NELSON 43

Mukilteo

4301 78th Street SW
Mukilteo, WA

PERMIT SET

SYNTHESISPLLC
THE FUSION OF ARCHITECTURE, DESIGN TECHNOLOGY & PEOPLE

12503 Bel-Red Road, Suite 101
Bellevue, WA 98005
p 425 646 1818 f 425 646 4141

NELSON
DEVELOPMENT

P.O. BOX 1301
SEAHURST, WA 98062

REVISIONS

ISSUE NO.	DATE	ITEM
1	10 11 2019	PERMIT SET

PROFESSIONAL STAMP

715# REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON

Digitally signed by Randy Brown
Date: 2019.10.10 20:29:01 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: COVER

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: –
PROJECT NO: 201613.03.003

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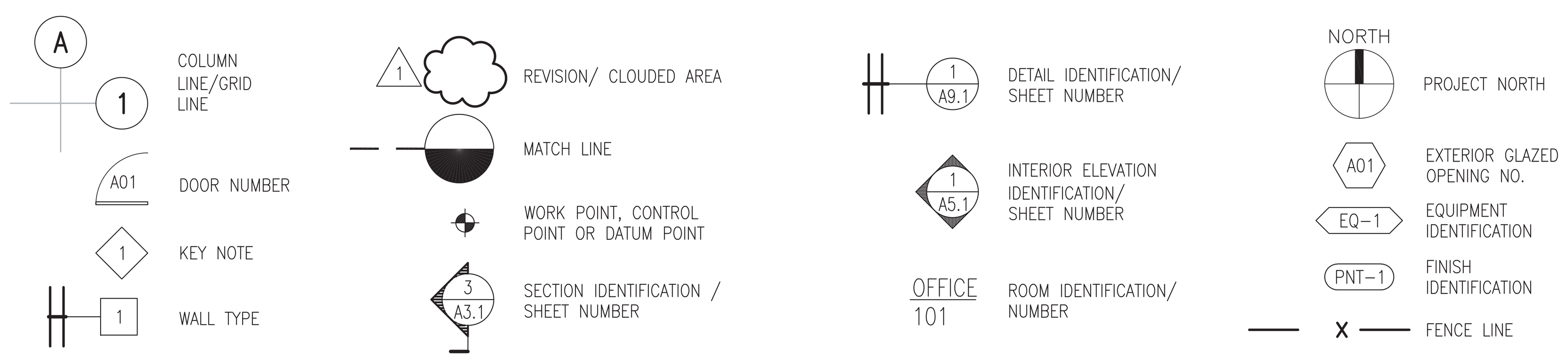
P:\201613 – Nelson Development\03 – Mukilteo\003 – 4 Ave Sort\003_CD.rvt, 10/10/2019 7:57 PM

ABBREVIATIONS

Abbr.	Meaning
<	ANGLE
CL	CENTER LINE
[	CHANNEL
Ø	DIAMETER OR ROUND
#	NUMBER OR POUND
ɗ	PENNY
⊥	PERPENDICULAR
ℓ	PLATE
AB	ANCHOR BOLT
AC	ACOUSTICAL OR ASPHALT CONCRETE
A/C	AIR CONDITIONING
ACP	ACOUSTICAL PANEL
ACT	ACOUSTICAL TILE
ADD	ADDITIVE
ADH	ADHESIVE
ADJ	ADJACENT
ADJT	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AGG	AGGREGATE
AL	ALUMINUM
ALT	ALTERNATE
AP	ACCESS PANEL
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
AWF	ACOUSTICAL WALL FABRIC
AWP	ACOUSTICAL WALL PANEL
BD	BOARD
BETW	BETWEEN
BLDG	BUILDING
BLK	BLOCK
BLKG	BLOCKING
BM	BEAM
BRG	BEARING
BO	BOTTOM OF
BOT	BOTTOM
BSMT	BASEMENT
BUR	BUILT UP ROOF
CAB	CABINET
CB	CATCH BASIN
CBU	CEMENTITIOUS BACKER UNIT
CEM	CEMENT
CER	CERAMIC
CFM	CUBIC FEET PER MINUTE
CG	CORNER GUARD
CHBD	CHALK BOARD
CI	CAST IRON
CJT	CONTROL JOINT
CLG	CEILING
CJ	CONSTRUCTION JOINT
CLK	CAULKING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CNTR	COUNTER
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CPT	CARPET
CT	CERAMIC TILE
CTR	CENTER
CTSK	COUNTER SINK
CY	CUBIC YARD
D	DEEP, DEPTH
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DMPF	DAMPPROOFING
DN	DOWN
DR	DOOR OR DRAIN
DWR	DRAWER
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
E	EAST
EA	EACH
EB	EXPANSION BOLT
EJ	EXPANSION JOINT
EIFS	EXTERIOR INSULATED FINISH SYSTEM
EL	
ELEC	ELEVATION
ELEV	ELECTRIC
EMER	ELEVATOR
ENCL	EMERGENCY ENCLOSURE OR ENCLOSED
EWC	ELECTRIC WATER COOLER
EQ	EQUAL
EQPT	EQUIPMENT EMERGENCY SHOWER/
ESEW	EYE WASH
EST	ESTIMATE
EXH	EXHAUST
EX	EXPANSION
EXST	EXISTING
EXP	EXPOSED
EXT	EXTERIOR
FA	FIRE ALARM
FB	FLAT BAR
FBD	FIBER BOARD
FBO	FURNISHED BY OTHERS
FCIC	FURNISHED BY CONTRACTOR INSTALLED BY CONTRACTOR
FCTY	FACTORY
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUSHER
FEC	FIRE EXTINGUSHER CABINET
FIN	FINISH
FL	FLOOR
FLG	FLASHING
FLUOR	FLUORESCENT
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOIC	FURNISH BY OWNER INSTALL BY CONTRACTOR
FOIO	FURNISH BY OWNER INSTALL BY OWNER
FOS	FACE OF STUD
FPW	FREEZE PROOF WALL HYDRANT
FS	FULL SIZE
FT	FEET
FTG	FOOTING
FURR	FURRING
FUT	FUTURE
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GL	GLASS OR GLAZING
GLBM	GLU-LAM BEAM
GC	GENERAL CONTRACTOR
GND	GROUND
GWB	GYPSUM WALL BOARD
GYP	GYPSUM
HB	HOSE BIB
HBD	HARD BOARD
HC	HOLLOW CORE OR HANDICAP
HD	HAND DRYER
HDR	HEADER
HDWD	HARD WOOD
HDWE	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
HTG	HEATING
HVAC	HEATING/VENTILIATION/ AIR CONDITIONING
HWH	HOT WATER HEATER
ID	INSIDE DIAMETER/ DIMENSION
IG	INSULATED GLASS
IN	INCH
INCL	INCLUDE
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JAN	JANITOR
JST	JOIST
JT	JOINT
KO	KNOCK OUT
KS	KNEE SPACE
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LB	LAG BOLT
LF	LINEAL FOOT
L	LONG, LENGTH
LG	LAMINATED GLASS
LH	LEFT HAND
LL	LIVE LOAD
LMS	LIQUID MARKING
	SURFACE
LT	LIGHT
LWC	LIGHT WEIGHT CONCRETE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MB	MACHINE BOLT
MDO	MEDIUM DENSITY OVERLAY
MDF	MEDIUM DENSITY FIBERBOARD
MECH	MECHANICAL
MEMB	MEMBRANE
MTL	METAL
MEZZ	MEZZANINE
MFR	MANUFACTURER
MH	MAN HOLE
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MO	MASONRY OPENING
MTD	MOUNTED
MULL	MULLION
N	NORTH
NIC	NOT IN CONTRACT
NO/#	NUMBER
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
OBS	OBSCURE
OC	ON CENTER
OD	OUTSIDE DIAMETER/ DIMENSION
OH	OVERHEAD
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
PBD	PARTICLE BOARD
PERP	PERPENDICULAR
PL	PLATE OR PROPERTY LINE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PWD	PLYWOOD
PNL	PANEL
PNT	PAINT
POL	POLISH
PR	PAIR
PRCST	PRECAST
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PTD	PAPER TOWEL DISPENSER
PTD/R	PAPER TOWEL DISPENSER AND RECEPTACLE
PTN	PARTITION
PTR	PAPER TOWEL RECEPTACLE
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QT	QUARRY TILE
R	RISER
RA	RETURN AIR
RAD	RADIUS
RB	RESILIENT BASE
R&S	ROD & SHELF
RD	ROOF DRAIN
RD/O	ROOF DRAIN OVERFLOW
REBAR	REINFORCING BAR
REF	REFERENCE, REFLECTED
REFR	REFRIGERATOR
REINF	REINFORCED
REQ	REQUIRED
REV	REVISION
RH	RIGHT HAND OR ROBE HOOK
RESIL	RESILIENT
RIO	ROUGH-IN ONLY
RM	ROOM
RO	ROUGH OPENING
RT	RESILIENT/RUBBER TILE
RUB	RUBBER
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEAT COVER DISPENSER
SCHD	SCHEDULE
SD	SOAP DISPENSER OR STORM DRAIN
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SHTG	SHEATHING
SIG	SOLAR INSULATED GLAZING
SIM	SIMILIAR
SK	SINK
SLR	SEALER
SND	SANITARY NAPKIN DISPENSER
SNR	SANITARY NAPKIN RECEPTACLE
SNT	SEALANT
SPEC	SPECIFICATION
SPGL	SPANDREL GLASS
SQ	SQUARE
SS	SOLID SURFACING
SST	STAINLESS STEEL
SSK	SERVICE SINK
STA	STATION
STC	SOUND TRANSMISSION CLASS
STN	STAIN
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRL	STRUCTURAL
SUSP	SUSPENDED
SV	SHEET VINYL
SYM	SYMMETRICAL
SWC	SPECIAL WALL COVERING
T	TREAD
TB	TOWEL BAR
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TG	TEMPERED GLASS
THK	THICK
THR	THRESHOLD
TIG	TEMPERED INSULATED GLAZING
TKBD	TACK BOARD
TO	TOP OF
TOC	TOP OF CONCRETE
TOP	TOP OF PAVEMENT
TOS	TOP OF STEEL
TOSL	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TPH	TOILET PAPER HOLDER
TPTN	TOILET PARTITION
TS	TUBULAR STEEL
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UON	UNLESS OTHERWISE NOTED
UR	URINAL
VAR	VARIES
VCT	VINYL COMPOSITION TILE
VENT	VENTILATOR
VERT	VERTICAL
VEST	VESTIBULE
VNR	VENEER
VR	VAPOR RETARDER
VWC	VINYL WALL COVERING
W	WEST
W/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WDO	WINDOW
WF	WIDE FLANGE
WG	WIRE GLASS
WM	WIRE MESH
WOM	WALK OFF MAT
WP	WATER PROOF
WPT	WORKING POINT
WR	WATER RESISTANT
WSCT	WAINSCOT
WT	WEIGHT
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER
YD	YARD

SYMBOLS



ENERGY CODE

1. ENERGY CODE COMPLIANCE:
   - WAREHOUSE AREAS: SEMI-HEATED
   - OFFICE AREAS: CONDITIONED
   - COMPLIANCE METHOD: COMPONENT
2. INSULATION REQUIREMENTS:
   - ROOF INSULATION: RIGID CONTINUOUS OVER DECK: R-30
   - WALL INSULATION: NONE
   - PERIMETER SLAB INSULATION: NONE
   - SKYLIGHTS: U=0.5
   - SECTIONAL DOORS: R-10
   - ROLL-UP DOORS: R-10
   - FIXED WINDOWS: U=0.38
   - ENTRANCES: U=0.60
3. SHADING COEEFICIENTS
   - SKYLIGHTS: SHGC=0.40 MAX.
   - FIXED WINDOWS: SHGC=0.40 MAX.
   - ENTRANCES: SHGC=0.40 MAX.

ZONING INFORMATION

1. Jurisdiction: **EVERETT, WA**
2. Present Zoning: **P1 – PLANNED INDUSTRIAL**
   RD – SINGLE-FAMILY RESIDENTIAL
3. Projected site use requires: **NO ACTION**
4. Use Zone Adjacent Lots: N **RD** E **P1** S **P1** W **RD**
5. Special Regulations Applicable:
   - A. Shoreline Management Act — Yes ___ No **X**
     Setback required --
   - B. Flood Plain or Waterway — Yes ___ No **X**
   - C. Airport open use/glide path — Yes ___ No **X**
   - D. Storm Water Retention/Run-Off — Yes ___ No **X**
   - E. Fire Lane Requirements — No **X**
6. Setbacks
   Required: Front Yard **10'** Rear Yard **20'**
   W Side Yard **10'** E Side Yard **10'**
7. Easements, Vacations, restrictive convenants as applicable:
   SEE CIVIL DRAWINGS
8. Parking
   Building Shell (Office space area is speculative)

Warehouse/Office	**55,820 SF**	0.5 Stall/1,000 SF		**30** Stalls
Parking Stalls Required	**4** Accessible (**1** Van)		**60** Parking	**64** Total
Parking Stalls Provided	**4** Accessible (**1** Van)		**84** Parking	**88** Total

   Standard: **SIZE: 8'-6" x 19'-0"**
   Compact: **SIZE: 8'-0" x 16'-0"**

9. Total Site Area

Total Site Area		**176,141** SF	**4.04** Acres
Parking Area:		**29,564** SF	
Parking Landscaping Required:	**10%**	**2,956** SF	
Landscaping Provided:	**16%**	**4,751** SF	

GENERAL NOTES

1. DIMENSIONS ARE TO FACE OF STUD, CONCRETE OR CENTER LINE OF COLUMN, UNLESS OTHERWISE NOTED.
2. DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN.
3. VERIFY ALL EXISTING CONDITIONS, DIMENSIONS, DETAILS, ETC. NOTIFY ARCHITECT OF ANY AND ALL DISCREPANCIES PRIOR TO PROCEEDING WITH THE WORK.
4. WHEN CONSTRUCTION DETAILS ARE NOT SHOWN OR NOTED FOR ANY PART OF THE WORK, DETAILS SHALL BE THE SAME AS FOR OTHER SIMILAR WORK. IF QUESTIONS CANNOT BE RESOLVED IN THIS MANNER, CONTACT THE ARCHITECT.
5. VERIFY ELEVATIONS & LOCATIONS TO BE JOINED BEFORE CONSTRUCTION. CONTACT ARCHITECT IF THEY DIFFER FROM THOSE SHOWN ON DRAWINGS.
6. ALL ROUGH-INS TO BE APPROVED PRIOR TO FRAMING INSPECTION.
7. MECHANICAL, ELECTRICAL, AND PLUMBING ARE BIDDER DESIGN. PORTIONS OF THIS WORK SHOWN ON DRAWINGS IS FOR DESIGN INTENT OR FOR COORDINATION ONLY.
8. MECHANICAL DESIGN/BUILD CONTRACTOR SHALL PROVIDE A MECHANICAL VENTILATION SYSTEM CAPABLE OF SUPPLYING THE MINIMUM OUTDOOR AIR QUANTITIES SPECIFIED IN THE 2015 IMC WITH WASHINGTON AMENDMENTS.
9. ELECTRICAL DESIGN/BUILD CONTRACTOR SHALL PROVIDE AND INSTALL MEANS OF EGRESS ILLUMINATION AND ILLUMINATED EXIT SIGNS PER IBC SECTIONS 1006 AND 1011.
10. DEFERRED SUBMITTALS:
    STRUCTURAL JOISTS
    FIRE ALARM AND SPRINKLERS

CODE INFORMATION

Code Edition: 2015 IBC, 2015 IFC, 2015 IMC, 2015 UPC, 2015 WSEC (WAC 51-11), ICC/ANSI A117.1-2009; WASHINGTON STATE AMENDMENTS TO THE ABOVE (WAC 51-50).

Scope of Work: Construct a 55,820 square foot industrial facility utilizing site cast concrete tilt-up wall panels, a wood roof supported on composite steel joists and girders with wood nailers and HSS columns. The facility is single story with a minimum clear height of 24'-0" above finished floor. There will be a total of (20) 9' X 10' dock high doors and (4) 12' X 14' grade access doors. The facility is fully sprinklered with an ESFR system.

Amended by Local Jurisdiction Yes X No ___ Date ___

Construction:			
New	X	Basic Wind Speed	**110 MPH**
Addition		Seismic Use Group	**1**
Alteration		Occupancy Category	**2**
Repair		Site/Soil Classification	**D**
		Snow Load	**25 PSF**

BUILDING CLASSIFICATION

A. Occupancy Classification (Section 302) **B / S-1**

B. Type of Construction (Section 602)
1. Type of Construction **III-B**
2. Automatic Sprinklers Provided Yes X No ___

C. Location of Property (602.1) **SEE SHEET A1.1**

	Distance to Property Line	Openings Permitted (Table 705.8)	Openings Protected (Table 705.8)	Fire Resistance of Exterior Wall (Table 601 & 602)
North	**88'** Feet	Yes X No ___	Yes ___ No X	**NONE**
East	**138'** Feet	Yes X No ___	Yes ___ No X	**NONE**
South	**91'** Feet	Yes X No ___	Yes ___ No X	**NONE**
West	**27'** Feet	Yes X No ___	Yes ___ No X	**NONE**
(Other)	– Feet	Yes ___ No ___	Yes ___ No ___	

D. Building Area (Section 506)

1. A_t, Tabular Area (Table 506.2) **S-1 OCCUPANCY** **70,000** SF
2. Frontage Increase (506.3)
   W (Width of Open Space per 506.3.2) = **30** FT
   I_f (Increase due to Frontage) =
   100[(F/P)-0.25](W/30) = **75** %
3. NS, Tabular Area (Table 506.2) **17,500** SF
4. A_a, Allowable Area (506.2.1)
   A_t + (NS x I_f)= **83,125** SF
5. Unlimited Building Area (507)

– Section 507.3	– Section 507.4	– Section 507.5	– Section 507.5
– Section 507.6	– Section 507.7	– Section 507.8	– Section 507.9
– Section 507.10	– Section 507.11	– Section 507.12	– Section 507.13

6. Actual Floor Area: 1st Flr: **55,820** SF Mezz: **0** SF Total: **55,820** SF

E. Allowable Height and Number of Stories (Table 504.3 & 504.4)

1. Tabular Building Height Allowed **75** Feet **3** Stories
2. Actual Building Height **32'-0"** Feet **1** Stories

INDEX OF DRAWINGS

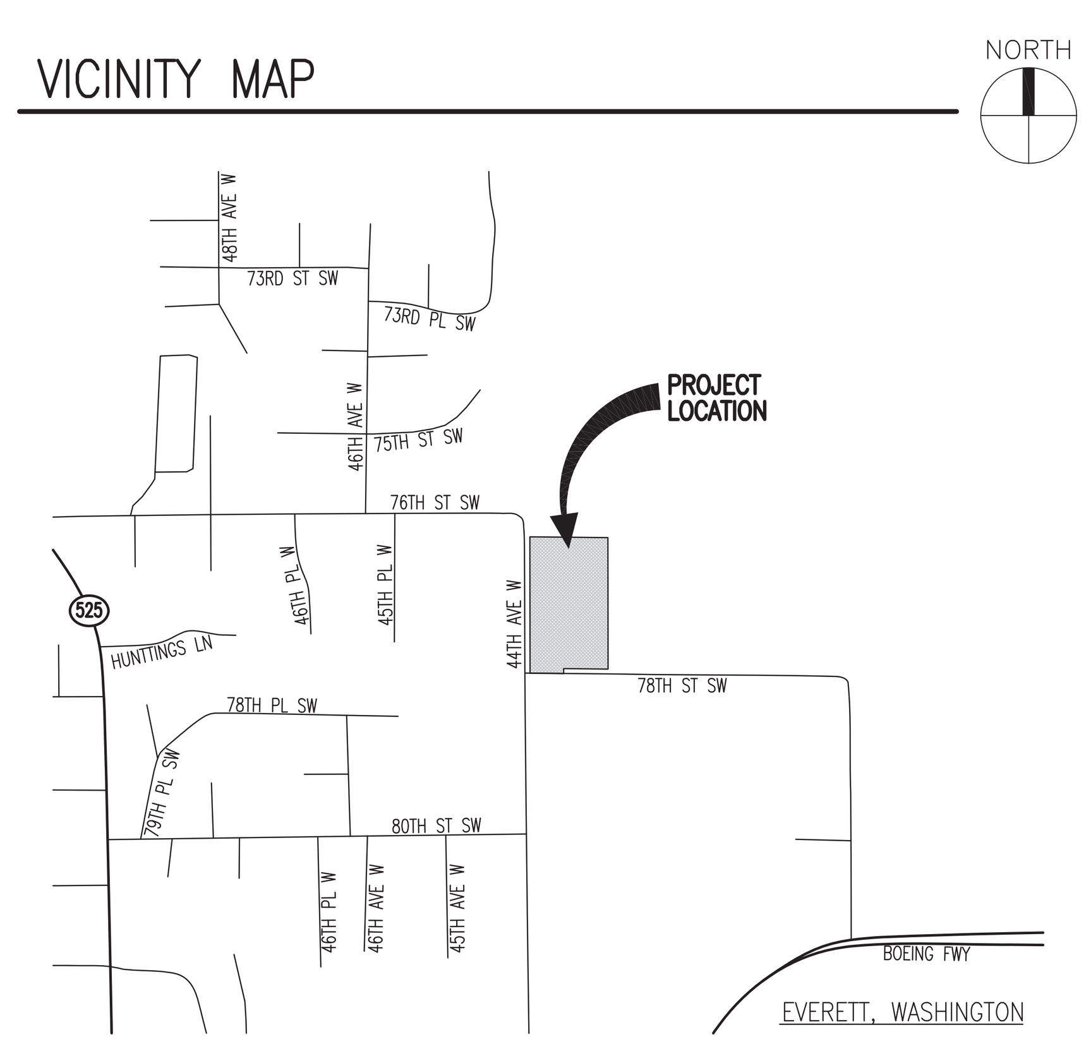
PROJECT INFORMATION

PROJECT SCOPE:	NEW BUILDING
PROJECT ADDRESS:	4301 78TH STREET SW MUKILTEO, WA 98275
BUILDING OWNER:	NELSON DEVELOPMENT P.O. BOX 1301 SEAHURST, WA 98062
PROPERTY TAX NO.:	2841000300100, 28041000300400, 2841000300500 & 28041000300600
ARCHITECT:	SYNTHESIS PLLC 12503 BEL-RED ROAD, SUITE 101 BELLEVUE, WA 98005 (425) 646-1818 CONTACT: RANDY BROWN
STRUCTURAL:	SHUTLER CONSULTING ENGINEERS 12503 BEL-RED ROAD, SUITE 100 BELLEVUE, WA 98005 (425) 450-4075 CONTACT: JOHN HEADLAND

LEGAL DESCRIPTION

SEC 10 TWP 28 RGE 04RT-10) W1/2 NW1/4 NW1/4 SW1/4 LESS N 100 FT & LESS S 231 FT & LESS W 208.71 FT

VICINITY MAP



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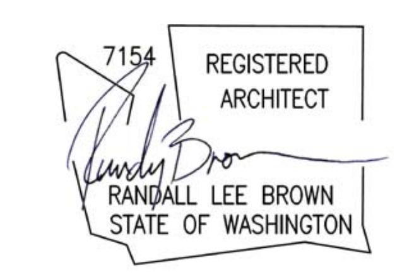

Digitally signed by Randy Brown
Date: 2019.10.10 20:29:36 -07'00'

PROJECT INFORMATION

NELSON 43

4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR:	BUILDING PERMIT		
TITLE:	CODE INFORMATION, SITE PLAN		
DESIGNED BY:		DRAWN BY:	
REVIEWED BY:		APPROVED BY:	
DATE:	08 07 19	SHEET NO:	G1.1
PROJECT NO:	201613.03.003		

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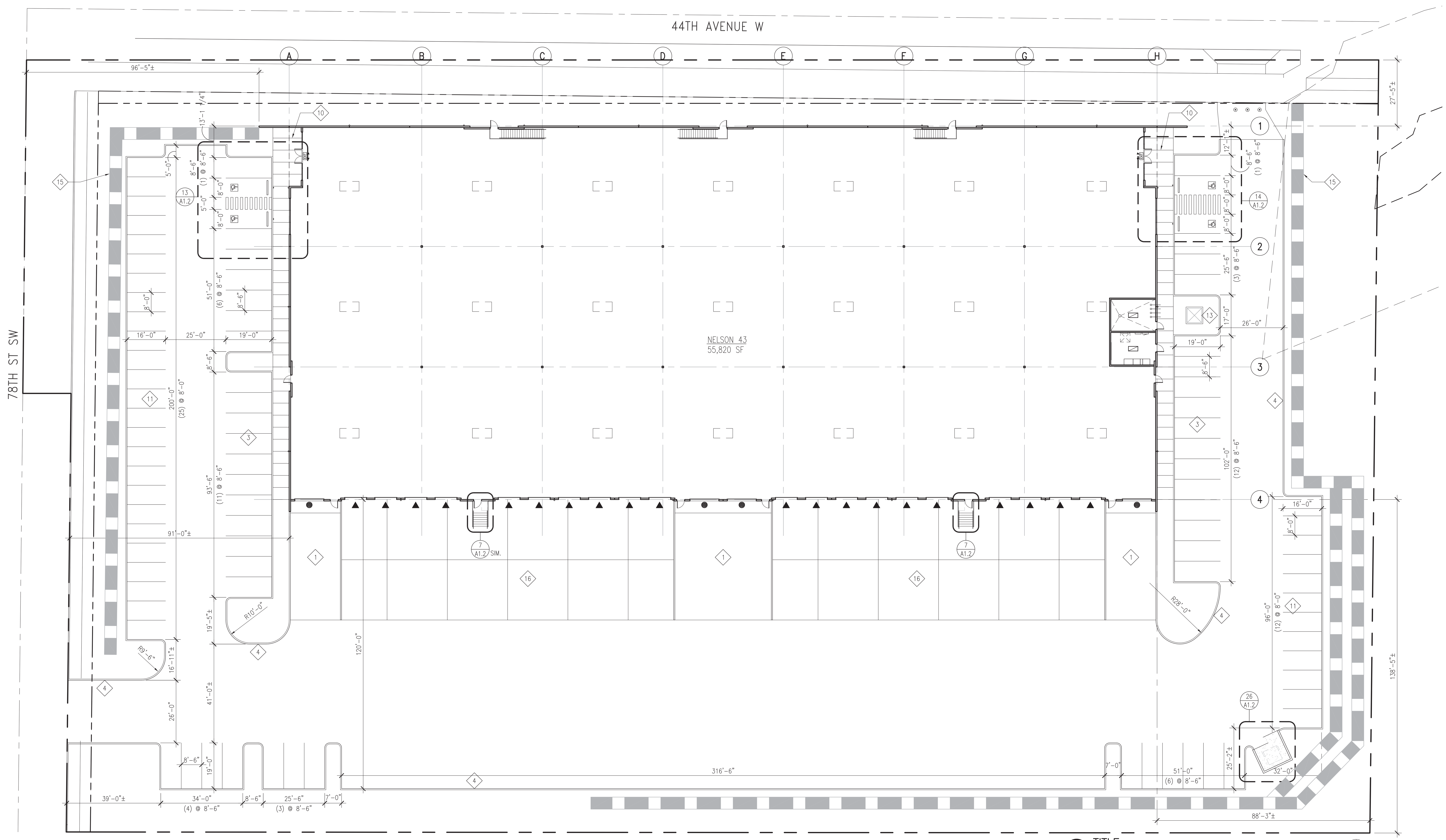
SITE KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED

1. AC PVMT RAMP, 1:12 MAX SLOPE, SEE CIVIL DWGS.
2. CONC LANDING, 5'-0"W x 5'-0"L MIN.
3. PAINT STRIPING ON FLOOR OR PAVEMENT.
4. EXTRUDED CONC CURB – 6" TYP W/ 24" RAD. OUTSIDE CORNERS TYP UON. USE THICK-FACE CURB AT SIDEWALKS.
5. 7'-0" HIGH CONC. TRASH ENCLOSURE SEE A1.2
6. ACCESSIBLE PARKING SIGN, SEE DET 11/A1.2.
7. ACCESSIBLE PARKING STALL W/ PAINTED INTERNATIONAL SYMBOL OF ACCESS. MAX SLOPE 1v:48h. SEE 16/A1.2.
8. VAN ACCESSIBLE PARKING STALL W/ PAINTED INTERNATIONAL SYMBOL OF ACCESS. MAX SLOPE 1v:48h. SEE 16/A1.2.
9. ACCESSIBLE RAMP, MAX SLOPE 1v:12h, MAX RISE 6" MIN LENGTH 6'-0", W/ NON-SLIP SURFACE.
10. 4" THICK, 5'-0"w (UON) CONC WALK, MAX SLOPE 1v:20h.
11. COMPACT PARKING STALL W/ PAINTED "COMPACT" DESIGNATION.
12. PROVIDE SIGN W/ THE INTERNATIONAL SYMBOL OF ACCESS, ATTACH TO GLASS ADJACENT TO DOOR.
13. APPROXIMATE ELECTRICAL TRANSFORMER LOCATION
14. APPROXIMATE GAS METER LOCATION
15. ACCESSIBLE PATH OF TRAVEL TO THE PUBLIC WAY
16. 50' CONCRETE ARPRON
17. RETAINING WALL, SEE CIVIL
18. BICYCLE RACK (FOR 2 OR MORE BICYCLES)



1 TITLE
SCALE: 1" = 20'-0"

NORTH

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7154 REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON

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Date: 2019.10.10 20:29:53 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: SITE PLAN

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A1.1
PROJECT NO: 201613.03.003

SITE KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED

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2. CONC LANDING, 5'-0"W x 5'-0"L MIN.
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9. ACCESSIBLE RAMP, MAX SLOPE 1v:12h, MAX RISE 6" MIN LENGTH 6'-0", W/ NON-SLIP SURFACE.
10. 4" THICK, 5'-0"w (UON) CONC WALK, MAX SLOPE 1v:20h.
11. COMPACT PARKING STALL W/ PAINTED "COMPACT" DESIGNATION.
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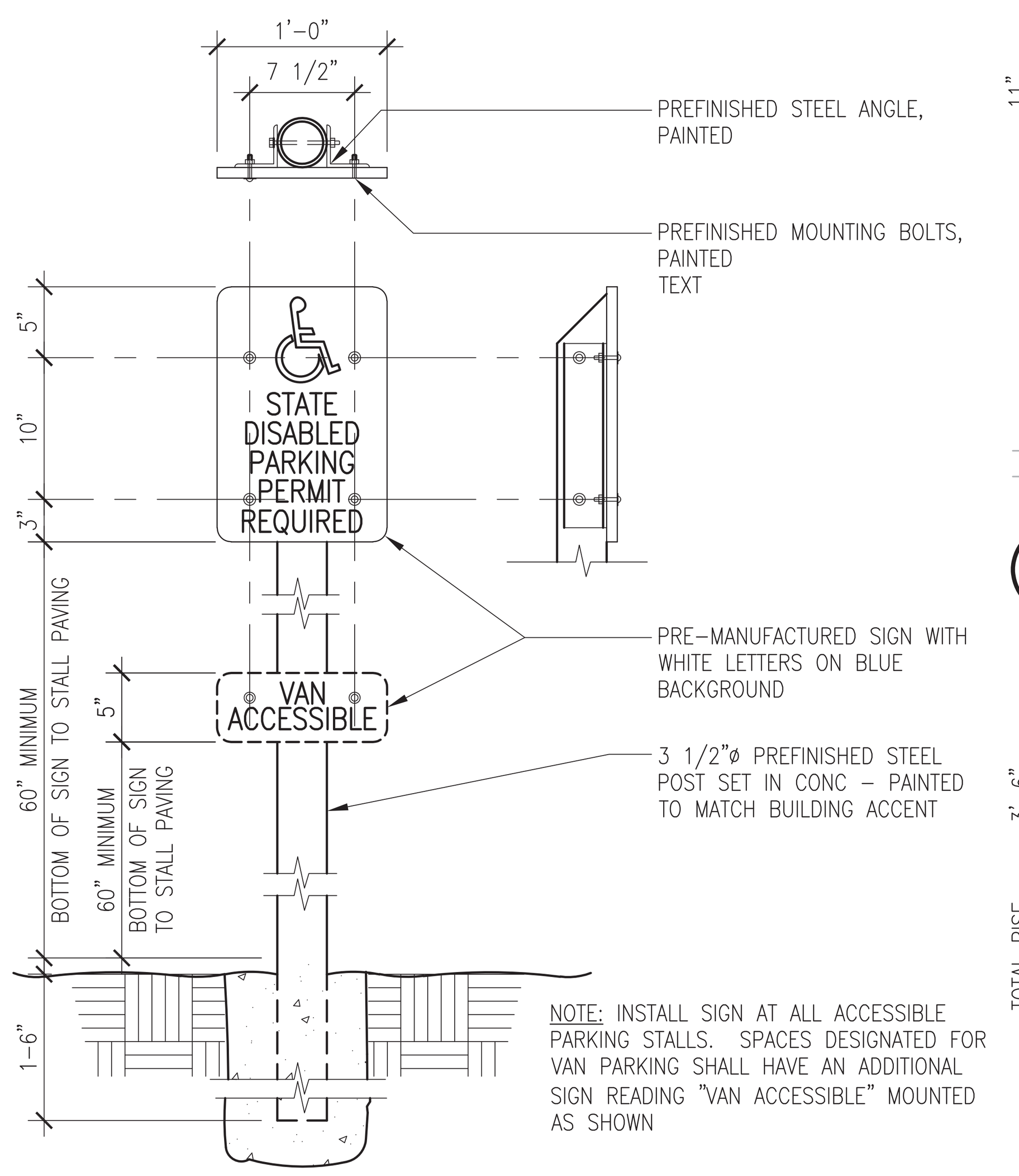
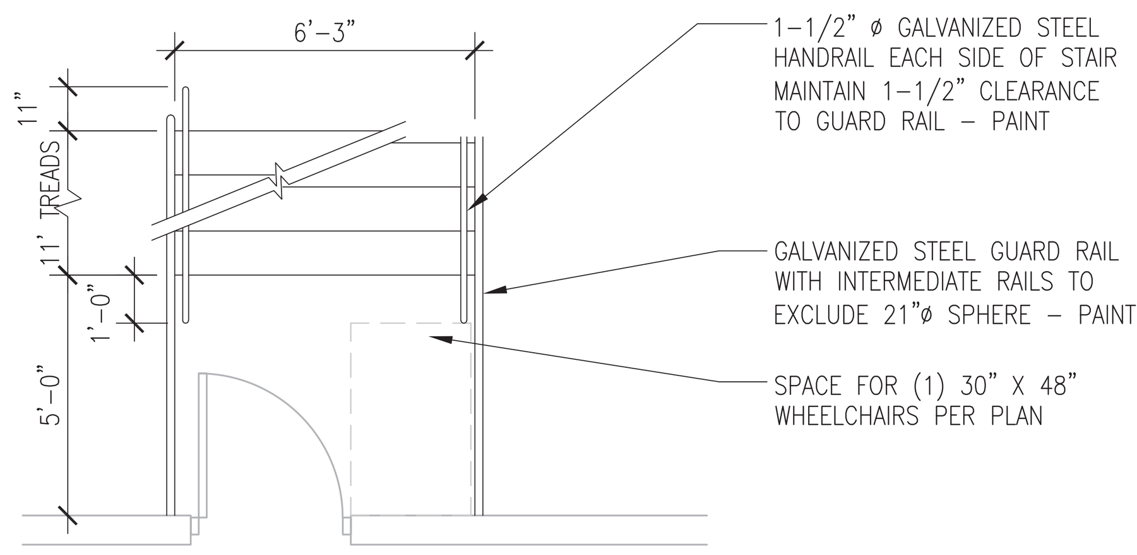
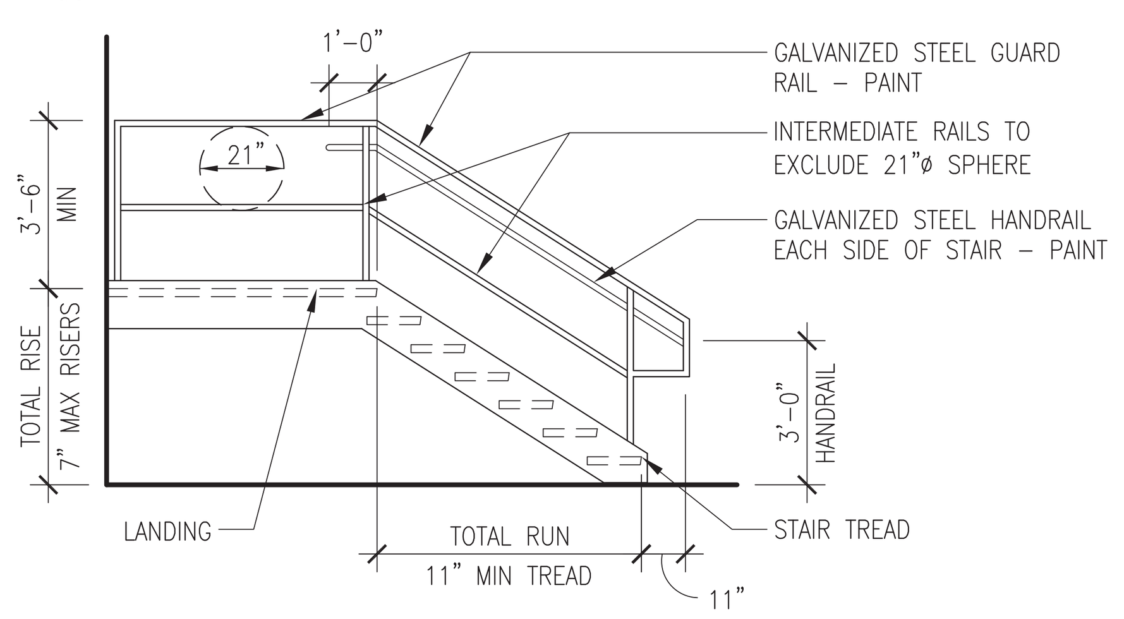


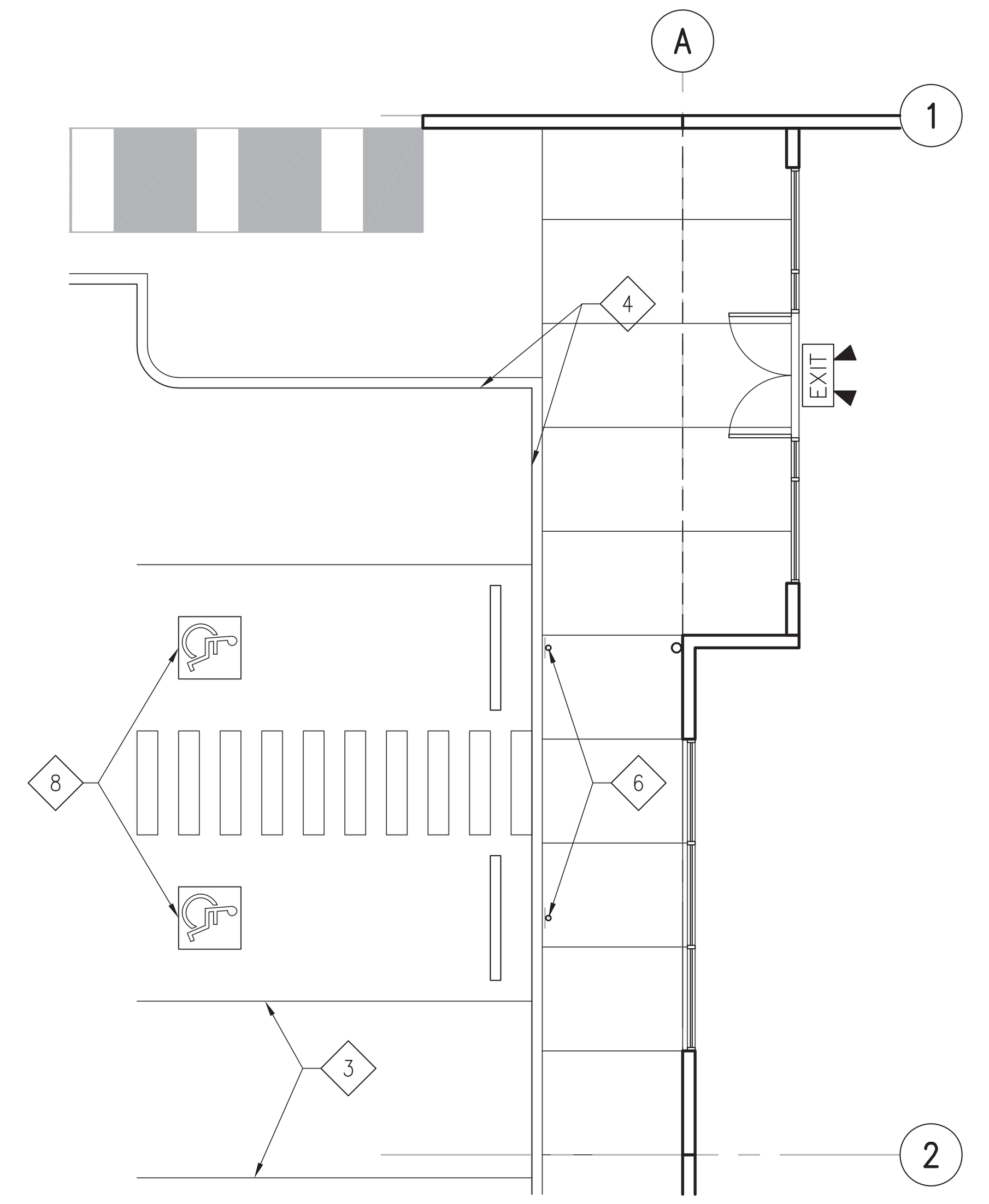
11 ACCESSIBLE PARKING SIGN
SCALE: 1" = 1'-0" ICC A117.1-2009 502.7



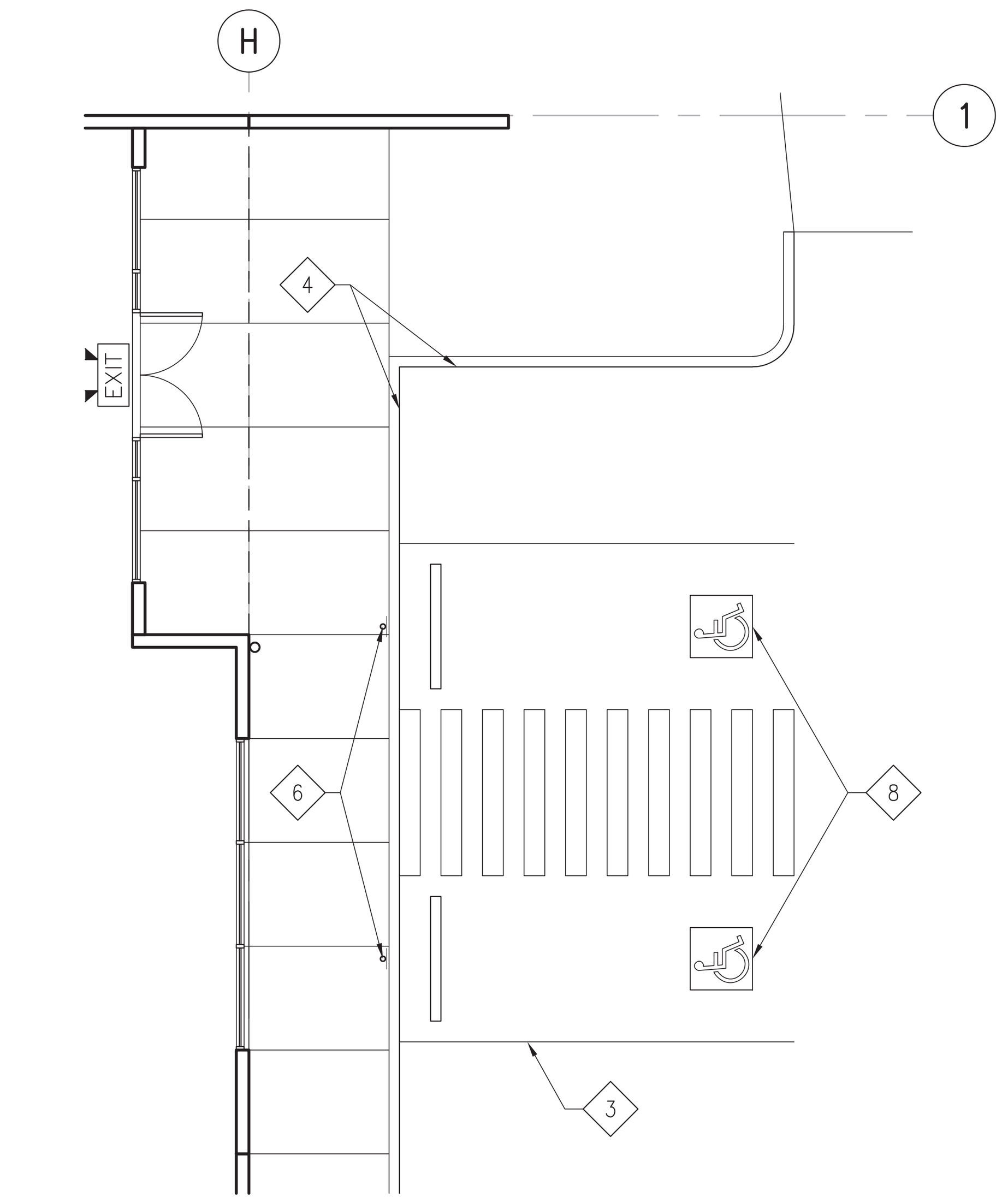
7 TYPICAL DOCK-STAIR PLAN
SCALE: 1/4" = 1'-0"



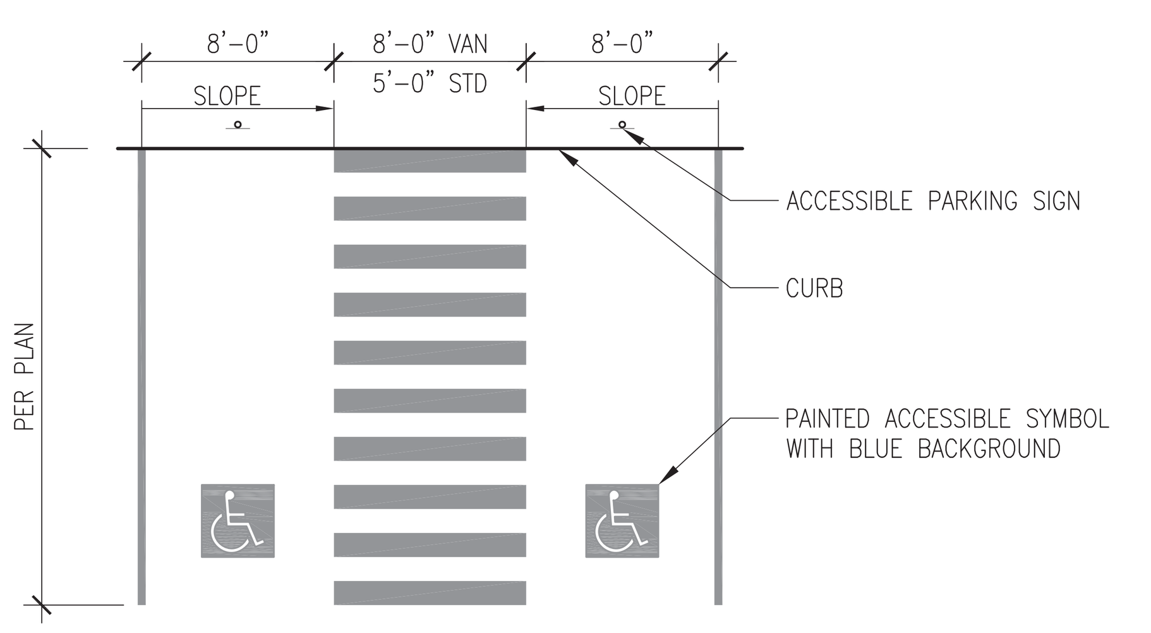
12 TYPICAL STEEL STAIR
SCALE: 1/4" = 1'-0"



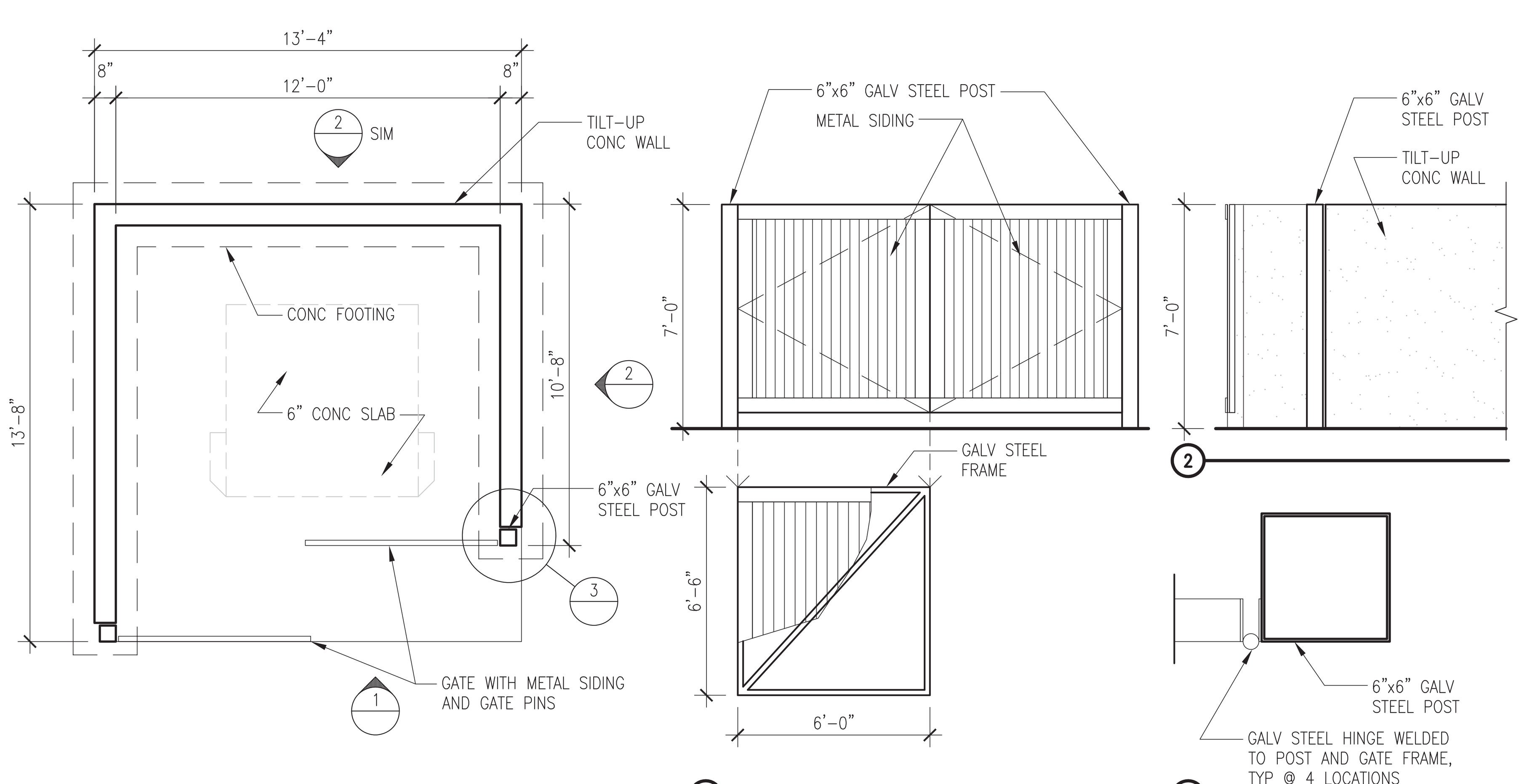
13 ENLARGED SITE PLAN
SCALE: 1/8" = 1'



14 ENLARGED SITE PLAN
SCALE: 1/8" = 1'



16 ACCESSIBLE PARKING STALLS
SCALE: 1/8" = 1'-0" ICC A117.1-2009 - 505.2



26 TRASH ENCLOSURE
SCALE: 1/4" = 1'-0"

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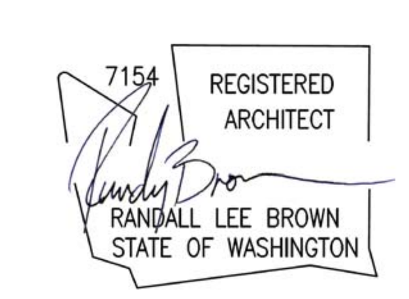

Digitally signed by Randy Brown
Date: 2019.10.10 20:30:09 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: SITE PLAN DETAILS

DESIGNED BY: DRAWN BY:
REVIEWED BY: APPROVED BY:
DATE: 08 07 19
SHEET NO: A1.2
PROJECT NO: 201613.03.003

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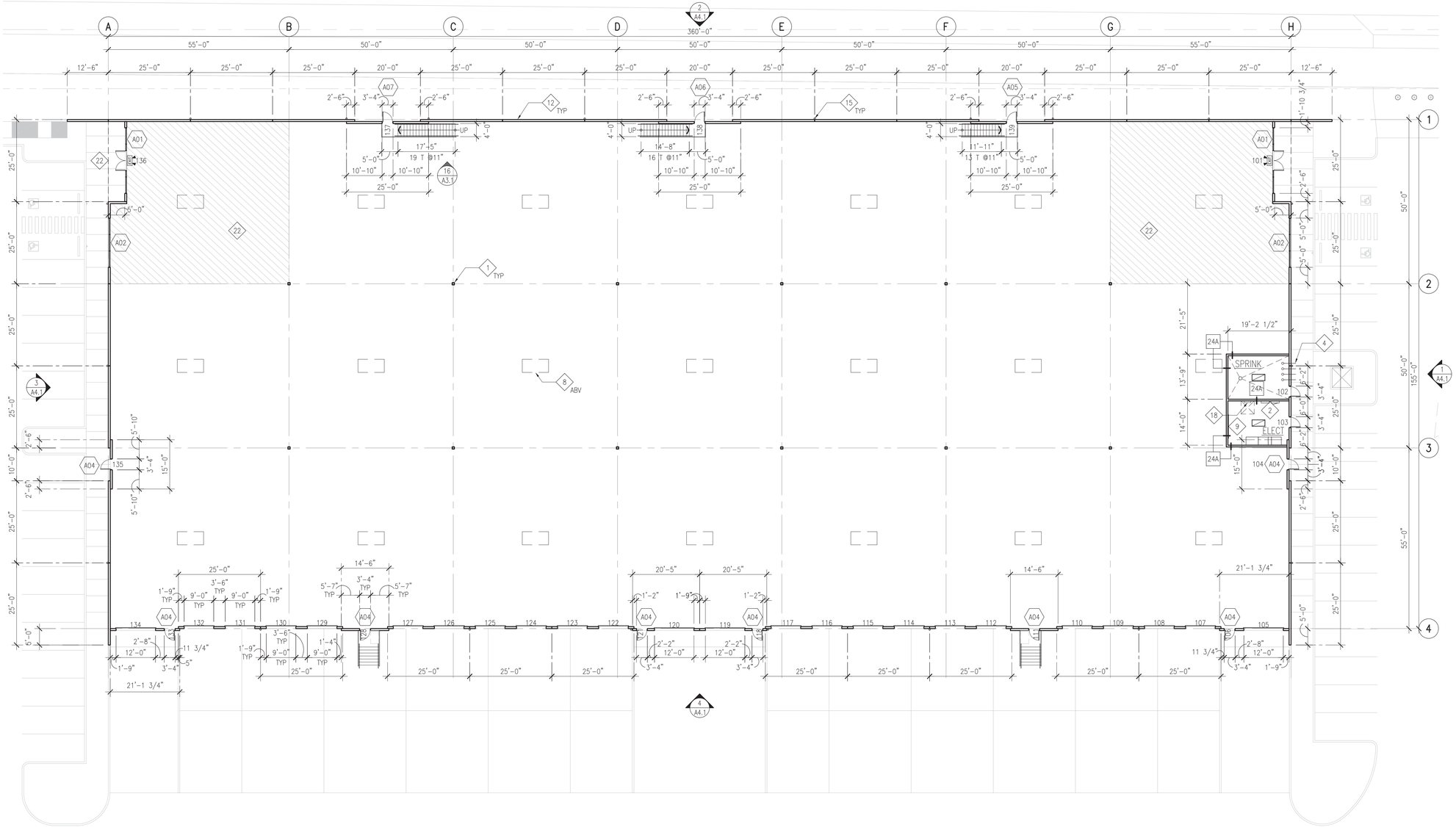
PLAN KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED

1. STEEL COLUMNS TYP, SEE STRUCTURAL DWGS.
2. ELECTRICAL DISTRIBUTION PANELS, SHOWN FOR COORDINATION.
3. CONCRETE SHEAR WALL OR BRACE FRAME, SEE STRUCTURAL DWGS.
4. FIRE PROTECTION SPRINKLER RISERS & DETECTOR DOUBLE CHECK VALVE ASSEMBLY, SHOWN FOR COORD.
5. GAS METER, SHOWN FOR COORDINATION, SEE CIVIL DRAWINGS FOR CONTINUATION.
6. SANITARY SEWER, SHOWN FOR COORDINATION, SEE CIVIL DRAWINGS FOR CONTINUATION.
7. STUB UP PLUMBING FOR FUTURE TOILET ROOM (TOILET ROOM N.I.C.)
8. 4' X 8' (UON) ACRYLIC TRIPLE DOME SKYLIGHT, SEE DET 8/A8.1.
9. 4'x 8'x 3/4" PLYWOOD TELEPHONE BOARD.
10. HIBAY HID LIGHT FIXTURE, 400w METAL HALIDE LAMP.
11. 1 1/2"ø NOM. GALV STL PIPE HANDRAIL, TOP @ 34" ABOVE STAIR NOSING OR RAMP TYP EA SIDE.
12. SITE-CAST CONC PANELS, PNT, SEE STRUCTURAL DWGS.
13. 6"ø RD & 6"ø SCHD 40 ABS PLASTIC RWL, ROUTE TO EXTERIOR, SEE CIVIL DWGS FOR CONTINUATION.
14. STL ANGLE RWL PROTECTOR, TYP @ TRUCK COURT, SEE DETAIL 5/A8.1
15. 6"ø PVC EXT. RWL W/ OVERFLOW SCUPPER, PNT, SEE DET 2/A8.1 & 3/A8.1. SEE CIVIL DWGS FOR CONT.
16. DOMESTIC WATER PRV & BACKFLOW PREVENTER, SHOWN FOR COORD. SEE CIVIL DWGS FOR CONTINUATION.
17. PAINT STRIPING ON FLOOR OR PAVEMENT.
18. STL ROOF ACCESS LADDER W/ CAGE. LOCATION TO BE COORDINATED W/ STRUCTURAL FRAMING LOCATIONS.
19. 48"x 48" ROOF ACCESS HATCH, SEE DET 9/A6.1.
20. PREFABICATED GALV STEEL PAN STAIRS & LANDINGS W/ CONC FILL, 7" MAX RISER, 11" MIN TREAD.
21. 1 1/2"ø NOM. GALV STEEL PIPE GUARD, TOP @ 42" ABOVE LANDING, STAIR NOSING OR RAMP, PAINT, TYP.
22. CONC SLAB ON VAPOR BARRIER ON 4" GRAVEL CAPILLARY BREAK IN OFFICE NODES (SHOWN SHADED).
23. PROVIDE SIGN W/ INTERNATIONAL SYMBOL OF ACCESS, ATTACH TO GLASS ADJACENT TO DOOR
24. HVAC EQUIPMENT AND PVC WALKWAY PADS BY TENANT
25. (2) 30"x48" WHEELCHAIR SPACE.
26. RECESSED DOCK LEVELER
27. ENTRY CANOPY – SEE STRUCTURAL
28. PROVIDE 10 MIL VAPOR BARRIER UNDER OFFICE AREAS

