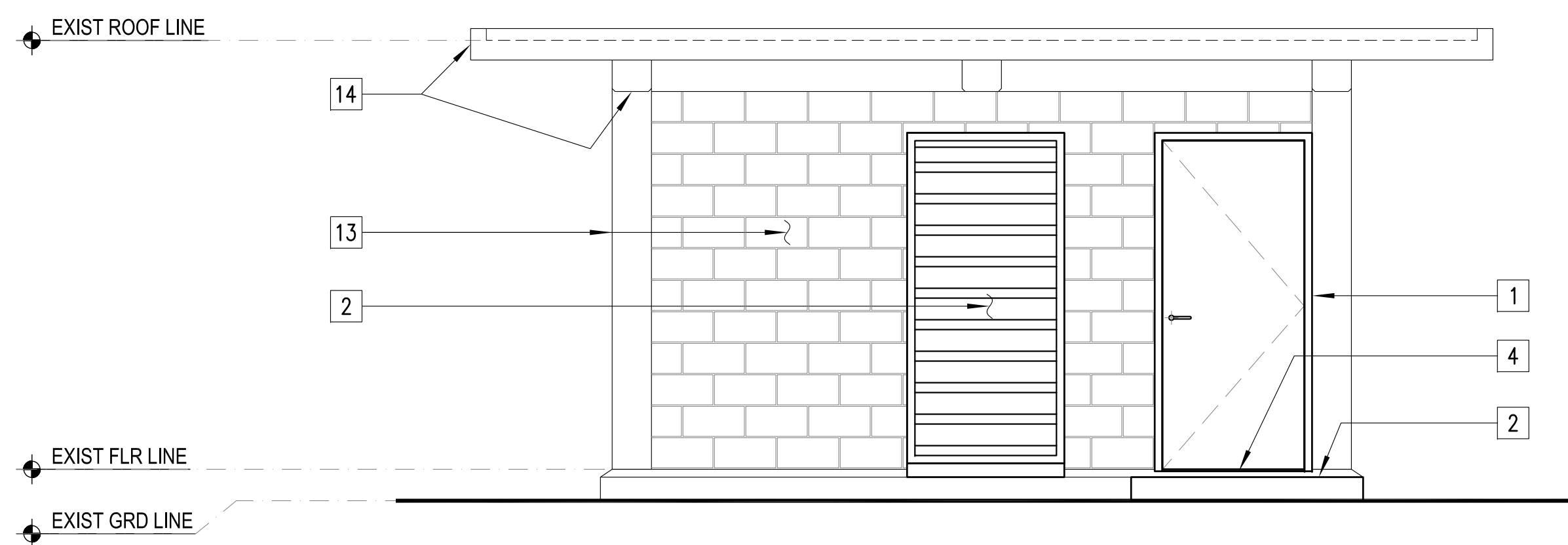
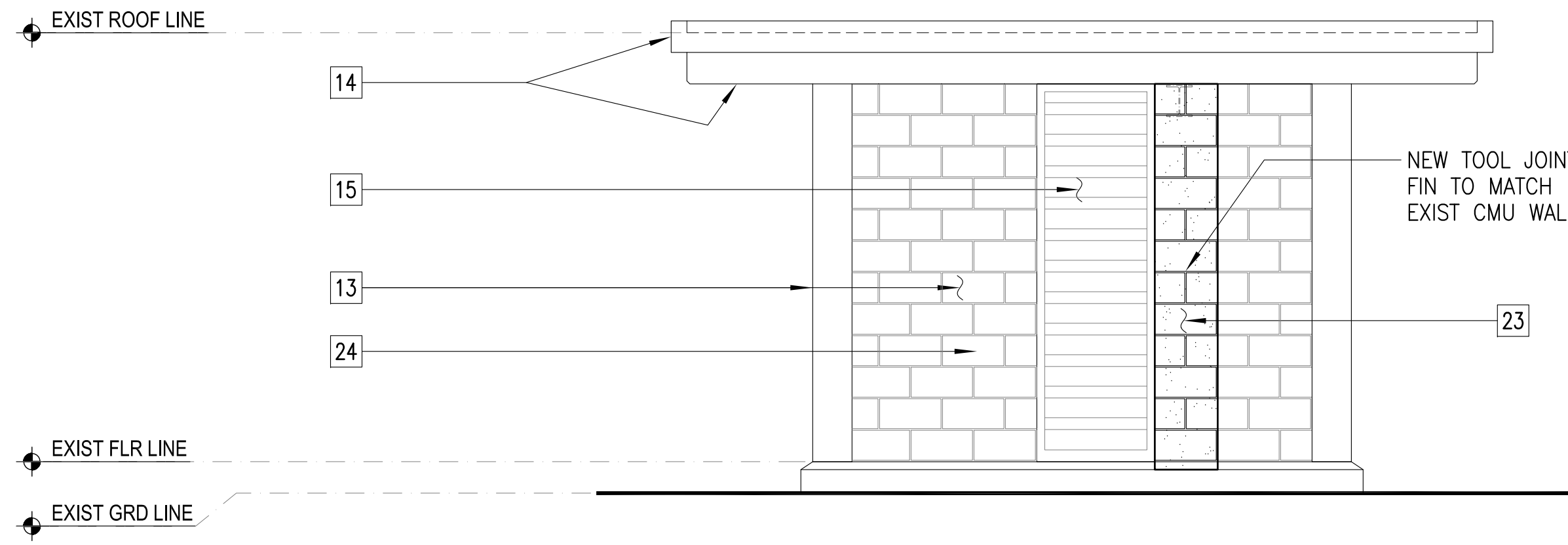


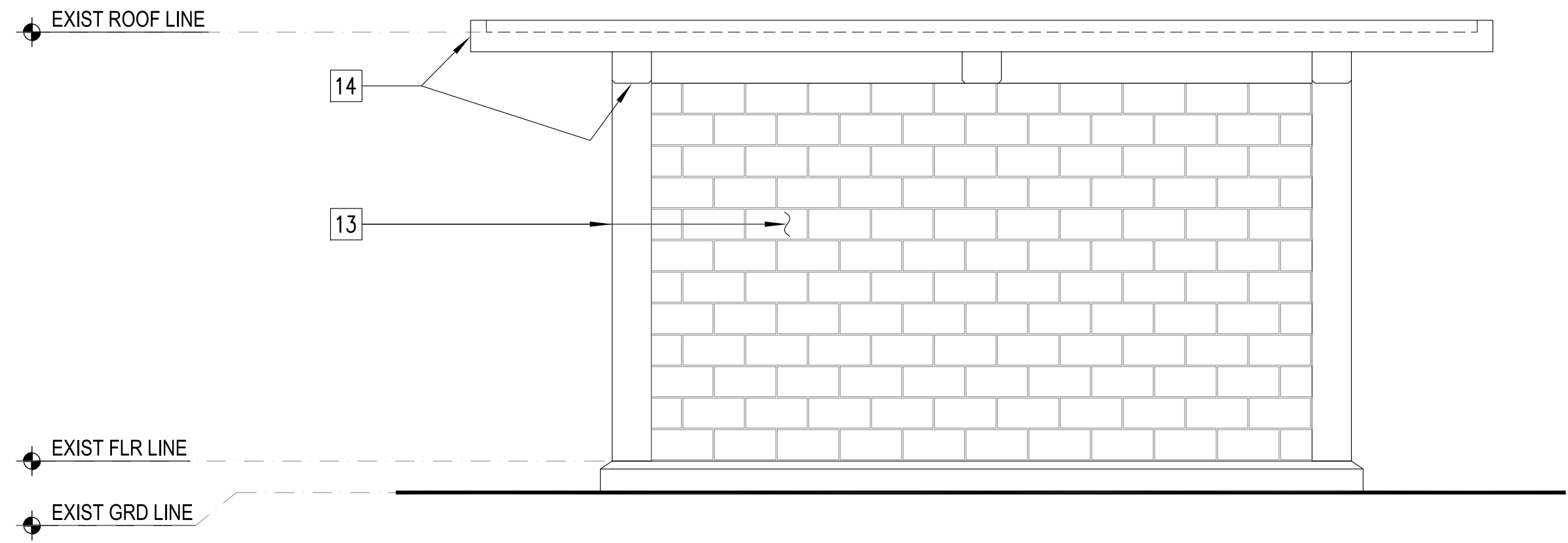
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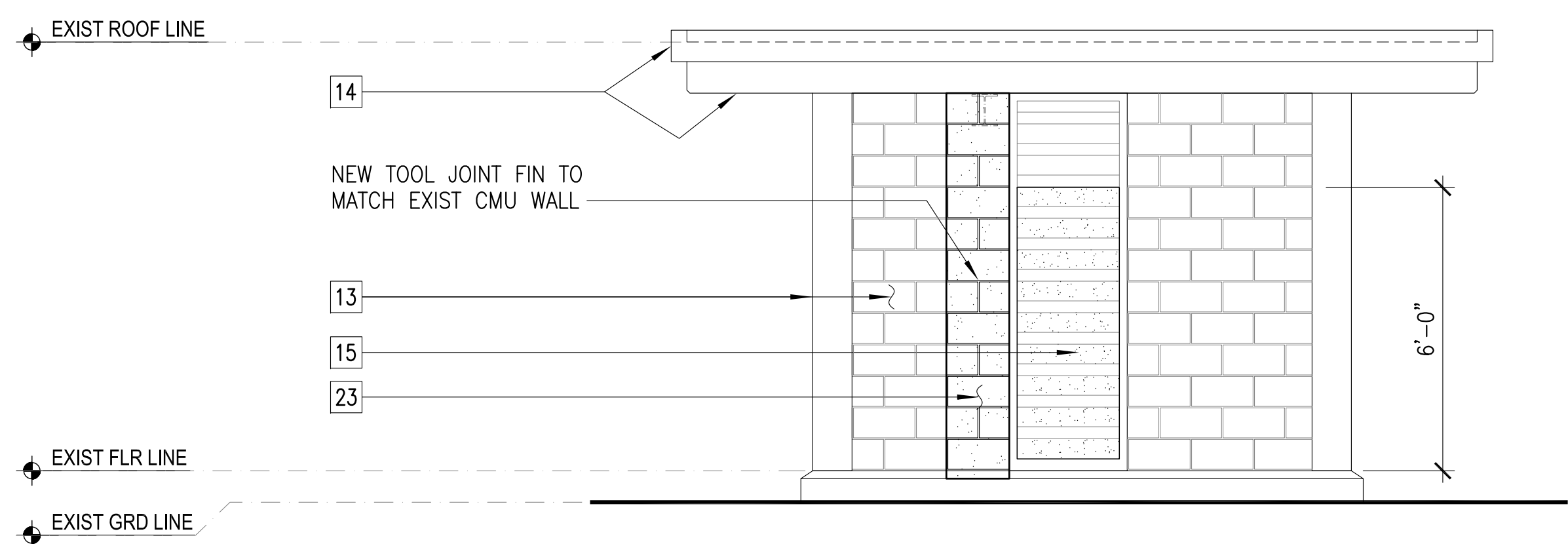
1A NEW SOUTH ELEVATION
A-2.1 | A-3.1



