GENERAL NOTES:

1. THE 2019 NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, INCLUDING ALL BASELINE DOCUMENT CHANGES THROUGH MAY 2022, SHALL GOVERN ON THIS PROJECT UNLESS OTHERWISE NOTED.

5. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD PRIOR TO THE START OF THE CONSTRUCTION. ANY ERRORS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.

6. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION. COST FOR PRIVATE THIRD PARTY UTILITY MARKOUTS SHALL BE BORNE BY THE CONTRACTOR.

7. THE CONTRACTOR SHALL USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

8. ALL PAVED AND CONCRETE AREAS DISTRIBUTED DURING CONSTRUCTION SHALL BE RESTORED TO A CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF CONSTRUCTION.

9. ALL GRASSED OR WOODED AREAS DISTRIBUTED DURING CONSTRUCTION SHALL BE TOPSOILED AND SEEDED.

10. ALL FILL SHALL BE PLACED IN 12" LAYERS AND THOROUGHLY COMPACTED TO THE SATISFACTION OF THE ENGINEER. IF BORROW FILL IS REQUIRED, IT SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF THE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION AND IT SHALL BE AT HIS OWN EXPENSE TO REPAIR OR REPLACE ANYTHING THAT HE DAMAGES.

12. APPROXIMATE DEPTH OF ALL WATER MAINS ARE ± 4 FEET.

13. APPROXIMATE DEPTH OF ALL GAS MAINS ARE ± 3 FEET.

14. ALL UNUSED AND REGULATED MATERIAL EXCAVATED FROM THE PROJECT SITE ARE TO BE DISPOSED OF AT AN APPROVED FACILITY.

15. ADDITIONAL TESTING FOR LEGAL DISPOSAL OF REGULATED MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. MATERIAL SHALL BE STOCKPILED ON SITE UNTIL TESTING RESULTS RECEIVED. SEPARATE PAYMENT WILL NOT BE MADE FOR MATERIAL TESTING. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN THE PRICE BID FOR REMOVAL AND DISPOSAL OF REGULATED MATERIAL.

CONSTRUCTION STAGING REQUIREMENTS:

OPTION A:

1. SECURITY FENCE REPLACEMENT SHALL BE LIMITED TO ONE (1), 400' (FEET) LENGTH OF FENCE MAXIMUM AT A TIME.
2. WHEN FENCE SECTIONS ARE REMOVED, A PORT SECURITY GUARD SHALL BE POSTED AT THAT LOCATION FOR THE DURATION OF THE WORK AND/OR UNTIL FENCE SECTION HAS BEEN REPLACED AND THE SECURITY PERIMETER FENCE IS DEEMED SECURE.
3. THE INTENT OF THIS PROCEDURE IS TO ENSURE THAT NO SECTION OF THE FENCE IS REMOVED BEYOND THAT WHICH CANNOT BE FULLY REPLACED DURING ONE WORK DAY.
4. AT THE END OF EACH WORK DAY, THE PORT PERIMETER SECURITY FENCING SHALL BE FULLY INTACT AND SECURE IN ACCORDANCE WITH USCG REQUIREMENTS.

OPTION B:

1. SHOULD THE CONTRACTOR ELECT TO USE TEMPORARY FENCING/BARRIERS TO ALLOW FOR MORE THAN 400' (FEET) OF FENCE REMOVAL AT A TIME, THE FOLLOWING WILL BE REQUIRED: TEMPORARY FENCING LAYOUT, MATERIALS AND LENGTH OF FENCE REMOVAL SUBJECT TO ENGINEER APPROVAL.
2. TEMPORARY FENCING SHALL MEET USCG STANDARDS AND REQUIREMENTS.
3. POSTS FOR TEMPORARY FENCING SHALL BE ADEQUATELY ANCHORED INTO THE GROUND. FENCE POST STANDS ON GRADE ARE NOT ACCEPTABLE.
4. AN APPROVED TEMPORARY FENCING SYSTEM SHALL BE INSTALLED SUCH THAT IT REMAINS IN PLACE AT ALL TIMES AND THE PORT REMAINS SECURE. ANY OPENINGS IN THE SECURITY PERIMETER, HOWEVER TEMPORARY, SHALL BE APPROVED BY THE ENGINEER AND SHALL HAVE A PORT SECURITY GUARD POSTED FOR THE DURATION OF THE OPENING.

