



**RIGIS**

## SITE LOCATION MAP

SCALE: 1"=2,000'



8 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02865  
(401) 334-4100

10 LINCOLN ROAD, SUITE 210  
FOXBORO, MA 02035  
(508) 543-1755

## FIGURE 1

BRISTOL INDEPENDENCE PARK  
BRISTOL, RI



PROJECT No. 22179.00

NOVEMBER 2022



**RIGIS**

## ANNOTATED AERIAL PHOTOGRAPH

SCALE: 1" = 60'



8 BLACKSTONE VALLEY PLACE  
LINCOLN, RI 02865  
(401) 334-4100

10 LINCOLN ROAD, SUITE 210  
FOXBORO, MA 02035  
(508) 543-1755

## FIGURE 2

INDEPENDENCE PARK  
BOAT RAMP IMPROVEMENTS  
BRISTOL, RI





# National Flood Hazard Layer FIRMette



71°17'5"W 41°40'41"N



## Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	Without Base Flood Elevation (BFE) Zone A, V, A99
	With BFE or Depth Zone AE, AO, AH, VE, AR
	Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
	Future Conditions 1% Annual Chance Flood Hazard Zone X
	Area with Reduced Flood Risk due to Levee. See Notes. Zone X
	Area with Flood Risk due to Levee Zone D
OTHER AREAS	NO SCREEN Area of Minimal Flood Hazard Zone X
	Effective LOMRs
GENERAL STRUCTURES	Area of Undetermined Flood Hazard Zone D
	Channel, Culvert, or Storm Sewer
OTHER FEATURES	Levee, Dike, or Floodwall
	Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS	Coastal Transect
	Base Flood Elevation Line (BFE)
	Limit of Study
	Jurisdiction Boundary
	Coastal Transect Baseline
	Profile Baseline
	Hydrographic Feature
	Digital Data Available
	No Digital Data Available
	Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 1/12/2023 at 2:40 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

RECEIVED  
2/5/2024

COASTAL RESOURCES  
MANAGEMENT COUNCIL

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020



Prepared for The:

TOWN OF BRISTOL, RHODE ISLAND

BRISTOL INDEPENDENCE PARK  
BOAT RAMP IMPROVEMENTS

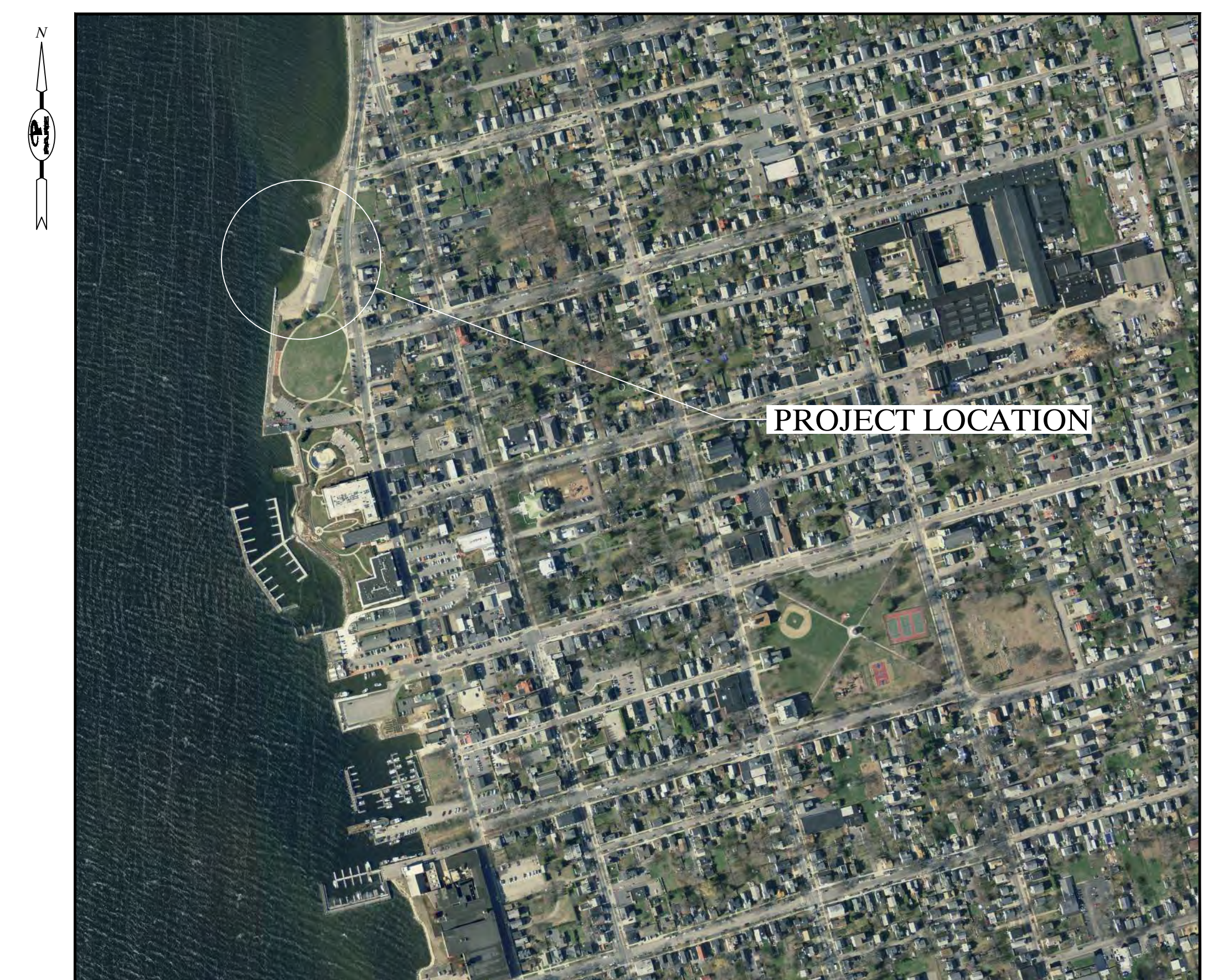
BRISTOL, RHODE ISLAND

FEBRUARY 2024

Drawing Index



LOCUS PLAN  
SCALE: 1" = 2000'



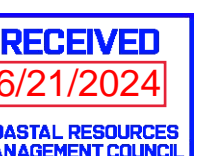
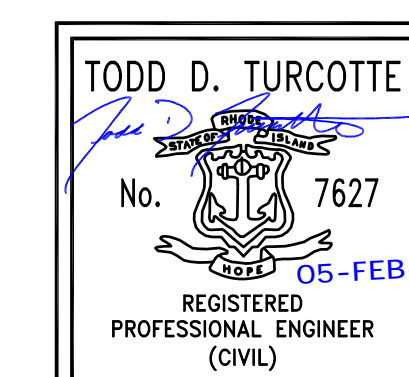
AERIAL PLAN  
SCALE: 1" = 400'

- 0.0 COVER
- EXISTING CONDITIONS BY PRINCPE COMPANY INC.
- 1.0 GENERAL NOTES
- 2.0 EXISTING SITE PLAN
- 2.1 PROPOSED SITE PLAN
- 2.2 BOAT LAUNCH FLOATS AND RAMP PLAN
- 2.3 PRE-CAST RAMP DETAILS
- 2.4 CAST-IN-PLACE RAMP DETAILS
- 2.5 PROPOSED REVETMENT PLAN AND SECTIONS
- 2.6 TIMBER FLOAT SECTIONS AND DETAILS

REVISIONS		
NO.	DESCRIPTION	DATE
1	COASTAL BANK LIMITS	2024-06-14

Prepared by:

PARE CORPORATION  
Foxboro, Massachusetts







NO.	DATE	DESCRIPTION	BY
2.	12/12/22	REVISE DATUM TO NAVD88	JML
1.	11/28/22	UPDATE EXISTING CONDITIONS	RAW

BRISTOL HARBOR  
NARRAGANSETT BAY  
(BATHYMETRY SURVEY)  
(12/13/2012)

LEGEND

- MAJOR CONTOUR
- MINOR CONTOUR
- G GAS LINE
- D DRAINAGE LINE
- S SEWER LINE
- W WATER LINE
- OHW OVERHEAD WIRES
- UTILITY POLE
- WATER VALVE
- GAS VALVE
- HYDRANT

NAVD88	TIDAL MLW
2.00 = MHHW	- MHHW = 4.44
1.72 = MHW	- MHW = 4.16
0.00 = NAVD 88	- NAVD 88 = 2.44
-0.36 = MTL	- MTL = 2.08
-0.87 = NGVD	- NGVD 29 = 1.57
-2.44 = MLW	- MLW = 0.00
-2.60 = MLLW	- MLLW = -0.16

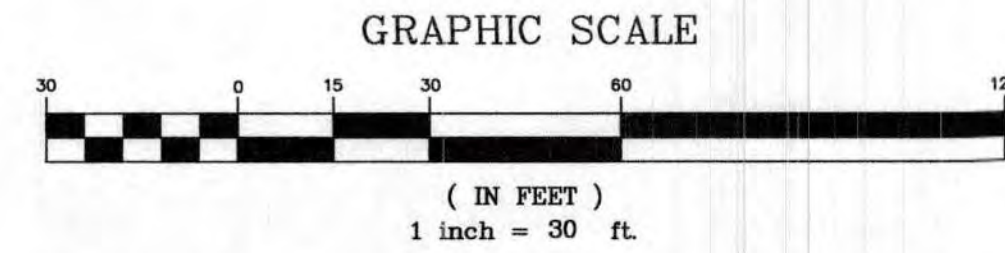
BENCHMARK DISK 1929E1977 ELEV. 6.33 (NAVD88)  
TIDAL STATION 8451929

THIS SURVEY HAS BEEN CONDUCTED AND THE PLAN HAS BEEN PREPARED PURSUANT TO SECTION 9 OF THE RULES AND REGULATIONS ADOPTED BY THE RHODE ISLAND STATE BOARD OF REGISTRATIONS FOR PROFESSIONAL LAND SURVEYORS NOVEMBER 25, 2015 AS FOLLOWS:

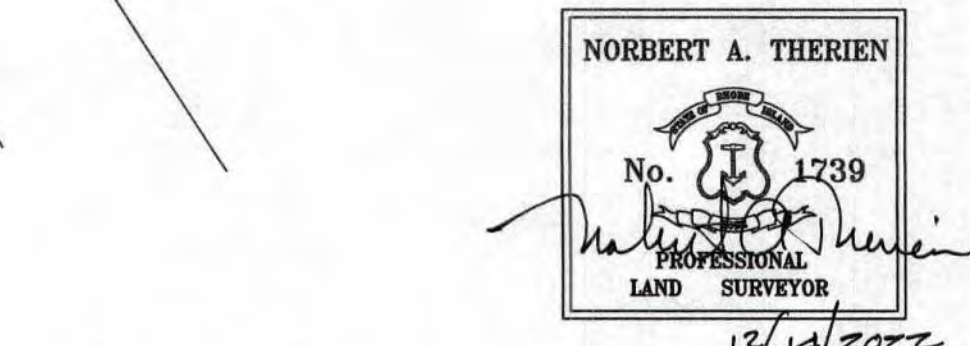
TYPE OF SURVEY: TOPOGRAPHICAL SURVEY  
MEASUREMENT SPECIFICATION: CLASS 3 STANDARD

PURPOSE OF SURVEY: EXISTING CONDITIONS

BY: *Norbert A. Therien* DATE: 12/14/2022  
NORBERT A. THERIEN, PLS NO. 1739



- GENERAL NOTES:
- THE LOCATION AND DEPTH OF EXISTING UTILITIES ARE APPROXIMATE AND HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS. RESTORATION AND REPAIR OF DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL INVOLVED UTILITY COMPANIES AND/OR TOWN WHOSE FACILITIES MIGHT BE AFFECTED BY ANY WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 72 HOURS IN ADVANCE.
  - THE CONTOURS SHOWN HEREIN ARE BASED UPON THE NAVD88 DATUM.
  - HORIZONTAL DATUM RHODE ISLAND STATE PLANE COORDINATES (NAD83).

