



State of Rhode Island
Department of Administration / Division of Purchases
One Capitol Hill, Providence, Rhode Island 02908-5855
Tel: (401) 574-8100 Fax: (401) 574-8387

February 1, 2013

ADDENDUM #1

RFP/RFQ # 7459230

TITLE: SOUTH BULKHEAD REPLACEMENT & SITE IMPROVEMENTS, PHASE I, DEM

CLOSING DATE AND TIME: FEBRUARY 8, 2013 AT 1:45 PM PREVAILING TIME

**EFFECTIVE JANUARY 1, 2013: NEW SOLICITATIONS MUST COMPLY
WITH R.I. GEN. LAWS SECTION 37-2-18 (P.L. 221).**
(Refer to the Attached: Notice to Contractors and Vendors Bidding on Public Works Projects)

In addition to the Notice on Public Works Projects (3 pages) attached is:

1. Pre-Bid Meeting notes (3 pages)
2. Section 01100 Alternatives (1 page)
3. Revised Bid Proposal 00310 (3 pages) **TO BE RETURNED WITH YOUR BID RESPONSE.**
4. Drawings of Galilee Ferry Improvements (23 pages)
5. Drawings of Reconstruction of South Bulkhead (7 pages)
6. Sign in Sheet (3)
7. Total of all pages including this Cover Form is 44 pages.



State of Rhode Island Department of Administration
Division of Purchases

REVISED
December 11, 2012

NOTICE TO CONTRACTORS
AND VENDORS BIDDING
ON PUBLIC WORKS PROJECTS

Effective **January 1, 2013** all Public Works related project proposals exceeding Five Hundred Thousand (\$500,000) dollars are required to include a “public copy.” All agency contract solicitations, requests for proposals, invitations for bids, etc. shall state that any bid or proposal that exceeds Five Hundred Thousand (\$500,000) dollars must include a copy to be available for public inspection upon the opening of the bids. Any bid or proposal in excess of Five Hundred Thousand (\$500,000) dollars which does not include a copy for public inspection shall be deemed to be non-responsive. Additionally, proposals submitted for a Master Price Agreement, when the total amount potentially may exceed Five Hundred Thousand (\$500,000) and the solicitation expressly requires any or all vendors to submit a public copy, must include a copy to be available for public inspection.

For further information, see R.I. Gen. Laws Section 37-2-18(j) and State Procurement Regulations at www.purchasing.ri.gov. This requirement applies to all public works projects (vertical and horizontal) exceeding Five Hundred Thousand (\$500,000) dollars and any combination of base bid plus all alternates.

In accordance to the State Procurement Regulations the following conditions are required:

1. All bid proposals shall be opened publicly and read aloud.
2. Each bid, together with the name of the bidder, shall be recorded and an abstract made available “immediately” for public inspection.
3. Copy of the redacted bid proposal shall be available for public inspection by the close of the business the day the subject bid(s) and/or contract(s) is opened by the Division of Purchases.

4. The burden to identify and withhold from the public copy that is released at the bid opening any trade secrets, commercial or financial information, or other information the bidder deems not subject to public disclosure pursuant to Chapter 38-2, the Access to Public Records Act, shall rest solely and exclusively with the bidder submitting the bid proposal.
5. At the time that a proposal is submitted, a bidder must submit a redacted copy of the bid proposal in a PDF (Portable Document File) file format on a read only CD-R Media Disk (hereinafter referred to as a "CD"). Vendors are required to provide all documents submitted in response to the bid solicitation on the CD.
 - a. The acceptable media is a CD-R. Media that is read/writable (CD RW) will not be accepted.
 - b. Only readable, not writeable media is acceptable.
 - c. Vendor is responsible for supplying their own CD-R media.
 - d. Vendor is responsible for the integrity of the CD.
6. Failure of the bidder to submit a public copy on a readable CD, as required by RIGL 37-2-18 as amended, shall result in the disqualification of said bid.
7. CD must be enclosed in a protective cover and the protective cover clearly labeled with the following:
 - a. Marked "Public Copy"
 - b. Title of Solicitation as it appears on the RIVIP cover letter.
 - c. Name of Company and Vendor ID as it appears on the RIVIP cover letter.
 - d. Bid Response Number as it appears on the RIVIP cover letter.
 - e. Date of Bid as it appears on the RIVIP cover letter.
8. Bid response on CD-R to be in a PDF (Portable Document Format).
 - a. One PDF file will be on the CD-R. File to meet the following requirements:
 - i. Only one file will contain all documents in response to the bid. If you have more than one document for the response, the documents must be concatenated or merged into one PDF document. Failure to submit only one PDF file may result in disqualification of bid.
 - ii. File should be named in the following manner:
 1. BidNumber_DateofBid_VendorName_VendorID.pdf. Where:
 1. Bid Number is the bid number for which the response is for as it appears on the RIVIP cover sheet.
 2. Dateofbid is date of bid using the format (mm-dd-yyyy).
 3. VendorName is the name of the vendor as one word – no spaces or punctuation.
 4. Vendor ID as it appears on the RIVIP vendor cover sheet.

Note: you must use underscores in separating the fields. Do not use underscores anywhere else in the filename other than to separate the fields.

Example: 1234567_06-01-2011_Vendor1_9876.pdf

9. Purchasing staff will officially conclude the bid opening and all loaded proposals will be posted to the Purchasing web site. All proposals will be available immediately after bid opening www.purchasing.ri.gov .

For technical assistance, contact the Division of Purchases office at 574-8100.

Addendum No. 1
January 31, 2013
Galilee South Bulkhead – Phase I
Pier 3 Reconstruction
Page 1 of 3

Pre-Bid Meeting Notes
January 25, 201

The following is a summary of the items discussed at the pre-bid meeting. The plans included in Addendum 1 have been revised to reflect any changes regarding these items.

1. The project completion target date is May 22nd when the High Speed Ferry arrives. This ferry will berth on the south side of the pier, and will arrive on May 22, 2013 and begin service to Block Island on Memorial Day weekend. If work is not completed at this time, as a minimum the ferry will need 100 feet of clear space on the south side to berth, and a minimum 8-foot wide safe access way on the pier for passenger loading and unloading, including aluminum gangways if needed. Additionally, an 8-foot wide continuous access way must be maintained on the north side of the pier for Interstate Navigation personnel to tie up the Block Island Ferry. The access requirements are shown on Drawing SK-1 included in Addendum 1.
2. The treatment of the timbers shall be 2.5 lb/cf CCA for all members that will be submerged (bracing, piles) and 1.0 lb/cf CCA for all other timber (decking, chocks, curbs, etc.). It was noted by those in attendance that due to hurricane Sandy repairs, the current lead time for treated timber is around 6 to 8 weeks, which may impact the project schedule.
3. There are no liquidated damages in the contract for completion time.
4. It was noted that the two 85-foot long Class A bearing piles will not likely be readily available. The lengths of the two proposed Class A bearing piles shall be reduced from 85 feet to 65 feet due to limited availability of the longer pile. The two existing piles adjacent to the new piles shall also be posted up to support the new timber framing. The new piles shall be through bolted to the existing pile and new posts.
5. The RIDEM will provide crew parking in their lot if necessary.
6. It was noted that the cellar pipe is only 2.5 feet long. Upon review, this is the specific equipment requested by the Narragansett Fire Marshal (Bresnan 193-9 nozzle and A-2.5 applicator).
7. The fender pile stick up above the deck shall be 6-feet. The 6-foot stick up is to prevent boats from riding over the top of the piles at low tide and shall be utilized.
8. The spikes for the 3-inch decking shall be increased to 60d.
9. Interstate Navigation will remove the Jersey barriers and the wooden ticket booth from the pier.

Addendum No. 1
January 31, 2013
Galilee South Bulkhead – Phase I
Pier 3 Reconstruction
Page 2 of 3

10. The existing electrical service shall be removed to the electrical hand hole at the southwest corner of the pier. This equipment is to be replaced as part of a future contract.
11. The existing pole mounted light fixture at the end of the pier is to be maintained during construction; however the power service shall be removed per #10 above.
12. The existing water service is to be maintained during construction.
13. The steel ramp is to be removed in one piece and provided to Interstate Navigation. The steel plate at the end of the pier is also Interstate Navigation's property and shall be removed and supplied to them.
14. A new cleat shall be secured to the end of the pier and fastened to the 10x10 ramp hoist support timbers. Cleat shall be same size as cleat that is welded to the metal ramp.
15. Dock washers shall be used for all bolted timber connections.
16. The corner pile clusters at the end of the pier shall be constructed using greenheart piles, not southern yellow pine.
17. Four existing timber ladders shall be replaced with new timber ladders; the ladders will be supplied by RIDEM.
18. The existing Teflon wear strips on the south side fender piles shall be removed and re-installed on the new fender piles.
19. A PDF of the 1993 RIDOT plans for improvements to the pier will be provided for reference purposes.

The following is a response to written questions submitted by Reagan Construction Corp. dated January 22, 2013:

1. The scale of the 11x17 PDF's of the drawings provided in the bid documents was distorted from the original. Full size PDF's of the drawings to scale have been provided with this addendum.
2. The work in this contract is for Pier 3 repairs only, and all applicable specifications to this work shall apply. There is no concrete or earthwork associated with this contract, these specification sections are therefore not applicable.

Addendum No. 1
January 31, 2013
Galilee South Bulkhead – Phase I
Pier 3 Reconstruction
Page 3 of 3

3. See the notes from the Pre-Bid meeting for clarification on access to the pier during construction, and the revision to Specification Section 01015 included with Addendum 1.
4. The finish deck elevation is shown on Sheet 3 “Existing Conditions”, and ranges from 5.07 to 5.57 feet NGVD (5.92 to 6.42 feet MLW). The top of the lower horizontal brace is approximately elevation 0.0 MLW.
5. The size of the deck spikes shall be increased to 60d.

Additional Addendum No. 1 Items:

1. The project bid form has been revised to include the deck replacement as a separate “Add-Alternate” bid item, to be performed after the High Speed Ferry departs on October 17, 2013.
2. Paragraph 1.5.G of Specification Section 010015 “Contractor’s Use of the Premises” shall be replaced with the following:
 - G. The Block Island Ferry will be using the northern-most 8’ bay throughout construction so the ferry can tie up and dock throughout the day and throughout the construction period. Construction work must accommodate the ferry on the north side of the pier. The existing cleats are to remain for the ferry. The southern-most 8’ bay must be available for the High Speed Ferry from May 22 to October 1 for passenger loading, ticketing, and docking. The contractor must provide safe travel for passengers loading and unloading onto the High Speed Ferry during those times and must install temporary fencing as needed. The High Speed Ferry will only need to access the southwestern 100’ of the pier between May 22 and October 1st.

PART 1 - GENERAL

1.1 DESCRIPTION:

- A. Work included: Provide alternative bid proposals as described in this Section.
- B. Related work:
 - 1. 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.
 - 2. Some of the items mentioned in this Section are described further in pertinent other Sections of these Specifications.
- C. Procedures:
 - 1. Provide alternative bids to be added to or deducted from the amount of the base bid if the corresponding change in scope is accepted by the Owner.
 - 2. Include within the alternative bid prices all costs, including materials, installations, and fees.
 - 3. Show the proposed alternative amounts opposite their proper description on the Bid Form.
 - 4. Coordinate alternates with related work to ensure that work affected by each selected alternate is properly accomplished.

1.2 SPECIFIC ALTERNATIVES:

A. **Alternate Number One:** Remove and Dispose all Existing timber decking and install new 3x12 timber decking (3/16" spacing) after the High Speed Ferry departs the pier on 10/17/2013 and before the High Speed Ferry returns to the pier on May 22, 2014. This Add Alternate includes all related work to installing the decking such as work to prepare the existing stringers, curbing, cleats, fire hatches, and tar paper. Removing and replacing the steel ramp will be part of the base bid.

****END OF SECTION****

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 **South Bulkhead Replacement and Site Improvements, Port of Galilee, Narragansett, 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 is:

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

Should there be a conflict between the Base Bid above and the Base Bid Price Breakdown below, the Base Bid above shall govern.

C. ALTERNATIVES:

For Alternate No. 1 Add \$ _____ DOLLARS (\$ _____)
(Price in Words) (Numbers)

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

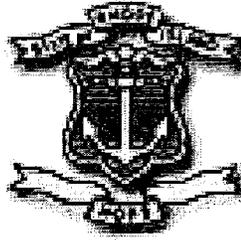
The undersigned is a (an) _____ (Individual- Partnership-Corporation-Joint Venture). Attach copies of articles of incorporation or partnership agreement, and Rhode Island Secretary of State's Certificate of Good Standing.

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. _____	_____	_____	\$ _____



STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS

**Bid # _7459230 SIGN IN SHEET
PRE-BID CONFERENCE**

**Project Name: SOUTH BULKHEAD REPLACEMENT & SITE
IMPROVEMENTS PHASE I
PORT OF GALILEE, NARRAGANSET, RI**

Date: JANUARY 25, 2013 10:00 AM

1	NAME: KISA LEE	PHONE: 333-2776 x4312	COMPANY: RIDEM
	FAX: 333-2069	ALT CONTACT #:	E-MAIL: KISA.LAWLESS@DEM.RI.GOV
2	NAME: Bill Ladd	PHONE: 401 421 4140	COMPANY: GZA
	FAX: 401 751 8613	ALT CONTACT #: 401 374 2312	E-MAIL: William.ladd@gza.com
3	NAME: LARRY AHEARN	PHONE: 846-1173	COMPANY: REAGAN CONSTRUCTION
	FAX: 847-8744	ALT CONTACT #:	E-MAIL: REAGANCONSTRUCT@AOL.COM
4	NAME: Nick TAVILLOS	PHONE: 295 5250	COMPANY: Specialty Divisor
	FAX: 401-295-1160	ALT CONTACT #:	E-MAIL: Nick@specialtydivisor.ca
5	NAME: Brian Cox	PHONE: 860-389-5424	COMPANY: Interstate Navigation
	FAX: 860-442-0215	ALT CONTACT #:	E-MAIL:
6	NAME: CHRISTIAN MYERS	PHONE: 401-439-5201	COMPANY: INTERSTATE NAVIGATION Co.