LIGHT FIXTURE LEGEND

- HIBAY 2'x4', LED, 192 WATTS (FILL: 90 MIN UNINTERRUPTED BATTERY BACKUP AS PER IBC 1008.3.4)
- RECESSED 2X4 LED 40 WATTS. (FILL: BATTERY BACKUP)
- SURFACE MOUNTED 2X4 LED 40 WATTS. (FILL: BATTERY BACKUP)
- EXIT — WALL OR CEILING MOUNT ILLUMINATED EXIT SIGN, W/ DIRECTION ARROW AS INDICATED, EMERGENCY POWER PACK, WHITE HOUSING W/ GREEN LETTERS, TWO 5 WATT COMPACT FLUORESCENT LAMPS (90 MIN UNINTERRUPTED BATTERY BACKUP AS PER IBC 1008.3.4)
- PROVIDE SELF-CONTAINED EGRESS ILLUMINATION FIXTURE WITH 90 MIN UNINTERRUPTED BATTERY BACKUP AS PER IBC 1008.3.4 (MAY BE COMBINED WITH EXIT SIGN)



NORTH

1 FLOOR PLAN
SCALE: 1/16" = 1'-0"

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PROFESSIONAL STAMP

7154 REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON

Digitally signed by Randy Brown
Date: 2019.10.10 20:30:24 -07'00'

PROJECT INFORMATION

NELSON 43

4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: FLOOR PLAN

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A2.1
PROJECT NO: 201613.03.003

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P:\20161 - Nelson Development\10 - Models\100 - 4 Axis Gen\100501.dwg, 10/10/2019 7:58 PM

PLAN KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED

1. STEEL COLUMNS TYP, SEE STRUCTURAL DWGS.
2. ELECTRICAL DISTRIBUTION PANELS, SHOWN FOR COORDINATION.
3. CONCRETE SHEAR WALL OR BRACE FRAME, SEE STRUCTURAL DWGS.
4. FIRE PROTECTION SPRINKLER RISERS & DETECTOR DOUBLE CHECK VALVE ASSEMBLY, SHOWN FOR COORD.
5. GAS METER, SHOWN FOR COORDINATION, SEE CIVIL DRAWINGS FOR CONTINUATION.
6. SANITARY SEWER, SHOWN FOR COORDINATION, SEE CIVIL DRAWINGS FOR CONTINUATION.
7. STUB UP PLUMBING FOR FUTURE TOILET ROOM (TOILET ROOM N.I.C.)
8. 4' X 8' (UON) ACRYLIC TRIPLE DOME SKYLIGHT, SEE DET 8/A8.1.
9. 4'x 8'x 3/4" PLYWOOD TELEPHONE BOARD.
10. HIBAY HID LIGHT FIXTURE, 400w METAL HALIDE LAMP.
11. 1 1/2"ø NOM. GALV STL PIPE HANDRAIL, TOP @ 34" ABOVE STAIR NOSING OR RAMP TYP EA SIDE.
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23. PROVIDE SIGN W/ INTERNATIONAL SYMBOL OF ACCESS, ATTACH TO GLASS ADJACENT TO DOOR
24. HVAC EQUIPMENT AND PVC WALKWAY PADS BY TENANT
25. (2) 30"x48" WHEELCHAIR SPACE.
26. RECESSED DOCK LEVELER
27. ENTRY CANOPY – SEE STRUCTURAL
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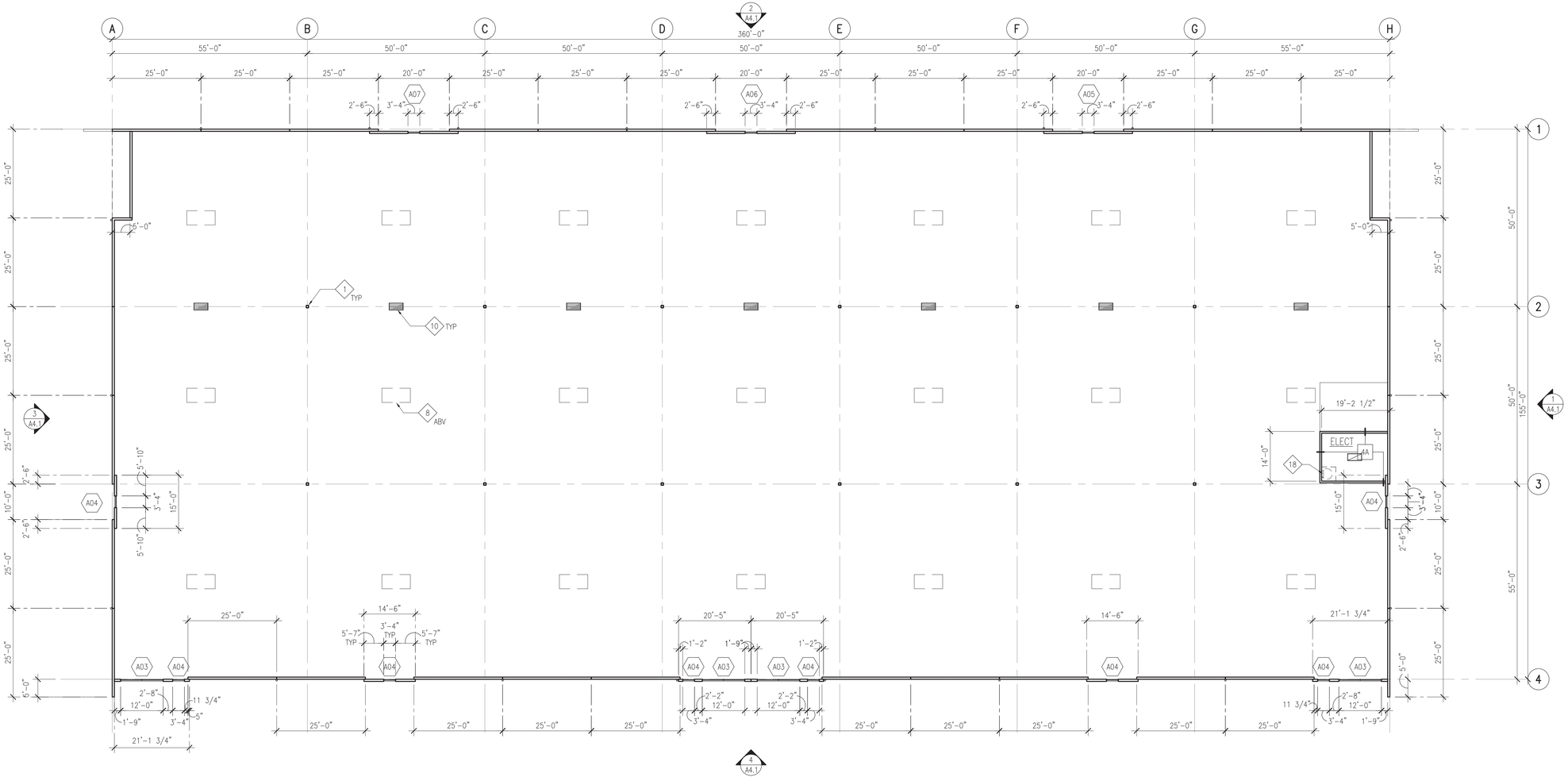

1 UPPER FLOOR PLAN
SCALE: 1/16" = 1'-0"

NORTH

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7154 REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON

Digitally signed by Randy Brown
Date: 2019.10.10 20:30:38 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: UPPER FLOOR PLAN

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A2.2
PROJECT NO: 201613.03.003

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PLAN KEYNOTES

NOTE: NOT ALL KEYNOTES ARE USED

1. STEEL COLUMNS TYP, SEE STRUCTURAL DWGS.
2. ELECTRICAL DISTRIBUTION PANELS, SHOWN FOR COORDINATION.
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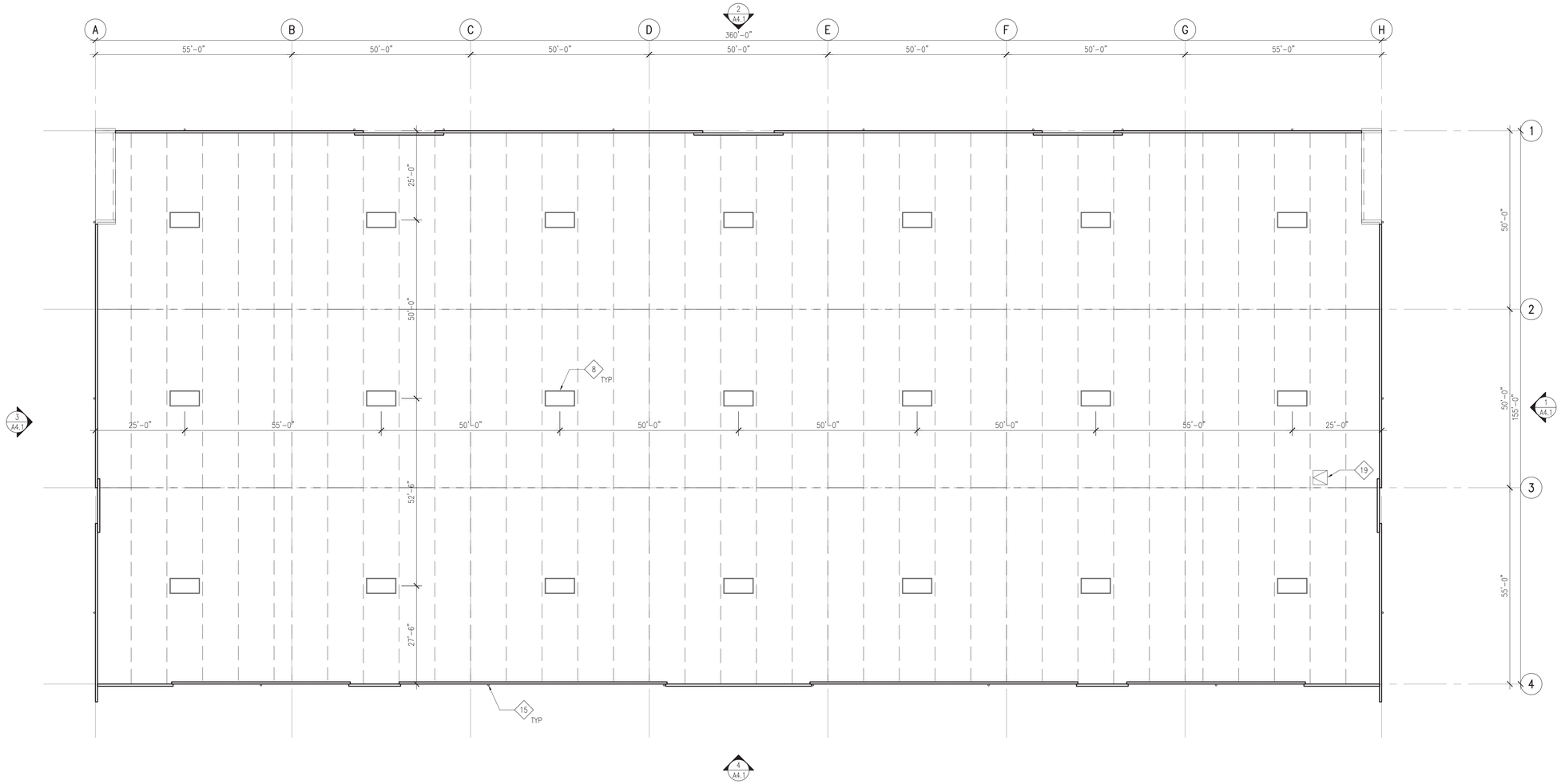

NORTH

1 ROOF PLAN
SCALE: 1/16" = 1'-0"

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RANDALL LEE BROWN
STATE OF WASHINGTON

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PROJECT INFORMATION

NELSON 43

4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: ROOF PLAN

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A2.3
PROJECT NO: 201613.03.003

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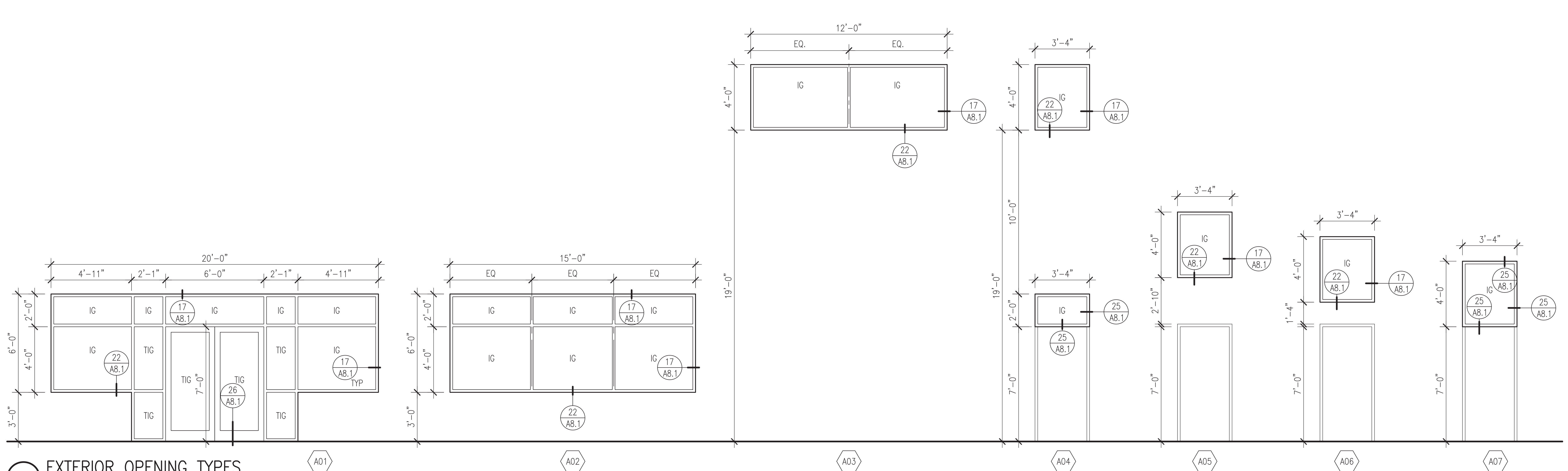
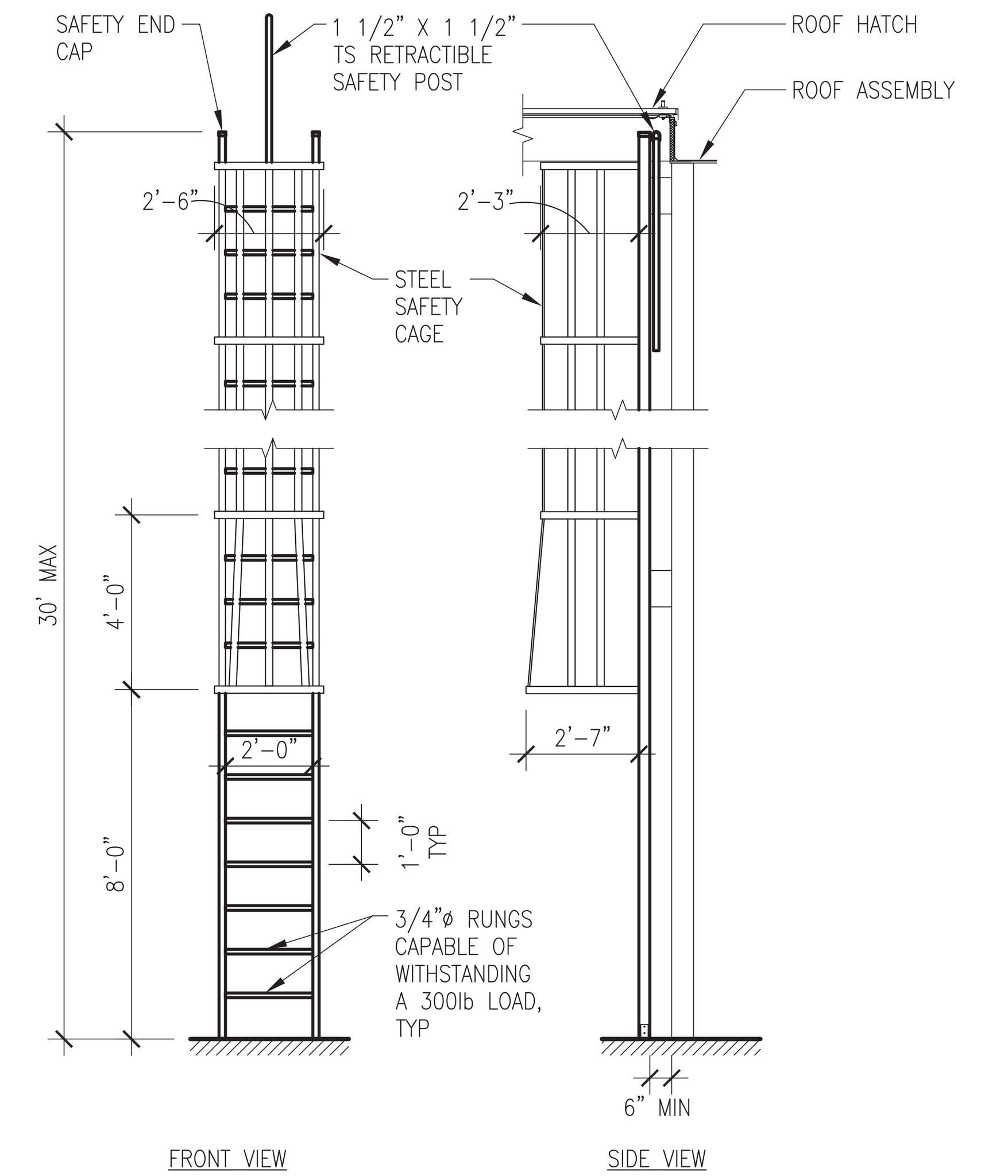
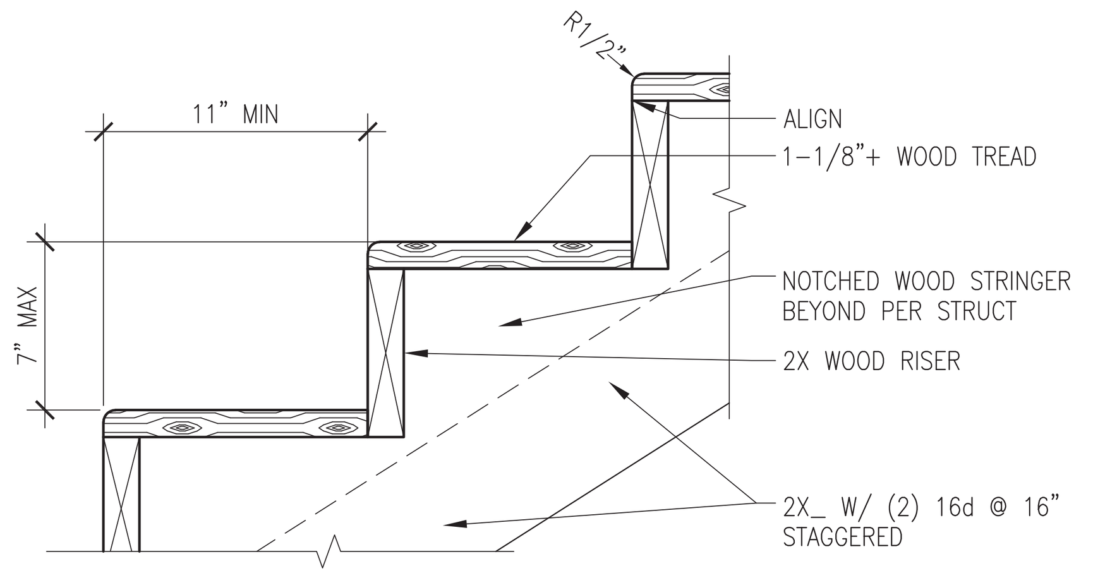


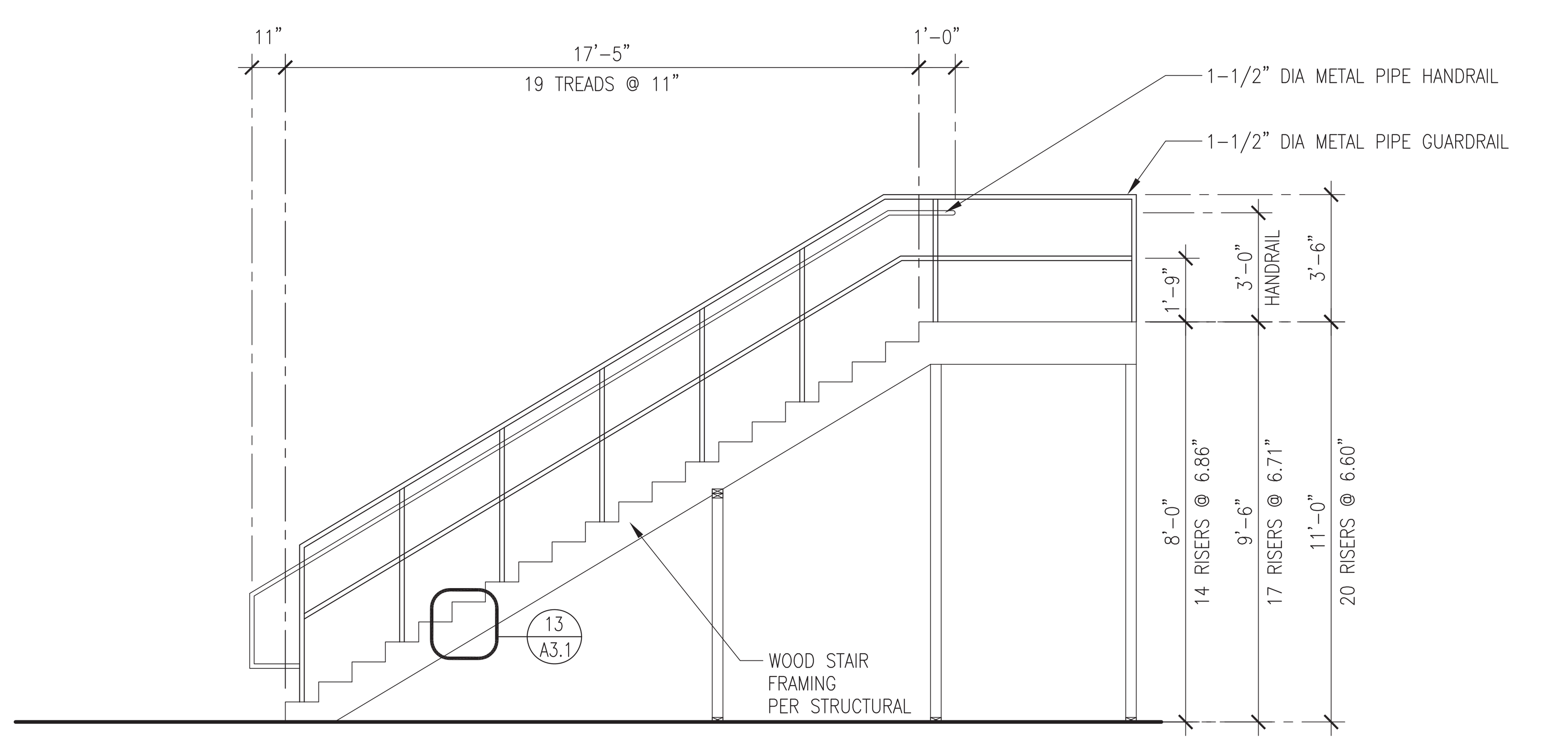
6 EXTERIOR OPENING TYPES
SCALE: N.T.S



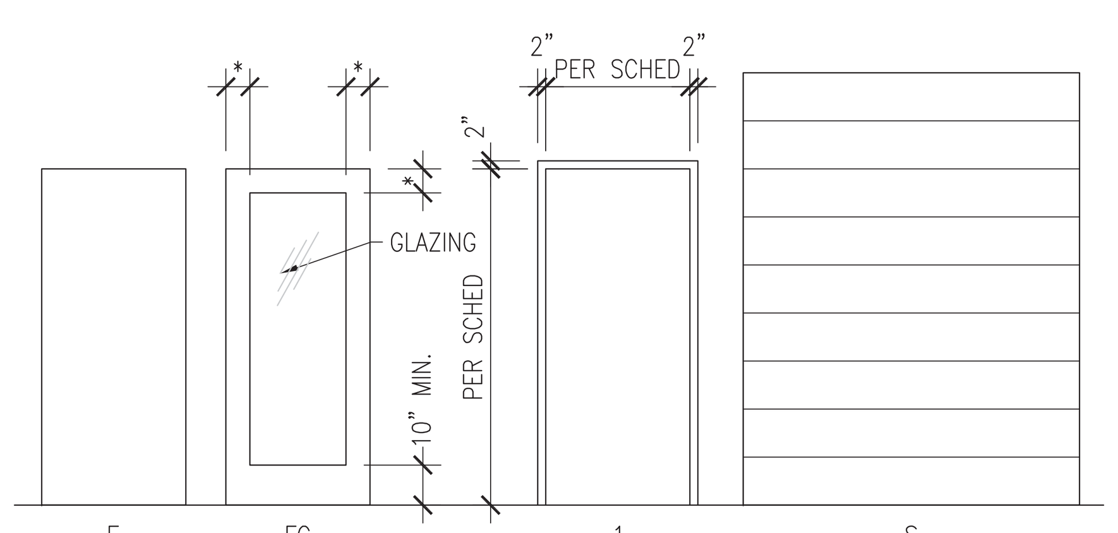
10 TYPICAL STEEL ROOF LADDER – CAGED
SCALE: 1/4" = 1'-0" MAX HEIGHT – 30' (OSHA)



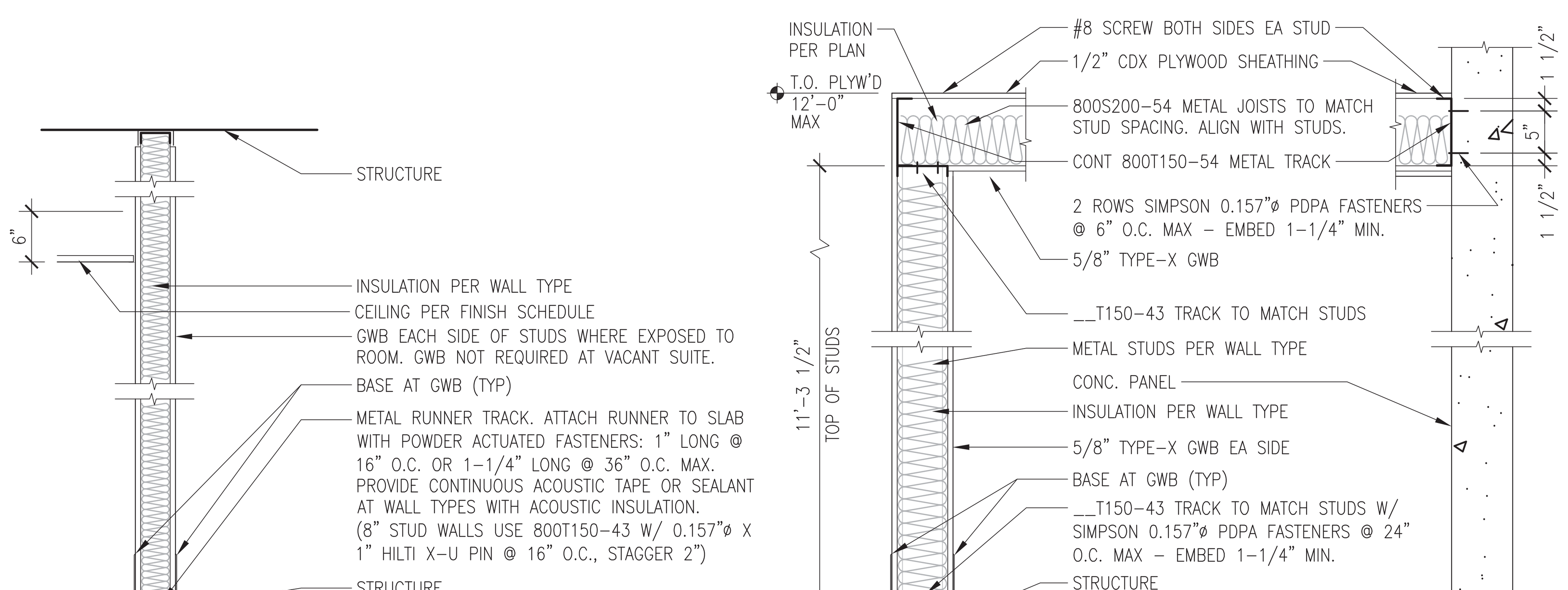
13 WOOD STAIR RISE & RUN
SCALE: 1-1/2" = 1'-0" WOOD



16 ELEVATION: WAREHOUSE STAIR (NOT OPEN TO THE PUBLIC) – SHOWN 11'-0" HIGH
SCALE: 1/4" = 1'-0"



18 DOOR AND FRAME TYPES
SCALE: NTS * = DIMENSION PER SPECIFIED DOOR STYLE



3 3-1/2" METAL STUDS (350S125-30) @ 24" O.C. W/ 5/8" GWB EACH SIDE
3A – SAME AS ABOVE W/ ACOUSTIC INSULATION

4 6" METAL STUDS (600S162-43) @ 24" O.C. W/ 5/8" GWB EACH SIDE
4A – SAME AS ABOVE W/ R-21 INSULATION

5 3-1/2" METAL STUDS (350S125-30) @ 24" O.C. W/ 5/8" GWB ONE SIDE
5A – SAME AS ABOVE W/ ACOUSTIC INSULATION

6 8" METAL STUDS (800SFS162-43) @ 24" O.C. W/ 5/8" GWB ONE SIDE
6A – SAME AS ABOVE W/ R-21

PROVIDE HORIZ BRIDGING @ 48" OC @ STUD FLANGES WHERE GWB IS OMITTED

23 3-1/2" STUDS (350S162-33) @ 24" O.C. W/ 5/8" TYPE-X GWB EA SIDE.
23A – SAME AS ABOVE W/ R-13 INSULATION

24 6" STUDS (600S162-43) @ 24" O.C. W/ 5/8" GWB EACH SIDE
24A – SAME AS ABOVE W/ R-21 INSULATION

26 WALL TYPES
SCALE: N.T.S. 4/15

DOOR NOTES
IBC 2015

1. DOOR TYPE INDICATIONS AS NOTATED BY THE STEEL DOOR INSTITUTE WHERE APPLICABLE. "RL" DENOTES RELIGHT
2. NOTATION OF PAIRS OF DOORS: F DENOTES SINGLE DOOR FF DENOTES PAIR OF DOORS
3. DETAILS ARE FOUND ON SHEET A8.1.
4. DOOR TYPES F & FG TO BE OPENABLE FROM THE INSIDE BY TURN OF A LEVER HANDLE. A DEAD BOLT MAY BE PROVIDED AT THE MAIN ENTRY IF A SIGN IS APPLIED TO THE INSIDE OF THE DOOR PER IBC SECTION 1010.1.9.3 (2.2) STATING, "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED" LETTERS 1" HIGH ON A CONTRASTING BACKGROUND.
5. PROVIDE ILLUMINATED EXIT SIGNS WITH BATTERY-POWERED EGRESS LIGHTING AT DOORS INDICATED BY EXIT-SIGN SYMBOL ON THE DRAWING. THE EGRESS LIGHTING ASSEMBLY SHALL PROVIDE ILLUMINATION OF A MINIMUM OF ONE FOOT CANDLE AT FLOOR LEVEL.
6. ALL EXIT DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
7. DOOR HARDWARE TO BE INSTALLED BETWEEN 34" MINIMUM AND 48" MAXIMUM AFF (IBC 2015 1010.1.9.2)

HARDWARE GROUPS
IBC 2015

HW-1 Exterior
1 1/2 PR HINGES
3 SILENCERS
1 KEYED LOCKSET

HW-4 Storefront Entry
3 PR HINGES
2 DOOR SWEEPS
1 CONTINUOUS SEAL
2 WALL/FLOOR STOPS
1 THRESHOLD
2 SURFACE-MOUNTED CLOSERS
1 APPROVED AUTO FLUSH BOLT (1)
1 LOCKSET

NOTES:

1. FLUSH BOLTS: "WHERE EGRESS DOORS ARE USED IN PAIRS, APPROVED AUTOMATIC FLUSH BOLTS SHALL BE PERMITTED TO BE USED, PROVIDED THAT THE DOOR LEAF HAVING THE AUTOMATIC FLUSH BOLTS HAS NO DOORKNOB OR SURFACE-MOUNTED HARDWARE." (IBC SECTION 1008.1.9.3.3) MANUALLY OPERATED FLUSH BOLTS OR SURFACE BOLTS ARE PERMITTED FROM THE OFFICE TO THE EXTERIOR, BUT NOT FROM THE WAREHOUSE TO THE EXTERIOR (IF WAREHOUSE OCCUPANT LOAD IS 50 OR GREATER). (IBC 1008.1.9.4 & EXCEPTIONS)
2. MAIN STOREFRONT DOORS ARE PERMITTED TO BE EQUIPPED WITH KEY-OPERATED LOCKING DEVICES FROM THE EGRESS SIDE. SEE NOTE UNDER DOOR NOTES. (IBC SECTION 1008.1.9.3.2)
3. THE UNLATCHING OF ANY DOOR OR LEAF SHALL NOT REQUIRE MORE THAN ONE OPERATION. (IBC SECTION 1008.1.9.5)

EXTERIOR GLAZING SCHEDULE

VERTICAL OPENINGS

TYPE	DESCRIPTION	SIZE (WxH)	VGA	QUANT.	UNITS	TOTAL VGA	U-FACTOR	VGA x U	NFRC-CPD / TABLE NO.	SHGC	REMARKS
A01	STOREFRONT ENTRANCE	6'-0" x 7'-0"	42.0 SF	2	1	84.0 SF	0.60	50.40	NFRC CERTIFIED	0.40	ENTRANCE DOORS ONLY
A01	STOREFRONT FIXED	SEE OPENING TYPE	48.2 SF	2	2	192.8 SF	0.38	73.26	NFRC CERTIFIED	0.40	ENTRANCE GLAZING
A01	ABOVE ENTRANCE	6'-0" x 2'-0"	12.0 SF	2	1	24.0 SF	0.38	9.12	NFRC CERTIFIED	0.40	TRANSOM
A02	STOREFRONT FIXED	15'-0" x 6'-0"	90.0 SF	2	1	180.0 SF	0.38	68.40	NFRC CERTIFIED	0.40	FLOOR 1 GLAZING
A03	FIXED WINDOW UNIT	12'-0" x 4'-0"	48.0 SF	4	1	192.0 SF	0.38	72.96	NFRC CERTIFIED	0.40	UPPER UNIT
A04	FIXED WINDOW UNIT	3'-4" x 2'-0"	6.7 SF	8	1	53.6 SF	0.38	20.37	NFRC CERTIFIED	0.40	TRANSOM
A04	FIXED WINDOW UNIT	3'-4" x 4'-0"	13.3 SF	8	1	106.4 SF	0.38	40.43	NFRC CERTIFIED	0.40	UPPER UNIT
A05	FIXED WINDOW UNIT	3'-4" x 4'-0"	13.3 SF	1	1	13.3 SF	0.38	5.05	NFRC CERTIFIED	0.40	UPPER UNIT
A06	FIXED WINDOW UNIT	3'-4" x 4'-0"	13.3 SF	1	1	13.3 SF	0.38	5.05	NFRC CERTIFIED	0.40	UPPER UNIT
A07	FIXED WINDOW UNIT	3'-4" x 4'-10"	16.1 SF	1	1	16.1 SF	0.38	6.12	NFRC CERTIFIED	0.40	TRANSOM
Area-Weighted Average Vertical Glazing U Factor – (Total VGA x U) / (Total VGA) =								0.38			

HORIZONTAL OPENINGS

TYPE	DESCRIPTION	SIZE (WxH)	HGA	QUANT.	UNITS	TOTAL HGA	U-FACTOR	HGA x U	NFRC-CPD / TABLE NO.	SHGC	REMARKS
	SKYLIGHTS	4'-0" x 8'-0"	32.0 SF	21	1	672.0 SF	0.30	201.60	DEFAULT (Table C303.1.3(4))	0.25	TRIPLE DOME
TOTALS:						672.0 SF		201.60			
Area-Weighted Average Horizontal Glazing U Factor – (Total HGA x U) / (Total HGA) =								0.30			

OPENING SCHEDULE

DOORS / OPENINGS										FRAMES			DETAILS			
NO	TYPE	OPENING SIZE	THK	MATL	GL TYPE	RTG	HDW	CLSR	FIN	TYPE	MATL	FIN	HEAD	JAMB	SILL	REMARKS
101	FG/FG	6'-0" x 8'-0"	1 3/4"	AL	TIG	--	4	Y	FCTY	--	AL	--	--	--	26/A8.1	
102	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
103	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
104	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
105	S	12'-0" x 14'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
106	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
107	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
108	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
109	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
110	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
111	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
112	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
113	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
114	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
115	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
116	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
117	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
118	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
119	S	12'-0" x 14'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
120	S	12'-0" x 14'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
121	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
122	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
123	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
124	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
125	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
126	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
127	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
128	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
129	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
130	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
131	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
132	S	10'-0" x 9'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
133	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
134	S	12'-0" x 14'-0"	--	STEEL	--	--	--	--	FCTY	--	--	--	18/A8.1	23/A8.1	29/A8.1	
135	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
136	FG/FG	6'-0" x 8'-0"	1 3/4"	AL	TIG	--	4	Y	FCTY	--	AL	--	--	--	26/A8.1	
137	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
138	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	
139	F	3'-0" x 7'-0"	1 3/4"	HM	--	--	1	Y	PNT	1	HM	PNT	19/A8.1	19/A8.1	24/A8.1	

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SEAHURST, WA 98062

REVISIONS

ISSUE NO.	DATE	ITEM
1	10 11 2019	PERMIT SET

PROFESSIONAL STAMP

7154 REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON

Digitally signed by Randy Brown
Date: 2019.10.10 20:31:13 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: WINDOW TYPES, WALL TYPES, SCHEDULES
DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A3.1
PROJECT NO: 201613.03.003

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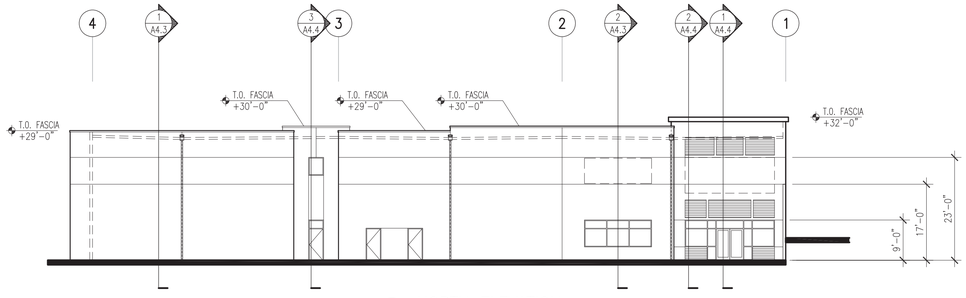
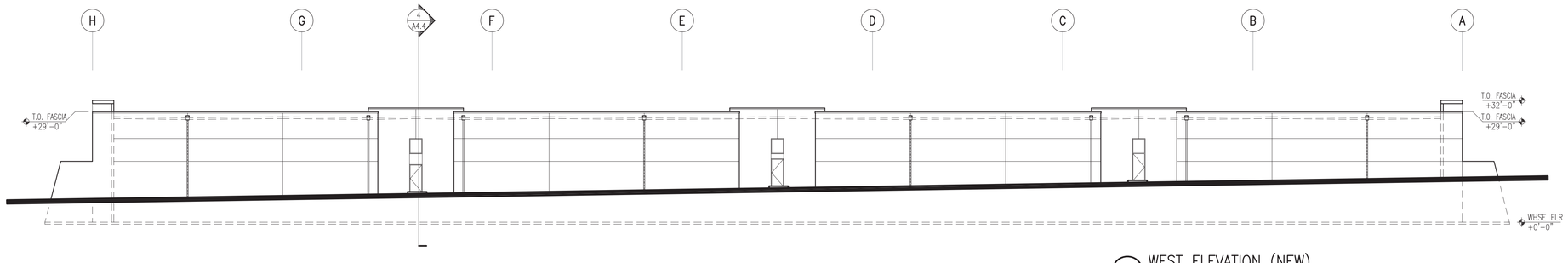
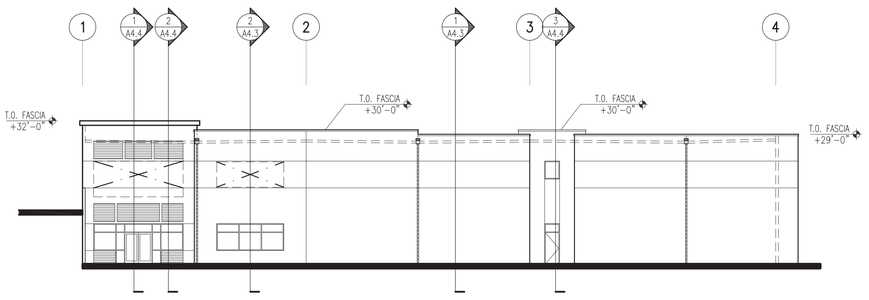


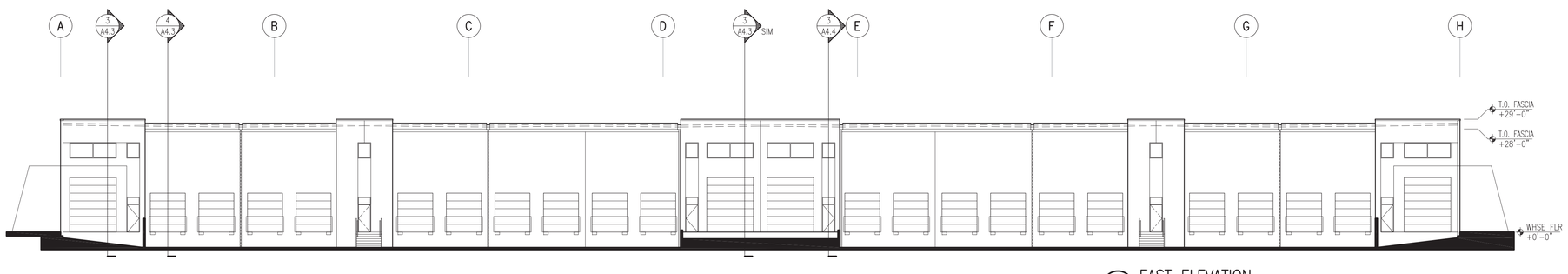
1 NORTH ELEVATION
SCALE: 1/16" = 1'-0"



2 WEST ELEVATION (NEW)
SCALE: 1/16" = 1'-0"



3 SOUTH ELEVATION
SCALE: 1/16" = 1'-0"



4 EAST ELEVATION
SCALE: 1/16" = 1'-0"

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RANDALL LEE BROWN
STATE OF WASHINGTON

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Date: 2019.10.10 20:31:36 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: EXTERIOR ELEVATIONS

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A4.1
PROJECT NO: 201613.03.003

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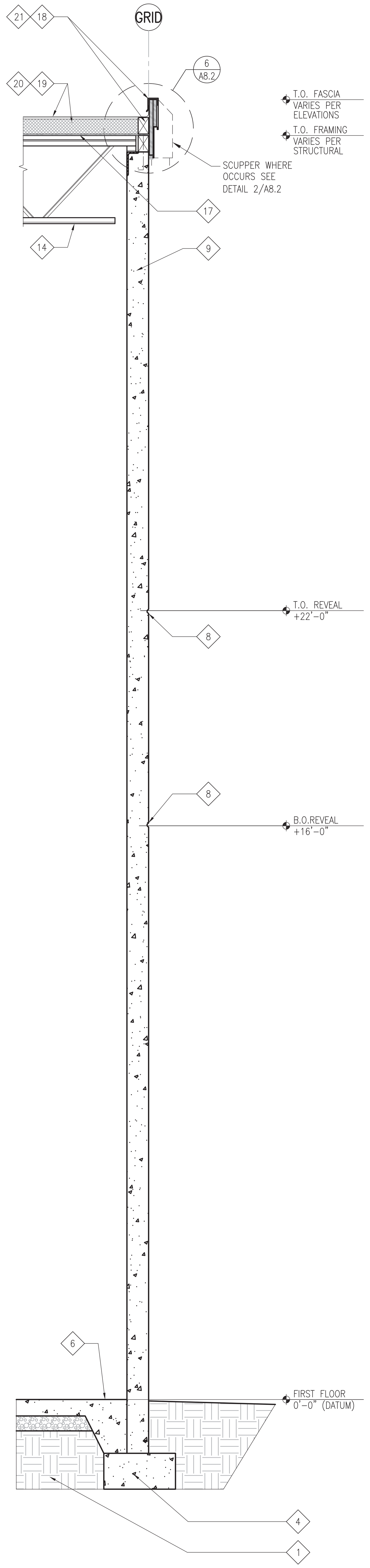
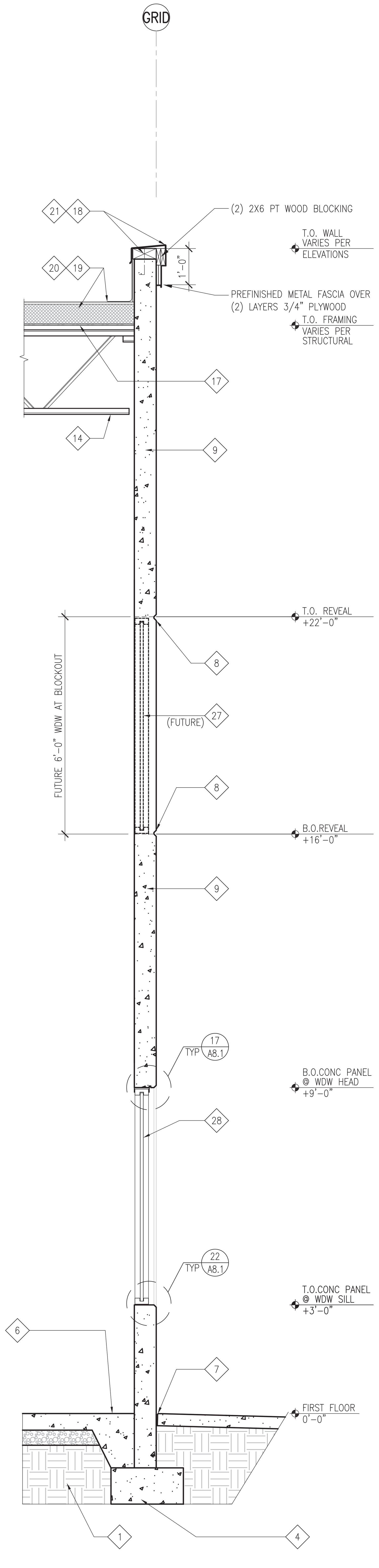
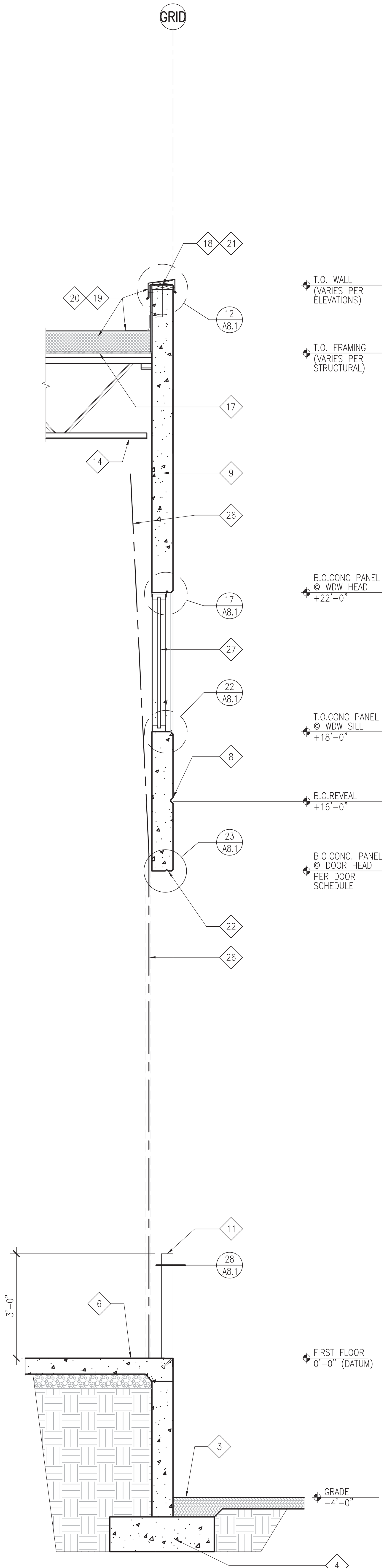


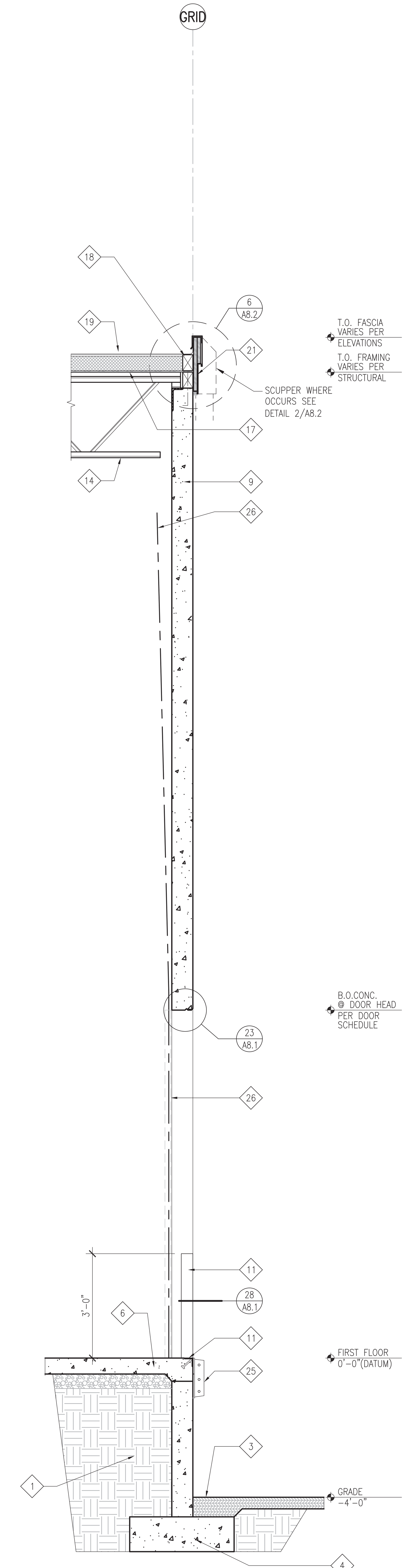
1 TYPICAL WALL SECTION
SCALE: 1/2" = 1'-0"



2 WALL SECTION AT WINDOW SYSTEM
SCALE: 1/2" = 1'-0"



3 SECTION AT GRADE DOOR
SCALE: 1/2" = 1'-0"



4 TYP SECTION AT DOCK DOOR
SCALE: 1/2" = 1'-0"

KEYNOTES – WALL SECTIONS
NOTE: NOT ALL KEYNOTES ARE USED

1. STRUCTURAL FILL
2. CURTAIN BOARD BEYOND
3. AC PAVING
4. CONC FOOTING, SEE STRUCT DWGS FOR ELEVATION
5. CONC WALK OR LANDING OVER COMPACTED FILL PER SOILS REPORT
6. CONC SLAB-ON-GRADE ON GRAVEL CAPILLARY BREAK ON STRUCTURAL FILL PER SOILS REPORT
7. SEALANT (W/ BACKER ROD AS NEEDED)
8. HORIZONTAL REVEAL, SEE DETAIL 13/A8.1, TYP UON
9. SITE CAST CONC WALL PANEL, PAINT
10. CANT
11. STEEL ANGLE, SEE STRUCT DWGS.
12. STEEL GIRDER, SEE STRUCTURAL FRAMING PLAN
13. STEEL BEAM, PAINT. SEE STRUCTURAL FRAMING PLAN
14. STEEL JOIST, SEE STRUCTURAL FRAMING PLAN
15. TUBE STEEL COLUMN OR BEAM, SEE STRUCTURAL DRAWINGS
16. FILTER FABRIC
17. OSB WOOD ROOF DECK, SEE STRUCTURAL DWGS
18. WOOD NAILER AND BLOCKING
19. 1/2" PROTECTION BOARD ON RIGID INSULATION W/ VAPOR BARRIER & PERIMETER WD BLKG AS REQD
20. SINGLE-PLY MEMBRANE ROOF ASSEMBLY, CLASS B, OR HIGHER
21. PREFINISHED METAL FASCIA
22. DRIP FORMED IN CONC PANEL
23. SURFACE REGLET
24. CRUSHED ROCK
25. DOCK BUMPER
26. SECTIONAL OVERHEAD DOOR TRACK
27. ALUMINUM WINDOW SYSTEM
28. ALUMINUM STOREFRONT SYSTEM
29. FOUNDATION DRAIN
30. GLAZING TYPE IG
31. GLAZING TYPE TIG
32. STEEL CHANNELS, SEE STRUCTURAL DRAWINGS
33. GLAZING TYPE SPGL (SPANDREL GLASS).
34. WALL SCONCE LIGHT FIXTURE EA SIDE OF ENTRY DOOR.
35. WATERPROOFING MEMBRANE SUBSURFACE DRAINAGE
36. PATTERN USING CONCRETE FORM LINER
37. R-10 PERIMETER RIGID INSULATION WITH TAPERED TOP EDGE

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7154 REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON

Digitally signed by Randy Brown
Date: 2019.10.10 20:32:00 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: WALL SECTIONS

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A4.3
PROJECT NO: 201613.03.003

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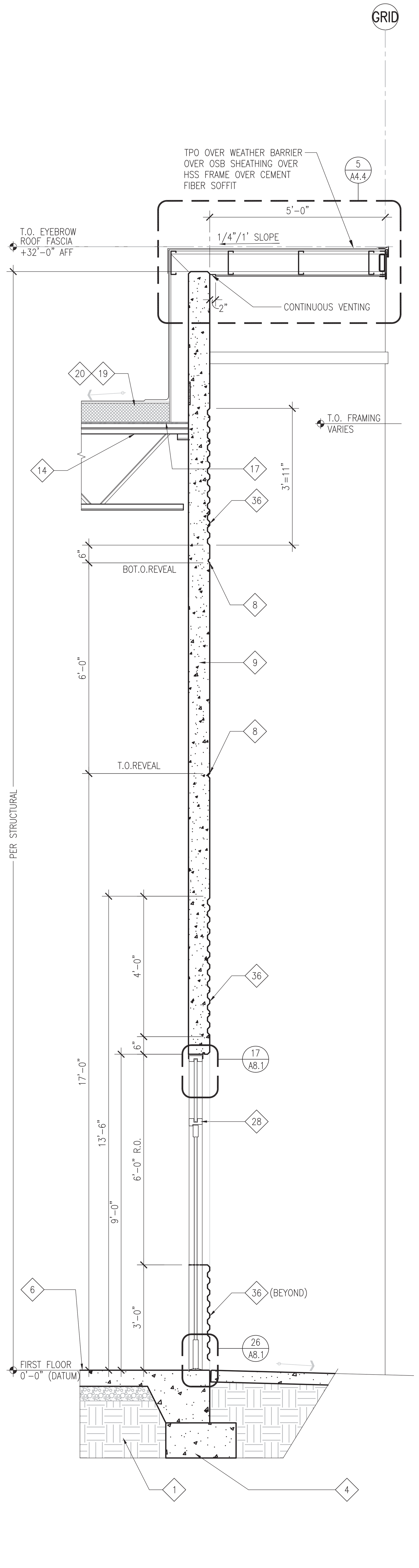
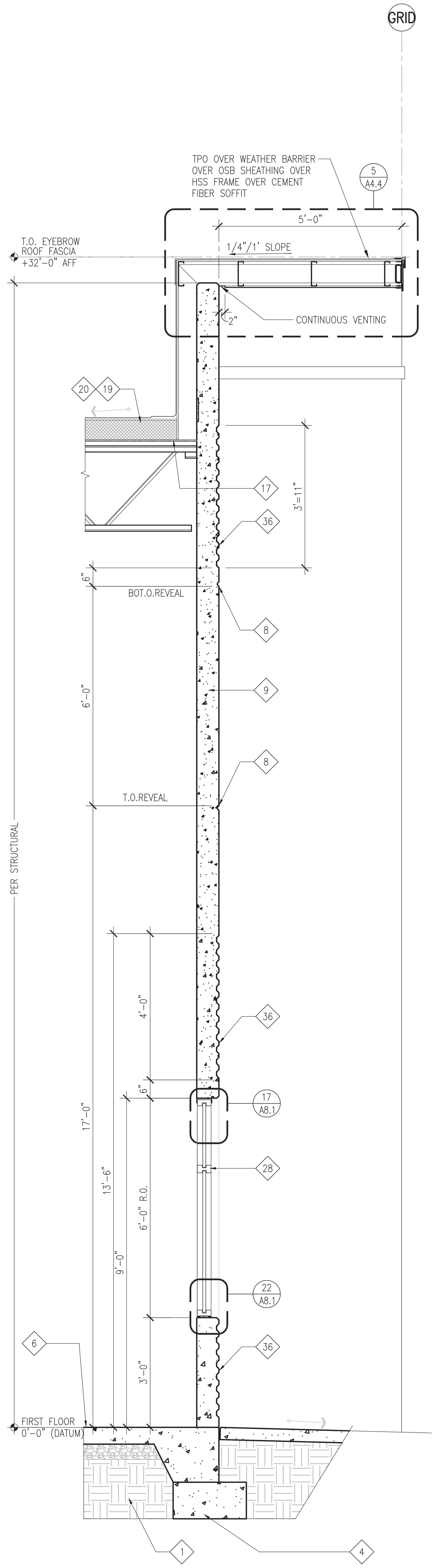


1 WALL SECTION AT LOBBY ENTRY

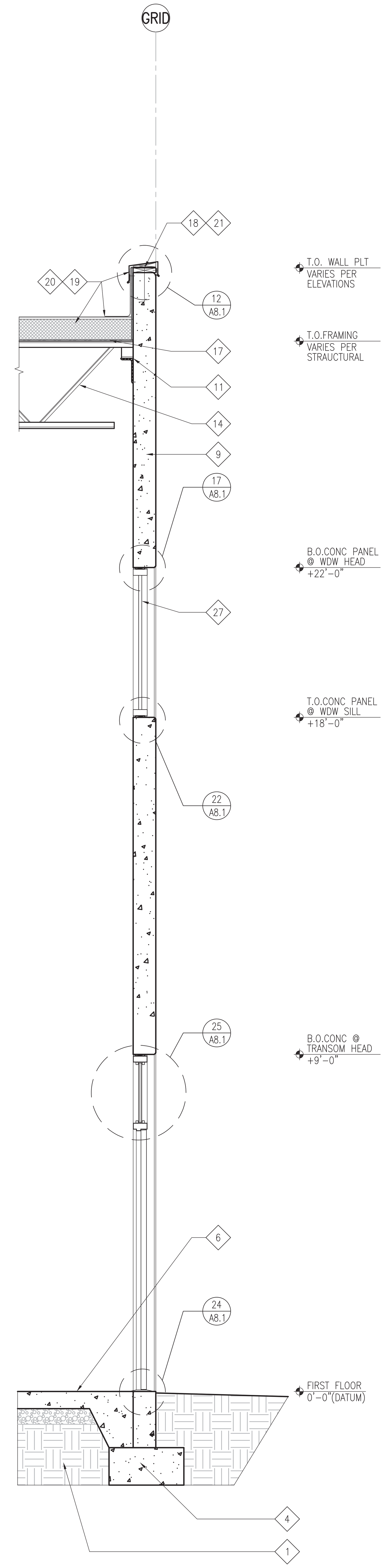
SCALE: 1/2" = 1'-0"