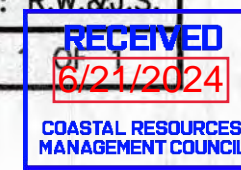


**PRINCIPLE COMPANY, INC.**  
ENGINEERING DIVISION  
27 SAKONNET RIDGE DRIVE  
TIVERTON, RI 02878  
401.816.5385  
SURVEY@PRINCIPLEENGINEERING.COM  
PRINCIPLEENGINEERING.COM

**INDEPENDENCE PARK  
THAMES STREET  
AP 8 LOT 12  
BRISTOL, RHODE ISLAND**

**EXISTING CONDITIONS**

DRAWN BY: J.M.L.	CHECKED BY: N.A.T.	FIELD BY: R.W.S.
DECEMBER 2022	JOB No.SVY-22-144	SHEET





GENERAL NOTES:

- FOR THE PURPOSE OF THIS PROJECT  

OWNER -

TOWN OF BRISTOL  
10 COURT STREET  
BRISTOL, RI 02809

ENGINEER -

PARE CORPORATION  
10 LINCOLN ROAD, SUITE 210  
FOXBORO, MA 02035  
CONTACT - TODD TURCOTTE, P.E.
- ALL CONSTRUCTION INDICATED ON THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF THE RHODE ISLAND STATE BUILDING CODE, ALL FEDERAL AND MUNICIPAL BUILDING CODES, AND THE SPECIFICATIONS INCLUDED IN THIS CONTRACT. THESE PLANS ARE INCOMPLETE UNLESS ACCOMPANIED BY THE SPECIFICATIONS INCLUDED IN THE CONTRACT DOCUMENTS.
- THE BASE PLAN WAS DEVELOPED BASED UPON THE SURVEY PERFORMED BY PRINCIPE COMPANY TITLED "EXISTING CONDITIONS - INDEPENDENCE PARK", DATED DECEMBER 2022. ANY DISCREPANCIES ON THESE PLANS WITH REGARD TO DIMENSIONS OR CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PORTION OF WORK.
- THE VERTICAL DATUM IS NAVD88; HORIZONTAL DATUM IS RHODE ISLAND STATE PLANE NAD83. CONTRACTOR SHALL ESTABLISH HORIZONTAL AND VERTICAL CONTROL AS REQUIRED TO ENABLE COMPLETION OF THE WORK.
- CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS, METHODS, AND SAFETY OF WORK.
- INSTALL PROPER CONSTRUCTION AND TRAFFIC SIGNAGE AT OR NEAR THE PROJECT ENTRANCES(S). COORDINATE WITH LOCAL POLICE WHEN CONSTRUCTION VEHICLE ACTIVITIES OR DELIVERIES COULD POTENTIALLY IMPEDE NORMAL DAILY TRAFFIC AND PEDESTRIAN TRAFFIC.
- ENSURE THAT ADEQUATE SHORING AND FALSEWORK ARE PROVIDED TO THE EXISTING STRUCTURE(S) RESULTING IN A STABLE AND SAFE STRUCTURE AT ALL TIMES. CONTRACTOR IS ADVISED THAT THE EXISTING SEAWALL IS DETERIORATED, THEREFORE THE STRUCTURAL CAPACITY OF THE RETAINING SYSTEM IS REDUCED.
- CONDITIONS AS INDICATED ON THE CONTRACT DRAWINGS ARE GENERAL IN NATURE. THE AGE AND SUBSEQUENT REPAIR AND RECONSTRUCTION OF VARYING ELEMENTS COMPRISING THE SEAWALL HAVE RESULTED IN VARIOUS CONDITIONS. THE CONTRACTOR SHALL VISIT AND INSPECT THE SITE TO DETERMINE THE EXTENT AND AMOUNT OF DEMOLITION AND REPAIR WORK TO BE PERFORMED BEFORE SUBMITTING THEIR BID.
- PLANS AND SECTIONS ARE APPROXIMATE AND ARE TO BE USED FOR GENERAL LAYOUT. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING FIELD MEASUREMENTS TO ASSURE CONSISTENCY WITH THE PROPOSED CONSTRUCTION PLANS. THE CONTRACTOR SHALL FIELD VERIFY ACTUAL CONDITIONS, DIMENSIONS, CLEARANCES, ELEVATIONS, AND OTHER INFORMATION INDICATED IN THE DOCUMENTS PRIOR TO ORDERING ANY MATERIALS, COMMENCING ANY FABRICATIONS, OR PERFORMING ANY WORK. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY FIELD CONDITIONS WHICH MAY DIFFER FROM THAT REPRESENTED PRIOR TO COMMENCING WORK.
- PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VISIT THE SITE AND SHALL NOTIFY THE ENGINEER OF ANY ADDITIONAL UTILITIES, STRUCTURES, OR ANY OTHER ELEMENTS THAT MAY IMPEDE WORK. UTILITY AND/OR STRUCTURE RELOCATIONS, IF NECESSARY, SHALL BE COORDINATED THROUGH THE OWNER'S ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS. PLANS SHALL NOT BE SCALED FOR DIMENSIONS.
- NOTES, TYPICAL DETAILS AND SCHEDULES APPLY TO ALL WORK UNLESS OTHERWISE NOTED. FOR CONDITIONS NOT SPECIFICALLY SHOWN, PROVIDE DETAILS OF SIMILAR NATURE. VERIFY APPLICABILITY BY SUBMITTING SHOP DRAWINGS FOR REVIEW.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF ALL PROJECT DEMOLITION AND EXCESS MATERIAL IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.
- THE CONTRACTOR SHALL PROTECT ALL ADJACENT STRUCTURES AND UTILITIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR OF ALL DAMAGE TO ADJACENT STRUCTURES AND UTILITIES AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A CONSTRUCTION SCHEDULE TO THE OWNER WITHIN 5 DAYS OF THE NOTICE OF AWARD. THE CONTRACTOR SHALL UPDATE SCHEDULE AS NEEDED THROUGHOUT THE COURSE OF WORK.
- CONTRACTOR'S STORAGE AREA: DUE TO THE SITE'S WATERFRONT LOCATION, ALL NECESSARY MEASURES SHALL BE TAKEN TO PREVENT BY ANY METHOD, OIL, CONSTRUCTION DEBRIS, STOCKPILED MATERIALS, AND OTHER MATERIALS ON THE SITE, FROM ENTERING THE WATERWAY. ANY DEBRIS FALLING INTO THE WATER SHALL BE RECOVERED AND PROPERLY DISPOSED OF. STAGING/LAYDOWN AREAS, AS APPROVED BY THE ENGINEER, SHALL BE RESTORED TO THE EXISTING CONDITION. THE CONTRACTOR SHALL REPLACE ALL DAMAGED MATERIALS AS A RESULT OF HIS OPERATIONS, TO THE SATISFACTION OF THE ENGINEER AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT ALL CONSTRUCTION DEBRIS OR WASTE FROM FALLING INTO THE WATER. ANY DEBRIS FALLING INTO THE WATER SHALL BE RECOVERED AND PROPERLY DISPOSED OF.
- THE CONTRACTOR SHALL MAINTAIN A SECURE SITE AND PROVIDE APPROPRIATE SAFETY MEASURES TO PREVENT ACCIDENTS. THE SAFETY MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO SIGNAGE, BARRICADES, FENCES, FLASHING WARNING LIGHTS, AND POLICING IF NECESSARY.
- IN CASE OF CONTRADICTION BETWEEN THE DRAWINGS, THE SPECIFICATIONS, AND THE CODES, OR IF ANY CHANGE IS REQUIRED, THE CONTRACTOR SHALL INFORM THE ENGINEER IMMEDIATELY. NO CHANGE SHALL BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
- UPON COMPLETION OF THE PROJECT, CONTRACTOR IS TO PROVIDE TWO AS-BUILT PLAN SETS TO THE OWNER DEPICTING ANY FIELD CHANGES OF DIMENSION OR DETAIL, LOCATION OF UNDERGROUND STRUCTURES AND/OR UTILITIES, CONSTRUCTION DEVIATIONS, CHANGES DUE TO FIELD OR CHANGE ORDER, AND DETAILS NOT ON THE ORIGINAL DRAWINGS.
- SHOP AND ERECTION DRAWINGS FOR ALL WORK SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL AS PER THE SPECIFICATIONS. FABRICATION OF THESE ITEMS SHALL NOT COMMENCE WITHOUT APPROVED SHOP DRAWINGS. SHOP DRAWINGS ARE PREPARED AND USED BY THE CONTRACTOR AS INSTRUMENTS TO SEQUENCE HIS WORK AND TO FACILITATE FABRICATION AND ERECTION. REVIEW OF SHOP DRAWINGS SHALL BE FOR GENERAL DETAIL AND ARRANGEMENT ONLY. CONTRACTOR SHALL BEAR FULL RESPONSIBILITY FOR DIMENSIONS, PROPER FIT, AND DETAILED DESIGN OF CONNECTIONS. THEIR APPROVAL BY THE ENGINEER IS NOT TO BE CONSTRUED AS A WAIVER OF CONSTRUCTION CONTRACT REQUIREMENTS OR RESPONSIBILITIES, UNLESS THE CONTRACTOR HAS BEEN GRANTED A DEVIATION IN WRITING.

DEMOLITION NOTES:

- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS IN THE FIELD PRIOR TO ANY DEMOLITION OR CONSTRUCTION. ANY DISCREPANCIES RELATING TO THE DRAWINGS SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- CONTRACTOR TO BE AWARE OF SELECTIVE DEMOLITION AT ALL SECTIONS OF WORK. CONTRACTOR WILL BE RESPONSIBLE FOR REPLACEMENT IN-KIND OF ALL WORK INADVERTENTLY REMOVED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL REMOVE ITEMS TO BE DEMOLISHED AS INDICATED ON THE DRAWINGS WITH CARE AND NOT TO DAMAGE ADJACENT STRUCTURES. THE WORK AREA WILL BE LEFT READY TO RECEIVE NEW WORK.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OFFSITE DISPOSAL OF ALL PROJECT DEMOLITION MATERIAL, TRASH, AND DEBRIS IN ACCORDANCE WITH LOCAL AND STATE LAWS.
- REFER TO SPECIFICATION SECTION 02100-"DEMOLITION AND REMOVAL" FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

CONCRETE NOTES:

- CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF ACI 318 - "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE RHODE ISLAND STATE BUILDING CODE.
- CONCRETE SHALL BE PROPORTIONED, MIXED, AND PLACED UNDER THE SUPERVISION OF THE APPROVED TESTING AGENCY.
- CONCRETE SHALL BE NORMAL WEIGHT, WITH TYPE II CEMENT, AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 5,000 PSI. ALL CONCRETE DESIGN MIXES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL.
- ALL CONCRETE SHALL BE AIR-ENTRAINED WITH AN AIR CONTENT OF 6% +/- 1%.
- ALL EXPOSED EDGES SHALL BE CHAMFERED 1" UNLESS NOTED OTHERWISE.
- WHEN CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE INTERFACE SHALL BE CLEAN, FREE OF LAITANCE AND INTENTIONALLY ROUGHENED TO FULL AMPLITUDE OF APPROXIMATELY 1/4 INCH.
- CONCRETE WASHOUT OPERATIONS TO OR WITHIN THE WATERWAY MUST NOT TAKE PLACE AT ANY TIME.

