COVER SHEET
G-000-CA
FOR BLUEBEAM LABELING/OCR:

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT

OWNER
LODI UNIFIED SCHOOL DISTRICT
1305 E VINE STREET
LODI, CA 95240
T (209)331-7000

ARCHITECT
PBK ARCHITECTS, INC
1110 IRON POINT RD, SUITE 200
FOLSOM,CA 95630
T (916)355-9922

CIVIL ENGINEER
WARREN CONSULTING ENGINEERS, INC
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95762
T (916)985-1870

MEP ENGINEER
LEAF ENGINEERS
1110 IRON POINT ROAD
FOLSOM, CA 95630
T (916)355-9922

TECHNOLOGY CONSULTANT
LEAF ENGINEERS
1110 IRON POINT ROAD
FOLSOM, CA 95630
T (916)355-9922

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

www.pbk.com
916-355-9922
FOLSOM, CA

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

DISCIPLINE

LEONA M. KETTERL
C-38823
REN. 09-30-25

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: Checker
DRAWN BY: Author

COVER SHEET

G-000-CA

Plot Stamp:
5/8/2025 11:00:15 AM

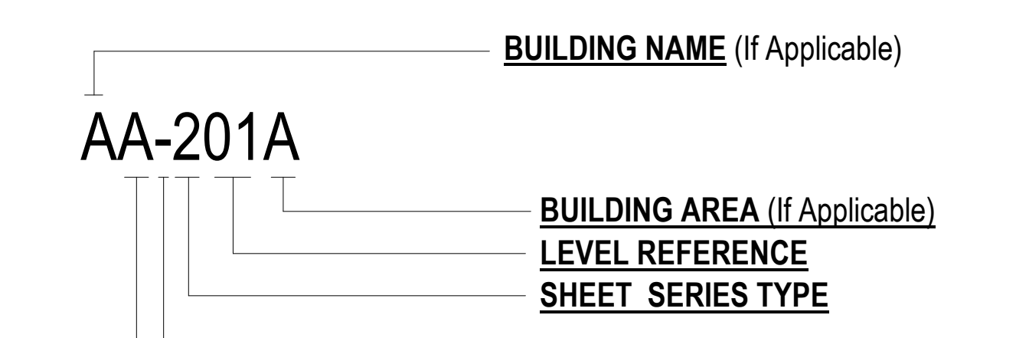
GENERAL PROJECT INFORMATION
G-002-CA
FOR BLUEBEAM LABELING/OCR

ABBREVIATIONS AND LEGEND KEYS

REFER TO SCHEDULES AND LEGENDS FOR ADDITIONAL ABBREVIATIONS
REFER TO OTHER DISCIPLINES FOR ADDITIONAL ABBREVIATIONS

A	
ABV	above
ACOUS	acoustical
ACT	acoustical ceiling tile
AD	area drain
ADJ	adjustable
AFF	above finished floor
ALT	alternate
ALUM	aluminum
APPROX	approximate
ARCH	architect / architectural
B	
B.O.	bottom of
BALC	balcony
BD	board
BET	between
BLDG	building
BLKG	blocking
BLW	below
BM	beam
BOT	bottom
BRKT	bracket
BULKHD	bulkhead
BUR	built up roof
C	
C.G.	corner guard
CAB	cabinet
CALK	caulking
CDS	cabinet design series
CEM	cement
CER	ceramic
CJ	control joint
CLG	ceiling
CLOS	closet
CLR	clear
CO	cased opening
COL	column
CONC	concrete
CONT	continous
CPT	carpet
CT	ceramic tile
CTR	center
CW	curtain wall
D	
DBL	double
DET	detail
DIA	diameter
DIM	dimension
DN	down
DR	door
DS	down spout
DW	dishwasher
DWG	drawing
E	
E	east
EA	each
EIFS	exterior insulation & finish system
ELEC	electric(al)
ELEV	elevation
EMER	emergency
ENCL	enclosure
EOS	edge of slab
EQ	equal
EQUIP	equipment
ETR	existing to remain
EW	each way
EXP. JT.	expansion joint
EXST	existing
F	
F.O.	face of
FA	fire alarm
FAP	fire annunciator panel
FD	floor drain
FE	fire extinguisher
FEC	fire extinguisher cabinet
FG	finish group
FH	fire hydrant
FHC	fire hose cabinet
FIN	finish
FLR	floor
FLUOR	fluorescent
FT	foot or feet
FUR	furring
G	
GAL	gallon
GALV	galvanized
GB	grab bar
GC	general contractor
GL	glass
GND	ground
GWB	gypsum wall board
GYP	gypsum
H	
H.W.H.	hot water heater
HC	handicapped
HDWD	hardwood
HDWR	hardware
HM	hollow metal
HORIZ	horizontal
HR	hour
HT	height
I	
ID	inner diameter
INCAN	incandescent
INSUL	insulation
INT	interior
J	
JAN	janitor
JST	joist
JT	joint
L	
LAM	laminate
LAV	lavatory
LB	pound(s)
LDG	landing
LT	light
M	
MAX	maximum
MECH	mechanical
MEMB	membrane
MFR	manufacturer
MIN	minimum
MISC	miscellaneous
MO	masonry opening
MTD	mounted
MTL	metal
N	
N	north
NIC	not in contract
NO	number
NOM	nominal
NTS	not to scale
O	
O.P.	overflow pipe
OA	overall
OC	on center
OD	outside diameter
OFF	office
OH	opposite hand
OPG	opening
OPP	opposite
P	
PART	partition
PCT	porcelain tile
PERM	perimeter
PG	paint grade
PLAM	plastic laminate
PLAS	plaster
PLYWD	plywood
POLYISO	polyisocyanurate
PR	pair
PT	paint
PTD	painted
R	
R	riser
RAD	radius
RCP	reflected ceiling plan
RD	roof drain
RE:	refer
REF	refrigerator
REINF	reinforced
REQD	required
RESIL	resilient
RM	room
RO	rough opening
RTU	root top unit (mech)
S	
S	south
SAFB	sound attenunation fiber batt
SC	scupper
SCHED	schedule
SEAL	sealant
SECT	section
SF	square foot
SHT	sheet
SIM	similar
SPEC	specification
SQ	square
SS	stainless steel
STD	standard
STF	storefront
STL	steel
STOR	storage
STRUCT	structural
SUSP	suspended
SYM	symmetrical
T	
T	tread
T&G	tongue & groove
T.O.	top of
TEL	telephone
TER	terrazzo
THK	thick
THR	threshold
TYP	typical
U	
UC	undercut
UNFIN	unfinished
UNO	unless noted otherwise
UON	unless otherwise noted
UTIL	utility
V	
VCT	vinyl compostion tile
VERT	vertical
VIF	verify in field
VTR	vent termination pipe
VWC	vinyl wall covering
W	
W	west
W/	with
W/O	without
WC	watercloset
WIN	window
WP	waterproof
WS	wood, solid core
WSCT	wainscot
WT	weight
X	
XPS	extruded polystrene

PROJECT GRAPHIC REFERENCES



DISCIPLINE

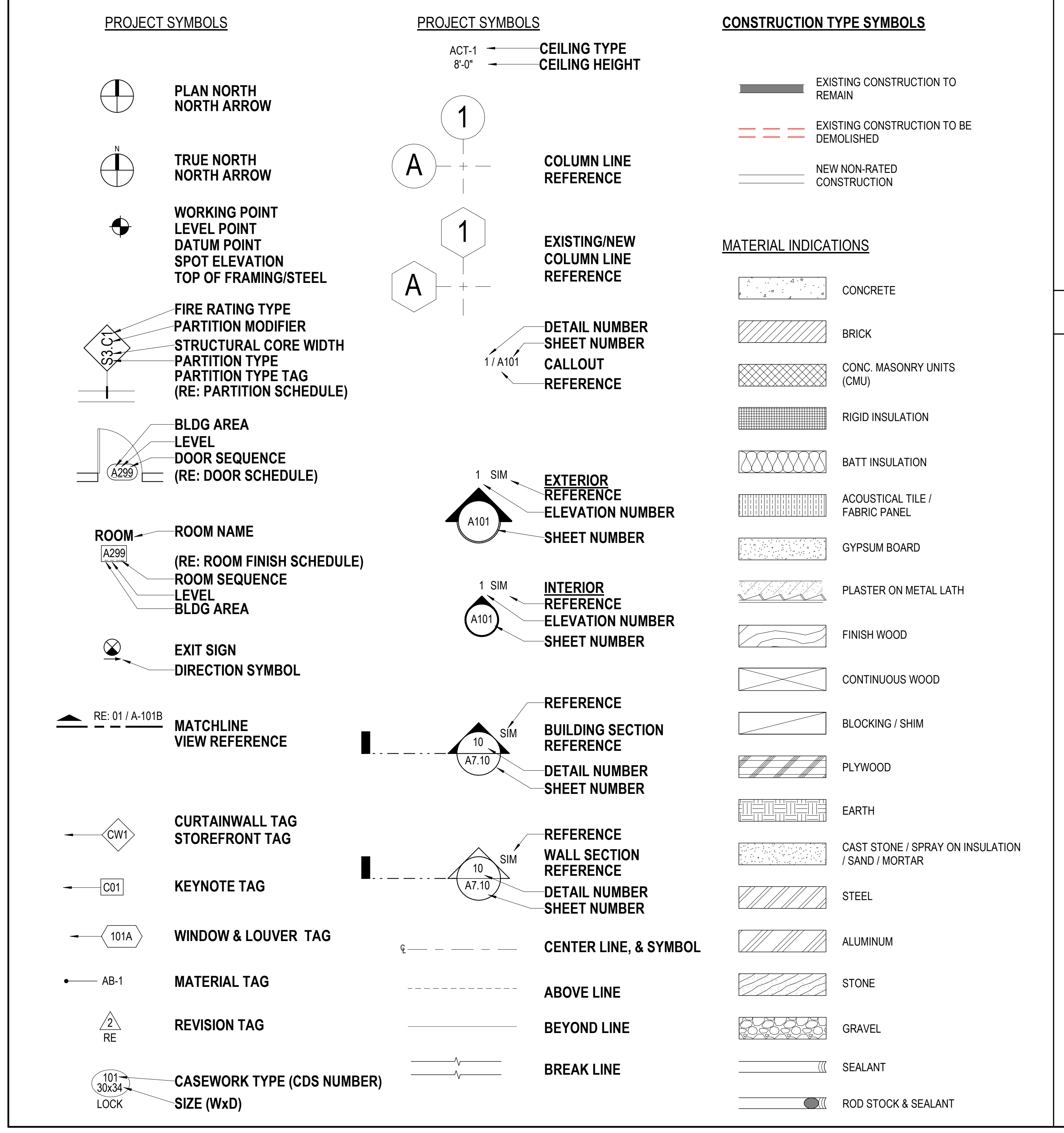
G	GENERAL
C	CIVIL
CA	SPORTS CIVIL
SA	SPORTS ARCH
S	STRUCTURAL
L	LANDSCAPE
D	DEMOLITION
A	ARCHITECTURAL
M	MECHANICAL
E	ELECTRICAL
P	PLUMBING
T	TECHNOLOGY
FS	FOOD SERVICE
AV	ACOUSTICAL
TH	THEATRICAL

SUBDISCIPLINE

-	*NOT USED*
S	SITE
D	DEMO
F	FURNITURE
G	GRAPHICS & SIGNAGE
Q	EQUIPMENT

0	GENERAL
1	PLANS: (Site, Floor, Finish, Graphics)
2	CEILING
3	ROOF
4	ENLARGED PLANS
5	ELEVATIONS (Exterior)
6	SECTIONS: (Bldg & Wall)
7	BLDG DETAILS
8	DIAGRAMS/COMPILED SCHEDULES: (Partition Types, Door & Panel/Frame Types, Window Types)
9	INTERIOR FINISHES/SCHEDULES (Finish Plan, Interior Elevations, Casework/Millwork Elevations & Details, Locker Types & Details)

PROJECT GRAPHIC REFERENCES



GENERAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN FULL ACCORDANCE WITH THE REQUIREMENTS OF THE CODES AND ALL APPLICABLE LOCAL ORDINANCES. WHERE CONTRACT DOCUMENTS EXCEED SUCH REQUIREMENTS, WITHOUT VIOLATING SUCH CODES, REGULATIONS AND ORDINANCES, CONTRACT DOCUMENTS TAKE PRECEDENCE. WHERE CODES CONFLICT, THE MORE STRINGENT SHALL APPLY.

2. PERFORMANCE BY THE CONSTRUCTION TEAM SHALL BE CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND PROJECT MANUAL (SPECIFICATIONS) AS NECESSARY TO DELIVER THE INDICATED RESULTS OF THE DESIGN INTENT.

3. REFER TO THE PROJECT MANUAL (SPECIFICATIONS) FOR GENERAL CONDITIONS, SUPPLEMENTARY AND SPECIAL CONDITIONS, AND OTHER REQUIREMENTS.

4. THE CONSTRUCTION DOCUMENT DRAWINGS AND PROJECT MANUAL (SPECIFICATIONS) ARE COMPLIMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY BOTH.

5. THE CONTRACTOR SHALL:
   A. CONFIRM ALL NEW AND EXISTING CONDITIONS WITH THE CONTRACT DOCUMENTS. NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ALL DISCREPANCIES OR CONFLICTS. DO NOT PROCEED WITH WORK IN THE AREA OF DISCREPANCY OR CONFLICT UNTIL DIRECTION IS GIVEN BY THE ARCHITECT. IF THE CONTRACTOR PROCEEDS WITHOUT DIRECTION FROM THE ARCHITECT, IT SHALL BE AT THE CONTRACTOR'S RISK, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED CORRECTIVE ACTION.
   B. REVIEW THE ARCHITECTURAL DRAWINGS BEFORE THE INSTALLATION OF SYSTEMS SHOWN ON CONSULTING ENGINEER'S DOCUMENTS. DISCREPANCIES BETWEEN THE ARCHITECTURAL AND CONSULTING ENGINEER'S DOCUMENTS SHALL BE BROUGHT TO THE ARCHITECT'S ATTENTION FOR DIRECTION. CONSTRUCTION INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
   C. CORRECT ALL WORK INSTALLED IN CONFLICT WITH THE CONSTRUCTION DOCUMENTS BY THE CONTRACTOR AS DIRECTED BY THE ARCHITECT AND AT NO ADDITIONAL EXPENSE TO THE OWNER.
   D. VISIT JOB SITE PRIOR TO BEGINNING WORK AND VERIFY ALL DIMENSIONS.
   E. SECURE AND PAY FOR ALL PERMITS, GOVERNMENTAL FEES, AND LICENSES REQUIRED FOR PROPER COMPLETION OF THE WORK. REQUEST ALL INSPECTIONS REQUIRED BY LOCAL GOVERNMENTAL AGENCIES AND COORDINATE WORK ACCORDINGLY.
   F. PROVIDE FOR THE PROPER SEQUENCE OF CONSTRUCTION, LOCATION, AND SIZE OF OPENINGS. COORDINATE ALL CONSTRUCTION AS INDICATED BY THE CONTRACT DOCUMENTS, INCLUDING SHOP DRAWINGS REVIEWED BY THE ARCHITECT.
   G. PROVIDE BARRICADES AND PROTECTIVE DEVICES SEPARATING CONSTRUCTION AREAS. PROVIDE TEMPORARY PASSAGES AS REQUIRED. PRIOR TO DELIVERY OF MATERIALS TO CONSTRUCTION ZONE AND REMOVAL OF WASTE FROM SITE, CHECK WITH OWNER FOR ACCEPTABLE ACCESS ROUTE AND TIME. UNDER NO CIRCUMSTANCES USE AREA OUTSIDE THE CONSTRUCTION ZONE WITHOUT PRIOR CLEARANCE FROM THE OWNER. COMPLY WITH REQUIREMENTS AS SPECIFIED IN THE PROJECT MANUAL.
   H. REMOVE ALL TRASH AND DEBRIS DAILY. DO NOT STORE BUILDING MATERIALS IN CORRIDORS AT ANY TIME. COMPLY WITH REQUIREMENTS AS SPECIFIED IN THE PROJECT MANUAL (SPECIFICATIONS).
   I. ENACT ALL MEASURES TO PROTECT IN PLACE AND SAFEGUARD ALL ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR ELEMENTS DAMAGED BY THE EXECUTION OF THE CONTRACT TO EQUAL OR LIKE NEW CONDITION.
   J. VERIFY POINTS OF CONNECTION, INCLUDING SIZES AND LOCATIONS, AND ALL OTHER REQUIRED OPERATING CRITERIA WITH EQUIPMENT MANUFACTURER.
   K. COORDINATE THE LOCATION AND TYPE OF ALL ACCESS PANELS REQUIRED FOR ACCESSING MECHANICAL, PLUMBING, ELECTRICAL, AND OTHER BUILDING SYSTEMS WITH THE ARCHITECT.
   L. ENSURE ALL CONSTRUCTION REMAINS ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED BY THE INSPECTOR OF RECORD. FOR CONTINUOUS INSPECTION, TESTING, AND OBSERVATION REQUIREMENTS, REFER TO THE TESTING AND OBSERVATION PROGRAM.
   M. STIPULATE THAT ALL PROPOSED SUBSTITUTIONS ARE EQUAL IN PERFORMANCE AND COMPLY WITH APPLICABLE CODES AND REGULATIONS. CONTRACTOR'S SUBSTITUTION OF ALTERNATE MATERIALS OR SYSTEMS SHALL BE AT NO ADDITIONAL COST TO OWNER.

6. DO NOT SCALE THE CONSTRUCTION DOCUMENTS. WRITTEN DIMENSIONS TAKE PRECEDENCE OVER SCALED GRAPHICS. NOTIFY THE ARCHITECT IMMEDIATELY IN WRITING OF ALL ADDITIONAL REQUIRED DIMENSIONS. DO NOT PROCEED WITH WORK IN THE AREA OF DISCREPANCY OR CONFLICT UNTIL DIRECTION IS GIVEN BY THE ARCHITECT. IF THE CONTRACTOR PROCEEDS WITHOUT DIRECTION FROM THE ARCHITECT, IT SHALL BE AT THE CONTRACTOR'S RISK, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED CORRECTIVE ACTION.

7. WHERE WORK OR EQUIPMENT IS INDICATED "N.I.C." (NOT IN CONTRACT) ON THE DRAWINGS, SUCH WORK AND/OR EQUIPMENT SHALL BE PROVIDED BY OTHERS. CONTRACTOR SHALL COORDINATE AND COOPERATE TO EFFECT SUCH INSTALLATION.

8. ALL PLAN DIMENSIONS SHOWN AT CENTER OF WALL REPRESENT CENTER LINE OF STUD OR STRUCTURAL ELEMENT UNLESS NOTED OTHERWISE.

9. ALL PLAN DIMENSIONS FOR MASONRY AND CONCRETE REPRESENT FACE OF MATERIAL AND OPENING UNLESS NOTED OTHERWISE.

10. ALL PLAN DIMENSIONS FOR STUD WALLS REPRESENT FACE OF STUD UNLESS NOTED OTHERWISE.

11. DIMENSIONS ARE NOT ADJUSTABLE WITHOUT THE REVIEW OF THE ARCHITECT UNLESS NOTED (±) OR "VERIFY". DIMENSIONS NOTED "HOLD" SHALL BE CONSIDERED AS ABSOLUTE AND USED FOR LAYOUT CONTROL UNLESS OTHERWISE DIRECTED BY THE ARCHITECT.

12. ANY ITEM, CONDITION OR DIMENSION NOTED AS "FIELD VERIFY" OR "VERIFY IN FIELD" SHALL BE CONFIRMED ON SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT OF RECORD BEFORE INCORPORATING INTO THE WORK.

13. ALL HEIGHTS ARE DIMENSIONED FROM TOP OF SLAB UNLESS NOTED "AFF" (ABOVE FINISH FLOOR)

14. "TYPICAL" MEANS COMPARABLE CHARACTERISTICS FOR THE ELEVATION OR DETAIL NOTED. WHEN A DETAIL OR NOTE IS IDENTIFIED AS "TYPICAL", THE CONTRACTOR SHALL APPLY THIS DETAIL OR NOTE TO EVERY LIKE CONDITION, WHETHER OR NOT THE REFERENCE IS REPEATED IN EVERY INSTANCE. VERIFY DIMENSIONS AND ORIENTATION ON PLANS.

15. PROVIDE WORK NOT SPECIFICALLY DETAILED OR SPECIFIED IN ACCORDANCE WITH DETAILS OR SIZES COVERING SIMILAR WORK.

16. "SIMILAR" MEANS COMPARABLE CHARACTERISTICS FOR THE ELEVATION OR DETAIL NOTED. VERIFY DIMENSIONS AND ORIENTATION ON PLANS.

17. ABBREVIATIONS THROUGHOUT THE DOCUMENTS COMPLY WITH DOCUMENT ABBREVIATION LIST OR ARE THOSE IN COMMON USE. ARCHITECT WILL DEFINE THE INTENT OF ANY IN QUESTION.

18. THESE DRAWINGS DO NOT CONTAIN THE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY

19. THESE DOCUMENTS AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, ARE THE PROPERTY OF PBK ARCHITECTS, INC., AND ARE NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF PBK ARCHITECTS, INC.

20. THE WORK SHOWN ON THESE DRAWINGS AS EXISTING CONDITIONS WAS PREPARED FROM INFORMATION FURNISHED BY THE OWNER. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, PBK ARCHITECTS, INC. IS NOT RESPONSIBLE FOR THE ACCURACY OR ADEQUACY OF ANY WORK SHOWN AS EXISTING NOR IS PBK ARCHITECTS, INC. RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY HAVE BEEN INCORPORATED INTO THESE DRAWINGS AS A RESULT.

21. FIRE SAFETY DURING CONSTRUCTION & DEMOLITION:
   A. GENERAL: FIRE SAFETY DURING CONSTRUCTION SHALL COMPLY WITH CALIFORNIA FIRE CODE (CFC) CALIFORNIA CODE OF REGULATIONS (CCR) TITLE 24, PART 9, CHAPTER 5 AND CHAPTER 33.
   B. ACCESS ROADS: FIRE DEPARTMENT ACCESS ROADS SHALL BE ESTABLISHED AND MAINTAINED IN ACCORDANCE WITH CHAPTER5, SECTION 501.4 AND CHAPTER 33, SECTION 3311.
   C. WATER SUPPLY: WATER MAINS AND HYDRANTS SHALL BE OPERATION IN ACCORDANCE WITH CHAPTER 5, SECTION 501.4 AND CHAPTER 33, SECTION 3313.
   D. BUILDING ACCESS: ACCESS TO BUILDINGS FOR THE PURPOSE OF FIREFIGHTING SHALL BE PROVIDED. CONSTRUCTION MATERIAL SHALL NOT BLOCK ACCESS TO BUILDINGS, HYDRANTS OR FIRE APPLIANCES.
   E. ALTERATIONS OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 33.
   F. DEMOLITION OF BUILDINGS: SHALL COMPLY WITH APPLICABLE PROVISIONS OF CHAPTER 33.
   G. FIRE WATCH: MAINTAIN FIRE WATCH WHEN REQUIRED BY THE BUILDING OFFICIAL AND WHEN EXISTING FIRE PROTECTION SYSTEMS ARE SHUT DOWN FOR ALTERATIONS IN ACCORDANCE WITH CHAPTER 33, SECTION 3305.5. FIRE WATCH SHALL REMAIN IN EFFECT UNTIL EXISTING FIRE PROTECTION SYSTEMS ARE RETURNED TO SERVICE OR AS ALLOWED BY THE BUILDING OFFICIAL.
   H. ALL CONSTRUCTION AND DEMOLITION SHALL BE IN ACCORDANCE WITH CHAPTER 33 OF THE CBC AND CFC, AND THE WRITTEN SITE FIRE SAFETY PLAN PER DSA BU 24-05, SECTION 3.

22. PENETRATIONS TO FIRE RATED MATERIALS OR ASSEMBLIES SHALL BE RESTORED TO EQUAL RATING. FIRE STOP SYSTEMS AS LISTED BY UNDERWRITERS LABORATORIES SHALL BE INSTALLED PER FIRE RESISTANCE DIRECTORY. FIRE STOP SYSTEMS SHALL BE AS SPECIFIED.

23. CUTTING, BORING, SAW-CUTTING OR DRILLING THROUGH STRUCTURAL ELEMENTS SHALL NOT COMMENCE UNTIL THE DRAWINGS HAVE BEEN SUMITTED, REVIEWED, AND APPROVED BY THE ARCHITECT OF RECORD.

24. NONRESIDENTIAL ENERGY STANDARDS COMPLIANCE STATEMENT (TITLE 24, PART 6):

    THE DESIGN INDICATED HEREIN COMPLIES WITH THE REQUIREMENTS OF THE ENERGY CONSERVATION STANDARDS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THE PROPOSED BUILDING(S) WILL BE IN COMPLIANCE WITH THE ENERGY CONSERVATION STANDARDS PROVIDED IT (THEY) IS (ARE) BUILT ACCORDING TO THESE DRAWINGS AND SPECIFICATIONS AND PROVIDED ANY FUTURE IMPROVEMENTS ARE COMPLETED ACCORDING TO THE REQUIREMENTS OF TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS. THESE PLANS AND SPECIFICATIONS HAVE BEEN PREPARED TO INCLUDE ALL SIGNIFICANT ENERGY CONSERVATION FEATURES REQUIRED FOR COMPLIANCE WITH THE STANDARDS. BUILDING AREAS THAT ARE UNCONDITIONED AND/OR NOT SUBJECT TO THE STANDARDS ARE INDICATED ON THE PLANS.

    ENVELOPE MANDATORY MEASURES:

   A. INSTALLED INSULATING MATERIALS SHALL HAVE BEEN CERTIFIED BY THE MANUFACTURER TO COMPLY WITH THE CALIFORNIA QUALITY STANDARDS FOR INSULATING MATERIAL.
   B. ALL INSULATING MATERIALS SHALL BE INSTALLED IN COMPLIANCE WITH THE FLAME SPREAD RATING AND SMOKE DENSITY REQUIREMENTS OF TITLE 24, PART 2, CALIFORNIA CODE OF REGULATIONS, SECTIONS 720 AND 2603.
   C. ALL EXTERIOR JOINTS AND OPENINGS IN THE BUILDING ENVELOPE THAT ARE POTENTIAL AND OBSERVABLE SOURCES OF AIR LEAKAGE SHALL BE CAULKED, GASKETED, WEATHERSTRIPPED OR OTHERWISE SEALED.
   D. SITE CONSTRUCTED DOORS, WINDOWS, AND SKYLIGHTS SHALL BE CAULKED BETWEEN THE UNIT AND THE BUILDING, AND SHALL BE WEATHERSTRIPPED (EXCEPT FOR UNFRAMED GLASS DOORS AND FIRE DOORS).
   E. MANUFACTURED DOORS AND WINDOWS INSTALLED SHALL HAVE AIR INFILTRATION RATES CERTIFIED BY THE MANUFACTURER IN ACCORDANCE WITH TITLE 24, PART 6, CALIFORNIA CODE OF REGULATIONS, SECTION 110.6.
   F. MANUFACTURED FENESTRATION PRODUCTS IN THE ENVELOPE OF THE BUILDING, INCLUDING, BUT NOT LIMITED TO, WINDOWS, SLIDING GLASS DOORS, FRENCH DOORS, SKYLIGHTS, CURTAIN WALLS, AND GARDEN WINDOWS MUST BE LABELED FOR U-VALUE IN ACCORDANCE WITH THE (NFRC) NATIONAL FENESTRATION RATING COUNCIL'S INTERIM U-VALUE RATING PROCEDURE.
   G. DEMISING WALL INSULATION SHALL BE INSTALLED IN ALL OPAQUE PORTIONS OF FRAMED WALLS (EXCEPT DOORS).

25. INSPECTOR OF RECORD REQUIREMENTS:
   A. ONE OR MORE INSPECTORS EMPLOYED BY THE OWNER IN ACCORDANCE WITH THE REQUIREMENTS OF TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS WILL BE ASSIGNED TO THE WORK. THE INSPECTORS DUTIES ARE SPECIFICALLY DEFINED IN SECTION 4-342 OF SAID TITLE 24, PART 1 AND IN ADDITION SHALL BE AS STIPULATED IN INTERPRETATION OF REGULATION DOCUMENT IR A-8.
   B. INSPECTOR SHALL BE CERTIFIED AS A CLASS __3__ INSPECTOR THROUGH THE DIVISION OF THE STATE ARCHITECT INSPECTOR EXAMINATION PROGRAM. INSPACTOR SHALL ALSO BE SPECIFICALLY APPROVED BY THE DIVISION OF THE STATE ARCHITECT FOR THIS PROJECT AT LEAST 10 DAYS PRIOR TO THE START OF ANY WORK FOR THIS PROJECT.

26. ALL WORK SHOWN ON THESE DRAWINGS SHALL COMPLY WITH THE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).

27. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY TITLE 24, CCR, PART 1, SECTION 4-338.

28. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.

29. DRINKING WATER SHALL COMPLY WITH ALL LOCAL HEALTH DEPARTMENT REQUIREMENTS.

30. FOOD HANDLING FACILITIES SHALL COMPLY WITH ALL LOCAL HEALTH REQUIREMENTS AND THE CALIFORNIA RETAIL FOOD FACILITIES LAW.

31. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR).

32. ALL SLOPE AND CROSS SLOPE OF ACCESSIBLE ROUTE PAVING INDICATED ON THESE DRAWINGS WAS DESIGNED IN COMPLIANCE WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN AND THE ACCESSIBILITY STANDARDS OF THE CALIFORNIA BUILDING CODE (CBC) TITLE 24, PART 2, CHAPTER 11B OF THE CALIFORNIA CODE OF REGULATIONS (CCR). STRICT EXECUTION OF THE SLOPE AND CROSS SLOPE OF ACCESSIBLE ROUTE PAVING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. SHOULD A CONDITION PRESENT ITSELF THAT WOULD RESULT IN AN INSTALLATION OTHER THAN WHAT IS INDICATED IN THESE DRAWINGS, PBK ARCHITECTS INC. SHALL BE NOTIFIED IN WRITING AND A COMPLIANT RESOLUTION WILL BE FORMULATED.

33. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

34. ARCHITECT OF RECORD (AOR) SHALL CONTACT THE LOCAL FIRE DEPARTMENT AND/OR EMERGENCY COMMUNICATIONS AUTHORITY TO OBTAIN DESIGN AND EQUIPMENT SPECIFICATIONS, AND TESTING AND ACCEPTANCE CRITERIA. IT IS THE RESPONSIBILITY OF THE DESIGN PROFESSIONAL / AOR TO SUBMIT PLANS AND REQUESTED DOCUMENTATION, AND APPLICABLE FEES, TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL. UPON COMPLETION, COPIES OF THE APPROVED PLANS, EQUIPMENT DATA SHEETS, AND PROOF OF TESTING AND ACCEPTANCE DOCUMENTATION SHALL BE PROVIDED TO THE SCHOOL DISTRICT. THE PROJECT INSPECTORS SHALL VERIFY THAT DOCUMENTATION IS PROVIDED TO THE SCHOOL DISTRICTS.

35. DEFERRED SUBMITTAL ITEMS:

    INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL DETAILED PLANS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR ENGINEER IN GENERAL RESPONSIBLE CHARGE OF DESIGN AND SIGNED BY A CALIFORNIA REGISTERED ARCHITECT OR PROFESSIONAL ENGINEER WHO HAS BEEN DELEGATED RESPONSIBILITY COVERING THE WORK SHOWN ON A PARTICULAR PLAN OR SPECIFICATION AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT.

    DEFFERED SUBMITTAL ITEMS SHALL BE SUBMITTED FOR REVIEW NO LATER THAN 60 DAYS AFTER THE NOTICE TO PROCEED.

    DEFERRED SUBMITTAL ITEMS FOR THIS PROJECT ARE THE FOLLOWING ITEMS:

    1. NONE

STATEMENT OF GENERAL CONFORMANCE

Application No.: 02-123356
File No.: 39-50

The drawings identified as follows:

☒ All drawing sheets included in this set not bearing my stamp and signature.

☐ Drawing sheets included under the following PC approval(s):
[01-234567, 02-345678]

have been prepared by other design professionals or consultants who are licensed and authorized to prepare such drawings (plans) in this state. The have been examined by me for:

1) Design intent and appear to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and
2) Coordination with my drawings (plans) and specifications and are acceptable for incorporation into the construction of this project.

Per Title 24, Part 1, Section 4-316(b): This Statement of General Conformance shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341, and 4-344 of Title 24, Part 1.

Signature: Leona M Ketterl
Date: 05-15-2025
Name: Leona Ketterl
License Number: C-38823
Expiration Date: 09-30-2025

SHEET NUMBER	SHEET NAME
ARCHITECTURAL GENERAL	
G-000-CA	COVER SHEET
G-002-CA	GENERAL PROJECT INFORMATION
G-030-CA	CAMPUS DATA & CODE REVIEW
CIVIL	
C0.1	CIVIL GENERAL NOTES AND ABBREVIATIONS
C0.2	TOPOGRAPHIC SURVEY
C1.1	DEMOLITION, GRADING AND PAVING PLAN
ARCHITECTURAL SITE	
AS100	OVERALL SITE PLAN
AS401	ENLARGED SITE PLANS
ARCHITECTURAL	
A-101	FLOOR PLAN & INTERIOR ELEVATIONS
ELECTRICAL	
E001	ELECTRICAL LEGEND, NOTE, & SHEET INDEX
ES101	ELECTRICAL SITE PLAN
E501	ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES
E601	ELECTRICAL DETAILS
FIRE ALARM	
FA0.0	FIRE ALARM TITLE SHEET, INDEX, LEGEND & NOTES
FA1.0	FIRE ALARM SITE PLAN & NEW PORTABLE FLOOR PLAN
FA2.0	FIRE ALARM RISER DIAGRAM
FA3.0	FIRE ALARM DETAILS AND CALCULATIONS
TECHNOLOGY	
T000	TECHNOLOGY COVER SHEET
T001	TECHNOLOGY RISER DIAGRAM AND SCHEDULES
T101	TECHNOLOGY SITE PLAN - MILLSWOOD MIDDLE SCHOOL
T201	TECHNOLOGY FLOOR PLAN
T601	TECHNOLOGY DETAILS
RELOCATABLE BUILDING - DSA #04-123316 S/N C-23-2994 A/B	
ALT-A0.0	COVER SHEET
A0.0.1	PROJECT OPTIONS SCHEDULE
A0.1	TYPICAL KEY PLAN AND SCHEDULES, GEN NOTES
A0.2	SIGNAGE AND SYMBOLS
A0.4	DSA-103 T&I PLYWOOD FLOORS
A0.5	CALGREEN SPEC'S
A0.6	CALGREEN CHECKLIST
A0.7	CALGREEN CHECKLIST
A0.8	CALGREEN CHECKLIST
A1.0	24X40 FLOOR PLAN
A2.1(B)	ARCHITECTURAL WUI DETAILS (WOOD FRAMING SHEETHING FINISH)
A2.7	WUI NOTES AND CRITERIA
A2.9	ARCHITECTURAL DETAILS (FLOORS)
A3.0.1	FIRE SEPARATION & PENETRATION DETAILS
A3.2	RCP
A3.2.1	CEILING NOTES
A3.3	CEILING DETAILS (T-GRID)
A4.0.1	ROOF PLAN MONO SLOPE (STANDING SEAM)
A4.1	ROOF DETAILS (STANDING SEAM)
A5.0	SIDEWALL ELEVATION
A5.1	ENDWALL ELEVATIONS
A5.2	INTERIOR ELEVATIONS
A6.0	SECTION- STANDING SEAM (MONO)
A6.2	SECTION
A7.2	ADDITIONAL OPTION DETAILS
E0.1	ELECTRICAL GENERAL NOTES
E1.0	ELECTRICAL PLAN 24X40
E1.1	ELECTRICAL SCHEDULES 24X40
M0.1	MISCELLANEOUS NOTES & DETAILS
M0.2	MISCELLANEOUS NOTES & DETAILS
M2.9	24'X40' T24 CZ14 (WALL AC)
M2.10	24'X40' T24 CZ14 (WALL AC)
M2.11	24'X40' T24 CZ15 (WALL AC)
M2.12	24'X40' T24 CZ15 (WALL AC)
M2.13	24'X40' T24 CZ16 (WALL AC)
M2.14	24'X40' T24 CZ16 (WALL AC)
M3.3	ENVELOPE AND NOTES
M5.1	MECHANICAL CEILING PLAN 24X40
F1.10	WOOD FOUNDATION NOTES SCHED FOR BLDG W/ 50+15
F1.11	WOOD FOUNDATION PLAN 24X40 BLDG W/ 50+15
F1.40	WOOD FOUNDATION DETAILS
S0.1	STRUCTURAL GEN NOTES
S1.0.4	WD SHTH'G FLR FRAMING PLAN CROSS-STRAP OPT.
S1.2	STRUCTURAL DETAILS (FLOOR)
S3.0.3	MONO SLOPE ROOF FRAM'G PLAN CROSS STRAP OPT.
S3.1	STRUCTURAL DETAILS (ROOF)
S3.3	ROOF PERIMETER TRUSS
S4.1	WD WALL FRAMING ELEVATIONS
S4.2	WALL DETAILS (WOOD FRAMING)
S4.4	TYP FRAMING
S4.5	FRAMING SCHEDULES
S5.0	LONG SECTION (MONO)
SR0	MODULE PLAN AND NOTES
SR1	RAMP LANDING
SR2	LANDING FRAME
SR3	FOUNDATION PLAN
SR4	RAMP ELEVATION
SR6	RAMP DETAILS
SR7	STAIR CONN

Total: 81

GOVERNING AGENCIES

DIVISION OF THE STATE ARCHITECT
STRUCTURAL SAFETY SECTION (DSA/SSS)
1102 Q STREET, SUITE 5200
SACRAMENTO, CA 95814
916-445-8730

DIVISION OF THE STATE ARCHITECT
ACCESS COMPLIANCE SECTION (DSA/ACS)
1102 Q STREET, SUITE 5200
SACRAMENTO, CA 95814
916-445-8730

DIVISION OF THE STATE ARCHITECT
FIRE AND LIFE SAFETY SECTION (DSA/FLS)
1102 Q STREET, SUITE 5200
SACRAMENTO, CA 95814
916-445-8730

CODES & STANDARDS

PARTIAL LIST OF APPLICABLE CODES

2025 California Administrative Code (CAC)	(Part 1, Title 24, CCR)
2022 California Building Code (CBC) (2021 International Building Code Volumes 1 & 2 with 2022 California Amendments)	(Part 2, Title 24, CCR)
2022 California Electrical Code (CEC) (2020 National Electrical Code with 2022 California Amendments)	(Part 3, Title 24, CCR)
2022 California Mechanical Code (CMC) (2021 IAPMO Uniform Mechanical Code with 2022 California Amendments)	(Part 4, Title 24, CCR)
2022 California Plumbing Code (CPC) (2021 IAPMO Uniform Plumbing Code with 2022 California Amendments)	(Part 5, Title 24, CCR)
2022 California Energy Code	(Part 6, Title 24, CCR)
2022 California Fire Code (2021 International Fire Code with 2022 California Amendments)	(Part 9, Title 24, CCR)
2022 California Existing Building Code (CEBC) (2021 International Existing Building Code with 2022 California Amendments)	(Part 10, Title 24, CCR)
2022 California Green Building Standards Code (CALGreen)	(Part 11, Title 24, CCR)
2022 California Referenced Standards Code	(Part 12, Title 24, CCR)

Title 19 CCR, Public Safety, State Fire Marshal Regulations
2019 ASME A17.1/CSA B44-13 Safety Code For Elevators and Escalators (per 2022 CBC Part 2, Ch 35)
Note: Cal/OSHA Elevator Unit enforces CCR Title 8 and uses the 2004 ASME A17.1 by adoption

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13	Standard for the Installation of Sprinkler Systems (as amended) *	(2022 Edition)
NFPA 14	Standard for the Installation of Standpipe and Hose Systems (as amended) *	(2019 Edition)
NFPA 17	Standard for Dry Chemical Extinguishing Systems	(2021 Edition)
NFPA 17A	Standard for Wet Chemical Extinguishing Systems	(2021 Edition)
NFPA 20	Standard for the Installation of Stationary Pumps for Fire Protection	(2019 Edition)
NFPA 22	Standard for Water Tanks for Private Fire Protection	(2018 Edition)
NFPA 24	Standard for the Installation of Private Fire Service Mains and Their Appurtenances (as amended)*	(2022 Edition)
NFPA 25	Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems with California Amendments (Based on NFPA 25, 2011 Edition)	(2013 Edition)
NFPA 72	National Fire Alarm and Signaling Code (as amended) *	(2022 Edition)
NFPA 80	Fire Doors and Other Opening Protectives	(2019 Edition)
NFPA 92	Standard for Smoke Control Systems	(2018 Edition)
NFPA 253	Standard Method of Test for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source	(2019 Edition)
NFPA 2001	Standard on Clean Agent Fire Extinguishing Systems (as amended) *	(2018 Edition)
ICC 300	ICC Standard on Bleachers, Folding and Telescoping Seating and Grandstands	(2017 Edition)
UL 300	Standard for Fire Testing of Fire Extinguishing Systems for Protection of Commercial Cooking Equipment—with Revisions through December 2014	2005 (R2010)
UL 464	Audible Signal Appliances—with Revisions through October 10, 2003	(2003 Edition)
UL 521	Heat Detectors for Fire Protective Signaling Systems—with Revisions through July 20, 2005	(1999 Edition)
UL 1971	Standard for Signaling Devices for the Hearing Impaired	2002(R2012)

* See CBC Chapter 35, Referenced Standards for State of California amendments to the NFPA Standards.
For a complete list of applicable NFPA standards refer to 2022 CBC (SFM) Chapter 35 and California Fire Code (CFC) Chapter 80.

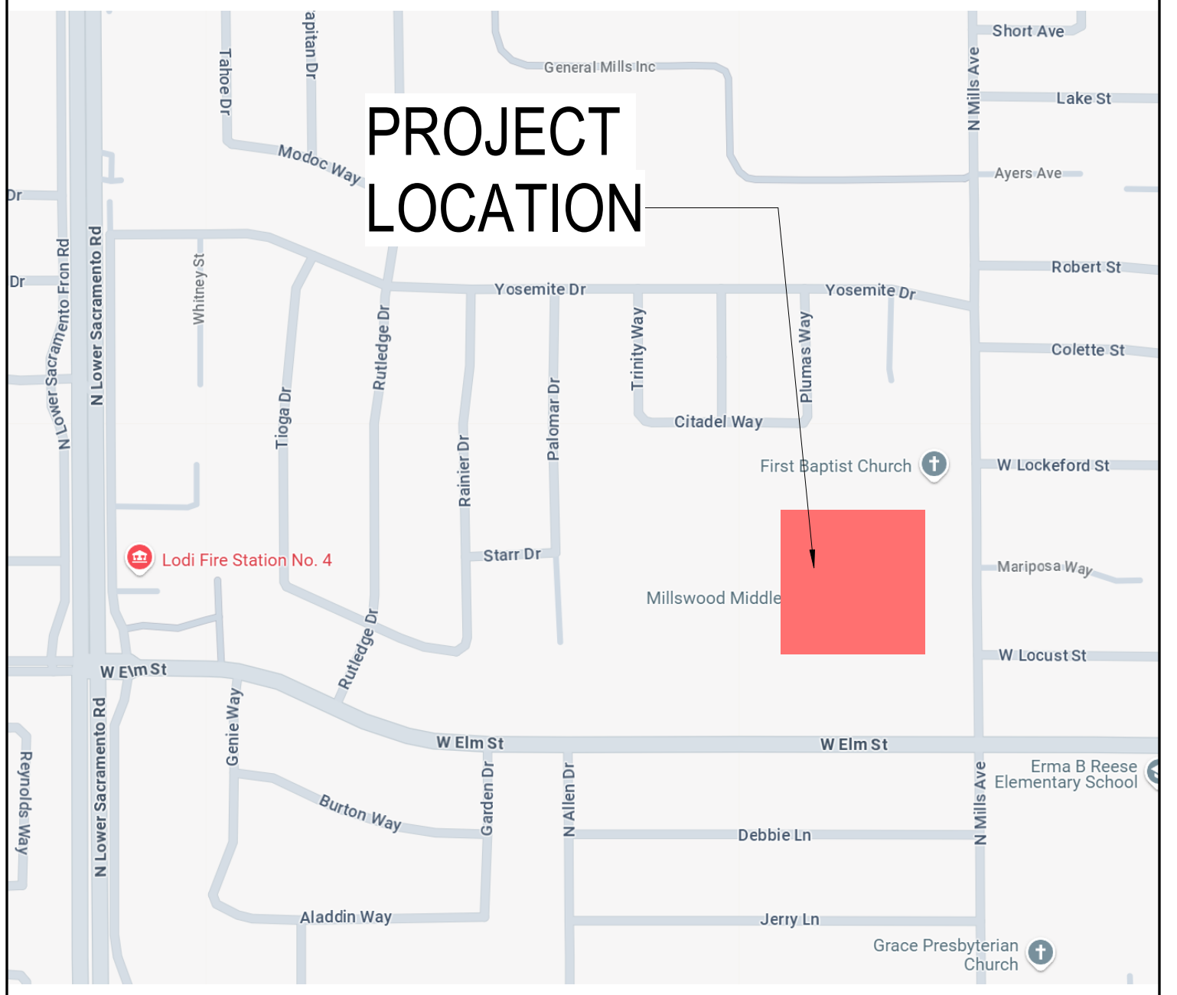
SCOPE OF WORK

THE SCOPE OF WORK AS STATED BELOW IS FOR PLAN REVIEW PURPOSES ONLY AND DOES NOT CONSTITUTE A DETAILED AND FULL EXPLANATION OF THE REQUIREMENTS OF THE CONTRACT DOCUMENTS.

SCOPE OF WORK INCLUDES ALL CONSTRUCTION AND SERVICES REQUIRED TO PROVIDE:

1. RELOCATION OF ONE 24X40 (960SF) MODULAR CLASSROOM BUILDING AS A COMPLETE BUILDING FROM STOCKPILE (APP #04-123316, SERIAL # C-23-2984 A/B).
2. CONCRETE PAD DESIGN FOR THE NEW PORTABLE CLASSROOM
3. CONSTRUCTION OF NEW ASPHALT PAVING LANDING AND CONCRETE WALKWAY
4. CONNECT PORTABLE TO SCHOOL SITE DATA, CLOCK, BELL & PAGING SYSTEM
5. NEW FIRE ALARM SYSTEM AT PORTABLES CONNECTED TO SCHOOLS EXISTING FIRE ALARM SYSTEM
6. DESIGN FOR DRYWEKKS AT CONDENSATE LINES AT THE PORTABLE.
7. DESIGN FOR PC RAMPS, PER PC DRAWING.
8. DESIGN FOR CLOSURE PANEL BETWEEN PORTABLES.
9. PRIOR TO SITE PLACEMENT OF THE MODULAR BUILDING, INSPECTOR AND DSA FIELD ENGINEER SHALL VERIFY THAT APP #04-123316 HAS BEEN CERTIFIED OR THAT AN IN-PLANT FINAL VERIFIED REPORT FOR THE LISTED SERIAL NUMBERS HAS BEEN PROVIDED.

