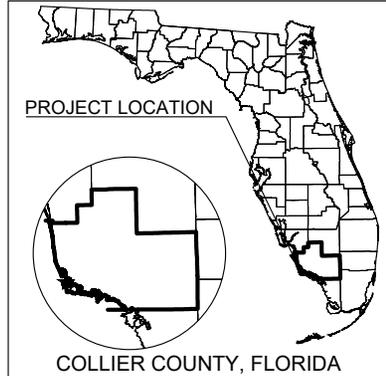


# 990 N BARFIELD DR

## SEAWALL AND DREDGE PLANS

MARCO ISLAND, COLLIER COUNTY, FLORIDA  
TOWNSHIP: 52S, RANGE: 26E, SECTION 08



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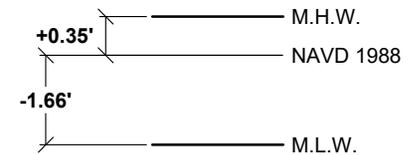
PROJECT LOCATION  
990 N BARFIELD DR, MARCO ISLAND, FLORIDA 34145

**NOTES:**

- COORDINATES SHOWN ARE IN FEET BASED ON THE NORTH AMERICAN DATUM OF 1983, WEST ZONE (NAD83)
- ELEVATIONS SHOWN ARE IN FEET BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- THE VERTICAL DATUMS ESTABLISHED BY DEP FOR THIS AREA ARE: MEAN HIGH WATER ELEVATION & MEAN LOW WATER ELEVATION AS DETAILED IN THE TIDE INFORMATION CHART.
- NOTE: THESE PERMIT DRAWINGS SHALL NOT BE CONSIDERED VALID FOR CONSTRUCTION PURPOSES UNLESS SIGNED AND SEALED BY:

JOSEPH T. FOSTER, P.E.  
FL LIC# 79708

**TIDE INFORMATION**



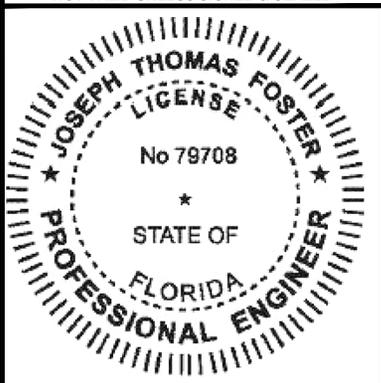
RELATIONSHIP BETWEEN NAVD 1988, MEAN HIGH WATER, MEAN LOW WATER TIDAL DATUM (1983 - 2001 EPOCH)

**NOTE:**

- TIDE INFORMATION OBTAINED FROM TIDE STATION I.D. 8725110 NAPLES, FLORIDA

REV. 10-20-23

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**FOSTER CONSULTING**  
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FL CERTIFICATE OF AUTHORIZATION NO. 32050  
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990 N BARFIELD DR  
MARCO ISLAND, FLORIDA

**COVER SHEET**

DATE: <b>10/21/22</b>	FILE: <b>21015</b>	REV: <b>1</b>
DRAWN BY: <b>AAC</b>	SHEET: <b>01 OF 08</b>	
CHECKED BY: <b>JTF</b>	<b>01</b>	
SCALE: <b>AS NOTED</b>		

**1. GENERAL**

- 1.A. THE WORK CONSISTS OF PROVIDING ALL CONSTRUCTION, LABOR, EQUIPMENT, MATERIAL & OPERATIONS IN CONNECTION WITH THE REPAIR OF THE SEAWALL, DREDGE, AND RELATED IMPROVEMENTS AS SHOWN ON THESE DRAWINGS.
- 1.B. ANY DISCREPANCIES IN THE PLANS WITH THE FIELD CONDITIONS SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER. CONSTRUCTION SHALL NOT CONTINUE UNTIL THE ENGINEER HAS ADDRESSED THE DISCREPANCIES.
- 1.C. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING STRUCTURES IN THE PROJECT VICINITY. ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTY WITHIN THE PROJECT VICINITY, INCLUDING STAGING SITES, WORK & ACCESS AREAS SHALL BE REPAIRED PROMPTLY BY THE CONTRACTOR. ANY DAMAGE AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT NO COST TO THE OWNER. ALL ACCESS & STAGING AREAS SHALL BE KEPT NEAT, ORDERLY & IN A SAFE MANNER. ALL ACCESS & STAGING AREAS SHALL BE RESTORED TO THE PRE-CONSTRUCTION CONDITION UPON PROJECT COMPLETION AT THE COST OF THE CONTRACTOR. THE SITE SHALL BE RESTORED BY REMOVING & FINISHING ALL EVIDENCE FOR CONSTRUCTION. IN THE EVENT INFRASTRUCTURE (SUCH AS WALKWAYS, SIDEWALKS, FENCES, VEGETATION, ETC.) IS TEMPORARILY REMOVED OR RELOCATED OR THERE IS UNAUTHORIZED DAMAGE TO VEGETATION AND/OR FACILITIES BY THE CONTRACTOR, THE CONTRACTOR SHALL RESTORE ALL DAMAGE TO STRUCTURES & NATURAL FEATURES TO PRE-CONSTRUCTION CONDITIONS OR BETTER, UNLESS OTHERWISE NOTED IN CONTRACT.
- 1.D. UTILITIES ARE NOT SHOWN IN THE PLANS. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL PRESENT UTILITIES PRIOR TO CONSTRUCTION.
- 1.E. CONTRACTOR IS RESPONSIBLE FOR PROVIDING PROPER CLEARANCE & PROTECTION TO ALL OVERHEAD WIRES & OBSTRUCTIONS.
- 1.F. THE CONTRACTOR SHALL EXCLUDE THE PUBLIC FROM THE WORK AREAS IN THE IMMEDIATE VICINITY OF OPERATIONS. CONTRACTOR SHALL PROVIDE APPROPRIATE SAFETY MEASURES TO PROTECT THE PUBLIC.
- 1.G. WHEN PUMPING CONCRETE, THE TRUCK CHUTE & PUMP WILL HAVE VISQUEEN OR SIMILAR PROTECTIVE MATERIAL ON THE ROADWAYS TO PREVENT SPILLAGE ONTO THE ASPHALT OR PAVERS.
- 1.H. ANY EXISTING UTILITIES (PEDESTALS, WATER) LADDER OR CLEAT FOUND ATTACHED TO THE EXISTING CAP OR DOCK THAT WILL BE IMPACTED BY THIS WORK SHALL BE REMOVED & REATTACHED TO THE NEW WORK UNLESS OTHERWISE NOTED IN CONTRACT.
- 1.I. ANY EXISTING UTILITIES THAT ARE NOT BEING REMOVED, BUT ARE BEING IMPACTED, SHALL BE TEMPORARILY SUPPORTED & REATTACHED AS REQUIRED.
- 1.J. ANY DOCK PILES OR PORTIONS OF DOCK SHALL BE REMOVED & REINSTALLED AS REQUIRED.
- 1.K. ALL NEW STRUCTURAL WORK INCLUDING CONCRETE & REINFORCEMENT SHALL BE ACCURATELY FIELD MEASURED & DIMENSIONS VERIFIED BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS. CONTRACTOR SHALL BE PREPARED TO MAKE FIELD ADJUSTMENTS TO ACCURATELY FIT THE NEW WORK TO EXISTING CONDITIONS.
- 1.L. NO CONSTRUCTION SHALL COMMENCE UNTIL ALL REQUIRED PERMITS & APPROVALS HAVE BEEN SECURED.
- 1.M. ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN CHANGED IN SIZE BY REPRODUCTION. THIS SHOULD BE CONSIDERED WHEN OBTAINING SCALED DATA. THESE DRAWINGS SHALL NOT BE SCALED. RELY ONLY ON SPECIFIED DIMENSIONS.
- 1.N. CONSTRUCTION WORK SHALL BE EXECUTED IN ACCORDANCE WITH ALL LOCAL, STATE, & NATIONAL BUILDING CODES & GOVERNING REGULATIONS, FDEP & USACE. CONTRACTOR SHALL ADHERE TO ALL CONDITIONS OF THE PERMITS & EXEMPTIONS.
- 1.O. REVIEW OF SUBMITTALS BY THE STRUCTURAL ENGINEER IS FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AS PRESENTED BY THE CONTRACT DOCUMENTS. NO DETAILED CHECK OF QUANTITIES OR DIMENSIONS WILL BE MADE.

