKING AREA		
B1	12" COMPACTED SUBGRADE	31423	SY
B2	GEOGRID (TXDOT, TYPE II)	31423	SY
B3	6" LIMESTONE FLEXIBLE BASE, TYPE A, GRADE 1-2	5271	CY
B4	PRIME COAT (0.15 GAL/SY)	4591	GAL
B5	2" HMAC, TYPE C	30610	SY
B6	PAVEMENT MARKING, TYPE 2, (W) (4")	15397	LF
B7	PAVEMENT MARKING, TYPE 2, (Y) (4")	3750	LF
B8	PAVEMENT MARKING, TYPE 2, (Y) (4") (DBL)	369	LF
B9	PAVEMENT MARKING, TYPE 2, (RED) (4")	335	LF
B10	PAVEMENT MARKINGS (RED) (FIRST RESPONDER PARKING)	2	EA
B11	PAVEMENT MARKING, TYPE 2, (W) (24")	254	LF
B12	PAVEMENT MARKINGS (W)(NO PARKING)	4	EA
B13	PAVEMENT MARKINGS (W) (ARROW)	30	EA
B14	PAVEMENT MARKINGS (W) (WORD)	1	EA
B15	24" LAYDOWN CURB	107	LF
B16	CONCRETE VALLEY GUTTER	52	LF
B17	SMALL RDSD SIGN ASSM	6	EA
B18	ACCESSIBLE PAINTED SYMBOL	7	EA
B19	ACCESSIBLE PARKING SIGN	7	EA
B20	PRECAST WHEEL STOPS	7	EA
B21	6" CURB AND GUTTER	301	LF
	PART C - VANTAGE POINT ROADWAY EXTENSION		
C1	EXCAVATION	150	CY
C2	EMBANKMENT (TY A) (FINAL)	50	CY
C3	GEOGRID (TXDOT, TYPE II)	903	SY
C4	6" LIMESTONE FLEXIBLE BASE, TYPE A, GRADE 1-2	151	CY
C5	PRIME COAT (0.15 GAL/SY)	118	GAL
C6	2" HMAC, TYPE C	783	SY
	PART D - WATERLINE		
D1	2" WATER SERVICE LINE	1540	LF
D2	3/4" HOSE BIB AND VALVE BOX	1	EA
D3	2" GATE VALVE AND VALVE BOX	3	EA
	PART E - STORM SEWER		
E1	15" CLASS III RCP	93	LF
E2	15" S.E.T.	2	EA
	PART F - BOAT RAMP		
F1	DEWATERING (COFFERDAMMING)	1	LS
F2	SHORELINE EXCAVATION	4500	CY
F3	FILTER FABRIC	2950	SY
F4	BOAT RAMP 8" GRAVEL BASE	685	CY
F5	CIP CONCRETE BOAT RAMP SLAB	675	CY
	PART G - SITE FACILITIES		
G1	PREFABRICATED RESTROOM BUILDING	1	LS
G2	EXCAVATION FOR RESTROOM BUILDING FOUNDATION	252	CY
G3	SELECT FILL FOR RESTROOM BUILDING FOUNDATION	272	CY
G4	GRAVEL BASE FOR RESTROOM BUILDING FOUNDATION	10	CY
G5	ONSITE SEWAGE FACILITY	1	LS
G6	PAVILION	1	LS
G7	PAVILLION FOUNDATION	1	LS
G8	6" CONCRETE DRIVEWAY	167	SY
G9	PARK ENTRY SIGNAGE	1	LS
G10	CONCRETE LOW RETAINING WALL	85	LF
G11	4" CONCRETE SIDEWALK AROUND PAVILION AND RESTROOM	891	SY
G12	CONCRETE RETAINING WALL AND STAIRS	320	CY
G13	RETAINING WALL DRAINAGE	360	LF
G14	CABLE GUARD RAIL AT TOP OF RETAINING WALL AND STAIRS	270	LF
G15	TRASH RECEPTACLES	7	EA
G16	FLAG POLE AND FOUNDATION	2	EA
	PART H - ELECTRICAL & ILLUMINATION		
H1	SITE PRIMARY POWER	1	LS
H2	SITE BRANCH POWER/CIRCUITS	1	LS
H3	FIXTURES	1	LS
H4	GEAR AND EQUIPMENT	1	LS
H5	CONCRETE ELECTRICAL ENCLOSURE PAD	1	LS
	PART I - ALTERNATE #1 - OVERFLOW PARKING LOT EXPANSION		
I1	MOBILIZATION (5% MAX, PART I)	1	LS
I2	12" COMPACTED SUBGRADE	13500	SY
I3	GEOGRID (TXDOT, TYPE II)	13500	SY
I4	6" LIMESTONE FLEXIBLE BASE, TYPE A, GRADE 1-2	2170	CY
I5	PRIME COAT (0.15 GAL/SY)	1950	GAL
I6	2" HMAC, TYPE C	13000	SY
I7	PAVEMENT MARKING, TYPE 2, (W) (4")	5000	LF
I8	SITE ELECTRICAL & ILLUMINATION (OVERFLOW PARKING AREA)	1	LS
I9	DEDUCT: HYDROMULCH (ITEM A6)	(13500)	SY
	PART J - ALTERNATE #2 - ADA WALKWAY AND FLOATING DOCK (NORTH)		
J1	MOBILIZATION (5% MAX, PART J)	1	LS
J2	PERMATRAK PRECAST ADA CONCRETE BOARDWALK	1	LS
J3	DRILL SHAFT (24") FOR BOARDWALK	578	LF
J4	CONCRETE PIER CAPS FOR BOARDWALK	15	CY
J5	HANDRAILS FOR CONCRETE BOARDWALK	670	LF
J6	ROCK RIPRAP (LABOR ONLY)	104	CY
J7	ACCUDOCK ADA ALUMINUM GANGWAY W/ ALL HARDWARE	1	LS
J8	ACCUDOCK FLOATING DOCK W/ ALL HARDWARE	1	LS
J9	12" DIA. TREATED TIMBER DRIVEN PILES	5	EA
	PART K - ALTERNATE #3 - FLOATING DOCK (SOUTH)		
K1	MOBILIZATION (5% MAX, PART K)	1	LS
K2	6" CONCRETE WALKWAY (MATCH BOAT RAMP SLOPE)	120	SY
K3	ACCUDOCK ALUMINUM GANGWAY W/ ALL HARDWARE	1	LS
K4	ACCUDOCK FLOATING DOCK W/ ALL HARDWARE	1	LS
K5	12" DIA. TREATED TIMBER DRIVEN PILES	5	EA
K6	ROCK RIPRAP (LABOR ONLY)	109	CY
K7	ADDITIONAL CLEARING AT SHORELINE	1	LS
	PART L - ALTERNATE #4 - TRANSFER PLATFORM		
L1	MOBILIZATION (5% MAX, PART L)	1	LS
L2	TIMBER LOADING RAMP	1	LS
L3	6" CONCRETE WALKWAY	5	SY
	PART M - ALTERNATE #5 - DECORATIVE STONE VENEER		
M1	MOBILIZATION (5% MAX, PART M)	1	LS
M2	4" STONE VENEER ON RETAINING WALLS	3000	SF
	PART N - ALTERNATE #6 - WOOD FRAMED ALTERNATIVE DESIGN		
N1	DEDUCT: WOOD FRAMED ALTERNATIVE DESIGN	(1)	LS

TESTING SCHEDULE

DESCRIPTION	MINIMUM RATE	EST. QUANTITY
SOILS:		
STANDARD PROCTOR - TRENCH BACKFILL	PER MATERIAL SOURCE	1
STANDARD PROCTOR - SUBGRADE	PER PARKING AREA	1
DENSITIES - TRENCH BACKFILL	PER 200 LF TRENCH/LIFT	4
DENSITIES - SUBGRADE (PARKING AREA)	PER 200 LF LANE/LIFT	120
DENSITIES - SUBGRADE (DRIVEWAYS)	PER 2 DRIVEWAYS	2
DENSITIES - SUBGRADE (SIDEWALK)	PER 5000 SF	4
FLEXIBLE BASE:		
SIEVE ANALYSIS	PER 3000 CY	2
ATTERBURG LIMITS	PER 3000 CY	2
MODIFIED PROCTOR	PER 3000 CY	2
L.S. ABRASION	PER 3000 CY	2
CBR (STANDARD)	PER MATERIAL SOURCE	1
WET BALL MILL TEST	PER MATERIAL SOURCE	1
TRIAXIAL TEST	PER MATERIAL SOURCE	1
DENSITIES OF COMPACTED BASE	PER 200 LF LANE/LIFT	120
HOT-MIX ASPHALT CONCRETE (HMAC):		
EXTRACTION, SIEVE ANALYSIS	PER 500 TONS OR DAY	6
LAB DENSITY & STABILITY	PER 500 TONS OR DAY	6
THEORETICAL DENSITY (RICE METHOD)	PER 500 TONS OR DAY	6
TEMPERATURE - DURING LAY-DOWN	CONTINUOUS AS NEEDED	1
THICKNESS - IN PLACE (CORE)	PER 1000 LF	4
% AIR VOIDS - IN PLACE (CORE)	PER 1000 LF	4
% THE ORETICAL DENSITY - IN PLACE (CORE)	PER 1000 LF	4
CONCRETE:		
(UNCONFINED COMPRESSION, 7, 14, & 28 DAY)		
SIDEWALKS	PER 4000 SF	2
CONCRETE RETAINING WALLS		4
CONCRETE BOAT RAMP:		
COMPRESSION STRENGTH (7 & 28 DAY)	PER DAY	6
FLEXURAL (BEAM) STRENGTH (7 & 28 DAY)	PER DAY	6
AIR CONTENT	PER DAY	6
SLUMP	PER DAY	6

TESTING SCHEDULE NOTES:

1. THE ABOVE TESTING RATES ARE ONLY ANTICIPATED GUIDELINES, THE ENGINEER RESERVES THE RIGHT TO CONDUCT ADDITIONAL TESTING AT THE ENGINEER'S DISCRETION. RE-TEST FOR FAILURES ARE NOT INCLUDED.
2. MOISTURE CONTENTS TO BE INCLUDED WITH DENSITY TEST.
3. IN THE EVENT OF FAILURES, ADDITIONAL TESTS WILL BE REQUIRED.
4. ALL TESTING WILL BE PROVIDED BY THE OWNER. SRA WILL CONTRACT FOR THE MATERIALS TESTING AND WILL PROVIDE THE CONTRACTOR WITH THE CONTACT INFORMATION.

LEGEND/ABBREVIATIONS

PROPOSED SYMBOLS

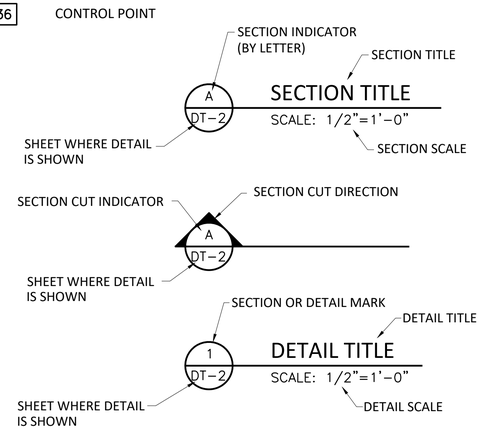
- CONCRETE CURB
- CONCRETE SIDEWALK OR PAVEMENT
- ASPHALT PAVEMENT
- -11.30% — SLOPE DIRECTION
- W — WATER LINE
- UE — UNDERGROUND ELECTRICAL
- 500 — PROPOSED CONTOUR
- RIP-RAP
- NORTH ARROW
- TRAFFIC FLOW ARROW
- STABILIZED CONSTRUCTION ENTRANCE
- TURF ESTABLISHMENT
- AREAS OF CLEARING
- B-1 — BORE LOCATION
- CP5736 — CONTROL POINT

EXISTING SYMBOLS

- PP — POWER POLE
- LP — LIGHT POLE
- SP — SIGN POST
- T TP — TELEPHONE PEDESTALS
- E — ELECTRICAL LINE
- 500 — EXISTING CONTOUR
- PROPERTY LINE
- EXISTING ROADWAY
- SF — SILT FENCE
- LOC — LIMITS OF CONSTRUCTION

NOTE:

WHERE THE WORD "PROPOSED" OR "PROP." IS UTILIZED IN THIS SET OF DOCUMENTS, IT SHALL MEAN "NEW CONSTRUCTION TO BE PERFORMED AS PART OF THIS CONTRACT."



ADDENDUM 2
ATTACHMENT 4
SHEET 1 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

STATE OF TEXAS — NICHOLAS A. CECAVA — 97391 — LICENSED PROFESSIONAL ENGINEER — 8-8-2024

FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
Corpus Christi, Texas 78401-3700
Phone - (361) 561-6500
Web - www.freese.com

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

GENERAL
LEGEND AND QUANTITIES

NO.	ISSUE	BY	DATE
1	ADDENDUM 2	SRT	8/5/2024

VERIFY SCALE Bar Scale is one inch on original drawing. If not one inch on this sheet, adjust scale. 0 1"

F&N JOB NO. SRA23985		
DATE	7/17/24	
DESIGNED	NAC	
DRAWN	DKS	
CHECKED		
APPROVED	NAC	

FILE NAME CV-SRA-ALL-QUANTS.dwg

SHEET G3

SEQ.

ACAD Rel: 24.2s (LMS Tech)
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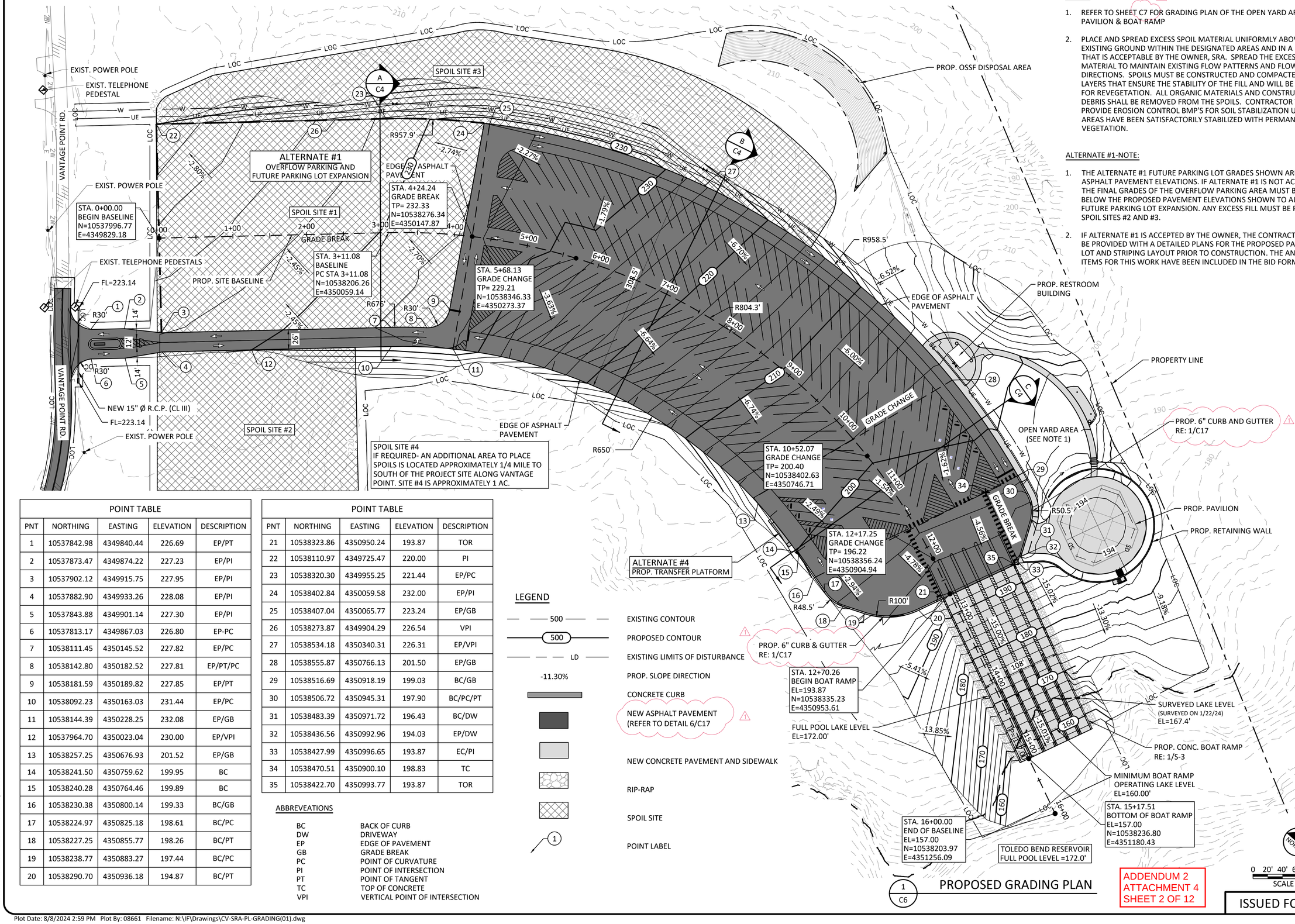

NOTES:

1. REFER TO SHEET C7 FOR GRADING PLAN OF THE OPEN YARD AREA, PAVILION & BOAT RAMP
2. PLACE AND SPREAD EXCESS SPOIL MATERIAL UNIFORMLY ABOVE EXISTING GROUND WITHIN THE DESIGNATED AREAS AND IN A MANNER THAT IS ACCEPTABLE BY THE OWNER, SRA. SPREAD THE EXCESS MATERIAL TO MAINTAIN EXISTING FLOW PATTERNS AND FLOW DIRECTIONS. SPOILS MUST BE CONSTRUCTED AND COMPACTED IN LAYERS THAT ENSURE THE STABILITY OF THE FILL AND WILL BE SUITABLE FOR REVEGETATION. ALL ORGANIC MATERIALS AND CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE SPOILS. CONTRACTOR TO PROVIDE EROSION CONTROL BMP'S FOR SOIL STABILIZATION UNTIL AREAS HAVE BEEN SATISFACTORILY STABILIZED WITH PERMANENT VEGETATION.

