STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

Department of Administration
DIVISION OF PURCHASES
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December 4, 2013

ADDENDUM NUMBER TWO

RFQ # 7535371

TITLE: Construction of a New Fixed Pier and Dredging at Ft. Adams

Closing Date and Time: 12/9/13 at 1:45 PM

Per the issuance of this ADDENDUM #2 (66) pages, including this cover sheet)

[X] **Specification Change /Addition / Clarifications**

THIS IS AN EXACT DUPLICATE TO ADDENDUM NUMBER ONE. THE FILES AND DRAWINGS ARE NOW IN PDF AND SHOULD BE MUCH EASIER TO READ.

SEE ATTACHED DOCUMENTS AND SIGN IN SHEET.

State of Rhode Island

Division of Purchases

One Capitol Hill

Providence, RI 02908

"NON-MANDATORY" PRE-BID CONFERENCE SIGN IN SHEET

BID NUMBER:	7535371
BID TITLE:	Construction of a New Fixed Pier & Dredging at Ft. Adams
PRE-BID DATE AND TIME:	November 25, 2013 at 10:00 AM

Purchasing Representative: John F. O'Hara II
Pre-bid START TIME: 10:00
Pre-bid END TIME: 10:45

	COMPANY NAME	COMPANY REPRESENTATIVE	ADDRESS	CONTACT E-MAIL	CONTACT PHONE NUMBER	CONTACT FAX NUMBER	PROPOSAL SUBMITTED (For Purchasing Use Only)
1	REAGAN CONSTRUCTION	LARRY AHEARN	121 GREEN LANE MIDDLETOWN RI	REAGAN CONSTRUCT @ AOL.COM	401 846-1173	401 847-8744	
2	SDS, INC	NICK TANIOMS	192 SMITH ST 02892 N. KINGSTOWN	NICK@SPECIALTY DIVE.COM	401-295 5256	401-295-1160	
3	CARDI	GREG MAURER	400 LINCOLN AVE WARWICK 02888	GMAURER @CARDI.COM	401 739 8300	401 732 0006	
4	AGM Marine Contractors	Jonah Mikutowicz	30 Echo Road Mashpee, MA 02649	jonah.mikutowicz@agmmarine.com	508-477-8801	508-477-8804	
5	MIG Corporation	LEA JARGIELEWSKI	One Acton Pl Acton MA 01720	lezj@migcorporation.com	978-864-4800	978 264-0123	
6	CRC C INC	JARED LINNARD	77 FEDERAL AVE [illegible] MA 02161	jared@[illegible]	617-328-[illegible]	617-773-[illegible]	
7	E.W Audet	J Audet	168 Bay Street Prov. RI	JAudet@EW[illegible]	461-3510	781-8822	
8	SF Marina USA	MASON SEARS	106 Pine St Portland ME 04102	HMSEARS@SFMARINAUSA.COM	207 653 3773	207 347 4238	
9	MANAFORT	ARTHUR SCOTTON	24 MARTIN ST CUMBERLAND RI	ASCOTTON@MANAFORT.COM	401-333-2550	401-333-2551	
10	Manafort	Andrew Giovanni	"	agiovanni@manafort.com	"	"	
11	Lenny Corrente	Laborers	410 SO MAIN ST PROV RI	LCORRENTE@LNEROF.ORG	639-0207	521-0061	
12	JOE DIAS	RIDEM		JOE.DIAS@DEM.RI.GOV			
13	Chris Feeney	LBG	295 Promenade St Prov. RI	CFeeney@louisberger.com	521-5986	331-8956	
14	Aaron Sylvia	LBG	295 Promenade St Prov	asylvia@LouisBerger.com	521-5989		
15	Paul HARDEN	EDC	315 Iron Horse Providence 02908	pharden@riedc.com	401-278-9100		
16	Purchasing	State of RI					

Rev: 4/30/13

** VENDOR: PLEASE SUBMIT A BUSINESS CARD IF AVAILABLE**

NOTICE OF ADDENDUM NUMBER ONE (1)

TO

State of Rhode Island
DEM-Planning and Development Contract No. 14-13
Bid Number 7535371
Fixed Pier, Fort Adams State Park
Newport, Rhode Island

DATE of ADDENDUM: **December 3, 2013**

The contract documents are hereby modified to include this document as if fully attached thereto.

PART A Division 00 Bidding and Contract Requirements and Division 01 General Requirements

ITEM 1) Information for Bidders

INSERT as an appendix to this Section the Minutes of the Pre-Bid Meeting attached hereto as, "Addendum 1, Attachment I".

ITEM 2) Section 00005 – Table of Contents

DELETE Section 00005 Table of Contents in its entirety.

REPLACE with Section 00005 Table of Contents attached hereto as "Addendum 1, Attachment II".

ITEM 3) Section 00310 – Bid Form

DELETE Section 00310 Bid Form in its entirety.

REPLACE with Section 00310 Bid Form attached hereto as "Addendum 1, Attachment III".

ITEM 4) Section 00500 – Contract Agreement

DELETE Section 00500 Contract Agreement AIA Document A101 Standard Form of Agreement Between Owner and Contractor in its entirety.

REPLACE with Section 00500 Contract Agreement attached hereto as "Addendum 1, Attachment IV".

Contract agreement shall be finalized and executed with the Contractor prior to a Purchase Order being issued.

ITEM 5) Section 01015 – Contractor's Use of the Premises

DELETE Section 01015 Contractor's Use of the Premises in its entirety.

REPLACE with Section 01015 Contractor's use of the Premises attached hereto as "Addendum 1, Attachment V".

ITEM 6) Section 02363 – Boring Logs

Insert Section 02363 – Attachment A – Boring Logs attached hereto as "Addendum 1, Attachment VI" at the end of Section 02363 Steel Pipe Piles.

ITEM 7) Section 16475 – Pier Lighting

Insert Section 16475 Pier Lighting in its entirety to Division 16 Electrical attached hereto as "Addendum 1, Attachment VII".

PART B Drawings

ITEM 8) C3 Proposed Fixed Pier Utilities – General Plan

DELETE Sheet C3 – Proposed Fixed Pier Utilities – General Plan.

REPLACE with Sheet C3 – Proposed Fixed Pier Utilities – General Plan attached hereto as "Addendum 1, Drawing C3".

ITEM 9) S1 Proposed New Pier General Notes

DELETE Sheet S1 – Proposed New Pier General Notes.

REPLACE with Sheet S1 – Proposed New Pier General Notes attached hereto as "Addendum 1, Drawing S1".

ITEM 10) S2 Proposed New Pier General Arrangement Drawing Sheet 1 of 3

DELETE Sheet S2 – Proposed New Pier General Arrangement Drawing Sheet 1 of 3.

REPLACE with Sheet S2 – Proposed New Pier General Arrangement Drawing Sheet 1 of 3 attached hereto as "Addendum 1, Drawing S2".

ITEM 11) S3 Proposed New Pier General Arrangement Drawing Sheet 2 of 3

DELETE Sheet S3 – Proposed New Pier General Arrangement Drawing Sheet 2 of 3.

REPLACE with Sheet S3 – Proposed New Pier General Arrangement Drawing Sheet 2 of 3 attached hereto as "Addendum 1, Drawing S3".

ITEM 12) S4 Proposed New Pier General Arrangement Drawing Sheet 3 of 3

DELETE Sheet S4 – Proposed New Pier General Arrangement Drawing Sheet 3 of 3.

REPLACE with Sheet S4 – Proposed New Pier General Arrangement Drawing Sheet 3 of 3 attached hereto as “Addendum 1, Drawing S4”.

ITEM 13) S6 Bottom Reinforcement In Concrete Pile Caps

DELETE Sheet S6 – Bottom Reinforcement In Concrete Pile Caps.

REPLACE with Sheet S6 – Bottom Reinforcement In Concrete Pile Caps attached hereto as “Addendum 1, Drawing S6”.

ITEM 14) S7 Precast Concrete Pile Cap Details – Pile Cap Nos. 1 Thru 14

DELETE Sheet S7 – Precast Concrete Pile Cap Details – Pile Cap Nos. 1 Thru 14.

REPLACE with Sheet S7 – Precast Concrete Pile Cap Details – Pile Cap Nos. 1 Thru 14 attached hereto as “Addendum 1, Drawing S7”.

ITEM 15) S8 Precast Concrete Pile Cap Details – Pile Cap No. 15

DELETE Sheet S8 – Precast Concrete Pile Cap Details – Pile Cap No. 15.

REPLACE with Sheet S8 – Precast Concrete Pile Cap Details – Pile Cap No. 15 attached hereto as “Addendum 1, Drawing S8”.

ITEM 16) S9 Typical East West Cast In Place Concrete Pile Cap Details

DELETE Sheet S9 – Typical East West Cast In Place Concrete Pile Cap Details.

REPLACE with Sheet S9 – Typical East West Cast In Place Concrete Pile Cap Details attached hereto as “Addendum 1, Drawing S9”.

ITEM 17) S10 Grade Beam at Start of Pier Bent 0

DELETE Sheet S10 – Grade Beam at Start of Pier Bent 0.

REPLACE with Sheet S10 – Grade Beam at Start of Pier Bent 0 attached hereto as “Addendum 1, Drawing S10”.

ITEM 18) S11 Precast Concrete Pile Cap Sleeve Details

DELETE Sheet S11 – Precast Concrete Pile Cap Sleeve Details.

REPLACE with Sheet S11 – Precast Concrete Pile Cap Sleeve Details attached hereto as “Addendum 1, Drawing S11”.

ITEM 19) S12 Proposed New Pier Bearing Pile Layout

DELETE Sheet S12 – Proposed New Pier Bearing Pile Layout.

REPLACE with Sheet S12 – Proposed New Pier Bearing Pile Layout attached hereto as “Addendum 1, Drawing S12”.

ITEM 20) S14 Proposed New Pier Wave Fence Arrangement Sheet 1 of 2

DELETE Sheet S14 – Proposed New Pier Wave Fence Arrangement Sheet 1 of 2.

REPLACE with Sheet S14 – Proposed New Pier Wave Fence Arrangement Sheet 1 of 2 attached hereto as “Addendum 1, Drawing S14”.

ITEM 21) S15 Proposed New Pier Wave Fence Arrangement Sheet 2 of 2

DELETE Sheet S15 – Proposed New Pier Wave Fence Arrangement Sheet 2 of 2.

REPLACE with Sheet S15 – Proposed New Pier Wave Fence Arrangement Sheet 2 of 2 attached hereto as “Addendum 1, Drawing S15”.

ITEM 22) S16 Framing Detail and Miscellaneous Details

DELETE Sheet S16 – Framing Details and Miscellaneous Details.

REPLACE with Sheet S16 – Framing Details and Miscellaneous Details attached hereto as “Addendum 1, Drawing S16”.

ITEM 23) S17 Floating Finger Dock Details

DELETE Sheet S17 – Floating Finger Dock Details.

REPLACE with Sheet S17 – Floating Finger Dock Details attached hereto as “Addendum 1, Drawing S17”.

ITEM 24) E1 Electrical Distribution Partial Site Plan, Detail & Note

DELETE Sheet E1 – Electrical Distribution Partial Site Plan, Detail & Note.

REPLACE with Sheet E1 – Electrical Distribution Partial Site Plan, Detail & Note attached hereto as “Addendum 1, Drawing E1”.

ITEM 25) E2 Electrical Distribution Fixed Pier Plan

DELETE Sheet E2 – Electrical Distribution Fixed Pier Plan.

REPLACE with Sheet E2 – Electrical Distribution Fixed Pier Plan attached hereto as “Addendum 1, Drawing E2”.

ITEM 26) E3 Electrical Distribution Partial One Line Diagram & Details

DELETE Sheet E3 – Electrical Distribution Partial One Line Diagram & Details.

REPLACE with Sheet E3 – Electrical Distribution Partial One Line Diagram & Details attached hereto as “Addendum 1, Drawing E3”.

********** **END OF ADDENDUM NUMBER 1** **********

FIXED PIER FORT ADAMS STATE PARK

PRE-BID MEETING
25 NOVEMBER, 2013 10:00 AM
VISITOR'S CENTER, FORT ADAMS STATE PARK, NEWPORT, RI

To all Contractors Estimating:

Attached are the meeting minutes from the pre-bid meeting held on November 25, 2013 at 10:00 AM at the Visitor's Center, Fort Adams State Park - Newport, Rhode Island.

Please be advised that the subject matter discussed at the meeting, the minutes recorded thereof, and the questions and answers, shall be part of the Contract Documents.

Meeting Minutes

Description of Meeting: Pre-Bid Meeting

Date/Time: 11-25-13 10:00 AM

Location: Fort Adams State Park Visitor's Center, Newport, RI

Attendees: See attached attendance sheet

Joe Dias from the RIDEM Department of Planning and Development began the meeting by giving a brief introduction to the project and welcoming everyone to the meeting.

Then John O'Hara from the State of Rhode Island Department of Purchasing gave a brief overview of the project contract requirements and accepted a few questions. He described how bids need to be submitted both in writing and on CD. Additionally he reminded the prospective bidders of the apprenticeship requirement of State of Rhode Island public bids.

Joe Dias then introduced LBG and Chris Feeney began describing the project. Mr. Feeney described the proposed elements of the project including the fixed pier, floating dock, finger piers and supporting utilities. Additionally Mr. Feeney described the permits obtained for the project including CRMC dredging and fixed pier, water quality, Army Corps of Engineers, and the Sanitary Sewer order of approval. Mr. Feeney specifically stated that the Contractor's work must be in compliance with the stipulations of the Permits in Specification Section 01067.

Mr. Feeney then briefly discussed the work restrictions on the project, specifically the dredge window, and the Contractor's use of the Premises. He went over Specification Section 01015 and the work restrictions related to use of the parking lot from May 15th to September 15th during the active season of the State Park.

Mr. Feeney then opened up the floor for questions.

Questions and Answers

1. Please confirm that the requirement to furnish an additional 5 feet of pile does not need to be carried for the Floating Pier Piles

   Please reference Bid Item No. 7 14" Steel Pipe Piles with HDPE Jackets, which states the following: "The Contractor shall carry an additional 3 ft of pile length for all piles that anchor the floating dock." The referenced 5 ft of additional pile length is applicable to Bid Item No. 6.

2. Please review the Seabed Elevation provided for Pile B15 (Sheet S12)

   Please see Addendum No. 1, Item 19. The table has been revised, accordingly.

3. Please provide information related to the Finger Dock Piles (Sheet S17). Are piles required? If so, provide details. If piles are required, how will the Finger Docks functions as movable units?

   Piles for the timber floating dock (finger docks) are to be provided by others. The Contractor shall only be responsible for installing dock 1 of 3 for each of the seven finger piers for project conformance. The remaining fourteen finger docks shall be delivered to site at a location to be determined by the Owner.

4. What are the coatings limits for the specified systems?

   The coating limits shall extend to 5-ft below the mudline.

5. Is the Alternate coating in lieu of the Contract coal tar epoxy coating?

   Yes.

6. If Seashield is utilized in the work, is it compatible with the mounting details for the Wave Fence?

   Seashield is compatible with the wave fence but may require minimal field modification of the HDPE jacket.

7. For the Pier Bearing Piles, is the "Estimated Tip Elevation" (Sheet S12) synonymous with the "minimum tip elevation" (Pile Spec Page 6)?

   Yes, the minimum tip elevation (Section 02363, paragraph 3.3.D) is synonymous with the estimated tip elevation (Sheet S-12).

8. Please review the following as it relates to the 20" Pipe Piles: Pile tolerances allow piles to deviate by 1.5" at the top of the pile, plus 1% from the vertical. If these tolerances are additive, it appears that the cast-in pile sleeves (Sheet S11) will not accommodate the piles. Please review.

   The pile tolerances (Section 02363, paragraph 3.5) are not additive. Each condition shall be met to be considered an acceptable pile.

9. Plans call for reinforcing steel to conform to ASTM A615 Gr 60 Hot Dipped Galvanized. Is it your intent to use ASTM A706 where reinforcing steel is to be welded?

   Yes, all bar reinforcing steel scheduled for welding shall be ASTM A706. Cast-In-Place / Pre-cast Concrete notes on Sheet S1 have been revised to reflect this clarification. Please see Addendum No. 1, Item 9.

10. Please review the following as it relates to the Floating Dock Finger Piers: The specs and plans appear to conflict as to dead load, live load, and free board. Plans call for live load at 40 PSF, Specs call for live load at 30 PSF. Plans call for free board at 23.6", Specifications call for free board at 18". Plans list dead load at 1200 pounds, then calculate dead load at 1592 pounds.

    Dead load freeboard of timber floats is specified to be approximately equal to the dead load freeboard of the 12' wide concrete floating dock which is shown on the drawings to be 22 inches (Sheet S4). The design live load for the timber floats is 40 psf with a 400 pound concentrated live load. Plans list the timber and hardware weight at approximately 1,200 lbs and an additional 392 lbs for the float drums which is equal to 1,592 lbs. The plans have been revised to reflect this clarification. Please see Addendum No. 1, Item 12.

11. Pile diameters and wall thicknesses are specified as "minimum." Do you mean "nominal"?

    In general the pile diameter is nominal and wall thickness is minimum. The minimum wall thickness is only provided as a means to allow the contractor the option of using secondary pipe if it saves cost.

12. If pile diameters and wall thicknesses specified are "minimum," is it your intent that the Contractor bear responsibility for sizing the piles to suit the characteristics of the project? (See Pile Specification 2.1 A. 3. for strength and rigidity requirements)

    Please see response to above related question.

13. If it is determined that the pipe pile geometry must change, how will you address other physical features of the work; i.e., 24" pipe pile sleeve, 14" pile guides, HDPE jacket, wave fence attachment details, and reinforcing steel layout/concrete structural dimensions?

    Please see response to above related question.

14. For the Pipe Pile Sleeve located in the center (Line B) of Precast Pile Cap 15 (Sheet S8), please confirm that 2 each #9 reinforcing is to be shop welded to both sides of the Sleeve (Sheet S9 calls for a #8 bar)

    Sheet S8 details pile cap 15. Sheet S9 details intermediate east-west field cast pile caps (0.1 to 14.1) along the north face of the pier. There are no sleeves at piles located between the major pile bents (1 to 15). It is intended that the #8 U-bars shown on Sheet S9 and the #9 center bars top and bottom (running east west) be field welded after the piles are driven and cut off, prior to casting in place the concrete.

15. With reference to Section D-8 on Sheet S8, is the #9 reinforcing shop welded to the Line A and Line C Sleeves independent of the #9 reinforcing shop welded to the Line B Sleeve (this should be the case since neither weld is called out as a Field Weld).

    It is intended that the "end of pier" pile cap at bent 15 be precast. Therefore all welding of reinforcement is to be performed in the shop.

16. Please provide details for the #6 Tension Ties placed inside the Pipe Piles.

    The size and length of the tension ties are shown on sections A-7, A-8, and A-9, Sheets S7, S8, and S9 respectively.

17. Section D-9 on Sheet S9 calls for 18" Pile - please clarify

    Please see Addendum No. 1, Item 16. All piles are 20" in diameter. Sheet S9 has been revised to correct this error.

18. Drawing S-17 shows "Water and Electric Service to Pedestals." Is this provided by others? How does this work with the movable piers?

    Please see Sheet C-3 for general location of marine pedestals, which shall be the Contractor's responsibility to install. It is noted that the placement of the service pedestals does limit the flexibility of the timber finger docks. This is largely an operational issue.

19. Please confirm your requirement for CCA treatment - typically, ACQ is used for deck planks, rails, etc.

    All timber used in the construction of the pier shall receive CCA treatment.

20. Please provide details of your requirements for the Arch Corner Fender.

    Sheet S16 has been revised to show the details for the Arch Corner Fenders. Please see Addendum No. 1, Item 22.

21. The first two Pile Bents are to be sloped at 1:22, or approximately 1.4' in 31'. Does the slope start at the western edge of Precast Pile Cap 2 (Precast Pile Cap 2 level), or is Precast Pile Cap 2 to be set on the 1:22 slope? Precast Pile Cap 1 (and possibly Precast Pile Cap 2) will need to be set on the 1:22 slope. In that the Pipe Piles (and thus the Pile Cap Sleeves) are in a vertical plane, this makes Precast Pile Cap 1 (and possibly Precast Pile Cap 2) unique. Please provide details for Precast Pile Cap 1(and Precast Pile Cap 2 if it is to be set on the 1:22 slope).

    The slope starts at the western edge of precast pile cap 2. The cross slope along the top of pile cap 1 results in approximately 1" additional concrete along the eastern top edge of the cap. It is intended to adjust the concrete cover on the top of the cap to make up this 1" difference.

22. Please review project scheduling requirements and constraints. Contract duration is 340 days, Dredging window – Oct 15 to Jan 31, Pre-construction survey must be completed a minimum of 30 days before dredging. Doesn't this present an impossibility of performance?

Dredging operations shall only occur within the dredging window October 15, 2014 and January 31, 2015 or 108 calendar days. As such, it will be necessary to dredge around the proposed fixed pier, which will be under active construction. Space will be provided to temporarily anchor the concrete float and timber finger docks during dredging operation. Dredging under the footprint of the fixed pier is not required.

Project will be awarded by the Office of Purchases after the bids have been reviewed and all pre-award requirements have been satisfied by the selected vendor. Therefore, it is not possible to provide an anticipated date that the contract will be awarded. Please be advised that the dredge window is a seasonal restriction dictated by CRMC and should not be viewed as an intended duration to complete dredge operations. If the project is awarded prior to February 25, 2014, then the effective dredge window will be reduced accordingly. If the actual NTP limits the effective dredge window to <100 days, then a no cost increase in project time will be executed to provide a minimum effective dredge window of 100 calendar days.

23. There are no details provided for the Platform at the top of the Gangway. Drawing S2 would indicate that your intent is that the platform be constructed from timber framing. Please clarify.

    Sheet S4 has been revised to show the framing requirements for the gangway platform. Please see Addendum No. 1, Item 12.

24. Horizontal limit for Wave Fence is shown from Line “O” to Line “15,” and extending east of Line “15” (Sheet S3). Attachment details (Sheet S14) will only accommodate Wave Fence between Pipe Piles. Please provide attachment details for Wave Fence from Line “0” to Line “0.1,” and east of Line “15.”

    The wave fence shall be terminated at the west face of pile line 15. A detail has been provided on Sheet S15 for the connection of the bottom of the wave fence west of pile line "0". This detail will be reviewed at the time of construction. Please see Addendum No. 1, Item 21.

25. Sheet C-3, reference to Detail 1, Sheet C-6 indicates typical of six, yet eight are shown.

    Please see Addendum No. 1, Items 8, 24, and 25. The schematic layouts shown on C-3, E-1, and E-2 are correct. There are a total of eight pedestals proposed. The note has been revised accordingly.

26. The electrical line appears to extend to the proposed marine pump-out valve at end of fixed pier. Is this line necessary or can it terminate at the proposed mega yacht pedestal for the OHP?

    The electrical conduit in question is required for the proposed lighting system on the northern limits of the fixed pier. Please see Addendum No. 1, Items 24 and 25.

27. Please provide additional detail on the proposed navigational beacon at the end of the fixed pier.

    Please see Addendum No. 1, Items 7, 8, 24, and 25.

28. Is a stainless steel rub strip acceptable for piles jacketed in HDPE?

Please see Sheet S-17, Removable Pile Guide Section, which states "Use 1/8 inch stainless steel rub strip with timber backing for piles jacketed in HDPE".

29. Please provide detail on proposed rails for aluminum gangway. The objective appears to comply with providing a rail system designed for 4-inch spacing. Are balusters required on the handicapped accessible ramps?

    Yes, ramps, platforms and guards shall comply with ADA requirements with regard to rails, edge protection, and barriers.

30. Please provide details for gangway platform.

    Please see response to related question above.

31. Float guide pile shows an external splice, which would cause the float to hang up. An inside splice is recommended. Please consider.

    Drawing S4 has been revised to show an inside splice. Please see Addendum No. 1, Item 12.

32. The drilling quantities for 20-inch piles versus boring log may not match up. Please review drilled pile quantity. After reviewing pile logs, we feel that this quantity may be low.

    The pile quantity has been increased on the bid form to 12. See Addendum No. 1, Item 3.

33. Please clarify dredge window restrictions with regards to project duration. Will it be necessary to dredge under the fixed pier?

    Please see response to related question above.

34. Are the limits of disturbance for the proposed pump-out force main within a paved area?

    Yes, please see Sheet C-4.

35. Can pre-cast operations take place off-site?

    Yes, the pre-cast operations can take place at an off-site location. The Contractor shall advise the Engineer of the location during the submittal process. In addition, full access for inspection during the pre-cast operation shall be granted to the Owner and Engineer.

36. Provide clarification of the connection between the fixed pier and landing.

    Drawing S4 has been revised to provide details for the gangway landing. Please see Addendum No. 1, Item 12.

37. Please confirm that the contractor is not to provide piles for the wood finger floats and is to provide piles for the concrete floats only.

    The Contractor shall only provide piles for the fixed pier and guide piles for the concrete float. Piles for the timber finger floats are not part of the Contract.

38. Sheet E-2 calls out six marina pedestals but shows eight pedestals. Please clarify.

    Please see Addendum No. 1, Items 8, 24 and 25. The schematic layouts shown on C-3, E-1, and E-2 are correct. There are a total of eight pedestals proposed. The note has been revised accordingly.

39. Please provide electrical requirements for the pump out.

    Power requirements are: 208 volt, single phase circuit consisting of 25A/2P circuit breaker in the Marina Substation at the beginning of the pier. Run 2#10 and 1#10 gnd in ¾" conduit.

40. Please clarify the electrical source for the white beacon at end of pier.

    Power source shall be from the 208Y/120Vm 3-ph,4-wire panel located in the Marina Substation at the beginning of the pier.

41. Pile guides for the wood floats indicate HDPE shims. If HDPE jackets are used on the piles, stainless steel shims should be used to prevent the two HDPE surfaces from welding themselves together. Please consider.

    A stainless steel rub strip is required per Sheet S17 for piles jacketed with HDPE.

42. An internal drive shoe will provide a tighter fit in the hole. Please consider.

    We will consider the use of an internal driving shoe if it does not negatively impact the pile installation and load capacity. This is considered a greater concern at piles that will require drilling to allow for installation to the minimum tip elevation.

43. Stirrups are typically shown as closed with 135° returns (Type T1). Given the precast and cast-in-place geometry of the structure, these will be very difficult (if not impossible) to place. Can a 90° return be used (Type T2), or can a "candy cane" tie (Type T9) be substituted to facilitate reinforcing steel placement.

    Type T2 is an acceptable substitution. Type T9 or 2 - Type S10 may also be acceptable substitutions. Such substitutions will be reviewed during the shop drawing stage of the project and acceptability will be determined at that time.

44. Please refer to Drawing S6, and to Elevation B9 on Sheet S9. A Note requires "FIELD WELD #9 BAR EACH SIDE OF 20" PILE TO SPLICE WITH PRE-CAST PILE CAP BOTTOM CENTER BAR – TYP." The bottom center bar is shown on Section F-9. Section E-9 and F-9 appear to show a bottom and a top bar. Please clarify the intent in this area, and confirm the number of #9 bars that are to be welded to the Pipe Piles located on Lines 1.1 thru 14.1.

    Two straight bars are to be field welded on each side of the pipe piles located on lines 1.1 thru 14.1. The bars are intended to splice to the straight bars shop welded top and bottom to the 24" sleeves in the precast concrete caps.

45. Drawing S6 calls for a "BUU" layer of 2 each #9's – please clarify nomenclature and confirm quantity (Sections E-9 and F-9 appear to show 4 bars).

Delete note "2 - #9 BUU - SEE SECTION E-8/S8 FOR ADD'L SIDE BARS". Refer to sheet S9 for reinforcing requirements. Please see Addendum No. 1, Item 13.

46. Section A-7 on Sheet S7 calls for “#9 BARS WELDED TO CENTER OF 24” PILE SLEEVE” top and bottom. Are these bars spliced to the bars attached by welding to the prefabricated pile sleeve (Sheet S11), or are they welded to the sleeve in addition to the welded bars shown on Sheet S11.

    A straight bar may be lap spliced to the center bars that are welded to pipe sleeves to provide continuation of the reinforcing across the pile cap. It is not intended that additional bars be welded to the pipe sleeves.

47. Please provide a detail of the #5 closed tie (diagonal tie/diamond tie) shown in Section F-7 and F-8. It appears to be detailed as a continuous bar.

    Diagonal tie/diamond ties are not continuous. Standard 135 degree bends or a u-bar with type T9 or T12 are acceptable. Other substitutions will be considered if requested during the shop drawing review process.

48. Section D-8 shows the reinforcing steel at Bent 15. What are the reinforcing steel fabrication details for the center Pipe Sleeve (not shown on Sheet S11).

    A detail has been added to Sheet S11 detailing the center pile sleeve. Please see Addendum No. 1, Item 18.

49. With reference to Section D-8, it appears that it is your intent that the #9 bars coming from/attached to the exterior Pipe Sleeves be continuous (“MECHANICAL SPLICE IF REQUIRED”). This is not typical for the other Precast Pile Caps (Section D-7). Please review.

    A straight bar developed with a standard lap splice is acceptable to provide bar continuity. The mechanical splice was called off as a substitute if the contractor required additional clearance.

50. Note on Drawing S7 (Section C-7) calls for “FIELD PLACE EAST WEST REINFORCEMENT DURING CONSTRUCTION OF PILE CAPS ALONG A & C BENTS.” Section C-7 also calls for the #9 top steel to be continuous. This would indicate that these bars are not spliced. Please review.

    Standard splices in accordance with the notes on Sheet S1 are acceptable in placing continuous bars.

51. Section D-8 calls for #9 U-Bars with a 62” Class B splice. In that these bars are anchoring over Lines A & C, please review the splice requirement and consider an embedment lesser length measured from the inside Bent face.

    There appears to be adequate space to support the required lap splice. If clearance issues are apparent during shop drawing preparation we will take a closer review.

52. With reference to Section E-10, please define the limits of demolition (if any) of the existing concrete cap to accommodate Bent 1 construction.

Construction of the grade beam at the top of the pier is shown on Sheet S10. As noted on Section E10 the bottom of the grade beam sits 4 feet below the top of the existing concrete capped stone seawall. The contractor is required to remove this section of the existing concrete cap/stone seawall in order to construct the grade beam at the start of the pier. Bidders are also referred to the landscape plans for landward work adjacent to the new grade beam.

53. Where is the location of the proposed construction trailer for the engineer?

    Following the pre-bid meeting, it was determined that the Visitors Center would not be used for the engineers office. The construction trailers required in the contract documents shall remain. The trailer will be located adjacent to the Visitors Center. Electrical power can be obtained from the panel for the Visitors Center.

54. Should drilling spoils be removed from the piles?

    The plans (sheet S12) indicate the required depth of spoil removal from within the pier piles. The method used to remove spoils is the contractor's responsibility and must meet regulatory permit requirements and also may not result in damage to the pile or the coating on the pile.

55. Pile quantity are listed as per each, which includes 5-ft or 3-ft (depending on pile type) additional pile length. How will the Contractor be compensated should additional length be required in excess of the specified overage?

    If a pile length is required that exceeds the minimum tip elevation plus the overage, then the Contractor would be compensated in accordance with AIA Document A201, Article 7 and as amended in Section 00800.

56. Have you specified acceptable manufacturers of the concrete float systems?

    Yes, please see Section 03320, paragraph 1.6B.

57. Are external pile guides acceptable for the concrete floats?

    It is acceptable to propose external pile guides during the shop drawing process. However, it is noted that external pile guides may impact the overall design.

58. Can the dimensions of the float system vary from the units specified? SF Marine provides standard floats in metric dimensions.

    Yes.

59. Can utility lines be routed internal to floats?

    Yes, utilities can be routed internally or externally depending on actual manufactured unit. This shall be specified during the shop drawing process.

60. Will a deeper profile wave attenuator be considered in lieu of proposed concrete float?

    No.

61. Does Contractor have to install timber floats?

    See response to related question above. Seven of the twenty one finger docks shall be installed to demonstrate compliance with contract documents. The remaining docks shall be delivered to the site at a location to be determined.

62. How do you remove spoils from the pile?

    Refer to #54 above.

63. Are there MBE requirements?

    Yes, please see Invitation to Bid.

64. Please provide additional detail for the proposed electrical splice location?

    The existing secondary handhole currently houses a 3-phase circuit. The Contractor shall splice the new conductor to this line within the secondary handhole. This will require coring the handhole as well as new conduit. This work shall be coordinated with National Grid for shutdown of the existing transformer.

65. Can an internal collar type splice be used for the 14" steel pipe piles that anchor the concrete floats?

    An internal type splice is required for this application to avoid conflicts when installing the HDPE jacket over the piles. Contractor shall submit their proposed collar splice as a shop drawing for approval.

66. Do piles require internal or external drilling in areas of bedrock, obstructions, and/or hard driving?

    Please refer to the Pile Installation Notes on sheet S12 (reissued as Addendum No. 1, Item 19) for requirements related to the installation of all fixed pier support piles. All fixed pier support pile drilling must be done through the pile as described on sheet S12. For the concrete float anchor piles it is acceptable to drill either through the pile as described for the fixed pier piles or ahead of the pile. If an oversize hole is drilled ahead of the float anchor piles the Owner may require the contractor to use a vibratory hammer on the pile as described in the technical specifications to ensure the pile is sufficiently "locked" into bedrock or soil, after the pile is driven to the minimum required tip depth.

67. Would RIDEM consider adding a bid item for mobilization of the rock socket subcontractor? This item will be necessary whether you are doing 1 rock socket, or 13?

    No, any applicable mobilization cost shall be accounted for in the appropriate bid item.