**2. LAYOUT & TESTING**

- 2.A. ALL CONSTRUCTION STAKEOUTS SHALL BE PERFORMED BY & PAID FOR BY THE CONTRACTOR UNLESS OTHERWISE NOTED IN CONTRACT. ALL TESTING & INSPECTION FOR CONCRETE MATERIALS SHALL BE IN ACCORDANCE WITH FDOT SPECIFICATIONS.

**3. DEMOLITION**

- 3.A. CONTRACTOR SHALL VERIFY THE EXTENTS, LOCATION & QUANTITIES OF EXISTING ELEMENTS TO BE REMOVED.
- 3.B. ALL DEBRIS WITHIN THE LIMITS OF THE PROJECT SHALL BE HAULED OFF SITE BY THE CONTRACTOR & DISPOSED OF IN A PROPER LOCATION. NO ILLEGAL DUMPING.
- 3.C. CONTRACTOR SHALL NOT DAMAGE ANY STRUCTURAL COMPONENTS BEYOND THE DEMOLITION REQUIREMENTS DEPICTED IN THESE DRAWINGS. ANY DAMAGE SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE.

**4. CONCRETE**

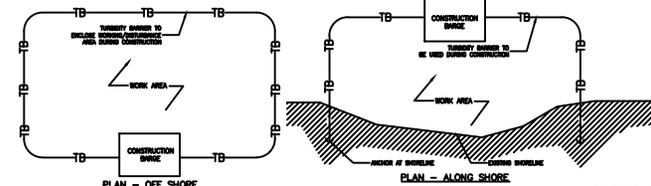
- 4.A. FORMS FOR THIS WORK SHALL BE MADE OF EITHER WOOD OR METAL. THEY SHALL BE STRAIGHT & FREE OF WARP OR BENDS. THEY SHALL HAVE SUFFICIENT STRENGTH & RIGIDITY, WHEN STAKED, TO RESIST THE PRESSURE OF THE CONCRETE WITHOUT SPRINGING. IF WOODEN FORMS ARE USED, THEY SHALL BE OF ADEQUATE SECTION. WHEN READY FOR THE CONCRETE TO BE DEPOSITED, THEY SHALL NOT VARY FROM THE APPROVED LINE & GRADE, & SHALL BE KEPT SO UNTIL THE CONCRETE HAS SET.
- 4.B. PRIOR TO PLACING THE CONCRETE, ANY WOODEN FORMS SHALL BE MOISTENED & ALL STEEL REINFORCING SHALL BE RINSED WITH FRESH WATER. THE CONCRETE SHALL BE PLACED IN THE FORMS & TAMPED IN PLACE SO THAT ALL HONEYCOMBS WILL BE ELIMINATED & SUFFICIENT MORTAR BROUGHT TO A SMOOTH EVEN FINISH BY MEANS OF A FLOAT.
- 4.C. CONTRACTOR SHALL BE PREPARED TO PLACE CONCRETE OF LOWER MEMBERS OF THE MARINE STRUCTURES IN SUBMERGED CONDITIONS UTILIZING TREMIE METHODS AT NO ADDITIONAL COST.
- 4.D. NO CONCRETE SHALL BE POURED DURING UNFAVORABLE WEATHER OR SEA CONDITIONS.
- 4.E. ALL STEEL SHALL HAVE A MINIMUM OF 3 INCHES CONCRETE COVER, UNLESS NOTED OTHERWISE. NO CHAIRS, TIES OR OTHER METAL SHALL PROTRUDE FROM SURFACE OF CONCRETE. TIES SHALL BE TUCKED INTO THE CAGE.
- 4.F. CAST-IN-PLACE CONCRETE SHALL BE A MINIMUM OF 5,000 P.S.I. (FILLER 3,500 P.S.I.) COMPRESSIVE STRENGTH AT 28 DAYS UNLESS NOTED OTHERWISE. WATER CEMENT RATIO SHALL BE LESS THAN OR EQUAL TO 0.4.
- 4.G. DURING OR AFTER THE CAP POURING, ANY LAITANCE RUNNING DOWN THE WATERSIDE OF THE SHEETS IS TO BE WASHED OFF. ALL CAP JACK BOLTS ARE TO BE PUSHED BACK THROUGH THE WALL OR OTHERWISE REMOVED, AND THE HOLES IN THE NEW SHEETS SEALED WITH TROWELABLE EPOXY SO NO RUST STAINS DISCOLOR THE SHEETS.
- 4.H. APPLY SIKA ARMATEC 110 BONDING AGENT, OR APPROVED EQUAL, AT CONSTRUCTION JOINTS PRIOR TO PLACEMENT OF NEW CONCRETE.
- 4.I. THE SIDE FORMS ARE TO BE STRIPPED THE NEXT DAY & HONEYCOMB PATCHED. THE WATERSIDE FACE LIGHTLY RUBBED & CURING COMPOUND OR VISQUEEN APPLIED. BOTTOM FORMS ARE TO BE LEFT ON FOR 2 DAYS.
- 4.J. COMPONENTS NOT CONSTRUCTED ACCORDING TO THESE SPECIFICATIONS SHALL BE REMOVED & REPLACED PROPERLY AT THE EXPENSE OF THE CONTRACTOR.
- 4.K. CONCRETE FORMWORKERS & FINISHERS: THE CONTRACTOR SHALL SUPPLY A SUFFICIENT NUMBER OF EXPERIENCED CONCRETE FORMWORKERS & FINISHERS IN ORDER TO COMPLETE THE WORK. A CONCRETE FOREMAN WHO HAS A THOROUGH UNDERSTANDING OF THE PLANS, SPECIFICATIONS & REFERENCED SPECIFICATIONS SHALL SUPERVISE ALL FORMWORKERS & FINISHERS.
- 4.L. EXPANSION JOINTS WILL BE FORMED WITH 1/2" THICK EXPANSION JOINT MATERIAL, NOT PLYWOOD OR OTHER RIGID MATERIALS & BE OVER THE SHEET PILE INTERLOCKS OR CONCRETE SLAB JOINTS.
- 4.M. THE EXPOSED EDGES OF THE FRONT & TOP FACES OF THE CAP & THE EDGES OF EXPANSION JOINTS WILL HAVE A 1/2" CHAMFER. EDGING TOOLS MAY BE USED WHERE PRACTICAL. A CHAMFER JOINT SHOULD NOT BE USED WHEN PAVERS ABUT THE CAP AT A 90° ANGLE.