NOTE: FOR ADDITIONAL INFORMATION REFER TO SIMILAR LOBBY ENTRY WALL SECTION 1 / A4.4

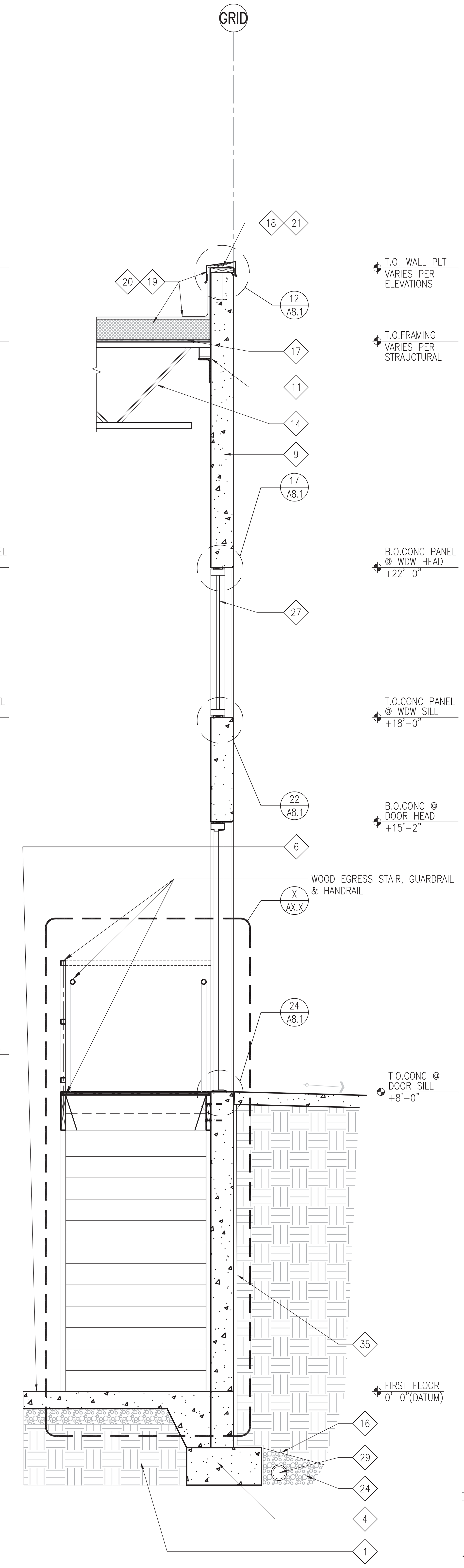
2 WALL SECTION AT LOBBY STOREFRONT

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



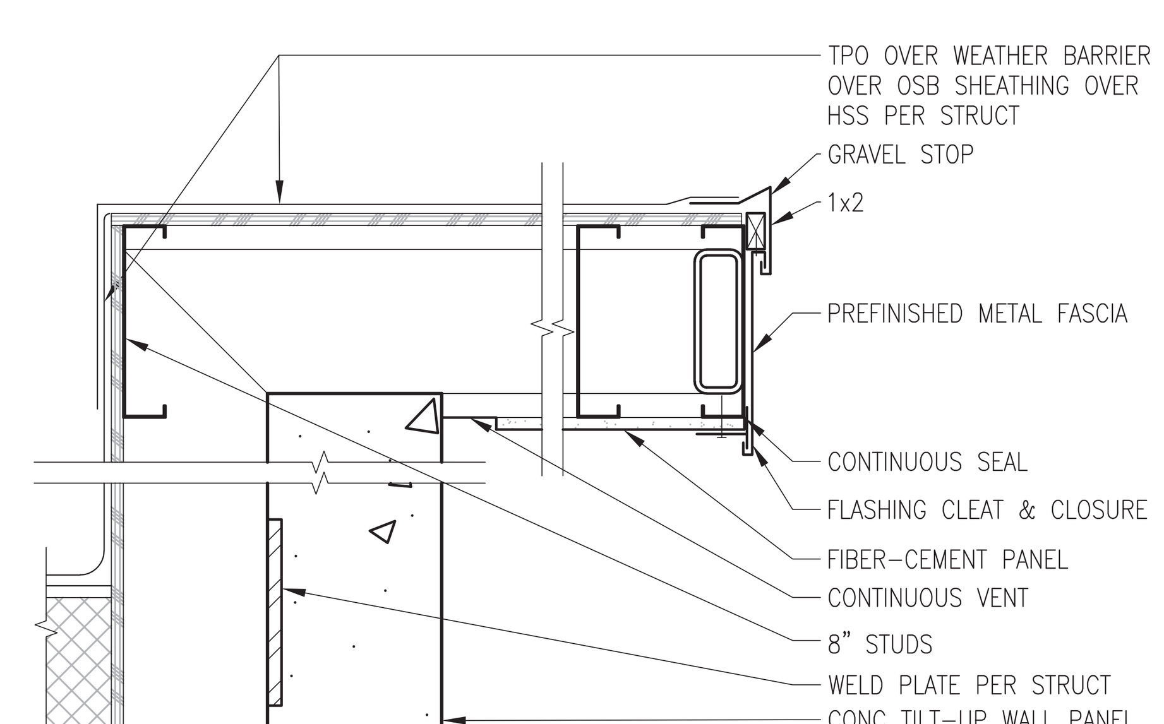
3 WALL SECTION: EGRESS DOOR W/ WINDOW

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



4 WALL SECTION: EGRESS DOOR W/ STAIRS

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



5 TYPICAL OVERHANG FASCIAS

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

TPO, Wood Deck

KEYNOTES – WALL SECTIONS

NOTE: NOT ALL KEYNOTES ARE USED

1. STRUCTURAL FILL
2. CURTAIN BOARD BEYOND
3. AC PAVING
4. CONC FOOTING, SEE STRUCT DWGS FOR ELEVATION
5. CONC WALK OR LANDING OVER COMPACTED FILL PER SOILS REPORT
6. CONC SLAB-ON-GRADE ON GRAVEL CAPILLARY BREAK ON STRUCTURAL FILL PER SOILS REPORT
7. SEALANT (W/ BACKER ROD AS NEEDED)
8. HORIZONTAL REVEAL, SEE DETAIL 13/A8.1, TYP UON
9. SITE CAST CONC WALL PANEL, PAINT
10. CANT
11. STEEL ANGLE, SEE STRUCT DWGS.
12. STEEL GIRDER, SEE STRUCTURAL FRAMING PLAN
13. STEEL BEAM, PAINT. SEE STRUCTURAL FRAMING PLAN
14. STEEL JOIST, SEE STRUCTURAL FRAMING PLAN
15. TUBE STEEL COLUMN OR BEAM, SEE STRUCTURAL DRAWINGS
16. FILTER FABRIC
17. OSB WOOD ROOF DECK, SEE STRUCTURAL DWGS
18. WOOD NAILER AND BLOCKING
19. 1/2" PROTECTION BOARD ON RIGID INSULATION W/ VAPOR BARRIER & PERIMETER WD BLKG AS REQD
20. SINGLE-PLY MEMBRANE ROOF ASSEMBLY, CLASS B, OR HIGHER
21. PREFINISHED METAL FASCIA
22. DRIP FORMED IN CONC PANEL
23. SURFACE REGLET
24. CRUSHED ROCK
25. DOCK BUMPER
26. SECTIONAL OVERHEAD DOOR TRACK
27. ALUMINUM WINDOW SYSTEM
28. ALUMINUM STOREFRONT SYSTEM
29. FOUNDATION DRAIN
30. GLAZING TYPE IG
31. GLAZING TYPE TIG
32. STEEL CHANNELS, SEE STRUCTURAL DRAWINGS
33. GLAZING TYPE SPGL (SPANDREL GLASS).
34. WALL SCONCE LIGHT FIXTURE EA SIDE OF ENTRY DOOR.
35. WATERPROOFING MEMBRANE SUBSURFACE DRAINAGE
36. PATTERN USING CONCRETE FORM LINER
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7154 REGISTERED ARCHITECT RANDALL LEE BROWN STATE OF WASHINGTON

Digitally signed by Randy Brown Date: 2019.10.10 20:32:17 -07'00'

PROJECT INFORMATION

NELSON 43

4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT

TITLE: WALL SECTIONS

DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A4.4
PROJECT NO: 201613.03.003

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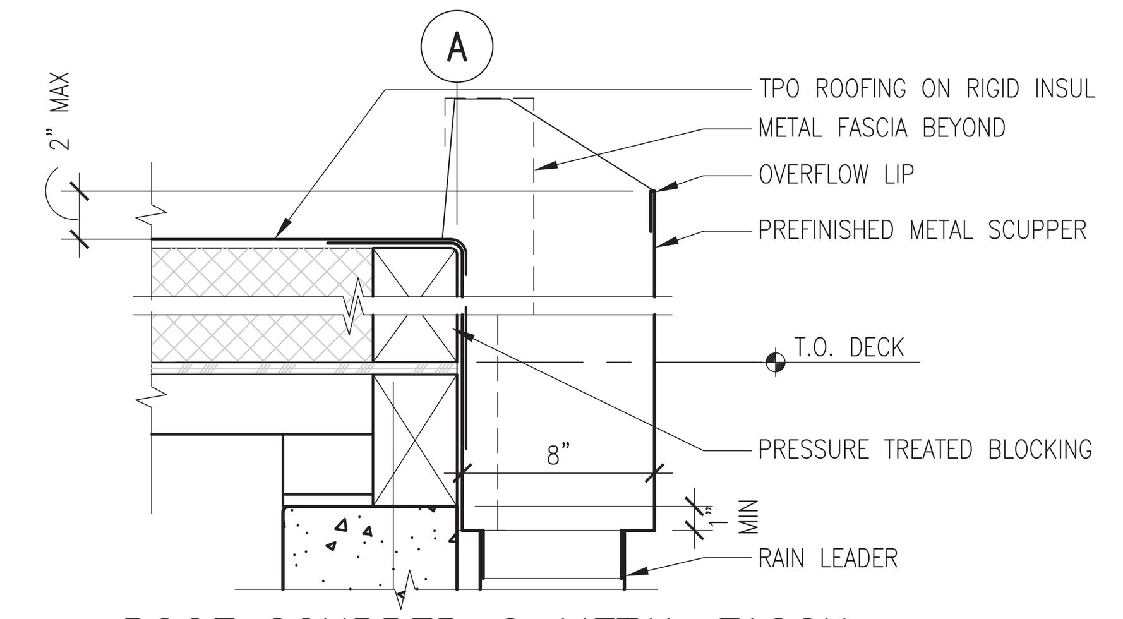
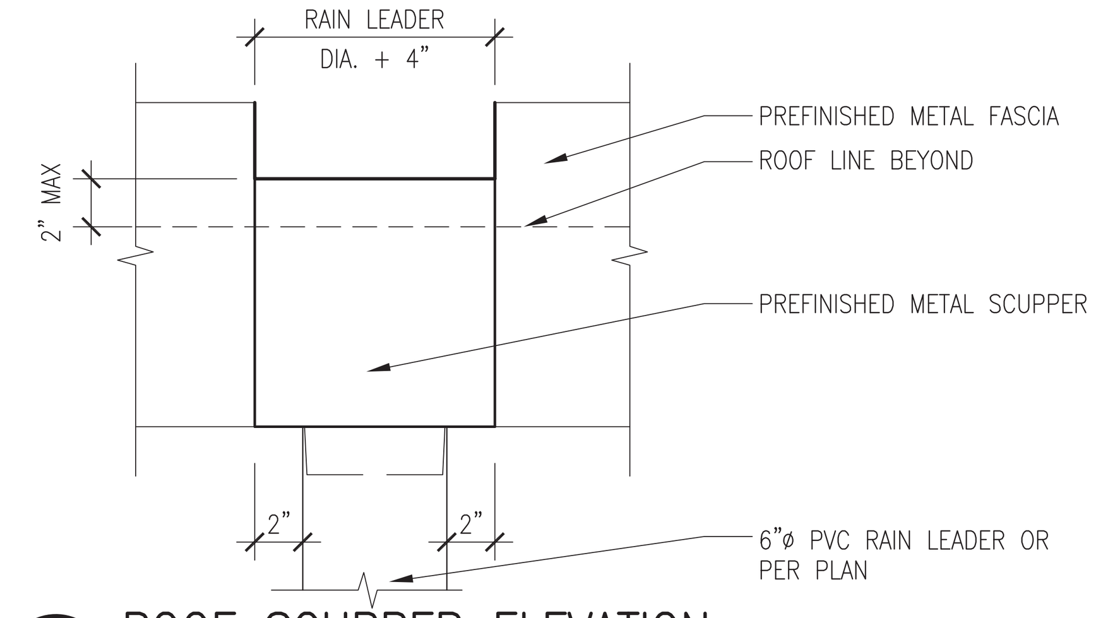
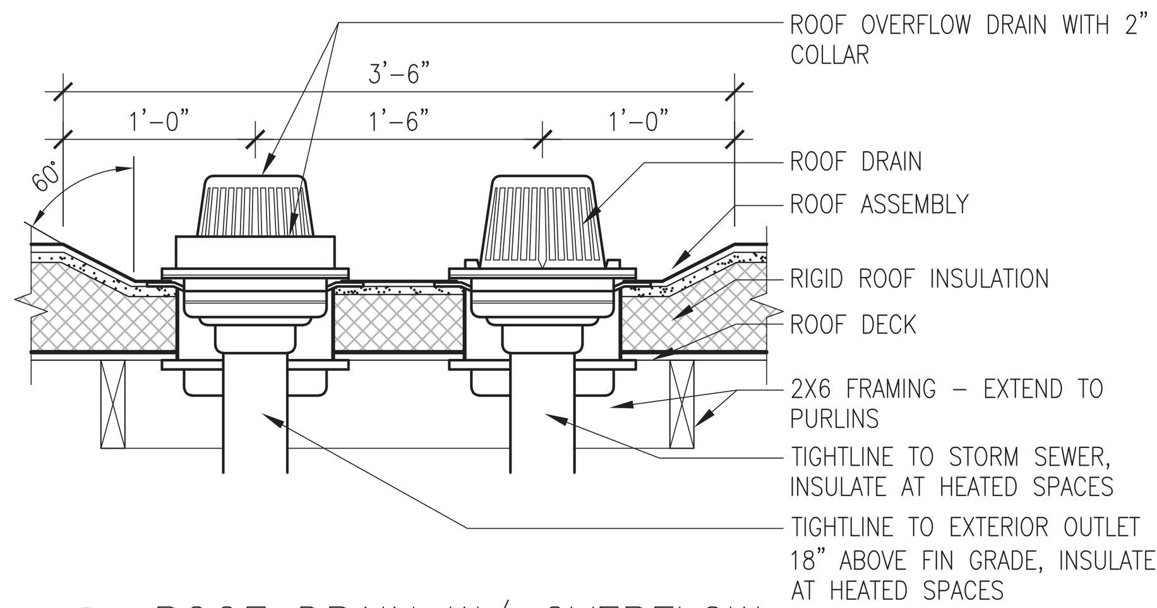


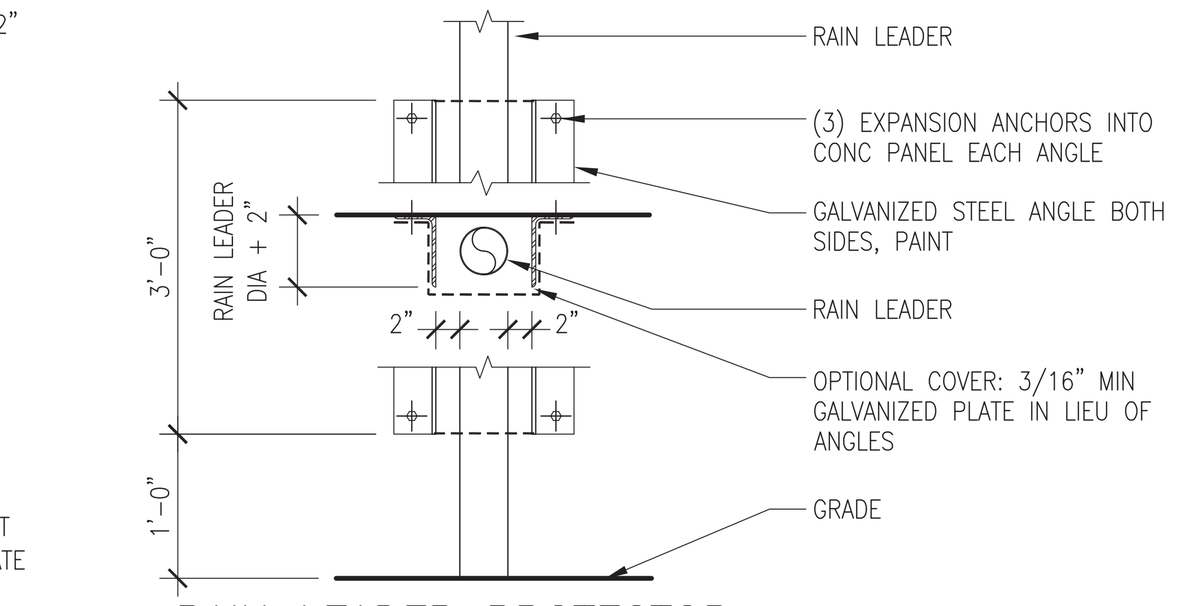
2 ROOF SCUPPER @ METAL FASCIA
SCALE: 1-1/2" = 1'-0" TPO



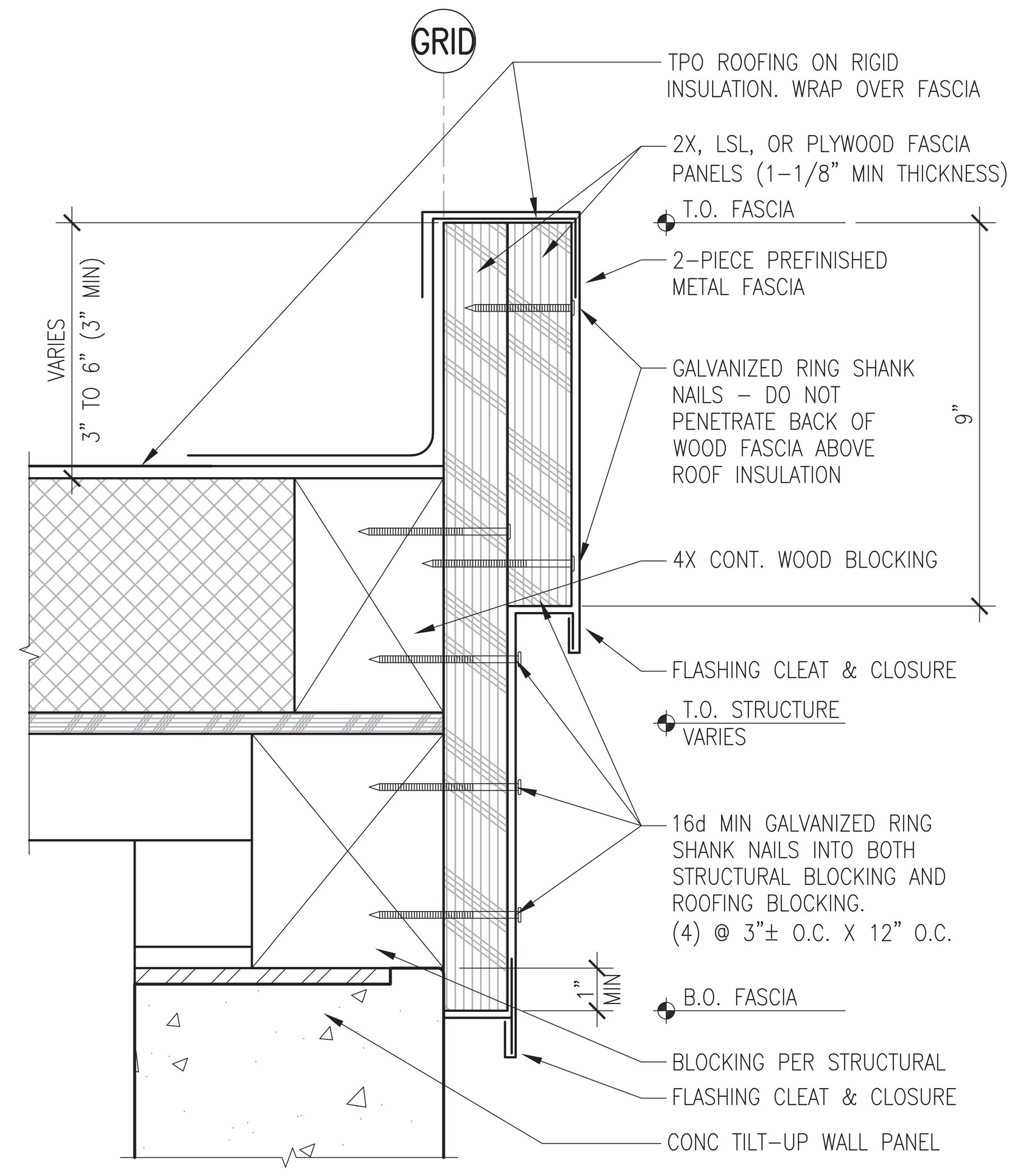
3 ROOF SCUPPER ELEVATION
SCALE: 1-1/2" = 1'-0" 6" RWL



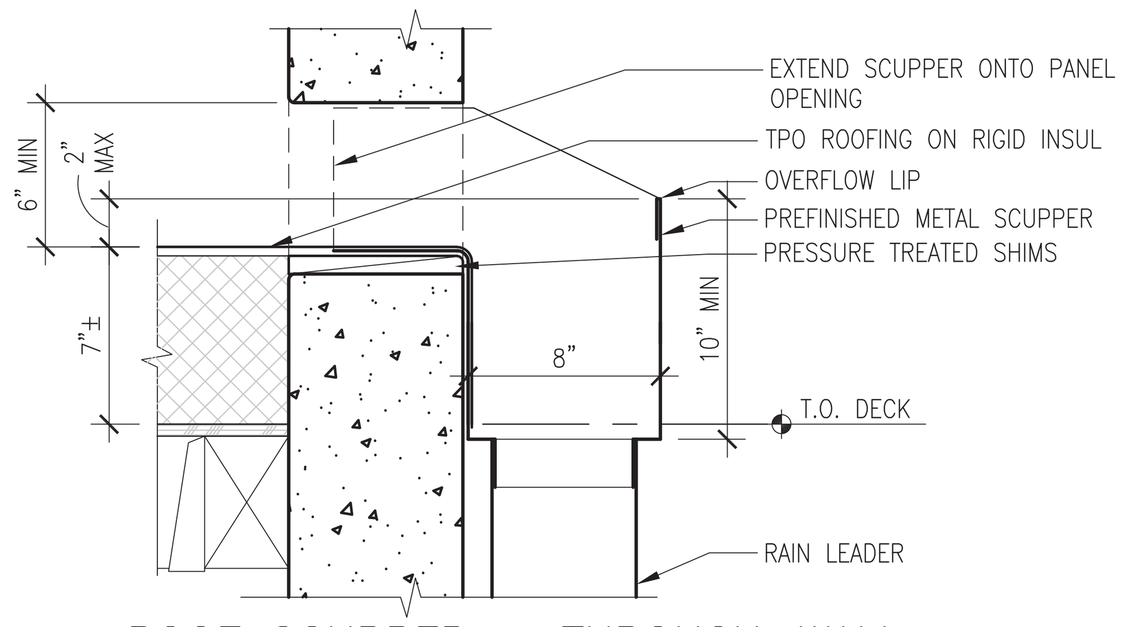
4 ROOF DRAIN W/ OVERFLOW
SCALE: 1" = 1'-0"



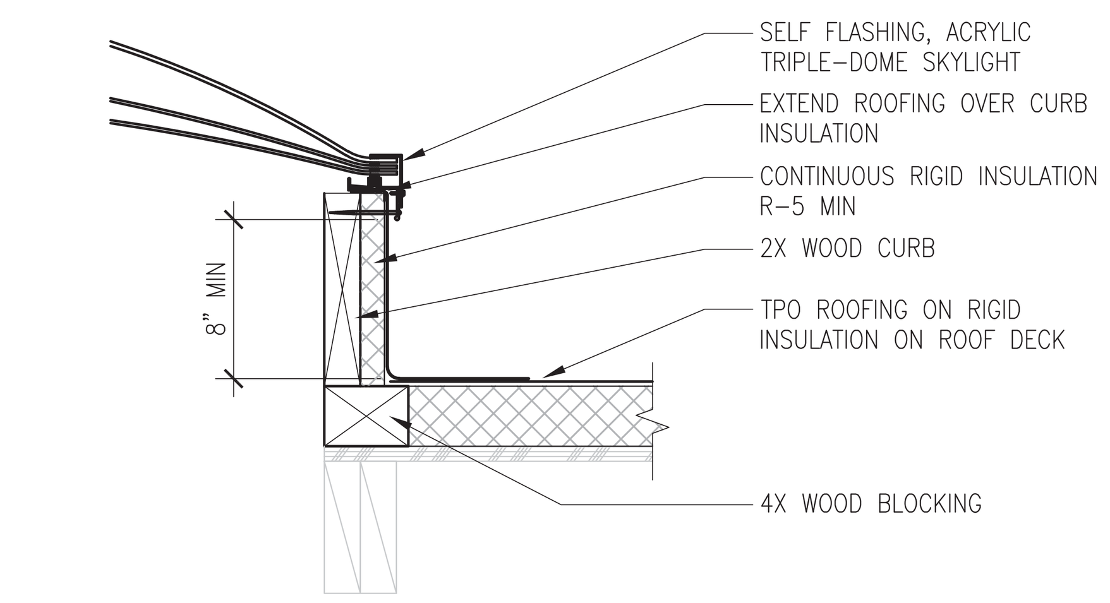
5 RAIN LEADER PROTECTOR
SCALE: 3/4" = 1'-0"



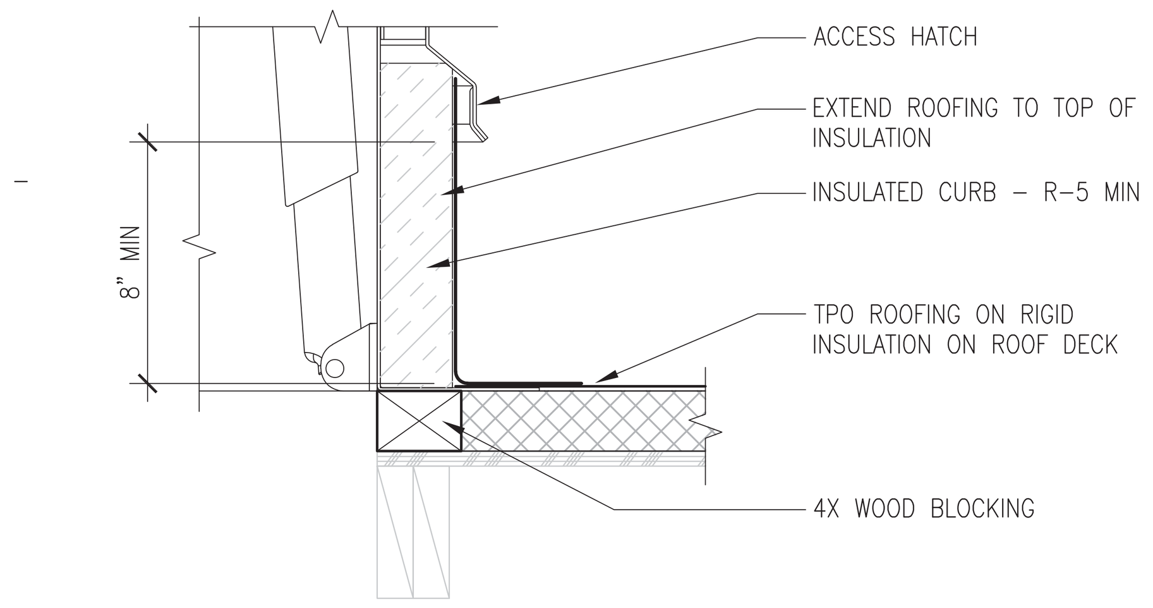
6 TYPICAL FASCIA
SCALE: 3" = 1'-0" TPO, Wood Deck



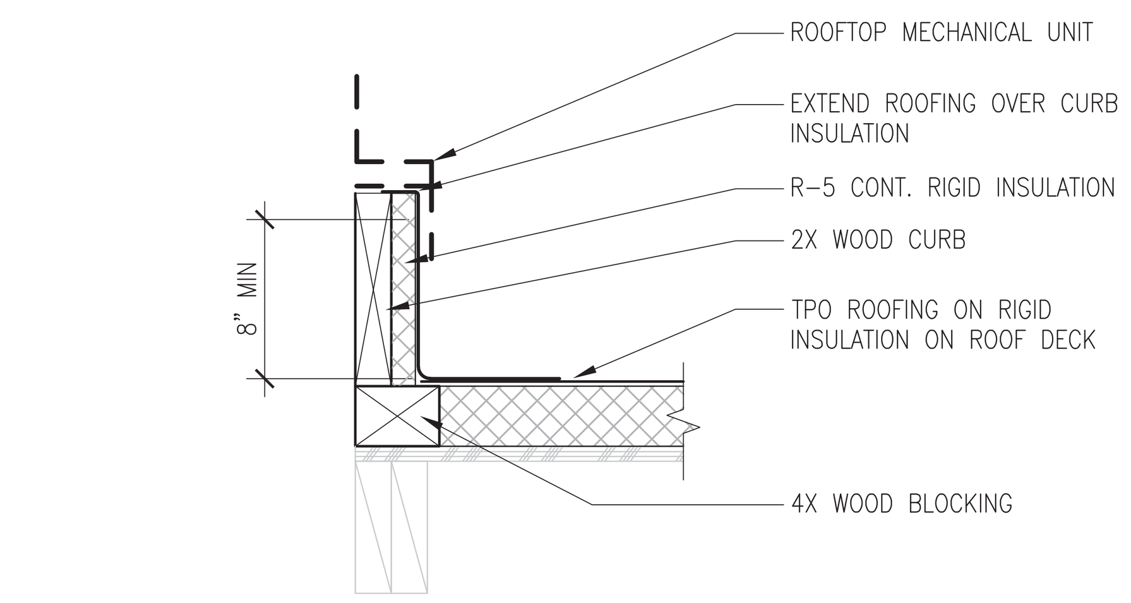
7 ROOF SCUPPER - THROUGH-WALL
SCALE: 1-1/2" = 1'-0" TPO



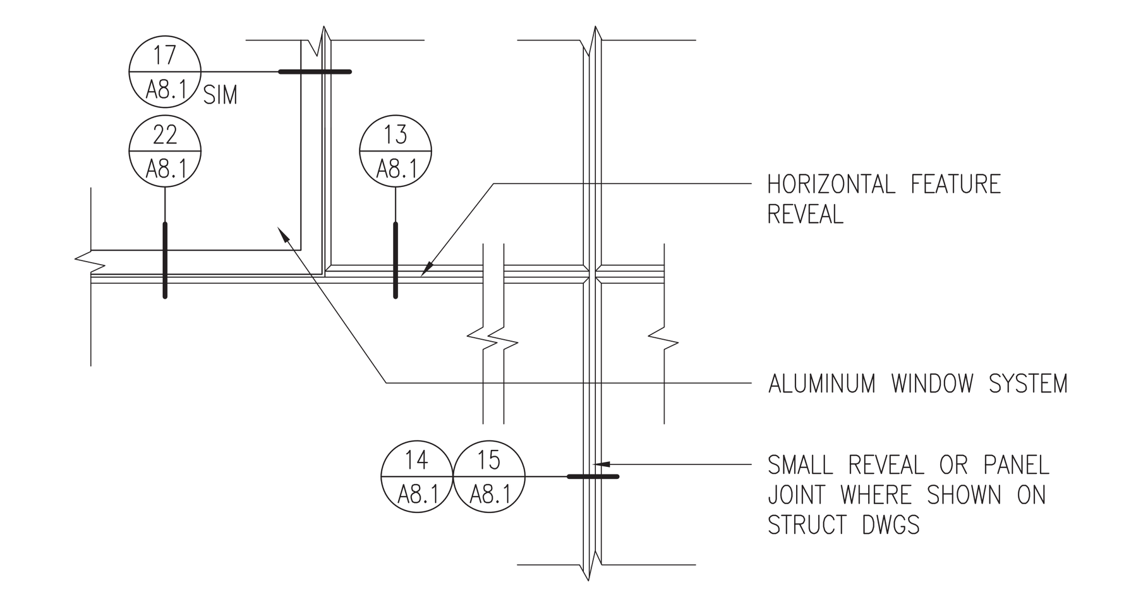
8 TYPICAL SKYLIGHT CURB
SCALE: 1-1/2" = 1'-0" TPO - INS 3



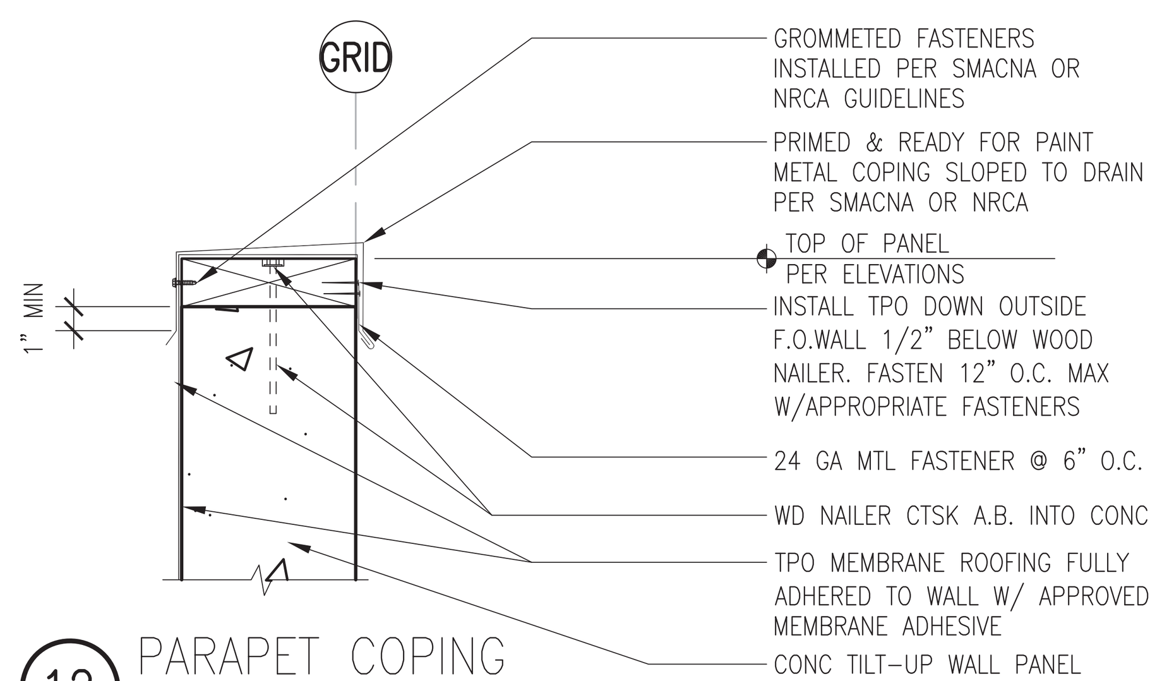
9 ROOF ACCESS HATCH
SCALE: 1-1/2" = 1'-0" TPO - INS



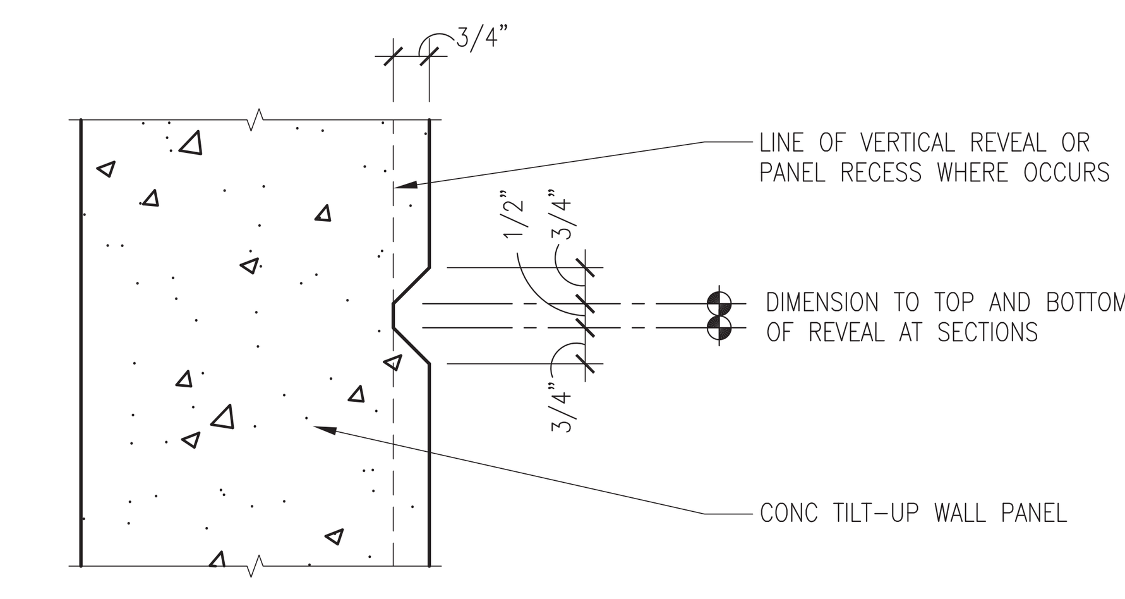
10 ROOFTOP MECH UNIT CURB
SCALE: 1-1/2" = 1'-0" TPO - INS



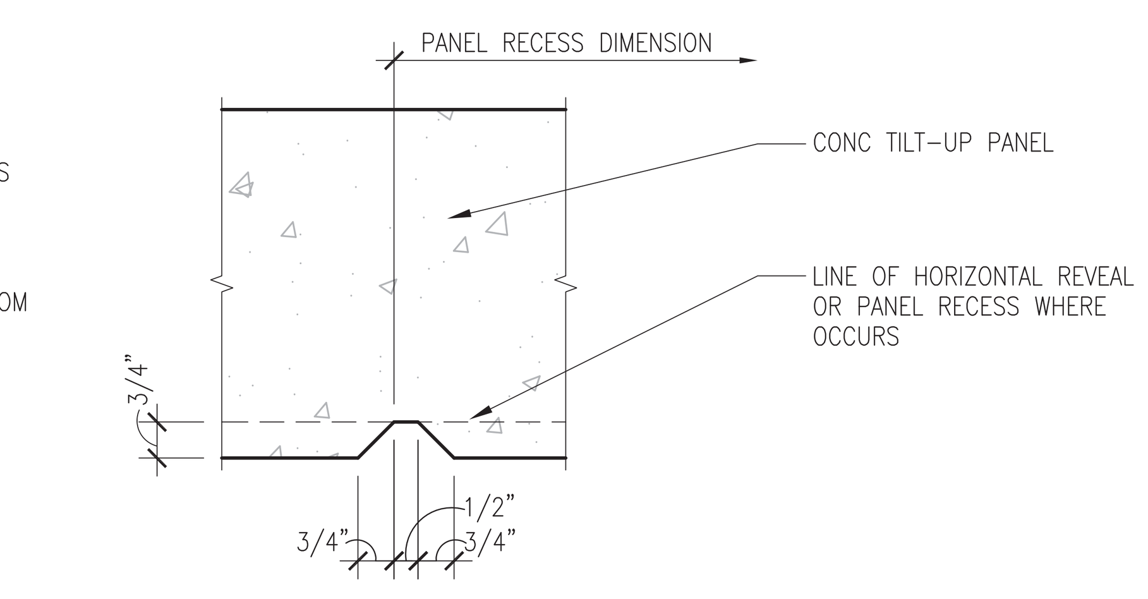
11 PARTIAL PANEL ELEVATION
SCALE: 3/4" = 1'-0"



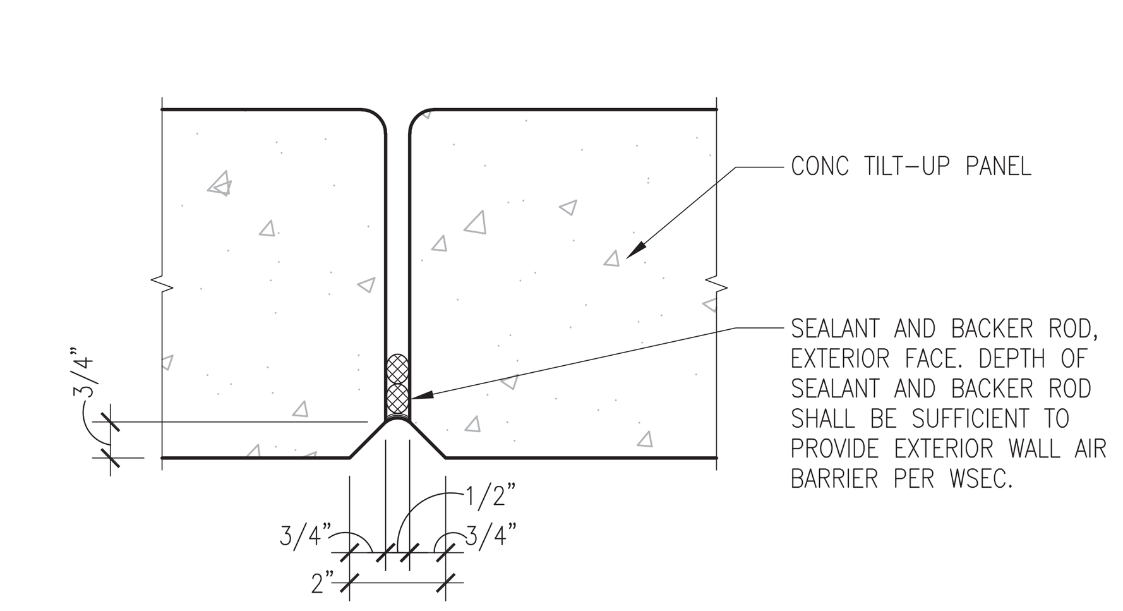
12 PARAPET COPING
SCALE: 1-1/2" = 1'-0"



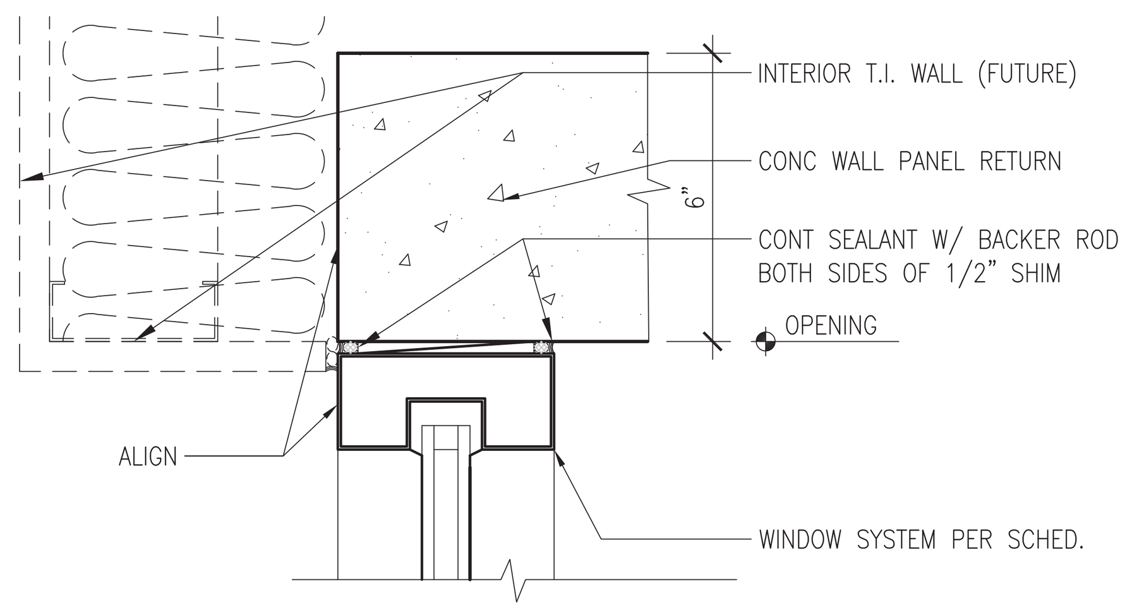
13 TYPICAL HORIZONTAL REVEAL
SCALE: 3" = 1'-0" 3/4"



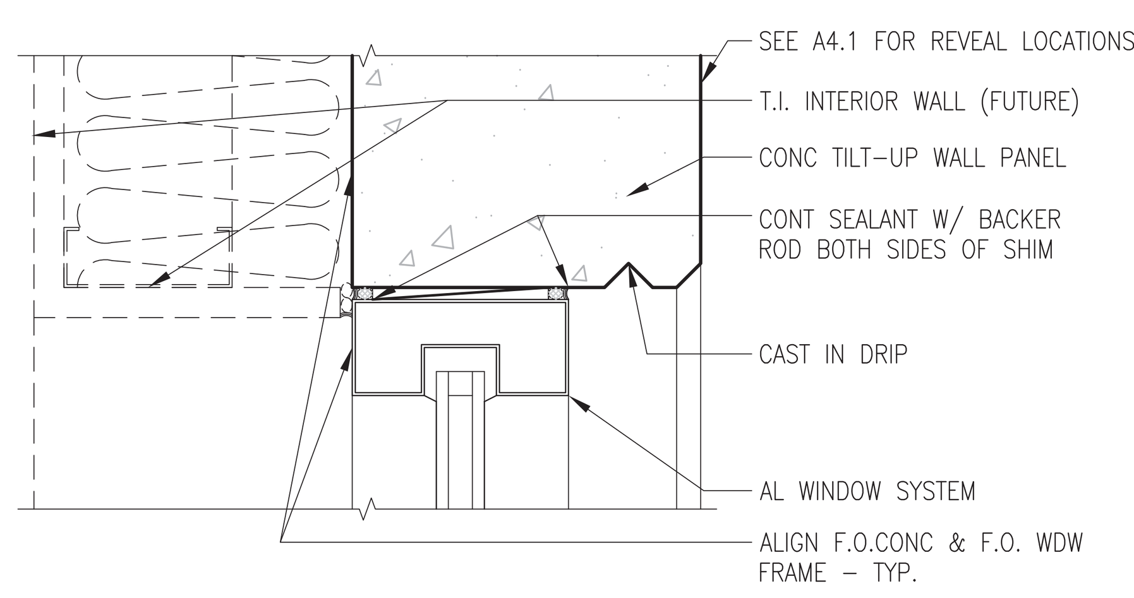
14 TYPICAL VERTICAL REVEAL
SCALE: 3" = 1'-0" 3/4"



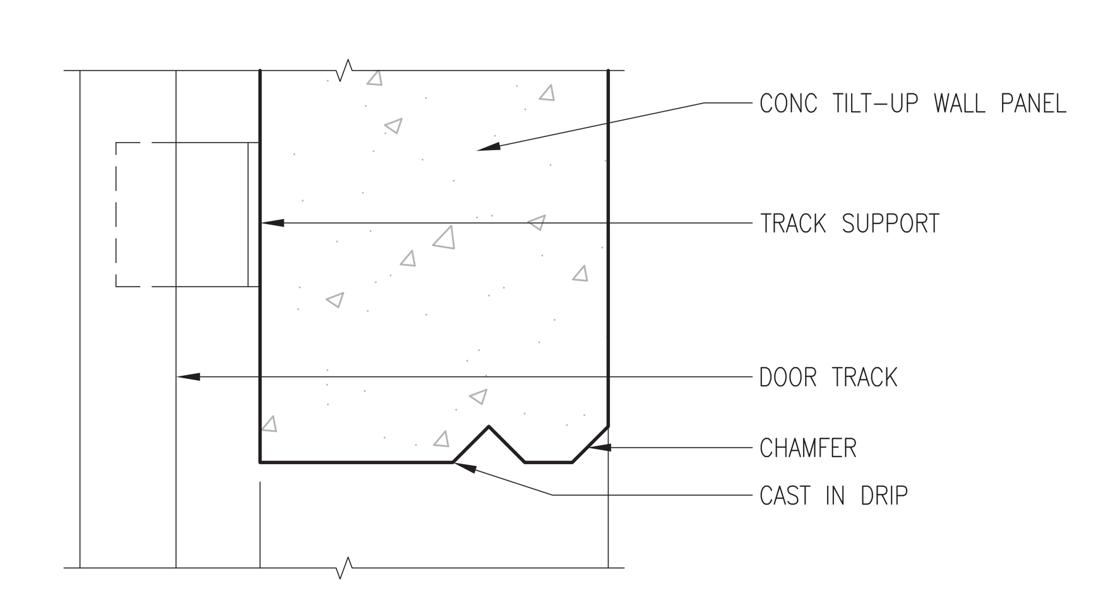
15 TYPICAL PANEL JOINT
SCALE: 3" = 1'-0" 3/4"



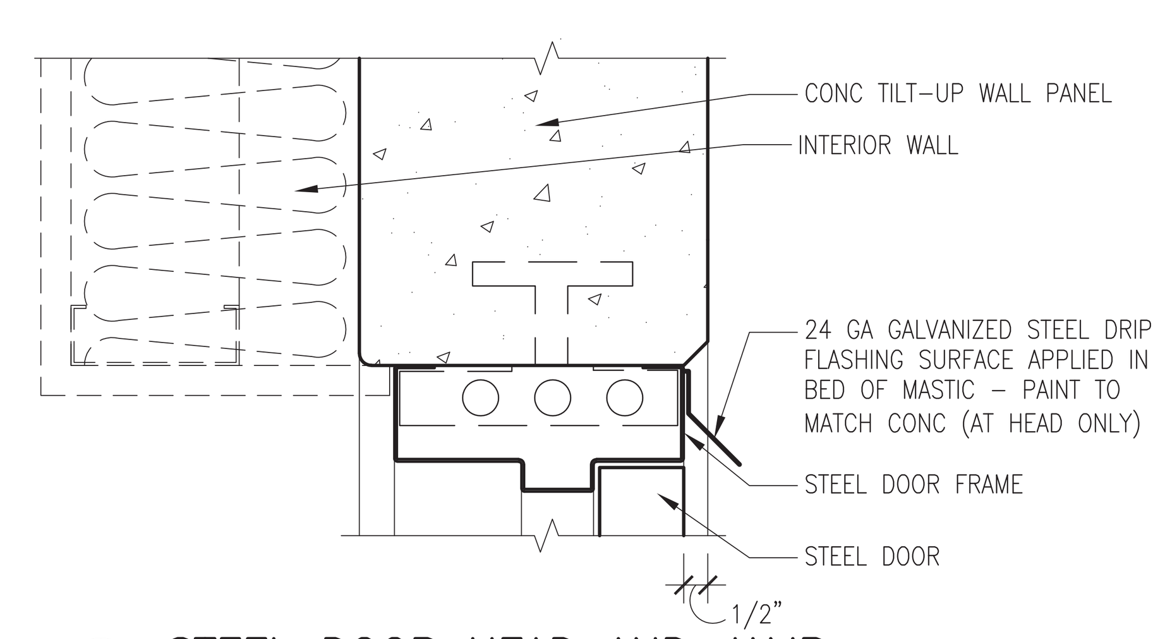
16 RECESSED AL STOREFRONT HEAD
SCALE: 3" = 1'-0"



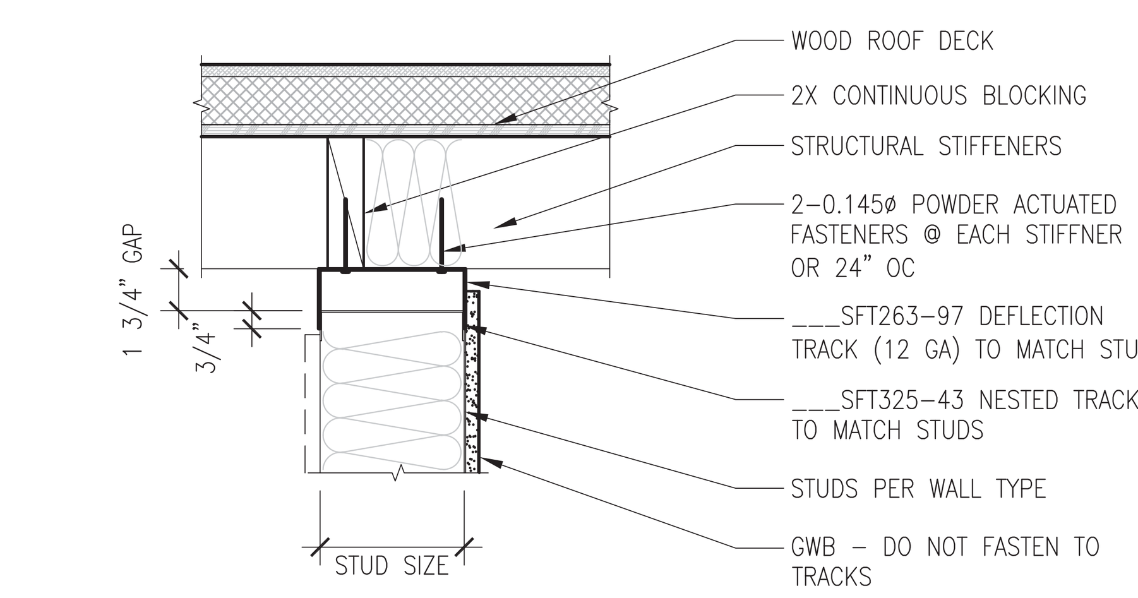
17 TYPICAL WINDOW HEAD (JAMB SIMILAR)
SCALE: 3" = 1'-0"



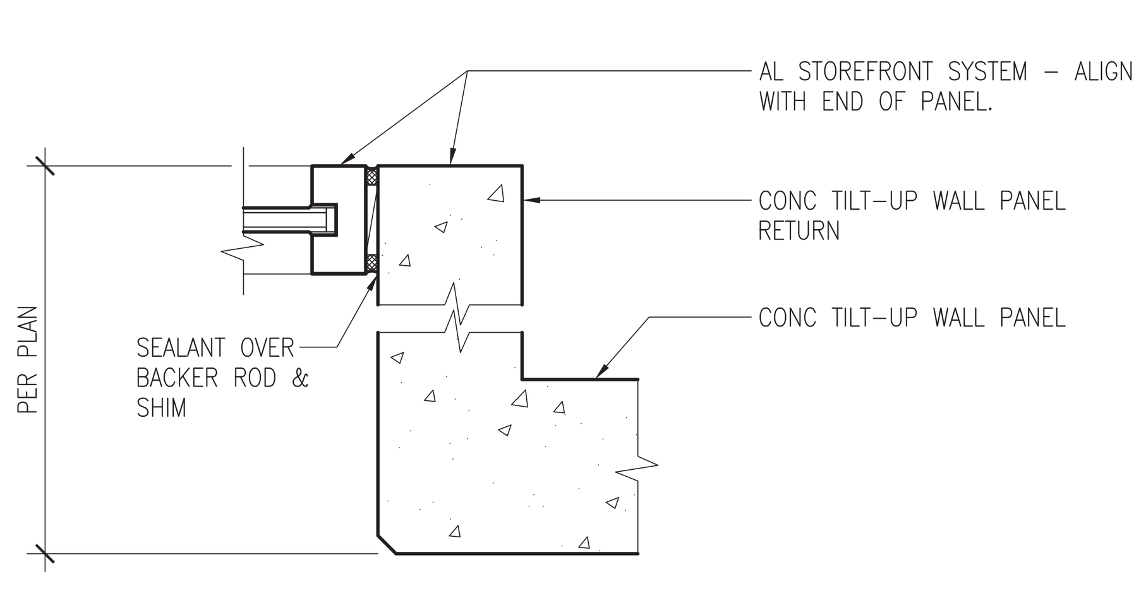
18 OVERHEAD DOOR HEAD
SCALE: 3" = 1'-0"



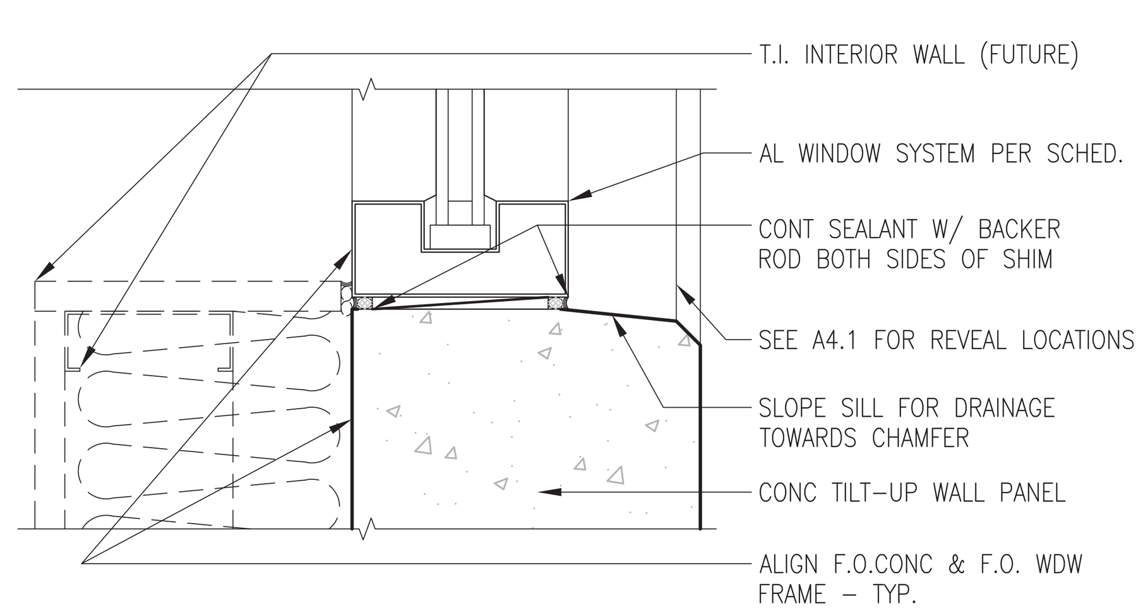
19 STEEL DOOR HEAD AND JAMB
SCALE: 3" = 1'-0"



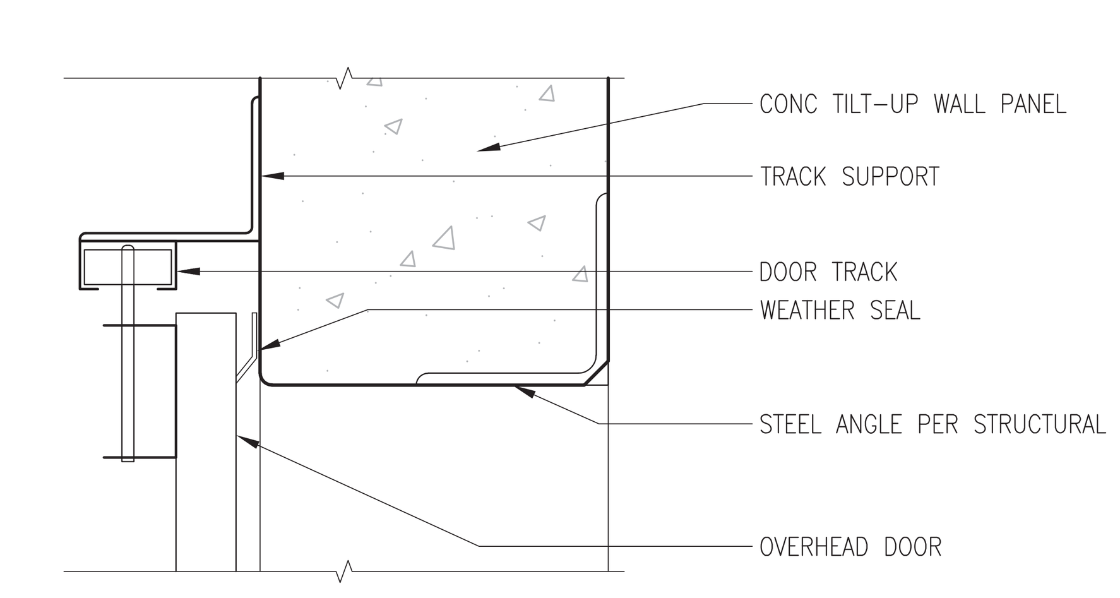
20 METAL STUD WALL AT ROOF
SCALE: 1-1/2" = 1'-0" 1-5/8" MAXIMUM LIVE LOAD DEFLECTION