68. In soil, till, or weathered rock, if refusal is reached above minimum tip, the Contractor is to drill within 1 foot of minimum tip elevation and subsequently drive pipe piles to “final depth.” Please confirm that “final depth,” “minimum tip,” and “estimated tip” are synonymous.

    Yes.

69. Please confirm that this drilling is reimbursed under the applicable “Drilling Sockets Into Rock” Pay Item.

    Only piles drilled and socketed into bedrock are reimbursed under the item. There is no additional cost for piles that must be drilled through till or weathered rock to reach minimum tip elevation. The Contractor should anticipate that most if not all piles will require this type of drilling to install them to the depth and tolerances required.

70. If refusal is encountered in sound bedrock, the Contractor is to drill to pile minimum tip elevation and subsequently drive pipe piles to “final depth.” Please confirm that “final depth,” “minimum tip,” and “estimated tip” are synonymous. Please confirm that this drilling is reimbursed under the applicable “Drilling Sockets Into Rock” Pay Item.

    Yes, the terms “final depth”, “minimum tip”, and “estimated tip” are synonymous. Also drilling is reimbursed under the applicable “Drilling Sockets into Rock” line item.

71. Drilling must be performed from inside the pile, and must be capable of removing all spoils. Please specify the diameter required for drilling sockets into rock.

    The drilling diameter shall be sufficiently large to allow for the piles to be driven into the bedrock the required socket length using the contractor’s proposed pile driving hammer. It is anticipated that the drill diameter will be just slightly smaller than the inside pile diameter.

72. Please define the “Owner controlled contingency” called out in Item B of the Bid Proposal.

    Terminology related to the “Owner Controlled Contingency” has been removed and the bid form has been reissued as Addendum No. 1, Item 3.

73. In the existing manhole, do we assume a splice to the existing cables? Also, will we need an expansion fitting at the beginning of the pier?

    Yes, please see response to question 64 above. Additionally the fixed pier will not require an expansion fitting, but the floating dock will require an expansion fitting.

74. On the pier, the drawings indicate marine pedestal, marine cable typical of 6, but 8 are shown. Please clarify which quantity is correct.

    See response to question 25 above.

75. At the end of the pier, a Beacon is shown. Who provides this, and where is it wired to?

    The Contractor shall furnish and install the pier light which shall be wired back to the marine substation. Please see the response to questions 26 and 27 above.

76. A cable specification would be helpful if possible.

    Cable for use on fixed pier and floating docks shall be flexible marine cable suitable for use in a salt water marine environment.

77. On Drawing E-1, what is note 2 referring to?

    This note shall be removed and the sheet reissued as Addendum No. 1, Item 24.

78. We are confused the way installation of the piles is specified in Drawing S12: The Engineer obviously expects that the piles be driven, at least the final foot (out of a total 5 feet), into the rock, even though he alerts on the presence of “obstructions, till and weathered rock” above the rock itself. There is no description of the rock type or quality, let alone a description of the type of “obstructions” that can be expected; or if the till would include boulders. Under those conditions, in our opinion the most sensible way to install the piles would NOT be by driving, but by DRILLING, using an overburden system. However, even then, we still don’t know anything about the rock. Therefore: We cannot assess the kind of productivity that we could get from our overburden system. From CRC’s perspective, it would be very uncertain whether you can drive an extra foot of pile (without damaging it) once we stopped drilling and pulled the overburden system’s hammer out of the pipe. In short, we are not comfortable the way the installation method is specified. In order to respond as responsibly as possible to the apparent designer’s intent we would have to deploy very expensive equipment and accept a very high degree of risk for a very small volume of work.

    Please refer to the boring logs (included in Addendum No. 1, Item 6 and Drawing sheet S-13) for information about the soil and bedrock. This includes the previous boring logs, specifically the old Guild Drilling Company logs. Boulders should be expected in the soil and one 2 ft boulder was indicated at boring B13-3. It is not our intent to cause damage to the piles when driving the last foot. The WEAP analysis to be provided by the Contractor as a submittal will be used to ensure the piles are not overstressed during driving this final foot. If necessary, during this method of installation, the pile tip will be allowed to remain above the required minimum tip elevation if driving stresses indicate damage may occur.

79. Bid quantity for Dredging is 12,000 cy, and bid quantity for Dredged Material Disposal is 10,300 cy. Specifications state that “debris” will not be placed in the CAD Cell. Are you anticipating 1,700 cy of debris to be generated by the dredging operations?

    Please see Addendum No. 1, Item 3. The bid quantity for the two related bid items has been revised to be consistent. The dredging bid quantity was increased to account for potential increases due to survey accuracy and methodology used to determine exact quantities for purposes of payment.

SECTION 00005
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SECTION 00310
BID PROPOSAL
BID PROPOSAL - GENERAL BIDS

TO THE CHIEF PURCHASING OFFICER OF THE STATE OF RHODE ISLAND, acting in the name and on behalf of the Department of Environmental Management, Division of Planning and Development.

The undersigned proposes to furnish all labor and materials required for **Fort Adams State Park Fixed Pier, Newport, Rhode Island** in accordance with the accompanying Contract Documents, plans and specifications prepared by the Department of Environmental Management, Division of Planning and Development for the Bid Price specified below, subject to additions and deductions according to the terms of the contract documents.

A. ADDENDA

This bid includes Addenda numbered:_____ and dated:_____
This bid includes Addenda numbered:_____ and dated:_____

B. BASE BID

Total proposed Base Bid Price:

_____ DOLLARS ($_____)
(Price in Words) (Numbers)

BASE BID BREAKDOWN:

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	In dollars and cents UNIT PRICE	AMOUNT BID
1	Mobilization and Demobilization	Lump Sum	1		
2	Fixed Pier Superstructure	Lump Sum	1		
3	Wave Fence	Lump Sum	1		
4	Fender System	Lump Sum	1		
5	Floating Dock	Lump Sum	1		
6	20” Steel Pipe Piles	Each	47		
7	14” Steel Pipe Piles with HDPE Jackets	Each	16		
8	Drilling 20” Sockets into Rock	Each	12		
9	Drilling 14” Sockets into Rock	Each	3		
10	Dredging	Cubic Yards	12,000		
11	Dredged Material Disposal	Cubic Yards	12,000	$17.00	
12	All Remaining Work	Lump Sum	1		

Total of Base Bid Breakdown $_____

NOTE: The sum of the price of all Base Bid Items should equal the Total Proposed Base Bid Price. In case of a conflict the Total Proposed Base Bid Price shall govern.

C. ALTERNATIVES:

1	Denso HD2000 System	Lump Sum	1

D. GENERAL CONTRACTOR AND SUBCONTRACTOR BASE BID PRICE BREAKDOWN

The PROPOSED BASE BID PRICE IS SUBDIVIDED AS FOLLOWS:
ITEM 1. The work of the General Contractor, being all work performed by the General Contractor's own work force:

_____DOLLARS $_____
(Price in words) (Numbers)

ITEM 2. The work of the General Contractor, being all work performed by a subcontractor not part of the General Contractor's own work force covered by ITEM 1 above:

SUB-TRADE	NAME OF SUBCONTRACTOR	AMOUNT
_____	_____	$_____
_____	_____	$_____
_____	_____	$_____

TOTAL OF ITEM NO. 2:_____ $_____
(Price in Words) (Price in Numbers)

E. QUALIFICATIONS OF SUBCONTRACTORS

The undersigned agrees that each of the above-named will be used for the work indicated at the amounts stated, unless a substitution is made with prior written approval of the Owner.

The undersigned further agrees to pay the premiums for the performance and payment bonds furnished by the subcontractors as required herein and that all of the cost of all such premiums is included in the amount set forth in item 1 of this bid.

F. LEGAL ORGANIZATION

The undersigned is a (an)_____(Individual-Partnership-Corporation-Joint Venture). Attach copies of articles of incorporation or partnership agreement, and Rhode Island Secretary of State's Certificate of Good Standing.

G. QUALIFICATIONS TO PERFORM WORK

The undersigned offers the following information as evidence of its organizational qualifications to perform the work as bid upon according to all requirements of the plans and the specifications.

1. The undersigned has been in business as a General Contractor under present business name for ___years.

2. List at least two and no more than five recent projects on which the undersigned served as the General Contractor for work of similar character as required for the above named project, along with the date of the project, the name of the Architect/Engineer, and the contract price

PROJECT NAME	**DATE**	**ARCHITECT/ENGINEER**	**CONTRACT PRICE**
1._____	_____	_____	$_____
2._____	_____	_____	$_____
3._____	_____	_____	$_____
4._____	_____	_____	$_____
5._____	_____	_____	$_____

3. List all construction contracts between the undersigned and the State of Rhode Island in the past five (5) years:

	PROJECT NAME	DATE	STATE AGENCY	STATE CONTACT PERSON	CONTRACT PRICE
1.					$
2.					$
3.					$
4.					$
5.					$
6.					$
7.					$
8.					$
9.					$
10					$

H. VIOLATION OF RI/DEM LAWS AND REGULATIONS

The undersigned is / is not (Please circle one) currently cited as being in violation of any law or regulation administered by the Department of Environmental Management.
If Yes please explain._____

I. REQUIREMENT FOR LICENSE NUMBER

In compliance with the requirements of Rhode Island General Law, Section 5-65-23, my Rhode Island license number for work to be performed by this firm as prime contractor is:

LICENSE NUMBER: _____

The undersigned acknowledges by signature below that the undersigned has read and understands the Information to Bidders, the terms of which are hereby incorporated into this Proposal.

DATE: _____

BIDDER: _____

BY: _____ _____
Signature Title

BUSINESS ADDRESS: _____

_____

_____

_____

TELEPHONE NUMBER: (_____)_____

FEIN NO.: __ __ -__ __ __ __ __ __ __

**************END OF PROPOSAL**************

DRAFT

AIA® Document A101™ – 2007

Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum

AGREEMENT made as of the « » day of « » in the year « »
(In words, indicate day, month and year.)

BETWEEN the Owner:
(Name, legal status, address and other information)

« Rhode Island Department of Environmental Management »« »
«Department of Planning and Development »
«235 Promenade Street »
«Providence, Rhode Island 02908 »

and the Contractor:
(Name, legal status, address and other information)

«»« »
« »
« »
« »

for the following Project:
(Name, location and detailed description)

«Fort Adams State Park»
«Newport, Rhode Island 02840»
«Bid No. 7535371 »

The Architect:
(Name, legal status, address and other information)

«The Louis Berger Group »« »
«295 Promenade Street »
«Providence, Rhode Island 02908 »
« »

The Owner and Contractor agree as follows.

ADDITIONS AND DELETIONS: The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201™–2007, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.

ELECTRONIC COPYING of any portion of this AIA® Document to another electronic file is prohibited and constitutes a violation of copyright laws as set forth in the footer of this document.

TABLE OF ARTICLES

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. No part of the Work shall be performed by Subcontractors without the Owner's prior written consent.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be the date fixed in a Purchase Order issued by the Owner.

«The Rhode Island Department of Administration, Division of Purchases shall issue a Purchase Order to authorize commencement of the work. The date of commencement shall be stipulated by the Purchase Order. »

§ 3.2 The Contract Time shall be measured from the date of commencement.

§ 3.3 The Contractor shall achieve Substantial Completion of the entire Work not later than «three hundred and forty days(«340») days from the date of commencement.

ARTICLE 4 CONTRACT SUM

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be « » ($ « »), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 The Contract Sum is based upon the following alternates, if any, which are described in the Contract Documents and are hereby accepted by the Owner:

(State the numbers or other identification of accepted alternates. If the bidding or proposal documents permit the Owner to accept other alternates subsequent to the execution of this Agreement, attach a schedule of such other alternates showing the amount for each and the date when that amount expires.)

« »

§ 4.3 Unit prices, if any:
(Identify and state the unit price; state quantity limitations, if any, to which the unit price will be applicable.)

Item	Units and Limitations	Price Per Unit ($0.00)

§ 4.4 Allowances included in the Contract Sum, if any:
(Identify allowance and state exclusions, if any, from the allowance price.)

Item	Price

ARTICLE 5 PAYMENTS

§ 5.1 PROGRESS PAYMENTS

§ 5.1.1 Based upon Applications for Payment submitted to the Architect by the Contractor and Certificates for Payment issued by the Architect and Statements of Account signed by the Architect, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month.

§ 5.1.3 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form and supported by such data to substantiate its accuracy as the Architect may require. This schedule, unless objected to by the Architect, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.4 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.5 Subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

.1 Take that portion of the Contract Sum properly allocable to completed Work as determined by multiplying the percentage completion of each portion of the Work by the share of the Contract Sum allocated to that portion of the Work in the schedule of values, less retainage of «five » percent (« 5 » %). Pending final determination of cost to the Owner of changes in the Work, amounts not in dispute shall be included as provided in Section 7.3.9 of AIA Document A201™–2007, General Conditions of the Contract for Construction;

.2 Add that portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction (or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing), less retainage of « five » percent (« 5 » %);

.3 Subtract the aggregate of previous payments made by the Owner; and

.4 Subtract amounts, if any, for which the Architect has withheld or nullified a Certificate for Payment as provided in Section 9.5 of AIA Document A201–2007.

§ 5.1.6 The progress payment amount determined in accordance with Section 5.1.6 shall be further modified under the following circumstances:

.1 Add, upon Substantial Completion of the Work, a sum sufficient to increase the total payments to the full amount of the Contract Sum, less such amounts as the Architect shall determine for incomplete Work, retainage applicable to such work and unsettled claims; and

(Section 9.8.5 of AIA Document A201–2007 requires release of applicable retainage upon Substantial Completion of Work with consent of surety, if any.)

.2 Add, if final completion of the Work is thereafter materially delayed through no fault of the Contractor, any additional amounts payable in accordance with Section 9.10.3 of AIA Document A201–2007.

§ 5.1.7 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 FINAL PAYMENT

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

.1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Section 12.2.2 of AIA Document A201–2007, and to satisfy other requirements, if any, which extend beyond final payment;

.2 a final Certificate for Payment has been issued by the Architect, a final Statement of Account has been signed by the Architect, and both the Certificate for Payment and Statement of Account have been approved in writing by the Owner; and

.3 the Contractor has submitted its final waiver of lien and final waivers of lien from all of its Subcontractors and suppliers in a form acceptable to the Owner; and

.4 the Contractor has submitted to the Owner all close-out documents, including without limitation, all as-built plans, warranties, manuals, and other materials set forth in the Contract Documents.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the issuance of the Architect's final Certificate for Payment and the delivery of the final Statement of Account.

§ 5.3 OWNERS RIGHTS

§ 5.3.1 The owner shall have the right to deduct from any payments due to the Contractor the amount of any unpaid obligations owed to the State of Rhode Island by the Contractor, including without limitation, any and all unpaid taxes, and to pay such deductions to the Controller of the State of Rhode Island.

§ 5.3.2 The owner shall have the right, on behalf of the State of Rhode Island, to deduct from any payments due to the Contractor the amount of any claim against the Contractor arising out of this Agreement or on account of any other reason.

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 INITIAL DECISION MAKER

The Purchasing Agent appointed in accordance with the provisions of R.I. Gen. Laws § 37-2-1 will serve as Initial Decision Maker pursuant to the provisions of R.I. Gen Laws § § 37-2-46 and 47, Rhode Island Procurement Regulations § 1.5, and Section 15.2 of AIA Document A201-2007.

§ 6.2 BINDING DISPUTE RESOLUTION

For any Claim not resolved by the procedures set forth in § 6.1, the method of binding dispute resolution shall be determined pursuant to the provisions of the Public Works Arbitration Act, R.I. Gen. Laws §§ 37-16-1 et seq., and R.I. Gen. Laws § 37-2-49.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2007. The Contractor may also be terminated by the Owner: (i) in the event of the unavailability of appropriated funds; (ii) in the absence of a determination of continued need; or (iii) as otherwise provided in the General Conditions of Purchase or applicable law.

§ 7.2 The Work may be suspended by the Owner as provided in the General Conditions of Purchase and/or Article 14 of AIA Document A201–2007.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2007 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 No interest shall be due or payable on account of any payment due or unpaid except in accordance with the provisions of "Prompt Payment by Department of Administration," R.I. Gen. Laws §§ 42-11.1-1 *et.seq.*

§ 8.3 The Owner's representative:
(Name, address and other information)

« »
« »
« »
« »
« »
« »

§ 8.4 The Contractor's representative:
(Name, address and other information)

« »
« »
« »
« »
« »
« »

§ 8.5 Neither the Owner's nor the Contractor's representative shall be changed without ten days written notice to the other party.

§ 8.6 Other provisions: None.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 The Contract Documents, except for the Purchase Order and Modifications issued after execution of this Agreement, are enumerated in the sections below.

§ 9.1.1 The Agreement is this executed AIA Document A101–2007, Standard Form of Agreement Between Owner and Contractor.

§ 9.1.2 The General Conditions are AIA Document A201–2007, General Conditions of the Contract for Construction.

§ 9.1.3 The Supplementary and other Conditions of the Contract:

Document	Title	Date	Pages
R.I. Gen. Laws 37-2-1 et seq.	State Purchasing Act		
State of Rhode Island Procurement Regulations			
Appendix A – General Conditions of Purchase			
R.I. Gen. Laws 37-16-1 et. Seq.	Public Works Arbitration Act		
R.I. Gen. Laws 42-11.1-1 et. Seq.	Prompt Payment by Department of Administration		

In the event of any conflict between the State of Rhode Island Procurement Regulations or any provision of the Rhode Island General Laws and the Supplementary and other Conditions of the Contract or other Contract Documents, the State of Rhode Island Procurement Regulations and the Rhode Island General Laws will control.

§ 9.1.4 The Specifications:
(Either list the Specifications here or refer to an exhibit attached to this Agreement.)
« »

Section	Title	Date	Pages

§ 9.1.5 The Drawings:
(Either list the Drawings here or refer to an exhibit attached to this Agreement.)
« »

Number	Title	Date

§ 9.1.6 The Addenda, if any:

Number	Date	Pages

Portions of Addenda relating to bidding requirements are not part of the Contract Documents unless the bidding requirements are also enumerated in this Article 9.

§ 9.1.7 Additional documents, if any, forming part of the Contract Documents:

..1 (List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201–2007 provides that bidding requirements such as advertisement or invitation to bid, Instructions to Bidders, sample forms and the Contractor's bid are not part of the Contract Documents unless enumerated in this Agreement. They should be listed here only if intended to be part of the Contract Documents.)

«The Project's Solicitation issued by the Rhode Island Department of Administration, Division of Purchases.

The RIVIP Bidder Certification Cover Form submitted by the Contractor. »

ARTICLE 10 INSURANCE AND BONDS

The Contractor shall purchase and maintain insurance and provide bonds as set forth in the Solicitation.
(State bonding requirements, if any, and limits of liability for insurance required in Article 11 of AIA Document A201–2007.)

Type of insurance or bond	Limit of liability or bond amount ($0.00)
Payment Performance Bond	

ARTICLE 11 NO LIENS

The Owner is the State of Rhode Island or a subdivision or agency of the State of Rhode Island, and therefore, pursuant to the provisions of R.I. Gen. Laws § 34-28-31, mechanics liens may not be placed against the Project.

ARTICLE 12 MISCELLANEOUS

§ 12.1 Domestic Steel. All steel products used or supplied in the Project by the Contractor, its Subcontractors or suppliers, shall comply with the provisions of the "Steel Products Procurement Act," R.I. Gen. Laws §§ 37-2.1-1 et seq.

§ 12.2 Occupational Safety. The Contractor shall conduct a construction safety awareness program for all on-site employees and otherwise comply with the provisions of "Safety Awareness Programs," R.I. Gen. Laws §§37-23-1 et seq.

§ 12.3 Prevailing Wages. The Contractor and its Subcontractors shall pay prevailing wage rates as promulgated for construction projects by the Rhode Island Department of Labor and Training Division of Professional Regulation and otherwise comply with all of the prevailing wages provisions of "Labor and Payment of Debts by Contractors," R.I. Gen. Laws §§ 37-13-1 et seq.

§ 12.4 Apprenticeship. The Contractor shall comply with the state public works contract apprenticeship requirements of R.I. Gen. Laws §§ 37-13-3.1 and the apprenticeship training program, and agreements provision of "Apprenticeship Programs in Trade and Industry," R.I. Gen. Laws §§ 28-45-1 et seq.

§ 12.5 MBE. The Contractor shall comply with the provisions of "Minority Business Enterprise," R.I. Gen. Laws §§ 37-14.1-1 et seq., and in particular, shall ensure that minority business enterprises have the maximum opportunity to participate in the performance of the Work.

§ 12.6 Disability. The Contractor shall comply with the provisions of the "Disability Business Enterprises Act," R.I. Gen. Laws §§ 37-2.2-1 et seq.

§ 12.7 Equal Opportunity. The Contractor shall comply with and demonstrate the same commitment to equal opportunity as prevails under federal contracts controlled by Federal Executive Orders 11246, 11625, 11375, and 11830 and the provisions of R.I. Gen. Laws § 28-5.1-10. Affirmative action plans must be submitted by the Contractor to the Rhode Island Equal Opportunity Office for review.

§ 12.8 Drug-Free Workplace. Pursuant to Executive Order No. 91-14, the Contractor shall comply with the State of Rhode Island drug-free workplace policy.

ARTICLE 13 THIRD-PARTY BENEFICIARY

The State of Rhode Island is a disclosed third-party beneficiary of this Agreement and shall have all of the rights and benefits to which such a party is entitled hereunder.

This Agreement entered into as of the day and year first written above; provided, however, that this Agreement shall not become effective until the Rhode Island Department of Administration Division of Purchases has issued a Purchase Order pursuant to § 3.1. The person signing for the Contractor below represents that he or she has been duly authorized to execute this Agreement on behalf of the Contractor.

OWNER *(Signature)*	CONTRACTOR *(Signature)*
« Janet Coit Director – R.I. Dept. of Environmental Management »« »	« »« »
(Printed name and title)	*(Printed name and title)*

SECTION 01015
CONTRACTOR'S USE OF THE PREMISES

PART 1 - GENERAL:

1.1 DESCRIPTION:

A. Work included: this section applies to situations in which the contractor or their representatives including, but not limited to, suppliers, subcontractors, employees, and field engineers, enter upon the Owner's property.

B. Related work: Documents affecting work of this section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE:

A. Promptly upon award of the contract, notify all pertinent personnel regarding requirements of this section.

B. Require that all personnel who will enter upon the Owner's property certify their awareness of and familiarity with the requirements of this section.

1.3 SUBMITTALS:

A. Maintain an accurate record of the names and identification of all persons entering upon the Owner's property in connection with the Work of this Contract, including times of entering and times of leaving, and submit a copy of the record to the Owner daily.

B. Submit access agreement for any land used for off-site storage and/or production.

1.4 TRANSPORTATION FACILITIES:

A. Truck, equipment and contractor's vehicle access:
   1. Provide adequate protection for curbs and sidewalks, and parking areas over which trucks and equipment pass to reach the job site.
   2. Do not permit contractor's vehicles to park in any area of the Owner's property except where the Owner has designated as the "Contractor's Parking Area".

1.5 CONTRACTOR LAYDOWN:

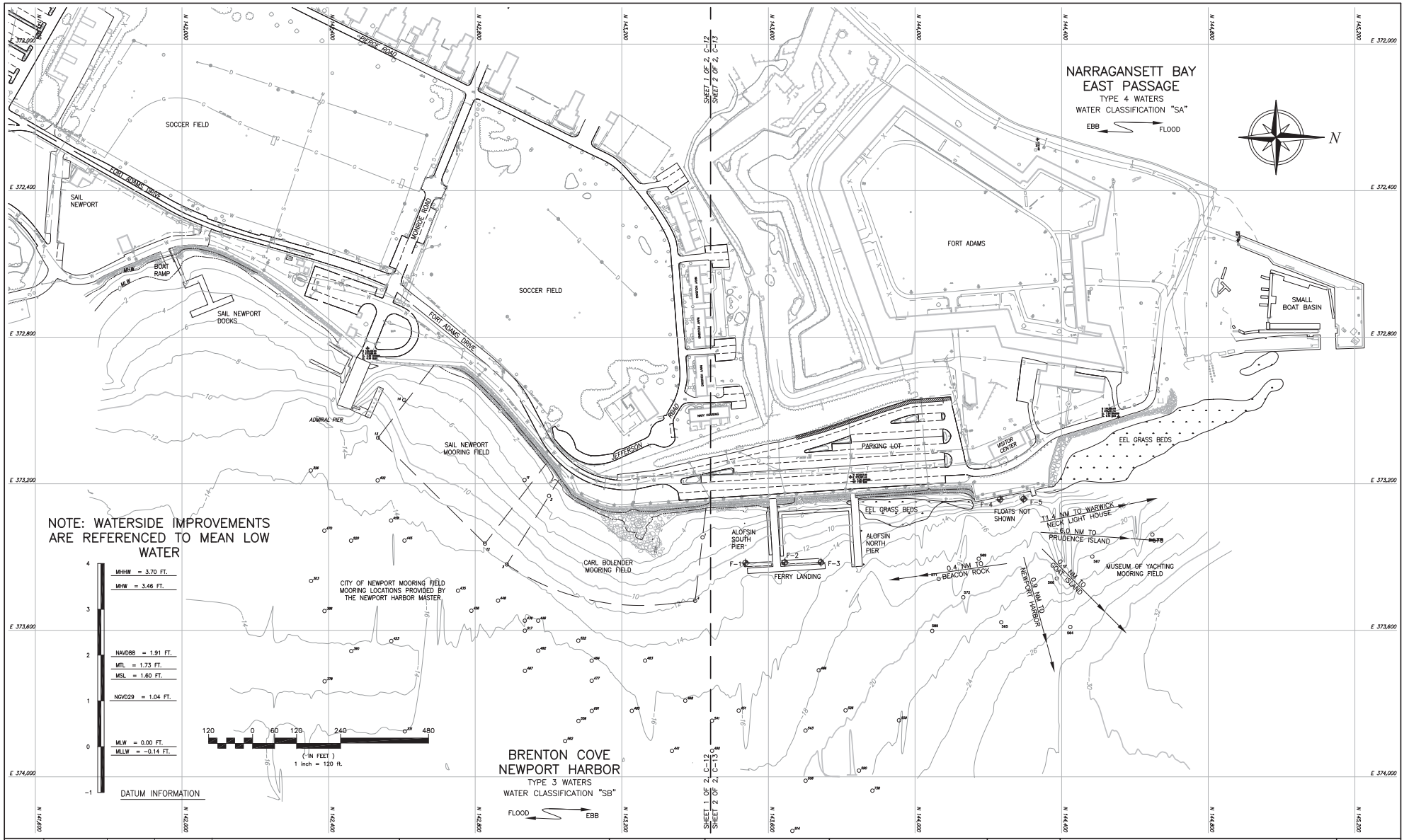
A. The Contractor may use the main parking lot adjacent to the Visitor's Center as a laydown and construction staging area subject to the following limitations:
   1. The Contractor shall not utilize the parking lot from May 15th to September 15th as a laydown area.
   2. The parking lot shall be swept, cleaned, and restriped (if necessary) by May 1st.
   3. The Contractor shall provide access to Fort Adams Trust and Visitor's Center at all times during the project. A total of twenty parking spaces must remain at all times.
   4. The Contractor shall not perform any work at the Fort Adams State Park from Friday August 1st to Sunday August 3rd 2014 during the Newport Jazz Festival, and from Friday July 25th to Sunday July 27 2014 during the Newport Folk Festival.

B. The Contractor may use the back half of the upper parking lot (adjacent to former guard station) for the duration of the project.

C. The Contractor shall utilize off-site staging for materials and equipment that cannot fit within the defines staging areas. The Contractor shall provide copies of agreements to the Owner for off-site storage.

**********END OF SECTION**********

Addendum 1, Item Attachment VI



NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION

The LOUIS BERGER GROUP, Inc.

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER
12/2/11

REGISTERED PROFESSIONAL ENGINEER

December 2, 2011
DATE

ST. JEAN ENGINEERING, LLC
Marine, & Structural Engineering
1145 Middle Road
East Greenwich, RI 02818
401.398.0999 email: st.jean.engineering@verizon.net

DRAWN BY: RSTJ
DEPT CHECK:
PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

WATER SIDE EXISTING CONDITIONS PLAN

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. 16-11

C-11

SHEET 12 OF 21

GUILD DRILLING CO., INC.

100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO Paul B. Aldinger & Associates, Inc. | ADDRESS East Providence, R.I. | HOLE NO. F-1

PROJECT NAME Prop. Newport Marine Terminal | LOCATION Newport, R.I. | PROJ. NO.

REPORT SENT TO above | OUR JOB NO. 99-24 | SURF. ELEV. -13.04

GROUND WATER OBSERVATIONS

At _____ after ____ Hours

At _____ after ____ Hours

	CASING	SAMPLER	CORE BAR.
Type	HW-NW	S/S	NV-II
Size I.D.	4" 3"	1-3/8"	
Hammer Wt.	300#	140#	BIT
Hammer Fall	24"	30"	Dia.

DATE

Start 7/10/98

Complete 7/13/98

Boring Foreman P. Brescia

Inspector/Engr.

LOCATION OF BORING 16' - Time: 8:30 AM - On the Water

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	To 6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev./ Depth	SOIL OR ROCK IDENTIFICATION Remarks include color, gradation, type of soil etc. Rock-color, type, condition, hardness, drilling time, seams, etc.	SAMPLE No.	Pen"	Rec."
	0	0.0-2.0	D	Wt.	of	Rods			Black Silty MUCK	1	24	2
	8											
	17	2.0-4.0	D	1	2	4		2.0	Gray fine SAND and Silt, some shells	2	24	10
	18					4						
	9	4.0-6.0	D	7	2	4				3	24	8
5	9					8		5.0	Gray medium to fine SAND, some fine to medium gravel, little silt			
	14											
	40							7.0				
		8.0-10.0	D	28	25	27			Olive Brown compact fine to medium SAND, Silt & fine Gravel, trace shale - Till	4	24	8
10						29						
15												
		15.0-16.2	D	10	100	*61/2"				5	14	6
								16.2	(Refusal - Roller Bit through 8" Boulder)			
		18.3-20.3	D	*13	*15	*21			Olive Brown Gray compact Silty TILL, some decomposed sandstone	6	24	12
20						*30						
25							Min/Ft					
		25.0-25.2	D	*78/2"			8	25.2		7	2	2
		25.2-30.2	C				5		Light Gray SLATE - Fractured	C1	60	54
							3		C1 REC 90%			
							3		RQD 14.8%			
30							6					
		30.2-35.2	C				6		* some quartz seams	C2	60	60
							5		C2 REC 100%			
							5		RQD 60.8%			
							6					
35							5					
								35.2	Bottom of Boring 35.2' (From Top of Mud Line)			

GROUND SURFACE TO _____ USED _____ CASING: THEN _____

Sample Type
D = Drive C = Cored W = Washed
UP = Fixed Piston UT = Shelby Tube
TP = Test Pit A = Auger
OE = Open End Rod
* 300# hammer

Proportions Used

trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb. Wt x 30" fall on 2" O.D. Sampler

Cohesionless	Density	Cohesive	Consistency	
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M./Stiff	
30-50	Dense	8-15	Stiff	
50+	Very Dense	15-30	V-Stiff	

SUMMARY:

Earth Boring 25.2'

Rock Coring 10'

Samples 7

HOLE NO. F-1

GUILD DRILLING CO., INC.

100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO Paul B. Aldinger & Associates, Inc. | ADDRESS East Providence, R.I. | HOLE NO. F-2

PROJECT NAME Prop. Newport Marine Terminal | LOCATION Newport, R.I. | PROJ. NO.

REPORT SENT TO above | OUR JOB NO. 99-24 | SURF. ELEV. -15.14

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	DATE	
At ____ after ____ Hours	Type	HW-NW	S/S	NV-II	Start	7/14/98
	Size I.D.	4" 3"	1-3/8"		Complete	7/15/98
At ____ after ____ Hours	Hammer Wt.	300#	140#	BIT	Boring Foreman	P. Brescia
	Hammer Fall	24"	30"	Dia.	Inspector/Engr.	

LOCATION OF BORING 17.5' - On the Water

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev./ Depth	SOIL OR ROCK IDENTIFICATION Remarks include color, gradation, type of soil etc. Rock-color, type, condition, hardness, drilling time, seams, etc.	SAMPLE No.	Pen"	Rec."
		0.0-2.0	D	Wt.	of	Rods			Black Silty MUCK	1	24	6
		2.0-4.0	D	2	2	4		2.0	Gray medium to fine SAND, some coarse sand,	2	24	10
						10			some silt, little fine gravel			
5												
		9.0-10.5	D	22	23	100		8.5	Olive Brown fine to medium SAND, Silt & fine to	3	18	12
10									medium Gravel - Till			
							Min/Ft	10.5	(Refusal at 10.5' - Boulder)			
		12.0-12.1	D	*100/1"			6		Olive Brown Silty TILL & Shale	4	1	1
		12.1-17.1	C				6	12.1		C1	60	60
							5		Light Gray SLATE - Fractured & Seamy			
15							7		C1 REC 100%			
							6		RQD 65%			
		17.1-22.1	C				7			C2	60	60
							6		C2 REC 100%			
							6		RQD 96.7%			
20							7					
							6					
		22.1-27.1	C				6			C3	60	60
							7		C3 REC 100%			
							6		RQD 72.5%			
25							6					
							6					
								27.1	Bottom of Boring 27.1'			
									(From Top of Mud Line)			

GROUND SURFACE TO _____ USED _____ CASING: THEN _____

Sample Type
D = Drive C = Cored W = Washed
UP = Fixed Piston UT = Shelby Tube
TP = Test Pit A = Auger
OE = Open End Rod
* 300# hammer

Proportions Used

trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb. Wt x 30" fall on 2" O.D. Sampler

Cohesionless	Density	Cohesive	Consistency	
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M./Stiff	
30-50	Dense	8-15	Stiff	
50+	Very Dense	15-30	V-Stiff	

SUMMARY:
Earth Boring 12.1'
Rock Coring 15'
Samples 4

HOLE NO. F-2

GUILD DRILLING CO., INC.