DEMOLITION NOTES:

1. DEMOLITION OF EXISTING CHAIN-LINK FENCE INCLUDES THE REMOVAL AND DISPOSAL OF ALL FENCING MATERIAL INCLUDING, BUT NOT LIMITED TO, MESH, POSTS, AND HARDWARE. THE REMOVAL OF ALL CONCRETE POST FOUNDATIONS IS ALSO INCLUDED. ANY PAVEMENT DAMAGED/DISTURBED DURING FENCE REMOVAL SHALL ALSO BE REMOVED AND DISPOSED OF AT NO ADDITIONAL COST.
2. THE EXISTING CHAIN-LINK FENCE HAS BEEN FORTIFIED WITH SHIPPING CONTAINERS. CONTRACTOR SHALL COORDINATE HANDLING/MOVING OF THE CONTAINERS WITH SJPC. SJPC SHALL RELOCATE CONTAINERS.
3. A SECURE PERIMETER MUST BE MAINTAINED AT ALL TIMES. THE LENGTH OF EXISTING FENCE/CONTAINERS ALLOWED TO BE REMOVED AT ONE TIME IS LIMITED TO 400'. TEMPORARY SECURITY FENCING IS REQUIRED.
4. TEMPORARY SECURITY FENCE SHALL BE 8' HIGH WITH POSTS DRIVEN INTO THE GROUND AND REMOVED UPON COMPLETION OF PERMANENT CONSTRUCTION. TEMPORARY FENCING ON STANCHIONS WILL NOT BE ACCEPTABLE.
5. THE SECURITY OF THE PERIMETER IS DETERMINED BY THE PORT. ALL REQUIREMENTS OF THE PORT MUST BE COMPLIED WITH. NO SEPARATE PAYMENT WILL BE MADE FOR MEASURES REQUIRED TO MAINTAIN A SECURE PERIMETER. THE COST SHALL BE INCLUDED IN THE VARIOUS BID ITEMS.

MATERIAL NOTES:

1. CONCRETE
   - A. CLASSES OF CONCRETE:
     - a. NJDOT CLASS OF CONCRETE USED:
       CLASS B CONCRETE FOR FOUNDATIONS AND MATS
     - b. NJDOT CLASS DESIGN STRENGTHS (MIX DESIGN REQUIREMENTS)
       CLASS B = 3,700 PSI
   - B. TESTING OF CAST-IN-PLACE CONCRETE
     - a. DURING THE PROGRESS OF THE WORK, TEST SHALL BE MADE BY AN APPROVED LABORATORY IN ACCORDANCE WITH THE STANDARD METHOD OF MAKING AND CURING CONCRETE COMPRESSION AND FLEXURE TEST SPECIMENS IN THE FIELD, A.S.T.M. DESIGNATION: C-31. COST OF ALL CONCRETE TESTS SHALL BE BORNE BY CONTRACTOR, WHO SHALL PROVIDE MOLDS AND SLUMP CONE ON THE PROJECT. CASTING OF ALL TEST CYLINDERS SHALL BE MADE UNDER OBSERVATION OF THE ENGINEER.
     - b. PROVING TEST SHALL CONSIST OF AT LEAST SIX (6) CYLINDERS FOR EACH 50 CUBIC YARD OF CONCRETE OF WHICH TWO (2) SHALL BE BROKEN AT 7 DAYS AND TWO (2) AT 28 DAYS WITH TWO (2) HELD FOR 56 DAY BREAK, IF NECESSARY. IMMEDIATELY FOLLOWING EACH LABORATORY TEST, ENGINEER SHALL BE FURNISHED WITH A CERTIFIED TEST REPORT IN DUPLICATE.
     - c. WHERE THE AVERAGE STRENGTH OF THE CYLINDERS SHOWN BY THESE TESTS FOR ANY PORTIONS OF THE STRUCTURE FALLS BELOW THE MINIMUM ULTIMATE COMPRESSIVE STRENGTHS CALLED FOR, THE ENGINEER SHALL HAVE THE RIGHT TO ORDER A CHANGE IN THE MIX OR IN THE WATER CONTENT FOR REMAINING PORTION OF STRUCTURE, OR REQUIRED CONDITIONS OF TEMPERATURE AND MOISTURE MAINTAINED TO SECURE THE REQUIRED STRENGTH AND MAY REQUIRE LOAD TESTS TO BE MADE ON THE PORTIONS OF THE STRUCTURE SO AFFECTED. SHOULD RESULTS OF LOAD TEST BE UNSATISFACTORY, CONCRETE SHALL BE REMOVED AND NEW CONCRETE PLACED AT NO COST TO OWNER.
     - d. NO SEPARATE PAYMENT WILL BE MADE FOR TESTING. ALL ASSOCIATED COSTS SHALL BE INCLUDED IN THE VARIOUS CONCRETE BID ITEMS.
2. REINFORCEMENT STEEL:
   - A. PROVIDE GRADE 60 DEFORMED UNCOATED REINFORCING BARS CONFORMING TO ASTM A615/A615M, A996/A996M, AND A706/A706M.
3. CHAIN-LINK FABRIC
   - A. STEEL CHAIN-LINK FABRIC: 2IN. MESH, 9 GAUGE, 8FT. HIGH
     - a. ZINC-COATED STEEL FABRIC: ASTM A392 HOT DIPPED GALVANIZED BEFORE OR AFTER WEAVING.
     - b. CLASS 1 – 1.2 OZ/FT²
   - B. FABRIC SELVAGE:
     STANDARD FABRIC SELVAGE FOR 2 IN (50 MM) MESH 72 IN. (1.8 M) HIGH AND OVER IS KNUCKLE FINISH AT ONE END, TWIST AT THE OTHER, K&T. FABRIC LESS THAN 72 IN (1.8 M), AND MESH SIZE LESS THAN 2 IN. (50 MM), KNUCKLE FINISH TOP AND BOTTOM, K&K. T&T AVAILABLE FOR 2" (50 MM) MESH.
4. STEEL FENCE FRAMEWORK
   - A. ROUND STEEL PIPE AND RAIL: ASTM F1043 GROUP IA HEAVY INDUSTRIAL FENCE FRAMEWORK, SCHEDULE 40 GALVANIZED PIPE PER ASTM F1083. EXTERIOR HOT DIPPED ZINC COATING MINIMUM AVERAGE 1.8 OZ/FT²
     - e. LINE POST: 2-1/2" OD
     - f. END, CORNER, PULL POST: 3" OD
     - g. TOP, BRACE, BOTTOM AND INTERMEDIATE RAILS, 1-5/8" OD
5. SWING GATES
   - A. SWING GATES: DOUBLE OPENING 32 FT. BY 8 FT. HIGH. GALVANIZED STEEL WELDED FABRICATION IN COMPLIANCE WITH ASTM F900. GATE FRAME MEMBERS 1-7/8 in. (1.900 in.) OD, ASTM F1043 GROUP IA PIPE. FRAME MEMBERS SPACED NO GREATER THAN 8 FT. APART VERTICALLY AND HORIZONTALLY. WELDED JOINTS PROTECTED BY APPLYING ZINC-RICH PAINT IN ACCORDANCE WITH ASTM PRACTICE A780. POSITIVE LOCKING GATE LATCH FABRICATED OF $\frac{5}{16}$ in. THICK BY $1\frac{3}{4}$ in. PRESSED STEEL GALVANIZED AFTER FABRICATION. GALVANIZED MALLEABLE IRON OR HEAVY GAUGE PRESSED STEEL POST AND FRAME HINGES. MATCH GATE FABRIC TO THAT OF FENCE SYSTEM. GATEPOSTS $6\frac{5}{8}$ in. (6.625 in.) OD, 18.99 lb/ft. ASTM F1083 SCHEDULE 40 PIPE.
6. BARBED WIRE
   - A. METALLIC COATED STEEL BARBED WIRE: COMPLY WITH ASTM A121, DESIGN NUMBER 12-4-5-14R, DOUBLE 12-½ GAUGE (0.099 IN.) TWISTED STRAND WIRE, WITH 4 POINT 14 GAUGE (0.080 IN.) ROUND BARBS SPACED 5 INCHES ON CENTER.
7. FITTINGS
   - A. BRACE BANDS AND LINE RAIL CLAMPS: GALVANIZED PRESSED STEEL COMPLYING WITH ASTM F626, STEEL THICKNESS 1/8 IN., BAND WIDTH 1 IN., ZINC COATED 1.20 OZ/FT². SECURE WITH 3/8 IN. GALVANIZED STEEL CARRIAGE BOLTS.
   - B. TERMINAL POST CAPS, LINE POST LOOP TOPS, RAIL AND BRACE ENDS, BOULEVARD CLAMPS, RAIL SLEEVES: IN COMPLIANCE TO ASTM F626, PRESSED STEEL GALVANIZED AFTER FABRICATION HAVING A MINIMUM ZINC COATING OF 1.20 OZ/FT².
   - C. TRUSS ROD ASSEMBLY: IN COMPLIANCE WITH ASTM F626, 3/8 IN. DIAMETER STEEL TRUSS ROD WITH A PRESSED STEEL TIGHTENER, MINIMUM ZINC COATING OF 1.2 OZ/FT², ASSEMBLY CAPABLE OF WITHSTANDING A TENSION OF 2,000 LBS. (970 KG).
   - D. TENSION BARS: IN COMPLIANCE WITH ASTM F626. GALVANIZED STEEL ONE-PIECE LENGTH 2 IN. LESS THAN THE FABRIC HEIGHT. MINIMUM ZINC COATING 1.2 OZ. /FT²
     - a. BARS FOR 2 IN. AND 1 ¾ IN. MESH SHALL HAVE A MINIMUM CROSS SECTION OF 3/16 IN. (4.8 MM) BY 3/4 IN. (19 MM).
   - E. BARBED WIRE ARMS: IN COMPLIANCE WITH ASTM F626, PRESSED STEEL GALVANIZED AFTER FABRICATION, MINIMUM ZINC COATING OF 1.20 OZ. /FT², CAPABLE OF SUPPORTING A VERTICAL 250 LB LOAD. TYPE I – THREE STRAND 45 DEGREE (0.785 RAD) ARM.
8. TIE WIRE AND HOG RINGS
   - A. TIE WIRE AND HOGS RINGS PER ASTM F626. 9 GAUGE (0.148 IN.) GALVANIZED STEEL PREFORMED POWER-FASTENED WIRE TIES, 9 GAUGE (0.148 IN.) GALVANIZED STEEL HOG RINGS. MINIMUM ZINC COATING 1.20 OZ/FT² (366 G/M²) FOR TIES AND HOG RINGS.
9. PRIVACY SLATS SHALL BE HEDLELINK BY PEXCO, LLC OR APPROVED EQUAL.
   - A. RIGID 16-GAUGE, BRAIDED GALVANIZED WIRE WITH EMBOSSED 3-MIL PVC HEDLE NEEDLES.
   - B. CONTACT INFORMATION: PEXCO, LLC – PHILADELPHIA

