

**ADDENDUM NO. 1 TO BID DOCUMENTS FOR THE
EAST MUD LAKE HYDROLOGIC RESTORATION
PROJECT (CS-20) - FINAL MAINTENANCE**

CAMERON PARISH, LOUISIANA



**STATE OF LOUISIANA
COASTAL PROTECTION AND RESTORATION AUTHORITY**

June 18, 2018

ADDENDUM 1 TO BID DOCUMENTS
EAST MUD LAKE HYDROLOGIC RESTORATION (CS-20) – FINAL MAINTENANCE

The interpretations, corrections or changes in this addendum supersede the requirements in the Bid Documents dated 3/16/2018. The Successful Bidder shall be issued a revised set of Contract Documents.

Bidders shall acknowledge receipt of this addendum in the Louisiana Uniform Public Work Bid Form.

1. Sign-in sheet from the mandatory pre-bid meeting is attached hereto.
2. Engineer's estimate of probable construction cost is \$300,000.

Responses to Questions from Bidders

1. Question: Can you provide the construction drawings or as-built drawings for the existing Structure No. 17 for the purpose of aiding in the estimating of demolition of the structure?

Response: See attached drawings.

2. Will there be any restrictions placed on the contractor for work being performed during the waterfowl seasons?

Response: The use of airboats is highly discouraged and conditional permission must be given for their use. Surface drive or shallow draft outboards should be used throughout construction. If the use of airboats is an absolute necessity, permission can be granted upon review and consideration by the land owner on a case-by-case basis. The use of airboats is prohibited during waterfowl season prior to 10:00 am and after 3:00 pm. All vessels shall adhere to the access routes provided in the project drawings.

3. Can additional time be added to the project calendar days if work is suspended during waterfowl hunting seasons?

Response: Yes, if work is suspended by CPRA through no fault of the Construction Contractor, additional time can be allocated.

4. When will new drawings be available for the redesign of the lifting arm to be installed on Structure #13?

Response: Revised drawings are attached.

5. Question: Our Tidewall local distributor checked with Tidewall Manufacturing and they were told that Tidewall does not make a pre-formed vinyl cap for their products. They do offer an aluminum cap for their vinyl sheet pile but the largest they have is 9.62" wide to fit over the vinyl sheet pile wall. This would work on a TW 25 to a TW 70 sheet pile. A TW 90 vinyl sheet pile (as called for) is 10" deep and their caps would not fit. Can a bent plate aluminum cap made of 5051 aluminum be used? If so, can details be provided and possible anchoring with 1/2" S.S. bolts to the face side of vinyl sheet piles?

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EAST MUD LAKE HYDROLOGIC RESTORATION (CS-20) – FINAL MAINTENANCE

Response: A bent aluminum cap made of 5051 aluminum will be allowed. Contractor shall provide shop drawings to the Engineer for review and approval prior to fabrication. Cap shall be anchored with ½” diameter stainless steel bolts, type 316 conforming to ASTM A 320. Bolts shall be installed on each side of the wall with bolt spacing at ±36” center-to-center.

6. Question: Spec. Section 107 Treated Timber Piles & Lumber, Sub Section 107.7 Driving states that swing leads will not be permitted. This is a small pile driving project and a small crane with swing leads could be used as a substantial savings as compared to a larger crane with non-swing leads. Can swing leads be utilized on this project?

Response: Swing leads will be allowed for this project.

7. Question: Spec Section 106 Vinyl Sheet Piles, Sub Section 106.7 Hardware calls for hardware to connect timber members to vinyl sheet pilings shall conform to ASTM A 325, which is high strength structural steel bolt usually galvanized. Drawing sheet 7 of 15 shows timber to vinyl sheet piles to be S.S. (stainless steel) on all elevations and sections. Which is correct?

Response: Hardware to connect timber members to vinyl sheet piles shall be stainless steel grade 316, conforming to ASTM A 320.

8. Question: Spec. Section 106 Vinyl Sheet Piles, Sub Section 106.7 Hardware, talks about a warning sign 44” x 44”, mounting hardware and pipe material for frame to be 6061-T6 aluminum. We cannot find any other details about this sign. Can more details be provided as to where it will be mounted and a sample sign?

Response: No permanent warning signs are required for this project. Contractor shall disregard any reference in the project specifications concerning permanent warning signs. Warning signs required during construction to warn the public and potential jobsite hazards shall be required as deemed necessary by the Construction Contractor.

9. Question: Spec. Section 107 Treated Timber Piles & Lumber, Sub Section 107.2 Materials calls for a 7” tip on timber piles. Sub Section 107.5 Selection and Preparation of Piles calls for a 9” pile point. There is some discrepancy on these 2 items. Can this be clarified?

Response: Pile tips should be 7” in diameter.

10. Question: Would CPRA consider allowing the use of CS20-SM-03 which is at Site 4 for any survey work at this site?

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Response: CS20-SM-03 may have been destroyed. A recent observation/update of this monument has not been performed by CPRA. For the purposes of this project, the Construction Contractor may elect to set a TBM (relative to the control monuments provided in the specifications) at a location of his choosing to aid in the construction of the project features.

Approved Equals

Vinyl Sheet Piles – ShoreGuard as manufactured by Crane Materials International (CMI), Section SG-825. Contractor shall be responsible for making any dimensional adjustments to Structure No. 17 components that may result from the use of this product.

Project Specifications Alterations

1. All sawn timber surfaces shall be coated with Coal-Tar Epoxy in accordance with TS-113 Coal-Tar Epoxy, which is attached hereto.

**PRE-BID CONFERENCE
SIGN IN SHEET**

PROJECT: CS-20 E. Mud Lake Final Maintenance
 DATE: June 6, 2018 at 10:00 m
 LOCATION: E. Mud Lake Project Site

Please Print Clearly

(Sign-in) Printed Name & Signature	Company Name & Address	Phone No., Fax No. & Email	Site Visit?
Paul Mattingly <i>[Signature]</i>	Cycle Construction 6 E 3rd St. Kenner, LA 70002	(504)-467-1444, (504)-467-1222 estimating@CycleConstruction.com	yes
CHAS KEENAN <i>[Signature]</i>	ORAIN BROTHERS, INC 300 RITA ROAD BELL CITY, LA	337-499-6014 charles@lesllo.net	yes
MIKE NITSKA <i>[Signature]</i>	HYDROTERRA TECH 202 JACOBS RUN SCOTT LA	337-315-2190 MIKE.NITSKA@HYDROTERRATEC.COM	YES
Edward T. McCain Edward T. McCain	M & M Elec. 864 Hwy 384 Lake Charles 70607	337-912-3752 et.m.m.elec@yahoo.com	yes
Brad Hebert <i>[Signature]</i>	MTC Oilfield 5121 Hwy 905 L. I. C. LA 70615	337-905-1170 brad.hebert@gcseervices	yes
Jeff Mizzi <i>[Signature]</i>	Leblanc Marine 3001 Rex J. Champagne New Iberia LA 70500	337-280-0156 jeff@leblancmarine.com	yes
BRYON RICHARD <i>[Signature]</i>	LONNIE HARPER & ASSOC.	(225) 965-1079 bryon@harper-group.com	yes
Chris Stancliff <i>[Signature]</i>	Wilco Marsh Buggies	cstancliff@wilcoindustrial.com +roy@wilcomarshbuggies.com	✓
Chris Wheat <i>[Signature]</i>	LONNIE R. HARPER & ASSOC.	337-905-1078, 337-505-1076 chris@harper-group.com	yes
DARRELL PONTIFF	CPRA 635 CAJUNDOME BLVD. LAFAYETTE, LA 70506	337-482-0683 darrell.pontiff@la.gov	yes

**PRE-BID CONFERENCE
SIGN IN SHEET**

PROJECT: CS-20 E. Mud Lake Final Maintenance

DATE: June 6, 2018 at 10:00 m

LOCATION: E. Mud Lake Project Site

Please Print Clearly

(Sign-in) Printed Name & Signature	Company Name & Address	Phone No., Fax No. & Email	Site Visit?
Brent Simonsen <i>BAS</i>	MEC Oilfield Services 5121 Hwy 90 E LC, LA	brent_simonsen@hotmail.com	✓
Nathan Dondis	B+J Inc	nathandondis@bjmarine.com 337-540-8313	✓
Randy Bertrand	B+J Inc	Randy Bertrand@BJmarine.com 337-485-9953	✓

**PRE-BID CONFERENCE
SIGN IN SHEET**

PROJECT: CS-20 E. Mud Lake Final Maintenance

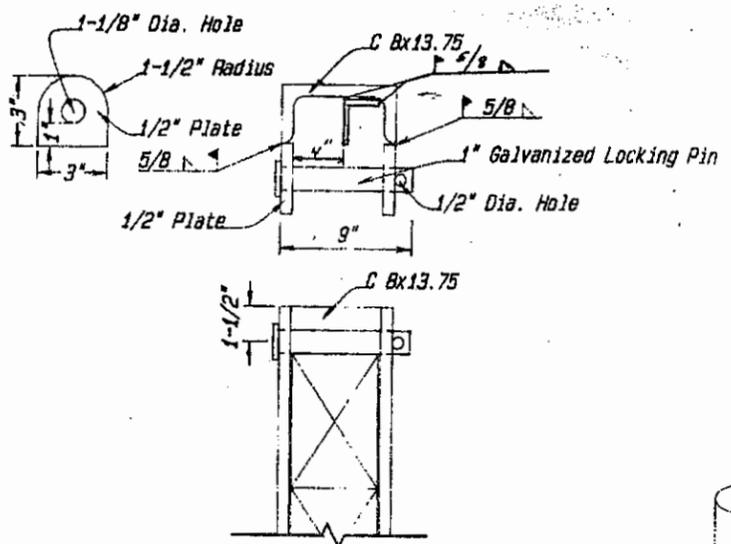
DATE: June 6, 2018 at 10:00 m

LOCATION: E. Mud Lake Project Site

Please Print Clearly

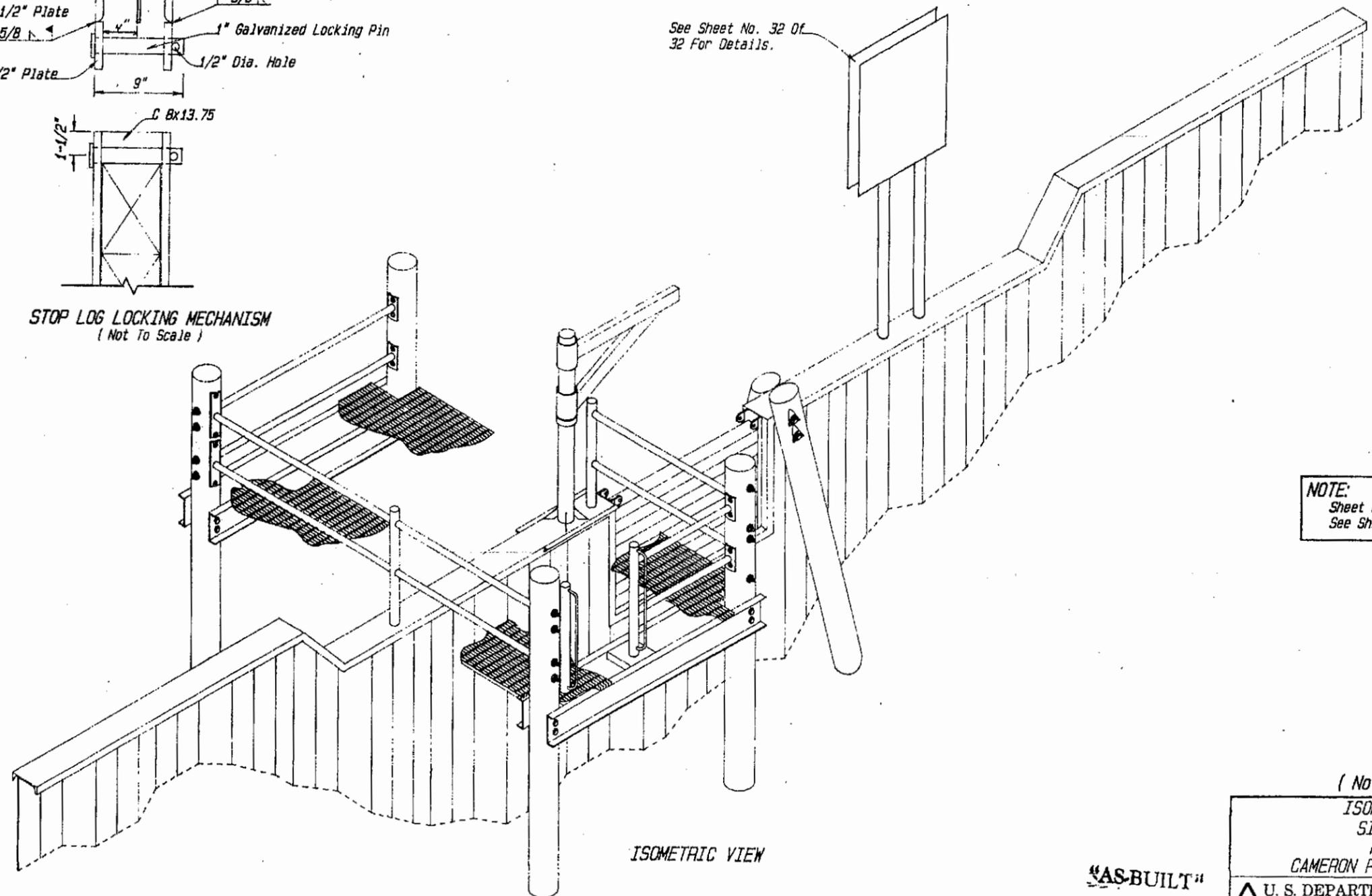
(Sign-In) Printed Name & Signature	Company Name & Address	Phone No., Fax No. & Email	Site Visit?

Structure #17 - As-builts.



STOP LOG LOCKING MECHANISM
(Not To Scale)

See Sheet No. 32 Of
32 For Details.



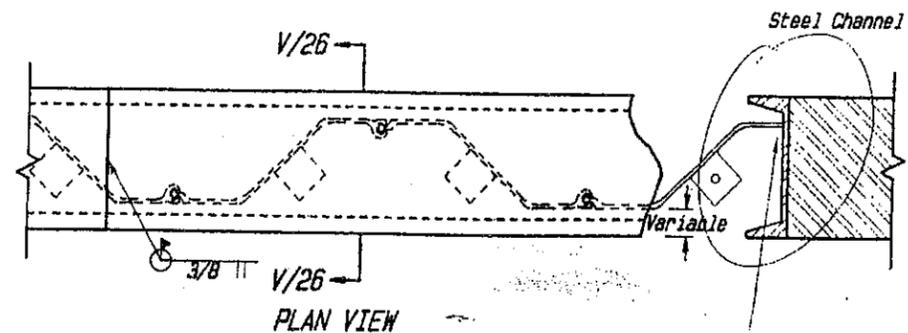
ISOMETRIC VIEW

"AS-BUILT"

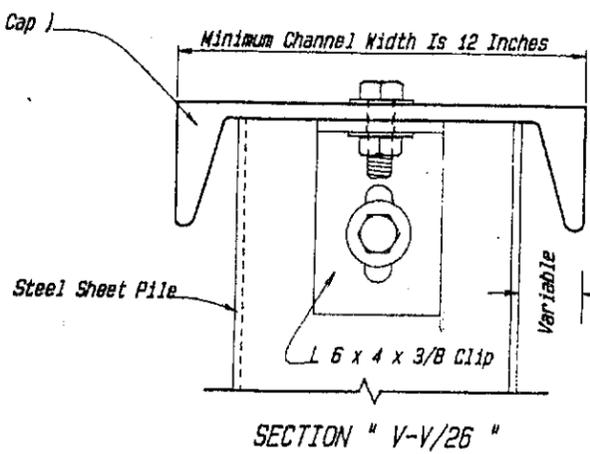
NOTE:
Sheet Metal Flashing Not Shown.
See Sheet 6 Of 27 For Details.

