


# 6 VOORHIS POINT WATERFRONT IMPROVEMENTS

6 VOORHIS POINT  
SOUTH NYACK, NY

NO.	DATE	REVISION	BY	PREPARED BY	MADE BY		<b>FOR APPROVAL NOT FOR CONSTRUCTION</b>  <small>WARNING - IT IS A VIOLATION OF SECTION 7209 OF THE STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THE ALTERING ENGINEER SHALL AFFIX THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.</small>	PREPARED FOR	TITLE OF PROJECT	DRAWING TITLE	DRAWING NO.
				<b>BUCKMAN</b>  BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN			IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	6 VOORHIS POINT WATERFRONT IMPROVEMENTS	<b>TITLE SHEET</b>	T-01
					B. BUCKMAN						DATE 2/4/2022
					B. BUCKMAN						REVISION NO. 0
					PROJECT NO. 20036		PROJECT LOCATION 6 VOORHIS POINT SOUTH NYACK, NY	SHEET NO. 1 OF 13			

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**GENERAL NOTES**

- ELEVATIONS ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).
- EXISTING TOPOGRAPHIC AND BATHYMETRIC INFORMATION IS BASED ON FIELD SURVEY PERFORMED BY CONTROL POINT ASSOCIATES, INC. DATED OCTOBER 22, 2020 WITH REVISIONS DATED NOVEMBER 17, 2020 AND REPRESENT CONDITIONS OF THE SITE AT THE TIME OF THE SURVEY.
- TIDAL DATA ARE COMPUTED FROM VDATUM 3.9 SOFTWARE PUBLISHED BY THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.
 

A. MEAN HIGHER HIGH WATER (MHHW)	EL. +2.04
B. MEAN HIGH WATER (MHW)	EL. +1.76
C. MEAN LOW WATER (MLW)	EL. -1.47
D. MEAN LOWER LOW WATER (MLLW)	EL. -1.64
- THE OWNER HAS SECURED CERTAIN PERMITS REQUIRED BY FEDERAL AND STATE AUTHORITIES FOR THE PROPOSED ACTIVITIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PERFORM THE WORK IN ACCORDANCE WITH THE TERMS AND CONDITIONS OF THE PERMITS. THE CONTRACTOR SHALL POST COPIES OF THE PERMITS AT THE SITE THROUGHOUT THE COURSE OF THE WORK. THE CONTRACTOR IS RESPONSIBLE TO OBTAIN PERMITS ASSOCIATED WITH THE LEGAL DISPOSAL OF CONSTRUCTION DEBRIS. THE CONTRACTOR SHALL SECURE REQUIRED LOCAL AUTHORIZATIONS AND PERMITS.
- PRIOR TO CONSTRUCTION AND FABRICATION OF CONSTRUCTION MATERIALS, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS.

**DESIGN CRITERIA**

- DESIGN CRITERIA ARE IN CONFORMANCE WITH "MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES" PUBLISHED BY THE AMERICAN SOCIETY OF PROFESSIONAL ENGINEERS, 2016 (ASCE 7-16).
- THE FACILITY IS DESIGNED FOR TWO CONDITIONS:
  - SERVICE CONDITIONS IS THE MAXIMUM ALLOWABLE ENVIRONMENTAL CONDITIONS IN WHICH THE FACILITY MAY REMAIN IN OPERATION. WHEN ENVIRONMENTAL CONDITIONS ARE EXPECTED TO EXCEED SERVICE CONDITIONS, VESSELS SHALL BE MOVED TO A SAFE HARBOR.
  - EXTREME CONDITIONS DENOTE THE MAXIMUM ALLOWABLE ENVIRONMENTAL CONDITIONS WITHIN WHICH THE STRUCTURE IS DESIGNED TO MAINTAIN ITS STRUCTURAL INTEGRITY USING SAFETY FACTORS FROM THE CODE.
- DESIGN LIVE LOAD SHALL BE A UNIFORMLY DISTRIBUTED LOAD OF 50 PSF UNLESS NOTED OTHERWISE. NO LIVE LOADING IS ALLOWED FOR EXTREME CONDITIONS.
- THE FACILITY IS DESIGNED TO ACCOMMODATE MOORING AND BERTHING LOADS ASSOCIATED WITH A BOAT WITH 40 FOOT OVERALL LENGTH. THE FLOATING DOCK IS DESIGNED TO ACCOMMODATE MOORING OF TWO DESIGN VESSELS, ONE ON EITHER SIDE OF THE DOCK, CONCURRENTLY.
- DESIGN WIND LOAD PARAMETERS FOR EXTREME CONDITIONS INCLUDE A BASIC WIND SPEED OF 110 MILES PER HOUR, EXPOSURE CATEGORY C, AND STRUCTURAL OCCUPANCY/RISK CATEGORY I. FOR SERVICE CONDITIONS, THE WIND SPEED IS LIMITED TO 55 MILES PER HOUR.
- EXTREME ENVIRONMENTAL CONDITIONS ARE BASED ON A MAXIMUM WATER LEVEL AT ELEVATION +7.0 PER FEMA FIRM PANELS FOR THE SITE. THE DESIGN WAVE IS CHARACTERIZED BY A SIGNIFICANT WAVE HEIGHT OF 4.2 FEET AND A PERIOD OF 3.1 SECONDS.

**STRUCTURAL STEEL**

- STRUCTURAL STEEL SHALL COMPLY WITH THE CURRENT EDITION OF THE "STEEL CONSTRUCTION MANUAL", PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE - STEEL", AS ADOPTED BY THE AMERICAN WELDING SOCIETY (AWS D1.1).
- WELDING ELECTRODES SHALL BE E70XX AND COMPLY WITH AWS A5.1 AND AWS A5.5.
- STRUCTURAL STEEL PLATES AND SHAPES SHALL CONFORM TO ASTM A572, GRADE 50. STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE B.
- HIGH-STRENGTH BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A 325 BOLTS".
- HIGH STRENGTH STRUCTURAL BOLTS SHALL CONFORM TO ASTM A325 WITH HEX HEADS. NUTS SHALL CONFORM TO ASTM A563.
- WASHERS BETWEEN THE BOLT HEAD OR NUT AND STRUCTURAL STEEL SHALL BE HIGH STRENGTH WASHERS CONFORMING TO ASTM F436. WASHERS AGAINST TIMBER SHALL BE COMMON DOCK WASHERS.
- ALL STEEL COMPONENTS SHALL BE HOT-DIP GALVANIZED UNLESS NOTED OTHERWISE. GALVANIZING SHALL CONFORM TO ASTM A123 OR ASTM 153 AS APPLICABLE.
- BOLTED CONNECTIONS SHALL USE 1/2" DIAMETER A 325 HIGH STRENGTH BOLTS UNLESS NOTED OTHERWISE.
- CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE STEEL FABRICATOR EXCEPT FOR THOSE SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS.

**TIMBER**

- VISUALLY GRADED STRUCTURAL LUMBER AND WOOD CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND SUPPLEMENT, "DESIGN VALUES FOR WOOD CONSTRUCTION", NDS 2018, PUBLISHED BY THE NATIONAL FOREST AND PAPER ASSOCIATION.
- TIMBER SHALL MEET THE REQUIREMENTS OF THE SOUTHERN PINE INSPECTION BUREAU, "STANDARD GRADING RULES FOR SOUTHERN PINE LUMBER". TIMBER GRADE SHALL BE NO 1 OR BETTER.
- ALL TIMBER SHALL BE TREATED WITH ALKALINE COPPER QUATERNARY (ACQ) TO A PENETRATION OF 0.60 POUNDS PER CUBIC FOOT.
- CUT AND DRILLED EXPOSED TIMBER AND LUMBER SURFACES SHALL BE LIBERALLY RECOATED BY BRUSH WITH A FIELD TREATMENT ACCEPTED BY THE ENGINEER OF RECORD.

**STEEL PILES**

- STEEL PIPE PILE MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A252, GRADE 3. PILES SHALL BE LONGITUDINALLY WELDED WITH SEAMS SPECIFIED AS COMPLETE PENETRATION WELD.
- STEEL PIPE PILES SHALL BE DRIVEN TO A MINIMUM CAPACITY OR MINIMUM EMBEDMENT LENGTH AS INDICATED ON THE CONTRACT DRAWINGS WHICHEVER IS LARGER.
- DO NOT FIELD SPLICE PILE IN LOWER 40 FEET. BOTH UPPER AND LOWER SECTIONS OF PILE ENDS, SHALL BE SMOOTH, SQUARE AND FLAT PRIOR TO SPLICING.
- ALL WELDING REQUIRED FOR THE STEEL PIPE PILES SHALL BE FULL PENETRATION WELDS CONFORMING TO AWS D1.1 WELDING CODE AND SHALL BE CAPABLE OF DEVELOPING THE PILE CROSS-SECTION IN TENSION AND BENDING.
- STEEL PIPE PILES SHALL BE SHOP COATED, ON OUTER SURFACES ONLY, TO A MINIMUM OF TEN (10) FEET BELOW THE DESIGN MUDLINE DEPTH ELEVATION OR AS INDICATED ON THE DRAWINGS.

