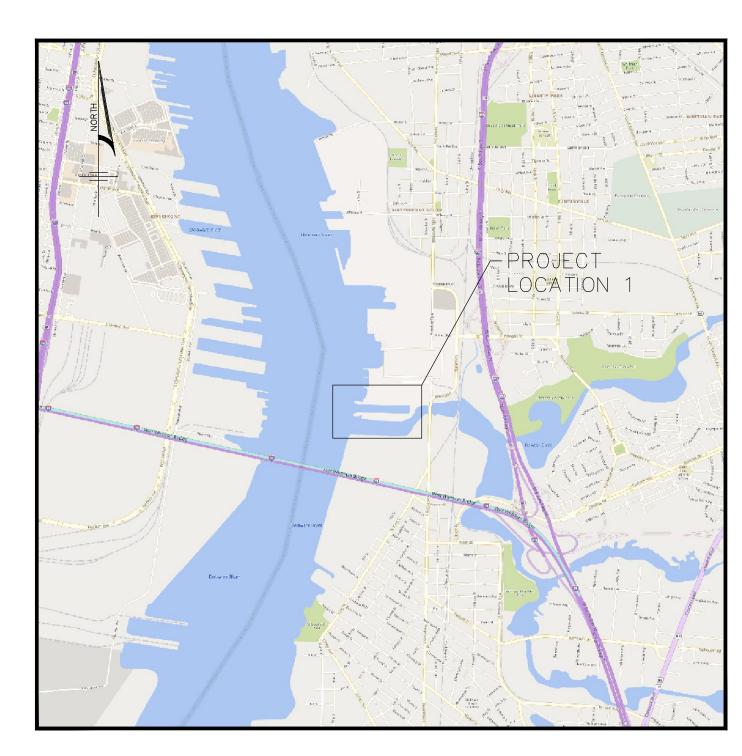
LIST OF DRAWINGS

No.	Description	Revision Date
01	TITLE SHEET	ORIGINAL SUBMISSIO
02	PROJECT NOTES	ORIGINAL SUBMISSIO
03	FACILITY SITE PLAN	ORIGINAL SUBMISSIO
04	PIER 5 SITE PLAN	ORIGINAL SUBMISSIO
05	PIER 5 EXISTING CONDITIONS 1 OF 2	ORIGINAL SUBMISSIC
06	PIER 5 EXISTING CONDITIONS 2 OF 2	ORIGINAL SUBMISSIO
07	PIER 5 PROPOSED REPAIRS 1 OF 2	ORIGINAL SUBMISSIC
08	PIFR 5 PROPOSED REPAIRS 2 OF 2	ORIGINAL SUBMISSIO

SOUTH JERSEY PORT CORPORATION

BROADWAY FACILITY IMMEDIATE REPAIRS BLOCK 455; LOT 1 CAMDEN, NEW JERSEY 08103





VICINITY MAP

USGS QUAD MAPS

SCALE: 1" = 2,000'



SITE MAP

Louis L. Zuegner IV P.E. PE No. GE04753800

Certificate of Authorization No. 24GA28184000

Certificate of Authorization No. 24GA28184000

Gateway 195 Centre 5 Commerce Way, Suite 9 Hamilton, NJ 08691

Example 1 P.E. PE No. GE04753800

Gateway 195 Centre 6 Commerce Way, Suite 9 Hamilton, NJ 08691

Example 2 P. No. GE04753800

Gateway 195 Centre 6 Commerce Way, Suite 9 Comm

Sheet Number

1 OF 8

ISSUED FOR BID

DESIGN CRITERIA

1. TIDAL DATUM INFORMATION IS TAKEN FROM BENCHMARK SHEET FOR STATION ID 8545240, PHILADELPHIA, PA, 12/21/2012, PUBLISHED BY THE U.S. DEPARTMENT OF COMMERCE, NATIONAL OCEAN AND ATMOSPHERIC ADMINISTRATION (NOAA).

ELEVATION OF TIDAL DATUM (STATION 8551910, REEDY POINT,	DE)
MEAN HIGHER-HIGH WATER (MHHW)	+6.50
MEAN HIGH WATER (MHW)	+6.10
NAVD 88	+2.91
MEAN LOW WATER (MLW)	0.00
MEAN LOWER LOW WATER (MLLW)	-0.19

2. 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. REVIEW OF CONSTRUCTION BY THE OWNER AND ENGINEER OF RECORD IS FOR GENERAL CONFORMANCE WITH THE CONTRACT DOCUMENTS ONLY. LACK OF COMMENT BY THE OWNER AND ENGINEER OF RECORD WITH REGARD TO CONSTRUCTION PROCEDURES SHALL NOT BE INTERPRETED AS APPROVAL OR ACCEPTANCE OF SUCH PROCEDURES.

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
- 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
- 8. 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.
- 9. 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.
- 10. 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.
- 11. 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.
- 12. THE CONTRACTOR SHALL GUARANTEE TO THE OWNER MATERIALS AND WORKMANSHIP AGAINST ORIGINAL DEFECTS, OR AGAINST INJURY FROM PROPER AND USUAL WEAR WHEN USED FOR THE PURPOSE INTENDED, FOR TWELVE (12) MONTHS AFTER DATE OF FINAL PAYMENT CERTIFICATIONS, AND SHALL MAINTAIN ITEMS IN PERFECT CONDITION DURING THE PERIOD OF GUARANTEE. DEFECTS APPEARING DURING THE PERIOD OF GUARANTEE SHALL BE MADE GOOD BY THE CONTRACTOR AT HIS EXPENSE UPON DEMAND OF THE OWNER. IT BEING REQUIRED THAT WORK SHALL BE IN PERFECT CONDITION WHEN THE PERIOD OF GUARANTEE SHALL HAVE ELAPSED. IN THE EVENT OF DEFAULT BY THE CONTRACTOR, THE COMPANY SHALL HAVE THE RIGHT TO MAKE GOOD DEFECTS AND BILL THE CONTRACTOR COST PLUS 15% FOR ADMINISTRATION FEES.
- 13. 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.
- 14. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE AND MAINTAIN UTILITIES HE DEEMS NECESSARY TO AFFECT THE WORK.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. COMPLY WITH LOCAL, STATE, AND FEDERAL REQUIREMENTS FOR PROTECTION OF THE ENVIRONMENT DURING THE WORK. NO LATER THAN 21 DAYS FOLLOWING AWARD OF CONTRACT, SUBMIT A COMPREHENSIVE PLAN DESCRIBING THE MEANS AND METHODS TO BE EMPLOYED FOR PROTECTION, CONTAINMENT, AND CLEAN UP. 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.
- 19. THE OWNER RESERVES THE RIGHT TO CHARGE THE CONTRACTOR FOR ADDITIONAL ENGINEERING SERVICES IF REQUIRED DUE TO THE CONTRACTOR'S ACTIONS OR INACTIONS.
- 20. 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.
- 21. 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 UNFORESEEN OBJECTS. NO CONSIDERATION WILL BE GIVEN FOR ADDITIONAL COMPENSATION ON THIS ACCOUNT WITHOUT THIS TIMELY NOTIFICATION.
- 22. SUBSTITUTIONS MAY BE FURNISHED FOR MATERIALS SPECIFIED HEREIN PROVIDED THE CONTRACTOR SECURES ACCEPTANCE FROM THE ENGINEER OF RECORD.

