INC. VILLAGE OF BAYVILLE

BAYVILLE, NEW YORK

MAINTENANCE & EXPANSION DREDGING AT THE CREEK BEACH MARINA

LOCATED IN

BAYVILLE N.Y.

CONTRACT NO. BAYV-CBMD24

MAYOR
Steve Minicozzi

TYPE II
S.E.Q.R., Classification

ATLAS LOCATION
TOWN OF BAYVILLE
SCALE:1" = 600'

VILLAGE BOARD

Robert E. De Natale	Aimee DiBartolomeo
Micah Tucker	Peter B. Valsecchi
Anne Walsh	Elisa Santoro

Village Clerk-Treasurer Maria Alfano-Hardy	Deputy Clerk-Treasurer Christopher Vivona

Superintendent of Public Works - Giuseppe Sicuranza

MAY 2025

SUBMITTED FOR CIVIL / STRUCTURAL APPROVAL BY:
KENNETH HOLMSTROM, PE

DATE

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A LiRo-Hill Company
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GENERAL NOTES

1. TOPOGRAPHIC SURVEY INFORMATION IS BASED UPON RLT ENGINEERING, GEOLOGY, AND LAND SURVEYING DATED JANUARY 25, 2025. BATHYMETRIC SURVEY INFORMATION IS BASED UPON GEI CONSULTANTS DATED JANUARY 10, 2025.
2. DOCK STRUCTURE LOCATION AND DETAILS ARE APPROXIMATED FROM VARIOUS AERIAL IMAGES, FIELD MEASUREMENTS, NAVIGATION DRAWINGS, AND GENERAL RESEARCH AND ARE TO BE VERIFIED BY OTHERS.
3. EXISTING CONDITIONS ARE BASED ON AVAILABLE INFORMATION AND SURVEY REPORTS WHICH MAY NOT COMPLETELY AND ACCURATELY DEPICT CONDITIONS AT THE TIME OF CONSTRUCTION. TOPOGRAPHIC AND BATHYMETRIC SURVEY INFORMATION SHOWN IS ONLY REPRESENTATIVE OF THE CONDITIONS EXISTING AT THE RESPECTIVE TIMES OF THE SURVEYS. ACTUAL CONDITIONS ENCOUNTERED DURING CONSTRUCTION MAY VARY FROM THOSE SHOWN. CONTRACTOR SHALL BASE BID ON THEIR OWN RECONNAISSANCE OF THE SITE AND FIELD VERIFY CONDITIONS INDICATED, PRIOR TO PREPARING SHOP DRAWINGS, ORDERING MATERIALS OR PERFORMING THE WORK. NO EXTRA WORK COMPENSATION WOULD BE CONSIDERED FOR CONDITIONS WHICH COULD BE KNOWN BEFORE CONSTRUCTION.
4. DRAWINGS DO NOT ADDRESS SITE SAFETY ISSUES RELATED TO THE WORK SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY AND PROVIDE A SITE SAFETY PLAN CONFORMING TO OSHA STANDARDS AND NEW YORK STATE STANDARDS.
5. THE CONTRACTOR SHALL PROVIDE REGULAR PERIODIC INSPECTION OF CONSTRUCTION OPERATIONS AS REQUIRED TO ENSURE ONGOING MAINTENANCE OF ALL SAFETY OPERATIONS AND EQUIPMENT. SUCH INSPECTIONS SHALL BE UNDERTAKEN BY AN AGENT OF THE CONSTRUCTION WHO IS QUALIFIED TO EVALUATE SUCH OPERATIONS AND EQUIPMENT. THIS INSPECTOR SHALL PREPARE WRITTEN SAFETY REPORTS WHICH SHALL BE MAINTAINED AT THE JOB SITE FOR REVIEW BY THE AUTHORITIES HAVING JURISDICTION.
6. THE CONTRACTOR SHALL TAKE ALL CARE NECESSARY TO AVOID DAMAGE TO THE DOCK, EXISTING ADJACENT BUILDING AND ALL OTHER STRUCTURES OR UTILITIES TO REMAIN AND BE PROTECTED. ANY DAMAGES SHALL BE REPAIRED TO THE SATISFACTION OF THE OWNER OF THE DAMAGED STRUCTURE AT THE SOLE EXPENSE OF THE CONTRACTOR.
7. DIMENSIONS AND LOCATIONS OF EXISTING STRUCTURES AND/OR UTILITIES TO REMAIN AND BE PROTECTED ARE APPROXIMATE. CONTRACTOR TO NOTIFY THE OWNER IMMEDIATELY OF DISCREPANCIES BETWEEN THE PLANS AND ACTUAL FIELD OBSERVATIONS.
8. TEMPORARY UTILITIES, AS REQUIRED FOR THE COMPLETION OF THE WORK, SHALL BE OBTAINED, PERMITTED AND PAID FOR BY THE CONTRACTOR.
9. ALL CONTRACT WORK SHALL CONFORM TO THE NYSDEC AND USACE PERMIT STANDARDS, IN ADDITION TO THE NEW YORK STATE BUILDING CODE LATEST AMENDED EDITION INCLUDING ALL REFERENCED STANDARDS.
10. THE CONTRACTOR SHALL BE AWARE THAT THE ROAD WILL REMAIN OPEN TO THE PUBLIC FOR THE DURATION OF THE CONTRACT. MAINTENANCE & PROTECTION OF TRAFFIC AND PEDESTRIANS SHALL BE EMPLOYED BY THE CONTRACTOR FOR ACTIVE WORK AREAS AND ADJACENT PROPERTIES. AT A MINIMUM, TEMPORARY PVC ORANGE CONSTRUCTION FENCING AND REFLECTIVE BARRELS SHALL BE USED AROUND ALL WORK AREAS AND ALL EXCAVATED AREAS SHALL BE FILLED OR SUFFICIENTLY BARRICADED EACH NIGHT AS DIRECTED BY THE ENGINEER. ADDITIONALLY, DURING THE DURATION OF CONSTRUCTION, THERE WILL BE NO UNREASONABLE INTERFERENCE WITH COASTAL NAVIGATION. THE CONTRACTOR IS TO COORDINATE WITH AND NOTIFY THE VILLAGE OF BAYVILLE AND THE ENGINEER NO LESS THAN A WEEK PRIOR TO ANY MAJOR MARINE OPERATIONS THAT MAY OBSTRUCT THE WATERWAYS ADJACENT TO THE MARINA.
11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER, FOR APPROVAL, A PHASING PLAN SHOWING A TEMPORARY CIRCULATION ROUTE AND FENCING TO THE CONSTRUCTION AREA. THIS ROUTE SHALL BE LAYED OUT SO AS TO KEEP THE PUBLIC SAFE FROM HARM FROM ANY AND ALL CONSTRUCTION ACTIVITIES. ALL COSTS ASSOCIATED WITH MPT WORK SHALL BE INCLUDED UNDER THE VARIOUS CONTRACT ITEMS.
12. THE CONTRACTOR SHALL INSTITUTE SEDIMENT CONTROL METHODS TO PREVENT SEDIMENT, CEMENT, OR ANY OTHER MATERIALS OR CONSTRUCTION DEBRIS FROM ENTERING NEARBY DRAINAGE SYSTEMS OR ANY WATERWAYS DURING ALL PHASES OF CONSTRUCTION. THE SEDIMENT CONTROL DEVICES AND PROCEDURES TO BE EMPLOYED BY THE CONTRACTOR SHALL MEET VILLAGE SWPPP STANDARDS, AS WELL AS THE STANDARDS AND REQUIREMENTS OF THE PERMITS OF THE NYSDEC & USACE. ALL COSTS ASSOCIATED WITH SEDIMENT WORK SHALL BE INCLUDED UNDER THE VARIOUS CONTRACT ITEMS. THESE MEASURES ARE INCLUDED WITHIN THESE CONTRACT DRAWINGS TO ACT AS A STORMWATER POLLUTION PREVENTION PLAN (SWPPP). ANY DEVIATION OR VIOLATION AND CONSEQUENT PENALTY BY THE NYSDEC WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY WITH NO COST TO THE VILLAGE WHATSOEVER.
13. EQUIPMENT AND MATERIALS LEFT OVER NIGHT SHALL BE SAFEGUARDED & SECURED BEHIND DESIGNATED CONTROLLED AREA AS APPROVED BY THE ENGINEER.
14. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT DUE TO THE NATURE OF A RECONSTRUCTION PROJECT, THE EXACT EXTENT OF RECONSTRUCTION WORK CANNOT ALWAYS BE ACCURATELY DETERMINED PRIOR TO THE COMMENCEMENT OF WORK. THESE CONTRACT DOCUMENTS HAVE BEEN PREPARED BASED ON THE FIELD INSPECTION, SURVEY AND OTHER AVAILABLE INFORMATION. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO CONSTRUCTION DETAILS AND WORK QUANTITIES. THE CONTRACTOR SHALL PERFORM THE WORK IN ACCORDANCE WITH FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER.
15. THE CONTRACTOR SHALL EXAMINE AND VERIFY IN THE FIELD ALL EXISTING CONDITIONS AND DIMENSIONS WITH THOSE SHOWN ON THE PLANS. IF FIELD CONDITIONS AND DIMENSIONS DIFFER FROM THOSE SHOWN ON THE PLANS THE CONTRACTOR SHALL BRING SUCH INFORMATION TO THE ATTENTION OF THE ENGINEER AND WAIT FOR THE ENGINEER'S DIRECTION BEFORE PROCEEDING WITH THE WORK.
16. THE CONTRACTOR IS CAUTIONED THAT THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THAT OTHER UNDERGROUND FACILITIES NOT SHOWN MAY EXIST. IT IS THE CONTRACTOR'S RESPONSIBILITY UNDER PART 753 OF THE NEW YORK STATE INDUSTRIAL CODE TO DETERMINE THE EXACT LOCATIONS OF UNDERGROUND UTILITIES PRIOR TO WORKING IN THE AREA AND TO AVOID INTERFERENCE. IN THE EVENT THE CONTRACTOR DAMAGES AN EXISTING UTILITY CAUSING AN INTERRUPTION IN SERVICE, HE/SHE SHALL COMMENCE WORK IMMEDIATELY TO RESTORE SERVICE AND MAY NOT CEASE UNTIL SUCH SERVICE IS RESTORED. ALL CORRECTIVE UTILITY WORK SHALL BE AT THE EXPENSE OF THE CONTRACTOR AND ACCEPTABLE TO THE ENGINEER AND THE UTILITY OWNER. SHOULD THE VILLAGE EMPLOY THE SERVICES OF OTHERS TO REMEDY THE DAMAGE CAUSED BY A CONTRACTOR'S OPERATION, COST FOR SUCH WORK WILL BE AT CONTRACTOR'S EXPENSE. IN ADDITION TO 16NYCRR 753, CONTRACTOR SHOULD BE AWARE OF EXISTING OVERHEAD UTILITIES. REFERENCE SHALL BE MADE TO NEW YORK STATE HIGH VOLTAGE PROXIMITY ACT AND 29 CFR 1926. CONTRACTOR TO CONTACT ONE-CALL PRIOR TO ANY SUBSURFACE EXCAVATION. RECEIPT OF NOTIFICATION TO BE PROVIDED TO THE ENGINEER.
17. THE CONTRACTOR SHALL PROTECT IN A SUITABLE MANNER ALL UTILITIES ENCOUNTERED, ABOVE OR BELOW GROUND, AND SHALL REPAIR AT HIS OWN COST ANY DAMAGE TO STRUCTURES, UTILITIES AND FACILITIES CAUSED BY HIS OPERATIONS TO THE SATISFACTION OF THE UTILITY OWNER. ALL UTILITY POLES & FOUNDATIONS MUST BE PROTECTED DURING CONSTRUCTION, AS PER THE REQUIREMENTS OF THE UTILITY AGENCIES. PROTECTION OF UTILITIES PAYMENTS MUST BE INCLUDED IN APPROPRIATE ITEMS. NO ADDITIONAL CLAIM, WHATSOEVER, WILL BE CONSIDERED.
18. THE CONTRACTOR WILL BE RESPONSIBLE FINANCIALLY FOR ANY POLE SUPPORT REQUIRED IN THE COURSE OF COMPLETING THE WORK SPECIFIED IN THIS CONTRACT. THE CONTRACTOR SHALL INCORPORATE THE COST OF POLE SUPPORT INTO THE VARIOUS CONTRACT ITEMS BID ON THE PROJECT AND WILL NOT BE PAID SEPARATELY FOR THIS ITEM.
19. THE CONTRACTOR IS CAUTIONED THAT THERE ARE LUMINAIRE MAST ARMS ON THE SITE'S UTILITY POLES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY STREET LIGHTING EQUIPMENT THAT IS DAMAGED DURING CONSTRUCTION.
20. WHERE EXISTING UTILITIES ARE LOCATED WITHIN THE CONTRACT LIMITS, THE CONTRACTOR SHALL BE REQUIRED TO GIVE THE PROPER AGENCY AND/OR THE VARIOUS OWNING COMPANIES AT LEAST 72 HOURS NOTICE BEFORE DOING ANY WORK, IN ACCORDANCE WITH THE NEW YORK STATE INDUSTRIAL CODE PART (RULE NO. 53) RELATING TO CONSTRUCTION, EXCAVATION, AND DEMOLITION OPERATIONS AT OR NEAR UNDERGROUND FACILITIES.
21. THE CONTRACTOR WILL BE REQUIRED TO ALTER THE GRADES OF ALL EXISTING UTILITIES TO THE SATISFACTION OF THE APPLICABLE UTILITY COMPANIES AND A.O.B.E. THE WORK WILL BE PAID FOR AS SHOWN ON THE PLANS AND SPECIFICATIONS. THE CONTRACTOR IS REQUIRED TO NOTIFY ANY UTILITY COMPANY PRIOR TO THE START OF THE PROJECT AND ANY WORK COMPLETED ON THE UTILITY.
22. BEARINGS AND DISTANCES SHOWN HEREON REFER TO THE NORTH AMERICAN DATUM OF 1983 (NAD83) NEW YORK STATE PLANE COORDINATES, LONG ISLAND ZONE.
23. THE CONTRACTOR SHALL LIMIT HIS/HER HOURS OF OPERATION WITHIN THE PROJECT AREA TO REGULAR WORKING HOURS BETWEEN 8:00 AM AND 4:30 PM, UNLESS OTHERWISE APPROVED BY THE VILLAGE OF BAYVILLE. SEE GENERAL CONDITIONS FOR FURTHER RESTRICTIONS AND INSTRUCTIONS.
24. THE CONTRACTOR SHALL PROTECT ALL EXISTING DRAINAGE, SANITARY STRUCTURES, PIPES, AND OUTLETS WHILE PERFORMING THE WORK IN THIS CONTRACT. THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE SHALL REPAIR ANY DAMAGE.
25. CATCH BASINS IN THE PROJECT AREA SHALL BE MAINTAINED OPERABLE AT ALL TIMES. THE CONTRACTOR SHALL TAKE THE NECESSARY PRECAUTIONS TO AVOID FILLING THE CATCH BASINS WITH DEBRIS WITHIN THE CONTRACT LIMITS DURING THE CONTRACT OPERATIONS. IF, AS A RESULT OF CONSTRUCTION, IF A FLOODING CONDITION OCCURS OR IN THE EVENT THE CONTRACTOR'S OPERATIONS DAMAGE OR BLOCK THE DRAINAGE SYSTEM, THE CONTRACTOR SHALL AT HIS/HER OWN EXPENSE IMMEDIATELY REPAIR OR RESTORE THE DRAINAGE SYSTEM AS DIRECTED BY THE ENGINEER AT NO EXTRA COST TO THE VILLAGE.
26. UNDER THE BENEFICIAL REUSE OF DREDGED MATERIAL ALTERNATIVE, EXISTING LOOSE SUBBASE MATERIAL SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER, UNACCEPTABLE SOIL TO BE REMOVED, AOBE. COST SHALL BE INCLUDED IN PRICE BID FOR ITEM 500.02. SCREENED GRAVEL, IF REQUIRED, SHALL BE PAID FOR UNDER ITEM 521.
27. ALL COSTS OF INVESTIGATION AND/OR REDESIGN DUE TO CONTRACTOR'S IMPROPER FABRICATIONS OR INSTALLATION OF STRUCTURAL ELEMENTS OR OTHER ITEMS NOT IN CONFORMANCE WITH THE CONTRACT DOCUMENTS SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.
28. THE BURNING OF ANY MATERIALS ON THE CONTRACT SITE OR WITHIN THE VILLAGE OF BAYVILLE WILL NOT BE PERMITTED.
29. ALL EXISTING STREET SIGNS IN THE CONTRACT SITE ARE TO REMAIN INTACT. SIGNS DAMAGED SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE. ANY SIGN THAT REQUIRES RESETTING SHALL BE PLACED IN ITS FINAL POSITION AS DETERMINED BY THE ENGINEER. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.
30. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL UTILITY RELATED WORK WITH THE RESPECTIVE UTILITY OWNERS IN ORDER TO COMPLETE THE PROJECT.
31. CONTRACTOR SHALL HIRE A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THE PROJECT FOR THE DESIGN OF ALL SHORING, SHEETING, BRACING, UNDERPINNING, AND OTHER METHODS USED TO ENSURE THE INTEGRITY OF EXISTING AND NEW STRUCTURAL ELEMENTS THROUGHOUT THE COURSE OF CONSTRUCTION. DETAILED SIGNED AND SEALED SHOP DRAWINGS SHALL BE PREPARED INDICATING ALL WORK TO BE PERFORMED. UNLESS OTHERWISE REVIEWED BY THE CONTRACTOR'S ENGINEER AND SUBMITTED TO THE ENGINEER OF RECORD, THE CONTRACTOR SHALL VERIFY THAT ANY CONSTRUCTION LOADS DO NOT EXCEED THE DESIGN CAPACITY OF THE STRUCTURE AND SHALL SUBMIT SIGNED AND SEALED CALCULATIONS TO THE EOR INDICATING AS SUCH.
32. AT THE COMPLETION OF CONSTRUCTION, THE CONTRACTOR SHALL PREPARE AND SUBMIT AS-BUILT DRAWINGS INDICATING THE FINAL CONFIGURATION OF ALL STRUCTURAL ELEMENTS ON SITE TO THE OWNER AND EOR FOR APPROVAL.
33. SUBMITTALS
    - A. THE FOLLOWING ITEMS REQUIRE SUBMITTAL OF SHOP AND ERECTION DRAWINGS, FOR REVIEW AND APPROVAL PRIOR TO FABRICATION/INSTALLATION:
      - a. STRUCTURAL STEEL
      - b. WOOD AND WOOD COMPONENTS
      - c. TIMBER PILES
    - B. THE FOLLOWING ITEMS ARE CONSIDERED DELEGATED DESIGN, AND REQUIRE SUBMITTAL OF SHOP AND ERECTION DRAWINGS AND STRUCTURAL CALCULATIONS SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF THIS PROJECT FOR REVIEW AND APPROVAL PRIOR TO FABRICATION/INSTALLATION:
      - a. STRUCTURAL TIMBER AND TIMBER FABRICATIONS
      - b. PILE SPLICES
    - C. THE DELEGATED DESIGN ENGINEER SHALL INCLUDE IN THEIR SCOPE AND CALCULATION SUBMITTAL THE CONNECTION OF THEIR COMPONENTS TO THE BASE STRUCTURE. THIS INCLUDES, BUT IS NOT LIMITED TO, BOLTS, WELDS, CAST-IN-PLACE ANCHORS, OR POST-INSTALLED ANCHORS. THEY SHALL ADDITIONALLY PROVIDE LOADS IMPOSED ON THE BASE STRUCTURE FOR REVIEW BY THE EOR.
    - D. THE CONTRACTOR SHALL SUBMIT TO THE EOR A SUBMITTAL SCHEDULE A MINIMUM OF FIFTEEN (15) BUSINESS DAYS PRIOR TO THE ISSUANCE OF THE FIRST SUBMITTAL PACKAGE FOR REVIEW AND APPROVAL.
    - E. THE CONTRACTOR SHALL ALLOW FOR A MINIMUM SUBMITTAL REVIEW TIME OF TEN (10) BUSINESS DAYS BY THE STRUCTURAL ENGINEER OF RECORD PLUS ANY ADDITIONAL TIME REQUIRED BY THE OTHER DESIGN PROFESSIONALS.
    - F. SUBMITTALS ISSUED TO THE DESIGN TEAM FOR REVIEW SHALL BEAR THE CONTRACTOR'S STAMP OF APPROVAL, CERTIFYING THAT ALL FIELD MEASUREMENTS, CONSTRUCTION CRITERIA, MATERIALS, ETC. HAVE BEEN VERIFIED AND EACH SHEET HAS BEEN REVIEWED FOR COMPLETENESS, COORDINATION BETWEEN TRADES, AND COMPLIANCE WITH THE CONTRACT DOCUMENTS. FURTHER, STRUCTURAL SHOP DRAWINGS WILL ONLY BE REVIEWED ONCE ANY REQUIRED CALCULATION PACKAGES FOR THAT WORK HAVE BEEN ISSUED ALONG WITH A SIGNED AND SEALED LETTER BY THE CONTRACTOR'S ENGINEER CERTIFYING THAT THE SHOP DRAWINGS HAVE PROPERLY INCORPORATED THEIR DESIGN, IN ACCORDANCE WITH THE 2010 AISC CODE OF STANDARD PRACTICE, OTHERWISE THE SUBMITTAL PACKAGE WILL BE REJECTED.