	FAX: (401) 783-8663	ALT CONTACT #: (401) 675-1239	E-MAIL: CMYERS@BlockISLANDFERRY.COM
7	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
8	NAME: MATT MELCHIONI FAX:	PHONE: 401. 742 4214 ALT CONTACT #: 401. 789. 0867	COMPANY: NARR. DOCK WOLVES ILLC E-MAIL: MELCHIONI@COX.NET
9	NAME: Peter Donatelli FAX: 401-808-4220	PHONE: 401-641-5386 ALT CONTACT #: 401-261-6584	COMPANY: NWH England Bldg & Bridge Co. E-MAIL:
10	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
11	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
12	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
13	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
14	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
15	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
16	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
17	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
18	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
19	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:
20	NAME: FAX:	PHONE: ALT CONTACT #:	COMPANY: E-MAIL:

21	NAME:	PHONE:	COMPANY:
	FAX:	ALT CONTACT #:	E-MAIL:
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	FAX:	ALT CONTACT #:	E-MAIL:
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	FAX:	ALT CONTACT #:	E-MAIL:
24	NAME:	PHONE:	COMPANY:
	FAX:	ALT CONTACT #:	E-MAIL:
25	NAME:	PHONE:	COMPANY:
	FAX:	ALT CONTACT #:	E-MAIL:

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	FBD-REGT (002)	93	1	23

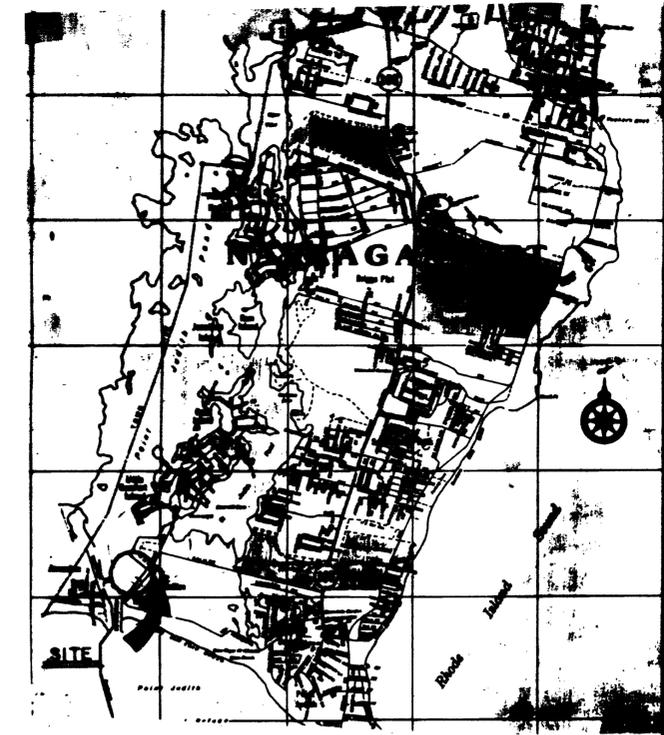
STATE OF RHODE ISLAND
DEPARTMENT OF TRANSPORTATION

PLAN, SECTION AND DETAILS
OF PIER No. 3, PIER "O" AND BULKHEAD

FOR
**GALILEE FERRY
TERMINAL IMPROVEMENTS**

PORT OF GALILEE
NARRAGANSETT RHODE ISLAND

R.I. CONTRACT No. 9352
R. I. FEDERAL AID PROJECT No. FBD-REGT (002)



LOCATION MAP

INDEX OF DRAWINGS

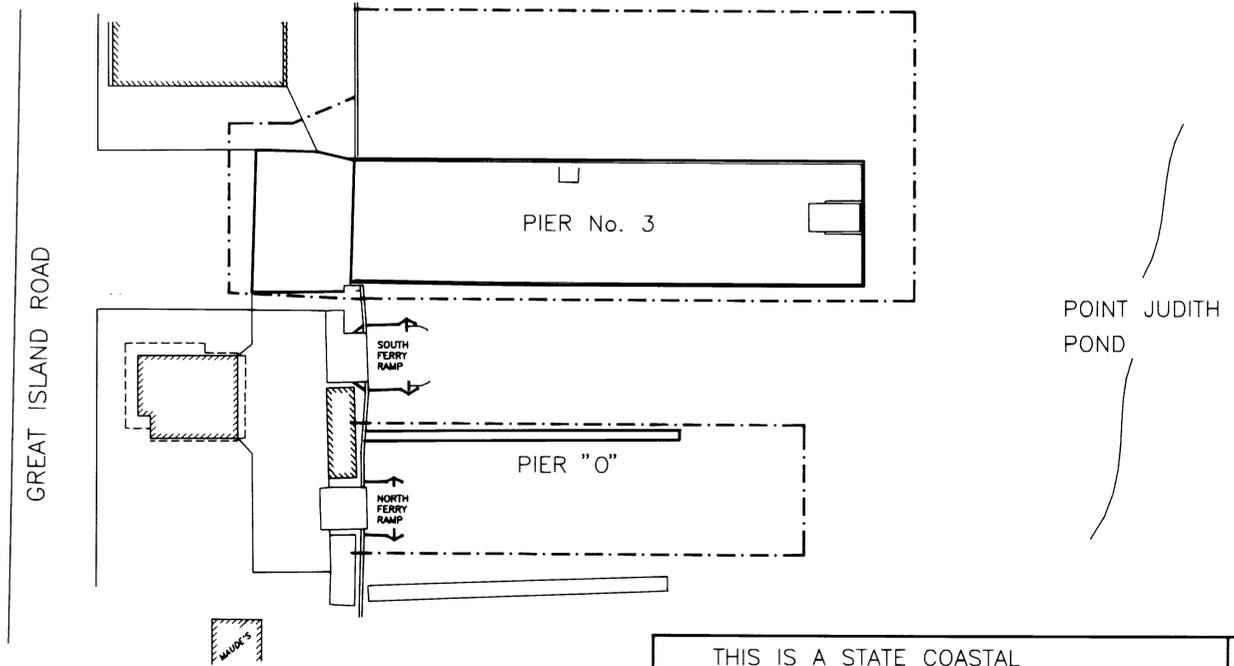
- 1 COVER
- 2 GENERAL NOTES
- 3 EXISTING SITE & DEMOLITION PLAN
- 4 PIER No. 3 TEMPORARY STRUCTURES
- 5 PROPOSED SITE PLAN
- 6 PIER No. 3 PILE LAYOUT & BRACING PLAN, SECTIONS & DETAILS
- 7 PIER No. 3 SUPERSTRUCTURE PLAN
- 8 PIER No. 3 SECTIONS & DETAILS 1
- 9 PIER No. 3 SECTIONS & DETAILS 2
- 10 PIER No. 3 SECTIONS & DETAILS 3
- 11 PIER No. 3 SECTIONS & DETAILS 4
- 12 PIER No. 3 SECTIONS & DETAILS 5
- 13 BULKHEAD ANCHORAGE SYSTEM @ PIER No. 3 PLAN, SECT. & DET. 1
- 14 BULKHEAD ANCHORAGE SYSTEM @ PIER No. 3 PLAN, SECT. & DET. 2
- 15 PIER "O" PLAN, SECTION & DETAILS
- 16 ELECTRICAL & MECHANICAL PLAN & DETAILS
- 17 MAINTENANCE & PROTECTION OF TRAFFIC PLAN
- 18 R.I. STANDARD
- 19-23 BORING LOGS

R.I. STANDARD SPECIFICATIONS

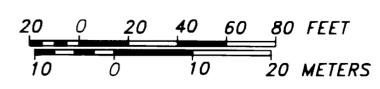
SPECIFICATIONS TO GOVERN THIS PROJECT ARE THE RI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, REVISION OF 1971, AMENDED BY: DIVISION I, PART 100, GENERAL REQUIREMENTS AND COVENANTS, REVISION OF 1992; COMPILATION OF CHANGES TO DIVISION II, CONSTRUCTION DETAILS, AND DIVISION III, MATERIALS, DATED DECEMBER, 1992, AND; THE STATE AND FEDERAL SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS. STANDARD DETAILS FOR THIS PROJECT ARE RI STANDARD DETAILS AS INCLUDED.

THE FOLLOWING STANDARD DETAILS ARE INCLUDED IN THIS PROJECT:

- 9.1 BALED HAY-EROSION CHECK
- 25.0 GENERAL NOTES-CONSTRUCTION & TEMPORARY SIGNS & MOUNTINGS
- 25.5 CONSTRUCTION & TEMPORARY SIGN MOUNTINGS
- 26.0 GENERAL NOTES-BARRICADES
- 26.5 POLYETHYLENE DRUM WITH MARKINGS
- 26.6 FLOURESCENT TRAFFIC CONE



PLAN



THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT

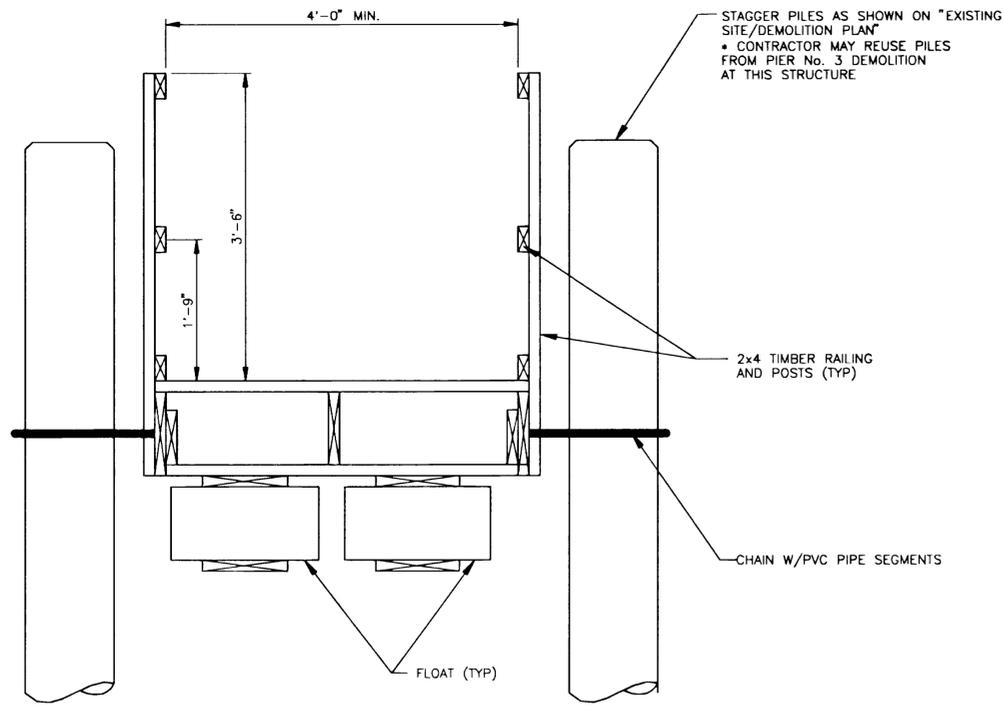
PARE ENGINEERING CORPORATION
Engineers - Planners - Consultants
8 Blackstone Valley Place, Lincoln, RI 02865
401/334/4100 Fax: 401/334/4108

Contract Number.....9352
Number of Sheet.....1
Total Sheets.....23

ROBERT A. VRENN JR.
PROFESSIONAL ENGINEER

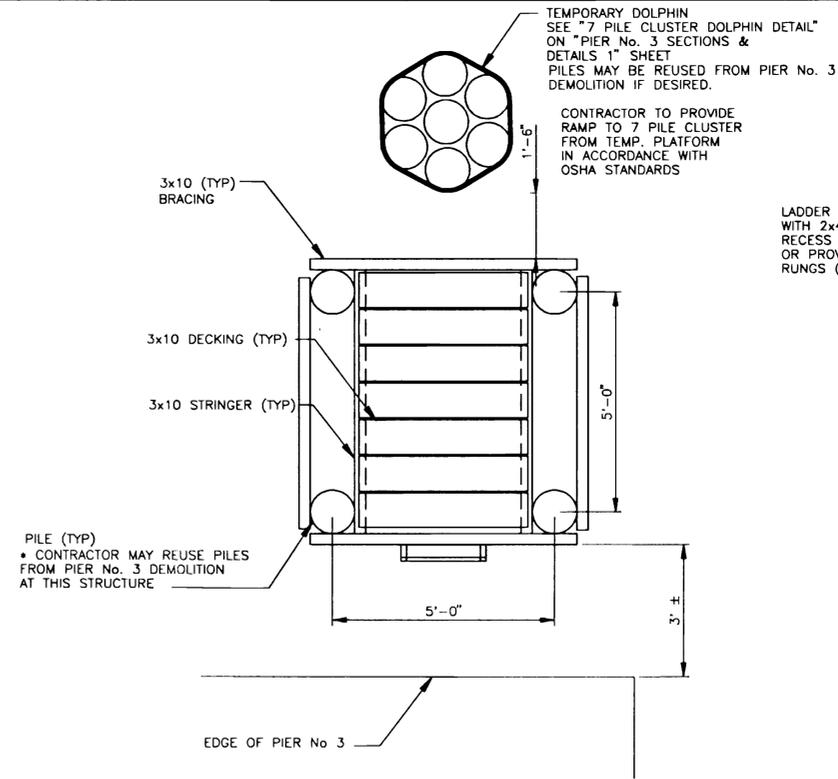
R.I. DEPARTMENT OF TRANSPORTATION	
APPROVED <i>[Signature]</i> CHIEF DESIGN ENGINEER	7/18/93 DATE
APPROVED <i>[Signature]</i> CHIEF ENGINEER	7-21-93 DATE
APPROVED <i>[Signature]</i> DIRECTOR	7-21-93 DATE
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION	
APPROVED	DATE
DIVISION ADMINISTRATOR	

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	FBD-REGT (002)	93	4	23

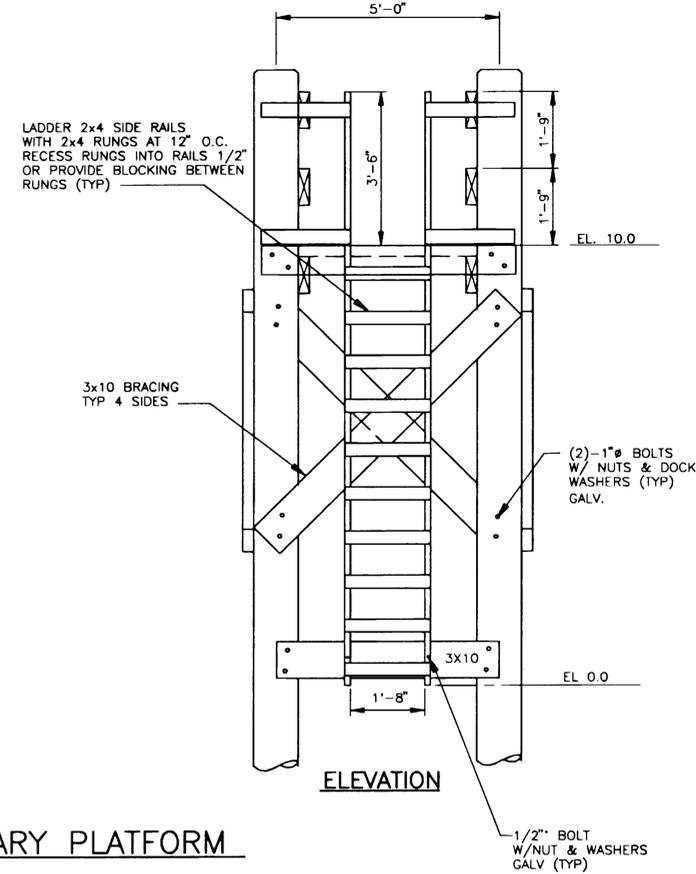


NOTE:
 FLOATATION SYSTEM TO BE DESIGNED TO SUPPORT 20 PSF UNIFORM OR 400 POUND CONCENTRATED LOAD (MIN) APPLIED ANYWHERE ON FLOAT. LOADS NOT CONCURRENTLY APPLIED. CONTRACTOR TO SUBMIT SHOP DRAWINGS & DESIGN CALCULATIONS TO THE OWNER FOR FINAL APPROVAL.