     16 PROGRESSIVE DRIVE
     MORRISVILLE, PA 19067
     PHONE: 215-736-2553 OR 770-343-4590
     WEBSITE: WWW.PEXCO.COM

ESTIMATE OF QUANTITIES

REPLACEMENT OF SECURITY PERIMETER FENCE - PHASE 2

ITEM	DESCRIPTION	QTY	UNIT
001	MOBILZATION	1	LS
002	CLEARING AND VEGETATION REMOVAL	1	LS
003	DEMOLITION OF EXISTING CHAIN LINK FENCE	690	LF
004	EARTHWORK	1	LS
005	8 FT. HIGH CHAIN LINK FENCE WITH BARBED WIRE TOP AND PRIVACY SLATS	1250	LF
006	8 FT. HIGH BY 32 FT. WIDE CHAIN LINK FENCE DOUBLE SWING GATE WITH BARBED WIRE TOP AND PRIVACY SLATS	1	EA
007	10" DIA. PIPE BOLLARS	6	EA
008	REINFORCE CONCRETE PAD FOR CONTAINERS	1	LS
009	REINFORCED CONCRETE PAD AT DOUBLE SWING GATE	1	LS
010	PLACEMENT & STORAGE OF REGULATED MATERIAL IN SJPC SUPPLIED DUMPSTER	1	LS

REMINGTON & VERNICK ENGINEERS
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(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE: 01/23/23
KIM C. WESTEN
NJ PROFESSIONAL ENGINEER LIC. No. 47013

No.	REVISION	DATE	BY	CHK
1	ADDENDUM NO. 1	1-23-23	CFC	KCW

QUANTITIES AND GENERAL NOTES

SOUTH JERSEY PORT CORPORATION
REPLACEMENT OF SECURITY PERIMETER FENCE - PH2
BALZANO MARINE TERMINAL
CITY OF CAMDEN CAMDEN COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
CFC	KCW	KCW	AS NOTED

DATE: 11/3/2022
JOB No.: 3965X001
SHEET No.: 3 of 9

EOQ-1
EOQ-1