State of Rhode Island and Providence Plantations
Coastal Resources Management Council
Oliver H. Stedman Government Center
4808 Tower Hill Road, Suite 3
Wakefield, RI 02879-1900

(401) 783-3370
Fax (401) 783-2069

PUBLIC NOTICE

File Number: 2018-06-060 Date: July 10, 2018

This office has under consideration the application of:

Roger Williams University
Attn: Jerome Williams
1 Old Ferry Road
Bristol, RI 02809

for a State of Rhode Island Assent to:

Reconfiguration of existing pier to include installation of a new 9' x 12.5' landing (4 piles), 4' x 35' aluminum gangway (2 piles) and series of seasonal touch-and-go berthing floats (8' x 105') totaling 840sf (5 piles) and to establish a Structural Perimeter Limit (6460sf).

Project Location:	1 Old Ferry Road
City/Town:	Bristol
Plat/Lot:	164 / 2
Waterway:	Mount Hope Bay

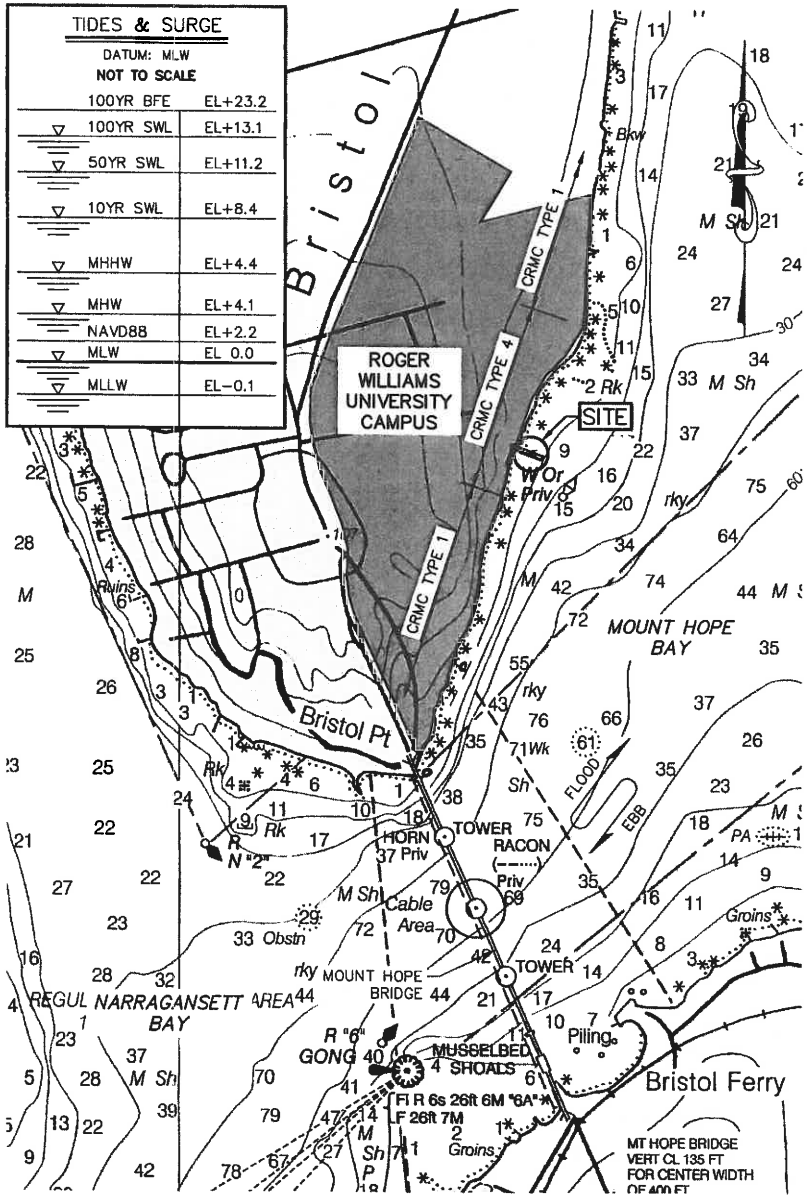
Plans of the proposed work may be seen at the CRMC office in Wakefield.

In accordance with the Administrative Procedures Act (Chapter 42-35 of the Rhode Island General Laws) you may request a hearing on this matter.

You are advised that if you have good reason to enter protests against the proposed work it is your privilege to do so. It is expected that objectors will review the application and plans thoroughly, visit site of proposed work if necessary, to familiarize themselves with the conditions and cite what law or laws, if any, would in their opinion be violated by the work proposed.

If you desire to protest, you must attend the scheduled hearing and give sworn testimony. A notice of the time and place of such hearing will be furnished you as soon as possible after receipt of your request for hearing. If you desire to request a hearing, to receive consideration, it should be in writing (**with your correct mailing address, e-mail address and valid contact number**) and be received at this office on or before August 10, 2018.

/lat



TIDAL & SURGE BENCHMARK NOTES:

1. TIDAL ELEVATIONS WERE OBTAINED FROM NOAA VDATUM SOFTWARE BASED ON COORDINATES OF THE PROJECT AREA AND THE 1983-2001 TIDAL EPOCH.
2. STORM SURGE ELEVATIONS PROVIDED WERE OBTAINED FROM FEMA FLOOD INSURANCE STUDY FOR BRISTOL COUNTY (ALL JURISDICTIONS) RHODE ISLAND DATED JULY 7, 2014. STILL WATER LINE (SWL) ELEVATIONS REFLECT THE ANTICIPATED STORM SURGE FOR THE RETURN PERIODS INDICATED. SWL ELEVATIONS EXCLUDE THE EFFECTS OF WAVE ACTION INCLUDING WAVE SETUP.
3. THE BASE FLOOD ELEVATION (BFE) PROVIDED WAS OBTAINED FROM FEMA FLOOD INSURANCE MAP (FIRM) 44001C0018H DATED JULY 7, 2014. THE BFE INCLUDES STORM SURGE, WAVE SETUP, WAVES AND WAVE RUNUP.