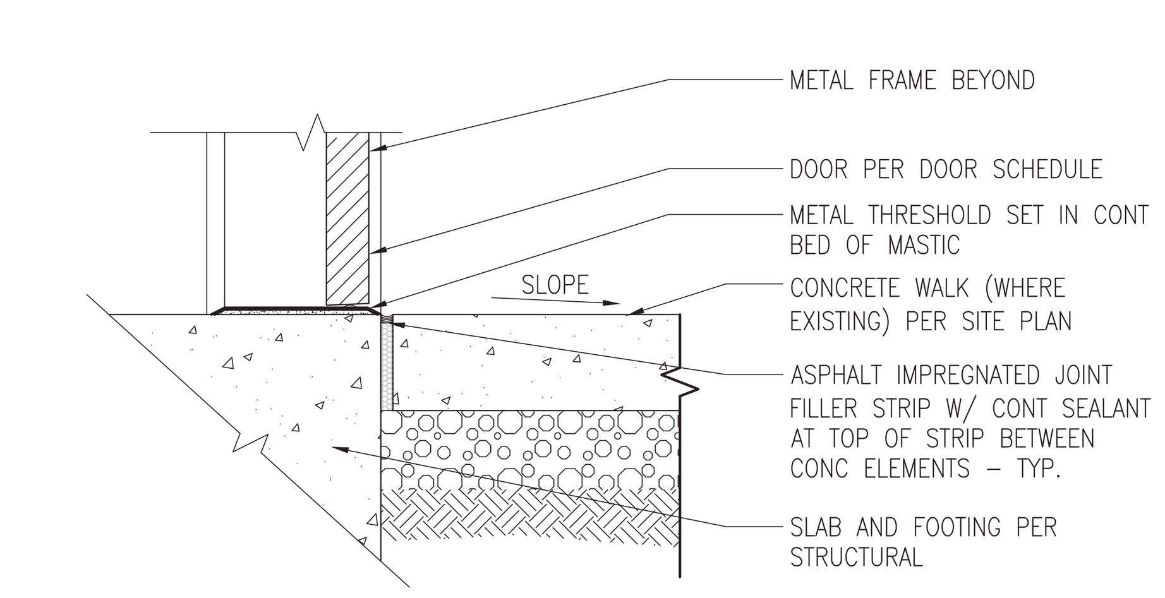
21 RECESSED AL STOREFRONT JAMB
SCALE: 1-1/2" = 1'-0"



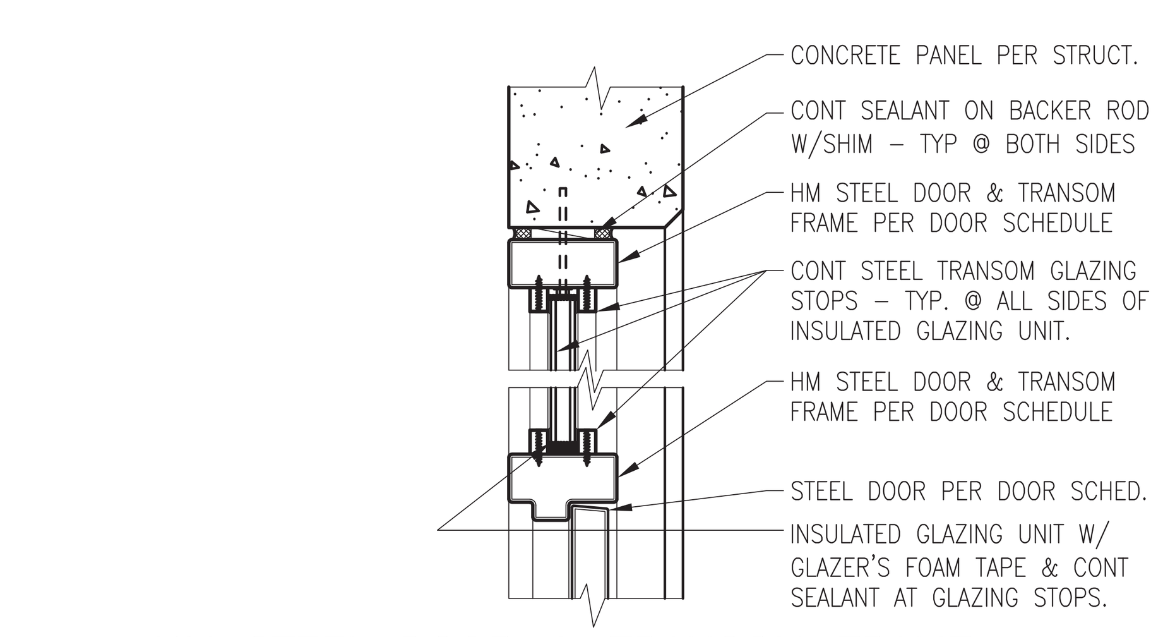
22 TYPICAL WINDOW SILL
SCALE: 3" = 1'-0"



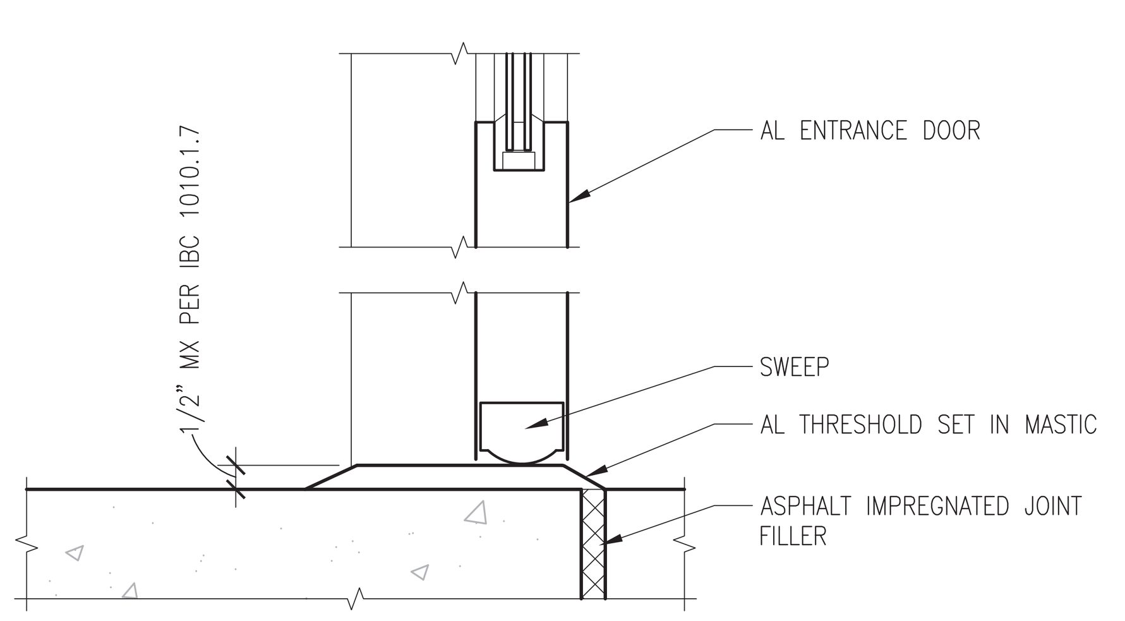
23 OVERHEAD DOOR JAMB
SCALE: 3" = 1'-0"



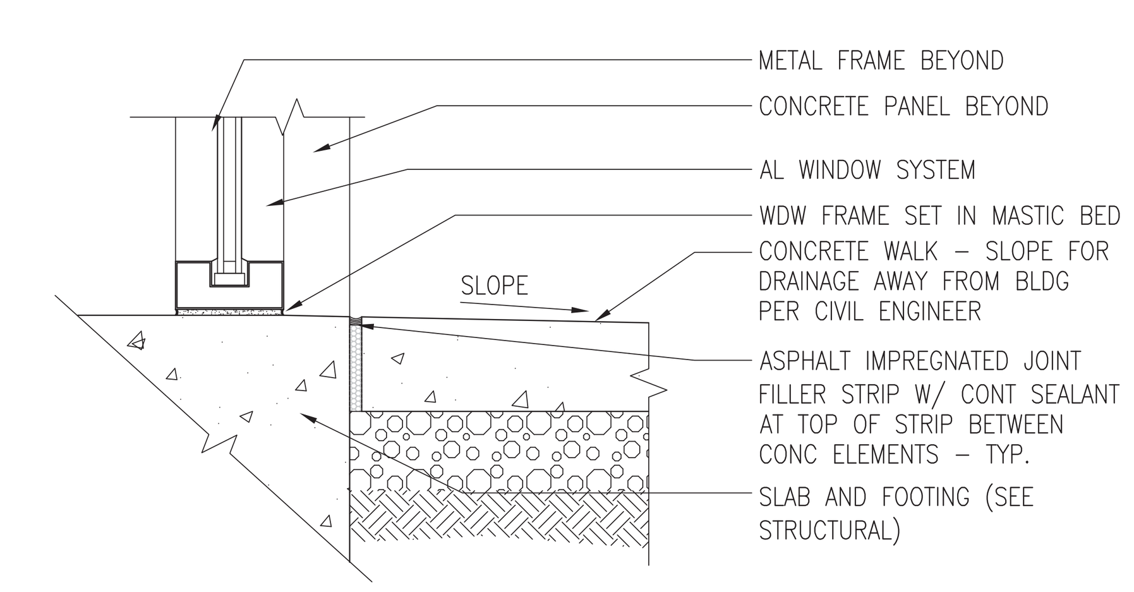
24 EXTERIOR DOOR THRESHOLD
SCALE: 1-1/2" = 1'-0"



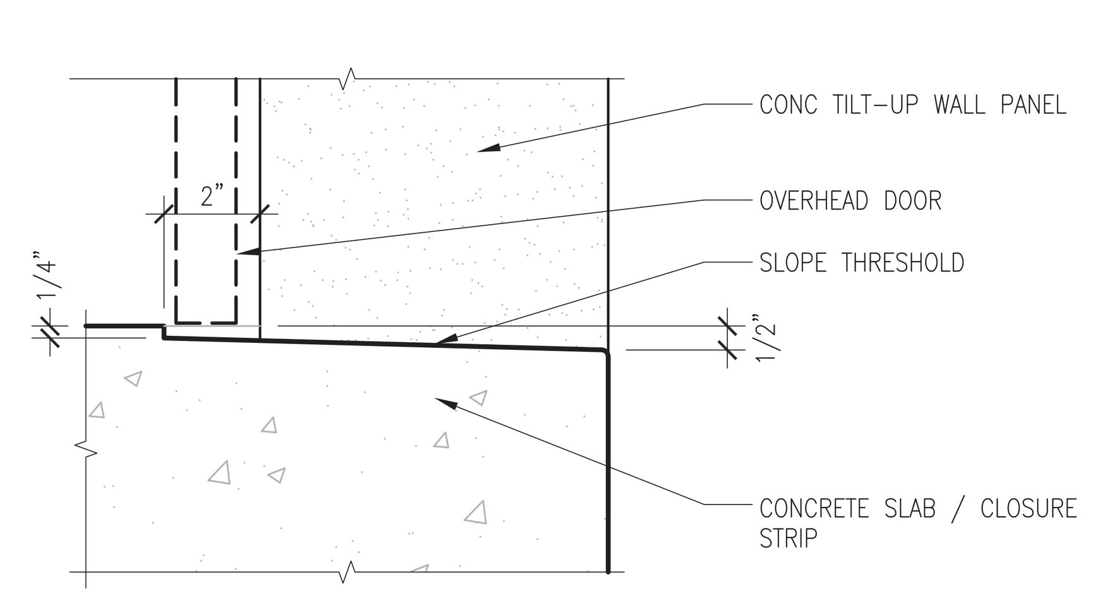
25 HM STEEL DOOR & TRANSOM FRAME
SCALE: 1-1/2" = 1'-0"



26 TYPICAL AL ENTRANCE SILL
SCALE: 3" = 1'-0"



27 WINDOW SILL AT GRADE
SCALE: 1-1/2" = 1'-0"



28 OVERHEAD DOOR SILL
SCALE: 3" = 1'-0"

SYNTHESIS PLLC
THE FUSION OF ARCHITECTURE, DESIGN TECHNOLOGY & PEOPLE
12503 Bel-Red Road, Suite 101
Bellevue, WA 98005
p 425 646 1818 f 425 646 4141

NELSON DEVELOPMENT
P.O. BOX 1301
SEAHURST, WA 98062

REVISIONS

ISSUE NO.	DATE	ITEM
1	10 11 2019	PERMIT SET

PROFESSIONAL STAMP

REGISTERED ARCHITECT
RANDALL LEE BROWN
STATE OF WASHINGTON
7154

Digitally signed by Randy Brown
Date: 2019.10.10 20:32:32 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: BUILDING PERMIT
TITLE: EXTERIOR DETAILS
DESIGNED BY:
DRAWN BY:
REVIEWED BY:
APPROVED BY:
DATE: 08 07 19
SHEET NO: A8.1
PROJECT NO: 201613.03.003

www.synthesispllc.com

GENERAL NOTES

CODE: INTERNATIONAL BUILDING CODE, 2015 EDITION

BUILDING RISK CATEGORY = II

LIVE LOADS:
UNIFORM LOADS:

LOCATION	LIVE LOAD	REDUCIBLE
SLAB ON GRADE	(SEE SLAB ON GRADE NOTES)	
ROOF	25 PSF (SNOW)	NO

SNOW LOAD DATA:

Pg = 20 PSF	Pf = 25 PSF (WITHOUT DRIFT)
Ce = 0.9	Pd = N/A
Ct = 1.0	W = N/A
Is = 1.0	

WIND DESIGN INFORMATION:
WIND LOADS ON THE MAIN WIND-FORCE RESISTING SYSTEM (MWFRS) WAS DETERMINED USING THE ENVELOPE PROCEDURE.
WIND SPEED (BASED ON TABLE 1609.3.1 OF IBC 2015): V_{ult} = 110 MPH V_{asd} = 85 MPH
EXPOSURE "B" λ= 1.00 K_{zt}=1.00

SEISMIC DESIGN INFORMATION:
SEISMIC FORCE RESISTING SYSTEM IS A BEARING WALL SYSTEM WITH SPECIAL REINFORCED CONCRETE SHEAR WALLS. THE STRUCTURE WAS ANALYZED USING THE EQUIVALENT LATERAL FORCE PROCEDURE.
R = 5.0 Ω_O = 2.0
S_S = 1.453 S_{DS} = 0.969
S_1 = 0.565 S_{D1} = 0.565
C_S = 0.194
I_E = 1.0
SITE SOIL CLASS = D
SEISMIC DESIGN CATEGORY = D
BASE SHEAR, V = 761 KIPS (ULTIMATE)

FOUNDATIONS:
FOUNDATION DESIGN PER GEOTECHNICAL REPORT #ES-6384 DATED DECEMBER 27TH, 2018, BY EARTH SOLUTIONS NW, LLC. ALL FOUNDATION WORK PER THIS REPORT. DESIGN CRITERIA INDICATED IN THE GEOTECHNICAL REPORT ARE AS FOLLOWS.
ALLOWABLE SOIL BEARING CAPACITY…2500 PSF
PASSIVE SOIL RESISTANCE…………………....350 PCF
ACTIVE SOIL PRESSURE…….………………..35 PCF
COEFFICIENT OF FRICTION………………......0.40
SEISMIC EARTH PRESSURE………………..….6H

ALL EXTERIOR FOOTINGS TO BE A MINIMUM OF 18 INCHES BELOW LOWEST ADJACENT GRADE. SOILS ENGINEER TO INSPECT AND APPROVE FOUNDATION EXCAVATIONS PRIOR TO POURING. ALL FOOTINGS AND SLABS SHALL BEAR ON COMPETENT NATIVE SOIL, RECOMPACTED NATIVE SOIL, OR NEW STRUCTURAL FILL. SEE THE SOILS REPORT FOR SPECIFIC FILL REQUIREMENTS, FILL PLACEMENT REQUIREMENTS, PRELOAD REQUIREMENTS AND ADDITIONAL INFORMATION.

SLABS ON GRADE:
THE SLAB ON GRADE FOR THIS PROJECT IS TYPICAL OF OTHER BUILDINGS WITH SIMILAR FLOOR LOADING AND SOIL CONDITIONS CONSTRUCTED IN THIS AREA. THE SLAB HAS NOT BEEN DESIGNED FOR ANY SPECIFIC LIVE LOAD AND HAS BEEN DETAILED TO MEET LOCAL INDUSTRY STANDARDS FOR SIMILAR BUILDINGS. NO CONSTRUCTION LOADS HAVE BEEN INCLUDED IN THE DESIGN OF THE FLOOR SLAB.

THE CONTRACTOR SHALL REVIEW WITH THE SOILS ENGINEER THE CONSTRUCTION LOADING OF THE SLAB AND SOILS BELOW. HE SHALL TAKE THE NECESSARY MEASURES TO INSURE THAT THE SLAB AND SOILS BELOW WILL NOT BE AFFECTED OR DAMAGED BY THE CONSTRUCTION LOADING. THE CONTRACTOR SHALL ADD ADDITIONAL CONCRETE, REINFORCING AND UPGRADE JOINT DETAILING AS REQUIRED FOR HIS LOADING.

CONTROL JOINTS SHALL BE SOFF CUT JOINTS PER THE DETAILS ON THE STRUCTURAL DRAWINGS. JOINTS SHALL BE CUT 0 TO 2 HOURS AFTER FINAL FINISH AT EACH JOINT LOCATION (AS SOON AS THE SLAB WILL SUPPORT THE SOFF CUT MACHINE AND OPERATOR). COMPLY WITH THE SOFF-CUT INTERNATIONAL, INC. INSTRUCTIONS FOR THE SOFF CUT SYSTEM. ALL JOINTS SHALL BE FILLED WITH MM-80 AS MANUFACTURED BY METZER MCGUIRE OR APPROVED EQUAL. THE JOINT FILLER SHALL BE INSTALLED IN CONFORMANCE WITH THE MANUFACTURER'S SPECIFICATIONS. INSTALL THE JOINT FILLER AS LONG AFTER THE SLAB HAS BEEN POURED AS POSSIBLE, BUT NOT LESS THAN 90 DAYS AFTER THE SLAB HAS BEEN POURED. THE JOINT SHALL BE CLEAN AND SOUND, AND FREE OF ALL OIL, DIRT, DEBRIS, PAINT AND ANY OTHER MATERIAL THAT MAY BE A BOND BREAKER. THE CONCRETE CURING COMPOUND MUST BE REMOVED PRIOR TO INSTALLING THE JOINT FILLER AND/OR SURFACE SEALER.

CONCRETE:
ALL CONCRETE SHALL BE STONE-AGGREGATE CONCRETE HAVING A UNIT WEIGHT OF APPROXIMATELY 145 POUNDS PER CUBIC FOOT. 28 DAY COMPRESSIVE STRENGTH SHALL BE AS FOLLOWS:

CONSTRUCTION	f'_C	EXPOSURE CLASS	MAX W/C RATIO	AIR CONTENT
PRECAST WALL PANELS	5,000 PSI	F1, S0, W0, C1	0.55	5%
FOOTINGS	3,500 PSI	F1, S0, W0, C1	0.55	5%
PRECAST RETAINING WALLS	3,500 PSI	F1, S0, W0, C1	0.55	5%
INTERIOR SLAB ON GRADE	3,500 PSI	F0, S0, W0, C0	N/A	N/A

DESIGN MIX FOR SLABS ON GRADE SHALL PROVIDE A MIX WITH A MAXIMUM SHRINKAGE OF 0.03% AT 42 DAYS.

CONCRETE IN ALL EXTERIOR SLABS TO BE AIR ENTRAINED 6% PLUS OR MINUS 1%.

CONCRETE SUBMITTALS SHALL CONFORM TO ACI 318 CHAPTER 26. MIXING AND PLACING OF ALL CONCRETE SHALL BE IN ACCORDANCE WITH THE IBC AND ACI CODE 318. PROPORTION OF AGGREGATE TO CEMENT SHALL BE AS SUCH TO PRODUCE A DENSE, WORKABLE MIX, WITH A MAXIMUM SLUMP OF 5 INCHES, WHICH CAN BE PLACED WITHOUT SEGREGATION OR EXCESS FREE SURFACE WATER. 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES UNLESS INDICATED OTHERWISE ON ARCHITECTURAL DRAWINGS. GROUT FOR COLUMN BASES SHALL BE "HI-FLOW GROUT" AS MANUFACTURED BY THE EUCLID CHEMICAL CO. OR APPROVED EQUAL.

ANCHORAGE TO CONCRETE:
EXPANSION BOLTS INTO CONCRETE SHALL BE SIMPSON STRONG-BOLT **2** AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. SPECIAL INSPECTION AND INSTALLATION PER ICC-ES REPORT ESR-3037.

CONCRETE SCREW ANCHORS SHALL BE SIMPSON TITEN HD SCREW ANCHORS AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. SPECIAL INSPECTION AND INSTALLATION PER ICC-ES REPORT ESR-2713.

EPOXY FOR FASTENING ANCHOR BOLTS AND REBAR INTO EXISTING CONCRETE TO BE SIMPSON SET-3G EPOXY ADHESIVE AS MANUFACTURED BY SIMPSON STRONG-TIE COMPANY, INC. SPECIAL INSPECTION AND INSTALLATION PER ICC-ES REPORT ESR-4057.

ANCHOR RODS INTO CONCRETE SHALL BE GRADE 36 MANUFACTURED AND INSTALLED PER ASTM F1554. ALL ANCHOR RODS/BOLTS ATTACHING PRESSURE TREATED WOOD PLATES TO CONCRETE SHALL BE HOT DIPPED GALVANIZED. ALL ANCHOR BOLTS FOR SILL PLATES SHALL BE PROVIDED WITH 3" X 3" X 0.229" THICK (MIN) PLATE WASHERS.

ANCHORAGE SUBSTITUTIONS MUST BE APPROVED BY THE ENGINEER. ANCHORAGE SUBSTITUTION REQUESTS REQUIRE ADDITIONAL ENGINEERING SERVICES.

REINFORCING STEEL:
ALL REINFORCEMENT SHALL CONFORM TO ASTM A615. (SEE BELOW FOR WELDED REBAR). ALL REINFORCING SHALL BE GRADE 60 (Fy = 60,000 psi; Fs = 32,000 psi). LAP CONTINUOUS REINFORCING BARS IN CONCRETE AS INDICATED BELOW. CORNER BARS (1'-7" BEND) WILL BE PROVIDED FOR ALL HORIZONTAL REINFORCEMENT. DETAIL STEEL IN ACCORDANCE WITH THE ACI MANUAL OF STANDARD PRACTICE OF DETAILING REINFORCED CONCRETE STRUCTURES. WELDED HEAD STUDS SHALL COMPLY WITH AWS D1. AND STUD MATERIAL SHALL COMPLY WITH ASTM A29 (Fy=65,000 psi).

(**REINFORCING STEEL** CONTINUED ABOVE LEFT)

REINFORCING STEEL CONTINUED:
REBAR FOR TILT-UP PANELS SHALL BE A706. A615 REBAR IS ACCEPTABLE IF MILL TESTS SHOW: 1) Fy DOES NOT EXCEED 60,000 psi BY MORE THAN 18,000 psi, AND 2)THE RATIO OF ACTUAL TENSILE STRENGTH TO ACTUAL YIELD STRENGTH IS NOT LESS THAN 1.25.

MINIMUM LAP SPLICE LENGTHS FOR CONCRETE

BAR SIZE	f'c=3500	f'c=5000
#4	26"	23"
#5	33"	29"
#6	40"	34"
#7	58"	49"
#8	66"	56"
#9	74"	63"
#10	84"	70"
#11	93"	78"

THE FOLLOWING MINIMUM COVER SHALL BE PROVIDED FOR REINFORCEMENT (UNLESS INDICATED OTHERWISE ON DRAWINGS):

A) CONCRETE CAST AGAINST & PERMANENTLY EXPOSED TO
EARTH..3" EARTH FACE
B) CONCRETE EXPOSED TO EARTH OR WEATHER (CAST IN FORMS)
#6 THROUGH #18 BARS...2"
#5 BARS & SMALLER..1-1/2"
C) CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
SLABS, WALLS & JOIST - #11 BAR & SMALLER................3/4"
BEAMS & COLUMNS..1-1/2"
D) PRECAST PANELS
#8 BARS & SMALLER……...……………………………….1" EXTERIOR FACE
#9 BARS & LARGER..………………………………...….2" EXTERIOR FACE
(SEE ITEM 'C' ABOVE FOR INTERIOR FACE.)

WELDED REBAR:
WELDED REBAR TO BE GRADE 60 CONFORMING TO ASTM A706. (PREHEAT ALL GRADE 60 REBAR PRIOR TO WELDING.) USE FRESH E80XX LOW HYDOGEN ELECTRODES TO WELD GRADE 60 REINFORCING; CONFORM TO PROCEDURES OF AWS D1.4, RECOMMENDED PRACTICES FOR WELDING REINFORCING STEEL. SEE SPECIAL INSPECTION PROGRAM. REINFORCING TO BE WELDED SHALL NOT HAVE CARBON CONTENT IN EXCESS OF .35%. ALL WELDS TO BE BY WABO CERTIFIED WELDERS.

STRUCTURAL STEEL:
RECTANGULAR AND SQUARE HSS SECTIONS SHALL CONFORM TO ASTM A500, GRADE C (Fy = 50,000 psi). ALL OTHER STRUCTURAL STEEL SHALL CONFORM TO ASTM A36 (Fy = 36,000 psi) OR ASTM A992 GRADE 50 (Fy = 50,000 psi). APPLY PRIMER COATS PER ARCHITECTURAL SPECIFICATIONS. WELDS NOT SPECIFIED SHALL BE 3/16" CONTINUOUS FILLET MINIMUM. ALL WELDS TO BE IN ACCORDANCE WITH AWS D1.1 AND D1.8 AND BY WABO CERTIFIED WELDERS. USE FRESH E70XX LOW HYDROGEN ELECTRODES. ALL STRUCTURAL WELDS SHOULD BE CONSIDERED PART OF THE SEISMIC FORCE RESISTING SYSTEM AND SHALL BE MADE WITH FILLER METAL PRODUCING WELDS WITH A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT 0 DEGREES-F AS DETERMINED BY THE APPLICABLE AWS A5 CLASSIFICATION TEST METHOD. DEMAND CRITICAL WELDS, AS SHOWN ON THE STRUCTURAL DRAWINGS, SHALL MEET THE REQUIREMENTS OF D1.8. THE CONTRACTOR SHALL SUBMIT TO THE BUILDING OFFICIAL A WELDING PROCEEDURE SPECIFICATION THAT VERIFIES THESE REQUIREMENTS.

MISCELLANEOUS STEEL CONNECTORS TO BE SIMPSON, OR APPROVED EQUAL. NAIL ALL HOLES WITH NAILS AS SPECIFIED BY MANUFACTURER UNLESS SHOWN OTHERWISE ON DRAWINGS. ALL NAILS ATTACHING TO PRESSURE TREATED WOOD MEMBERS SHALL BE HOT DIPPED GALVANIZED.

MACHINE BOLTS TO BE A307.

HIGH STRENGTH BOLTS FOR STEEL TO STEEL CONNECTIONS SHALL BE ASTM A325N OR ASTM A490, INSTALLATION AND SPECIAL INSPECTION PER AISC SPECIFICATIONS. ALL A325N OR A490 BOLTS SHALL BE PRETENSIONED IN STANDARD BOLT HOLES UNLESS NOTED OTHERWISE ON PLANS. MINIMUM BOLT PRETENSION PER AISC 16.1 TABLE J3.1 UNLESS NOTED OTHERWISE. ACCEPTABLE PRETENSIONING METHODS ARE TURN-OF-NUT, CALIBRATED WRENCH, TWIST-OFF-TYPE (ASTM F1852), OR DIRECT-TENSION INDICATOR (ASTM F959) PER AISC SPECIFICATIONS.

STEEL JOISTS AND JOIST GIRDERS:
STEEL JOISTS ARE TO BE DESIGNED AND FABRICATED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION SPECIFICATIONS, 14TH EDITION AND STANDARD SPECIFICATIONS FOR STEEL JOISTS AS ADOPTED BY THE STEEL JOIST INSTITUTE AND PROVIDE A CERTIFICATION OF COMPLIANCE AT THE COMPLETION OF FABRICATION. JOIST MANUFACTURER TO PROVIDE ALL BRIDGING AND BLOCKING, BOTH PERMANENT AND ERECTION. SHOP DRAWINGS AND DESIGN CALCULATIONS, STAMPED BY A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER, ARE TO BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS WILL NOT BE REVIEWED UNLESS THEY BEAR THE STAMP OF A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER AND CALCULATIONS STAMPED BY THE SAME ENGINEER ARE SUBMITTED ALONG WITH THE SHOP DRAWINGS. DESIGN CRITERIA SHALL MEET OR EXCEED THE FOLLOWING:

ROOF JOIST…........……………..............LOADING -- TOP CHORD..................25 PSF L.L. PLUS
9 PSF D.L.
-- BOTTOM CHORD..…...6 PSF D.L.

ROOF JOIST……..……………...……......DEFLECTION -- LIVE LOAD.....……........L/360
-- TOTAL LOAD....……...L/240

STEEL JOIST SUPPLIERS NOTE:
THE JOIST CONFIGURATIONS, INCLUDING DEPTHS AND SPACING, SHOWN ON THE DRAWINGS INDICATE THE DESIRED JOIST CONFIGURATION AND ARE TO BE COMPLIED WITH WHEREVER POSSIBLE. IF A JOIST MANUFACTURER IS UNABLE TO MEET THE LOAD REQUIREMENTS SPECIFIED WITH THE JOIST CONFIGURATION INDICATED, HE OR SHE IS TO SUBMIT WRITTEN NOTICE TO THAT AFFECT TO THE ARCHITECT PRIOR TO SUBMITTING A COST PROPOSAL OR BID.

IF A DIFFERENT SYSTEM IS PROPOSED THAT REQUIRES REVISIONS TO PRESENT STRUCTURAL FRAMING OR DETAILS, SUCH SYSTEM SHALL BE CONSIDERED SUBJECT TO THE APPROVAL OF THE OWNER, ARCHITECT AND ENGINEER.

WHERE IT IS NECESSARY TO BUTT OPPOSITE JOISTS OVER A NARROW SUPPORT WITH BEARING LENGTH LESS THAN MINIMUM REQUIREMENT, SPECIAL END CONDITIONS (SHORT BEARING LENGTH) SHALL BE DESIGNED BY THE JOIST MANUFACTURER PER SJI SPECIFICATION SECTION 104.4(b).

IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND JOIST MANUFACTURER TO VERIFY THE WEIGHT AND LOCATIONS OF ALL MECHANICAL EQUIPMENT PRIOR TO SUBMITTING SHOP DRAWINGS. IT SHALL BE NOTED IN THE JOIST MANUFACTURER'S BID WHETHER OR NOT AN ALLOWANCE HAS BEEN MADE FOR MECHANICAL UNITS.

FRAMING LUMBER:		REFERENCE DESIGN VALUES
STEEL JOIST PURLIN NAILERS	D.F. #2	Fb = 900 psi
2x, 3x, 4x MEMBERS	D.F. #2	Fb = 900 psi
6x MEMBERS	D.F. #2	Fb = 875 psi
4x POSTS	D.F. #1	Fb = 1000 psi
6x POSTS	D.F. #1	Fb = 1200 psi

LUMBER NOT NOTED SHALL BE D.F. #2 OR BETTER.

ALL GRADES SHALL CONFORM TO WWPA WESTERN LUMBER GRADING RULES -- 2011 EDITION. ALL BOLTS HEADS AND NUTS BEARING AGAINST WOOD SHALL BE PROVIDED WITH STANDARD CUT WASHERS EXCEPT AS NOTED FOR ANCHOR BOLTS UNDER STRUCTURAL STEEL SECTION. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE PRESSURE TREATED. MAXIMUM MOISTURE CONTENT 19% AT INSTALLATION FOR ALL LUMBER.

WOOD SHEATHING:
ROOF SHEATHING......15/32" OR 19/32" OSB OR CDX PLYWOOD STRUCTURAL I RATED PANELS WITH STRENGTH AXIS PARALLEL TO SUPPORTS W/EXTERIOR GLUE…..INDEX 32/16

ALL PLYWOOD SHALL CONFORM TO U.S. PRODUCT STANDARD P.S. 1-09. ALL O.S.B. SHALL CONFORM TO U.S. PRODUCT STANDARD P.S. 2-10. NAILING SHALL BE AS INDICATED ON PLAN. HIGH SHEAR DIAPHRAGMS SHALL HAVE SPECIAL INSPECTIONS AS OUTLINED BELOW. CONTRACTOR IS TO CALL THE ENGINEER TO SCHEDULE SITE VISIT PRIOR TO COVERING ROOF SHEATHING.

(**GENERAL NOTES** CONTINUED ABOVE LEFT)

GENERAL NOTES CONTINUED:
PRECAST PANELS:
PANEL LIFTING STRESSES ARE TO BE CHECKED BY THE CONTRACTOR AND HE SHALL PROVIDE REINFORCING STEEL AS REQUIRED FOR HIS METHOD OF HANDLING AND ERECTION OF PRECAST PANELS. USE STRONGBACKS AS REQUIRED AT EXCESSIVE PANEL OPENINGS. CONTINUOUS GROUT BETWEEN PANELS AND FOOTINGS TO BE "EMBECO" MASTER FLOW #713 BY MASTER BUILDERS, INC. OR APPROVED EQUAL. SEE DRAWINGS FOR ADDITIONAL NOTES REGARDING PRECAST PANELS.

STATEMENT OF SPECIAL INSPECTIONS:
SPECIAL INSPECTIONS SHALL BE PERFORMED AS OUTLINED IN THE STRUCTURAL NOTES. TESTING SHALL BE IN ACCORDANCE WITH THE SPECIAL INSPECTION SECTION OUTLINED ON THIS DRAWING SHEET. A SEPARATE STATEMENT OF SPECIAL INSPECTIONS AS REQUIRED PER IBC SECTION 1705 SHALL BE PROVIDED BY OTHERS FOR ALL MATERIALS, SYSTEMS, COMPONENTS AND WORK NOT INCLUDED IN THE STRUCTURAL DRAWINGS.

SPECIAL INSPECTION FOR SEISMIC RESISTANCE:
SPECIAL INSPECTION FOR SEISMIC RESISTANCE IS REQUIRED FOR THE FOLLOWING COMPONENTS AND SYSTEMS:

1) ROOF TOP HVAC UNITS CONTAINING HAZARDOUS MATERIALS
2) WALL TIES
3) ROOF DIAPHRAGM
4) SHEAR WALLS
5) HOLD-DOWNS
6) CONCRETE WALL REINFORCING AND CONNECTIONS
7) FOUNDATION REINFORCING

CONTRACTORS RESPONSIBILITY (IBC SECTION 1704.4):
THE CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF THE MAIN WIND OR SEISMIC FORCE RESISTING SYSTEM, DESIGNATED SEISMIC SYSTEM, OR WIND/SEISMIC RESISTING COMPONENT LISTED IN THE STATEMENT OF SPECIAL INSPECTIONS SHALL SUBMIT A WRITTEN STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND THE OWNER PRIOR TO COMMENCEMENT OF WORK ON THE SYSTEM OR COMPONENT. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN THE FOLLOWING:
1. ACKNOWLEDGMENT OF AWARENESS OF THE SPECIAL REQUIREMENTS CONTAINED IN THE STATEMENT OF SPECIAL INSPECTIONS;
2. ACKNOWLEDGMENT THAT CONTROL WILL BE EXERCISED TO OBTAIN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS APPROVED BY THE BUILDING OFFICIAL;
3. PROCEDURES FOR EXERCISING CONTROL WITHIN THE CONTRACTOR'S ORGANIZATION, THE METHOD AND FREQUENCY OF REPORTING AND DISTRIBUTION OF THE REPORTS; AND
4. IDENTIFICATION AND QUALIFICATIONS OF THE PERSON(S) EXERCISING SUCH CONTROL AND THEIR POSITION(S) IN THE ORGANIZATION.

SPECIAL INSPECTIONS:
SPECIAL INSPECTIONS PER IBC SECTION 1705. A COPY OF ALL INSPECTION REPORTS AND TEST RESULTS FOR ALL REQUIRED INSPECTIONS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT, SHUTLER CONSULTING ENGINEERS, THE OWNER AND THE ARCHITECT BY THE TESTING AGENCY FOR REVIEW. THE TESTING AGENCY SHALL BE AN INDEPENDENT TESTING AGENCY APPROVED BY THE BUILDING DEPARTMENT. THE FOLLOWING INSPECTIONS SHALL BE PROVIDED AS A MINIMUM; ADDITIONAL INSPECTIONS AS REQUIRED BY THE BUILDING DEPARTMENT SHALL ALSO BE PERFORMED. JOB SITE VISITS BY THE ENGINEER DO NOT CONSTITUTE AN OFFICIAL INSPECTION. SPECIAL INSPECTION OF THE PANELIZED ROOF STIFFENER HANGERS SHALL BE PER THE DETAIL ON SHEET S-3.0.

SEE SPECIAL INSPECTION FREQUENCY TABLE ON THIS SHEET FOR BOTH ON SITE CONSTRUCTION AND OFF SITE FABRICATION .

SPRINKLER SUPPORT NOTES:
1A. ALL SPRINKLER PIPE LARGER THAN 3" NOMINAL DIAMETER IS TO BE CONSIDERED A "MAIN" FOR THE PURPOSE OF THESE NOTES.

B. THE BIDS FOR BOTH THE SPRINKLER AND JOISTS ARE TO INCLUDE ALL HANGERS, BRACES, ETC., AND ACCOUNT FOR THE LOADS INDICATED.

2A. ALL MAINS RUNNING PERPENDICULAR TO THE JOISTS ARE TO BE VERTICALLY SUPPORTED NO FARTHER APART THAN AT EVERY OTHER JOIST.

B. EACH JOIST THAT IS CROSSED BY A MAIN IS TO BE DESIGNED FOR THE VERTICAL SUPPORT LOAD BASED ON SUPPORTS AT EVERY OTHER JOIST.

5. ALL MAINS RUNNING PARALLEL TO THE JOISTS MUST BE:
A. PLACED MID-WAY BETWEEN TWO JOISTS AND BE TRAPEZED SO EACH JOIST SUPPORTS HALF THE LOAD.
B. SUPPORTED AT 10'-0" ON CENTER MAXIMUM.

4. USE THE FOLLOWING WEIGHTS FOR SPRINKLER VERTICAL SUPPORT DESIGN:

PIPE SIZE	*WT PER FOOT*	*HANGER VERTICAL LOAD EXAMPLE:*
8"	51#	GIVEN: 8" DIAMETER MAIN-- SUPPORTS AT 5' ON CENTER
6"	32#	FIND: HANGER DESIGN LOAD
5"	24#	SOLN: 51#/FT X 10' = 510#
4"	17#	ADDN'L PER NFPA #13 = 250#
3-1/2"	14#	TOTAL SUPPORT DESIGN LOAD = 760#/HGR

ALL HANGERS TO BE DESIGNED, SUPPLIED AND INSTALLED BY THE SPRINKLER SUPPLIER.

5. SPRINKLER LATERAL SWAY BRACING (AT 90 DEGREES TO MAIN) TO BE:
A. SPACED A MAXIMUM OF TWICE THE VERTICAL SUPPORT SPACING.
B. BRACED FROM THE MAIN TO A ROOF STRUCTURAL MEMBER WITH CONNECTIONS DESIGNED AND INSTALLED BY THE SPRINKLER SUPPLIER.
C. DESIGNED FOR A LATERAL LOAD OF THE WEIGHT PER FOOT OF HALF THE WATER FILLED PIPE WEIGHT TIMES THE SWAY BRACE SPACING.

6. THE SPRINKLER DESIGNER IS TO PROVIDE THE CONTRACTOR, ARCHITECT AND JOIST MANUFACTURER WITH DETAILS OF HANGER AND SWAY BRACE ATTACHMENTS WITH DESIGN LOADS, SO THESE LOADS CAN BE DESIGNED INTO THE JOISTS, ETC.

7. THE ROOF JOIST DESIGNER TO PROVIDE AND INSTALL ADDITIONAL BRACES TO TAKE THE SWAY BRACE LOAD FROM THE SWAY BRACE INTO THE ROOF DIAPHRAGM.

DEFERRED SUBMITTALS
THE FOLLOWING ITEMS ARE DEFERRED STRUCTURAL COMPONENTS SUBMITTALS. REFER TO ARCHITECTURAL, MECHANICAL ELECTRICAL AND CIVIL DRAWINGS FOR ADDITIONAL DEFERRED SUBMITTAL COMPONENTS.
1. STEEL JOIST AND GIRDERS
2. PRE-ENGINEERED STEEL STAIRS (SEE STAIR NOTES)
3. MECHANICAL AND ELECTRICAL COMPONENT CONNECTIONS & SUPPORTS

DOCUMENTS FOR DEFERRED SUBMITTALS SHALL BE SUBMITTED TO SHUTLER CONSULTING ENGINEERS, INC. WHO SHALL REVIEW THEM FOR GENERAL CONFORMANCE WITH THE DESIGN OF THE BUILDING. THE DEFERRED SUBMITTALS SHALL THEN SUBMITTED TO THE BUILDING DEPARTMENT BY THE GENERAL CONTRACTOR. DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL APPROVED BY THE BUILDING OFFICIAL.

SHOP DRAWINGS:
SHOP DRAWINGS FOR THE FOLLOWING ITEMS SHALL BE SUBMITTED TO THE ARCHITECT AND STRUCTURAL ENGINEER FOR REVIEW PRIOR TO FABRICATION. SHOP DRAWINGS CONSISTING OF REPRODUCTIONS OR COPIES OF ANY PORTIONS OF THE STRUCTURAL DRAWINGS WILL NOT BE ACCEPTED AS SHOP DRAWINGS NOR REVIEWED BY THE STRUCTURAL ENGINEER AS SUCH.
1) REINFORCING STEEL
a)structural concrete elements i.e. beams, walls, col, ftgs, etc.
2) STRUCTURAL STEEL ITEMS
3) STEEL JOISTS & GIRDERS

THE ENGINEER OF RECORD WILL REVIEW SHOP DRAWINGS FOR DESIGN INTENT ONLY. VERIFICATION OF DIMENSIONS AND QUANTITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE NOT GUARANTEED BY THE ENGINEER OF RECORD. DRAWINGS FOR COMPONENTS DESIGNED PRIMARILY BY THE MANUFACTURER SHALL BEAR THE STAMP OF A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER AND BE SUBMITTED TO THE STRUCTURAL ENGINEER FOR A CURSORY REVIEW FOR COMPLIANCE WITH THE INTENT OF THE STRUCTURAL DRAWINGS AND FOR LOADS IMPOSED ON THE BASIC STRUCTURE. THE COMPONENT DESIGNER IS RESPONSIBLE FOR CODE CONFORMANCE AND ALL NECESSARY CONNECTIONS NOT SPECIFICALLY CALLED OUT ON ARCHITECTURAL OR STRUCTURAL DRAWINGS. SUBMISSIONS SHALL INCLUDE A REPRODUCIBLE AND TWO COPIES; REPRODUCIBLE WILL BE REVIEWED AND RETURNED. SHOP DRAWINGS MUST BE REVIEWED AND STAMPED BY THE CONTRACTOR PRIOR TO REVIEW BY THE ENGINEER.

(**SHOP DRAWINGS** CONTINUED ABOVE LEFT)

SHOP DRAWINGS CONTINUED:
SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.

SPECIAL CONDITIONS:
THE DRAWINGS INDICATE THE STRUCTURE IN ITS FINAL CONDITION. DURING CONSTRUCTION THE CONTRACTOR SHALL PROVIDE ADEQUATE SHORING, BRACING, AND GUYING IN ACCORDANCE WITH SOUND PRACTICE AND ALL NATIONAL, STATE, AND LOCAL CODES. CONTRACTOR TO COORDINATE ALL TRADES AND VERIFY DIMENSIONS IN FIELD. OBTAIN ARCHITECT'S APPROVAL PRIOR TO ALL FIELD CHANGES. SEE ARCHITECTURAL DRAWINGS FOR ALL FLOOR AND WALL OPENING DIMENSIONS AND LOCATIONS, FLOOR AND WALL FINISHES, ETC.

MECHANICAL, FIRE PROTECTION AND ELECTRICAL SYSTEMS:
IT SHALL BE THE GENERAL CONTRACTOR AND/OR SUB-CONTRACTOR'S RESPONSIBILITY TO PROVIDE ALL NECESSARY ENGINEERING AND CONSTRUCTION DOCUMENTS FOR THEIR SCOPE OF WORK. THIS SHALL INCLUDE THE DESIGN OF THEIR SYSTEM AND ANY REVIEW AND MODIFICATIONS OF THE BASIC STRUCTURAL SYSTEM SHOWN ON THESE CONSTRUCTION DOCUMENTS AS WELL AS ANY ADDITIONAL STRUCTURAL SUPPORT REQUIRED BY THEIR SYSTEM.

STAIRS:
STAIRS TO BE DESIGNED BY OTHERS. SHOP DRAWINGS ALONG WITH STRUCTURAL CALCULATIONS STAMPED BY A LICENSED WASHINGTON STATE STRUCTURAL ENGINEER SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. STAIR STRINGERS SHALL BE C12 X 20.7 MINIMUM. STAIR LANDING SUPPORT POSTS SHALL BE HSS 3 X 3 X 3/16 MINIMUM.

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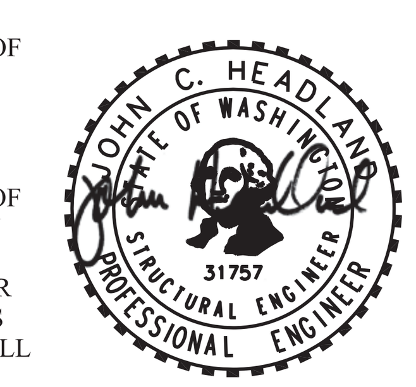
REVISIONS

ISSUE NO.	DATE	ITEM
	10-11-19	PERMIT SET

PROFESSIONAL STAMP



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Date: 2019.10.11 14:15:08 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: GENERAL NOTES
DESIGNED BY: CT DRAWN BY: AL, RB
REVIEWED BY: JH APPROVED BY:
DATE: 10-11-19
SHEET NO: S1.0
PROJECT NO: 18-40 1 OF 13

STRUCTURAL DRAWING ABBREVIATIONS:

A.B.	ANCHOR BOLT	LBS/#	POUNDS
ADJ.	ADJACENT	LF	LINEAR FOOT
A.F.F.	ABOVE FINISHED FLOOR	L.L.	LIVE LOAD
ALT.	ALTERNATE	LLH	LONG LEG HORIZONTAL
APPROX.	APPROXIMATELY	LLV	LONG LEG VERTICAL
ARCH.	ARCHITECTURAL	LSH	LONG SLOTTED HOLE
BM	BEAM	LSL	TIMBERSTRAND
BLDG	BUILDING	LVL	MICROLLAM
BLKG	BLOCKING	M.B.	MACHINE BOLT
BRC	BRACING	M.B.S.	METAL BUILDING SUPPLIER
BRG	BEARING	MAX.	MAXIMUM
BTWN	BETWEEN	MECH.	MECHANICAL
BOT.	BOTTOM	MEZZ.	MEZZANINE
CA	CAMBER	MFR	MANUFACTURER
C.A.	CENTER-TO-CENTER	MTL	METAL
C.I.P.	CAST-IN-PLACE	MIN.	MINIMUM
C.J.	CONSTRUCTION JOINT	MISC.	MISCELLANEOUS
℄	CENTERLINE	N.I.C.	NOT IN CONTRACT
CLG	CEILING	(N)	NEW
CLR	CLEAR	NO.	NUMBER
CMU	CONCRETE MASONRY UNIT	NOM.	NOMINAL
COL.	COLUMN	N.S.	NEAR SIDE
CONC.	CONCRETE	NTS	NOT TO SCALE
CONN.	CONNECTION	o.c.	ON CENTER
CONST.	CONSTRUCTION	O.D.	OUTSIDE DIAMETER
CONT.	CONTINUOUS	O.F.	OUTSIDE FACE
CONTR.	CONTRACTOR	OPNG	OPENING
COORD.	COORDINATE	OPP.	OPPOSITE
C.P.	COMPLETE PENETRATION	OSB	ORIENTED STRAND BOARD
C.S.	CLOSURE STRIP JOINT	OVS	OVERSIZED HOLE
d	PENNY SIZE	P	POST
DBL	DOUBLE	P.A.	POWDER ACTUATED
DET.	DETAIL	P.C.	PRECAST
DF	DOUGLAS FIR	PCF	POUNDS PER CUBIC FOOT
DIA./ø	DIAMETER	PEN.	PENETRATION
DIM.	DIMENSION	PL	PLATE
D.L.	DEAD LOAD	P.L.	PROPERTY LINE
D.O.	DITTO	PLYWD	PLYWOOD
DN	DOWN	PNL	PANEL
D.S.	DOWNSPOUT	PSF	POUNDS PER SQUARE FOOT
DWG	DRAWING	PSI	POUNDS PER SQUARE INCH
DWL	DOWEL	PSL	PARALLAM
(E)	EXISTING	PT	POINT
EA.	EACH	P.T.	PRESSURE TREATED
EL./ELEV.	ELEVATION	R.D.	ROOF DRAIN
EQ.	EQUAL	R.O.	ROUGH OPENING
EQUIP.	EQUIPMENT	REINF.	REINFORCING
E.A.	EACH FACE	REQ'D	REQUIRED
E.S.	EACH SIDE	REV.	REVISION
E.W.	EACH WAY	RTN	RETURN
EXP.	EXPANSION	SCHED.	SCHEDULE
EXT.	EXTERIOR	SECT.	SECTION
F.B.	FLUSH BEAM	SHT.	SHEET
F.D.	FOOTING DRAIN	SHTHG	SHEATHING
FDN	FOUNDATION	SIM.	SIMILAR
FIN.	FINISH	S.J.	SHRINKAGE CONTROL JOINT
FLG	FLANGE	S.O.G.	SLAB ON GRADE
FLR	FLOOR	SP.	SPACE
F.O.C.	FACE OF CONCRETE	SPEC.	SPECIFICATION
F.O.F.	FACE OF FINISH	SQ.	SQUARE
F.O.S.	FACE OF STUD	SSH	SHORT SLOTTED HOLE
F.P.	FULL PENETRATION	STD	STANDARD
F.S.	FAR SIDE	STIFF.	STIFFENER
FT	FOOT	STL	STEEL
FTG	FOOTING	STRUCT.	STRUCTURAL
GA.	GAGE	SYM	SYMMETRICAL
GALV.	GALVANIZED	T&B	TOP & BOTTOM
G.L.	GLULAM	T&G	TONGUE & GROOVE
GLB	GLULAM BEAM	THK	THICKNESS
GR.	GRADE	TJI	TRUS JOIST
GWB	GYPSUM WALL BOARD	T.O.C.	TOP OF CONCRETE
HD	HOLDOWN	T.O.F.	TOP OF FOOTING
HDR	HEADER	T.O.J.	TOP OF JOIST
HORIZ.	HORIZONTAL	T.O.W.	TOP OF WALL
HSS	HOLLOW STRUCTURAL STEEL	U.N.O.	UNLESS NOTED OTHERWISE
HT	HEIGHT	VERT.	VERTICAL
IBC	INTERNATIONAL BUILDING CODE	w/	WITH
I.D.	INSIDE DIAMETER	WF	WIDE FLANGE
I.F.	INSIDE FACE	w/o	WITHOUT
IN.	INCH	WD	WOOD
INFO.	INFORMATION	W.H.S.	WELD HEAD STUD
INT.	INTERIOR	WP	WORK POINT
JST	JOIST	WT	STRUCTURAL TEE
K	KIP (1000 lbs)	W.W.F.	WELDED WIRE FABRIC
KSI	KIPS PER SQUARE INCH		
KSF	KIPS PER SQUARE FOOT		

SPECIAL INSPECTION PROGRAM

VERIFICATION AND INSPECTION	INSPECTION FREQUENCY CONTINUOUS	INSPECTION FREQUENCY PERIODIC	REFERENCED STANDARD
STEEL CONSTRUCTION OTHER THAN STRUCTURAL STEEL			
1. Inspection of welding:			
a. Cold-formed steel deck:			
1) Floor and roof deck welds.	---	X	AWS D1.3
b. Reinforcing steel:			
1) Verification of weldability of reinforcing steel other than ASTM A 706.	---	X	AWS D1.4 ACI 318: Section 3.5.2
2) Reinforcing steel resisting flexural and axial forces in intermediate and special moment frames, and boundary elements of special structural walls of concrete and shear reinforcement.	X	---	
3) Shear reinforcement.	X	---	
4) Other reinforcing steel	---	X	

STRUCTURAL STEEL

Special inspections and non-distructive testing of structural steel elements in buildings, structures and portions thereof shall be in accordance with the quality assurance inspection requirements of AISC 360.

REQUIRED SPECIAL INSPECTIONS OF OPEN-WEB STEEL JOIST AND JOIST GIRDERS — TYPE	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS	REFERENCED STANDARD
1. Installation of open web steel joist and joist girders			
a. End connections - welding or bolted.	---	X	SJI specifications listed in Section 2207.1.
b. Bridging - horizontal or diagonal	---		
1. Standard bridging.	---	X	SJI specifications listed in Section 2207.1.
2. Bridging that differs from the SJI specifications listed in Section 2207.1.	---	X	

REQUIRED SPECIAL INSPECTIONS AND TEST OF CONCRETE CONSTRUCTION — TYPE	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS	REFERENCED STANDARD	IBC REFERENCE
1. Inspection of reinforcing steel, including prestressing tendons, and placement.	---	X	ACI 318: 3.5, 7.1-7.7	1908.4
2. Reinforcing bar welding:				---
a. Verify weladability of reinforcing bars other than ASTM A706		X	AWS D1.4	
b. Inspect single-pass fillet welds, maximum 5/16"; and		X	ACI 318:26.6.4	
c. Inspect all other welds.	X			
3. Inspection of anchors cast in concrete.	---	X	ACI 318: 17.8.2	---
4. Inspect anchors post-installed in hardened concrete members.				---
a. Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads	X		ACI 318: 17.8.2.4	
b. Mechanical anchors and adhesive anchors not defineed in 4.a.		X		
5. Verifying use of required design mix	---	X	ACI 318: Ch. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. Prior to concrete placement, fabricate specimens for strength test perform slump and air content test, and determin the temperature of the concrete.	X	---	ASTM C172, ASTM C31, ACI 318: 26.4, 26.12	1908.10
7. Inspection of concrete and shotcrete placement for proper application techniques.	X	---	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. Verify maintenance of specified curing temperature and techniques.	---	X	ACI 318: 26.5.3-26.5.5	1908.9
9. Inspect erection of precast concrete members.	---	X	ACI 318: Ch. 26.8	---
10. Verification in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.	---	X	ACI 318: 26.11.2	---
11. Inspect formwork for shape, location and dimensions of the concrete member being formed.	---	X	ACI 318: 26.11.2(b)	---

REQUIRED SPECIAL INSPECTIONS AND TESTS OF SOILS — TYPE	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS
1. Verify materials below shallow foundations are adequate to achieve the design bearing capacity.	---	X
2. Verify excavations are extended to proper depth and have reached proper material.	---	X
3. Perform classification and testing of compacted fill materials.	---	X
4. Verify use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill.	X	---
5. Prior to placement of compacted fill, inspect subgrade and verify that site has been prepared properly.	---	X

WOOD

For Wind Exposure Category B, C, or D and Seismic Design Category C, D, E, or F: (IBC 1705.11.1, 1705.12.2)		
1. Field Gluing of elements of main windforce-resisting system or seismic force-resisting system.	X	---
2. Nailing, bolting, anchoring and other fastening of components within the main windforce or seismicforce resisting system, including wood shear walls, diaphragms, drag struts, braces, and hold-downs.	---	X [(a)]

a. Special inspection is not required for wood shear walls, shear panels and diaphragms, including nailing, bolting, anchoring and other fastening to other components of the main windforce or seismicforce resisting system, where the fastener spacing of the sheathing is more than 4 in. on center.

REQUIRED SPECIAL INSPECTIONS OF PLUMBING, MECHANICAL AND ELECTRICAL COMPONENTS

For Seismic Design Category C, D, E, or F: (IBC 1705.12.6)		
1. Anchorage of electrical equipment for emergency and standby power systems.	---	X
2. Installation and anchorage of piping systems designed to carry hazardous materials and their associated mechanical units.	---	X
3. Installation and anchorage of ductwork designed to carry hazardous materials.	---	X
4. Installation and anchorage of vibration isolation systems where the construction documents require a nominal clearance of 1/4 inch or less between the equipment support frame and restraint.	---	X
For Seismic Design Category E or F:		
1. Anchorage of other electrical equipment.	---	X

REQUIRED SPECIAL INSPECTIONS OF ARCHITECTURAL COMPONENTS — TYPE	CONTINUOUS INSPECTIONS	PERIODIC INSPECTIONS
For Wind Exposure Category B, C, or D and Seismic Design Category D, E, or F: (IBC 1705.12.5)		
1. Erection and fastening of roof and wall cladding.	---	X
For Seismic Design Category D, E, or F:		
1. Interior and exterior nonbearing walls.	---	X
2. Interior and exterior veneer.	---	X

Special Inspection/Testing Program Notes:

1. The special inspector shall be a qualified person who shall demonstrate competence to the satisfaction of the Building Official for the type of inspections listed.
2. If necessary, the contractor shall arrange a pre-construction meeting with the Architect, Engineer, Building Official, Testing Agency to review the special inspection program.
3. Duties of the Special Inspector include, but are not limited to:
   a. Observe the work for conformance with the approved permit plans and specifications. Discrepencies shall be brought to the attention of the Contractor for correction, if uncorrected, then to the attention of the Architect, Engineer, and Building Official.
   b. Issue Inspection Reports for each inspection to the Contractor, Architect, Engineer, and Building Official as a minimum. The reports shall be issued in a timely manner.
   c. The Special Inspector shall submit a final report stating whether the work requiring special inspection was inspected, whether the work was completed in conformance with the approved plans and specifications, and whether the work was in conformance with any applicable workmanship provisions of the applicable code or standard.
4. Special inspections and testing requirements apply equally to all bidder designed components.
5. Fabricators shall submit a certificate of compliance to the Building Official stating that work was completed in accordance with the approved construction documents.