CONCRETE REINFORCING NOTES:

- REINFORCING BARS SHALL BE DETAILED IN ACCORDANCE WITH ACI 315 - "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" AND THE RHODE ISLAND STATE BUILDING CODE.
- COMPLETE SHOP DRAWINGS AND SCHEDULES OF ALL REINFORCING STEEL SHALL BE PREPARED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO COMMENCEMENT OF THAT PORTION OF THE WORK. ALL ACCESSORIES MUST BE SHOWN ON THE SHOP DRAWINGS.
- REINFORCING BARS SHALL BE EPOXY COATED AND CONFORM TO ASTM A615 OR A706 (WELDABLE) GRADE 60.
- ALL SUPPORTS SUCH AS CHAIRS, BOLSTERS, SPACERS, BLOCKS AND HANGERS SHALL BE OF NON-CORROSIVE MATERIAL. BLOCKS SHALL BE MADE OF 4,000 PSI (UN-REINFORCED) CONCRETE.
- UNLESS NOTED ON THE DRAWINGS, THE MINIMUM CONCRETE PROTECTION (CLEAR COVER) FOR CAST-IN-PLACE CONCRETE COVER SHALL BE AS FOLLOWS:

A.

FORMED CONCRETE EXPOSED TO EARTH OR WATER: 3"

B.

CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
- MINIMUM REINFORCEMENT DEVELOPMENT LENGTH SHALL BE IN ACCORDANCE WITH ACI 318 UNLESS NOTED ON THE DRAWINGS. LAP SPICE LENGTHS SHALL BE IN ACCORDANCE WITH ACI 318 FOR CLASS B LAPS UNLESS NOTED OTHERWISE.
- ALL REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS. UNLESS NOTED OTHERWISE, BARS SHALL BE CONTINUOUS AND SHALL RUN CONTINUOUSLY AROUND CORNERS AND LAPPED AT NECESSARY SPLICES OR HOOKED AT DISCONTINUOUS ENDS.

LUMBER NOTES:

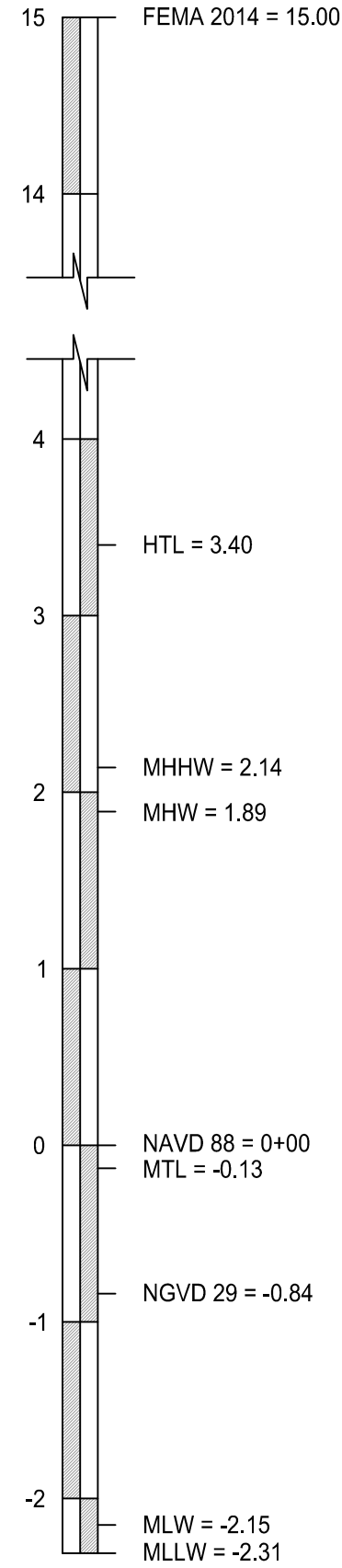
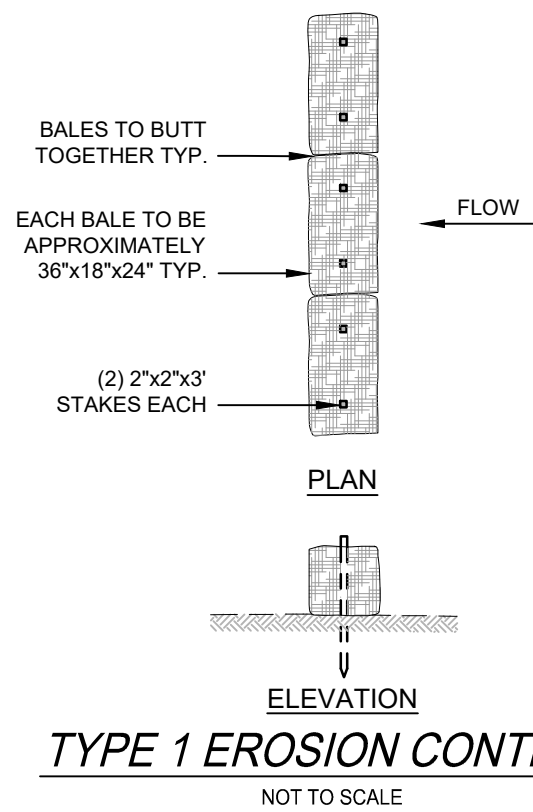
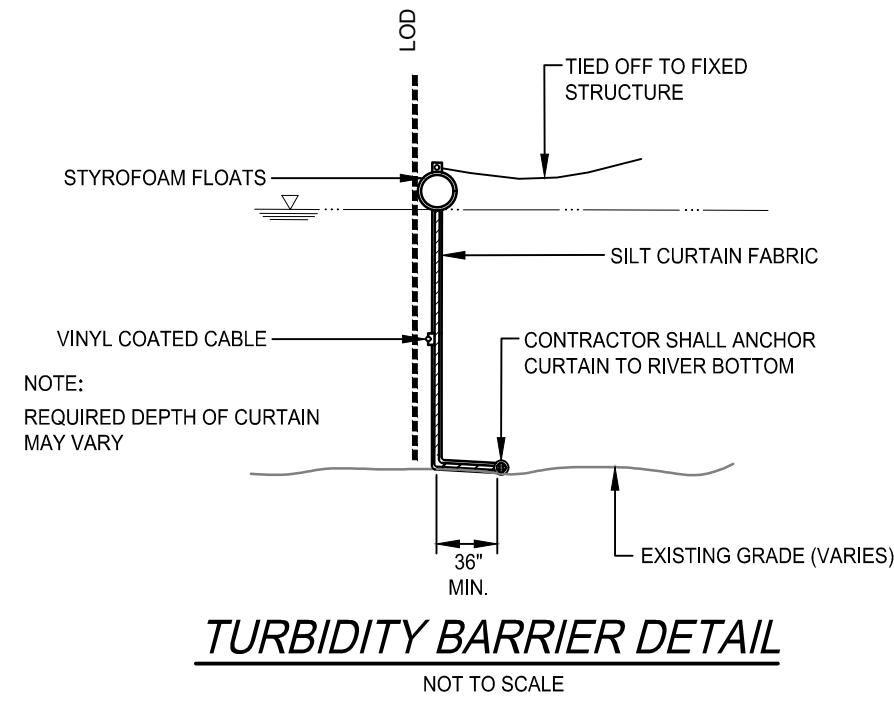
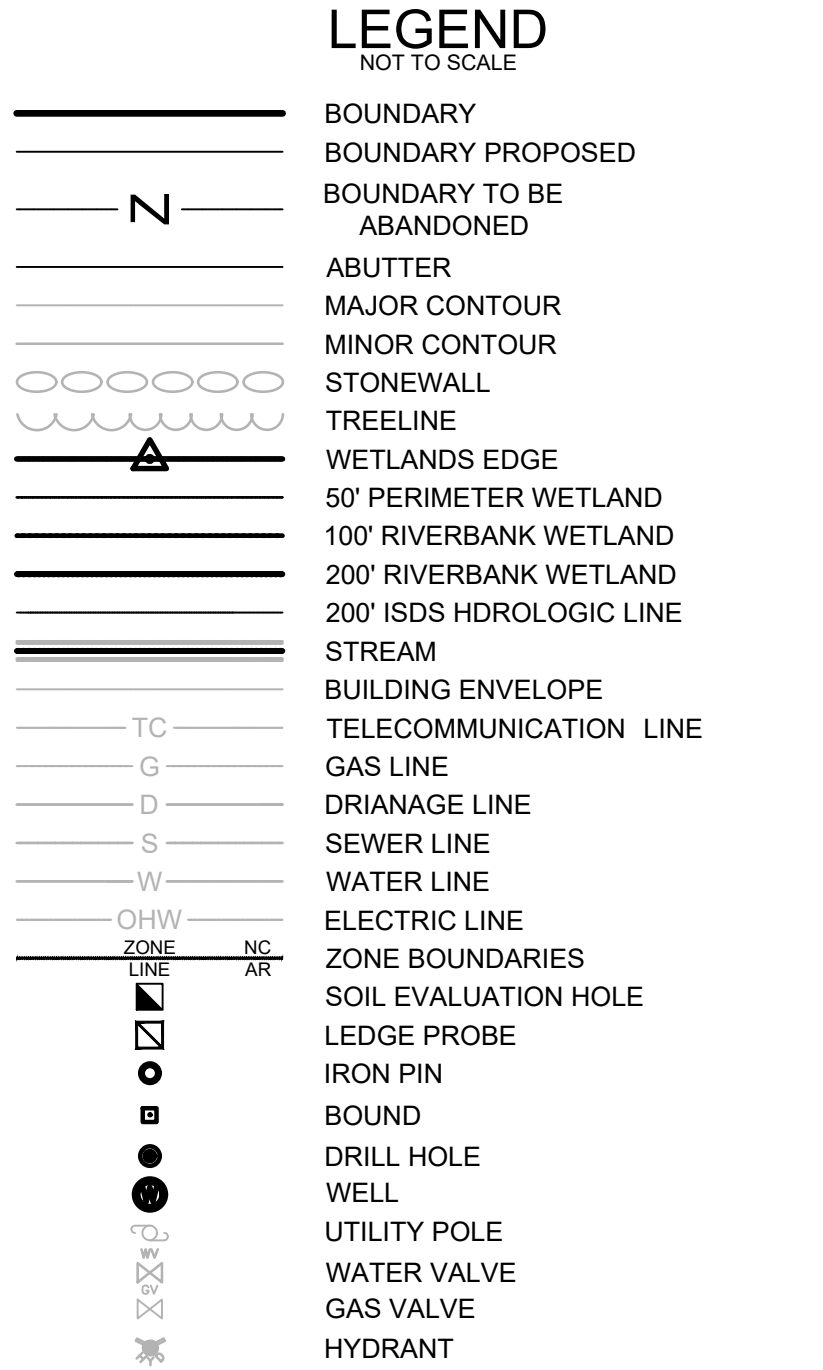
- ALL NEW LUMBER SHALL BE SOUTHERN YELLOW PINE NO. 1 OR BETTER (lb=1,200 PSI).
- NEW LUMBER SHALL BE PRESSURE TREATED TO A MINIMUM NET RETENTION OF 0.6 PCF OF CCA IN ACCORDANCE WITH AWPA STANDARD C18 UNLESS OTHERWISE NOTED.
- ALL FIELD CUTS AND BOLT HOLES SHALL BE PROTECTED IN ACCORDANCE WITH AWPA STANDARD M4.
- LUMBER DIMENSIONS PROVIDED IN THE PLANS ARE DRESSED SIZES UNLESS SPECIFIED OTHERWISE.
- TIMBER BEARING PILES ARE TO BE CLASS B GREENHEART TIMBER PILES WITH A MINIMUM DIAMETER OF 14 INCHES 3 FT FROM THE BUTT.