STRUCTURAL DESIGN CRITERIA

1. DESIGN LOADS:
   A. RISK CATEGORY: I

   B. WIND DESIGN DATA:

ULTIMATE DESIGN WIND SPEED (V_{ULT}):	109 MPH
NOMINAL DESIGN WIND SPEED (V_{ASD}):	85 MPH
WIND RISK CATEGORY:	I
WIND IMPORTANCE FACTOR (Iw):	1.0
EXPOSURE CATEGORY:	D

   C. EARTHQUAKE DESIGN DATA:

SEISMIC IMPORTANCE FACTOR (Ie):	1.0
SPECTRAL RESPONSE ACCELERATIONS:	Ss= .263g S1= .058g
SITE CLASS:	D
SPECTRAL RESPONSE COEFFICIENTS:	Sds= .279g Sd1= .092g
SEISMIC DESIGN CATEGORY (SDC):	B
SEISMIC RESPONSE COEFFICIENT (CS):	0.186
DESIGN BASE SHEAR (PER PILE):	0.71 KIPS
RESPONSE MODIFICATION FACTOR (R):	1½
ANALYSIS PROCEDURE:	EQUIVALENT LATERAL FORCE

   D. FLOOD ZONE DESIGN DATA:
      SPECIAL FLOOD HAZARD ZONE: VE

SPECIAL INSPECTION NOTES

1. AS PER CHAPTER 17 OF THE NEW YORK STATE BUILDING CODE, THE FOLLOWING ITEMS ARE SUBJECT TO SPECIAL INSPECTION BY AN INDEPENDENT QUALIFIED INSPECTION AND/OR TESTING AGENCY HIRED BY THE OWNER AND APPROVED BY THE ENGINEER AND BUILDING OFFICIAL.
   - A. STRUCTURAL OBSERVATIONS (1704.6)
   - B. WOOD CONSTRUCTION (1705.5)
   - C. DEEP DRIVEN FOUNDATIONS (1705.7)
2. THE SPECIAL INSPECTOR SHALL HAVE QUALIFICATIONS IN ACCORDANCE WITH APPLICABLE STATE AND LOCAL DOB REQUIREMENTS AND PROVIDE SPECIAL INSPECTION REPORTS WITHIN 5 BUSINESS DAYS OF PERFORMING THE INSPECTION INCLUDING NOTIFICATION/DISTRIBUTION TO THE ENGINEER.
3. THE CONTRACTOR SHALL PROVIDE WRITTEN NOTICE TO THE INSPECTOR FOR ALL ITEMS REQUIRING INSPECTION A MINIMUM OF 72 HOURS PRIOR TO COMMENCEMENT OF THAT PORTION OF WORK. FOR ON-GOING INSPECTIONS THE CONTRACTOR SHALL PROVIDE 24 HRS ADVANCE NOTICE BEFORE INSPECTION.
4. THE CONTRACTOR SHALL PROVIDE SAFE ACCESS AND MEANS TO ALLOW THE ABOVE TESTING AND/OR INSPECTION REQUIREMENTS TO BE COMPLETED IN A MANNER CONSISTENT WITH APPLICABLE OSHA, STATE, AND LOCAL DOB REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE SCAFFOLDING, PERSONNEL HOISTS OR ANY OTHER EQUIPMENT NECESSARY TO ACCESS AREAS SUBJECT TO INSPECTIONS.
5. INSPECTION DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO PERFORM WORK IN A WORKMAN LIKE MANNER AND IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. THE INSPECTOR IS NOT RESPONSIBLE FOR SUPERVISING CONSTRUCTION OR FOR PROVIDING "QUALITY CONTROL" SERVICES FOR THE CONTRACTOR.

