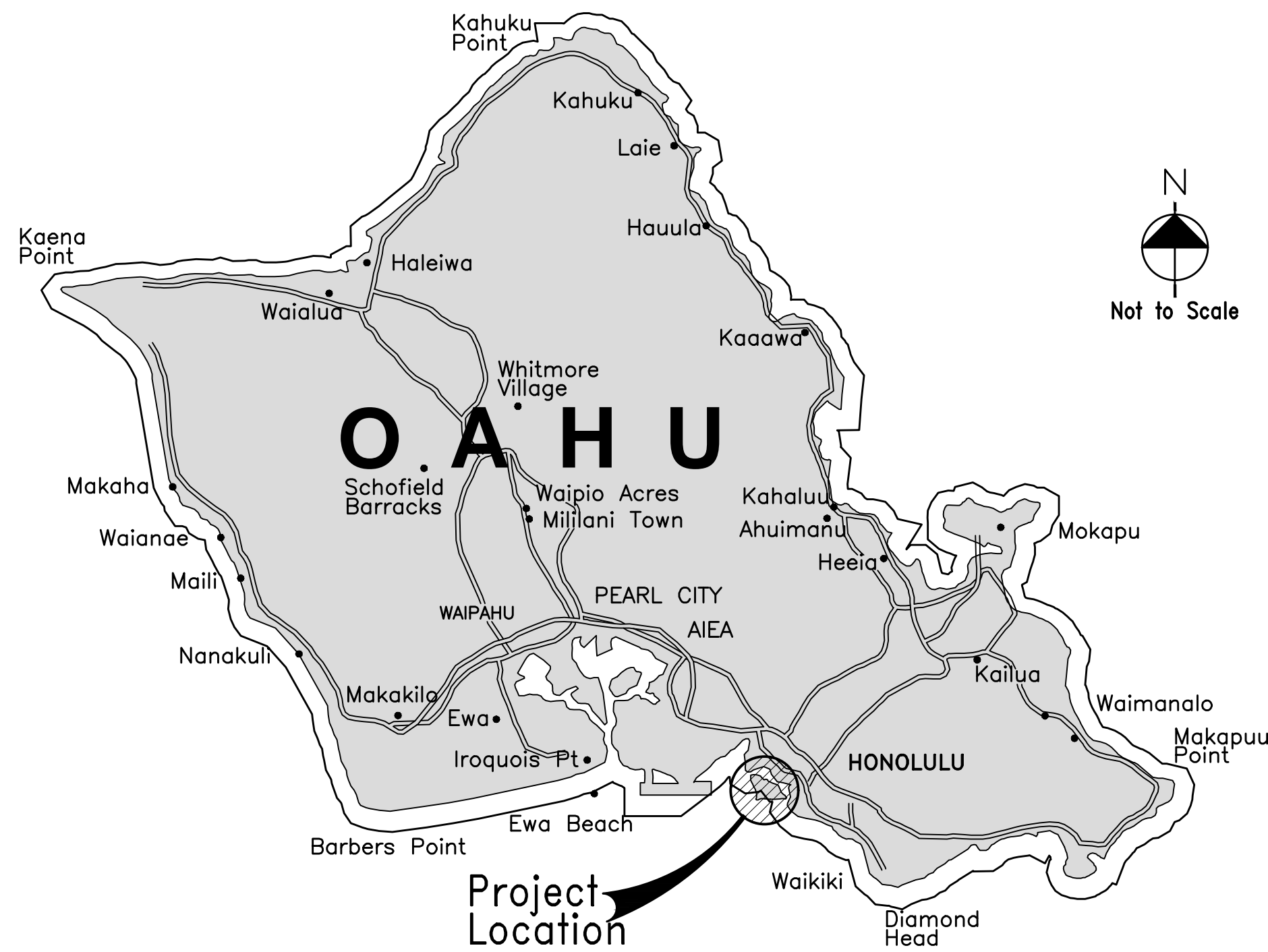


REPAIR FENCING AT PIER 53, HONOLULU HARBOR, OAHU, HAWAII

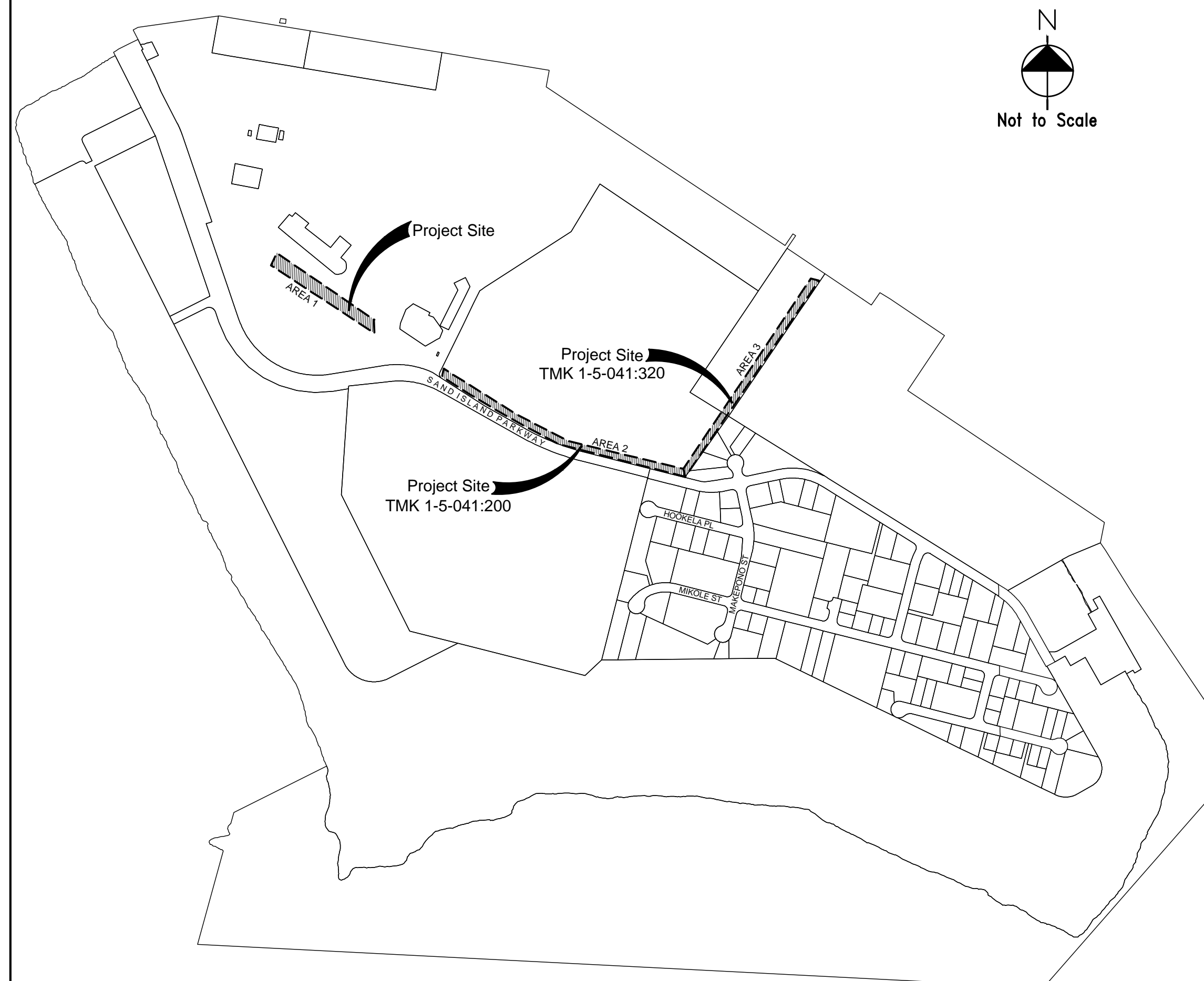
FOR THE
STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
HARBORS DIVISION

S10845



LOCATION MAP

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

CONSULTANT:

CIVIL ENGINEER

WILSON OKAMOTO CORPORATION
1907 S BERETANIA STREET, SUITE 400
HONOLULU, HI 96826

TEL: 808.946.2277
FAX: 808.946.2253

STRUCTURAL ENGINEER

MKE ASSOCIATES LLC
AIEA COMMERCIAL CENTER, SUITE 205
99-205 Moanalua Road
Aiea, Hawaii 96701