(Not To Scale)

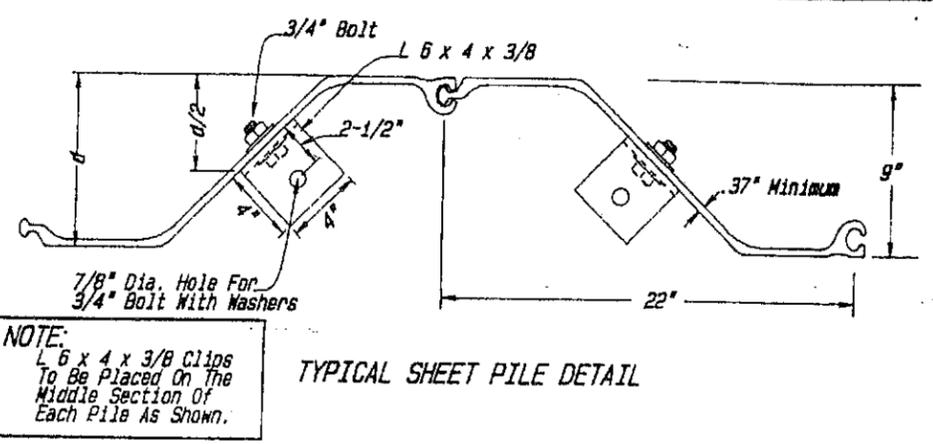
ISOMETRIC VIEW SITE NO. 17 MUD LAKE CAMERON PARISH, LOUISIANA			
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE			
Designed	T. HENRY	Date	5/94
Drawn	D. PHELIPS	Date	8/94
Traced		Sheet	No. 25
Checked	J. WOOD	Date	8/94
		Drawing No.	LA. 212



NOTE:
 This Connection Varies Based On The Location Of The Channel Cap With Respect To The Pile And Cannot Be Designed Until The Pile Is In Place And The Location Of The Opening Has Been Identified. The Contractor Shall Submit A Method Of Connecting The Channel Cap To The Pile And All Drawings For Approval Prior To Fabrication. The Contractor May Request The Assistance Of The NRCS State Design Staff When Developing This Connection.

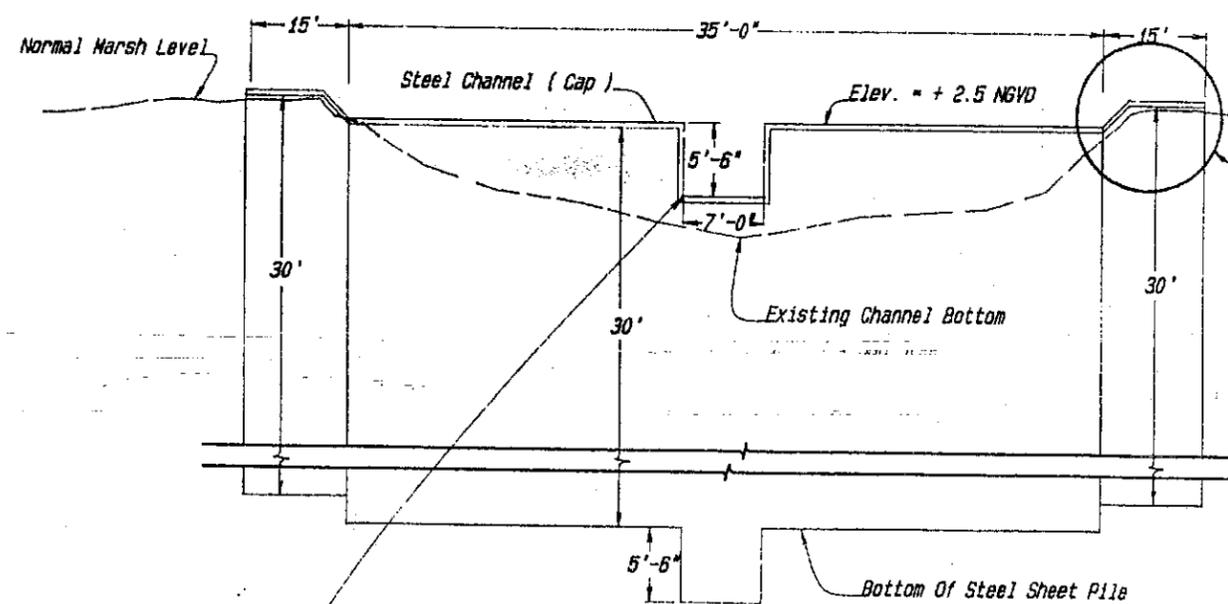


TYPICAL CHANNEL CAP TO SHEET PILE AT EL. +2.5



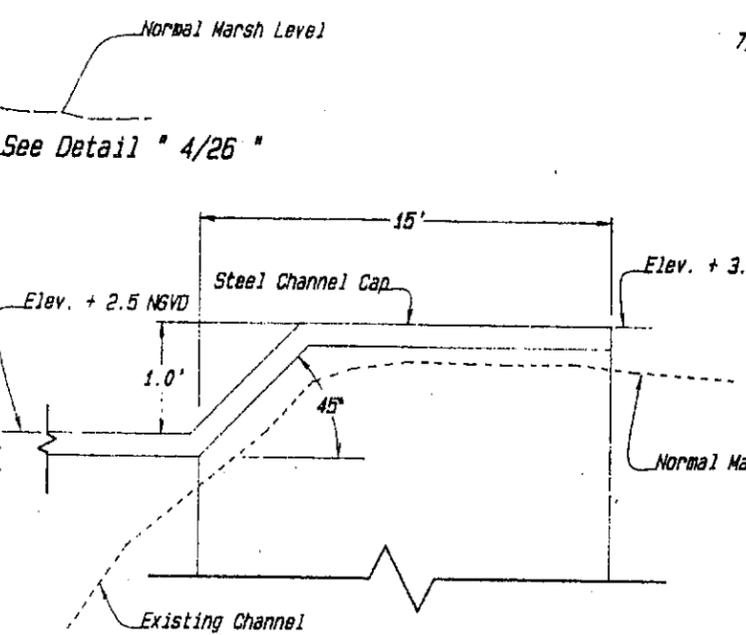
NOTE:
 L 6 x 4 x 3/8 Clips To Be Placed On The Middle Section Of Each Pile As Shown.

Structure #17 - As-builts

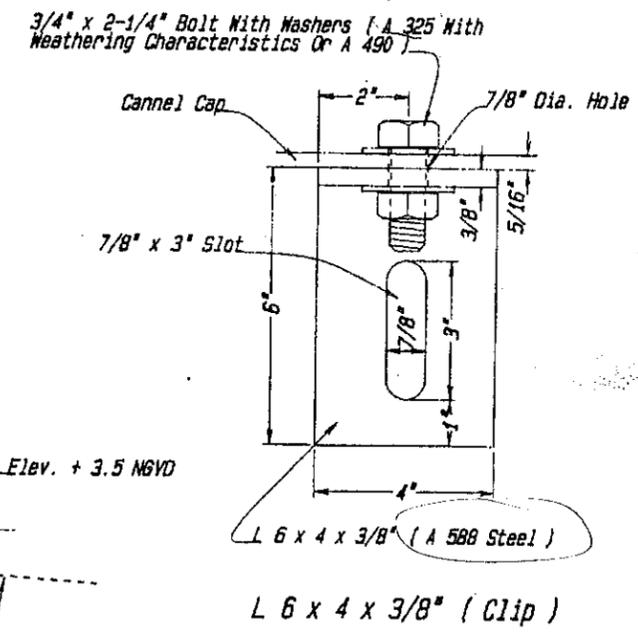


VARIABLE CREST WEIR - SITE NO. 17

NOTE:
 Connection Of Channel Cap To Sheet Pile At El. -3.0 NGVD Shall Be Made As Follows:
 The L 6 x 4 x 3/8 Shall Be Welded To The Bottom Of The Channel Cap Prior To Installation. The Location And Orientation Of The L 6 x 4 x 3/8 Angles Shall Be The Same As For The Connections At El. +2.5 NGVD. The Holes In The Sheet Pile Shall Be Field Drilled.



Detail "4/26"
 (Weir To Wing Wall Transition)



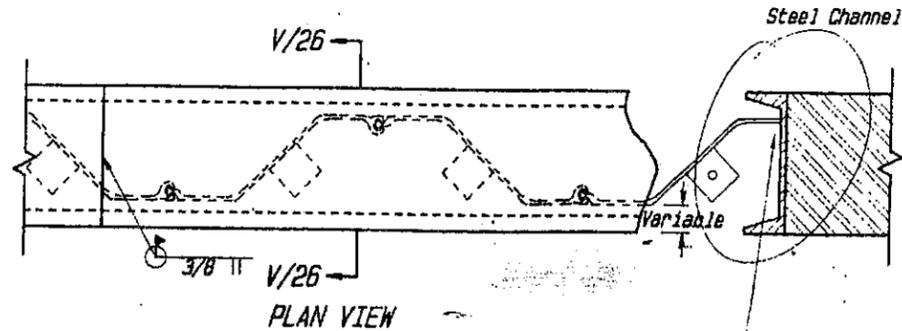
"ASBUILT"

(NOT TO SCALE)

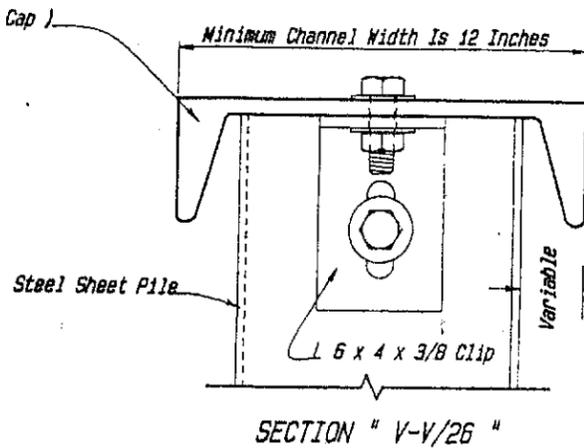
DETAILS -- SHEET PILE AND CHANNEL
 SITE NO. 17
 MUD LAKE
 CAMERON PARISH, LOUISIANA

U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

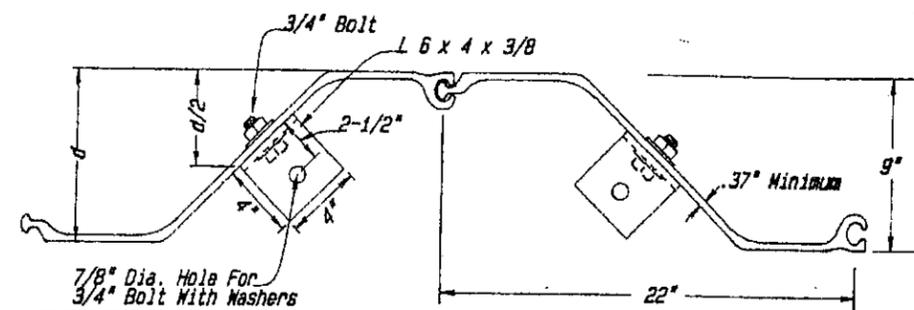
Designed	J. HENRY	Date	7/83	Approved By	
Drawn	A. GERRILLON	Date	8/93	Title	STATE CONSERVATION ENGINEER
Traced		Sheet	26	Title	LA. 212
Checked	J. MOORE	of	32		



NOTE:
 This Connection Varies Based On The Location Of The Channel Cap With Respect To The Pile And Cannot Be Designed Until The Pile Is In Place And The Location Of The Opening Has Been Identified. The Contractor Shall Submit A Method Of Connecting The Channel Cap To The Pile And All Drawings For Approval Prior To Fabrication. The Contractor May Request The Assistance Of The NRCS State Design Staff When Developing This Connection.



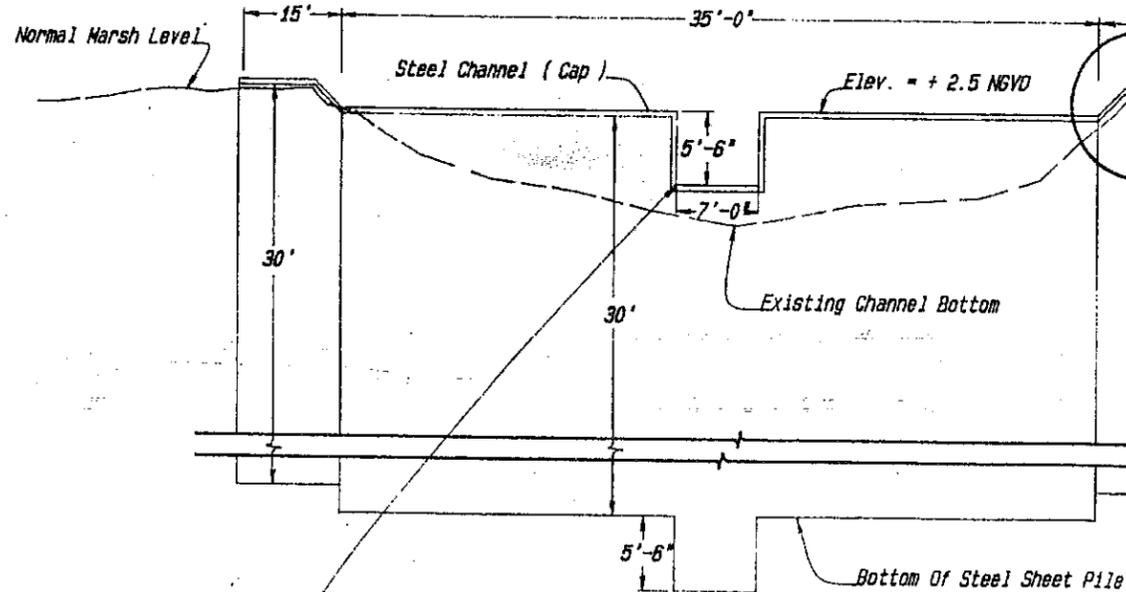
TYPICAL CHANNEL CAP TO SHEET PILE AT EL. +2.5



NOTE:
 L 6 x 4 x 3/8 Clips To Be Placed On The Middle Section Of Each Pile As Shown.

