

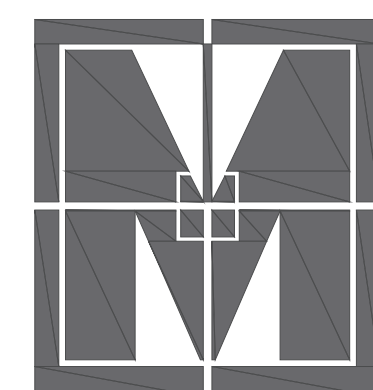


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TARWATER VETERINARIAN CLINIC



THE SEAL APPEARING
ON THIS DOCUMENT WAS
AUTHORIZED BY
ALAN R. MAGEE
TX NO. 7028
ON SEPTEMBER 26, 2024



MAGEE ARCHITECTS, L.P.

DESIGNERS ■ PLANNERS ■ INTERIORS

GRANDVIEW, TEXAS

SEPTEMBER 26, 2024

SET NUMBER _____

TARWATER VETERINARIAN CLINIC

802 E. CRINER STREET GRANDVIEW, TEXAS 76050

MAGEE ARCHITECTS, L. P.
DESIGNERS • PLANNERS • INTERIORS

BUILDING DATA:

BUILDING CODE: 2015 INTERNATIONAL BUILDING CODE WITH COG AMENDMENTS
 MECHANICAL CODE: 2015 INTERNATIONAL MECHANICAL CODE WITH COG AMENDMENTS
 PLUMBING CODE: 2015 INTERNATIONAL PLUMBING CODE WITH COG AMENDMENTS
 ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE WITH COG AMENDMENTS
 ENERGY CODE: 2015 INTERNATIONAL ENERGY CODE WITH COG AMENDMENTS
 FIRE CODE: 2015 INTERNATIONAL FIRE CODE WITH COG AMENDMENTS

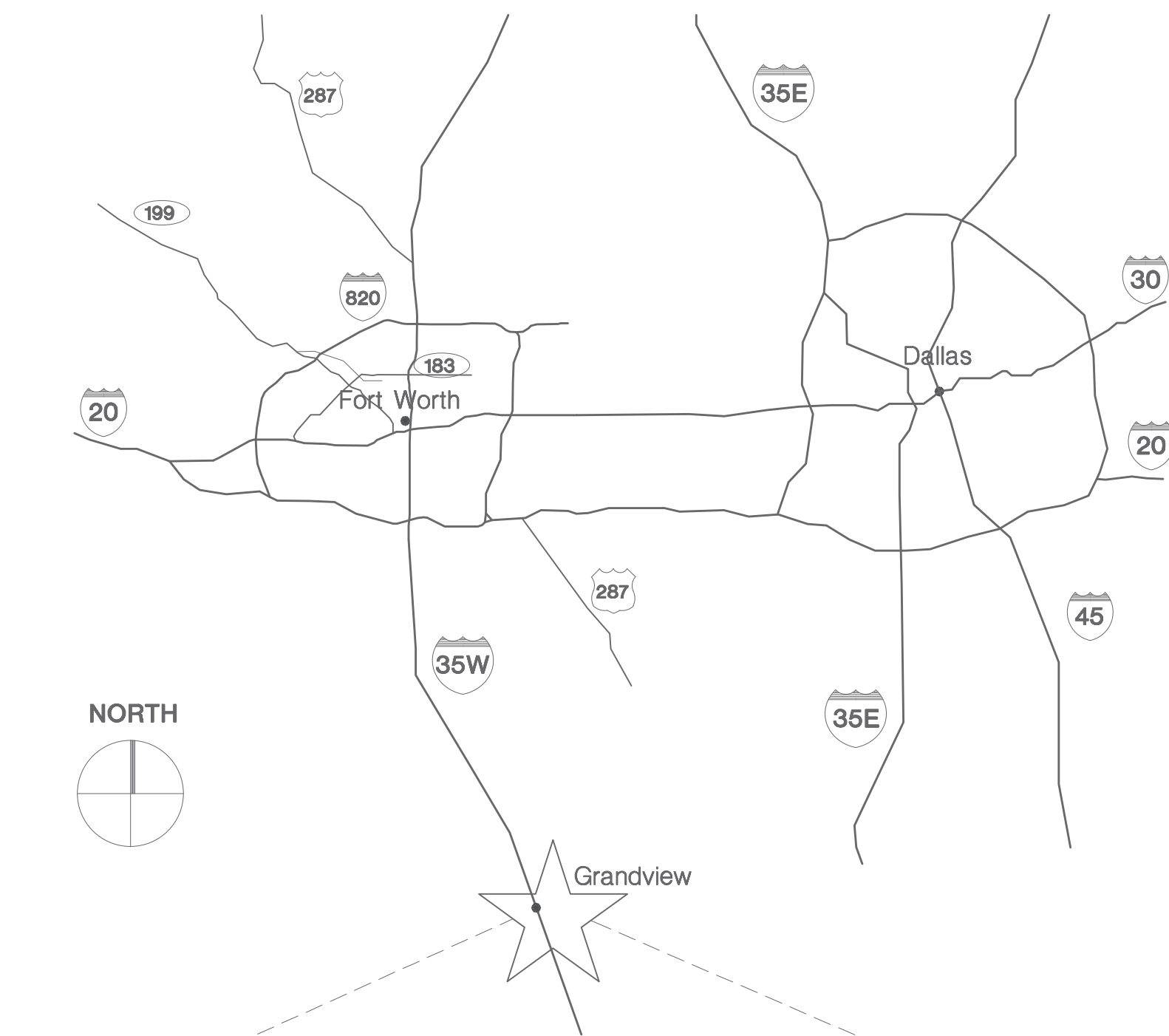
BUILDING AREA: 5,375 SQ. FT. UNDER ROOF (4,880 SQ. FT. A/C)

CONSTRUCTION TYPE: V-B
 OCCUPANCY: B
 FIRE SPRINKLER SYSTEM: NO
 OCCUPANT LOAD: 49
 REQUIRED # OF EXITS: 2
 FIRE RATING EXTERIOR LOAD BEARING: 0 HOUR
 FIRE RATING INTERIOR LOAD BEARING: 0 HOUR
 SITE EXISTING ZONING TYPE: C-3

ADD ALTERNATE #1:

- STONE CLAD CORNER COLUMNS AT COLUMN LINES A3 AND A6
- 4 SCONCES ON STONE CLAD CORNER COLUMNS
- ALUMINUM TRELLIS ON BOTH SIDES OF THE ENTRY CANOPY

LOCATION MAP



TARWATER VETERINARIAN CLINIC
802 E. CRINER ST.
GRANDVIEW, TX 76050

ABBREVIATIONS

ACOUS	- ACOUSTIC	HMAC	- HOT MIX ASPHALTIC CONCRETE
ALUM	- ALUMINUM	HORIZ	- HORIZONTAL
ALT	- ALTERNATE	ID	- INSIDE DIAMETER
ADJ	- ADJUSTABLE	INSUL	- INSULATION
A D	- AREA DRAIN	INT	- INTERIOR
AGG	- AGGREGATE	JST	- JOIST
ASPH	- ASPHALT	JT	- JOINT
BOT	- BOTTOM	LAM	- LAMINATED
BASMT	- BASEMENT	MULL	- MULLION
B M	- BENCH MARK	M H	- MANHOLE
BD	- BOARD	MFG	- MANUFACTURER
BLDG	- BUILDING	M O	- MASONRY OPENING
CAB	- CABINET	MAX	- MAXIMUM
C I	- CAST IRON	M T	- METAL THRESHOLD
CLG	- CEILING	MIN	- MINIMUM
CEM	- CEMENT	MISC	- MISCELLANEOUS
CJ	- CONTROL JOINT	N I C	- NOT IN CONTRACT
C	- CENTER LINE	O C	- ON CENTER
CMU	- CONCRETE MASONRY UNIT	OPG	- OPENING
C O	- CLEAN OUT	O D	- OUTSIDE DIAMETER
COL	- COLUMN	PLAS	- PLASTER
CONC	- CONCRETE	PL	- PLATE
CONST	- CONSTRUCTION	RT	- POINT
C T	- CERAMIC TILE	POL	- POLISHED
CONT	- CONTINUOUS	RADIUS	- RADIUS
CONTR	- CONTRACTOR	REINF	- REINFORCED
C S	- COUNTERSUNK	R D	- ROOF DRAIN
DET	- DETAIL	SPEC	- SPECIFICATION
DIM	- DIMENSION	SCHED	- SCHEDULE
DN	- DOWN	SECT	- SECTION
D S	- DOWNSPOUT	STD	- STANDARD
EW	- EACH WAY	STRUCT	- STRUCTURAL
ELEC	- ELECTRIC	STL	- STEEL
EWC	- ELECTRIC WATER COOLER	STL PL	- STEEL PLATE
ELEV	- ELEVATION	TERR	- TERRAZZO
E J	- EXPANSION JOINT	THK	- THICK
EXT	- EXTERIOR	T&G	- TONGUE & GROOVE
FIN	- FINISH(ED)	TYP	- TYPICAL
FLR	- FLOOR	VCT	- VINYL COMPOSITION TILE
F D	- FLOOR DRAIN	VERT	- VERTICAL
FTG	- FOOTING	V W C	- VINYL WALL COVERING
FV	- FIELD VERIFY	VEST	- VESTIBULE
GALV	- GALVANIZED	VOL	- VOLUME
G I	- GALVANIZED IRON	W H	- WATER HEATER
GA	- GAUGE	W C	- WATER CLOSET
GL	- GLASS, GLAZED	WDW	- WINDOW
GYP	- GYPSUM	W P	- WORKING POINT
HC	- HANDICAPPED	WD	- WOOD
HT	- HEIGHT	W/	- WITH
H M	- HOLLOW METAL	YD	- YARD

SYMBOLS LEGEND

	WALL SECTION LOCATION AND NUMBER
	DETAIL INDICATION AND NUMBER
	ROOM NUMBER
	DOOR NUMBER
	WINDOW DESIGNATION
	FINISHED FLOOR ELEVATION
	ELEVATION INDICATION
	WALL TYPE
	REVISION NUMBER
	IMAGE NUMBER/SHEET NUMBER

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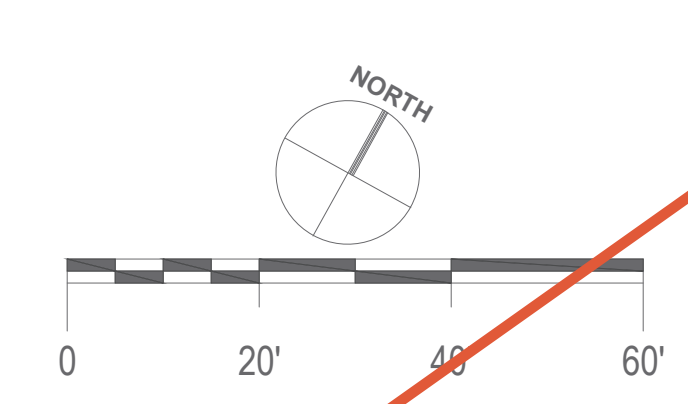
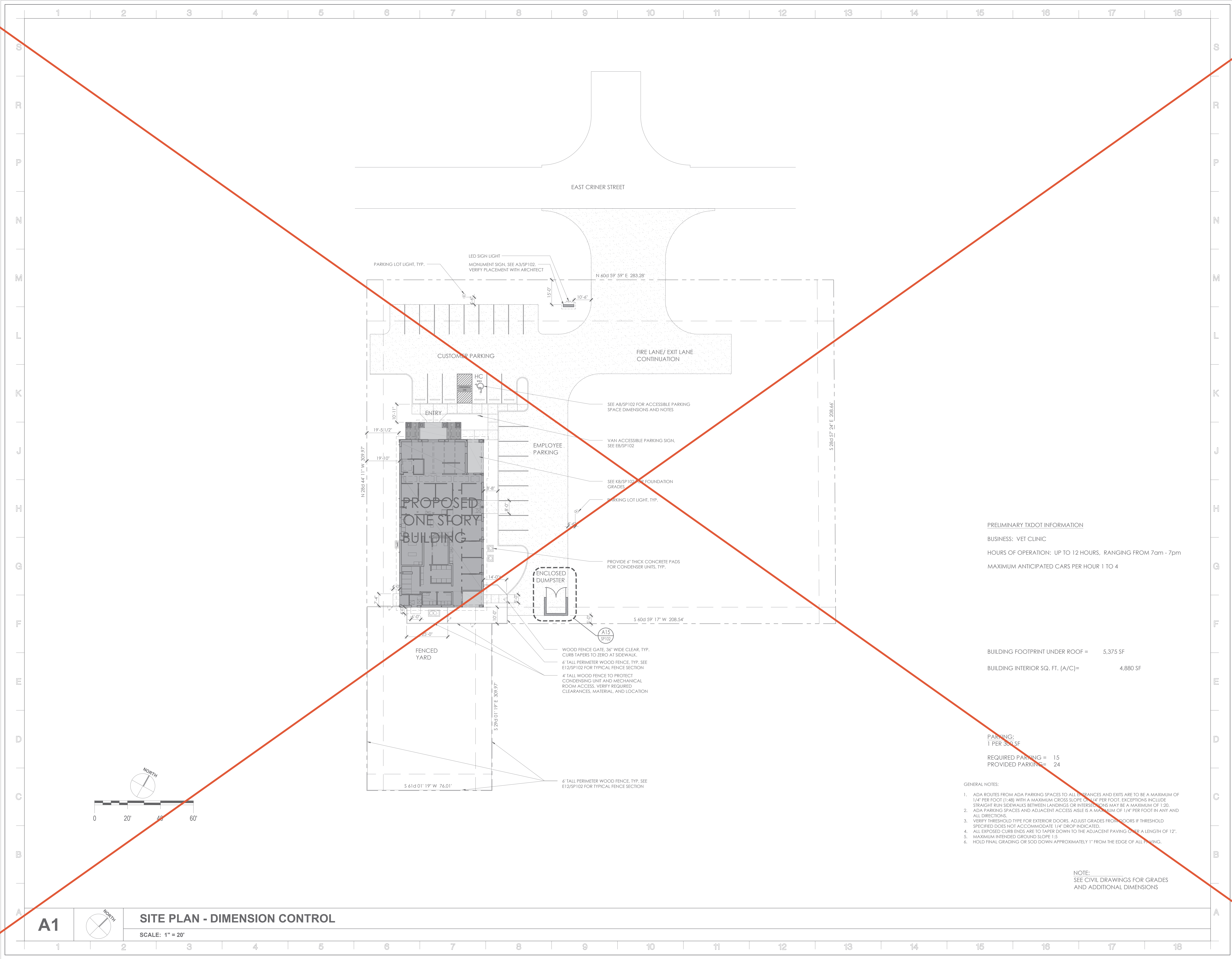
SP101	ARCHITECTURAL SITE PLAN - DIMENSION CONTROL
SP102	SITE DETAILS
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A002	ROOM FINISH & DOOR SCHEDULE, TYPES
A003	WINDOW SCHEDULE & DETAILS
A004	DOOR DETAILS
A101	FLOOR PLAN
A102	ROOF PLAN AND PARTIAL FLOOR PLAN
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M002	MECHANICAL SCHEDULES
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P001	PLUMBING GENERAL NOTES AND LEGENDS
P002	PLUMBING SCHEDULES
P200	UNDER FLOOR PLUMBING PLAN
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Alan R. Magee



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SET NUMBER _____



PRELIMINARY TxDOT INFORMATION
 BUSINESS: VET CLINIC
 HOURS OF OPERATION: UP TO 12 HOURS, RANGING FROM 7am - 7pm
 MAXIMUM ANTICIPATED CARS PER HOUR 1 TO 4

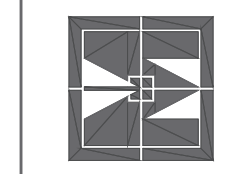
BUILDING FOOTPRINT UNDER ROOF = 5,375 SF
 BUILDING INTERIOR SQ. FT. [A/C]= 4,880 SF

PARKING:
 1 PER 300 SF
 REQUIRED PARKING = 15
 PROVIDED PARKING = 24

- GENERAL NOTES:
- ADA ROUTES FROM ADA PARKING SPACES TO ALL ENTRANCES AND EXITS ARE TO BE A MAXIMUM OF 1/4" PER FOOT (1.48) WITH A MAXIMUM CROSS SLOPE OF 1/4" PER FOOT. EXCEPTIONS INCLUDE STRAIGHT RUN SIDEWALKS BETWEEN LANDINGS OR INTERSECTIONS MAY BE A MAXIMUM OF 1:20.
 - ADA PARKING SPACES AND ADJACENT ACCESS AISLE IS A MAXIMUM OF 1/4" PER FOOT IN ANY AND ALL DIRECTIONS.
 - VERIFY THRESHOLD TYPE FOR EXTERIOR DOORS. ADJUST GRADES FROM DOORS IF THRESHOLD SPECIFIED DOES NOT ACCOMMODATE 1/4" DROP INDICATED.
 - ALL EXPOSED CURB ENDS ARE TO TAPER DOWN TO THE ADJACENT PAVING OVER A LENGTH OF 12'.
 - MAXIMUM INTENDED GROUND SLOPE 1:5
 - HOLD FINAL GRADING OR SOD DOWN APPROXIMATELY 1" FROM THE EDGE OF ALL PAVING.

NOTE:
 SEE CIVIL DRAWINGS FOR GRADES
 AND ADDITIONAL DIMENSIONS

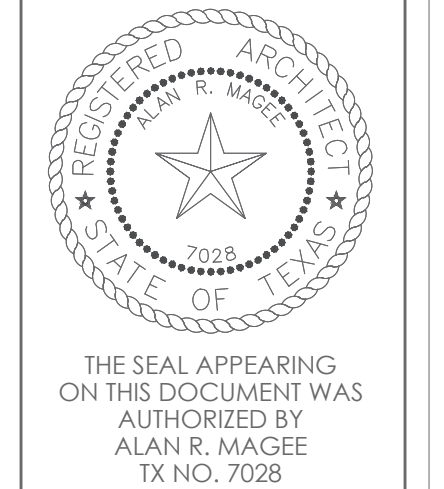
A1 **SITE PLAN - DIMENSION CONTROL**
 SCALE: 1" = 20'



TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: PF
 REVISED:

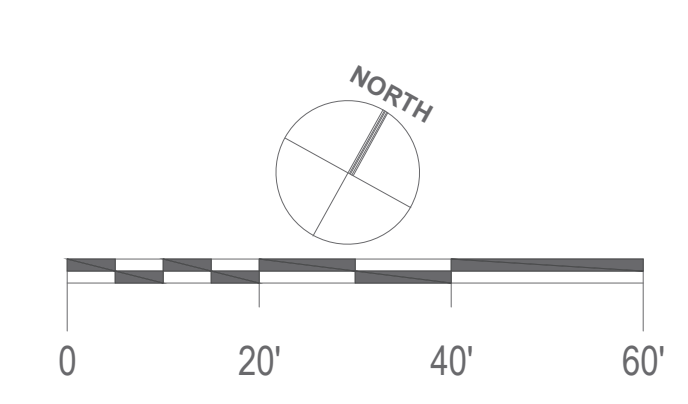
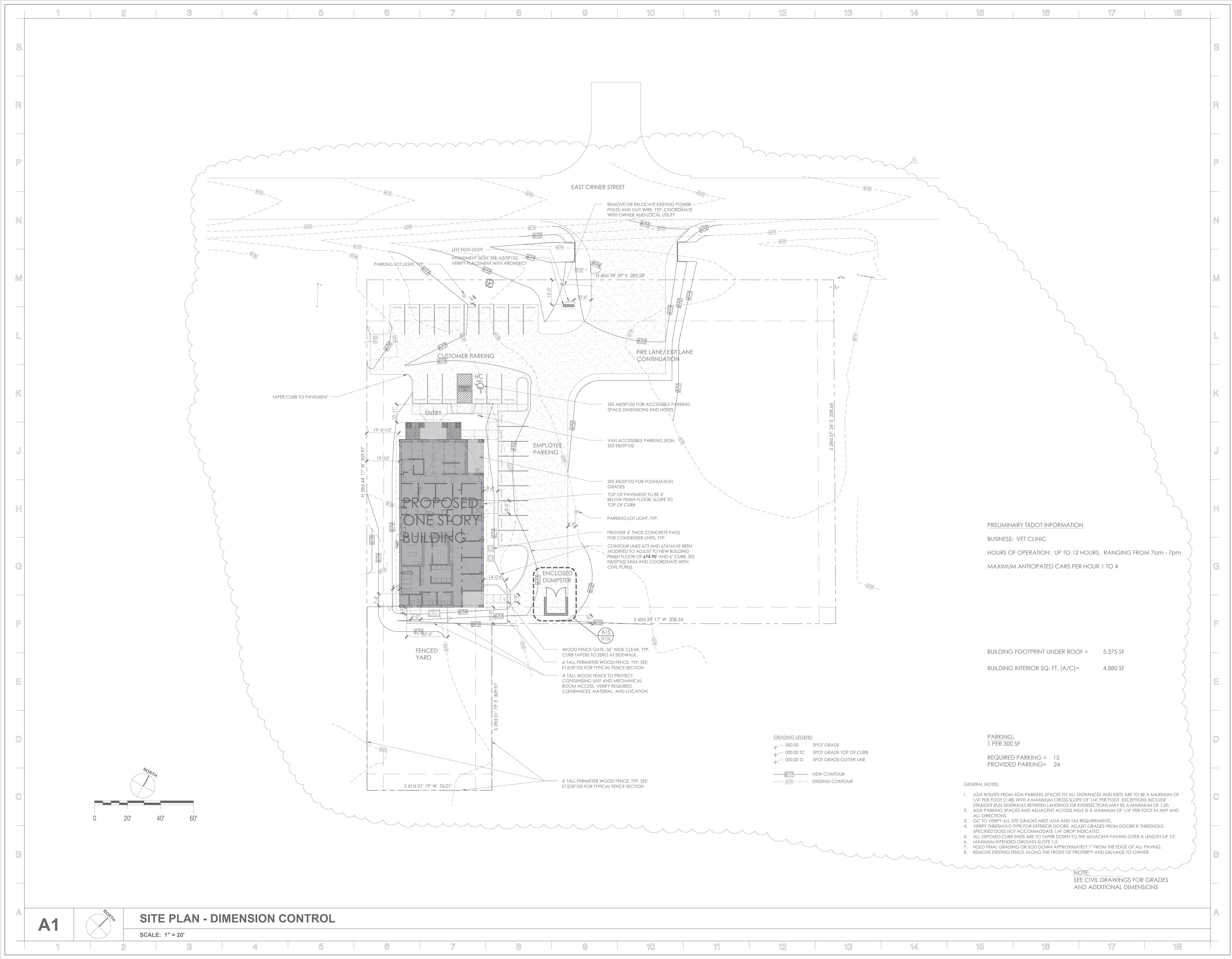
Alan R. Magee



SHEET CONTENT
 SITE PLAN DIMENSION CONTROL

SHEET NUMBER

SP101



A1

SITE PLAN - DIMENSION CONTROL

SCALE: 1" = 20'

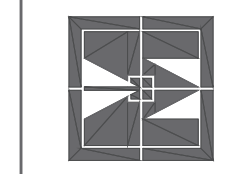
PRELIMINARY TXDOT INFORMATION
 BUSINESS: VET CLINIC
 HOURS OF OPERATION: UP TO 12 HOURS, RANGING FROM 7am - 7pm
 MAXIMUM ANTICIPATED CARS PER HOUR 1 TO 4

BUILDING FOOTPRINT UNDER ROOF = 5,375 SF
 BUILDING INTERIOR SQ. FT. [A/C]= 4,880 SF

PARKING:
 1 PER 300 SF
 REQUIRED PARKING = 15
 PROVIDED PARKING = 24

- GENERAL NOTES:
- ADA ROUTES FROM ADA PARKING SPACES TO ALL ENTRANCES AND EXITS ARE TO BE A MAXIMUM OF 1/4" PER FOOT (1.48) WITH A MAXIMUM CROSS SLOPE OF 1/4" PER FOOT. EXCEPTIONS INCLUDE STRAIGHT RUN SIDEWALKS BETWEEN LANDINGS OR INTERSECTIONS MAY BE A MAXIMUM OF 1:20.
 - ADA PARKING SPACES AND ADJACENT ACCESS AISLE IS A MAXIMUM OF 1/4" PER FOOT IN ANY AND ALL DIRECTIONS.
 - GC TO VERIFY ALL SITE GRADES MEET ADA AND TAS REQUIREMENTS.
 - VERIFY THRESHOLD TYPE FOR EXTERIOR DOORS. ADJUST GRADES FROM DOORS IF THRESHOLD SPECIFIED DOES NOT ACCOMMODATE 1/4" DROP INDICATED.
 - ALL EXPOSED CURB ENDS ARE TO TAPER DOWN TO THE ADJACENT PAVING OVER A LENGTH OF 12".
 - MAXIMUM INTENDED GROUND SLOPE 1:5
 - HOLD FINAL GRADING OR SOCD DOWN APPROXIMATELY 1" FROM THE EDGE OF ALL PAVING.
 - REMOVE EXISTING FENCE ALONG THE FRONT OF PROPERTY AND SALVAGE TO OWNER

NOTE:
 SEE CIVIL DRAWINGS FOR GRADES
 AND ADDITIONAL DIMENSIONS



TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: PF
 REVISED: 10/31/2024

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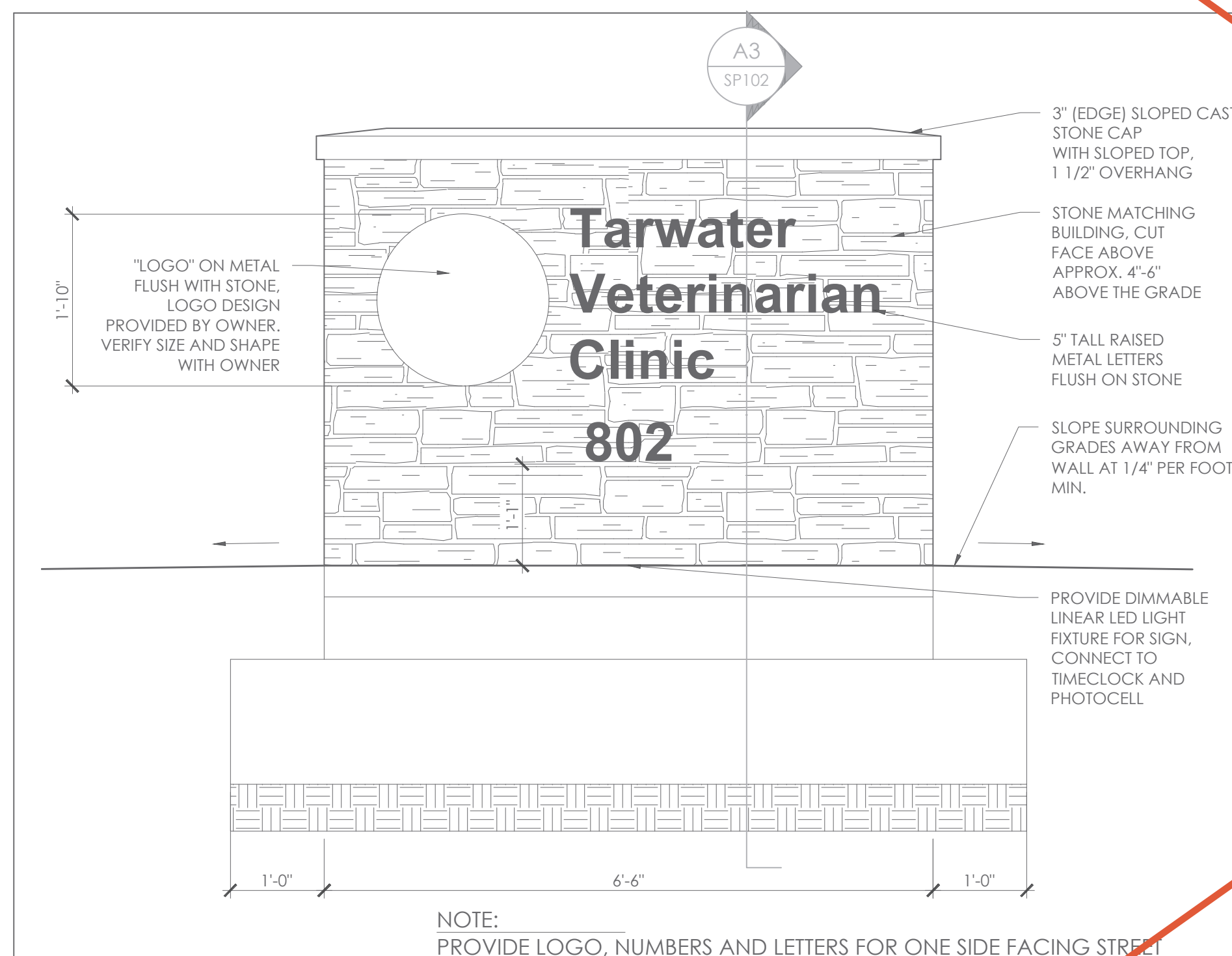


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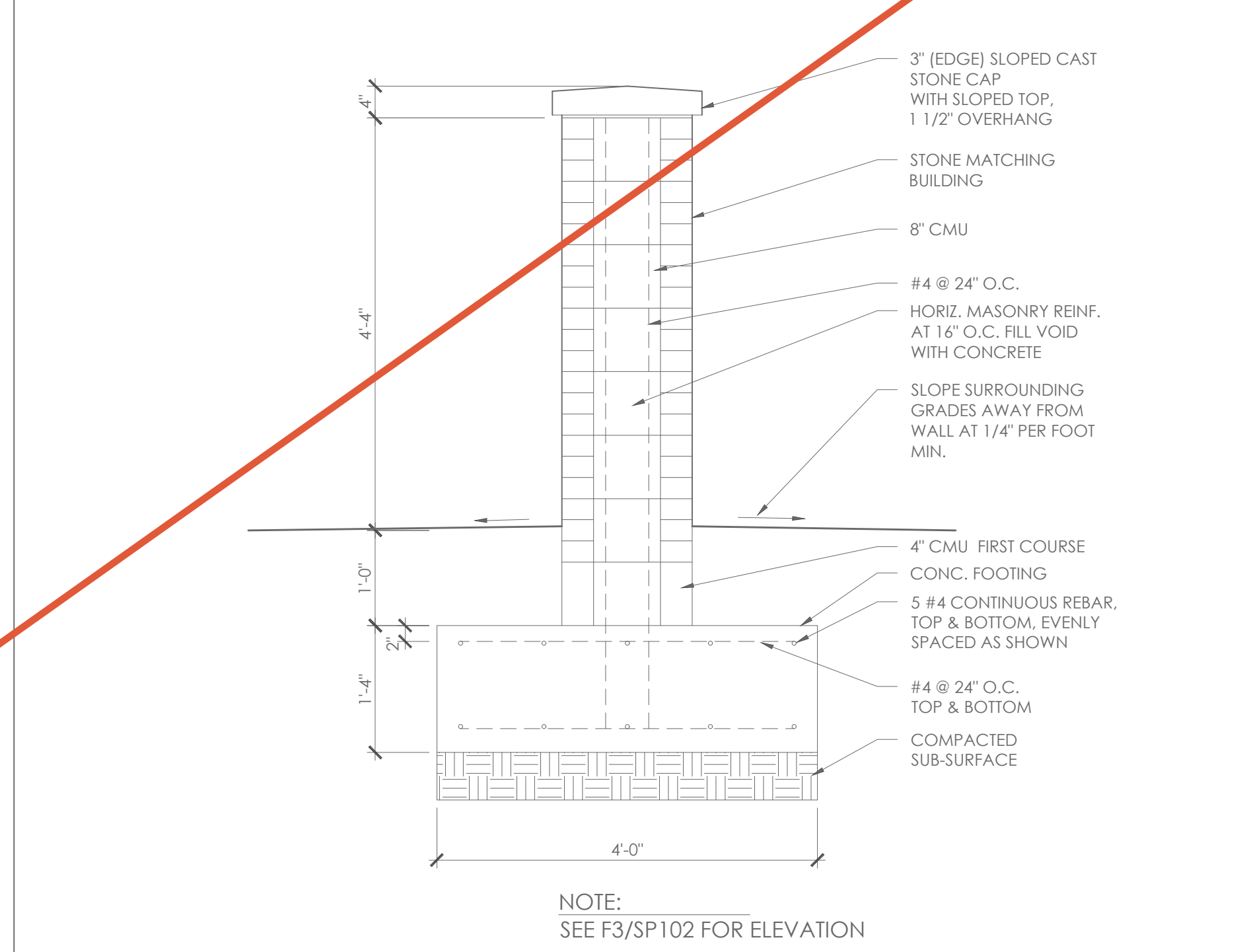
SHEET CONTENT
 SITE PLAN DIMENSION CONTROL

SHEET NUMBER

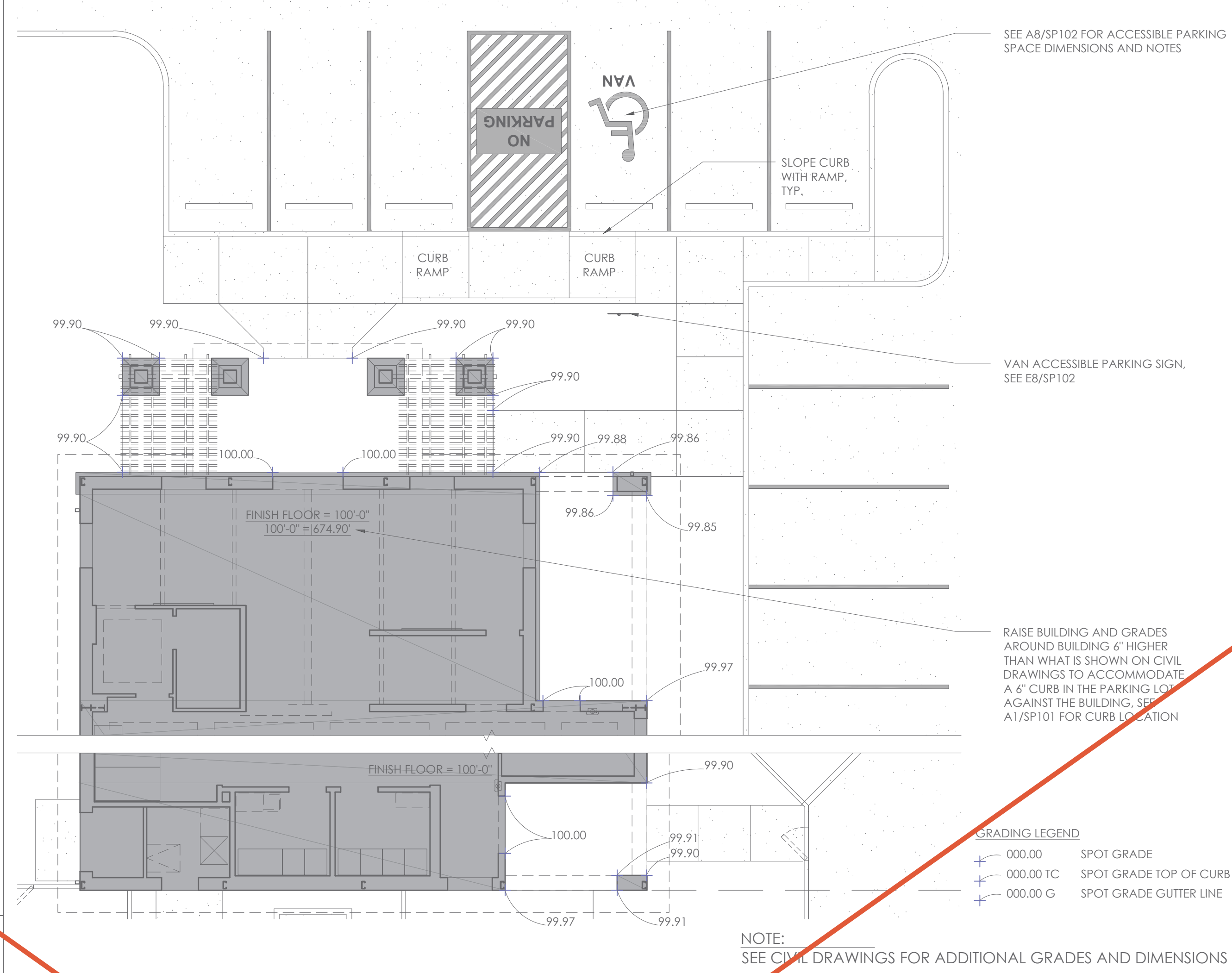
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 SP101**



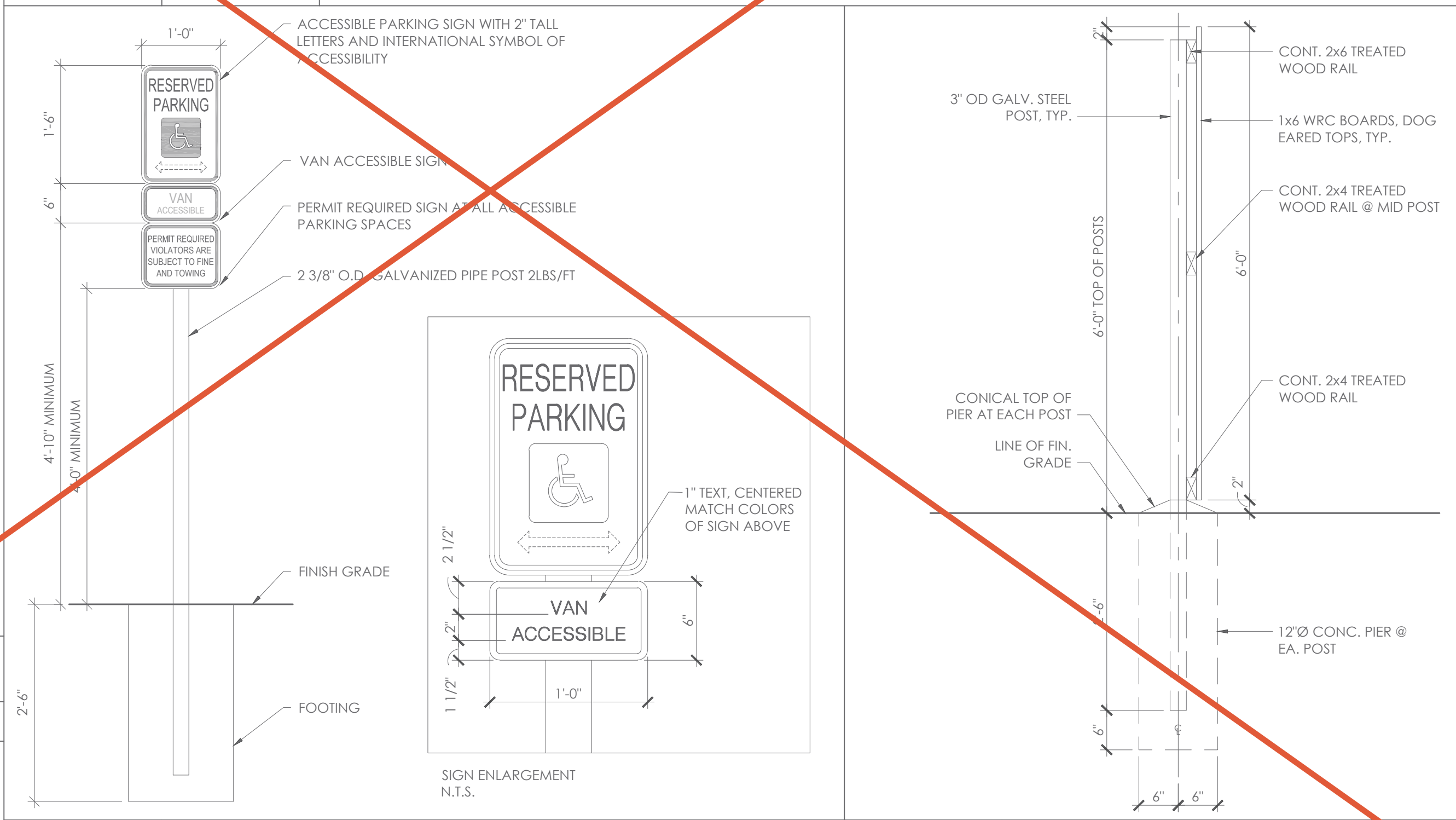
F3 MONUMENT SIGN ELEVATION
SCALE: 1/4" = 1'-0"



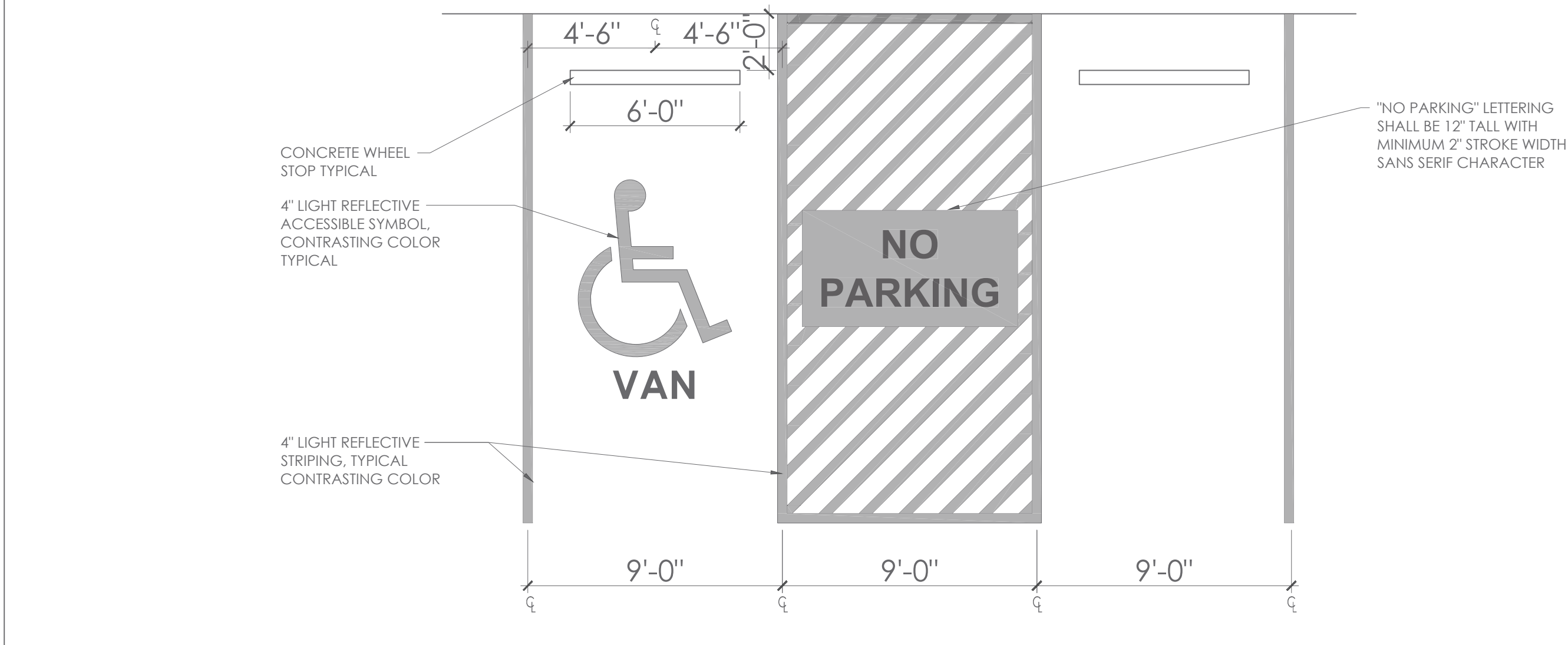
A3 MONUMENT SIGN SECTION
SCALE: 3/4" = 1'-0"



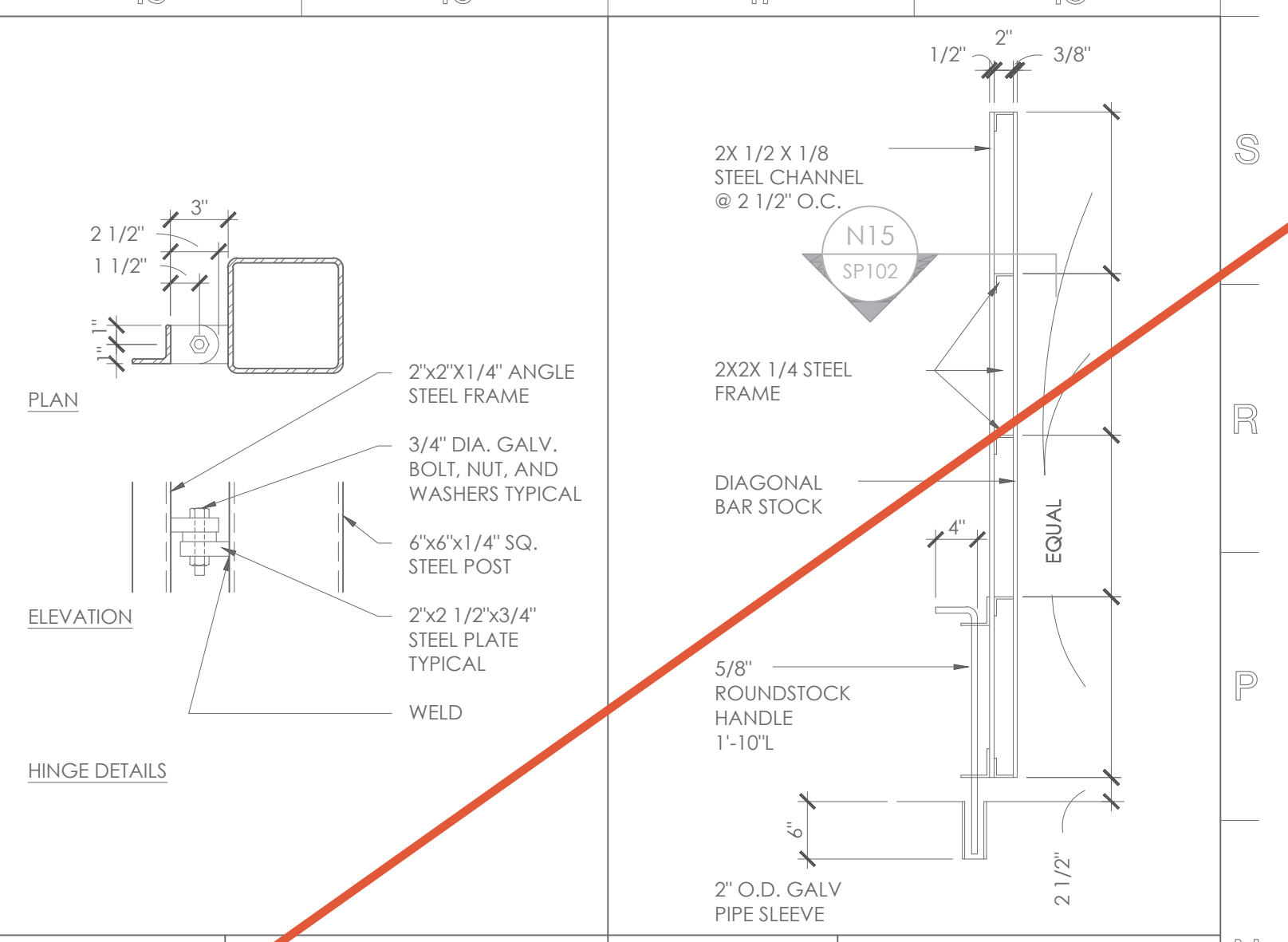
K8 GRADING PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



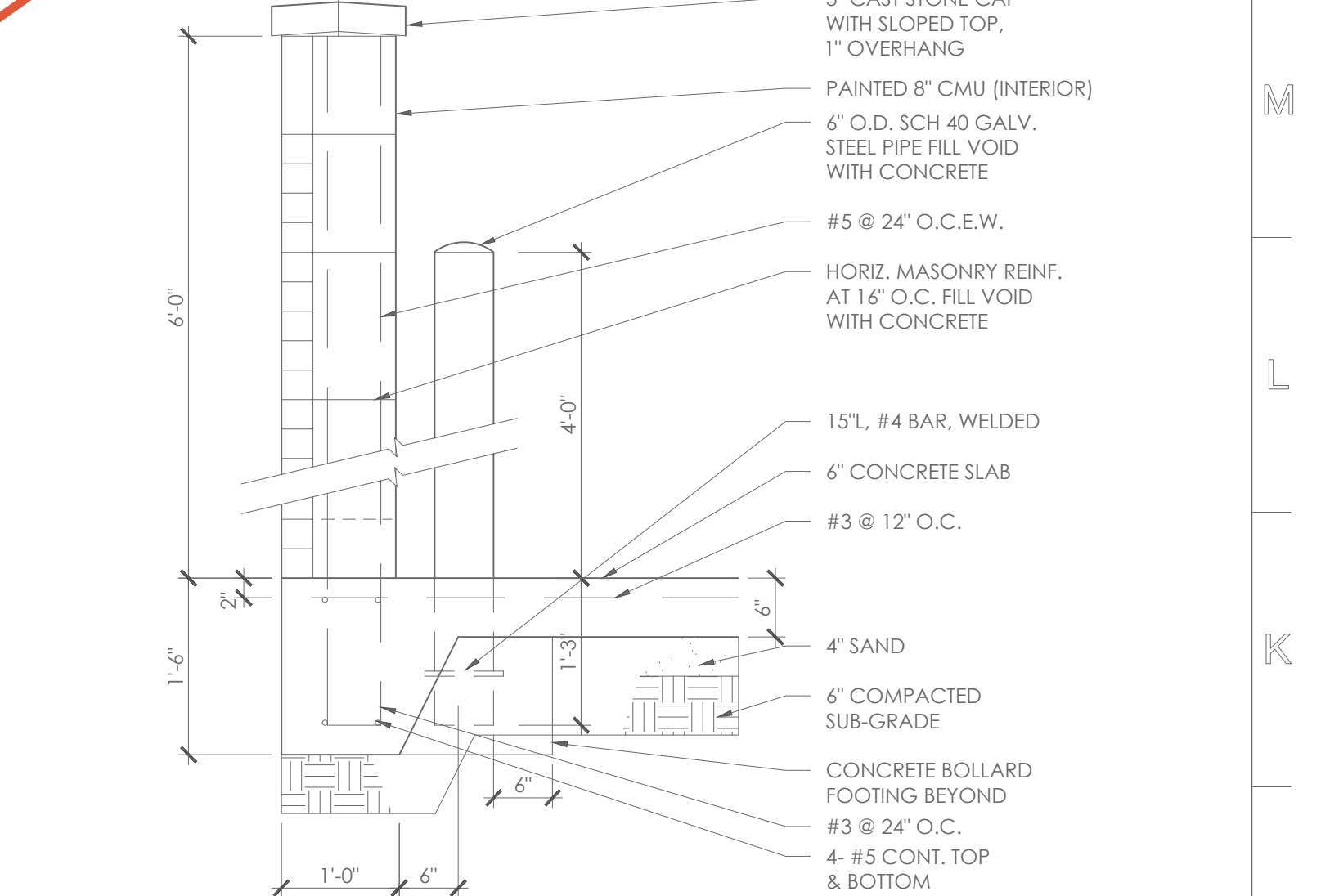
E8 H.C. PARKING SIGN SCALE: 3/4" = 1'-0"
E12 FENCE SECTION SCALE: 3/4" = 1'-0"



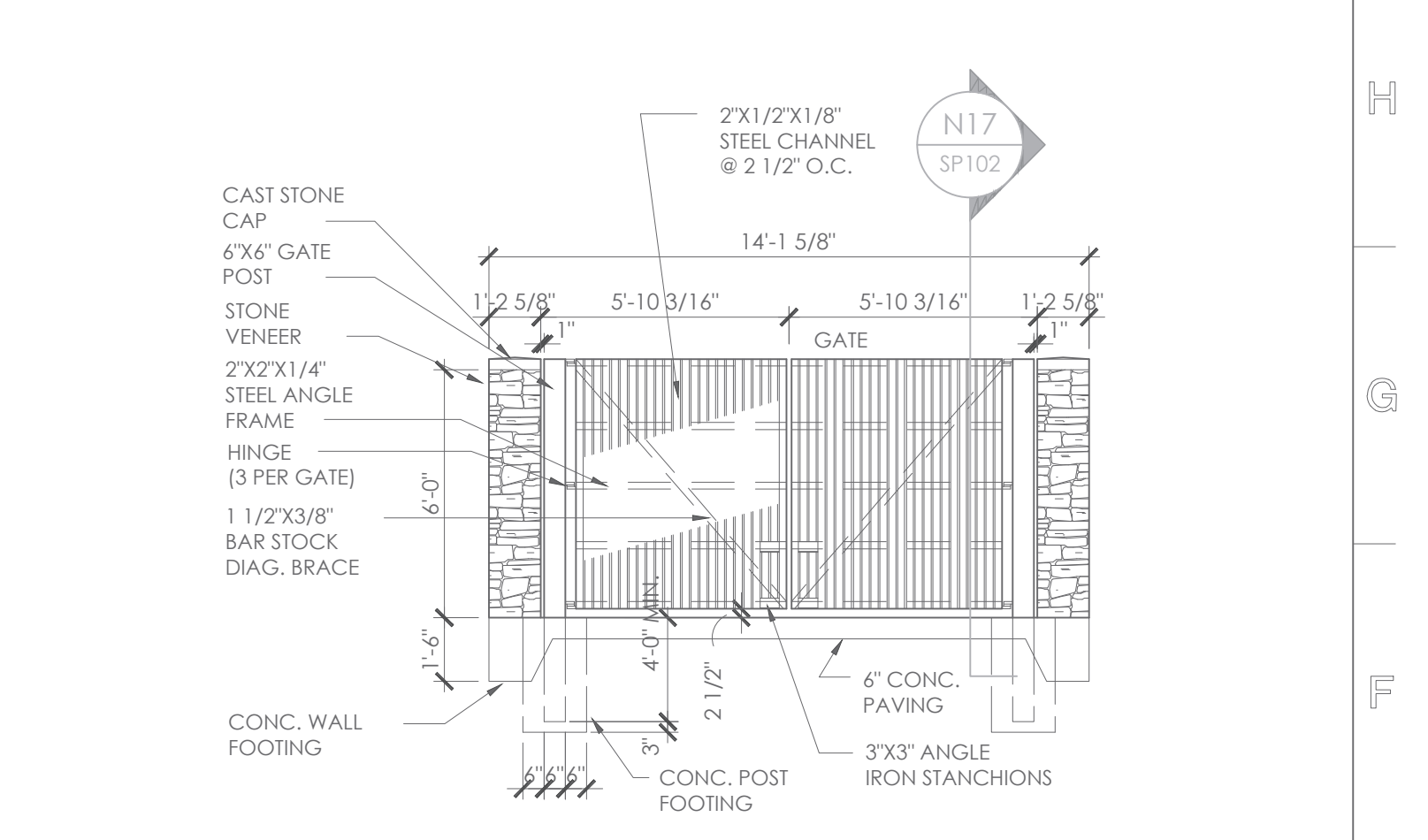
A8 PLAN DETAIL - H.C. PARKING
SCALE: 1/4" = 1'-0"



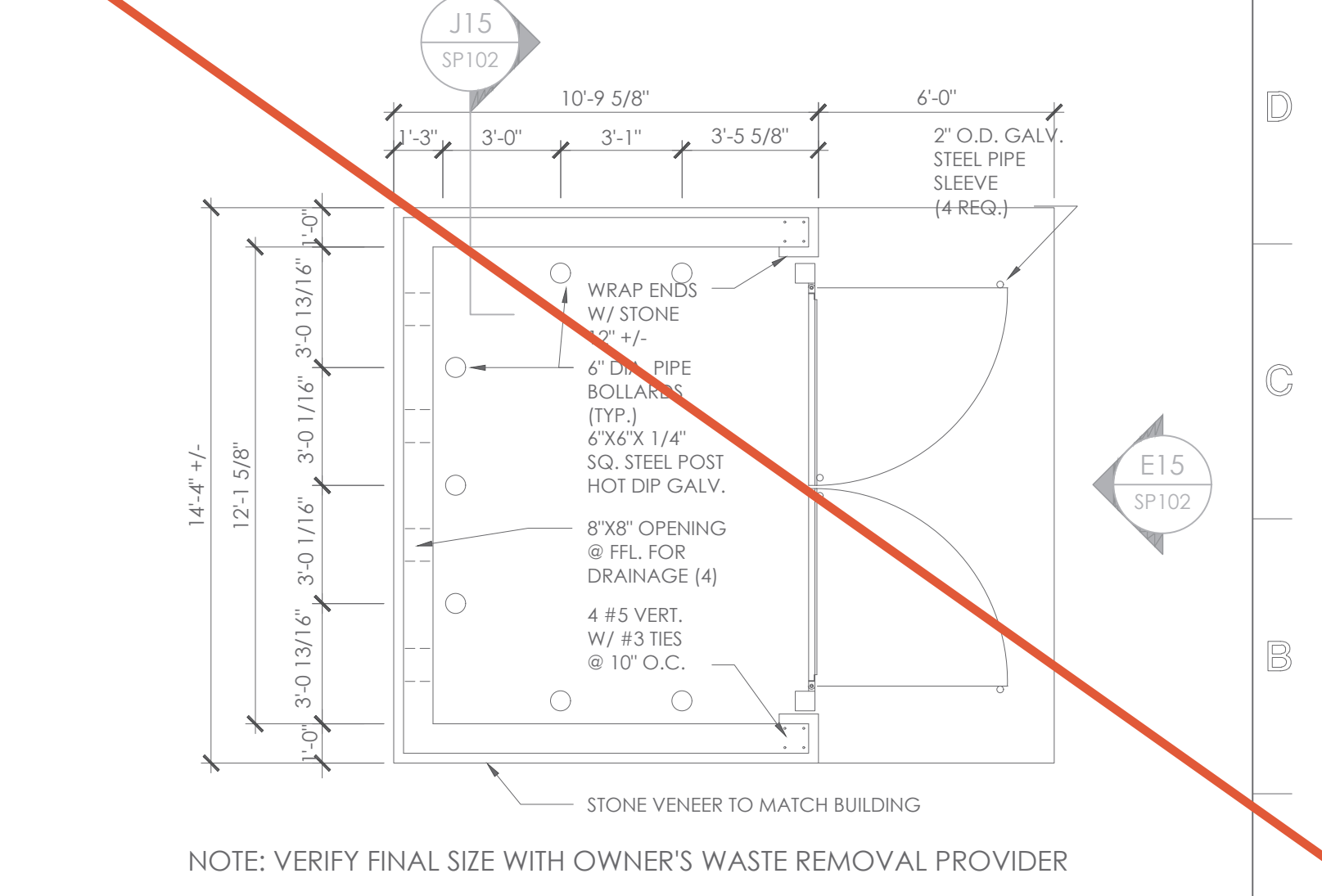
N15 DETAIL SCALE: 1 1/2" = 1'-0"
N17 SECTION SCALE: 3/4" = 1'-0"



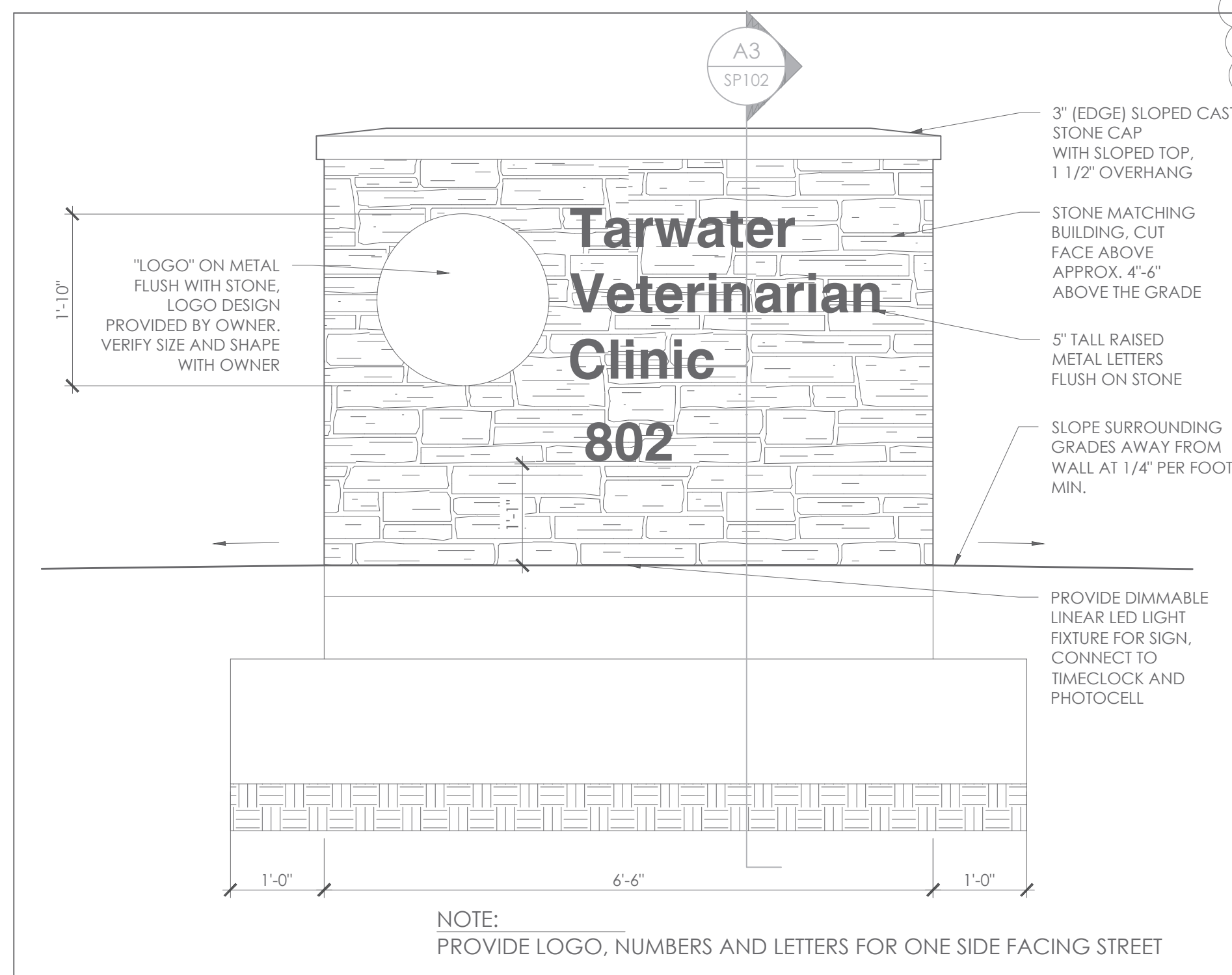
J15 SECTION DETAIL
SCALE: 3/4" = 1'-0"



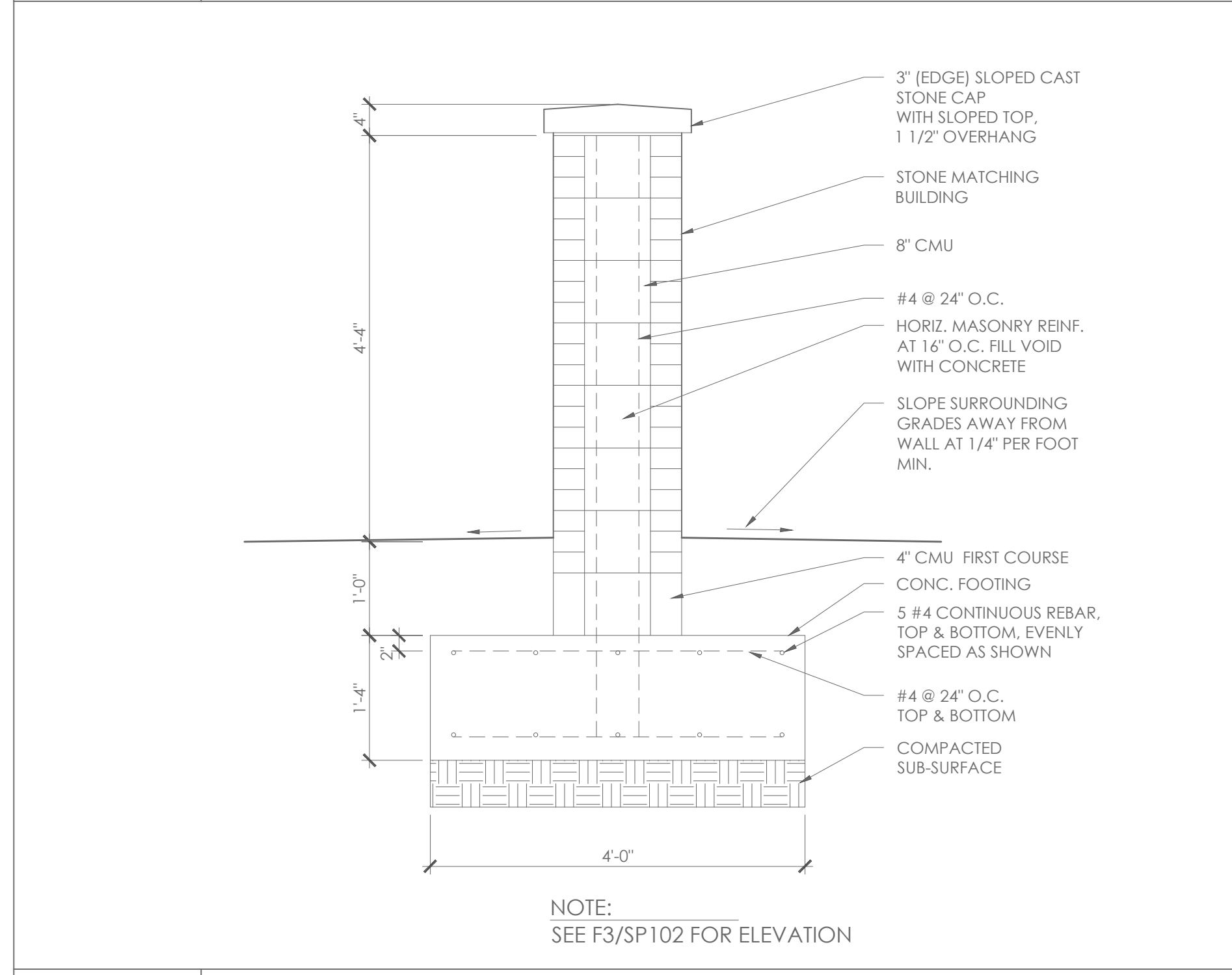
E15 ELEVATION
SCALE: 1/4" = 1'-0"



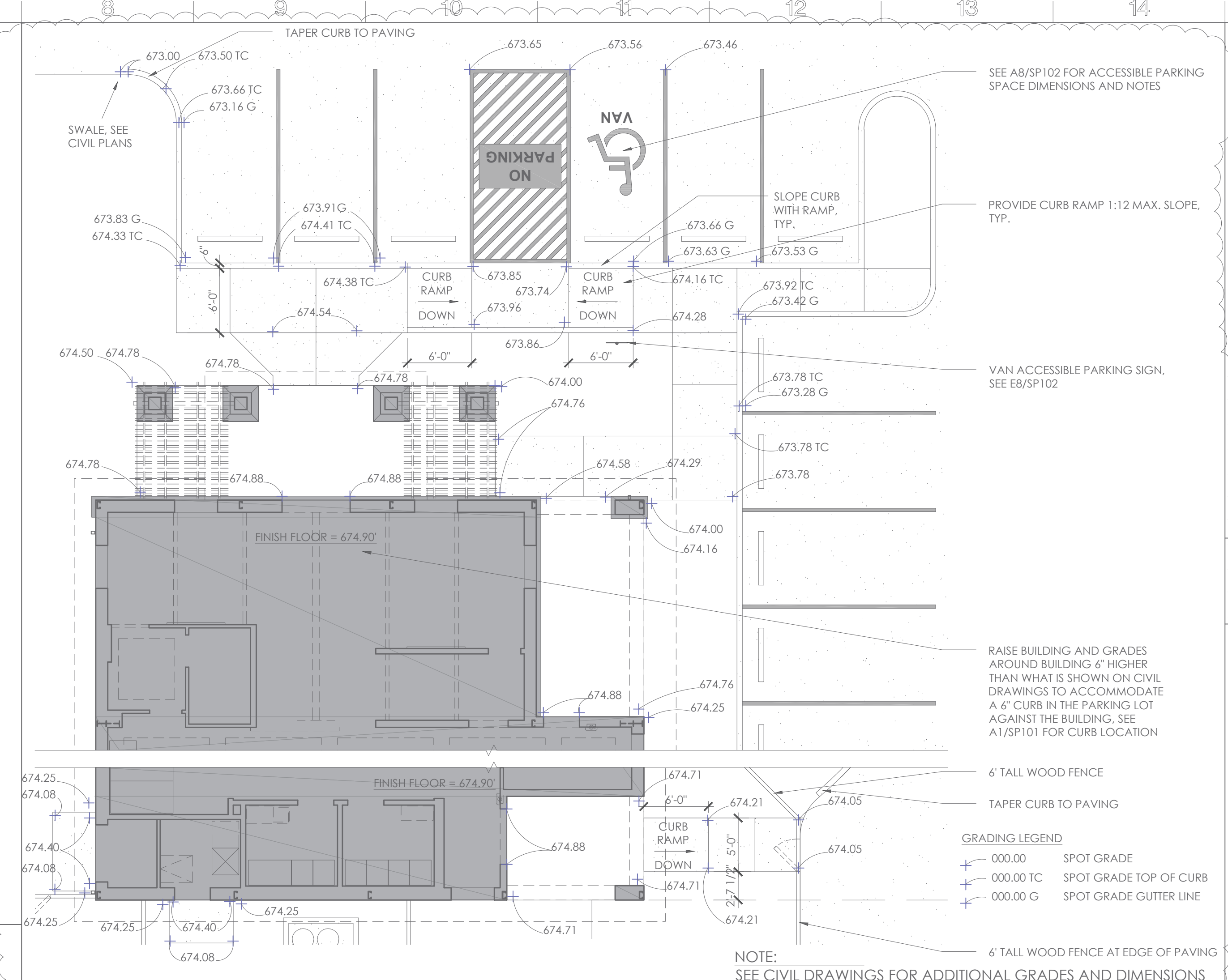
A15 DUMPSTER ENCLOSURE PLAN
SCALE: 1/4" = 1'-0"



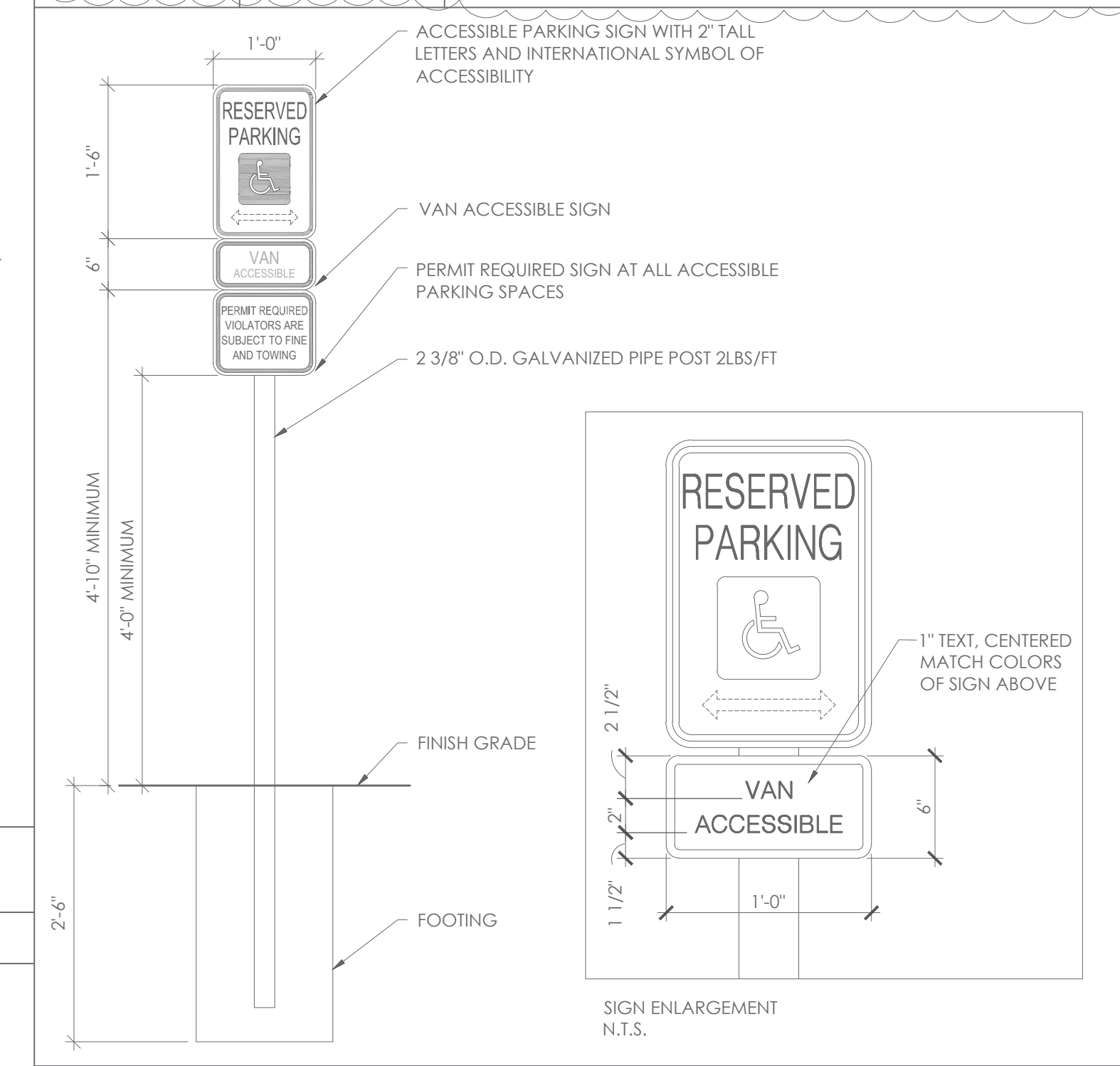
F3 MONUMENT SIGN ELEVATION
SCALE: 1/4" = 1'-0"



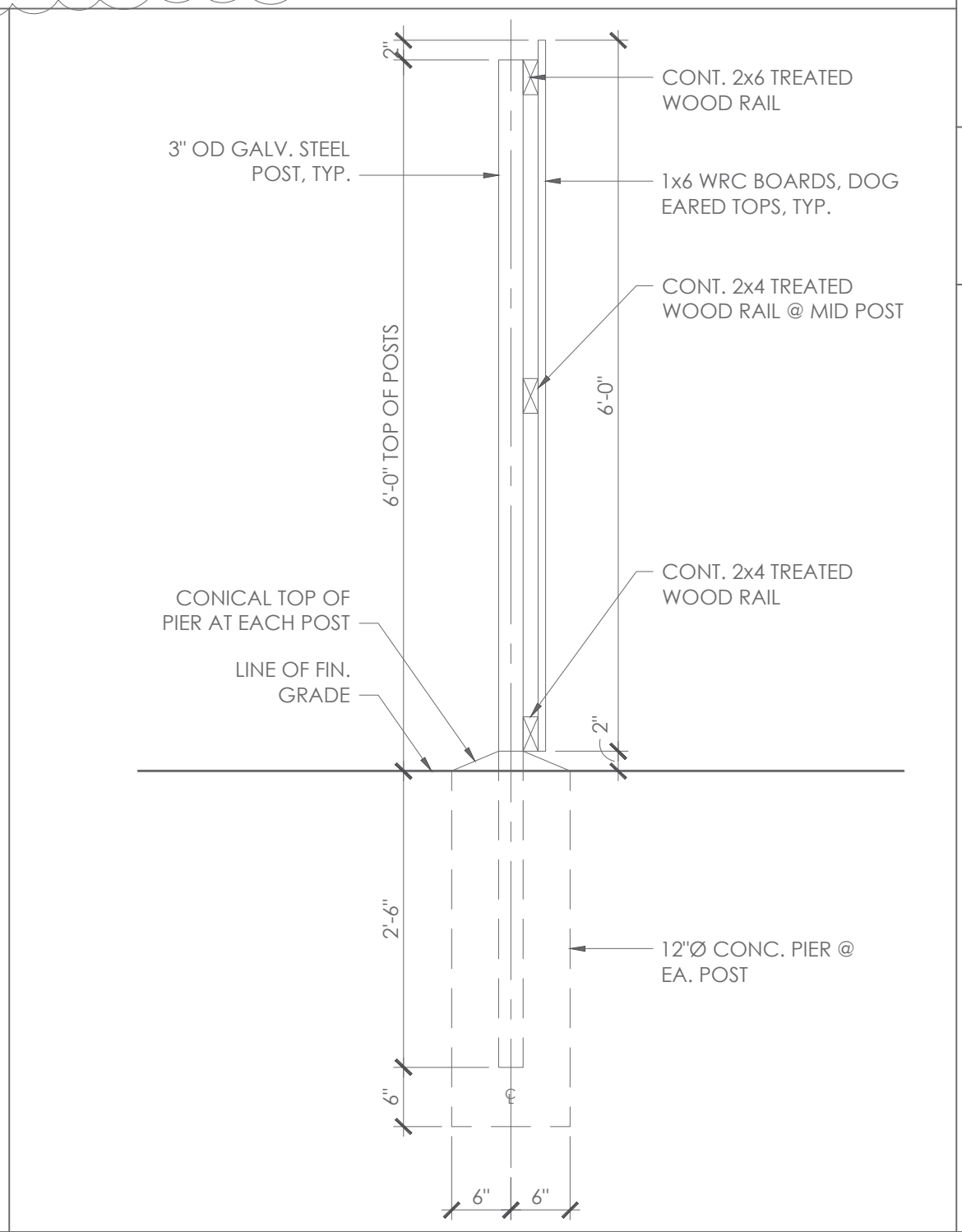
A3 MONUMENT SIGN SECTION
SCALE: 3/4" = 1'-0"



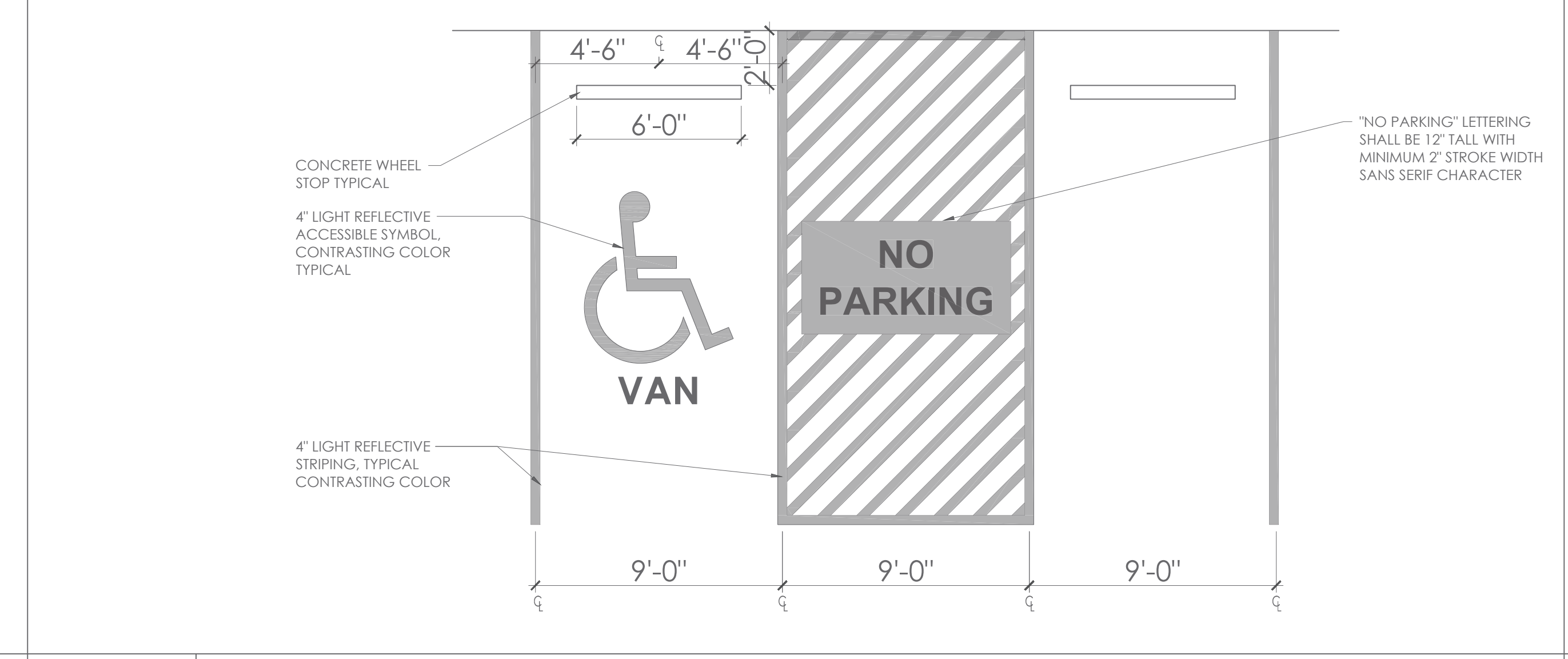
K8 GRADING PLAN ENLARGEMENT
SCALE: 1/8" = 1'-0"



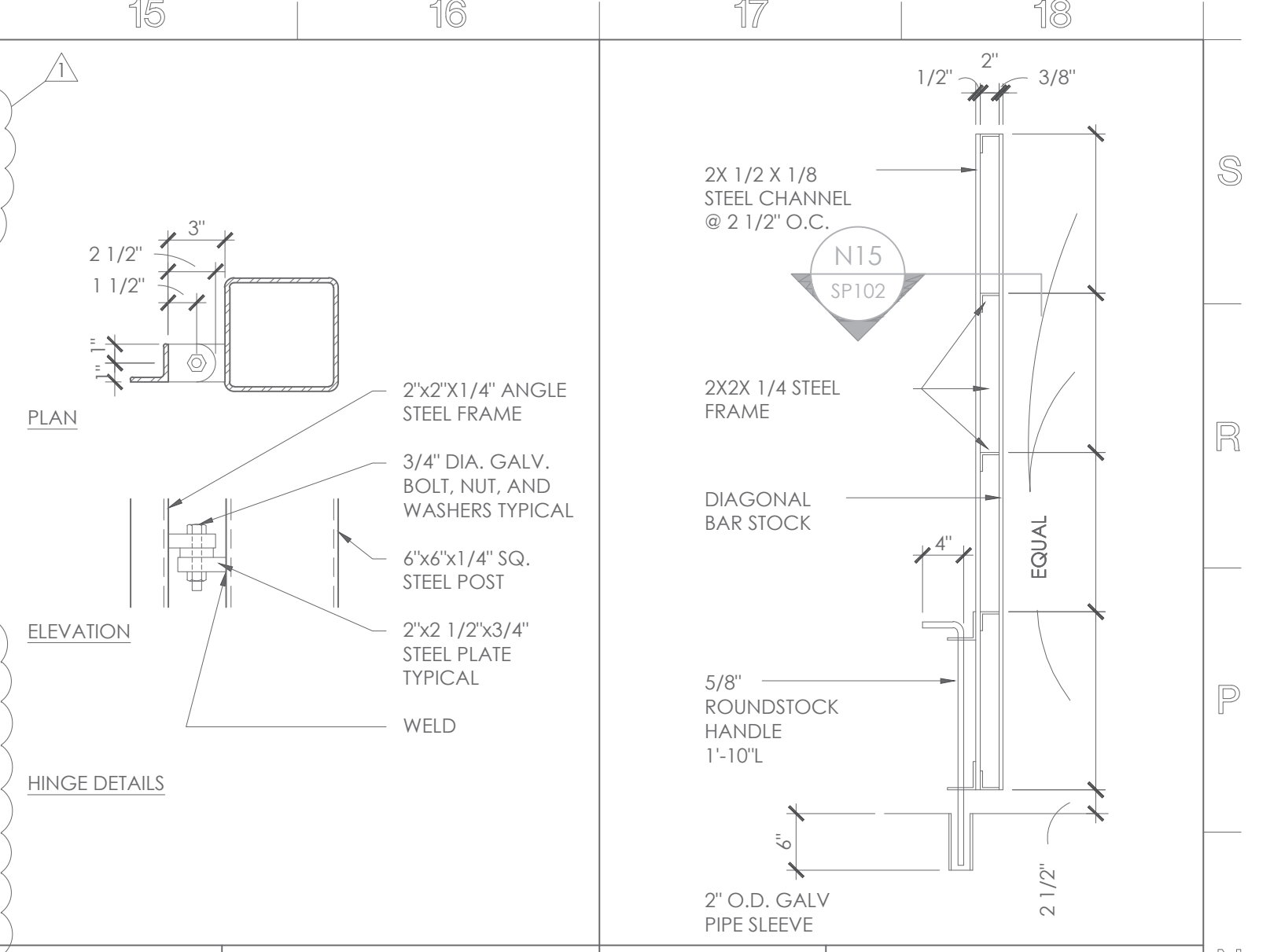
E8 H.C. PARKING SIGN
SCALE: 3/4" = 1'-0"



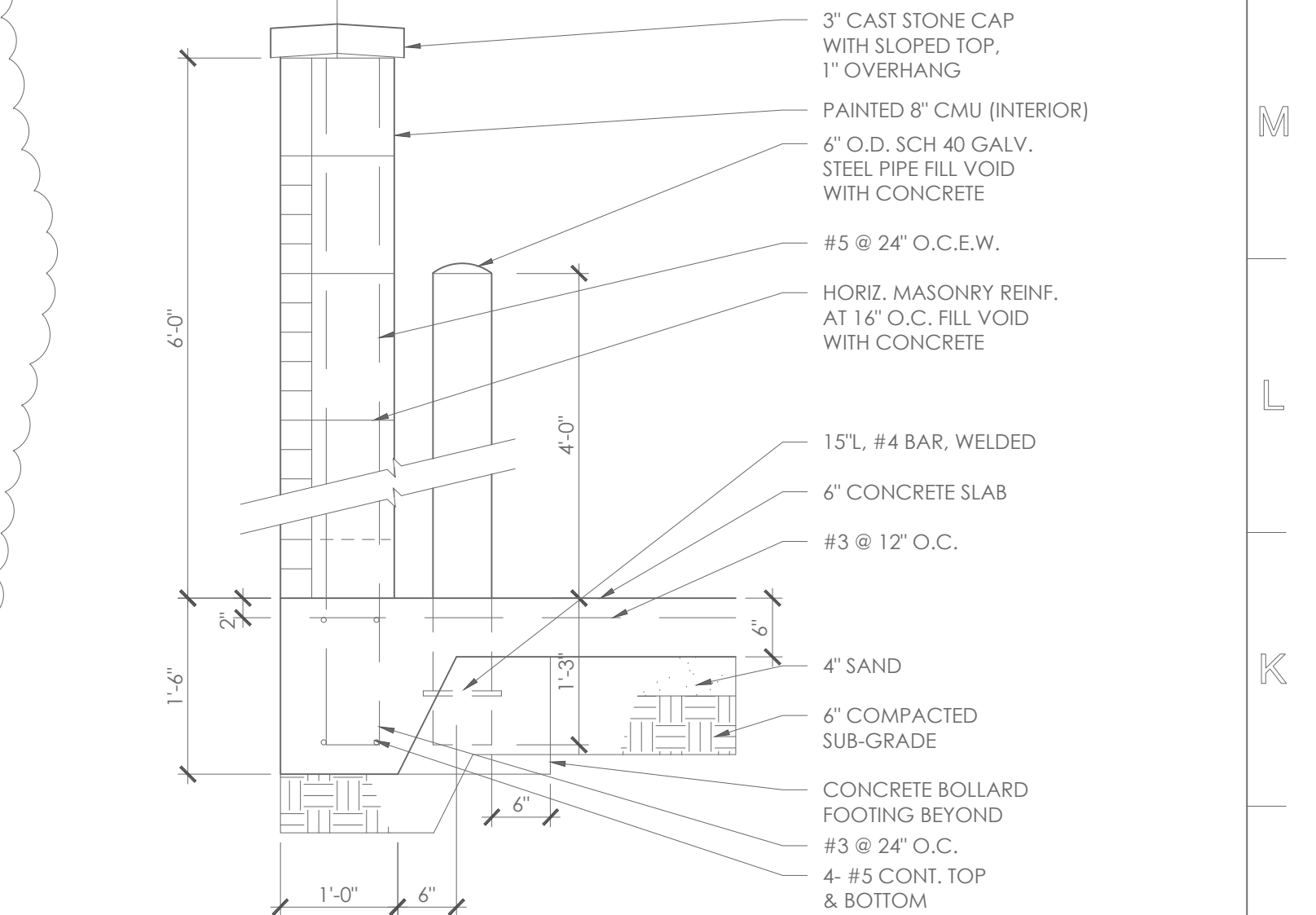
E12 FENCE SECTION
SCALE: 3/4" = 1'-0"



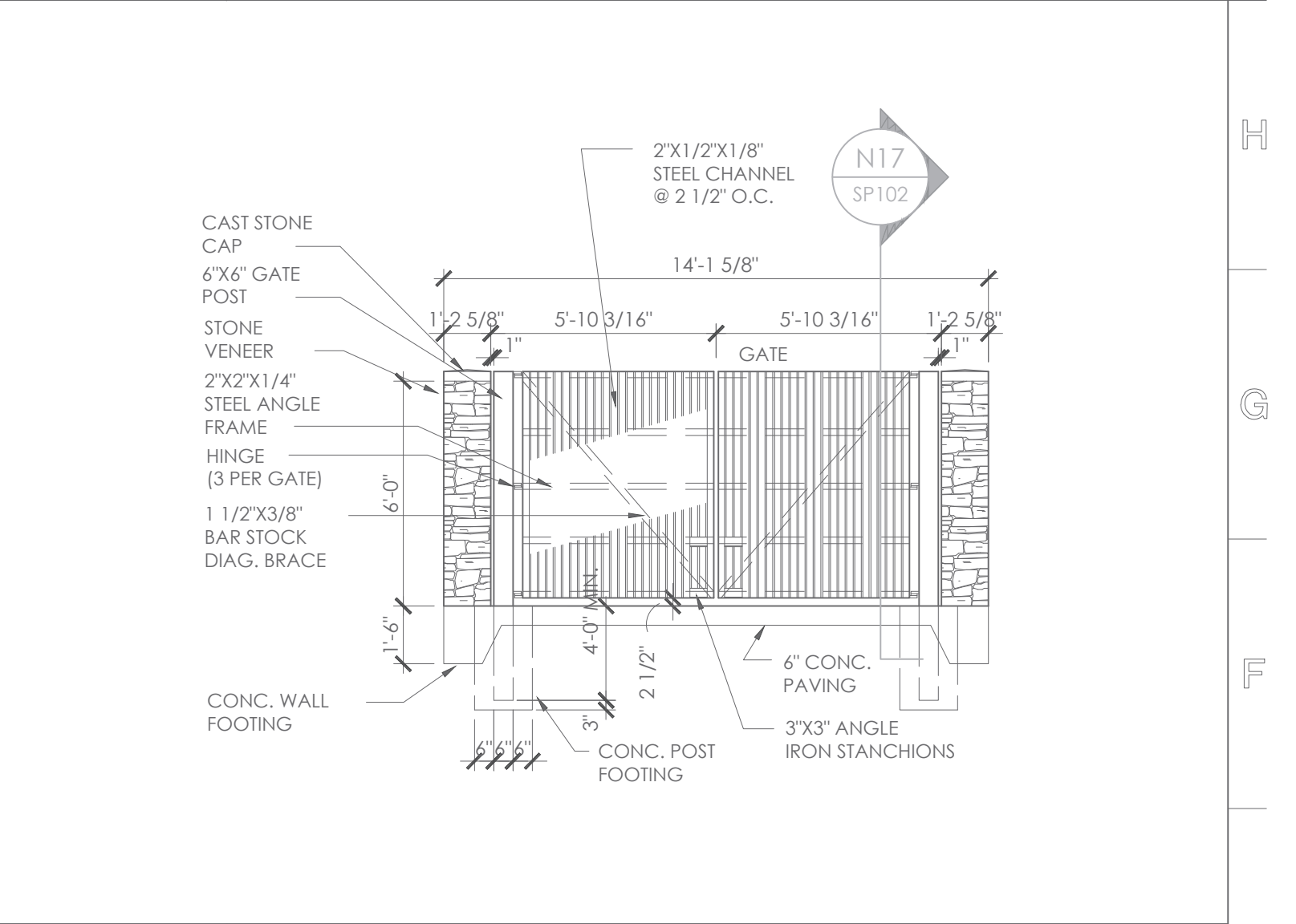
A8 PLAN DETAIL - H.C. PARKING
SCALE: 1/4" = 1'-0"



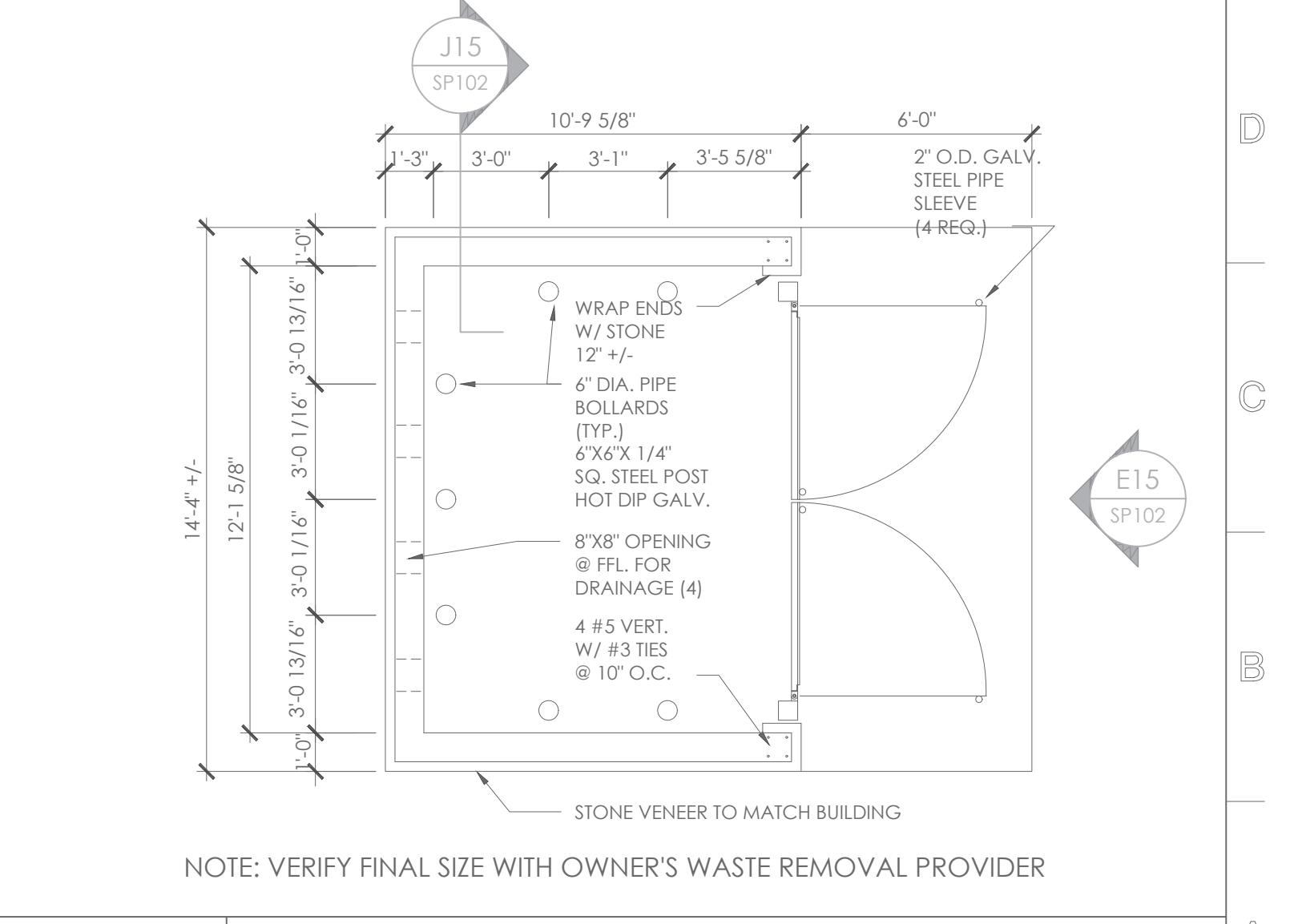
N15 DETAIL SCALE: 1 1/2" = 1'-0"
N17 SECTION SCALE: 3/4" = 1'-0"