**5. STEEL**

- 5.M. ALL REINFORCING STEEL SHALL CONFORM TO ASTM A615, GRADE 60, DEFORMED BARS FREE FROM LOOSE RUST & SCALE.
- 5.N. STEEL SHALL BE PLACED AS SHOWN IN THE PLANS. ALL ACCESSORIES SHALL BE PLASTIC UNTO SUPPORT REINFORCING EXPOSED TO WEATHER. ALL REINFORCING STEEL SHALL BE ACCURATELY LOCATED & FIRMLY HELD IN PLACE BEFORE & DURING THE PLACING OF CONCRETE.
- 5.O. THE LOOSE ENDS OF THE REBAR TIES AND/OR TIE-WIRES ARE TO BE PUSHED INSIDE THE CAGE AFTER TYING.
- 6. **ANCHORS**
- 6.A. THE CONTRACTOR IS TO USE THE FOLLOWING ANCHOR OPTIONS. ANY DEVIATION FROM THESE OPTIONS IS TO BE APPROVED BY THE E.O.R. PRIOR TO CONSTRUCTION.
- 6.B. **EARTH ANCHORS** - MR SR MANTA RAY EARTH ANCHORS ARE TO BE SET & TENSIONED TO 13000# PER ANCHOR (UNLESS OTHERWISE NOTED) & ARE TO BE A MINIMUM OF 42" BELOW THE TOP OF CAP ELEVATION UNLESS NOTED OTHERWISE. ALL MEANS & METHODS INVOLVING THE INSTALLATION & TENSIONING OF THE ANCHORS IS TO COINCIDE WITH THE ANCHOR MANUFACTURER'S SPECIFICATIONS. THE CONTRACTOR IS RESPONSIBLE FOR LOGGING THE TENSION CAPACITY OF EACH ANCHOR & WILL SUBMIT THE ANCHOR RESULTS TO THE E.O.R. UPON REQUEST.
- 6.C. **CONCRETE DEADMAN** - 3,000 P.S.I. (MIN) REINFORCED CONCRETE DEADMAN WITH A MINIMUM DEPTH OF 30" BELOW TOP OF CAP ELEVATION. ALL DEADMAN ARE TO HAVE A MINIMUM OF 4" CONCRETE COVERAGE ON ALL INTERNAL REBAR. ALL VERTICAL & HORIZONTAL REBAR IS TO BE NO. 4-BAR THREADED ROD. THE NUMBER OF REBAR VARIES DEPENDING ON THE SIZE OF THE DEADMAN. SEE THE FOLLOWING DEADMAN OPTIONS.
  - 6.C.1. 4'-0" DEADMAN - 1'-0" THICK X 2'-0" HIGH X 4'-0" LONG REINFORCED CONCRETE DEADMAN FOR ALL SINGLE TIEBACK DEADMAN OR SHARED EXPANSION JOINT DEADMAN. (4) HORIZONTAL NO. 4-BAR WITH (4) VERTICAL NO. 4-BAR.
  - 6.C.2. 6'-0" DEADMAN - 1'-0" THICK X 2'-0" HIGH X 6'-0" LONG REINFORCED CONCRETE DEADMAN FOR DOUBLE TIEBACK DEADMAN. (4) HORIZONTAL NO. 4-BAR WITH (6) VERTICAL NO. 4-BAR.

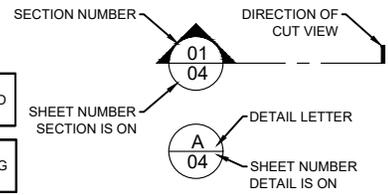
**7. ENVIRONMENTAL MANAGEMENT PLAN**

- 7.A. ALL WORK WILL ADHERE TO PERFORMANCE REQUIREMENTS OF THE CLEAN WATER ACT, SECTION 404 PERMIT & SECTION 401 WATER QUALITY CERTIFICATION. NO IN-WATER WORK WILL BEGIN UNTIL AFTER ISSUANCE OF REGULATORY AUTHORIZATIONS.
- 7.B. THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF AN ENVIRONMENTAL PROTECTION PLAN. THE PLAN WILL IDENTIFY CONSTRUCTION ELEMENTS & RECOGNIZE SPILL SOURCES AT THE SITE. THE PLAN WILL OUTLINE BMP'S, RESPONSIVE ACTIONS IN THE EVENT OF A SPILL OR RELEASE, & NOTIFICATION & REPORTING PROCEDURES. THE PLAN WILL ALSO OUTLINE CONTRACTOR MANAGEMENT ELEMENTS SUCH AS PERSONNEL RESPONSIBILITIES, ACTION AREA SECURITY, SITE INSPECTIONS & TRAINING.
- 7.C. NO PETROLEUM PRODUCTS, LIME, CHEMICALS, OR OTHER TOXIC OR HARMFUL MATERIALS WILL BE ALLOWED TO ENTER SURFACE WATERS.
- 7.D. WASH WATER RESULTING FROM WASH-DOWN OF EQUIPMENT OR WORK AREAS WILL BE CONTAINED FOR PROPER DISPOSAL.
- 7.E. EQUIPMENT THAT ENTERS SURFACE WATERS WILL BE MAINTAINED TO PREVENT ANY VISIBLE SHEEN FROM PETROLEUM PRODUCTS.
- 7.F. NO OIL, FUELS, OR CHEMICALS WILL BE DISCHARGED TO SURFACE WATERS, OR ONTO LAND WHERE THERE IS A POTENTIAL FOR RE-ENTRY INTO SURFACE WATERS. FUEL HOSES, OIL DRUMS, OIL OR FUEL TRANSFER VALVES, FITTINGS, ETC. WILL BE CHECKED REGULARLY FOR LEAKS & WILL BE MAINTAINED & STORED PROPERLY TO PREVENT SPILLS.
- 7.G. NO CLEANING SOLVENTS OR CHEMICALS USED FOR TOOLS OR EQUIPMENT CLEANING WILL BE DISCHARGED TO GROUNDWATER OR SURFACE WATERS.
- 7.H. CONSTRUCTION MATERIALS WILL NOT BE STORED WHERE HIGH TIDES, WAVE ACTION, OR UPLAND RUNOFF COULD CAUSE MATERIALS TO ENTER SURFACE WATERS.
- 7.I. BARGE OPERATIONS WILL BE RESTRICTED TO TIDAL ELEVATIONS ADEQUATE TO PREVENT GROUNDING OF A BARGE.
- 8. **TURBIDITY BARRIERS**
- 8.A. THE CONTRACTOR SHALL FURNISH, INSTALL & MAINTAIN TURBIDITY CONTROL BARRIERS AROUND THE WORK AREA AS NECESSARY. THE PURPOSE OF THE BARRIER IS TO AVOID ANY DEBRIS FROM GOING INTO THE MAIN WATERS. THE CONTRACTOR HAS THE OPTION TO ENCLOSE THE ENTIRE WATERSIDE OF THE SITE, WITHIN THE LIMITS OF DISTURBANCE, OR TO INSTALL & MOVE THE BARRIER IN STAGES. THE CONTRACTOR SHALL MAINTAIN SUCH BARRIERS AT ALL TIMES IN THE AREAS WHERE WORK IS IN PROGRESS UNLESS STRONG CURRENT PREVENTS THEIR DEPLOYMENT.
- 8.B. TURBIDITY BARRIERS ARE TO BE MANUFACTURED IN ACCORDANCE WITH FDOT ROADWAY & TRAFFIC DESIGN STANDARDS INDEX NO. 103.
- 8.C. BARRIERS SHALL BE ANCHORED AT 100 FT INTERVALS MAX. PROVIDE A BUOY AT EACH ANCHOR LOCATION.
- 9. **EROSION & SEDIMENT CONTROL**
- 9.A. SILT FENCES TO BE MANUFACTURED & INSTALLED IN ACCORDANCE WITH FDOT ROADWAY & TRAFFIC DESIGN STANDARDS INDEX NO. 102 & FDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION SECTION 104.
- 10. **TIDAL DATA**
- 10.A. CONTRACTOR MAY NEED TO ADJUST WORK PLAN TO ACCOUNT FOR ACTUAL WATERLEVELS & CHANGING WATER LEVELS. THE SITE MAY BE SUBJECT TO VARIABLE WAVE & SURGE CONDITIONS & IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE TEMPORARY SUPPORT FOR MARINE STRUCTURES & SHORELINE DURING CONSTRUCTION. TIDAL DATA OBTAINED FROM CLOSEST NOAA STATION.