GENERAL NOTES:

1. DRAWINGS AND SPECIFICATIONS, AS INSTRUMENTS OF PROFESSIONAL SERVICE, SHALL REMAIN THE PROPERTY OF HARBOR ENGINEERING, LLC. DOCUMENTS ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR OTHER PROJECTS OR PURPOSES OR BY ANY OTHER PARTIES THAN THOSE AUTHORIZED BY CONTRACT WITHOUT THE SPECIFIC WRITTEN AUTHORIZATION OF HARBOR ENGINEERING, LLC. THE USE OF THIS DOCUMENT IS CONTINGENT UPON PAYMENT TO HARBOR ENGINEERING, LLC. FOR SERVICES RENDERED. NON-PAYMENT SHALL GIVE HARBOR ENGINEERING, LLC. THE AUTHORITY TO BAR DOCUMENT USE BY ANY AND ALL PARTIES.
2. ALL WORK SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS AS SHOWN IN THESE PLANS AND SPECIFICATIONS.
3. THE CONTRACTOR IS REQUIRED TO VISIT THE SITE PRIOR TO SUBMITTING A BID FOR THE PROJECT.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BRINGING ALL ELEMENTS OF THE PROJECT IN CONFORMANCE WITH THESE PLANS AND SPECIFICATIONS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT THE CONDITIONS SHOWN HEREIN ARE AS THEY APPEAR ON-SITE AND NOTIFY THE ENGINEER IN WRITING OF ANY DISCREPANCIES IN DIMENSIONS AND/ OR SITE CONDITIONS. THE CONTRACTOR SHALL NOT BEGIN ORDERING MATERIALS, FABRICATION OR INSTALLATION FOR ANY SUCH AFFECTED AREA UNTIL THE DISCREPANCY HAS BEEN RESOLVED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER. IF ANY MODIFICATIONS ARE REQUIRED IN ANY ELEMENT, THE CONTRACTOR SHALL SUBMIT PROPOSED CHANGES IN WRITING TO THE ENGINEER FOR REVIEW.
6. ALL WORK SHALL COMPLY WITH FEDERAL, STATE, AND LOCAL LAWS AND STATUTES AND THE REQUIREMENTS AND CONDITIONS OF ALL REGULATORY PERMITS ISSUED FOR THE WORK. CONTRACTOR SHALL BE FAMILIAR WITH THE RI COASTAL RESOURCES MANAGEMENT PROGRAM (RICRMP) AND MAINTAIN COPIES OF FEDERAL, STATE AND LOCAL REGULATORY PERMITS ON SITE THROUGHOUT CONSTRUCTION.
7. ALL SAFETY REGULATIONS ARE TO BE STRICTLY FOLLOWED. METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE OSHA CODE, THE RHODE ISLAND STATE BUILDING CODE, AND THE REFERENCED STANDARDS INCLUDED THEREIN THAT ARE APPLICABLE TO THIS PROJECT.
8. THESE DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE PROJECT REGULATORY PERMITS AND ALL CONDITIONS OF THOSE PERMITS. THE CONTRACTOR IS ADVISED THAT THE REGULATORY PERMITS FOR THIS PROJECT MAY CONTAIN ADDITIONAL REQUIREMENTS THAT, AFTER ANY ADDENDUM, SUPERSEDE THE DRAWING NOTES. THE CONTRACTOR IS FURTHER ADVISED THAT IN THE CASE OF ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS FOUND BEFORE CONSTRUCTION, THE FINAL DECISION AS TO WHAT INFORMATION TAKES PRECEDENCE WILL BE MADE BY THE ENGINEER OF RECORD ON THE BASIS OF THAT INTENT.
9. ALL COMPONENTS SHALL BE INSTALLED PER EACH MANUFACTURER'S SPECIFICATIONS AND/OR STANDARD INDUSTRY PRACTICE AS APPLICABLE.
10. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PRESERVE THE SURVEY BENCHMARKS ESTABLISHED ON SITE. ANY ADDITIONAL SURVEY WORK REQUIRED WILL BE AT THE EXPENSE OF THE CONTRACTOR.
11. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES A SET OF RECORD DRAWINGS AND SPECIFICATIONS DURING THE PROGRESSION OF THE PROJECT. RECORD DRAWINGS SHALL BE UPDATED ON A DAILY BASIS AND SHALL BE SUBMITTED TO THE ENGINEER AT THE COMPLETION OF CONSTRUCTION.
12. THE CONTRACTOR SHALL SAFEGUARD AND PROTECT ALL EXCAVATIONS.
13. DAMAGE TO ANY PROPERTY, PRIVATE OR OF PUBLIC TRUST, OCCURRING DURING THE CONSTRUCTION BY THE CONTRACTOR, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER AT THE EXPENSE OF THE CONTRACTOR.

HARBOR ENGINEERING, LLC
26 BOSWORTH STREET
BARRINGTON, RI 02806
(401) 829-4870
harboreng.com

No.	Revision	Date	App.

0 1000 FT 2000 FT
GRAPHIC SCALE

Client/Owner:
ROGER WILLIAMS UNIVERSITY
ONE OLD FERRY ROAD
BRISTOL, RI 02809

Issued for:
REGULATORY REVIEW
BIDDING & CONSTRUCTION

Drawing Title:
VICINITY CHART
NOAA CHART #13226 (MAY, 2016)
MOUNT HOPE BAY
& CRMC WATER TYPES

AUGUST J. KREUZKAMP, III
No. 7949
REGISTERED PROFESSIONAL ENGINEER
CIVIL
5/21/2018

Date: 5/21/2018
Scale: 1"=1000FT
Designed By: MNG/AJK
Drawn by: AJK
Checked by:
Project Number: 2016-07
Sheet 1 of 6
Drawing Number:

DESIGN LIVE LOAD CAPACITIES:

LANDING	100 PSF
GANGWAY:	60 PSF
FLOATS:	40 PSF

PIER CONSTRUCTION

1. ALL TIMBER FRAMING MATERIAL SHALL BE SOUTHERN YELLOW PINE #2 GRADE OR BETTER AND TREATED WITH WOOD PRESERVATIVE (PRESSURE TREATMENT): FS TT-W-571 AWPA TREATMENT C2 USING CHROMATED COPPER ARSENATE (0.6 CCA MINIMUM RETENTION). ALL HOLES AND CUTS SHALL BE DRESSED WITH CCA.
2. BRUSH APPLY TWO COATS OF WOOD PRESERVATIVE TO SURFACE OF PRESERVATIVE TREATED MATERIALS WHICH HAVE BEEN FIELD CUT, DRESSED OF DRILLED.
3. ALL HARDWARE, STEEL STRAPS AND THREADED FASTENERS SHALL BE HOT DIPPED GALVANIZED STEEL FOR EXTERIOR, HIGH HUMIDITY (4 MILS FOR MARINE ENVIRONMENT) TO ASTM A123 AND TREATED WOOD LOCATIONS.
4. UNLESS NOTED OTHERWISE ALL BOLTS AND THREADED RODS TO BE 1" IN DIAMETER OR GREATER AND SHALL CONFORM TO A307 GRADE A W/ HEAVY HEX NUTS AND HOT DIPPED GALVANIZED (HDG) OGEE OR DOCK STEEL WASHERS. BOLT HOLES SHALL BE A MAXIMUM OF $\frac{1}{8}$" LARGER THAN THE BOLT DIAMETER SPECIFIED.
5. ALL DECKING SHALL BE FASTENED TO STRINGERS WITH 5" LONG 12 GA STAINLESS STEEL (316) SCREWS.
6. ALL TIMBER FRAMING USED IN THE PROJECT SHALL BE STRAIGHT IN BOTH LONGITUDINAL PLANES WITH NO OR MINIMAL TWIST. TIMBER SHALL BE INSPECTED FOR CROWN PRIOR TO INSTALLATION BY THE CONTRACTOR AND INSTALLED CROWN UP WHERE A SLIGHT CROWN EXISTS. JOINTS SHALL BE SAW CUT AND ACCURATELY AND TIGHTLY FITTED. THE ENGINEER RESERVES THE RIGHT TO REJECT TIMBER MEMBERS AND FINISH CONSTRUCTION OF TIMBER ASSEMBLIES WHERE IN THE OPINION OF THE ENGINEER THE DESIGN INTENT OF THE STRUCTURE WOULD BE COMPROMISED DUE TO THE FAULTY TIMBER, JOINTING, AND OR CONSTRUCTION PRACTICES.
7. COUNTERSINK AREAS WHERE HARDWARE INTERFERES WITH CONSTRUCTION.

PILES

1. THE CONTRACTOR SHALL SUBMIT CERTIFICATES SUBSTANTIATING CONFORMANCE WITH MATERIAL, PRESERVATIVE & COATING SPECIFICATIONS PRIOR TO INSTALLATION.
2. TIMBER PILES SHALL HAVE A 12 INCH DIAMETER BUTT AND A 8 INCH DIAMETER TIP.
   - 2.1. GANGWAY SUPPORT PILES: SHALL BE SOUTHERN YELLOW PINE (SYP) GRADE 2 OR BETTER, CCA TREATED TO 2.5 LBS PER CUBIC FOOT, AND HAVE A MINIMUM FB=1950 PSI.
   - 2.2. LANDING SUPPORT PILES & FLOAT ANCHOR PILES: SHALL BE GREENHEART 12% MC WITH FB=24,900 PSI AND E=3,350,000 PSI. ALL PILE BUTTS SHALL BE ADEQUATELY BANDED WITH STAINLESS STEEL BANDS TO PREVENT FUTURE BROOMING.

PILE DRIVING

1. THE CONTRACTOR SHALL USE EQUIPMENT ADEQUATE IN SIZE, CAPACITY, AND NUMBERS, AND MAINTAINED TO THE REQUIREMENTS OF ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS TO ACCOMPLISH THE WORK.
2. THE CONTRACTOR SHALL KEEP AN ACCURATE SET OF PILE INSTALLATION/DRIVING LOGS. ALL PILES BEING INSTALLED SHALL BE CLEARLY MARKED IN 1 FOOT INCREMENTS PRIOR TO INSTALLATION TO SUPPORT MONITORING/RECORDING EFFORTS. ALL LOGS SHALL BE CERTIFIED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO PAYMENT. PILE LOGS SHALL INCLUDE:
   - 2.1. PIER PILES: PILE BENT, PILE LETTER, DEPTH TO MUDLINE (INCLUDING DATE & TIME RECORDED), TOTAL EMBEDMENT, BLOW COUNT WITH AN APPROVED IMPACT HAMMER TO SUBSTANTIATE AXIAL CAPACITY.
   - 2.2. FLOAT ANCHOR PILES: PILE ID, DEPTH TO MUDLINE (INCLUDING DATE & TIME RECORDED) AND TOTAL EMBEDMENT.

TIMBER FLOAT GENERAL NOTES:

1. THE FLOATING DOCKS SHALL BE MANUFACTURED BY MEECO SULLIVAN, LLC OR OTHER APPROVED MANUFACTURER.
2. THE CONTRACTOR SHALL SUBMIT WITH HIS BID THE PROPOSED DOCK SYSTEM DESCRIPTION AND SPECIFICATIONS, TYPICAL SECTION/DETAIL (INCLUDING FLOATATION, FRAMING, DECKING AND CONNECTIONS), CATALOG CUT SHEETS FOR ANY COMMERCIALLY AVAILABLE COMPONENTS (INCLUDING CLEATS, FENDERING, PILE GUIDES, ETC.) AND ANY NOTABLE EXCEPTIONS OR CHANGES FROM THESE DRAWINGS.
3. MANUFACTURER TO PROVIDE SHOP DRAWINGS, BUOYANCY CALCULATIONS AND REQUIRED SUBMITTALS TO THE OWNER FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
4. WARRANTY – THE CONTRACTOR AND MANUFACTURER SHALL PROVIDE A MINIMUM 5 YEAR MEANINGFUL, WRITTEN WARRANTY FOR THE INSTALLED FLOATING DOCK PRODUCT. A DETAILED OPERATIONS AND MAINTENANCE MANUAL SHALL BE PROVIDED TO THE OWNER AT THE TIME OF ACCEPTANCE.