REMOVAL NOTES

1. DURING ALL PHASES OF REMOVAL AND CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN STRUCTURAL INTEGRITY OF STRUCTURES TO BE REMOVED AND ADJACENT FACILITIES TO REMAIN, WITH INTERIOR OR EXTERIOR SHORING, BRACING OR SUPPORT TO PREVENT MOVEMENT, SETTLEMENT, DAMAGE, OR COLLAPSE OF STRUCTURES.
2. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS BY MEASUREMENTS AT THE JOB SITE AND SHALL TAKE ANY AND ALL OTHER MEASUREMENTS NECESSARY TO VERIFY THE DRAWINGS AND TO ALLOW PROPER PERFORMANCE OF HIS WORK. ANY DISCREPANCY BETWEEN THE DRAWINGS AND THE MEASURED DIMENSIONS OF THE EXISTING STRUCTURE SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE ENGINEER. NO WORK SHALL PROCEED UNTIL SUCH DISCREPANCY HAS BEEN RECTIFIED. SUCH DISCREPANCIES BETWEEN THE DRAWINGS AND THE MEASURED DIMENSIONS SHALL NOT BE THE REASON FOR ANY EXTRA COST OR DELAY IN THE EXECUTION OF THE WORK AND THE WORK SHALL BE PERFORMED PER INTENT OF THE CONTRACT DOCUMENTS AT NO EXTRA COST TO THE OWNER.
3. WHERE EXISTING WORK IS TO BE CUT, UNDERPINNED AND/OR SHEETED, THE CONTRACTOR SHALL PROVIDE ALL SHEETING, SHORING, NEEDLING, BRACING, WEDGING AND DRY-PACKING AND SHALL BE RESPONSIBLE FOR THE SAFETY OF THE STRUCTURE DURING THIS OPERATIONS AT NO EXTRA COST TO THE OWNER. EXISTING STRUCTURES TO REMAIN SHALL BE SAFED-OFF AND PROTECTED FROM ELEMENTS AT ALL TIMES.
4. TEMPORARY BRACING OR SHORING SHALL BE PROVIDED WHEREVER REQUIRED TO SUPPORT LOADS AS MAY BE IMPOSED UPON THE STRUCTURE DURING CONSTRUCTION. PROVIDE TEMPORARY SHORING WHEREVER REQUIRED DUE CONSTRUCTION SEQUENCING FOR THE SUPPORT OF THE STRUCTURE PRIOR TO COMMENCEMENT OF WORK. SUCH BRACING OR SHORING SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND SHALL REMAIN IN PLACE AS LONG AS REQUIRED TO MAINTAIN SAFETY.
5. THE CONTRACTOR IS CAUTIONED TO MAKE CONTINUOUS OBSERVATIONS OF EXISTING STRUCTURE DURING THE PERFORMANCE OF HIS WORK. SHOULD HE BECOME AWARE OF ANY SITUATIONS THAT REQUIRE FURTHER INVESTIGATION OR STUDY (SUCH AS CRACKS IN CONCRETE AND PARTITIONS, DETERIORATION OF EXISTING STRUCTURE TO REMAIN, EXCESSIVE DEFLECTIONS...), THEY SHALL NOTIFY THE ENGINEER IMMEDIATELY.
6. AREAS OF WORK SHOULD BE EMPTY DURING DEMOLITION. REMOVE STRUCTURAL ELEMENTS FROM THE TOP DOWN. DO NOT ALLOW DEBRIS TO PILE UP OR FALL IN THE WATER. THE CONTRACTOR SHALL BRING ANY QUESTIONABLE LOCATIONS OR SPECIAL CONDITIONS TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR CLARIFICATION.
7. THE CONTRACTOR SHALL HIRE AN ENGINEER LICENSED IN THE STATE OF PROJECT TO PREPARE THE SEQUENCE THE CONTRACTOR WILL FOLLOW DURING THE EXECUTION OF THE WORK. THE DETAILS AND ENGINEERING OF SHORING, BRACING AND OTHER CONSTRUCTION REQUIRED FOR SUCH WORK, AND THE PHASING, STAGING AND SEQUENCE OF SUCH OPERATION SHALL BE PREPARED AS SHOP DRAWINGS BY A PROFESSIONAL ENGINEER RETAINED BY THE CONTRACTOR OR SUBCONTRACTOR. THE CONTRACTOR SHALL PROVIDE A RECORD COPY OF THE DRAWINGS AND FORMS TO THE OWNER, ENGINEER OF RECORD AND THE ENGINEER RESPONSIBLE FOR THE INSPECTION OF SUCH WORK, WHO SHALL REPORT TO THE OWNER ANY DEVIATIONS OBSERVED DURING HIS INSPECTION.
8. DRAWINGS AS PREPARED BY THE CONTRACTOR'S ENGINEER RESPONSIBLE FOR SEQUENCE, SHORING, STAGING, ETC. SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 33 OF THE NEW YORK STATE BUILDING CODE. THESE DRAWINGS SHALL BE SUBMITTED TO THE VILLAGE OF BAYVILLE FOR APPROVAL AND PERMIT WHICH MUST BE OBTAINED PRIOR TO THE START OF ANY WORK.

WOOD NOTES

1. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE CODE REFERENCED EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION" AND THE REFERENCED SUPPLEMENT OF THE AMERICAN FOREST & PAPER ASSOCIATION.
2. ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE AND/OR EXPOSED TO WEATHER SHALL BE PRESSURE TREATED DIMENSIONAL LUMBER. PRESSURE TREATED FRAMING SHALL MEET THE AWPA (AMERICAN WOOD PRESERVERS ASSOCIATION) STANDARD U1 USE CATEGORY SYSTEM AS LISTED BELOW:
   A. EXPOSED TO EXTERIOR WEATHER IN THE FINISHED STRUCTURE: UC3B
   B. IN CONTACT WITH EARTH: UC4A
3. CUT ENDS OF PRESSURE TREATED WOOD SHALL BE PROTECTED PER AWPA STANDARD M4-CARE OF PRESERVATIVE TREATED PRODUCTS.
4. EXCEPT WHERE NOTED OTHERWISE, ALL DIMENSIONAL LUMBER AND PILES SHALL BE KILN DRIED SOUTHERN PINE NO. 2 OR BETTER, MAXIMUM MOISTURE CONTENT OF 15%, WITH THE MINIMUM LIMITS STATED BELOW:
   Fb = 1950 PSI
   Fv = 160 PSI
   Fc = 1250 PSI
   E = 1,500,000 PSI
5. UNLESS OTHERWISE NOTED, ALL NEW STEEL PLATES AND ANGLES AT FLOATING DOCK CONNECTIONS SHALL BE A MINIMUM OF ⅜" THICK AND MADE OF ASTM A276 TYPE 316 STAINLESS STEEL, WITH A MINIMUM YIELD STRENGTH OF 30 KSI.
6. UNLESS OTHERWISE NOTED, ALL NEW BOLTS AND MISCELLANEOUS ACCESSORIES AT FLOATING DOCK CONNECTIONS SHALL BE MADE OF ASTM F593 TYPE 316 STAINLESS STEEL.
7. ALL BOLTS FOR WOOD TO WOOD CONNECTIONS SHALL BE HOT-DIP GALVANIZED ASTM A307 GRADE A UNLESS OTHERWISE NOTED AND PROVIDED WITH GALVANIZED WASHERS OR PLATES. ALL BOLT HOLES SHALL BE DRILLED NOT MORE THAN THE NOMINAL DIAMETER OF THE BOLT PLUS 1/16" USING SHARP BITS AND SLOW FEED RATES. BOLTS SHALL BE SNUG TIGHT, BUT NOT CRUSH THE WOOD.
8. STEEL CONNECTORS MANUFACTURED BY SIMPSON STRONG TIE OR APPROVED EQUAL SHALL BE USED TO JOIN RAFTERS, TRUSSES, JOISTS, OR BEAMS TO OTHER MEMBERS AT FLUSH-FRAMED CONDITIONS, UNLESS OTHERWISE NOTED. HANGERS SHALL BE TOP FLANGE TYPE OF A SIZE SPECIFICALLY DESIGNED FOR THE MEMBER SUPPORTED, UNLESS OTHERWISE NOTED.
9. THE NUMBER, SIZE AND TYPE OF FASTENERS USED TO INSTALL ALL STEEL CONNECTORS SHALL BE AS SPECIFIED IN THE CONNECTOR MANUFACTURER'S MANUAL UNLESS OTHERWISE NOTED. WHERE MULTIPLE FASTENING OPTIONS ARE LISTED IN THE MANUAL, PROVIDE THE ASSEMBLY WITH THE HIGHEST RATED CAPACITY.
10. ANY CONNECTORS SHOWN IN THE DRAWINGS SATISFY THE MINIMUM REQUIREMENTS. WHERE REACTIONS ARE SHOWN OR AN ALTERNATE CONNECTION IS PROPOSED THE CONTRACTOR SHALL SUBMIT CALCULATIONS, BEARING THE SIGNATURE AND SEAL OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE HAVING JURISDICTION, THAT PROVE THE ALTERNATE CONNECTOR SELECTION. FOR REACTIONS SHOWN IN THE DRAWINGS THE DURATION FACTOR CD = 1.0.
11. GALVANIZED AND STAINLESS STEEL SHALL NOT BE MIXED IN ANY ONE CONNECTION.
12. NAILING THROUGH WOOD FRAMING MAY BE HAND OR MECHANICALLY DRIVEN. NAILING SHOWN IN PLANS IS FOR COMMON NAILS, UNLESS OTHERWISE NOTED. WHERE NAILS OF SMALLER SIZE (GAUGE OR EMBEDMENT) ARE SUBSTITUTED, INCREASE NAILING COUNT/SPACING AS REQUIRED TO PROVIDE AN EQUAL OR GREATER CAPACITY.
13. NO STRUCTURAL FRAMING SHALL BE NOTCHED OR DRILLED WITHOUT PRIOR APPROVAL OF THE ENGINEER UNLESS OTHERWISE NOTED.
14. STEEL CONNECTORS, JOIST HANGERS, FRAMING ANCHORS & RAFTER ANCHORS SHALL BE MINIMUM 18 GAUGE PRIME GALVANIZED STEEL AS MANUFACTURED BY SIMPSON, OR APPROVED EQUAL. SPECIAL NAILS AS SUPPLIED BY MANUFACTURER SHALL BE USED FOR REQUIRED NAILING.
15. PROVIDE CONNECTORS THAT ARE STAINLESS STEEL FOR CONNECTION TO FIRE RETARDANT TREATED OR PRESSURE PRESERVATIVE TREATED LUMBER.
16. ANY MISCELLANEOUS STEEL BEING REMOVED AND REINSTALLED AS PART OF THIS WORK SHALL UNDERGO OIL FREE ABRASIVE BLASTING AT ALL INSTANCES OF OXIDATION AND SCALE WHERE 5-25% OF THE MEMBER'S THICKNESS HAS BEEN LOST. AFTER REMOVAL OF SCALE, BELZONA 6111 OR APPROVED EQUIVALENT SHALL BE APPLIED TO PROTECT AGAINST FUTURE CORROSION. CONTRACTOR TO COORDINATE COLOR WITH THE VILLAGE OF BAYVILLE.