TEL: 808.488.7579
FAX: 808.488.7818

DEPARTMENT OF TRANSPORTATION
STATE OF HAWAII

APPROVED BY: *[Signature]*

Nov 30, 2023

FOR DIRECTOR OF TRANSPORTATION

DATE

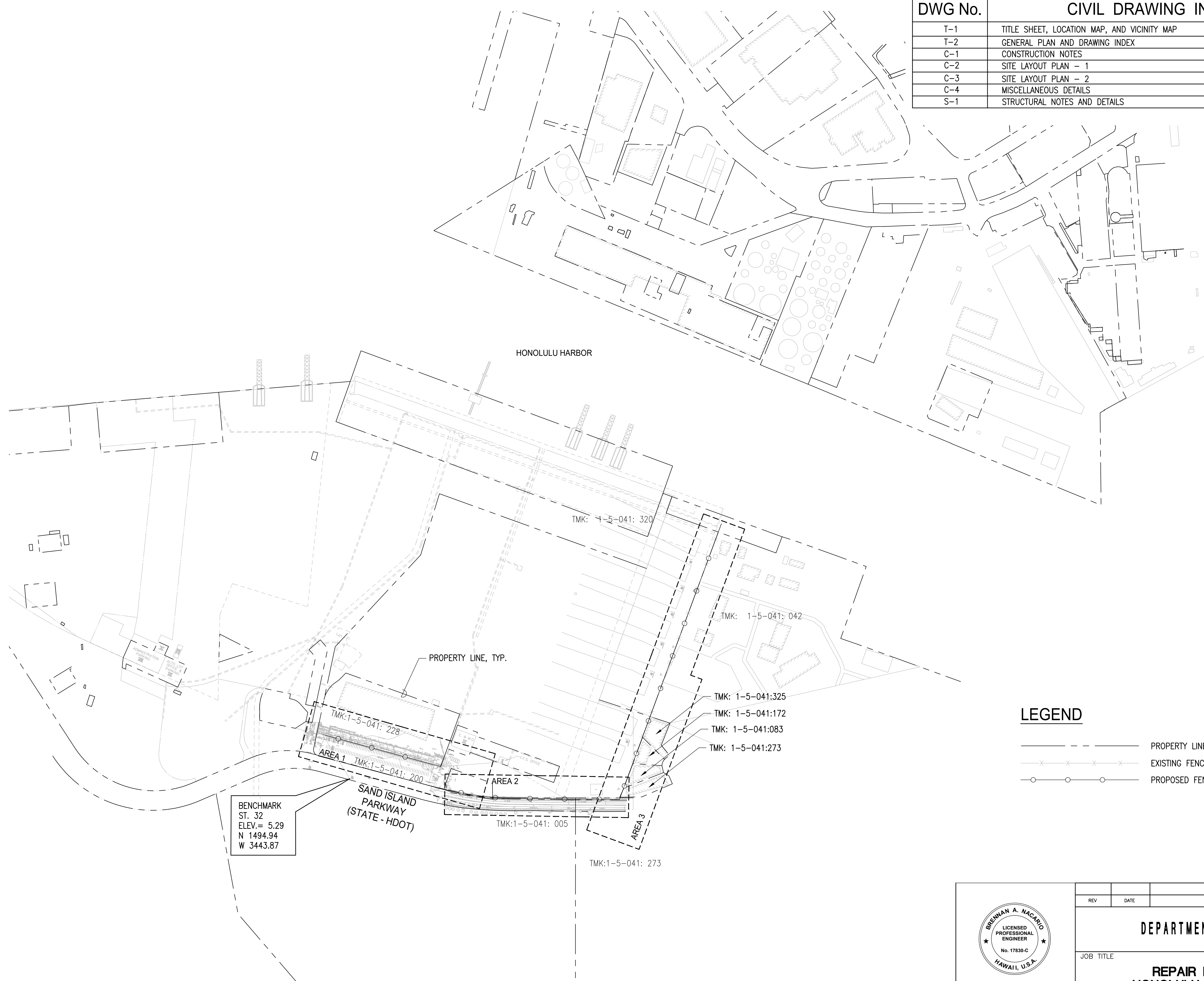
SHEET

T-1

1 of 7 SHTS

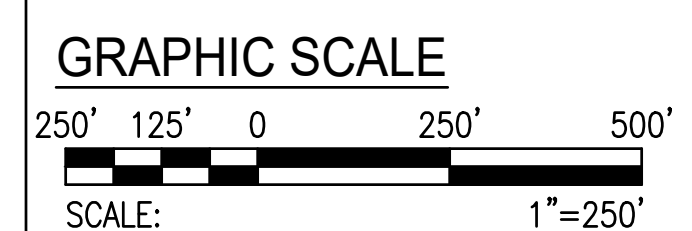
DWG No.	CIVIL DRAWING INDEX
T-1	TITLE SHEET, LOCATION MAP, AND VICINITY MAP
T-2	GENERAL PLAN AND DRAWING INDEX
C-1	CONSTRUCTION NOTES
C-2	SITE LAYOUT PLAN - 1
C-3	SITE LAYOUT PLAN - 2
C-4	MISCELLANEOUS DETAILS
S-1	STRUCTURAL NOTES AND DETAILS

TRUE NORTH
SCALE: 1"=250'



LEGEND

	PROPERTY LINE
	EXISTING FENCE
	PROPOSED FENCE



GENERAL PLAN AND DRAWING INDEX
SCALE: 1"=250'



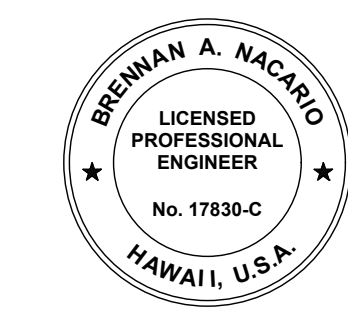
LICENSE EXPIRES 4/30/24
THIS WORK WAS PREPARED BY
ME OR UNDER MY SUPERVISION
Brennan Nacario

REV	DATE	DESCRIPTION	BY	APPROVED
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS				
JOB TITLE REPAIR FENCING AT PIER 53, HONOLULU HARBOR, OAHU, HAWAII				
SHEET TITLE GENERAL PLAN AND DRAWING INDEX				
DESIGNED BY:	WOC	JOB NUMBER		S10845
DRAWN BY:	WOC			
CHECKED BY:	WOC			
DATE:	NOV 9, 2023			
SCALE:	AS NOTED			SHEET T-2 2 of 7 SHEETS

STRUCTURAL NOTES:

GENERAL :