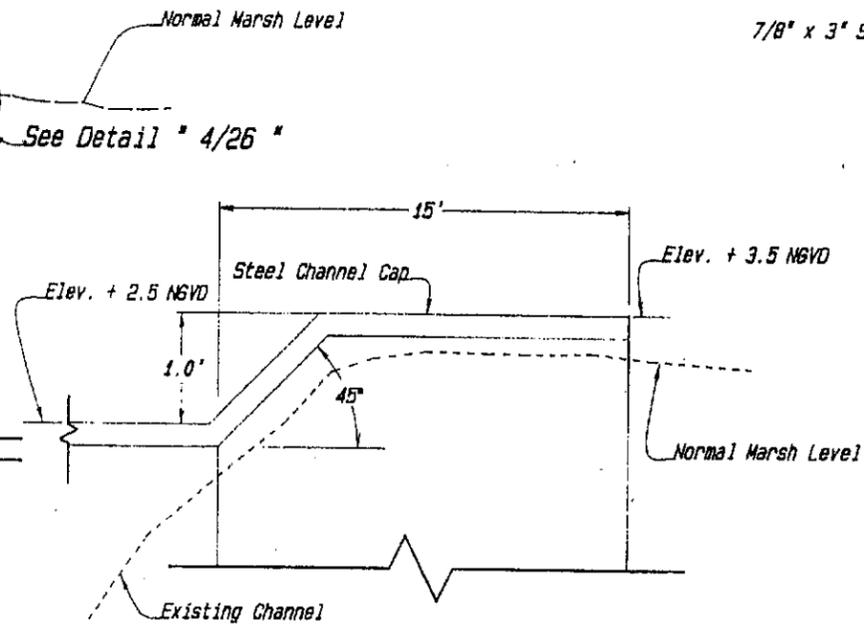
TYPICAL SHEET PILE DETAIL

Structure #17 - As-builts

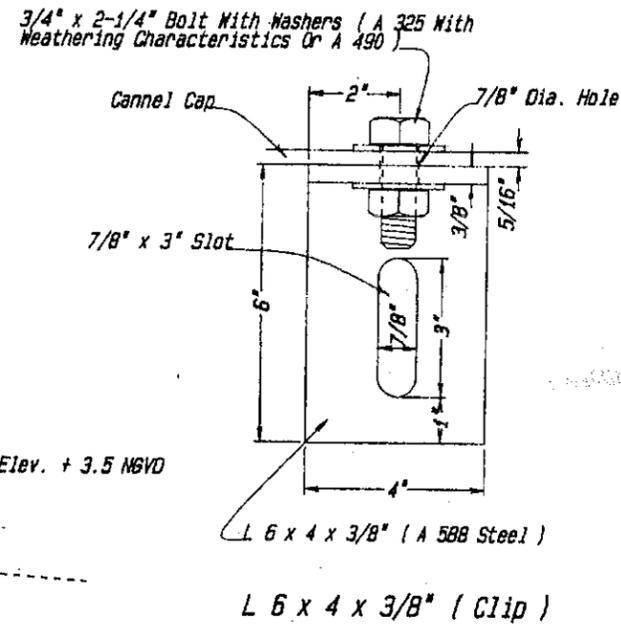


VARIABLE CREST WEIR - SITE NO. 17

NOTE:
 Connection Of Channel Cap To Sheet Pile At El. -3.0 NGVD Shall Be Made As Follows:
 The L 6 x 4 x 3/8 Shall Be Welded To The Bottom Of The Channel Cap Prior To Installation. The Location And Orientation Of The L 6 x 4 x 3/8 Angles Shall Be The Same As For The Connections At El. +2.5 NGVD. The Holes In The Sheet Pile Shall Be Field Drilled.



Detail " 4/26 " (Weir To Wing Wall Transition)



(NOT TO SCALE)

DETAILS - SHEET PILE AND CHANNEL
 SITE NO. 17
 MUD LAKE
 CAMERON PARISH, LOUISIANA

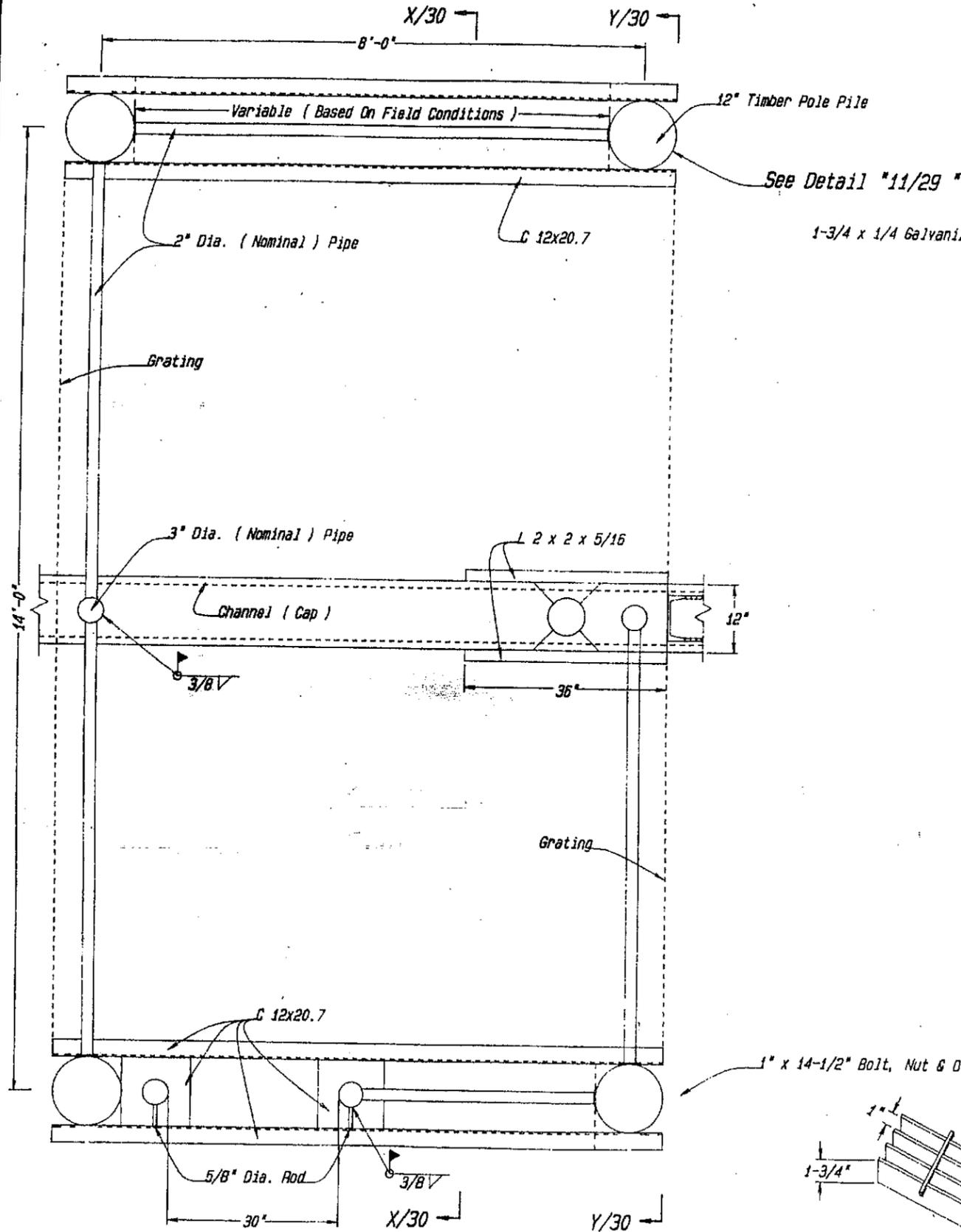
"AS-BUILT"

U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed: J. HENRY	Date: 7/83
Drawn: A. GREKULLO	8/83
Traced:	
Checked: J. HOOPE	8/84
Approved by: _____	Title: STATE CONSERVATION ENGINEER
Approved by: _____	Title: _____
Sheet: _____	Drawing No: _____
LA 212	

Structure #17 - As-Built

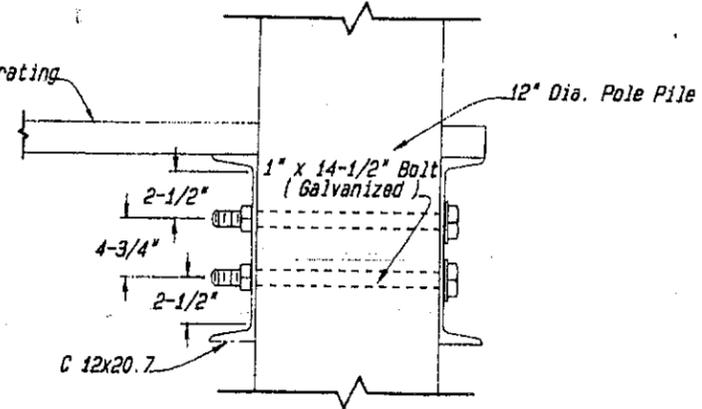
NOTES:

1. Secure Grating As Per Manufacturers Recommendations i.e., J-Bolt, Saddle Clip, Etc. All Fasteners Shall Be Stainless Steel.
2. Contractor Shall Submit Shop Drawings Of Fastener Details To The C.O.T.R. 14 Days Prior To Purchasing And/Or Fabricating.

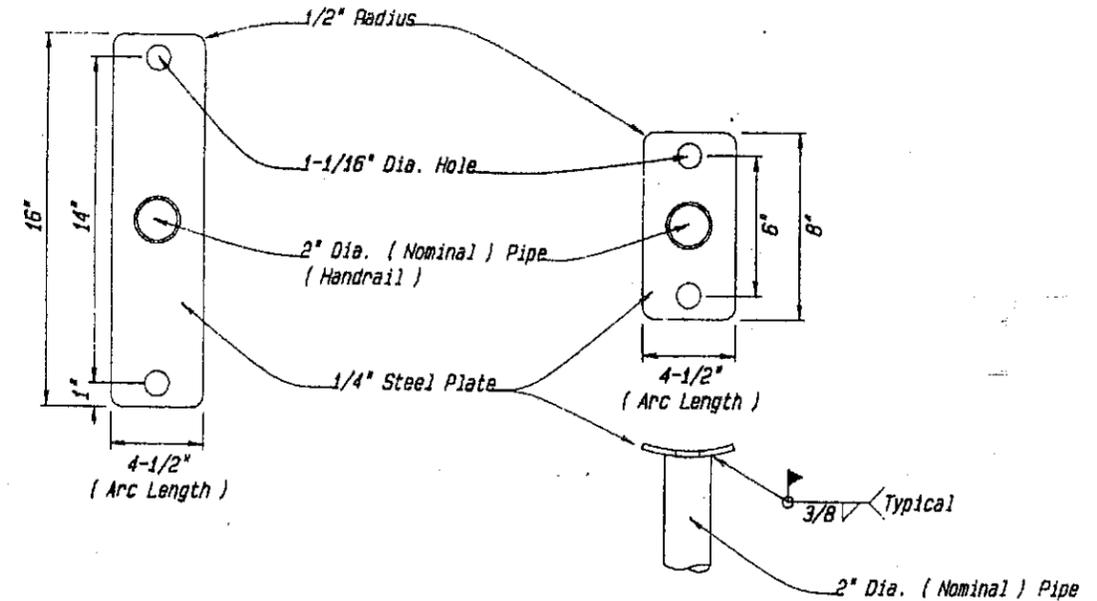


See Detail "11/29"

1-3/4 x 1/4 Galvanized Grating



Detail "11/29"



BOLTING DETAILS - HANDRAILS

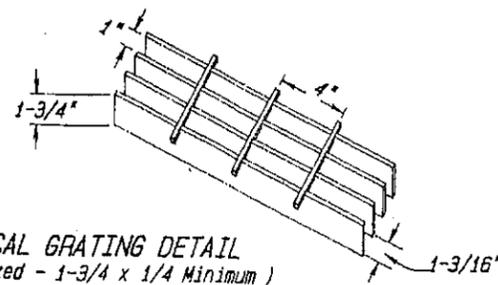
(NOT TO SCALE)

DETAILS - HOIST DECK
AND HANDRAILS - SITE NO. 17
MUD LAKE
CAMERON PARISH, LOUISIANA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed <i>J. HENRY</i>	Date <i>7/93</i>	Approved by _____
Drawn <i>O.P. # 1.G.</i>	2/95	Title <i>STATE CONSERVATION ENGINEER</i>
Traced _____		Title <i>ALEXANDRIA, LOUISIANA</i>
Checked <i>L. MOORE</i>	2/95	Sheet <i>No. 29</i>
		of <i>32</i>
		Drawing No. <i>LA. 212</i>

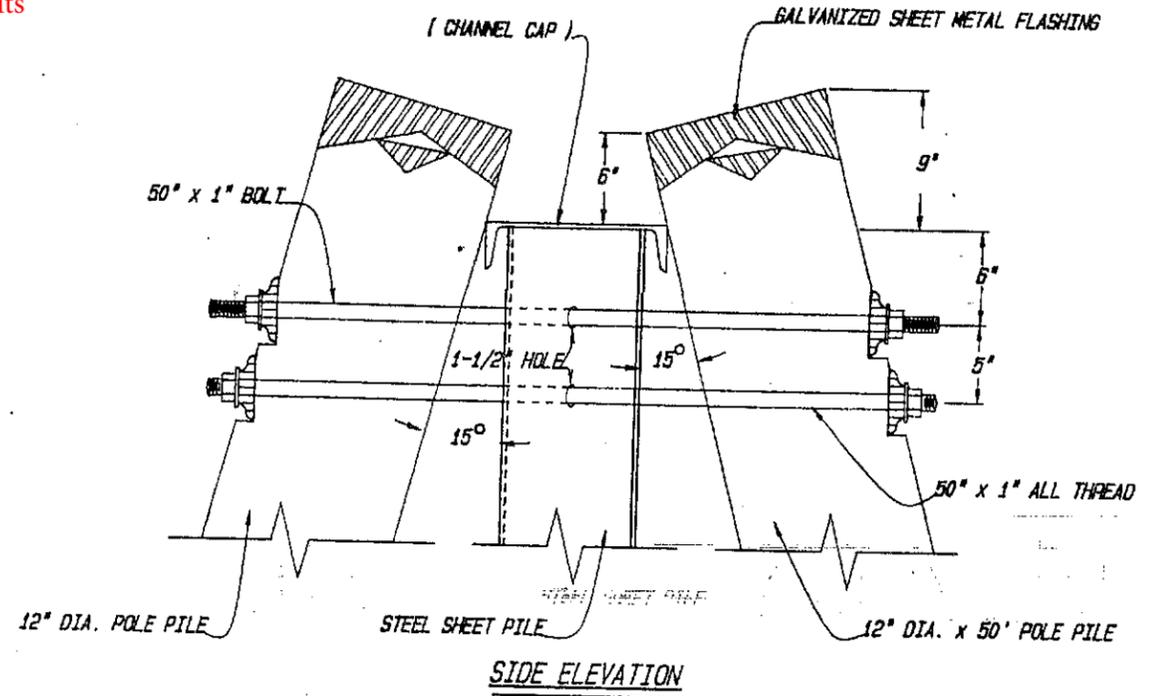
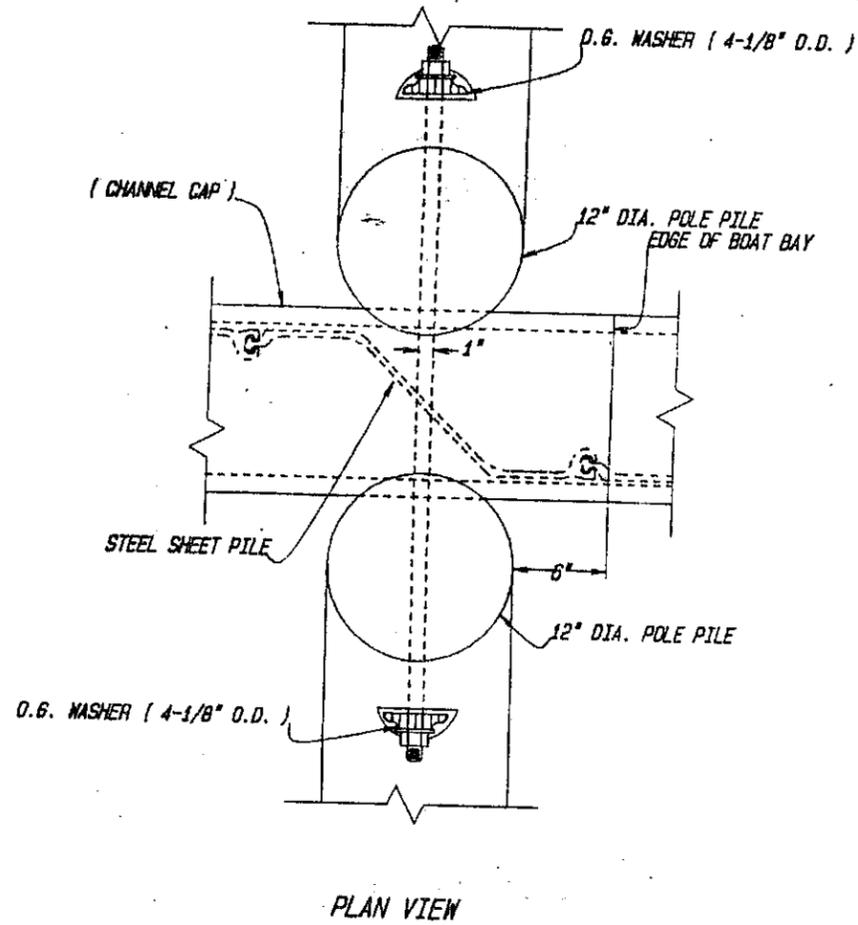
"AS-BUILT"