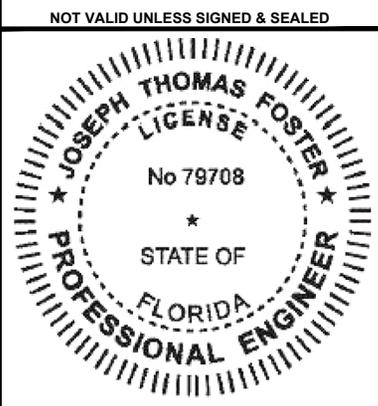
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**SYMBOLS LIBRARY**



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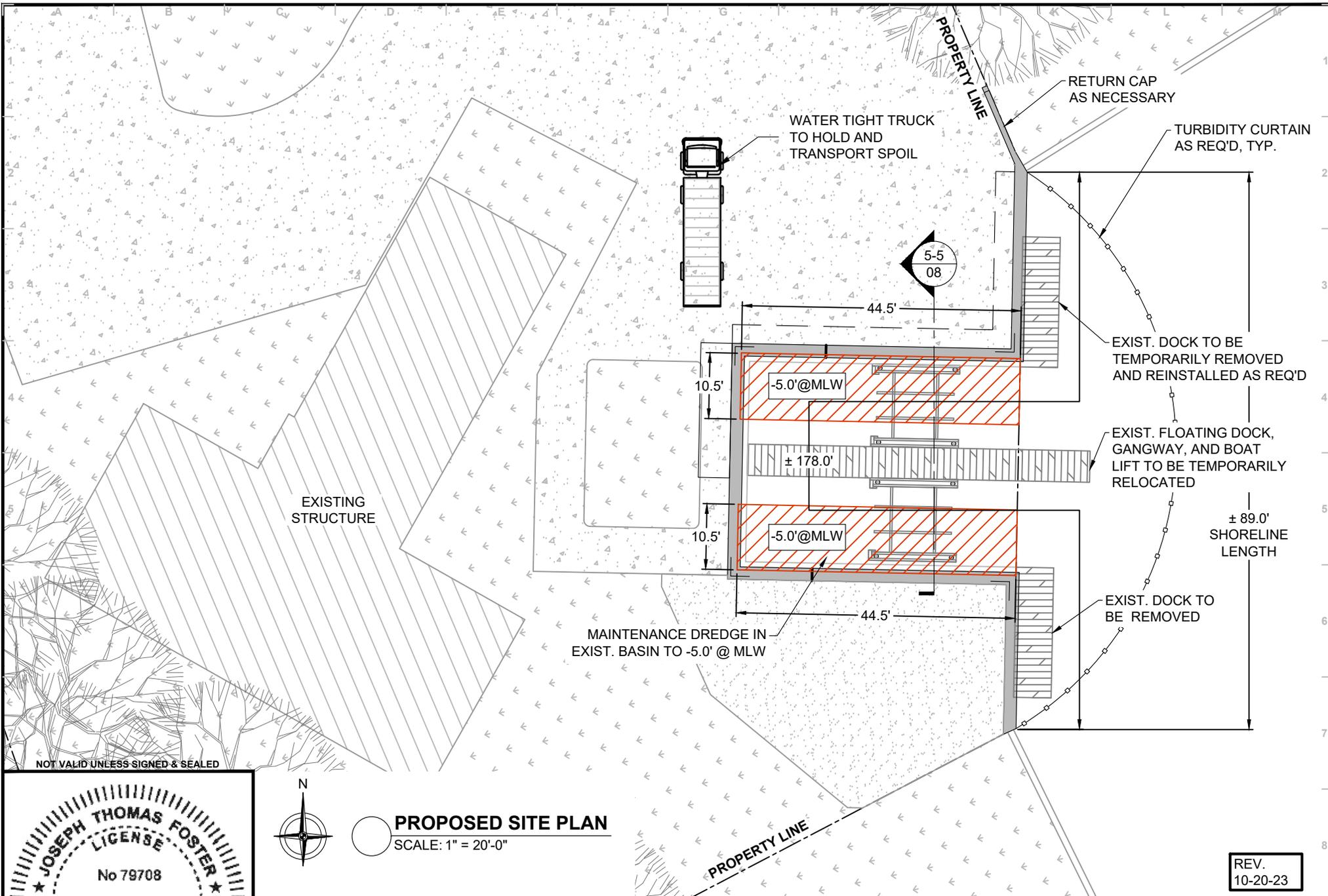
CONTRACTOR TO VERIFY THAT ELECTRICAL LINES ARE DEENERGIZED PRIOR TO ANY WORK. TURBIDITY CURTAINS TO BE USED IN ACTIVE CONSTRUCTION AREA DURING IN-WATER ACTIVITIES.



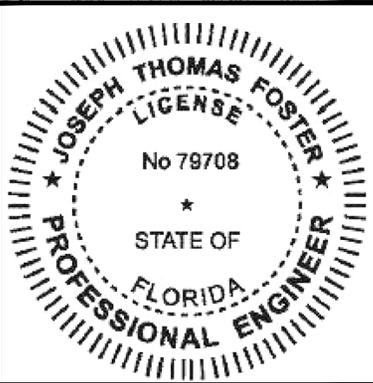
**FOSTER CONSULTING**  
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990 N BARFIELD DR  
 MARCO ISLAND, FLORIDA  
**GENERAL NOTES**

DATE:	10/21/22	FILE:	21015	REV:	1
DRAWN BY:	AAC	SHEET:	02 OF 08		
CHECKED BY:	JTF				
SCALE:	AS NOTED				02



NOT VALID UNLESS SIGNED & SEALED



PROPOSED SITE PLAN  
SCALE: 1" = 20'-0"