TIMBER FLOAT CONSTRUCTION NOTES:

1. FLOATING DOCKS SHALL BE CONSTRUCTED USING CCA TREATED TIMBER FRAMING, PERMAFLOAT FLOATATION TUBS AND TIMBER DECKING. FLOATS SHALL BE ENCASED IN VIRGIN POLYETHYLENE RESIN CONTAINING UV RAY INHIBITORS AND CARBON BLACK PIGMENT. NOMINAL WALL THICKNESS SHALL BE 0.15". THE FOAM CORE SHALL BE POLYSTYRENE FOAM WITH A MINIMUM OF 1#/CF.
2. ALL OUTER FRAMING LUMBER SHALL BE GRADE #1 SOUTHERN YELLOW PINE, S4S TREATED TO 0.60 PCF RETENTION OF CCA PRESERVATIVE.
3. ALL INNER FRAMING LUMBER TO BE GRADE #2 OR BETTER SOUTHERN YELLOW PINE, S4S TREATED TO 0.60 PCF RETENTION OF CCA PRESERVATIVE.
4. HARDWARE USED TO SECURE FLOATATION TO THE FLOAT FRAMING SHALL BE STAINLESS STEEL. UNLESS NOTED OTHERWISE, ALL REMAINING FLOAT HARDWARE SHALL BE HOT DIP GALVANIZED STEEL PER ASTM A123.
5. FLOAT DECKING SHOULD BE NO LESS THAN 1" NOMINAL IPE WITH MAXIMUM STRINGER SPACING NO GREATER THAN 24".
6. ALL EXTERNAL PILE GUIDES ASSOCIATED WITH THE FLOATING DOCKS SHALL BE SIZED TO ACCOMMODATE THE SPECIFIED ANCHOR PILES. FLOATS WILL BE USED SEASONALLY AND REMOVED EACH WINTER.
7. DOCK BUMPER SHALL BE INSTALLED ALONG ALL VESSEL BERTHING AREAS AND EXTERNAL PILE GUIDES. DOCK BUMPER SHALL BE DIMEX 5001 DOCK BUMPER (GRAY). DOCK BUMPER SHALL BE FASTENED EVERY 6" WITH 1" STAINLESS STEEL SCREWS.
8. FLOAT MANUFACTURER SHALL PROVIDE OWNER SHOP DRAWINGS FOR OWNER APPROVAL THAT INCLUDE FRAMING, PONTOONS, FENDERING, CLEATS AND BUOYANCY CALCULATIONS.

TIMBER FLOAT LOADING:

1. THE SPECIFIED FREEBOARD SHALL BE BASED ON DEAD LOADS CONSISTING OF THE ENTIRE WEIGHT OF THE FLOATING STRUCTURE, GANGWAYS, PILE GUIDES AND OTHER ACCESSORIES AND APPURTENANCES.
2. TIMBER FLOAT LIVE LOAD CAPACITY: 40 PSF MIN
3. CONCENTRATED LIVE LOAD: 400 LBS AT ANY ONE POINT ON THE DECK SHALL NOT TILT THE DOCKS MORE THAN SIX DEGREES FROM HORIZONTAL.
4. THE DEAD LOAD FREEBOARD SHALL BE MAINTAINED WITHIN ONE INCH OF THAT IDENTIFIED IN THESE SPECIFICATIONS FOR A PERIOD OF FIVE YEARS FOLLOWING INSTALLATION.
5. PILE DESIGN TAKES INTO ACCOUNT 10-YEAR RETURN PERIOD WIND (80MPH), CURRENT (3 KNOTS) AND WAVES (HS=4.7FT & T=4.3SEC). NO VESSELS WERE CONSIDERED FOR WIND LOAD. FLOAT SHOULD BE UNOCCUPIED DURING A SIGNIFICANT STORM EVENT.
6. PILE DESIGN IS BASED ON THE MARINE SOIL CHARACTERIZATION PROVIDED BY THE OWNER (MARINE NATURAL SCIENCES). AREA MARINE SOILS INCLUDES A SHELL HASH ALONG THE TOP 18-24 INCHES (IGNORED) AND A COARSE TO FINE SAND BELOW.

HARBOR ENGINEERING, LLC
26 BOSWORTH STREET
BARRINGTON, RI 02806
(401) 829-4870
harboreng.com

No.	Revision	Date	App.