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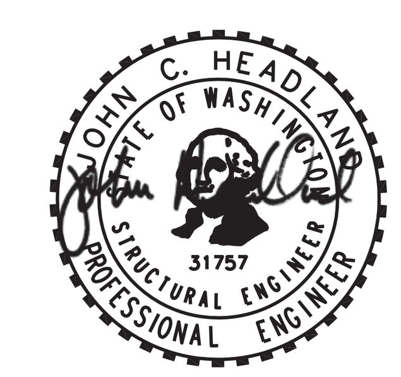
REVISIONS

ISSUE NO.	DATE	ITEM
	10-11-19	PERMIT SET

PROFESSIONAL STAMP



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PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: SPECIAL INSPECTIONS & ABBREVIATIONS
DESIGNED BY: CT DRAWN BY: AL, RB
REVIEWED BY: JH APPROVED BY:
DATE: 10-11-19 SHEET NO: S1.01
PROJECT NO: 18-40 2 OF 13

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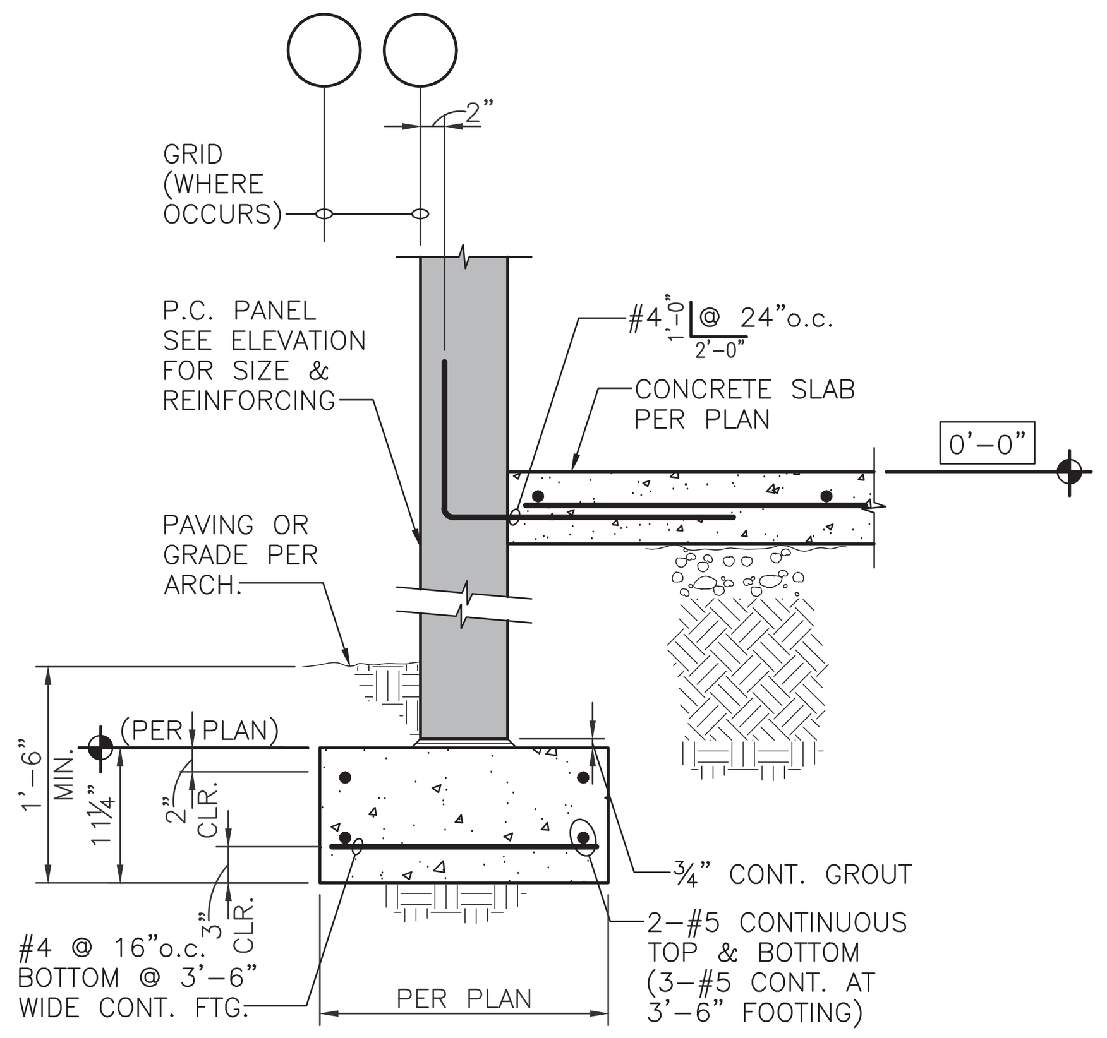

SECTION A-1.1

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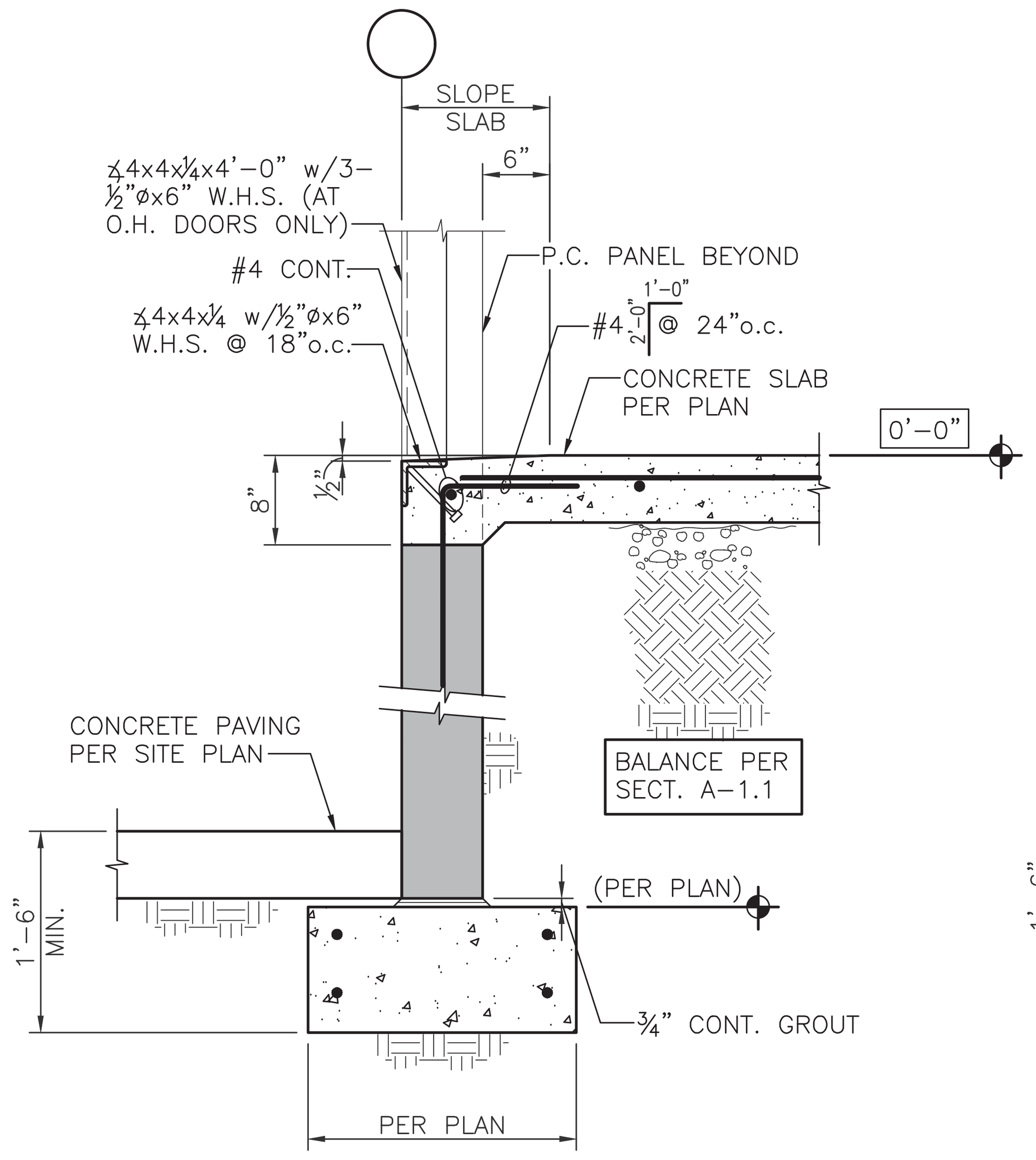

SECTION B-1.1

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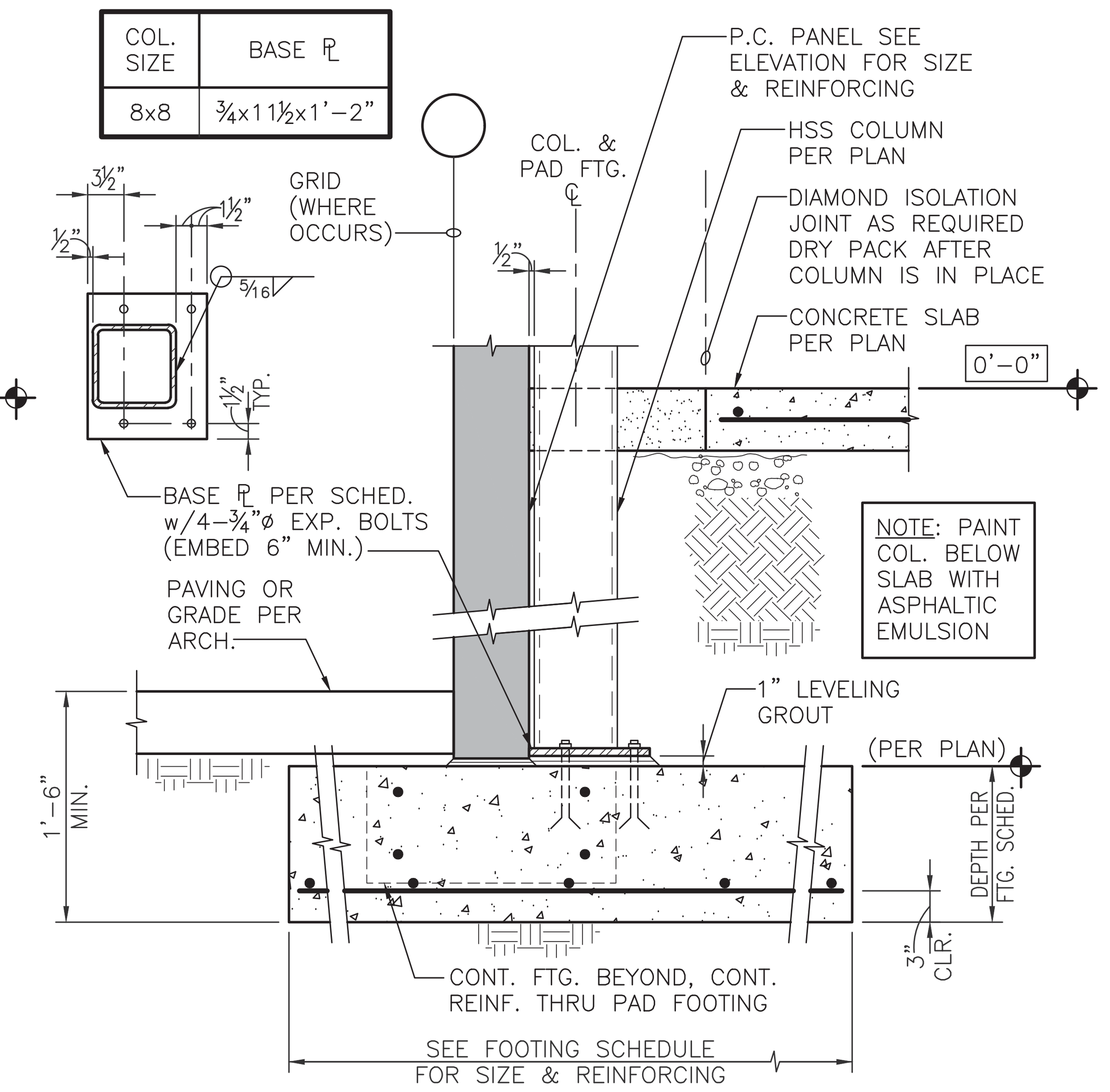

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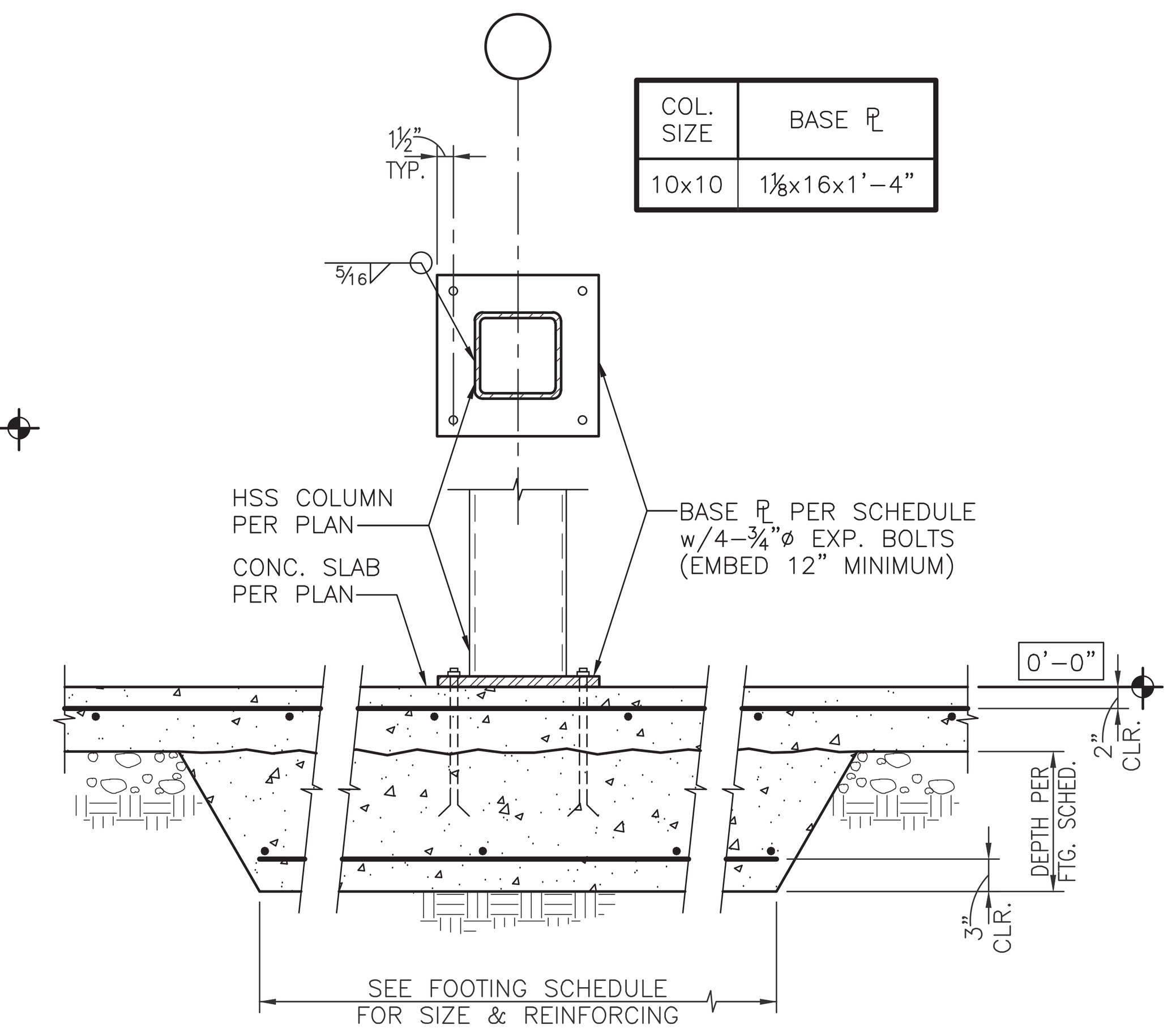

SECTION D-1.1

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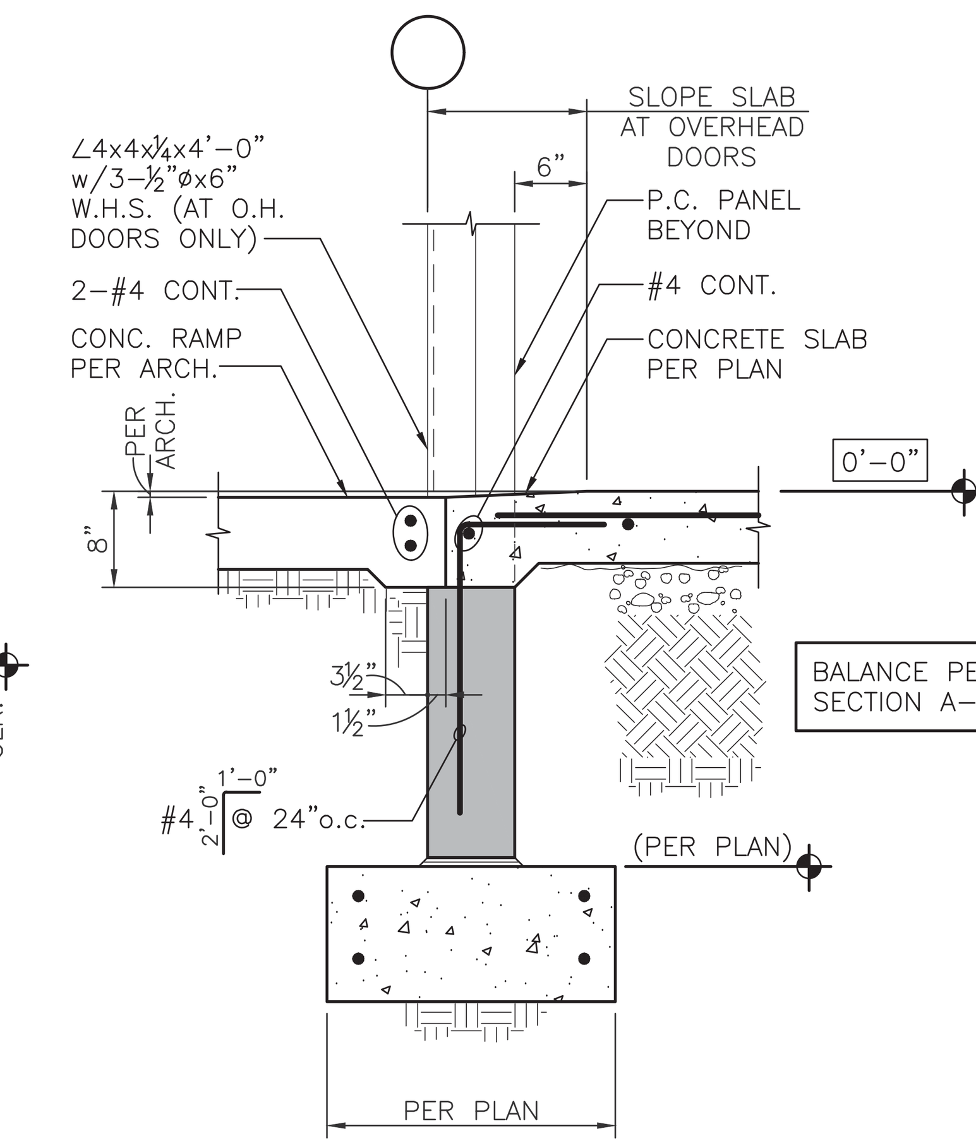

SECTION E-1.1

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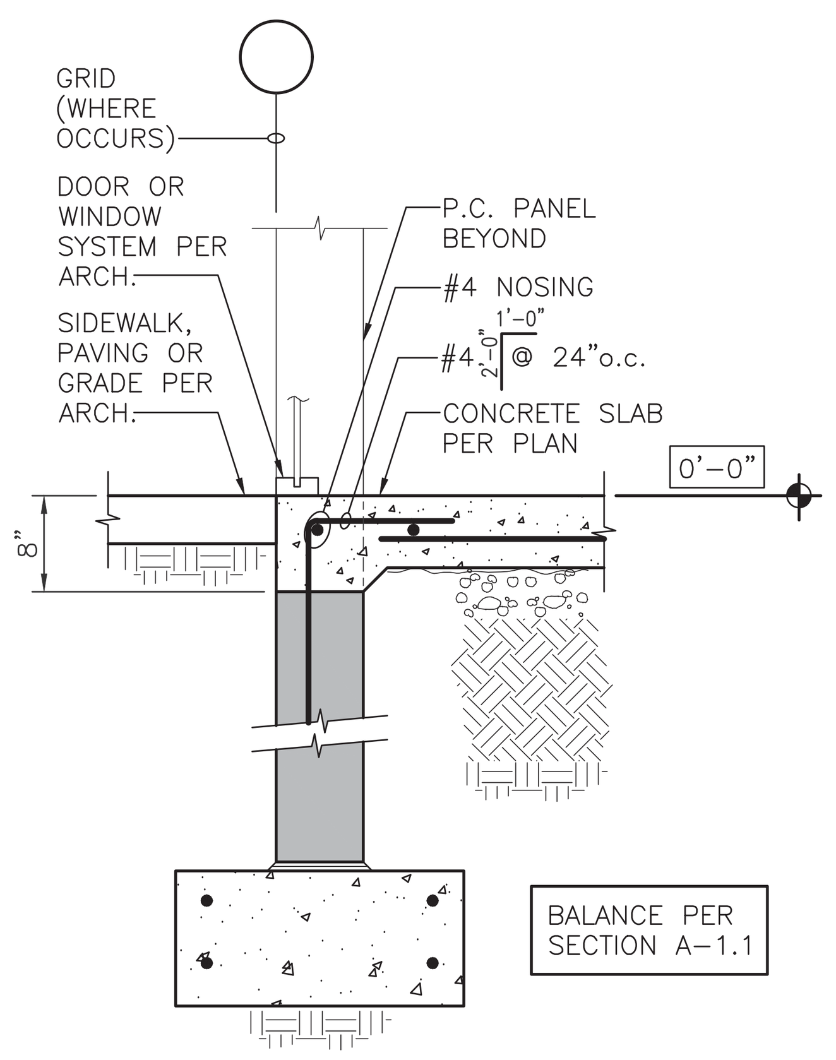

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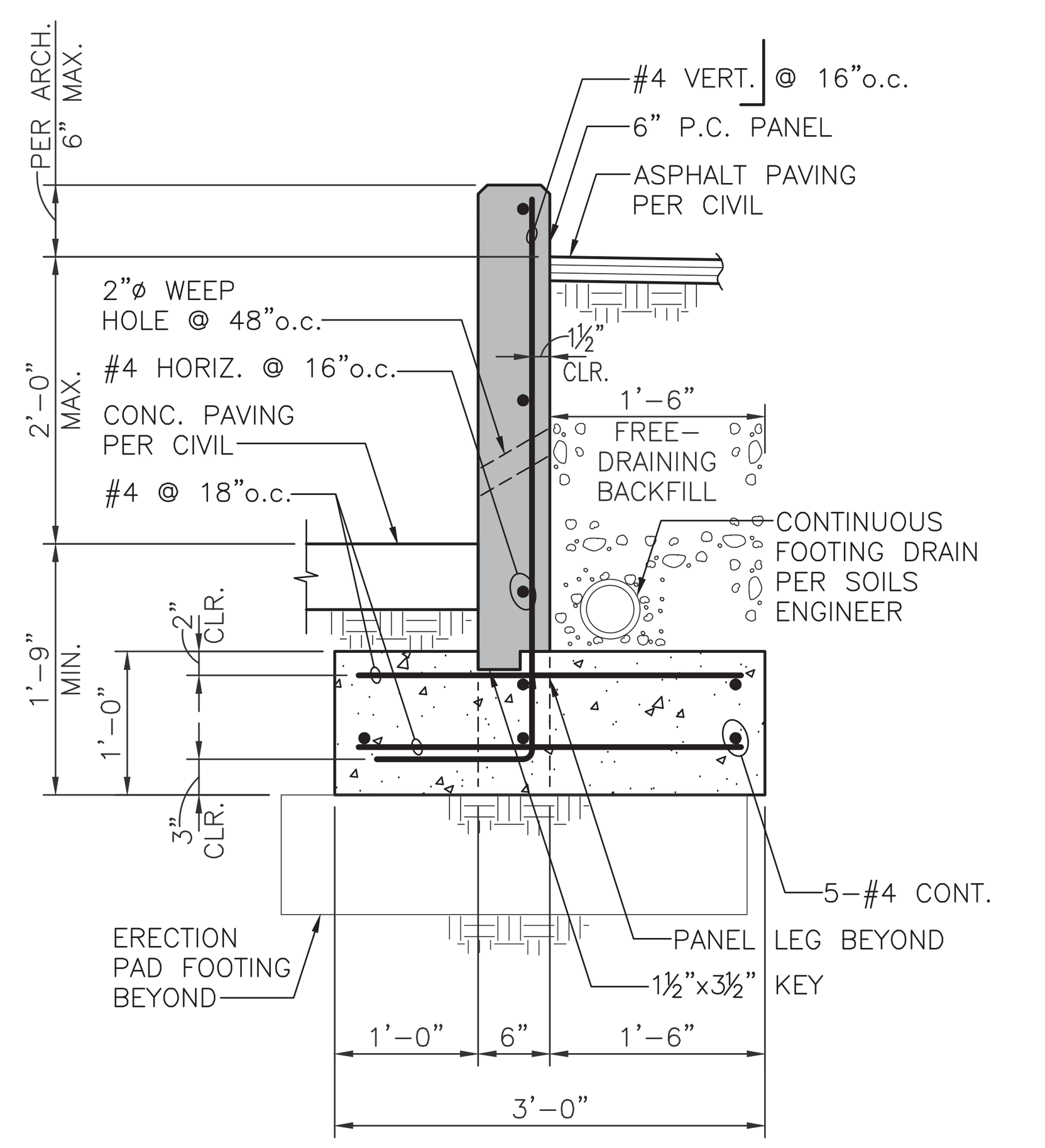

SECTION G-1.1

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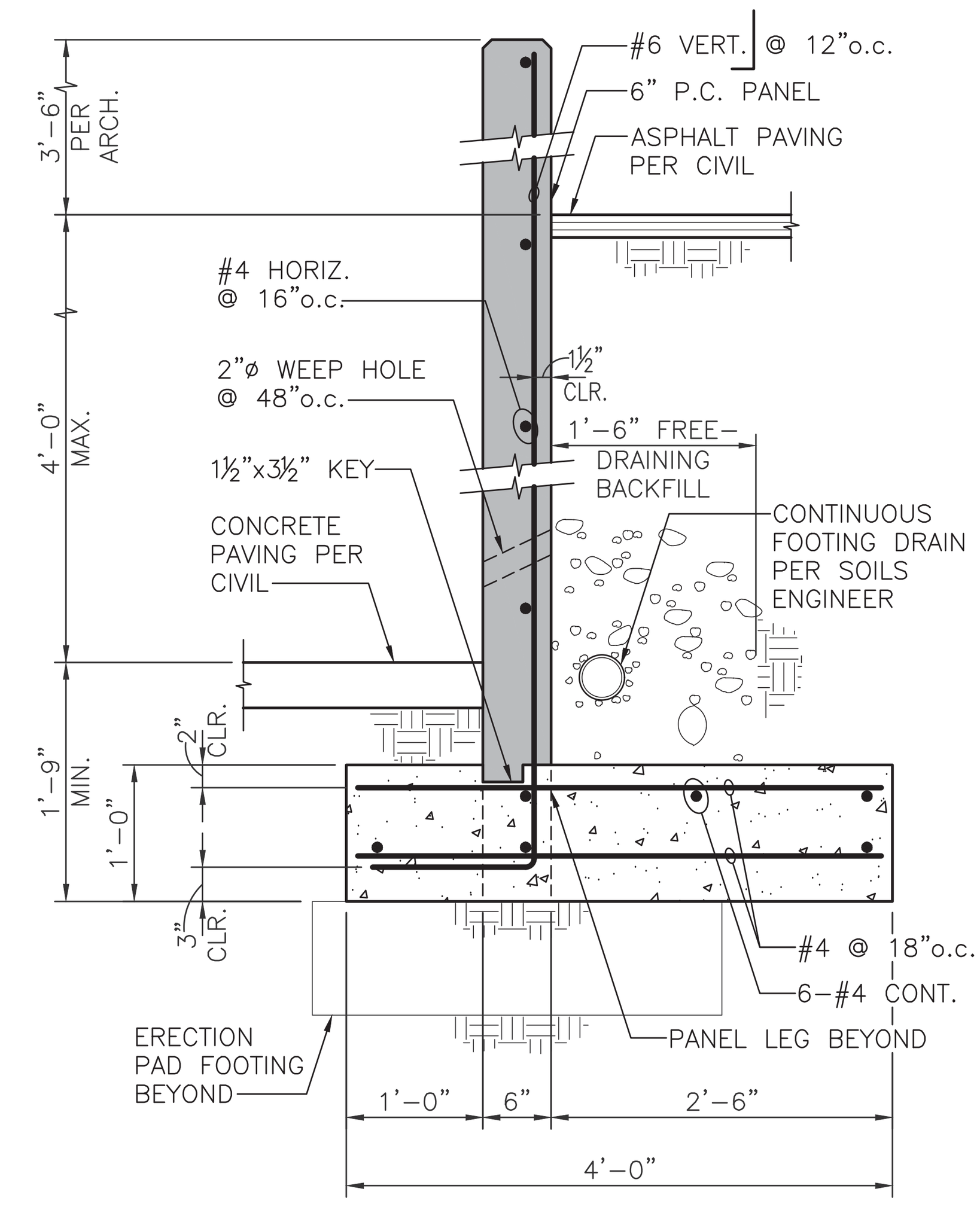

SECTION H-1.1

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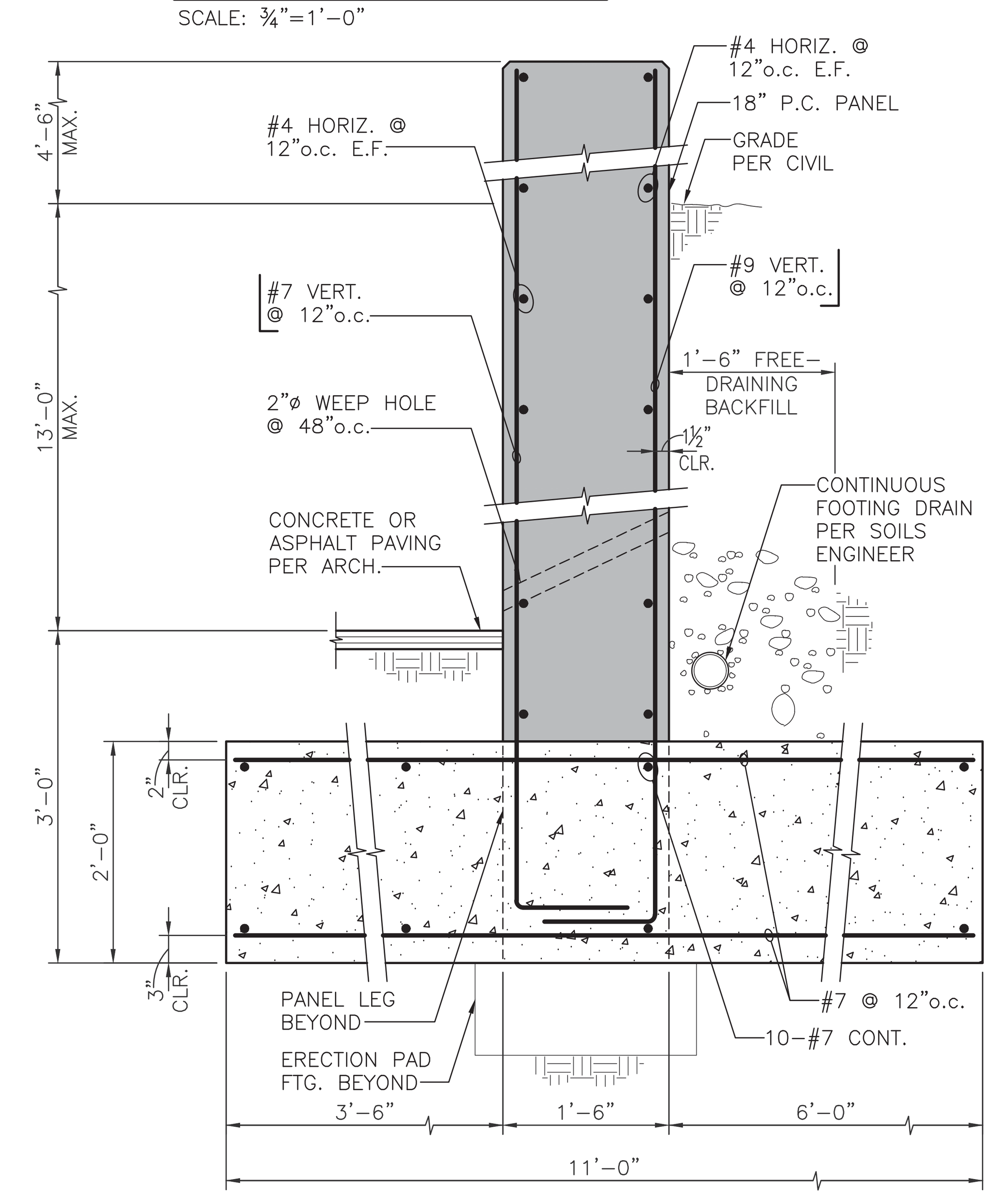

SECTION J-1.1

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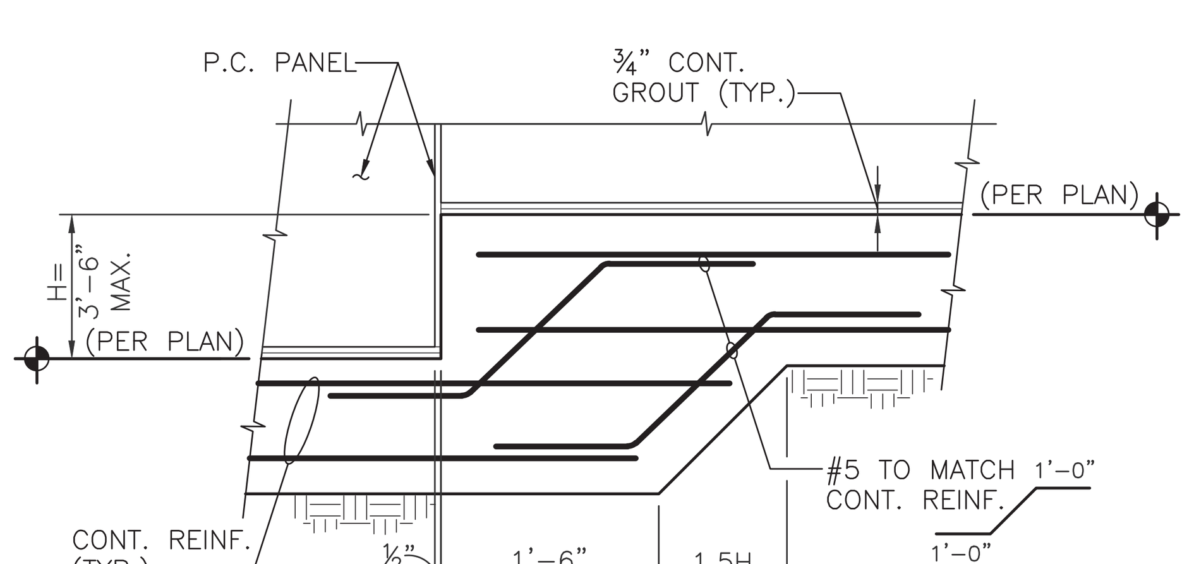
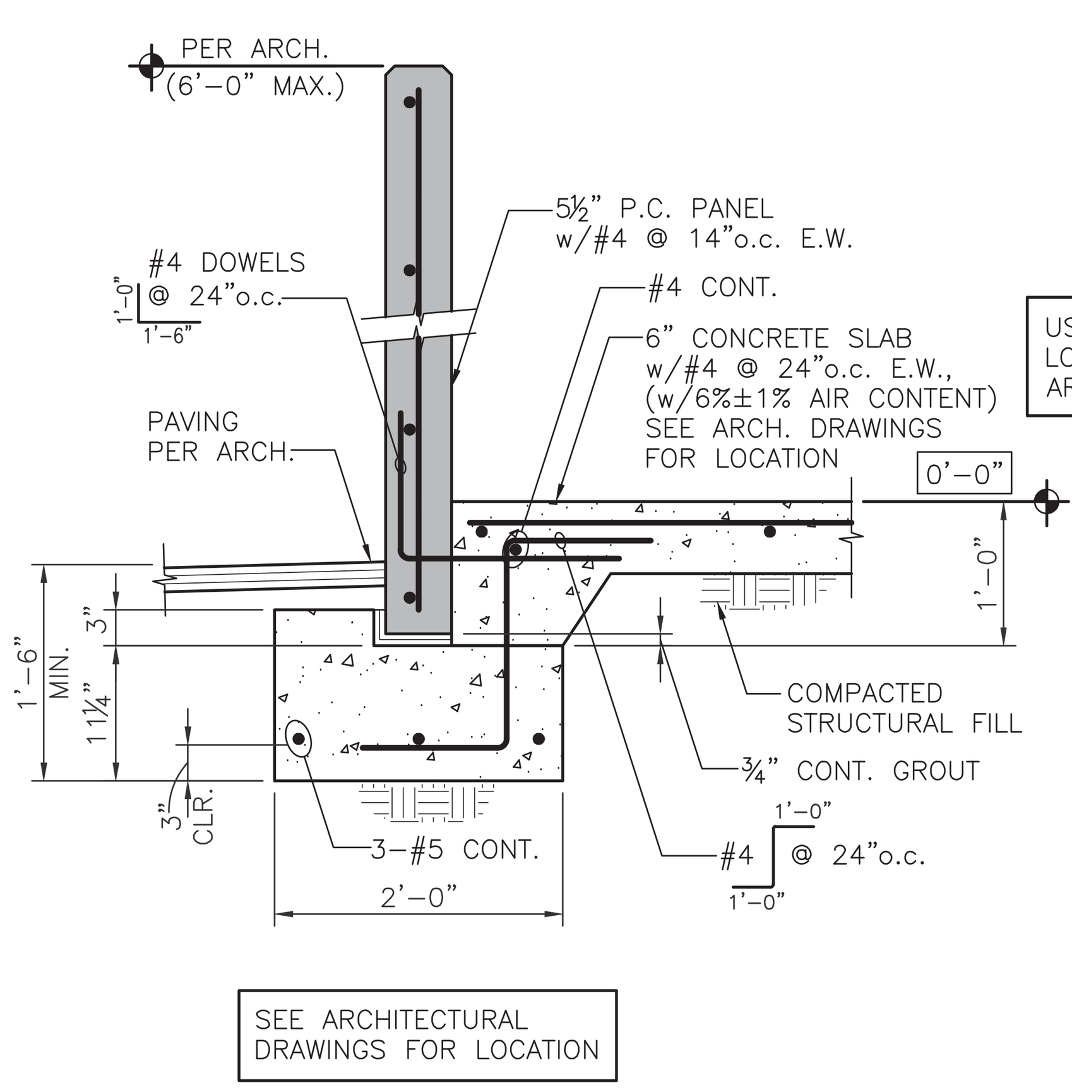


TYP. STEP FOOTING DETAIL



DUMPSTER DETAIL

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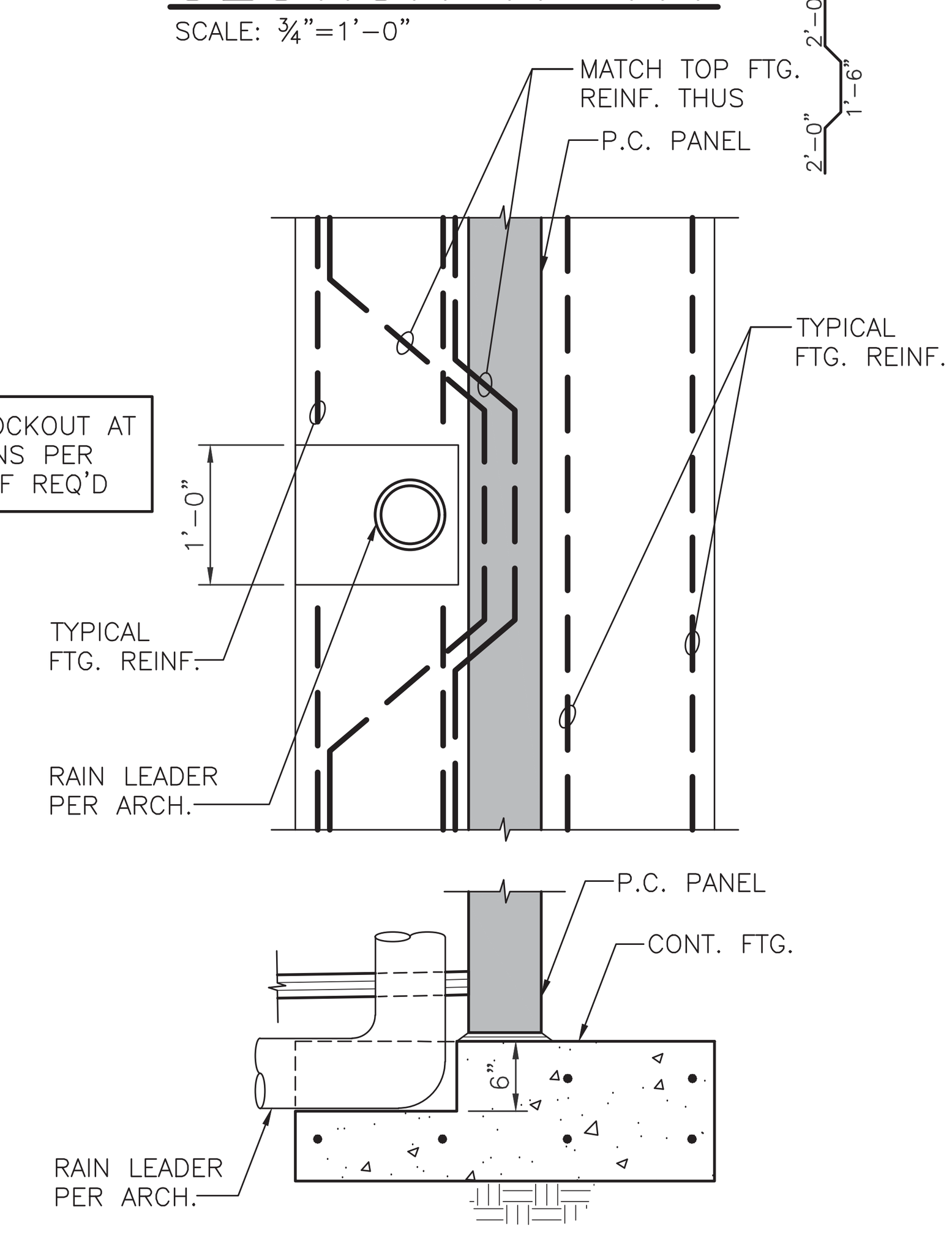
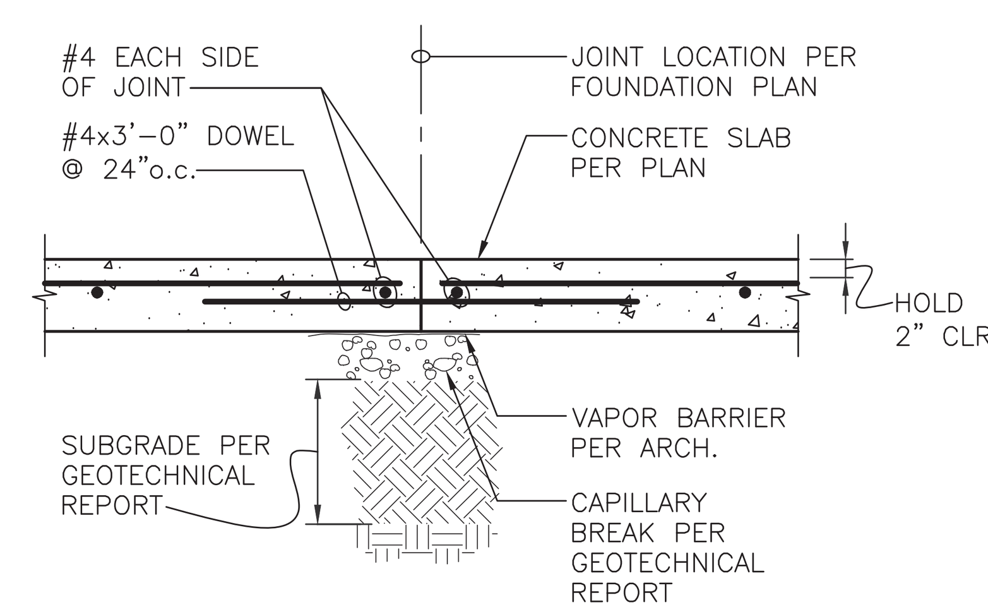
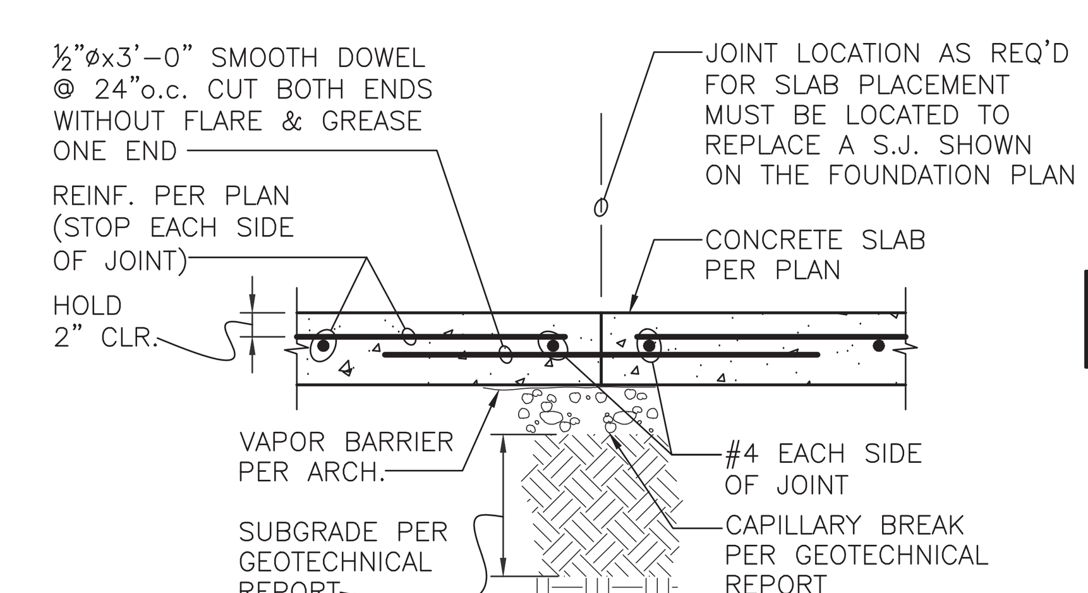


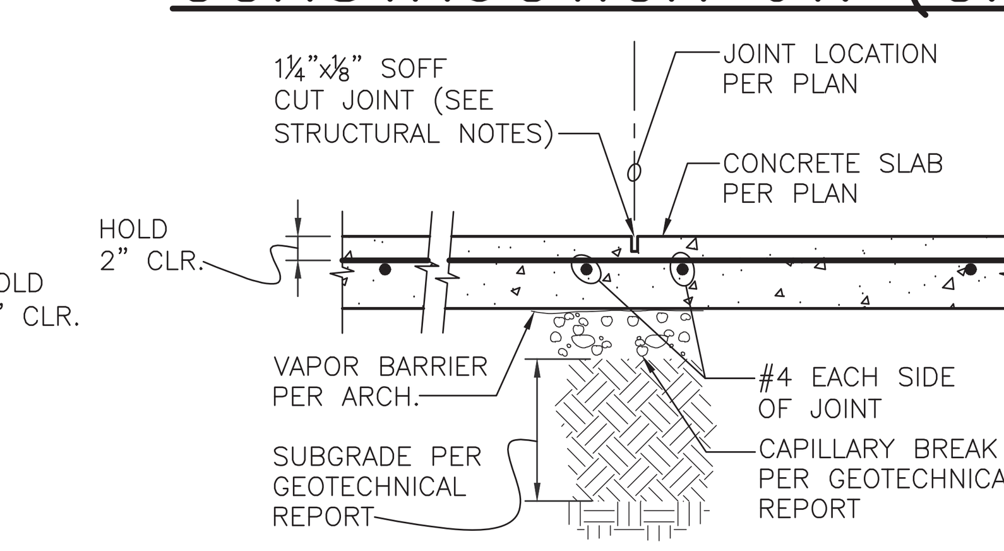
TYPICAL FOOTING BLOCK-OUT AT RAIN LEADERS



CLOSURE STRIP JT. (C.S.)



CONSTRUCTION JT. (C.J.)



CONTROL JOINT (S.J.)

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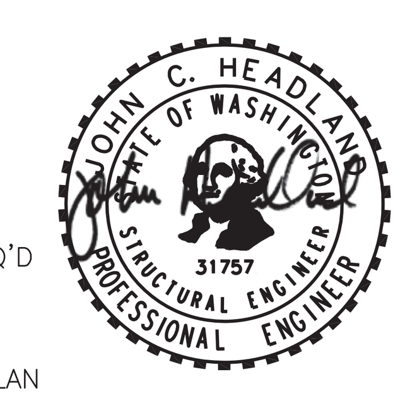

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Date: 2019.10.11 14:13:54 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: FOUNDATION SECTIONS

DESIGNED BY: CT | DRAWN BY: AL, RB
REVIEWED BY: JH | APPROVED BY:
DATE: 10-11-19 | SHEET NO: S1.1
PROJECT NO: 18-40 | 3 OF 13

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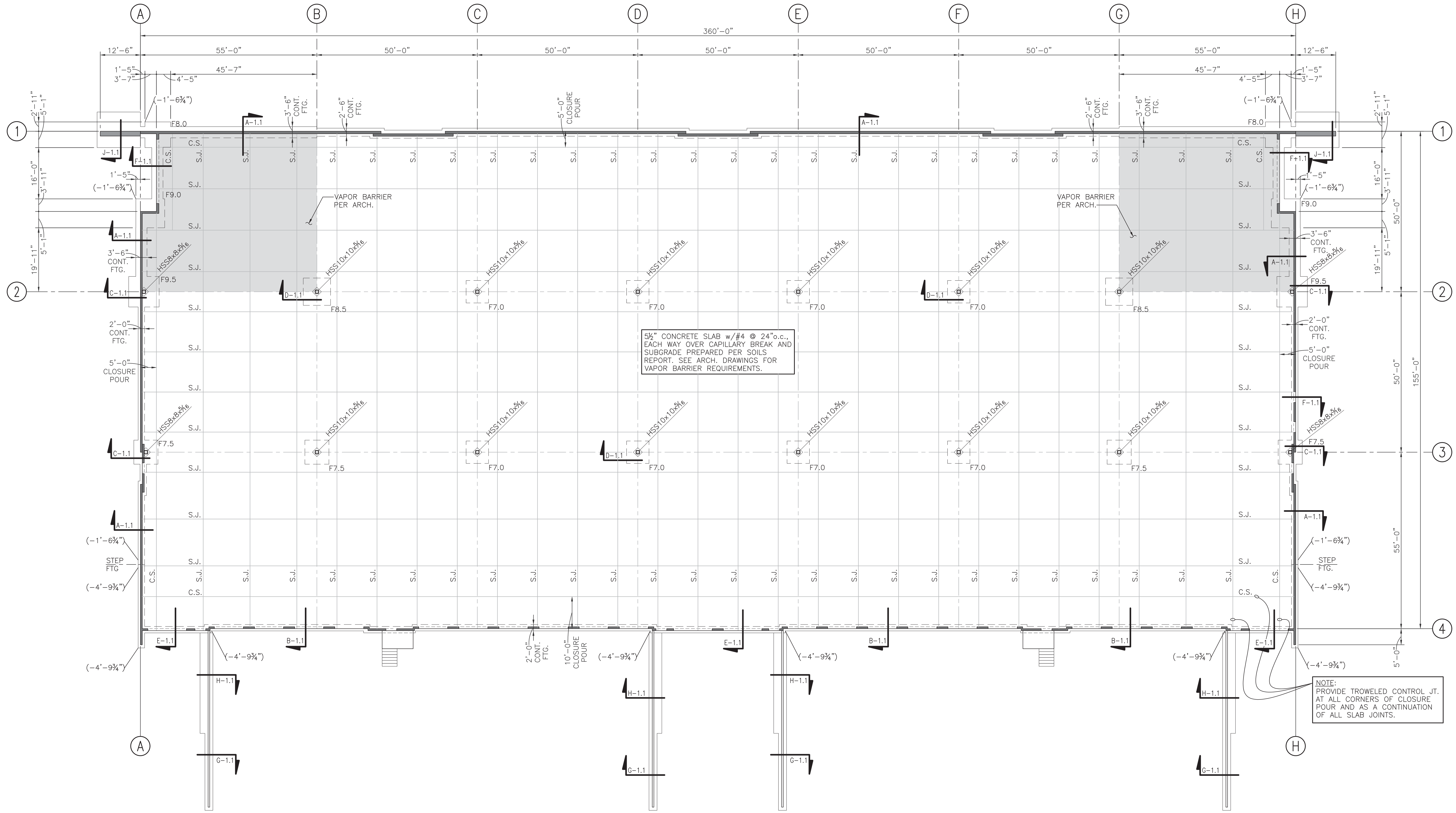

FOUNDATION PLAN

SCALE: 3/16"=1'-0"

NOTES:

1) TOP OF FINISHED FLOOR SLAB AT ELEVATION 561.00' IS REFERENCE DATUM 0'-0".
2) ELEVATION SHOWN THUS: (-__'-__") INDICATE TOP OF FOOTING ELEVATION BELOW REFERENCE DATUM.
3) BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE 1'-6" MINIMUM BELOW LOWEST ADJACENT GRADE.
4) SEE SHEET S-1.1 FOR STEP FOOTING & SLAB JOINT DETAILS.
5) SEE SHEET S-3.0 FOR FOOTING SCHEDULE.
6) SEE PANEL ELEVATIONS FOR PANEL THICKNESS.

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JOHN C. HEADLAND
STATE OF WASHINGTON
31757
STRUCTURAL ENGINEER
PROFESSIONAL ENGINEER

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PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
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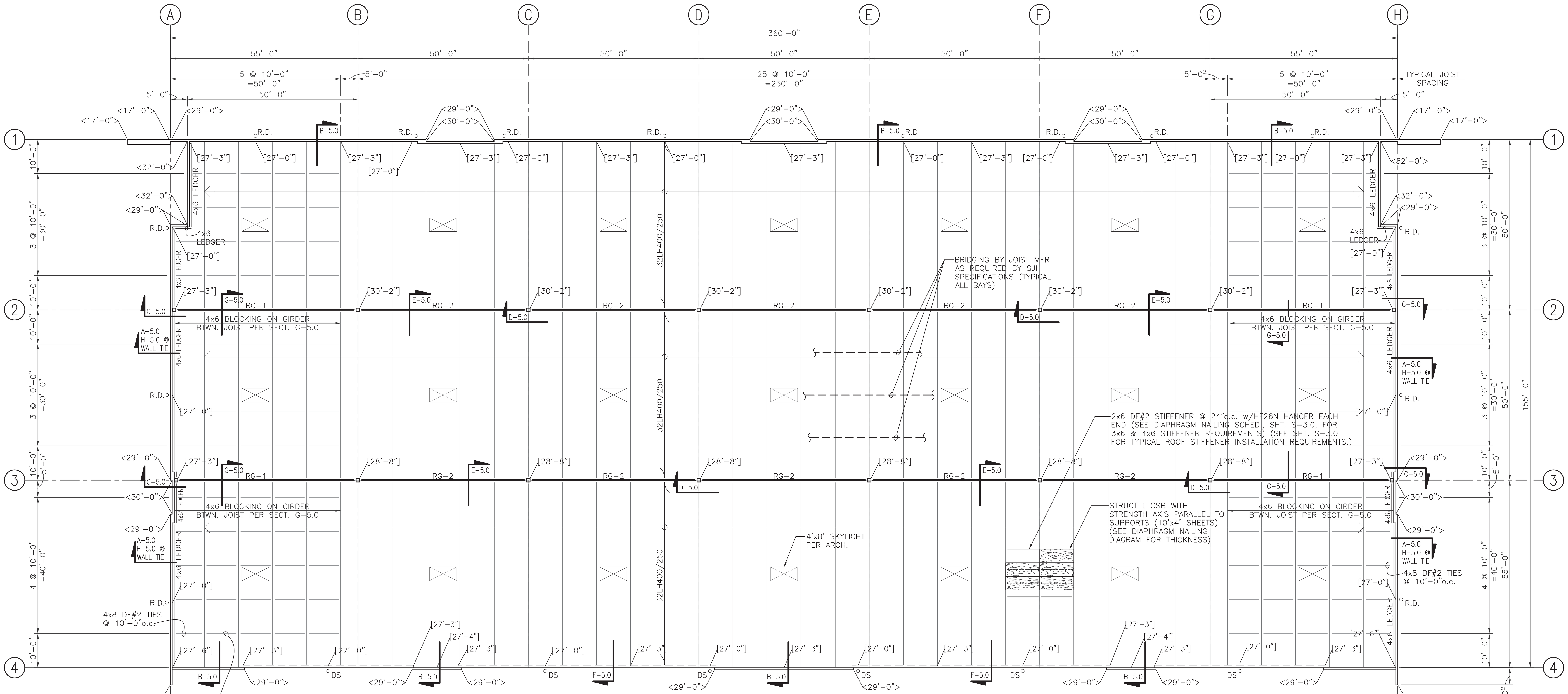
SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: FOUNDATION PLAN

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S2.0
PROJECT NO: 18-40
4 OF 13



NOTE:
SEISMIC STRAPS NOT PERMITTED ON SHEATHING JOINT IN HIGH SHEAR DIAPHRAGM.

ROOF FRAMING PLAN

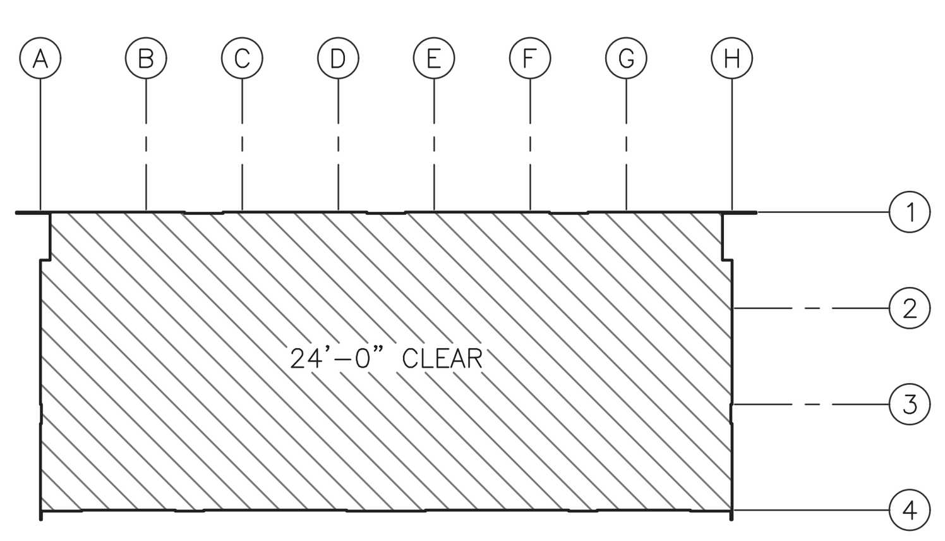
SCALE: 1/16"=1'-0"

NOTE:
CONTRACTOR TO VERIFY WEIGHT & LOCATION OF ALL MECHANICAL UNITS & SPRINKLER MAINS PRIOR TO SUBMITTING ROOF TRUSS & GIRDER SHOP DRAWINGS.