SPILL PREVENTION CONTROL NOTES:

- SPILLS AND LEAKS SHALL BE AVOIDED THROUGH FREQUENT INSPECTION OF EQUIPMENT AND MATERIAL STORAGE AREAS, AND SHALL BE REMEDIATED AND REPAIRED AS NECESSARY.
- HAZARDOUS MATERIAL STORAGE TO BE PLACED ONLY IN DESIGNATED AREAS. MATERIAL STORAGE AREAS SHALL BE ROUTINELY INSPECTED FOR LEAKY CONTAINERS, OPEN CONTAINERS, OR IMPROPER STORAGE TECHNIQUES THAT MAY LEAD TO SPILLS OR LEAKS.
- APPROPRIATE SPILL REMEDIATION PROCEDURES AND SUPPLIES SHALL BE READILY AVAILABLE ON-SITE. TOOLS AND SUPPLIES SHALL BE CLEARLY MARKED SO THAT ALL PERSONNEL CAN LOCATE AND ACCESS THESE SUPPLIES.
- SPILL REMEDIATION SHALL BE PERFORMED IMMEDIATELY. CONTRACTOR SHALL FOLLOW PROPER RESPONSE PROCEDURES IN ACCORDANCE WITH ANY APPLICABLE REGULATORY REQUIREMENTS.
- AT NO TIME SHALL SPILLS BE DIVERTED TOWARD STORM DRAINS OR TO THE WATERWAY.
- EQUIPMENT/VEHICLE FUELING AND REPAIR/MAINTENANCE OPERATIONS SHALL TAKE PLACE ONLY WITHIN DESIGNATED STAGING AREAS.
- THE EQUIPMENT OPERATOR SHALL FULLY MONITOR FUELING OPERATIONS TO EQUIPMENT AND VEHICLES AT ALL TIMES.
- ANY SPILLAGE SHALL BE IMMEDIATELY CLEANED WITH SPILL KITS KEPT ON SITE.
- IN THE CASE OF SMALL AMOUNTS OF SOIL CONTAMINATION, SUCH SOIL SHALL BE PLACED IN 55 GALLON DRUMS FOR DISPOSAL BY A LICENSED HAZARDOUS WASTE HAULER AT NO ADDITIONAL COST TO THE OWNER.
- IN THE CASE OF A LARGE AMOUNT OF SOIL CONTAMINATION OR DISCHARGE TO THE WATERWAY, RHODE ISLAND DEM AND APPLICABLE AGENCIES SHALL BE NOTIFIED AS REQUIRED. A HAZARDOUS WASTE REMEDIATION FIRM SHALL BE CONTRACTED TO REMOVE AND DISPOSE OF THE CONTAMINATED MATERIAL OR CONTAIN THE SPILL AT NO ADDITIONAL COST TO THE OWNER.

EROSION CONTROL NOTES:

- EROSION AND SEDIMENT CONTROLS TO BE INSTALLED AS REQUIRED FOR AND AS DETERMINED BY THE ENGINEER, OWNER, OR REGULATORY AGENCY.
- CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL DEVICES FOR THE DURATION OF THE PROJECT.
- CONTRACTOR SHALL PREVENT SEDIMENT FROM ENTERING THE WATERWAY VIA DISCHARGES THROUGH ANY DRAINAGE STRUCTURES OR RUNOFF FROM WITHIN THE LIMITS OF WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, RESTORING AND REPAIRING ALL DAMAGE AS A RESULT OF UNAUTHORIZED WORK OR DISCHARGES AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL INSTALL AND MAINTAIN TURBIDITY BARRIERS AS INDICATED IN THE CONTRACT DOCUMENTS. TURBIDITY BARRIERS SHALL BE ANCHORED SECURELY AS TO ENSURE COLLECTION OF SEDIMENT AND ENABLE THE WORK TO BE PERFORMED.
- SOIL STOCKPILES SHALL BE A MINIMUM OF 2-FEET FROM THE EDGE OF THE WALL TO LIMIT RUNOFF INTO THE HARBOR.
- THE LIMITS OF EROSION CONTROL BARRIERS SHALL BE ADJUSTED OR EXPANDED AS FIELD CONDITIONS WARRANT.
- ALL EROSION CONTROL BARRIERS SHALL BE INSPECTED AT LEAST ONCE PER WEEK. ANY DAMAGED AREAS OF THE EROSION CONTROL BARRIER SHALL BE REPAIRED WITHIN 24 HOURS OF DISCOVERY.
- DISCHARGE OF TURBID WATER TO THE WATERWAY IS PROHIBITED.
- THE TURBIDITY BARRIER SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF WORK AND SHALL REMAIN IN PLACE UNTIL ALL PILES AND FORMWORK ARE REMOVED.



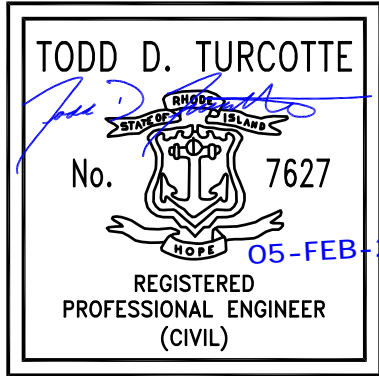
DATUM ELEVATION INFORMATION  
VALUES BASED ON INTERPOLATION BETWEEN  
NOAA STATIONS: QUONSET 8454049 AND  
CONINICUT LIGHT 8452944



SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON  
ORIGINAL DRAWING  
0" 1"

Bristol Independence Park  
Boat Ramp Improvements  
Bristol, Rhode Island



REVISIONS:

NO.	DESCRIPTION	DATE

PROJECT NO.: 21185.00  
DATE: FEBRUARY 2024  
SCALE: AS NOTED  
DESIGNED BY: BMD  
CHECKED BY: BMD  
DRAWN BY: JJP  
APPROVED BY: TDT  
DRAWING TITLE:

GENERAL NOTES

DRAWING NO. 1  
SHEET NO. 1

RECEIVED  
02/21/2024  
COASTAL RESOURCES  
MANAGEMENT COMPANY

ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION





SCALE ADJUSTMENT GUIDE  
BAR IS ONE INCH ON ORIGINAL DRAWING  
0" 1"

# Bristol Independence Park Boat Ramp Improvements

Bristol, Rhode Island

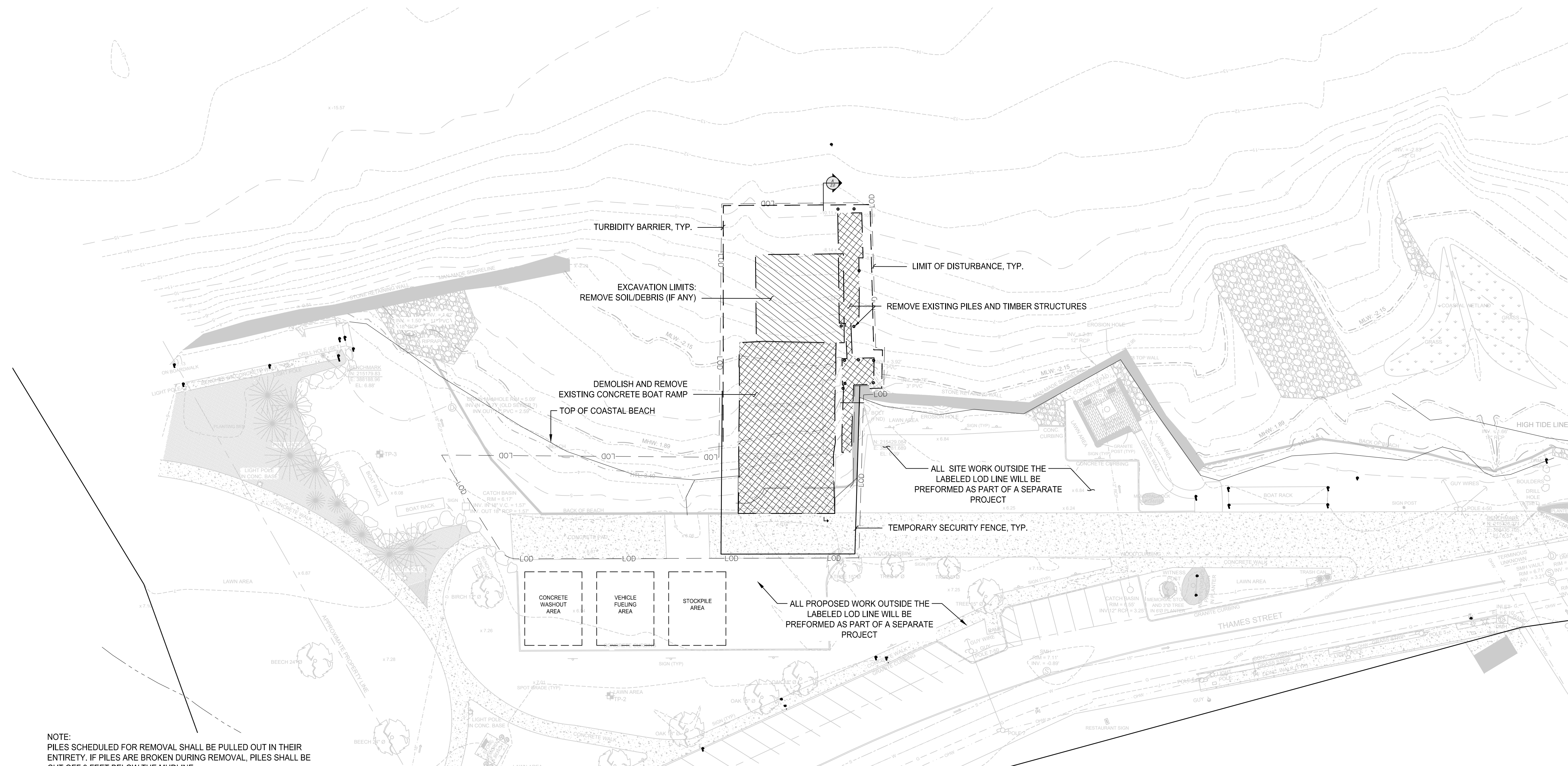
TODD D. TURCOTTE  
No. 7627  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)  
05-FEB-24

REVISIONS:

PROJECT NO.: 21185.00  
DATE: FEBRUARY 2024  
SCALE: AS NOTED  
DESIGNED BY: BMD  
CHECKED BY: BMD  
DRAWN BY: JJP  
APPROVED BY: TDT

DRAWING TITLE:  
EXISTING SITE,  
DEMOLITION PLAN  
AND SECTION

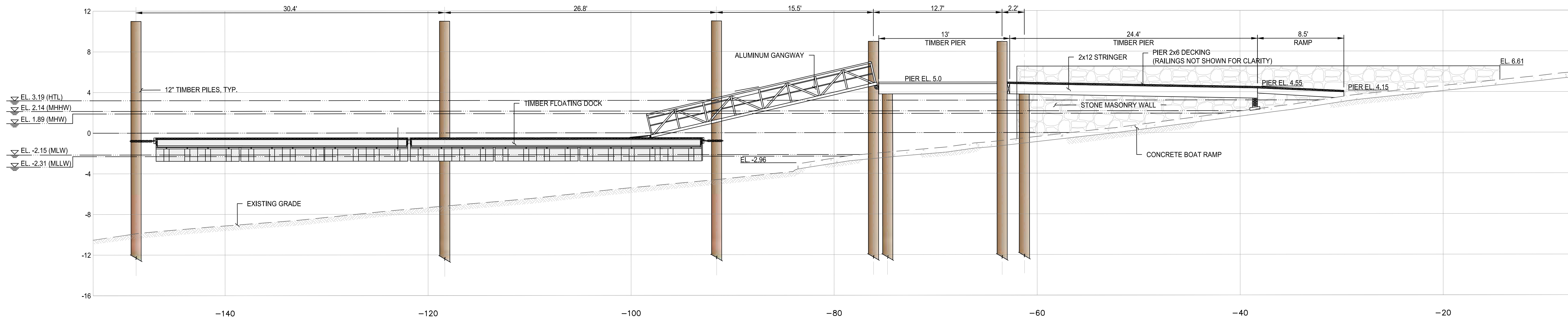
DRAWING NO. 21185.00  
SHEET NO. 2.0  
RECEIVED  
2024  
COASTAL RESOURCES  
MANAGEMENT



NOTE:  
PILES SCHEDULED FOR REMOVAL SHALL BE PULLED OUT IN THEIR ENTIRETY. IF PILES ARE BROKEN DURING REMOVAL, PILES SHALL BE CUT OFF 3 FEET BELOW THE MUDLINE.

EXISTING SITE AND DEMOLITION PLAN - INDEPENDENCE PARK

SCALE: 1" = 30'

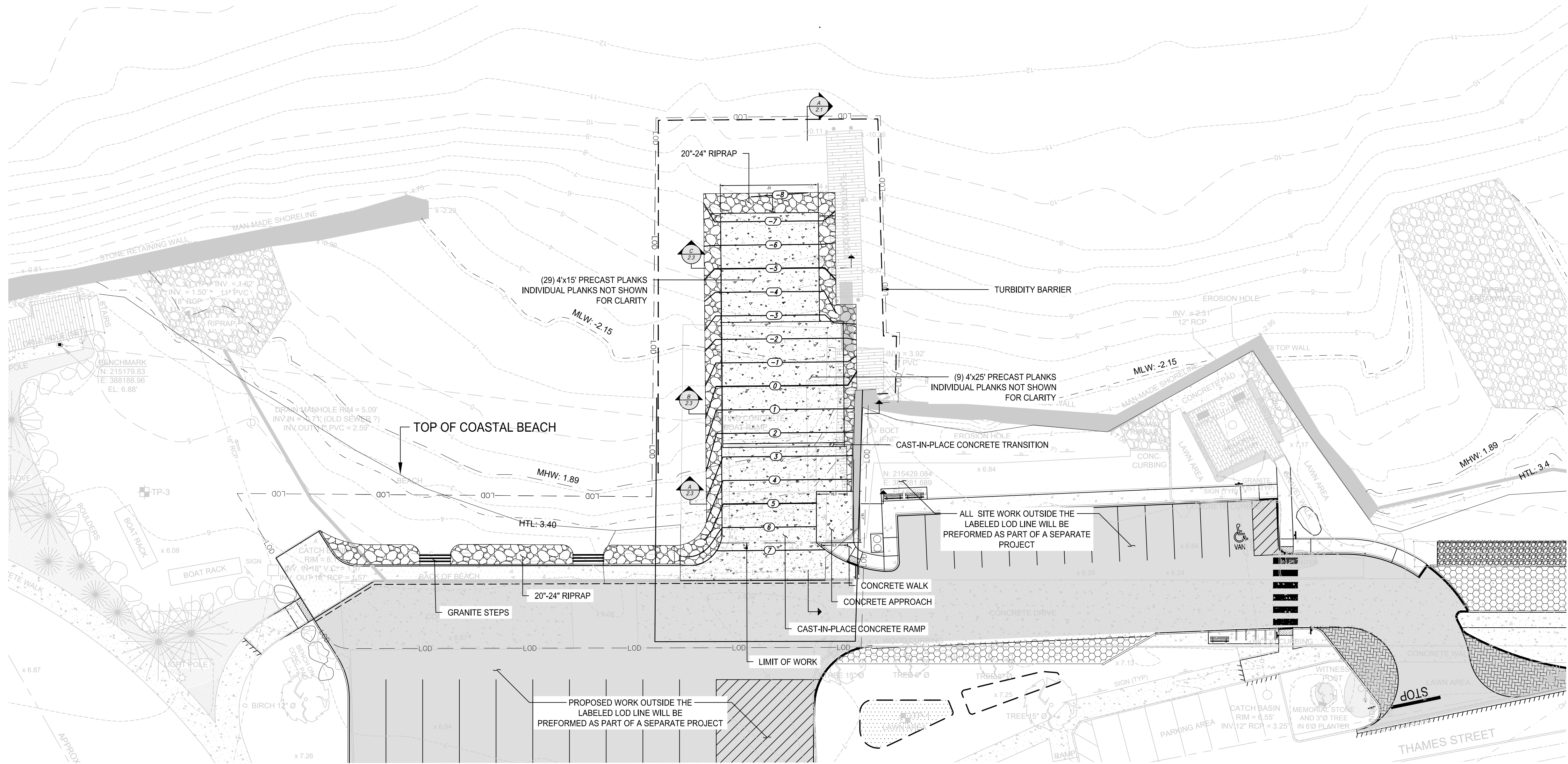


EXISTING SECTION - INDEPENDENCE PARK

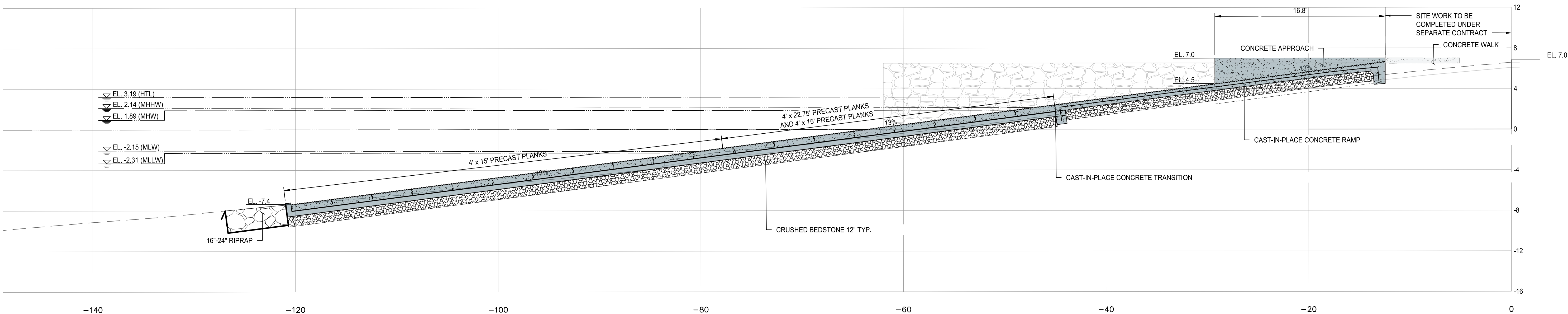
SCALE: 1" = 5'

ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION





PROPOSED SITE PLAN - INDEPENDENCE PARK  
SCALE: 1" = 20'



PROPOSED SECTION - INDEPENDENCE PARK  
SCALE: 1" = 5'



SCALE ADJUSTMENT GUIDE  
BAR IS ONE INCH ON ORIGINAL DRAWING  
0" 1"

Bristol Independence Park  
Boat Ramp Improvements  
Bristol, Rhode Island

TODD D. TURCOTTE  
No. 7627  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)  
05-FEB-24

REVISIONS:

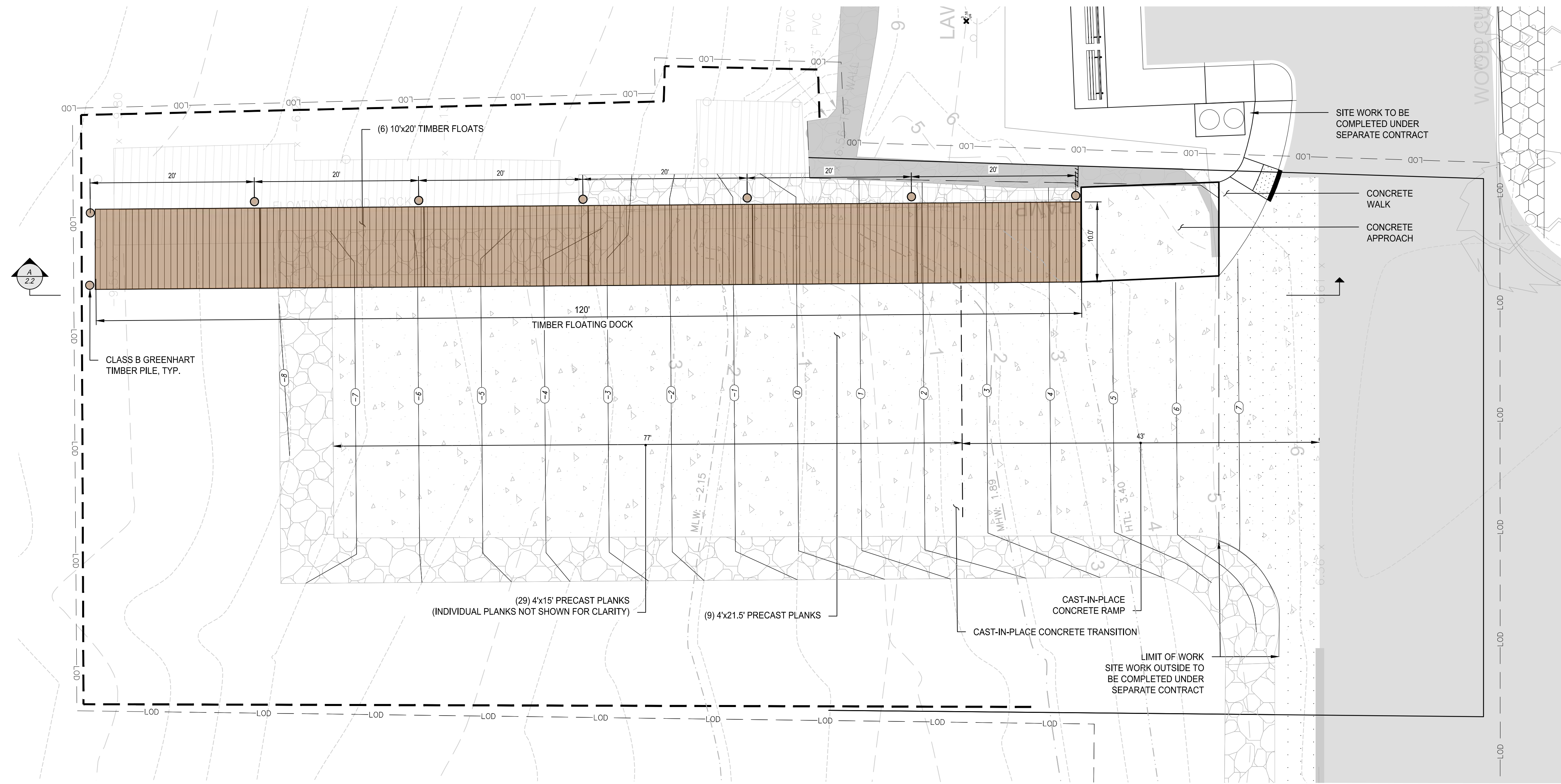
PROJECT NO.: 21185.00  
DATE: FEBRUARY 2024  
SCALE: AS NOTED  
DESIGNED BY: BMD  
CHECKED BY: BMD  
DRAWN BY: JJP  
APPROVED BY: TDT  
DRAWING TITLE:

PROPOSED SITE PLAN AND SECTION

DRAWING NO.: 2.1  
SHEET NO. 5 OF 10

ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION

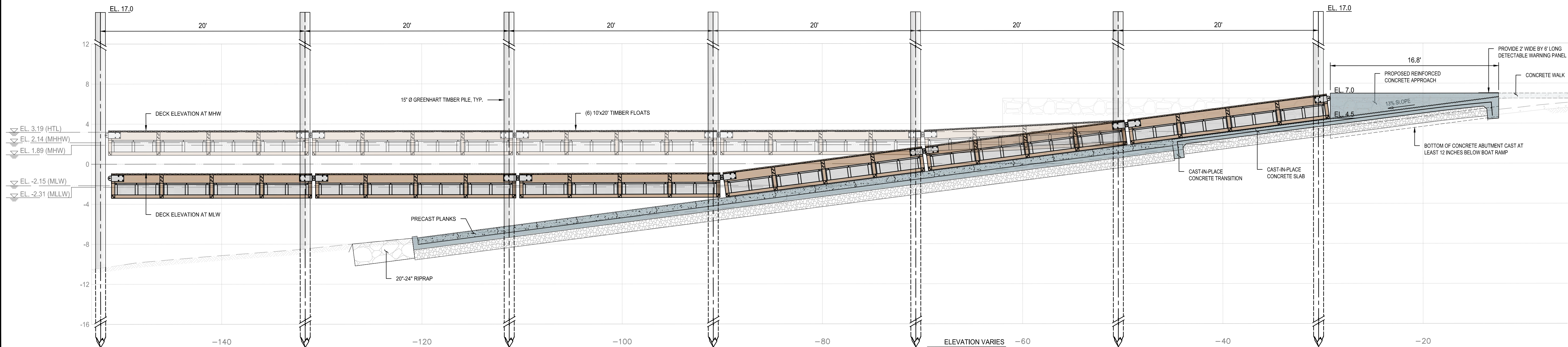




PROPOSED SITE PLAN - INDEPENDENCE PARK  
SCALE: 1"=8'

NOTES:

1. BOAT RAMP LENGTH AND PITCH INTERPRETED FROM EXISTING PLANS. MUST BE FIELD-VERIFIED PRIOR TO MATERIAL PROCUREMENT OR INSTALLATION.
2. FINAL PILE LENGTH TO BE DETERMINED BY BEDROCK SURFACE ELEVATION. SEE BOAT RAMP ROCK SOCKET DETAIL, THIS SHEET.
3. DETECTABLE WARNING PANEL SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE RHODE ISLAND STANDARD SPECIFICATIONS.



PROPOSED SECTION - INDEPENDENCE PARK  
SCALE: 1"=5'

ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION



SCALE ADJUSTMENT GUIDE  
BAR IS ONE INCH ON ORIGINAL DRAWING  
0" 1"

Bristol Independence Park  
Boat Ramp Improvements  
Bristol, Rhode Island

TODD D. TURCOTTE  
No. 7627  
REGISTERED PROFESSIONAL ENGINEER (CIVIL)  
05-FEB-24

REVISIONS:

PROJECT NO.: 21185.00  
DATE: FEBRUARY 2024  
SCALE: AS NOTED  
DESIGNED BY: BMD  
CHECKED BY: BMD  
DRAWN BY: JJP  
APPROVED BY: TDT  
DRAWING TITLE:

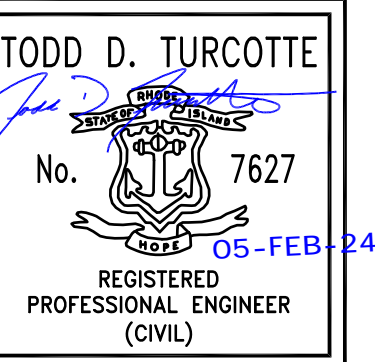
BOAT LAUNCH  
FLOATS AND RAMP PLAN

DRAWING NO.:  
2.2  
SHEET NO. 6 OF 10





# Bristol Independence Park Boat Ramp Improvements



PROJECT NO.:	21185.00
DATE:	FEBRUARY 2024
SCALE:	AS NOTED
DESIGNED BY:	BMD
CHECKED BY:	BMD
DRAWN BY:	JJP
APPROVED BY:	TDT
DRAWING TITLE:	

## PRECAST RAMP DETAILS

RAWING NO.:  
**2.3**  
HEET NO. 7 OF 10

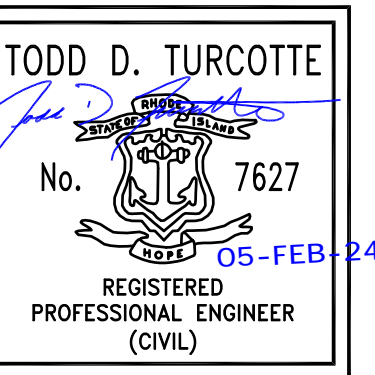


ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION





**Bristol Independence Park  
Boat Ramp Improvements**



PROJECT NO.:	21185.00
DATE:	FEBRUARY 2024
SCALE:	AS NOTED
DESIGNED BY:	BMD
CHECKED BY:	BMD
DRAWN BY:	JJP
APPROVED BY:	TDT
DRAWING TITLE:	