J15 SECTION DETAIL
SCALE: 3/4" = 1'-0"



E15 ELEVATION
SCALE: 1/4" = 1'-0"



A15 DUMPSTER ENCLOSURE PLAN
SCALE: 1/4" = 1'-0"

MAGEE ARCHITECTS, L.P.
DESIGNERS • PLANNERS • INTERIORS
HTTP://WWW.MAGEE-ARCHITECTS.COM/
FORT WORTH, TEXAS 817319892

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802 E. CRINER STREET
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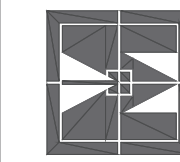
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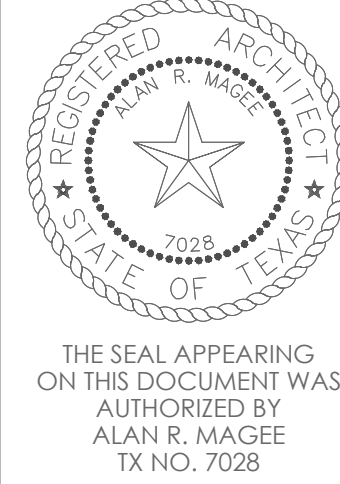
SHEET CONTENT
SITE DETAILS

SHEET NUMBER
SA04 SP102

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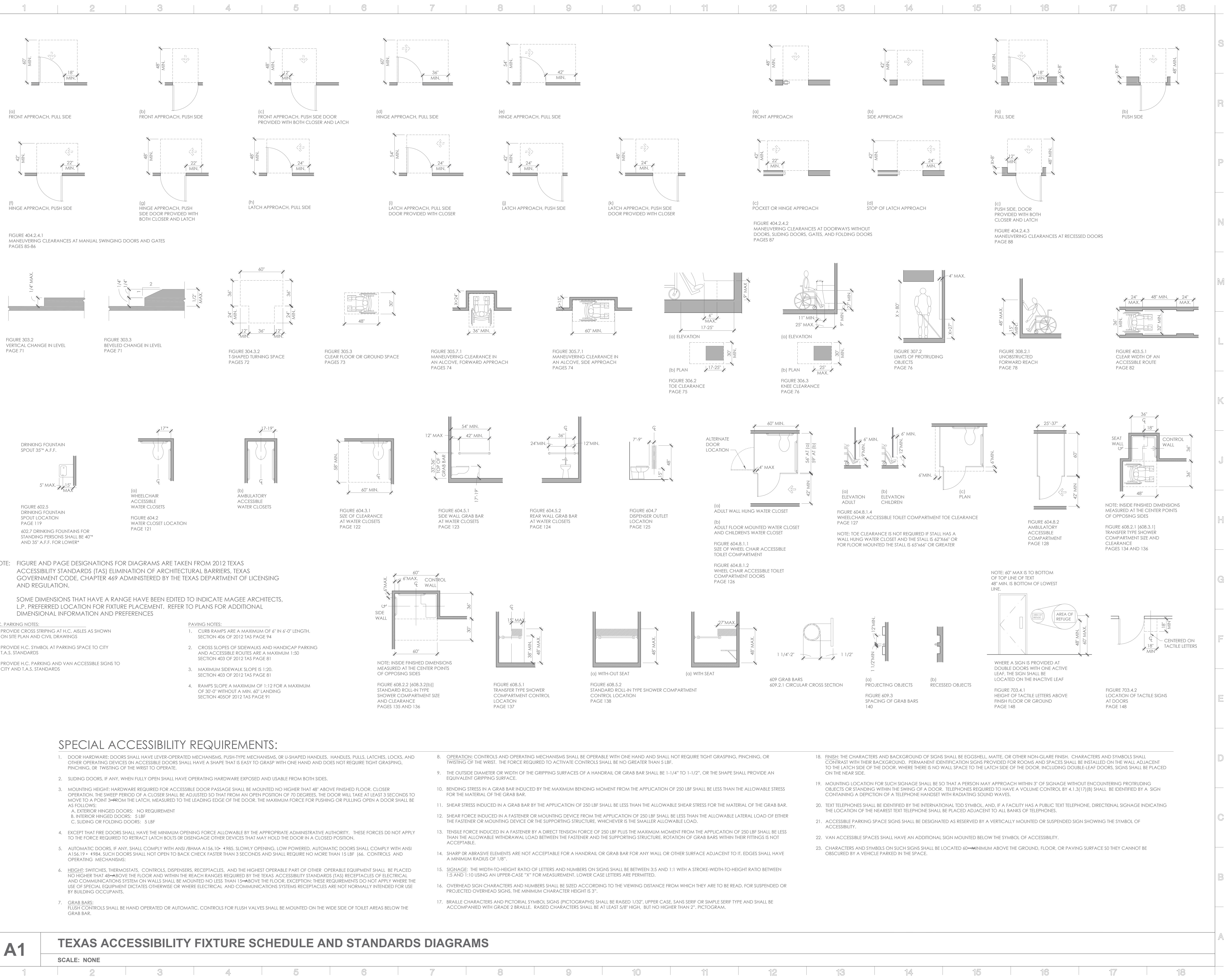


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SHEET CONTENT
 TEXAS ACCESSIBILITY STANDARDS DIAGRAMS
 DOOR CLEARANCE PLAN

SHEET NUMBER

A001

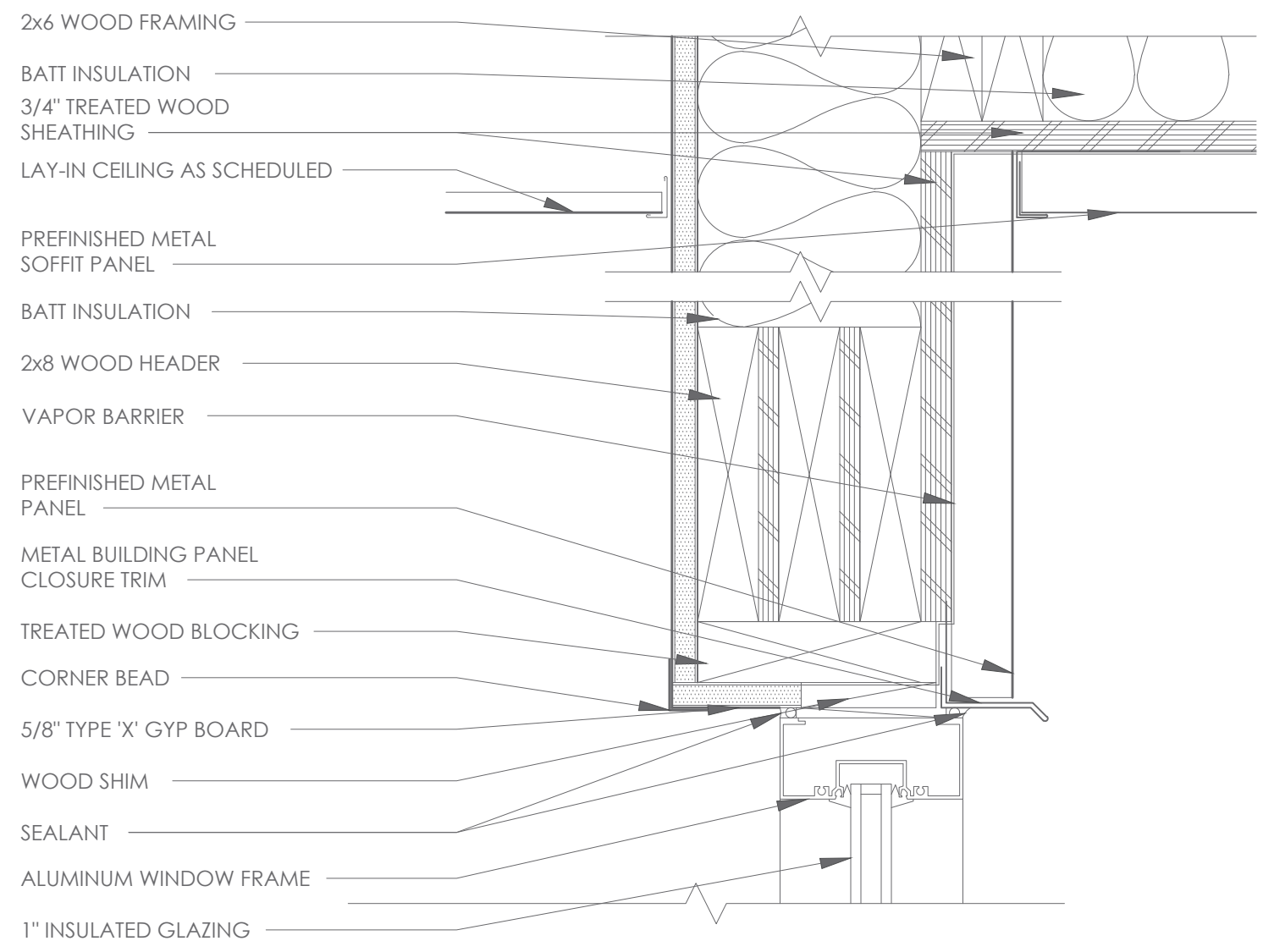


A1

TEXAS ACCESSIBILITY FIXTURE SCHEDULE AND STANDARDS DIAGRAMS

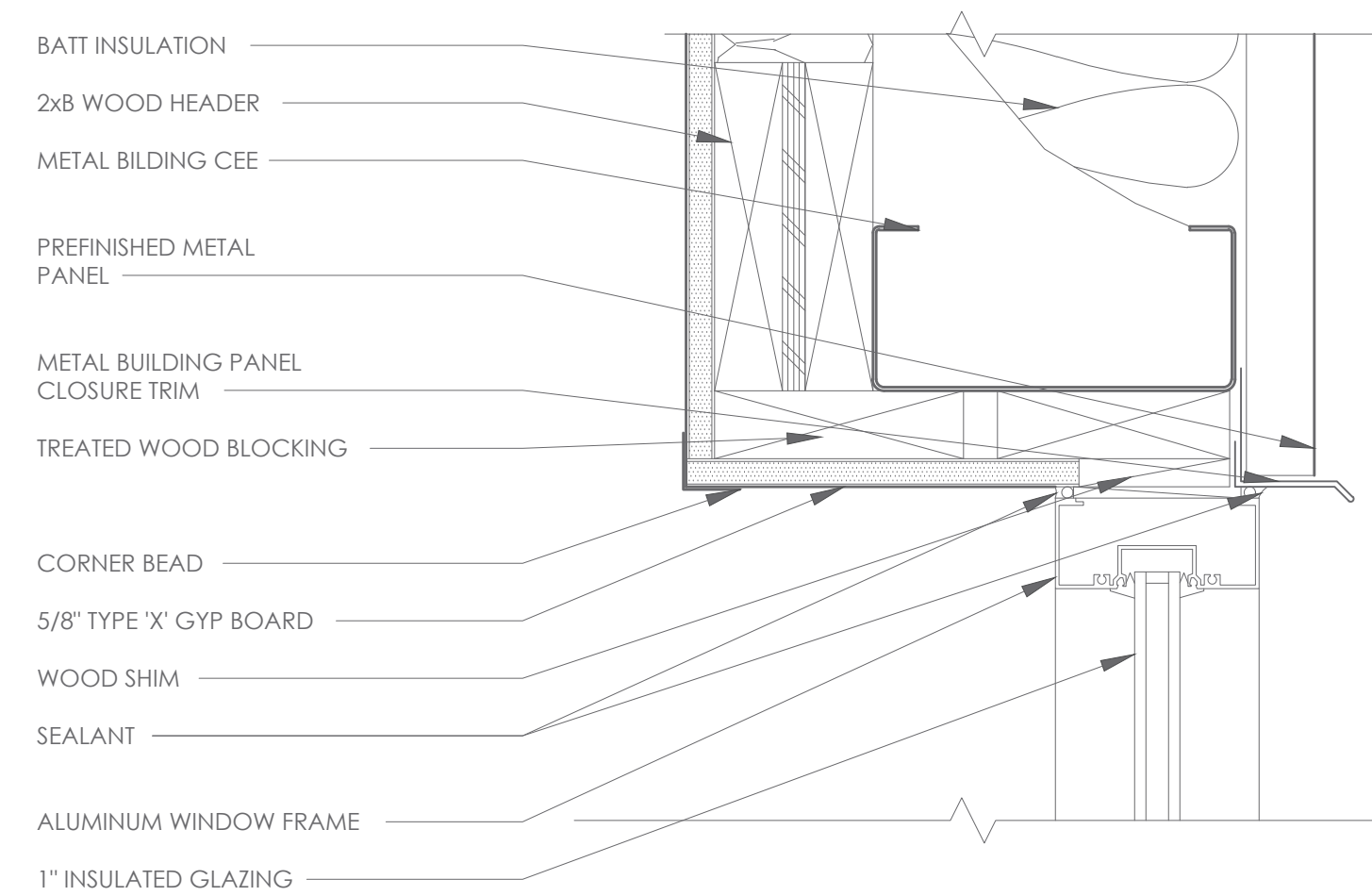
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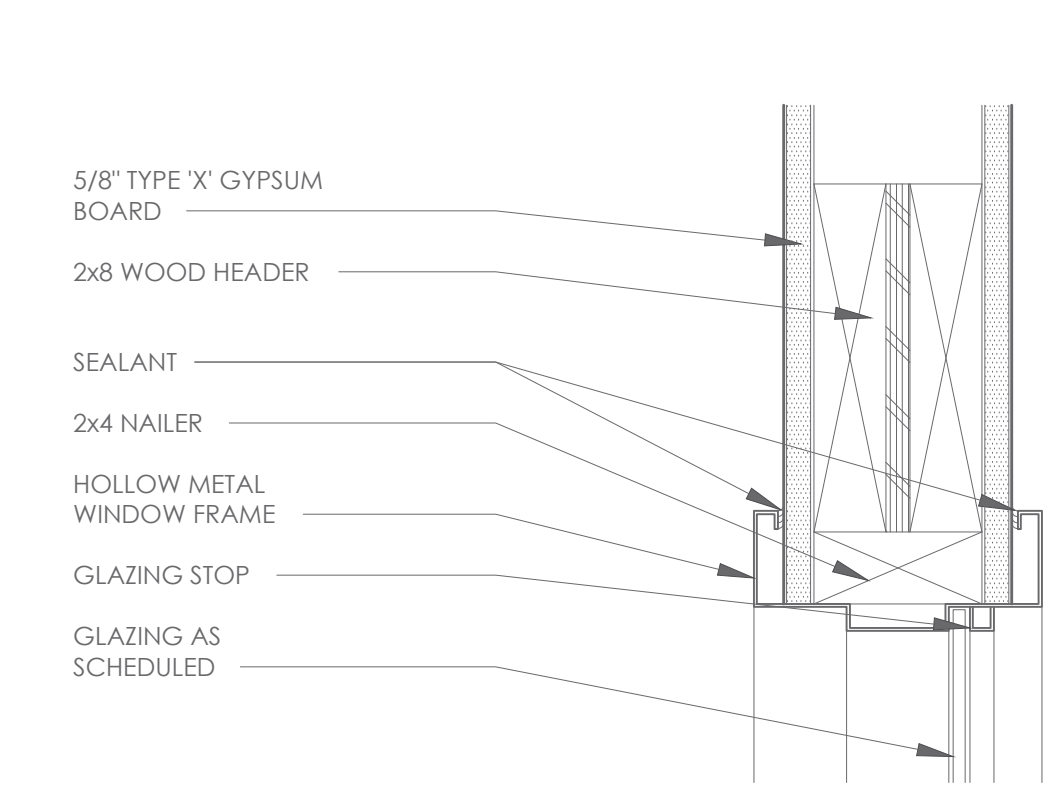


N1 HEAD DETAIL
SCALE: 3" = 1'-0"

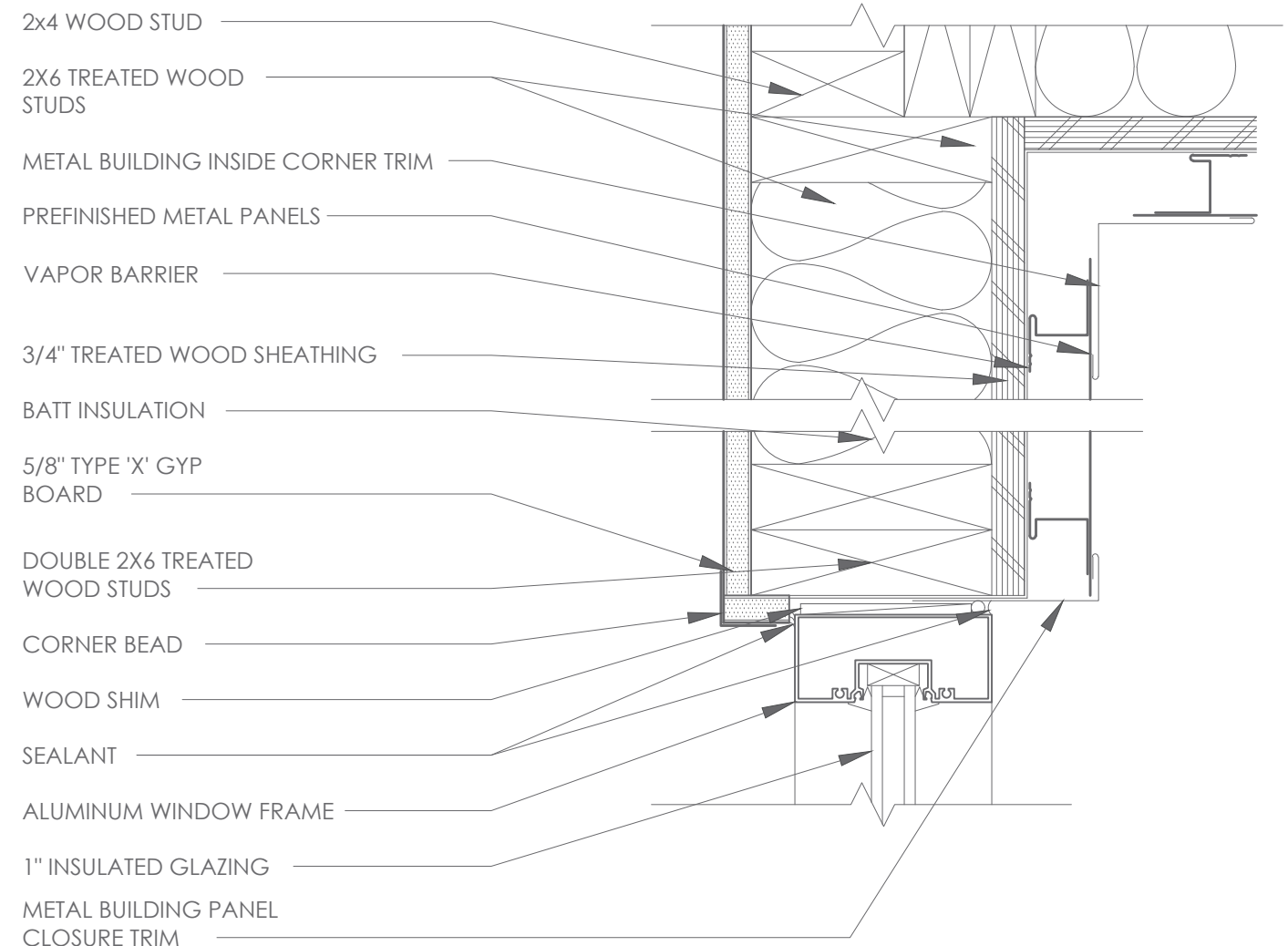
N7 NOT USED
SCALE: 3" = 1'-0"



N11 HEAD DETAIL
SCALE: 3" = 1'-0"

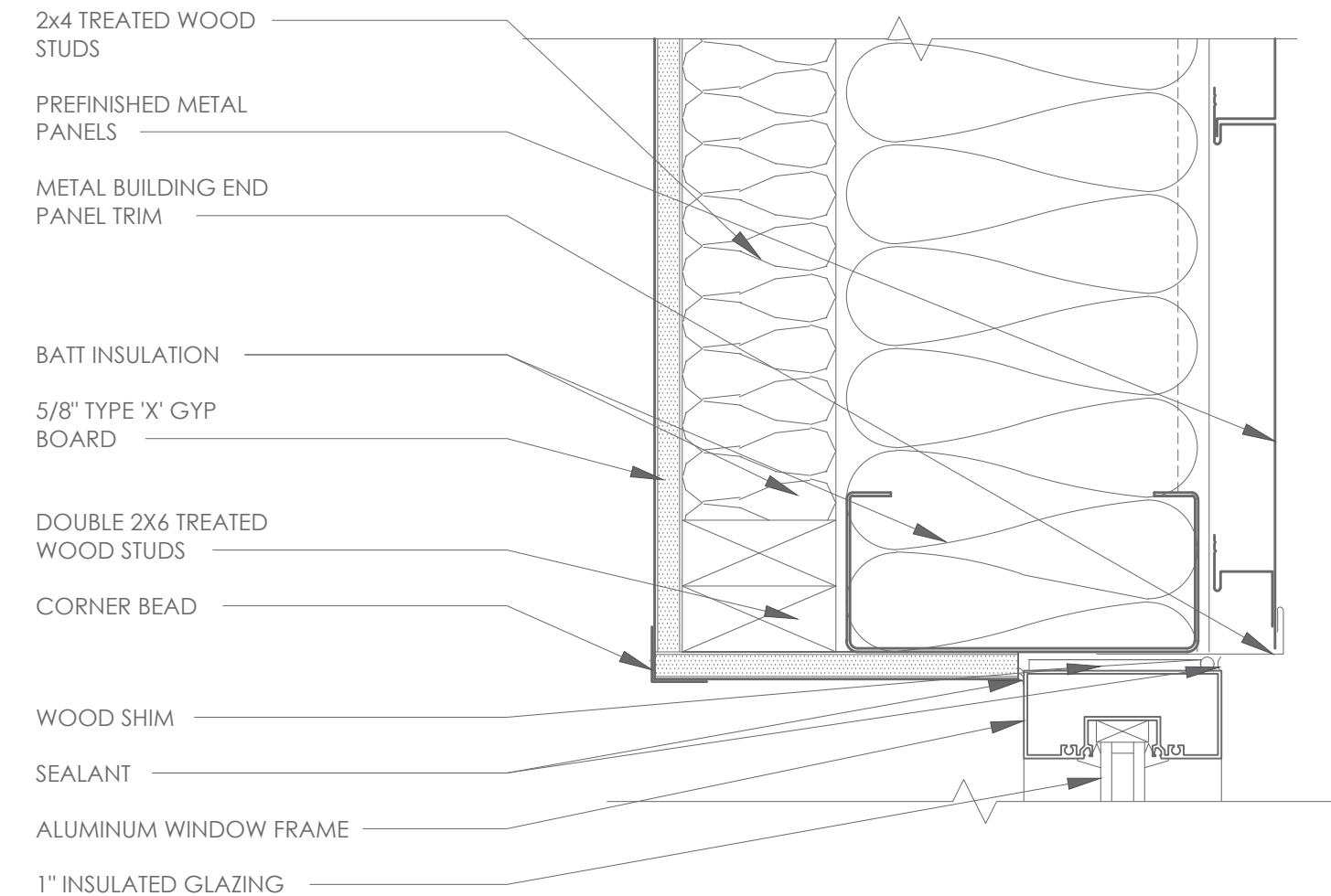


N15 HEAD DETAIL
SCALE: 3" = 1'-0"

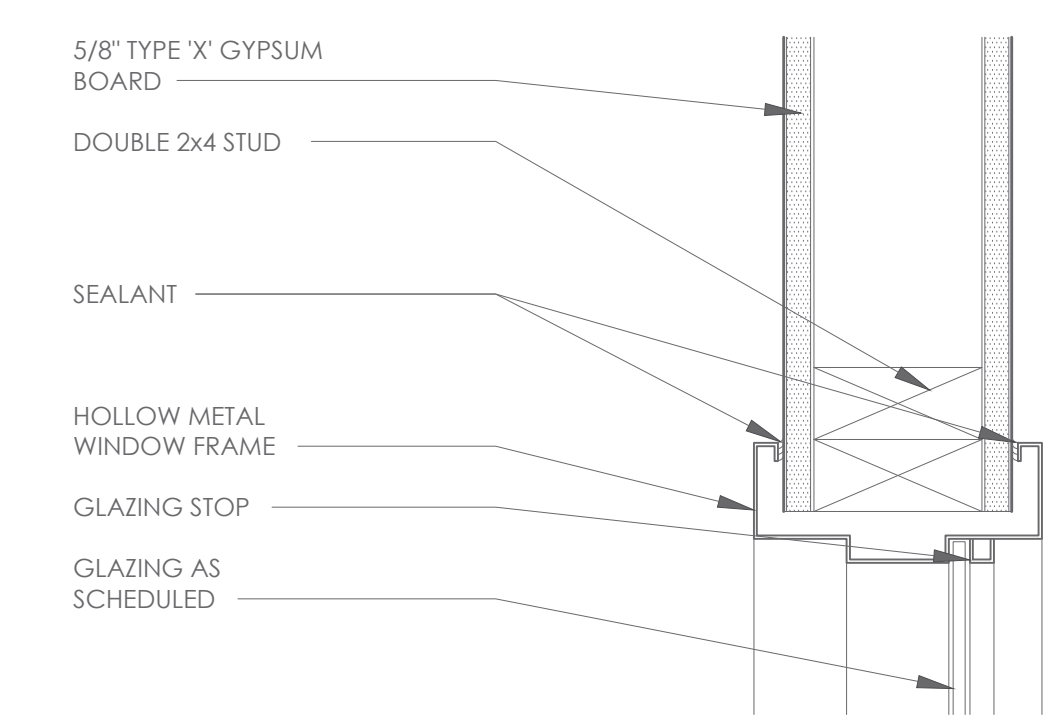


J1 JAMB DETAIL
SCALE: 3" = 1'-0"

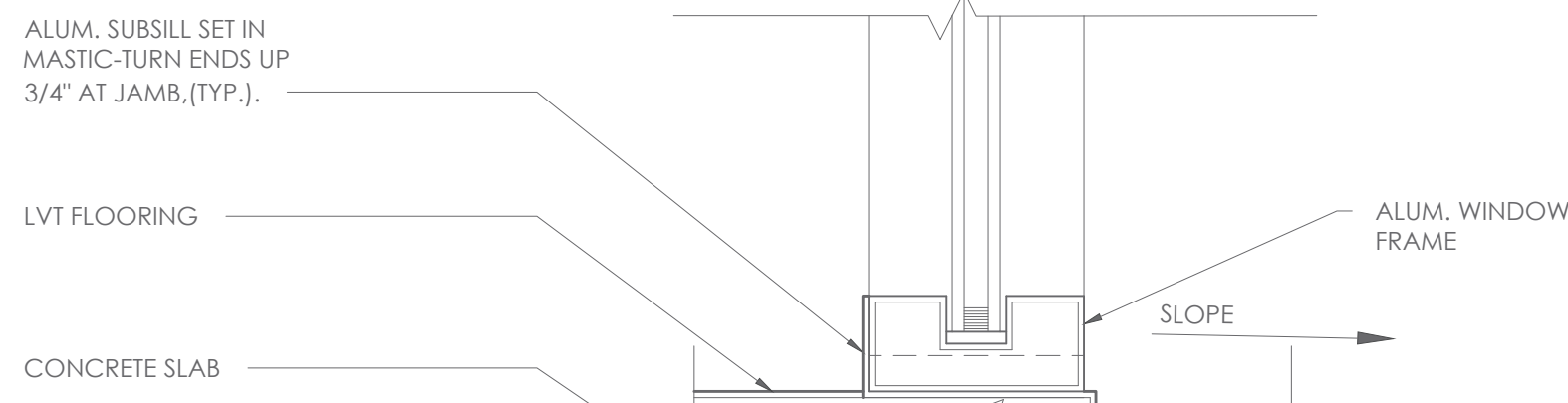
J7 NOT USED
SCALE: 3" = 1'-0"



J11 JAMB DETAIL
SCALE: 3" = 1'-0"



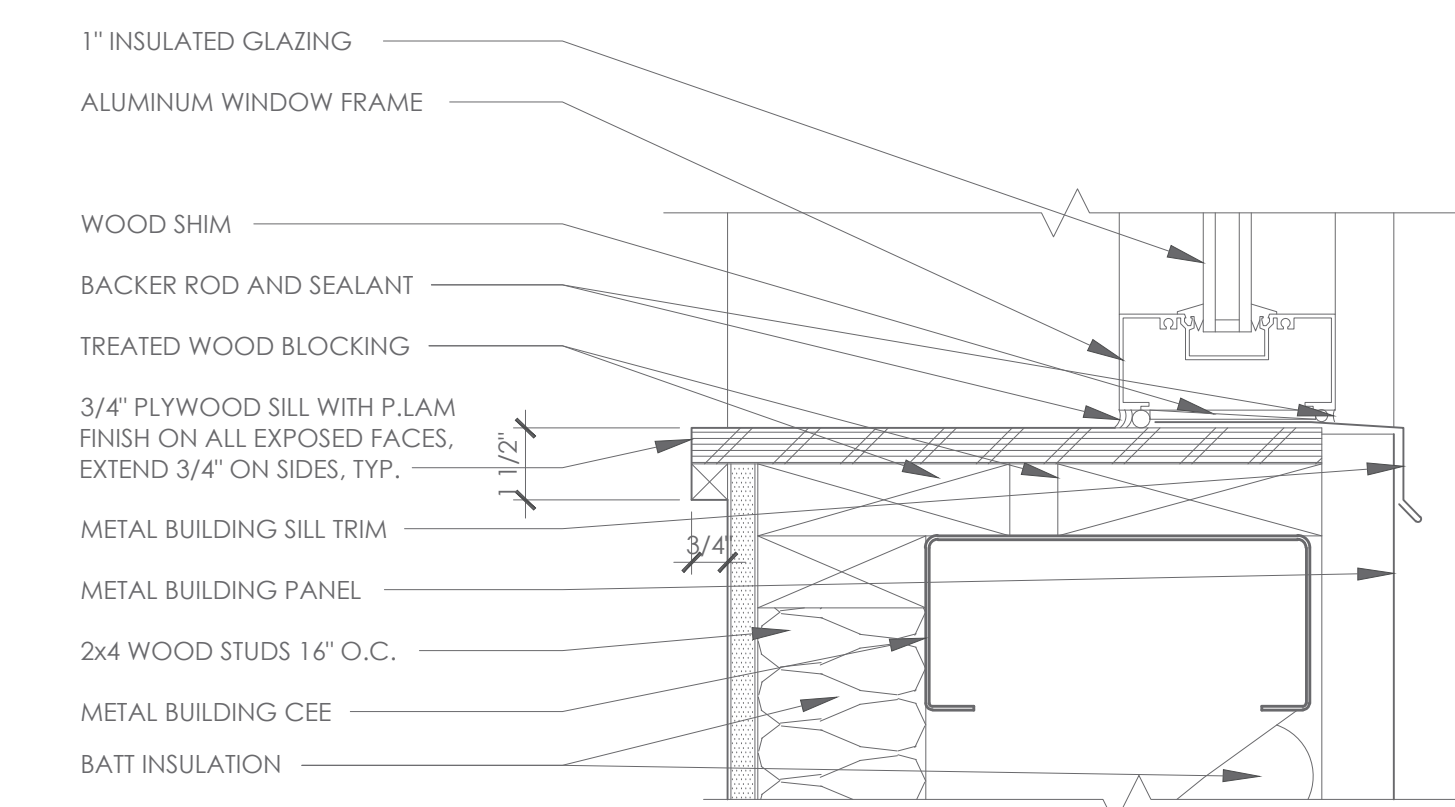
J15 JAMB DETAIL
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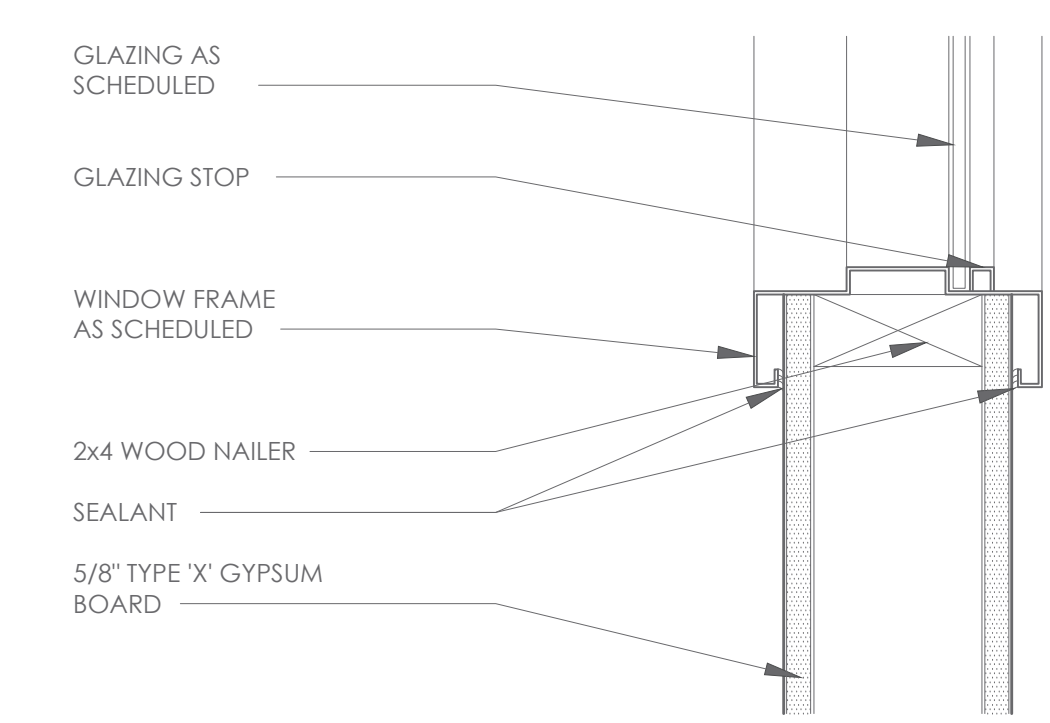
E1 SILL DETAIL
SCALE: 3" = 1'-0"

GENERAL NOTES:
 • PROVIDE TEMPERED GLAZING WITHIN 2'-0" OF SIDES OF DOORS, TYPICAL AND WHERE INDICATED.
 • ALUMINUM WINDOWS TO HAVE CENTER GLAZING, U.N.O.
 • INTERIOR WINDOW SILLS TO BE FL-4 OR FRAME, AS NOTED

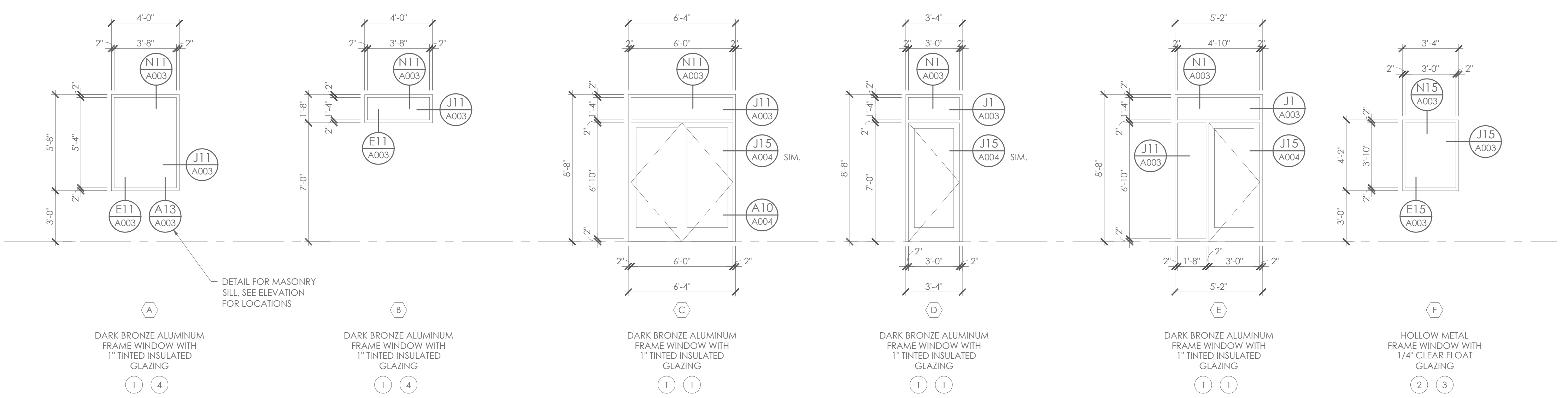
- ① = TEMPERED GLAZING
- ① 1" INSULATED GLAZING:
1/4" BRONZE EXTERIOR & 1/4" CLEAR INTERIOR, U.N.O.;
TEMPERED WHERE REQUIRED BY CODE AND/OR INDICATED
- ② 1/4" CLEAR FLOAT GLASS
- ③ PROVIDE MINI BLINDS, COLOR TO BE SELECTED
(BID COLOR TO MATCH FRAME COLOR, EVEN IF PREMIUM)
- ④ PROVIDE SHADES, COLOR TO BE SELECTED
(BID COLOR TO MATCH ANODIZED ALUMINUM, EVEN IF PREMIUM)



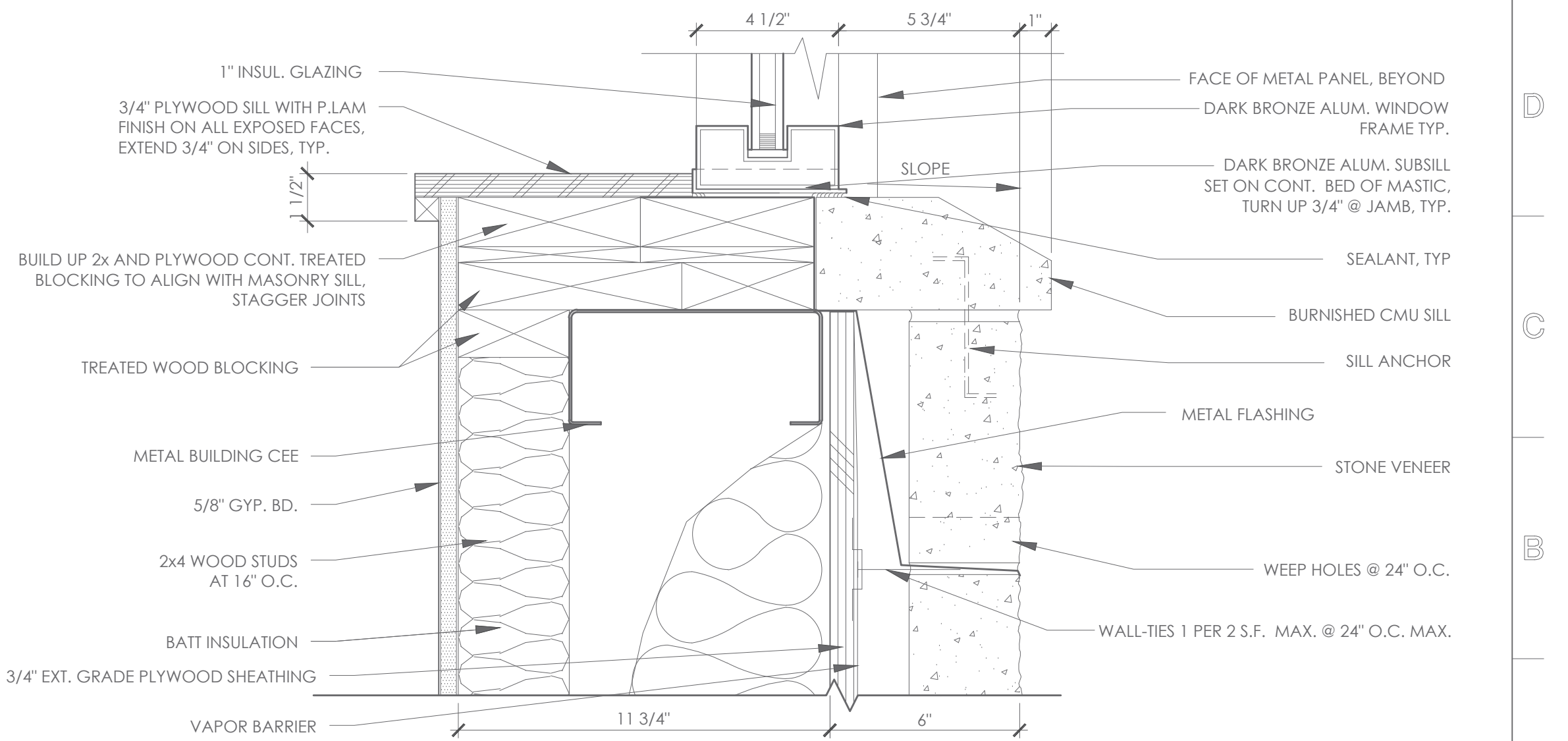
E11 SILL DETAIL
SCALE: 3" = 1'-0"



E15 SILL DETAIL
SCALE: 3" = 1'-0"

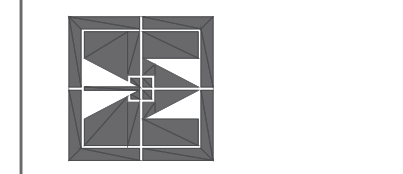


A1 WINDOW TYPES
SCALE: 1/4" = 1'-0"



A13 SILL DETAIL
SCALE: 3" = 1'-0"

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 FORT WORTH, TEXAS 817319392



TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: PF
 REVISED:

Alan R. Magee

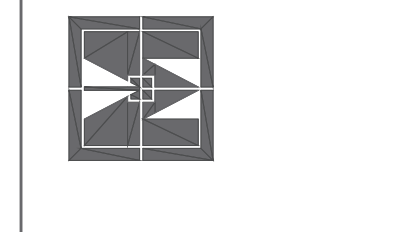
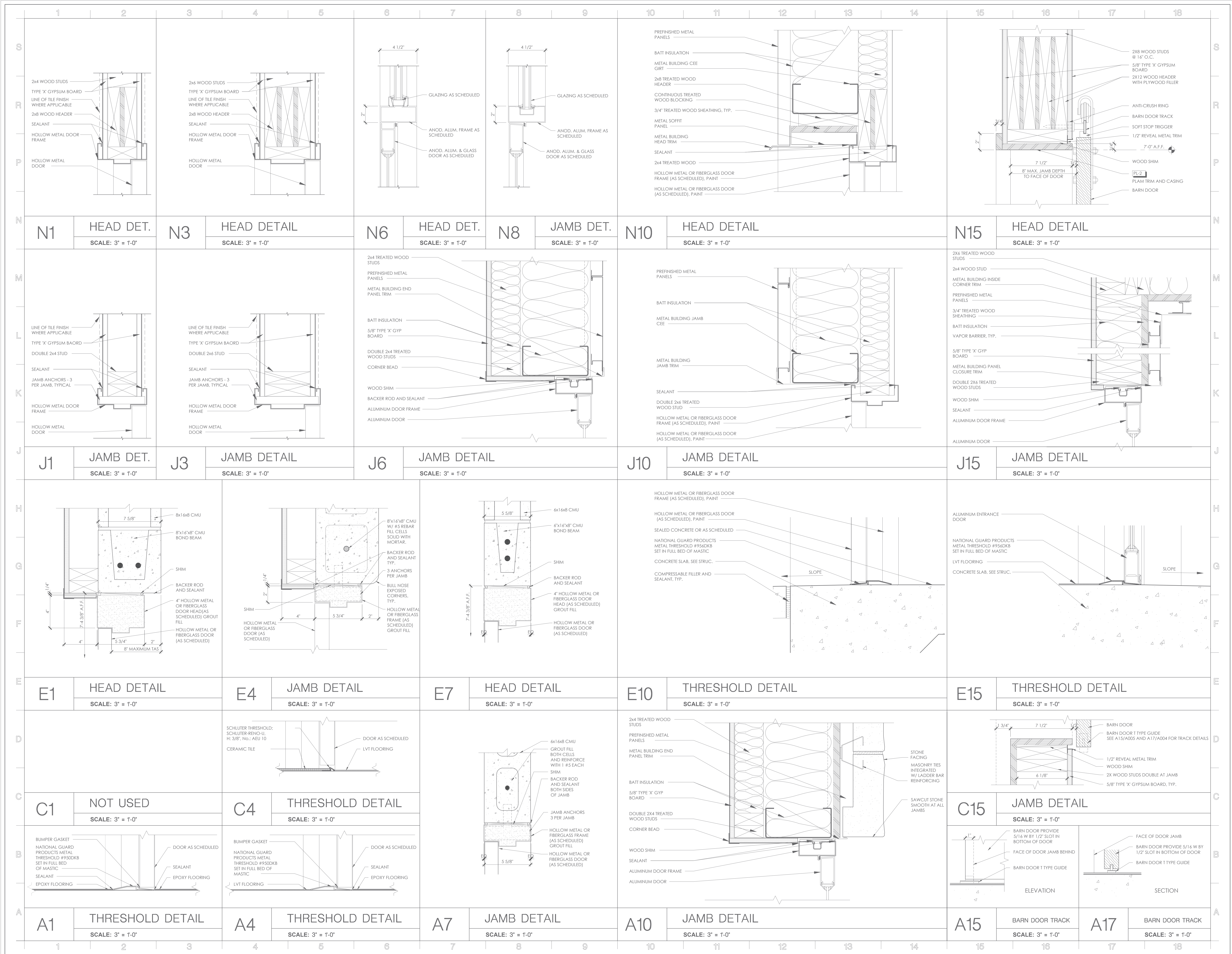


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SHEET CONTENT
 WINDOW SCHEDULE
 WINDOW DETAILS

SHEET NUMBER

A003



PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: PF
 REVISED:

Alan R. Magee



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SHEET CONTENT
 DOOR DETAILS

SHEET NUMBER

A004

BUILDING

PRE-ENGINEERED METAL BUILDING WITH CONCEALED FASTENER FASCIA SIDING, CONCEALED FASTENER ROOFING, OVERHANGS, GUTTERS, AND DOWNSPOUTS

WALL TYPES LEGEND

- PROVIDE METAL BUILDING WALL - 8" GIRTS WITH METAL SIDING WITH CONCEALED FASTENERS ON EXTERIOR, ON INTERIOR PROVIDE 3/4" WOOD STUDS AT 16" O.C. WITH 5/8" TYPE 'X' GYPSUM BOARD TO STRUCTURE ABOVE (INSULATION = R13 + R6.5 GI MINIMUM)
- PROVIDE METAL BUILDING WALL - 8" GIRTS WITH METAL SIDING WITH CONCEALED FASTENERS ON EXTERIOR, ON INTERIOR PROVIDE 10" TALL 5" CMU WALL ON INTERIOR (INSULATION = R7.6 GI MINIMUM)
- EXTERIOR WALL - 2x6 WOOD STUDS @ 16" O.C. TO STRUCTURE ABOVE WITH METAL SIDING WITH CONCEALED FASTENERS ON EXTERIOR, ON INTERIOR PROVIDE 5/8" TYPE 'X' GYPSUM BOARD TO STRUCTURE ABOVE (INSULATION = R13 + R6.5 GI MINIMUM)
- 2x4 WOOD STUDS AT 16" O.C. TO STRUCTURE ABOVE
- 2x4 WOOD STUDS AT 16" O.C., DIAGONALLY BRACE TO STRUCTURE @ 48" O.C.
- PAINTED 6x8 1/2 CMU WALL, 10" TALL, GROUT FILL EVERY CELL. PROVIDE 2x4 WOOD STUDS AT 16" O.C. WITH 5/8" TYPE 'X' GYPSUM BOARD AND SOUND ATTENUATION TO STRUCTURE ABOVE
- PAINTED 6x8 1/2 CMU WALL, 10" TALL, GROUT FILL EVERY CELL. PROVIDE 2x4 WOOD STUDS AT 16" O.C. WITH 5/8" TYPE 'X' GYPSUM BOARD AND SOUND ATTENUATION TO STRUCTURE ABOVE

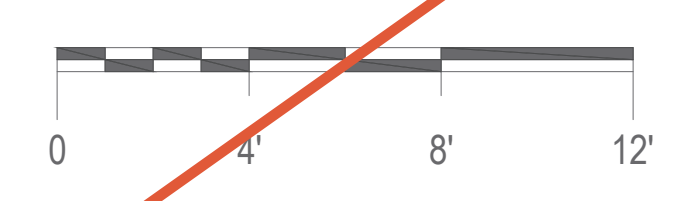
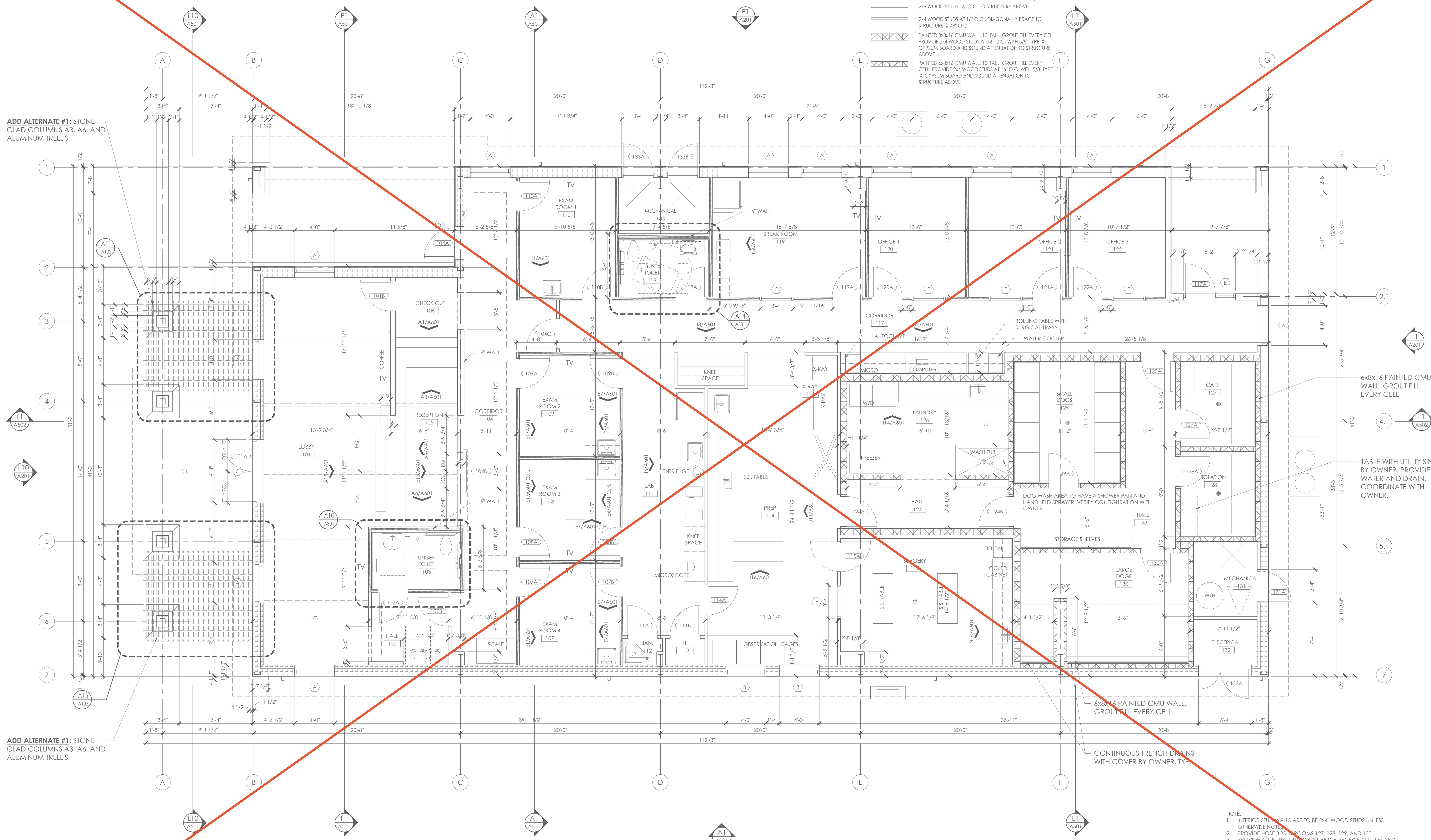
FIRE EXTINGUISHER CABINETS - CUSTOM COLOR TO MATCH WALL FINISH. COORDINATE REQUIRED NUMBER AND LOCATION WITH FIRE MARSHAL

GENERAL NOTES:

- PROVIDE SOUND ATTENUATION BATS IN WALLS SURROUNDING MECHANICAL EQUIPMENT AND TOILETS
- SEE A401 FOR LOCATION OF DRAFTSTOPPING WALLS IN ATTIC
- PROVIDE PRESSURE-TREATED LUMBER FOR ALL BASE PLATES, BLOCKING, FLYWOOD AT NEAR EXTERIOR SURFACES, AND WHERE NOTED.
- ALL WORK SHALL COMPLY WITH APPLICABLE GOVERNING CODES
- USE BULL NOSE CMU AT ALL OUTSIDE EDGES AND CORNERS OF CMU WALLS INCLUDING JAMBS WHERE THE EDGE IS EXPOSED. US FACTORY FINISH BULL NOSE. DO NOT GRIND.
- ROOF INSULATION SHALL BE A MINIMUM OF R19 + R11 L.S. (LINER SYSTEM)

ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS

ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS



FLOOR PLAN

SCALE: 1/4" = 1'-0"

A1

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TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
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 REVISED:

Alan R. Magee



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SHEET CONTENT
 FLOOR PLAN
 BUILDING NOTES
 WALL TYPES

SHEET NUMBER

A101

BUILDING

PRE-ENGINEERED METAL BUILDING WITH CONCEALED FASTENER FASCIA SIDING, CONCEALED FASTENER ROOFING, OVERHANGS, GUTTERS, AND DOWNSPOUTS

WALL TYPES LEGEND

- PROVIDE METAL BUILDING WALL - 8" GIRTS WITH METAL SIDING WITH CONCEALED FASTENERS ON EXTERIOR, ON INTERIOR PROVIDE 2x4 WOOD STUDS AT 16" O.C. WITH 5/8" TYPE 'X' GYPSUM BOARD TO STRUCTURE ABOVE (INSULATION = SINGLE LAYER, FILLED CAVITY FIBERGLASS SYSTEM - R-25 WITH 1/8" FOAM TAPE AT METAL BUILDING WALL WITH R13 BETWEEN WOOD STUDS)
- PROVIDE METAL BUILDING WALL - 8" GIRTS WITH METAL SIDING WITH CONCEALED FASTENERS ON EXTERIOR, ON INTERIOR PROVIDE 10" TALL 6" THICK (6x6x16) CMU WALL (INSULATION = SINGLE LAYER, FILLED CAVITY FIBERGLASS SYSTEM - R-25 WITH 1/8" FOAM TAPE AT METAL BUILDING WALL)
- EXTERIOR WALL - 2x4 WOOD STUDS @ 16" O.C. TO STRUCTURE ABOVE WITH METAL SIDING WITH CONCEALED FASTENERS ON EXTERIOR OVER 3/4" SHEATHING, ON INTERIOR PROVIDE 5/8" TYPE 'X' GYPSUM BOARD TO STRUCTURE ABOVE (INSULATION = R20 BATT MINIMUM)
- 2x4 WOOD STUDS @ 16" O.C. TO STRUCTURE ABOVE (SOUND ATTENUATION BATTS WHERE SHOWN)
- 2x4 WOOD STUDS AT 16" O.C. DIAGONALLY BRACE TO STRUCTURE @ 48" O.C. (SOUND ATTENUATION BATTS WHERE SHOWN)
- PAINTED 6x8x16 CMU WALL, 10" TALL, GROUT FILL EVERY CELL. PROVIDE 2x4 WOOD STUDS AT 16" O.C. WITH 5/8" TYPE 'X' GYPSUM BOARD AND SOUND ATTENUATION TO STRUCTURE ABOVE
- PAINTED 6x8x16 CMU WALL, 10" TALL, GROUT FILL EVERY CELL. PROVIDE 2x4 WOOD STUDS AT 16" O.C. WITH 5/8" TYPE 'X' GYPSUM BOARD AND SOUND ATTENUATION TO STRUCTURE ABOVE

FIRE EXTINGUISHER CABINETS - CUSTOM COLOR TO MATCH WALL FINISH. COORDINATE REQUIRED NUMBER AND LOCATION WITH FIRE MARSHAL.

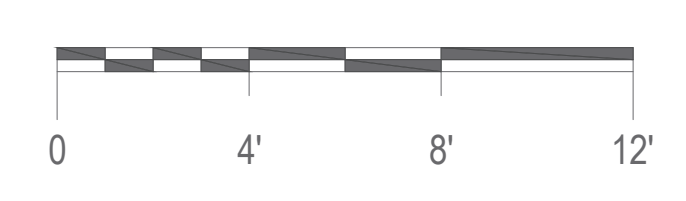
GENERAL NOTES:

- PROVIDE SOUND ATTENUATION BATTS IN WALLS SURROUNDING MECHANICAL EQUIPMENT AND TOILETS
- SEE A401 FOR LOCATION OF DRAFTSTOPPING WALLS IN ATTIC
- PROVIDE PRESSURE-TREATED LUMBER FOR ALL BASE PLATES, BLOCKING, PLYWOOD NEAR EXTERIOR SURFACES, AND WHERE NOTED.
- ALL WORK SHALL COMPLY WITH APPLICABLE GOVERNING CODES
- USE BULL NOSE CMU AT ALL OUTSIDE EDGES AND CORNERS OF CMU WALLS, INCLUDING JAMBS WHERE THE EDGE IS EXPOSED. US FACTORY FINISH BULL NOSE-DO NOT GRIND.
- PROVIDE A CONTINUOUS AIR BARRIER AS SPECIFIED FOR THE BUILDING ENVELOPE
- ROOF INSULATION SHALL BE R38 MINIMUM CONSISTING OF 2 LAYERS OF 6" THICK R19 WITH THERMAL SPACER BLOCKS. LOWER LAYER TO BE FACED INSULATION WITH STEEL BANDING FOR SUPPORT.

ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS

ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS

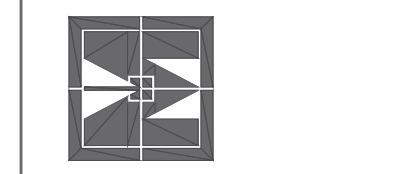
STONE VENEER BELOW, TYP., SEE ELEVATIONS



FLOOR PLAN

SCALE: 1/4" = 1'-0"

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TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN: PF
REVISED: 10/14/2024

Alan R. Magee

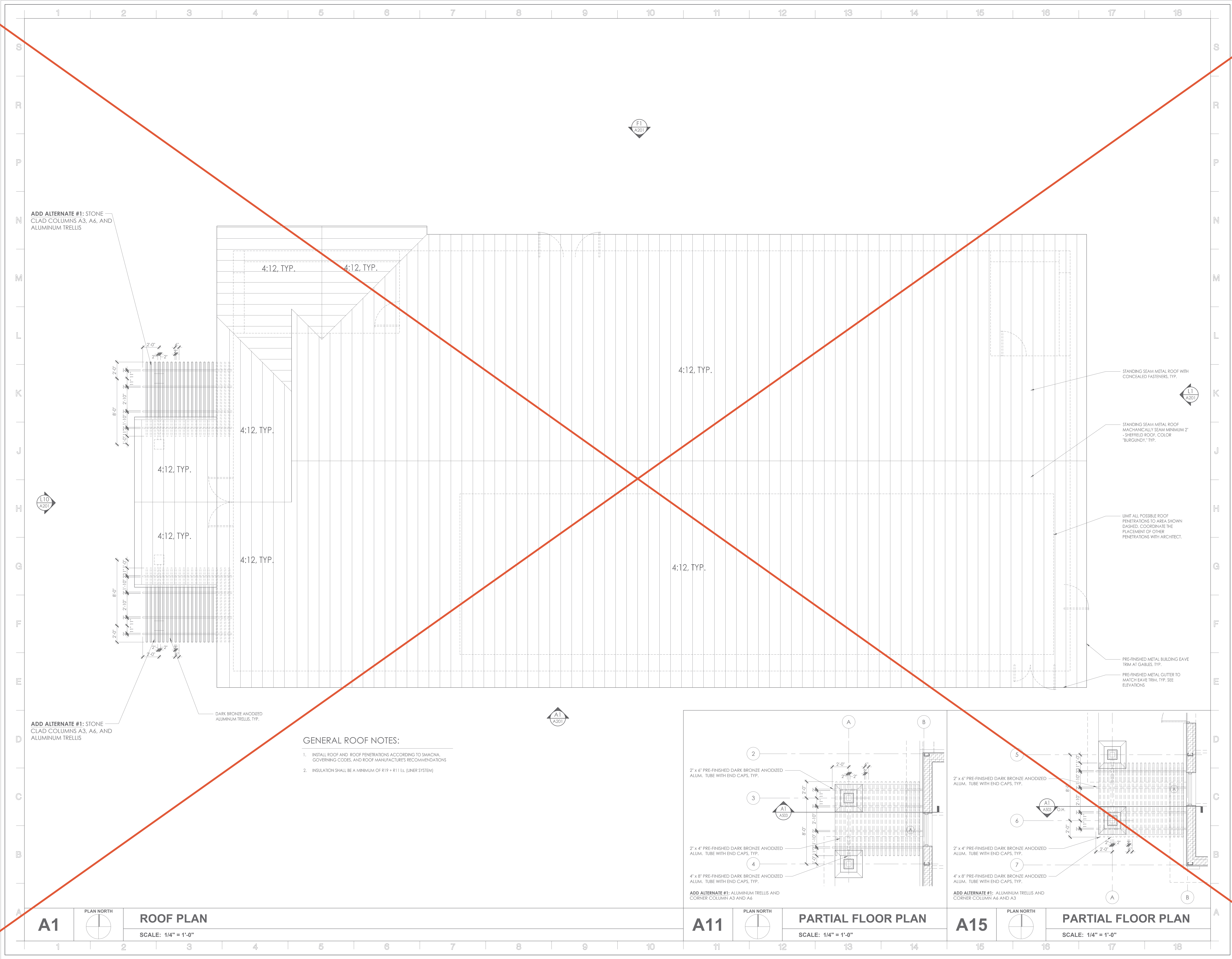


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SHEET CONTENT
FLOOR PLAN
BUILDING NOTES
WALL TYPES

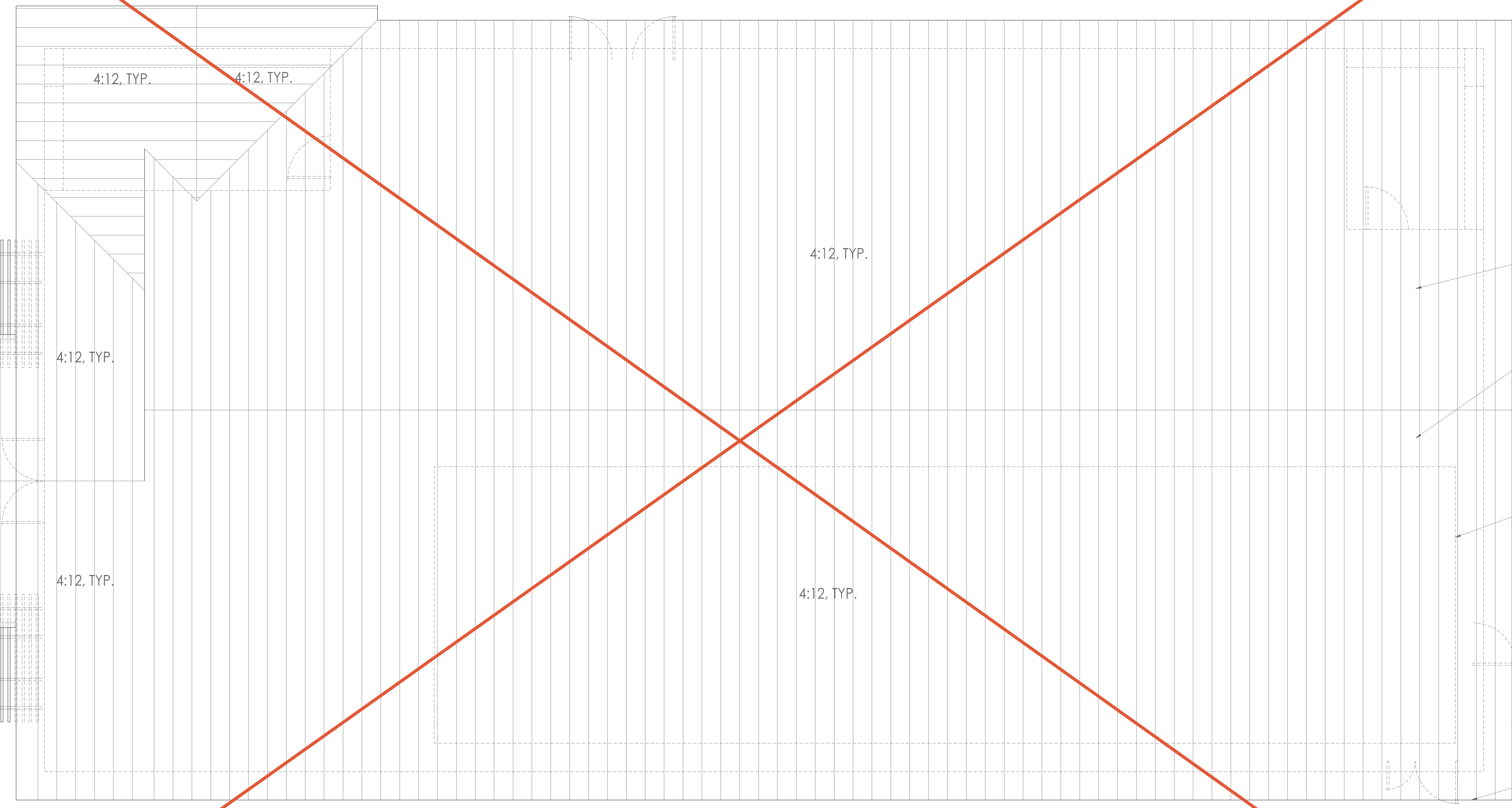
SHEET NUMBER

SA01
A101



ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS

ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS



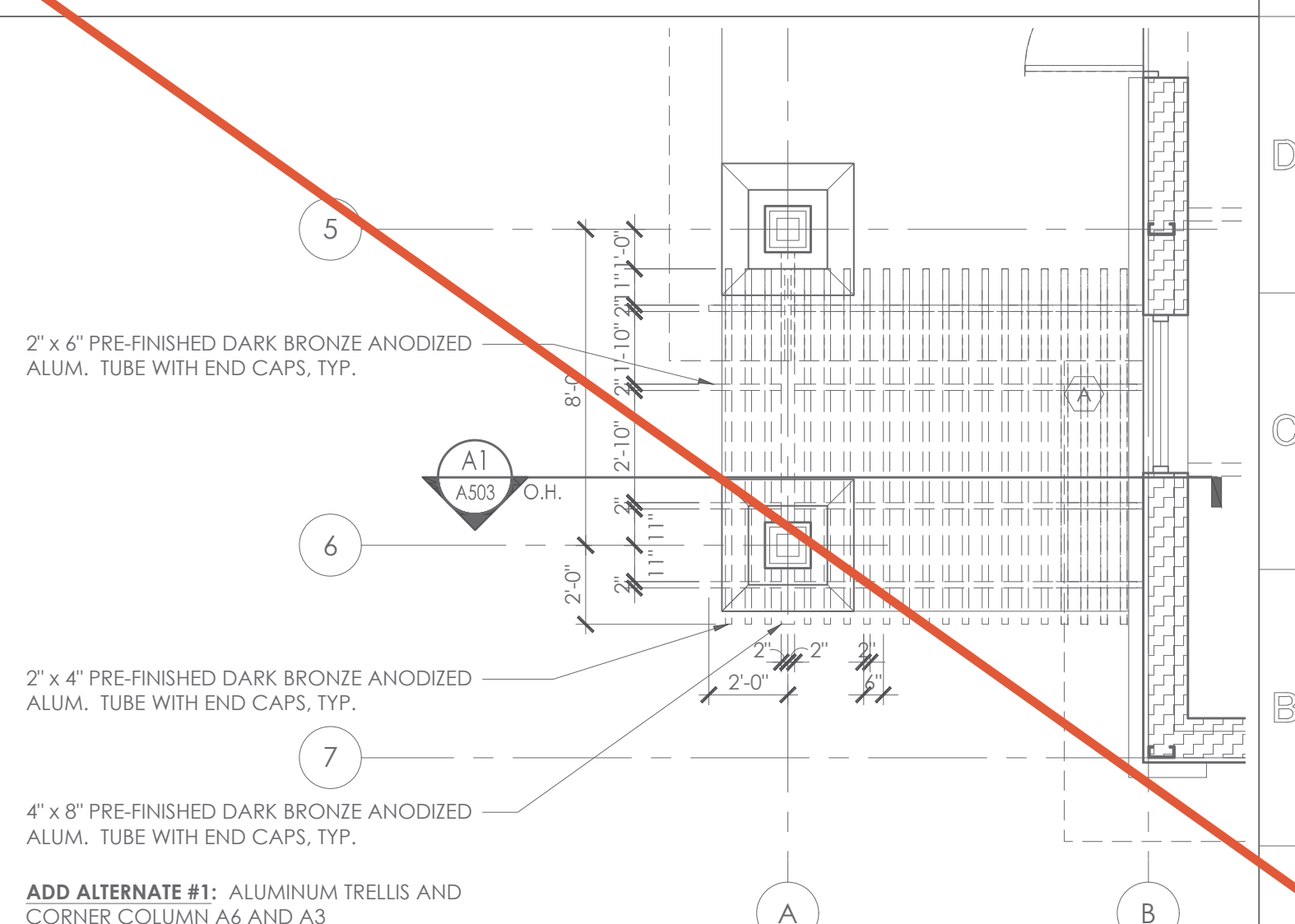
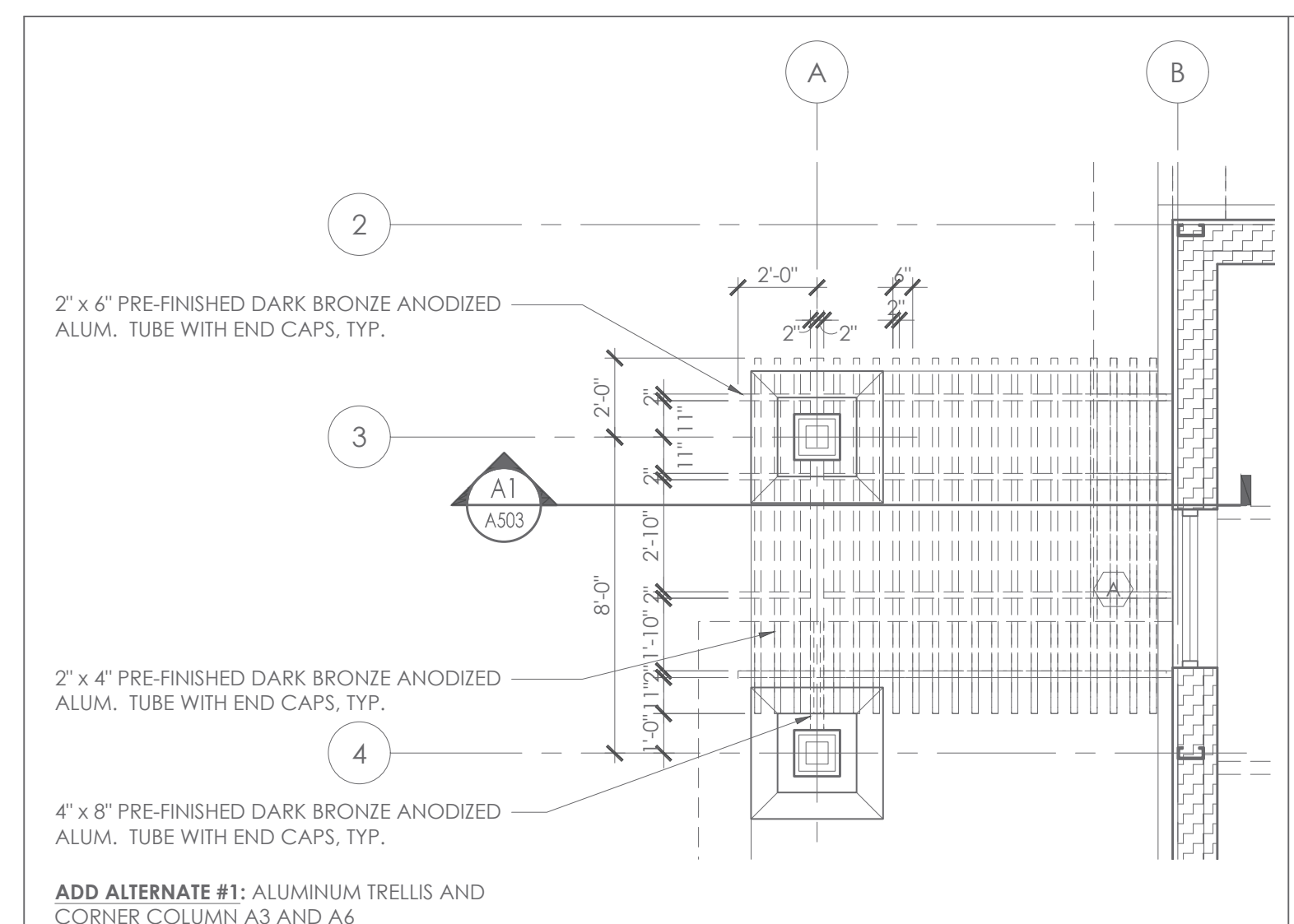
- GENERAL ROOF NOTES:**
1. INSTALL ROOF AND ROOF PENETRATIONS ACCORDING TO SMACNA, GOVERNING CODES, AND ROOF MANUFACTURERS RECOMMENDATIONS
 2. INSULATION SHALL BE A MINIMUM OF R19 + R11 LS. (LINER SYSTEM)

STANDING SEAM METAL ROOF WITH CONCEALED FASTENERS, TYP.

STANDING SEAM METAL ROOF MECHANICALLY SEAM MINIMUM 2" SHEETED ROOF, COLOR 'BURGUNDY', TYP.

LIMIT ALL POSSIBLE ROOF PENETRATIONS TO AREA SHOWN DASHED, COORDINATE THE PLACEMENT OF OTHER PENETRATIONS WITH ARCHITECT.

PRE-FINISHED METAL BUILDING EAVE TRIM AT GABLES, TYP.
PRE-FINISHED METAL GUTTER TO MATCH EAVE TRIM, TYP. SEE ELEVATIONS



A1 PLAN NORTH
ROOF PLAN
SCALE: 1/4" = 1'-0"

A11 PLAN NORTH
PARTIAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

A15 PLAN NORTH
PARTIAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

Alan R. Magee

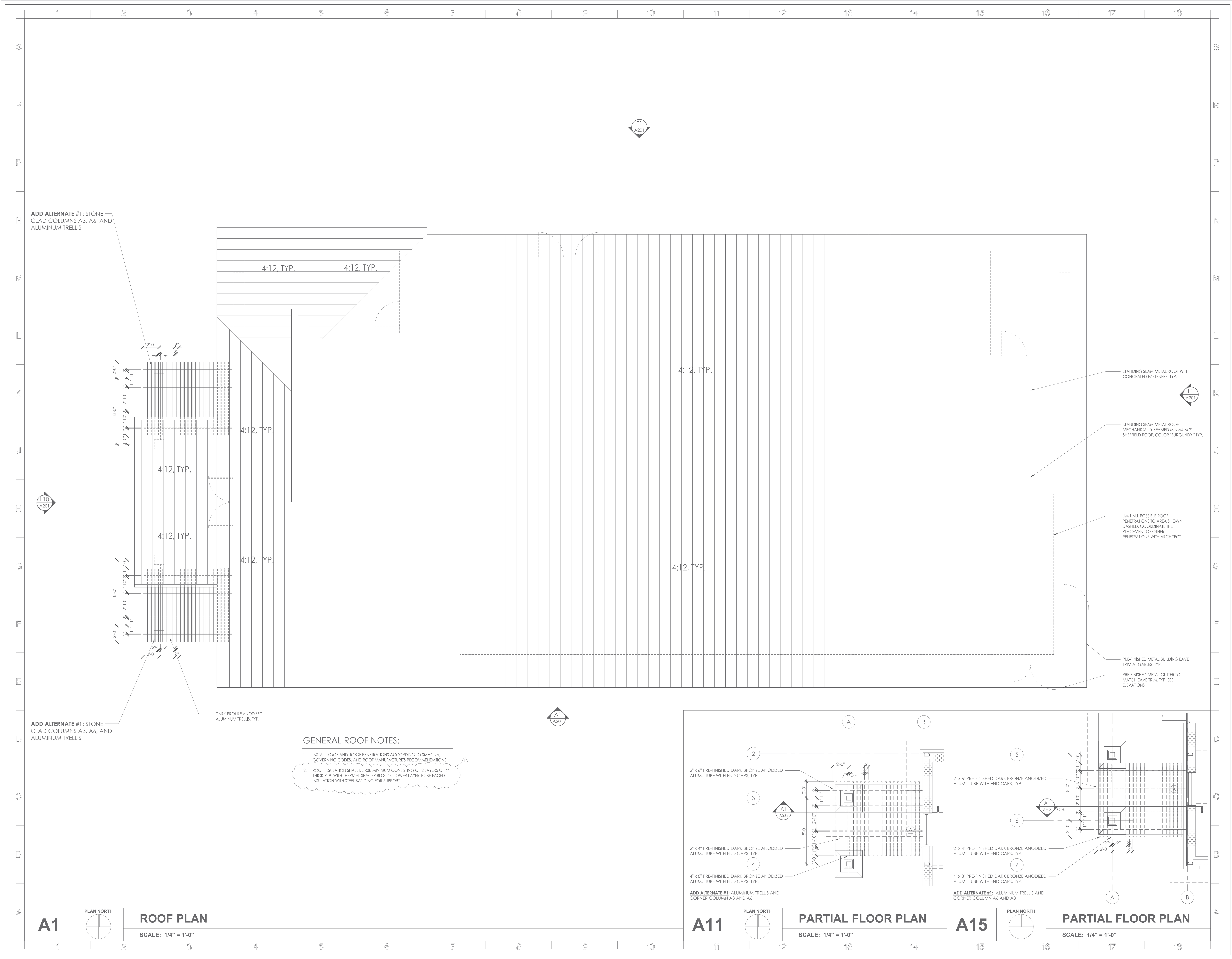


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SHEET CONTENT
ROOF PLAN
PARTIAL FLOOR PLAN

SHEET NUMBER

A102



ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS

ADD ALTERNATE #1: STONE CLAD COLUMNS A3, A6, AND ALUMINUM TRELLIS

- GENERAL ROOF NOTES:**
1. INSTALL ROOF AND ROOF PENETRATIONS ACCORDING TO SMACNA GOVERNING CODES AND ROOF MANUFACTURER'S RECOMMENDATIONS
 2. ROOF INSULATION SHALL BE R38 MINIMUM CONSISTING OF 2 LAYERS OF 4" THICK R19 WITH THERMAL SPACER BLOCKS. LOWER LAYER TO BE FACED INSULATION WITH STEEL BANDING FOR SUPPORT.

STANDING SEAM METAL ROOF WITH CONCEALED FASTENERS, TYP.

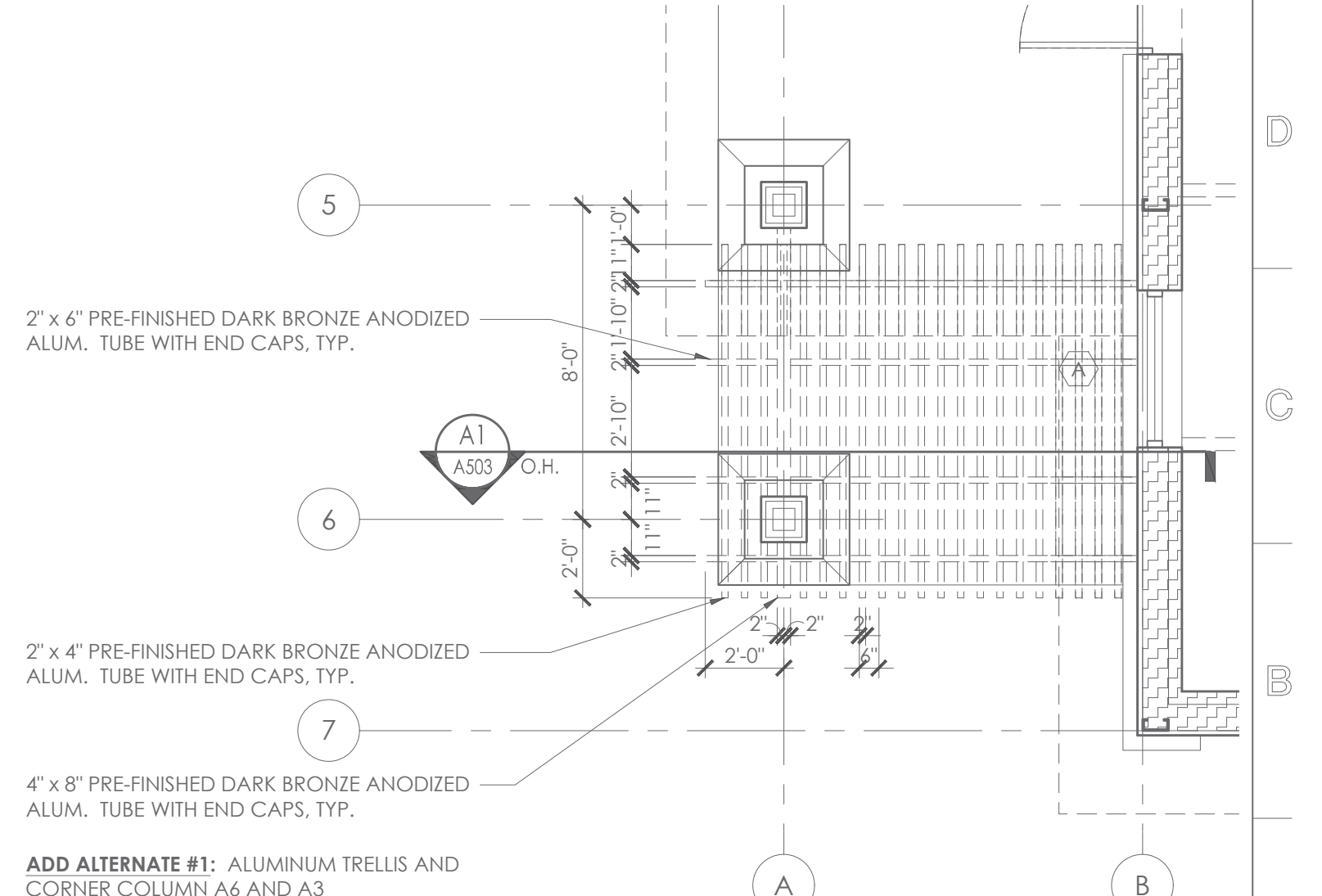
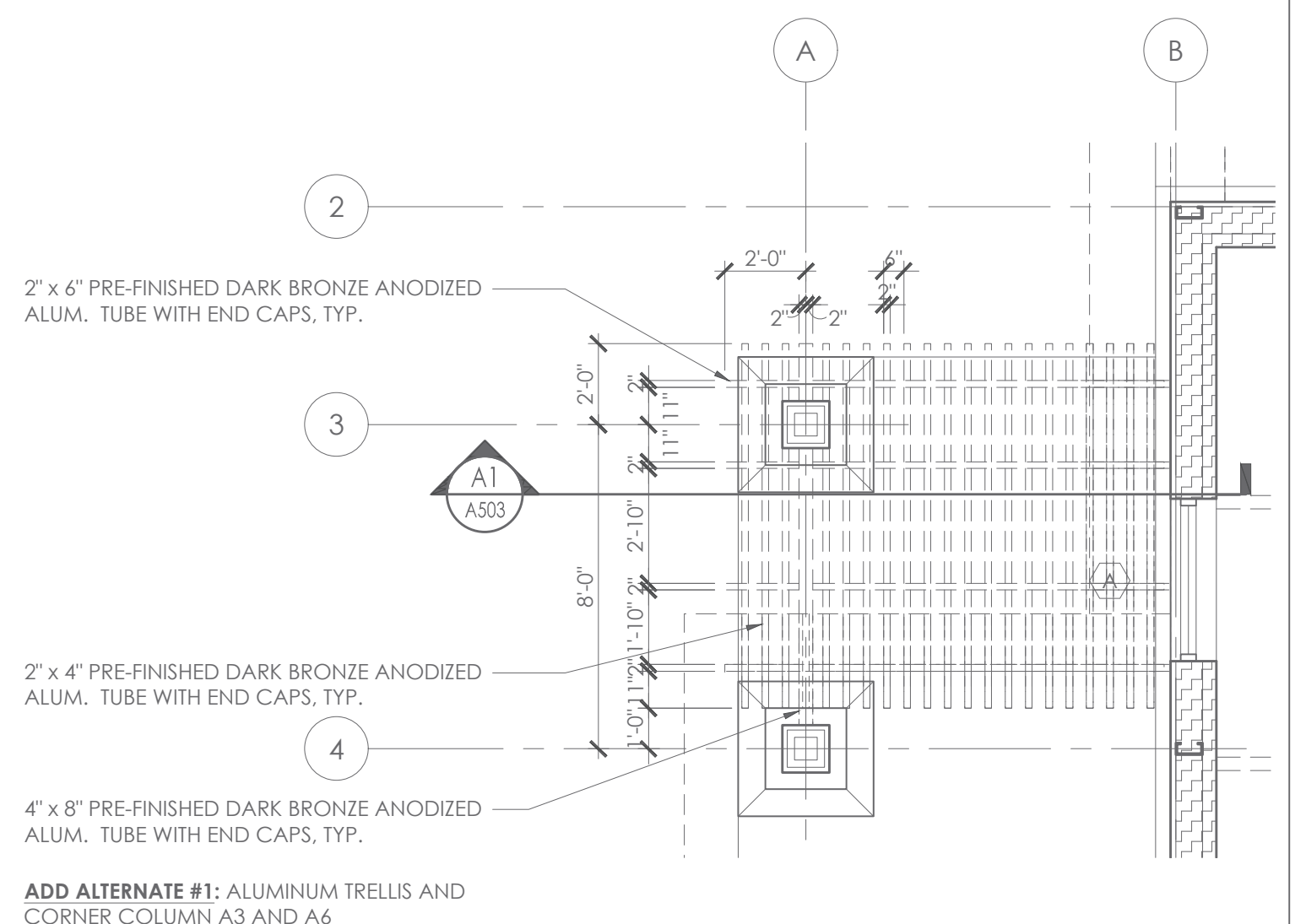
STANDING SEAM METAL ROOF MECHANICALLY SEALED MINIMUM 2" SHELFIELD ROOF, COLOR "BURGUNDY", TYP.

LIMIT ALL POSSIBLE ROOF PENETRATIONS TO AREA SHOWN DASHED. COORDINATE THE PLACEMENT OF OTHER PENETRATIONS WITH ARCHITECT.

PRE-FINISHED METAL BUILDING EAVE TRIM AT GABLES, TYP.
PRE-FINISHED METAL GUTTER TO MATCH EAVE TRIM, TYP. SEE ELEVATIONS

1. INSTALL ROOF AND ROOF PENETRATIONS ACCORDING TO SMACNA GOVERNING CODES AND ROOF MANUFACTURER'S RECOMMENDATIONS

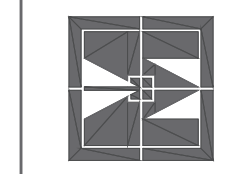
2. ROOF INSULATION SHALL BE R38 MINIMUM CONSISTING OF 2 LAYERS OF 4" THICK R19 WITH THERMAL SPACER BLOCKS. LOWER LAYER TO BE FACED INSULATION WITH STEEL BANDING FOR SUPPORT.



