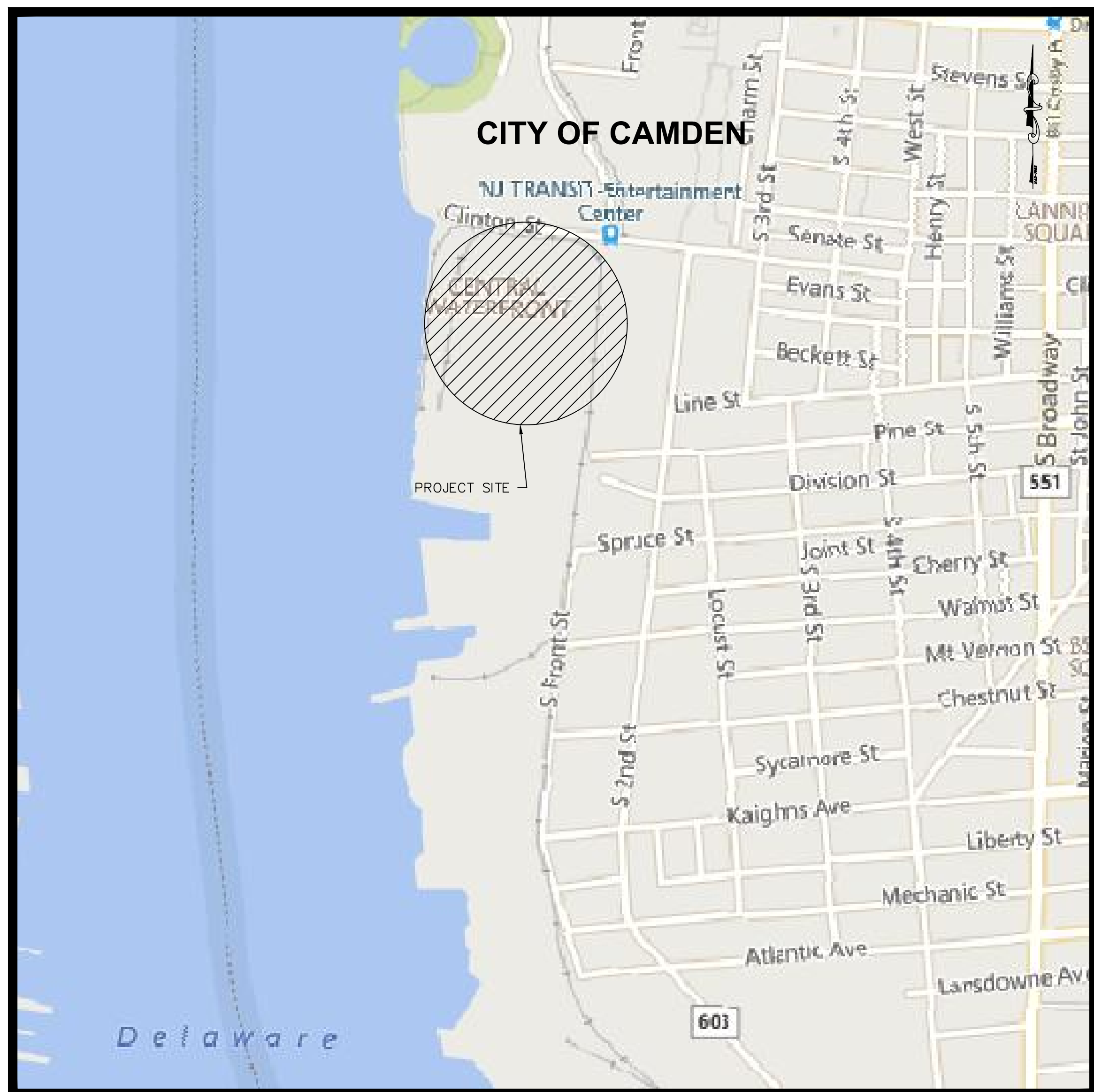


REPLACEMENT OF SECURITY PERIMETER FENCE BALZANO MARINE TERMINAL



DATE: _____
WILLIAM M. BISIRRI
 NJ PROFESSIONAL ENGINEER LIC. No. 51082

LIST OF UTILITIES	
WATER & SEWER:	CAMDEN WATER L.L.C. 1257 S. SECOND ST. CAMDEN, NJ 08104 856-635-1264
WATER:	NEW JERSEY AMERICAN WATER CO. 213 CARRIAGE LANE DELTRAN, NJ 08075
GAS:	PSE&G GAS DISTRIBUTION DIVISION 300 CONNECTICUT DRIVE BURLINGTON, NJ 08086 856-778-6776 ATTN: GEORGE BAKER
ELECTRIC:	PSE&G ELECTRIC DISTRIBUTION DIVISION 300 NEW ALBANY ROAD MOORESTOWN, NJ 08057 856-573-2077 ATTN: BOB SODER
CABLE:	COMCAST 1250 HADDONFIELD ROAD CHERRY HILL, NJ 08034 856-272-1000
TELEPHONE:	VERIZON - NEW JERSEY 10 TANSBORO ROAD BERLIN, NJ 08009
AT&T:	TRANSCONTINENTAL CABLE ROUTE UNDERGROUND LOCATION SERVICE NEW JERSEY UTILITIES ASSOCIATION 800-252-1133



PROJECT LOCATION MAP

SCALE: 1" = 1000'

THE ELECTRONIC VERSION OF THE 2019 NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, EFFECTIVE SEPTEMBER 1, 2019, AS REFERENCED IN BASELINE DOCUMENT CHANGE ANNOUNCEMENT BDC19S-01, UNLESS MODIFIED WITHIN THE TECHNICAL SPECIFICATIONS OF THIS CONTRACT, SHALL GOVERN.

THE NEW JERSEY DEPARTMENT OF TRANSPORTATION "STANDARD ROADWAY CONSTRUCTION\TRAFFIC CONTROL\BRIDGE CONSTRUCTION DETAILS" BOOKLET DATED 2007 AND "ELECTRICAL BUREAU STANDARD DETAILS, 2007" AND ALL BASELINE DOCUMENT CHANGES MADE TO THESE CONSTRUCTION DETAILS, SHALL GOVERN, EXCEPT FOR THOSE DETAILS CONTAINED HEREIN.

CITY OF CAMDEN CAMDEN COUNTY, NEW JERSEY

OCTOBER, 2021

SHEET INDEX	
SHEET #	DESCRIPTION
1	TITLE
2	LEGEND
3	ESTIMATE & GENERAL NOTES
4	OVERALL SITE PLAN
5 - 7	CONSTRUCTION PLAN
8 - 12	CONSTRUCTION DETAILS

FUNDING SOURCE:
SJPC

New Jersey One Call
CALL BEFORE YOU DIG
 811 or 1-800-272-1000
ITS THE LAW

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT NJ ONE CALL PRIOR TO THE START OF CONSTRUCTION. CALL FOR MARKOUTS THREE (3) FULL BUSINESS DAYS IN ADVANCE AND BEGIN EXCAVATION WITHIN 10 DAYS. ALL CONTRACTORS ON-SITE MUST HAVE THEIR OWN MARKOUT.

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID.

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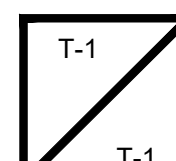
NO.	REVISION	DATE	BY/CHK

TITLE SHEET

SOUTH JERSEY PORT CORPORATION
REPLACEMENT OF SECURITY PERIMETER FENCE
BALZANO MARINE TERMINAL

CITY OF CAMDEN CAMDEN COUNTY NEW JERSEY

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
CFC	DHS	WMB	AS NOTED
DATE:	SHEET NO.:		
4/20/2021	1 OF 12		
JOB NO.:		3965X001	



STANDARD LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED



REMINGTON & VERNICK ENGINEERS
 2059 SPRINGDALE ROAD
 CHERRY HILL, NJ 08003
 (856) 795-9595, FAX (856) 795-1882
 WEB SITE ADDRESS : WWW.RVE.COM
 Certification of Authorization: 24 CA 28003300
 ~ENGINEERING EXCELLENCE~

DATE:
WILLIAM M. BISIRRI
 NJ PROFESSIONAL ENGINEER LIC. No. 51062

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ITEM	DESCRIPTION	EXISTING	PROPOSED
	OVERHEAD WIRE	OHW	
	SANITARY FORCE MAIN PIPE	FM	FM
	STORM SEWER PIPE ≤ 12"	D	D
	STORM SEWER PIPE > 12"	(SIZE & TYPE)	(SIZE & TYPE)
	GAS SERVICE	G	G
	SANITARY SEWER PIPE ≤ 12"	S	S
	SANITARY SEWER PIPE > 12"	(SIZE & TYPE)	(SIZE & TYPE)
	ELECTRIC SERVICE	E	E
	FIBER OPTIC SERVICE	FO	FO
	TELEPHONE SERVICE	T	T
	COMMUNICATIONS SERVICE	C	C
	IRRIGATION PIPE	IRR	IRR
	WATER SERVICE	W	W
	WATER SHUT-OFF	WS	
	WATER METER	WM	WM
	WATER VALVE	WV	WV NEW / WV RESET
	WATER HYDRANT	WH	WH NEW / WH RESET
	WELL	WELL	WELL
	YARD HYDRANT	YH	
	METER PIT	MP	
	GAS SHUT-OFF	GSO	
	GAS METER	GM	
	GAS VALVE	GV	GV NEW / GV RESET
	GAS LINE MARKER	GLM	
	CLEANOUT	CO	
	SEWER VENT	SV	
	INLET TYPE A	ITA	ITA NEW / ITA RESET / ITA RECONSTRUCT
	INLET TYPE B	ITB	ITB NEW / ITB RESET / ITB RECONSTRUCT
	INLET TYPE E	ITE	ITE NEW / ITE RESET / ITE RECONSTRUCT
	AREA DRAIN	AD	
	MANHOLES	MH	MH NEW / MH RESET / MH RECONSTRUCT
	IRRIGATION CONTROL VALVE	ICV	ICV NEW / ICV RESET
	IRRIGATION BOX	IB	
	IRRIGATION CONTROL BOX	ICB	
	SPRINKLER HEAD	SH	
	UNKNOWN VALVE	UV	
	COMMUNICATIONS PEDESTAL	CP	
	COMMUNICATIONS LINE MARKER	CLM	
	TELEPHONE PEDESTAL	TP	
	TELEPHONE LINE MARKER	TLM	
	ELEC. BOX	EB	
	ELEC. METER	EM	
	ELEC. TRANSFORMER PAD	ETP	
	ELEC. VAULT	EV	
	ELEC. LINE MARKER	ELM	
	UTILITY POLE	UP	UP STANDARD / UP W/ LIGHT / UP W/ SOLAR
	GUY ANCHOR	GA	
	ELEC. OUTLET	EO	
	LIGHTS	L	L POLE / L AREA
	VENT	V	
	VENT PIPE	VP	

- ⊙ SANITARY ⊙ DRAINAGE ⊙ TELEPHONE
- ⊙ WATER ⊙ CATV ⊙ UNDERDRAIN
- ⊙ ELECTRIC ⊙ GAS ⊙ UNKNOWN

ITEM	DESCRIPTION	EXISTING	PROPOSED
	CROWS FOOT	Y	
	AERIAL TARGET		+ (SET)
	CONCRETE MONUMENT	■	■ (SET)
	PK / MAG NAIL	○	• (SET)
	DRILL HOLE		
	SPIKE		
	DRILL HOLE W/ WINGS	+	
	STAKE	△	▲ (SET)
	HUB	△	△ (SET)
	PIN W/ CAP	●	• (SET)
	IRON PIPE		• (SET)
	IRON PIN		• (SET)
	CROSS CUT	⊗	■ (SET)
	DISK	□	
	STONE	○	
	REBAR	●	
	BASELINE	7+00	8+00
	CENTERLINE		
	EASEMENT		
	RIGHT-OF-WAY		
	PROPERTY BOUNDARY		
	ADJACENT PROPERTY BOUNDARY		
	RAILROAD TRACKS		
	STATE BOUNDARY		
	MUNICIPAL / COUNTY BOUNDARY		

ITEM	DESCRIPTION	EXISTING	PROPOSED
	BORING LOCATION	⊕ B-#	⊕ B-#
	MONITORING WELL LOCATION	⊕ MW-#	⊕ MW-#
	TEST PIT LOCATION	⊕ TP-#	⊕ TP-#
	FRESHWATER WETLAND FLAG	⊕ FW-#	
	FRESHWATER WETLAND LINE		
	FRESHWATER WETLAND BUFFER		
	EDGE OF WATER		
	STREAM CENTERLINE		

ITEM	DESCRIPTION	EXISTING	PROPOSED
	GRASS/SOD		
	DECIDUOUS TREE		○ SHADE ⊕ ORNAMENTAL
	SHRUBS / BUSH		○ ⊕
	EVERGREENS		⊕
	STUMP		○
	WOODS / TREE LINE		
	WIRE FENCE		
	SPLIT RAIL FENCE		
	WOOD / VINYL FENCE		
	CHAIN-LINK FENCE		

ITEM	DESCRIPTION	EXISTING	PROPOSED
	TOP OF BANK / DITCH	TB	
	BOTTOM OF BANK / DITCH	BB	
	CONTOUR (MAJOR)	5	5
	CONTOUR (MINOR)	3	3
	FLOW LINE / SWALE		
	TIME OF CONCENTRATION		
	SPOT GRADE	x 3.48	x 3.48
	ROADWAY GRADE	T5.45 GL4.95	TC5.45 GL4.95
	DRAINAGE FLOW		

ITEM	DESCRIPTION	EXISTING	PROPOSED
	EDGE OF PAVEMENT		
	CURB		
	PAVEMENT / CONC. / SIDEWALK	BITUMINOUS/ASPHALT CONCRETE BRICK/PAVERS STONE	ASPHALT DRIVEWAY CONCRETE BRICK/PAVERS STONE MILLING
	LIMIT OF EXCAVATION		
	GUIDE RAIL		
	BOLLARD	○	○
	MAILBOX	⊕	⊕
	SIGNS	+	+
	FLAG POLE	~	~
	BENCH	—	—
	PILE	⊙	⊙
	DETECTABLE WARNING SURFACE		
	TYPICAL STRIPING		
	ADA STRIPING		
	TRAFFIC CONTROL BOX	⊕	⊕
	TRAFFIC LIGHT		↕ (ARM TO SCALE)
	DEPT. OF TRANSPORTATION MANHOLE	⊕	
	STATE HIGHWAY DEPARTMENT	⊕ MANHOLE ⊕ BOX	
	RAILROAD CROSSING BEACON	⊕	
	CALL BOX	⊕	
	OIL FILL	○	
	UNDERGROUND STORAGE TANK LID	⊕	
	RISER PIPE	⊕	
	RAISED PAVEMENT MARKER	•	•

ITEM	DESCRIPTION	EXISTING	PROPOSED
	BBQ GRILL	⊕	
	WATER FOUNTAIN	⊕	
	KIOSK	⊕	
	AIR CONDITIONER	⊕	
	PARKING METER	⊕	
	FIRE CONTROL VALVE	⊕	
	BARRICADE	⊕	

ITEM	DESCRIPTION	EXISTING	PROPOSED
	PHOTO LOCATION		⊕
	BENCHMARK LOCATION		⊕ (BM X)
	TYPICAL SECTION ARROW		↔ A
	MATCH LINE		
	TYPICAL NORTH ARROW		

NORTH POINT TO BE USED ON STANDARD CONSTRUCTION SHEETS WHERE BEARINGS REFER TO STATE PLANE COORDINATE SYSTEM.