RECEIVED
JUN 19 2018
COASTAL RESOURCES MANAGEMENT COUNCIL

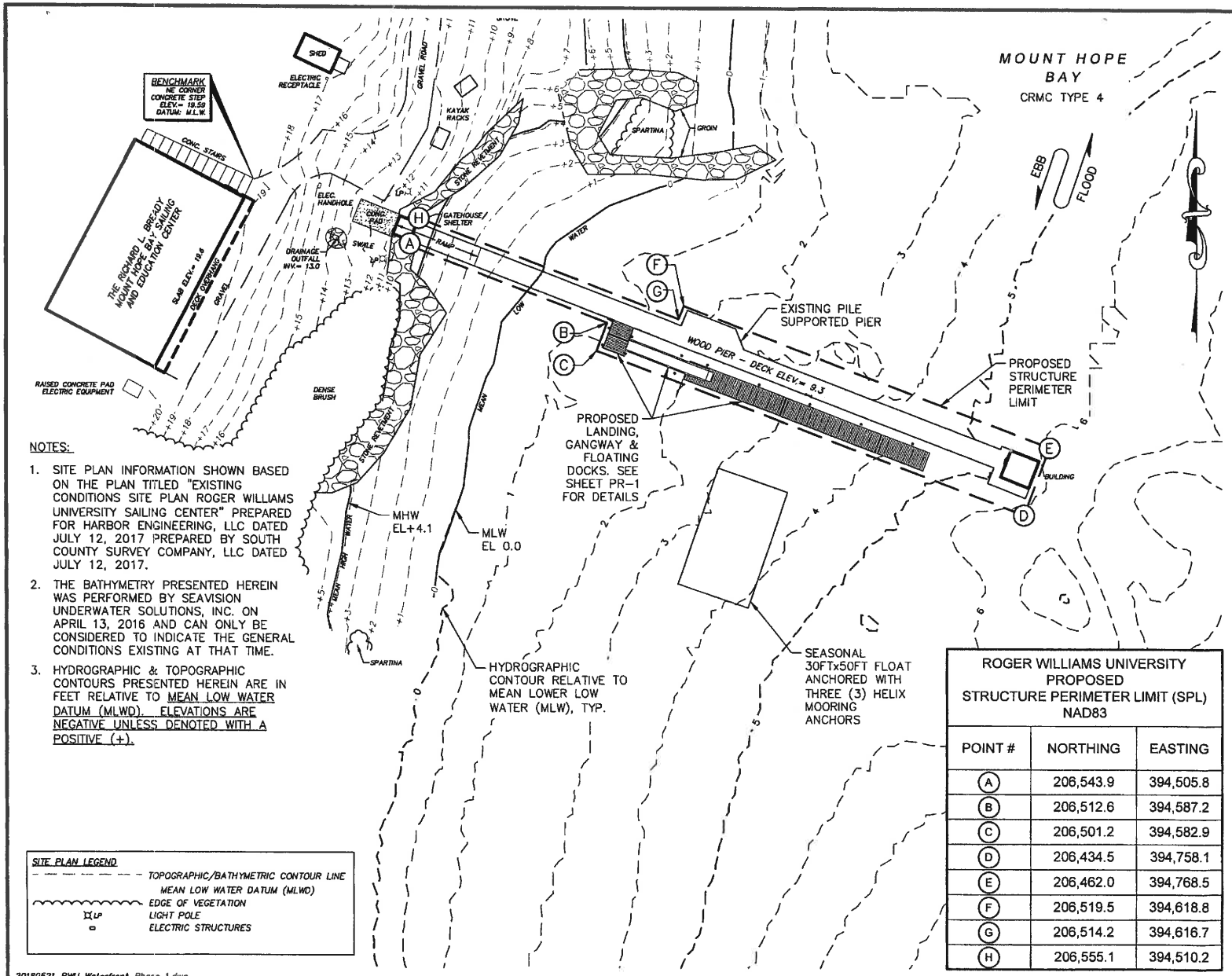
Client/Owner:
ROGER WILLIAMS UNIVERSITY
ONE OLD FERRY ROAD
BRISTOL, RI 02809

Issued for:
REGULATORY REVIEW
BIDDING & CONSTRUCTION

Drawing Title:
PROJECT NOTES
FOR PROPOSED LANDING, GANGWAY & FLOATING DOCKS

AUGUST J. KREUZKAMP, III
No. 7949
REGISTERED PROFESSIONAL ENGINEER
CIVIL
5/18/2018

Date:	5/21/2018
Scale:	1"=40FT
Designed By:	MNG/AJK
Drawn by:	AJK
Checked by:	
Project Number:	2016-07
Sheet	2 of 6
Drawing Number:	N-1



NOTES:

1. SITE PLAN INFORMATION SHOWN BASED ON THE PLAN TITLED "EXISTING CONDITIONS SITE PLAN ROGER WILLIAMS UNIVERSITY SAILING CENTER" PREPARED FOR HARBOR ENGINEERING, LLC DATED JULY 12, 2017 PREPARED BY SOUTH COUNTY SURVEY COMPANY, LLC DATED JULY 12, 2017.
2. THE BATHYMETRY PRESENTED HEREIN WAS PERFORMED BY SEAVISION UNDERWATER SOLUTIONS, INC. ON APRIL 13, 2016 AND CAN ONLY BE CONSIDERED TO INDICATE THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. HYDROGRAPHIC & TOPOGRAPHIC CONTOURS PRESENTED HEREIN ARE IN FEET RELATIVE TO MEAN LOW WATER DATUM (MLWD). ELEVATIONS ARE NEGATIVE UNLESS DENOTED WITH A POSITIVE (+).

SITE PLAN LEGEND

- TOPOGRAPHIC/BATHYMETRIC CONTOUR LINE
- MEAN LOW WATER DATUM (MLWD)
- EDGE OF VEGETATION
- LP LIGHT POLE
- ELECTRIC STRUCTURES

ROGER WILLIAMS UNIVERSITY
PROPOSED
STRUCTURE PERIMETER LIMIT (SPL)
NAD83

POINT #	NORTHING	EASTING
A	206,543.9	394,505.8
B	206,512.6	394,587.2
C	206,501.2	394,582.9
D	206,434.5	394,758.1
E	206,462.0	394,768.5
F	206,519.5	394,618.8
G	206,514.2	394,616.7
H	206,555.1	394,510.2

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No.	Revision	Date	App.