A1 PLAN NORTH
ROOF PLAN
SCALE: 1/4" = 1'-0"

A11 PLAN NORTH
PARTIAL FLOOR PLAN
SCALE: 1/4" = 1'-0"

A15 PLAN NORTH
PARTIAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
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REVISED: 10/14/2024

Alan R. Magee

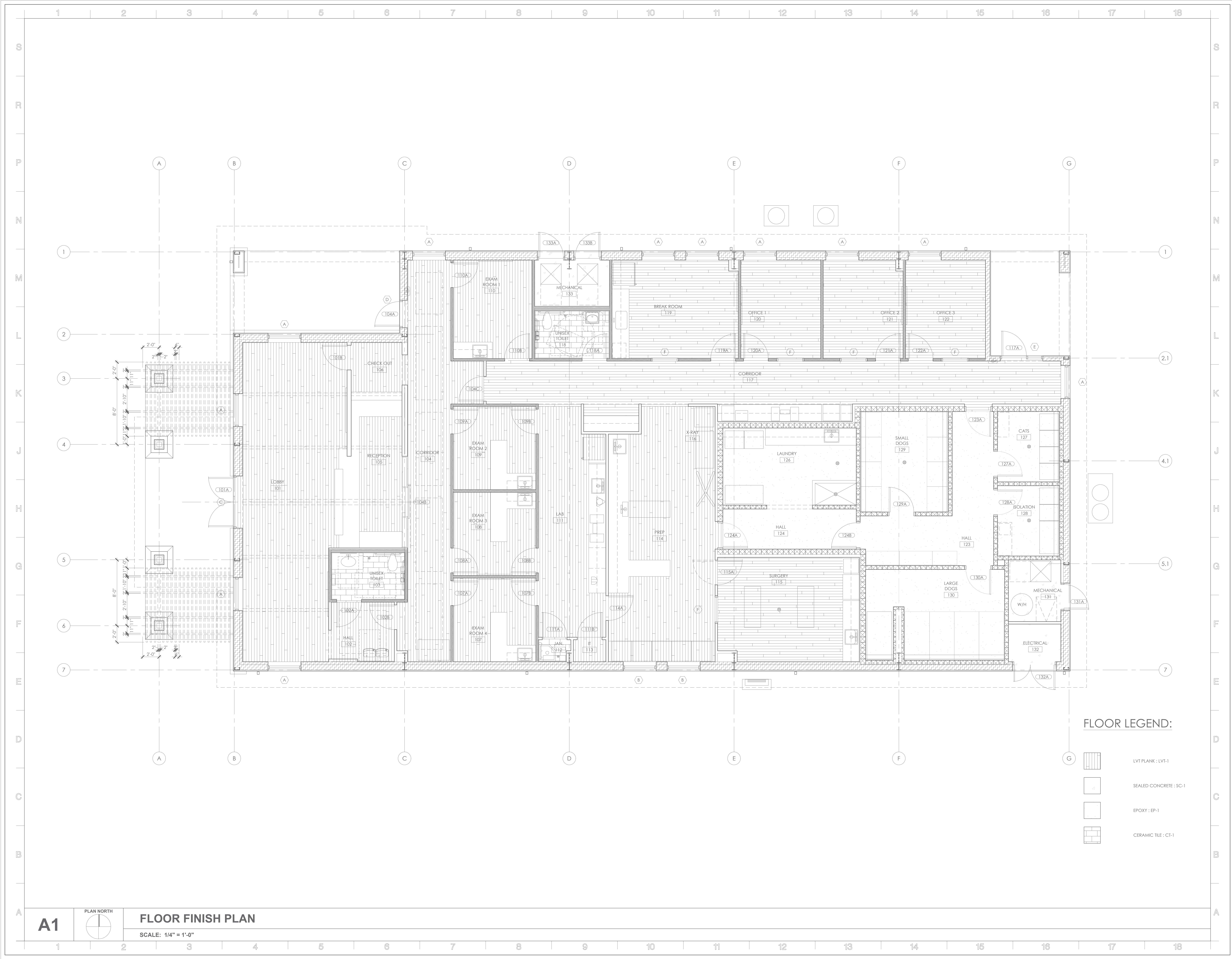


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SHEET CONTENT
ROOF PLAN
PARTIAL FLOOR PLAN

SHEET NUMBER

SA02
A102




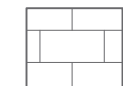


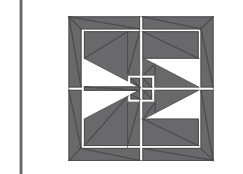
A1

FLOOR FINISH PLAN

SCALE: 1/4" = 1'-0"

FLOOR LEGEND:

-  LVT PLANK : LVT-1
-  SEALED CONCRETE : SC-1
-  EPOXY : EP-1
-  CERAMIC TILE : CT-1



TARWATER VETERINARIAN CLINIC

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 GRANDVIEW, TEXAS 76050

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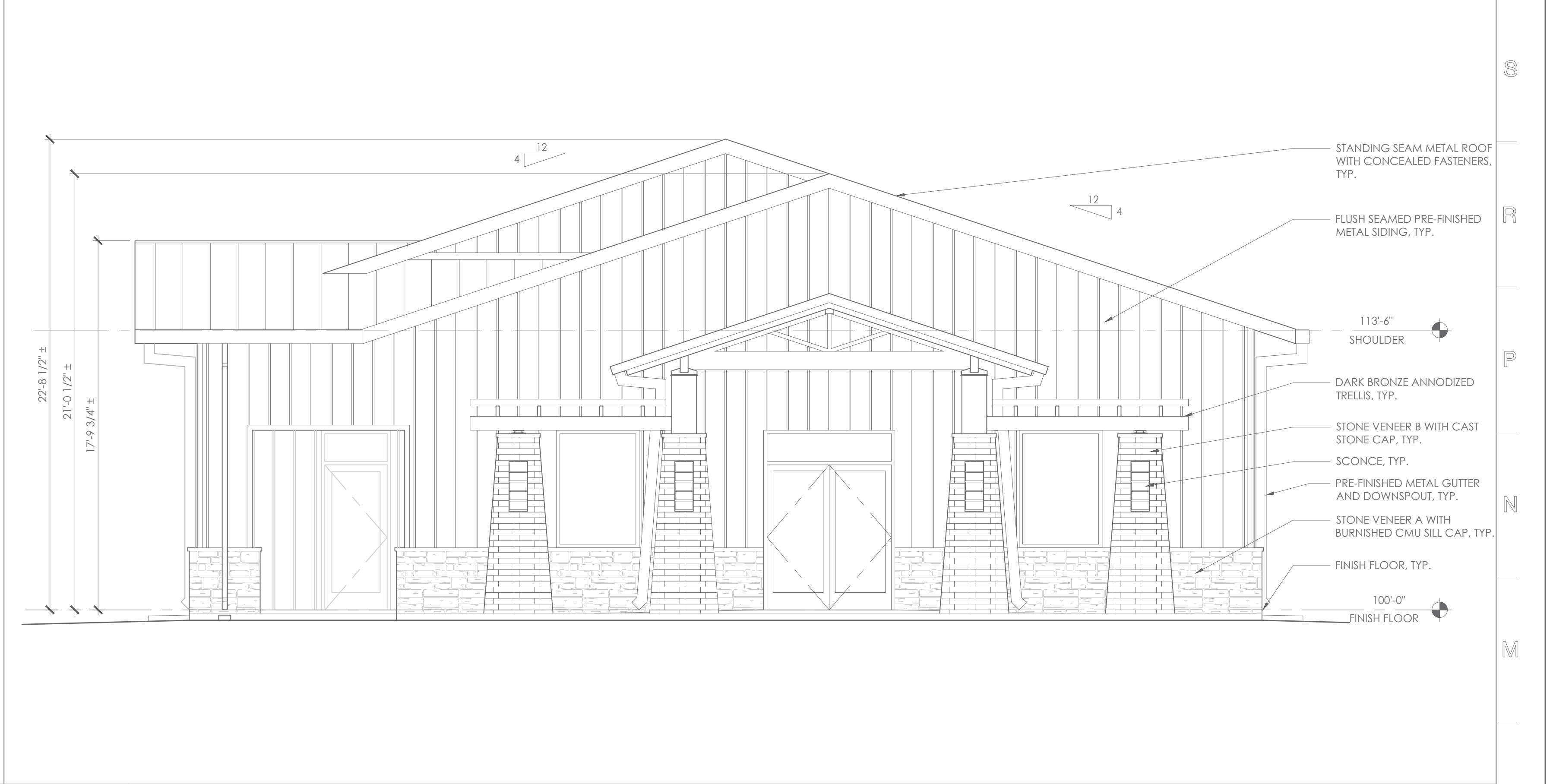
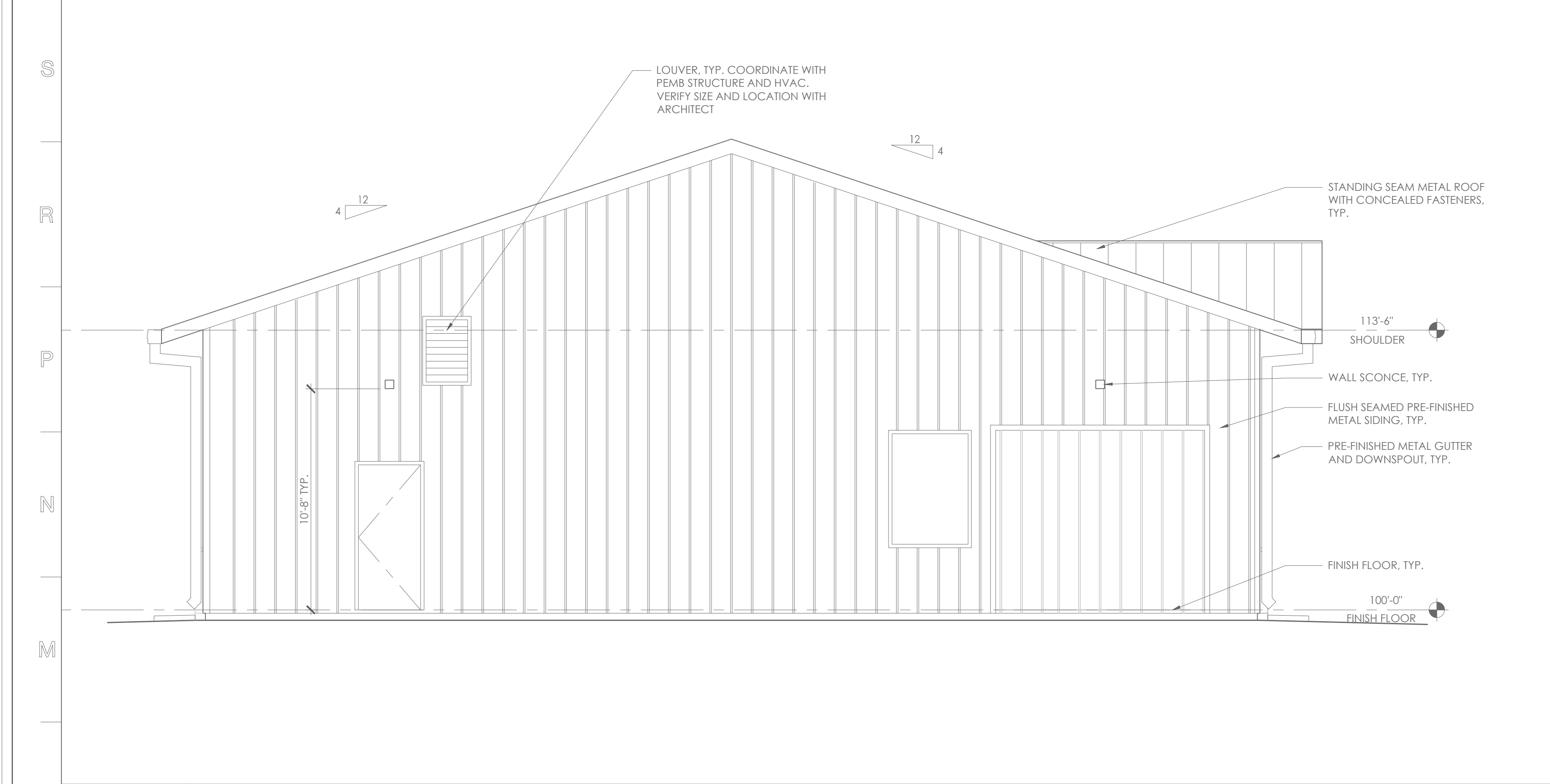
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SHEET CONTENT
 FLOOR FINISH PLAN

SHEET NUMBER

A103

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



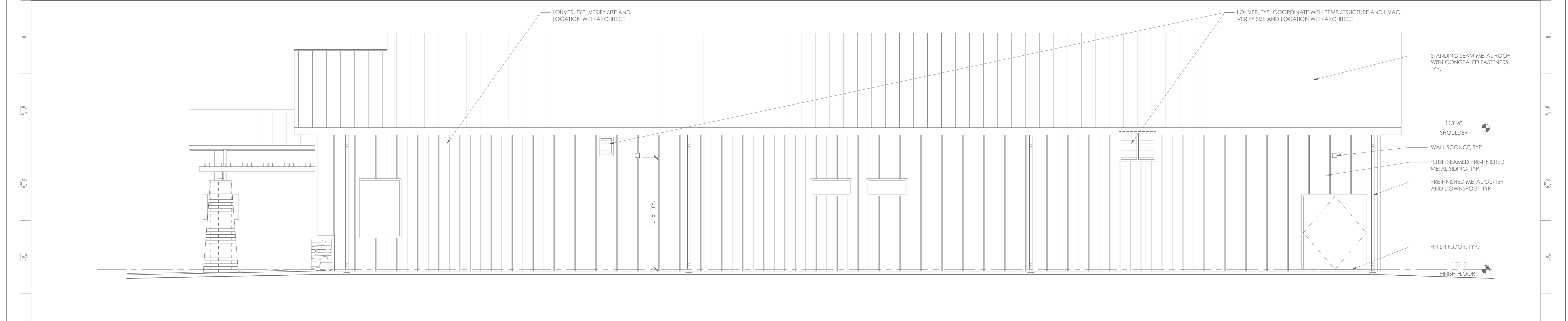
L1 **SOUTH ELEVATION**
SCALE: 1/4" = 1'-0"

L10 **NORTH ELEVATION**
SCALE: 1/4" = 1'-0"



F1 **EAST ELEVATION**
SCALE: 1/4" = 1'-0"

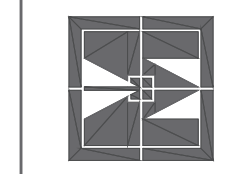
F10 **WEST ELEVATION**
SCALE: 1/4" = 1'-0"



A1 **WEST ELEVATION**
SCALE: 1/4" = 1'-0"

A10 **EAST ELEVATION**
SCALE: 1/4" = 1'-0"

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TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

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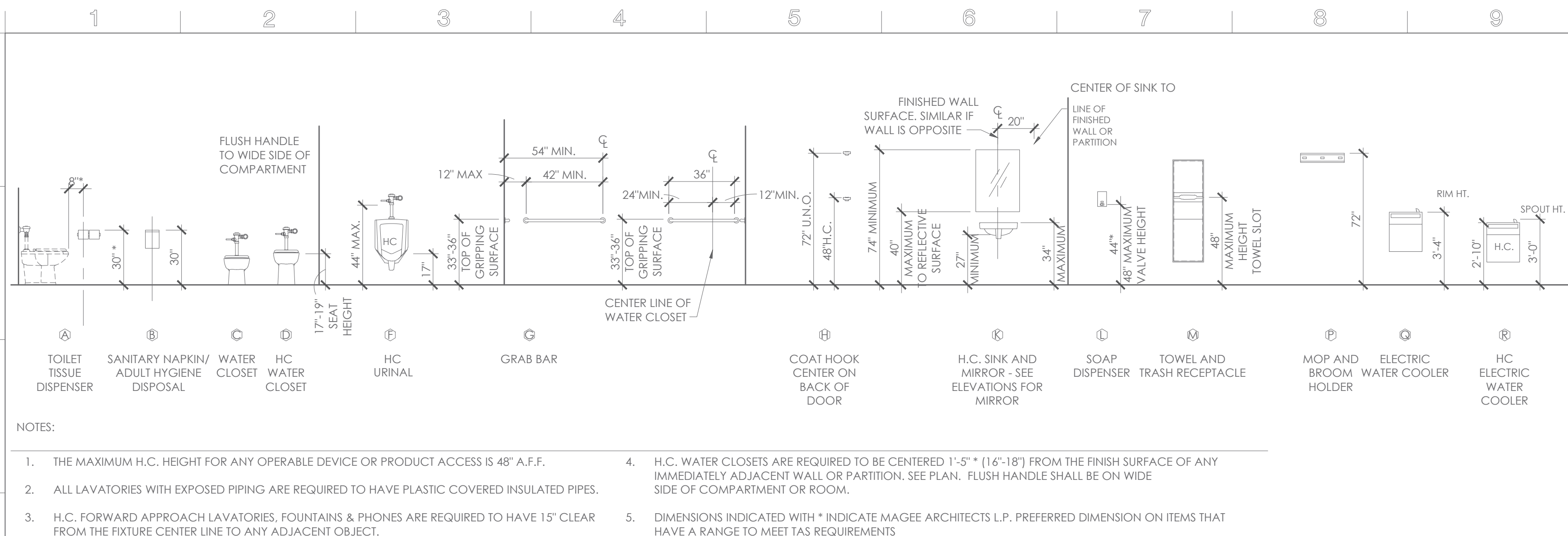


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SHEET CONTENT
EXTERIOR ELEVATIONS

SHEET NUMBER

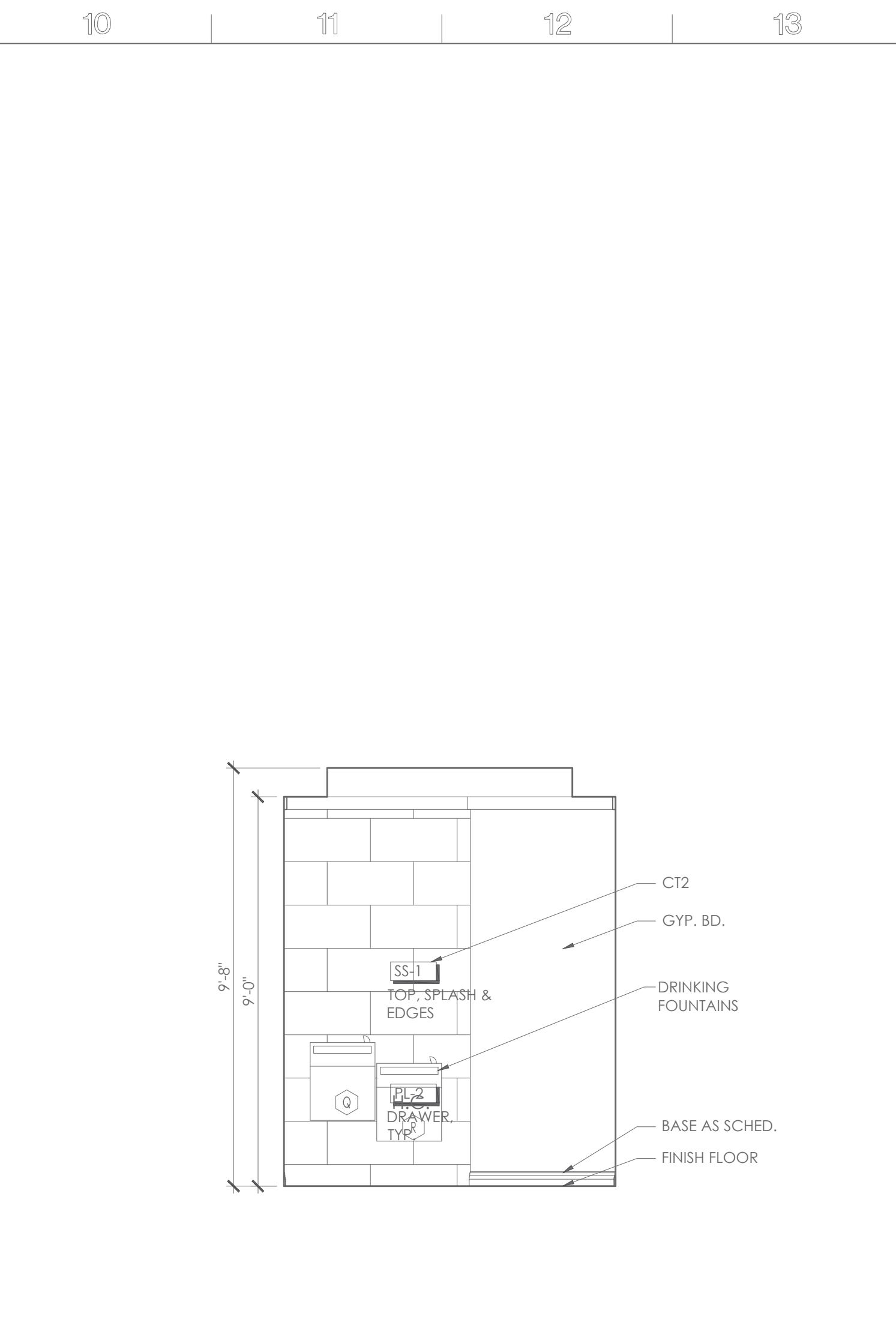
A201



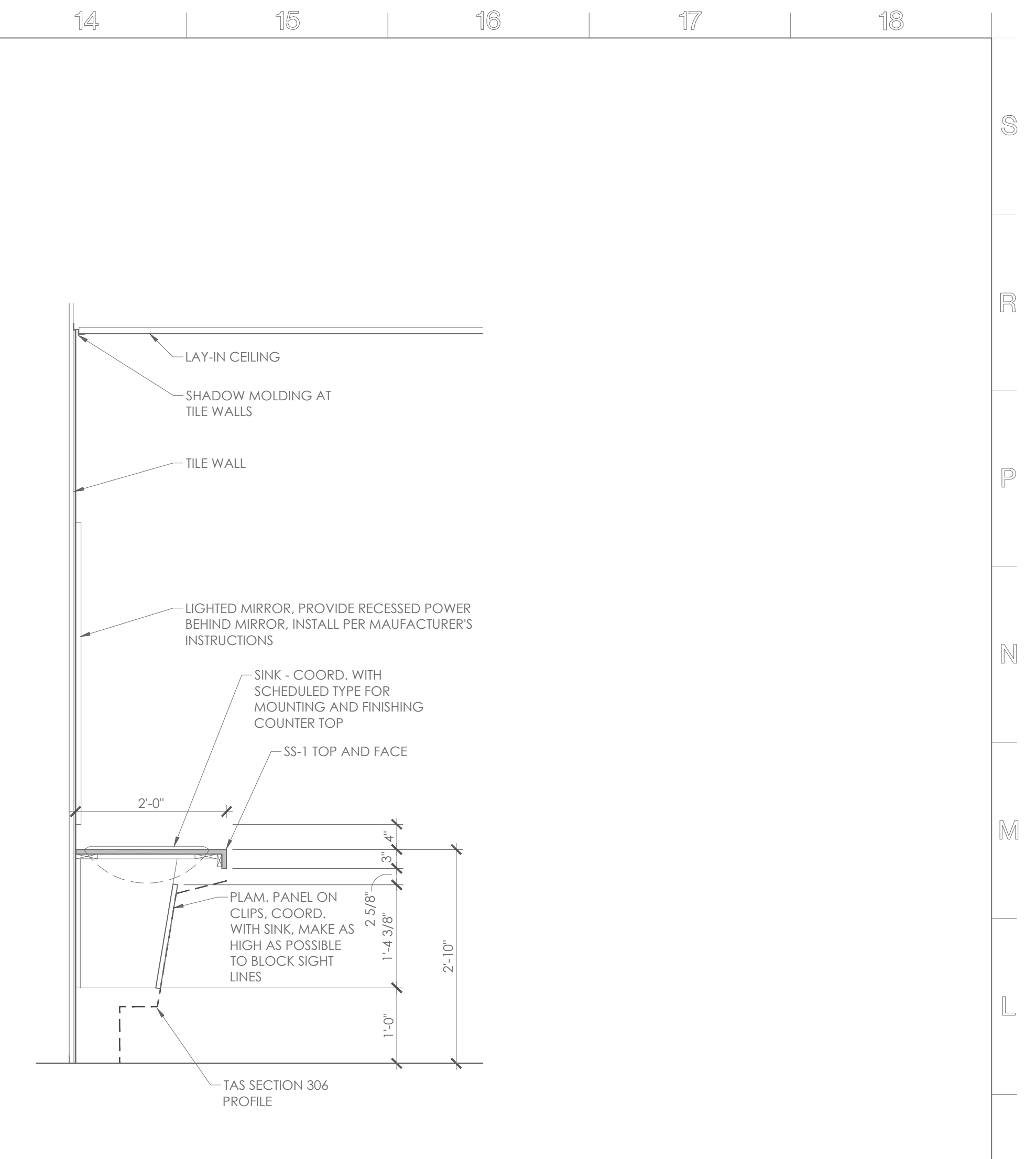
N1	FIXTURE SCHEDULE
	SCALE: N.T.S.

NOTES:

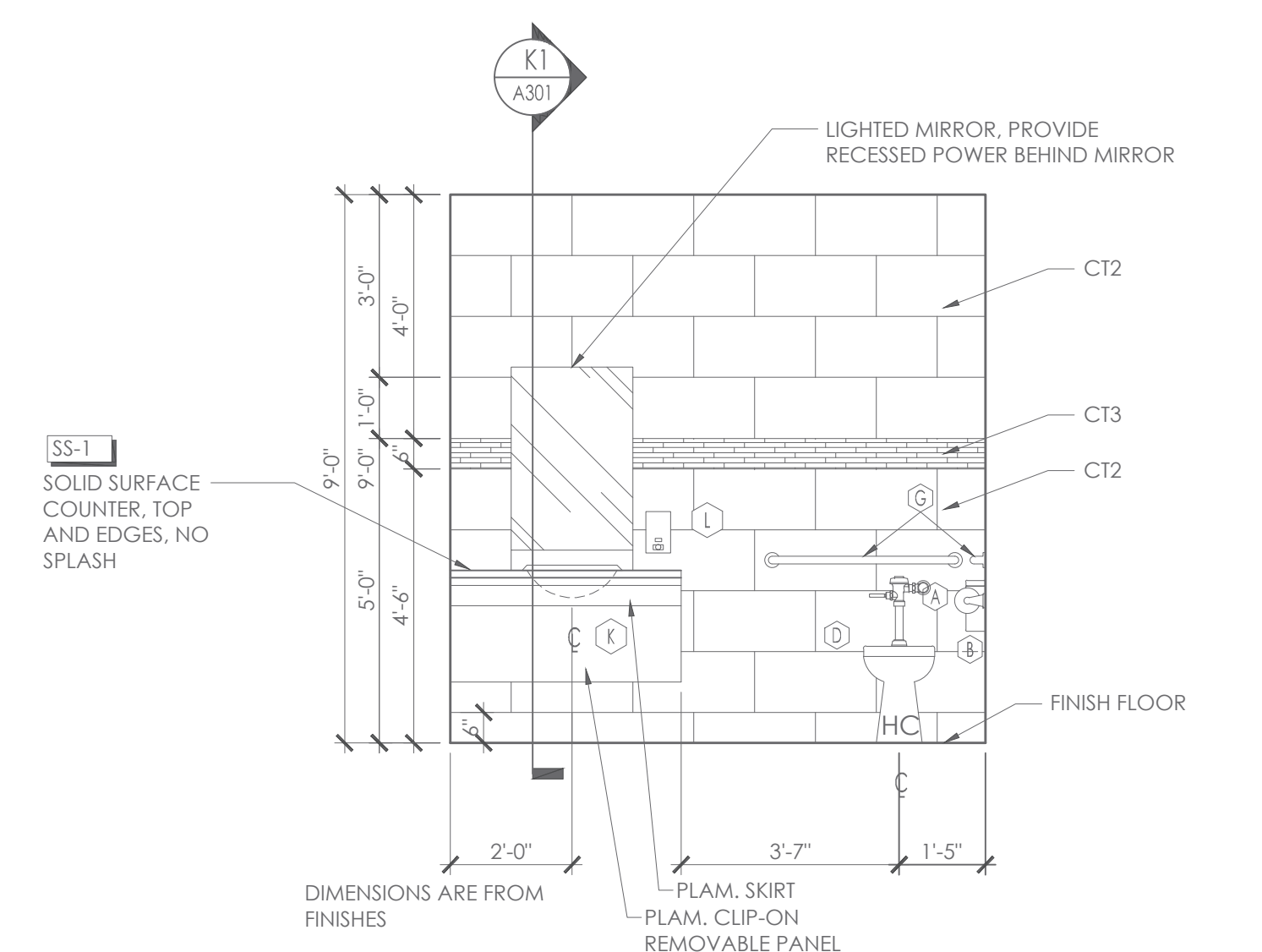
1. THE MAXIMUM H.C. HEIGHT FOR ANY OPERABLE DEVICE OR PRODUCT ACCESS IS 48" A.F.F.
2. ALL LAVATORIES WITH EXPOSED PIPING ARE REQUIRED TO HAVE PLASTIC COVERED INSULATED PIPES.
3. H.C. FORWARD APPROACH LAVATORIES, FOUNTAINS & PHONES ARE REQUIRED TO HAVE 15" CLEAR FROM THE FIXTURE CENTER LINE TO ANY ADJACENT OBJECT.
4. H.C. WATER CLOSETS ARE REQUIRED TO BE CENTERED 1'-5" (1'-6" TO 1'-8") FROM THE FINISH SURFACE OF ANY IMMEDIATELY ADJACENT WALL OR PARTITION. SEE PLAN. FLUSH HANDLE SHALL BE ON WIDE SIDE OF COMPARTMENT OR ROOM.
5. DIMENSIONS INDICATED WITH * INDICATE MAGEE ARCHITECTS L.P. PREFERRED DIMENSION ON ITEMS THAT HAVE A RANGE TO MEET TAS REQUIREMENTS



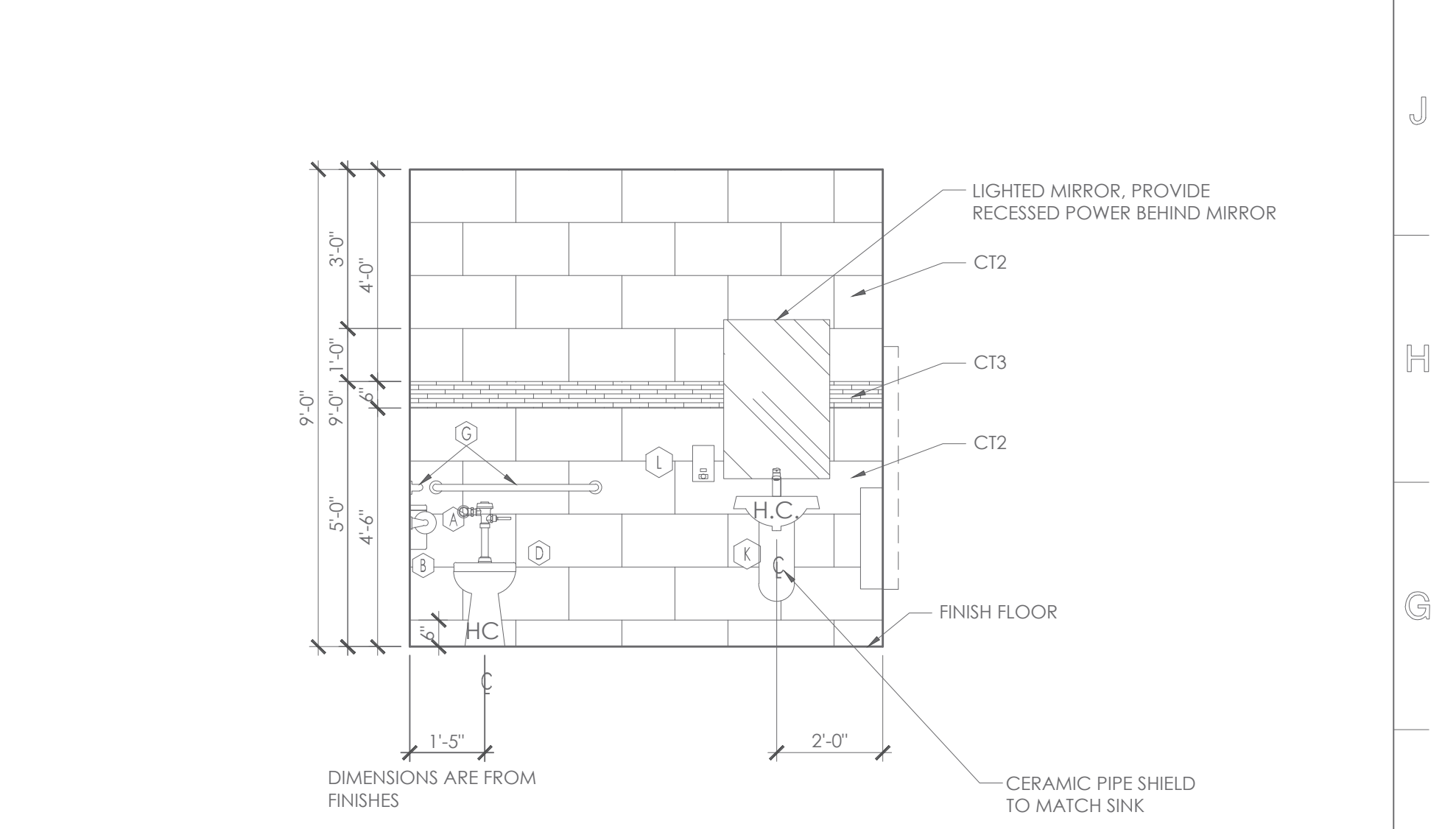
K10 ELEVATION
SCALE: 3/8" = 1'-0"



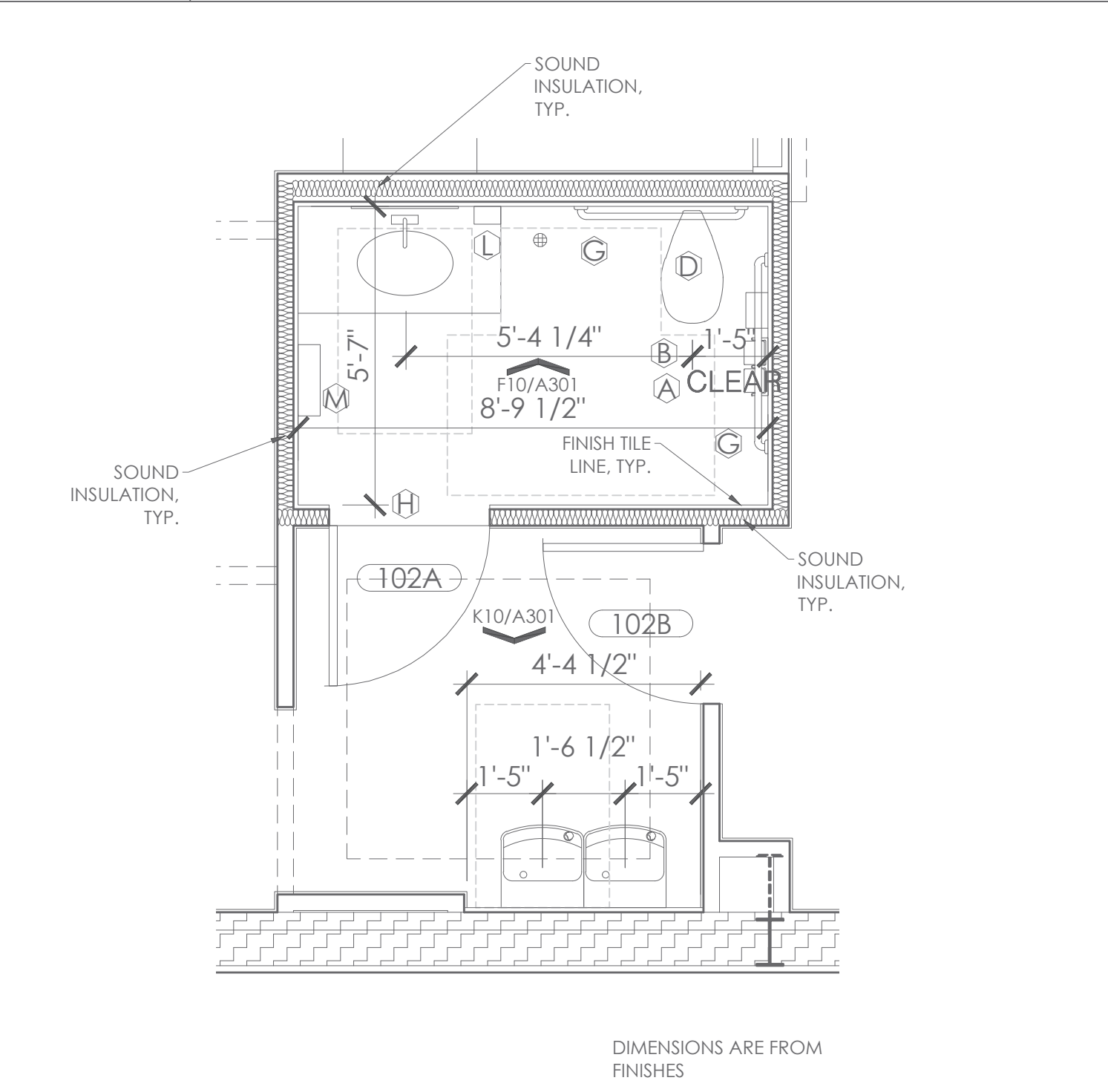
K1 SECTION DETAIL
SCALE: 3/4" = 1'-0"



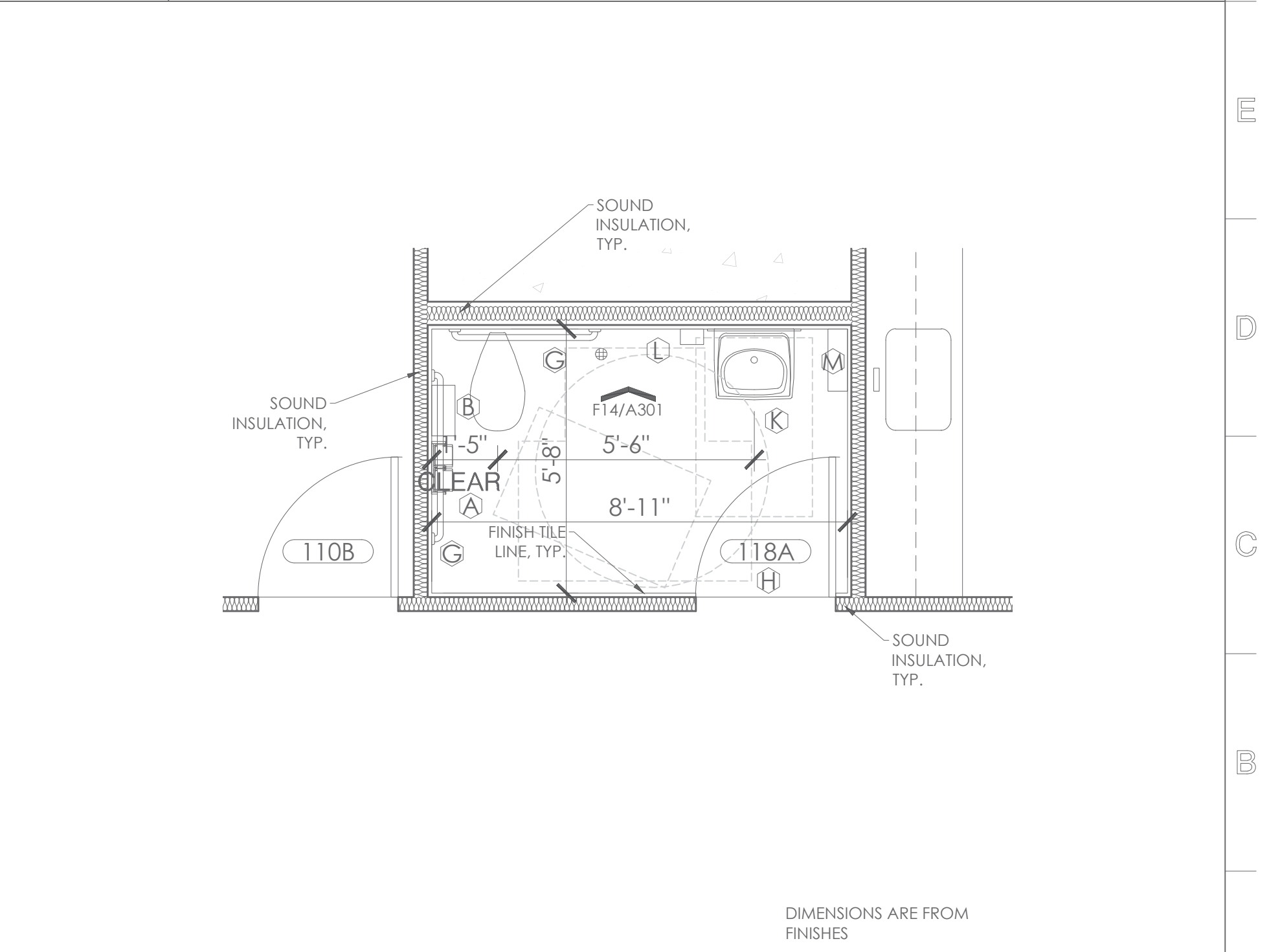
F10 ELEVATION
SCALE: 3/8" = 1'-0"



F14 ELEVATION
SCALE: 3/8" = 1'-0"

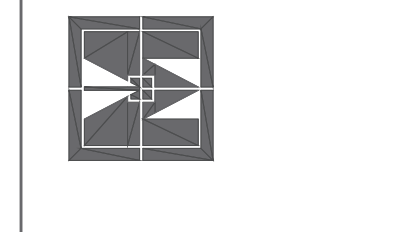


A10 PLAN NORTH
ENLARGED FLOOR PLAN
SCALE: 3/8" = 1'-0"



A14 PLAN NORTH
ENLARGED FLOOR PLAN
SCALE: 3/8" = 1'-0"

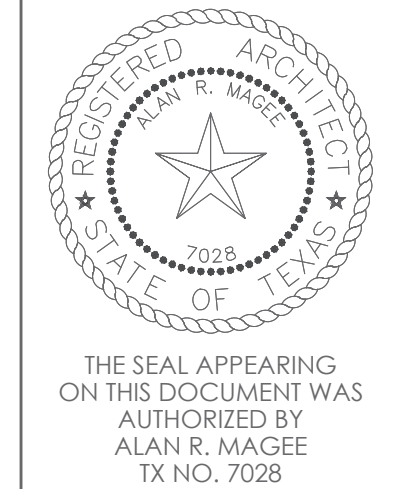
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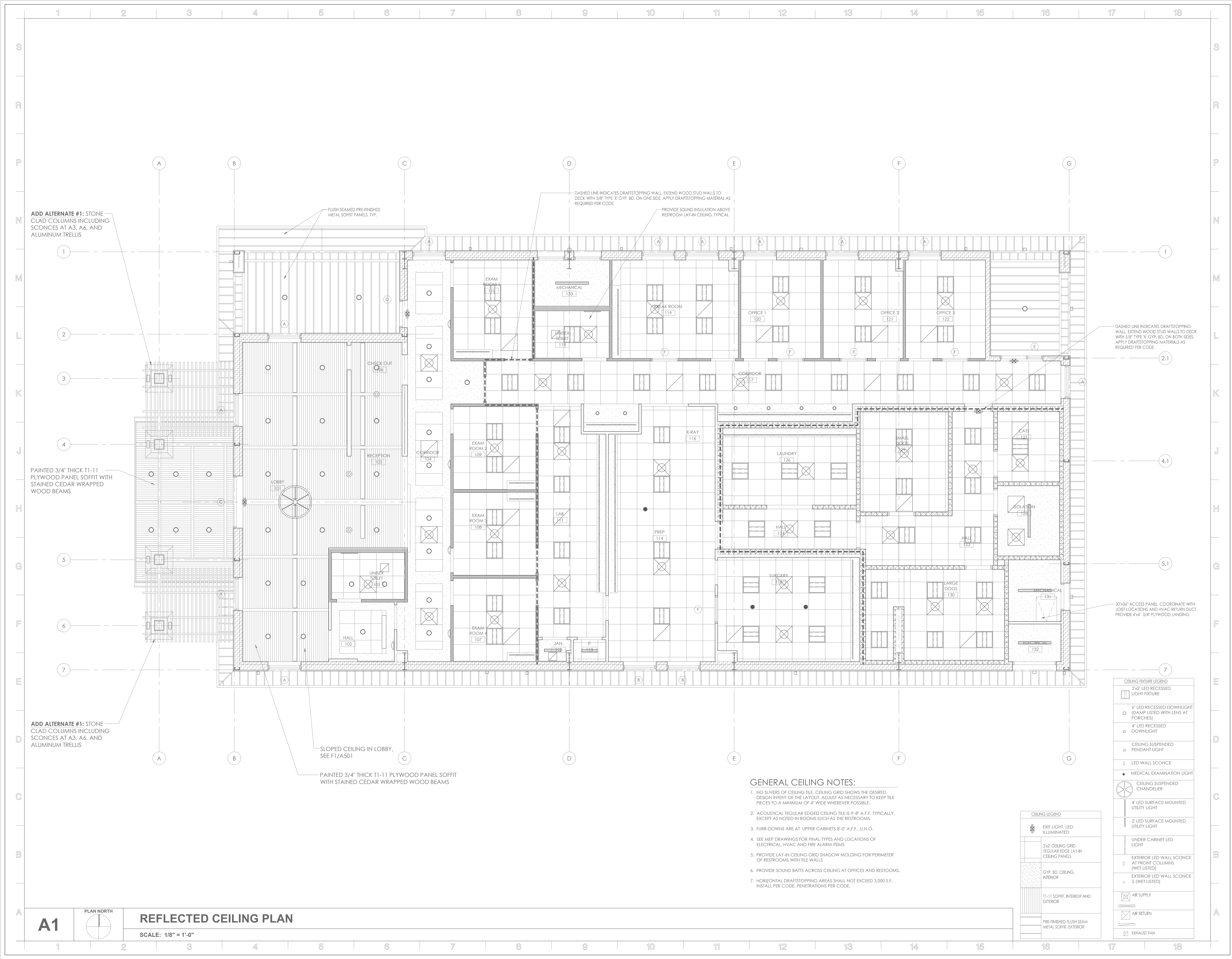
Alan R. Magee



SHEET CONTENT
ENLARGED PLANS
TOILET ELEVATIONS

SHEET NUMBER

A301



ADD ALTERNATE #1: STONE CLAD COLUMNS INCLUDING SCUNCES AT A3, A6, AND ALUMINUM TRELLIS

PAINTED 3/4" THICK T1-11 PLYWOOD PANEL SOFFIT WITH STAINED CEDAR WRAPPED WOOD BEAMS

ADD ALTERNATE #1: STONE CLAD COLUMNS INCLUDING SCUNCES AT A3, A6, AND ALUMINUM TRELLIS

FLUSH SEAMED PRE-FINISHED METAL SOFFIT PANELS, TYP.

DASHED LINE INDICATES DRAFTSTOPPING WALL. EXTEND WOOD STUD WALLS TO DECK WITH 5/8" TYPE 'X' GYP. BD. ON ONE SIDE. APPLY DRAFTSTOPPING MATERIAL AS REQUIRED PER CODE

PROVIDE SOUND INSULATION ABOVE RESTROOM. LAY-IN CEILING, TYPICAL

DASHED LINE INDICATES DRAFTSTOPPING WALL. EXTEND WOOD STUD WALLS TO DECK WITH 5/8" TYPE 'X' GYP. BD. ON BOTH SIDES. APPLY DRAFTSTOPPING MATERIALS AS REQUIRED PER CODE

30"x36" ACCESS PANEL. COORDINATE WITH JOIST LOCATIONS AND HVAC RETURN DUCT. PROVIDE 4"x4" 3/4" PLYWOOD LANDING

SLOPED CEILING IN LOBBY. SEE F1/A501

PAINTED 3/4" THICK T1-11 PLYWOOD PANEL SOFFIT WITH STAINED CEDAR WRAPPED WOOD BEAMS

GENERAL CEILING NOTES:

- NO SLIVERS OF CEILING TILE. CEILING GRID SHOWS THE DESIRED DESIGN INTENT OF THE LAYOUT. ADJUST AS NECESSARY TO KEEP TILE PIECES TO A MINIMUM OF 4" WIDE WHEREVER POSSIBLE.
- ACOUSTICAL TEGULAR EDGED CEILING TILE IS 9'-8" A.F.F. TYPICALLY, EXCEPT AS NOTED IN ROOMS SUCH AS THE RESTROOMS.
- FURR-DOWNS ARE AT UPPER CABINETS 8'-0" A.F.F., U.N.O.
- SEE MEP DRAWINGS FOR FINAL TYPES AND LOCATIONS OF ELECTRICAL, HVAC AND FIRE ALARM ITEMS.
- PROVIDE LAY-IN CEILING GRID SHADOW MOLDING FOR PERIMETER OF RESTROOMS WITH TILE WALLS.
- PROVIDE SOUND BATTIS ACROSS CEILING AT OFFICES AND RESTROOMS.
- HORIZONTAL DRAFTSTOPPING AREAS SHALL NOT EXCEED 3,000 S.F. INSTALL PER CODE. PENETRATIONS PER CODE.

CEILING LEGEND	
	EXIT LIGHT, LED ILLUMINATED
	2x2 CEILING GRID TEGULAR EDGE LAY-IN CEILING PANELS
	GYP. BD. CEILING, INTERIOR
	T1-11 SOFFIT, INTERIOR AND EXTERIOR
	PRE-FINISHED FLUSH SEAM METAL SOFFIT, EXTERIOR

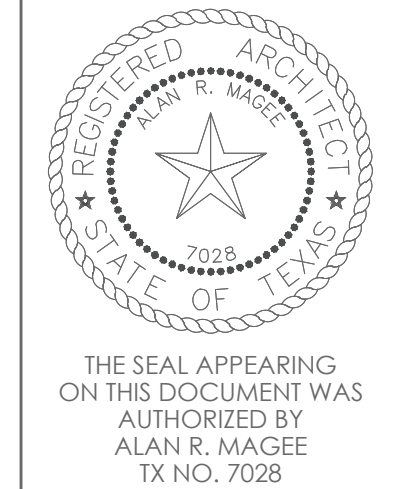
CEILING FIXTURE LEGEND	
	2x2 LED RECESSED LIGHT FIXTURE
	6" LED RECESSED DOWNLIGHT (DAMP LISTED WITH LENS AT PORCHES)
	4" LED RECESSED DOWNLIGHT
	CEILING SUSPENDED PENDANT LIGHT
	LED WALL SCNCE
	MEDICAL EXAMINATION LIGHT
	CEILING SUSPENDED CHANDELER
	4" LED SURFACE MOUNTED UTILITY LIGHT
	2" LED SURFACE MOUNTED UTILITY LIGHT
	UNDER CABINET LED LIGHT
	EXTERIOR LED WALL SCNCE AT FRONT COLUMNS (WET LISTED)
	EXTERIOR LED WALL SCNCE 2 (WET LISTED)
	AIR SUPPLY
	AIR RETURN
	EXHAUST FAN

A1

REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

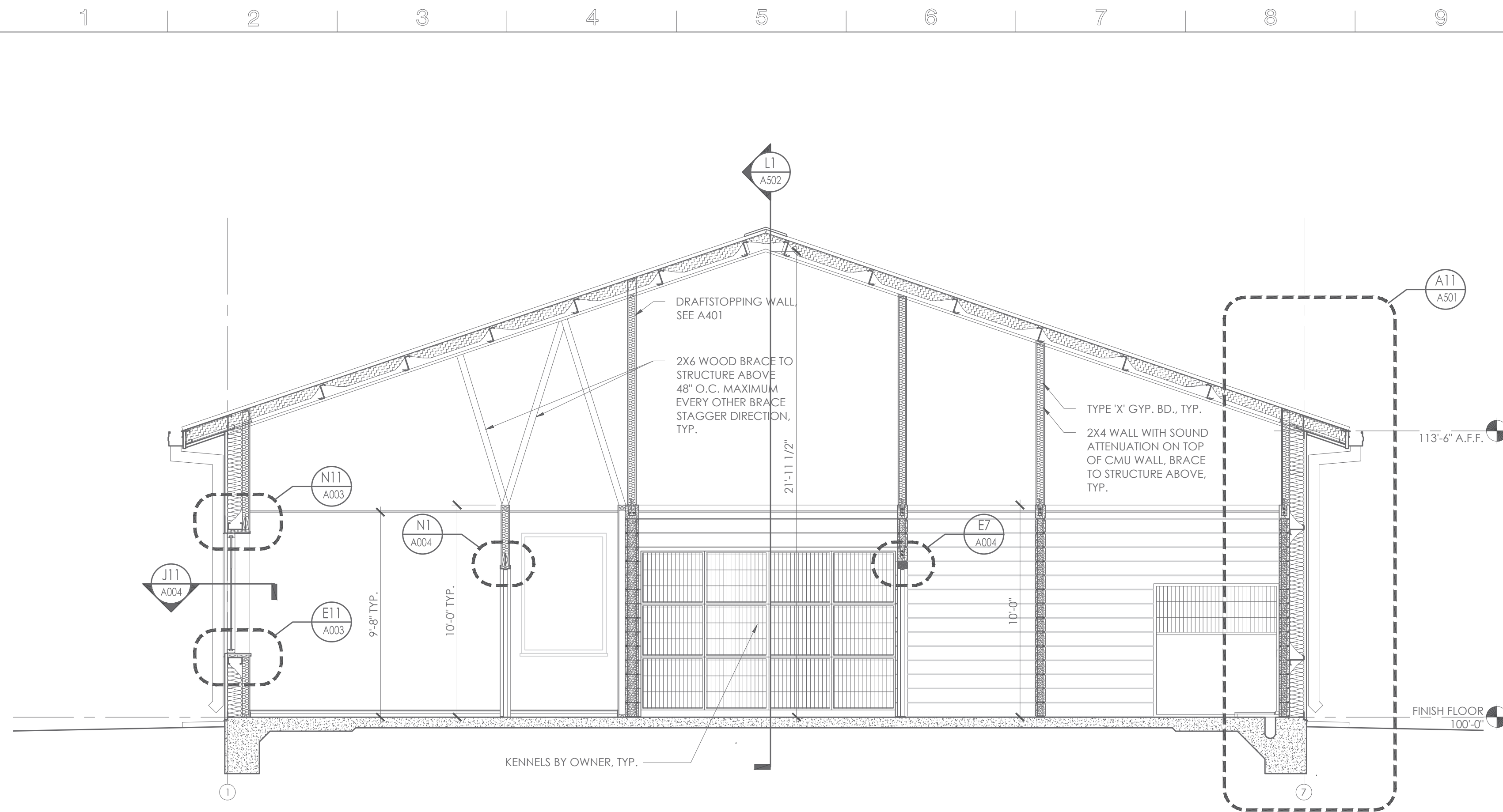
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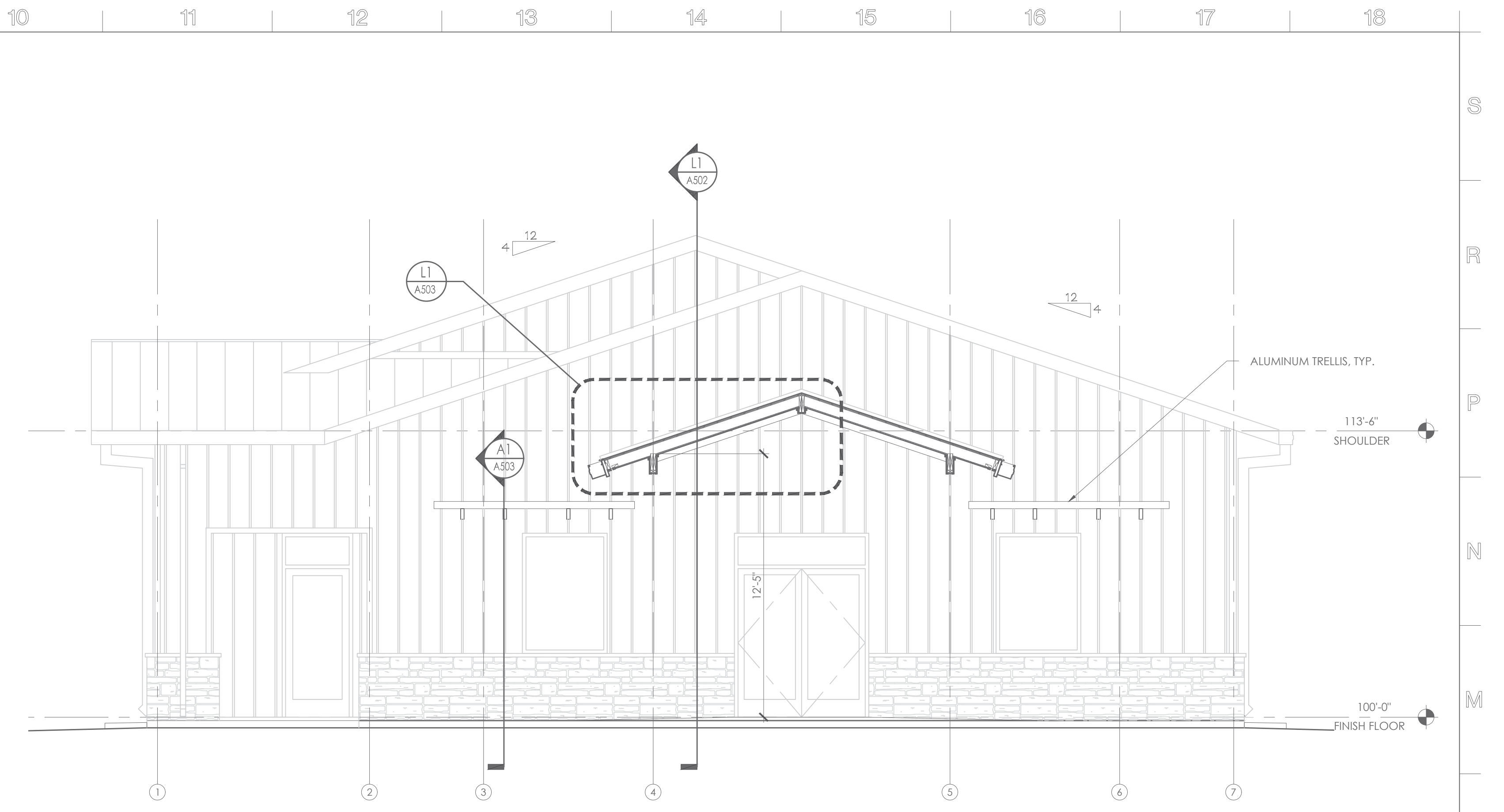
SHEET CONTENT
REFLECTED CEILING PLAN

SHEET NUMBER

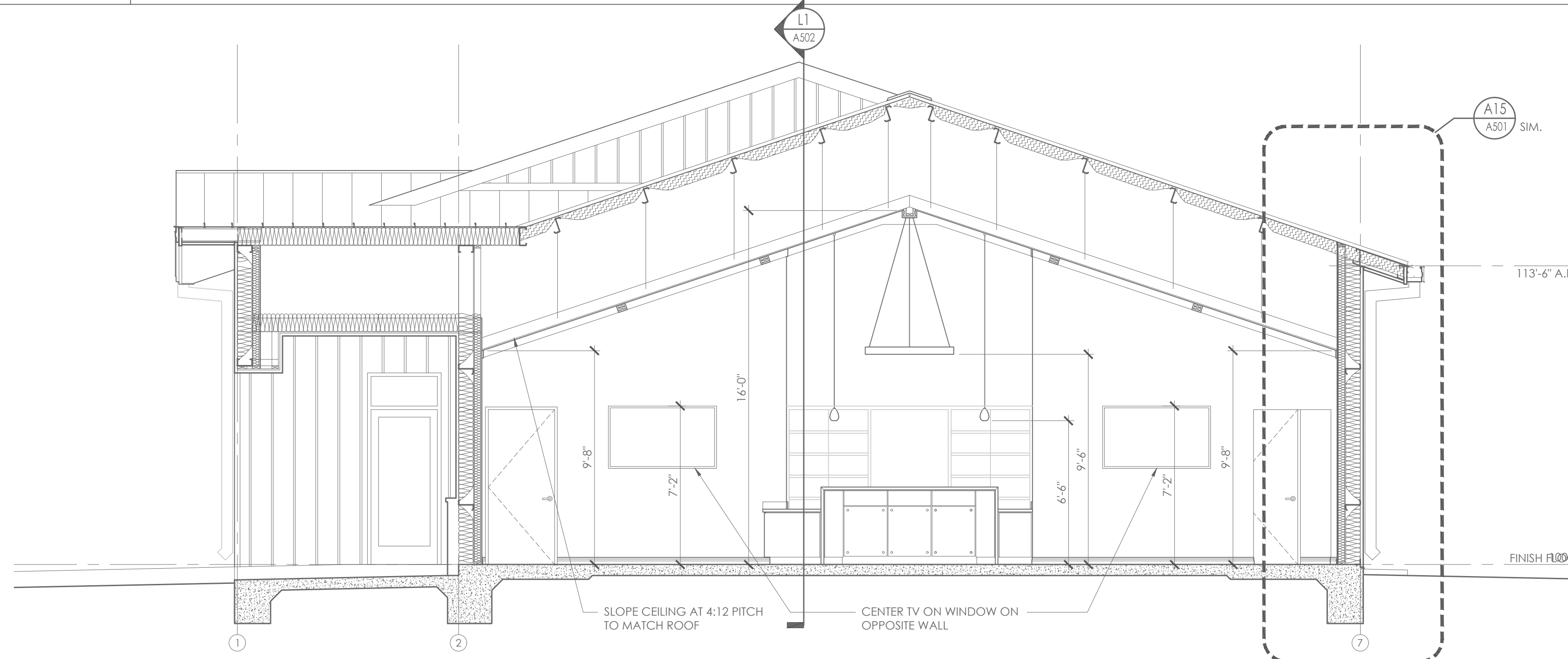
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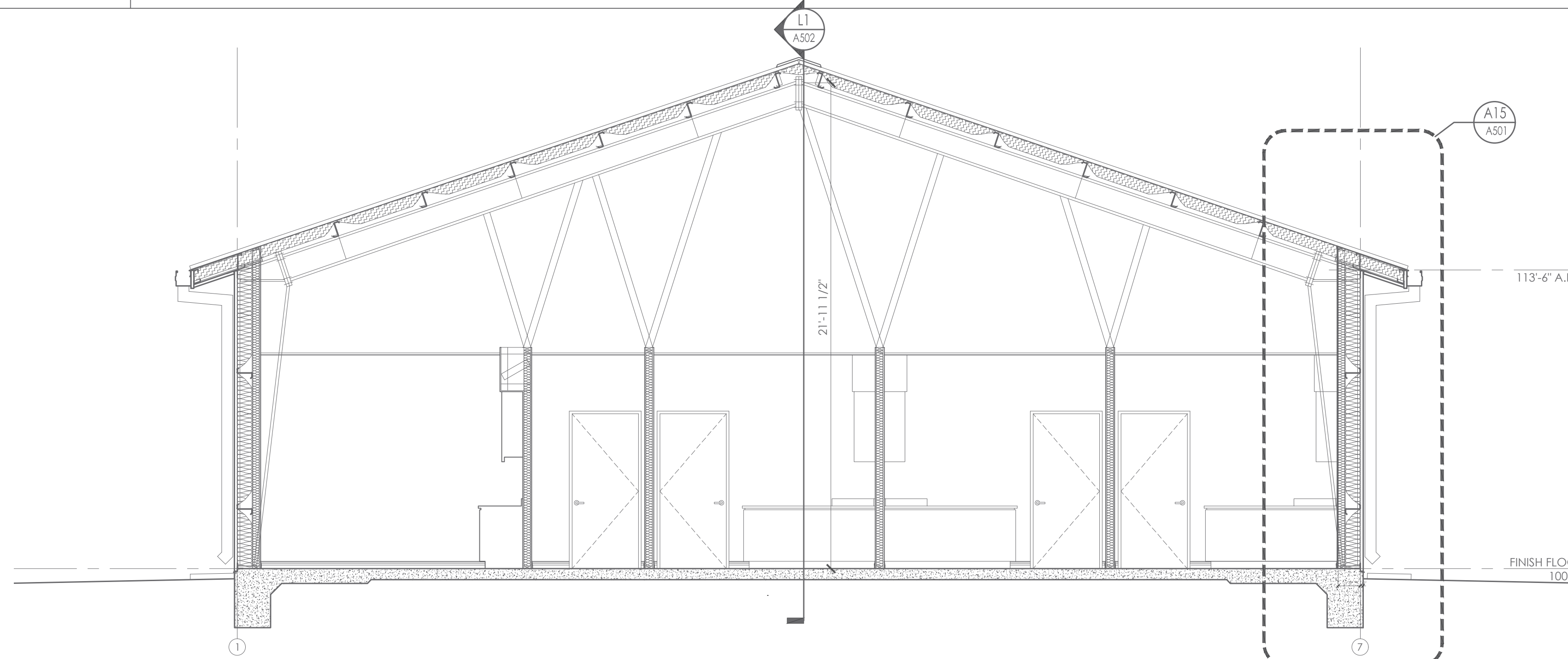
L1 BUILDING SECTION
SCALE: 1/4" = 1'-0"



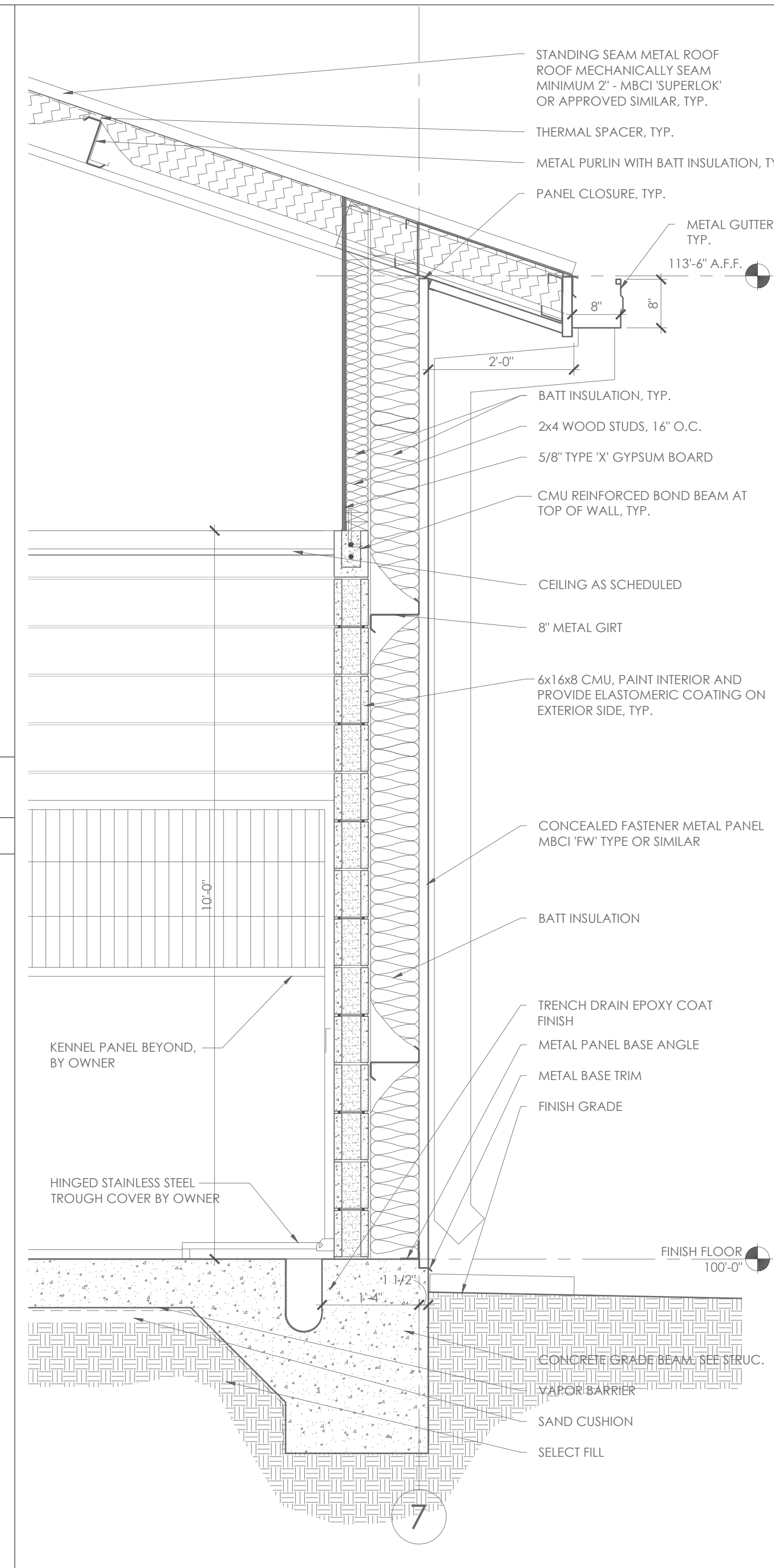
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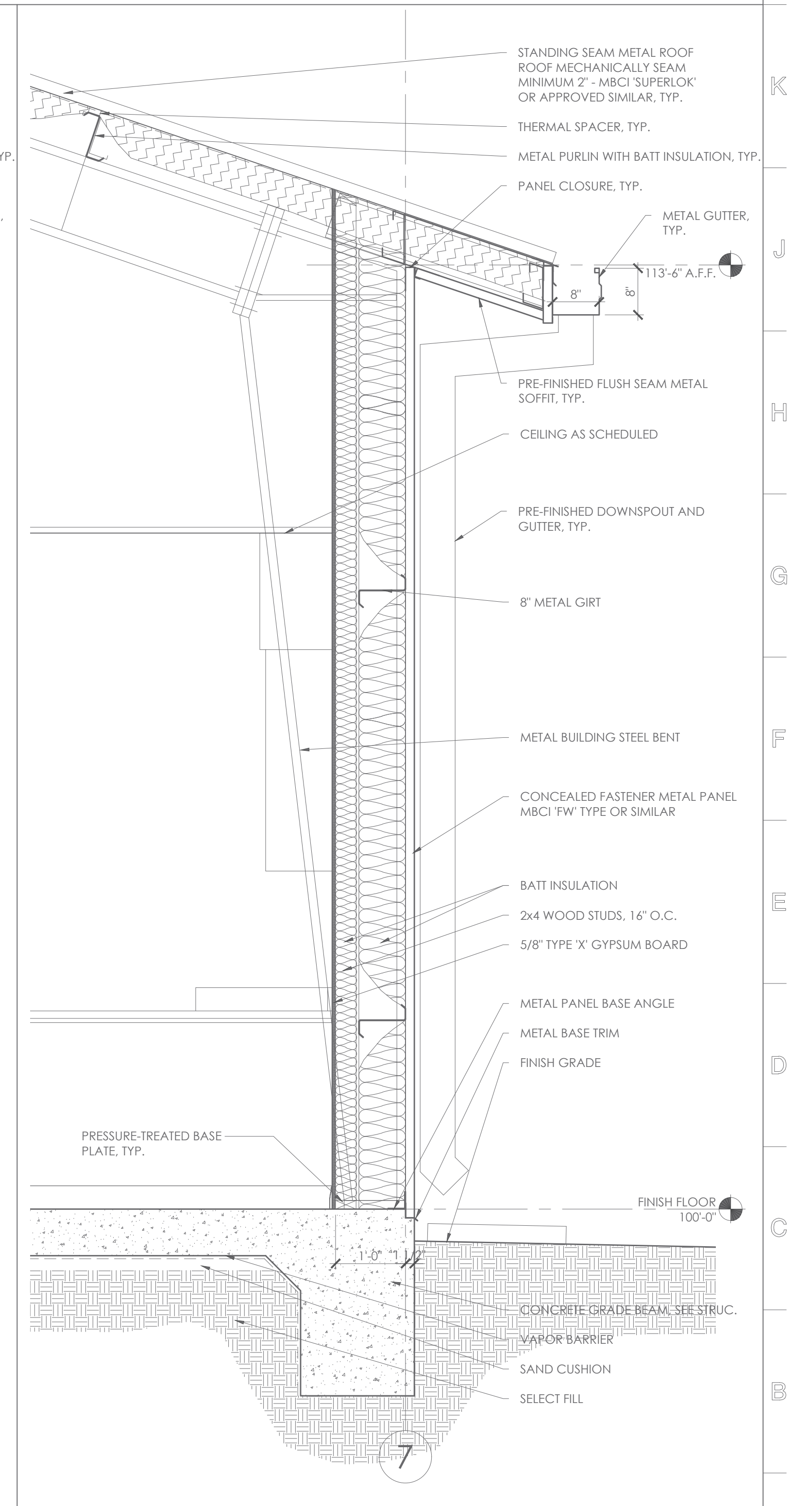
F1 BUILDING SECTION
SCALE: 1/4" = 1'-0"



A1 BUILDING SECTION
SCALE: 1/4" = 1'-0"



A11 WALL SECTION
SCALE: 3/4" = 1'-0"



A15 WALL SECTION
SCALE: 3/4" = 1'-0"

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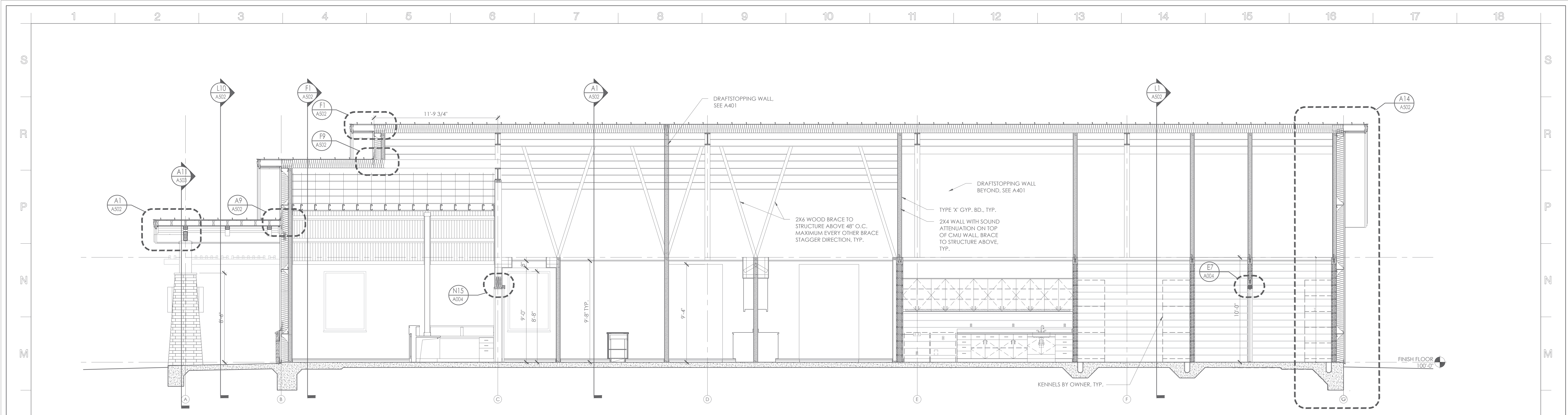


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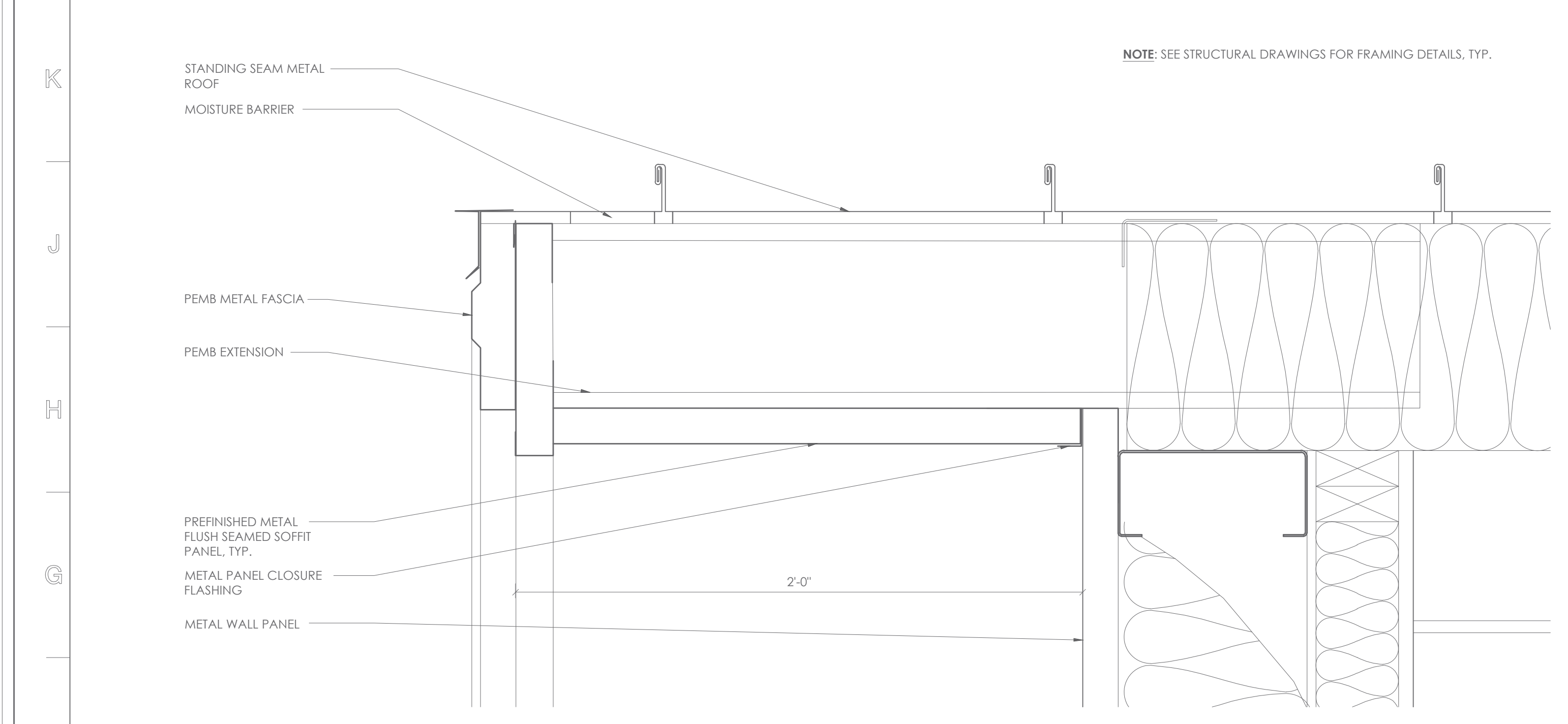
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BUILDING SECTIONS

SHEET NUMBER

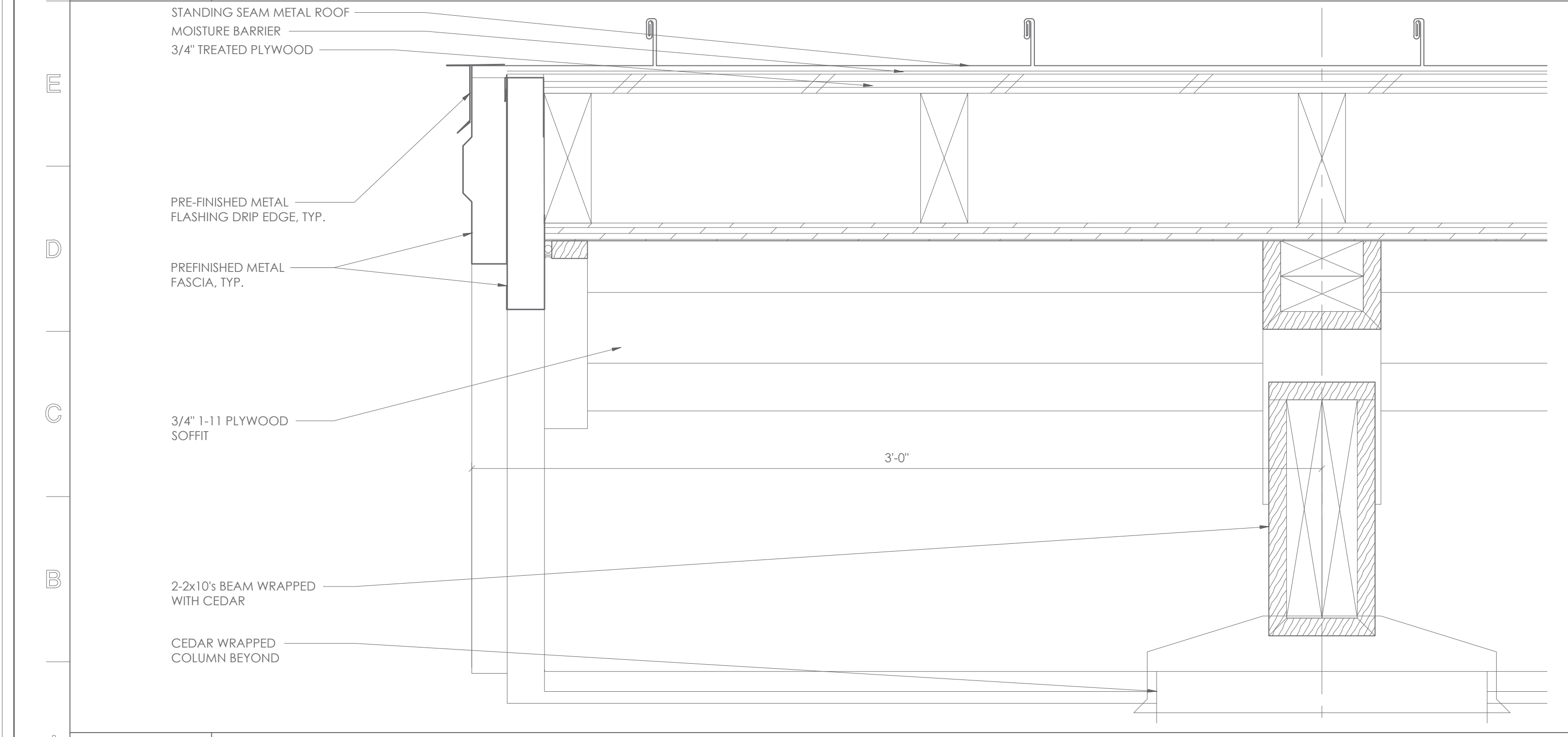
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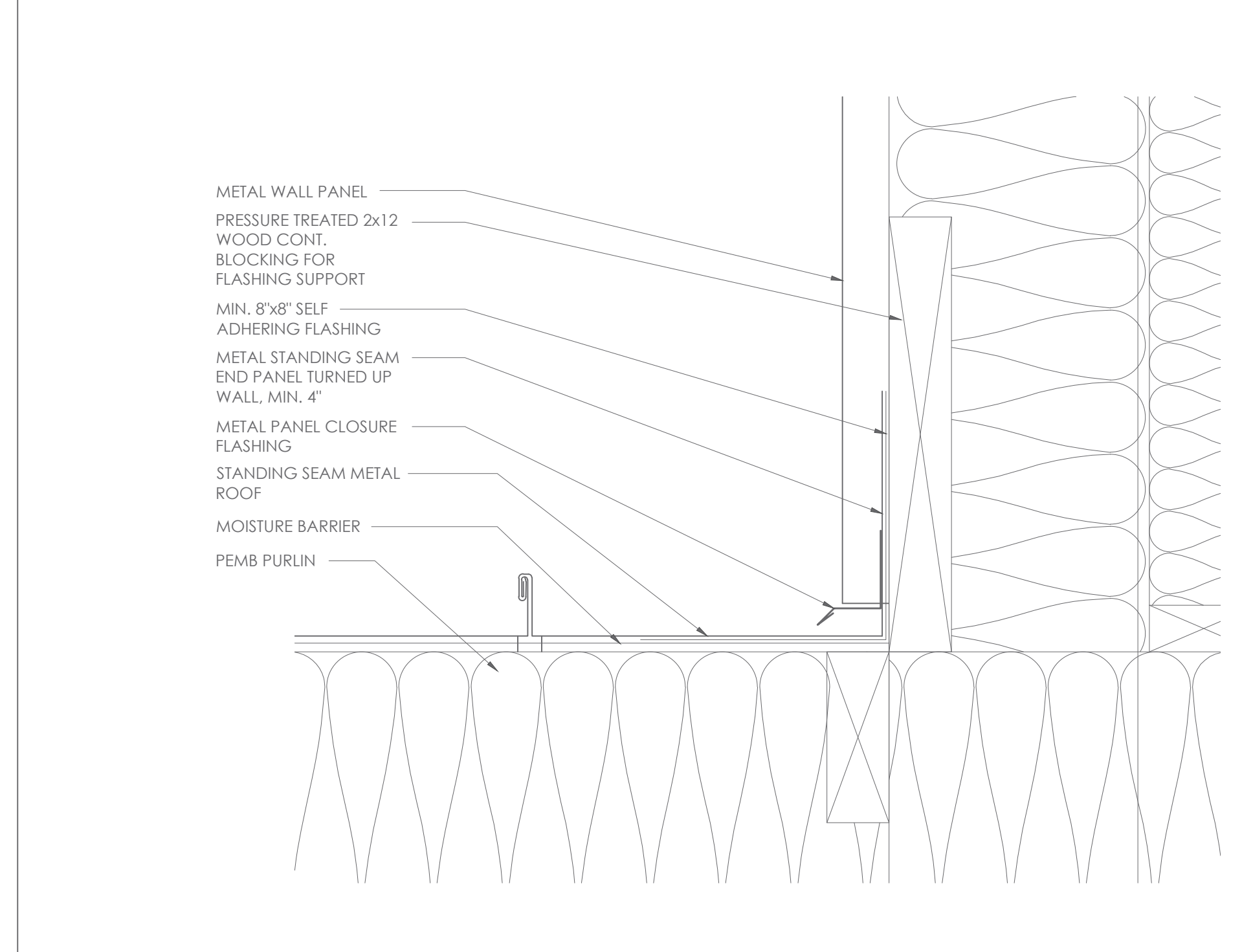
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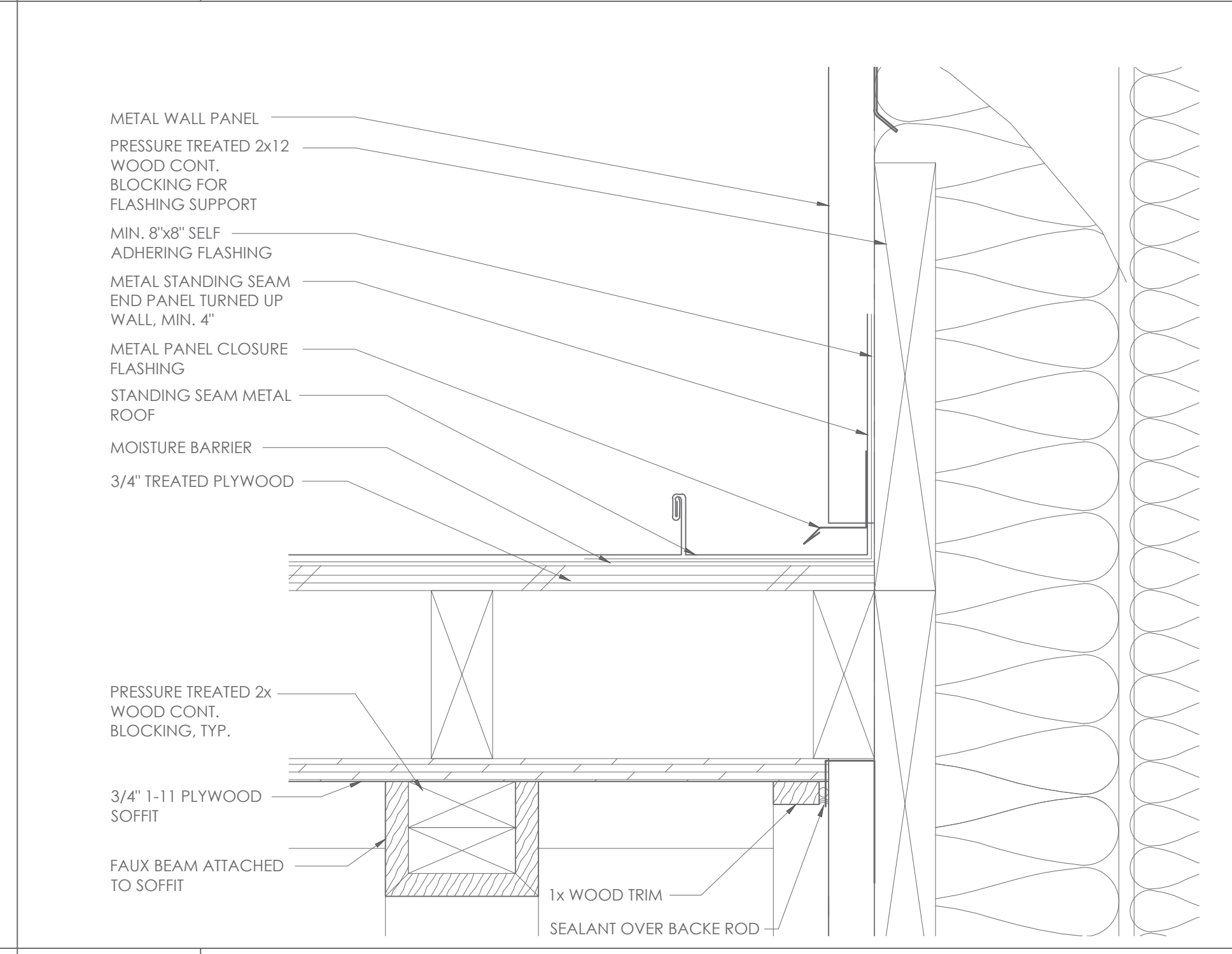
F1 SECTION DETAIL
SCALE: 3" = 1'-0"



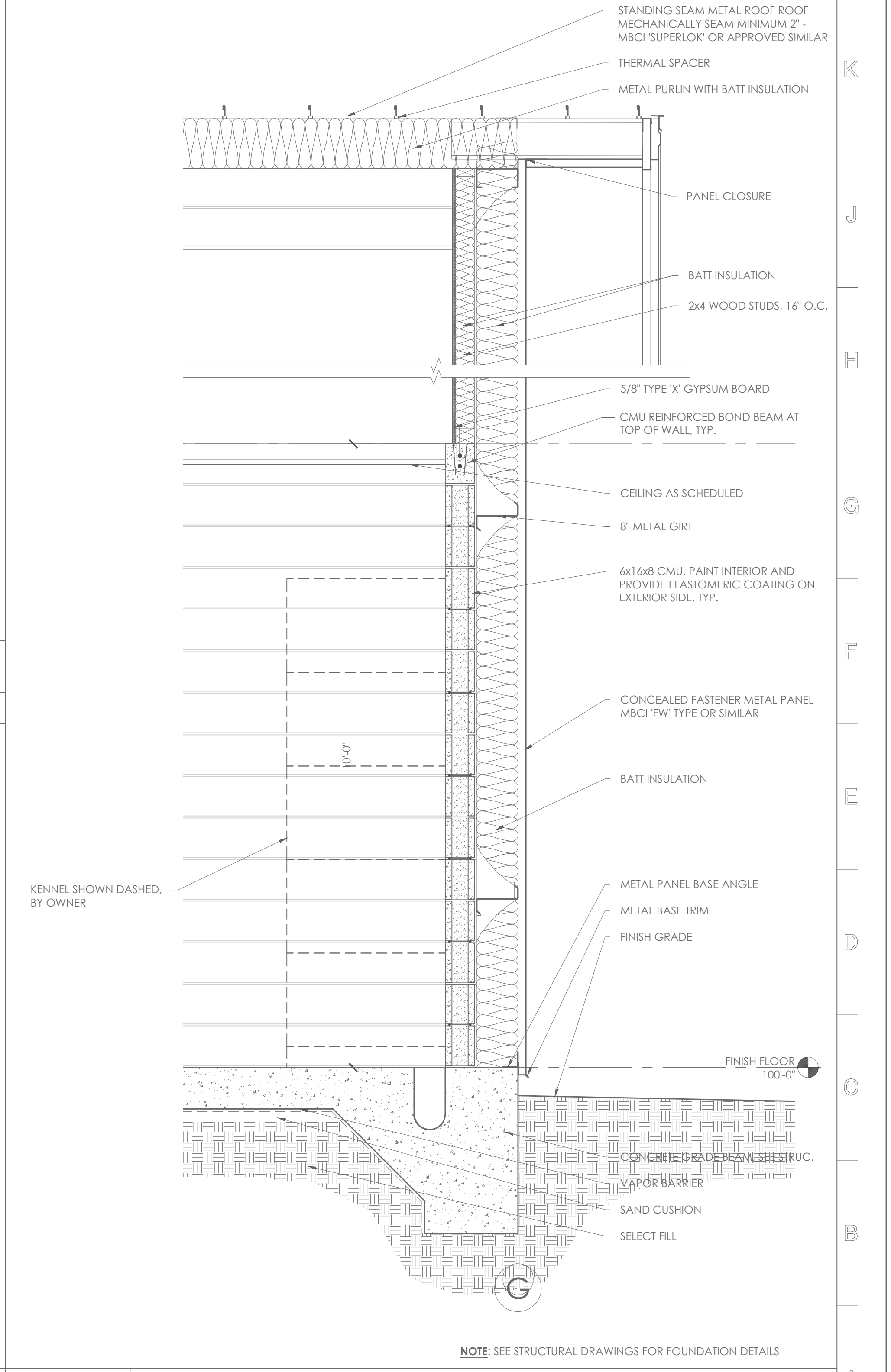
A1 SECTION DETAIL
SCALE: 3" = 1'-0"



F9 SECTION DETAIL
SCALE: 3" = 1'-0"

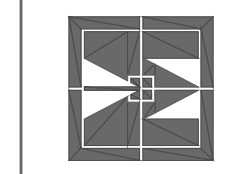


A9 SECTION DETAIL
SCALE: 3" = 1'-0"



A14 WALL SECTION
SCALE: 3/4" = 1'-0"

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TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN: PF
REVISED:

Alan R. Magee

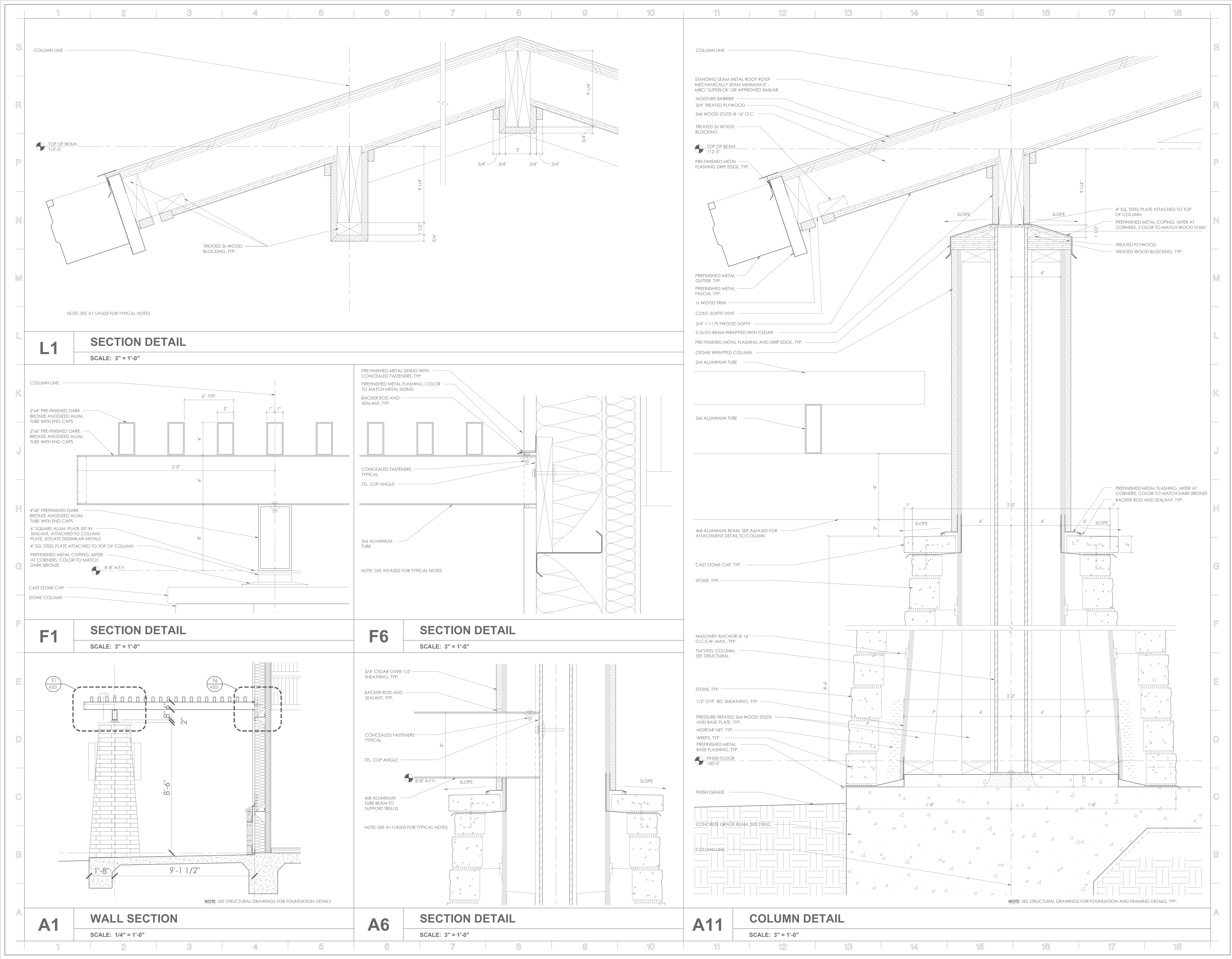


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SHEET CONTENT
BUILDING SECTION
WALL SECTIONS AND DETAILS

SHEET NUMBER

A502



L1 SECTION DETAIL
SCALE: 3" = 1'-0"

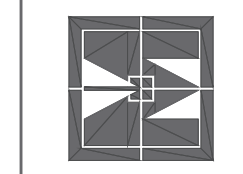
F1 SECTION DETAIL
SCALE: 3" = 1'-0"

F6 SECTION DETAIL
SCALE: 3" = 1'-0"

A1 WALL SECTION
SCALE: 1/4" = 1'-0"

A6 SECTION DETAIL
SCALE: 3" = 1'-0"

A11 COLUMN DETAIL
SCALE: 3" = 1'-0"



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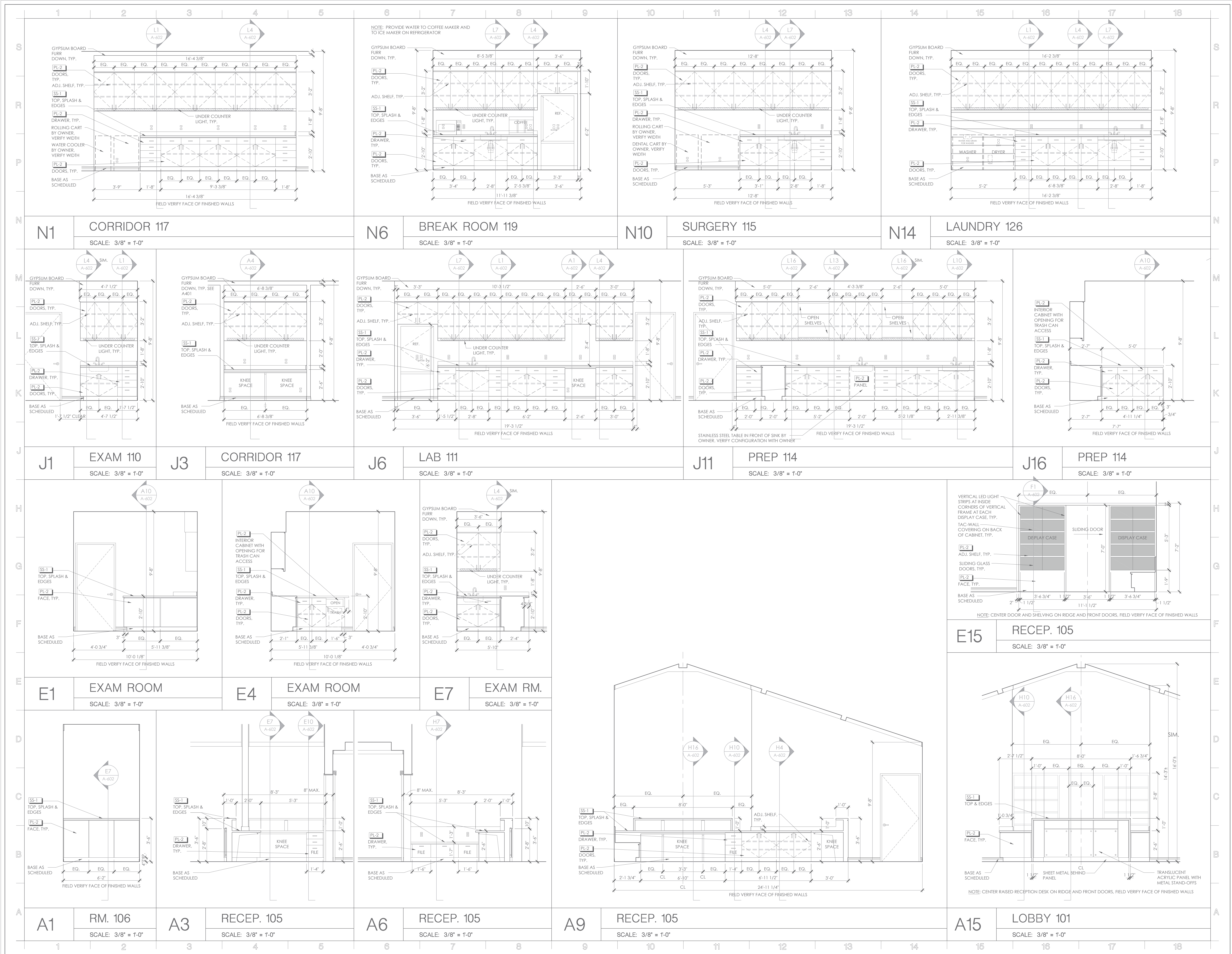


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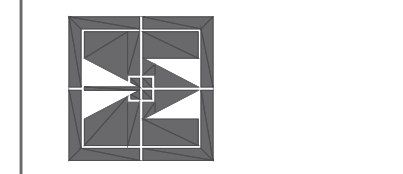
SHEET CONTENT
SECTIONS AND DETAILS

SHEET NUMBER

A503



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TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: PF
 REVISED:

Alan R. Magee



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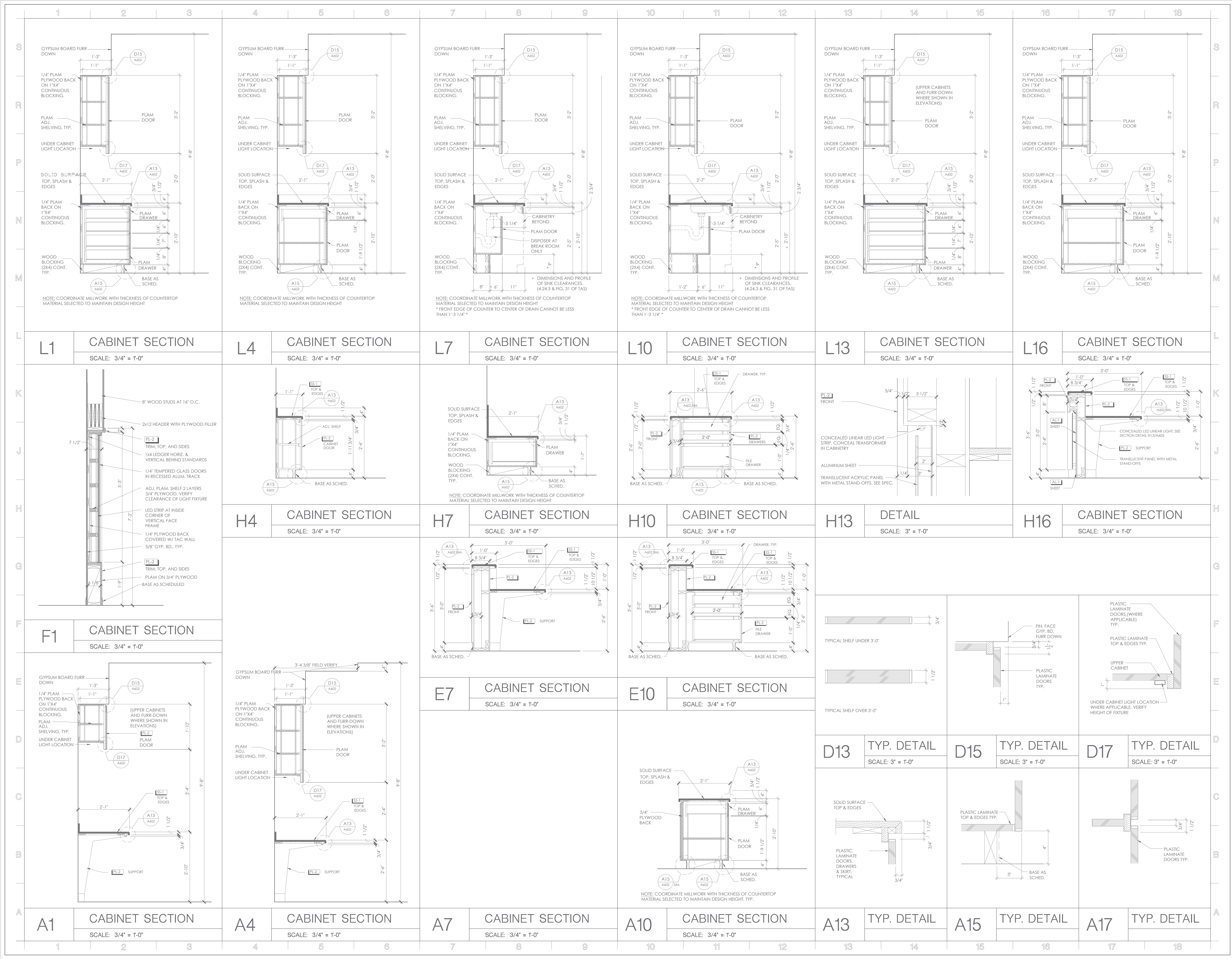
SHEET CONTENT
 MILLWORK ENLARGED PLAN
 ELEVATIONS AND DETAILS

SHEET NUMBER

A601

817319892

FORT WORTH, TEXAS



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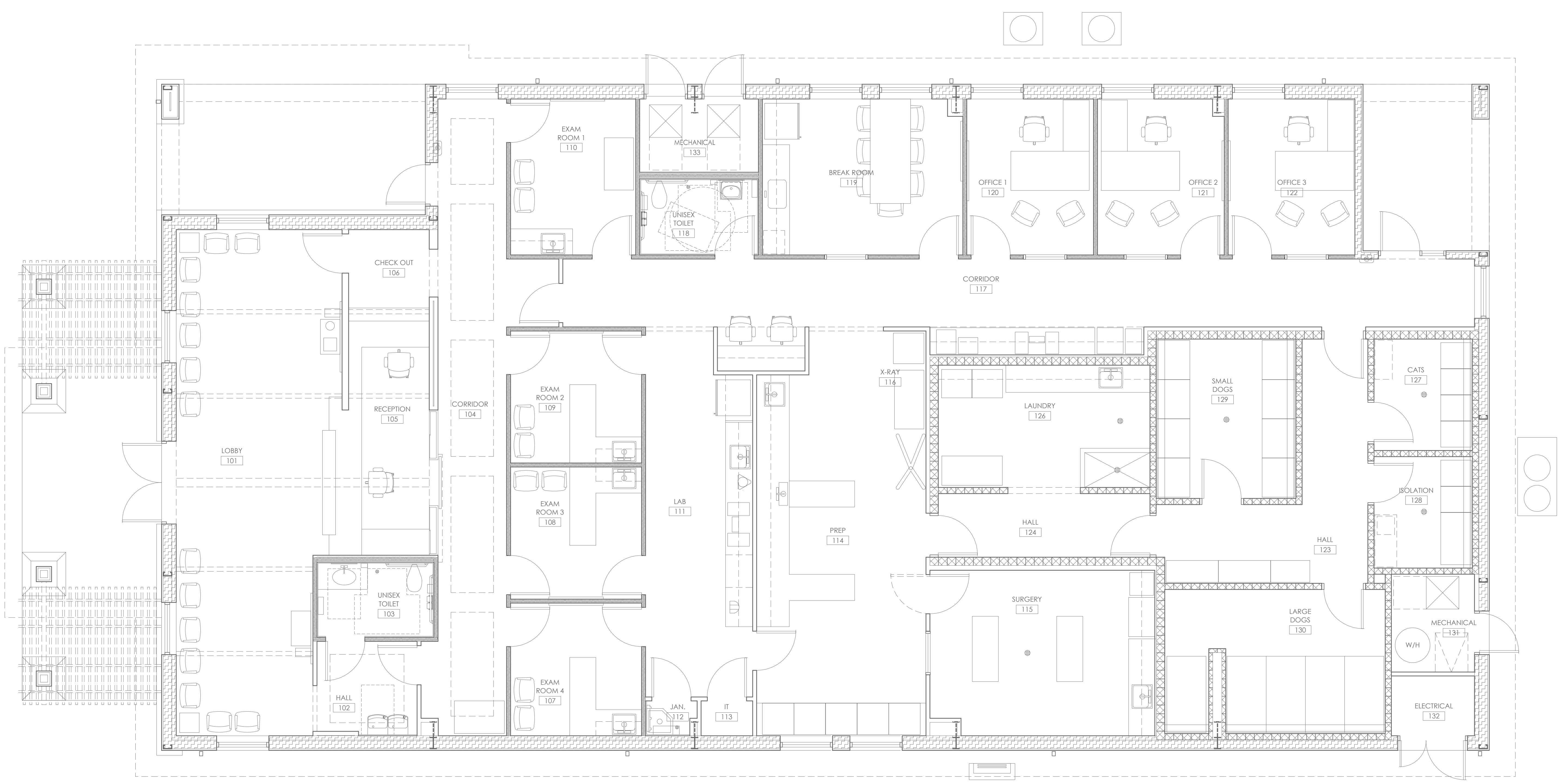
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SHEET CONTENT
 MILLWORK SECTIONS AND DETAILS

SHEET NUMBER
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FORT WORTH, TEXAS 817319892

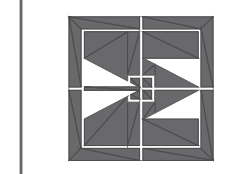
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FURNITURE PLAN SHOWN FOR REFERENCE ONLY

A1 PLAN NORTH
FURNITURE PLAN
 SCALE: 1/4" = 1'-0"

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PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: PF
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SHEET CONTENT
 FURNITURE PLAN (FOR REFERENCE ONLY)

SHEET NUMBER

F101

DESIGN SPECIFICATIONS:

02300 SOILS:

- A. MINIMUM ASSUMED SOIL BEARING CAPACITY = 4,500 PSF (SHALY CLAY)
B. REFER TO: "GEOTECHNICAL ENGINEERING REPORT, GRANDVIEW TEXAS VETERINARIAN CLINIC, 802 EAST CRINER STREET, GRANDVIEW, TEXAS", PROJECT No. W242089, DATED AUGUST 2024, PREPARED BY UES, DALLAS, TEXAS.
D. THE SLAB-ON-GRADE SHALL BEAR ON SELECT FILL AND/OR CHEMICALLY TREATED SOILS. ALL MATERIALS BELOW THE SLAB SHOULD BE FREE OF DEBRIS, ORGANIC MATERIAL OR ANY OTHER DELETERIOUS MATERIAL. SOILS BELOW THE SLAB SHALL BE COMPACTED TO 90% STANDARD PROCTOR MAXIMUM DRY DENSITY.
E. FOOTINGS AND FOUNDATIONS SHALL BE IN ACCORDANCE WITH IBC AND AS NOTED IN THESE PLANS.

