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IFB Addendum #1 San Mateo County Harbor District Oyster Point Marina Entrance Nav Aids Replacement Project

CONTRACT NO. 2020-04

Questions, Clarifications, Requests for Modifications

Date: September 16, 2021

To All Plan Holders:

The following changes, additions, and/or deletions are hereby made a part of the Bid Documents for the above noted project, fully and completely as if the same were fully contained therein. All other terms, Conditions, and specifications of the original Invitation to Bid remain unchanged.

This amendment must be acknowledged in the space provided in the General Conditions, Bid Acknowledgment of Addenda.

The Submittal Date and Time has NOT changed:

Sealed Bid Proposals shall be submitted to the San Mateo County Harbor District, Administration Office, no later than October 7, 2021 at 2:00 p.m. local time at 504 Avenue Alhambra, 2nd Floor, El Granada, CA 94018.

MODIFICATIONS

The modifications directed by this Addendum No. 1 are described in this page and the following attachments:

1. Addendum Text: 2 pages
2. Drawings: 2 pages

QUESTIONS/CLARIFICATIONS

Q1: Shortening the piles to 80 feet or less?

A1: A 100' minimum length is required for the new 30 inch diameter x 0.75 inch thick steel pipe pile. Drawings have been revised to represent a minimum tip elevation of -84.7 feet MLLW.

Q2: Allow a wider range of pile diameters and wall thicknesses?

A2: The steel pipe pile shall have a diameter of 30 inches with a tolerance of +/-0.75%, and a thickness of 0.75 inches with a tolerance of +15% to -12.5% per API pipe specifications. API 5L x 52 or equal is acceptable. Upon awarded contract, a wider range of pile diameters and wall thicknesses may be evaluated.

Q3: Allow more splices?

A3: Contractor is limited to one "field" splice in addition to two "shop" splices. All splices shall be tested as stated in the contract document technical specifications and drawings.

Q4: Extending the completion date?

A4: The completion date may **not** be extended due to limitations of regulatory permits. All work must be completed within the environmental work window that closes on November 30th.

CHANGES TO BID DOCUMENT

1. **REPLACE** notes on drawing sheet G-002. Reference attached drawings.
2. **REPLACE** callout on drawing sheet S-101. Reference attached drawings.

DESIGN CRITERIA:

- 1. THE COMPLETED STRUCTURES HAVE BEEN DESIGNED IN ACCORDANCE WITH THE BUILDING CODE OF THE STATE OF CALIFORNIA.
2. THE COMPLETED STRUCTURE HAS BEEN DESIGNED TO WITHSTAND THE FOLLOWING DESIGN LIVE LOADS APPLIED IN CONJUNCTION WITH DESIGN DREDGE/MUDLINE ELEVATIONS INDICATED ON THE CONTRACT DRAWINGS:
DESIGN MUDLINE ELEVATION: -11.0 FEET MLLW
LIVE LOADS: WAVE LOAD, INERTIA: 2.67 KIPS, WAVE LOAD, DRAG: 0.37 KIPS, IMPACT LOAD: 18.42 KIPS
3. TIDAL DATUM INFORMATION IS TAKEN FROM BENCHMARK SHEET FOR STATION ID 94144392, OYSTER POINT MARINA, SAN FRANCISCO BAY, CA, ACCEPTED 10/14/2003, PUBLISHED BY THE U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEAN SERVICE (NOS). ELEVATIONS REFERENCE MEAN LOWER LOW WATER DATUM (MLLW).

Table with 3 columns: TIDAL STAGE, NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88), MEAN LOWER LOW WATER (MLLW). Rows include MEAN HIGHER HIGH WATER (MHHW), MEAN HIGH WATER (MHW), MEAN LOW WATER (MLW), MEAN LOWER LOW WATER (MLLW), and NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88).

TIDAL DATA IS PER NOAA AVERAGES BASED ON THE 1983-2001 TIDAL EPOCH AND NOT GUARANTEED TO REPRESENT CONDITIONS, WHICH MAY OCCUR DURING CONSTRUCTION. ACTUAL WATER LEVELS WILL VARY FROM LEVELS INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN ESTIMATES OF WATER LEVELS WHICH MAY OCCUR DURING CONSTRUCTION.

THE STRUCTURES HAVE BEEN DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER CONSTRUCTION IS COMPLETE. THE STABILITY OF THE STRUCTURES PRIOR TO COMPLETION IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. THIS RESPONSIBILITY EXTENDS TO RELATED ASPECTS OF THE CONSTRUCTION ACTIVITY INCLUDING, BUT NOT LIMITED TO, ERECTION METHODS, ERECTION SEQUENCE, CONNECTIONS, TEMPORARY BRACING, FORMS, SHORING, USE OF EQUIPMENT, AND SIMILAR CONSTRUCTION PROCEDURES.

GEOTECHNICAL NOTES:

- 1. RESULTS OF GEOTECHNICAL DATA MAY BE REFERENCED IN THE FOLLOW REPORTS:
"GEOTECHNICAL INVESTIGATION, SOUTH SAN FRANCISCO FERRY TERMINAL, OYSTER POINT MARINA" BY TREADWELL & ROLLO DATED: 10 OCTOBER 2007.
"GEOTECHNICAL STUDIES, OYSTER POINT MARINA, DOCKS 8 & 11 MODIFICATIONS" BY TREADWELL & ROLLO DATED: 24 JULY 2012.
"CONSTRUCTION PLANS FOR BREAKWATER REPLACEMENT & EXTENSIONS" BY DMJM, DATED: 1978.
2. NAVIGATION AIDS ARE PLACED APPROXIMATELY 1,450 FEET FROM EXISTING BORING LOCATIONS.
3. FOTH HAS ASSUMED THAT THE SAME SOIL PARAMETERS ARE APPLICABLE.
4. THE SITE IS UNDERLAIN BY AN 88 TO 98 FEET THICK LAYER OF "BAY MUD". REFERENCE SHEETS B-101 THROUGH B-103 FOR FURTHER INFORMATION.