UTILITIES

SITE & ROADWORK

MISC.

GENERAL

ABBREVIATIONS

APR.	APRON	E.B., W.B.	EASTBOUND, WESTBOUND.	PC	POINT OF CURVATURE	S.H.D.	STATE HIGHWAY DEPARTMENT
BL	BASELINE	N.B., S.B.	NORTHBOUND, SOUTHBOUND	PI	POINT OF INFLECTION	SHLD.	SHOULDER
G	GUTTER			PT	POINT OF TANGENCY	STY.	STOREY
BM	BENCH MARK			PK	PARKER KAYLON MASONRY NAIL	T.B.A.	TO BE ABANDONED
BIT.	BITUMINOUS	HW	HEADWALL	PROP.	PROPOSED	T.B.R.	TO BE REMOVED
BLDG.	BUILDING	H.D.P.E.	HIGH DENSITY POLYETHYLENE PIPE	P.V.C.	POLYVINYL CHLORIDE PIPE	TC	TOP OF CURB
CL	CENTERLINE	INV.	INVERT	PVC	POINT OF VERTICAL CURVATURE	TEL	TELEPHONE
C.I.P.	CAST IRON PIPE	IP	IRON PIN	PVI	POINT OF VERTICAL INTERSECTION	TEMP.	TEMPORARY
CONC.	CONCRETE	J.B.	JUNCTION BOX	PVT	POINT OF VERTICAL TANGENCY	TYP.	TYPICAL
C.M.P.	CORRUGATED METAL PIPE	L.S.T.	LANDSCAPE TIE	R	RADIUS	U.D.	UNDERDRAIN
CULV.	CULVERT	L.O.M.	LIMIT OF MILLING	R.C.P.	REINFORCED CONCRETE PIPE	U.P.	UTILITY POLE
D.C.	DEPRESSED CURB	L.O.P.	LIMIT OF PAVING	RMC	RIGID METALLIC CONDUIT	VAR.	VARIES
DH	DRILL HOLE	MB	MAILBOX	R.O.W.	RIGHT OF WAY	VIF	VERIFY IN FIELD
DIA.	DIAMETER	MAX.	MAXIMUM	R.R.	RAILROAD	WM	WATER METER
DWY	DRIVEWAY	MIN.	MINIMUM	RTE.	ROUTE		
D.I.P.	DUCTILE IRON PIPE	NO.	NUMBER	SAN.	SANITARY		
EL.	ELEVATION	N.T.S.	NOT TO SCALE	SWK.	SIDEWALK		
EX.	EXISTING	PERF.	PERFORATED				

NO.	REVISION	DATE	BY

LEGEND

SOUTH JERSEY PORT CORPORATION

REPLACEMENT OF SECURITY PERIMETER FENCE

BALZANO MARINE TERMINAL

CITY OF CAMDEN

CAMDEN COUNTY

NEW JERSEY

DRAWN BY: CFC
 DESIGN BY: DHS
 CHECKED BY: WMB
 SCALE: AS NOTED

DATE: 4/20/2021
 SHEET NO.: 2 OF 12
 JOB No.: 3965X001

ESTIMATE OF QUANTITIES				
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	REMARKS
001	REMOVAL OF VEGETATION	1	LS	SEE PLAN NOTES FOR LOCATION
002	8' ORNAMENTAL ALUMINUM FENCE	175	LF	
003	8' HIGH CHAIN LINK FENCE WITH BARBED WIRE TOP	1450	LF	
004	10' HIGH CHAIN LINK FENCE WITH BARBED WIRE TOP AND PRIVACY SLATS	1000	LF	
005	8' HIGH BI-FOLD GATE	1	EA	G4
006	8' HIGH RAIL GATE	1	EA	G6
007	10' HIGH RAIL GATE WITH BARBED WIRE TOP AND PRIVACY SLATS	1	EA	G1
008	8' HIGH DOUBLE SWING GATE	2	EA	G5, G7
009	8' HIGH SINGLE SWING GATE	1	EA	G8
010	10' HIGH DOUBLE SWING GATE WITH BARBED WIRE TOP AND PRIVACY SLATS	2	EA	G2, G3

GENERAL NOTES:

- 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.
- LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
- THE CONTRACTOR SHALL USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- ALL PAVED AND CONCRETE AREAS DISTRIBUTED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF CONSTRUCTION.
- ALL GRASSED OR WOODED AREAS DISTRIBUTED DURING CONSTRUCTION SHALL BE TOPSOILED AND SEEDED.
- 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.
- 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.
- APPROXIMATE DEPTH OF ALL WATER MAINS ARE ± 4 FEET.
- APPROXIMATE DEPTH OF ALL GAS MAINS ARE ± 3 FEET.
- ALL UNUSED MATERIAL EXCAVATED FROM THE PROJECT SITE ARE TO BE DISPOSED OF AT AN APPROVED FACILITY.
- FENCING TO COMPLY WITH UNITED FACILITIES CRITERIA (UFC) 4-022-03, SECURITY FENCES AND GATES.
- GATE IDENTIFICATION PLACARDS AND ALL FENCE SIGNS SHALL BE REMOVED PRIOR TO CONSTRUCTION AND PRESERVED BY THE CONTRACTOR FOR THE DURATION OF CONSTRUCTION.
- CONTRACTOR SHALL REPLACE ALL GATE IDENTIFICATION PLACARDS AND FENCE SIGNS UPON COMPLETION OF CONSTRUCTION.
- CONTRACTOR SHALL RESTORE ALL GATE ALARMS AND OTHER FENCE SECURITY DEVICES TO FULL WORKING ORDER UPON COMPLETION OF CONSTRUCTION.

CONSTRUCTION STAGING REQUIREMENTS:

OPTION A:

- SECURITY FENCE REPLACEMENT SHALL BE LIMITED TO ONE (1), 400' (FEET) LENGTH OF FENCE MAXIMUM AT A TIME.
- 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.
- 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.
- 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:

- 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.
- TEMPORARY FENCING SHALL MEET USCG STANDARDS AND REQUIREMENTS.
- POSTS FOR TEMPORARY FENCING SHALL BE ADEQUATELY ANCHORED INTO THE GROUND. FENCE POST STANDS ON GRADE ARE NOT ACCEPTABLE.
- 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.



REMINGTON & VERNICK ENGINEERS
 2059 SPRINGDALE ROAD
 CHERRY HILL, NJ 08003
 (856) 795-9595, FAX (856) 795-1882
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 Certification of Authorization: 24 CA 28003300
 ~ENGINEERING EXCELLENCE~

DATE: _____
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 NJ PROFESSIONAL ENGINEER LIC. No. 51082

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ADDENDUM NO. 4	REVISION	DATE	BY
		12/21	CFC/DM

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

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
CFC	DHS	WMB	AS NOTED
DATE:	SHEET No.:		
4/20/2021	3 of 12		
JOB No.:	3965X001		

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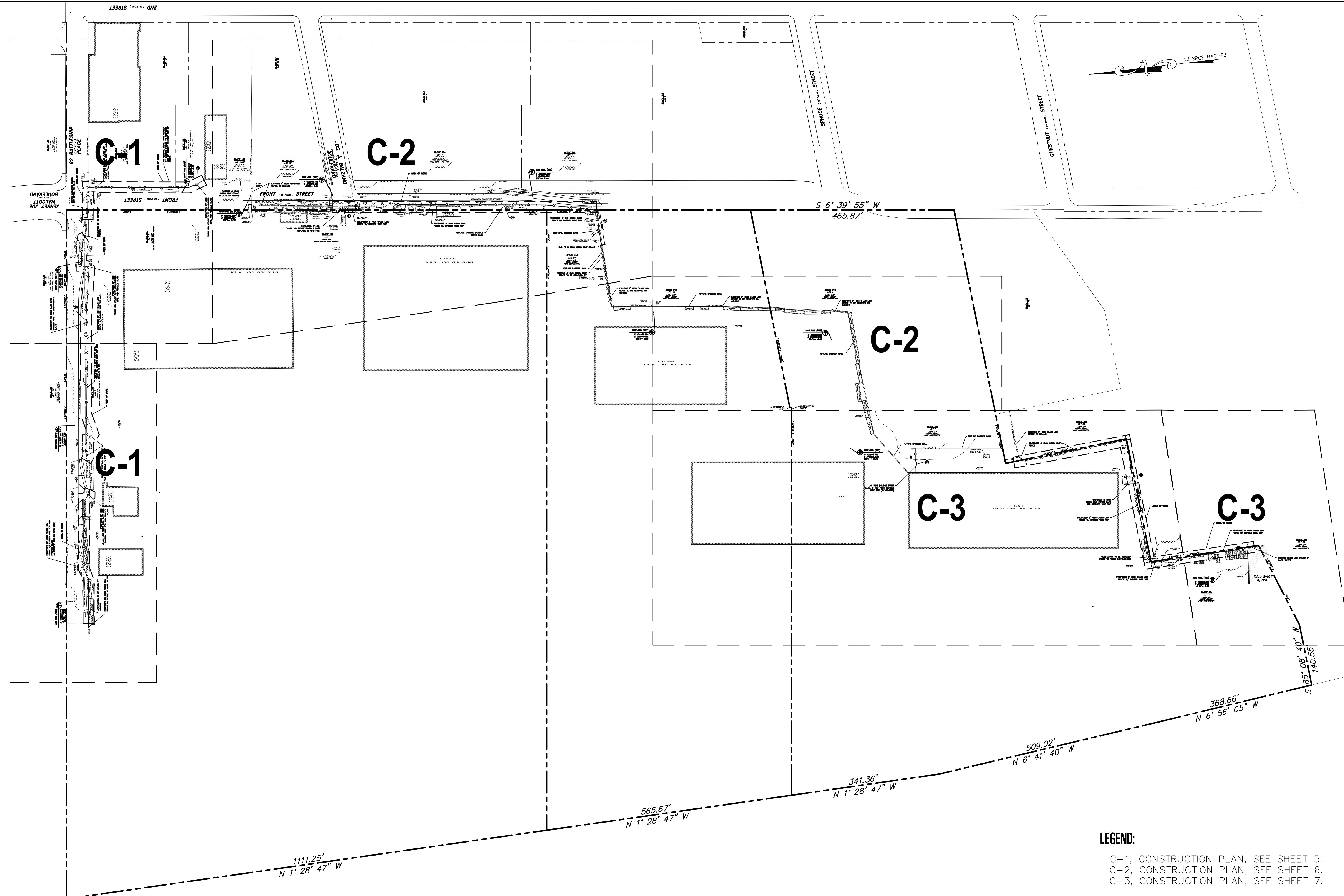
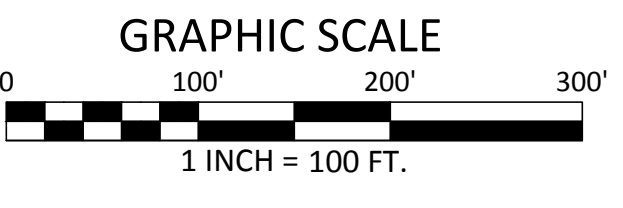
OVERALL SITE PLAN

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

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
CFC	DHS	WMB	AS NOTED
DATE:	4/20/2021	JOB No.:	3965X001
SHEET No.:	4	of	12

OVERALL SITE PLAN
 SCALE: 1" = 100'

LEGEND:
 C-1, CONSTRUCTION PLAN, SEE SHEET 5.
 C-2, CONSTRUCTION PLAN, SEE SHEET 6.
 C-3, CONSTRUCTION PLAN, SEE SHEET 7.