03000 CONCRETE:

- A. CONCRETE SHALL BE IN ACCORDANCE WITH IBC & ACI.
B. CAST-IN-PLACE CONCRETE SHALL HAVE A 28 DAY MINIMUM COMPRESSIVE STRENGTH OF:
PIERS 3,000 PSI (NW)
GROUND FLOOR SLAB 3,000 PSI (NW)
GRADE BEAMS 3,000 PSI (NW)
C. NO WATER SHALL BE ADDED TO THE CONCRETE, AFTER THE TRUCK HAS LEFT THE BATCH PLANT WITHOUT AUTHORIZATION FROM THE ENGINEER-OF-RECORD (EOR), UNLESS THE DELIVERY TICKET INDICATES AN AMOUNT OF WATER THAT IS ALLOWED TO BE ADDED AT THE JOB SITE, AFTER AUTHORIZATION BY THE TESTING LAB REPRESENTATIVE.
D. CONCRETE MIX DESIGNS SHALL BE SUBMITTED TO THE STRUCTURAL EOR FOR REVIEW & APPROVAL. SUBMITTALS SHALL INCLUDE CERTIFICATES FOR AGGREGATES, ADDITIVES AND CEMENTITIOUS MATERIALS.
F. FLOOR FLATNESS SHALL NOT HAVE DEVIATIONS GREATER THAN 0.125" IN TEN FEET.
G. THE READY MIX COMPANY SUPPLYING THE CONCRETE SHALL COMPLY WITH ASTM C94 & SHALL BE A NRMCA CERTIFIED MANUFACTURER. IN LIEU OF THE ABOVE REQUIREMENTS THE PLANT SHALL BE CERTIFIED TO PRODUCE STRUCTURAL CONCRETE BY TXDOT.
H. CONTRACTOR SHALL APPLY A DISSIPATING CURING/SEALER TO THE SLAB, TIMING AND APPLICATION PROCEDURES SHALL COMPLY WITH MANUFACTURERS RECOMMENDATIONS.
J. CONCRETE ADMIXTURES SHALL NOT CONTAIN ANY CALCIUM-CHLORIDE.
K. CONCRETE SHALL BE NORMAL WEIGHT (±145 PCF) CONCRETE WITH A MIN. OF 4% AIR ENTRAINMENT.
L. FLY ASH (ASTM C618) OR SLAG CEMENT (ASTM C989) MAY BE SUBSTITUTED FOR UP TO 40% OF THE PORTLAND CEMENT (ASTM C150; TYPE I/II). FLY ASH SHALL NOT EXCEED 25% OF CEMENTITIOUS MATERIALS.
M. MAXIMUM WATER TO CEMENT (W/C) RATIO SHALL BE 0.51 (±0.03).
N. CONTRACTOR SHALL ENGAGE A QUALIFIED TESTING & INSPECTING AGENCY, ACCEPTABLE TO THE OWNER, TO PERFORM FIELD TESTS, INSPECTIONS AND PREPARE TEST/INSPECTION REPORTS.
P. TESTING AGENCY SHALL OBTAIN THE FOLLOWING, PER ASTM C172:
1. SLUMP, PER ASTM C143, FOR EACH TRUCK LOAD.
2. AIR CONTENT, PER ASTM C223, FOR THE FIRST AND EACH FIFTH TRUCK AFTER THAT.
3. TEMPERATURE, PER ASTM C1064, FOR EACH TRUCK.
4. STRENGTH, PER ASTM C31, FOR EACH MIX DESIGN THAT DAY & FOR EVERY 50 CYD OF CONCRETE PLACED EACH DAY.
R. CAST & FIELD CURE FOUR STANDARD CYLINDERS. TEST, PER ASTM C39, ONE CYLINDER AT 7 DAYS, TWO CYLINDERS AT 28 DAYS & HOLD ONE CYLINDER FOR FUTURE TESTING.
S. NOTIFY EOR, WITHIN 24 HOURS, IF 7 DAY CYLINDER IS LESS THAN 60% OF DESIGN STRENGTH.

03200 CONCRETE REINFORCEMENT:

- A. STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH IBC, ACI 318 AND AS NOTED IN THESE PLANS.
B. REINFORCING STEEL: SHALL BE ASTM A615, GRADE 60
C. WELDED WIRE REINFORCING (WWR): SHALL BE ASTM A185.
D. CONCRETE COVER SHALL BE IN ACCORDANCE WITH IBC AND AS FOLLOWS:
3" FOR CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH
2" FOR CONCRETE EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
1 1/2" FOR CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND
E. VERTICAL AND HORIZONTAL REINFORCEMENT WILL BE LAPPED FOR 36 BAR DIAMETERS OR 24", WHICHEVER IS GREATER. MASONRY REINFORCEMENT WILL BE LAPPED 48 BAR DIAMETERS OR 30", WHICH EVER IS GREATER. CORNER REINFORCEMENT SHALL BE LAPPED 30".
F. ALL REINFORCING STEEL SHALL BE PLACED IN ACCORDANCE WITH THE TYPICAL BENDING DIAGRAMS AND PLACING DETAILS OF ACI STANDARDS. ALL REINFORCING STEEL SHALL BE HELD SECURELY IN POSITION WITH STANDARD ACCESSORIES DURING PLACING OF CONCRETE.

05105 EPOXY ANCHORS:

- A. ANCHORING ADHESIVE: SHALL BE ONE OF THE FOLLOWING PRODUCTS (DUAL CARTRIDGE INSTALLATION ONLY):
* SIMPSON STRONG-TIE CO., PRODUCT: ET-HP
B. ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH ASTM A36 OR ASTM F1554 GRADE 36.
C. WASHERS: SHALL BE IN ACCORDANCE WITH ASTM F436 GRADE 36.
D. NUTS: SHALL BE IN ACCORDANCE WITH ASTM A563 GRADE A HEX.
E. HOLES FOR EPOXY ANCHORS SHALL BE DRILLED & CLEANED PER MANUFACTURER'S RECOMMENDATIONS AND EPOXY & ANCHOR SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS

05100 STEEL:

- A. ALL STEEL CONSTRUCTION SHALL BE IN ACCORDANCE WITH IBC, AISC & AWS.
B. ALL ANGLES, PLATES, CHANNELS AND MISC. STEEL SHOWN ON THESE DRAWINGS SHALL BE ASTM A36 MATERIAL.
D. ALL STRUCTURAL TUBING SHALL BE ASTM A500 (GRADE B)
F. ALL FILLET WELDS SHALL CONFORM TO SECTION J2.2B OF AISC SPECIFICATIONS, EVEN WHEN SHOWN OTHERWISE ON ARCHITECTURAL OR STRUCTURAL DRAWINGS.
G. ALL WELDS ALONG THE LENGTH OF MEMBERS INDICATED ON ARCHITECTURAL OR STRUCTURAL DRAWINGS, BUT NOT SIZED SHALL BE A MINIMUM OF 3/8" FILLET, 2" EACH END AND 2" AT 12" o.c. BOTH SIDES.
H. ALL WELDS MADE TO PRIMARY MEMBERS SHALL BE MADE WITH E70XX ELECTRODES.
K. CONTRACTOR SHALL SUBMIT WELDING CERTIFICATES FOR ALL FIELD WELDING, IN ACCORDANCE w/ AWS D1.1.
L. ALL SPLICES IN MEMBERS SHALL BE SHOWN ON THE SHOP DRAWINGS.
P. BASE PLATE GROUT SHALL COMPLY WITH ASTM C1107 AND SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5KSI.
R. ALL STEEL SHALL RECEIVE ONE COAT OF THE STANDARD SHOP PRIMER.
S. DO NOT USE THERMAL CUTTING DURING ERECTION. DO NOT ENLARGE UNFAIR HOLES IN MEMBERS BY BURNING OR USING DRIFT PINS.
T. CONTRACTOR SHALL ENGAGE A QUALIFIED TESTING AGENCY TO PERFORM VISUAL INSPECTIONS OF THE BOLTED & WELDED CONNECTIONS.

DESIGN SPECIFICATIONS:

04200 MASONRY:

- A. MASONRY CONSTRUCTION SHALL BE IN ACCORDANCE WITH IBC AND IN ACCORDANCE WITH THE SPECIFICATIONS FOR MASONRY STRUCTURES, ACI 530.1-11.
B. ACI 3.5 D LIMITS THE GROUT LIFT HEIGHT TO 5' AND REQUIRES A 1-HOUR INITIAL SET TIME BETWEEN LIFTS.

04202 MASONRY CONSTRUCTION:

- A. CONCRETE MASONRY UNITS: SHALL BE HOLLOW UNIT MASONRY IN ACCORDANCE WITH ASTM C 90 AND SHALL HAVE A MINIMUM NET AREA COMPRESSIVE STRENGTH OF 2,000 PSI WHEN USING TYPE M OR S MORTAR (ASTM C 270) IN ACCORDANCE WITH ACI 530, THE 2,000 PSI BLOCK IN COMBINATION WITH TYPE M OR S MORTAR PROVIDES A DESIGN COMPRESSIVE STRENGTH (f'm) OF 2,000 PSI.
B. THE GROUT SHALL BE IN ACCORDANCE WITH ASTM C 476 AND SHALL HAVE A MAXIMUM COURSE AGGREGATE SIZE OF 3/8" PLACED AT AN 8" TO 11" SLUMP AND HAVE A MINIMUM SPECIFIED COMPRESSIVE STRENGTH OF 2000 PSI AT 28 DAYS WHEN TESTED IN ACCORDANCE WITH ASTM C 1019. FINE GROUT SHALL ONLY BE ALLOWED WITH WRITTEN APPROVAL OF THE ENGINEER-OF-RECORD.
C. DEFINITIONS:
GROUT POUR HEIGHT - THE TOTAL HEIGHT OF MASONRY TO BE GROUTED PRIOR TO ERECTION OF ADDITIONAL MASONRY.
GROUT POUR - CONSISTS OF ONE OR MORE GROUT LIFTS.
GROUT LIFT - THE LAYER OF GROUT PLACED IN A SINGLE CONTINUOUS OPERATION AND IS LIMITED TO 5 FEET (1524 MM).
RODDING - THE ACT OF COMPACTING FRESHLY POURED CONCRETE OR GROUT IN ITS FORM BY FREEING THE MASS OF AIR POCKETS WITH REPEATED STABS OF A ROD.
PUDDLING - THE PROCESS OF INDUCING COMPACTION OF GROUT BY USE OF A TAMPING ROD.
PUDDLE - THE ACT OF WORKING CONCRETE TO ELIMINATE HONEYCOMB, AND TO PRODUCE A DENSER MASS.
PUDDLE STICK - A STICK OR ROD USED TO CONSOLIDATE GROUT BY HAND.
D. MASONRY CONSTRUCTION AND INSPECTION GUIDELINES:
1. LAY UP MASONRY IN RUNNING BOND FOR SIZES AND REINFORCING PER PLANS AND ELEVATIONS.
2. FACE SHELLS OF BED JOINT SHALL BE MORTARED.
3. WEBS SHALL BE MORTARED AT CELLS TO BE GROUTED.
4. VERTICAL CELLS ARE TO BE ALIGNED WHERE THEY ARE TO BE GROUT FILLED UNLESS BOND IS SHIFTED DUE TO SITE CONDITIONS.
5. INSTALL HORIZONTAL JOINT REINFORCING AT 16 INCHES (407 MM) ON CENTER STARTING FIRST BLOCK ABOVE FOUNDATION.
6. MAINTAIN MINIMUM OF 1/2 INCH (12.7 MM) COVER ON JOINT REINFORCING TO EXTERIOR AND REINFORCING SHALL BE EMBEDDED IN MORTAR.
7. GROUT SPACES BOTH VERTICAL AND HORIZONTAL ARE TO BE SUBSTANTIALLY FREE OF DROPPINGS, DEBRIS, LOOSE AGGREGATE AND ANY MATERIAL DELETERIOUS TO MASONRY GROUT.
8. INSTALL REINFORCING IN GROUT CELLS PRIOR TO GROUTING.
9. GROUT SPACES ARE TO BE INSPECTED PRIOR TO PLACING GROUT.
10. FILL CELLS AS NOTED ON THE PLANS, ELEVATIONS AND DETAILS.
11. PLACE GROUT IN LIFT TO 60 INCHES IN HEIGHT (CLEAN OUT HOLES ARE NOT REQUIRED).
12. A REINFORCING BAR MAY BE USED TO ROD GROUT IN CELL, TO ENSURE THERE ARE NO VOIDS IN GROUT.
13. PLACE REINFORCING APPROXIMATELY 1 INCH (25 MM) TO THE SIDE OF DOWEL IN CELL (ACI 530-1.12.3.3)
14. GROUT SHOULD SET IN APPROXIMATELY 90 MINUTES DEPENDING ON GROUT SLUMP AND WEATHER CONDITIONS.
15. DO NOT BEND OR MOVE REINFORCEMENT AFTER GROUT HAS SET.
16. FILL ALL CELLS SOLID BELOW FINISH FLOOR ELEVATION.
17. MASONRY SHALL BE INSPECTED PER ACI 530, ASSURANCE LEVEL B.
E. TOLERANCES
CENTER REINFORCING:
CENTERLINE LOCATION SHOULD BE WITHIN 1/2 INCH (13MM) OF CENTER OF MASONRY.
HORIZONTAL LOCATION SHALL BE WITHIN 2 INCHES (51 MM) OF THE CENTER OF THE CELL.
REINFORCING SHALL MAINTAIN POSITION WITHOUT BEING TIED.
DO NOT MOVE REINFORCING AFTER INITIAL SET OF GROUT.

- F. BOND BEAMS:
HORIZONTAL REINFORCING SHALL BE 1/4 INCH (6 MM) CLEAR OF MASONRY FOR FINE GROUT AND 1/2 INCH (13 MM) FOR COARSE GROUT. KNOCK OUT WEB BLOCKS SHALL BE USED FOR BLOCK AT THE TOP AND/OR THE BOTTOM OF THE BOND BEAMS, DEPENDING ON THE LOCATION. WIRE MESH OR SOME OTHER MEANS SHALL BE USED TO PREVENT GROUT FROM ESCAPING FROM THE BOTTOM OF THE BOND BEAMS INTO CELLS WITHOUT VERTICAL REINFORCING.

13120 PRE-ENGINEERED BUILDING:

- A. THE PRE-ENGINEERED METAL BUILDING (PEMB) SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF THE METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA) METAL BUILDING SYSTEM MANUAL.
B. ALL INTERIOR WALLS AND EXTERIOR WALL SHEATHING SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER.
C. VERIFY ALL COLUMN LOCATIONS, ANCHOR BOLTS, DIMENSIONS AND ROOF FRAMING WITH METAL BUILDING MANUFACTURER AND APPROVED ANCHOR BOLT SHOP DRAWINGS AND LAYOUT.
D. METAL BUILDING MANUFACTURER SHALL DESIGN THE RIGID FRAMES AND HORIZONTAL ROOF DIAGONAL BRACING TO SUPPORT WIND LOADS IN CRITERIA.
E. SEE METAL BUILDING ELEVATIONS FOR WALL OPENING SIZE AND LOCATIONS. FRAME CONNECTIONS AT ROOF SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER, PROVIDE X-BRACING AS SHOWN ON METAL BUILDING PLANS & ELEVATIONS.
F. FOUNDATIONS FOR THIS PEMB ARE PRELIMINARY & ARE BASED ON PRELIMINARY CALCULATIONS. FOUNDATIONS SHALL NOT BE INSTALLED PRIOR TO A FULL REVIEW OF THE PEMB SHOP DRAWING SUBMITTAL.

DESIGN CRITERIA:

DESIGN CODE: 2015 INTERNATIONAL BUILDING CODE (IBC)
BASIC WIND SPEED: 115 MPH
RISK CATEGORY: II
WIND EXPOSURE: C
INTERNAL PRESSURE COEFFICIENT: ± 0.18 ENCLOSED BUILDING
MAXIMUM DESIGN WIND PRESSURES (PSF, LRFD):

Table with 3 columns: OPENING SIZE (SF), EDGE ZONES (5'-6" FROM OUTSIDE CORNERS), INTERIOR ZONE. Values range from 0-20 to >100 for opening sizes and corresponding wind pressures.

DESIGN LIVE LOADS:
ROOF: 20 PSF (REDUCIBLE)
DESIGN DEAD LOADS:
COLLATERAL ROOF: 7 PSF
SNOW LOADS:
GROUND SNOW LOAD: 5 PSF

GENERAL NOTES

- 1. CODES USED: 2015 INTERNATIONAL BUILDING CODE, ACI, AISC, AWS, NDS AND ASCE 7-10. ALL LATEST EDITIONS USED.
2. ALL DESIGN, CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION OVER THE WORK.
3. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE JOB SITE PRIOR TO COMMENCING CONSTRUCTION.

DRAWING LIST

- S001 GENERAL NOTES, DESIGN CRITERIA & DESIGN SPECIFICATIONS
S101 FOUNDATION PLAN, SECTIONS & DETAILS
S101 ENTRY CANOPY FRAMING PLAN, SECTIONS & DETAILS
S301 FOUNDATION & MASONRY SECTIONS & DETAILS

REQUIRED SHOP DRAWING SUBMITTALS:

THE GENERAL CONTRACTOR SHALL SUBMIT, FOR APPROVAL, THE FOLLOWING ITEMS:
CONCRETE MIX DESIGNS, REBAR LAYOUT DRAWINGS, MASONRY MATERIALS (BLOCK, GROUT, JOINT REINF., ETC.) & PEMB DESIGN/ERECTION DRAWINGS.

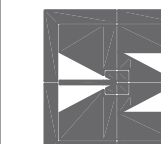


6421 Camp Bowie Blvd., #307, Fort Worth, TX 76116
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Texas Firm Registration No. 24384



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TX LICENSE NO. 50666

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TARWATER VETERINARIAN CLINIC

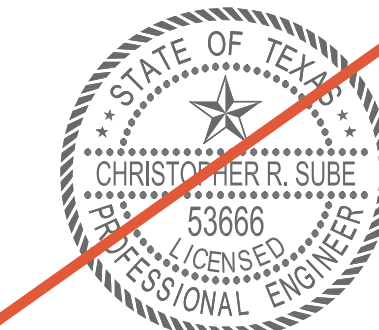
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

MA PROJECT No.: 1744-22
DE PROJECT No.: 2440
DATE: 09-26-24
DRAWN: CRS
REVISED:

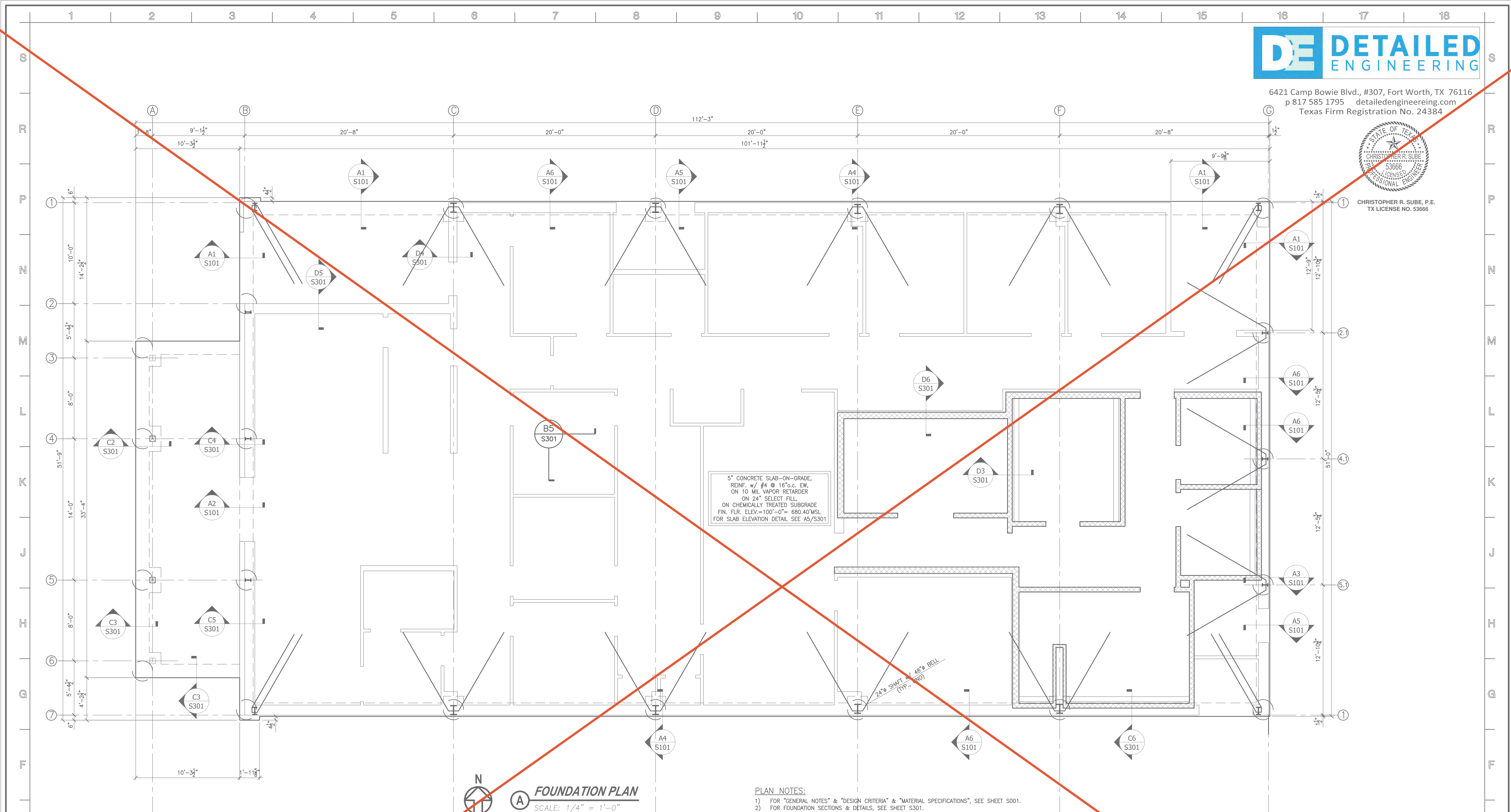
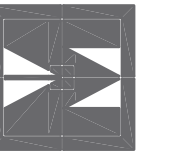
SHEET CONTENT
GENERAL NOTES,
DESIGN CRITERIA &
MATERIAL SPECIFICATIONS

SHEET NUMBER

S001



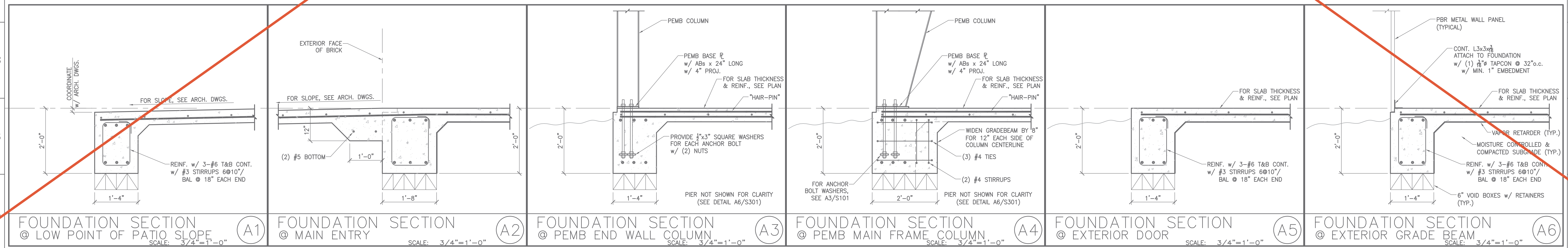
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 TX LICENSE NO. 53666



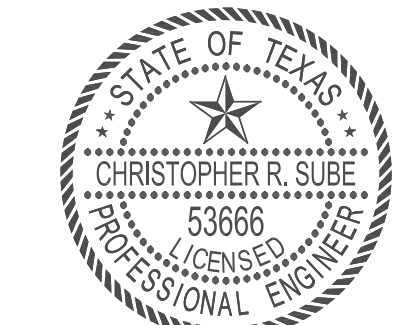
5" CONCRETE SLAB-ON-GRADE,
 REINF. w/ #4 @ 16"o.c. EW,
 ON 10 MIL VAPOR RETARDER
 ON 2" SELECT FILL,
 ON CHEMICALLY TREATED SUBGRADE
 FIN. FLR. ELEV.=100'-0"= 680.40'MSL
 FOR SLAB ELEVATION DETAIL SEE A5/S301

- PLAN NOTES:**
- 1) FOR "GENERAL NOTES" & "DESIGN CRITERIA" & "MATERIAL SPECIFICATIONS", SEE SHEET S001.
 - 2) FOR FOUNDATION SECTIONS & DETAILS, SEE SHEET S301.
 - 3) FOR ENTRY CANOPY FRAMING PLAN, SEE B/S102.

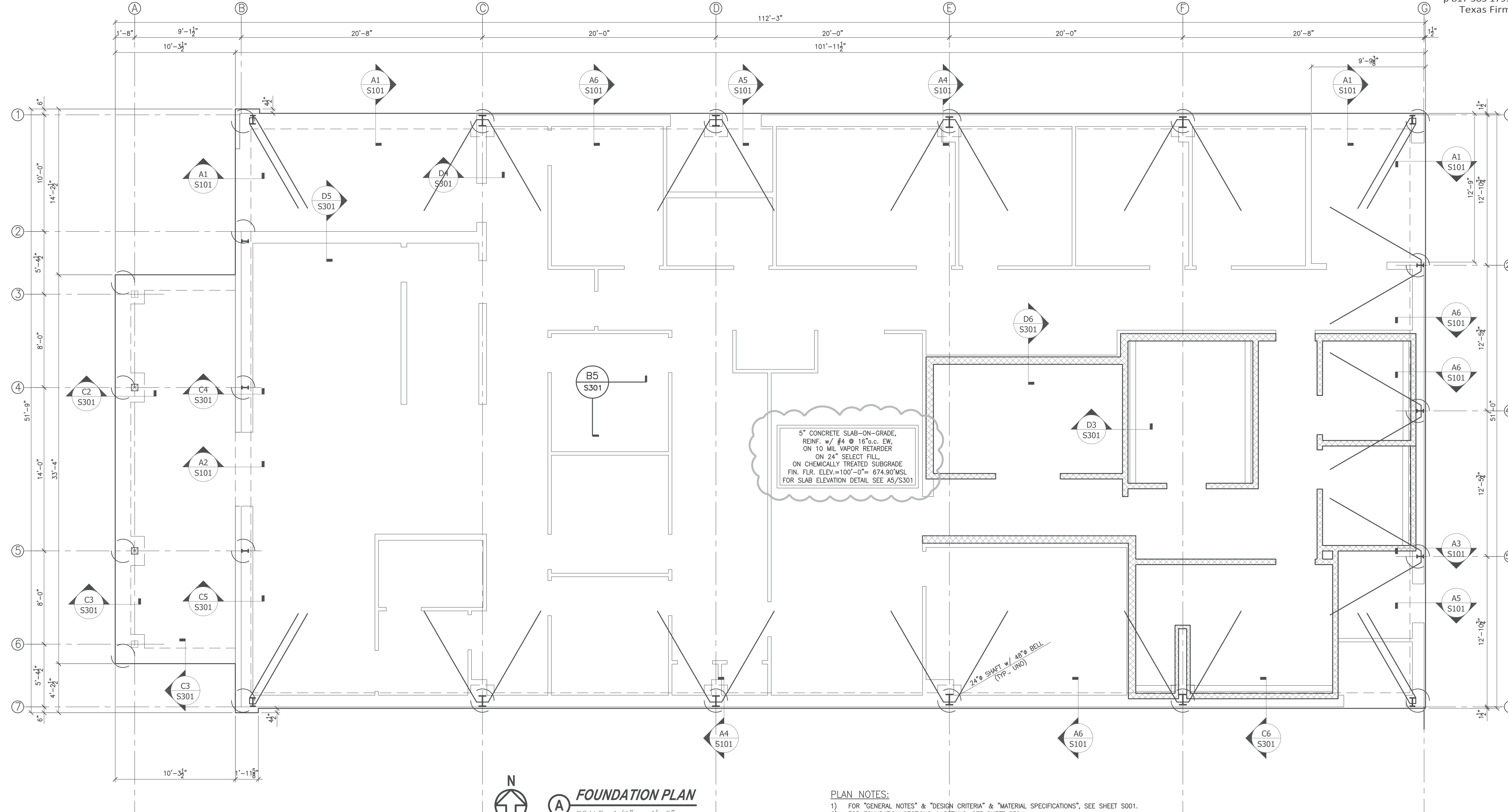
FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"



FOUNDATION SECTION @ LOW POINT OF PATIO SLOPE (A1) SCALE: 3/4"=1'-0"
FOUNDATION SECTION @ MAIN ENTRY (A2) SCALE: 3/4"=1'-0"
FOUNDATION SECTION @ PEMB END WALL COLUMN (A3) SCALE: 3/4"=1'-0"
FOUNDATION SECTION @ PEMB MAIN FRAME COLUMN (A4) SCALE: 3/4"=1'-0"
FOUNDATION SECTION @ EXTERIOR DOOR (A5) SCALE: 3/4"=1'-0"
FOUNDATION SECTION @ EXTERIOR GRADE BEAM (A6) SCALE: 3/4"=1'-0"

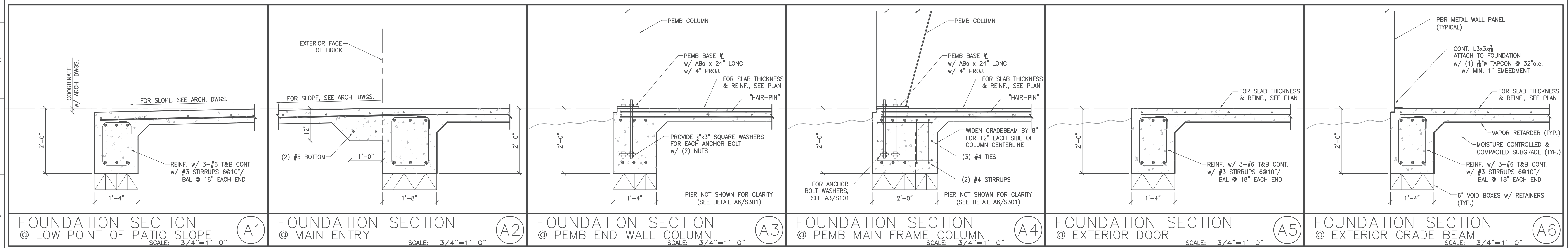


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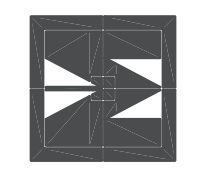


FOUNDATION PLAN
 SCALE: 1/4" = 1'-0"

- PLAN NOTES:**
- 1) FOR "GENERAL NOTES" & "DESIGN CRITERIA" & "MATERIAL SPECIFICATIONS", SEE SHEET S001.
 - 2) FOR FOUNDATION SECTIONS & DETAILS, SEE SHEET S301.
 - 3) FOR ENTRY CANOPY FRAMING PLAN, SEE B/S102.



FOUNDATION SECTION @ LOW POINT OF PATIO SLOPE (A1) SCALE: 3/4" = 1'-0"
FOUNDATION SECTION @ MAIN ENTRY (A2) SCALE: 3/4" = 1'-0"
FOUNDATION SECTION @ PEMB END WALL COLUMN (A3) SCALE: 3/4" = 1'-0"
FOUNDATION SECTION @ PEMB MAIN FRAME COLUMN (A4) SCALE: 3/4" = 1'-0"
FOUNDATION SECTION @ EXTERIOR DOOR (A5) SCALE: 3/4" = 1'-0"
FOUNDATION SECTION @ EXTERIOR GRADE BEAM (A6) SCALE: 3/4" = 1'-0"



MA PROJECT No.:	1744-22
DE PROJECT No.:	24-40
DATE:	09-26-24
DRAWN:	CRS
REVISED:	
ADDENDUM #3	10/31/24

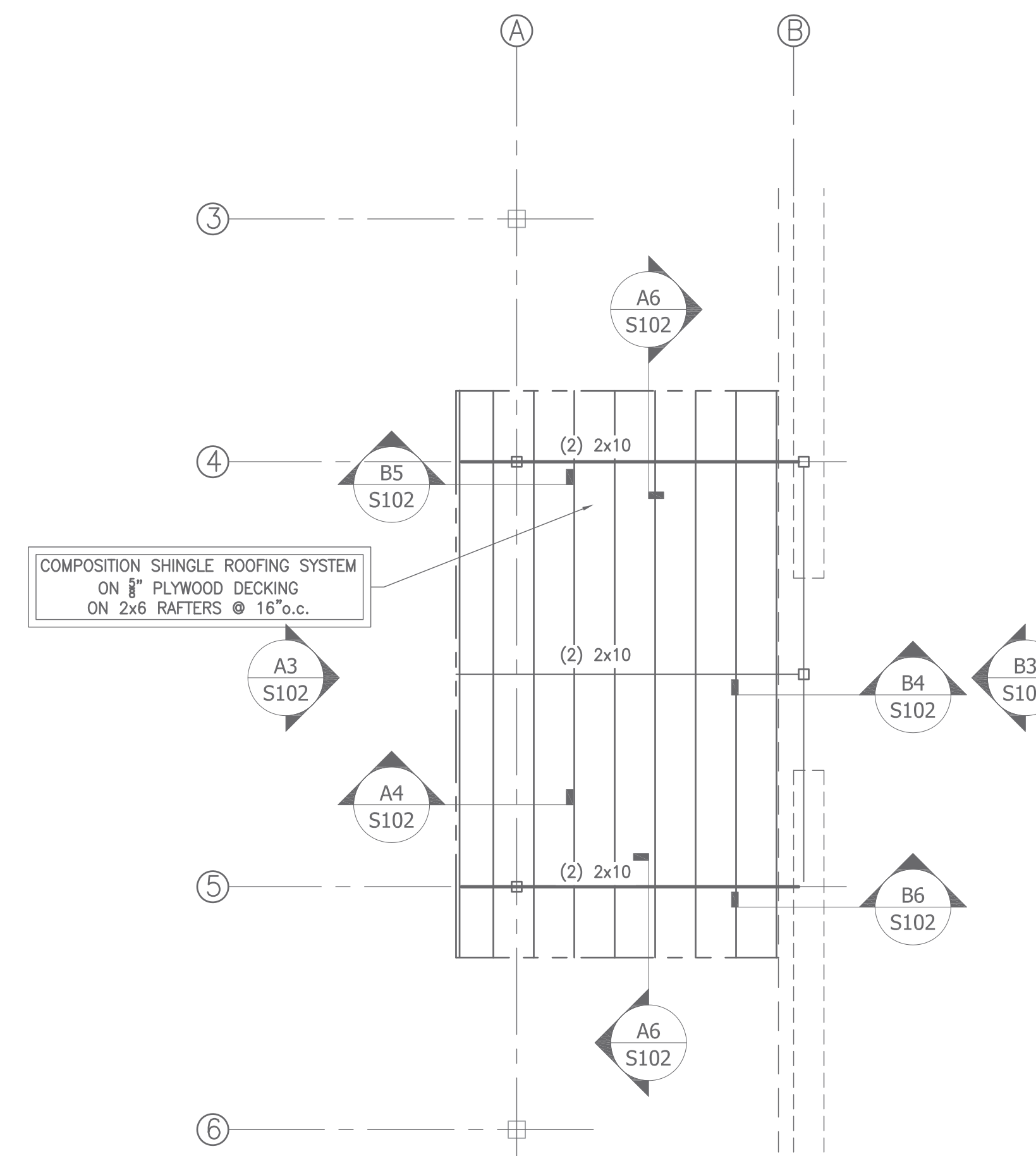
SHEET CONTENT
 FOUNDATION PLAN
 SECTIONS & DETAILS

SHEET NUMBER

**SS101
 S101**



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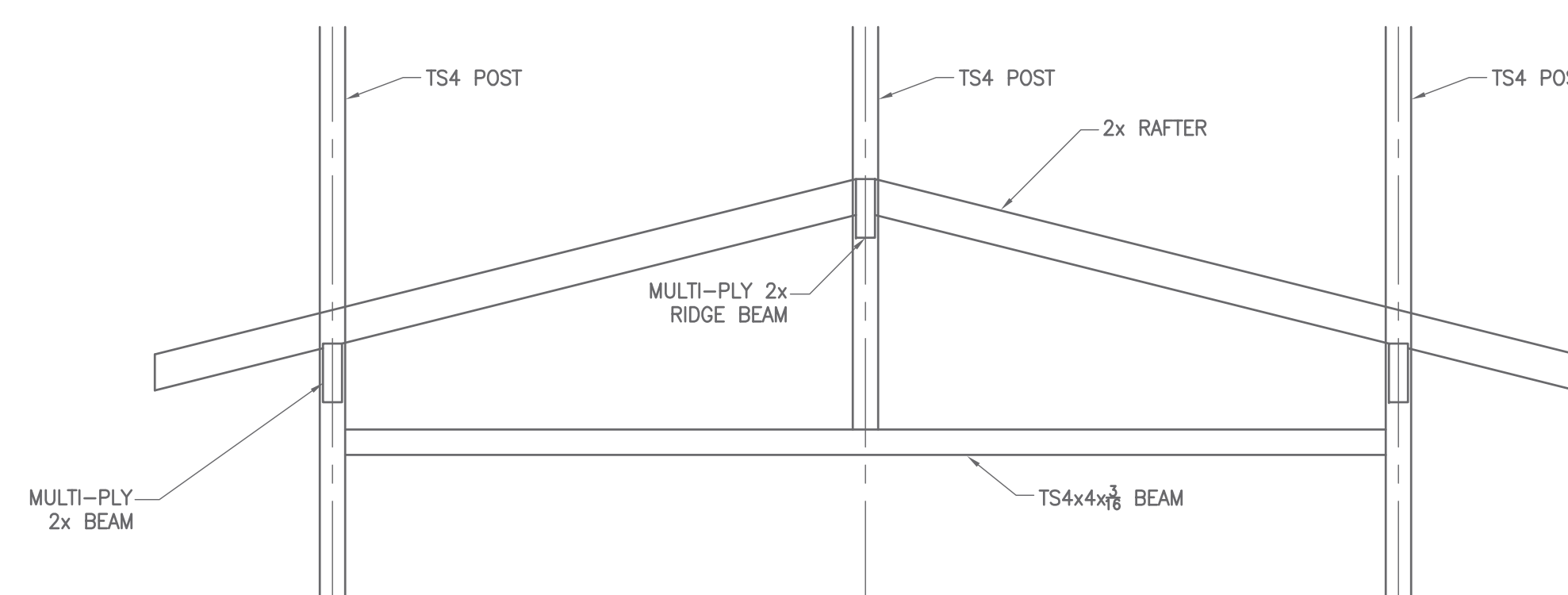


B ENTRY CANOPY FRAMING PLAN
 SCALE: 1/4" = 1'-0"

- PLAN NOTES:**
- FOR "GENERAL NOTES" & "DESIGN CRITERIA" & "MATERIAL SPECIFICATIONS", SEE SHEET S001.
 - FOR FOUNDATION PLAN, SEE A/S101.

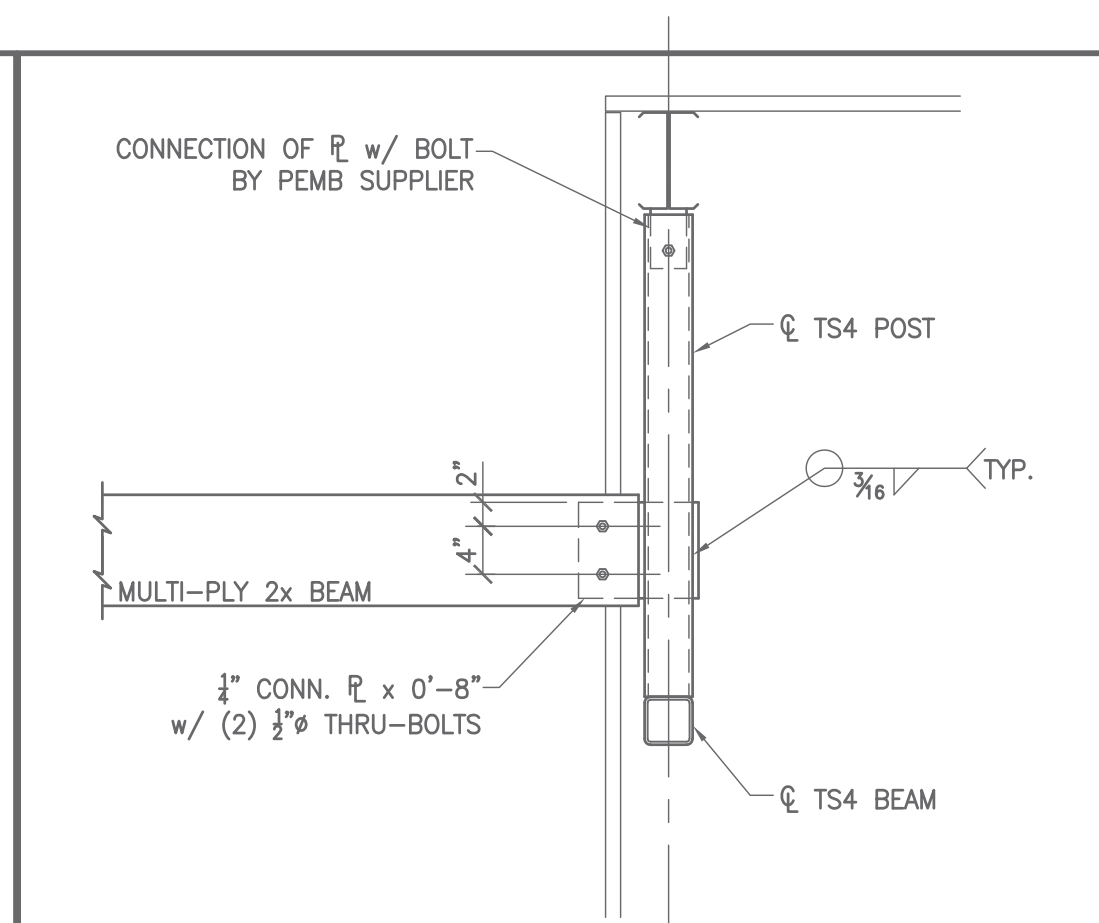
TYPICAL MULTI-PLY HEADER/BEAM NAILING PATTERN U.N.O.	
HEADER/BEAM SIZE	FASTENING PATTERN (ALTERNATE SIDES WHEN FASTENING)
(-)2x6	(2) ROWS OR 10dx3" NAILS @ 8" O.C.
(-)2x8	(3) STAGGERED ROWS OF 10dx3" NAILS @ 12" O.C.
(-)2x10	(4) STAGGERED ROWS OF 10dx3" NAILS @ 12" O.C.
(-)2x12	(4) STAGGERED ROWS OF 10dx3" NAILS @ 12" O.C.
(-)1.75x14" LVLs	(6) STAGGERED ROWS OF 10dx3" NAILS @ 12" O.C.
(-)1.75x16" LVLs	(6) STAGGERED ROWS OF 10dx3" NAILS @ 12" O.C.
(-)1.75x22" LVLs	(8) STAGGERED ROWS OF 20dx4" NAILS @ 12" O.C.
(-)1.75x24" LVLs	(8) STAGGERED ROWS OF 20dx4" NAILS @ 12" O.C.

REMARKS:
 FASTENING OF LVL PLYs MAY BE DONE PER MANUFACTURERS RECOMMENDATIONS IN LIEU OF TABLE ABOVE.

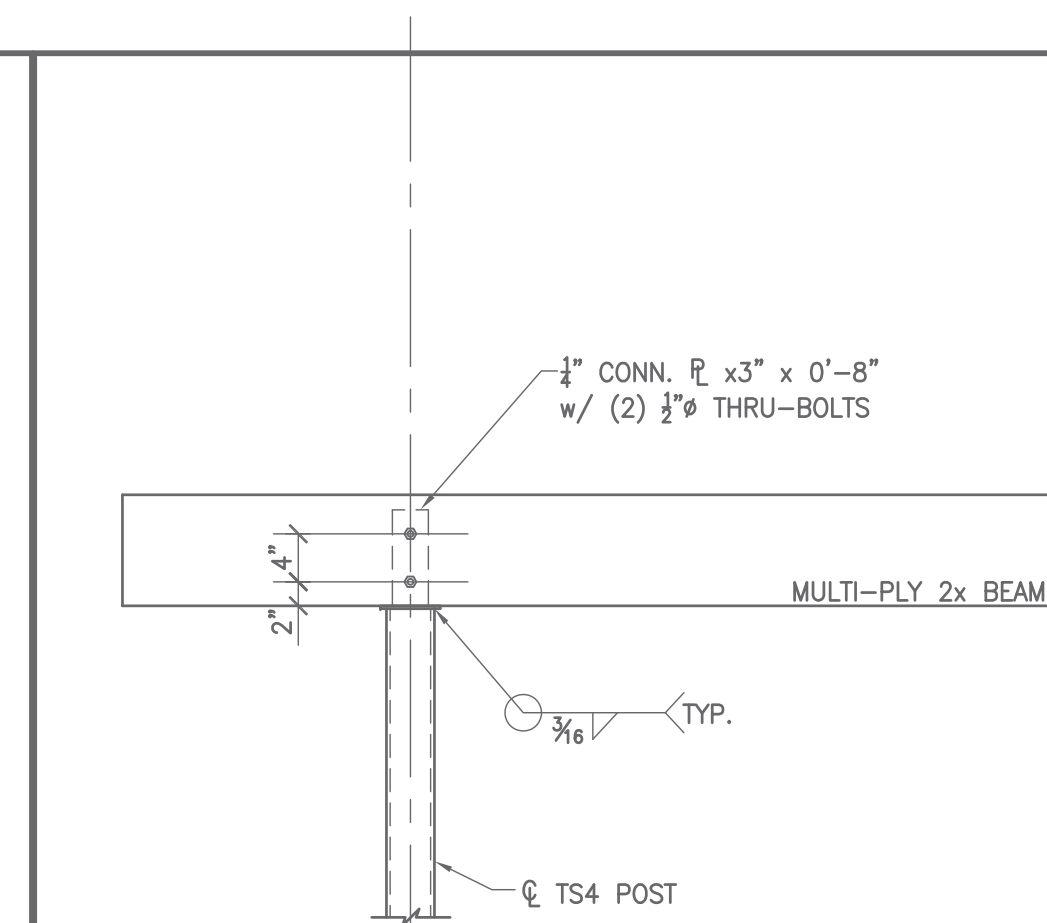


B1 BEAM NAILING SCHEDULE
 SCALE: NTS

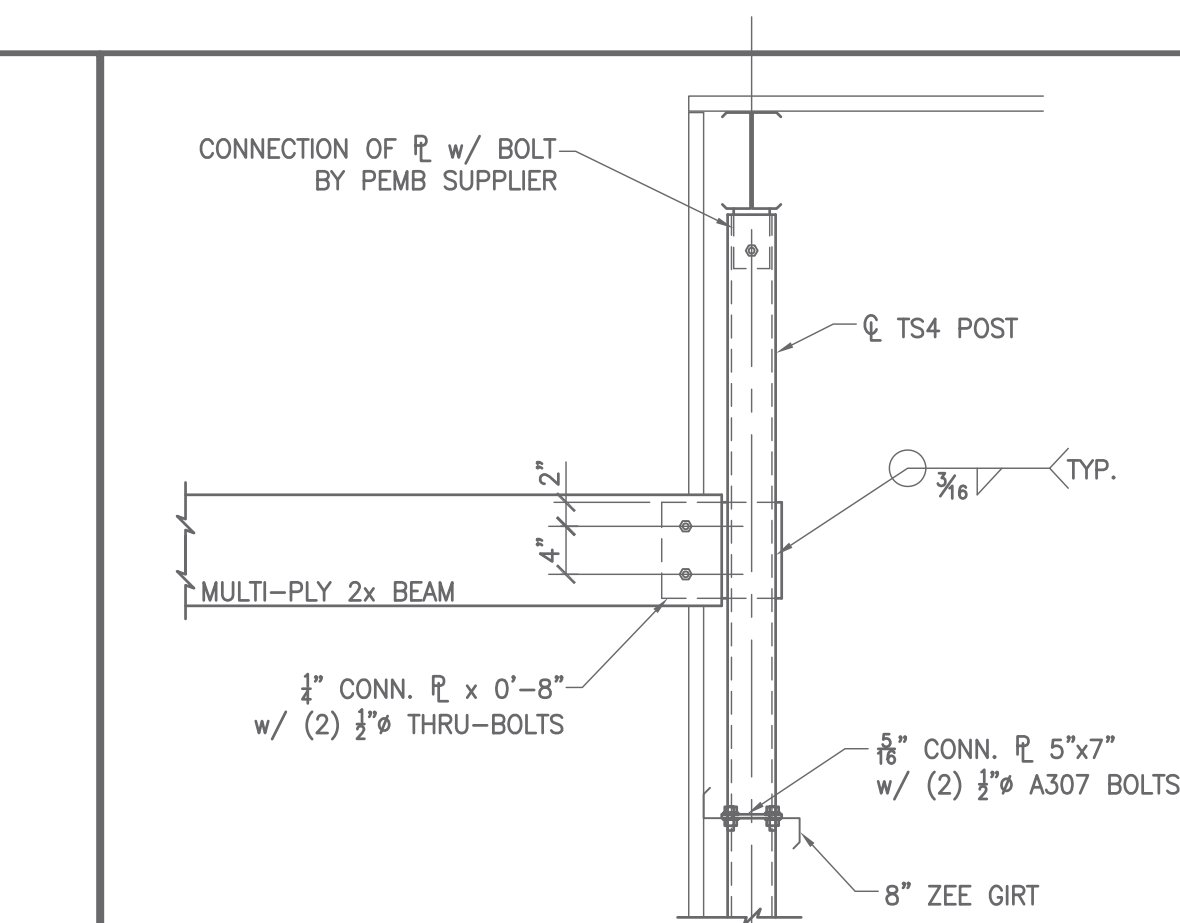
B3 ENTRY CANOPY FRAME ELEVATION
 SCALE: NTS



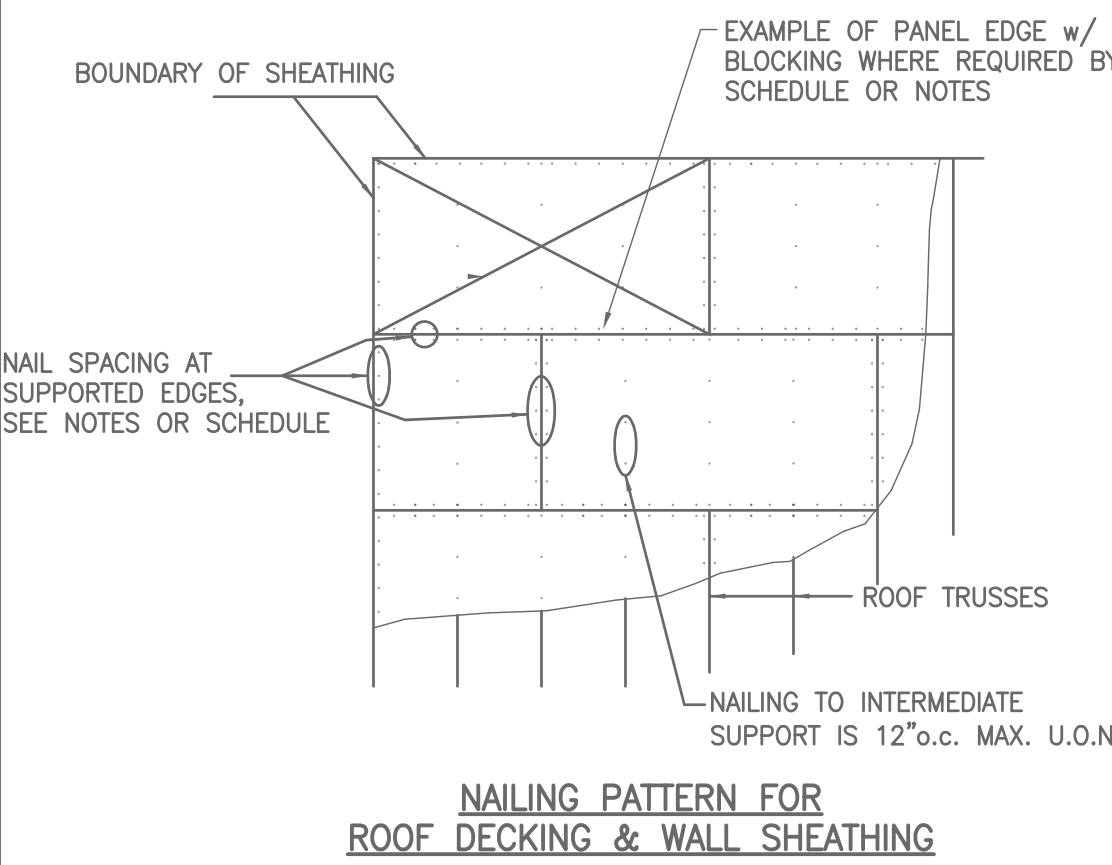
B4 WOOD FRAMING DETAIL @ TS4 POST w/ 2x RIDGE BEAM
 SCALE: 3/4" = 1'-0"



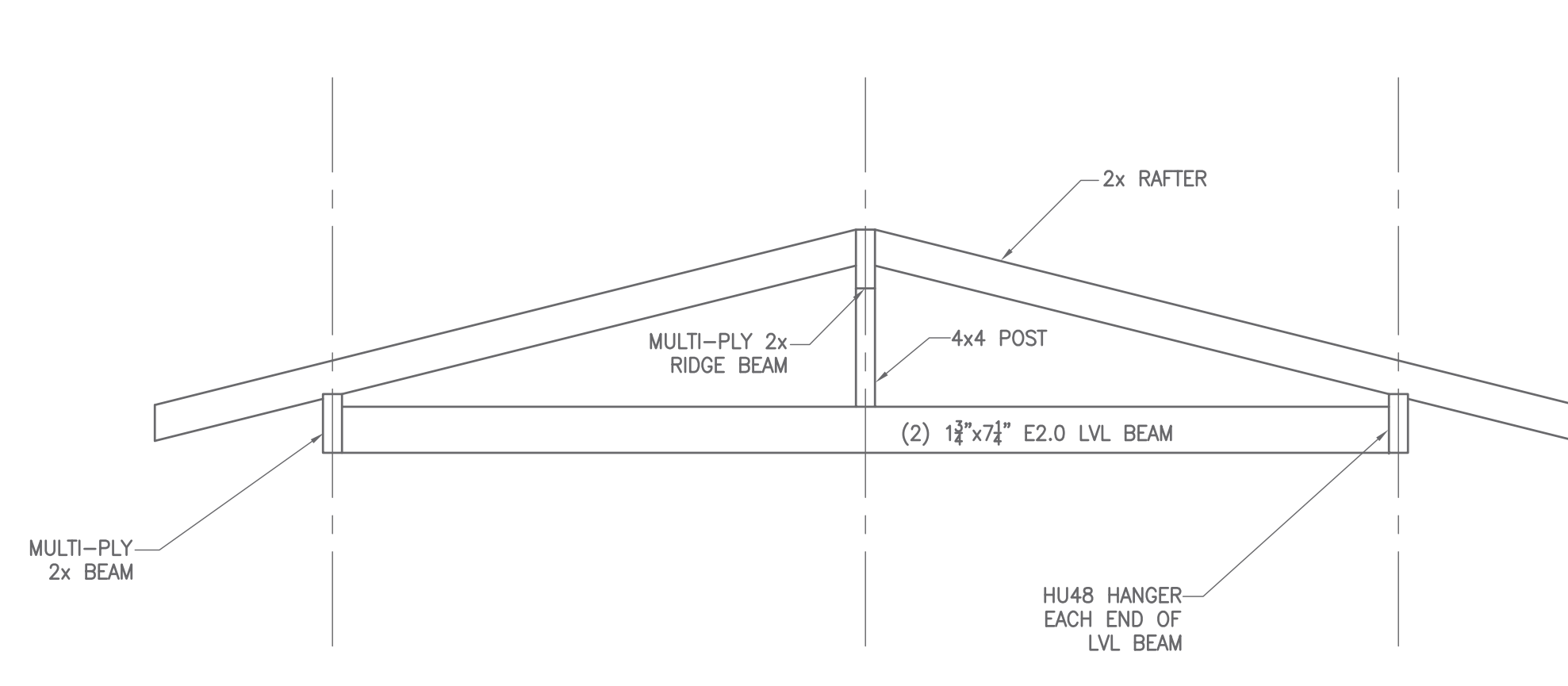
B5 WOOD FRAMING DETAIL @ TS4 POST w/ 2x BEAM OVER
 SCALE: 3/4" = 1'-0"



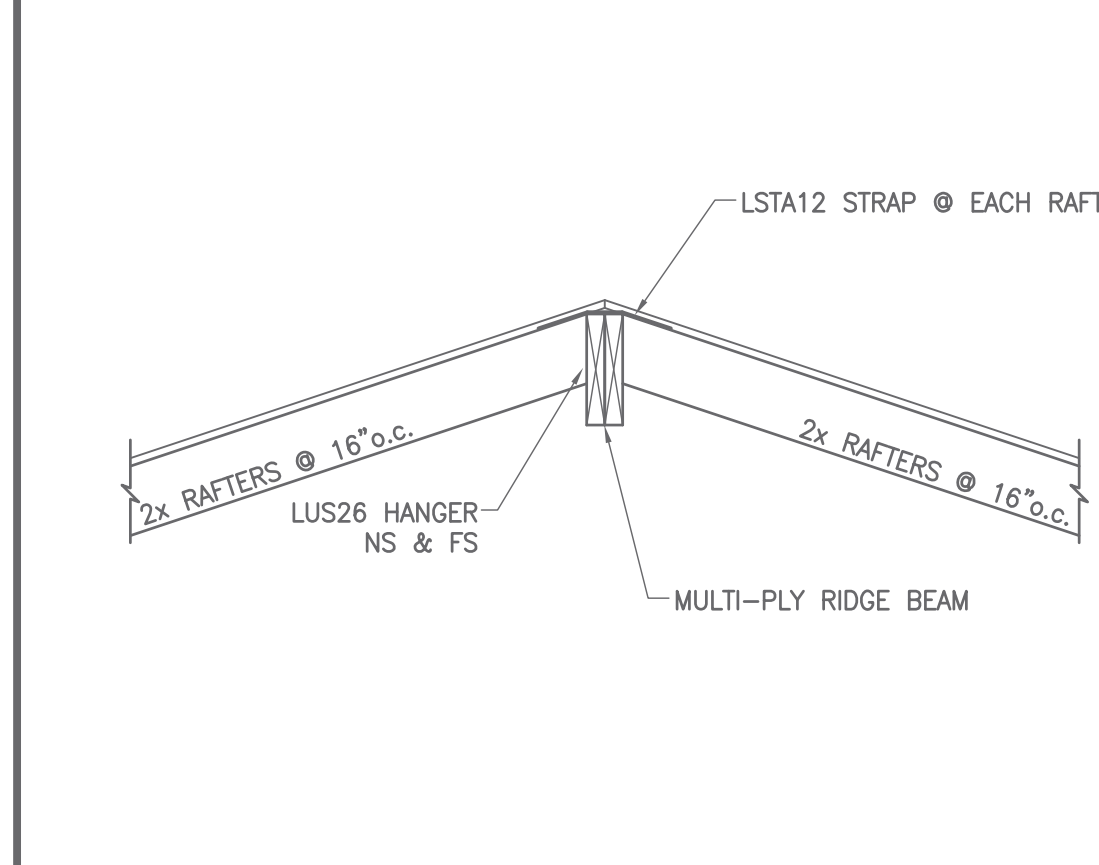
B6 WOOD FRAMING DETAIL @ TS4 POST w/ 2x BEAM & GIRTS
 SCALE: 3/4" = 1'-0"



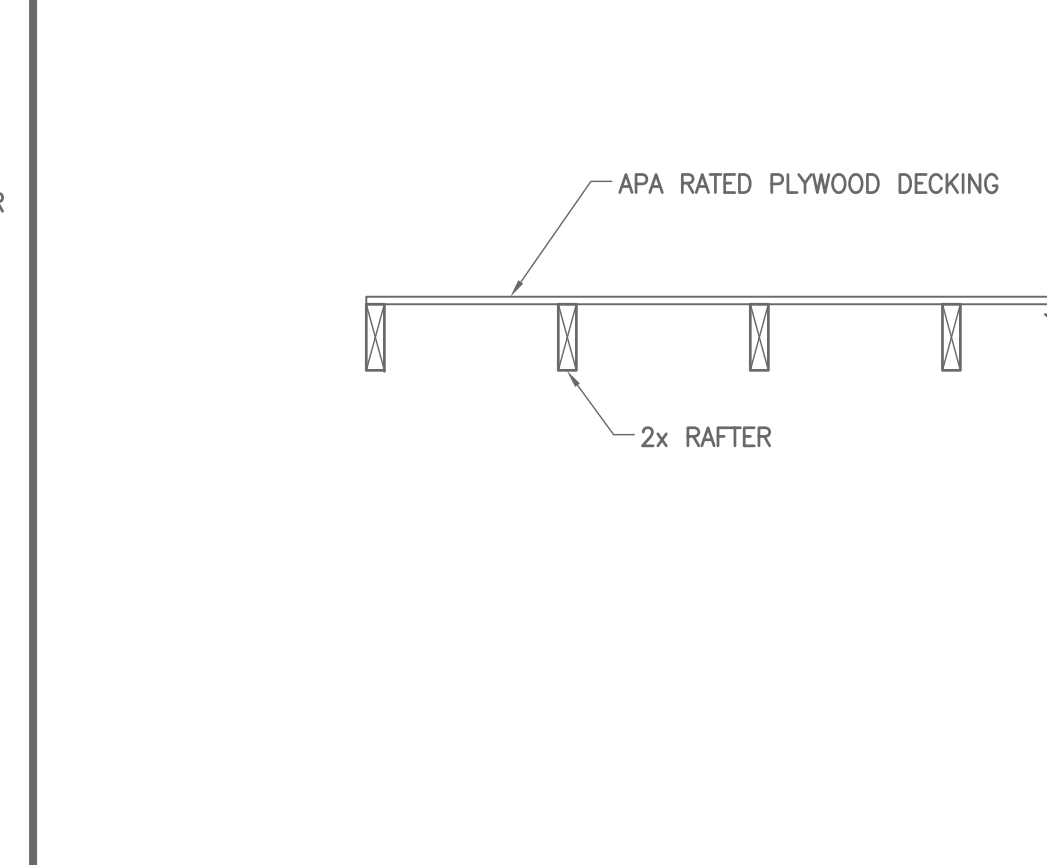
A1 NAIL PATTERN DETAIL @ ROOF DECKING & WALL SHEATHING
 SCALE: NTS



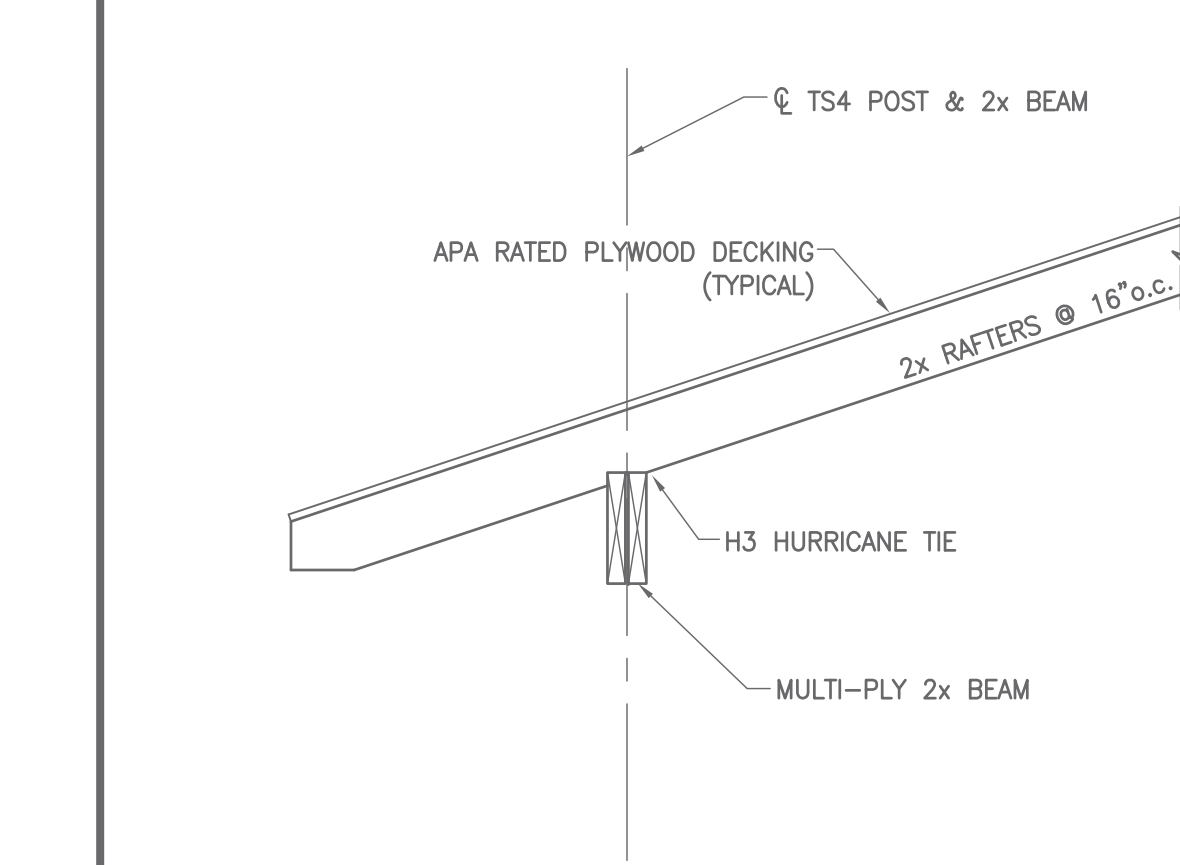
A3 ENTRY CANOPY FRAME ELEVATION
 SCALE: NTS



A4 WOOD FRAMING SECTION @ RIDGE
 SCALE: 3/4" = 1'-0"



A5 WOOD FRAMING SECTION @ RAKE
 SCALE: 3/4" = 1'-0"



A6 WOOD FRAMING SECTION @ EAVE
 SCALE: 3/4" = 1'-0"