**PROTECTIVE COATING**

- MATERIAL USED FOR FACTORY EPOXY COATING OF ALL SCHEDULED SURFACES SHALL BE BAR-RUST 235 MULTI-PURPOSE EPOXY COATING AS MANUFACTURED BY DEVCO COATINGS OR EQUIVALENT ACCEPTED BY THE ENGINEER OF RECORD.
- FIELD TOUCH-UP COATING SHALL BE IDENTICAL TO FACTORY COATING AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
- PROTECTIVE COATING TOP COAT SHALL BE BLACK UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR BY THE OWNER.
- SURFACES SHALL BE PREPARED IN STRICT ACCORDANCE WITH THE PROTECTIVE COATING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
- THE PROTECTIVE COATING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. COATING IS TO BE APPLIED IN TWO COATS TO ACHIEVE A MINIMUM OVERALL DRY FILM THICKNESS OF 15 MILS.
- ALL HOLIDAYS OR OTHER IMPERFECTIONS IN THE COATING SHALL BE REMOVED OR REPAIRED AT THE CONTRACTORS EXPENSE PRIOR TO FINAL ACCEPTANCE OF THE WORK.

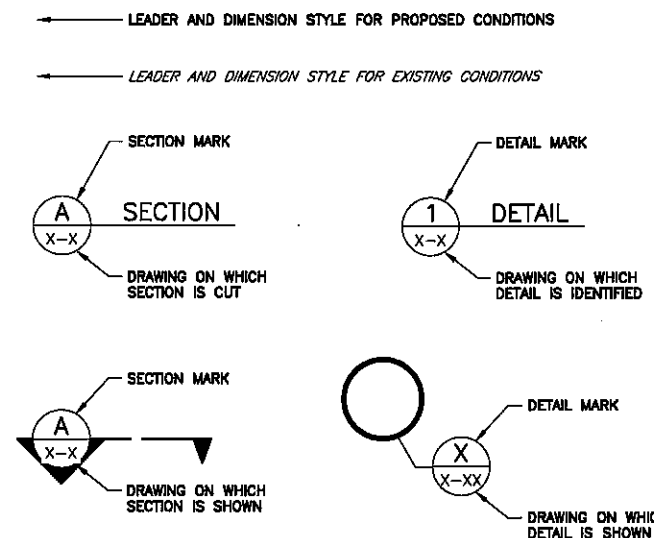
**PILE DRIVING**

- INSTALL PILES USING VIBRATORY METHODS TO CAPACITY AND TOE ELEVATIONS WITHOUT DAMAGING THE PILE HEAD. WHERE REQUIRED, CUT OFF HEADS OF PILES ACCURATELY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AFTER COMPLETION OF DRIVING.
- DRIVE THE PILES STRAIGHT AND TRUE AT INDICATED LOCATIONS, WITH DEVIATION FROM THE LONGITUDINAL AXIS OF NOT MORE THAN 1/4 INCH PER FOOT.
- LOCATE THE PILES WITHIN 3 INCHES OF THE POSITIONS INDICATED ON THE DRAWINGS.
- WITHDRAW PILES THAT ENCOUNTER UNDERGROUND OBSTRUCTIONS SUFFICIENT TO IMPEDE PILE DRIVING. RE-DRIVE AS CLOSE AS POSSIBLE TO ORIGINAL POSITION, SUBJECT TO REVIEW OF THE OWNER. REMOVE PILES WHICH BREAK OR DRIVE OUT OF LINE. DRIVE ANOTHER PILE IN ITS PLACE.
- DRIVE PILES TO THEIR FULL PENETRATION WITHOUT BENDING, RUPTURING, OR MODERATELY DAMAGING THE PILES. IF FAILURE IN THE ABOVE RESPECTS IS ENCOUNTERED, PULL THE PILE AND DRIVE A NEW PILE AT NO ADDITIONAL COST TO THE OWNER.
- JETTING TO ASSIST PENETRATION WILL NOT BE PERMITTED UNLESS ACCEPTED BY THE ENGINEER OF RECORD. WHERE ACCEPTED, PRE-DRILLING TO ASSIST PENETRATION MAY BE USED WHERE EXTREME DRIVING RESISTANCE IS ENCOUNTERED, OR WHERE VIBRATIONS FROM DRIVING MAY BE DETRIMENTAL TO ADJACENT STRUCTURES.
- WHERE PILES ARE PUSHED UP BY PRESSURE FROM DRIVING OF ADJACENT PILES, RE-DRIVE AS REQUIRED AND AT NO ADDITIONAL COST TO THE OWNER.

**ABBREVIATIONS AND SYMBOLS**

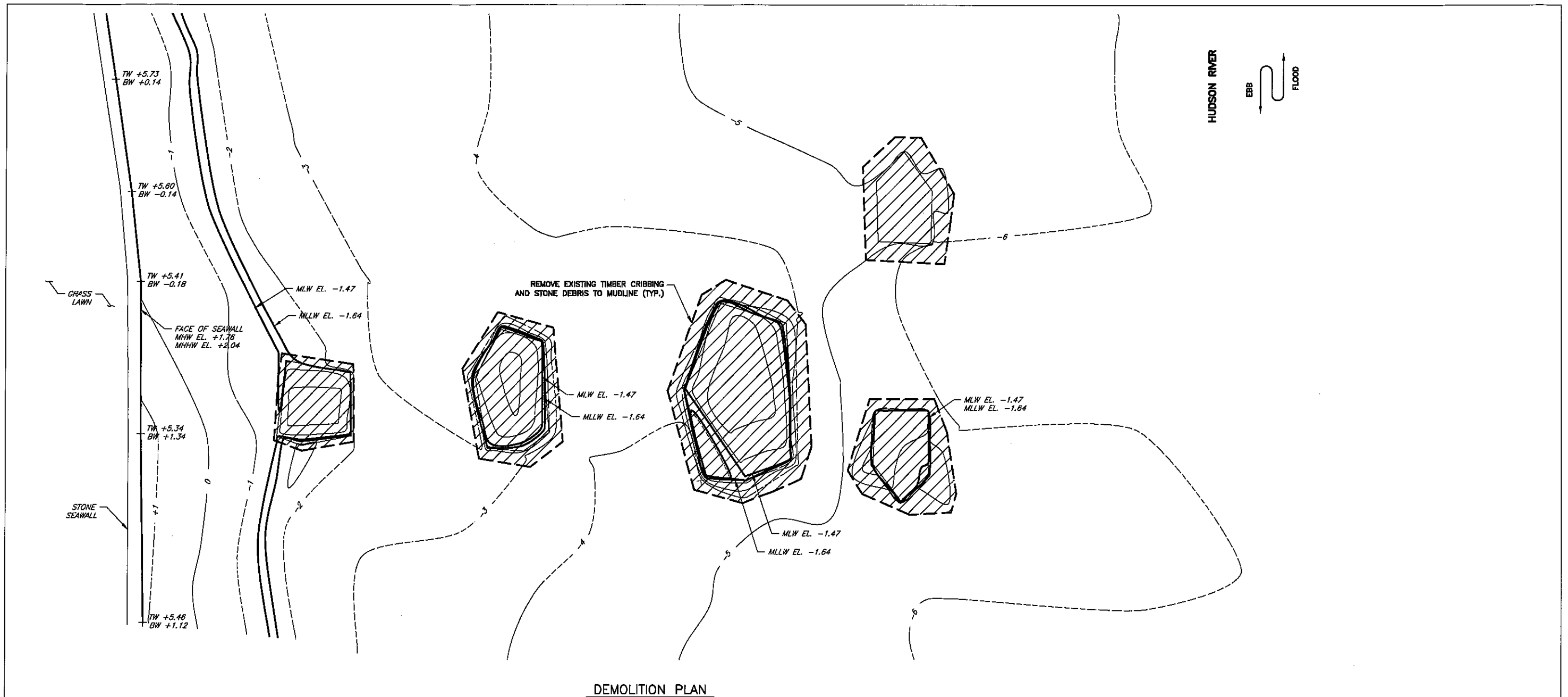
ADD'L	ADDITIONAL
ALT.	ALTERNATE
BOT.	BOTTOM
CLR.	CLEAR
COL.	COLUMN
CONC.	CONCRETE
DWG.	DRAWING
EA.	EACH
EF.	EACH FACE
EL.	ELEVATION
EQ.	EQUAL
EXIST.	EXISTING
FT. OR	FOOT
GALV.	GALVANIZED
H.D.G.	HOT-DIP GALVANIZED
I.D.	INSIDE DIAMETER
IN. OR	INCHES
KSL.	KIPS PER SQUARE INCH
LONG.	LONGITUDINAL
MAX.	MAXIMUM
N.	NORTH
N.I.C.	NOT IN CONTRACT
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OPP.	OPPOSITE
PL.	PLATE
PSI.	POUNDS PER SQUARE INCH
PSF.	POUNDS PER SQUARE FOOT
R.	RADIUS
REINF.	REINFORCING
REF.	REFERENCE
REQD.	REQUIRED
S.	SOUTH
SECT.	SECTION
SIM.	SIMILAR
SPA.	SPACING
SS.	STAINLESS STEEL
TYP.	TYPICAL
U.O.N.	UNLESS OTHERWISE NOTED
⊕	CENTERLINE
±	DIAMETER
±	PLUS OR MINUS
↑	NORTH ARROW

**DRAWING CONVENTIONS**



NO.	DATE	REVISION	BY	PREPARED BY	MADE BY		<p align="center"><b>FOR APPROVAL NOT FOR CONSTRUCTION</b></p> <p><small>WARNING - IT IS A VIOLATION OF SECTION 7209 OF THE STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THE ALTERING ENGINEER SHALL AFFIX THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.</small></p>	PREPARED FOR	TITLE OF PROJECT	DRAWING TITLE	DRAWING NO.
				<b>BUCKMAN</b>	B. BUCKMAN			IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	<b>6 VOORHIS POINT WATERFRONT IMPROVEMENTS</b>	<b>GENERAL NOTES</b>	<b>G-01</b>
				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN						DATE 2/4/2022
					B. BUCKMAN						REVISION NO. 0
					PROJECT NO. 20036					SHEET NO. 2 OF 13	