VICINITY MAP



IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PBK
www.pbk.com
916-355-9922
FOLSOM, CA

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO.: 02-123356 DSA FILE NO.: 39-50

LODI USD

Not for permitting or construction

LEONA M. KETTERL
C-38823
REN. 09-30-25

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: Checker
DRAWN BY: Author

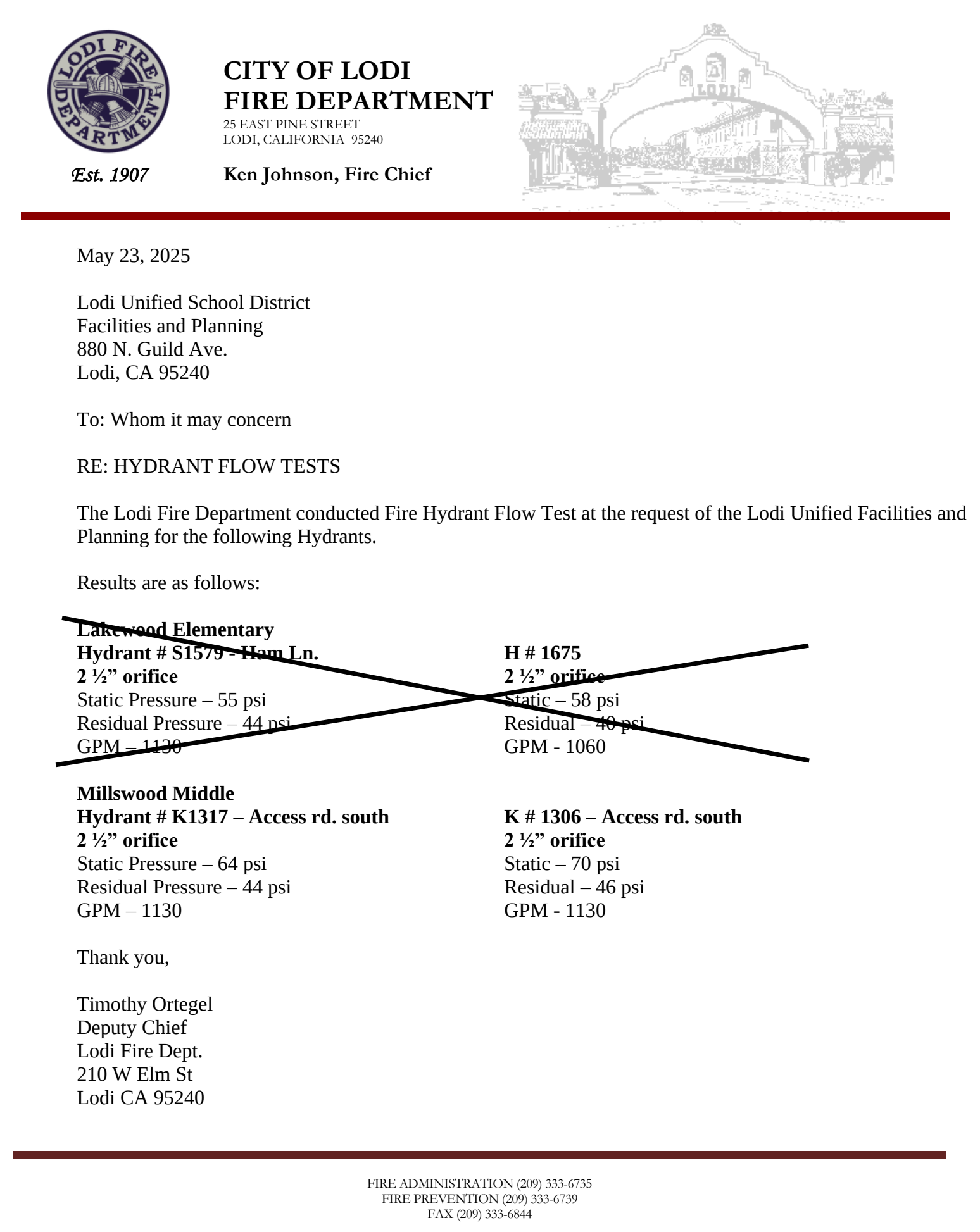
GENERAL PROJECT INFORMATION

G-002-CA

Plot Stamp:
5/8/2025 11:00:15 AM

CAMPUS DATA & CODE REVIEW
G-030-CA
FOR BLUEBEAM LABELING/OCR:

0"
1"



CITY OF LODI
FIRE DEPARTMENT
25 EAST PINE STREET
LODI, CALIFORNIA 95240
Est. 1907
Ken Johnson, Fire Chief

May 23, 2025

Lodi Unified School District
Facilities and Planning
880 N. Guild Ave.
Lodi, CA 95240

To: Whom it may concern

RE: HYDRANT FLOW TESTS

The Lodi Fire Department conducted Fire Hydrant Flow Test at the request of the Lodi Unified Facilities and Planning for the following Hydrants.

Results are as follows:

~~**Lakewood Elementary**~~	
~~**Hydrant # S1579 - Ham Ln.**~~	~~**H # 1675**~~
~~**2 ½" orifice**~~	~~**2 ½" orifice**~~
~~Static Pressure – 55 psi~~	~~Static – 58 psi~~
~~Residual Pressure – 44 psi~~	~~Residual – 40 psi~~
~~GPM – 1130~~	~~GPM - 1060~~
Millswood Middle	
Hydrant # K1317 – Access rd. south	**K # 1306 – Access rd. south**
2 ½" orifice	**2 ½" orifice**
Static Pressure – 64 psi	Static – 70 psi
Residual Pressure – 44 psi	Residual – 46 psi
GPM – 1130	GPM - 1130

Thank you,

Timothy Ortegel
Deputy Chief
Lodi Fire Dept.
210 W Elm St
Lodi CA 95240

FIRE ADMINISTRATION (209) 333-6735
FIRE PREVENTION (209) 333-6739
FAX (209) 333-6844

CODE ANALYSIS - BLDG "P1 - P6"

1. GOVERNING CODE: 2022 CALIFORNIA BUILDING CODE (CBC)
2. OCCUPANCY GROUPS: (CBC 302) E
3. CONSTRUCTION TYPE: (CBC 602 & TABLE 601) TYPE V-B WITHOUT AUTOMATIC FIRE SPRINKLER SYSTEM
4. BASIC ALLOWABLE HEIGHT & BUILDING AREA: (CBC TABLES 504.3, 504.4, 506.2) (CBC 602 & TABLE 601)

OCCUPANCY GROUP	ALLOW. HEIGHT S (w/ Area Inc)	ALLOW. STORIES S (w/ Area Inc)	ALLOW. AREA S1
GROUP E	40'-0"	1	9,500 SF

5. PROPOSED BUILDING DATA:

OCCUPANCY GROUP	ACTUAL BLDG HEIGHT	ACTUAL # OF STORIES	ACTUAL BLDG AREA
GROUP E	12'-6"	1	6,768 SF

6,768 SF

6.

7. FIRE RESISTANCE RATING REQUIREMENTS: (CBC TABLE 601)

STRUCTURAL FRAME:	0 HOURS
BEARING WALLS - EXTERIOR:	0 HOURS
BEARING WALLS - INTERIOR:	0 HOURS
NON-BEARING WALLS & PARTITIONS - EXTERIOR (CBC TABLE 705.5)	FIRE RATING BASED ON FIRE SEPARATION DISTANCE: X<5' 1 HOUR 5'≤X<10' 1 HOUR 10'≤X<30' 0 HOURS X≥30' 0 HOURS
ACTUAL SEPARATION DIST:	**>20'-0" 0 HOURS**
NON-BEARING WALLS & PARTITIONS - INTERIOR:	0 HOURS
FLOOR CONSTRUCTION:	0 HOURS
ROOF CONSTRUCTION:	0 HOURS
SHAFT ENCLOSURES: (CBC 713)	0 HOURS
PROJECTIONS: (CBC 705.2)	0 HOURS (ANY APPROVED MATERIALS)
EXTERIOR OPENINGS: (CBC TABLE 705.8)	(20'≤X<25') UNPROTECTED, SPRINKLERED NO LIMIT
CORRIDORS: (CBC TABLE 1020.1)	0 HOURS

8. OCCUPANT LOAD: (CBC TABLE 1004.5) REFER TO SHEET A-101
9. TOTAL EGRESS WIDTH REQUIRED: (CBC 1005.1) SHOWN ON PLAN
10. COMMON PATH OF EGRESS TRAVEL: (CBC TABLE 1006.2.1) TWO EXITS OR EXIT ACCESS DORWAYS FROM A SPACE SHALL BE PROVIDED WHERE THE COMMON PATH OF TRAVEL EXCEEDS 75 FEET.

CAMPUS BUILDING INDEX

BLDG ID	DESCRIPTION	STORIES	BUILDING AREA	OCCUPANCY	CONSTRUCTION TYPE	FIRE SPRINKLERS	DSA #
BLDG A	ADMINISTRATION	2	68,628	B	V-A	Yes	02-102956, 02-122005
BLDG B	MULTI-PURPOSE	1	14,478	A2.1,E-2	V-A	Yes	02-102956, 02-122005
LS	LUNCH SHELTER	1	1,047	A2	V-B	No	02-122005
P1	PORTABLE CLASSROOM	1	960	E	V-B	No	02-107065
P2	PORTABLE CLASSROOM	1	960	E	V-B	No	02-107065
P3	PORTABLE CLASSROOM	1	960	E	V-B	No	02-107065
P4	PORTABLE CLASSROOM	1	960	E	V-B	No	02-106169, 02-121945
P5	PORTABLE CLASSROOM	1	960	E	V-B	No	68145, 02-121945
P6	PORTABLE CLASSROOM	1	960	E	V-B	No	THIS APPLICATION

CODE ANALYSIS & BUILDING INFORMATION - BLDG P1 - P6

BUILDING IDENTIFICATION	BUILDING DESCRIPTION	CONSTRUCTION TYPE	SPRINKLERED	BUILDING & COVERED AREA	MIN. REQUIRED FIRE FLOW *(CFC TABLE BB 105.1)*
P1	(E) CLASSROOM	V-B	NO	1,128	1,500 *GALLONS/MINUTE*
P2	(E) CLASSROOM	V-B	NO	1,128	
P3	(E) CLASSROOM	V-B	NO	1,128	
P4	(E) CLASSROOM	V-B	NO	1,128	
P5	(E) CLASSROOM	V-B	NO	1,128	
P6	(N) CLASSROOM	V-B	NO	1,128	

TOTAL BUILDING AREA	6,768 SF
MINIMUM NUMBER OF HYDRANTS REQUIRED*	1
AVERAGE SPACING OF HYDRANTS	500'
MAX. SPACING FROM ANY POINT ON STREET OR ROAD FRONTAGE TO A HYDRANT	250'

*PER 2022 CFC SECTION CC105 TABLE CC105.1

PARKING TYPE	PARKING REQUIRED	PARKING ACTUAL
Accessible	0	4
Accessible Van	1	1
Standard	0	91
Total	0	96

PARKING COUNT

TOTAL PARKING SPACES REQUIRED: 0

ACCESSIBLE PARKING SPACES, PER CBC TABLE 208.2
1 TO 25 PARKING SPACES REQUIRES A MINIMUM NUMBER OF 1 ACCESSIBLE SPACES, 1 OF 1 PARKING SPACES TO BE VAN ACCESSIBLE

SITE ANALYSIS LEGEND

— — —	PROPERTY LINE	— • • • —	ASSUMED PROPERTY LINE
●●●●●●	ACCESSIBLE PATH OF TRAVEL	●●●●●●	(E) ACCESSIBLE PATH OF TRAVEL
▒	(E) BUILDING	FH	(E) / PROPOSED FIRE HYDRANT
■	PROPOSED BUILDING		
▨	(E) / PROPOSED FIRE LANE		
▩	ACCESSIBLE TOILET ROOM		

NOTE:
REFER TO CIVIL DRAWINGS FOR PAVEMENT MARKING AND EQUIPMENT DETAILS.

PATH OF TRAVEL NOTES

ACCESSIBLE PATH OF TRAVEL (P.O.T.)
THE ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAXIMUM AND AT LEAST 48" IN WIDTH.

SURFACE IS STABLE, FIRM AND SLIP RESISTANT, CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED.

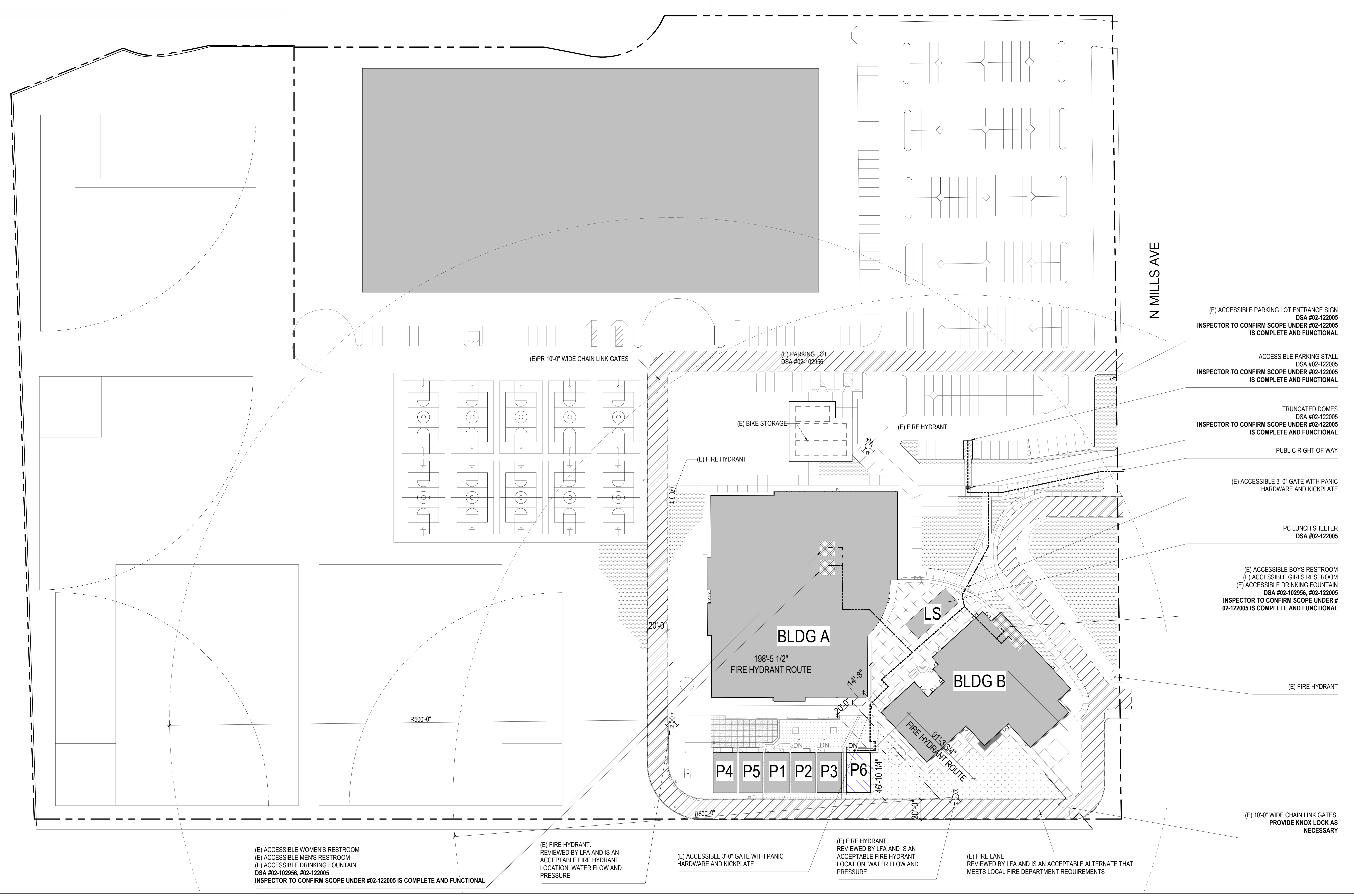
ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL ABOVE 27" AND LESS THAN 80".

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:
THE P.O.T. INDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR **PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS**. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

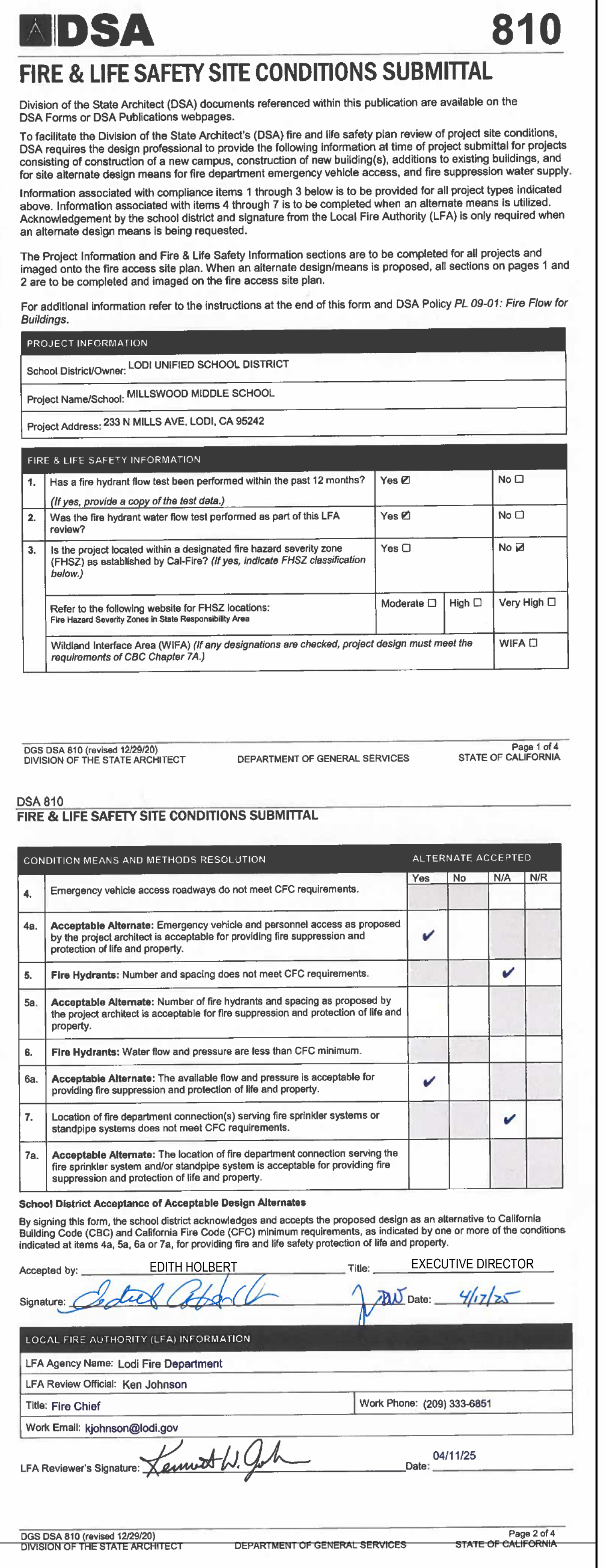
DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLIANT WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

KEYNOTE LEGEND

NUMBER	DESCRIPTION


N MILLS AVE
(E)PR 10'-0" WIDE CHAIN LINK GATES
(E) PARKING LOT
DSA #02-102956
(E) BIKE STORAGE
(E) FIRE HYDRANT
(E) FIRE HYDRANT
BLDG A
LS
BLDG B
198'-5 1/2"
FIRE HYDRANT ROUTE
14'-8"
20'-0"
20'-0"
91'-3 3/4"
FIRE HYDRANT ROUTE
DN
DN
DN
P4
P5
P1
P2
P3
P6
46'-10 1/4"
20'-0"
R500'-0"
R500'-0"
(E) ACCESSIBLE PARKING LOT ENTRANCE SIGN
DSA #02-122005
INSPECTOR TO CONFIRM SCOPE UNDER #02-122005
IS COMPLETE AND FUNCTIONAL
ACCESSIBLE PARKING STALL
DSA #02-122005
INSPECTOR TO CONFIRM SCOPE UNDER #02-122005
IS COMPLETE AND FUNCTIONAL
TRUNCATED DOMES
DSA #02-122005
INSPECTOR TO CONFIRM SCOPE UNDER #02-122005
IS COMPLETE AND FUNCTIONAL
PUBLIC RIGHT OF WAY
(E) ACCESSIBLE 3'-0" GATE WITH PANIC HARDWARE AND KICKPLATE
PC LUNCH SHELTER
DSA #02-122005
(E) ACCESSIBLE BOYS RESTROOM
(E) ACCESSIBLE GIRLS RESTROOM
(E) ACCESSIBLE DRINKING FOUNTAIN
DSA #02-102956, #02-122005
INSPECTOR TO CONFIRM SCOPE UNDER # 02-122005 IS COMPLETE AND FUNCTIONAL
(E) FIRE HYDRANT
(E) 10'-0" WIDE CHAIN LINK GATES.
PROVIDE KNOX LOCK AS NECESSARY
(E) ACCESSIBLE WOMEN'S RESTROOM
(E) ACCESSIBLE MEN'S RESTROOM
(E) ACCESSIBLE DRINKING FOUNTAIN
DSA #02-102956, #02-122005
INSPECTOR TO CONFIRM SCOPE UNDER #02-122005 IS COMPLETE AND FUNCTIONAL
(E) FIRE HYDRANT.
REVIEWED BY LFA AND IS AN ACCEPTABLE FIRE HYDRANT LOCATION, WATER FLOW AND PRESSURE
(E) ACCESSIBLE 3'-0" GATE WITH PANIC HARDWARE AND KICKPLATE
(E) FIRE HYDRANT
REVIEWED BY LFA AND IS AN ACCEPTABLE FIRE HYDRANT LOCATION, WATER FLOW AND PRESSURE
(E) FIRE LANE
REVIEWED BY LFA AND IS AN ACCEPTABLE ALTERNATE THAT MEETS LOCAL FIRE DEPARTMENT REQUIREMENTS

01 CODE INFORMATION SITE PLAN
1" = 50'-0"



DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings.*

PROJECT INFORMATION
School District/Owner: LODI UNIFIED SCHOOL DISTRICT
Project Name/School: MILLSWOOD MIDDLE SCHOOL
Project Address: 233 N MILLS AVE, LODI, CA 95242

FIRE & LIFE SAFETY INFORMATION

1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☑		No ☐
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☑		No ☐
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: Fire Hazard Severity Zones in State Responsibility Area	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES — Page 1 of 4 STATE OF CALIFORNIA

DSA 810
FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

	CONDITION MEANS AND METHODS RESOLUTION	ALTERNATE ACCEPTED Yes	No	N/A	N/R
4.	Emergency vehicle access roadways do not meet CFC requirements.				
4a.	**Acceptable Alternate:** Emergency vehicle and personnel access as proposed by the project architect is acceptable for providing fire suppression and protection of life and property.	✓			
5.	**Fire Hydrants:** Number and spacing does not meet CFC requirements.			✓	
5a.	**Acceptable Alternate:** Number of fire hydrants and spacing as proposed by the project architect is acceptable for fire suppression and protection of life and property.				
6.	**Fire Hydrants:** Water flow and pressure are less than CFC minimum.				
6a.	**Acceptable Alternate:** The available flow and pressure is acceptable for providing fire suppression and protection of life and property.	✓			
7.	Location of fire department connection(s) serving fire sprinkler systems or standpipe systems does not meet CFC requirements.			✓	
7a.	**Acceptable Alternate:** The location of fire department connection serving the fire sprinkler system and/or standpipe system is acceptable for providing fire suppression and protection of life and property.				

School District Acceptance of Acceptable Design Alternates

By signing this form, the school district acknowledges and accepts the proposed design as an alternative to California Building Code (CBC) and California Fire Code (CFC) minimum requirements, as indicated by one or more of the conditions indicated at items 4a, 5a, 6a or 7a, for providing fire and life safety protection of life and property.

Accepted by: EDITH HOLBERT Title: EXECUTIVE DIRECTOR
Signature: Date: 4/17/25

LOCAL FIRE AUTHORITY (LFA) INFORMATION
LFA Agency Name: Lodi Fire Department
LFA Review Official: Ken Johnson
Title: Fire Chief Work Phone: (209) 333-6851
Work Email: kjohnson@lodi.gov

LFA Reviewer's Signature: Kenneth W. Joh Date: 04/11/25

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES — Page 2 of 4 STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

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916-355-9922
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BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO.: 02-123356 DSA FILE NO.: 39-50

LODI USD

DISCIPLINE

LEONA M. KETTERL
C-38823
REN. 09-30-25

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: Checker
DRAWN BY: Author

CAMPUS DATA & CODE REVIEW

G-030-CA

Plot Stamp:
5/8/2025 3:30:30 PM

CIVIL ABBREVIATIONS AND LEGEND

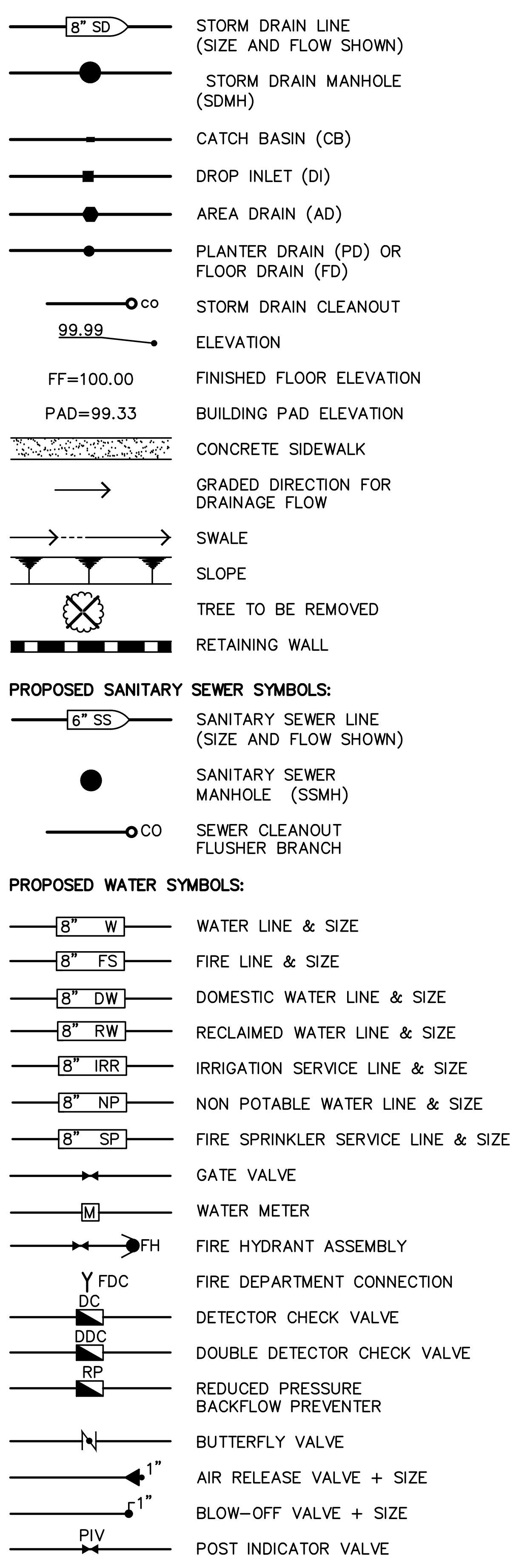
ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS MAY BE USED ON THESE PLANS.

AB	AGGREGATE BASE
AC	ASPHALTIC CONCRETE
AD	AREA DRAIN
APN	ASSESSOR'S PARCEL NUMBER
ARV	AIR RELEASE VALVE
ASB	AGGREGATE SUB-BASE
BO	BLOW-OFF VALVE
BV	BUTTERFLY VALVE
BW	BACK OF WALK
C/L	CENTERLINE
CB	CATCH BASIN
CL	CLASS
CMP	CORRUGATED METAL PIPE
CATV	CABLE TELEVISION
CO	CLEANOUT
COMM	COMMUNICATION
CONC.	CONCRETE
CONST.	CONSTRUCT
CR	CURB RETURN
CS	CONCRETE SURFACE
DC	DOUBLE CHECK VALVE
DDC	DOUBLE DETECTOR CHECK VALVE
DG	DECOMPOSED GRANITE
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWG	DRAWING
DS	DOWNSPOUT
E	ELECTRIC
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
EX	EXISTING
FS	FIRE SERVICE LINE
FDC	FIRE DEPARTMENT CONNECTION
FL	FLOWLINE
FM	SANITARY SEWER FORCE MAIN
FF	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
G	GAS
GR	GRATE ELEVATION
GRD	GRADE ELEVATION
GV	GATE VALVE
HB	HOSE BIBB
HBD	HEADER BOARD
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
INV	PIPE INVERT ELEVATION
JP	JOINT UTILITY POLE
LF	LINEAL FEET
LIP	LIP OF GUTTER
LT	LEFT
MS	MOWSTRIP
NTS	NOT TO SCALE
OH	OVERHEAD
PCC	PORTLAND CEMENT CONCRETE
PD	PLANTER DRAIN
PIV	POST INDICATOR VALVE
P/L	PROPERTY LINE
PP	POWER POLE
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
R	RADIUS
RIM	MANHOLE RIM ELEVATION (SOLID COVER)
RP	REDUCED PRESSURE BACKFLOW PREVENTER
RW	RIGHT OF WAY
SCH	SCHEDULE
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SG	SUBGRADE ELEVATION
SS	SANITARY SEWER
SSMH	SANITARY SEWER MANHOLE
STD	STANDARD
S/W	SIDEWALK
T	TELEPHONE
TC	TOP OF CURB
TD	TRENCH DRAIN
TDCB	TRENCH DRAIN CATCH BASIN
TP	TELEPHONE POLE
TR	TOP OF RAMP ELEVATION
TRW	TOP OF RETAINING WALL
TSW	TOP OF SEAT WALL
TW	TOP OF WALK ELEVATION
U	UTILITY
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
VCP	VITRIFIED CLAY PIPE
W	WATER
W/	WITH
W/O	WITHOUT
WV	WATER VALVE

LEGEND

NOTE: NOT ALL SYMBOLS MAY BE USED ON THESE PLANS.



PROPOSED GRADING & DRAINAGE SYMBOLS:

8" SD	STORM DRAIN LINE (SIZE AND FLOW SHOWN)
●	STORM DRAIN MANHOLE (SDMH)
	CATCH BASIN (CB)
■	DROP INLET (DI)
⬢	AREA DRAIN (AD)
●	PLANTER DRAIN (PD) OR FLOOR DRAIN (FD)
CO	STORM DRAIN CLEANOUT
99.99	ELEVATION
FF=100.00	FINISHED FLOOR ELEVATION
PAD=99.33	BUILDING PAD ELEVATION
▨	CONCRETE SIDEWALK
→	GRADED DIRECTION FOR DRAINAGE FLOW
→---→	SWALE
	SLOPE
⊗	TREE TO BE REMOVED
	RETAINING WALL

PROPOSED SANITARY SEWER SYMBOLS:

6" SS	SANITARY SEWER LINE (SIZE AND FLOW SHOWN)
●	SANITARY SEWER MANHOLE (SSMH)
CO	SEWER CLEANOUT FLUSHER BRANCH

PROPOSED WATER SYMBOLS:

8" W	WATER LINE & SIZE
8" FS	FIRE LINE & SIZE
8" DW	DOMESTIC WATER LINE & SIZE
8" RW	RECLAIMED WATER LINE & SIZE
8" IRR	IRRIGATION SERVICE LINE & SIZE
8" NP	NON POTABLE WATER LINE & SIZE
8" SP	FIRE SPRINKLER SERVICE LINE & SIZE
	GATE VALVE
M	WATER METER
FH	FIRE HYDRANT ASSEMBLY
FDC	FIRE DEPARTMENT CONNECTION
DC	DETECTOR CHECK VALVE
DDC	DOUBLE DETECTOR CHECK VALVE
RP	REDUCED PRESSURE BACKFLOW PREVENTER
	BUTTERFLY VALVE
1"	AIR RELEASE VALVE + SIZE
1"	BLOW-OFF VALVE + SIZE
PIV	POST INDICATOR VALVE

DEMOLITION GENERAL NOTES

1. REFER TO ARCHITECTURAL, LANDSCAPE, ELECTRICAL AND PLUMBING PLANS FOR ADDITIONAL DEMOLITION ITEMS.
2. IN THE EVENT THAT ANY UNUSUAL CONDITIONS NOT COVERED BY THE GEOTECHNICAL INVESTIGATION REPORT OR ARE ENCOUNTERED DURING GRADING OPERATIONS THE GEOTECHNICAL ENGINEER AND THE ARCHITECT SHALL BE IMMEDIATELY NOTIFIED FOR DIRECTIONS.
3. ADDITIONAL DEMOLITION INFORMATION MAY BE SHOWN ON THE GRADING, DRAINAGE, AND UTILITY PLANS, AND THOSE PLANS PREPARED BY OTHER DISCIPLINES FOR THIS PROJECT.
4. ALL DEMOLISHED ITEMS SHALL BE DISPOSED OF OFFSITE AT A SUITABLE, LEGAL, DUMP SITE OR OTHER FACILITY.
5. ALL DISPOSED OF MATERIALS SHALL BE RECYCLED IF POSSIBLE.
6. THE SCHOOL DISTRICT SHALL HAVE SALVAGE RIGHTS TO ANY DEMOLISHED ITEMS SHOWN HEREON. THE CONTRACTOR SHALL GIVE THE DISTRICT NOTICE 7 DAYS PRIOR TO THE START OF DEMOLITION. THE DISTRICT SHALL MOVE ANY RETAINED ITEMS OUT OF THE CONTRACTORS WORK AREA, UNLESS ANOTHER ARRANGEMENT IS MADE WITH THE CONTRACTOR. ANY REMAINING ITEMS BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. ANY ITEMS NOT SHOWN FOR REMOVAL SHALL REMAIN AND SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION TO A REASONABLE EXTENT.
7. EXISTING UTILITY STRUCTURES IN AREAS OF NEW PAVING SHALL BE REMOVED AND REPLACED WITH NEW BOX/COVER AT NEW GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.
8. ITEMS OUTSIDE THE LIMITS OF DEMOLITION SHALL REMAIN AND BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
9. EXISTING UTILITY STRUCTURES AND PIPING NOT SHOWN ON DEMOLITION PLAN TO BE REMOVED SHALL REMAIN AND BE PROTECTED.
10. SAWCUTS AND SUBSEQUENT PATCH BACK OF CONCRETE WALKS, SHALL BE TO THE EXISTING CONCRETE JOINT BEYOND THE NEAREST LOCATION OF DEMOLITION AS SHOWN. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE, SHOW AND COORDINATE WITH EXISTING JOINTS, HOWEVER IF FIELD CONDITIONS ARE OTHERWISE, IT IS UNDERSTOOD TO REMOVE AND PATCH BACK TO THE NEAREST JOINTS BEYOND DEMOLITION.
11. PRIOR TO THE START OF CONSTRUCTION, VERIFY AND POTHOLE ALL UTILITY POINTS OF CONNECTION FOR LOCATION, DEPTH, AND SIZE. IF CONFLICT IS FOUND, CONTACT THE ENGINEER IMMEDIATELY FOR DIRECTION.
12. WITHIN LANDSCAPE AREAS TO BE DEMOLISHED THERE MAY BE EXISTING IRRIGATION LINES NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL REMOVE LATERAL LINES AND HEADS ENCOUNTERED. MAIN LINES AND CONTROL WIRES MAY ONLY BE REMOVED PROVIDED THAT ROUTING IS KNOWN AND REMOVAL WILL NOT DEACTIVATE AN IRRIGATION SYSTEMS INTENDED TO REMAIN. IF CONFLICT IS FOUND, CONTACT THE ENGINEER FOR DIRECTION.
13. COORDINATE REMOVAL OF LANDSCAPE ITEMS WITH LANDSCAPE PLANS.

GENERAL NOTES

811 Know what's below. Call before you dig.

1. THE TYPES, LOCATIONS, SIZES, AND/OR DEPTHS OF EXISTING UNDERGROUND UTILITIES AS SHOWN ON THESE PLANS WERE OBTAINED FROM SOURCES OF VARYING RELIABILITY. THE CONTRACTOR IS CAUTIONED THAT ONLY ACTUAL EXCAVATION WILL REVEAL THE TYPES, EXTENT, SIZES, LOCATIONS AND DEPTHS OF SUCH UNDERGROUND UTILITIES. A REASONABLE EFFORT HAS BEEN MADE TO LOCATE AND DELINEATE ALL KNOWN UNDERGROUND UTILITIES. HOWEVER, WARREN CONSULTING ENGINEERS CAN ASSUME NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF ITS DELINEATION OF SUCH UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH MAY BE ENCOUNTERED BUT WHICH ARE NOT SHOWN ON THESE PLANS. THE CONTRACTOR OR ANY SUBCONTRACTOR FOR THIS CONTRACT SHALL NOTIFY MEMBERS OF UNDERGROUND SERVICE ALERT (USA) TWO (2) WORKING DAYS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING TOLL FREE 1-800-227-2600, OR 811.
2. WARREN CONSULTING ENGINEERS, INC. (WCE) ASSUMES NO RESPONSIBILITY FOR ERRORS IN PHYSICAL LOCATION OF IMPROVEMENTS, HORIZONTAL OR VERTICAL. IN ADDITION, ANY SUCH ERRORS IN PHYSICAL LOCATION MAY AFFECT THE INTENDED DESIGN OF SUCH IMPROVEMENTS AND WCE CANNOT BE HELD RESPONSIBLE FOR SUCH CONDITIONS WHICH ARE A RESULT OF ERRORS IN SURVEYING, OR IMPROPER CONSTRUCTION.
3. IF SUBSURFACE CULTURAL RESOURCES, REMAINS, AND/OR ARTIFACTS ARE UNCOVERED DURING PROJECT CONSTRUCTION, ALL WORK IN THE VICINITY SHALL BE STOPPED UNTIL SUCH ITEMS CAN BE ASSESSED BY AN APPROPRIATE MEMBER OF THE COUNTY ENVIRONMENTAL IMPACT SECTION STAFF.
4. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY: THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND SHALL NOT BE LIMITED TO NORMAL WORKING HOURS: AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.
5. THE CONTRACTOR SHALL OBTAIN AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL SAFETY FOR ALL EXCAVATIONS OF 5 FEET OR MORE IN DEPTH.
6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE NECESSARY PRE-CONSTRUCTION SITE REVIEWS TO DETERMINE NECESSARY MEANS AND METHODS TO COMPLETE THE IMPROVEMENTS SHOWN ON THESE PLANS.
7. WHERE IMPROVEMENTS LIE WITHIN AN EXISTING DEVELOPED AREA, CONTRACTOR SHALL USE CAUTION WHEN ACCESSING THE SITE THROUGH THESE EXISTING IMPROVEMENTS. IT IS THE CONTRACTORS RESPONSIBILITY TO PROTECT ANY SUCH EXISTING IMPROVEMENTS OUTSIDE THE PROJECT BOUNDARY, OR EXISTING IMPROVEMENTS WITHIN THE BOUNDARY WHICH ARE TO REMAIN. PROPER PRECAUTIONS SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION. ANY DAMAGE SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER.
8. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO KEEP DETAILED RECORDS OF MINOR CHANGES OR ADJUSTMENTS MADE DURING CONSTRUCTION (WHICH WERE NOT FORMALLY ISSUED). UPON PROJECT COMPLETION, THESE RECORDS AND/OR INFORMATION SHALL BE PROVIDED TO THE OWNER AND WARREN CONSULTING ENGINEERS, INC. UNLESS AN OFFICIAL "AS-BUILT" SET OF PLANS IS A REQUIREMENT OF THE CONTRACT. IF AS-BUILT PLANS ARE A REQUIREMENT OF THE CONTRACT, REFER TO SPECIFICATIONS FOR AS-BUILT DELIVERABLE REQUIREMENTS.
9. IN VEHICULAR PATHWAYS, EXISTING ASPHALTIC AND/OR CONCRETE SURFACES SHALL BE CUT TO A NEAT AND STRAIGHT LINE, PARALLEL OR PERPENDICULAR TO THE VEHICULAR TRAVELED PATH. THIS IS TYPICALLY THE ROADWAY CENTERLINE, BUT MAY VARY. THAT SAWCUT EDGE SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION SO A CLEAN EDGE REMAINS FOR PATCH BACK.. IF EDGE IS DAMAGED, A NEW SAW CUT WILL BE REQUIRED. THE EXPOSED EDGE SHALL BE "TACKED" WITH EMULSION PRIOR TO PAVING.
10. NO BURNING OR BLASTING SHALL BE ALLOWED ONSITE UNLESS SPECIFICALLY ADDRESSED ON PLANS, OR SPECIFICALLY APPROVED AND COORDINATED WITH THE ARCHITECT, ENGINEER, AND LOCAL AGENCY OR OTHER ADMINISTRATIVE AUTHORITY.
11. SUBGRADE AND RESULTING FINISHED GRADE SHALL BE CONSTRUCTED SMOOTH AND UNIFORM BETWEEN SPOT ELEVATIONS, CONTOURS OR OTHER STRUCTURE ELEVATIONS SHOWN ON GRADING OR OTHER PLANS. NO MOUNDS, RUTS, DEPRESSIONS OR OTHER GRADING DEFICIENCIES WILL BE ALLOWED UNLESS SPECIFICALLY SHOWN ON PLANS.
12. ON NEW WATER SYSTEMS, SERVICE LATERALS SHALL BE MADE USING APPROPRIATE "TEE" AND "WYE" FITTINGS. SADDLE TAPS WILL ONLY BE ALLOWED WHEN MAKING CONNECTIONS TO EXISTING WATER MAINS.
13. CURING COMPOUND SHALL BE APPLIED IN A CONTINUOUS SOLID WET FLOWING COAT. ANY "SPOTTY" APPLICATIONS SHALL BE RECOATED IMMEDIATELY. APPLICATION SHALL BE INSPECTED BY PROJECT INSPECTOR DURING APPLICATION.
14. EMBEDMENT OF FEATURES IN CONCRETE PAVING, CURBS, OR WALLS, SUCH AS SQUARE OR ROUND TUBING, POSTS, OR COLUMNS, STEEL BOLTED PLATES, OR OTHER STRUCTURES, SHALL REQUIRE ADDITIONAL SCORE OR EXPANSION JOINTS TO PREVENT UNCONTROLLED CRACKING. THOSE ADDITIONAL JOINTS MAY OR MAY NOT BE SPECIFICALLY SHOWN ON PLANS BUT SHALL BE PROVIDED BY THE CONTRACTOR.
15. EMBEDMENT OF FEATURES IN CONCRETE PAVING, CURBS, OR WALLS, SUCH AS SQUARE OR ROUND TUBING, POSTS, OR COLUMNS, STEEL BOLTED PLATES, OR OTHER STRUCTURES, SHALL REQUIRE A MINOR ADJUSTMENT OF REBAR WITHIN CONCRETE TO ALLOW FOR SUCH STRUCTURE. THAT REBAR ADJUSTMENT MAY NOT BE SPECIFICALLY SHOWN ON PLANS.
16. NO MORE THAN 1 GALLON OF WATER PER YARD OF CONCRETE CAN BE ADDED TO THE TRUCK AFTER ARRIVAL TO PROJECT SITE. THE ADDITION OF WATER CAN ONLY BE ADDED UNDER THE SUPERVISION OF THE CONCRETE INSPECTOR OR LABORATORY TECHNICIAN.
17. WHEN PUMPING CONCRETE FOR PLACEMENT, ABSOLUTELY NO WATER IS TO BE ADDED TO PUMP HOPPER. ANY WATER ADDED TO HOPPER WILL BE REASON FOR CONCRETE REJECTION AT THE CONTRACTORS EXPENSE.
18. ALL CONTRACTION/CONSTRUCTION JOINTS "CJ" SHALL BE 1/4 THE SLAB THICKNESS DEEP, BUT NO LESS THAN 1" FOR CONTROLLING OF CRACKING. CONTRACTOR SHALL EXERCISE CAUTION WHEN FINAL TROWELING OF CONCRETE SO AS NOT TO FILL IN THESE JOINTS WITH CONCRETE CREAM. ANY CRACKS OUTSIDE OF JOINTS WHICH WERE CONSTRUCTED LESS THAN 1" DEEP, SHALL BE CAUSE FOR CONCRETE SLAB(S) TO BE REMOVED AND REPLACE AT CONTRACTORS EXPENSE.
19. ANY SCREED BOARDS SET WITHIN CONCRETE SLABS SHALL BE AN "OVERHEAD SCREED" SO THERE IS NO INTERFERENCE WITH THE PLACEMENT AND ALIGNMENT OF SLAB REINFORCING.
20. 3-1/2" FELT JOINTS WILL NOT BE ACCEPTED. PROVIDE A FULL 4" FELT JOINT FOR 4" SLAB CONSTRUCTION, AND A 6" FELT JOINT FOR A 6" SLAB SLAB CONSTRUCTION.
21. SHOULD ANY SHRINKAGE CRACKS OCCUR OUTSIDE OF EITHER THE EXPANSION JOINTS OR CRACK CONTROL JOINTS, THEN THE CONCRETE SLAB SHALL BE SAWCUT AT THE NEAREST JOINTS ON EACH SIDE OF THE CRACK AND THE CONCRETE SECTION SHALL BE, REMOVED AND REPLACED. NEW CONCRETE SHALL BE DOWELED INTO EXISTING CONCRETE PER DRAWING DETAIL.
22. ALL AREAS DISTURBED BY GRADING OPERATIONS WHETHER SHOWN ON THE DRAWINGS OR NOT SHALL BE HYDROSEEDED UNLESS OTHERWISE NOTED. HYDRO SEEDING SHALL CONFORM TO LOCAL CITY/COUNTY STANDARDS.
23. REPAIR OR PATCHING OF GALVANIZED METALS, SUCH AS AFTER WELDING GALVANIZED COMPONENTS, SHALL BE MADE USING A ZINC COMPOSITION "HOT STICK" APPLICATION PER ASTM A 780-01. GALVANIZING PAINTS WILL NOT BE ALLOWED.
24. AT LIMITS OF NEW PAVEMENT OR CURBS ADJACENT TO LANDSCAPING PROVIDE A 4:1 MINIMUM TRANSITION TO EXISTING GRADE WITH TOPSOIL. ADJUST EXISTING IRRIGATION HEADS TO FINISH GRADE AND PROVIDE SOD IN GRASS AREAS TO RESTORE TO EXISTING CONDITION.
25. TRANSITION BETWEEN PAVED SURFACES AND LANDSCAPE AREAS SHALL BE NO GREATER THAN 1", UNLESS NOTED OTHERWISE.
26. WITHIN LIMITS OF WORK THERE MAY BE EXISTING IRRIGATION LINES NOT SHOWN ON THIS PLAN. CONTRACTOR SHALL REMOVE LATERAL LINES AND HEADS ENCOUNTERED. MAIN LINES AND CONTROL WIRES MAY ONLY BE REMOVED PROVIDED THAT ROUTING IS KNOWN AND REMOVAL WILL NOT DEACTIVATE AN IRRIGATION SYSTEMS INTENDED TO REMAIN. IF CONFLICT IS FOUND, CONTACT THE ARCHITECT FOR DIRECTION.
27. GENERAL CONTRACTOR IS REQUIRED TO HIRE A LANDSCAPE SUBCONTRACTOR TO PERFORM ALL LANDSCAPE AND IRRIGATION REPAIRS.
28. WIDTH OF NEW SIDEWALKS SHALL MATCH WIDTH OF EXISTING, ADJACENT, SIDEWALKS.
29. SEE ARCHITECTURAL PLANS FOR EXPANSION AND CONTROL JOINT LAYOUT.
30. ADJUST TO FINISH GRADE ALL UTILITY BOXES, FRAMES, COVERS SLEEVES, POST HOLES GRATES, ETC. FOUND IN AREA OF WORK, WHETHER SHOWN OR NOT. CLEAN OR REPLACE AS NECESSARY TO ENSURE PROPER SEATING.
31. ALL NEW ASPHALT PAVING TO BE PROVIDED WITH 2 COATS OF SEALCOAT.
32. PRIOR TO NEW SEALCOAT ON EXISTING ASPHALT SURFACES, FILL ALL CRACKS 1/4" INCHES OR WIDER WITH AN APPROVED CRACK FILLER.
33. FOR ACCESSIBLE PATH OF TRAVEL REQUIREMENTS SEE ARCHITECTURAL SHEETS.
34. PERCENT OF SLOPE SHOWN ON ARROWS ARE MAXIMUM SLOPES AND NOT INTENDED TO SUPERCEDE SLOPES DEFINED BY SPOT ELEVATIONS. ← 0.0% MAX.
35. WITHIN THE LIMITS OF ACCESSIBLE PARKING AREA AND ACCESSIBLE DROP OFF ZONE THE SLOPE OF PAVEMENT SHALL NOT EXCEED 1.9% IN ANY DIRECTION.
36. SLOPE OF FINISHED PAVING TO BE 1% MINIMUM FOR ASPHALT, 0.5% MINIMUM FOR CONCRETE AND THE MAXIMUM SLOPE SHALL BE AS FOLLOWS;

    CROSS SLOPE PERPENDICULAR TO PATH OF TRAVEL – 1.9%
    DIRECTION OF TRAVEL – 4.9%
    RAMP IN DIRECTION OF TRAVEL – 8.0%
    PLAZA 1.9% – IN ANY DIRECTION
37. THE SLOPE AWAY FROM THE BUILDING ON PAVED SURFACES SHALL BE 1% MINIMUM AND 2% MAXIMUM .
38. TRANSITIONS BETWEEN CONCRETE AND OR ASPHALT SURFACES SHALL BE FLUSH, UNLESS NOTED OTHERWISE BY CURB OR STEP.