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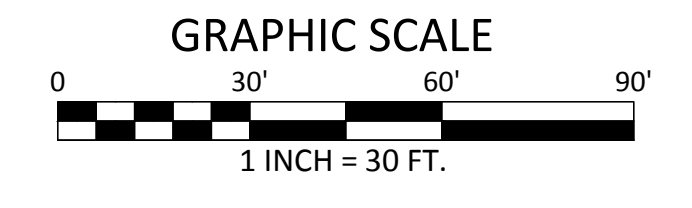
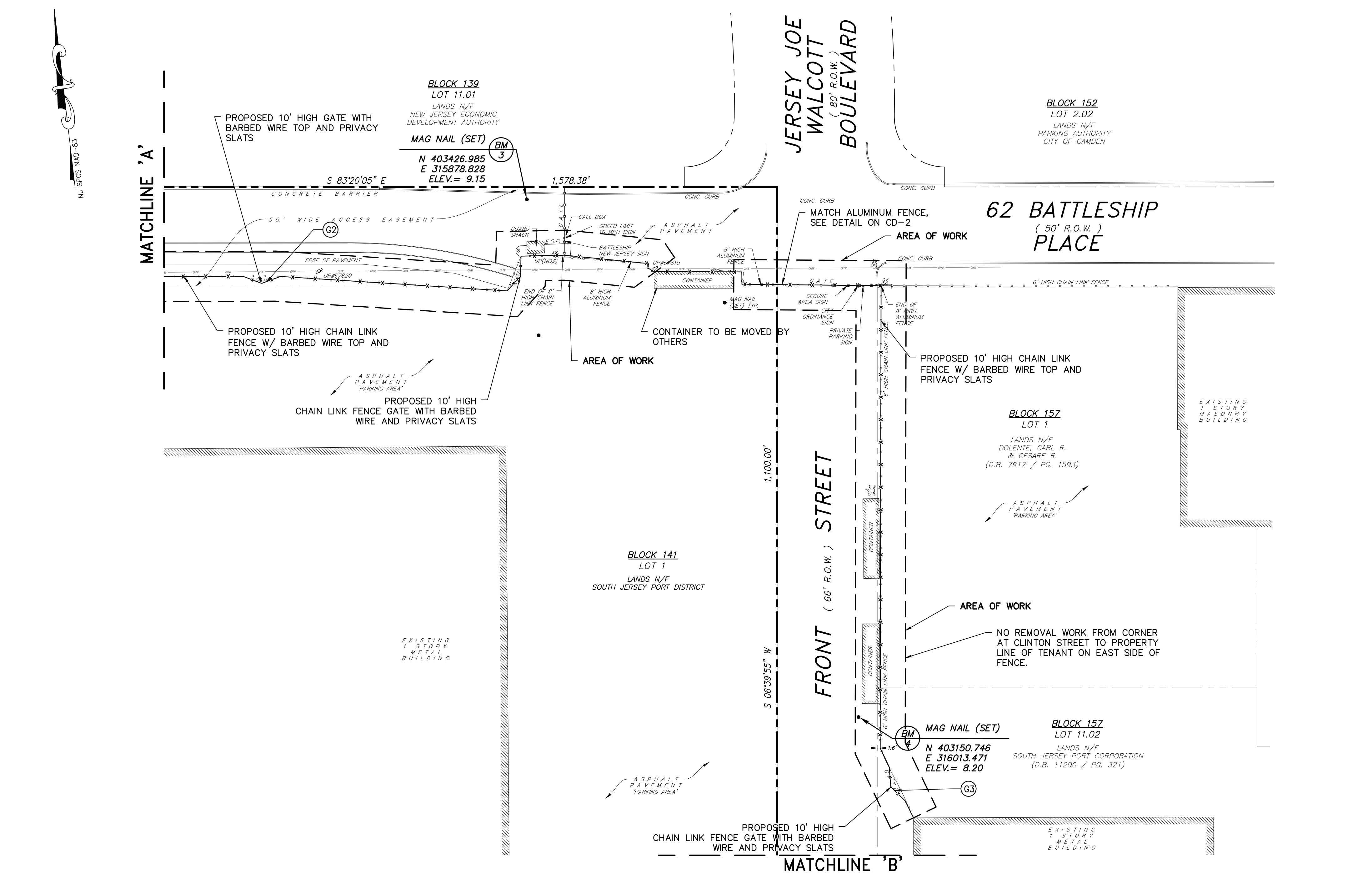
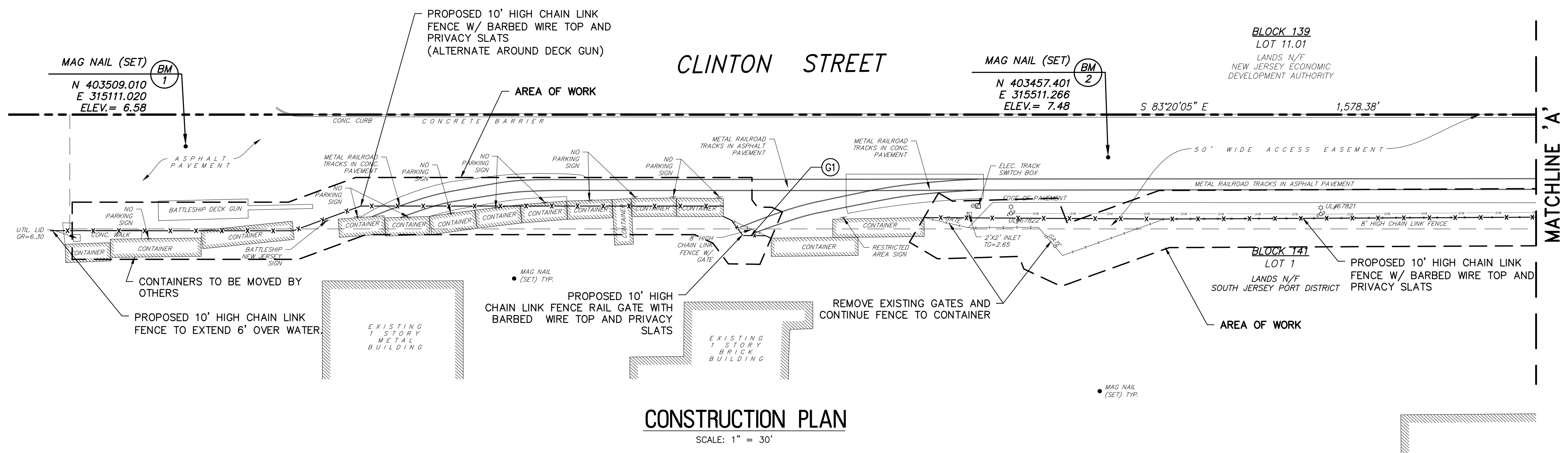
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NO.	REVISION	DATE	BY

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

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C-1
 C-3



REMINGTON & VERNICK ENGINEERS
 2059 SPRINGDALE ROAD
 CHERRY HILL, NJ 08003
 (856) 795-9595, FAX (856) 795-1882
 WEB SITE ADDRESS : WWW.RVE.COM
 Certification of Authorization: 24 CA 28003300
 "ENGINEERING EXCELLENCE"

DATE:
WILLIAM M. BISIRRI
 NJ PROFESSIONAL ENGINEER LIC. NO. 51082

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID

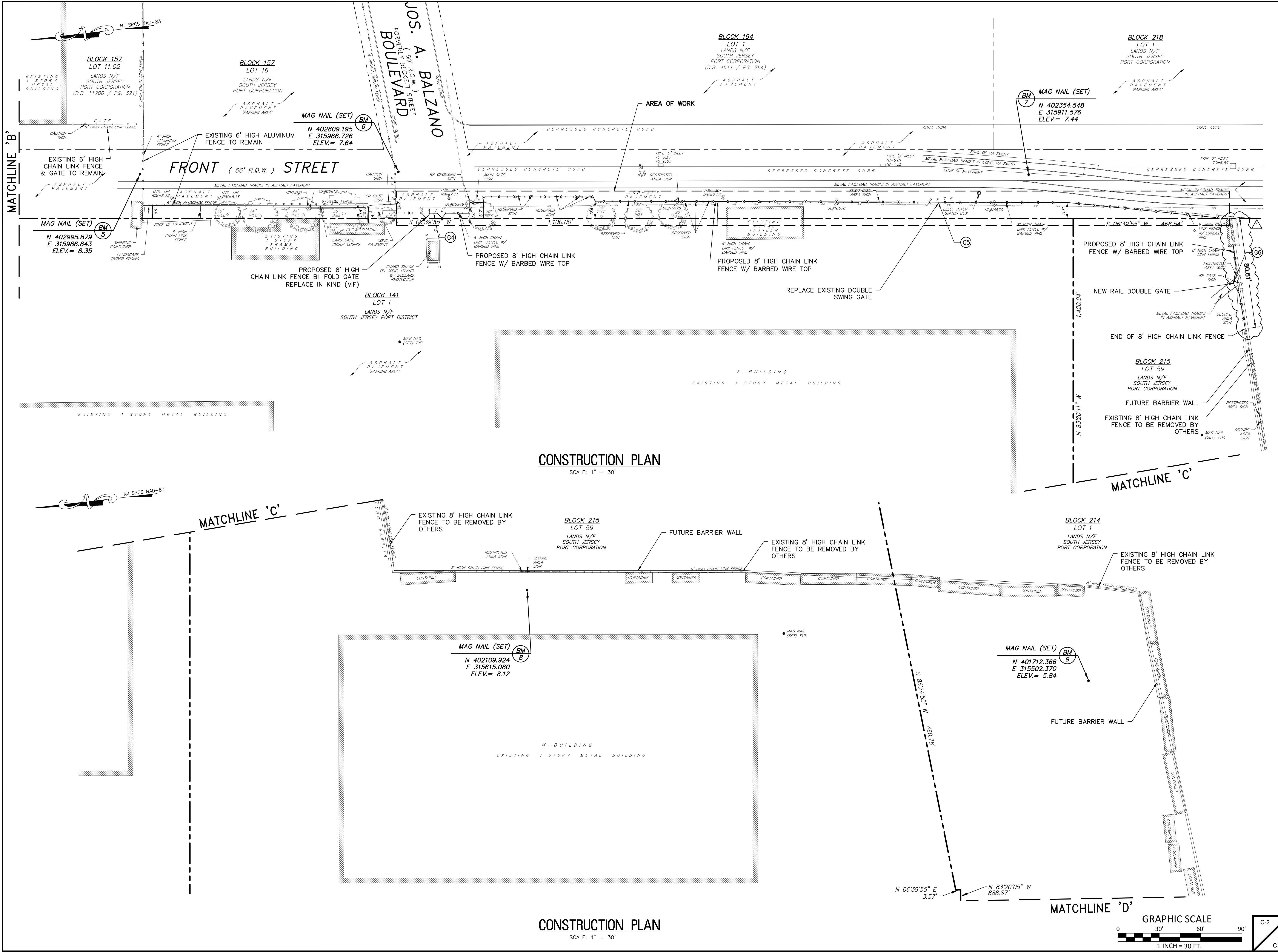
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NO.	REVISION	DATE	BY	CHK
1		11/22/2021	CFC	WMB
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CONSTRUCTION PLAN

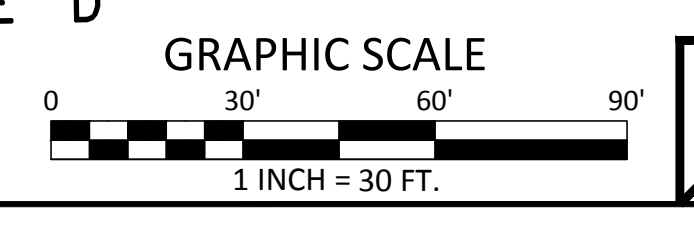
SOUTH JERSEY PORT CORPORATION
 REPLACEMENT OF SECURITY PERIMETER FENCE
 BALZANO MARINE TERMINAL
 CITY OF CAMDEN
 CAMDEN COUNTY
 NEW JERSEY

DATE	DESIGN BY	CHECKED BY	SCALE
4/20/2021	DHS	WMB	AS NOTED
3965X001			6 of 12

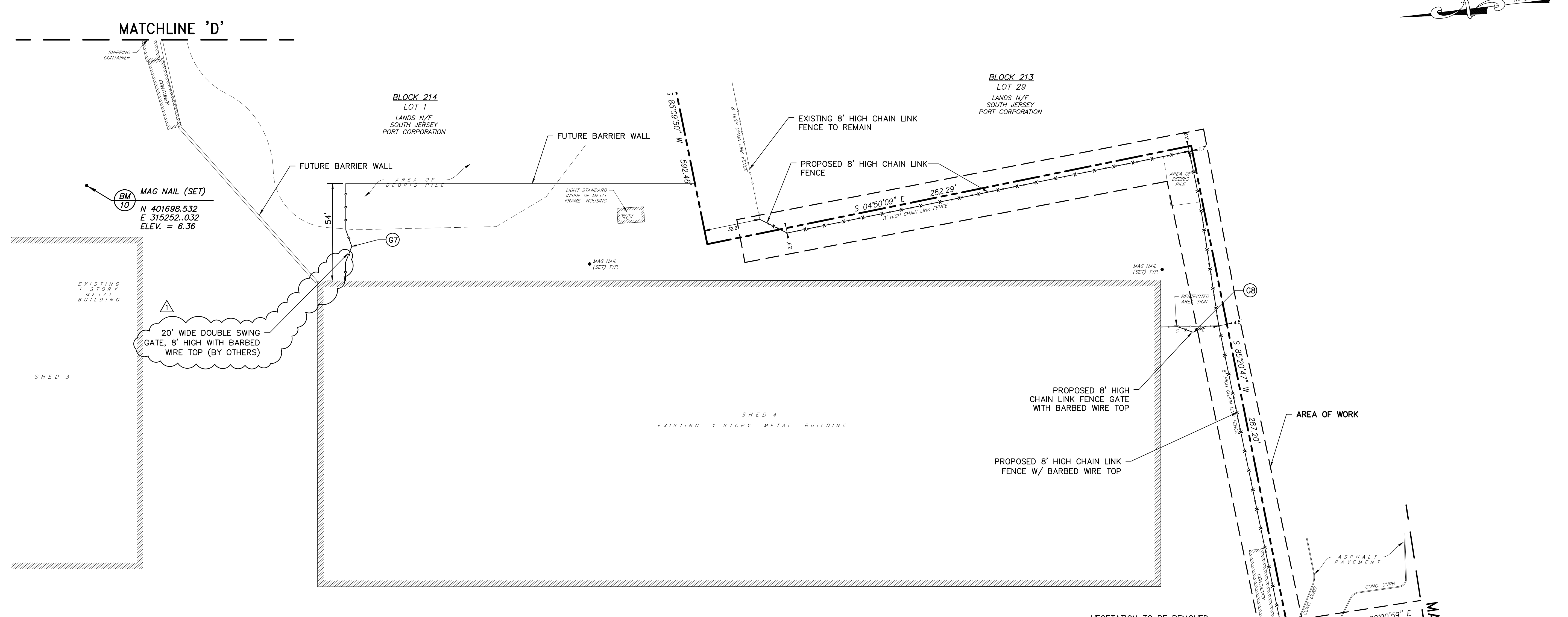


CONSTRUCTION PLAN
 SCALE: 1" = 30'

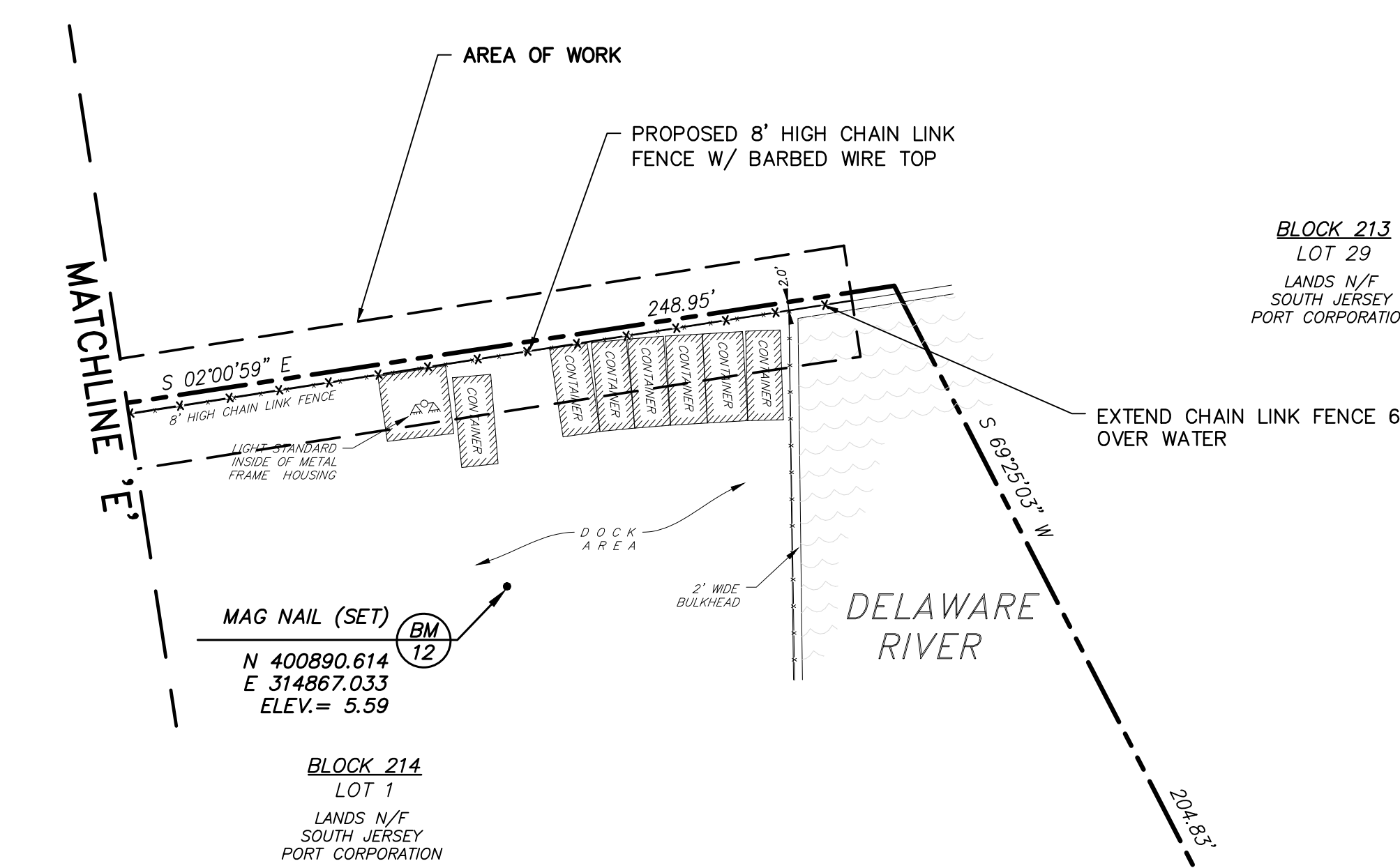
CONSTRUCTION PLAN
 SCALE: 1" = 30'