TOPOGRAPHIC SURVEY NOTES:

- 1. RESULTS OF TOPOGRAPHY SURVEY PREPARED BY HJW GEOSPATIAL, INC., IN OAKLAND CALIFORNIA USING COMPUTER ASSISTED, PHOTOGRAMMETRIC METHODS.
2. IN AREAS OF DENSE VEGETATION, ACCURACY OF CONTOURS MAY DEVIATE FROM ACCEPTED ACCURACY STANDARDS.
3. THE COORDINATES ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE III, NAD 1983.
4. CONTROL SURVEY PERFORMED BY TUCKER & ASSOCIATES.
5. ELEVATIONS ARE BASED REFERENCED TO MEAN LOWER LOW WATER (MLLW) DATUM.
6. THE LOCATION OF UNDERGROUND UTILITY LINES WERE LOCATED AND CONNECTED TO THE ABOVEGROUND UTILITY STRUCTURE USING EXISTING UTILITY MAPS SUPPLIED BY THE OYSTER POINT MARINA HARBOR MASTERS OFFICE AND WERE NOT FIELD VERIFIED. ANY UNDERGROUND CONSTRUCTION MUST BE PRECEDED BY AN UNDERGROUND UTILITY SURVEY AND/OR ON-SITE "POT-HOLING" TO VERIFY LINE LOCATION.
7. THE INFORMATION DEPICED ON THIS PLAN REPRESENTS THE RESULTS OF TOPOGRAPHIC SURVEYS PERFORMED, AND CAN ONLY BE CONSIDERED AS INDICATING EXISTING CONDITIONS AT THAT TIME. NO SURVEYS WERE CONDUCTED TO LOCATE PROPERTY LINES, CHANNEL LIMITS, EASEMENTS, UTILITIES, GEOTECHNICAL FEATURES, SHORELINES, HABITATS OR ANY OTHER PHYSICAL FEATURES RELATING TO THE PROJECT SITE, NOR DOES FOTH WARRANT THE EXISTENCE OR LOCATION OF SAID PHYSICAL FEATURES.
8. POSSESSION AND USE OF THE MATERIAL CONTAINED ON THESE DRAWINGS IS GRANTED ONLY IN CONNECTION WITH ITS USE AS IT RELATES TO THE TITLED PROJECT. ANY OTHER USE, REPRODUCTION OR DISCLOSURE OF THE INFORMATION CONTAINED HEREON IS EXPRESSLY PROHIBITED WITHOUT THE WRITTEN CONSENT OF FOTH INFRASTRUCTURE & ENVIRONMENT.

HYDROGRAPHIC SURVEY NOTES:

- 1. RESULTS OF HYDROGRAPHY FROM SURVEY CONDUCTED BY FOTH & VAN DYKE AND ASSOCIATES, INC. ON 03/11/2019.
2. SOUNDINGS ARE IN MEAN LOWER LOW WATER (MLLW) BASED ON MINIMUM VALUES, SORTED BY A 23' RADIUS.
3. DATA IS IN MEAN LOWER LOW WATER (MLLW) BASED ON AVERAGE VALUES ON A 3'X3' GRID.
4. COORDINATES ARE BASED ON THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, ZONE 3.
5. BENCHMARK IS MAG NAIL LOCATED APPROXIMATELY 2068895.114 USN, 6016332.087 USE AT 30.66' MLLW.
6. THE INFORMATION DEPICED ON THIS PLAN REPRESENTS THE RESULTS OF HYDROGRAPHIC SURVEYS PERFORMED ON THE DATES SHOWN, AND CAN ONLY BE CONSIDERED AS INDICATING THE SEABED CONDITIONS AT THAT TIME. INTERPOLATED INFORMATION FROM BETWEEN SOUNDING RUNS IS NOT GUARANTEED. SHOALS, OBSTRUCTIONS OR OTHER DIFFERING CONDITIONS MAY EXIST BETWEEN THESE RUNS. NO SURVEYS WERE CONDUCTED TO LOCATE PROPERTY LINES, CHANNEL LIMITS, EASEMENTS, UTILITIES, GEOTECHNICAL FEATURES, SHORELINES, STRUCTURES, HABITATS OR ANY OTHER PHYSICAL FEATURES RELATING TO THE PROJECT SITE, NOR DOES FOTH WARRANT THE EXISTENCE OR LOCATION OF SAID PHYSICAL FEATURES.

GENERAL CONDITIONS:

- 1. NO GUARANTEE TO THE ACCURACY OF THE REFERENCE DOCUMENTS IS PROVIDED HEREIN AND THE CONTRACTOR SHALL RELY ON HIS OWN FIELD VERIFICATION FOR ITEMS SO REQUIRED.
2. SECTIONS, DETAILS, NOTES, DIMENSIONS AND CONDITIONS ARE APPLICABLE AT ANY OTHER LOCATION WHERE CONDITIONS AND DETAIL ARE SIMILAR BUT ARE NOT SPECIFICALLY NOTED AS SUCH OR ARE NOT SHOWN.