100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO Paul B. Aldinger & Associates, Inc. | ADDRESS East Providence, R.I. | HOLE NO. F-3

PROJECT NAME Prop. Newport Marine Terminal | LOCATION Newport, R.I. | PROJ. NO.

REPORT SENT TO above | OUR JOB NO. 99-24 | SURF. ELEV. -15.24

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	DATE	
At ____ after ____ Hours	Type	HW	S/S	NV-II	Start	7/20/98
	Size I.D.	4"	1-3/8"		Complete	7/20/98
At ____ after ____ Hours	Hammer Wt.	300#	140#	BIT	Boring Foreman	P. Brescia
	Hammer Fall	24"	30"	Dia.	Inspector/Engr.	

LOCATION OF BORING 16' - Time: 9:00 AM - On the Water

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev./ Depth	SOIL OR ROCK IDENTIFICATION Remarks include color, gradation, type of soil etc. Rock-color, type, condition, hardness, drilling time, seams, etc.	SAMPLE No.	Pen"	Rec."
		0.0-2.0	D	WOR	4	5			6" Black Muck - Gray silty fine SAND, Shells & Organics	1	24	6
						10						
		3.0-5.0	D	17	22	25		3.0	Olive Brown compact fine to medium SAND, Silt & fine to medium Gravel, Cobbles - Till	2	24	8
						28						
5							Min/Ft	5.0	(Top of Rock 5')			
		5.5-10.5	C				10		Light Gray SLATE - Fractured & Quartz Seams	C1	60	60
							8		C1 REC 100%			
							8		RQD 8.8%			
							9					
10							8					
		10.5-15.5	C				8		C2 REC 100%	C2	60	60
							8		RQD 36.7%			
							7					
							8					
15							7					
		15.5-20.5	C				7		C3 REC 100%	C3	60	60
							8		RQD 73.3%			
							8					
							7					
20							8					
								20.5	Bottom of Boring 20.5' (From Top of Mud Line)			

GROUND SURFACE TO _____ USED _____ CASING: THEN _____

Sample Type
D = Drive C = Cored W = Washed
UP = Fixed Piston UT = Shelby Tube
TP = Test Pit A = Auger
OE = Open End Rod
* 300# hammer

Proportions Used

trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb. Wt x 30" fall on 2" O.D. Sampler

Cohesionless	Density	Cohesive	Consistency	
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M./Stiff	
30-50	Dense	8-15	Stiff	
50+	Very Dense	15-30	V-Stiff	

SUMMARY:
Earth Boring 5'
Rock Coring 15'
Samples 2

HOLE NO. F-3

GUILD DRILLING CO., INC.

100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO Paul B. Aldinger & Associates, Inc. | ADDRESS East Providence, R.I. | HOLE NO. F-4

PROJECT NAME Prop. Newport Marine Terminal | LOCATION Newport, R.I. | PROJ. NO.

REPORT SENT TO above | OUR JOB NO. 99-24 | SURF. ELEV. -16.06

GROUND WATER OBSERVATIONS

At _____ after _____ Hours

At _____ after _____ Hours

	CASING	SAMPLER	CORE BAR.
Type	HW-NW	S/S	NV-II
Size I.D.	4" 3"	1-3/8"	
Hammer Wt.	300#	140#	BIT
Hammer Fall	24"	30"	Dia.

DATE

Start 7/15/98

Complete 7/16/98

Boring Foreman P. Brescia

Inspector/Engr. _____

LOCATION OF BORING 16' - Time: 9:00 AM - On the Water

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	To 6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev./ Depth	SOIL OR ROCK IDENTIFICATION Remarks include color, gradation, type of soil etc. Rock-color, type, condition, hardness, drilling time, seams, etc.	SAMPLE No.	Pen"	Rec."
	0	0.0-2.5	D	Wt.	of	Rods			Black Silty MUCK	1	30	4
	0											
	18	2.5-4.5	D	3	7	7		2.5	Gray fine to medium SAND, some silt, trace gravel	2	24	8
	48					8						
5	47											
	52											
	46											
		7.0-9.0	D	10	12	16		7.0	Olive Gray fine to medium SAND, Clayey Silt & fine to medium Gravel, trace shale	3	24	4
						20						
10												
		13.5-15.0	D	*21	*18	*60		13.5	Gray silty weathered SHALE	4	18	12
15							Min/Ft					
		15.0-20.0	C				7	15.0	(Refusal at 15' - Top of Good Rock)	C1	60	60
							6					
							6		Gray SLATE			
							7		C1 REC 100%			
							7		RQD 52.5%			
20		20.0-25.0	C				8			C2	60	60
							7		C2 REC 100%			
							7		RQD 66.7%			
							6					
							7					
25		25.0-30.0	C				7			C3	60	60
							7		C3 REC 100%			
							7		RQD 90.8%			
							8					
30							8					
								30.0	Bottom of Boring 30' (From Top of Mud Line)			

GROUND SURFACE TO _____ USED _____ CASING: THEN _____

Sample Type
D = Drive C = Cored W = Washed
UP = Fixed Piston UT = Shelby Tube
TP = Test Pit A = Auger
OE = Open End Rod
* 300# hammer

Proportions Used

trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb. Wt x 30" fall on 2" O.D. Sampler

Cohesionless	Density	Cohesive	Consistency	
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M./Stiff	
30-50	Dense	8-15	Stiff	
50+	Very Dense	15-30	V-Stiff	

SUMMARY:

Earth Boring 15'

Rock Coring 15'

Samples 4

HOLE NO. F-4

GUILD DRILLING CO., INC.

100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO Paul B. Aldinger & Associates, Inc. | ADDRESS East Providence, R.I. | HOLE NO. F-5

PROJECT NAME Prop. Newport Marine Terminal | LOCATION Newport, R.I. | PROJ. NO.

REPORT SENT TO above | OUR JOB NO. 99-24 | SURF. ELEV. -12.36

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR.	DATE	
At ____ after ____ Hours	Type	HW-NW	S/S	NV-II	Start	7/16/98
	Size I.D.	4" 3"	1-3/8"		Complete	7/17/98
At ____ after ____ Hours	Hammer Wt.	300#	140#	BIT	Boring Foreman	P. Brescia
	Hammer Fall	24"	30"	Dia.	Inspector/Engr.	

LOCATION OF BORING 14.5' - Time: 12:30 PM - On the Water

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler From 0-6	6-12	To 12-18	Moisture Density or Consist.	Strata Change Elev./ Depth	SOIL OR ROCK IDENTIFICATION Remarks include color, gradation, type of soil etc. Rock-color, type, condition, hardness, drilling time, seams, etc.	SAMPLE No.	Pen"	Rec."
		0.0-2.0	D	Wt.	of	Rods			Black Silty MUCK & Shells	1	24	2
		3.0-5.0	D	8	8	20			* some fine to medium sand & fine gravel	2	24	8
5						20						
								7.0				
		9.0-11.0	D	20	34	36			Olive Brown compact fine to medium SAND, Silt & fine to medium Gravel, Cobbles - Till	3	24	16
10						36						
15		15.0-17.0	D	*14	*11	*14				4	24	12
						*15	Min/Ft					
		17.5-22.5	C				6	17.5	Gray fractured SLATE with Quartzite Seams	C1	60	60
							7		C1 REC 100%			
							7		RQD 20%			
20							6					
		22.5-27.5	C				7					
							7		C2 REC 100%	C2	60	60
							6		RQD 47.5%			
25							7					
							6					
							7					
								27.5	Bottom of Boring 27.5' (From Top of Mud Line)			

GROUND SURFACE TO _____ USED _____ CASING: THEN _____

Sample Type
D = Drive C = Cored W = Washed
UP = Fixed Piston UT = Shelby Tube
TP = Test Pit A = Auger
OE = Open End Rod
* 300# hammer

Proportions Used

trace	0 to 10%
little	10 to 20%
some	20 to 35%
and	35 to 50%

140 lb. Wt x 30" fall on 2" O.D. Sampler

Cohesionless	Density	Cohesive	Consistency	
0-10	Loose	0-4	Soft	30 + Hard
10-30	Med. Dense	4-8	M./Stiff	
30-50	Dense	8-15	Stiff	
50+	Very Dense	15-30	V-Stiff	

SUMMARY:
Earth Boring 17.5'
Rock Coring 10'
Samples 4

HOLE NO. F-5

FAIRBANKS ENGINEERING CORPORATION

42 COBBLESTONE HILL ROAD, EXETER, RI
GEOTECHNICAL AND MARINE ENGINEERS

BORING NO. FA-02

SHEET 1 OF 1

PROJECT: FORT ADAMS CRANE AREA
NEWPORT, RHODE ISLAND

PROJECT NO. 11029.00
CHKD. BY RWF

BORING CO. N.H. Boring, Inc.
FOREMAN Don and Jason
ENGINEER FEC:RWF Sr.

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION _____ DATUM _____
DATE START 4/4/2012 DATE END 4/4/2012

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING 300 lb. HAMMER FALLING 24 IN.

CASING SIZE: OTHER: HSA

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME
4-Apr	9:15	4'6"		

DEPTH (ft)	CASING (bl/ft)	SAMPLE NO.	PEN. (in.)/ REC.	DEPTH (FT)	BLOWS/6"	TONS/FT^2 OR KG/CM^2	SAMPLE DESCRIPTION (Burmister CLASSIFICATION)	REMARKS	STRATUM DESCRIPTION
		S-1	24/2	0-2	10-15-14-10		6" of ASPHALT to dark brown F SAND, trace (+) Silt and F Gravel		Fill?
		S-2	24/0	2-4	7-5-4-3		N/R		
5		S-3	24/12	4-6	6-4-3-2		Dark brown F SAND, trace (+) Silt, pieces of Shale, F Gravel, orange staining present		Sand & Gravel
		S-4	24/6	6-8	1-1-2-1		Brown SAND and GRAVEL, trace Silt, pieces of Shale, orange staining present	1	
		S-5	24/14	8-10	8-3-1-1		Same		
10		S-6	24/8	10-12	1/12"-1-2		Orange SAND, trace F Gravel and Silt (18"+-) to gray SAND and Gravel, little silt	1	
		S-7	24/10	12-14	1-2-1-5		Orange brown SAND and F GRAVEL (4"+-) to gray F/M SAND, trace (-) Silt	1	
15		S-8	24/0	14-16	8-9-17-12		N/R		
								2	
							BOB @ 16 ft: No Refusal		
20									
25									
30									

GRANULAR SOILS

BLOWS/FT	DENSITY
0 - 4	V. LOOSE
4 - 10	LOOSE
10 - 30	M.DENSE
30 - 50	DENSE
>50	V.DENSE

COHESIVE SOILS

BLOWS/FT	DENSITY
<2	V.SOFT
2 - 4	SOFT
4 - 8	M.STIFF
8 - 15	STIFF
15 - 30	V.STIFF
>30	HARD

REMARKS:
1.) Loose zones correspond with the orange stained sand layers
2.) Located 64" south of boring FA-01

BURMISTER CLASSIFICATION

TRACE	0 - 10%
LITTLE	10 - 20%
SOME	20 - 35%
AND	35 - 50%

PERCENT BY WEIGHT

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

BORING NO. **FA-02**

FAIRBANKS ENGINEERING CORPORATION

42 COBBLESTONE HILL ROAD, EXETER, RI
GEOTECHNICAL AND MARINE ENGINEERS

BORING NO. FA-03

SHEET 1 OF 1

PROJECT: FORT ADAMS CRANE AREA
NEWPORT, RHODE ISLAND

PROJECT NO. 11029.00
CHKD. BY RWF

BORING CO. N.H. Boring, Inc.
FOREMAN Don and Jason
ENGINEER FEC:RWF Sr.

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION _____ DATUM _____
DATE START 4/4/2012 DATE END 4/4/2012

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING 300 lb. HAMMER FALLING 24 IN.

CASING SIZE: OTHER: HSA

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME
4-Apr		4'6"		

DEPTH (ft)	CASING (bl/ft)	SAMPLE NO.	PEN. (in.)/ REC.	DEPTH (FT)	BLOWS/6"	TONS/FT^2 OR KG/CM^2	SAMPLE DESCRIPTION (Burmister / CLASSIFICATION)	REMARKS	STRATUM DESCRIPTION
		S-1	24/16	0-2	10-20-17		6" of ASPHALT to dark brown F SAND, trace (+) Silt, F Gravel, pieces of Brick	1	Fill
		S-2	24/6	2-4	12-9-4-4		Black F/M SAND, trace (+) C Sand and F Gravel; Shale pieces mixed throughout		
5		S-3	24/12	4-6	18-11-4-3		Black F/M SAND, trace Silt and F Gravel to orange brown SAND and GRAVEL		
		S-4	24/6	6-8	2-2-1-1		Black SAND and GRAVEL, trace (-) Silt; Shale pieces mixed throughout		Sand & Gravel
		S-5	24/3	8-10	1-1-1-1		Dark brown SAND and GRAVEL, trace (-) Silt		
10		S-6	24/2	10-12	6-6-2-1		Dark brown F/M SAND, trace C Sand and F Gravel, trace (-) Silt		
		S-7	24/5	12-14	1/24"		Dark brown SAND and GRAVEL to gray F SAND		
15		S-8	24/16	14-16	5-7-22-24		Black F SAND and F GRAVEL to gray F SAND and F GRAVEL to tan F/M SAND and GRAVEL, trace (-) Silt throughout		
							BOB @ 16 ft: No Refusal		
20									
25									
30									

GRANULAR SOILS

BLOWS/FT	DENSITY
0 - 4	V. LOOSE
4 - 10	LOOSE
10 - 30	M.DENSE
30 - 50	DENSE
>50	V.DENSE

COHESIVE SOILS

BLOWS/FT	DENSITY
<2	V.SOFT
2 - 4	SOFT
4 - 8	M.STIFF
8 - 15	STIFF
15 - 30	V.STIFF
>30	HARD

REMARKS:
1.) Located 64" north of boring FA-01

BURMISTER CLASSIFICATION

TRACE	0 - 10%
LITTLE	10 - 20%
SOME	20 - 35%
AND	35 - 50%

PERCENT BY WEIGHT

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

FAIRBANKS ENGINEERING CORPORATION

42 COBBLESTONE HILL ROAD, EXETER, RI
GEOTECHNICAL AND MARINE ENGINEERS

BORING NO. FA-04

SHEET 1 OF 1

PROJECT FORT ADAMS CRANE AREA
NEWPORT, RHODE ISLAND

PROJECT NO. 11029.00
CHKD. BY RWF

BORING CO. N.H. Boring, Inc.
FOREMAN Don and Jason
ENGINEER FEC:RWF Sr.

BORING LOCATION SEE EXPLORATION LOCATION PLAN
GROUND SURFACE ELEVATION _____ DATUM _____
DATE START 4/4/2012 DATE END 4/4/2012

SAMPLER: UNLESS OTHERWISE NOTED, SAMPLER CONSISTS OF A 2" SPLIT SPOON DRIVEN USING A 140 lb. HAMMER FALLING 30 in.

CASING: UNLESS OTHERWISE NOTED, CASING DRIVEN USING 300 lb. HAMMER FALLING 24 IN.

CASING SIZE: OTHER: HSA

GROUNDWATER READINGS

DATE	TIME	WATER AT	CASING AT	STABILIZATION TIME
4-Apr		4'6"		

DEPTH (ft)	CASING (bl/ft)	SAMPLE NO.	PEN. (in.)/ REC.	DEPTH (FT)	BLOWS/6"	TONS/FT^2 OR KG/CM^2	SAMPLE DESCRIPTION Burmister CLASSIFICATION	REMARKS	STRATUM DESCRIPTION
		S-1	18/14	0.5-2	16-18-20		6" of ASPHALT to dark brown SAND and GRAVEL, trace Silt		Fill
		S-2	24/10	2-4	10-8-8-7		Dark brown SAND and GRAVEL, trace Coal: Shale pieces mixed throughout		
5		S-3	24/16	4-6	2-6-4-3		Dark brown SAND and GRAVEL, trace Silt; Shale pieces mixed throughout		
		S-4	24/2	6-8	6-7-7-5		Dark brown SAND to orange SAND, trace F Gravel		Sand & Gravel
		S-5	24/7	8-10	4-3-3-2		C SAND and F GRAVEL with orange staining present		
10		S-6	24/6	10-12	1-1/12"-1		Dark brown SAND and F GRAVEL, Shell piece in tip of spoon orange Sand in tip	1	
		S-7	24/6	12-14	3-1-1-2		Gray F SAND, trace (-) Silt		
15		S-8	24/18	14-16	12-16-19-26		Gray F SAND, trace (-) Silt to F SAND and Weathered SHALE, trace Silt	2	Till or weathered Bedrock?
							BOB @ 16 ft: No Refusal		
20									
25									
30									

GRANULAR SOILS	
BLOWS/FT	DENSITY
0 - 4	V. LOOSE
4 - 10	LOOSE
10 - 30	M.DENSE
30 - 50	DENSE
>50	V.DENSE

COHESIVE SOILS	
BLOWS/FT	DENSITY
<2	V.SOFT
2 - 4	SOFT
4 - 8	M.STIFF
8 - 15	STIFF
15 - 30	V.STIFF
>30	HARD

REMARKS:
1.) Loose zones correspond with the orange stained sand layers
2.) Located 51" west of boring FA-01

BURMISTER CLASSIFICATION	
TRACE	0 - 10%
LITTLE	10 - 20%
SOME	20 - 35%
AND	35 - 50%
PERCENT BY WEIGHT	

NOTES:
1) THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES, TRANSITIONS MAY BE GRADUAL.
2) WATER LEVEL READINGS HAVE BEEN MADE IN THE DRILL HOLES AT TIMES AND UNDER CONDITIONS STATED ON THE BORING LOGS. FLUCTUATIONS IN THE LEVEL OF GROUNDWATER MAY OCCUR DUE TO OTHER FACTORS THAN THOSE PRESENT AT THE TIME MEASUREMENTS WERE MADE.

BORING NO. **FA-04**

SECTION 16475
Pier Lighting

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Pier luminaires and accessories.

B. Lamps.

C. Luminaire accessories.

1.2 REFERENCES

A. ANSI C78.379 - Electric Lamps - Incandescent and High-Intensity Discharge Reflector Lamps - Classification of Beam Patterns.

B. NEMA WD 6 - Wiring Devices-Dimensional Requirements.

D. NFPA 70 - National Electrical Code.

E. NFPA 101 - Life Safety Code.

1.4 SUBMITTALS FOR REVIEW

A. Shop Drawings: Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.

B. Product Data: Provide dimensions, ratings, and performance data.

1.5 SUBMITTALS FOR INFORMATION

A. Section 01300 - Submittals: Submittals for information.

B. Submit manufacturer's installation instructions. Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

1.6 SUBMITTALS FOR CLOSEOUT

A. Submit manufacturer's operation and maintenance instructions for each product.

1.7 QUALIFICATIONS

A. Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum five (5) years documented experience.

1.8 REGULATORY REQUIREMENTS

A. Conform to requirements of NFPA 70.

B. Conform to requirements of NFPA 101.

C. Products: Listed and classified by Underwriters Laboratories, Inc. as suitable outdoor use in marine environment.

1.9 EXTRA PRODUCTS

A. Section 01700 - Project Closeout.

B. Furnish two (2) replacement lamps for each lamp type.

PART 2 - PRODUCTS

2.1 LUMINAIRES

A. Furnish SDL Lighting 3230 Bollard for pier illumination. Unit shall have a housing which is resistant to a marine environment having a color of white. Units shall be 15.5" tall. Units shall be provided with a cool white LED driven light source and be listed for wet locations. Units shall have a LED light source with a temperature range of 4000K to 5300K and shall be 80 CRI LUXEON rebel "ES" LEDs or approved equal. Each unit shall house enough LEDs to provide a minimum of 2100 Lumens.

1. Substitutions: Or approved equal

B. Furnish B & B Broadway Navigation Light; Bracket mounted pier light shall be Model #PL-BM. Light shall be designed and listed as marine signal light for marking stationary piers per Coast Guard requirements and shall be mounted per Coast Guard specifications. Housing shall be cast aluminum and suitable for marine environment. Construction shall be rain-tight and fully gasketed. The light assembly shall be designed for heavy duty, long life service. Design shall provide ready access for lamp service. Lens shall be heat resistant Fresnel glass. Nominal lens section shall be 180 degrees. Inside lens diameter shall measure approximately 7" (175mm). Outside lens diameter shall measure approximately 8" (205mm). Color shall be red. Lamp shall be 100 watt, 120 volt, A-19 shape, clear. Lamp shall have a rated life of 20,000 hours and shall be of a rough service design with multiple filament support fingers

1. Substitutions: Or approved equal

2.2 LAMPS

A. Incandescent Lamp Manufacturers:
1. Phillips
2. Osram Sylvania
3. General Electric

B. LED Lamp Manufacturers:
1. Phillips
2. Osram Sylvania
3. General Electric

C. Lamp Types: As specified for luminaire.

D. Reflector Lamp Beam Patterns: ANSI C78.379.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Locate bollard lighting as indicated on drawings.

B. Install bollard lighting using accessories and firestopping materials to meet regulatory requirements for fire rating.

C. Install bollard and pier lighting as specific by manufacture installation manual.

C. Install accessories furnished with each luminaire.

D. Make wiring connections to branch circuit using building wire with insulation suitable for temperature conditions within luminaire.

E. Bond products and metal accessories to branch circuit equipment grounding conductor.

F. Install specified lamps in each luminaire.

3.2 FIELD QUALITY CONTROL

A. Operate each luminaire after installation and connection. Inspect for proper connection and operation.

3.3 ADJUSTING

A. Aim and adjust luminaires as indicated or as directed.

3.4 CLEANING

A. Section 01700 - Project Closeout: Cleaning installed work.

B. Clean electrical parts to remove conductive and deleterious materials.

C. Remove dirt and debris from enclosures.

D. Clean photometric control surfaces as recommended by manufacturer.

E. Clean finishes and touch up damage.

3.5 DEMONSTRATION AND INSTRUCTIONS

A. Demonstrate luminaire operation for minimum of eight (8) hours.

3.6 PROTECTION OF FINISHED WORK

A. Relamp luminaires that have failed lamps prior to Substantial Completion.

3.7 SCHEDULES

A. See Plans.

**************END OF SECTION**************

NOTES:

1. THE PROPOSED FIXED PIER IS 24' WIDE AND 240' LONG AS SHOWN ON THE STRUCTURAL DRAWINGS.
2. THE PROPOSED CONCRETE FLOAT IS 12' WIDE AND 210' LONG AS SHOWN ON THE STRUCTURAL DRAWINGS.
3. THE PROPOSED FINGER PIERS ARE TIMBER FLOAT (6'X20') THAT MAY BE INSTALLED IN MULTIPLE CONFIGURATIONS TO ACCOMMODATE A WIDE RANGE OF EVENTS. THE FINGER PIERS WILL ONLY BE INSTALLED FOR SPECIAL EVENTS. NORMAL/TYPICAL OPERATION WILL BE FOR THE CONCRETE FLOAT TO RECEIVE WATER TAXIS.
4. THE FIXED PIER WILL BE ILLUMINATED WITH NIGHT SKY COMPLIANT LED BOLLARDS MOUNTED ON TIMBER CURBING. (SEE SHEET E-2 AND SPEC SECTION 16475)
5. A PIER LIGHT WITH A NIGHT SKY COMPLIANT WHITE LIGHT SHALL ILLUMINATE THE END OF THE PIER TO ADVISE MARINERS. (SEE SPEC SECTION 16475)
6. PRE-CAST CONCRETE PILE CAPS TO HAVE SLEEVES FOR PROPOSED UTILITY CONDUITS. (SEE STRUCTURAL SHEETS)
7. THE CONTRACTOR SHALL RELOCATE TWO EXISTING LIGHT POLES AS DEPICTED ON THE DRAWINGS. THE CONTRACTOR SHALL RECONNECT LIGHTS BACK TO EXISTING ELECTRICAL HANDHOLES.
8. THE CONTRACTOR SHALL PROVIDE NEW CONDUCTORS, SWEEPS, AND/OR HANDHOLES AS REQUIRED TO RELOCATE THE TWO LIGHTS. (SEE SHEET L-1)

1 / C8 1½" DECK HYDRANT TYPE VACUUM SEWER CONNECTION

EASTON MARINA MEGA YACHT PEDESTAL 100 A WITH 45 kVA 208Y/120 VOLTS TRANSFORMER AND (2) HOSE BIBBS

MARINA LIFE RING AND FIRE EXTINGUISHER STATION

2 IN. HDPE DR-17 VACUUM SEWER

MARINE PUMP OUT STATION WITH HOSE 3" NPT HDPE FEMALE ADAPTER AND 3" BALL VALVE

PIER LIGHT (WHITE LIGHT NIGHT SKY COMPLIANT)

MARINA PEDESTAL 208Y/120 VOLTS 100 A WITH 45 kVA TRANSFORMER AND (2) HOSE BIBBS — 1 / C6

MARINA SUBSTATION 277Y/480 VOLT PRIMARY 208Y/120 VOLT SECONDARY 150 kVA WITH PRIMARY AND SECONDARY PANELBOARDS

2 / C8 PUMP STATION

2 IN. B.V.

SSV OLIVER HAZARD PERRY

1 — 2" DRAIN VALVE AND VALVE BOX WITH 2" SQ. NUT PROVIDE HOLE IN DECK TO NUT

4 COND. 500 MCM 3" CONDUIT

3" TO 2" REDUCER

EXISTING SECONDARY MANHOLE

EXISTING 3" HDPE WATER

3" HDPE — 1 / C5

MARINE PUMP OUT STATION WITH HOSE

L SHAPED TIMBER FLOAT

60' TYP.

20' TYP.

28' TYP.

6' TYP.

2 IN. HDPE DR-17 VAC. SEWER

2 IN. DRAIN BALL VALVE

3" HDPE TAP, METER BOX, 2" WATER METER, AND 3" ISOLATION VALVE — 4 / C5

NOTE: INDIVIDUAL CABLES FROM SUBSTATION TO EACH MARINA PEDESTAL INSTALLED WITHIN UTILITY CHASE OF FLOATING PIER

TEMPORARY EVENT RELATED FINGER PIERS (6'x20' TYP.)

1 / C7 3" HDPE DR-17 SANITARY FORCE MAIN

NOTE: 2" HDPE POTABLE WATER INSTALLED WITHIN FLOATING PIER UTILITY CHASE; ¾" TAP TO EACH MARINA PEDESTAL — 2 / C6

1 / C6 MARINA PEDESTAL WITH (2) EA. 120V 30A RECEPTACLES AND HOSE BIBS-TYPICAL OF 8

EELGRASS

VAC VAC 2" VACUUM SEWER
SS SS 3" SANITARY FORCE MAIN
W POTABLE WATER
E E ELECTRIC
C.O. SANITARY CLEANOUT

20 0 20 40
SCALE OF FEET

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12-03-13	APS	CF	ADDENDUM 1

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., St. Jean Engineering, LLC., and Engineering Design Services, Inc.

CHRISTOPHER S. FEENEY 6680 REGISTERED PROFESSIONAL ENGINEER CIVIL

REGISTERED PROFESSIONAL ENGINEER

DATE

DRAWN BY: W. MAHONEY
DEPT CHECK: A. SYLVIA
PROJECT CHECK: C. FEENEY

FIXED PIER

PROPOSED FIXED PIER UTILITIES-GENERAL PLAN

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

C3

SHEET 5 OF 33

DESCRIPTION OF WORK

THE WORK COVERED UNDER THESE CONTRACT DOCUMENTS, INCLUDING THE DRAWINGS, GENERAL NOTES, AND SPECIFICATIONS AND ALL AMENDMENTS, CONSISTS OF PROVIDING ALL PLANT, LABOR, SUPERVISION, EQUIPMENT, APPLIANCES AND MATERIALS AND IN PERFORMING ALL OPERATIONS IN CONNECTION WITH AT LEAST, BUT NOT NECESSARILY LIMITED TO, THE FOLLOWING ITEMS:

1. CONSTRUCTION OF FIXED PIER
2. CONSTRUCTION OF FLOATING DOCK SYSTEM
3. LANDSIDE WORK IN CONNECTION WITH PIER/DOCK CONSTRUCTION

THE CONTRACTOR SHALL PROVIDE ALL ITEMS AND ACCESSORIES REQUIRED TO COMPLETE ALL ASPECTS OF THE WORK NEEDED FOR A COMPLETE AND PROPER INSTALLATION, ALL IN STRICT ACCORDANCE WITH THE CONTRACT DOCUMENTS

GENERAL NOTES:

1. LANDSIDE TOPOGRAPHY WAS DEVELOPED BY WATERMAN ENGINEERING COMPANY, EAST PROVIDENCE AND PROVIDED ON PLANS DATED MARCH 10, 2011. HYDROGRAPHIC INFORMATION SHOWN IS THE RESULT OF A BATHYMETRIC SURVEY COMPLETED IN 2012. ALL GRADES AND DIMENSIONS AND BATHYMETRY SHALL BE FIELD VERIFIED PRIOR TO ANY CONSTRUCTION.
2. SOUNDINGS AND UPLAND TOPOGRAPHY ARE REFERENCED TO MEAN LOW WATER (MLW). BENCHMARK SET ON SITE IS SHOWN ON SHEET C1.
3. THIS PLAN WAS PRODUCED FOR PURPOSES OF DESIGN, PLANNING AND THE CONSTRUCTION OF A NEW FIXED PIER AND FLOATING DOCK SYSTEM. USE OF THIS PLAN FOR ANY OTHER WORK IS AT THE SOLE RISK OF THE END USER.
4. ALL WORK SHALL COMPLY WITH LOCAL LAWS AND STATUTES AND THE REQUIREMENTS AND CONDITIONS OF ALL REGULATORY PERMITS ISSUED FOR THE WORK.
5. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS REGULATORY PERMITS AND ALL CONDITIONS OF THOSE PERMITS. THE CONTRACTOR IS ADVISED THAT THE REGULATORY PERMITS FOR THIS PROJECT MAY CONTAIN ADDITIONAL REQUIREMENTS THAT, AFTER ANY ADDENDUM, SUPERSEDE THE DRAWING NOTES. THE CONTRACTOR IS FURTHER ADVISED THAT IN THE CASE OF ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS FOUND BEFORE CONSTRUCTION, THE FINAL DECISION AS TO WHAT INFORMATION TAKES PRECEDENCE WILL BE MADE BY THE ENGINEER OF RECORD ON THE BASIS OF THAT INTENT.
6. ALL EXISTING CONDITIONS AND DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND FABRICATION OR ORDERING OF ANY CONSTRUCTION MATERIALS.
7. ALL SECTIONS AND DETAILS APPLY TO SAME AND SIMILAR CONDITIONS UNLESS SPECIFICALLY NOTED OTHERWISE HEREIN.
8. DAMAGE TO ANY PROPERTY, PRIVATE OR OF PUBLIC TRUST, OCCURRING DURING THE CONSTRUCTION BY THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.
9. THE CONTRACTOR SHALL USE ADEQUATE NUMBERS OF SKILLED WORKMEN WHO ARE THOROUGHLY TRAINED AND EXPERIENCED IN THE NECESSARY CRAFTS AND WHO ARE COMPLETELY FAMILIAR WITH THE SPECIFIED REQUIREMENTS AND METHODS NEEDED FOR PROPER PERFORMANCE OF THE WORK.
10. THE CONTRACTOR SHALL USE EQUIPMENT ADEQUATE IN SIZE, CAPACITY, AND NUMBERS, AND PROPERLY MAINTAINED WITH REGARD TO THE SAFETY OF OPERATOR, OTHER WORKMEN, AND GENERAL PUBLIC.
11. THE CONTRACTOR SHALL PROTECT ALL WETLANDS AND COASTAL RESOURCES FROM INTRUSION BY TURBID WATERS, CONSTRUCTION DEBRIS, CONSTRUCTION EQUIPMENT, OR PERSONNEL DURING ALL WORK ACTIVITIES.
12. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL NECESSARY PERMITS, LICENSES, CERTIFICATES OF INSPECTION, AND PAY ALL LEGAL FEES IN CONNECTION WITH THE WORK OF THIS CONTRACT. THE OWNER HAS OBTAINED NECESSARY REGULATORY PERMITS REQUIRED FOR THE WORK IN REGULATED AREAS. THE CONTRACTOR SHALL REQUEST COPIES OF THOSE REGULATORY PERMITS AND MAKE PROVISION IN THIS WORK AND IN THE COST OF THE WORK FOR ALL APPLICABLE CONDITIONS OF THOSE PERMITS. FAILURE TO CONSIDER ANY CONDITION OF THE REGULATORY PERMITS AS A PART OF THE BID SHALL NOT RELIEVE THE CONTRACTOR FROM HIS RESPONSIBILITY TO APPLY THOSE CONDITIONS TO HIS WORK AT NO ADDITIONAL COST TO THE OWNER.
13. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT FROM DAMAGE ALL ABOVE AND BELOW GROUND UTILITIES AND, UTILITY STRUCTURES, PRIOR TO ANY WORK.
14. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RESTORE ALL LANDSCAPING , INCLUDING BUT NOT LIMITED TO LAWN, TREES, PLANTINGS, ETC. DAMAGED BY THE CONTRACTOR DURING THE COURSE OF THE PROJECT.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT & POSITIONING OF ALL PROPOSED STRUCTURES AS SHOWN ON THE PROJECT DRAWINGS.