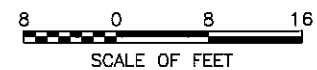




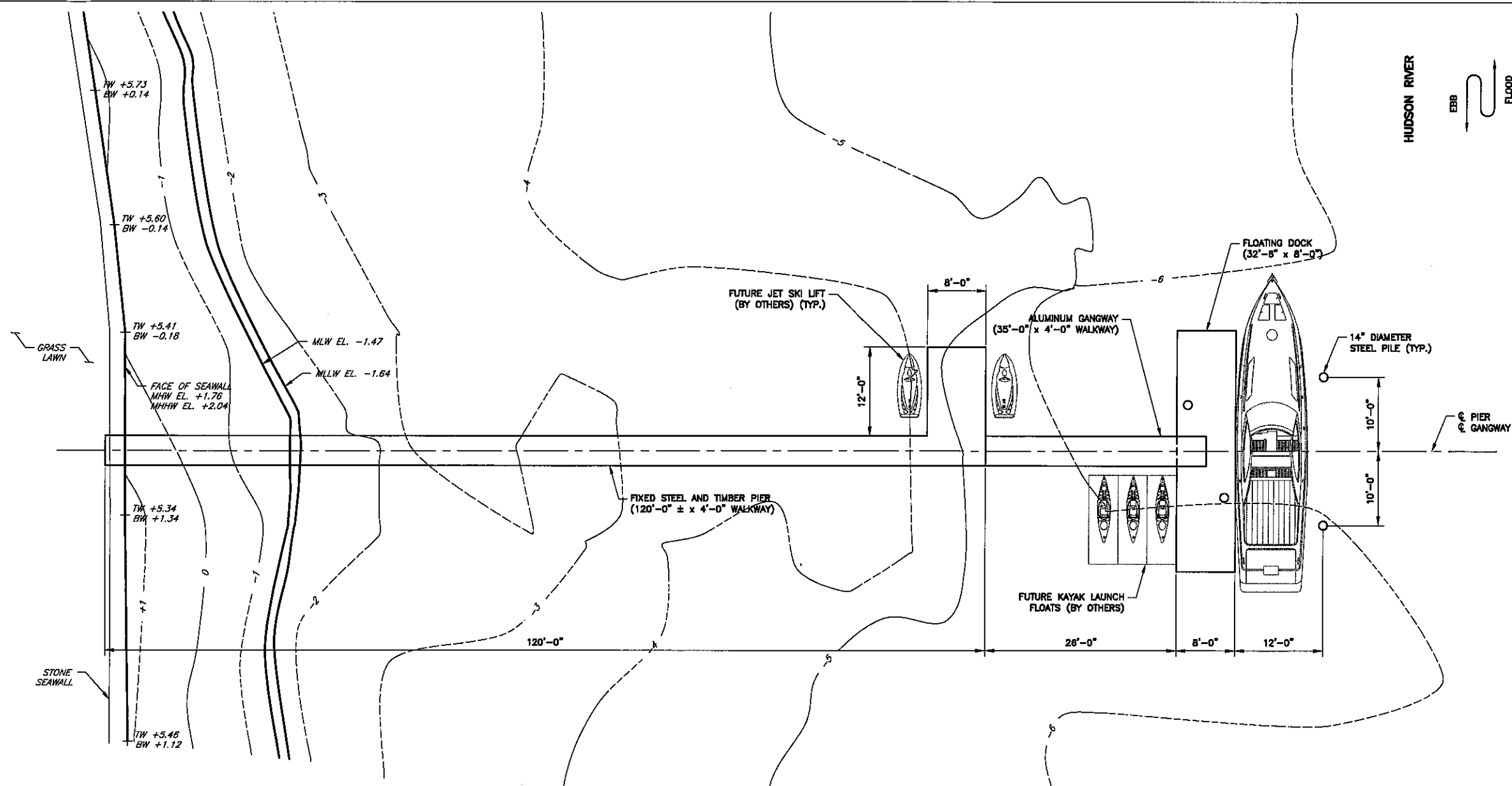
DEMOLITION PLAN

**NOTES**

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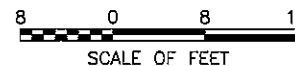
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				<b>BUCKMAN</b>  BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN  B. BUCKMAN  B. BUCKMAN		IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	<b>6 VOORHIS POINT WATERFRONT IMPROVEMENTS</b>	<b>DEMOLITION PLAN</b>	<b>MR-02</b>
					PROJECT NO.		20036	PROJECT LOCATION <b>6 VOORHIS POINT SOUTH NYACK, NY</b>		DATE 2/4/2022
										REVISION NO. 0
							SHEET NO. <b>4 OF 13</b>			



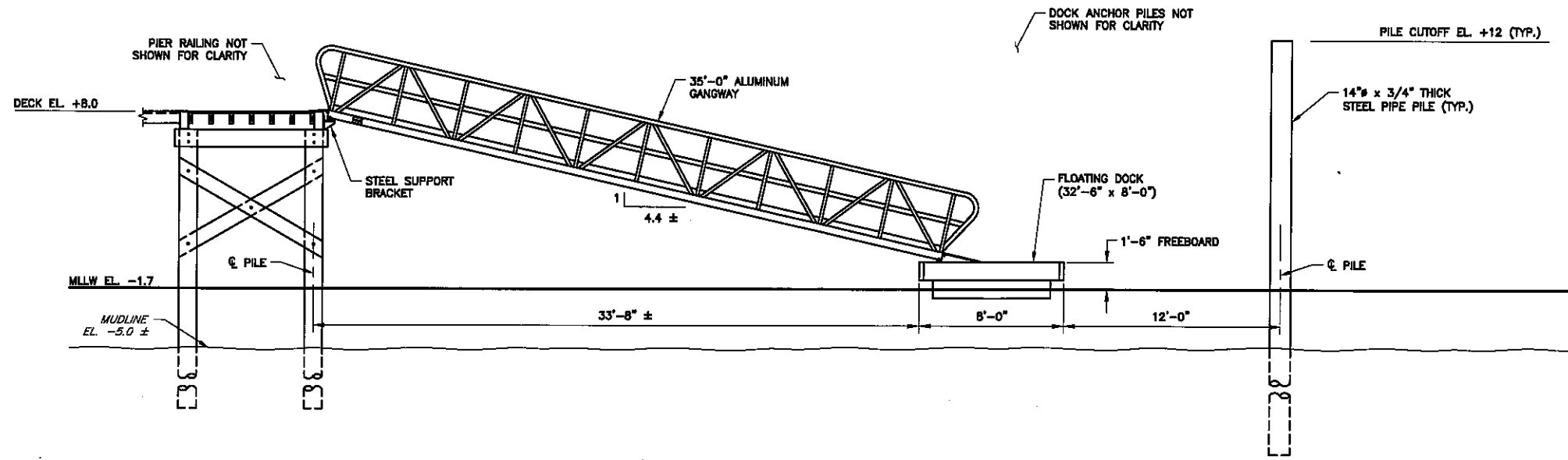
PROPOSED PLAN

**NOTES**

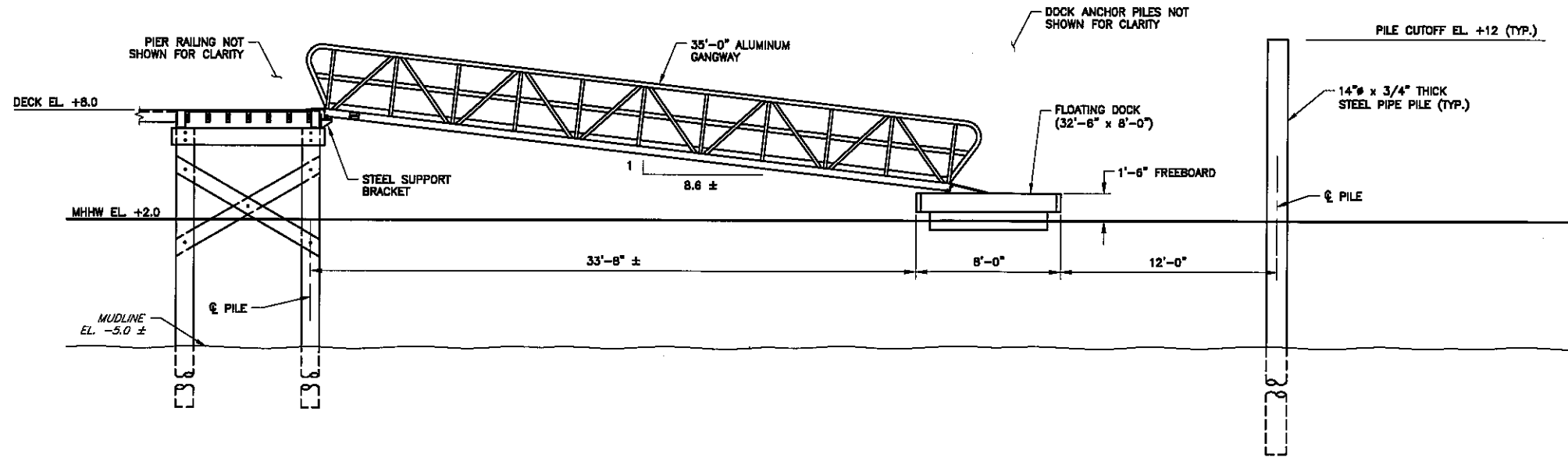
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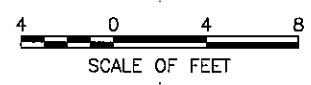
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				<b>BUCKMAN</b>	B. BUCKMAN	<b>NOT FOR CONSTRUCTION</b>	IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	<b>6 VOORHIS POINT WATERFRONT IMPROVEMENTS</b>	<b>PROPOSED PLAN</b>	<b>MR-03</b>
				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN	STATE OF NEW YORK LICENSED PROFESSIONAL ENGINEER 89320		PROJECT LOCATION 6 VOORHIS POINT SOUTH NYACK, NY		DATE 2/4/2022
					B. BUCKMAN					REVISION NO. 0
					PROJECT NO. 20036					SHEET NO. 5 OF 13



