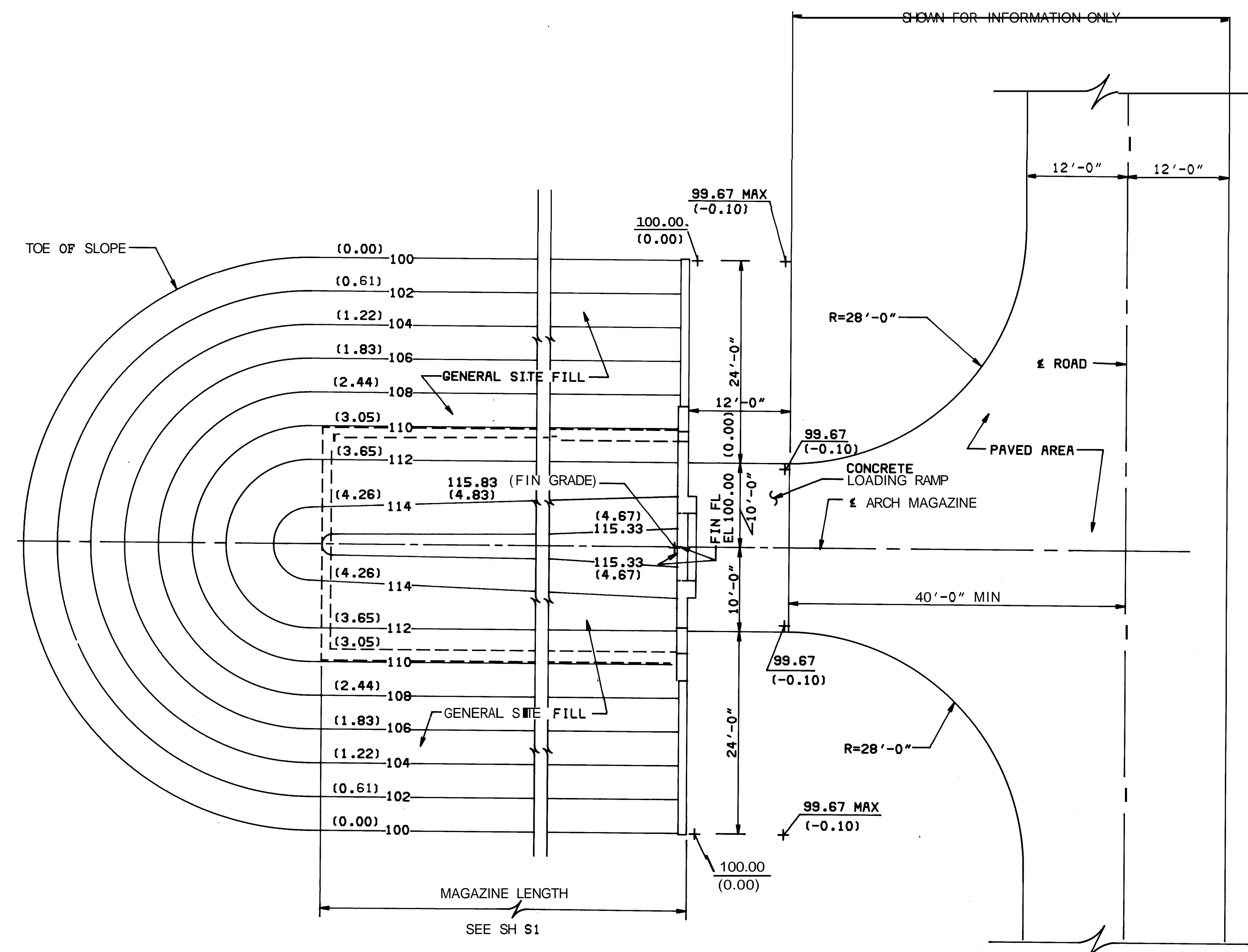


LTR	DESCRIPTION	PREP'D BY	DATE	APPROVED

ABBREVIATIONS

AB	ANCHOR BOLT	LG	LARGE, LONG
ABT	ABOUT	LGTH	LENGTH
ACI	AMERICAN CONCRETE INSTITUTE		LONG LEG VERTICAL
A/R	ANCHOR	LTGS	LIGHTINGS
AMP	AMPERE	M	METERS
ASSY	ASSEMBLY	MACH	MACHINE
AWG	AMERICAN WIRE GAUGE	MAG	MAGAZINE
BKR	BREAKER	MAX	MAXIMUM
CJ	CONSTRUCTION JOINT	MET	METAL
CL	CENTERLINE	MIN	MINIMUM
CLR	CLEAR	MM	MILLIMETER
CM	CUBIC METERS	MS	MILLISECOND
CONC	CONCRETE	NAPEC	NAVAL AMMUNITION PRODUCT.
CONST	CONSTRUCTION		ENGINEERING CENTER
CONT	CONTINUOUS	NAVFAC	NAVAL FACILITIES
COORD	COORDINATE		ENGINEERING COMMAND
CTR	CENTER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
CY	CUBIC YARDS	NF	NEAR FACE
DET	DETAILER	NO	NUMBER
DIA	DIMENSION	OC	ON CENTER
DN	DOWNING	OPRG	OPENING
DWG	DRAWING		OPPOSITE
DWLS	DOWELS	PC	POUNDS PER CUBIC INCH
EA	EACH	PL	PLATE
EF	EACH FACE	PROJ	PROJECTION
EJ	EXPANSION JOINT	PSF	POUNDS PER SQUARE FOOT
EL	ELEVATION	PSI	POUNDS PER SQUARE INCH
ENCL	ENCLOSE, ENCLOSURE	PVMT	PAVEMENT
EQ	EQUAL	R	RADIUS
EQUIP, EQPT	EQUIPMENT	RCPTS	RECEPTACLES
EV	EACH WAY	REF	REFERENCE
EXP	EXPANSION	REINF	REINFORCEMENT
F	FAHRENHEIT	REQD	REQUIRED
FDN	FOUNDATION	RHW	RUBBER HEAT AND WATER RESISTANT INSULATION
FF	FAR FACE	SECT	SECTION
FIN	FINISH	SH	SPACE
FIXTS	FIXTURES	SNT	SEALANT (JOINT SEALING MATERIAL)
FL	FOOTING	SP	SPACE
FTG	FOOTING	SST	STAINLESS STEEL
G	GRAM	STD	STANDARD
GALV	GALVANIZE	STLF	STEELER
GEN	GENERAL		SYMMETRICAL
GFCI	GROUND FAULT CURRENT INTERRUPTOR		TOP AND BOTTOM
GND	GROUND		THREAT
GR	GRADE		PLASTIC HEAT AND WATER RESISTANT INSULATION
HEX	HEXAGONAL	THD	TOP OF STEEL
HP	HORSEPOWER	TOS	TYPICAL
HPT	HIGH PULSE DETECTION SYSTEM	TYP	TYPICAL
IDS		UNO	UNLESS NOTED OTHERWISE
JT	JOINT	W	WITH
KG	KILOGRAM	WO	WITHOUT
KSX	KIPS PER SQUARE INCH	WT	WEIGHT
KV	KILOVATT	WVF	WELDED WIRE FABRIC



SITE PLAN MAGAZINE AT GRADE-LEVEL

SCALE: 1/8" = 1'-0"
CONTOUR INTERVAL: 2'

- NOTES:
- SEE GEN NOTE 15, NAVFAC DWG NO. 1404322 FOR REF ELEVATION.
 - NUMBERS IN PARENTHESIS ARE METERS.
 - CONTOURS SHOWN REPRESENT TYPICAL CONDITIONS FOR SINGLE MAGAZINE. CONTOURS MAY REQUIRE ADJUSTMENT FOR SITING OF MULTIPLE MAGAZINES, OR WHERE SOIL OR DRAINAGE CONDITIONS SO INDICATE.

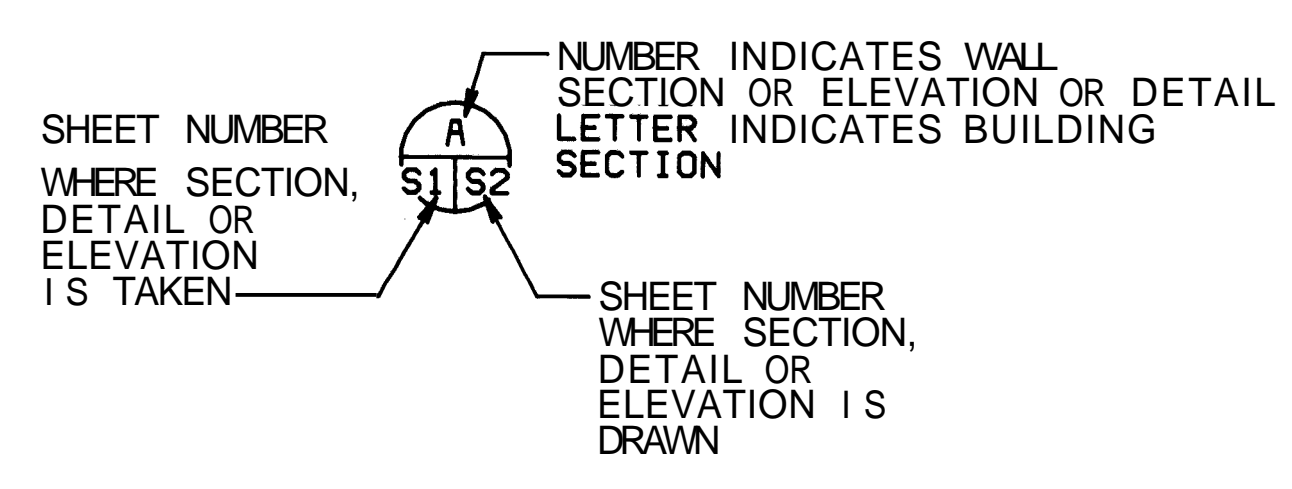
THIS SET OF 15 DWGS. (NAVFAC DWG. NOS. 1404310-324) SUPERSEDES Y&D OWGS, 627954-957, 649602-605, 658384-388, 724368, 751861, 764596-597, 793746-748, 803060, 822978-989.

METRIC CONVERSIONS REINFORCING BARS	
BAR SIZE	METRIC EQUIVALENT DIAMETER (MM)
#3	10
#4	13
#5	16
#6	19
#7	22
#8	25
#9	29

* EXCLUDES DEFORMATIONS SEE STRUCTURAL DWGS FOR REINF BAR USE

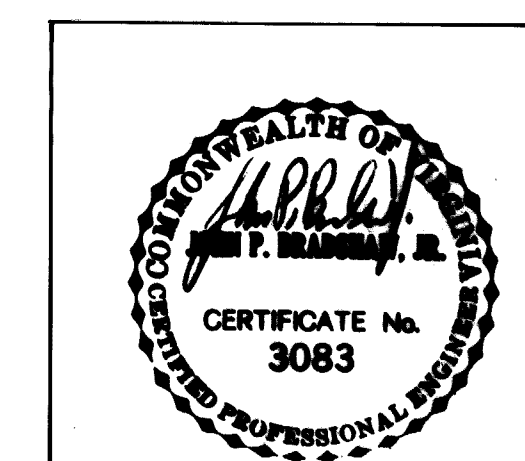
METRIC CONVERSIONS STRUCTURAL STEEL SHAPES	
SHAPE DESIGNATION ON DRAWING	METRIC EQUIVALENT DEPTH (MM) X WT PER LENGTH (KG PER M)
C8 X 11.5	203 X 83.38
C10 X 15.3	203 X 94.26
C12 X 20.7	254 X 110.94
S10 X 25.4	254 X 184.17
W10 X 30	254 X 228.98
W10 X 45	254 X 322.83
W10 X 60	254 X 435.04
C4 X 7.25	102 X 52.57
MC6 X 12	152 X 87.00

METRIC CONVERSIONS	
1'-0"	= 305MM
10'-0"	= 3050MM
12'-0"	= 3660MM
24'-0"	= 7315MM
28'-0"	= 8534MM
40'-0"	= 12.20M



GRAPHIC SCALES

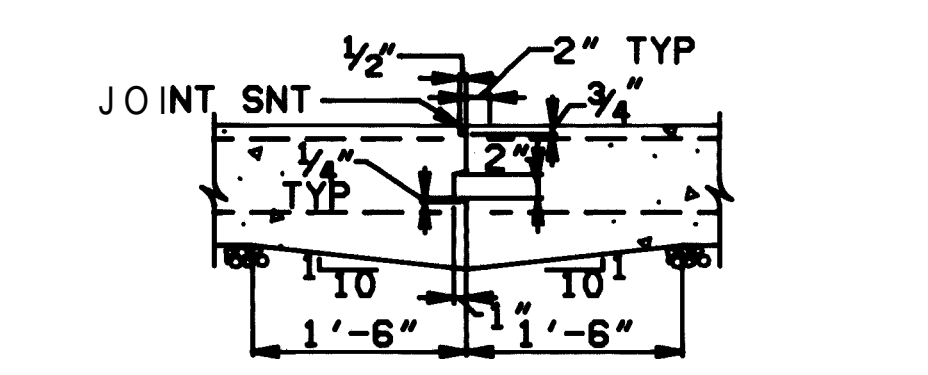
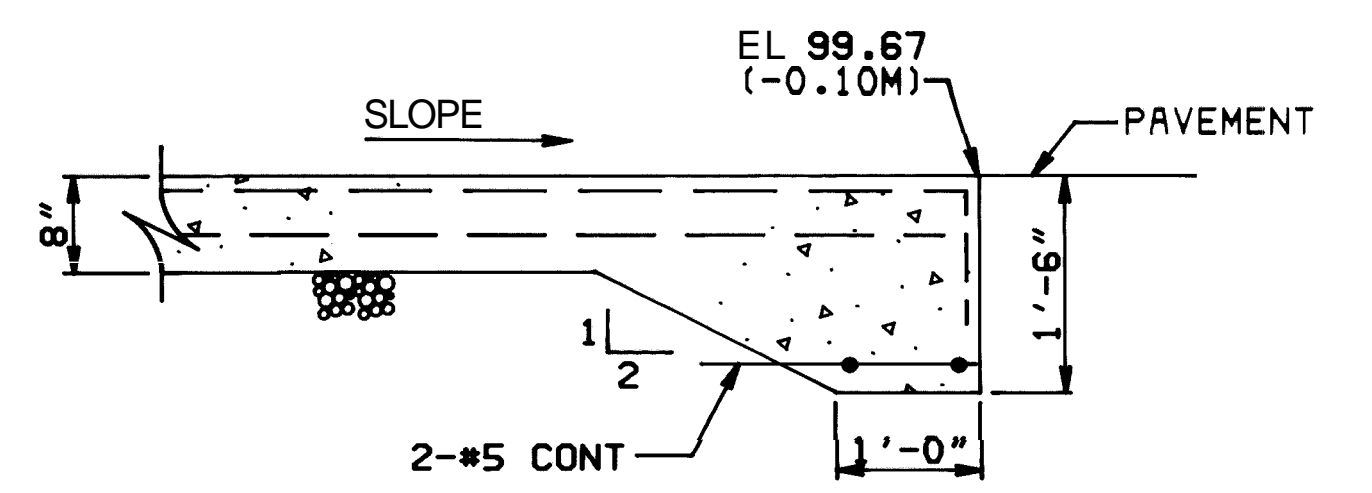
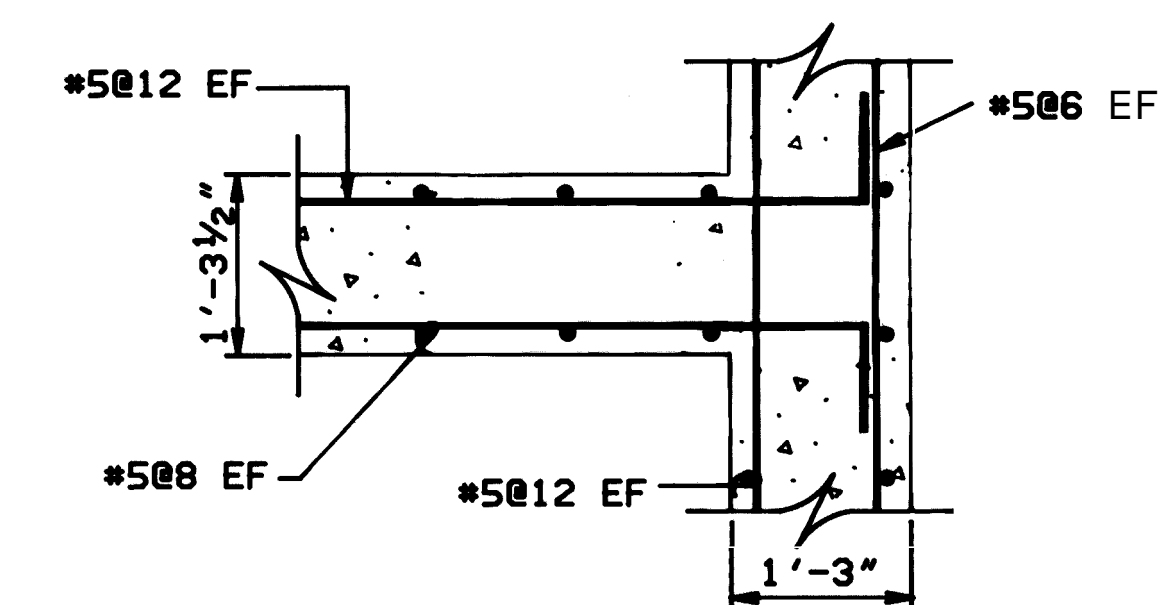
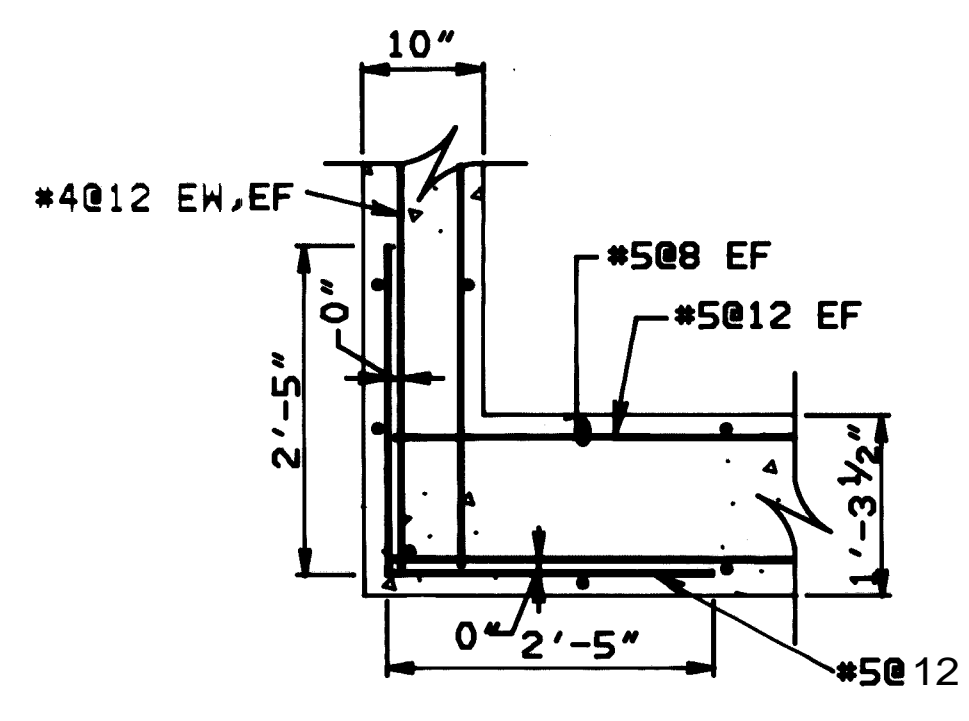
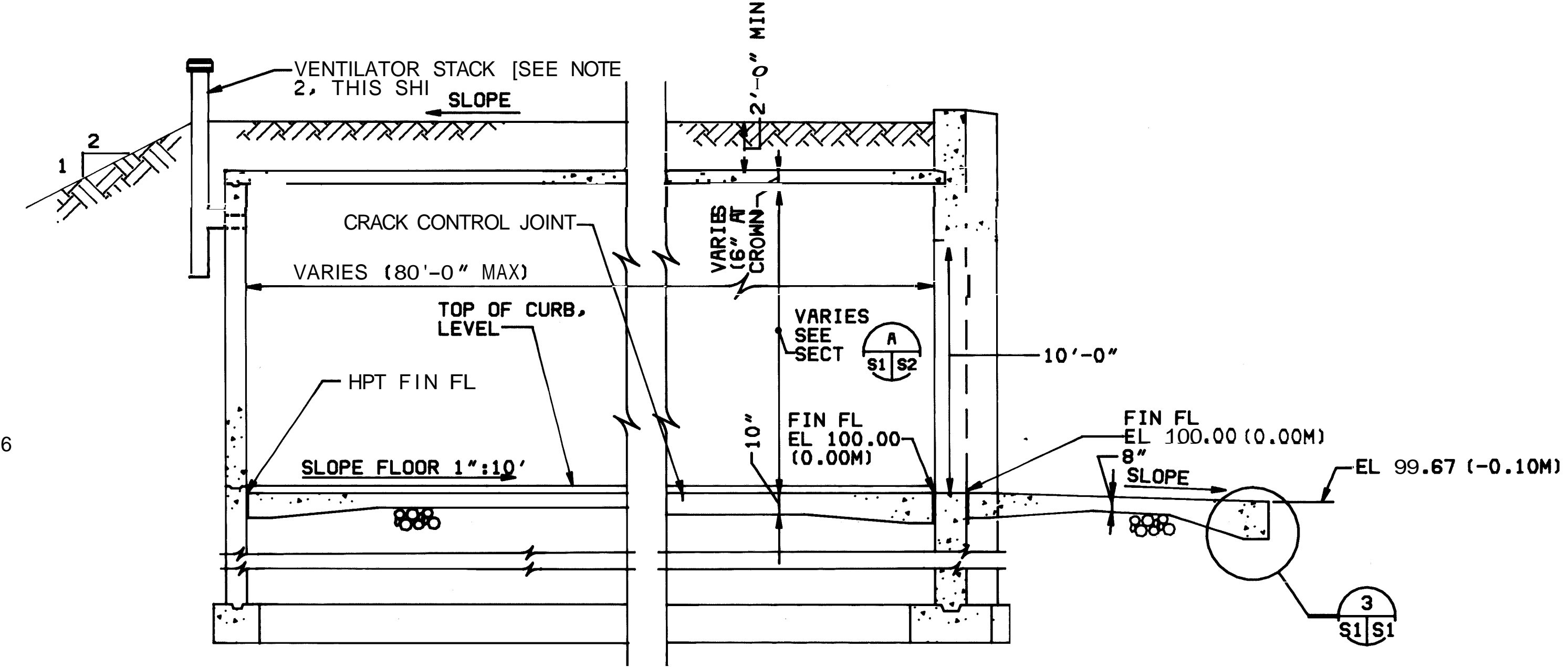
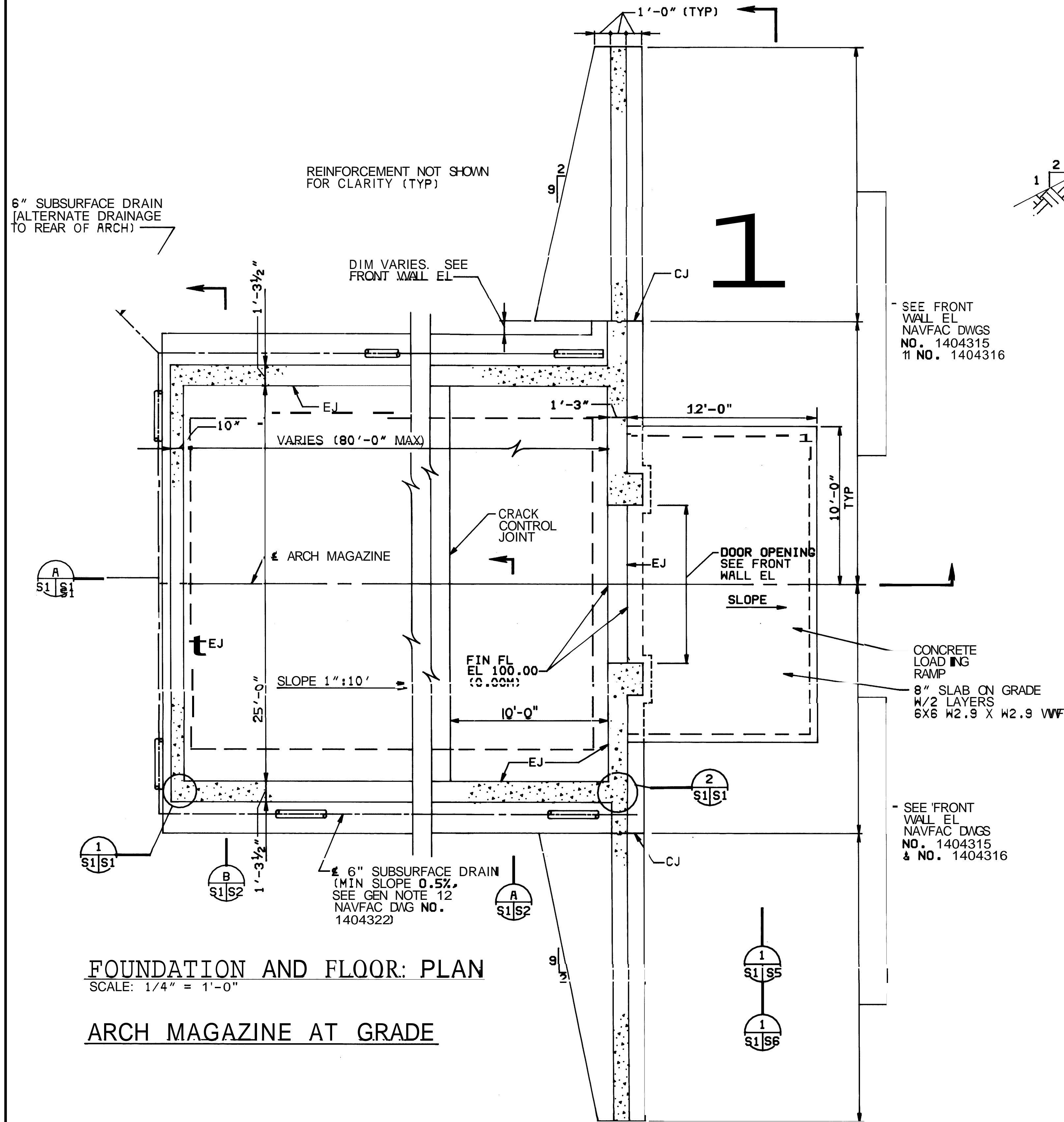
1/8" = 1'-0"



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET ALEXANDRIA, VA. 22304

STANDARD
EARTH-COVERED CONCRETE ARCH MAGAZINE
CIVIL
SITE PLAN AND ABBREVIATIONS
MAGAZINE AT GRADE-LEVEL

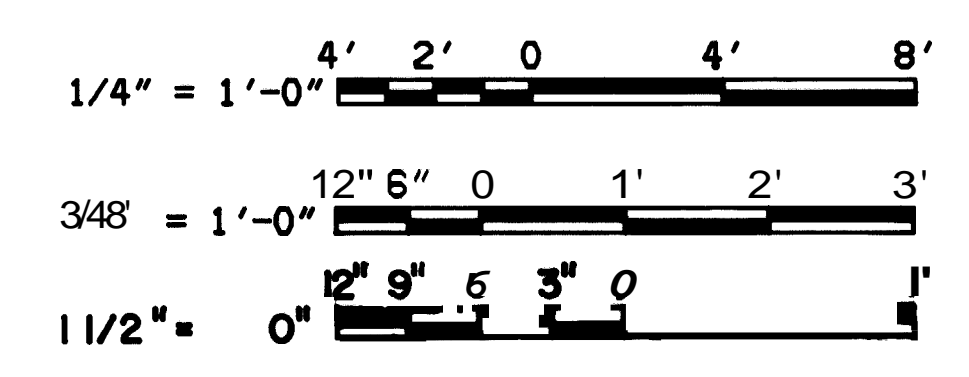
REVISIONS		PREP'D BY	DATE	APPROVED
LTR	DESCRIPTION			



- NOTES:
- DET 1 AND DET 2, THIS SHEET, SHOW CONDITIONS BELOW FLOOR SLAB.
 - SEE NAVFAC DWG NO. 1404322 FOR GENERAL NOTES, VENTILATOR SCHEDULE AND WALL CRACK CONTROL JOINT DETAILS

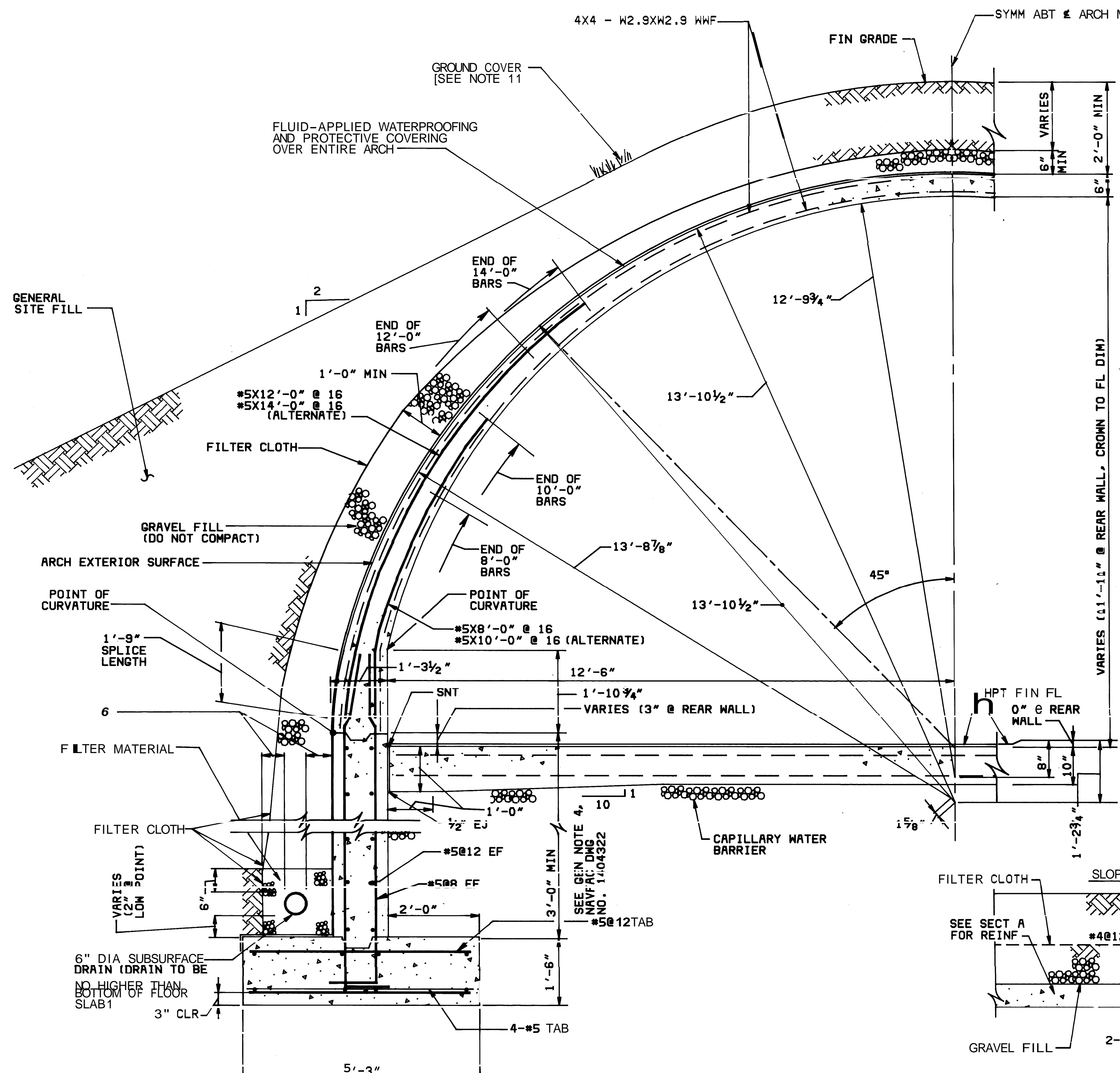
METRIC CONVERSIONS		
1/4" = 6MM	1'-3 1/2" = 394MM	80'-0" = 24.4M
1/2" = 13MM	1'-5" = 432MM	
3/4" = 19MM	1'-6" = 457MM	
1" = 25MM	2'-0" = 610MM	
2" = 51MM	2'-5" = 737MM	
4" = 102MM	3'-0" = 914MM	
6" = 152MM	5'-0" = 1520MM	
8" = 203MM	10'-0" = 3050MM	
10" = 254MM	12'-0" = 3660MM	
1'-0" = 305MM	15'-0" = 4570MM	
1'-2 3/8" = 365MM	25'-0" = 7630MM	
1'-3" = 381MM		