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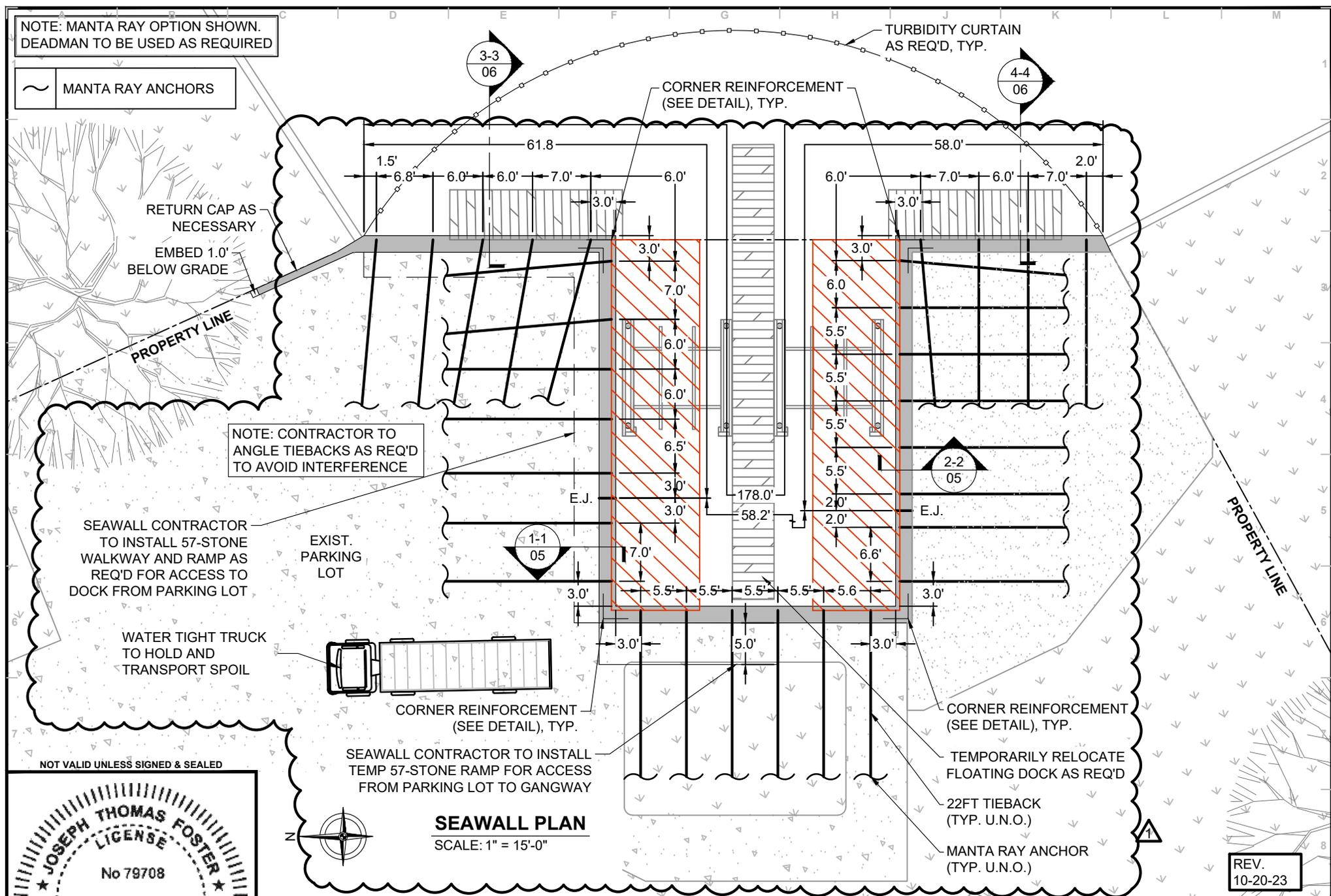
990 N BARFIELD DR  
 MARCO ISLAND, FLORIDA

**PROPOSED SITE PLAN**

DATE: <b>10/21/22</b>	FILE: <b>21015</b>	REV: <b>1</b>
DRAWN BY: <b>AAC</b>	SHEET: <b>03 OF 08</b>	
CHECKED BY: <b>JTF</b>		
SCALE: <b>AS NOTED</b>		<b>03</b>

NOTE: MANTA RAY OPTION SHOWN.  
DEADMAN TO BE USED AS REQUIRED

MANTA RAY ANCHORS

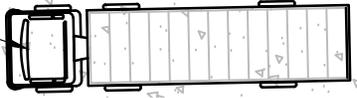


NOTE: CONTRACTOR TO  
ANGLE TIEBACKS AS REQ'D  
TO AVOID INTERFERENCE

SEAWALL CONTRACTOR  
TO INSTALL 57-STONE  
WALKWAY AND RAMP AS  
REQ'D FOR ACCESS TO  
DOCK FROM PARKING LOT

EXIST.  
PARKING  
LOT

WATER TIGHT TRUCK  
TO HOLD AND  
TRANSPORT SPOIL



CORNER REINFORCEMENT  
(SEE DETAIL), TYP.

SEAWALL CONTRACTOR TO INSTALL  
TEMP 57-STONE RAMP FOR ACCESS  
FROM PARKING LOT TO GANGWAY

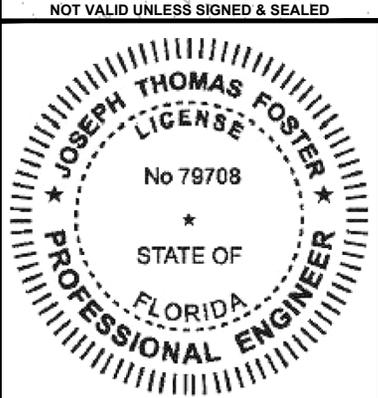
CORNER REINFORCEMENT  
(SEE DETAIL), TYP.

TEMPORARILY RELOCATE  
FLOATING DOCK AS REQ'D

22FT TIEBACK  
(TYP. U.N.O.)

MANTA RAY ANCHOR  
(TYP. U.N.O.)

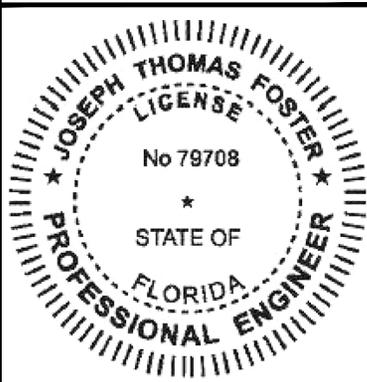
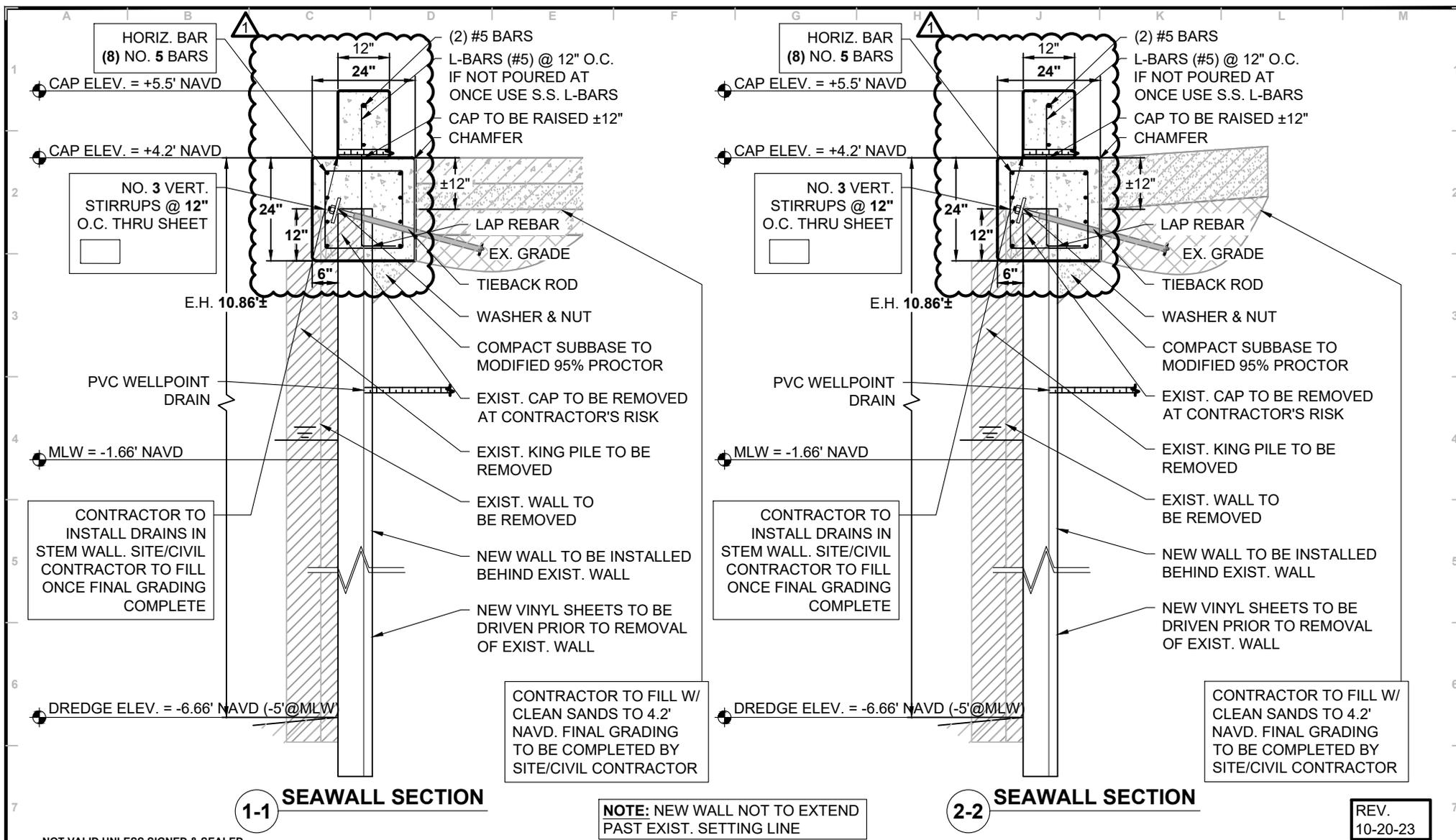
**SEAWALL PLAN**  
SCALE: 1" = 15'-0"