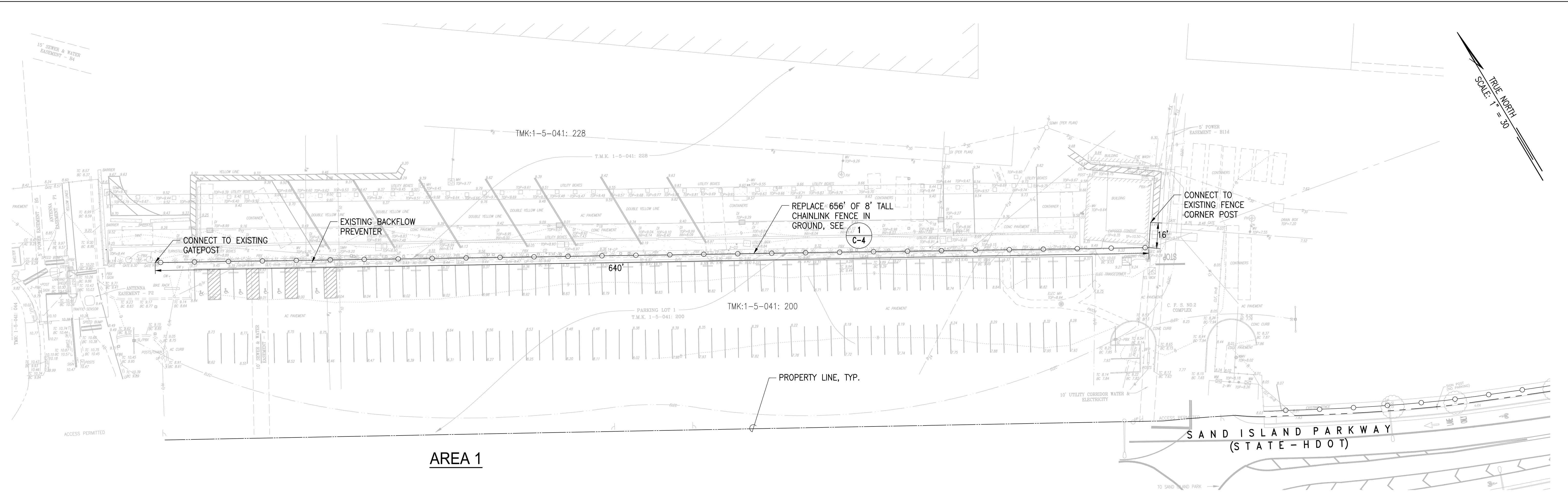
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3. THE CONTRACTOR SHALL TAKE FIELD MEASUREMENTS AND VERIFY FIELD CONDITIONS AND SHALL COMPARE SUCH FIELD MEASUREMENTS AND CONDITIONS WITH THE DRAWINGS BEFORE COMMENCING WORK. REPORT IN WRITING TO THE HARBORS DIVISION CONSTRUCTION ENGINEER ALL INCONSISTENCIES AND OMISSIONS.
4. CONTRACTOR SHALL RESOLVE ANY DISCREPANCIES AND QUESTIONS PRIOR TO THE START OF WORK. NO EXTRA PAYMENT SHALL BE ALLOWED ON ACCOUNT OF WORK MADE NECESSARY BY CONTRACTORS FAILURE TO VISIT THE SITE AND/OR FAILURE TO RESOLVE DISCREPANCIES AND QUESTIONS.
5. THE CONTRACTOR SHALL PROTECT ALL UTILITIES AND STRUCTURES IN AND ADJACENT TO THE PROJECT SITE. ANY DAMAGE SHALL BE REPAIRED TO THE SATISFACTION OF THE HARBORS DIVISION CONSTRUCTION ENGINEER AND PAID FOR BY THE CONTRACTOR.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES.
7. THE CONTRACTOR SHALL COORDINATE HIS/HER WORK WITH OTHER CONTRACTORS WITHIN THE PROJECT AREA. THE CONTRACTOR SHALL ALSO COORDINATE WITH THE HARBORS DIVISION OAHU DISTRICT MANAGER AND CONSTRUCTION ENGINEER FOR AN APPROVED STAGING AND STORAGE AREA AND FOR RESTRICTIONS OF HARBORS OPERATIONS OVER REPAIR AREAS.
8. THE CONTRACTOR SHALL REMOVE ALL DEBRIS RESULTING FROM HIS/HER WORK AS REQUIRED FOR PUBLIC HEALTH AND SAFETY AND TO THE SATISFACTION OF THE HARBORS DIVISION CONSTRUCTION ENGINEER. SHOULD THE STATE PERFORM ANY OF THE ABOVE WORK DUE TO NON-PERFORMANCE BY THE CONTRACTOR, THE CONTRACTOR AGREES TO REIMBURSE THE STATE FOR ALL COSTS INCURRED.
9. HARBOR OPERATIONS TAKE PRECEDENCE OVER CONSTRUCTION ACTIVITY. THE CONTRACTOR MUST WORK AROUND HARBOR OPERATIONS SO THAT THE PIERS WILL REMAIN OPERATIONAL. WEEKEND WORK MAY BE REQUIRED AND SHALL BE COORDINATED WITH THE HARBORS DIVISION CONSTRUCTION ENGINEER AND TENANTS IN ADVANCE.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR METHODS OF CONSTRUCTION, WORKMANSHIP AND JOB SAFETY. THE CONTRACTOR SHALL PROVIDE TEMPORARY SHORING AND BRACING AS REQUIRED FOR STABILITY OF STRUCTURAL MEMBERS AND SYSTEMS.
11. ALL WORK SPECIFIED IN THE CONTRACT BUT NOT LISTED SEPARATELY SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE PAID FOR SEPARATELY.
12. NOTES AND DETAILS ON THE STRUCTURAL PLANS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. SHOULD THERE BE CONFLICTS BETWEEN THE REQUIREMENTS OF THE PLANS OR SPECIFICATIONS, THE MORE STRINGENT SHALL APPLY.
13. THE CONTRACTOR SHALL COMPLY WITH THE CLEAN WATER ACT AND THE STATE HARBORS DIVISION STORMWATER MANAGEMENT PROGRAM. NO POLLUTANTS ARE ALLOWED TO BE DISCHARGED DIRECTLY OR INDIRECTLY THROUGH THE HARBORS SMALL MS4 OR OTHER POTENTIAL PATHWAY INTO HARBOR WATERS.
14. THE CONTRACTOR WILL BE RESPONSIBLE FOR REGULATORY FINES OR PENALTIES THAT MAY BE IMPOSED BY ENVIRONMENTAL REGULATORY AGENCIES (EPA AND/OR STATE DOH) IN THE EVENT OF VIOLATIONS.
15. THE CONTRACTOR SHALL SUBMIT A SITE-SPECIFIC BEST MANAGEMENT PRACTICES (BMP) PLAN TO HARBORS DIVISION ENGINEER BRANCH PRIOR TO THE START OF ANY CONSTRUCTION WORK. THE SITE SPECIFIC BMP PLAN SHALL COMPLY WITH ENVIRONMENTAL PROTECTION AND TEMPORARY WATER POLLUTION, DUST, AND EROSION CONTROL ARTICLES IN THE SPECIFICATIONS AND PROPOSAL.
16. IN CASE OF SPILL, LEAK, OR OTHER RELEASE CONTAINING A HAZARDOUS SUBSTANCE OR OIL, THE CONTRACTOR SHALL NOTIFY APPROPRIATE FACILITY PERSONNEL, EMERGENCY RESPONSE AGENCIES, AND REGULATORY AGENCIES FOLLOWING NOTIFICATION PROCEDURES, AND SHALL NOTIFY THE HARBORS DIVISION CONSTRUCTION ENGINEER IMMEDIATELY (I.E. WITHIN 24 HOURS). SUCH CONTACT INFORMATION MUST BE IN LOCATIONS THAT ARE READILY ACCESSIBLE AND AVAILABLE. CONTRACTOR SHALL NOTIFY THE HDOT HARBORS DIVISION CONSTRUCTION ENGINEER OF ANY ILLICIT DISCHARGE AND/OR SPILL/RELEASE THAT OCCURS ONSITE.



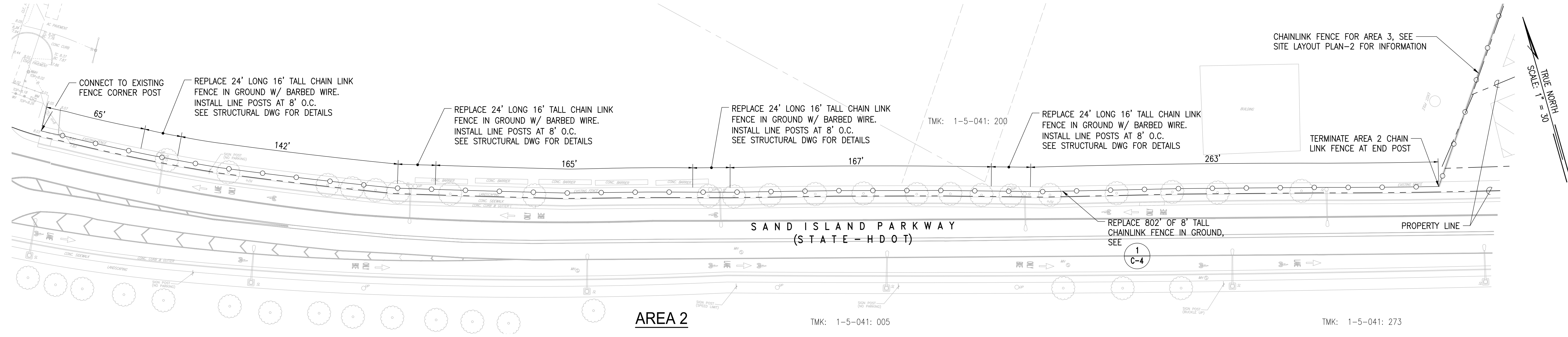
LICENSE EXPIRES 4/30/24
 THIS WORK WAS PREPARED BY
 ME OR UNDER MY SUPERVISION
Brennan Nacario

REV	DATE	DESCRIPTION	BY	APPROVED
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS				
JOB TITLE REPAIR FENCING AT PIER 53, HONOLULU HARBOR, OAHU, HAWAII				
SHEET TITLE CONSTRUCTION NOTES				
DESIGNED BY:	WOC			C-1
DRAWN BY:	WOC			
CHECKED BY:	WOC			
DATE:	NOV 9, 2023			
SCALE:	AS NOTED			S10845
				SHEET 3 of 7 SHEETS

TRUE NORTH
SCALE: 1" = 30'



AREA 1



AREA 2

TRUE NORTH
SCALE: 1" = 30'

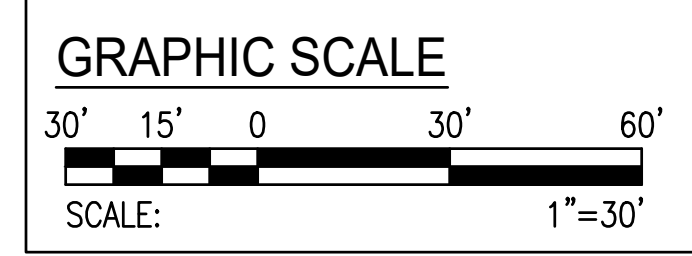
LEGEND

- PROPOSED FENCE
- PROPERTY LINE

NOTES:

1. FENCE TO BE INSTALLED IN ALIGNMENT WITH EXISTING FENCE.
2. REINSTALL SALVAGED SIGNS IN THE SAME LOCATION AS THEIR ORIGINAL PLACEMENT ON THE EXISTING FENCE.
3. WORK WILL NOT START UNTIL MATSON HAS COMPLETED UTILITY RELOCATION ON AND ADJACENT TO FENCE.
4. POST SHALL BE OFFSET AND IN-LINE WITH EXIST. POST SEE DETAIL.