NOTES:
1) ELEVATIONS SHOWN THUS: [__'-__"] INDICATE TOP OF FRAMING (BOTTOM OF SHEATHING) ABOVE REFERENCE DATUM.
2) ELEVATIONS SHOWN THUS: <__'-__"> INDICATE TOP OF PARAPET ELEVATIONS ABOVE REFERENCE DATUM.
3) MECHANICAL EQUIPMENT & DUCTS AND/OR PIPES & SPRINKLER SYSTEMS SHALL NOT BE SUSPENDED FROM OR SUPPORTED BY THE 2x6 STIFFENERS WITHOUT PRIOR CONSENT OF THE ENGINEER. ALL MECHANICAL EQUIPMENT ON THE ROOF SHALL BE REVIEWED BY THE ENGINEER PRIOR TO PLACEMENT. (SHOP DRAWINGS SHOWING THE SIZE, WEIGHT & LOCATION OF ALL MECANICAL EQUIPMENT & SPRINKLER LINES SHALL BE SUMITTED TO THE ENGINEER PRIOR TO GIRDER FABRICATION).
4) MECHANICAL WEIGHTS ARE IN ADDITION TO THE TABULATED LOADINGS FOR THE JOIST & GIRDERS.
5) SEE SHEET S-3.0 FOR GIRDER SCHEDULE.
6) SEE SHEET S-3.0 FOR ROOF DIAPHRAGM NAILING SCHEDULE.
7) ROOF PURLINS SHALL BE DESIGNED FOR A 6.0 PSF MINIMUM NET UPLIFT.
8) SEE SHEET S-3.0 FOR SKYLIGHT/SMOKE VENT & ROOF HATCH FRAMING DETAILS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS.

DO NOT LOCATE SKYLIGHTS DIRECTLY OVER THE TOP OF A SPRINKLER HEAD

NOTE:
ROOF JOIST MANUFACTURER SHALL DESIGN ALL ROOF JOISTS FOR AN ADDITIONAL 500# POINT LOAD FOR HVAC ALLOWANCE. SEE DETAILS ON SHEET S-3.0. LOAD TO BE PLACED AT ANY JOIST PANEL POINT (UPPER OR LOWER, ONE POINT LOAD PER JOIST).



CLEAR HEIGHT DIAGRAM

SCALE: 1"=100'

NOTE: HEIGHTS SHOWN ARE FROM TOP OF SLAB TO BOTTOM OF ROOF STRUCTURE.

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PROJECT INFORMATION

NELSON 43
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MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: ROOF FRAMING PLAN

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S2.1
PROJECT NO: 18-40
5 OF 13

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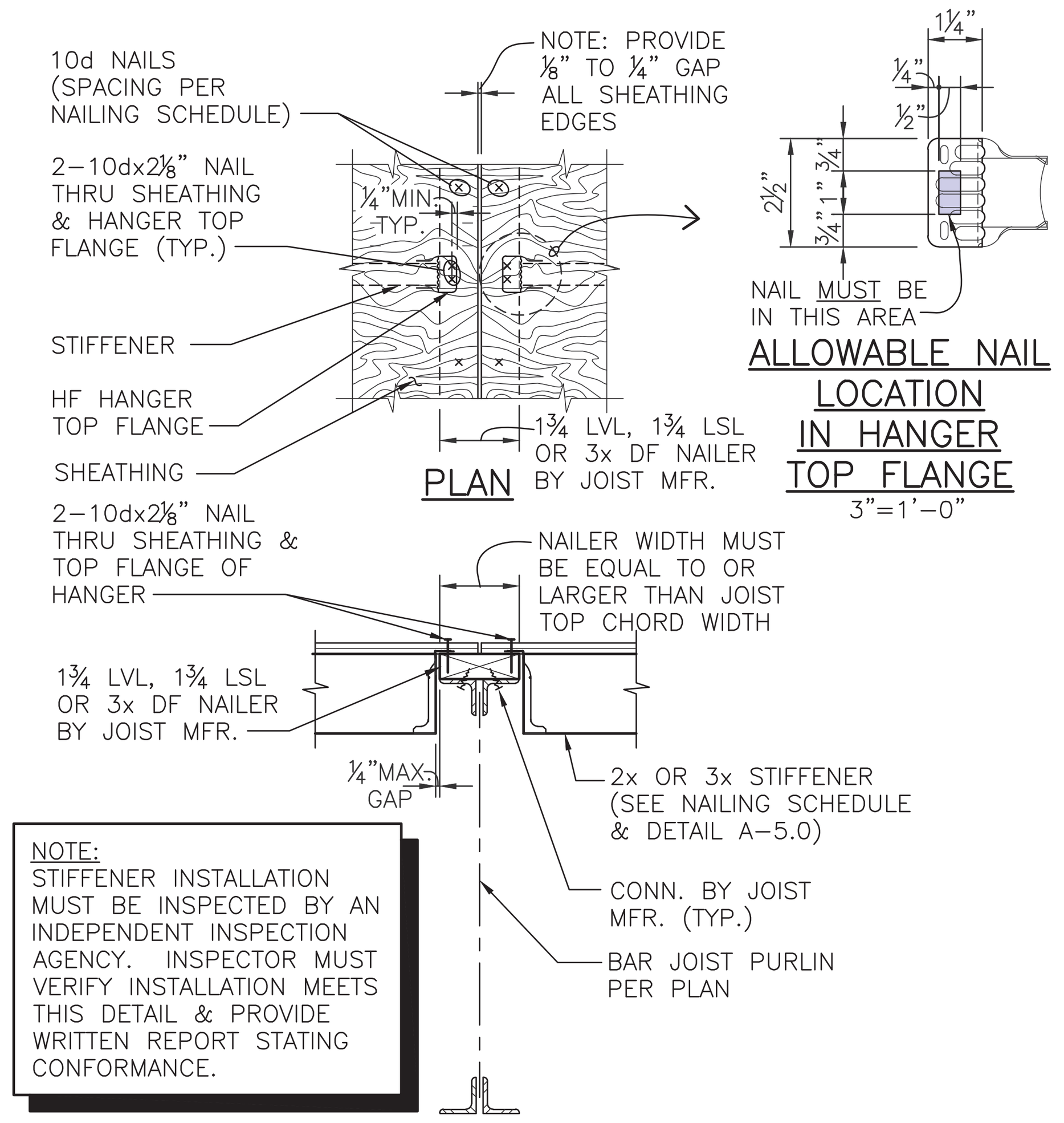
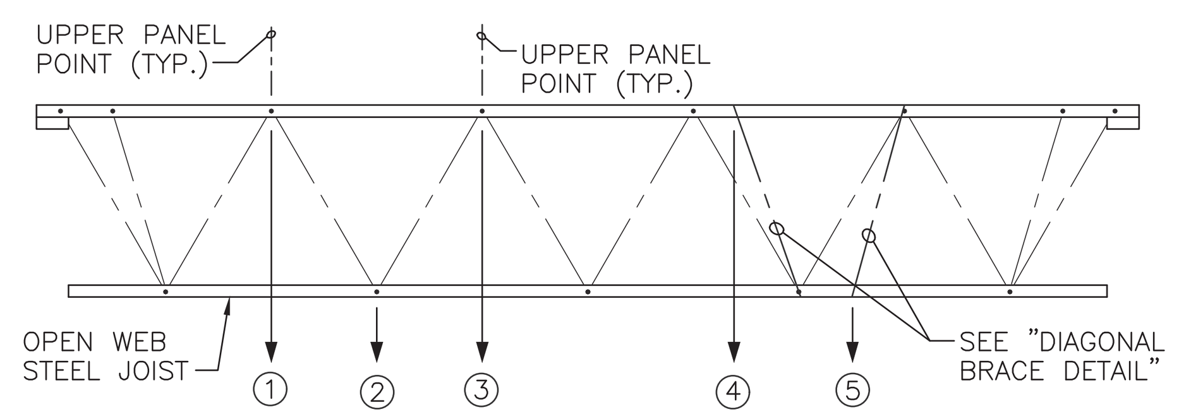


NOTE:
STIFFENER INSTALLATION MUST BE INSPECTED BY AN INDEPENDENT INSPECTION AGENCY. INSPECTOR MUST VERIFY INSTALLATION MEETS THIS DETAIL & PROVIDE WRITTEN REPORT STATING CONFORMANCE.

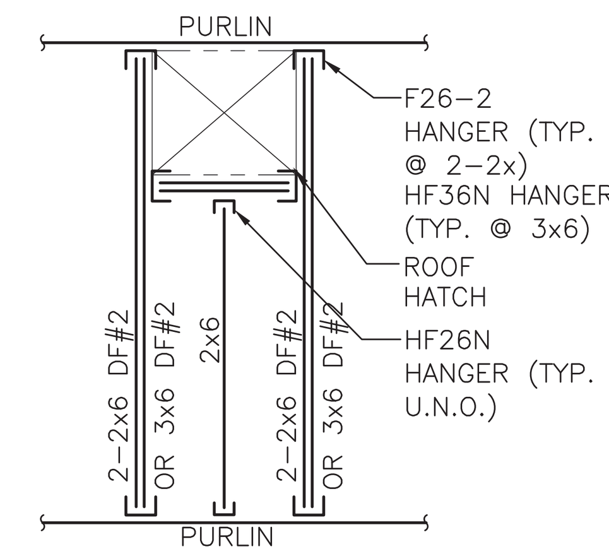
TYP. ROOF STIFFENER HANGER INSTALLATION REQUIREMENTS



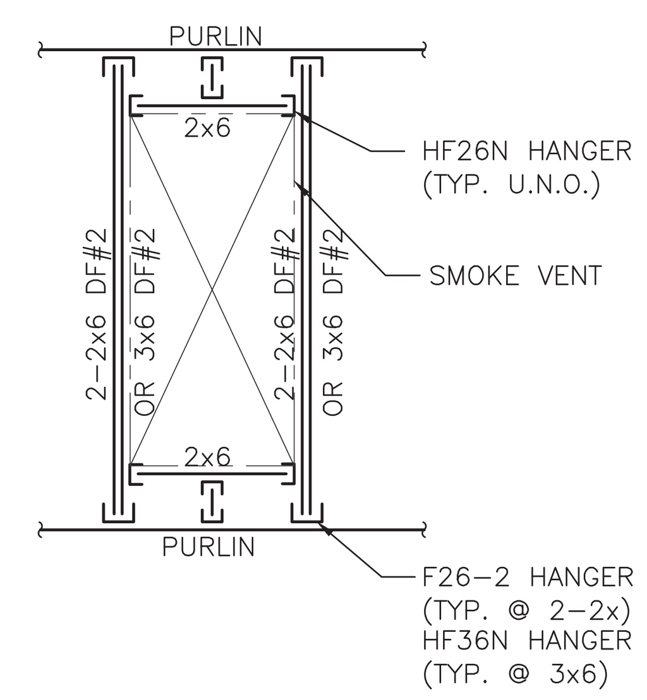
1. HANG WITHIN 3" OF ANY UPPER PANEL POINT.
2. HANG WITHIN 3" OF ANY LOWER PANEL POINT.
3. TRAPEZE BETWEEN ANY PANEL POINTS.
4. ADD AN ANGLE E.S. TO STIFFEN THE TOP CHORD. SEE "DIAGONAL BRACE DETAIL".
5. ADD AN ANGLE E.S. TO STIFFEN THE BOTTOM CHORD. SEE "DIAGONAL BRACE DETAIL".

NOTES:
1) DO NOT CUT OR DRILL THRU ANY JOIST MEMBER.
2) THIS DETAIL IS APPLICABLE TO LOADING FROM MECHANICAL EQUIPMENT, SPRINKLER PIPES, ETC.
3) ROOF JOISTS ARE DESIGNED TO SUPPORT AN EQUIVALENT UNIFORM COLLATERAL DEAD LOAD OF 6 POUNDS PER SQUARE FOOT (OF ROOF AREA) FOR THE SUPPORT OF SUSPENDED CEILINGS, DUCTS, SPRINKLER LINES, ETC. (15 PSF TOTAL DEAD LOAD).

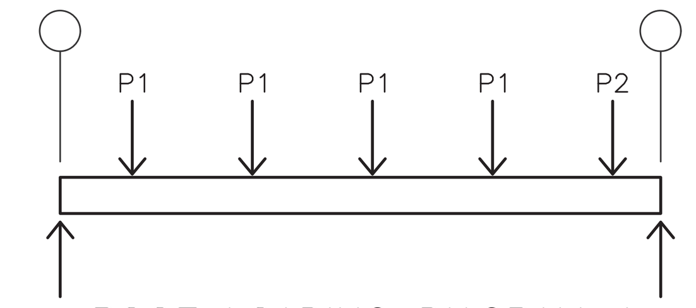
ALLOWABLE METHODS & LOCATIONS FOR HANGING LOADS FROM OPEN WEB STEEL JOISTS



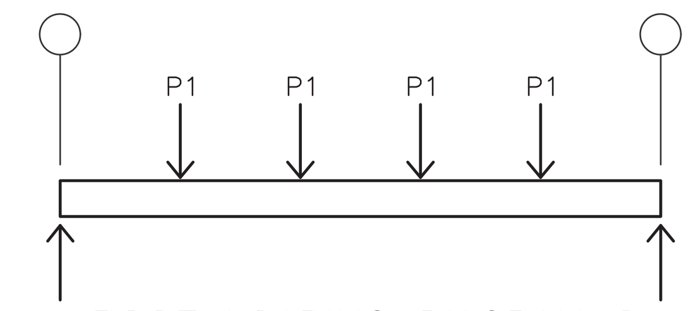
ROOF HATCH FRAMING DETAIL



SKYLIGHT FRAMING DETAIL



ROOF LOADING DIAGRAM 1
(SEE PLAN FOR GIRDER SPAN AND SPACING)



ROOF LOADING DIAGRAM 2
(SEE PLAN FOR GIRDER SPAN AND SPACING)

ROOF GIRDER DESIGN CRITERIA

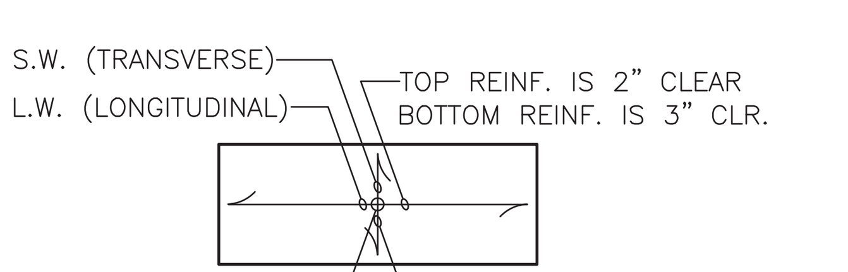
MARK	DEPTH	NOMENCLATURE	LOAD DIAGRAM NUMBER	LOAD P1 T.L.	LOAD P1 L.L.	LOAD P2 T.L.	LOAD P2 L.L.	NET UPLIFT
RG-1	32"/50"	32/50G6N SPECIAL	1	21.8^K	13.1^K	16.4^K	9.8^K	5 PSF
RG-2	48"	48G5N21.8^K	2	21.8^K	13.1^K	--	--	5 PSF

ROOF GIRDER SCHEDULE NOTES:
1) LIVE LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/360. TOTAL LOAD DEFLECTIONS SHALL BE LIMITED TO SPAN/240.
2) MECHANICAL EQUIPMENT LOADS, ROOF TOP UNIT LOADS & SPRINKLER MAIN LOADS ARE IN ADDITION TO LOADS SHOWN.
3) DEPTH OF JOIST GIRDER BEARING TO BE 7½".
4) TOTAL LOADS SHOWN INCLUDE AN 80 PLF ALLOWANCE FOR THE GIRDER WEIGHT. ADJUST THE TOTAL IF REQUIRED.
5) MECHANICAL UNIT LOADS SHOWN ON THE DRAWINGS ARE TO BE ADDED TO THE LOADING INDICATED IN SCHEDULE.
6) ROOF GIRDERS INDICATED BY xx/yy DEPTH SHALL BE TAPERED FROM xx" DEPTH AT THE LOWER ROOF ELEVATION COLUMN TO yy" DEPTH AT THE HIGHER ROOF ELEVATION COLUMN.
7) ALL GIRDERS WITH A STRAIGHT TAPER END-TO-END TO MAINTAIN CLEAR HEIGHTS MAY, AT THE SUBCONTRACTOR'S OPTION, BE DESIGNED & FABRICATED AT A UNIFORM DEPTH EQUAL TO THE TABULATED SHALLOW END DEPTH.
8) SEE THIS SHEET FOR GIRDER TOP CHORD AXIAL LOADS.

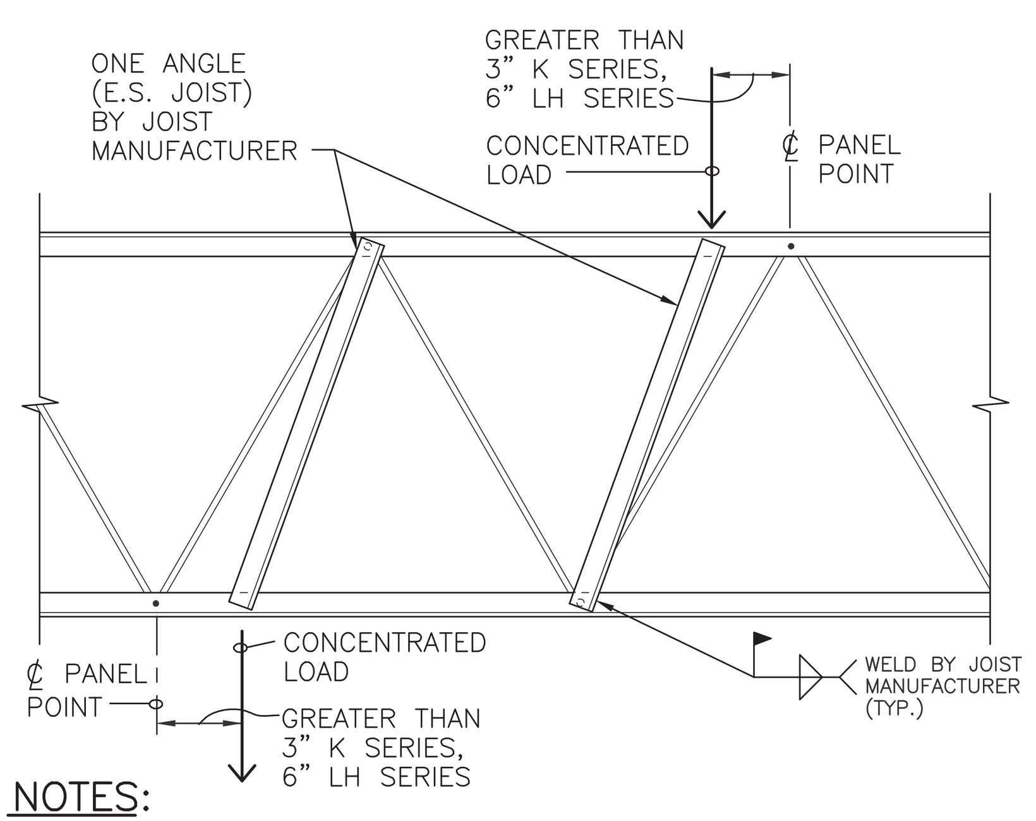
FOOTING SCHEDULE

MARK	SIZE	REINFORCEMENT
F3.0	3'-0"x3'-0"x0'-10"	3-#5 E.W., BOTTOM
F3.5	3'-6"x3'-6"x0'-10"	3-#5 E.W., BOTTOM
F4.0	4'-0"x4'-0"x0'-11"	4-#5 E.W., BOTTOM
F4.5	4'-6"x4'-6"x1'-0"	4-#6 E.W., BOTTOM
F5.0	5'-0"x5'-0"x1'-1"	4-#6 E.W., BOTTOM
F5.5	5'-6"x5'-6"x1'-2"	5-#6 E.W., BOTTOM
F6.0	6'-0"x6'-0"x1'-4"	6-#6 E.W., BOTTOM
F6.5	6'-6"x6'-6"x1'-5"	7-#6 E.W., BOTTOM
F7.0	7'-0"x7'-0"x1'-6"	7-#6 E.W., BOTTOM
F7.5	7'-6"x7'-6"x1'-7"	8-#6 E.W., BOTTOM
F8.0	8'-0"x8'-0"x1'-8"	9-#6 E.W., BOTTOM
F8.5	8'-6"x8'-6"x1'-9"	8-#7 E.W., BOTTOM
F9.0	9'-0"x9'-0"x1'-10"	8-#7 E.W., BOTTOM
F9.5	9'-6"x9'-6"x1'-11"	9-#7 E.W., BOTTOM
F10.0	10'-0"x10'-0"x2'-0"	10-#7 E.W., BOTTOM

NOTE: SOME FOOTINGS IN SCHEDULE MAY NOT BE USED.



TYPICAL REINFORCEMENT PLACEMENT



NOTES:
1) WHERE CONCENTRATED LOADS ARE SUPPORTED BY JOIST CHORDS & ARE LOCATED MORE THAN 3" FROM A PANEL POINT CENTERLINE, FOR K SERIES JOIST OR 6" FOR LH SERIES JOIST, REINFORCE THE JOIST WITH AN ANGLE BY JOIST MANUFACTURER (E.S. JOIST), EXTENDING FROM THE POINT LOAD TO THE NEAREST PANEL POINT ON THE OPPOSITE CHORD.
2) REMOVE LOAD FROM JOIST PRIOR TO WELDING ANGLE.

DIAGONAL BRACE DETAIL

HIGH SHEAR ROOF DIAPHRAGM NAILING SCHEDULE

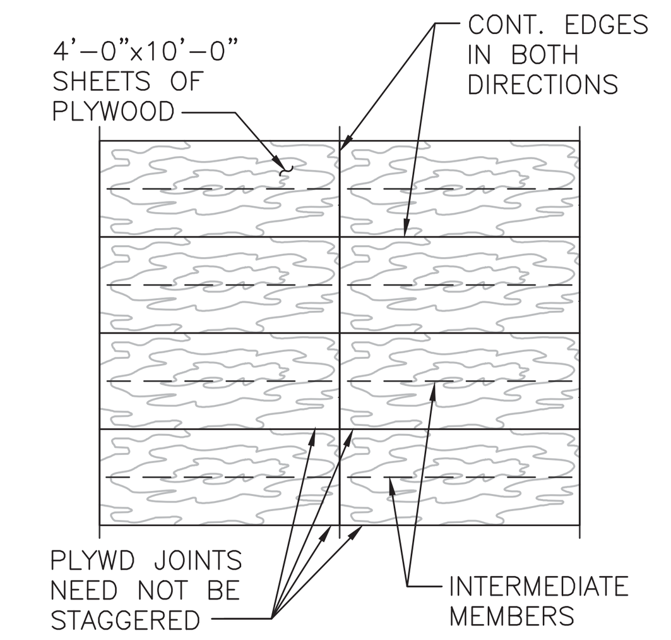
MARK	SHEATHING THICKNESS & GRADE	STIFFENER AT PLYWOOD JOINT	NUMBER OF ROWS OF NAILS	NAIL SPACING ALONG CONTINUOUS PANEL EDGES	BOUNDARY NAILING	ALLOWABLE SHEAR
V	15/32" STRUCT I	4x6	2	2 ROWS @ 4"o.c.	2 ROWS @ 4"o.c.	915#/FT
VI	15/32" STRUCT I	4x6	2	2 ROWS @ 3"o.c.	2 ROWS @ 3"o.c.	1165#/FT
VII	15/32" STRUCT I	4x6	2	2 ROWS @ 2½"o.c.	2 ROWS @ 2½"o.c.	1290#/FT
VIII	19/32" STRUCT I	4x6	2	2 ROWS @ 2½"o.c.	2 ROWS @ 2½"o.c.	1440#/FT

NOTES:
1) ALL NAILS TO BE 10d COMMON (.148øx2" MINIMUM LENGTH).
2) SPACE NAILS @ 12"o.c. AT ALL INTERMEDIATE FRAMING MEMBERS.
3) PROVIDE 2 ROWS 10d @ 2½"o.c., STAGGERED AT ALL DIAPHRAGM BOUNDARIES.
4) PROVIDE 4x6 STIFFENER w/F46 HANGER EACH END AT ALL PANEL EDGES IN MARK (V), (VI), (VII) AND (VIII).
5) PROVIDE 4x8 STIFFENER w/B48 HANGER EACH END AT ALL SEISMIC STRAPS (SEE SECTION H-5.0). SEISMIC STRAPS NOT PERMITTED ON SHEATHING JOINT AT EXTERIOR WALL IN HIGH SHEAR DIAPHRAGM.
6) AT DRAG STRUT IN HIGH SHEAR NAILING REGION, PROVIDE 2 ROWS 10d COMMON @ 2½"o.c. STAGGERED EACH SIDE OF JOINT PER HIGH SHEAR DIAPHRAGM NAILING DETAIL.
7) HIGH-LOAD DIAHRAGMS MUST BE INSTALLED WITH SPECIAL INSPECTION. THE SPECIAL INSPECTOR MUST INSPECT THE STRUCTURAL WOOD PANEL SHEATHING TO ASCERTAIN WHETHER IT IS OF THE GRADE & THICKNESS SHOWN ON THE APROVED BUILDING PLANS. ADDITIONALLY, THE SPECIAL INSPECTOR MUST VERIFY THE NOMINAL WIDTH OF FRAMING MEMBERS AT ADJOINING PANEL EDGES, THE NAIL DIAMETER AND LENGTH, THE NUMBER OF FASTENER LINES, THE SPACING BETWEEN FASTENERS IN EACH LINE AND AT EDGE MARGINS AGREE WITH THE APPROVED BUILDING PLANS.

ROOF DIAPHRAGM NAILING SCHEDULE

MARK	SHEATHING	STIFFENER AT PLYWOOD JOINT	CONTINUOUS EDGES	'OTHER' EDGE	ALLOWABLE SHEAR
I	15/32"	2x6	6"o.c.	6"o.c.	320#/FT
II	15/32"	2x6	4"o.c.	4"o.c.	425#/FT
III	15/32"	2x6	3"o.c.	3"o.c.	568#/FT
IV	15/32"	3x6	3"o.c.	3"o.c.	640#/FT

NOTES:
1) ALL NAILS TO BE 10d COMMON (0.148"øx2" MINIMUM LENGTH).
2) SPACE NAILS @ 12"o.c. AT ALL INTERMEDIATE FRAMING MEMBERS.
3) PROVIDE 2 ROWS 10d @ 2½"o.c., STAGGERED AT ALL DIAPHRAGM BOUNDARIES.
4) PROVIDE 4x8 STIFFENER w/B48 HANGER EACH END AT ALL SEISMIC STRAPS (SEE SECTION H-5.0) (SEE HIGH SHEAR ROOF DIAPHRAGM NOTES FOR ADDITIONAL REQUIREMENTS).
5) PROVIDE 2 ROWS 10d COMMON @ 2½"o.c., STAGGERED EACH SIDE OF JOINT AT DRAG STRUTS. (SEE HIGH SHEAR ROOF DIAPHRAGM NOTES FOR ADDITIONAL DRAG STRUT NAILING REQUIREMENTS.
6) IF NAILS LONGER THAN 2" IN LENGTH ARE USED, THEN 3x6 STIFFENERS (WITH HF36N HANGERS EACH END) ARE REQUIRED AT PANEL EDGES IN MARK (III).
7) PROVIDE 3x6 STIFFENERS WITH HF36N HANGERS EACH END AT ALL PANEL EDGES IN MARK (IV).
8) PROVIDE ⅛" TO ¼" GAP AT ALL SHEATHING EDGES.



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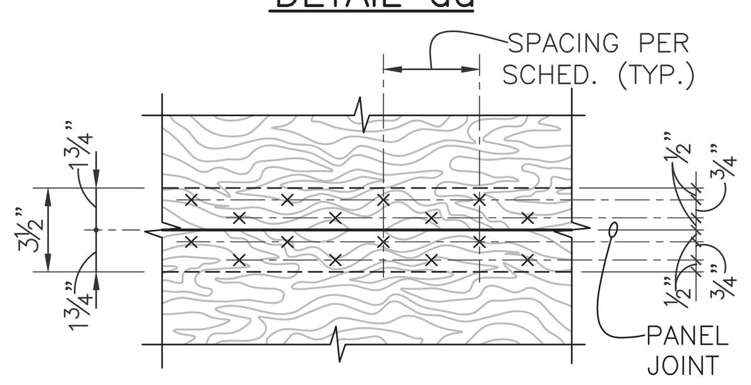
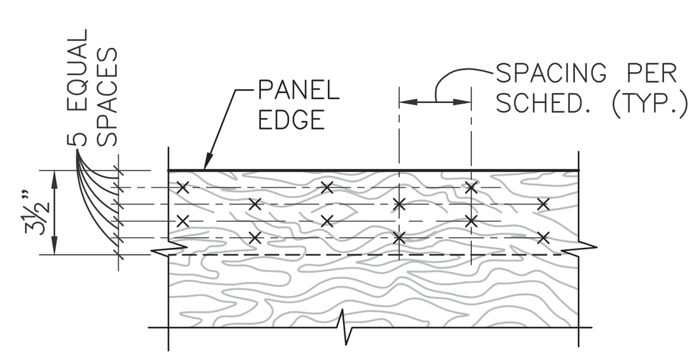
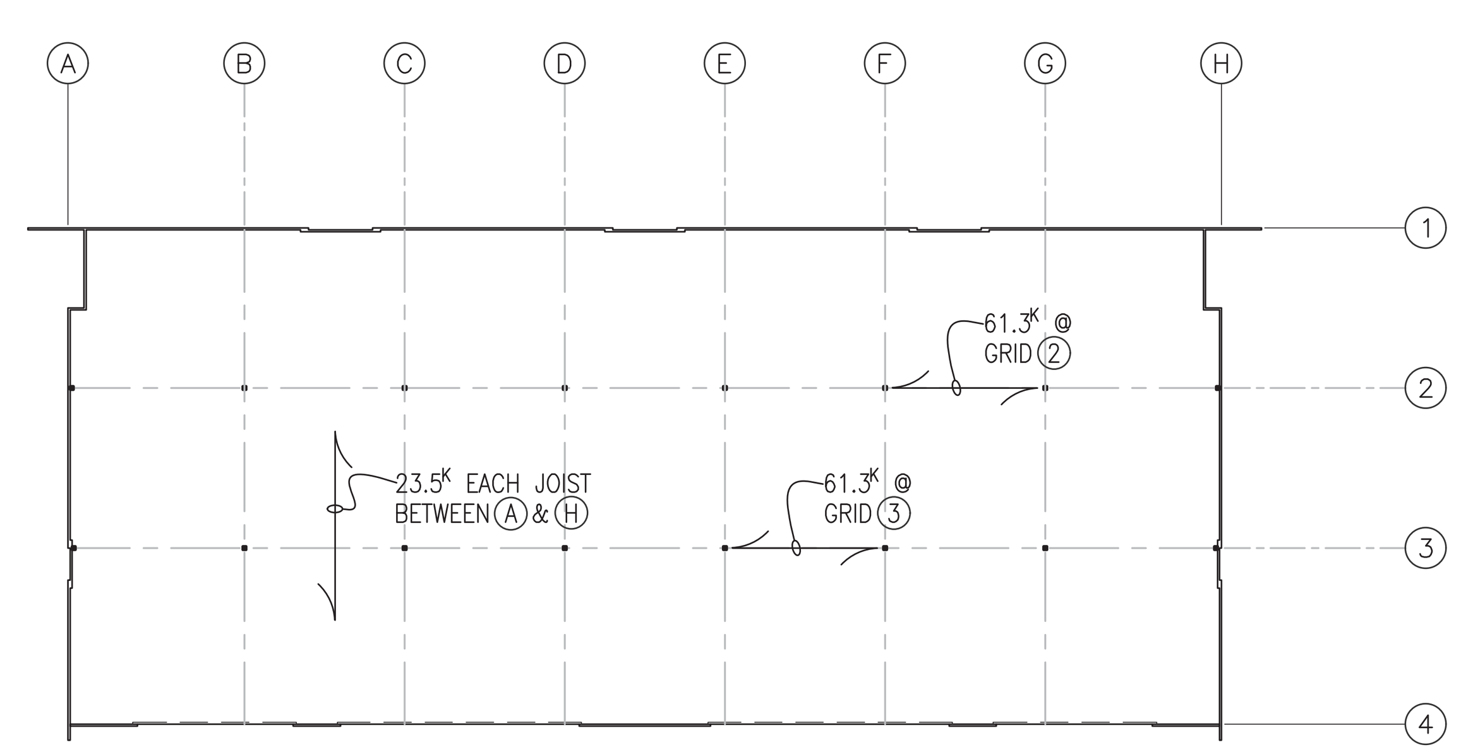


HIGH SHEAR DIAPHRAGM NAILING DETAIL AT 4x's

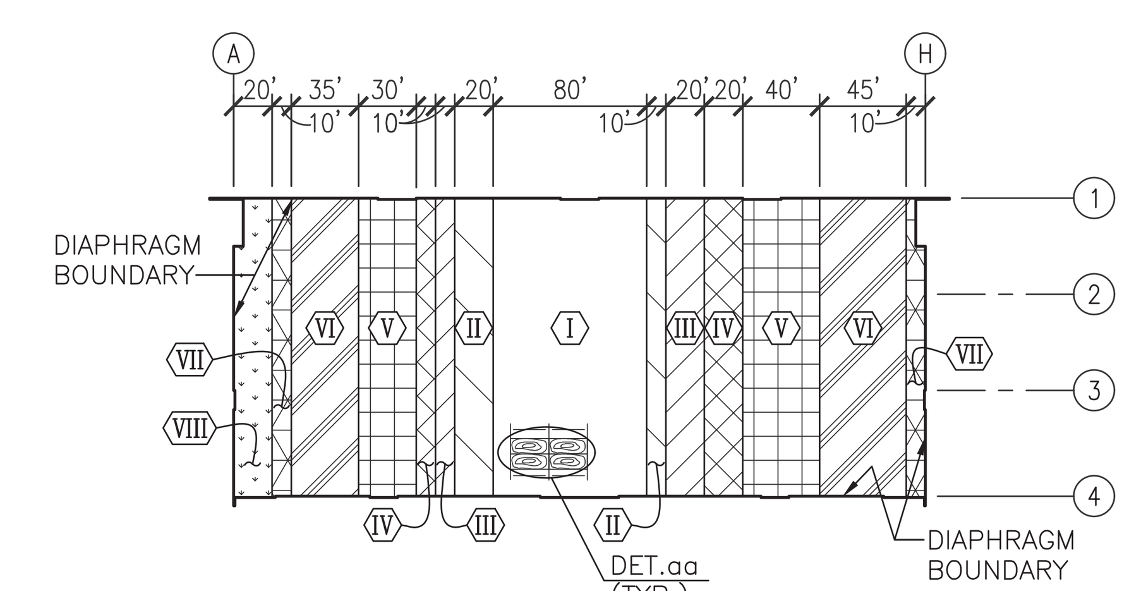


BOUNDARY NAILING: 2 ROWS STAGGERED



BAR JOIST TOP CHORD TIE FORCE LOAD DIAGRAM
SCALE: 1"=60'

TIE FORCE LOAD DIAGRAM NOTES:
1) LOAD SHOWN IS FOR EACH JOIST IN DESIGNATED AREA, FULL WIDTH OF BUILDING.
2) DESIGN TOP CHORD & SEAT OF ROOF PURLIN BAR JOIST TO TRANSFER THE SHOWN SEISMIC LOAD.
3) THE LOAD SHOWN IS A WORKING STRESS VALUE, BUT DOES INCLUDE THE 1.4 FACTOR PER ASCE SECTION 12.11.2.2.2.



ROOF DIAPHRAGM NAILING DIAGRAM
SCALE: 1"=100'

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JOHN C. HEADLAND, STATE OF WASHINGTON, 31757, PROFESSIONAL STRUCTURAL ENGINEER

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PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: SCHEDULES AND DIAGRAMS

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
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PROJECT NO: 18-40
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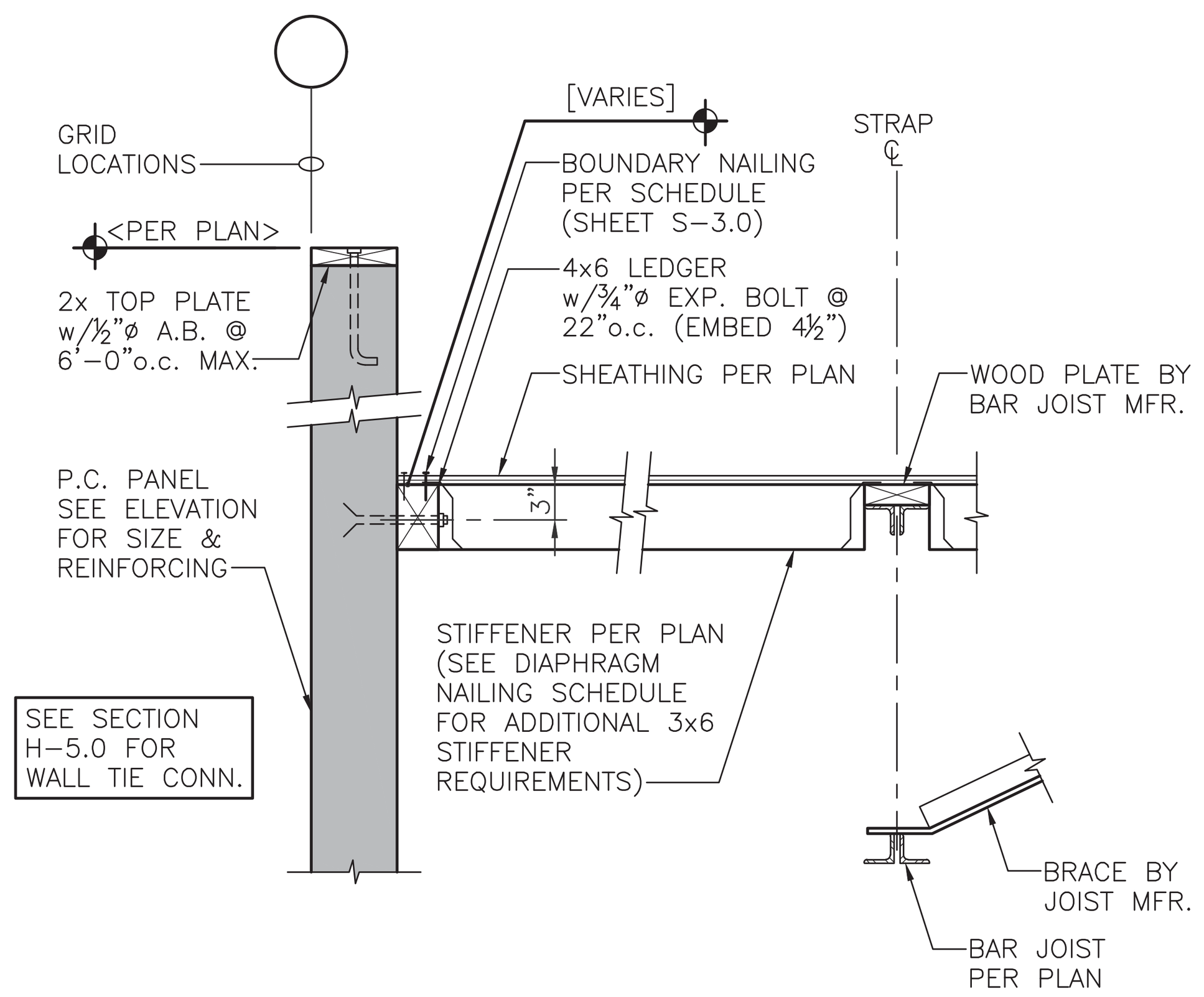
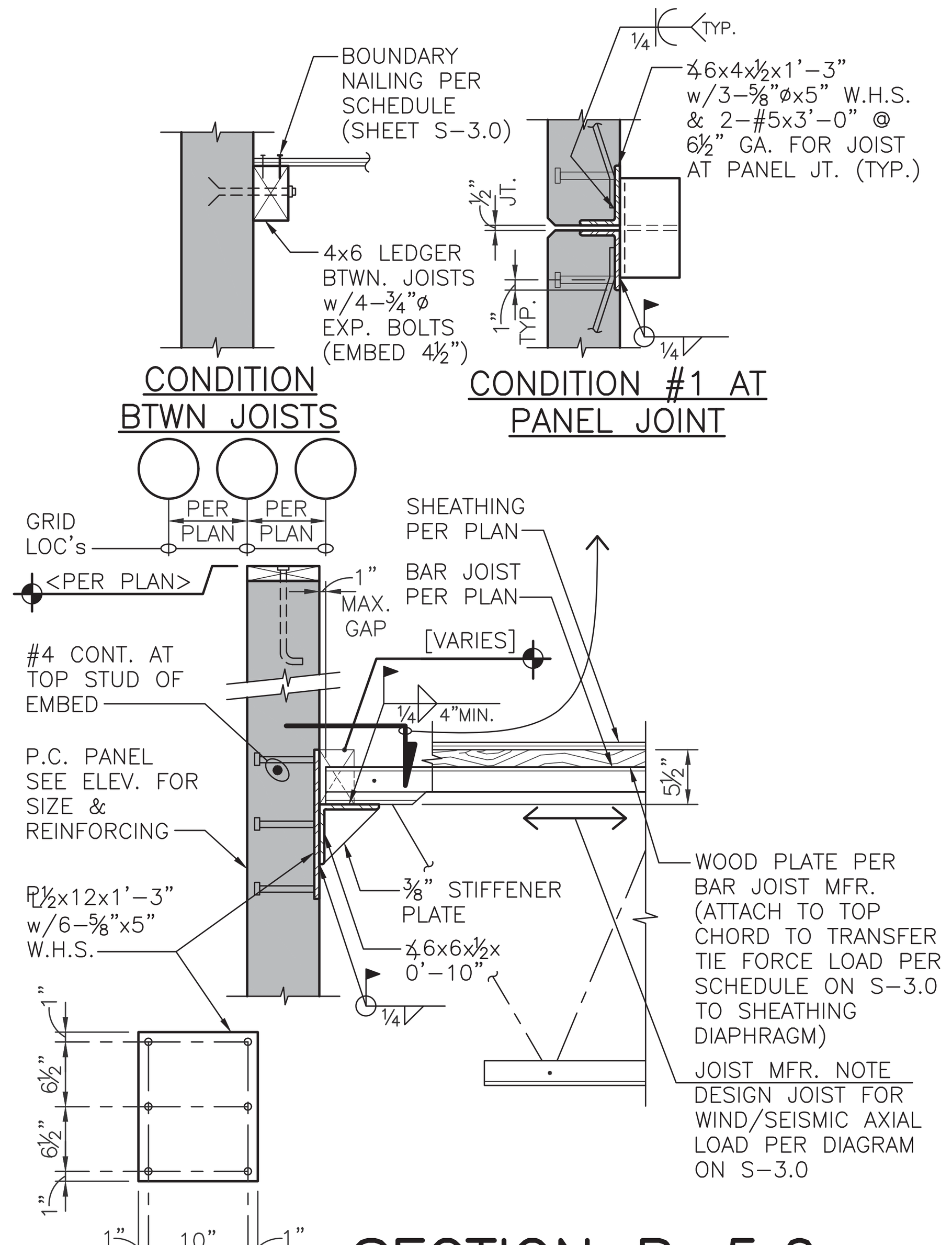


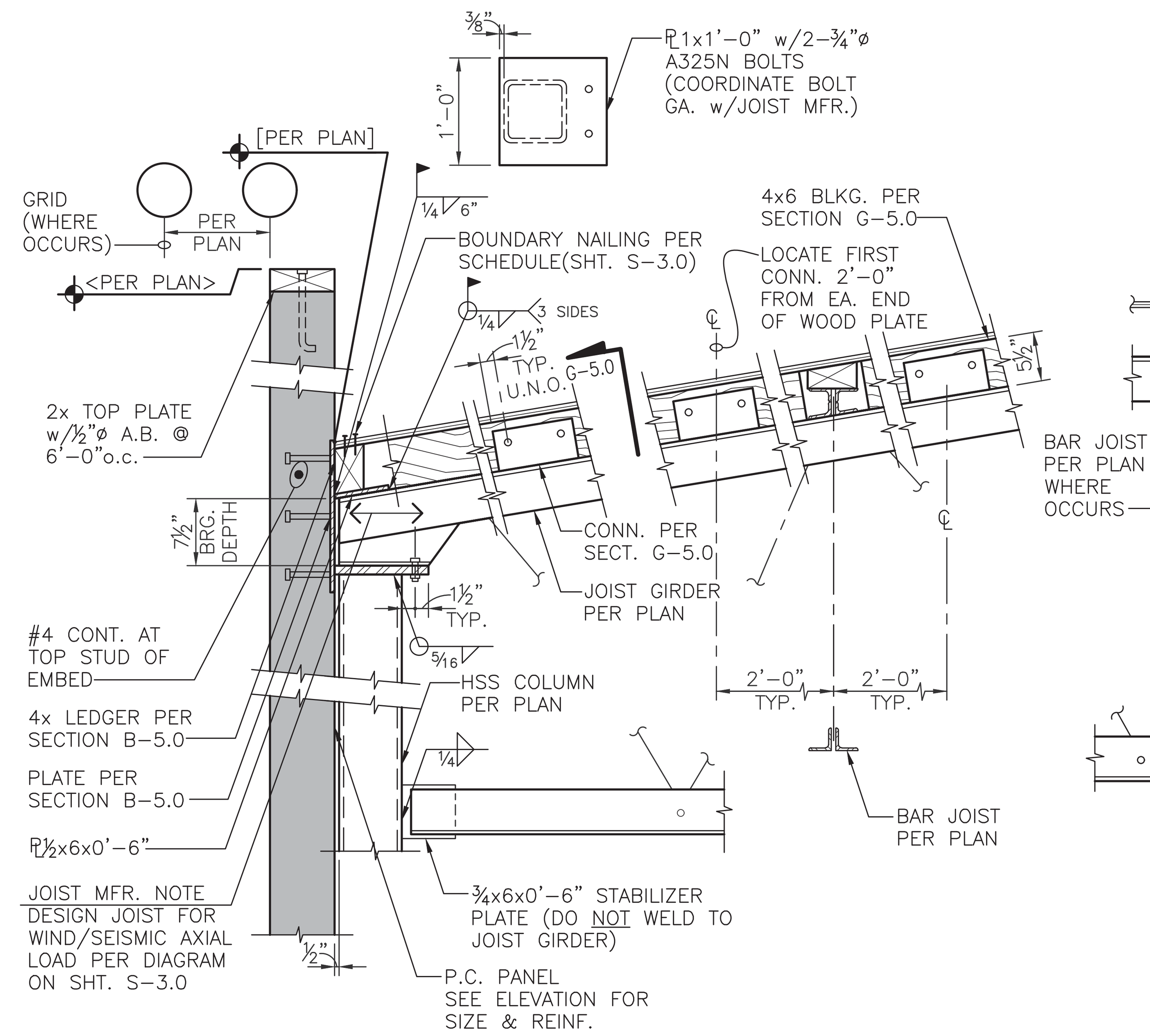
SECTION A–5.0

SCALE: ¾"=1'-0"



SECTION B–5.0

SCALE: ¾"=1'-0"



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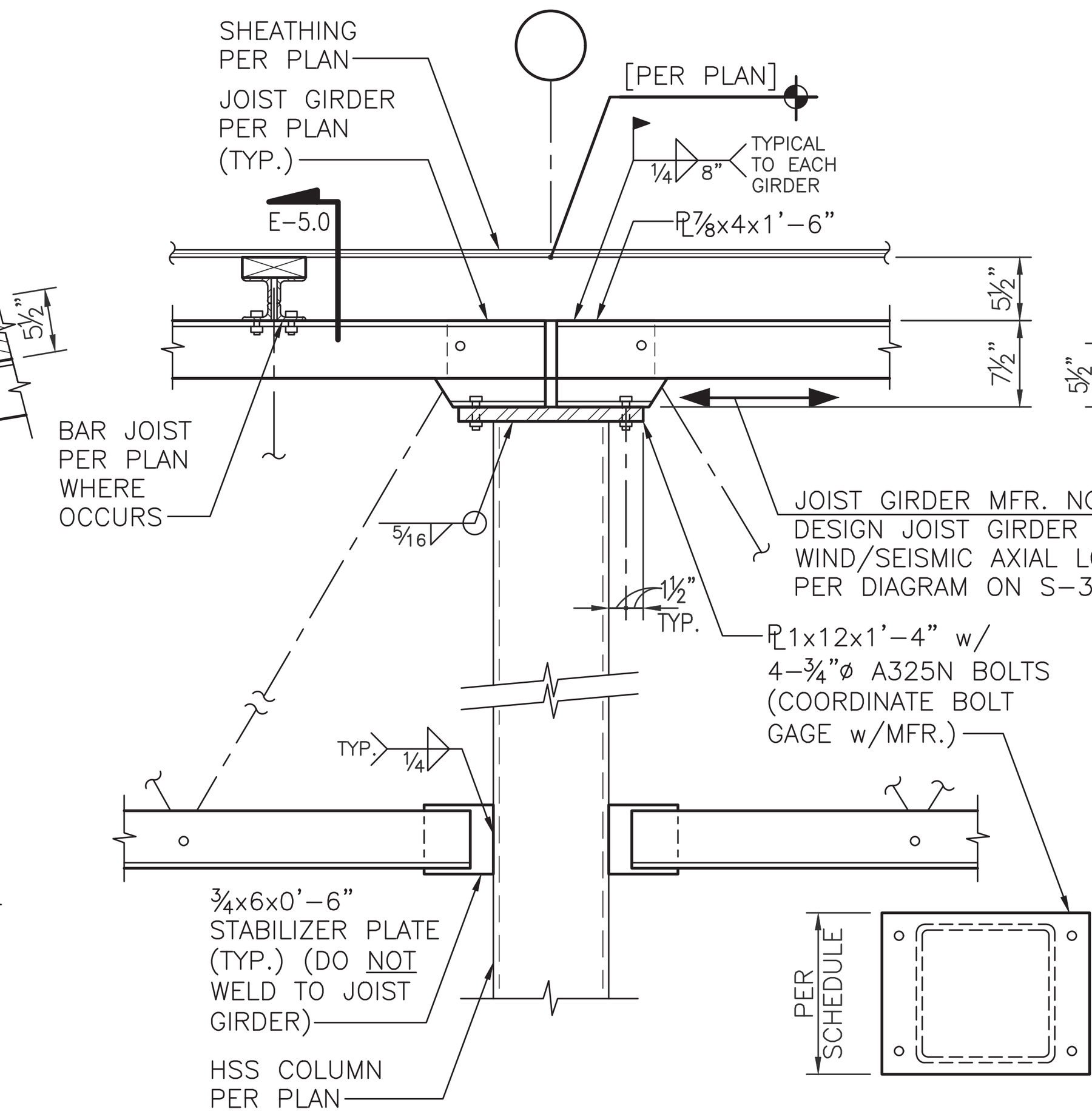

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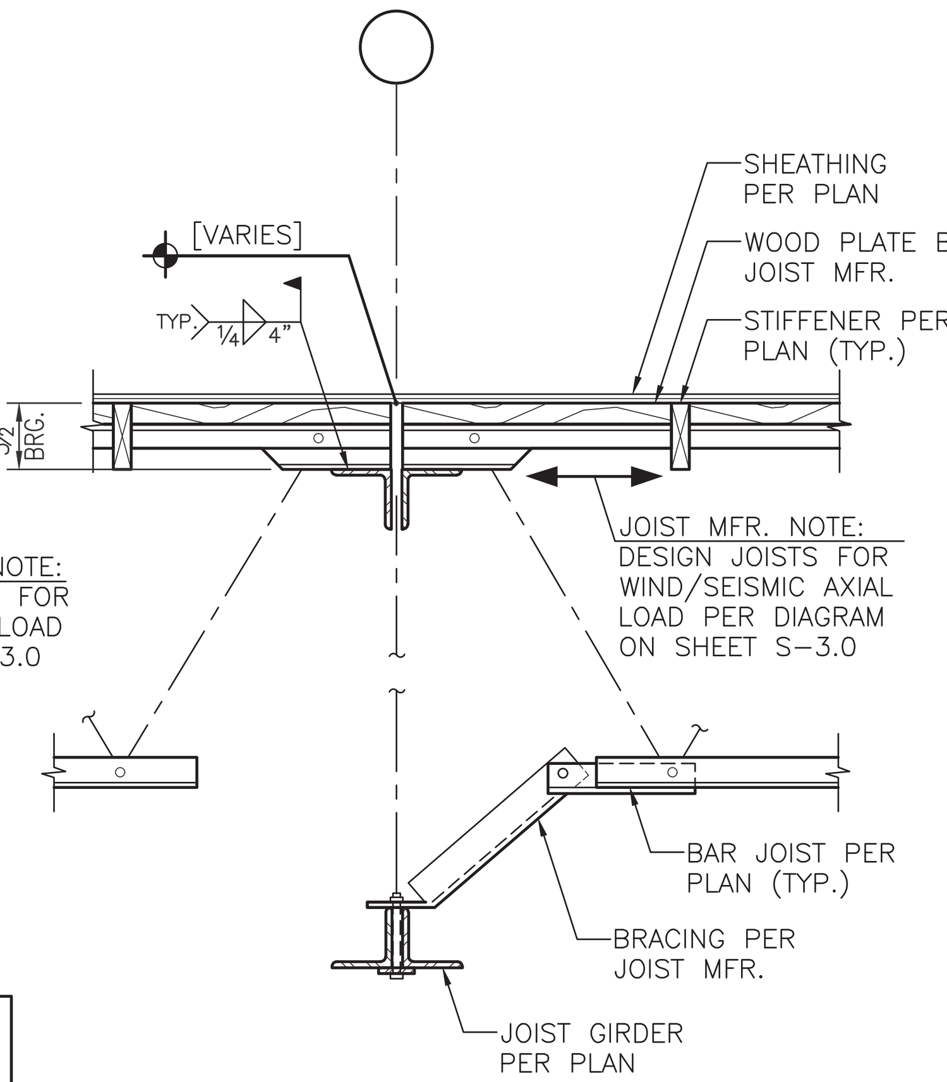

SECTION E–5.0

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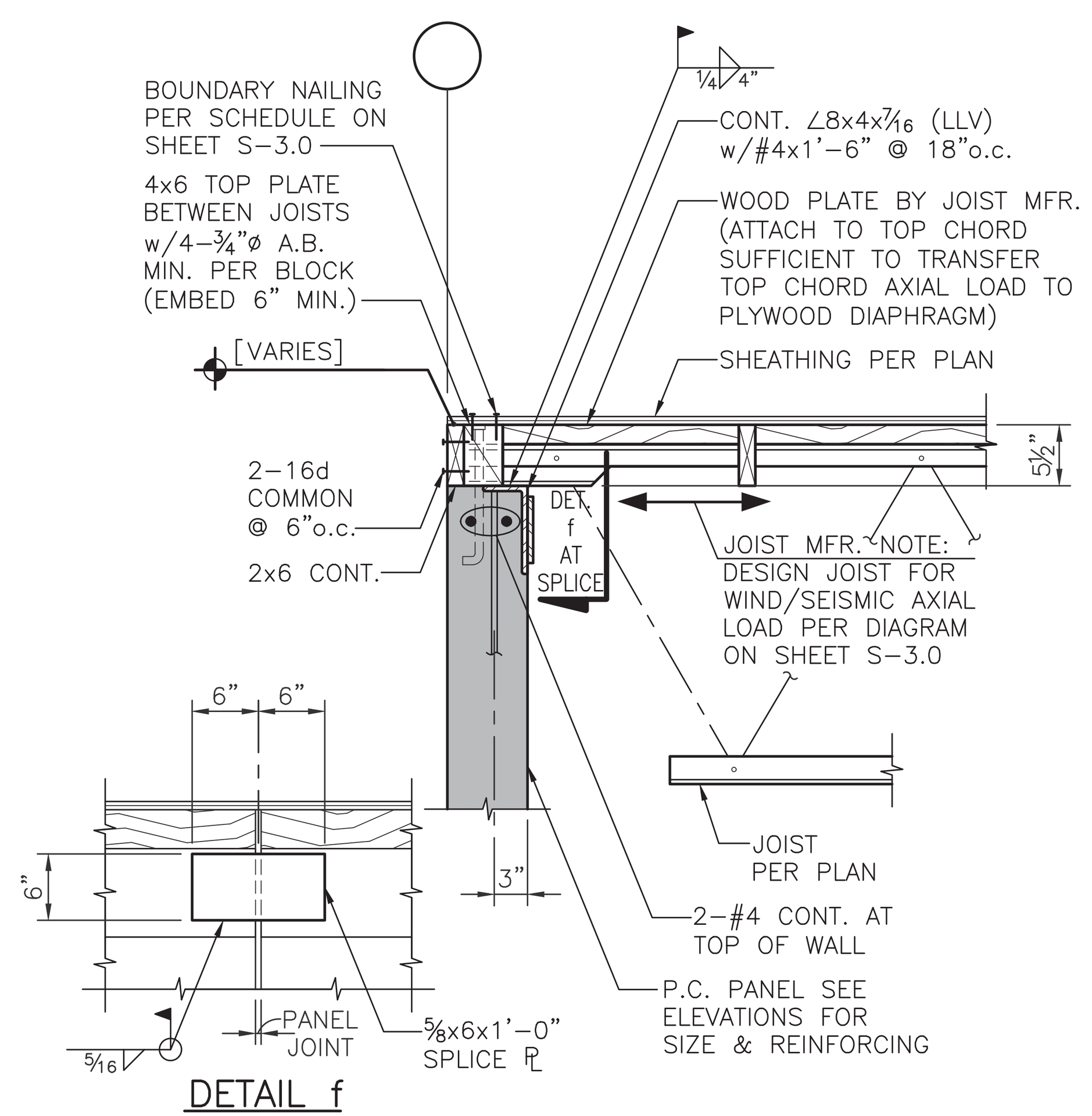