- 3. THE CONTRACTOR SHALL PERFORM THE WORK IN A MANNER THAT DOES NOT IMPEDE THE OWNER'S OPERATIONS ON SITE OR THE OWNER'S ON SITE OPERATING EQUIPMENT.
4. THE CONTRACTOR PRIOR TO CONSTRUCTION AND FABRICATION OF CONSTRUCTION MATERIALS SHALL VERIFY EXISTING CONDITIONS AND DIMENSIONS.
5. IF, DURING THE PERFORMANCE OF THE WORK, THE CONTRACTOR FINDS A CONFLICT, ERROR, OR DISCREPANCY IN THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL SO REPORT TO THE ENGINEER OF RECORD IN WRITING AT ONCE. BEFORE PROCEEDING WITH THE WORK AFFECTED THEREBY, THE CONTRACTOR SHALL OBTAIN A WRITTEN INTERPRETATION OR CLARIFICATION FROM THE ENGINEER OF RECORD. WORK DONE BEFORE THE ENGINEER OF RECORD RENDERS HIS DECISION IS AT THE CONTRACTOR'S SOLE RISK.
6. THE WORK SHALL BE PERFORMED IN A GENERAL SEQUENCE DEVELOPED BY THE CONTRACTOR AND SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW, IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR THE SEQUENCES AND PROCEDURES TO BE USED.
7. THE CONTRACTOR SHALL FURNISH AND COORDINATE PLANT, LABOR, SUPERVISION, MATERIALS, EQUIPMENT AND APPLIANCES FOR DEMOLITION AND/OR CONSTRUCTION WORK IN CONNECTION WITH THE DEMOLITION AND/OR CONSTRUCTION OF THE MARINE FACILITIES.
8. THE OWNER HAS SECURED CERTAIN PERMITS REQUIRED BY FEDERAL, AND STATE AUTHORITIES FOR THE NEW 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.
9. SPECIAL INSPECTION REQUIREMENTS PER LOCAL AND/OR STATE BUILDING CODES SHALL BE FULFILLED AND SHALL BE COORDINATED BY THE OWNER. THE CONTRACTOR SHALL INFORM THE OWNER OF THE PROGRESS OF WORK AND PROVIDE ADEQUATE NOTICE AS TO WHEN SPECIAL INSPECTIONS ARE TO OCCUR SUCH AS TO NOT DELAY THE SCHEDULE.
10. THE CONTRACTOR SHALL FURNISH MATERIALS FOR INSTALLATION IN THE COMPLETED WORK AS SPECIFIED HEREINAFTER. THE CONTRACTOR SHALL HANDLE THESE MATERIALS AS THEY ARE DELIVERED TO THE SITE OR OFF-SITE WORK AREAS, AND SHALL STORE THEM IN A DESIGNATED STORAGE AREA.
11. THE CONTRACTOR WILL INDEMNIFY AND SAVE HARMLESS THE OWNER AND ENGINEER OF RECORD FROM AND AGAINST ALL LOSSES AND ALL CLAIMS, DEMANDS, PAYMENTS, SUITS, ACTIONS, RECOVERIES, AND JUDGMENTS OF EVERY NATURE AND DESCRIPTION BROUGHT OR RECOVERED AGAINST THE OWNER AND ENGINEER OF RECORD BY REASON OF ANY ACT OR OMISSION OF THE CONTRACTOR, OR OF ANY SUBCONTRACTOR TO THE CONTRACTOR, OR OF ANY PERSON DIRECTLY OR INDIRECTLY EMPLOYED BY THE CONTRACTOR OR ANY SUCH SUBCONTRACTOR, IN THE PERFORMANCE OF ANY WORK FOR, OR THE RENDERING OF ANY SERVICES TO, THE OWNER.
12. THE CONTRACTOR AGREES THAT, AT ITS OWN COST AND EXPENSE, IT SHALL PROCURE AND CONTINUE IN FORCE; INSURANCE COVERAGE AS REQUIRED BY THE OWNER. SUCH INSURANCE SHALL BE WRITTEN BY A COMPANY OR COMPANIES AUTHORIZED TO ENGAGE IN THE BUSINESS OF GENERAL LIABILITY INSURANCE IN THE STATE IN WHICH THE DEMISED PREMISES ARE LOCATED, AND THERE SHALL BE DELIVERED TO THE OWNER WITH THE BID CUSTOMARY CERTIFICATES EVIDENCING SUCH PAID-UP INSURANCE, WHICH CERTIFICATES ARE TO BE ISSUED BY THE INSURANCE COMPANIES. GOOD AND RESPONSIBLE COMPANIES, REASONABLY ACCEPTABLE TO THE OWNER, SHALL WRITE SUCH INSURANCE.
13. THE ENGINEER AND ITS SUB CONSULTANTS SHALL BE ADDED TO THE CONTRACTORS GENERAL LIABILITY INSURANCE POLICY AS ADDITIONAL INSURED ON PRIMARY AND CON-CONTRIBUTORY BASIS. SUBMIT CERTIFICATES OF INSURANCE TO THE ENGINEER AS EVIDENCE OF THIS COVERAGE.
14. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE ACCURACY OF LOCATIONS, DIMENSIONS, AND LEVELS AND NO PLEA AS TO INSTRUCTIONS OR ORDER RECEIVED FROM OTHER SOURCES OTHER THAN INFORMATION CONTAINED ON CONTRACT DRAWINGS, SPECIFICATIONS OR IN WRITTEN ORDERS OF THE OWNER OR ENGINEER OF RECORD SHALL JUSTIFY DEPARTURE FROM THE DIMENSIONS AND ELEVATIONS REQUIRED BY THE CONTRACT DRAWINGS.
15. THE CONTRACTOR SHALL TAKE HIS OWN MEASUREMENTS AT THE SITE, VERIFYING THE SAME WITH THE CONTRACT DRAWINGS AND EXISTING FACILITIES, AND WILL BE HELD RESPONSIBLE FOR THE PROPER FIT AND ALIGNMENT OF COMPLETED WORK IN POSITION.
16. AT THE CONTRACTOR'S EXPENSE, THE CONTRACTOR'S WORKING AREAS SHALL BE CLEANED BY HIM ON A DAY-TO-DAY BASIS, WITH RUBBISH REMOVED FROM THE SITE AND WORK AREAS CLEANED AT THE END OF EACH DAY. AT FINAL COMPLETION OF WORK THE CONTRACTOR SHALL LEAVE THE ENTIRE PREMISES, WITHIN THE SITE OF HIS OPERATIONS, CLEAN AND FREE FROM THE RUBBISH RESULTING FROM HIS CONSTRUCTION OPERATIONS.
17. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN UTILITIES HE DEEMS NECESSARY TO AFFECT THE WORK.
18. THE CONTRACTOR SHALL PROVIDE FIELD ENGINEERING SERVICES REQUIRED FOR PROPER COMPLETION OF THE WORK INCLUDING, BUT NOT NECESSARILY LIMITED TO: ESTABLISHING AND MAINTAINING LINES AND LEVELS; STRUCTURAL DESIGN OF SHORES, FORMS, AND SIMILAR ITEMS PROVIDED BY THE CONTRACTOR AS PART OF HIS MEANS AND METHODS OF CONSTRUCTION.
19. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN AT HIS EXPENSE REQUIRED FIRE PROTECTION SYSTEMS AND DEVICES AS NECESSARY TO SAFELY PERFORM THE WORK IN ACCORD WITH THE APPLICABLE REGULATIONS. IT SHALL BE OPERATIONAL THROUGHOUT THE PERIOD OF CONSTRUCTION.
20. THE OWNER SHALL HAVE THE RIGHT TO WITHHOLD WITHOUT PENALTY PAYMENT DESCRIBED ABOVE, OR SECTIONS REFERENCED HEREIN, FOR COMPLETED WORK SHOULD THE CONTRACTOR FAIL TO MEET OBLIGATIONS OR REQUIREMENTS OF THE CONTRACT. WITHHELD PAYMENT SHALL BE PROMPTLY MADE UPON THE CONTRACTOR'S FULL COMPLIANCE WITH THE CONTRACT.
21. COMPLY WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR PROTECTION OF THE ENVIRONMENT DURING THE WORK. ENSURE THAT PERSONNEL ARE PROPERLY TRAINED AND THAT SUFFICIENT EQUIPMENT AND MATERIALS ARE READILY AVAILABLE FOR USE IF REQUIRED. ABIDE BY STATE AND FEDERAL SPILL REPORTING REQUIREMENTS.
22. THE OWNER RESERVES THE RIGHT TO CHARGE THE CONTRACTOR FOR ADDITIONAL ENGINEERING SERVICES IF REQUIRED DUE TO THE CONTRACTOR'S ACTIONS OR INACTIONS.
23. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SAFETY OF HIS OPERATIONS. THE CONTRACTOR SHALL TAKE REASONABLE PRECAUTIONS FOR THE SAFETY OF, AND SHALL PROVIDE REASONABLE PROTECTION TO PREVENT DAMAGE, INJURY, OR LOSS TO PERSONS EMPLOYED BY THE CONTRACTOR IN PERFORMANCE OF THE WORK, AND PERSONS NEARBY THAT MAY BE AFFECTED BY THE CONTRACTOR'S OPERATIONS OR THE WORK, INCLUDING EQUIPMENT AND MATERIALS WHICH WILL BE INCORPORATED IN THE WORK, AND OTHER PROPERTIES AND STRUCTURES AT THE SITE, OR ON ADJACENT PROPERTIES.
24. OBSTRUCTIONS ARE DEFINED AS UNFORESEEN OBJECTS, WHICH IMPEDE PROGRESS. OBJECTS, WHICH ARE MADE KNOWN TO THE CONTRACTOR, WILL NOT BE CONSIDERED TO BE OBSTRUCTIONS. NOTIFY THE ENGINEER OF RECORD IMMEDIATELY UPON ENCOUNTERING OBSTRUCTIONS. NO CONSIDERATION WILL BE GIVEN FOR ADDITIONAL COMPENSATION ON THIS ACCOUNT WITHOUT THIS TIMELY NOTIFICATION.
25. SUBSTITUTIONS MAY BE FURNISHED FOR MATERIALS SPECIFIED HEREIN PROVIDED THE CONTRACTOR SECURES ACCEPTANCE FROM THE ENGINEER OF RECORD.