SHEET INDEX

C0.1 GENERAL NOTES AND ABBREVIATIONS
C0.2 TOPOGRAPHIC SURVEY
C1.1 DEMOLITION, GRADING AND PAVING PLAN

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

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FOLSOM, CA
916-355-9922
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BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

ANTHONY J. TASSANO
NO. C74696
04/28/2025

WCE
WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95762 | (916) 985-1870

CLIENT	
LODI USD	
DATE	PROJECT NUMBER
05/15/2025	250048

DRAWING HISTORY

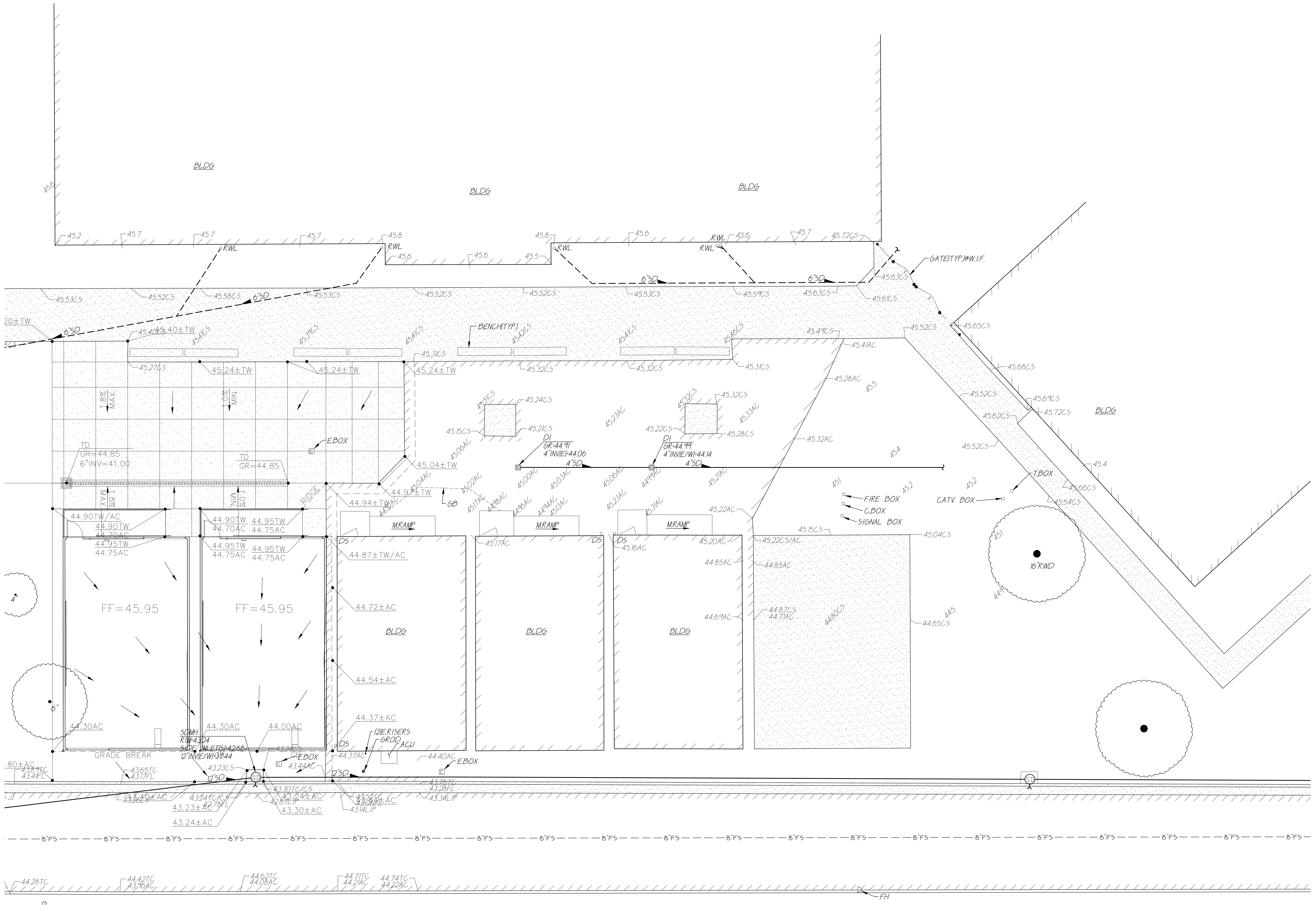
No.	Description	Date

CHECKED BY: AT
DRAWN BY: AT

CIVIL GENERAL NOTES AND ABBREVIATIONS

C0.1

FILENAME: I:\25-035\CIVIL\DWG\25-035-C01.DWG



EXISTING TOPOGRAPHY

- = PROPERTY LINE
- = CENTERLINE
- = EASEMENT
- = PROPERTY CORNER FOUND AS NOTED
- = PROPERTY CORNER NOTHING FOUND OR SET
- = TEMPORARY BENCHMARK (SEE TBM LIST FOR INFO)
- = SWALE OR DRAINAGE FLOW
- = DRAINAGE FLOW
- = FENCE (TYPE NOTED)
- = TREE (SIZE/TYPE INDICATED)
- = SLOPE
- = CONTOUR
- = CONCRETE SURFACE
- = EDGE OF ASPHALT
- = EDGE OF BUILDING
- = SIGN
- = POST OR BOLLARD
- = GROUND ELEVATION
- = HARD SURFACE ELEVATION

EXISTING UTILITIES

- = STORM DRAIN LINE (SIZE & DIRECTION OF FLOW)
- = STORM DRAIN LINE (RECORD INFORMATION)
- = STORM DRAIN LINE (UNDERGROUND LOCATING)
- = STORM DRAIN MANHOLE
- = STORM DRAIN CLEANOUT
- = DROP INLET
- = AREA DRAIN
- = RAIN WATER LEADER
- = DOWNSPOUT
- = SANITARY SEWER LINE (SIZE & DIRECTION OF FLOW)
- = SANITARY SEWER LINE (RECORD INFORMATION)
- = SANITARY SEWER LINE (UNDERGROUND LOCATING)
- = SANITARY SEWER MANHOLE
- = SANITARY SEWER CLEANOUT
- = WATER LINE (SIZE INDICATED)
- = WATER LINE (RECORD INFORMATION)
- = WATER LINE (UNDERGROUND LOCATING)
- = WATER MANHOLE
- = WATER VALVE
- = WATER METER
- = WATER BOX
- = IRRIGATION CONTROL VALVE
- = FIRE HYDRANT
- = BACKFLOW PREVENTER
- = SPRINKLER
- = HOSE BIBB
- = OVERHEAD ELECTRIC LINE
- = UNDERGROUND ELECTRIC LINE
- = UNDERGROUND ELECTRIC LINE (RECORD INFORMATION)
- = UNDERGROUND ELECTRIC LINE (UNDERGROUND LOCATING)
- = ELECTRIC MANHOLE
- = UTILITY POLE (WITH GUY WIRE)
- = ELECTRIC METER
- = ELECTRIC BOX
- = STREET LIGHTING BOX
- = LIGHT STANDARD
- = SIGNAL LIGHT
- = FLOOD LIGHT
- = ELECTRICAL OUTLET
- = GAS LINE (SIZE INDICATED)
- = GAS LINE (RECORD INFORMATION)
- = GAS LINE (UNDERGROUND LOCATING)
- = GAS MANHOLE
- = GAS VALVE
- = GAS METER
- = TELEPHONE LINE
- = TELEPHONE LINE (RECORD INFORMATION)
- = TELEPHONE LINE (UNDERGROUND LOCATING)
- = STORM DRAIN BOX
- = TRAFFIC SIGNAL BOX

ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS MAY BE USED ON THESE PLANS.

AC	ASPHALTIC CONCRETE
ACC	ACCESSIBLE
ACU	AIR CONDITIONING UNIT
AD	AREA DRAIN
APN	ASSESSOR'S PARCEL NUMBER
ARV	AIR RELEASE VALVE
BBALL	BASKETBALL POLE
BCM	BRASS CAP MONUMENT
BFP	BACK FLOW PREVENTER
BL.	BLOCK
BLDG	BUILDING
BOL	BOLLARD
BOV	BLOW-OFF VALVE
BR.	BRICK
BWF	BARBED WIRE FENCE
C	COMMUNICATION
CATV	CABLE TELEVISION
CIP	CAPPED IRON PIPE
C/L	CENTERLINE
C.L.F.	CHAIN LINK FENCE
CO	CLEANOUT
COL	COLUMN
CONC.	CONCRETE
COND.	CONDENSATE
CPF	CONTROL POINT FOUND
CPS	CONTROL POINT SET
CS	CONCRETE SURFACE
DF	DRINKING FOUNTAIN
DG	DECOMPOSED GRANITE
DI	DROP INLET
DRWY	DRIVEWAY
DS	DOWNSPOUT
DWG	DRAWING
E	ELECTRIC
EP	EDGE OF PAVEMENT
ESMT	EASEMENT
FA	FIRE ALARM
FDC	FIRE DEPARTMENT CONNECTION
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FL	FLOWLINE
FO	FIBER OPTIC
FS	FIRE SERVICE
G	GAS
GB	GRADE BREAK
GD	GARAGE DOOR
GR	GRATE
GRB	GROUND ROD BOX
GROD	GROUND ROD
GST	GATE STOP
GV	GAS VALVE
HB	HOSE BIBB
HBB	HOSE BIBB BOX
HBD	HEADER BOARD
HP	HIGH PRESSURE
HR	HANDRAIL
HVE	HIGH VOLTAGE ELECTRIC
IC	IN CONCRETE
ICP	IRRIGATION CONTROL PANEL
ICV	IRRIGATION CONTROL VALVE
INV	PIPE INVERT ELEVATION
IRR	IRRIGATION
JP	JOINT UTILITY POLE
JT	JOINT TRENCH
LNDG	LANDING
LVE	LOW VOLTAGE ELECTRIC
M.	METAL
MH	MANHOLE
MS	MOW STRIP
MSC	METAL STORAGE CONTAINER
NTS	NOT TO SCALE
OH	OVERHEAD
OHANG	OVERHANG
OIP	OPEN IRON PIPE
P/L	PROPERTY LINE
PA	PLANTER AREA
PB	PARKING BUMPER
PH	POSTHOLE
PIV	POST INDICATOR VALVE
PP	POWER POLE
PRI	PER RECORD INFORMATION
PUE	PUBLIC UTILITY EASEMENT
PV	PAVERS
PVC	POLYVINYL CHLORIDE
R	RUBBER
RG	ROLLING GATE
RIM	MANHOLE RIM ELEVATION
ROW	RIGHT OF WAY
RW	RETAINING WALL
RWD	REDWOOD
RWL	RAIN WATER LEADER
SB	SIGNAL BOX
SD	STORM DRAIN
SDMH	STORM DRAIN MANHOLE
SIG	SIGNAL
SL	STREET LIGHT
SLB	STREET LIGHT BOX
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEANOUT
SSMH	SANITARY SEWER MANHOLE
STL.	STEEL
T	TELEPHONE
TBALL	TETHER BALL POLE
TBM	TEMPORARY BENCHMARK
TC	TOP OF CURB
TD	TRENCH DRAIN
TP	TELEPHONE POLE
TRW	TOP OF RETAINING WALL
UG	UNDERGROUND
UNK	UNKNOWN
V	VENT
VBALL	VOLLEYBALL
W	WATER
W/	WITH
WD.	WOOD
WF	WOOD FENCE
W.I.F.	WROUGHT IRON FENCE
W.R.F.	WOOD RAIL FENCE
XF	TRANSFORMER
XWALK	CROSSWALK
YD	YARD DRAIN

TBM LIST

NUMBER	DESCRIPTION	NORTHING	EASTING	ELEVATION
1	CPS CHISELED "+"	10000.46	9999.72	43.81
2	CPS CHISELED "+"	9991.25	10487.64	43.44
4	CPS CHISELED "+"	10103.81	9967.87	43.82
5	CPS CHISELED "+"	10332.85	9963.94	43.80
6	CPS CHISELED "+"	10432.80	9964.26	43.76
7	CPF BM1207 EL=43.328	9803.54	10428.34	43.33
1000	CPS CHISELED "+"	9991.11	10494.45	43.74

BASIS OF BEARINGS:
ASSUMED

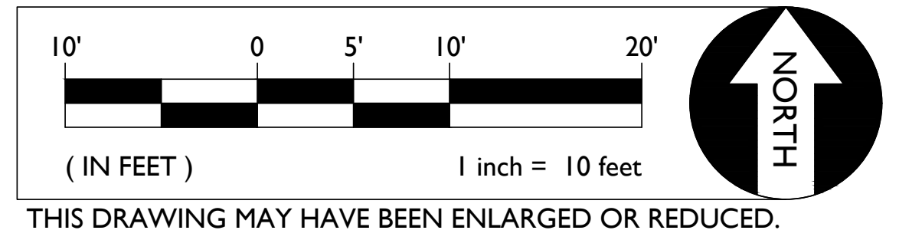
F.E.M.A. INFORMATION:
THE SUBJECT PROPERTY IS LOCATED IN "ZONE X (SHADED)--AREAS OF 0.2% ANNUAL CHANCE FLOOD; AREAS OF 1% ANNUAL CHANCE FLOOD WITH AVERAGE DEPTHS OF LESS THAN 1 FOOT OR WITH DRAINAGE AREAS LESS THAN 1 SQUARE MILE; AND AREAS PROTECTED BY LEVEES FROM 1% ANNUAL CHANCE FLOOD" PER FLOOD INSURANCE RATE MAP 06077C0168F DATED OCTOBER 16, 2009.

NOTE:
EXISTING UTILITIES BASED ON VISIBLE SURFACE STRUCTURES AND RECORD INFORMATION.

A.P.N.	029-400-040

BENCHMARK NO. BM 1207 ELEV. 43.328
SOUTHWEST CORNER ELM ST. & MILLS AVE.
10.2' W/ CL OF CURB RETURN ON ELM ST.,
0.5' BEHIND BOC

GRAPHIC SCALE



(IN FEET) 1 inch = 10 feet

THIS DRAWING MAY HAVE BEEN ENLARGED OR REDUCED.

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BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO.: 02-123356 DSA FILE NO.: 39-50

LODI USD

TRUE

ANTHONY J. TASSANO
NO. C74696
04/28/2025

WARREN CONSULTING ENGINEERS, INC.
1117 WINDFIELD WAY, SUITE 110
EL DORADO HILLS, CA 95762 | (916) 985-1870

CLIENT	
LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

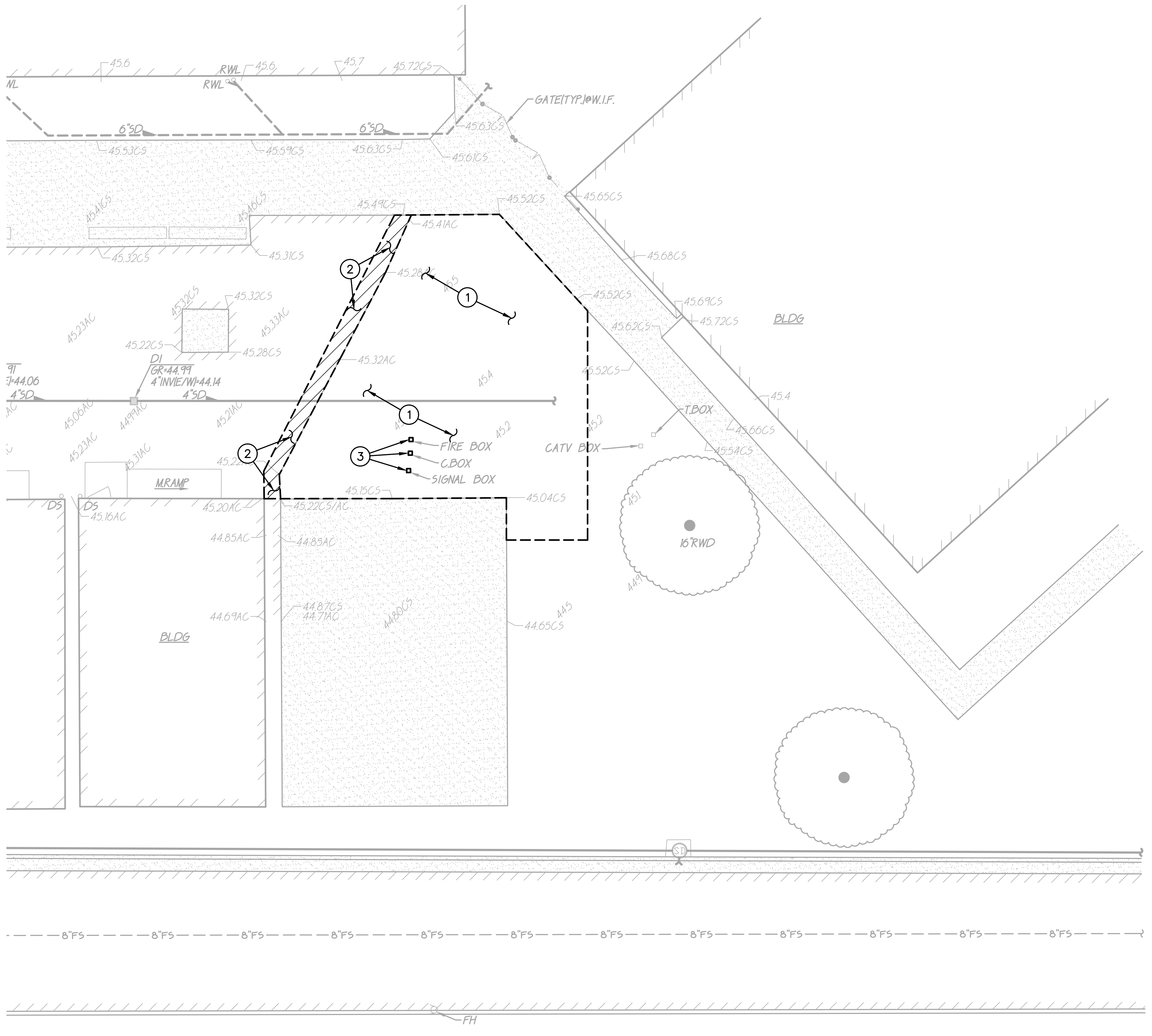
No.	Description	Date

CHECKED BY: AT
DRAWN BY: AT

TOPOGRAPHIC SURVEY

C0.2

FILENAME: \25-035\CIVIL\DWG\25-035-C02.DWG

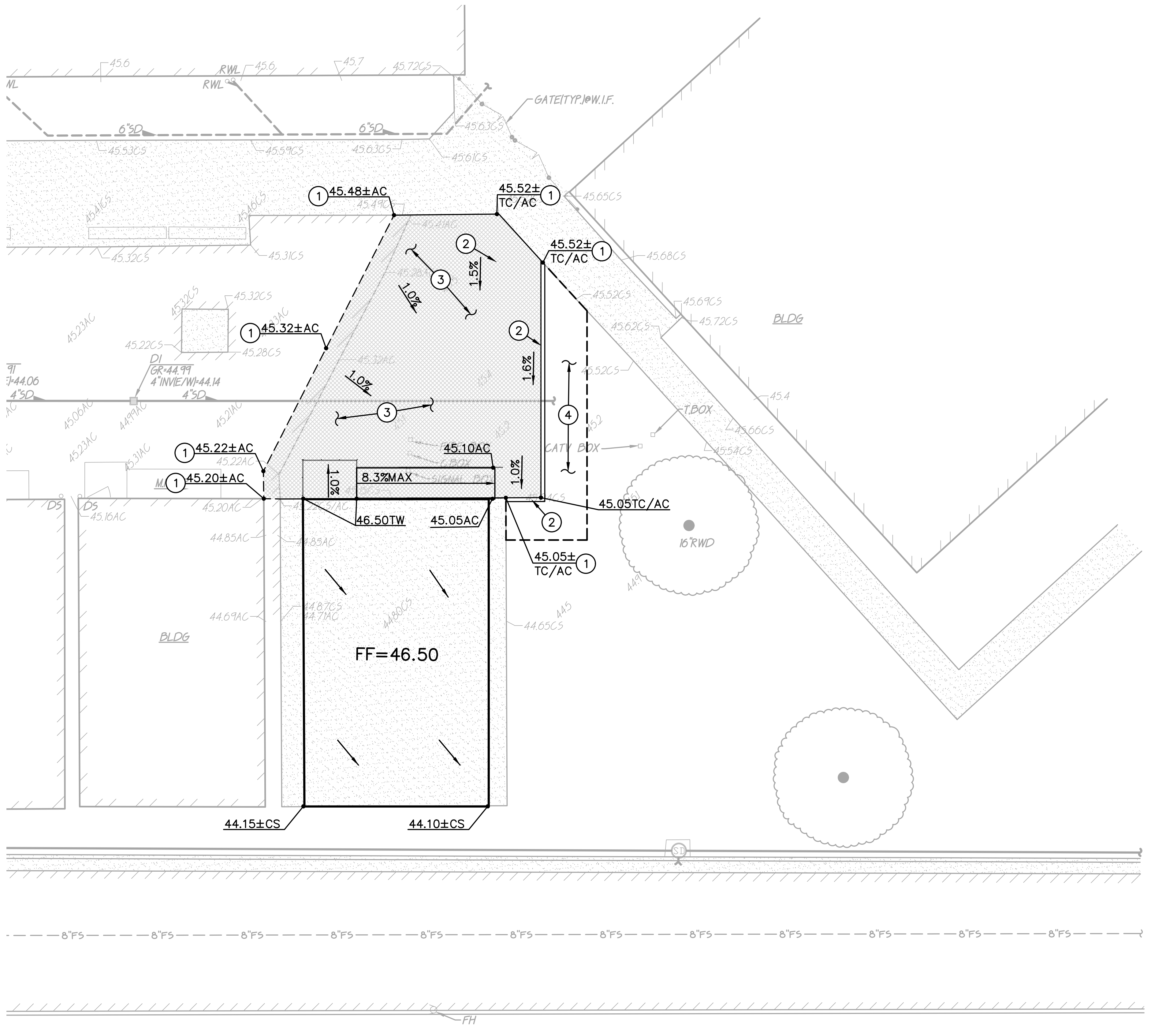


DEMOLITION PLAN

SCALE 1"=10'

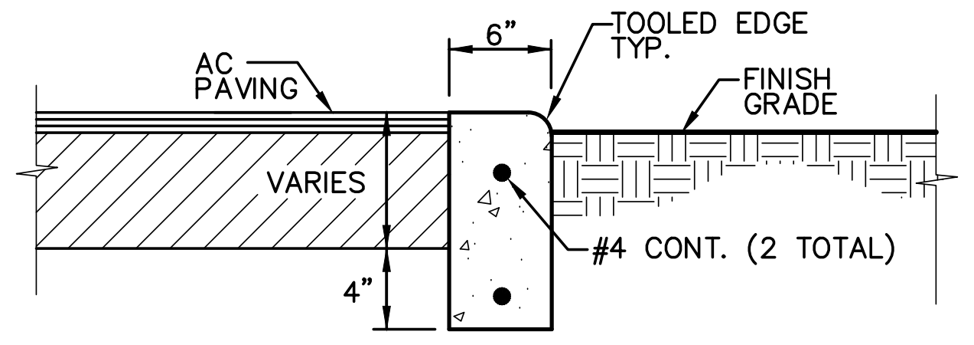
○ DEMOLITION NOTES

1. REMOVE AND DISPOSE OF TURF/VEGETATION AS REQUIRED TO ALLOW FOR PROPOSED CONSTRUCTION. IRRIGATION PIPING AND SPRINKLER HEADS IN CONFLICT WITH PROPOSED CONSTRUCTION SHALL BE REMOVED AND REPLACED OUTSIDE OF NEW WORK TO ALLOW FOR CONTINUED COVERAGE OF TURF. PATCH BACK TURF AREAS DAMAGED/REMOVED FOR CONSTRUCTION WITH NEW SOD AND/OR MULCH TO MATCH EXISTING CONDITIONS.
2. ▨ SAWCUT, REMOVE AND DISPOSE OF EXISTING ASPHALT PAVING AND AGGREGATE BASE TO LIMITS SHOWN. SAWCUT SHALL BE TO NEAT, STRAIGHT LINE, AND BE MAINTAINED THROUGHOUT CONSTRUCTION.
3. REMOVE EXISTING UTILITY BOX AND/OR FRAME AND COVER AND PROVIDE NEW. NEW BOX SHALL BE SIMILAR IN SIZE, BUT WITH TRAFFIC RATING AND SLIP RESISTANT COVER.



GRADING AND PAVING PLAN

SCALE 1"=10'

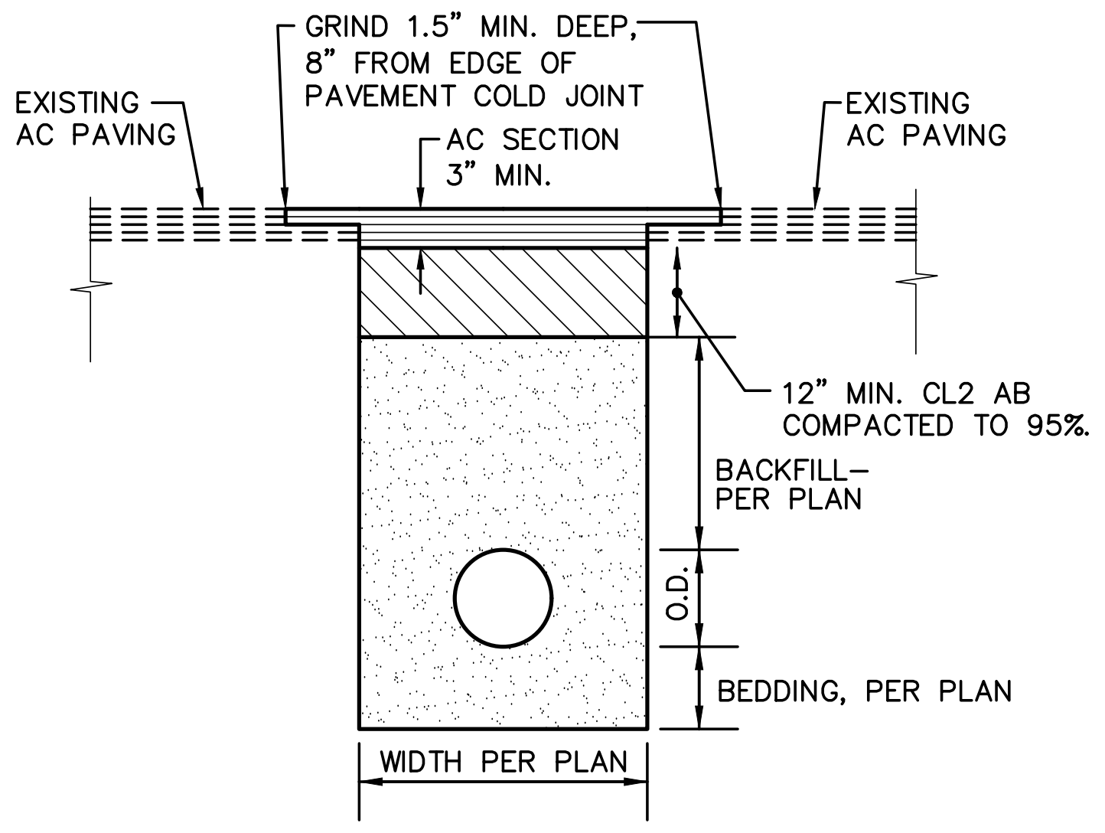


NOTES:

1. PROVIDE FELT EXPANSION JOINTS (E.J.) AT 60 FEET O.C. PROVIDE CONTROL JOINTS AT 10 FEET O.C., EXCEPT WHEN PLACING ADJACENT TO CONCRETE WALKS THE EXPANSION JOINTS SHALL ALIGN WITH THE EXPANSION JOINTS SHOWN FOR THE CONCRETE WALKS.
2. AT E.J. USE 1/2"X24" SMOOTH DOWELS, ALIGN WITH REBAR,GREASE 1/2 THE LENGTH BEFORE CONCRETE PLACEMENT.

1/C1.1 FLUSH CONCRETE CURB

NO SCALE



2/C1.1 ASPHALT PATCH AT TRENCH

NO SCALE

SUBGRADE PREPARATION

FOLLOWING SITE DEMOLITION ACTIVITIES,

EXCAVATE DOWN TO ROUGH SUBGRADE ELEVATION, SCARIFY THE EXISTING SOILS TO A MINIMUM DEPTH OF 12 INCHES AND UNIFORMLY MOISTURE CONDITION TO AT LEAST 2 PERCENT ABOVE THE OPTIMUM MOISTURE CONTENT AND COMPACT TO AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY PER ASTM D1557.

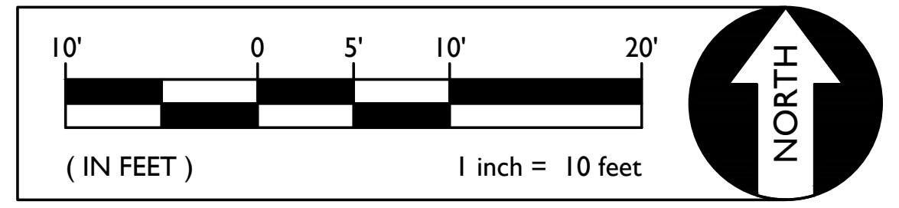
○ GRADING AND PAVING NOTES

1. MATCH EXISTING GRADE/ELEVATION.
2. CONSTRUCT FLUSH CONCRETE CURB PER 1/C1.1
3. ▨ PLACE 3" AC OVER 12" CLASS II AB ON COMPACTED SUBGRADE. PLACE TWO (2) APPLICATIONS OF SEAL COAT.
4. TURF DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED WITH AN APPROVED SOD. SPRINKLERS AND IRRIGATION PIPING REMOVED/DAMAGED SHALL BE REPLACED IN A LOCATION THAT WILL ALLOW PROPER COVERAGE TO AREAS BEING IRRIGATED.

ASPHALT TRENCH REPAIR

ASPHALT PAVING THAT IS SAWCUT/REMOVED FOR TRENCHING ACTIVITIES SHALL BE REPLACED WITH 3"AC OVER 12"AB. ANY STRIPING REMOVED SHALL BE REPLACED IN KIND WITH 2 COATS OF NEW STRIPING. SEE ELECTRICAL PLANS FOR LOCATIONS WHERE TRENCHING OCCURS THROUGH PAVEMENT. 2/C1.1

GRAPHIC SCALE



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FILENAME: I: \25-035\CIVIL\DWG\25-035-C11.DWG

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BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

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MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

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DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

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ANTHONY J. TASSANO
NO. C74696
04/28/2025

WARREN CONSULTING ENGINEERS, INC.
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EL DORADO HILLS, CA 95762 | (916) 985-1870

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DATE	PROJECT NUMBER
05/15/2025	250048

DRAWING HISTORY

No.	Description	Date

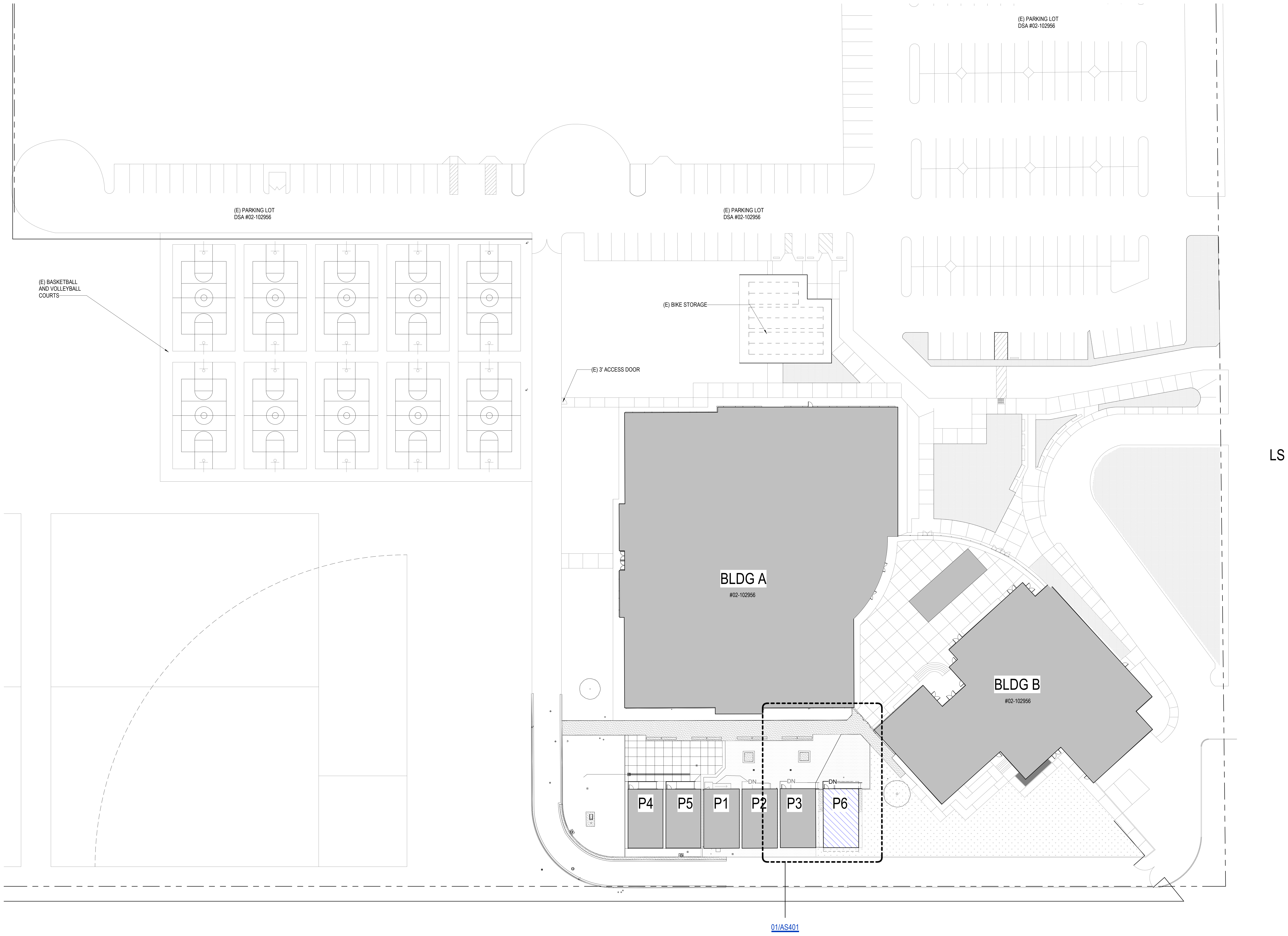
CHECKED BY: AT
DRAWN BY: AT

DEMOLITION, GRADING
AND PAVING PLAN

C1.1

OVERALL SITE PLAN
AS100
FOR BLUEBEAM LABELING/OCR:

0"
1"



01 OVERALL SITE PLAN - MILLSWOOD MIDDLE SCHOOL
1" = 30'-0"

GENERAL SITE PLAN NOTES

1. REFER TO CIVIL DOCUMENTS.
2. COORDINATE ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL, LANDSCAPE, AND OR STRUCTURAL DOCUMENTS.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1% MINIMUM, 2% MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5% FOR A HORIZONTAL DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O.
5. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION OF SITE SIGNAGE.
6. THE RELOCATABLE BUILDING ON THIS APP IS CURRENTLY IN STOCKPILE AND UNAVAILABLE FOR THE AOR TO VERIFY CONDITIONS. PER DSA IR 16-1, THE AOR MUST PROVIDE A LETTER STATING THAT THESE BUILDINGS GENERALLY CONFORM TO THE ORIGINALLY-APPROVED PLANS AND SPECIFICATIONS AND HAVE NOT BEEN ALTERED. THEREFORE, THE AOR, PRIOR TO PROJECT CLOSEOUT, SHALL PROVIDE A LETTER COMPLYING WITH IR-16-1 SECTION 5.2.2.

SITE PLAN LEGEND

■	EXISTING BUILDING
▨	PROPOSED BUILDING / ADDITION
⁘	(E) LANDSCAPE RE: CIVIL DRAWINGS
⁘	(E) CONCRETE SIDEWALK RE: CIVIL DRAWINGS
― ‒ ‒ ―	PROPERTY LINE
×―×	CHAIN LINK FENCE

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BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

DISCIPLINE

LEONA M. KETTERL
C-38823
REN. 09-30-25

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: Checker
DRAWN BY: Author

OVERALL SITE PLAN

AS100

Plot Stamp:
5/15/2025 11:32:15 AM

ENLARGED SITE PLANS
AS401
FOR BLUEBEAM LABELING/OCR:

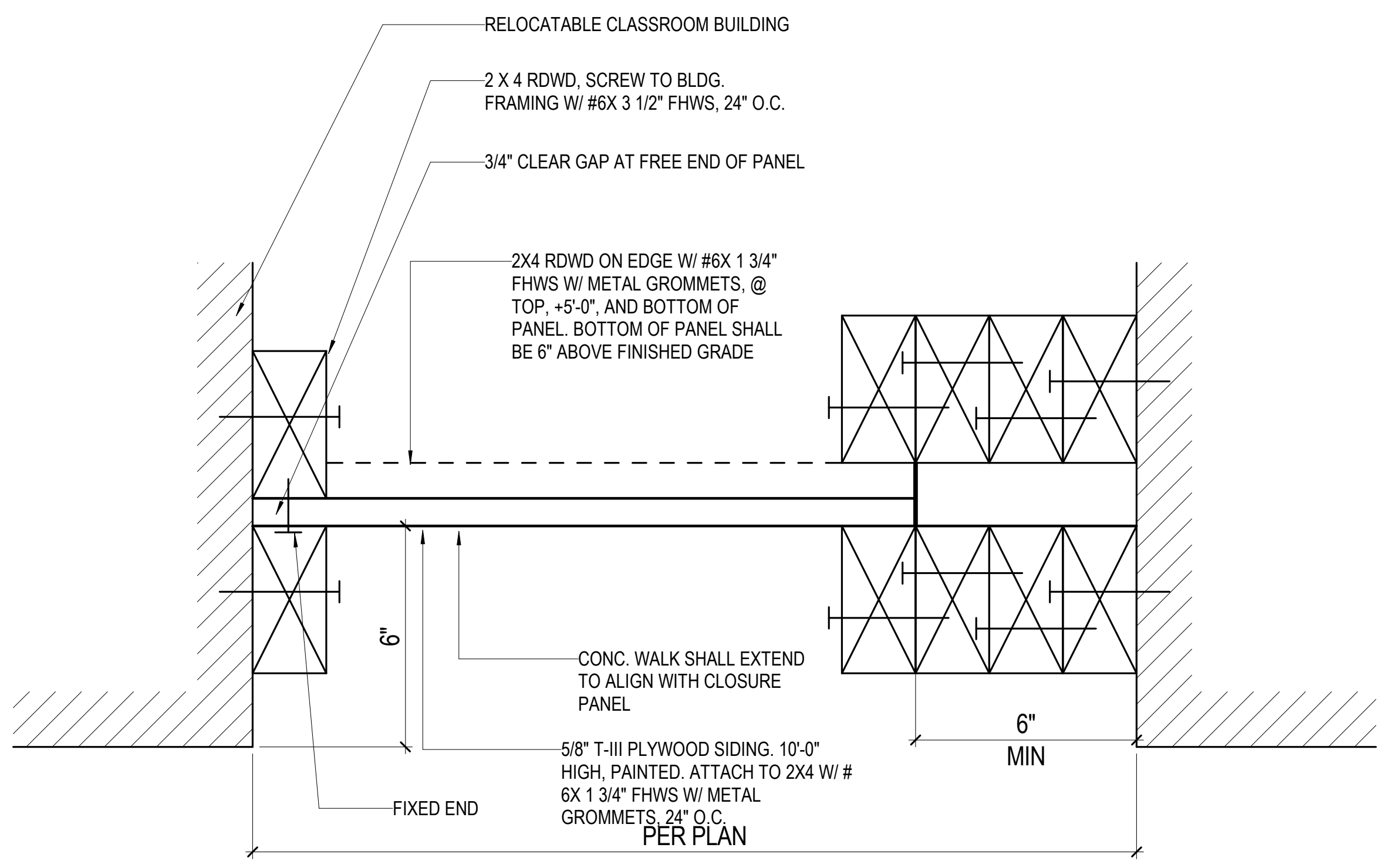
0"
1"

GENERAL SITE PLAN NOTES

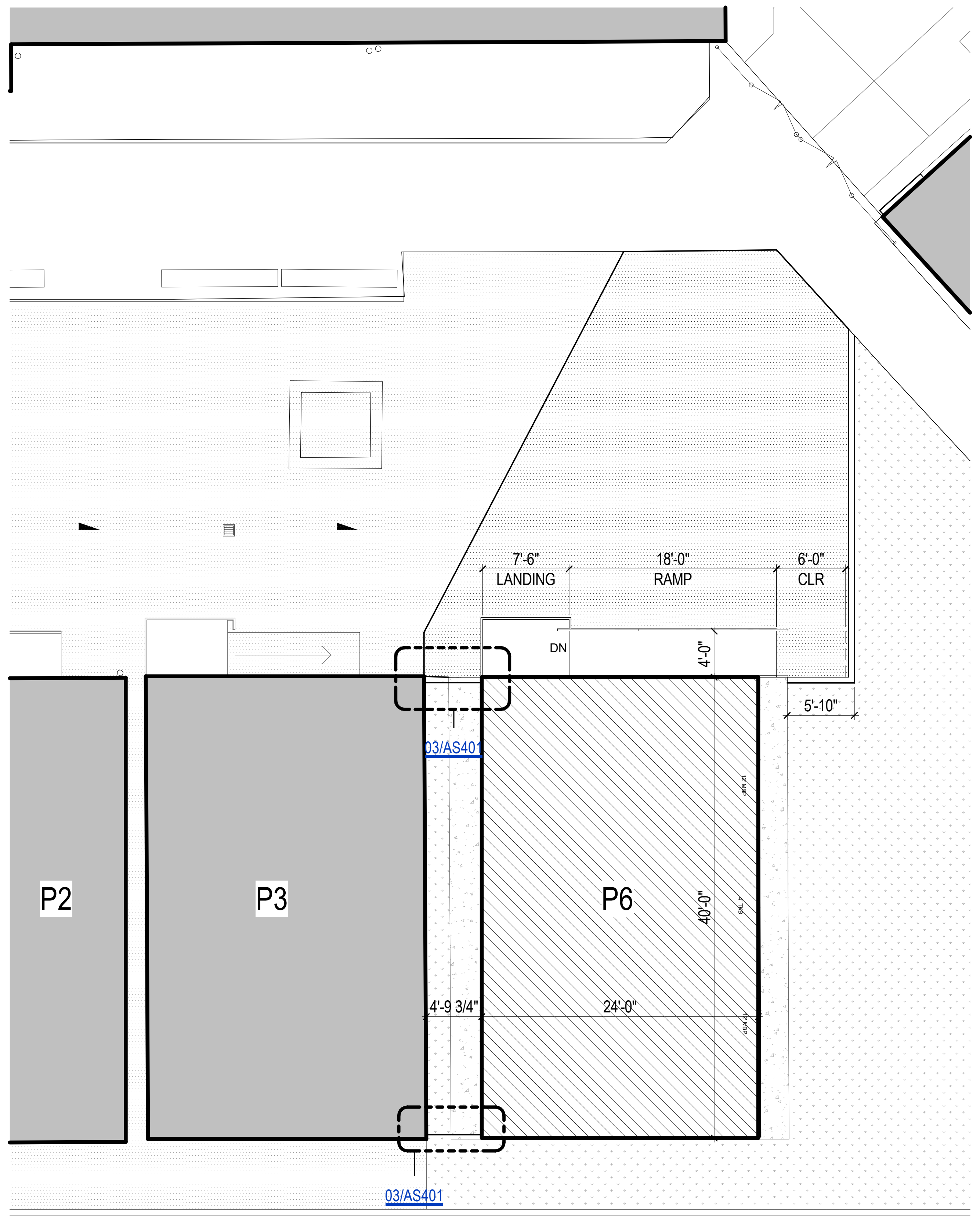
1. REFER TO CIVIL DOCUMENTS.
2. COORDINATE ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL DOCUMENTS.
3. PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1% MINIMUM, 2% MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
4. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5% FOR A HORIZONTAL DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O.
5. VERIFY ALL SITE SIGNAGE LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.