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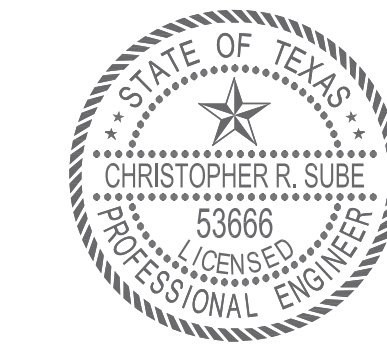
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MA PROJECT No.: 1744-22
 DE PROJECT No.: 24-40
 DATE: 09-26-24
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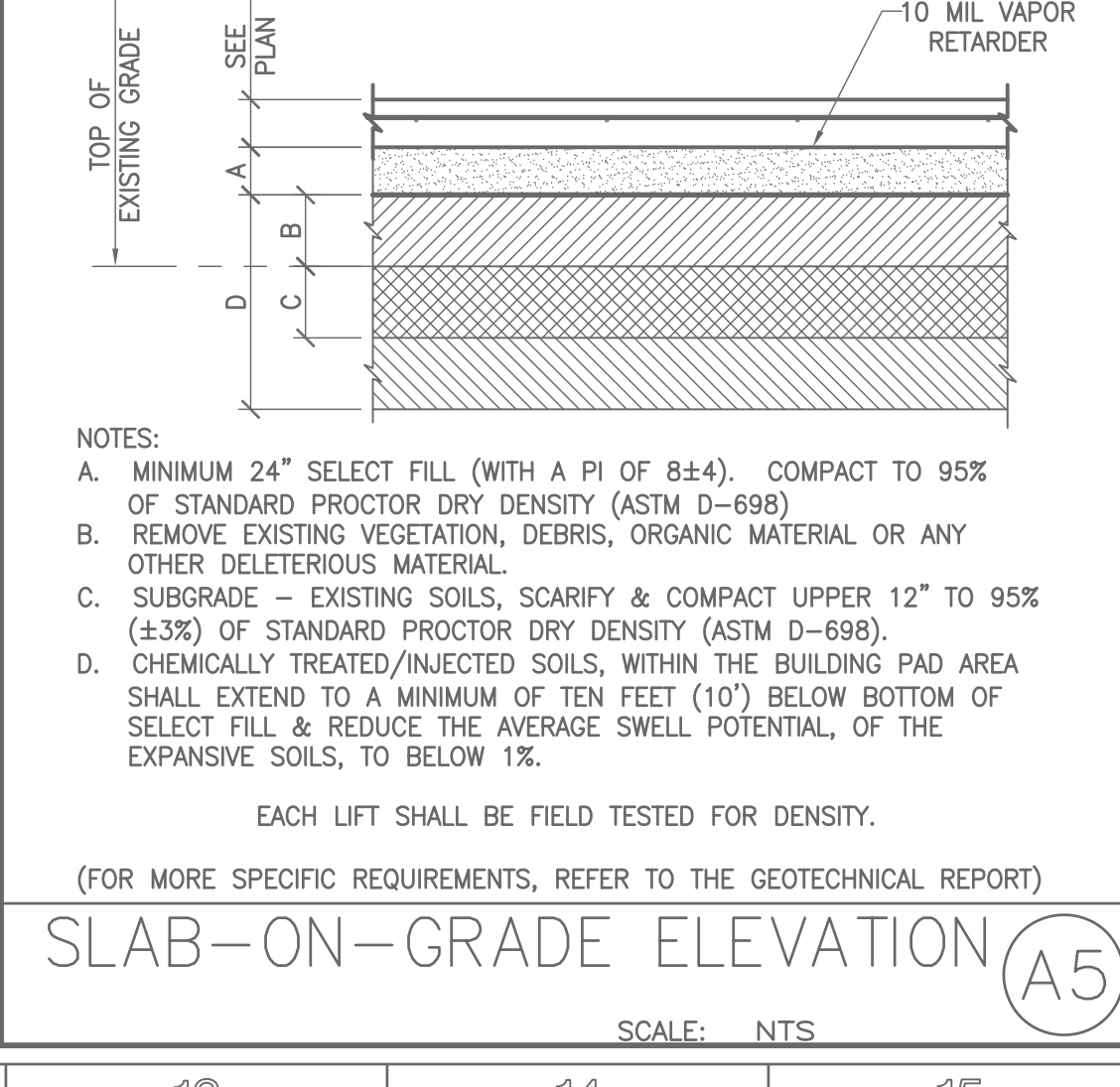
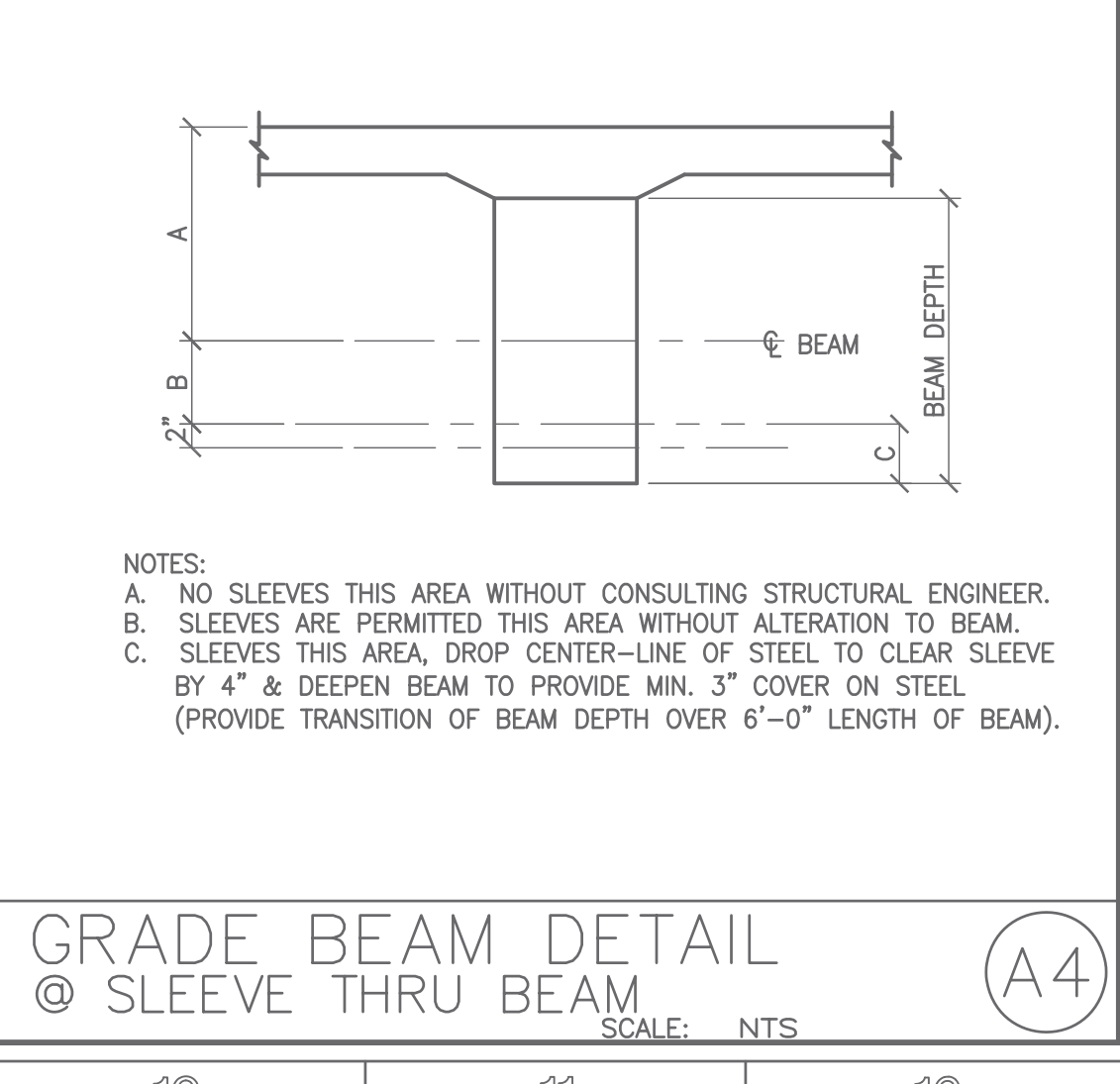
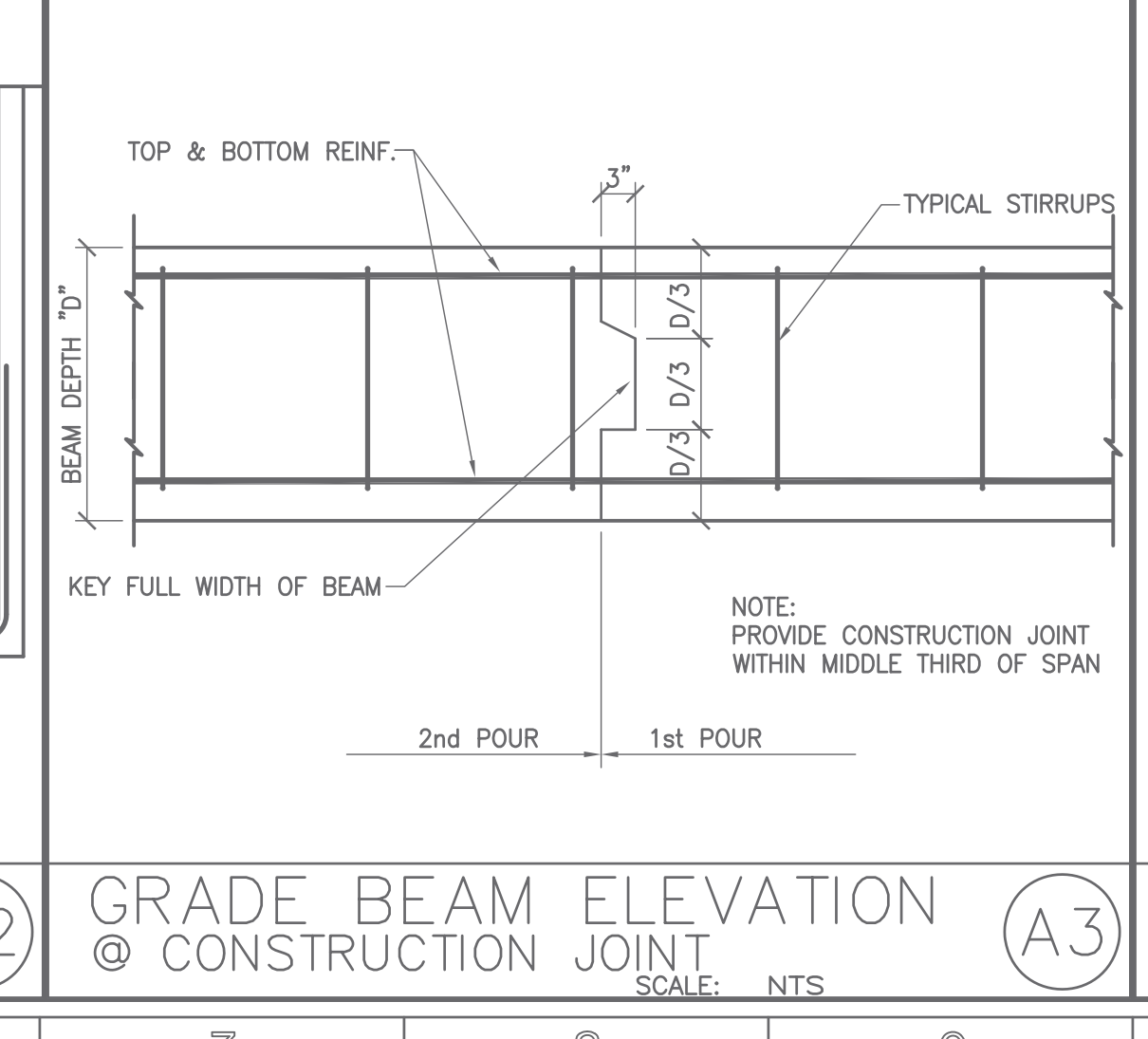
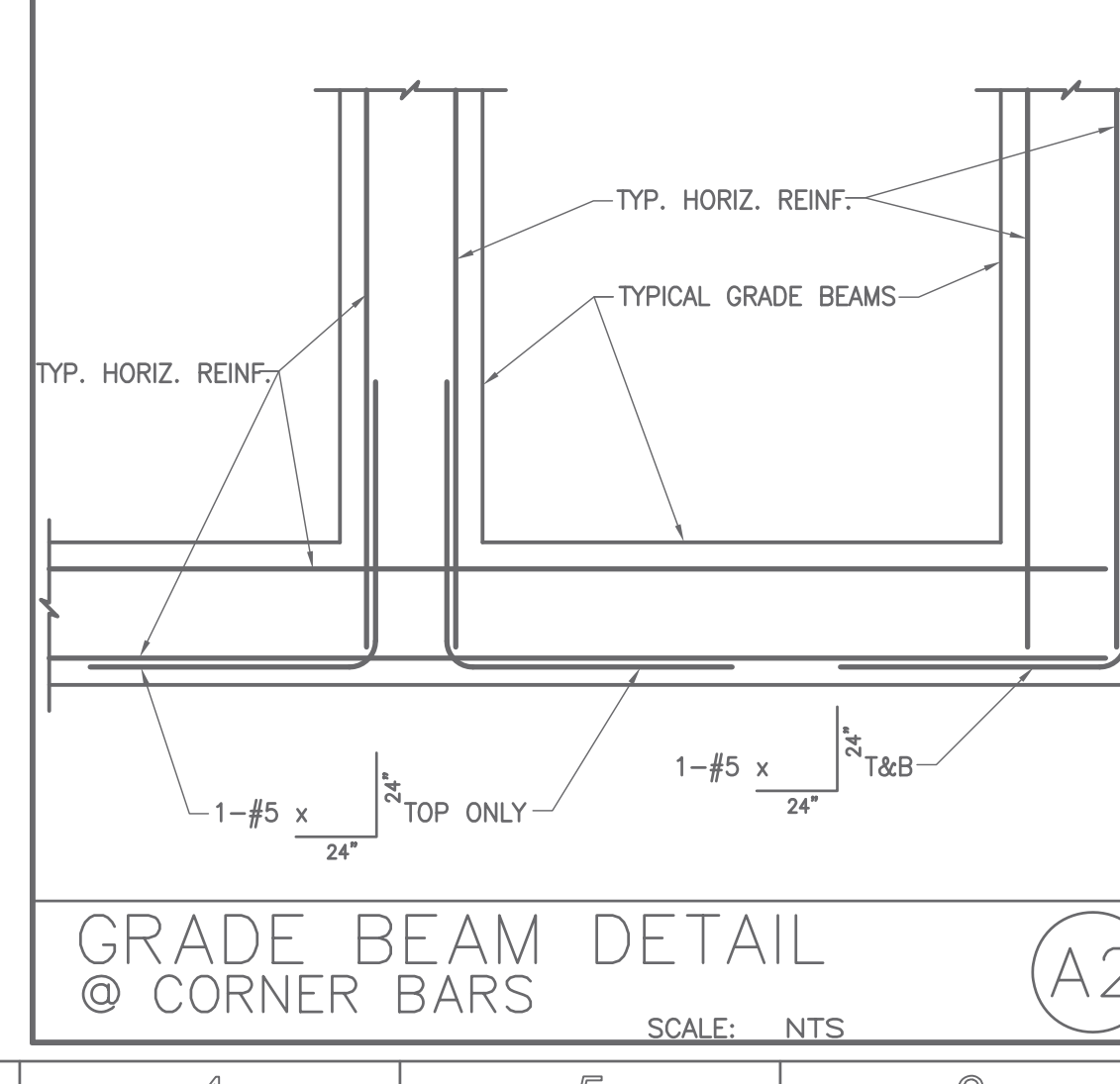
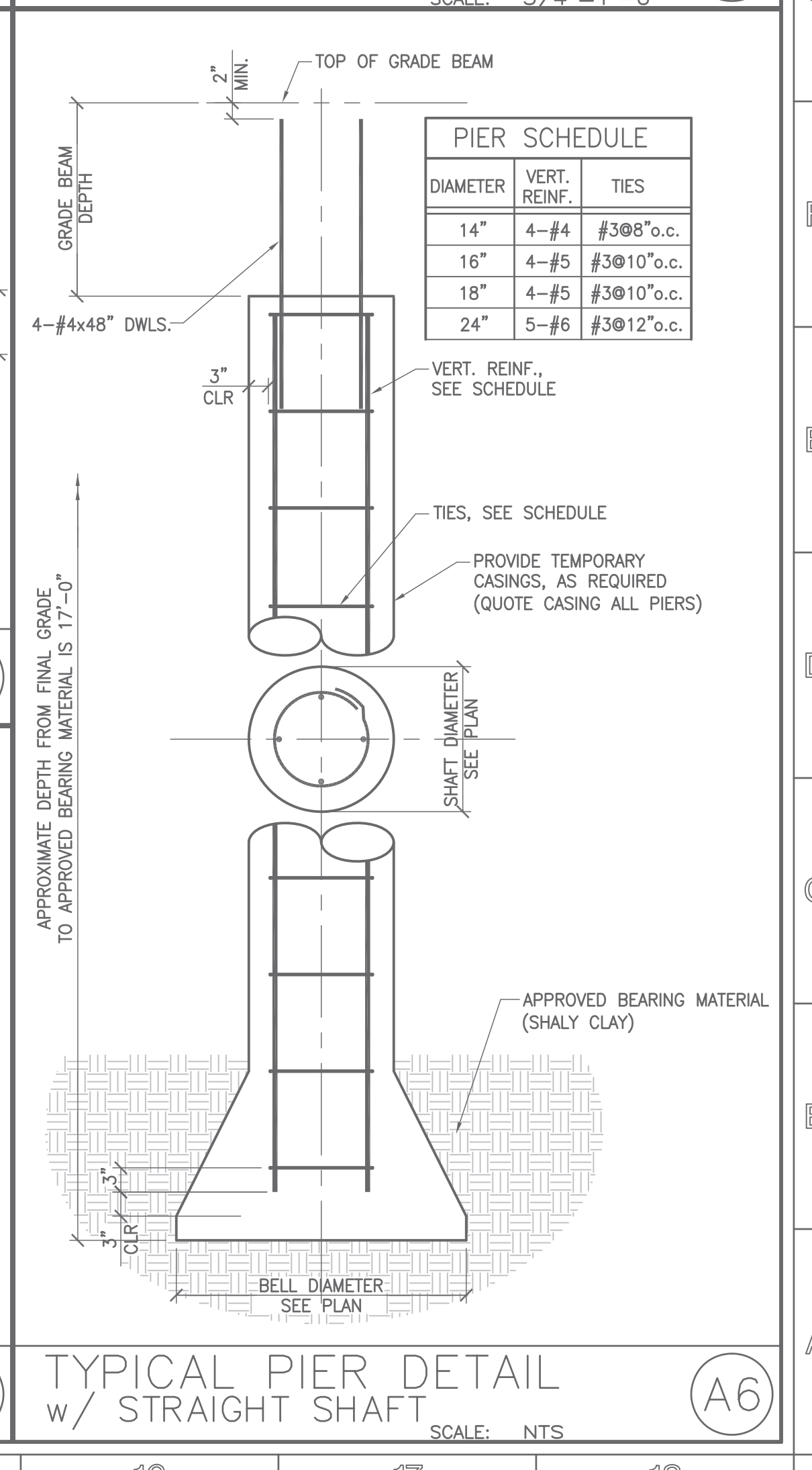
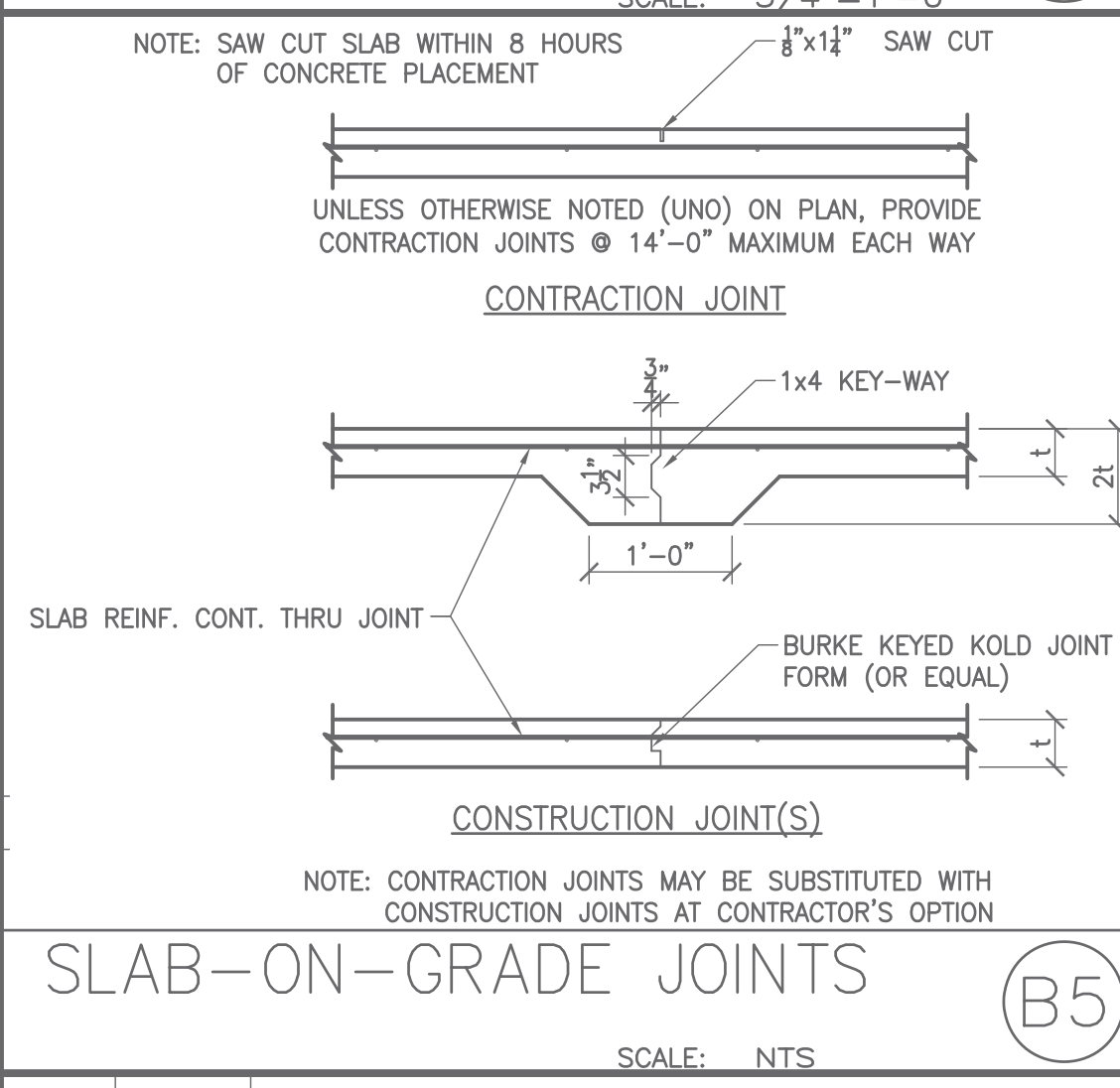
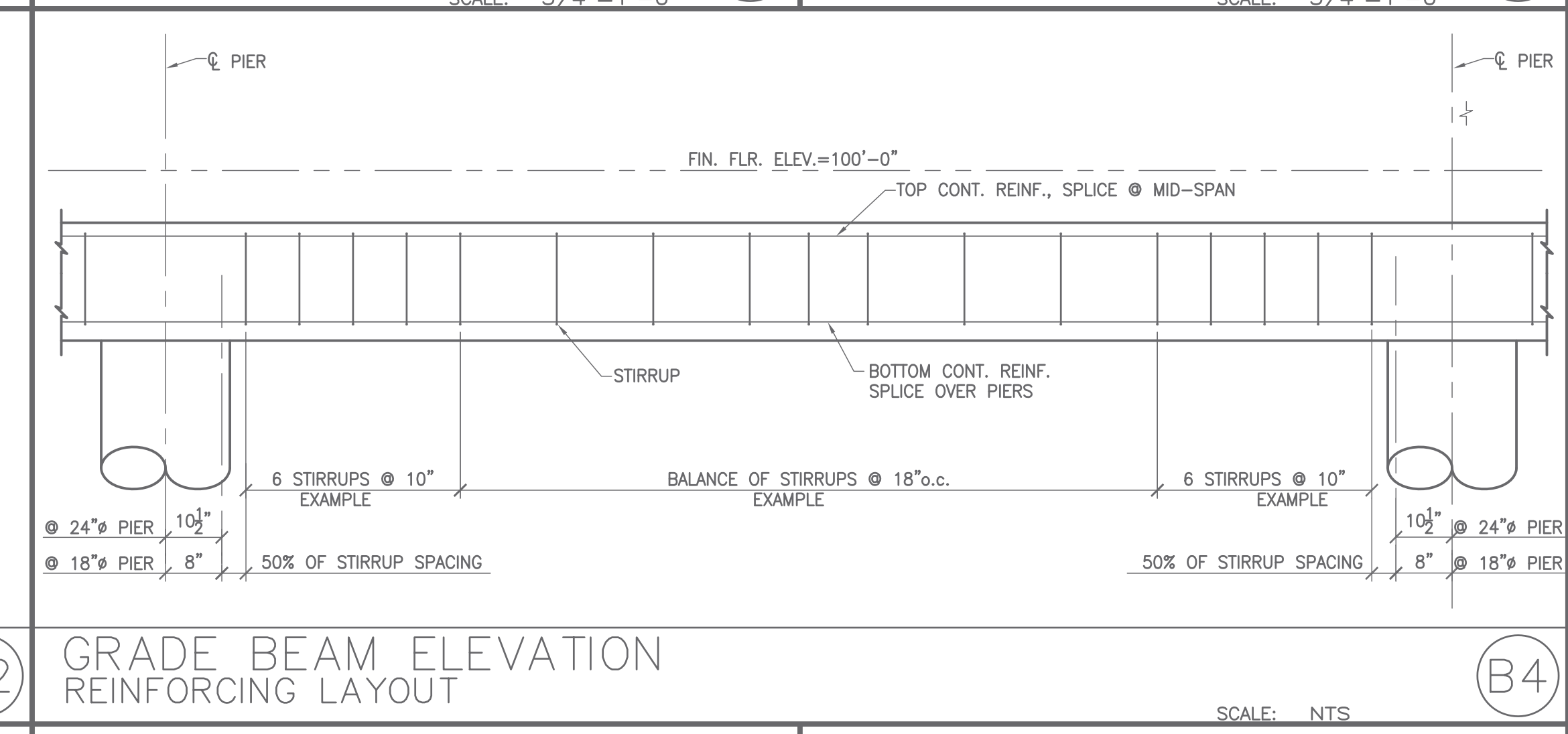
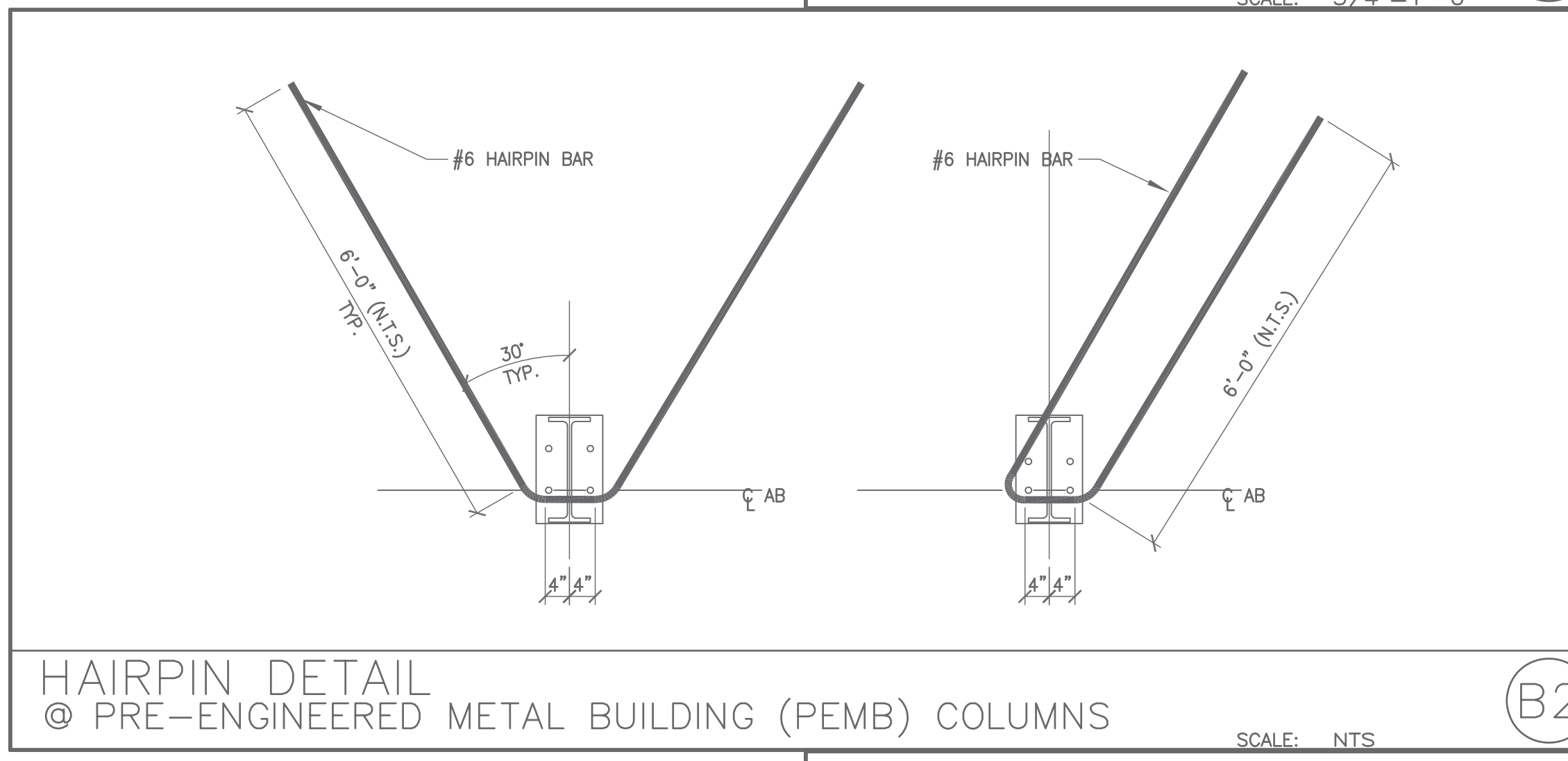
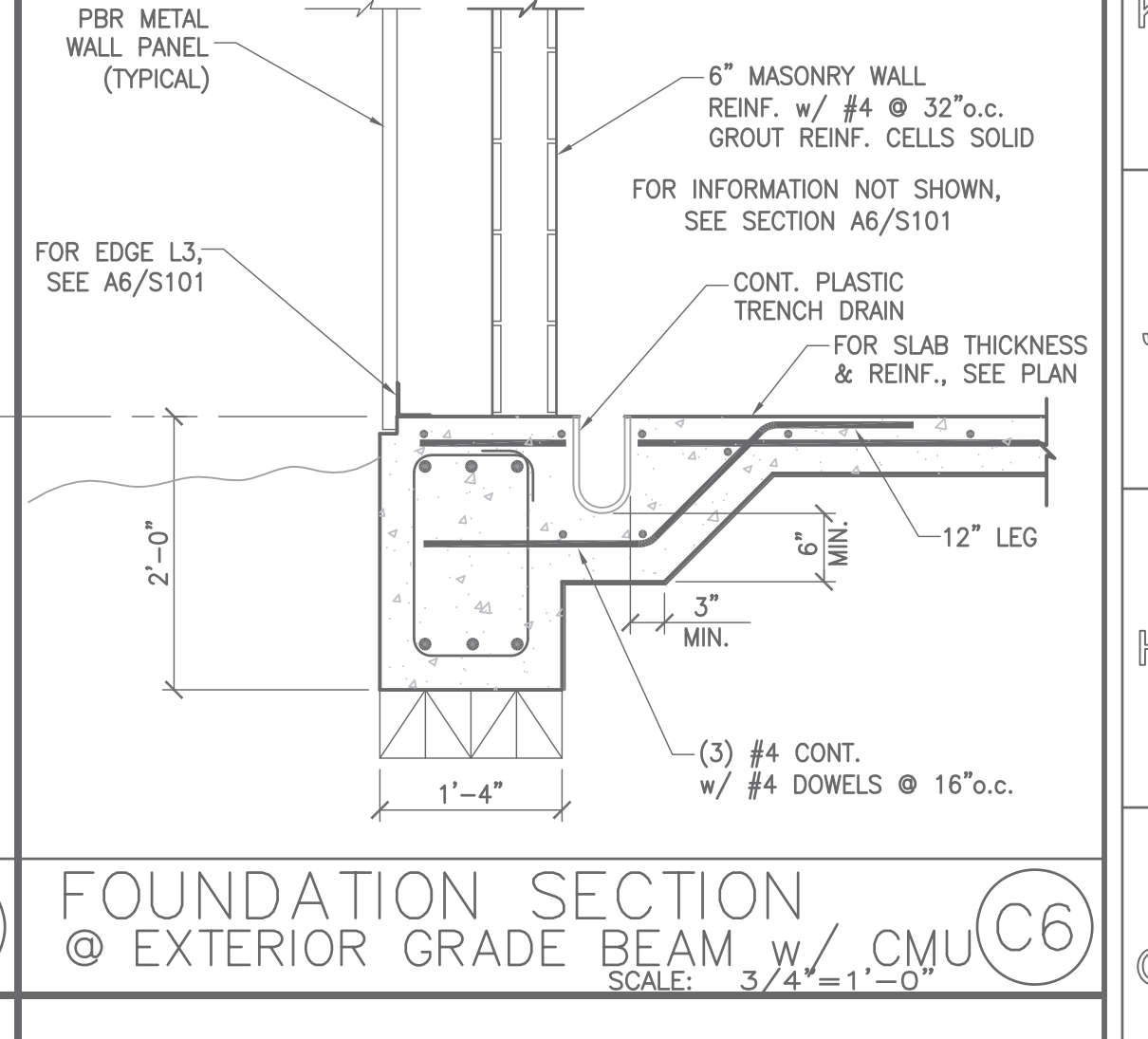
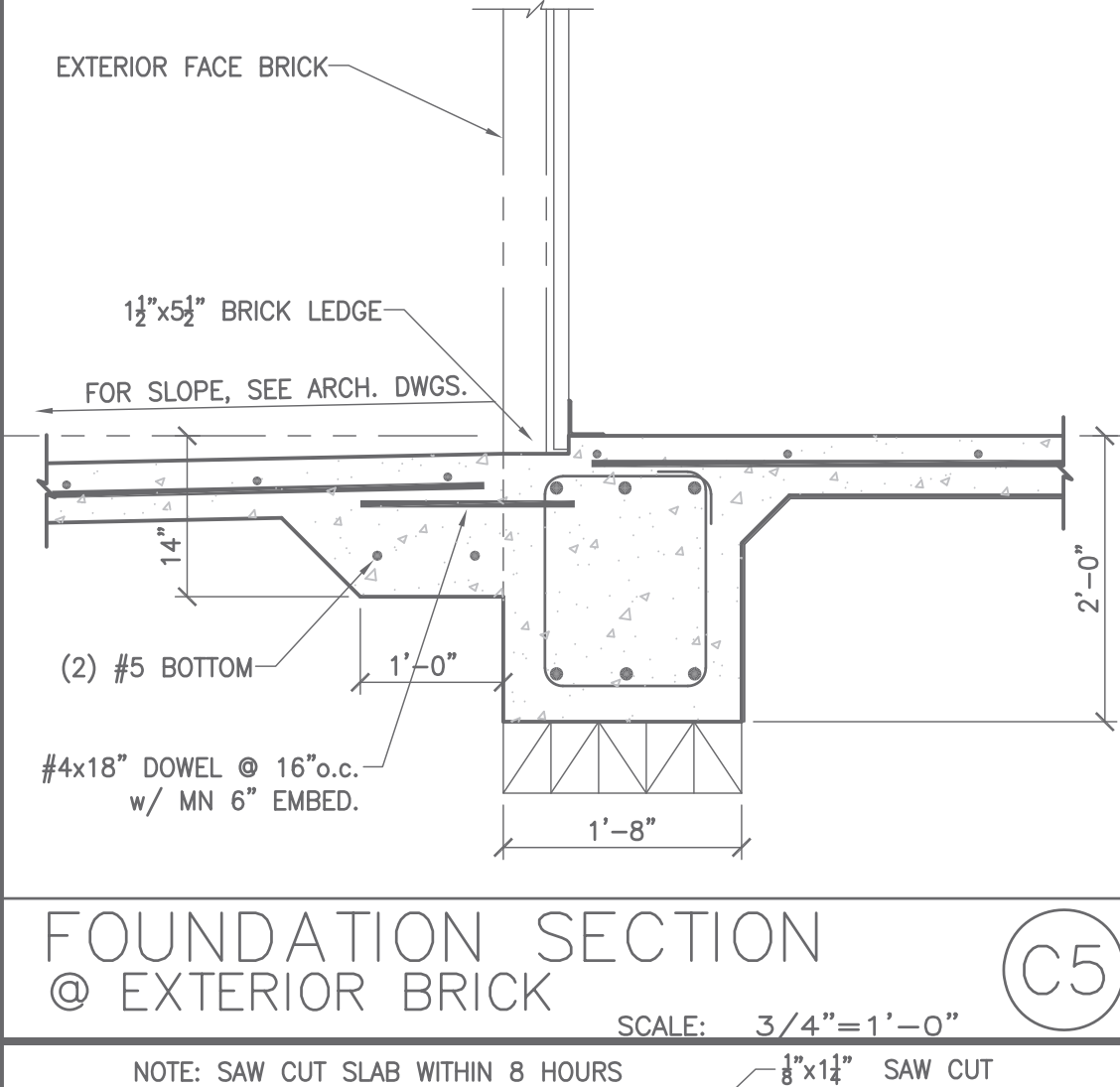
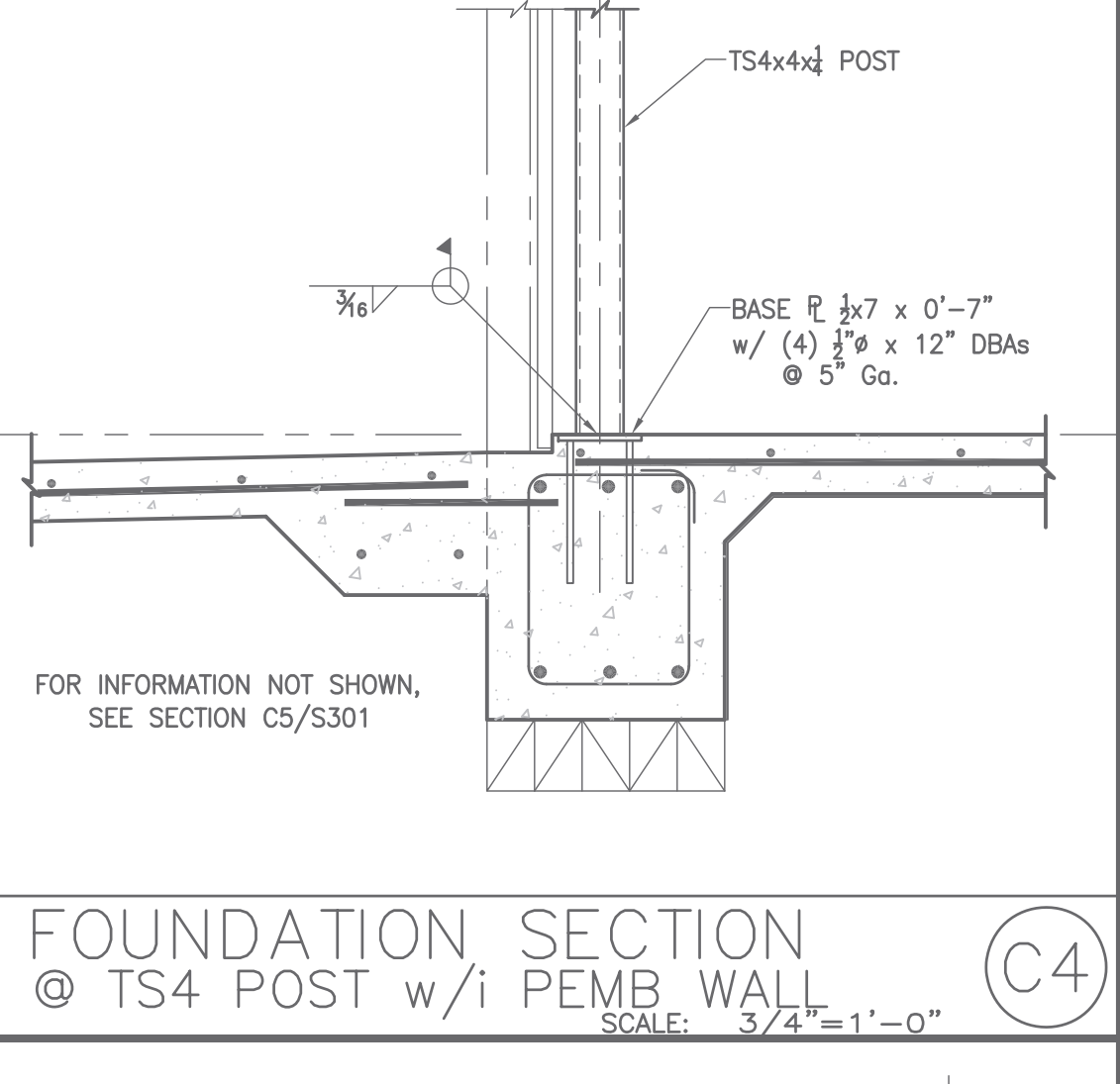
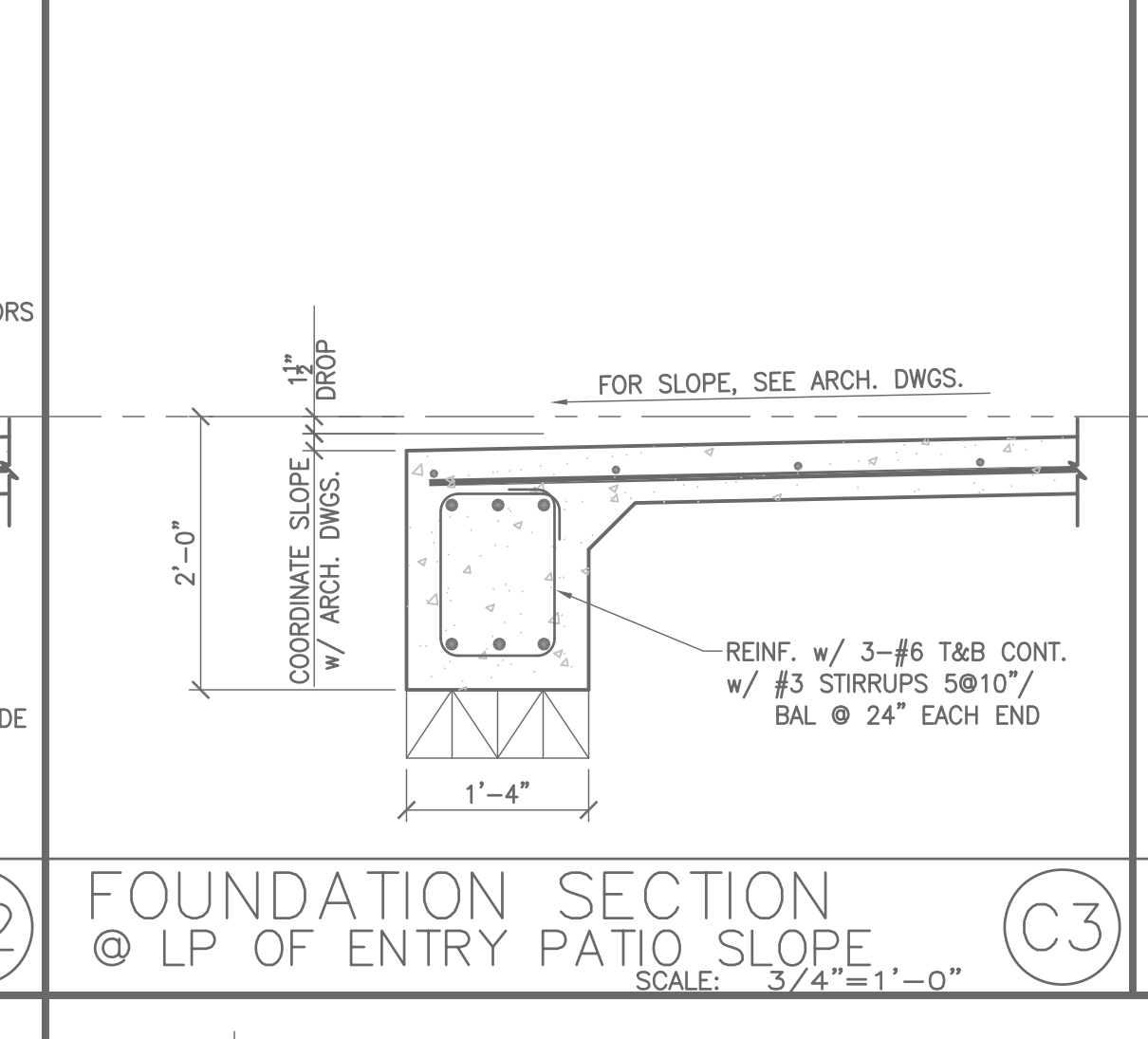
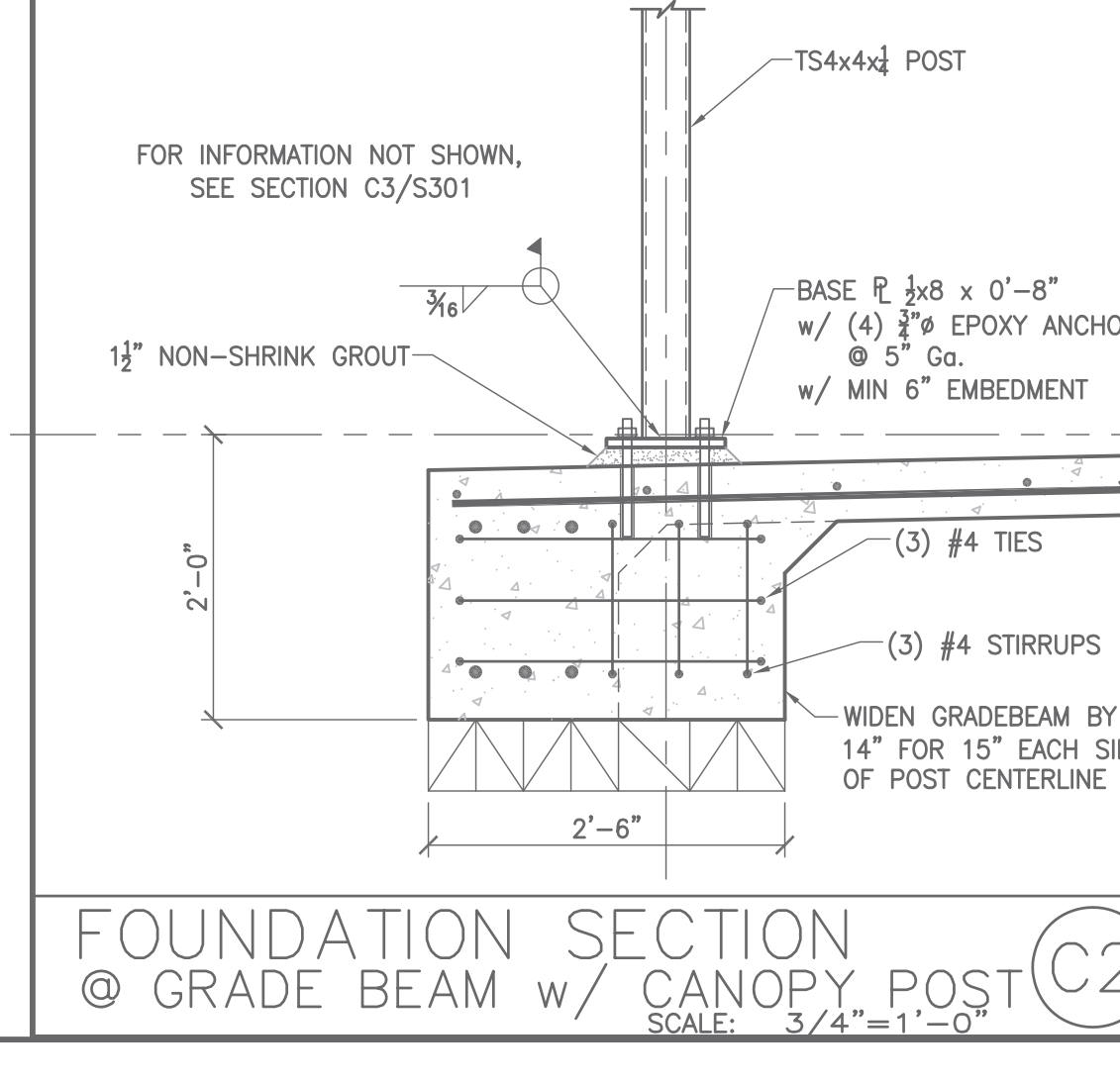
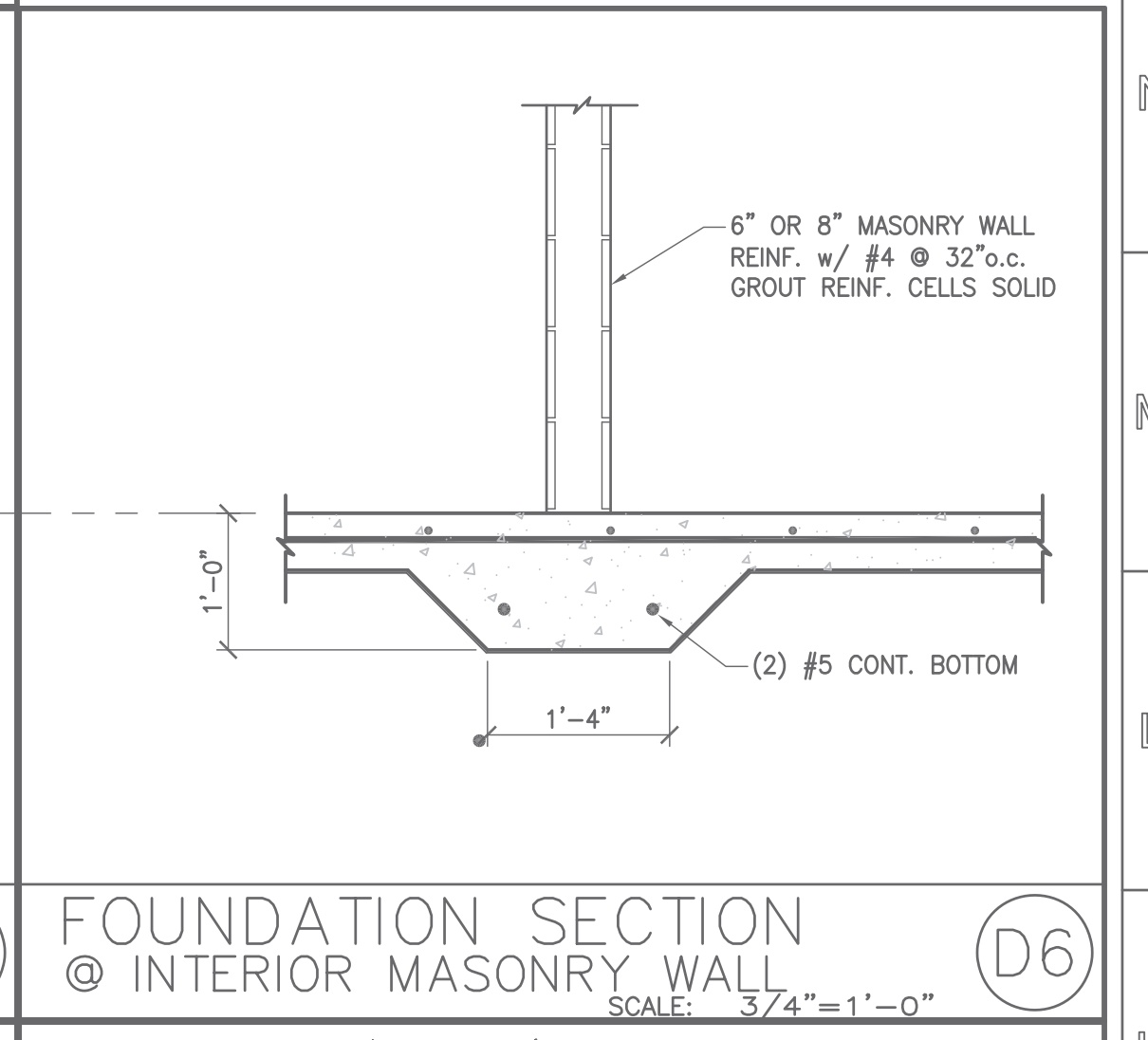
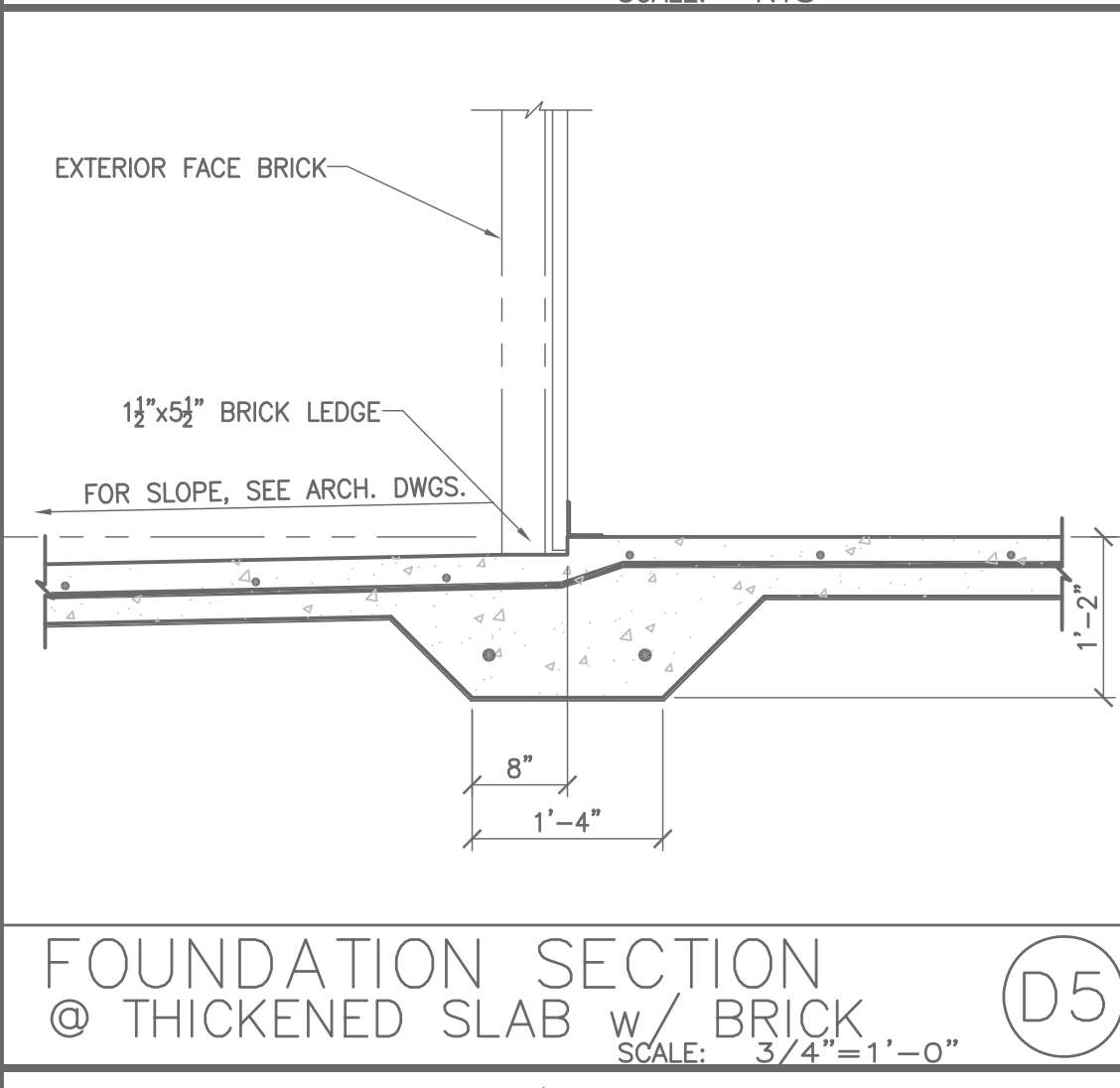
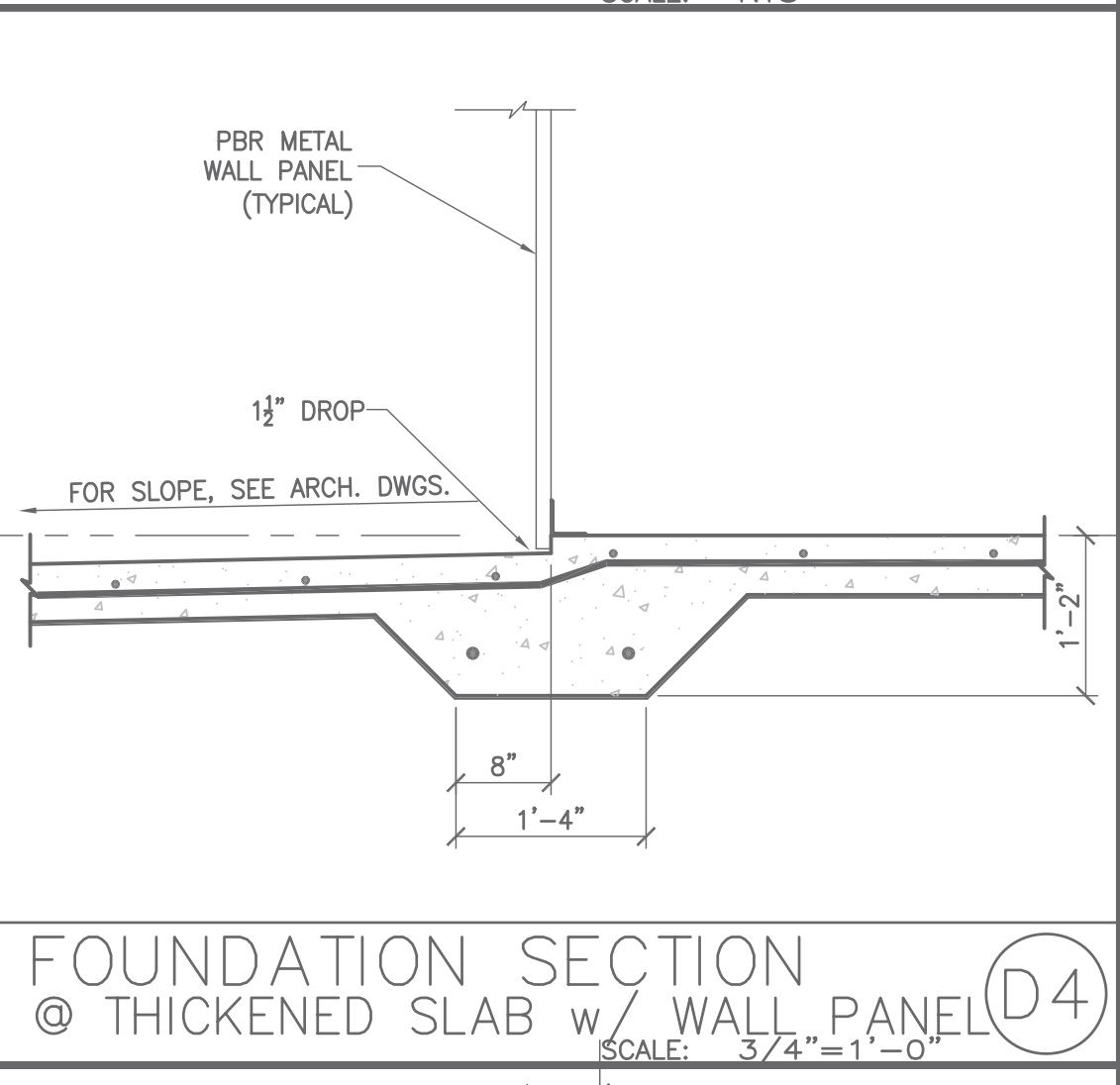
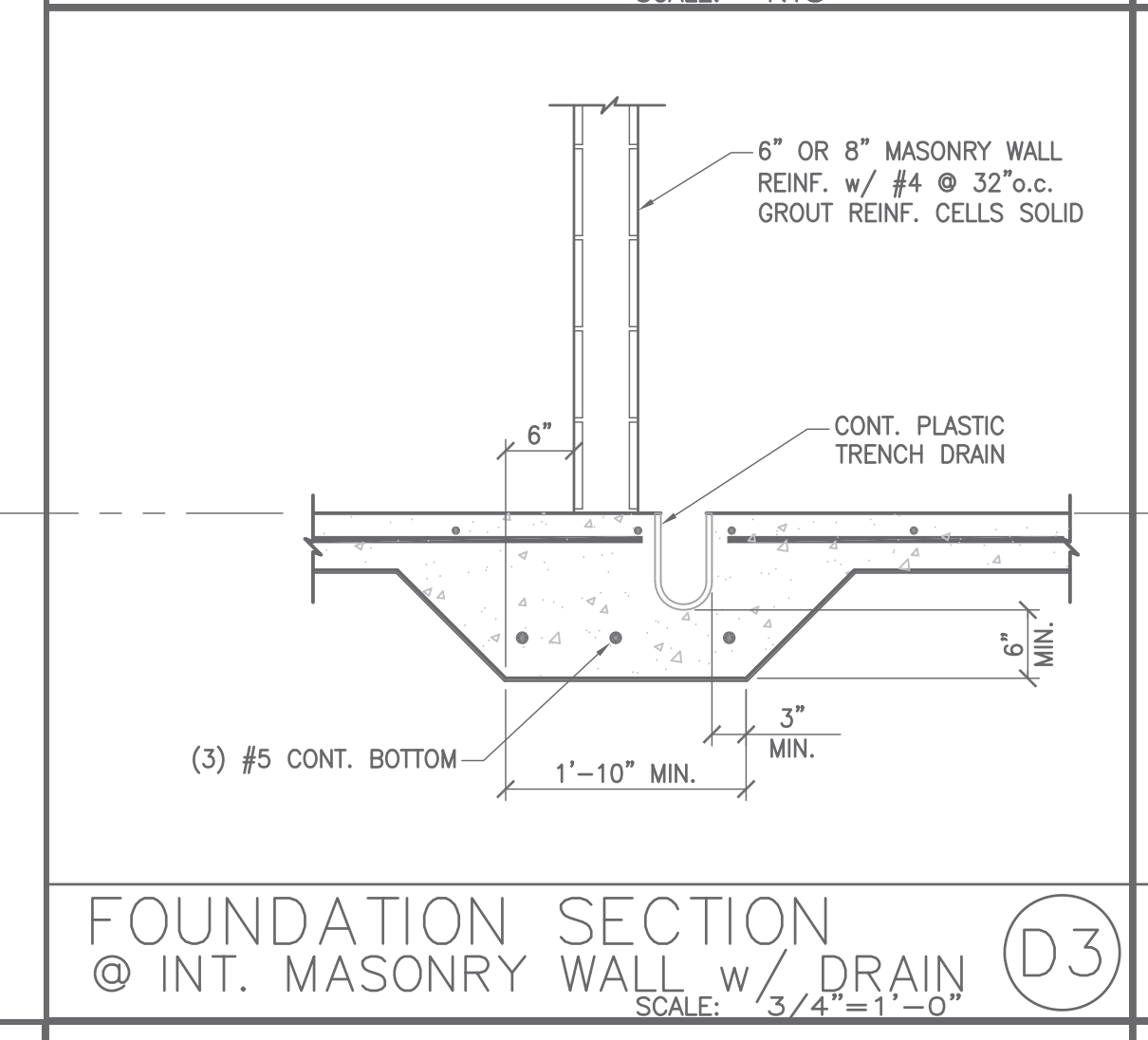
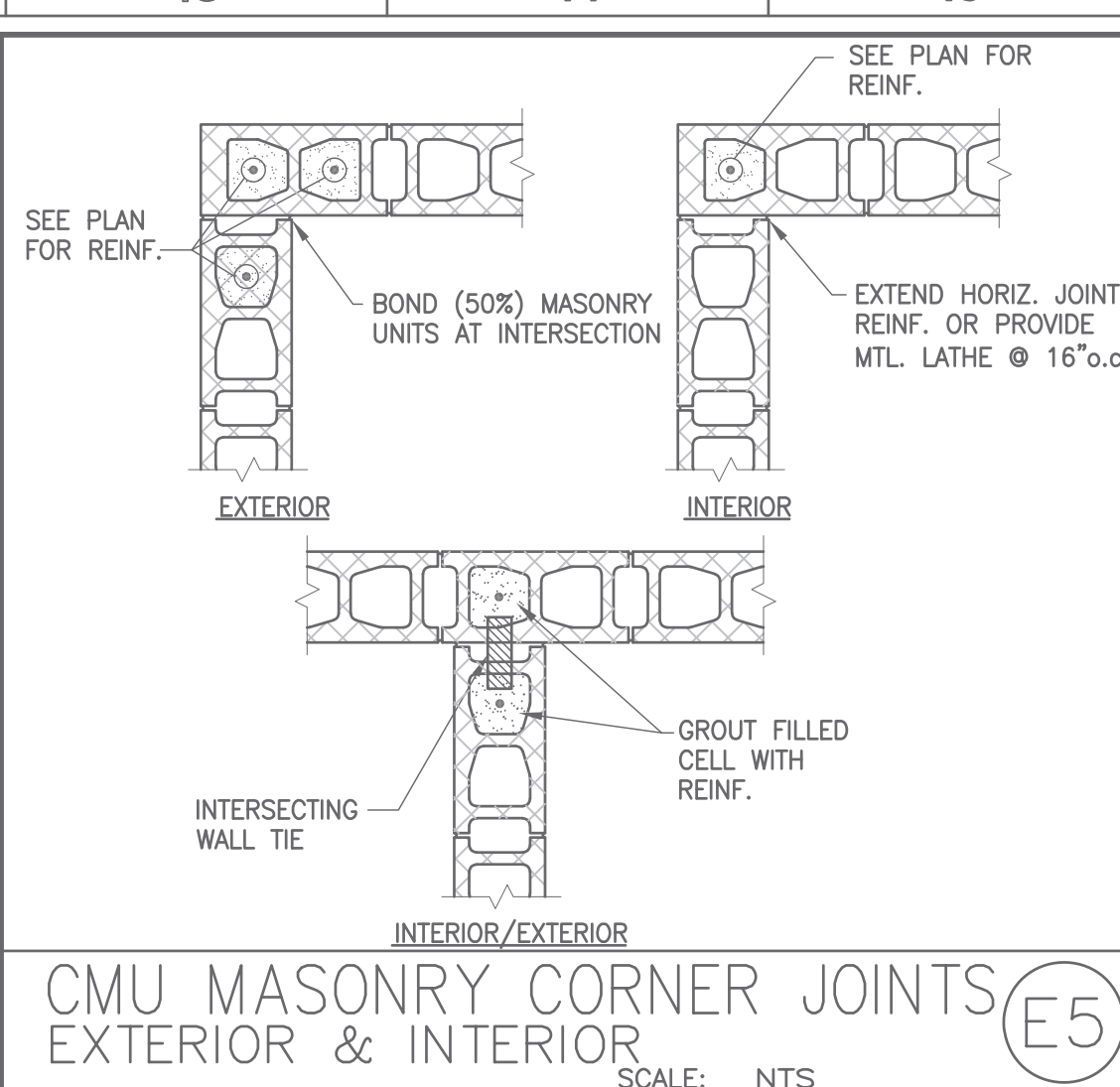
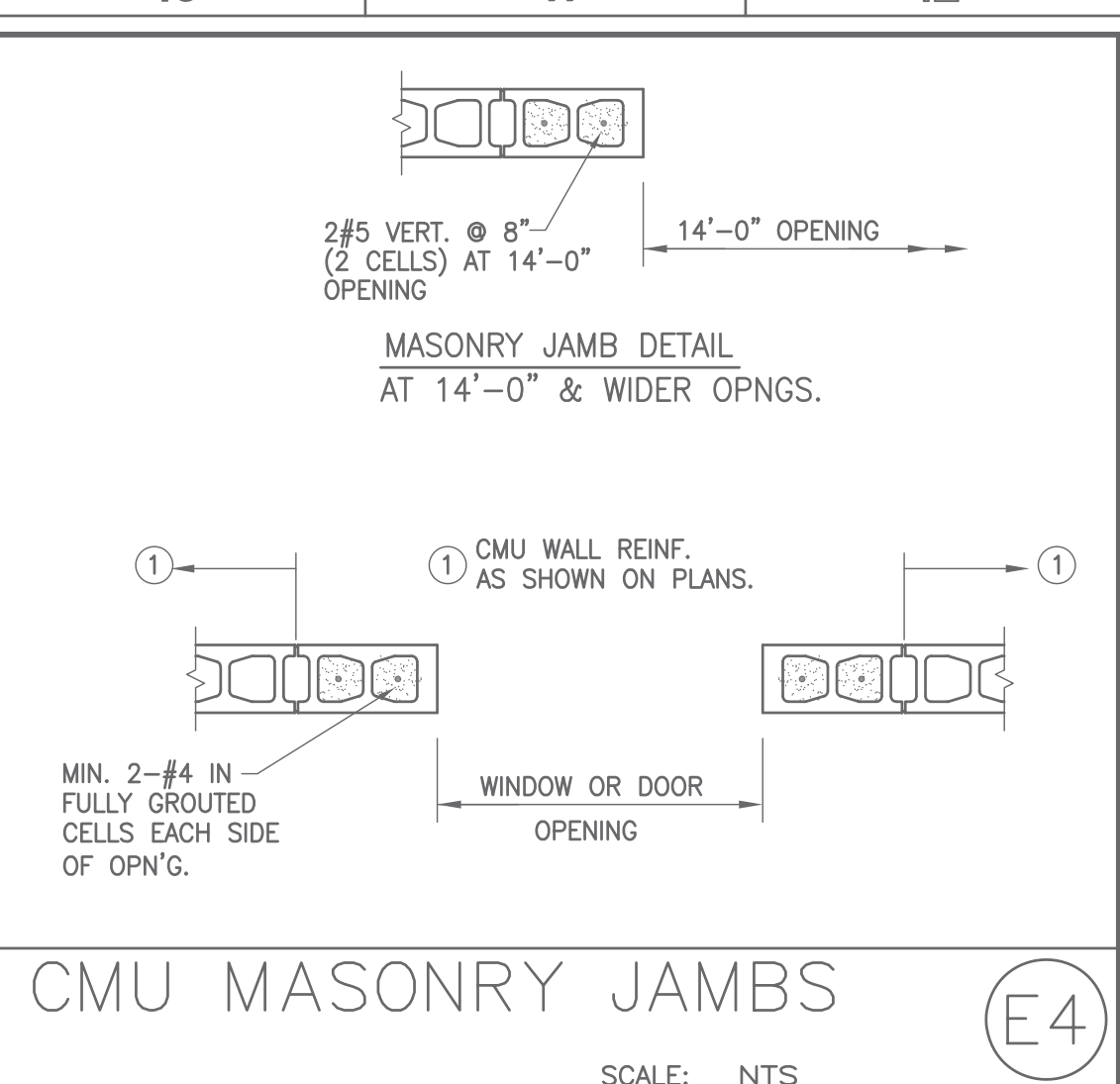
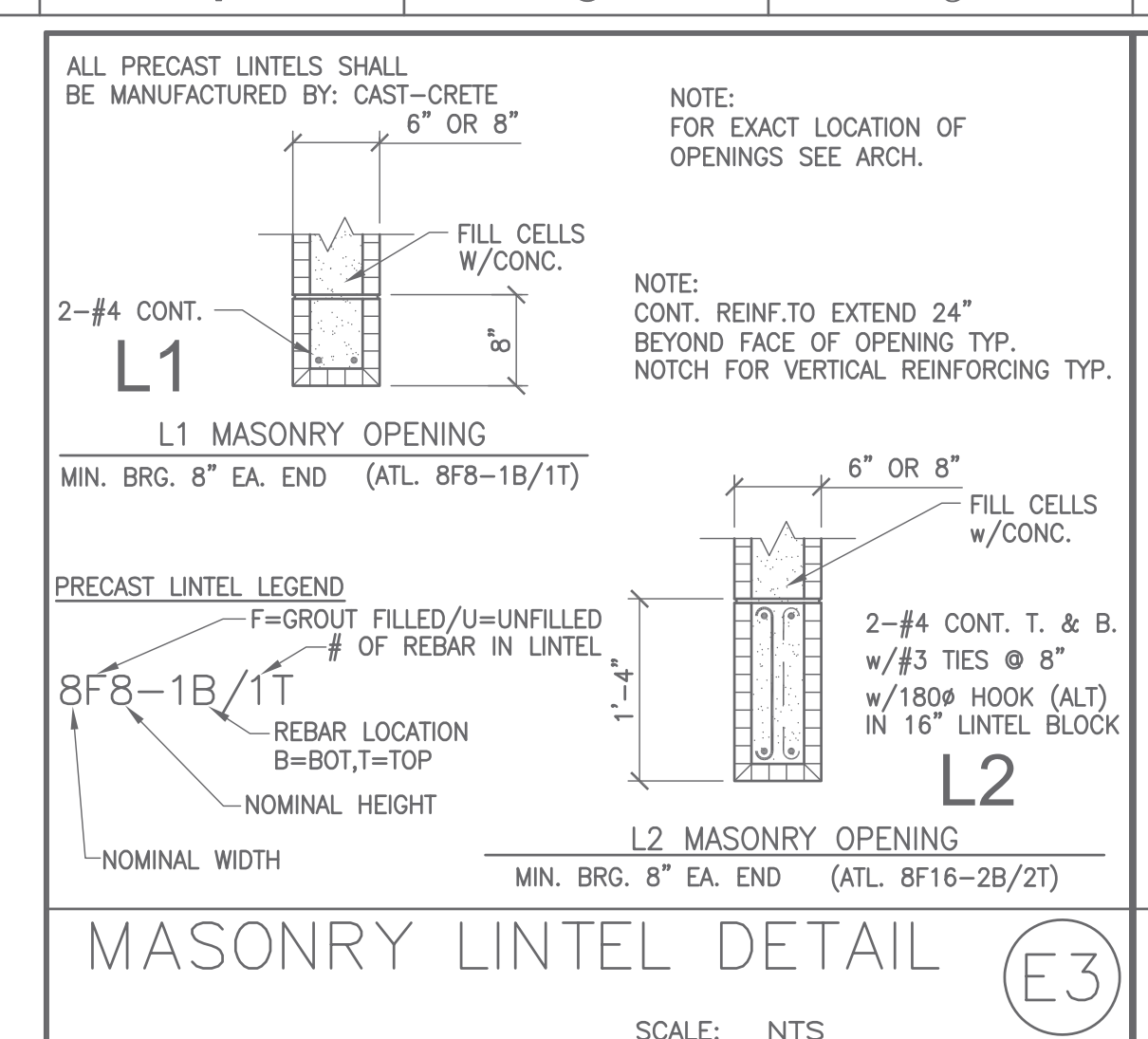
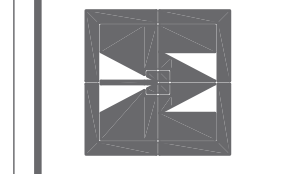
SHEET CONTENT
 ENTRY CANOPY FRAMING PLAN
 SECTIONS & DETAILS

SHEET NUMBER

S102



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 TX LICENSE NO. 53666



MECHANICAL PROJECT NOTES	
1	PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS.
2	THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS, MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC. FROM THE ARCHITECTURAL DRAWINGS, FIELD MEASUREMENTS, AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC.) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCE'S SHALL BE PART OF THE ORIGINAL CONTRACT BID.
3	CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO, MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS, ETC. NOTIFY THE ARCHITECT OF ANY CONFLICTS.
4	BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTOR'S FAILURE TO FIELD COORDINATE.
5	NEITHER THE OWNER NOR THE ENGINEER IS RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.
6	LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE, BUT NOT BE LIMITED TO, VALVES, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN POINTS IF REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE.
7	COORDINATE ELECTRICAL REQUIREMENTS OF APPROVED MECHANICAL EQUIPMENT WITH THE ELECTRICAL SUB-CRONTACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL EQUIPMENT, DEVICES, WIRING, OR CONDUIT.
8	PROVIDE GENERAL CONTROL WIRING, THERMOSTATS, MOTORIZED DAMPERS AND CONDUIT ASSOCIATED WITH HVAC EQUIPMENT. COORDINATE THE LOCATION OF ALL THERMOSTATS, ROOM SENSORS, ETC. WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC. EXISTS, NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION. INSTALL THERMOSTATS WITH PROTECTIVE LOCKING COVER, CENTERED AT 4'-0" ABOVE FINISHED FLOOR, UNLESS OTHERWISE INDICATED. COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY'S STANDARD (TAS).
9	ALL DIMENSIONS SHOWN ON THE DRAWINGS FOR DUCTWORK ARE NET INSIDE CLEAR DIMENSIONS. FOR RECTANGULAR DUCT, THE FIRST FIGURE OF THE DUCT SIZE INDICATES THE DIMENSION OF THE FACE SHOWN. VERIFY THAT THE DUCTWORK SPECIFIED WILL FIT IN THE SPACE AVAILABLE USING THE ARCHITECTURAL, STRUCTURAL, AND ELECTRICAL DRAWINGS AS REFERENCE PRIOR TO FABRICATION AND INSTALLATION.
10	PROVIDE TURNING VANES ON ALL RECTANGULAR SUPPLY, EXHAUST, AND RETURN DUCTWORK INCLUDING THE TOP AND BOTTOM OF VERTICAL DUCTS UNLESS OTHERWISE INDICATED.

MECHANICAL PROJECT NOTES	
11	PROVIDE A LOCKING QUADRANT VOLUME DAMPER AT THE TAP OF EACH RUN-OUT TO DIFFUSERS FOR BALANCING PURPOSES, UNLESS OTHERWISE INDICATED. THE RUN-OUT DUCT SIZE IS THE SAME SIZE AS THE DIFFUSER OR GRILLE NECK SIZE, UNLESS OTHERWISE INDICATED.
12	REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION OF ALL FIRE RATED WALLS AND CEILINGS. PROVIDE FIRE DAMPERS AND/OR COMBINATION FIRE/SMOKE DAMPERS IN DUCTWORK AT ALL LOCATIONS WHERE DUCTS PASS THROUGH FIRE RATED ASSEMBLY. MECHANICAL SUB-CRONTACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING FIRE AND FIRE/SMOKE DAMPERS. COORDINATE CONSTRUCTION REQUIREMENTS AND PROVISIONS FOR CONNECTIONS TO FIRE ALARM SYSTEM.
14	ALL RECTANGULAR AND ROUND SUPPLY AND RETURN DUCTWORK LOCATED IN EXPOSED INTERIOR AREAS SHALL BE INTERNALLY LINED WITH DUCT LINER AND EXTERNALLY PAINTED. REFER TO ARCHITECT FOR COLOR SELECTION.
15	INSTALL DX PIPING AS SPECIFIED, INCLUDING FILTER/DRYER, SIGHT GLASS, ISOLATION/CHARGING VALVES, AND ALL APPURTENANCES PER MANUFACTURER'S RECOMMENDATIONS. INSTALLATION SHALL BE ACCOMPLISHED IN A NEAT AND ORDERLY FASHION, AS APPROVED BY THE ENGINEER. COORDINATE FOR ROUTING OF DX PIPING, UP INSIDE OF WALLS, ETC. AS REQUIRED, TERMINATING AT AHU'S. PROVIDE BRACING/ISOLATION AS REQUIRED TO PREVENT VIBRATION OF DX PIPING INSIDE WALLS, ETC. SIZE, ROUTE, AND INSULATE DX PIPING PER MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATION REQUIREMENTS.
16	PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN EQUIPMENT, UNLESS OTHERWISE NOTED. PROVIDE ISOLATION AS INDICATED OR AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.
17	SEAL ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING MATERIAL.
18	ALL EQUIPMENT SHALL HAVE IDENTIFICATION TAGS. TAGS SHALL BE PLASTIC LAMINATE, WHITE FACE WITH 1/2" TALL BLACK LETTERS. THE TAG SHALL MATCH THE UNIT DESIGNATIONS SHOWN ON THE SCHEDULES.
19	EXPAND OR REDUCE DUCTS AT EQUIPMENT CONNECTIONS BASED ON THE EQUIPMENT PURCHASED, WITH TRANSITIONS NOT TO EXCEED 30 DEGREES. SIZES SHOWN ON SCHEDULES, ETC. ARE FOR GUIDANCE ONLY. ASPECT RATIO SHALL BE NO GREATER THAN 4:1, PER SMACNA'S GUIDELINES.
20	ALL DUCTS WITH A DIMENSION GREATER THAN 12" PASSING THRU A NON-RATED WALL SHALL HAVE THE OPENING FRAMED IN WITH METAL STUDS. COORDINATE OPENING SIZE AND LOCATION WITH OTHER TRADES.
21	PROVIDE ALL CEILING RETURN GRILLES WITH RETURN SOUND ATTENUATOR AS DETAILED.
22	WHERE DAMPERS ARE LOCATED ABOVE HARD CEILINGS PROVIDE CONCEALED YOUNG REGULATORS. REGULATORS SHALL NOT BE LOCATED IN CORRIDORS, PATIENT CARE, OR TREATMENT AREAS. EACH REGULATOR SHALL BE LABELED PER THE SPECIFICATIONS.
23	TEST AND BALANCE SHALL BE PERFORMED BY AN AABC LICENSED FIRM IN THE TESTING, ADJUSTING, AND BALANCING (TAB) BUSINESS FOR A MINIMUM OF 10 YEARS. AABC FIRM SHALL SUBMIT A REPORT TO THE ENGINEER OF RECORD INDICATING EQUIPMENT NAMEPLATE DATA, DESIGN PERFORMANCE, INITIAL TESTED PERFORMANCE, AND FINAL ADJUSTED PERFORMANCE. REPORT SHALL BE SUBMITTED IN A TIMELY FASHION PRIOR TO JOB CLOSE-OUT. TAB SHALL BE PERFORMED ON ALL NEW SYSTEMS SPECIFIED AND ON ALL EXISTING SYSTEMS MODIFIED AS PART OF THIS CONTRACT. TAB FIRM SHALL PERFORM A FUNCTIONAL PERFORMANCE TEST OF THE SYSTEM BASED ON THE CONTRACT DOCUMENTS HEREIN AND SHALL RELAY ALL DISCREPANCIES AND OUTSTANDING CONSTRUCTION ITEMS RELATING TO THE MECHANICAL EQUIPMENT AND PERFORMANCE TO THE ENGINEER OF RECORD.
24	ALL DUCTWORK SHALL BE SHEET METAL FABRICATED IN ACCORDANCE WITH SMACNA STANDARDS. SUPPLY AND RETURN DUCTWORK LOCATED OUTSIDE, EXPOSED TO AMBIENT CONDITIONS, SHALL BE INTERNALLY LINED WITH 2" DUCT LINER. BREAK SHEET METAL IN A MANNER TO PREVENT STANDING WATER ON HORIZONTAL SURFACES. SEAL ALL SEAMS WITH MASTIC DESIGNED FOR USE ON METAL DUCT, GLASS FIBER DUCT BOARD, AND FLEXIBLE DUCT. MASTIC SHALL BE UL 181 LISTED FOR THE APPLICATION USED.

MECHANICAL ABBREVIATIONS	
(D)	EXISTING TO BE REMOVED
(E)	EXISTING TO REMAIN
(R)	EXISTING TO BE RELOCATED
A/C	AIR CONDITIONING UNIT
AF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AHU	AIR HANDLING UNIT
BAS	BUILDING AUTOMATION SYSTEM
BFG	BELOW FINISHED GRADE
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT PER HOUR
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CFH	CUBIC FEET PER HOUR
CFM	CUBIC FEET PER MINUTE
CU	COPPER, CONDENSING UNIT
D	EQUIPMENT DRAIN
DB	DRY BULB
DEG, °	DEGREES
DEMO	DEMOLITION
DN	DOWN
E/A	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
EQUIP	EQUIPMENT
ESP	EXTERNAL STATIC PRESSURE
EW	ENTERING WATER TEMPERATURE
FCU	FAN COIL UNIT
FD	FIRE DAMPER
FLA	FULL LOAD AMPS
FPWAV	FAN POWERED VAV
FSD	FIRE SMOKE DAMPER
FT	FEET
FT, WG	FEET, WATER GAUGE
GA	U.S. GAUGE
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HWR	HEATING WATER RETURN
HWS	HEATING WATER SUPPLY
HZ	HERTZ
IN	INCHES
IN, WG	INCHES, WATER GAUGE
KM	KILOMATT
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBS	1000 BRITISH THERMAL UNITS PER HOUR
MCA	MINIMUM CIRCUIT AMPACITY
MIN	MINIMUM
MOCIP	MAXIMUM OVERCURRENT PROTECTION
N/A	NOT APPLICABLE
O/A	OUTSIDE AIR
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
PH	PHASE
PROVIDE	FURNISH AND INSTALL
PSI	POUNDS PER SQUARE INCH
R/A	RETURN AIR
RE:	REFERENCE, REFER
RFI	REQUEST FOR INFORMATION
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
S/A	SUPPLY AIR
SD	SMOKE DETECTOR
SF	SUPPLY FAN
T/A	TRANSFER AIR
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES
V	VOLTAGE
VAV	VARIABLE AIR VOLUME
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
WB	WET BULB

MECHANICAL CODE SUMMARY	
CODE SUMMARY	
BUILDING CODE:	2021 INTERNATIONAL BUILDING CODE (IBC) WITH CITY AMENDMENTS.
IECC CODE:	2021 INTERNATIONAL ENERGY CONSERVATION CODE (IECC) WITH CITY AMENDMENTS.
MECHANICAL CODE:	2021 INTERNATIONAL MECHANICAL CODE (IMC) WITH CITY AMENDMENTS.

MECHANICAL BASIS OF DESIGN	
AMBIENT TEMPERATURE AT CONDENSING UNITS:	105 DEG F (DB, SUMMER)
INDOOR DESIGN TEMPERATURE (SUMMER):	75 DEG F (DB), 50% (RH)
INDOOR DESIGN TEMPERATURE (WINTER):	70 DEG F (DB)
OUTDOOR DESIGN TEMPERATURE (SUMMER):	98 DEG F (DB), 78 DEG F (WB)
OUTDOOR DESIGN TEMPERATURE (WINTER):	22 DEG F (DB)
OUTSIDE AIR REQUIREMENTS:	PER IMC TABLE 403.3

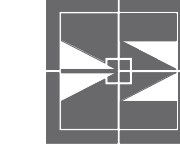
DRAWING/DETAIL REFERENCE	
	DRAWING/DETAIL NUMBER REFER TO
	SHEET NUMBER NECK SIZE OR WIDTH X HEIGHT (FOR LOUVERS) AMOUNT OF AIR DIFFUSER, GRILLE DESIGNATION
	ELEVATION NUMBER SHEET NUMBER

MISCELLANEOUS	
	DRAWING NOTE REFERENCE (I.E., NOTES BY SYMBOL)
	CONNECTION INTO EXISTING

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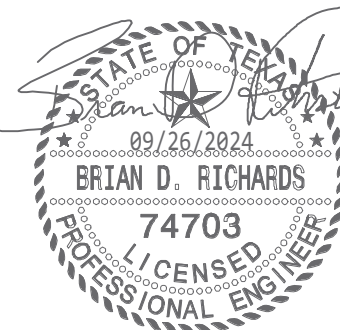
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Texas Registration # F-10963

MAGEE ARCHITECTS, L.P.
DESIGNERS - PLANNERS - INTERIORS
HTTP://WWW.MAGEE-ARCHITECTS.COM/



TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:



SHEET CONTENT
MECHANICAL GENERAL
NOTES

SHEET NUMBER

M001

100% O/A SPLIT SYSTEM A/C UNIT WITH ELECTRIC HEAT																																			
MARK AHU/CU	ARRANGEMENT	EVAPORATOR FAN				ELECTRIC HEATING			COMPRESSOR		CONDENSER		NET COOLING PERFORMANCE				ELECTRIC REHEATING			AHU POWER CONN.				CU POWER CONN.				EER	MANUFACTURER AND MODEL	UNIT WEIGHTS AHU/CU(LBS)	REMARKS				
		S/A CFM	O/A CFM	EXT. S.P.	MOTOR HP	LEAVING AIR D.B.	KW	NO. STAGES	NO.	RLA	REF. TYPE	NO. FANS	H.P. EACH	O.D. D.B.	ENTERING AIR D.B.	LEAVING AIR W.B.	D.B.	W.B.	SENS	LAT	TOTAL	LEAVING AIR D.B.	MBH	NO. STAGES	V.	Ph.	MCA					MOCOP	V.	Ph.	MCA
3	UPFLOW	1,500	1,500	0.5	2.00	95.0	35	2	20.4/22.4	R-410A	2	1	105	100.0	78.0	55.0	54.5	72.9	54.3	127.2	95.0	38	SCR	230	3	90.0	90.0	230	3	63.0	80.0	10.8	AAON V3 & CFA	775/1122	1-10

- EXTERNAL STATIC PRESSURE ("WG") INCLUDES DUCTWORK, BALANCING DAMPERS AND AIR DEVICES ONLY
- CAPACITIES LISTED ARE NET FROM UNIT DISCHARGE. UNITS SHALL PERFORM TO LISTED CAPACITIES. UNIT PERFORMANCE MUST SATISFY BOTH SENSIBLE AND LATENT CAPACITY REQUIREMENTS.
- PROVIDE FACTORY CONDENSER COIL HAIL GUARDS.
- PROVIDE WITH MODULATING ELECTRIC HEAT (SCR).
- PROVIDE WITH CRANKCASE HEATER.
- PROVIDE WITH MODULATING VFD DRIVEN COMPRESSOR
- AAON IS THE BASIS OF DESIGN. NO EXCEPTIONS.
- PROVIDE WITH AAON CONTROLLER WITH PROGRAMMING TO SUPPORT BOTH TEMPERATURE AND HUMIDITY CONTROL.
- PROVIDE UNIT WITH MODULATING ELECTRIC REHEAT (SCR).

SPLIT SYSTEM SCHEDULE																																
MARK	TONNAGE	INDOOR UNIT											AIR COOLED CONDENSING UNIT											FCU COOLING PERFORMANCE DATA				REMARKS				
		ARRANGEMENT	UNIT CFM	O/A CFM	EXT. S.P.	H.P.	POWER CONNECTION				WEIGHT/LBS	MANUFACTURER AND MODEL NO.	COMPRESSORS		REF. TYPE	FANS		POWER CONNECTION				HEATING CAPACITY			MANUFACTURER AND MODEL NO.	CAPACITY (MBH)			AMB. D.B.	ENTERING		
							V.	Ph.	MCA	MOCOP			NO.	R.LAMPS EACH		NO.	FLA	V.	Ph.	MCA	MOCOP	TEMP	I.D. DB TEMP	LVG DB TEMP		MBH	TOTAL			SENS	F.	D.B.
AHU/CU-1	3	VERTICAL	980	200	0.4	1/2	230	1	5.0	15.0	144	TRANE/TEM6	1	17.0	R410A	1	0.74	230	1	24	35	22	60	85	26.2	TRANE/4TWR	33.1	27.6	105	81	68	1-10
AHU/CU-2	5	VERTICAL	1,740	350	0.7	3/4	230	1	9.0	15.0	174	TRANE/TEM6	1	32.1	R410A	1	1.3	230	1	41	60	22	60	85	46.3	TRANE/4TWR	58.9	47.0	105	81	68	1-10
AHU/CU-4	1.5	WALL MOUNTED	437	0	-	-	230	1	1.0	-	29	MITSUBISHI/MSZ	1	17.0	R410A	1	0.65	230	1	18	20	22	75	95	9.4	MITSUBISHI/MUZ	16.4	10.9	105	78	62	2-9, 11-13

- REMARKS:
- UNITS SHALL BE PROVIDED WITH TXV VALVES
 - SIZE, ROUTE, INSULATE AND PROVIDE APPURTENANCES FOR DX PIPING SYSTEMS, IN STRICT ACCORDANCE WITH MANUFACTURER'S PUBLISHED INSTRUCTIONS.
 - LISTED CAPACITIES ARE FOR THE FAN COIL UNIT AND CONDENSER UNIT COMBINATION. UNITS SHALL PERFORM TO LISTED CAPACITIES.
 - PROVIDE FACTORY CONDENSER COIL HAIL GUARDS.
 - SEER / EER, RATINGS ARE AT ARI CONDITIONS FOR CONDENSING UNIT ONLY.
 - PROVIDE FILTER DRYER AND SIGHT GLASS ON THE DX LINES.
 - FOR LONG DX RUNS, USE MANUFACTURER'S RECOMMENDED LONG LINE INSTALLATION GUIDELINES.
 - PROVIDE FACTORY PROGRAMMABLE THERMOSTAT 7-DAY, 2-EVENT.
 - COORDINATE OUTDOOR UNIT MOUNTING REQUIREMENTS.
 - ACCEPTABLE MANUFACTURERS ARE: CARRIER, LG, DAIKIN, TRANE, MITSUBISHI.
 - PROVIDE WITH AN MINI CONDENSATE PUMP.
 - ACCEPTABLE MANUFACTURERS ARE: MITSUBISHI, LG.
 - THE INDOOR UNIT IS POWERED BY THE OUTDOOR UNIT.

FAN SCHEDULE											
MARK EF-	SERVES	CFM	EXT. SP IN WG	MOTOR DATA			DRIVE	MAX SONES	WEIGHT/LBS	MANUFACTURER/ MODEL SERIES	REMARKS
				HP	VOLTS	PH					
1-6	RESTROOMS & EXAM ROOMS	50	0.3	1/25	120	1	DIRECT	10.2	12	COOK/GC-128	1,2,3
7	PREP ROOM	830	0.3	1/3	120	1	DIRECT	4.0	58	COOK/GC-822	1,2,4
8	ANIMAL ZONES	780	0.5	1/5	120	1	DIRECT	9.5	49	COOK/100 SQN-D GALV	1,2,5

- REMARKS:
- ACCEPTABLE MANUFACTURER'S ARE: LOREN COOK, GREENHECK, PENNBARRY.
 - PROVIDE VIBRATION ISOLATORS.
 - FAN RUNS INTERMITTENTLY, CONTROLLED BY THE ATTACHED OCCUPANCY SENSOR.
 - FAN RUNS INTERMITTENTLY, CONTROLLED BY A SWITCH WITH A PROGRAMMABLE TIMER.
 - FAN RUNS CONTINUOUSLY.

LOUVER SCHEDULE										
MARK	CFM	TYPE	MATERIAL	OPENING SIZE				DELTA P	MANUFACTURER AND MODEL NUMBER	REMARKS
				WIDTH(IN)	HEIGHT(IN)	VELOCITY (FPM)	FREE AREA (SF)			
L1	310	EXHAUST	ALUMINIUM	12.0	18.0	600	0.50	0.1	POTTORFF EFD-445	1,2,3,4,5
L2	550	INTAKE	ALUMINIUM	12.0	30.0	600	0.92	0.1	POTTORFF EFD-445	1,2,3,4,5
L3	1,500	INTAKE	ALUMINIUM	24.0	36.0	600	2.50	0.1	POTTORFF EFD-445	1,2,3,4,5
L4	830	EXHAUST	ALUMINIUM	18.0	30.0	600	1.37	0.1	POTTORFF EFD-445	1,2,3,4,5
L5	770	EXHAUST	ALUMINIUM	18.0	30.0	600	1.30	0.1	POTTORFF EFD-445	1,2,3,4,5

- OR APPROVED EQUAL
- PROVIDE EXTRUDED ALUMINUM, 4" DRAINABLE STATIONARY WALL LOUVER WITH BIRD SCREEN.
- PROVIDE LOUVER WITH ANODIZED FINISH, COORDINATE COLOR WITH ARCHITECT
- PROVIDE WITH EXTENDED SILL.
- PROVIDE TRANSITION OR ADAPTOR WHERE REQUIRED TO ADAPT DUCTWORK TO NECK SIZE.

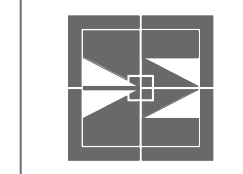
AIR DEVICE SCHEDULE									
MARK	SERVES	NECK SIZE (INCHES)	FACE SIZE (INCHES)	MOUNTING	TYPE	MATERIAL	MAXIMUM NC	DESIGN BASIS MANUFACTURER/ MODEL SERIES	REMARKS
S1	SUPPLY	6	48 x 4	CEILING	SLOT	ALUMINIUM	25	TITUS/ML-37	1-6
S2	SUPPLY	6,8,10	24 x 24	CEILING	LOUVERED	ALUMINIUM	25	TITUS/TDCA	1,2
S3	SUPPLY	6,8	24 x 24	CEILING	LOUVERED	ALUMINIUM	25	TITUS/OMNI	1,2
R1	RETURN	8	48 x 4	CEILING	SLOT	STEEL	30	TITUS/MLR-37	1,2,3,6
R2	RETURN	6,8,10	24 x 24	CEILING	LOUVERED	STEEL	30	TITUS/PAR	1,2
E1	EXHAUST	6,8,10,12,14	24 x 24	CEILING	LOUVERED	STEEL	30	TITUS/PAR	1,2
E2	EXHAUST	6	12 x 12	CEILING	LOUVERED	STEEL	30	TITUS/PAR	1,2

- REMARKS:
- PROVIDE MOUNTING FRAME TO BE COMPATIBLE WITH TYPE OF CEILING IN WHICH THE DEVICE IS TO BE MOUNTED. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES.
 - WHERE ROUND NECK SIZE IS NOTED ON DUCTWORK PLAN, PROVIDE RECTANGULAR TO ROUND DUCT COLLAR.
 - PROVIDE WITH ONE (1) 1/2" SLOTS.
 - PROVIDE WITH BORDER 2A.
 - PROVIDE WITH MPI INSULATED PLENUM.
 - SLOT BORDER IS X-X, CONTRACTOR TO COORDINATE.

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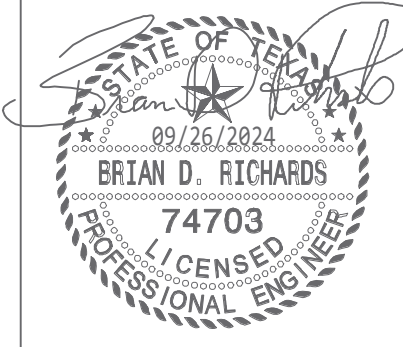
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FORT WORTH, TEXAS 8177319392



TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:



SHEET CONTENT
MECHANICAL SCHEDULES

SHEET NUMBER

M002

100% O/A SPLIT SYSTEM A/C UNIT WITH ELECTRIC HEAT																																								
MARK AHU/CU	ARRANGEMENT	EVAPORATOR FAN				ELECTRIC HEATING			COMPRESSOR			CONDENSER		NET COOLING PERFORMANCE					ELECTRIC REHEATING			AHU POWER CONN.				CU POWER CONN.				EER	MANUFACTURER AND MODEL	UNIT WEIGHTS AHU/CU(LBS)	REMARKS							
		S/A CFM	O/A CFM	EXT. S.P.	MOTOR HP	LEAVING AIR D.B.	KW	NO. STAGES	NO.	RLA	REF. TYPE	NO. FANS	H.P. EACH	O.D. D.B.	ENTERING AIR D.B.	W.B.	D.B.	W.B.	SENS	LAT	TOTAL	LEAVING AIR D.B.	MBH	NO. STAGES	V.	Ph.	MCA	MOCP	V.					Ph.	MCA	MOCP				
-	UPFLOW	1,500	1,500	0.5	2.00	95.0		35	SCR	2		20.4/22.4	R-410A	2	1	105		100.0	78.0	55.0	54.5	72.9	54.3	127.2	95.0		38	SCR	208	3	90.0	90.0	208	3	63.0	80.0	10.8	AAON V3 & CFA	775/1122	1-10

- EXTERNAL STATIC PRESSURE ("WG") INCLUDES DUCTWORK, BALANCING DAMPERS AND AIR DEVICES ONLY
- CAPACITIES LISTED ARE NET FROM UNIT DISCHARGE. UNITS SHALL PERFORM TO LISTED CAPACITIES. UNIT PERFORMANCE MUST SATISFY BOTH SENSIBLE AND LATENT CAPACITY REQUIREMENTS.
- PROVIDE FACTORY CONDENSER COIL HAIL GUARDS.
- PROVIDE WITH MODULATING ELECTRIC HEAT (SCR).
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- PROVIDE WITH MODULATING VFD DRIVEN COMPRESSOR
- AAON IS THE BASIS OF DESIGN. NO EXCEPTIONS.
- PROVIDE WITH AAON CONTROLLER WITH PROGRAMMING TO SUPPORT BOTH TEMPERATURE AND HUMIDITY CONTROL.
- PROVIDE UNIT WITH MODULATING ELECTRIC REHEAT (SCR).

SPLIT SYSTEM SCHEDULE																																
MARK	TONNAGE	ARRANGEMENT	UNIT CFM	O/A CFM	EXT. S.P.	H.P.	INDOOR UNIT				WEIGHT/LBS	MANUFACTURER AND MODEL NO.	AIR COOLED CONDENSING UNIT								FCU COOLING PERFORMANCE DATA						REMARKS					
							POWER CONNECTION						NO.	R.L.A.MPS EACH	REF. TYPE	FANS		POWER CONNECTION				HEATING CAPACITY				CAPACITY (MBH)		AMB. D.B. F.	ENTERING			
							V.	Ph.	MCA	MOCP						NO.	FLA	V.	Ph.	MCA	MOCP	O.D. TEMP	I.D. DB TEMP	L.V.G DB TEMP	MBH	TOTAL			SENS	D.B. F.	W.B. F.	
AHU/CU-1	3	VERTICAL	980	200	0.4	1/2	208	1	5.0	15.0	144	TRANE/TEM6	1	17.0	R410A	1	0.74	208	1	24	35	22	60	85	26.2	TRANE/4TWR	33.1	27.6	105	81	68	1-10
AHU/CU-2	5	VERTICAL	1,740	350	0.7	3/4	208	1	9.0	15.0	174	TRANE/TEM6	1	32.1	R410A	1	1.3	208	1	41	60	22	60	85	46.3	TRANE/4TWR	58.9	47.0	105	81	68	1-10
AHU/CU-4	1.5	WALL MOUNTED	437	0			208	1	1.0		29	MITSUBISHI/MSZ	1	17.0	R410A	1	0.65	208	1	18	20	22	75	95	9.4	MITSUBISHI/MUZ	16.4	10.9	105	78	62	2-9, 11-13
AHU/CU-5	1	WALL MOUNTED	400	0			208	1	1.0		22	MITSUBISHI/MSY	1	17.0	R410A	1	0.65	208	1	7	15					MITSUBISHI/MUY	9.0	9.0	105	78	62	2-9, 11-13

- REMARKS:
- UNITS SHALL BE PROVIDED WITH TXV VALVES
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 - PROVIDE FACTORY PROGRAMMABLE THERMOSTAT 7-DAY, 2-EVENT.
 - COORDINATE OUTDOOR UNIT MOUNTING REQUIREMENTS.
 - ACCEPTABLE MANUFACTURERS ARE: CARRIER, LG, DAIKIN, TRANE, MITSUBISHI.
 - PROVIDE WITH AN MINI CONDENSATE PUMP.
 - ACCEPTABLE MANUFACTURERS ARE: MITSUBISHI, LG.
 - THE INDOOR UNIT IS POWERED BY THE OUTDOOR UNIT.

FAN SCHEDULE											
MARK EF-	SERVES	CFM	EXT. SP IN WG	MOTOR DATA			DRIVE	MAX SONES	WEIGHT/LBS	MANUFACTURER/ MODEL SERIES	REMARKS
				HP	VOLTS	PH					
1-6	RESTROOMS & EXAM ROOMS	50	0.3	1/25	120	1	DIRECT	10.2	12	COOK/GC-128	1,2,3
7	PREP ROOM	830	0.3	1/3	120	1	DIRECT	4.0	58	COOK/GC-822	1,2,4
8	ANIMAL ZONES	780	0.5	1/5	120	1	DIRECT	9.5	49	COOK/100 SQN-D GALV	1,2,5

- REMARKS:
- ACCEPTABLE MANUFACTURER'S ARE: LOREN COOK, GREENHECK, PENNBARRY.
 - PROVIDE VIBRATION ISOLATORS.
 - FAN RUNS INTERMITTENTLY, CONTROLLED BY THE ATTACHED OCCUPANCY SENSOR.
 - FAN RUNS INTERMITTENTLY, CONTROLLED BY A SWITCH WITH A PROGRAMMABLE TIMER.
 - FAN RUNS CONTINUOUSLY.

LOUVER SCHEDULE										
MARK	CFM	TYPE	MATERIAL	OPENING SIZE				DELTA P	MANUFACTURER AND MODEL NUMBER	REMARKS
				WIDTH(IN)	HEIGHT(IN)	VELOCITY (FPM)	FREE AREA (SF)			
L1	310	EXHAUST	ALUMINIUM	12.0	18.0	600	0.50	0.1	POTTORFF EFD-445	1,2,3,4,5
L2	550	INTAKE	ALUMINIUM	12.0	30.0	600	0.92	0.1	POTTORFF EFD-445	1,2,3,4,5
L3	1,500	INTAKE	ALUMINIUM	24.0	36.0	600	2.50	0.1	POTTORFF EFD-445	1,2,3,4,5
L4	830	EXHUAST	ALUMINIUM	18.0	30.0	600	1.37	0.1	POTTORFF EFD-445	1,2,3,4,5
L5	770	EXHUAST	ALUMINIUM	18.0	30.0	600	1.30	0.1	POTTORFF EFD-445	1,2,3,4,5

- OR APPROVED EQUAL
- PROVIDE EXTRUDED ALUMINIUM, 4" DRAINABLE STATIONARY WALL LOUVER WITH BIRD SCREEN.
- PROVIDE LOUVER WITH ANODIZED FINISH, COORDINATE COLOR WITH ARCHITECT
- PROVIDE WITH EXTENDED SILL.
- PROVIDE TRANSITION OR ADAPTOR WHERE REQUIRED TO ADAPT DUCTWORK TO NECK SIZE.

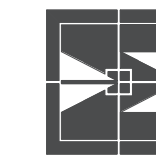
AIR DEVICE SCHEDULE									
MARK	SERVES	NECK SIZE (INCHES)	FACE SIZE (INCHES)	MOUNTING	TYPE	MATERIAL	MAXIMUM NC	DESIGN BASIS MANUFACTURER/ MODEL SERIES	REMARKS
S1	SUPPLY	8	48 x 4	CEILING	SLOT	ALUMINIUM	25	TITUS/ML-37	1-6
S2	SUPPLY	6,8,10	24 x 24	CEILING	LOUVERED	ALUMINIUM	25	TITUS/TDCA	1,2
S3	SUPPLY	6,8	24 x 24	CEILING	LOUVERED	ALUMINIUM	25	TITUS/OMNI	1,2
R1	RETURN	8	48 x 4	CEILING	SLOT	STEEL	30	TITUS/MLR-37	1,2,3,6
R2	RETURN	6,8,10	24 x 24	CEILING	LOUVERED	STEEL	30	TITUS/PAR	1,2
E1	EXHAUST	6,8,10,12,14	24 x 24	CEILING	LOUVERED	STEEL	30	TITUS/PAR	1,2
E2	EXHAUST	6	12 x 12	CEILING	LOUVERED	STEEL	30	TITUS/PAR	1,2

- REMARKS:
- PROVIDE MOUNTING FRAME TO BE COMPATIBLE WITH TYPE OF CEILING IN WHICH THE DEVICE IS TO BE MOUNTED. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR CEILING TYPES.
 - WHERE ROUND NECK SIZE IS NOTED ON DUCTWORK PLAN, PROVIDE RECTANGULAR TO ROUND DUCT COLLAR.
 - PROVIDE WITH ONE (1) 1/2" SLOTS.
 - PROVIDE WITH BORDER 2A.
 - PROVIDE WITH MPI INSULATED PLENUM.
 - SLOT BORDER IS X-X, CONTRACTOR TO COORDINATE.

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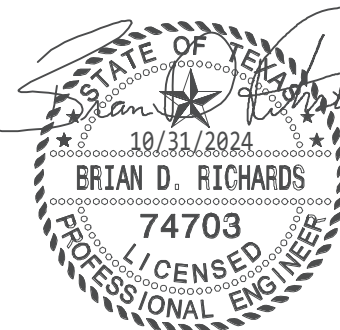


TARWATER VETERINARIAN CLINIC

802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:

10/31/2024

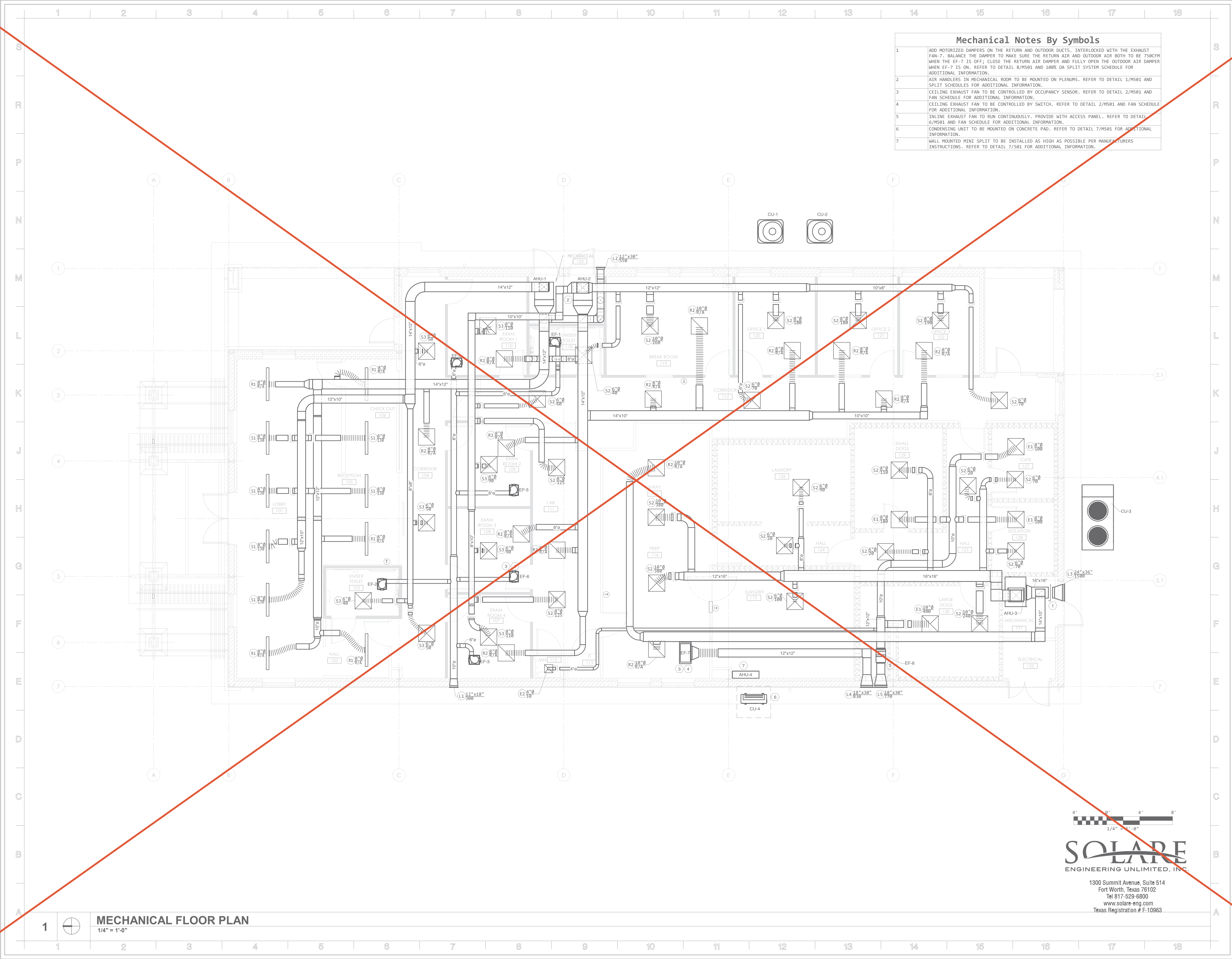


SHEET CONTENT
MECHANICAL SCHEDULES

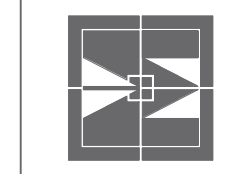
SHEET NUMBER

SM01
M002

Mechanical Notes By Symbols	
1	ADD MOTORIZED DAMPERS ON THE RETURN AND OUTDOOR DUCTS. INTERLOCKED WITH THE EXHAUST FAN-7. BALANCE THE DAMPER TO MAKE SURE THE RETURN AIR AND OUTDOOR AIR BOTH TO BE 750CFM WHEN THE EF-7 IS OFF; CLOSE THE RETURN AIR DAMPER AND FULLY OPEN THE OUTDOOR AIR DAMPER WHEN EF-7 IS ON. REFER TO DETAIL 6/M501 AND 100% OA SPLIT SYSTEM SCHEDULE FOR ADDITIONAL INFORMATION.
2	AIR HANDLERS IN MECHANICAL ROOM TO BE MOUNTED ON PLENUMS. REFER TO DETAIL 1/M501 AND SPLIT SCHEDULES FOR ADDITIONAL INFORMATION.
3	CEILING EXHAUST FAN TO BE CONTROLLED BY OCCUPANCY SENSOR. REFER TO DETAIL 2/M501 AND FAN SCHEDULE FOR ADDITIONAL INFORMATION.
4	CEILING EXHAUST FAN TO BE CONTROLLED BY SWITCH. REFER TO DETAIL 2/M501 AND FAN SCHEDULE FOR ADDITIONAL INFORMATION.
5	INLINE EXHAUST FAN TO RUN CONTINUOUSLY. PROVIDE WITH ACCESS PANEL. REFER TO DETAIL 6/M501 AND FAN SCHEDULE FOR ADDITIONAL INFORMATION.
6	CONDENSING UNIT TO BE MOUNTED ON CONCRETE PAD. REFER TO DETAIL 7/M501 FOR ADDITIONAL INFORMATION.
7	WALL MOUNTED MINI SPLIT TO BE INSTALLED AS HIGH AS POSSIBLE PER MANUFACTURERS INSTRUCTIONS. REFER TO DETAIL 7/501 FOR ADDITIONAL INFORMATION.