SELECTIVE DEMOLITION AND DISPOSAL:

- 1. SELECTIVE DEMOLITION AND DISPOSAL SHALL BE PERFORMED IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL PERMIT AND BUILDING CODE REQUIREMENTS.
2. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF THOSE STRUCTURES AND DERELICT COMPONENTS AS INDICATED ON THE DRAWINGS.
3. SELECTIVE DEMOLITION INCLUDES BUT IS NOT LIMITED TO REMOVAL AND REUSE (WHERE POSSIBLE) OF EXISTING MATERIALS, UTILITIES, AND OTHER COMPONENTS ESSENTIAL FOR A COMPLETE PROJECT.
4. THE CONTRACTOR SHALL TAKE REASONABLE CARE IN REMOVING ELEMENTS SELECTED TO BE DEMOLISHED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. DAMAGE OR DESTRUCTION BY THE CONTRACTOR TO EXISTING ELEMENTS DESIGNATED TO REMAIN SHALL BE REPAIRED OR REPLACED IN-KIND AT THE DISCRETION OF THE OWNER AT NO ADDITIONAL COST.
5. ITEMS TO BE REMOVED AND REUSED SHALL BE PLACED IN A STAGING AREA ACCESSIBLE FOR INSPECTION BY THE OWNER.

- 6. PRIOR TO COMMENCEMENT OF SELECTIVE DEMOLITION, THE CONTRACTOR SHALL SUBMIT A DISPOSAL PLAN FOR ITEMS TO BE DEMOLISHED. DEMOLITION MATERIALS DESIGNATED BY THE OWNER TO BE REMOVED FROM THE SITE SHALL BECOME THE PROPERTY OF THE CONTRACTOR. THE DEBRIS DISPOSAL PLAN SHALL ACKNOWLEDGE THIS OWNERSHIP AND SHALL IDENTIFY THE MEANS AND METHODS AND FINAL DISPOSITION FOR DISPOSAL MATERIALS.
7. PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR SHALL CLEARLY MARK THE LIMITS OF THE DEMOLITION FOR REVIEW AND APPROVAL BY THE OWNER.
8. COMPLETELY REMOVE ITEMS DESIGNATED LEAVING SURFACES CLEAN, SOUND, AND READY TO RECEIVE NEW MATERIALS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
9. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE STABILITY OF THE STRUCTURE DURING THE COURSE OF DEMOLITION.
10. THE CONTRACTOR SHALL SUBMIT A DISPOSAL CERTIFICATE TO THE OWNER'S REPRESENTATIVE CERTIFYING LEGAL AND PROPER DISPOSAL.