ALTERNATE #1-NOTE:

1. THE ALTERNATE #1 FUTURE PARKING LOT GRADES SHOWN ARE FINAL ASPHALT PAVEMENT ELEVATIONS. IF ALTERNATE #1 IS NOT ACCEPTED, THE FINAL GRADES OF THE OVERFLOW PARKING AREA MUST BE SET 8" BELOW THE PROPOSED PAVEMENT ELEVATIONS SHOWN TO ALLOW FOR FUTURE PARKING LOT EXPANSION. ANY EXCESS FILL MUST BE PLACED IN SPOIL SITES #2 AND #3.
2. IF ALTERNATE #1 IS ACCEPTED BY THE OWNER, THE CONTRACTOR WILL BE PROVIDED WITH A DETAILED PLANS FOR THE PROPOSED PARKING LOT AND STRIPING LAYOUT PRIOR TO CONSTRUCTION. THE ANTICIPATED ITEMS FOR THIS WORK HAVE BEEN INCLUDED IN THE BID FORM.

POINT TABLE				
PNT	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	10537842.98	4349840.44	226.69	EP/PT
2	10537873.47	4349874.22	227.23	EP/PI
3	10537902.12	4349915.75	227.95	EP/PI
4	10537882.90	4349933.26	228.08	EP/PI
5	10537843.88	4349901.14	227.30	EP/PI
6	10537813.17	4349867.03	226.80	EP-PC
7	10538111.45	4350145.52	227.82	EP/PC
8	10538142.80	4350182.52	227.81	EP/PT/PC
9	10538181.59	4350189.82	227.85	EP/PT
10	10538092.23	4350163.03	231.44	EP/PC
11	10538144.39	4350228.25	232.08	EP/GB
12	10537964.70	4350023.04	230.00	EP/VPI
13	10538257.25	4350676.93	201.52	EP/GB
14	10538241.50	4350759.62	199.95	BC
15	10538240.28	4350764.46	199.89	BC
16	10538230.38	4350800.14	199.33	BC/GB
17	10538224.97	4350825.18	198.61	BC/PC
18	10538227.25	4350855.77	198.26	BC/PT
19	10538238.77	4350883.27	197.44	BC/PC
20	10538290.70	4350936.18	194.87	BC/PT

POINT TABLE				
PNT	NORTHING	EASTING	ELEVATION	DESCRIPTION
21	10538323.86	4350950.24	193.87	TOR
22	10538110.97	4349725.47	220.00	PI
23	10538320.30	4349955.25	221.44	EP/PC
24	10538402.84	4350059.58	232.00	EP/PI
25	10538407.04	4350065.77	223.24	EP/GB
26	10538273.87	4349904.29	226.54	VPI
27	10538534.18	4350340.31	226.31	EP/VPI
28	10538555.87	4350766.13	201.50	EP/GB
29	10538516.69	4350918.19	199.03	BC/GB
30	10538506.72	4350945.31	197.90	BC/PC/PT
31	10538483.39	4350971.72	196.43	BC/DW
32	10538436.56	4350992.96	194.03	EP/DW
33	10538427.99	4350996.65	193.87	EC/PI
34	10538470.51	4350900.10	198.83	TC
35	10538422.70	4350993.77	193.87	TOR

LEGEND

- EXISTING CONTOUR
- PROPOSED CONTOUR
- EXISTING LIMITS OF DISTURBANCE
- PROP. SLOPE DIRECTION
- CONCRETE CURB
- NEW ASPHALT PAVEMENT (REFER TO DETAIL 6/C17)
- NEW CONCRETE PAVEMENT AND SIDEWALK
- RIP-RAP
- SPOIL SITE
- POINT LABEL

ABBREVEATIONS

BC	BACK OF CURB
DW	DRIVEWAY
EP	EDGE OF PAVEMENT
GB	GRADE BREAK
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENT
TC	TOP OF CONCRETE
VPI	VERTICAL POINT OF INTERSECTION

1 C6 PROPOSED GRADING PLAN

ADDENDUM 2
ATTACHMENT 4
SHEET 2 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

STATE OF TEXAS
NICHOLAS A. CECAVA
97391
LICENSED PROFESSIONAL ENGINEER
8-8-2024

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SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA
CIVIL
PROPOSED PARKING LOT
STAKING AND GRADING PLAN

NO.	ISSUE	BY	DATE
2	ADDENDUM 2	SRT	8/5/2024

VERIFY SCALE Bar Scale is one inch on original drawing. If not one hinch on this sheet, adjust scale.

F&N JOB NO.	SRA23985
DATE	07/17/24
DESIGNED	NAC
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APPROVED	NAC
FILE NAME	CV-SRA-PL-GRADING(01).dwg

SHEET C6
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GENERAL

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE 2018 INTERNATIONAL BUILDING CODE, INCLUDING LOCAL SUPPLEMENTS, EXCEPT WHERE APPLICABLE CODES OR THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.

2. CONSTRUCTION ACTIVITIES SHALL BE IN ACCORDANCE WITH APPLICABLE OSHA, STATE, AND LOCAL REGULATIONS. THIS DESIGN IS NOT INTENDED TO CONFLICT WITH SAFETY OR APPLICABLE REGULATIONS OR TO RELIEVE THE CONTRACTOR OF COMPLIANCE WITH THESE REQUIREMENTS. IN CASE OF CONFLICT WITH SAFETY OR APPLICABLE REGULATIONS, CONTACT THE ENGINEER FOR GUIDANCE BEFORE PROCEEDING WITH FABRICATION OR CONSTRUCTION.

3. PRIOR TO FABRICATION OR CONSTRUCTION:
   - A. REVIEW OTHER DISCIPLINE DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS, DEPRESSIONS, OFFSETS, SLEEVES, CURBS, PADS, INSERTS, EQUIPMENT REQUIREMENTS, ETCETERA, WHICH ARE NOT SHOWN ON STRUCTURAL DRAWINGS.
   - B. VERIFY DIMENSIONS AND LOCATIONS OF ALL OPENINGS, DEPRESSIONS, OFFSETS, SLEEVES, CURBS, PADS, INSERTS, EQUIPMENT REQUIREMENTS, ETCETERA.
   - C. FIELD VERIFY ALL EXISTING CONDITIONS, INCLUDING LOCATION AND DIMENSIONS OF ALL EXISTING CONSTRUCTION AND UTILITIES.
   - D. NOTIFY OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES BETWEEN DISCIPLINES, CONSTRUCTABILITY ISSUES, OR EXISTING CONDITIONS.

4. REMOVE ALL ABANDONED FOUNDATIONS, UTILITIES, PIPELINES, ETCETERA THAT INTERFERE WITH NEW CONSTRUCTION.

5. THE STRUCTURE IS DESIGNED FOR STABILITY IN THE FINAL CONDITION ONLY. PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED FOR STABILITY DURING CONSTRUCTION.

6. PLANS, SECTIONS, AND DETAILS ARE NOT TO BE SCALED FOR DETERMINATION OF QUANTITIES, LENGTHS, OR FIT OF MATERIALS.

7. THE GENERAL NOTES AND TYPICAL DETAILS ARE GENERAL AND APPLY TO THE ENTIRE PROJECT EXCEPT WHERE THERE ARE SPECIFIC INDICATIONS TO THE CONTRARY.

LOADS (SERVICE/STRENGTH LEVEL, UNO)

1. SUPERIMPOSED DEAD LOADS (NOT INCLUDING STRUCTURAL FRAMING SELF-WEIGHT):
   - A. ROOF: 13 PSF
   - B. ELEVATED FLOORS: 8 PSF

2. FLOOR LIVE LOADS:
   - A. MECH, ELECT, AND EQUIP ROOMS: 150 PSF
   - B. SLAB-ON-GRADE: 100 PSF
   - C. RESTROOMS: 50 PSF

3. ROOF LIVE LOAD:
   - A. ROOF: 20 PSF

4. LATERAL LOADS:
   - A. RISK CATEGORY **II**
   - B. WIND LOAD:
     - i. BASIC WIND SPEED: V = **110** MPH
     - ii. WIND EXPOSURE: **C**
     - iii. INTERNAL PRESSURE COEFFICIENT: GCpi = +/-**0.18**
   - C. SEISMIC LOAD:
     - i. SEISMIC IMPORTANCE FACTOR: I = **1.00**
     - ii. MAPPED SPECTRAL ACCELERATIONS: SS = **0.116**, S1 = **0.058**
     - iii. SITE CLASS: **D**
     - iv. SPECTRAL RESPONSE COEFFICIENT: SDS = **0.124**, SD1 = **0.093**
     - v. SEISMIC DESIGN CATEGORY: **A**
     - vi. BASIC SEISMIC FORCE-RESISTING SYSTEM:
       1. ORDINARY TIMBER CONCENTRICALLY BRACED FRAME
       2. ORDINARY TIMBER WITH SHEAR WALLS
     - vii. DESIGN BASE SHEAR V = 0.01W
     - viii. SEISMIC RESPONSE COEFFICIENT: CS = 0.032
     - ix. ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

FOUNDATION

1. FOUNDATIONS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT "GEOTECHNICAL ENGINEERING REPORT; SABINETOWN PARK DEVELOPMENT-PHASE 1; ; HEMPHILL, TEXAS", DATED APRIL 9, 2024, PREPARED BY RINER ENGINEERING, INC. A UES COMPANY (REPORT NO. 23-0711). A COPY OF THIS REPORT IS AVAILABLE FOR INSPECTION AT THE ENGINEER'S OFFICE FOR INFORMATIONAL PURPOSES ONLY. THE GEOTECHNICAL REPORT IS NOT PART OF THE CONTRACT DOCUMENTS.

2. EXCAVATION DESIGN AND SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR. ANY SLOPES SHOWN ARE A MAXIMUM AND SHALL BE DECREASED AS REQUIRED FOR SAFETY OR TO MEET OSHA REQUIREMENTS.

3. EXCAVATION AND SUBGRADE PREPARATION
   - A. IN THE AREAS OF IMPROVEMENTS REMOVE AND DISPOSE OF ALL CONCRETE, TREES, STUMPS, BRUSH, DEBRIS, ROOTS, RUBBISH AND ANY OTHER UNDESIRABLE MATTER. ALL VEGETATION SHALL BE REMOVED AND THE EXPOSED SURFACE SCARIFIED TO AN ADDITIONAL DEPTH OF AT LEAST 6 INCES.
   - B. BUILDING PAD AND PAVING SUBGRADES SHALL BE PROOFROLLED WITH A FULLY LOADED TANDEM AXLE DUMP TRUCK OR SIMILAR PNEUMATIC-TIRE EQUIPMENT TO LOCATE AREAS OF LOOSE SUBGRADE. IN AREAS TO BE CUT, THE PROOFROLL SHALL BE PERFORMED AFTER THE FINAL GRADE IS ESTABLISHED. IN AREAS TO BE FILLED, THE PROOFROOL SHALL BE PERFORMED PRIOR TO FILL PLACEMENT. AREAS OF LOOSE OR SOFT SUBGRADE ENCOUNTERED IN THE PROOFROLL SHALL BE REMOVED AND REPLACED WITH ENGINEERING FILL, MOISTURE CONDITIONED (DRIED OR WETTED, AS NEEDED) AND COMPACTED IN PLACE.
   - C. LIMIT EXTREME WETTING OR DRYING OF THE SUBSURFACE SOILS TO PREVENT SWELLING AND SHRINKAGE OF SOILS. STANDARD CONSTRUCION PRACTICES OF GOOD SURFACE WATER DRAINAGE MUST BE USED. POSITIVE SLOPE OF THE GROUND AWAY FROM ANY FOUNDATOIN SHALL BE PROVIDED. DITCHES OR SWALES SHALL BE PROVIDED TO CARRY RUN-OFF WATER DURING AND AFTER CONSTRUCTION.
   - D. SOFT AND/OR WET SURFACE SOILS MAY BE ENCOUNTERED DURING CONSTRUCTION, ESPECIALLY FOLLOWING PERIODS OF WET WEATHER. IF SPECIFIED COMPACTION CANNOT BE ACHIEVED DUE TO SOFT OR WET SURFACE SOILS, ONE OF THE FOLLOWING CORRECTIVE MEASURES WILL BE REQUIRED:
     - i. REMOVAL OF THE WET AND/OR SOFT SOIL AND REPLACEMENT WITH SELECT FILL
     - ii. CHEMICAL TREATMENT OF THE WET AND/OR SOFT SOIL TO IMPROVE THE SUBGRADE STABILITY, OR
     - iii. IF ALLOWED BY THE SCHEDULE, DRYING BY NATURAL MEANS
   - E. SELECT FILL SHALL CONSIST OF SOIL WITH A LIQUID LIMIT LIESS THAN 35 AND A PLASTICITY INDEX BETWEEN 7 AND 20. THE SELECT FILL HALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8-INCHES AND SHALL BE COMPACTED TO AT LEAST 95 PERCENT MAXIMUM DRY DENSITY (PER ASTM D-698) AND AT A MOISTURE CONTENT BETWEEN OPTIMUM AND 4 PERCENT ABOVE OPTIMUM MOISTURE CONTENT.
   - F. THE SUBGRADE TO RECEIVE SELECT FILL SHALL BE SCARIFIED TO A DEPTH OF 6-INCHES AND COMPACTED TO 92 TO 96 PERCENT OF THE MATERIAL'S MAXIMUM STANDARD PROCTOR DRY DENSITY (ASTM D-698) AT A WORKABLE MOISTURE LEVEL AT LEAST 4 PERCENT POINTS ABOVE OPTIMUM.
   - G. BASED ON LABORATORY TESTING CONDUCTED FOR THIS PROJECT, THE NATIVE CLAY ON-SITE SOILS WILL NOT MEET REQUIREMENTS FOR SELECT FILL OUTLINED ABOVE. AS AN ALTERNATIVE TO IMPORTING SELECT FILL, THE NATIVE CLAY SOIL MAY BE BLENDED WITH LIME TO REDUCE THE PLASTICITY INDEX TO MEET SELECT FILL REQUIREMENTS. PRIOR TO PROCEEDING WITH THIS OPTION, LIME SERIES TESTS SHALL BE PERFORMED TO ASSESS THE AMOUNT OF LIME REQUIRED.
   - H. GENERAL FILL MAY BE PLACED IN IMPROVED AREAS OUTSIDE THE BUILDING PAD AREAS. GENERAL FILL SHALL CONSIST OF MATERIAL APPROVED BY THE GEOTECHINCAL ENGINEER WITH A LIQUID LIMIT LESS THAN 50. GENERAL FILL SHALL BE PLACED IN LOOSE LIFTS NOT EXCEEDING 8-INCHES AND SHALL BE UNIFORMLY COMPACTED TO A MINIMUM OF 95 PERCENT MAXIMUM DRY DENSITY (PER ASTM D-698) AND WITH +/- 2 PERCENT OF THE OPTIMUM MOISTURE CONTENT.
   - I. THE SUBGRADE MOISTURE CONTENT AND DENSITY SHALL BE MAINTAINED DURING CONSTRUCTION.