<u>SELECTIVE DEMOLITION AND DISPOSAL</u>

1. THE CONTRACTOR SHALL REMOVE AND DISPOSE ALL STEEL MATERIALS LABELED FOR DEMOLITION IN THE CONTRACT DOCUMENTS. THIS WORK INCLUDES BUT IS NOT LIMITED TO, IMPRESSED CURRENT BAR, ASPHALT AND BACKFILL.

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. THE CONTRACTOR SHALL SAFEGUARD AND PROTECT EXCAVATIONS.

4. DURING EXECUTION OF THE WORK, THE CONTRACTOR IS REQUIRED TO INSTALL AND MAINTAIN REQUIRED SEDIMENTATION AND EROSION CONTROL MEASURES TO PROTECT ADJACENT WATERWAYS. MEASURES INCLUDE BUT ARE NOT LIMITED TO TEMPORARY BERMS. 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.

- 1. 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 ALL WELDING.
- 2. UNDERWATER WELDS ARE TO BE PERFORMED BY WELDERS WITH A MINIMUM OF FIVE (5) YEARS EXPERIENCE PERFORMING UNDERWATER WELDS OF THE SPECIFIED TYPES AND SIZES. CONTRACTOR IS TO SUBMIT WELDER QUALIFICATIONS TO THE ENGINEER OF RECORD FOR APPROVAL.
- 3. WELDING ELECTRODES SHALL BE E70XX AND COMPLY WITH AWS A5.1 AND AWS a5.5.
- 4. DESIGN FABRICATION, AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE "MANUAL OF STEEL ERECTION LRFD," 15TH EDITION AS ADOPTED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION.
- 5. STEEL SECTIONS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
 - PLATES: ASTM A572, Fy=50 KSI
- ANGLES: ASTM A572, Fy=50 KSI 6. UNLESS OTHERWISE NOTED IN DESIGN DOCUMENTS, STEEL PLATES SHALL BE EPOXY COATED.
- 7. WELDS TO BE COATED WITH DENSO SEASHIELD SZ UNDERWATER EPOXY OR ENGINEER OF RECORD APPROVED EQUIVALENT APPLICATION OF THE EPOXY IS TO BE IN CONFORMATION WITH THE MANUFACTURES SPECIFICATIONS.

- 1. MATERIAL USED FOR FACTORY EPOXY COATING OF ALL SCHEDULED SURFACES SHALL BE BAR—RUST 235 MULTI—PURPOSE EPOXY COATING AS MANUFACTURED BY DEVOE 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 MANUFACTURERS REQUIREMENTS.
- 3. PROTECTIVE COATING TOP COAT SHALL BE BLACK UNLESS OTHERWISE INDICATED ON THE DRAWINGS OR BY THE OWNER.
- 4. SURFACES SHALL BE PREPARED IN STRICT ACCORDANCE WITH THE PROTECTIVE COATING SYSTEM MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 5. THE PROTECTIVE COATING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS. COATING IS TO BE APPLIED IN TOW COATS TO ACHIEVE AN OVERALL DRY FILM THICKNESS OF 15 MILS.
- 6. ALL HOLIDAYS OR OTHER IMPERFECTIONS IN THE COATING SHALL BE REMOVED OR REPAIRED AT THE CONTRACTOR'S EXPENSE PRIOR TO FINAL ACCEPTANCE OF THE WORK.

NON-SHRINK GROUT

1. NON-SHRINK GROUT SHALL BE A NON-SHRINK, NON-METALLIC CEMENTITIOUS GROUT, CONFORMING TO ASTM C827 AND SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 5000 PSI IN THE FLOWABLE STATE. GROUT PRODUCT MUST BE SUITABLE FOR SUBMERGED/UNDERWATER APPLICATIONS.

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

- 1. CONTROLLED LOW STRENGTH MATERIAL (CLSM), FILL SHALL HAVE A MINIMUM WET DENSITY OF 90 POUNDS PER CUBIC FOOT
- (PCF) AND A MAXIMUM WET DENSITY OF 110 PCF. 2. CSLM FILL SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 100 PSI AND NOT TO EXCEED 200 PSI.
- 3. CSLM FILL SHALL HAVE A SLUMP OF 8 TO 11 INCHES.
- 4. CLSM FILL SHALL CONTAIN 15% TO 20% ENTRAINED AIR. AIR ENTRAINMENT ADMIXTURE SHALL BE DARAFILL AS MANUFACTURED BY W.R. GRACE & CO. OR EQUIVALENT.

- 1. FILL IS TO BE AASHTO No. 57 STONE.
- 2. THE SUB-BASE IS TO BE NJDOT APPROVED DENSE GRADED AGGREGATE (DGA)
- 3. ASPHALT IS TO BE NJDOT I-4 MIX.
- 4. ALL AGGREGATES TO BE PLACED AND COMPACTED IF APPLICABLE IN ACCORDANCE WITH NJDOT SPECIFICATIONS.