TEMPORARY WORK:

- 1. LABOR, EQUIPMENT, AND MATERIALS REQUIRED TO PERFORM THE WORK THAT, UPON COMPLETION, ARE NOT A PART OF THE WORK, SHALL BE FURNISHED, INSTALLED, AND SUBSEQUENTLY REMOVED FROM THE SITE BY THE CONTRACTOR.
2. TEMPORARY WORK SHALL BE SUBJECT TO THE REQUIREMENTS OF THE STATE AND APPLICABLE LOCAL BUILDING CODES.
3. DURING EXECUTION OF THE WORK, THE CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN REQUIRED ENVIRONMENTAL CONTROL MEASURES TO PROTECT ADJACENT WATERWAYS. MEASURES INCLUDE BUT ARE NOT LIMITED TO TEMPORARY CONTAINMENT BOOMS, AND TURBIDITY CURTAINS. IN ACCORDANCE WITH STATE REGULATORY AUTHORIZATIONS, THE CONTRACTOR SHALL FURNISH, INSTALL, MAINTAIN TEMPORARY TURBIDITY CURTAINS DURING CONSTRUCTION. TEMPORARY MATERIALS AND EQUIPMENT SHALL CONFORM TO REQUIREMENTS FOR TEMPORARY WORK.

STEEL PILES:

- 1. STEEL PIPE PILE MATERIAL SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF API 5L X 52 OR DESIGN ENGINEER APPROVED ALTERNATIVE WITH A MINIMUM Fy OF 50 KSI.
2. STEEL PIPE PILE WITH DIAMETER 30" SHALL BE MANUFACTURED WITH STEEL PLATES IN CONFORMANCE TO THE REQUIREMENTS OF ASTM A633, GRADE E, WITH A MINIMUM Fy = 50 KSI. STEEL PIPE PILES SHALL HAVE A WALL THICKNESS OF 0.75 INCHES UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
3. PILES SHALL BE FURNISHED WITH ADEQUATE LENGTH TO ALLOW FOR DRIVING TOLERANCES AND FIELD ADJUSTMENT TO MEET DRIVING CRITERIA.
4. ALL FIELD AND SHOP SPLICE WELDS SHALL BE UT TESTED. WELD TEST REPORTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW.
5. ONE FIELD SPLICE IS PERMITTED AND NO MORE THAN TWO (2) TOTAL SHOP SPLICES WILL BE PERMITTED PER PILE. THE SPLICE SHALL BE A FULL PENETRATION WELD AND SHALL DEVELOP THE FULL STRENGTH OF THE PILE. SUBMIT SPLICE DETAILS TO THE DESIGN ENGINEER FOR REVIEW AND APPROVAL. NO SPLICE SHALL BE ALLOWED FROM THE UNDERSIDE OF THE CAP TO 20 FEET BELOW THE MUDLINE WITHOUT WRITTEN APPROVAL OF THE ENGINEER. THE FULL CIRCUMFERENCE AND DEPTH OF ALL FIELD SPLICES SHALL BE VISUALLY INSPECTED AND UT TESTED. VISUAL AND ULTRASONIC TESTING SHALL BE PERFORMED BY A THIRD PARTY ORGANIZATION RETAINED BY THE CONTRACTOR.
6. THE TIPS OF PIPE PILES SHALL BE FITTED WITH AN OPEN END CUTTING SHOE, SUCH AS 0-14000 OR 0-14001 AS MANUFACTURED BY ASSOCIATED PILE & FITTING CORP OR EQUIVALENT ACCEPTED BY THE ENGINEER OF RECORD. INSTALL POINTS TIGHT TO TIP AND WELD ALL AROUND AS RECOMMENDED BY MANUFACTURER, UNLESS OTHERWISE NOTED.
7. 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.

PILE DRIVING:

- 1. STEEL PIPE PILES FOR THE NAVIGATION AID MONOPILE SHALL BE INSTALLED TO A MINIMUM EMBEDMENT LENGTH AS LISTED BELOW:
MONOPILE
30-INCH DIAMETER X 0.75 INCH WALL THICKNESS
TIP ELEVATION: -84.7 FT MLLW
2. DRIVE PILES WITH A HYDRAULICALLY OPERATED VIBRATORY HAMMER, AS APPLICABLE, WITH SUFFICIENT ENERGY AND ENERGY TRANSFER CHARACTERISTICS TO DRIVE THE PILES TO THE REQUIRED CAPACITY AND TOE ELEVATIONS WITHOUT DAMAGING THE PILE HEAD. CUT OFF HEADS OF PILES ACCURATELY IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AFTER COMPLETION OF DRIVING.
3. DRIVE THE PILES STRAIGHT AND TRUE AT INDICATED LOCATIONS, WITH DEVIATION FROM THE LONGITUDINAL AXIS OF NOT MORE THAN 1/4 INCH PER FOOT.
4. LOCATE THE PILES WITHIN 3 INCHES OF THE POSITIONS INDICATED ON THE DRAWINGS.
5. CONTINUOUSLY DRIVE EACH PILE TO REACH THE CAPACITY AND FULL EMBEDDED LENGTH CALLED FOR ON THE DRAWINGS.
6. WITHDRAW PILES THAT ENCOUNTER UNDERGROUND OBSTRUCTIONS SUFFICIENT TO IMPEDE PILE DRIVING. REDRIVE AS CLOSE AS POSSIBLE TO ORIGINAL POSITION, SUBJECT TO REVIEW OF THE OWNER. REMOVE PILES THAT SPLIT, BROOM, BREAK OR DRIVE OUT OF LINE. DRIVE ANOTHER PILE IN ITS PLACE. PROVIDE AND MAINTAIN NECESSARY LIGHTING AND BARRIERS TO ADEQUATELY ASSURE PUBLIC SAFETY. PROVIDE ADEQUATE SAFEGUARDS TO PROTECT FROM DAMAGE IMPROVEMENTS ON THE WORK SITE AND ON ADJACENT PROPERTIES.
7. PROVIDE DRIVING RESISTANCE PENETRATION AND REFUSAL VALUES AS ACCEPTED BY THE ENGINEER OF RECORD.
8. USE SUITABLE CUSHIONS OR DRIVING HEADS TO AVOID DAMAGE TO THE PILES, DEVELOPING PROPER TOTAL DRIVING ENERGY, AND DIRECTING THE ENERGY ALONG THE LONGITUDINAL CENTER OF GRAVITY OF THE PILE.
9. DRIVE PILES TO THEIR FULL PENETRATION WITHOUT BENDING, RUPTURNING, OR SEVERELY 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. IF A REPLACEMENT PILE FAILS TO DEVELOP FULL DRIVING RESISTANCE, PULL THE REPLACEMENT PILE AND DRIVE A NEW PILE WITH LARGER DIAMETER AT NO ADDITIONAL COST TO THE OWNER.
10. GETTING TO ASSIST PENETRATION WILL NOT BE PERMITTED UNLESS ACCEPTED BY THE ENGINEER OF RECORD. PRE-DRILLING WILL NOT BE PERMITTED UNLESS ACCEPTED BY THE ENGINEER OF RECORD, WHEREBY 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.