A
4 **TEMPORARY FLOAT SECTION**
 NOT TO SCALE



PLAN



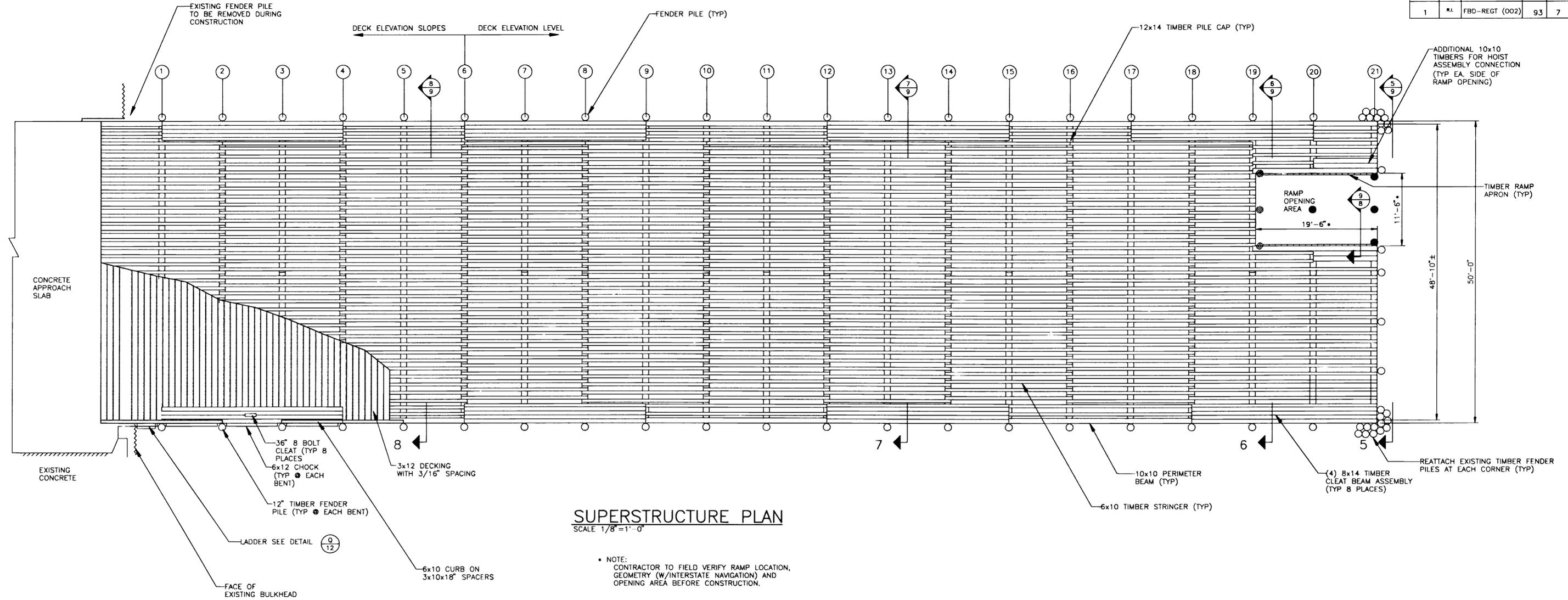
ELEVATION

B
4 **TEMPORARY PLATFORM**
 SCALE 1/2" = 1'-0"

NOTE:
 ALL HARDWARE TO BE HOT DIPPED GALVANIZED

THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT	REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION
	NO.	DATE	BY	
 PARE ENGINEERING CORPORATION <i>Engineers - Planners - Consultants</i> 8 Blackstone Valley Place, Lincoln, RI 02865 401/334/4100 Fax: 401/334/4108				PIER No. 3 TEMPORARY STRUCTURES
	CHECKED BY R.W.F. DATE JULY, 1993 SCALE AS NOTED			

FED. ROAD DIV. NO.	STATE	FEDERAL AID PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
1	R.I.	FBD-REGT (002)	93	7	23



SUPERSTRUCTURE PLAN
SCALE 1/8" = 1'-0"

NOTE:
CONTRACTOR TO FIELD VERIFY RAMP LOCATION,
GEOMETRY (W/INTERSTATE NAVIGATION) AND
OPENING AREA BEFORE CONSTRUCTION.

NOTE:
ALL HARDWARE TO BE HOT DIPPED GALVANIZED

THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT	REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION
	NO.	DATE	BY	
 PARE ENGINEERING CORPORATION Engineers - Planners - Consultants 8 Blackstone Valley Place, Lincoln, RI 02865 401/334/4100 Fax: 401/334/4108				PIER No. 3 SUPERSTRUCTURE PLAN CHECKED BY <u>R.W.F.</u> DATE <u>JULY, 1993</u> SCALE <u>AS NOTED</u>

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.
SHEET 1 OF 1

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO: 93-264

HOLE NO: B-1
PROJ. NO.:
SURF. ELEV.: -11.0' MLLW

GROUND WATER OBSERVATIONS

At	after	Hours	Type	HW-NW	S/S	Start
At				4' 3"	1-3/8"	5/8/93
				300#	140#	5/8/93
				24"	30"	

CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler
SAMPLER: 140 lb. Wt x 30' fall on 2" O.D. Sampler
CORE BAR: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 8" on Sampler			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		
				0-8"	8-12"	12-18"				No.	Pen'	Rec.'
		0.0-2.0	D	1	12	1			Black fine SAND, some organic silt	1	24	20
		4.0-6.0	D	1	2	2			Gray Brown fine SAND, little silt	2	24	19
5									(7' to 9' - Vertical Pipe)			
									Refusal - Bottom of Boring			

GROUND SURFACE TO: USED: CASING: THEN: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Sample Type: D=Drive C=Cored W=Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Loose Cohesive Consistency Soft 30 + Hard
 Earth Boring 9'
 UP=Fixed Platon UT=Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring
 TP=Test Pit A=Auger some 20 to 35% 10-30 Med Dense 4-8 M/SBH
 Samples 2
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-SBH HOLE NO. B-1

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.
SHEET 1 OF 2

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO: 93-264

HOLE NO: B-1A
PROJ. NO.:
SURF. ELEV.: -11.0' MLLW

GROUND WATER OBSERVATIONS

At	after	Hours	Type	HW-NW	S/S	Start
At				4' 3"	1-3/8"	5/8/93
				300#	140#	5/8/93
				24"	30"	

CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler
SAMPLER: 140 lb. Wt x 30' fall on 2" O.D. Sampler
CORE BAR: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 8" on Sampler			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		
				0-8"	8-12"	12-18"				No.	Pen'	Rec.'
		44.0-46.0	D	Wt	Tools	6			Gray Organic SILT	10	24	10
		49.0-51.0	D	24	19	17			Gray fine to coarse SAND, some fine to medium gravel	11	24	7
									Bottom of Boring 51'			
5									Gray fine SAND	3	24	18
10		9.0-11.0	D	6	9	12			Gray Organic SILT	4	24	24
15		14.0-16.0	D	Wt	of	Ham.				5	24	20
20		19.0-21.0	D	9	8	9				6	24	18
25		24.0-26.0	D	3	3	4				7	24	18
30		29.0-31.0	D	Wt	of	Tools				8	24	20
35		34.0-36.0	D	Wt	of	Tools				9	24	24

GROUND SURFACE TO: USED: CASING: THEN: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Sample Type: D=Drive C=Cored W=Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Loose Cohesive Consistency Soft 30 + Hard
 Earth Boring 51'
 UP=Fixed Platon UT=Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring
 TP=Test Pit A=Auger some 20 to 35% 10-30 Med Dense 4-8 M/SBH
 Samples 9
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-SBH HOLE NO. B-1A

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.
SHEET 2 OF 2

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO: 93-264

HOLE NO: B-1A
PROJ. NO.:
SURF. ELEV.: -11.0' MLLW

GROUND WATER OBSERVATIONS

At	after	Hours	Type	HW-NW	S/S	Start
At				4' 3"	1-3/8"	5/8/93
				300#	140#	5/8/93
				24"	30"	

CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler
SAMPLER: 140 lb. Wt x 30' fall on 2" O.D. Sampler
CORE BAR: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 8" on Sampler			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		
				0-8"	8-12"	12-18"				No.	Pen'	Rec.'
		44.0-46.0	D	Wt	Tools	6			Gray Organic SILT	10	24	10
		49.0-51.0	D	24	19	17			Gray fine to coarse SAND, some fine to medium gravel	11	24	7
									Bottom of Boring 51'			

GROUND SURFACE TO: USED: CASING: THEN: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Sample Type: D=Drive C=Cored W=Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Loose Cohesive Consistency Soft 30 + Hard
 Earth Boring 51'
 UP=Fixed Platon UT=Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring
 TP=Test Pit A=Auger some 20 to 35% 10-30 Med Dense 4-8 M/SBH
 Samples 9
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-SBH HOLE NO. B-1A

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.
SHEET 1 OF 3

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO: 93-264

HOLE NO: B-2
PROJ. NO.:
SURF. ELEV.: -11.0' MLLW

GROUND WATER OBSERVATIONS

At	after	Hours	Type	HW-NW	S/S	NV-II	Start
At	11.5'	above	Ground	4' 3"	1-3/8"		4/28/93
				300#	140#		4/30/93
				24"	30"		

CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler
SAMPLER: 140 lb. Wt x 30' fall on 2" O.D. Sampler
CORE BAR: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 8" on Sampler			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		
				0-8"	8-12"	12-18"				No.	Pen'	Rec.'
		0.0-2.0	D	Wt	of	Tools			Black fine to coarse SAND, little fine gravel & shells	1	24	8
									3.0			
5		5.5-7.5	D	6	8	7			Gray silty fine SAND	2	24	12
10		11.0-13.0	D	Wt	of	Pods			8.0			
									Gray Organic SILT	3	24	24
15		16.0-18.0	D	Wt	of	Tools				4	24	24
20		21.0-23.0	D	1	2	1				5	24	20
25		26.0-28.0	D	Wt	of	Tools				6	24	24
30		31.0-33.0	D	Wt	of	Tools				7	24	12
35		36.0-38.0	D	Wt	of	Tools				8	24	8

GROUND SURFACE TO: USED: CASING: THEN: 140 lb. Wt x 30' fall on 2" O.D. Sampler

Sample Type: D=Drive C=Cored W=Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Loose Cohesive Consistency Soft 30 + Hard
 Earth Boring 86'
 UP=Fixed Platon UT=Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring
 TP=Test Pit A=Auger some 20 to 35% 10-30 Med Dense 4-8 M/SBH
 Samples 17
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-SBH HOLE NO. B-2

THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT	REVISIONS			RHODE ISLAND DEPARTMENT OF TRANSPORTATION GALILEE FERRY TERMINAL IMPROVEMENTS PORT OF GALILEE NARRAGANSETT RHODE ISLAND BORING PLAN 1 CHECKED BY _____ DATE JULY, 1993 SCALE _____
	NO.	DATE	BY	

PARE ENGINEERING CORPORATION
 Engineers - Planners - Consultants
 8 Blackstone Valley Place, Lincoln, RI 02865
 401/334/4100 Fax: 401/334/4108

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

TO: **Pare Engineering Corporation** ADDRESS: **Lincoln, R.I.** SHEET **2** OF **3**
PROJECT NAME: **B.I. Ferry Pier Improvements** LOCATION: **Narragansett/Galilee, R.I.** HOLE NO: **B-2**
REPORT SENT TO: **above** OUR JOB NO: **93-264** SURF. ELEV: **-11.0' M.L.W.**

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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		
				0-6"	6-12"	12-18"				No.	Per'	Sec'
		41.0-43.0	D	17	10	12		40.0	Black fine to coarse SAND & fine to medium Gravel	9	24	8
45		46.0-46.0	D	25	22	11				10	24	5
50		51.0-53.0	D	82	82	36				11	24	5
55		56.0-56.0	D	25	22	23			Gray silty fine SAND	12	24	12
60		61.0-63.0	D	38	31	32			Brown fine to coarse SAND & fine to medium Gravel, trace silt	13	24	10
65		66.0-68.0	D	16	22	12				14	24	7
70		71.0-73.0	D	12	15	35			Brown fine to coarse SAND, little silt	15	24	20
75		76.0-77.5	D	13	18	100			Brown silty fine SAND, little coarse sand & fine to coarse gravel, trace boulders	16	18	15
80		81.0-83.0	D	17	14	47			Brown fine to coarse SAND & Gravel	17	24	16
85		86.0-91.0	C				6.5 MPF	85.5	Top of Bedrock 85.5' Pink GRANITE - Badly Weathered	C1	80	35

ROUND SURFACE TO: USED: CASING: THEN: SUMMARY:
 Sample Type: D-Drive C-Cored W-Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Cohesive Consistency Earth Boring **06**
 LP-Fixed Platen UT-Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring **10**
 TP-Test Pit A=Auger some 20 to 35% 10-30 Med. Dense 4-8 M/Stiff Samples **17**
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-Stiff HOLE NO. **B-2**

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

TO: **Pare Engineering Corporation** ADDRESS: **Lincoln, R.I.** SHEET **3** OF **3**
PROJECT NAME: **B.I. Ferry Pier Improvements** LOCATION: **Narragansett/Galilee, R.I.** HOLE NO: **B-2**
REPORT SENT TO: **above** OUR JOB NO: **93-264** SURF. ELEV: **-11.0' M.L.W.**

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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		
				0-6"	6-12"	12-18"				No.	Per'	Sec'
90		91.0-96.0	C						Pink GRANITE - Badly Weathered	C2	80	44
95								96.0	Bottom of Boring 96'			

ROUND SURFACE TO: USED: CASING: THEN: SUMMARY:
 Sample Type: D-Drive C-Cored W-Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Cohesive Consistency Earth Boring **06**
 LP-Fixed Platen UT-Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring **10**
 TP-Test Pit A=Auger some 20 to 35% 10-30 Med. Dense 4-8 M/Stiff Samples **17**
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-Stiff HOLE NO. **B-2**

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

TO: **Pare Engineering Corporation** ADDRESS: **Lincoln, R.I.** SHEET **1** OF **2**
PROJECT NAME: **B.I. Ferry Pier Improvements** LOCATION: **Narragansett/Galilee, R.I.** HOLE NO: **B-3**
REPORT SENT TO: **above** OUR JOB NO: **93-264** SURF. ELEV: **-11.0' M.L.W.**

GROUND WATER OBSERVATIONS: At Tide 1 after Hours Type **HW-NW** S/S Start **5/4/93**
 3.4' above Ground after Hours Type **4" 3"** 1-3/8" Complete **5/4/93**
 12:45 PM 5/4/93 after Hours Hammer Wt. **300#** 140# Boring Foreman **K. Allen**
 Hammer Fall **24"** 30" Inspector/Engr.