CAST-IN-PLACE / PRE-CAST CONCRETE:

1. CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 301 AND ACI 350, LATEST EDITION.
2. CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 5,000 PSI, IN ACCORDANCE WITH ASTM STANDARDS.
3. PORTLAND CEMENT: ASTM C150, TYPE II
4. AIR ENTRAIN ALL CONCRETE TO 5-6%.
5. NO CHLORIDES SHOULD INTENTIONALLY BE ADDED. TOTAL WATER SOLUBLE CHLORIDE ION (CI) CONTENT OF THE CONCRETE PRIOR TO EXPOSURE SHOULD NOT EXCEED 0.10 PERCENT BY WEIGHT OF THE CEMENT FOR NORMAL REINFORCED CONCRETE AND 0.06 PERCENT BY WEIGHT FOR PRESTRESSED CONCRETE.
6. WATER-CEMENT RATIOS AND COMPRESSIVE STRENGTHS FOR THE THREE (3) EXPOSURE ZONES SHALL BE AS FOLLOWS:

ZONE	MAX. W/C RATIO	MIN. 28 DAY CYLINDER COMPRESSIVE STRENGTH
SUBMERGED	0.45	5000 PSI (35 MPa)
SPLASH	0.40	5000 PSI (35 MPa)
ATMOSPHERIC	0.40	5000 PSI (35 MPa)

MAXIMUM SLUMP SHALL BE 4".

7. REINFORCING STEEL SHALL BE ASTM A615 GR. 60 HOT DIPPED GALVANIZED. REINFORCING STEEL SCHEDULED FOR WELDING SHALL BE ASTM A706. NOMINAL CONCRETE COVER FOR CAST-IN-PLACE CONCRETE OVER REINFORCEMENT SHALL BE AS FOLLOWS:

ZONE	COVER OVER PRIMARY REINFORCING STEEL	COVER OVER STIRRUPS, SPIRALS, AND TIES
SUBMERGED	3 in. (64 mm)	2.5 in. (51 mm)
*SPLASH	3.5 in. (76 mm)	3 in. (64 mm)

NOMINAL CONCRETE COVER FOR PRECAST CONCRETE SHALL BE AS FOLLOWS;

ZONE	COVER OVER PRIMARY REINFORCING STEEL	COVER OVER STIRRUPS, SPIRALS, AND TIES
SUBMERGED	2.5 in. (64 mm)	2 in. (51 mm)
*SPLASH	3.0 in. (76 mm)	2.5 in. (64 mm)

*NOTE: SPLASH ZONE INCLUDES ATMOSPHERIC ZONE SUBJECT TO SALT SPRAY.

8. CONSTRUCTION JOINTS SHALL BE PREPARED WITH EXTRA CARE AS FOLLOWS:
   (a) CAREFUL PREPARATION OF THE SURFACE BY HEAVY WET ABRASIVE BLASTING OR HIGH-PRESSURE WATER JET TO REMOVE LAITANCE AND TO EXPOSE THE COARSE AGGREGATE. THE MAXIMUM SIZE AGGREGATE SHOULD BE EXPOSED TO ABOUT 25 PERCENT OF ITS NORMAL DIAMETER.
   (b) USE AN EPOXY-RESIN BONDING COMPOUND SPRAYED ON JUST BEFORE CONCRETING. APPLY IN STRICT CONFORMANCE TO MANUFACTURER'S RECOMMENDATIONS. SUPPLY MANUFACTURER, PRODUCT INFORMATION AND APPLICATION LITERATURE TO ENGINEER FOR APPROVAL PRIOR TO USE.
   (c) INCREASING THE CEMENT CONTENT OF THE CONCRETE AT THE START OF THE NEXT PLACEMENT.
9. HOT DIPPED GALVANIZED REINFORCING BAR SPLICES SHALL OVERLAP A MINIMUM OF 56 BAR DIAMETERS FOR #7 AND LARGER BARS, 36 DIAMETERS FOR #6 AND SMALLER BARS, AND 28 BAR DIAMETERS FOR STIRRUPS, SPIRALS AND TIES, UNLESS OTHERWISE NOTED.
10. CONTRACTOR SHALL SUBMIT PLACING DRAWINGS AND SHOP DRAWINGS FOR ALL REINFORCEMENT USED IN THE PROJECT.
11. IN HOT WEATHER CONCRETE SHALL BE PROTECTED IN ACCORDANCE WITH ACI 305R-89.
12. THE REPAIRING OF DAMAGED OR ABRADED SURFACES OF THE HOT DIPPED GALVANIZED COATING SHALL BE DONE WITH MATERIALS RECOMMENDED FOR THIS PURPOSE BY THE MANUFACTURER OF THE COATING MATERIALS AND APPROVED BY THE OWNER. REPAIR COATINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS AND DIRECTIONS.

STRUCTURAL STEEL

1. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE "MANUAL OF STEEL CONSTRUCTION - ASD", NINTH EDITION, AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC).
2. ALL WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE FOR STEEL" (AWS D1.1) LATEST EDITION, AS ADOPTED BY THE AMERICAN WELDING SOCIETY (AWS). ALL WELDING SHALL BE PERFORMED BY A CERTIFIED WELDER IN ACCORDANCE WITH AWS STANDARDS.
3. ALL CONNECTIONS SHALL BE DESIGNED BY A STEEL FABRICATOR EXCEPT THOSE SPECIFICALLY DETAILED ON THE CONTRACT DOCUMENTS.
4. STRUCTURAL STEEL MATERIALS SHALL MEET THE FOLLOWING REQUIREMENTS:
5. STEEL SECTIONS AND MISC: ASTM A572 GRADE 50 UNLESS OTHERWISE NOTED
6. BOLTS: ASTM A325 WITH HEAVY HEXAGONAL HEADS
7. NUTS: ASTM A563 WITH HEAVY HEXAGONAL HEADS
8. WASHERS: ASTM F436 OVERSIZED DOCK WASHERS
9. WELD RODS: ASTM A233, E70XX SERIES ELECTRODES AS REQ'D FOR CONDITIONS OF INTENDED USE
10. BOLTS, NUTS, & WASHERS: ALL BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED FOR EXTREME SERVICE (MIN. 4 MIL THICKNESS U.O.N.) IN ACCORDANCE WITH ASTM A153 AND MEET MINIMUM TESTS OF ASTM A239.

STEEL PIPE PILES

1. PIPE PILES SHALL BE MINIMUM ASTM A252 GR. 3 (Fy 45 KSI).
2. THE CONTRACTOR SHALL SUBMIT FOR EACH SHIPMENT CERTIFICATES AND IDENTIFICATION WITH SPECIFIC LOTS PRIOR TO INSTALLING PILING. IDENTIFICATION DATA SHALL INCLUDE PILING TYPE, DIMENSIONS, CHEMICAL COMPOSITION, MECHANICAL PROPERTIES, SECTION PROPERTIES, HEAT NUMBER, AND MILL IDENTIFICATION MARK.
3. THE CONTRACTOR SHALL SUBMIT DESCRIPTIONS OF PILE DRIVING EQUIPMENT TO BE EMPLOYED DURING THE PROJECT TO THE OWNER FOR REVIEW. DESCRIPTIVE INFORMATION TO INCLUDE MANUFACTURER'S NAME, MODEL NUMBERS, CAPACITY, RATED ENERGY, HAMMER DETAILS, CUSHION MATERIAL, HELMET, AND TEMPLATES.
4. A PILE HAMMER SHALL BE UTILIZED HAVING A DELIVERED FORCE OR ENERGY SUITABLE FOR THE TOTAL WEIGHT OF THE PILE AND THE CHARACTER OF THE SUBSURFACE MATERIAL TO BE ENCOUNTERED. USE A PROTECTING CAP DURING DRIVING TO PREVENT DAMAGE TO THE TOP OF THE PILE. ALL DAMAGE TO THE PILE CAUSED BY DRIVING SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL SUBMIT A WAVE EQUATION ANALYSIS OF PILE DRIVING (WEAP ANALYSIS) TO THE ENGINEER FOR REVIEW PRIOR TO THE START OF PIPE PILE INSTALLATION.
6. A PILE DRIVING RECORD OF ALL PILES SHALL BE MAINTAINED AND AS A MINIMUM CONTAIN THE FOLLOWING INFORMATION:
   - PILE REFERNECE NUMBER OR LOCATION
   - PILE LENGTH
   - DATE OF DRIVING
   - DEPTH DRIVEN
   - LENGTH OF EXTENSIONS
   - PILE TYPE AND GRADE OF STEEL
   - TYPE OF HAMMER
   - COMMENCING SURFACE LEVEL
   - LENGTH OF OFF CUTS
   - MEASUREMENT OF DRIVING RESISTANCE

   ALL INFORMATION REGARDING INTERUPTIONS, UNEXPECTED CHANGES IN DRIVING CHARACTERISTICS, AND TIMES TAKEN TO OVERCOME THEM
7. PIPE PILES SHALL BE GUIDED AND HELD IN POSITION BY TEMPORARY GATES OR A TEMPLATE OR GUIDE SYSTEM TO INSURE PILES ARE DRIVEN TO LINE AND PLUMB OR PROPERLY BATTERED AS REQUIRED. IF THE PILE BECOMES UNALIGNED DURING DRIVING THE CONDITION SHALL BE CORRECTED IMMEDIATELY AND THE PILE RE-DRIVEN TO PROPER ALIGNMENT.
8. PILE TOLERANCES SHALL BE AS PROVIDED IN TECHNICAL SPECIFICATIONS SECTION 02363 - STEEL PIPE PILES
9. BORING LOGS INDICATE THAT BEDROCK OR HARD DRIVING MAY BE ENCOUNTERED. REFER TO SHEET 12 FOR SPECIFIC REQUIREMENTS RELATED TO PILE INSTALLATION.

STEEL COATING

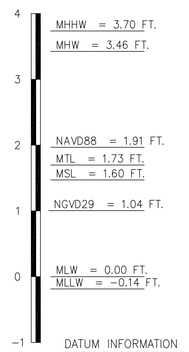
1. THE SURFACES OF THE STEEL PIPE PILES FURNISHED AND ERECTED SHALL BE COATED WITH BITUMASTIC 300 M COAL TAR EPOXY AS MANUFACTURED BY CARBOLINE OR APPROVED EQUAL. COATING SYSTEM SHALL BE BLACK IN COLOR.
2. ALL SURFACES SHALL BE CLEANED, AT A MINIMUM, TO STEEL STRUCTURES PAINTING COUNCIL SURFACE PREPARATION SPECIFICATIONS SSPC-SP3 PRIOR TO THE APPLICATION OF THE COATING SYSTEM. ALL WORK CLEANED IN ONE DAY MUST BE COATED ON THAT DAY AS SOON AS POSSIBLE AFTER BLASTING. THE EPOXY SHALL BE APPLIED WHEN THE SURFACE AND AIR TEMPERATURES ARE AT LEAST 50 DEGREES FAHRENHEIT. ALL SURFACES TO BE COATED SHALL BE COMPLETELY DRY, FREE OF MOISTURE, SOIL, DUST, SALT, AND GRIT AT THE TIME OF COATING.
3. THE COATING SHALL BE APPLIED WITH BRUSH OR SPRAY IN AT LEAST TWO COATS TO A MINIMUM DRY FILM THICKNESS OF 16 MILS. EACH COAT SHALL BE COMPLETELY CURED BEFORE SUCCEEDING COATS ARE APPLIED AS PER MANUFACTURER'S INSTRUCTIONS. PREPARATION AND APPLICATION SHALL BE PERFORMED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND IN THE PRESENCE OF AN OWNER'S REPRESENTATIVE. COATED SURFACES, EXCEPT FOR SPLICED AREAS, SHALL NOT BE IMMERSED FOR AT LEAST 14 DAYS AFTER THE APPLICATION OF THE COATING. AFTER DRIVING, ABRADED AND OTHERWISE DAMAGED AREAS OF COATING ABOVE LOW WATER SHALL BE GENEROUSLY COATED WITH THE MATERIAL SPECIFIED BELOW FOR THIS PURPOSE.
4. THE COATING SHALL EXTEND TO A MINIMUM OF FIVE (5) FEET BELOW THE FINAL MUD LINE ON ALL PILES. (1)
5. THE REPAIRING OF DAMAGED OR ABRADED SURFACES, INCLUDING COATING AREAS REMOVED FROM WELDING, OF THE COAL TAR EPOXY COATING SHALL BE DONE WITH THE COAL TAR EPOXY MATERIAL OF THE SAME TYPE USED FOR THE INITIAL APPLICATION; OR OTHER MATERIAL RECOMMENDED FOR THIS PURPOSE BY THE MANUFACTURER OF THE COATING MATERIALS AND APPROVED BY THE OWNER. REPAIR COATINGS SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTRUCTIONS AND DIRECTIONS.
6. THE COATING SHALL BE READILY APPLIED WITHOUT THINNING. IF THINNING IS DESIRED BY THE CONTRACTOR, ADDITIONAL COATS MAY BE REQUIRED TO ACHIEVE THE SPECIFIED FILM THICKNESS. THINNING SHALL NOT BE DONE WITHOUT THE PRIOR APPROVAL OF THE OWNER.
7. SATISFACTORY PERFORMANCE WILL BE THE BASIS OF ACCEPTANCE OF THE COMPLETED WORK BY THE OWNER. ACCEPTANCE OF THE COMPLETED WORK SHALL BE BASED UPON VISUAL INSPECTION BY THE OWNERS' REPRESENTATIVE FOR PINHOLES, FILM CONTINUITY, AND QUALITY OF APPLICATION. DETECTION OF INADEQUATELY COATED AREAS WILL BE INDICATED BY THE OWNER BY CIRCLING THESE AREAS IN CHALK. THESE AREAS SHALL BE REPAIRED BY THE CONTRACTOR. AT HIS OWN EXPENSE.
8. THE FINISHED COATING SHALL GENERALLY BE SMOOTH AND SEMI-GLOSSY. SAGS, DIMPLING, OR CURTAINING SHALL BE CAUSE FOR REJECTION.
9. THE CONTRACTOR SHALL SUBMIT A CERTIFIED STATEMENT BY THE RESPONSIBLE COATING SUPPLIER THAT THE WORK WAS DONE IN CONFORMANCE WITH THESE SPECIFICATIONS.

TIMBER FRAMING:

1. ALL TIMBER WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL FOREST PRODUCTS ASSOCIATION NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.
2. ALL TIMBER FRAMING SHALL BE STRESS GRADED LUMBER HAVE THE FOLLOWING STRUCTURAL PROPERTIES (U.O.N.):
   - SOUTHERN YELLOW PINE: (#1 OR SELECT STRUCTURAL)
     Fb = 1,400 PSI
     Fv = 110 PSI
3. ALL FRAMING MEMBERS AND DECKING SHALL BE TREATED WITH WOOD PRESERVATIVE (PRESSURE TREATMENT): FS TT-W-571 AWPA TREATMENT C2 USING CHROMATED COPPER ARSENATE (0.6 CCA MINIMUM RETENTION). ALL HOLES AND CUTS SHALL BE DRESSED WITH CCA. TIMBER USED FOR WAVE FENCE SHALL BE TREATED FOR A 2.5 CCA MINIMUM RETENTION.
4. ALL THREADED FASTENERS AND ANCHORS SHALL BE HOT DIPPED GALVANIZED STEEL FOR EXTERIOR, HIGH HUMIDITY (4 MILS FOR MARINE ENVIRONMENT) TO ASTM A123 AND TREATED WOOD LOCATIONS. BOLTS SHALL CONFORM TO A307 GRADE A W/HEAVY HEX NUTS AND HOT DIPPED GALVANIZED (HDG) OGEE OR DOCK STEEL WASHERS AS SPECIFIED ON DRAWINGS. BOLT HOLES SHALL BE A MAXIMUM OF $\frac{1}{8}$" LARGER THAN BOLT DIAMETER SPECIFIED.
5. ALL NAILS SHALL BE AS SPECIFIED ON DRAWINGS (4 GAUGE SILICON BRONZE UNLESS OTHERWISE SPECIFIED). PRE-DRILL UNDERSIZE HOLES FOR NAILS THROUGH TOP PLY ONLY.
6. ALL TIMBER SIZES ARE NOMINAL UNLESS OTHERWISE NOTED.
8. ALL TIMBER FRAMING USED IN THE PROJECT SHALL BE STRAIGHT IN BOTH LONGITUDINAL PLANES WITH NO OR MINIMAL TWIST. TIMBER SHALL BE INSPECTED FOR CROWN PRIOR TO INSTALLATION BY THE CONTRACTOR AND INSTALLED CROWN UP WHERE SLIGHT CROWN EXISTS. JOINTS SHALL BE SAW CUT AND ACCURATELY AND TIGHTLY FITTED. THE ENGINEER RESERVES THE RIGHT TO REJECT TIMBER MEMBERS AND FINISH CONSTRUCTION OF TIMBER ASSEMBLIES WHERE IN THE OPINION OF THE ENGINEER THE DESIGN INTENT OF THE STRUCTURE WOULD BE COMPROMISED DUE TO THE FAULTY TIMBER, JOINTING, AND OR CONSTRUCTION PRACTICES.

FLOATING DOCKS:

1. CONCRETE FLOATING DOCKS SHALL BE CONSTRUCTED TO MEET THE DIMENSIONAL REQUIREMENTS SHOWN ON SHEET S2.
2. CONCRETE FLOATING DOCK LIVE LOAD SHALL BE 60 PSF MINIMUM. A CONCENTRATED LIVE LOAD OF 500 LBS LOCATED ANYWHERE ALONG THE DOCK SHALL NOT TILT THE DOCK MORE THAN 6 DEGREES IN THE HORIZONTAL PLANE.
3. THE CONCRETE DOCK SHALL HAVE A MINIMUM OF 22" FREEBOARD AT FULL DEAD LOAD AND 13" AT DEAD LOAD PLUS LIVE LOAD.
4. THE CONCRETE DOCK SHALL BE SO CONSTRUCTED (BALLASTED) SUCH THAT CONCENTRATED LOADS FOR THE GANGWAY AND GANGWAY PLATFORM SHALL NOT CAUSE EXCESSIVE DOCK TILT (MORE THAN 6 DEGREES) IN EITHER DIRECTION.
5. A TRACK RAIL SYSTEM, OR OTHER MEANS OF ADJUSTING THE TIMBER DOCK FINGERS, SHALL BE INSTALLED ON THE SOUTH SIDE OF THE CONCRETE FLOATING DOCK SYSTEM SO THAT VARYING SLIP WIDTHS CAN BE EASILY ACHIEVED TO ACCOMMODATE DIFFERENT SAILING EVENTS.
6. SEE SPECIFICATION 03320 FOR ADDITIONAL CONCRETE FLOATING DOCK CONSTRUCTION REQUIREMENTS.
7. REFER TO SHEET S17 FOR CONSTRUCTION DETAILS OF FLOATING TIMBER DOCK FINGERS.
8. ALL HARDWARE USED IN THE CONSTRUCTION AND CONNECTION OF FLOATING DOCKS SHALL BE HOT DIPPED GALVANIZED OR STAINLESS STEEL GRADE 316.
9. ALL GANGWAYS AND GANGWAY LANDINGS TO BE CONSTRUCTED OF MARINE GRADE ALUMNINUM WITH NON SKID WALKING SURFACES CAPABLE OF SUSTAINING A MINIMUM LIVE LOAD OF 100 PSF



DESIGN CRITERIA:

1. ALL DIMENSIONS ARE IN FEET AND INCHES. ELEVATIONS ARE REFERENCED TO MEAN LOW WATER (MLW).
2. FIXED PIER IS DESIGNED FOR TYPE IIB MOORING SERVICE. NO VESSELS SHALL BE MOORED TO THE PIER WHEN WIND SPEEDS EXCEED 64 KNOTS, AND CURRENT IS GREATER THAN 2 KNOTS
3. LIVE LOAD - UNIFORMLY DISTRIBUTED LOAD OF 200 POUNDS PER SQUARE FOOT.
4. NORMAL TIDAL RANGE - 3.5; FOOT
5. DESIGN VESSELS:
   OLIVER HAZARD PERRY

LOA	195.75 FT. (22.86m)
LENGTH ON DECK	131.08 FT.
BEAM	32.0 FT. (7.62m)
MAX DRAFT	11.42 FT. (2.13 m)
DISPLACEMENT	616 TONS (1,232,000 LBS)

6. WIND ON VESSELS:
   A. OPERATING 64 KNOTS (32.9 m/sec)
   B. SURVIVAL 96 KNOTS (49.2 m/sec)
7. WAVE LOADS - IF WAVES ARE IN EXCESS OF THE FOLLOWING OPERATING PARAMETERS, ALL OPERATIONS AND BERTHING SHALL BE TERMINATED UNTIL CONDITIONS SUBSIDE TO BELOW THE FOLLOWING CONDITIONS:

		SURVIVAL
SIGNIFICANT WAVE HEIGHT	3 FT (0.91m)	4.7 FT. (3.8m)
WAVE LENGTH (Lo)	82 FT (25m)	127 FT. (38.8m)
WAVE PERIOD	3 - 4 SECONDS	5 SECONDS
STILLWATER HEIGHT	+1 FT. (MHHW)	12.6 FT MLW

8. CURRENTS - DESIGN CURRENT ON MOORED VESSEL = 3% OF WIND = 1.05 KNOTS
9. TEMPERATURE RANGE = 60 DEGREES FAHRENHEIT ABOVE AND BELOW MEAN AMBIENT TEMPERATURE
10. MOORING FORCES - 30 TON LINE PULL - FIXED PIER
11. BERTHING FORCES: BERTHING SPEED (ALL VESSELS) 1 FT/SEC

ABBREVIATIONS

U. O. N.	UNLESS OTHERWISE NOTED
N. T. S.	NOT TO SCALE
I. A. W.	IN ACCORDANCE WITH
TYP.	TYPICAL
R & D	REMOVE AND DISPOSE
BIT.	BITUMINOUS CONCRETE
F. F.	FINISH FLOOR
T. O. F.	TOP OF FOUNDATION
M. P. L.	MARINA PERIMETER LINE
LBG	LOUIS BERGER GROUP
S. F.	SQUARE FOOT
EXTG.	EXISTING
SMH	SEWER MANHOLE
DMH	DRAINAGE MANHOLE
MIN.	MINIMUM
HDG	HOT DIPPED GALVANIZED
SS	STAINLESS STEEL
EF	EACH FACE
EW	EACH WAY
NF	NEAR FACE
FF	FAR FACE

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE CONCRETE NOTE #7 ADD COATING NOTE #4

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

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DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

PROPOSED NEW PIER GENERAL NOTES

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

S1

SHEET 14 OF 33

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FENDERS & ANCHOR BOLT ARRANGEMENT AND LOCATION PLAN FOR APPROVAL.

240' OVERALL LENGTH

Varies 16' 16' 16' 16' 16' 16' 16' 16' 16' 16' 16' 16' 16' 15'-3½" 2'-2½"

4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 4' 3'-3½"

1'-10½" 10'-1½" 10'-1½" 1'-10½"

EMERGENCY LADDER 2 PLACES BENT A SUBMIT SHOP DWGS.

WAVE FENCE NORTH SIDE OF PIER

MARITIME INTERNATIONAL MCS 630 CELL FENDERS (G3) WITH UHMW-PE SHIELD

LADDERS SHALL BE CONSTRUCTED OF STAINLESS STEEL GRADE 316.

SLOPE 1:22 FIRST TWO PILE BENTS TO MATCH EXTG. GRADE

START SLOPE AT WEST FACE OF PILE CAP 2

FIXED PIER LIVE LOAD = 200 PSF

REINFORCED CONCRETE PILE CAPS

TIMBER FRAMING AND TIMBER DECK INFILL

30 TON CLEAT NORTH SIDE ONLY

MARITIME INTERNATIONAL AD 250 ARCH FENDERS OR EQUIVALENT.

24'

SEE SHEET S4 FOR PLATFORM FRAMING DETAILS

9'

8'

TRANSITION PLATE

ADA COMPLIANT GANGWAY SYSTEM

4'

ARTICULATING GANGWAY

GANGWAY PLATFORM

FIXED GANGWAY

TRANSITION PLATE

14 – 14"ø DOCK GUIDE PILES WITH HDPE JACKET

2 EMERGENCY LADDERS NORTH SIDE OF FLOATING DOCK – STAINLESS STEEL GRADE 316

12' WIDE CONCRETE FLOATING DOCKS SEE SPECIFICATION 03320 AND NOTES ON SHT. S1

SEE SHEET S4 FOR FLOATING DOCK GUIDE PILE REQUIREMENTS

INTERNAL PILE GUIDES

2'-6"

12'

210'

N

LOCATION OF EEL GRASS

TRACK RAIL SYSTEM OR OTHER MEANS OF ADJUSTING FINGER SPACING SHALL BE INSTALLED ON SOUTH SIDE OF CONCRETE FLOATING DOCKS.

REMOVABLE TIMBER FINGERS ANCHORED TO RAIL SYSTEM ON PERMANENT CONCRETE FLOAT

PLAN VIEW – PROPOSED FIXED PIER

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

ALL GANGWAYS AND GANGWAY LANDINGS TO BE CONSTRUCTED OF MARINE GRADE ALUMNINUM WITH NON SKID WALKING SURFACES CAPABLE OF SUSTAINING A MINIMUM LIVE LOAD OF 100 PSF. RAMPS, PLATFORMS AND GUARDS SHALL COMPLY WITH ADA REQUIREMENTS WITH REGARD TO GUARDS/HANDRAILS, EDGE PROTECTION AND BARRIERS.

EAST

FLOATING DOCK GUIDE PILES

ELEV. 21.5 MLW (EL. 19.6 NAVD88)

ELEV. 17 (NAVD88) VE ZONE

13'

VINYL CAP GLUED TO HDPE PILE JACKET TO PREVENT MOISTURE INFILTRATION

ELEV. 7.16 MLW (EL. 5.25 NAVD88)

1r 22

8x8 TIMBER CURB SEE SHT. S16

TOP OF FIXED PIER ELEV. 8.60 MLW

MARITIME INTERNATIONAL AD 250 ARCH CORNER FENDERS OR EQUIVALENT.

ELEV. 3.46 (MLW)

ELEV. 0.00 (MLW)

ELEV. 0.00 (MLW)

SEE SHEET S10 FOR CONNECTION TO EXISTING CONCRETE CAPPED GRANITE SEAWALL

DREDGE LINE TO MINUS 18 MLW

14" STEEL FLOATING DOCK GUIDE PILES WITH HDPE JACKETS

14" STEEL PLATFORM PILES WITH HDPE JACKETS – 20' PENETRATION BELOW MUDLINE

MIN. 20' EMBEDMENT FOR ALL FLOATING DOCK GUIDE PILES

SEE SHEET S12 FOR PILE DRIVING DEPTHS.

SOUTH ELEVATION OF PROPOSED FIXED PIER

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

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		ADD NOTE FOR GANGWAY PLATFORM FRAMING

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

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REGISTERED PROFESSIONAL ENGINEER

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DRAWN BY: RSTJ

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SITE INFRASTRUCTURE IMPROVEMENTS

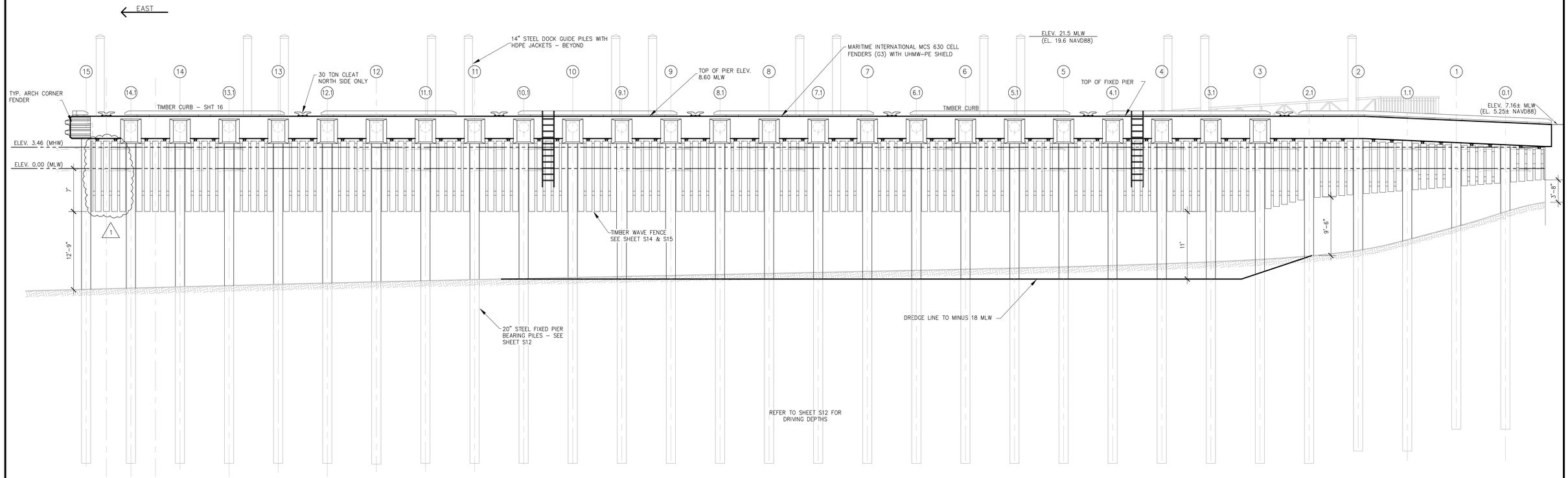
PROPOSED NEW PIER
GENERAL ARRANGEMENT DRAWING
SHEET 1 OF 3

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

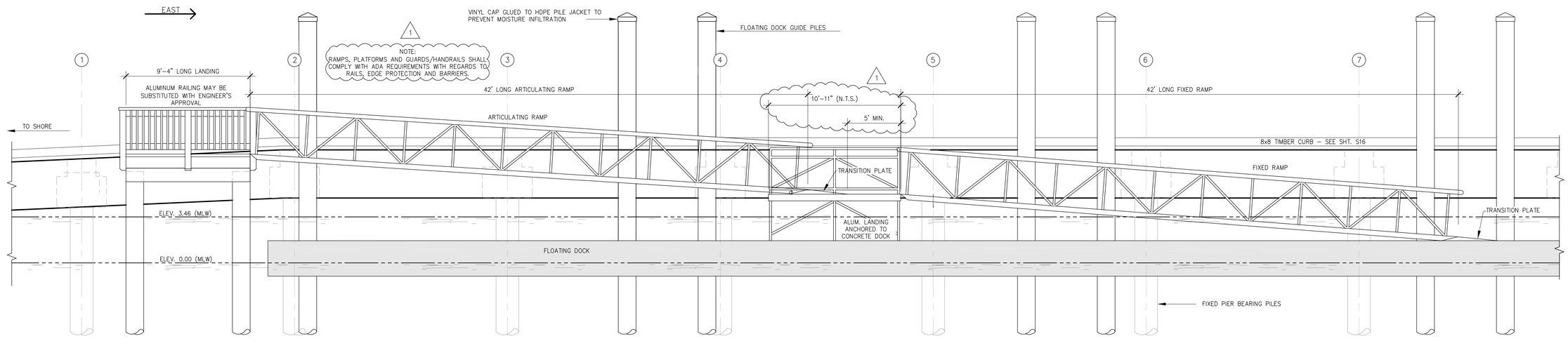
S2

SHEET 15 OF 33



NORTH ELEVATION OF PROPOSED FIXED PIER

SCALE: $\frac{1}{8}$" = 1'–0"



CONTRACTOR SHALL FURNISH ALUMINUM (MARINE GRADE 6061–T6) GANGWAY, LANDINGS, RAILINGS AND STAINLESS STEEL (A316) ATTACHMENT HARDWARE AS SHOWN ON THE PLANS. SHOP DRAWINGS AND COMPUTATIONS SHALL BE SEALED BY A RHODE ISLAND REGISTERED PROFESSIONAL ENGINEER AND SUBMITTED FOR APPROVAL BY THE ENGINEER OF RECORD PRIOR TO FABRICATION.