MARINE NOTES

1. TIMBER MEMBERS WITH THROUGH CRACKS, EXTENSIVE DETERIORATION, THROUGH ROTTING, OR MISSING PORTIONS SHALL BE REPLACED, AS NEEDED.
2. ONLY SELECT PORTIONS OF HORIZONTAL BLOCKING WITH HEAVY DETERIORATION, THROUGH ROTTING OR MISSING PORTIONS SHALL BE REPAIRED BY PARTIAL REPLACEMENT AND/OR SPLICING OF NEW IN-KIND BLOCKING TO EXISTING.
3. EXISTING ANCHOR RODS, OR THROUGH BOLTS IF MISSING, OR SHOWING DETERIORATION OF MORE THAN 60% TO GROSS CROSS SECTION AREA, SHALL BE REPLACED OR ENTIRELY, AS NEEDED.
4. IN LIEU OF PHYSICAL REPLACEMENT OF PARTIALLY DETERIORATED TIMBER MEMBERS, CONTRACTOR MAY SUGGEST ALTERNATE REPAIR PROCEDURES (SUCH AS EPOXY SEALING, ETC.), FOR APPROVAL BY ENGINEER.
5. THE FOLLOWING DESIGN SPECIFICATIONS WITH ALL PROVISIONS IN EFFECT AS OF JANUARY 30, 2019 SHALL BE USED FOR THE PILINGS AND (RE-INSTALLATION) OF DOCK WORK:
   - A. FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) P-55 COASTAL CONSTRUCTION MANUAL.
   - B. UNITED STATES ARMY CORE OF ENGINEERS (USACE) TIMBER PILE DESIGN AND CONSTRUCTION MANUAL (2016)
6. THE CONTRACTOR SHALL ASSURE THAT BULKHEAD ELEMENTS ARE INSTALLED AS PER THIS SPECIFICATION AND SHALL USE THE APPROPRIATE GUIDEBEAMS AND/OR TEMPLATE SYSTEMS TO ASSURE ALIGNMENT AND PLUMBNESS CRITERIA ARE MET.
7. TIMBER PILES AND PLANKING SHALL BE REMOVED ONLY WHEN INSTALLATION OF THE NEW PILES ARE COMPLETED TO AVOID DOCK COLLAPSE.
8. THE TIMBER SIZES TO BE USED FOR THIS PROJECT SHOULD BE AS INDICATED IN THE CONTRACT DRAWINGS. ALL TIMBER ELEMENTS SHOULD BE PRESSURE TREATED SOUTHERN PINE TREATED IN ACCORDANCE WITH AWPA STANDARDS WITH 1.0 RETENTION. ANY DEVIATION FROM THIS NEEDS TO BE APPROVED BY ENGINEER OR OWNER IN WRITING BEFORE USE ON THE PROJECT SITE.
9. DURING REMOVAL OPERATIONS, THE CONTRACTOR SHALL NOT DROP WASTE CONCRETE, DEBRIS, OR OTHER MATERIAL UNLESS AT AN AUTHORIZED DISPOSAL SITE. PLATFORMS, NETS, SCREENS, OR OTHER PROTECTIVE DEVICES SHALL BE USED TO CATCH MATERIAL. IF MATERIAL FALLS ON THE AREA BELOW AND ADJACENT TO THE CONTRACTOR'S OPERATIONS, IT SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR ON A REGULAR RECURRING BASIS.
10. THE COST OF FURNISHING, INSTALLING, MAINTAINING, REMOVING, AND DISPOSING OF ALL PLATFORMS, NETS, SCREENS, AND OTHER PROTECTIVE DEVICES, SHALL BE INCLUDED IN THE UNIT BID PRICES OF THE APPROPRIATE ITEMS IN THE CONTRACT.
11. DREDGING IS RESTRICTED BETWEEN FEBRUARY 1ST AND SEPTEMBER 30TH TO PROTECT ESSENTIAL FISH HABITATS AND FISHERIES. IN TURN, DREDGING IS PERMISSIBLE FROM OCTOBER 1ST THROUGH JANUARY 31ST.

PILE INSTALLATION NOTES

1. THE PILES SHALL BE INSTALLED ONLY IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE.
2. CONTRACTOR SHALL KEEP A DETAILED RECORD OF ALL PILE DRIVING OPERATIONS. THESE RECORDS MUST BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR DAILY REVIEW.
3. CONTRACTOR AND OWNER'S REPRESENTATIVE SHALL KEEP AN INDEPENDENT RECORD OF EVERY DRIVEN PILE. THE RECORDS (SIGNED BY NYS PE) SHALL GIVE DATE, TIME, DIAMETER, LENGTH, LOCATION, TYPE, TOTAL DEPTH OF PENETRATION, RATE OF PENETRATION, NUMBER OF BLOWS PER FOOT IN LENGTH, BLOWS PER 1 INCH FOR A MINIMUM OF THE LAST 3 INCHES, THE KIND AND SIZE OF HAMMER USED IN DRIVING AND ANY UNUSUAL PHENOMENA SHALL BE NOTED AND RECORDED, ESPECIALLY IF THEY INDICATE POSSIBLE DAMAGE TO THE PILE.
4. THE CONTRACTOR SHALL REMOVE ANY SURFACE AND/OR SHALLOW DEPTH OBSTRUCTIONS TO OBTAIN THE REQUIRED PENETRATION OF THE PILES.
5. IF THE CONTRACTOR REQUESTS SPECIAL METHODS TO ADVANCE THE PILE TO THE REQUIRED PENETRATION, SUCH SUPPLEMENTARY METHODS WILL BE SUBJECT TO THE OWNER'S REPRESENTATIVES APPROVAL.
6. FOR PILE INSTALLATION MONITORING PURPOSES, CONTRACTOR SHALL PAINT MARKINGS ON EACH PILE AT 1 FOOT INTERVALS, WITH A LABEL AT EACH 5 FEET INTERVAL, STARTING FROM THE TOE OF THE PILE.
7. TOLERANCES FOR PILE DRIVING:
   - 7.1. DEVIATION FROM VERTICAL SHALL NOT BE MORE THAN 1 PERCENT ALONG THE PILE LENGTH.
   - 7.2. PILE LOCATION: THE TOP OF THE PILE SHALL BE WITHIN 3 INCHES OF THE INDICATED PLAN LOCATION, UNLESS OTHERWISE NOTED.
   - 7.3. PIPE SWEEP: PILE SHALL NOT HAVE A PERMANENT SWEEP OR CURVATURE OF MORE THAN 3 INCHES FROM THE PILE AXIS BETWEEN PILE HEAD AND MUDLINE.

EXCAVATION AND BACKFILL NOTES

1. GRANULAR BACKFILL (OBTAINED FROM SITE MATERIAL OR DREDGED MATERIAL OR IMPORTED) SHALL BE CLEAN GRANULAR MATERIAL, FREE FROM DELETERIOUS DEBRIS OR ORGANIC MATTER, WITH NO MORE THAN 15 PERCENT PASSING THE NO. 200 SIEVE, AND IS SUBJECT TO APPROVAL BY THE ENGINEER.
2. BACKFILL SHALL BE PLACED IN MAXIMUM 12-INCH LOOSE LIFTS, WITH EACH LIFT COMPACTED TO 95 PERCENT OF MAXIMUM DRY DENSITY ACCORDING TO ASTM, D1557 MODIFIED PROCTOR TEST.
3. ALL PROVIDE PROOF ROLLING OF ALL SURFACE AREAS AROUND THE ENTIRETY OF THE SITE AND ROLLER COMPACTION WITH THE LARGEST ROLLER COMPACTOR EQUIPMENT AVAILABLE: MINIMUM 10 TON STATIC WEIGHT SMOOTH AND/OR PAD FOOT DRUM ROLLER, SUCH AS THE VOLVO MODEL SD115B OR APPROVED EQUAL. AS EXAMPLE, THIS COMPACTOR IS AN 84-INCH WIDE SINGLE DRUM ROLLER, WITH CENTRIFUGAL FORCE GREATER THAN 50,000 FT-POUNDS, AND WEIGHTS OVER 25,000 POUNDS.
4. UNCONSOLIDATED RIVER SILTS ARE ANTICIPATED TO REQUIRE PROCESSING WITH CEMENT TO FORM PROCESSED DREDGED MATERIAL (PDM). MIXTURE TO INCLUDE APPROXIMATELY 8% CEMENT, AND AFTER CURING ACHIEVE A MINIMUM WEIGHT OF 80 PCF AND A MINIMUM SHEAR STRENGTH OF 1,500 PSF. CONTRACTOR TO DESIGN MIX AS REQUIRED TO ACHIEVE UNIT WEIGHT AND STRENGTH AND SUBMIT TO ENGINEER OR APPROVAL. A SITE-SPECIFIC TEST PROGRAM SHALL BE UNDERTAKEN TO DETERMINE THE OPTIMUM MIX PROPORTIONS OF VARIOUS CONSTITUENTS, AFTER WHICH PLACEMENT AND QUALITY CONTROL MEASURES WILL BE FURTHER REFINED AND FINALIZED. PDM SHALL BE ALLOWED TO CURE IN PLACE WITHOUT DISTURBANCE.

LEGEND

	CENTER LINE		SIGN POST
	PROPERTY LINE (PLAN OR PROFILE)	W	EXISTING WATER MAIN
	EXISTING CURB		STREET LIGHT POLE
	PROPOSED NEW CURB	D	EXISTING STORM DRAIN PIPE
	EXISTING CURB TO BE REMOVED, RELOCATED & REPLACED WITH NEW CURB		WATER VALVE
	EXISTING SIDEWALK		GAS VALVE
	EXISTING SIDEWALK TO BE REMOVED & REPLACED		SPRINKLER HEAD
	PROPOSED SIDEWALK		MONITORING WELL
	CHAIN LINK FENCE	Ⓢ Ⓓ	EXISTING MANHOLE (SEWER-S, DRAINAGE-D)
	STOCKADE FENCE		
	PVC FENCE		
	HEDGE	Ⓓ	EXISTING CATCH BASIN
15"	DECIDUOUS TREE AND DIAMETER		
S	SHRUB		
	LIPA OR TELEPHONE POLE		GRADING LIMIT LINE
	FIRE HYDRANT		PROPOSED SURFACE FLOW
DIP	DUCTILE IRON PIPE	H.P.	HIGH POINT
PVC	POLYVINYL CHLORIDE PIPE	TC.	TOP OF CURB
RCP	REINFORCED CONCRETE PIPE	BC.	BOTTOM OF CURB
	VEGETATION	RIM	MANHOLE ELEVATION
	PILE TO BE REMOVED AND REPLACED	GR	CATCH BASIN GRATE ELEVATION
	NEW FLOATS	CI	BOTTOM CURB INLET ELEVATION
	RELOCATED FINGER FLOATING DOCKS		
	EXISTING TO BE REMOVED WHILE DREDGING		
	PROPOSED RIP RAP		
	PROPOSED SPARTINA ALTERNIFLORA		

SHEET LIST

NO.	DATE	REVISION	BY

GENERAL NOTES, SHEET INDEX, LEGEND

INC. VILLAGE OF BAYVILLE
MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

LiRo Engineers, Inc.
A LiRo-Hill Company
New York, N.Y. 212-563-0280 [T]

SCALE:
PLAN:
PROFILE:
HORIZ:
VERT:
DATE: 04/16/2025
DRAWING NUMBER CS-001

DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:	SHEET NUMBER
AS	DS	DL	25-019-0778	002 OF 009

EXISITNG CONDITIONS PLAN NOTES

1. THE MEAN LOW WATER LEVEL SERVES AS THE REFERENCE DATUM WITH AN ELEVATION OF 0.00 IDENTIFIED ON THE SURVEY.
2. ELEVATIONS AND CONTOURS IDENTIFIED ARE IN A DATUM BASED ON THE MEAN LOW WATER, WHICH IS 3.94' BELOW NAVD88 AS PER NOAA ONLINE VERTICAL DATUM TRANSFORMATION. STAR NAIL ELEVATION = 10.78, MLW = 6.84 NAVD88.
3. BEARINGS SHOWN ON THIS SURVEY REFER TO NORTH AMERICAN DATUM OF 1983 (NAD83) NEW YORK STATE PLANE COORDINATE SYSTEM (NYSPCS) LONG ISLAND ZONE UNLESS OTHERWISE NOTED.
4. THE WIDTH OF THE EXISTING FLOATING FINGER DOCKS IS 2'–6" UNLESS OTHERWISE NOTED.
5. EXISTING FLOATING FINGER DOCKS VARY IN LENGTH AND SPACING. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS SHOWN.
6. UTILITIES ALONG FLOATING DOCKS ARE NOT SHOWN FOR CLARITY.
7. LANDWARD LIMITS OF TIDAL WETLANDS AS DETERMINED BY W.P. BOWMAN, PhD (LAND USE) ON 01/15/2025.