GRAPHIC SCALES

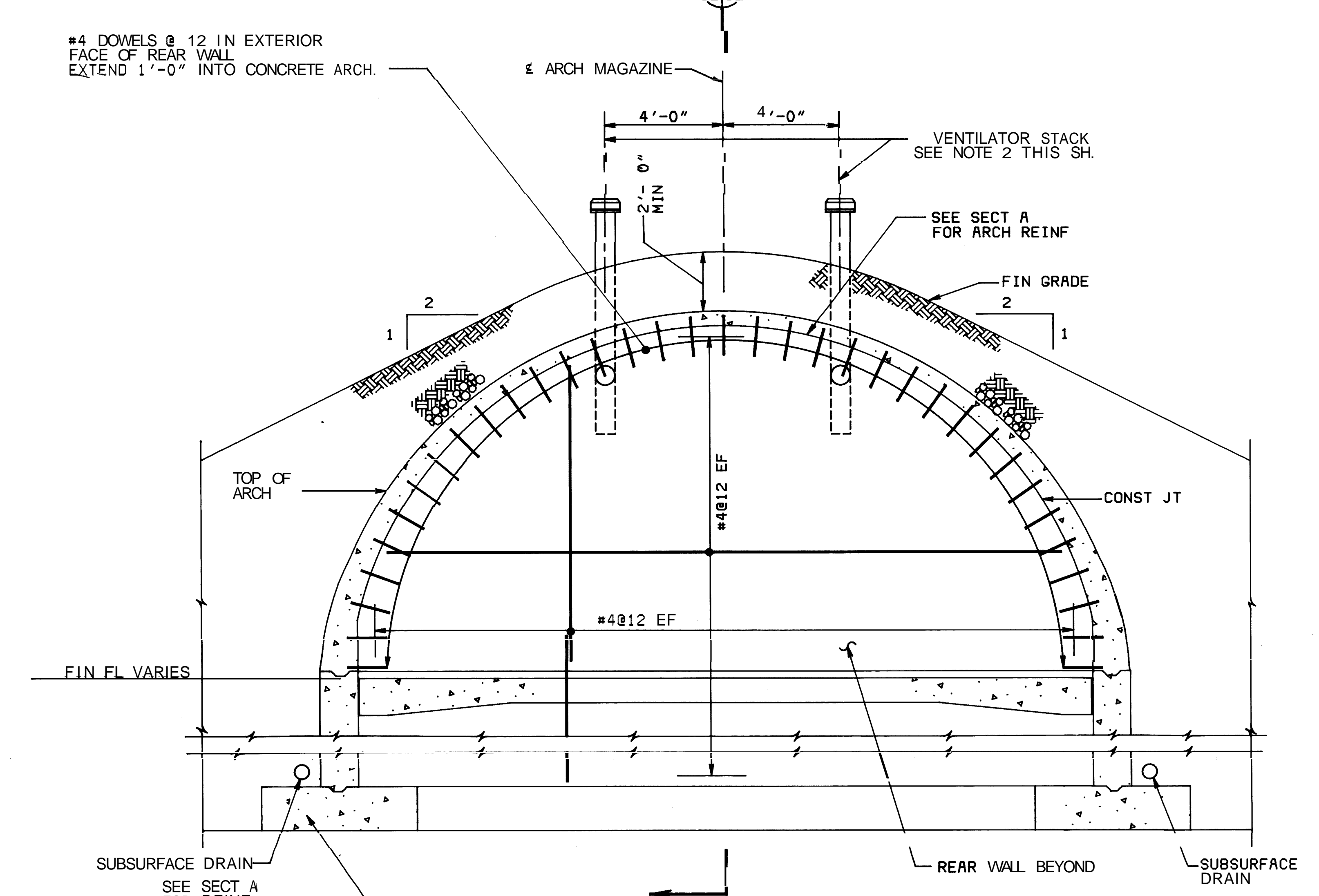


	HAYES, BEAY, WITTEN & WITTEN ARCHITECTS ENGINEERS PLANNERS RICHMOND, VIRGINIA	DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND 200 STOVALL STREET ALEXANDRIA, VA. 22304
	DRAWN BY: DR. CAY CHECKED BY: CH. BIRD SUBMITTED BY: [Signature] DATE: 7/18/83 SCALE: AS NOTED	STANDARD EARTH-COVERED CONCRETE ARCH MAGAZINE STRUCTURAL FOUNDATION AND FLOOR PLAN AND SECTIONS MAGAZINE AT GRADE-LEVEL

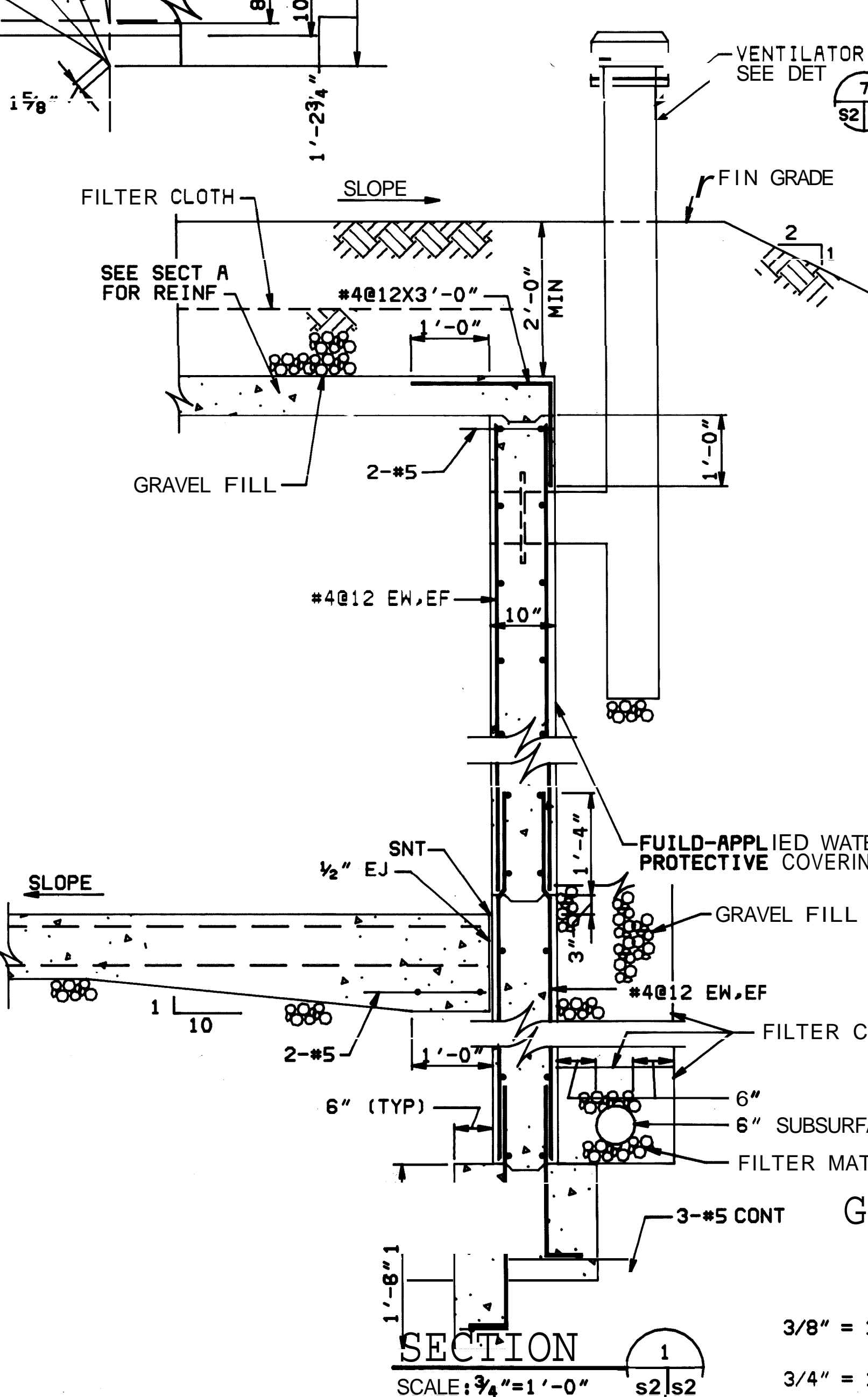
REVISIONS			
LTR	DESCRIPTION	PREP'D BY	DATE APPROVED



SECTION A
SCALE: 3/8" = 1'-0"
SCALE: 3/4" = 1'-0"
S1A

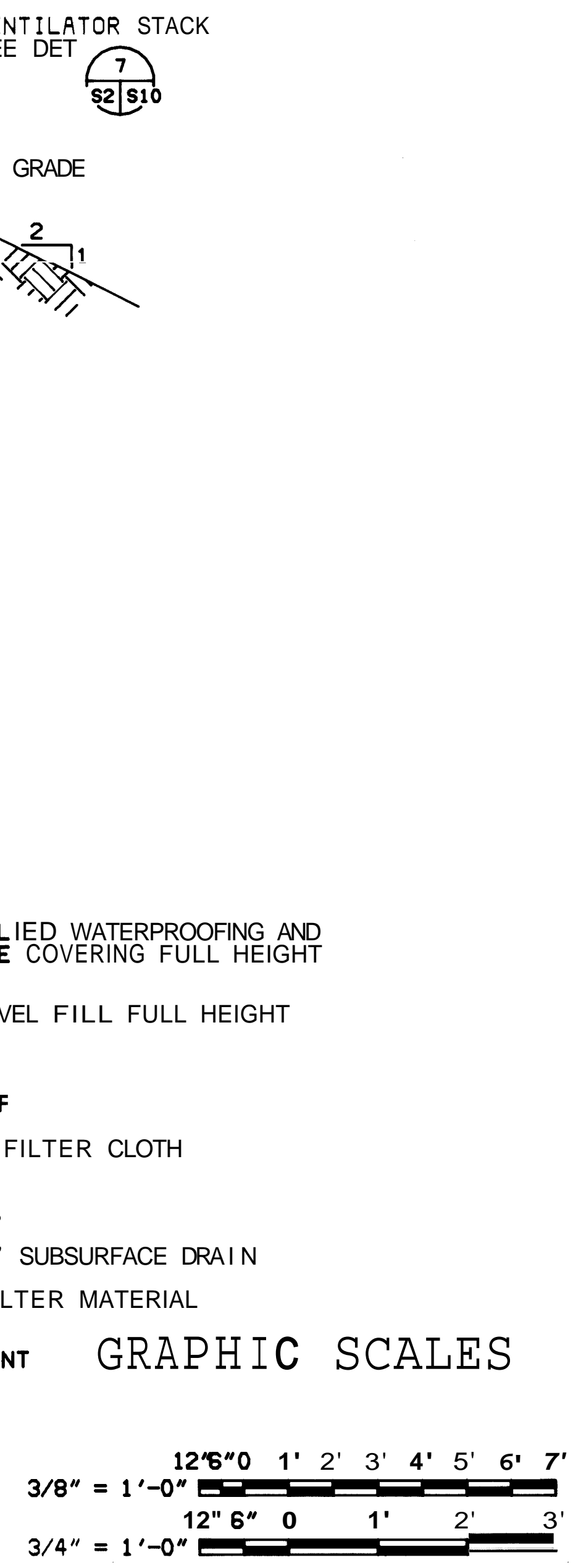


SECTION B
SCALE: 3/8" = 1'-0"
S1A



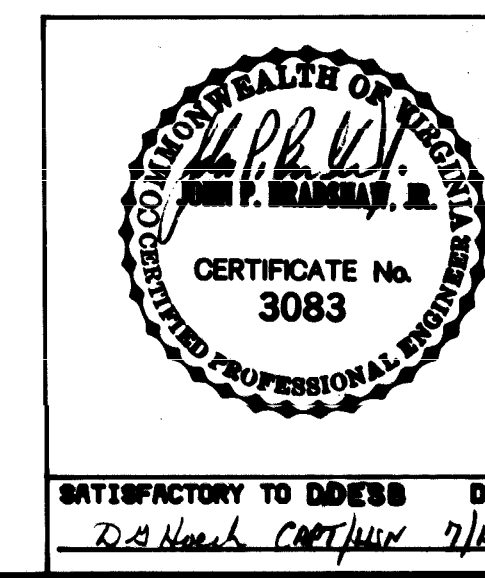
SECTION 1
SCALE: 3/4" = 1'-0"
S2S2

- NOTES:
- GROUND COVER SHALL BE DETERMINED BY GENERAL SITE FILL MATERIAL AND CLIMATIC CONDITIONS. GROUND COVER MUST BE MAINTAINED AT MAXIMUM 6" HEIGHT WHEN GRAVEL FILL IS USED NO GROUND COVER IS REQUIRED.
 - IF ONE VENTILATOR STACK IS REQUIRED, LOCATE ON CENTER LINE OF ARCH MAGAZINE. SEE VENTILATOR SCHEDULE ON NAVFAC DMG NO. 1404322.
 - GENERAL SITE FILL SHALL BE COMPACTED TO AT LEAST 95% OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698, EXCEPT THE FILL DIRECTLY ABOVE THE CONCRETE ARCH, WHICH SHALL BE COMPACTED TO 90% OF THE MAXIMUM DRY DENSITY.



METRIC CONVERSIONS

1/2" = 13MM	1'-6" = 457MM	12'-1 3/4" = 3700MM
1 3/8" = 41MM	1'-9" = 533MM	12'-6" = 3800MM
2" = 51MM	1'-10 3/4" = 577MM	12'-9 3/4" = 3900MM
3" = 76MM	2'-0" = 610MM	13'-8 7/8" = 4180MM
6" = 152MM	2'-6" = 761MM	13'-10 1/2" = 4210MM
8" = 203MM	3'-0" = 914MM	14'-0" = 4270MM
10" = 254MM	4'-0" = 1220MM	
1'-0" = 305MM	5'-3" = 1600MM	
1'-1" = 330MM	8'-0" = 2440MM	
1'-2 3/4" = 374MM	10'-0" = 3050MM	
1'-3 1/2" = 394MM	12'-0" = 3660MM	
1'-4" = 406MM		



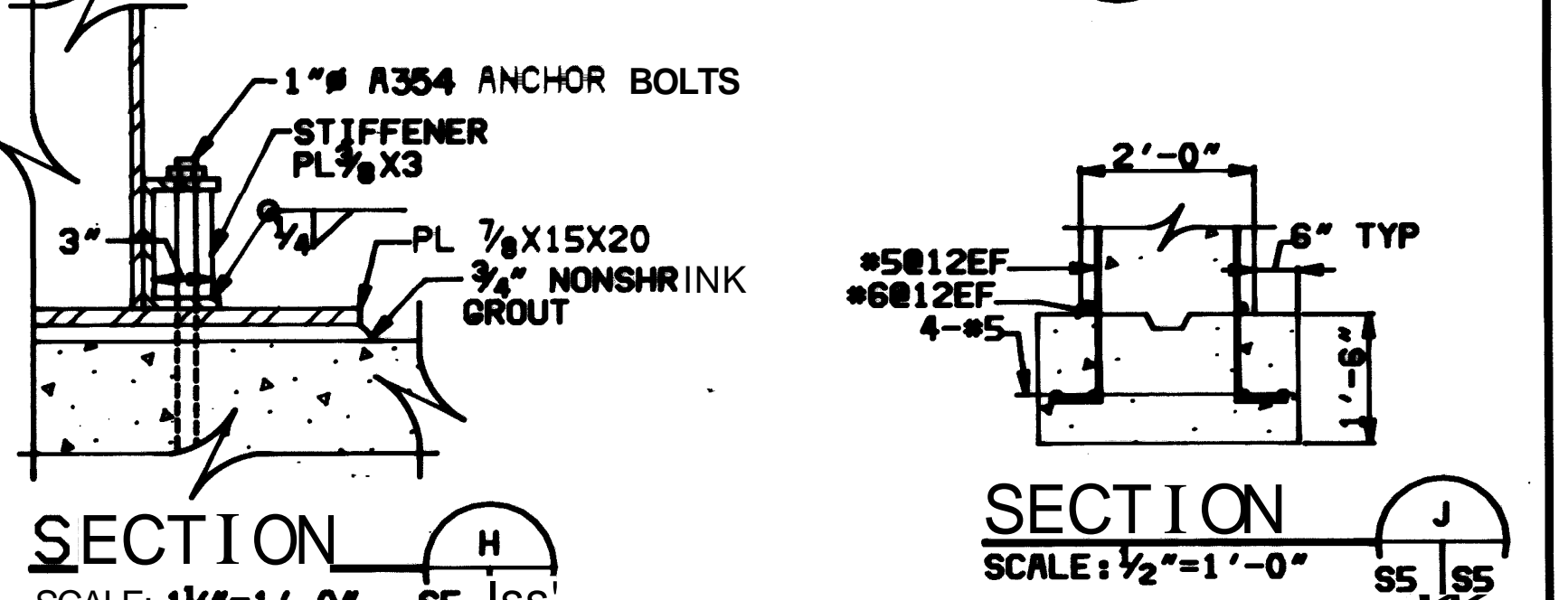
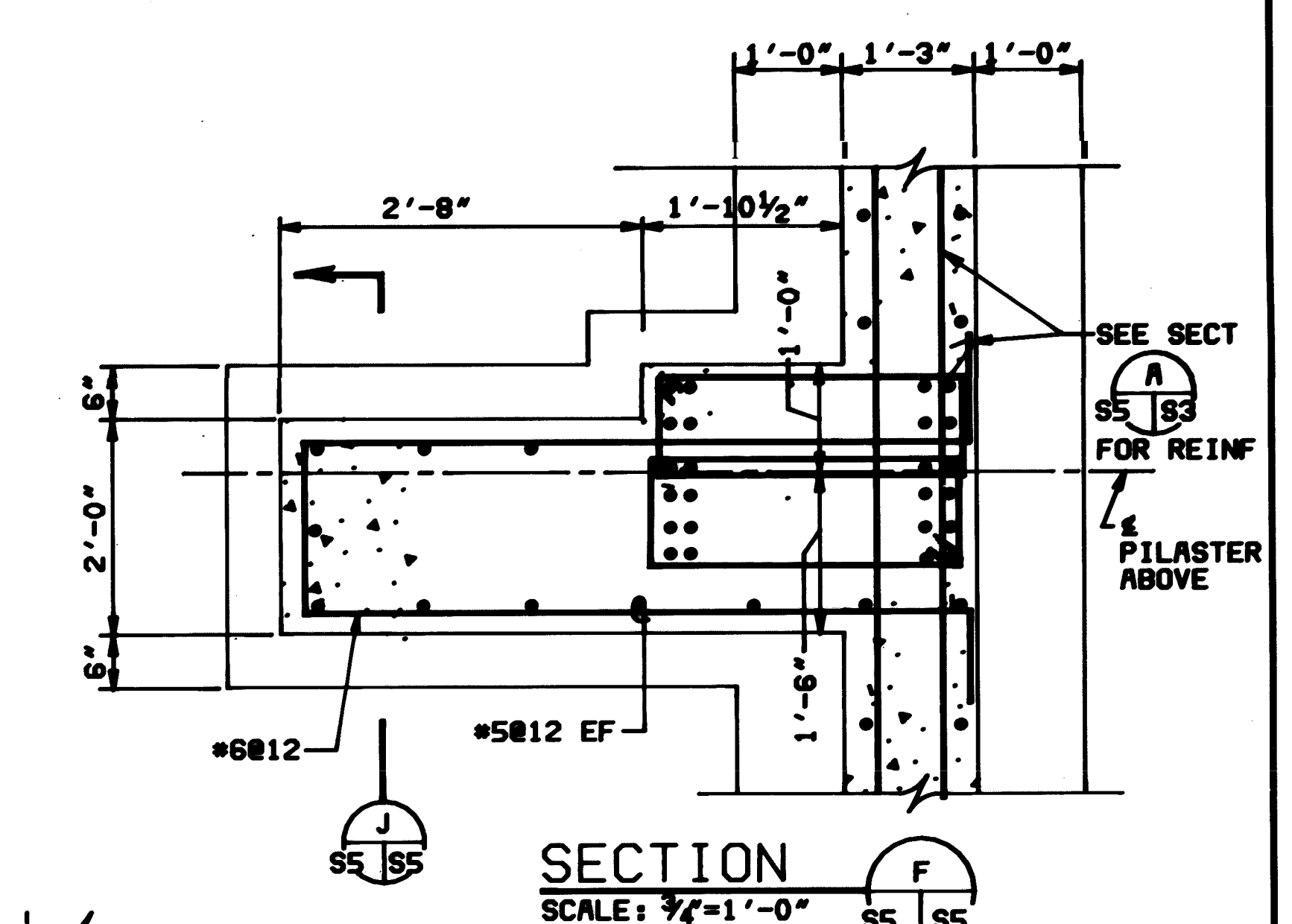
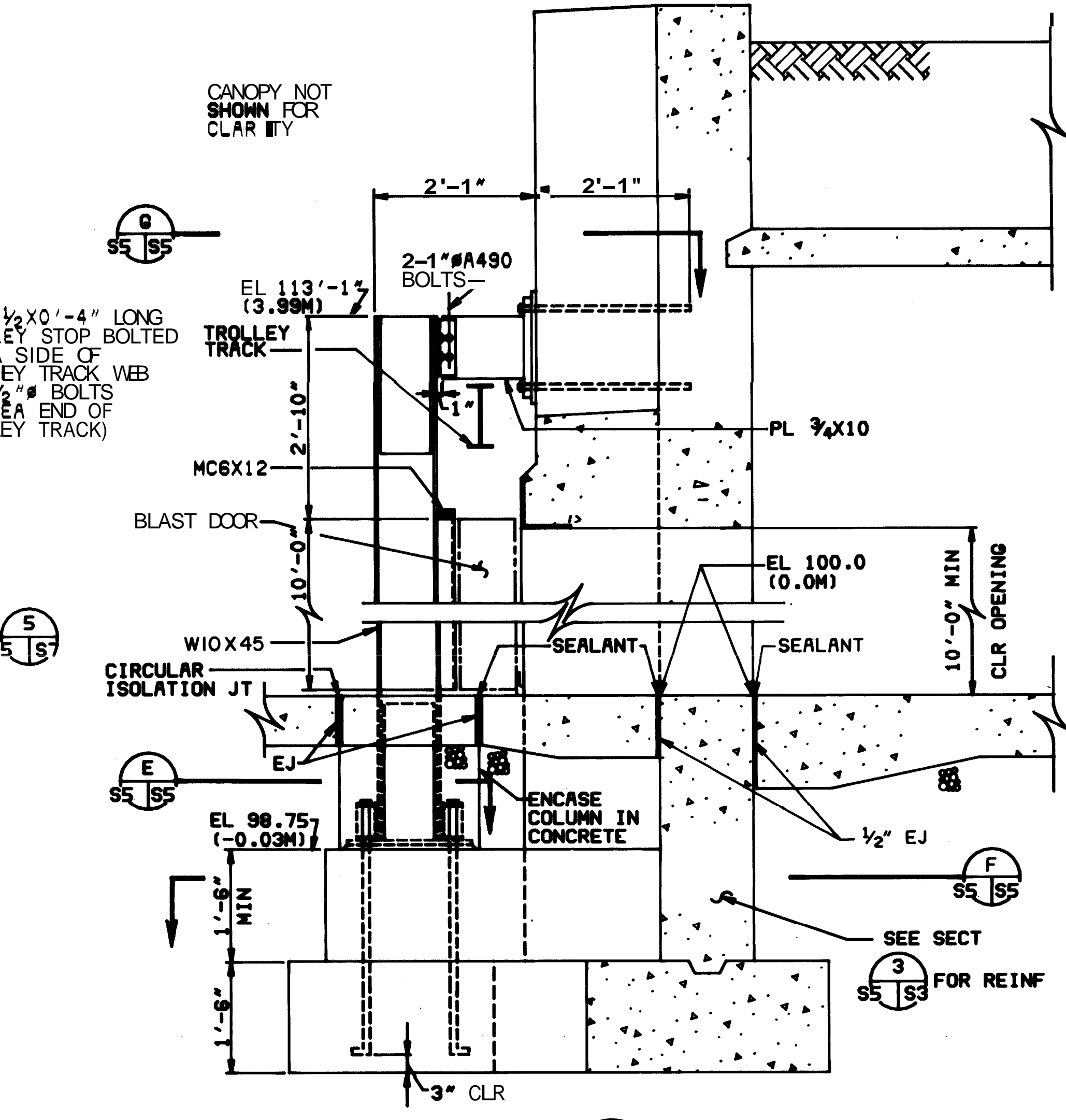
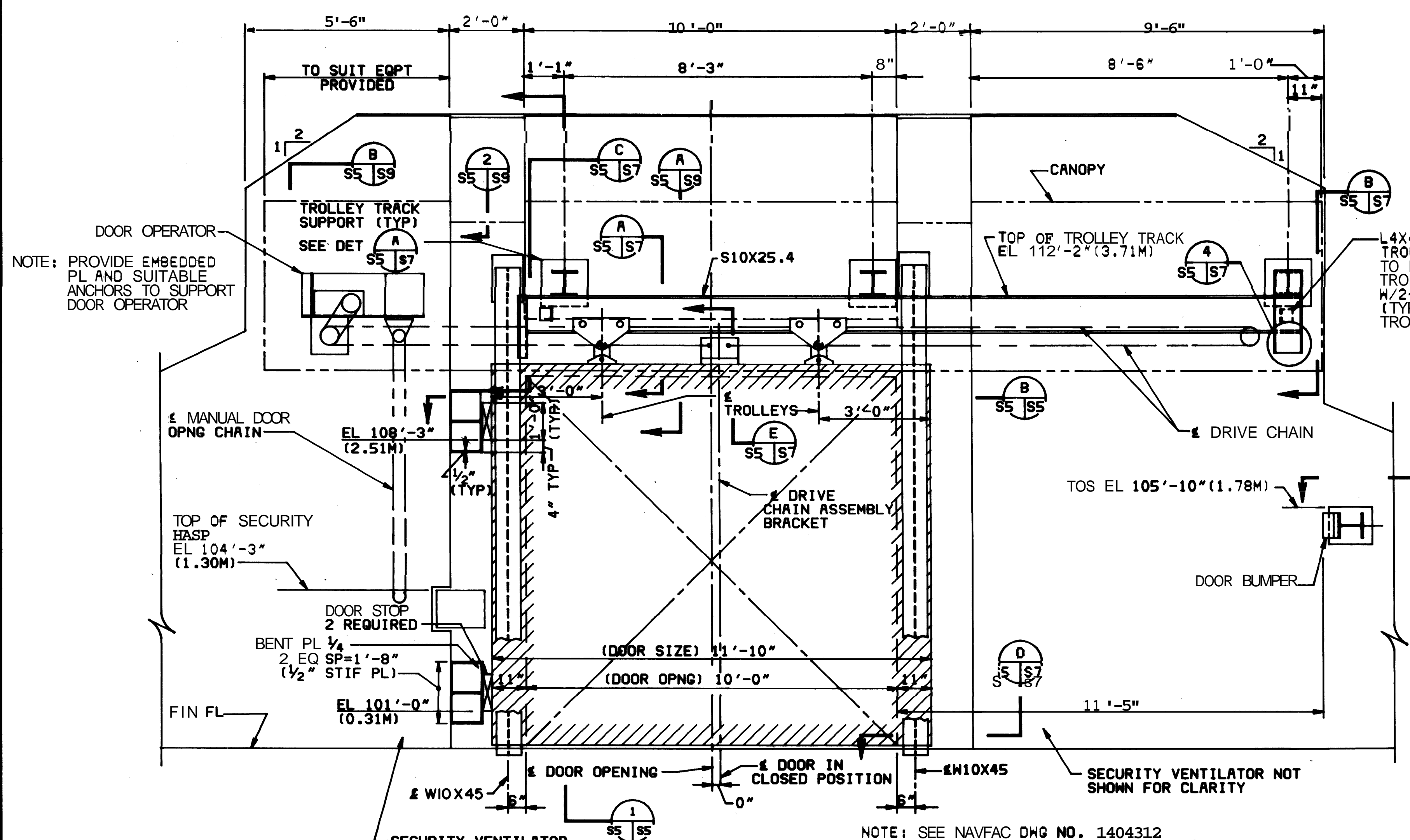
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOVALL STREET
ALEXANDRIA, VA. 22304