ACCESSIBLE GANGWAY ON SOUTH SIDE OF PROPOSED FIXED PIER

SCALE: $\frac{1}{4}$" = 1'–0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE EXTENT OF WAVE FENCE, GANGWAY PLATFORM

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN — No. 4997 — REGISTERED PROFESSIONAL ENGINEER — 12/3/13

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SITE INFRASTRUCTURE IMPROVEMENTS

PROPOSED NEW PIER GENERAL ARRANGEMENT DRAWING SHEET 2 OF 3

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

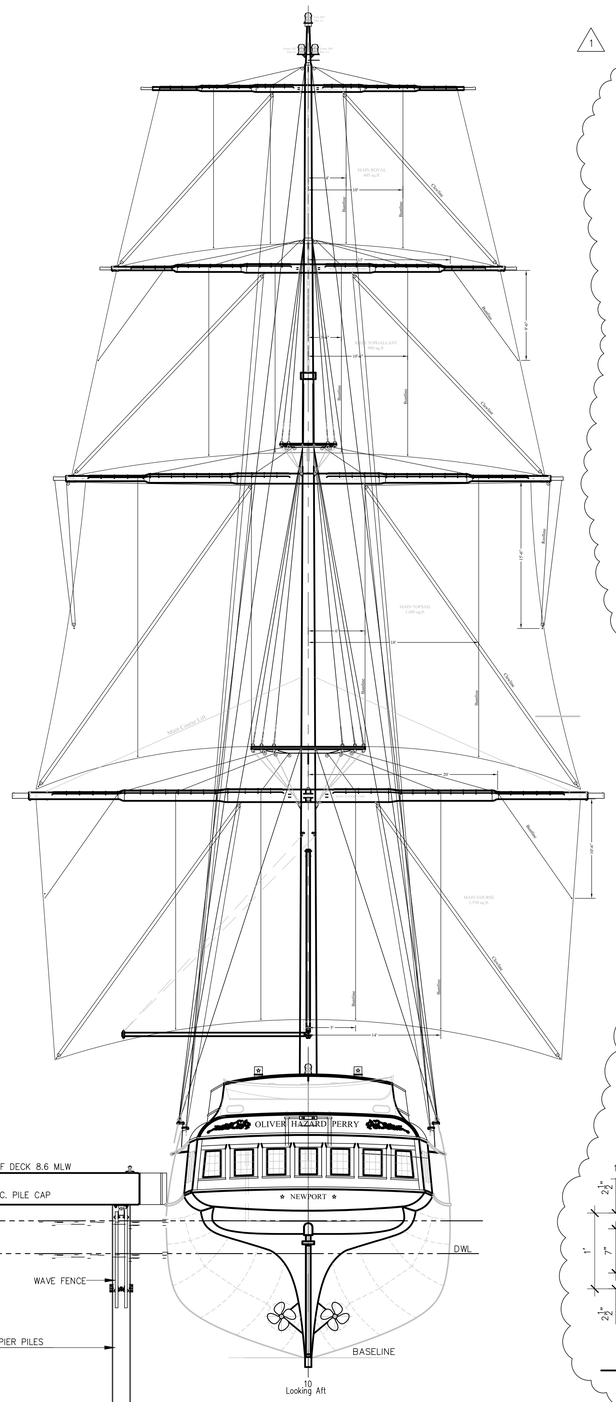
OF S3

SHEET 16 33

N

FIXED PIER WITH OLIVER HAZARD PERRY AT DOCK

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



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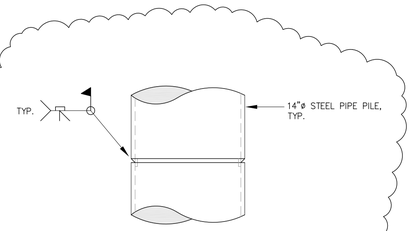
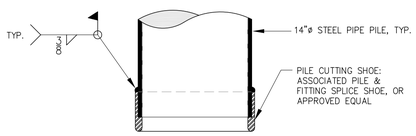


DOCK GUIDE PILING SPLICE DETAIL

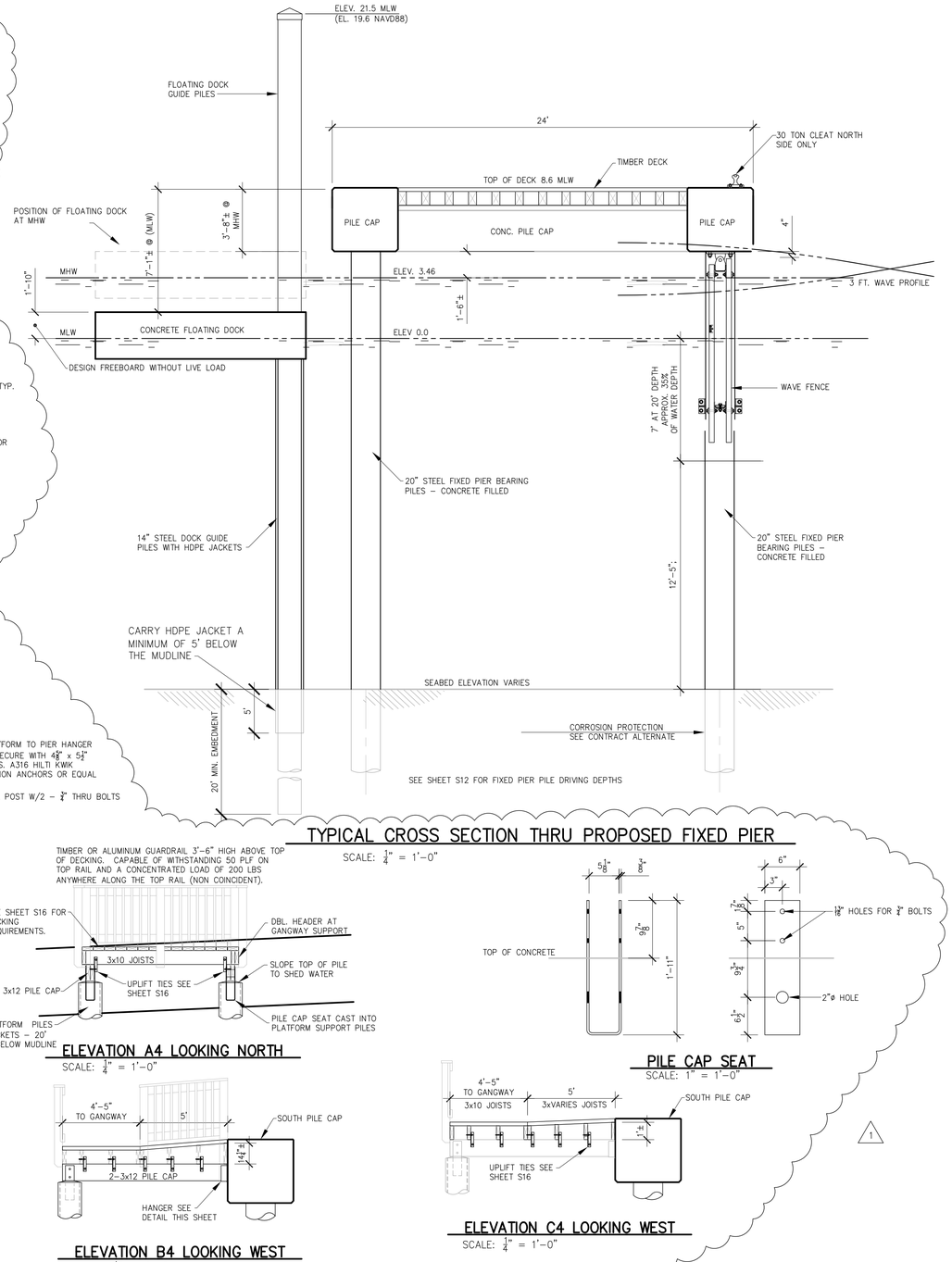
SCALE: 1" = 1'-0"

FOR USE ONLY IF SPLICING IS REQUIRED. ALL SPLICES SHALL BE BELOW THE HDPE SLEEVE.



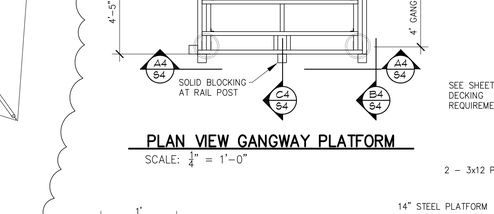
DOCK GUIDE PILE CUTTING SHOE DETAIL

SCALE: 1" = 1'-0"



TYPICAL CROSS SECTION THRU PROPOSED FIXED PIER

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



PLAN VIEW GANGWAY PLATFORM

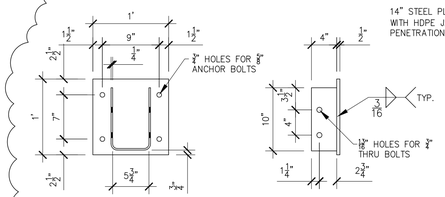
SCALE: 1/4" = 1'-0"

ELEVATION A4 LOOKING NORTH

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

PILE CAP SEAT

SCALE: 1" = 1'-0"



GANGWAY PLATFORM TO PIER HANGER

SCALE: 1" = 1'-0"

ELEVATION B4 LOOKING WEST

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

ELEVATION C4 LOOKING WEST

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

1

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE PILE SPLICE, SHOWN GANGWAY PLATFORM FRAMING

The LOUIS BERGER GROUP, Inc.

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DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

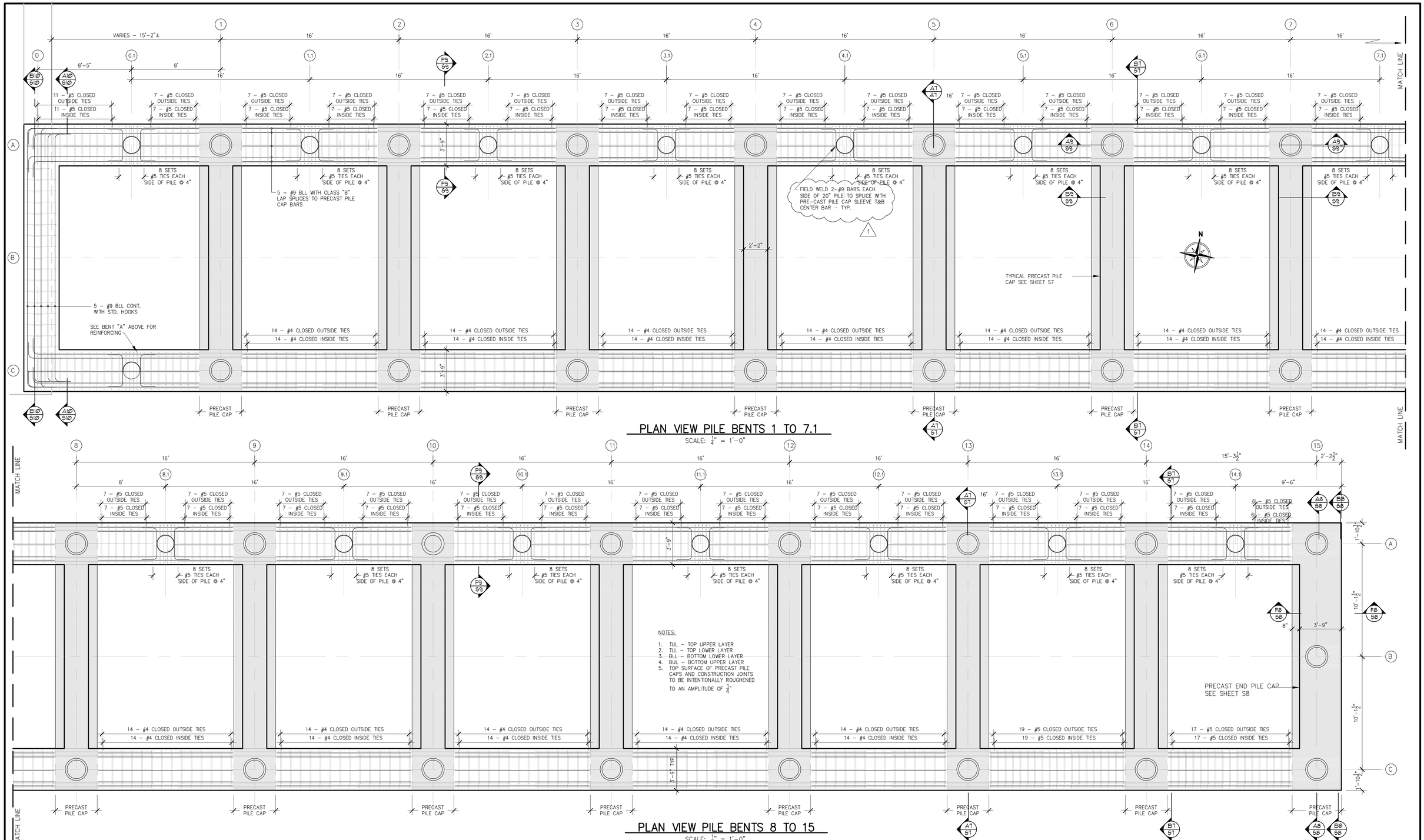
PROPOSED NEW PIER
GENERAL ARRANGEMENT DRAWING
SHEET 3 OF 3

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

OF S4

SHEET 17 33



NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE CALL OUT

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

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SITE INFRASTRUCTURE IMPROVEMENTS

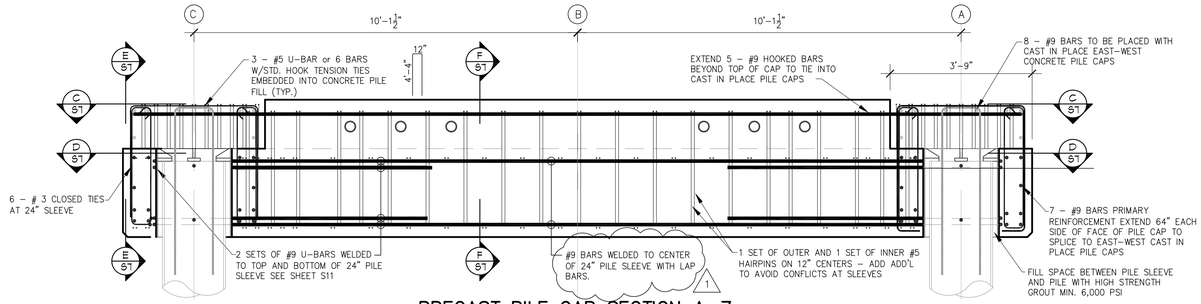
BOTTOM REINFORCEMENT IN CONCRETE PILE CAPS

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

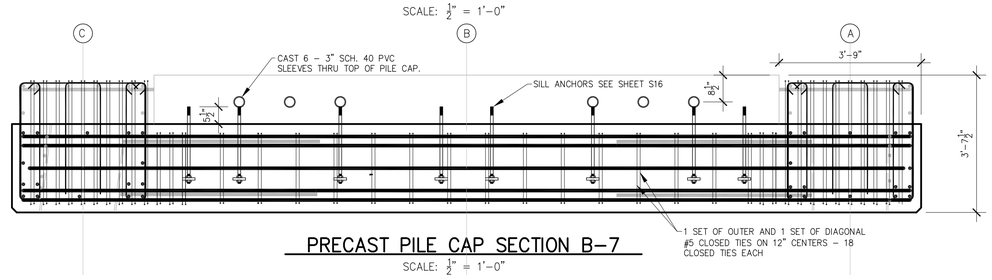
OF S6

SHEET 19 33



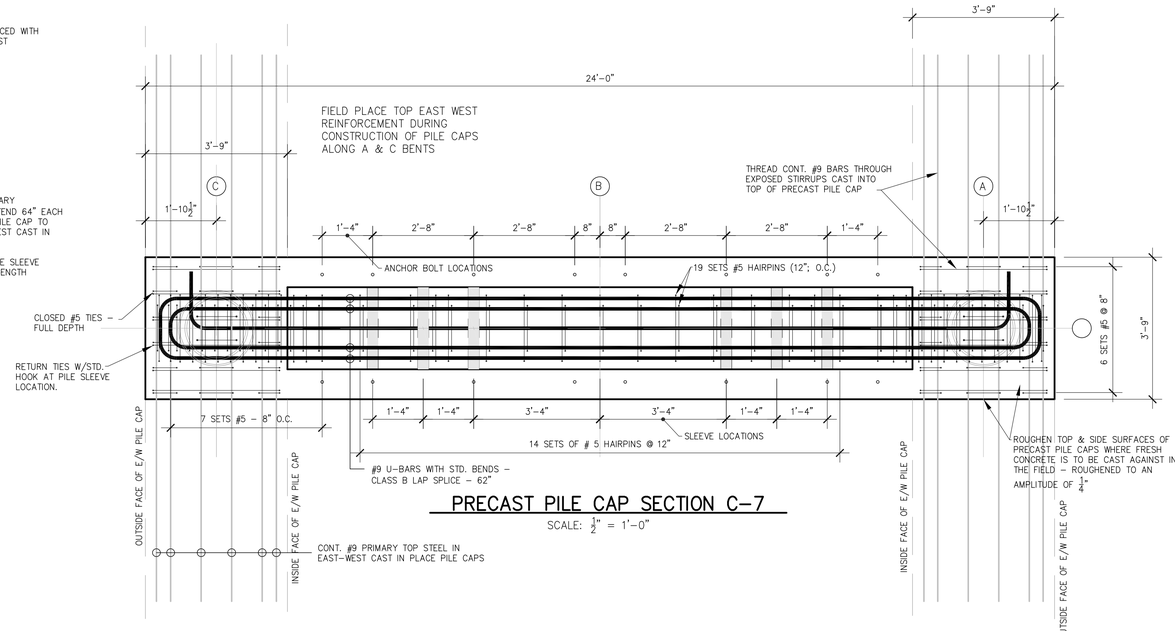
PRECAST PILE CAP SECTION A–7

SCALE: $\frac{1}{2}$" = 1'–0"



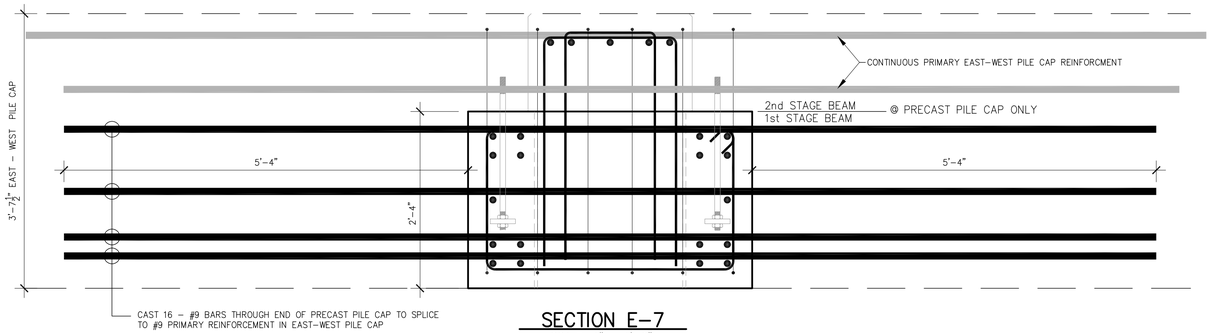
PRECAST PILE CAP SECTION B–7

SCALE: $\frac{1}{2}$" = 1'–0"



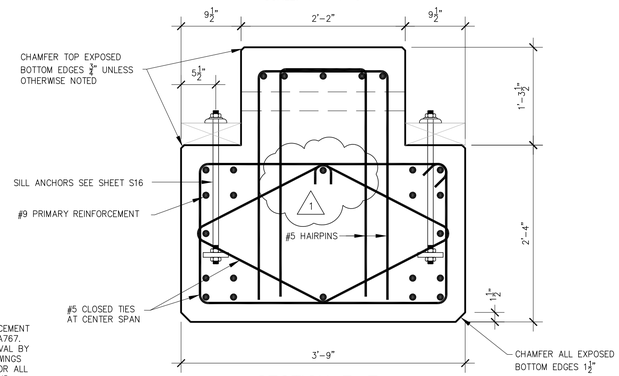
PRECAST PILE CAP SECTION C–7

SCALE: $\frac{1}{2}$" = 1'–0"



SECTION E–7

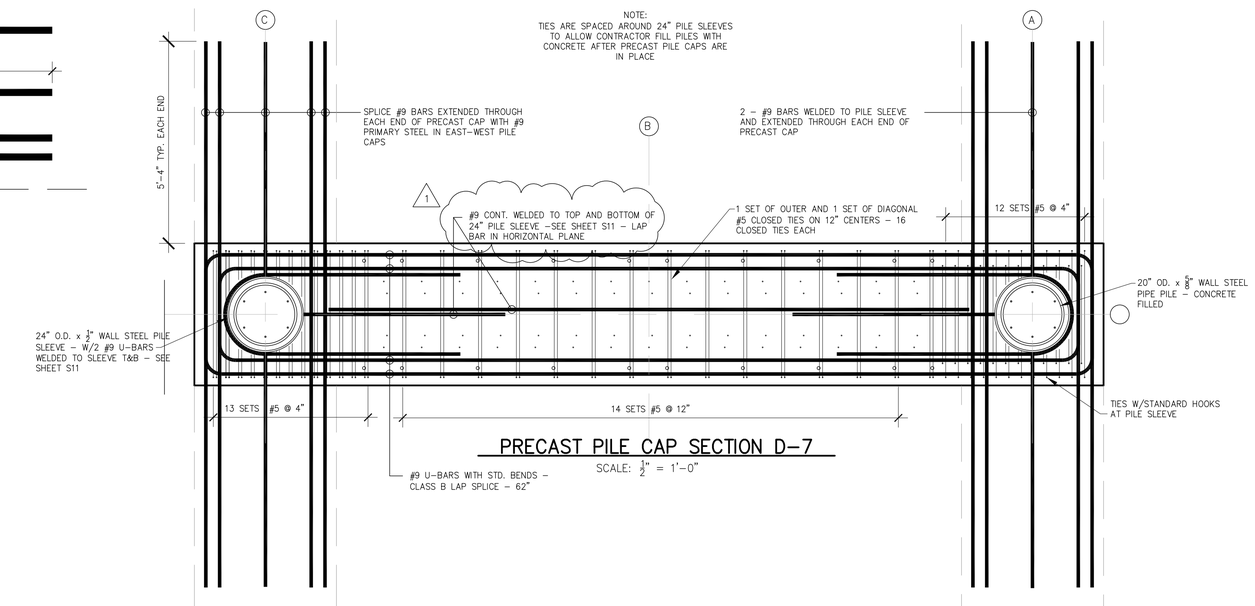
SCALE: 1" = 1'–0"



SECTION F–7

SCALE: 1" = 1'–0"

NOTE:
ALL STEEL REINFORCEMENT SHALL BE SHOP FABRICATED. REINFORCEMENT SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A767. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR REVIEW AND APPROVAL BY OWNER PRIOR TO SHIPPING REINFORCEMENT TO SITE. SHOP DRAWINGS SHALL INCLUDE PLACEMENT DRAWINGS, DETAILS AND SCHEDULES FOR ALL STRAIGHT BARS, HOOKS, TIES, DOWELS, BENT BARS, CHAIRS AND SUPPORTS, AND MISCELLANEOUS STEEL EMBEDMENTS.



PRECAST PILE CAP SECTION D–7

SCALE: $\frac{1}{2}$" = 1'–0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE CALL OUT, SHOW STIRRUP HOOKS

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER
12/3/13

REGISTERED PROFESSIONAL ENGINEER

DATE

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DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

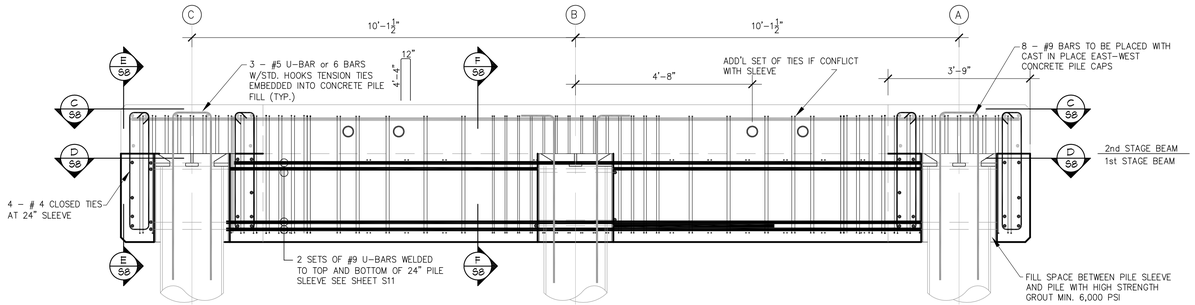
PRECAST CONCRETE PILE CAP DETAILS PILE CAPS NOS. 1 THRU 14

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

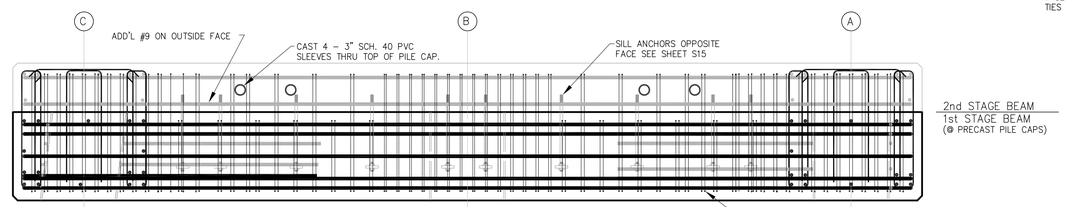
OF S7

SHEET 20 33



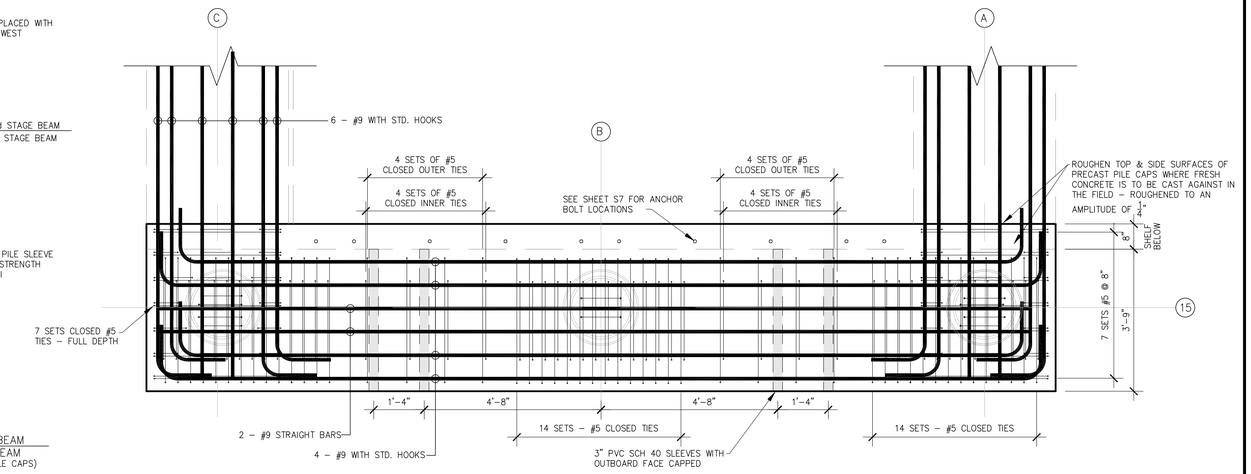
PRECAST PILE CAP BENT 15 – SECTION A-8

SCALE: ½" = 1'-0"



PRECAST PILE CAP BENT 15 – SECTION B-8

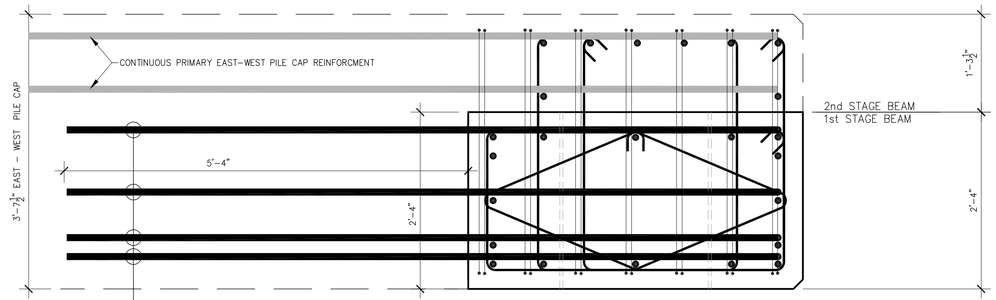
SCALE: ½" = 1'-0"



PRECAST PILE CAP SECTION C-8

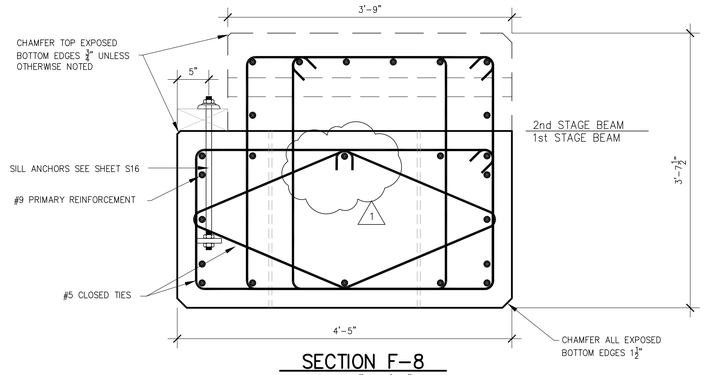
SCALE: ½" = 1'-0"

REINFORCING SHOWN IN THIS PLAN TO BE FIELD PLACE DURING CONSTRUCTION OF SECOND STAGE BEAM



SECTION E-8

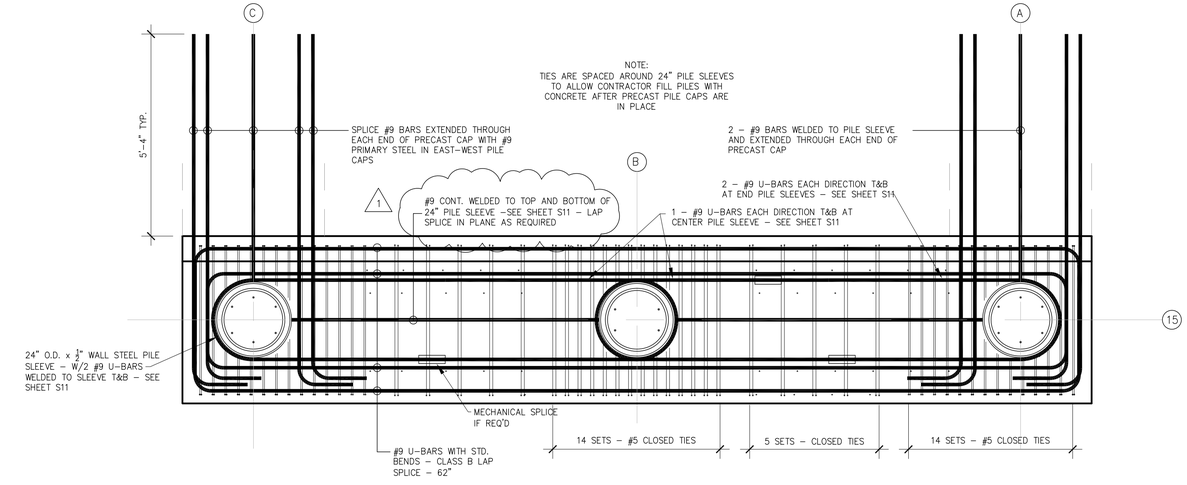
SCALE: 1" = 1'-0"



SECTION F-8

SCALE: 1" = 1'-0"

NOTE:
ALL STEEL REINFORCEMENT SHALL BE SHOP FABRICATED. REINFORCEMENT SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A767. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR REVIEW AND APPROVAL BY OWNER PRIOR TO SHIPPING REINFORCEMENT TO SITE. SHOP DRAWINGS SHALL INCLUDE PLACEMENT DRAWINGS, DETAILS AND SCHEDULES FOR ALL STRAIGHT BARS, HOOKS, TIES, DOWELS, BENT BARS, CHAIRS AND SUPPORTS, AND MISCELLANEOUS STEEL EMBEDMENTS.