LOCATION OF BORING:

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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		
				0-6"	6-12"	12-18"				No.	Per'	Sec'
		0.0-2.0	D	1=12"	1=12"				Gray Organic SILT, little fine sand	1	24	12
5												
10		11.0-13.0	D	5	4	6			Gray fine to medium SAND	2	24	12
15												
20		21.0-23.0	D	Wt.	of	Tools			Gray Organic SILT with Shells, trace fine sand	3	24	24
25												
30		31.0-33.0	D	Wt.	of	Tools				4	24	24
35												

ROUND SURFACE TO: USED: CASING: THEN: SUMMARY:
 Sample Type: D-Drive C-Cored W-Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Cohesive Consistency Earth Boring **06**
 LP-Fixed Platen UT-Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring **10**
 TP-Test Pit A=Auger some 20 to 35% 10-30 Med. Dense 4-8 M/Stiff Samples **5**
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-Stiff HOLE NO. **B-3**

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

TO: **Pare Engineering Corporation** ADDRESS: **Lincoln, R.I.** SHEET **2** OF **2**
PROJECT NAME: **B.I. Ferry Pier Improvements** LOCATION: **Narragansett/Galilee, R.I.** HOLE NO: **B-3**
REPORT SENT TO: **above** OUR JOB NO: **93-264** SURF. ELEV: **-11.0' M.L.W.**

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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		
				0-6"	6-12"	12-18"				No.	Per'	Sec'
		40.0-42.0	D	Wt.	of	Tools			Gray Organic SILT with Shells, trace fine sand	5	24	24
								42.0	Bottom of Boring 42'			

ROUND SURFACE TO: USED: CASING: THEN: SUMMARY:
 Sample Type: D-Drive C-Cored W-Washed
 Proportions Used: trace 0 to 10% Cohesionless Density Cohesive Consistency Earth Boring **06**
 LP-Fixed Platen UT-Shelby Tube little 10 to 20% 0-10 Loose 0-4 Soft 30 + Hard Rock Coring **10**
 TP-Test Pit A=Auger some 20 to 35% 10-30 Med. Dense 4-8 M/Stiff Samples **5**
 OE=Open End Rod and 35 to 50% 30-50 Dense 8-15 Stiff
 * 300# hammer 50+ Very Dense 15-30 V-Stiff HOLE NO. **B-3**

THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT  PARE ENGINEERING CORPORATION Engineers - Planners - Consultants 8 Blackstone Valley Place, Lincoln, RI 02865 401/334/4100 Fax: 401/334/4108	REVISIONS NO. DATE BY			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
				GALILEE FERRY TERMINAL IMPROVEMENTS PORT OF GALILEE NARRAGANSETT RHODE ISLAND	
				BORING PLAN 2	
				CHECKED BY _____ DATE JULY, 1993 SCALE _____	

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 2 OF 2

TO: Pare Engineering Corporation ADDRESS: Lincoln, R.I.
PROJECT NAME: B.J. Ferry Pier Improvements LOCATION: Narragansett/Galilee, R.I.
REPORT SENT TO: above OUR JOB NO.: 93-264

HOLE NO. B-5
PROJ. NO.
SURF. ELEV. 46.5' M.L.W.

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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			
				0-6	6-12	12-18				No.	Plan	Rec.	
45		44.0-46.0	D Wt. Rods						Gray Organic SILT		10	24	24
50		49.0-51.0	D Wt. of Tools								11	24	24
60		58.0-61.0	D WOR 1=12'								12	24	24
70		69.0-71.0	D 24 21						68.0 Gray fine to coarse SAND & Gravel		13	24	8
80		79.0-81.0	D 9 10						79.0 Brown fine to coarse SAND, little fine to medium gravel		14	24	6
85		84.0-86.0	D 24 22						84.0 Brown fine to coarse SAND, little fine to coarse gravel, trace silt		15	24	14
									86.0 Bottom of Boring 86'				

GROUND SURFACE TO	USED	CASING	THEN	SUMMARY
Sample Type	Proportions Used	140 lb. Wt x 30" fall on 2" O.D. Sampler	Earth Boring	51
D=Drive C=Cored W=Washed	trace 0 to 10%			
UP=Fixed Platon UT=Shelby Tube	little 10 to 20%			
TP=Test Pit A=Auger	some 20 to 35%			
OE=Open End Rod	and 35 to 50%			
* 300# hammer				

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 2

TO: Pare Engineering Corporation ADDRESS: Lincoln, R.I.
PROJECT NAME: B.J. Ferry Pier Improvements LOCATION: Narragansett/Galilee, R.I.
REPORT SENT TO: above OUR JOB NO.: 93-264

HOLE NO. B-6
PROJ. NO.
SURF. ELEV. 46.5' M.L.W.

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	DATE
At 6.0'	after Hours	Type NW	S/S	Start	5/7/93
		Size I.D. 3"	1-3/8"	Complete	5/7/93
		Hammer Wt. 300#	140#	Boring Foreman	K. Allen
		Hammer Fall 24"	30"	Inspector/Engr.	

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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			
				0-6	6-12	12-18				No.	Plan	Rec.	
		0.5-2.5	D 32 28						Brown fine to coarse SAND & fine Gravel		1	24	15
5													
10		9.0-11.0	D 1 1						Gray fine SAND, trace shells		2	24	12
15													
20		19.0-21.0	D 5 5						Gray fine SAND, little all		3	24	22
25													
30		29.0-31.0	D 2 2						Gray Organic SILT, little fine sand & peat		4	24	20
35													
		39.0-41.0	D 2 3						* some fine sand (could be wash)		5	24	10

GROUND SURFACE TO	USED	CASING	THEN	SUMMARY
Sample Type	Proportions Used	140 lb. Wt x 30" fall on 2" O.D. Sampler	Earth Boring	51
D=Drive C=Cored W=Washed	trace 0 to 10%			
UP=Fixed Platon UT=Shelby Tube	little 10 to 20%			
TP=Test Pit A=Auger	some 20 to 35%			
OE=Open End Rod	and 35 to 50%			
* 300# hammer				

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 2 OF 2

TO: Pare Engineering Corporation ADDRESS: Lincoln, R.I.
PROJECT NAME: B.J. Ferry Pier Improvements LOCATION: Narragansett/Galilee, R.I.
REPORT SENT TO: above OUR JOB NO.: 93-264

HOLE NO. B-6
PROJ. NO.
SURF. ELEV. 46.5' M.L.W.

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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			
				0-6	6-12	12-18				No.	Plan	Rec.	
45									Gray Organic SILT with Shells				
50		49.0-51.0	D Wt. of Tools								6	24	12
									51.0 Bottom of Boring 51'				

GROUND SURFACE TO	USED	CASING	THEN	SUMMARY
Sample Type	Proportions Used	140 lb. Wt x 30" fall on 2" O.D. Sampler	Earth Boring	51
D=Drive C=Cored W=Washed	trace 0 to 10%			
UP=Fixed Platon UT=Shelby Tube	little 10 to 20%			
TP=Test Pit A=Auger	some 20 to 35%			
OE=Open End Rod	and 35 to 50%			
* 300# hammer				

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO: Pare Engineering Corporation ADDRESS: Lincoln, R.I.
PROJECT NAME: B.J. Ferry Pier Improvements LOCATION: Narragansett/Galilee, R.I.
REPORT SENT TO: above OUR JOB NO.: 93-264

HOLE NO. B-7
PROJ. NO.
SURF. ELEV. 46.5' M.L.W.

GROUND WATER OBSERVATIONS		CASING	SAMPLER	CORE BAR	DATE
At 6.0'	after Hours	Type NW	S/S	Start	5/7/93
		Size I.D. 3"	1-3/8"	Complete	5/7/93
		Hammer Wt. 300#	140#	Boring Foreman	K. Allen
		Hammer Fall 24"	30"	Inspector/Engr.	

Depth	Casing Blows per foot	Sample Depths From - To	Type of Sample	Blows per 6" on Sampler			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			
				0-6	6-12	12-18				No.	Plan	Rec.	
		0.5-2.5	D 33 35						Brown Black fine to coarse SAND, little organic silt - FH		1	24	8
5		4.0-6.0	D 8 5						4.0 Gray fine to medium SAND, trace gravel		2	24	12
11		9.0-11.0	D 8 12								3	24	14
15		14.0-16.0	D 3 3								4	24	2
20		18.0-21.0	D 9 7						19.0 Gray fine SAND, trace silt		5	24	16
25		24.0-26.0	D 8 9						* little silt		6	24	24
30		29.0-31.0	D 1 6						28.0 Gray Organic SILT, little fine sand		7	24	18
									31.0 Bottom of Boring 31'				

GROUND SURFACE TO	USED	CASING	THEN	SUMMARY
Sample Type	Proportions Used	140 lb. Wt x 30" fall on 2" O.D. Sampler	Earth Boring	31
D=Drive C=Cored W=Washed	trace 0 to 10%			
UP=Fixed Platon UT=Shelby Tube	little 10 to 20%			
TP=Test Pit A=Auger	some 20 to 35%			
OE=Open End Rod	and 35 to 50%			
* 310# hammer				

THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT	REVISIONS		
	NO.	DATE	BY
PARE ENGINEERING CORPORATION Engineers - Planners - Consultants 8 Blackstone Valley Place, Lincoln, RI 02865 401/334/4100 Fax: 401/334/4108	RHODE ISLAND DEPARTMENT OF TRANSPORTATION GALILEE FERRY TERMINAL IMPROVEMENTS PORT OF GALILEE NARRAGANSETT RHODE ISLAND BORING PLAN 4		
	CHECKED BY _____ DATE JULY, 1993 SCALE _____		

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 1

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO.: 93-264

HOLE NO.: B-8
PROJ. NO.:
SURF. ELEV.: -12.8' MLLW

DATE: 5/10/93

GROUND WATER OBSERVATIONS: CASING: _____ SAMPLER: _____ CORE BAR: _____

At 15.5' above Ground	after 9 Hours	Type BW	S/S	Start 5/10/93
At 12:45 PM	5:10/93	Size I.D. 2-1/2"	1-3/8"	Complete 5/10/93
		Hammer Wt. 300#	140#	Boring Foreman K. Allen
		Hammer Fall 24"	30"	Inspector/Engr.

LOCATION OF BORING

Depth	Casing Blows per foot	Sample Depth From To	Type of Sample	Blows per 8" on Sampler			Moisture Density or Consist.	Strata Change Elev./Depth	SOIL OR ROCK IDENTIFICATION	SAMPLE		
				0-8"	8-12"	12-18"				No.	Pen	Rec.
0-2.0	D	4	7	8				Black fine to medium SAND, trace silt	1	24	18	
7.5-9.0	D	24	5	4				Gray fine SAND, little organic silt	2	18	12	
13.0-14.5 (0" Recovery - Had to Overdrive)	D	6	6	5				Gray Organic SILT, trace fine sand	3	18	0	
18.0-18.5	D	3	8	3				with Shells	4	18	18	
23.0-24.5	D	1	2	2					5	18	18	
28.0-29.5	D	1	2	1					6	18	18	
33.0-34.5	D	2	3	3					7	18	18	
38.0-40.0	D	2	2	2				Bottom of Spoon - 2" Brown Peat	8	24	24	

GROUND SURFACE TO USED: _____ CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler THEN: Bottom of Boring 40'

Sample Type: D=Drive C=Cored W=Washed
LP=Fixed Platon 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%

Cohesionless: 0-10
10-30
30-50
50+

Density: Loose
Med. Dense
Dense
Very Dense

Cohesive: 0-4
4-8
8-15
15-30

Consistency: Soft
M./Stiff
Stiff
V.Stiff

30 + Hard

Earth Boring 40'
Rock Coring
Samples 8

SUMMARY:
Earth Boring 40'
Rock Coring
Samples 8

HOLE NO. B-8

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 1 OF 2

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO.: 93-264

HOLE NO.: B-9
PROJ. NO.:
SURF. ELEV.: -18.5' MLLW

DATE: 5/11/93

GROUND WATER OBSERVATIONS: CASING: _____ SAMPLER: _____ CORE BAR: _____

At 22.5' above Ground	after 5 Hours	Type BW	S/S	Start 5/11/93
At 1:45 PM	5/11/93	Size I.D. 2-1/2"	1-3/8"	Complete 5/11/93
		Hammer Wt. 300#	140#	Boring Foreman K. Allen
		Hammer Fall 24"	30"	Inspector/Engr.

LOCATION OF BORING

Depth	Casing Blows per foot	Sample Depth From To	Type of Sample	Blows per 8" on Sampler			Moisture Density or Consist.	Strata Change Elev./Depth	SOIL OR ROCK IDENTIFICATION	SAMPLE		
				0-8"	8-12"	12-18"				No.	Pen	Rec.
0-2.0	D	1	4	2				Black Muck with Shells then silty fine Sand	1	24	7	
7.0-9.0	D	Wt. Tools	1	2				Gray Organic SILT, trace fine sand & shells	2	24	24	
13.0-15.0	D	1	1	1					3	24	24	
18.0-20.0	D	1	1	1					4	24	24	
23.0-25.0	D	1	2	1					5	24	24	
28.0-30.0	D	1	1	2					6	24	24	
33.0-35.0	D	4	3	4					7	24	24	
38.0-40.0	D	20	11	13				Brown Organic SILT with Peat, trace fine to coarse sand & gravel	8	24	16	

GROUND SURFACE TO USED: _____ CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler THEN: _____

Sample Type: D=Drive C=Cored W=Washed
LP=Fixed Platon 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%

Cohesionless: 0-10
10-30
30-50
50+

Density: Loose
Med. Dense
Dense
Very Dense

Cohesive: 0-4
4-8
8-15
15-30

Consistency: Soft
M./Stiff
Stiff
V.Stiff

30 + Hard

Earth Boring 60'
Rock Coring
Samples 12

SUMMARY:
Earth Boring 60'
Rock Coring
Samples 12

HOLE NO. B-9

GUILD DRILLING CO., INC.
100 WATER STREET • EAST PROVIDENCE, R.I.