- 1. THE CONTRACTOR SHALL MAKE THE FOLLOWING SUBMITTALS IN ELECTRONIC FORMAT TO THE ENGINEER OF RECORD: A. WORK SCHEDULE — SUBMIT A WORK SCHEDULE: THE WORK SCHEDULE SHALL INDICATE THE START AND END DATES OF ALL WORK ELEMENTS. THE SCHEDULE SHALL INCORPORATE COORDINATION ACTIVITIES AS MAY BE REQUIRED. THE SCHEDULE SHALL INDICATE CRITICAL PATH ELEMENTS, AND SHALL ANTICIPATE REVIEW PERIODS FOR SUBMITTALS, RE-SUBMITTALS, AND POTENTIAL DELAYS OR POSSIBLE INTERRUPTION IN WORK SUCH AS "WEATHER DAYS".
- B. STAGING AND SEQUENCING PLAN SUBMIT A STAGING PLAN WHICH SHALL INDICATE STAGING AREAS, STORAGE AREA, PROTECTION OF MATERIALS, TEMPORARY ENVIRONMENTAL CONTROLS, EQUIPMENT, WORK SEQUENCING, MAINTENANCE AND PROTECTION OF THE PUBLIC AND TRAFFIC, LABOR AND EQUIPMENT FORCE NEEDED FOR THE TOPSIDE WORK, DEMOLITION PROCEDURES, AND MEANS AND METHODS OR ANY OTHER WORK ELEMENT AS SPECIFIED.
- C. CONCRETE MIX DESIGN, ADMIXTURES, AND PLACEMENT PROCEDURES SUBMIT CONCRETE MIX DESIGNS AND ADMIXTURES. ADMIXTURE MANUFACTURER SHALL PROVIDE CERTIFICATIONS AS SPECIFIED. CONTRACTOR SHALL ALSO SUBMIT CONCRETE PLACEMENT/PUMPING PROCEDURES AND EQUIPMENT, FOR APPROVAL BY THE ENGINEER.
- D. PRODUCT DATA, CERTIFICATES, MSDS SHEETS, AND INSPECTION REPORTS SUBMIT DATA FOR PROPRIETARY MATERIALS OR SYSTEMS INCLUDING STEEL PLATES AND SHAPES, GROUT, CLSM, AGGREGATES, BACKER RODS, ETC. SUBMIT MSDS SHEETS FOR ALL MATERIALS REQUIRING SPECIAL HANDLING OR MATERIALS THAT CONTAIN ORGANICALLY HARMFUL OR HAZARDOUS
- E. MATERIAL CERTIFICATES AND TEST REPORTS SUBMIT DISPOSAL CERTIFICATES AND MATERIALS CERTIFICATES AS SPECIFIED AND AS OTHERWISE REQUESTED BY THE ENGINEER, INCLUDING NAMES. SOURCES, AND DESCRIPTIONS. SUBMIT LABORATORY TEST REPORTS FOR CONCRETE AS SPECIFIED. MATERIAL CERTIFICATES IN LIEU OF MATERIAL LABORATORY TEST REPORTS MAY BE SUBMITTED WHEN PERMITTED BY THE ENGINEER. MATERIAL CERTIFICATES SHALL BE SIGNED BY MANUFACTURER AND CONTRACTOR, CERTIFYING THAT EACH MATERIAL ITEM COMPLIES WITH, OR EXCEEDS, THE SPECIFIED REQUIREMENTS.
- 2. ALL SUBMITTALS SHALL CONTAIN INFORMATION PERTAINING TO THE PROJECT INCLUDING TITLE, DATE, SHEET NOS. SCALES, MATERIALS, PRODUCTS, SYSTEMS, AND ANY OTHER RELEVANT INFORMATION SPECIFIC TO THE ITEM OF WORK COVERED UNDER THE SUBMITTAL.

197 300 250

71 215 300

163 460 384

30

75

50

ESTIMATED BID QUANTITIES PIER 5

AASHTO No. 57 Stone

NJDOT I-4 Ashalpt

Dense Graded Aggregate (DGA) CF

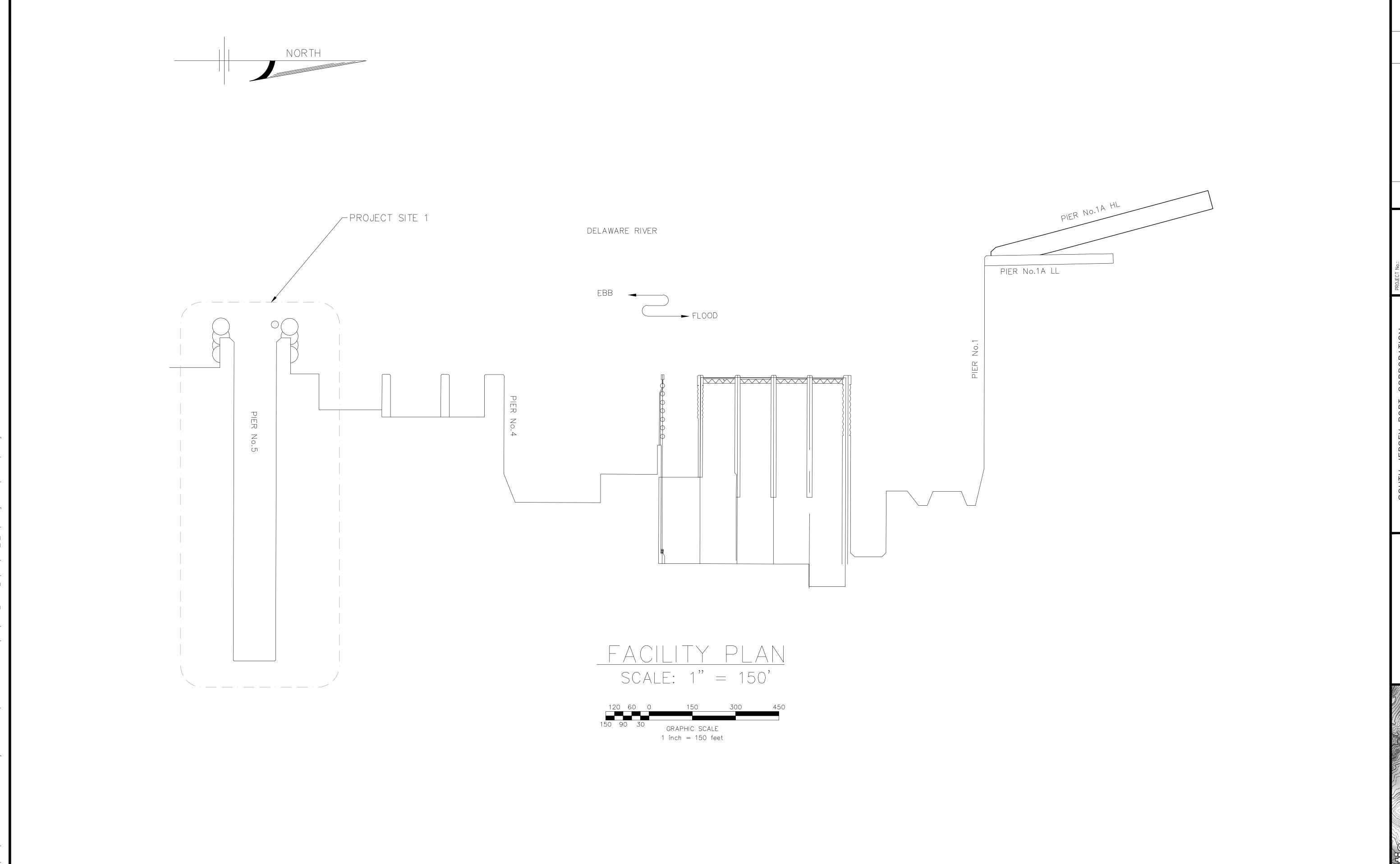
Quantity per Location Unit of Material Suspected Suspected Suspected Measure Cell 4N Void 1 Void 2 Void 3 Steel Plate Repairs LF 14 76 38 74 60 112 84 30 LF Saw Cutting Controlled Low-Strength Material (CLSM) 38 12 | 16