PRECAST PILE CAP SECTION D-8

SCALE: ½" = 1'-0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE CALL OUT, SHOW STIRRUP HOOKS

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN
No. 4997
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DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

PRECAST CONCRETE PILE CAP DETAILS PILE CAP NO. 15

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

OF S8

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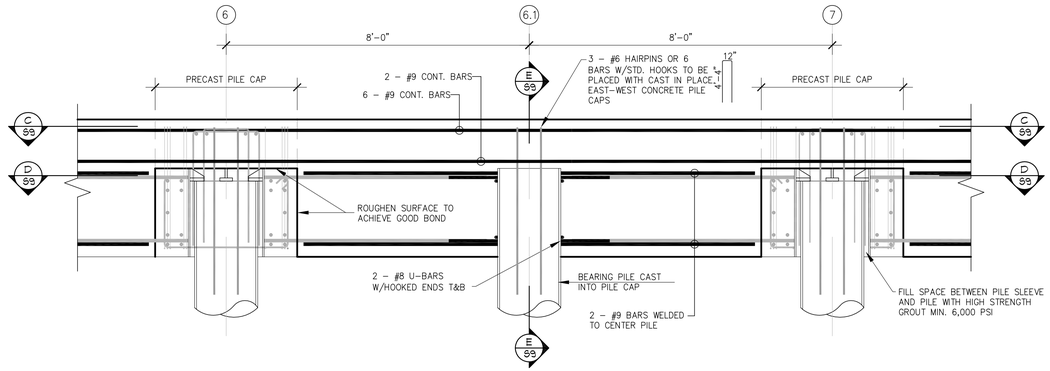
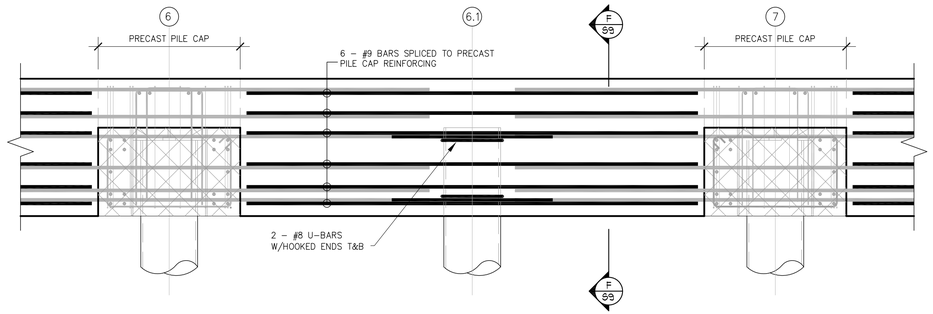


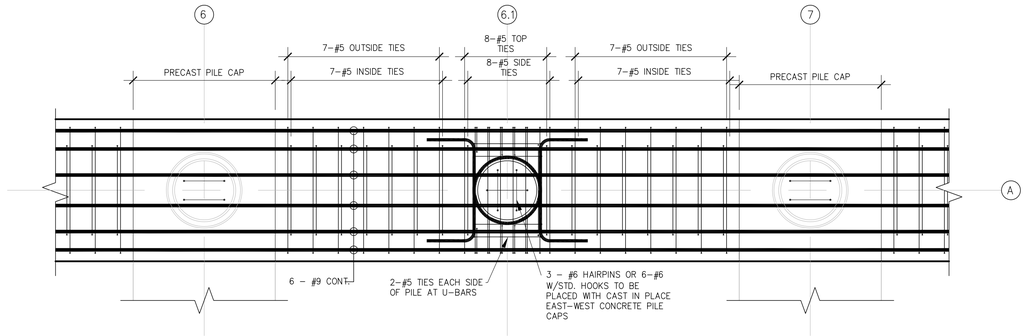
CAST IN PLACE PILE CAP BENT A – SECTION A–9

SCALE: $\frac{1}{2}$" = 1'–0"



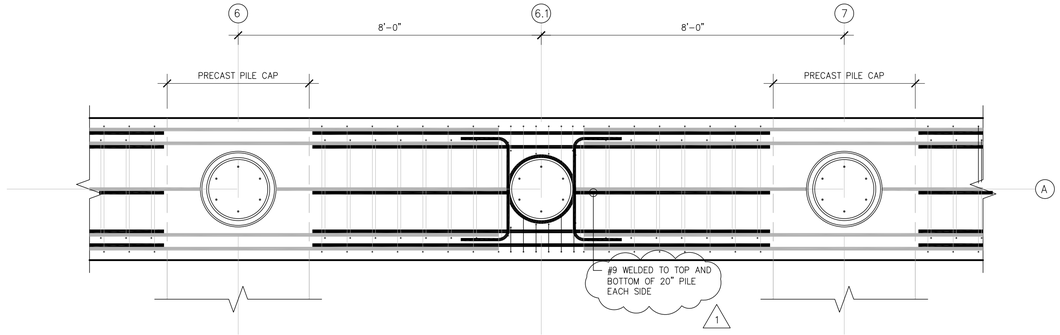
CAST IN PLACE PILE CAP BENT A – SECTION B–9

SCALE: $\frac{1}{2}$" = 1'–0"



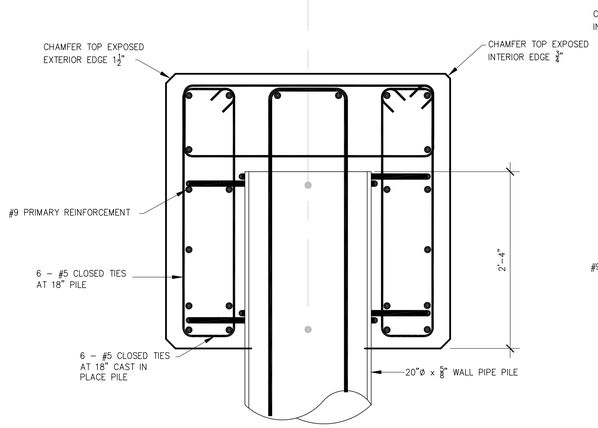
CAST–IN–PLACE PILE CAP SECTION C–9

SCALE: $\frac{1}{2}$" = 1'–0"



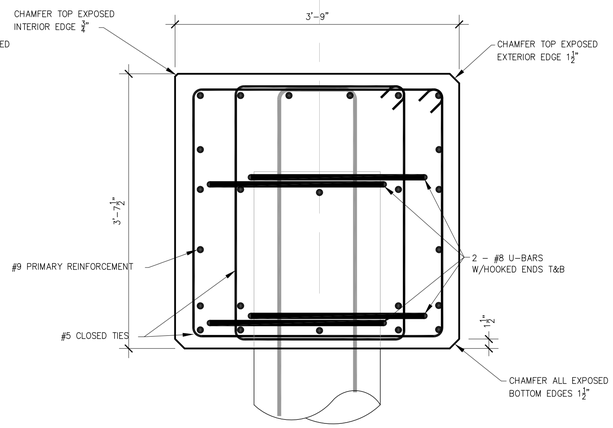
CAST–IN–PLACE PILE CAP SECTION D–9

SCALE: $\frac{1}{2}$" = 1'–0"



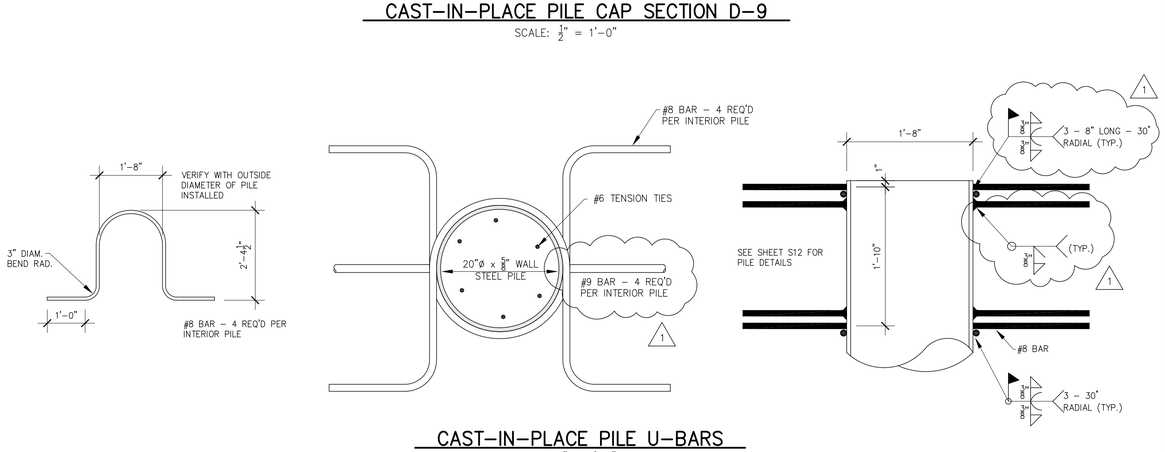
SECTION E–9

SCALE: 1" = 1'–0"



SECTION F–9

SCALE: 1" = 1'–0"



CAST–IN–PLACE PILE U–BARS

SCALE: 1" = 1'–0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE CALL OUT, REVISE WELD

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN
STATE OF RHODE ISLAND
No. 4997
REGISTERED PROFESSIONAL ENGINEER
12/3/13

REGISTERED PROFESSIONAL ENGINEER

DATE

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DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

TYPICAL EAST WEST CAST IN PLACE CONCRETE PILE CAP DETAILS

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

OF S9

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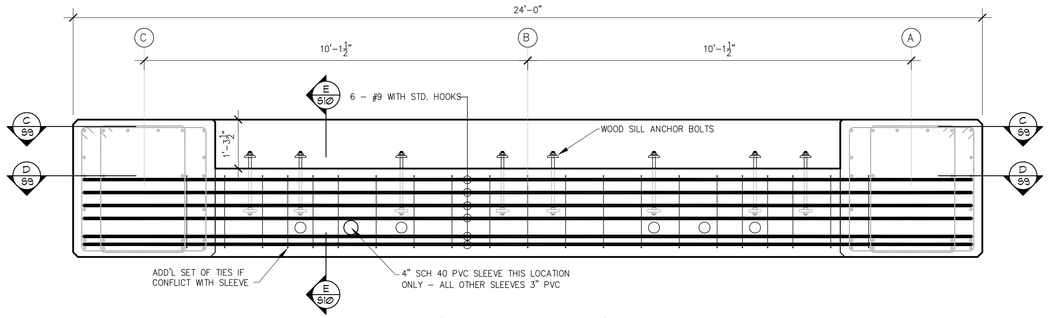
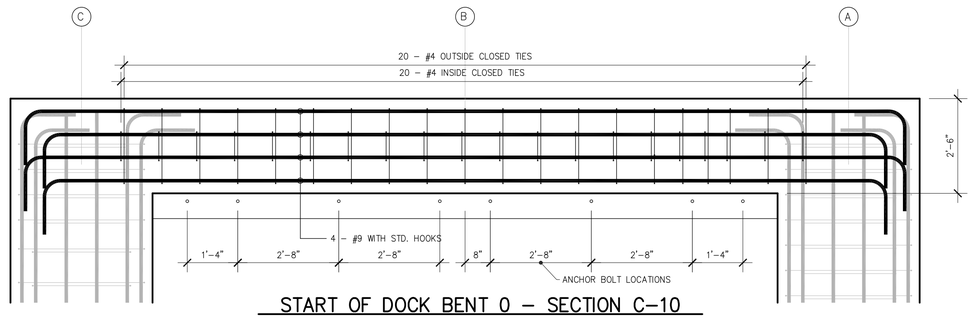


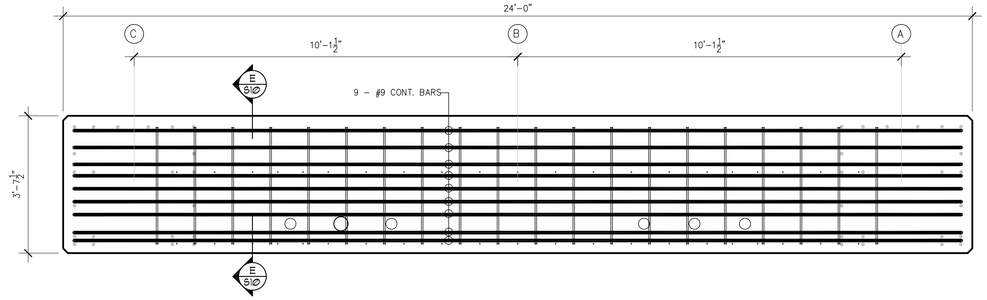
START OF DOCK BENT 0 - SECTION A-10

SCALE: ½" = 1'-0"



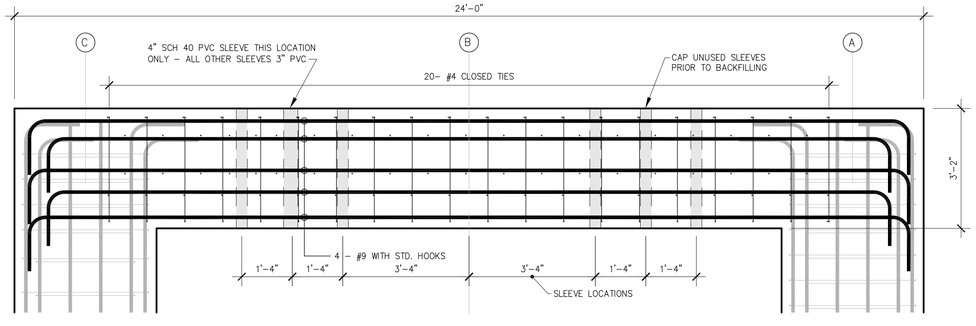
START OF DOCK BENT 0 - SECTION C-10

SCALE: ½" = 1'-0"



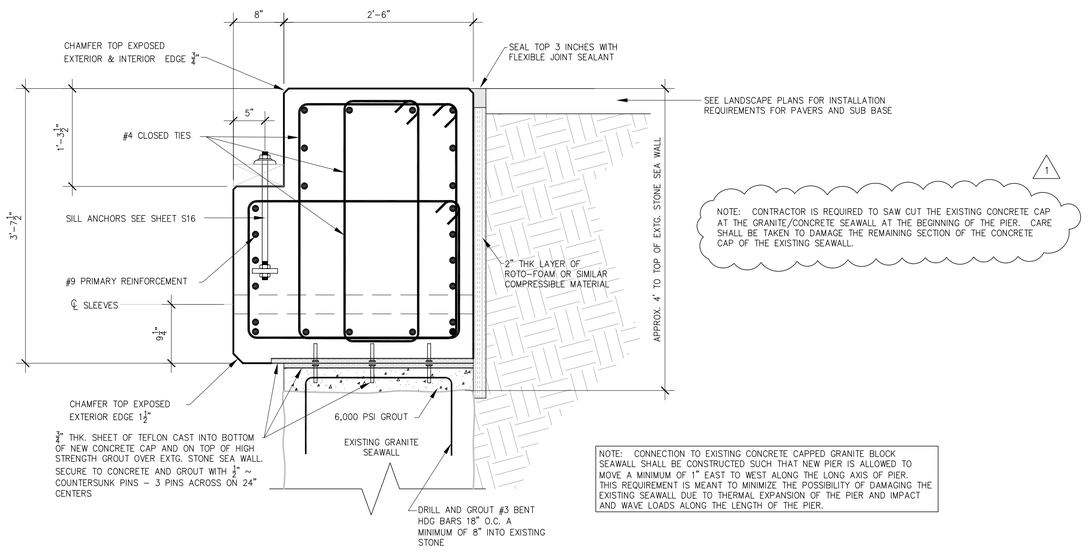
START OF DOCK BENT 0 - SECTION B-10

SCALE: ½" = 1'-0"



START OF DOCK BENT 0 - SECTION D-10

SCALE: ½" = 1'-0"



1

NOTE: CONTRACTOR IS REQUIRED TO SAW CUT THE EXISTING CONCRETE CAP AT THE GRANITE/CONCRETE SEAWALL AT THE BEGINNING OF THE PIER. CARE SHALL BE TAKEN TO DAMAGE THE REMAINING SECTION OF THE CONCRETE CAP OF THE EXISTING SEAWALL.

NOTE: CONNECTION TO EXISTING CONCRETE CAPPED GRANITE BLOCK SEAWALL SHALL BE CONSTRUCTED SUCH THAT NEW PIER IS ALLOWED TO MOVE A MINIMUM OF 1" EAST TO WEST ALONG THE LONG AXIS OF PIER. THIS REQUIREMENT IS MEANT TO MINIMIZE THE POSSIBILITY OF DAMAGING THE EXISTING SEAWALL DUE TO THERMAL EXPANSION OF THE PIER AND IMPACT AND WAVE LOADS ALONG THE LENGTH OF THE PIER.

SECTION E-10

SCALE: 1" = 1'-0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		ADD NOTE FOR DEMO OF EXTG. CONCRETE CAP

The LOUIS BERGER GROUP, Inc.

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No. 4997
REGISTERED PROFESSIONAL ENGINEER
12/3/13

REGISTERED PROFESSIONAL ENGINEER

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DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

GRADE BEAM AT START OF PIER BENT 0

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

OF S10

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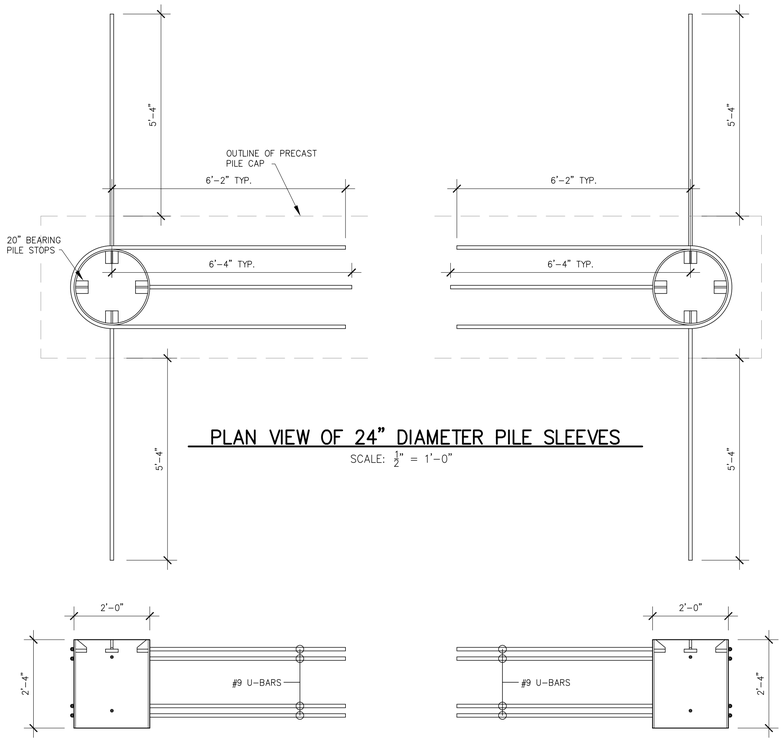
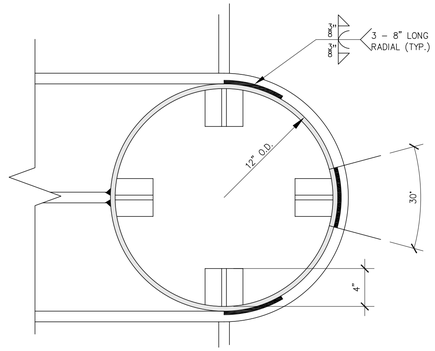


PLAN VIEW OF 24" DIAMETER PILE SLEEVES

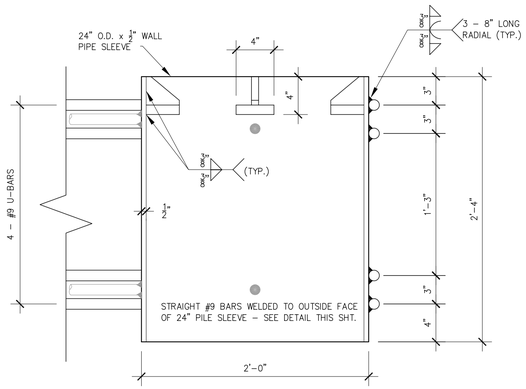
SCALE: $\frac{1}{2}$" = 1'-0"

ELEVATION THRU CENTER OF 24" DIAMETER PILE SLEEVES

SCALE: $\frac{1}{2}$" = 1'-0"

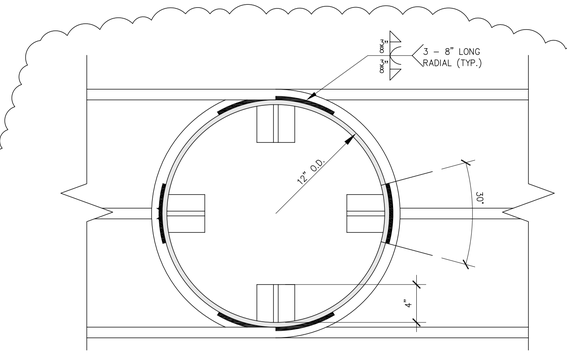


TOP PLAN VIEW
PILE SLEEVE ALONG PILE BENT LINE "A"

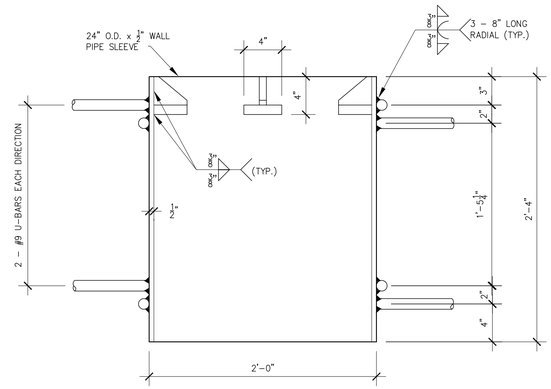


SECTION THRU CENTERLINE
PILE SLEEVE ALONG PILE BENT LINE "A"

SCALE: $1\frac{1}{2}$" = 1'-0"

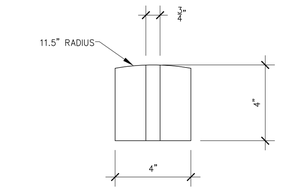


TOP PLAN VIEW
PILE SLEEVE PILE BENT LINE "15-B"



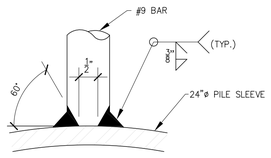
SECTION THRU CENTERLINE
PILE SLEEVE PILE BENT LINE "15-B"

SCALE: $1\frac{1}{2}$" = 1'-0"



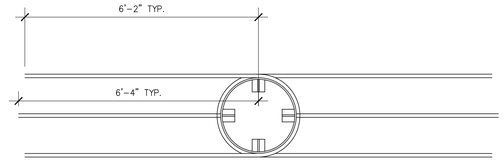
PILE SLEEVE STOPS - BENT LINE "A"

SCALE: 3" = 1'-0"



STRAIGHT BAR WELDED TO PILE SLEEVE

SCALE: 6" = 1'-0"



PLAN VIEW OF 24" DIAMETER PILE SLEEVE AT BENT "15-B"

SCALE: $\frac{1}{2}$" = 1'-0"

1

NOTE:
DURING SETTING OF PRECAST CONCRETE PILE CAPS OVER INSTALLED BEARING PILES CONTRACTOR SHALL SHIM (USING STEEL SHIMS) BETWEEN TOP OF CUT OFF PILE AND PILE SLEEVE STOPS SO THAT BEARING PILES BEAR ON A MINIMUM OF 3 PILE STOPS. FIELD WELD PILE STOPS TO PREVENT DISLODGING. PILE CAPS SHALL BE ADEQUATELY SHIMMED AND SUPPORTED ON MIN. OF 3 PILE STOPS PRIOR TO RELEASING PILE CAPS FROM CRANE USED TO HOIST PILE CAPS INTO PLACE.

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		ADD PILE SLEEVE 15-B DETAIL

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12/3/13

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DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

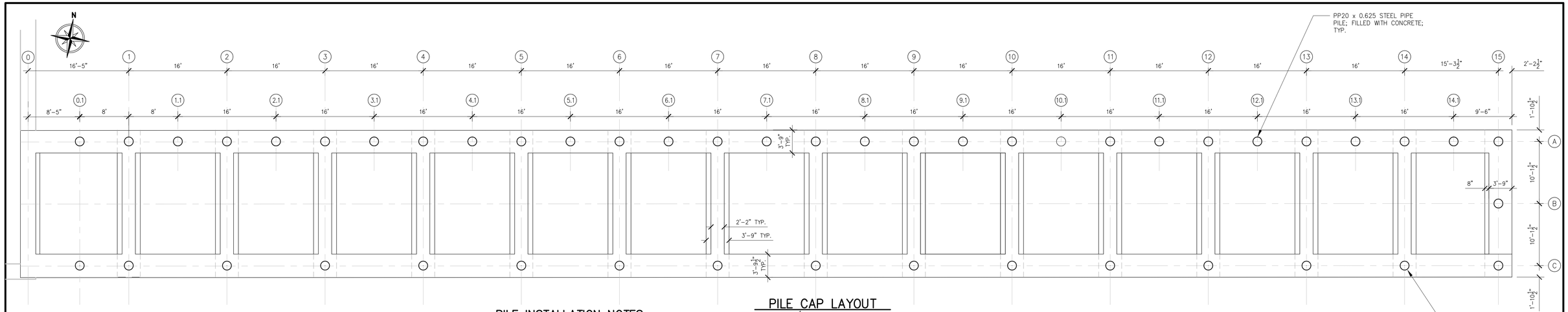
PRECAST CONCRETE PILE CAP SLEEVE DETAILS

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

OF S11

SHEET 24 33



BEARING PILE ELEVATION TABLE

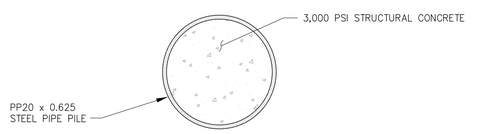
PILE NO.	DIAMETER (IN.)	WALL THK. (IN.)	BATTER (H:V)	ESTIMATED TIP ELEVATION (FT.)	CUT OFF ELEVATION (FT.)	PILE LENGTH (FT.)	APPROX. SEABED ELEVATION (FT.)
A1	20	0.625	0	−45.0	+5.16	50.16	−9
A2	20	0.625	0	−45.0	+5.83	50.83	−13
A3	20	0.625	0	−48.0	+5.83	53.83	−18
A4	20	0.625	0	−48.0	+5.83	53.83	−18
A5	20	0.625	0	−48.0	+5.83	53.83	−18
A6	20	0.625	0	−48.0	+5.83	53.83	−18
A7	20	0.625	0	−50.0	+5.83	55.83	−18
A8	20	0.625	0	−50.0	+5.83	55.83	−18
A9	20	0.625	0	−50.0	+5.83	55.83	−18
A10	20	0.625	0	−50.0	+5.83	55.83	−18
A11	20	0.625	0	−50.0	+5.83	55.83	−18
A12	20	0.625	0	−55.0	+5.83	60.83	−19
A13	20	0.625	0	−55.0	+5.83	60.83	−19
A14	20	0.625	0	−55.0	+5.83	60.83	−20
A15	20	0.625	0	−55.0	+5.83	60.83	−20
B15	20	0.625	0	−55.0	+5.16	60.16	−20 (1)
C1	20	0.625	0	−45.0	+5.16	50.56	−9
C2	20	0.625	0	−45.0	+5.83	51.23	−13
C3	20	0.625	0	−53.0	+5.83	59.30	−18
C4	20	0.625	0	−53.0	+5.83	59.30	−18
C5	20	0.625	0	−53.0	+5.83	59.30	−18
C6	20	0.625	0	−53.0	+5.83	59.30	−18
C7	20	0.625	0	−60.0	+5.83	66.36	−18
C8	20	0.625	0	−60.0	+5.83	66.36	−18
C9	20	0.625	0	−60.0	+5.83	66.36	−18
C10	20	0.625	0	−60.0	+5.83	66.36	−18
C11	20	0.625	0	−60.0	+5.83	66.36	−18
C12	20	0.625	0	−65.0	+5.83	71.40	−19
C13	20	0.625	0	−65.0	+5.83	71.40	−19
C14	20	0.625	0	−65.0	+5.83	71.40	−20
C15	20	0.625	0	−65.0	+5.83	71.40	−20
A0.1	20	0.625	0	−45.0	+4.81	49.81	−7
A1.1	20	0.625	0	−45.0	+5.52	50.52	−9
A2.1	20	0.625	0	−45.0	+5.83	50.83	−14
A3.1	20	0.625	0	−48.0	+5.83	53.83	−18
A4.1	20	0.625	0	−48.0	+5.83	53.83	−18
A5.1	20	0.625	0	−48.0	+5.83	53.83	−18
A6.1	20	0.625	0	−48.0	+5.83	53.83	−18
A7.1	20	0.625	0	−50.0	+5.83	55.83	−18
A8.1	20	0.625	0	−50.0	+5.83	55.83	−18
A9.1	20	0.625	0	−50.0	+5.83	55.83	−18
A10.1	20	0.625	0	−50.0	+5.83	55.83	−18
A11.1	20	0.625	0	−50.0	+5.83	55.83	−19
A12.1	20	0.625	0	−55.0	+5.83	60.83	−19
A13.1	20	0.625	0	−55.0	+5.83	60.83	−20
A14.1	20	0.625	0	−55.0	+5.83	60.83	−20
C0.1	20	0.625	0	−45.0	+4.81	50.21	−7

PILE INSTALLATION NOTES:

1. STEEL PIPE PILES SHALL BE INSTALLED USING AN IMPACT HAMMER OF SUFFICIENT SIZE TO ACHIEVE THE REQUIRED MINIMUM TIP ELEVATION WITHOUT DAMAGING THE PILE.
2. IT IS ACCEPTABLE TO SET THE STEEL PIPE PILES USING A VIBRATORY HAMMER TO ACHIEVE THE REQUIRED ALIGNMENT. PILES SHALL ONLY BE DRIVEN USING A VIBRATORY HAMMER THE MINIMUM DEPTH NECESSARY TO ACHIEVE STABILITY AND ALIGNMENT. THE PILES MUST BE DRIVEN TO FINAL DEPTH USING AN IMPACT HAMMER.
3. OBSTRUCTIONS, TILL, WEATHERED BEDROCK AND BEDROCK ARE ANTICIPATED TO BE ENCOUNTERED DURING THE PILE INSTALLATION. THESE ARE DIFFICULT DRIVING CONDITIONS THAT WILL IMPACT INSTALLATION.
4. PILES MUST BE DRIVEN TO THE MINIMUM TIP ELEVATIONS REGARDLESS OF THE HARD DRIVING CONDITIONS ENCOUNTERED. IF PILE REFUSAL IS ENCOUNTERED ABOVE THE MINIMUM TIP ELEVATION THE FOLLOWING SHALL BE UNDERTAKEN TO ACHIEVE THE REQUIRED PILE MINIMUM TIP ELEVATION:
   - 4.1. IF REFUSAL IS ENCOUNTERED IN THE SOIL, TILL OR WEATHERED BEDROCK THE MATERIAL SHALL BE DRILLED TO 1 FOOT ABOVE THE REQUIRED PILE MINIMUM TIP ELEVATION. THE PILE SHALL THEN BE DRIVEN TO FINAL DEPTH.
   - 4.2. IF REFUSAL IS ENCOUNTERED IN SOUND BEDROCK THE MATERIAL SHALL BE DRILLED TO THE REQUIRED PILE MINIMUM TIP ELEVATION. THE PILE SHALL THEN BE DRIVEN TO FINAL DEPTH.
5. ALL OBSTRUCTIONS, HARD DRIVING, AND BEDROCK DRILLING SHALL BE PERFORMED THROUGH (FROM INSIDE) THE STEEL PIPE PILE. THE DRILLING METHOD SHALL ALSO BE CAPABLE OF REMOVING ALL SPOILS FROM WITHIN THE PILE UPON COMPLETION.
6. PRE−DRILLING A HOLE AND THEN DRIVING THE PILE INTO THE PRE−DRILLED HOLE IS NOT ALLOWED. THE DRILLING METHOD SPECIFIED HEREIN (E.G., DRILLING A SMALLER DIAMETER HOLE THAN THE PILE AND DRIVING THE PILE INTO/THROUGH THIS DRILL HOLE) IS REQUIRED TO ENSURE THAT DESIGN SKIN FRICTION AND END BEARING PILE CAPACITIES ARE DEVELOPED.
7. PILES SHALL BE FITTED WITH A CUTTING SHOE AS DETAILED ON THIS SHEET. (1)
8. THE 14" STEEL PIPE FLOAT ANCHOR PILES MAY BE INSTALLED USING THE METHODS DESCRIBED ABOVE FOR THE FIXED PIER PILES. HOWEVER, IT IS ALSO ACCEPTABLE TO DRILL AHEAD OF THESE PILES IN AREAS WHERE THE PILES CANNOT BE DRIVEN TO THE MINIMUM REQUIRED TIP ELEVATION USING THE IMPACT HAMMER APPROVED FOR THE PROJECT. IN THESE AREAS THE DRILL HOLE MAY EXTEND TO THE MINIMUM REQUIRED TIP ELEVATION AND CANNOT BE MORE THAN 1" LARGER THAN THE EXTERIOR PILE DIAMETER. PILES INSTALLED USING THIS EXTERNAL DRILLING METHOD SHALL ALSO BE RE−DRIVEN (UP AND DOWN) USING A VIBRATORY HAMMER TO ENSURE THE SOIL "LOCKS" AROUND THE PERIMETER OF THE PILE AS DESCRIBED IN THE TECHNICAL SPECIFICATION SECTION 02363.
9. REFER TO SHEET S1 FOR ADDITIONAL PILE NOTES.

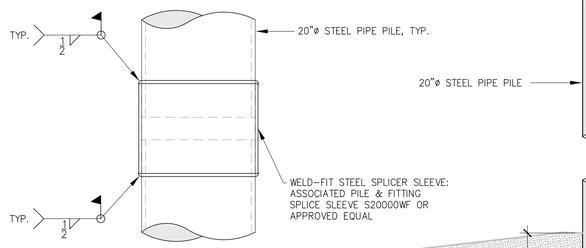
PILE CAP LAYOUT

SCALE: $\frac{1}{8}$" = 1'−0"



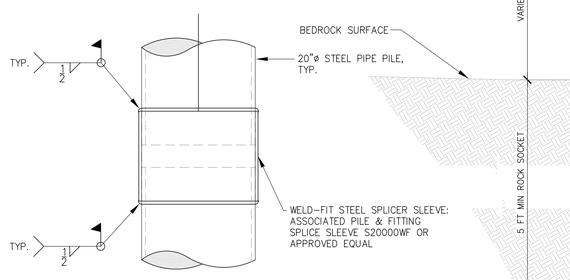
CONCRETE FILL DETAIL

SCALE: 1" = 1'−0"



PILING SPLICE DETAIL

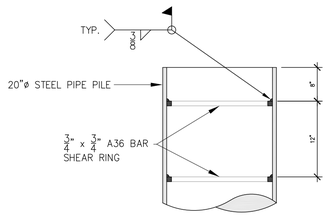
SCALE: 1" = 1'−0"



PILING SPLICE DETAIL

SCALE: 1" = 1'−0"

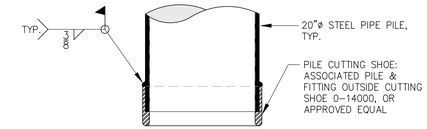
NOTE: CONCRETE REQUIRED TO FILL THE PIPE PILES IS CALLED OFF AS Fc' = 3000 PSI IN THE DETAILS ON THIS SHEET. THIS MATERIAL IS ACCEPTABLE FOR MOST OF THE PILE LENGTH. HOWEVER, THE CONCRETE STRENGTH SHALL BE INCREASED TO Fc'=5000 PSI AT THE TOP OF THE PILE IN THE ZONE WHERE REINFORCING STEEL EXTENDING INTO THE PILE CAP IS REQUIRED.