1B NEW WEST ELEVATION
A-2.1 | A-3.1

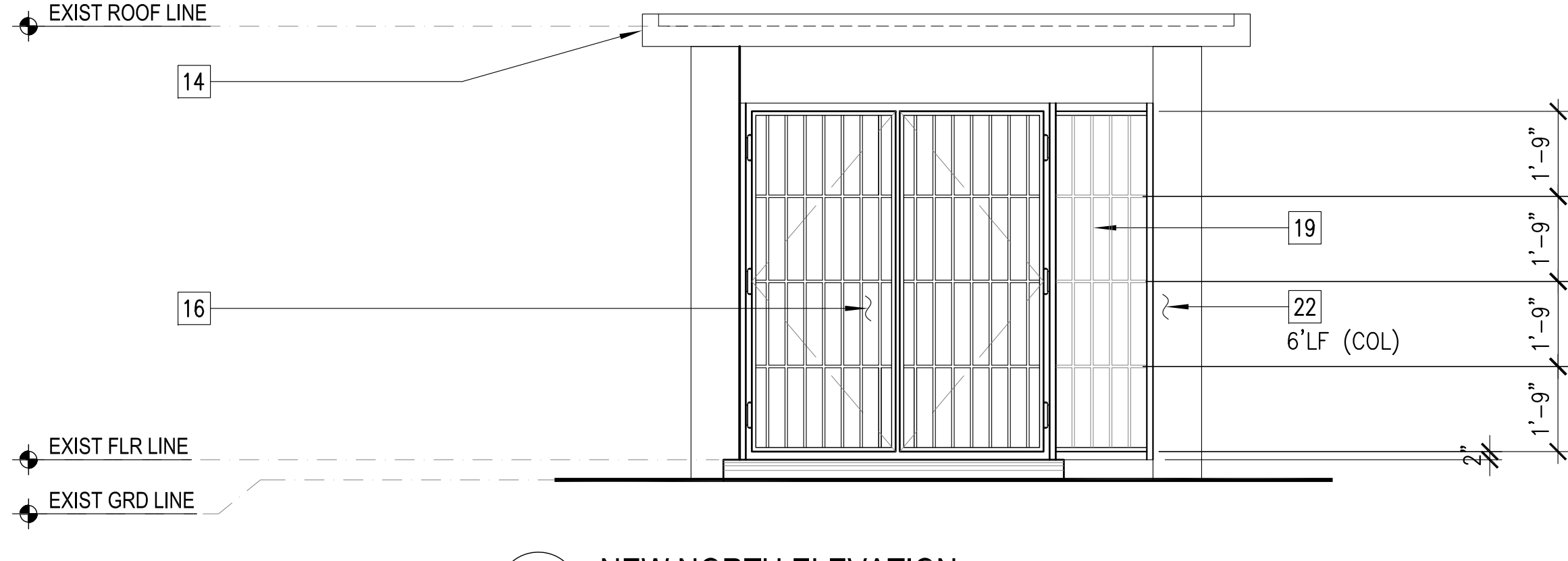


1C NEW NORTH ELEVATION
A-2.1 | A-3.1

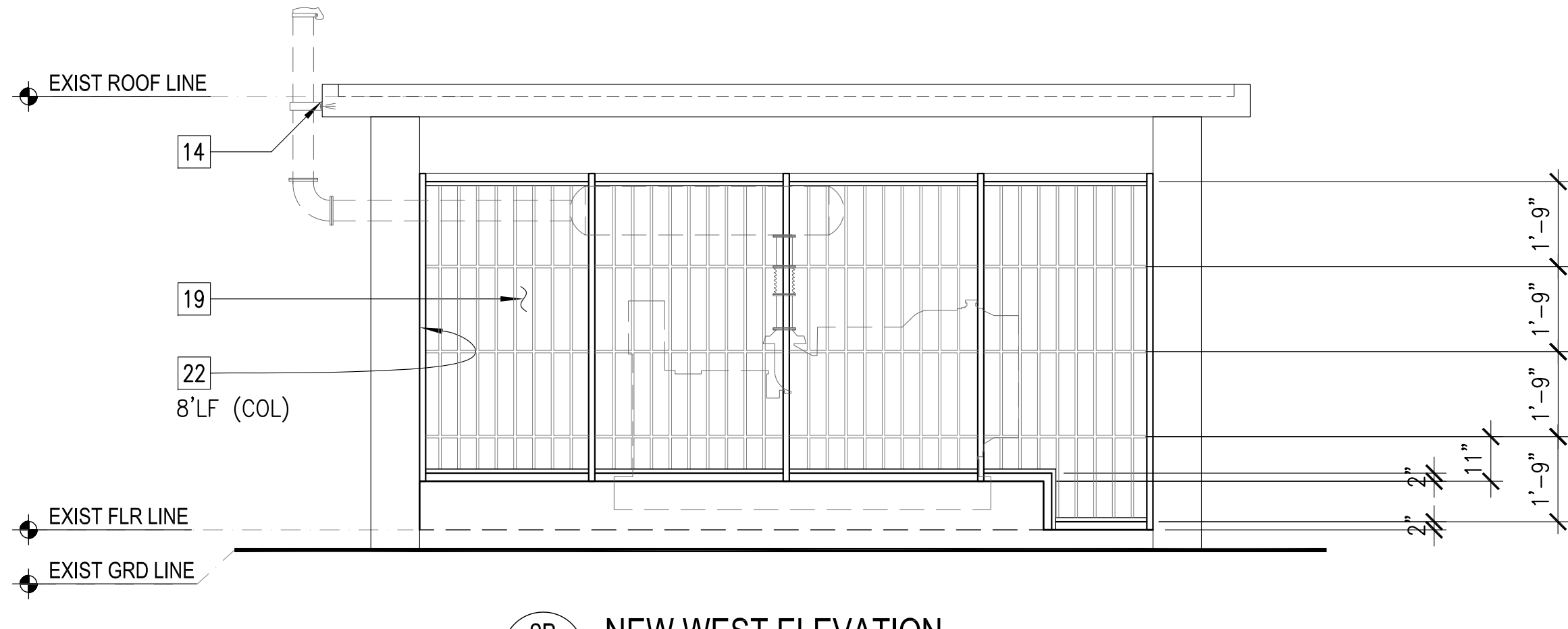


1D NEW EAST ELEVATION
A-2.1 | A-3.1

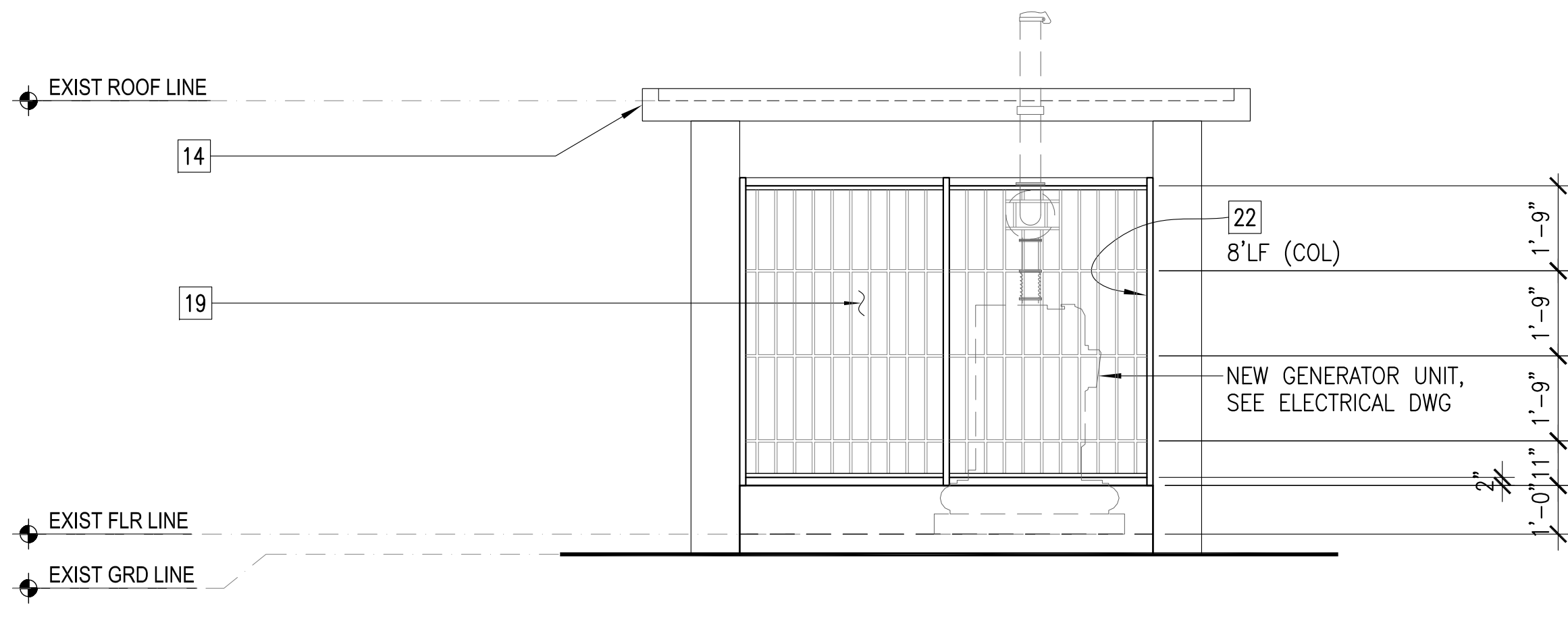
1 NEW PUMP HOUSE ELEVATIONS
A-2.1 | A-3.1 SCALE: 3/8" = 1'-0"



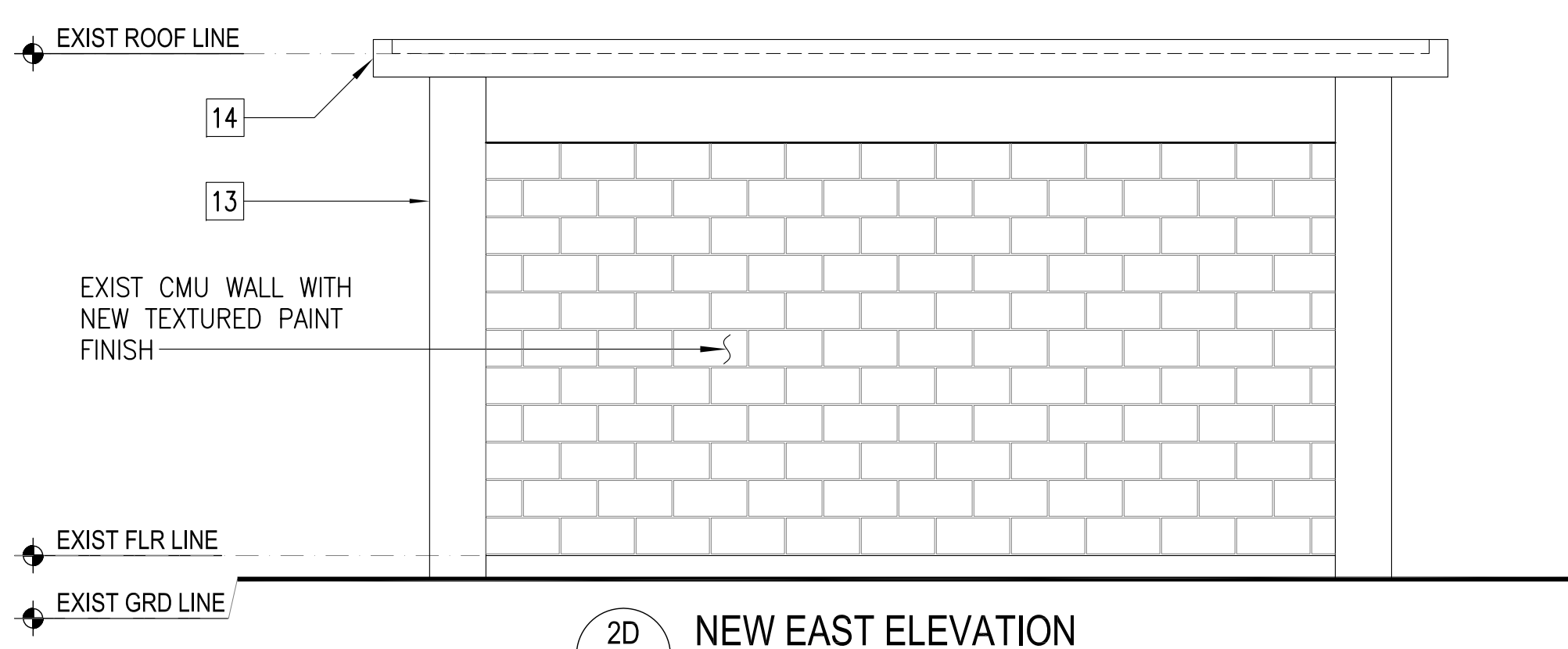
2A NEW NORTH ELEVATION
A-2.1 | A-3.1



2B NEW WEST ELEVATION
A-2.1 | A-3.1



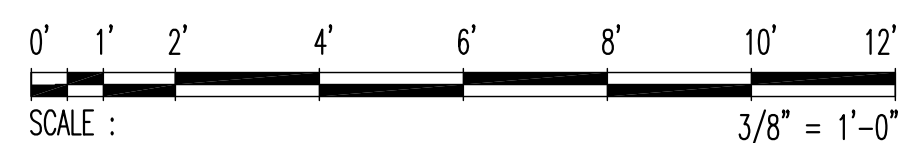
2C NEW SOUTH ELEVATION
A-2.1 | A-3.1



2D NEW EAST ELEVATION
A-2.1 | A-3.1

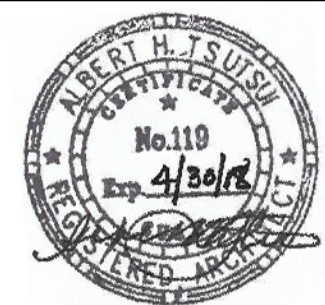
2 NEW GENERATOR HOUSE ELEVATIONS
A-2.1 | A-3.1 SCALE: 3/8" = 1'-0"

GRAPHIC SCALE:



NEW WORKS KEYED NOTES:

- 1 PROVIDE NEW HOLLOW METAL FLUSH DOOR AND FRAME (HOT DIPPED GALVANIZED) AND HARDWARES.
- 2 PROVIDE NEW CONCRETE WINDOW LOUVER TO MATCH EXISTING. PROVIDE INSECT SCREENS. SEE NOTE 15.
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I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION

DATE: 05-17-2017

DES. BY: kje

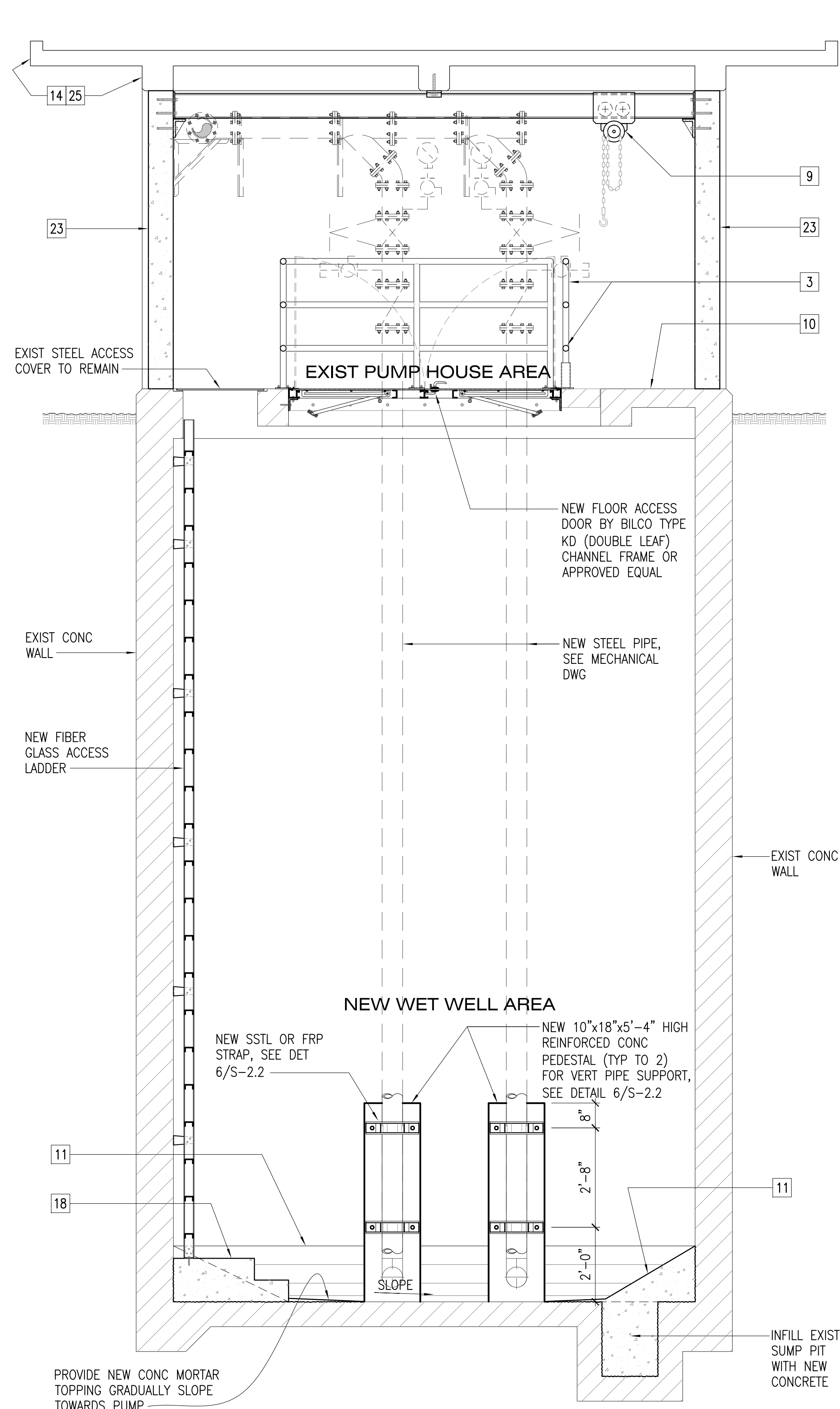
DRN. BY: jl

CHK. BY: aht

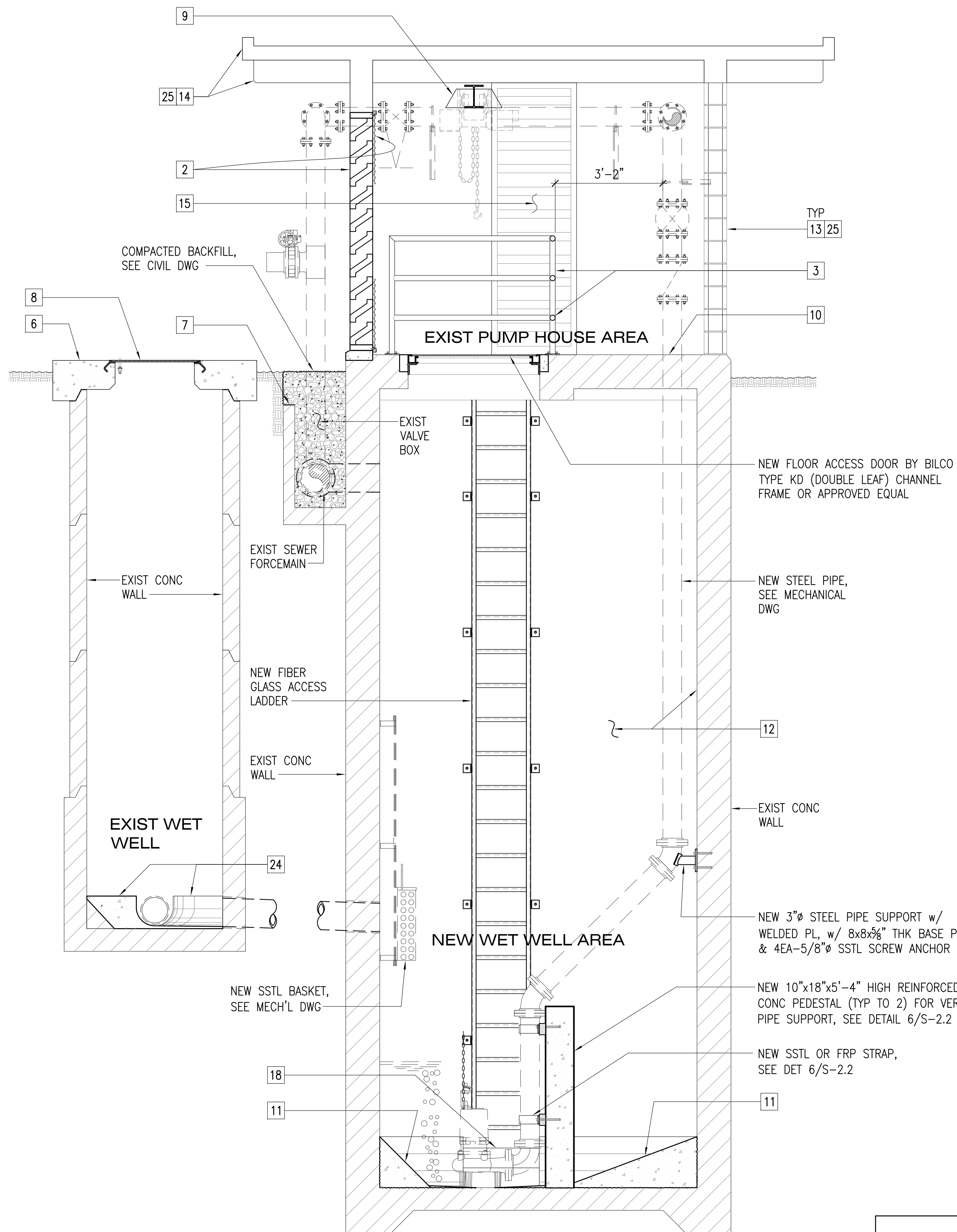
REV	DATE	BY

DESCRIPTION	APPROVED BY

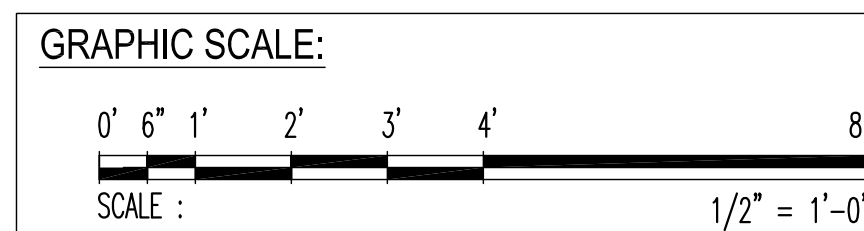
GUAM WATERWORKS AUTHORITY GOVERNMENT OF GUAM
ENGINEERING DIVISION
PROJECT: BAYSIDE PUMP STATION REHABILITATION TAN MARIAN COATLA LP, TAMUNING, GUAM
CONTENTS: NEW PUMP HOUSE ELEVATIONS, NEW GENERATOR HOUSE ELEVATIONS and NEW WORKS KEYED NOTES
DRAWING NO. A-3.1
SHT. 11 OF 27



1 NEW PUMP HOUSE LONGITUDINAL SECTION
A-2.1 | A-4.1 SCALE: 1/2" = 1'-0"

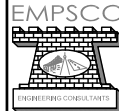


2
A-2.1 | A-4.1
NEW PUMP HOUSE CROSS SECTION
SCALE: 1/2" = 1'-0"



- NEW WORKS KEYED NOTES:

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 Engineering Management & Planning Services Corporation 118 ARAPAHO DRIVE, SUITE 200, BETHESDA, MARYLAND 20814 PHONE: (301) 656-0000 FAX: (301) 656-0001 TEL: (301) 656-0001 / 656-0004 TOLL FREE: (800) 656-0001							
		REV	DATE	BY	DESCRIPTION		APPROVED BY
I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION DATE: <u>05-17-2017</u> .		GWA NO.		 GUAM WATERWORKS AUTHORITY GOVERNMENT OF GUAM			
		GRANT ID NO.					
		CONTRACT NO.					
		PROJECT NO.					
DES. BY: kje		CHIEF ENGR: .		CONTENTS: NEW PUMP HOUSE LONGITUDINAL SECTION, NEW PUMP HOUSE CROSS SECTION & NEW WORKS KEYED NOTES		DRAWING NO.	
ENGR. SUP: jl		A-4.1					
CHK. BY: ah		PROJ. ENGR: .				SHT. <u>12</u> OF <u>27</u>	

NEW WORKS KEYED NOTES:

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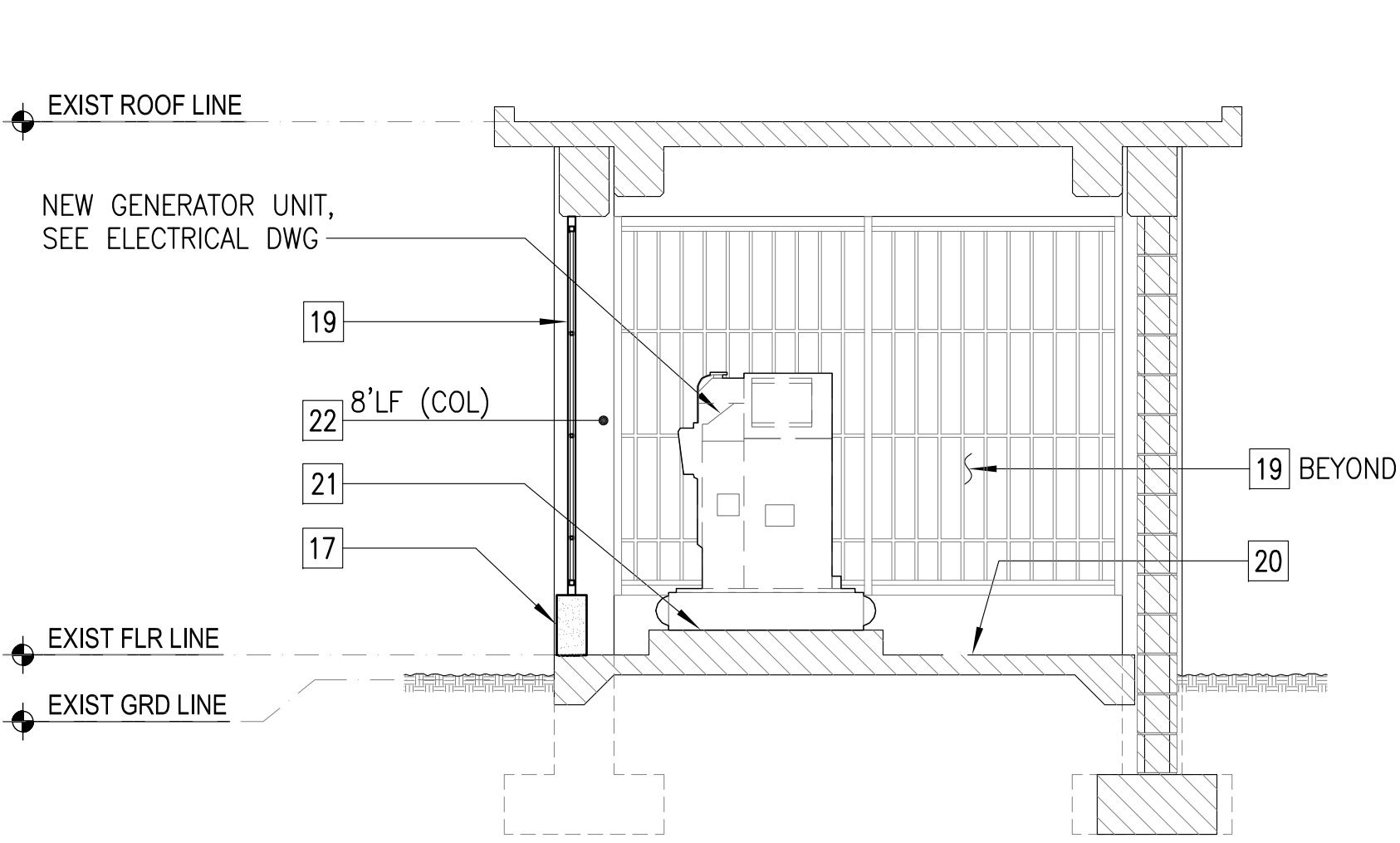
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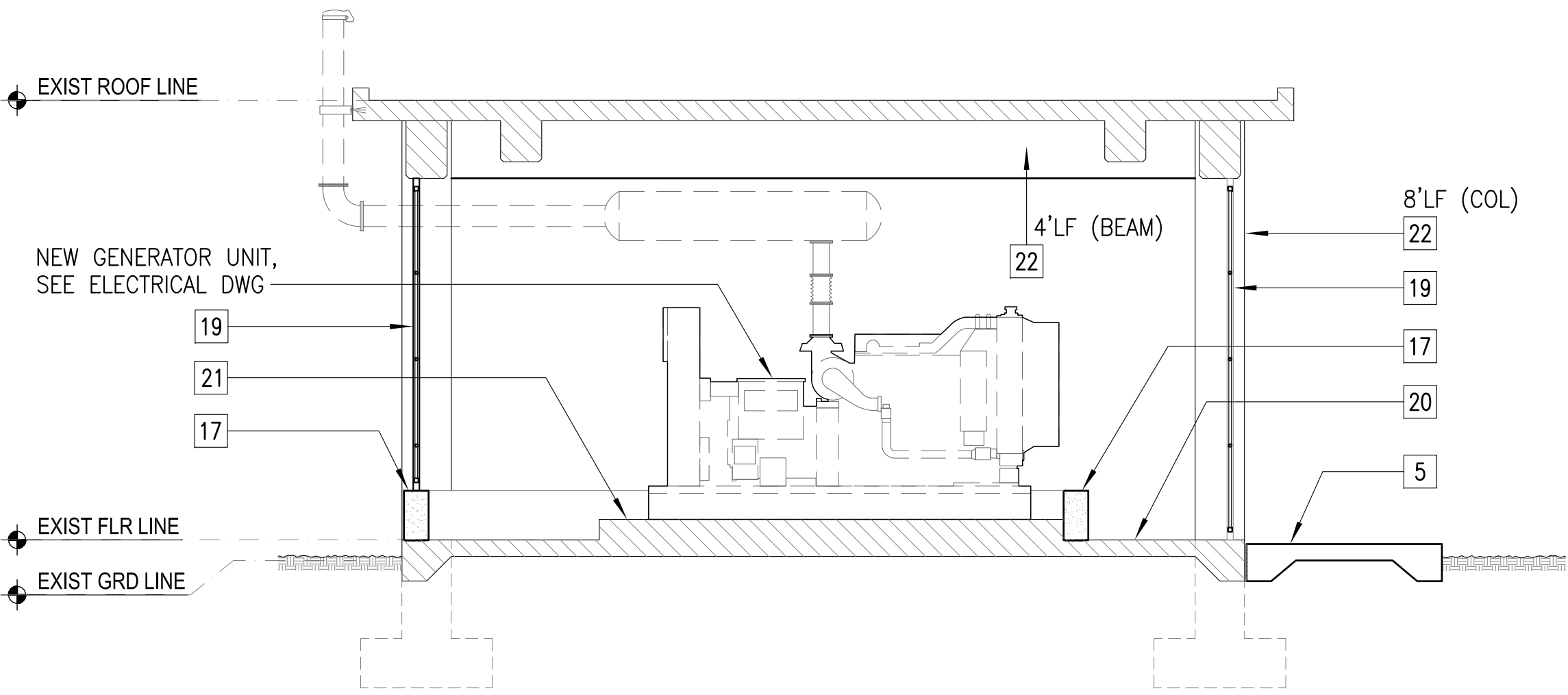
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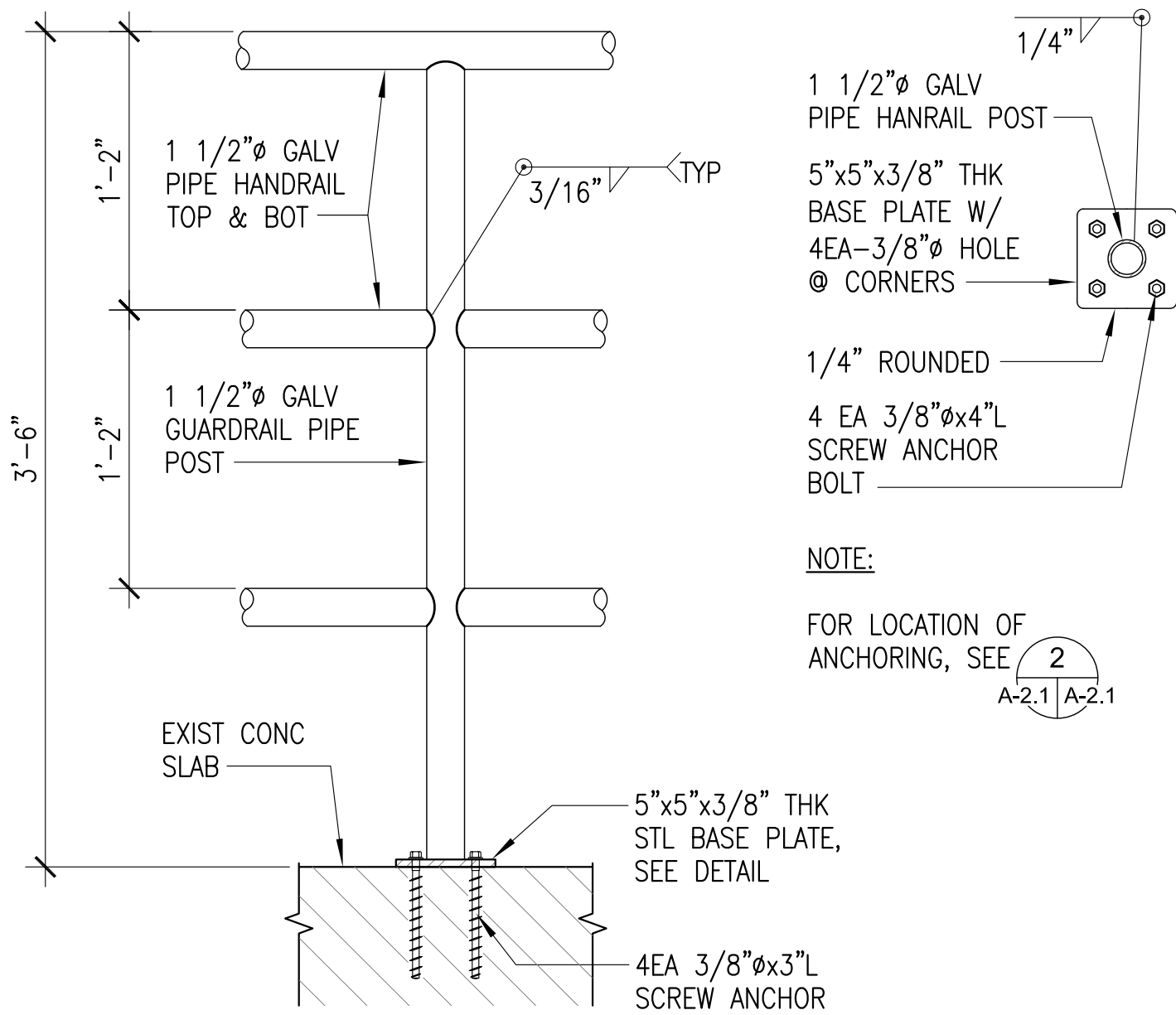