CF

SF

ШШ Sheet Number OF

CORF ACILITY EPAIR

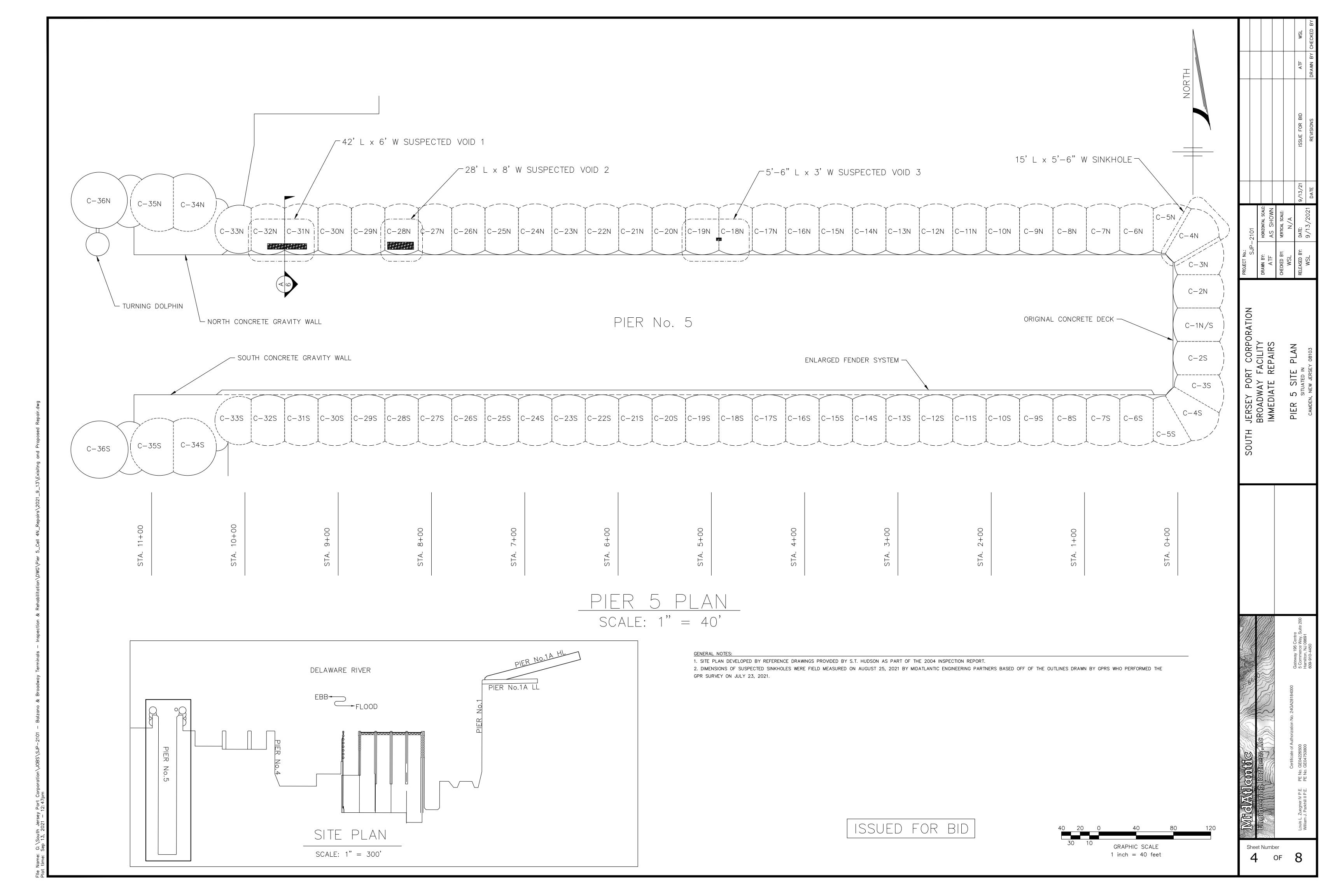


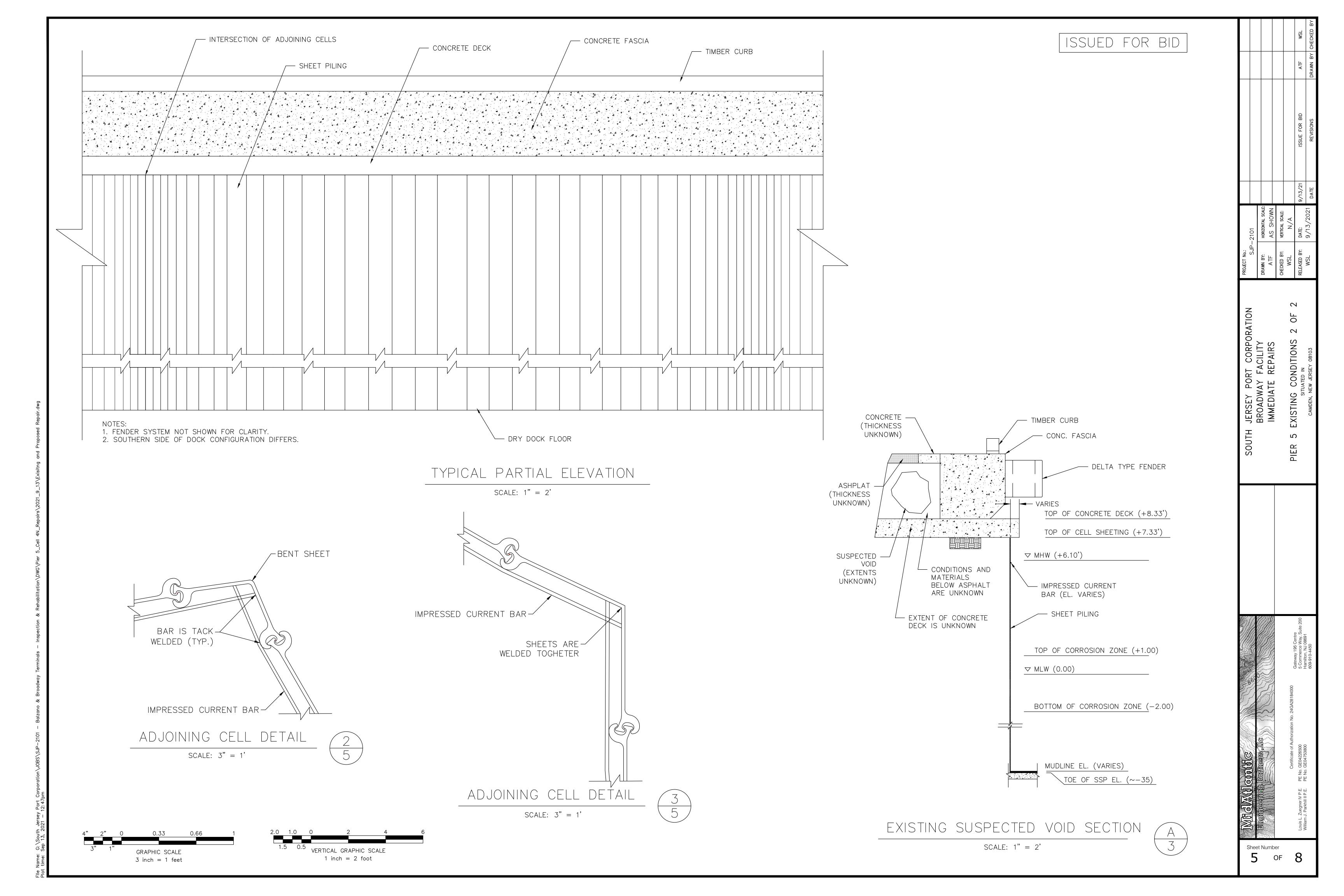
ISSUED FOR BID

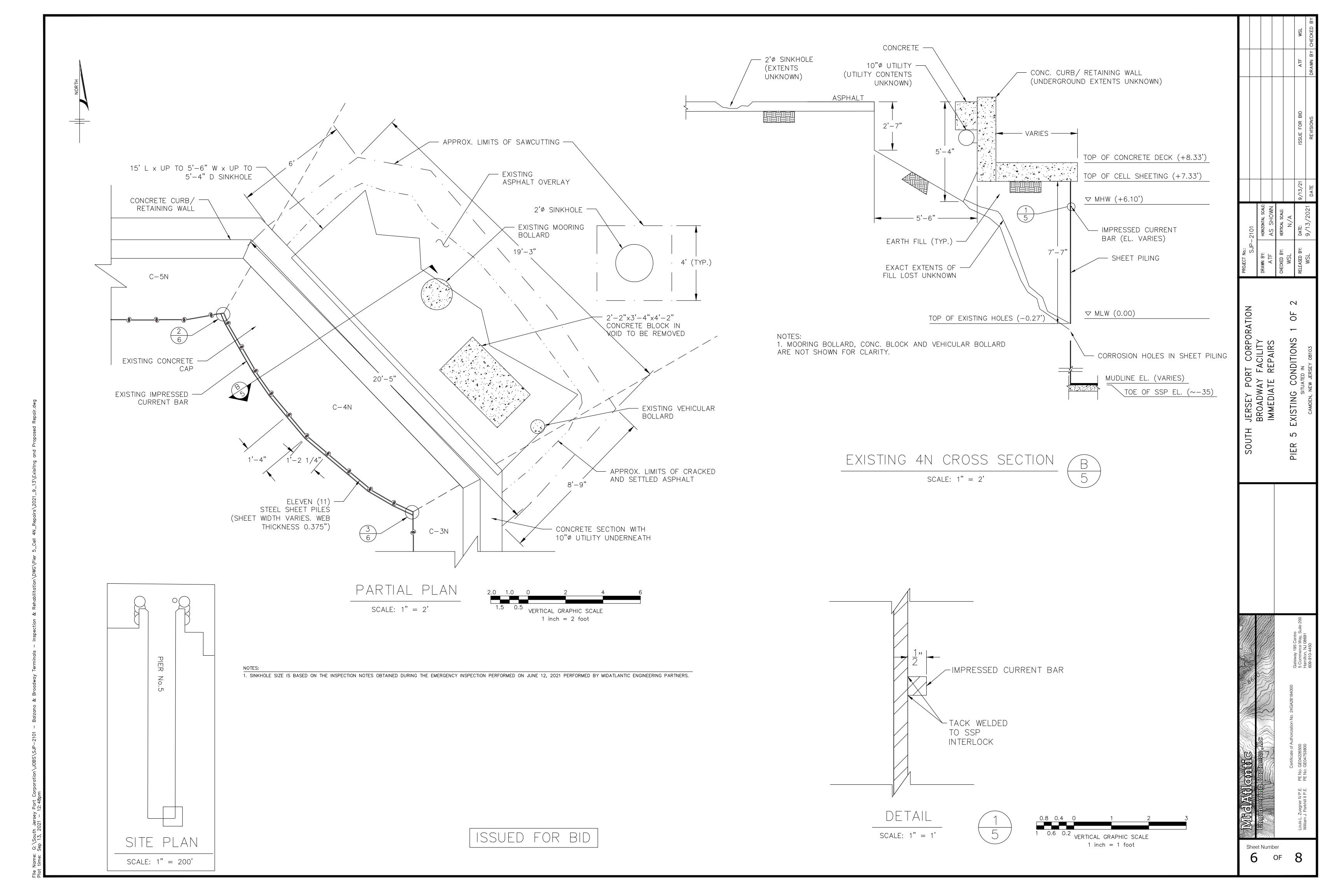
FACILITY SITE

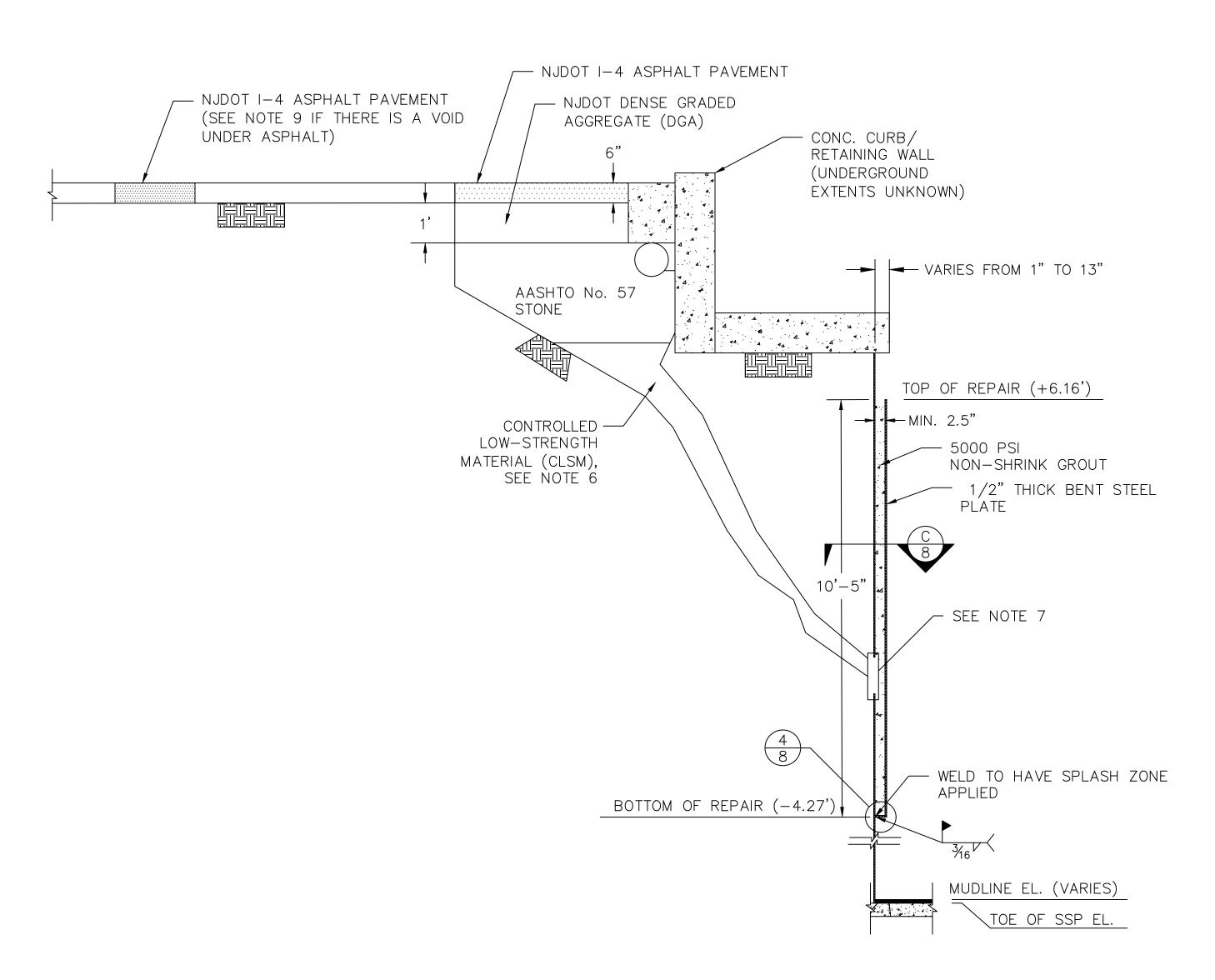
Sheet Number

3 OF 8









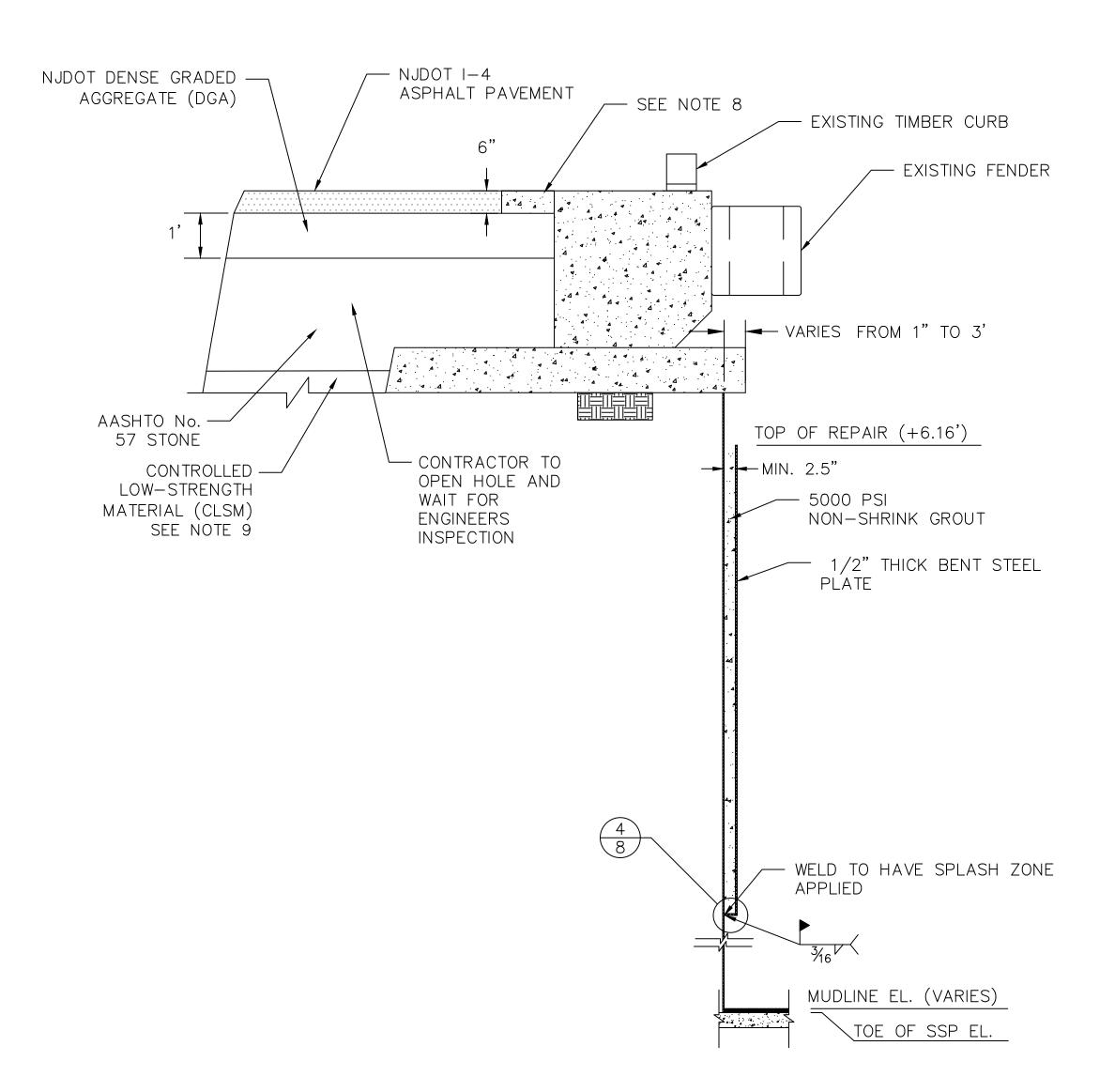
PROPOSED 4N REPAIR CROSS SECTION

SCALE: 1" = 2"

NOTES:

1. FOR GENERAL NOTES SEE SHEET 2.

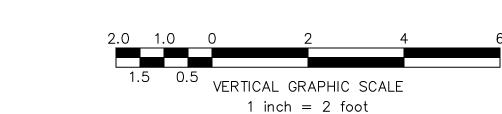