NOTE:
INSTALL ON ALL PIPE PILES

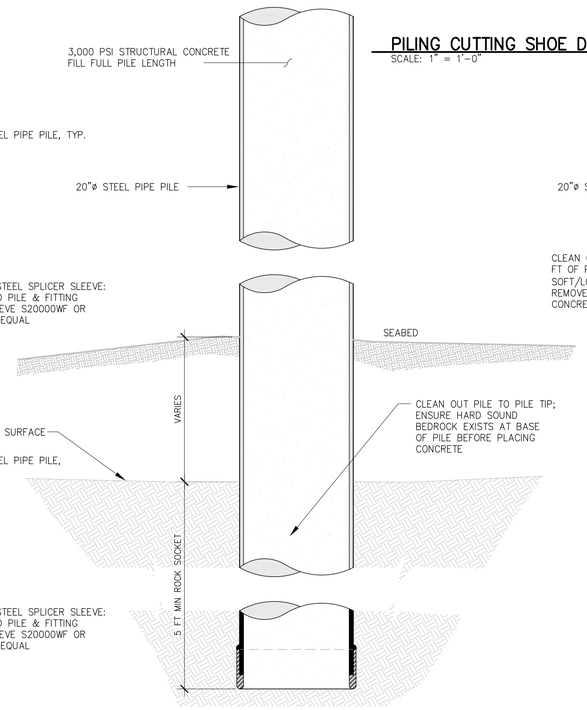
PILING SHEAR RING DETAIL

SCALE: 1" = 1'−0"



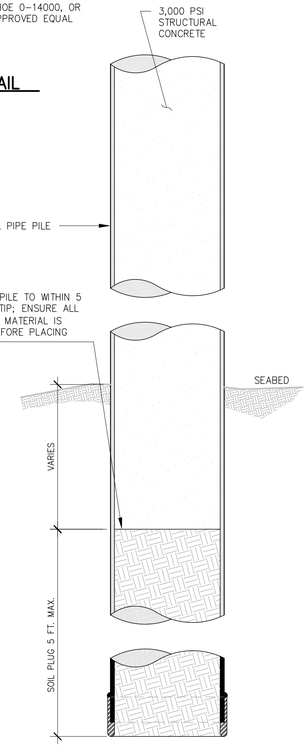
PILING CUTTING SHOE DETAIL

SCALE: 1" = 1'−0"



CONCRETE FILL DETAILS @ PILES END BEARING IN BEDROCK

SCALE: 1" = 1'−0"



CONCRETE FILL DETAILS @ PILES END BEARING IN SOIL

SCALE: 1" = 1'−0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE NOTE 8, RENUMBER NOTE 9

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN — No. 4997 — REGISTERED PROFESSIONAL ENGINEER — 12/3/13

REGISTERED PROFESSIONAL ENGINEER

DATE

ST. JEAN ENGINEERING, LLC
CIVIL, MARINE AND STRUCTURAL CONSULTING ENGINEERING
1145 Middle Road, East Greenwich, RI 02818
Phone: 401.398.0999
email: st.jean.engineering@verizon.net

DRAWN BY: R.F.

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

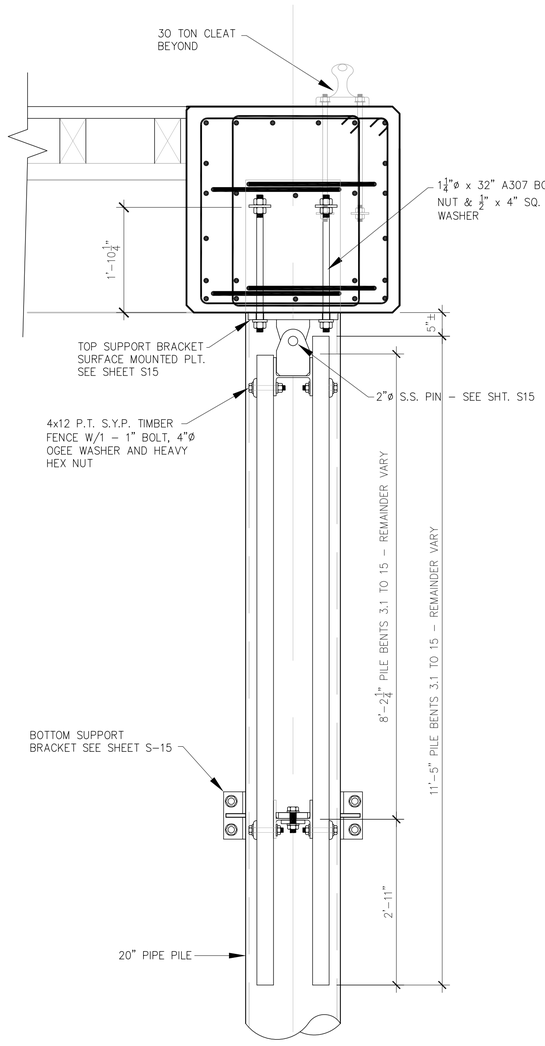
PROPOSED NEW PIER BEARING PILE LAYOUT

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14−13

OF S12

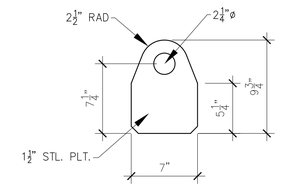
SHEET 25 33



SECTION THRU – WAVE FENCE FACE

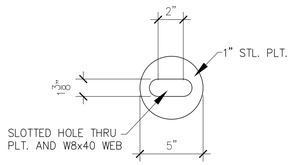
SCALE: ¾" = 1'-0"

NOTE: DIMENSIONS SHOWN ARE SIZED TO FIT BETWEEN ACCURATELY DRIVEN PILES. IF TOLERANCES CAN NOT BE ACHIEVED SOME MODIFICATION TO THE WIDTH OF THE FENCE BETWEEN PILES MAY BE REQUIRED BY THE CONTRACTOR. (1)



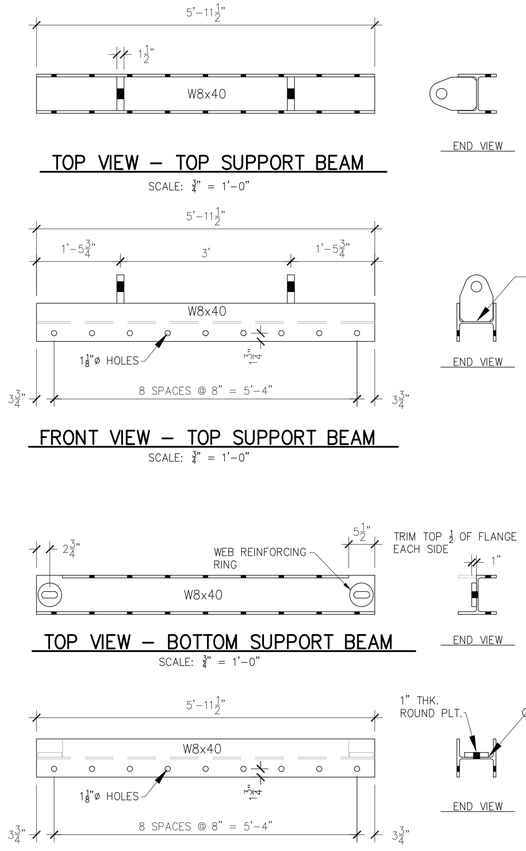
TOP SUPPORT PADEYE

SCALE: 1½" = 1'-0"



WEB REINFORCING RING

SCALE: 2" = 1'-0"



TOP VIEW – TOP SUPPORT BEAM

SCALE: ¾" = 1'-0"

FRONT VIEW – TOP SUPPORT BEAM

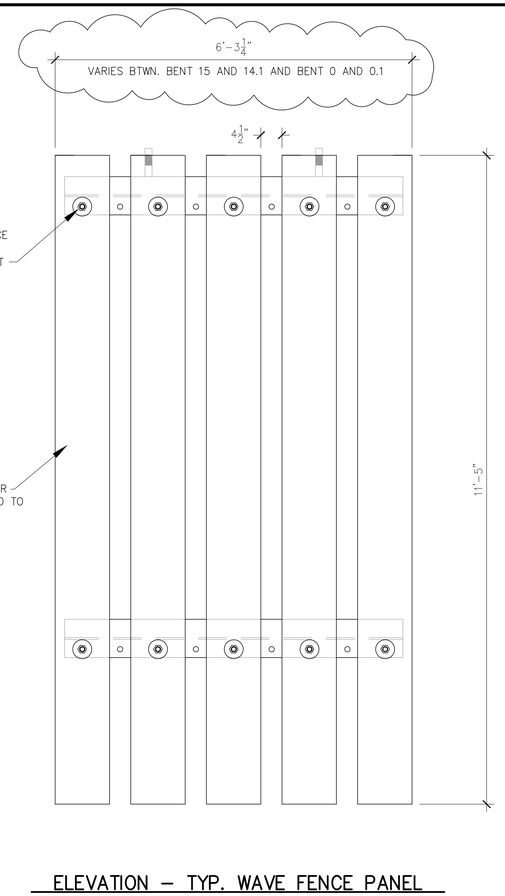
SCALE: ¾" = 1'-0"

TOP VIEW – BOTTOM SUPPORT BEAM

SCALE: ¾" = 1'-0"

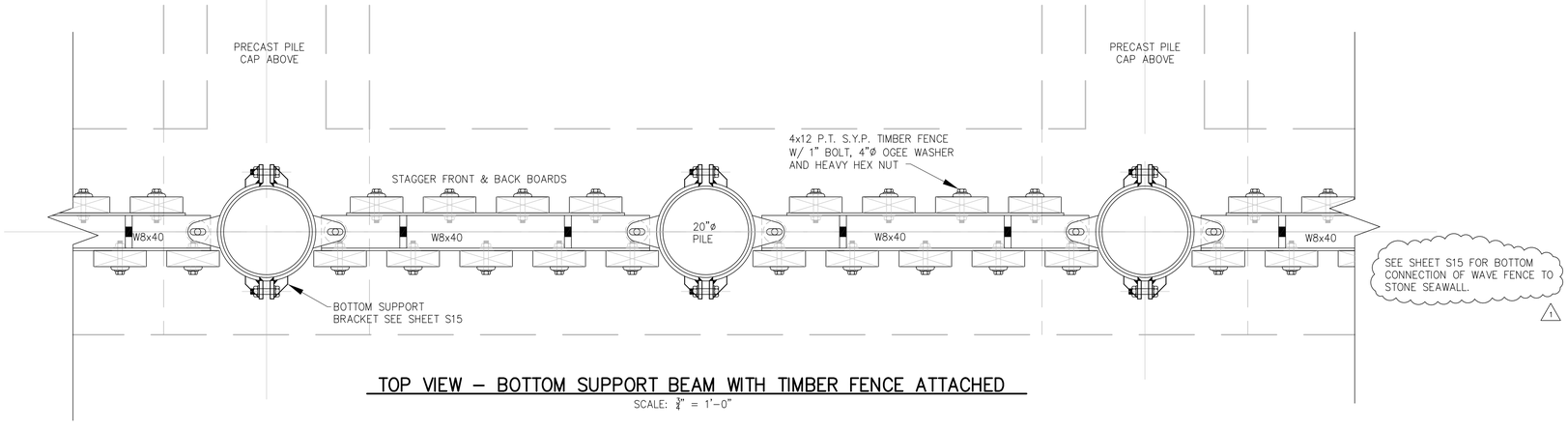
FRONT VIEW – BOTTOM SUPPORT BEAM

SCALE: ¾" = 1'-0"



ELEVATION – TYP. WAVE FENCE PANEL

SCALE: ¾" = 1'-0"



TOP VIEW – BOTTOM SUPPORT BEAM WITH TIMBER FENCE ATTACHED

SCALE: ¾" = 1'-0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		ADD NOTES REGARDING WIDTH/LENGTH OF WAVE FENCE

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN
No. 4997
REGISTERED 12/3/13
PROFESSIONAL ENGINEER

REGISTERED PROFESSIONAL ENGINEER

DATE

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DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

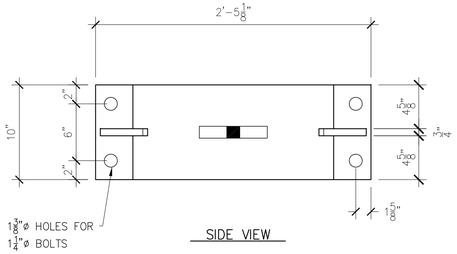
PROPOSED NEW PIER
WAVE FENCE ARRANGEMENT SHEET 1 OF 2

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

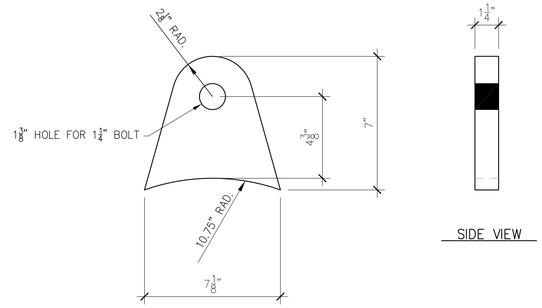
OF S14

SHEET 27 33



SIDE VIEW

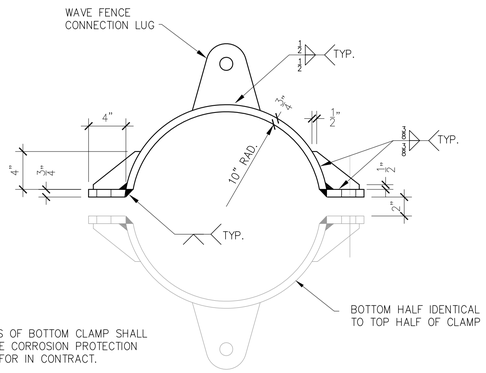
BOTTOM CLAMP SUPPORT ASSEMBLY SHALL BE COATED WITH 2 COATS OF COAL TAR EPOXY OVER HOT DIPPED GALVANIZING.



SIDE VIEW

WAVE FENCE CONNECTION LUG

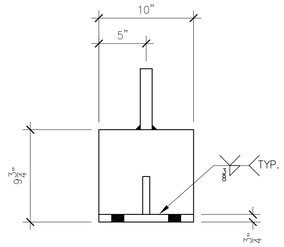
SCALE: 3" = 1'-0"



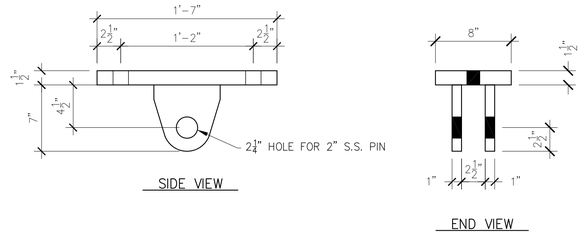
NOTE:
INSIDE RADIUS OF BOTTOM CLAMP SHALL ACCOMMODATE CORROSION PROTECTION IF PROVIDED FOR IN CONTRACT.

BOTTOM SUPPORT CLAMP – TOP VIEW

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

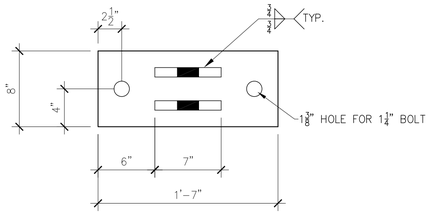


END VIEW



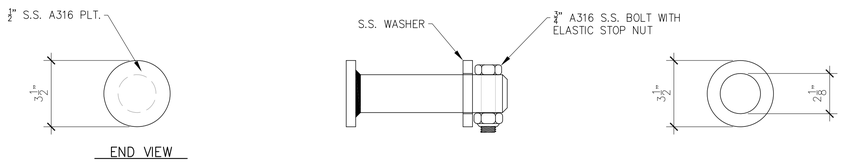
SIDE VIEW

END VIEW



TOP SUPPORT BRACKET – BOTTOM VIEW

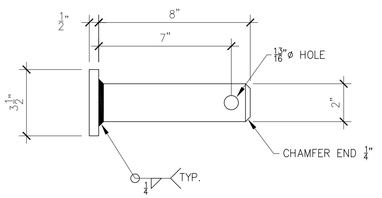
SCALE: 1 1/2" = 1'-0"



END VIEW

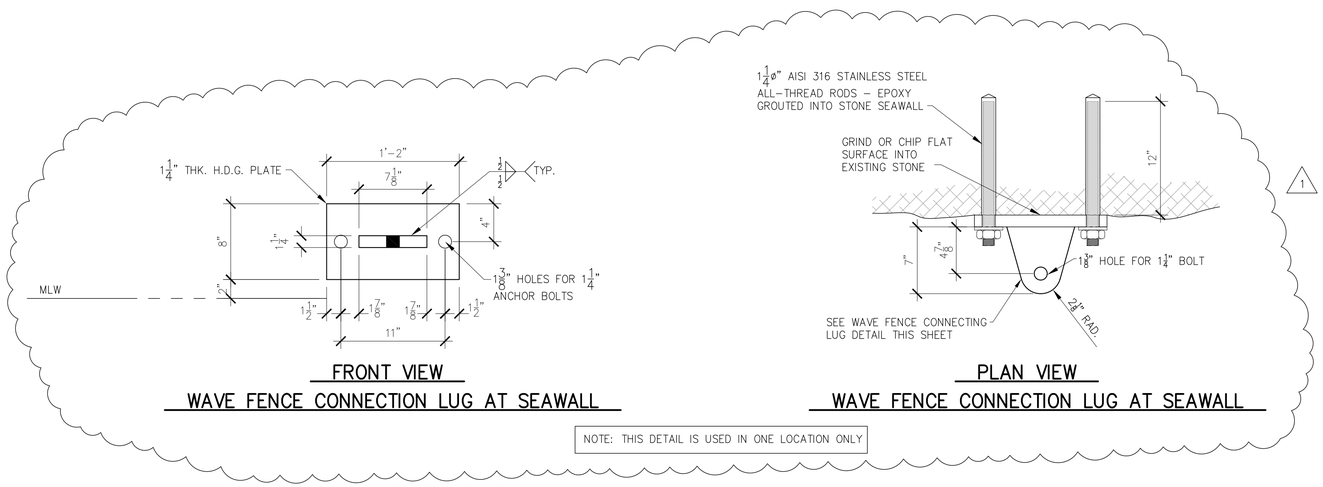
TOP SUPPORT BRACKET PIN ASSEMBLY

SCALE: 3" = 1'-0"



TOP SUPPORT BRACKET PIN

SCALE: 3" = 1'-0"



FRONT VIEW
WAVE FENCE CONNECTION LUG AT SEAWALL

PLAN VIEW
WAVE FENCE CONNECTION LUG AT SEAWALL

NOTE: THIS DETAIL IS USED IN ONE LOCATION ONLY

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		SHOW WAVE FENCE TO SEAWALL CONNECTION

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN
No. 4997
REGISTERED PROFESSIONAL ENGINEER
12/3/13

REGISTERED PROFESSIONAL ENGINEER

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DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

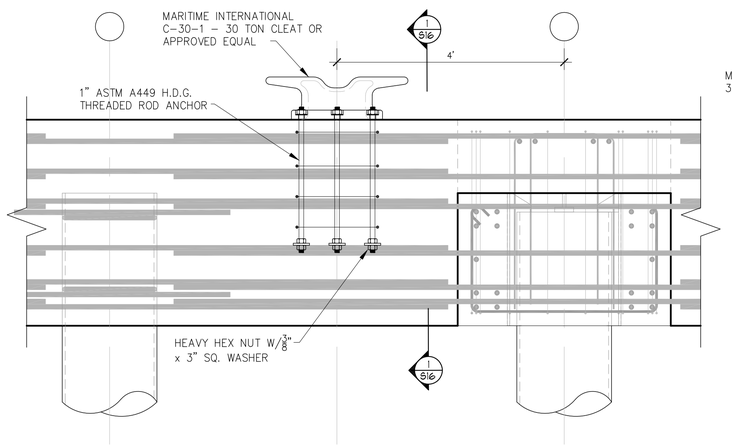
PROPOSED NEW PIER
WAVE FENCE ARRANGEMENT SHEET 2 OF 2

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

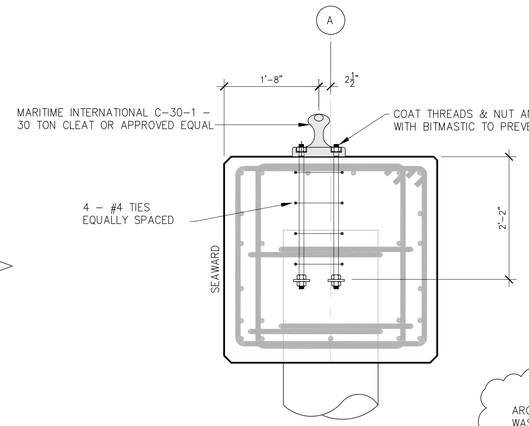
OF S15

SHEET 28 33



CLEAT ANCHOR DETAIL

SCALE: $\frac{3}{4}$" = 1'-0"



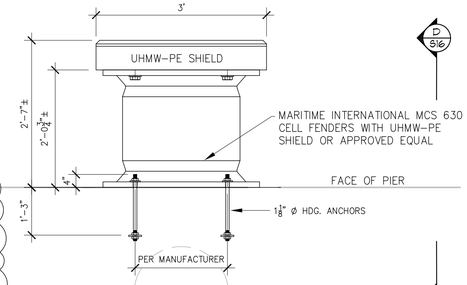
SECTION 1-1 LKG. WEST

SCALE: $\frac{3}{4}$" = 1'-0"

1

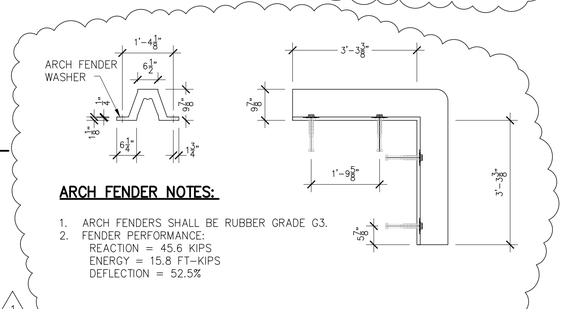
CELL FENDER NOTES:

1. FENDER PERFORMANCE:
   REACTION = 58 KIPS
   ENERGY 52.8 KIPS
   TOLERANCE = ± 10%
   DEFLECTION = 52.5 %
2. PANEL TO BE THE CLOSED BOX TYPE. INSIDE OF PANEL TO BE PRESSURE TESTED TO INSURE WATER TIGHTNESS.
3. UHMW-PE FACED PANELS TO BE SECURED TO CLOSED BOX PANEL W/ $\frac{5}{8}$" DIAM. A316 S.S. WELD STUDS AND FLANGE NUTS.
4. ALL ANCHORS AND BOLTING HARDWARE TO BE HOT-DIPPED-GALVANIZED AS PER ASTM A123 OR A153 AS REQUIRED.
5. ALL DIMENSIONS ARE IN FEET AND INCHES.
6. GENERAL TOLERANCE TO BE ±5%
7. ALL STEEL TO BE MINIMUM 34 KSI YIELD EQUAL TO ASTM A36.



TYPICAL PIER FENDER SYSTEM

SCALE: $\frac{3}{4}$" = 1'-0"



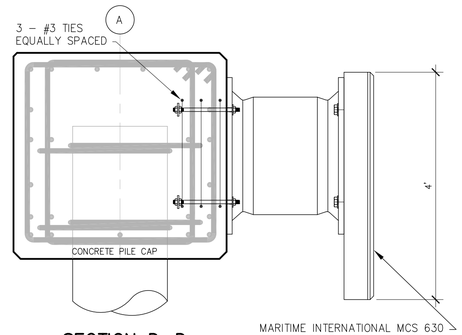
ARCH FENDER NOTES:

1. ARCH FENDERS SHALL BE RUBBER GRADE G3.
2. FENDER PERFORMANCE:
   REACTION = 45.6 KIPS
   ENERGY = 15.8 FT-KIPS
   DEFLECTION = 52.5%

1

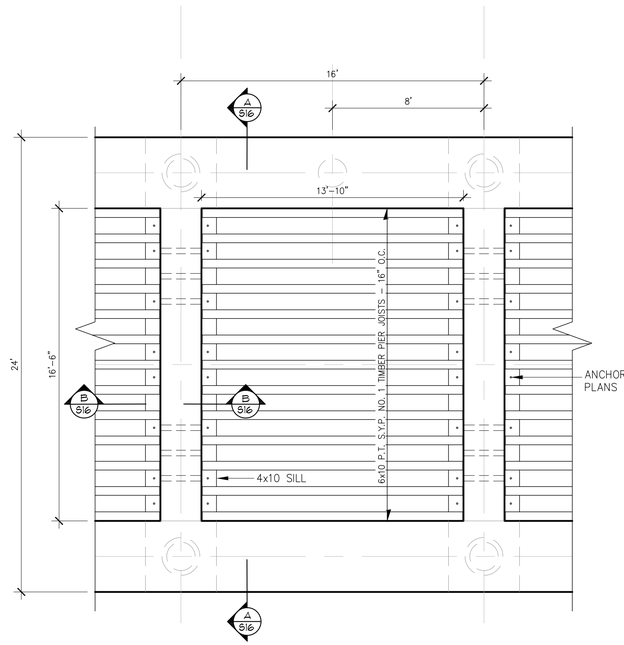
CORNER ARCH FENDER SYSTEM

SCALE: 1" = 1'-0"



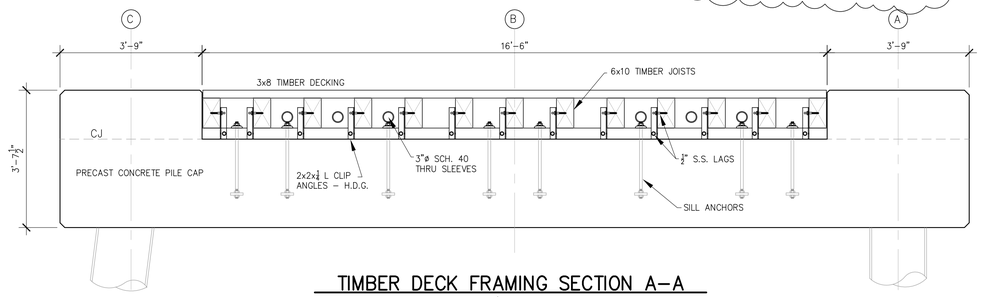
SECTION D-D

SCALE: $\frac{3}{4}$" = 1'-0"



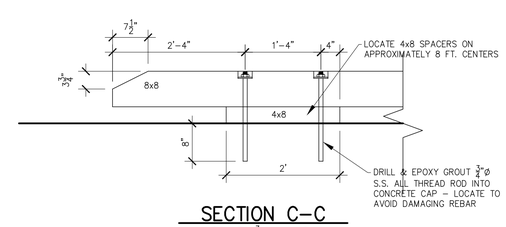
TIMBER DECK FRAMING PLAN

SCALE: $\frac{1}{4}$" = 1'-0"



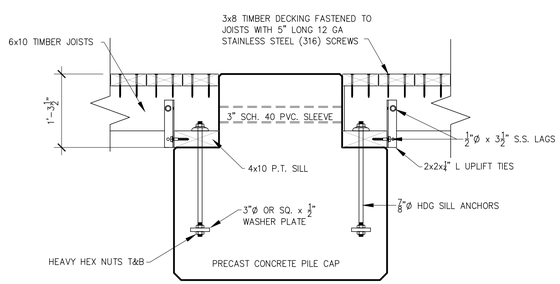
TIMBER DECK FRAMING SECTION A-A

SCALE: $\frac{1}{2}$" = 1'-0"



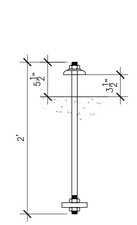
SECTION C-C

SCALE: $\frac{3}{4}$" = 1'-0"

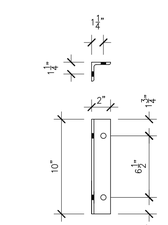


SECTION B-B

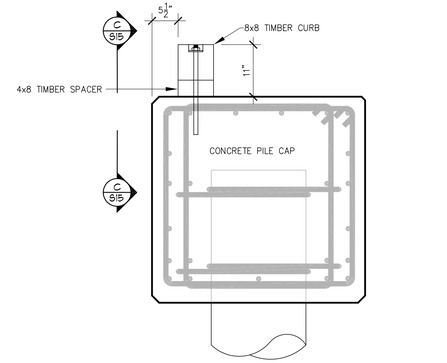
SCALE: $\frac{3}{4}$" = 1'-0"



7/8"ø HDG SILL ANCHOR



2x2x1/4" L UPLIFT TIES



TIMBER CURB AT PIER PERIMETER

SCALE: $\frac{3}{4}$" = 1'-0"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		INCLUDE FENDER PERFORMANCE REQ'MTS.

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN
STATE OF RHODE ISLAND
NO. 4997
REGISTERED
PROFESSIONAL ENGINEER
12/3/13

REGISTERED PROFESSIONAL ENGINEER

DATE

ST. JEAN ENGINEERING, LLC
CIVIL, MARINE AND STRUCTURAL CONSULTING ENGINEERING
1145 Middle Road, East Greenwich, RI 02818
Phone: 401.398.0999
email: stjean.engineering@verizon.net

DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

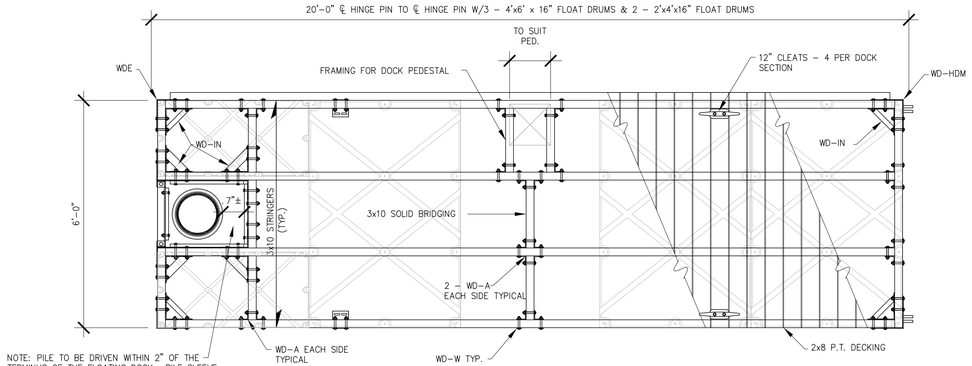
FRAMING DETAILS AND MISCELLANEOUS DETAILS

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

OF S16

SHEET 29 33



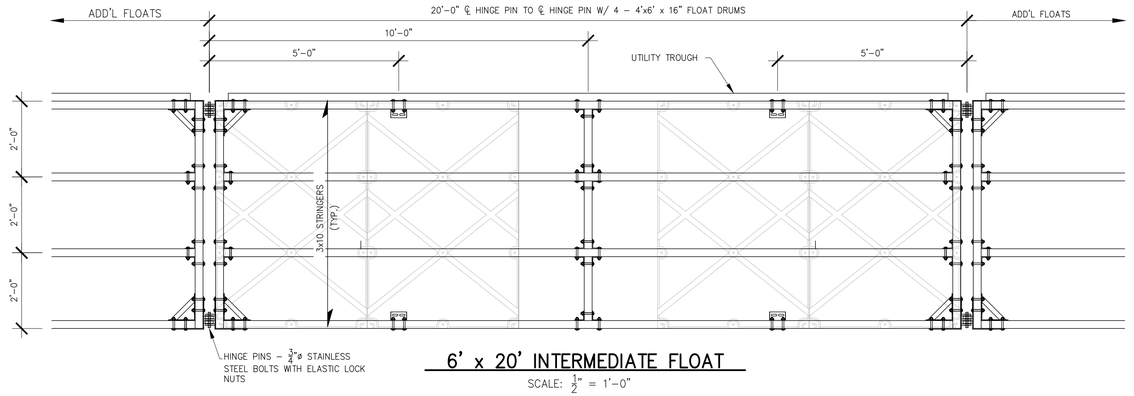
NOTE: PILE TO BE DRIVEN WITHIN 2" OF THE TERMINUS OF THE FLOATING DOCK. PILE SLEEVE IS OVERSIZE IN LONG DIRECTION OF THE FLOATING DOCKS TO ALLOW FOR FLOATING THE DOCK FORWARD, CLEAR OF THE MIDDLE FLOAT, TO ALLOW REMOVAL FOR OFF SEASON STORAGE.