STANDARD
EARTH-COVERED CONCRETE ARCH MAGAZINE
STRUCTURAL
ARCH SECTION AND MISCELLANEOUS DETAILS

SIZE CODE IDENT. NO. NAVFAC DRAWING NO.
F 80091 1404314

CONTR. CONTR. NO.
SCALE AS NOTED SPEC. NFSS-MIG SHEET S2 OF

REVISIONS		PREP'D BY	DATE	APPROVED
LTR	DESCRIPTION			

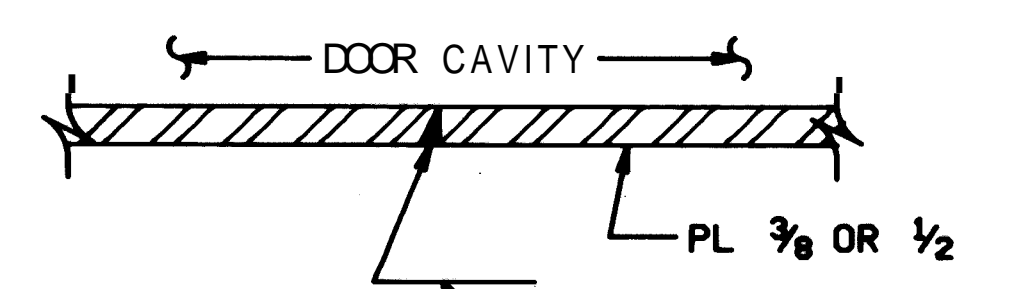


ELEVATION 1
SCALE: 1/2"=1'-0" S1 S5

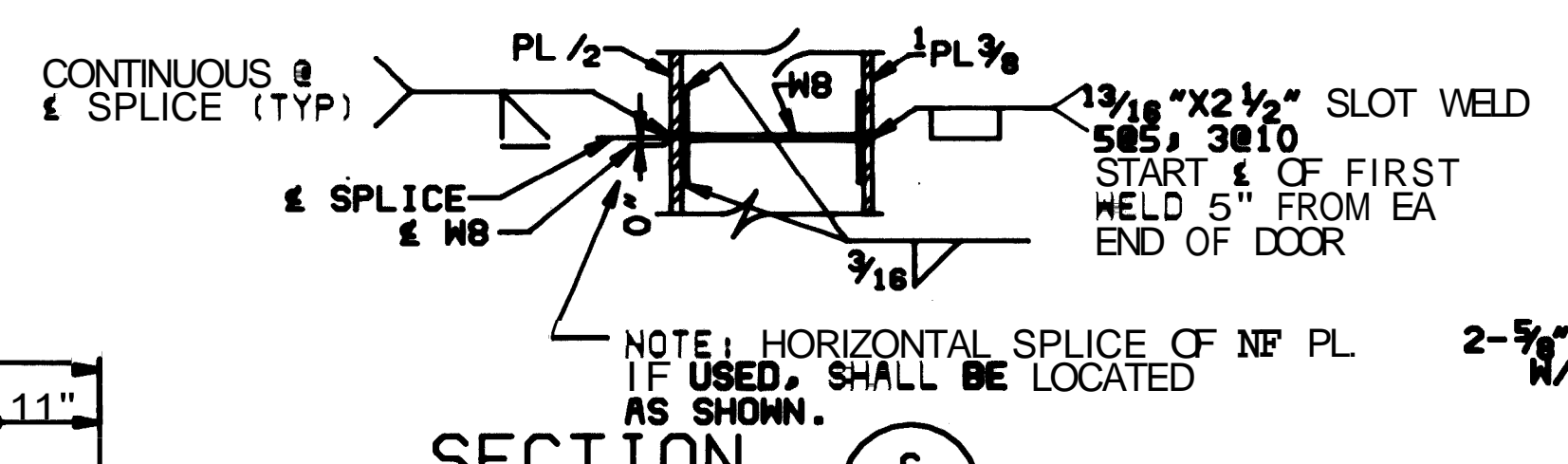
SECTION 1
SCALE: 3/4"=1'-0" S5 S5

SECTION H
SCALE: 1 1/2"=1'-0" S5 S5

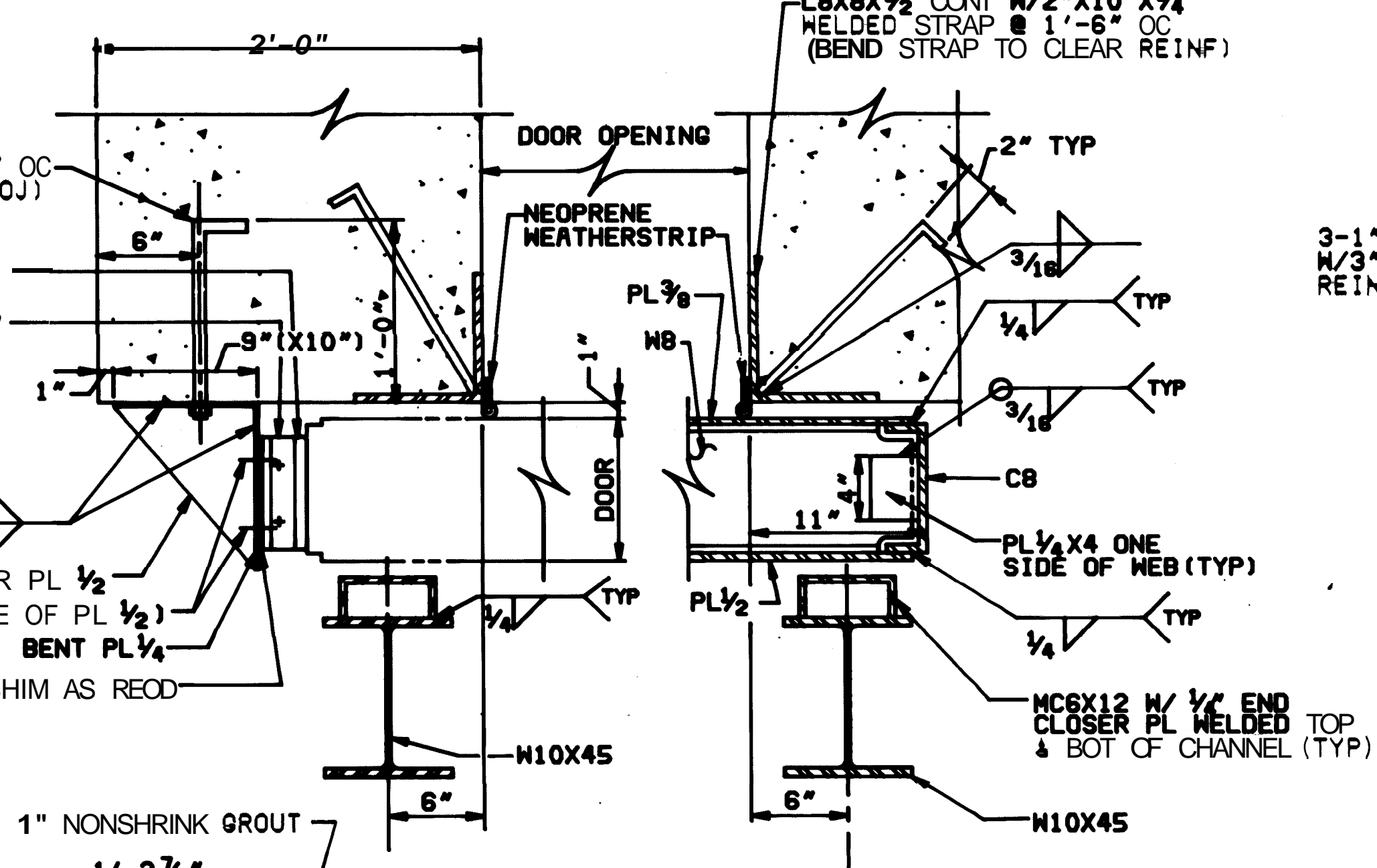
SECTION J
SCALE: 1/2"=1'-0" S5 S5



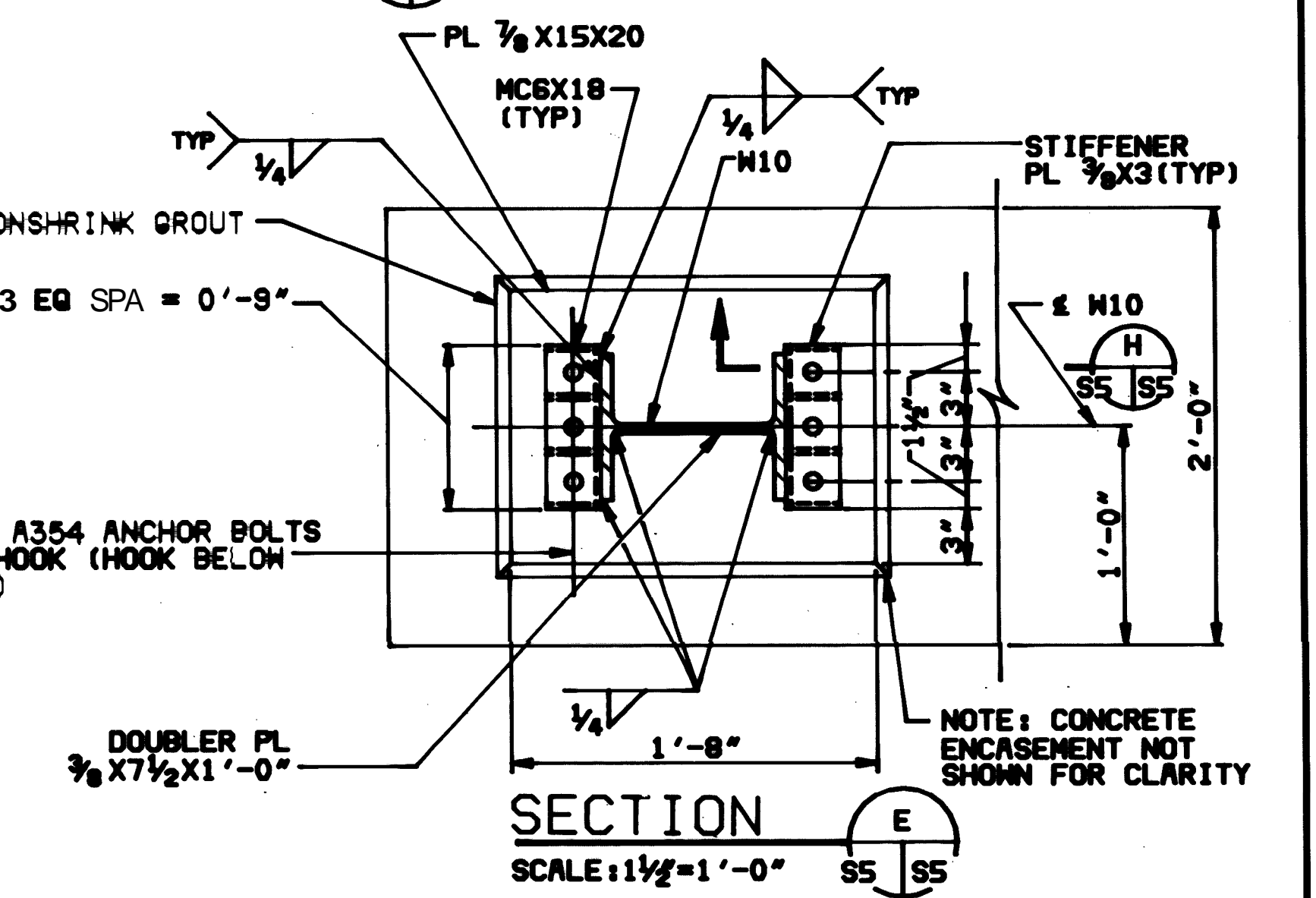
TYPICAL VERTICAL SPLICE
NO SCALE



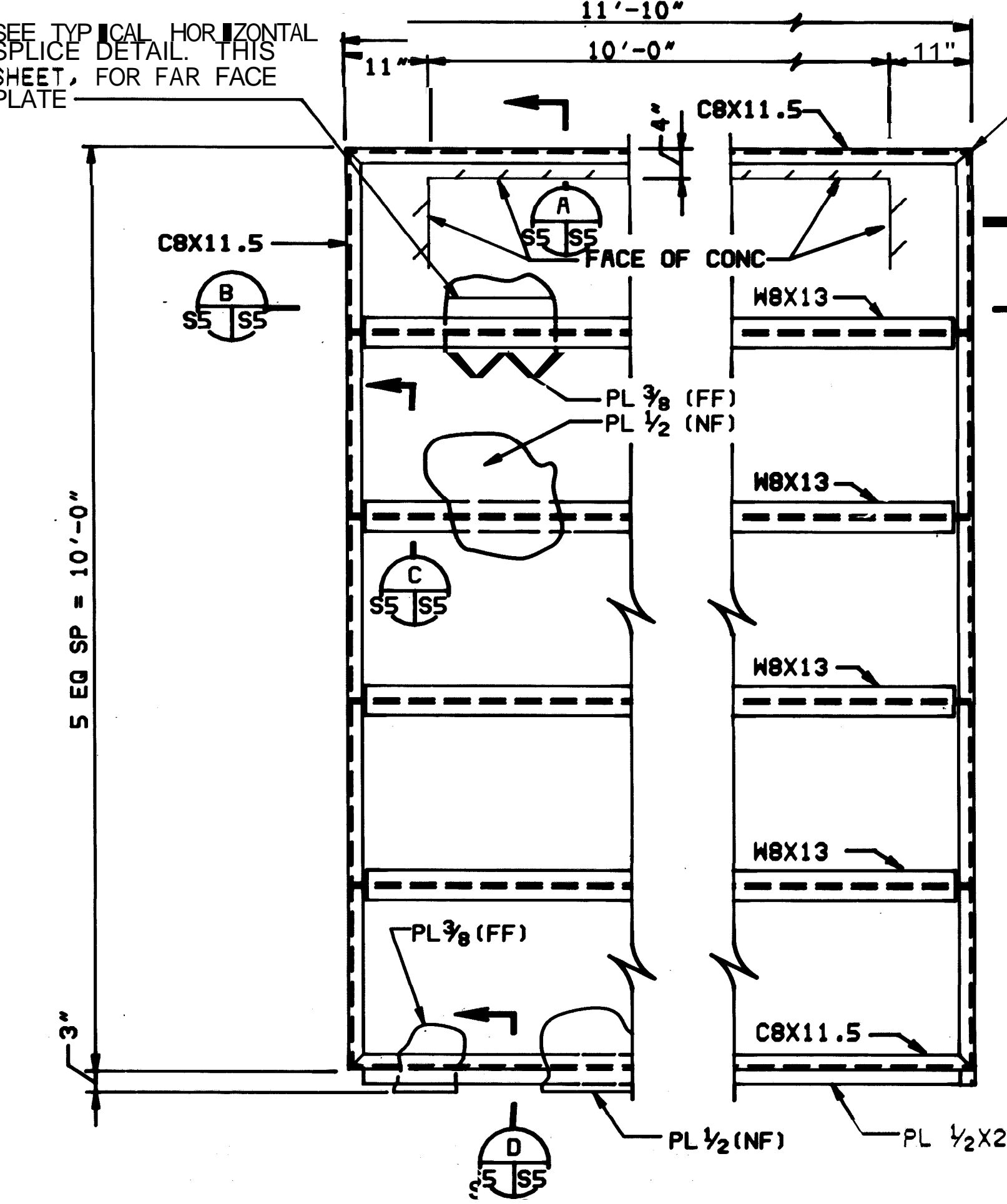
SECTION C
SCALE: 1 1/2"=1'-0" S5 S5



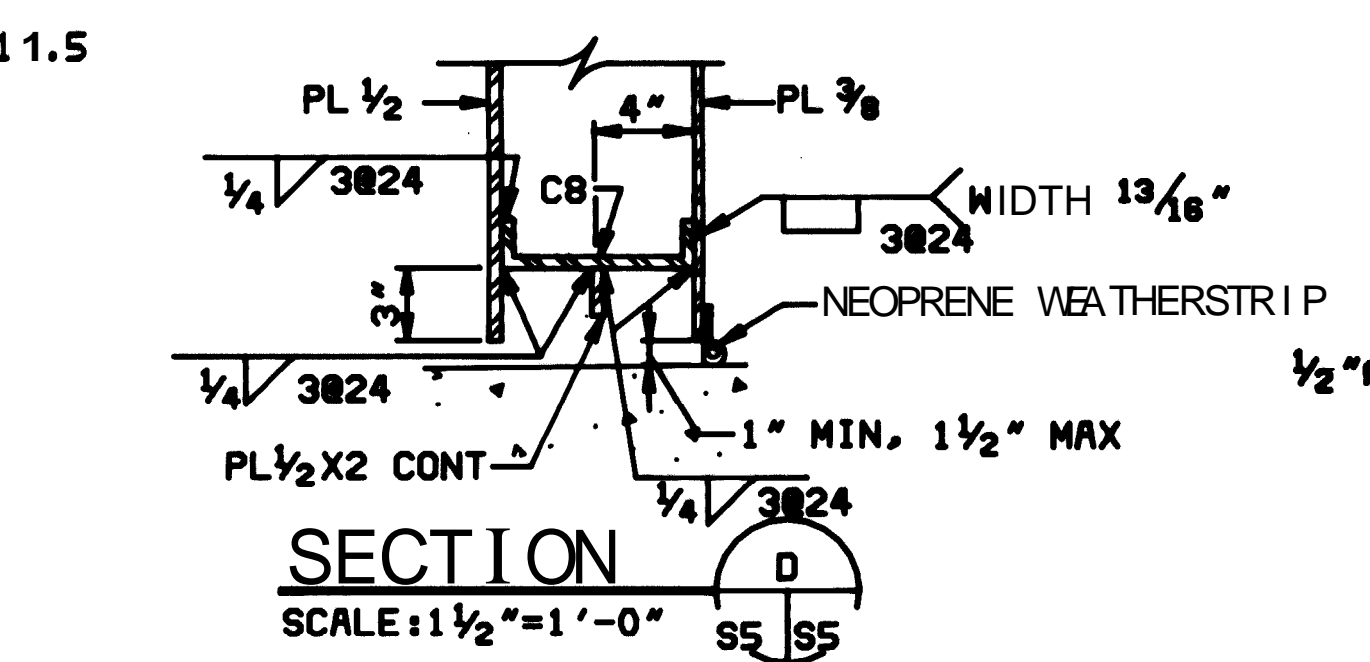
SECTION B
SCALE: 1 1/2"=1'-0" S5 S5



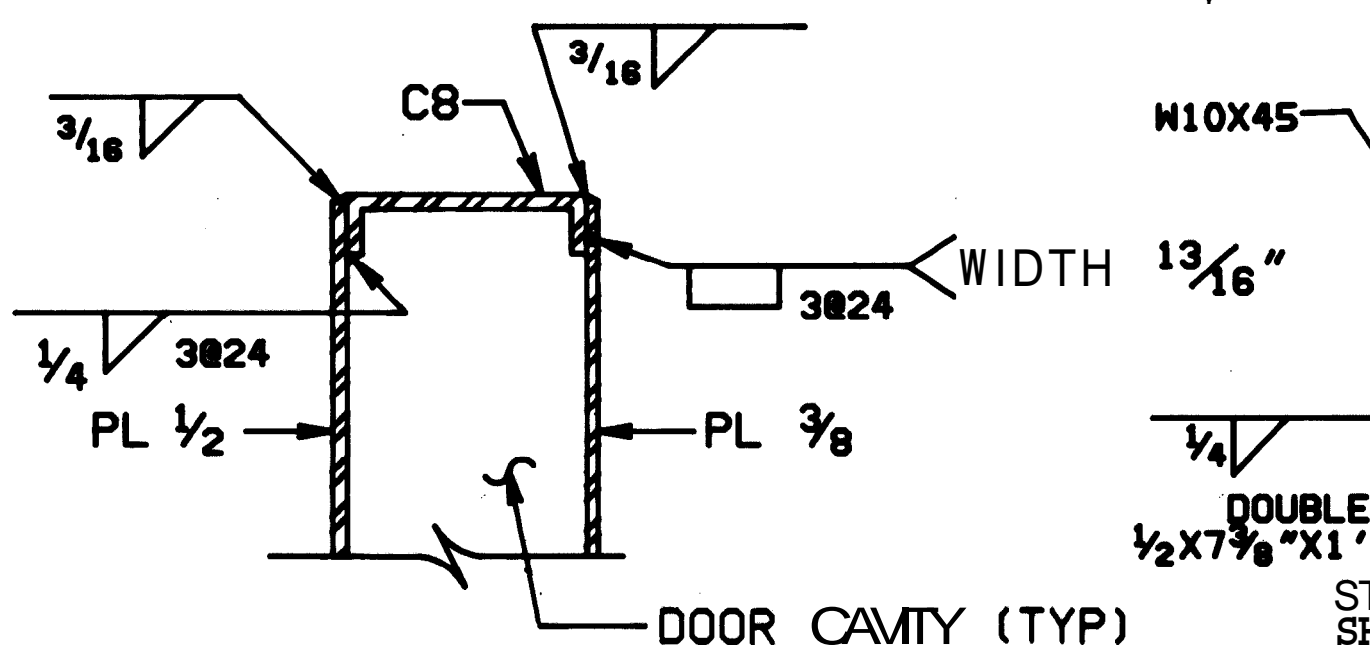
SECTION E
SCALE: 1 1/2"=1'-0" S5 S5



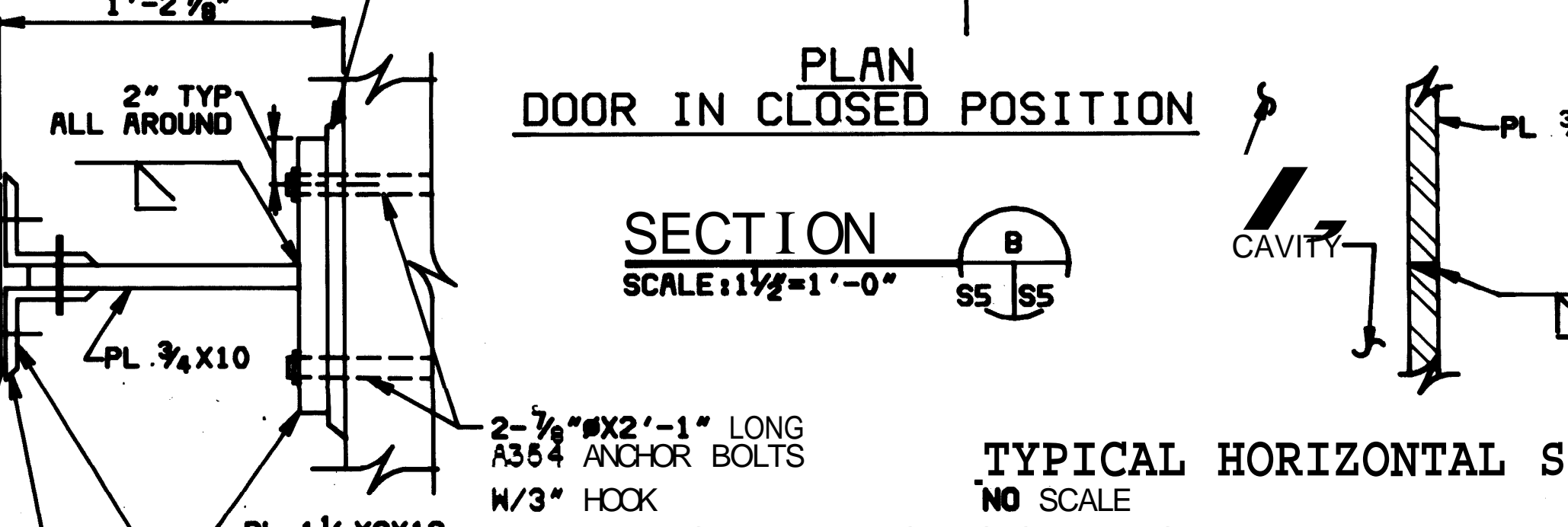
FRONT ELEVATION
DOOR FRAMING FOR 10'-0" WIDE DOOR OPNG
SCALE: 3/4"=1'-0"



SECTION D
SCALE: 1 1/2"=1'-0" S5 S5



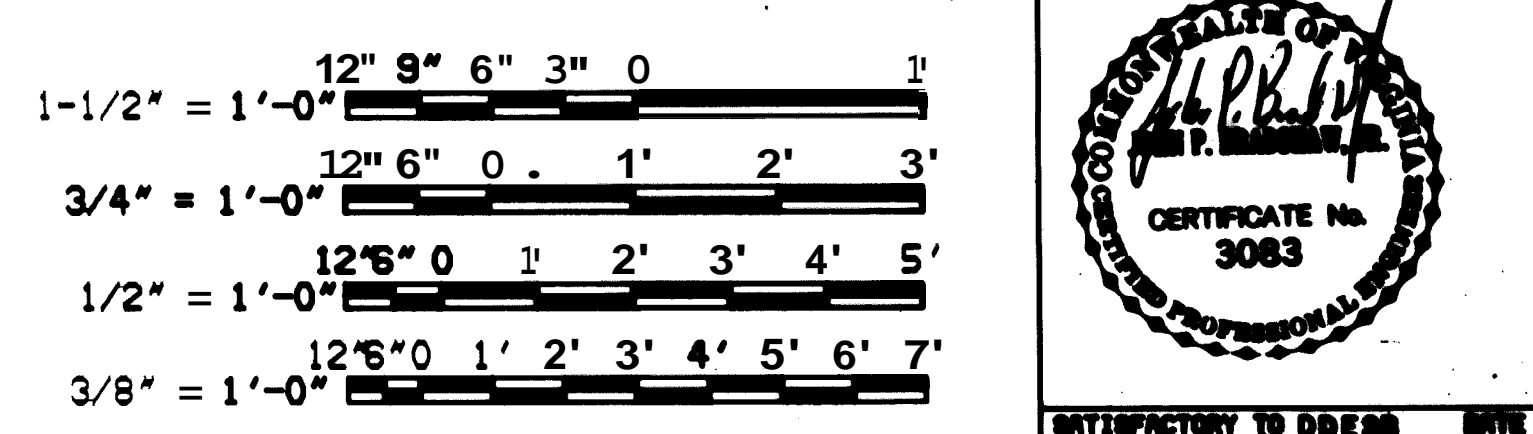
SECTION A
SCALE: 1 1/2"=1'-0" S5 S5



SECTION G
SCALE: 1 1/2"=1'-0" S5 S5

SECTION B
SCALE: 1 1/2"=1'-0" S5 S5

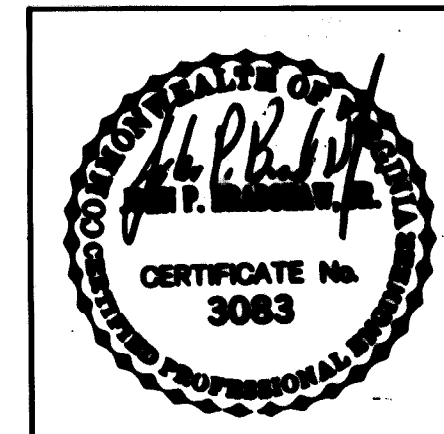
TYPICAL HORIZONTAL SPLICE
NO SCALE
GRAPHIC SCALES



- NOTES:**
- VERTICAL SPLICES IN DOOR PLATES, IF USED, SHALL BE SPACED APART A MIN OF 5'-0", AND SHALL BE CONTINUOUS FULL DOOR HEIGHT.
 - LOCATIONS OF ALL SPLICES IN DOOR PLATES SHALL BE SHOWN ON SHOP DRAWINGS.
 - SEE NAVFAC DNG NO. 1404310 & NO. 1404311 FOR ABBREVIATIONS.

METRIC CONVERSIONS			
3/16" = 5MM	3" = 76MM	1'-1" = 330MM	3'-0" = 914MM
1/4" = 6MM	3 1/2" = 89MM	1'-2" = 356MM	4'-0" = 1220MM
5/16" = 8MM	4" = 102MM	1'-8" = 86MM	4'-6" = 1350MM
3/8" = 10MM	5" = 127MM	MM	5'-0" = 1520MM
1/2" = 13MM	6" = 152MM	1'-6" = 457MM	5'-6" = 1670MM
5/8" = 16MM	6 1/4" = 158MM	1'-10" = 558MM	8'-3" = 2510MM
3/4" = 19MM	7" = 178MM	MM	8'-6" = 2591MM
13/16" = 21MM	8" = 203MM	2'-0" = 610MM	10'-0" = 2850MM
1" = 25MM	9" = 228MM	2'-1" = 635MM	
1 1/8" = 29MM	9 1/2" = 241MM	2'-2" = 660MM	11'-5" = 3480MM
1 1/4" = 32MM	10" = 254MM	2'-6" = 663MM	11'-11" = 3630MM
1 1/2" = 38MM	11" = 279MM	MM	
2" = 51MM	1'-0" = 305MM	2'-10" = 644MM	
2 1/2" = 64MM			

CHECK GRAPHIC SCALES BEFORE USING



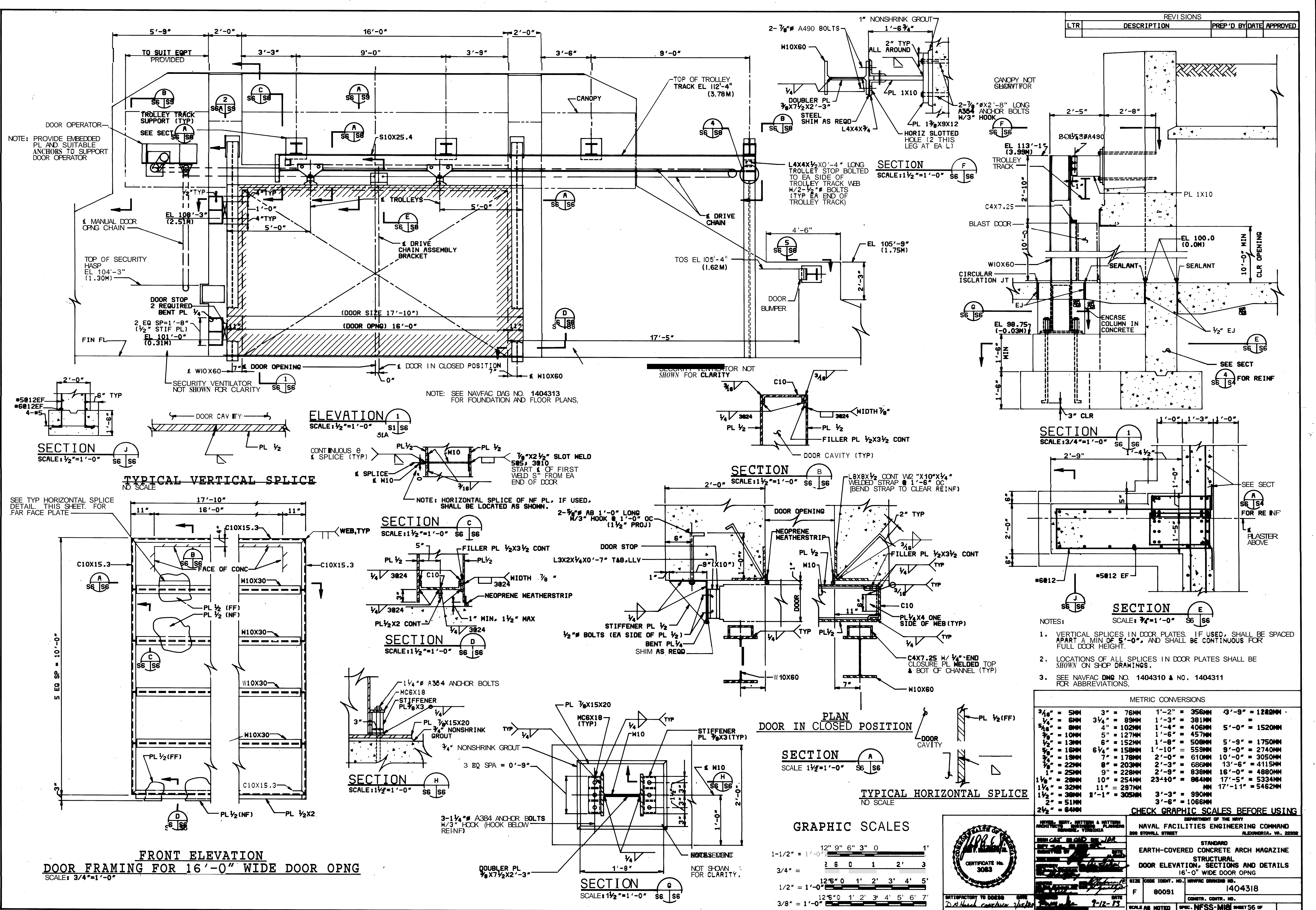
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
300 STOWELL STREET
ALEXANDRIA, VA. 22304

STANDARD
EARTH-COVERED CONCRETE ARCH MAGAZINE
STRUCTURAL
DOOR ELEVATIONS, SECTIONS AND DETAILS
10'-0" WIDE DOOR OPNG

SIZE: CODE IDENT. NO. NAVFAC DRAWING NO.
F 80091 1404317

CONSTR. CONTR. NO.
SCALE AS NOTED SPEC. NFSS-M18 SHEET 55 OF 55

REVISIONS			
LTR	DESCRIPTION	PREP'D BY	DATE APPROVED

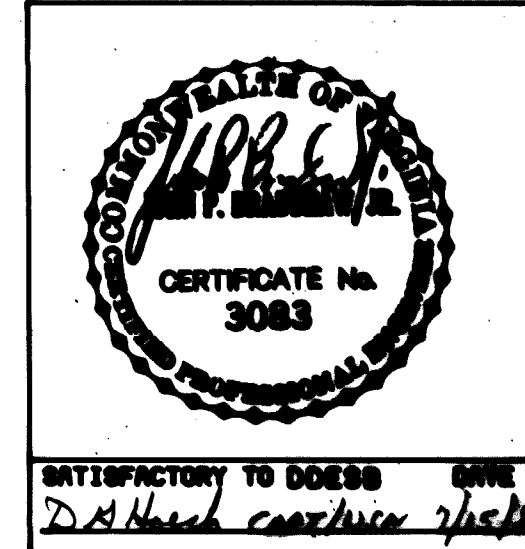
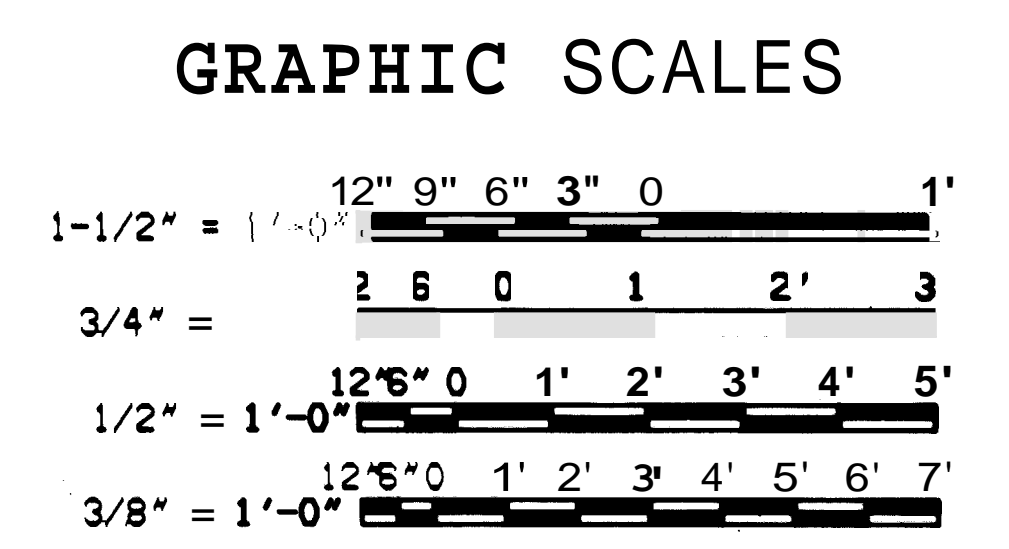


- NOTES:
1. VERTICAL SPLICES IN DOOR PLATES, IF USED, SHALL BE SPACED APART A MIN OF 5'-0", AND SHALL BE CONTINUOUS FOR FULL DOOR HEIGHT.
 2. LOCATIONS OF ALL SPLICES IN DOOR PLATES SHALL BE SHOWN ON SHOP DRAWINGS.
 3. SEE NAVFAC DAG NO. 1404310 & NO. 1404311 FOR ABBREVIATIONS.