0 40 80
GRAPHIC SCALE

Client/Owner:
ROGER WILLIAMS UNIVERSITY
ONE OLD FERRY ROAD
BRISTOL, RI 02809

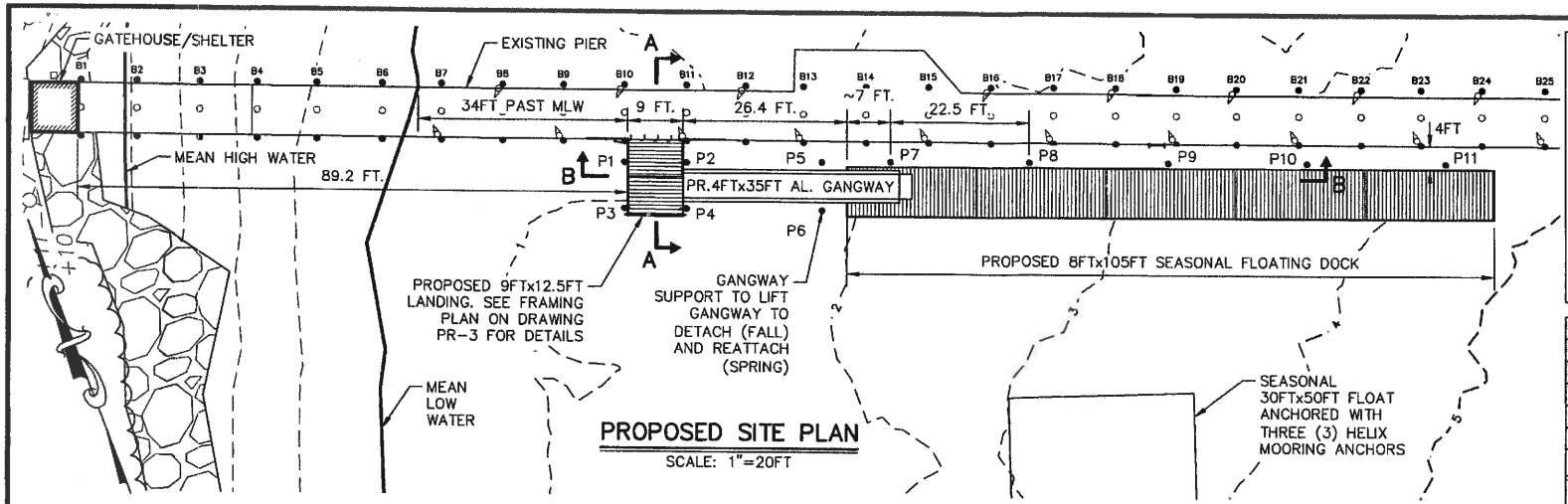
Issued for:
REGULATORY REVIEW
BIDDING & CONSTRUCTION

Drawing Title:
EXISTING SITE PLAN
WITH PROPOSED STRUCTURAL PERIMETER LIMIT, LANDING, GANGWAY & FLOATING DOCKS
DATUM: MEAN LOW WATER (MLW)

AUGUST J. KREUZKAMP, III
No. 7949
REGISTERED PROFESSIONAL ENGINEER
CIVIL
5/21/2018

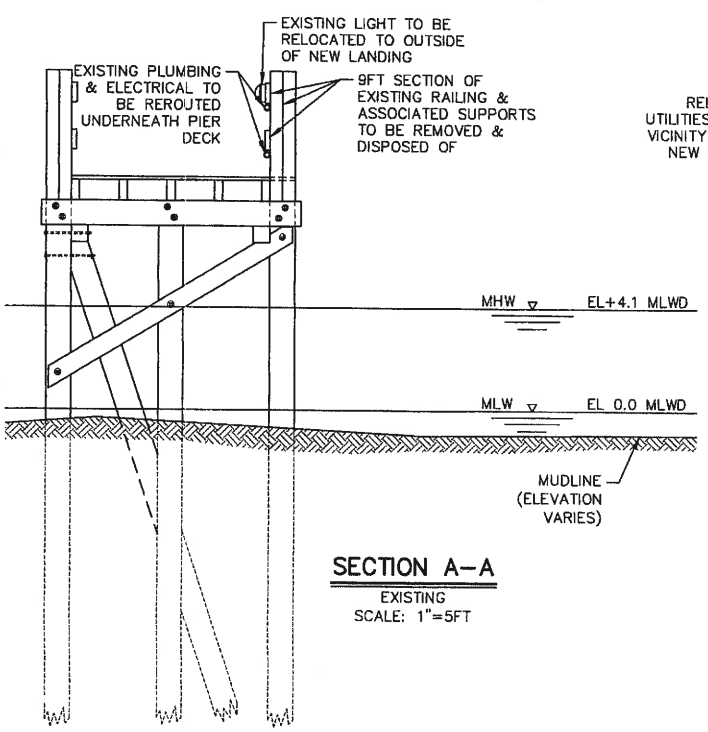
Date:	5/21/2018
Scale:	1"=40FT
Designed By:	MNG/AJK
Drawn by:	AJK
Checked by:	
Project Number:	2016-07
Sheet	3 of 6
Drawing Number:	EX-1

20180521_RWU Waterfront_Phase 1.dwg



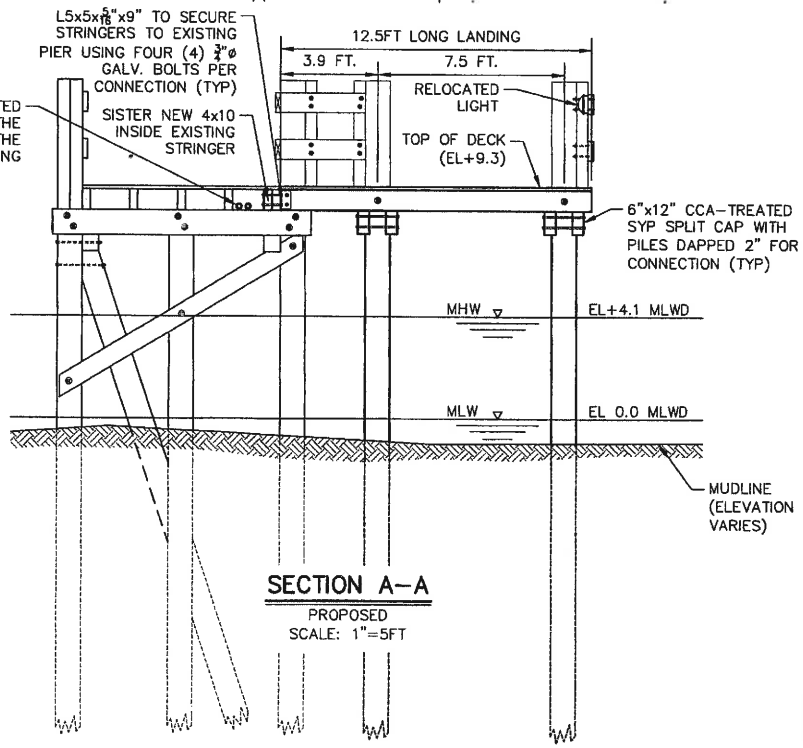
PROPOSED SITE PLAN

SCALE: 1"=20FT



SECTION A–A

EXISTING
SCALE: 1"=5FT



SECTION A–A

PROPOSED
SCALE: 1"=5FT

20180521_RWU Waterfront_Phase 1.dwg

HARBOR ENGINEERING, LLC
26 BOSWORTH STREET
BARRINGTON, RI 02806
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JUN 19 2018
COASTAL RESOURCES MANAGEMENT COUNCIL