1
C-4

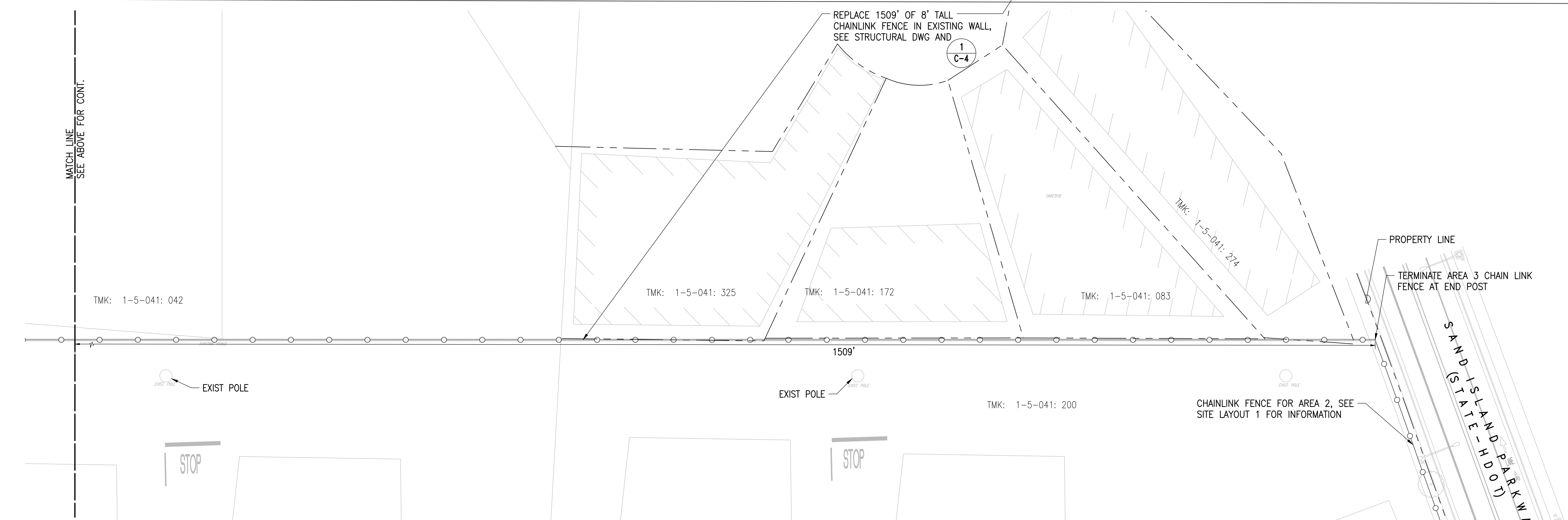
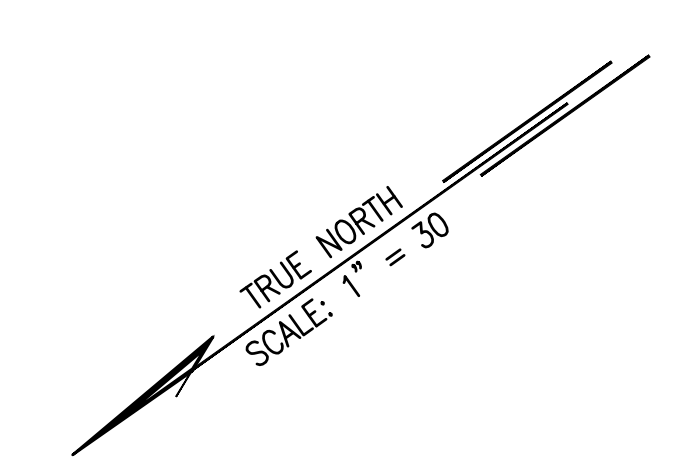
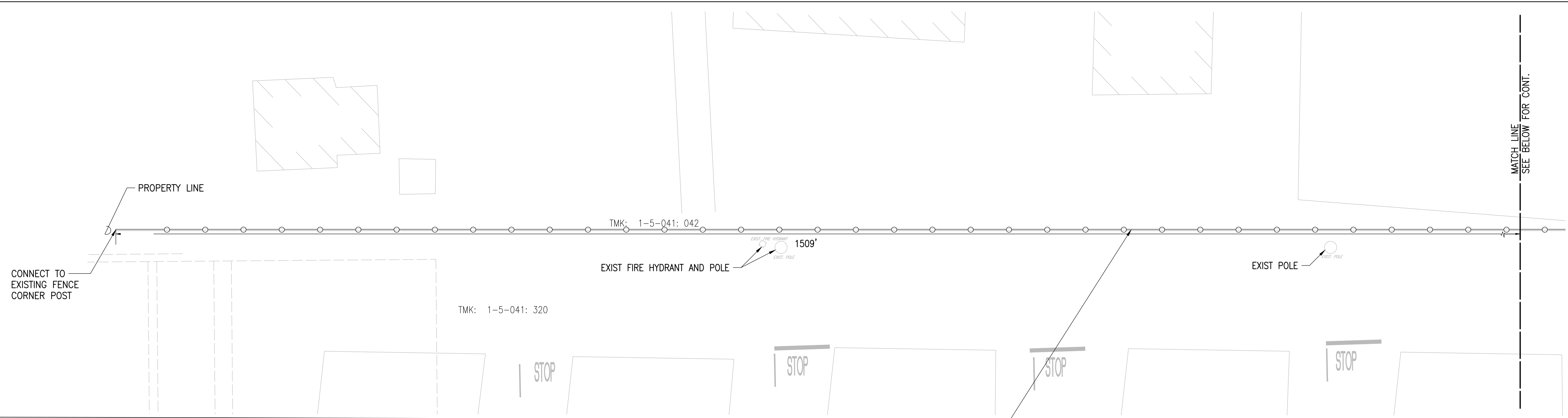
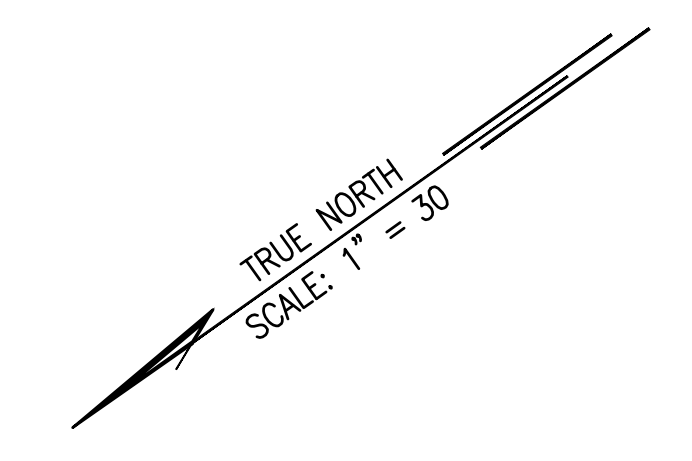


SITE LAYOUT PLAN - 1
SCALE: 1"=30'



LICENSE EXPIRES 4/30/24
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Brennan Nacarido

REV	DATE	DESCRIPTION	BY	APPROVED
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS				
JOB TITLE REPAIR FENCING AT PIER 53, HONOLULU HARBOR, OAHU, HAWAII				
SHEET TITLE SITE LAYOUT PLAN - 1				
DESIGNED BY:	WOC	CHECKED BY:	WOC	JOB NUMBER S10845
DATE:	NOV 9, 2023	SCALE:		
SHEET				C-2
4 of 7 SHEETS				