0 20' 40'

NO.	DATE	REVISION	BY

EXISTING CONDITIONS PLAN

INC. VILLAGE OF BAYVILLE MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

LiRo Engineers, Inc.
A LiRo-Hill Company
New York, N.Y. 212-563-0280 [T]

SCALE:
PLAN: 1"=20'
PROFILE:
HORIZ:
VERT:

DATE: 04/16/2025

DRAWING NUMBER CS-100

DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:	SHEET NUMBER
AS	AS	DL	25-019-0778	3 OF 9

CONSTRUCTION PLAN NOTES

1. LANDWARD LIMITS OF TIDAL WETLANDS CORRESPOND TO MEAN HIGH WATER AS DETERMINED BY W.P. BOWMAN, PhD (LAND USE) ON 01/15/2025.
2. THE MEAN LOW WATER LEVEL SERVES AS THE REFERENCE DATUM WITH AN ELEVATION OF 0.00 IDENTIFIED ON THE SURVEY.
3. EXISTING FLOATING FINGER DOCKS VARY IN LENGTH, WIDTH, AND SPACING.
4. UTILITIES ALONG FLOATING DOCKS ARE NOT SHOWN FOR CLARITY.
5. BEARINGS SHOWN ON THIS SURVEY REFER TO NORTH AMERICAN DATUM OF 1983 (NAD83) NEW YORK STATE PLANE COORDINATE SYSTEM (NYSPCS) LONG ISLAND ZONE UNLESS OTHERWISE NOTED.
6. EXISTING FINGER DOCK NUMBER DESIGNATIONS ON MAIN DOCK ARE TO BE RELOCATED TO ALIGN WITH NEW LOCATIONS OF FINGER DOCKS.
7. TYPICAL SECTIONS SHOWN OF DREDGING AREA LIMITS ARE TAKEN AT STA 1+65, 3+17, 6+18 ALONG DREDGING BASELINE.
8. NEW PILE LOCATIONS ARE TO BE VERIFIED IN THE FIELD.

New Piling Locations

Point #	Northing	Easting	Description
1	267198.01	1104043.84	WP-1
2	267198.64	1104067.43	WP-2
3	267198.94	1104093.86	WP-3
4	267198.71	1104118.57	WP-4
5	267195.62	1104143.74	WP-5
6	267200.41	1104169.58	WP-6
7	267196.86	1104193.97	WP-7
8	267199.99	1104218.34	WP-8
9	267196.70	1104243.69	WP-9
10	267201.42	1104268.24	WP-10
11	267197.34	1104292.91	WP-11
12	267201.37	1104319.11	WP-12
13	267197.84	1104344.10	WP-13
14	267193.71	1104376.69	WP-14
15	267194.61	1104407.55	WP-15
16	267196.28	1104437.53	WP-16
17	267196.75	1104468.59	WP-17
18	267256.46	1104467.52	WP-18
19	267248.08	1104445.15	WP-19
20	267248.61	1104424.68	WP-20
21	267248.01	1104404.31	WP-21
22	267247.58	1104383.79	WP-22
23	267247.29	1104363.60	WP-23
24	267250.62	1104342.79	WP-24
25	267250.26	1104316.71	WP-25

New Piling Locations

Point #	Northing	Easting	Description
26	267245.72	1104296.86	WP-26
27	267245.98	1104276.14	WP-27
28	267245.83	1104256.10	WP-28
29	267245.37	1104236.26	WP-29
30	267246.33	1104216.21	WP-30
31	267245.76	1104196.15	WP-31
32	267246.07	1104175.84	WP-32
33	267245.22	1104155.89	WP-33
34	267244.46	1104135.72	WP-34
35	267244.51	1104115.82	WP-35
36	267243.65	1104096.03	WP-36
37	267243.50	1104077.02	WP-37
38	267242.97	1104057.96	WP-38
39	267316.79	1104023.17	WP-39
40	267315.86	1104012.77	WP-40
41	267181.06	1103993.26	WP-41
42	267179.39	1103965.82	WP-42
43	267177.72	1103938.37	WP-43
44	267131.80	1103941.04	WP-44
45	267133.47	1103968.49	WP-45
46	267135.14	1103995.94	WP-46
47	267155.33	1104023.09	WP-47

LEGEND

NEW FLOATS

EXISTING FLOATING "FINGER DOCKS" TO BE REMOVED AND REINSTALLED AFTER DREDGING

NO.	DATE	REVISION	BY

CONSTRUCTION PLAN

INC. VILLAGE OF BAYVILLE
MAINTENANCE DREDGING AT THE CREEK
BEACH MARINA

LiRo Engineers, Inc.
A LiRo-Hill Company
New York, N.Y. 212-563-0280 [T]

SCALE:
PLAN: 1"=20'
PROFILE:
HORIZ:
VERT:
DATE: 04/16/2025
DRAWING NUMBER CS-101

DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:
AS	AS	DL	25-019-0778

GRADING PLAN NOTES

1. LANDWARD LIMITS OF TIDAL WETLANDS CORRESPOND TO MEAN HIGH WATER AS DETERMINED BY W.P. BOWMAN, PhD (LAND USE) ON 01/15/2025.
2. THE MEAN LOW WATER LEVEL SERVES AS THE REFERENCE DATUM WITH AN ELEVATION OF 0.00 IDENTIFIED ON THE SURVEY.
3. EXISTING FLOATING FINGER DOCKS VARY IN LENGTH, WIDTH AND SPACING.
4. UTILITIES ALONG FLOATING DOCKS ARE NOT SHOWN FOR CLARITY.
5. BEARINGS SHOWN ON THIS SURVEY REFER TO NORTH AMERICAN DATUM OF 1983 (NAD83) NEW YORK STATE PLANE COORDINATE SYSTEM (NYSPCS) LONG ISLAND ZONE UNLESS OTHERWISE NOTED.
6. ELEVATIONS AND CONTOURS ARE SHOWN RELATIVE TO THE MEAN LOW WATER LEVEL.
7. EXISTING FINGER DOCK NUMBER DESIGNATION TO BE ADDED AT A LATER DATE.
8. NEW PILE LOCATIONS ARE TO BE VERIFIED IN THE FIELD.
9. BATHMETRIC DATA, AND PROPOSED CHANNEL BOTTOM PLANMETRIC CALCS ARE FOR 20'X20' CLOSED AREA ENCOMPASSING THOSE VALUES.

0 20' 40'

NO.	DATE	REVISION	BY

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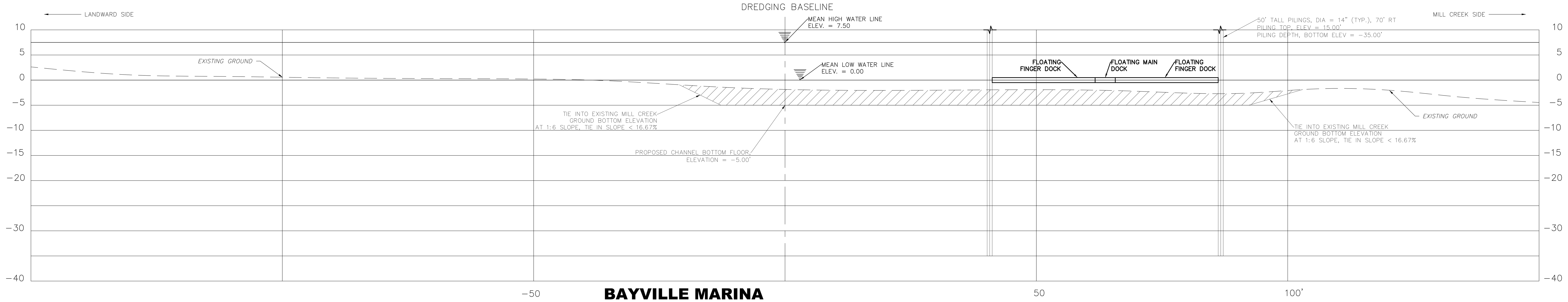
GRADING PLAN

INC. VILLAGE OF BAYVILLE
MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

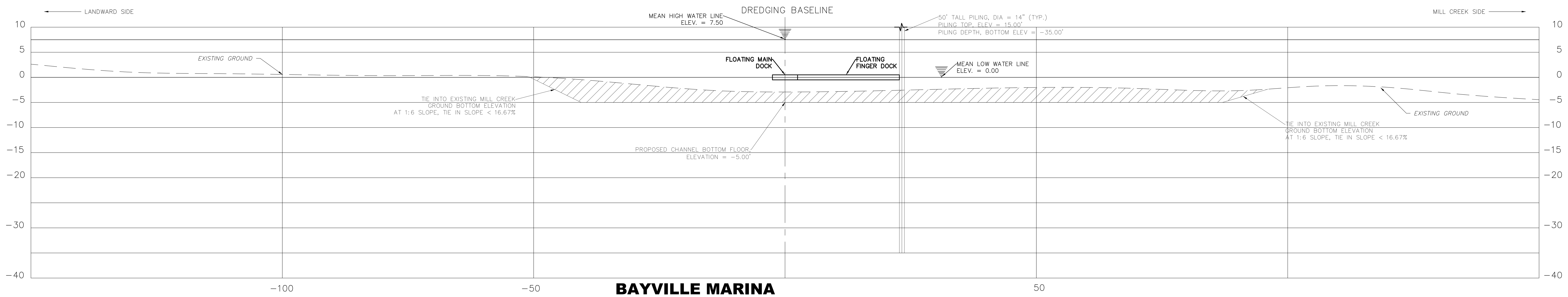
LiRo Engineers, Inc.
A LiRo-Hill Company
New York, N.Y. 212-563-0280 [T]

SCALE: PLAN: 1" = 20'
PROFILE: HORIZ: VERT:
DATE: 04/16/2025
DRAWING NUMBER CS-102

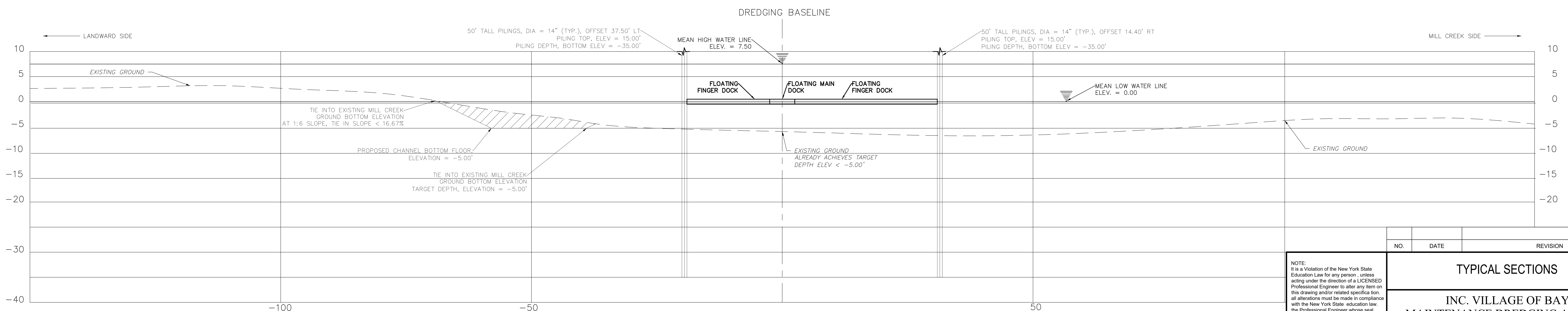
DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:	SHEET NUMBER
AS	AS	DL	25-019-0778	005 OF 009



BAYVILLE MARINA
1 TYPICAL SECTION - MILL CREEK STA 1+65
1" = 10'



BAYVILLE MARINA
2 TYPICAL SECTION - MILL CREEK STA 3+17
1" = 10'



BAYVILLE MARINA
3 TYPICAL SECTION - MILL CREEK STA 6+18
1" = 10'

NOTE

PROJECT DREDGING BASELINE ALONG MAIN FLOATING DOCK, SAMPLE LINES FOR TYPICALS SHOWN, PLAN VIEW LOCATIONS DISPLAYED ON SHEET 4, CS 101 - CONSTRUCTION PLAN.