4. ALL BELOW GRADE FOUNDATION ELEMENTS ARE DESIGNED WITH FORMED SIDES. IF THE CONTRACTOR ELECTS TO USE EARTH FORMED SIDES, THE EXPOSED SURFACE AND 12 INCHES

   BELOW GRADE SHALL BE FORMED TO THE DESIGN DIMENSION AND ONE INCH SHALL BE ADDED TO EACH SIDE TO PROVIDE ADEQUATE COVER OVER THE REINFORCING AT THE CONTRACTOR'S EXPENSE.

5. DO NOT BACKFILL FOUNDATION WALLS UNTIL THE RESTRAINING SLABS OR ADEQUATE BRACING ARE IN PLACE.

6. EXTERIOR SLABS SHALL SLOPE AWAY FROM THE STRUCTURE A MINIMUM OF 1/4" PER FOOT UNLESS NOTED OTHERWISE. GRADING AROUND STRUCTURES SHALL BE SUCH AS TO DRAIN ALL WATER AWAY FROM BUILDINGS.

7. ALL FOUNDATIONS SHALL BEAR ON SOUND, UNDISTURBED, LEVEL EXCAVATIONS. REMOVE ANY AND ALL LOOSE DEBRIS FROM EXPOSED BEARING SURFACE. SUITABLE BEARING MATERIAL SHALL BE VERIFIED BY A GEOTECHNICAL PROFESSIONAL ENGINEER

8. ALLOWABLE NET BEARING PRESSURE USED FOR FOUNDATION DESIGNS IS 1,500 PSF (NET DEAD LOAD PLUS SUSTAINED LIVE LOAD) AND 2,250 PSF (NET TOTAL LOAD PRESURE). THE BEARING PRESSURE IS BASED ON A FACTOR OF SAFETY OF 3 AND 2, RESPECTIVELY, AGAINST SHEAR FAILURE OF THE FOUNDATION BEARING SOILS.

9. ALLOWABLE NET BEARING CAPACITY FOR CONTINUOUS STRIP FOOTING IS 2,000 PSF.

10. MOISTURE CONTENT IN FOOTING EXCAVATIONS SHALL BE MAINTAINED UNTIL FOOTING IS PLACED. FOOTINGS SHALL BE PLACED AS SOON AS PRACTICAL AFTER EXCAVATIONS ARE COMPLETED.

11. MUD SLABS, WHERE INDICATED, SHALL BE PLACED THE SAME DAY EXCAVATION IS COMPLETED. THE GEOTECHNICAL ENGINEER SHALL VERIFY THAT THE BEARING SURFACE IS FREE OF LOOSE AND/OR DELETERIOUS MATERIAL BEFORE PLACEMENT OF MUD SLAB.

12. WORKING PLATFORM: 8" OF COMPACTED CLEAN CRUSHED STONE (ASTM C33 NO. 57 COARSE AGGREGATE) OVER NON-WOVEN GEOTEXTILE (MIRAFI 1100N OR APPROVED EQUAL). LAP SEGMENTS A MINIMUM OF 3FEET BUT NOT LESS THAN THAT REQUIRED BY THE MANUFACTURER. EXTEND GEOTEXTILE BEYOND LIMITS OF CRUSHED STONE AS REQUIRED TO ENCLOSE ENDS OF CRUSHED STONE AND TOP WHERE EXPOSED. EXTEND GEOTEXTILE AN ADDITIONAL 12" TO RETURN/LAP UNDER CONCRETE SLAB.

13. PLACEMENT OF WORK PLATFORM SHALL BE [WITHIN 24 HOURS OF][THE SAME DAY AS] FINAL EXCAVATION. IF THIS TIME LIMITATION CANNOT BE MET, THEN AT A MINIMUM, 6" OF EXCAVATION SHALL REMAIN UNTIL WORK PLATFORM IS PLACED.

CONCRETE

1. CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF ACI 301 AND ACI 318.][CONCRETE CONSTRUCTION SHALL CONFORM TO THE LATEST EDITIONS OF ACI 301 AND ACI 350.

2. ALL DETAILING, FABRICATION AND ERECTION OF REINFORCING BARS, UNLESS NOTED OTHERWISE, SHALL BE IN ACCORDANCE WITH THE ACI DETAILING MANUAL (ACI SP-66), LATEST EDITION.

3. CONCRETE SHALL HAVE SPECIFIED COMPRESSIVE STRENGTHS, f'c, AT 28-DAYS AS FOLLOWS:
   - A. GRADE BEAMS: 4,000 PSI
   - B. RETAINING WALLS: 5,000 PSI
   - C. SIDEWALKS AND CURBS:3,000 PSI
   - D. OTHER: 3,000 PSI
   - E. CEMENT: PORTLAND CEMENT, ASTM C150, TYPE I/II, EQUIVALENT ALKALIES < 0.60%
   - F. W/C RATIO: 0.45 MAXIMUM
   - G. AGGREGATE: ASTM C 33, 1" MAXIMUM, CLASS 3M
   - H. ENTRAINED AIR: ACI 318-08, EXPOSURE CLASS F1
   - I. SLUMP: 5" (+/-1")

4. ALL REINFORCING SHALL BE IN ACCORDANCE WITH ASTM A615, GRADE 60, DEFORMED.

5. CONCRETE CLEAR COVER OVER REINFORCING SHALL BE AS LISTED BELOW, UNLESS NOTED OTHERWISE.
   - A. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
   - B. ALL OTHER: 2"
   - C. SEE DRAWINGS FOR EXCEPTIONS

6. ALL EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4" INSIDE FORMS OR TOOLED TO 3/4" RADIUS ON SLABS UNLESS NOTED OTHERWISE.

7. SLABS ON GRADE SHALL HAVE CONSTRUCTION JOINTS AND/OR CONTROL JOINTS LOCATED AS SHOWN ON THE DRAWINGS OR AT 15 FEET MAXIMUM SPACING. DO NOT PROVIDE CONTROL JOINTS IN STRUCTURAL SLABS. CONTRACTOR SHALL LOCATE SLAB JOINTS ON RECORD INFORMATION SHOP DRAWINGS.

8. ALL CONSTRUCTION JOINTS (CXJ) SHALL BE THOROUGHLY CLEANED AND PURPOSELY ROUGHENED TO 1/4" PRIOR TO PLACING ADJACENT CONCRETE.

9. ADDITIONAL CONSTRUCTION JOINTS SHALL HAVE PRIOR APPROVAL OF THE ENGINEER.

10. PENETRATIONS OTHER THAN SHOWN SHALL NOT BE ALLOWED WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

11. IN CASES WHERE REINFORCING BARS CANNOT BE EXTENDED AS FAR AS REQUIRED DUE TO THE LIMITED EXTENT OF THE ADJACENT CONCRETE STRUCTURE, THE BARS SHALL EXTEND AS FAR AS POSSIBLE AND END IN STANDARD HOOKS.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN OF ALL FORMING, TEMPORARY BRACING AND SHORING.

13. CONDUITS AND PIPING EMBEDDED IN CONCRETE SHALL BE SPACED A MINIMUM OF FOUR DIAMETERS AND THE OUTSIDE DIAMETER SHALL BE LESS THAN 30% OF THE MEMBER THICKNESS PLACED BETWEEN LAYERS OF REINFORCING.

14. UNLESS NOTED OTHERWISE, HOOKS SHOWN ON DRAWINGS SHALL BE ASSUMED TO BE STANDARD HOOKS PER ACI 318.

15. UNLESS NOTED OTHERWISE, LAP SPLICES IN BEAMS AND WALLS SHALL BE STAGGERED.

16. BUNDLED BARS ARE BARS PLACED IN CONTACT WITH EACH OTHER IN GROUPS OF TWO, THREE, OR FOUR. INDIVIDUAL BAR SPLICES WITHIN A BUNDLE SHALL NOT OVERLAP. ENTIRE BUNDLES SHALL NOT BE LAP SPLICED.

17. ALL REINFORCING SHALL BE CONTINUOUS. CONTINUOUS BARS SHALL LAP 48 BAR DIAMETERS OF SMALLER BAR LAPPED, UNLESS NOTED OTHERWISE. ALL REBAR EMBEDMENT LENGTHS SHALL BE 36 BAR DIAMETERS, UNLESS NOTED OTHERWISE.

POST-INSTALLED ANCHORS (EXPANSION OR ADHESIVE)

1. INSTALL IN ACCORDANCE WITH MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), BUT NOT LESS THAN THAT INDICATED BELOW.

2. INSTRUCTIONS BELOW ARE NOT INTENDED TO CONFLICT WITH APPLICABLE SAFETY OR OSHA REGULATIONS OR TO RELIEVE CONTRACTOR OF COMPLIANCE WITH ALL APPLICABLE SAFETY AND OSHA REGULATIONS. IN CASE OF CONFLICT WITH SAFETY OR OSHA REGULATIONS, CONTACT THE ENGINEER FOR GUIDANCE BEFORE PROCEEDING WITH FABRICATION OR CONSTRUCTION.

3. ADHESIVE ANCHORS SHALL ONLY BE INSTALLED BY CONSTRUCTION PERSONNEL CERTIFIED UNDER ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM OR APPROVED EQUAL. SUBMIT CERTIFICATIONS AS RECORD DATA PRIOR TO ANCHOR INSTALLATION.

4. SUBMIT ANCHOR MATERIAL CERTIFICATIONS AND ALLOW INSPECTION OF UNOPENED ANCHORS ONSITE, PRIOR TO INSTALLATION.

5. ANCHOR DIAMETER AND EMBEDMENT SHALL BE AS INDICATED.

6. HOLES SHALL BE DRILLED USING ROTARY HAMMER DRILLS WITH ANSI MATCHED TOLERANCE CARBIDE-TIPPED DRILL BITS. DRILL BIT DIAMETER SHALL MATCH DIAMETER RECOMMENDED BY MANUFACTURER. DRILL HOLES USING ANCHOR MANUFACTURER'S VACUUM DUST EXTRACTION SYSTEM OR APPROVED EQUAL.

7. USE CARE AND CAUTION WHEN INSTALLING TO AVOID CUTTING OR DAMAGING EXISTING REINFORCING STEEL. FIELD VERIFY EXISTING REINFORCING LOCATIONS PRIOR TO FABRICATION OR CONSTRUCTION, AND THEN COORDINATE REBAR LOCATIONS WITH SHOP DRAWINGS.

8. EXPANSION ANCHORS SHALL BE A STUD BOLT TYPE WITH HEX HEAD NUT AND SHALL BE GALVANIZED STEEL UNLESS NOTED OTHERWISE, AND AS NOTED BELOW:
   - A. ANCHORS SHALL BE DEWALT POWER STUD+, HILTI KWIK BOLT TZ2, OR SIMPSON STRONG-TIE STRONG-BOLT 2.
   - B. VERIFY HOLE IS CLEAR OF DUST AND DEBRIS.
   - C. DRIVE ANCHOR INTO HOLE WITH A HAMMER AND THEN TIGHTEN TO SPECIFIED TORQUE.

ADDENDUM 2
ATTACHMENT 4
SHEET 3 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

STATE OF TEXAS
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89499
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8-8-2024

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SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

STRUCTURAL

STRUCTURAL NOTES (01)

NO.	ISSUE	BY	DATE
1	ADDENDUM 2	SRT	08/06/2024

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DATE	07/17/24
DESIGNED	SRT
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APPROVED	SRT
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9. ADHESIVE ANCHORS SHALL BE DEFORMED REINFORCING BARS (ASTM A615, GR 60) OR GALVANIZED STEEL THREADED ROD,UNLESS NOTED OTHERWISE, AND AS NOTED BELOW:
   A. ADHESIVE SHALL BE DEWALT PURE220+, HILTI HIT-RE 500 V3, OR SIMPSON STRONG-TIE SET-3G. USE DEWALT AC200, HILTI HIT-HY 270, SIMPSON STRONG-TIE SET-3G FOR HOLLOW AND GROUTED MASONRY.
   B. PRIOR TO INSTALLATION: ALL DEFORMED BARS AND THREADED ROD SHALL BE CLEAN, FREE OF OIL, GREASE, OR OTHER RESIDUE, IN ACCORDANCE WITH MPII.
   C. VERIFY HOLE IS CLEAR OF DUST AND DEBRIS.
   D. INSTALL ADHESIVE STARTING AT BACK OF HOLE. AS REQUIRED BY MPII, USE MANUFACTURER SUPPLIED PISTON PLUG INJECTION SYSTEM FOR ALL HORIZONTAL AND VERTICALLY INCLINED HOLES.
   E. INSTALL ANCHOR BY SIMULTANEOUSLY TWISTING AND INSERTING INTO HOLE.
   F. ALLOW ANCHOR TO SET REQUIRED TIME. DO NOT DISTURB.
   G. TIGHTEN NUT. DO NOT OVER-TORQUE.
   H. MINIMUM CONCRETE AGE AT TIME OF INSTALLATION: 28DAYS
   I. CONCRETE TEMPERATURE RANGE AT TIME OF INSTALLATION SHALL BE: 41DEG F TO 104DEG F.
   J. CONCRETE MOISTURE CONDITION AT TIME OF INSTALLATION: DRY.

PRE-ENGINEERED BUILDING

1. THE BUILDING SHALL BE A MANUFACTURER'S STANDARD PRE-ENGINEERED STRUCTURE OF THE APPROXIMATE INSIDE AREA SHOWN, EXCEPT AS NOTED. OVERALL DIMENSIONS AND CONSTRUCTION DETAILS MAY VARY TO SUIT MANUFACTURER'S STANDARD DESIGN.

2. THE BUILDING SHALL BE DESIGNED AND FABRICATED ACCORDING TO AISC, MBMA AND AISI LATEST SPECIFICATIONS. THE DIMENSIONAL TOLERANCES OUTLINED IN THE AWS CODE UNDER WORKMANSHIP AND THE TOLERANCES APPLICABLE TO ROLL FROM STEEL UNDER THE AISC "STANDARD MILL PRACTICE", SECTION SHALL BE REQUIRED IN THE FABRICATION OF THE STEEL BUILDING FRAMES.

3. THE BUILDING FRAME SHALL BE DESIGNED TO LIMIT THE LATERAL DEFLECTION TO L/180 AT THE BUILDING EAVE, WHERE L IS THE HEIGHT OF THE BUILDING EAVE.

4. THE BUILDING SHALL BE DESIGNED TO SUPPORT ALL MECHANICAL EQUIPMENT INCLUDING HEATERS, SPRINKLERS, EXHAUST SYSTEM, AND ALL OTHER SUCH DEVICES. ADDITIONAL GIRTS OR PURLINS SHALL BE PLACED IN CONVENIENT LOCATIONS FOR ATTACHMENT OF ALL MECHANICAL EQUIPMENT.