LEGEND

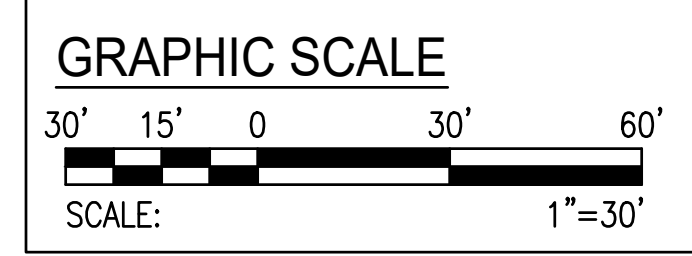
- PROPOSED FENCE
- PROPERTY LINE

AREA 3

NOTES:

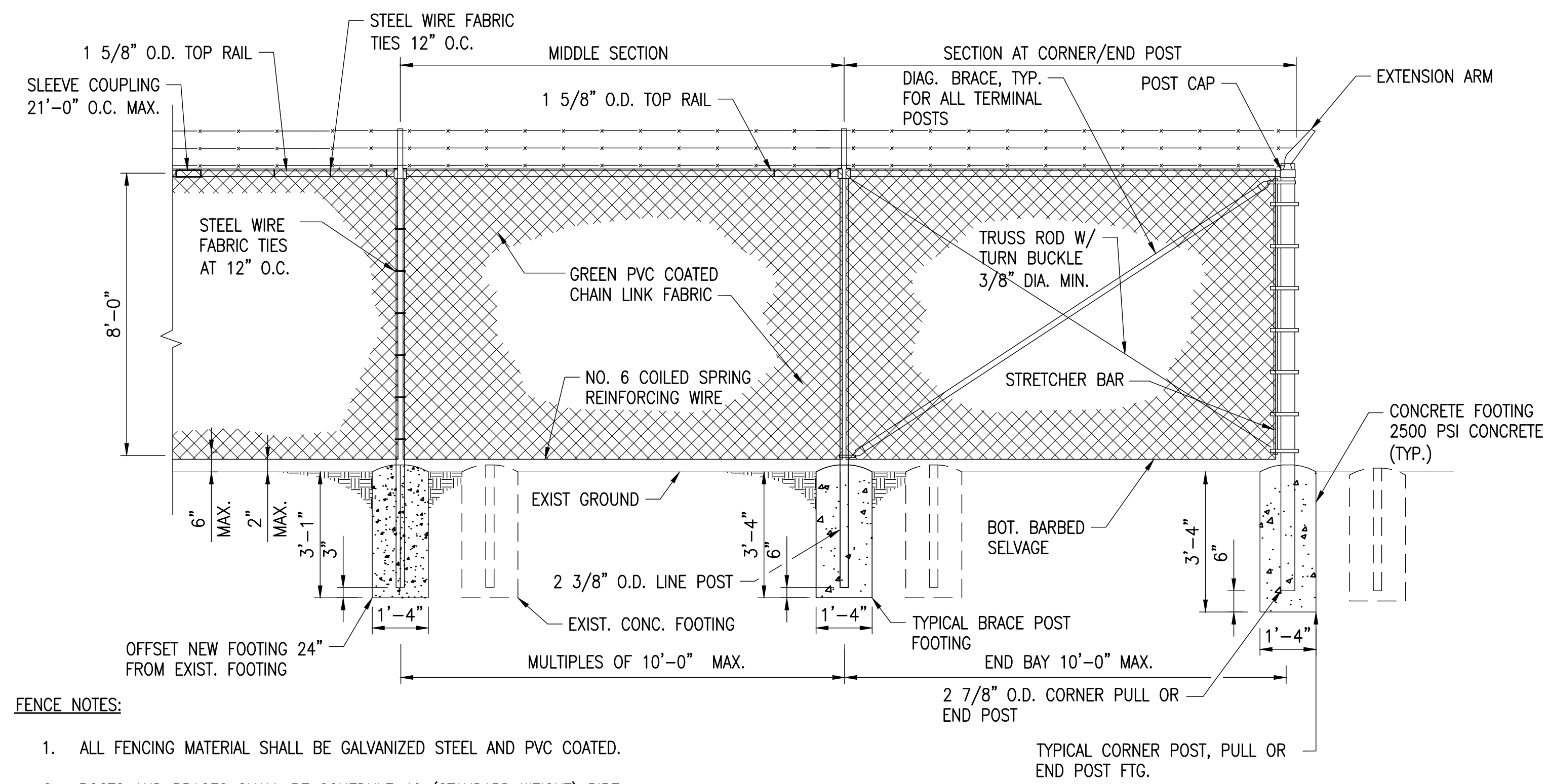
1. CONTRACTOR TO FOLLOW EXISTING FENCE ALIGNMENT.
2. CONTRACTOR NOT ALLOWED IN COAST GUARD PROPERTY.

SITE LAYOUT PLAN - 2
SCALE: 1"=30'



LICENSE EXPIRES 4/30/24
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Brennan Nacario

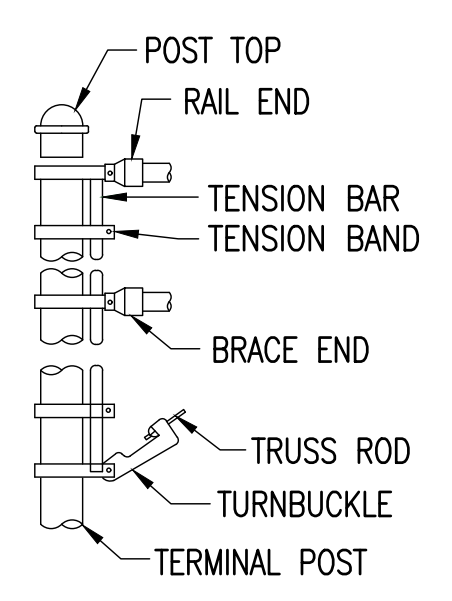
REV	DATE	DESCRIPTION	BY	APPROVED
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS				
REPAIR FENCING AT PIER 53, HONOLULU HARBOR, OAHU, HAWAII				
SITE LAYOUT PLAN - 2				
DESIGNED BY:	WOC	JOB NUMBER:		S10845
DRAWN BY:	WOC	DATE:		
CHECKED BY:	WOC	NOV 9, 2023		
DATE:	NOV 9, 2023	SCALE:		
SCALE: AS NOTED				C-3
				5 of 7 SHTS



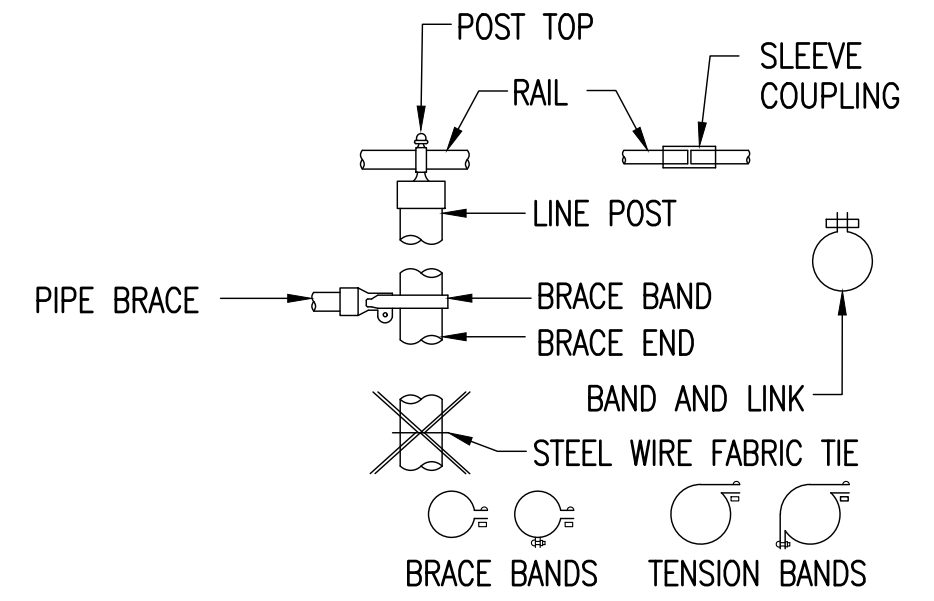
FENCE NOTES:

1. ALL FENCING MATERIAL SHALL BE GALVANIZED STEEL AND PVC COATED.
2. POSTS AND BRACES SHALL BE SCHEDULE 40 (STANDARD WEIGHT) PIPE. UNLESS NOTED, SIZES SPECIFIED ARE OUTSIDE DIAMETER.
3. TOP OF CONCRETE FOOTING SHALL BE CROWNED TO SHED WATER.
4. FOR FENCE INSTALLED IN EXISTING WALL, SEE STRUCTURAL DRAWING FOR POST EMBEDMENT.