C-2
 C-3



CONSTRUCTION PLAN
SCALE: 1" = 30'



CONSTRUCTION PLAN
SCALE: 1" = 30'



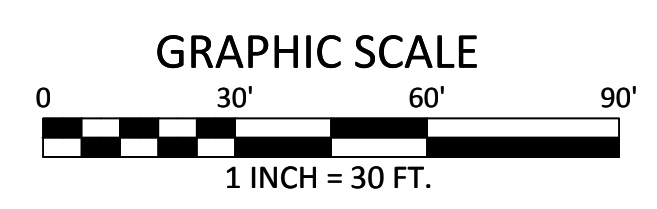
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CONSTRUCTION PLAN
SOUTH JERSEY PORT CORPORATION
REPLACEMENT OF SECURITY PERIMETER FENCE
BALZANO MARINE TERMINAL
CITY OF CAMDEN CAMDEN COUNTY NEW JERSEY



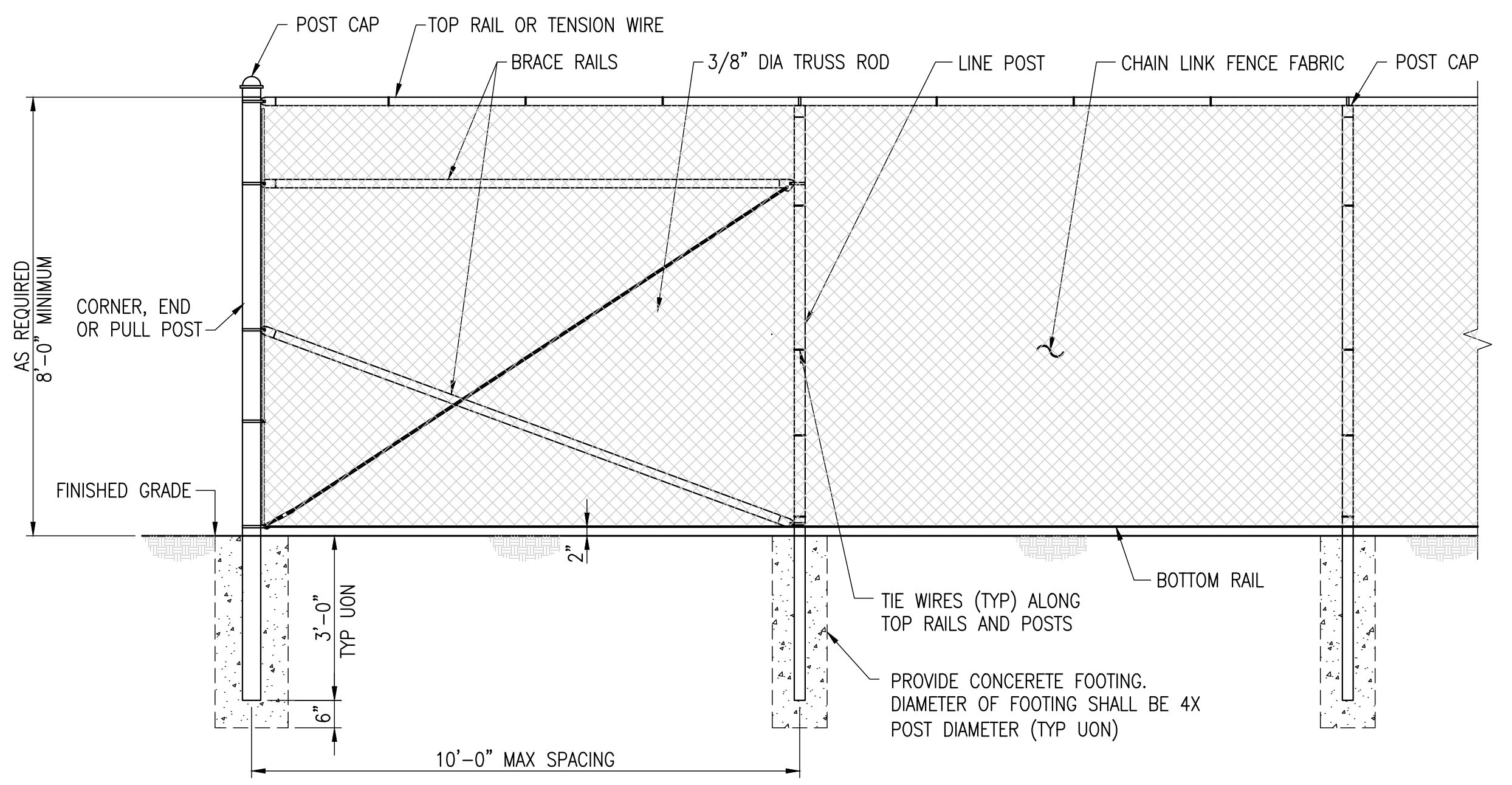
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DATE: 4/20/2021		SHEET No.: 7 of 12	
JOB No.: 3965X001			

C-3
C-3

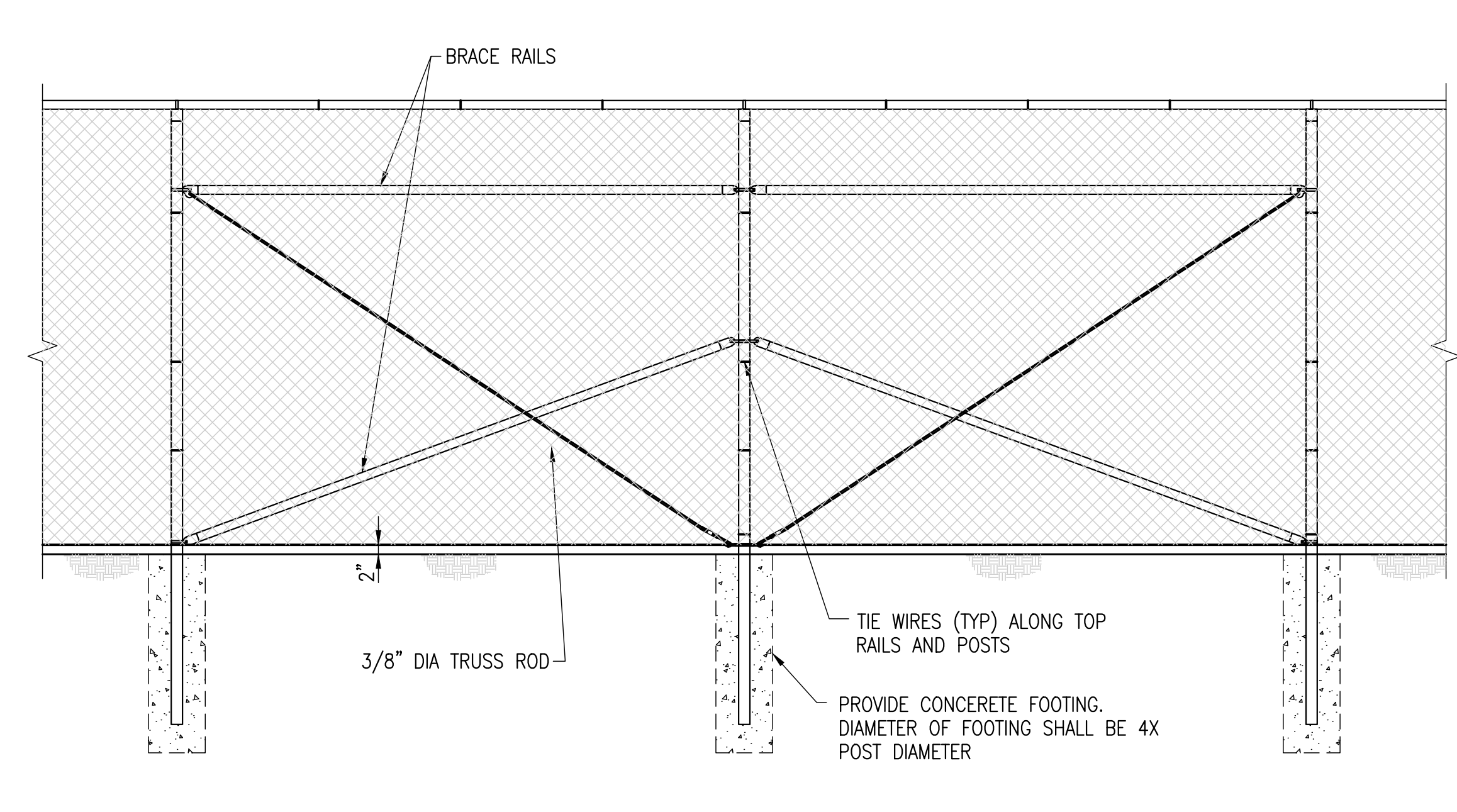
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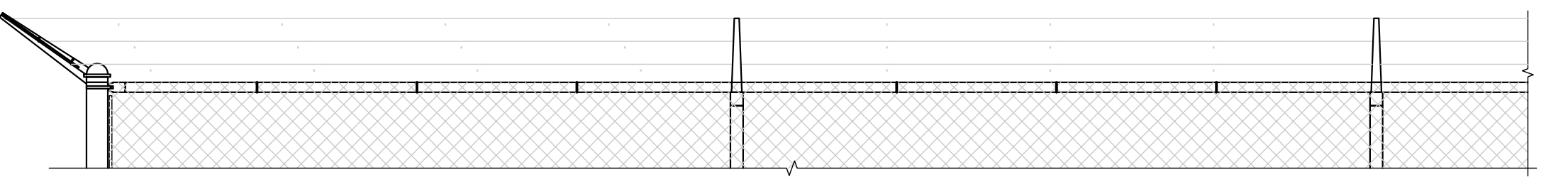
TYPICAL FENCE AND CORNER PANEL ELEVATION
 SCALE: 1" = 1'-0"



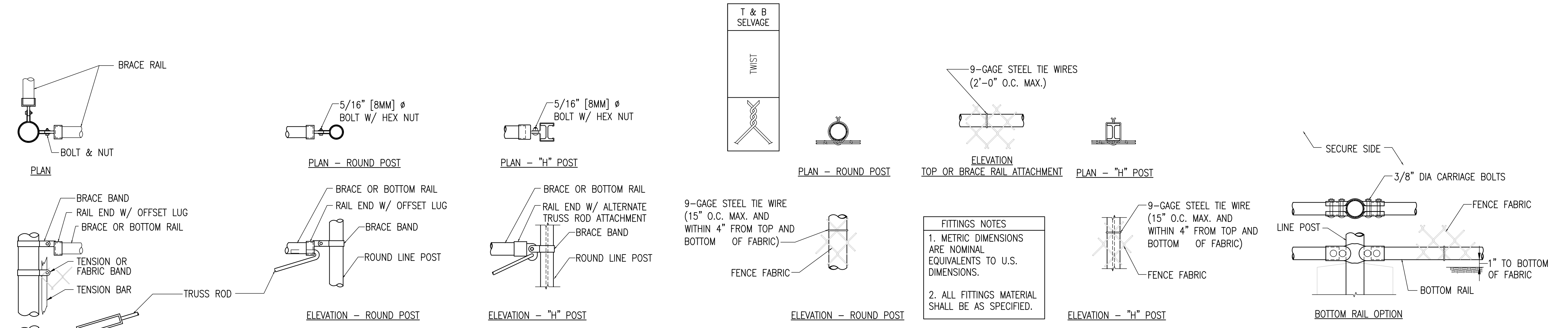
TYPICAL FENCE AND BRACED PANEL ELEVATION
 SCALE: 1" = 1'-0"

NOTE (1): A BOTTOM RAIL CAN BE ADDED FOR SECURITY, IT SHALL BE INSTALLED APPROX 3" ABOVE GRADE (A MINIMUM OF 2" AND A MAXIMUM OF 4"). HARDWARE SHALL BE WELDED OR SHOT NAILED TO POSTS AND RAILS IN ORDER TO SECURE IN PLACE. ATTACH FABRIC TO NEW BOTTOM RAIL TO ELIMINATE POSSIBILITY OF PEELING UP FABRIC.

NOTE (2): SOME LOCATIONS MAY REQUIRE 8' OF FABRIC.



TYPICAL 3 STRAND BARBED WIRE AND SINGLE EXTENSION ARM CONFIGURATION
 SCALE: 1" = 1'-0"



CORNER OR END POSTS
 SCALE: 1 1/2" = 1'-0"

LINE POST DETAILS
 SCALE: 1 1/2" = 1'-0"

FITTINGS NOTES
 1. METRIC DIMENSIONS ARE NOMINAL EQUIVALENTS TO U.S. DIMENSIONS.
 2. ALL FITTINGS MATERIAL SHALL BE AS SPECIFIED.