METRIC CONVERSIONS

3/16" = 5MM	3" = 76MM	1'-2" = 356MM	3'-9" = 1200MM
1/4" = 6MM	3 1/4" = 89MM	1'-3" = 381MM	5'-0" = 1520MM
5/16" = 8MM	4" = 102MM	1'-4" = 406MM	5'-9" = 1750MM
3/8" = 10MM	5" = 127MM	1'-6" = 457MM	9'-0" = 2740MM
1/2" = 13MM	6" = 152MM	1'-8" = 508MM	9'-9" = 3050MM
5/8" = 16MM	6 1/4" = 158MM	1'-10" = 559MM	13'-6" = 4115MM
3/4" = 19MM	7" = 178MM	2'-0" = 610MM	17'-5" = 5334MM
7/8" = 22MM	8" = 203MM	2'-3" = 686MM	17'-11" = 5462MM
1" = 25MM	9" = 228MM	2'-6" = 762MM	
1 1/8" = 28MM	10" = 254MM	2'-9" = 838MM	
1 1/4" = 32MM	11" = 279MM	23'-0" = 864MM	
1 1/2" = 38MM	1 1/8" = 305MM	3'-3" = 990MM	
1 3/4" = 44MM		3'-6" = 1066MM	

CHECK GRAPHIC SCALES BEFORE USING



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOWELL STREET
ALEXANDRIA, VA. 22304

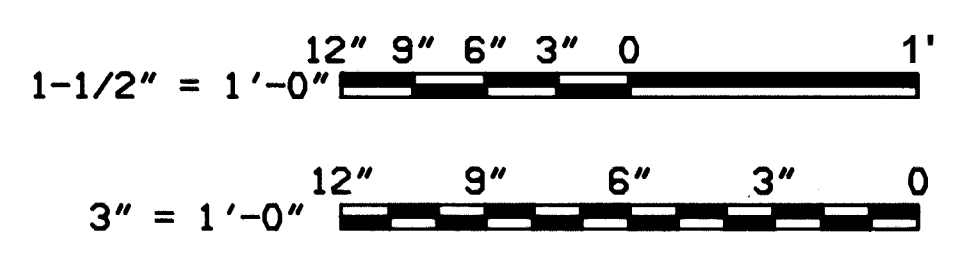
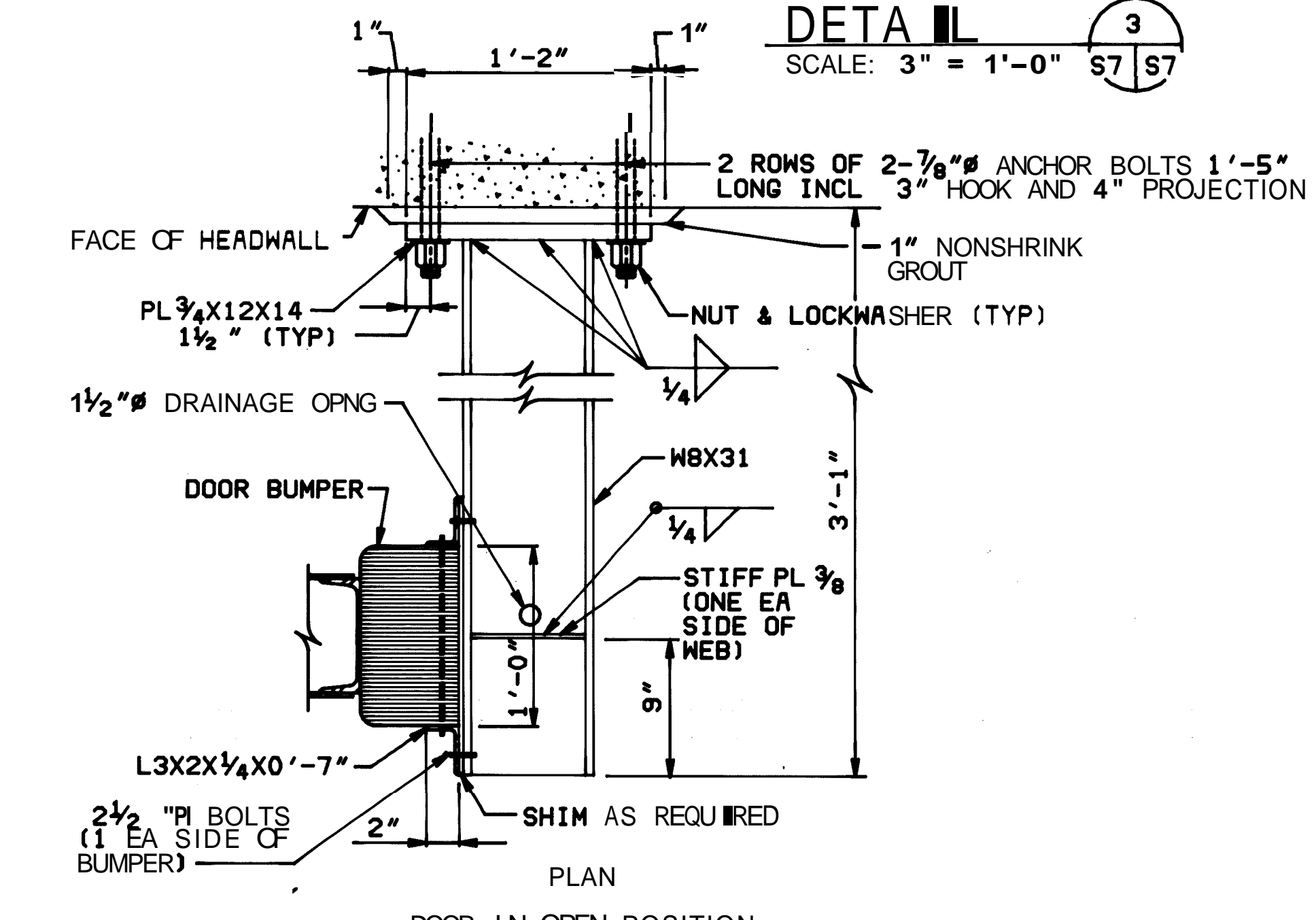
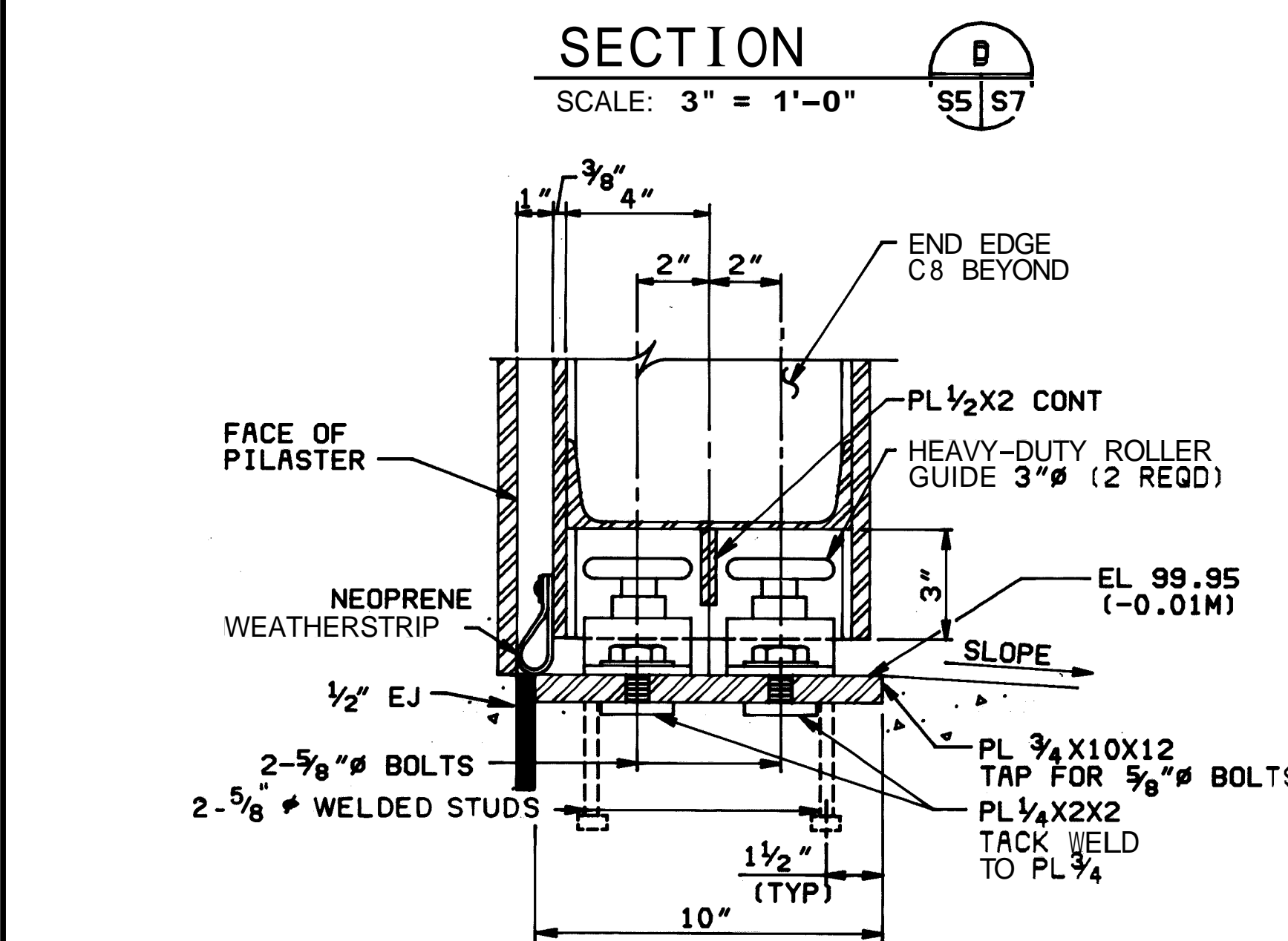
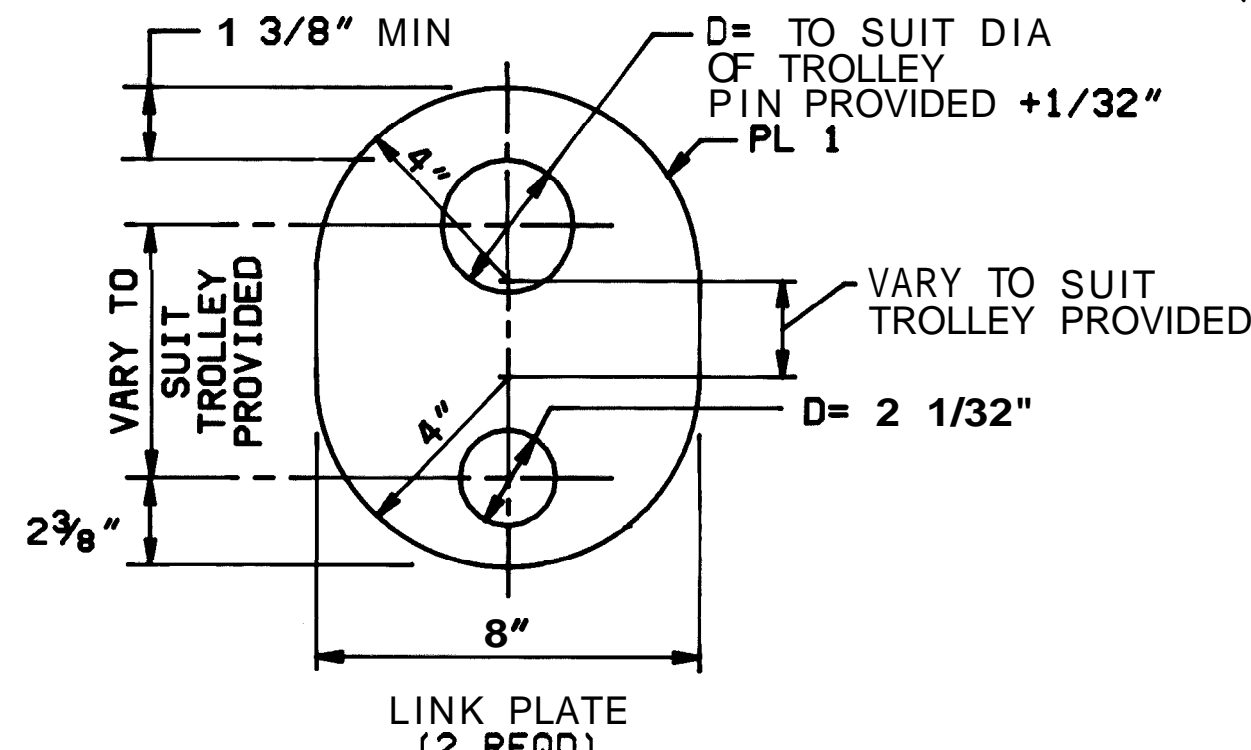
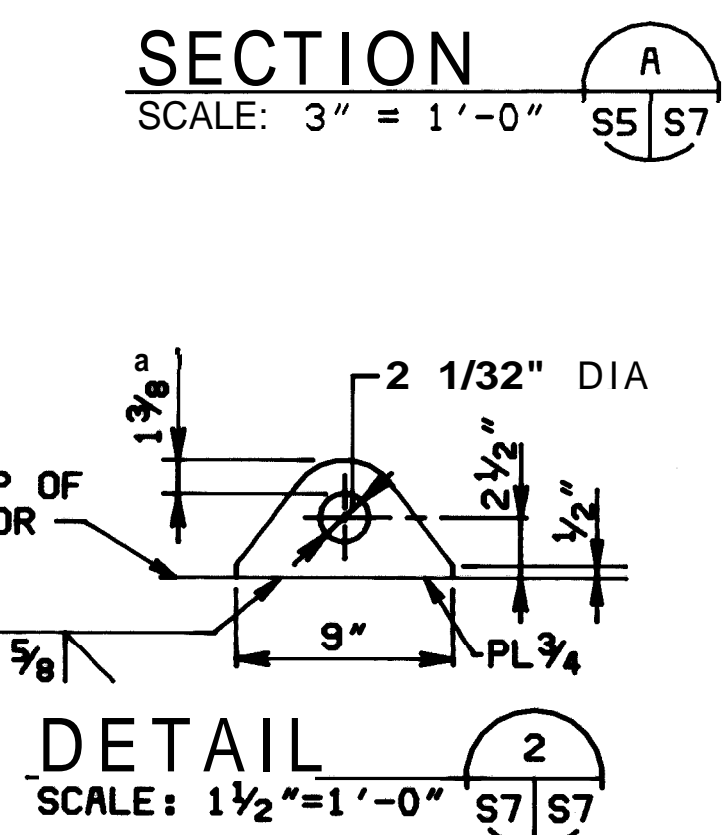
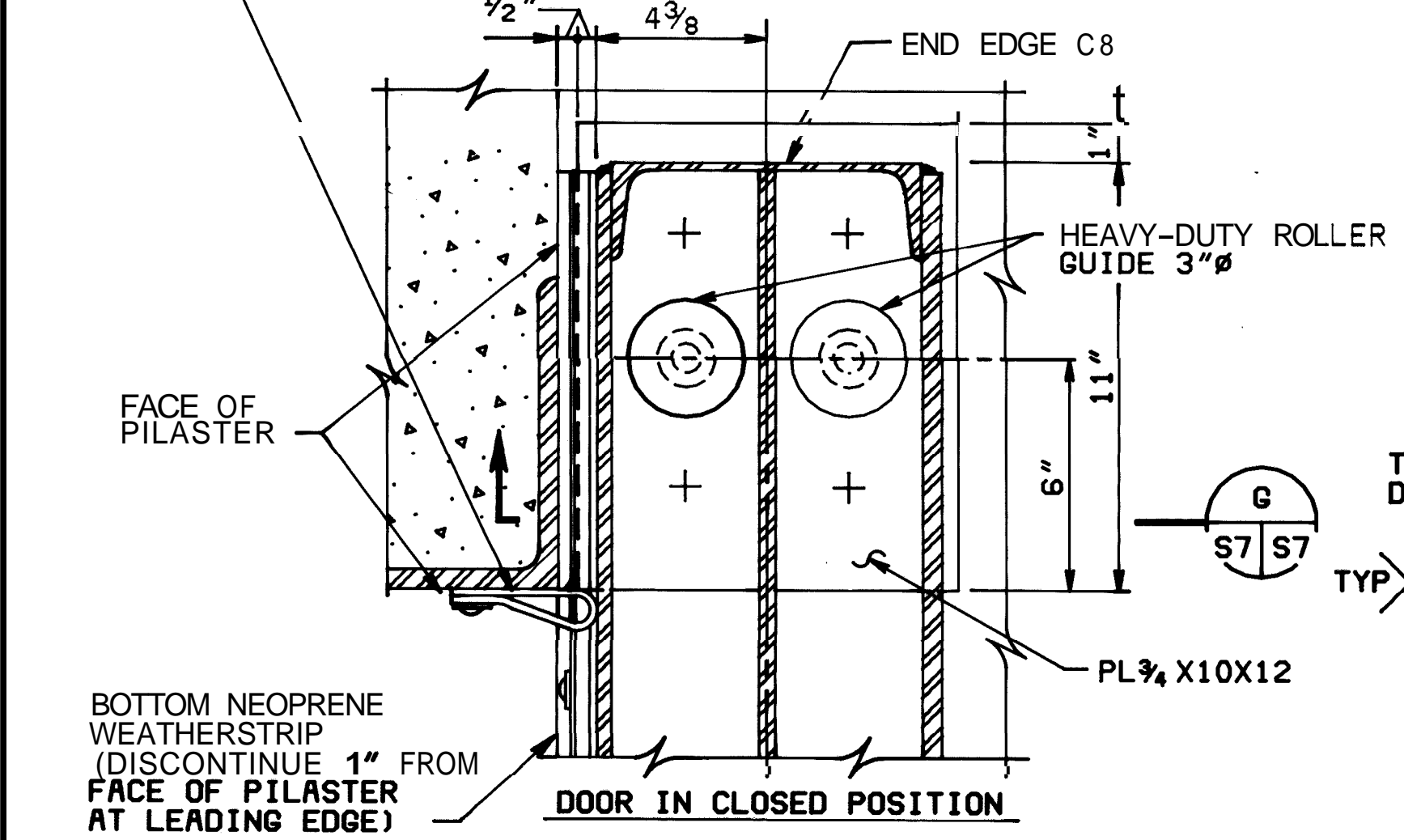
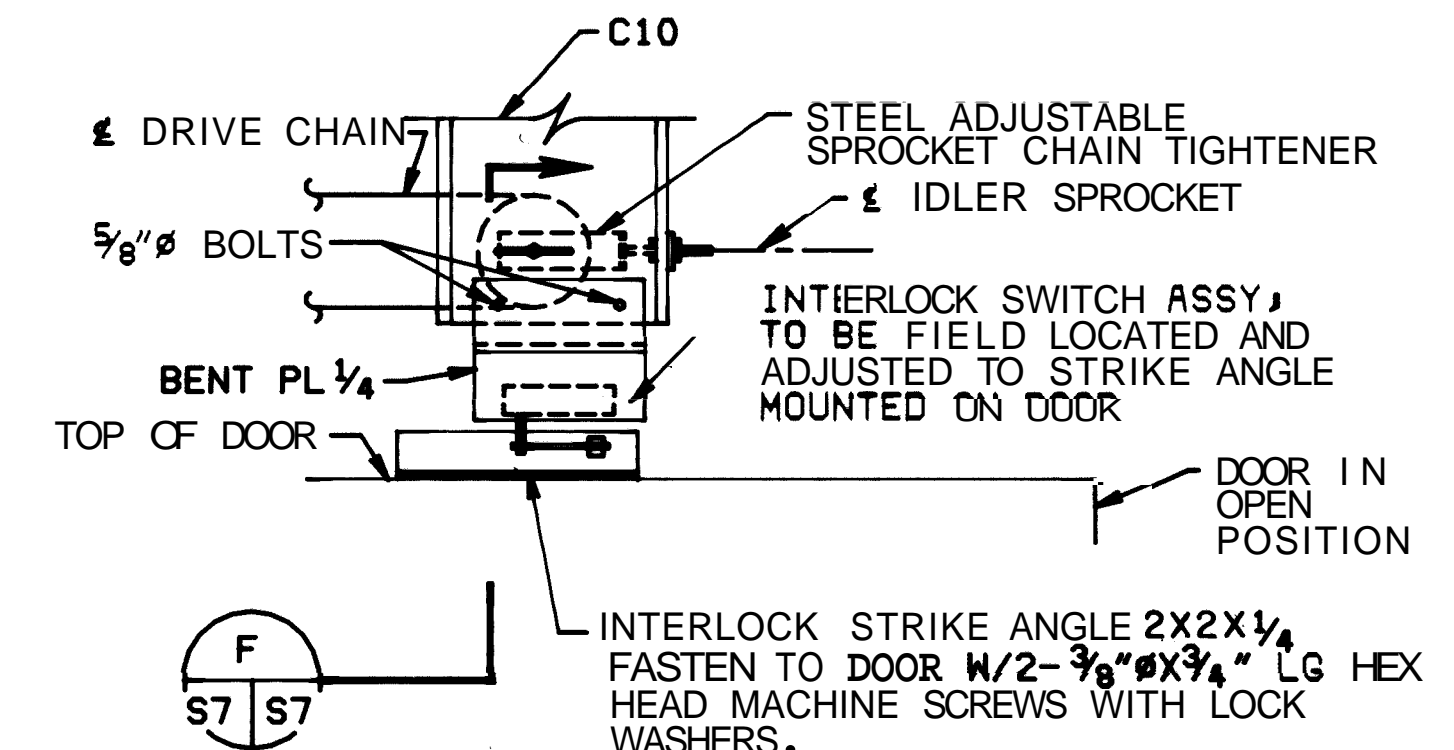
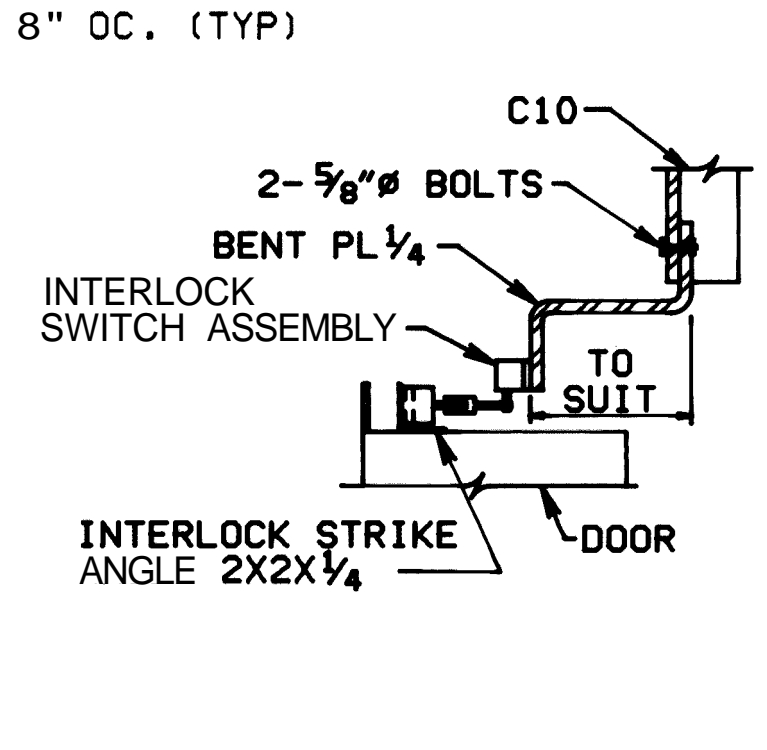
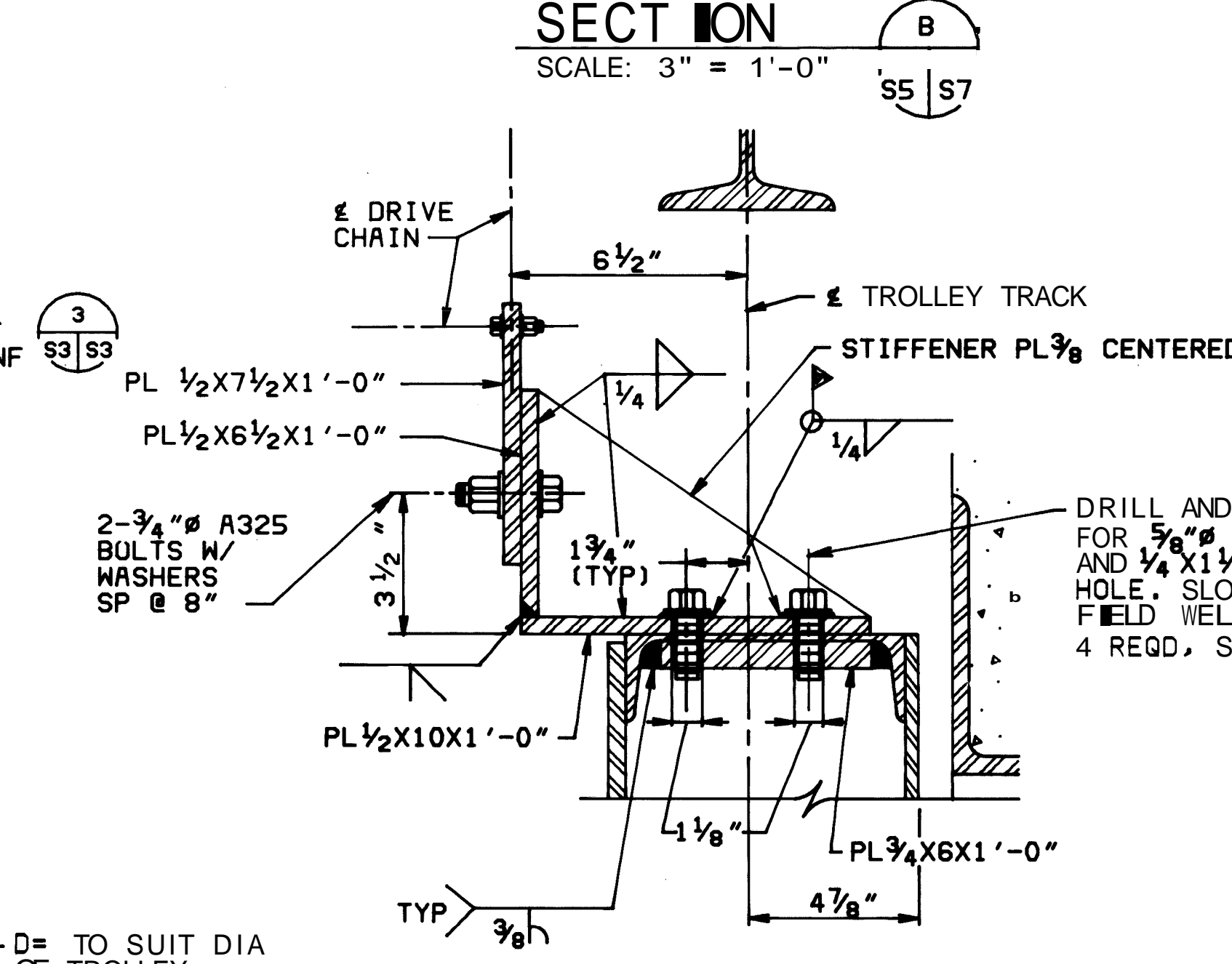
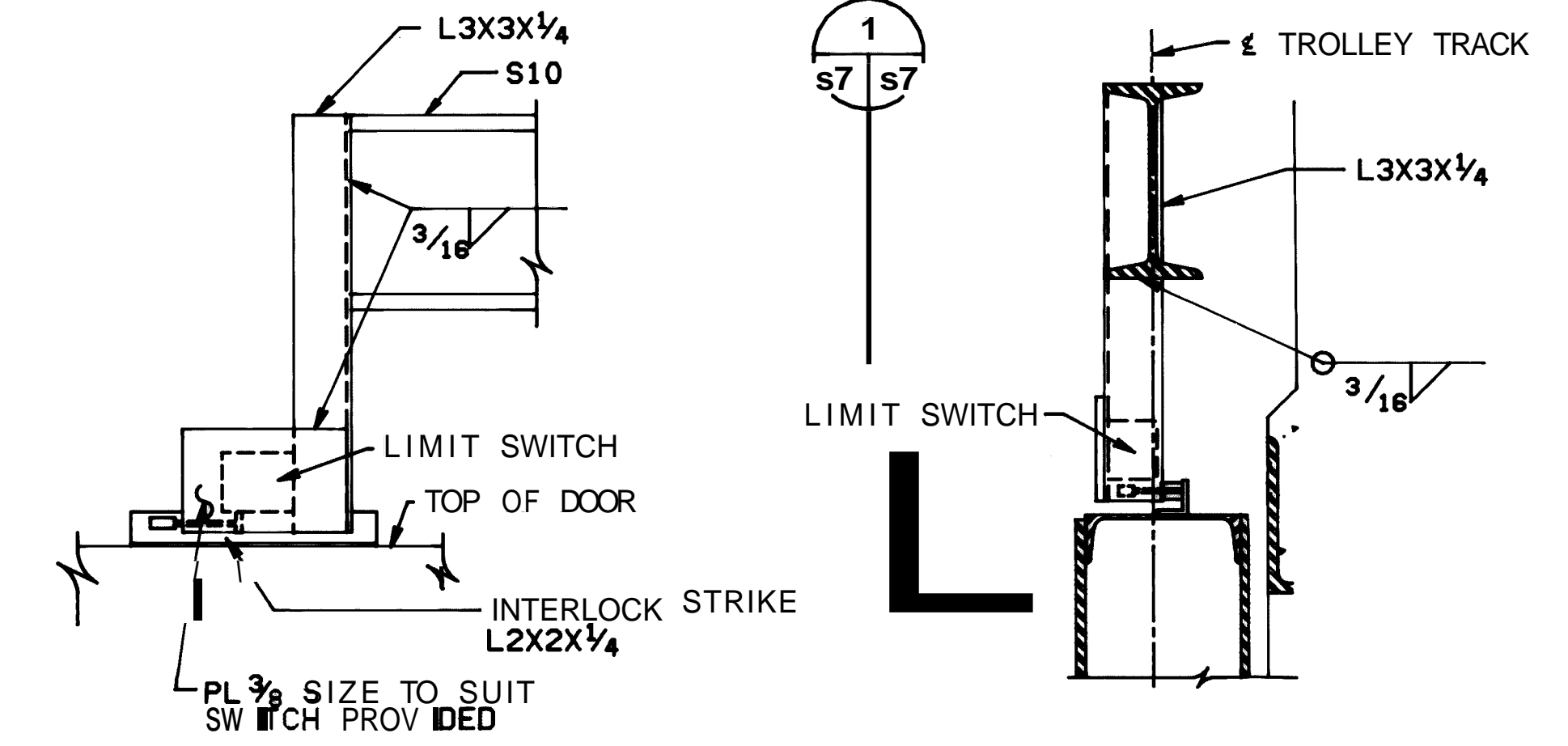
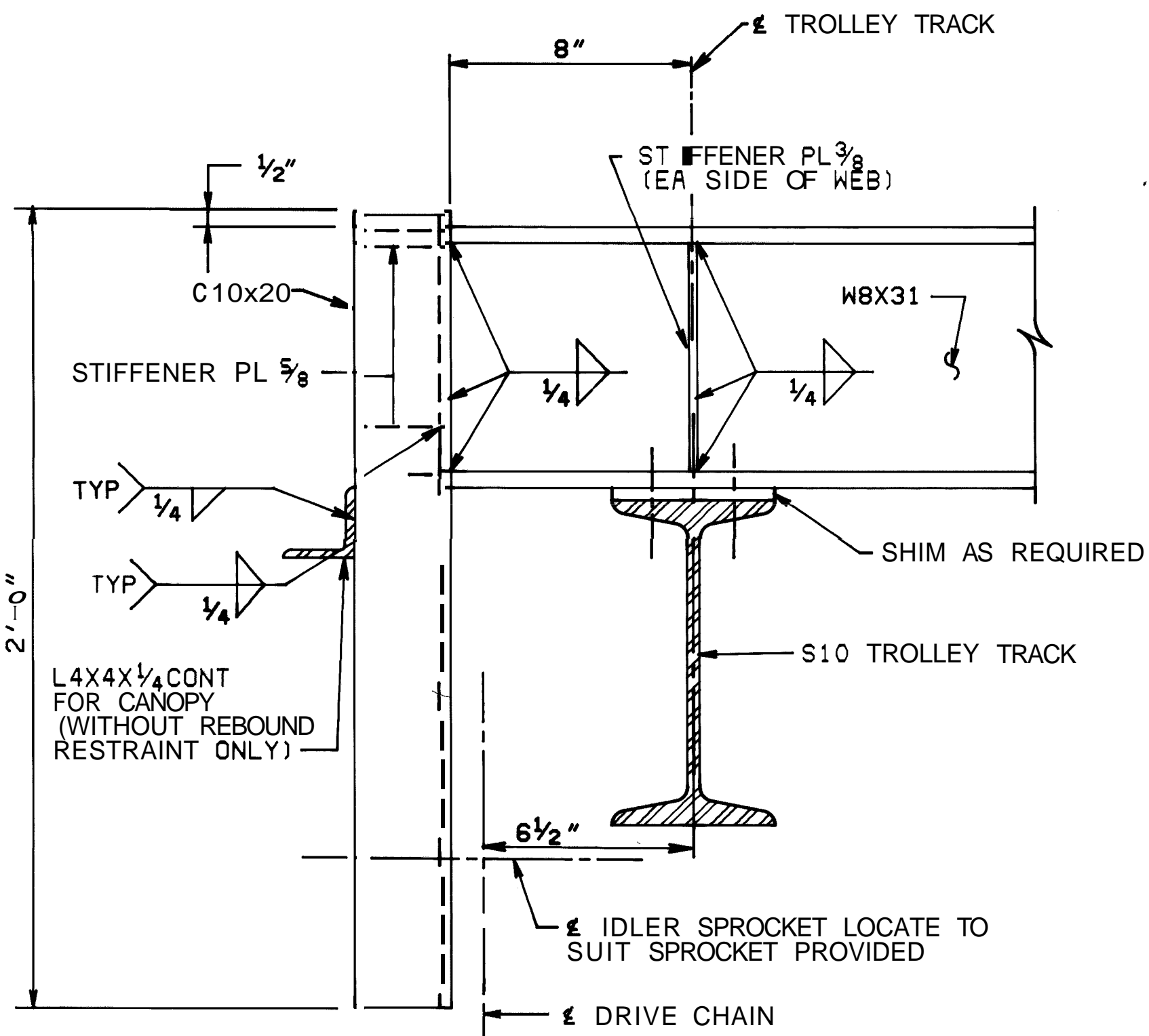
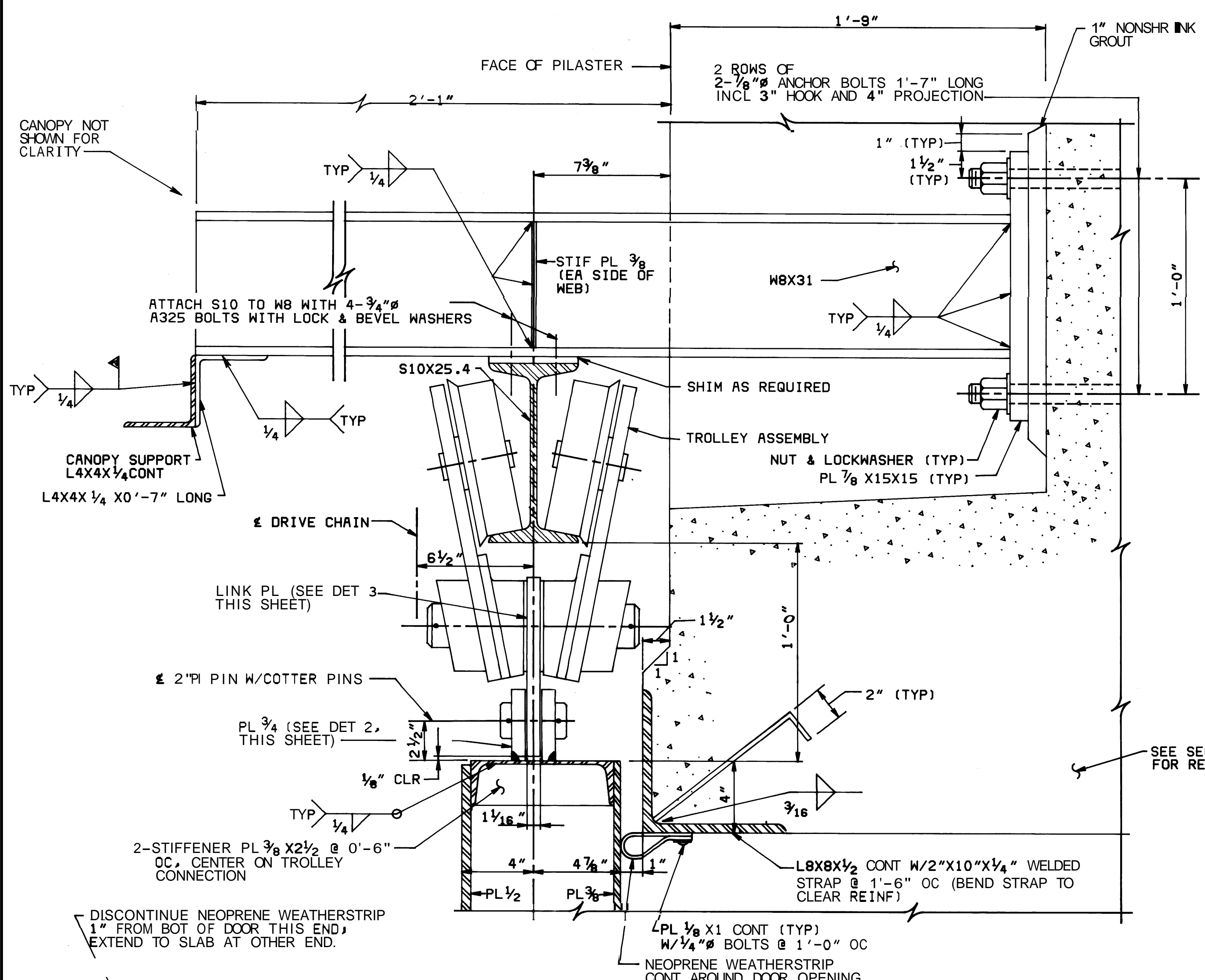
STANDARD
EARTH-COVERED CONCRETE ARCH MAGAZINE
STRUCTURAL
DOOR ELEVATION, SECTIONS AND DETAILS
16'-0" WIDE DOOR OPNG