- 11. WHERE PILES ARE PUSHED UP BY PRESSURE FROM DRIVING OF ADJACENT PILES, RE-DRIVE AS REQUIRED AND AT NO ADDITIONAL COST TO THE OWNER.
12. THE CONTRACTOR SHALL PROVIDE THE OWNER WITH A COMPLETE DRIVING RECORD WITH THE DATE OF FINAL INSTALLATION AND TIP ELEVATIONS. THIS RECORD SHALL BE SUBMITTED WEEKLY AND SIGNED BY A REPRESENTATIVE OF THE CONTRACTOR. THE CONTRACTOR SHALL KEEP AN ACCURATE SET OF PILE RECORDS INDICATING PILE NUMBER, PILE TYPE AND INSTALLED LENGTH, TYPE OF IMPACT OR VIBRATORY HAMMER AND RATED ENERGY, DATE OF INSTALLATION, FINAL TIP ELEVATION, AND CONTRACTOR'S REPRESENTATIVE NAME AND SIGNATURE.

STRUCTURAL STEEL:

- 1. STRUCTURAL STEEL SHALL COMPLY WITH THE "STEEL CONSTRUCTION MANUAL", FIFTEENTH EDITION, PUBLISHED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
2. WELDING SHALL CONFORM TO THE "STRUCTURAL WELDING CODE - STEEL", AS ADOPTED BY THE AMERICAN WELDING SOCIETY (AWS D1.1). A WELDER CERTIFIED IN ACCORDANCE WITH AWS STANDARDS SHALL PERFORM WELDING.

- 3. WELDING ELECTRODES SHALL BE E70XX AND COMPLY WITH AWS A5.1 AND AWS A5.5.
4. STRUCTURAL STEEL SHAPES SHALL CONFORM TO ASTM A 572, GRADE 50. STEEL TUBES SHALL CONFORM TO ASTM A500, GRADE C. STEEL PLATES SHALL CONFORM TO ASTM A572 Fy = 50 KSI.
STEEL HARDWARE:
PIPE: ASTM A53 GRADE B, SCHEDULE 40
HIGH STRENGTH STRUCTURAL BOLTS: ASTM A325, W/ HEXAGONAL HEADS
NUTS: ASTM A563
WASHERS: ASTM F436
5. HIGH-STRENGTH BOLTS, NUTS AND WASHERS SHALL BE IN ACCORDANCE WITH "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS".
6. GALVANIZING SHALL CONFORM TO ASTM A 123 OR ASTM A 153, AS APPLICABLE.
7. STEEL SHAPES, PLATES, AND HARDWARE SHALL BE HOT DIPPED GALVANIZED.
8. BOLTED CONNECTIONS SHALL USE 1" DIAMETER F3125 GR. A325 HIGH-STRENGTH BOLTS UNLESS OTHERWISE NOTED.
9. CONNECTIONS SHALL BE DESIGNED AND DETAILED BY THE STEEL FABRICATOR EXCEPT FOR THOSE SPECIFICALLY DETAILED IN THE CONTRACT DOCUMENTS.

PROTECTIVE COATING:

- 1. 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.
2. FIELD TOUCH-UP COATING SHALL BE IDENTICAL TO FACTORY COATING AND APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS.
3. SURFACES SHALL BE PREPARED IN STRICT ACCORDANCE WITH THE PROTECTIVE COATING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
4. THE PROTECTIVE COATING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. COATING IS TO BE APPLIED WITH A MINIMUM OF THREE COATS TO ACHIEVE AN OVERALL DRY FILM THICKNESS OF 15 MILS.
5. ALL HOLIDAYS OR OTHER IMPERFECTIONS IN THE COATING SHALL BE REMOVED OR REPAIRED AT THE CONTRACTORS EXPENSE PRIOR TO FINAL ACCEPTANCE OF THE WORK.
6. PROTECTIVE COATING TOP COAT OF SURFACES THAT WILL BE SUBMERGED IN SALT WATER SHALL BE BLACK UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR BY THE OWNER.
7. SURFACES THAT WILL BE EXPOSED TO SUNLIGHT AND ABOVE THE WATER SHALL BE COATED WITH A MINIMUM OF 3 MILS OF A COMPATIBLE POLYURETHANE TOP COAT. COLOR OF THIS TOP COAT SHALL BE COORDINATED WITH OWNER.
8. HANDRAILS, RUB RAILS, BOLLARDS, AND OTHER SAFETY ITEMS SHALL BE PAINTED SAFETY YELLOW.
9. STEEL PILES, STEEL PILE CAPS AND STEEL BRACING THAT WILL BE IN DIRECT CONTACT WITH SALT WATER SHALL BE PAINTED BLACK.