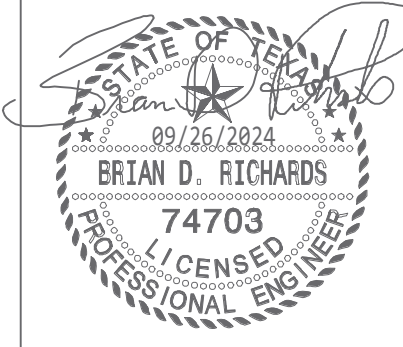


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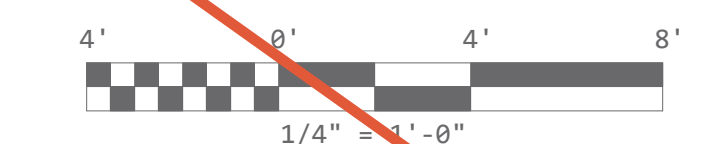
PROJECT NO. : 1744-22
 DATE: 09/26/2024
 DRAWN:
 REVISED:



SHEET CONTENT
 MECHANICAL FLOOR PLAN

SHEET NUMBER

M201



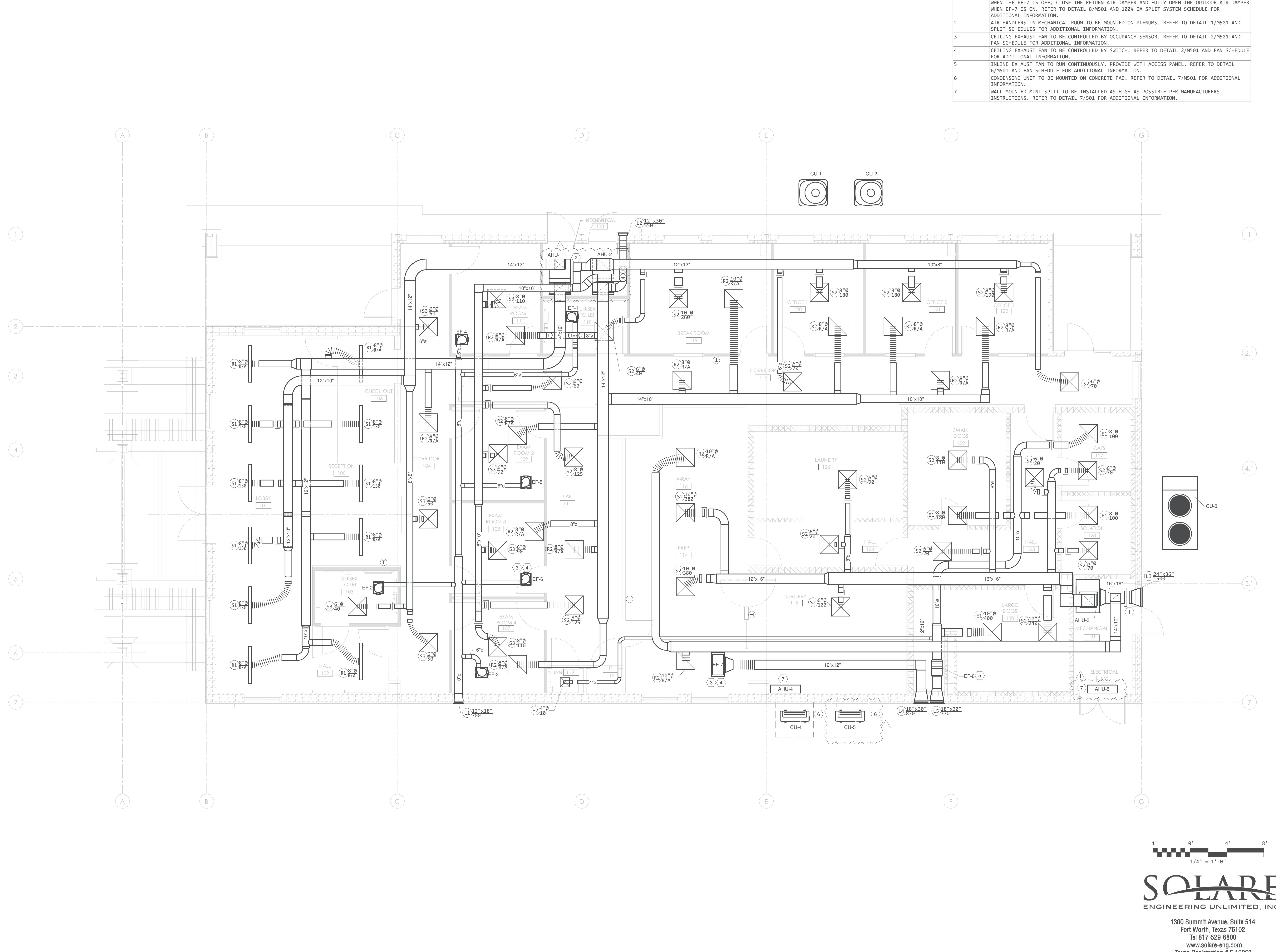
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1 **MECHANICAL FLOOR PLAN**
 1/4" = 1'-0"

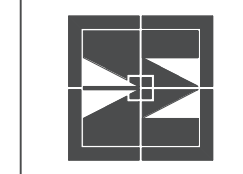
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

A B C D E F G



Mechanical Notes By Symbols	
1	ADD MOTORIZED DAMPERS ON THE RETURN AND OUTDOOR DUCTS. INTERLOCKED WITH THE EXHAUST FAN-7. BALANCE THE DAMPER TO MAKE SURE THE RETURN AIR AND OUTDOOR AIR BOTH TO BE 750CFM WHEN THE EF-7 IS OFF; CLOSE THE RETURN AIR DAMPER AND FULLY OPEN THE OUTDOOR AIR DAMPER WHEN EF-7 IS ON. REFER TO DETAIL 6/M501 AND 100% OA SPLIT SYSTEM SCHEDULE FOR ADDITIONAL INFORMATION.
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4	CEILING EXHAUST FAN TO BE CONTROLLED BY SWITCH. REFER TO DETAIL 2/M501 AND FAN SCHEDULE FOR ADDITIONAL INFORMATION.
5	INLINE EXHAUST FAN TO RUN CONTINUOUSLY. PROVIDE WITH ACCESS PANEL. REFER TO DETAIL 6/M501 AND FAN SCHEDULE FOR ADDITIONAL INFORMATION.
6	CONDENSING UNIT TO BE MOUNTED ON CONCRETE PAD. REFER TO DETAIL 7/M501 FOR ADDITIONAL INFORMATION.
7	WALL MOUNTED MINI SPLIT TO BE INSTALLED AS HIGH AS POSSIBLE PER MANUFACTURERS INSTRUCTIONS. REFER TO DETAIL 7/501 FOR ADDITIONAL INFORMATION.

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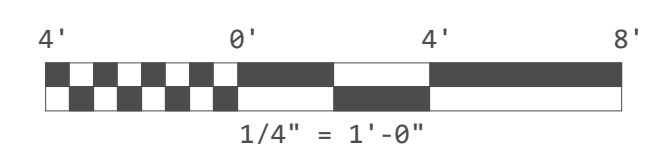
PROJECT NO. : 1744-22
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SHEET CONTENT
 MECHANICAL FLOOR PLAN

SHEET NUMBER

SM02
M201

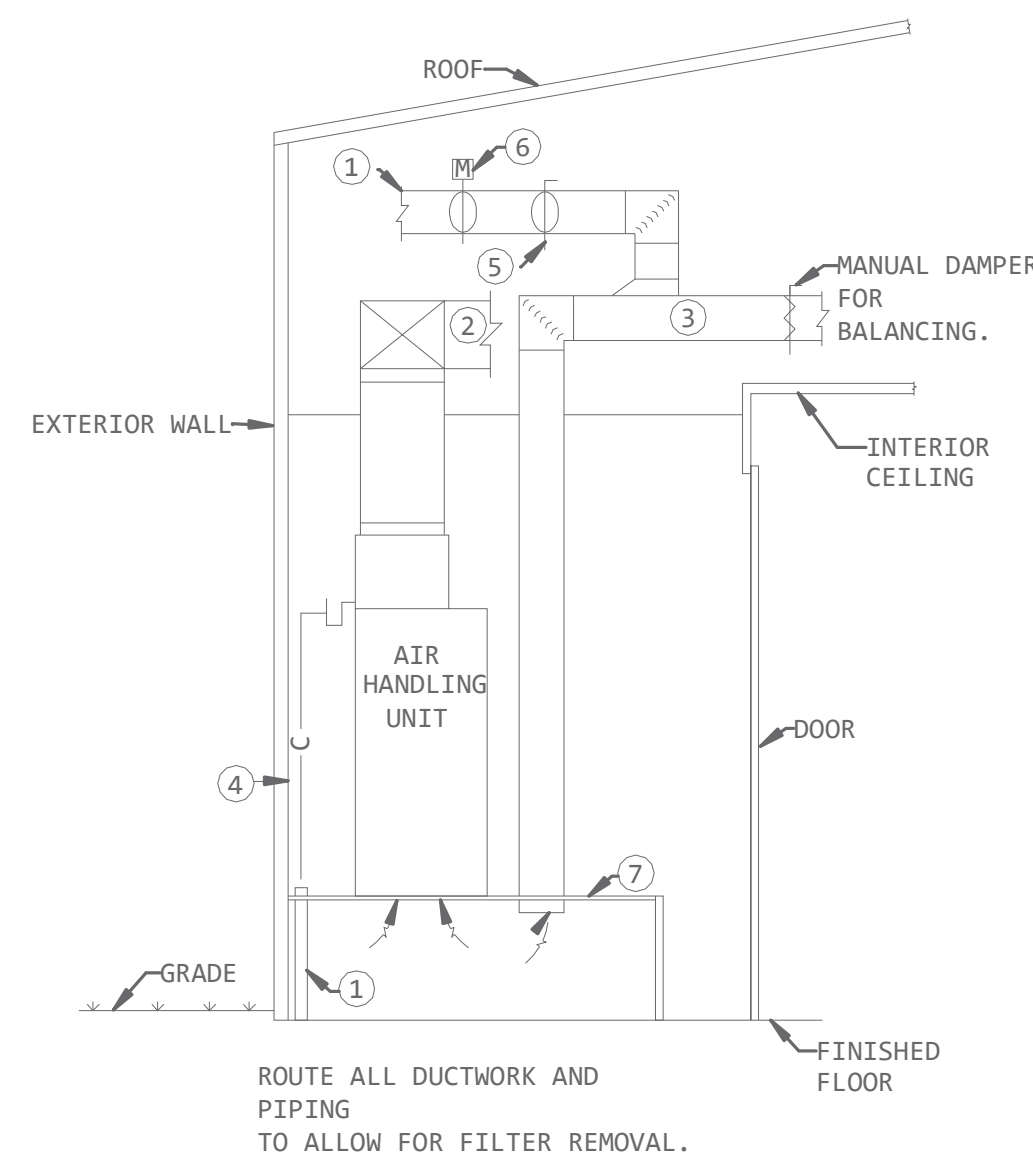


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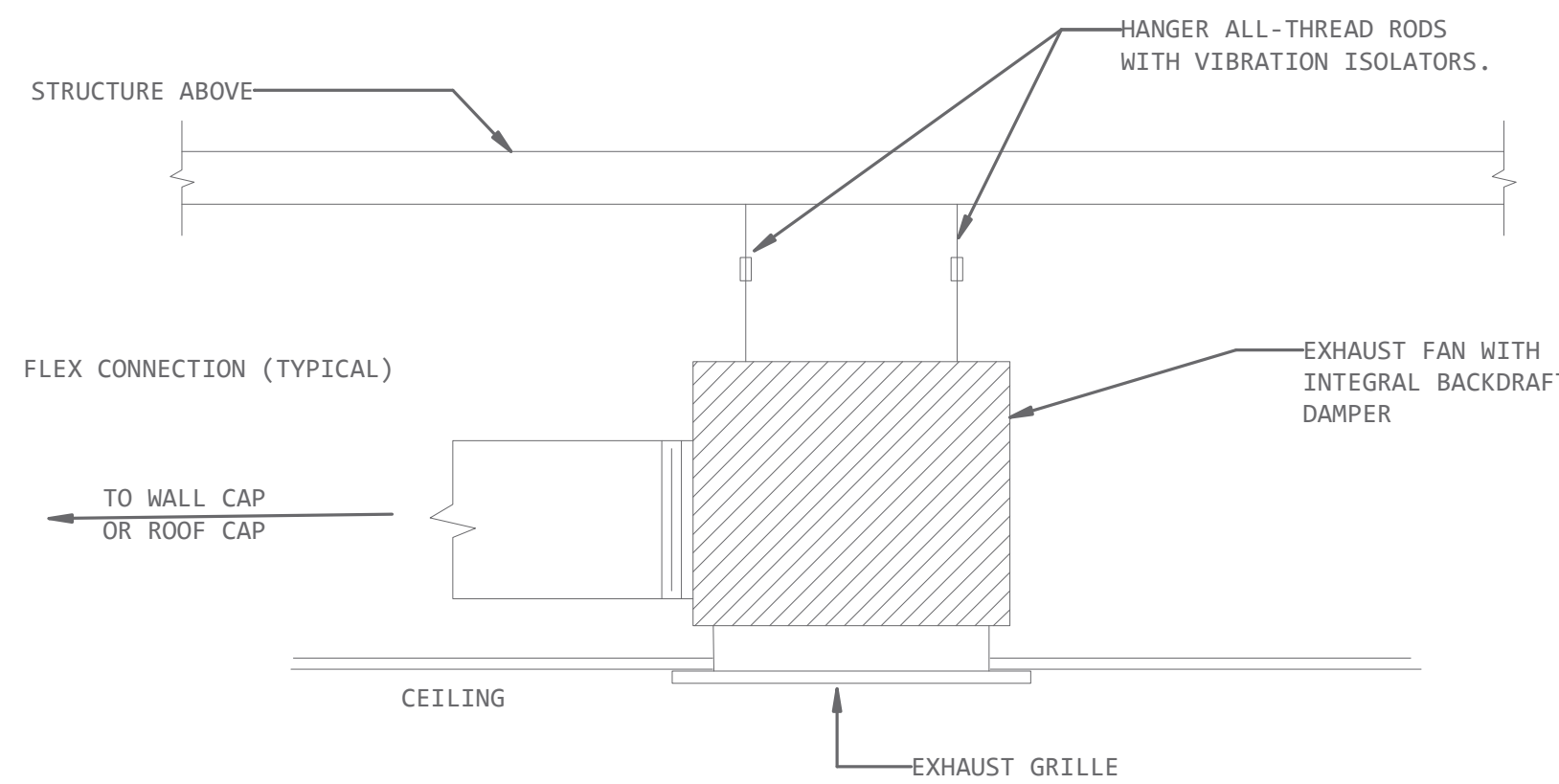
1 **MECHANICAL FLOOR PLAN**
 1/4" = 1'-0"

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

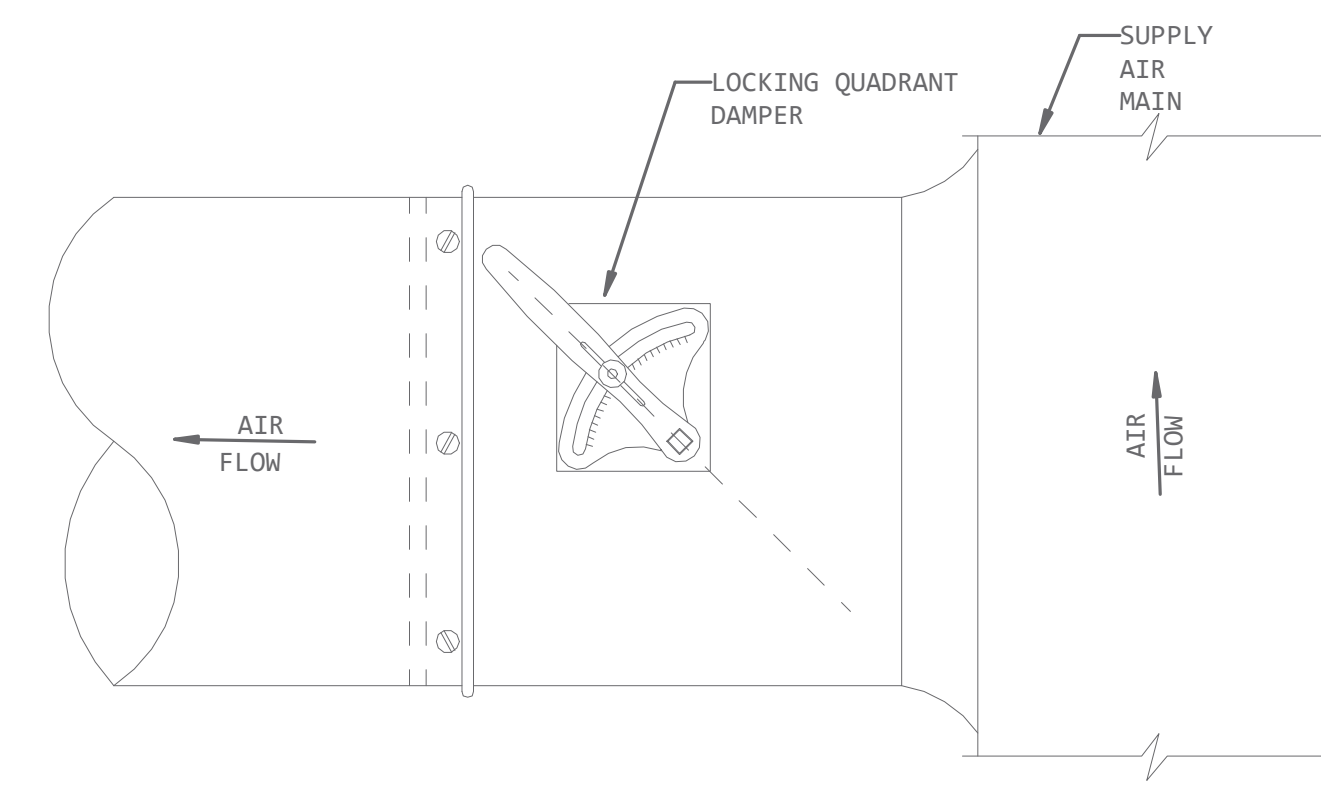


- NOTES BY SYMBOL (THIS DETAIL ONLY):
1. OUTSIDE AIR INTAKE DUCT. SIZE AND ROUTING OF O/A DUCT SHALL BE AS SHOWN ON PLANS. CONNECT TO MAIN OUTDOOR AIR DUCT. MAIN OUTDOOR AIR DUCT CONNECTED TO O/A INTAKE LOUVER. LOUVER SHALL BE AS SCHEDULED AND LOCATED PER PLANS. SEAL ALL EXTERIOR WALL PENETRATIONS WEATHER TIGHT.
 2. DUCT SIZE AND LOCATION AS SHOWN ON PLANS. PUT TURNING VANES IN ELBOWS.
 3. RETURN AIR DUCT. SIZE AND LOCATE AS INDICATED ON PLAN.
 4. CONTRACTOR TO ROUTE 1" CONDENSATE DRAIN TO PLUMBING STANDPIPE (UNLESS OTHERWISE INDICATED ON PLUMBING PLANS). FOR MULTIPLE AIR HANDLING UNITS INSTALLATIONS, CONNECT 1" DRAIN FROM EACH UNIT TO A 1 1/4" COMMON HEADER, ADD A CONDENSATE TRAP AND DRAIN INTO PLUMBING STANDPIPE.
 5. MANUAL DAMPER, BALANCE O/A AS SCHEDULED.
 6. MOTORIZED DAMPER. INTERLOCK WITH AHU FAN MOTOR TO OPEN WHEN FAN MOTOR IS ENERGIZED, CONTRACTOR SHALL MAKE ALL CONNECTIONS.
 7. CONTRACTOR SHALL PROVIDE A RAISED FLOOR PLENUM. PLENUM SHALL BE CONSTRUCTED OF ANGLE IRON AND SHEET METAL TO SUPPORT AIR HANDLING UNITS. PROVIDE 1" JOHNS-MANSVILLE PERMACOTE LINACOUSTIC INSULATION ON ALL SURFACES INSIDE PLENUM. PLENUM HEIGHT SHALL BE 12".

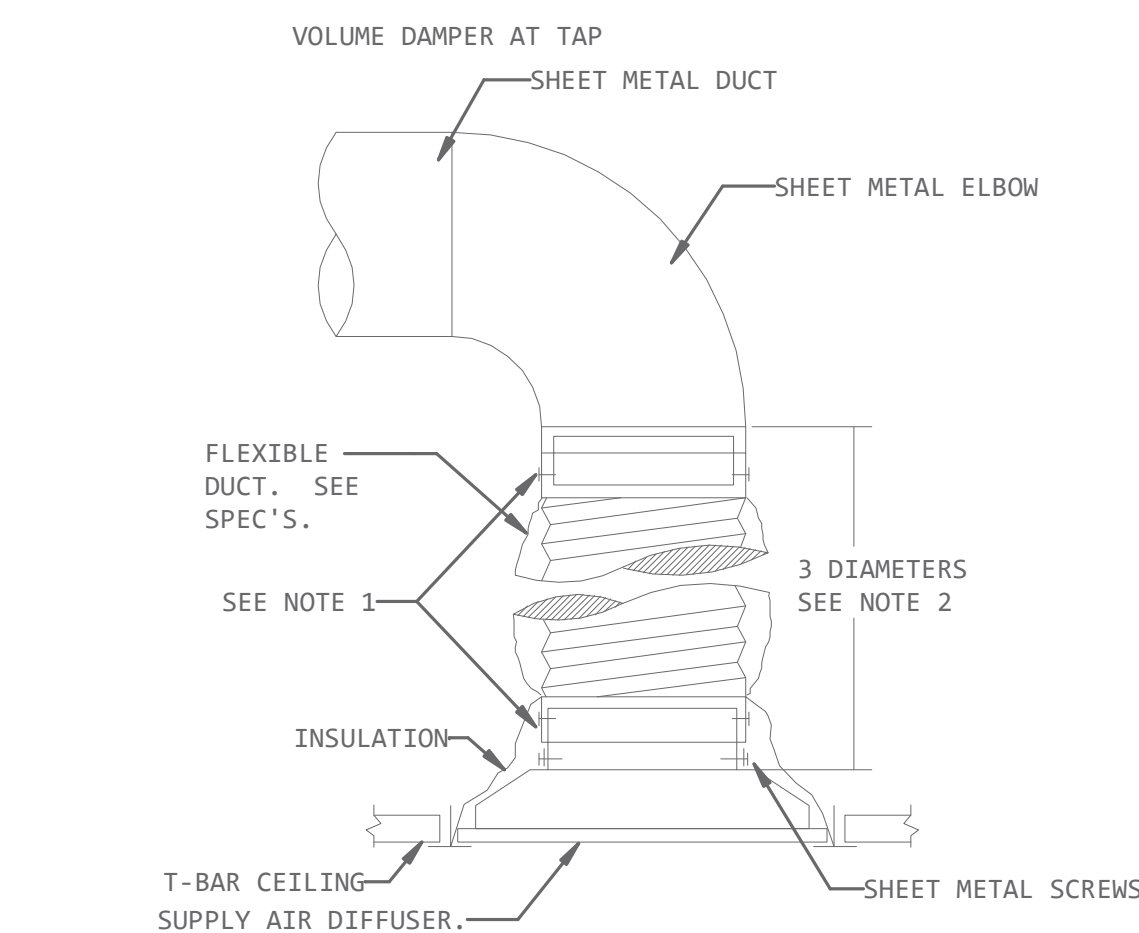
1 TYPICAL MECHANICAL ROOM DETAIL (WITH O/A INTAKE ON EXT. WALL)
N.T.S



2 CEILING EXHAUST FAN
N.T.S

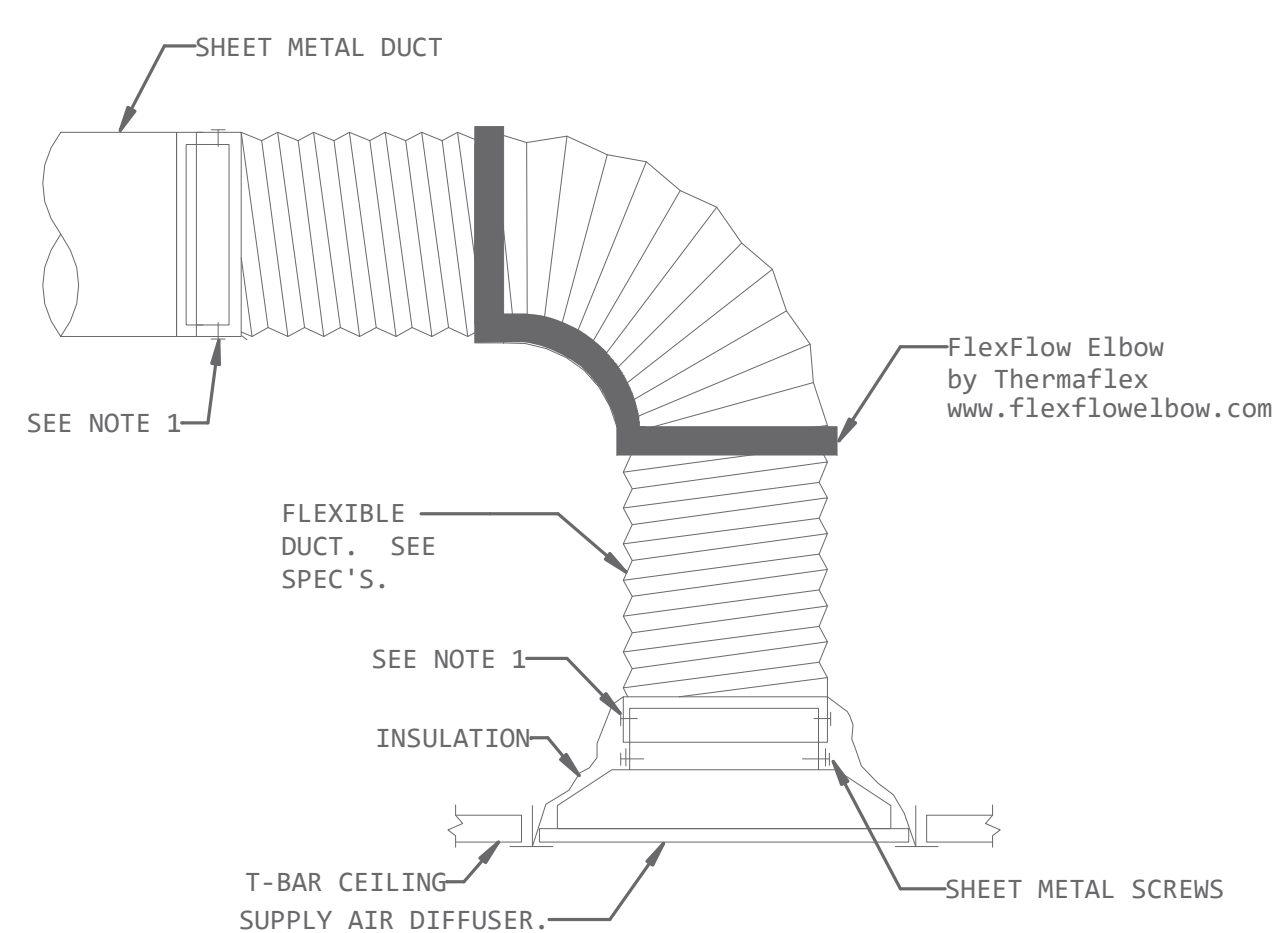


3 TYPICAL CONICAL TAP WITH MANUAL DAMPER
1/8" = 1'-0"
REQ'D AT EACH RUN-OUT TAP TO EVERY TERMINAL SUPPLY AIR DEVICE, AND OTHERWISE AS INDICATED.



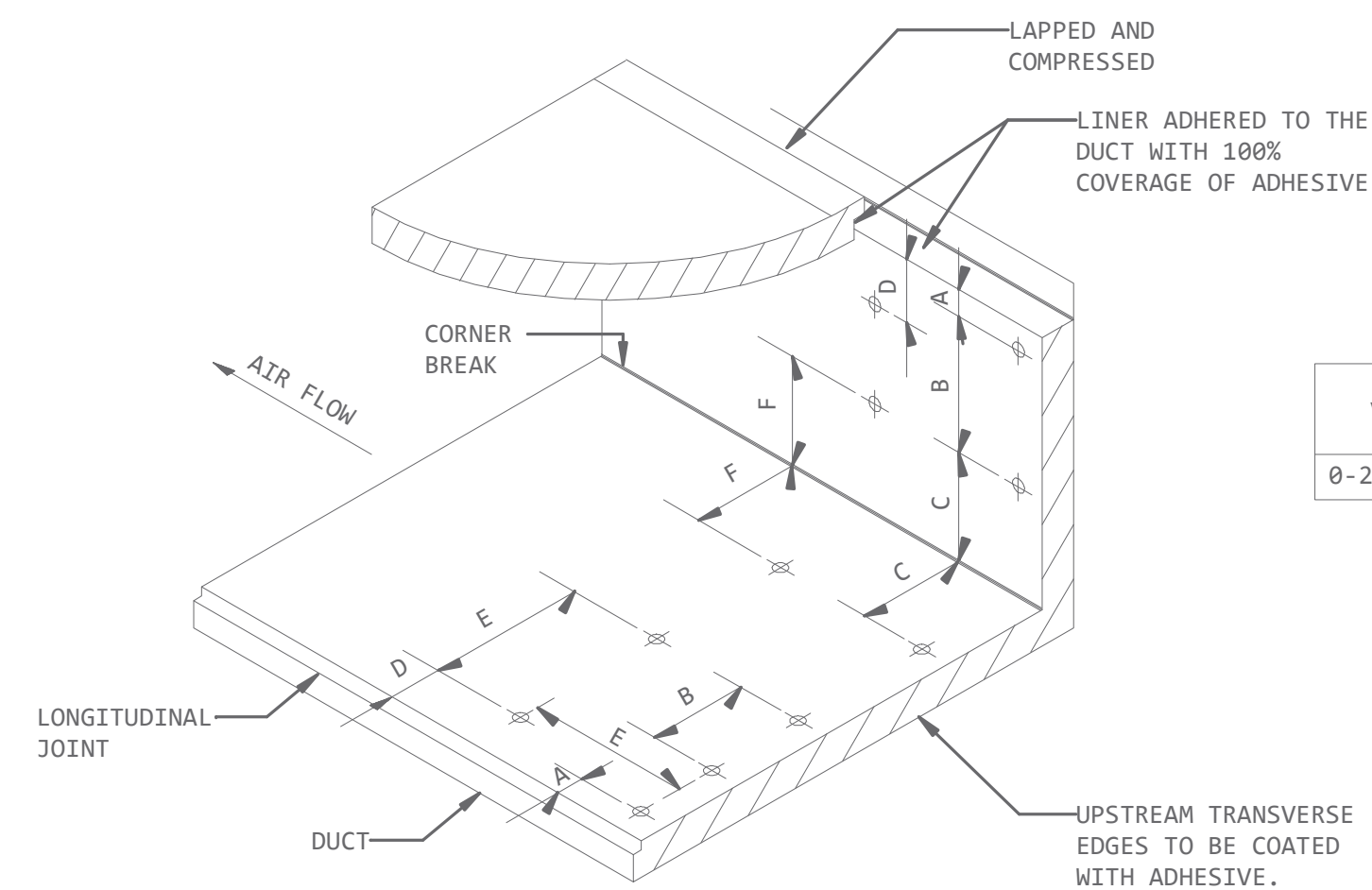
- NOTES:
1. USE PLENUM COLLARS TO ATTACH FLEXIBLE DUCT . USE SHEET METAL SCREWS AND (2) WRAPS OF TAPE TO SECURE PLENUM COLLARS. ALTERNATE METHOD: BANDING DEVICE OR PANDUIT STRAP, IN LIEU OF SHEET METAL SCREWS. ALL TAPES AND SEALING MATERIALS SHALL COMPLY WITH UL181A FOR RIGID DUCT AND UL181B FOR FLEXIBLE DUCT.
 2. SECURE SHEET METAL DROP TO DIFFUSER NECK WITH A MIN. OF (3) SHEET METAL SCREWS AND (2) FULL WRAPS OF TAPE PER UL REQUIREMENTS LISTED IN NOTE 1.
 3. ALL FLEX DUCT SHALL BE INSTALLED WITHOUT KINKS, SAGGING, OR SHORT-RADIUS BENDS.

4 TYPICAL FLEXDUCT CONNECTIONS
N.T.S

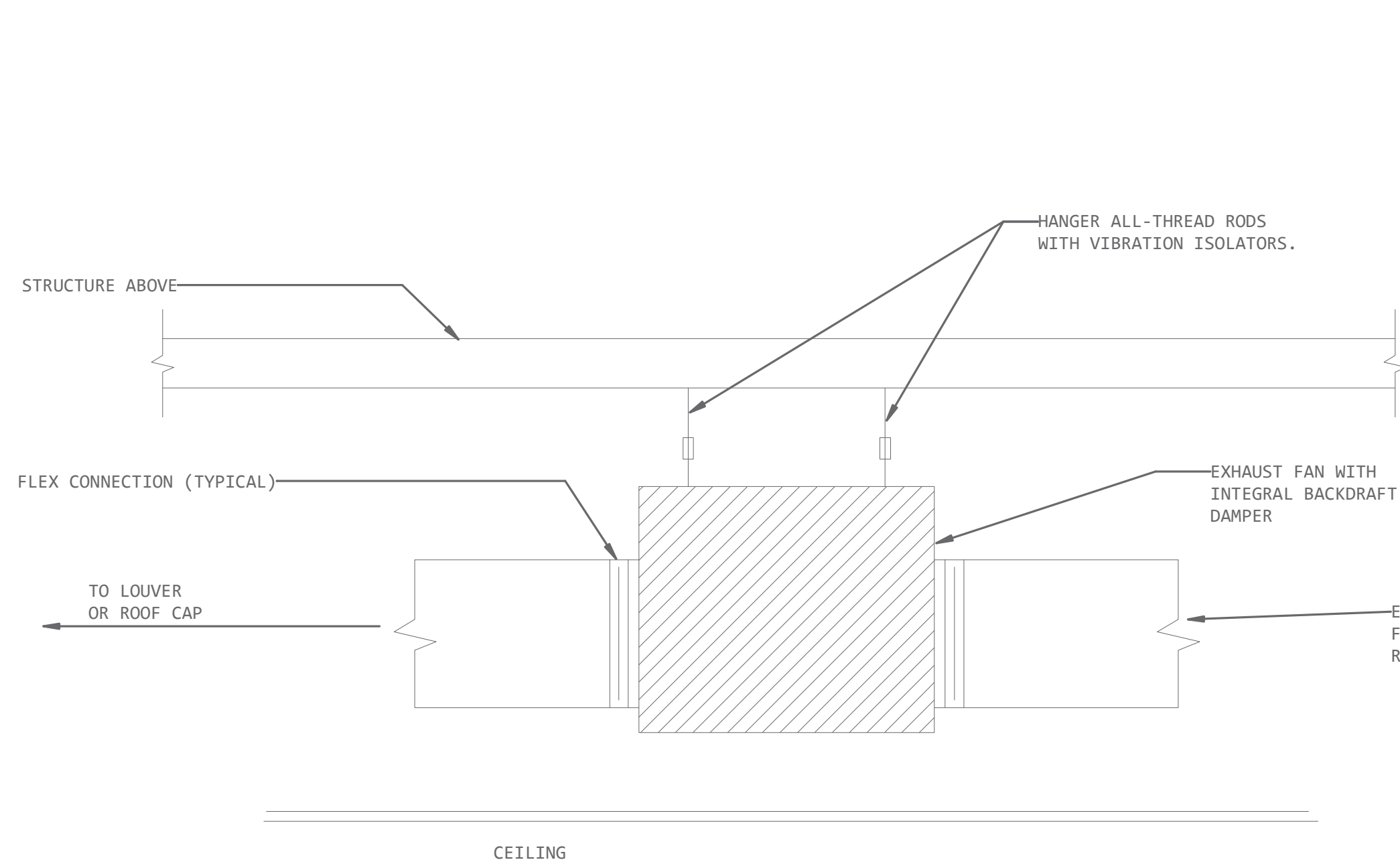


- NOTES:
1. USE PLENUM COLLARS TO ATTACH FLEXIBLE DUCT . USE SHEET METAL SCREWS AND (2) WRAPS OF TAPE TO SECURE PLENUM COLLARS. ALTERNATE METHOD: BANDING DEVICE OR PANDUIT STRAP, IN LIEU OF SHEET METAL SCREWS. ALL TAPES AND SEALING MATERIALS SHALL COMPLY WITH UL181A FOR RIGID DUCT AND UL181B FOR FLEXIBLE DUCT.
 2. F A MINIMUM OF 2 DIAMETERS OF STRAIGHT RUN IS NOT AVAILABLE ABOVE THE REGISTER USE HARD DUCT SHORT RADIUS CONNECTION.
 3. ALL FLEX DUCT SHALL BE INSTALLED WITHOUT KINKS, SAGGING, OR SHORT-RADIUS BENDS.

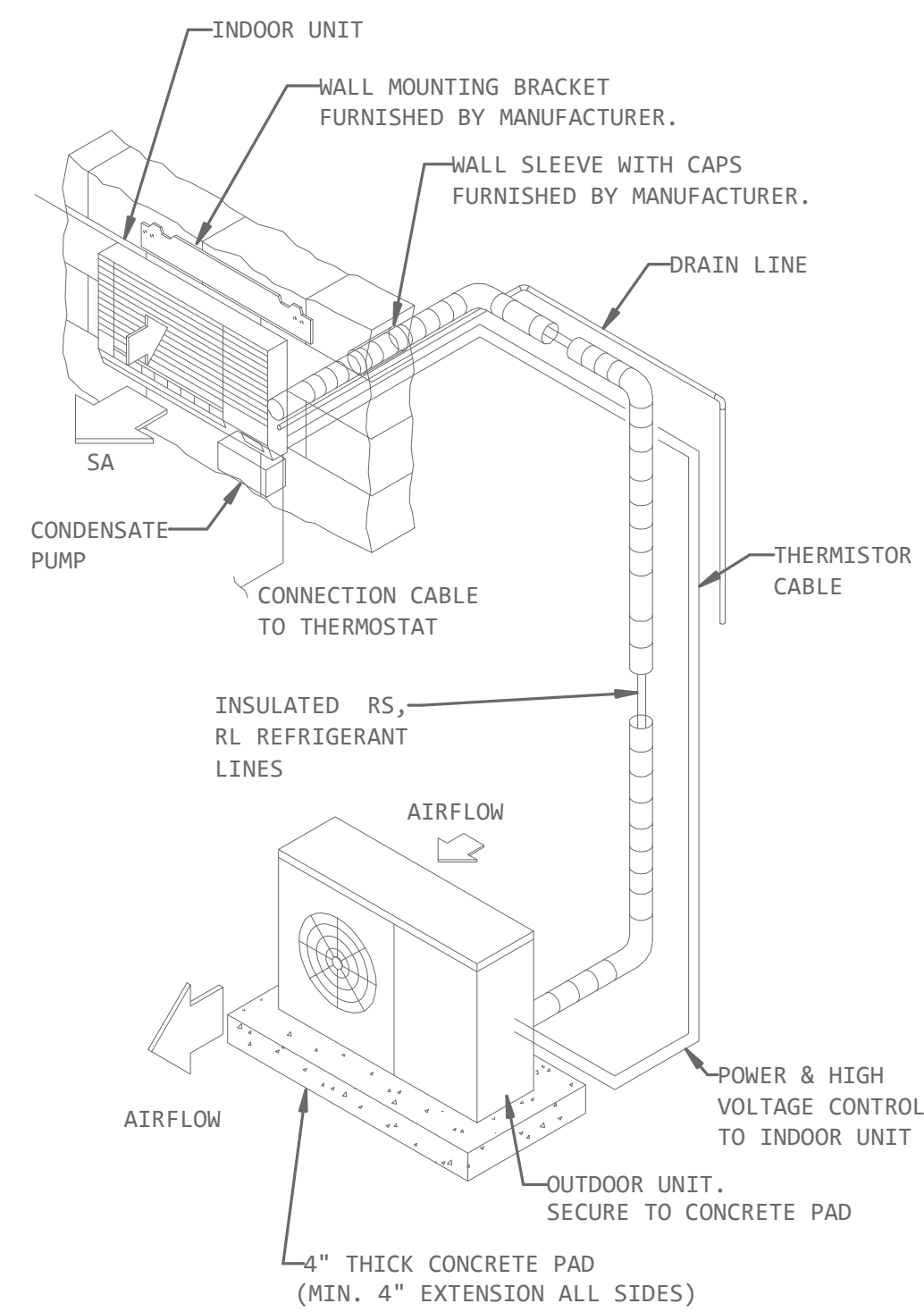
5 TYPICAL FLEXIBLE DUCT LINER INSTALLATION
N.T.S



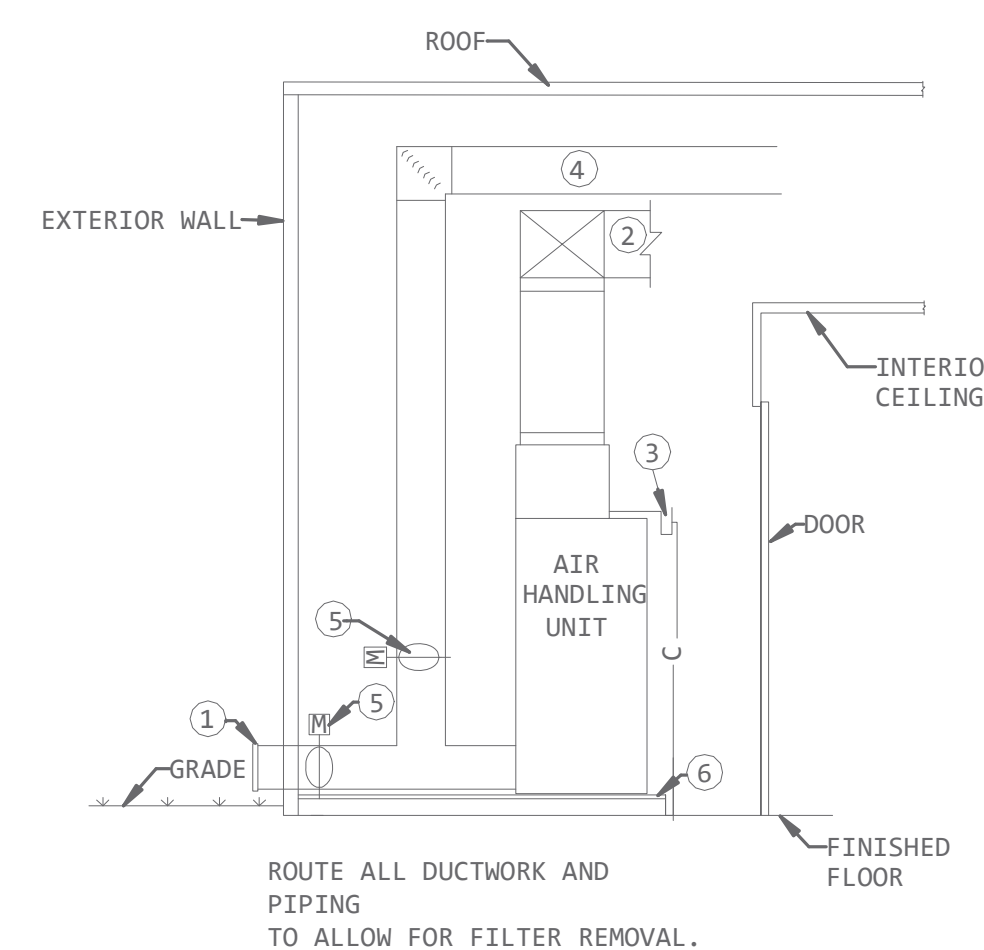
VELOCITY	DUCT LINER UPSTREAM EDGE			MID-SECTION		
	A	B	C	D	E	F
0-2000 F.P.M.	3"	12"	12"	6"	18"	12"



6 TYPICAL SUSPENDED INLINE EXHAUST FAN
N.T.S



7 TYPICAL DUCTLESS AIR CONDITIONER
N.T.S



8 TYPICAL MECHANICAL ROOM DETAIL (100% O/A INTAKE ON EXT. WALL) Copy 1
N.T.S

- NOTES BY SYMBOL (THIS DETAIL ONLY):
1. OUTSIDE AIR INTAKE DUCT. SIZE AND ROUTING OF O/A DUCT SHALL BE AS SHOWN ON PLANS. CONNECT TO MAIN OUTDOOR AIR DUCT. MAIN OUTDOOR AIR DUCT CONNECTED TO O/A INTAKE LOUVER. LOUVER SHALL BE AS SCHEDULED AND LOCATED PER PLANS. SEAL ALL EXTERIOR WALL PENETRATIONS WEATHER TIGHT.
 2. SUPPLY AIR DUCT, DUCT SIZE AND LOCATION AS SHOWN ON PLANS. PUT TURNING VANES IN ELBOWS.
 3. CONTRACTOR TO ROUTE 1" CONDENSATE DRAIN TO PLUMBING STANDPIPE (UNLESS OTHERWISE INDICATED ON PLUMBING PLANS). FOR MULTIPLE AIR HANDLING UNITS INSTALLATIONS, CONNECT 1" DRAIN FROM EACH UNIT TO A 1 1/4" COMMON HEADER, ADD A CONDENSATE TRAP AND DRAIN INTO PLUMBING STANDPIPE.
 4. RETURN AIR DUCT, DUCT SIZE AND LOCATION AS SHOWN ON PLANS. PUT TURNING VANES IN ELBOWS. PROVIDE 1" JOHNS-MANSVILLE PERMACOTE LINACOUSTIC INSULATION ON ALL DUCT SURFACES.
 5. MOTORIZED DAMPER. INTERLOCKED WITH THE EXHAUST FAN-7. BALANCE THE RETURN AIR AND OUTDOOR AIR BOTH TO BE 75BCHM WHEN THE EF-7 IS OFF; CLOSE THE RETURN AIR DAMPER AND FULLY OPEN OUTDOOR AIR DAMPER WHEN EF-7 IS ON. CONTRACTOR SHALL MAKE ALL CONNECTIONS.
 6. CONTRACTOR SHALL PROVIDE A SUPPORTED FOUNDATION. FOUNDATION SHALL BE CONSTRUCTED OF ANGLE IRON AND SHEET METAL TO SUPPORT AIR HANDLING UNITS.

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PROJECT NO.: 1744-22
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REVISED:



SHEET CONTENT
MECHANICAL DETAILS

SHEET NUMBER

M501

PLUMBING SYMBOLS AND ABBREVIATIONS

NOTE: ALL SYMBOLS AND ABBREVIATIONS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS

GENERAL NOTES

- PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION. PROVIDE ALL PERMITS, INSPECTIONS, LICENSES AND FEES. FURNISH ALL LABOR, EQUIPMENT, SUPPLIES AND MATERIALS NECESSARY TO PROVIDE COMPLETE AND OPERATIONAL SYSTEMS.
- THE DRAWINGS AND SPECIFICATIONS INDICATE THE GENERAL DESIGN AND ARRANGEMENT OF PIPES, FIXTURES, EQUIPMENT, SYSTEMS, ETC. INFORMATION SHOWN IS DIAGRAMMATIC IN CHARACTER AND DOES NOT NECESSARILY INDICATE EVERY REQUIRED OFFSET, FITTING, ETC. DO NOT SCALE THE DRAWINGS FOR DIMENSIONS. TAKE ALL DIMENSIONS, MEASUREMENTS, EQUIPMENT LOCATIONS, LEVELS, ETC FROM THE ARCHITECTURAL DRAWINGS AND FROM THE EQUIPMENT TO BE FURNISHED. PIPING MAY BE RELOCATED OR OFFSET FOR PROPER CLEARANCES OR TO AVOID CONFLICTS WITH OTHER TRADES. THE DESIGN INTENT (I.E. PITCHES, VELOCITIES, PRESSURE DROPS, VOLTAGE DROPS, ETC) CANNOT BE GREATLY ALTERED WITHOUT THE APPROVAL OF THE ARCHITECT. THE COST OF THESE DEVIATIONS TO AVOID INTERFERENCES SHALL BE PART OF THE ORIGINAL CONTRACT BID.
- EACH SUBCONTRACTOR SHALL CONFER AND COOPERATE WITH ALL OTHER TRADES TO COORDINATE THEIR WORK. COORDINATION SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO MATERIALS AND EQUIPMENT ROUTED IN CEILING AND WALL CAVITIES, EQUIPMENT ARRANGEMENT IN MECHANICAL SPACES, INCLUDING EQUIPMENT CLEARANCE REQUIREMENTS, ELEVATIONS AND DIMENSIONS OF STRUCTURAL MEMBERS AND OPENINGS, ETC. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF ANY CONFLICTS.
- BASE FINAL INSTALLATION OF MATERIALS AND EQUIPMENT ON ACTUAL DIMENSIONS AND CONDITIONS AT THE PROJECT SITE. FIELD MEASURE FOR MATERIALS AND EQUIPMENT REQUIRING EXACT FIT. NO EXTRAS WILL BE GIVEN FOR THE CONTRACTORS FAILURE TO FIELD COORDINATE.
- THE OWNER OR ENGINEER ARE NOT RESPONSIBLE FOR THE CONTRACTORS SAFETY PRECAUTIONS OR FOR MEANS, METHODS, TECHNIQUES, CONSTRUCTION SEQUENCES, OR PROCEDURES REQUIRED TO PERFORM THE WORK.
- THE CONTRACTOR SHALL LOCATE ALL EQUIPMENT THAT MUST BE SERVICED, OPERATED, OR MAINTAINED IN FULLY ACCESSIBLE POSITIONS. EQUIPMENT SHALL INCLUDE (BUT NOT LIMITED TO) VALVES, SHOCK ABSORBERS, TRAPS, CLEANOUTS, MOTORS, CONTROLLERS, SWITCHGEAR, AND DRAIN PORTS AS REQUIRED FOR BETTER ACCESSIBILITY. FURNISH ACCESS DOORS FOR THIS PURPOSE. MINOR DEVIATIONS FROM THE DRAWINGS MAY BE ALLOWED TO PROVIDE FOR BETTER ACCESSIBILITY. ANY CHANGES SHALL BE APPROVED BY THE ARCHITECT AND CONSTRUCTION MANAGER/GENERAL CONTRACTOR PRIOR TO MAKING THE CHANGE.
- THE CONTRACTOR SHALL PROVIDE ACCESS DOORS, WALL OPENINGS, ROOF OPENINGS OR ANY OTHER CONSTRUCTION REQUIREMENT NEEDED TO ACCOMMODATE THE PLUMBING EQUIPMENT. LOCATIONS OF THESE OPENINGS SHALL BE SUBMITTED IN SUFFICIENT TIME TO BE INSTALLED IN THE NORMAL COURSE OF WORK.
- THE CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF PLUMBING EQUIPMENT WITH THE ELECTRICAL CONTRACTOR PRIOR TO THE PURCHASE AND INSTALLATION OF ANY ELECTRICAL GEAR OR CONDUIT.
- PROVIDE VIBRATION ISOLATORS FOR MOTOR DRIVEN PLUMBING EQUIPMENT UNLESS NOTED OTHERWISE. PROVIDE ISOLATION AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER.
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL WALL CLEANOUTS, ACCESS DOORS, ETC WITH THE ARCHITECT AND ALL OTHER TRADES PRIOR TO INSTALLATION. IF A CONFLICT WITH MILLWORK, LIGHT SWITCHES, WINDOWS, ETC EXISTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT OF THE POTENTIAL INTERFERENCE PRIOR TO INSTALLATION.
- PLUMBING VENTS THROUGH THE ROOF SHALL BE A MINIMUM OF 10 FEET FROM ALL OUTSIDE AIR INTAKES AND A MINIMUM OF 5 FEET FROM EXTERIOR PERIMETER WALLS.
- SOME PIPES SHOWN ON EACH FLOOR PLAN MAY BE SHOWN WITH AN OFFSET FOR CLARITY.
- PLUMBING FIXTURES AND TRIM OF LIKE KIND SHALL BE OF THE SAME MANUFACTURER THROUGHOUT THE PROJECT. TYPICAL CATEGORIES INCLUDE THE FOLLOWING:
 - A. WATER CLOSETS, LAVATORIES, URINALS
 - B. ELECTRIC WATER COOLERS, DRINKING FOUNTAINS
 - C. FAUCETS, MIXING VALVES
 - D. TAIL PIECE, FIXTURE TRAPS, ESCUTCHEONS, ARM EXTENSIONS, STRAINERS
 - E. FIXTURE CARRIERS, FLOOR DRAINS, FLOOR SINKS, ROOF DRAINS, OVERFLOW DRAINS
 - F. COUNTER TOP SINKS
- PROVIDE WATER HAMMER ARRESTERS BETWEEN THE NEXT TO LAST AND LAST FIXTURE AT EACH BATTERY OF PLUMBING FIXTURES IN ACCORDANCE WITH THE WATER HAMMER ARRESTER SCHEDULE AND THE PLUMBING AND DRAINAGE INSTITUTE STANDARD PDI-WH-201.
- ALL SANITARY WASTE PIPING WITHIN THE BUILDING ENVELOPE SHALL HAVE MINIMUM SLOPES AS REQUIRED BY THE LOCAL CODE AUTHORITY. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS INDICATED ON FLOOR PLANS PRIOR TO INSTALLATION OF ANY SITE UTILITIES AND CONNECTION INTO EXISTING SERVICES.
- COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH VALVE HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL.
- SEAL ALL PIPE PENETRATIONS THROUGH FIRE RATED BUILDING ELEMENTS WITH AN APPROVED FIRE PROOFING MATERIAL.
- ALL FLOOR DRAIN AND FLOOR SINK TRAPS SHALL BE PRIMED WITH LISTED TRAP PRIMERS. PROVIDE SPIGOT ADAPTER ON ALL FLOOR DRAINS. HORIZONTAL TRAP PRIMER PIPING SHALL NOT BE ROUTED WITHIN FLOOR SLAB.
- CONTRACTOR SHALL PROVIDE AND INSTALL A MINIMUM HORIZONTAL LENGTH OF 10' OF 1" THICK PIPING INSULATION ON ALL STORM AND OVERFLOW PIPING WITHIN THE BUILD STARTING FROM EACH DRAIN BODY.
- CONTRACTOR SHALL PROVIDE AND INSTALL OF 1/2" THICK PIPING INSULATION ON ALL CONDENSATE PIPING WITHIN BUILDING ENVELOPE.
- PLASTIC PIPING IN RETURN AIR PLENUMS: REFER TO MECHANICAL DRAWINGS AND COORDINATE WITH MECHANICAL CONTRACTOR FOR LOCATION OF RETURN AIR PLENUMS. PLASTIC PIPING INSTALLED IN A RETURN AIR PLENUM MUST BE COMPLETELY INSULATED WITH UL LISTED PLENUM WRAP COMPLYING WITH ASTM E 84. THIS APPLIES TO PVC PIPING AND ALL OTHER PLASTIC PIPING NOT MEETING ASTM E 84 25/50 FLAME AND SMOKE DEVELOPMENT INDEX. PLENUM WRAP FLAME SPREAD AND SMOKE DEVELOPED INDEX OF THE FOIL ENCAPSULATED BLANKET SHALL BE LESS THAN 25/50 RESPECTIVELY. INSTALL INSULATION IN ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.

WATER HAMMER ARRESTER SCHEDULE

P.D.I. SIZE	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330

- NOTES:
- ALL WHA'S SHALL BE PISTON TYPE WITH EPDM O-RINGS, SIOUX CHIEF'S SERIES 650 OR EQUAL.
 - ALL WHA'S SHALL BE ANSI/ASSE 1010 2004 CERTIFIED AND APPROVED FOR INSTALLATION WITH NO ACCESS PANEL REQUIRED.
 - SIZE AND LOCATE WATER HAMMER ARRESTERS IN ACCORDANCE WITH PDI PAMPHLET PDI-WH-201.

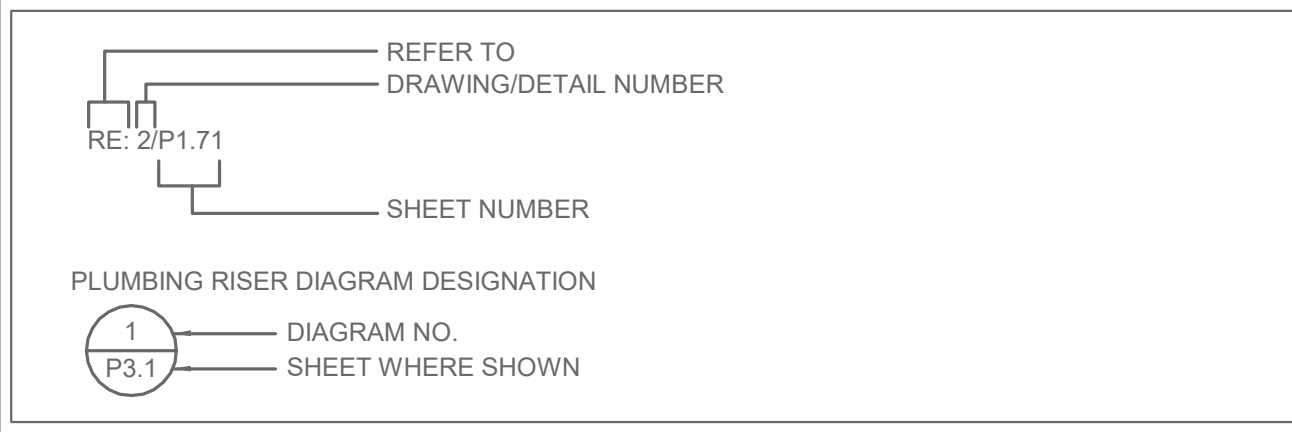
ABBREVIATIONS

A/E	ARCHITECT/ENGINEER	KW	KILOWATT
AFF	ABOVE FINISHED FLOOR	L	LENGTH
AHU	AIR HANDLING UNIT	LB	POUNDS
APPROX	APPROXIMATE	LRA	LOCKED ROTOR AMPS
BATT	BATTERY	MAX	MAXIMUM
BD	BUILDING DRAIN (BELOW FLOOR)	MCA	MINIMUM CIRCUIT AMPACITY
B.F.G.	BELOW FINISHED GRADE	MIN	MINIMUM
BS	BUILDING SEWER (OUTSIDE OF BLDG)	MSB	MOP SINK BASIN
CU	COPPER, CONDENSING UNIT	N/A	NOT APPLICABLE
CW	DOMESTIC COLD WATER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
D	EQUIPMENT DRAIN	NFPA	NON-FREEZE WALL HYDRANT
(D)	DEMOLISH	N/O,N/C	NORMALLY OPEN, NORMALLY CLOSED
DCO	TWO-WAY GRADE CLEANOUT	O/C	ON CENTER
DEG	DEGREES	OFD	ROOF OVERFLOW DRAIN
DSN	DOWNSPOUT NOZZLE	PH	PHASE
(E)	EXISTING	PROVIDE	FURNISH AND INSTALL
EQUIP	EQUIPMENT	PSI	POUNDS PER SQUARE INCH
EWC	ELECTRIC WATER COOLER	RD	ROOF DRAIN
F	DEGREES FAHRENHEIT	RE	REFERENCE, REFER
FCO	FLOOR CLEANOUT	RLA	RUNNING LOAD AMPS
FCU	FAN COIL UNIT	RM	ROOM
FD	FLOOR DRAIN	RPBFP	REDUCED PRESSURE PRINCIPLE
FS	FLOOR SINK	RPZ	REDUCED PRESSURE ZONE
FT	FOOT, FEET	S	SINK
PVC	FIRE VALVE CABINET	SD	STORM DRAIN (BELOW FLOOR)
G	NATURAL GAS	ST	STORM WATER (ABOVE CEILING)
GCO	GRADE CLEANOUT	SSD	SUBSURFACE DRAIN
GWH	NATURAL GAS WATER HEATER	THRU	THROUGH
H	HEIGHT	TP	TRAP PRIMER
HP	HORSEPOWER	TYP	TYPICAL
HW	DOMESTIC HOT WATER	U	URNAL
HWC	DOMESTIC HOT WATER CIRCULATION LOOP	UL	UNDERWRITERS LABORATORIES, INC.
HWTM	HOT WATER TEMPERATURE	V	SANITARY VENT
HZ	HERTZ	VTR	SANITARY VENT THRU ROOF
IE	INVERT ELEVATION	W	SANITARY WASTE (ABOVE FLOOR)
IN	INCH, INCHES	WC	WATER CLOSET
J-BOX	JUNCTION BOX	WCO	WALL CLEANOUT
		W/	WITH
		W/O	WITHOUT

LINE TYPES

SYMBOL	DESCRIPTION
	SANITARY SEWER (ABOVE CEILING)
	SANITARY SEWER (BELOW FLOOR, BUILDING DRAIN)
	SANITARY SEWER (OUTSIDE OF BUILDING, BUILDING SEWER)
	ACID WASTE
	FORCED MAIN
	GREASY WASTE (ABOVE CEILING)
	GREASY WASTE (BELOW FLOOR)
	OIL WASTE
	EQUIPMENT DRAIN (ABOVE CEILING)
	STORM WATER PIPING (ABOVE CEILING)
	STORM WATER PIPING (BELOW FLOOR/GRADE)
	OVERFLOW DRAIN (ABOVE CEILING)
	SUBSURFACE DRAINAGE
	SANITARY VENT
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER
	DOMESTIC HOT WATER CIRCULATION
	NON-POTABLE WATER
	NATURAL GAS
	FIRE PROTECTION MAIN WATER SUPPLY
	STANDPIPE FIRE PROTECTION WATER
	AUTOMATIC FIRE SPRINKLER (WET)
	AUTOMATIC FIRE SPRINKLER (PRE-ACTION)
	AUTOMATIC FIRE SPRINKLER (DRY)
	FIRE DEPARTMENT CONNECTION
	COMPRESSED AIR
	DIRECTION OF FLOW
	DIRECTION OF PIPE SLOPE DOWN
	PIPE DEMOLITION

DRAWING/DETAIL REFERENCE



MISCELLANEOUS

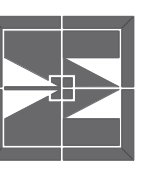
- DRAWING NOTE REFERENCE (I.E., NOTES BY SYMBOL)
- CONNECTION INTO EXISTING

BASIS OF PLUMBING DESIGN

PRIMARY CODES:
 PLUMBING: 2015 INTERNATIONAL PLUMBING CODE (WITH CITY AMENDMENTS)

PROJECT DESIGN VALUES:
 SANITARY SEWER AND VENT SYSTEM(S): TOTAL DRAINAGE FIXTURE UNITS = 61 DFU
 DOMESTIC WATER SYSTEM(S): TOTAL WATER FIXTURE UNITS = 63 FU, PEAK DEMAND = 55 GPM
 DOMESTIC HOT WATER SYSTEM(S): DOMESTIC HOT WATER TEMPERATURE = 140°F, TEMPERED DOMESTIC HOT WATER TEMPERATURE = 105°F, CIRCULATED DOMESTIC WATER SYSTEM

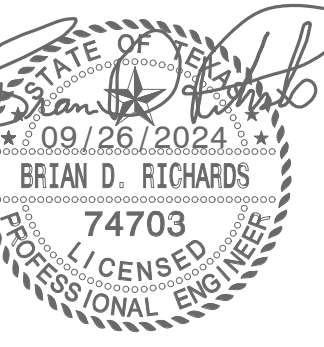
MAGEE ARCHITECTS, L.P.
 DESIGNERS - PLANNERS - INTERIORS
 HTTP://WWW.MAGEE-ARCHITECTS.COM/
 FORT WORTH, TEXAS 8177519392



TARWATER VETERINARIAN CLINIC

802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: HCH
 REVISED:



SHEET CONTENT
 PLUMBING GENERAL NOTES AND LEGENDS

SHEET NUMBER

P001



1300 Summit Avenue, Suite 514
 Fort Worth, Texas 76102
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 Texas Registration # F-10963

PLUMBING FIXTURE SCHEDULE									
MARK	DESCRIPTION	ROUGH IN (MINIMUM)					MANUFACTURER AND MODEL NUMBER	ADA (TAS)	
		W	V	GW	H	E			
WC1	WATER CLOSET, ADA COMPLIANT, FLOOR MOUNT, FLUSHOMETER VALVE, TOP SPUD, ELONGATED, SIPHON ACTION JETTED BOWL, VITREOUS CHINA, WHITE, ASME A112.19.2M, 2" FULLY GLAZED TRAPWAY, 10" ROUGH-IN, 1.28 GPF FLUSHOMETER VALVE, 1.28 GPF, EXPOSED DIAPHRAGM-TYPE, CHROME PLATED, 1 1/2" TOP SPUD, SPUD CONNECTION AND FLANGE, OSCILLATING NON-HOLD OPEN HANDLE, CHROME PLATED ANGLE STOP WITH STOP CAP, VACUUM BREAKER FLUSH CONNECTION, CAST WALL FLANGE WITH SET SCREW, ANS/ASME 112.19.6 SEAT, EXTRA HEAVY WEIGHT, POSTURE MOLDED SOLID PLASTIC, ELONGATED, OPEN FRONT, LESS COVER, EXTERNAL CHECK VALVES, STAINLESS STEEL HINGE POSTS, WHITE	4"	2"	-	-	-	AMERICAN STANDARD, 3043.001; KOHLER, K-96057; ZURN, Z5665-BWL1; SLOAN, ST-2029.	♿	
L1	LAVATORY, 20"X17" OVAL, SELF-RIMMING BASIN WITH FAUCET LEDGE, 4" CENTER FAUCET HOLES, VITREOUS CHINA, FRONT OVERFLOW, ANS A112.19.2 FAUCET, DECK MOUNT, CHROME PLATED BRASS, 4" INTEGRAL SPOUT, TWO-HANDLE, 1/4" TURN, 2 1/2" LEVER HANDLES, 4" CENTERS, NSF 61 COMPLIANT, ANS A112.18.1M, 0.5 GPM MAX. FLOW RATE SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	2"	1 1/2"	-	-	-	AMERICAN STANDARD, 0476.028; KOHLER, K-2196-4; ZURN, Z5114; SLOAN, SS-3002. CHICAGO FAUCETS, 802-VE66XKABCP, T&S BRASS, B-0871-VF05; ZURN, Z81101-XL-27M. MCGUIRE, LFH2185CCLK, T&S BRASS, B-1305; OR BRASSCRAFT, OCR1912A MCGUIRE, 8902; BRASSCRAFT, 507, OR EQUAL IN T&S BRASS MCGUIRE, 155WC, OR EQUAL IN T&S BRASS; OR BRASSCRAFT WATTS, LFUSG-B; LEONARD, 170-LF; BRADLEY, S59-4000A; OR EQUAL	♿	
L2	LAVATORY, 20"X18" VITREOUS CHINA WALL MOUNT, 4" CENTER FAUCET HOLES, FRONT OVERFLOW, CONCEALED ARM CARRIER SYSTEM, DECK MOUNTED FAUCET, INTEGRAL 4" BACKSPASH, ANS A112.19.2 FAUCET, DECK MOUNT, CHROME PLATED BRASS, 4" INTEGRAL SPOUT, TWO-HANDLE, 1/4" TURN, 2 1/2" LEVER HANDLES, 4" CENTERS, NSF 61 COMPLIANT, ANS A112.18.1M, 0.5 GPM MAX. FLOW RATE SUPPLY AND STOPS, LOOSE KEY, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. OFFSET TAILPIECE AND STRAINER, CHROME PLATED CAST BRASS FIXTURE CARRIER, CONCEALED ARMS, LEVELING AND SECURING SCREWS, UPRIGHTS, WELDED FEET THERMOSTATIC MIXING VALVE, 0.25 GPM MINIMUM FLOW, INTEGRAL INLET CHECK VALVES AND STRAINER, SET TEMPERATURE TO 105°, ASSE 1070.	2"	1 1/2"	-	-	-	AMERICAN STANDARD, 0355.012; KOHLER, K-2005; ZURN, Z5364; SLOAN, SS-3003. CHICAGO FAUCETS, 802-VE66XKABCP, T&S BRASS, B-0871-VF05; ZURN, Z81101-XL-27M. MCGUIRE, LFH2185CCLK, T&S BRASS, B-1305; OR BRASSCRAFT, OCR1912A MCGUIRE, 8902; BRASSCRAFT, 507, OR EQUAL IN T&S BRASS MCGUIRE, 155WC, OR EQUAL IN T&S BRASS; OR BRASSCRAFT JOSAM, SERIES 17100; WATTS, CA-411; ZURN, Z1231; OR JR SMITH, 0700 WATTS, LFUSG-B; LEONARD, 170-LF; BRADLEY, S59-4000A; OR EQUAL	♿	
S1	SINK, SINGLE COMPARTMENT, 19"X21"X5", SELF RIMMING, SEAMLESS #18 GAUGE TYPE 304 STAINLESS STEEL, FAUCET LEDGE, MINIMUM 1 3/4" VERTICAL AND HORIZONTAL RADIUS BASIN CORNERS, FULLY UNDERCOATED, ANS A112.19.3M. DRAIN CENTERED IN REAR OF BASIN FAUCET, DECK MOUNT, CHROME PLATED BRASS, 5 1/4" RIGID / SWING GOOSENECK SPOUT, TWO-HANDLE, 1/4" TURN 2 1/2" LEVER HANDLES, 4" CENTERS, NSF 61 COMPLIANT, ANS A112.18.1M, 1.0 GPM MAX. FLOW RATE SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. TAILPIECE AND FORGED STAINLESS STEEL BASKET STRAINER	2"	1 1/2"	-	-	-	♿		
S2	SINK, SINGLE COMPARTMENT, 19"X21"X5", SELF RIMMING, SEAMLESS #18 GAUGE TYPE 304 STAINLESS STEEL, FAUCET LEDGE, MINIMUM 1 3/4" VERTICAL AND HORIZONTAL RADIUS BASIN CORNERS, FULLY UNDERCOATED, ANS A112.19.3M. DRAIN CENTERED IN REAR OF BASIN FAUCET, DECK MOUNT, CHROME PLATED BRASS, 5 1/4" RIGID / SWING GOOSENECK SPOUT, TWO-HANDLE, 1/4" TURN 2 1/2" LEVER HANDLES, 4" CENTERS, NSF 61 COMPLIANT, ANS A112.18.1M, 1.0 GPM MAX. FLOW RATE FAUCET MOUNTED EYEWASH SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. TAILPIECE AND FORGED STAINLESS STEEL BASKET STRAINER	2"	1 1/2"	-	-	-	♿		
S3	SINK, SINGLE COMPARTMENT, 17"X28"X5 1/2", SELF RIMMING, SEAMLESS #18 GAUGE TYPE 304 STAINLESS STEEL, FAUCET LEDGE, MINIMUM 1 3/4" VERTICAL AND HORIZONTAL RADIUS BASIN CORNERS, FULLY UNDERCOATED, ANS A112.19.3M. DRAIN CENTERED IN REAR OF BASIN FAUCET, DECK MOUNT, 8" SWING SPOUT, CHROME PLATED BRASS, 8" CENTERS, WITH SIDE HAND SPRAY, TWO-1/4" TURN 2 1/2" LEVER HANDLES, NSF 61 COMPLIANT, ANS A112.18.1M, 1.5 GPM MAX. FLOW RATE SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. TAILPIECE AND FORGED STAINLESS STEEL BASKET STRAINER	2"	1 1/2"	-	-	-	♿		
VT1	VETERINARIAN TABLE, AS SELECTED BY OWNER, INSTALLED BY CONTRACTOR. FAUCET, COMPONENT OF TABLE, AS SELECTED BY OWNER, INSTALLED BY CONTRACTOR. SUPPLY AND STOP, LOOSE KEY, CHROME PLATED BRASS VALVES AND CHROME PLATED COPPER RISERS P-TRAP, CHROME PLATED CAST BRASS BODY WITH CLEANOUT, SEAMLESS WALL BEND, 17 GA. TAILPIECE AND FORGED STAINLESS STEEL BASKET STRAINER	2"	1 1/2"	-	-	-	♿		
DW1	DOG WASH FAUCET AND SPRAY HOSE, 8" WALL MOUNTED MIXING FAUCET WITH VACUUM BREAKER, 9'-0" COILED HOSE WITH WITH ANGLED SPRAY VALVE, 4 GPM MIN. FLOW RATE. ASME A112.18.1, ASSE 1001. SHOWER STALL STRAINER, HEAVY CAST BRASS BODY, STAINLESS STEEL GRID	2"	1 1/2"	-	-	-	♿		
HR1	COMPLETE HOSE REEL SYSTEM, 8" WALL MOUNTED MIXING FAUCET, CONTINUOUS VACUUM BREAKER, 50'-0" HEAVY-DUTY HOSE, ASSE 1056	-	-	3/4"	3/4"	-	♿		
MSB1	MOP SINK BASIN, ONE PIECE PRECAST TERRAZZO 24"X24"X2" (1 1/4" WALL THICKNESS WITH MINIMUM 9.75" INSIDE DEPTH) 6" DROP FRONT, STAINLESS STEEL EDGE CAPS ON ALL SIDES, CAST BRASS DRAIN WITH STAINLESS STEEL STRAINER FAUCET, EXPOSED YOKE, WALL MOUNTED UTILITY FAUCET, VACUUM BREAKER, 6" THREADED SPOUT 24"X2" STAINLESS STEEL MOP BRACKET WITH THREE RUBBER TOOL GRIPS 3/8" RUBBER HOSE (58") CHROME COUPLING 1 END, 5/8" STAINLESS STEEL BRACKET W/ RUBBER GRIP ALUMINUM BUMPER GUARD ON LEADING EDGE OF MOP SINK BASIN STAINLESS STEEL WALL GUARDS	3"	2"	-	-	-	♿		
EW1	TWO STATION WATER COOLER, INDOOR BI-LEVEL WALL MOUNTED, FILTERED, SELF CONTAINED ELECTRIC REFRIGERATION, STAINLESS STEEL BASIN AND CABINET WITH ANTI-SPLASH RIDGE, INTEGRAL DRAIN STRAINER, NON-SQUIRT BUBBLER, PUSH BAR ACTUATION ON FRONT AND SIDES OF WATER COOLER, REFRIGERATION SYSTEM SERVING BOTH BI-LEVELS TO INCLUDE HIGH EFFICIENCY COMPRESSOR, R-134A, FULLY INSULATED STAINLESS STEEL TANK, 8 GPH WITH 50°F SUPPLY TEMPERATURE AND 80°F AMBIENT, 115VOLT, ANS 117.1, NSF/ANSI 61 HANDICAPPED COMPLIANT APRON, MOLDED STAINLESS STEEL SKIRT KIT FOR INSTALLATION ON THE HIGH UNIT SERVICE STOP WITH DIELECTRIC COUPLING P-TRAP, PVC, WHITE FIXTURE CARRIER, STEEL TOP AND BOTTOM PLATES W/ ADJ. HOLES, CHROME PLATED CAP NUTS/WASHERS	2"	1 1/2"	-	-	-	♿		
FD1	FLOOR DRAIN, CAST IRON BODY, ANCHOR FLANGE, WEEPHOLES FOR DOUBLE DRAINAGE, 6" SQUARE STAINLESS STEEL FLAT STRAINER, ADJUSTABLE DRAIN HEAD W/ MACHINED INTEGRAL BODY THREADS, ASME A112.21.1 INSTALL TRAP SEAL SYSTEM, ABS PLASTIC FRAME, SILICONE RUBBER FLAPPERS AND FOUR FLEXIBLE SEALING RIBS, UV RESISTANT, ASSE 1072.	-	-	-	-	-	♿		
FS1	FLOOR SINK, 8"X8"X6", CI BODY, DEL DRAINAGE FLANGE, STAINLESS STEEL DOME STRAINER, 1/2" GRATE, NON-PUNCTURING FLASHING COLLAR, PORCELAIN ENAMEL OR EPOXY COATED INTERIOR INSTALL TRAP SEAL SYSTEM, ABS PLASTIC FRAME, SILICONE RUBBER FLAPPERS AND FOUR FLEXIBLE SEALING RIBS, UV RESISTANT, ASSE 1072.	-	-	-	-	-	♿		
TD1	TRENCH DRAIN, 6" WIDE WITH 4 1/2" THROAT, 4" OUTLET, POLYPROPYLENE MODULAR CHANNEL SECTIONS, INTERLOCKING ENDS, RADIUS BOTTOM, 0.75% BUILT-IN SLOPE, BOTTOM OUTLET, ACID RESISTANT COATED FRAME, HEAL PROOF DUCTILE IRON GRATE, VANDAL PROOF SECURITY GRATE.	-	-	-	-	-	♿		
WCO	WALL CLEANOUT, CI BODY, RECESSED, THREADED BRASS PLUG, STAINLESS STEEL ACCESS COVER	-	-	-	-	-	♿		
GCO	GRADE CLEANOUT, HEAVY DUTY COATED CAST IRON ACCESS BODY WITH ANCHOR FLANGES, HEAVY DUTY DUCTILE IRON ACCESS COVER WITH VANDAL RESISTANT STAINLESS STEEL SCREWS	-	-	-	-	-	♿		
DCO	2-WAY GRADE CLEANOUT, TWO-RISER CLEANOUT BODY WITH HEAVY DUTY COATED CAST IRON ACCESS BODY WITH ANCHOR FLANGES, HEAVY DUTY DUCTILE IRON ACCESS COVER WITH VANDAL RESISTANT STAINLESS STEEL SCREWS	-	-	-	-	-	♿		
PCO	PLUG CLEANOUT, SPIGOT CONNECTION, ROUNDED HEAD THREADED BRASS PLUG	-	-	-	-	-	♿		
NFWHT	NON-FREEZE WALL HYDRANT, EXPOSED WALL TYPE, CHROME FINISH ON BRASS CASTINGS, VACUUM BREAKER, LOOSE KEY HANDLE, 3/4" MALE HOSE THREAD NOZZLE	-	-	3/4"	-	-	♿		
IMB1	REFRIGERATOR ICE MAKER CONNECTION BOX, 8"X8" RECESSED STAINLESS STEEL ENCLOSURE	-	-	1/2"	-	-	♿		

- NOTES:
- CONTRACTOR SHALL FURNISH AND INSTALL SUPPLIES, STOPS, TRAPS, TAILPIECES AND ALL APPURTENANCES NECESSARY FOR A COMPLETE INSTALLATION OF ALL FIXTURES.
 - ALL ADA ACCESSIBLE SINKS AND LAVATORIES SHALL BE EQUIPPED WITH TRUBERG #102 UNDER SINK PROTECTIVE PIPE COVERS WHERE NOT CONCEALED BY MILLWORK.
 - COMPLY WITH THE PROVISIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE TEXAS ACCESSIBILITY STANDARD (TAS). PLUMBING CONTRACTOR SHALL PROVIDE PLUMBING FIXTURES WITH FLUSH WALL HANDLES LOCATED ON THE WIDE SIDE OF EACH STALL OR ROOM.
 - FLOOR CLEANOUT ACCESS COVERS IN ALL FINISHED AREAS SHALL BE OF THE RECESSED TYPE TO ALLOW FOR INSERTION OF FINISHED FLOOR TREATMENT. TILE OR CARPET MARKER AS NECESSARY.
 - ABOVE THE FLOOR P-TRAPS ON LAVATORIES AND SINKS SHALL BE 17 GAUGE, CHROME PLATED BRASS. ACCEPTABLE MANUFACTURERS: MCGUIRE, T&S BRASS, OR BRASSCRAFT.
 - CONTRACTOR SHALL VERIFY FIXTURE SUPPLIES AND APPURTENANCES FOR EACH FIXTURE PRIOR TO BIDDING AND PURCHASING.
 - ALL FLOOR MOUNTED WATER CLOSETS SHALL HAVE 10" ROUGH-IN UNLESS OTHERWISE NOTED.
 - CONTRACTOR SHALL VERIFY PLUMBING FIXTURES PROVIDED COMPLY WITH HANDICAPPED ACCESSIBILITY STANDARDS INCLUDING HEIGHT AND CLEARANCE REQUIREMENTS.
 - ALL WATER CLOSET AND URINAL FLUSH VALVES SHALL INCLUDE CHROME PLATED CAST WALL FLANGE WITH SETSCREW AND COVER TUBE.

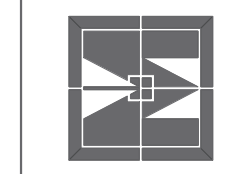
DOMESTIC ELECTRIC WATER HEATER SCHEDULE													
REMARKS LEGEND: 1. TWO ELECTRIC HEATING ELEMENTS SET FOR NON-SIMULTANEOUS OPERATION. 2. ADJUST STORAGE WATER TEMPERATURE IN ACCORDANCE WITH LOCAL ENERGY CODE REQUIREMENTS. 3. OR EQUAL.													
MARK	SERVICE	TYPE	STORAGE CAPACITY (GAL)	RECOVERY RATE (80 RISE) (GPH)	LEAVING WATER TEMPERATURE (F)	ELECTRICAL CHARACTERISTICS				MANUFACTURER	MODEL NUMBER	REMARKS	
WH1	DOMESTIC HOT WATER	ELECTRIC TANK	80	138	140	# ELEMENTS	KW	VOLTS	PHASE	HZ	A.O. SMITH	DRE-80-27	2, 3

THERMOSTATIC MIXING VALVE SCHEDULE										
REMARKS LEGEND: 1. PROVIDE AND INSTALL WITH STAINLESS STEEL RECESSED CABINET ASSEMBLY. 2. PROVIDE AND INSTALL WITH PAINTED, RECESSED CABINET ASSEMBLY. VERIFY WITH ARCHITECTURAL SPECIFICATIONS FOR COLOR. 3. PROVIDE AND INSTALL WITH PAINTED, SURFACE MOUNTED CABINET ASSEMBLY. VERIFY WITH ARCHITECTURAL SPECIFICATIONS FOR COLOR. 4. MIXING VALVE SHALL MEET ASSE CERTIFICATION OF SCHEDULED USE. 5. OR EQUAL.										
MARK	SERVICE	TYPE	FLOWRATE CAPACITY (GPM) HIGH / LOW (GPM)	PRESSURE DROP (PSIG)	INLET HOT WATER TEMPERATURE (F)	INLET COLD WATER TEMPERATURE (F)	LEAVING WATER TEMPERATURE (F)	MANUFACTURER	MODEL NUMBER	REMARKS
TSMV1	TEMPERED HOT WATER	MASTER MIXING VALVE	20 / 1	15	140	57	110	LEONARD	TM-420B-LF-OT	4, 5

PUMP SCHEDULE													
REMARKS LEGEND: 1. PROVIDE 7-DAY TIME CLOCK FOR OPERATION OF CIRCULATION PUMP (SET TO OPERATE DURING NORMAL BUSINESS HOURS, ADJUSTABLE). 2. PUMPS SHALL BE RATED FOR CONTINUOUS OPERATION AT WATER TEMPERATURE OF CONNECTED SYSTEM. 3. OR EQUAL.													
MARK	SERVICE	TYPE	FLOWRATE (GPM)	TOTAL DYNAMIC HEAD (FEET)	SPEED (RPM)	EFFIC (%)	ELECTRICAL CHARACTERISTICS			MANUFACTURER	MODEL NUMBER	REMARKS	
CP1	DOMESTIC HOT WATER CIRCULATION	INLINE CENTRIFUGAL PUMP	4	25	1750	65	HP	VOLTS	PHASE	HZ	TACO	0013-3SP	1, 2, 3

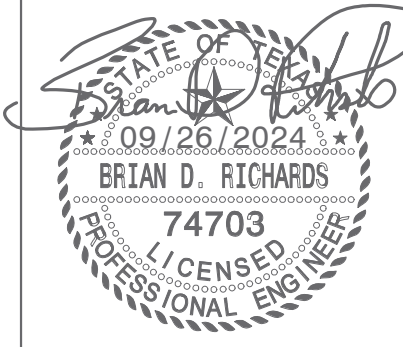
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TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN: HCH
REVISED:

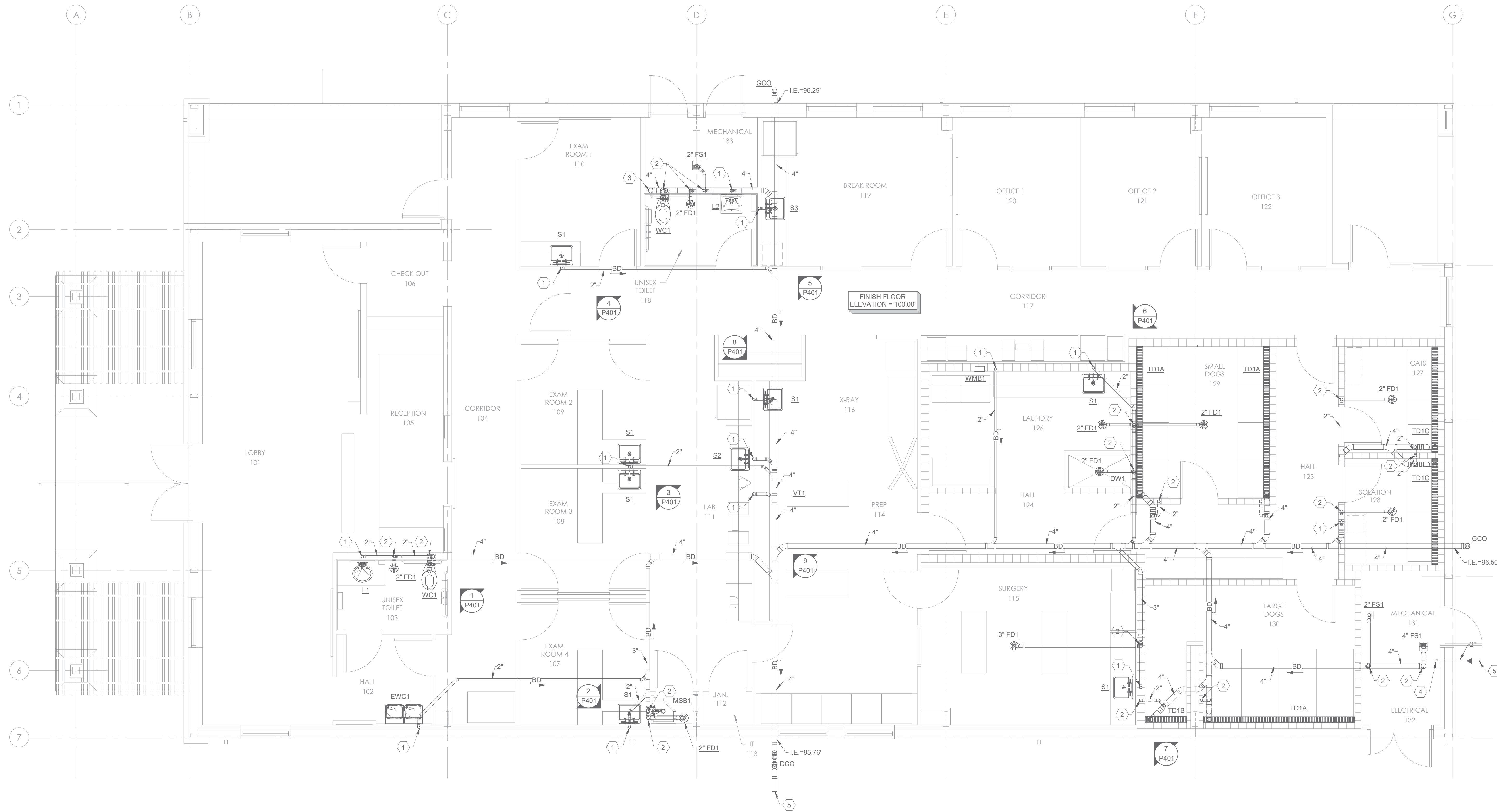


SHEET CONTENT
PLUMBING SCHEDULES

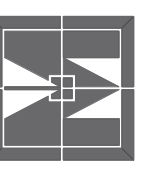
SHEET NUMBER

P002

P200 NOTES BY SYMBOL	
NUMBER	NOTE
1	2" SANITARY SEWER UP.
2	2" SANITARY SEWER VENT UP.
3	4" SANITARY SEWER UP.
4	2" DOMESTIC COLD WATER UP TO REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER. REFER DETAIL 13P401.
5	REFER CIVIL FOR CONTINUATION.



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TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

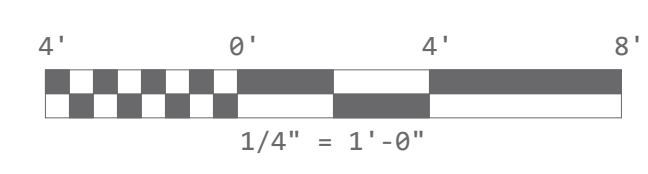
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 DRAWN: HCH
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SHEET CONTENT
 UNDER FLOOR PLUMBING PLAN

SHEET NUMBER

P200

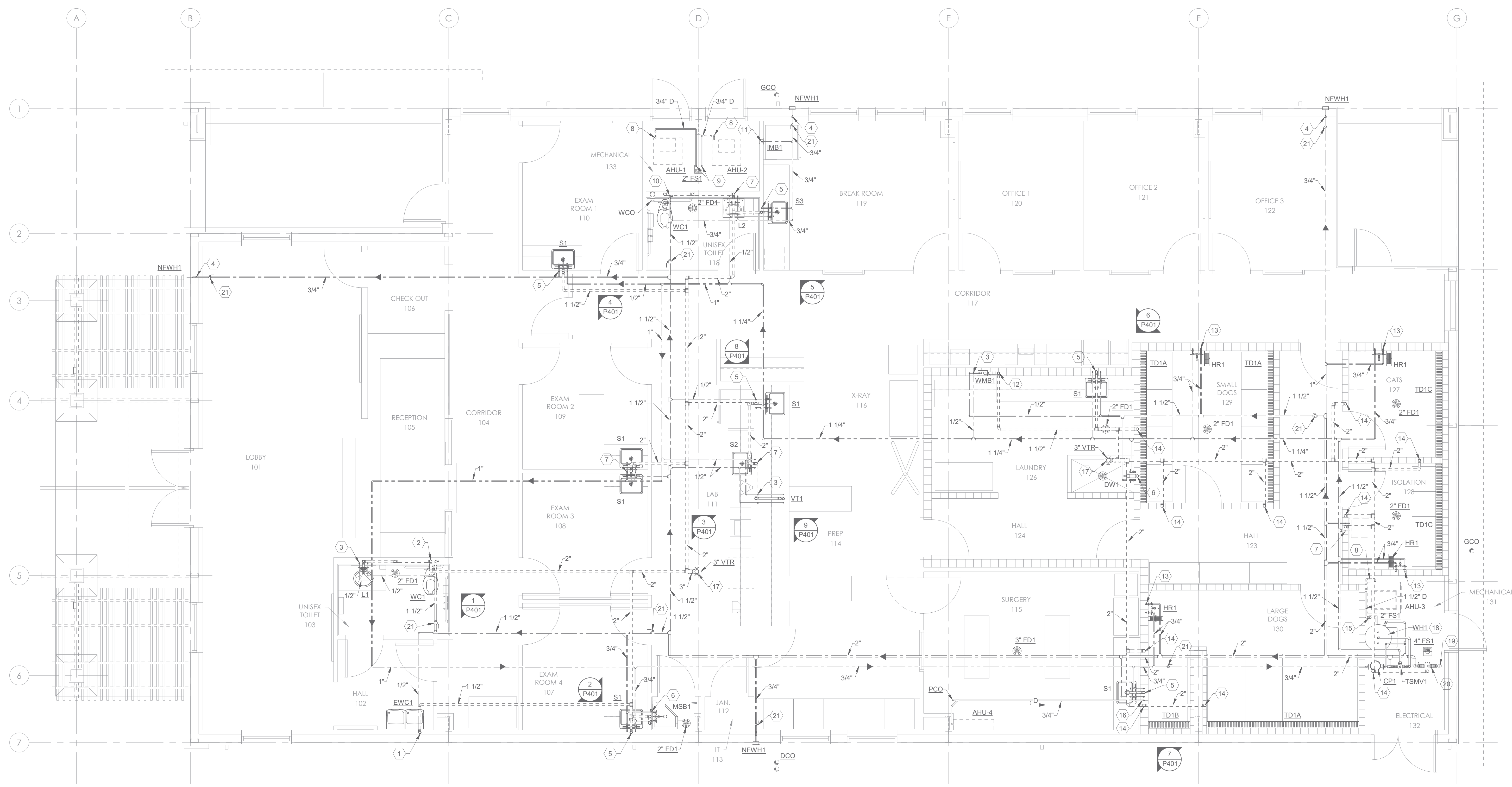


SOLARE
 ENGINEERING UNLIMITED, INC.