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990 N BARFIELD DR  
MARCO ISLAND, FLORIDA  
**SEAWALL PLAN**

DATE:	10/21/22	FILE:	21015	REV:	1
DRAWN BY:	AAC	CHECKED BY:	JTF	SHEET: 04 OF 08	
SCALE:	AS NOTED	04			



- CONSTRUCTION NOTES:**
1. CONCRETE - 5000 PSI (CAP) & 3500 PSI (FILLER) AT 28 DAYS
  2. SHEETS - 18 FT LONG VINYL SHEET PILE (ESP 26.5, SG-950, CP-1580, TRULINE\*). \*TRULINE CONTACT E.O.R FOR ADDITIONAL SPECS.
  3. TIEBACK RODS - 1" x 22 FT PVC ENCASED TIEBACK ROD WITH (2) HDG 6" x 6" x 1/2" PLATE WASHERS & NUTS AT EACH END WITH CONCRETE DEADMAN OR 1" x 22 FT HDG TIEBACK ROD W/ (1) HDG PLATE WASHER
  4. REBAR - GRADE 60, PLAIN.
  5. DRAINS - 1.25" DIA. X 4FT LONG SLIT TYPE PVC WELL POINT DRAINS THROUGH WALL AT 6' CENTERS 6" ABOVE THE BARNACLE LINE.
  6. MEETS FBC 2020 - 7TH EDITION