TYPICAL GRATING DETAIL
(Galvanized - 1-3/4 x 1/4 Minimum)

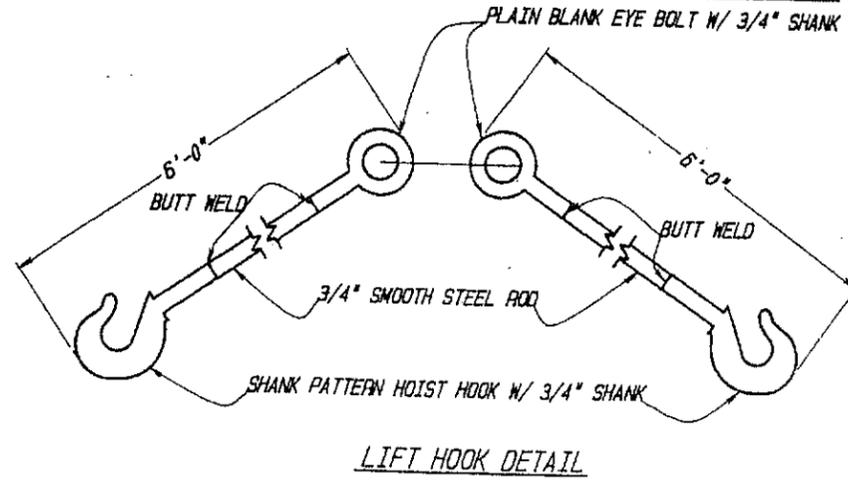
PLAN
(Hoist Deck Detail)

Structure #17 - As-builts



- NOTES:
1. 1" DIAMETER BOLT MAY BE SUBSTITUTED FOR 1" ALL-THREAD.
 2. GALVANIZED SHEET METAL FLASHING SHALL BE 20 GAGE, ATTACHED USING GALVANIZED RING SHANK NAILS.
 3. SEE CONSTRUCTION SPECIFICATION 13, PILING.
 4. TACK WELD ALL NUTS AFTER INSTALLATION TO PREVENT REMOVAL.

NOTE:
LIFT HOOKS SHALL BE CONNECTED WITH FIVE LINKS OF 1/2" CHAIN AT EYE BOLTS.



"ASBUILT"

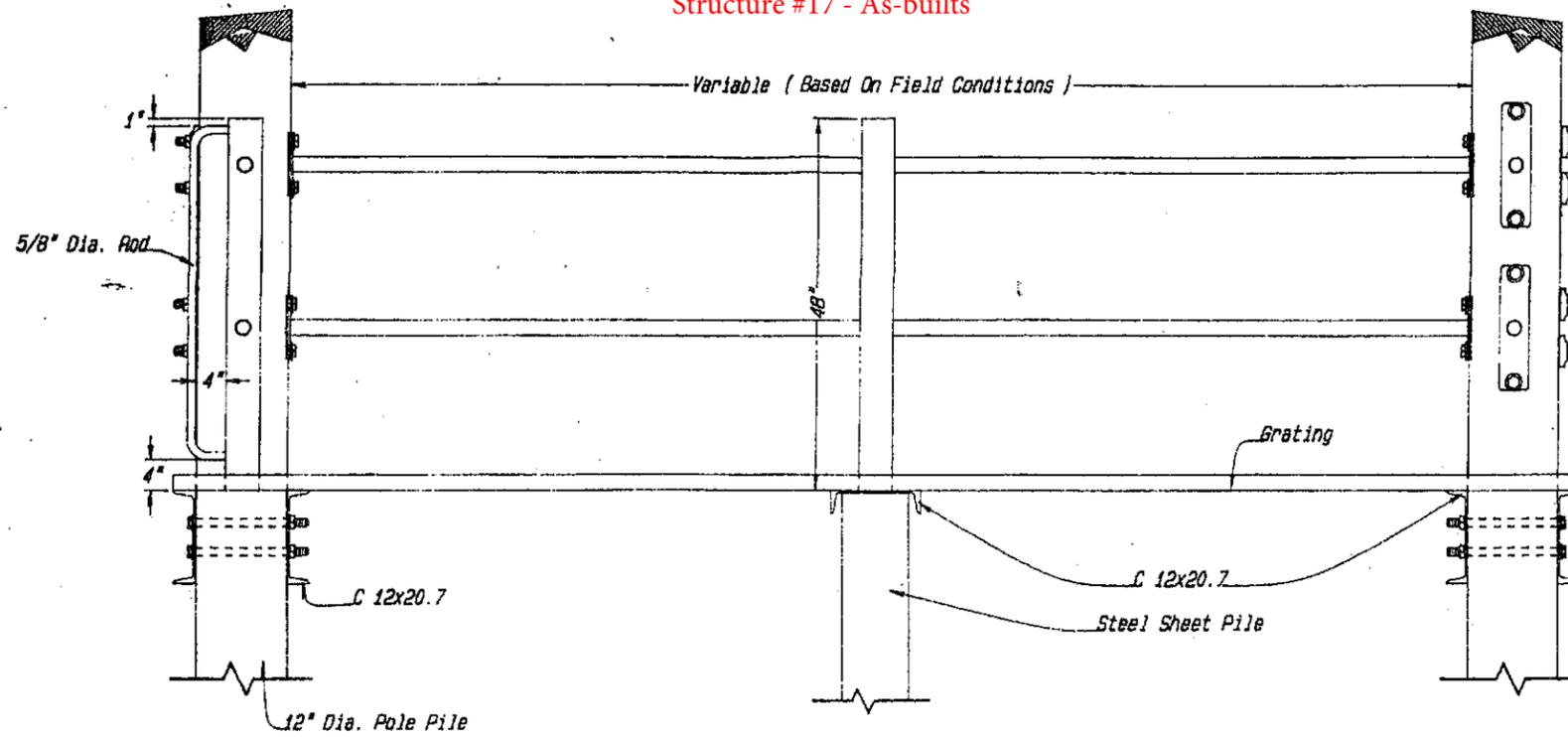
(NOT TO SCALE)

DETAILS - POLE PILE AND LIFT HOOK
SITE NO. 17
MUD LAKE
CAMERON PARISH, LOUISIANA

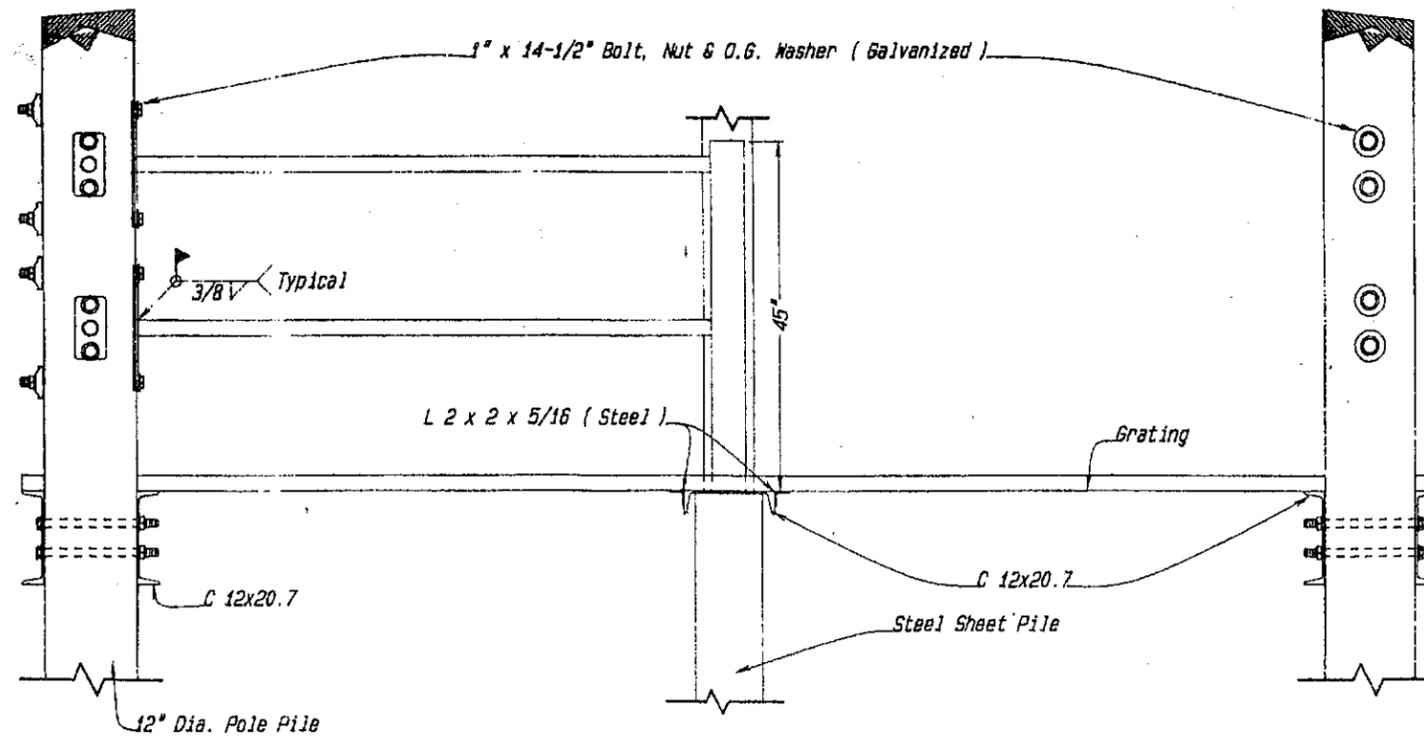
U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

Designed	T. HENRY	Date	07/82	Approved by	
Drawn	A. BERNILLION	Date	08/82	Title	STATE CONSERVATION ENGINEER
Traced				Title	ALEXANDRIA, LOUISIANA
Checked	J. MOORE	Date	08/84	Sheet	No. 31 of 32
				Drawing No.	LA. 212

Structure #17 - As-builts



SECTION " X-X/29 "
 (Hoist Support Not Shown For Clarity)



SECTION " Y-Y/29 "
 (Hoist Support Not Shown For Clarity)

"AS-BUILT"

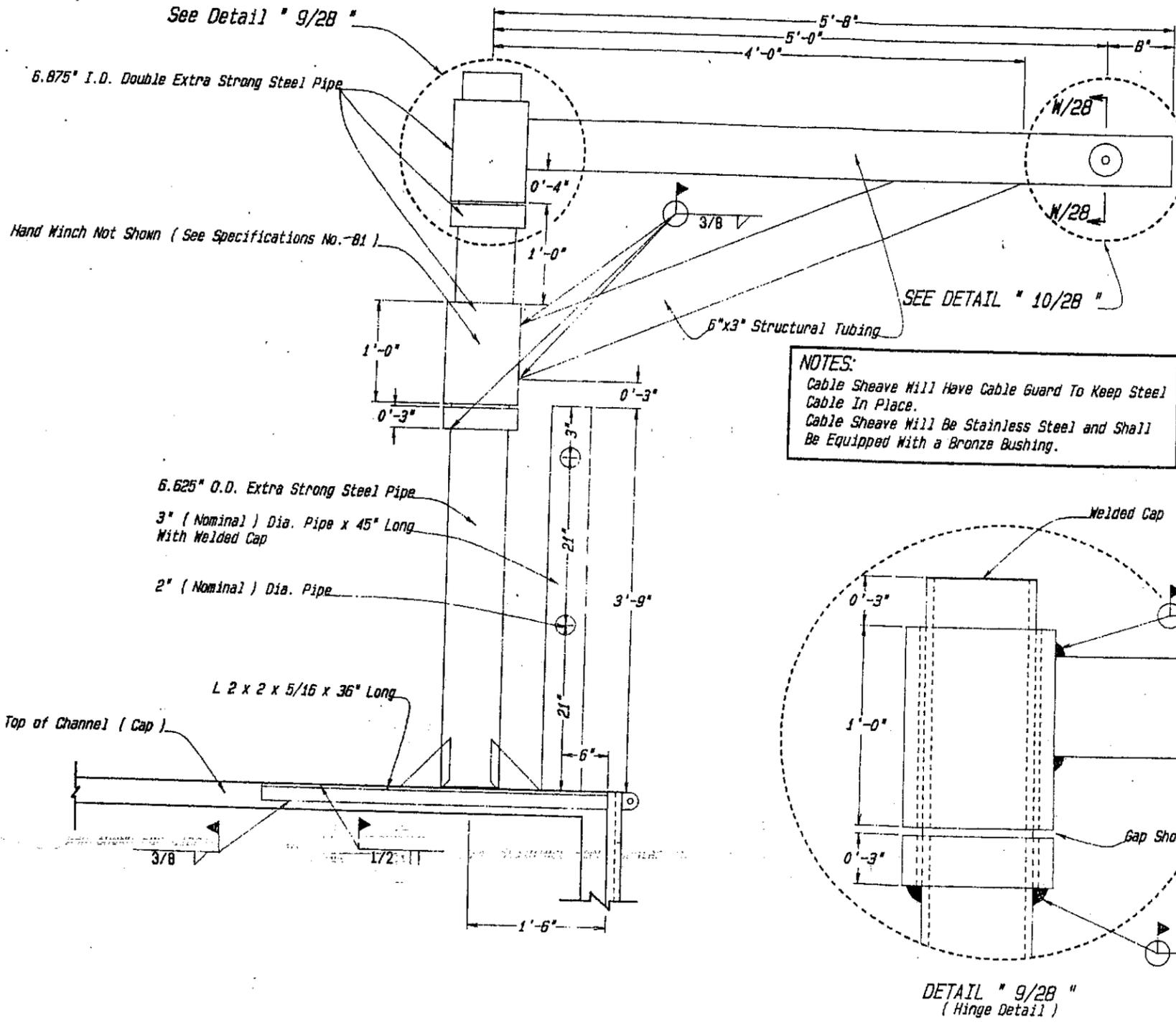
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DETAILS - HANDRAILS
 SITE NO. 17
 MUD LAKE
 CAMERON PARISH, LOUISIANA