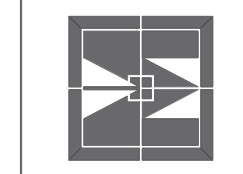
1300 Summit Avenue, Suite 514
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 www.solare-eng.com
 Texas Registration # F-10963

1 UNDER FLOOR PLUMBING PLAN
 1/4" = 1'-0"

P201 NOTES BY SYMBOL	
NUMBER	NOTE
1	1/2" DOMESTIC COLD WATER AND 1 1/2" SANITARY SEWER VENT DOWN.
2	1" DOMESTIC COLD WATER AND 2" SANITARY SEWER VENT DOWN.
3	1/2" DOMESTIC COLD WATER & 1/2" DOMESTIC HOT WATER DOWN.
4	3/4" DOMESTIC COLD WATER DOWN.
5	1/2" DOMESTIC COLD WATER & 1/2" DOMESTIC HOT WATER AND 1 1/2" SANITARY SEWER VENT DOWN.
6	3/4" DOMESTIC COLD WATER & 3/4" DOMESTIC HOT WATER AND 2" SANITARY SEWER VENT DOWN.
7	1/2" DOMESTIC COLD WATER & 1/2" DOMESTIC HOT WATER AND 2" SANITARY SEWER VENT DOWN.
8	TYPICAL CONDENSATE DRAIN CONNECTION. REFER DETAIL 14/P401.
9	3/4" CONDENSATE DRAIN DOWN TO INDIRECT DISCHARGE AT FLOOR SINK. DISCHARGE CONDENSATE DRAIN 1" MIN. ABOVE FLOOD RIM OF FLOOR SINK.
10	1" DOMESTIC COLD WATER DOWN.
11	1/2" DOMESTIC COLD WATER DOWN.
12	1 1/2" SANITARY SEWER VENT DOWN.
13	3/4" DOMESTIC COLD WATER AND 3/4" DOMESTIC HOT WATER DOWN.
14	2" SANITARY SEWER VENT DOWN.
15	1 1/2" CONDENSATE DRAIN DOWN TO INDIRECT DISCHARGE AT FLOOR SINK. DISCHARGE CONDENSATE DRAIN 1" MIN. ABOVE FLOOD RIM OF FLOOR SINK.
16	3/4" CONDENSATE DRAIN DOWN TO BRANCH TAIL PIECE OF SINK. REFER DETAIL 16/P401.
17	3" SANITARY SEWER VENT UP TO VENT THRU ROOF.
18	ELECTRIC WATER HEATER WH1, CIRCULATION PUMP CP1 AND THERMOSTATIC MIXING VALVE TSMV1. REFER DETAIL 15/P401.
19	2" DOMESTIC COLD WATER DOWN. REFER 1/P200 FOR CONTINUATION.
20	2" DOMESTIC COLD WATER TO REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER. REFER DETAIL 13/P401.
21	ISOLATION VALVE.



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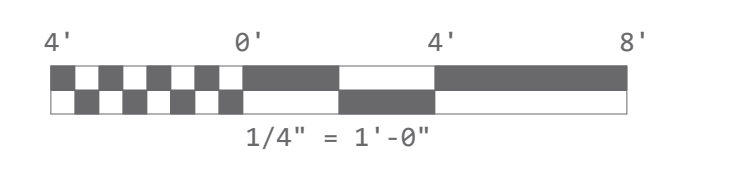
PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN: HCH
 REVISED:



SHEET CONTENT
 PLUMBING PLAN


SHEET NUMBER

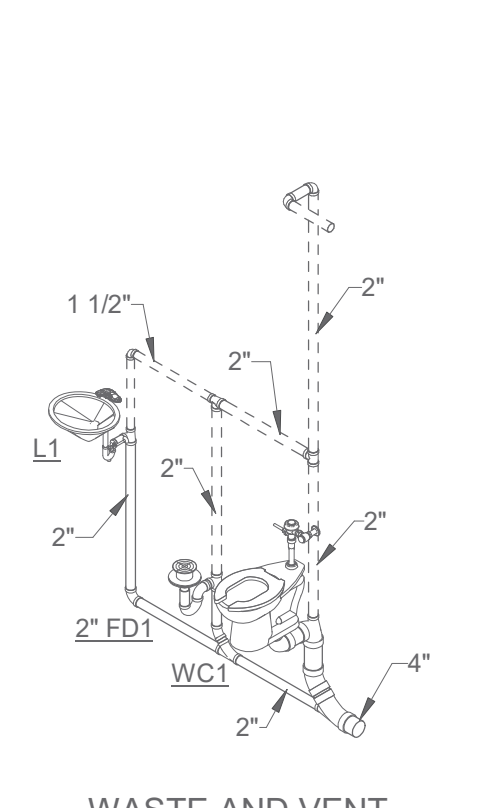
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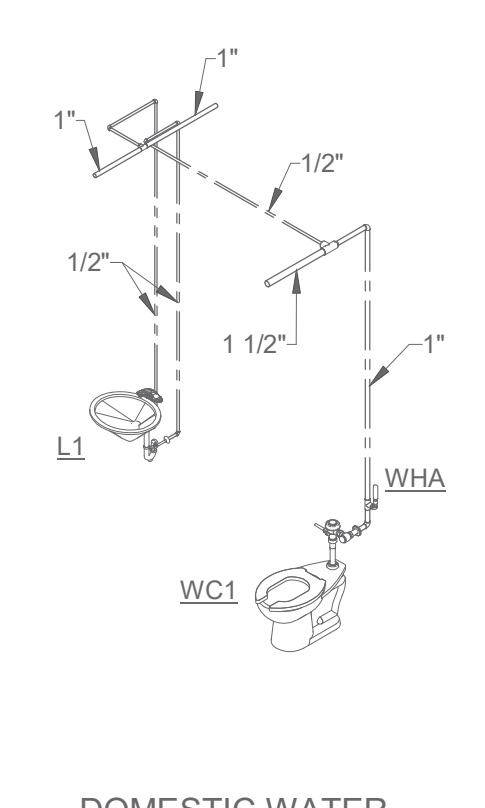
SOLARE
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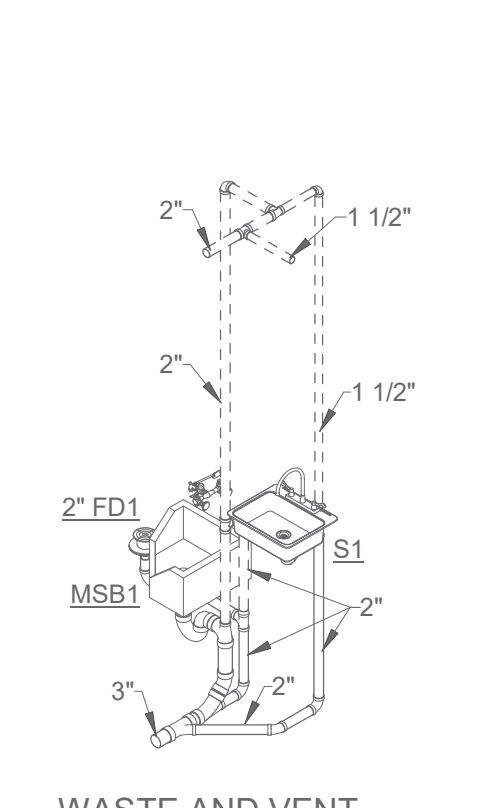
1  **PLUMBING PLAN**
 1/4" = 1'-0"



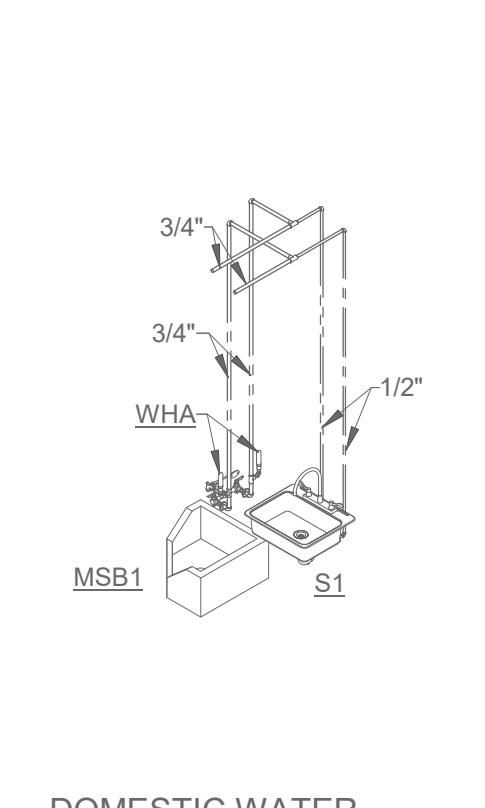
1 **PLUMBING RISER DIAGRAM**



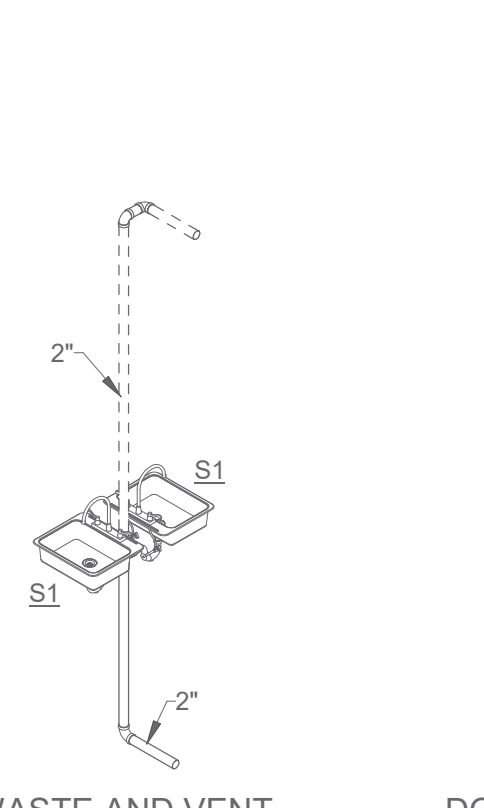
2 **PLUMBING RISER DIAGRAM**



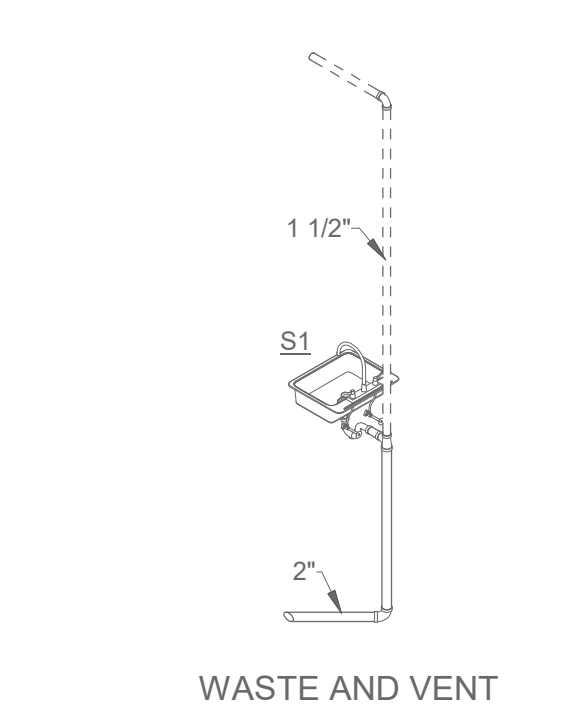
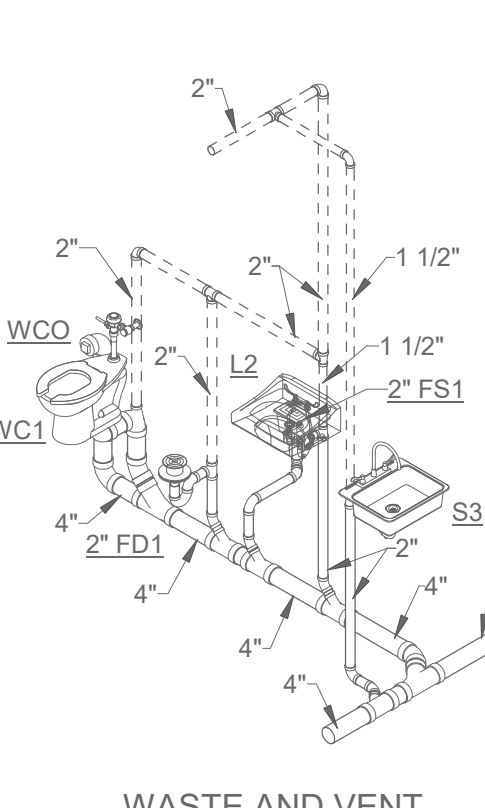
3 **PLUMBING RISER DIAGRAM**



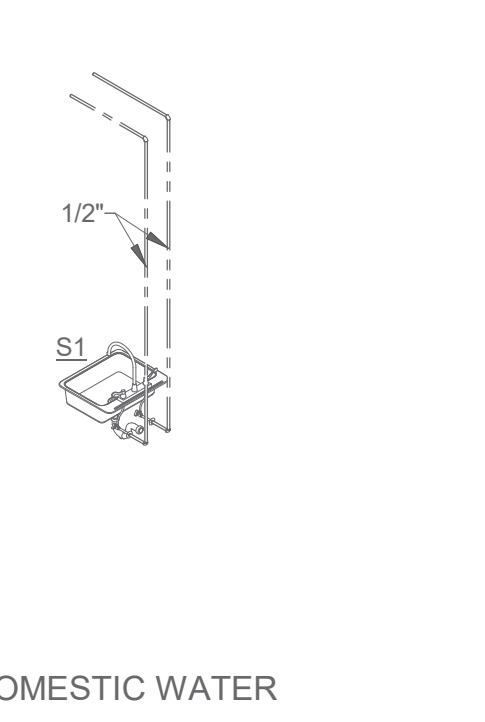
4 **PLUMBING RISER DIAGRAM**



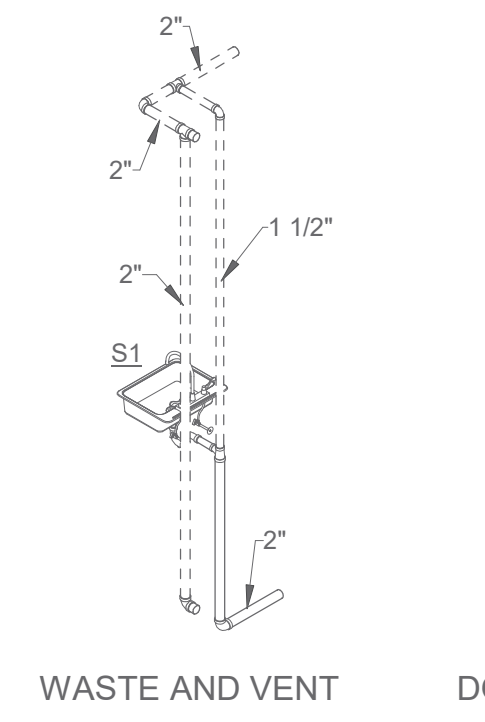
5 **PLUMBING RISER DIAGRAM**



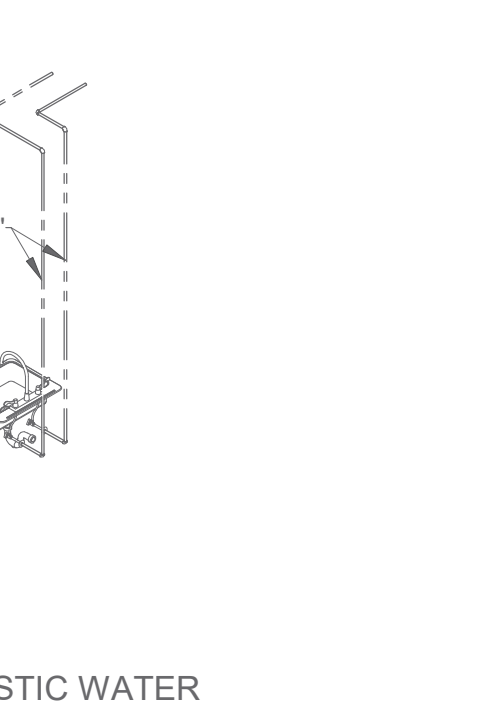
6 **PLUMBING RISER DIAGRAM**



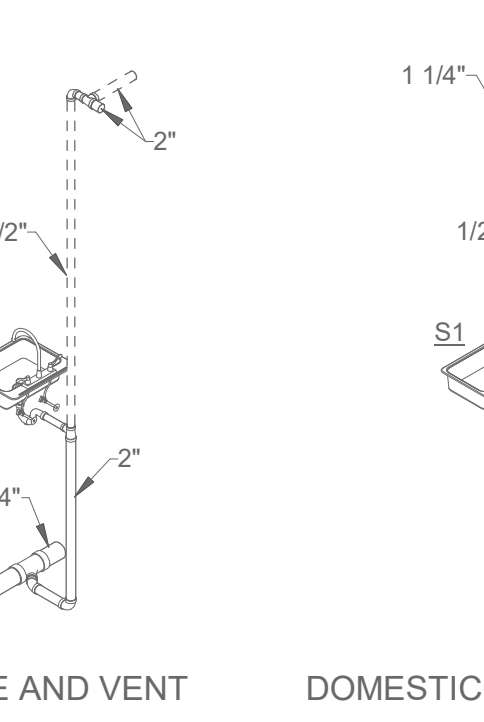
7 **PLUMBING RISER DIAGRAM**



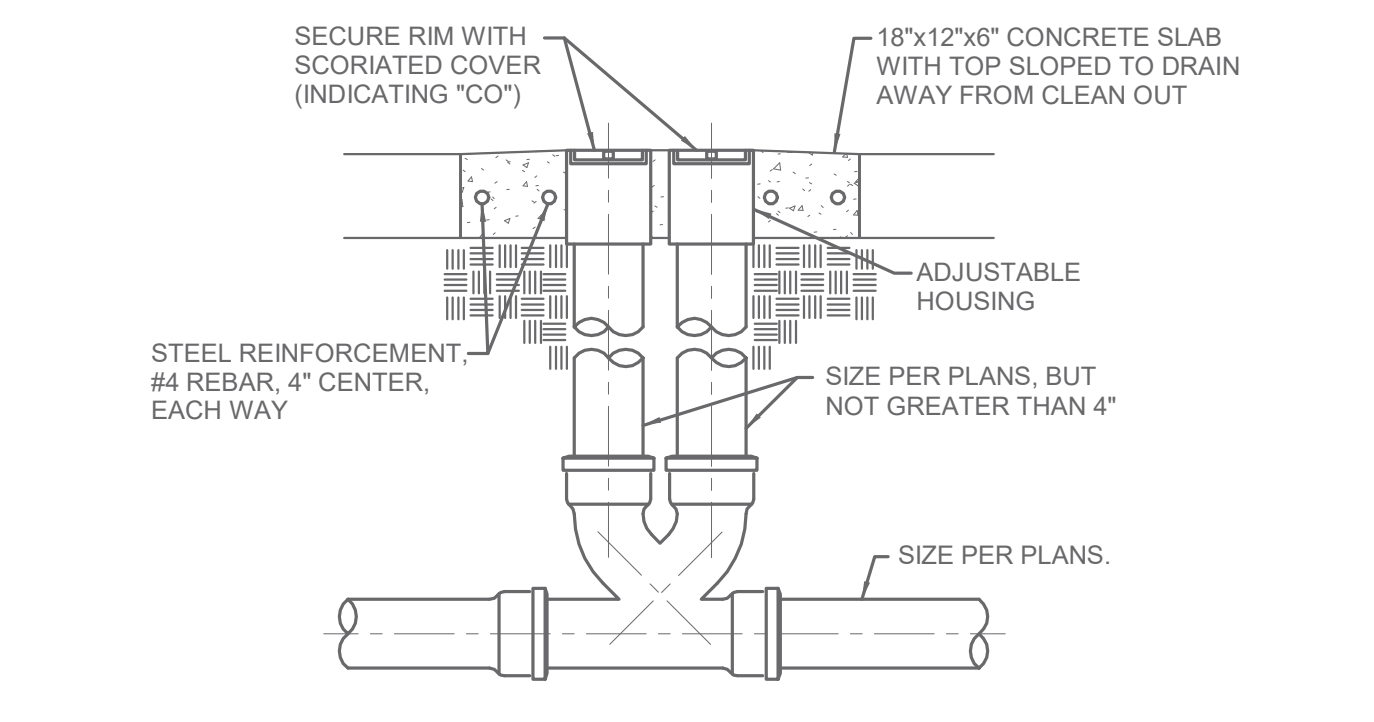
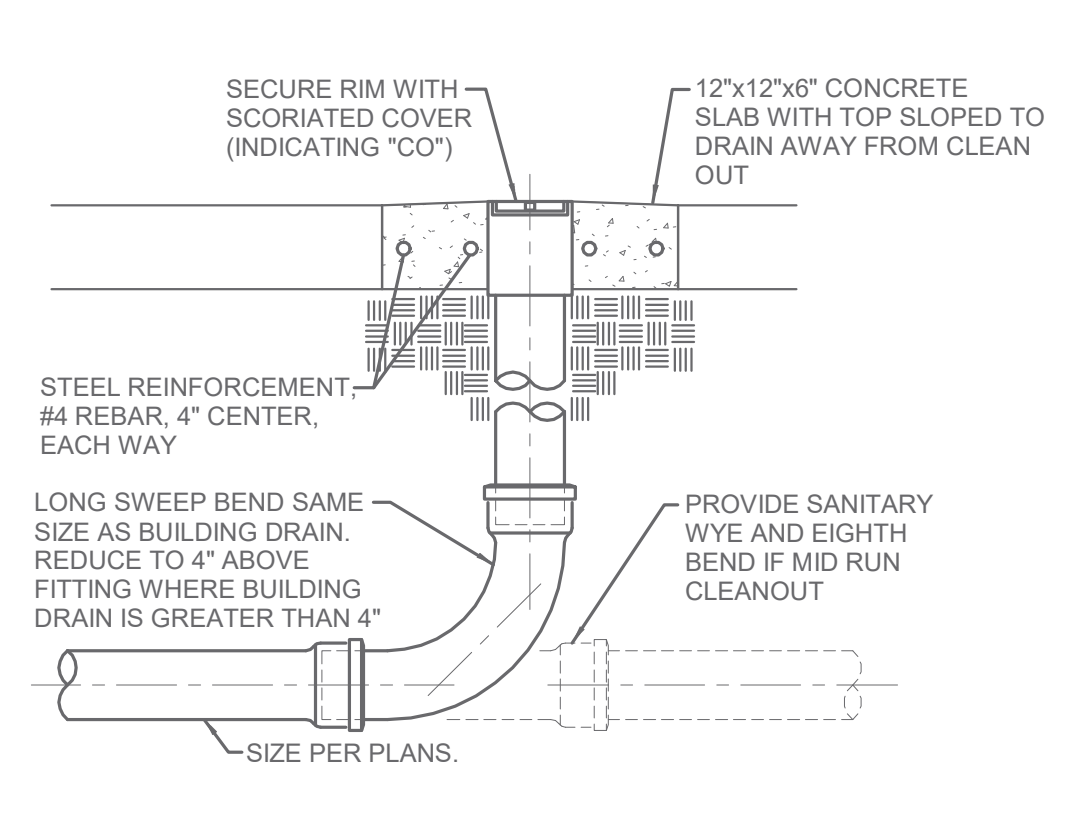
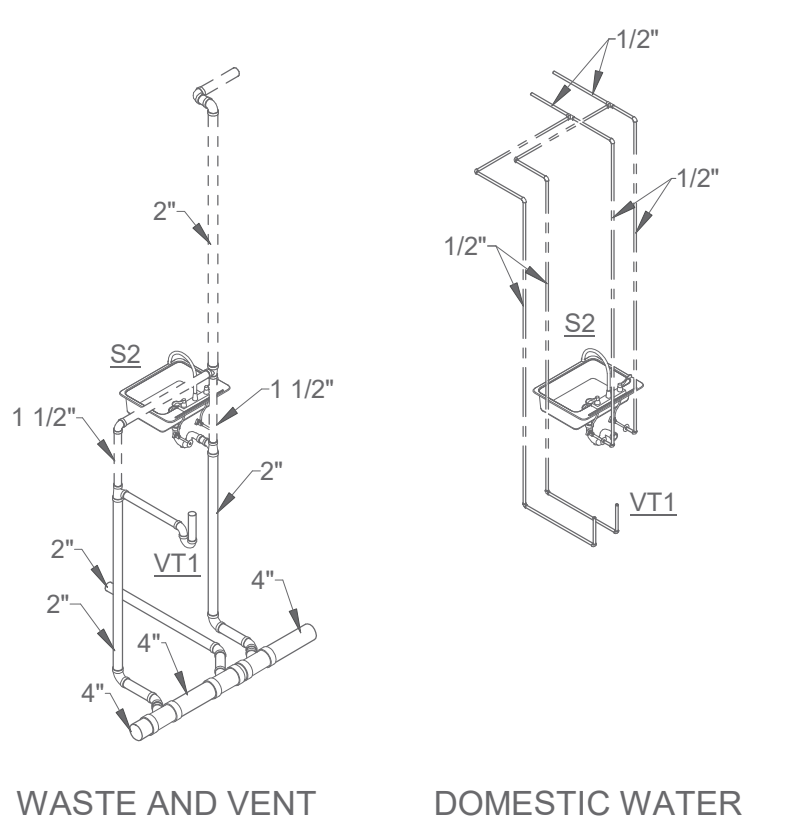
8 **PLUMBING RISER DIAGRAM**



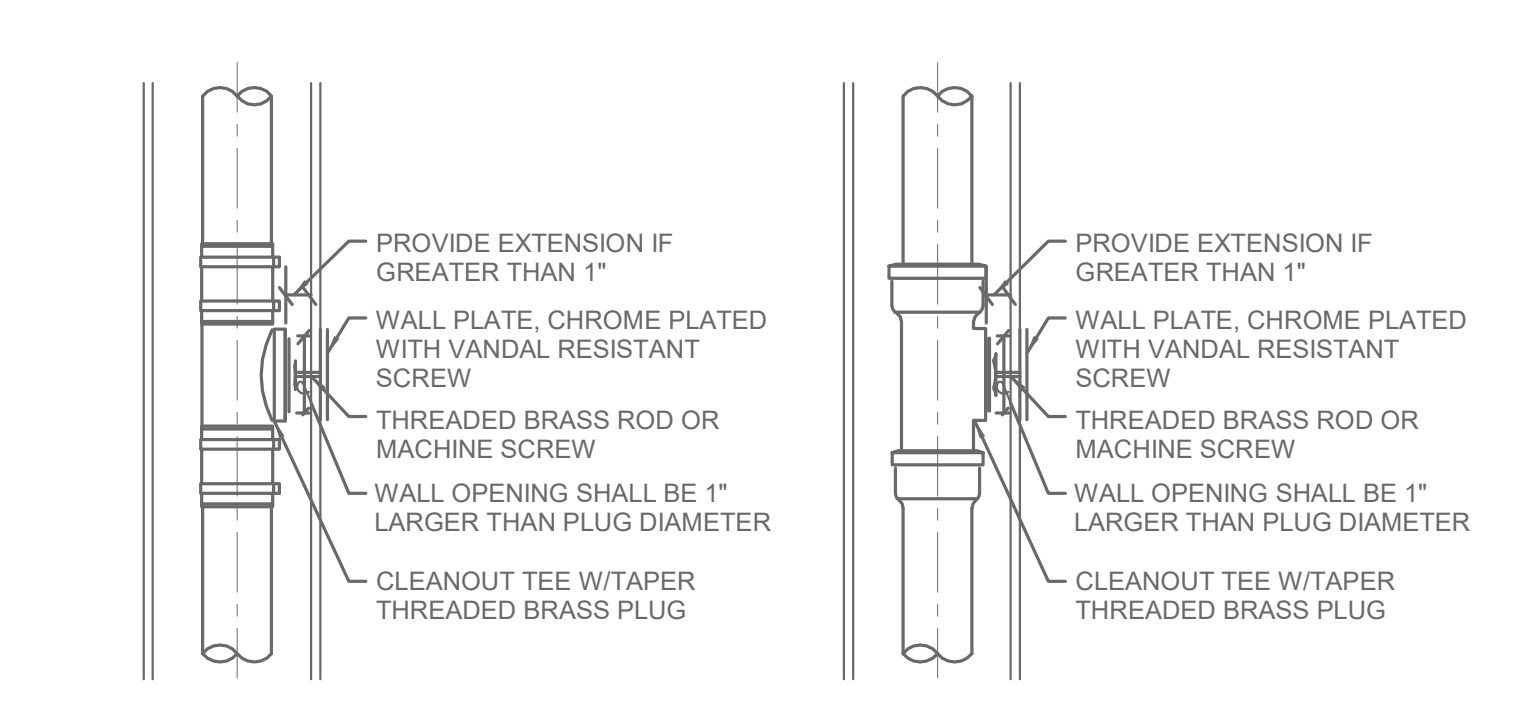
9 **PLUMBING RISER DIAGRAM**



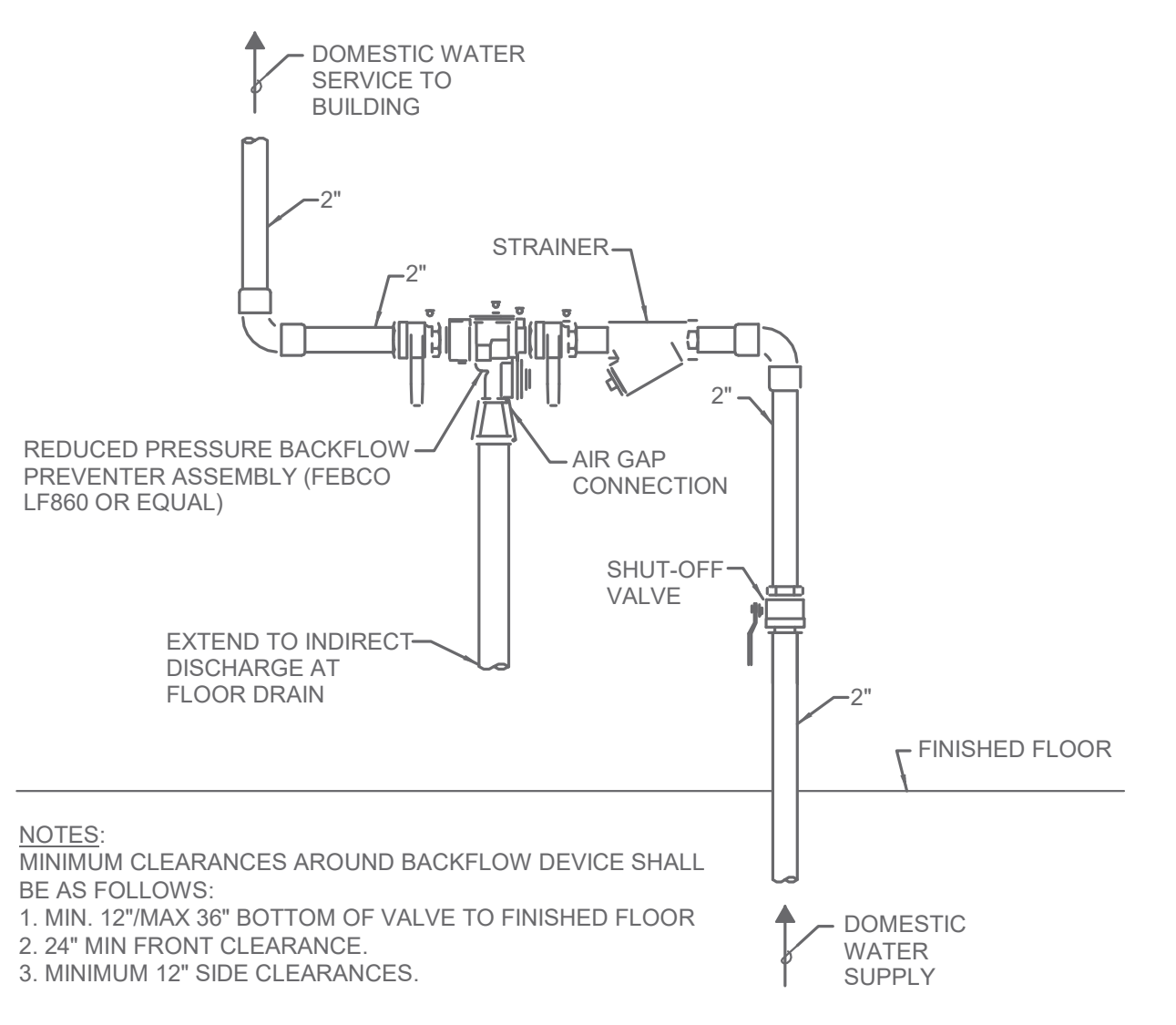
10 **GRADE CLEANOUT DETAIL**



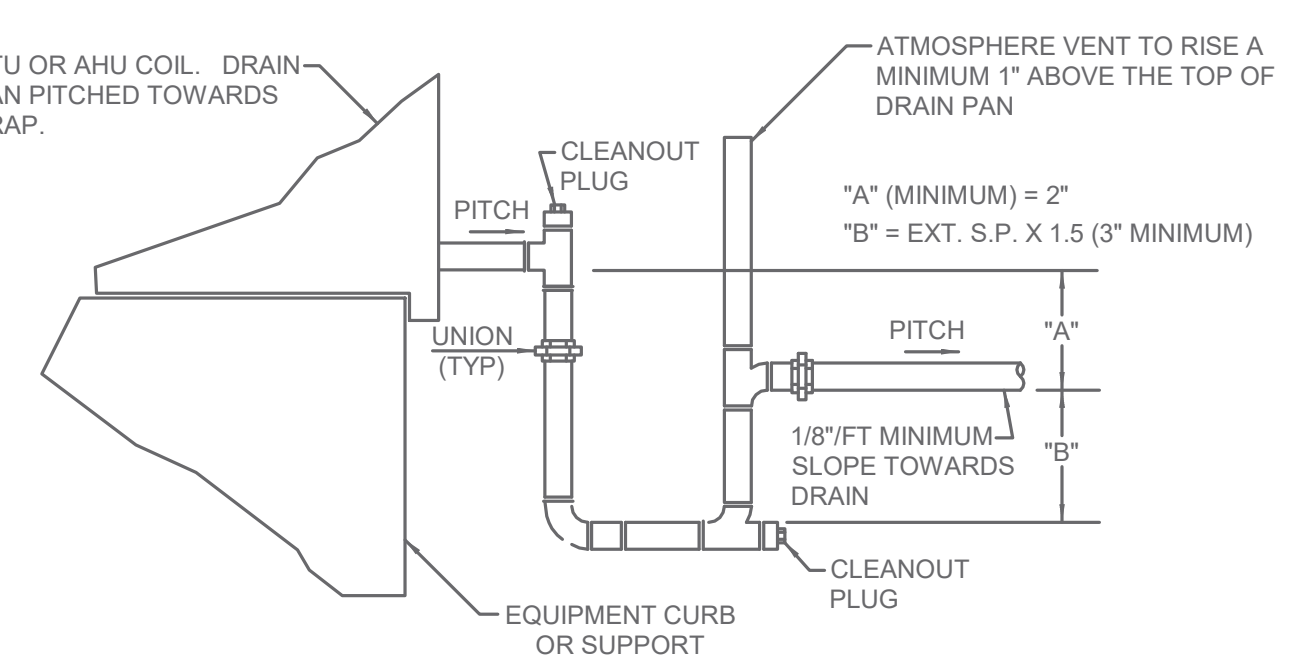
11 **TWO-WAY GRADE CLEANOUT DETAIL**



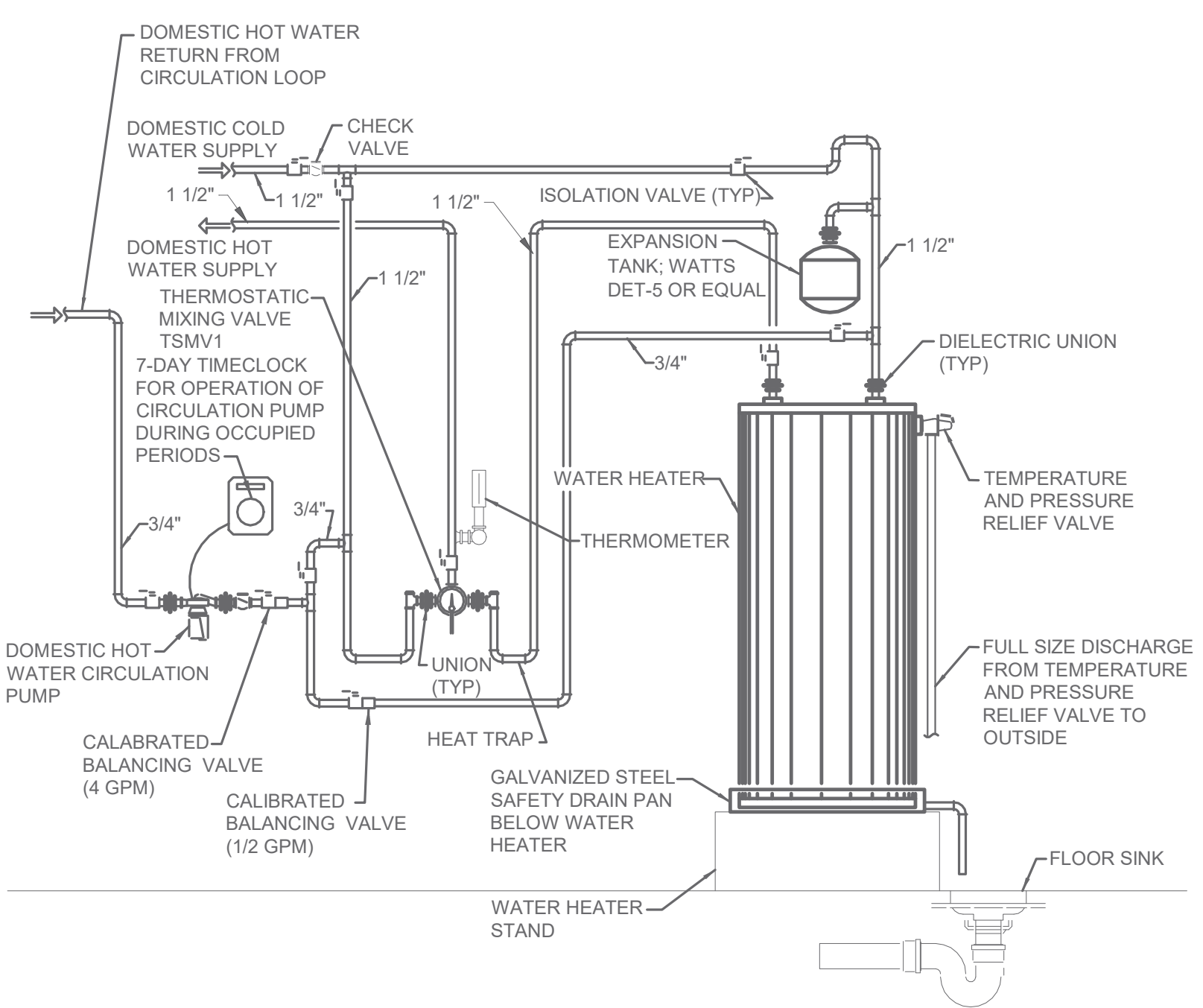
12 **WALL CLEANOUT DETAIL**



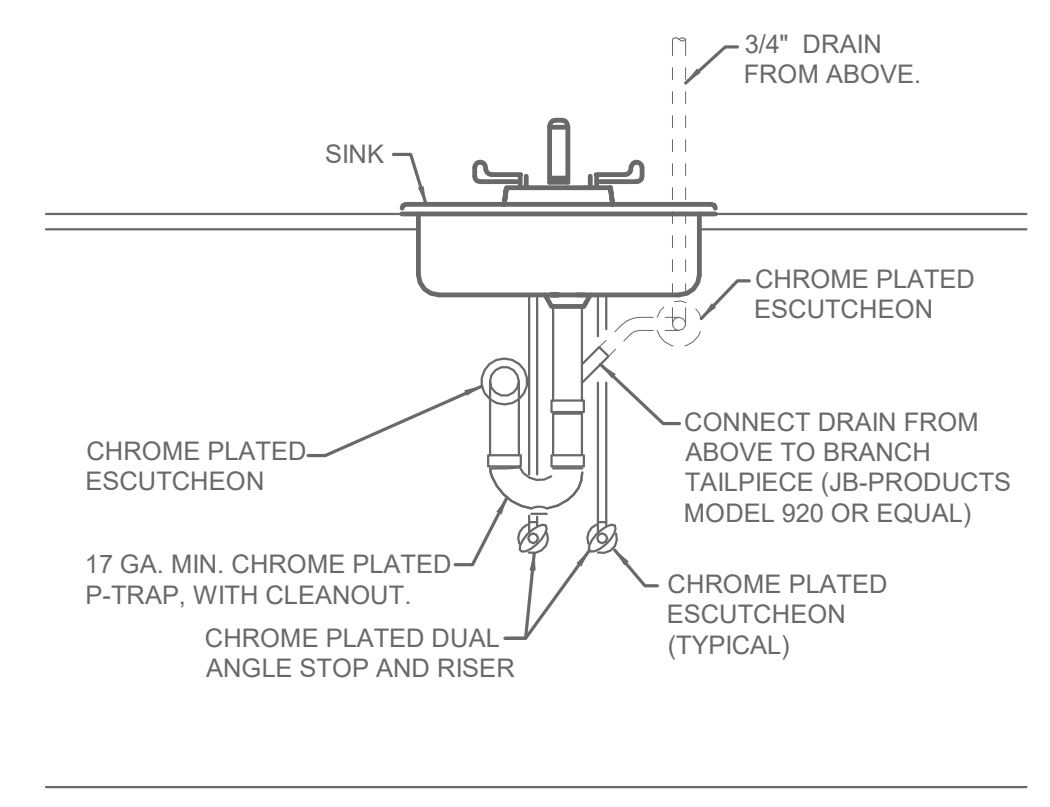
13 **RPZ BACKFLOW PREVENTER DETAIL**



14 **CONDENSATE DRAIN DETAIL**



15 **WATER HEATER DETAIL**



16 **TYPICAL SINK BRANCH TAIL PIECE DETAIL**

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PROJECT NO.: 1744-22
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DRAWN: HCH
REVISED:

09/26/2024
BRIAN D. RICHARDS
74703
LICENSED PROFESSIONAL ENGINEER

SHEET CONTENT
PLUMBING RISER DIAGRAMS
AND DETAILS

SHEET NUMBER

P401

CODE SUMMARY	
NUMBER	NOTE
GOVERNING CODES:	
BUILDING	2015 INTERNATIONAL BUILDING CODE (IBC)
ELECTRICAL	2017 NATIONAL ELECTRICAL CODE (NEC)
ENERGY	2015 INTERNATIONAL ENERGY CONSERVATION CODE (IECC)
FIRE	2015 INTERNATIONAL FIRE CODE (IFC)

COMMON ABBREVIATIONS	
NUMBER	NOTE
AF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AL	ALUMINUM
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BFG	BELOW FINISHED GRADE
BLDG	BUILDING
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CU	COPPER
DEG, °	DEGREES
DEMO	DEMOLITION
EMT	ELECTRICAL METALLIC TUBING
FT	FEET
G, GND	GROUND
GA	GAUGE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
HZ	HERTZ
IG	ISOLATED FLOOR
IN	INCHES
IT	INFORMATION TECHNOLOGY, DATA
L	LENGTH
LBS	POUNDS
LCD	LIQUID CRYSTAL DISPLAY
LED	LIGHT-EMITTING DIODE
LTG	LIGHTING
MAX	MAXIMUM
MDP	MAIN DISTRIBUTION PANEL
MIN	MINIMUM
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NO.	NUMBER
OD	OUTSIDE DIAMETER
PA	PUBLIC ADDRESS
PVC	POLYVINYL CHLORIDE
RE:	REFERENCE, REFER
RFI	REQUEST FOR INFORMATION
SE	SERVICE ENTRANCE
TYP	TYPICAL
U/F	UNDER FLOOR
U/G	UNDER GROUND
U/S	UNDER SLAB
UL	UNDERWRITERS LABORATORIES
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS, VOLTAGE
W	WATTS
W/	WITH
W/O	WITHOUT
WP	WEATHER RESISTANT, WEATHER PROOF

MOUNTING HEIGHTS

NOTE
MOUNTING HEIGHTS SHOWN BELOW SHALL BE USED AS THE DEFAULT MOUNTING HEIGHT FOR THE ITEMS LISTED UNLESS STATED OTHERWISE IN PLAN. ARCHITECT/OWNER MAY REVISE ANY MOUNTING HEIGHT NECESSARY FOR PREFERENCE OF DESIGN. CONTRACTOR SHALL OBTAIN AND REVIEW ALL ELEVATIONS PROVIDED BY ARCHITECT/OWNER TO VERIFY LOCATIONS PREFERRED BY OWNER OR ARCHITECT.

LIGHTING CONTROL SWITCHES:
- 44" AFF TO HIGHEST OPERABLE PART IN "ON" POSITION.

WALL RECEPTACLES:
- 15" MINIMUM AFF TO CENTERLINE OF LOWEST RECEPTACLE OR 18" AFF TO CENTERLINE OF BOX.
- WATER COOLERS-DIRECTLY BEHIND COOLER - COORDINATE ELEVATION WITH THE COOLER TO BE INSTALLED PRIOR TO ROUGH-IN
- IN AREAS NOT LISTED BELOW ABOVE COUNTER RECEPTACLES SHALL BE 6" ABOVE COUNTER

BATHROOM RECEPTACLES:
-44" MAX AFF TO CENTERLINE OF HIGHEST RECEPTACLE.
-12" MINIMUM FROM ANY OBSTRUCTION
-12" MAX FROM LEADING EDGE OF VANITY COUNTER IF ON SIDE WALL.

RECEPTACLES BEHIND KITCHEN COUNTERS:
-44" MAX AFF TO CENTERLINE OF HIGHEST RECEPTACLE
-12" MIN FROM ANY OBSTRUCTION (INCLUDING FRIDGE)
-36" MINIMUM FROM CORNERS
-44" MAX AFF TO "ON" POSITION OF REDUNDANT CONTROLS FOR RANGE HOOD (TYPE A UNITS / ACCESSIBLE UNITS / COMMON AREA KITCHENS)
-24" MAX DEPTH BETWEEN LEADING EDGE OF COUNTERTOP AND RECEPTACLES/SWITCHES LOCATED ON KITCHEN BACKSPLASH WALL (TYPE A UNITS / ACCESSIBLE UNITS / COMMON AREA KITCHENS)

DATA JUNCTION BOX FOR DATA AND OR COMMUNICATIONS:
-MOUNT ADJACENT TO ASSOCIATED POWER OUTLET FOR SIMILAR DEVICES OR USE. IN THE EVENT IT IS NOT CLEAR VERIFY WITH ARCHITECTURAL ELEVATIONS OR CONFIRM WITH DESIGNER.

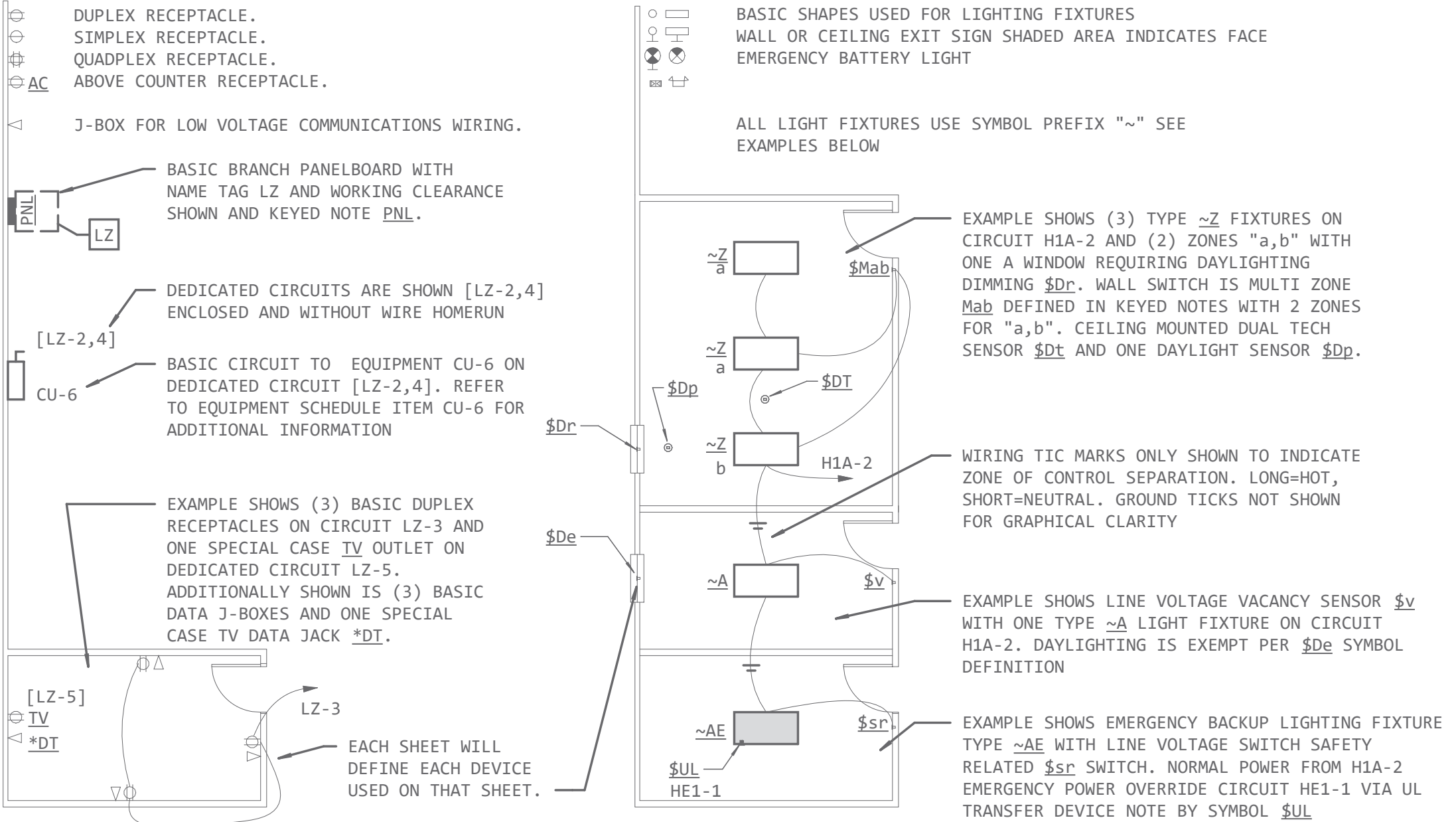
ALL THE ABOVE MENTIONED MOUNTING HEIGHTS SHALL BE COORDINATED WITH ARCHITECTURAL ELEVATIONS AND DETAILS.

PROJECT GENERAL NOTES	
NUMBER	NOTE
1	REFER TO SPECIFICATIONS FOR MATERIALS AND METHODS OF ELECTRICAL CONSTRUCTION.
2	REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR THE EXACT LOCATION OF ALL CEILING MOUNTED DEVICES.
3	REFER TO ARCHITECTURAL INTERIOR ELEVATION DRAWINGS, WHERE THE ARCHITECT HAS DRAWN SUCH ELEVATIONS, FOR THE LOCATIONS OF ALL WALL MOUNTED DEVICES.
4	COORDINATE THE EXACT LOCATION OF ALL THERMOSTATS, STARTERS, DISCONNECTS, ETC. AND COORDINATE ALL REQUIREMENTS FOR CONTROL AND POWER WIRING WITH THE MECHANICAL CONTRACTOR OR THE TRADE PROVIDING THE EQUIPMENT.
5	ALL RECEPTACLE OUTLETS LOCATED WITHIN 6'-0" OF A MET BAR OR SINK SHALL BE GFI TYPE. ALL RECEPTACLE OUTLETS LOCATED OUTDOORS SHALL BE WP/GFI. ALL RECEPTACLES SERVING VENDING MACHINES AND ELECTRIC WATER COOLERS SHALL BE GFI TYPE.
6	ALL CONDUIT PENETRATIONS THROUGH THE ROOF TO SERVE MECHANICAL EQUIPMENT SHALL BE WITHIN THE ASSOCIATED EQUIPMENT ROOF CURB. COORDINATE LOCATIONS OF PENETRATIONS WITH THE MECHANICAL CONTRACTOR.
7	PROVIDE ACCESS DOORS IN WALLS AND CEILINGS WHERE ACCESS TO CONCEALED ELECTRICAL BOXES AND DEVICES IS REQUIRED. ALL ACCESS LOCATIONS ARE
8	EACH BRANCH AND FEEDER CIRCUIT SHALL BE PROVIDED WITH A GROUND CONDUCTOR SIZED PER ARTICLE 250 OF THE NATIONAL ELECTRICAL CODE (NFPA 70), WHERE A CONDUIT CONTAINS MULTIPLE BRANCH CIRCUITS, PROVIDE A SINGLE GROUND CONDUCTOR UNLESS OTHERWISE NOTED.
9	INTEGRATED EQUIPMENT RATINGS (IIC) SHOWN ARE MINIMUMS. CONTRACTOR SHALL PROVIDE MANUFACTURER'S EQUAL OR NEXT HIGHER STANDARD RATINGS.
10	ALL PULL CORD/WIRE PROVIDED FOR EMPTY RACEWAY/CONDUIT SYSTEMS SHALL HAVE A MINIMUM STRENGTH OF 200 LBS TENSILE STRENGTH. ALL EMPTY CONDUITS SHALL HAVE A PULL CORD.
11	PROVIDE LUGS AS REQUIRED FOR ALL ELECTRICAL EQUIPMENT TO ACCEPT THE SIZE AND NUMBER OF CONDUCTORS SHOWN IN THESE DOCUMENTS.
12	ALL CONDUCTORS SHALL BE THW/THHN UNLESS OTHERWISE INDICATED. CONDUCTORS SHALL BE RATED FOR 75 DEGREES C. TERMINATIONS SHALL BE RATED FOR 75 DEGREES C. DEVIATIONS SHALL COMPLY WITH NEC ARTICLE 110 FOR EXACT EQUIPMENT BEING PROVIDED.
13	OUTLET BOXES SHALL NOT BE INSTALLED BACK TO BACK IN WALLS. A MINIMUM OF 6" SEPARATION BETWEEN BOXES SHALL BE MAINTAINED TO PREVENT SOUND TRANSMISSION.
14	THERE SHALL BE NO SPLICES OF WIRING INSIDE PANELBOARDS OR DISCONNECT SWITCHES. ONLY ONE WIRE SHALL BE TERMINATED TO ANY SINGLE LUG ON A CIRCUIT BREAKER.
15	EXPOSED CONDUIT INSTALLED IN OPEN CEILING AREAS SHALL BE MOUNTED TIGHT TO STRUCTURE AND ROUTE IN PARALLEL WITH ADJACENT WALL.
16	COORDINATE THE REQUIREMENTS FOR OVERCURRENT PROTECTIVE DEVICE SIZE, DISCONNECT SWITCH SIZE, AND CONDUCTOR AND CONDUIT SIZES WITH THE REQUIREMENTS OF THE MECHANICAL EQUIPMENT THAT IS ACTUALLY TO BE INSTALLED, AND PROVIDE AND INSTALL ALL ELECTRICAL COMPONENTS AS REQUIRED. THE ELECTRICAL COMPONENT SIZING SHOWN ON THESE DRAWINGS IS BASED UPON THE REQUIREMENTS FOR THE SPECIFIED MECHANICAL EQUIPMENT AVAILABLE AT THE TIME OF DESIGN. VARIATIONS IN REQUIREMENTS MAY OCCUR AS A RESULT OF THE PROVISION OF OTHER MANUFACTURER'S EQUIPMENT OR IN CHANGES TO THE SPECIFIED EQUIPMENT. SUCH REVISED REQUIREMENTS ARE A PART OF THIS CONTRACT AND SHALL BE ACCOMMODATED WITHOUT ADDITIONAL CHARGE.
17	FOR COORDINATION PURPOSES, DEVICES MAY BE MOVED A MAXIMUM DISTANCE OF FIVE FEET, PRIOR TO INSTALLATION, AT NO COST TO THE OWNER, UPON INSTRUCTION BY THE ARCHITECT OR ENGINEER
18	ALL DEVICE PLATE COLORS TO BE AS SPECIFIED BY ARCHITECT.
19	CIRCUITS SHOWN TO SPECIFIC EQUIPMENT ARE SHOWN TO DISCONNECT. CONTRACTOR SHALL EXTEND CIRCUIT FROM DISCONNECT TO FINAL TERMINATION OF DEVICE PROVIDED BY OTHERS AND MAKE UNIT OPERATIONAL. COORDINATE EXACT TERMINATION POINTS WITH SUPPLIER OF EQUIPMENT.
20	ALL CONDUIT SHALL BE CONCEALED IN NEW BUILDING CONSTRUCTION WHERE POSSIBLE.
21	ALL CIRCUITS TO CONTAIN GROUND WIRE, TIC MARKS FOR WIRING DO NOT SHOW GROUND WIRE FOR GRAPHICAL CLARITY.
22	ALL RECEPTACLES SHALL BE TAMPER RESISTANT PER NEC 406.12

FIRE ALARM DESIGN GENERAL NOTES	
NUMBER	NOTE
1	DRAWINGS DO NOT SHOW EXACT PLACEMENT OF DEVICES. THIS IS A DELEGATED DESIGN PERFORMANCE SPECIFICATION FOR THE FIRE ALARM SYSTEM.
2	THE CONTRACTOR SHALL EMPLOY A FIRE ALARM PLANNING SUPERINTENDENT, CERTIFIED OR LICENSED BY THE STATE FIRE MARSHAL'S OFFICE, TO DESIGN AND INSTALL A COMPLETE FIRE ALARM SYSTEM.
3	THE LICENSED FIRE ALARM DESIGNER SHALL ENSURE THAT HIS DESIGN MEETS ALL OF THE REQUIREMENTS OF NFPA, ADA, NEC, TAS AND ALL LOCAL CODES AND AMENDMENTS, AND THE REQUIREMENTS OF THE AUTHORITY HAVING JURISDICTION.
4	CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS TO DETERMINE OCCUPANCY CLASSIFICATION AND OCCUPANT LOAD OF THE BUILDING.
5	PROVIDE SMOKE DUCT DETECTORS FOR EACH ATR HANDLING UNIT EXCEEDING 2000 CFM. DETECTORS SHALL BE MONITORED BY MAIN FIRE ALARM PANEL PER LOCAL FIRE MARSHALL REQUIREMENTS.
6	VERIFY FINAL LOCATION OF FIRE ALARM CONTROL PANEL WITH FIRE MARSHALL PRIOR TO INSTALLATION. VERIFY FINAL LOCATION OF FIRE ALARM ANNUNCIATOR AND/OR VOICE EVAC PANEL WITH OWNER AND FIRE MARSHALL PRIOR TO INSTALLATION.

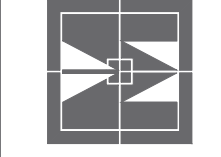
PROJECT UNDERLINED KEYED NOTES	
KEY	Description
\$5r	LINE VOLTAGE TOGGLE SWITCH FOR LOCATIONS WHERE AUTOMATIC OFF WOULD ENGAGE LIFE SAFETY.
\$5v	DIGITAL LOW VOLTAGE BUTTON PROGRAMMED TO VACANCY SENSOR (ON/OFF, RAISE/LOWER) USED TO ALLOW OCCUPANTS TO MANUALLY TURN LIGHTS ON WHEN THEY ENTER THE ROOM AND HAVE LIGHTS TURN OFF AUTOMATICALLY WHEN ROOM IS VACANT
AC	ABOVE COUNTER RECEPTACLE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT.
AG	GFI ABOVE COUNTER RECEPTACLE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT.
CIR	MOTOR RATED SWITCH FOR CIRCULATION PUMP. CONFIRM LOCATION WITH INSTALLER OF PUMP.
DIS	800/3/NF/NEMA 3R MAIN SERVICE DISCONNECT. COORDINATE EXACT INSTALLATION LOCATION ON SITE.
DRY	OUTLET FOR CLOTHES DRYER COORDINATE EXACT NEMA CONFIGURATION WITH ITEM PURCHASED BY OTHERS MOUNT AT 36" AFF.
DT	4" SQUARE JBOX WITH 3/4" C TO ACCESSIBLE LOCATION ABOVE CEILING FOR OWNERS DATA AND TELEPHONE WIRING.
EF	MOTORIZED SWITCH WITH OCCUPANCY SENSOR/TIMER FOR EXHAUST FAN. REFER TO MECHANICAL DESIGN FOR CONTROL METHOD AND SETTINGS.
EF-1	MOTORIZED SWITCH FOR EXHAUST FAN IN LARGE DOGS AREA. REFER TO MECHANICAL DESIGN FOR CONTROL METHOD AND SETTINGS.
FRZ	GFI RECEPTACLE FOR FREEZER. COORDINATE LOCATION WITH OWNER.
GD	SIMPLEX GFI RECEPTACLE BELOW SINK FOR GARBAGE DISPOSAL. PROVIDE ABOVE COUNTER CONTROL SWITCH AT LOCATION INDICATED BY ARCHITECT ELEVATIONS. OUTLET TO BE ACCESSIBLE FROM INSIDE CABINET.
IRR	GFI OUTLET FOR IRRIGATION CONTROLLER. COORDINATE MOUNTING LOCATION WITH INSTALLER OF IRRIGATION SYSTEM.
MBAUH-1	30/2/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT
MBAUH-2	30/2/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT
MBAUH-3	90/3/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT.
MBCU-1	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT
MBCU-2	60/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT.
MBCU-3	80/3/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT
MBCU-4	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT EU-4.
MDP	MAIN DISTRIBUTION PANEL 800A 240V 3PH HIGH LEG
MW	GFI RECEPTACLE FOR MICROWAVE. COORDINATE LOCATION WITH OWNER.
PHWH1	30/2/NF/NEMA 3R DISCONNECT FOR ELECTRIC WATER HEATER
POLE	25" TALL 5" SQUARE STRAIGHT STEEL POLE
Q	QUADPLEX RECEPTACLE
R	DUPLEX RECEPTACLE
RF	GFI RECEPTACLE FOR REFRIGERATOR. COORDINATE LOCATION WITH INSTALLER OF REFRIGERATOR.
REV	RECESSED DUPLEX RECEPTACLE FOR TELEVISION OR DISPLAY, COORDINATE EXACT ELEVATION WITH ARCHITECT.
UTILITY	PROPOSED UTILITY PAD MOUNT TRANSFORMER. PROVIDE AND INSTALL PAD PER UTILITY COMPANY STANDARDS. COORDINATE ADDITIONAL REQUIREMENT WITH UTILITY COMPANY.
WASH	OUTLET FOR CLOTHES WASHING MACHINE COORDINATE EXACT NEMA CONFIGURATION WITH ITEM PURCHASED BY OTHERS MOUNT AT 36" AFF.
WF	DUPLEX RECEPTACLE FOR WATER FOUNTAIN. COORDINATE EXACT LOCATION AND HEIGHT WITH THE INSTALLER OF THE EQUIPMENT.
WP	WEATHER RESISTANT RECEPTACLE IN NEMA 3R WHILE IN USE COVER.
X-RAY	OUTLET FOR X-RAY MACHING COORDINATE EXACT NEMA CONFIGURATION AND MOUNTING HEIGHT WITH OWNER.
-AF2	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE. REFER TO SCHEDULE.
-AF2E	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE WITH EMERGENCY BATTERY. REFER TO SCHEDULE.
-CH	CEILING SUSPENDED CHANDELIER LIGHT. 124W 4623LM 3000K. DARK BRONZE FINISH.
-D1	4" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.
-D2	6" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.
-D2E	6" RECESSED LED CAN LIGHT FIXTURE WITH EMERGENCY BATTERY. REFER TO SCHEDULE.
-L1	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
-L2	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
-L3	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
-MI	MEDICAL EXAMINATION LIGHT BY OWNER.
-P1	CEILING SUSPENDED PENDANT LIGHT. TO BE SELECTED BY AOR
-PL	AREA LIGHT INSTALLED ON 25' BY 5' STEEL SQUARE POLE. REFER TO LUMINAIRE SCHEDULE AND POLE BASE DETAILS.
-S1	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
-S1E	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
-S2	2FT SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
-SIGN	FLOOD LIGHT FOR MONUMENT SIGN ILLUMINATION
-SLM	LED SIDE LIT MIRROR ABOVE TOILET SINK. COMES WITH 120V/24V ADAPTOR TO CONNECT TO GFCI OUTLET. WIDTH & HEIGHT TO BE DETERMINED BY ARCHITECT. DARK BRONZE FINISH.
-WS1	WALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.
-WS2	WALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.
-WS3	WALL MOUNTED LED SCENCE. REFER TO SCHEDULE.
-XEC	ECONOMICAL EXIT LIGHT CEILING MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION
-XEN	ECONOMICAL EXIT LIGHT WALL MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION.
Bdt	DUAL TECHNOLOGY SENSOR COORDINATED WITH ASSOCIATED SWITCHING SYSTEM

SYMBOLS ARE NOT LIMITED TO EXAMPLES SHOWN BELOW, REFER TO KEYED NOTES EACH SHEET FOR MORE SPECIFIC DEFINITIONS AND DIRECTIONS.



EXAMPLE ELECTRICAL DRAFTING
1/8" = 1'-0"

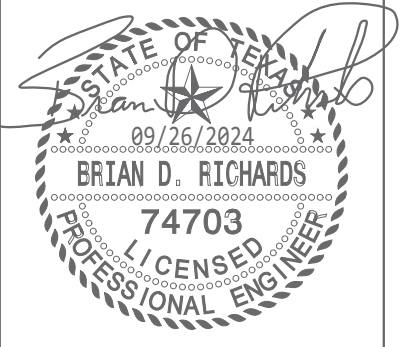
MAGEE ARCHITECTS, L.P.
DESIGNERS - PLANNERS - INTERIORS
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TARWATER VETERINARIAN CLINIC

802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:

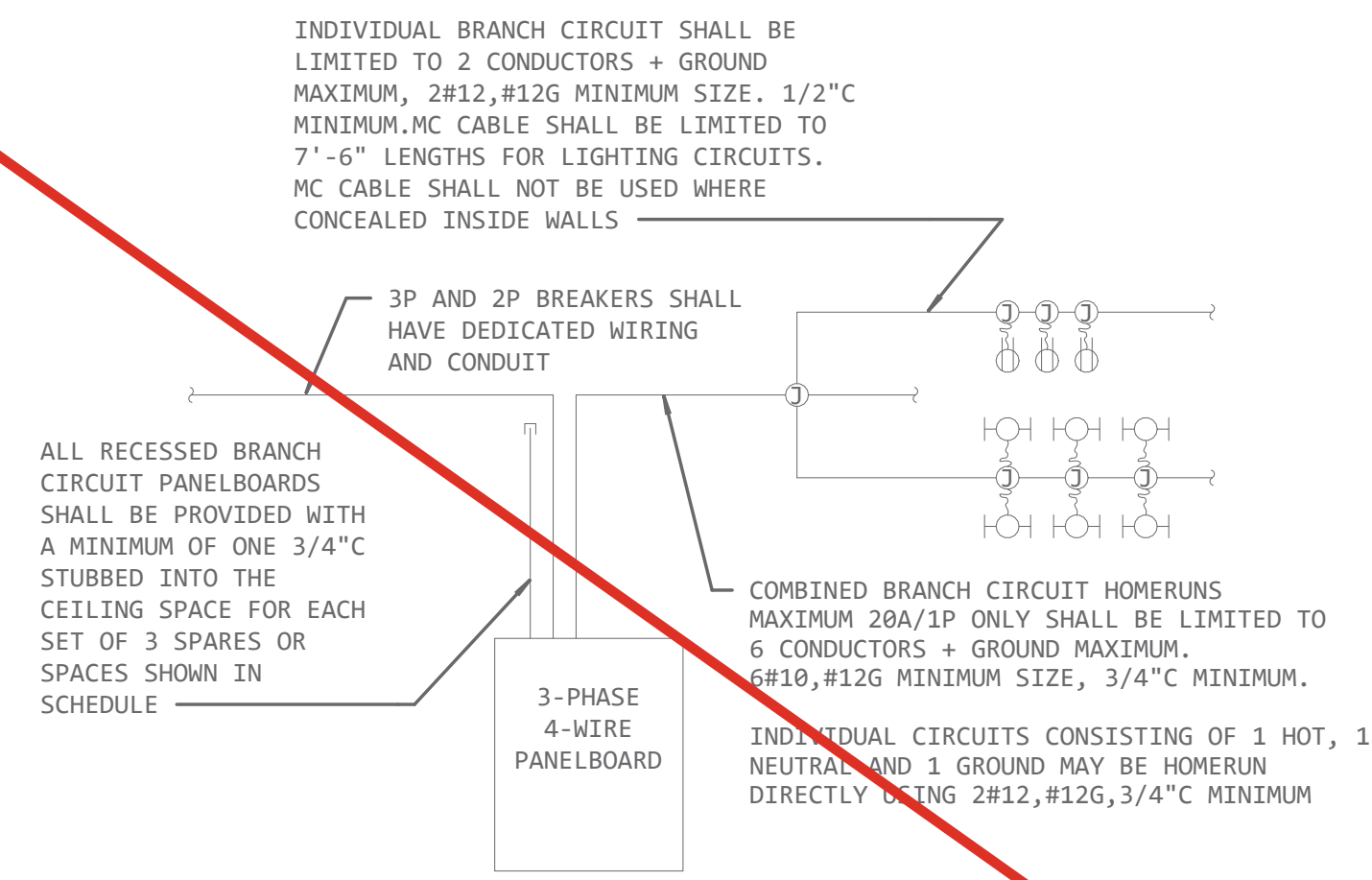


SHEET CONTENT
ELECTRICAL GENERAL NOTES
AND ABBREVIATION

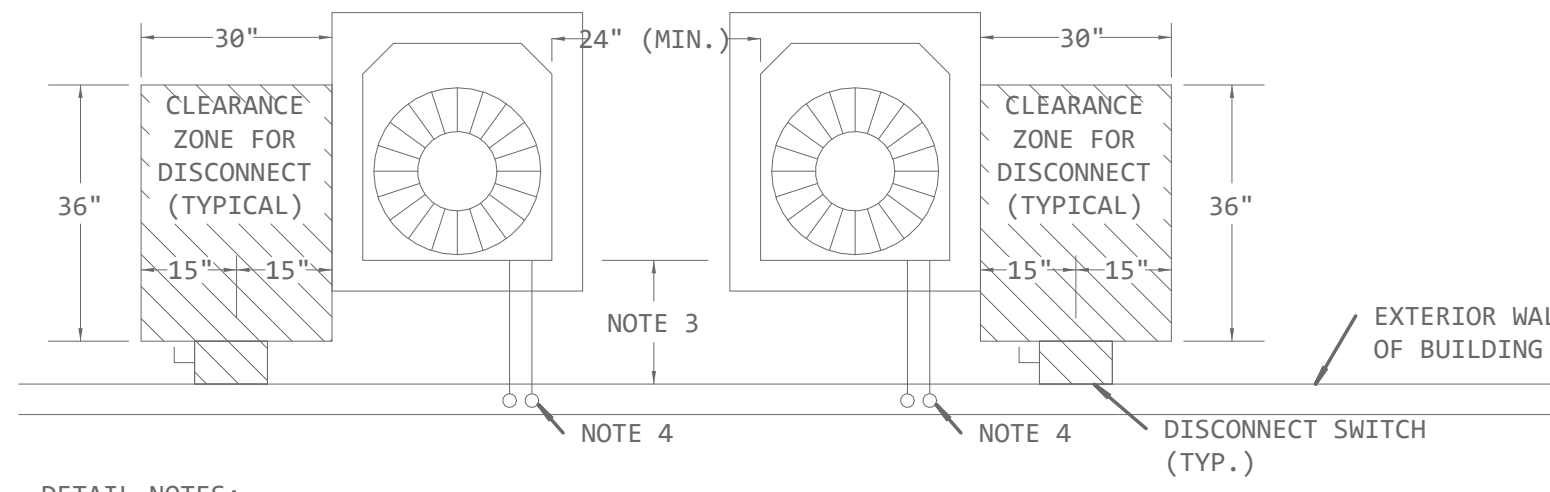
SHEET NUMBER

E001

SOLARE
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1300 Summit Avenue, Suite 514
Fort Worth, Texas 76102
Tel 817-529-6800
www.solare-eng.com
Texas Registration # F-10963



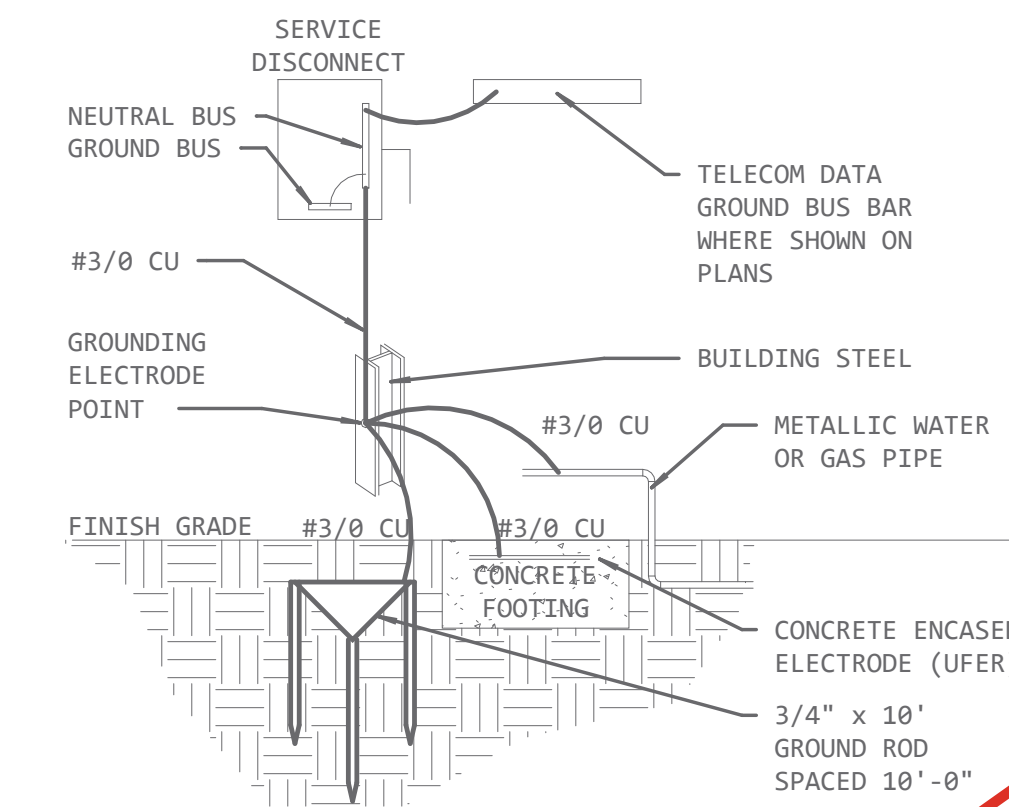
1 LIGHTING CONTROLS DETAIL
N.T.S.



DETAIL NOTES:

- TOP DISCHARGE AREA SHOULD BE UNRESTRICTED FOR AT LEAST FIVE (5) FEET ABOVE UNIT. UNIT SHOULD BE PLACED SO ROOF RUN-OFF WATER DOES NOT POUR DIRECTLY ON UNIT.
- UNIT SHOULD BE UNOBSTRUCTED FOR 12" (MIN.) ON ANY SIDE AND IN FRONT.
- 12" (MIN) FOR DISCONNECT SWITCH ON THE SIDE OF UNIT. DISCONNECT SWITCH MAY BE PLACED BEHIND UNIT, IN THIS CASE THIS DIMENSION FROM THE FRONT OF THE DISCONNECT SWITCH TO THE BACK OF THE UNIT CAN BE NO SMALLER THAN 36" FOR 208 V. AND 42" FOR 480 V. UNITS.
- REFRIGERANT PIPING TO RUN IN WALL UP TO MECHANICAL SPACE AND TO AIR HANDLER UNIT. SEAL WALL PENETRATION WEATHER TIGHT.

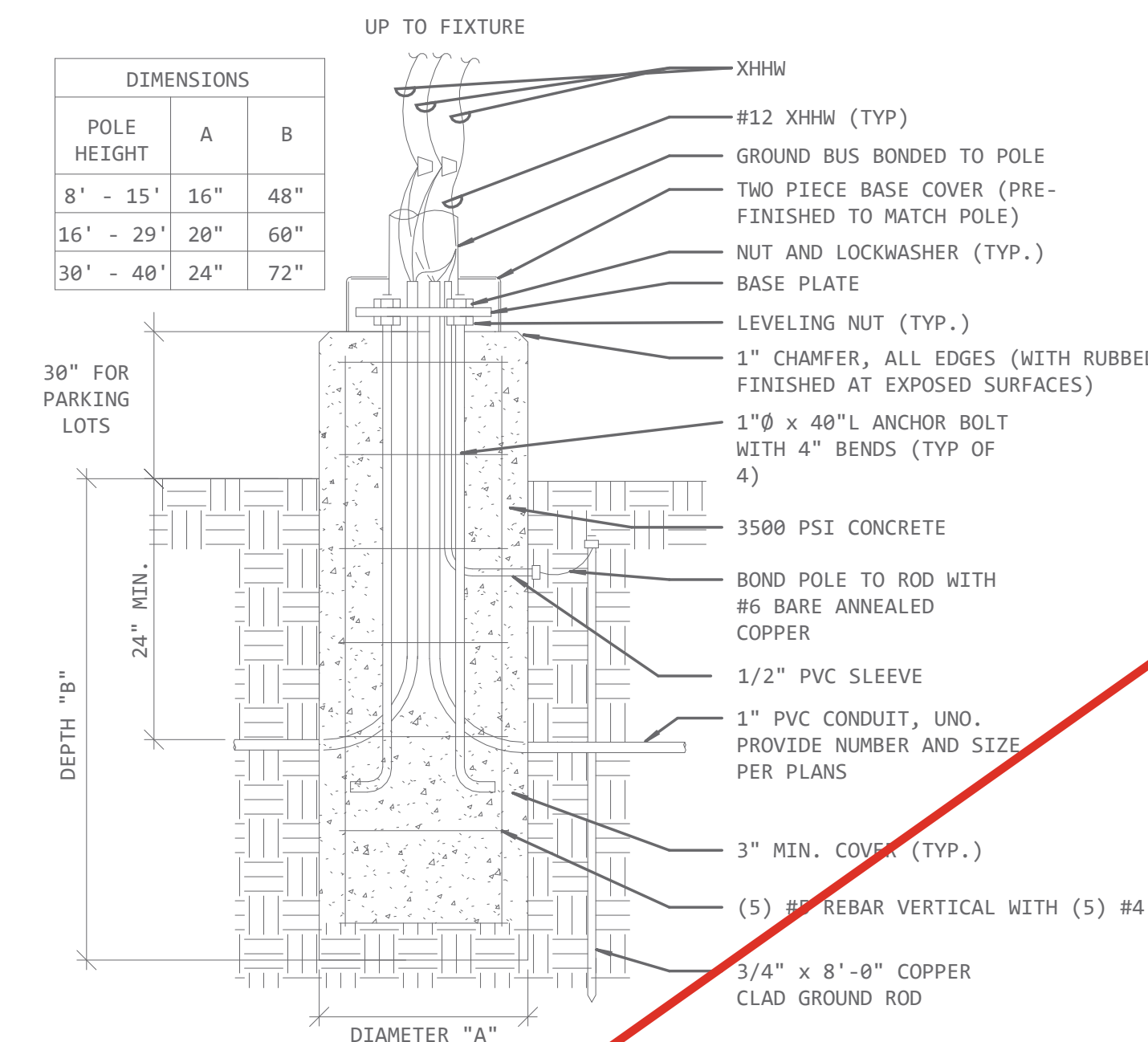
2 DISCONNECT CLEARANCE DETAIL
N.T.S.



SERVICE ENTRANCE GROUNDING DETAIL NOTES:

- AT THE CONTRACTOR'S OPTION, ANY ONE OF THE THREE ALLOWED ELECTRODE SYSTEMS SHOWN MAY BE USED AS THE MAIN GROUNDING ELECTRODE POINT (GROUND RODS, UFER, OR BUILDING STEEL) WITH ALL OTHER ELECTRODES BONDED TO IT. THE SAMPLE SHOWN USES BUILDING STEEL AS THE MAIN ELECTRODE POINT.
- THE GROUNDING ELECTRODE CONDUCTOR (GEC) SHALL BE SIZED IN ACCORDANCE WITH NEC TABLE 250.167. REFER TO FEEDER SCHEDULE.

3 SERVICE ENTRANCE GROUNDING DETAIL
N.T.S.



4 POLE BASE DETAIL
N.T.S.

RISER GENERAL NOTES

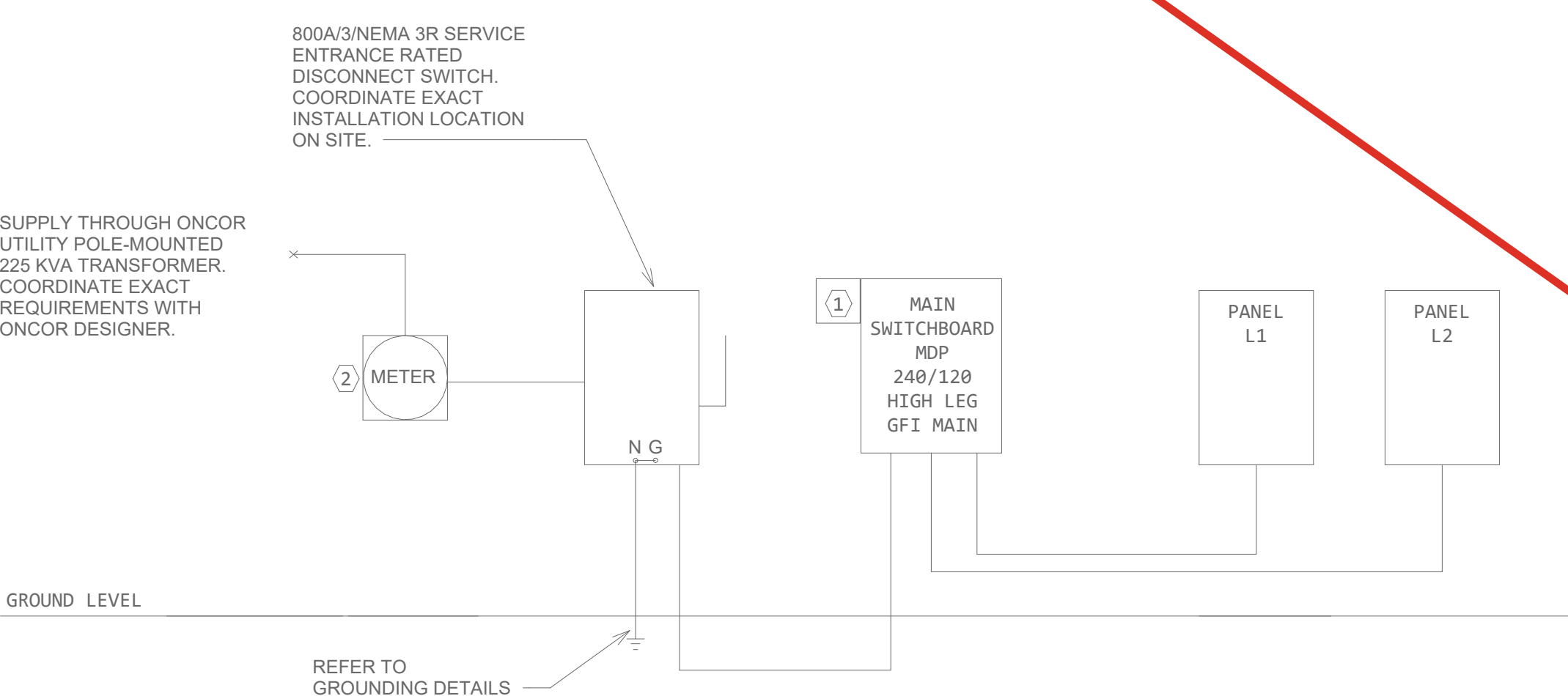
- CONTRACTOR SHALL PERFORM ARC FLASH STUDY AND PROVIDE AND INSTALL LABELS ON ALL ELECTRICAL EQUIPMENT. LABELS SHALL INDICATE FLASH PROTECTION REQUIREMENTS AND SHOCK PROTECTION REQUIREMENTS AND OTHER INFORMATION AS REQUIRED BY OSHA AND NFPA 70E. SERVICE EQUIPMENT SHALL BE MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT IN ACCORDANCE WITH NEC.
- CONTRACTOR SHALL PROVIDE AND PERFORM COMPLETE OVERCURRENT PROTECTION COORDINATION STUDY IN ACCORDANCE WITH NEC REQUIREMENTS PRIOR TO PURCHASE OF EQUIPMENT AND PROVIDE STUDY WITH SWITCHBOARD AND PANELBOARD SUBMITTALS. CONTRACTOR SHALL SUBMIT COORDINATION STUDY TO CITY INSPECTOR UPON REQUEST.
- ALL OVERCURRENT DEVICES RATED 1,200 OR LARGER SHALL HAVE ARC ENERGY REDUCTION CAPABILITY AS REQUIRED BY NEC. INSTALL BREAKERS WITH NONE-SELECTIVE INTERLOCKING OR AN ENERGY REDUCING MAINTENANCE SWITCH WITH LOCAL STATUS INDICATOR.

SECONDARY FEEDER SCHEDULE

FED FROM	EQUIPMENT FED	SECONDARY	FEEDER	TRANSFORMER RATING
UTILITY	UTILITY			225000 VA
MDP	L1		4#4/Ø, #4G, 2-1/2" C	
MDP	L2		(2)4#3/Ø, #16, 3" C	
UTILITY	MDP		(3)4#3Ø, #2G, 3" C	

RISER NOTES BY SYMBOL

- PROVIDE ASCO 240/120 SERVICE ENTRANCE RATED AND LISTED CONNECTION SPD SURGE PROTECTION. PROVIDE WITH INTEGRAL FUSED DISCONNECT MOUNTED TO SIDE OF SWITCHBOARD ENCLOSURE, CONNECT USING MANUFACTURERS ACCUGUIDE CABLE DIRECTLY TO BUS USING SHORTEST DISTANCE POSSIBLE. CONDUCTORS SHALL BE ROUTED TO AVOID SHARP BENDS AND MINIMIZE LEAD LENGTHS. RISER DIAGRAM.
- UTILITY METER. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH ONCOR DESIGNER.

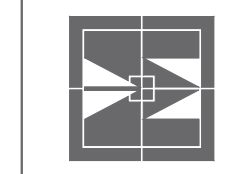


5 RISER DIAGRAM
NO SCALE

SOLARE
ENGINEERING UNLIMITED, INC.

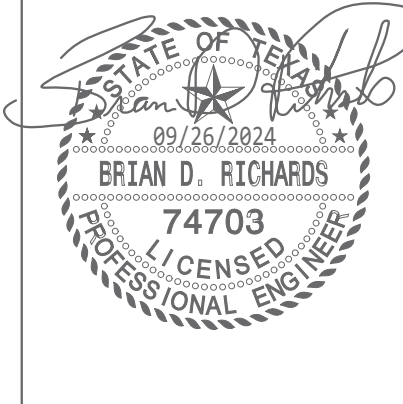
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TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

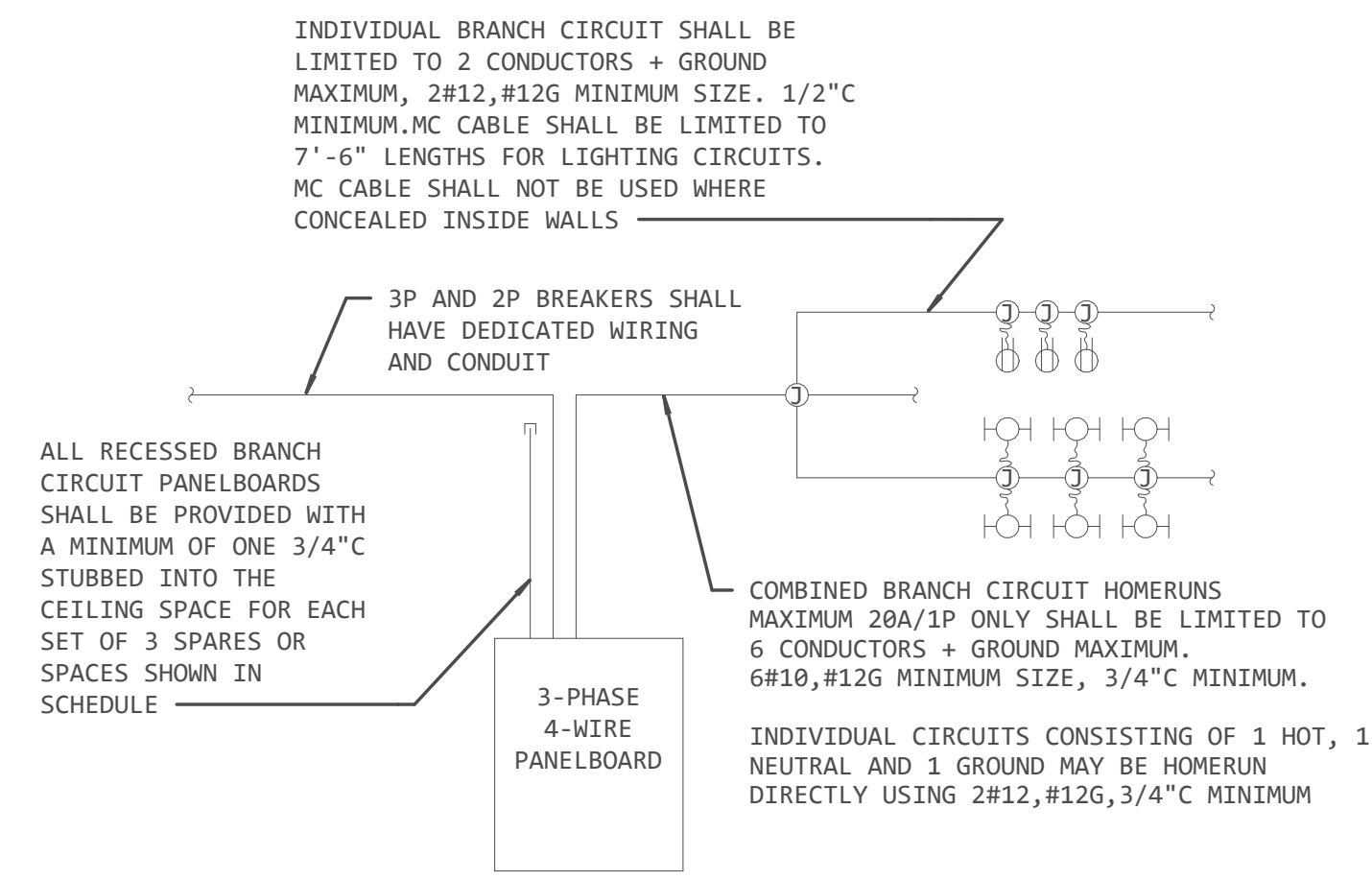
PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:



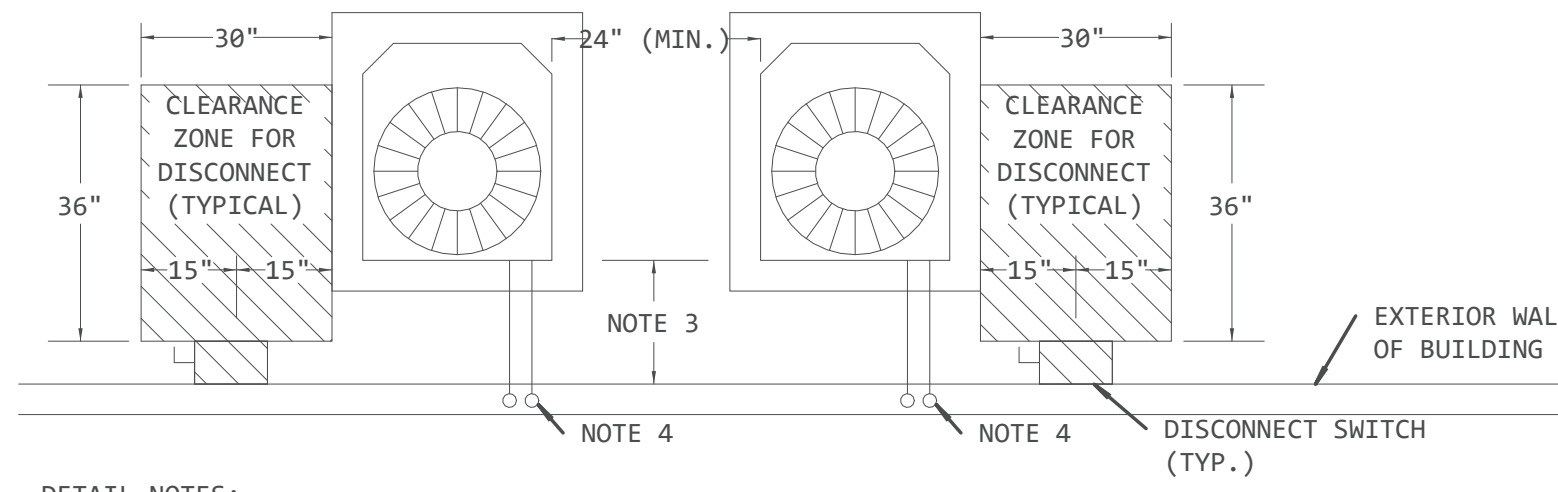
SHEET CONTENT
ELECTRICAL DETAILS

SHEET NUMBER

E002



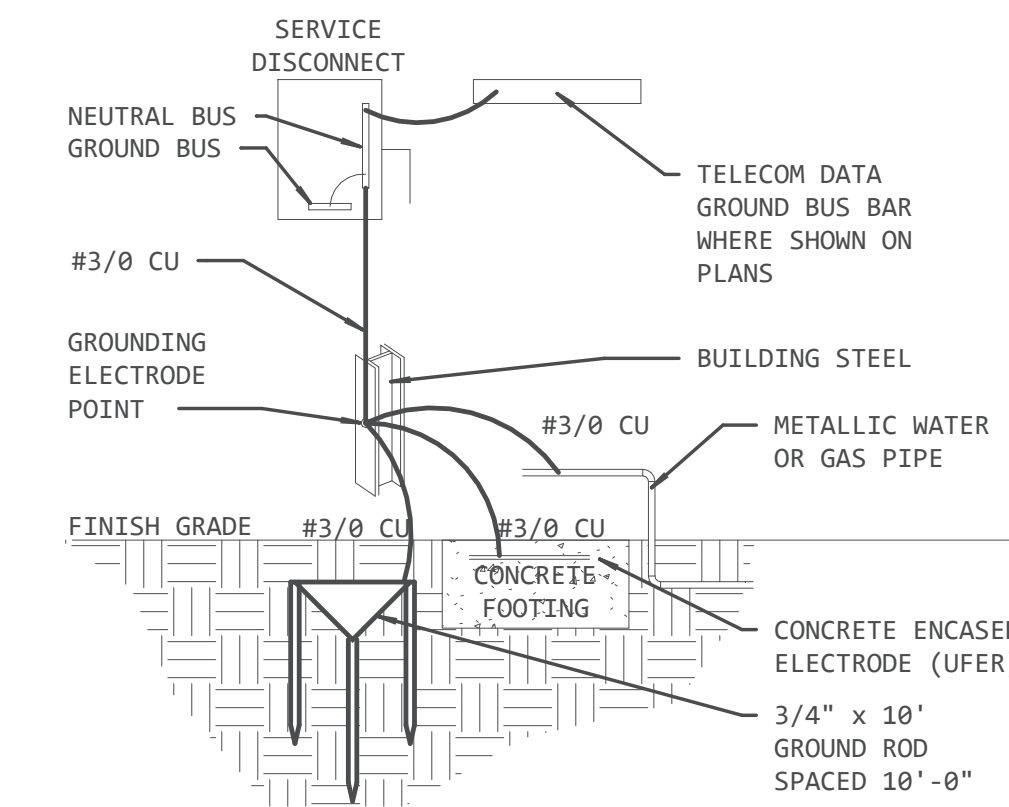
1 LIGHTING CONTROLS DETAIL
N.T.S.