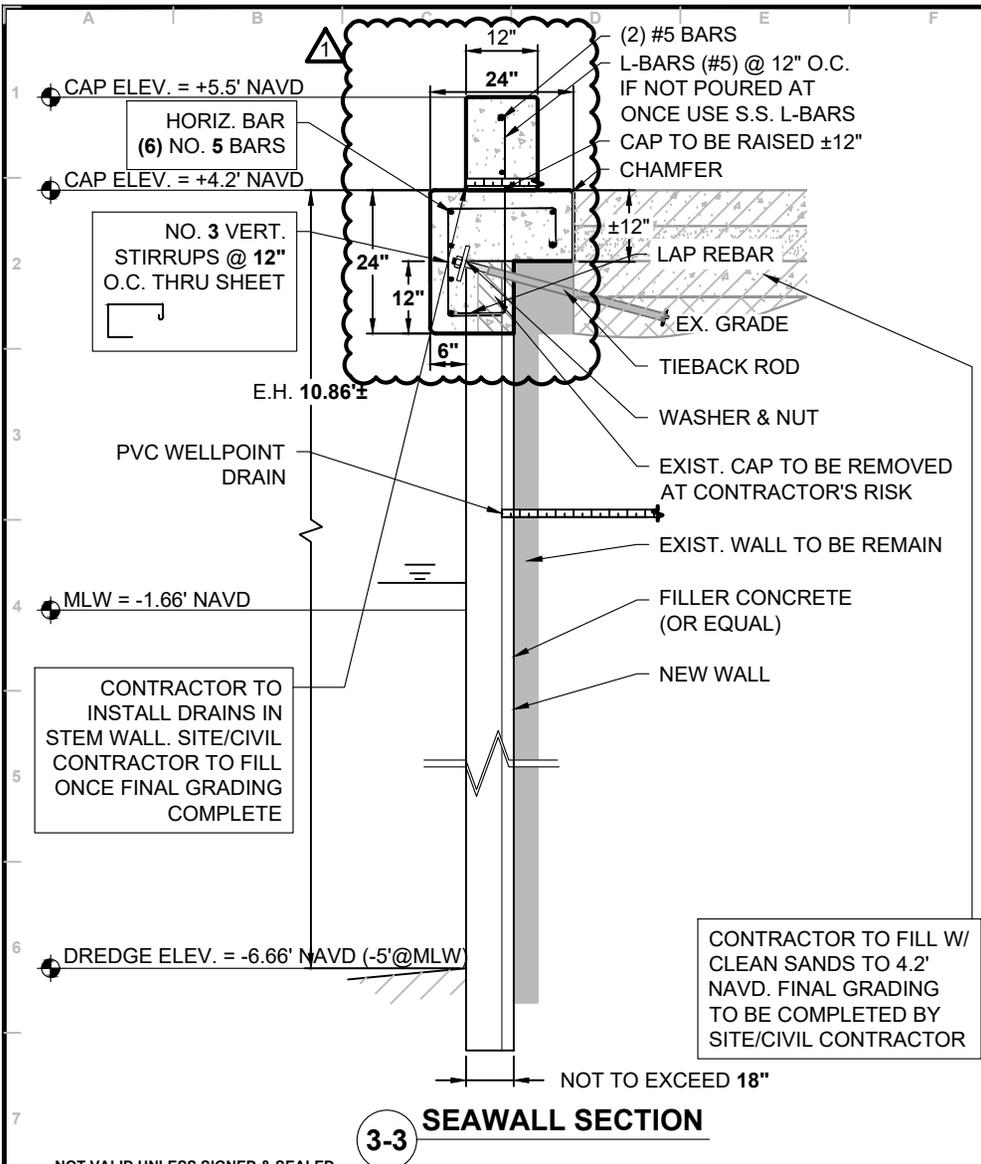


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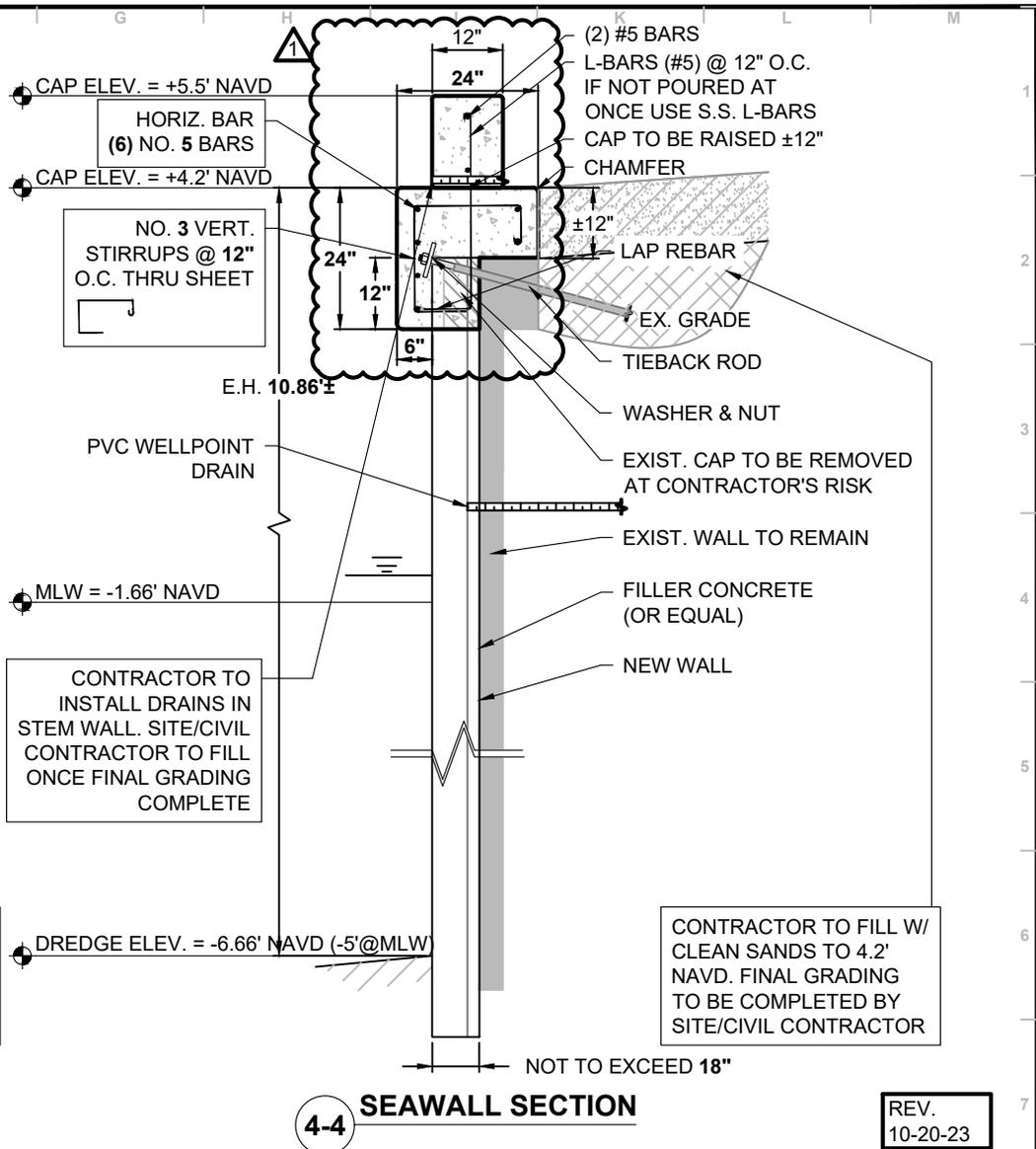
990 N BARFIELD DR  
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**SEAWALL SECTIONS**

DATE:	10/21/22	FILE:	21015	REV:	1
DRAWN BY:	AAC	CHECKED BY:	JTF	SHEET:	05 OF 08
SCALE:	AS NOTED				05



**3-3 SEAWALL SECTION**



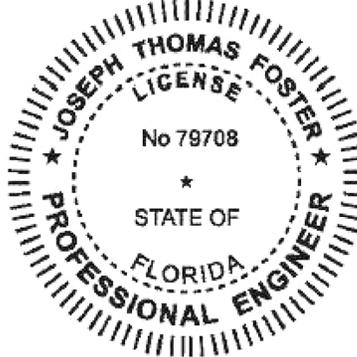
**4-4 SEAWALL SECTION**

REV. 10-20-23

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**CONSTRUCTION NOTES:**

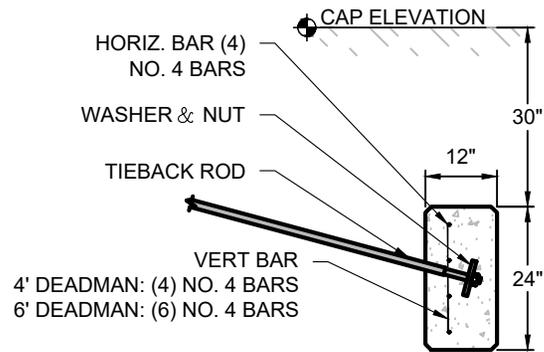
1. CONCRETE - 5000 PSI (CAP) & 3500 PSI (FILLER) AT 28 DAYS
2. SHEETS - 18 FT LONG VINYL SHEET PILE (ESP 26.5, SG-950, CP-1580, TRULINE\*). \*TRULINE CONTACT E.O.R FOR ADDITIONAL SPECS.
3. TIEBACK RODS - 1" x 22 FT PVC ENCASED TIEBACK ROD WITH (2) HDG 6" x 6" x 1/2" PLATE WASHERS & NUTS AT EACH END WITH CONCRETE DEADMAN OR 1" x 22 FT HDG TIEBACK ROD W/ (1) HDG PLATE WASHER & NUT CONNECTED TO MR-SR MANTA RAY ANCHORS TENSIONED TO 15000#.
4. REBAR - GRADE 60, PLAIN.
5. DRAINS - 1.25" DIA. X 4FT LONG SLIT TYPE PVC WELL POINT DRAINS THROUGH WALL AT 6' CENTERS 6" ABOVE THE BARNACLE LINE.
6. MEETS FBC 2020 - 7TH EDITION



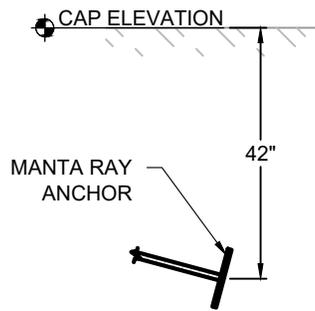
**FOSTER CONSULTING**  
 FL PROFESSIONAL ENGINEER NO. 79708  
 DE LIC. # 18618 · NJ LIC. # 24GE05181200 · TX LIC. # 133648  
 FL CERTIFICATE OF AUTHORIZATION NO. 32050  
 WWW.JFOSTERCONSULTING.COM  
 P: (727) 821-1949  
 P.O. BOX 7370, ST. PETERSBURG, FL 33734

990 N BARFIELD DR  
 MARCO ISLAND, FLORIDA  
**SEAWALL SECTIONS CONT.**

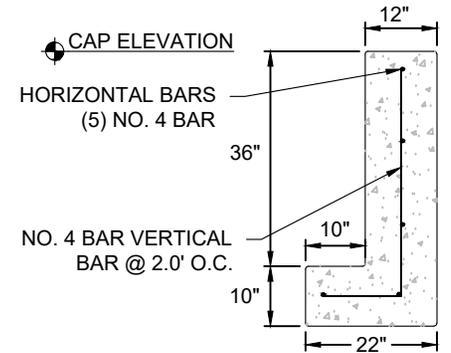
DATE: 10/21/22	FILE: 21015	REV: 1
DRAWN BY: AAC	SHEET: 06 OF 08	
CHECKED BY: JTF	SCALE: AS NOTED	
		06