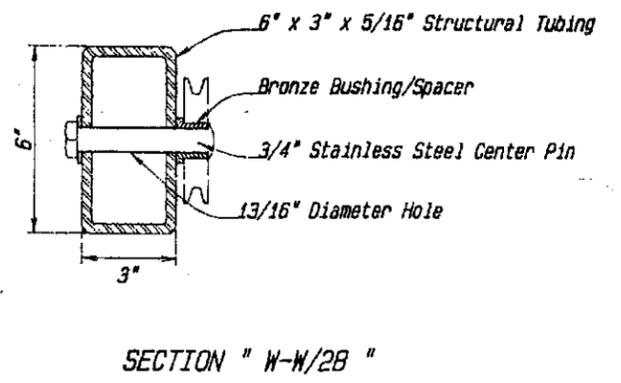
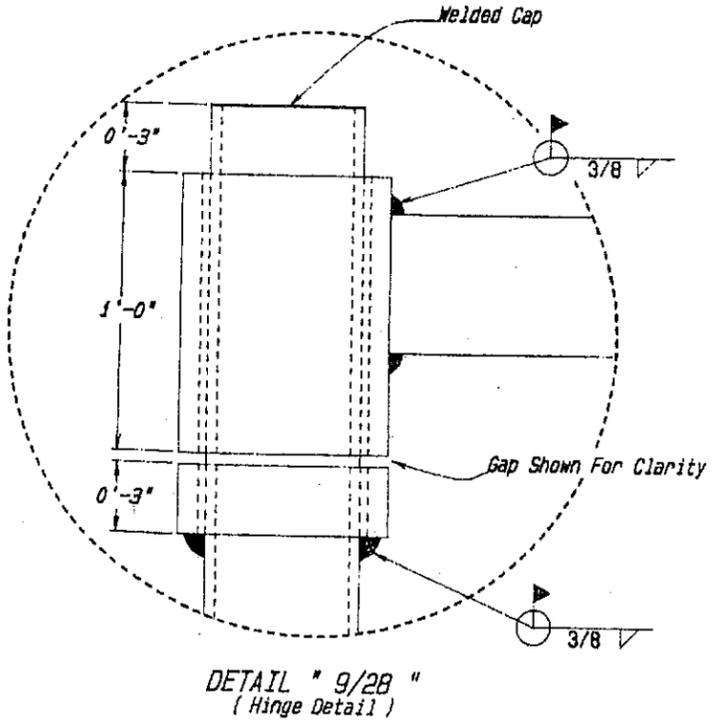
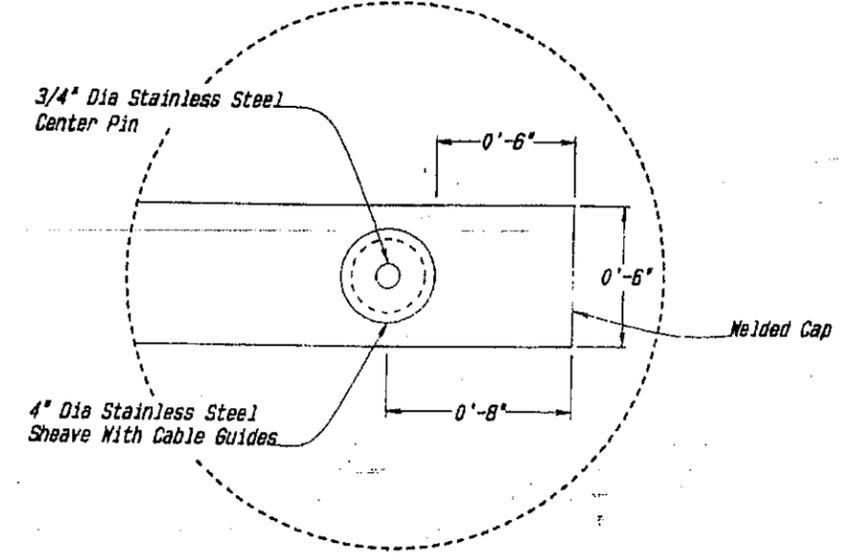
U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

Designed <i>T. HENRY</i>	Date <i>7/91</i>	Approved by <i>STATE CONSERVATION ENGINEER</i>
Drawn <i>D. PHILLIPS</i>	Date <i>2/95</i>	Title <i>ALEXANDRIA, LOUISIANA</i>
Traced	Sheet <i>30</i>	Drawing No. <i>LA. 212</i>
Checked <i>J. MOORE</i>	Date <i>2/95</i>	of <i>32</i>

Structure #17 - Asbuilts



NOTES:
 Cable Sheave Will Have Cable Guard To Keep Steel Cable In Place.
 Cable Sheave Will Be Stainless Steel and Shall Be Equipped With a Bronze Bushing.



NOTES:

- 4" Diameter Stainless Sheave Must Have Cable Guards (Guides) To Keep The Cable In Place. Guides Not Shown.
- Hand Winch Shall Be Rated At 2500 lbs. Minimum And Shall Have A Gear Ratio Between 5 : 1 and 7 : 1.
- Winch Shall Be Equipped With 3/8" Diameter Stainless Steel Cable.
- The Winch Shall Be Removable And Configured For Right Handed Operators, And Attached According To Manufacturers Recommendations.
- Hand Winch Shall Have A Lock-Down Device To Prevent Un-Authorized Operation.
- Contractor Shall Provide To The COTR For Approval, Shop Drawings Of The Hand Winch 14 Days Prior To Purchasing.

NOTES:

- Channel Cap And Angle Shall Be Made Of ASTM A588 Steel. (Corrosion Resistant High Strength Steel).
- Steel Sheet Pile Shall Be Of The Type For Use In Marine Environments And Shall Conform To ASTM Specification A690/A690M-90 And Have A Minimum Section Modulus Of 17.00 In³ Per Linear Foot Of Sheet Pile Wall.
- All Sheet Pile And Channel Dimensions Shown Are Typical, And Are Subject To Change Based On Manufacturer/Supplier.
- Minimum Web And Flange Thickness Shall Be .37 Inches.
- Sheet Pile Shall Be Driven In The "Normal Configuration" As Shown.

"ASBUILT"

(NOT TO SCALE)

DETAILS- HOIST
 SITE NO. 17
 MUD LAKE
 CAMERON PARISH, LOUISIANA

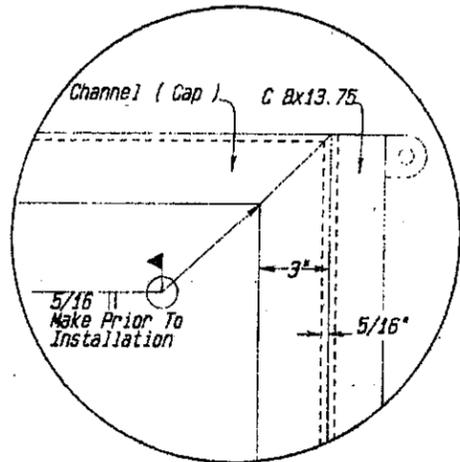
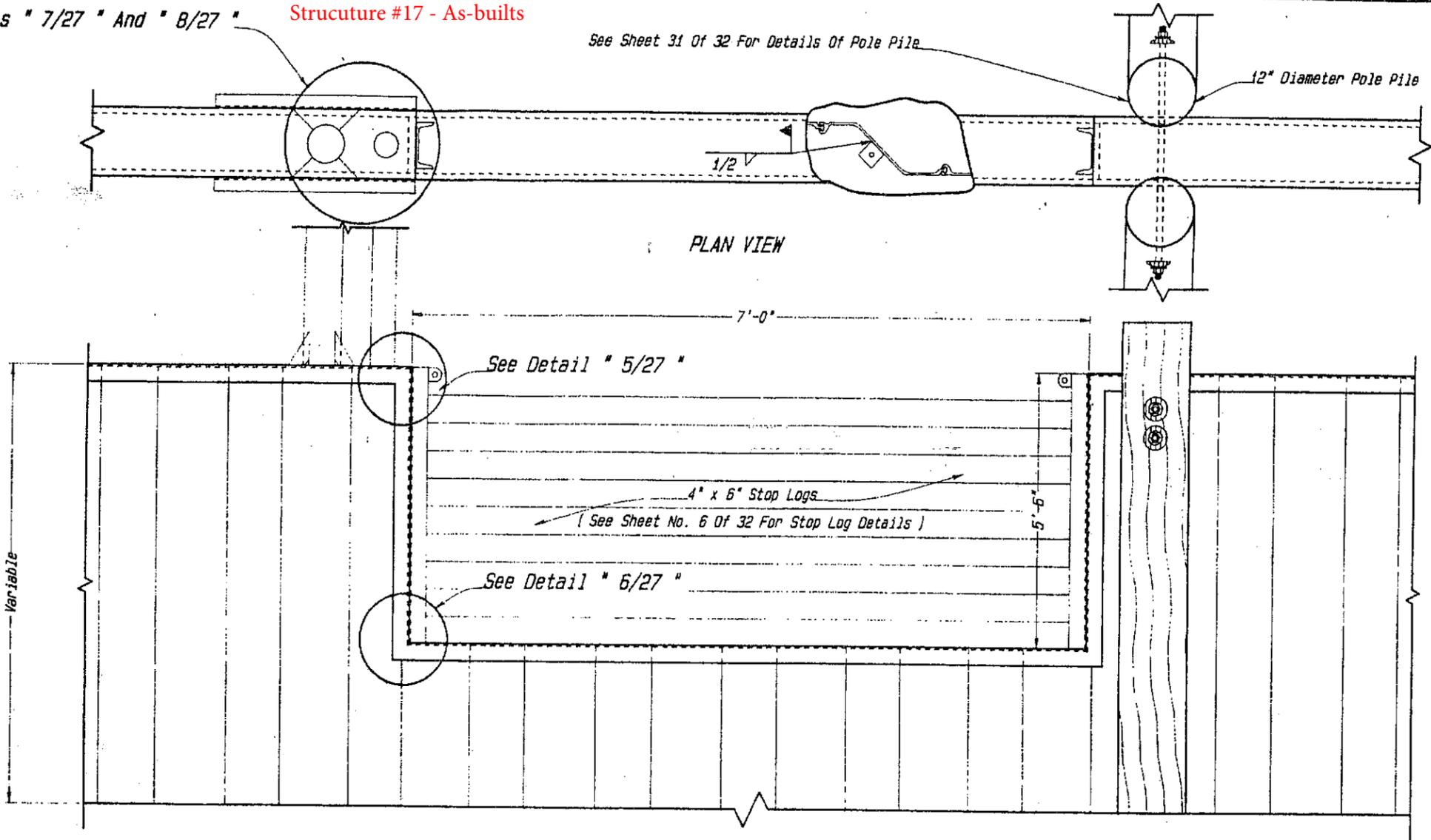
U. S. DEPARTMENT OF AGRICULTURE
 SOIL CONSERVATION SERVICE

Designed: J. HEARD	Date: 2/93	Approved by: _____
Drawn: J. HEARD	Date: 2/93	Title: STATE CONSERVATION ENGINEER
Traced: _____	Sheet: _____	File: _____
Checked: J. MOORE	Date: 8/94	Sheet: _____
		LA. 212

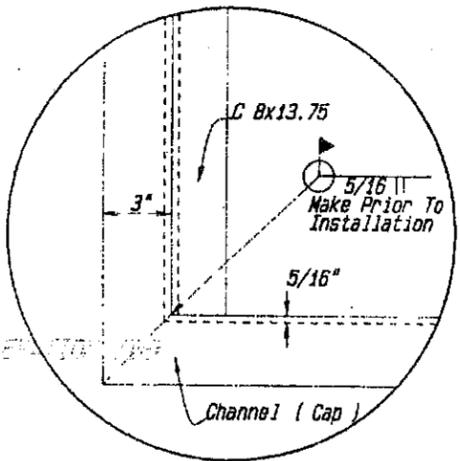
See Details " 7/27 " And " 8/27 " **Structure #17 - As-builts**

See Sheet 31 Of 32 For Details Of Pole Pile

NOTE:
Hoist Deck Not Shown For Clarity.
See Sheet No. 29 Of 32 For Hoist Deck Details.

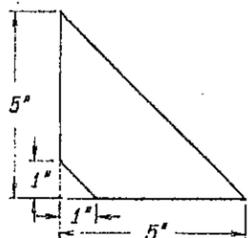


Detail " 5/27 "



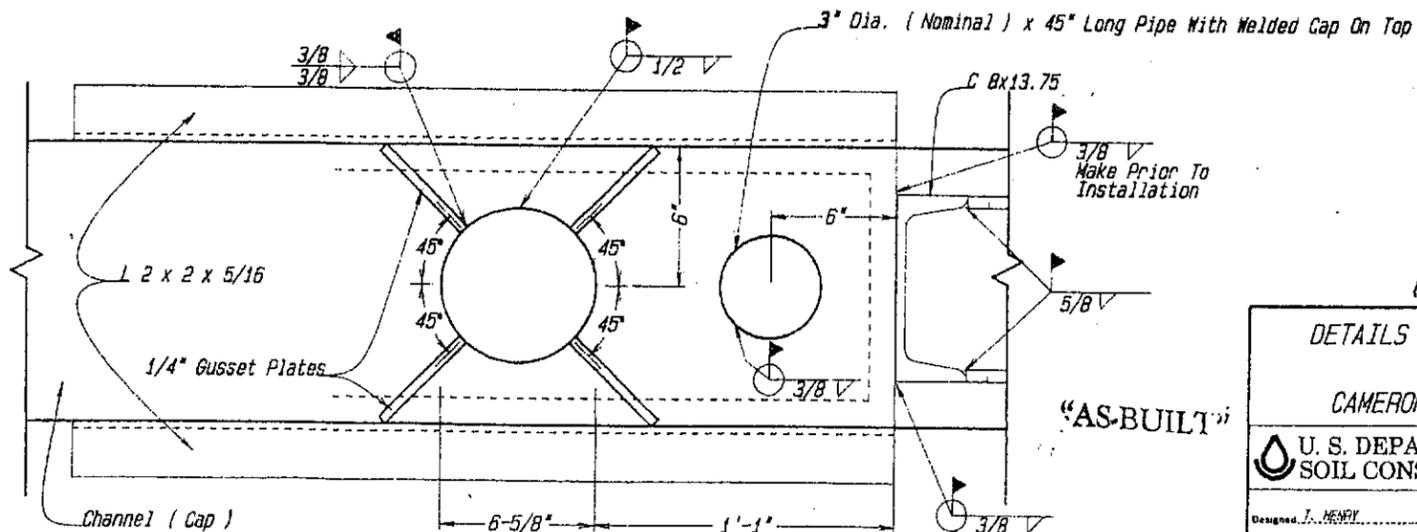
Detail " 6/27 "

CORNER DETAILS



Detail " 8/27 "