SHEET 2 OF 2

TO: Pare Engineering Corporation
PROJECT NAME: B.I. Ferry Pier Improvements
REPORT SENT TO: above

ADDRESS: Lincoln, R.I.
LOCATION: Narragansett/Galilee, R.I.
OUR JOB NO.: 93-264

HOLE NO.: B-9
PROJ. NO.:
SURF. ELEV.: -18.5' MLLW

DATE: 5/13/93

GROUND WATER OBSERVATIONS: CASING: _____ SAMPLER: _____ CORE BAR: _____

At 43.0-45.0	D	38	15	15				Gray fine to medium SAND, little fine to medium gravel, trace silt	9	24	6
48.0-49.5	D	107	100	110				Gray fine to coarse SAND & fine to medium Gravel, trace silt	10	18	10
53.0-54.5	D	28	21	27					11	18	7
58.0-60.0	D	*99	*26	*26				58.0 Brown weathered fine to coarse GRAVEL	12	24	2
								60.0 Bottom of Boring 60'			

GROUND SURFACE TO USED: _____ CASING: 140 lb. Wt x 30' fall on 2" O.D. Sampler THEN: _____

Sample Type: D=Drive C=Cored W=Washed
LP=Fixed Platon 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%

Cohesionless: 0-10
10-30
30-50
50+

Density: Loose
Med. Dense
Dense
Very Dense

Cohesive: 0-4
4-8
8-15
15-30

Consistency: Soft
M./Stiff
Stiff
V.Stiff

30 + Hard

Earth Boring 60'
Rock Coring
Samples 12

SUMMARY:
Earth Boring 60'
Rock Coring
Samples 12

HOLE NO. B-9

<p>THIS IS A STATE COASTAL RESOURCE FACILITY IMPROVEMENT PROJECT IN COOPERATION BETWEEN THE RHODE ISLAND DEPARTMENTS OF TRANSPORTATION AND ENVIRONMENTAL MANAGEMENT</p> <p align="center">  PARE ENGINEERING CORPORATION Engineers - Planners - Consultants 8 Blackstone Valley Place, Lincoln, RI 02865 401/334/4100 Fax:401/334/4108 </p>	REVISIONS NO. DATE BY			RHODE ISLAND DEPARTMENT OF TRANSPORTATION	
				GALILEE FERRY TERMINAL IMPROVEMENTS PORT OF GALILEE	
				NARRAGANSETT RHODE ISLAND	
				BORING PLAN 5	
				CHECKED BY: _____ DATE <u>JULY, 1993</u> SCALE: _____	

CONSTRUCTION DOCUMENTS

RECONSTRUCTION OF SOUTH BULKHEAD-PHASE I PORT OF GALILEE

NARRAGANSETT, RHODE ISLAND

JUNE 2012

ADDENDUM NO. 1, JANUARY 31, 2013

PREPARED FOR:

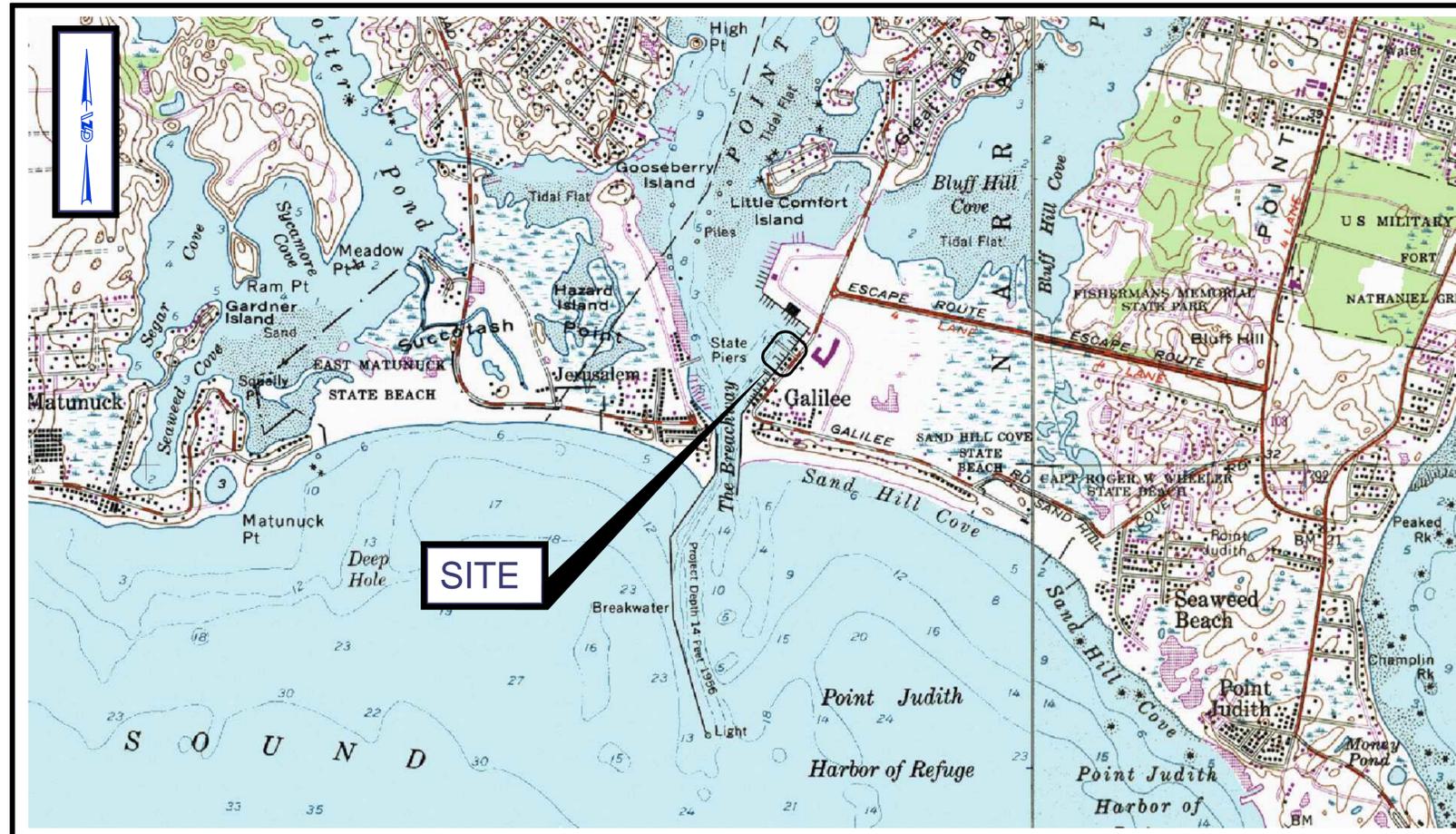


STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

PREPARED BY:



GZA GEOENVIRONMENTAL, INC.
530 BROADWAY, PROVIDENCE, RI 02909
(401) 421-4140 FAX: (401) 751-8613

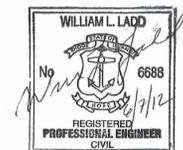


SITE LOCUS

1 INCH = 1,000 FEET (APPROX.)
0 500' 1000' 2000' 3000' 4000'

INDEX TO SHEETS

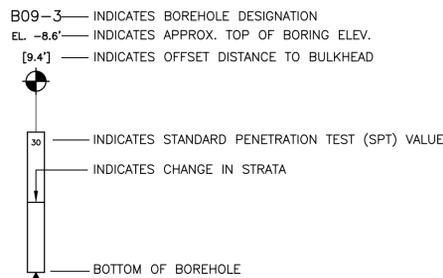
DRAWING NO.	TITLE
1	TITLE, INDEX, LOCUS
2	NOTES & LEGEND
3	EXISTING CONDITIONS PLAN
4	GENERAL LAYOUT PLAN
5	DEMOLITION PLAN
6	DETAILED BULKHEAD PLAN
7	SECTIONS EXISTING CONDITIONS & PROPOSED CONDITIONS
8	EXISTING & PROPOSED BULKHEAD PROFILE STA. 0+00 TO STA. 3+55
9	DETAILS (1 OF 4) TYPICAL SECTIONS
10	DETAILS (2 OF 4) CONCRETE BACKFILL PLAN & SECTION
11	DETAILS (3 OF 4) ANCHORED BULKHEAD, CONCRETE CAP & SURFACE DETAILS
12	DETAILS (4 OF 4) FENDER WALE, PIPE PENETRATIONS, & CONNECTION DETAILS
13	ELECTRICAL IMPROVEMENTS PLAN & DETAILS SHEET 1
14	ELECTRICAL IMPROVEMENTS PLAN & DETAILS SHEET 2
15	PIER J & K IMPROVEMENT PLAN
16	PIER J & K IMPROVEMENT DETAILS
17	STATE PIER NO. 3 IMPROVEMENT PLAN
18	STATE PIER NO.3 IMPROVEMENT DETAILS
SK-1	SITE ACCESS PLAN



© 2013 GZA GeoEnvironmental, Inc. 029 Drawing Name: S:\03\13408-01\Drawings\GZA_0103\13408_01.dwg Date: 01/31/2013 2:45pm Plotted on: 01/31/2013 2:45pm by: csherman

LEGEND:

- EXISTING SPOT GRADE
- EXISTING SAN. MANHOLE
- EXISTING UTILITY POLE
- EXISTING CONTOUR
- EXISTING SIGN
- EXISTING EDGE OF WATER
- PROPOSED BITUMINOUS PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED LIMIT OF DISTURBANCE
- INDICATES BORINGS PERFORMED BY GEOLOGIC, INC. IN JULY 2009 AND OBSERVED BY GZA PERSONNEL.
- INDICATES BORINGS PERFORMED BY GUILD DRILLING CO., INC. IN DECEMBER 1999 THROUGH JANUARY 2000, OBSERVED BY OTHERS.
- INDICATES BORINGS PERFORMED BY P.S.I. IN APRIL THROUGH MAY 1997, OBSERVED BY OTHERS.
- PROPOSED DOUBLE YARD HYDRANT AND BOLLARDS
- PROPOSED 2" WATER SERVICE



TIDAL ELEVATIONS

MLW DATUM	NGVD DATUM
MHHW = +3.25'	MHHW = +2.40'
MHW = +3.00'	MHW = +2.15'
MSL = +1.41'	MSL = +0.56'
NGVD = +0.85'	NGVD = 0.00
MLW = 0.00'	MLW = -0.85
MLLW = -0.13'	MLLW = -0.98'

NOTE: ELEVATIONS SHOWN ON THE PLANS ARE BASED UPON NGVD DATUM. TO CONVERT TO MLW, ADD 0.85 FEET.

GENERAL NOTES:

- THE PROJECT SITE IS A WORKING COMMERCIAL FISHING PORT WITH LIMITED SHORESIDE ACCESS. THE CONTRACTOR SHALL COORDINATE ALL ACTIVITIES WITH THE LEASE TENANTS THAT WILL BE IMPACTED BY THE CONSTRUCTION, INCLUDING TEMPORARY REMOVAL AND REPLACEMENT OF ANY EQUIPMENT OR MATERIALS OWNED BY TENANTS THAT WILL BE AFFECTED BY THE WORK.
- THERE WILL BE LIMITED SPACE AVAILABLE ON SHORE FOR STORAGE OF EQUIPMENT AND MATERIALS. THE CONTRACTOR SHALL REVIEW THE AVAILABLE STORAGE AND LAY DOWN AREAS AS INDICATED BY RIDEM PRIOR TO PREPARING HIS BID.
- CONTINUOUS ACCESS SHALL BE PROVIDED TO ALL PIERS WITHIN THE WORK AREA. TEMPORARY GANGWAYS SHALL BE PROVIDED BY THE CONTRACTOR TO MAINTAIN ACCESS DURING PIER DEMOLITION AND REPAIR WORK.
- PRECONSTRUCTION SURVEYS OF ALL BUILDINGS AND STRUCTURES WITHIN 200 FEET OF THE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 01390 PRIOR TO THE START OF ANY SITE WORK, INCLUDING DEMOLITION.
- BASE MAP DEVELOPED FROM AUTOCAD DRAWING FILE "EXISTING CONDITIONS.DWG" PREPARED BY BRYANT ASSOCIATES, INC. TRANSMITTED TO GZA ON AUGUST 21, 2009.
- THE ABOVE REFERENCED BASE MAP IS A CLASS III TOPOGRAPHIC SURVEY (FIELD WORK PERFORMED IN JULY 2009). HORIZONTAL DATUM IS RI STATE PLANE NAD 83. VERTICAL DATUM IS NGVD 1929.
- SUPPLEMENTAL SITE FEATURES HAVE BEEN ADDED TO AUGMENT THE ABOVE REFERENCED BASE MAP IN THE AREA OUTSIDE 25' INLAND FROM THE BULKHEAD AND LIMITS OF WORK. THESE FEATURES WERE DEVELOPED USING ELECTRONIC IMAGE FILES OF RIDOT PLANS FOR THE ROADWAY RECONSTRUCTION PROJECT-PORT OF GALILEE PREPARED BY STORCH ENGINEERS AND DATED 05-30-97.
- GENERAL DOCK CONFIGURATION IS SHOWN FOR COORDINATION PURPOSES ONLY. EXACT CONFIGURATION TO BE FIELD VERIFIED.
- THE LOCATIONS OF THE EXPLORATIONS WERE APPROXIMATELY DETERMINED BY LINE OF SIGHT AND/OR TAPE MEASUREMENTS FROM EXISTING TOPOGRAPHIC FEATURES. THESE LOCATIONS SHOULD BE CONSIDERED ACCURATE ONLY TO THE DEGREE IMPLIED BY THE METHOD USED.
- SEE EXPLORATION LOGS IN APPENDIX A OF SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- ELEVATIONS OF EXISTING BORINGS WERE ESTIMATED USING MUDLINE ELEVATIONS SHOWN ON CURRENT TOPOGRAPHIC SURVEY.
- THE WALL SHALL BE LOCATED AS SHOWN ON THE DRAWINGS.
- CONFORM TO CONSTRUCTION SEQUENCE AND GENERAL NOTES AND ALL OTHER REQUIREMENTS ON THE DRAWINGS AND SPECIFICATIONS UNLESS OTHERWISE APPROVED BY GZA.
- REPORT FIELD LOCATIONS IN PLAN AND ELEVATION OF UTILITIES OR OTHER OBSTRUCTIONS WHICH CONFLICT WITH DESIGN LOCATIONS OF PROPOSED WORK.
- REPORT EXISTING CONDITIONS THAT VARY FROM THOSE INDICATED IN CONTRACT DOCUMENTS INCLUDING SUBSURFACE CONDITIONS (BASED ON BORING LOGS) SO THE EFFECT ON THE PROPOSED BULKHEAD CAN BE EVALUATED.
- EXISTING STRUCTURE AND UTILITY LOCATIONS SHOWN ARE APPROXIMATE AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR.
- CONFORM TO OSHA REQUIREMENTS FOR ALL EXCAVATIONS.