KEYNOTE LEGEND

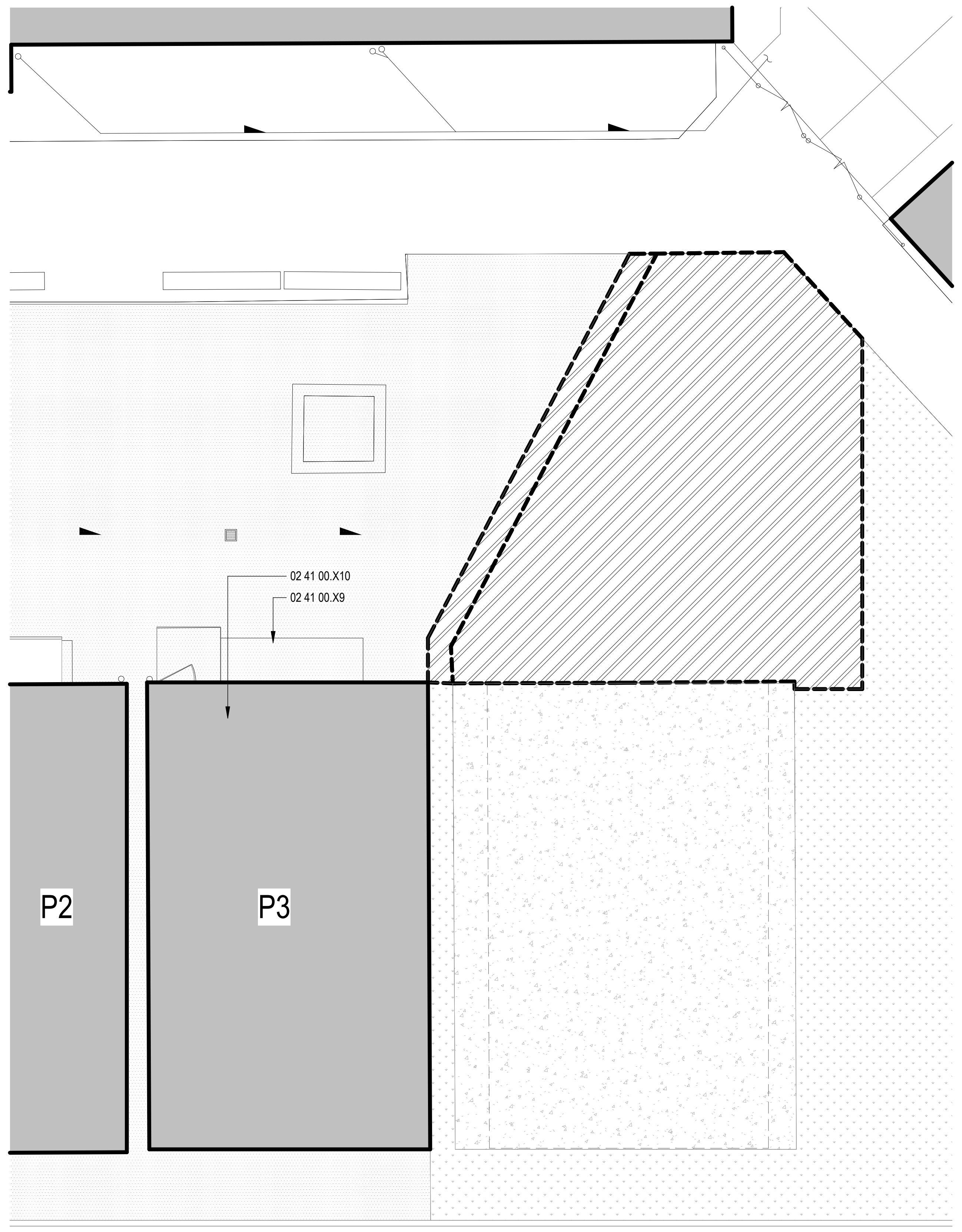
NUMBER	DESCRIPTION
02 41 00.X9	EXISTING RAMP TO REMAIN.
02 41 00.X10	EXISTING RELOCATABLE CLASSROOM TO REMAIN.


RELOCATABLE CLASSROOM BUILDING
2 X 4 RDWD, SCREW TO BLDG. FRAMING W/ #6X 3 1/2" FHWS, 24" O.C.
3/4" CLEAR GAP AT FREE END OF PANEL
2X4 RDWD ON EDGE W/ #6X 1 3/4" FHWS W/ METAL GROMMETS, @ TOP, +5'-0", AND BOTTOM OF PANEL. BOTTOM OF PANEL SHALL BE 6" ABOVE FINISHED GRADE
6"
CONC. WALK SHALL EXTEND TO ALIGN WITH CLOSURE PANEL
5/8" T-III PLYWOOD SIDING. 10'-0" HIGH, PAINTED. ATTACH TO 2X4 W/ # 6X 1 3/4" FHWS W/ METAL GROMMETS, 24" O.C.
FIXED END
6"
MIN
PER PLAN

03 CLOSURE PANEL AND FRAME
3" = 1'-0"



02 ENLARGED SITE PLAN
1/8" = 1'-0"



01 ENLARGED DEMO SITE PLAN
1/8" = 1'-0"

SITE PLAN LEGEND

▨	AREA TO BE DEMOLISHED
■	EXISTING BUILDING
▨	PROPOSED PORTABLE BUILDING RE: MODULAR MANUFACTURER #04-123316
░	(E) CONCRETE RE: CIVIL DRAWINGS
□	ASPHALT CONCRETE RE: CIVIL DRAWINGS
□	(E) ASPHALT CONCRETE RE: CIVIL DRAWINGS

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LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

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TRUE

DISCIPLINE

LICENSED ARCHITECT
LEONA M. KETTERL
C-38823
REN. 09-30-25
STATE OF CALIFORNIA

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: LK
DRAWN BY: MG / CL

ENLARGED SITE PLANS

AS401

Plot Stamp:
5/15/2025 11:32:42 AM

FLOOR PLAN & INTERIOR ELEVATIONS
A-101
FOR BLUEBEAM LABELING/OCR

GENERAL NOTES

1. OCCUPANCY LOAD FACTORS ARE ACCORDING TO CBC SECTION 1004, TABLE NO. 1004.5

2. REFER TO FUNCTION OF SPACE / SPACE USE SCHEDULE BELOW: ACCESSORY USE AREA EXCLUDED FROM OCCUPANT LOADING.

3. WHERE OCCUPANT LOAD SIGN IS REQUIRED THE ROOM SHALL BE POSTED WITH A SIGN NEAR THE MAIN EXIT FROM THE ROOM. REFER TO SIGNAGE SCHEDULE FOR DETAIL.

4. ALL DOORS TO ROOMS OR SPACES THAT HAVE AN OCCUPANT LOAD OF 5 OR MORE SHALL BE EQUIPPED WITH HARDWARE THAT IS LOCKABLE FROM THE INSIDE PER CBC 1010.8.2.

5. COMPLIANCE WITH CFC CH 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION WILL BE ENFORCED.

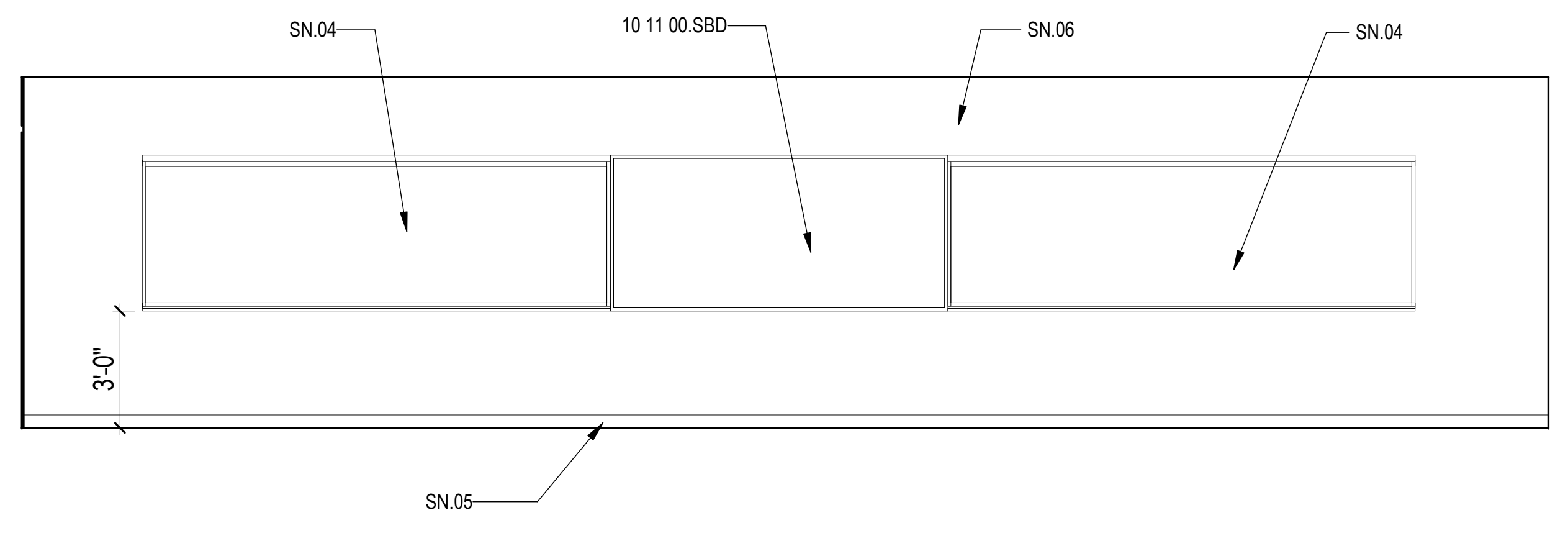
6. SITE SPECIFIC FOUNDATION PLAN IS TO BE USED WITH PC DRAWINGS' NOTES AND DETAILS. SEE STRUCTURAL FOUNDATION PLAN ON SITE SPECIFIC SECTION AND REMAINING CONSTRUCTION INFO ON THE PC DRAWINGS.

KEYNOTE LEGEND

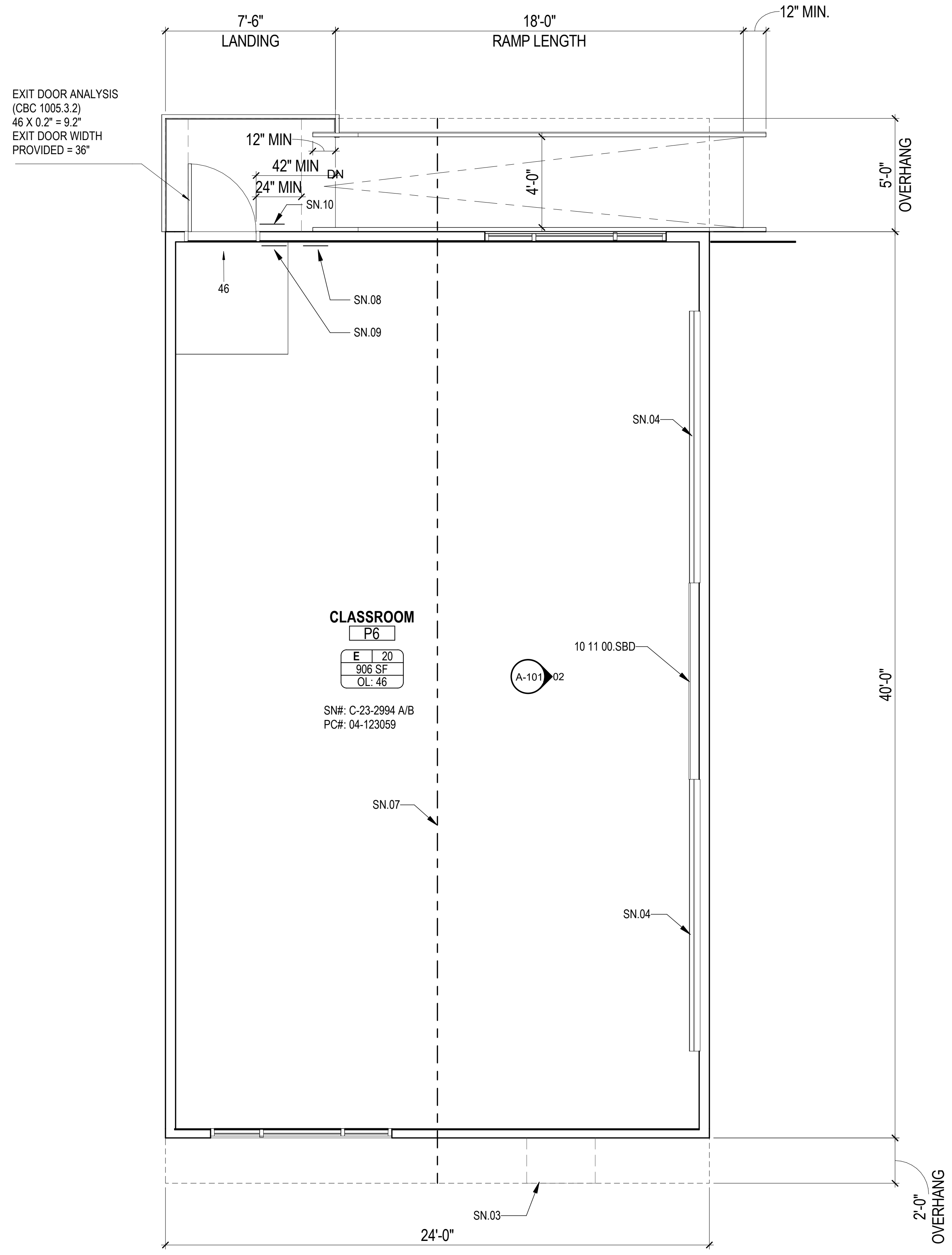
NUMBER	DESCRIPTION
10 11 00.SBD	SMARTBOARD

SHEET NOTE LEGEND

NUMBER	DESCRIPTION
SN.03	MECHANICAL EQUIPMENT. REFER TO PC DRAWINGS FOR ADDITIONAL INFORMATION.
SN.04	MARKERBOARD. TO BE INSTALLED BY PC PORTABLE MANUFACTURER AFTER DELIVERY OF RELOCATABLE BUILDING. REFER TO PC DRAWING FOR ADDITIONAL INFORMATION.
SN.05	WALLBASE. REFER TO PC DRAWING FOR ADDITIONAL INFORMATION.
SN.06	TACKABLE WALL PANELS. REFER TO PC DRAWING FOR ADDITIONAL INFORMATION.
SN.07	RELOCATABLE BUILDING MOD LINE. FOR REFERENCE.
SN.08	ASSISSTED LISTENING SYSTEM SIGNAGE. REFER TO PC DRAWING FOR ADDITIONAL INFORMATION.
SN.09	OCCUPANCY LOAD SIGNAGE. REFER TO PC DRAWING FOR ADDITIONAL INFORMATION.
SN.10	ROOM IDENTIFICATION SIGNAGE. REFER TO PC DRAWING FOR ADDITIONAL INFORMATION.



02 P6 - INTERIOR ELEVATION
1/4" = 1'-0"



01 FLOOR PLAN
1/4" = 1'-0"

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DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

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Not for permitting or construction

LEONA M. KETTERL
C-38823
REN. 09-30-25

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: LK
DRAWN BY: MG/CL

FLOOR PLAN & INTERIOR ELEVATIONS

A-101

Plot Stamp:
5/8/2025 11:00:18 AM

ELECTRICAL LEGEND, NOTES, & SHEET INDEX
E001
FOR BLUEBEAM LABELING/OCR:

0"
1"

ELECTRICAL NOTES & SYMBOL LEGEND

SYMBOLS SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS

MEP COMPONENT ANCHORAGE NOTES

1. ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:
   A. ALL PERMANENT EQUIPMENT AND COMPONENTS.
   B. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
   C. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVETHE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
2. THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BEPOSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGNCOMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALLHAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:
   A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
   B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
3. THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERALRESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

UL LISTINGS NOTE

ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATIES (UL) AND BEAR THEIR LABEL OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY.

ALL EQUIPMENT/DEVICES INSTALLED RECESSED IN FIRE RATED CEILINGS OR WALLS SHALL BE ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE CEILING OR WALL.

DEVICE LOCATION NOTE

THE LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TOINSTALLATIONS. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED INWALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN, UNLESS OTHERWISE NOTED. ELECTRICAL DEVICES SHALL BE MOUNTED PER "ACCESSIBLE DEVICE MOUNTING HEIGHT" DETAIL.

COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT. DISCONNECT SWITCHES, STARTERS, WIRING, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS SHALL BE PROVIDED THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGHING IN ALL CONDUIT TO THIS EQUIPMENT.

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK, AND SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, CEC, ALL STATE AND LOCAL CODES AND AMENDMENT
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA (DRAWINGS AND SPECIFICATIONS.) HE SHALL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.
4. ALL ELECTRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
5. PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS, OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING DISCONNECTED TO MAINTAIN SYSTEMS IN OPERATION.
6. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER, WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED WITH THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE, AND OVERTIME PAY SHALL BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANEL BOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.
7. AFTER ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED, REPRESENTATIVES OF THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.
8. FURNISH A ONE-YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLETION.
9. ALL FINAL CONNECTIONS TO OWNER-FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR.
10. THE EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONRY WALLS, GRADE BEAMS, FLOORS, OR STRUCTURAL STEEL MEMBERS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAW CUTTING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL, FLOOR, OR CEILING. THE EXACT METHOD AND LOCATION OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED.
11. FINAL CONNECTIONS TO VIBRATING EQUIPMENT AND AT SEISMIC SEPARATIONS SHALL BE FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS, AND LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS.
12. EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE, AND CONNECTION METHODS IN HVAC AIR PLENUMS SHALL BE APPROVED FOR USE IN PLENUMS AND SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE.
13. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING. ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.
14. CONDUIT SHALL NOT BE INSTALLED IN ANY FLOOR SLAB. CONDUIT SHALL BE INSTALLED CONCEALED IN THE CEILING SPACE, CONCEALED WALLS, OR 24" MINIMUM BELOW SLAB ON GRADE UNLESS NOTED OTHERWISE.
15. LOCATE ELECTRICAL EQUIPMENT AND BOXES IN ACCESSIBLE CEILING SPACE OR PROVIDE AN ACCESS PANEL FOR INACCESSIBLE CEILING SYSTEMS. ACCESS DOORS SHALL BE A MINIMUM DIMENSION OF 24" X 24". ACCESS DOOR LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
16. COORDINATE REQUIRED ACCESS DOORS IN NON-ACCESSIBLE CEILINGS TO SUIT FIELD CONDITIONS. THE EXACT SIZES AND PHYSICAL LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL BE PROVIDED IN OTHER SECTIONS OF THE SPECIFICATIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
17. WHENEVER A DISCREPANCY OF ANY SYSTEM AND/OR EQUIPMENT ARISES ON THE CONTRACT DOCUMENTS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER.
18. STRAIGHT FEEDER BRANCH CIRCUIT AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS.
19. PANEL SCHEDULES SHALL BE REVISED TO REFLECT FINAL ROOM NAMES AND NUMBERS USING THE OWNER'S ROOM NAMES AND NUMBERS DESIGNATIONS. CONTRACTOR TO PROVIDE FINAL PANEL SCHEDULE TO EEOR AT COMPLETION OF PROJECT.
20. WHERE OUTLETS OCCUR AT TACKABLE WALL PANELS OR OTHER WALL FINISHES, PROVIDE EXTENSION RINGS AS REQUIRED SO THAT NO SPACE WILL EXIST BETWEEN DEVICE PLATE AND BACKBOX PER CALIFORNIA ELECTRICAL CODE 314.20. SEE ARCHITECTURAL ELEVATIONS FOR WALL FINISHES AND LOCATIONS.
21. COORDINATE LOCATIONS OF ALL SEISMIC SEPARATIONS.
22. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF ALL LOW VOLTAGE / TECHNOLOGY SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. CABLING CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT.
23. ALL AC POWER CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM TECHNOLOGY LOW VOLTAGE CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
24. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.
25. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
26. ALL CONDUCTORS SHALL BE UL LISTED, COPPER #12 MINIMUM SIZE, TYPE THHN/THWN THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY, UNLESS NOTED OTHERWISE.
27. ALL CABLING SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH MAXIMUM 40% CABLE FILL. MINIMUM CONDUIT SIZE SHALL BE 3/4" INTERIOR & 1" EXTERIOR.
28. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.
29. COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO DIVISION 26 ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE.
30. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.
31. CIRCUITING:
   A. BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT BX IS ALLOWED AND WHETHER "THROUGH-FIXTURE" OR"OCTOPUS (EMT WITH FLEXIBLE WHIPS)" TYPE LIGHTING BRANCH CIRCUITING IS REQUIRED.
   B. WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANELSCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED.
   C. BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO DIVISION 26 SPECIFICATIONS UNDER SECTION ENTITLED "ELECTRICAL WIRING" FOR REQUIREMENTS.
   D. THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOME RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.
32. WHEN REMOVING EXISTING ELECTRICAL WORK WHERE OTHER ITEMS REMAIN ON THE SAME CIRCUIT, THE CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO MAINTAIN CIRCUIT CONTINUITY.
33. ALL ITEMS NOTED TO BE REMOVED ARE TO REMAIN THE PROPERTY OF THE OWNER; HOWEVER, CONTRACTOR SHALL REMOVE FROM JOB SITE ALL MATERIAL NOT RETAINED BY OWNER.
34. FIELD VERIFY CONDITION OF, AND MODIFICATIONS AND ADDITIONS TO, ALL EXISTING ELECTRICAL FIXTURES, PANELS, WIRING, ETC.
35. CONTRACTOR SHALL FIELD VERIFY EXISTING BRANCH CIRCUIT LOADING WHEN MAKING MODIFICATIONS AND/OR ADDITIONS TO THAT CIRCUIT. IF NEW WORK WOULD OVERLOAD EXISTING CIRCUIT, CONTRACTOR SHALL LOCATE ANOTHER EXISTING CIRCUIT (THE CLOSEST), WHICH WOULD NOT BE OVERLOADED UPON ADDING NEW LOAD, AND SHALL TIE NEW LOAD INTO THAT CIRCUIT.
36. CONTRACTOR TO REFER TO ARCHITECTURAL PHASING PLANS AND HAVE A GOOD UNDERSTANDING OF SCOPE OF PROJECT PRIOR TO COMMENCEMENT OF WORK.
37. LUMINAIRE SUPPORT IN SUSPENDED CEILINGS:
   A. PROVIDE MEANS OF SUPPORT FOR LUMINAIRES PER NEC 410-16. T BAR CLIPS SHALL BE INSTALLED ON THE LUMINAIRE AND SHALL BE FIELD SECURED TO THE INVERTED CEILING TEES SO THAT THE LUMINAIRE IS SECURELY FASTENED TO THE CEILING SYSTEM FRAMING MEMBERS.
   B. CEILING TILES SHALL NOT BEAR THE WEIGHT OF LUMINAIRES. SURFACE MOUNT LUMINAIRES, RECESSED DOWNLIGHTS, LIGHT TRACK, EXIT SIGN, ETC. SHALL BE SUPPORTED BY PROPER FRAMES OR OTHER ATTACHMENT TO MAIN CEILING SYSTEM GRID OR BUILDING STRUCTURE ABOVE CEILING.
   C. LUMINAIRES SHALL BE CENTERED IN CEILING TILE.
   D. LUMINAIRE SHALL HAVE FLANGE OR TRIM RING FOR CLOSURE OF CEILING CUTOUT OR OPENING.
   E. FIRE-RATED CEILING ASSEMBLY: FOR LUMINAIRES TO BE FLUSH-MOUNTED INTO A FIRE-RATED CEILING OR SURFACE MOUNTED TO A FIRE-RAGED CEILING, INSTALL WITH INDEPENDENT, SECURE SUPPORT. RACEWAY, CABLE ASSEMBLIES, BOXES AND FITTINGS LOCATED ABOVE A FIRE-RATED FLOOR/CEILING OR ROOF CEILING ASSEMBLY SHALL NOT BE SECURED TO, OR SUPPORTED BY, THE CEILING ASSEMBLY INCLUDING THE CEILING SUPPORT WIRES. PROVIDE AN INDEPENDENT MEANS OF SECURE SUPPORT. INDEPENDENT SUPPORT WIRES SHALL BE DISTINGUISHABLE BY COLOR, TAGGING, OR OTHER EFFECTIVE MEANS FROM THOSE THAT ARE PART OF THE FIRE-RATED DESIGN.
38. CONTRACTOR SHALL FIELD VERIFY ANY EXISTING UNDERGROUND PIPING, WIRING OR OTHER FACILITIES PRIOR TO TRENCHING, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY INSTALLATION OF NEW WORK.

ELECTRICAL ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A OR AMP	AMPERES	LV	LOW VOLTAGE
ABV	ABOVE	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MCA	MINIMUM CIRCUIT AMPS
AFG	ABOVE FINISH GRADE	MCC	MOTOR CONTROL CENTER
AIC	AMPERE INTERRUPTING CAPACITY	MFR	MANUFACTURER
AL	ALUMINUM	MH	MANHOLE
AS	DISCONNECT SWITCH SIZE RATING	MOCP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	MTD	MOUNTED
AUX	AUXILIARY	MTG	MOUNTING
AWG	AMERICAN WIRE GAUGE	MV	MEDIUM VOLTAGE
B.S.	BARE STRANDED	NAC	NOTIFICATION APPLIANCE CIRCUIT
BKBD	BACKBOARD	NC	NORMALLY CLOSED
BKR	BREAKER	NEC	NATIONAL ELECTRICAL CODE
BLDG	BUILDING	NF	NON-FUSED
C	CONDUIT	NIC	NOT IN CONTRACT
C.O.	CONDUIT ONLY WITH PULL WIRE	NO.	NUMBER
CB	CIRCUIT BREAKER	OC	ON CENTER
CKT	CIRCUIT	OD	OUTSIDE DIAMETER
CL	CENTER LINE	PB	PULL BOX
CLG.	CEILING	PC	PHOTOCELL
COL	COLUMN	PH OR Ø	PHASE
CU	COPPER	PIV	POST INDICATING VALVE
DIS	DISCONNECT	PNL	PANEL
DP	DISTRIBUTION PANEL	POC	POINT OF CONNECTION
DWG	DRAWING	PRI.	PRIMARY
EA	EACH	PVC	POLY-VINYL CHLORIDE
ELEC.	ELECTRICAL	PWR	POWER
EMH	ELECTRICAL MANHOLE	REC/RECEPT	RECEPTACLE
EMT	ELECTRICAL METALLIC TUBING	REQ'D	REQUIRED
EPO	EMERGENCY POWER OFF	RGS	RIGID GALVANIZED STEEL
EQ	EQUIPMENT	RPBP	REDUCED PRESSURE BACK FLOW PREVENTER
FA	FIRE ALARM		
FACP	FIRE ALARM CONTROL PANEL	SF	SQUARE FEET
FATC	FIRE ALARM TERMINAL CABINET	SP	SPARE
FF	FINISHED FLOOR	SPECS	SPECIFICATIONS
FLA	FULL LOAD AMPS	STD	STANDARD
FO	FIBER OBTIC	SW	SWITCH
FT	FEET	SWBD	SWITCHBOARD
GFI	GROUND FAULT INTERRUPTER	TB	TERMINAL BLOCK
GFR	GROUND FAULT RELAY	TEL./TELE	TELEPHONE
GND	GROUND	TPS	TWISTED SHIELDED PAIR
HP	HORSEPOWER	TRANSF/XFMR	TRANSFORMER
HTR	HEATER	TS	TAMPER SWITCH
HV	HIGH VOLTAGE	TYP	TYPICAL
ISC	SHORT CIRCUIT CURRENT	UG	UNDERGROUND
KCMIL	THOUSAND CIRCULAR MILS	UNO	UNLESS NOTED OTHERWISE
KV	KILOVOLT	V	VOLTS
KVA	KILOVOLT-AMPERES	VA	VOLT-AMPERES
KW	KILOWATT	VFD	VARIABLE FREQUENCY DRIVE
LF	LINEAR FEET	W	WATTS
LIS	LOAD INTERRUPTER SWITCH	WP	WEATHERPROOF
LOC.	LOCATION	Z	IMPEDANCE
LTG	LIGHTING		

⊖	**SHEET OR DETAIL REFERENCE** - NUMBER ON TOP INDICATES DETAIL NUMBER - NUMBER ON BOTTOM INDICATES SHEET NUMBER
⬡	**MECHANICAL EQUIPMENT CALLOUT** SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS
☐	KEY NOTE

CIRCUITING

↗	ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROWINDICATES PARTIAL CIRCUIT, "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT: PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.
LC1-X	LIGHTING CIRCUIT DESIGNATION FOR SPACE, U.N.O.
LC1-X	CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. SEE PANEL SCHEDULES FOR INFORMATION.
+42"	A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE

MOUNTING OVER OBSTRUCTION DETAIL

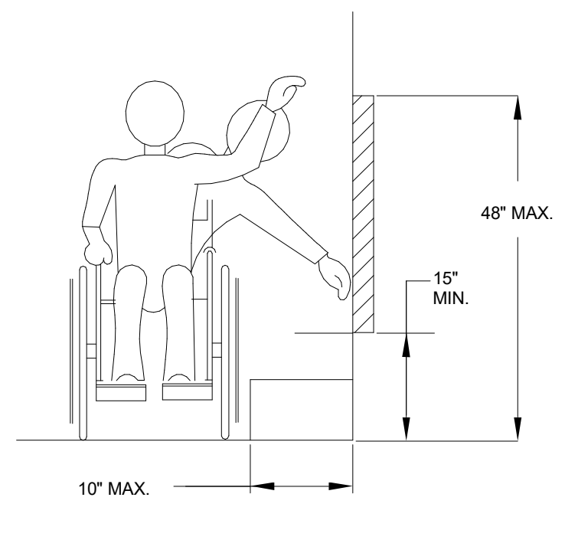
NOTE: SIDE REACH

1. UNOBSTRUCTED: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES MAX, AND THE LOW SIDE REACH SHALL BE 15 INCHES MIN ABOVE THE FINISH FLOOR OR GROUND.

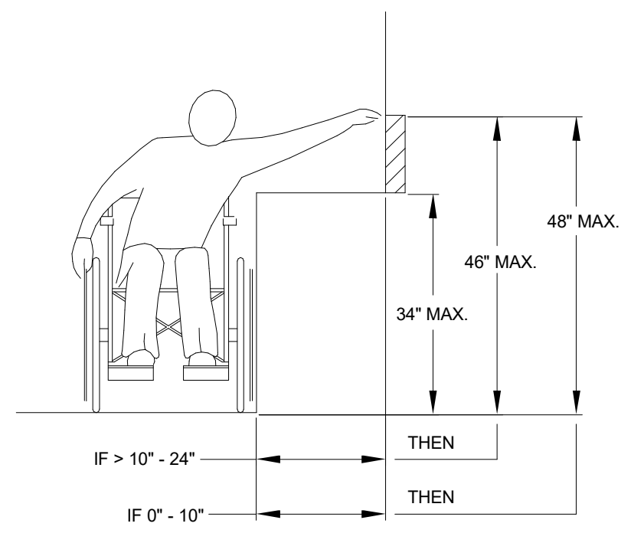
1.1. EXCEPTION: AN OBSTRUCTION SHALL BE PERMITTED BETWEEN THE CLEAR FLOOR OR GROUND SPACE AND THE ELEMENT WHERE THE DEPTH OF THE OBSTRUCTION IS 10 INCHES MAX.

2. OBSTRUCTED HIGH REACH: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES MAX, AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAX. THE HIGH SIDE REACH SHALL BE 48 INCHES MAX FOR A REACH DEPTH OF 10 INCHES MAX. WHERE THE REACH DEPTH EXCEEDS 10 INCHES, THE HIGH SIDE REACH SHALL BE 46 INCHES MAX FOR A REACH DEPTH OF 24 INCHES MAX.

3. OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.



UNOBSTRUCTED SIDE REACH 2022 CBC 11B-308.3.1



OBSTRUCTED SIDE REACH 2022 CBC 11B-308.3.2

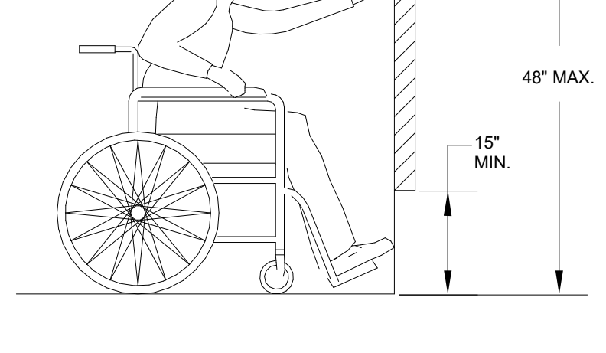
NOTES: FORWARD REACH

1. UNOBSTRUCTED:

WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES MAX, AND THE LOW FORWARD REACH SHALL BE 15 INCHES MIN ABOVE THE FINISH FLOOR OR GROUND.

2. OBSTRUCTED REACH: WHERE A CLEAR FLOOR OR GROUND SPACE THAT ALLOWS A FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION, AND THE DEPTH OF THE OBSTRUCTION SHALL BE 25 INCHES MAX. THE HIGH FORWARD REACH SHALL BE 44 INCHES MAX FOR A DEPTH OF 25 INCHES MAX.

3. OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.



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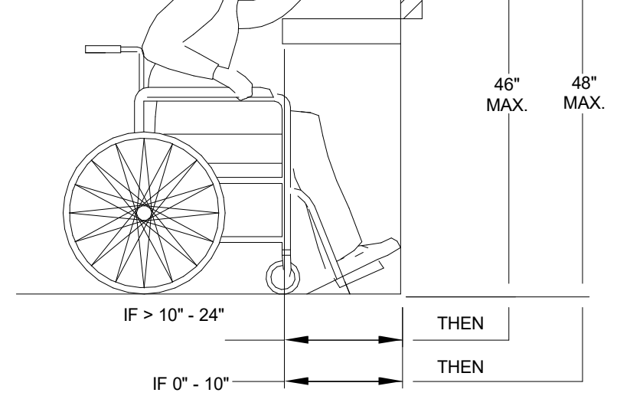


OBSTRUCTED FORWARD REACH 2022 CBC 11B-308.2.2

ELECTRICAL DEVICES & EQUIPMENT

Ⓙ	JUNCTION BOX
$M	20A MOTOR-RATED TOGGLE SWITCH
⊖	20A-125V DUPLEX RECEPTACLE
⊘	20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
⊖ >	20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP
⊖ C	20A-125V CONTROLLED PLUG-LOAD DUPLEX RECEPTACLE
●	20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE
⊖ CH	20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS
⊕	20A-125V FOURPLEX RECEPTACLE (SAME SYMBOLOGY TYPES AS DUPLEX RECEPTACLE)
⊖	SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED)
⊙	20A-125V FLUSH FLOOR DUPLEX RECEPTACLE
⦶	20A-125V CEILING MOUNTED DUPLEX RECEPTACLE
B	BELL
⏚	EMERGENCY POWER OFF (EPO)
⬡	PUSHBUTTON
☐	DISCONNECT SWITCH. DISCONNECT SWITCHES SHALL BE 30/NF/3 UON. NF = NON-FUSIBLE, NEMA 1 ENCLOSURE. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY.
□	TRANSFORMER
▭	PANELBOARD
▭	SWITCHBOARD OR DISTRIBUTION PANELBOARD
▦	PHOTOVOLTAIC SOLAR PANEL

LIGHTING FIXTURES

FIXTURE TYPE DESIGNATION → A
PANEL AND CIRCUIT NUMBER → LC1-X
SWITCHLEG CONTROL IDENTIFICATION → a

EMERGENCY	NORMAL	
◩	□	LED 2' x 2' FIXTURE
◩	▭	LED 2' x 4' FIXTURE
▭	▭	LED LINEAR FIXTURE (SURFACE/RECESSED/SUSPENDED)
◩	□	LED SURFACE MOUNTED FIXTURE
●─	○─	LED STRIP FIXTURE
●	○	LED DOWNLIGHT (ROUND)
◩	□	LED DOWNLIGHT (SQUARE)
●	○	LED INDOOR WALL SCONCE FIXTURE
◩	□	LED WALL MOUNTED FIXTURE
●	○	LED OUTDOOR PEDESTRIAN STYLE POST-TOP AREA FIXTURE
■	□	LED OUTDOOR ARM MOUNT AREA FIXTURE
■■■	□□□	SPORTS LIGHTING FIXTURE
▽		LED ACCENT SPOT LIGHT
⊠		EMERGENCY EXIT LIGHT SIGN. REFER TO LIGHTING PLAN FOR NUMBER OF FACES AND DIRECTIONAL ARROWS

REFER TO LIGHT FIXTURE SCHEDULE FOR MANUFACTURER ORDER NUMBERS

LIGHTING CONTROLS

FINSHES SHALL BE SELECTED BY CAMPUS REPRESENTATIVE PRIOR TO ORDERING

▨	PRIMARY DAYLIGHTING ZONE	▨	SECONDARY DAYLIGHTING ZONE

SINGLE LINE DIAGRAM

L1A	PANELBOARD	ECM	ELECTRIC CIRCUIT MONITOR
☐	AUTOMATIC TRANSFER SWITCH	SPD	SURGE PROTECTIVE DEVICE
▭	CIRCUIT BREAKER (FUSED TYPE)	○	MOTOR
⌒	CIRCUIT BREAKER	●	TAP
GF	GROUND FAULT CIRCUIT BREAKER	●	POINT OF CONNECTION
M	METER	─	CONTINUATION LINE
≈	TRANSFORMER	G	GENERATOR
⊠	COMBINATION MOTOR-STARTER	⏚	GROUND
⊠	DISCONNECT SWITCH W/COMBINATION MOTOR-STARTER		
F	DISCONNECT SWITCH - FUSED		
☐	DISCONNECT SWITCH		

RENOVATION WORK

EXISTING WORK SHALL BE SHOWN LIGHT - NEW WORK SHALL BE SHOWN DARK

(E) ⊖	(E) ☐	EXISTING TO REMAIN	(RR) ⊖ (RR) ☐	EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.
(R) ⊖	(R) ☐	EXISTING SHALL BE DEMOLISHED AND REMOVED.	⊖ ☐	NO TAG INDICATES NEW EQUIPMENT.
(ER) ⊖	(ER) ☐	EQUIPMENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.		

ELECTRICAL SHEET INDEX

E001	ELECTRICAL LEGEND, NOTES, & SHEET INDEX
ES101	ELECTRICAL SITE PLAN
E501	ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES
E601	ELECTRICAL DETAILS

LIST OF APPLICABLE CODES

2025 CALIFORNIA ADMINISTRATIVE CODE (CAC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 1

2022 CALIFORNIA BUILDING CODE (CBC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2, VOLUME 1 & 2

2022 CALIFORNIA ELECTRICAL CODE (CEC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 3

2022 CALIFORNIA ENERGY CODE
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 6

2022 CALIFORNIA FIRE CODE (CFC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 9

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CGBSC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11

2022 NFPA 72, NATIONAL FIRE ALARM AND SIGNALING CODE
WITH CA AMENDMENTS

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7 SECTION 13.3 AS DEFINED IN ASCE 7 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTION 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. THE MEP DESIGN PROFESSIONAL ENGINEER RESPONSIBLE OR CONTENT ON THESE SHEETS HAS VERIFIED THAT THE DESIGN METHODS IDENTIFIED BELOW ARE IN ACCORDANCE WITH DSA IR 16-13.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP ☐ MD ☐ PP ☐ E ☒ OPTION 1: PROJECT SPECIFIC DESIGN
MP ☐ MD ☐ PP ☐ E ☐ OPTION 2: DESIGN BASED ON OSHPD OPM, WITHIN PROJECT SUBMITTAL.
MP ☐ MD ☐ PP ☐ E ☐ OPTION 3: DESIGN BASED ON OSHPD OPM, DEFERRED SUBMITTAL.

UTILITY PENETRATION NOTE

UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIESSHALL BE FIRESTOPPED AND SEALED WITH AN APPROVED UL LISTED SYSTEM OR MATERIAL. STEEL ELECTRICAL OUTLET BOXES WHICH DO NOT EXCEED 16 SQUARE INCHES IN AREA, NEED NOT BE PROTECTED IN ONE HOUR OR TWO HOUR FIRE RATED WALLS, PARTITIONS, CEILING, OR AREASEPARATION UNLESS THEY:

1. OCCUR ON OPPOSITE SIDES OF THE WALL WITHIN 24 INCH HORIZONTAL DISTANCE OF ONE ANOTHER IN THIS CASE , ONLY ONE OUTLET BOX NEEDS TO BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL OR DETAIL TO CORRECT THIS CONDITION.

2. OCCUR IN COMBINATION WITH OUTLET BOXES OF ANY SIZE SUCH THAT THE AGGREGATE AREA OF UNPROTECTED OUTLET BOXES EXCEEDS 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA IN THIS CASE, ONLY A SUFFICIENT NUMBER OF OUTLET BOXES NEED TO BE PROTECTED BY AN APPROVED MATERIAL OR DETAIL TO DECREASE THE AGGREGATE AREA OF UNPROTECTED UTILITY BOXES TO LESS THAN 100 SQUARE FEET OF WALL.

STEEL ELECTRICAL OUTLET BOXES WHICH EXCEED 16 SQUARE INCHES IN AREA, AND ALL OTHER STEEL UTILITY OUTLET BOXES REGARDLESS OF SIZE, SHALL BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL AS LISTED OR EQUAL.

FIRESTOPPING MATERIAL:
MPP-1 MOLDABLE PUTTY PADS

3M CONTRACTOR PRODUCTS
MINNEAPOLIS,
MN 3M TEST REPORT NO. 1167
DATED AUGUST 21, 1987

FLAMESAFE FSP 1077 FIRESTOP PADS
INTERNATIONAL PROTECTIVE COATINGS
OAKHURST, NJ

FSP FIRESTOP PUTTY PADS
HEVI-DUTY NELSON PRODUCTS
TULSA, OK

STEEL UTILITY BOXES WHICH EXCEED 100 SQUARE INCHES IN AREA SHALL BE PROTECTED BY ENCASEMENT.

UTILITY AND ELECTRICAL OUTLETS OR BOXES SHALL BE SECURELY FASTENED TO THE STUD FRAMING OF THE WALL, PARTITION OR CEILING ASSEMBLY. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT SO THAT THE CLEARANCE BETWEEN THE BOX AND THE GYPSUM BOARD DOES NOT EXCEED 1/8 INCH IN SMOKE WALLS OR PARTITIONS, THE 1/8 INCH CLEARANCE SHALL BE FILLED WITH AN APPROVED FIRE-RATED SEALANT.

DIAGRAMMATIC NOTE

DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE DETAILED CONDUIT ROUTING OR LENGTHS REQUIRED FOR COMPLETE INSTALLATION. ROUTING OF RACEWAYSSHALL BE AT THE OPTION OF THE CONTRACTOR BUT SHALL BE IN STRICT COMPLIANCE WITH STRUCTURAL REQUIREMENTS, CONTRACT DOCUMENTS AND SPECS UNLESS OTHERWISE NOTED. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES. DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS ANY ELECTRICAL ARCHITECTURAL, STRUCTURAL AND/OR MECHANICAL ITEMS OR FEATURES, REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR FEATURES, REFERTO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR DIMENSIONS.

STRUCTURAL NOTE

UNLESS SPECIFICALLY SHOWN ON THESE PLANS. STRUCTURAL MEMBERS SHALL NOT BE CUT. DRILLED, OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PBK
www.pbk.com
916-355-9922
FOLSOM, CA

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
No. E-19817
Exp. 3-31-26

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

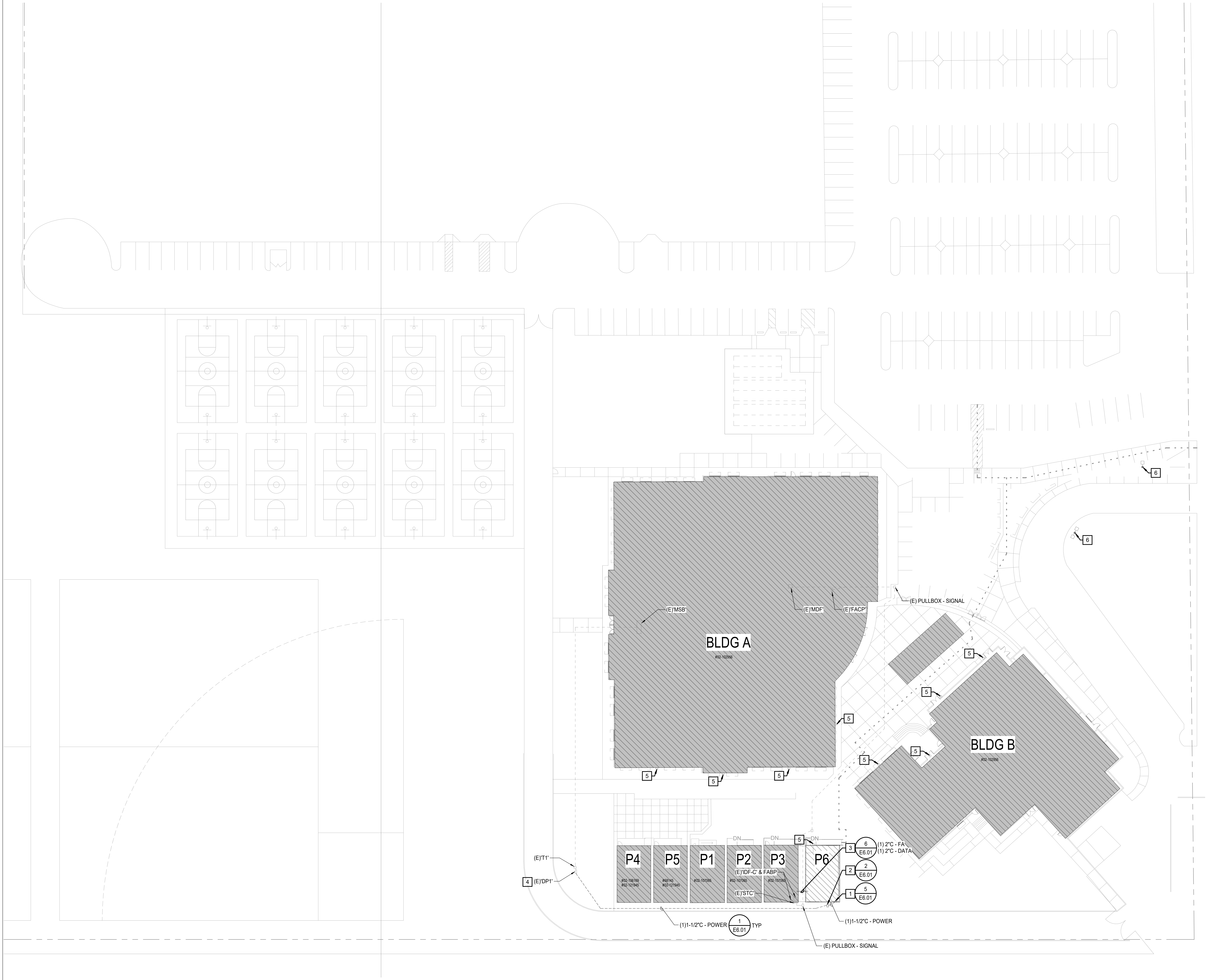
CHECKED BY: SM
DRAWN BY: KG

ELECTRICAL LEGEND, NOTES, & SHEET INDEX

E001

ELECTRICAL SITE PLAN
ES101
FOR BLUEBEAM LABELING/OCR:

0"
1"



1 ELECTRICAL SITE PLAN - MILLSWOOD MIDDLE SCHOOL
1" = 30'-0"

GENERAL NOTES

1. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
2. UNLESS NOTED OTHERWISE ALL UNDERGROUND CONDUIT SHOWN ON THIS PLAN TO BE MINIMUM 1" IN SIZE.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.