CHAIN-LINK FENCE AND DETAILS

GRAPHIC SCALES

1" = 1'-0" 0 6" 1' 2'

1 1/2" = 1'-0" 0 4" 8" 1'-4"

CD-1

CONSTRUCTION DETAILS

SOUTH JERSEY PORT CORPORATION
 BALZANO MARINE TERMINAL
 CAMDEN COUNTY, NEW JERSEY
 CITY OF CAMDEN

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
CFC	DHS	WMB	AS NOTED
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JOB No.:	3965X001		8 of 12



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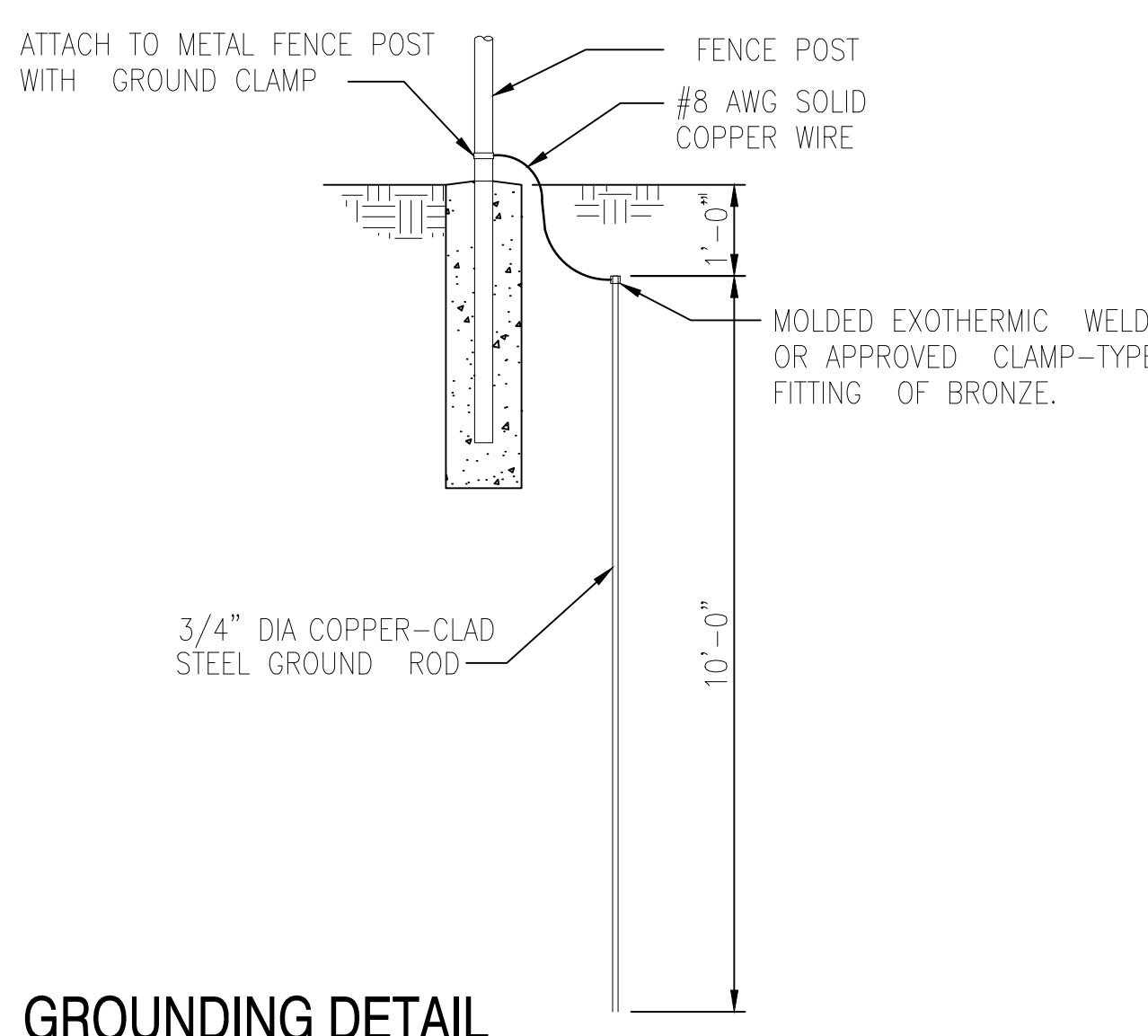
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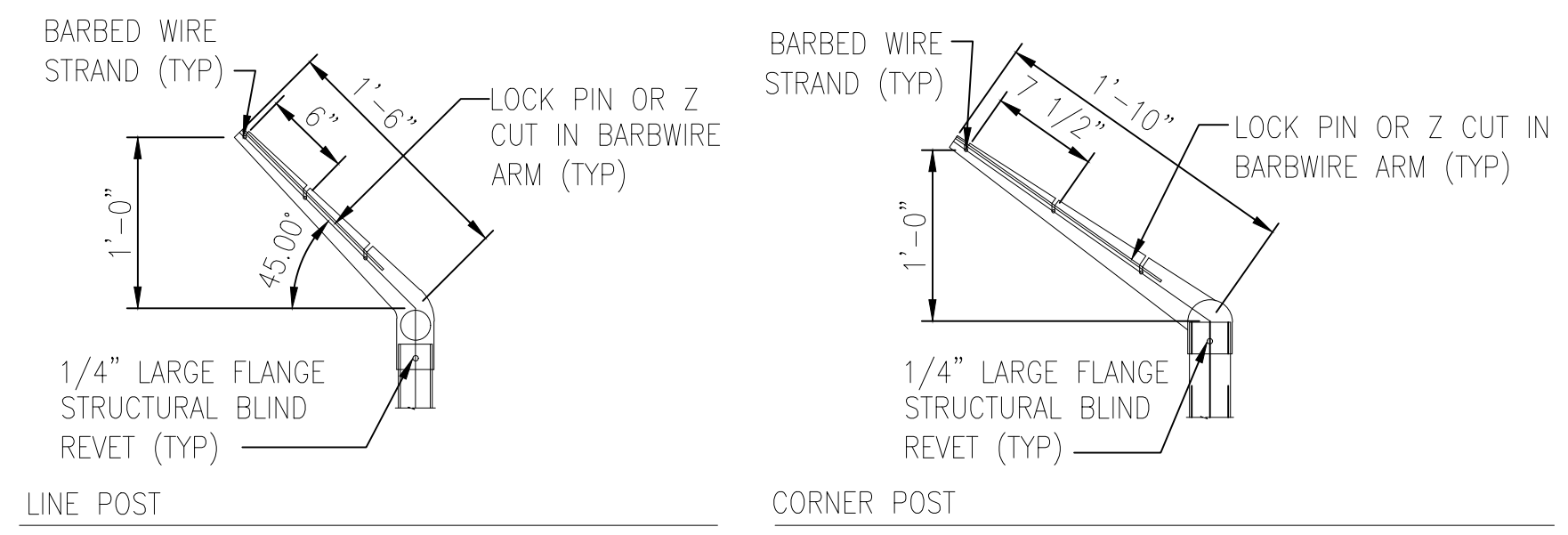
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1	ADDENDUM NO. 5	12/2/21	CFC/M	

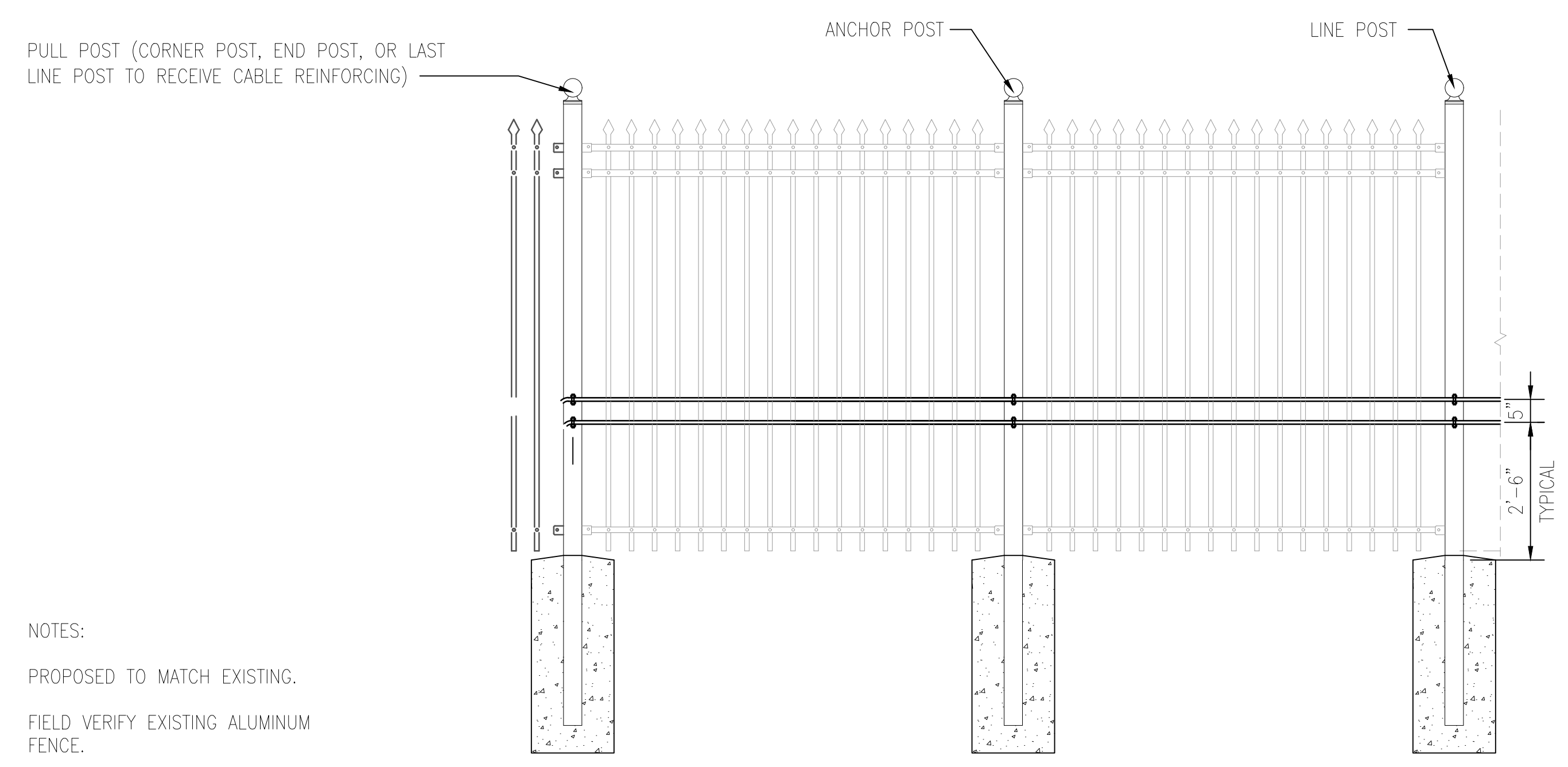
CONSTRUCTION DETAILS
 SOUTH JERSEY PORT CORPORATION
REPLACEMENT OF SECURITY PERIMETER FENCE
 BALZANO MARINE TERMINAL
 CITY OF CAMDEN CAMDEN COUNTY NEW JERSEY



GROUNDING DETAIL
 NO SCALE



SINGLE EXTENSION ARM DETAILS
 SCALE: 1" = 1'-0"



NOTES:
 PROPOSED TO MATCH EXISTING.
 FIELD VERIFY EXISTING ALUMINUM FENCE.

TYPICAL ELEVATION OF ALUMINUM FENCE
 SCALE: 1/2" = 1'-0"

A1
 UFC-720 | UFC-720

ALUMINUM FENCE DETAILS

GRAPHIC SCALES

1" = 1'-0"

1 1/2" = 1'-0"

CD-2
 CD-5

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4/20/2021			
JOB No.:			
3965X001			

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M:\Projects\Balzano Marine Terminal Security Fence\Drawings\UFC-720\UFC-720.dwg 12/2/21 1:28:01 PM



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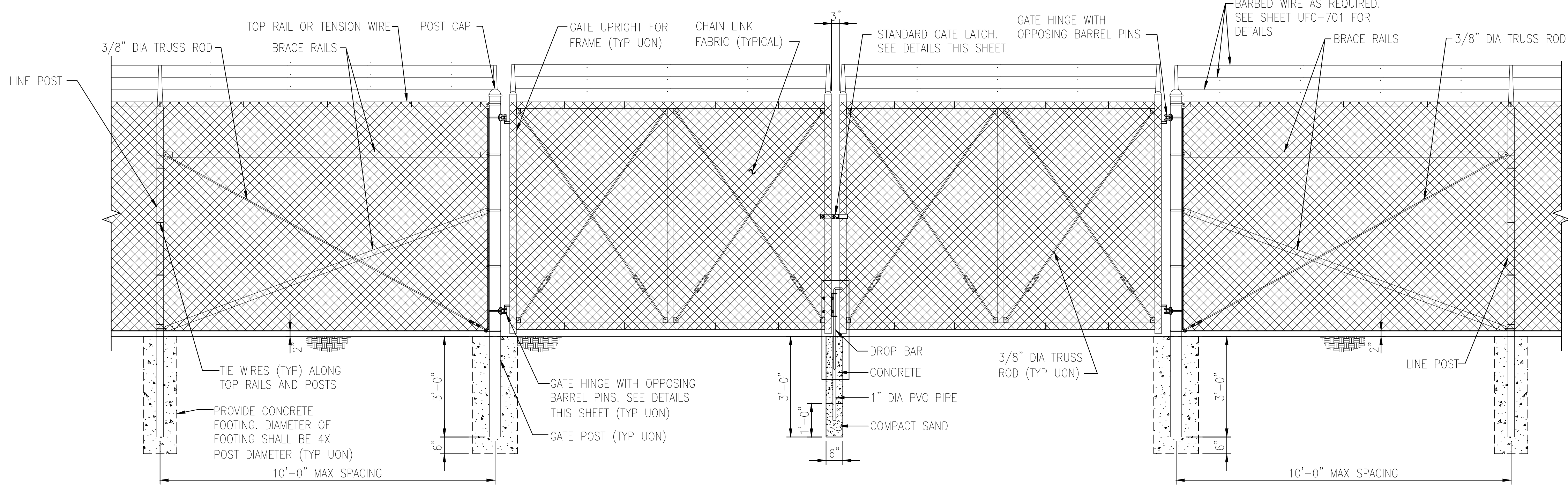
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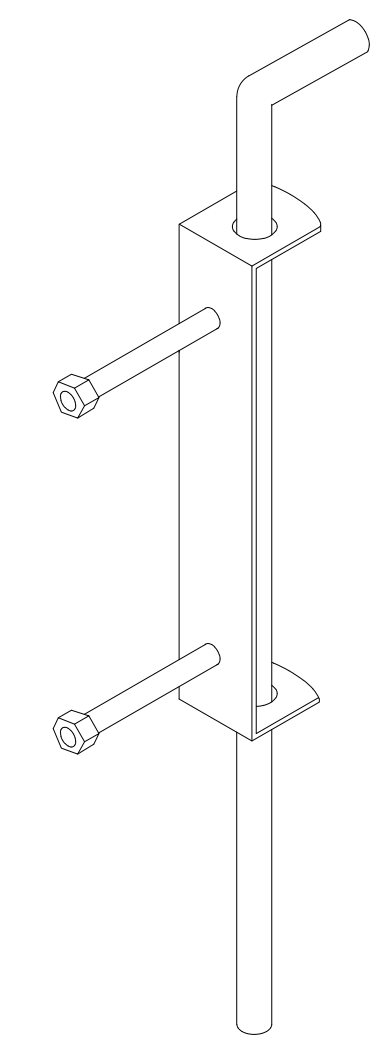
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PLAN - DOUBLE SWING GATE

SCALE: 1" = 1'-0"



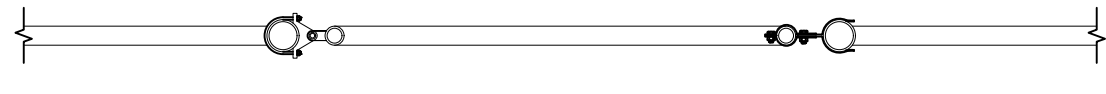
NOTE: PROVIDE ONE DROP BAR FOR EACH LEAF (TYP). ASSOCIATED GALV SLEEVES TO BE INSTALLED FLUSH WILL GRADE AT FULLY OPEN AND CLOSED POSITIONS. CONTRACTOR SHALL PROVIDE 6" LAYER OF #10 STONE BELOW BOTTOM OF SLEEVE TO ALLOW FOR DRAINAGE.