SHEET PILE BULKHEAD NOTES:

- PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SUPERVISION NECESSARY TO COMPLETE THE FRP SHEET PILE WALL AS SPECIFIED IN THIS SECTION.
- ALL SHEET PILES SHALL BE SHORE GUARD UC-50 FIBERGLASS REINFORCED POLYMER (FRP) AS MANUFACTURED BY CRANE MATERIALS INTERNATIONAL OR APPROVED EQUIVALENT. IF THE ANTILEVERED STEEL SHEET PILE ALTERNATE PER THE BID DOCUMENTS IS TO BE USED AT THE DIRECTION OF RIDEM, THE STEEL SHEETING SHALL BE 45-FOOT GRADE 50 SHEETS WITH MINIMUM SECTION MODULUS OF 45.2 CUBIC INCHES/FT. WITH THE TOP 20 FEET COATED WITH COAL TAR EPOXY.
- UNLESS OTHERWISE NOTED, ANY SUBSTITUTION OF STRUCTURAL SHAPES OR CONNECTION DETAILS SHALL BE SUBMITTED FOR REVIEW AND ACCEPTANCE BY GZA GEOENVIRONMENTAL, INC. IN WRITING PRIOR TO USE.
- MATERIALS SHALL BE STORED AND HANDLED IN ACCORDANCE WITH THE MANUFACTURERS' RECOMMENDATIONS.
- THE CONTRACTOR SHALL PROVIDE DETAILS OF PILING DRIVING EQUIPMENT. THE DRIVING EQUIPMENT AND METHOD SHALL BE SUBMITTED FOR REVIEW AND ACCEPTANCE BY THE ENGINEER. NO JETTING WILL BE PERMITTED, EXCEPT AS MAY BE NEEDED TO REMOVE OBSTRUCTIONS. JETTING MAY PROCEED ONLY AFTER RECEIPT OF WRITTEN ACCEPTANCE FROM RIDEM OR BY GZA GEOENVIRONMENTAL, INC.
- ALL SHEETS SHALL BE MARKED AT A GIVEN DISTANCE FROM THE BOTTOM, WHICH WILL SHOW ABOVE THE WATERLINE AFTER DRIVING, SO THAT THE BOTTOM ELEVATION OF EACH SHEET AND ITS RELATION WITH ADJACENT SHEETS CAN BE RECORDED.
- DO NOT DRIVE SHEETING WITHIN 50 FEET OF CONCRETE LESS THAN 72 HOURS OLD.
- CUT OFF PORTIONS OF PILES SHALL BE REMOVED AND DISPOSED OF OFF-SITE BY THE CONTRACTOR.
- DRIVE PILES TO THE MINIMUM ELEVATIONS AS SHOWN ON THE DRAWINGS.
- PILES SHALL BE DRIVEN PLUMB AND TRUE TO LINE.
- PILES WHICH ARE DAMAGED, MISLOCATED, OR DRIVEN OUT OF VERTICAL ALIGNMENT SHALL BE WITHDRAWN AND REPLACED BY NEW PILES OR CUT OFF AND ABANDONED AS DIRECTED BY GZA GEOENVIRONMENTAL, INC.
- PILES SHALL BE DRIVEN WITHIN APPROVED FALSEWORK OR APPROVED TEMPLATES.
- CONTRACTOR SHALL INSTALL EVERY THIRD PAIR OF FRP SHEET PILES SHEETS TO 20' BELOW MUDLINE AND THEN EXTRACT TO 1 FOOT ABOVE TIDE LEVEL TO ALLOW ON-SITE OWNER'S REPRESENTATIVE TO OBSERVE THE SHEET CONDITION. AFTER SHEET CONDITION IS VIEWED CONTRACTOR SHALL INSTALL SHEET PAIR TO DESIGN TIP ELEVATION. IF SHEETS SHOWN SIGNS OF DAMAGE, CONTRACTOR SHALL MITIGATE THE CAUSE AND REPLACE DAMAGED SHEETS AT NO ADDITIONAL COST TO THE OWNER. MITIGATION SHALL INCLUDE EXCAVATION OF ANY OBSTRUCTIONS, DRIVING STEEL MANDREL SECTIONS TO RELOCATE OR BREAKTHROUGH OBSTRUCTIONS, AND/OR MANUFACTURER RECOMMENDATIONS TO ALLOW SHEET INSTALLATION

DRAINAGE AND UTILITY NOTES:

- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES, BOTH UNDERGROUND AND OVERHEAD PRIOR TO BEGINNING CONSTRUCTION. REPAIR OF ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER. THE LOCATION OF ALL UTILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION OBTAINED FROM UTILITY COMPANIES.
- UTILITY SERVICE TO ALL FACILITIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- ALL EXISTING UTILITY STRUCTURES WITHIN LIMITS OF WORK SHALL BE ADJUSTED TO PROPOSED GRADE.
- EACH UTILITY COMPANY IS TO BE CONSULTED BEFORE ANY WORK IMPACTING THEIR UTILITIES BEGINS.
- THE CONTRACTOR SHALL MAKE DRAINAGE PROVISIONS DURING ALL PHASES AND SEQUENCES OF THE WORK.

DEMOLITION NOTES:

- DEMOLITION SHALL INCLUDE THE FURNISHING OF ALL LABOR, SUPERVISION, EQUIPMENT, MATERIALS, AND SERVICES TO DEMOLISH AND/OR REMOVE DESIGNATED FACILITIES. THESE FACILITIES INCLUDE PORTIONS OF EXISTING FIXED PIERS ADJACENT TO THE EXISTING BULKHEAD, INCLUDING TIMBER PILES, DECKING, PILE CAPS AND STRINGERS, EXISTING PAVEMENTS, AND THE TOP PORTION OF THE EXISTING STEEL BULKHEAD. THE WORK ALSO INCLUDES HAULING THE DEMOLITION DEBRIS FROM THE SITE AND ITS LEGAL DISPOSAL OFF OF THE SITE AND ALL OTHER ASSOCIATED AND APPURTENANT WORK AS DESCRIBED ON THE CONTRACT DOCUMENTS OR IMPLIED WITHIN.
- NO REPRESENTATION IS MADE OR INTENDED CONCERNING THE EXACT DIMENSIONS OF STRUCTURES TO BE DEMOLISHED, TYPES OF MATERIAL TO BE REMOVED, OR SALVAGE VALUE IF ANY.
- METHOD OF DEMOLITION IS LEFT TO THE CONTRACTOR'S DISCRETION, EXCEPT THAT DEMOLITION BY FIRE OR EXPLOSIVES SHALL NOT BE PERMITTED.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING VISITED THE SITE AND ACQUAINTED HIMSELF WITH THE NATURE, CHARACTER, AND EXTENT OF THE REMOVAL, DEMOLITION AND REPAIR AND ALTERATIONS REQUIRED UNDER THIS CONTRACT.
- THERE WILL BE NO DISPOSAL OF MATERIALS IN THE WATERS SURROUNDING THE PORT. THE CONTRACTOR SHALL RETRIEVE ALL MATERIALS THAT FALL INTO THE WATER.
- ALL DISPOSAL OF DEMOLITION MATERIALS OR DEBRIS SHALL BE CARRIED OUT IN STRICT ADHERENCE TO THE REGULATIONS OF THE STATE OF RHODE ISLAND, AND THE LOCAL MUNICIPAL JURISDICTION UNDER WHICH THE DISPOSAL AREA IS REGULATED.
- REMOVAL OR DEMOLITION WORK SHALL BE ACCOMPLISHED IN SUCH A MANNER AS TO AVOID HAZARDS TO PERSONS AND PROPERTY.
- ANY DAMAGE TO EXISTING WORK OR ANY ADJACENT PROPERTY, INCLUDING THE INTERRUPTION OF A UTILITY SERVICE WHICH IS TO REMAIN IN OPERATION, SHALL BE REPAIRED OR RESTORED BY AND AT THE EXPENSE OF THE CONTRACTOR. ALL REPAIRS AND RESTORATION SHALL MATCH ADJACENT WORK AND FINISH IN EVERY RESPECT, UNLESS OTHERWISE SPECIFIED OR INDICATED.

CONCRETE NOTES:

- CONCRETE SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318) AND THE PROJECT SPECIFICATIONS.
- CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI UNLESS NOTED OTHERWISE. MAXIMUM AGGREGATE SIZE SHALL BE 3/4 INCH. THE CONCRETE MIXTURE SHALL HAVE A SLUMP OF 4 TO 6 INCHES. IF THE CONCRETE IS TO BE PUMPED, THE DESIGN MIX MAY INCLUDE A HIGH RANGE WATER REDUCER TO INCREASE SLUMP AND PUMPABILITY. ALL EXPOSED CONCRETE SHALL HAVE AIR ENTRAINMENT OF 4% TO 6%.
- ALL CONCRETE MIXES TO BE USED ON THE PROJECT SHALL BE SUBMITTED TO THE ENGINEER FOR ACCEPTANCE PRIOR TO CONSTRUCTION.
- ALL STEEL REINFORCING BARS SHALL BE ASTM A615, 60KSI YIELD STRENGTH, EPOXY COATED.
- ALL EXPOSED CONCRETE EDGES SHALL HAVE A 3/4 INCH CHAMFER.
- CONCRETE FOR THE PRECAST CONCRETE CAPS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PRECAST CONCRETE CAPS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION. THE SHOP DRAWINGS SHALL INCLUDE PROPOSED DESIGN MIX AND STRENGTH DATA.

MATERIALS NOTES:

- ALL STRUCTURAL STEEL AND HARDWARE SHALL BE ASTM A36 OR A992 (GRADE 50) STEEL AS NOTED.
- ALL STRUCTURAL STEEL AND HARDWARE SHALL BE COATED WITH COAL TAR EPOXY IN ACCORDANCE WITH PROJECT SPECIFICATIONS. ALL BOLTS, NUTS, AND WASHERS SHALL BE HOT DIPPED GALVANIZED STEEL IN ACCORDANCE WITH ASTM A123, OR A153 AS APPLICABLE.
- ALL SHOP & FIELD WELDING SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THE AMERICAN SOCIETY FOR WELDING IN BUILDINGS AND CONSTRUCTION AWS D1.1-96. WELDING ELECTRODES SHALL BE E70XX.
- ALL STRUCTURAL TIMBER SHALL BE SOUTHERN YELLOW PINE (SYP) PRESSURE TREATED WITH CCA TO A MINIMUM RETENTION OF 1.0 PCF (OXIDE BASIS) IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- ALL TIMBER FASTENERS AND HARDWARE SHALL BE HOT DIPPED GALVANIZED STEEL IN ACCORDANCE WITH ASTM A-123 OR A-153 AS APPLICABLE, MINIMUM WEIGHT OF ZINC SHALL BE 2 OZ. PER SQ. FT.
- "GRAVEL BORROW" BACKFILL SHALL MEET THE REQUIREMENTS OF THE RHODE ISLAND DEPARTMENT OF TRANSPORTATION (RIDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", M.01.02, BANK RUN OR PLANT-PROCESSED SAND AND GRAVEL. ALL GRAVEL BORROW BACKFILL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN THICKNESS AND SHALL BE COMPACTED TO 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED IN ACCORDANCE WITH ASTM D-1557, THE MODIFIED PROCTOR TEST.

TIEBACK ANCHOR NOTES:

- TIEBACK ANCHORS SHALL CONSIST OF #9 OR #14 GRADE 75 EPOXY COATED THREADBAR WITH AN UNBONDED LENGTH OF 15 FEET AND A BONDED LENGTH AS REQUIRED TO OBTAIN THE REQUIRED DESIGN CAPACITY WITH A FACTOR OF SAFETY OF 1.5. SEE SHEET 6 FOR SCHEDULE OF REQUIRED DESIGN CAPACITY.
- TIEBACK ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH SPECIFICATION SECTION 02220.
- TIEBACK ANCHORS TO BE PROVIDED WITH DOUBLE CORROSION PROTECTION IN ACCORDANCE WITH DETAILS ON SHEET 9 AND THE MANUFACTURER'S RECOMMENDATIONS.
- ALL TIEBACKS AND HARDWARE SHALL BE INSTALLED PRIOR TO BACKFILLING SHEET PILE WALL WITH CONCRETE. THE ANCHORS SHALL BE TIGHTENED AS REQUIRED TO PREVENT MOVEMENT DURING BACKFILLING.
- TWO TEST ANCHORS SHALL BE INITIALLY INSTALLED AND PERFORMANCE TESTED IN ACCORDANCE WITH PROJECT SPECIFICATIONS.
- ALL PRODUCTION ANCHORS SHALL BE PROOF TESTED TO 133% OF THE DESIGN LOAD.
- ALL ANCHORS SHALL BE LOCKED OFF AT 110% OF THE DESIGN LOAD.

CONSTRUCTION SEQUENCE:

CONSTRUCTION SEQUENCE SHALL INCLUDE BUT NOT LIMITED TO:

- INSTALL TURBIDITY CURTAIN TO LIMITS OF DISTURBANCE.
- REMOVE/DEMOLISH EXISTING PAVEMENT/CONCRETE PAVEMENT.
- INSTALL PILING.
- INSTALL CONCRETE WALL BELOW EXISTING STRUCTURES.
- INSTALL WALES AND TIE BACKS. TIGHTEN ANCHORS TO PREVENT LATERAL MOVEMENT WHILE BACKFILLING SHEETS.
- BACKFILL SHEETS WITH CONCRETE IN LIFTS. CONTRACTOR SHALL DETERMINE LIFT THICKNESS TO RESULT IN NO LATERAL MOVEMENT OF SHEETS. CONTRACTOR TO SUBMIT CALCULATIONS SUPPORTING PROPOSED LIFT THICKNESS.
- TEST & LOCKOFF ANCHORS.
- INSTALL CONCRETE CAP & PAVEMENT STRUCTURE.
- INSTALL TIMBER WALE, CHOCKS, AND FENDER PILES.

WATER SERVICE NOTES

- NEW 2-INCH WATER SERVICE TO BE INSTALLED THROUGH THE RIGHT OF WAY AT THE BAIT SHACK, WITH METER PIT AND SHUT OFF VALVE, TO SERVICE THREE PAIRS OF FROST PROOF YARD HYDRANTS.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY LOCAL AND STATE PERMITS.
- INSTALLATION SHALL BE IN ACCORDANCE WITH TOWN OF NARRAGANSETT REQUIREMENTS.
- WATER SERVICE SHALL BE 2-INCH COPPER, AND SHALL BE INSTALLED AT MINIMUM FROST DEPTH OF 40" OR AS REQUIRED BY PERMIT.
- YARD HYDRANTS SHALL BE INSTALLED IN PAIRS (6 TOTAL), AND SHALL BE CLAYTON MARK FROST PROOF HYDRANTS WITH RISER, INSTALLED PER MANUFACTURER'S SPECIFICATIONS. CONTRACTOR SHALL PROVIDE AS PART OF THE BASE BID PRICE AN ADDITIONAL TEN HYDRANTS AND RISERS FOR RIDEM TO STOCK AS FUTURE REPLACEMENTS.
- HYDRANTS SHALL BE INSTALLED IN A 3-FOOT BY 3-FOOT BOX OUT IN THE PROPOSED CONCRETE SURFACE FINISH. THE BOX-OUT SHALL BE FINISHED WITH A 4-INCH THICK CONCRETE SURFACE WITH PREMOULDED EXPANSION JOINT FILLER AROUND THE EDGES.
- PROVIDE 3-INCH DIAMETER CONCRETE FILLED STEEL PIPE BOLLARDS ON EACH SIDE OF HYDRANTS.

PIER 3 FIRE SUPPRESSION IMPROVEMENT NOTES

- FIRE SUPPRESSION IMPROVEMENTS TO PIER 3 SHALL INCLUDE THE INSTALLATION OF TEN DECK HATCHES AT A 20-FOOT SPACING DOWN THE CENTERLINE OF THE PIER, AND THE PROVISION OF A STEEL STORAGE BOX WITH REVOLVING NOZZLES AND 5-FOOT LONG CELLAR LOCATED AT THE LANDWARD END OF THE PIER.
- WATER SUPPLY FOR FIRE SUPPRESSION WILL UTILIZE THE EXISTING FIRE HYDRANT LOCATED ON GREAT ISLAND ROAD, ADJACENT TO UTILITY POLE #2 IN FRONT OF THE INTERSTATE NAVIGATION TICKET OFFICE.
- THE EFFECTIVE OPENING OF THE DECK HATCHES SHALL NOT EXCEED 100 SQUARE INCHES, AND SHALL NOT BE LESS THAN 9 INCHES IN THE SMALLEST DIMENSION.
- THE DECK ACCESS HATCHES SHALL BE FABRICATED FROM STAINLESS STEEL, WITH ANGLE FRAME AND A DIAMOND PLATE HINGED COVER WITH AN HS-20 WHEEL LOAD RATING. THE HATCH COVER SHALL BE FLUSH WITH THE DECK SURFACE, AND SHALL HAVE A RECESSED DROP HANDLE. THE HATCH SHALL BE PAINTED FIRE SAFETY RED.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE HATCH FABRICATION FOR REVIEW BY THE ENGINEER PRIOR TO INSTALLATION.
- A "JOB BOX" MODEL 1-658990 STEEL CABINET (72"L X 24"W X 27.75"H) STORAGE CABINET SHALL BE PROVIDED AT THE LANDWARD END OF THE PIER FOR STORAGE OF SUPPLEMENTAL FIRE FIGHTING EQUIPMENT. THE CABINET SHALL BE PAINTED FIRE SAFETY RED.
- EIGHT ELKHART BRASS MODEL 193-9 BRESNAN DISTRIBUTOR NOZZLES AND EIGHT ELKHART BRASS MODEL A-2.5 APPLICATORS SHALL BE PROVIDED IN THE BASE BID PRICE, FOR ON-SITE STORAGE IN THE STEEL CABINET.