GANGWAY POSITION AT MLLW



GANGWAY POSITION AT MHHW



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1	05/26/21	REVISED PIER FRAMING	BDB	<b>BUCKMAN</b>	B. BUCKMAN			IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	<b>6 VOORHIS POINT WATERFRONT IMPROVEMENTS</b>	<b>PIER AND DOCK ELEVATIONS</b>	<b>MR-04</b>
				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN				PROJECT LOCATION		DATE
					B. BUCKMAN				6 VOORHIS POINT SOUTH NYACK, NY		2/4/2022
					PROJECT NO.	20036				REVISION NO.	1
										SHEET NO.	6 OF 13

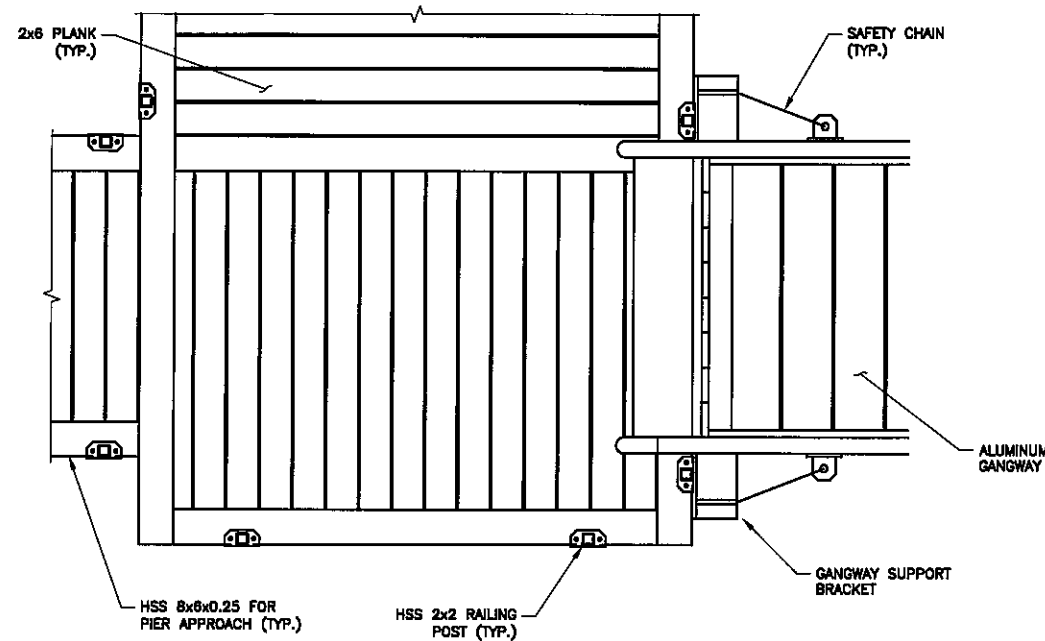




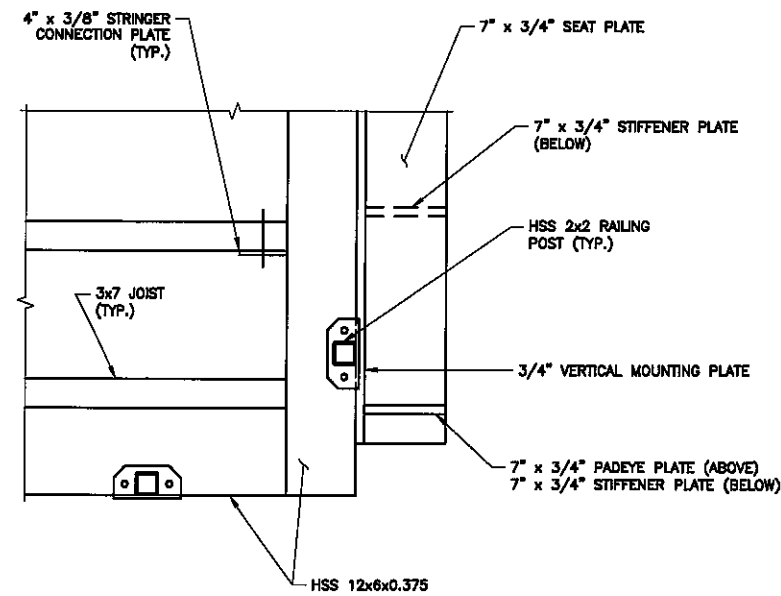


**NOTES**

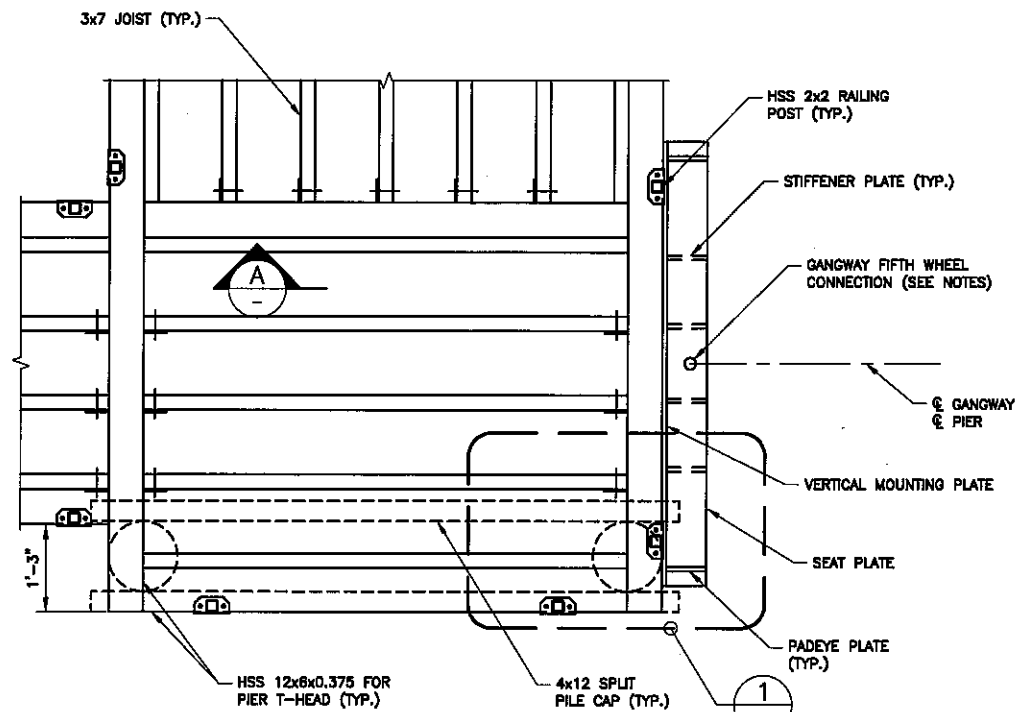
1. CONTRACTOR SHALL PROVIDE TO THE ENGINEER FOR REVIEW AND APPROVAL SHOP DRAWINGS OF THE GANGWAY SUPPORT BRACKET WITH NECESSARY MODIFICATIONS INDICATED BY THE GANGWAY MANUFACTURE TO ACCOMMODATE THEIR SYSTEM INCLUDING, BUT NOT LIMITED TO, FIFTH WHEEL CONNECTION, SAFETY CHAIN CONNECTION, AND HEIGHT OF SEAT PLATE BELOW TOP OF DECK.
2. THE GANGWAY SUPPORT BRACKET SHOP DRAWINGS SHALL ALSO SHOW THE CONNECTIONS FOR THE RAILING POST.
3. THE GANGWAY SUPPORT BRACKET AND ITS CONNECTION HARDWARE SHALL BE HOT-DIP GALVANIZED.