- 2. CLEAN SSP OF CELL IN THE FOOTPRINT OF REPAIRS. CLEAN ALL EXPOSED SURFACES OF MARINE GROWTH, SCALING AND CORROSION USING APPROPRIATE CLEANING EQUIPMENT.
- 3. IMMEDIATELY PRIOR TO WELDING, THOROUGHLY CLEAN NEW AND EXISTING STEEL SURFACE RECEIVING WELDS OF ALL FOREIGN MATTER INCLUDING MARINE GROWTH, SEDIMENTS, COATINGS, RUST, OIL AND LOOSE MATERIAL FOR A MINIMUM DISTANCE OF 3" ON EACH SIDE OF THE WELD.
- 4. THE EXISTING CELL IS DETERIORATED. SIGNIFICANT BULGING AND LEANING IS POSSIBLE IN THE EXISTING SSP. STEEL PLATE AND ANGLES SHALL BE FIELD MEASURED AND FIELD TRIMMED TO CONFORM TO CELL HORIZONTAL AND VERTICAL CURVATURE.
- 5. CONTRACTOR TO REVIEW FIELD CONDITIONS PRIOR TO PROCUREMENT OF MATERIALS. PROCURED QUANTITY AND SIZE OF MATERIAL SHALL BE IN CONSIDERATION OF FIELD CONDITIONS.
- 6. EXTENT OF VOID MAY EXCEED WHAT IS SHOWN ON THE DRAWING.
- 7. ANY CORROSION HOLE THAT IS GREATER THAN 5" DIA. MUST TO BE PLUGGED PRIOR TO PLATE INSTALLATION.
- 8. IF NECESSARY TO REMOVE CONCRETE, REPLACE WITH MINIMUM 4000 PSI CONCRETE TO THE ORIGINAL DIMENSIONS.
- 9. SUSPECTED VOIDS BELOW THE ASPHALT ARE TO BE FILLED AS FOLLOWS: A. BOTTOM OF VOID TO 4' TO THE TOP OF THE ASPHALT — CONTROLLED LOW—STRENGTH MATERIAL (CLSM) B. 4' TO 1.5' TO THE TOP OF THE ASPHALT — AASHTO No. 57 STONE B. 1.5' TO 0.5' TO THE TOP OF THE ASPHALT — DENSE GRADED AGGREGATE (DGA) C. 0.5' TO 0" TO THE TOP OF THE ASPHALT - NJDOT I-4 ASPHALT



PROPOSED TYPICAL VOID REPAIR CROSS SECTION

SCALE: 1" = 2'