DETAIL: DROP BAR
 NOT TO SCALE

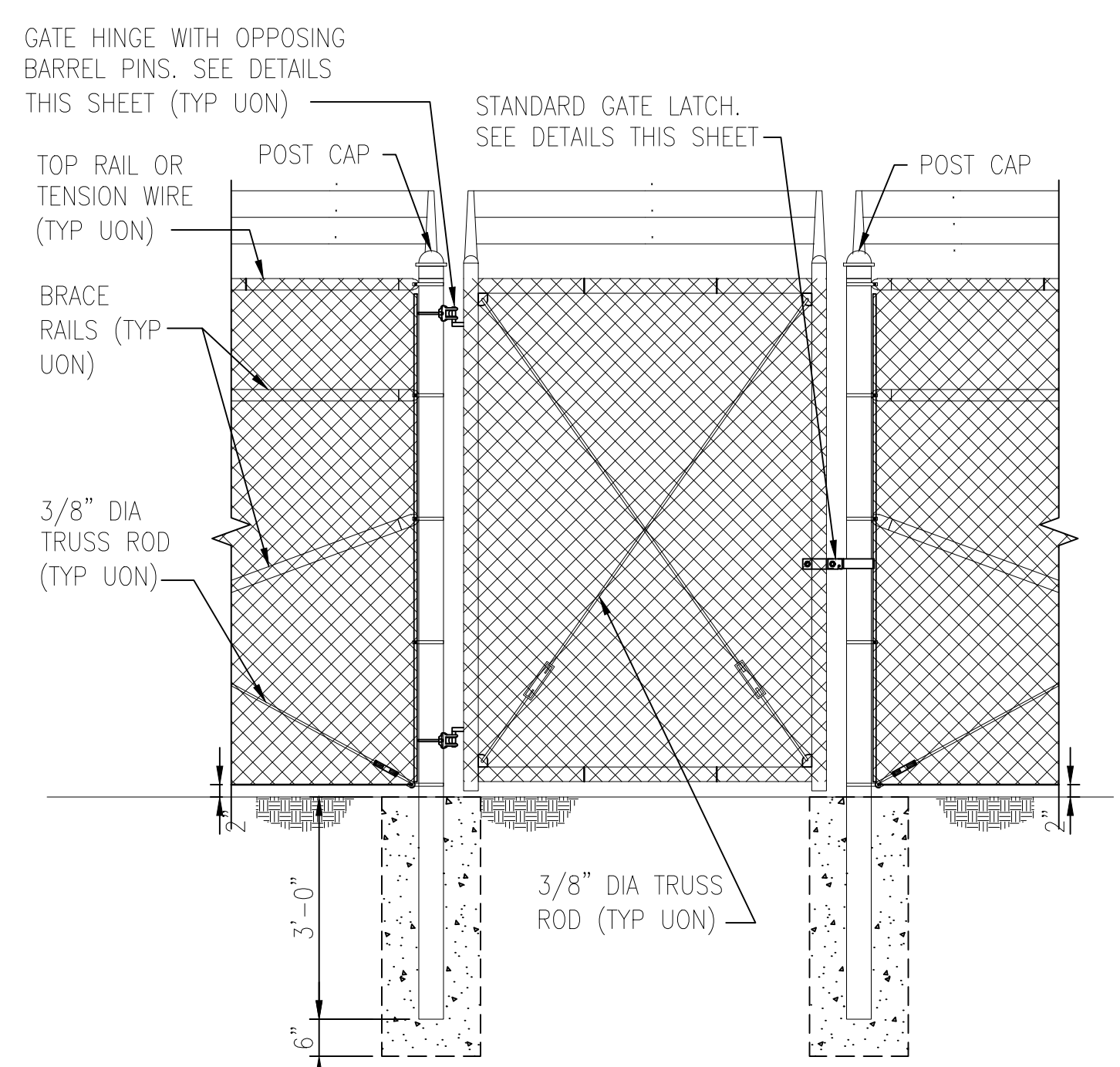
TYPICAL 20' WIDE DOUBLE SWING GATE ELEVATION, G2, G3, G5, G7

SCALE: 1/2" = 1'-0"



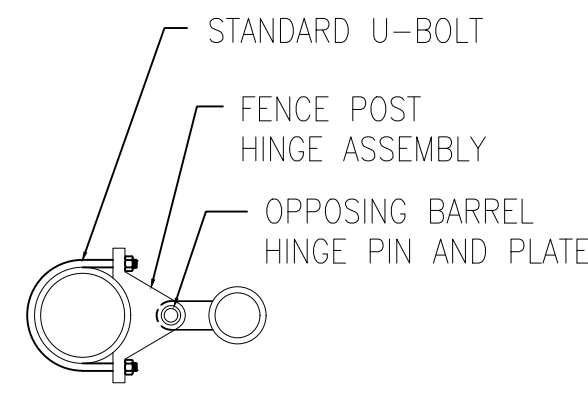
PLAN SINGLE SWING GATE

SCALE: 1" = 1'-0"

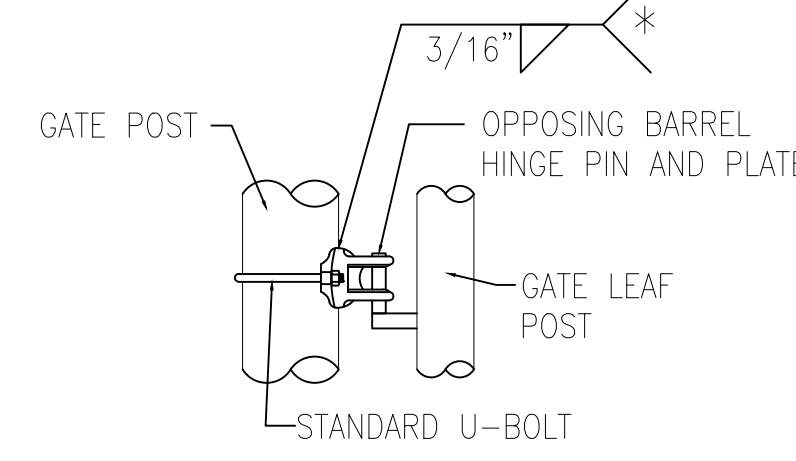


5'-0" WIDE TYPICAL FENCE SINGLE SWING GATE ELEVATION, G8

SCALE: 1/2" = 1'-0"

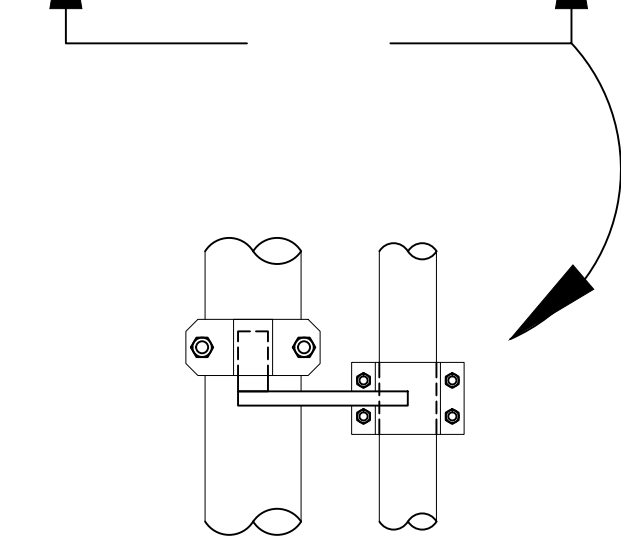
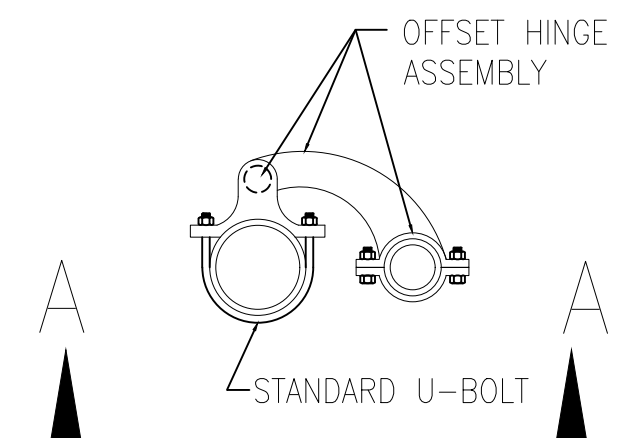


(*NOTE: WELD HINGES TO POST IF INSTALLING CABLE REINFORCEMENT ON GATES. ENSURE CORRECT HEIGHT FOR FULL OPERATION PRIOR TO WELDING (TYPICAL).)



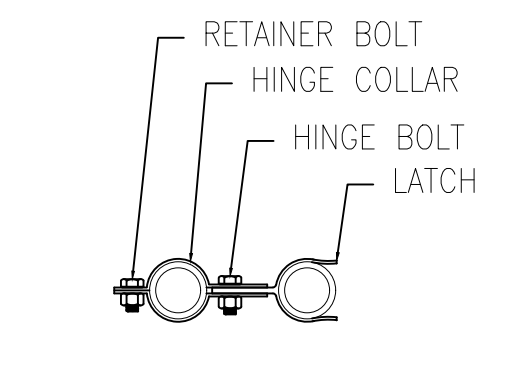
GATE HINGE DETAIL

SCALE: 1 1/2" = 1'-0"



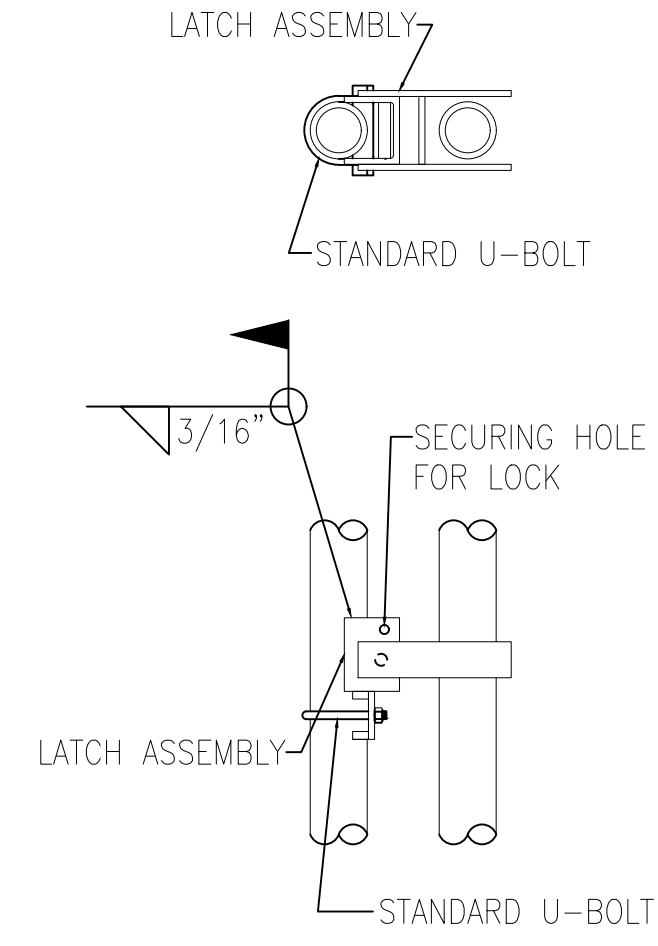
OFFSET HINGE DETAIL

SCALE: 1 1/2" = 1'-0"



GATE LATCH DETAIL

SCALE: 1 1/2" = 1'-0"



FULCRUM LATCH DETAIL

SCALE: 1 1/2" = 1'-0"

SINGLE OR DOUBLE LEAF GATES		
NOM HEIGHT (H)	UPRIGHT HT (U)	FRAME HT (F)
NOM HT INCLUDING BARBED WIRE	ACTUAL DIM	ACTUAL DIM
8'-0" [2438MM]	7'-10" [2388MM]	6'-8 1/2" [2045MM]

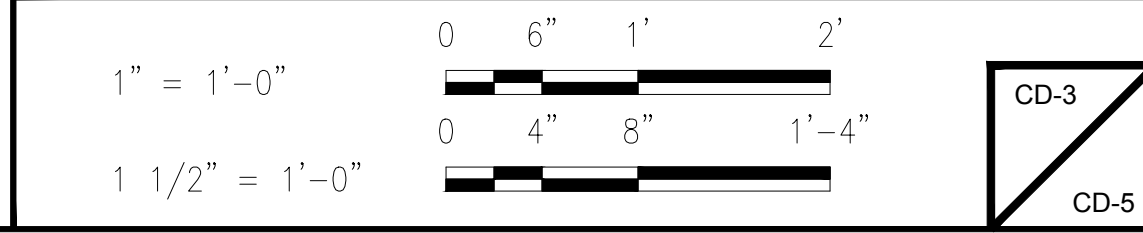
SINGLE LEAF GATES		
OPENING	GATE POSTS	HINGE SPACE (S)
FACE TO FACE	SQUARE & ROUND SIZES	POST TO UPRIGHT
3'-0" [914MM]	2.5" [63.5MM] SQ x 3/16" TH OR 2.875" [73MM] OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]
6'-0" [1829MM]	4" [102MM] SQ x 3/16" TH OR 4" [102MM] OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]
12'-0" [3657MM]	6" [153MM] SQ x 3/16" TH OR 6.625" [168MM] OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]
19'-0" [5790MM]	8" [203MM] SQ x 1/4" TH OR 8.625" [219MM] OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]

GATE POSTS & FOUNDATIONS: GATE POST SIZE AND ASSOCIATED FOOTING DIAMETER TO BE DETERMINED BY MANUFACTURER, BASED ON LEAF WEIGHT & DIMENSION, BUT NOT LESS THAN DIAMETER SHOWN ON THESE DRAWINGS. MINIMUM FOOTING DIAMETERS (TO BE FILLED W/4000 PSI CONC): 40" Ø FOR 8" POST; 36" Ø FOR 6" POST; 24" Ø FOR 4" POST; OTHER SIZES TO BE DESIGNED BY MFR OR KTR. NO FOOTING WIDTH SHALL BE LESS THAN 4(X) THE POST WIDTH.

NOTE: IF GATE HINGES ARE NOT OPPOSING (AS SHOWN ABOVE) OR LEAF IS NOT LOCKED MECHANICALLY TO THE HINGES, WELD AN ANGLE, PLATE, OR BLOCK ABOVE HINGE TO RESTRICT LEAF FROM BEING REMOVED OR LIFTED OFF. RESTRICTION SHALL NOT HINDER OPERATION OF GATE.