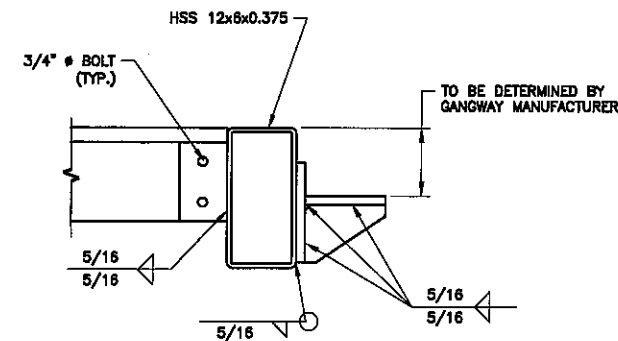
PIER PLAN AT GANGWAY BRACKET  
SCALE (A)



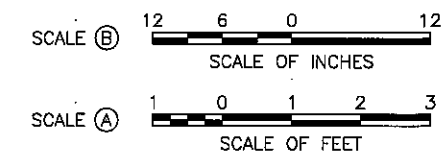
1 BRACKET DETAIL  
SCALE (B)



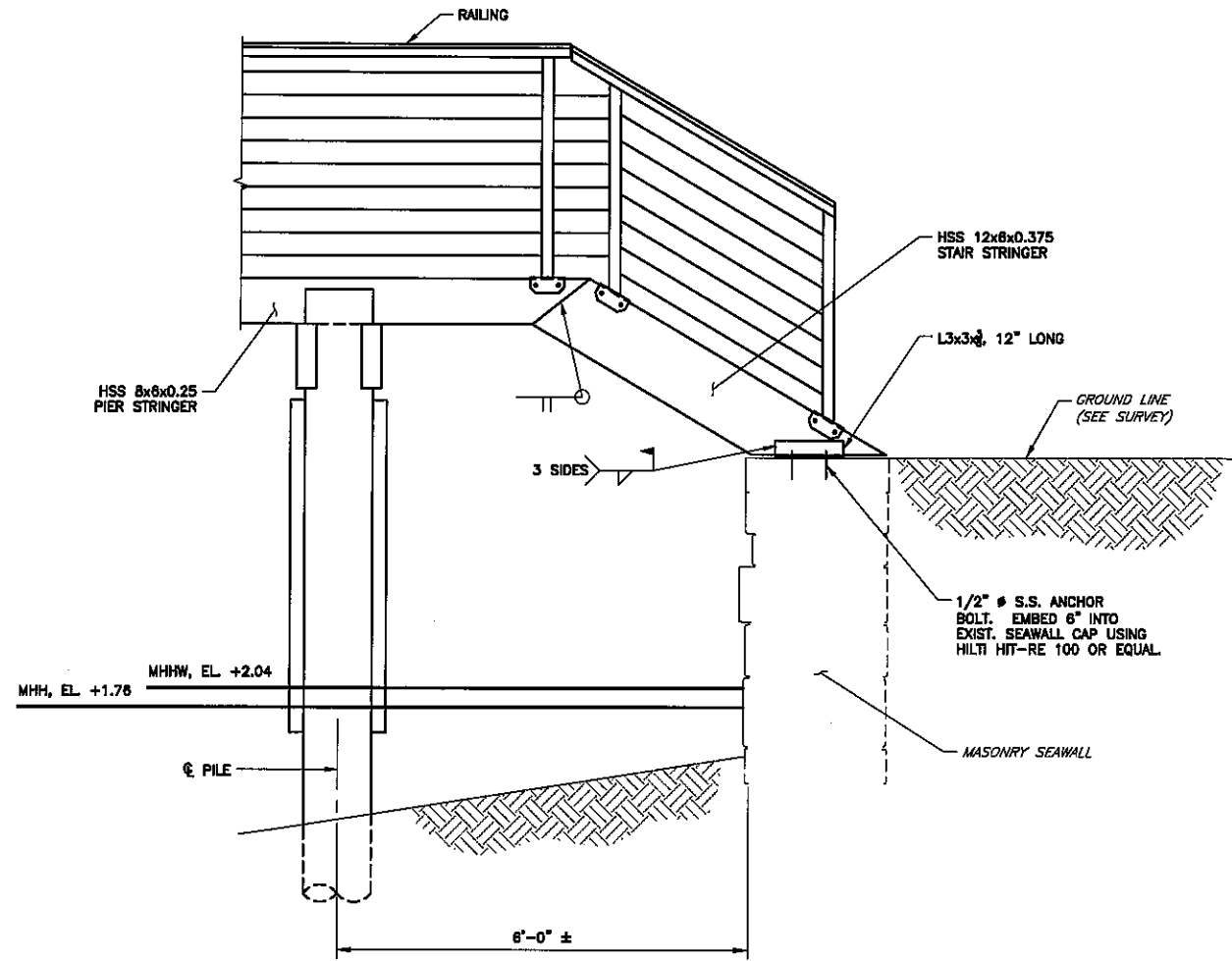
PIER FRAMING AT GANGWAY BRACKET  
SCALE (A)



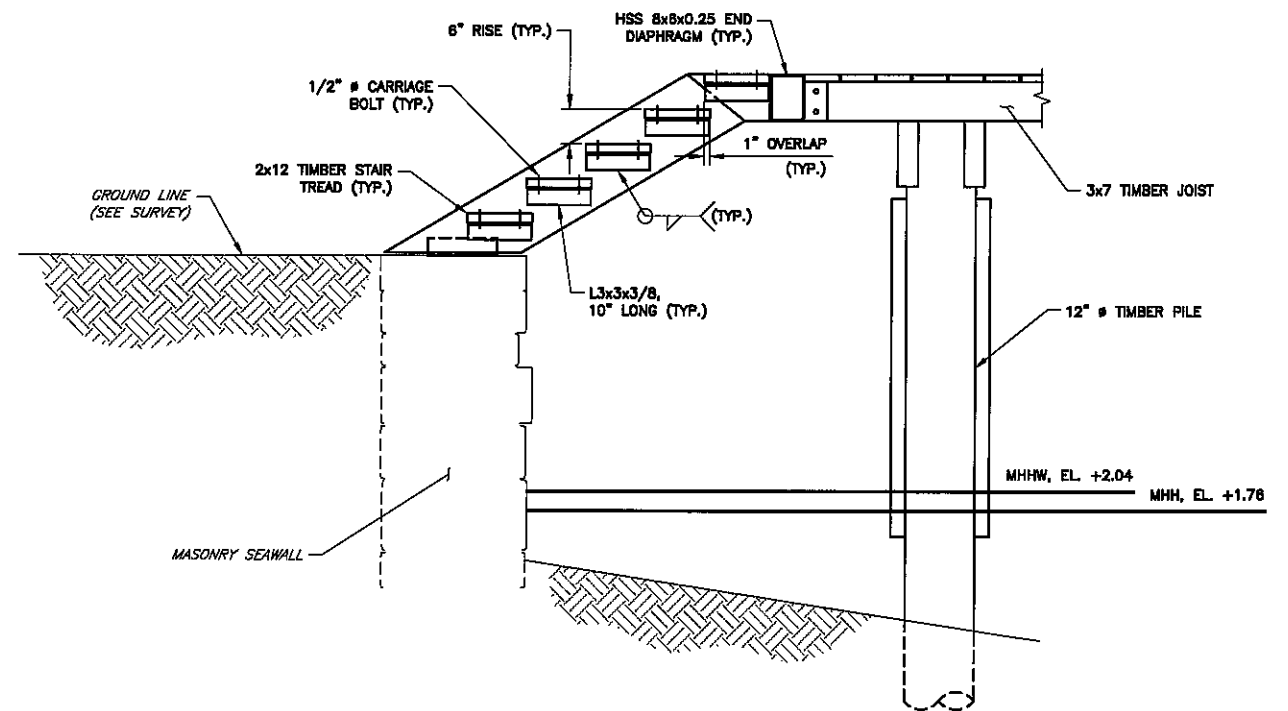
A SECTION THROUGH BRACKET  
SCALE (B)



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				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN				PROJECT LOCATION		DATE
					B. BUCKMAN				6 VOORHIS POINT SOUTH NYACK, NY		2/4/2022
					PROJECT NO.	20036			REVISION NO.	0	
									SHEET NO.	9 OF 13	