KEY NOTES

1	PROVIDE POWER CONNECTIONS TO PORTABLE ELECTRICAL PANEL.
2	PROVIDE N16 PULL BOX FOR POWER.
3	PROVIDE CONDUIT CHASES BETWEEN PORTABLES FOR SIGNAL AND FIRE ALARM CONNECTIONS TO EXISTING IDF AND FABP IN BUILDING 'P3'. STUB RACEWAYS TO AREA ABOVE CEILING.
4	UTILIZE EXISTING 100/2P SPARE CIRCUIT BREAKER IN PANEL TO PROVIDE POWER TO NEW PORTABLE BUILDING.
5	EXISTING WALLPACK LIGHT FIXTURE SHOWN FOR REFERENCE ONLY TO DEMONSTRATE COMPLIANCE WITH EGRESS PATH ILLUMINATION.
6	EXISTING SITE POLE LIGHT FIXTURE SHOWN FOR REFERENCE ONLY TO DEMONSTRATE COMPLIANCE WITH EGRESS PATH ILLUMINATION.

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DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

E	F
C	D
A	B

KEY PLAN
NORTH: PLAN TRUE
N

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26

CLIENT	
LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: SM
DRAWN BY: KG

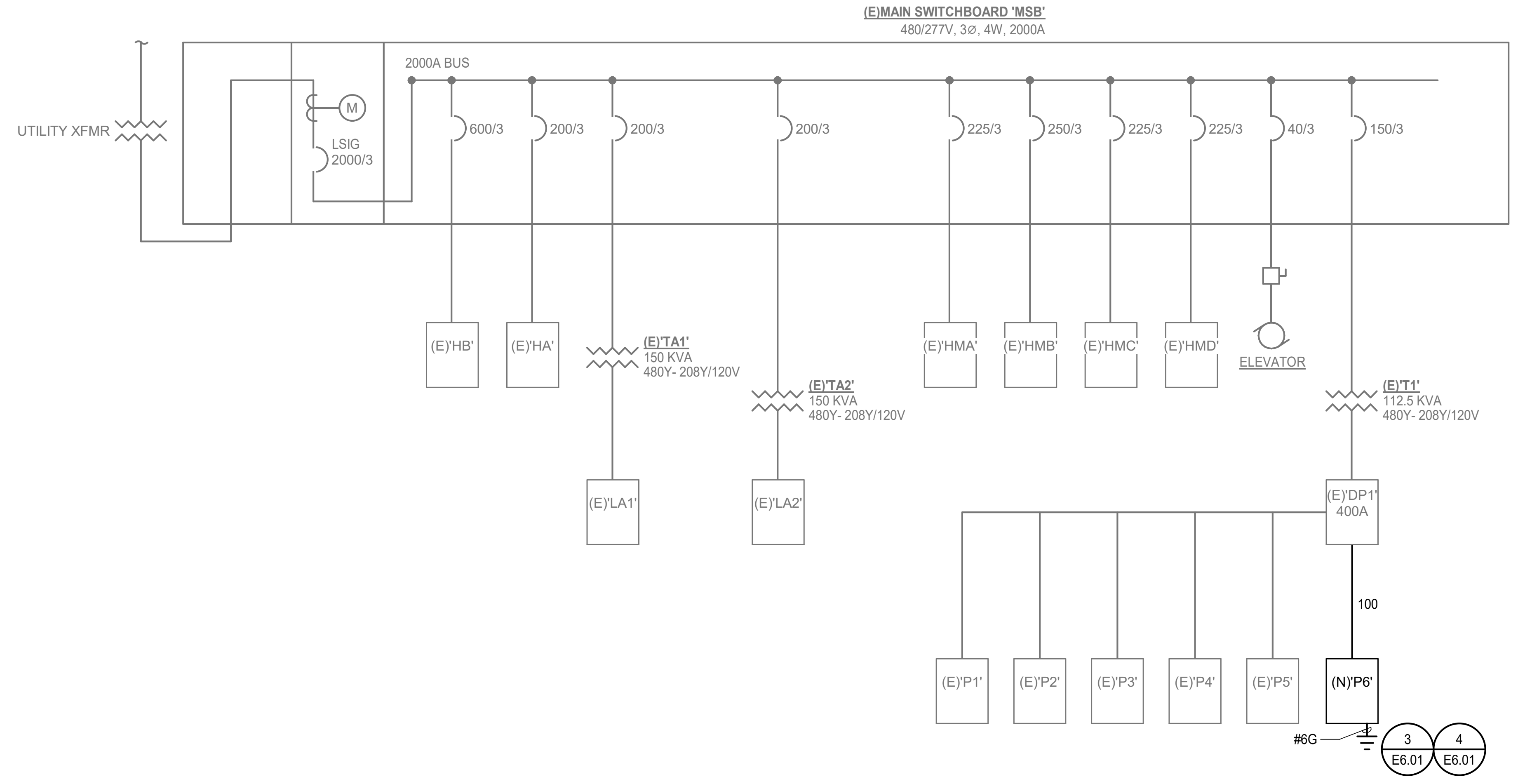
ELECTRICAL SITE PLAN

ES101

Plot Stamp:
5/15/2025 1:24:27 PM

ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES
E501
FOR BLUEBEAM LABELING/OCR:

0"
1"



1 SINGLE LINE DIAGRAM
NOT TO SCALE

ELECTRICAL CONTRACTOR NOTE

IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PROVIDE NECESSARY SPLICES, SPLICING KITS, JUNCTION BOXES AND/OR SUPPLEMENTARY LUGS KITS AND ASSEMBLIES TO ENSURE CONDUCTORS OVERSIZED DUE TO VOLTAGE DROP ARE PROPERLY CONNECTED AT THEIR DESIGNATED TERMINALS

TRANSFORMER FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS	NOTES
P15	3#10, 1#10G	3/4"	1	
S15	4#6, 1#8G	1"	1	
K15	3#4, 1#6N, 1#8G	1 1/4"	1	
G15	1#8G	1/2"	1	
P15	2#8, 1#10G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
S15	3#4, 1#6G	1 1/2"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G15	1#6G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P25	2#6, 1#10G	1"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
D25	3#1, 1#6G	1 1/2"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G25	1#6G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P30	3#6, 1#10G	3/4"	1	
S30	4#1, 1#6G	1 1/2"	1	
K30	3 #1/0, 1#2/0N, 1#6G	2"	1	
G30	1#6G	1/2"	1	
P37	2#1, 1#6G	1 1/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
D37	3#3/0, 1#4G	3"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G37	1#4G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P45	3#4, 1#8G	1"	1	
S45	4#1/0, 1#6G	1 1/2"	1	
K45	3#2/0, 1#250, 1#4G	2"	1	
G45	1#6G	1/2"	1	
P50	2#1, 1#6G	1 1/4"	1	
S50	3#3/0, 1#3G	2"	1	
G50	1#3G	3/4"	1	
P75	3#1, 1#8G	1 1/2"	1	
S75	4#4/0, 1#2G	2 1/2"	1	
K75	3#4/0, 1#3/0N, 1#2G	2 1/2"	1	
G75	1#1/0G	1/2"	1	
P75	2#3/0, 1#6G	2"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
S75	3#3/0, 1#4G	2"	2	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G75	1#4G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P75A	3#1, 1#8G	1 1/2"	1	FOR 480 3Ø: 120/240 3Ø TRANSFORMERS
S75A	4#4/0, 1#2G	2 1/2"	1	FOR 480 3Ø: 120/240 3Ø TRANSFORMERS
G75A	1#2G	1/2"	1	FOR 480 3Ø: 120/240 3Ø TRANSFORMERS
P112	3#2/0, #6G	2"	1	
S112	4#3/0, 1#1/0G	2"	2	
K112	3#4/0, 1#350N, 1#1/0G	2 1/2"	2	
G112	1#1/0G	3/4"	1	
P150	3#250, 1#4G	2 1/2"	1	
S150	4#350, 1#2/0G	3"	2	
K150	3#350, 2#3/0N, 1#2/0G	3"	2	
G150	1#2/0G	3/4"	1	
P167	2#4/0, 1#2/0G	2"	2	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
S167	3#350, 1#3/0G	3"	3	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
G167	1#3/0G	3/4"	1	FOR 480 1Ø: 120/240 1Ø TRANSFORMERS
P225	3#500, 3#3G	3"	1	
S225	4#300, 1#2/0G	3"	1	
K225	3#350, 2#3/0, 1#1G	3 1/2"	3	
G225	1#2/0G	3/4"	1	

FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS	NOTES
30N	4#10, 1#10G	1"	1	
50N	4#6, 1#10G	1"	1	
60N	4#6, 1#10G	1"	1	
100	3#1, 1#8G	1 1/2"	1	
100N	4#1, 1#8G	1 1/2"	1	
125	3#1, 1#6G	1 1/2"	1	
125N	4#1, 1#6G	2"	1	
150	3#1/0, 1#6G	1 1/2"	1	
150N	4#1/0, 1#6G	2"	1	
175	3#2/0, 1#6G	2"	1	
175N	4#2/0, 1#6G	2"	1	
200	3#3/0, 1#6G	2"	1	
200N	4#3/0, 1#6G	2"	1	
225	3#4/0, 1#4G	2"	1	
225N	4#4/0, 1#4G	2 1/2"	1	
250	3#250, 1#4G	2 1/2"	1	
250N	4#250, 1#4G	3"	1	
300	3#350, 1#4G	3"	1	
300N	4#350, 1#4G	3"	1	
400	3#3/0, 1#3G	2"	2	
400N	4#3/0, 1#3G	2"	2	
400S	4#500	3 1/2"	1	
600	3#350, 1#1G	3"	2	
600N	4#350, 1#1G	3"	2	
600S	4#350	3"	2	
800	3#500, 1#1/0G	3"	2	
800N	4#500, 1#1/0G	3 1/2"	2	
800S	4#500	3 1/2"	2	
1000	3#400, 1#2/0G	3"	3	
1000N	4#400, 1#2/0G	3"	3	
1000S	4#400	3"	3	
1200	3#350, 1#3/0G	3"	4	
1200N	4#350, 1#3/0G	3"	4	
1200S	4#350	3"	4	
1600S	4#400	3"	5	
2000S	4#400	3"	6	
2500S	4#500	3 1/2"	7	
3000S	4#500	3 1/2"	8	
4000S	4#500	3 1/2"	11	

NOTE: NOT ALL FEEDERS USED FOR THIS PROJECT

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DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26

CLIENT
LODI USD

DATE
05/15/2025

PROJECT NUMBER
250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: SM
DRAWN BY: KG

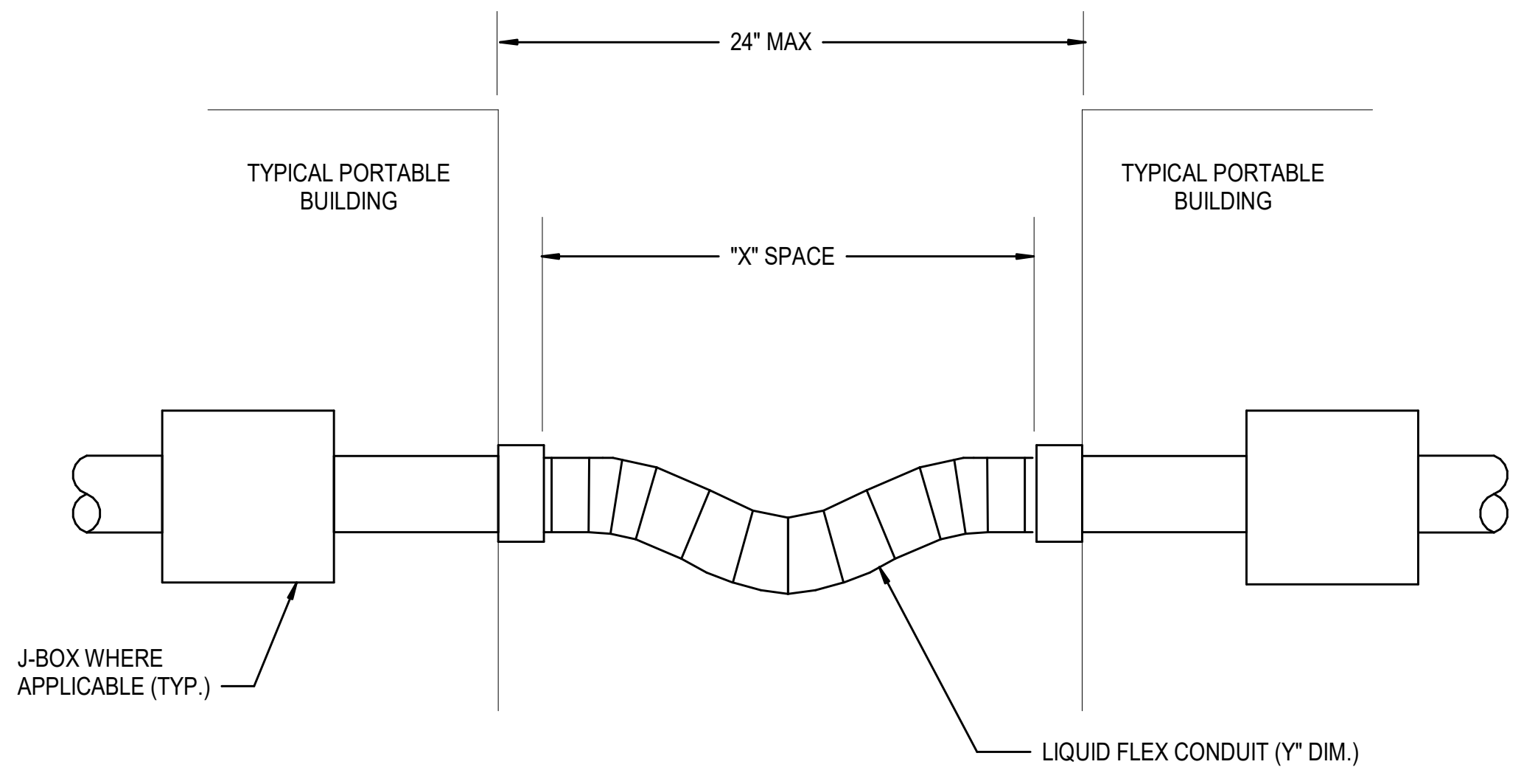
ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES

E501

Plot Stamp:
5/15/2025 1:24:27 PM

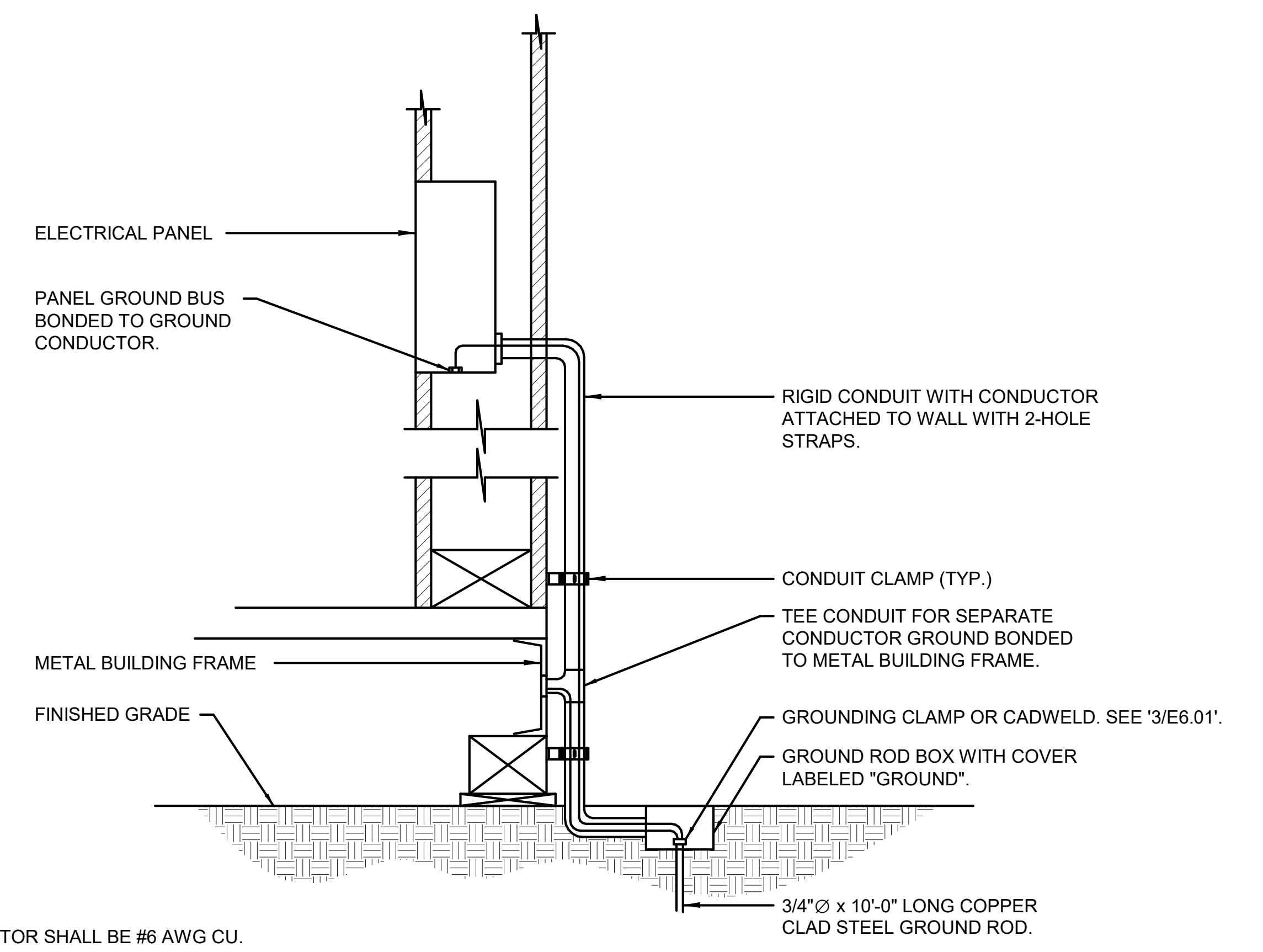
ELECTRICAL DETAILS
E601
FOR BLUEBEAM LABELING/OCR:

0"
1"


24" MAX
TYPICAL PORTABLE BUILDING
TYPICAL PORTABLE BUILDING
"X" SPACE
J-BOX WHERE APPLICABLE (TYP.)
LIQUID FLEX CONDUIT (Y" DIM.)

CONDUIT SIZE	"X" SPACE	"Y" FLEX LENGTH
3/4" - 2"	18"	+30"

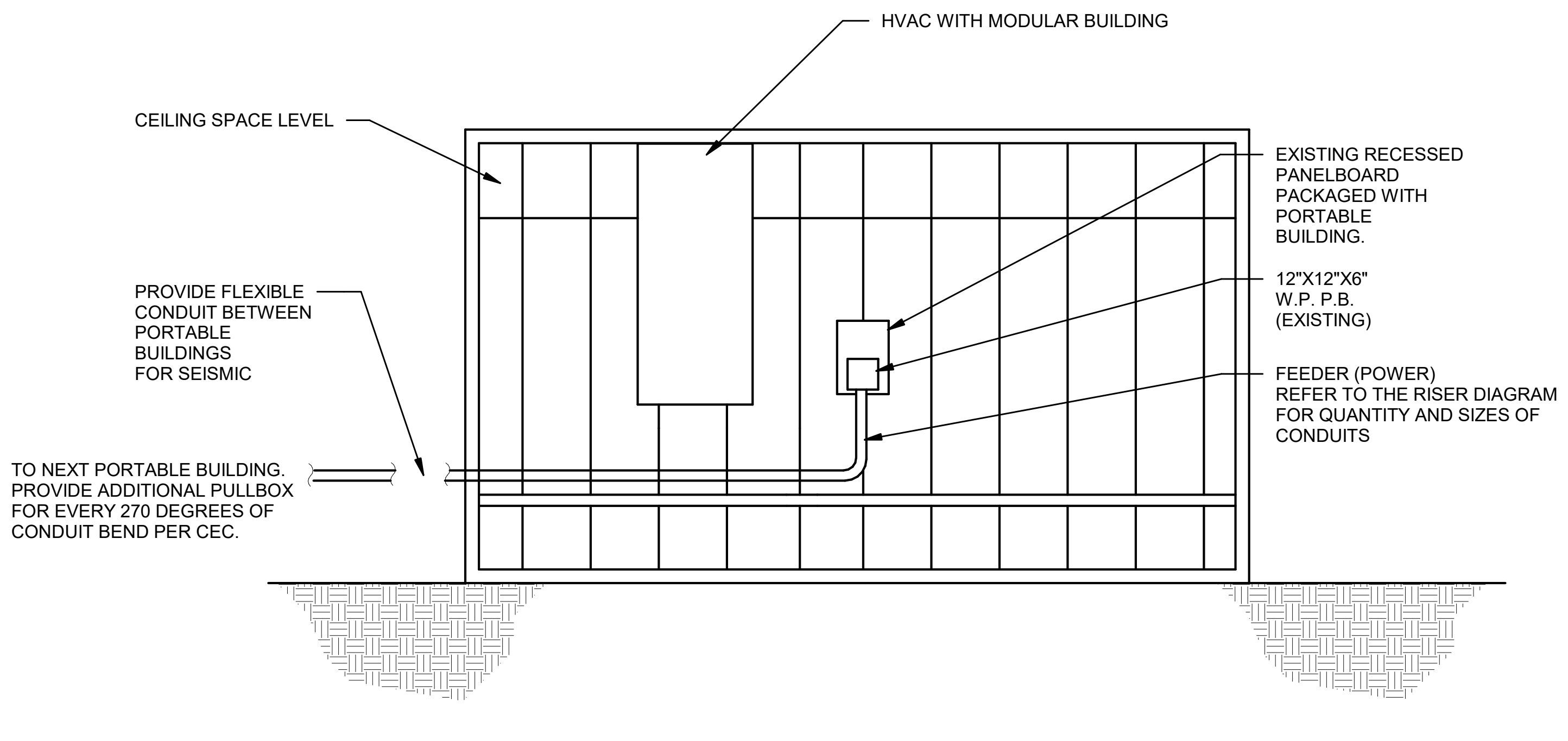
6 CONDUIT RUN THRU SEISMIC SEPARATION DETAIL
NOT TO SCALE


ELECTRICAL PANEL
PANEL GROUND BUS BONDED TO GROUND CONDUCTOR.
RIGID CONDUIT WITH CONDUCTOR ATTACHED TO WALL WITH 2-HOLE STRAPS.
CONDUIT CLAMP (TYP.)
TEE CONDUIT FOR SEPARATE CONDUCTOR GROUND BONDED TO METAL BUILDING FRAME.
METAL BUILDING FRAME
FINISHED GRADE
GROUNDING CLAMP OR CADWELD. SEE '3/E6.01'.
GROUND ROD BOX WITH COVER LABELED "GROUND".
3/4"∅ x 10'-0" LONG COPPER CLAD STEEL GROUND ROD.

DETAIL NOTES:

1. SIZE OF CONDUCTOR SHALL BE #6 AWG CU.
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL AND TO METAL BUILDING FRAME (CEC. 250-81). IN ADDITION TO THE DETAIL SHOWN ABOVE, BOND THE ELECTRICAL GROUND TO METAL WATER PIPE EMBEDDED AT LEAST 10 FT. INTO THE SOIL IF AVAILABLE (CEC. 250-81 & 250.83).
3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDINGS).
4. CHECK RESISTANCE TO GROUND. IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN, SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS. (CEC. 250-84).
5. GROUND TEST SHALL BE WITNESSED BY PROJECT INSPECTOR, AND RECORDED FOR OWNER MANUAL.

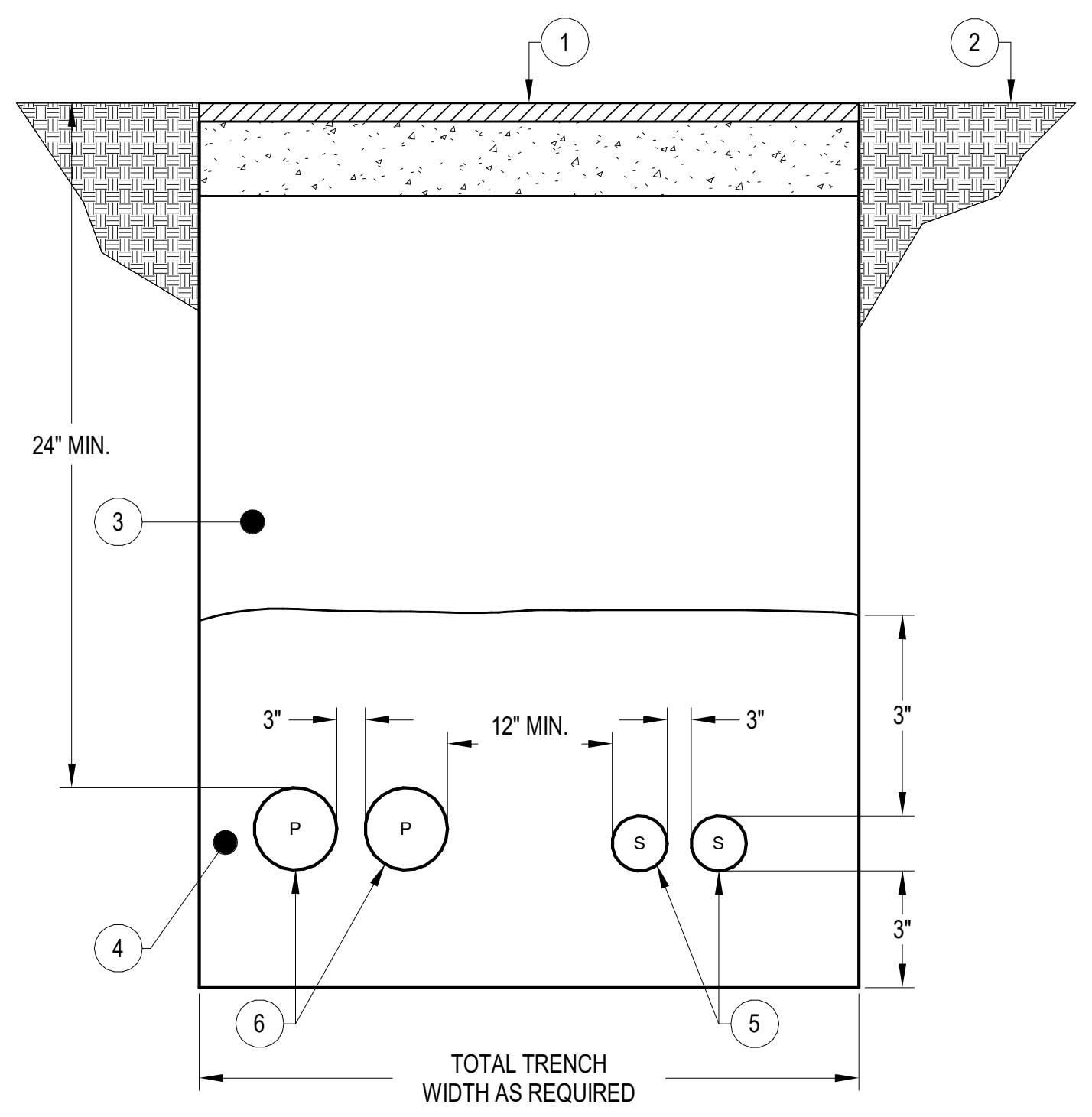
4 PORTABLE BUILDING GROUNDING DETAIL
NOT TO SCALE


HVAC WITH MODULAR BUILDING
CEILING SPACE LEVEL
EXISTING RECESSED PANELBOARD PACKAGED WITH PORTABLE BUILDING.
PROVIDE FLEXIBLE CONDUIT BETWEEN PORTABLE BUILDINGS FOR SEISMIC
12"X12"X6" W.P. P.B. (EXISTING)
FEEDER (POWER) REFER TO THE RISER DIAGRAM FOR QUANTITY AND SIZES OF CONDUITS
TO NEXT PORTABLE BUILDING. PROVIDE ADDITIONAL PULLBOX FOR EVERY 270 DEGREES OF CONDUIT BEND PER CEC.

5 PORTABLE BUILDING POWER CONNECTION DETAIL
NOT TO SCALE

GENERAL NOTES:

1. THE EXTENT THAT PEDESTRIAN SURFACES ARE TRENCHED AND PATCHED, THE PATCH SHALL COMPLY WITH CBC §11B-302.1 AND §11B-303.

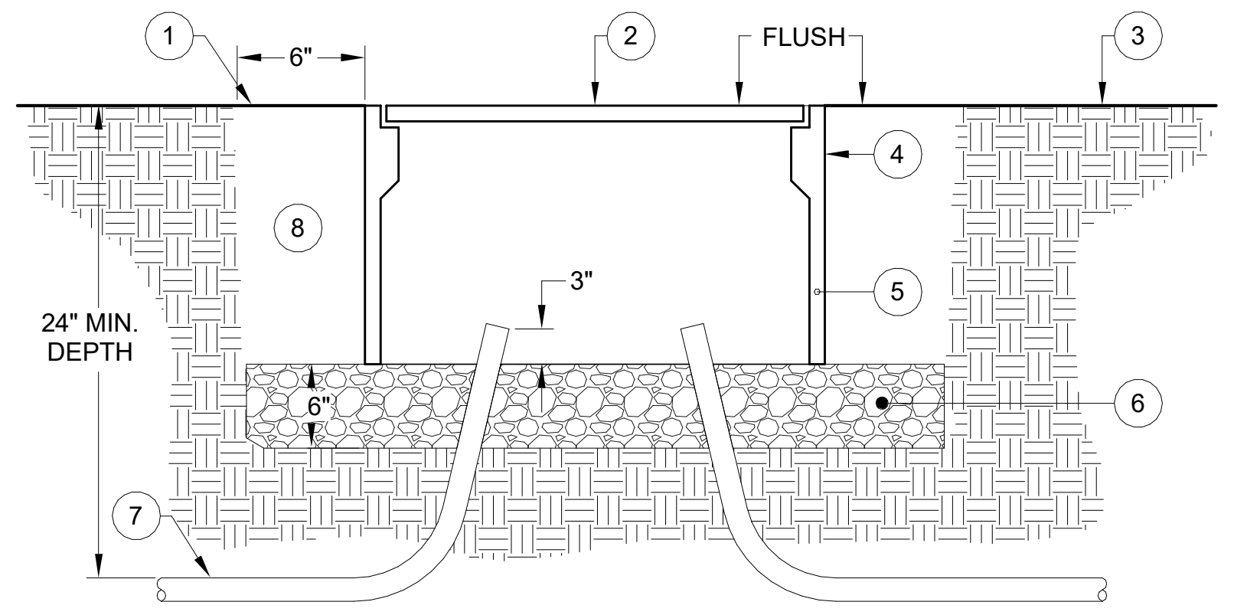


NOTES:

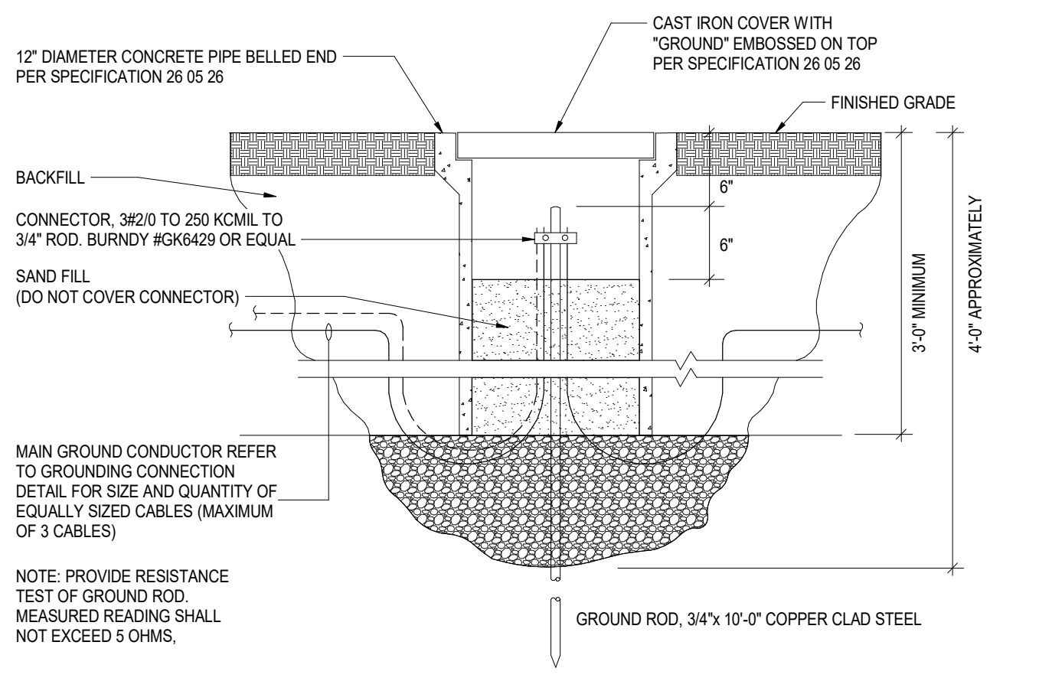
1. SAWCUT AND REMOVE CONCRETE OR PAVING WHERE APPLICABLE. WHERE EXISTING SURFACE IMPROVEMENTS (CONCRETE, PAVING, LANDSCAPING, TURF, ETC.) HAVE BEEN REMOVED OR DISTURBED, REPAIR OR REPLACE TO MATCH SURROUNDING CONDITIONS.
2. FINISHED GRADE.
3. ROCK FREE NATIVE BACKFILL, 90% COMPACTION.
4. #4 MINIMUM SALT-FREE SAND.
5. S = SIGNAL (INCLUDES TELECOM, CATV, FIRE ALARM, SECURITY OR SIMILAR CABLING. QTY. AND SIZE AS SHOWN ON PLANS.
6. P = POWER (THIS DETAIL APPLIES TO CONDUITS CARRYING 600V OR BELOW CONDUCTORS. HIGHER VOLTAGE HAS DIFFERENT REQUIREMENTS. QTY. AND SIZE AS SHOWN ON PLANS

1 TRENCH DETAIL
NOT TO SCALE

1. SET BOX FLUSH WITH FINISHED GRADE. WHERE EXISTING SURFACE IMPROVEMENTS (CONCRETE, PAVEMENT, LANDSCAPING, TURF, ETC.) HAVE BEEN REMOVED OR DISTURBED. REPAIR OR REPLACE TO MATCH SURROUNDING CONDITIONS.
2. TRAFFIC RATED COVER IN HARD-SCAPE INSTALLATIONS, NON-TRAFFIC RATED REINFORCED CONCRETE CONCRETE COVER OTHERWISE. SEE SPECIFICATION 26 05 33 COVER MARKED OR INSCRIBED WITH INTENDED USE.
3. FINISHED GRADE.
4. REINFORCED CONCRETE PULLBOX. QTY AND SIZE AS SHOWN ON PLANS.
5. PROVIDE BOX EXTENSION RINGS AS REQUIRED.
6. CRUSHED GRAVEL DRAIN BASE BEDDING.
7. TYPICAL UNDERGROUND CONDUIT PER PLANS. DEPTH MIN. 24", SEE TYPICAL TRENCH DETAIL.
8. EXCAVATE A MINIMUM WIDTH EQUAL TO THE DIMENSIONS OF THE BOX PULS 6" ON ALL SIDES. BACKFILL WITH ROCK-FREE NATIVE SOIL AT 90% COMPACTION.



2 UNDERGROUND PULLBOX DETAIL
NOT TO SCALE


12" DIAMETER CONCRETE PIPE BELLED END PER SPECIFICATION 26 05 26
CAST IRON COVER WITH "GROUND" EMBOSSED ON TOP PER SPECIFICATION 26 05 26
FINISHED GRADE
BACKFILL
CONNECTOR, 3#2/0 TO 250 KCMIL TO 3/4" ROD. BURNDY #GK6429 OR EQUAL
SAND FILL (DO NOT COVER CONNECTOR)
6"
6"
3'-0" MINIMUM
4'-0" APPROXIMATELY
MAIN GROUND CONDUCTOR REFER TO GROUNDING CONNECTION DETAIL FOR SIZE AND QUANTITY OF EQUALLY SIZED CABLES (MAXIMUM OF 3 CABLES)
NOTE: PROVIDE RESISTANCE TEST OF GROUND ROD. MEASURED READING SHALL NOT EXCEED 5 OHMS,
GROUND ROD, 3/4"x 10'-0" COPPER CLAD STEEL

3 GROUND WELL ASSEMBLY
NOT TO SCALE

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DATE: 07/07/2025

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BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26
ELECTRICAL

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: SM
DRAWN BY: KG

ELECTRICAL DETAILS

E601

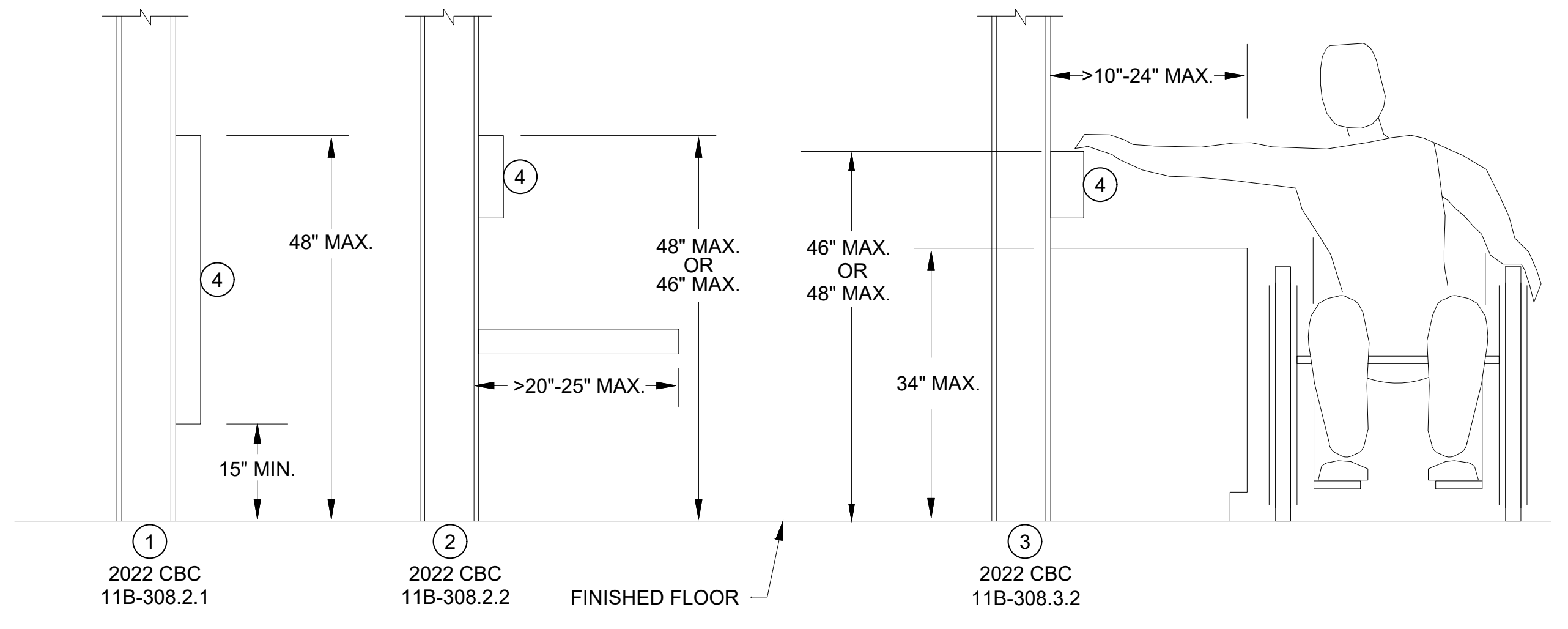
Plot Stamp:
5/15/2025 1:24:28 PM

FIRE ALARM MATRIX OF OPERATION

FIRE ALARM SYSTEM MATRIX

	SMOKE DETECTOR	HEAT DETECTOR	OPEN/SHORT CIRCUIT	GROUND FAULT	A/C LOSS	BATTERY TROUBLE	SYSTEM SILENCE	SYSTEM RESET
ALARM AT FACP & REMOTE ANNUNCIATOR(S)	X	X						
SUPERVISORY AT FACP & REMOTE ANNUNCIATOR(S)								
TROUBLE AT FACP & REMOTE ANNUNCIATOR(S)			X	X	X	X		
REPORT EVENT TO OFFSITE SUPERVISING STATION	X	X	X	X	X	X		
ACTIVATE EVACUATION SIGNALS	X	X						
DEACTIVATE VOICE MESSAGES							X	X
DEACTIVATE VISUAL SIGNALS								X
RESET FACP TO NORMAL CONDITION								X

MOUNTING OVER OBSTRUCTION DETAIL

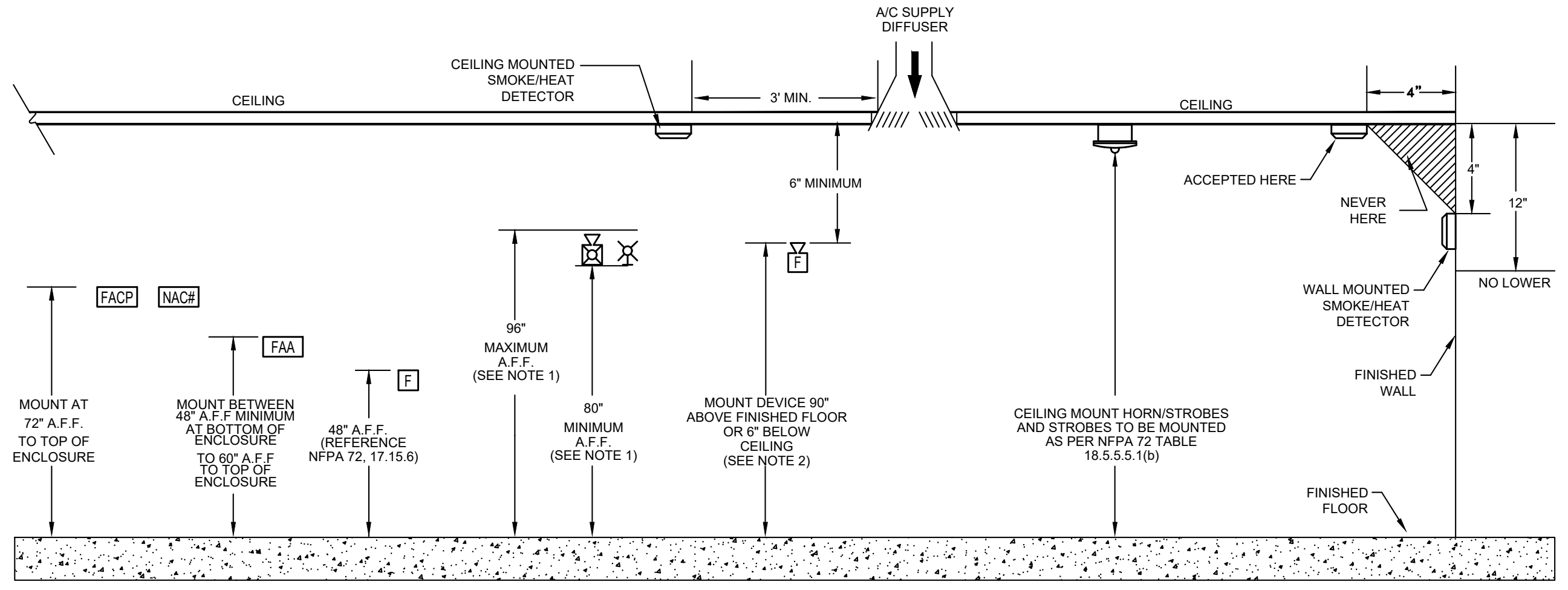


NOTES: #

1. WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES (1219MM) MAXIMUM AND THE LOW FORWARD REACH SHALL BE 15 INCHES (381MM) MINIMUM ABOVE THE FINISHED FLOOR OR GROUND.
2. WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION. THE HIGH FORWARD REACH SHALL BE 48 INCHES (1219MM) MAXIMUM WHERE THE REACH DEPTH IS 20 INCHES (508MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 20 INCHES (508MM), THE HIGH FORWARD REACH SHALL BE 44 INCHES (1118MM) MAXIMUM AND THE REACH DEPTH SHALL BE 25 INCHES (635MM) MAXIMUM.
3. WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES (864MM) MAXIMUM AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES (610MM) MAXIMUM. THE HIGH SIDE REACH SHALL BE 48 INCHES (1219MM) MAXIMUM FOR A REACH DEPTH OF 10 INCHES (254MM) MAXIMUM. WHERE THE REACH DEPTH EXCEEDS 10 INCHES (254MM), THE HIGH SIDE REACH SHALL BE 46 INCHES (1168MM) MAXIMUM FOR A REACH DEPTH OF 24 INCHES (610MM) MAXIMUM.
4. OPERABLE PARTS SHALL BE PLACED WITHIN ONE OR MORE OF THE REACH RANGES SPECIFIED IN SECTION 11B-308 AS SHOWN ABOVE.

FIRE ALARM ELEVATION MOUNTING DETAIL

NFPA 72



A/C SUPPLY DIFFUSER
CEILING MOUNTED SMOKE/HEAT DETECTOR
CEILING
3' MIN.
CEILING
4"
6" MINIMUM
ACCEPTED HERE
NEVER HERE
4"
12"
NO LOWER
FACP
NAC#
FAA
F
F
WALL MOUNTED SMOKE/HEAT DETECTOR
96" MAXIMUM A.F.F. (SEE NOTE 1)
80" MINIMUM A.F.F. (SEE NOTE 1)
FINISHED WALL
MOUNT AT 72" A.F.F. TO TOP OF ENCLOSURE
MOUNT BETWEEN 48" A.F.F MINIMUM AT BOTTOM OF ENCLOSURE TO 60" A.F.F TO TOP OF ENCLOSURE
48" A.F.F. (REFERENCE NFPA 72, 17.15.6)
MOUNT DEVICE 90" ABOVE FINISHED FLOOR OR 6" BELOW CEILING (SEE NOTE 2)
CEILING MOUNT HORN/STROBES AND STROBES TO BE MOUNTED AS PER NFPA 72 TABLE 18.5.5.5.1(b)
FINISHED FLOOR

NOTES:

1. WALL-MOUNTED APPLIANCES SHALL BE MOUNTED SUCH THAT THE ENTIRE LENS IS NOT LESS THAN 80 IN. (2.03m) AND NOT GREATER THAN 96 IN. (2.44m) ABOVE THE FINISHED FLOOR OR AT THE MOUNTING HEIGHT SPECIFIED USING THE PERFORMANCE-BASED ALTERNATIVE OF 18.5.5.7. (NFPA 72, CHAPTER 18.5.5.1*)
2. WHERE LOW CEILING HEIGHTS DO NOT PERMIT ALL MOUNTING AT A MINIMUM OF 80 IN. (2.03m), WALL MOUNTED VISUAL NOTIFICATION APPLIANCES SHALL BE MOUNTED WITHIN 6 IN. (150mm) OF THE CEILING. (NFPA 72, CHAPTER 18.5.5.2)

FIRE ALARM DEVICE ADDRESS LEGEND

01
└ SLC OR ZONE DEVICE #

1. SIGNATURE LINE CIRCUIT (INITIATION) DEVICE ADDRESS. ADDRESSES MAY DIFFER DEPENDING ON MANUFACTURER.

N1. 1
└ NAC DEVICE
└ NAC CIRCUIT (FACP)

2. FIRE ALARM CONTROL PANEL NOTIFICATION APPLIANCE CIRCUIT ADDRESS.

A. 1. 1
└ NAC DEVICE
└ NAC CIRCUIT
└ NAC POWER SUPPLY # (REMOTE POWER SUPPLY)

3. REMOTE POWER SUPPLY NOTIFICATION APPLIANCE CIRCUIT ADDRESS.

SA. 1. 1
└ SPEAKER/SPEAKER STROBE
└ SPEAKER CIRCUIT
└ AMPLIFIER NUMBER

4. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM AMPLIFIER AND SPEAKER ADDRESSES.