SIZE CODE IDENT. NO. NFFS-MS-1040318
F 90091 1040318

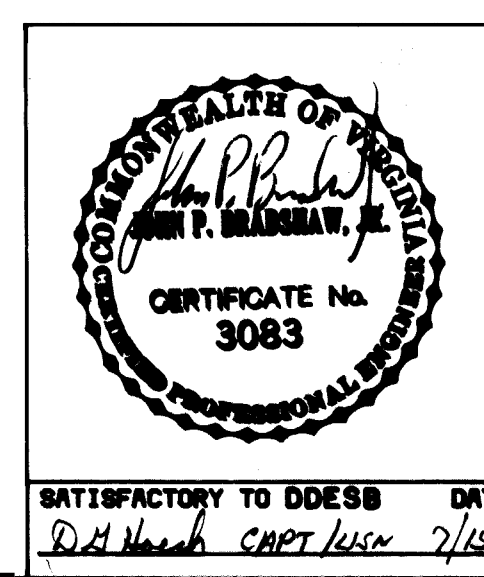
CONSTR. CONTR. NO. 9-12-13

SCALE AS NOTED SPEC. NFFS-M18 SHEET S6 OF

REVISIONS			
LTR	DESCRIPTION	PREP'D BY	DATE APPROVED



METRIC CONVERSIONS			
1/32" = 1MM	1/8" = 3MM	1/4" = 6MM	3/8" = 9MM
1/2" = 12MM	5/8" = 16MM	3/4" = 19MM	7/8" = 22MM
1" = 25MM	1 1/8" = 32MM	1 1/4" = 38MM	1 3/8" = 44MM
1 1/2" = 51MM	1 3/4" = 57MM	1 7/8" = 64MM	2" = 76MM
2 1/8" = 89MM	2 1/4" = 95MM	2 3/8" = 102MM	2 1/2" = 114MM
2 7/8" = 127MM	3" = 133MM	3 1/8" = 140MM	3 1/4" = 152MM
3 5/8" = 181MM	4" = 191MM	4 1/8" = 203MM	4 1/4" = 215MM
4 3/8" = 221MM	4 1/2" = 228MM	4 7/8" = 241MM	5" = 254MM
5 1/8" = 297MM	5 1/4" = 305MM	5 3/8" = 318MM	5 1/2" = 330MM
5 7/8" = 343MM	6" = 356MM	6 1/8" = 368MM	6 1/4" = 381MM
6 3/8" = 393MM	6 1/2" = 406MM	6 7/8" = 418MM	7" = 432MM
7 1/8" = 457MM	7 1/4" = 470MM	7 3/8" = 483MM	7 1/2" = 508MM
7 7/8" = 533MM	8" = 549MM	8 1/8" = 562MM	8 1/4" = 574MM
8 3/8" = 600MM	8 1/2" = 610MM	8 7/8" = 623MM	9" = 635MM
9 1/8" = 650MM	9 1/4" = 660MM	9 3/8" = 673MM	9 1/2" = 698MM
9 7/8" = 725MM	10" = 732MM	10 1/8" = 745MM	10 1/4" = 757MM
10 3/8" = 780MM	10 1/2" = 790MM	10 7/8" = 803MM	11" = 825MM



DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOWALL STREET ALEXANDRIA, VA. 22304

DESIGNER: R. M. WATTERS
CHECKED: J. A. RAY
DATE: 9-12-83

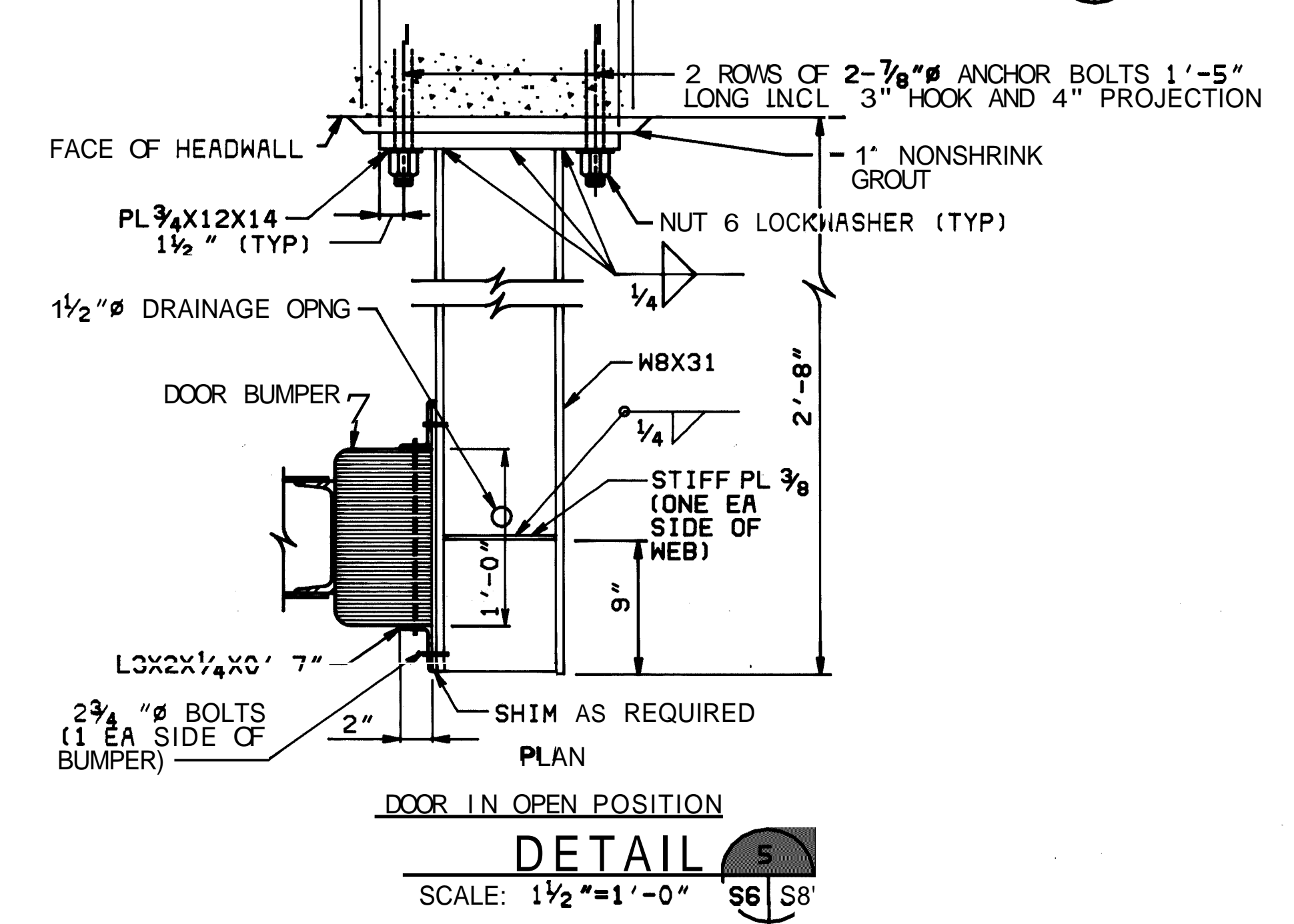
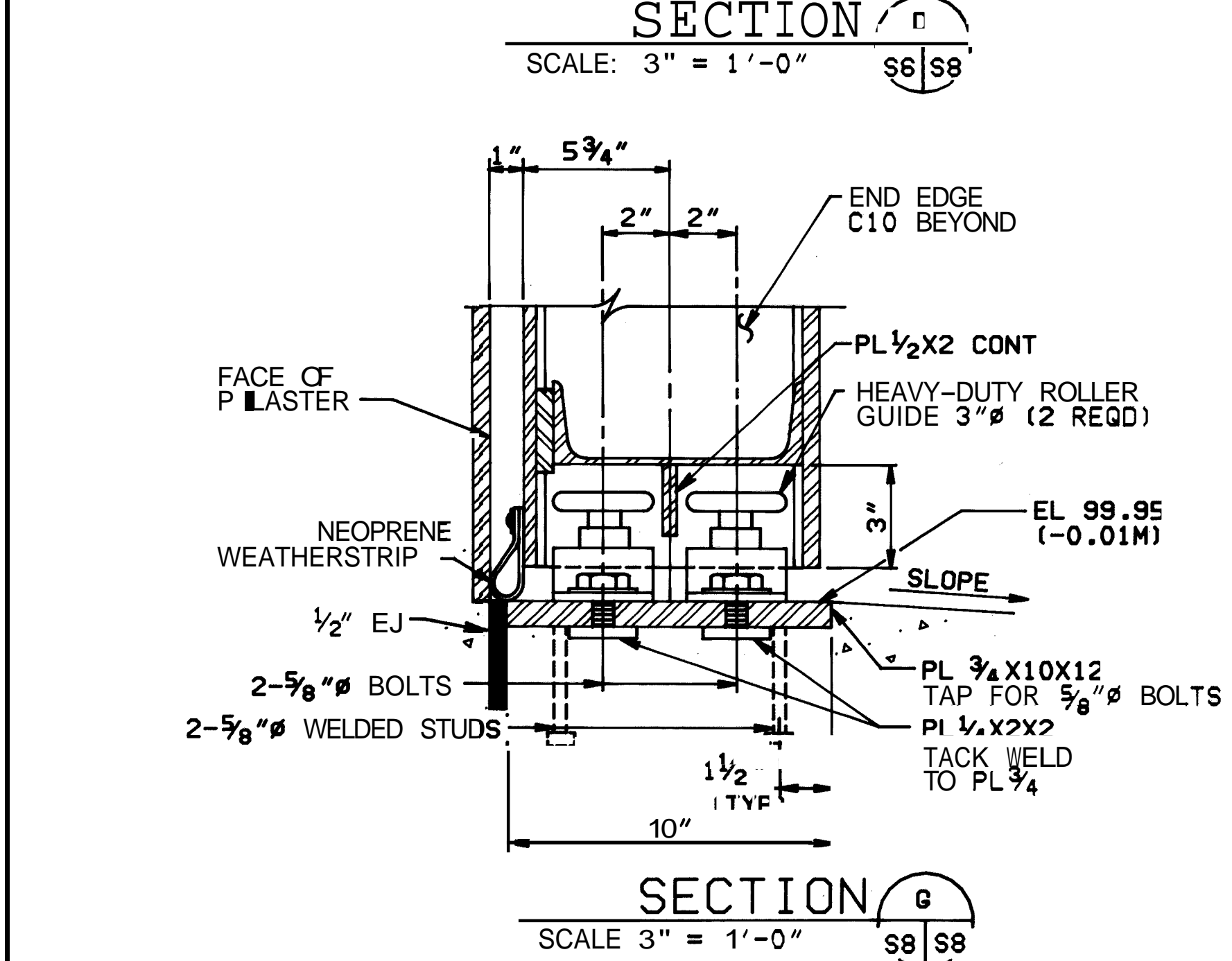
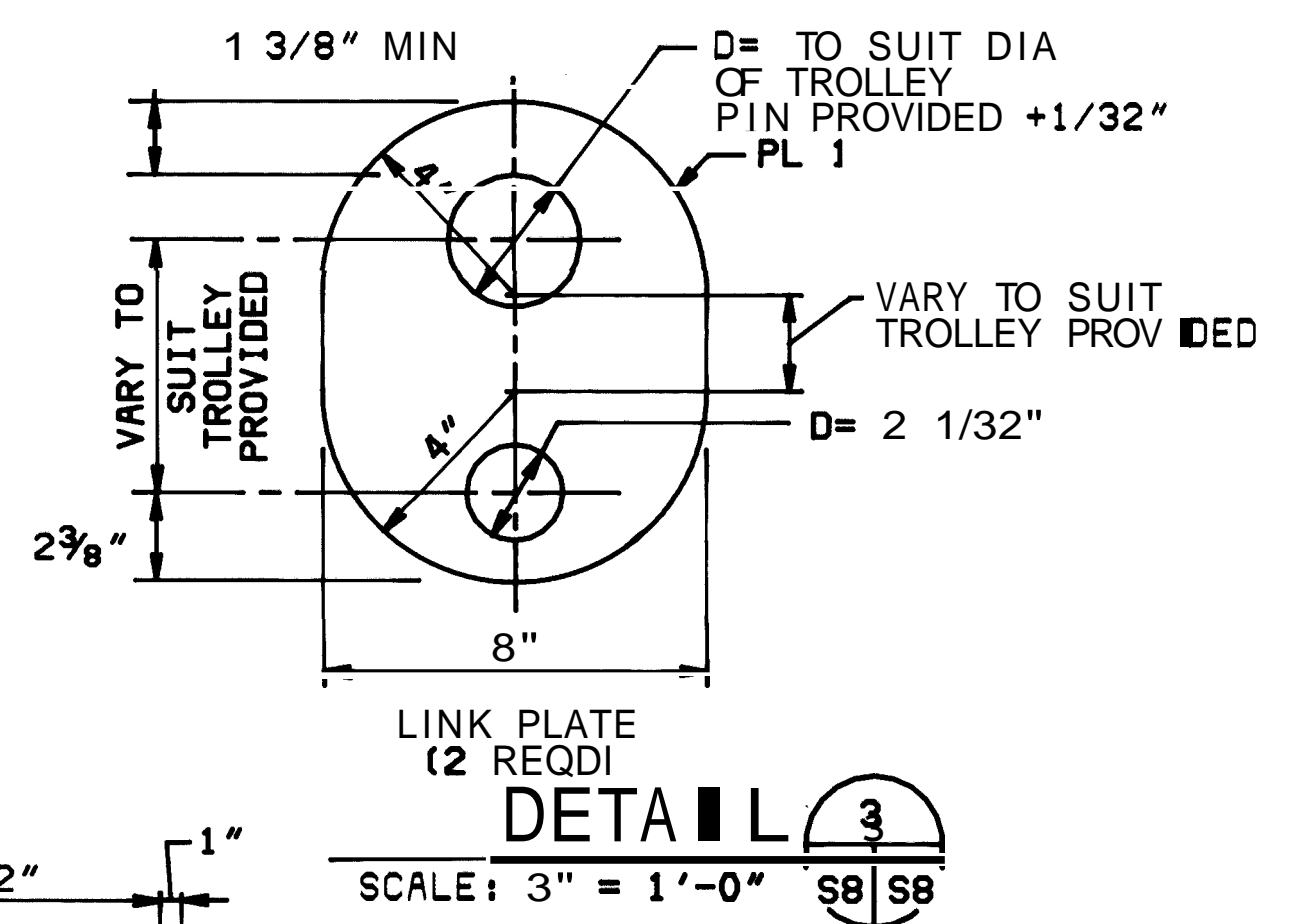
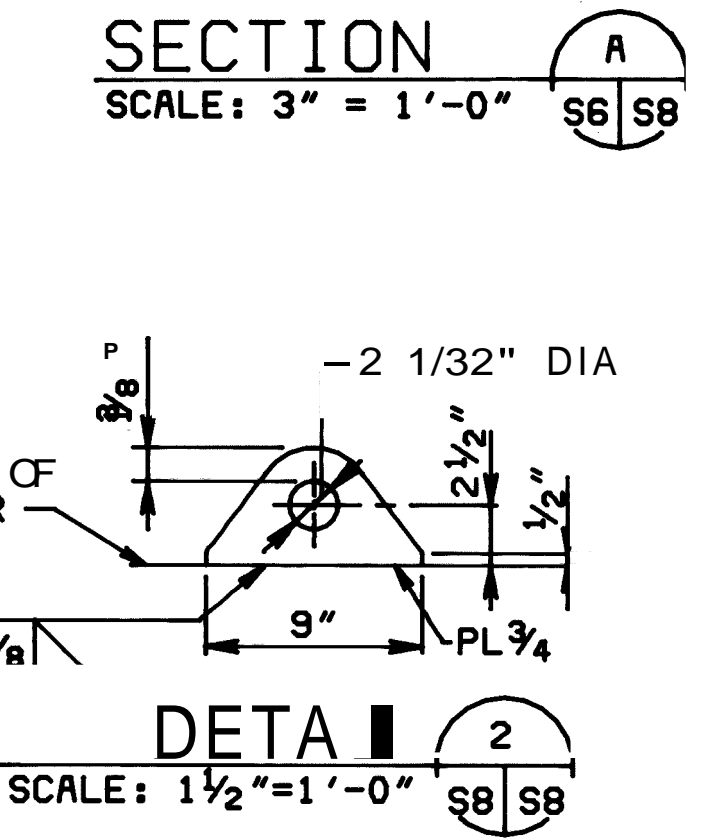
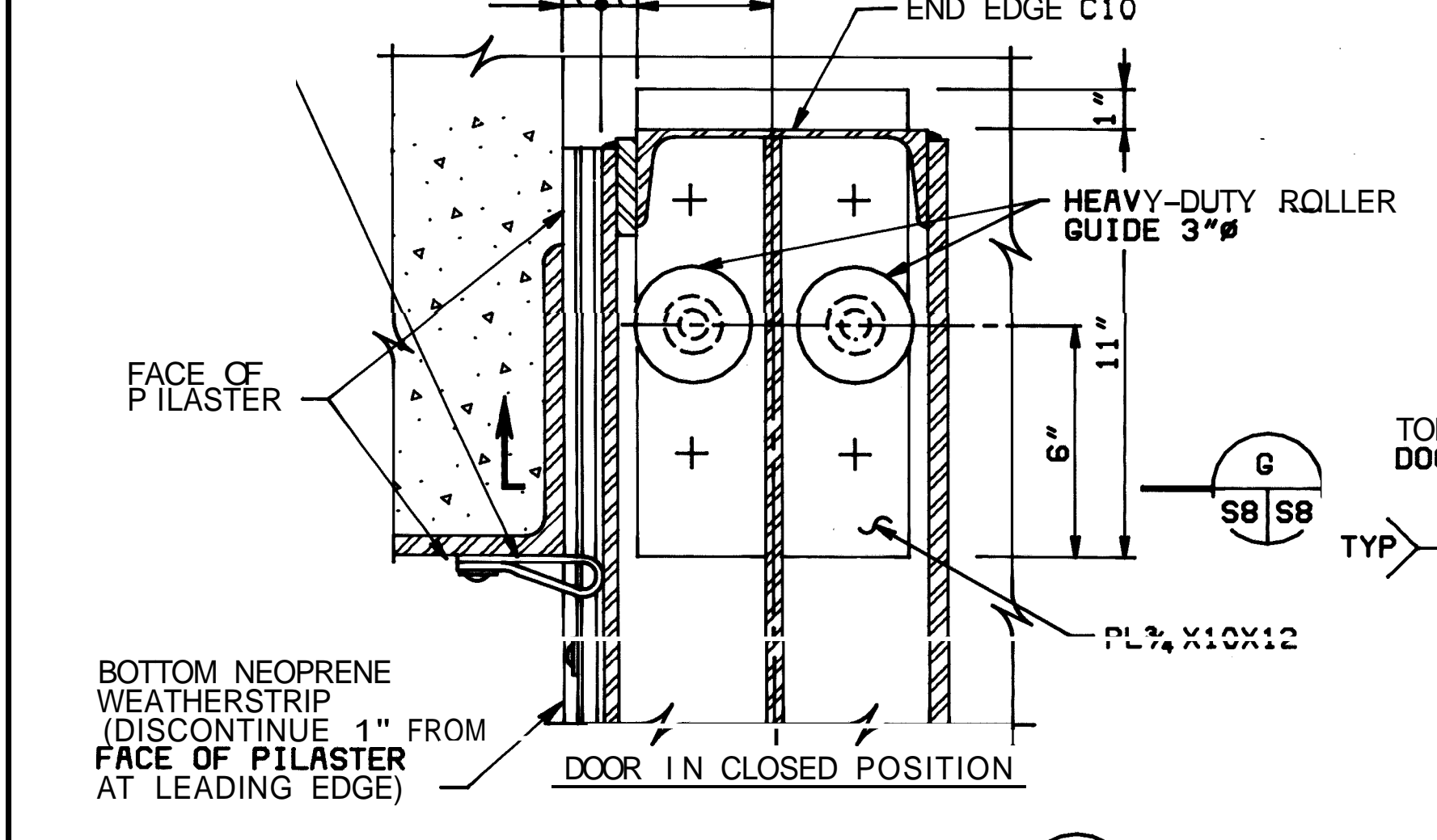
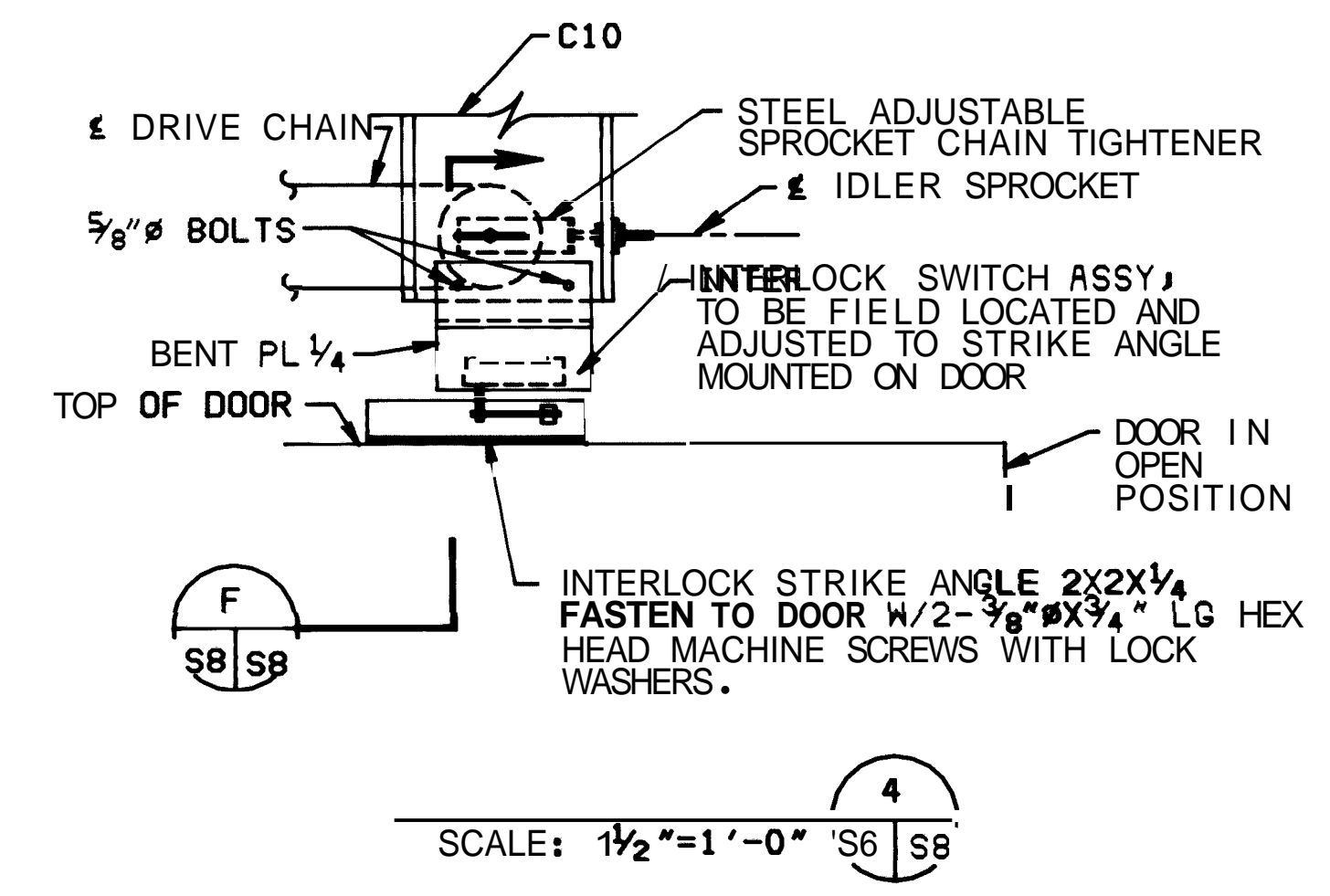
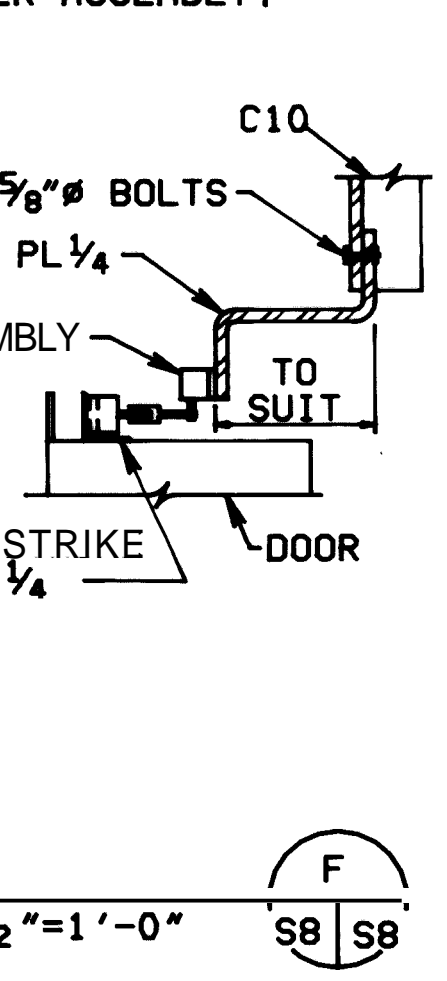
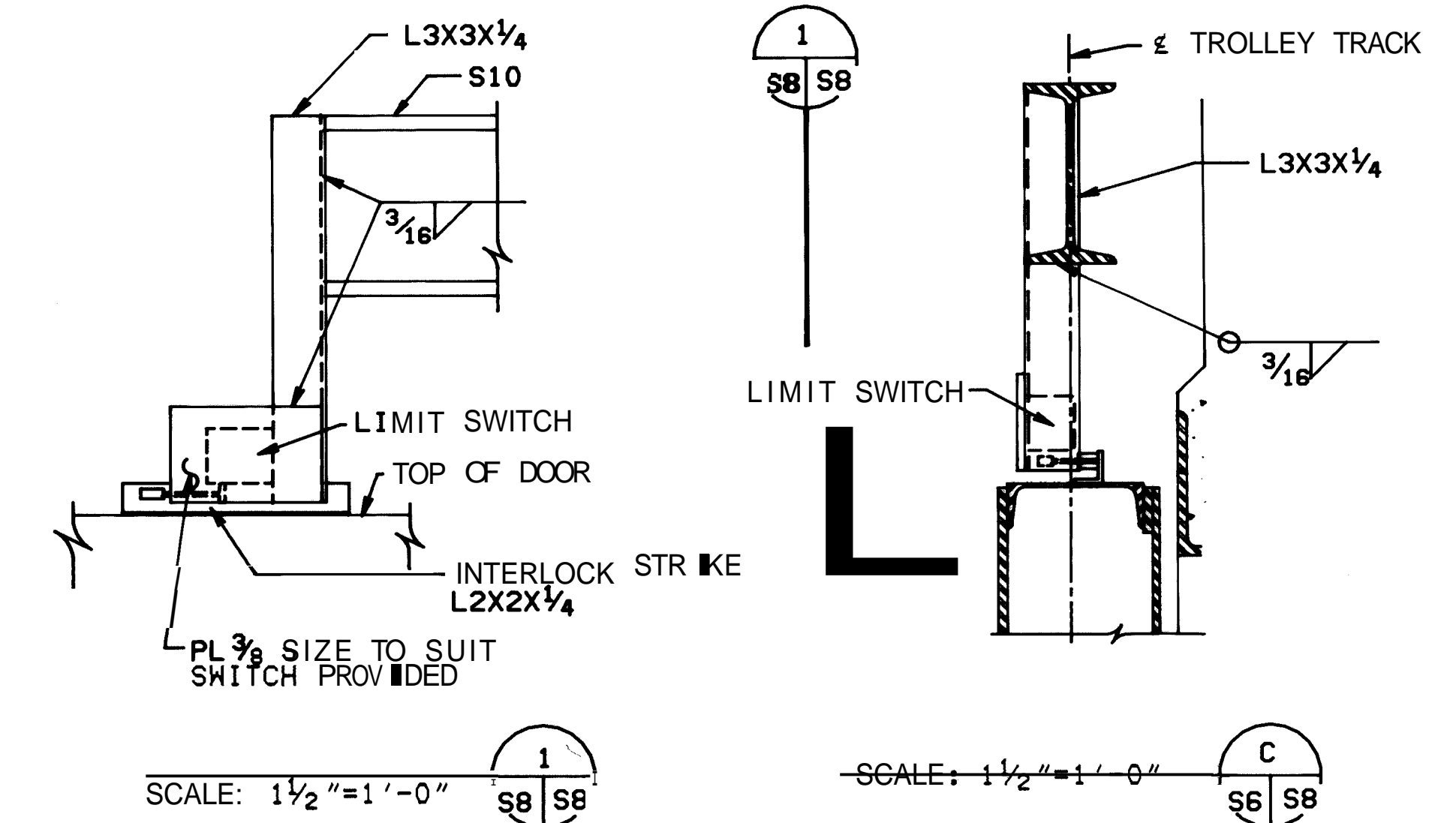
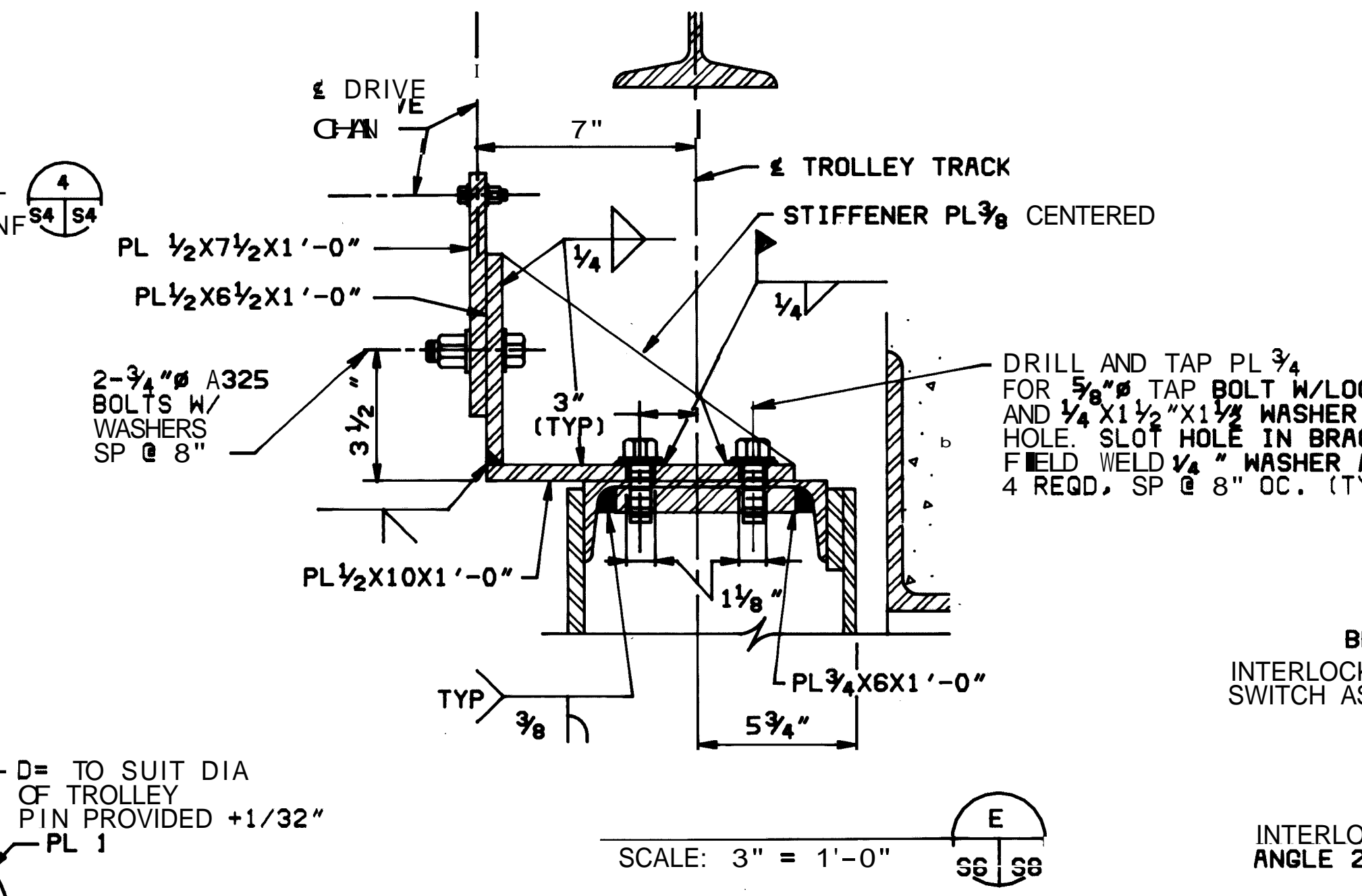
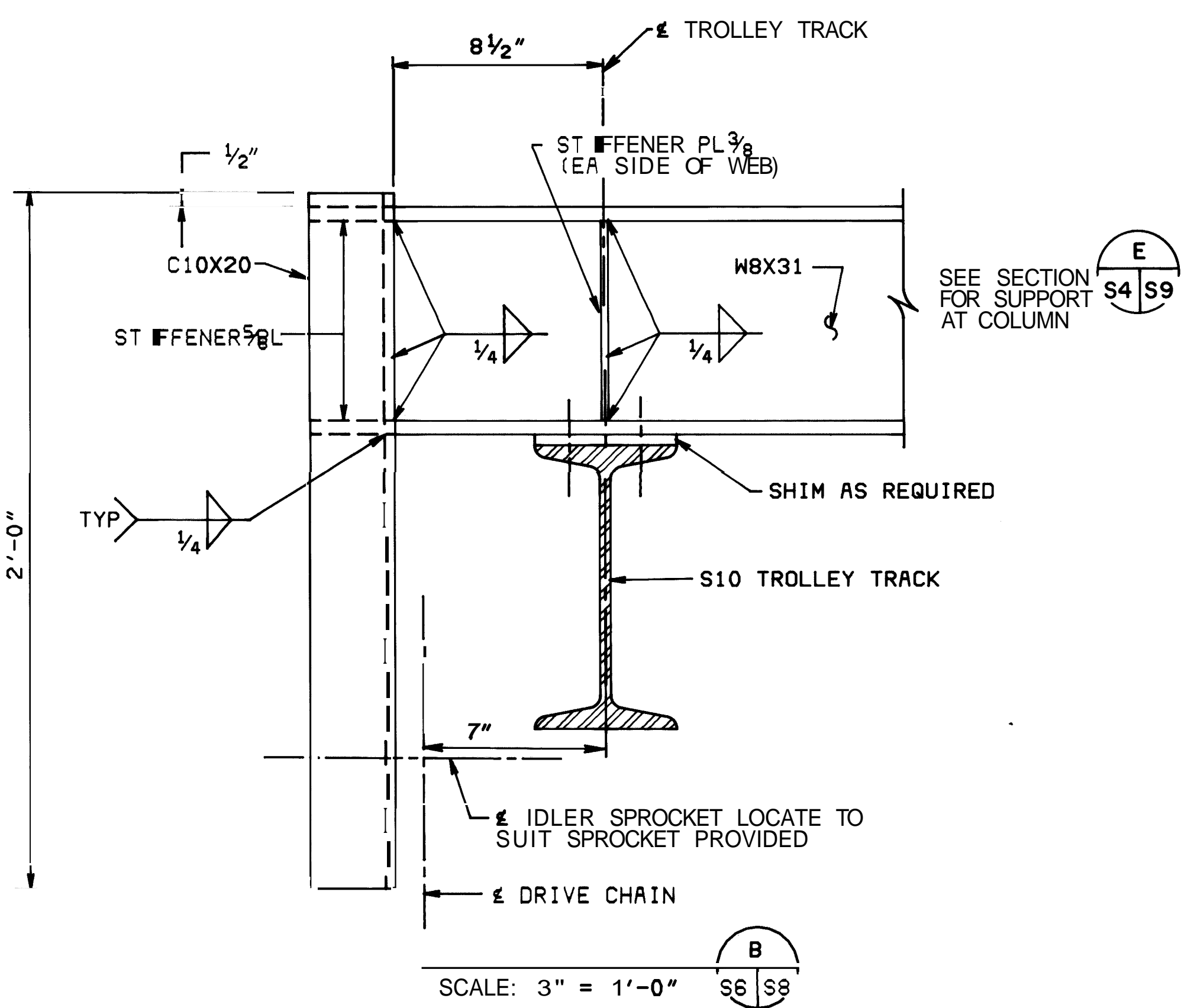
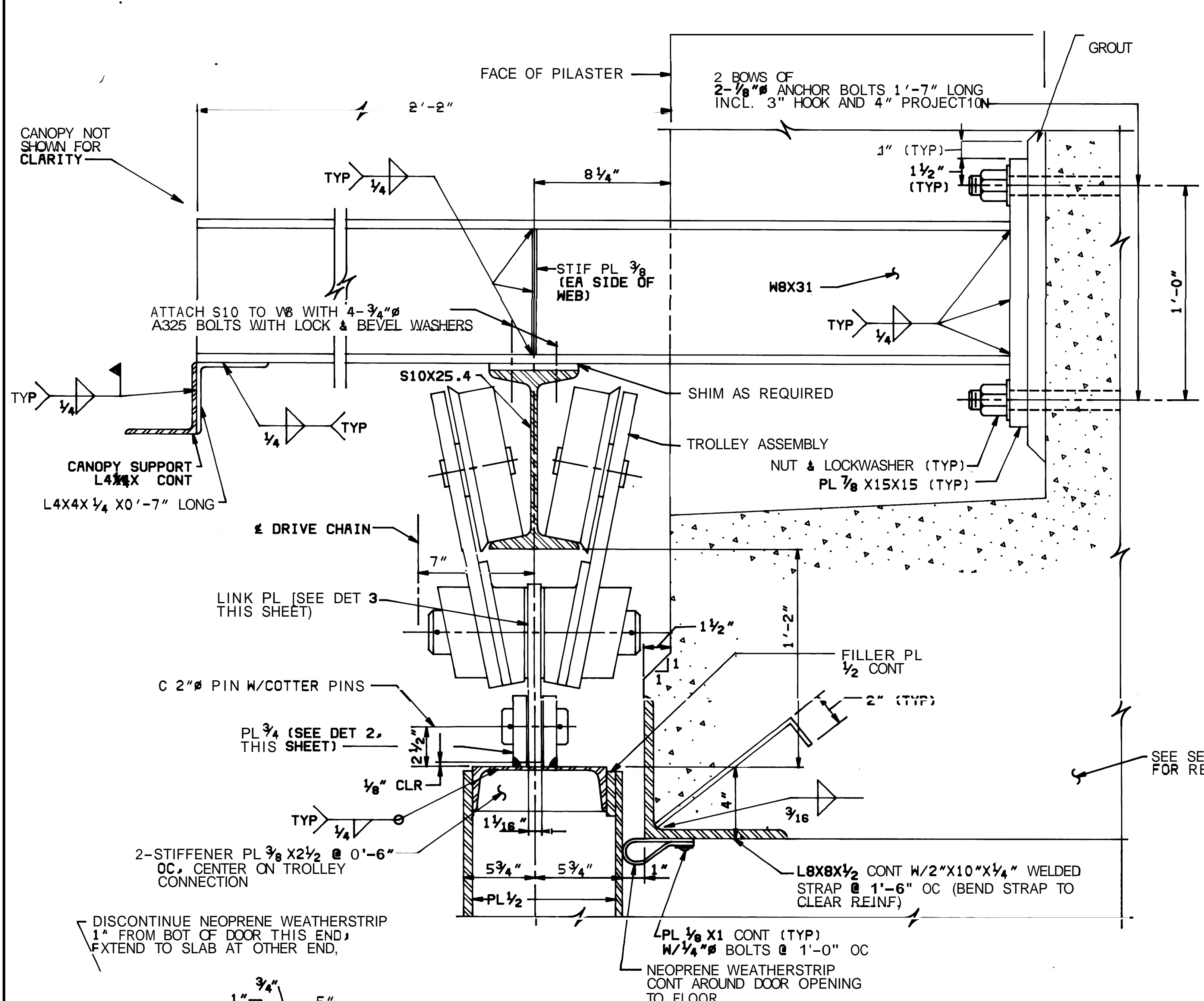
PROJECT: EARTH-COVERED CONCRETE ARCH MAGAZINE