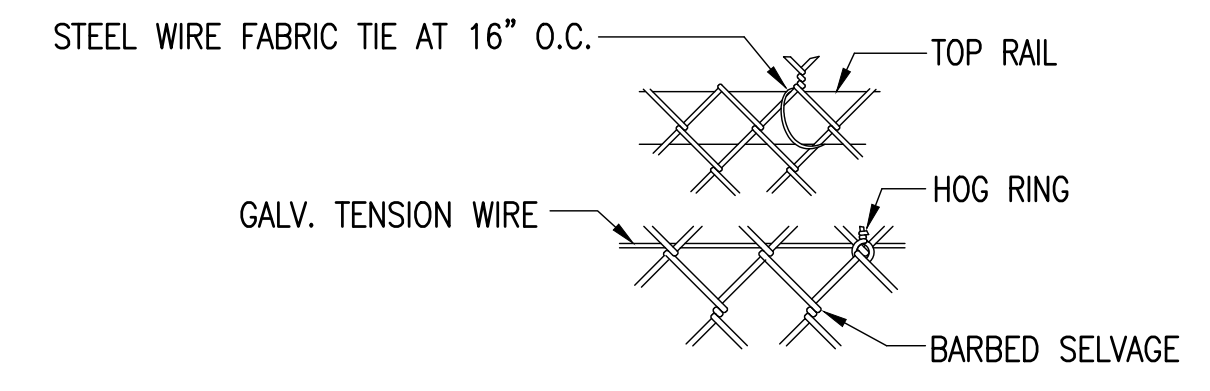
1 CHAIN LINK SECURITY FENCE
C-4 NOT TO SCALE



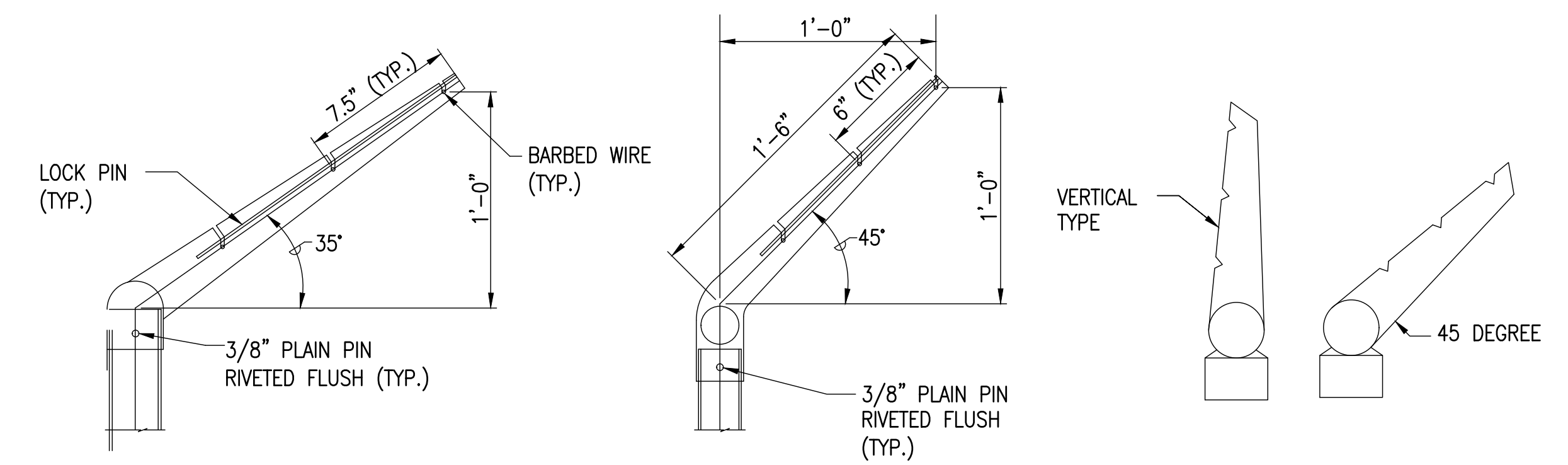
POST DETAILS



FASTENERS



FABRIC DETAILS

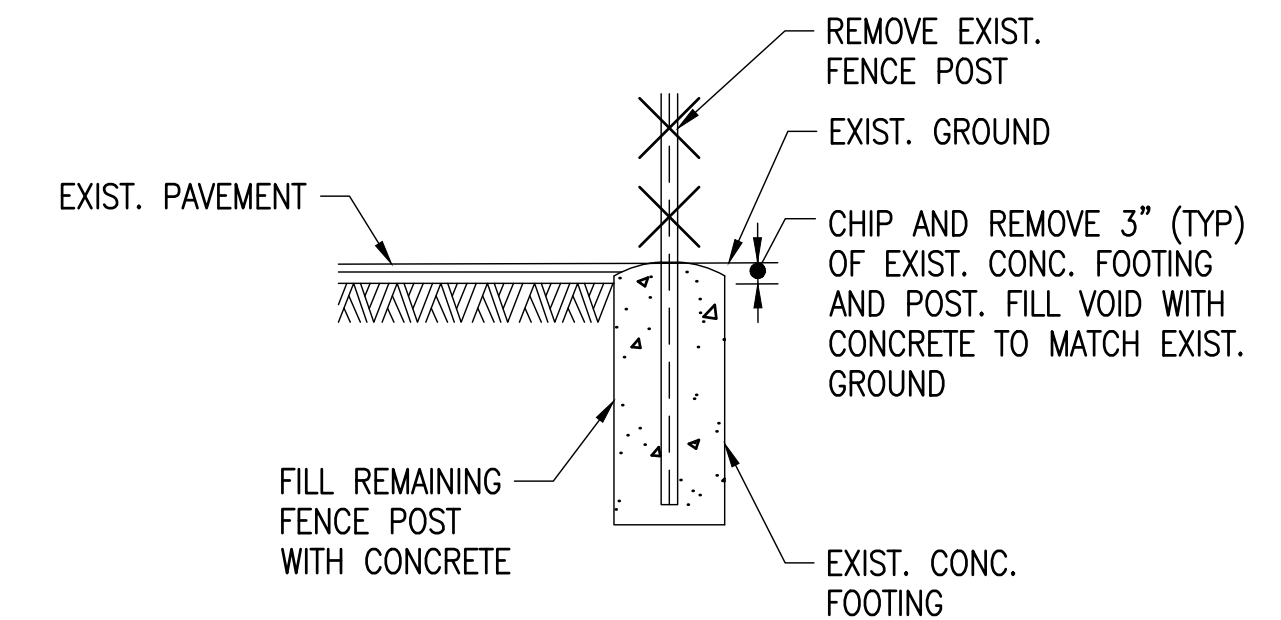
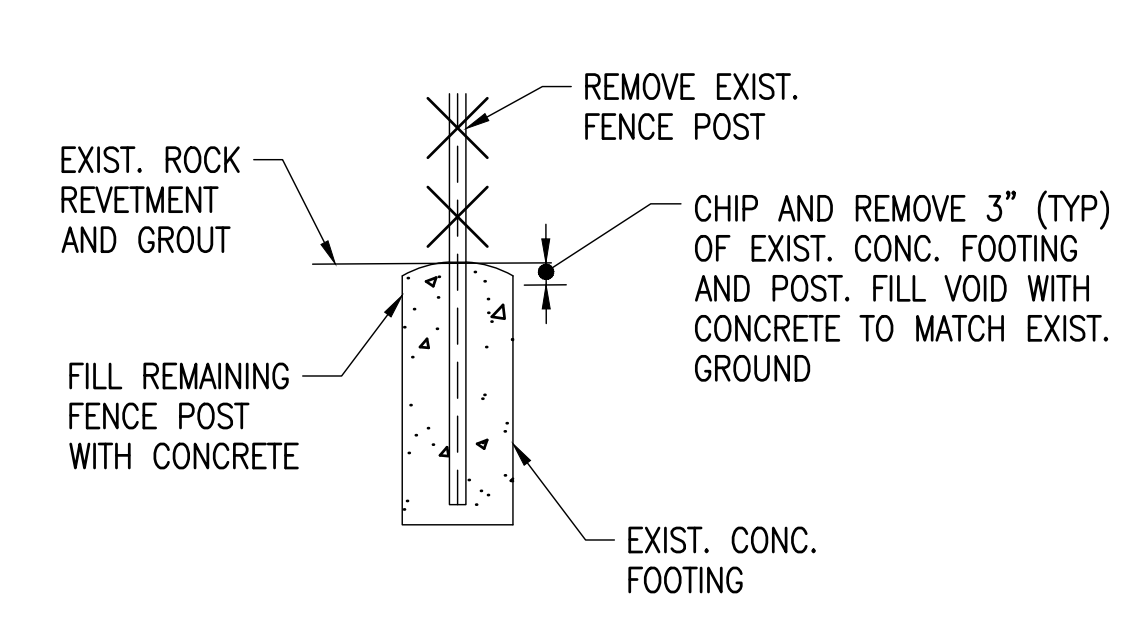


SLOPE, CORNER END OR PULL POST
LINE POST
EXTENSION ARMS

NOTES:

1. SHOULD AN OBSTRUCTION (UTILITY POLE, SIGN ETC) INTERFERE WITH THE NEW BARB WIRE, CHANGE FROM A 45 DEGREE BARB WIRE ARM TO A VERTICAL BARB WIRE ARM IN THE AREA OF OBSTRUCTION.