ISSUED FOR BID

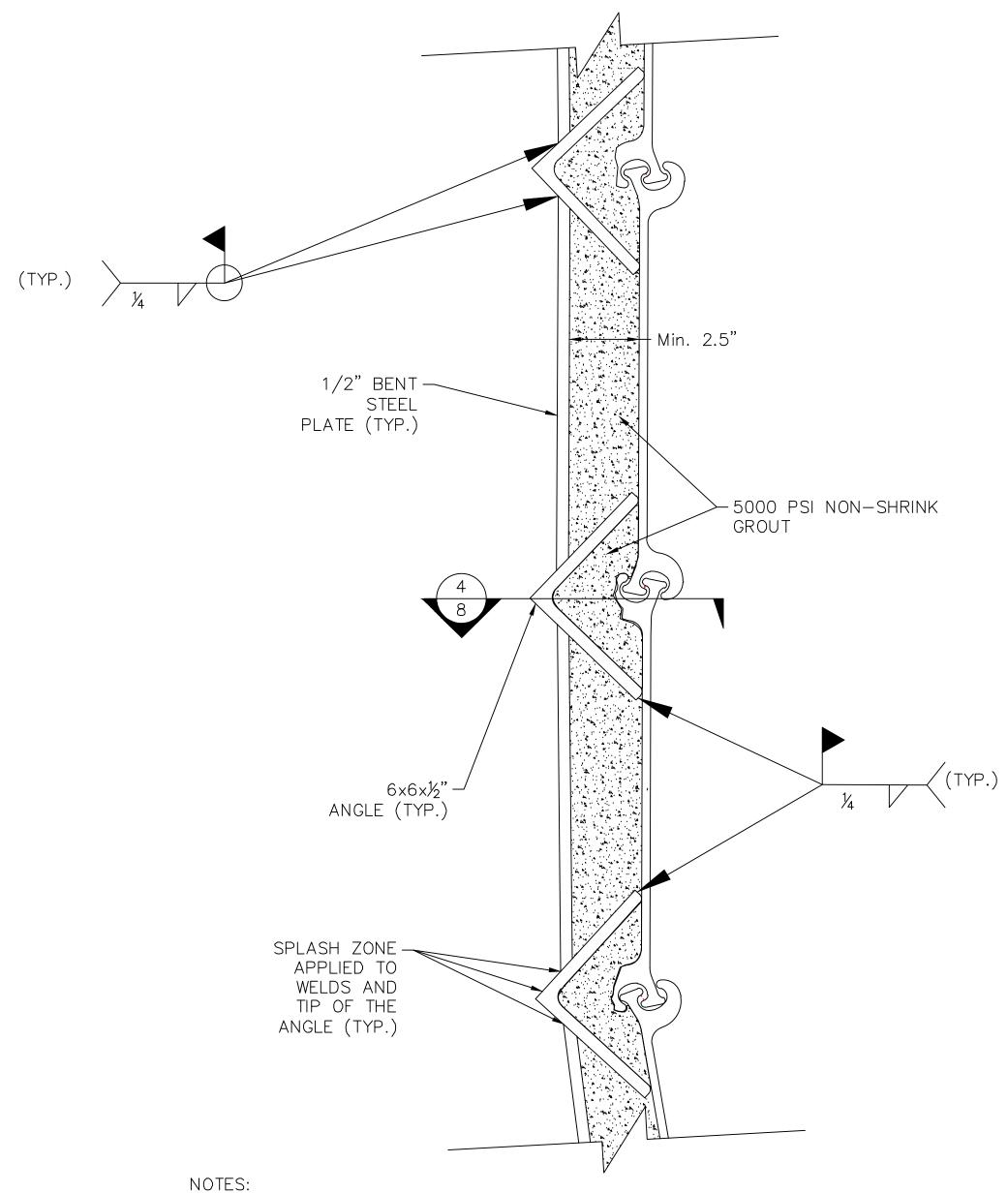


7

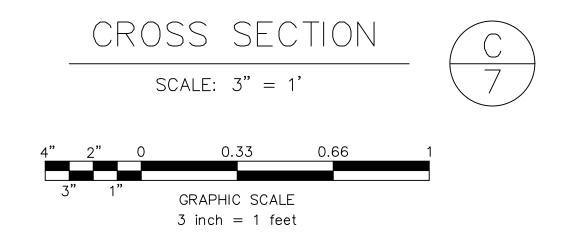
OF

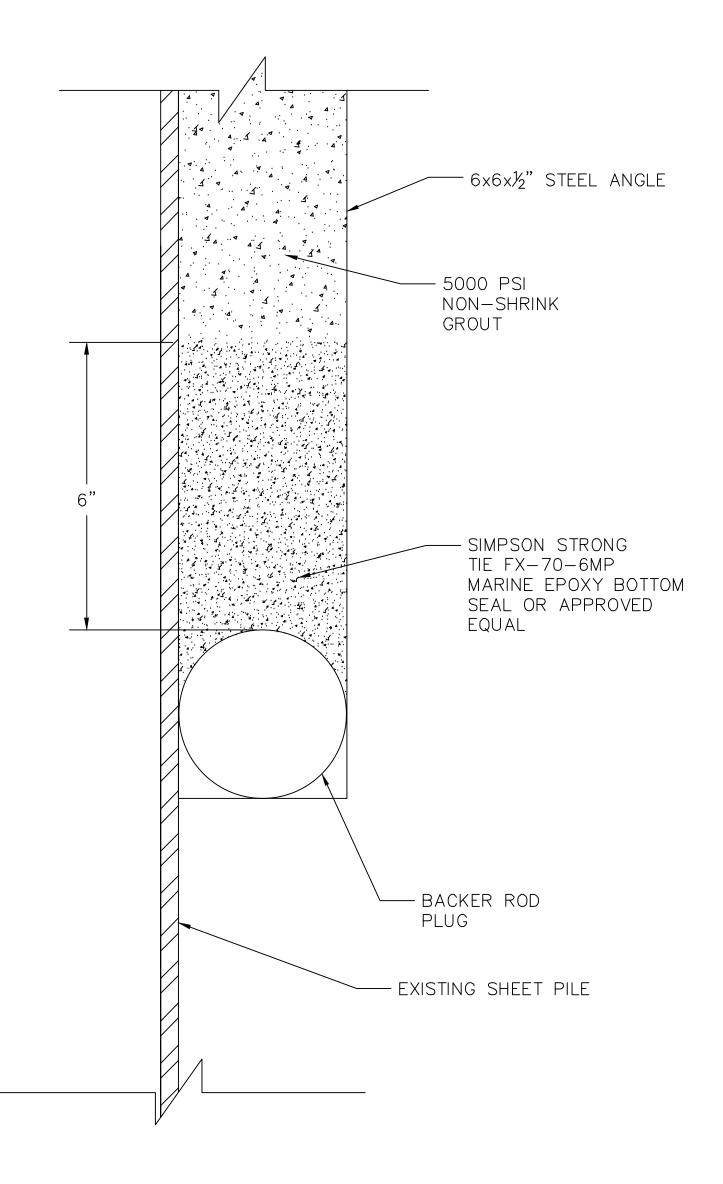
Sheet Number

7 OF 8

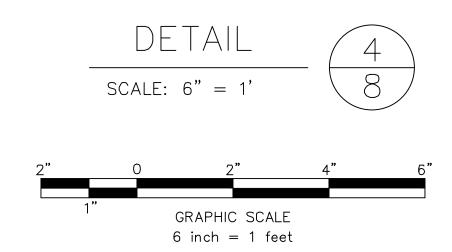


1. IMPRESSED CURRENT BAR TO BE REMOVED AS NECESSARY TO INSTALL 6x6x1/2 ANGLES.
2. STEEL ANGLES ARE TO BE UNCOATED.
3. CONTRACTOR TO POWER WASH ALL SURFACES PRIOR TO INSTALLATION OF REPAIR TO ENSURE SUFFICIENT BOND WITH GROUT.





1. BACKER ROD TO BE INSTALLED IN A MANNER THAT WILL CREATE A SEAL ALLOWING NONE OF THE BOTTOM SEAL EPOXY TO ESCAPE.



ISSUED FOR BID

7 Certifice PE No. GE042; PE No. GE047?

8 of 8