DETAIL NOTES:

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- REFRIGERANT PIPING TO RUN IN WALL UP TO MECHANICAL SPACE AND TO AIR HANDLER UNIT. SEAL WALL PENETRATION WEATHER TIGHT.

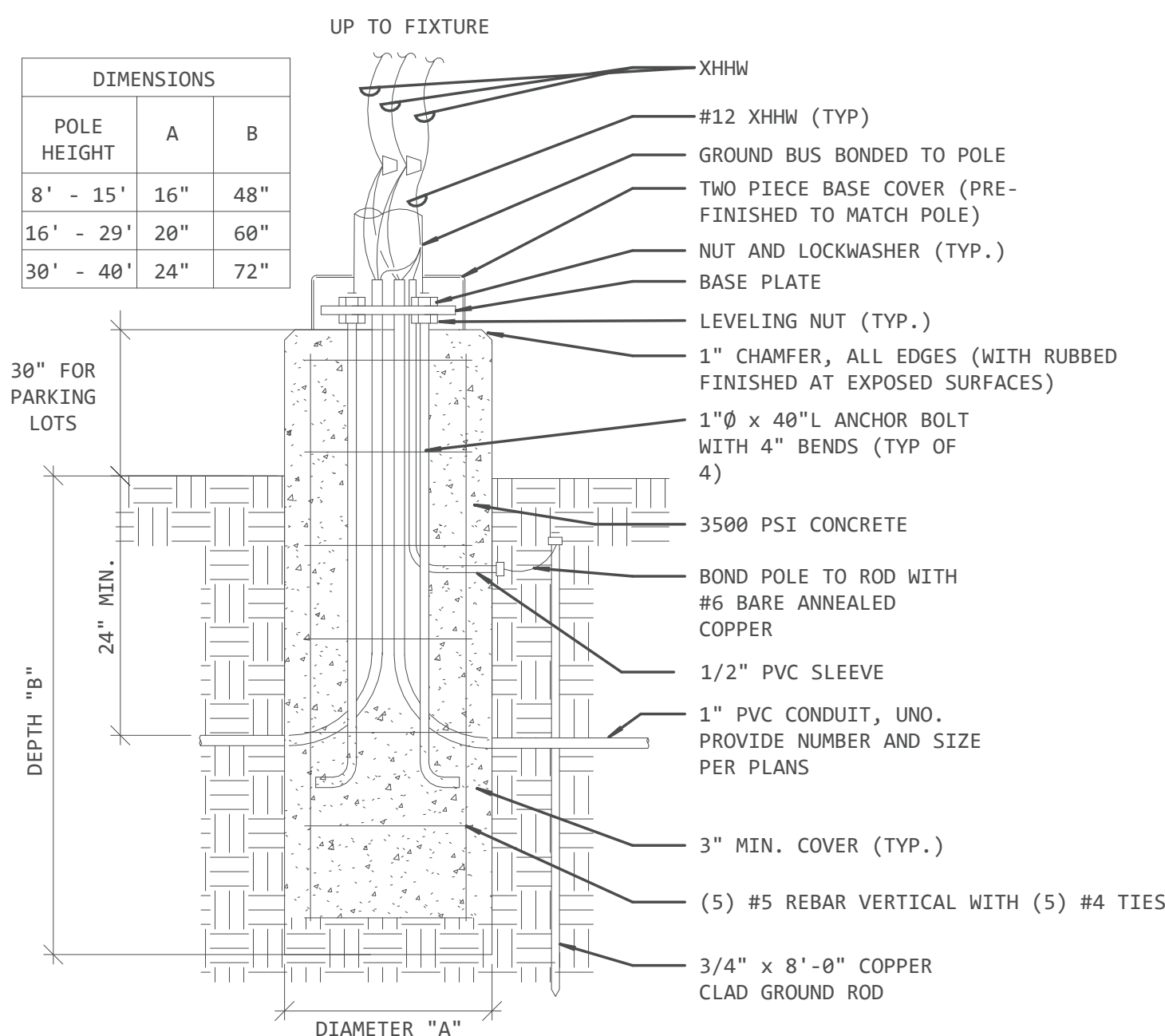
2 DISCONNECT CLEARANCE DETAIL
N.T.S.



SERVICE ENTRANCE GROUNDING DETAIL NOTES:

- AT THE CONTRACTOR'S OPTION, ANY ONE OF THE THREE ALLOWED ELECTRODE SYSTEMS SHOWN MAY BE USED AS THE MAIN GROUNDING ELECTRODE POINT (GROUND RODS, UFER, OR BUILDING STEEL) WITH ALL OTHER ELECTRODES BONDED TO IT. THE EXAMPLE SHOWN USES BUILDING STEEL AS THE MAIN ELECTRODE POINT.
- THE GROUNDING ELECTRODE CONDUCTOR (GEC) SHALL BE SIZED IN ACCORDANCE WITH NEC TABLE 250.66. REFER TO FEEDER SCHEDULE.

3 SERVICE ENTRANCE GROUNDING DETAIL
N.T.S.



4 POLE BASE DETAIL
N.T.S.

RISER GENERAL NOTES

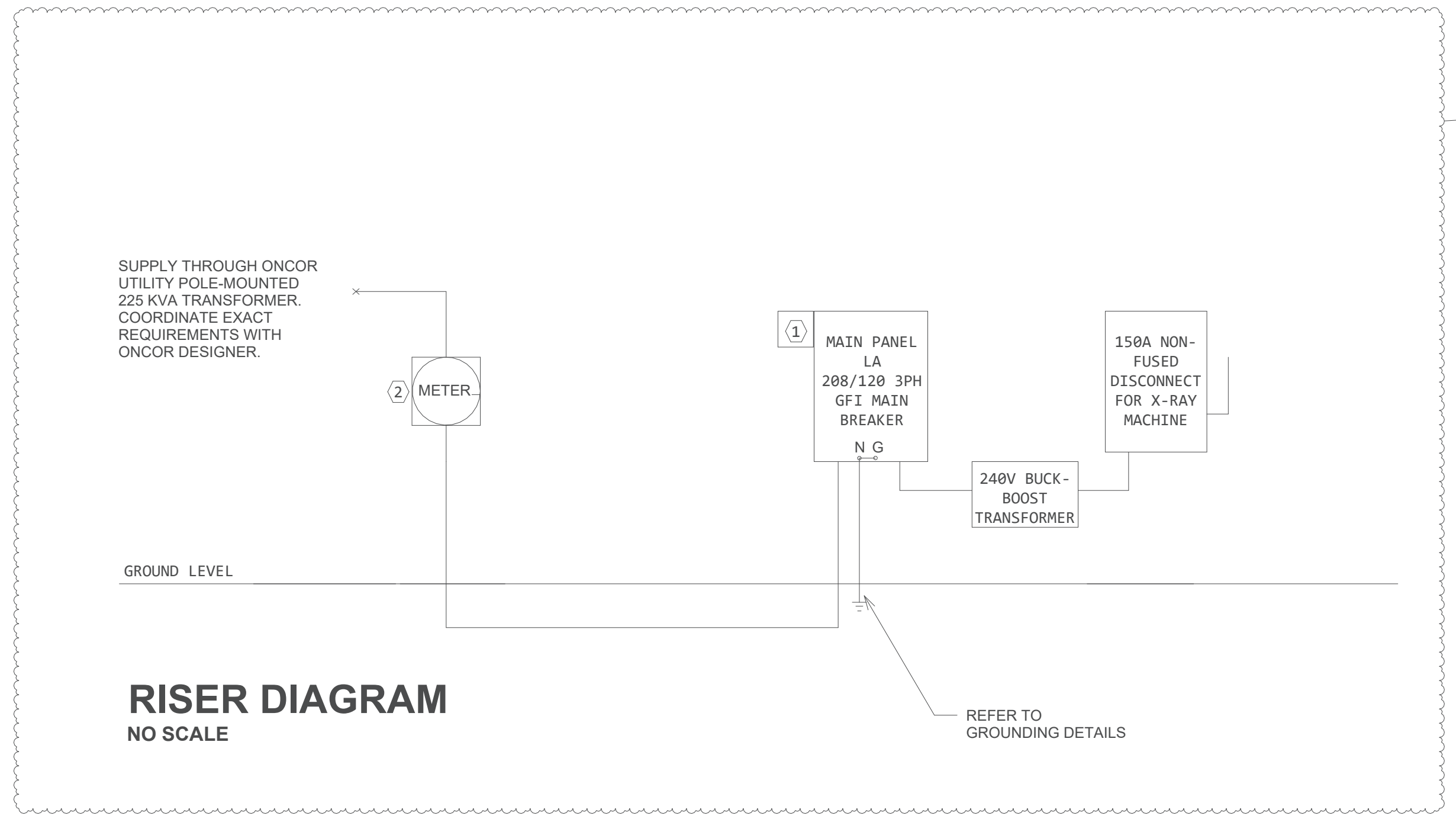
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RISER NOTES BY SYMBOL

- PROVIDE ASCO 200/120 SERVICE ENTRANCE RATED AND LISTED CONNECTION SPD SURGE PROTECTION. CONNECT USING MANUFACTURERS ACCUGUIDE CABLE DIRECTLY TO BUS USING SHORTEST DISTANCE POSSIBLE. CONDUCTORS SHALL BE ROUTED TO AVOID SHARP BENDS AND MINIMIZE LEAD LENGTHS. RISER DIAGRAM.
- UTILITY METER. COORDINATE EXACT INSTALLATION REQUIREMENTS WITH ONCOR DESIGNER.

SECONDARY FEEDER SCHEDULE

FED FROM	EQUIPMENT FED	SECONDARY	FEEDER	TRANSFORMER RATING
UTILITY	UTILITY			225000 VA
	LA		(2)4#350, #26, 3" C	

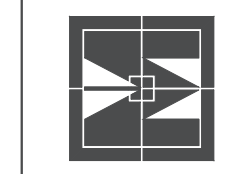


5 RISER DIAGRAM
NO SCALE

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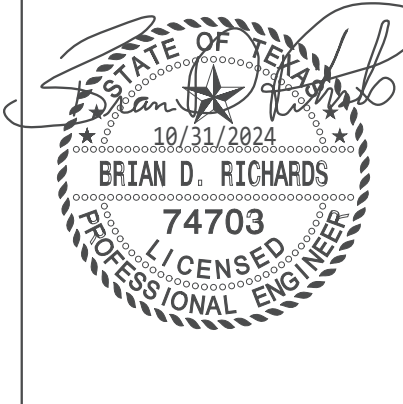
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Texas Registration # F-10963

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FORT WORTH, TEXAS 8177519392



TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:
10/31/2024



SHEET CONTENT
ELECTRICAL DETAILS

SHEET NUMBER
**SE01
E002**

NAME: LA
 Supply From: UTILITY
 Feeder: (2)4#350,#2G,3°C
 Enclosure: NEMA 1

Mounting: SURFACE
 Volts: 120/208 Wye
 Phases: 3
 Wires: 4

Fault Current(Amps): 39,894
 ATC-Rating(Amps): 65,000
 Mains Type: MCB
 Mains Rating: 600

CKT	LEN	BRANCH CIRCUIT 300	WIRE SIZE 2#12,#12G,1/2°C UON	LOAD NAME	BKR (A)	WIRE SIZE			BKR (A)	LOAD NAME	WIRE SIZE 2#12,#12G,1/2°C UON	BRANCH CIRCUIT 300	LEN	CKT		
						P	A(A)	B(A)							C(A)	
1	7...	0.84%		IRRIGATION CTL	20	1	2	2	1	20		0.82%	3...	2		
3	26'	0.77%		ACT DUPLEX GFI, DUPLEX...	20	1		9	8	1	20		0.62%	25'	4	
5	52'	1.81%		ACT DUPLEX, DUPLEX...	20	1			11	12	1	20		1.05%	26'	6
7	62'	2.16%		DUPLEX RECEPTACLE, TV	20	1	11	9		1	20		1.59%	53'	8	
9	63'	1.05%		MICROWAVE	20	1		5	11		1	20		2.52%	72'	10
11	85'	3.40%		ACT DUPLEX GFI, DUPLEX...	20	1			12	10	1	20		3.07%	92'	12
13	97'	1.61%		REFRIGERATOR	20	1	5	5			1	20		1.45%	87'	14
15	116'	2.89%		WP RECEPTACLE	20	1		8	11		1	20		3.72%	106'	16
17	95'	1.18%		EXHAUST FAN	20	1			4	9	1	20		2.80%	93'	18
19	117'	4.66%		ACT DUPLEX, DUPLEX...	20	1	12	9			1	20		2.86%	95'	20
21	87'	0.97%		WATER FOUNTAIN	20	1		3	4		1	20		0.94%	75'	22
23	97'	3.41%		ACT DUPLEX, ACT DUPLEX...	20	1			11	12	1	20		4.33%	108'	24
25	89'	2.67%		ACT DUPLEX GFI, DUPLEX...	20	1	9	9			1	20		2.39%	80'	26
27	69'	2.41%		ACT DUPLEX GFI, DUPLEX...	20	1		11	5		1	20		0.90%	60'	28
29	55'	0.23%		EXHAUST FAN	20	1			1	11	1	20		2.37%	68'	30
31	70'	2.82%		ACT DUPLEX, ACT DUPLEX...	20	1	12	5			1	20		1.27%	76'	32
33	54'	1.35%		DUPLEX RECEPTACLE	20	1		8	9		1	20		1.25%	42'	34
35	53'	0.88%		FREEZER	20	1			5	6	1	20		1.07%	54'	36
37							14	10			1	20		2.02%	61'	38
39	63'	1.74%		CLOTHES DRYER	20	2		14	14		1	20		2.36%	50'	40
41	45'	0.24%		LIGHTING	20	1			2	13	1	20		4.01%	93'	42
43	292'	0.81%		Lighting	20	1	1	1			1	20		0.67%	236'	44
45							6	1			1	20		0.07%	18'	46
47									6	10		2				48
49							30	10			2			1.81%	98'	50
51	78'	1.75%	3#8,#10G,3/4°C	(CU-1,24MCA,35MOC,208/1)	40	2			30	51		2	70			52
53									23	51		3	100			54
55	42'	1.08%	3#10,#10G,1/2°C	(CU-4,18MCA,28MOC,208/1)	30	2			23	78		3	100			56
57									90	78		3	100			58
59	8'-0"	0.08%	4#1/0,#6G,1-1/2°C	(AHU-3,90MCA,90MOC,208/3)	125	3			90	78		3	100			60
61							90	75								62
63	63'	0.84%	3#1/0,#6G,1-1/2°C	X-RAY BUCK-BOOST TRANSFORMER	150	2			115	75		3	100			64
65									115	75				0.05%	5'-6"	66
67	34'	0.57%		(CU-5,7MCA,15MOC,208/1)	20	2	9	3			1	20		0.11%	7...	68
69								9								70
71																72
73																74
75																76
77																78
79																80
81																82
83																84

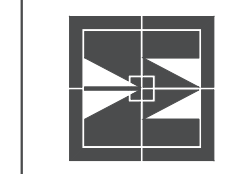
Total Load kVA: 50 65 64
 Total Amps: 420 A 560 A 555 A

ALL LENGTHS SHOWN ARE FOR CALCULATION PURPOSES ONLY TO ESTIMATED HOME RUN POINT ADDITIONAL WIRE WILL BE NEEDED FOR CIRCUIT, CONTRACTOR SHALL ESTIMATE BASED ON CONTRACTOR PLANNED INSTALL. IF ANY VALUES ARE SUBSTANTIALLY DIFFERANT CONTRACTOR SHALL NOTIFY A/E OF REVISIONS NEEDED AND AMALIT INSTRUCTIONS BEFORE PROCEEDING.

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals
Continuous	1800 VA	125.00%	2250 VA	
Electric Clothes Dryer	3000 VA	100.00%	3000 VA	Total Conn. Load: 180 kVA
HVAC	28222 VA	100.00%	28222 VA	Total Conn. Amps 500 A
Heating	27000 VA	100.00%	27000 VA	Total Demand Load: 172 kVA
Lighting	3595 VA	125.00%	4494 VA	Total Demand Amps: 478 A
Non-Continuous	57599 VA	100.00%	57599 VA	
Receptacle	28260 VA	67.69%	19130 VA	
X-Ray	24000 VA	100.00%	24000 VA	
Non-Continuous	6500 VA	100.00%	6500 VA	

Schedule Notes:

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 FORT WORTH, TEXAS 817319392



TARWATER VETERINARIAN CLINIC
 802 E. CRINER STREET
 GRANDVIEW, TEXAS 76050

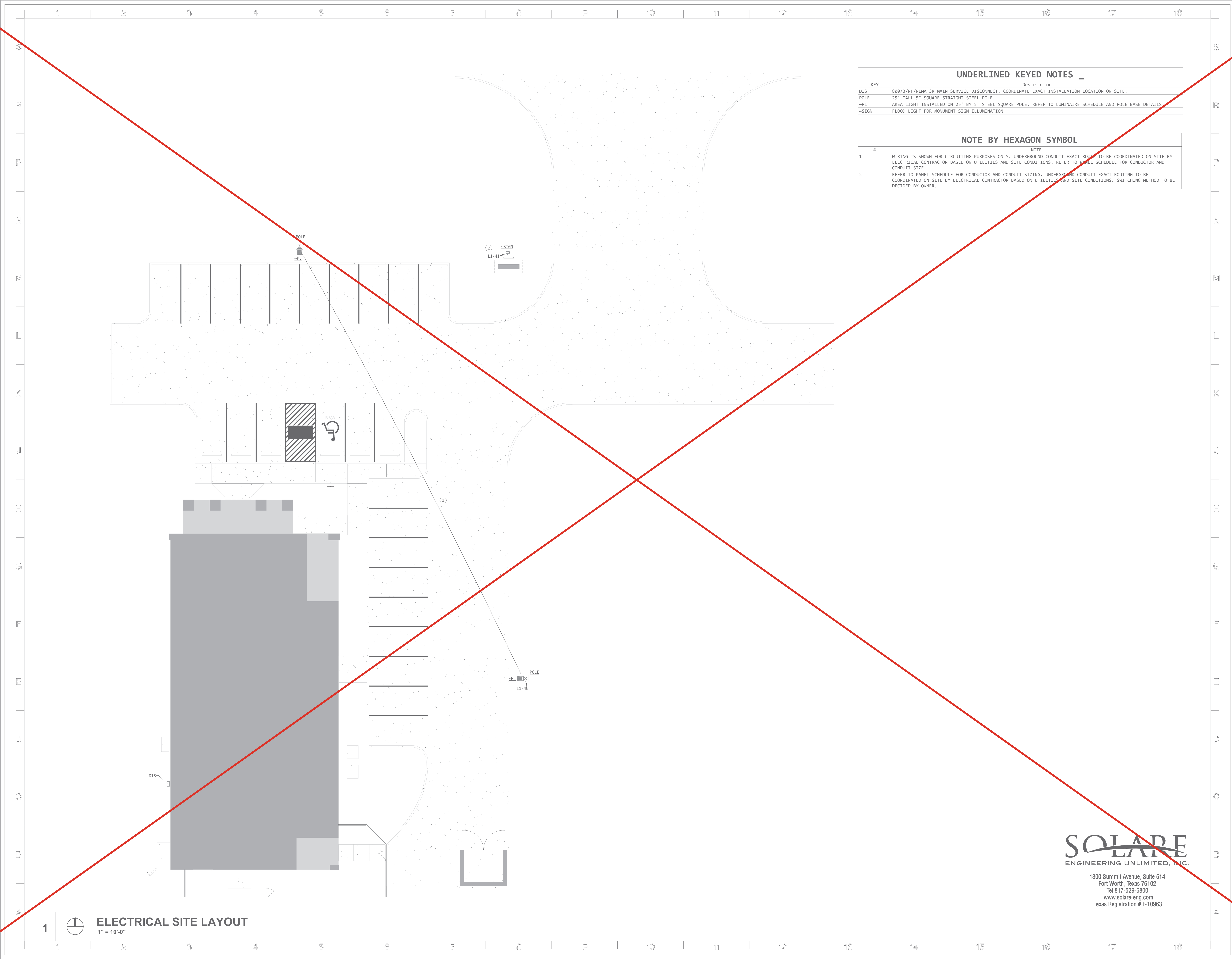
PROJECT NO.: 1744-22
 DATE: 09/26/2024
 DRAWN:
 REVISED:
 10/31/2024



SHEET CONTENT
 ELECTRICAL PANELS
 SCHEDULES

SHEET NUMBER
SE02
E003

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1



ELECTRICAL SITE LAYOUT

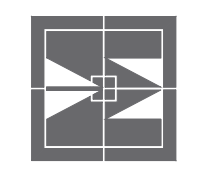
1" = 10'-0"

UNDERLINED KEYED NOTES	
KEY	Description
DIS	800/3/1/5/NEMA 3R MAIN SERVICE DISCONNECT. COORDINATE EXACT INSTALLATION LOCATION ON SITE.
POLE	25" TALL 5" SQUARE STRAIGHT STEEL POLE
-PL	AREA LIGHT INSTALLED ON 25" BY 5" STEEL SQUARE POLE. REFER TO LUMINAIRE SCHEDULE AND POLE BASE DETAILS.
-SIGN	FLOOD LIGHT FOR MONUMENT SIGN ILLUMINATION

NOTE BY HEXAGON SYMBOL	
#	NOTE
1	WIRING IS SHOWN FOR CIRCUITING PURPOSES ONLY. UNDERGROUND CONDUIT EXACT ROUTING TO BE COORDINATED ON SITE BY ELECTRICAL CONTRACTOR BASED ON UTILITIES AND SITE CONDITIONS. REFER TO PANEL SCHEDULE FOR CONDUCTOR AND CONDUIT SIZE.
2	REFER TO PANEL SCHEDULE FOR CONDUCTOR AND CONDUIT SIZING. UNDERGROUND CONDUIT EXACT ROUTING TO BE COORDINATED ON SITE BY ELECTRICAL CONTRACTOR BASED ON UTILITIES AND SITE CONDITIONS. SWITCHING METHOD TO BE DECIDED BY OWNER.

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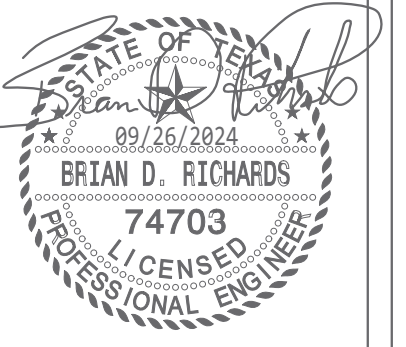
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TARWATER VETERINARIAN CLINIC

802 E. CRINER STREET
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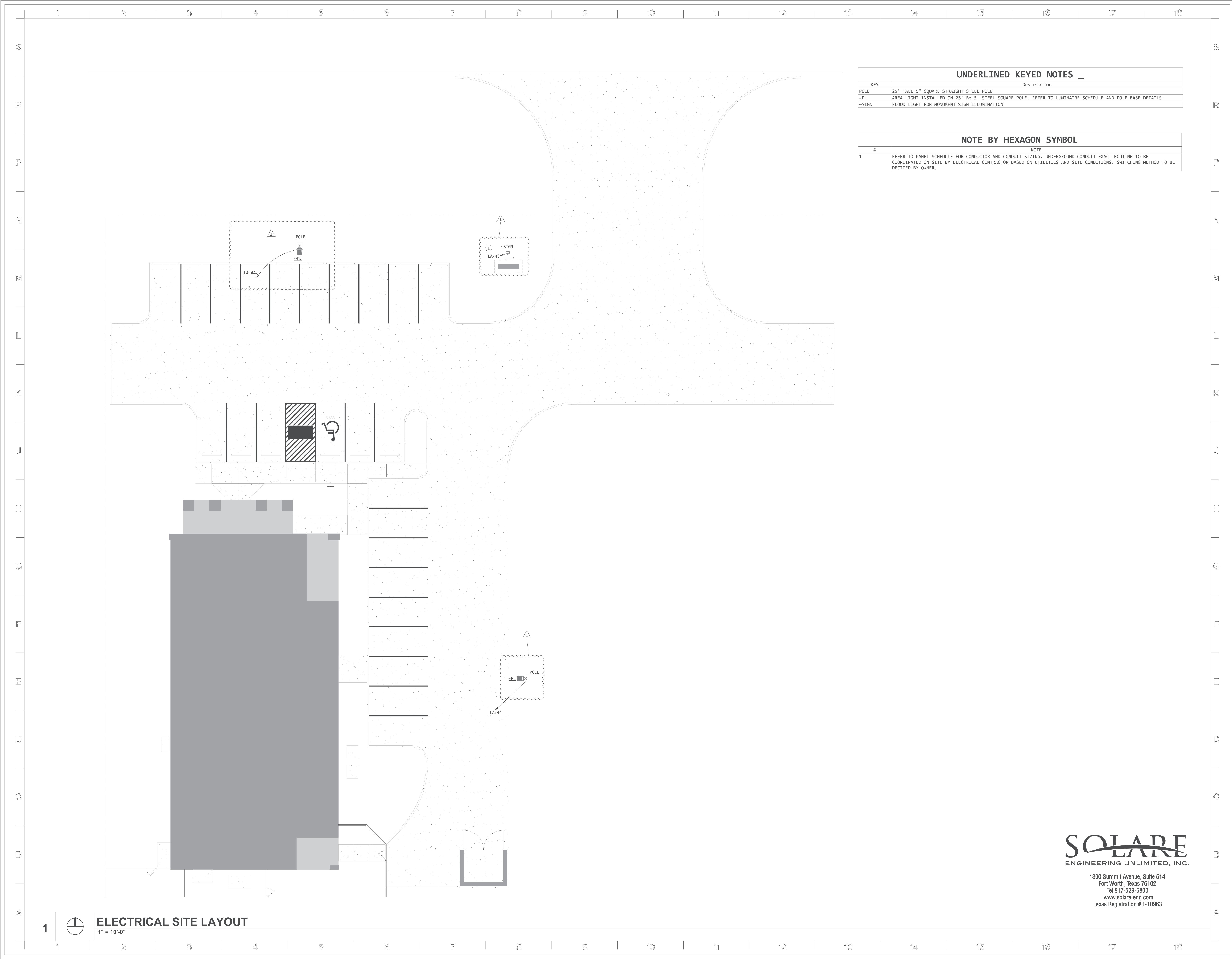
PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:



SHEET CONTENT
ELECTRICAL SITE LAYOUT

SHEET NUMBER

E200



1

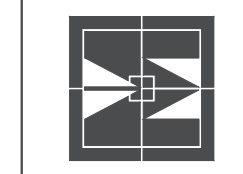
ELECTRICAL SITE LAYOUT
1" = 10'-0"

UNDERLINED KEYED NOTES	
KEY	Description
POLE	25' TALL 5" SQUARE STRAIGHT STEEL POLE
-PL	AREA LIGHT INSTALLED ON 25' BY 5' STEEL SQUARE POLE. REFER TO LUMINAIRE SCHEDULE AND POLE BASE DETAILS.
-SIGN	FLOOD LIGHT FOR MONUMENT SIGN ILLUMINATION

NOTE BY HEXAGON SYMBOL	
#	NOTE
1	REFER TO PANEL SCHEDULE FOR CONDUCTOR AND CONDUIT SIZING. UNDERGROUND CONDUIT EXACT ROUTING TO BE COORDINATED ON SITE BY ELECTRICAL CONTRACTOR BASED ON UTILITIES AND SITE CONDITIONS. SWITCHING METHOD TO BE DECIDED BY OWNER.

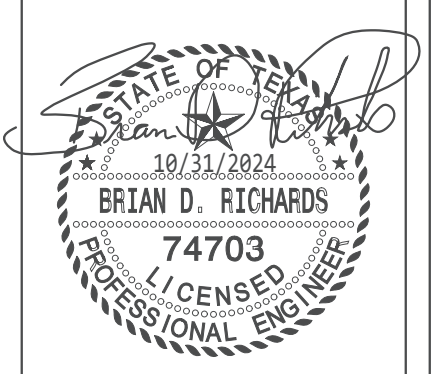
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HTTP://WWW.MAGEE-ARCHITECTS.COM/
FORT WORTH, TEXAS 817.751.9392



TARWATER VETERINARIAN CLINIC
802 E. CRINER STREET
GRANDVIEW, TEXAS 76050

PROJECT NO.: 1744-22
DATE: 09/26/2024
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REVISED:
10/31/2024



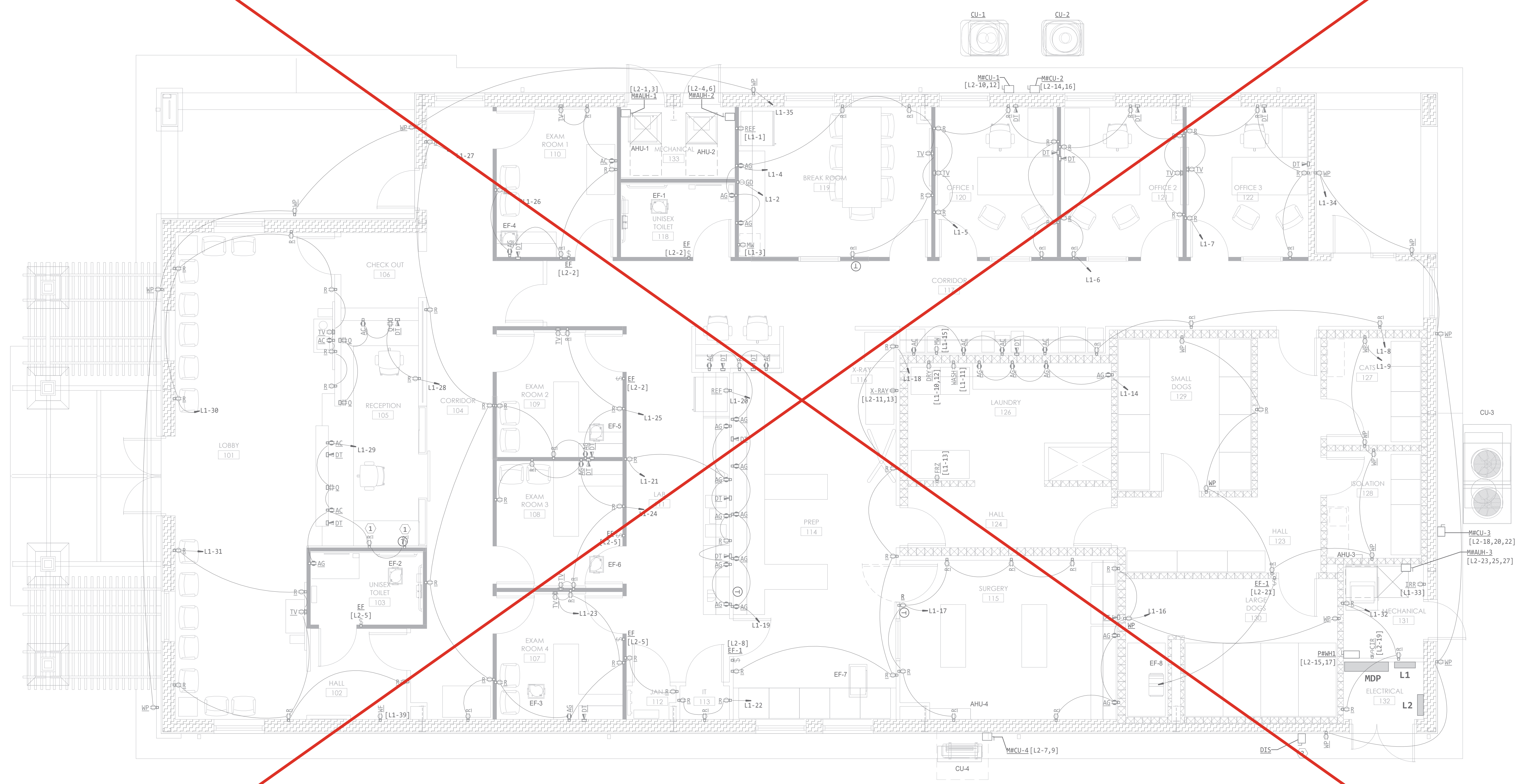
SHEET CONTENT
ELECTRICAL SITE LAYOUT

SHEET NUMBER
SE03
E200

#	NOTE
1	INSTALL @ 2" AFF OVER LOW COUNTER
2	SERVICE ENTRANCE DISCONNECT SWITCH TO BE INSTALLED NEXT TO UTILITY METER. COORDINATE EXACT LOCATION ON SITE.

KEY	Description
AC	ABOVE COUNTER RECEPTACLE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT.
AG	GFI ABOVE COUNTER RECEPTACLE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT.
CIR	MOTOR RATED SWITCH FOR CIRCULATION PUMP. CONFIRM LOCATION WITH INSTALLER OF PUMP.
DIS	800/3/NF/NEMA 3R MAIN SERVICE DISCONNECT. COORDINATE EXACT INSTALLATION LOCATION ON SITE.
DRY	OUTLET FOR CLOTHES DRYER COORDINATE EXACT NEMA CONFIGURATION WITH ITEM PURCHASED BY OTHERS MOUNT AT 36" AFF.
DT	4" SQUARE 3BOX WITH 3/4" TO ACCESSIBLE LOCATION ABOVE CEILING FOR OWNERS DATA AND TELEPHONE WIRING.
EF	MOTORIZED SWITCH WITH OCCUPANCY SENSOR/TIMER FOR EXHAUST FAN. REFER TO MECHANICAL DESIGN FOR CONTROL METHOD AND SETTINGS.
EF-1	MOTORIZED SWITCH FOR EXHAUST FAN IN LARGE DOGS AREA. REFER TO MECHANICAL DESIGN FOR CONTROL METHOD AND SETTINGS.
FRZ	GFI RECEPTACLE FOR FREEZER. COORDINATE LOCATION WITH OWNER.
GD	SIMPLEX GFI RECEPTACLE BELOW SINK FOR GARBAGE DISPOSAL. PROVIDE ABOVE COUNTER CONTROL SWITCH AT LOCATION INDICATED BY ARCHITECT ELEVATIONS. OUTLET TO BE ACCESSIBLE FROM INSIDE CABINET.
JRR	GFI OUTLET FOR IRRIGATION CONTROLLER. COORDINATE MOUNTING LOCATION WITH INSTALLER OF IRRIGATION SYSTEM.
MHAUH-1	30/2/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT
MHAUH-2	30/2/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT
MHAUH-3	30/3/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT.
MICU-1	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT
MICU-2	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT.
MICU-3	30/3/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT

KEY	Description
MICU-4	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT CU-4.
MDP	MAIN DISTRIBUTION PANEL 800A 240V 3PH HIGH LEG
MW	GFI RECEPTACLE FOR MICROWAVE. COORDINATE LOCATION WITH OWNER.
PHWH1	30/2/NF/NEMA 3R DISCONNECT FOR ELECTRIC WATER HEATER
Q	QUADPLEX RECEPTACLE
R	DUPLEX RECEPTACLE
REF	GFI RECEPTACLE FOR REFRIGERATOR. COORDINATE LOCATION WITH INSTALLER OF REFRIGERATOR.
TV	RECESSED DUPLEX RECEPTACLE FOR TELEVISION OR DISPLAY, COORDINATE EXACT ELEVATION WITH ARCHITECT.
WASH	OUTLET FOR CLOTHES WASHING MACHINE COORDINATE EXACT NEMA CONFIGURATION WITH ITEM PURCHASED BY OTHERS MOUNT AT 36" AFF.
WF	DUPLEX RECEPTACLE FOR WATER FOUNTAIN. COORDINATE EXACT LOCATION AND HEIGHT WITH THE INSTALLER OF THE EQUIPMENT.
WP	WEATHER RESISTANT RECEPTACLE IN NEMA 3R WHILE IN USE COVER.
X-RAY	OUTLET FOR X-RAY MACHING COORDINATE EXACT NEMA CONFIGURATION AND MOUNTING HEIGHT WITH OWNER.



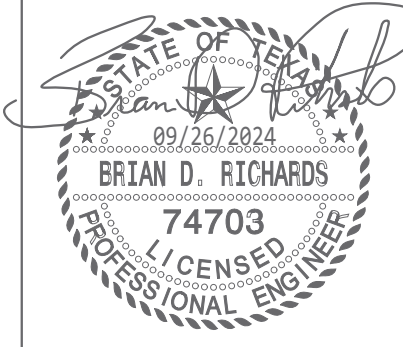
1  **ELECTRICAL POWER PLAN**
1/4" = 1'-0"

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PROJECT NO.: 1744-22
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SHEET CONTENT
ELECTRICAL POWER FLOOR PLAN

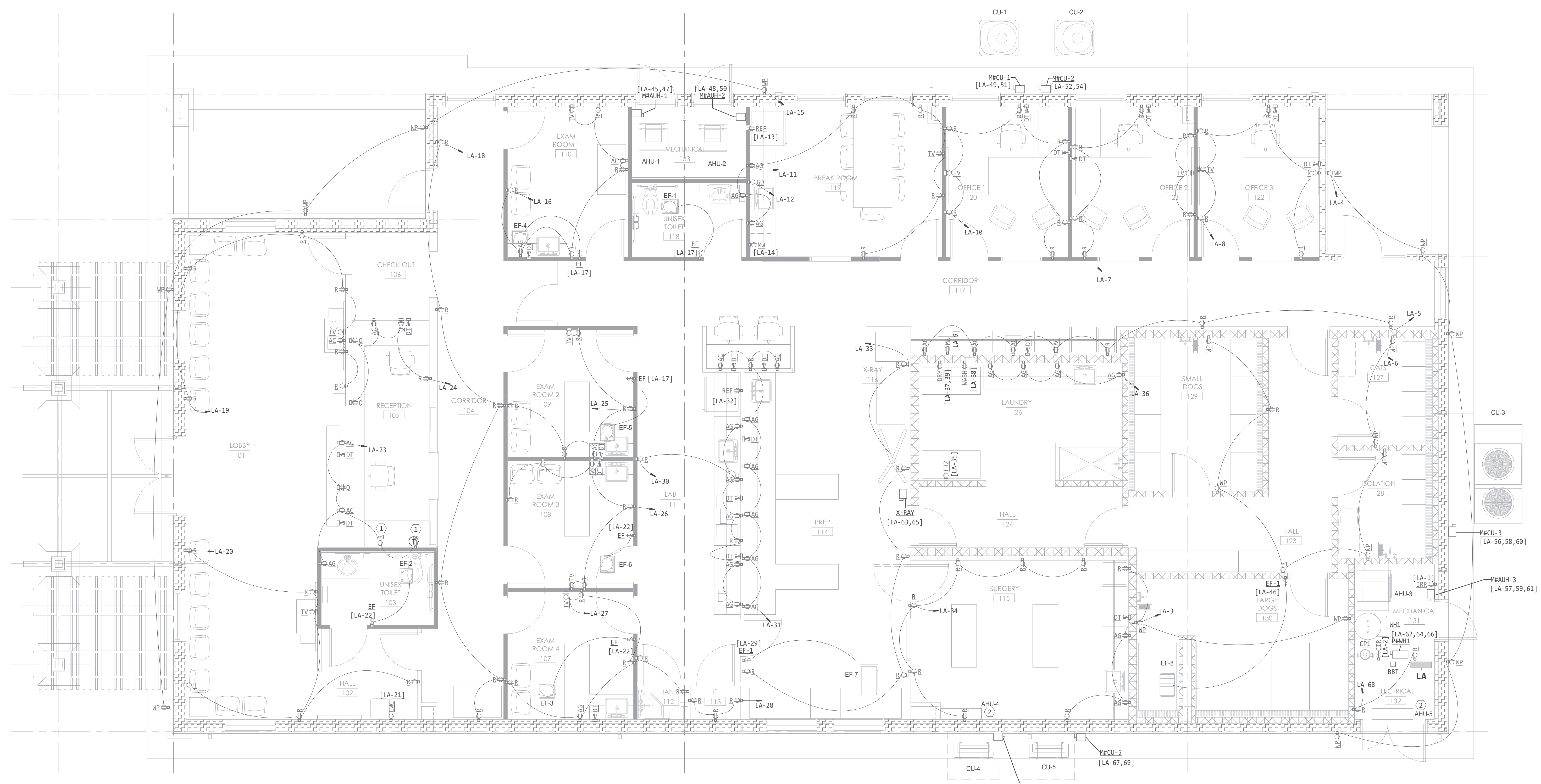
SHEET NUMBER

E201

#	NOTE
1	INSTALL @ 2' 2" AFF OVER LOW COUNTER
2	AHU-4 & AHU-5 ARE ELECTRICALLY SUPPLIED THROUGH CU-4 & CU-5 RESPECTIVELY

KEY	Description
AC	ABOVE COUNTER RECEPTACLE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT.
AG	GFI ABOVE COUNTER RECEPTACLE, REFER TO ARCHITECTURAL ELEVATIONS FOR EXACT PLACEMENT.
BBT	240V OUTPUT SINGLE PHASE 16/32V BUCK-BOOST TRANSFORMER FOR X-RAY MACHINE. CONTRACTOR SHALL USE SQUARED MODEL 5805V68R OR EQUIVALENT WITH CAPACITY NOT LESS THAN 3.5KVA. TRANSFORMER SHALL BE CONNECTED AS SHOWN FOR X-RAY CONNECTION IN LA PANEL SCHEDULE.
CP1	MOTOR RATED SWITCH FOR CIRCULATION PUMP. CONFIRM LOCATION WITH INSTALLER OF PUMP.
CP1	CLOSED COUPLED VERTICAL IN-LINE MOUNTED PUMP
DRY	OUTLET FOR CLOTHES DRYER COORDINATE EXACT NEMA CONFIGURATION WITH ITEM PURCHASED BY OTHERS MOUNT AT 36" AFF.
DT	4" SQUARE JBOX WITH 3/4" C TO ACCESSIBLE LOCATION ABOVE CEILING FOR OWNERS DATA AND TELEPHONE WIRING.
EF	MOTOR RATED SWITCH WITH OCCUPANCY SENSOR/TIMER FOR EXHAUST FAN. REFER TO MECHANICAL DESIGN FOR CONTROL METHOD AND SETTINGS.
EF-1	MOTOR RATED SWITCH FOR EXHAUST FAN IN LARGE DOGS AREA. REFER TO MECHANICAL DESIGN FOR CONTROL METHOD AND SETTINGS.
EW	DUPLEX RECEPTACLE FOR ELECTRIC WATER COOLER. COORDINATE EXACT LOCATION AND HEIGHT WITH THE INSTALLER OF THE EQUIPMENT.
FRZ	GFI RECEPTACLE FOR FREEZER. COORDINATE LOCATION WITH OWNER.
GD	SIMPLEX GFI RECEPTACLE BELOW SINK FOR GARBAGE DISPOSAL. PROVIDE ABOVE COUNTER CONTROL SWITCH AT LOCATION INDICATED BY ARCHITECT ELEVATIONS. OUTLET TO BE ACCESSIBLE FROM INSIDE CABINET.
JRR	GFI OUTLET FOR IRRIGATION CONTROLLER. COORDINATE MOUNTING LOCATION WITH INSTALLER OF IRRIGATION SYSTEM.
MMAUH-1	30/2/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT

KEY	Description
MMAUH-2	30/2/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT
MMAUH-3	90/3/NF/NEMA 3R DISCONNECT FOR AIR HANDLING UNIT.
MFCU-1	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT
MFCU-2	60/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT.
MFCU-3	80/3/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT
MFCU-4	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT CU-4.
MFCU-5	30/2/NF/NEMA 3R DISCONNECT FOR CONDENSING UNIT CU-5.
MW	GFI RECEPTACLE FOR MICROWAVE. COORDINATE LOCATION WITH OWNER.
PIWH1	80/3/NF/NEMA 3R DISCONNECT FOR ELECTRIC WATER HEATER
Q	QUADPLEX RECEPTACLE
R	DUPLEX RECEPTACLE
REF	GFI RECEPTACLE FOR REFRIGERATOR. COORDINATE LOCATION WITH INSTALLER OF REFRIGERATOR.
TV	RECESSED DUPLEX RECEPTACLE FOR TELEVISION OR DISPLAY, COORDINATE EXACT ELEVATION WITH ARCHITECT.
WASH	OUTLET FOR CLOTHES WASHING MACHINE COORDINATE EXACT NEMA CONFIGURATION WITH ITEM PURCHASED BY OTHERS MOUNT AT 36" AFF.
WH1	COMMERCIAL ELECTRIC WATER HEATER
WP	WEATHER RESISTANT RECEPTACLE IN NEMA 3R WHILE IN USE COVER.
X-RAY	100/2/NF/NEMA 1 DISCONNECT FOR THE X-RAY MACHINE. VERIFY WHETHER THE MACHINE HAS AN INTEGRATED DISCONNECT SWITCH IN WHICH CASE THERE IS NO NEED FOR EXTERNAL DISCONNECT SWITCH. CONNECTION IS THROUGH 240V BUCK-BOOST TRANSFORMER. CONFIRM ELECTRICAL CONNECTION REQUIREMENTS WITH THE MANUFACTURER.



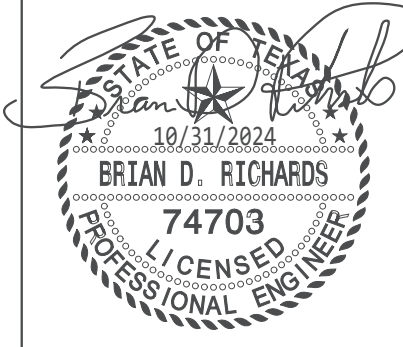
1  **ELECTRICAL POWER PLAN**
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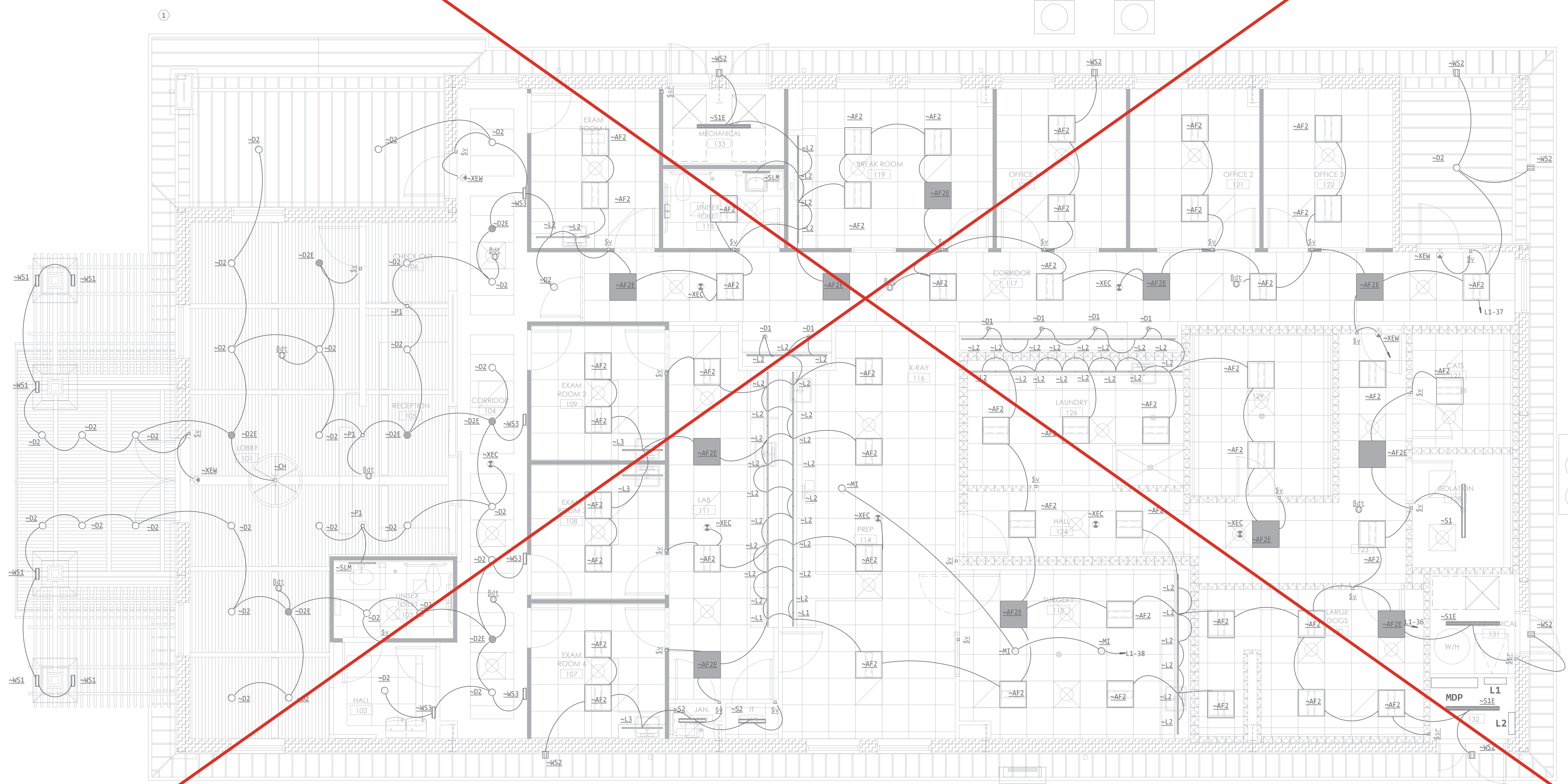


SHEET CONTENT
ELECTRICAL POWER FLOOR PLAN

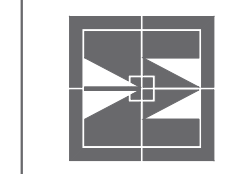
SHEET NUMBER
SE04
E201

#	NOTE
1	APPROXIMATE LOCATION FOR AN EXTERIOR LIGHT PHOTOCELL CONTROLLER. COORDINATE EXACT LOCATION ON SITE. REFER TO SHEET E-301 FOR EXTERIOR LIGHTING CONTROL.

KEY	Description
\$sr	LINE VOLTAGE TOGGLE SWITCH FOR LOCATIONS WHERE AUTOMATIC OFF WOULD ENGAGE LIFE SAFETY.
\$v	DIGITAL LOW VOLTAGE BUTTON PROGRAMMED TO VACANCY SENSOR(ON/OFF, RAISE/LOWER) USED TO ALLOW OCCUPANTS TO MANUALLY TURN LIGHTS ON WHEN THEY ENTER THE ROOM AND HAVE LIGHTS TURN OFF AUTOMATICALLY WHEN ROOM IS VACANT
MDP	MAIN DISTRIBUTION PANEL 800A 240V 3PH HIGH LEG
-AF2	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE. REFER TO SCHEDULE.
-AF2E	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE WITH EMERGENCY BATTERY. REFER TO SCHEDULE.
-CH	CEILING SUSPENDED CHANDLER LIGHT. 12W 4623LM 3000K. DARK BRONZE FINISH.
-D1	4" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.
-D2	6" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.
-D2E	6" RECESSED LED CAN LIGHT FIXTURE WITH EMERGENCY BATTERY. REFER TO SCHEDULE.
-L1	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
-L2	ULTRA SLIM UNDER CABINET LED LIGHT DIFFERENT LENGTHS.
-L3	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
-MI	MEDICAL EXAMINATION LIGHT BY OWNER.
-P1	CEILING SUSPENDED PENDANT LIGHT. TO BE SELECTED BY AOR
-S1	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
-S1E	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
-S2	2FT SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
-SLM	LED SIDE LIT MIRROR ABOVE TOILET SINK. COMES WITH 120V/24V ADAPTOR TO CONNECT TO GFCI OUTLET. WIDTH & HEIGHT TO BE DETERMINED BY ARCHITECT. DARK BRONZE FINISH.
-WS1	WALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.
-WS2	WALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.
-WS3	WALL MOUNTED LED SCENCE. REFER TO SCHEDULE.
-XEC	ECONOMICAL EXIT LIGHT CEILING MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION
-XEW	ECONOMICAL EXIT LIGHT WALL MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION.
Bot	DUAL TECHNOLOGY SENSOR COORDINATED WITH ASSOCIATED SWITCHING SYSTEM

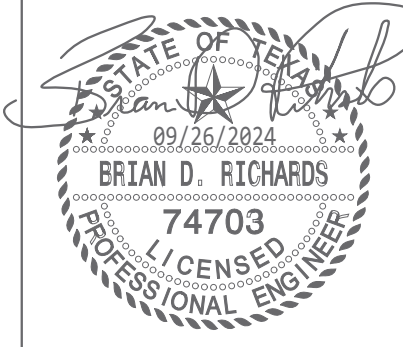


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SHEET CONTENT
 ELECTRICAL LIGHTING FLOOR PLAN

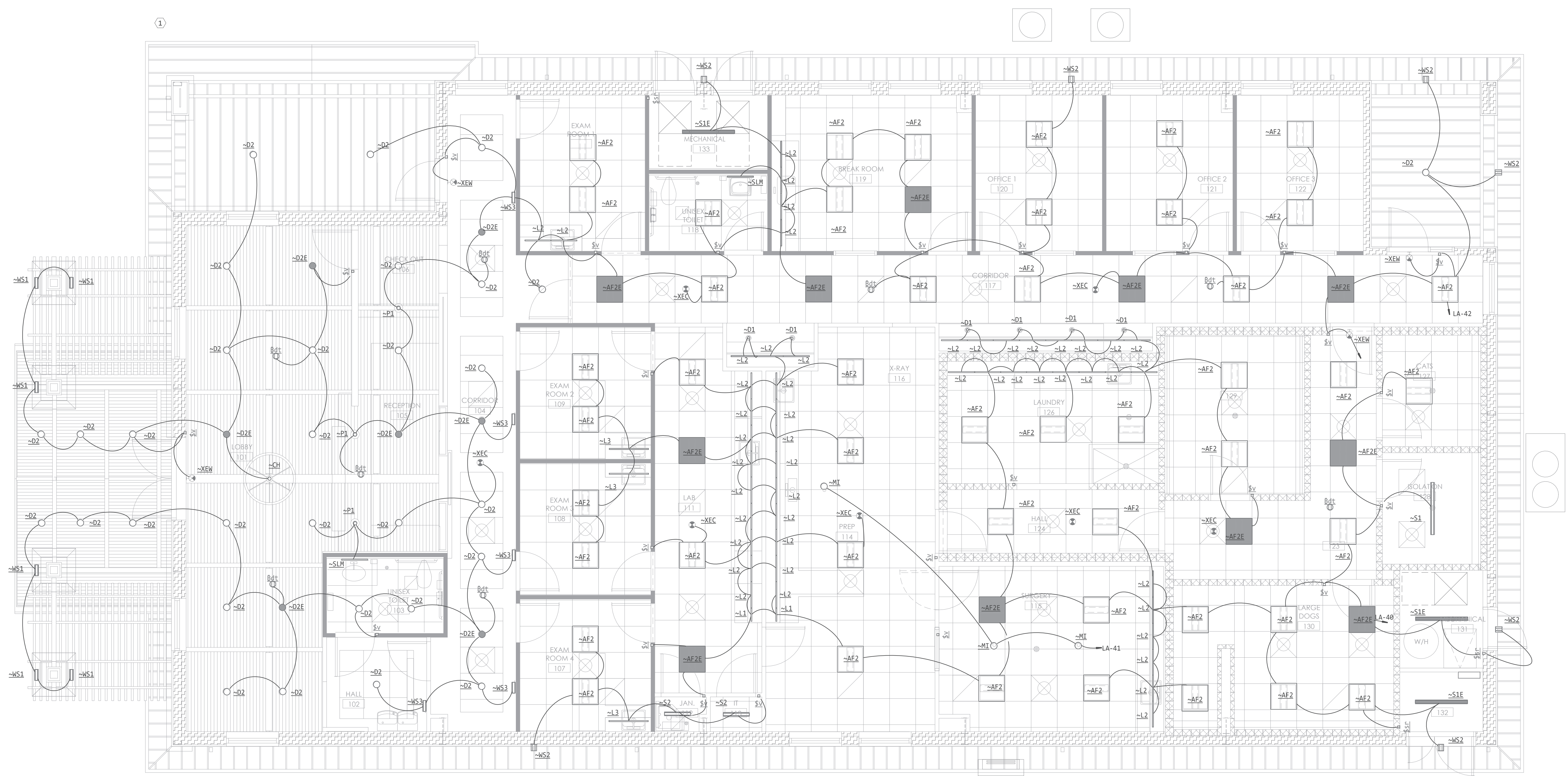
SHEET NUMBER

E202

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NOTE BY HEXAGON SYMBOL	
#	NOTE
1	APPROXIMATE LOCATION FOR AN EXTERIOR LIGHT PHOTOCELL CONTROLLER. COORDINATE EXACT LOCATION ON SITE. REFER TO SHEET E-301 FOR EXTERIOR LIGHTING CONTROL.

UNDERLINED KEYED NOTES	
KEY	Description
<u>\$sr</u>	LINE VOLTAGE TOGGLE SWITCH FOR LOCATIONS WHERE AUTOMATIC OFF WOULD ENGAGE LIFE SAFETY.
<u>\$v</u>	DIGITAL LOW VOLTAGE BUTTON PROGRAMMED TO VACANCY SENSOR(ON/OFF, RAISE/LOWER) USED TO ALLOW OCCUPANTS TO MANUALLY TURN LIGHTS ON WHEN THEY ENTER THE ROOM AND HAVE LIGHTS TURN OFF AUTOMATICALLY WHEN ROOM IS VACANT
<u>-AF2</u>	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE. REFER TO SCHEDULE.
<u>-AF2E</u>	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE WITH EMERGENCY BATTERY. REFER TO SCHEDULE.
<u>-CH</u>	CEILING SUSPENDED CHANDELIER LIGHT. 124W 4623LM 3000K. DARK BRONZE FINISH.
<u>-D1</u>	4" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.
<u>-D2</u>	6" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.
<u>-D2E</u>	6" RECESSED LED CAN LIGHT FIXTURE WITH EMERGENCY BATTERY. REFER TO SCHEDULE.
<u>-L1</u>	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
<u>-L2</u>	ULTRA SLIM UNDER CABINET LED LIGHT DIFFERENT LENGTHS.
<u>-L3</u>	ULTRA SLIM UNDER CABINET LED LIGHT. DIFFERENT LENGTHS.
<u>-MI</u>	MEDICAL EXAMINATION LIGHT BY OWNER.
<u>-P1</u>	CEILING SUSPENDED PENDANT LIGHT. TO BE SELECTED BY AOR
<u>-S1</u>	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
<u>-S1E</u>	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
<u>-S2</u>	2FT SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.
<u>-SLM</u>	LED SIDE LIT MIRROR ABOVE TOILET SINK. COMES WITH 120V/24V ADAPTOR TO CONNECT TO GFCI OUTLET. WIDTH & HEIGHT TO BE DETERMINED BY ARCHITECT. DARK BRONZE FINISH.
<u>-WS1</u>	WALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.
<u>-WS2</u>	WALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.
<u>-WS3</u>	WALL MOUNTED LED SCENCE. REFER TO SCHEDULE.
<u>-XEC</u>	ECONOMICAL EXIT LIGHT CEILING MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION
<u>-XEW</u>	ECONOMICAL EXIT LIGHT WALL MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION.
<u>Bdt</u>	DUAL TECHNOLOGY SENSOR COORDINATED WITH ASSOCIATED SWITCHING SYSTEM

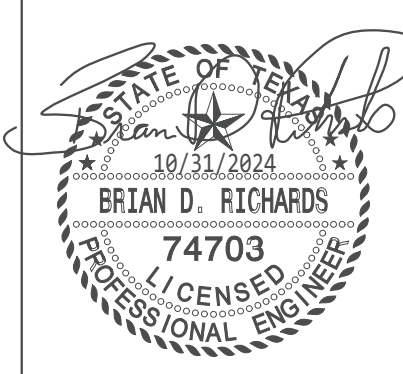


1  **ELECTRICAL LIGHTING PLAN**
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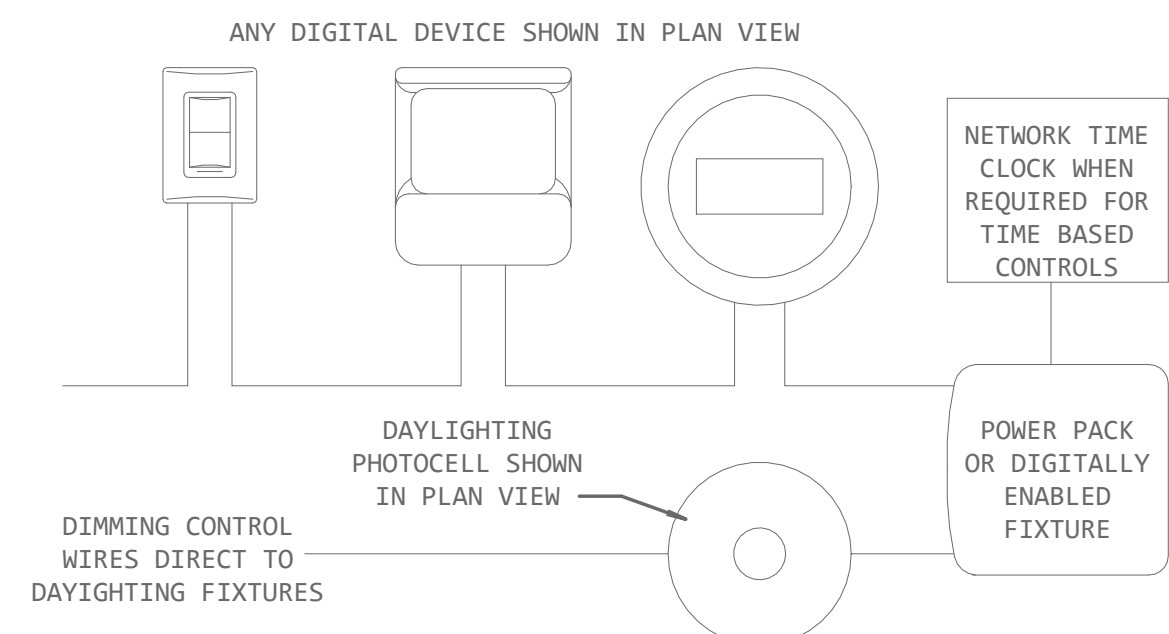
SHEET CONTENT
ELECTRICAL LIGHTING FLOOR PLAN

SHEET NUMBER
SE05
E202

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DIGITAL LIGHTING CONTROLS NOTES AND DETAIL

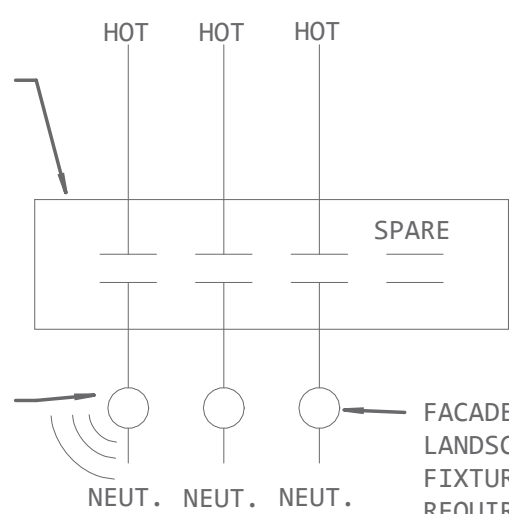
- DIGITAL LIGHTING CONTROLS GENERAL NOTES:
1. ALL POWER PACKS TO BE MOUNTED ABOVE CEILING NEAREST THE FIRST WALL SWITCH SERVING THE ASSOCIATED ROOM. PLAN VIEW SHOWS QUANTITY OF ZONES REQUIRED MANUFACTURER MAY COMBINE POWER PACKS WHERE POSSIBLE INTO MULTI ZONE POWER PACKS.
 2. DETAIL IS GENERIC IN NATURE. PLAN VIEWS WILL INDICATE NUMBER OF ZONES, PROVIDE POWER PACK OR EQUIVALENT FOR EACH ZONE. PLAN VIEW WILL INDICATE LOCATION OF DIGITAL WALL SWITCHES WITH NUMBER OF BUTTONS REQUIRED. ACCEPTABLE MANUFACTURERS ARE WATT STOPPER, LUTRON AND ACUITY CONTROLS. OTHERS WILL BE CONSIDERED WITH PRE-APPROVAL PRIOR TO BIDDING.
 3. CONTRACTOR IS RESPONSIBLE FOR PROVIDING A FULLY FUNCTIONAL SYSTEM.
 4. ALL WIRING SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS



EXTERIOR LIGHTING CONTROL DETAIL

- EXTERIOR LIGHTING CONTROL GENERAL NOTES:
1. FOR GENERAL EXTERIOR SITE AND BUILDING LIGHTING, PROVIDE 365/7 DAY ASTRONOMIC TIME CONTROL WITH OVERRIDE ON/OFF AND MINIMUM 2 DAY PERMANENT SCHEDULE RETENTION. PROVIDE ONE RELAY OR CONTACT PER ZONE REQUIRED.
 2. PROVIDE TIME SCHEDULE TO BE ON AT NIGHT AND OFF AT DAWN
 3. CIRCUIT AS SHOWN IN PLAN VIEW.

PROVIDE TIME CLOCK WITH NEEDED ZONES OR TIMELOCK CONTACTOR COMBINATION WITH ZONES NEEDED.



ENERGY CODE SETBACK WILL BE BY INTEGRAL MOTION SENSOR ON FIXTURE TO ACHIEVE MINIMUM 30% REDUCTION IN TOTAL SITE LIGHTING POWER WHERE SPECIFIED WITH FIXTURE

- EXTERIOR LIGHTING ENERGY CODE REQUIREMENTS :
1. ALL EXTERIOR LIGHTING SHALL BE CONTROLLED AS A FUNCTION OF AVAILABLE LIGHT USING AN ASTRONOMIC TIMELOCK, PHOTOCELL OR SIMILAR MEANS, UNLESS NOTED OTHERWISE.
 2. EXTERIOR LIGHTING SHALL BE REDUCED BY MINIMUM OF 30% AFTER MIDNIGHT AT THE LATEST TO 6AM, OR 1-HOUR AFTER CLOSING AND 1 HOUR BEFORE BUSINESS OPENING, OR ANYTIME OF INACTIVITY OF MORE THAN 15 MINUTES.
 3. EXEMPTIONS TO EXTERIOR LIGHTING:
 - A. EMERGENCY EGRESS LIGHTING
 - B. COVERED VEHICLE ENTRANCES TO PARKING STRUCTURES
 - C. BUILDING FACADE AND LANDSCAPE LIGHTING MAY BE PHOTOCELL ONLY; 30% DIMMING IS NOT REQUIRED.

GENERAL ENERGY CODE REQUIREMENTS :

1. ALL AREAS LISTED BELOW SHALL HAVE OCCUPANCY SENSOR CONTROL:
 - ENCLOSED SPACES 300 SQ.FT. OR LESS
 - PRIVATE OFFICES
 - RESTROOMS
 - STORAGE ROOMS
 - JANITORIAL CLOSETS
 - COPY OR PRINT ROOMS
 - LOUNGES
 - EMPLOYEE LUNCH AND BREAK ROOMS
2. FOR OCCUPANCY SENSORS, AUTOMATIC ON TO 100% OUTPUT IS ALLOWED FOR PUBLIC CORRIDORS, LOBBIES AND SIMILAR PUBLIC USE ONLY AREAS. AUTOMATIC SENSORS ON SHALL BE PROGRAMMED TO AUTOMATICALLY TURN ON LIGHTING TO NO MORE THAN 50% IN OTHER SPACES IN ACCORDANCE WITH IECC REQUIREMENTS.
3. AREAS NOT PROVIDED WITH OCCUPANCY SENSORS AS LISTED ABOVE SHALL BE ON A TIME BASED SCHEDULE. TIME SWITCH CONTROLS SHALL PROVIDE MAXIMUM 2-HOUR OVERRIDE (MAXIMUM 5,000 SQ.FT. EACH OVERRIDE) WITHIN SPACE CONTROLLED OR HAVE A PILOT LIGHT AND MAP OF LIGHTING CONTROLLED.
 - A. MALLS, ARCADES, AUDITORIUMS, SINGLE TENANT RETAIL, INDUSTRIAL FACILITIES AND ARENAS ARE EXEMPT FROM THE 2-HOUR LIMIT ON OVERRIDE TIME AND MAY CONTROL SPACES UP TO 20,000 SQ.FT.
 - B. AREAS NOT EXEMPTED FROM TIME BASED CONTROLS SHALL HAVE LIGHT REDUCTION CONTROLS (DIMMER) LOCATED IN SPACE FOR A MINIMUM 50% REDUCTION BY OCCUPANT.
5. LIGHTING REDUCTION IS NOT REQUIRED FOR ROOMS WITH ONLY ONE LIGHT FIXTURE, ROOMS USING LESS THAN 0.6 W/SQ.FT., CORRIDORS, EQUIPMENT ROOMS, AND PUBLIC LOBBIES.
6. TIME CONTROLS SHALL HAVE A 7-DAY CLOCK WITH DIFFERENT SCHEDULE EACH DAY, HAVE HOLIDAY SCHEDULING CAPABILITY AND 10 HOUR BACKUP FOR PROGRAMMING.
7. AREAS THAT HAVE SPECIAL EXEMPTIONS MUST BE EVALUATED ON A CASE BY CASE BASIS. THESE AREAS INCLUDE SLEEPING AREAS, PATIENT CARE AREAS, AREAS WHERE AUTOMATIC LIGHTING SHUTOFF WOULD ENDANGER LIFE SAFETY, DWELLING UNITS WITHIN COMMERCIAL BUILDINGS, AND WALK-IN COOLER AND FREEZERS
8. SINGLE POLE LINE VOLTAGE TOGGLE SWITCHES MAY BE USED WHERE AUTOMATIC LIGHTING CONTROLS WOULD ENDANGER LIFE SAFETY OR ARE EXEMPT FOR EGRESS RELATED LIFE SAFETY REASONS.

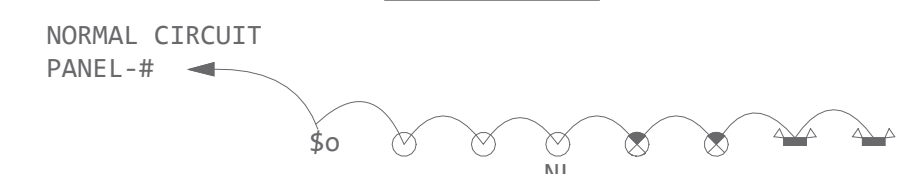
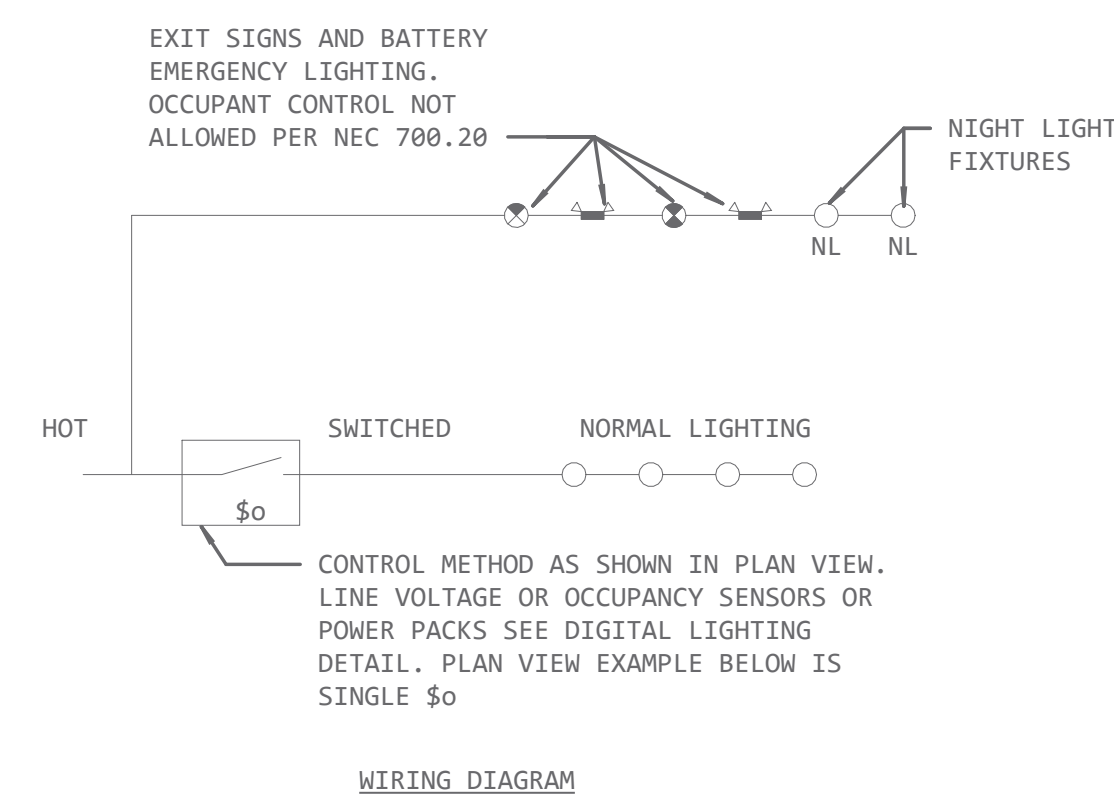
LIGHTING CONTROL GENERAL NOTES:

1. SENSOR LOCATIONS ARE MINIMUMS. CONTRACTOR SHALL PROVIDE FOR A MINIMUM OF 10% ADDITIONAL DEVICES TO COVER DARK SPOTS DISCOVERED DURING CONSTRUCTION FROM FIELD INSTALLED OBSTRUCTIONS. CONTRACTOR SHALL ALSO ALLOW FOR A MOVE OF UP TO 5'-0" IN ANY DIRECTION FOR ALL SENSORS, AT NO ADDITIONAL COST TO THE OWNER, TO ALLOW FOR FIELD ADJUSTMENT OF SENSOR PLACEMENTS TO ACHIEVE OPTIMUM PERFORMANCE.
2. INSTALLATION SHALL BE IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.
3. CONTRACTOR SHALL PROVIDE A MINIMUM OF (2) SITE VISITS BY FACTORY TRAINED PERSONNEL TO ADJUST SENSORS AND TRAIN THE OWNER ON USE AND MAINTENANCE OF LIGHTING CONTROL COMPONENTS.
4. AFTER COMMISSIONING LIGHTING CONTROLS, CONTRACTOR SHALL PROVIDE A WRITTEN TEST REPORT INDICATING THAT ALL LIGHTING CONTROL SYSTEMS HAVE BEEN COMMISSIONED, TESTED AND FOUND TO BE FUNCTIONING IN ACCORDANCE WITH CONTRACT DOCUMENT AND CODE REQUIREMENTS. CONTRACTOR SHALL ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, MANUFACTURER'S INSTRUCTIONS AND CODE REQUIREMENTS. FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH IECC SECTIONS C408.3.1.1/2 FOR THE APPLICABLE CONTROL TYPES.

ELECTRICAL CONTRACTOR IS TO HIRE COMMISSIONING AGENT TO COMMISSION LIGHTING CONTROLS, CONTRACTOR SHALL PROVIDE A WRITTEN TEST REPORT INDICATING THAT ALL LIGHTING CONTROL SYSTEMS HAVE BEEN COMMISSIONED AND TESTED, AND FOUND TO BE FUNCTIONING IN ACCORDANCE WITH CONTRACT DOCUMENT AND CODE REQUIREMENTS. CONTRACTOR SHALL ENSURE THAT CONTROL HARDWARE AND SOFTWARE ARE CALIBRATED, ADJUSTED, PROGRAMMED AND IN PROPER WORKING CONDITION IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, MANUFACTURER'S INSTRUCTIONS AND CODE REQUIREMENTS. FUNCTIONAL TESTING SHALL BE IN ACCORDANCE WITH IECC SECTIONS C408.3.1.1 AND C408.3.1.2 FOR THE APPLICABLE CONTROL TYPES.

LIGHTING CONTROLS DETAIL

NTS



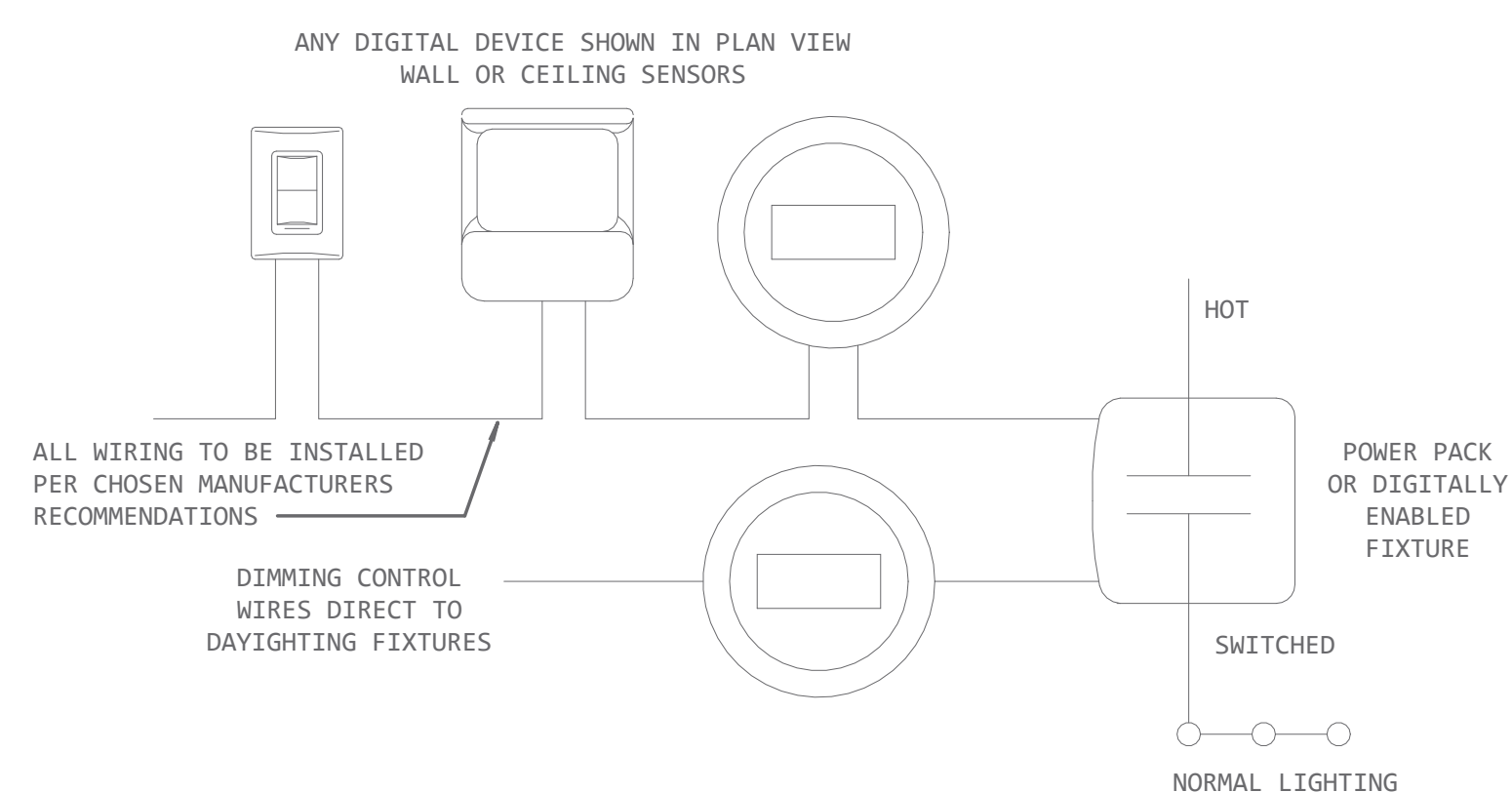
PLAN VIEW DRAFTING SHOWN FOR CLARITY AS LOOPED CIRCUIT CONNECTIONS. ACTUAL WIRING TO FOLLOW WIRING DIAGRAM ABOVE FOR INTERCONNECTION OF ELEMENTS.

PLAN VIEW DIAGRAM

NOTE: EMERGENCY BALLAST MUST BE FED FROM SAME BRANCH CIRCUIT AS NORMAL LIGHTING IN AREA SERVED.

OPERATION: NORMAL FIXTURE FOLLOWS CONTROL METHOD SHOWN. NIGHT LIGHTS STAY ON ALL DAY. LOSS OF POWER FORCES EMERGENCY ILLUMINATION VIA BATTERY POWER TO TURN ON.

DEDICATED BATTERY PACK LIGHTING FOR EMERGENCY LIGHTING

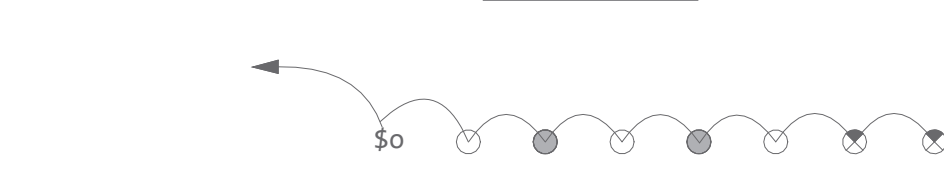
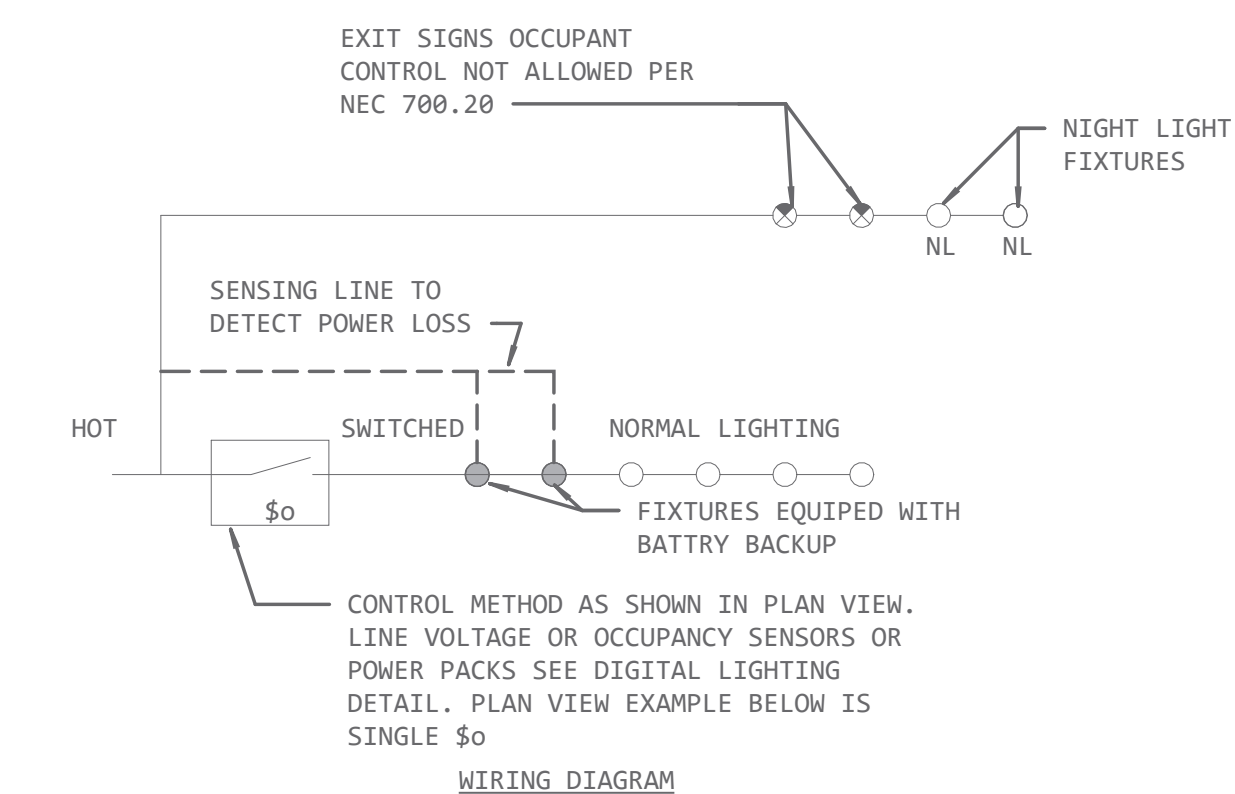


DIGITAL LIGHTING CONTROL / MANAGEMENT



OPERATION: EXTERIOR LIGHTING TO FUNCTION ON PHOTOCELL ON/OFF DUSK TO DAWN. LIGHTING TO BE SET BACK MINIMUM OF 30% WHEN NO MOTION IS DETECTED.

EXTERIOR LIGHTING CONTROL



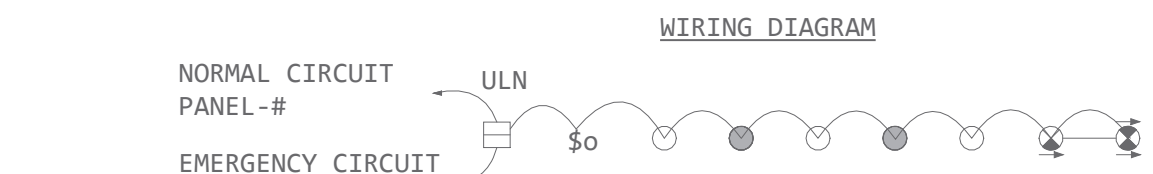
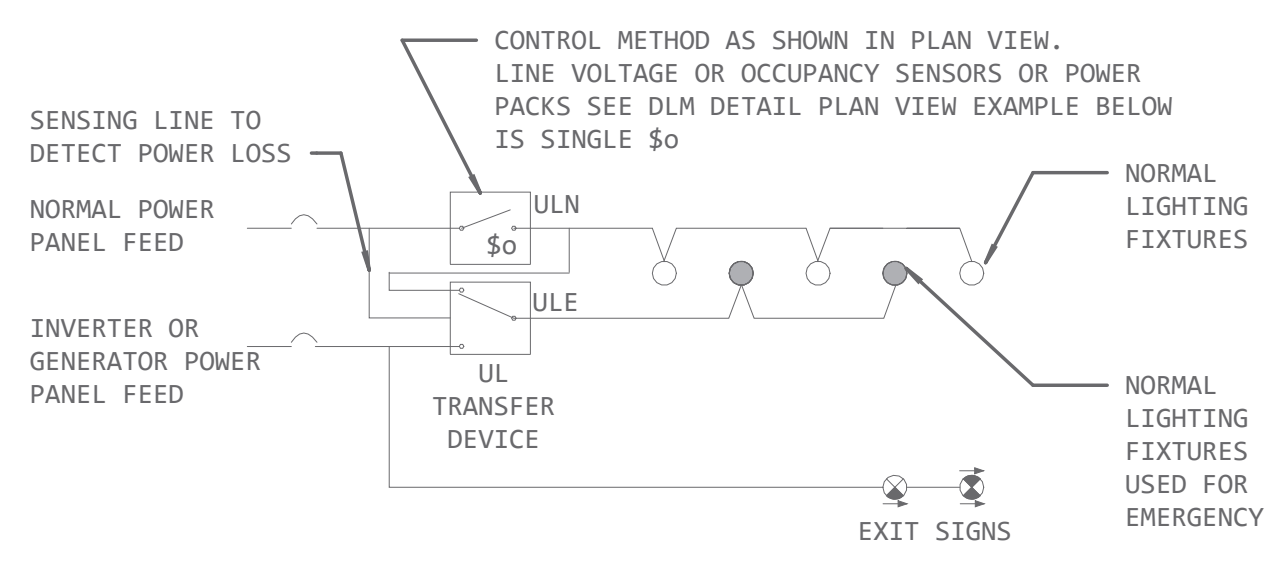
PLAN VIEW DRAFTING SHOWN FOR CLARITY AS LOOPED CIRCUIT CONNECTIONS. ACTUAL WIRING TO FOLLOW WIRING DIAGRAM ABOVE FOR INTERCONNECTION OF ELEMENTS.

PLAN VIEW DIAGRAM

NOTE: EMERGENCY BALLAST MUST BE FED FROM SAME BRANCH CIRCUIT AS NORMAL LIGHTING SERVING FIXTURE WITH EMERGENCY DRIVER.

OPERATION: NORMAL FIXTURE FOLLOWS CONTROL METHOD SHOWN. NIGHT LIGHTS STAY ON ALL DAY. LOSS OF POWER FORCES EMERGENCY ILLUMINATION VIA BATTERY DRIVER TO TURN ON.

INTEGRATED BATTERY IN NORMAL LIGHTING FIXTURES USED FOR EMERGENCY LIGHTING



PLAN VIEW DRAFTING SHOWN FOR CLARITY AS LOOPED CIRCUIT CONNECTIONS. ACTUAL WIRING TO FOLLOW WIRING DIAGRAM ABOVE FOR INTERCONNECTION OF ELEMENTS.

PLAN VIEW DIAGRAM

NOTE: EMERGENCY BALLAST MUST BE FED FROM SAME BRANCH CIRCUIT AS NORMAL LIGHTING

ALL EQUIPMENT SERVING EMERGENCY LIGHTING TO BE LISTED PER NEC 700.16

OPERATION: NORMAL FIXTURE FOLLOWS CONTROL METHOD SHOWN. LOSS OF POWER FORCES EMERGENCY ILLUMINATION VIA INVERTER OR GENERATOR

GENERATOR OR INVERTER EMERGENCY POWER FEED

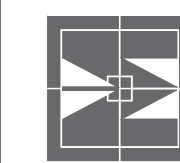
LIGHTING FIXTURE SCHEDULE

TAG	TAG DESCRIPTION	Manufacturer	Model	VOLT	VA	COMMENTS
POLE	25' TALL 5" SQUARE STRAIGHT STEEL POLE	LSI Industries	TBC			POLE COLOR TO BE SELECTED BY ARCHITECT
-AF2	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE.	LITHONIA	CPX 2X2 3200LM 35K M4 MVOLT	120 V	19 VA	
-AF2E	RECESSED FLAT PANEL 2X2 LED LIGHT FIXTURE WITH EMERGENCY BATTERY	LITHONIA	CPX 2X2 3200LM 35K M4 MVOLT E10WLCF	120 V	19 VA	
-CH	CEILING SUSPENDED CHANDELIER LIGHT GRACE 48 CHANDELIER. 124W 4623LM 3000K. DARK BRONZE FINISH.	VISUAL COMFORT & CO	700GR-C-48-BW-LED930	120 V	124 VA	
-D1	4" RECESSED LED CAN LIGHT FIXTURE. REFER TO SCHEDULE.	LITHONIA	LDN4 35/30 L04AR LSS MVOLT G21	120 V	33 VA	
-D2	6" RECESSED LED CAN LIGHT FIXTURE.	LITHONIA	LDN6 35/10 L04AR LSS MVOLT G21	120 V	11 VA	
-D2E	6" RECESSED LED CAN LIGHT FIXTURE WITH EMERGENCY BATTERY	LITHONIA	LDN6 35/10 L04AR LSS MVOLT G21 ELRSD	120 V	11 VA	
-L1	1' ULTRA SLIM UNDER CABINET LED LIGHT.	ALA HORTON CONTROLS	UCES 121N S4W6 90CRI WH M6	120 V	7 VA	
-L2	2' ULTRA SLIM UNDER CABINET LED LIGHT .	ALA HORTON CONTROLS	UCES 241N S4W6 90CRI WH M6	120 V	11 VA	
-L3	3' ULTRA SLIM UNDER CABINET LED LIGHT.	ALA HORTON CONTROLS	UCES 361N S4W6 90CRI WH M6	120 V	16 VA	
-M1	MEDICAL EXAMINATION LIGHT BY OWNER		ME-550	120 V	65 VA	TO BE SUPPLIED BY OWNER
-P1	CEILING SUSPENDED PENDANT LIGHT ALINA SMALL ACCENT PENDANT.	VISUAL COMFORT & CO	SLPD278-C-B-L	120 V	5 VA	
-PL	AREA LIGHT INSTALLED ON 25' HIGH AND 5"X5" SQUARE STEEL POLE. AOR TO SELECT POLE COLOR AND FINISH. REFER TO POLE BASE DETAILS.	Cooper Lighting Solutions	GLEON-SA1C-830-U-S13	120 V	56 VA	AOR TO SELECT ALL COLORS AND FINISHES
-S1	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.	LITHONIA	ZL1N L48 7000LM FST 35K 80CRI WH	120 V	52 VA	
-S1E	SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE WITH EMERGENCY BATTERY PACK. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING.	LITHONIA	ZL1N L48 7000LM FST 35K 80CRI E10WLCF WH	120 V	52 VA	
-S2	2FT SURFACE MOUNTED LED UTILITY STRIP LIGHT FIXTURE. PROVIDE NECESSARY HARDWARE FOR SURFACE MOUNTING. REFER TO SCHEDULE.	LITHONIA	ZL1N L24 3500LM FST 35K 80CRI WH	120 V	31 VA	
-SIG	FLOOD LIGHT FOR MONUMENT SIGN ILLUMINATION	Acuity Brands Lighting	DSXF2 LED P3 30K 70CRI MFL MVOLT	120 V	100 VA	AOR TO SELECT COLORS AND FINISHES
-SLM	LED SIDE LIT MIRROR ABOVE TOILET SINK. COMES WITH 120V/24V ADAPTOR TO CONNECT TO GFCI OUTLET. WIDTH & HEIGHT TO BE DETERMINED BY ARCHITECT. DARK BRONZE FINISH.	BOBRICK	B-169-2430-1250	120 V	30 VA	
-HS1	HALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.	NEW STAR	LUN-G-C-L2-35-1-RW-E-5-12-B2	120 V	25 VA	
-HS2	HALL MOUNTED EXTERIOR LED SCENCE. PRODUCT TO BE WEATHER PROOF. REFER TO SCHEDULE.		700WSP1T-S-2-LED030	120 V	24 VA	
-HS3	HALL MOUNTED LED SCENCE.	MINKA-LAVERY	P5048-37B-L	120 V	25 VA	
-XEC	ECONOMICAL EXIT LIGHT CEILING MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION	EVENLITE	TLX-EM-GU(GREEN)-W(WHITE)-SD	120 V	5 VA	
-XEW	ECONOMICAL EXIT LIGHT WALL MOUNTED. FACE AND CHEVRONS AS SHOWN IN PLAN LOCATION.	EVENLITE	TLX-EM-GU(GREEN)-W(WHITE)-SD	120 V	5 VA	



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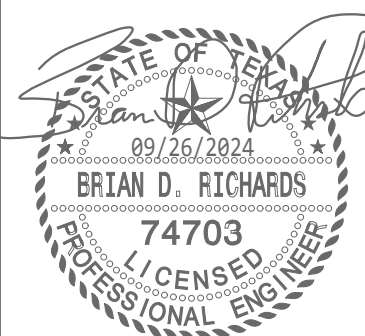
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PROJECT NO.: 1744-22
DATE: 09/26/2024
DRAWN:
REVISED:



SHEET CONTENT

LIGHTING DETAILS

SHEET NUMBER

E301