0 10' 20'

NO.	DATE	REVISION	BY

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TYPICAL SECTIONS

INC. VILLAGE OF BAYVILLE
MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

LiRo Engineers, Inc.
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SCALE:
PLAN: 1" = 10'
PROFILE:
HORIZ:
VERT:
DATE: 04/16/2025
DRAWING NUMBER CS-200

DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:	SHEET NUMBER
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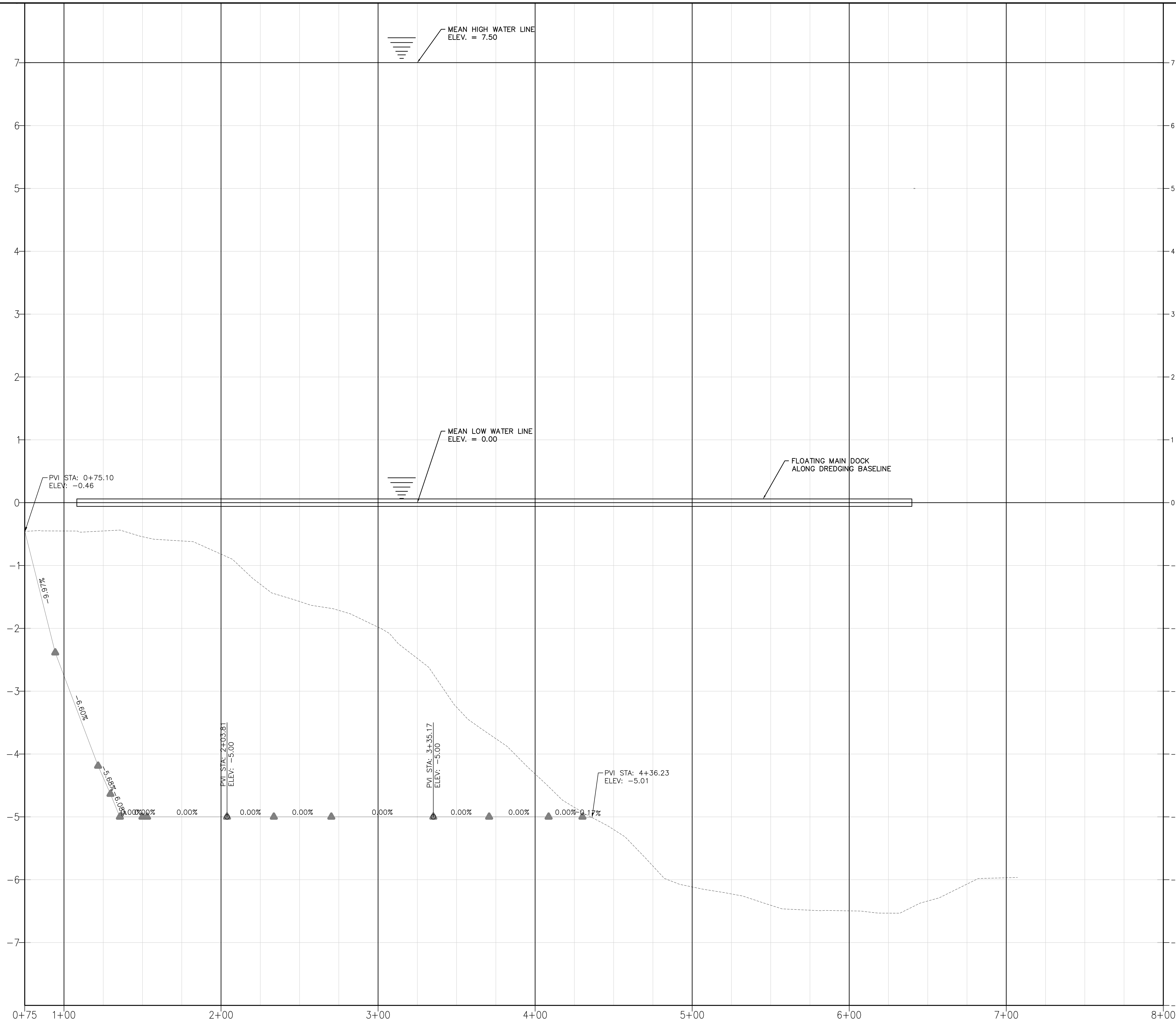

EXISTING ELEVATION	PROPOSED ELEVATION
-0.45	-2.755
-0.45	-4.375
-0.54	-5.000
-0.61	-5.000
-0.82	-5.000
-1.30	-5.000
-1.57	-5.000
-1.71	-5.000
-1.98	-5.000
-2.48	-5.000
-3.25	-5.000
-3.76	-5.000
-4.32	-5.000
-4.85	-5.000
-5.20	
-5.78	
-6.11	
-6.23	
-6.41	
-6.48	
-6.50	
-6.53	
-6.34	
-6.07	
-5.97	

NOTES

1. PILES NOT SHOWN FOR CLARITY.

0 30' 60'

NO.	DATE	REVISION	BY

PROFILES AND ELEVATIONS

INC. VILLAGE OF BAYVILLE MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

LiRo Engineers, Inc.
A LiRo-Hill Company
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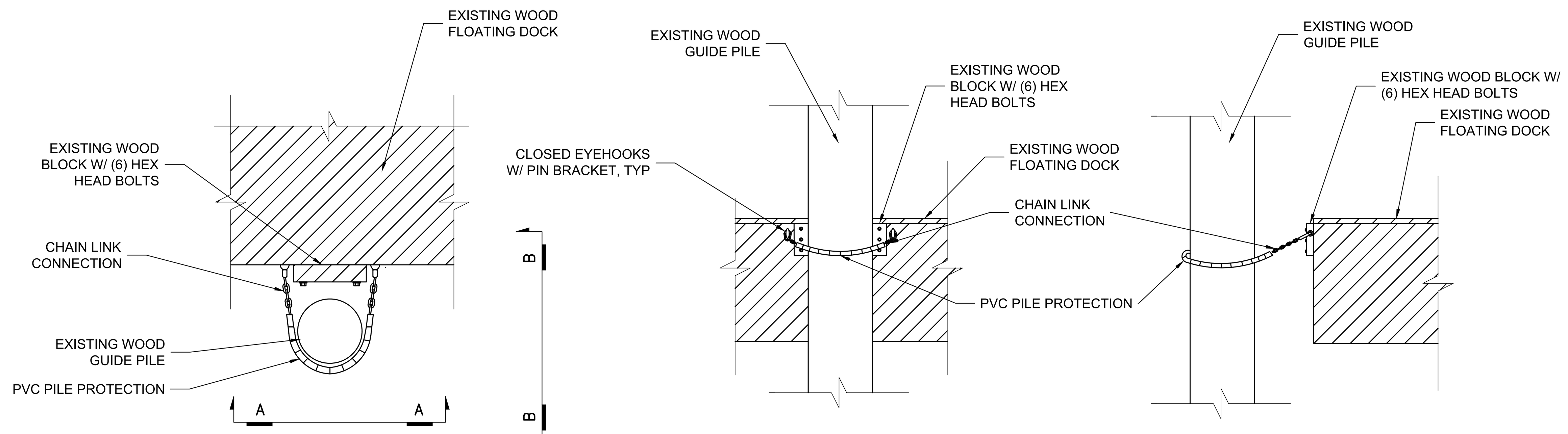
SCALE:
PLAN: 1" = 30
PROFILE:
HORIZ:
VERT:

DATE: 04/16/2025

DRAWING NUMBER CS-201

DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:
AS	AS	DL	25-019-0778



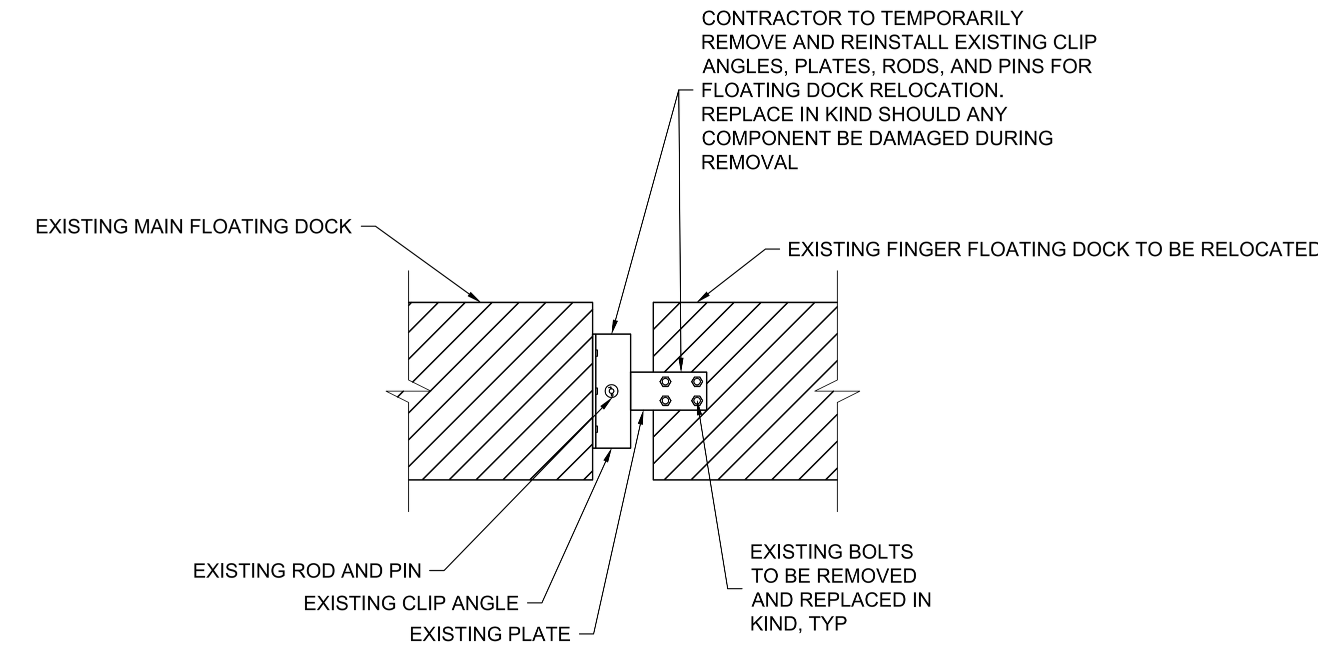
SECTION A-A

SECTION B-B

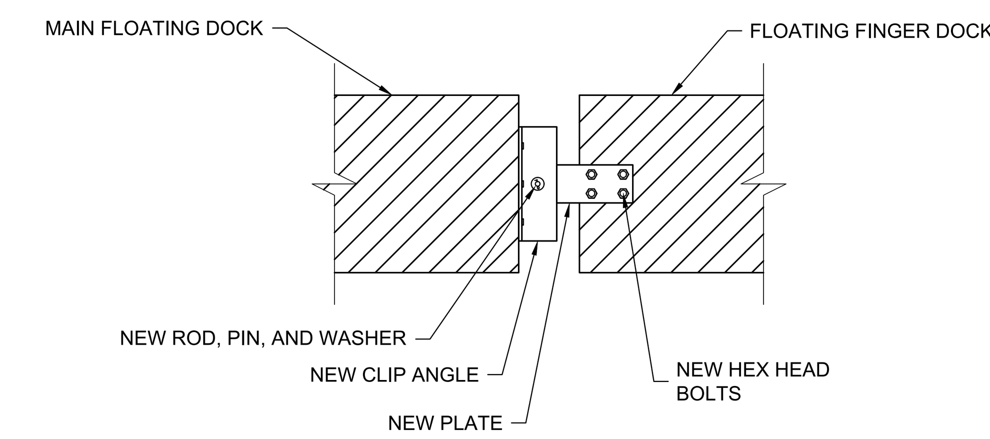
NOTES:

1. FOR ALL FLOATING FINGER DOCKS TO BE REMOVED AND RELOCATED, SALVAGE EXISTING CHAIN LINK CONNECTIONS AND ASSOCIATED ACCESSORIES AND REINSTALL AT NEW LOCATIONS.
2. FOR ALL NEW FLOATING DOCKS, REPLACE EXISTING CHAIN LINK CONNECTIONS AND ASSOCIATED ACCESSORIES IN KIND W/ MARINE GRADE PRODUCTS.
3. CONTRACTOR TO SUBMIT PRODUCT DATA FOR NEW ASSEMBLAGE FOR APPROVAL.