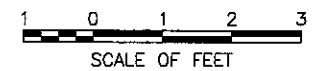
STAIR ELEVATION VIEW



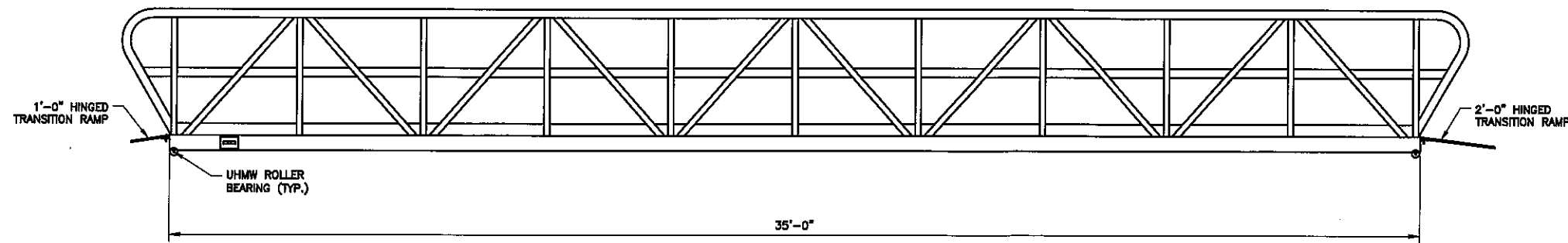
SECTION THROUGH STAIR TREADS

**NOTE**

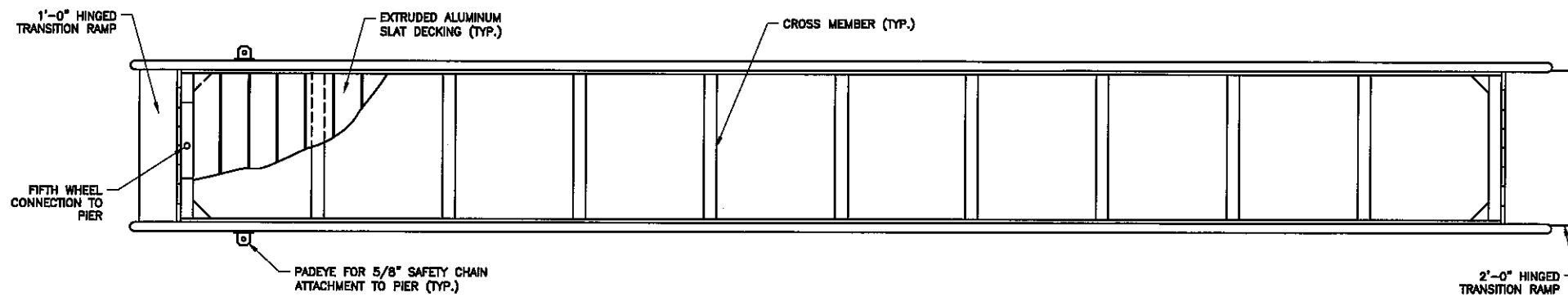
CONTRACTOR MAY SUBMIT AN ALTERNATE STAIR DESIGN TO THE ENGINEER AND OWNER FOR REVIEW AND APPROVAL. THE ALTERNATE SYSTEM SHALL BE SIMILAR IN APPEARANCE TO THE CURRENTLY PROPOSED STAIR DESIGN, TO BE DETERMINED SOLELY BY THE ENGINEER AND OWNER. THE CONTRACTOR MUST DEMONSTRATE THAT THE ALTERNATIVE SYSTEM CAN SAFELY SUPPORT THE RAILING LOADS PRESCRIBED IN ASCE 7-16 AND SATISFIES THE REQUIREMENTS OF IBC.



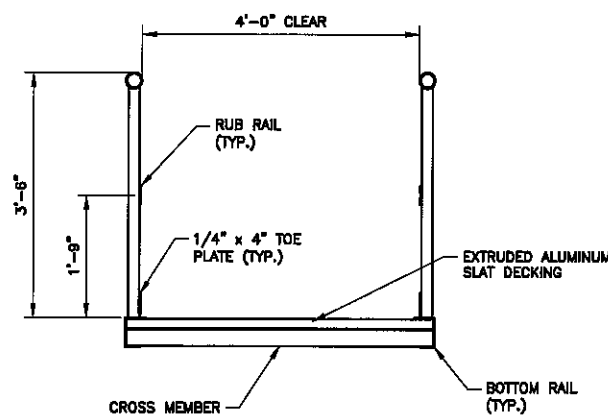
NO.	DATE	REVISION	BY	PREPARED BY	MADE BY	PROJECT NO.	FOR APPROVAL	PREPARED FOR	TITLE OF PROJECT	DRAWING TITLE	DRAWING NO.
				<b>BUCKMAN</b>	B. BUCKMAN	20036	<b>NOT FOR CONSTRUCTION</b>	IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	<b>6 VOORHIS POINT WATERFRONT IMPROVEMENTS</b>	<b>PIER DETAILS 4</b>	<b>MR-08</b>
				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN		<small>WARNING - IT IS A VIOLATION OF SECTION 2209 OF THE STATE EDUCATION LAW FOR ANY PERSON TO ALTER THIS DRAWING IN ANY WAY UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. THE ALTERING ENGINEER SHALL AFFIX THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE, THE DATE OF ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.</small>		PROJECT LOCATION 6 VOORHIS POINT SOUTH NYACK, NY		DATE 2/4/2022
					B. BUCKMAN						REVISION NO. 0
											SHEET NO. 10 OF 13



GANGWAY ELEVATION



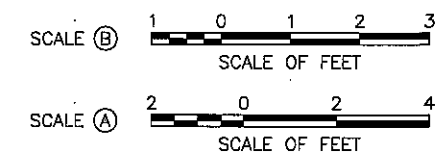
GANGWAY PLAN



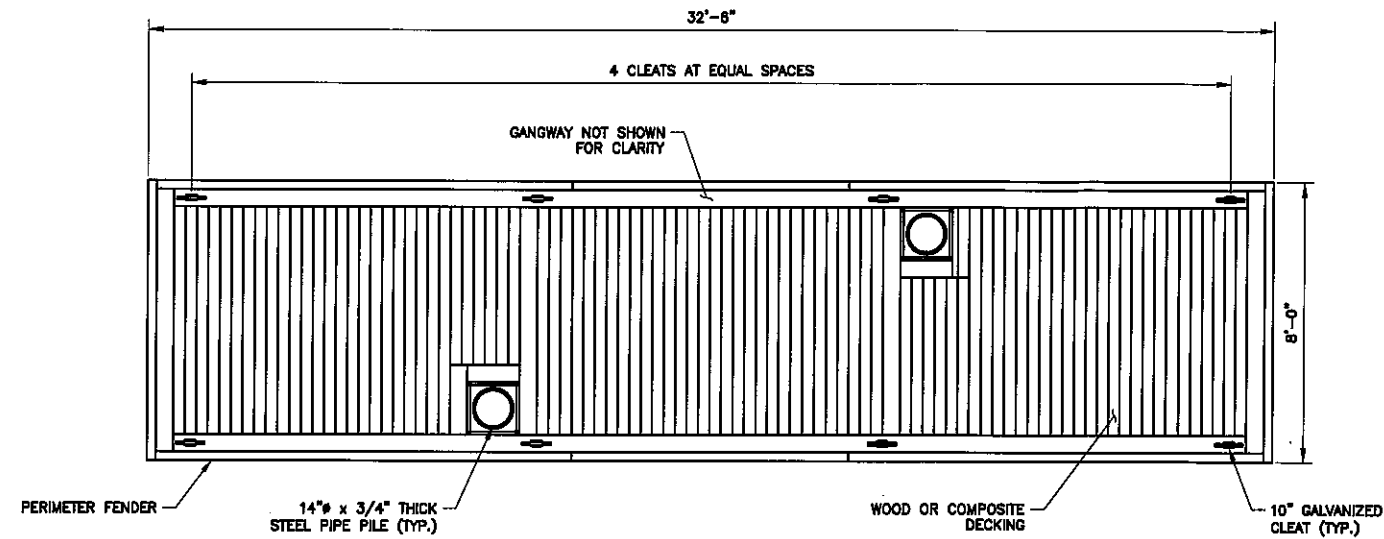
GANGWAY TYPICAL SECTION

**GANGWAY NOTES**

1. THE WORK COVERED UNDER THIS SECTION SHALL CONSIST OF MANUFACTURING AND SUPPLYING OF A PREFABRICATED ALUMINUM GANGWAY AS SHOWN IN THE PLANS. ALL MATERIALS SHALL BE MANUFACTURED OR DISTRIBUTED BY RAVENS MARINE OR APPROVED EQUAL.
2. THE GANGWAY SHALL BE DESIGNED WITH MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF THE ALUMINUM ASSOCIATION "SPECIFICATIONS FOR ALUMINUM STRUCTURES" FOR BUILDINGS AND SIMILAR TYPE STRUCTURES. TO ENSURE SPECIFIED CRITERIA HAVE BEEN MET, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING:
  - A. SHOP DRAWINGS SHOWING DIMENSIONAL LAYOUT OF THE GANGWAY.
  - B. SHOP DRAWINGS SHOWING CONNECTION DETAILS INCLUDING, BUT NOT LIMITED TO, ROLLER BEARINGS, FIFTH WHEEL CONNECTION, RAILINGS, TRANSITION RAMPS, AND PLANKS.
  - C. ENGINEERING CALCULATIONS SHOWING COMPLIANCE WITH THE DESIGN CRITERIA SPECIFIED HEREIN. CALCULATIONS MUST BE SIGNED AND SEALED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF NEW YORK.
3. ALUMINUM EXTRUSIONS FOR GANGWAY STRUCTURES SHALL BE ALUMINUM ALLOY 6061-T6 EXTRUDED IN ACCORDANCE WITH THE REQUIREMENTS OF FEDERAL SPECIFICATION QQ-A-200.
4. STAINLESS STEEL BOLTS, NUTS, WASHERS, AND SCREWS SHALL BE TYPE 304.
5. ROLLER BEARINGS SHALL BE UHMW POLYURETHANE WITH BLACK ULTRAVIOLET LIGHT INHIBITOR ADDED.
6. EXTRUDED RIBBED DECKING SHALL BE DESIGNED TO WITHSTAND A COMBINED DEAD LOAD AND LIVE LOAD OF 100 POUNDS PER SQUARE FOOT PER INDIVIDUAL SLAT WITH AN ALLOWABLE DEFLECTION OF  $L/180$  WHERE "L" IS THE SPAN OF THE DECKING.
7. HANDRAILS SHALL BE DESIGNED TO WITHSTAND A CONCENTRATED LOAD OF 200 POUNDS OR A LINEAR LOAD OF 50 POUNDS PER LINEAR FOOT, WHICHEVER PRODUCES MAXIMUM EFFECT. INTERMEDIATE RAILS SHALL BE DESIGNED FOR A CONCENTRATED LOAD OF 50 POUNDS. THE RAILS SHALL BE DESIGNED TO WITHSTAND THE LOADS ACTING IN ANY DIRECTION.
8. GANGWAYS SHALL BE DESIGNED TO WITHSTAND A UNIFORM LIVE LOAD OF 50 POUNDS PER SQUARE FOOT APPLIED VERTICALLY. ALLOWABLE DEFLECTION SHALL BE A MAXIMUM OF  $L/180$  WHERE "L" IS THE LENGTH OF THE GANGWAY.
9. DECKING SHALL BE EXTRUDED ALUMINUM SLATS TO PROVIDE A NON-SKID SURFACE AND SHALL NOT EXCEED 9 INCHES IN WIDTH AND NOT MORE THAN 3/8 INCH AIR SPACE BETWEEN THE SLATS. THE LEGS OF EACH SLAT SHALL BE WELDED TO THE SIDE MEMBERS WITH A MINIMUM OF 1-1/4 INCHES OF WELD PER LEG. DECKING SLATS SHALL BE PLACED TRANSVERSELY ON THE GANGWAY.
10. HINGED TRANSITION PLATES SHALL HAVE A NON-SKID SURFACE MADE OF DIAMOND PLATE, RIBBED PLATE, SLIP-NOT COATING, OR APPROVED EQUAL.
11. HINGE MOUNT EXTRUSIONS SHALL BE WELDED TO THE FRAME OF THE DOCK WITH A CONTINUOUS FILLET WELD UNLESS OTHERWISE SHOWN ON THE PLANS.
12. ANY POTENTIALLY CORROSIVE INSTALLATION OF DISSIMILAR METALS SHALL BE PROPERLY INSULATED TO MINIMIZE OR ELIMINATE CORROSION IN A MARINE ENVIRONMENT.
13. GANGWAYS SHALL BE SECURELY FASTENED TO THE DOCK. MANUFACTURER SHALL DESIGN THE FIFTH WHEEL CONNECTION AND INDICATE ANY MODIFICATIONS TO THE STEEL SUPPORT BRACKET NECESSARY TO ACCOMMODATE THE GANGWAY CONNECTION.