1A CROSS SECTION
A-2.1 A-4.2

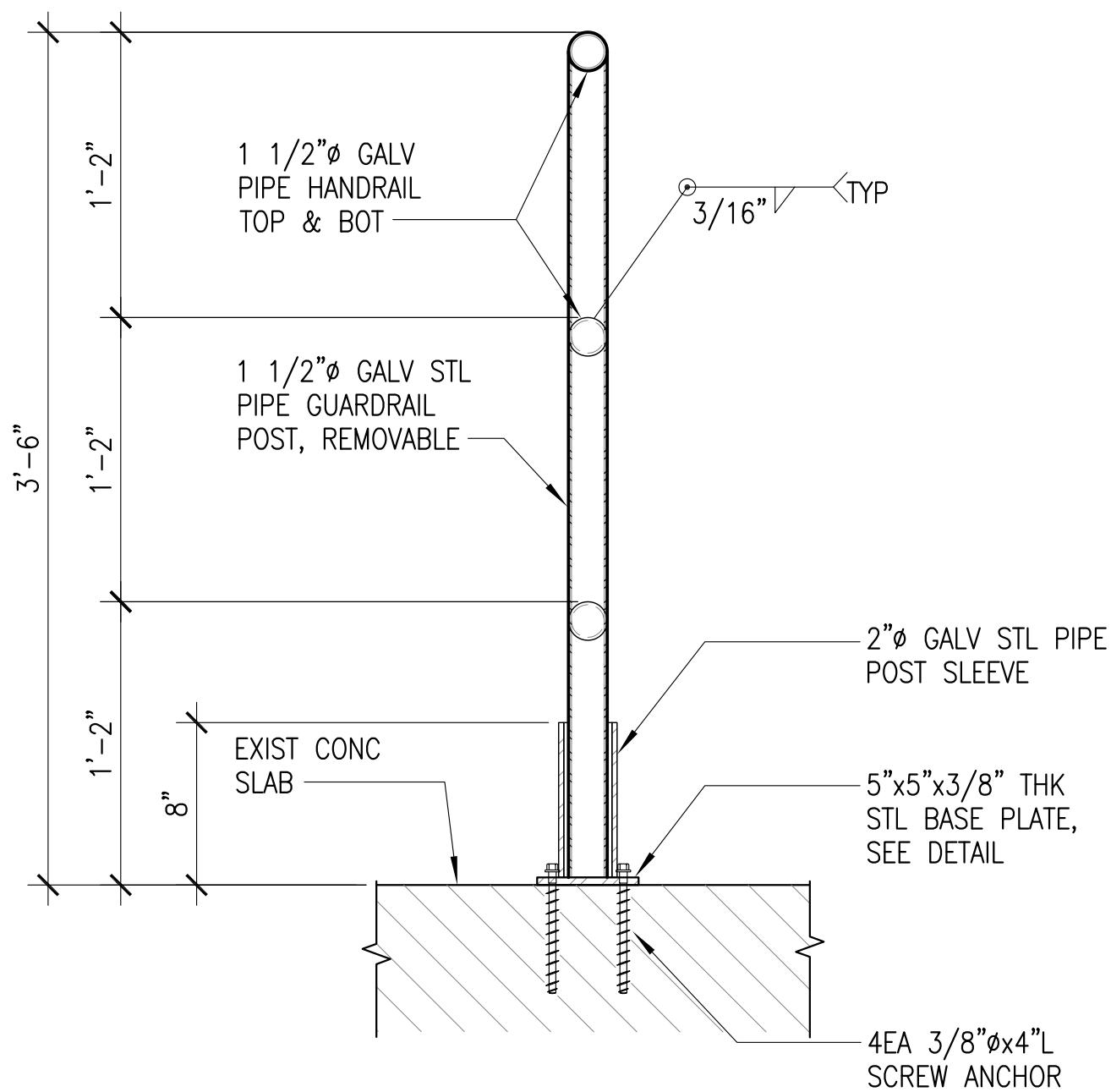


1B LONGITUDINAL SECTION
A-2.1 A-4.2

1 NEW GENERATOR HOUSE CROSS & LONGITUDINAL SECTIONS
SCALE: 3/8" = 1'-0"

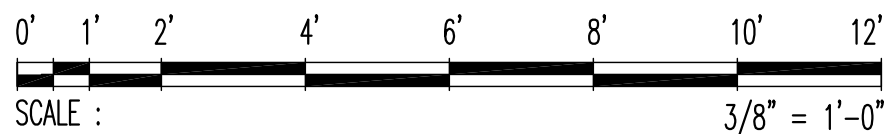


3 TYPICAL PIPE RAILING DETAIL
SCALE: 1 1/2" = 1'-0"



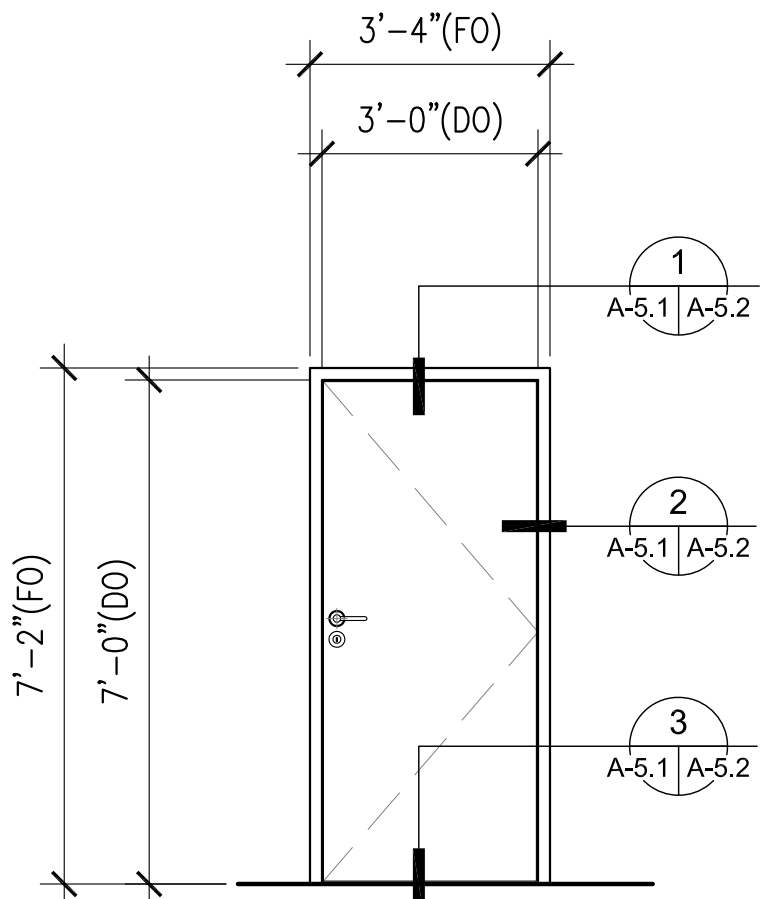
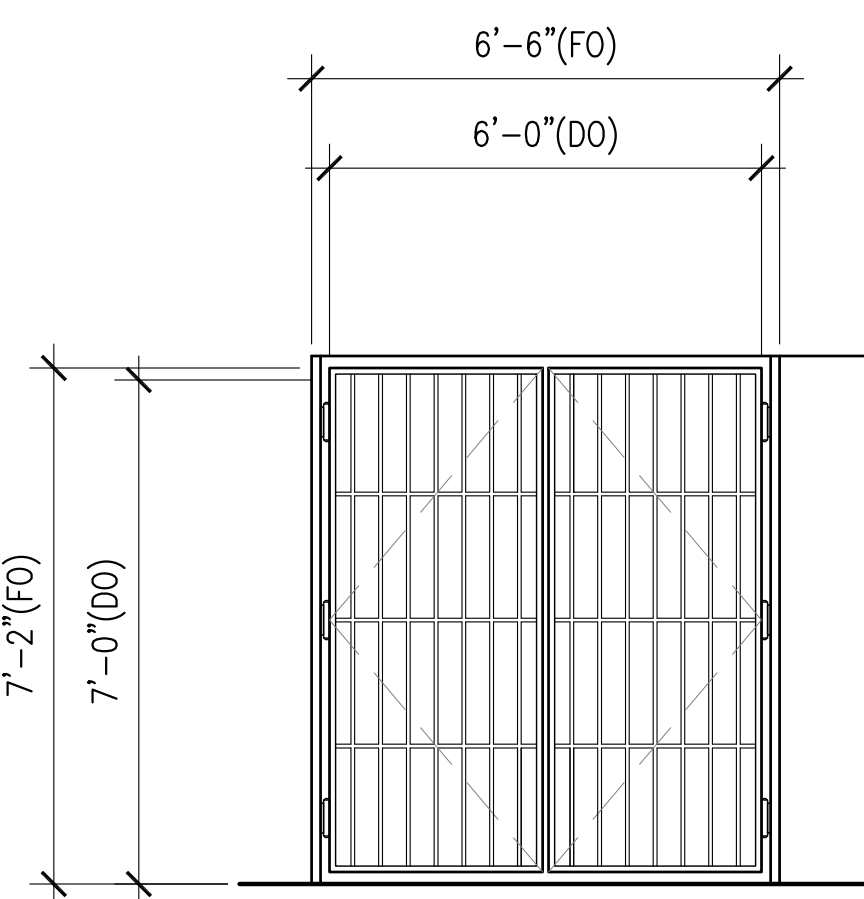
4 REMOVABLE GALVAZINED PIPE RAILING DETAIL
SCALE: 1 1/2" = 1'-0"

GRAPHIC SCALE:



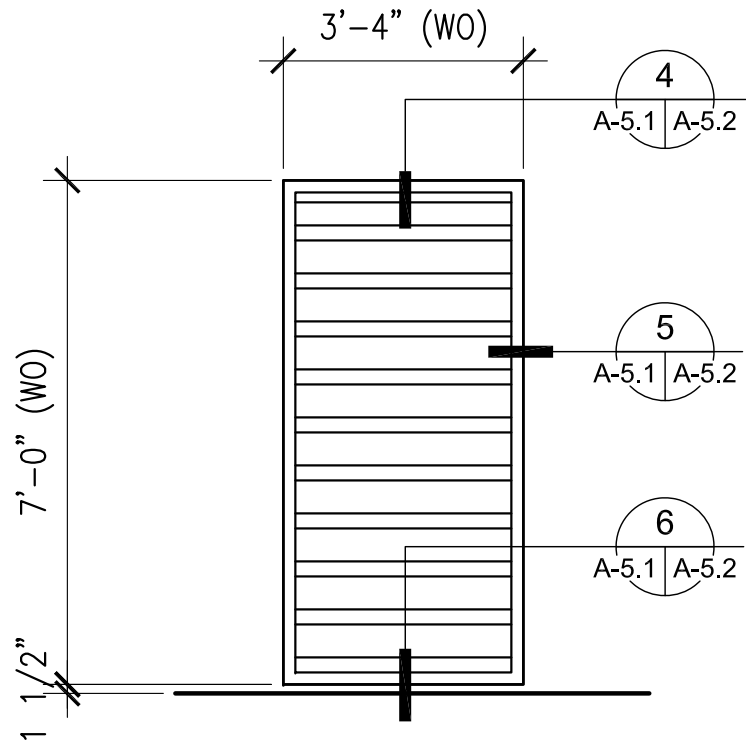
 Engineering Management & Planning Services Corporation 1998 ARADT DRIVE, SUITE 200, BAYVIEW ROSTER #1, GUAMPS&CO GUAM PERMIT TEL: (671) 438-2516 / 438-4716 FAX: (671) 438-2134					
	REV	DATE	BY	DESCRIPTION	APPROVED BY
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION DATE: 05-17-2017	CWA NO.		 GUAM WATERWORKS AUTHORITY GOVERNMENT OF GUAM		
	GRANT ID NO.				
	CONTRACT NO.		ENGINEERING DIVISION		
	PROJECT NO.				
	PROJECT:		BAYSIDE PUMP STATION REHABILITATION TAN MARIAN COATLA LP, TAMUNING, GUAM		
CONTENTS:		DRAWING NO. A-4.2			
DES. BY: kje	CHIEF ENGR: .	NEW GENERATOR HOUSE CROSS SECTION, NEW GENERATOR LONGITUDINAL SECTION, GALVANIZED PIPE RAILING DETAILS AND NEW WORKS KEYED NOTES			SHT. 13 OF 27
DRN. BY: jl	ENGR. SUP: .				
CHK. BY: aht	PROJ. ENGR: .				

DOORS TYPES/SCHEDULE

MARK & QUANTITY	D1 1 EA	MARK & QUANTITY	D2 2 EA
			
	TYPE A		TYPE B
TYPE	HOT-DIPPED GALVANIZED STEEL SWING FLUSH DOOR	TYPE	HOT-DIPPED GALVANIZED STEEL GRILLE DOUBLE DOOR
GLASS	N.A.	GLASS	N.A.
HARDWARE	HINGES (SSTL) 1 EA - CONTINUOUS HINGES CLOSER - SSTL MORTISE LOCKSET WITH LEVER HANDLES LEVER EXTENSION FLUSH BOLTS - ROCKWOOD 550 OR APPROVED EQUAL DOORSTOP - FLOOR MOUNT TRIMCO 1210. WEATHERSTRIP - SELF ADHESIVE GASKET PEMKO SILICONE SEAL 588D25 RAIN DRIPS - REESE R199A OR APPROVED EQUAL DOOR SHOE - PEMKO 216 DPK. THRESHOLD - REESE T575A x TL4C INTERLOCK THRESHOLD CLOSER - CONCEALED FULL FUNCTION WITH HOLD OPEN PARALLEL ARM.	HARDWARE	HINGES (SSTL) 3 EA - 4 1/4"x4" STANDARD MORTISE WITH BALL BEARINGS. CLOSER - LOCKING DEVICE WITH PADLOCK HOLE DOORSTOP - PLUNGER BAR MOUNTED ON FRAME
DOOR KNOB MOUNT HT	40 5/16"	DOOR KNOB MOUNT HT	N.A.
DOOR RATING	N.A.	DOOR RATING	N.A.
LOCATION	ENTRANCE (FRONT)	LOCATION	GENERATOR HOUSE (FRONT)

1 DOOR ELEVATIONS AND SCHEDULE
SCALE: 3/8" = 1'-0"

LOUVERED WINDOW SCHEDULE									
WINDOW NO.	TYPE	OPERATION	OPENING SIZE WxH	DETAIL REFERENCE				QTY	REMARKS
				JAMB	HEAD	MULLION	SILL		
W1	1	FIXED	3'-4"x7'-0"	5 A-5.1 A-5.2	4 A-5.1 A-5.2		6 A-5.1 A-5.2	1	CONCRETE LOUVER



2 LOUVERED WINDOW ELEVATION AND SCHEDULE
SCALE: 3/8" = 1'-0"

ROOM FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR FINISH	BASE		WALLS				CEILING FINISH	CEILING HEIGHT	REMARKS
			MATERIAL	HEIGHT	W1	W2	W3	W4			
101	WET WELL LOWER FLOOR	POLYMORPHIC RESIN COATING	POLYMORPHIC RESIN COATING	-	POLYMORPHIC RESIN COATING	POLYMORPHIC RESIN COATING	POLYMORPHIC RESIN COATING	POLYMORPHIC RESIN COATING	POLYMORPHIC RESIN COATING	23'-9"	FULL HEIGHT
102	PUMP HOUSE GROUND FLR	EPOXY SEALER	PAINT	6"	PAINT	PAINT	PAINT	PAINT	PAINT	PAINT	FULL HEIGHT
103	GENERATOR HOUSE	EPOXY SEALER	PAINT	6"	PAINT	PAINT	PAINT	PAINT	PAINT	PAINT	FULL HEIGHT

EXTERIOR FINISH AND COLOR SCHEDULE

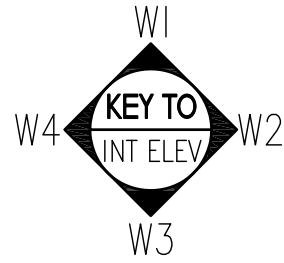
ITEM	MAT'L	FINISH	COLOR	REMARKS
ROOF	CONC	ROOF COATING	WHITE	ELASTOMERIC ROOF COATING
WALL	CONC	PAINT	GOV GUAM GWA STANDARD	PAINT
DOOR FRAME	STEEL	PAINT	GOV GUAM GWA STANDARD	FACTORY FINISH (FF)
EXT. DOOR	HOT DIPPED GALV	PAINT	GOV GUAM GWA STANDARD	FACTORY FINISH (FF)
LOUVERS	CONCRETE	PAINT	GOV GUAM GWA STANDARD	PAINT

INTERIOR FINISH COLOR SCHEDULE

ITEM	MATERIAL	FINISH	COLOR	REMARKS
WALL PANELS	CONC	PAINTED	GOV GUAM GWA STANDARD	CONCRETE PANEL (PCP)
DOOR PANELS	HOT DIPPED GALV	PAINTED	GOV GUAM GWA STANDARD	FACTORY FINISH (FF)
DOOR FRAMES	STEEL	PAINTED	GOV GUAM GWA STANDARD	FACTORY FINISH (FF)
CONCRETE CURB	CONC	PAINTED	GOV GUAM GWA STANDARD	FACTORY FINISH (FF)
CONCRETE PAD	CONC	PAINTED	GOV GUAM GWA STANDARD	FACTORY FINISH (FF)