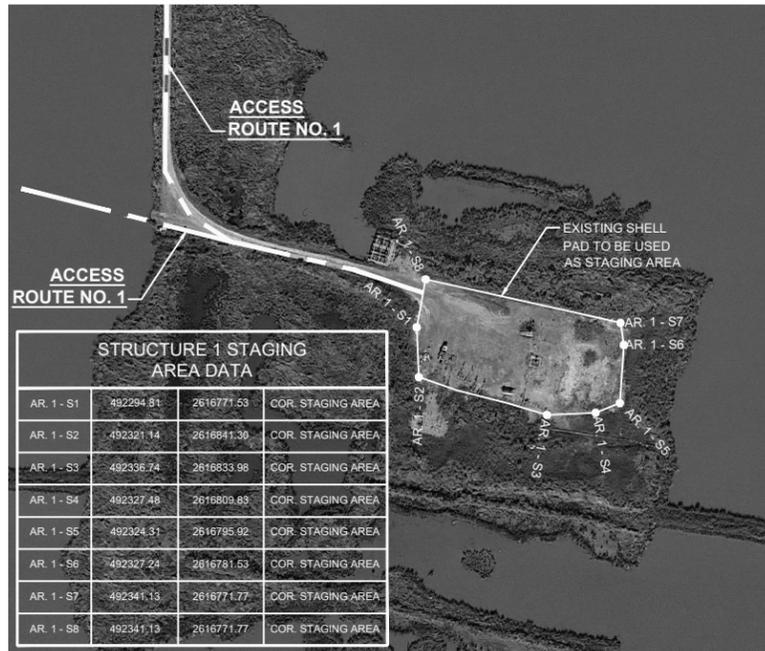
GUSSET PLATE DETAILS



Detail " 7/27 "

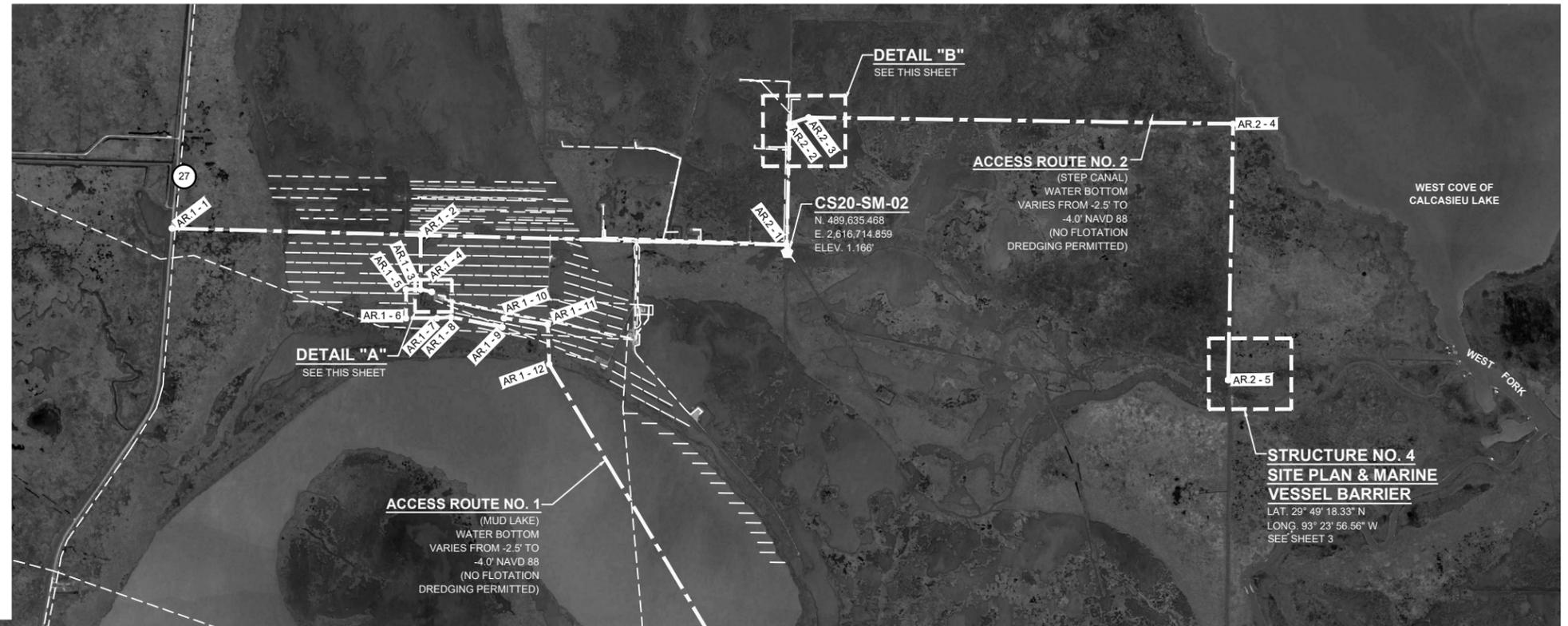
(NOT TO SCALE)

DETAILS - VARIABLE CREST WEIR SITE NO. 17 MUD LAKE CAMERON PARISH, LOUISIANA	
U. S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	
Designed J. HENRY Drawn A.G. & O.P.P. Checked J. MOORE	Date 1/53 2/25 2/95
Approved By Title STATE CONSERVATION ENGINEER ALEXANDRIA, LOUISIANA	Drawing No. LA. 212



STRUCTURE 1 STAGING AREA DATA			
AR 1-S1	492294.81	2616771.53	COR. STAGING AREA
AR 1-S2	492321.14	2616841.30	COR. STAGING AREA
AR 1-S3	492336.74	2616833.98	COR. STAGING AREA
AR 1-S4	492327.48	2616809.63	COR. STAGING AREA
AR 1-S5	492324.31	2616795.92	COR. STAGING AREA
AR 1-S6	492327.24	2616781.53	COR. STAGING AREA
AR 1-S7	492341.13	2616771.77	COR. STAGING AREA
AR 1-S8	492341.13	2616771.77	COR. STAGING AREA

DETAIL "A"



DETAIL "A"
SEE THIS SHEET

DETAIL "B"
SEE THIS SHEET

**STRUCTURE NO. 4
SITE PLAN & MARINE
VESSEL BARRIER**
LAT. 29° 49' 18.33" N
LONG. 93° 23' 56.56" W
SEE SHEET 3

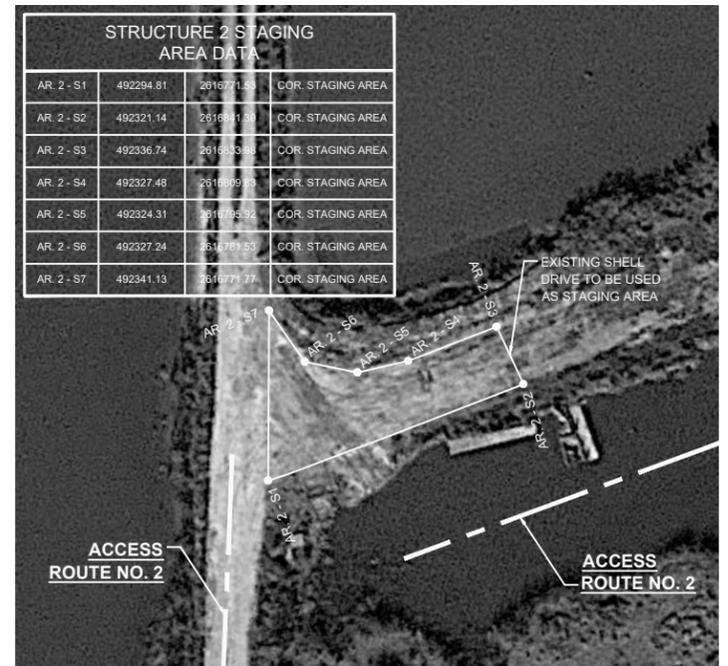
ACCESS ROUTE DATA TABLE

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AR 1-3	488871.73	2609176.86	CL OF ACCESS ROUTE 1
AR 1-4	488822.16	2609408.42	CL OF ACCESS ROUTE 1
AR 1-5	488871.73	2608875.80	CL OF ACCESS ROUTE 1
AR 1-6	488284.24	2608875.80	CL OF ACCESS ROUTE 1
AR 1-7	488284.24	2609511.52	CL OF ACCESS ROUTE 1
AR 1-8	488304.60	2609800.87	CL OF ACCESS ROUTE 1
AR 1-9	488100.15	2610857.44	CL OF ACCESS ROUTE 1
AR 1-10	488283.78	2610892.98	CL OF ACCESS ROUTE 1
AR 1-11	488151.48	2611788.59	CL OF ACCESS ROUTE 1
AR 1-12	487340.63	2611821.65	CL OF ACCESS ROUTE 1
AR 1-13	481701.74	2615176.94	CL OF ACCESS ROUTE 1
AR 1-14	480723.89	2615181.33	CL OF ACCESS ROUTE 1
AR 2-1	489783.58	2616707.69	CL OF ACCESS ROUTE 2
AR 2-2	492271.73	2616760.47	CL OF ACCESS ROUTE 2
AR 2-3	492398.68	2617156.59	CL OF ACCESS ROUTE 2
AR 2-4	492266.88	2625884.80	CL OF ACCESS ROUTE 2
AR 2-5	487016.71	2625781.86	CL OF ACCESS ROUTE 2



**STRUCTURE NO. 13
SITE PLAN**
LAT. 29° 48' 04.25" N
LONG. 93° 28' 29.16" W
SEE SHEET 11

**STRUCTURE NO. 17
SITE PLAN**
LAT. 29° 48' 21.61" N
LONG. 93° 25' 56.33" W
SEE SHEET 5

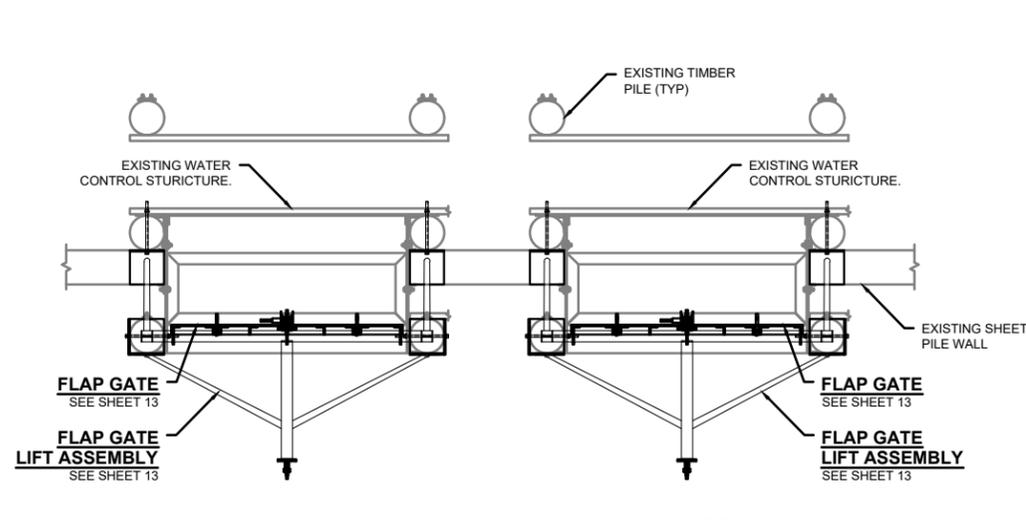


STRUCTURE 2 STAGING AREA DATA			
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AR 2-S3	492336.74	2616833.98	COR. STAGING AREA
AR 2-S4	492327.48	2616809.63	COR. STAGING AREA
AR 2-S5	492324.31	2616795.92	COR. STAGING AREA
AR 2-S6	492327.24	2616781.53	COR. STAGING AREA
AR 2-S7	492341.13	2616771.77	COR. STAGING AREA

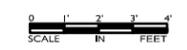
DETAIL "B"



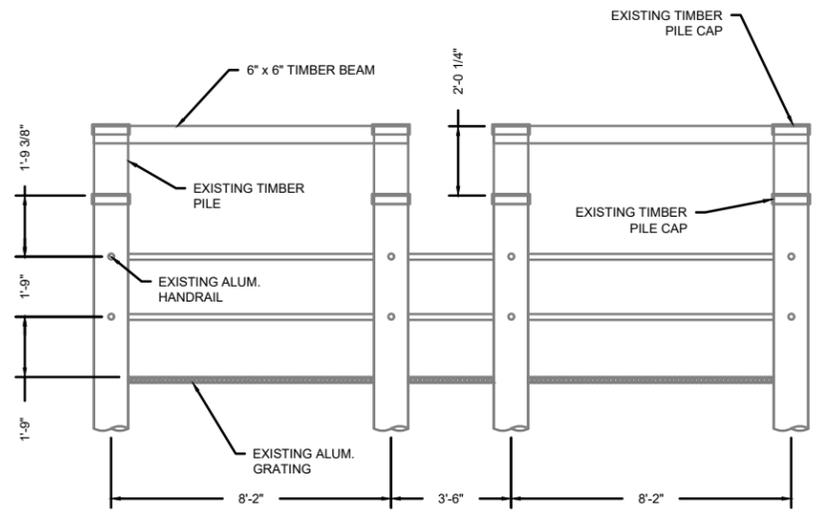
TYPE OF CONSTRUCTION CLASSIFICATION III (HEAVY CONSTRUCTION)	 LONNIE G. HARPER and Associates, Inc. CIVIL ENGINEERING AND LAND SURVEYING 2746 Hwy 384, Bell City, Louisiana 70630 PHONE: (337) 905-1079 FAX: (337) 905-1076				COASTAL PROTECTION AND RESTORATION AUTHORITY 150 TERRACE AVENUE BATON ROUGE, LOUISIANA 70802	EAST MUD LAKE - HYDROLOGIC RESTORATION - FINAL MAINTENANCE STATE PROJECT NUMBER: CS-20 FEDERAL PROJECT NUMBER: CS-20 APPROVED BY: L. HARPER, P.E.	PROJECT LOCATION DATE: 03/16/2018 SHEET 2 OF 15	
		01	06/08/2018	REVISED COORDINATE OF AR 2-1				A.P.H.
		REV.	DATE	DESCRIPTION	BY			



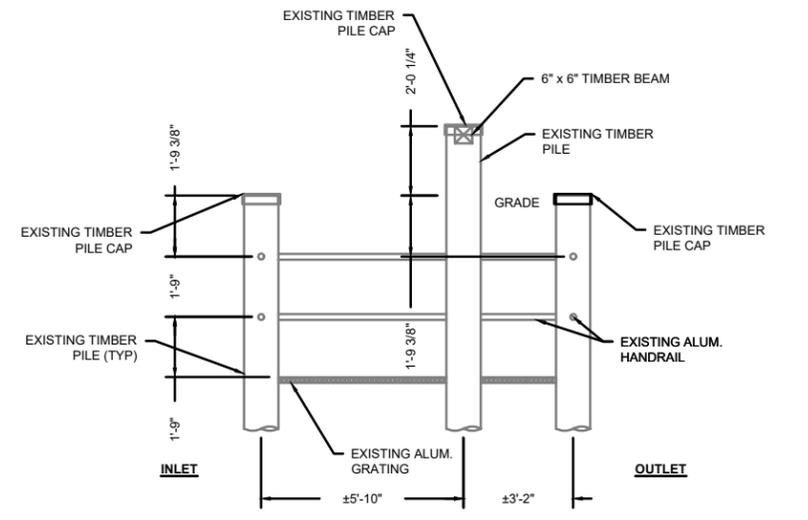
STRUCTURE PLAN



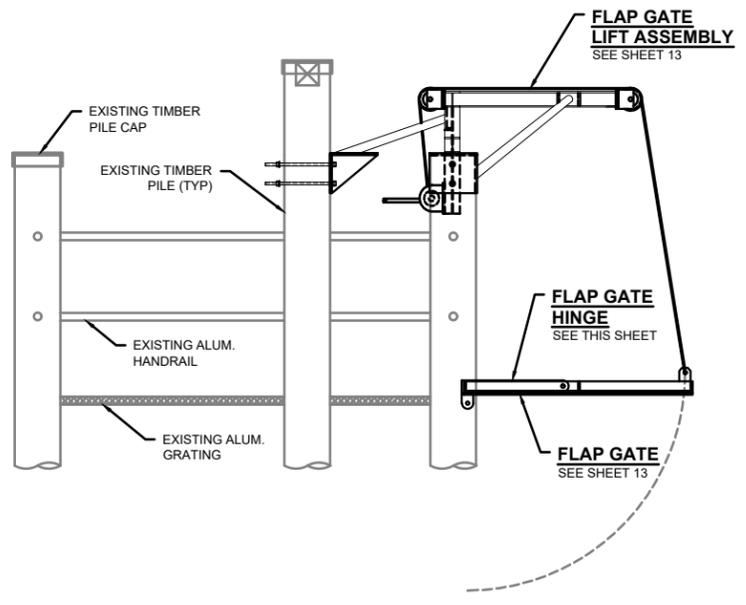
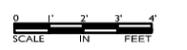
NOTE:
THE EXISTING GRATING OMITTED FOR CLARITY.