BARBED WIRE ARRANGEMENT DETAILS

GRAPHIC SCALES



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SHEET No.:			10 of 12

DATE:
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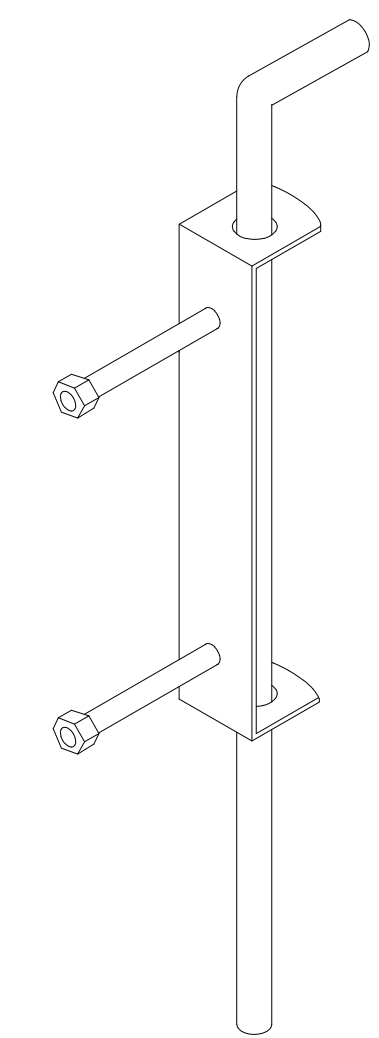
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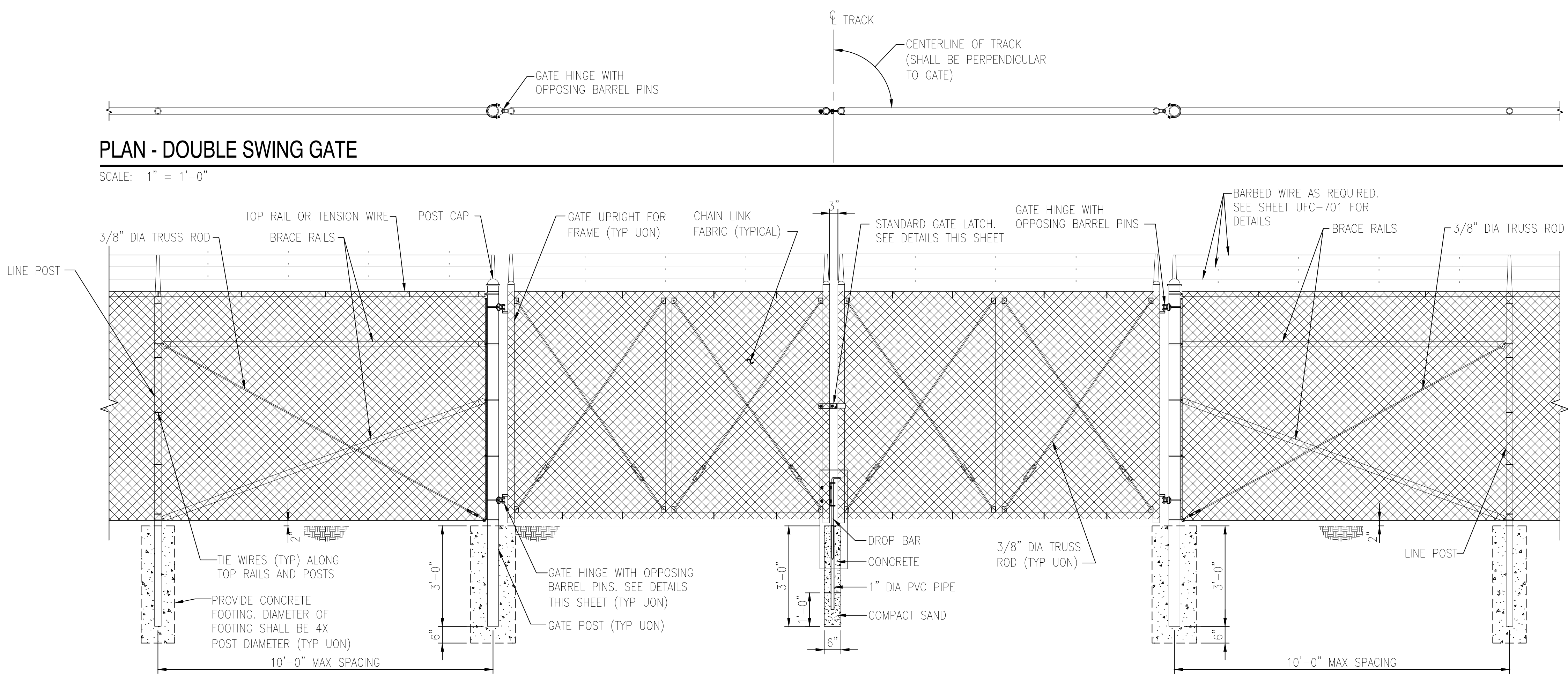
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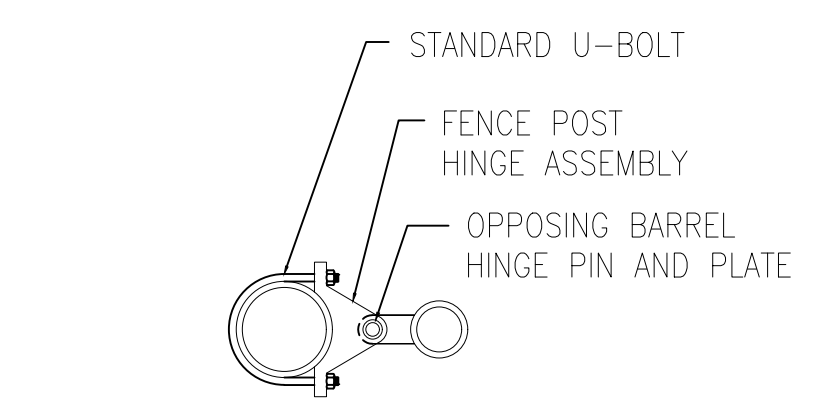
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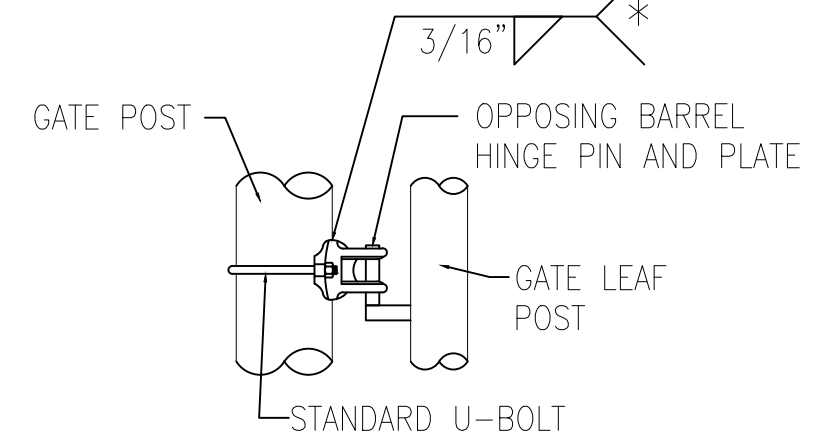
DETAIL: DROP BAR
NOT TO SCALE



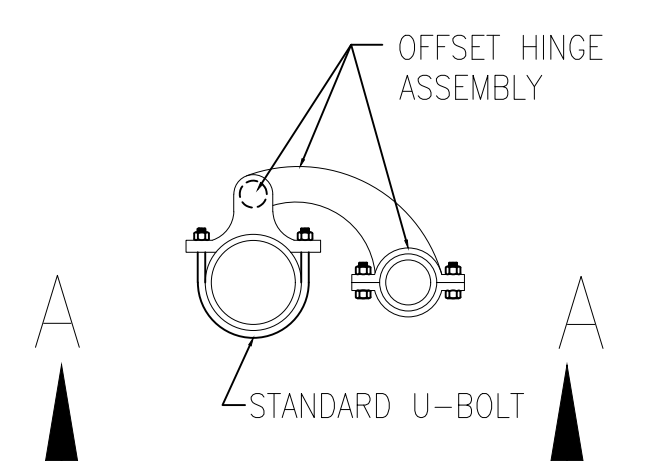
TYPICAL 21' WIDE DOUBLE SWING GATE ELEVATION (RAIL GATE), G1, G6
SCALE: 1/2" = 1'-0"



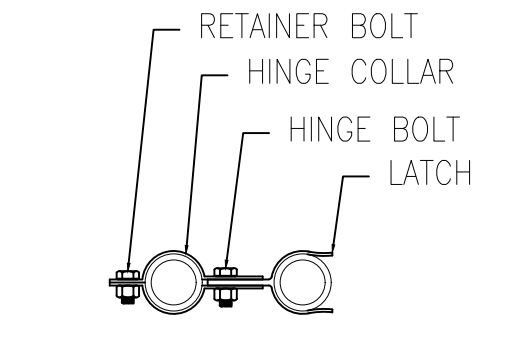
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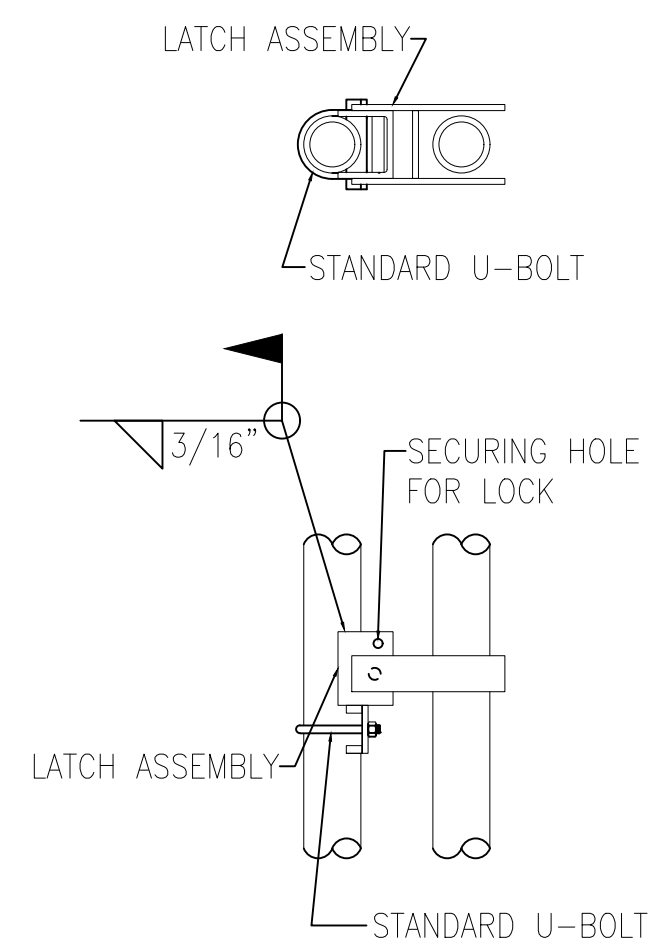
GATE HINGE DETAIL
SCALE: 1 1/2" = 1'-0"



OFFSET HINGE DETAIL
SCALE: 1 1/2" = 1'-0"



GATE LATCH DETAIL
SCALE: 1 1/2" = 1'-0"



FULCRUM LATCH DETAIL
SCALE: 1 1/2" = 1'-0"

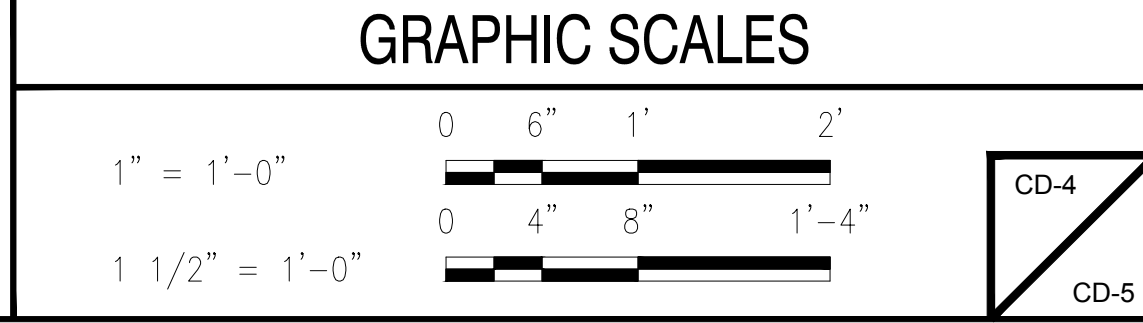
SINGLE OR DOUBLE LEAF GATES		
NOM HEIGHT (H)	UPRIGHT HT (U)	FRAME HT (F)
8'-0" [2438MM]	7'-10" [2388MM]	6'-8 1/2" [2045MM]

SINGLE LEAF GATES		
OPENING	GATE POSTS	HINGE SPACE (S)
FACE TO FACE	SQUARE & ROUND SIZES	POST TO UPRIGHT
3'-0" [914MM]	2.5" [63.5MM] SQ x 3/16" TH OR 2.875" [73MM] OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]
THROUGH		
6'-0" [1829MM]	4" [102MM] SQ x 3/16" TH OR 4" [102MM] OD	FOR SQUARE & ROUND GATE POSTS: 2 1/4" [57MM]
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THROUGH		
23'-0" [7010MM]		

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BARBED WIRE ARRANGEMENT DETAILS



CD-4
CD-5

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID

ALL DOCUMENTS PREPARED BY REMINGTON & VERNICK ENGINEERS AND AFFILIATES ARE INSTRUMENTS OF SERVICE IN RESPECT OF THE PROJECT. THEY ARE NOT INTENDED OR REPRESENTED TO BE SUITABLE FOR REUSE BY OWNER OR OTHERS ON EXTENSIONS OF THE PROJECT OR ON ANY OTHER PROJECT. ANY REUSE WITHOUT WRITTEN VERIFICATION OR ADAPTATION BY REMINGTON & VERNICK ENGINEERS AND AFFILIATES FOR THE SPECIFIC PURPOSE INTENDED WILL BE AT OWNERS SOLE RISK AND WITHOUT LIABILITY OR LEGAL EXPOSURE TO REMINGTON & VERNICK ENGINEERS AND AFFILIATES. AND OWNER SHALL INDEMNIFY AND HOLD HARMLESS REMINGTON & VERNICK ENGINEERS AND AFFILIATES FROM ALL CLAIMS, DAMAGES, LOSSES AND EXPENSES ARISING OUT OF OR RESULTING THEREFROM.

NO.	REVISION	DATE	BY	CHK
1	ADDENDUM NO. 5	12-21-21	CFC	
2	ADDENDUM NO. 4-ADDED SHEET 12	12-21-21	CFC	

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

DRAWN BY:	DESIGN BY:	CHECKED BY:	SCALE:
CFC	DHS	WMB	AS NOTED
DATE:	SHEET No.:		
4/20/2021	12 of 12		
JOB No.:	3965X001		

LAYOUT OF REINFORCING

DESIGNER OF RECORD TO LOCATE DEADMEN ON SITE PLANS, SATISFYING SPACING CRITERIA, OVERLAPS, AND FENCE CORNERS / TURNING POINTS. AT GATES IT IS DESIRABLE TO HAVE TRAFFIC ON EITHER SIDE OF A MEDIAN TO OPERATE AND PROTECT INDEPENDENTLY (NOT UTILIZING THE SAME DEADMAN SYSTEMS). THEREFORE DEADMEN SHOULD BE PLACED IN THE MEDIAN TO ANCHOR THE GATE REINFORCING FOR EACH SIDE OF THE ROAD. IF THERE IS NO PHYSICAL MEDIAN (MERELY PAINTED LINES), LIMITED ROOM, OR UTILITY CONFLICTS THAT DO NOT ALLOW FOR DEADMEN PLACEMENT BETWEEN THE GATES, ENSURE THAT THE CABLING FOR BOTH GATES ARE CONNECTED-- EITHER DIRECTLY OR VIA AN INTERMEDIATE CABLE WHICH CREATES AN INTEGRAL CABLE SYSTEM ACROSS THE ENTIRE GATE AREA.