6' x 20' FLOAT WITH PILE GUIDE

SCALE: $\frac{1}{2}$" = 1'–0"

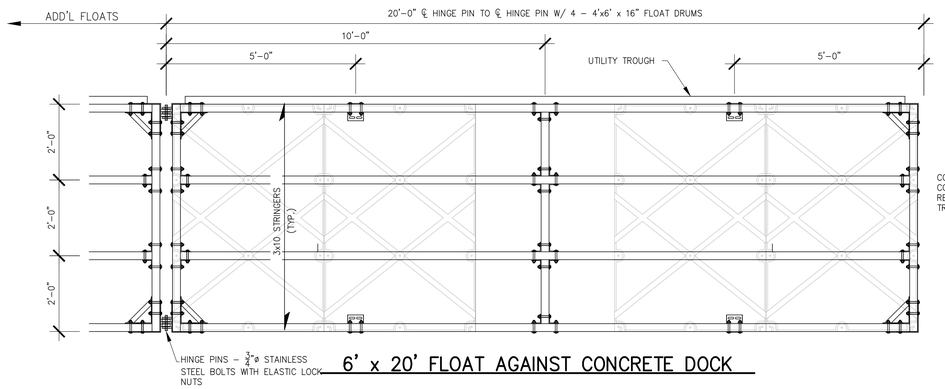
END VIEW

SCALE: $\frac{1}{2}$" = 1'–0"



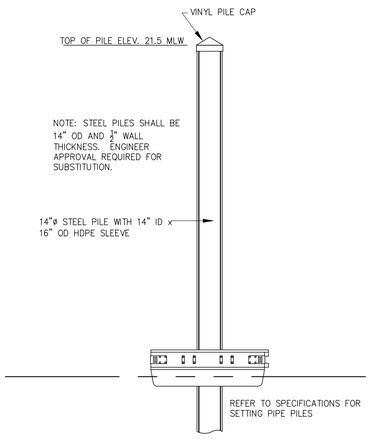
6' x 20' INTERMEDIATE FLOAT

SCALE: $\frac{1}{2}$" = 1'–0"



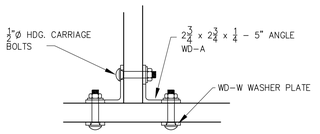
CONTRACTOR SHALL COORDINATE WITH CONCRETE DOCK MANUFACTURER REGARDING CONNECTION TO ADJUSTABLE TRACK CAST INTO CONCRETE DOCK

6' x 20' FLOAT AGAINST CONCRETE DOCK

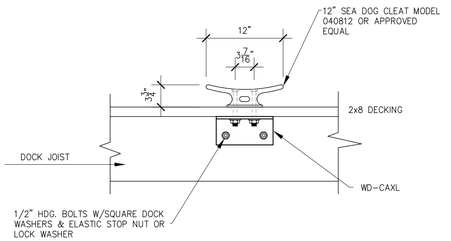


TYPICAL DOCK GUIDE PILE

SCALE: $\frac{1}{4}$" = 1'–0"

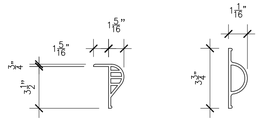


TYP. REINFORCEMENT AT ENDS OF DOCK JOISTS



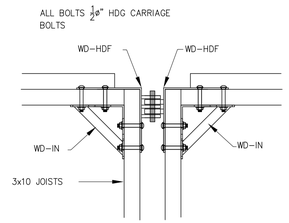
DOCK CLEAT ELEVATION

SCALE: 1" = 1'–0"



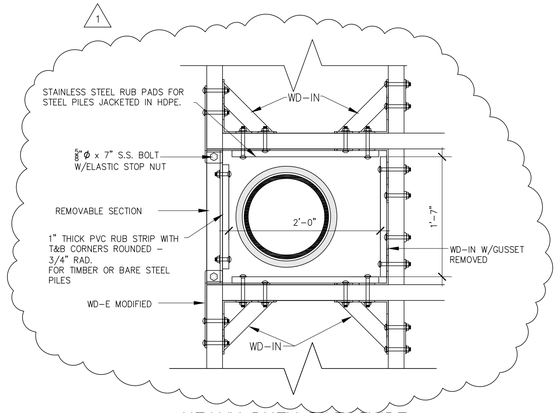
290 300-A

DOCK BUMPERS



TYPICAL HINGE ARRANGEMENT

SCALE: 1" = 1'–0"

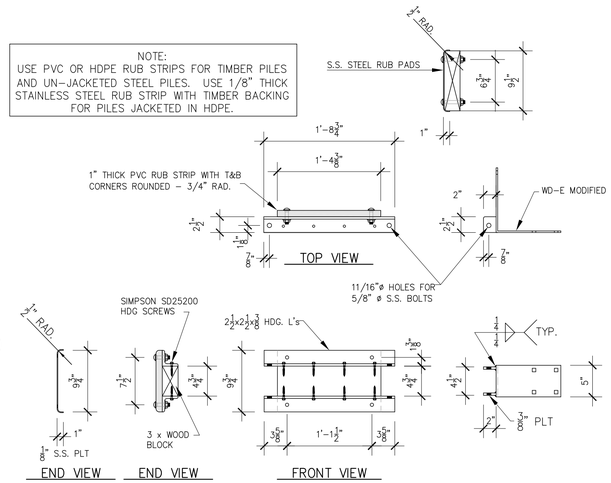


HEAVY DUTY PILE GUIDE

SCALE: 1" = 1'–0"

NOTE: PAD OUT GUIDE WITH TIMBER FOR TIMBER PILES

NOTE:
USE PVC OR HDPE RUB STRIPS FOR TIMBER PILES AND UN–JACKETED STEEL PILES. USE 1/8" THICK STAINLESS STEEL RUB STRIP WITH TIMBER BACKING FOR PILES JACKETED IN HDPE.

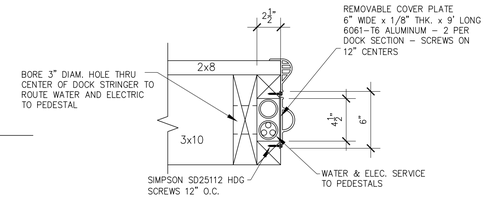


REMOVABLE PILE GUIDE SECTION

SCALE: 1" = 1'–0"

HARDWARE SCHEDULE

HARDWARE	DESCRIPTION
WD–A	REINFORCING ANGLE
WD–W	DBL WASHER PLATE
WD–CA	CLEAT ANGLE
WD–CAXL	XL CLEAT ANGLE
WD–CAFW	CLEAT FLAT WASHER
WD–HDM	HEAVY DUTY OUTSIDE CORNER MALE
WD–HDF	HEAVY DUTY OUTSIDE CORNER FEMALE
WD–E	OUTSIDE CORNER
WD–IN	INSIDE CORNER
WD–HDTF	HEAVY DUTY SINGLE "T" FEMALE
WD–HDTM	HEAVY DUTY SINGLE "T" MALE
WD–HDB	HEAVY DUTY BACKUP PLATE



UTILITY TROUGH

SCALE: 1½" = 1'–0"

1

FLOATING DOCK BOUYANCY COMPUTATIONS
(BASED ON ACE ROTO–MOLD BLACK FOAM FILLED FLOATATION TUBS – NINIGRET MARINE)

6' x 20' FLOAT
ESTIMATED DEAD WT. = 1,200#s
4' x 6' x 16" DRUM WEIGHT = 98# X 4 = 392#s
LIVE LOAD = 120' X 40 #/sf = 4,800#s
DRUM BOUYANCY = 1,863#s / FLOAT DRUM
NO. OF DRUMS REQ'D = 6,392/1,863 = 3.4
USE 4 – 4'x6'x16" DRUMS

FREE BOARD COMPUTATIONS:
TOTAL DEPTH OF DOCK:
16" + 9.50 + 1.5" = 27" OVERALL
DRUM BOUYANCY / INCH = (4 x 1,863) / 16 = 465#/"
DEAD LOAD FREEBOARD = 27" –(1,592/465) = 23.6"
LIVE LOAD FREEBOARD = 27" – (6,392/465) = 13.25"

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12/3/13	RSTJ		REVISE PILE GUIDE, REVISE BUOYANCY COMPS

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RICHARD N. ST. JEAN — No. 4997 — REGISTERED PROFESSIONAL ENGINEER — 12/3/13

REGISTERED PROFESSIONAL ENGINEER

DATE

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CIVIL, MARINE AND STRUCTURAL CONSULTING ENGINEERING
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email: st.jean.engineering@verizon.net

DRAWN BY: RSTJ

DEPT CHECK:

PROJECT CHECK:

SITE INFRASTRUCTURE IMPROVEMENTS

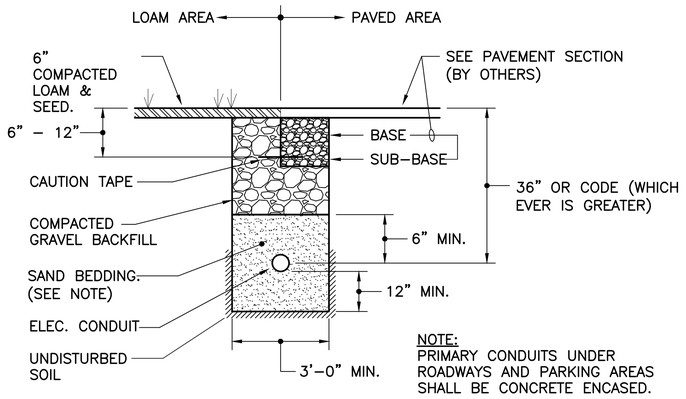
FLOATING FINGER DOCK DETAILS

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

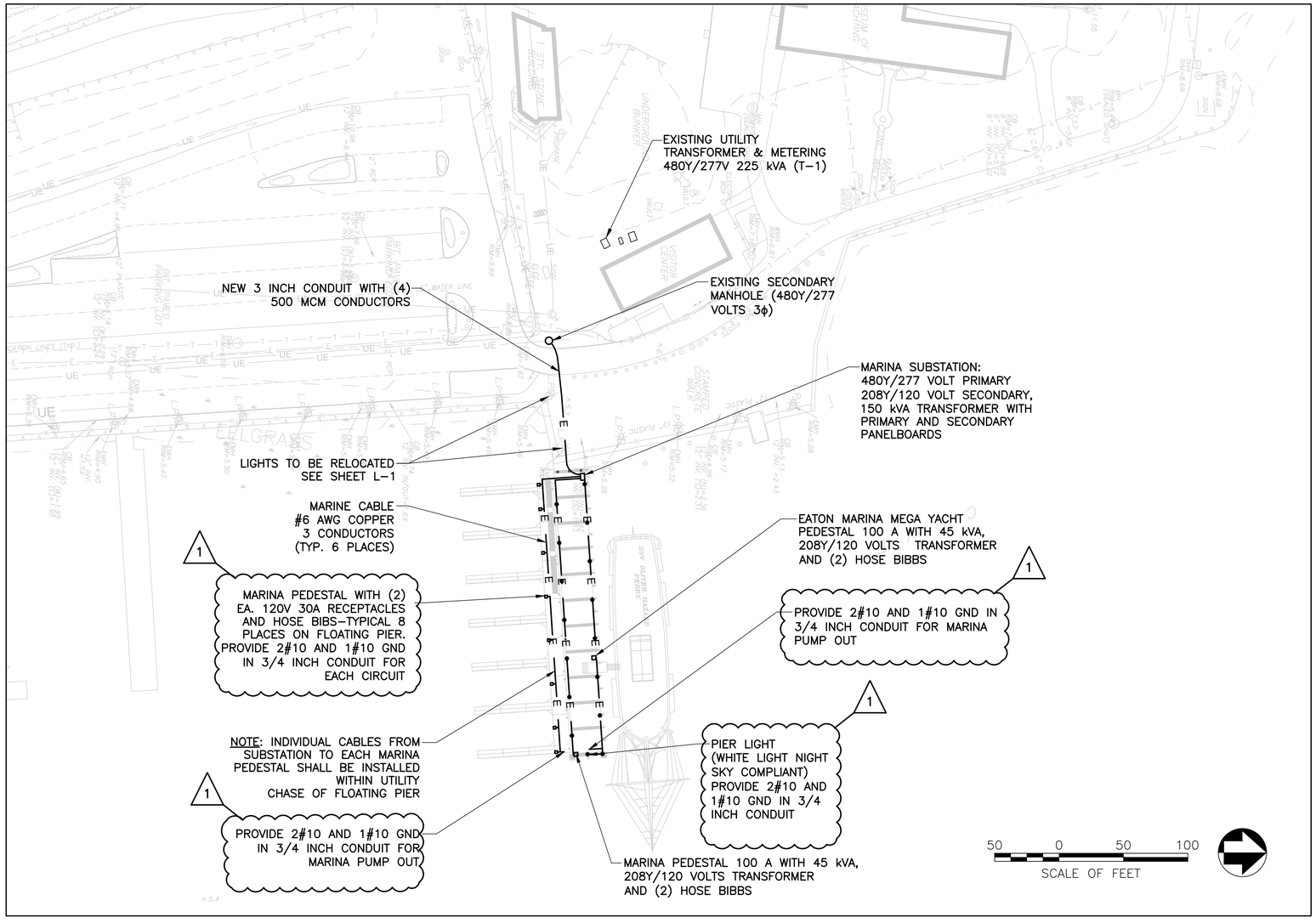
OF S17

SHEET 30 33



CONDUIT TRENCH DETAIL

NOT TO SCALE



NOTE:
ALL LOCATIONS OF THIS CORPORATION'S FACILITIES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD BEFORE ANY DIGGING COMMENCES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY DIG SAFE AT **888-DIG-SAFE (344-7233) OR DIAL 811 (WWW.DIGSAFE.COM)** PRIOR TO ANY EXCAVATIONS. IN THE EVENT THAT NATIONAL GRID ELECTRIC FACILITIES ARE DAMAGED DUE TO CONSTRUCTION, THE CONTRACTOR WILL BE HELD RESPONSIBLE FOR PAYMENT ON A CLAIM BASIS.

NOTES:

1. THE CONTRACTOR IS NOTIFIED OF THE PRESENCE OF UNMARKED AND/OR ABANDONED UNDERGROUND UTILITIES AND OTHER SUBSURFACE STRUCTURES AND FEATURES OVER THE ENTIRE EXTENT OF THIS SITE.

1

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12–03–13	APS	CF	ADDENDUM 1

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

RAYMOND W. DUSSEAULT III
REGISTERED PROFESSIONAL ENGINEER

OCTOBER 25, 2013
DATE

ENGINEERING DESIGN SERVICES INCORPORATED
141 Industrial Highway Slatersville, RI 02876
Tel (401) 765-7659 Fax (401) 765-2984

DRAWN BY: RWD
DEPT CHECK: SPC
PROJECT CHECK: RWD

FIXED PIER

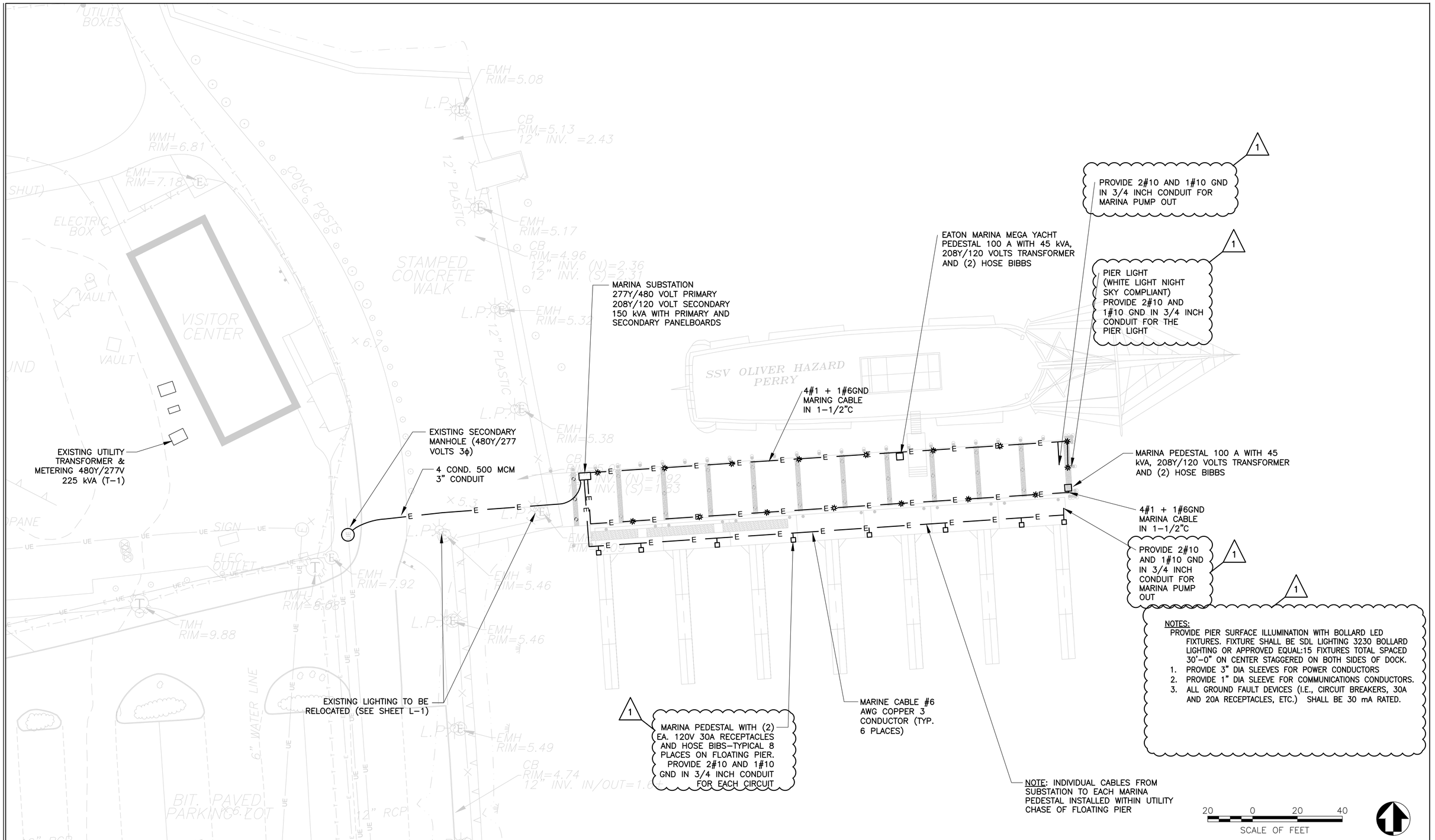
ELECTRICAL DISTRIBUTION PARTIAL SITE PLAN, DETAIL & NOTE

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

E-1

SHEET 31 OF 33



NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12-03-13	APS	CF	ADDENDUM 1

The LOUIS BERGER GROUP, Inc.

In association with GLA/BETA GROUP, INC., and St. Jean Engineering, LLC.

RAYMOND W. DUSSEAULT III
STATE OF RHODE ISLAND
No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

RAYMOND W. DUSSEAULT III
REGISTERED PROFESSIONAL ENGINEER

OCTOBER 25, 2013
DATE

ENGINEERING DESIGN SERVICES INCORPORATED
141 Industrial Highway Slatersville, RI 02876
Tel (401) 765-7659 Fax (401) 765-2984

DRAWN BY: RWD
DEPT CHECK: SPC
PROJECT CHECK: RWD

FIXED PIER

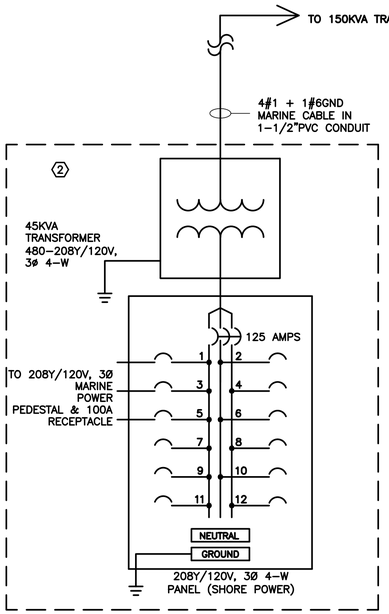
ELECTRICAL DISTRIBUTION FIXED PIER PLAN

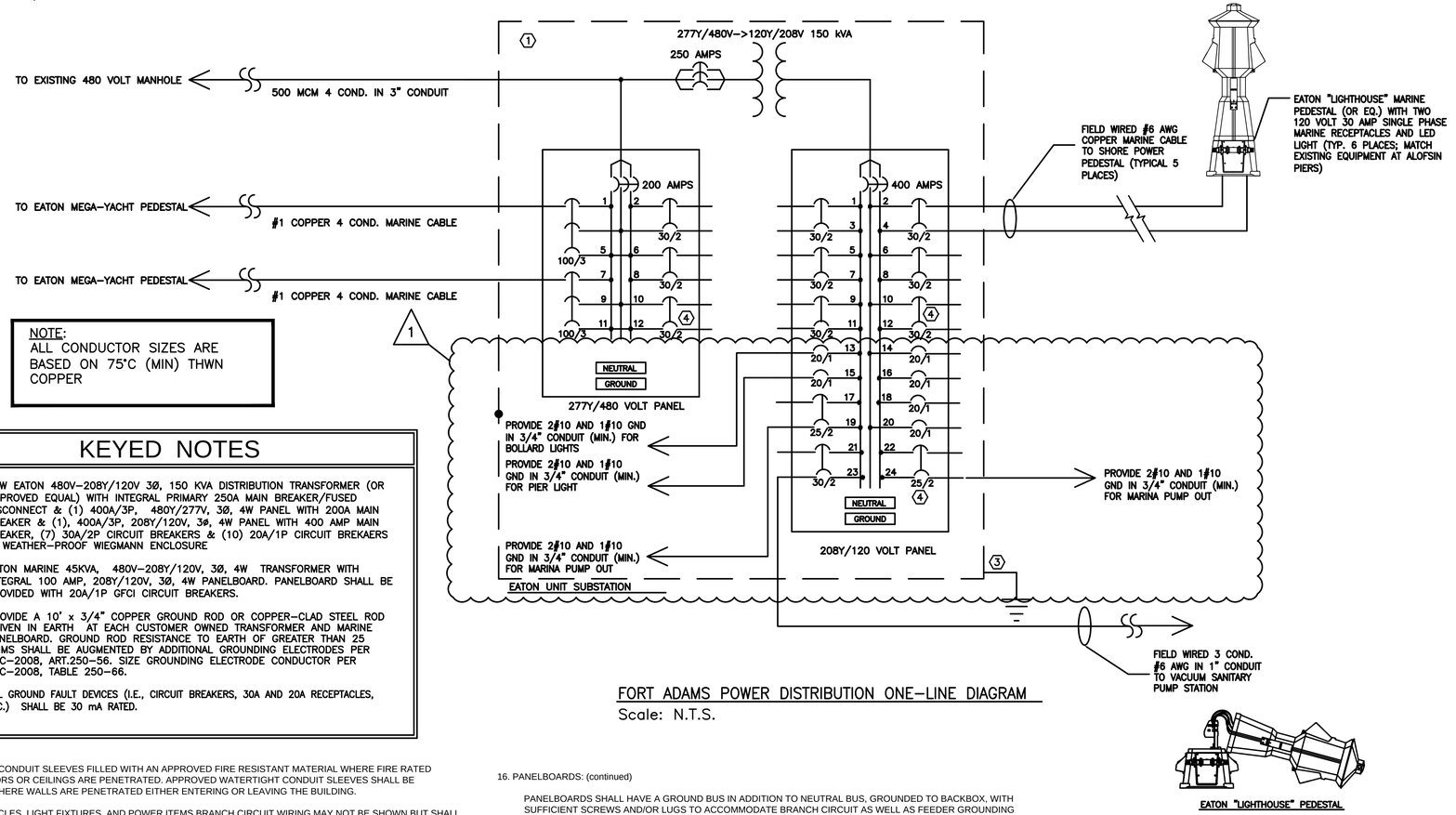
FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14-13

E-2

SHEET 32 OF 33





NOTE:
ALL CONDUCTOR SIZES ARE BASED ON 75°C (MIN) THWN COPPER

KEYED NOTES

1. NEW EATON 480V–208Y/120V 3Ø, 150 KVA DISTRIBUTION TRANSFORMER (OR APPROVED EQUAL) WITH INTEGRAL PRIMARY 250A MAIN BREAKER/FUSED DISCONNECT & (1) 400A/3P, 480Y/277V, 3Ø, 4W PANEL WITH 200A MAIN BREAKER & (1), 400A/3P, 208Y/120V, 3Ø, 4W PANEL WITH 400 AMP MAIN BREAKER, (7) 30A/2P CIRCUIT BREAKERS & (10) 20A/1P CIRCUIT BREKAERS IN WEATHER–PROOF WIEGMANN ENCLOSURE
2. EATON MARINE 45KVA, 480V–208Y/120V, 3Ø, 4W TRANSFORMER WITH INTEGRAL 100 AMP, 208Y/120V, 3Ø, 4W PANELBOARD. PANELBOARD SHALL BE PROVIDED WITH 20A/1P GFCI CIRCUIT BREAKERS.
3. PROVIDE A 10' x 3/4" COPPER GROUND ROD OR COPPER–CLAD STEEL ROD DRIVEN IN EARTH AT EACH CUSTOMER OWNED TRANSFORMER AND MARINE PANELBOARD. GROUND ROD RESISTANCE TO EARTH OF GREATER THAN 25 OHMS SHALL BE AUGMENTED BY ADDITIONAL GROUNDING ELECTRODES PER NEC–2008, ART.250–56. SIZE GROUNDING ELECTRODE CONDUCTOR PER NEC–2008, TABLE 250–66.
4. ALL GROUND FAULT DEVICES (I.E., CIRCUIT BREAKERS, 30A AND 20A RECEPTACLES, ETC.) SHALL BE 30 mA RATED.

FORT ADAMS POWER DISTRIBUTION ONE–LINE DIAGRAM
Scale: N.T.S.

GENERAL ELECTRICAL SPECIFICATIONS

1. FURNISH LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY FOR THE PROPER AND COMPLETE INSTALLATION OF ALL ELECTRIC WORK SHOWN ON THE DRAWINGS AND HEREIN SPECIFIED.

2. ALL ITEMS NOT SHOWN ON THE DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS, BUT WHICH ARE NECESSARY TO MAKE A COMPLETE ELECTRICAL INSTALLATION, SHALL BE FURNISHED AND INSTALLED AS PART OF THIS PROJECT.

3. ALL ELECTRICAL INSTALLATIONS AND GROUNDING SHALL BE IN STRICT ACCORDANCE WITH THE LATEST REQUIREMENTS OF THE LOCAL, STATE AND NATIONAL CODES.

4. OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND INSPECTIONS.

5. MATERIALS AND WORKMANSHIP SHALL BE THE BEST OF THEIR RESPECTIVE KIND AND IN FULL ACCORDANCE WITH THE MOST MODERN ELECTRICAL CONSTRUCTION STANDARDS. ALL MATERIAL SHALL BE NEW, UNLESS OTHERWISE NOTED AND FREE OF ANY DEFECTS.

6. THE ELECTRICAL CONTRACTOR SHALL CLEAN AT THE END OF EACH DAY ALL AREAS WORKED IN. EMPTY BOXES, RUBBISH, AND OTHER CONSTRUCTION MATERIALS OF NO USE SHALL BE REMOVED FROM THE BUILDING.

7. ALL EQUIPMENT AND INSTALLATION OF ELECTRICAL EQUIPMENT SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM DATE OF FINAL ACCEPTANCE.

8. FURNISH AND INSTALL TEMPORARY POWER AS REQUIRED TO OPERATE TOOLS AND LIGHTING. PROVIDE PANELS AND LIGHTING FIXTURES FOR CONSTRUCTION AS NEEDED.

9. THE PLANS DEPICT THE LOCATION OF ALL FIXTURE AND EQUIPMENT AND ARE INTENDED TO INDICATE THE GENERAL SCOPE OF WORK, LAYOUT AND QUALITY OF WORKMANSHIP. THEY ARE NOT INTENDED FOR THE PURPOSE OF EXECUTION OF THE WORK, BUT THE CONTRACTOR SHALL UNDERSTAND THAT SUCH DETAILS ARE PART OF THE WORK.

10. THE CONTRACTOR SHALL CAREFULLY VERIFY ALL MEASUREMENTS AT THE SITE AND DETERMINE THE EXACT LOCATION OF ALL CHASES AND OPENINGS REQUIRED BY THIS WORK AND SHALL PROVIDE ALL SLEEVES, INSERTS, AND HANGERS REQUIRED.

11. BRANCH CIRCUITS ADDED TO ANY EXISTING PANELBOARDS SHALL ALSO INCLUDE THE CIRCUIT BREAKER DIRECTORY TO BE UPDATED. IF NO DIRECTORY EXISTS THAN ONE SHALL BE PROVIDED INDICATING THE NEW CIRCUITS ADDED.

12. WIRE AND CABLE FOR BRANCH CIRCUITS SHALL BE TYPE THWN/THHN, INSULATED FOR 600VOLTS, RATED AT 75°C MINIMUM AND UL LISTED FOR BUILDING WIRE USE. WIRE SIZE SHALL BE A MINUMUM OF #12 AWG SOLID. ALL CONDUCTORS SHALL BE COPPER. ALL WIRING SHALL BE CONCEALED AND INSTALLED IN RACEWAY. RACEWAYS SHALL BE E.M.T. WITH STEEL SET SCREW FITTINGS. METAL-CLAD CABLE TYPE MC CABLE MAY BE USED IN AREAS WHERE APPROVED BY THE LOCAL WIRING INSPECTOR.

13. PROVIDE CONDUIT SLEEVES FILLED WITH AN APPROVED FIRE RESISTANT MATERIAL WHERE FIRE RATED WALLS, FLOORS OR CEILINGS ARE PENETRATED. APPROVED WATERTIGHT CONDUIT SLEEVES SHALL BE PROVIDED WHERE WALLS ARE PENETRATED EITHER ENTERING OR LEAVING THE BUILDING.

14. RECEPTACLES, LIGHT FIXTURES, AND POWER ITEMS BRANCH CIRCUIT WIRING MAY NOT BE SHOWN BUT SHALL BE PROVIDED AS REQUIRED. MINIMUM WIRING SHALL BE 2#12 PLUS 1#12GROUND IN 3/4"C. NO MORE THAN THREE PHASES MAY BE COMBINED IN A SINGLE HOMERUN AND EACH PHASE SHALL BE PROVIDED WITH AN INDIVIDUAL NEUTRAL.

15. ALL CONDUITS SHALL CONTAIN A GREEN SAFETY GROUND WIRE. BOND ALL PANELS, CABINETS, ENCLOSURES, CONDUITS, ETC., AS REQUIRED PER CODE.

16. PANELBOARDS:

PANELBOARDS SHALL BE PROVIDED AT LOCATIONS INDICATED ON THE DRAWINGS AND IN ACCORDANCE WITH PANEL SCHEDULES SHOWN ON THE DRAWINGS.

PANELS SHALL BE CIRCUIT BREAKER TYPE INSTALLED IN NEMA 6P ENCLOSURES, AS INDICATED ON THE DRAWINGS AND PROVIDED WITH NEATLY TYPED DIRECTORY CARDS.

BUSSING SHALL BE OF COPPER HAVING CURRENT CAPACITIES AS INDICATED AND SIZED FOR SUCH CAPACITIES IN ACCORDANCE WITH UNDERWRITER LABORATORY STANDARDS. UNLESS OTHERWISE NOTED, FULL SIZE NEUTRAL BARS SHALL BE INCLUDED. BUS BAR TAPS FOR PANELS WITH SINGLE POLE BRANCHES SHALL BE ARRANGED FOR SEQUENCE PHASING OF THE BRANCH CIRCUIT DEVICES. BUSSING SHALL BE BRACED THROUGHOUT TO CONFORM TO INDUSTRY STANDARD PRACTICE GOVERNING SHORT CIRCUIT STRESSES IN PANELBOARDS. PHASE BUSSING SHALL BE FULL HEIGHT WITHOUT REDUCTION.

THE BRANCH CIRCUIT BREAKERS SHALL BE MOLDED CASE, BOLT-ON TYPE, THERMAL-MAGNETIC TRIP, SINGLE, TWO OR THREE POLES SHOWN ON THE DRAWINGS. ALL MULTIPLE POLE BREAKERS SHALL BE SINGLE HANDLE, COMMON TRIP. WHERE BREAKERS OF LARGER CAPACITY ARE REQUIRED, THEY SHALL HAVE CIRCUIT CHARACTERISTICS AS SHOWN ON DRAWINGS AND SHALL BE RATED FOR SWITCHING DUTY WHERE REQUIRED. PROVIDE HANDLE LOCKS FOR EMERGENCY LIGHTING CIRCUITS, FIRE ALARM, SECURITY, OR OTHER SIMILAR FUNCTIONS.

16. PANELBOARDS: (continued)

PANELBOARDS SHALL HAVE A GROUND BUS IN ADDITION TO NEUTRAL BUS, GROUNDED TO BACKBOX, WITH SUFFICIENT SCREWS AND/OR LUGS TO ACCOMMODATE BRANCH CIRCUIT AS WELL AS FEEDER GROUNDING CONDUCTORS.

ALL PANELBOARDS SHALL BE DEAD-FRONT, SAFETY TYPE, AND UL LISTED.

BRANCH CIRCUIT PANELBOARDS FOR 120/208 VOLT SERVICE SHALL BE SIMILAR TO CUTLER-HAMMER PRL-3A & PRL-4 TYPE WITH 22,000 AMP MINIMUM IC CIRCUIT BREAKERS. REFER TO PANELBOARD SCHEDULES FOR SPECIFIC RATINGS.

CABINETS SHALL BE DESIGNED TO PROVIDE WIRING GUTTERS IN ACCORDANCE WITH NEC ARTICLE 408.55.

EACH PANELBOARD, AS A COMPLETE UNIT, SHALL HAVE A SHORT CIRCUIT RATING. PANELBOARDS SHALL BE MARKED WITH THEIR MAXIMUM SHORT CIRCUIT CURRENT RATING AT THE SUPPLY VOLTAGE AND SHALL BE UL LISTED.

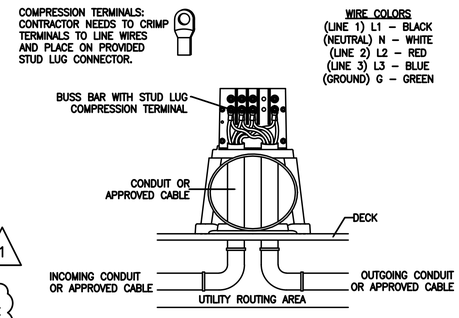
SPACES SHALL BE PROVIDED WITH ALL REQUIRED BUSSING, SUPPORTS, CONNECTORS, ETC. NECESSARY FOR FUTURE INSTALLATION OF CIRCUIT BREAKERS.

PANELBOARDS SHALL BE LISTED BY UNDERWRITER'S LABORATORIES FOR MARINE USE AND SHALL BEAR THE UL LABEL. PANELBOARDS SHALL BE AS INDICATED ABOVE BY EATON & CUTLER HAMMER.

"SERIES RATED" EQUIPMENT & ALUMINUM BUSSING IS NOT ACCEPTABLE.

17. ALL SUPPORTS AND ANCHORS SHALL BE DESIGNED AND INSTALLED PER REQUIREMENTS FOR THE SEISMIC CLASSIFICATIONS AS OUTLINED IN THE APPLICABLE BUILDING CODE. SITE LOCATION AND PREVAILING ORIENTATION SHALL BE TAKEN INTO ACCOUNT IN THE DESIGN.

EATON "LIGHTHOUSE" PEDESTAL



1
NOTE:
APPLY SILICONE ELECTRICAL GREASE TO ALL EXPOSED ELECTRICAL CONNECTIONS INCLUDING STUDS AND CRIMPED WIRE TERMINATIONS.

EATON LIGHTHOUSE PEDESTAL INSTALLATION DETAILS
Scale: N.T.S.

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS DESCRIPTION
1	12–03–13	APS	CF	ADDENDUM 1

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No. 7139
REGISTERED PROFESSIONAL ENGINEER (ELECTRICAL)

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DRAWN BY: RWD
DEPT CHECK: SPC
PROJECT CHECK: RWD

FIXED PIER

ELECTRICAL DISTRIBUTION PARTIAL ONE LINE DIAGRAM & DETAILS

FORT ADAMS STATE PARK, NEWPORT, RHODE ISLAND

RIDEM PROJ. No. P&D 14–13

E-3

SHEET 33 OF 33