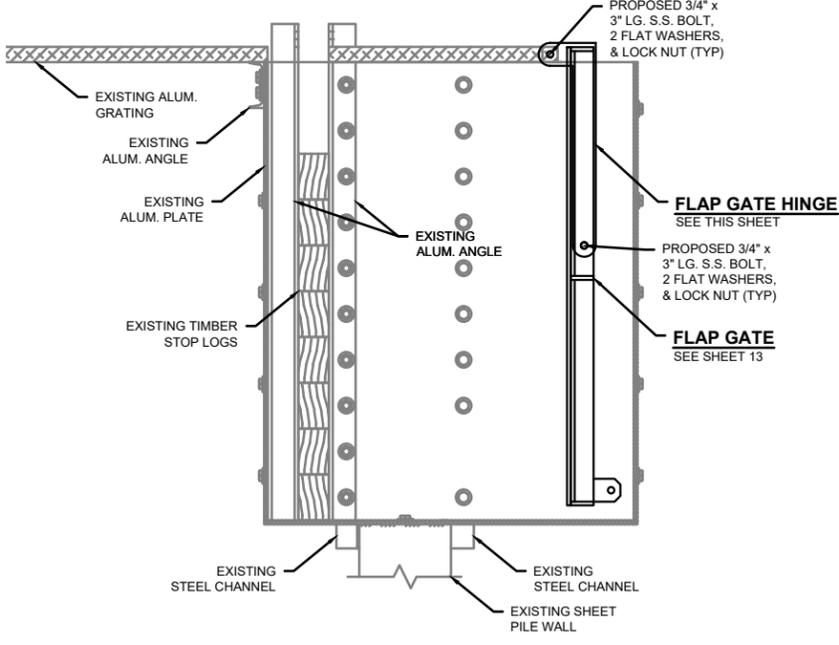
TIMBER PILE ELEVATION



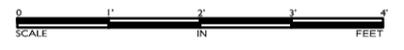
TIMBER PILE SECTION



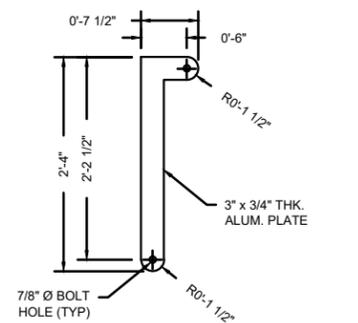
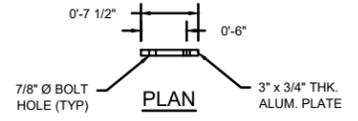
UPGRADED STRUCTURE SECTION



STRUCTURE SECTION



NOTE:
THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ADJUST AS NECESSARY TO FIT EXISTING CONDITIONS. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS REFLECTING ANY OF THESE CHANGES FOR APPROVAL PRIOR TO FABRICATION.



FLAP GATE HINGE (4 REQ.'D)

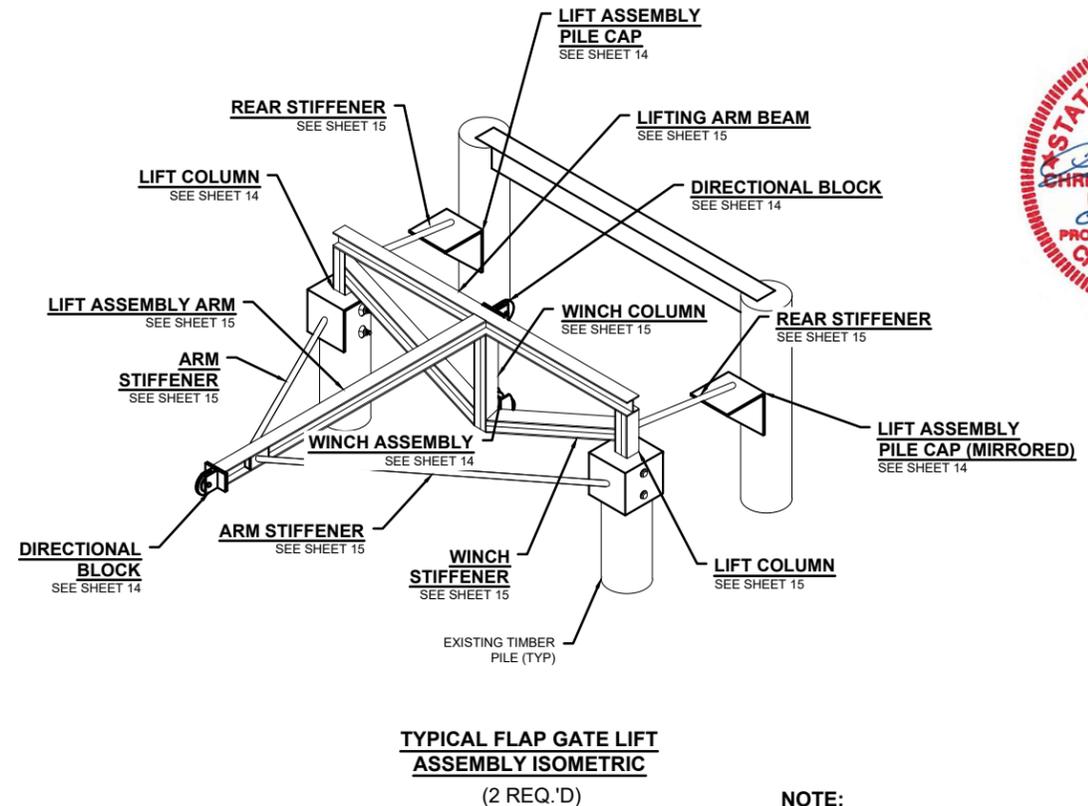
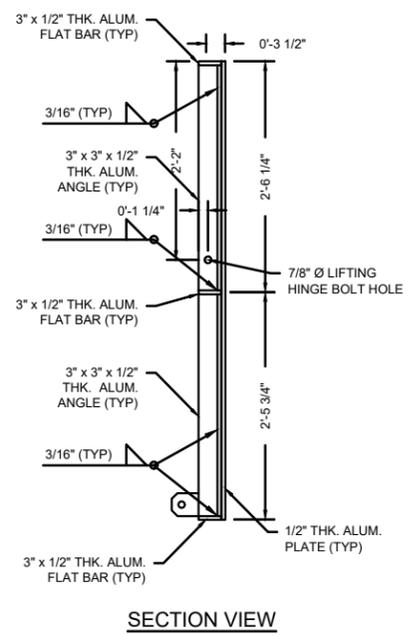
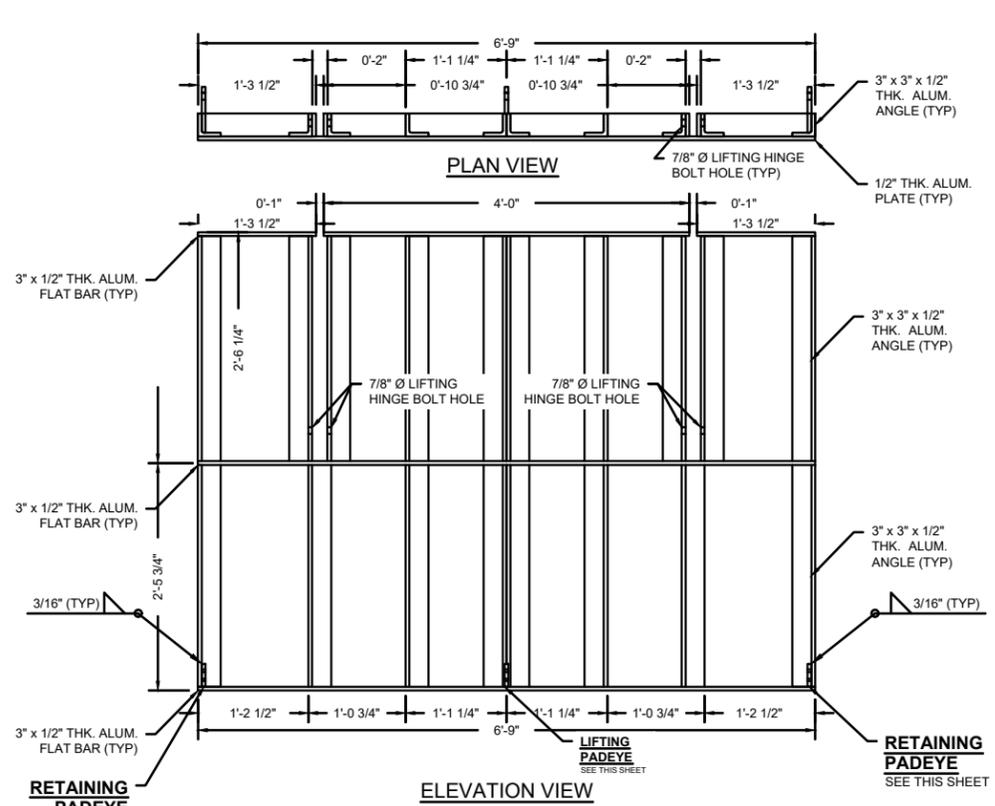


MAINTENANCE TASKS FOR STRUCTURE NO. 13:	
TASK 1	MODIFY EXISTING TIMBER PILES.
TASK 2	PROVIDE AND INSTALL TWO (2) NEW FLAP GATES.
TASK 3	REPAIR OR REPLACE ANY MISSING OR DAMAGED FLAP GATE HINGES. (4 TOTAL HINGES AT THIS STRUCTURE)
TASK 4	INSTALL TWO (2) FLAP GATE LIFTING ASSEMBLIES.

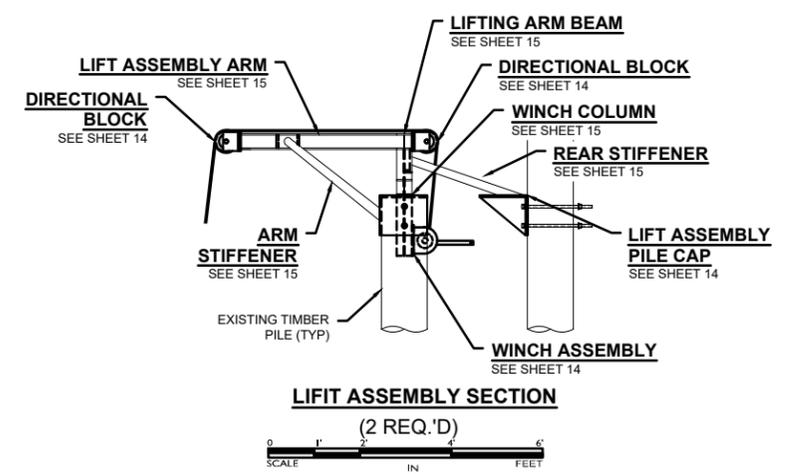
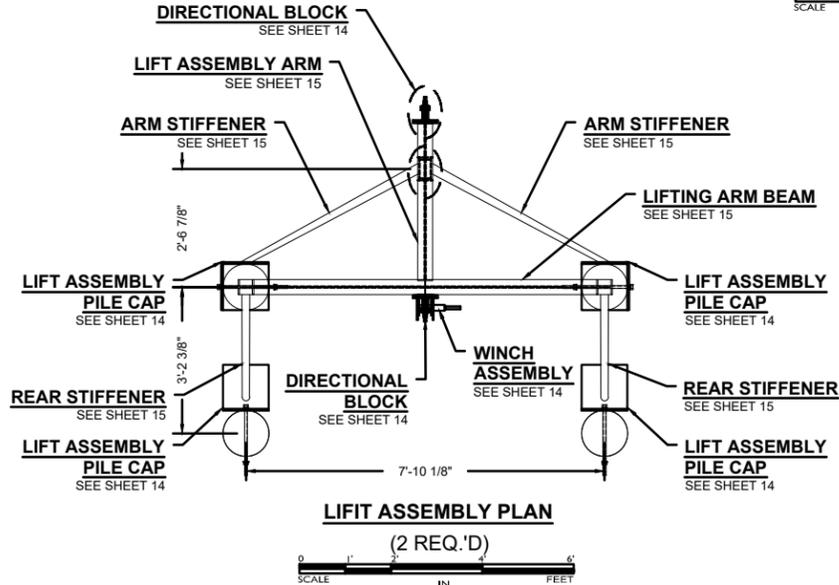
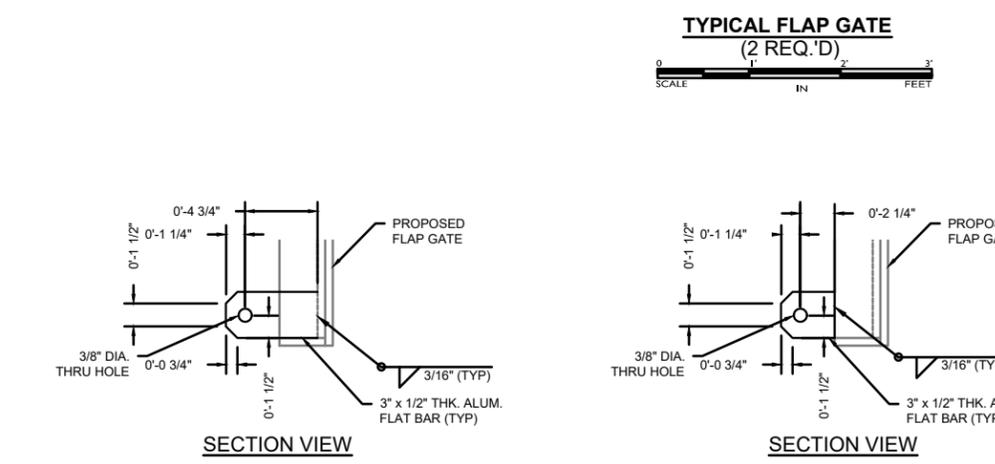
GENERAL NOTES:

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- CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL COMPONENTS FIT AND FUNCTION PROPERLY.