STEEL GRATING:

- 1. STEEL GRATING SHALL BE WELDED RECTANGULAR DESIGN TYPE WB AS MANUFACTURED BY IKG INDUSTRIES OR EQUIVALENT ACCEPTED BY ENGINEER.
2. MAIN BEARING BARS SHALL BE 1 INCH X 3/16 INCH, SPACED 1 3/16 INCHES CENTER-TO-CENTER.
3. CROSS BARS SHALL BE RESISTANCE WELDED AT RIGHT ANGLES TO BEARING BARS. CROSS BARS SHALL BE SPACED 4 INCHES CENTER-TO-CENTER.
4. STEEL GRATING SHALL HAVE SERRATED MAIN BARS AND BE GALVANIZED.
5. PROVIDE NOSING BARS AT STAIR TREADS.

NAVIGATION LIGHT & SIGNAGE:

- 1. NAVIGATION LIGHT SHALL BE SELF-CONTAINED LANTERN M660 AS MANUFACTURED BY SABIK, A CARMANAH COMPANY OR EQUIVALENT ACCEPTED BY ENGINEER AND CLIENT.
2. COLOR OF NAVIGATION LIGHT SHALL BE GREEN AND/OR RED DEPENDENT ON NAVIGATION AID NUMBER AND AS DIRECTED ON DRAWINGS PER COAST GUARD REQUIREMENTS.
3. PROVIDE POLE MOUNT FOR NAVIGATION LIGHT. POLE SHALL BE 2" STD PIPE.
4. WELD LIGHT POST TO RAILING POST AS INDICATED ON DRAWINGS.
5. NAVIGATION SIGNS SHALL MEET COAST GUARD REQUIREMENTS.
6. MOUNT NAVIGATION SIGNS TO NEW RAILING SYSTEM AS INDICATED ON DRAWINGS.

U.S. COAST GUARD LIGHT LIST:

Table with columns: NO., NAME & LOCATION, POSITION, CHARACTERISTIC, HEIGHT, RANGE, STRUCTURE, REMARKS. Lists navigation aid details for various locations like TRIPOD DOLPHIN, SG ON SEAWALL, TR ON SEAWALL, etc.

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SAN MATEO COUNTY HARBOR DISTRICT
SOUTH SAN FRANCISCO, CALIFORNIA
REPLACEMENT OF OYSTER POINT MARINA ENTRANCE NAVIGATION AIDS

Table with columns: REVISIONS, DESCRIPTION, DATE, BY, T.M, DATE OF PREPARATION. Includes a grid for tracking revisions and preparation dates.

Table with columns: SURVEYED, DRAWN, DESIGNED, CHECKED, SHEET NUMBER, SHEET TITLE. Includes project details and sheet identification.