5. DESIGN LOADS SHALL CONFORM TO THE GENERAL NOTES AND LOAD COMBINATIONS SHALL COMPLY WITH MBMA SPECIFICATIONS.

6. UNLESS CROSS BRACING IS USED TO RESIST LATERAL LOADS, LOAD TESTS ON METAL PANEL WALLS AND ROOF MUST BE SUBMITTED WHERE THESE ARE USED AS A DIAPHRAGM.

ADDENDUM 2
ATTACHMENT 4
SHEET 4 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

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SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

STRUCTURAL

STRUCTURAL NOTES (02)

NO.	ISSUE	BY	DATE
1	ADDENDUM 2	SRT	08/06/2024

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DATE 07/17/24
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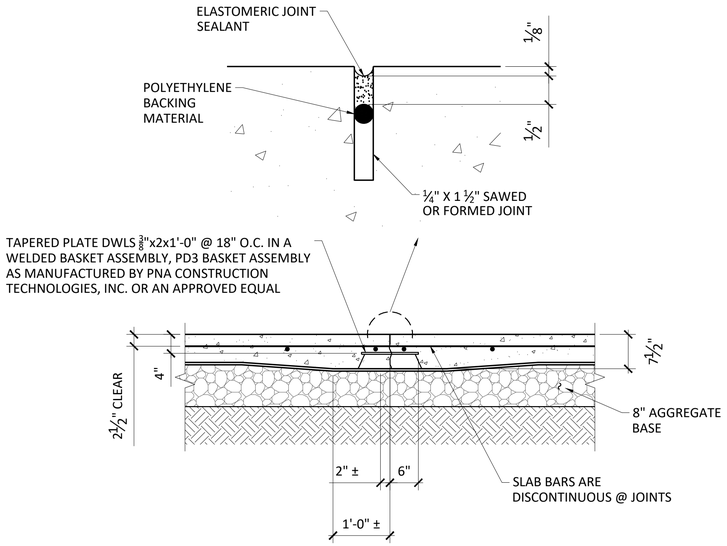


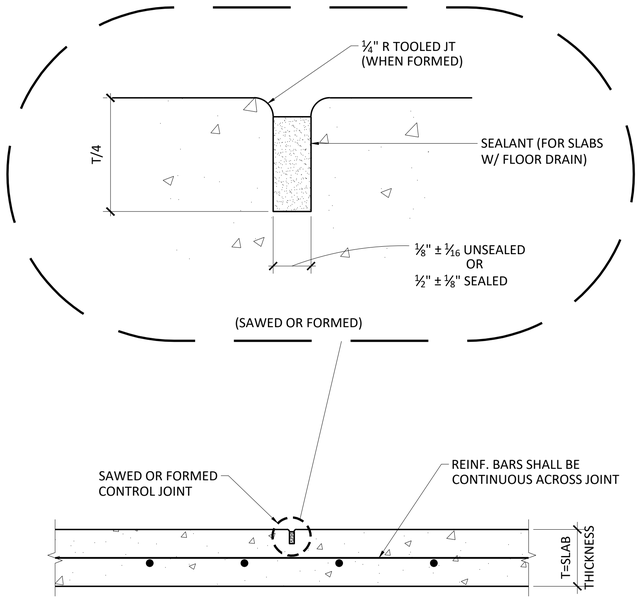
SLAB-ON-GRADE DOWELED JOINT (D.J.) DETAILS - 6" SLAB

1 / S5

SCALE: 3/4"= 1'-0"

NOTES:

1. SAWED JOINTS SHOULD BE CUT 4 TO 12 HOURS AFTER THE SLAB HAS BEEN IN AN AREA - 4 HOURS IN HOT WEATHER AND 12 HOURS IN COLD WEATHER.
2. DOWELS SHALL BE SMOOTH, ALIGNED, AND SUPPORTED SO THAT THEY WILL REMAIN PARALLEL IN BOTH THE HORIZONTAL AND VERTICAL PLANES DURING PLACING AND FINISHING OF THE CONCRETE. ALL DOWELS SHALL HAVE SAWN AND DEBURRED EDGES.
3. ALL SUBGRADE RUTTING SHALL BE REPAIRED PRIOR TO SLAB PLACEMENT.



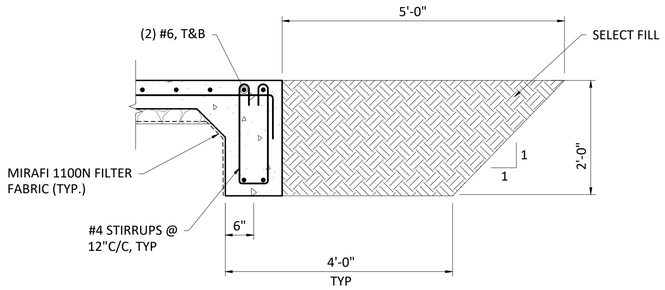
SLAB SAW CUT CONTROL JOINT (SJ)

2 / S5

1 1/2"=1'-0"

NOTES:

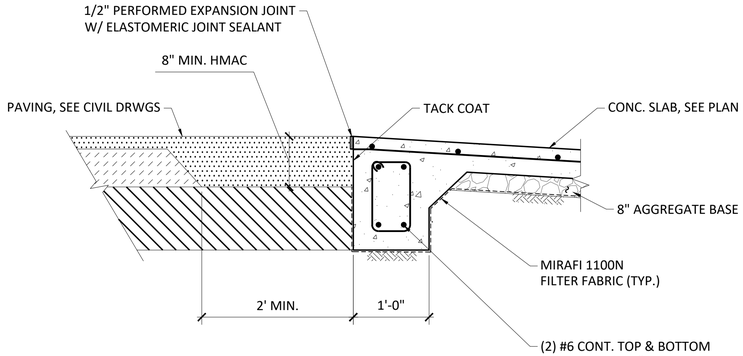
1. REFER TO PLAN FOR SLAB CONTROL JOINT LOCATIONS.
2. SAW JOINTS WITHIN 1 HOUR OF COMPLETION OF FINISHING OPERATIONS WITH EARLY-ENTRY ROLLER SAW.



TOE GRADE BEAM DETAIL

3 / S3

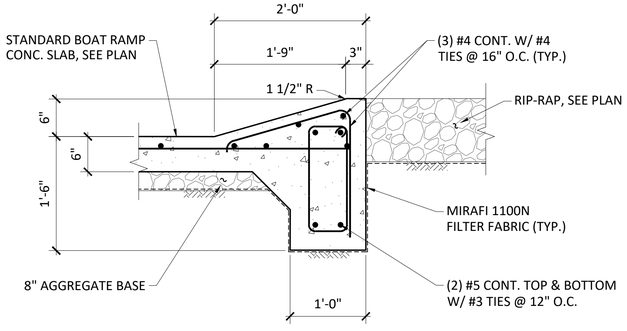
3/4"=1'-0"



CONCRETE TO ASPHALT TIE-IN

4 / S3

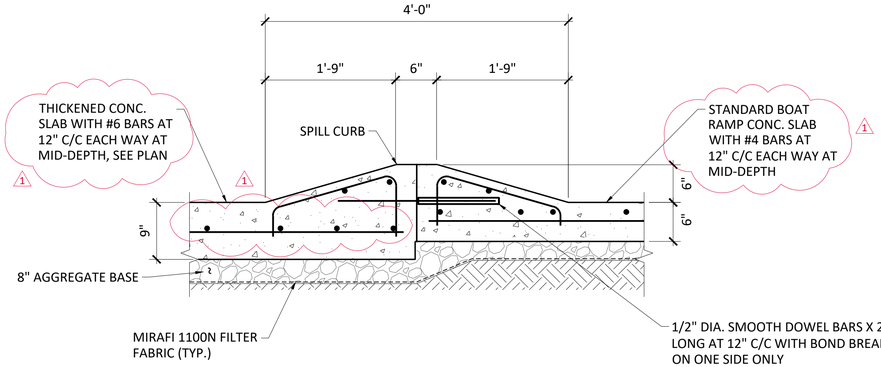
1"=1'-0"



SECTION @ EDGE

5 / S4

1"=1'-0"



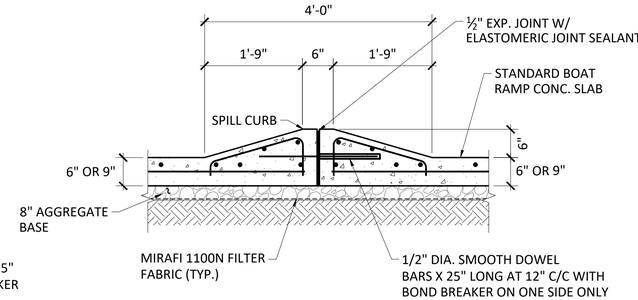
SECTION @ LONGITUDINAL CONSTRUCTION JOINT

6 / S4

1"=1'-0"

NOTE:

1. SEE 3/S-13 FOR CURB REINFORCEMENT & DIMENSIONS



SECTION @ LONGITUDINAL EXPANSION JOINT

7 / S4

1"=1'-0"

ADDENDUM 2
ATTACHMENT 4
SHEET 5 OF 12

0 6" 1' 2'
3/4"=1'-0

0 6" 1' 2'
1"=1'-0"

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

SHANE RAY TORNO
89499
LICENSED PROFESSIONAL ENGINEER
STATE OF TEXAS

8-8-2024

FREESE NICHOLS

800 N. Shoreline Blvd., Suite 1600N
Corpus Christi, Texas 78401-3700
Phone - (361) 561-6500
Web - www.freese.com

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

STRUCTURAL

BOAT RAMP DETAILS

F&N JOB NO.	SRA23985
DATE	07/17/24
DESIGNED	SRT
DRAWN	DKS
CHECKED	
APPROVED	SRT
FILE NAME	ST-SRA-DT-RAMP(01).dwg

NO.	ISSUE	DATE	BY
1	ADDENDUM 2	08/05/2024	SRT

VERIFY SCALE Bar Scale is one inch on original drawing. If not one inch on this sheet, adjust scale.

SHEET S5

SEQ.

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Last Saved: 8/1/2024 4:41 PM Saved By: 08661

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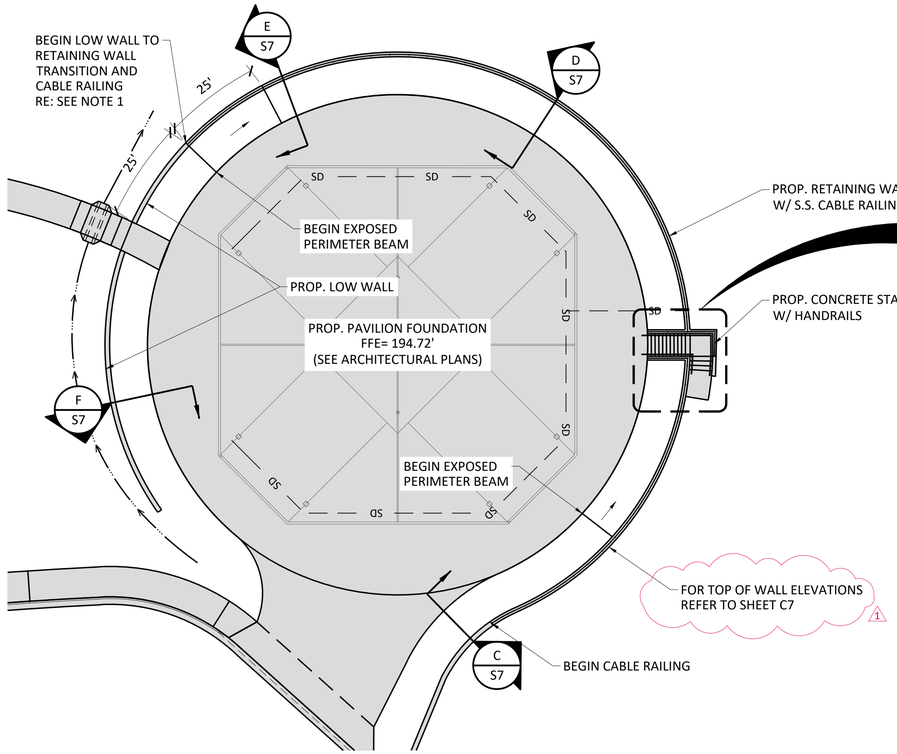
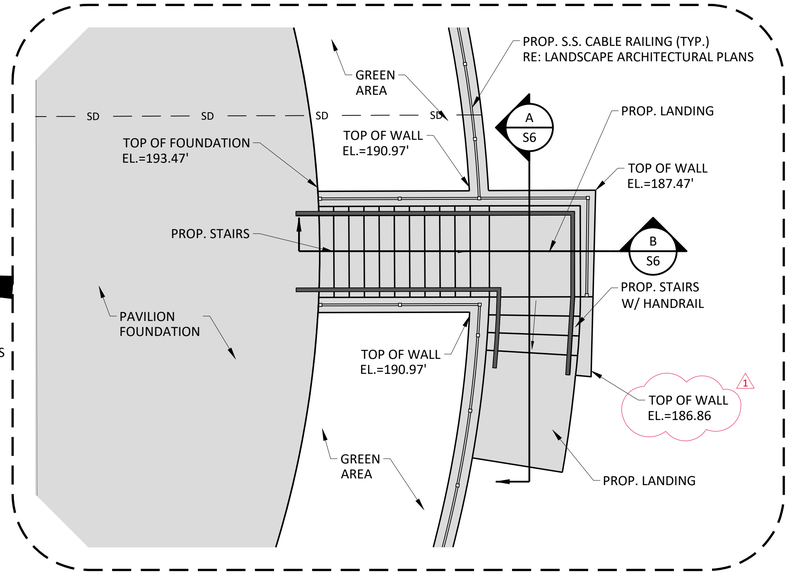
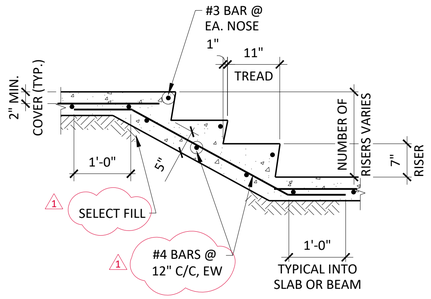


NOTES:

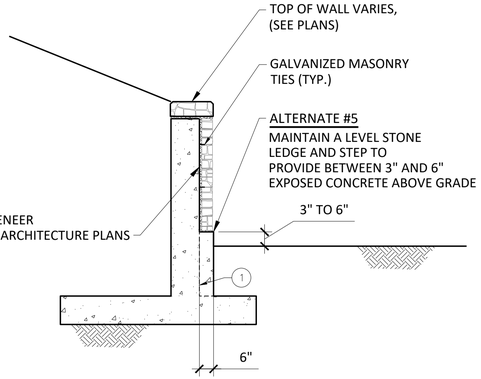
1. FOR PAVILION AND PARKING LOT GRADING PLAN, REFER TO SHEETS C6 & C7.