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		REV. 01 DATE 06/08/2018 DESCRIPTION REVISED LIFTING ARM PER CLIENTS REQUEST BY A.P.H.	DRAWN BY: A. HARPER	DESIGNED BY: C. WHEAT	



NOTE:
THE ENTIRE ASSEMBLY SHALL BE WELD USING A WELD THAT IS 1/16" THINNER THAN THE SMALLEST CONNECTING MATERIAL ALL THE WAY AROUND EACH OBJECT.

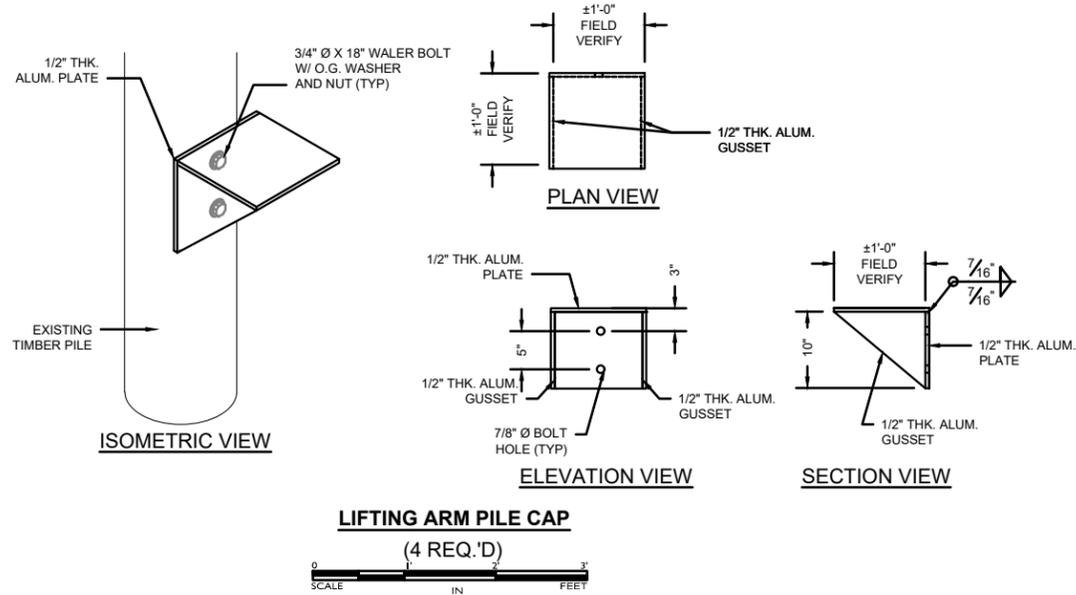


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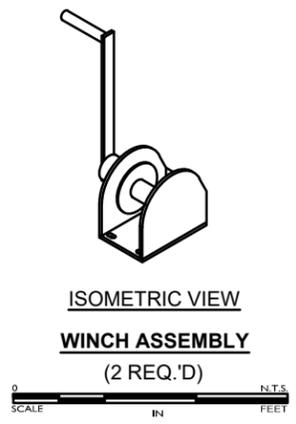
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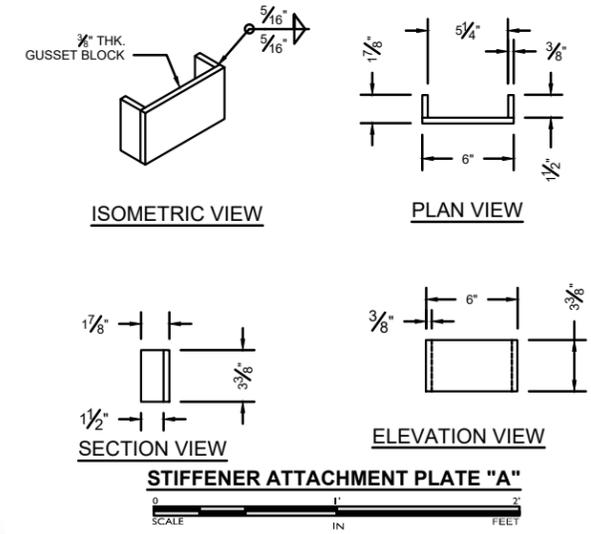
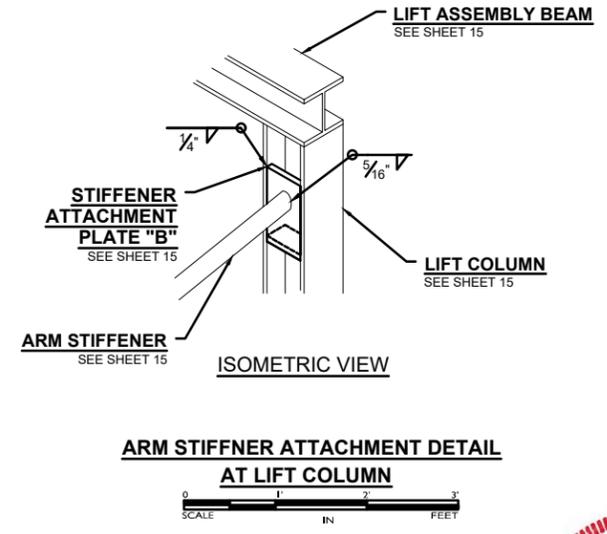
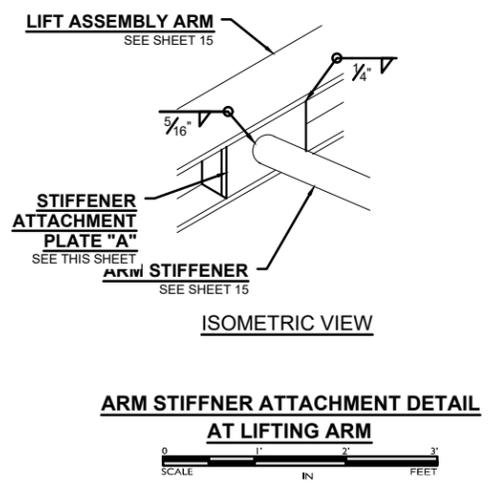
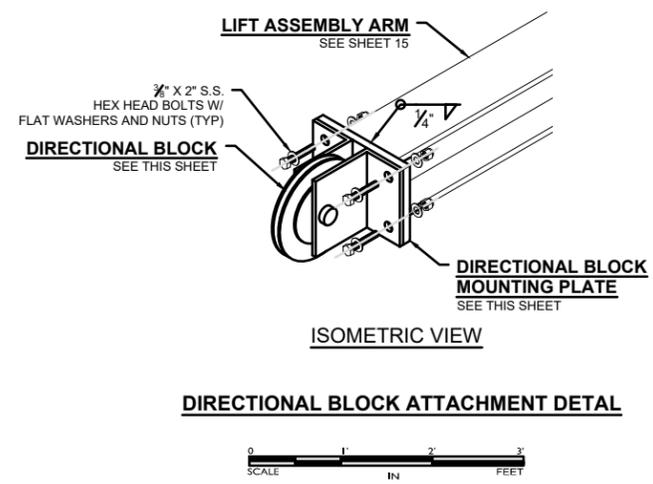
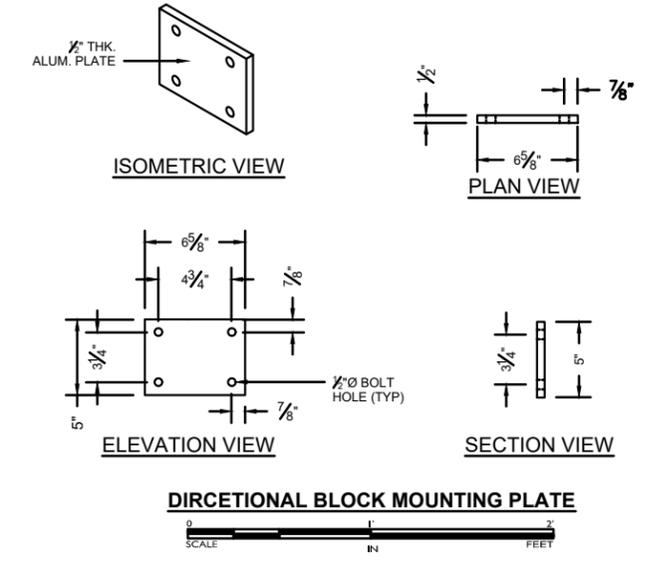
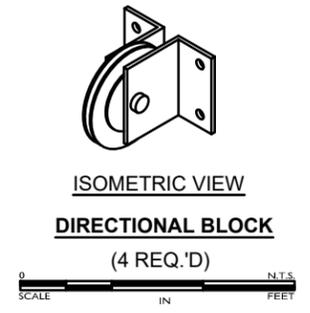
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		<table border="1"> <thead> <tr> <th>REV.</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>01</td> <td>06/08/2018</td> <td>REVISED LIFTING ARM PER CLIENTS REQUEST</td> <td>A.P.H.</td> </tr> </tbody> </table>	REV.	DATE	DESCRIPTION	BY	01	06/08/2018	REVISED LIFTING ARM PER CLIENTS REQUEST	A.P.H.	DRAWN BY: A. HARPER DESIGNED BY: C. WHEAT
REV.	DATE	DESCRIPTION	BY								
01	06/08/2018	REVISED LIFTING ARM PER CLIENTS REQUEST	A.P.H.								



NOTE:
HEAVY DUTY GALVANIZED HAND WINCH W/ 30 L.F. OF 3/16\"/>



NOTE:
STAINLESS STEEL VERTICAL DIRECTIONAL BLOCK (MODEL VBS7000 AS MANUFACTURED BY JEAMAR WINCHES, OR APPROVED EQUAL)



NOTE:
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CLASSIFICATION III (HEAVY CONSTRUCTION)			01	06/08/2018	REVISED LIFTING ARM PER CLIENTS REQUEST	A.P.H.	STATE PROJECT NUMBER: CS-20	DATE: 03/16/2018
		REV.	DATE	DESCRIPTION	BY	FEDERAL PROJECT NUMBER: CS-20	APPROVED BY: L. HARPER, P.E.	SHEET 14 OF 15
				DRAWN BY: A. HARPER	DESIGNED BY: C. WHEAT			

TS – 113 COAL-TAR EPOXY

113.1 SCOPE

This specification shall consist of furnishing all materials, labor, equipment, supervision, etc., to paint all sawn timber surfaces associated with this project in conformance with these specifications and as directed by the Project Engineer.

113.2 REFERENCE TEST METHODS AND SPECIFICATIONS

Federal Test Method No. 141, Abrasion, Method 6192, CS-17 Wheel; 1000 grams load TT-C 550 C 4.4.5.2 and 4.4.5.3 Graffiti-resistance.

American Society of Testing and Materials (ASTM)

ASTM D 4541-85; Adhesion - Elcometer Adhesion Tester

ASTM D 3363-74; Hardness

ASTM D 2247-68; Humidity

ASTM B 117-73; Salt Spray (FOG)

ASTM D 149; Dielectric Strength

ASTM D 4585; Humidity (Controlled Condensation)

ASTM D 4060; Abrasion-resistance

ASTM D 522; Method 2; Flexibility

ASTM G 53; QUV

ASTM D 3363; Pencil Hardness

ASTM D 4141-C; EMMAQUA NTW, Weathering

113.3 SUBMITTALS

Contractor shall submit the following information

Product data sheets

Coating Schedule

Generic type of coating

Performance Data

Material Safety Data Sheets

List of ten projects that have performed satisfactorily for five years in the gulf coast area.

113.4 DELIVERY, STORAGE AND HANDLING

All materials, delivered to job-site, shall be in original sealed and labeled containers of the coal-tar manufacturer,

Store materials in a protected area at a temperature between 40° F and 100° F All coatings and coal-tar shall be stored in enclosed structures to protect them from weather and excessive heat or cold. Flammable coatings or coal-tar must be stored to conform to Parish, State and Federal safety codes for flammable coating or paint materials. At all times, coatings and coal-tar shall be protected from freezing.

113.5 PROJECT CONDITIONS

Environmental Requirements: Coatings shall be applied during good painting weather. Air and surface temperatures shall be between 40° F and 120°F.

Surface temperature shall be at least 5° F above dew point. Relative humidity shall be below 85%.

113.6 WARRANTY

The contractor shall warranty his work for a period of one year to the extent that he shall repair any defects due to faulty workmanship or materials which may appear on the structure during this period. A first anniversary inspection shall be conducted in accordance with Section 9 of AWWA D-102-97

113.7 PRODUCTS

ACCEPTABLE MANUFACTURERS: Ameron Coatings, Alpharetta, GA
www.AmeronCoatings.com, or approved equal.

113.8 MATERIALS

See coating schedule in this specification.

113.9 REQUIREMENTS

All coating utilized shall be certified “non-lead” (less than 0.06% lead by weight in the dried film) as defined in part 1303 of the consumer Product Safety Act.

The coating manufacturer shall certify that the zinc dust used in the zinc coatings meets the requirement of ASTM D 520 Type III. The manufacturer of the exterior coating system shall be capable of providing case histories that are a minimum of five (5) years old. The polyurethane color coat shall pass SSPC No.36 standard for urethanes.

113.10 EXECUTION

CONTAINMENT/DISPOSAL

Containment / Disposal costs - The painting contractor shall be responsible for all costs associated with containment and waste disposal that may result from the execution of this project.

SURFACE PREPARATION

Prepare surfaces in accordance with coating system’s specifications which may be located at www.Amercoat.com.

Prior to preparation, all surfaces shall be clean and dry and free of dust, dirt, oil, wax, grease and other contaminants. Remove all oil, dirt, grease and all other soluble surface contaminants in accordance with SSPC-SP1. Abrasive blast all surfaces in accordance with SSPC-SP10 to produce an anchor pattern of 2 to 4 mil profile as determined with a Keane-Tator surface profile comparator or a similar device. Verify chlorides are within the limitations of the coating manufacturer, and an anchor pattern from 2-4 Mils has been achieved. If not, consult manufacturer’s representative.

MATERIAL PREPARATION

Materials shall be mixed, thinned and applied according to the manufacturer’s recommendations.

113.11 FIELD QUALITY CONTROL

Inspection

The contractor will be required to perform random testing of coating thickness and holiday detection, said tests shall be performed after each coat has been applied. Frequency

of tests shall be sufficient to ensure that contract plans and specifications are satisfied.

Correct work that is not acceptable and request a re-inspection.

Any damaged areas shall be repaired as to manufactures specifications.

113.12 CLEANING

Removal of Trash

Remove and dispose of, in a legal manner, all rubbish or other unsightly material leaving the premises pre-project condition.

113.13 COATING SCHEDULE

Surface Preparation

Remove all visible oil, grease, soil, dirt and other soluble contaminants in accordance with SSPC SP1. All surfaces shall be abrasive blast cleaned to a Near White Metal Blast Cleaning in accordance with the recommended methods outlined in the Steel Structures Painting Council's Specification SSPC SP10.

Coating System requirement in dry mils

1 st Coat: Ameron 78HB, or approved equal	7.0-10.0
2 nd Coat: Ameron 78HB, or approved equal	<u>7.0-10.0</u>
Total	14.0-20.0 mils

113.14 BASIS OF PAYMENT

There shall be no direct payment for Coal Tar Epoxy.