SECTION F–5.0

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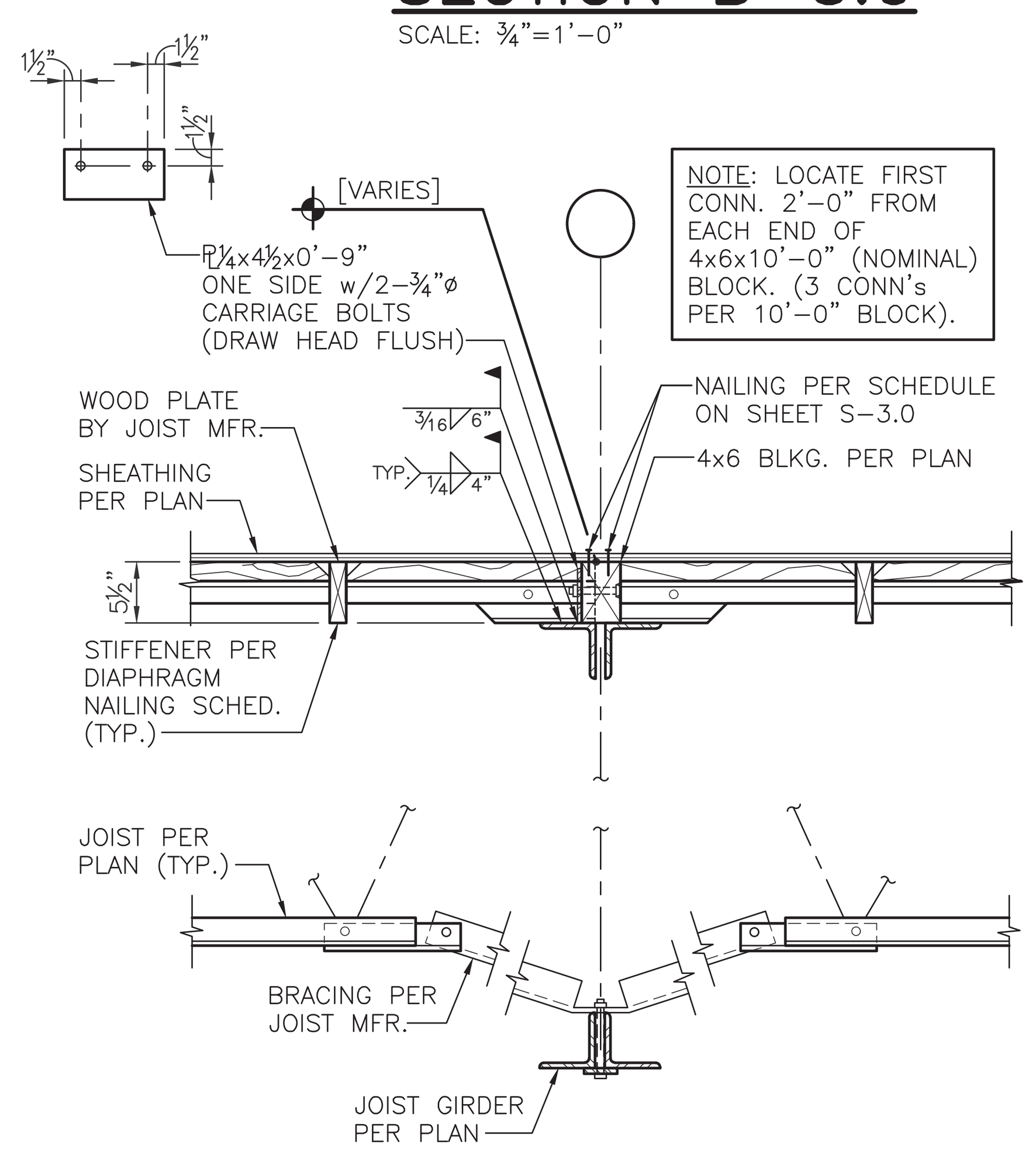
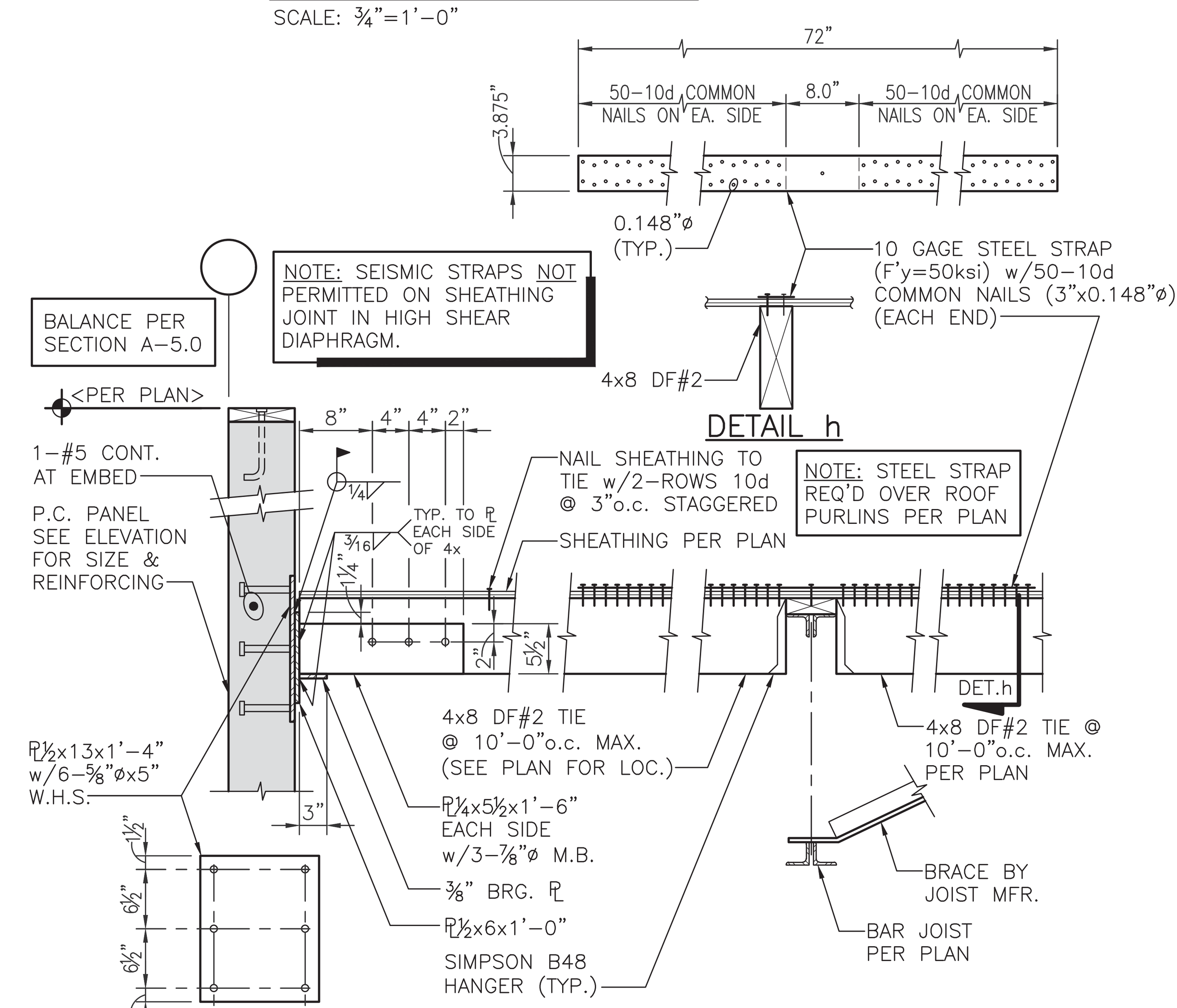


SECTION G–5.0

SCALE: ¾"=1'-0"



SECTION H–5.0

SCALE: ¾"=1'-0"

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REVISIONS

ISSUE NO.	DATE	ITEM
	10-11-19	PERMIT SET

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JOHN C. HEADLAND, STATE OF WASHINGTON, 31757, PROFESSIONAL STRUCTURAL ENGINEER

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Date: 2019.10.11 14:11:39 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: ROOF FRAMING SECTIONS

DESIGNED BY: CT   DRAWN BY: AL, RB
REVIEWED BY: JH   APPROVED BY:
DATE: 10-11-19   SHEET NO: S5.0
PROJECT NO: 18-40   7 OF 13

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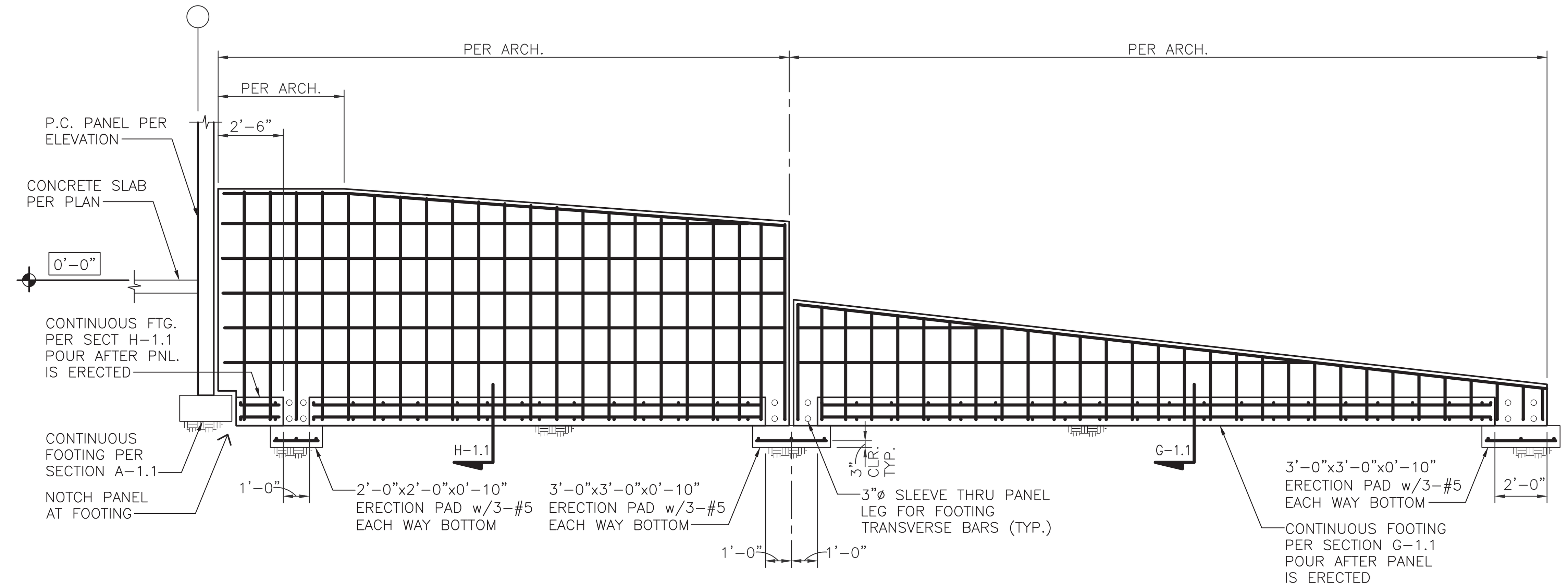
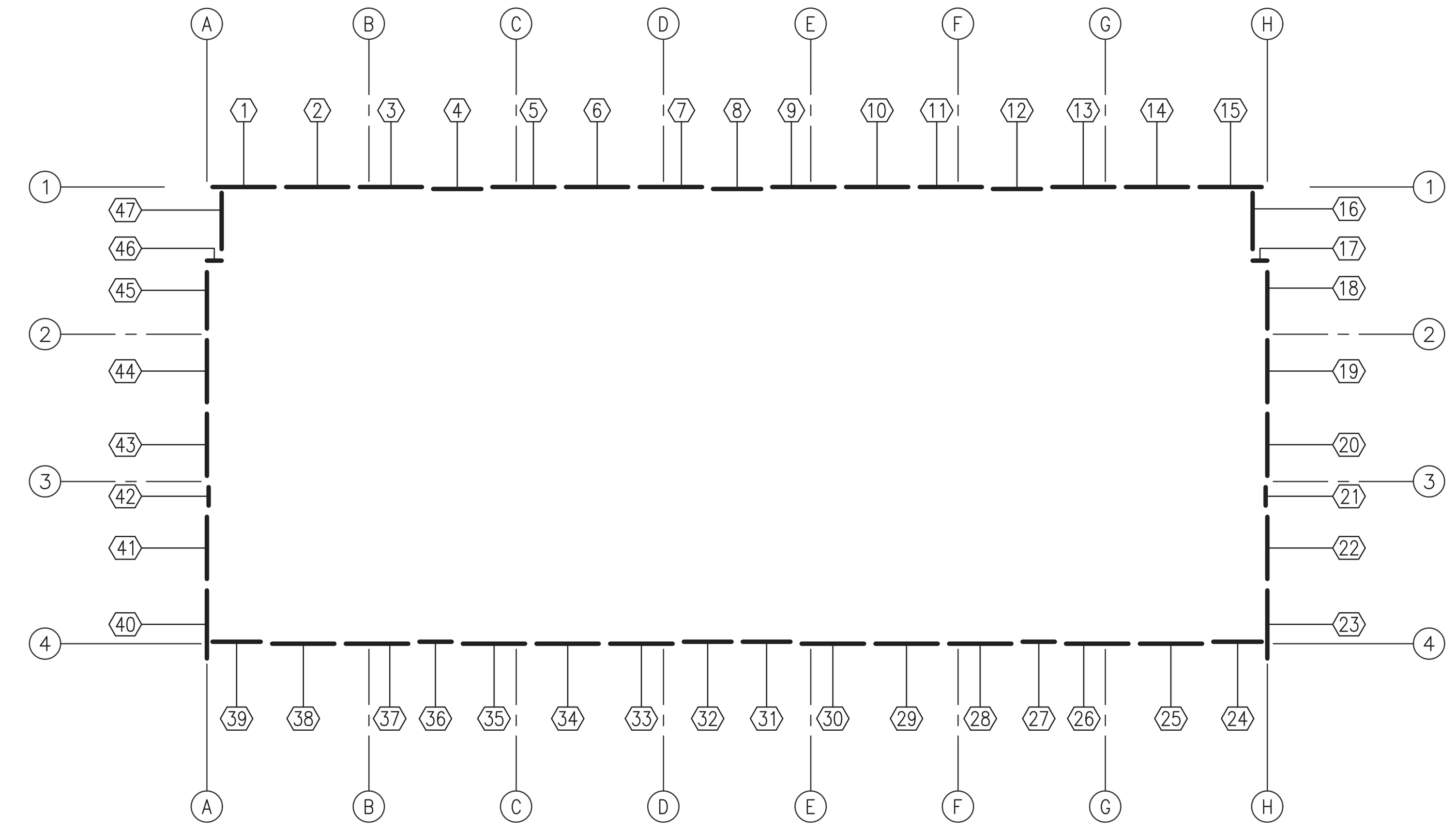


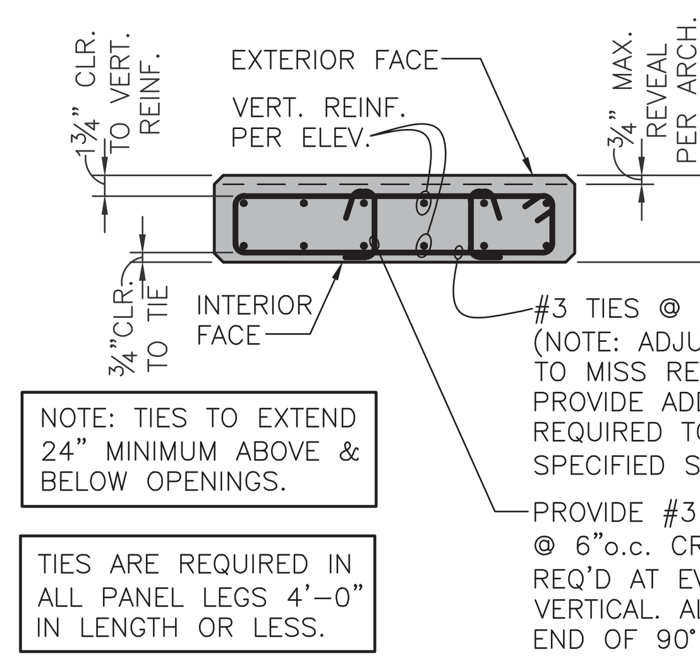
TYPICAL 6" THICK TILT-UP RETAINING WALL DETAIL

SCALE: ¼"=1'-0"



P.C. PANEL PLACEMENT KEY

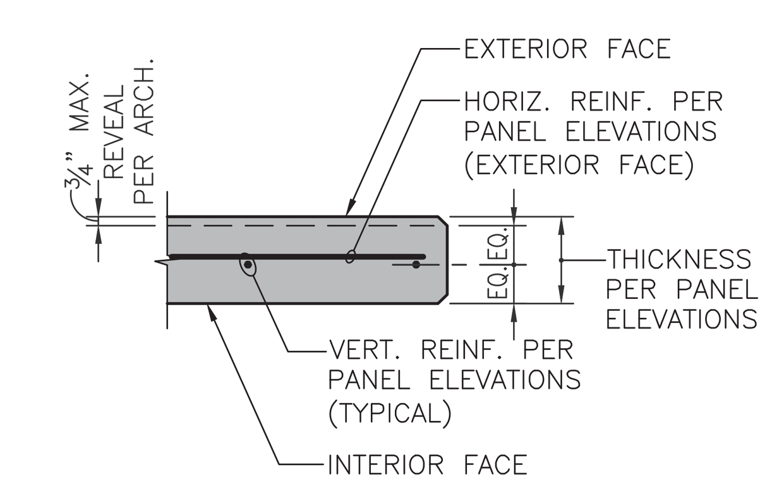
SCALE: 1"=50'



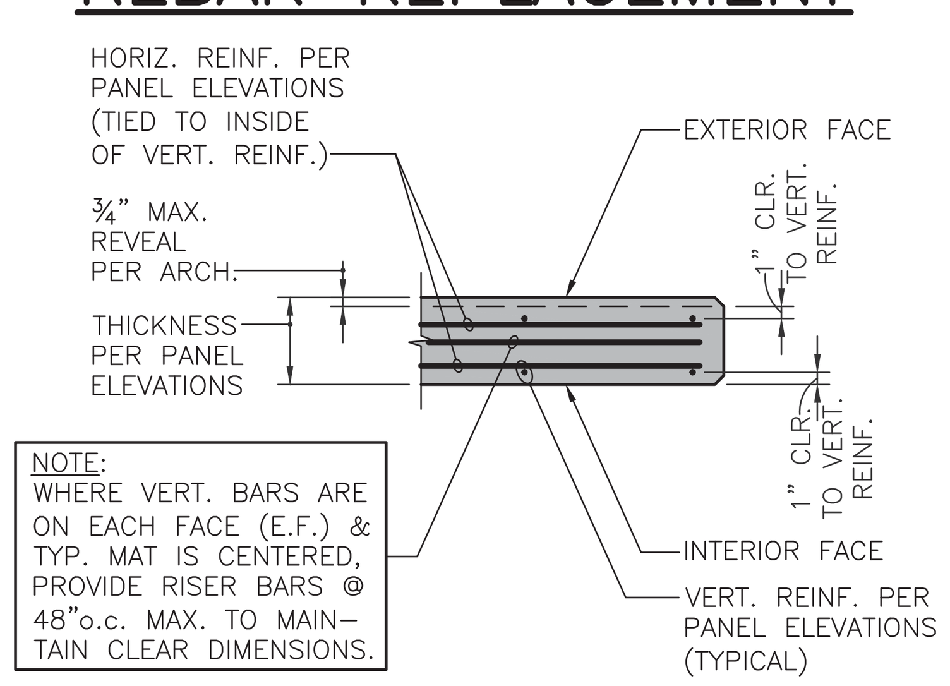
NOTE: TIES TO EXTEND 24" MINIMUM ABOVE & BELOW OPENINGS.

TIES ARE REQUIRED IN ALL PANEL LEGS 4'-0" IN LENGTH OR LESS.

TYP. REBAR PLACEMENT AT PANEL LEG WITH TIES & REVEALS



TYPICAL SINGLE MAT REBAR REPLACEMENT

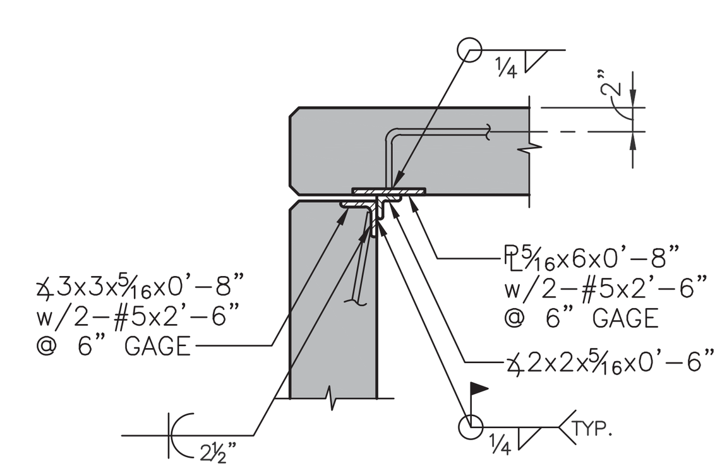


NOTE: WHERE VERT. BARS ARE ON EACH FACE (E.F.) & TYP. MAT IS CENTERED, PROVIDE RISER BARS @ 48"o.c. MAX. TO MAINTAIN CLEAR DIMENSIONS.

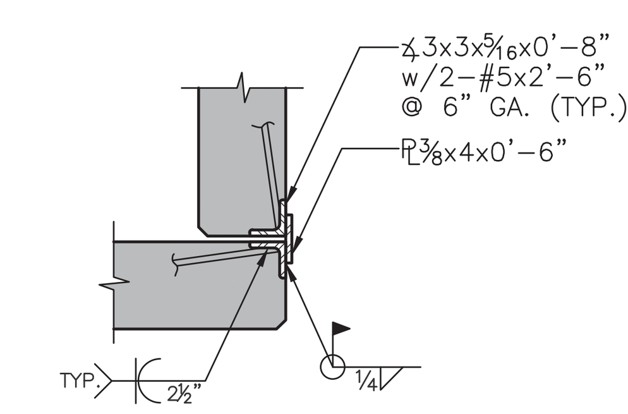
TYPICAL DOUBLE MAT REBAR REPLACEMENT

PRECAST PANEL REINFORCING NOTES:

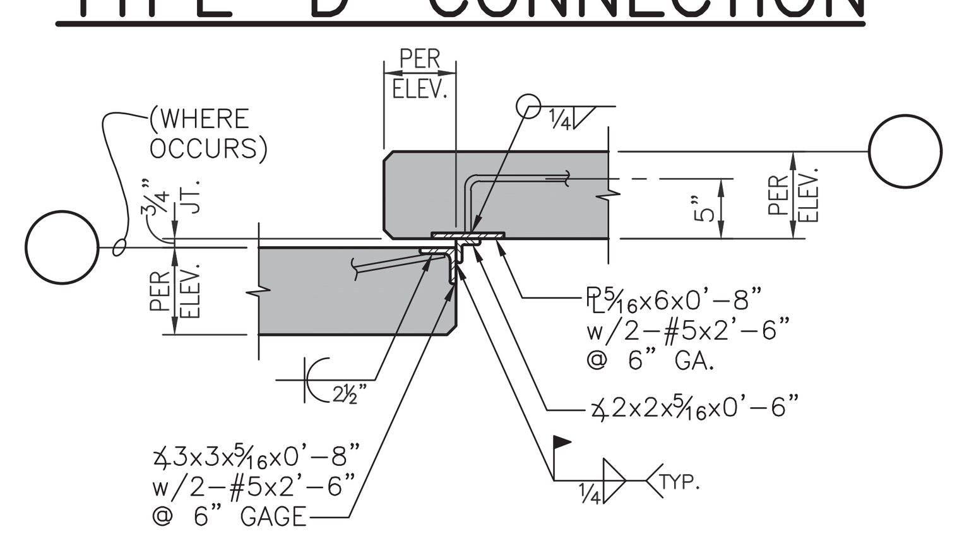
1) THICKNESS INDICATED IS MINIMUM THICKNESS ALLOWED w/¾" DEEP REVEAL IN PANELS INDICATED ONLY. DEEPER REVEALS, EXPOSED AGGREGATE AND/OR RAKED ARCHITECTURAL FINISHES ARE NOT ALLOWED WITHOUT PRIOR REVIEW AND APPROVAL BY THE STRUCTURAL ENGINEER.
2) PROVIDE 1-#7 OR 2-#5 MINIMUM HORIZONTAL AT TOP & BOTTOM OF ALL OPENINGS (EXTEND 2'-0" BEYOND OPENINGS) UNLESS NOTED OTHERWISE.
3) PROVIDE #4x2'-6" DIAGONALS AT CORNERS OF ALL OPENINGS. #4x2'-6" DIAGONALS EACH FACE AT CORNERS OF ALL OPENINGS IN PANELS OVER 7¼" THICK.
4) PANEL ELEVATIONS ARE VIEWED FROM INSIDE LOOKING OUT, UNLESS NOTED OTHERWISE.
5) SEE PANEL ELEVATIONS FOR PANEL THICKNESS.
6) CONTRACTOR IS TO VERIFY ALL DIMENSIONS IN FIELD PRIOR TO FORMING PANELS.
7) SHOP DRILL ⅛" DIAMETER AIR-RELEASE HOLES IN EMBEDMENTS AT 6" CENTERS TO DISPLACE ALL VOIDS.
8) REINFORCING IS TO BE PLACED PER "TYPICAL SINGLE MAT REBAR PLACEMENT" DETAIL UNLESS INDICATED AS EACH FACE ("E.F."). SEE "TYPICAL DOUBLE MAT REBAR PLACEMENT" DETAIL FOR REBAR PLACEMENT INDICATED AS EACH FACE ("E.F.").



TYPE 'C' CONNECTION



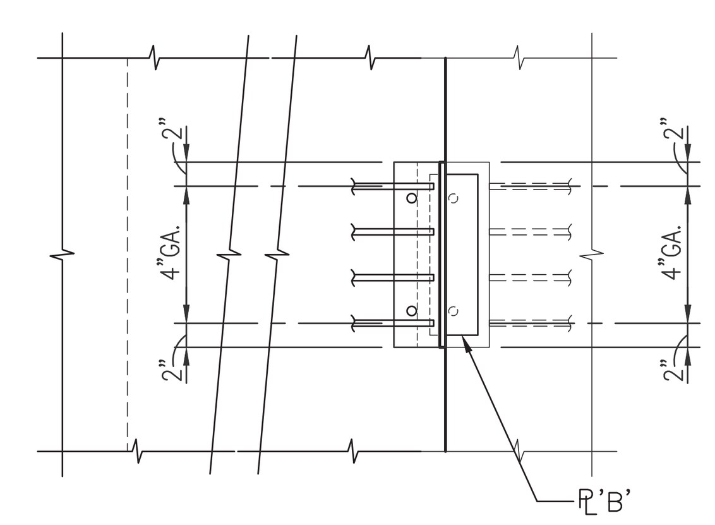
TYPE 'D' CONNECTION



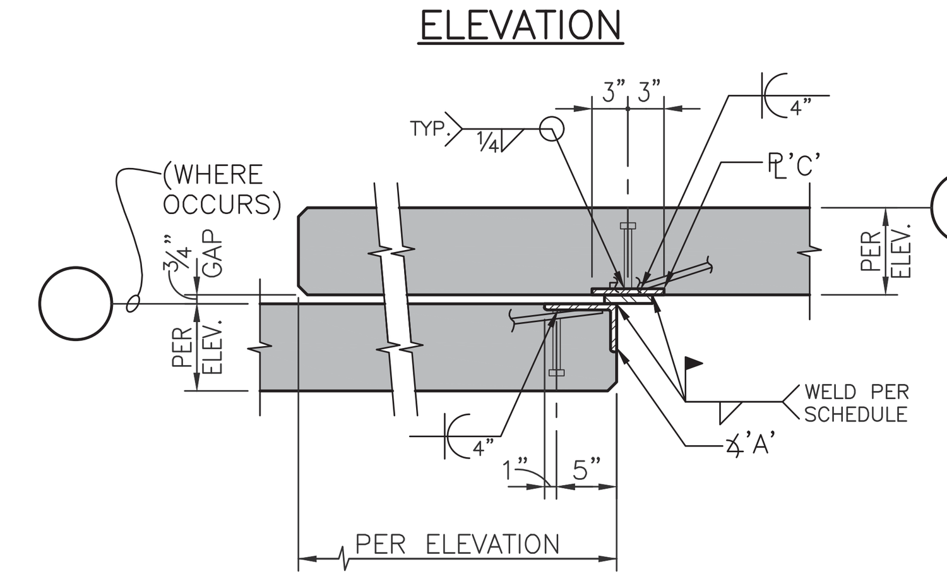
TYPE 'E' CONNECTION

SCHEDULE FOR TYPE 'F' CONNECTION

MARK	ANGLE 'A'	PLATE 'B'	PLATE 'C'	WELD
F1	∠6x4x½x1'-0 w/3-#5 x3'-0" & 2-¾"øx5" W.H.S.	PL⅜x4x0'-9"	PL½x6x1'-0" w/3-#5 x3'-0" & 2-¾"øx5" W.H.S.	¼ 9" LONG
F2	∠6x4x½x2'-3" w/7-#7 x5'-0" & 4-¾"øx5" W.H.S.	PL⅜x4x2'-0"	PL½x6x2'-3" w/7-#7 x5'-0" & 4-¾"øx5" W.H.S.	⅜ 24" LONG

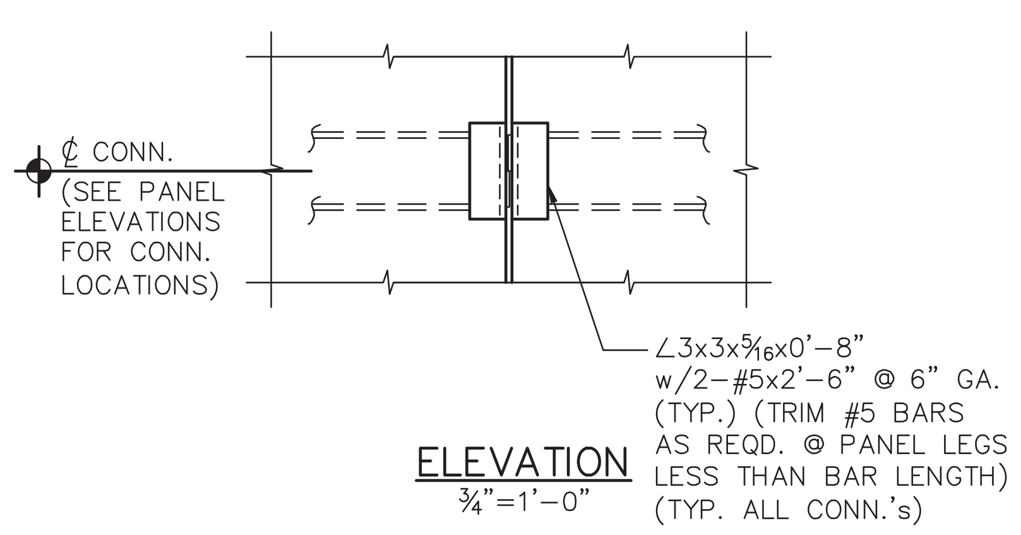


ELEVATION



PLAN

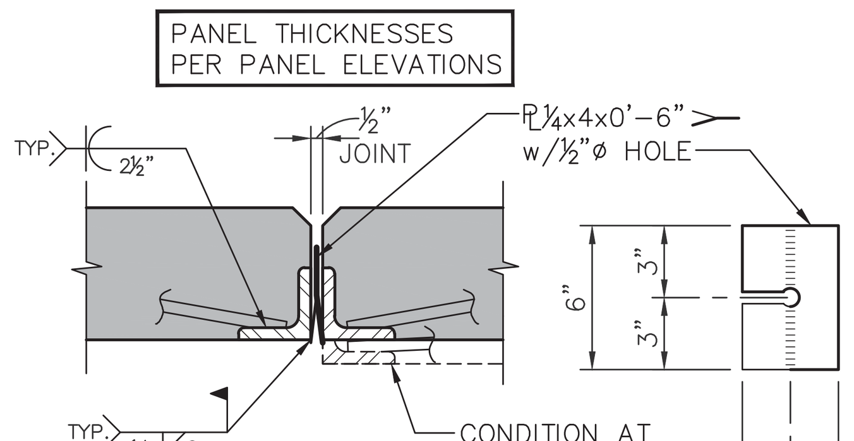
TYPE 'F' CONNECTION



ELEVATION

¾"=1'-0"

PANEL THICKNESSES PER PANEL ELEVATIONS

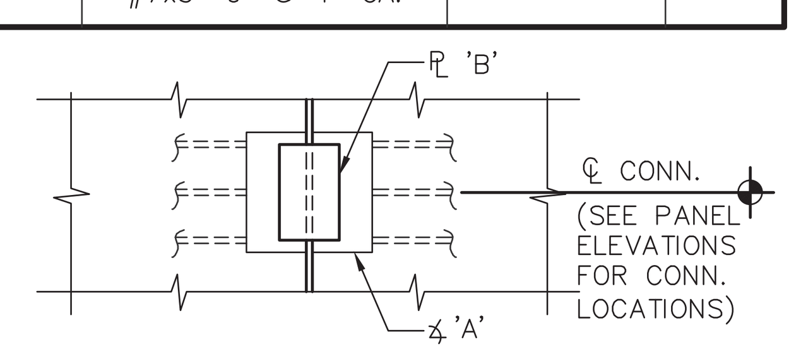


PLAN

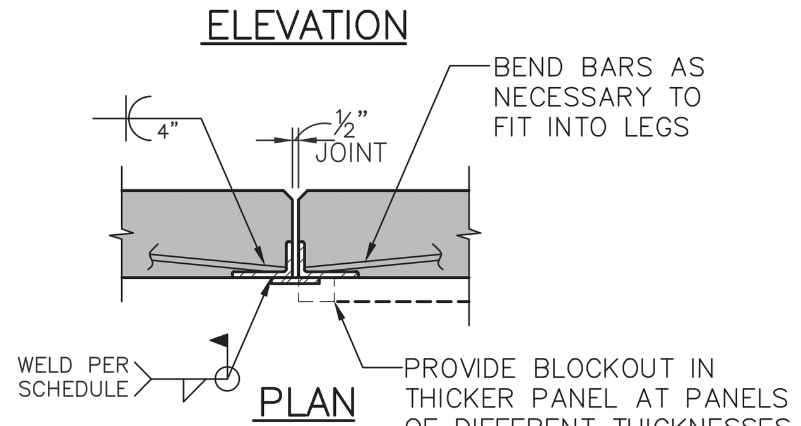
1½"=1'-0"

TYPE 'A' CONNECTION

MARK	ANGLE 'A'	PLATE 'B'	WELD
B1	∠5x3x5⁄16x1'-0" w/3-#5x3'-0" @ 4" GA.	PL5⁄16x5x0'-9"	¼
B2	∠5x3x5⁄16x2'-3" w/7-#7x5'-0" @ 4" GA.	PL⅜x5x2'-0"	⅜



ELEVATION



PLAN

TYPE 'B' CONNECTION

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REVISIONS

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Date: 2019.10.11 14:11:08 -07'00'

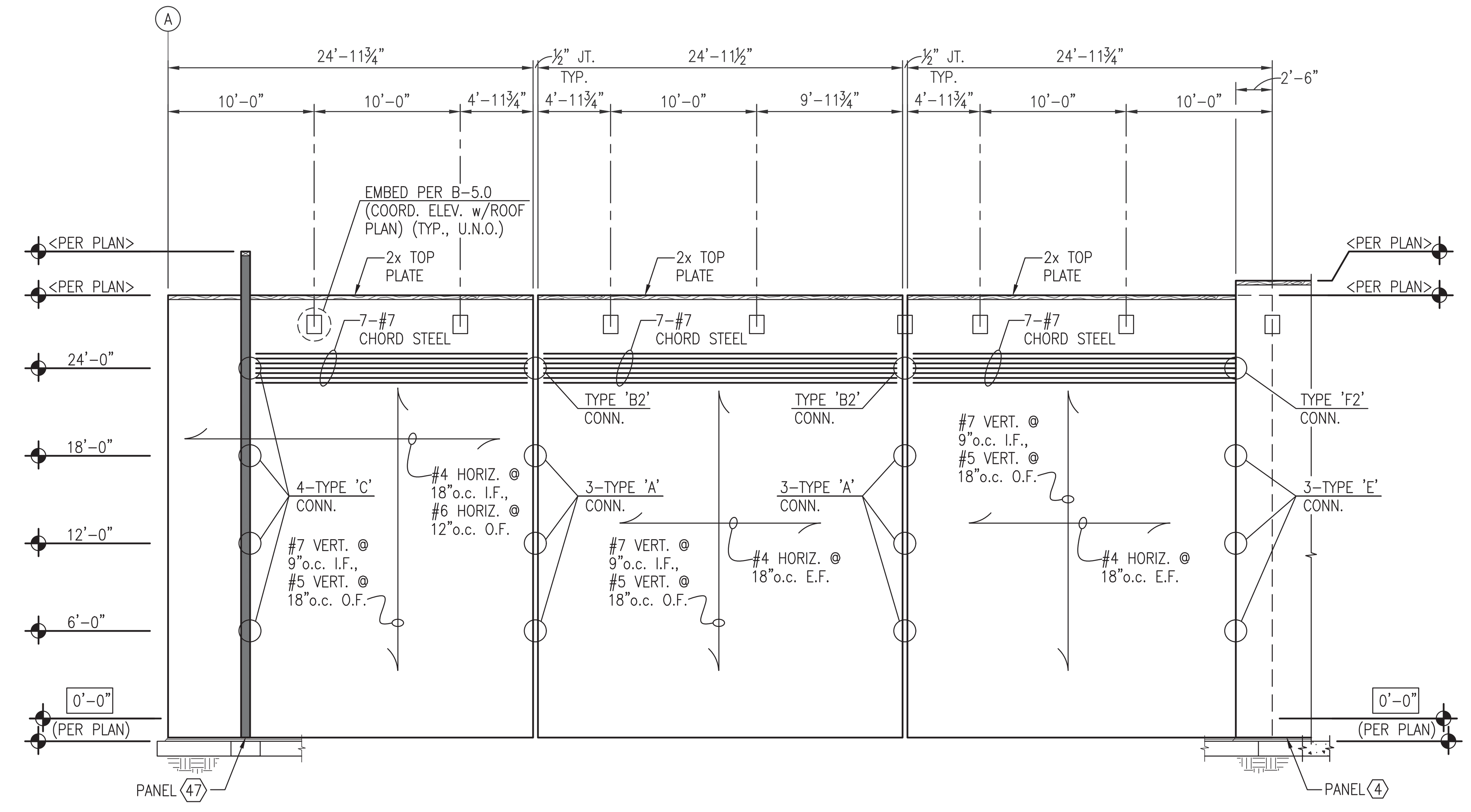
PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

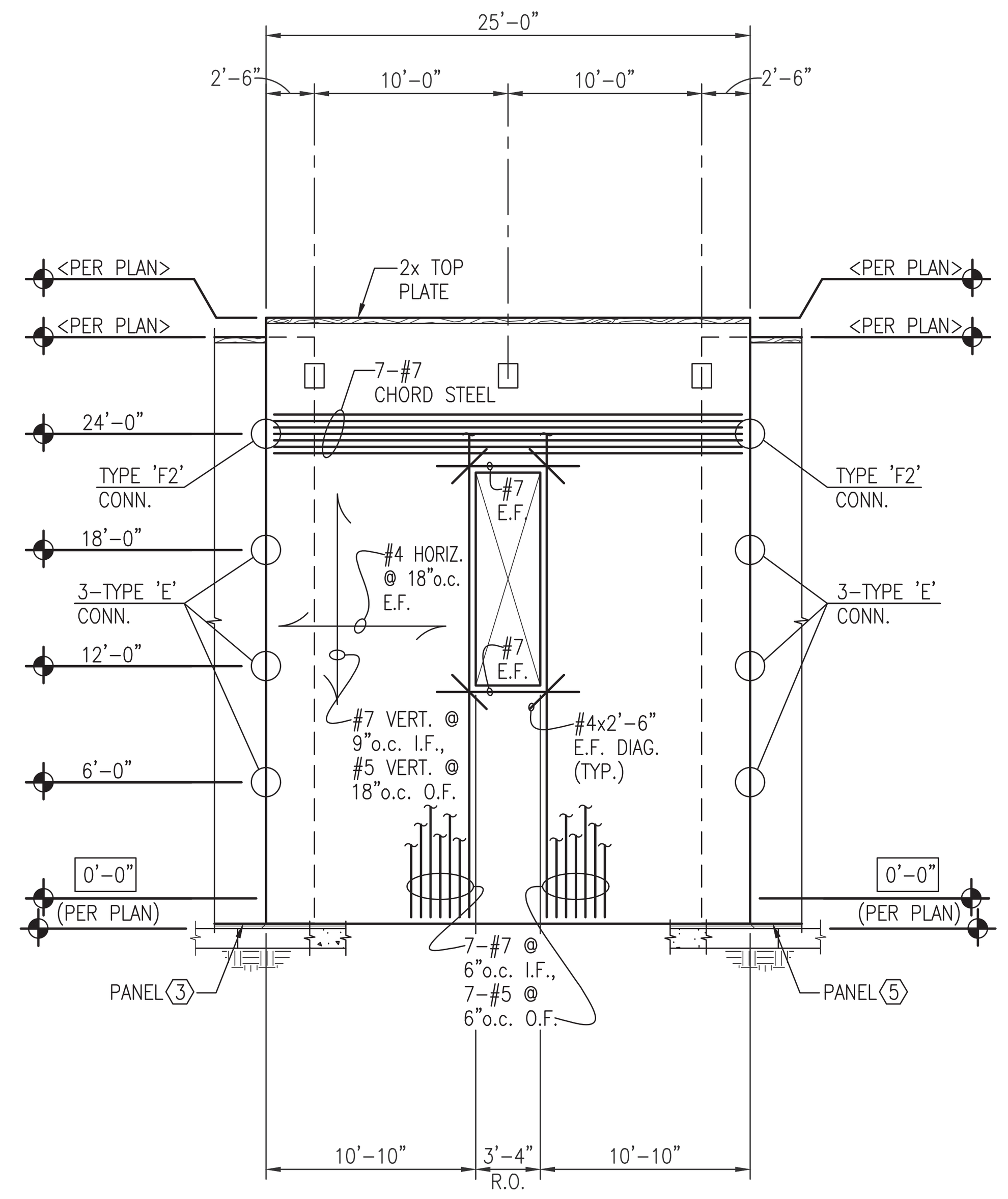
RELEASE FOR: PERMIT SUBMITTAL
TITLE: PANEL CONNECTIONS, PANEL DETAILS & PANEL KEY

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S6.0
PROJECT NO: 18-40
8 OF 13



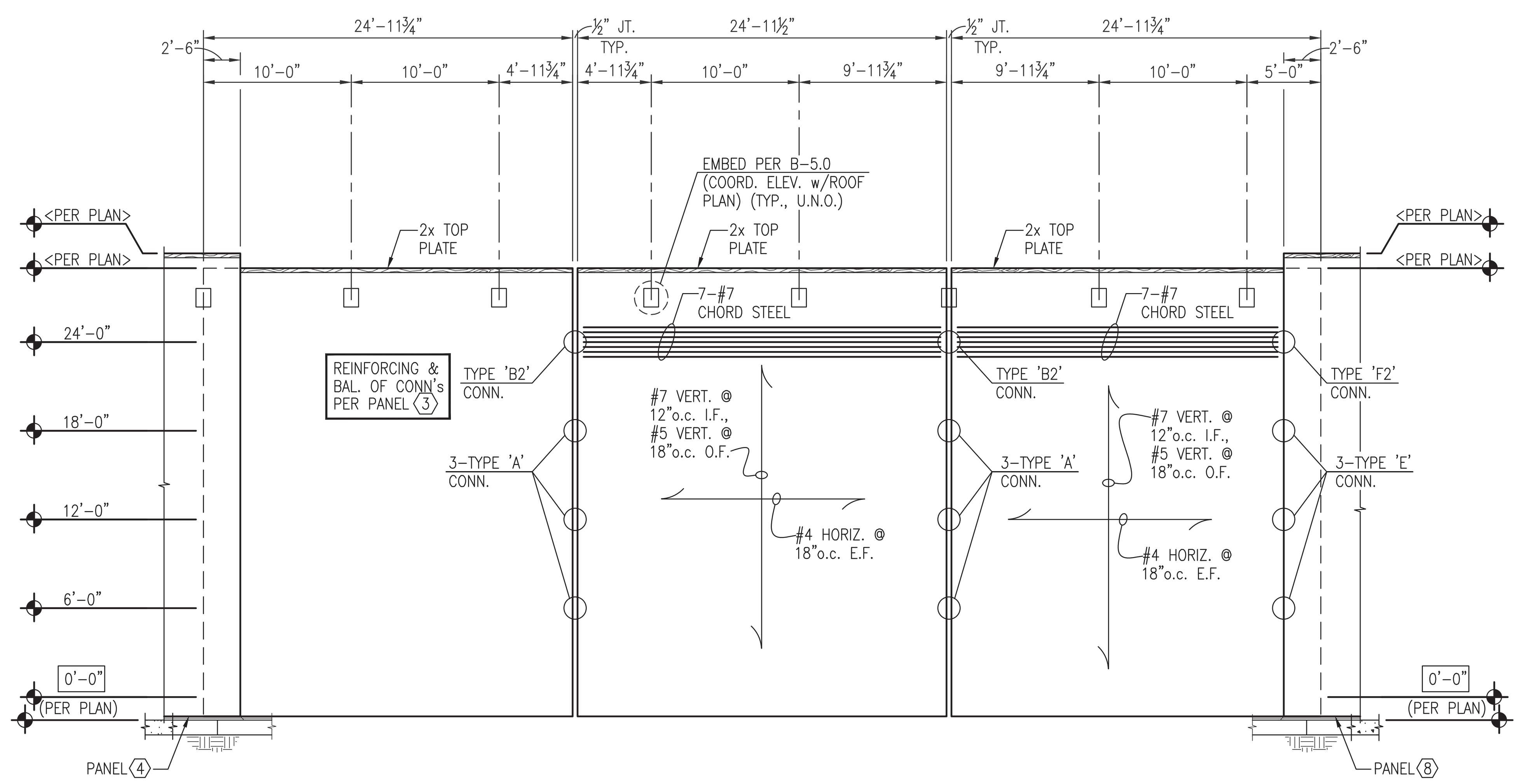
PARTIAL WEST P.C. PANEL ELEVATIONS AT GRID 1

(9¼" THICK PANELS w/¾" MAX. REVEALS)



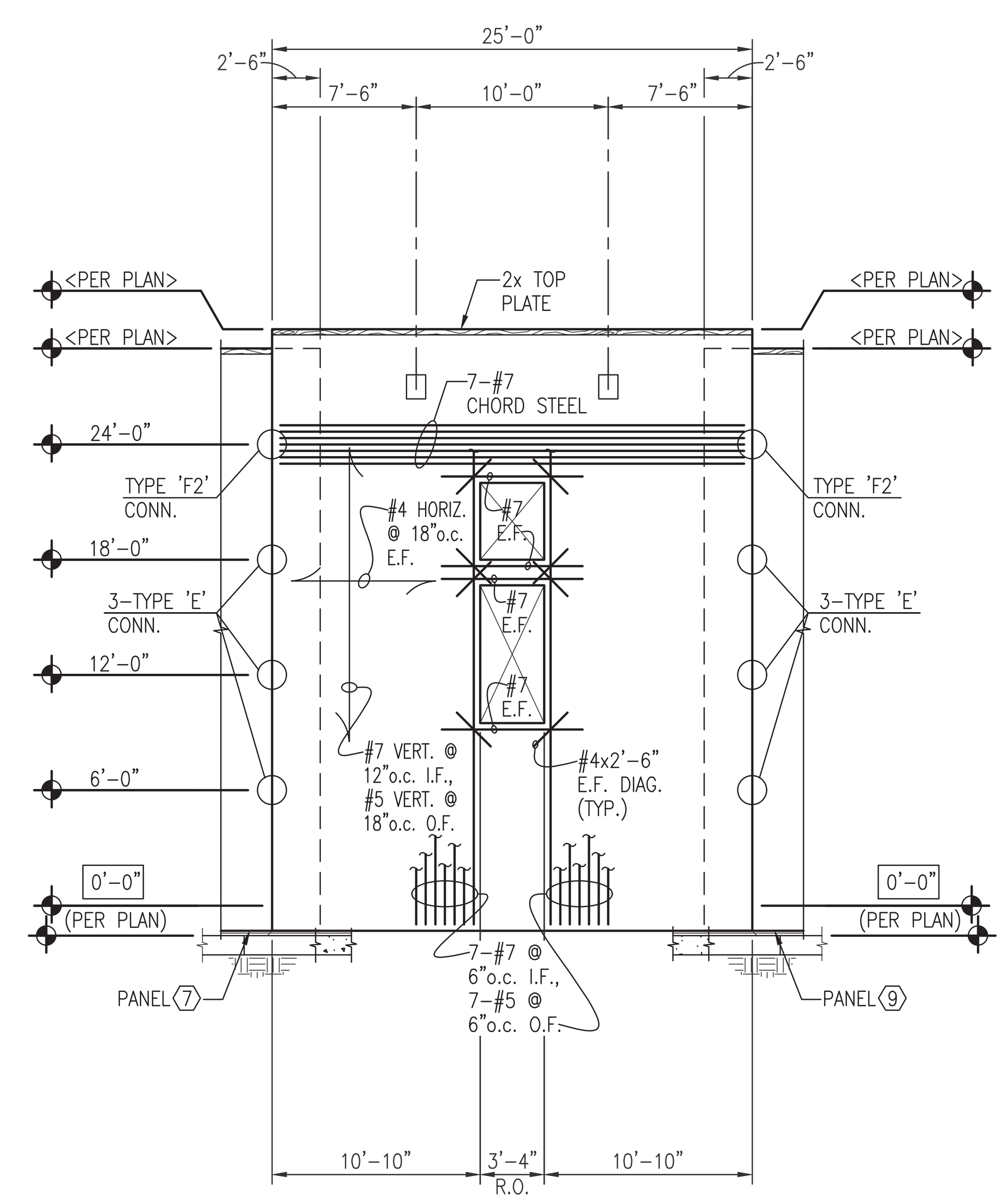
PARTIAL WEST P.C. PANEL ELEVATION 9¼" EAST OF GRID 1

(9¼" THICK PANEL w/¾" MAX. REVEALS)



PARTIAL WEST P.C. PANEL ELEVATIONS AT GRID 1

(9¼" THICK PANELS w/¾" MAX. REVEALS)



PARTIAL WEST P.C. PANEL ELEVATION 9¼" EAST OF GRID 1

(9¼" THICK PANEL w/¾" MAX. REVEALS)

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PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: PANEL ELEVATIONS

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S6.1
PROJECT NO: 18-40
9 OF 13

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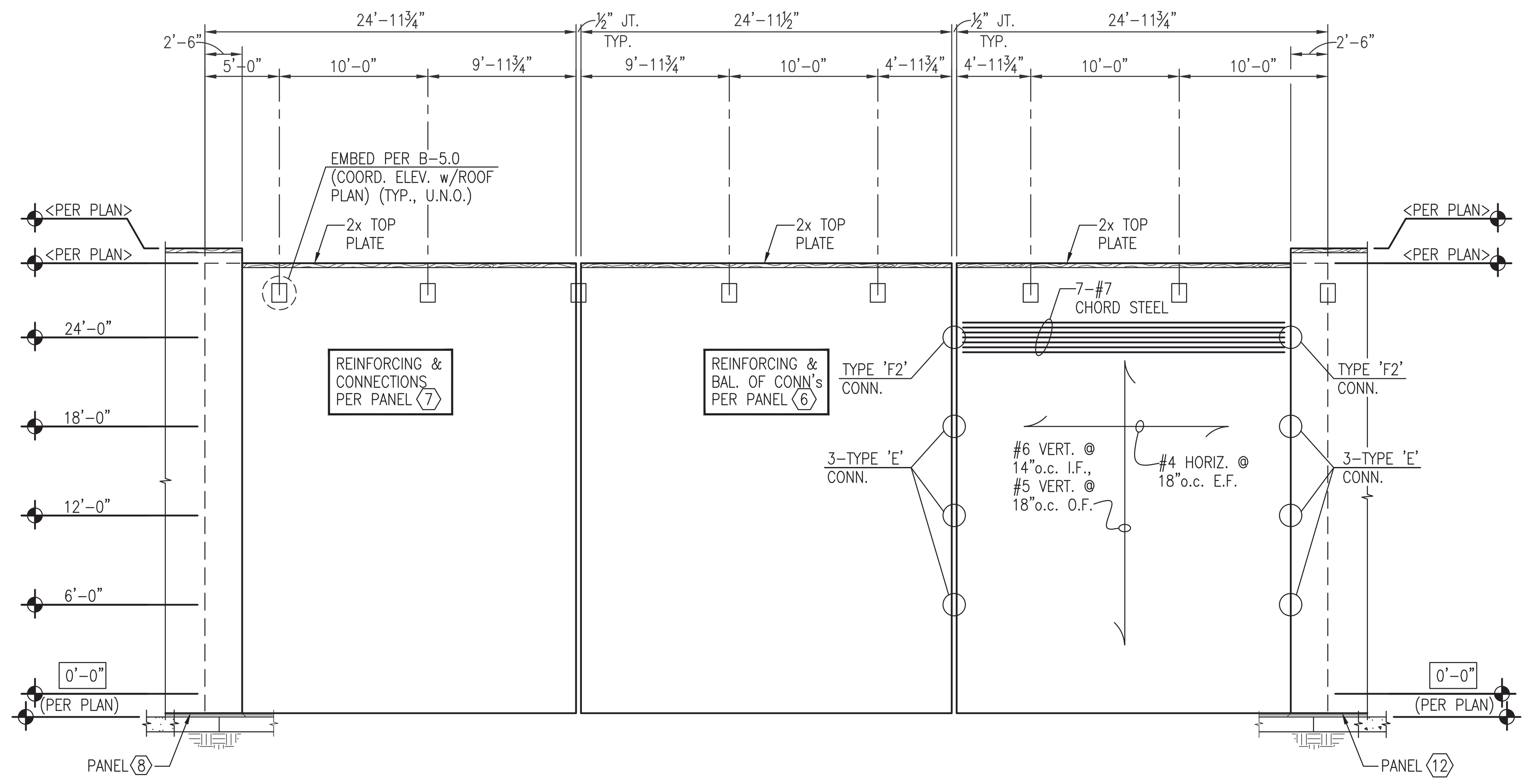


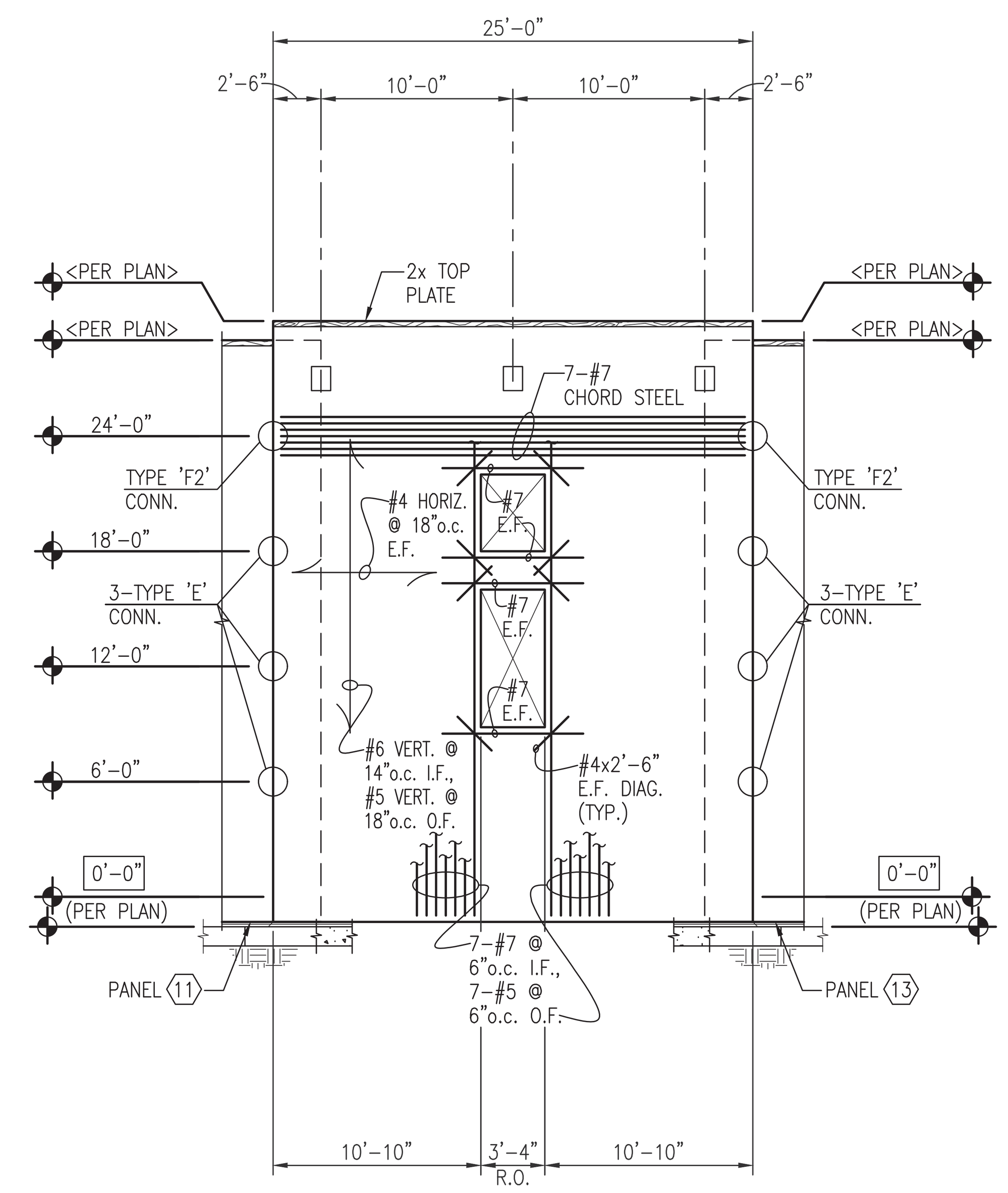
9

10

11

PARTIAL WEST P.C. PANEL ELEVATIONS AT GRID 1

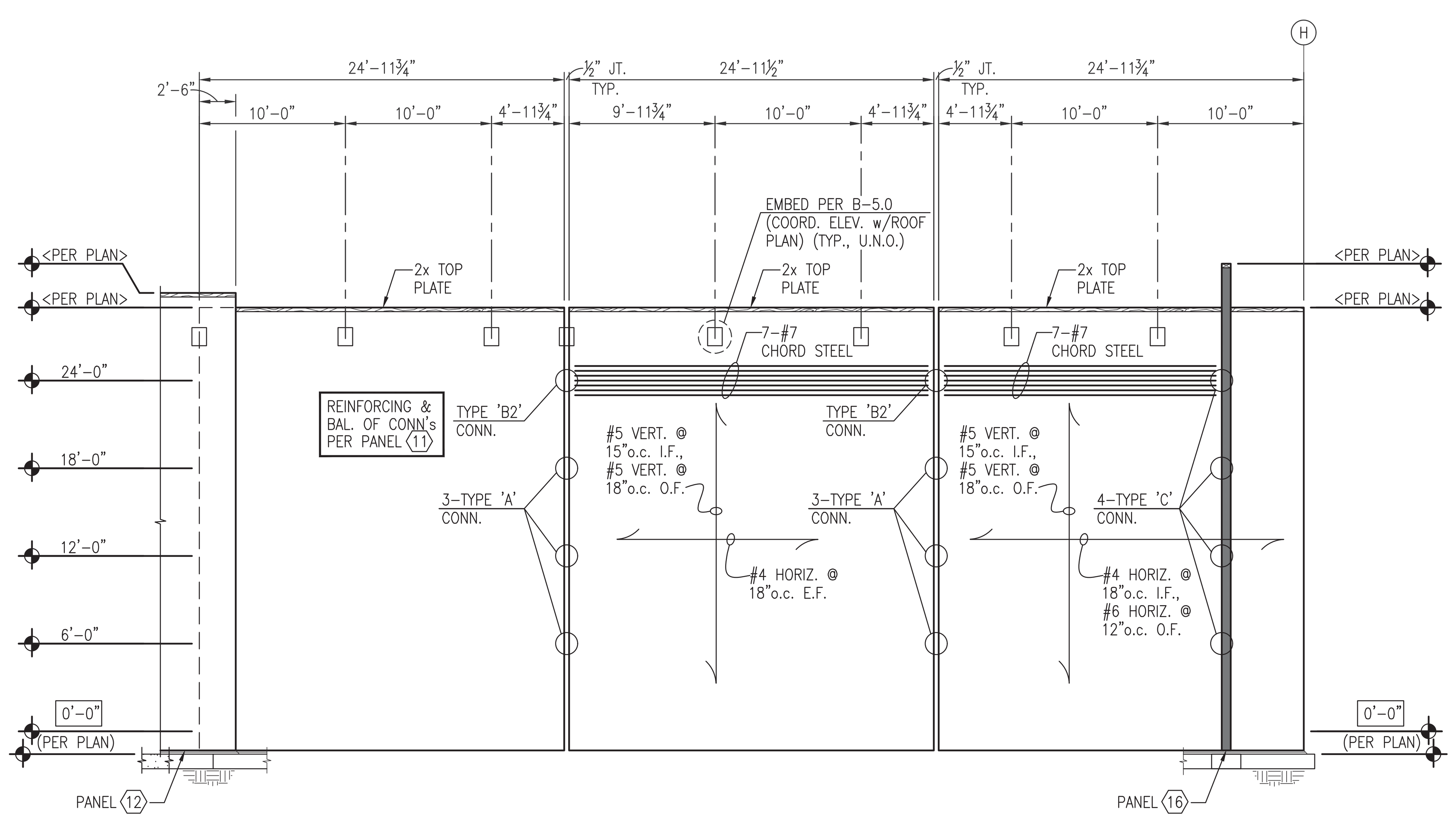
(9¼" THICK PANELS w/¾" MAX. REVEALS)