2 S6 **PAVILION STAIRS PLAN**
SCALE: 1"=5'

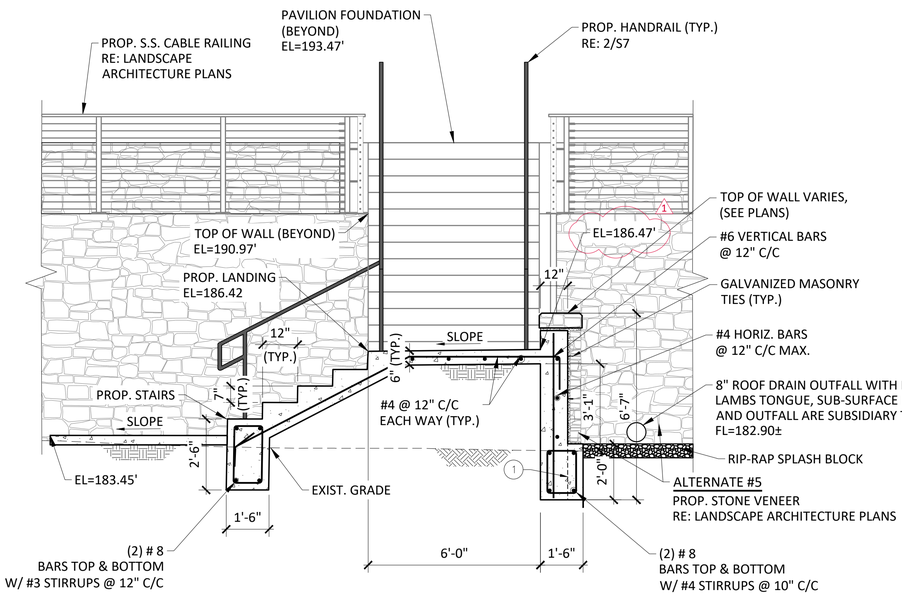


3 S6 **TYPICAL STAIR DETAIL**
SCALE: 3/4"=1'-0"

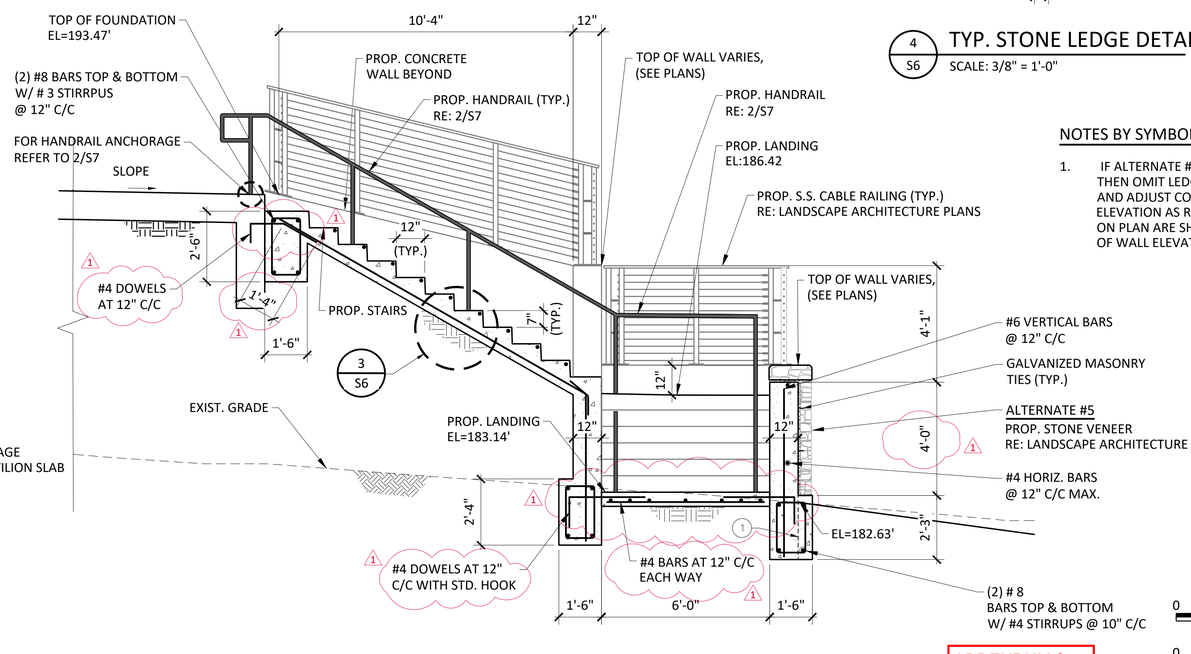


4 S6 **TYP. STONE LEDGE DETAIL**
SCALE: 3/8" = 1'-0"

1 S6 **PAVILION PLAN**
SCALE: 1"=20'



A S6 **PAVILION STAIRS SECTION (N TO S)**
SCALE: 3/8"= 1'-0"



B S6 **PAVILION STAIRS SECTION (W TO E)**
SCALE: 3/8"= 1'-0"

NOTES BY SYMBOL "◯":

1. IF ALTERNATE #5 IS NOT SELECTED THEN OMIT LEDGE FOR STONE VENEER AND ADJUST CONCRETE WALL TOP ELEVATION AS REQUIRED. ELEVATIONS ON PLAN ARE SHOWN TO FINAL TOP OF WALL ELEVATION.

ADDENDUM 2
ATTACHMENT 4
SHEET 6 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144
SHANE RAY TORNO 89499 LICENSED PROFESSIONAL ENGINEER
8-8-2024
FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
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SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

STRUCTURAL

CONCRETE STAIR DETAILS

NO.	ISSUE	BY	DATE
1	ADDENDUM 2	SRT	08/05/2024

VERIFY SCALE Bar Scale is one inch on original drawing. If not one inch on this sheet, adjust scale.

0 1' 2' 4' — 3/8"=1'-0
0 5' 10' — SCALE IN FEET
0 20' 40' — SCALE IN FEET

F&N JOB NO.	SRA23985
DATE	07/17/24
DESIGNED	SRT
DRAWN	DKS
CHECKED	
APPROVED	EG
FILE NAME	ST-SRA-DT-WALL(01).dwg

SHEET S6
SEQ.

ACAD Rel: 24.2s (LMS Tech)
Filename: N:\ST\ST-SRA-DT-WALL(01).dwg
Last Saved: 8/1/2024 4:41 PM Saved By: 08661
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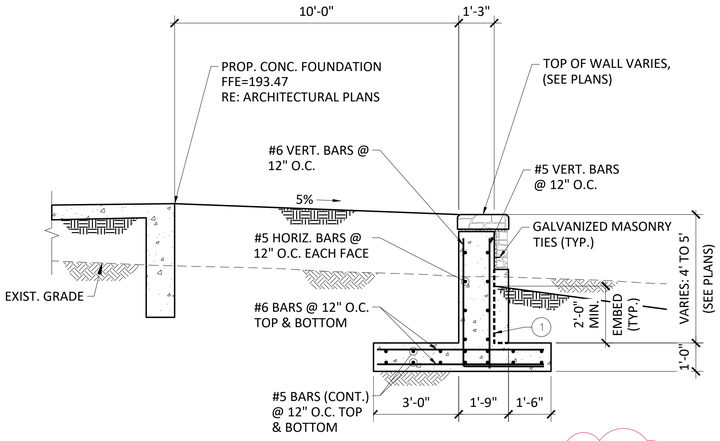
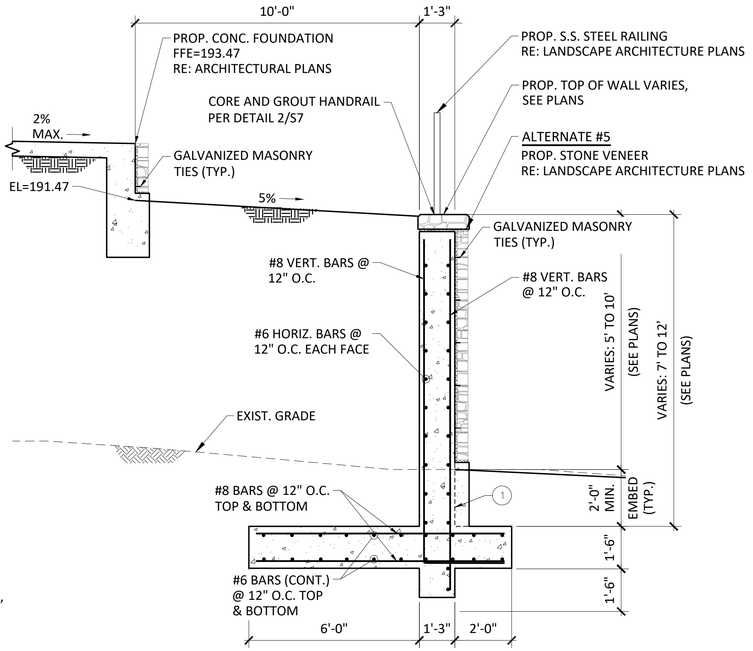


C S7 RETAINING WALL SECTION

SCALE: 3/8"= 1'-0"

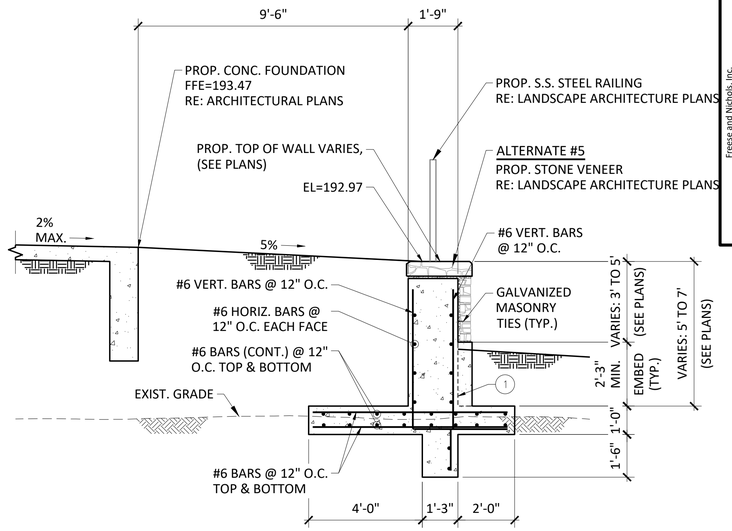
ESTIMATED TO BE 85 L.F. 1



D S7 RETAINING WALL SECTION

SCALE: 3/8"= 1'-0"

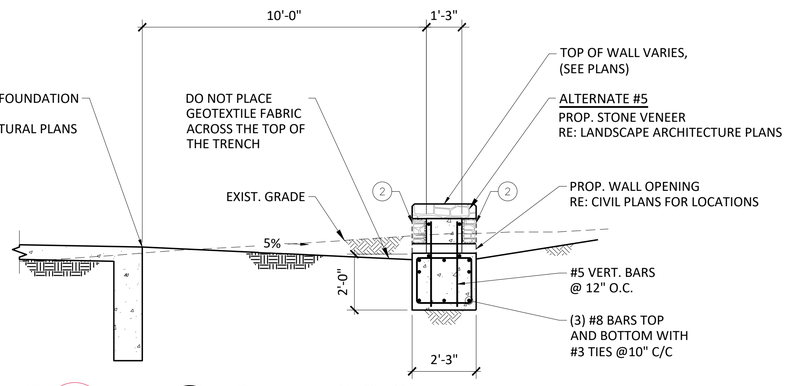
ESTIMATED TO BE 203 L.F. 1



E S7 RETAINING WALL SECTION

SCALE: 3/8"= 1'-0"

ESTIMATED TO BE 25 L.F. 1



F S7 LOW WALL SECTION

SCALE: 3/8"= 1'-0"

1 ESTIMATED TO BE 96 L.F.

1 RETAINING WALL NOTES:

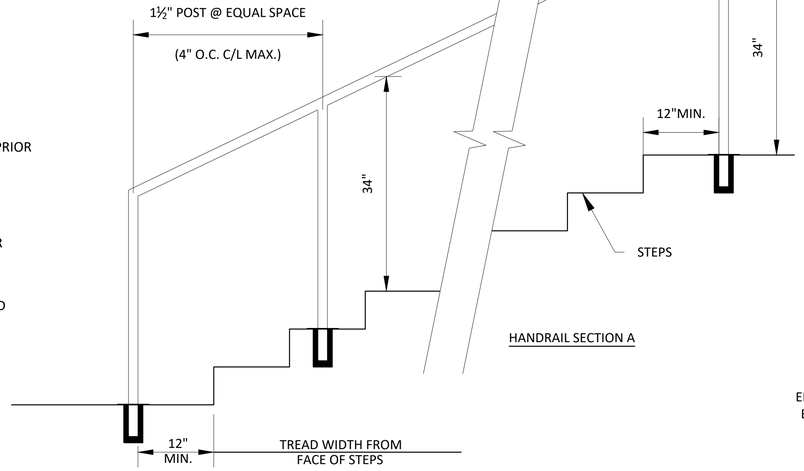
1. SEE SHEET S9 FOR BACKFILL AND DRAIN DETAILS FOR ALL RETAINING WALLS.
2. 2" CLEARANCE FOR REBAR IN FORMED WALLS.
3. 3" CLEARANCE FOR REBAR WHEN CAST AGAINST EARTH.

NOTES BY SYMBOL "◯":

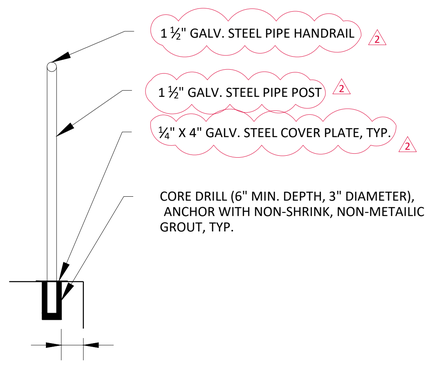
1. IF ALTERNATE #5 IS NOT SELECTED THEN OMIT LEDGE FOR STONE VENEER AND ADJUST CONCRETE WALL TOP ELEVATION AS REQUIRED. ELEVATIONS ON PLAN ARE SHOWN TO FINAL TOP OF WALL ELEVATION.
2. IF ALTERNATE #5 IS NOT SELECTED THEN COMPLETE W/ CONCRETE AS SHOWN.

1 HANDRAIL NOTES:

1. CONTRACTOR SHALL MAKE FIELD MEASUREMENTS OF AS BUILT STEPS PRIOR TO FABRICATION OF HANDRAILS.
2. STICK WELD ALL JOINTS (CONTINUOUS). GRIND WELDS SMOOTH.
3. THE CLEAR SPACE BETWEEN HANDRAIL AND AN ADJACENT WALL OR GUARDRAIL SHALL BE 1 ½" MINIMUM.
4. SPLICES AND EXPANSION JOINTS SHALL UTILIZE INTERNAL SPLICE CONNECTORS WITH SET SCREWS TO ALLOW FOR RAIL EXPANSION OVER AMBIENT TEMPERATURE CHANGE.
5. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF RAILING, INCLUDING POST LOCATION OF EACH RUN.
6. AFTER INSTALLATION, CONTRACTOR SHALL PRIME AND PAINT ALL HAND RAILS BASED ON THE OWNER'S PREFERRED COLOR SELECTION



HANDRAIL SECTION A



EDGE OF CORE DRILL HOLE SHALL BE 3½" FROM EDGE PAVEMENT

HANDRAIL SECTION B

2 S7 HANDRAIL

1"=1'-0"

ADDENDUM 2
ATTACHMENT 4
SHEET 7 OF 12

0 6" 1' 2'
1"=1'-0"

0 1' 2' 4'
3/8"=1'-0

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

SHANE RAY TORNO
89499
LICENSED
PROFESSIONAL
ENGINEER
STATE OF TEXAS

8-8-2024

FREESE NICHOLS
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Corpus Christi, Texas 78401-3700
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Web - www.freese.com

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

STRUCTURAL
CONCRETE RETAINING WALL DETAILS

NO.	ISSUE	BY	DATE
2	REVISION 1	SRT	08/06/2024
1	ADDENDUM 2	SRT	08/05/2024

VERIFY SCALE Bar Scale is one inch on original drawing. If not one hinch on this sheet, adjust scale.

F&N JOB NO.	SRA23985
DATE	07/17/24
DESIGNED	SRT
DRAWN	DKS
CHECKED	EG
APPROVED	
FILE NAME	ST-SRA-DT-WALL(01).dwg

SHEET S7

SEQ.