1 WOOD GUIDE PILE SUPPORT FRAME REPLACEMENT DETAIL
NTS

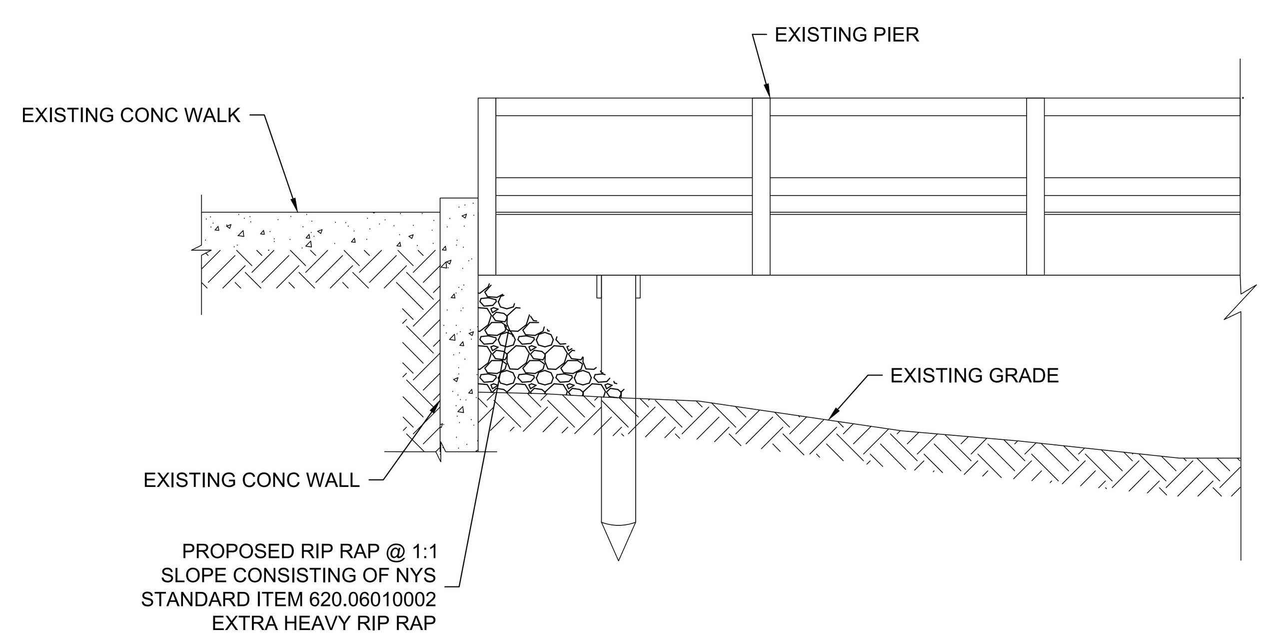


2 EXISTING FLOATING DOCK CONNECTION REMOVAL DETAIL
NTS

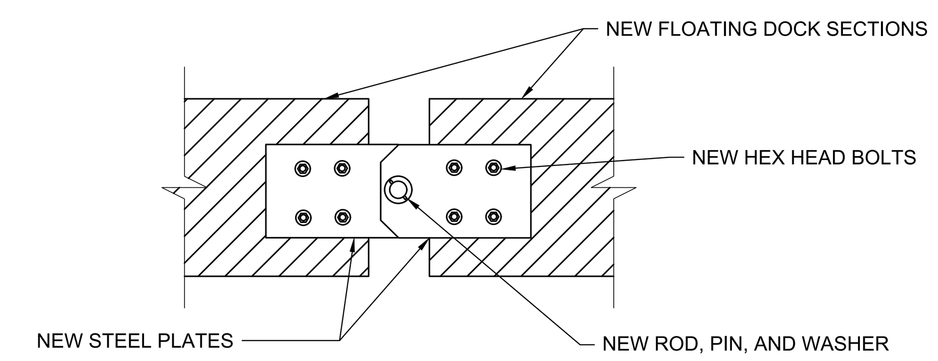


NOTES:
1. DETAIL OCCURS AT BOTH SIDES OF DOCK.
2. DIMENSIONS, SIZES AND NUMBER OF NEW ANGLES, PLATES, BOLTS, ETC. SHALL AT A MINIMUM MATCH THAT OF WHICH IS EXISTING AT OTHER FLOATING DOCK LOCATIONS OR THAT OF WHICH IS PROVIDED ON CS-001, WHICHEVER IS GREATER.

3 PROPOSED FLOATING DOCK CONNECTION DETAIL
NTS

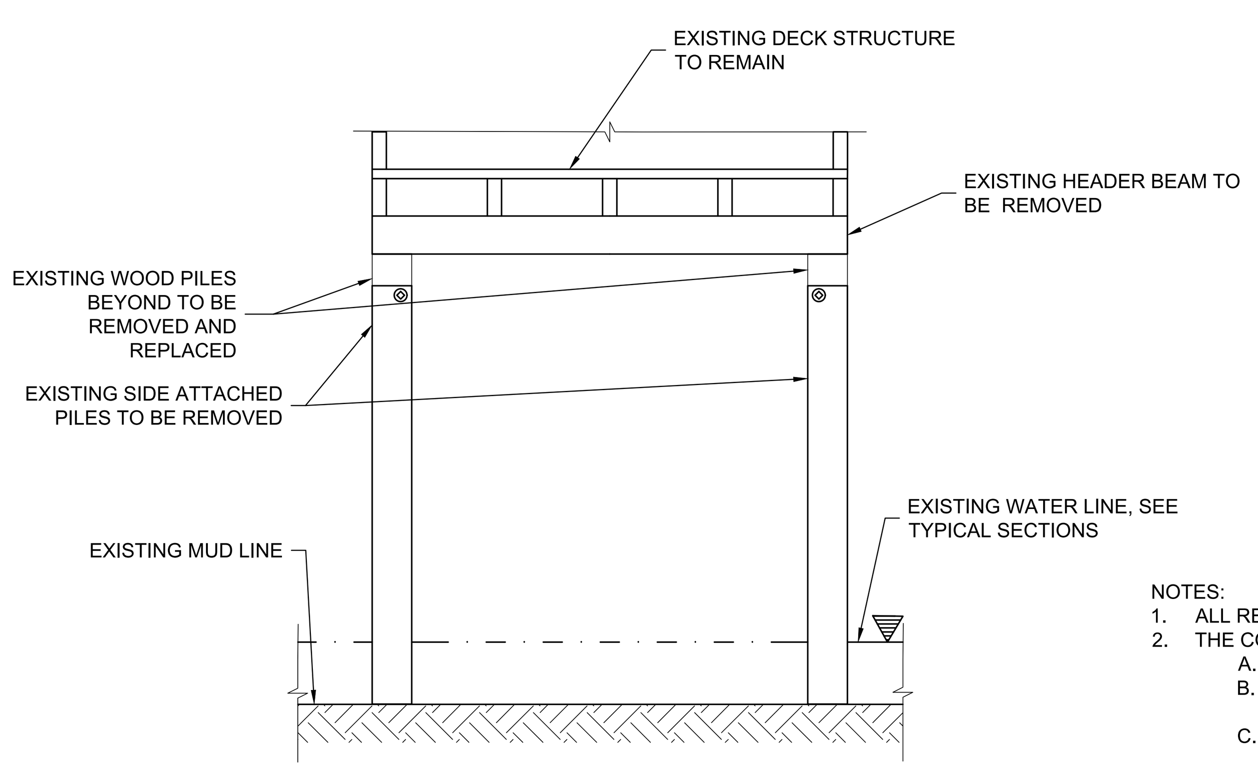


4 RIP RAP INSTALLATION SECTION
NTS



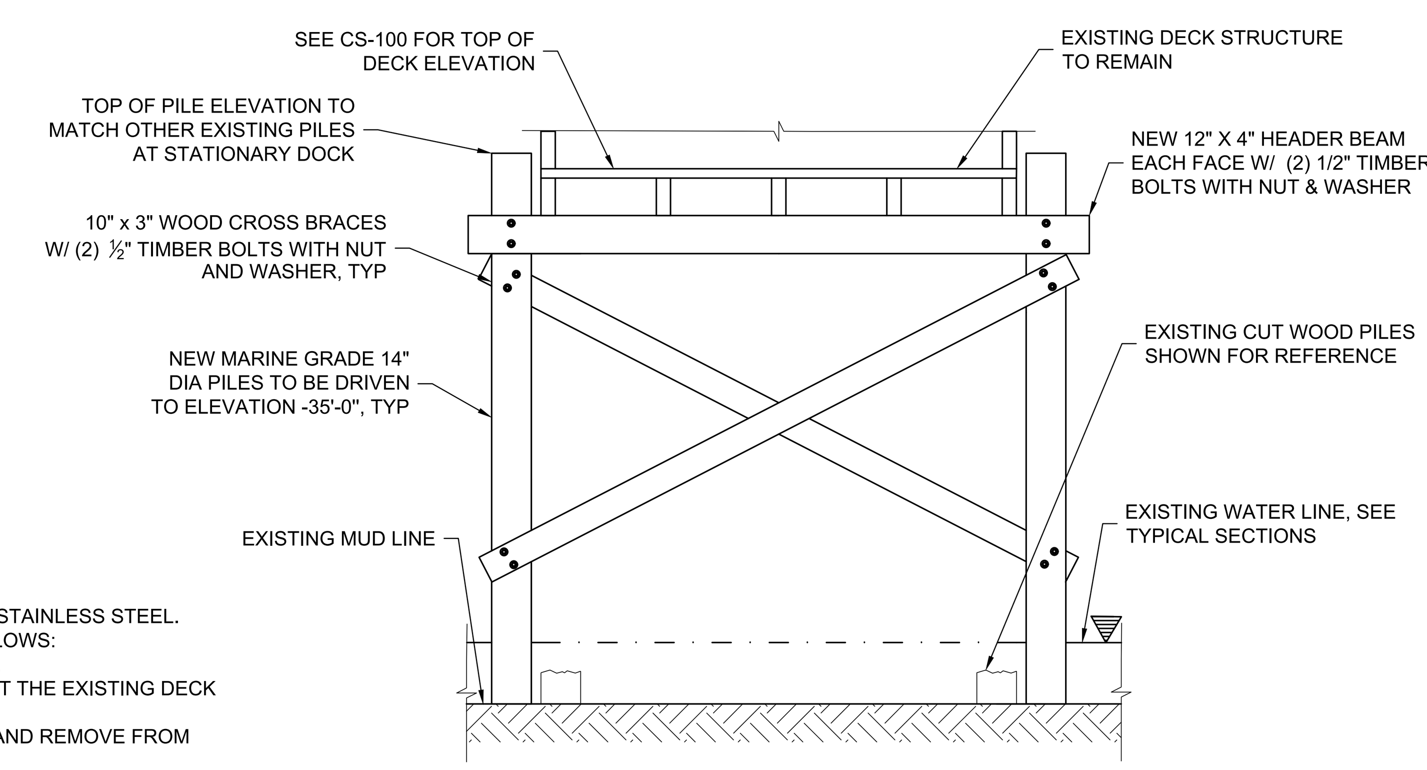
NOTES:
1. DETAIL OCCURS AT BOTH SIDES OF DOCK.
2. DIMENSIONS, SIZES AND NUMBER OF NEW ANGLES, PLATES, BOLTS, ETC. SHALL AT A MINIMUM MATCH THAT OF WHICH IS EXISTING AT OTHER FLOATING DOCK LOCATIONS OR THAT OF WHICH IS PROVIDED ON CS-001, WHICHEVER IS GREATER.