12

PARTIAL WEST P.C. PANEL ELEVATION 9¼" EAST OF GRID 1

(9¼" THICK PANEL w/¾" MAX. REVEALS)



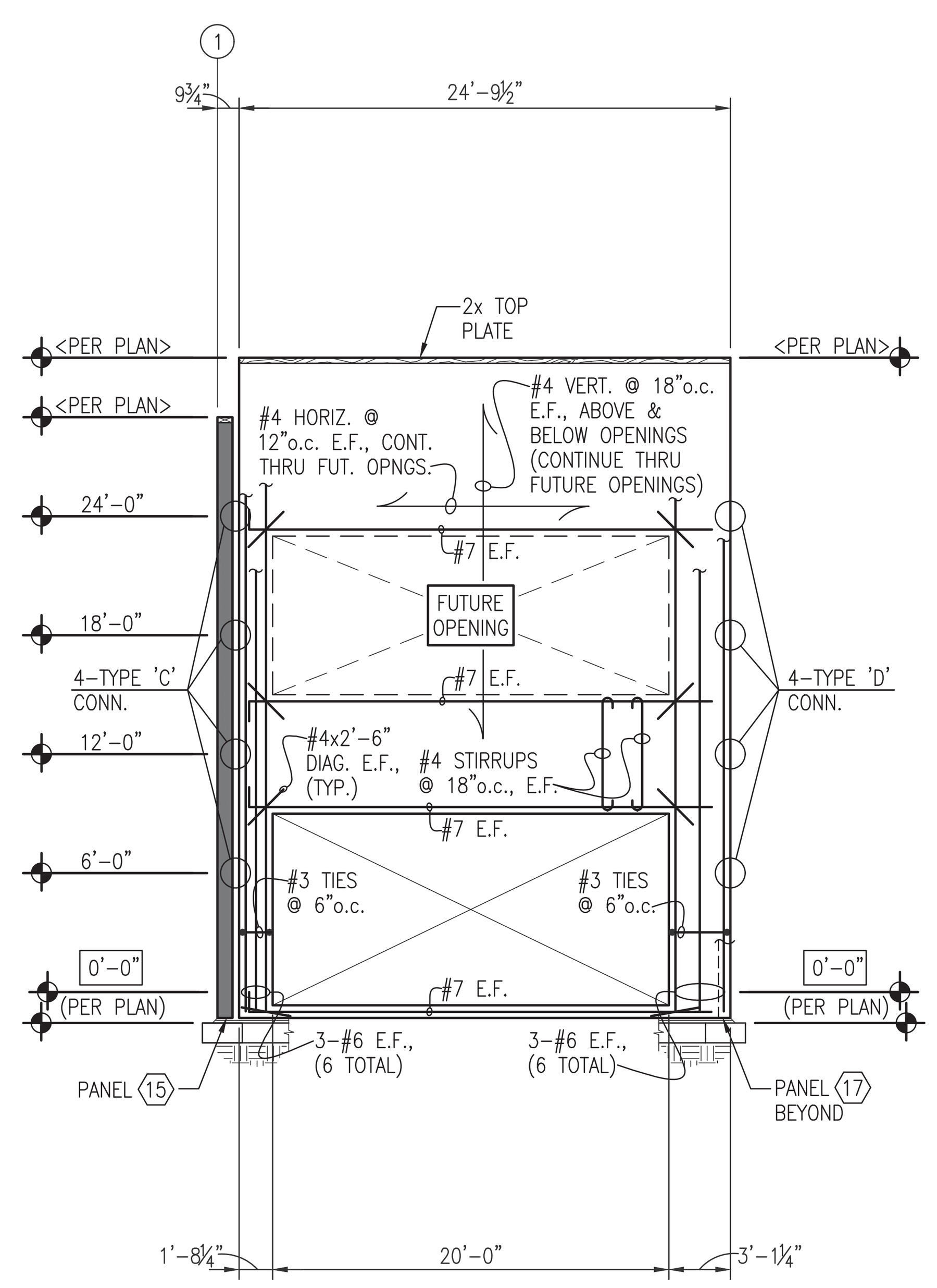
13

14

15

PARTIAL WEST P.C. PANEL ELEVATIONS AT GRID 1

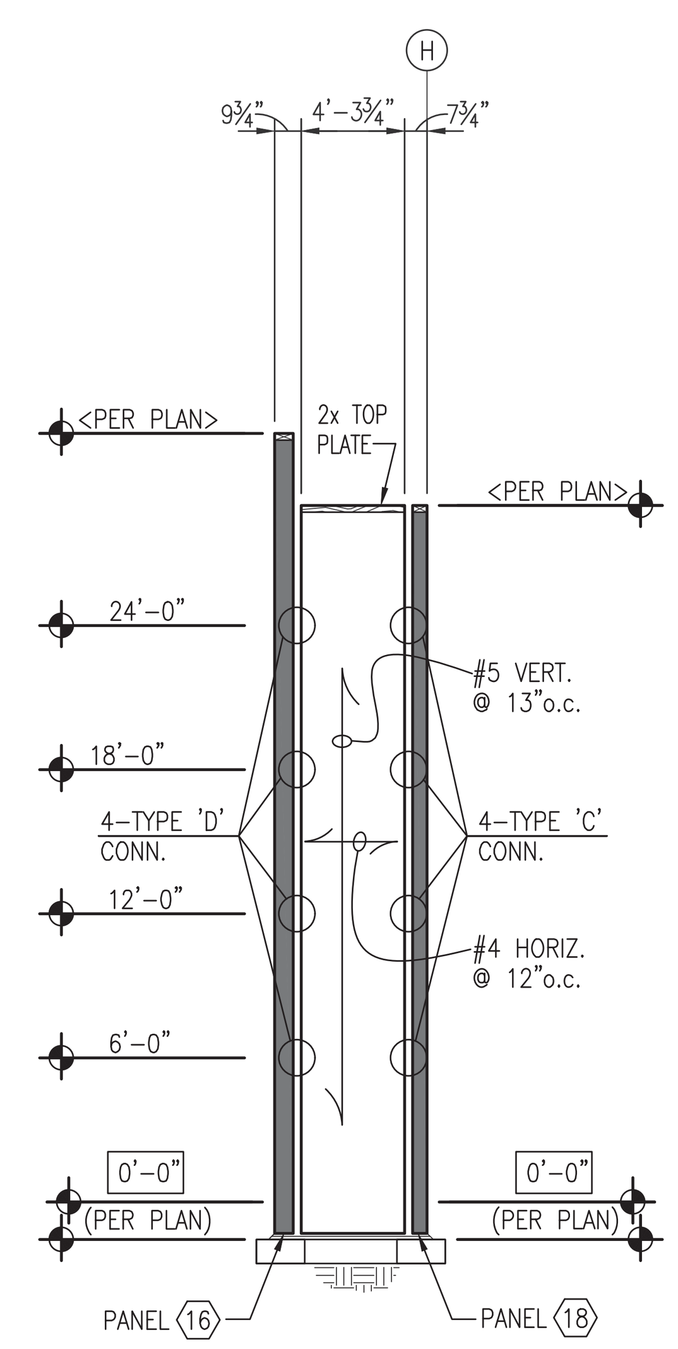
(9¼" THICK PANELS w/¾" MAX. REVEALS)



16

PARTIAL NORTH P.C. PANEL ELEVATION 5'-0" SOUTH OF GRID H

(9¼" THICK PANEL w/¾" MAX. REVEALS)



17

PARTIAL WEST P.C. PANEL ELEVATION 25'-0" EAST OF GRID 1

(7¼" THICK PANEL w/¾" MAX. REVEALS)

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PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: PANEL ELEVATIONS

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S6.2
10 OF 13
PROJECT NO: 18-40

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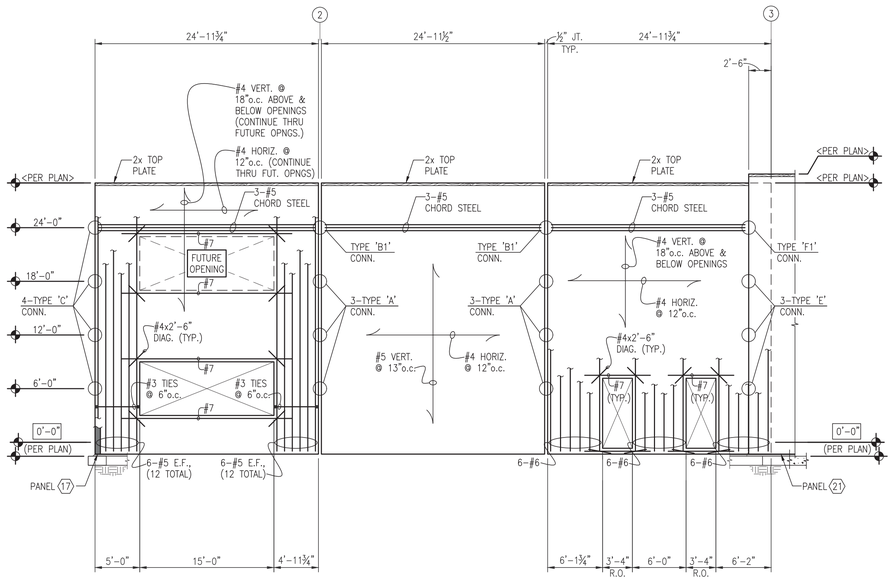
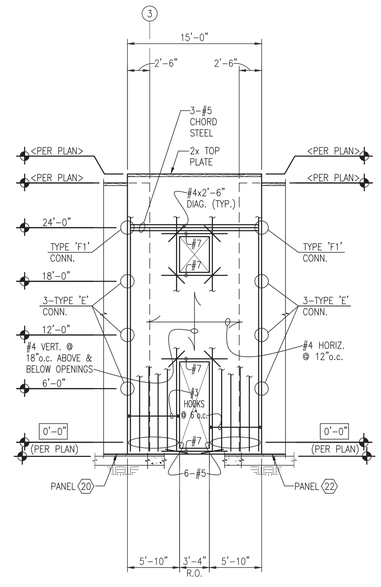


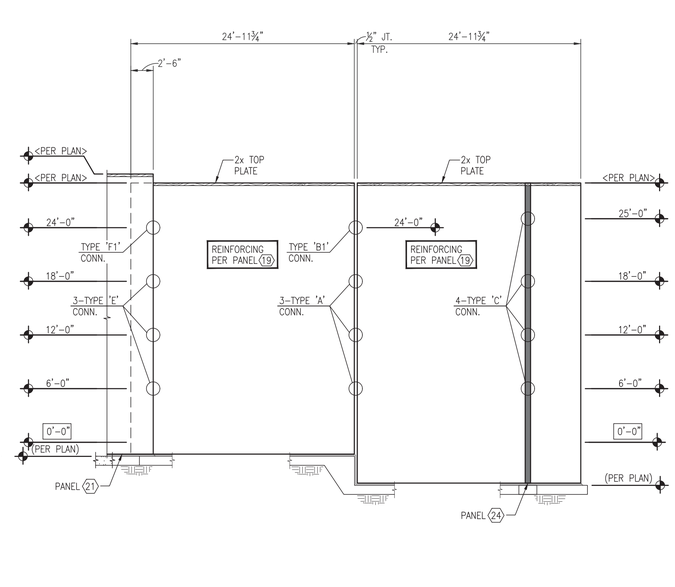
PARTIAL NORTH P.C. PANEL ELEVATIONS AT GRID (H)

(7¼" THICK PANELS w/¾" MAX. REVEALS)



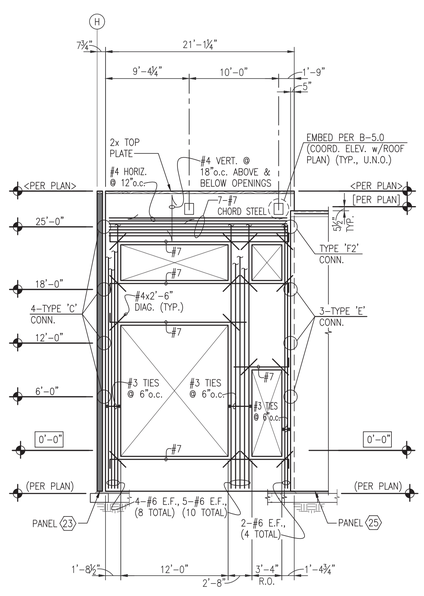
PARTIAL NORTH P.C. PANEL ELEVATION 7¼" SOUTH OF GRID (H)

(7¼" THICK PANEL w/¾" MAX. REVEALS)



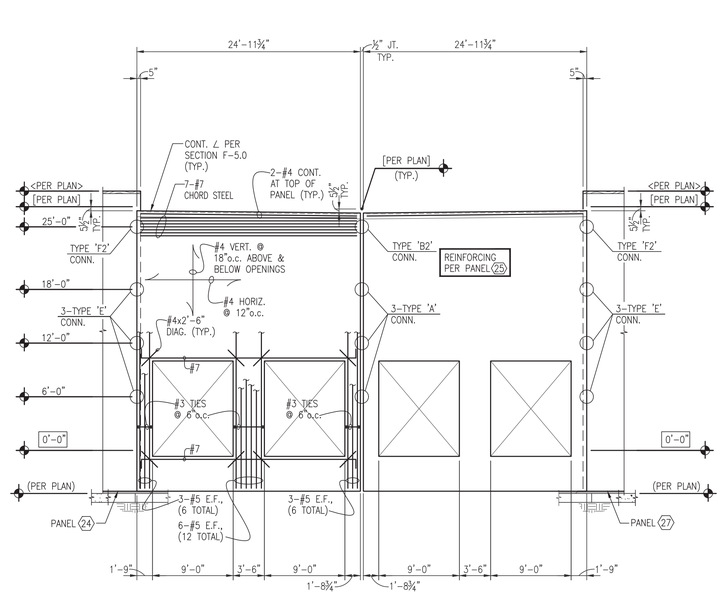
PARTIAL NORTH P.C. PANEL ELEVATIONS AT GRID (H)

(7¼" THICK PANELS w/¾" MAX. REVEALS)



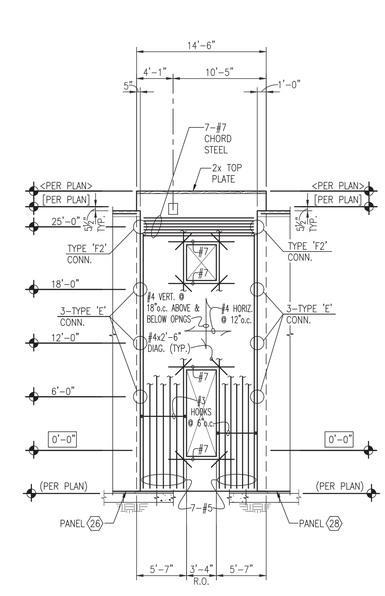
PARTIAL EAST P.C. PANEL ELEVATION 7¼" WEST OF GRID (4)

(7¼" THICK PANEL w/¾" MAX. REVEALS)



PARTIAL EAST P.C. PANEL ELEVATIONS AT GRID (4)

(7¼" THICK PANELS w/¾" MAX. REVEALS)



PARTIAL EAST P.C. PANEL ELEVATION 7¼" WEST OF GRID (4)

(7¼" THICK PANEL w/¾" MAX. REVEALS)

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REVISIONS

ISSUE NO.	DATE	ITEM
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PROFESSIONAL STAMP

JOHN C. HEADLAND — STATE OF WASHINGTON — 31757 — STRUCTURAL ENGINEER — PROFESSIONAL ENGINEER

Digitally signed by John Headland
Date: 2019.10.11 14:09:59 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: PANEL ELEVATIONS

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S6.3
PROJECT NO: 18-40
11 OF 13

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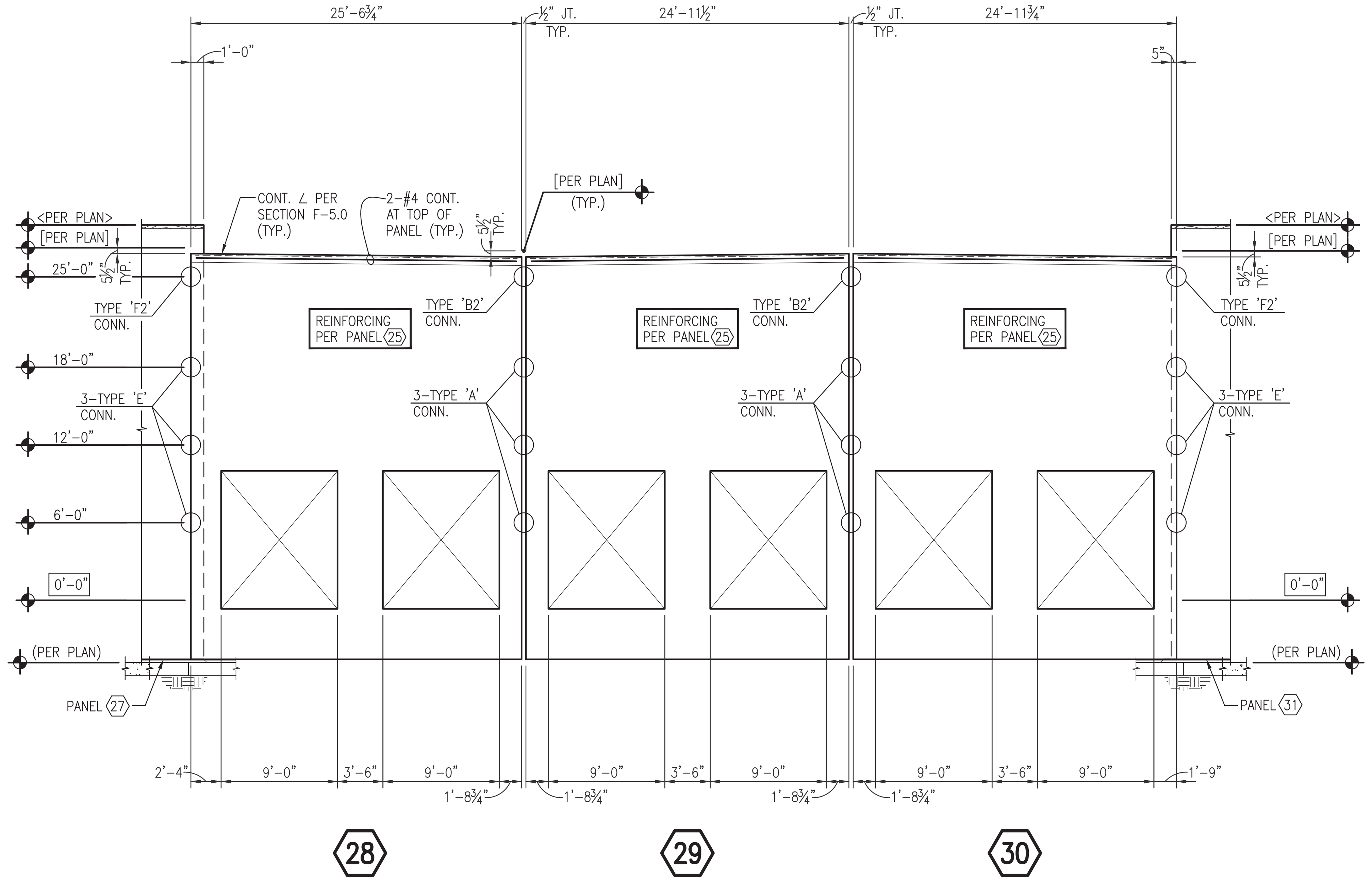
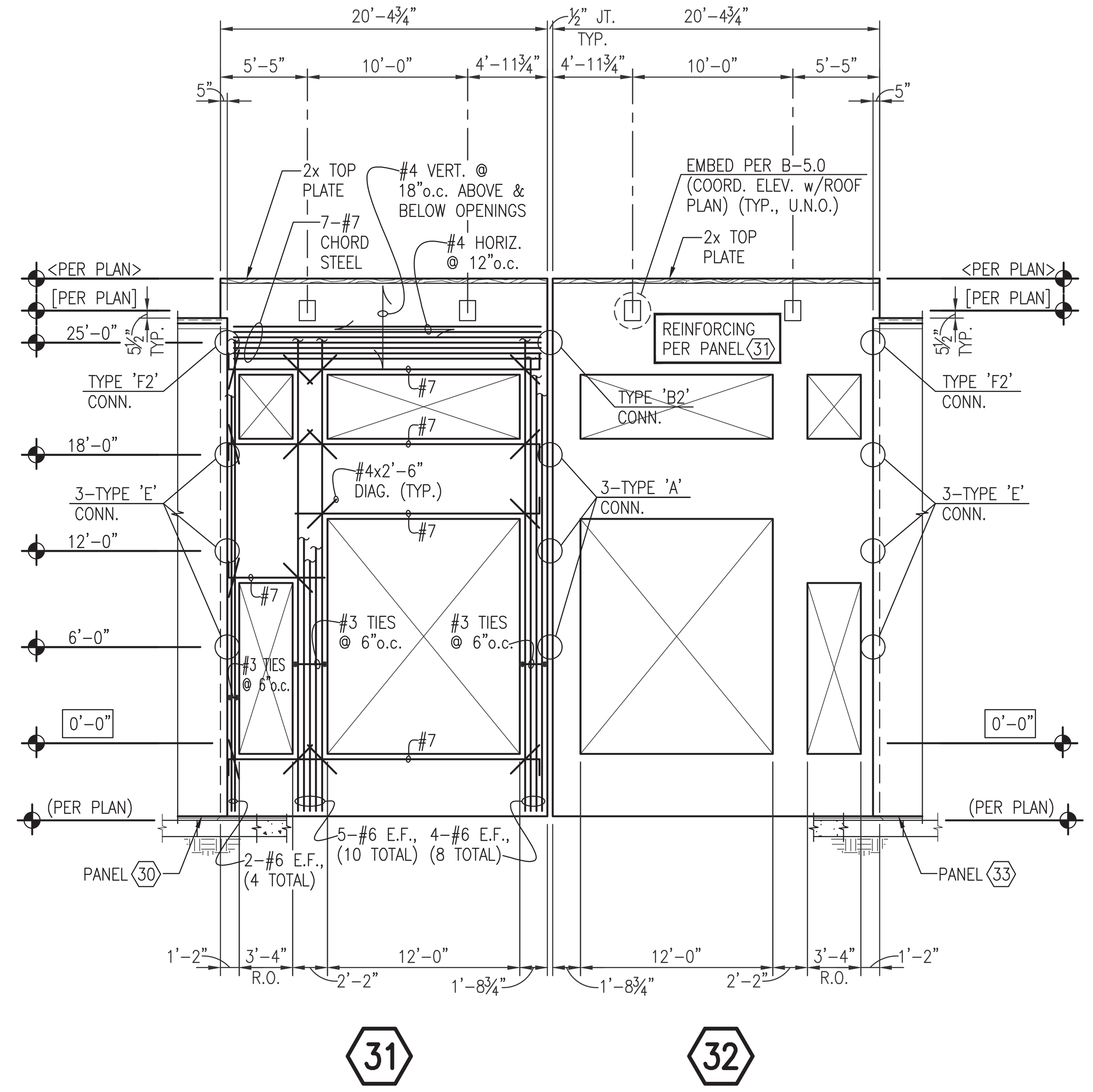


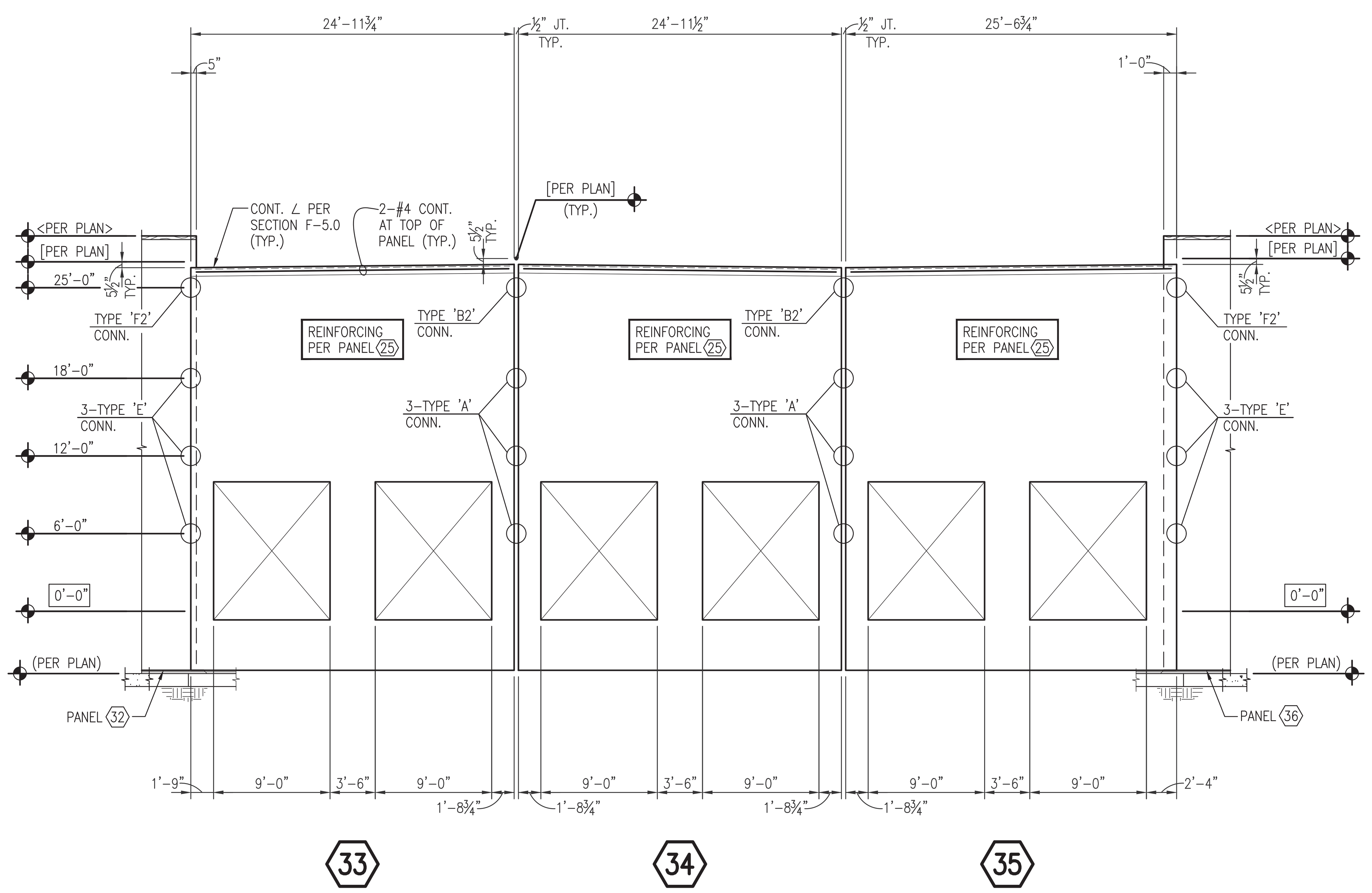
PARTIAL EAST P.C. PANEL ELEVATIONS AT GRID 4

(7¼" THICK PANELS w/¾" MAX. REVEALS)



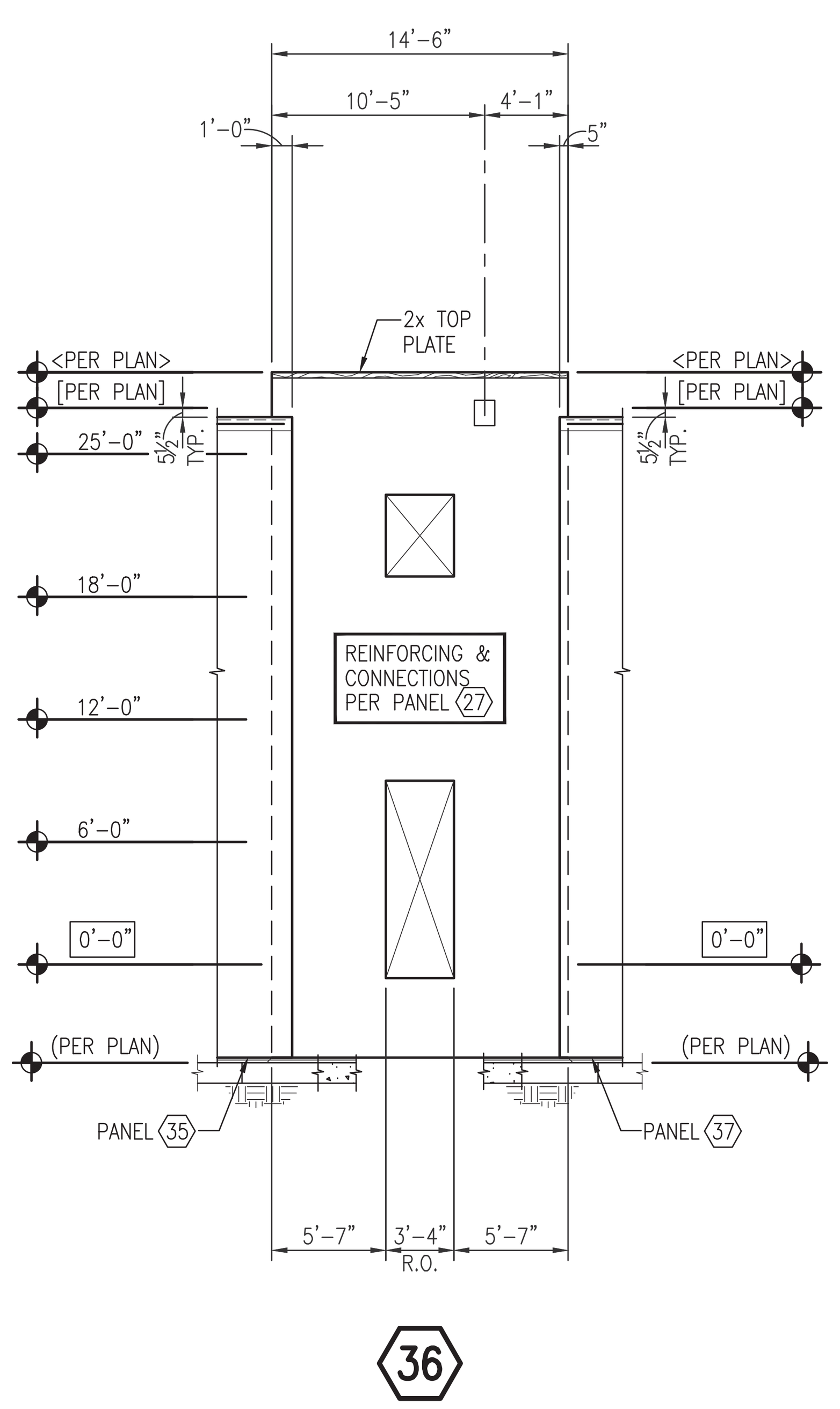
PARTIAL EAST P.C. PANEL ELEVATIONS 7¼" WEST OF GRID 4

(7¼" THICK PANELS w/¾" MAX. REVEALS)



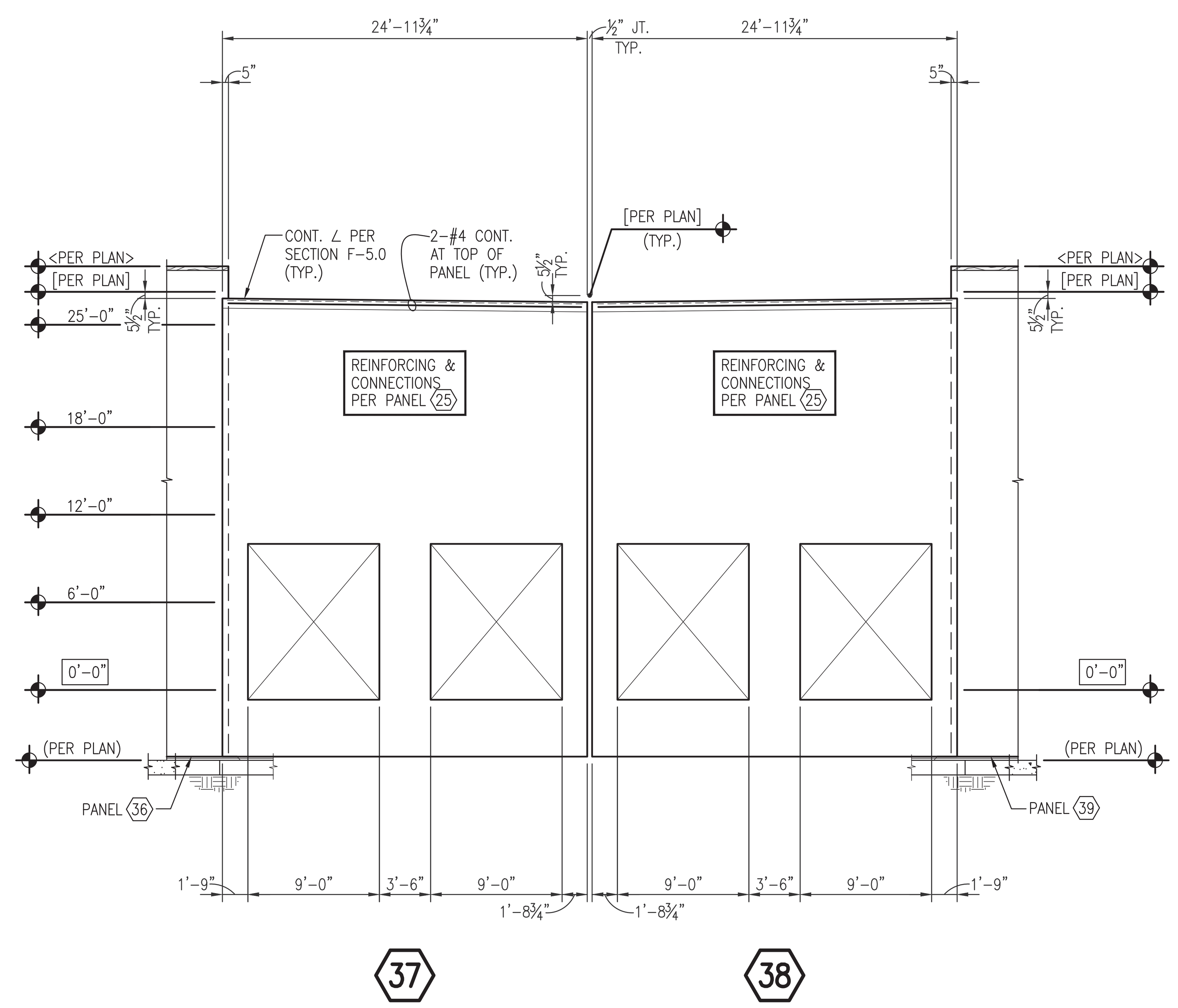
PARTIAL EAST P.C. PANEL ELEVATIONS AT GRID 4

(7¼" THICK PANELS w/¾" MAX. REVEALS)



PARTIAL EAST P.C. PANEL ELEVATION 7¼" WEST OF GRID 4

(7¼" THICK PANEL w/¾" MAX. REVEALS)



PARTIAL EAST P.C. PANEL ELEVATIONS AT GRID 4

(7¼" THICK PANELS w/¾" MAX. REVEALS)

SYNTHESIS PLLC
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NELSON DEVELOPMENT
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12503 Bel-Red Road, Suite 100
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REVISIONS

ISSUE NO.	DATE	ITEM
	10-11-19	PERMIT SET

PROFESSIONAL STAMP

JOHN C. HEADLAND, STATE OF WASHINGTON, 31757, STRUCTURAL ENGINEER, PROFESSIONAL ENGINEER

Digitally signed by John Headland
Date: 2019.10.11 14:09:39 -07'00'

PROJECT INFORMATION

NELSON 43
4301 78TH STREET SW
MUKILTEO, WA

SHEET INFORMATION

RELEASE FOR: PERMIT SUBMITTAL
TITLE: PANEL ELEVATIONS

DESIGNED BY: CT
DRAWN BY: AL, RB
REVIEWED BY: JH
APPROVED BY:
DATE: 10-11-19
SHEET NO: S6.4
PROJECT NO: 18-40
12 OF 13

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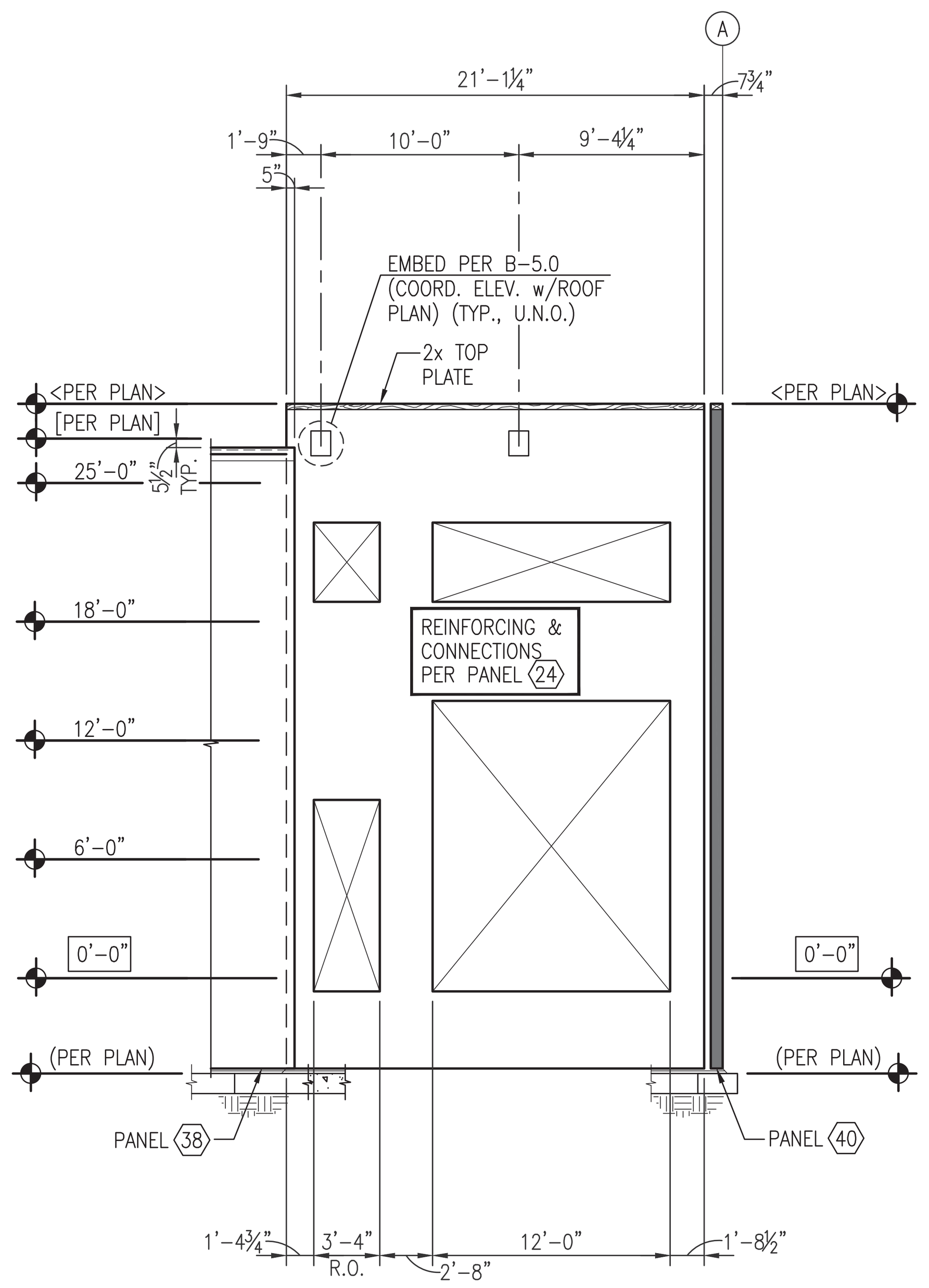
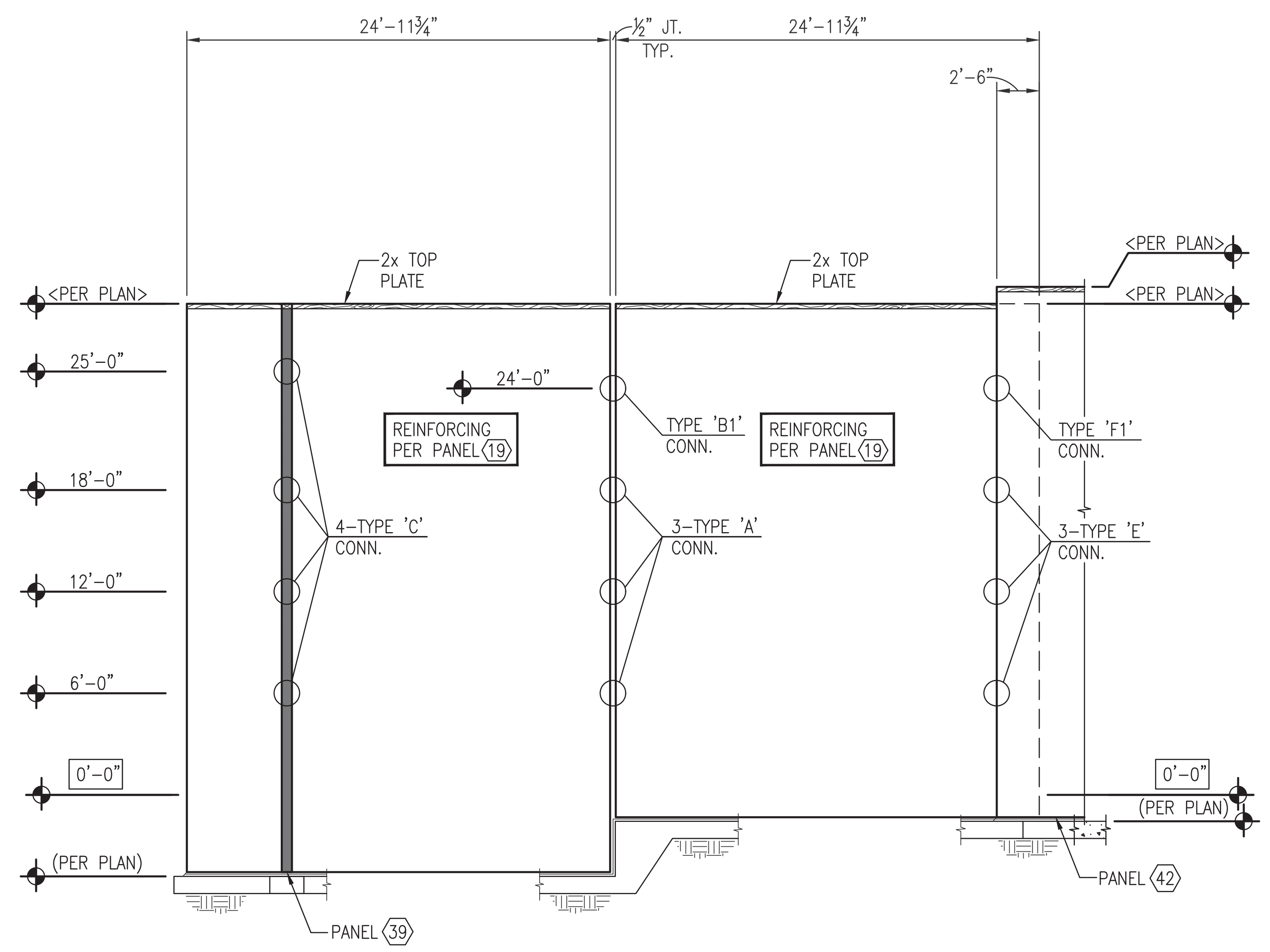


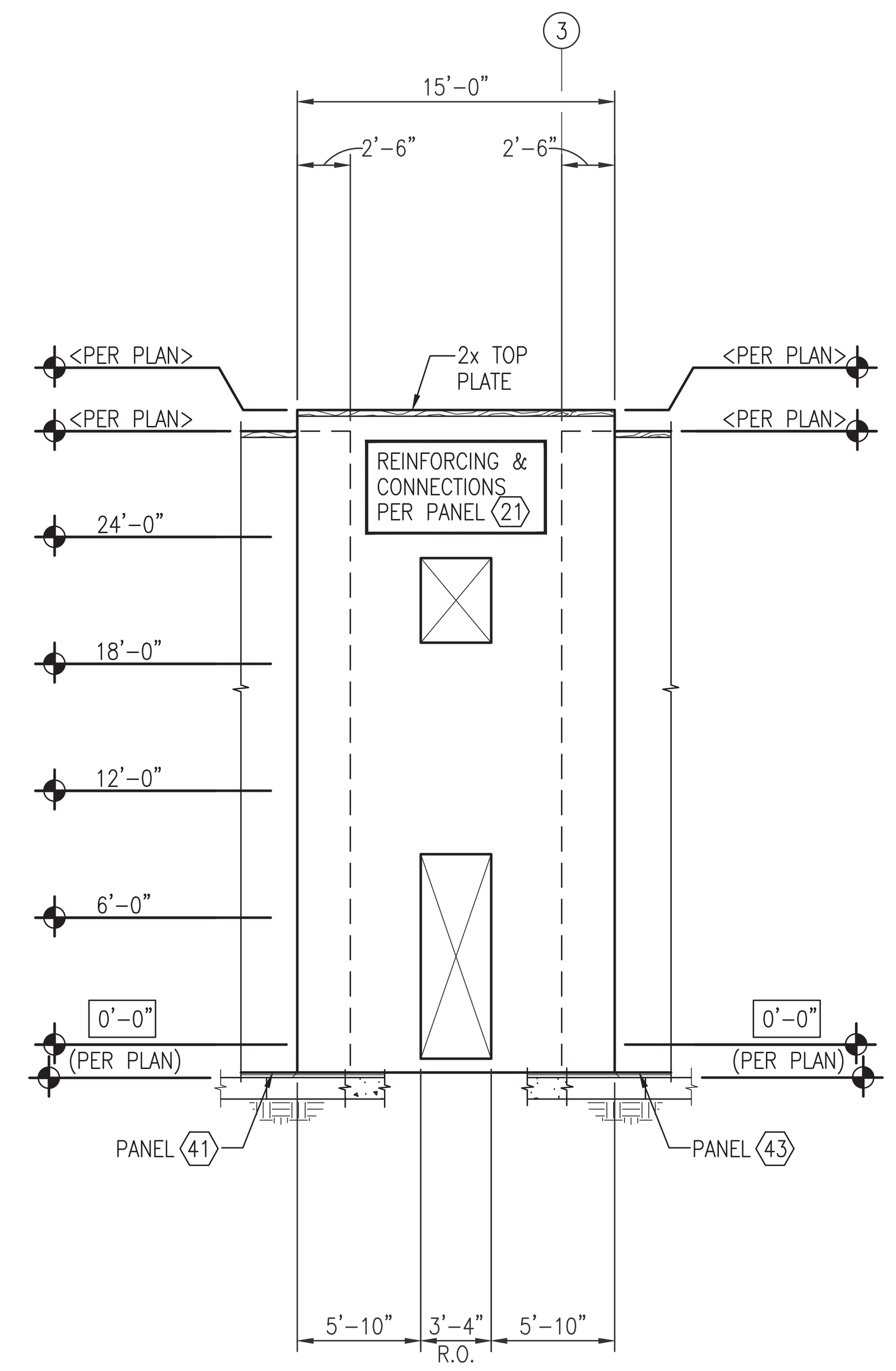
39

PARTIAL EAST
P.C. PANEL ELEVATION
7¼" WEST OF GRID 4
(7¼" THICK PANEL w/¾" MAX. REVEALS)



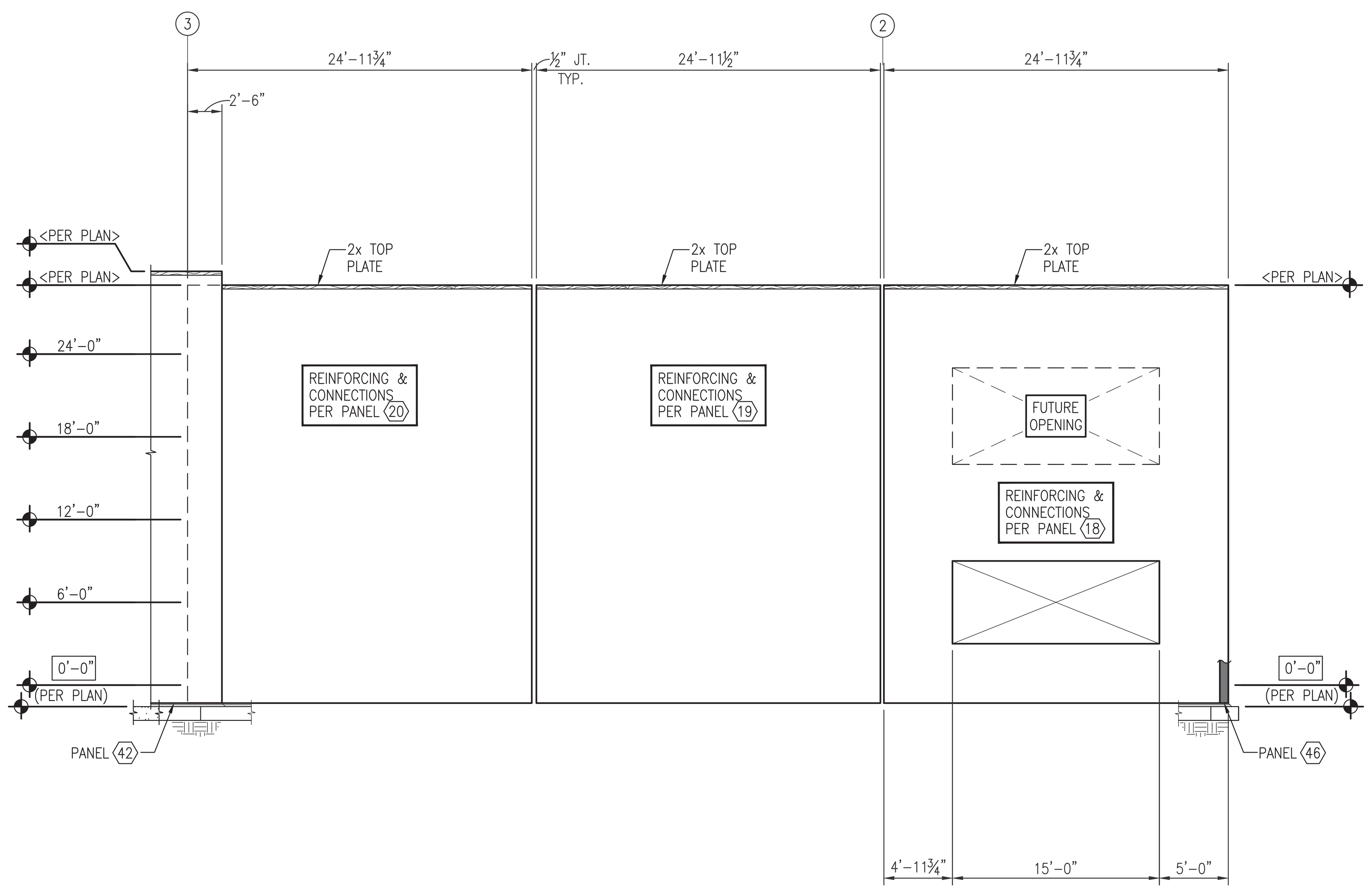
40 41

PARTIAL SOUTH P.C. PANEL ELEVATIONS AT GRID A
(7¼" THICK PANELS w/¾" MAX. REVEALS)



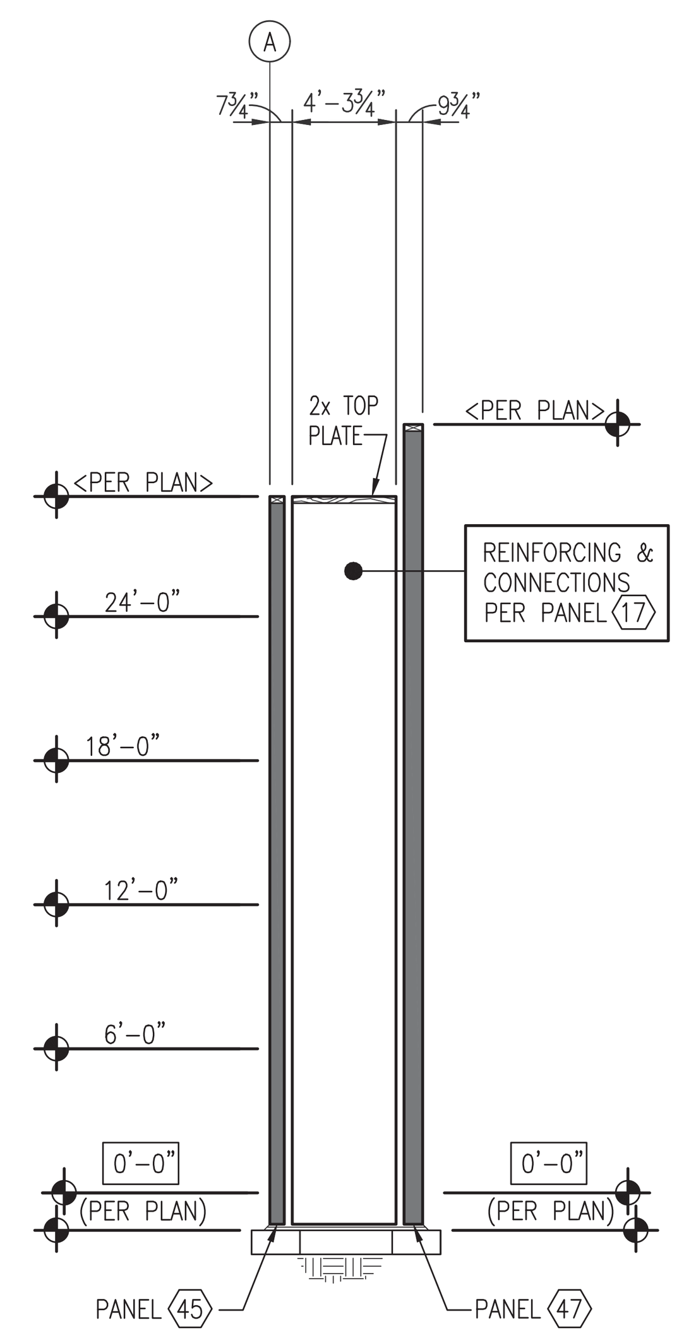
42

PARTIAL SOUTH
P.C. PANEL ELEVATION
7¼" NORTH OF GRID A
(7¼" THICK PANEL w/¾" MAX. REVEALS)



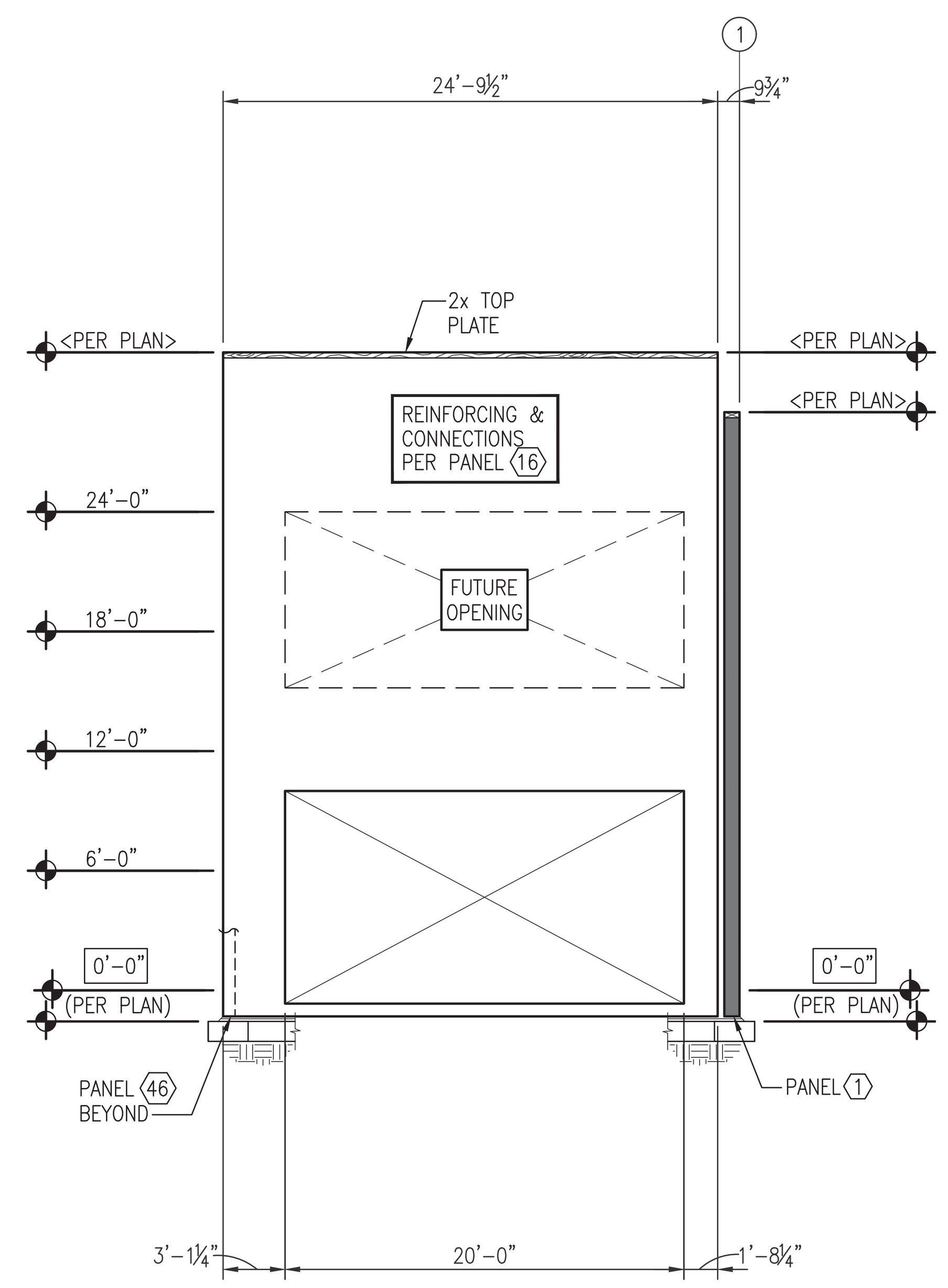
43 44 45

PARTIAL SOUTH P.C. PANEL ELEVATIONS AT GRID A
(7¼" THICK PANELS w/¾" MAX. REVEALS)



46

PARTIAL WEST
P.C. PANEL ELEVATION
25'-0" EAST OF GRID 1
(7¼" THICK PANEL w/¾" MAX. REVEALS)



47

PARTIAL NORTH
P.C. PANEL ELEVATION
5'-0" SOUTH OF GRID A
(9¼" THICK PANEL w/¾" MAX. REVEALS)

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SHEET INFORMATION

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13 OF 13
PROJECT NO: 18-40