MODIFICATIONS TO TYPICAL DESIGN

IF LARGER DESIGN THREATS OR CUSTOMER REQUESTS INDICATE A NEED FOR GREATER SECURITY, MORE 3/4" Ø CABLES CAN BE UTILIZED OR THE CABLES CAN BE UPGRADED TO 1" Ø. BOTH SCENARIOS REQUIRE THE DEADMAN (WHICH WILL NEED TO BE LARGER) TO BE DESIGNED BY A PROFESSIONAL ENGINEER TO SATISFY THE CRITERIA OUTLINED IN REINF NOTE 19 ON THIS SHEET. FOR BIDDING PURPOSES, ESTABLISH A UNIT COST FOR ADDITIONAL EXCAVATION AND NEW CONCRETE PER CUBIC FOOT.

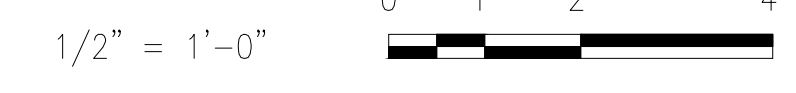
IF 1" Ø CABLE IS USED, SPECIFICATIONS SHALL MATCH REINF NOTE 1 ON THIS SHEET, EXCEPT THE CABLE SHALL HAVE A MINIMUM BREAKING STRENGTH OF 70,000 POUNDS (35 TONS). OTHER COMPONENTS, SUCH AS EYEBOLTS, U-BOLTS, ROPE CLIPS, THIMBLES, AND OTHER ASSOCIATED HARDWARE SHALL BE SIZED ACCORDINGLY.

REINFORCING NOTES

- REINFORCING CABLES SHALL BE U.S. DOMESTIC MINIMUM 3/4" Ø 6x19 CLASS WIRE ROPE, REGULAR LAY, EXTRA IMPROVED FLOW STEEL (EIP), INDEPENDENT WIRE ROPE CORE (IWRC), CLASS A CONFORMING TO ASTM A1023 AND GALVANIZED IN ACCORDANCE WITH ASTM A475, & HAVE A MINIMUM BREAKING STRENGTH OF 40,000 POUNDS (20 TONS). CABLES SHALL HAVE A BLACK VINYL COATING, BUT SHALL NOT BE IMPREGNATED.
- CABLES SHALL BE CONTINUOUS FROM DEADMAN TO DEADMAN. NO SPLICES IN CABLE SHALL BE ALLOWED. CABLE BARRIER SHALL BE INSTALLED BETWEEN FENCE POST AND FENCE FABRIC AS PER PLANS. U-BOLTS SHALL BE INSTALLED PERPENDICULAR TO THE LAY OR THE STRANDS OF THE WIRE ROPE AND SHALL BE TIGHTENED AFTER SAG IN CABLE BARRIER HAS BEEN REMOVED. CONCRETE DEADMAN SPACING SHALL BE AT MAXIMUM 200' INTERVALS & TURNING POINTS (EXTERNAL CORNERS).
- WIRE ROPE ENDS SHALL TERMINATE AROUND TURNBUCKLES, GATE POSTS OR EXTRA HEAVY-DUTY WIRE ROPE THIMBLES (AT GATES). THESE TERMINATIONS REQUIRE 18" MINIMUM OF ROPE FOR TURN BACK AND A MINIMUM OF (4)- CLIPS EACH (EQUAL SPACING).
- CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS PRIOR TO ORDERING MATERIALS.
- DEADMEN TO BE INSTALLED ON THE SECURED SIDE (INTERIOR) OF THE FENCE; WHILE CABLES SHOULD BE INSTALLED ON THE EXTERIOR SIDE OF POST.
- PROVIDE NECESSARY SLACK IN CABLES (GATES ONLY) TO ALLOW FOR FULL SWING OF ALL GATE LEAVES.
- OFFSET DEADMAN SYSTEMS FROM FENCELINE (PLAN VIEW) TO AVOID CONFLICT WITH EXISTING FENCE POSTS.
- ALLOW EPOXY ANCHOR BOLTS (MIN 2 DAYS) & CONCRETE DEADMEN (MIN 7 DAYS) TO CURE, PRIOR TO APPLYING LOADS (INSTALLING TURNBUCKLES & STRAIGHTENING CABLES).
- ALL WELDING SHALL BE DONE IN ACCORDANCE WITH AWS D1.1. ALL WELD MATERIAL SHALL BE E70XX ELECTRODES.
- STRUCTURAL STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NINTH EDITION OF THE AISC "MANUAL OF STEEL CONSTRUCTION FOR ALLOWABLE STRESS DESIGN.
- STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 AND SHALL HAVE A MINIMUM YIELD STRESS OF 36000 PSI.
- ALL STRUCTURAL STEEL MEMBERS AND HARDWARE USED IN CABLE ANCHORING SYSTEM SHALL BE HOT-DIPPED GALVANIZED. ANY AREAS WHERE COATING IS DAMAGED OR REMOVED SHALL BE COVERED WITH A ZINC RICH COMPOUND.
- TURNBUCKLES SHALL BE 1/4"x18", TYPE I, GALVANIZED IN ACCORDANCE WITH ASTM F1145.
- WIRE ROPE CLAMPS SHALL BE TYPE I, GALVANIZED, IN ACCORDANCE WITH FS FF-C-450.
- ALL THREADED RODS, U-BOLTS, AND BOLTS SHALL CONFORM TO ASTM A307 AND SHALL BE INSTALLED WITH F844 WASHERS AND A563 NUTS. ENTIRE BOLT ASSEMBLY SHALL BE GALVANIZED. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- ZINC RICH COMPOUND FOR REPAIRS SHALL BE 95% METALLIC ZINC, BY WEIGHT IN DRIED FILM; CONFORMING TO FED SPEC DOD-P-21035A & MEETING MILITARY SPEC MIL-P-26915A. INSTALL AT LEAST TWO COATS, 4 MILS MIN TOTAL THICKNESS.
- ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 318. CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4000 PSI. THE MINIMUM CONCRETE COVER SHALL BE 3", UNLESS OTHERWISE NOTED.
- ALL ITEMS NOT NOTED AS "EXIST" OR "EXISTING" SHALL BE PROVIDED AND INSTALLED UNDER THE REQUIREMENTS OF THIS CONTRACT.
- DESIGN CRITERIA:
UFC 4-022-03 "SECURITY ENGINEERING: FENCES, GATES AND GUARD FACILITIES"

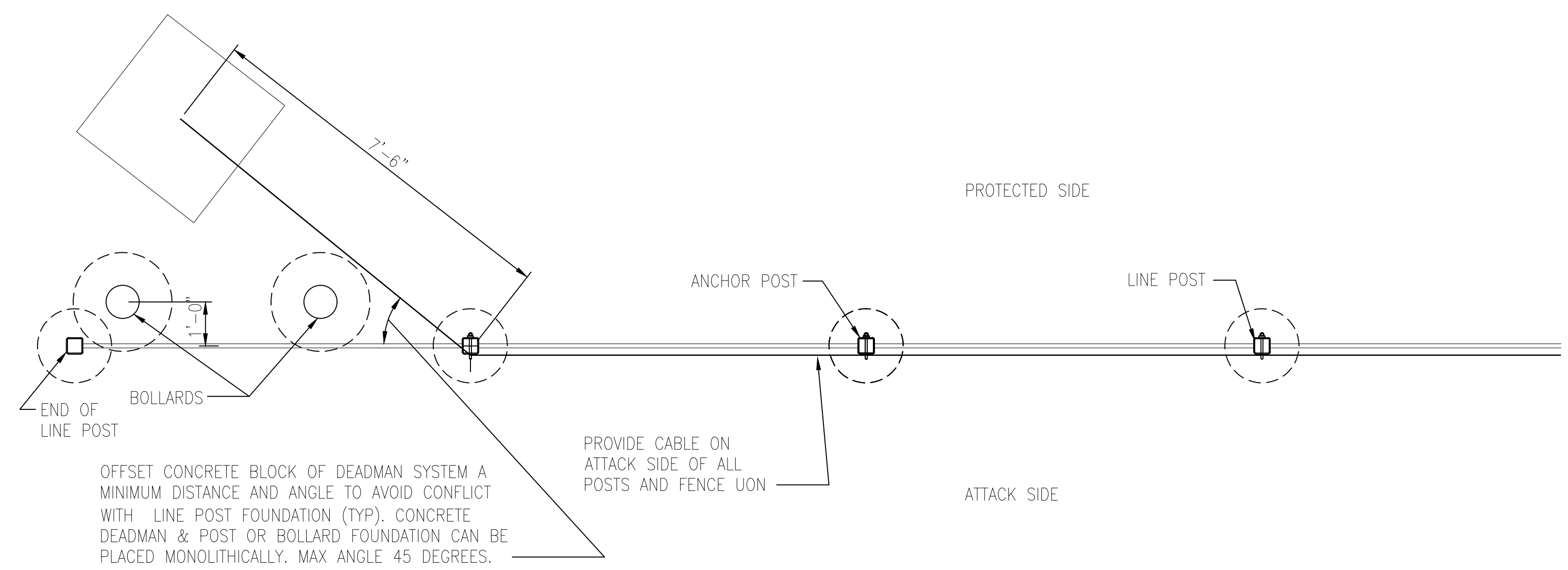
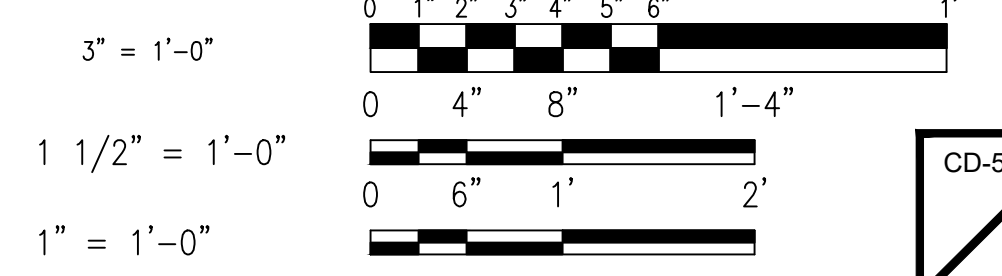
UFC 4-022-02 "SELECTION AND APPLICATIONS OF VEHICLE BARRIERS."
- IF CABLE REINFORCING GATES, PROVIDE EYEBOLTS TO SECURE CABLE TO GATE PICKETS @ 24" OC & U-BOLTS TO SECURE TO GATE UPRIGHTS. MODIFY AS NEEDED FOR OPERATION.

GRAPHIC SCALES



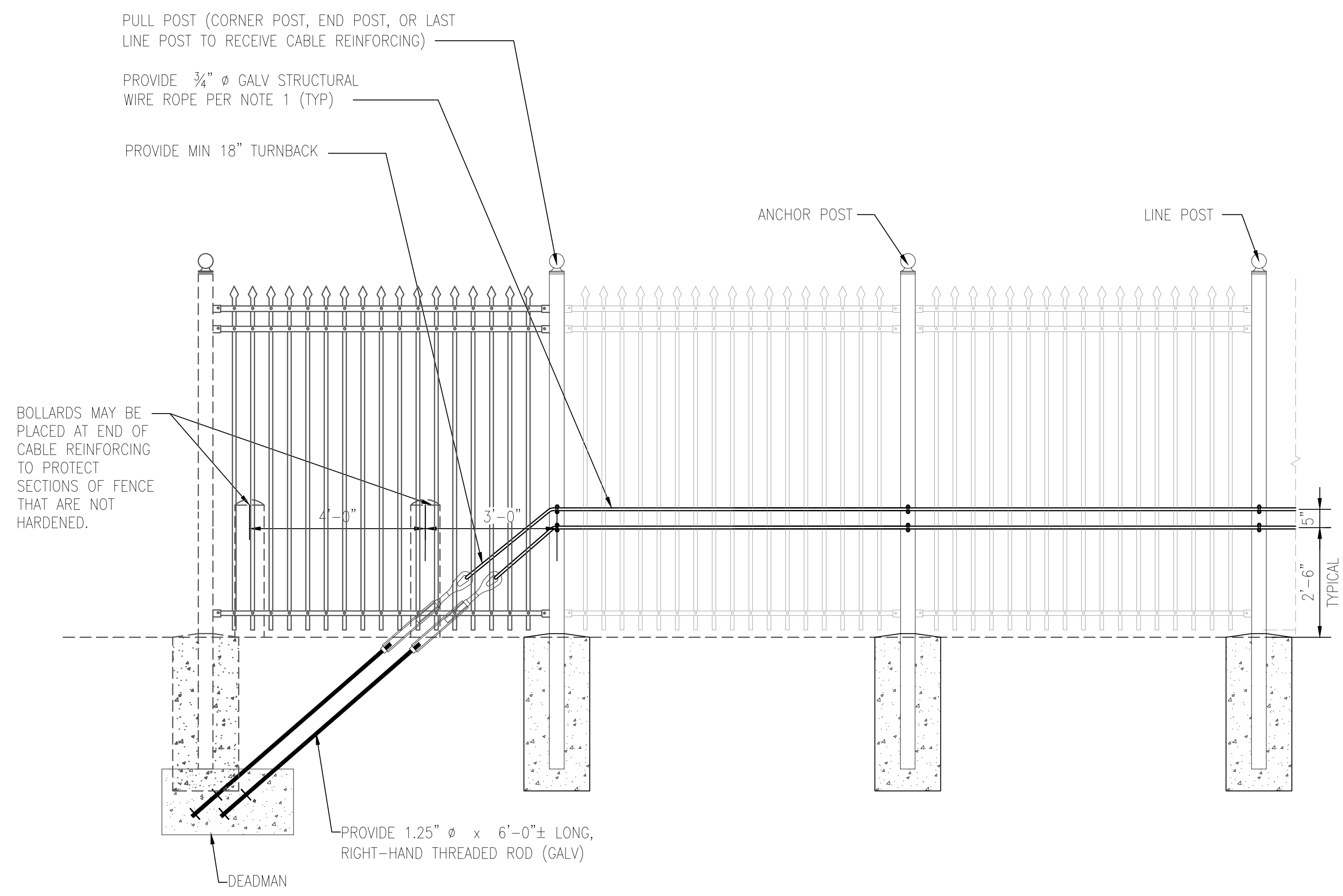
TYPICAL CABLE REINFORCED ORNAMENTAL FENCE END POST

GRAPHIC SCALES



TYPICAL PLAN OF END POST DEADMAN AND LINE POST LAYOUT

SCALE: 1/2" = 1'-0"



TYPICAL ELEVATION OF END POST DEADMAN AND LINE POST LAYOUT

SCALE: 1/2" = 1'-0"

A1
UFC-720 UFC-720

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