KEY TO ROOM FINISHES

PCP PAINTED CONCRETE PANEL FF FACTORY FINISH PC PLAIN CONCRETE
EPF ELASTOMERIC PAINT FINISH LP LATEX PAINT

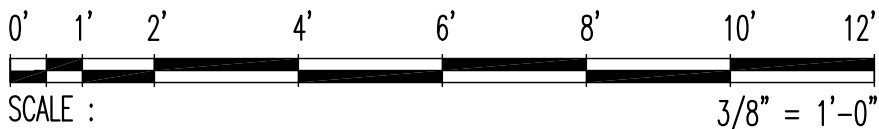


KEY TO INTERIOR ELEVATIONS

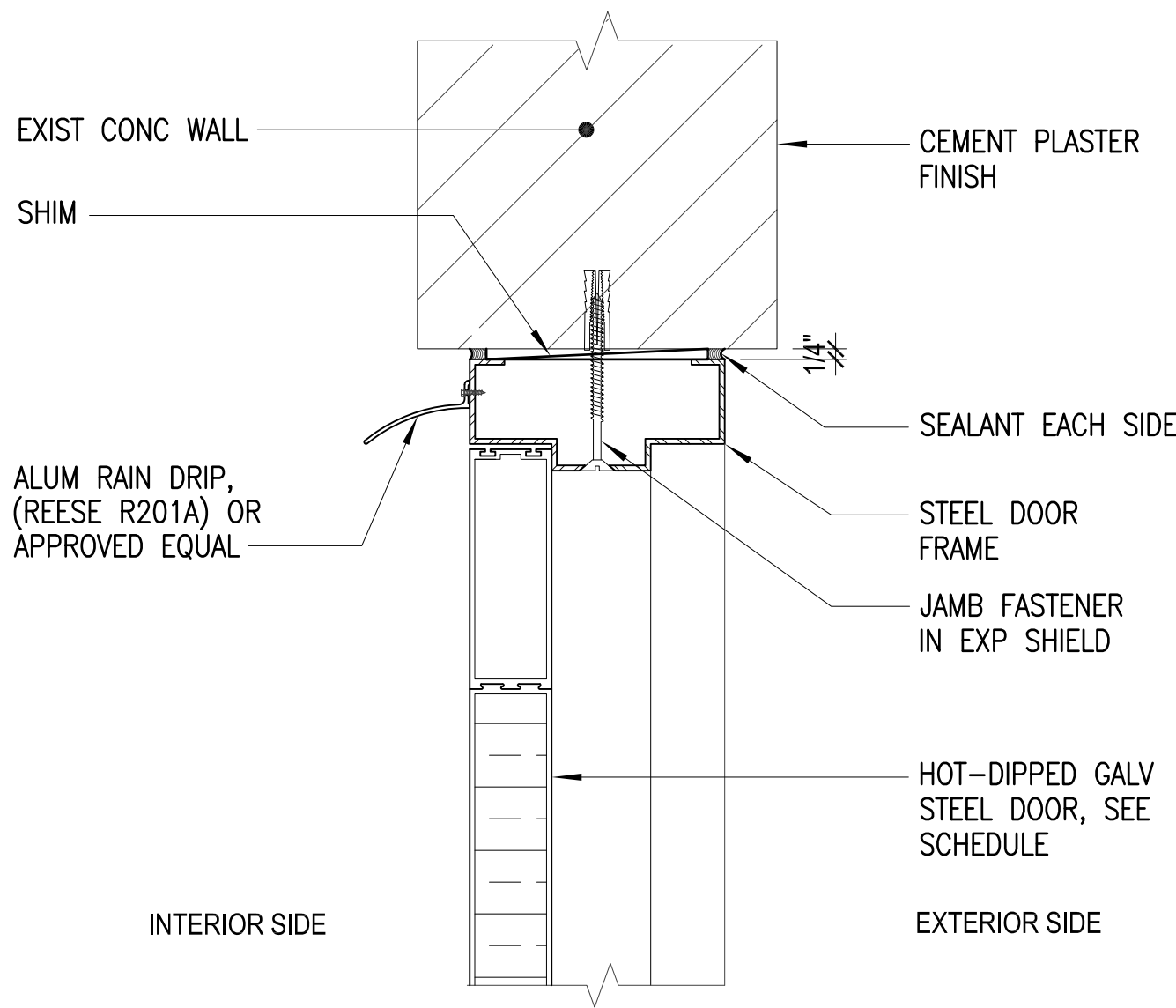
ABBREVIATIONS:

AL ALUMINUM
ANOD ANODIZED
CONC CONCRETE
FF FACTORY FINISH
H HEIGHT
HC HOLLOW CORE
HM HOLLOW METAL
HORIZ HORIZONTAL
HT HEIGHT
MAT MATERIAL
NO NUMBER
OFCI OWNER FURNISHED
SC CONTRACTOR INSTALLED
THK SOLID CORE
W THICKNESS
WIDTH

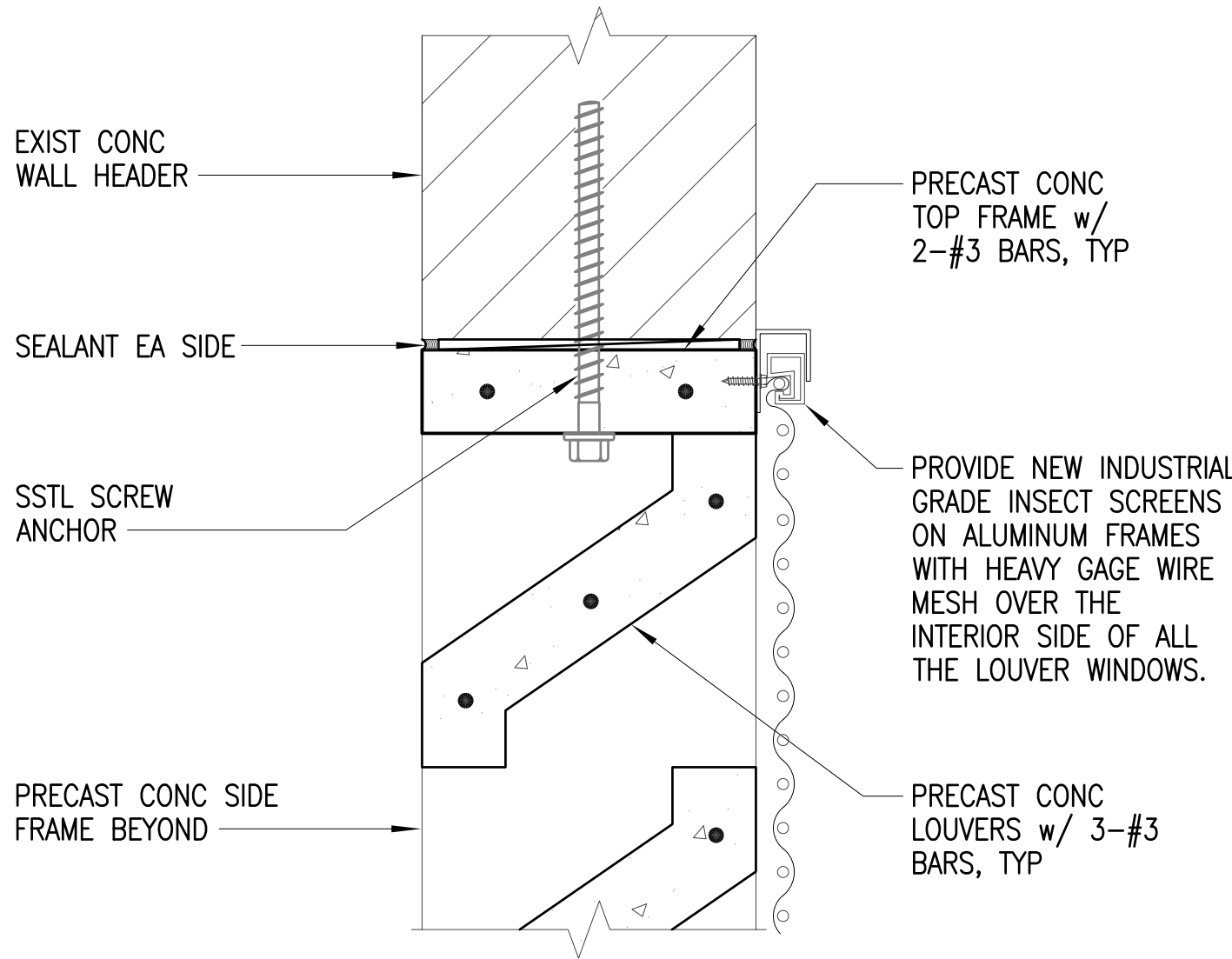
GRAPHIC SCALE:



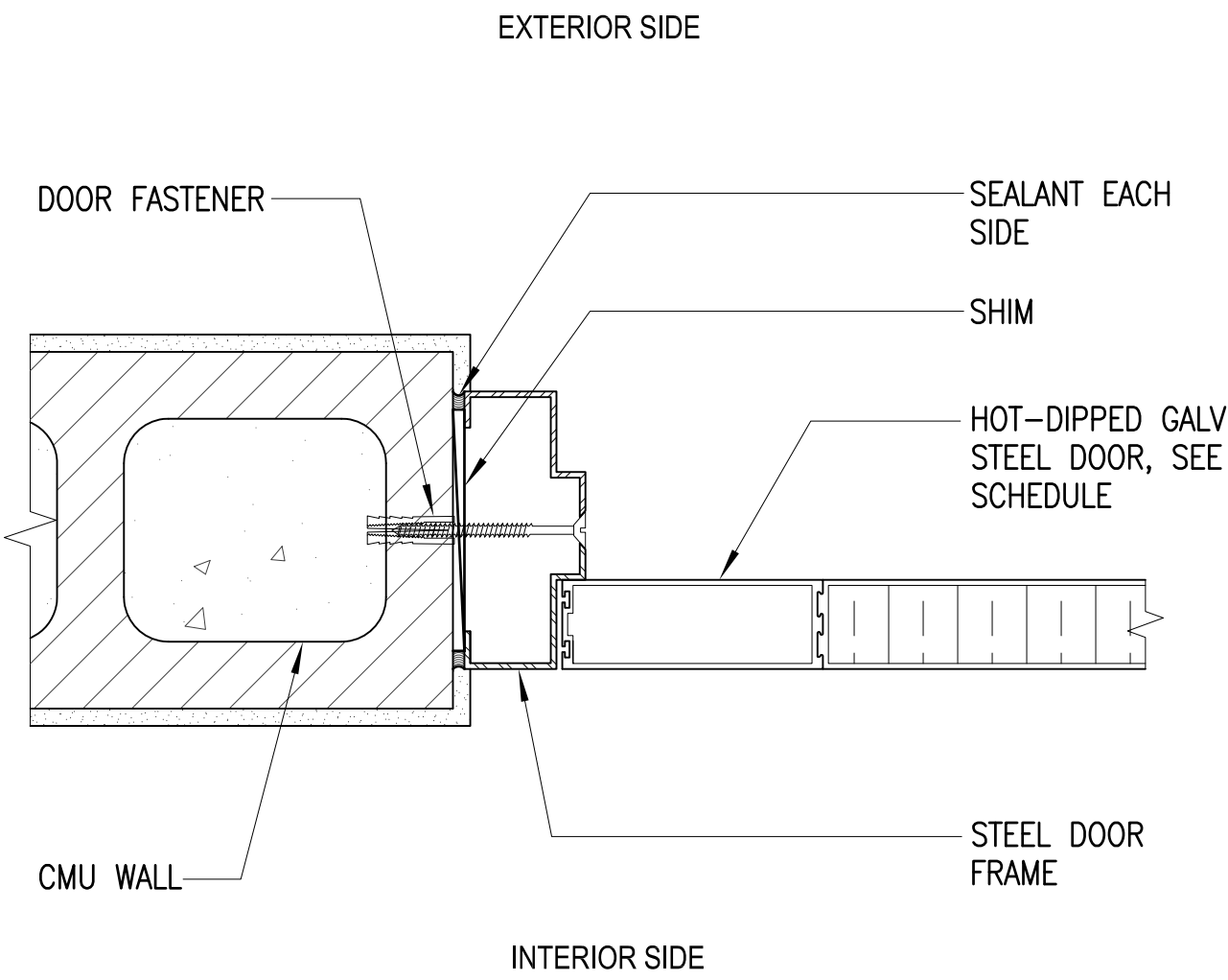
					
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DES. BY: kje DRN. BY: jl CHK. BY: aht	CHIEF ENGR: • ENGR. SUP: • PROJ. ENGR: •			PROJECT: BAYSIDE PUMP STATION REHABILITATION TAN MARIAN COATLA LP, TAMUNING, GUAM	CONTENTS: DOOR ELEVATIONS & SCHEDULE, LOUVERED WINDOW ELEV & SCHED, ROOM FINISH SCHEDULE, EXTERIOR FIN & COLOR SCHED, INTERIOR FIN & COLOR SCHED, KEY TO ROOM FIN & ABBREVIATIONS
				DRAWING NO. A-5.1	SHT. 14 OF 27