No.	Revision	Date	App.

0 1" 2"
GRAPHIC SCALE

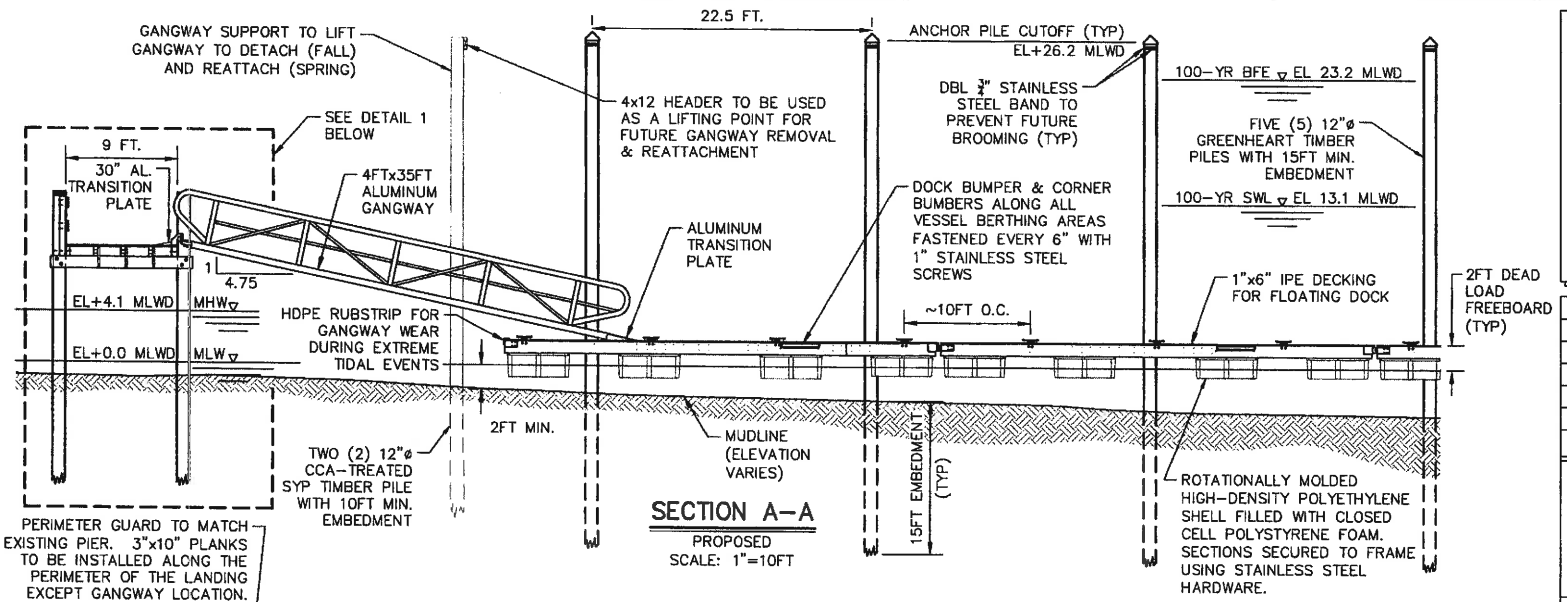
Client/Owner:
ROGER WILLIAMS UNIVERSITY
ONE OLD FERRY ROAD
BRISTOL, RI 02809

Issued for:
REGULATORY REVIEW
BIDDING & CONSTRUCTION

Drawing Title:
PROPOSED SITE PLAN
PROPOSED LANDING, GANGWAY & FLOATING DOCKS
DATUM: MEAN LOW WATER (MLW)

AUGUST J. KREUZKAMP, III
No. 7949
REGISTERED PROFESSIONAL ENGINEER
CIVIL

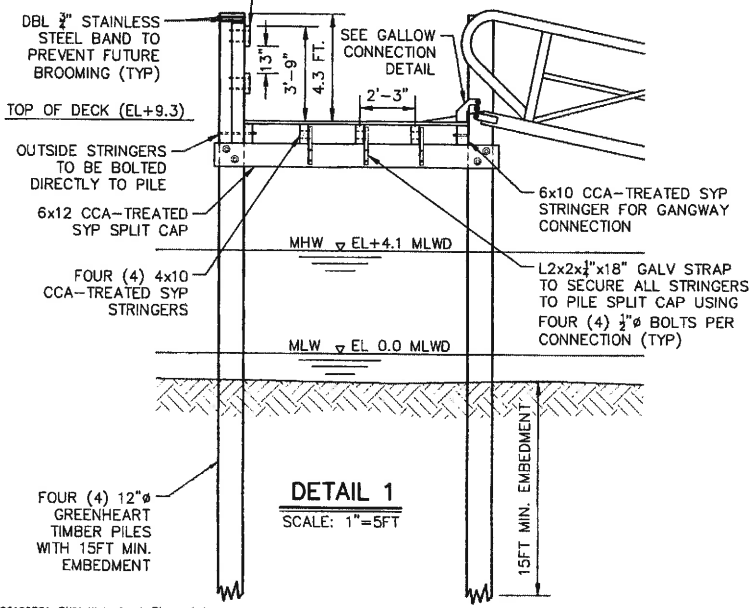
Date: 5/21/2018
Scale: VARIES
Designed By: MNG/AJK
Drawn by: AJK
Checked by:
Project Number: 2016-07
Sheet 4 of 6
Drawing Number: PR-1