STRUCTURAL DOOR DETAILS
10'-0" WIDE DOOR OPENING

NAVFAC DRAWING NO. 1404319
CONSTR. CONTR. NO. 80091

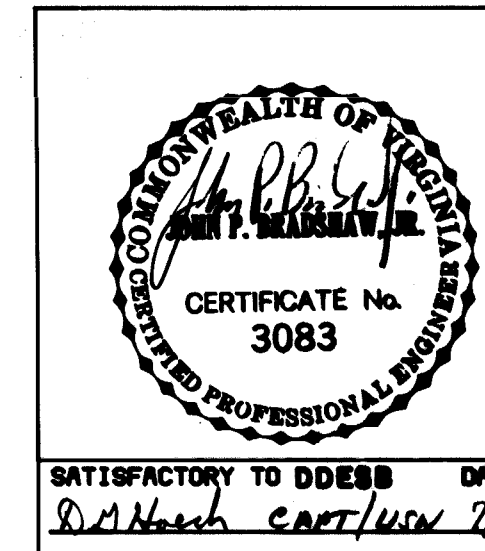
SCALE: AS NOTED SPEC. NFSS-M18 SHEET 57 OF 57

LTR	DESCRIPTION	PREP'D BY	DATE	APPROVED

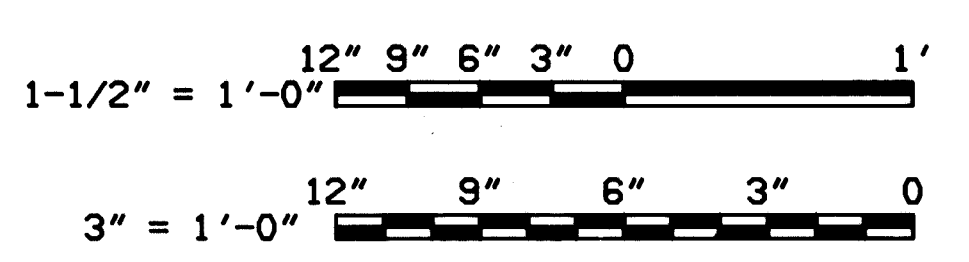


METRIC CONVERSIONS			
1/32" = 1MM	1 1/16" = 27MM	4" = 102MM	11" = 297MM
3/8" = 3MM	1 1/8" = 28MM	5" = 127MM	1'-0" = 305MM
3/16" = 5MM	1 3/8" = 35MM	5 3/4" = 146MM	1'-2" = 356MM
1/4" = 6MM	1 1/2" = 38MM	6" = 152MM	1'-3" = 381MM
5/16" = 8MM	2" = 51MM	6 1/2" = 165MM	1'-6" = 457MM
3/8" = 10MM	2 1/32" = 52MM	7" = 178MM	2'-0" = 610MM
1/2" = 13MM	2 1/4" = 57MM	7 1/2" = 191MM	2'-2 5/8" = 676MM
5/8" = 16MM	2 1/2" = 64MM	8" = 203MM	3'-0" = 914MM
1 1/8" = 17MM	3" = 76MM	8 1/4" = 209MM	
3/4" = 19MM	3 1/2" = 89MM	9" = 228MM	
7/8" = 22MM	3 3/4" = 95MM	10" = 254MM	
1" = 25MM			

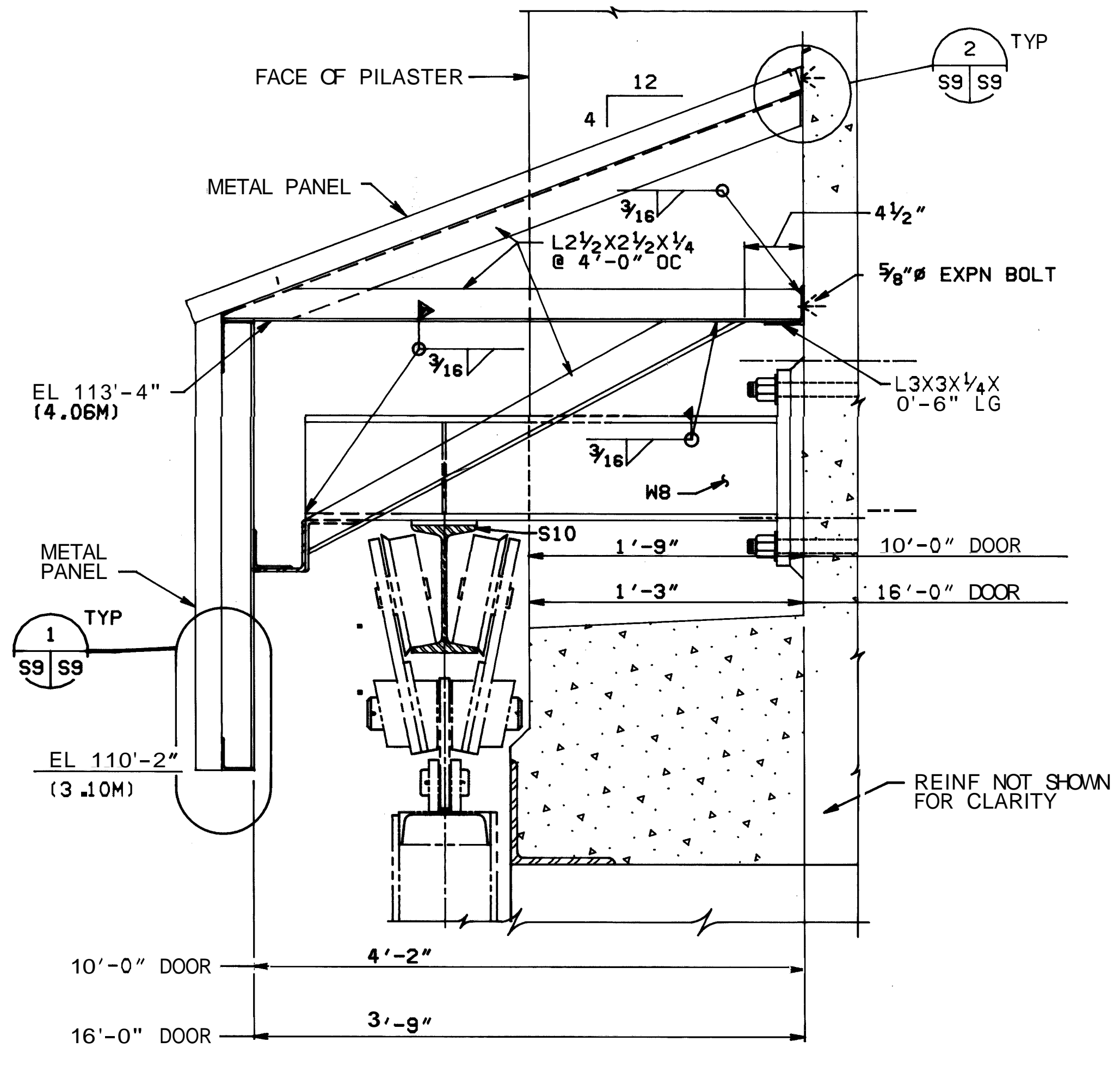
CHECK GRAPHIC SCALES BEFORE USING



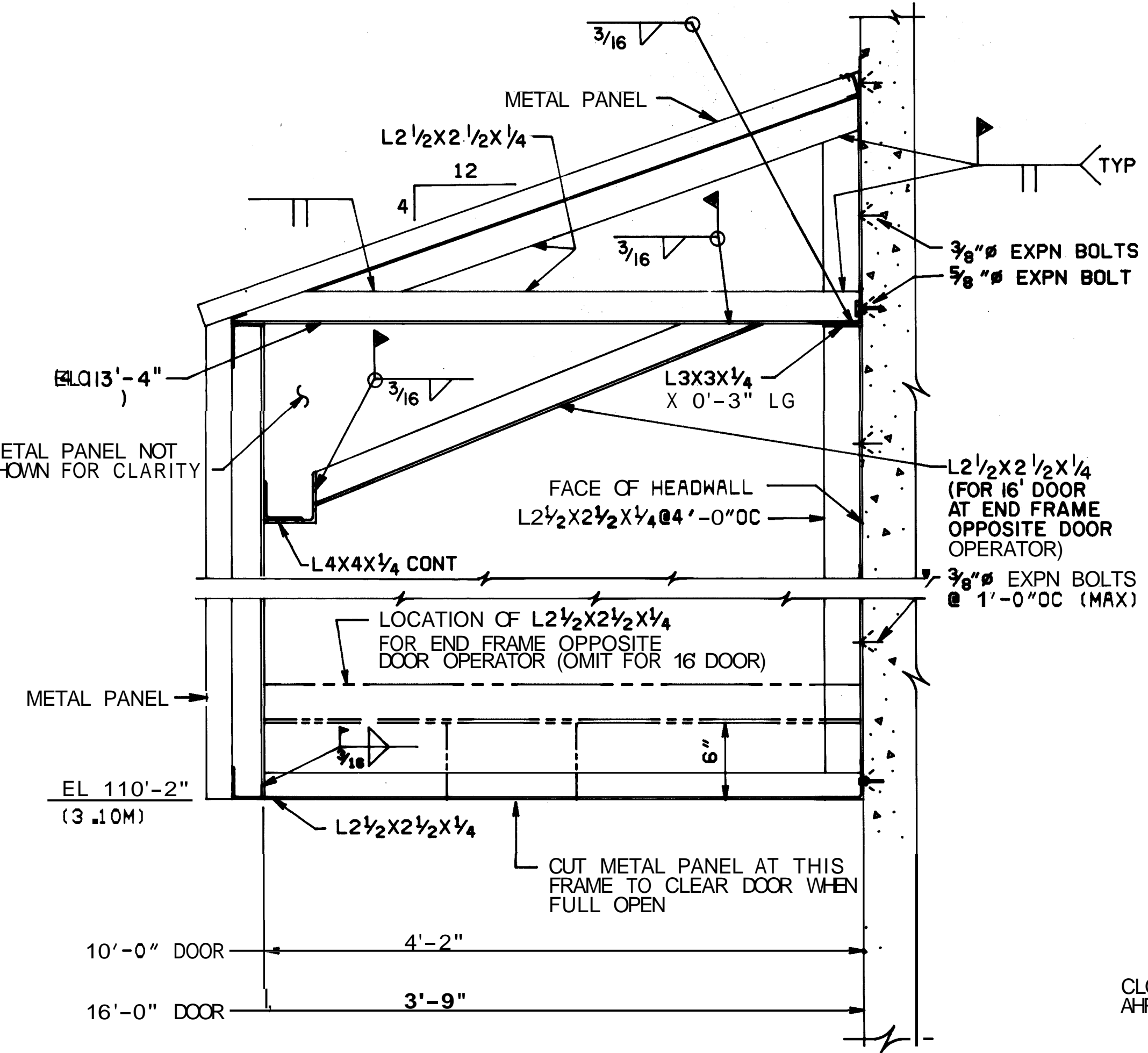
DESIGNER		SUBMITTED BY		DATE	
JAMES H. HATTEN	ARCHITECTS	JAMES H. HATTEN	ARCHITECTS	11/12/22	11/12/22
NAVAL FACILITIES ENGINEERING COMMAND		STANDARD		1404320	
200 STOWALL STREET		EARTH-COVERED CONCRETE ARCH MAGAZINE		16'-0" WIDE DOOR OPENING	
ALEXANDRIA, VA. 22332		STRUCTURAL		80091	
		CONSTR. CONTR. NO.			
		SCALE AS NOTED		SPEC. NFSS-M18	



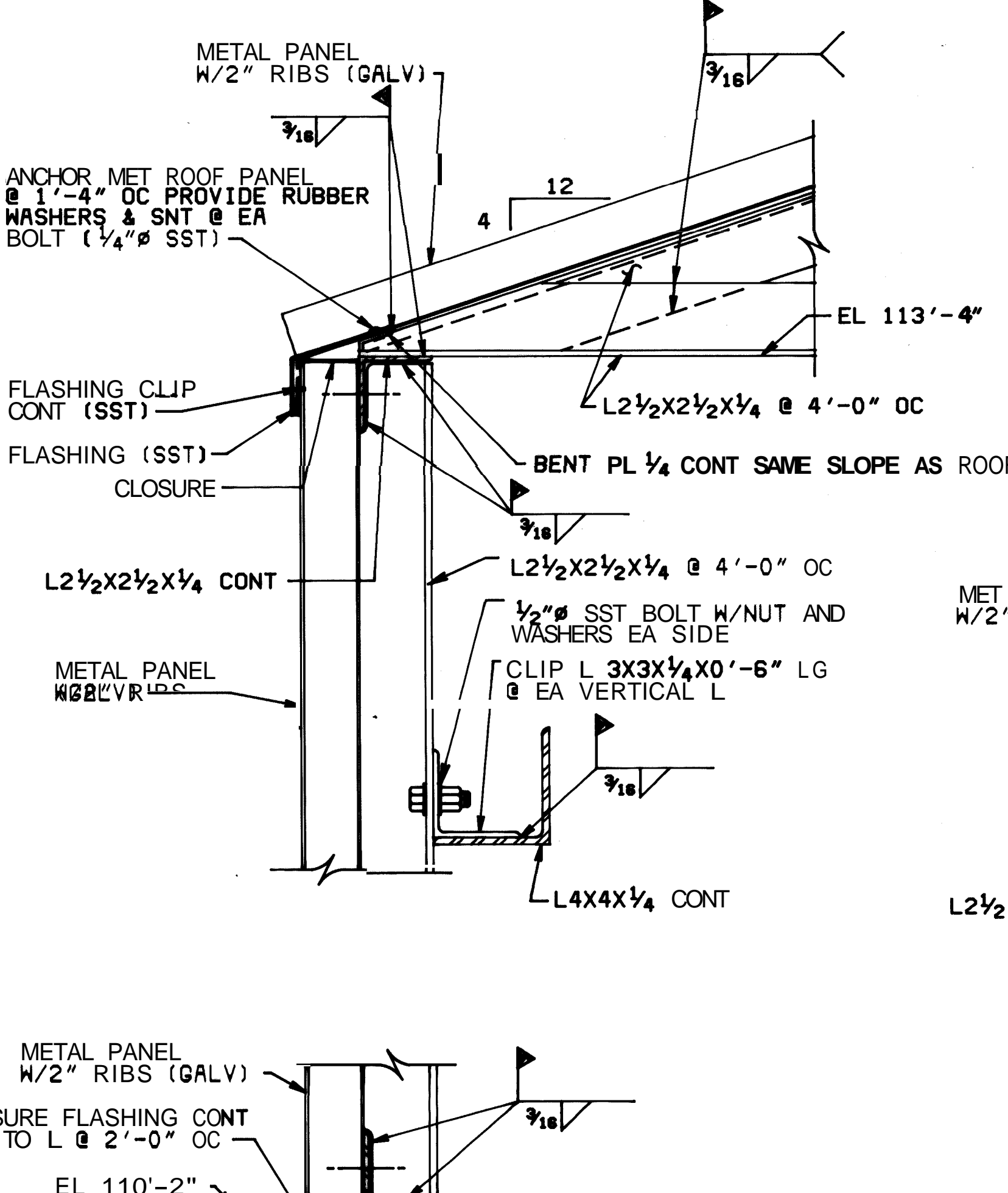
REVISIONS			
LTR	DESCRIPTION	PREP'D BY	DATE APPROVED



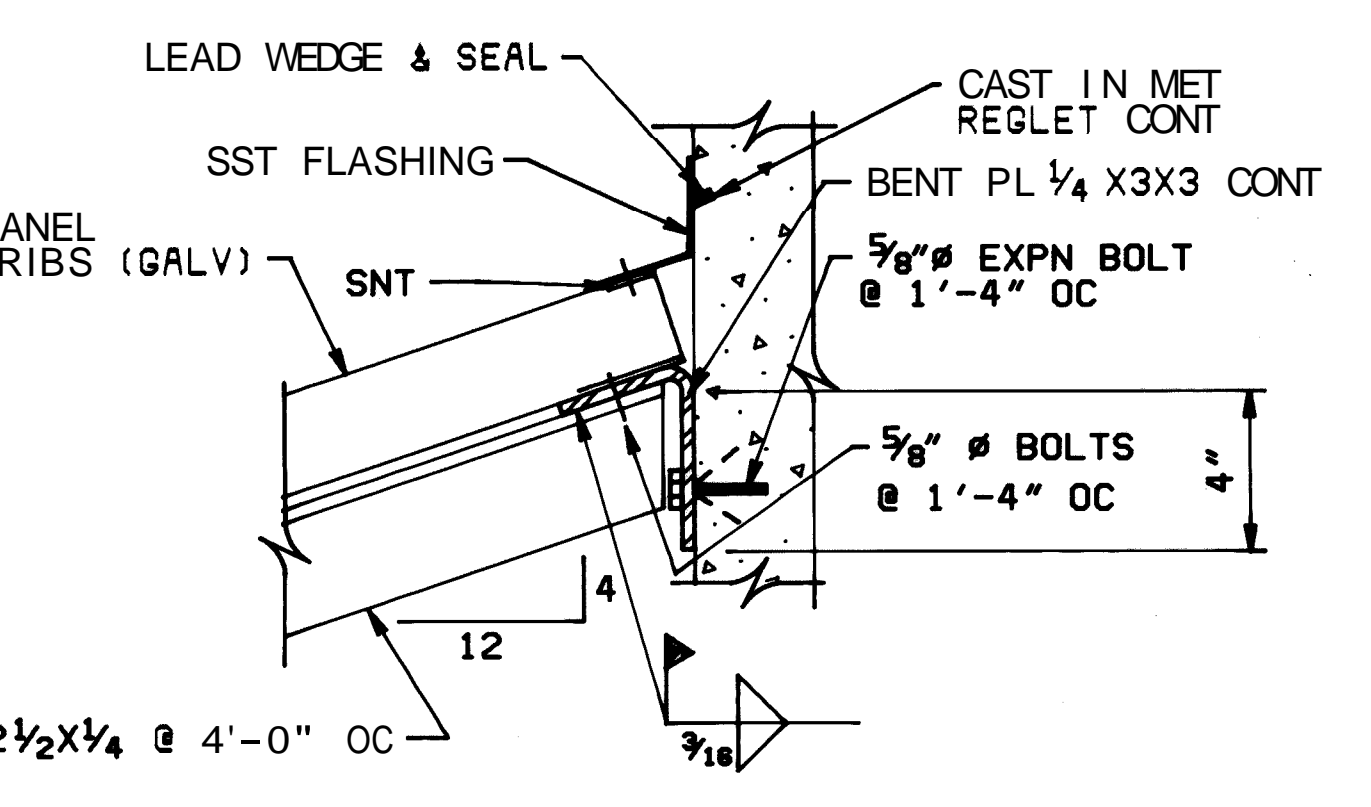
INTERMEDIATE CANOPY FRAME
SECTION A
SCALE: 1 1/2" = 1'-0"
S5/S9
S6