NOTES:

1. DEVICE ADDRESSING VARIES DEPENDING ON THE MANUFACTURER. FIRE ALARM CONTRACTOR TO PROGRAM DEVICES ACCORDING TO THE MANUFACTURER'S OPERATION MANUAL.
2. CORRECT DEVICE ADDRESSING TO BE REFLECTED ON AS-BUILT RECORD DRAWINGS.

FIRE ALARM SYSTEM EQUIPMENT LEGEND AND SYMBOLS

SYM.			DESCRIPTION	MOUNTING	CSFM #
FACP	QS4	EST	EXISTING FIRE ALARM CONTROL PANEL	EXISTING APPL. #02-121945	7165-1388:237
NAC-B	BPS6A	EST	EXISTING FIRE ALARM NOTIFICATION APPLIANCE POWER SUPPLY	EXISTING APPL. #02-121945	7300-1657:0229
AMP-A	EVAX25	EVAX	EXISTING EMERGENCY VOICE/ALARM CONTROL PANEL	EXISTING APPL. #02-121945	6912-1446:0100
S P	SIGA-OSD	EST	FIRE ALARM ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR	4-11/16" SQUARE BOX W/ 3 O RING	7272-1657:0511
H	SIGA-HRD	EST	FIRE ALARM ADDRESSABLE HEAT DETECTOR	4-11/16" SQUARE BOX W/ 3 O RING	7270-1657:0333
NO SYMBOL	SIGA-SB	EST	DETECTOR MOUNTING BASE - STANDARD	4-11/16" SQUARE BOX W/ 3 O RING	7300-1657:0120
C	SPSCRL	SYSTEM SENSOR	MULTI CANDELA TEMPORAL SPEAKER STROBE, CEILING MOUNT - RED	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7320-1653:0505
WP S	SPRK	SYSTEM SENSOR	WEATHER PROOF SPEAKER, WALL MOUNT-RED	WBB BACK BOX IS INCLUDED	7320-1653:0201

NOTES:

1. LEGEND REFLECTS SCOPE OF WORK ONLY.

FIRE ALARM WIRE SCHEDULE

TAG	COND.	TYPE	AWG	DESCRIPTION	USE
A	2	SOLID	18	#18/2, RED JACKET, FPLP	SIGNAL LINE CIRCUIT (SLC)
Au	2	STRANDED	18	#18/2, RED JACKET (FIRE UNDERGROUND RATED)	SIGNAL LINE CIRCUIT (SLC) - UNDERGROUND
B	4	SOLID	18	#18/4, RED JACKET, FPLP	SBUS
Bu	4	STRANDED	18	#18 THWN RED(+) BLACK(-) JACKET (FIRE UNDERGROUND RATED)	SBUS - UNDERGROUND
H	2	SOLID	16	#16/2, RED JACKET, FPLP	INDICATING CIRCUIT (IDC)
Hu	2	STRANDED	16	#16 THWN RED(+) BLACK(-) JACKET (FIRE UNDERGROUND RATED)	INDICATING CIRCUIT (IDC) - UNDERGROUND
N	2	SOLID STRANDED	12	#12/2, RED JACKET, FPLP #12, THWN, RED (+) BLACK (-) WHEN USED IN CONDUIT	NOTIFICATION APPLIANCE CIRCUIT
Nu	2	STRANDED	12	#12 THHN, THWN RED(+) BLACK(-) (FIRE UNDERGROUND RATED)	NOTIFICATION APPLIANCE CKT.-UNDERGROUND
S	2	STRANDED	14	#14/2 -OVERALL SHIELDED CLASS 2 CABLE	SPEAKER CIRCUIT
Su	2	STRANDED	14	#14/2 -OVERALL SHIELDED C2 CABLE (UNDERGROUND RATE)	SPEAKER CIRCUIT - UNDERGROUND

NOTES:

1. ALL FIRE ALARM INITIATING OR SLC CIRCUIT WIRING SHALL BE CLASS "B", STYLE "4" UNLESS OTHERWISE NOTED.
2. ALL FIRE ALARM NOTIFICATION AND SPEAKER CIRCUIT WIRING SHALL BE CLASS "B", STYLE "Z" UNLESS OTHERWISE NOTED.

FIRE ALARM SCOPE OF WORK

1. ADDITIONS TO AN EXISTING EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM IN ACCORDANCE WITH NFPA 72, CFC §907, CBC §907, DSA GL-2 §2.3, DSA IR 9-1, APPLICABLE CODES & REGULATIONS AND THE AUTHORITY HAVING JURISDICTION.

FIRE ALARM SYSTEM CODES AND STANDARDS

2025 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
NFPA 13 STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED) 2022 EDITION.
NFPA 14 STANDARD FOR INSTALLATION OF STANDPIP AND HOSE SYSTEMS (CA AMENDED) 2019 EDITION.
NFPA 17 STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS 2021 EDITION.
NFPA 17A STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS 2021 EDITION.
NFPA 20 STANDARD FOR INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION 2019 EDITION.
NFPA 22 STANDARD FOR WATER TANKS FOR PRIVATE FIRE PROTECTION 2018 EDITION.
NFPA 24 STANDARD FOR INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED) 2022 EDITION.
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED) 2022 EDITION
NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES. (CA AMENDED) 2019 EDITION.
NFPA 170 STANDARD FOR FIRE SAFETY AND EMERGENCY SYMBOLS. (CA AMENDED) 2018 EDITION.
NFPA 2001 STANDARD FOR CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED) 2018 EDITION.
UL300 STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT 2005 (R2010) REVISED EDITION.
UL464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS INCLUDING ACCESSORIES (CA AMENDED) 2003 EDITION.
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS. (CA AMENDED) 1999 EDITION.
UL1971 STANDARD FOR SIGNALING DEVICES FOR HEARING IMPAIRED 2024 REVISED EDITION.
ICC300 STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING AND GRANDSTANDS 2017 EDITION.

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

FIRE ALARM REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE AND SUBMIT THE FIRE ALARM SHOP DRAWINGS AND AS BUILT DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO AND AFTER INSTALLATION AND ACCEPTANCE OF THE FIRE ALARM SYSTEM. SUBMITTALS SHALL CONTAIN THE FOLLOWING:

A. SHOP DRAWINGS: COMPLETE 1/8" MINIMUM SCALE FLOOR PLANS SHOWING ALL DEVICES, APPLIANCES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF THE BID SET OF FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE QUANTITIES, DEVICE MOUNTING HEIGHTS, ROOM NAMES & NUMBER AND LOCATIONS OF ALL FIRE RATED WALLS.
B. SHOP DRAWINGS SHALL INCLUDE ELECTRICAL CONTRACTOR'S AND/OR FIRE ALARM SYSTEM INSTALLERS NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER IN THEIR TITLE BLOCK STAMPED.
C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURE'S MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBER(S).
D. SHOP DRAWINGS TO USE ALL NFPA-170 SYMBOLS. NO EXCEPTIONS.
E. ORIGINAL COPIES OF MANUFACTURE'S SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES AS INDICATED.
F. AS BUILT DRAWINGS SHALL BE COMPLETE AND REFLECT THE FIRE ALARM SYSTEM AS ACTUALLY INSTALLED WITH ALL OF THE CONTROL PANELS, DEVICES AND APPLIANCES SHOWN, ADDRESSED ACCORDING TO THE MANUFACTURE'S OPERATION MANUAL, ALL CONDUCTORS ANNOTATED AND REFLECT ALL REQUIREMENTS AS STATED FOR SHOP DRAWINGS.
G. UPON COMPLETION AND ACCEPTANCE OF THE THE PROJECT, A REPRODUCIBLE SET OF AS BUILT DRAWINGS OF THE ENTIRE FIRE ALARM SYSTEM OR AREAS WORKED UPON SHALL BE PROVIDED IN PDF AND ELECTRONIC DESIGN PROGRAM (CURRENT AUTODESK AUTOCAD MINIMUM) FORM TO THE ARCHITECT/ENGINEER OF RECORD FOR REVIEW.
H. VOLTAGE DROP CALCULATIONS TO INCLUDE THE FOLLOWING:

(a) POINT-TO-POINT OR OHMS LAW CALCULATIONS
(b) IDENTIFICATION OF THE ZONE OR CIRCUIT IN CALCULATIONS
(c) VOLTAGE DROP PERCENTAGE (NOT TO EXCEED THE LISTED MANUFACTURE'S OPERATING VOLTAGE RANGES)
(d) NOTE OF CIRCUIT NUMBER FOR WORST CASE CALCULATION

I. BATTERY TYPE(S), AMP HOURS AND CALCULATIONS. INCLUDE THE FOLLOWING:

1. NORMAL OPERATION: 100% OF APPLICABLE DEVICES FOR 24 HOURS = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY. (I.E.: ZONE MODULES, DETECTORS AND OTHER IDENTIFIED DEVICES.
2. ALARM CONDITION: 100% OF THE APPLICABLE DEVICES FOR 15 MINUTES = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING ALARM. (I.E.: ZONE MODULES, SIGNAL MODULES, DETECTORS, SIGNAL DEVICES, ANNUNCIATORS, AMPLIFIERS AND OTHER IDENTIFIED DEVICES)
3. NORMAL OPERATION + ALARM OPERATION

a. TOTAL AMP HOURS REQUIRED.
b. TOTAL AMP HOURS PROVIDED.

FIRE WATCH NOTE

A FIRE PREVENTION AND SAFETY PLAN SHALL BE THE RESPONSIBILITY OF THE OWNER OR OWNER'S AUTHORIZED AGENT FOR FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION OF ALL PHASES OF THE PROJECT FROM START TO ACCEPTANCE. (REFERENCE CFC §3301.1 THRU §3303.10) THE FIRE CODE OFFICIAL OR THE LOCAL AUTHORITY HAVING JURISDICTION SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS OUT OF SERVICE. A FIRE WATCH SHALL BE PROVIDED WITH NO LESS THAN ONE (1) MEANS FOR NOTIFICATION OF THE FIRE DEPARTMENT AND PERFORM CONSTANT PATROLS OF THE PROTECTED PREMISES IN ACCORDANCE WITH DSA IR F-2 AND CFC §901.7.

FIRE ALARM SYSTEM ABBREVIATIONS

*NOT ALL ABBREVIATIONS WILL APPLY

ABBREVIATION	DESCRIPTION
AFF	ABOVE FINISHED FLOOR
AIC	AMPERES INTERRUPTING CAPACITY
ARCH.	ARCHITECT; ARCHITECTURAL
AWG	AMERICAN WIRE GAUGE
C	CEILING
CFC	CALIFORNIA FIRE CODE
CKT	CIRCUIT
C.O.	CONDUIT ONLY WITH PULL WIRE
CU	COPPER
DWG	DRAWING
(E)	EXISTING
EMT	ELECTRICAL METALLIC TUBING
FA	FIRE ALARM
FLR	FLOOR
FT	FEET
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
(N)	NEW
NIC	NOT IN CONTRACT
PNL	PANEL
(R)	REMOVE, REPLACE or RELOCATE
REQ'D	REQUIRED
SF	SQUARE FEET
SHT	SHEET
SW	SWITCH
TYP	TYPICAL
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
W	WATT
WP	WEATHERPROOF

FIRE ALARM SHEET INDEX

SHEET #	SHEET DESCRIPTION
FA0.0	FIRE ALARM LEGEND, NOTES & INDEX
FA1.0	FIRE ALARM SITE PLAN AND FLOOR PLAN
FA2.0	FIRE ALARM RISER DIAGRAM
FA3.0	FIRE ALARM CALCULATIONS AND DETAILS

FIRE ALARM GENERAL NOTES

*NOT ALL NOTES WILL APPLY

1. APPLICABLE STANDARD NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35.
2. INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPROVED BY DSA.
3. UPON COMPLETION OF SYSTEM INSTALLATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
4. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
5. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
6. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
7. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM THE FINISHED FLOOR.
9. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
10. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (dBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR 5 dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
11. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
13. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN THE SAME VIEW OF EACH OTHER SHALL BE SYNCHRONIZED.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
15. ALL FIRE ALARM WIRING SHALL BE FPLR OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
16. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
17. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM, DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
18. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
19. FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS' SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
20. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL." CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
21. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 7.8.2(a).
22. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
23. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.
24. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 907.6.6.
25. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
26. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
27. THE AUDIBLE CARBON MONOXIDE ALARM SIGNAL SHALL BE A FOUR-PULSE TEMPORAL PATTER AND COMPLY WITH THE FOLLOWING:
    (1) SIGNALS SHALL BE A PATTER CONSISTING OF FOUR CYCLES OF 100 MILLISECONDS +/- 10 PERCENT "ON" AND 100 MILLISECONDS +/- 10 PERCENT "OFF".
    (2) AFTER THE INITIAL 4 MINUTES OF ALARM, THE 5-SECOND "OFF" TIME SHALL BE PERMITTED TO BE CHANGED TO 60 SECONDS +/- 10 PERCENT.
    (3) THE ALARM SIGNAL SHALL BE REPEATED IN COMPLIANCE WITH NFPA 72 18.4.3.2(1)(2)(3)(4) UNTIL THE ALARM RESETS OR THE ALARM SIGNAL IS MANUALLY SILENCED.
28. A CARBON MONOXIDE ALARM SIGNAL SHALL TAKE PRECEDENCE OVER SUPERVISORY OR TROUBLE SIGNALS. (NFPA 72, 26.2.4.1) THE ACTUATION OF A CARBON MONOXIDE DETECTOR OR SYSTEM SHALL BE DISTINCTIVELY INDICATED AS A CARBON MONOXIDE ALARM SIGNAL. (NFPA 72, 26.2.4.1.2)
29. ALL EQUIPMENT SHALL BE NEW, UNDERWRITERS LABORATORY AND CALIFORNIA STATE FIRE MARSHAL LISTED.
30. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE SERVICING, TROUBLESHOOTING, ETC.
31. DO NOT DEVIATE FROM CONDUIT RUNS AS SHOWN ON FLOOR PLANS WITHOUT PRIOR APPROVAL FROM SYSTEM SUPPLIER. FACTORS SUCH AS EXCESSIVE VOLTAGE DROP, ADDITIONAL PARTS, ENGINEERING, ETC., THAT ARE A RESULT OF CONDUIT RUN DEVIATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
32. ALL FAN SHUTDOWN FUNCTIONS, DAMPER CLOSURES, AND ASSOCIATED MECHANICAL SYSTEM FIRE ALARM INTERFACE SHALL BE BY MECHANICAL CONTRACTOR IN ACCORDANCE WITH CMC §609.
33. ALL DUCT SMOKE DETECTORS SHALL BE MOUNTED BY THE MECHANICAL CONTRACTOR. DUCT SMOKE DETECTORS EXPOSED TO THE WEATHER SHALL BE WEATHER PROTECTED BY THE MECHANICAL CONTRACTOR. ALL AIR VELOCITY TESTING SHALL BE PERFORMED BY THE MECHANICAL CONTRACTOR.
34. ALL 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
35. ALL FIRE ALARM DEVICE BACKBOXES, FIRE ALARM TERMINAL CABINETS, GUTTERS, JUNCTION BOXES, AND ASSOCIATED CONDUITS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO FIRE ALARM SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACKBOXES SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
36. SMOKE DETECTOR TESTING SHALL BE ACCOMPLISHED PER THE MANUFACTURER'S INSTRUCTIONS.
37. ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION. THE FIRE ALARM CONTROL PANEL TO SUPERVISE THE ANNUNCIATOR PANEL, ALL INITIATING AND INDICATING DEVICE CIRCUITS.
38. ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES.
39. POINT, COMMON ANNUNCIATION, AND T-TAPPING ARE PROHIBITED.
40. PROVIDE 3/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO TELEPHONE BACKBOARD FOR OWNER PROVIDED CENTRAL STATION MONITORING.
41. ALL CONDUIT SHALL BE 3/4" MINIMUM, UNLESS OTHERWISE NOTED.
42. ALL FIRE SPRINKLER WATER FLOW SWITCHES SHALL BE 2 WIRE WITH NON-ELECTRONIC RETARD TYPE.
43. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
44. FIRE ALARM SYSTEM SHALL BE UL LISTED (UUJS).
45. CBC 907.6.6.4 GROUP E SCHOOLS: AUTOMATIC FIRE ALARM SYSTEMS SHALL BE MONITORED AND SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE & PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD, FM 3011. TERMINATION OF MONITORING SERVICES SHALL BE IN ACCORDANCE WITH SECTION 907.6.6.2.
46. SUBSTITUTION OF SYSTEM COMPONENTS OR MANUFACTURER WILL REQUIRE THE CONTRACTOR TO SEPARATELY OBTAIN APPROVAL WITH THE CSFM AT CONTRACTOR'S EXPENSE AND SHALL MEET ALL REQUIREMENTS OF THE SYSTEM AS DESIGNED AND PRE-APPROVED. ALL PROPOSED SUBSTITUTIONS SHALL BE LISTED WITH THE CALIFORNIA STATE FIRE MARSHAL.
47. FINAL ACCEPTANCE TEST TO INCLUDE TESTING THE CONNECTION BETWEEN THE FIRE ALARM PANEL AND THE SUPERVISING STATION.
48. COORDINATE WITH THE ENGINEER FOR USE OF EXISTING CONDUIT ON A CASE BY CASE BASIS.
49. PRIOR TO DEMOLITION, CONTRACTOR SHALL TEST THE INTERCOM SYSTEM TO ENSURE FULL FUNCTIONALITY. GENERATE A LIST OF FAULTY EQUIPMENT AND PROVIDE TO THE OWNER AND THE ARCHITECT. PROVIDE PRICING FOR ANY REQUIRED EQUIPMENT REPAIRS OR REPLACEMENT.
50. CONTRACTOR SHALL DISCONNECT EXISTING FIRE ALARM SYSTEM FROM THE EXISTING INTERCOM SYSTEM. ENSURE THE INTERCOM SYSTEM IS COMPLETELY FUNCTIONAL AFTER DISCONNECTION.
51. CONTRACTOR SHALL CLEARLY MARK THE ABANDON SECTION OF PUBLIC ADDRESS SYSTEM.
52. PROVIDE A FIRE ALARM DOCUMENTATION CABINET PER NFPA72,7.7.
53. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33.
54. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS,DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK (CAC 4-317(C)).
55. CHANGES TO THE DIVISION OF THE STATE ARCHITECT APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS FOR CHANGES TO THE STRUCTURAL, ACCESSIBILITY OR FIRE -SAFETY PORTIONS OF THE PROJECT. CHANGES SHALL BE SUBMITTED TO AND APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK SHOWN THEREON CAC 4-338(C)).
56. PROJECT INSPECTOR TO APPROVE SYSTEM VOICE-EVACUATION INTELLIGIBILITY DURING TESTING PHASE.
57. CONTRACTOR SHALL PROVIDE ALL CABLING, RELAYS, MOUNTING HARDWARE AND ANY OTHER DEVICES (FIRE ALARM SYSTEM DEVICES) TO PROVIDE A FULLY FUNCTIONING FIRE ALARM OVERRIDE SYSTEM. WHEN FIRE ALARM CEASES, EACH LOCAL SOUND SYSTEM SHALL AUTOMATICALLY REVERT TO NORMAL OPERATION. FIRE ALARM MODULES AND CABLING BY FIRE ALARM CONTRACTOR.
58. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
59. NOTIFICATION APPLIANCES USED FOR SIGNALING OTHER THAN FIRE SHALL NOT HAVE THE WORD "FIRE" OR ANY FIRE SYMBOL, IN ANY FORM (I.E., STAMPED, IMPRINTED, ETC.) ON THE APPLIANCE VISIBLE TO THE PUBLIC.NOTIFICATION APPLIANCES WITH MULTIPLE VISIBLE ELEMENTS SHALL BE PERMITTED TO HAVE FIRE MARKING ONLY ON THOSE VISIBLE ELEMENTS USED FOR FIRE SIGNALING. PER NFPA 72, 18.3.3.2/ NFPA 720, 6.3.3.2/ IR 9-2, 5.4.4 & 5.4.5.
60. AUTOMATIC FIRE ALARM SYSTEMS SHALL BE MONITORED AND SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE & PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF FM 3011. TERMINATION OF MONITORING SERVICES SHALL BE IN ACCORDANCE WITH SECTION 907.6.6.2.
61. THE NEW PROJECT SUBMITTAL TO INCLUDE DIRECTION THAT FIRE ALARM SYSTEM RECORD OF COMPLETION AND FIRE ALARM SYSTEM RECORD OF INSPECTION AND TESTING FORM THESE TWO DOCUMENTS FROM NFPA 72 ARE TO BE COMPLETED AND SUBMITTED PRIOR TO CLOSE OUT OF THE PROJECT. A COPY OF COMPLETED AND SIGNED FORM SHALL BE GIVEN TO THE ARCHITECT OR ENGINEER OF RECORD, THE PROJECT INSPECTOR, THE OWNER (SCHOOL DISTRICT) AND LOCAL FIRE AUTHORITY.
62. INTELLIGIBILITY SHALL BE TESTED ACCORDING TO NFPA 72 ANNEX D.2 (SPEECH INTELLIGIBILITY).
63. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PBK
www.pbk.com
916-355-9922
FOLSOM, CA

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO.: 02-123356 DSA FILE NO.: 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
E-19817
Exp. 3-31-26

CLIENT	
LODI USD	
DATE	PROJECT NUMBER
05/15/2025	250048

DRAWING HISTORY

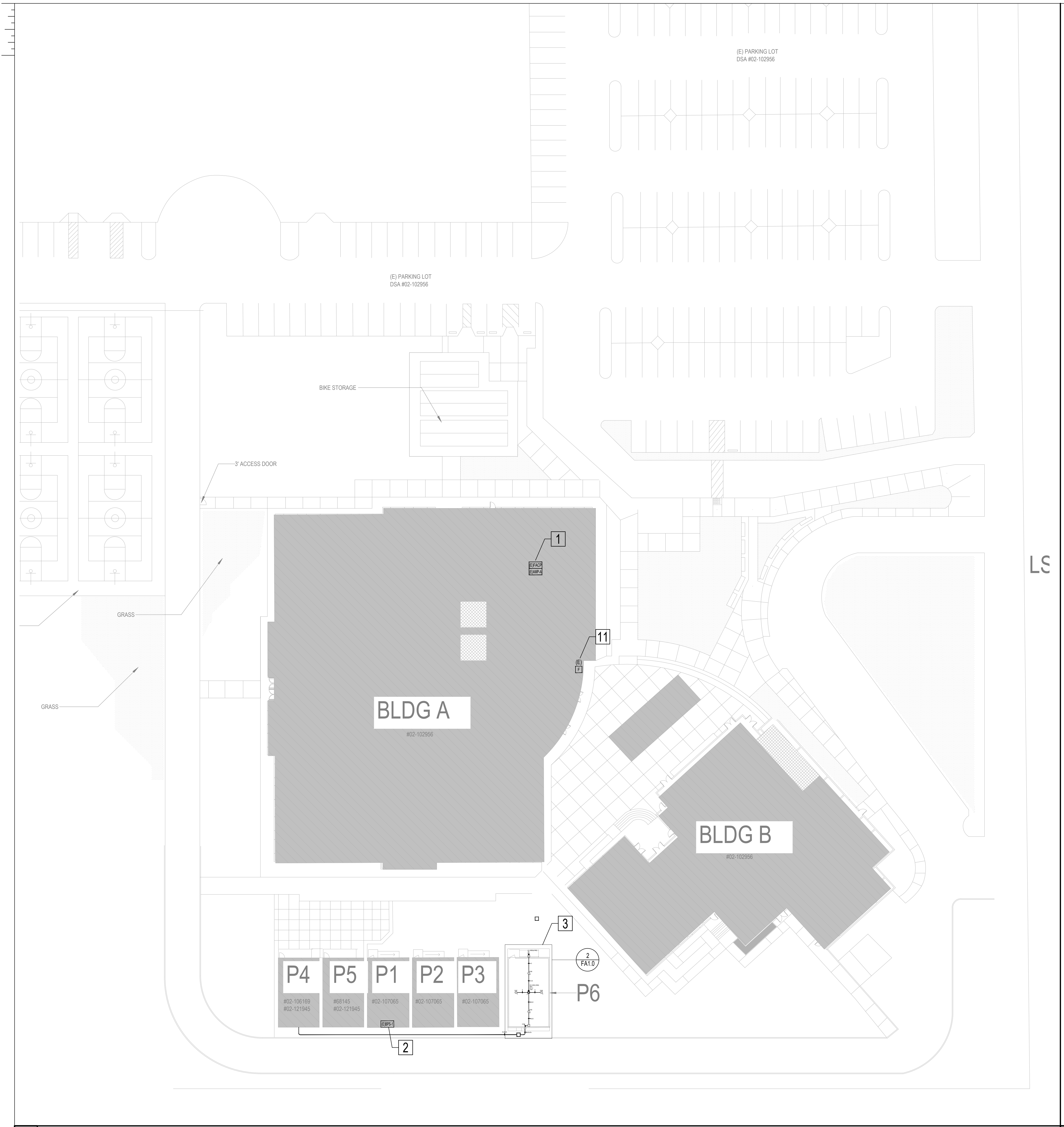
No.	Description	Date

CHECKED BY: RT
DRAWN BY: CY

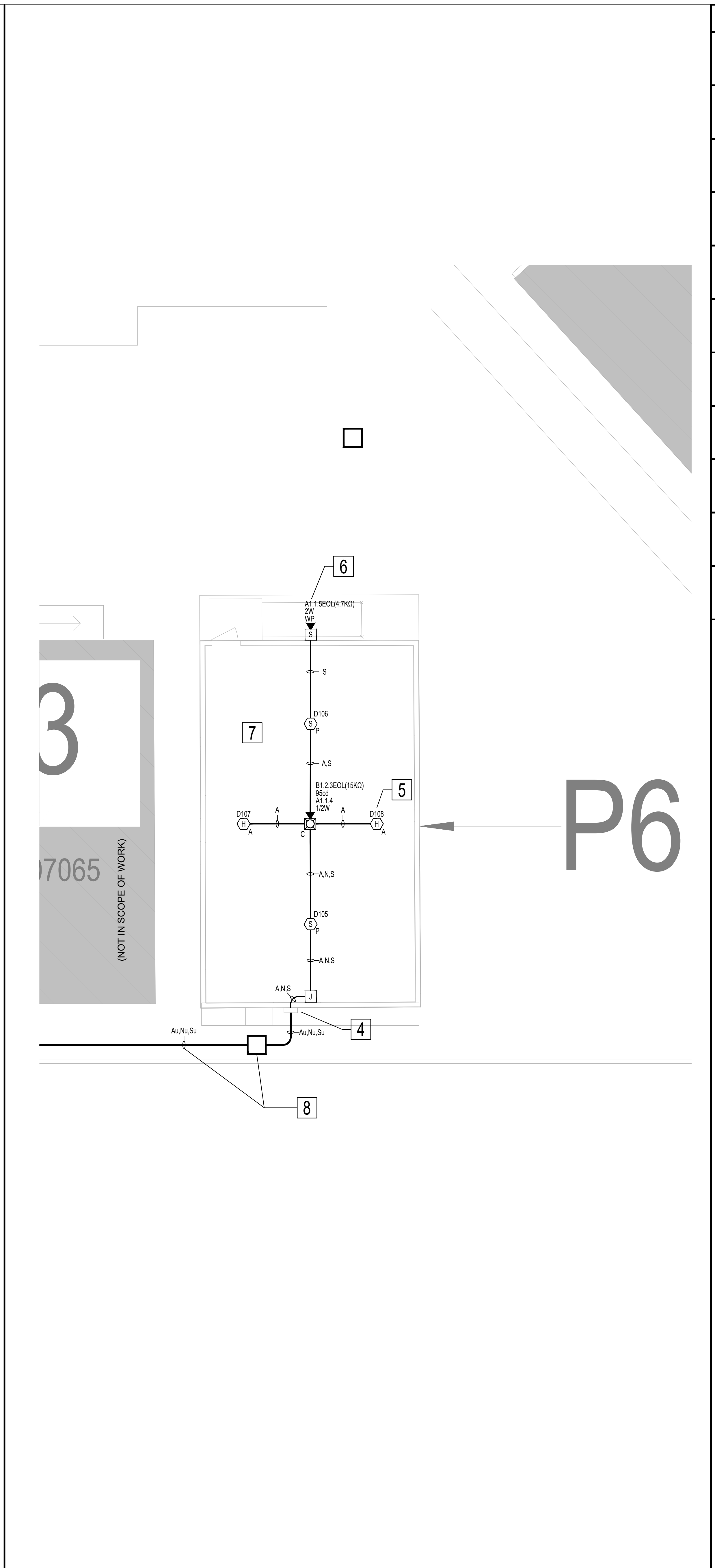
FIRE ALARM TITLE SHEET, INDEX, LEGEND & NOTES

FA0.0

0"
1"



1 FIRE ALARM SITE PLAN
SCALE: 1" = 30'-00"



2 FIRE ALARM FLOOR PLAN - NEW PORTABLE BLDG.
SCALE: 1/8" = 1'-00"

FIRE ALARM SHEET NOTES

1 EXISTING FIRE ALARM CONTROL PANEL AND FIRE ALARM AMPLIFIER LOCATION. THESE ARE TO REMAIN AS CURRENTLY CONFIGURED AND INSTALLED AT THIS TIME.

2 EXISTING POWER SUPPLY LOCATION. TO REMAIN AS CURRENTLY CONFIGURED AND INSTALLED AT THIS TIME.

3 SCOPE OF WORK BUILDING.

4 NEW STC CABINET. COORDINATE WITH ELECTRICAL FOR EXACT LOCATION. ROUTE ALL NEW FIRE ALARM SYSTEM CONDUCTORS FROM BUILDING B4 THROUGH EXISTING AND NEW UNDERGROUND CONDUIT PATHWAY TO SCOPE OF WORK BUILDING. REFERENCE ELECTRICAL SITE PLAN FOR LOCATIONS.

5 INSTALL HEAT DETECTION IN ABOVE CEILING SPACES.

6 INSTALL EXTERIOR NOTIFICATION AUDIBLE APPLIANCE IN ACCORDANCE WITH CFC §907.5.2.4.

7 FIRE ALARM CONDUCTOR(S) MAY BE INSTALLED IN AN "OPEN RUN" MANNER IN ABOVE CEILING SPACES. REFERENCE SHEET FA0.0 NOTE #18 AND CEC REQUIREMENTS.

8 EXTEND EXISTING SLC, NOTIFICATION POWER SUPPLY AND AMPLIFIER CIRCUITS TO SCOPE OF WORK. ROUTE NEW FIRE ALARM CONDUCTORS IN EXISTING AND NEW UNDERGROUND CONDUIT PATHWAY(S) AND PULL BOXES FROM PORTABLE BUILDING 4. (APPL. #02-121945)

9 NEW END OF LINE FOR POWER SUPPLY 1 CIRCUIT B1.2.

10 NEW END OF LINE FOR AMPLIFIER 1 CIRCUIT 1.

11 EXISTING MANUAL PULL STATION.

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DSA SUBMITTAL
DSA APPL. NO.: 02-123356 DSA FILE NO.: 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26

CLIENT
LODI USD

DATE	PROJECT NUMBER
05/15/2025	250048

DRAWING HISTORY

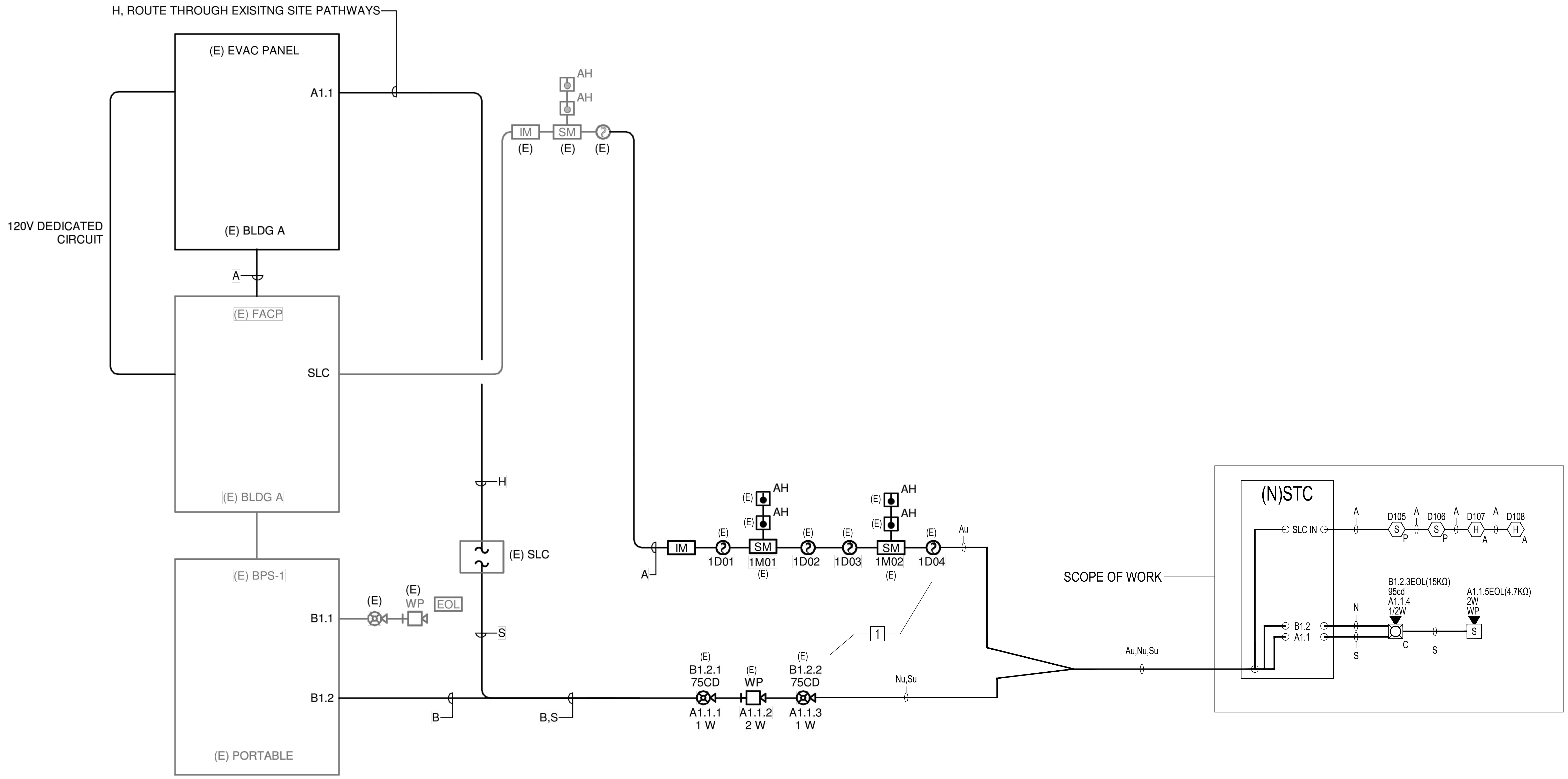
No.	Description	Date

CHECKED BY: RT
DRAWN BY: CY

FIRE ALARM SITE PLAN & NEW PORTABLE FLOOR PLAN

FA1.0

FIRE ALARM SHEET NOTES	
1	EXTEND EXISTING SLC, NAC AND SPEAKER CIRCUIT FROM EXISTING PORTABLE AS SHOWN.



*RISER DIAGRAM REFLECTS SCOPE OF WORK ONLY

1 FIRE ALARM RISER DIAGRAM
SCALE: NO SCALE

IDENTIFICATION STAMP
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APP: 02-123356 INC:
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DATE	PROJECT NUMBER
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DRAWING HISTORY

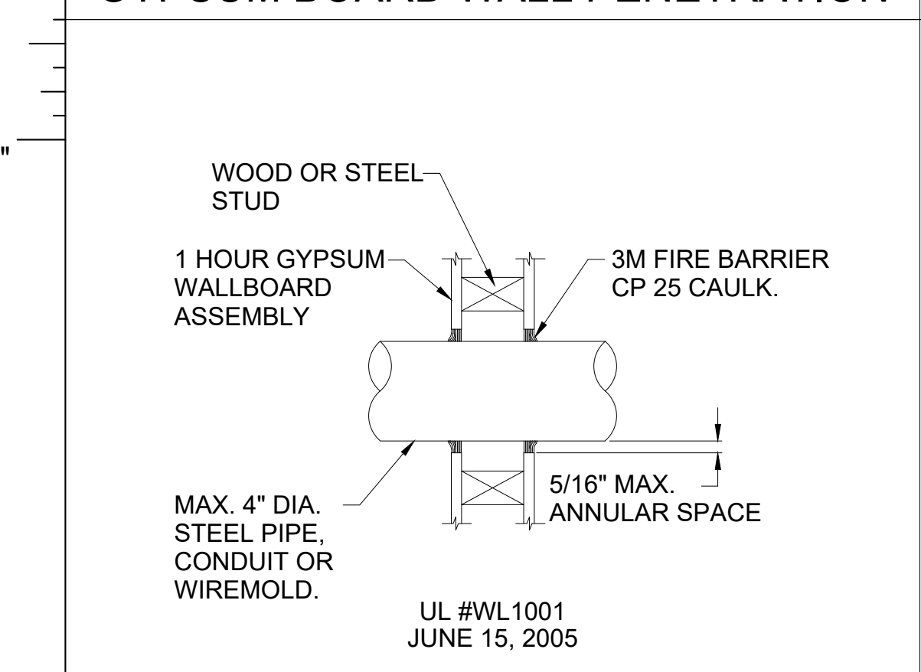
No.	Description	Date

CHECKED BY: RT
DRAWN BY: CY

FIRE ALARM RISER DIAGRAM

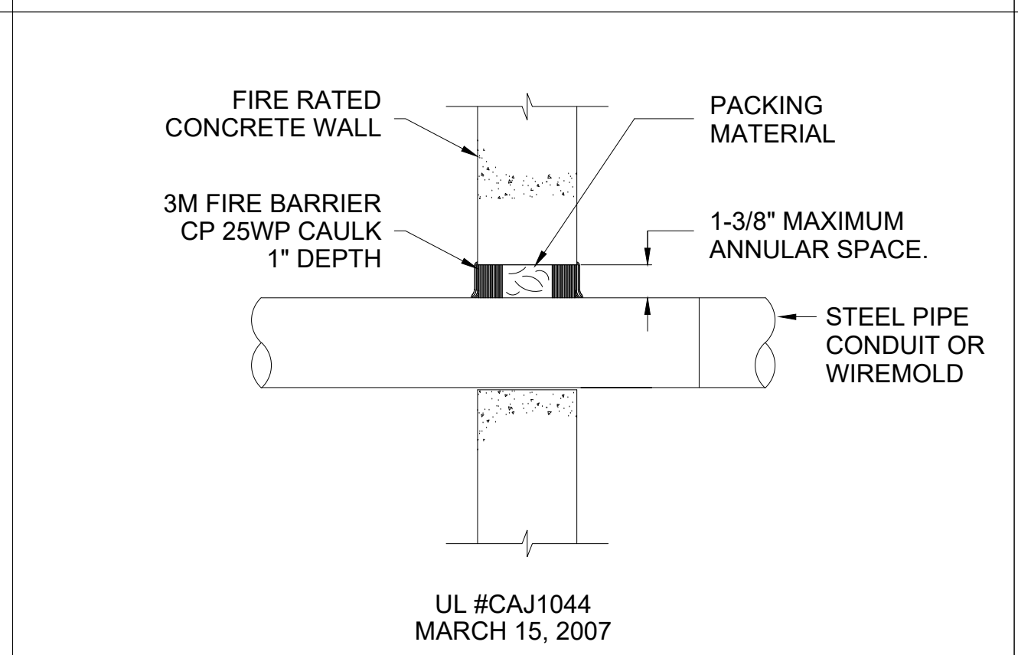
FA2.0

GYPSUM BOARD WALL PENETRATION


WOOD OR STEEL STUD
1 HOUR GYPSUM WALLBOARD ASSEMBLY
3M FIRE BARRIER CP 25 CAULK.
5/16" MAX. ANNULAR SPACE
MAX. 4" DIA. STEEL PIPE, CONDUIT OR WIREMOLD.

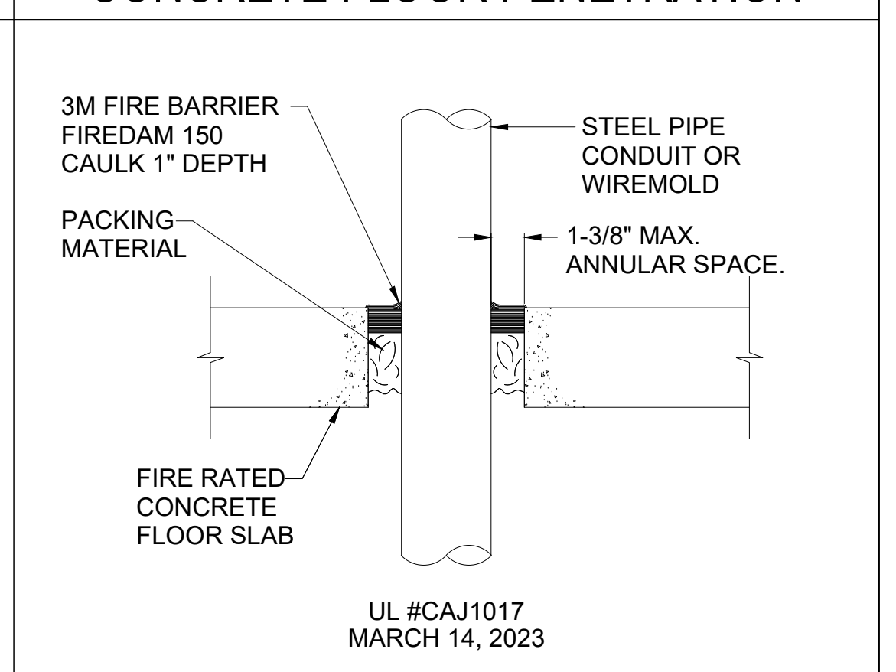
UL #WL1001
JUNE 15, 2005

CONCRETE WALL PENETRATION


FIRE RATED CONCRETE WALL
PACKING MATERIAL
3M FIRE BARRIER CP 25WP CAULK 1" DEPTH
1-3/8" MAXIMUM ANNULAR SPACE.
STEEL PIPE CONDUIT OR WIREMOLD

UL #CAJ1044
MARCH 15, 2007

CONCRETE FLOOR PENETRATION


3M FIRE BARRIER FIREDAM 150 CAULK 1" DEPTH
STEEL PIPE CONDUIT OR WIREMOLD
PACKING MATERIAL
1-3/8" MAX. ANNULAR SPACE.
FIRE RATED CONCRETE FLOOR SLAB

UL #CAJ1017
MARCH 14, 2023

ITEM 1

WALL ASSEMBLY - THE 1, 2, 3 OR 4 HOUR FIRE RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS - WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAX. 2 HR. RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOMINAL 2" X 4" LUMBER SPACED IN 18" ON CENTER WITH NOMINAL 2" X 4" LUMBER AND PLATES AND CROSS BRACES. STEEL STUDS TO BE MINIMUM 3-8/8" WIDE BY 1-3/8" DEEP CHANNELS SPACED MAXIMUM 24" ON CENTER.
B. WALLBOARD/GYPSUM - NOMINAL $\frac{1}{2}$"oR $\frac{8}{8}$" THICK, 4' WIDE SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARDS RYPS, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE SPECIFIED IN THE INDIVIDUAL U300 OR U400 DESIGN IN THE UL FIRE RESISTANCE DIRECTORY.

MAXIMUM DIAMETER OF OPENINGS IS 13-1/2".

SYSTEM NUMBER: WL1001 (FORMERLY SYSTEM NUMBER 147)
F RATINGS: 1, 2, 3 AND 4 HOUR (SEE ITEMS 2 AND 3)
T RATINGS: 0, 1, 2, 3 AND 4 HOUR (SEE ITEM 3)
L RATING AT AMBIENT: LESS THAN 1 CFM/SQ FT (SEE ITEM 3)

ITEM 2

PIPE OR CONDUIT - NOMINAL 12" IN DIAMETER (OR SMALLER) SCHEDULE 10 (OR HEAVIER), STEEL PIPE NOMINAL 6" IN DIAMETER (OR SMALLER), STEEL CONDUIT NOMINAL 4" IN DIAMETER (OR SMALLER), STEEL ELECTRICAL METALLIC TUBING OR TYPE L (OR HEAVIER), COPPER TUBING NOMINAL 1" IN DIAMETER (OR SMALLER), FLEXIBLE STEEL CONDUIT. WHEN COPPER PIPE OR FLEXIBLE STEEL CONDUIT IS USED, MAXIMUM F RATING OF FIRESTOP SYSTEM (TIEM CONSTRUCTED USING STEEL CHANNEL STUDS). A MAXIMUM OF ONE (1) PIPE OR CONDUIT IS PERMITTED IN THE FIRESTOP SYSTEM. PIPE OR CONDUIT TO BE INSTALLED NEAR CENTER OF STUD CAVITY WIDTH AND TO BE RIGIDLY SUPPORTED IN BOTH SIDES OF WALL ASSEMBLY.

ITEM 3

FILL, VOID OR CAVITY MATERIAL, CAULK - CAULK FILL MATERIAL INSTALLED TO COMPLETELY FILL ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND GYPSUM WALLBOARD AND WITH A MINIMUM OF $\frac{1}{4}$" IN DIAMETER BOARD OF CAULK APPLIED TO PERIMETER OF PIPE OR CONDUIT AT ITS EGRESS FROM THE WALL. CAULK INSTALLED SYMMETRICALLY ON BOTH SIDES OF WALL ASSEMBLY. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. IN THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED AS TABULATED BELOW:

MAX PIPE OR CONDUIT DIA. (INCHES)	ANNULAR SPACE (INCHES)	F RATING (HOURS)	T RATING (HOURS)
1	0 TO 3/16	1 OR 2	0 + 1 OR 2
1	1/4 TO 1/2	3 OR 4	3 OR 4
4	0 TO 1/4	1 OR 2	0
6	1/4 TO 1/2	3 OR 4	0
12	3/16 TO 3/8	1 OR 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 NOMINAL
MINNESOTA MINING & MFG. CO. - TYPES CP-23 S/L, CP-25 N/8, CP-25 WS, CP-25 WS + (NOTE: L RATINGS APPLY WHEN THE TYPE CP-25WS+CAULK IS USED)

THROUGH WALL & FIRE STOP PENETRATION DETAILS 01

ALL WORK SHALL BE IN CONFORMANCE WITH TITLE 24, 2022 CALIFORNIA CODE OF REGULATIONS (CCR), 2022 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR, 2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR

CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWINGS OR ACCEPTED BY THE ARCHITECT AND STRUCTURAL ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS.

THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:
A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

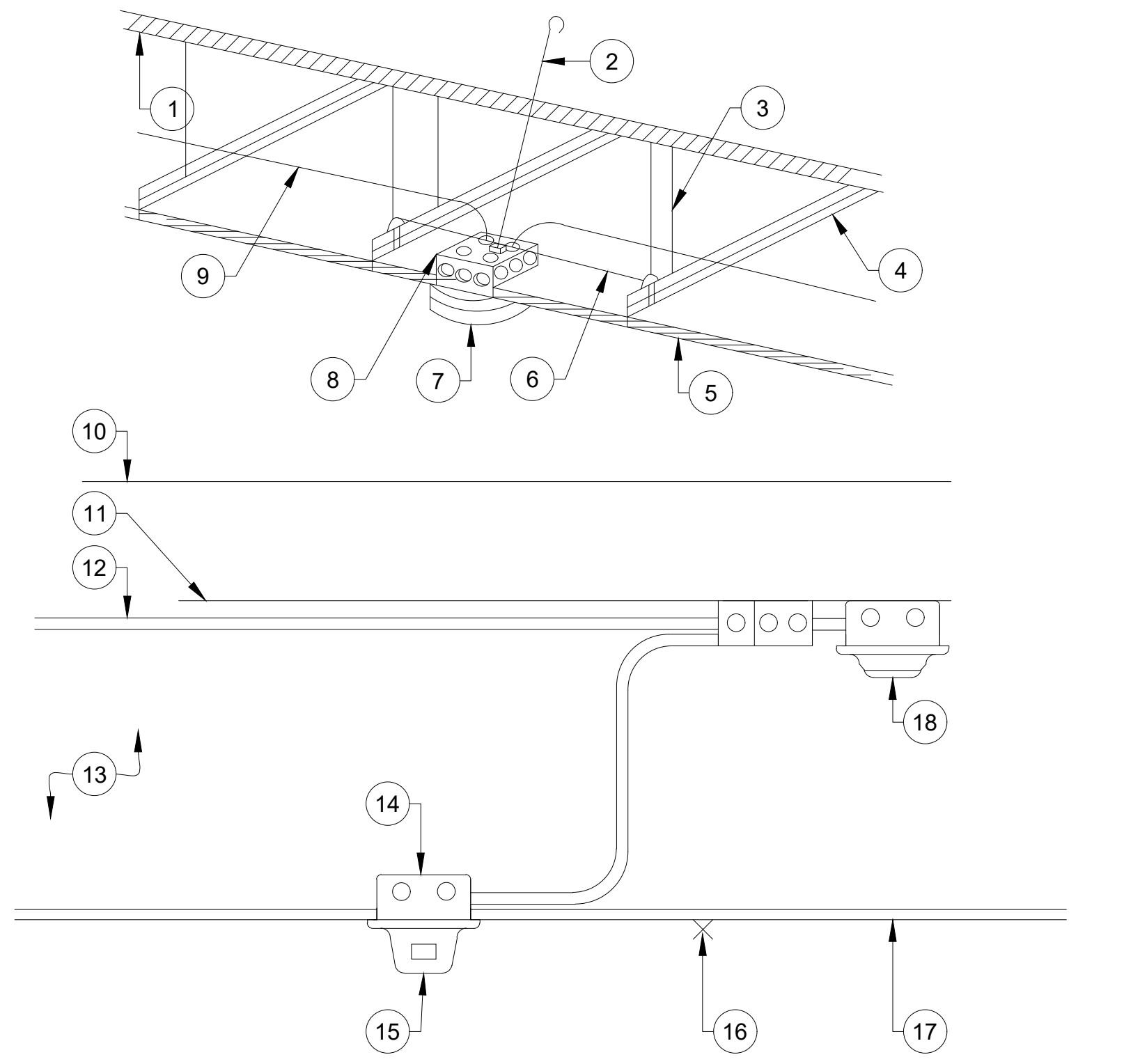
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAi OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICALPIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP [ ] MD [ ] PP [ ] E [X] OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
MP [ ] MD [ ] PP [ ] E [ ] OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAi PRE-APPROVAL (OPM #) #_____.

ANCHORAGE AND BRACING NOTES 02

1. BUILDING CEILING STRUCTURE
2. SEISMIC HANGER.
3. HANGERS
4. T-BAR
5. DROP CEILING TILE.
6. T-BAR BOX SUPPORT BRACKET.
7. DETECTOR
8. 4" Sq. BOX.
9. 3/4" MINIMUM METALLIC CONDUIT.
10. UNDERSIDE OF ROOF STRUCTURE.
11. ROOF FRAMING MEMBER.
12. 3/4" MINIMUM CONDUIT, CONCEAL IN ATTIC SPACE.
13. CEILING SPACE.
14. JUNCTION BOX MOUNTED IN CEILING (SEE NOTE).
15. DETECTOR.
16. "PERMANENT MARKER" INDICATES THE LOCATION OF THE HEAT DETECTOR IN THE ATTIC SPACE. RED LETTER ON WHITE BACKGROUND SHALL BE 3/4" HIGH.
17. FINISH CEILING.
18. DETECTOR.



**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

CEILING & ABOVE CEILING DETECTOR MOUNTING DETAIL 04

ALL MECHANICAL, PLUMBING AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:

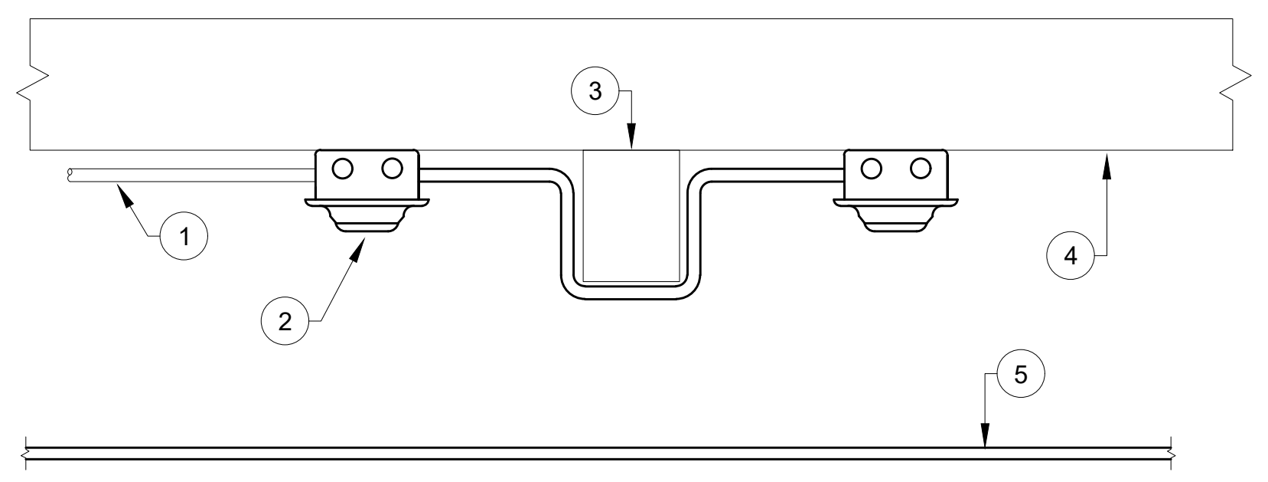
1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

1. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

MEP ANCHORAGE AND BRACING NOTES 03



1. 3/4" MIN. CONDUIT SECURED TO FRAME/CEILING.
2. DETECTOR SURFACE MOUNTED IN ACCORDANCE WITH NFPA 72, 17.6.3.3.1.2.
3. ROOF FRAMING MEMBER/JOIST/BEAM PROJECTED MORE THAN 4 IN. (100mm) BELOW STRUCTURE.
4. UNDERSIDE OF ROOF STRUCTURE.
5. FINISHED CEILING.

REFERENCE NFPA 72, CHAPTER 17.6.3.3.1
**DETAIL IS GENERAL IN NATURE AND APPLIES WHERE APPLICABLE.

PORTABLE ABOVE CEILING DETECTOR MOUNTING DETAIL 05

QUICKSTART QS4
FACP Battery Calculation Worksheet 5/15/2025
(current values will be expressed in mA)

EDWARDS SYSTEMS TECHNOLOGY

Device Description	Quantity of Devices	Standby mA Per Device	Alarm mA Per Device	Total Device Standby mA	Total Device Alarm mA
QS4-EXISTING FIRE ALARM SYSTEM (ALL)	1	342	483	342	483
				0	0
SIGA-OSD	2	0.0032	0.0045	0.0064	0.009
SIGA-HRD	2	0.0032	0.0032	0.0064	0.0064
Total Current				342.0128	483.0154

***SINGLE LOOP CARD(S) ARE CALCULATED AT MAXIMUM LOAD**

Summary Section		
	Standby Hours Required	24
	Alarm Minutes Required	15
	Total System Standby mA	342.0128
	Total System Alarm mA	483.0154
Standby Hours * (Total Standby mA * .001) =	*Total System Standby AH*	8.21
Alarm Minutes * .0167 per min. * (Total Alarm mA * .001) =	Total System Alarm AH	0.12
Total Standby AH + Total Alarm AH =	*Total System AH*	8.33
Total System AH * 1.25 =	*Minimum Required AH*	10.41

20% CONTINGENCY FACTOR ADDED **INSTALL (2)-12VDC 12AH BATTERIES**

EVAX Series Battery Calculations

QTY	ITEM	STANDBY CURRENT	STANDBY TIME	TOTAL STANDBY PWR (AH)	ALARM CURRENT	ALARM TIME	TOTAL ALARM POWER	TOTAL Amp Hour POWER
A		B	C Hours	D A x B x C	E	F Hours	G A x D x F	H D + G
1	25 / 25E	0.18	24	4.32	1.1	0.25	0.275	4.595
		SUB TOTALS		4.32		SUB TOTAL (H)		4.595

ENTER --- Stby (hours) 24
ENTER --- Alarm (mins) 15
Safety Factor 25% 1.25
Total Amp Hour Power 5.74375

BPS6/10A (E)BPS-1
BATTERY CALCULATIONS FOR 15 MIN. ALARM & 24 HOUR STANDBY

● 24
○ 60

PART#	DESCRIPTION	QTY	STANDBY CURRENT	TOTAL STANDBY	ALARM CURRENT	TOTAL ALARM
PANEL CONTROLLER AND CARDS						
BPS6/10A	REMOTE BOOSTER POWER SUPPLY	1	0.07000	0.07000	0.27000	0.27000
		PANEL TOTALS		0.070		0.270
24V AUXILIARY DEVICES						
	24V AUX. DEVICE TOTALS			0.000		0.000
PANEL CIRCUIT	FIELD NOTIFICATION APPLIANCE CIRCUITS					
N1	NOTIFICATION APPLIANCE CIRCUIT -(E)B1.1	1	0.000	0.000	0.374	0.374
N2	NOTIFICATION APPLIANCE CIRCUIT -B1.2	1	0.000	0.000	0.343	0.343
	NAC TOTALS			0.000		0.717
	OVERALL TOTALS			0.070		0.987

TOTAL ALARM AMPS 0.987 X 15 MINS= 0.247
TOTAL STANDBY AMPS 0.070 X 24 HOURS= 1.680
5 MINS = 0.083
15 MINS = 0.250
TOTAL AMP HOURS REQUIRED= 1.927
RECOMMENDED MINIMUM BATTERY SIZE= 7.0 AMP HOURS
LESS 25% DERATING FACTOR= 5.3 AMP HOURS
SPARE AMP HOURS 3.3 AMP HOURS

NOTIFICATION CIRCUIT - B1.2 - VOLTAGE DROP CALCULATIONS

1) STARTING VOLTAGE (24Vdc) AT 80% EFFICIENCY: Vdc = 24Vdc x .80 = 19.2Vdc
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.07/1000 +#12 FEET x 1.93/1000 + #10 FEET x 1.21/1000) x 2
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 16VDC EOL AS PER UL864 10TH EDITION
* FORMULA = CURRENT X DISTANCE² X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP

PART #	DEVICE TYPE	NO. OF DEVICE ON CKT	TOTAL LINEAR FEET OF WIRE #14	#12	#10	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)
SPSRL-95	WALL SPKR/STROBE @ 95cd	1					0.121	0.121	
SPSCRL-75	CEILING SPKR/STRB @ 75cd	2					0.111	0.222	
				350		1.351		0.343	0.463

TOTAL AMPS: 0.343 **TOTAL % DROP:** 2.41% **TOTAL V-DROP:** 0.463

STARTING VOLTAGE 19.2VDC ACTUAL FINISH VOLTAGE 18.74 VDC

NOTIFICATION CIRCUIT - (E)B1.1 - VOLTAGE DROP CALCULATIONS

1) STARTING VOLTAGE (24Vdc) AT 80% EFFICIENCY: Vdc = 24Vdc x .80 = 19.2Vdc
2) WIRE RESISTANCE (OHMS) = (#14 FEET x 3.07/1000 +#12 FEET x 1.93/1000 + #10 FEET x 1.21/1000) x 2
3) UTILIZING EOL OHM'S CALCULATIONS, ACCEPTABLE VOLTAGE DROP IS NO LESS THAN 16VDC EOL AS PER UL864 10TH EDITION
* FORMULA = CURRENT X DISTANCE² X RESISTIVITY CONSTANT / CIRCULAR MILLS / VOLTAGE X 1000 = % OF DROP

PART #	DEVICE TYPE	NO. OF DEVICE ON CKT	TOTAL LINEAR FEET OF WIRE #14	#12	#10	RES. OF WIRES (OHMS)	DEVICE LOAD (AMPS)	TOTAL LOAD (AMPS)	VOLTAGE DROP (VOLTS)
EXISTING	EXISTING NAC CIRCUIT	1					0.374	0.374	
				125		0.483		0.374	0.180

TOTAL AMPS: 0.374 **TOTAL % DROP:** 0.94% **TOTAL V-DROP:** 0.180

STARTING VOLTAGE 19.2VDC ACTUAL FINISH VOLTAGE 19.02 VDC

FIRE ALARM FUNDAMENTAL OF DESIGN: CALCULATIONS

AS STATED IN NFPA 72, CHAPTER 10.3.5: EQUIPMENT SHALL BE DESIGNED SO THAT IT IS CAPABLE OF PERFORMING ITS INTENDED FUNCTIONS UNDER THE FOLLOWING CONDITIONS:

(1) *AT 85 PERCENT AND AT 110 PERCENT OF THE NAMEPLATE PRIMARY (MAIN) AND SECONDARY (STANDBY) INPUT VOLTAGE(S)
(2) AT AMBIENT TEMPERATURES OF 32°F (0°C) AND 120°F (49°C)
(3) AT A RELATIVE HUMIDITY OF 85 PERCENT AND AN AMBIENT TEMPERATURE OF 86°F (30°C)

AS PER THE MANUFACTURE, THE FIRE ALARM CONTROL PANEL'S LISTED VOLTAGE IS 24VDC. THE OPERATING VOLTAGE RANGES FROM 19.2VDC TO 27.6VDC (FLOATING CHARGE VOLTAGE).

WHERE BACK-UP BATTERIES ARE USED, THE BATTERY CALCULATIONS ARE BASED ON A BACK-UP POWER (BATTERY) THAT DERATED BY 1.25 (25%). (REFERENCE NFPA 72 10.6.7.2.14*)

EXAMPLE:

BATTERY POWER (24VDC) X 80% = DERATING FACTOR (STARTING VOLTAGE)

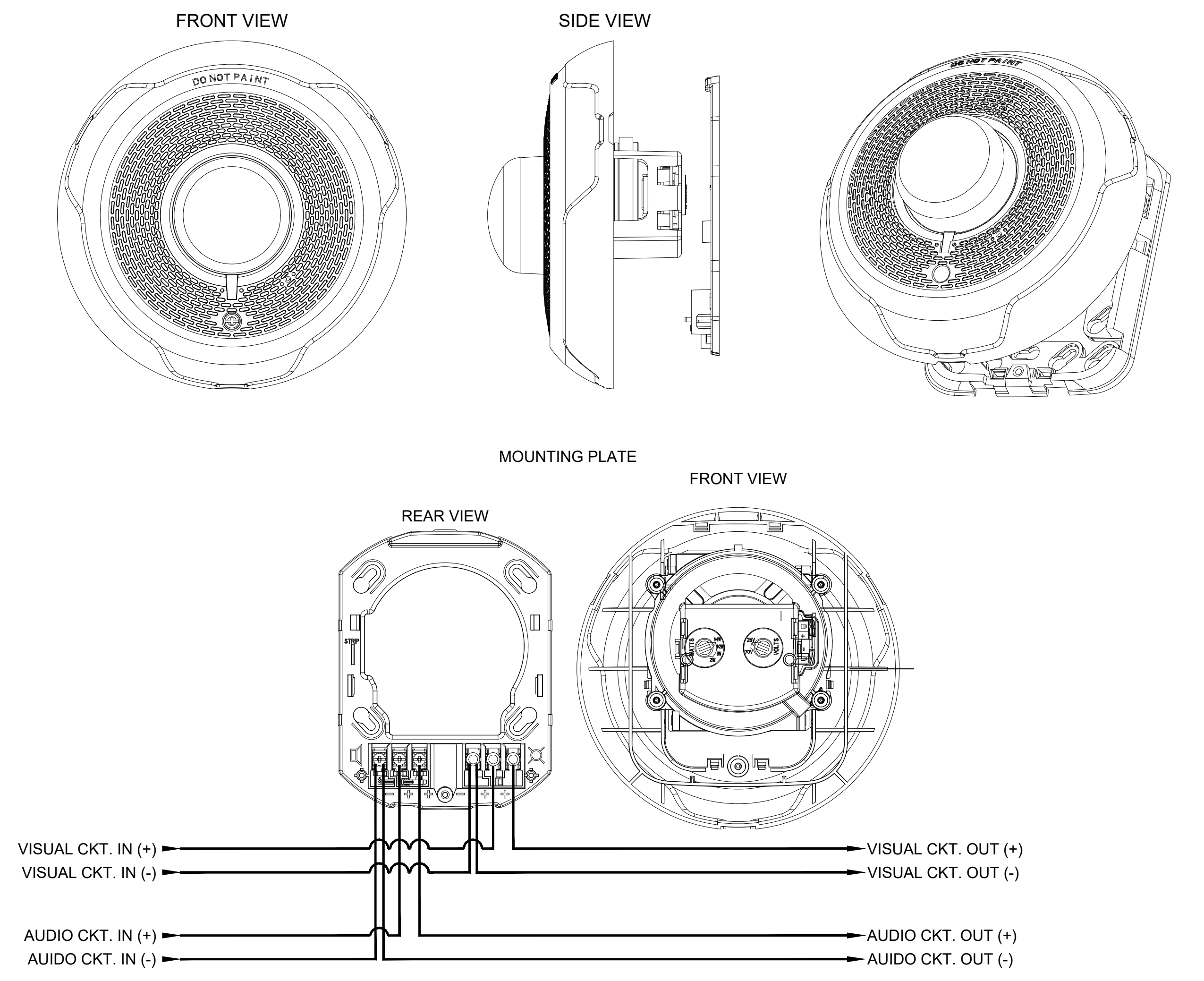
24VDC X .80 = 19.2VDC

AS PER UL864, 10TH EDITION, THE NOTIFICATION APPLIANCES MUST OPERATE BETWEEN 16VDC AND 33VDC AND STATES THAT THE END OF LINE VOLTAGE FOR A NOTIFICATION APPLIANCE CIRCUIT MUST BE NOT LESS THAN 16VDC (MANUFACTURE'S UL LISTED OPERATING VOLTAGE). THUS ALL NOTIFICATION APPLIANCE CIRCUITS ARE CALCULATED WITH A 25% DERATED FACTOR AND THE STARTING VOLTAGE IN 19.2VDC. ALTHOUGH THE PERCENTAGE OF VOLTAGE DROP MAY VARY, ALL NOTIFICATION APPLIANCE CIRCUITS AND BATTERY CALCULATIONS MUST AND WILL CONFIRM TO THIS STANDARD.

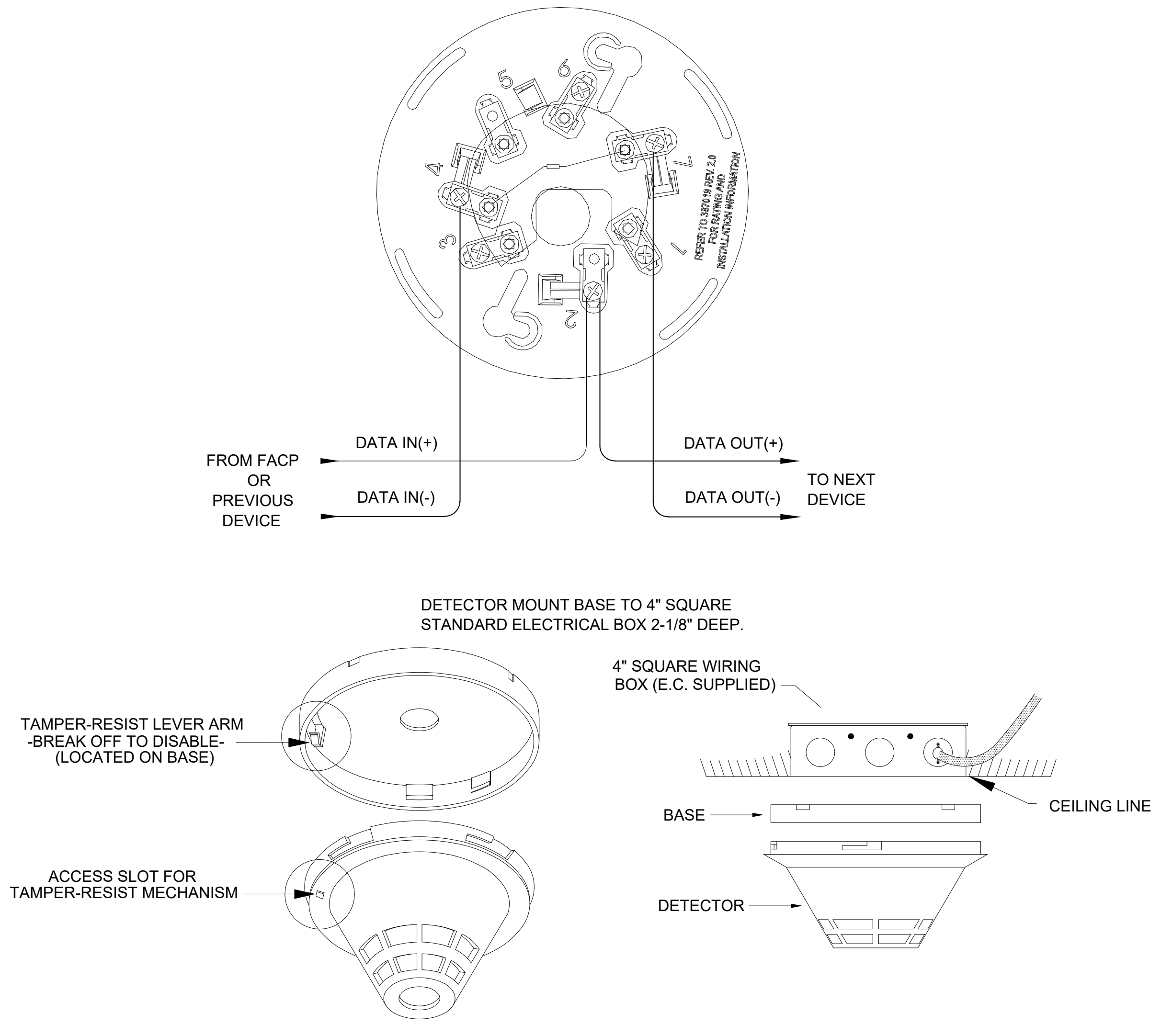
NOTES:

1. NO CHANGE TO EXISTING POWER SUPPLY BATTERIES AT THIS TIME.
2. FIELD VERIFY EXISTING FACP BATTERY SIZE. IF LESS THAN 12AH, REPLACE WITH NEW 18AH MINIMUM BATTERIES.
3. FIELD VERIFY EXISTING EVAX AMPLIFIER BATTERY SIZE. IF LESS THAN 7AH, REPLACE WITH NEW 7AH BATTERIES MINIMUM.
4. CALCULATIONS REFLECT SCOPE OF WORK ONLY.

FIRE ALARM CALCULATIONS - SCOPE OF WORK ONLY 06



SYSTEM SENSOR SPSCRL CEILING MOUNT SPEAKER STROBE DETAIL 07


REFER TO 387019 REV. 2.0 FOR RATING AND INSTALLATION INFORMATION
FROM FACP OR PREVIOUS DEVICE
DATA IN(+)
DATA IN(-)
DATA OUT(+)
DATA OUT(-)
TO NEXT DEVICE
DETECTOR MOUNT BASE TO 4" SQUARE STANDARD ELECTRICAL BOX 2-1/8" DEEP.
4" SQUARE WIRING BOX (E.C. SUPPLIED)
TAMPER-RESIST LEVER ARM -BREAK OFF TO DISABLE- (LOCATED ON BASE)
BASE
CEILING LINE
ACCESS SLOT FOR TAMPER-RESIST MECHANISM
DETECTOR

SIGA-OSD SMOKE & SIGA-HRD HEAT DETECTOR WITH SIGA-SB BASE DETAIL 08

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

FOLSOM, CA
916-355-9922
www.pbk.com

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

DISCIPLINE

NO. E-19817
Exp. 3-31-26

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: RT
DRAWN BY: CY

FIRE ALARM DETAILS AND CALCULATIONS

FA3.0

TECHNOLOGY COVER SHEET
T000
FOR BLUEBEAM LABELING/OCR.

TECHNOLOGY PLAN GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF THE TELECOMMUNICATION, NETWORK, AND VIDEO EQUIPMENT SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. CONTRACTOR SHALL COORDINATE AND INSTALL ALL 120V POWER REQUIREMENTS AND LOCATIONS AS REQUIRED FOR ALL EQUIPMENT (TYPICAL)

2. CONTRACTOR SHALL COORDINATING WITH PBK TECHNOLOGY DEPARTMENT PRIOR TO THE INSTALLATION OF RACKS AND RACK EQUIPMENT. NO RACKS SHALL BE PERMANENTLY INSTALLED WITHOUT WRITTEN APPROVAL OF THE PROPOSED LOCATIONS.

3. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONDUITS, BACK BOXES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR THE SCS SHALL BE THE RESPONSIBILITY OF THE SCS INSTALLER.

4. THE SELECTED, INSTALLING CONTRACTOR MUST BE A CERTIFIED INTEGRATOR/INSTALLER AUTHORIZED BY THE SPECIFIED SYSTEM MANUFACTURER TO INSTALL THE CABLE PLANT AND CONNECTIVITY PRODUCTS. REFER TO SPECIFICATIONS FOR PRODUCT TYPE AND DESCRIPTION.

5. SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH ENGINEERING BEST PRACTICES AS ESTABLISHED BY ANSI/EIA/TIA, BICSI, AND THE CEC.

6. ALL WIRING SHALL MEET ALL STATE AND LOCAL ELECTRICAL CODES.

7. ALL TELECOMMUNICATIONS SYSTEMS EQUIPMENT AND MOUNTING LOCATIONS SHALL BE IN COMPLIANCE WITH ADA ACCESSIBILITY STANDARDS.

8. ALL INDUSTRY STANDARD CATEGORY 6A CABLING PRACTICES MUST BE FOLLOWED FOR ALL DATA CABLING.

9. ALL DATA CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM AC POWER CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.

10. ALWAYS CROSS OTHER SYSTEM CABLES AT A 90 DEGREE ANGLE.

11. ALL CABLES AND TERMINATION COMPONENTS SHALL BE MACHINE LABELED AT BOTH ENDS. LABEL ALL CABLES PER TS DRAWINGS AND/OR SPECIFICATIONS. FINAL CABLE/OUTLET IDENTIFICATION LABELS SHALL BE COORDINATED WITH THE OWNER AND PBK.

12. CONTRACTOR TO PROVIDE LIGHTNING PROTECTION ON ALL COMMUNICATION CABLE BETWEEN BUILDINGS.

13. ALL EXPOSED CABLING ROUTED IN PLENUM SHALL BE PLENUM-RATED. ALL NON PLENUM-RATED CABLING INSTALLED IN PLENUM SPACES SHALL BE INSTALLED IN CONDUIT.

14. NO TERMINATION OR SPLICES SHALL BE INSTALLED IN OR ABOVE CEILINGS UNLESS NOTED NOTED OTHERWISE.

15. TECHNOLOGY CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH ALL CMU AND RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.

16. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.

17. CONTRACTOR SHALL ROUTE ALL FIBER/VOICE/DATA AND CATV CABLING DOWN CORRIDORS AND PERPENDICULAR OR PARALLEL TO BUILDING WALLS ENTER INTO ALL ROOMS ABOVE THE MAIN DOORWAY.

18. ALL COMMUNICATION CABLE INSTALLED SHALL ROUTE TO THE CENTER OF THE ROOM IN WHICH IT SERVES AND THEN TO THE OUTLET LOCATION IT IS INTENDED FOR. EACH CABLE SHALL HAVE A 10' SERVICE LOOP AT THE CENTER OF EACH ROOM AND A 3' SERVICE LOOP ABOVE EACH OUTLET LOCATION.

19. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM A PANDUIT J-MOD CABLE SUPPORT SYSTEMS AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. PANDUIT J-MOD SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. IN LOCATION WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.

20. CONTRACTOR TO PROVIDE AND INSTALL ALL REQUIRED CABLING AND COMPONENTS TO FURNISH TWO (2) ANALOG TELEPHONE CABLES TO THE FIRE ALARM SYSTEM. CONTRACTOR TO COORDINATE WITH THE SYSTEM INSTALLER FOR EXACT LOCATIONS AND TERMINATION INSTRUCTIONS PRIOR TO INSTALLATION.

21. ALL EXPOSED CABLING OR CABLING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE PROPERLY SIZED TO MAINTAIN THE 40% FILL RATIO.

22. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED. CONTRACTOR TO MAINTAIN A 40% MAXIMUM FILL RATION ON ALL SLEEVES INSTALLED.

AUDIO & VIDEO GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF EACH SYSTEM SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE INSTALLING CONTRACTORS LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS (TYPICAL). PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TO MAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECTS ELECTRICAL CONTRACTOR.

2. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IN WALL CONDUITS, BELOW GRADE CONDUITS, BELOW SLAB CONDUITS, CONDUITS ACROSS OPEN AREAS BACK BOXES, SLEEVES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL BE THE RESPONSIBILITY OF EACH SYSTEM INSTALLER.

3. THE SECURITY CAMERA SYSTEM INSTALLER SHALL BE RESPONSIBLE FOR CONNECTING ALL APPLICABLE SYSTEM EQUIPMENT TO THE OWNER'S NETWORK.

4. ALL EXPOSED SYSTEM'S WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4".

5. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ANY MOISTURE FROM ENTERING BUILDING.

6. NO CONDUITS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. IF EXTERIOR CONDUITS ARE REQUIRED FOR A COMPLETE INSTALLATION, EACH SYSTEM CONTRACTOR SHALL COORDINATE WITH THE PROJECTS CONSULTANT PRIOR TO ANY ROUGH-IN.

7. EACH SYSTEM CONTRACTOR SHALL PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL CONDUIT STUB OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED.

8. ALL CABLE SHALL BE ROUTED DOWN CORRIDORS, PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS AND STRUCTURE. CABLE TO EACH DEVICE SHALL BRANCH OFF OF A MAIN CORRIDOR TRUNK. ROUTING CABLES THROUGH CLASSROOMS, OFFICES, STORAGE ROOMS, RESTROOMS OR ANY TYPE OF ROOM OTHER THAN A CORRIDOR WILL NOT BE ACCEPTED. ENTER ALL ROOMS ABOVE THE ASSOCIATED ROOM DOORWAY.

9. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM A PANDUIT J-MOD CABLE SUPPORT SYSTEMS AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. PANDUIT J-MOD SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.

10. SECURITY CAMERA SYSTEM INSTALLER SHALL PROVIDE A CEILING MOUNTED INSTALLATION KIT RECOMMENDED BY THE MANUFACTURER OF THE CAMERA. EACH CEILING MOUNTED CAMERA KIT SHALL HAVE A SUPPORT WIRE ATTACHED TO THE BUILDING'S STRUCTURE TO PREVENT THE CAMERA FROM DROPPING TO THE FLOOR AT ANY TIME. AT NO POINT SHALL THE WEIGHT OF THE CEILING MOUNTED SECURITY CAMERA BE SUPPORTED BY THE CEILING GRID SYSTEM OR CEILING TILES. ALL CEILING MOUNTED CAMERAS SHALL BE FLUSH MOUNTED.

11. ALL EXTERIOR AND WALL MOUNTED CAMERA LOCATIONS MUST BE COORDINATED WITH THE OWNER PRIOR TO ROUGH-IN. ALL CAMERAS TO BE MOUNTED AT 12'-0" AFG. COORDINATION MEETINGS SHALL BE SCHEDULED THROUGH THE ARCHITECTS PROJECT MANAGER.

12. ALL SECURITY CAMERAS SHOWN TO WATCH EXTERIOR DOORS SHALL BE MOUNTED AT 40' FROM DOOR AT ALL LOCATIONS POSSIBLE. NO CAMERA SHALL BE INSTALLED MORE THAN 40' FROM DOOR.

13. CONDUIT, BACK BOX AND CABLING REQUIREMENTS FOR IP SECURITY CAMERAS: EACH IP CAMERA SHALL BE EQUIPPED WITH (1) CAT6 CABLE BY CABLING CONTRACTOR. CONTRACTOR SHALL MOUNT THIS OUTLET AT +12" ABOVE THE CEILING IN A PLENUM RATED JACK AND COORDINATE ALL FINAL LOCATIONS WITH OTHER TRADES ON THE PROJECT TO VERIFY THAT THE LOCATION OF THE OUTLET MAINTAINS 12" OF CLEARANCE FROM THE FRONT OF THE FACEPLATE FOR OWNER ACCESS. ELECTRICAL CONTRACTOR SHALL ROUTE (1) 1" CONDUIT FROM THE BUILDING STRUCTURE TO A SINGLE GANG BACK BOX MOUNTED AT 5' OR LESS ABOVE THE FINISHED CEILING. SECURE CONDUIT AND BACK BOX TO INSURE MINIMAL SWAY MOVEMENT.

14. VIDEO SURVEILLANCE CONTRACTOR SHALL PROVIDE ONE (1) ADDITIONAL OMNICAST LICENSE FOR EACH DOOR EQUIPPED WITH AN INTERIOR CARD READER AND SOUNDER TO ENABLE THE LOCAL CAMERA VIEW TO BE DISPLAYED ON THE LCD MONITOR IN THE RECEPTION AREA.

15. ALL NEW EXTERIOR CAMERAS COVERING DOORS EQUIPPED WITH SOUNDERS SHALL BE AXIS MODEL #F4005E. PROVIDE ALL REQUIRED AXIS HARDWARE FOR FULLY FUNCTIONAL SYSYTEMS AT ALL #F4005E CAMERA LOCATIONS, INTERIOR AND EXTERIOR.

16. PROVIDE LICENSES FOR ALL CAMERAS AS REQUIRED TO PROVIDE A TURNKEY SYSTEM. SALIENT SYSTEMS LICENSES FOR EXISTING ANALOG AND IP CAMERAS ARE TRANSFERABLE TO NEW IP CAMERAS. PROVIDE LICENSES ONLY FOR NEW CAMERAS THAT ARE NOT REPLACING EXISTING CAMERAS.

INTERCOM SYSTEM'S GENERAL NOTES

1. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF EACH SYSTEM SHALL BE A DEDICATED CIRCUIT AND 0N EMERGENCY POWER WHEN AVAILABLE. THE INSTALLING CONTRACTOR OF EACH SYSTEM SHALL BE RESPONSIBLE FOR PROVIDING THEIR OWN 120V POWER REQUIREMENTS FOR ALL REMOTE POWER SUPPLIES. THE INSTALLING CONTRACTORS LICENSED ELECTRICAL SUBCONTRACTOR SHALL COORDINATE ELECTRICAL PANEL LOCATIONS AND AVAILABLE SPACE DEDICATED FOR THE CONTRACTOR'S SYSTEM REQUIREMENTS. (TYPICAL). PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL POWER TO MAIN CONTROL PANELS AND ALL HEAD END EQUIPMENT. SYSTEM INSTALLERS SHALL COORDINATE LOCATION AND CONNECTION OF CONTROL PANEL AND HEAD END POWER WITH THE PROJECTS ELECTRICAL CONTRACTOR.

2. THE PROJECTS ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL IN WALL CONDUITS, BELOW GRADE CONDUITS, BELOW SLAB CONDUITS, CONDUITS ACROSS OPEN AREAS BACK BOXES, SLEEVES, AND OTHER RACEWAY REQUIRED FOR DEVICES AND PATHWAYS SHOWN ON THE FLOOR PLANS AND DETAIL SHEETS. ANY ADDITIONAL CONDUITS, SLEEVES, AND RACEWAY REQUIREMENTS FOR EACH SYSTEM SHALL BE THE RESPONSIBILITY OF EACH SYSTEM INSTALLER.

3. ALL EXPOSED SYSTEM'S WIRING OR WIRING ROUTING ACROSS NON ACCESSIBLE CEILINGS SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH 40% CABLE FILL RATIO. MINIMUM CONDUIT SIZE SHALL BE 3/4".

4. CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL EXTERIOR WALL PENETRATIONS ARE PROPERLY SEALED TO PREVENT ANY MOISTURE FROM ENTERING BUILDING.

5. NO CONDUITS SHALL BE INSTALLED ON THE EXTERIOR OF THE BUILDING. IF EXTERIOR CONDUITS ARE REQUIRED FOR A COMPLETE INSTALLATION, EACH SYSTEM CONTRACTOR SHALL COORDINATE WITH THE PROJECTS CONSULTANT PRIOR TO ANY ROUGH-IN.

6. EACH SYSTEM CONTRACTOR SHALL PROVIDE AND INSTALL PROTECTIVE BUSHINGS ON ALL CONDUIT STUB OUTS AND SLEEVES TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR O CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE EXCEPTED.

7. ALL CABLE SHALL BE ROUTED DOWN CORRIDORS, PARALLEL AND PERPENDICULAR TO THE BUILDING WALLS AND STRUCTURE. CABLE TO EACH DEVICE SHALL BRANCH OFF OF A MAIN CORRIDOR TRUNK. ROUTING CABLES THROUGH CLASSROOMS, OFFICES, STORAGE ROOMS, RESTROOMS OR ANY TYPE OF ROOM OTHER THAN A CORRIDOR WILL NOT BE ACCEPTED. ENTER ALL ROOMS ABOVE THE ASSOCIATED ROOM DOORWAY.

8. THE SYSTEM INSTALLER SHALL PROPERLY SUPPORT ALL INSTALLED SYSTEM CABLING FROM AN APPROVED CABLE SUPPORT SYSTEM AS DETAILED IN SPECIFICATIONS. NO CABLING SHALL BE ROUTED AND TIED DIRECTLY TO BUILDING STEEL, CEILING GRID SUPPORT, CONDUIT, PIPING, OR DUCTWORK. THE CABLE SUPPORT SYSTEM SHALL BE DIRECTLY CONNECTED TO THE BUILDING'S STEEL JOIST. AT LOCATIONS WHERE THE BOTTOM OF THE JOIST IS MORE THAN 5' ABOVE THE CEILING, THE SYSTEM INSTALLER SHALL PROVIDE AND INSTALL THREADED ROD AND ALL REQUIRED MATERIALS TO CONNECT THE THREADED ROD TO THE BUILDING STEEL AND THE CABLE SUPPORT SYSTEM TO THE THREADED ROD. CABLE PATHWAY SHALL NOT BE HIGHER THAN 5' ABOVE THE CEILING AT ANY LOCATIONS.

9. ALL INTERCOM CABLING FOR CLASSROOMS, OFFICES, CONFERENCE ROOMS, WORK ROOMS, AND LOUNGES SHALL BE HOME RUNS TO HEAD END EQUIPMENT TO ALLOW ZONING TO BE ACCOMPLISHED.

10. ALL EXTERIOR AND WALL MOUNTED SPEAKERS SHALL BE MOUNTED AT 10'-0" UNLESS OTHERWISE NOTED.

11. EXTERIOR SPEAKERS SHALL NOT BE GROUPED WITH INTERIOR SPEAKERS.

12. ALL SPEAKERS SHALL BE CONNECTED TO A STANDARD PUNCH DOWN BLOCK LOCATED NEAR HEAD END EQUIPMENT AND THEN CONNECTED TO HEAD END EQUIPMENT.

13. ALL CEILING MOUNTED SPEAKERS SHALL BE INSTALLED UTILIZING A TILE BRIDGE SUPPORT SYSTEM. AT NO POINT SHOULD THE WEIGHT OF A CEILING MOUNTED SPEAKER BE SUPPORTED BY A CEILING TILE ONLY.

14. ALL WALL MOUNTED CALL INITIATING DEVICES SHALL BE INSTALLED AT +42" ABOVE THE FINISHED FLOOR.

TECHNOLOGY SCOPE OF WORK

1. PROVIDE COMPLETE TECHNOLOGY SYSTEMS EQUIPMENT WITH INSTALLATION AS REQUIRED FOR A COMPLETE WORKING SYSTEM PER DESIGN DRAWINGS AND SPECIFICATIONS FOR COMMUNICATIONS ROOM 109, AND OTHER SPACES REQUIRED TECHNOLOGY CONNECTIONS IN FBO BUILDING AND SITE PER THE DESIGN DRAWINGS.

2. PROVIDE NEW CONDUITS, J-HOOKS ABOVE ACCESSIBLE CEILING SPACES TO SUPPORT NEW TECHNOLOGY WIRING AS REQUIRED BETWEEN END DEVICES AND TECHNOLOGY HEADEND EQUIPMENT. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL WIRING WITH TERMINATION AND TESTING AS REQUIRED FOR A COMPLETE WORKING SYSTEM.

3. PROVIDE NEW EMPTY UNDERGROUND CONDUITS CAP IN-PLACE FOR FUTURE USE BETWEEN THE NEW COMMUNICATION ROOM 109 IN FBO BUILDING TO FUTURE TERMINAL EXPANSION, AND HANGAR. REFER TO SITE PLAN T1.01 FOR NUMBER AND SIZE OF UNDERGROUND CONDUITS.

4. PROVIDE COMPLETE INFRASTRUCTURE INCLUDING WIRING TO ALL SECURITY DEVICES PER PLANS.

5. THE CONTRACTOR SHALL PROVIDE CONDUITS, UNDERGROUND PULL BOXES, AND WIRING AS REQUIRED FOR CONNECTIONS TO ALL SITE DEVICES.

6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE TECHNOLOGY EQUIPMENT/DEVICES MOUNTING AS NOTED PER THE DESIGN DRAWINGS.

7. THE CONTRACTOR SHALL PROVIDE NEW UNDERGROUND CONDUITS FOR NEW UTILITY SERVICE PROVIDER CONNECTION, AND COORDINATE WITH UTILITY SERVICE PROVIDER COMPANY FOR FINAL POINT OF CONNECTION PRIOR TO INSTALLATION.

8. PROVIDE ACCESS CONTROL SYSTEM TO INCLUDE ACCESS CONTROL PANEL, POWER SUPPLY AND CARD READERS PER SPECIFICATIONS.

9. PROVIDE VIDEO SURVEILLANCE SYSTEM AND SECURITY CAMERAS WITH REQUIRED LICENSING FOR A COMPLETE WORKING SYSTEM INCLUDING INTEGRATION WITH ACCESS CONTROL SYSTEM.

TECHNOLOGY SYMBOL LIST

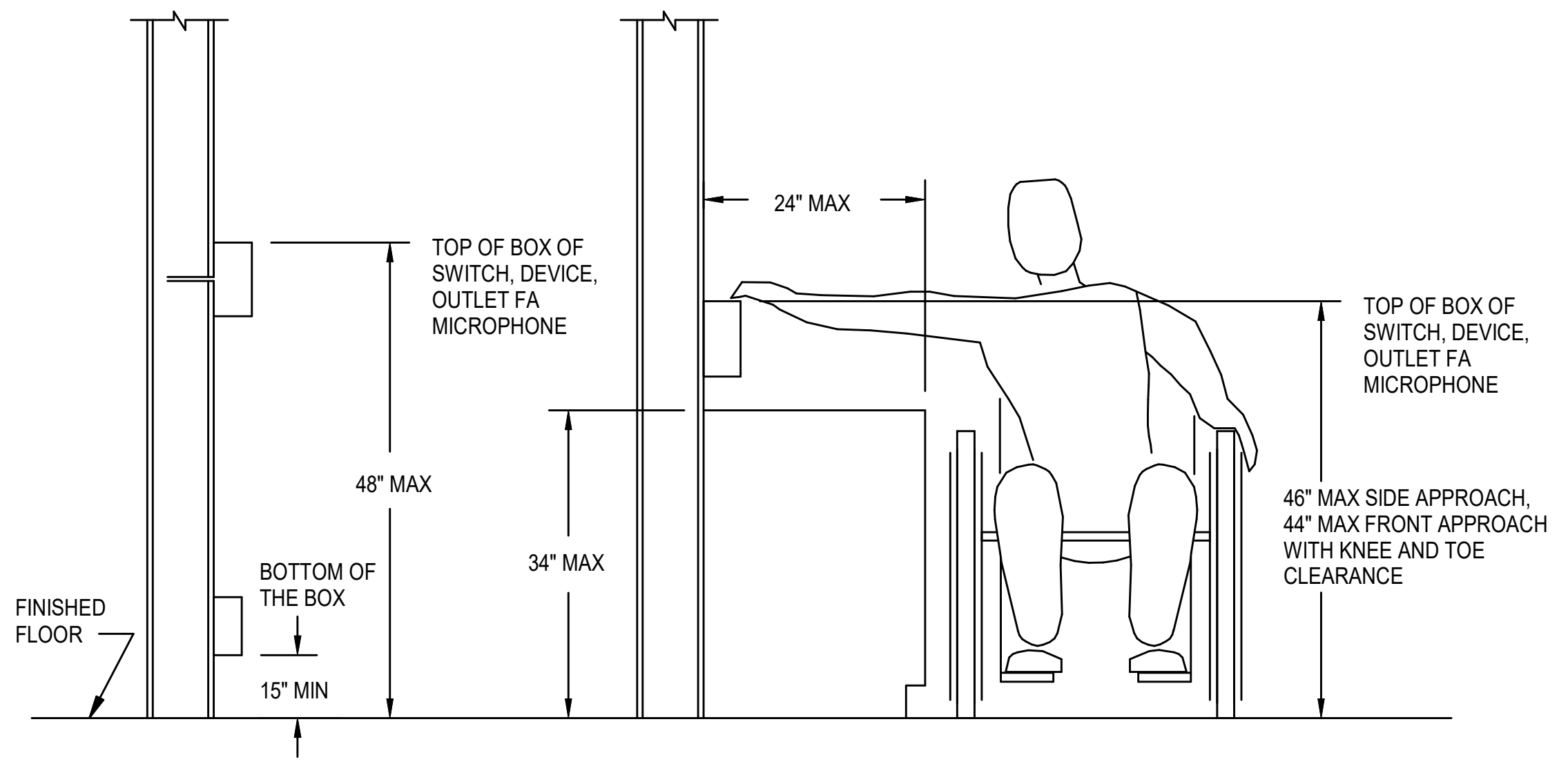
SYMBOL:	DESCRIPTION:	NOTE:
AV ▽	AUDIO VIDEO OUTLETS	1.
#-TV ▽	COMBINATION DATA/TV OUTLETS	2.,5.
WAP	WIRELESS ACCESS POINT DEVICE/ENCLOSURE (CEILING)	. 1.,2.,5.
# ▽	INFORMATION OUTLET (WALL)	1.,2.,5.
WAP	WIRELESS ACCESS POINT DEVICE/ENCLOSURE (WALL)	.
CR1	CREDENTIAL READER - TYPE 1	4.
##-##	VIDEO SURVEILLANCE CAMERA 270° FIELD OF VIEW (CEILING)	6.
##-##	VIDEO SURVEILLANCE CAMERA 270° FIELD OF VIEW (WALL)	6.
##-##	VIDEO SURVEILLANCE CAMERA SINGLE SENSOR (CEILING)	6.
PATC	PUBLIC ADDRESS TERMINAL CABINET (WALL)	
S1	PUBLIC ADDRESS SPEAKER (CEILING) TYPE 1	.
S1	PUBLIC ADDRESS SPEAKER (WALL) TYPE 1	.
IDCP	INTRUSION DETECTION CONTROL PANEL (WALL)	
IDPS	INTRUSION DETECTION POWER SUPPLY (WALL)	
MD	INTRUSION DETECTION MOTION DETECTOR (WALL)	.
UPB1	UNDERGROUND PULL BOX TYPE1	7.
UPB2	UNDERGROUND PULL BOX TYPE2	
—	CONDUIT (CONCEALED IN OR ABOVE CEILING/HORIZONTAL SURFACE)	.
—	UNDERGROUND/FLOOR CONDUIT	.
○—	CONDUIT UP	.
○—	CONDUIT DOWN	.
—	CONDUIT WITH CONTINUATION	.
[—]	CONDUIT SLEEVE	.
═	FIRE RATED PATHWAY SLEEVE SYSTEM	.