SECTION A-A

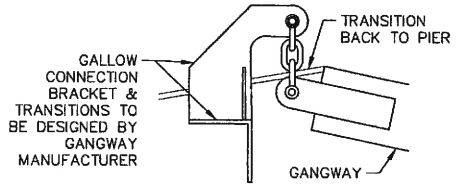
PROPOSED
SCALE: 1"=10FT

PERIMETER GUARD TO MATCH EXISTING PIER. 3"x10" PLANKS TO BE INSTALLED ALONG THE PERIMETER OF THE LANDING EXCEPT GANGWAY LOCATION.



DETAIL 1

SCALE: 1"=5FT



GANGWAY GALLOW CONNECTION

SCALE: 1"=1FT

GANGWAY NOTES:

1. THE ALUMINUM GANGWAY SHALL BE MANUFACTURED BY RAVENS MARINE, INC. OR OTHER APPROVED MANUFACTURER.
2. THE ALUMINUM GANGWAY SHALL BE DESIGNED TO MANAGE A DEAD LOAD AND LIVE LOADS INCLUDING 60 PSF AND 500 POUNDS POINT LOAD. LIVE LOAD DEFLECTION SHALL NOT EXCEED L/240.
3. GANGWAY DECKING – OHIO I-BAR GRATING 7-SGLI-4 1"X$\frac{3}{16}$"
4. GANGWAY SHOULD INCLUDE A BEARING PLATE WITH SIDES THAT RESTRICT THE MOTION OF THE GANGWAY EXCLUSIVELY TO A LONGITUDINAL DIRECTION ALONG THE FLOAT.
5. GANGWAY MANUFACTURER TO PREPARE AND SUBMIT TO OWNER'S ENGINEER SHOP DRAWINGS AND DESIGN CALCULATIONS FOR THE GANGWAY, TRANSITIONS, BEARING PLATE & GALLOW-STYLE CONNECTION SUPPORT THAT HAVE BEEN PREPARED, SIGNED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER.

20180521_RWU Waterfront_Phase 1.dwg

HARBOR ENGINEERING, LLC
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BARRINGTON, RI 02806
(401) 829-4870
harboreng.com

RECEIVED
JUN 19 2018
COASTAL RESOURCES MANAGEMENT COUNCIL

No.	Revision	Date	App.

0 1" 2"
GRAPHIC SCALE

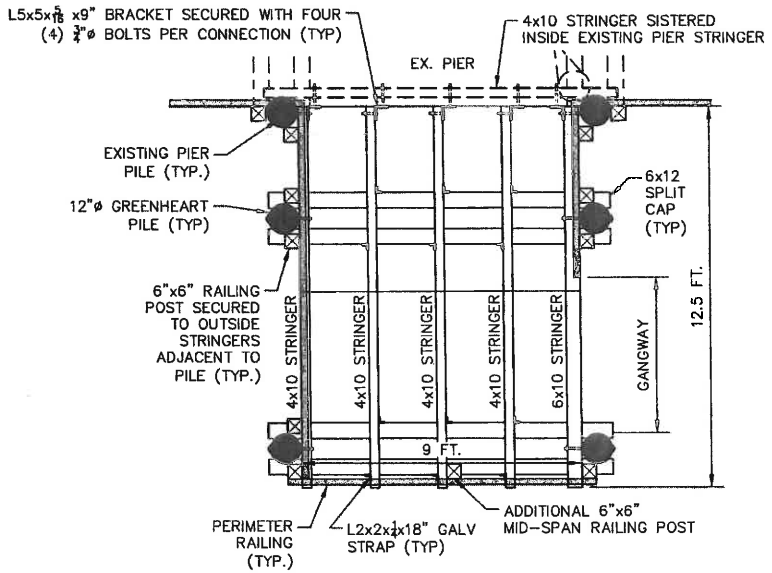
Client/Owner:
ROGER WILLIAMS UNIVERSITY
ONE OLD FERRY ROAD
BRISTOL, RI 02809

Issued for:
REGULATORY REVIEW
BIDDING & CONSTRUCTION

Drawing Title:
SECTION A-A & DETAILS
PROPOSED LANDING, GANGWAY & FLOATING DOCKS
DATUM: MEAN LOW WATER (MLW)

AUGUST J. KREUZKAMP, III
No. 7945
REGISTERED PROFESSIONAL ENGINEER
CIVIL
5/21/2018

Date:	5/21/2018
Scale:	VARIES
Designed By:	MNG/AJK
Drawn by:	AJK
Checked by:	
Project Number:	2016-07
Sheet	5 of 6
Drawing Number:	PR-2



FRAMING PLAN

SCALE: 1"=4FT

FRAMING NOTES:

1. SEE SHEET N1 FOR PROJECT NOTES.

HARBOR ENGINEERING, LLC
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BARRINGTON, RI 02806
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No.	Revision	Date	App.

0 1" 2"

GRAPHIC SCALE

Client/Owner:
ROGER WILLIAMS UNIVERSITY
ONE OLD FERRY ROAD
BRISTOL, RI 02809

Issued for:
REGULATORY REVIEW
BIDDING & CONSTRUCTION

Drawing Title:
FRAMING PLAN & DETAILS
PROPOSED LANDING, GANGWAY & FLOATING DOCKS
DATUM: MEAN LOW WATER (MLW)

AUGUST J. KREUZKAMP, III
No. 7949
REGISTERED PROFESSIONAL ENGINEER
CIVIL
5/21/2018

Date:	5/21/2018
Scale:	VARIES
Designed By:	MNG/AJK
Drawn by:	AJK
Checked by:	
Project Number:	2016-07
Sheet	6 of 6
Drawing Number:	PR-3

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