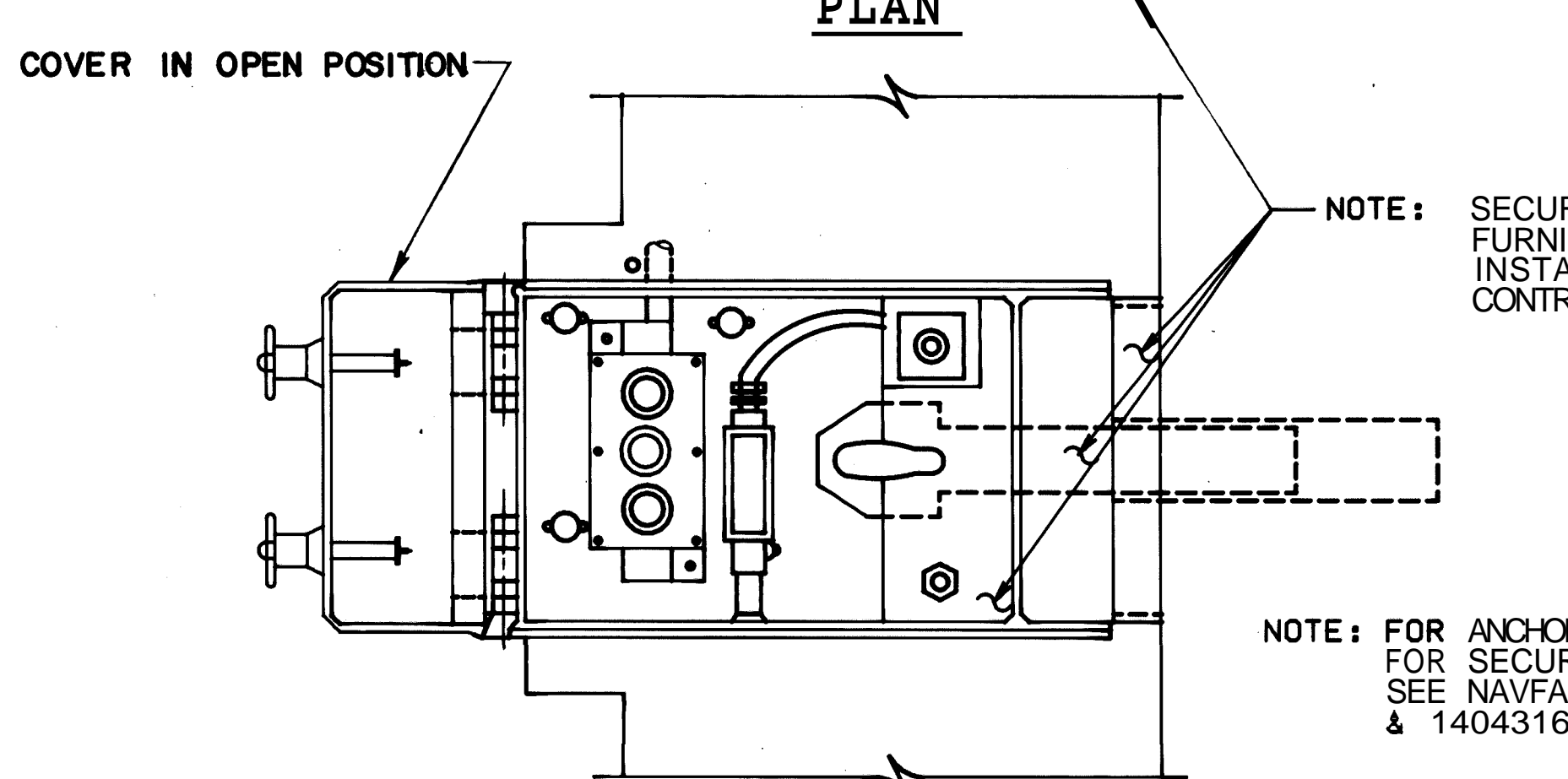
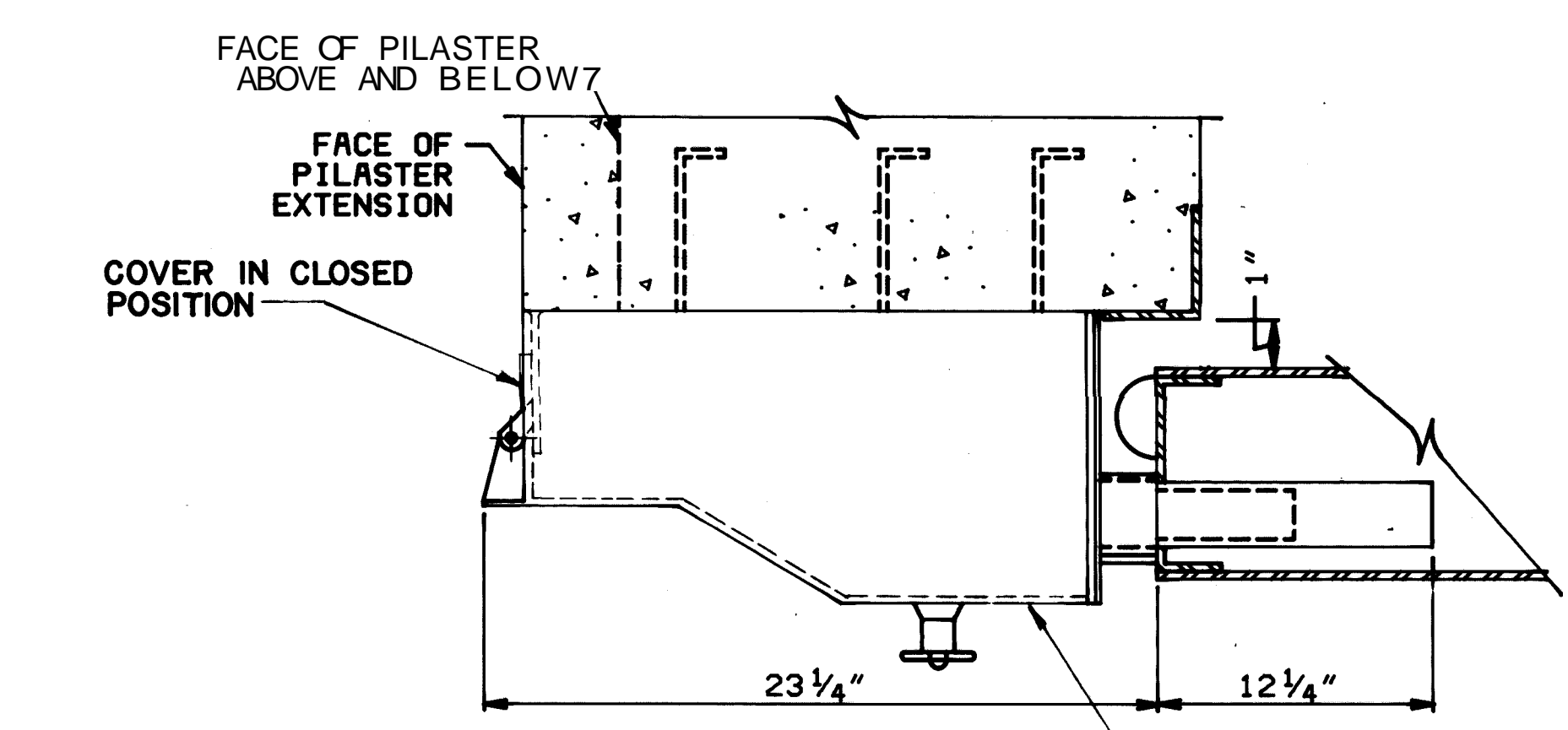
END CANOPY FRAME
SECTION B
SCALE: 1 1/2" = 1'-0"
S5/S9
S6



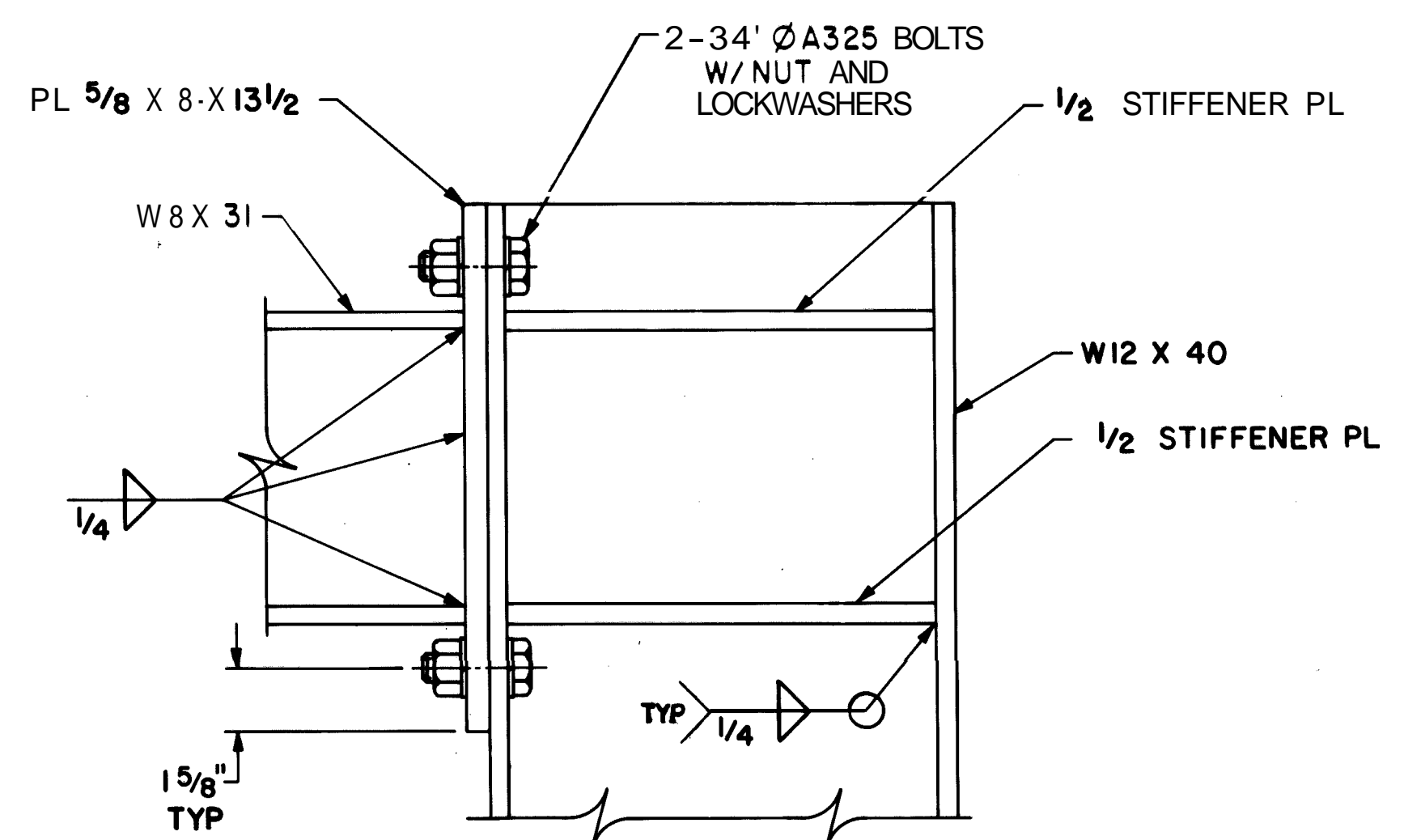
DETAIL 1
SCALE: 3" = 1'-0"
S9/S9



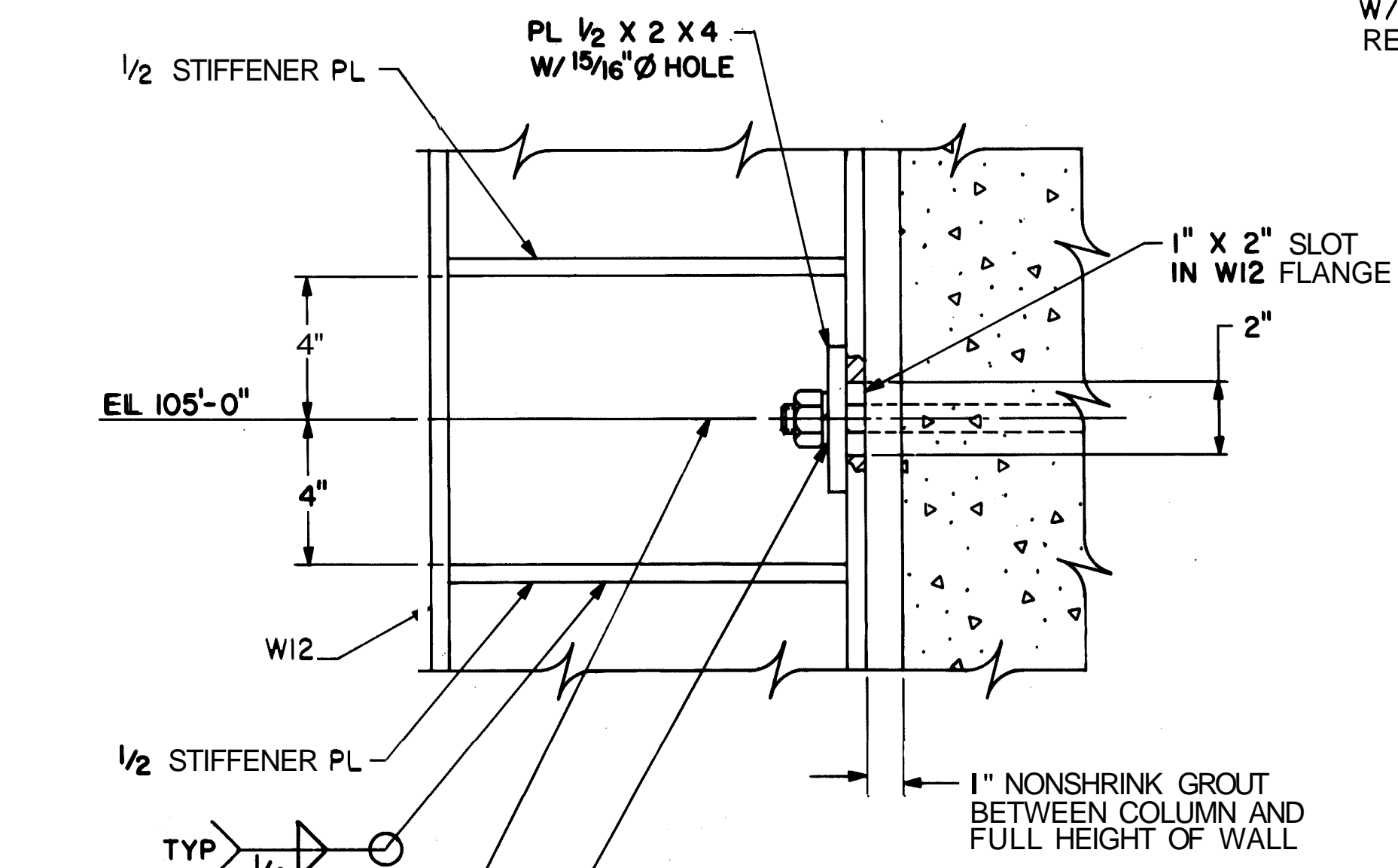
DETAIL 2
SCALE: 3" = 1'-0"
S5/S6
S9/S9



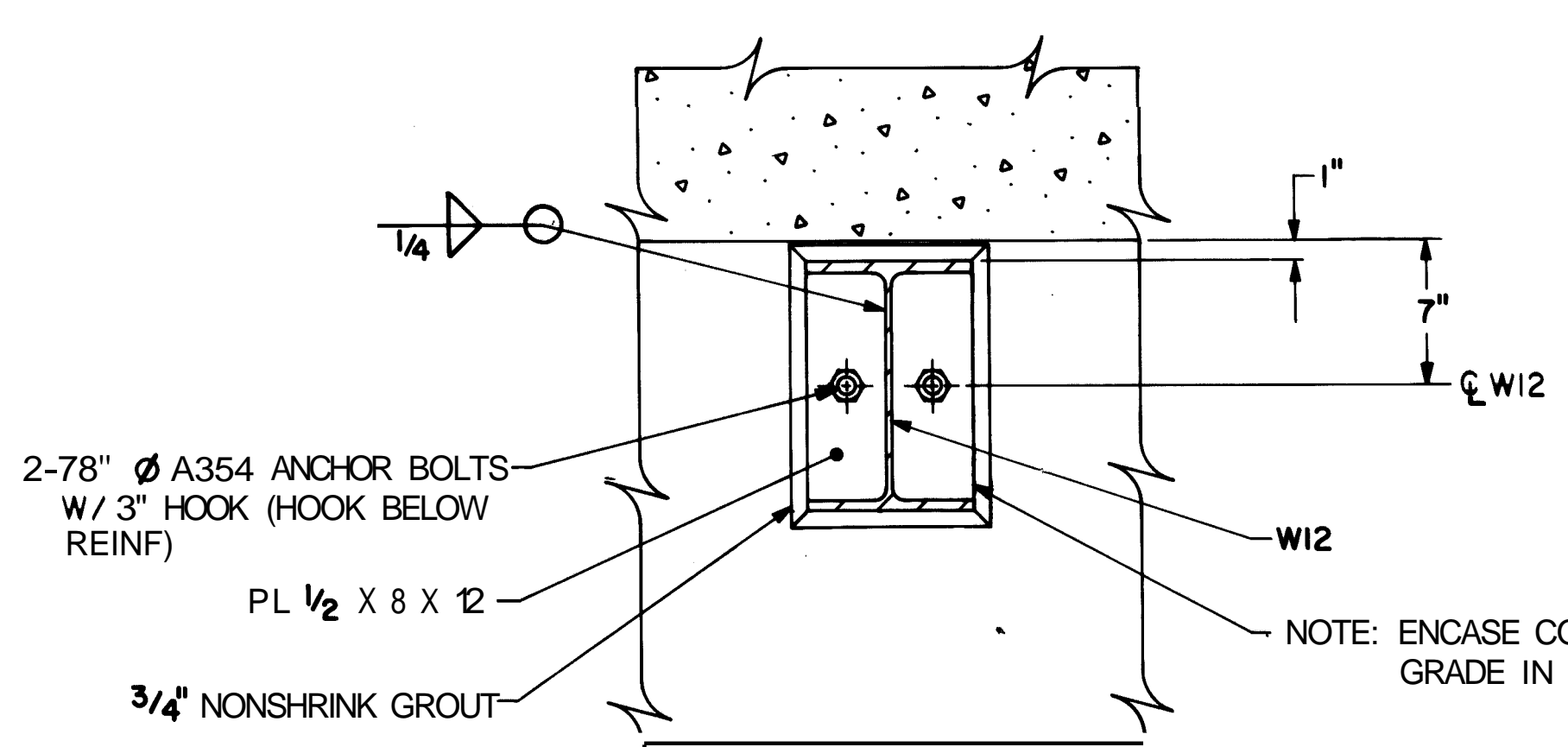
ELEVATION
SLIDING DOOR SECURITY HASP DETAIL
NO SCALE



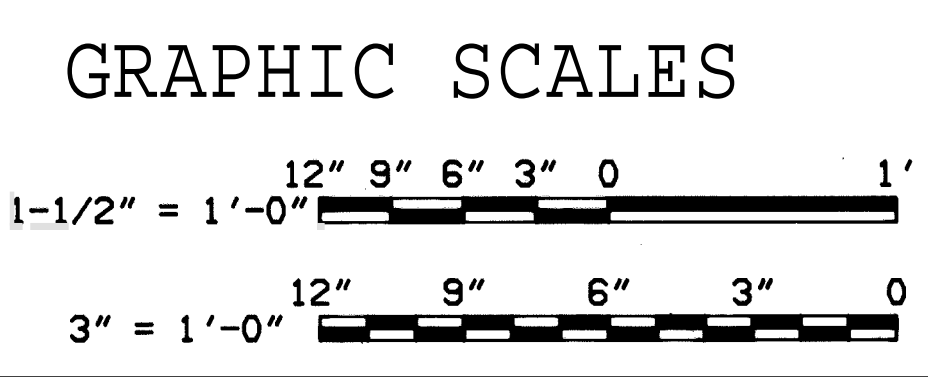
SECTION E
SCALE: 3" = 1'-0"
S4/S9



SECTION F
SCALE: 3" = 1'-0"
S4/S9

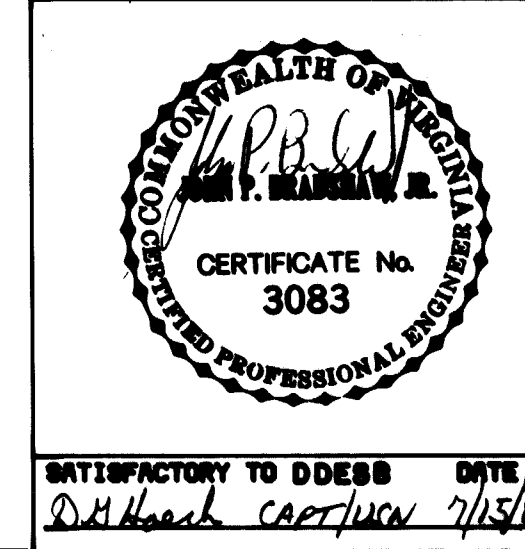


SECTION G
SCALE: 1 1/2" = 1'-0"
S4/S9



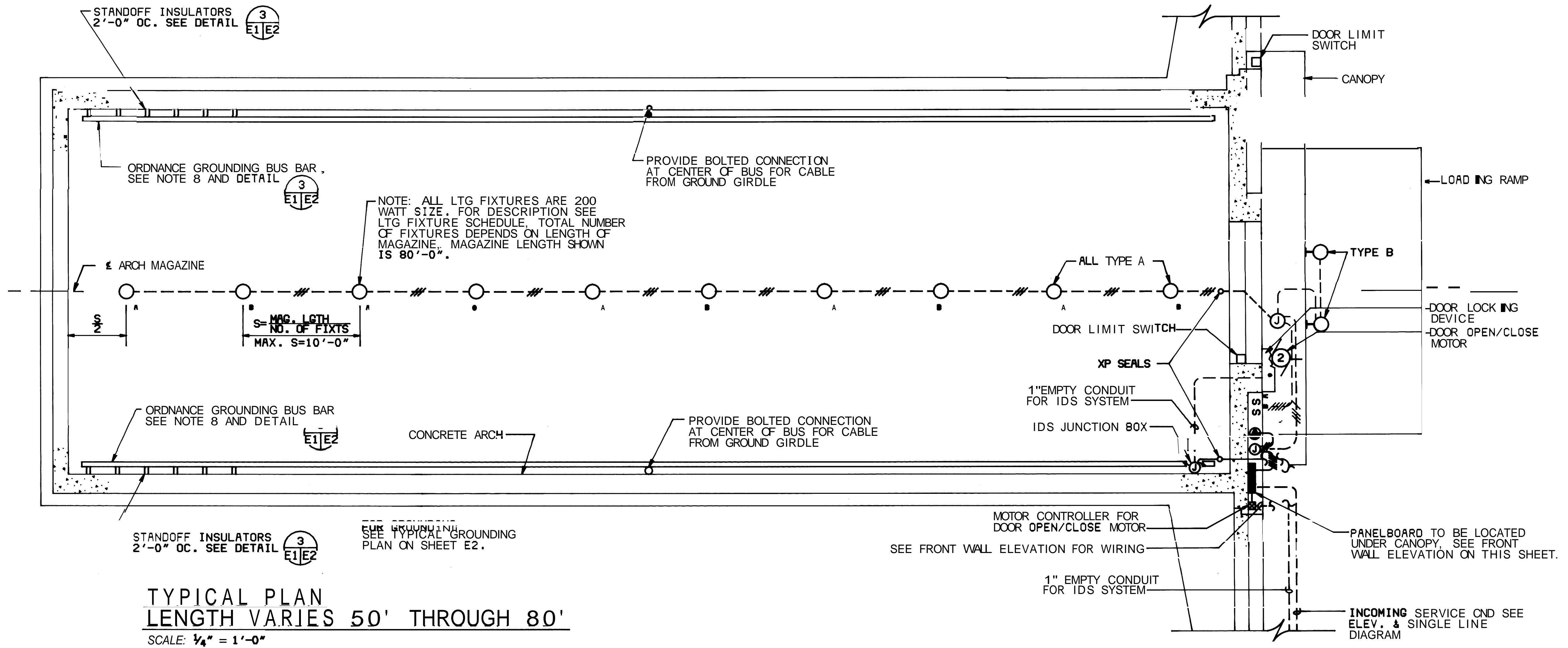
METRIC CONVERSIONS			
1/4" = 6MM	1'-4" = 4061MM	3/8" = 10MM	2'-0" = 610MM
1/2" = 13MM	3'-2" = 965MM	5/8" = 16MM	3'-6 5/8" = 1082MM
1 1/2" = 38MM	3'-4 9/16" = 1250MM	2" = 51MM	M
2 1/2" = 64MM	4'-0 3/4" = 1239MM	3" = 76MM	4'-1 3/4" = 1264MM
4" = 102MM	10'-0" = 3050MM	4 1/2" = 115MM	16'-0" = 4880MM
6" = 152MM		1'-0" = 305MM	

CHECK GRAPHIC SCALES BEFORE USING



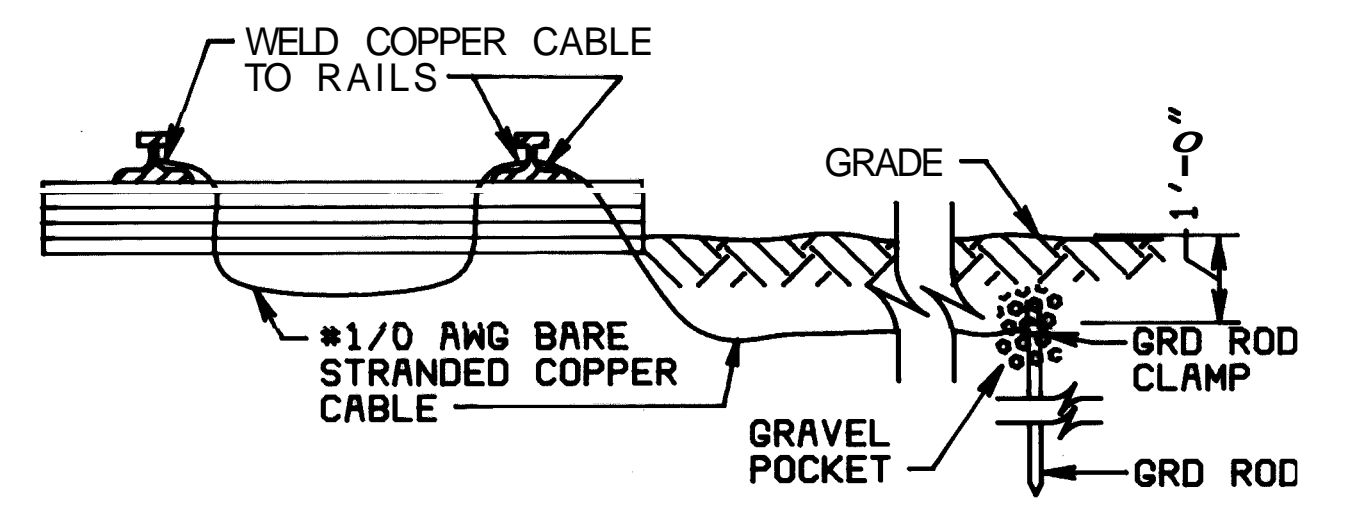
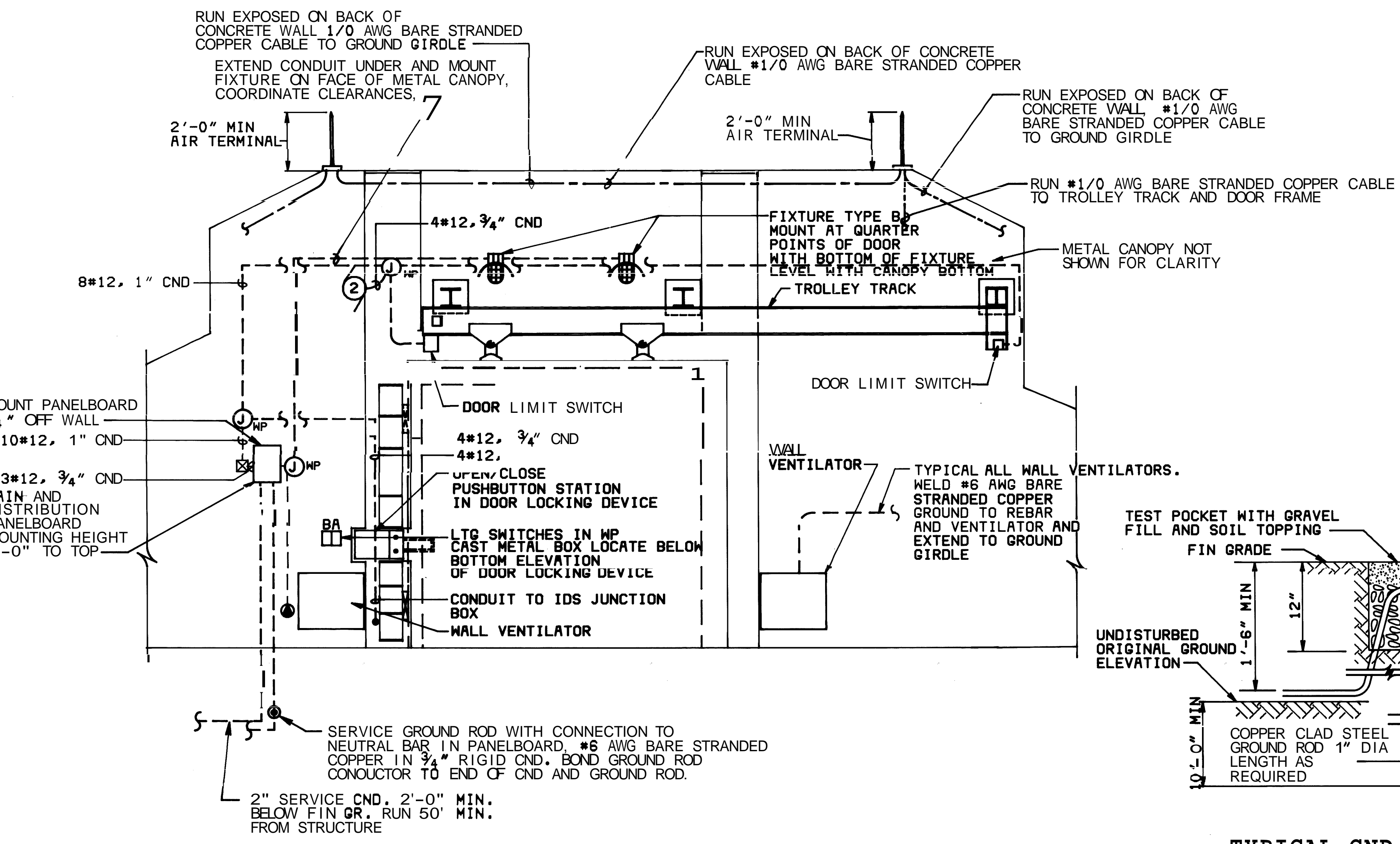
DEPARTMENT OF THE NAVY			
NAVAL FACILITIES ENGINEER/ARCHITECT/MAN			
300 STOWELL STREET	22332	STANDARD	
EARTH-COVERED CONCRETE ARCH MAGAZINE		STRUCTURAL	
CANOPY SECTIONS AND MISCELLANEOUS DETAILS		SIZE	CODE IDENT. NO. NAVFAC DRAWING NO.
		80091	1404321
CONTR. CONTR. NO.		SCALE AS NOTED SPEC. NFSS-M18 SHEET 59 OF	

REVISIONS		
NO.	DESCRIPTION	PREP'D BY/DATE APPROVED

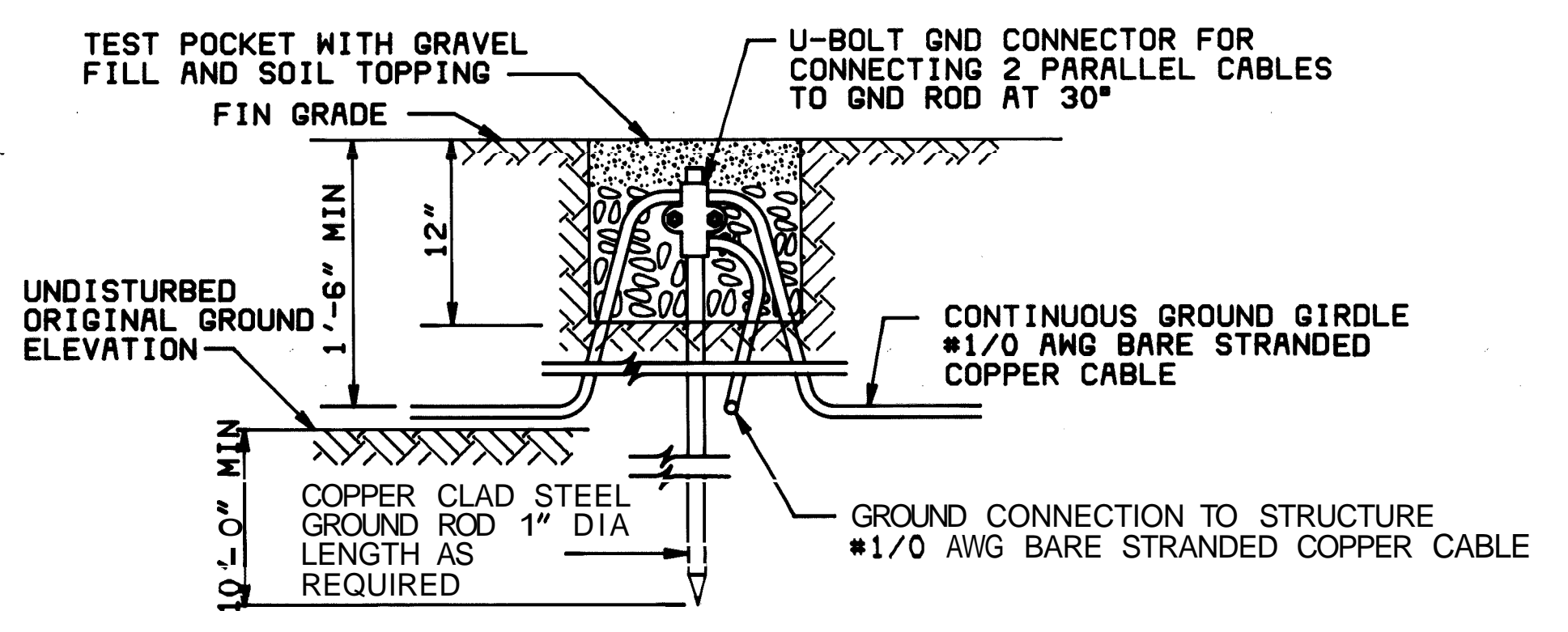


- LEGEND**
- LIGHTING FIXTURE - CEILING TYPE A
 - LIGHTING FIXTURE - BRACKET TYPE B
 - ⊕ SINGLE RECEPTACLE - GND TYPE - 20A, 125V, 3P
 - ⊙ JUNCTION BOX, WALL MOUNTED
 - S_{A,B} LOCAL SWITCH WITH PILOT LIGHT - SP-20A, 120/277V (SUBSCRIPT DENOTES FIXTURE CONTROL)
 - ▬ DISTRIBUTION PANELBOARD 120/240V, 1ϕ, 3M, S/N, SOLID GROUND BUS IN NEMA 3R ENCLOSURE
 - ⊖ EXPLOSION PROOF SEAL FITTING IN CONDUIT RUN
 - WIRING IN RIGID CONDUIT - EXPOSED (CROSS MARKS DENOTE NUMBER OF WIRES WHEN OTHER THAN TWO)
 - GROUNDING CONDUCTOR AS DESCRIBED (SEE NOTE 5)
 - ⊙ GROUND ROD (DRIVEN IN EARTH) W/TEST POCKET
 - CONTINUOUS BURIED GND GIRDLE - NO. 1/0 AWG BARE STRANDED COPPER CABLE - 1'-6" MIN. BELOW GRADE EXCEPT 2'-0" MIN. UNDER ROADWAY (SEE NOTE 6)
 - XP EXPLOSION PROOF
 - WP WEATHER PROOF
 - ⊙ MOTOR - NUMBER DENOTES HORSEPOWER
 - ⊕ CABLE TO CABLE CONNECTION BY EXOTHERMIC WELD PROCESS
 - ⊕ MOTOR CONTROLLER

- NOTES**
- INTERIOR ELECTRICAL EQUIPMENT AND ITS INSTALLATION SHALL CONFORM TO NATIONAL ELECTRICAL CODE NECA 70 LATEST REVISION FOR THE TYPE OF HAZARDOUS LOCATION INVOLVED AND AS A MINIMUM CLASS I, DIVISION II, GROUP D AND CLASS II, DIVISION II, GROUP G.
 - RACEWAY SHALL BE RIGID STEEL, THREADED CONDUIT MIN. SIZE 3/4".
 - CONDUCTORS SHALL BE COPPER WITH RW OR THW INSULATION (EXCEPT GROUND CONDUCTOR). MINIMUM SIZE NO. 12AWG.
 - GROUND RODS SHALL BE INSTALLED IN UNDISTURBED EARTH AND SHALL NOT BE LOCATED IN OR UNDER PAVING OF ANY KIND OR IN ANY UNPAVED WALK PATH OR ROADWAY.
 - FOR GENERAL GROUNDING REQUIREMENTS REFER TO NAVFAC STANDARD SPECIFICATION M18.
 - WHERE GROUND GIRDLE IS LOCATED UNDER ROADWAY THE CABLE SHALL BE INSTALLED IN HEAVY WALL RIGID PVC CONDUIT FOR PHYSICAL PROTECTION.
 - FOR DETAILS OF CONCRETE ARCH GROUNDING CONNECTIONS SEE NAVFAC DWG 1404324.
 - ORDNANCE GROUNDING BUS BAR SHALL BE FOR EQUIPMENT GROUNDING ONLY AND SHALL HAVE ONE POINT GROUND CONNECTION TO THE GROUND GIRDLE AS SHOWN AND SHALL OTHERWISE BE COMPLETELY ISOLATED FROM ALL OTHER METAL PARTS AND/OR GROUND CONNECTIONS OF THE STRUCTURE. BUS BARS ARE REQUIRED IN A LIMITED NUMBER OF MAGAZINES ONLY.