NO.	DATE	REVISION	BY	PREPARED BY	MADE BY	FOR APPROVAL	PREPARED FOR	TITLE OF PROJECT	DRAWING TITLE	DRAWING NO.
				<b>BUCKMAN</b>	B. BUCKMAN	NOT FOR CONSTRUCTION	IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	6 VOORHIS POINT WATERFRONT IMPROVEMENTS	GANGWAY DETAILS	MR-09
				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	B. BUCKMAN			PROJECT LOCATION 6 VOORHIS POINT SOUTH NYACK, NY		DATE 2/4/2022
					B. BUCKMAN					REVISION NO. 0
					PROJECT NO. 20036					SHEET NO. 11 OF 13

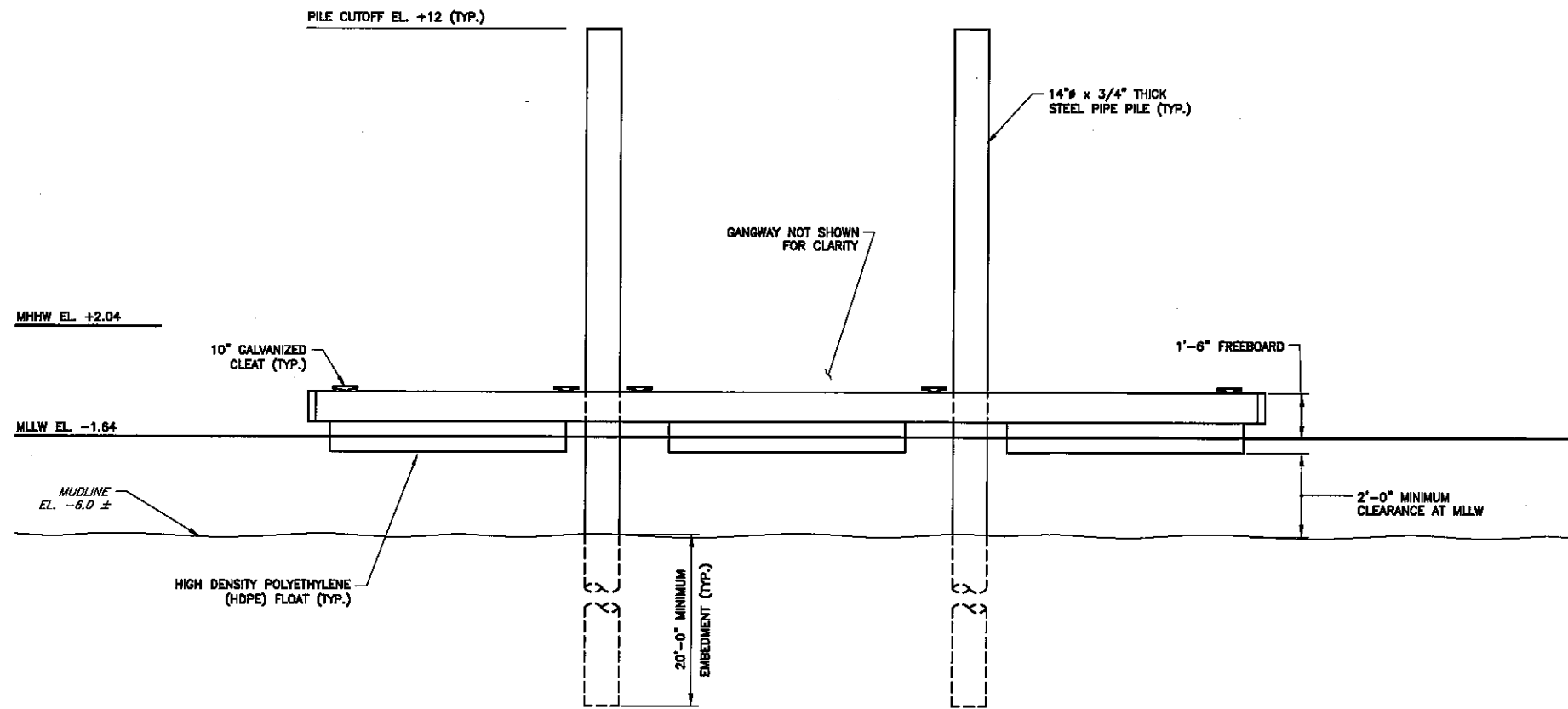


FLOATING DOCK PLAN

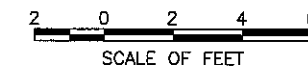


**FLOATING DOCK NOTES**

1. THE WORK COVERED UNDER THIS SECTION SHALL CONSIST OF MANUFACTURING AND SUPPLYING OF A FLOATING DOCK SYSTEM AS SHOWN IN THE PLANS.
2. THE FLOATING DOCK SYSTEM SHALL BE COMPLETELY PREFABRICATED BY THE CONTRACTOR IN THEIR PLANT AND DELIVERED READY FOR ASSEMBLY AT THE SITE.
3. THE FLOATING DOCK SHALL BE DESIGNED WITH LOADS AND MINIMUM SAFETY FACTORS ON WORKING STRESS WHICH CONFORM TO THOSE SET FORTH IN THE LATEST ISSUE OF ASCE MANUALS AND REPORTS ON ENGINEERING PRACTICE NO. 50 - PLANNING AND GUIDELINES FOR SMALL CRAFT HARBORS. TO ENSURE SPECIFIED CRITERIA HAVE BEEN MET, THE CONTRACTOR SHALL SUBMIT THE FOLLOWING:
  - A. SHOP DRAWINGS SHOWING DIMENSIONAL LAYOUT OF THE FLOATING DOCK.
  - B. SHOP DRAWINGS SHOWING CONNECTION DETAILS INCLUDING, BUT NOT LIMITED TO, MOORING HARDWARE, FENDERING, DECKING, INTERNAL PILE WELLS, AND PILE GUIDES.
  - C. ENGINEERING CALCULATIONS SHOWING COMPLIANCE WITH THE DESIGN CRITERIA SPECIFIED HEREIN. CALCULATIONS MUST BE SIGNED AND SEALED BY AN ENGINEER LICENSED TO PRACTICE IN THE STATE OF NEW YORK.
3. LIVE LOAD FOR THE FLOATING DOCK SHALL BE 50 POUNDS PER SQUARE FOOT ACTING ON THE DOCK AND THE GANGWAY. DEAD LOAD FOR THE FLOATING DOCK SHALL INCLUDE ALL DOCK COMPONENTS PLUS THE REACTION FROM THE GANGWAY.
4. THE FLOATING DOCK SHALL BE CONNECTED AND DESIGNED SO AS TO SAFELY WITHSTAND A MINIMUM WIND PRESSURE OF 20 POUNDS PER SQUARE FOOT AGAINST THE AVERAGE PROFILE OF THE BERTHED VESSELS AND EXPOSED PORTIONS OF THE FLOATING DOCK SYSTEM SUPERIMPOSED WITH A 1.0 FOOT WAVE HEIGHT WITH WAVE PERIODS LESS THAN 2 SECONDS. DOCK DESIGN SHALL BE VERIFIED TO BE ADEQUATE TO RESIST LOADS PRODUCED BY THE 100-YEAR STORM EVENT WITH NO VESSELS BERTHED.
5. THE FLOTATION UNITS SHALL BE DESIGNED TO MAINTAIN THEIR DESIRED BUOYANCY AND FREEBOARD EVEN IF STRUCTURALLY DAMAGED. CONNECTIONS OF THE FLOTATION SYSTEM WILL BE SO DESIGNED THAT THE SYSTEM WILL EFFECTIVELY ACT AS A SINGLE UNIT. A RIGID SYSTEM IS REQUIRED WHICH WILL NEITHER RACK NOR TWIST IN TORSION UNDER EXTREME DESIGN CONDITIONS.
6. THE CONTRACTOR SHALL DEMONSTRATE BY IN WATER-TESTS OR WRITTEN CALCULATIONS THAT THE SYSTEM WILL NOT TILT, LIST, OR PITCH MORE THAN SIX DEGREES FROM HORIZONTAL WHEN A CONCENTRATED LOAD OF 500 POUNDS IS PLACED ANYWHERE ON THE DECK.
7. MOORING CLEATS SHALL BE GALVANIZED CAST STEEL, THRU BOLTED INTO THE DOCK STRUCTURE.
8. ALL BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL OR HOT-DIP GALVANIZED.
9. ANY POTENTIALLY CORROSIVE INSTALLATION OF DISSIMILAR MATERIALS SHALL BE PROPERLY INSULATED TO MINIMIZE OR ELIMINATE CORROSION IN A MARINE ENVIRONMENT.
10. PROVIDE FENDERING ALL AROUND THE PERIMETER OF THE FLOATING DOCK TO PROTECT BOTH THE BOATS AND DOCKS.