ISSUE FOR BID PURPOSES
PROJECT NO: 21S046.00
SHEET NUMBER: G-002



9/16/2021

Thursday, September 16, 2021 3:15:33 PM
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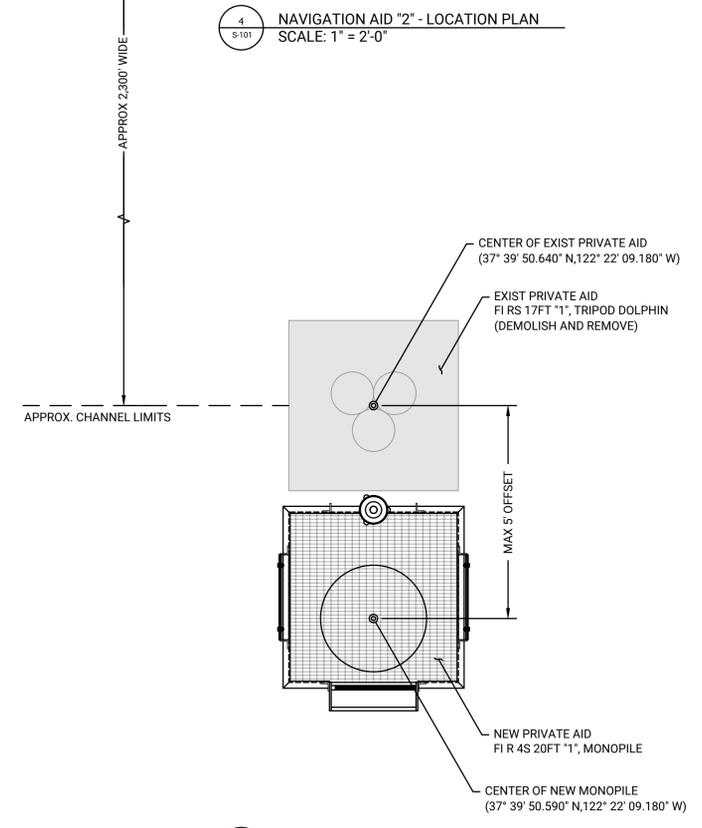
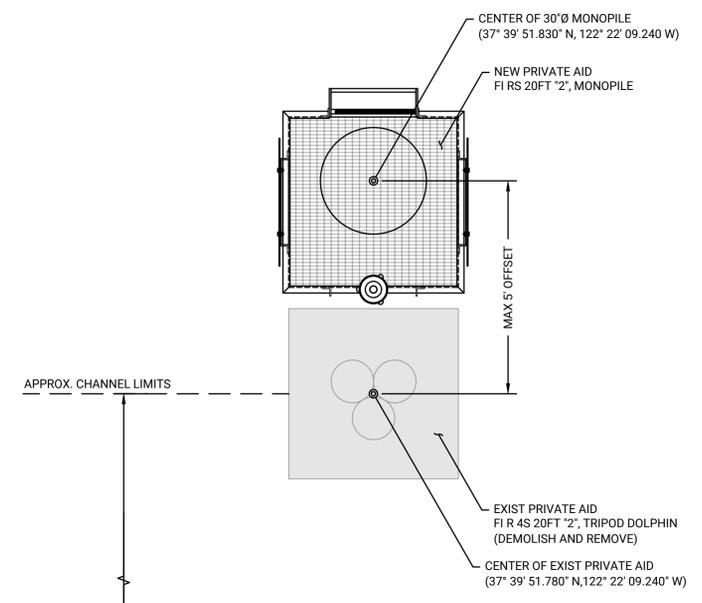
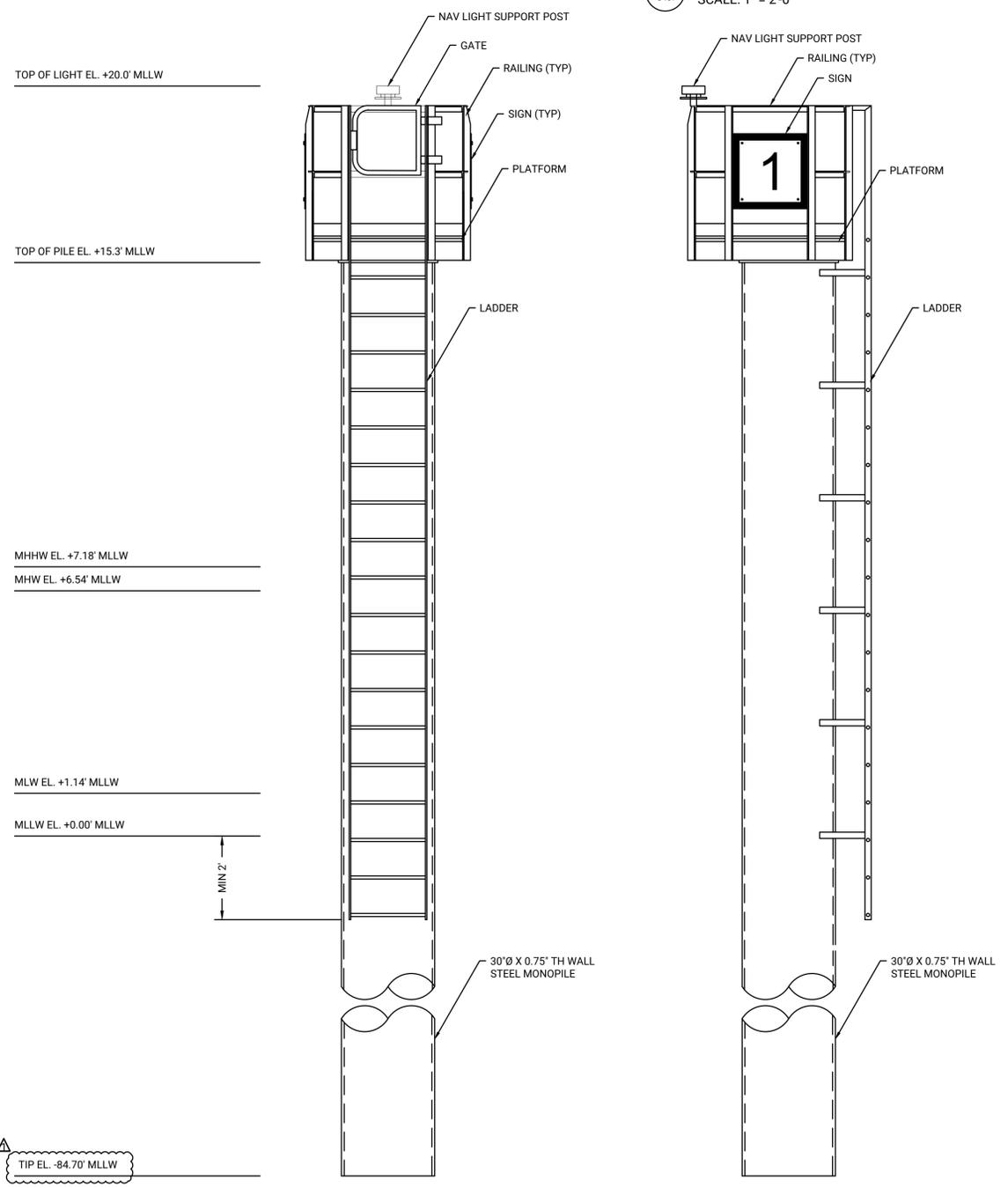
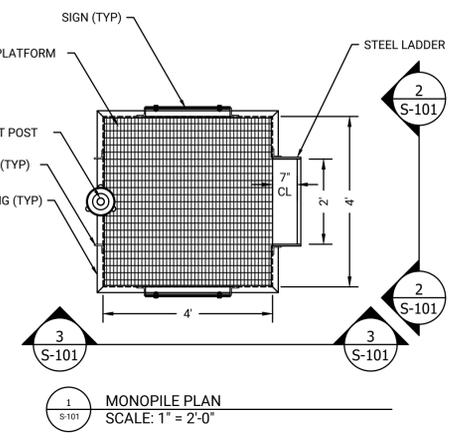
REVISIONS		DATE	DESCRIPTION
NO.	BY	DATE	DESCRIPTION
1	TJM	9/16/21	ADDENDUM NO. 1

DATE OF PREPARATION		
SURVEYED	BY	DATE
DRAWN	SM/TM	08/24/2021
DESIGNED	SM	08/24/2021
CHECKED	AM	08/24/2021

SHEET TITLE:
**STRUCTURAL
PLAN &
ELEVATIONS**

ISSUANCE:
**ISSUE FOR BID
PURPOSES**

PROJECT NO: 21S046.00
SHEET NUMBER
S-101



9/16/2021
Sea March
SOREN MORCH
No. 80720
Exp. 03/31/23
CIVIL ENGINEER
STATE OF CALIFORNIA