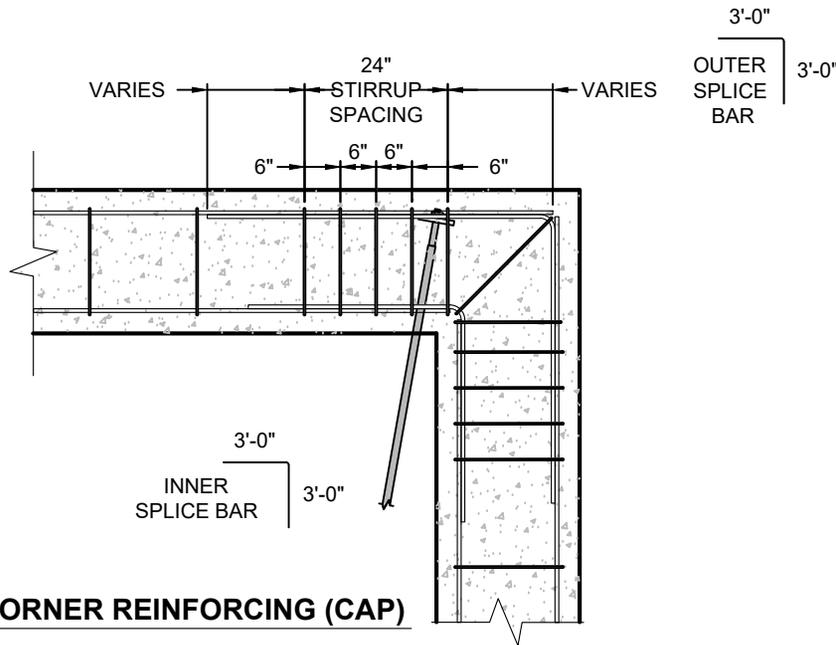
4FT OR 6FT  
DEADMAN  
**TYP. DEADMAN**



**TYP. MANTA RAY**

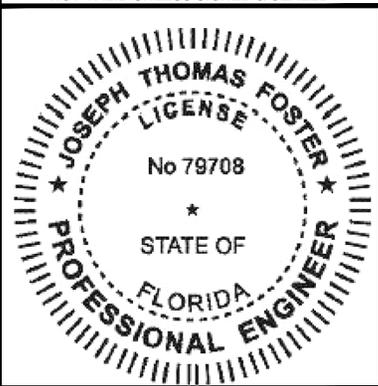


**TYP. RETURN CAP**



**TYP. CORNER REINFORCING (CAP)**

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990 N BARFIELD DR  
 MARCO ISLAND, FLORIDA

**SEAWALL DETAILS**

DATE:	10/21/22	FILE:	21015	REV:	1
DRAWN BY:	AAC	CHECKED BY:	JTF	SHEET: 07 OF 08	
SCALE:	AS NOTED	07			

DREDGE VOLUME (MAINTENANCE)  
±32.93 CUBIC YARDS

**NOTE:** NEW SHEETS TO BE DRIVEN  
PRIOR TO OLD WALL BEING REMOVED.

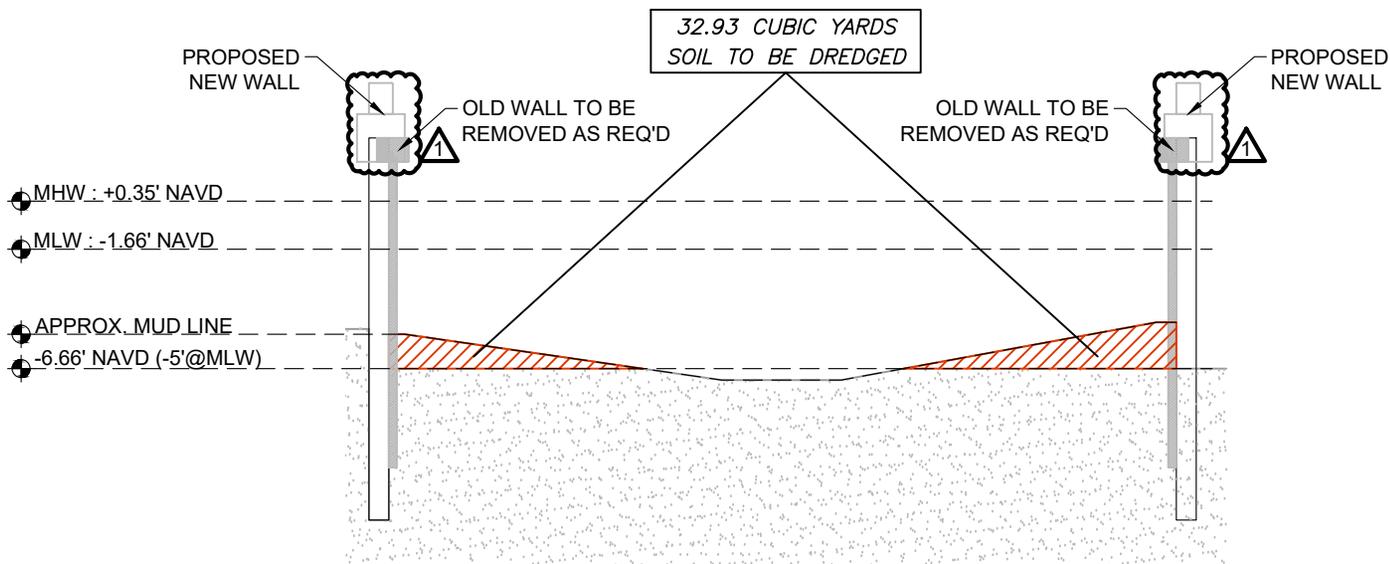
**NOTE:** PORTIONS OF DREDGE TO  
BE COMPLETED PRIOR TO OLD  
WALL BEING REMOVED.

DREDGE VOLUME (MIANTENANCE)  
20.03± SF  
0.74 CY/FT  
44.5' LF (A.O.I.)  
±32.93 CUBIC YARDS

**EXCAVATION/SOIL  
RELOCATION LEGEND**

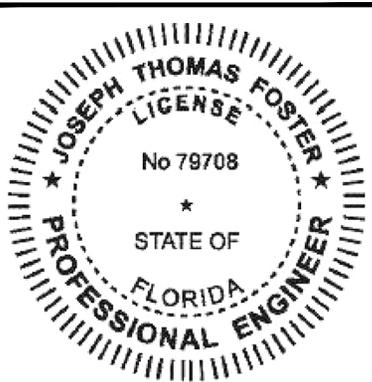


**NOTE:** DREDGE TO BE COMPLETED  
FROM THE UPLANDS



**5-5 DREDGE SECTION @ EXIST. BASIN**

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MARCO ISLAND, FLORIDA

**DREDGE SECTION**

DATE: <b>10/21/22</b>	FILE: <b>21015</b>	REV: <b>1</b>
DRAWN BY: <b>AAC</b>	SHEET: <b>08 OF 08</b>	
CHECKED BY: <b>JTF</b>	<b>08</b>	
SCALE: <b>AS NOTED</b>		