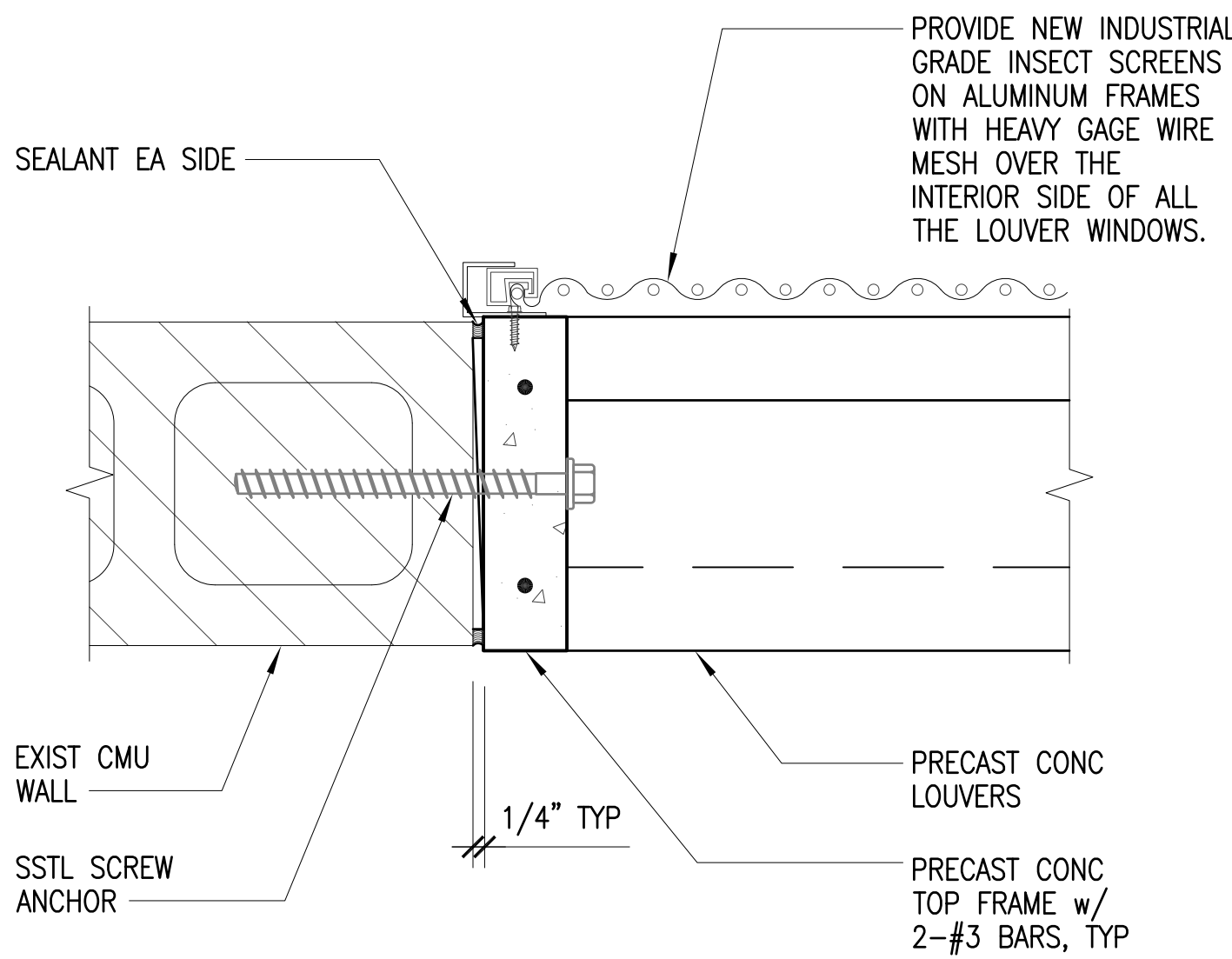
1 DOOR HEAD DETAIL
SCALE: 3" = 1'-0"



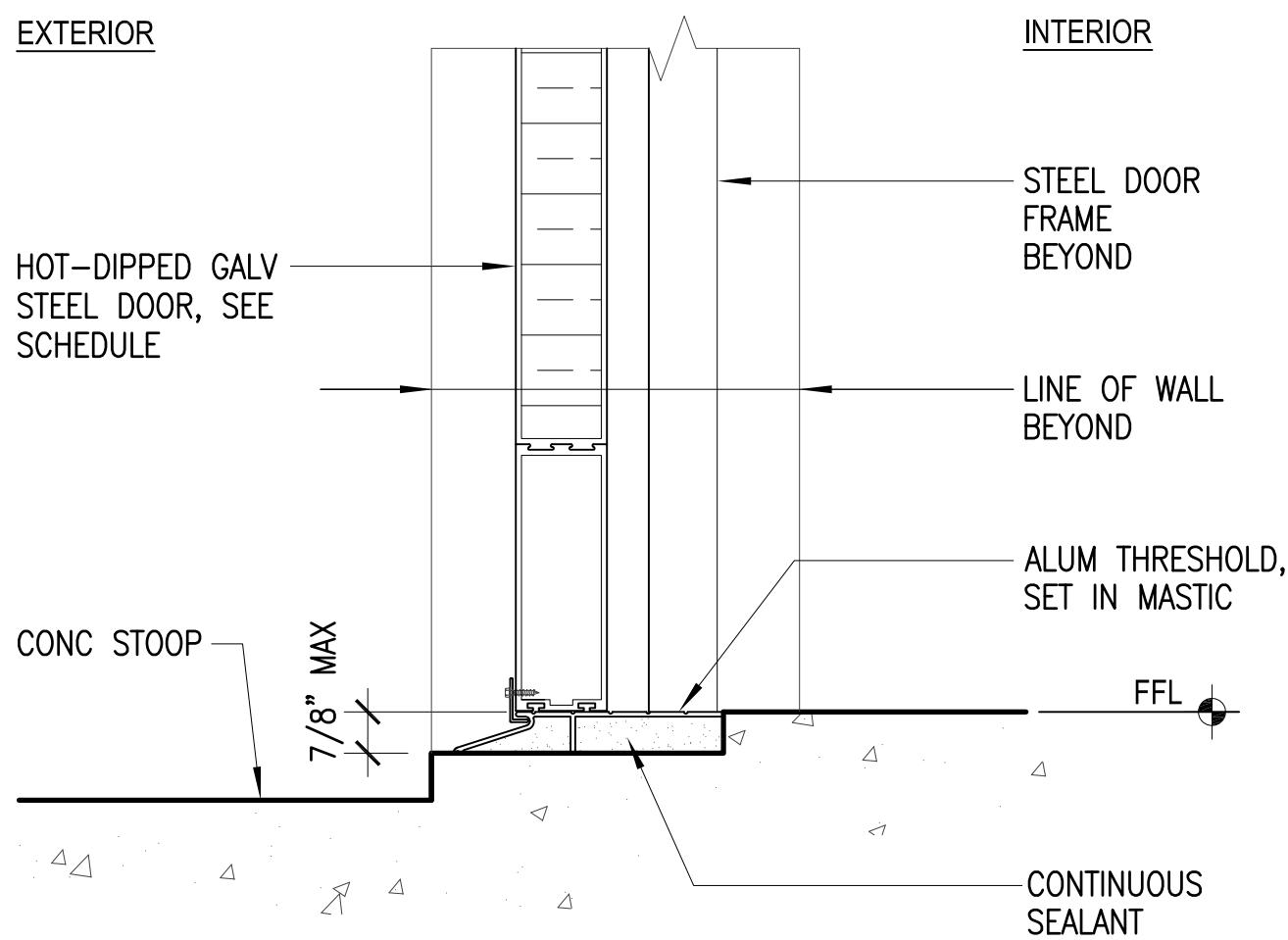
4 LOUVER HEAD DETAIL
SCALE: 3" = 1'-0"



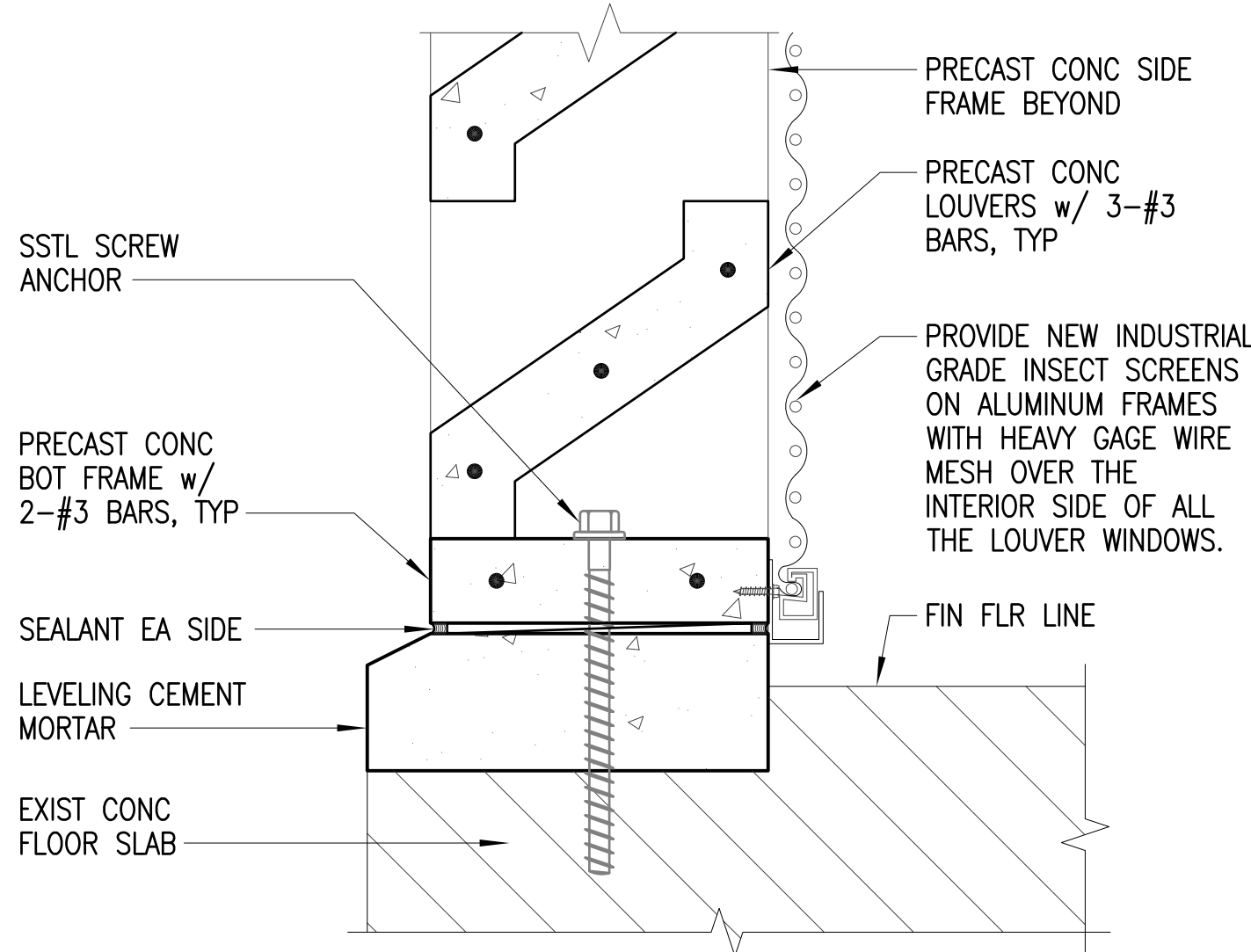
2 DOOR JAMB DETAIL
SCALE: 3" = 1'-0"



5 LOUVER JAMB DETAIL
SCALE: 3" = 1'-0"



3 DOOR SILL DETAIL
SCALE: 3" = 1'-0"



6 LOUVER SILL DETAIL
SCALE: 3" = 1'-0"

GRAPHIC SCALE:



EMPSCO Engineering Management & Planning Services Corporation 1998 ADAMI DRIVE, 2ND FLOOR, SUITE 202 PO BOX 16, DEDDICK, GUAM 96921 TEL: (671) 438-5716 / 438-4716 FAX: (671) 438-2131		REV	DATE	BY	DESCRIPTION	APPROVED BY
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION DATE: 05-17-2017	GWA NO.	 GUAM WATERWORKS AUTHORITY GOVERNMENT OF GUAM ENGINEERING DIVISION PROJECT: BAYSIDE PUMP STATION REHABILITATION TAN MARIAN COATLA LP, TAMUNING, GUAM				
	GRANT ID NO.					
	CONTRACT NO.					
	PROJECT NO.					
	CHIEF ENGR.					
DES. BY: kje	ENGR. SUP:	CONTENTS: DOOR DETAILS AND LOUVERED WINDOW DETAILS				DRAWING NO. A-5.2
DRN. BY: jl	PROJ. ENGR:	SHT. 15 OF 27				
CHK. BY: aht						

5/17/2017 3:00:07 PM

1. GENERAL NOTES AND TYPICAL STRUCTURAL DETAILS SHALL APPLY TO ALL DRAWINGS UNLESS OTHERWISE SHOWN OR NOTED.
2. THE CONTRACTOR SHALL TONE AND LOCATE ALL UTILITY LINES WITHIN THE PROJECT AREA PRIOR TO START OF EXCAVATION. THE CONTRACTOR SHALL BE HELD RESPONSIBLE AND SHALL PAY FOR ALL DAMAGES TO THE MAINTENANCE AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES.
3. ALL WORK CALLED FOR ON THE PLANS AND ALL WORK NOT CALLED FOR BUT REQUIRED FOR THE CONSTRUCTION OF THIS PROJECT, SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACTOR'S SCOPE OF WORK.
4. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL OR BETTER CONDITION ALL EXISTING IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PAVEMENTS, CURBS, SIDEWALKS, LANDSCAPING, STRUCTURES, UTILITIES DEMOLITION AND RESTORATION OF EXISTING WORK SHALL BE INCIDENTAL AND INCLUDED WITHIN THE CONTRACTOR'S LUMP SUM BID PRICE.