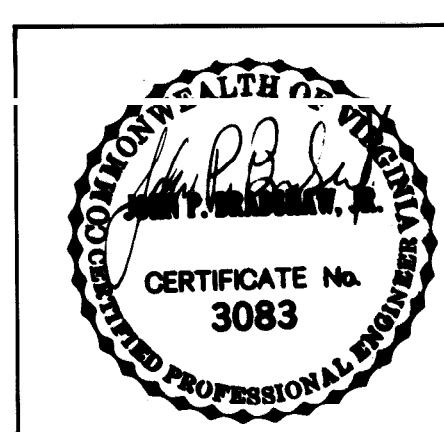


- NOTES - GROUNDING**
- ALL REINFORCING STEEL IN BUILDING, PLATFORM, RETAINING WALLS, PAVEMENT IN FRONT OF BUILDING AND ALL METAL PARTS AND EQUIPMENT IN BUILDING SHALL BE BONDED TO GROUND GIRDLE. CONNECTIONS SHALL BE NO. 6 AWG MIN. BARE STRANDED COPPER WIRE OR EQUIVALENT CAPACITY COPPER BRAID STRAP.



METRIC CONVERSIONS

1/4"	=	6MM
3/8"	=	10MM
1/2"	=	13MM
3/4"	=	19MM
1"	=	25MM
1 1/2"	=	38MM
2"	=	51MM
2 1/2"	=	64MM
3"	=	76MM
3 1/2"	=	89MM
4"	=	102MM
4 1/2"	=	114MM
5"	=	127MM
5 1/2"	=	140MM
6"	=	152MM
6 1/2"	=	165MM
7"	=	178MM
7 1/2"	=	190MM
8"	=	203MM
8 1/2"	=	216MM
9"	=	229MM
9 1/2"	=	241MM
10"	=	254MM
10 1/2"	=	267MM
11"	=	279MM
11 1/2"	=	292MM
12"	=	305MM
12 1/2"	=	318MM
13"	=	330MM
13 1/2"	=	343MM
14"	=	356MM
14 1/2"	=	368MM
15"	=	381MM
15 1/2"	=	394MM
16"	=	406MM
16 1/2"	=	419MM
17"	=	432MM
17 1/2"	=	444MM
18"	=	457MM
18 1/2"	=	470MM
19"	=	482MM
19 1/2"	=	495MM
20"	=	508MM
20 1/2"	=	521MM
21"	=	533MM
21 1/2"	=	546MM
22"	=	559MM
22 1/2"	=	571MM
23"	=	584MM
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26"	=	660MM
26 1/2"	=	673MM
27"	=	686MM
27 1/2"	=	699MM
28"	=	711MM
28 1/2"	=	724MM
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29 1/2"	=	750MM
30"	=	762MM
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39"	=	991MM
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43"	=	1094MM
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45"	=	1145MM
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46 1/2"	=	1183MM
47"	=	1196MM
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74 1/2"	=	1898MM
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76"	=	1936MM
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77"	=	1962MM
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83 1/2"	=	2128MM
84"	=	2140MM
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97"	=	2472MM
97 1/2"	=	2485MM
98"	=	2498MM
98 1/2"	=	2511MM
99"	=	2523MM
99 1/2"	=	2536MM
100"	=	2549MM



CHECK GRAPHIC SCALES BEFORE USING

NAVY, SEA, WATERS & WATERS ARCHITECTS ENGINEERS PLANNERS

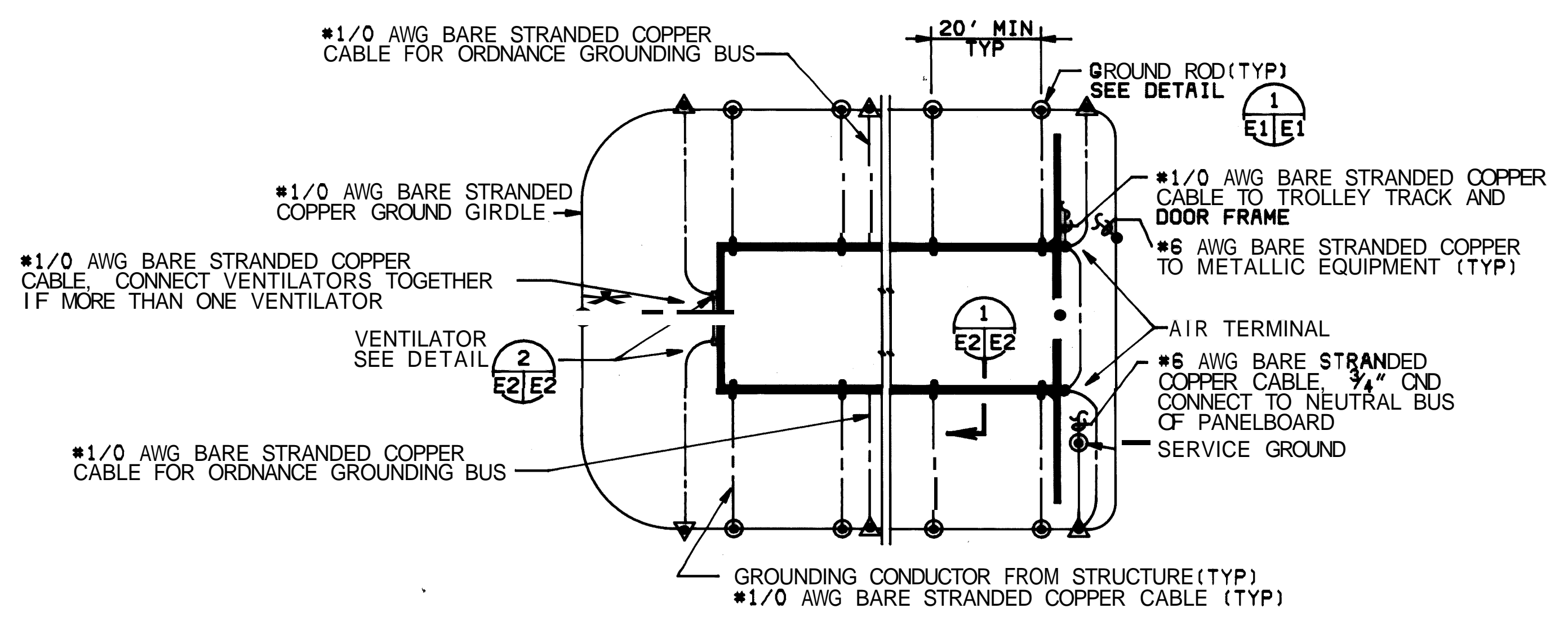
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOWELL STREET ALEXANDRIA, VA. 22304

STANDARD
EARTH-COVERED CONCRETE ARCH MAGAZINE
ELECTRICAL
PLANS AND DETAILS

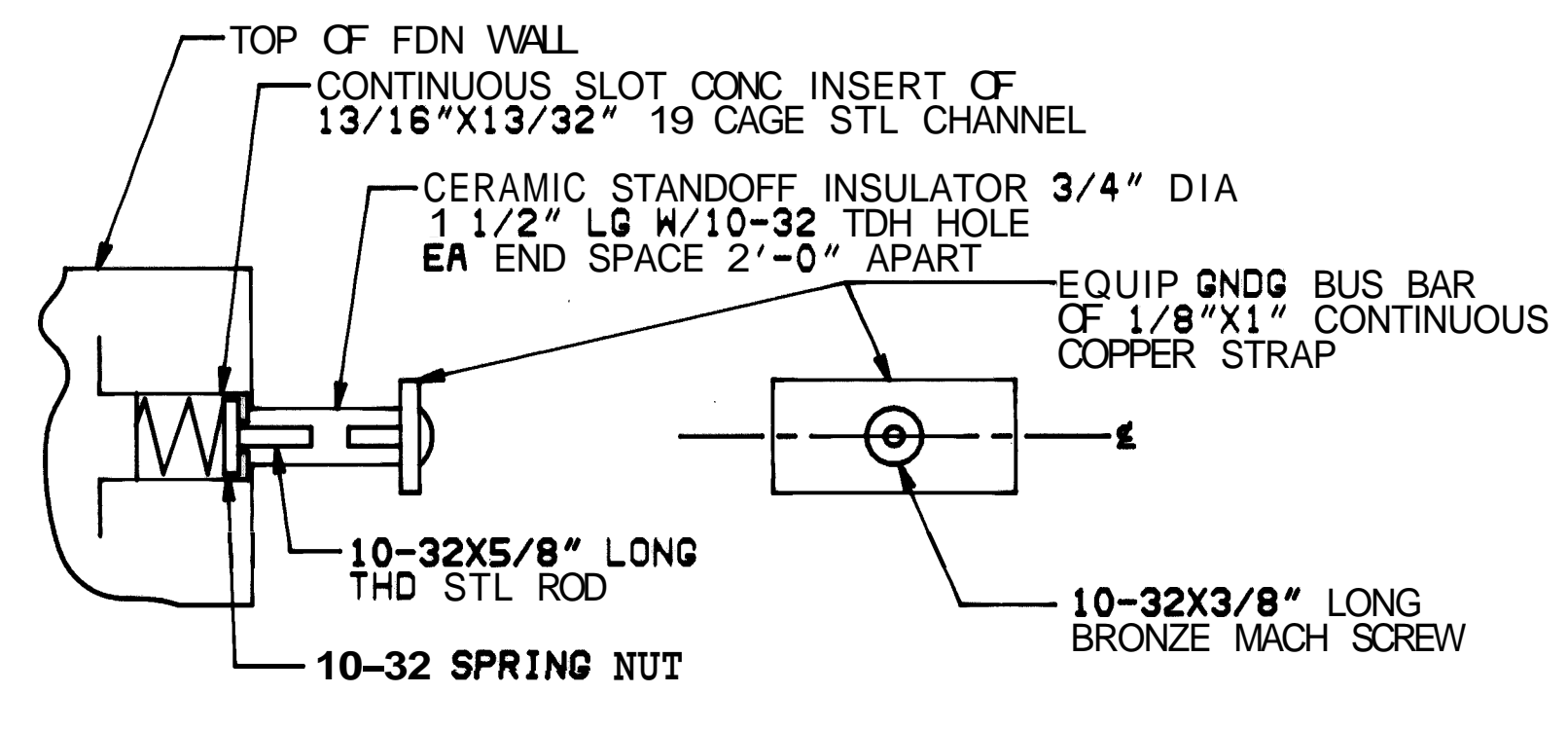
SIZE CODE IDENT. NO. NAVFAC DRAWING NO.
F 80091 1404323

CONSTR. CONTR. NO.
SCALE AS NOTED SPEC. NFSS-M18 SHEET 1 OF

LTR	DESCRIPTION	PREPD BY	DATE	APPROVED
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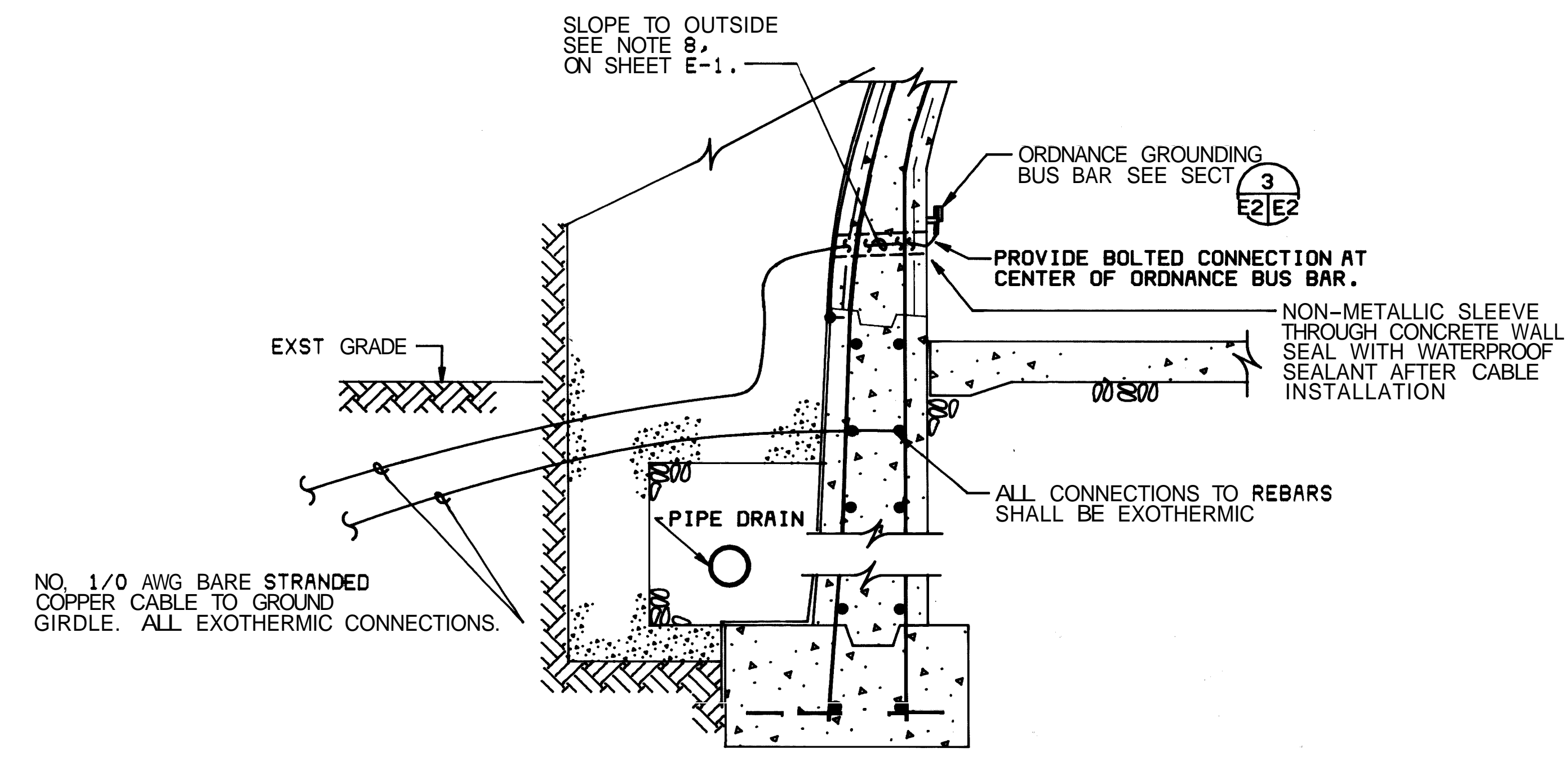
TYPICAL GROUNDING PLAN
SCALE: 1" = 20'-0"



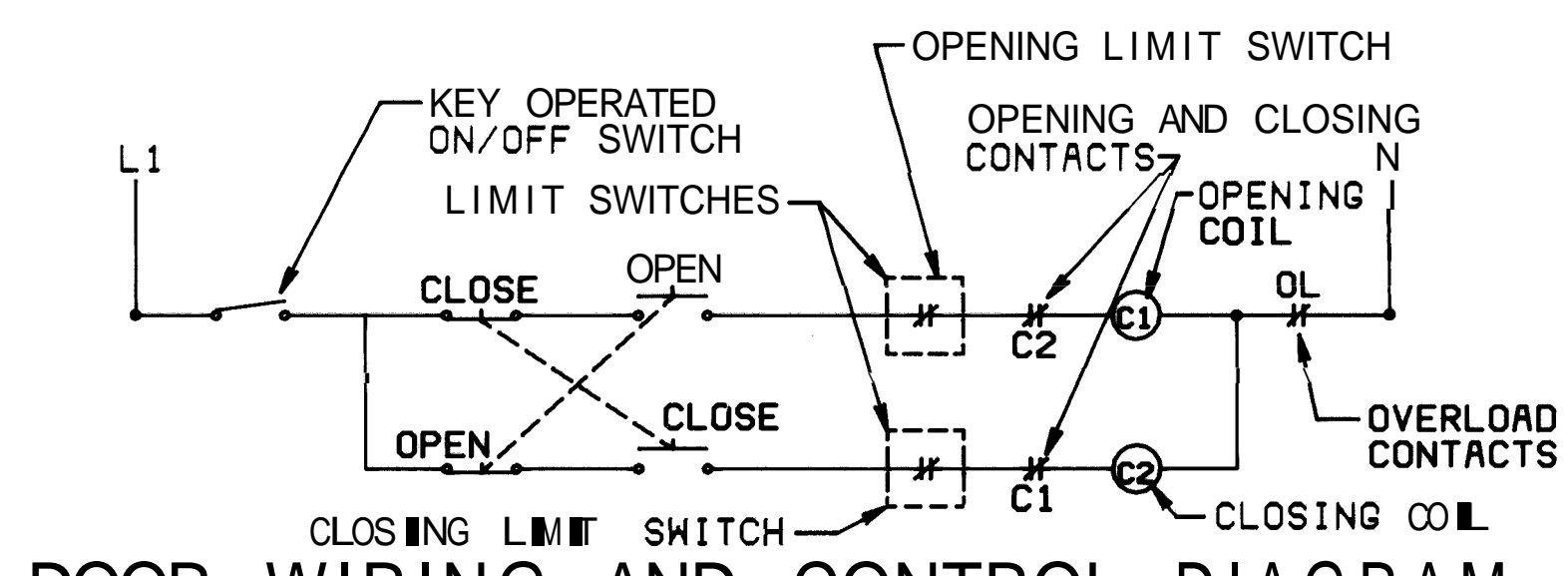
SECTION FRONT VIEW
ORDNANCE GROUNDING BUS BAR

DETAIL 3
NO SCALE

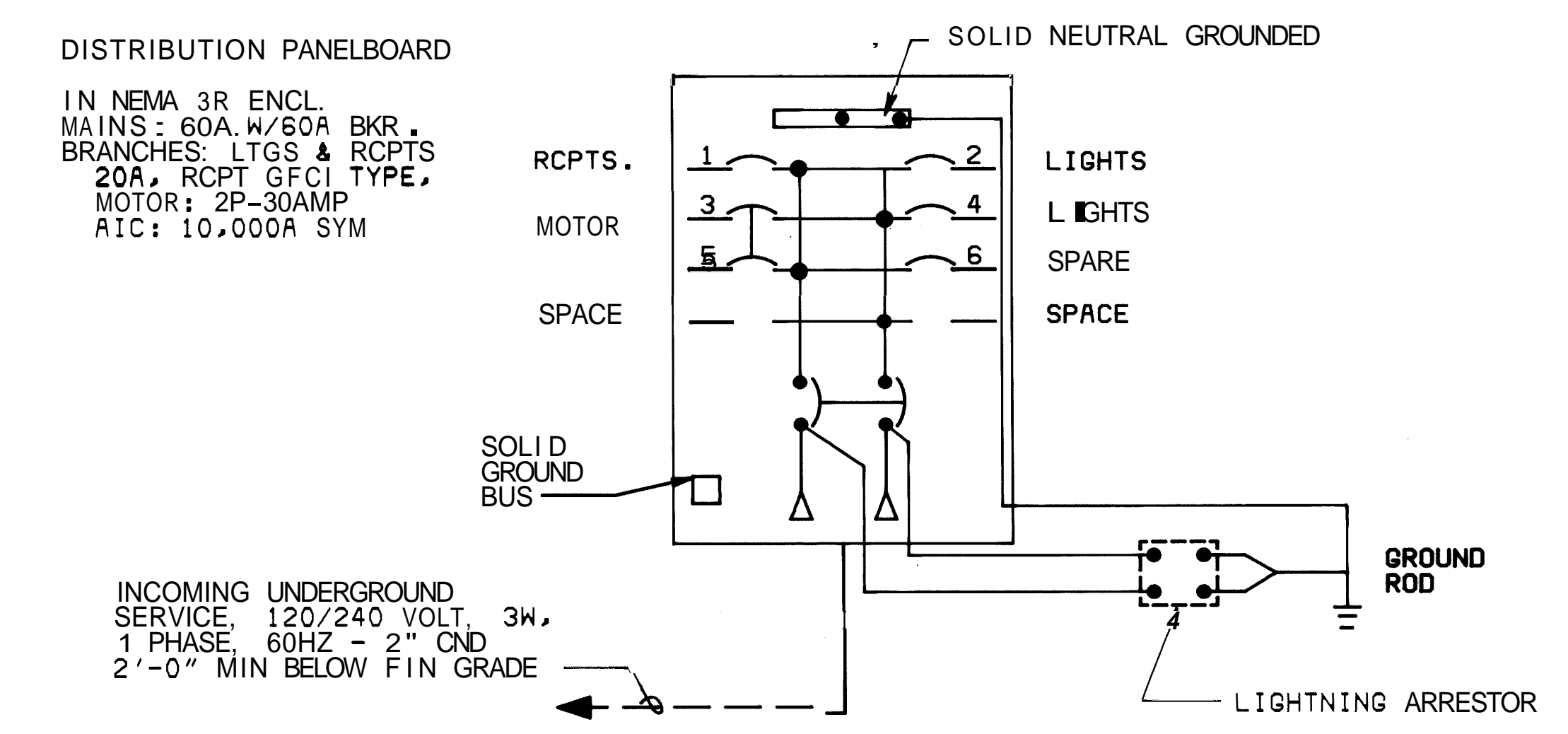
ARCH TYPE	MAGAZINE SIZE		EXTERIOR		INTERIOR		MOTOR		PANEL TOTAL (1 MAG) (KW) *			
	WIDTH (FT)	LENGTH (FT)	LGT FIX QTY	RECP WATTS	LGT FIX QTY	RECP WATTS	QTY	SIZE				
1	25	80	2	200	1	900	10	200	0	1	2880	6.2
2	25	50	2	200	1	900	5	200	0	1	7880	5.2



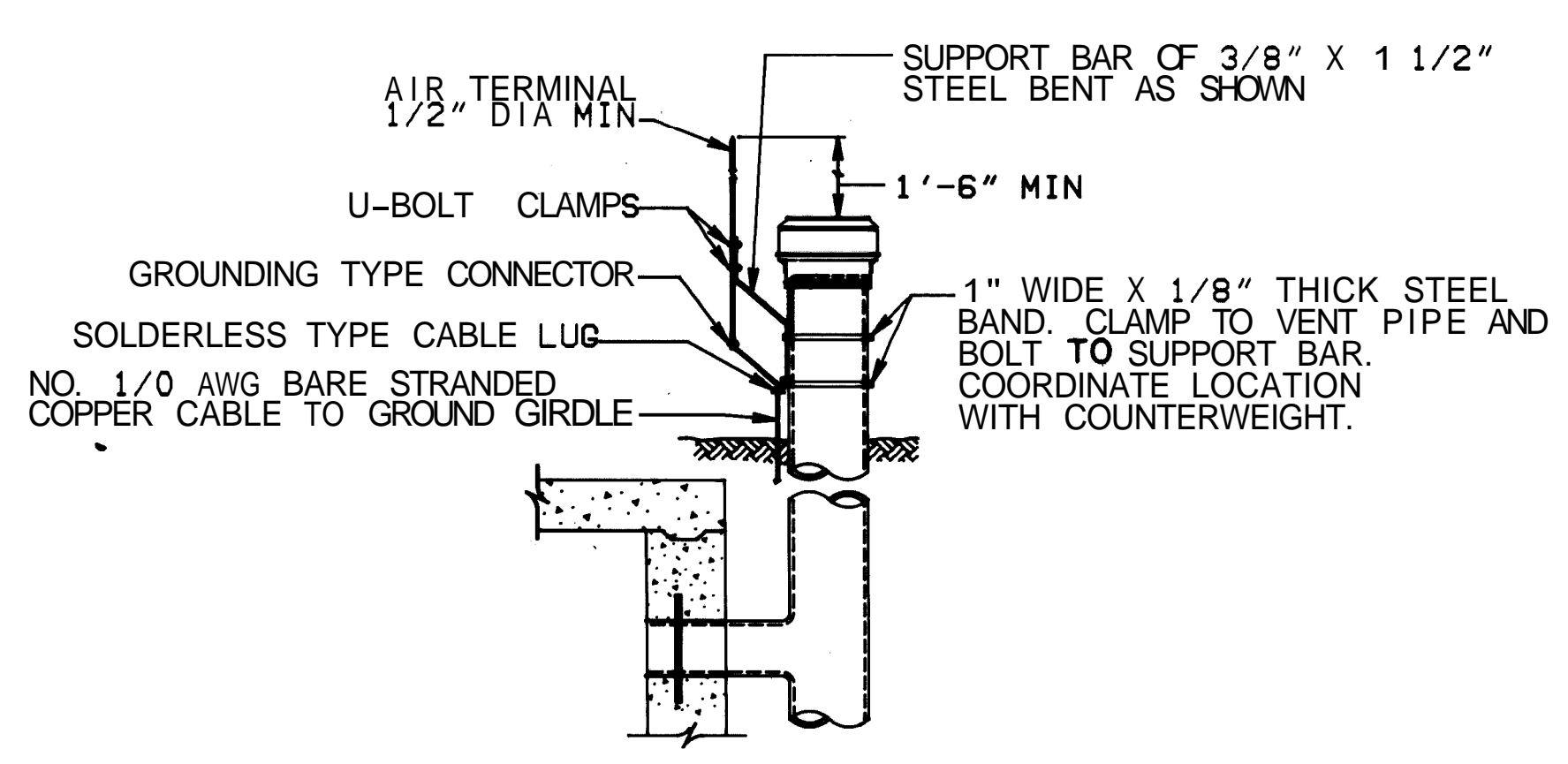
SECTION 1
NO SCALE



DOOR WIRING AND CONTROL DIAGRAM
NO SCALE



ELECTRICAL SERVICE SINGLE LINE DIAGRAM
NO SCALE

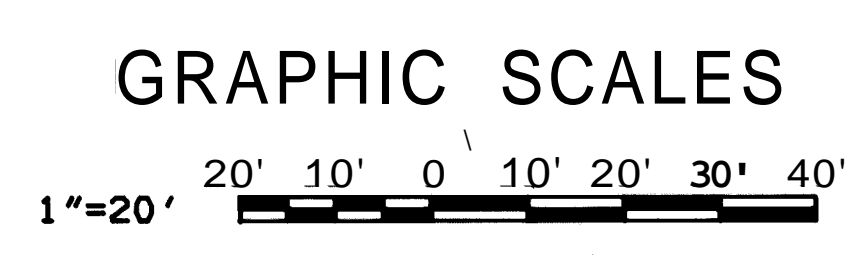


VENTILATOR GROUNDING

DETAIL 2
NO SCALE

LIGHTING FIXTURE SCHEDULE		
TYPE	DESCRIPTION	SIZE
A	EXPLOSION PROOF INCANDESCENT CEILING MOUNTED ASSEMBLY WITH CLEAR LAMP GLOBE, GUARD AND DOME REFLECTOR SUITABLE FOR HAZARDOUS LOCATION CLASS I, DIV II, GROUP D AND CLASS II, DIV II, GROUP G	200W
B	VAPOR TIGHT INCANDESCENT WALL MOUNTED FIXTURE ENCLOSED AND GASKETED, WITH CLEAR LAMP GLOBE, GUARD AND 30" ANGLE REFLECTOR - TO BE OPERATED BY PHOTO-CELL MOUNTED ABOVE FIXTURE.	200W

METRIC CONVERSIONS	
1/4" =	6MM
3/8" =	10MM
1/2" =	13MM
5/8" =	16MM
3/4" =	19MM
7/8" =	22MM
1 1/2" =	38MM
1'-0" =	305MM
1'-6" =	457MM
2'-0" =	610MM
20'-0" =	6096MM



CHECK GRAPHIC SCALES BEFORE USING

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
200 STOWALL STREET ALEXANDRIA, VA. 22332

STANDARD
EARTH-COVERED CONCRETE ARCH MAGAZINE
ELECTRICAL
SCHEDULES AND SINGLE LINE DIAGRAM

CERTIFICATE No. 3083

DATE 7-12-82

SIZE CODE IDENT. NO. NAVFAC DRAWING NO. 1404324

CONSTR. CONTR. NO.

SCALE AS NOTED SPEC. NFSS-MIB SHEET 2 OF