No.	Description	Date
ADDENDUM NO. 1		1/31/13
REVISIONS:		

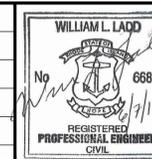


STATE OF RHODE ISLAND
 DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 DIVISION OF PLANNING AND DEVELOPMENT



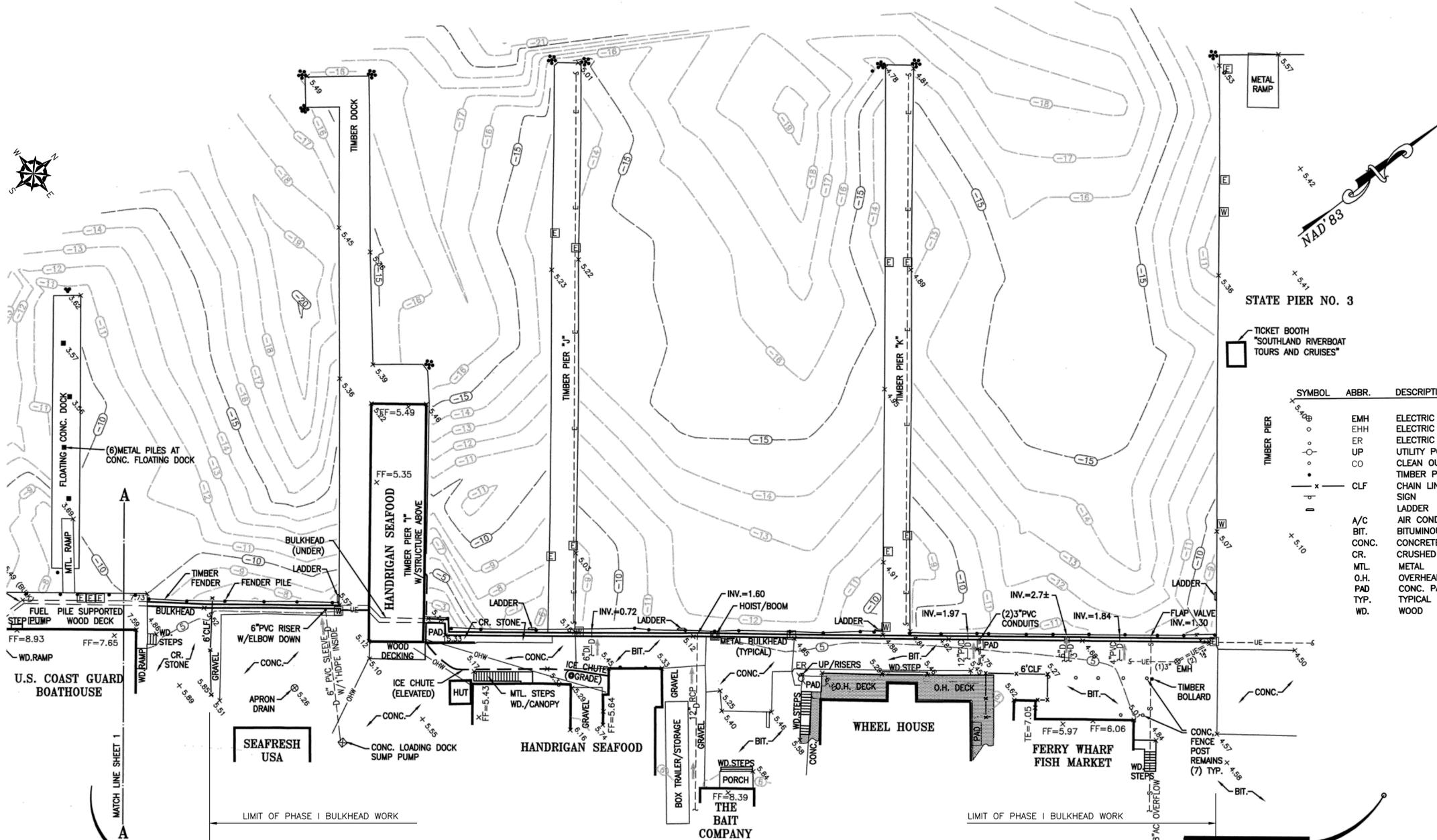
RECONSTRUCTION OF
 SOUTH BULKHEAD-PHASE I
 PORT OF GALILEE
 NARRAGANSETT, RHODE ISLAND

Design by:	WLL
Drawn by:	CB
Checked by:	RJM
Date:	JUNE 2012
Scale:	NONE
Project No.:	33498.00



NOTES & LEGEND

2



STATE PIER NO. 3

TICKET BOOTH
"SOUTHLAND RIVERBOAT
TOURS AND CRUISES"

LEGEND

SYMBOL	ABBR.	DESCRIPTION	SYMBOL	DESCRIPTION
○	EMH	ELECTRIC MANHOLE	-16-	1' CONTOUR INTERVAL
○	EHH	ELECTRIC HANDHOLE	-15-	5' CONTOUR INTERVAL
○	ER	ELECTRIC RISER	○	SPOT GRADE (TYPICAL)
○	UP	UTILITY POLE	x	FF=6.16 FINISHED FLOOR ELEVATION
○	CO	CLEAN OUT	x	TE=6.16 TRESHOLD ELEVATION
○	CLF	CHAIN LINK FENCE	—	GUARDRAIL
○	A/C	AIR CONDITION EQUIPMENT	→	FLOW DIRECTION ARROW
○	BIT.	BITUMINOUS	—	DRAINAGE LINE
○	CONC.	CONCRETE	—	SANITARY LINE
○	CR.	CRUSHED	—	ELECTRIC ON PIERS
○	MTL.	METAL	—	UNDERGROUND ELECTRIC
○	O.H.	OVERHEAD	—	OVERHEAD WIRES
○	PAD	CONC. PAD	—	ELECTRIC SERVICE
○	TYP.	TYPICAL	—	WATER SERVICE
○	WD.	WOOD		

PIPE ABBR.	DESCRIPTION
AC	ASBESTOS CEMENT
CI	CAST IRON
DI	DUCTILE IRON
INV.	INVERT ELEVATION
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
VC	VITRIFIED CLAY

PROJECT BENCHMARK
USC&GS DISK NO. 3 (1948)
FOUND ON CONCRETE STEP
AT FRONT ENTRANCE TO
COAST GUARD BOATHOUSE
ELEV. 7.55 (NGVD 1929)

SURVEY CONTROL (NAD '83)
MAG NAIL
N 107773.69
E 325159.84

- NOTES:**
- HORIZONTAL DATUM NAD '83.
 - VERTICAL DATUM NGVD 1929 BASED ON PLAN ENTITLED "STATE OF RHODE ISLAND DEPARTMENT OF ENVIRONMENTAL MANAGEMENT DIVISION OF PLANNING AND DEVELOPMENT, UTILITIES, PORT OF GALILEE, NARRAGANSETT, R.I., SHEET 1 OF 3, SCALE: 1"=50", DATE: NOV. 1983", LABELED AS PLAN "NAR 4084, DRAWER 59", D.E.M. OFFICE, PROVIDENCE, RI.
 - CLASS III TOPOGRAPHIC SURVEY FIELD WORK PERFORMED JULY 2009.

REVISIONS	
NO.	DESCRIPTION

PREPARED FOR:
GZA GeoEnvironmental, Inc.
530 Broadway
Providence, RI 02909

BRYANT ASSOCIATES, INC.
Engineers - Surveyors - Construction Managers
14 Breakneck Hill Road, Suite 200
Lincoln, Rhode Island 02865-3925

THIS PLAN CONFORMS TO A CLASS III STANDARD TOPOGRAPHIC SURVEY AS ADOPTED BY THE RHODE ISLAND BOARD OF REGISTRATION FOR PROFESSIONAL LAND SURVEYORS.
Geoffrey S. Hoogasian 8/21/09
GEOFFREY S. HOOGASIAN, PLS #1982 DATE

GEOFFREY S. HOOGASIAN
No. 1982
PROFESSIONAL LAND SURVEYOR

SCALE: 1"=20'
SCALE IN FEET
0 20 40 60
DATE: 8/21/09
DRAWN BY: GSH SHEET 2 OF 2

EXISTING CONDITIONS
PORT OF GALILEE
SOUTH BULKHEAD

NARRAGANSETT RHODE ISLAND

No.	Description	Date

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT
GZA GeoEnvironmental, Inc.

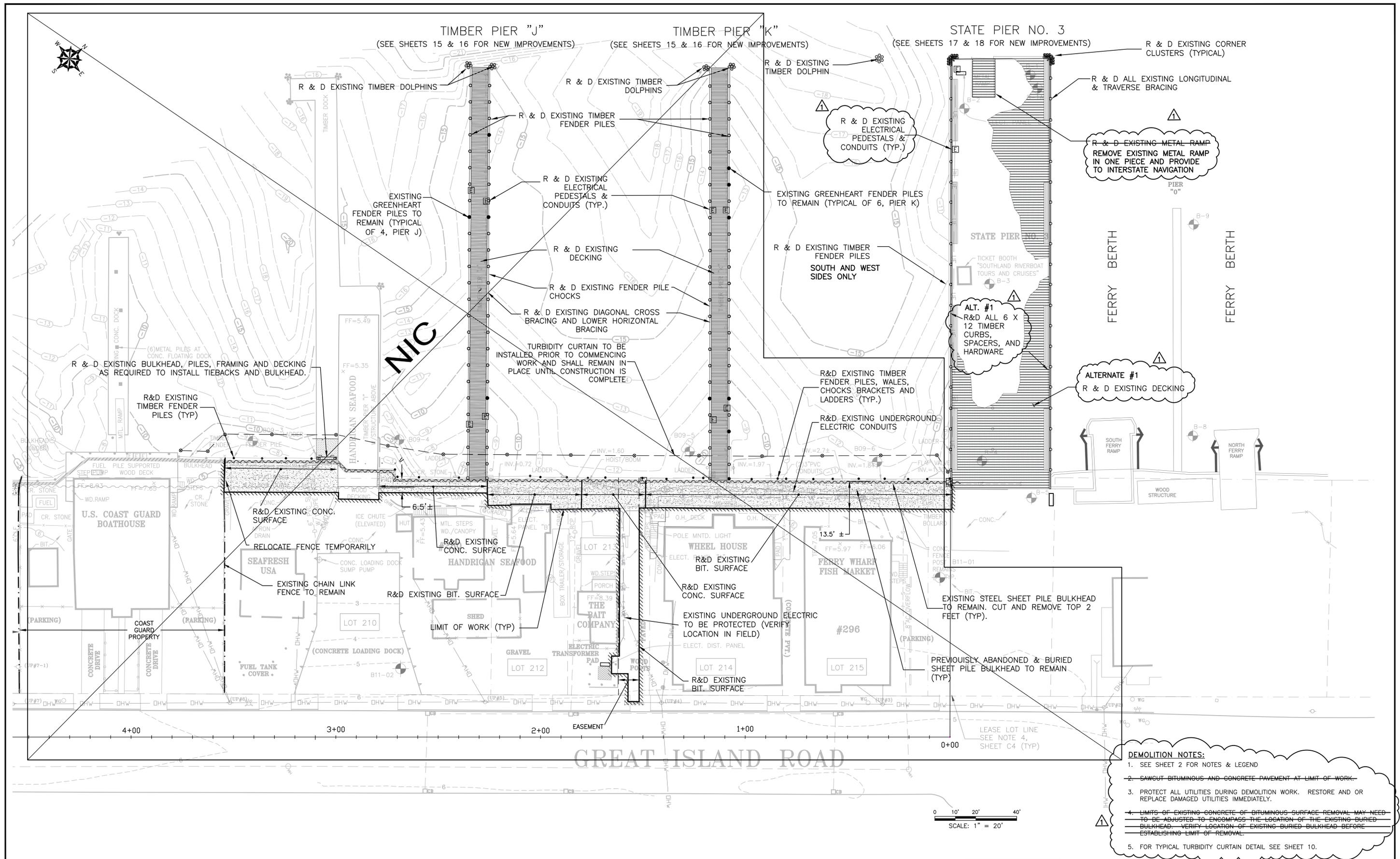
RECONSTRUCTION OF
SOUTH BULKHEAD-PHASE I
PORT OF GALILEE
NARRAGANSETT, RHODE ISLAND

Design by: WLL
Drawn by: CB
Checked by: RJM
Date: JUNE 2012
Scale: AS NOTED
Project No.: 33498.00

WILLIAM L. LADD
No. 6688
REGISTERED PROFESSIONAL ENGINEER
CIVIL

EXISTING CONDITIONS PLAN

3
SHEET 3 OF 18



- DEMOLITION NOTES:**
- SEE SHEET 2 FOR NOTES & LEGEND
 - SAWCUT BITUMINOUS AND CONCRETE PAVEMENT AT LIMIT OF WORK
 - PROTECT ALL UTILITIES DURING DEMOLITION WORK. RESTORE AND OR REPLACE DAMAGED UTILITIES IMMEDIATELY.
 - LIMITS OF EXISTING CONCRETE OF BITUMINOUS SURFACE REMOVAL MAY NEED TO BE ADJUSTED TO ENCOMPASS THE LOCATION OF THE EXISTING BURIED BULKHEAD. VERIFY LOCATION OF EXISTING BURIED BULKHEAD BEFORE ESTABLISHING LIMIT OF REMOVAL.
 - FOR TYPICAL TURBIDITY CURTAIN DETAIL SEE SHEET 10.

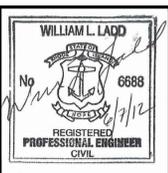
ADDENDUM NO. 1	1/31/13	
No.	Description	Date
REVISIONS:		

STATE OF RHODE ISLAND
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

GZA
GeoEnvironmental, Inc.