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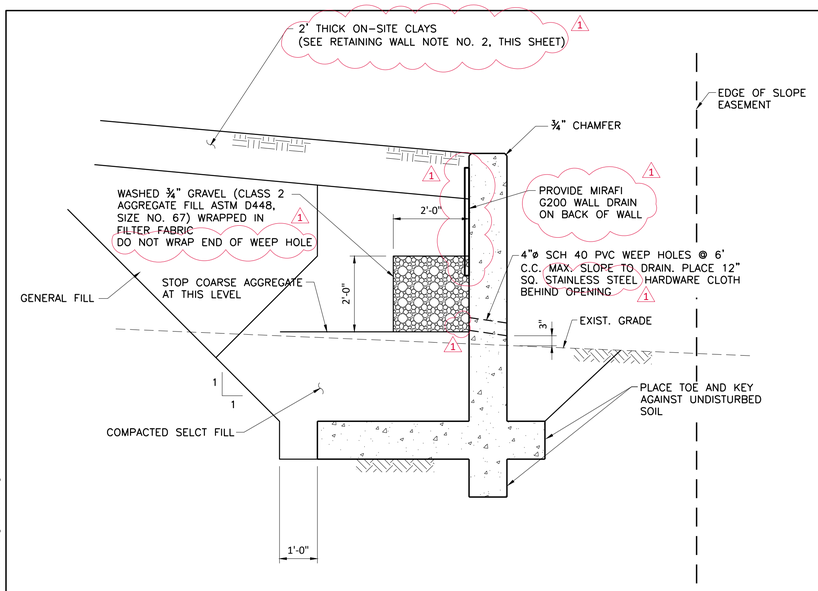
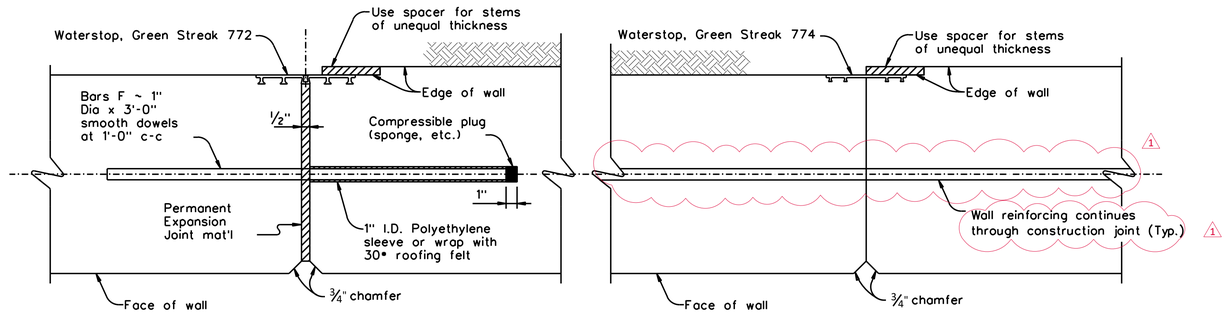


CANTILEVER RETAINING WALL EARTHWORK DETAIL

SCALE: 1/2"=1'-0"



EXPANSION JOINT

CONSTRUCTION JOINT

RETAINING WALL NOTES:

1. SELECT FILL SHALL BE USED FOR BACKFILL AGAINST WALLS. SELECT FILL SHALL CONSIST OF MATERIALS WHICH ARE A VERY SANDY CLAY, CLAYEY SAND, OR CRUSHED LIMESTONE WHICH HAVE A LIQUID LIMIT LESS THAN OR EQUAL TO 35 AND A PLASTICITY INDEX BETWEEN A MINIMUM OF 4 AND A MAXIMUM OF 15, AND WHICH ARE FREE OF ORGANIC MATERIALS. PLACE IN 8" LOOSE LIFTS AND COMPACTED TO BETWEEN 95 AND 100 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR) AND WITHIN 2 PERCENT BELOW TO 2 PERCENT ABOVE OPTIMUM MOISTURE CONTENT.
2. AT AREAS NOT PAVED, BACKFILL SHALL STOP 2'-0" BELOW FINAL GRADE. THE UPPER 2'-0" SHALL BE BACKFILLED WITH ON-SITE CLAYS. EXTEND CLAY CAP A MINIMUM OF 3'-0" BEYOND LIMITS OF SELECT FILL. PLACE CLAY IN 8" LOOSE LIFTS AND COMPACT TO BETWEEN 95 AND 100 PERCENT OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698 (STANDARD PROCTOR) AND AT OPTIMUM MOISTURE CONTENT TO 5 PERCENT ABOVE OPTIMUM MOISTURE CONTENT.
3. DO NOT BACKFILL AGAINST ANY WALL UNTIL THE CONCRETE HAS REACHED ITS SPECIFIED 28-DAY COMPRESSIVE STRENGTH OR 7 DAYS, WHICHEVER IS LONGER. COMPACTION WITHIN 5'-0" OF WALLS SHALL BE ACHIEVED WITH HAND COMPACTION EQUIPMENT. OVER COMPACTION IS NOT ALLOWED.
4. IN-PLACE FIELD DENSITY TESTS SHALL BE CONDUCTED AT A RATE OF 1 TEST PER 3000 SQUARE FEET FOR EACH LIFT, WITH A MINIMUM OF 2 TESTS PER LIFT. EACH LIFT SHALL BE COMPACTED, TESTED AND APPROVED BEFORE ANOTHER LIFT IS PLACED. ANY AREA FOUND NOT TO COMPLY WITH COMPACTION REQUIREMENTS SHALL BE REWORKED AND RETESTED. THE SUBGRADE MOISTURE CONTENT AND DENSITY SHALL BE MAINTAINED DURING CONSTRUCTION.
5. INCORPORATE EXPANSION JOINTS AT 60' SPACING (MAXIMUM). WALL REINFORCING SUBMITTAL WILL INCLUDE EXPANSION JOINT LOCATIONS FOR ENGINEER REVIEW AND APPROVAL.
6. LOCATIONS OF CONSTRUCTION JOINTS MUST BE APPROVED BY ENGINEER PRIOR TO PLACEMENT.

ADDENDUM 2
ATTACHMENT 4
SHEET 8 OF 12

ISSUED FOR BID

DATE:
FILE:
DATE TIME
DOCUMENT NAME

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

SHANE RAY TORNO
89499
LICENSED
PROFESSIONAL ENGINEER
STATE OF TEXAS

8-8-2024

FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
Corpus Christi, Texas 78401-3700
Phone - (361) 561-6500
Web - www.freese.com

SABINE RIVER AUTHORITY

SABINETOWN RECREATION AREA

STRUCTURAL

RETAINING WALL MISCELLANEOUS DETAILS

NO.	ISSUE	BY	DATE
1	ADDENDUM 2	SRT	08/05/2024

F&N JOB NO. SRA23985
DATE 07/17/24
DESIGNED SRT
DRAWN DKS
CHECKED RG
APPROVED SRT
FILE NAME ST-SRA-DTL-WALLS(01).dwg

VERIFY SCALE Bar Scale is one inch on original drawing. If not one inch on this sheet, adjust scale.
0 1"

SHEET S9
SEQ.

ACAD Rel: 24.2s (LMS Tech)
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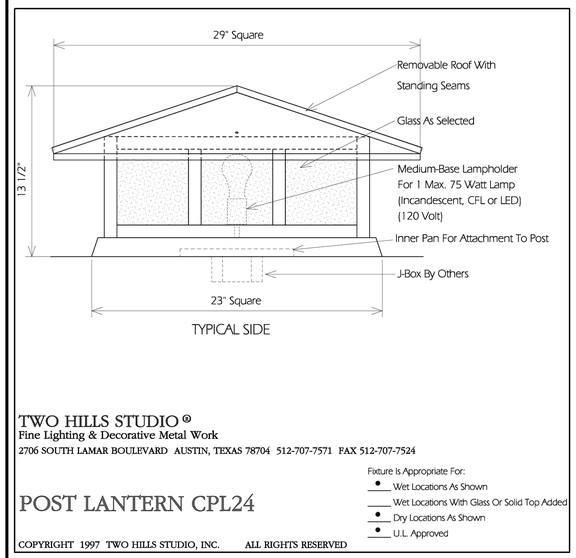
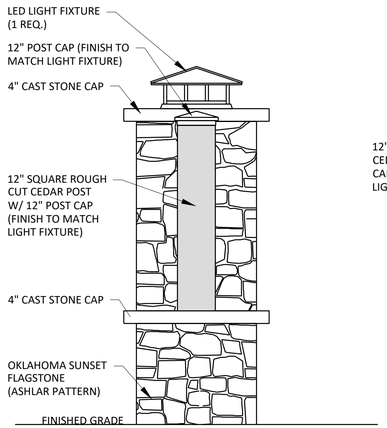
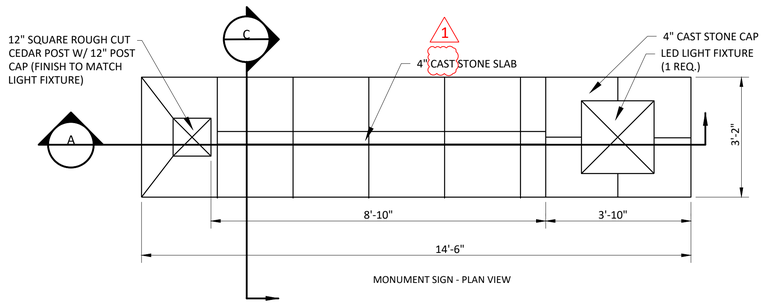


1 L1 **POST LANTERN**
NTS

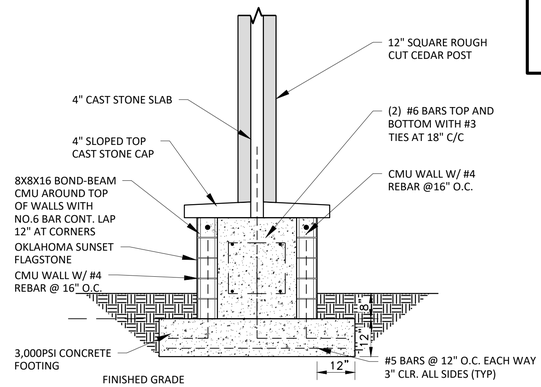


2 L1 **MONUMENT SIGN - END ELEVATION**
NTS

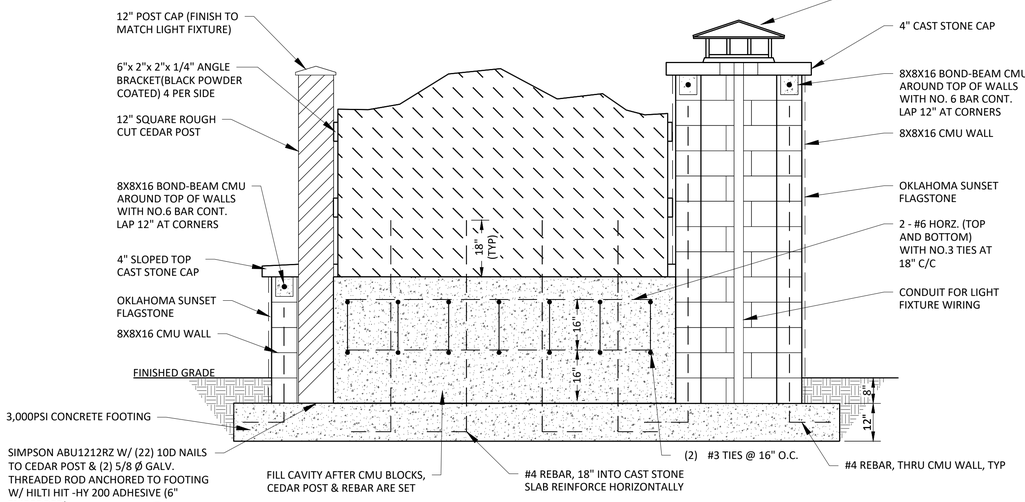


3 L1 **MONUMENT SIGN - PLAN VIEW**
NTS

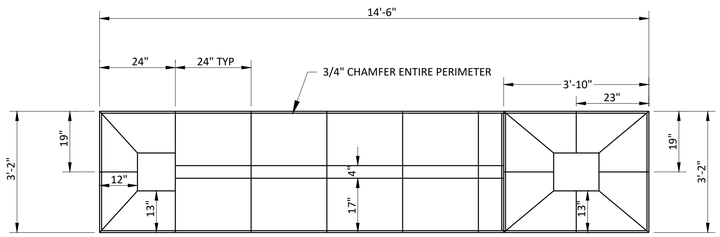
NOTES:
1. GROUT SOLID ALL CELLS
2. TOP OF ALL WALL SHALL HAVE A BONDBEAM W/ (2) #4 CONT. TYP
3. ALL MASONRY SHALL BE RUNNING BOND, UNLESS NOTED
4. REINFORCE ALL WALLS W/ HORIZONTAL TRUSS TYPE JOINT REINFORCING @ 16" O.C.
5. REINFORCE ALL WALL CORNERS W/ ONE TYP WALL REBAR



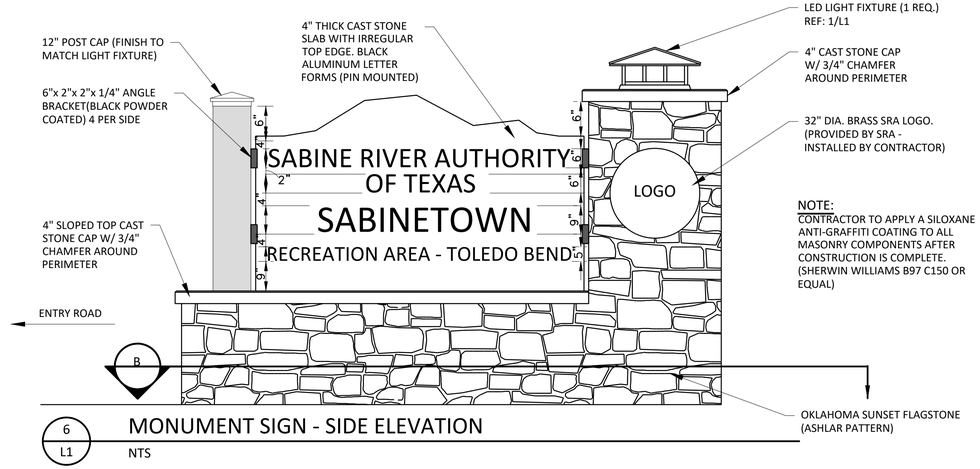
4 L1 **MONUMENT SIGN - CONSTRUCTION SECTION C**
NTS



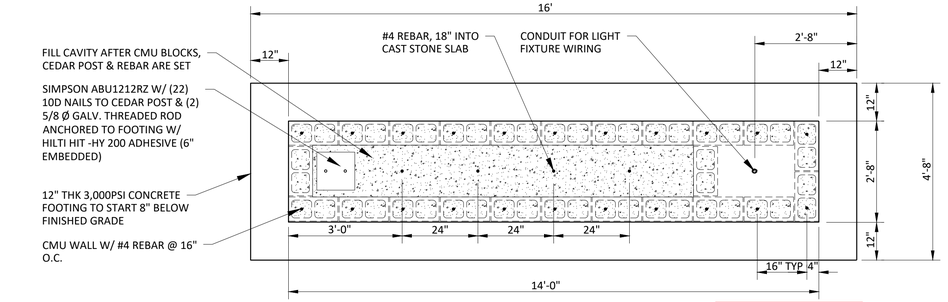
5 L1 **MONUMENT SIGN - CONSTRUCTION SECTION A**
NTS



7 L1 **MONUMENT SIGN - CAP STONE LAYOUT**
NTS



6 L1 **MONUMENT SIGN - SIDE ELEVATION**
NTS



8 L1 **MONUMENT SIGN - CONSTRUCTION SECTION B**
NTS

ADDENDUM 2
ATTACHMENT 4
SHEET 9 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

REGISTERED LANDSCAPE ARCHITECT
JOHN PAUL JANKOWSKI
2807
STATE OF TEXAS
8/8/2024

FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
Corpus Christi, Texas 78401-3700
Phone - (361) 561-6500
Web - www.freese.com

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA
LANDSCAPE ARCHITECTURE
PARK SIGN

NO.	ISSUE	BY	DATE
2	ADDENDUM 2	BPJ	08/09/2024

F&N JOB NO. SRA23985
DATE 07/15/2024
DESIGNED BPJ
DRAWN JMST
CHECKED JHH
APPROVED
FILE NAME L-DT-DTL_BASE.dwg

VERIFY SCALE Bar Scale is one inch on original drawing. If not one hinch on this sheet, adjust scale.
0 1"

SHEET L1
SEQ.