1. FOUNDATION DESIGN AND RECOMMENDATION FOR THE PUMP STATION ARE BASED ON GEOTECHNICAL REPORT PREPARED BY PACIFIC SOILS ENGINEERING AND TESTING, DATED 18 AUGUST 2016. FOR THE BANK PROTECTION AT EASEMENT ENTRY, REFER TO THE LIMITED SUBSURFACE SOIL INVESTIGATION REPORT PREPARED BY GEO-ENGINEERING & TESTING DATED FEBRUARY 11, 2017.
2. PROVIDE BASE COURSE BELOW FOOTINGS AND SLAB, A MINIMUM OF 4 INCHES COMPACTED THICKNESS EQUIVALENT TO 95% RELATIVE COMPACTION, ASTM D1557. EXISTING NATURAL GRADE SHALL BE COMPACTED TO 90% MAXIMUM DRY DENSITY, ASTM D1557, PRIOR TO INSTALLATION OF BASE COURSE.
3. EXCAVATION SHALL BE MONITORED TO ENSURE CONDITION OF SOIL BEARING PRIOR TO PLACEMENT OF CONCRETE FORMS AND REINFORCEMENT.

1. ALL CONCRETE SHALL DEVELOP A MINIMUM OF $f'c=3,000$ psi, ULTIMATE COMPRESSIVE STRENGTH AFTER 28 DAYS.
2. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST EDITION OF AMERICAN CONCRETE INSTITUTE (ACI 318).
3. ALL INSERT, ANCHOR BOLTS, PLATES ETC. TO BE EMBEDDED IN CONCRETE SHALL BE HOT DIP GALVANIZED UNLESS NOTED OTHERWISE.

1. MASONRY UNIT SHALL BE GRADE IN CONFORMING TO ASTM C90. ALL MASONRY UNIT SHALL BE OF NORMAL WEIGHT WITH MINIMUM COMPRESSIVE STRENGTH OF 1500 PSI.
2. MORTAR AND GROUT SHALL CONFORM TO THE REQUIREMENTS OF SECTION 2130 IBC. CEMENT FOR MORTAR AND GROUT SHALL BE LOW IN ALKALI TYPE CONFORMING TO ASTM C150.
3. MORTAR SHALL BE TYPE M OR S AND SHALL DEVELOP A MINIMUM STRENGTH OF 2000 PSI AT 28 DAYS.

1. CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE PLANS AND SPECIFICATION DETAILS DEALING WITH PILING IN THE CONTRACT. PROVIDE THE REQUIRED "WELDING PROCEDURES" FOR ALL WELDS PROPOSED FOR THE PILES AND SPLICES AND THE "PILE DRIVING EQUIPMENT".
2. FIELD PILE DRIVING PROCEDURES, DRIVING RECORDS AND DATA OBSERVATIONS SHALL BE REQUIRED AND BE RECORDED AND SUBMITTED TO PMU/C.O. ON STANDARD FORMS PREPARED BY CONTRACTOR. FORMS SHALL BE SUBMITTED ON A DAILY BASIS.
3. RECORDATION IS ACCOMPLISHED BASED ON BLOWS-PER-UNIT DEPTH. EMBEDMENT DEPTH SHALL BE FIELD VERIFIED BY CONTRACTOR DURING THE INSTALLATION BASED ON PILE MARKINGS.
4. CONTRACTOR SHALL VERIFY ALL DATA LOGGED ON THE FORMS FOR COMPLETENESS AND NOTE WHETHER FINAL LENGTHS ARE IN ACCORDANCE WITH THE PLAN REQUIREMENTS.
5. CONTRACTOR SHALL SUBMIT APPROVAL FOR PILE DRIVING EQUIPMENT. VERIFY THAT THE TYPE, STRIKING ENERGY PER BLOW, RATED SPEED AND TYPE OF EQUIPMENT TO BE USED ARE APPROPRIATE FOR THE INTENDED PURPOSE.

6. HAMMERS SHALL HAVE CONTINUOUS COMPRESSOR CAPACITY TO ASSURE THAT THE RATED CONDITIONS ARE ACHIEVED. HAMMERS SHALL HAVE AN ACCEPTABLE MEANS FOR MEASURING HAMMER ENERGY PRESSURE. CONTRACTOR SHALL BE RESPONSIBLE TO INSPECT AND CHECK HAMMER OPERATION FOR PROPER FUNCTIONING.
7. STEEL SHEET PILES SHALL AS SPECIFIED AND FROM ROLLED SECTIONS OF STANDARD DIMENSIONS. THEY SHALL BE NEW AND UN-USED AND CONFORM TO ASTM A36M MATERIALS STANDARDS.
8. ALL SHEET PILES AND COMPONENTS FOR PERMANENT STRUCTURES SHALL BE PROVIDED WITH CORROSION PROTECTION USING HOT-DIPPED GALVANIZED COATING OR A COAL-TAR EPOXY BASED COATING SYSTEM.
9. PILES SHALL BE PLUMB (TRULY VERTICAL). PILE ALIGNMENT SHALL BE MEASURED WITH A TEMPLATE IN THE FIELD. OBSERVE AND RECORD THE METHOD BEING FOLLOWED. THE PILE SHALL NOT VARY FROM THE PLANNED LOCATION AND BE WITHIN TOLERANCE OF ONE-INCH, AND SHALL NOT HAVE MORE THAN A 1/4 INCH PER FOOT VARIATION AT THEIR TIP FROM THE VERTICAL.
10. SPLICES SHALL BE A CONTINGENT ITEM THAT IS REQUIRED WHEN THE ENGINEER DIRECTS THE CONTRACTOR TO DRIVE A PILE MORE THAN 5 FEET BEYOND THE ESTIMATED PLAN LENGTH. ALL SPLICES ARE SUBJECT TO THE APPROVAL OF THE PMU.
11. PILE CUTOFFS SHALL BE MADE TO THE REQUIRED ELEVATION AS SHOWN ON THE PLANS. ALL CAVITIES CREATED BY THE PILE DRIVING SHALL BE BACKFILLED.
12. CONTRACTOR SHALL ENSURE THAT ALL REMAINING EXPOSED SURFACES OF PILE SECTIONS AND COMPONENTS AFTER INSTALLATION SHALL BE PROVIDED WITH CORROSION PROTECTIVE COATING.
13. WHEN NECESSARY, THE CONTRACTOR SHALL PROVIDE EQUIPMENT AND LABOR FOR PILE FIELD TESTING AND PILE HAMMER EFFICIENCY EVALUATION. THE CONTRACTOR WILL PERFORM ALL INCIDENTAL WORK TO PERFORM THE TEST REQUIREMENTS. TESTING WILL BE PERFORMED BY CONTRACTOR'S CREWS AND OBSERVED BY PMU.
14. DEFECTIVE PILES ARE CATEGORIZED BY THE FOLLOWING DEFICIENCIES: LOCATION INCORRECT, OUT OF PLUMB, PILE DAMAGED, PILES FAILS TO ACHIEVE RESISTANCE, TIP ELEVATION NOT WITHIN TOLERANCES. PMU DETERMINES PILE IS UNSERVICEABLE. THE CONTRACTOR SHALL REMOVE REJECTED PILES AND A NEW REPLACEMENT PILE SHALL BE DRIVEN IN PLACE.

1. SHEET PILE SHALL CONFORM TO ASTM A328/328M, STANDARD SPECIFICATION FOR STEEL SHEET PILING.
2. SHEET PILING SHALL BE THE SECTIONS SPECIFIED. PROVIDE FABRICATED SECTIONS CONFORMING THE REQUIREMENT AND THE PILING MANUFACTURE'S RECOMMENDATIONS FOR FABRICATION SECTIONS.
3. ANY SUBSTITUTIONS SHALL BE SUBMITTED TO THE CONTRACT ADMINISTRATOR FOR APPROVAL.
4. SUBMIT A SHOP DRAWING FOR DETAIL DRAWINGS FOR SHEEL PILING, INCLUDING FABRICATED SECTION SHOWING COMPLETE PILING DIMENSIONS AND DETAILS, DRIVING SEQUENCE AND LOCATION OF INSTALLED PILING.
5. THE INTERLOCKS OF SHEET PILING SHALL BE FREE-SLIDING, PROVIDE A SWING ANGLE SUITABLE FOR THE INTENDED INSTALLATION BUT NOT LESS THAN 5 DEGREES WHEN INTERLOCKED, AND MAINTAIN CONTINUOUS INTERLOCKING WHEN INSTALLED.

1. ALL REINFORCING BARS SHALL CONFORM TO ASTM A615 GRADE 40 REQUIREMENTS.
2. REINFORCING SHALL BE SPLICED ONLY AS INDICATING ON THE DRAWING.

1. UNLESS OTHERWISE NOTED, ALL STRUCTURAL MEMBER SHALL CONFORM TO ASTM A36 STEEL W/ MINIMUM YIELD STRENGTH, F_y , EQUAL TO 36 ksi.
2. ALL SHOP AND FIELD CONNECTIONS SHALL BE BOLTED WITH HIGH STRENGTH BOLTS EXCEPT WHERE OTHERWISE SHOWN OR NOTED IN THE DRAWINGS TO BE BOLTED WITH MACHINE BOLT OR WELDED.
3. ALL BOLTS, NUTS, AND WASHERS SHALL CONFORM TO ASTM A325M, TYPE 3, AND HAVE A HARDENED WASHER UNDER THE ELEMENT TURNED IN TIGHTENING.
4. TIE ROD SHALL CONFORM TO ASTM A722 HIGH STRENGTH STEEL BAR.
5. USE AWS E70XX ELECTRODES FOR WELDING, UNLESS OTHERWISE SPECIFIED. WELDS SHALL BE CONTINUOUS FILLET WELDS OF MINIMUM REQUIRED THROAT THICKNESS SHALL NOT BE LESS THAN 3/16 INCH.
6. ALL HARDWARE, BOLTS, TIE RODS AND STRUCTURAL MEMBERS SHALL BE HOT DIPPED GALVANIZED.
7. SHOP DRAWINGS: THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE THE WORK STARTED.

 Engineering Management & Planning Services Corporation 1998 ARABY DRIVE, 210 EMPSCO BUILDING SUITE 14, GUNESHER, GUAM 96909 TEL: (671) 638-0716 & 638-0718 FAX: (671) 638-2150						
 I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION DATE: <u>05-17-2017</u>	REV DATE BY	GWA NO. GRANT ID NO. CONTRACT NO. PROJECT NO.	DESCRIPTION	APPROVED BY	 GUAM WATERWORKS AUTHORITY GOVERNMENT OF GUAM ENGINEERING DIVISION	PROJECT: BAYSIDE PUMP STATION REHABILITATION TAN MARIAN COAT LA PL, TAMUNING, GUAM
DES. BY: tdg DRN. BY: jl CHK. BY: rmca	CHIEF ENGR: . ENGR. SUP: . PROJ. ENGR: .	CONTENTS: STRUCTURAL NOTES			DRAWING NO. S-0.1	SHT. 16 OF 27