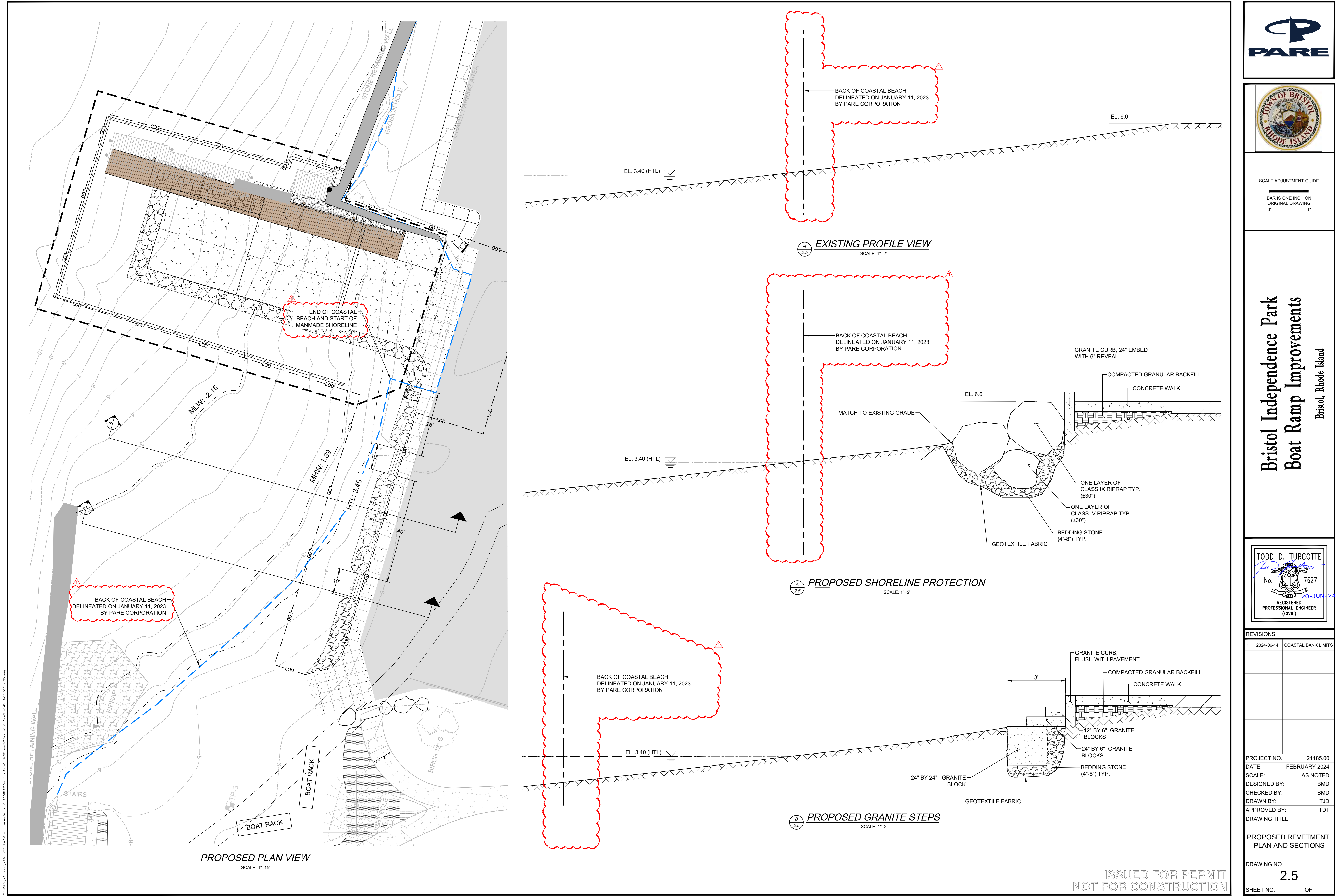
RAWING NO.:  
2.4  
HEET NO. 8 OF 10



ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION

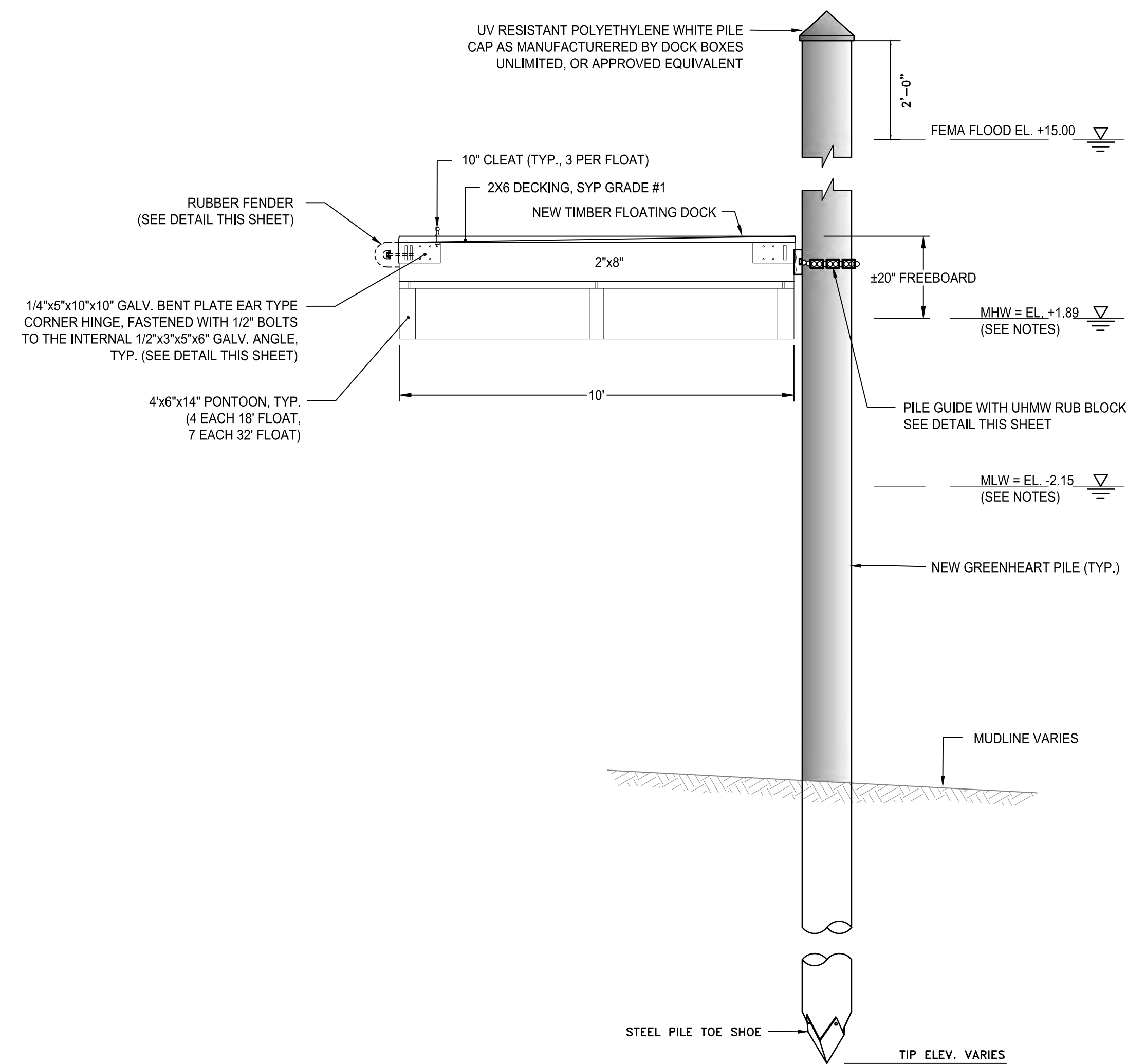
\\JOBS\27 Jobs\27185.00 Bristol - Independence Park\DWGS\shortcuts\Shortcuts\2.4 CAST-IN-PLACE RAMP DETAILS.dwg



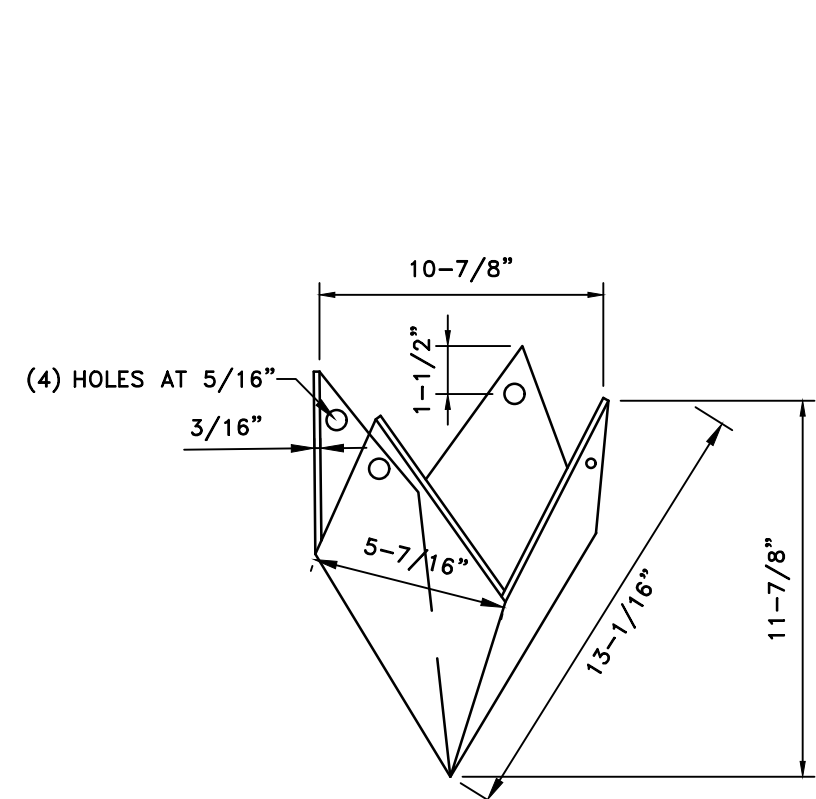




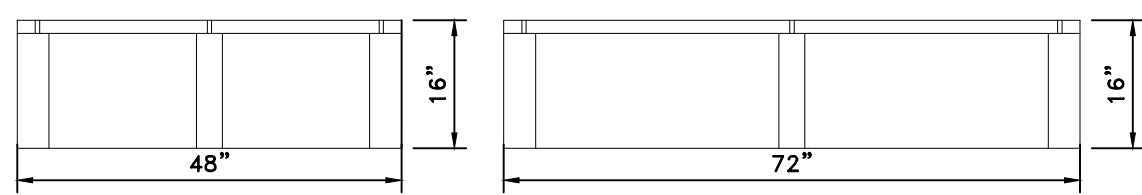
C:\WORK\27 - Bristol Independence Park Boat Ramp Improvements - Permits\27.5 - Final - 02/04/24.dwg



MOORING PILE AND FLOAT ELEVATION  
NOT TO SCALE

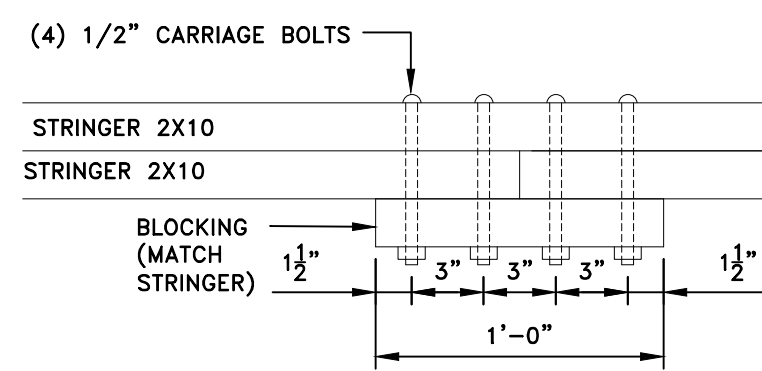


STEEL PILE SHOE DETAIL  
NOT TO SCALE

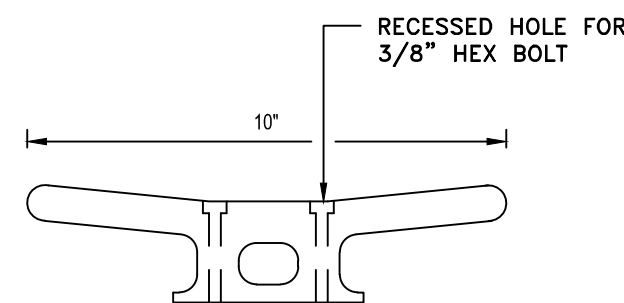


NOTE:  
USE PERMAFLOATS PONTOONS OR APPROVED EQUIVALENT. ACTUAL PONTOON  
SIZE DEPENDENT ON FINAL DESIGN BY CONTRACTOR.

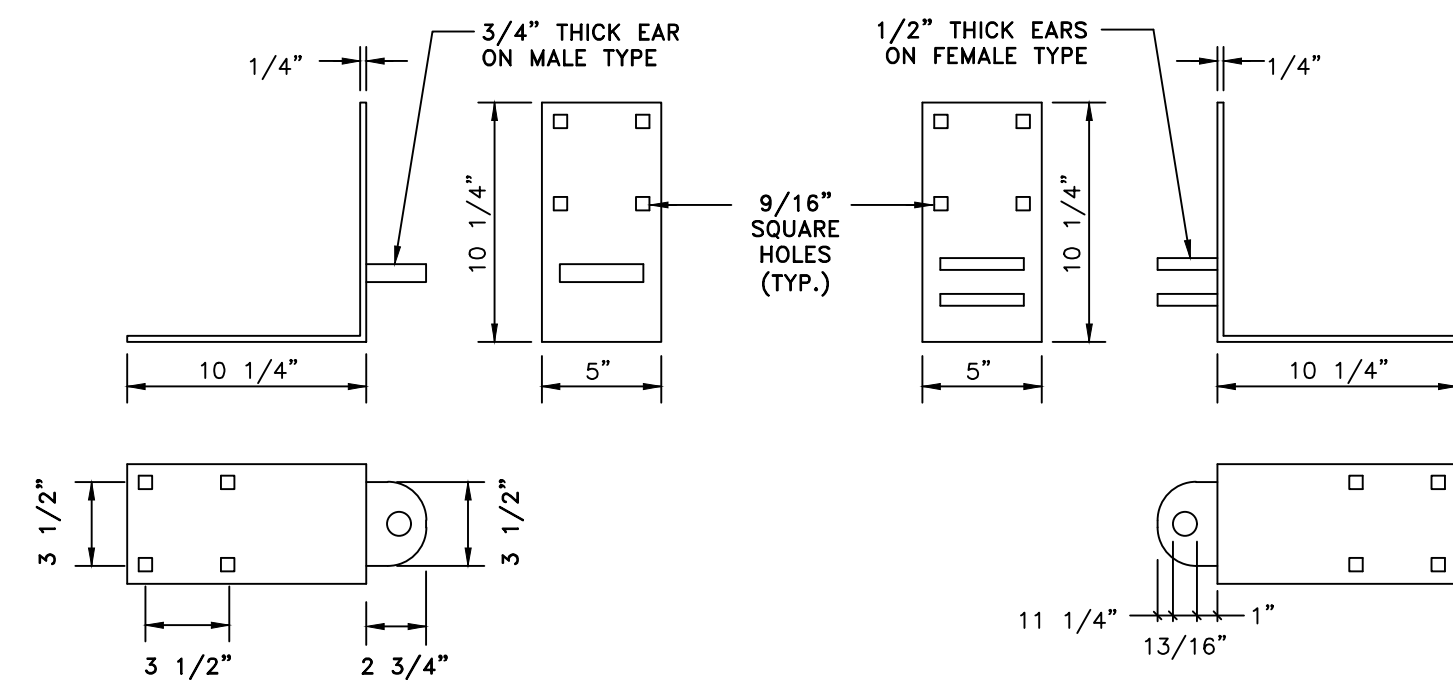
PONTON DETAILS  
SCALE: 1"= 2'