5 TYPICAL FLOATING DOCK SPLICE DETAIL
NTS



EXISTING LAYOUT

NOTES:
1. ALL REPLACED STEEL FASTENERS TO BE TYPE 316 STAINLESS STEEL.
2. THE CONSTRUCTION SEQUENCE SHALL BE AS FOLLOWS:
   A. DRIVE NEW PILES TO ELEVATION AS SHOWN.
   B. PROVIDE TEMPORARY SHORING TO SUPPORT THE EXISTING DECK STRUCTURE.
   C. CUT THE EXISTING PILES AT THE MUD LINE AND REMOVE FROM STRUCTURE.
   D. REMOVE EXISTING HEADER BEAM.
   E. INSTALL NEW HEADER BEAM TO MATCH THE ELEVATION OF THE EXISTING HEADER BEAM AND SECURE TO SUPPORTING PILES.
   F. REMOVE TEMPORARY SHORING.



PROPOSED LAYOUT

6 STATIONARY DOCK PILE REPLACEMENT
NTS

NO.	DATE	REVISION	BY

MISCELLANEOUS DETAILS

INC. VILLAGE OF BAYVILLE
MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

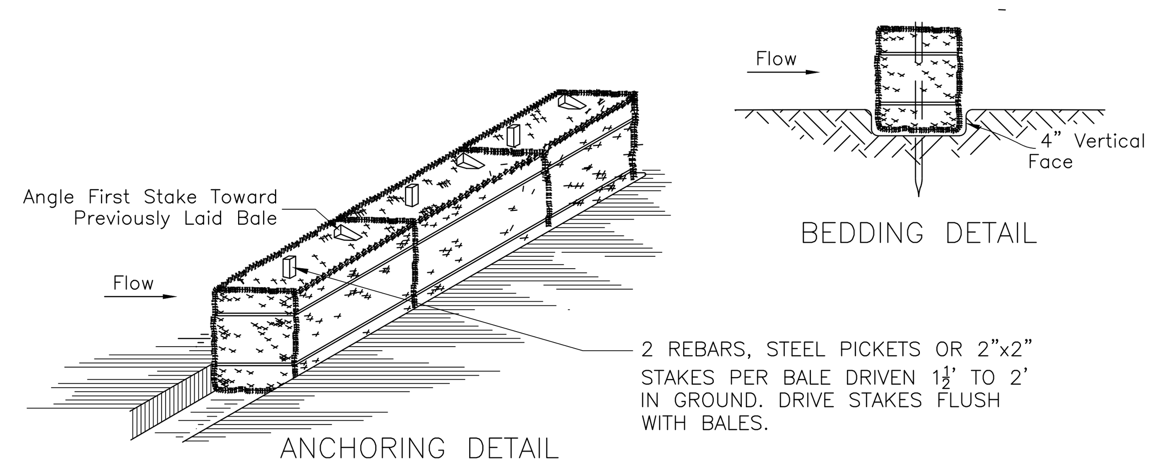
LiRo Engineers, Inc.
A LiRo-Hill Company
New York, N.Y. 212-563-0280 [T]

SCALE:
PLAN:
PROFILE:
HORIZ:
VERT:
DATE: 04/16/2025
DRAWING NUMBER CS-500

DESIGNED BY:	DRAFTED BY:	CHECKED BY:	PROJECT NO:	SHEET NUMBER
JD	AK	DL	25-019-0778	008 OF 009

NOTES FOR TEMPORARY SOIL & EROSION CONTROL

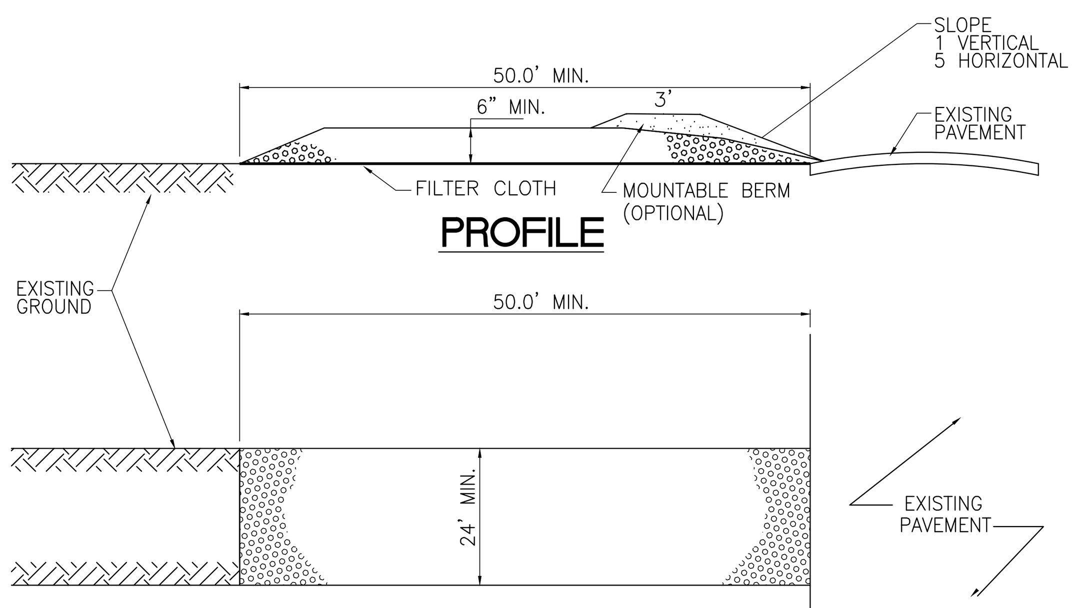
1. IF CONSTRUCTION ACTIVITIES ARE DISCONTINUED IN AREAS OF SOIL DISTURBANCE BEFORE FINAL GRADING IS COMPLETE, TEMPORARY GRADING SHALL BE SEEDED AND MULCHED, A.O.B.E. THE AREAS SHALL BE SEEDED WITH AN APPROPRIATE PERENNIAL GRASS SEED MIX AND SHALL BE MULCHED WITH HAY OR STRAW WITHIN 21 DAYS OF THE TIME IT WAS TEMPORARILY DISCONTINUED. MULCH SHALL BE MAINTAINED UNTIL A SUITABLE VEGETATIVE COVER IS ESTABLISHED. THE COST OF THIS WORK SHALL BE INCLUDED IN MAINTENANCE AND PROTECTION OF TRAFFIC.
2. PERIODIC CLEANING OF TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL DEVICES MAY BE NECESSARY.
3. ALL SOIL AND EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO STARTING ANY CONSTRUCTION WORK AND SHALL REMAIN IN PLACE UNTIL SLOPES ARE STABILIZED WITH SEEDING AND/OR OTHER SLOPE PROTECTION A.O.B.E.
4. STRAW BALES HAVE A LIMITED LIFE EXPECTANCY AND SHALL BE INSPECTED AND REPLACED AS NECESSARY.
5. ALL ERODED SOIL SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERCOURSES.
6. SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE USED FOR ALL EXISTING AND PROPOSED DRAINAGE INLETS. CONTROLS SHALL REMAIN IN PLACE UNTIL THE SLOPES DRAINING TO THE INLET HAVE BEEN STABILIZED BY EITHER PAVING, SEEDING, OR SLOPE PROTECTION.
7. IN THE EVENT DEWATERING OPERATIONS BECOME NECESSARY, FILTRATION OF THE DISCHARGE WILL BE REQUIRED UNLESS THE PUMP DISCHARGE IS CLEAR AND FREE OF SEDIMENT. THE LOCATION AND DESIGN OF THIS FILTRATION METHOD SHALL BE APPROVED BY THE ENGINEER. THE COST OF ANY NECESSARY DEWATERING SHALL BE INCLUDED IN THE VARIOUS ITEMS INCLUDED IN THE CONTRACT.
8. TEMPORARY SOIL EROSION AND WATER POLLUTION CONTROL MEASURES DETAILED IN THE PLANS SHALL BE CONSIDERED AS THE MINIMUM REQUIRED.
9. PRIOR TO AND/OR DURING THE COURSE OF CONSTRUCTION, THE CONTRACTOR SHALL COMPLY WITH ALL ADDITIONAL MEASURES DEEMED NECESSARY BY THE ENGINEER AND SHALL BE RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT DEVICES.
10. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PREVENT CONTAMINATION OF THE STREAMS BY SILT, SEDIMENT, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, CONCRETE LEACHATE, OR ANY OTHER POLLUTANT ASSOCIATED WITH THE PROPOSED CONSTRUCTION.
11. DURING CONSTRUCTION, NO WET OR FRESH CONCRETE, LEACHATE OR WASHINGS FROM CONCRETE TRUCKS, MIXERS, OR OTHER DEVICES SHALL BE ALLOWED TO ESCAPE INTO THE DRAINAGE SYSTEM, WETLANDS OR NEARBY WATERS.



1. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES AND PLACED SO THE BINDINGS ARE HORIZONTAL.
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
4. INSPECTION SHALL BE FREQUENT AND REPAIR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

STRAW BALE DIKE DETAIL

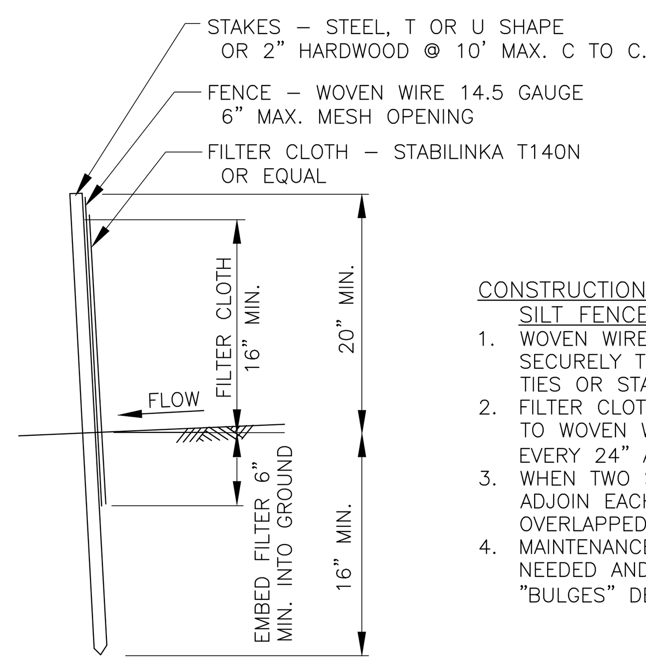
NOT TO SCALE



PLAN VIEW

STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE



CONSTRUCTION NOTES FOR FABRICATED SILT FENCE:

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE DETAIL
ITEM 572

NOT TO SCALE

CONSTRUCTION ENTRANCE NOTES:

1. STONE SIZE – USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH – NOT LESS THAN 50 FEET
3. THICKNESS – NOT LESS THAN 6 INCHES.
4. WIDTH – TWENTY FOUR (24) FOOT MINIMUM
5. FILTER CLOTH – WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER – ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

NO.	DATE	REVISION	BY

EROSION & SEDIMENT CONTROL DETAILS

INC. VILLAGE OF BAYVILLE
MAINTENANCE DREDGING AT THE CREEK BEACH MARINA

LiRo Engineers, Inc.
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SCALE:
PLAN:
PROFILE:
HORIZ:
VERT:
DATE: 04/16/2025
DRAWING NUMBER CS-501

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