RECONSTRUCTION OF
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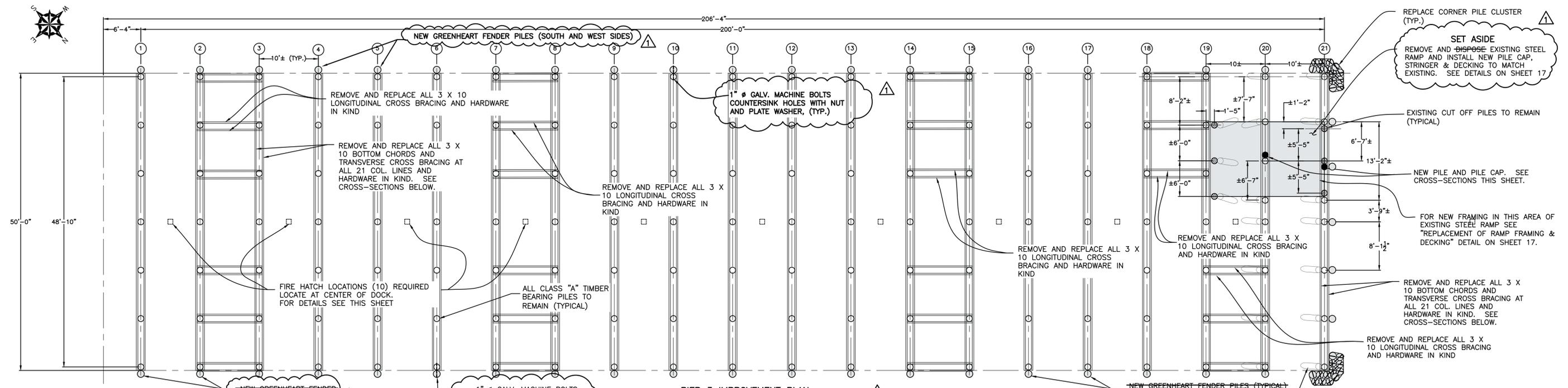
Design by: WLL
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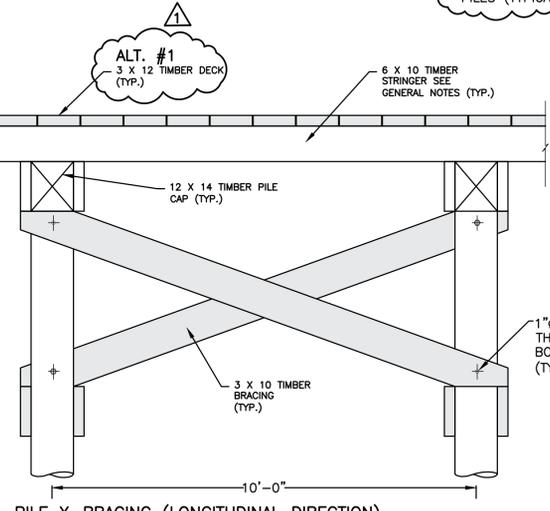
DEMOLITION
PLAN

5

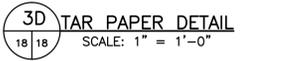
SHEET 5 OF 18



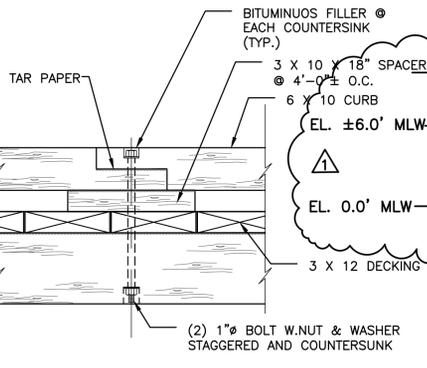
PIER 3 IMPROVEMENT PLAN
SCALE: 1/8" = 1'-0"



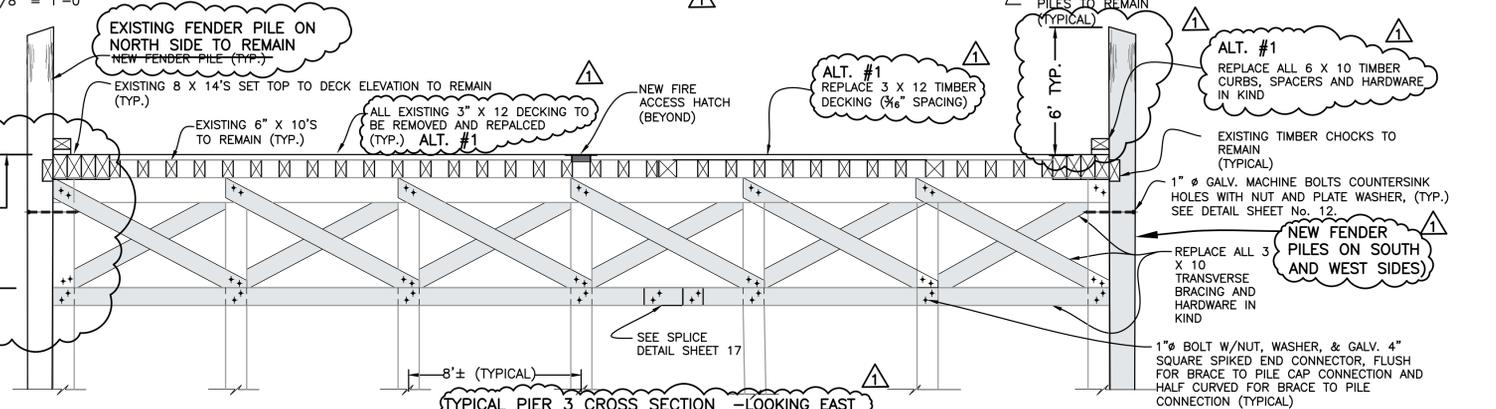
PILE X-BRACING (LONGITUDINAL DIRECTION)
SCALE: 1/2" = 1'-0"



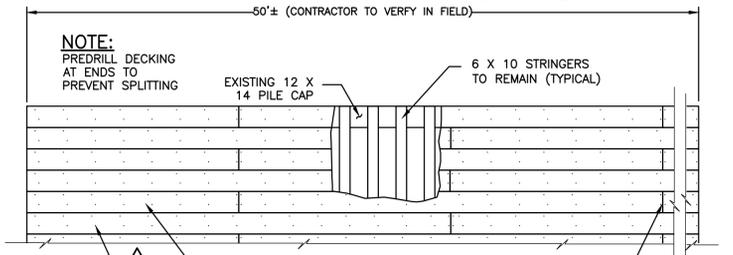
3D TAR PAPER DETAIL
SCALE: 1" = 1'-0"



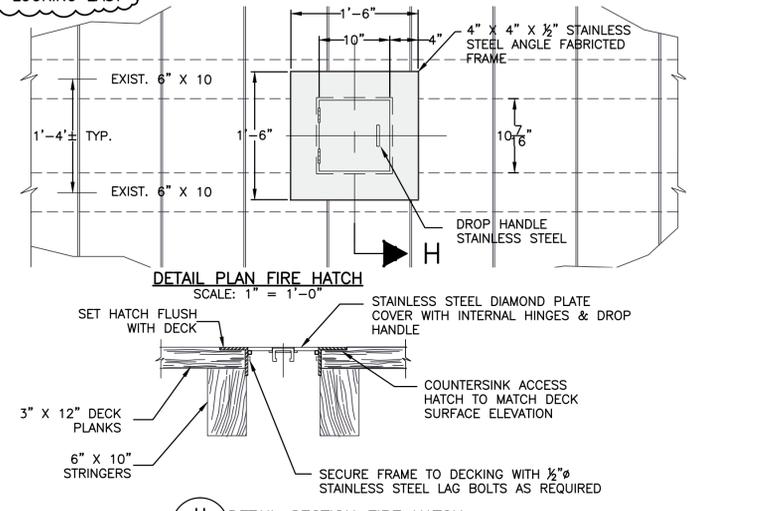
3E SHIP LAP @ CURBING
SCALE: 1" = 1'-0"



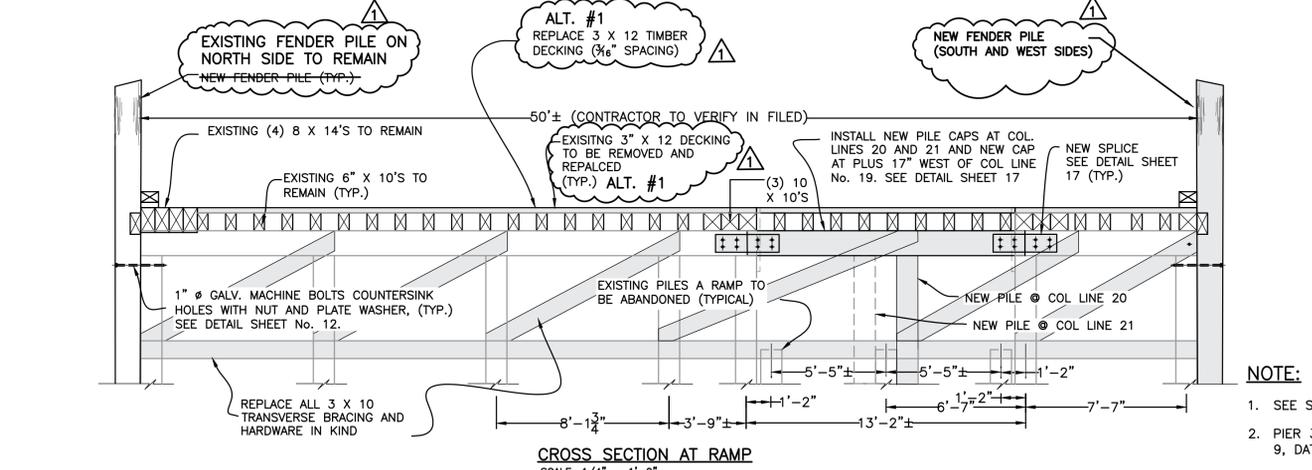
TYPICAL PIER 3 CROSS SECTION - LOOKING EAST
SCALE: 1/4" = 1'-0"



DETAIL NEW DECK LAYOUT AND NAILING PLAN
SCALE: 1/4" = 1'-0"



H DETAIL SECTION FIRE HATCH
SCALE: 1" = 1'-0"



CROSS SECTION AT RAMP
SCALE: 1/4" = 1'-0"

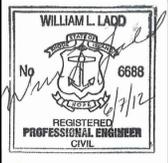
- NOTE:**
- SEE SHEET 2 FOR NOTES & LEGEND
 - PIER 3 PLAN AND SECTIONS SHOWN DEVELOPED FROM GALILEE FERRY TERMINAL IMPROVEMENTS CONTRACT DRAWINGS, SHEET 9, DATED JULY, 1993 BY PARE ENGINEERING CORPORATION, ORIGINAL SCALE 1/4"=1'-0".

ADDENDUM NO. 1	1/31/13	
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STATE OF RHODE ISLAND
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STATE PIER NO.3
IMPROVEMENT DETAILS



TIMBER PIER "J"

TIMBER PIER "K"

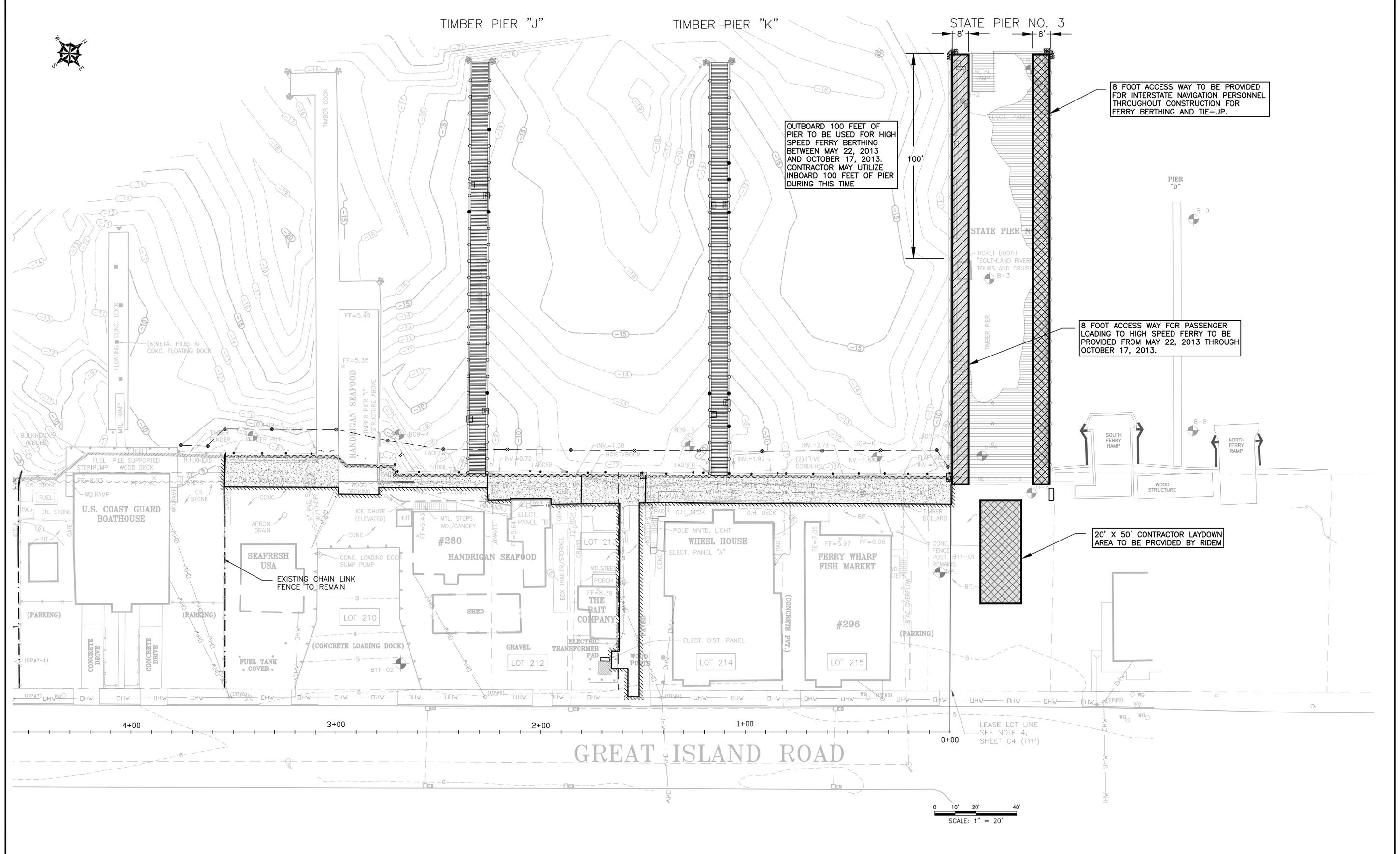
STATE PIER NO. 3

OUTBOARD 100 FEET OF PIER TO BE USED FOR HIGH SPEED FERRY BERTHING BETWEEN MAY 22, 2013 AND OCTOBER 17, 2013. CONTRACTOR MAY UTILIZE INBOARD 100 FEET OF PIER DURING THIS TIME

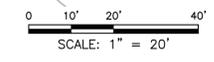
8 FOOT ACCESS WAY TO BE PROVIDED FOR INTERSTATE NAVIGATION PERSONNEL THROUGHOUT CONSTRUCTION FOR FERRY BERTHING AND TIE-UP.

8 FOOT ACCESS WAY FOR PASSENGER LOADING TO HIGH SPEED FERRY TO BE PROVIDED FROM MAY 22, 2013 THROUGH OCTOBER 17, 2013.

20' X 50' CONTRACTOR LAYDOWN AREA TO BE PROVIDED BY RIDEM



GREAT ISLAND ROAD



No.	Description	Date
REVISIONS:		

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DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF PLANNING AND DEVELOPMENT

GZA
GeoEnvironmental, Inc.

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SITE ACCESS PLAN SK-1
SHEET 1 OF 1