ACAD Rel: 24.2s (LMS Tech)
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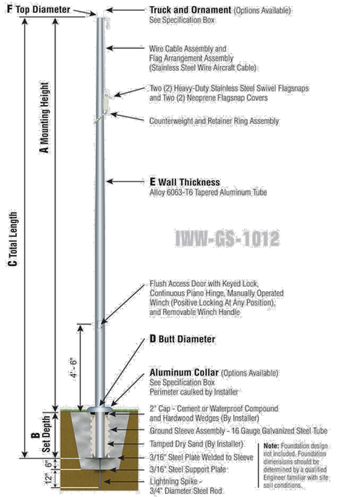
Last Saved: 8/6/2024 10:59 PM Saved By: 08457
Plot Date: 8/6/2024 11:01 PM Plot By: 08457 Filename: N:\LA\Base\L-DT-DTL_BASE.dwg

CONCORD AMERICAN FLAGPOLE
Pride. Quality. Tradition.

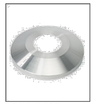
Titan Series
IWW - Internal with Winch
Wire Halyard
Ground Set Installation

IWW80H24 - SAT




TRK-9800-58
Int. Revolving Truck Sealed Bearings


BAL-1258-GLD
HD Gold Anodized Aluminum Ball


COL1-A12S
FC-11 Spun Alum
1-Piece


SAT
Satin Finish


IWW - WINCH
Flush Mount
Hinged Door

Specifications
A. Mounting Height: 80'
B. Set Depth: 8'-0"
C. Total Length: 88'-0"
D. Butt Diameter: 12"
E. Wall Thickness: .375"
F. Top Diameter: 4"
Flagpole Sections: 4
Shaft Weight: 1140 lbs.
Hardware Weight: 59 lbs.
Ground Sleeve Weight: 119 lbs.
* Max Flag Size: 15' x 25'
* Max Wind Speed w/Nylon Flag: 89 mph
* Max Wind Speed No Flag: 121 mph
* Wind Speed Specifications from ANSI/NAAMM FP 1001-07

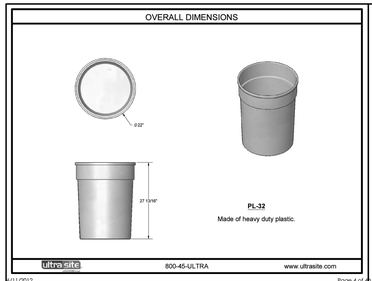
Customer Name: SRA			
Dealer:		Qty: 1	
Project:	Sabinetown Park/Fishing Facility	Location: TX	
Notes:			

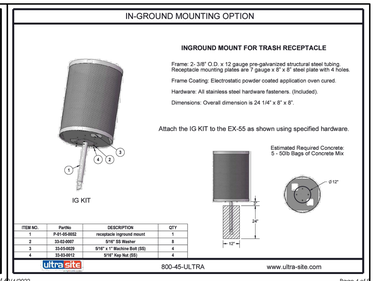
IWW80H24G-TAZ-O0G-C2N-FSA

PROVIDE THE FOLLOWING:
1 - USA FLAG AND 1 - TEXAS FLAG

CAFP_010819_1pg - 1 -

1 L5 **FLAG POLE**
NTS





SURFACE MOUNT MOUNTING OPTION

SM KIT

SURFACE MOUNT FOR TRASH RECEPTACLE

Frame: 2- 3/8" O.D. x 12 gauge pre-galvanized structural steel tubing. Receptacle mounting plates are 7 gauge x 8" x 8" steel plate with 4 holes. Surface mounting plates are ¼" x 6" x 8" steel plate with 4 holes.

Frame Coating: Electrostatic powder coated application oven cured.

Hardware: All stainless steel hardware fasteners. (Included).

Dimensions: Overall dimension is 3-3/4" x 8" x 8".

Attach the SM KIT to the EX-55 as shown using specified hardware.

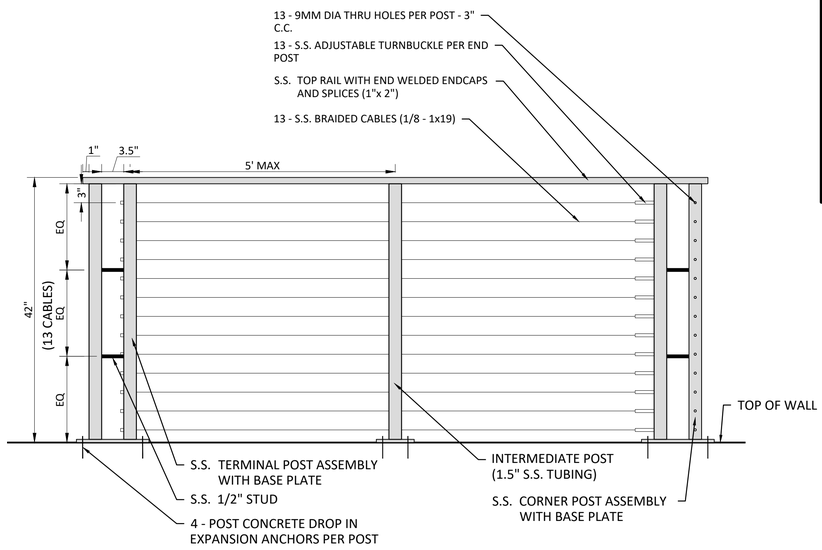
Recommended Surface Mount Hardware:
3/8" x 3-1/2" Concrete Expansion Anchor Bolts
(Not Included)

ITEM NO.	PartNo	DESCRIPTION	QTY
1	P-01-05-0053	receptacle surface mount	1
2	33-02-0007	5/16" SS Washer	8
3	33-05-0029	5/16" x 1" Machine Bolt (SS)	4
4	33-03-0012	5/16" Kep Nut (SS)	4

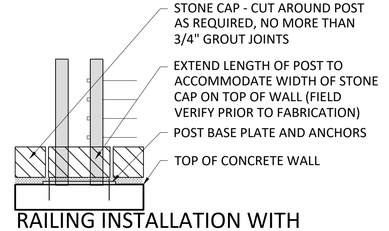
ultra site
800-45-ULTRA www.ultra-site.com

2/4/2022 Page 5 of 9

2 L5 **TRASH RECEPTACLE**
NTS

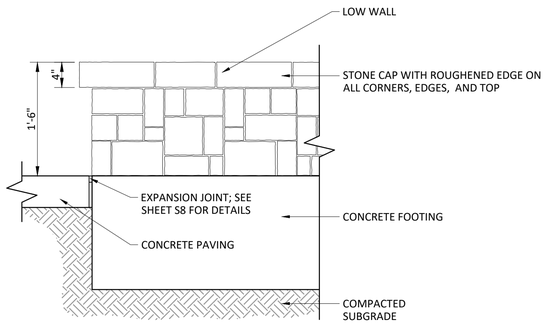


CABLE RAILING NOTES:
1. ALL POST AND RAILS SHALL BE 316 STAINLESS STEEL.
2. ALL WELDED CONNECTIONS SHALL BE CONTINUOUSLY FILLET TIG WELDED BY A QUALIFIED WELDER.
3. MINIMIZE FIELD WELDING WHERE POSSIBLE.
4. CLEAN AND PASSIVATE ALL STEEL COMPONENTS AND TREAT WITH PENETRATING RUST PROHIBITER SUCH AS RUST RESCUE 200 OR EQUAL.
5. ALL CABLE TERMINATIONS SHALL BE FITTED WITH A CROWN NUT OR OTHER CAPPING DEVICE.

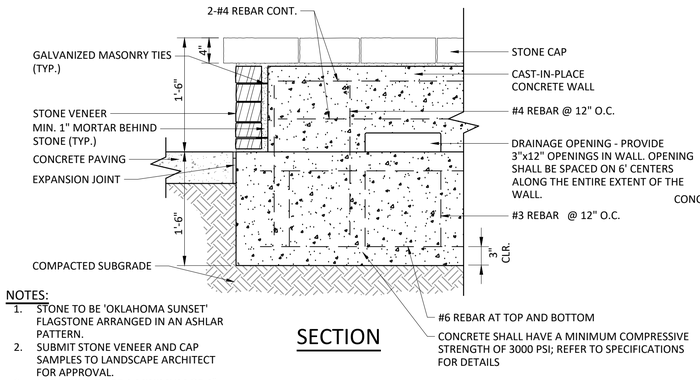


RAILING INSTALLATION WITH MASONRY CAP

3 L5 **CABLE RAILING**
NTS

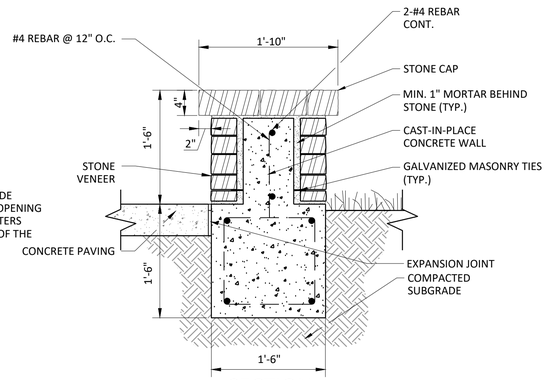


ELEVATION



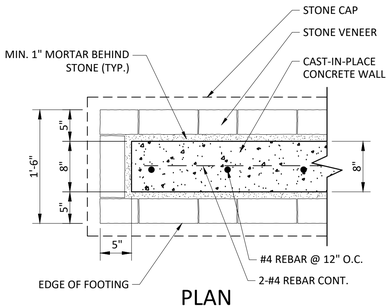
NOTES:
1. STONE TO BE 'OKLAHOMA SUNSET' FLAGSTONE ARRANGED IN AN ASHLAR PATTERN.
2. SUBMIT STONE VENEER AND CAP SAMPLES TO LANDSCAPE ARCHITECT FOR APPROVAL.
3. CAP STONE TO BE A MINIMUM OF 4" THICK. ARRANGE STONE JOINTS TO ENSURE A MINIMUM OF 6" LATERAL DISTANCE IS AFFIXED TO THE WALL BELOW.

SECTION



SECTION

NOTES:
1. FOOTING SHALL BEAR ON UNDISTURBED SOIL AND PROPERLY COMPACTED SUBGRADE.
2. STONE TYPE, SHAPE AND PATTERN SHALL BE A MILSAP BLEND SAWN CHOPPED, WITH FACE HEIGHTS BETWEEN 4"-8" AND BED DEPTHS OF 4"
3. STONE AND MORTAR CONSTRUCTION TO CONFORM TO SPECIFICATIONS.
4. PROVIDE GALVANIZED MASONRY TIES AT ALL STONE VENEER FASCIA AT 9" VERTICAL O.C.
5. SUBMIT STONE TYPE AND COLOR TO LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO CONSTRUCTION. LANDSCAPE ARCHITECT TO APPROVE MOCKUP STONE VENEER INDICATING PATTERN, JOINTING, COLORS, ETC. PRIOR TO PROCEEDING WITH WORK.



PLAN

4 L5 **LOW MASONRY WALL DETAIL**
NTS

ADDENDUM 2
ATTACHMENT 4
SHEET 10 OF 12

ISSUED FOR BID

Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

REGISTERED LANDSCAPE ARCHITECT
BRIAN PAUL JANISCH
2301
STATE OF TEXAS
8/8/2024

FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
Corpus Christi, Texas 78401-3700
Phone - (361) 561-6500
Web - www.freese.com

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA
LANDSCAPE ARCHITECTURE
FURNISHINGS

NO.	ISSUE	BY	DATE
1	ADDENDUM 2	BPJ	08/09/2024

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DATE 07/15/2024
DESIGNED BPJ
DRAWN JMST
CHECKED JHH
APPROVED
FILE NAME L-DT-DTL_BASE.dwg

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SEQ.

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Plot Date: 8/6/2024 11:03 PM Plot By: 08457 Filename: N:\LA\Base\L-DT-DTL_BASE.dwg

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	LAMPS	VOLTAGE
1 H	PARKING LOT PULL/LED FIXTURE. LUMINAIRE WITH MICRO STRIKE 320 OPTICS, INTEGRAL SURGE SUPPRESSION DEVICE, FIELD ROTATABLE OPTICS, UL 1598 WET LOCATION LISTED, DIE-CAST ALUMINUM HOUSING, COLOR CHOICE PER ARCHITECT/OWNER, SIZE 2, TYPE 4 DISTRIBUTION. EQUAL TO CURRENT VIPER SERIES. POLE: ROUND TAPERED STEEL (RTS) 30FT POLE. COLOR TO MATCH FIXTURE AND APPROVED BY ARCHITECT/ OWNER. INCLUDE VIBRATION DAMPER SYSTEM FOR EVERY POLE. EQUAL TO VALMONT POLE NUMBER: XXXX XXXX-XX-XX X- XXXX.	POLE MOUNTED	260.1W LED 32,642 LUMENS 5000K	240
1 HM	NEXUS 750 WATT SPORTS LIGHTER LED. YOLK MOUNT FRAME, HEAVY DUTY DIE-CAST ALUMINUM HOUSING DESIGNED TO MINIMIZE GLARE AND BE WEATHER TIGHT WITH 3G VIBRATION RATINGS TO ENSURE IT CAN SURVIVE HARSH ENVIRONMENTS. NEXUS COMES STANDARD WITH 20KV SURGE PROTECTION AND 110 VOLT DIMMING INTEGRAL OR REMOTE DRIVER OPTIONS ARE AVAILABLE, 10 YEAR WARRANTY, CALCULATED LIFE HOURS 100,000+ CALM DRIVER MANUFACTURED BY MEANWELL, OPERATING TEMPERATURE -40°F TWO 122°F. BEAM OPTICS OPTIONS ARE 25° AND 30°. FIXTURE COMBS WITH ANTISTATIC POWDER COATING BLACK IN COLOR. FIXTURE ALSO INCLUDES POLYCARBONATE MATCHING HOOD VISOR. POLE: ROUND TAPERED STEEL 100 FOOT POLE. GALVANIZED STEEL POLE INCLUDES (3) SECTIONS. INCLUDE VIBRATION DAMPER SYSTEM FOR EACH HIGH MAST POLE ORDERED. EQUAL TO VALMONT POLE NUMBER: XXXX XXXX-XX-XX X- XXXX.	YOKE MOUNTED ON HIGH MAST FIXTURE RING. EACH POLE SHALL INCLUDE RAISE/LOWERING SYSTEM TO ALLOW FIXTURE MAINTENANCE AT GROUND LEVEL	760.1W LED 9,660 LUMENS 4000K	240 (100-277)
D	CANOPY LED FIXTURE DESIGNED FOR OUTDOOR AND INDOOR PAVILIONS. 19 INCHES IN DIAMETER WITH A LOW PROFILE OF 3.75 INCHES. CRI INDEX 80, TYPE 5 OPTICS, PENDANT MOUNTED, INCLUDE BIRD SHIELD WHEN ORDERING. ALSO INCLUDE 500 LUMEN UP-LIGHT OPTION. VERIFY WITH ARCHITECT/ OWNER FOR COLOR CHOICE. EQUAL TO LITHONIA THE VCPG LED SERIES. ALSO INCLUDE SENSORS AS REQUIRED TO CONTROL ALL TYPE D FIXTURES WITH nLIGHT CONTROL SYSTEM OF APPROVED EQUAL	PENDANT MOUNT WITH BIRD PROTECTION SHIELD/SHROUD	82W LED 11,027 LUMENS 5000K	120
S (SIGN)	LINEAR SIGN LIGHT FIXTURE, EXTRUDED ALUMINUM, STAINLESS STEEL FASTENERS, ACRYLIC/UV RESISTANT LENS, KMS KNUCKLE MOUNTING TO ALLOW AIMING, WFL DISTRIBUTION, SET-BACK DETERMINED DURING MOCK-UP, POWDER COATED BLACK FINISH, COLOR AS SELECTED BY OWNER, EQUAL TO HYDREL 4750L STATIC WHITE SERIES, 0-10V DIMMING.	GROUND REFER TO DETAIL SHEET E4.00	42 WATT LED 4594 LUMENS 3000K	240

NOTES:

1. VERIFY EXACT LOCATION, MOUNTING, AND METHOD OF INSTALLATION FOR ALL LIGHTING FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.
2. SUBMIT POINT-BY-POINT FOOT-CANDLE CALCULATIONS FOR PAVILION AND SITE LIGHTING (10 FT. CENTERS FOR PAVILION AND 20 FT. CENTERS FOR SITE)
3. INCLUDE VIBRATION DAMPERING SYSTEM FOR EACH POLE.