FLOATING DOCK ELEVATION

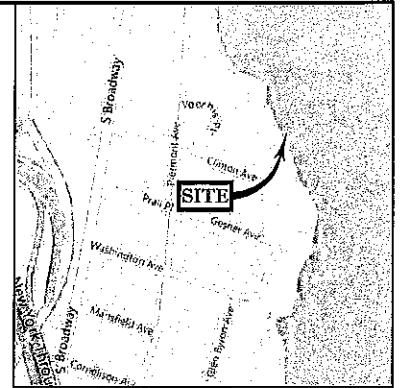


NO.	DATE	REVISION	BY	PREPARED BY	MADE BY	PREPARED FOR	TITLE OF PROJECT	DRAWING TITLE	DRAWING NO.
			BDB	<b>BUCKMAN</b>	B. BUCKMAN	IDA PARKS 6 VOORHIS POINT SOUTH NYACK, NY 10960	<b>6 VOORHIS POINT WATERFRONT IMPROVEMENTS</b>	<b>FLOATING DOCK DETAILS</b>	<b>MR-10</b>
				BUCKMAN ENGINEERING, PLLC 255 DEAN STREET BROOKLYN, NY 11217	DRAWN BY B. BUCKMAN		PROJECT LOCATION 6 VOORHIS POINT SOUTH NYACK, NY		DATE 2/4/2022
					CHECKED BY B. BUCKMAN				REVISION NO. 0
					PROJECT NO. 20036				SHEET NO. 12 OF 13

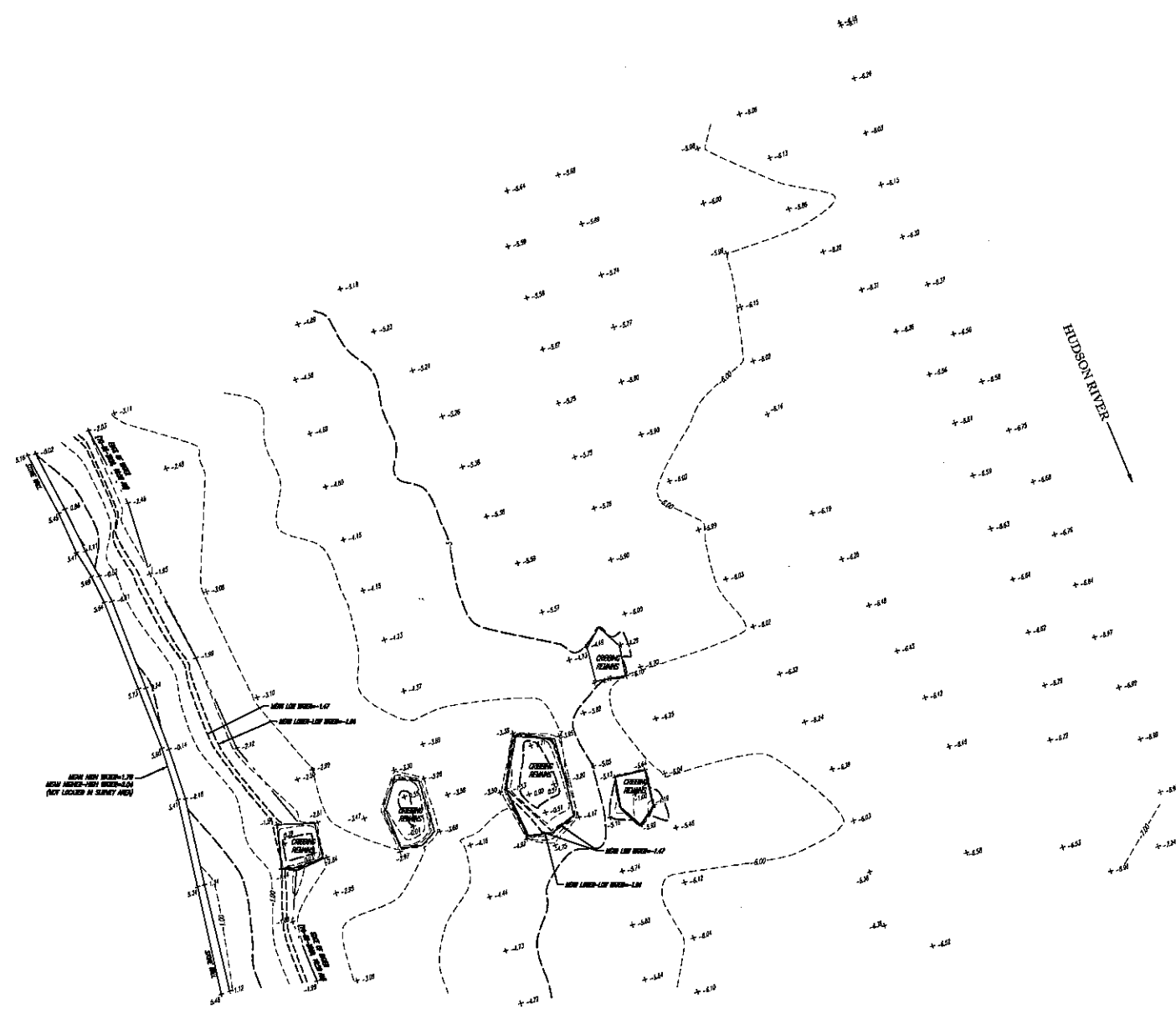


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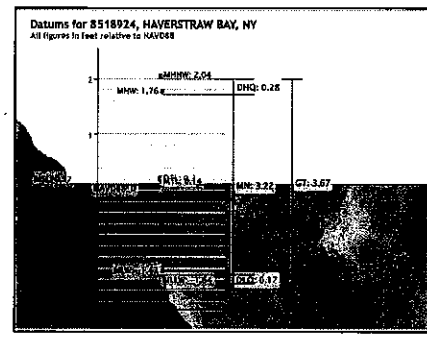


VICINITY MAP  
© 2008 DeLorme, Street Atlas USA



- NOTES:
1. UPLAND PROPERTY KNOWN AS LOT 6, BLOCK 2 AS SHOWN IN THE OFFICIAL TAX MAP OF THE VILLAGE OF SOUTH NYACK, ROCKLAND COUNTY, NEW YORK, SHEET 99.9Z.
  2. THIS PLAN IS BASED ON INFORMATION PROVIDED, BY A SURVEY PREPARED IN THE FIELD BY CONTROL POINT ASSOCIATES, INC. AND OTHER REFERENCE MATERIAL AS LISTED HEREON.
  3. ELEVATIONS REFER TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), BASED ON GPS OBSERVATIONS TAKEN AT THE TIME OF THE SURVEY.  
TO CONVERT ELEVATION FROM NAVD88 (MAP) TO MEAN LOW LOW WATER ADD 1.64 FEET.
  4. MAPPING PREPARED ON NAD83 STATE PLANE COORDINATE SYSTEM - NEW YORK EAST ZONE.

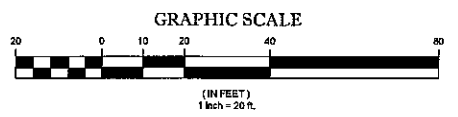
- REFERENCES:
1. THE OFFICIAL TAX ASSESSOR'S MAP OF VILLAGE OF SOUTH NYACK, ROCKLAND COUNTY, NEW YORK, SHEET 99.9Z.



LEGEND

--- EXISTING CONTOUR

x 121.65 EXISTING SPOT ELEVATION



UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUB-DIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.

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STATE OF NEW YORK  
WILLIAM THEODORE WHIMPLE  
LICENSED LAND SURVEYOR  
20928

11-17-2020

DATE

WILLIAM T. WHIMPLE  
NEW YORK PROFESSIONAL LAND SURVEYOR #50526

No.	REVISED CONTOURS PER CLIENT COMMENT	D.J.D.	W.T.W.	11-17-2020	
No.	DESCRIPTION OF REVISION	FIELD CREW	DRAWN	APPROVED	DATE
1					
FIELD DATE	10-8-2020				
FIELD BOOK NO.	TOPOGRAPHIC SURVEY				
FIELD BOOK P/L	TMS-WATERFRONT				
	6 VOORHIS POINT				
	TWP# 69.2-2-6				
	SOUTH NYACK, ROCKLAND COUNTY				
	STATE OF NEW YORK				
FIELD CREW	VD / EF				
DRAWN	B.E.C.				
REVIEWED	J.J.L.	DATE	10.22.2020	SCALE	1" = 20'
APPROVED	J.J.L.	DATE	09-20-159	FILE NO.	09-200159
				DWG. NO.	1 OF 1

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