3 EXTENSION ARM DETAILS
C-4 NOT TO SCALE



4 EXISTING POST REMOVAL
C-4 NOT TO SCALE

FENCE ACCESSORY NOTE:

1. IN LIEU OF THE ACCESSORY DETAILS SHOWN, APPROVED TYPES STANDARD WITH THE MANUFACTURER MAY BE PROVIDED.

2 TYPICAL CHAIN LINK FENCE ACCESSORIES DETAIL
C-4 NOT TO SCALE



LICENSE EXPIRES 4/30/24
THIS WORK WAS PREPARED BY ME OR UNDER MY SUPERVISION
Brennan Nacarido

REV	DATE	DESCRIPTION	BY	APPROVED
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS				
REPAIR FENCING AT PIER 53, HONOLULU HARBOR, OAHU, HAWAII				
MISCELLANEOUS DETAILS				
DESIGNED BY:	WOC	JOB NUMBER:		C-4
DRAWN BY:	WOC	S10845		
CHECKED BY:	WOC			
DATE:	NOV 9, 2023			
SCALE:	AS NOTED			

STRUCTURAL NOTES:

GENERAL:

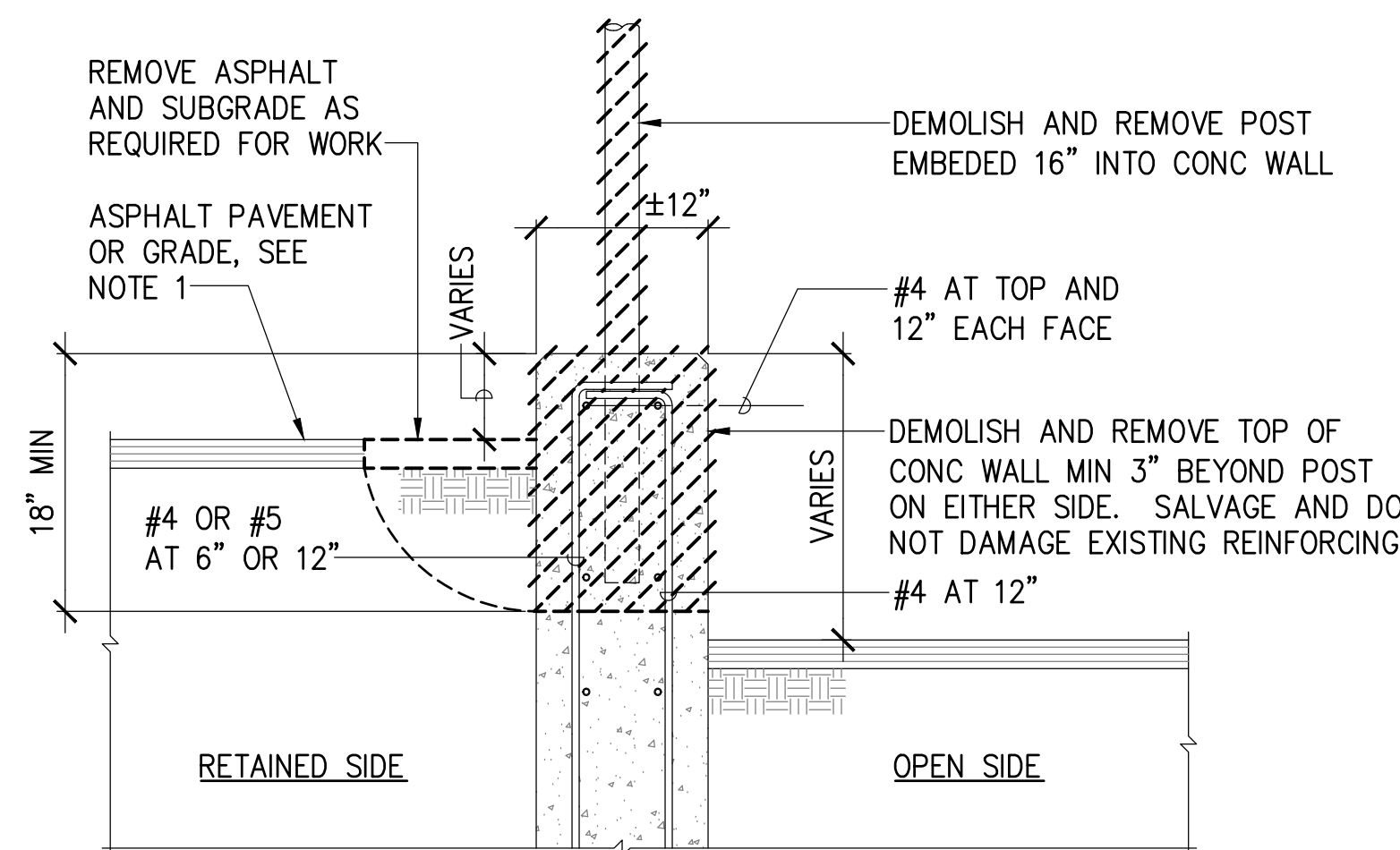
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CONCRETE FOR POST EMBED IN WALL:

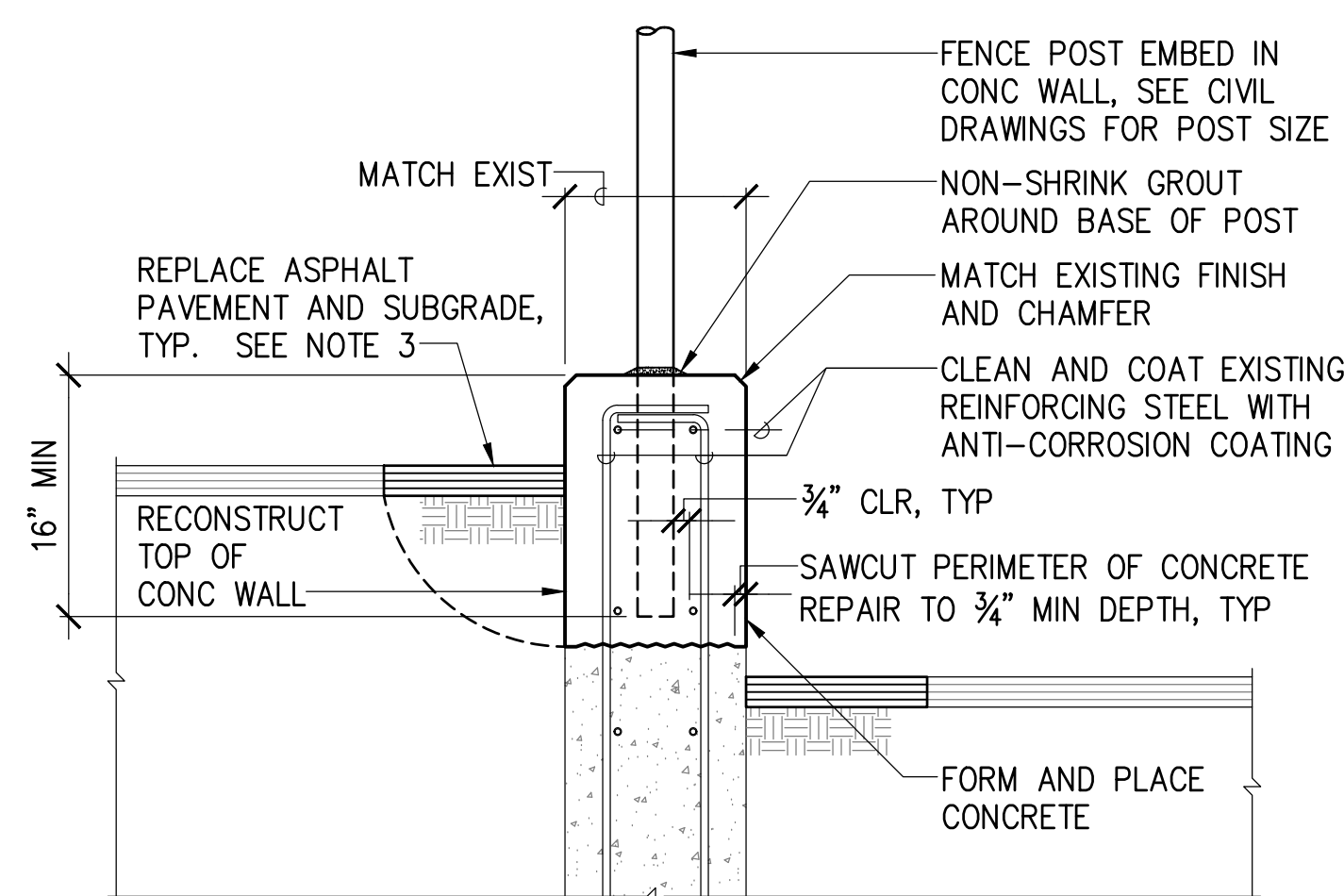
1. CONCRETE CONSTRUCTION SHALL CONFORM TO AMERICAN CONCRETE INSTITUTE ACI SPEC-301-20 AND ACI PRC-546-14.
2. FORMED CONCRETE SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF $f'_c=5,000$ PSI WITH SILICA FUME AND CORTEC MCI 2005 NS MIGRATING CORROSION INHIBITING ADMIXTURE, OR APPROVED EQUAL, UNLESS NOTED OTHERWISE.
3. MAXIMUM AGGREGATE SIZE SHALL BE $\frac{3}{8}$ INCH AND SHALL BE COORDINATED WITH CONCRETE PREPARATION PROCEDURES FOR SPALL REPAIRS.
4. CONCRETE DELIVERY TICKETS SHALL RECORD ALL FREE WATER IN THE MIX: AT BATCHING BY PLANT, FOR CONSISTENCY BY DRIVER, AND ANY ADDITIONAL REQUEST BY CONTRACTOR IF PERMITTED BY THE MIX DESIGN.
5. MAXIMUM WATER TO CEMENTITIOUS MATERIALS RATIO SHALL BE 0.40.
6. PATCHING COMPOUND SHALL BE SIKACRETE 211 SCC PLUS BY SIKA, OR APPROVED EQUAL AND MAY BE USED IN LIEU OF CONCRETE.
7. ANTI-CORROSION COATING WITH A MINIMUM 7 DAY OPEN TIME FOR REINFORCING STEEL SHALL BE ARMATEC 110 EPOCEM BY SIKA CORP OR APPROVED EQUAL.
8. REINFORCING BARS, INSERTS, AND OTHER ITEMS TO BE CAST IN THE CONCRETE SHALL BE SECURED IN POSITION PRIOR TO PLACEMENT OF CONCRETE.
9. NON-SHRINK GROUT SHALL BE A PREMIXED NON-METALLIC FORMULA, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 3,000 PSI IN 1 DAY AND 5,000 PSI IN 28 DAYS.

STRUCTURAL STEEL:

1. FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION MANUAL OF STEEL CONSTRUCTION, FIFTEENTH EDITION.
2. STRUCTURAL STEEL PIPES SHALL CONFORM TO ASTM A53 GRADE B UNLESS OTHERWISE NOTED AND SHALL BE HOT-DIPPED GALVANIZED.



EXISTING CONDITION

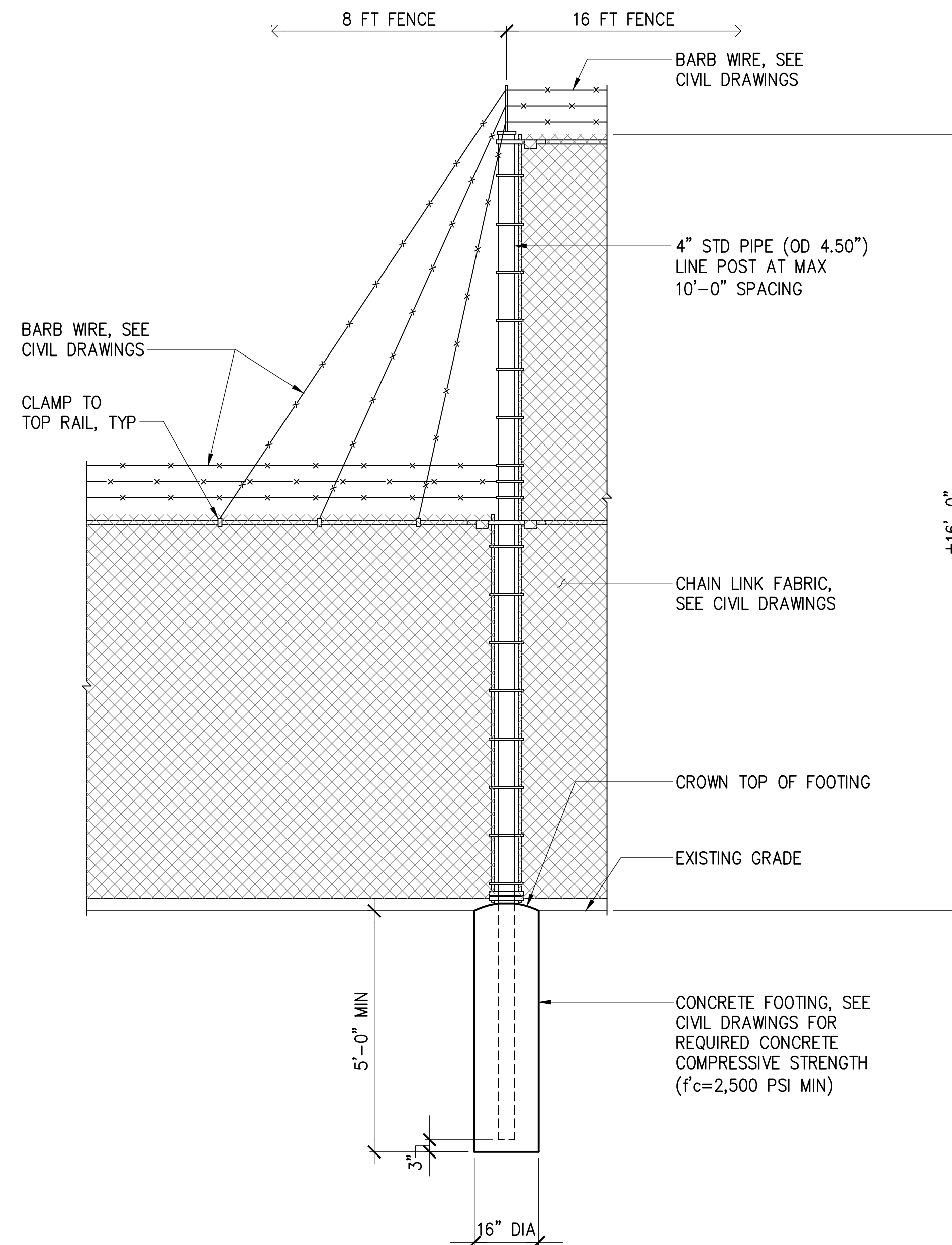


REPAIRED CONDITION

NOTES:

1. RETAINING SIDE AND WALL HEIGHTS VARY ALONG LENGTH OF WALL.
2. CHAIN LINK FENCE NOT SHOWN FOR CLARITY.
3. SHORE AND RECOMPACT SOIL AND REPLACE ASPHALT PAVEMENT, GRAVEL OR GRADE TO MATCH EXISTING CONDITIONS AS NECESSARY TO PERFORM THE WORK.

1 POST EMBEDMENT DETAIL
SCALE: 1' = 1"-0"



2 16 FT FENCE POST
SCALE: 1/2" = 1"-0"

		REV DATE DESCRIPTION BY APPROVED	
STATE OF HAWAII DEPARTMENT OF TRANSPORTATION HARBORS			
JOB TITLE REPAIR FENCING AT PIER 53 HONOLULU HARBOR, OAHU, HAWAII			
SHEET TITLE STRUCTURAL NOTES AND DETAILS			
DESIGNED BY: GO		JOB NUMBER S10845	SHEET S-1
DRAWN BY: DL			
CHECKED BY: GM			
DATE: NOV 9, 2023			
SCALE: AS NOTED			