EXTERIOR SITE LIGHTING CONTROL SCHEDULE

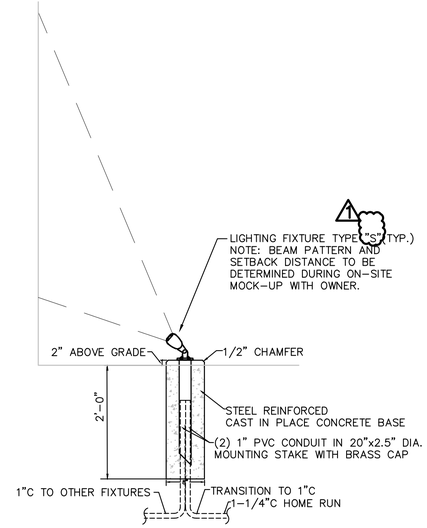
ZONE	EQUIP LOC.	PHOTOCELL	TIMECLOCK NUMBER	HOA SWITCH	CONTACTOR		
					CONTACTOR NO.	RATING	CIRCUITS
POLES P1-P6 & P9-P18	ENCL NO.1	1	TC-1	1	C-1	6P-30A	MP-1,3 MP-2,4
POLES P7 THRU P8	ENCL NO.1	1	TC-1	2	C-2	2P-30A	MP-6,8
ENTRY SIGN	ENCL NO.1	1	TC-1	3	C-3	2P-30A	MP-5,7
PAVILION LIGHTS	ENCL NO.2	2	TC-2	4	C-4	2P-30A	P-1
PAVILION FAN	ENCL NO.3	FAN OFF/ON AND SPEED BY CONTROLLER INCLUDED WITH FAN					P-4,6

NOTES:

1. PROVIDE AUXILIARY RELAYS AS REQUIRED FOR 2-WIRE CONTROL.
2. CONTACTORS SHALL BE LOCATED IN SEPARATE NEMA 1 ENCLOSURE IN ENCLOSURE No. 1
3. PHOTOCELL SHALL BE INSTALLED (WITH GRC PROTECTIVE COLLAR) ON EXTERIOR OF NORTH WALL OF ENCLOSURE No. 1 AS HIGH AS POSSIBLE AND FACING NORTH.
4. PROVIDE PHOTOCELL-ON, TIMECLOCK-OFF CONTROL AND HOA SWITCH FOR BY-PASS ON/OFF/AUTO OPERATION.
5. HOA SWITCHES SHALL BE INSTALLED IN HINGED COVER OF ABOVE CONTACTOR REFERENCED CONTACTOR ENCLOSURE.

POLE SCHEDULE

POLE NUMBER	POLE HEIGHT	FIXTURE TYPE	FIXTURE QUANTITY	VOLTAGE
P1	30'	1 H	1	240
P2	30'	1 H	1	240
P3	30'	1 H	1	240
P4	30'	1 H	1	240
P5	30'	1 H	1	240
P6	30'	1 H	1	240
P7	80'	1 HM	5	240
P8	80'	1 HM	5	240
P9	30'	1 H	1	240
P10	30'	1 H	1	240
P11	30'	1 H	1	240
P12	30'	1 H	1	240
P13	30'	1 H	1	240
P14	30'	1 H	1	240
P15	30'	1 H	1	240
P16	30'	1 H	1	240
P17	30'	1 H	1	240
P18	30'	1 H	1	240



SIGN LIGHTING MOUNTING DETAIL

NOT TO SCALE

ADDENDUM 2
ATTACHMENT 4
SHEET 11 OF 12

ISSUED FOR BID

YAGGI ENGINEERING, INC.
CONSULTING • ENGINEERS
5840 WEST INTERSTATE 20, SUITE 270
ARLINGTON, TEXAS 76017 – 817-483-2373
TEXAS REGISTRATION #F-9622
YE PROJECT 2350.02

STATE OF TEXAS
R. TIM YAGGI
57030
REGISTERED PROFESSIONAL ENGINEER
07-15-2024

FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
Corpus Christi, Texas 78401-3700
Phone - (361) 561-6500
Web - www.freese.com
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA

LIGHT FIXTURE SCHEDULE - LIGHT POLE SCHEDULE - INTERIOR AND EXTERIOR LIGHTING CONTROL SCHEDULE

NO.	ISSUE	BY	DATE
1	ADDENDUM #2	RLT	8/6/24

FAN JOB NO. SRA23985
DATE 7/17/24
DESIGNED RTY
DRAWN RLT
CHECKED RTY
APPROVED RTY
FILE NAME E4.00 LTG SCHED..dwg

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SHEET
E4.00
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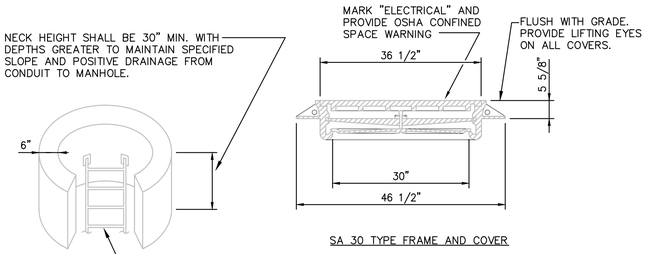
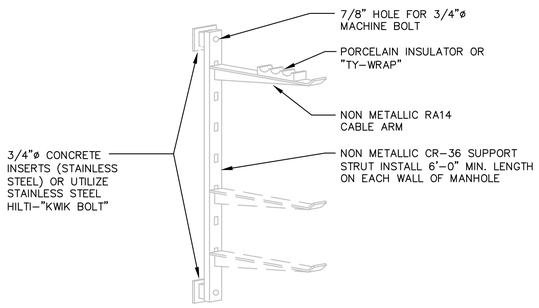


1 MANHOLE NECK AND COVER DETAILS

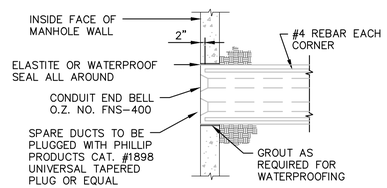
SCALE: NOT TO SCALE



NOTES:
1. ALL CABLE ROUTED AROUND MANHOLE SHALL BE LOCATED ON RACKS MOUNTED IN THE TOP 2'-0" OF MANHOLE. FILL RACKS FROM TOP FIRST.
2. ALL CABLES TO BE SUPPORTED EVERY 3'-0" HORIZONTALLY.
3. CIRCUITS SHALL BE SECURED TO INDIVIDUAL CABLE RACK INSULATORS WITH ADEQUATE SIZED CABLE TIES DURING INSTALLATION OF NEW CABLES OR REINSTALLATION OF EXISTING CIRCUITS.
4. PRODUCT NUMBERS ARE UNDERGROUND DEVICES ONLY.

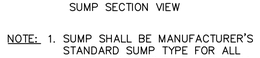
4 CABLE RACK DETAIL

SCALE: NOT TO SCALE



5 TYPICAL DUCT BANK ENTRANCE DETAIL AT MANHOLE

SCALE: NOT TO SCALE

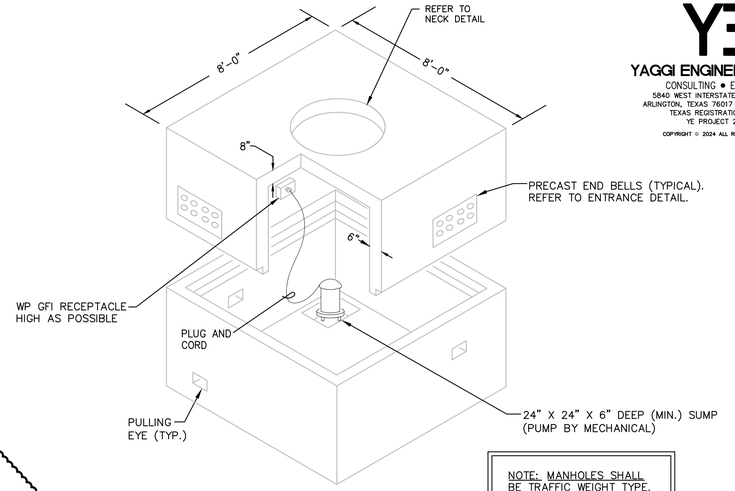


SUMP SECTION VIEW

NOTE: 1. SUMP SHALL BE MANUFACTURER'S STANDARD SUMP TYPE FOR ALL ELECTRICAL MANHOLES. IT SHALL NOT BE A LEAVE-OUT OR BLOCK-OUT. IT SHALL NOT PENETRATE THROUGH THE BOTTOM OF MANHOLE. DIMENSIONS AS NOTED IN SPECIFICATIONS.

2 MANHOLE SUMP DETAIL

SCALE: NOT TO SCALE

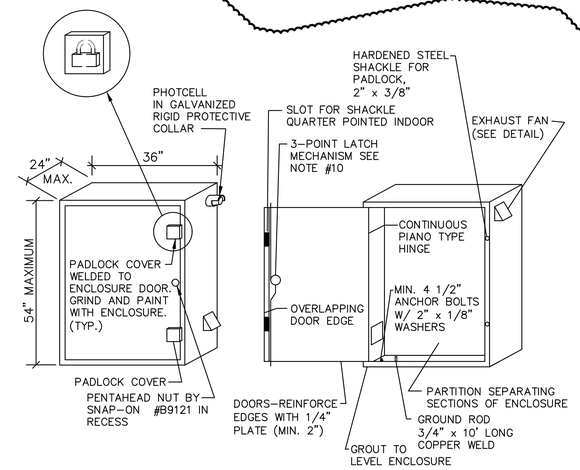


NOTE: MANHOLES SHALL BE TRAFFIC WEIGHT TYPE.

3 ELECTRICAL MANHOLE DETAIL (TYPICAL)

SCALE: NOT TO SCALE

NOTE:
1. 7'-0" X 7'-0" X 7'-0" (HEADROOM) CLEAR INSIDE DIMENSIONS.
2. PROVIDE NON-METALLIC END BELLS TO CORRESPOND WITH ACTUAL DUCT BANK CONFIGURATIONS. SUBMIT DETAIL FOR EACH MANHOLE.
3. REFER TO CABLE RACKING DETAIL, NECK, FRAME AND COVER DETAILS FOR ADDITIONAL MANHOLE INFORMATION.
4. SUBMIT CABLE TRAINING DETAIL FOR BOTH MANHOLES.
5. GROUND MANHOLE AND METAL COMPONENTS WITHIN MANHOLE PER NEC.



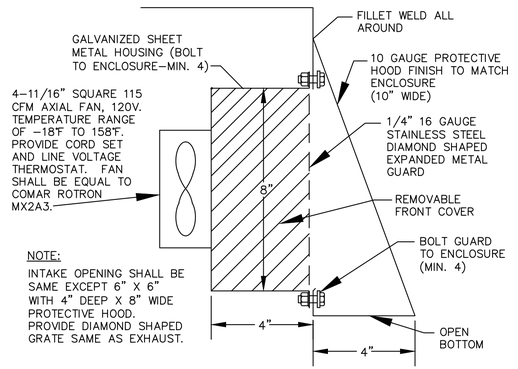
ELECTRICAL ENCLOSURE DETAILS

NOT TO SCALE

NOTES:
1. SEE ENCLOSURE EQUIPMENT LAYOUT, SCHEDULES & DETAILS FOR EQUIPMENT INSTALLED HEREIN.
2. CONTINUOUS FOAM GASKETING AROUND DOOR.
3. ENCLOSURE SHALL BE NEMA 4 (10 GAUGE STEEL MINIMUM) WITH RAIN SHIELD OVER DOORS.
4. ALL INTERIOR COMPONENTS SHALL BE DEAD FRONT. NO EXPOSED ELECTRICAL TERMINALS SHALL BE VISIBLE.
5. INTERIOR PANELS SHALL BE INSTALLED FOR MOUNTING OF ALL COMPONENTS.
6. WELDED AND CUT JOINTS SHALL BE GROUND SMOOTH.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ALL COMPONENTS FIT INSIDE ENCLOSURE.
8. SUBMIT DIMENSIONED FABRICATION DRAWINGS WITH INTERIOR COMPONENT LAYOUT FOR ENGINEER APPROVAL.
9. CONCRETE PAD SHALL BE MINIMUM 3" ABOVE GRADE AND MINIMUM 5" BELOW GRADE. ALL TOP EDGES TO BE TOOLED WITH 3/4" CHAMFER. PAD TO BE 6" LARGER THAN ENCLOSURE ON ALL SIDES. PLACE #3 REBAR 6" O.C. BOTH WAYS. MEDIUM BROOM FINISH.
10. 3-POINT LATCHING MECHANISM SHALL BE OPENED AND CLOSED WITH PENTAHEAD NUT WELDED TO LATCHING MECHANISM. RIGHT DOOR IS TO CLOSE FIRST, AND LEFT DOOR WITH LATCHING MECHANISM CLOSES LAST WITH A 4" OVERLAP. PENTAHEAD NUT BY SNAP-ON #B9121 SHALL BE IN RECESS TO PROHIBIT USE OF ANY SOCKET EXCEPT PENTAHEAD SOCKET.
11. ENCLOSURE FINISH SHALL HAVE RUST INHIBITIVE PRIMER AND TWO COATS OF HIGH GRADE POWDER-COAT FINISH, COLOR SHALL BE DETERMINED BY OWNER AND ACHRITECT.
12. FURNISH TWO (2) PENTAHEAD SOCKETS TO OWNER WITH ENCLOSURE.
13. INSTALL GROUNDING BUSHING ON ALL CONDUIT ENTRIES.
14. CABINET DIMENSIONS SHALL BE DETERMINED BY THE ENCLOSED COMPONENTS. CABINET SHALL NOT BE LESS THAN 36"D. HEIGHT SHALL NOT EXCEED 60".
15. PROVIDE EXHAUST FAN PER DETAIL THIS SHEET.

6 TYPICAL ELECTRICAL ENCLOSURE DETAIL

SCALE: NOT TO SCALE



NOTE:
INTAKE OPENING SHALL BE SAME EXCEPT 6" X 6" WITH 4" DEEP X 8" WIDE PROTECTIVE HOOD. PROVIDE DIAMOND SHAPED GRATE SAME AS EXHAUST.

7 TYPICAL EXHAUST FAN DETAIL

SCALE: NOT TO SCALE

ADDENDUM 2
ATTACHMENT 4
SHEET 12 OF 12

ISSUED FOR BID

YAGGI ENGINEERING, INC.
CONSULTING • ENGINEERS
5840 WEST INTERSTATE 20, SUITE 270
ARLINGTON, TEXAS 76017 – 817-483-2373
TEXAS REGISTRATION #F-9622
YE PROJECT 2350.02

STATE OF TEXAS
R. TIM YAGGI
57030
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07-15-2024

FREESE NICHOLS
800 N. Shoreline Blvd., Suite 1600N
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Web - www.freese.com
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Texas Registered Engineering Firm F-2144

SABINE RIVER AUTHORITY
SABINETOWN RECREATION AREA
DETAILS - ELECTRICAL -

NO.	ISSUE	BY	DATE
1	ADDENDUM #2	RLT	8/6/24

F&N JOB NO. SRA23985
DATE 7/17/24
DESIGNED RTY
DRAWN RLT
CHECKED RTY
APPROVED RTY
FILE NAME E8.00 DETAILS.dwg

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VERIFY SCALE 0 1"

SHEET E8.00
SEQ.

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