BUTT SPLICE DETAIL  
NOT TO SCALE

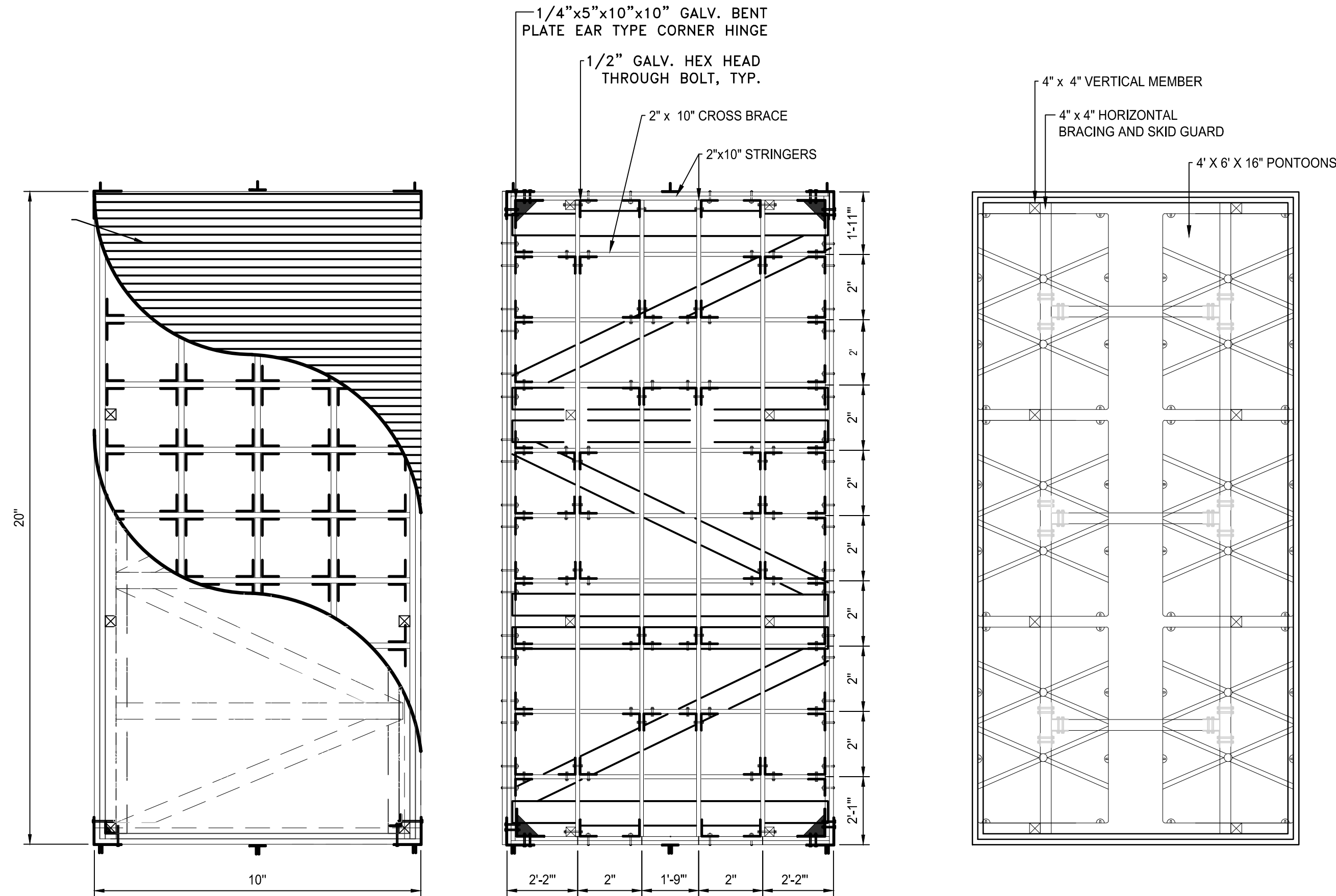


CLEAT DETAIL  
NOT TO SCALE

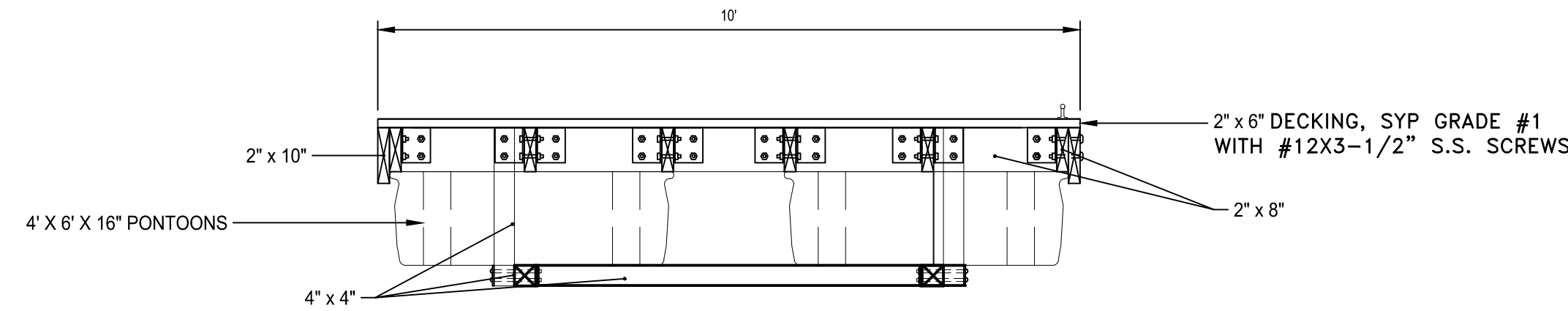


NOTE:  
CORNER ANGLES TO BE FABRICATED TO SUIT FLOAT LAYOUT.

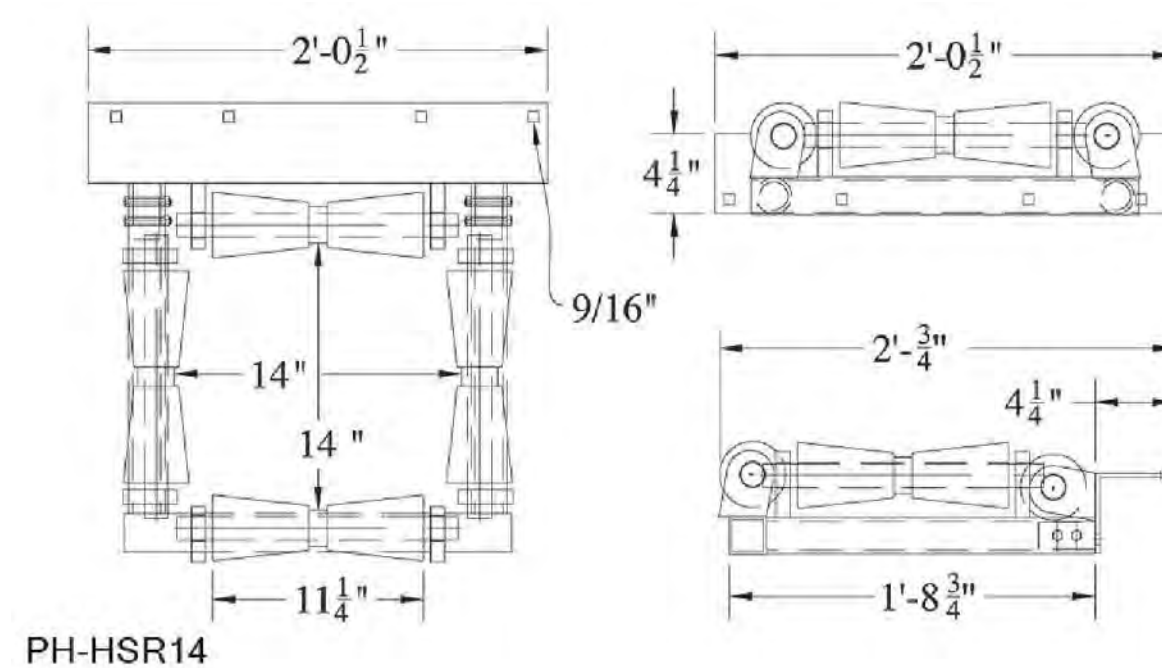
FLOAT HINGE DETAILS  
NOT TO SCALE



PROPOSED 10' TIMBER FLOAT PLAN  
SCALE: 1"= 3'



PROPOSED TIMBER LAUNCH FLOAT SECTION  
SCALE: 1"= 2'



PH-HSR14

TIMBER FLOAT PILE GUIDE DETAILS  
SCALE: 1"= 2'

NOTES:

- ALL TIMBER SHALL BE S4S AND SHALL BE TREATED AS REQUIRED BY AWPA U1-11, USCA MARINE USE NORTHERN WATERS AND TREATED IN ACCORDANCE WITH HE TECHNICAL SPECIFICATIONS SECTION 02400, UNLESS OTHERWISE NOTED.
- ALL STEEL FABRICATIONS HARDWARE AND FASTENERS SHALL BE HOT-DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A123 OR ASTM153, AS APPLICABLE.
- CORNER ANGLES TO BE FABRICATED TO SUIT FLOAT LAYOUT.
- ALL TIMBER CONNECTION WELDS SHALL BE 1/4" FILLET WELDS UNLESS SPECIFIED OTHERWISE.
- SUBMIT FLOAT FABRICATION DRAWINGS AND DESIGN CALCULATIONS FOR PROPOSED FLOAT SYSTEM, AS INDICATED IN THE PROJECT SPECIFICATIONS, FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION. SEE SPECIFICATIONS FOR LOAD REQUIREMENTS.
- THE TIMBER FLOAT FRAMING AND PONTOON CONFIGURATION IS FOR INFORMATION ONLY. LENGTH OF TIMBER FLOATS SHALL BE AS SPECIFIED ON THE PROPOSED SITE PLAN, AND ACTUAL FRAMING USED SHALL BE DETERMINED BY DESIGN.
- FLOATING DOCKS SHALL BE PROVIDED WITH UTILITY RACEWAY AS REQUIRED.

ISSUED FOR PERMIT  
NOT FOR CONSTRUCTION

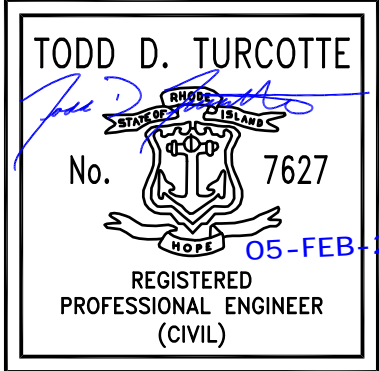


SCALE ADJUSTMENT GUIDE

BAR IS ONE INCH ON  
ORIGINAL DRAWING  
0" 1"

Bristol Independence Park  
Boat Ramp Improvements

Bristol, Rhode Island



REVISIONS:

PROJECT NO.: 21185.00  
DATE: FEBRUARY 2024  
SCALE: AS NOTED  
DESIGNED BY: BMD  
CHECKED BY: BMD  
DRAWN BY: JJP  
APPROVED BY: TDT  
DRAWING TITLE:

TIMBER FLOAT  
SECTIONS AND DETAILS

DRAWING NO.:  
2.5  
SHEET NO. 10 OF 10