GENERAL NOTES:

1. ALL SYMBOLS LISTED ABOVE ARE FOR REFERENCE ONLY. REFER TO PLANS AND LINE TYPE KEY FOR NEW, EXISTING TO REMAIN AND TO BE REMOVED ITEMS FOR ADDITIONAL INFORMATION. REFER TO GENERAL TECHNOLOGY EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR FULL.
2. DESCRIPTIONS AND MANUFACTURERS OF ALL DEVICES.

TECHNOLOGY SYMBOL LIST NOTES:

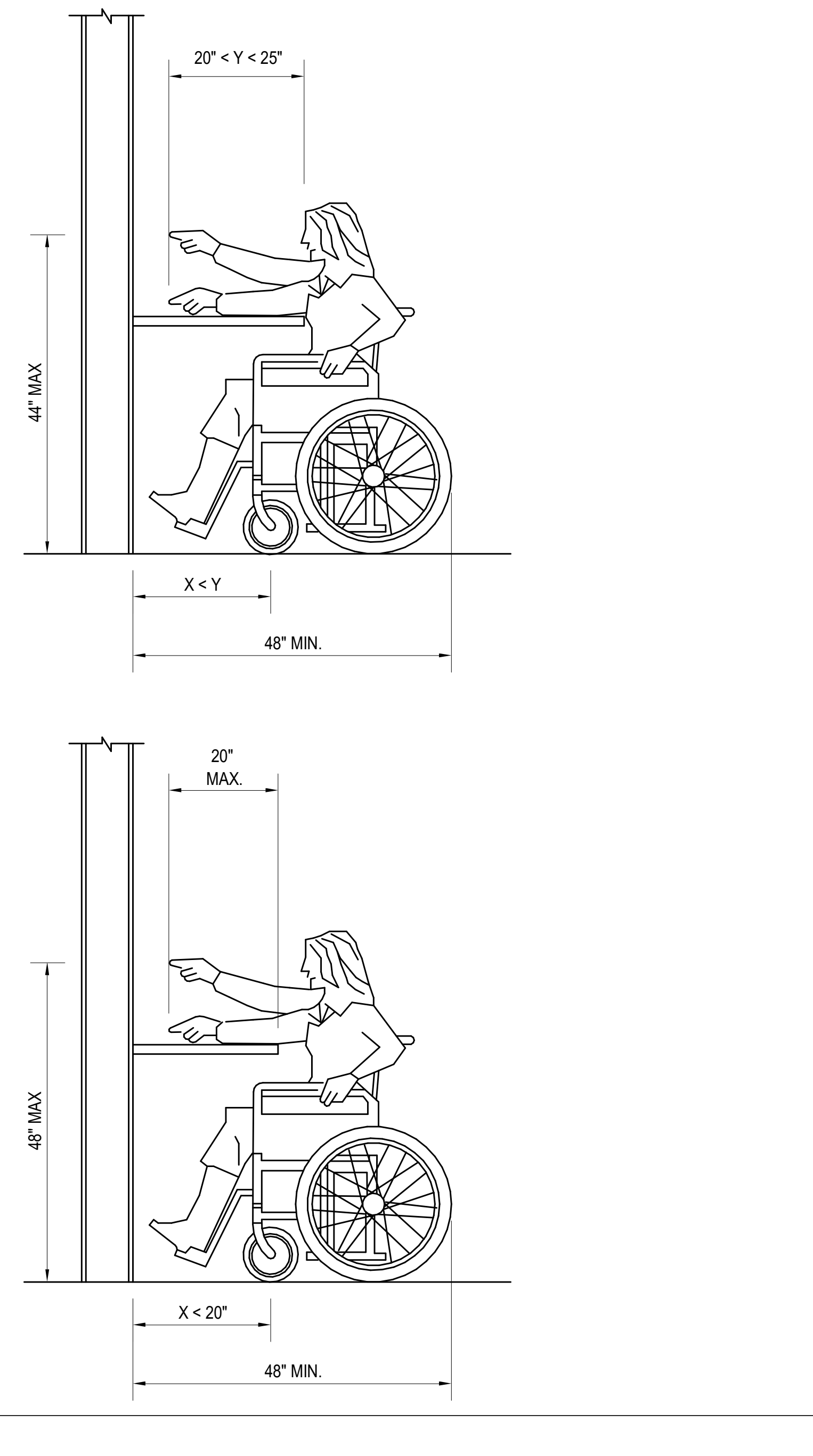
1. "#" INDICATES INFORMATION OUTLET FACEPLATE CONFIGURATION.
2. SYMBOL SUBSCRIPT INDICATES DEVICE TYPE.
3. INFORMATION OUTLET INSTALLED IN E.C. PROVIDED FLOOR BOX. "#" INDICATES DATA OUTLET FACEPLATE CONFIGURATION. REFER TO THE ELECTRICAL FLOOR PLANS FOR ADDITIONAL INFORMATION.
4. EQUIPMENT/DEVICE HEIGHT AS INDICATED ON PLANS.
5. REFER TO SPECIFICATION - EXTERIOR COMMUNICATION PATHWAYS AND DETAIL 6/T6.02 FOR UNDERGROUND COMMUNICATIONS PULL BOX.
6. REFER TO SPECIFICATION - EXTERIOR COMMUNICATION PATHWAYS FOR UNDERGROUND COMMUNICATIONS HANDHOLE.
7. PROVIDE AV OUTLET WITH (2) HDMI CONNECTORS AND CABLES. REFER TO FLOOR PLAN FOR DETAILS.


TOP OF BOX OF SWITCH, DEVICE, OUTLET FA MICROPHONE
48" MAX
BOTTOM OF THE BOX
FINISHED FLOOR
15" MIN
24" MAX
34" MAX
TOP OF BOX OF SWITCH, DEVICE, OUTLET FA MICROPHONE
46" MAX SIDE APPROACH, 44" MAX FRONT APPROACH WITH KNEE AND TOE CLEARANCE

2022 CBC FIG. 11B-308.2.1

2022 CBC FIG. 11B-308.2.2

2022 CBC FIG. 11B-308.3.2



NOTE:

1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).

2. FOR 24" REACH TO CONTROLS, OUTLETS OR SWITCHES ON THE WALL AT THE ACCESSIBLE WORK SURFACE WITH KNEE/TOE SPACE, AN ADDITIONAL 7" MUST BE ADDED TO THE KNEE SPACE.

DRAWING INDEX

SHEET	DESCRIPTION
T000	TECHNOLOGY COVER SHEET
T001	TECHNOLOGY COVER SHEET
T101	TECHNOLOGY SITE PLAN - MILLSWOOD MIDDLE SCHOOL
T201	TECHNOLOGY FLOOR PLAN
T601	TECHNOLOGY DETAILS

TECHNOLOGY ABBREVIATION KEY

ABBR:	DESCRIPTION:
AFF	ABOVE FINISHED FLOOR
BFC	BELOW FINISHED CEILING
C	CONDUIT
C.M.	CONSTRUCTION MANAGER
E.C.	ELECTRICAL CONTRACTOR
G.C.	GENERAL CONTRACTOR
J-BOX	JUNCTION BOX
MPOE	MIMIMUM POINT OF ENTRY
MC	MAIN CROSS-CONNECT
S.C.	SECURITY CONTRACTOR
SIM	SIMILAR
T.C.	TECHNOLOGY CONTRACTOR
TR-#	TELECOMMUNICATIONS ROOM
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
+#	MOUNTING HEIGHT ABOVE FINISHED FLOOR

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2022
2025 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

PARTIAL LIST OF APPLICABLE STANDARDS
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED): 2022 EDITION
NFPA 720 STANDARD FOR THE INSTALLATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT; 2016 EDITION
NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES; 2016 EDITION
UL 464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES; 2003 EDITION
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS; 1999 EDITION
UL 1971 STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED; 2002 EDITION (R2010)
ICC 300 STANDARD FOR BLEACHERS, FOLDING AND TELESCOPING SEATING AND GRANDSTANDS; 2017 EDITION

FOR A COMPLETE LIST OF APPLICABLE NFPA STANDARDS REFER TO 2022 CBC (SFM) CHAPTER 35 AND CALIFORNIA FIRE CODE CHAPTER 80.

SEE CALIFORNIA BUILDING CODE, CHAPTER 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

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LODI USD

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26

CLIENT	
LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

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TECHNOLOGY COVER SHEET

T000

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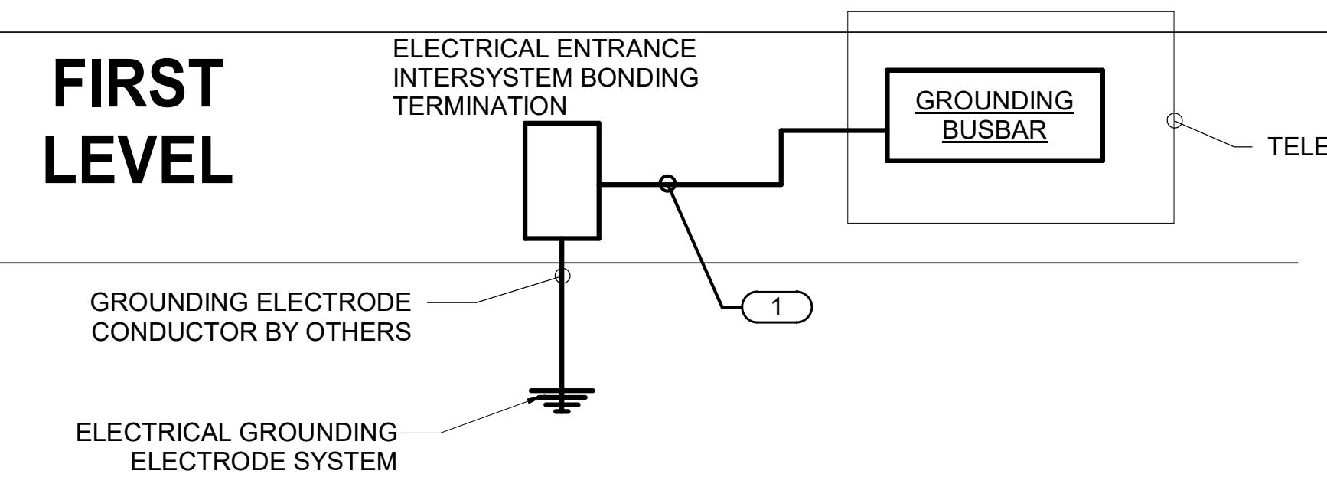
TECHNOLOGY RISER DIAGRAM AND SCHEDULES
T001
FOR BLUEBEAM LABELING/OCR.



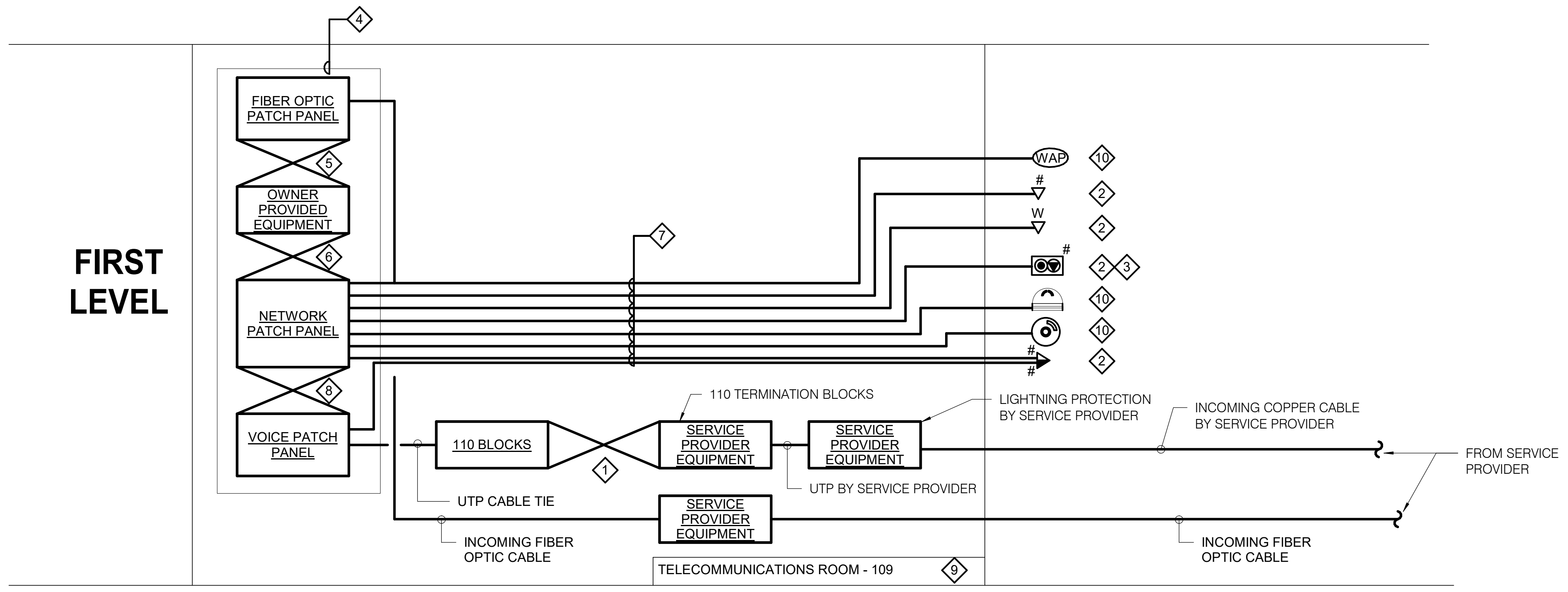
NOTES:
1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION LOCATIONS AND CONDUCTOR TYPE. ALL CONNECTIONS AND SYSTEM DEVICES SHOWN ARE TYPICAL AND NOT REPRESENTATIVE OF ACTUAL PROJECT QUANTITIES. REFER TO FLOOR PLANS AND ENLARGED FLOOR PLANS FOR ACTUAL QUANTITIES AND LOCATIONS OF DEVICES AND MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. ALL CONDUCTORS IN THE TECHNOLOGY BONDING SYSTEM SHALL BE MINIMUM SIZE OF 3/0 AWG PLENUM RATED COPPER (GREEN OR MARKED WITH A DISTINCTIVE GREEN COLOR) UNLESS CONDUCTOR LENGTH IS LESS THAN 66 FEET. REFER TO BONDING CONDUCTOR SIZING SCHEDULE FOR SIZING CRITERIA FOR CONDUCTORS LESS THAN 66 FEET IN LENGTH. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. ALL BONDING CONDUCTORS AND BONDING JUMPERS SHALL BE CONNECTED BY COMPRESSION LUGS, EXOTHERMIC WELDING, OR IRREVERSIBLE COMPRESSION CONNECTORS. SOLDER IS NOT AN ACCEPTABLE MEANS OF CONNECTION. SHEET METAL SCREWS SHALL NOT BE USED TO CONNECT COMMUNICATIONS BONDING CONDUCTORS TO EQUIPMENT. WHERE NECESSARY, REMOVE PAINT AND/OR USE PAINT-PIERCING WASHERS TO PROVIDE PROPER ELECTRICAL BOND AT ALL CONNECTIONS.
4. REFER TO [5/T5.00] FOR TYPICAL TELECOM ROOM BONDING FLOW DIAGRAM.

KEYNOTES:
1. BONDING CONDUCTOR FOR TELECOMMUNICATIONS (BCT). BCT SHALL BE THE SAME SIZE AS THE TBB OR LARGER. REFER TO BONDING CONDUCTOR SIZING SCHEDULE FOR SIZING REQUIREMENTS.

BONDING CONDUCTOR SIZING SCHEDULE

CONDUCTOR LENGTH IN FEET	MINIMUM ACCEPTABLE SIZE - AWG
LESS THAN 13'	6
14' - 20'	4
21' - 26'	3
27' - 33'	2
34' - 41'	1
42' - 52'	1/0
53' - 66'	2/0
GREATER THAN 66'	3/0

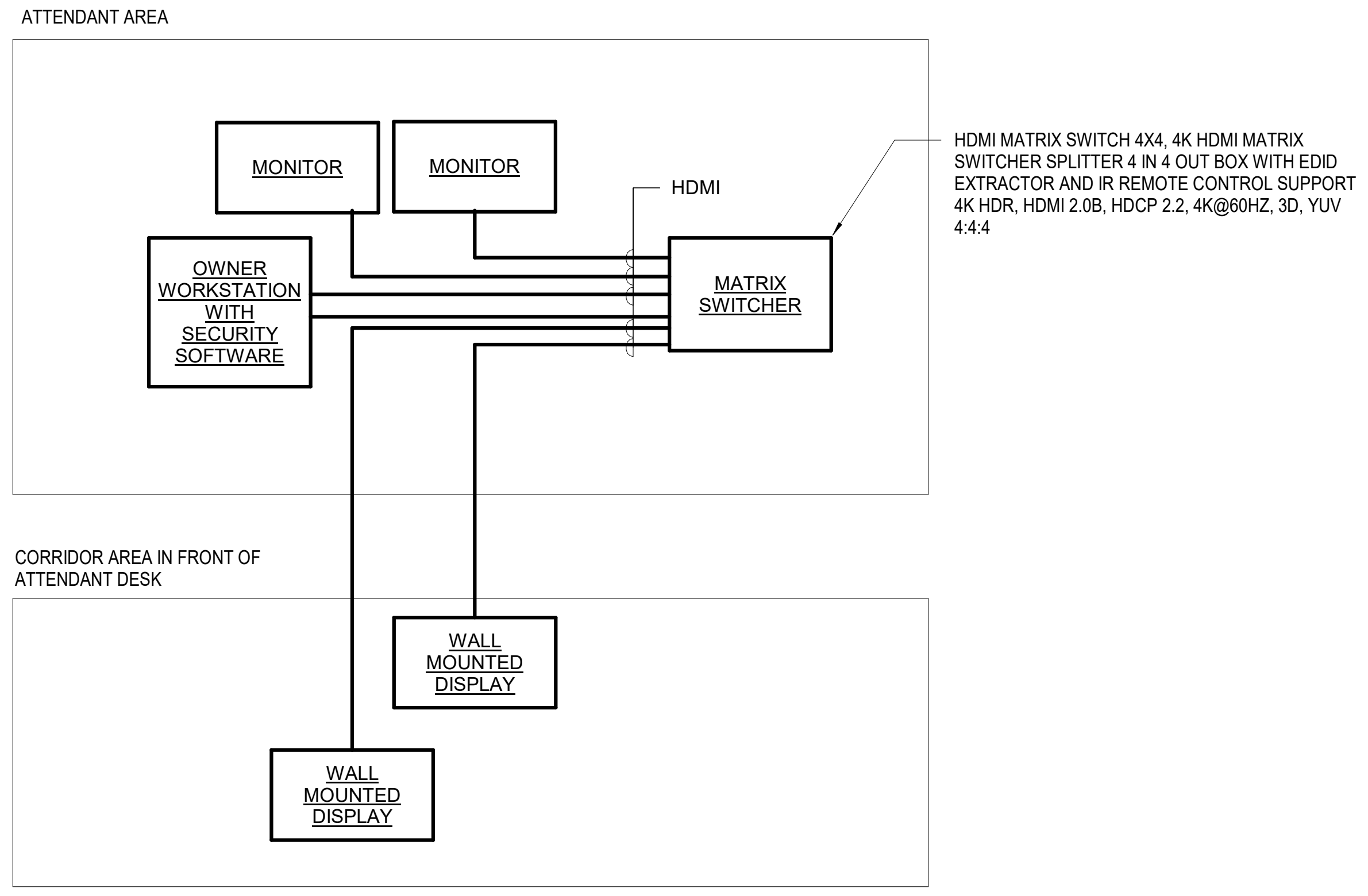
TECHNOLOGY BONDING RISER DIAGRAM
12" = 1'-0" 1



NOTES:
1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION(S), LOCATIONS AND CABLE TYPE. ALL INFORMATION OUTLETS ARE TYPICAL OF THE OUTLETS IN THE AREA SHOWN. REFER TO FLOOR PLANS FOR MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. REFER TO FLOOR PLANS FOR QUANTITY OF CABLES AND JACKS TO BE INSTALLED AT EACH INFORMATION OUTLET.
3. RUN CAT6 CABLES FROM THE TENANT OFFICES TO A IDF CABINET IN THE TELECOMMUNICATIONS ROOM AND SHALL BE TERMINATED ON A SEPARATE CABINET FROM FBO WIRING.

KEYNOTES:
1. CROSS-CONNECT BACKBONE RISER CABLE TO THE INCOMING SERVICE PROVIDER CABLE.
2. # INDICATES VOICE/DATA FACEPLATE CONFIGURATION. REFER TO TECHNOLOGY FLOOR PLANS FOR ADDITIONAL INFORMATION.
3. DATA OUTLET INSTALLED IN E.C. PROVIDED AND INSTALLED FLOOR BOX.
4. RACK OR CABINET AS DEFINED ON THE TELECOM ROOM LAYOUT.
5. REFER TO SPECIFICATIONS FOR FIBER PATCH CORD REQUIREMENTS.
6. RJ-45 TO RJ45 CATEGORY **6** UTP PATCH CORDS, REFER TO SPECIFICATIONS.
7. **23** GAUGE 4-PAIR, CATEGORY **6**, UNSHIELDED TWISTED PAIR CABLE, REFER TO SPECIFICATIONS.
8. REFER TO SPECIFICATIONS FOR COPPER PATCH CORD REQUIREMENTS.
9. REFER TO FLOOR PLANS FOR TELECOMMUNICATIONS ROOM LOCATIONS.
10. PROVIDE 2-PORT PLENUM RATED SURFACE MOUNT BOX ABOVE ACCESSIBLE CEILING.

FIBER AND COPPER RISER DIAGRAM
12" = 1'-0" 2


ATTENDANT AREA
MONITOR
MONITOR
HDMI
OWNER
WORKSTATION
WITH
SECURITY
SOFTWARE
MATRIX
SWITCHER
HDMI MATRIX SWITCH 4X4, 4K HDMI MATRIX SWITCHER SPLITTER 4 IN 4 OUT BOX WITH EDID EXTRACTOR AND IR REMOTE CONTROL SUPPORT 4K HDR, HDMI 2.0B, HDCP 2.2, 4K@60HZ, 3D, YUV 4:4:4
CORRIDOR AREA IN FRONT OF
ATTENDANT DESK
WALL
MOUNTED
DISPLAY
WALL
MOUNTED
DISPLAY

NOTES:
1. THIS RISER IS DIAGRAMMATIC AND MAY NOT SHOW ACTUAL ROUTING OR QUANTITIES OF MATERIALS SHOWN. THIS RISER IS SHOWN FOR CLARIFICATION OF CONNECTION(S), LOCATIONS AND CABLE TYPE. ALL INFORMATION OUTLETS ARE TYPICAL OF THE OUTLETS IN THE AREA SHOWN. REFER TO FLOOR PLANS FOR MORE SPECIFIC ROUTING INFORMATION. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
2. REFER TO FLOOR PLANS FOR QUANTITY OF CABLES AND JACKS TO BE INSTALLED AT EACH AV OUTLET.

AV WIRING DIAGRAM
12" = 1'-0" 3

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233 N MILLS AVENUE
LODI, CA 95242

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DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26
ELECTRICAL

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

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TECHNOLOGY RISER DIAGRAM AND SCHEDULES

T001

0"
1"

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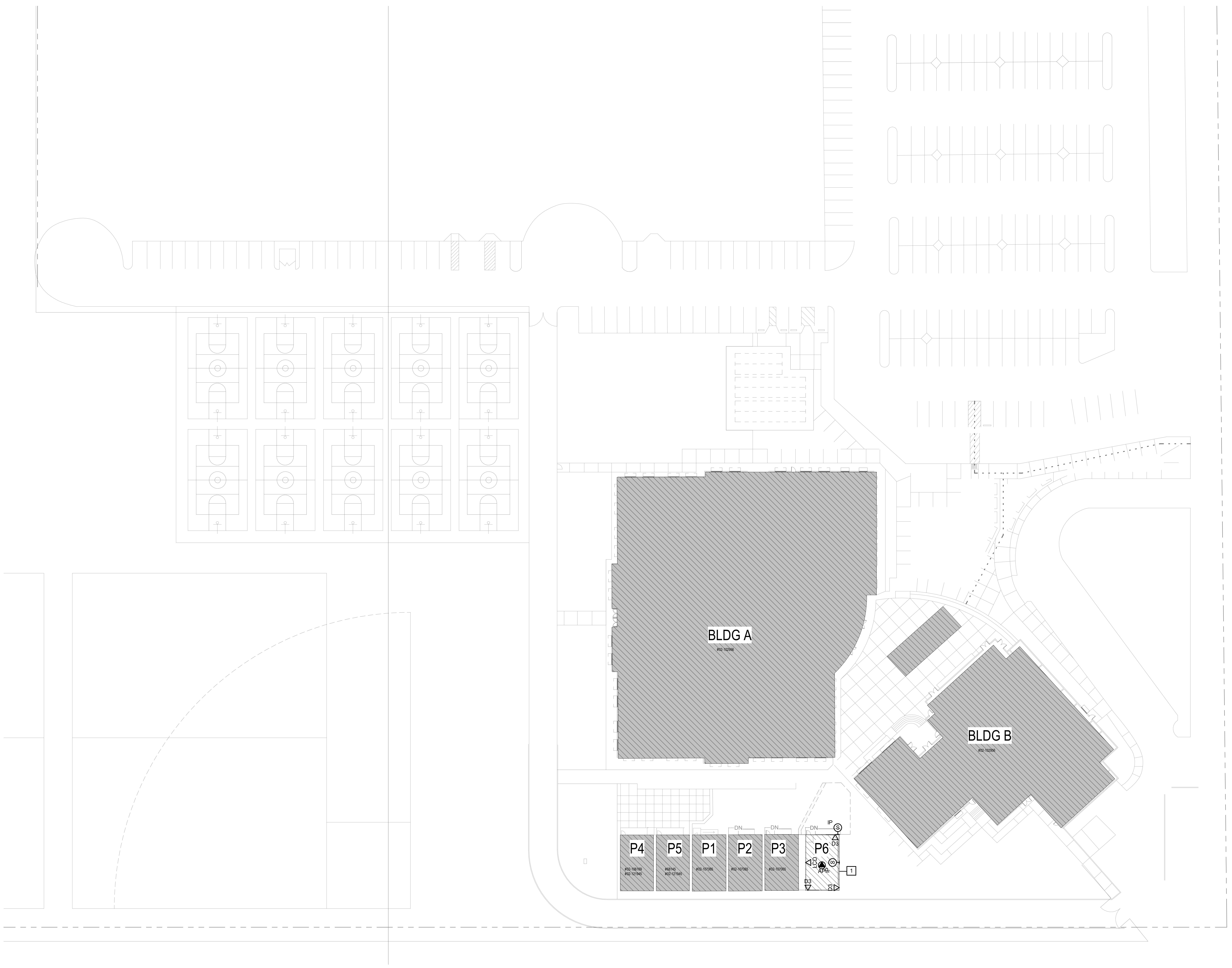
TECHNOLOGY SITE PLAN - MILLSWOOD MIDDLE SCHOOL
T101
FOR BLUEBEAM LABELING/OCR.

0"
1"



1 TECHNOLOGY SITE PLAN - MILLSWOOD MIDDLE SCHOOL
1" = 30'-0"

GENERAL NOTES

KEY NOTES

1 AREA OF WORK

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E	F
C	D
A	B

KEY PLAN
NORTH: PLAN TRUE

DISCIPLINE

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CLIENT
LODI USD

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PROJECT NUMBER
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TECHNOLOGY SITE PLAN - MILLSWOOD MIDDLE SCHOOL

T101

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TECHNOLOGY FLOOR PLAN
T201
FOR BLUEBEAM LABELING/OCR.

0"
1"

GENERAL NOTES

A. ALL EXTERIOR CAMERAS AND WIRELESS ACCESS POINTS SHALL BE INSTALLED AT 12 FT. A.F.F. UNLESS OTHERWISE NOTED.

B. ALL EXTERIOR CAMERAS AT CANOPY LOCATIONS SHALL BE INSTALLED AT 8 IN. BELOW THE CANOPY. ELECTRICAL CONTRACTOR SHALL VERIFY LOCATIONS PRIOR TO ROUGH-IN OF CONDUIT INFRASTRUCTURE.

C. EXTERIOR PUBLIC ADDRESS SPEAKERS SHALL BE ZONED SEPARATELY FROM INTERIOR PUBLIC ADDRESS SPEAKERS.

D. ACCESS CONTROL CONTRACTOR SHALL CONNECT DOOR HARDWARE CABLE TO ACCESS CONTROL SYSTEM.

E. FOR ALL EXTERIOR MOUNTED IP DEVICES, PROVIDE A BISCUIT TERMINATED ON THE INTERIOR OF THE BUILDING AND A PRETERMINATED CABLE CONNECTED FROM THE BISCUIT TO THE DEVICE.

F. CAMERA ORIENTATION SHOWN DOES NOT INDICATE ACTUAL FIELD OF VIEW. COORDIATE WITH OWNER AND ADJUST CAMERAS FOR PROPER FIELD OF VIEW.

G. EVERY VIDEO DISPLAY (LCD, VIDEO PROJECTOR, ETC.) SHALL RECEIVE 1 QTY. DATA CABLE ROUTED TO NEAREST IDF.

H. ALL CAMERA BACK BOXES MOUNTED UNDER CANOPIES SHALL BE INSTALLED AT 8" BELOW CANOPY BUT NO HIGHER THAN 12 FT. A.F.F.

I. FOR CORNER MOUNTED EXTERIOR CAMERAS, ELECTRICAL CONTRACTOR SHALL ROUTE CONDUIT THROUGH THE CORNER OF THE BUILDING. NO EXPOSED CONDUIT OR SEALTIGHT SHALL BE VISIBLE ON THE EXTERIOR OF THE BUILDING.

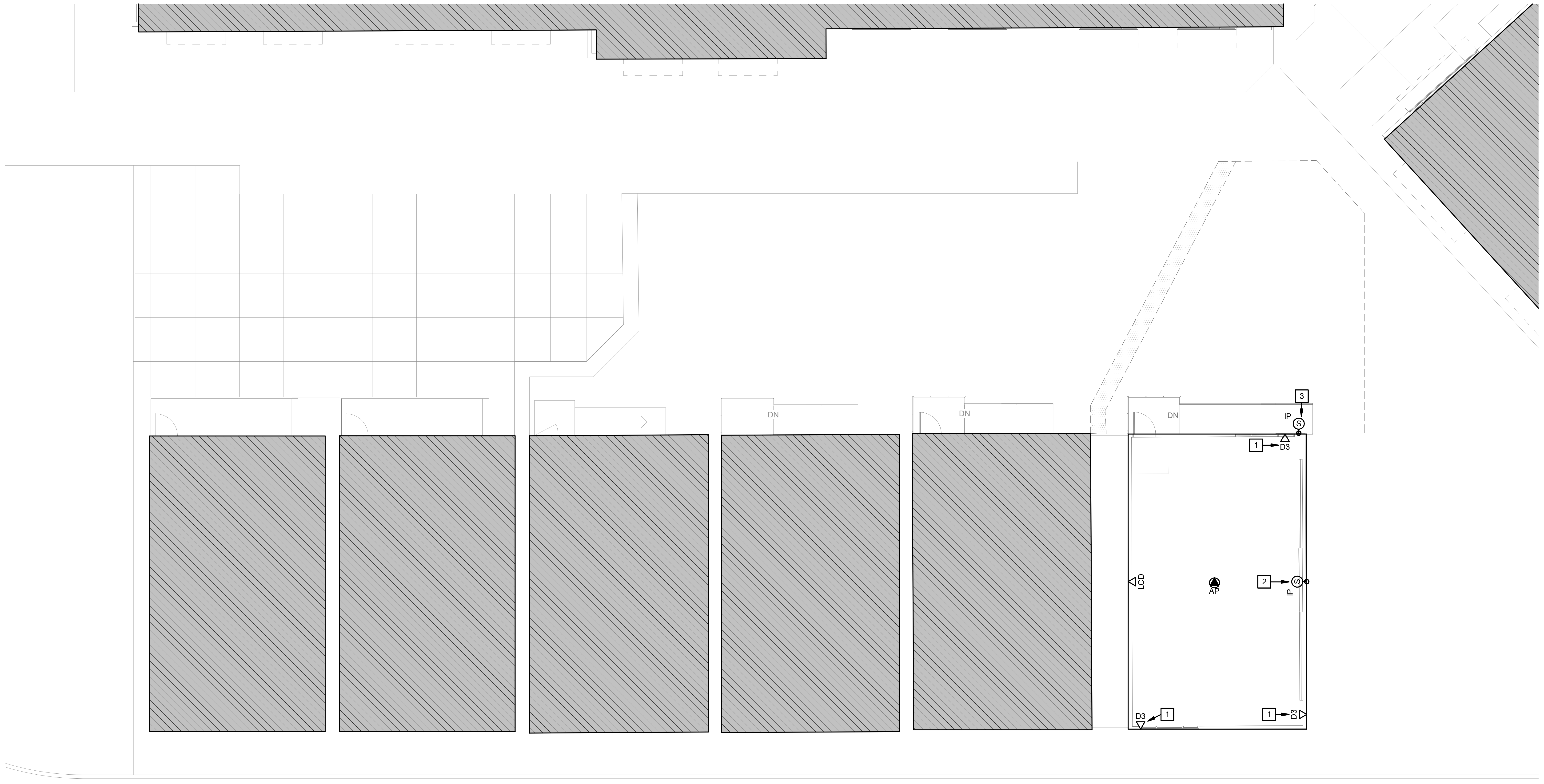
J. D1 THROUGH D6 FLOOR POCKETS SHOWN SHALL BE THE SAME FLOOR POCKET SHOWN ON THE ELECTRICAL PLANS. DO NOT PROVIDE A SEPARATE FLOOR POCKET FOR DATA CABLES.

K. PROVIDE NEW TELECOMMUNICATIONS INFRASTRUCTURE SYSTEM PER DISTRICT STANDARDS AND THE SPECIFICATIONS. COORDINATE WITH THE DISTRICT IT REPRESENTATIVE.

L. INTRUSION ALARM SYSTEM TO BE INSTALLED BY THE OWNER'S CONTRACTED VENDOR, PROVIDE CONDUIT PATHWAY TO THE NEW PORTABLE BUILDINGS AND COORDINATE AS REQUIRED.

KEY NOTES

1	AT TYPICAL WORKSTATION, PROVIDE PANDUIT T-70 SURFACE RACEWAY WITH DIVIDER TO ACCESSIBLE CEILING. PROVIDE PANDUIT WORKSTATION OUTLET CENTER OFFSET BOX, T70WC2IW. CONNECT POWER RECEPTACLE TO SPARE 20A CIRCUIT AT EXISTING MODULAR BUILDING LOAD CENTER. TELECOM OUTLET WITH 2-BEIGE JACKS AND 1 BLUE JACK (COMPUTER & PHONE).
2	PROVIDE CABLING AND INFRASTRUCTURE FOR OWNER FURNISHED CLOCK/PA SPEAKER.
3	PROVIDE CABLING AND INFRASTRUCTURE FOR OWNER FURNISHED OUTDOOR PA SPEAKER.



1 TECHNOLOGY ENLARGED PROPOSED SITE PLAN
1/8" = 1'-0"

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DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

E	F
C	D
A	B

KEY PLAN

NORTH: PLAN TRUE

DISCIPLINE

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Exp. 3-31-26

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DATE 05/15/2025	PROJECT NUMBER 250048	
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TECHNOLOGY FLOOR PLAN

T201

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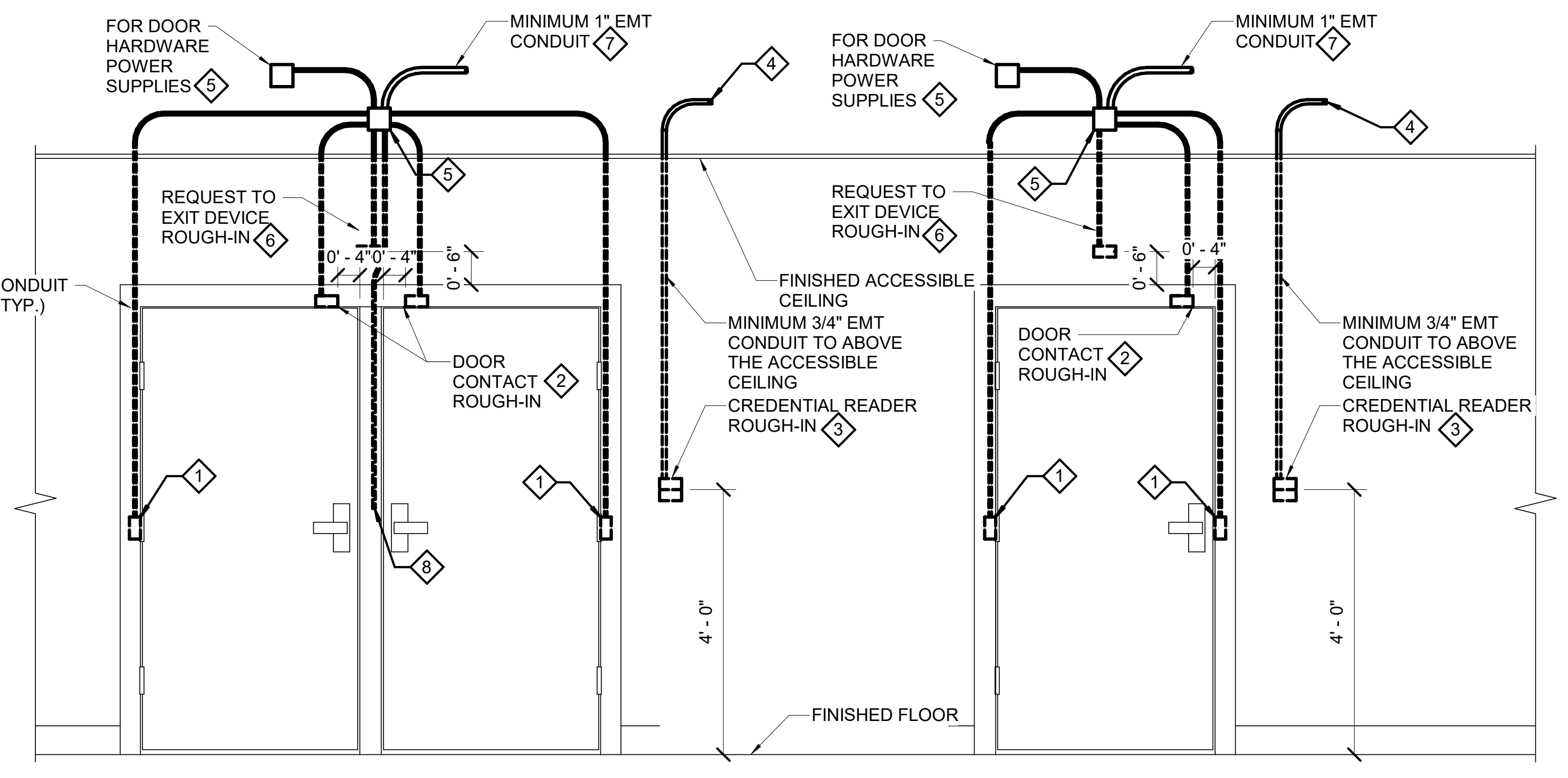
TECHNOLOGY DETAILS
T601
FOR BLUEBEAM LABELING/OCR.

0"
1"


FOR DOOR HARDWARE POWER SUPPLIES 5
MINIMUM 1" EMT CONDUIT 7
4
5
REQUEST TO EXIT DEVICE ROUGH-IN 6
0' - 4"
0' - 4"
0' - 6"
1/2" EMT CONDUIT MINIMUM (TYP.)
DOOR CONTACT ROUGH-IN 2
FINISHED ACCESSIBLE CEILING
MINIMUM 3/4" EMT CONDUIT TO ABOVE THE ACCESSIBLE CEILING
CREDENTIAL READER ROUGH-IN 3
1
8
4' - 0"
FINISHED FLOOR

DOOR FRAME ROUGH-IN DIAGRAM
(ALL DOUBLE DOORS WITH OR WITHOUT MULLION)

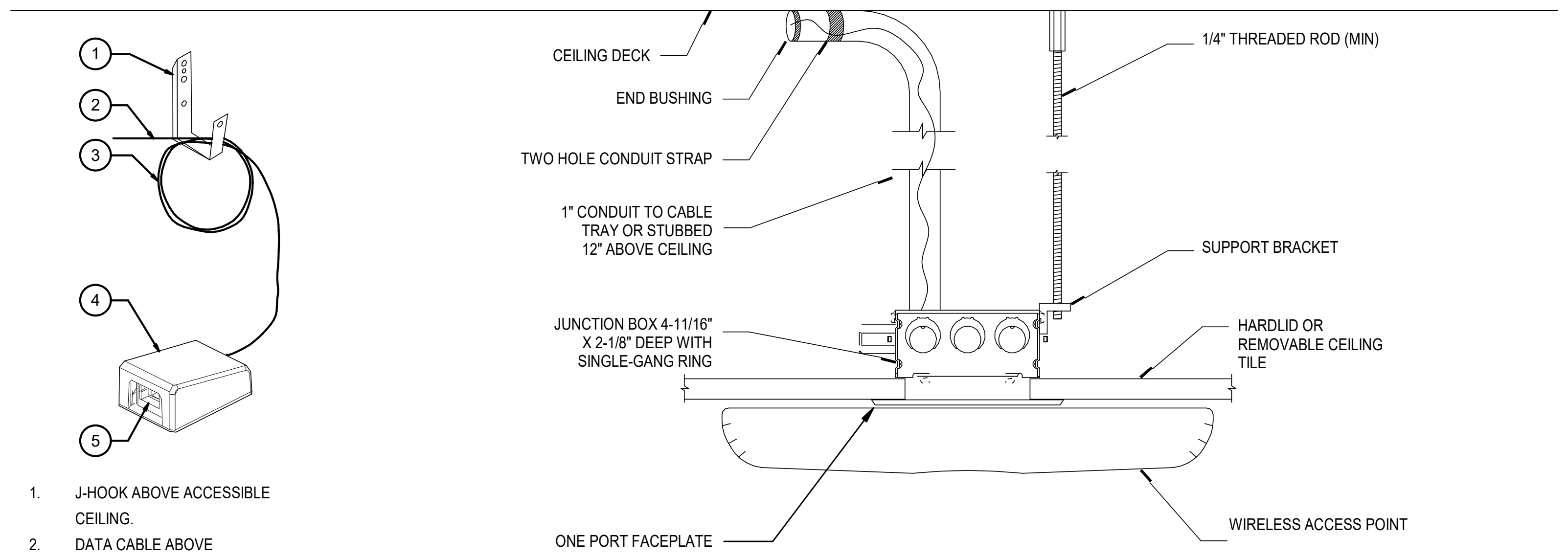
DOOR FRAME ROUGH-IN DIAGRAM
(ALL SINGLE DOORS)

NOTES:
1. CONFIGURATIONS SHOWN IN THE DETAIL ABOVE ARE DIAGRAMMATIC, INTENDED TO DESCRIBE THE CONTROLLED SECURITY SCHEME ROUGH-IN REQUIREMENTS OF THE DOORS. DETAILS ABOVE MAY NOT ACCURATELY REPRESENT DOOR SIZE, DOOR SWING, DOOR HARDWARE, OR DOOR FUNCTIONALITY. REFER TO ARCHITECTURAL DOOR HARDWARE SCHEDULE, DOOR HARDWARE GROUPS AND DOOR HARDWARE SPECIFICATIONS FOR COMPLETE INFORMATION. MIRROR THE DETAIL AS REQUIRED.
2. ROUGH IN SHOWN IN THE DETAIL ABOVE REPRESENTS THE MINIMUM REQUIREMENTS FOR ALL CONTROLLED SECURITY SYSTEM DEVICES AND CABLING UNLESS OTHERWISE NOTED. COORDINATE EXACT REQUIREMENTS WITH SELECTED DOOR MATERIALS, DOOR HARDWARE, AND CONTROLLED SECURITY DEVICES AND CABLING PRIOR TO INSTALLATION.
3. ALL CABLING IN WALLS AND WHERE EXPOSED ON VERTICAL SURFACES SHALL BE INSTALLED IN EMT CONDUIT OR SURFACE MOUNT RACEWAY. CABLING ROUTED HORIZONTALLY ABOVE THE ACCESSIBLE CEILING MAY BE INSTALLED FREE-AIR CABLING PROPERLY RATED FOR THE CEILING ENVIRONMENT.
4. THE ELECTRICAL OR SECURITY CONTRACTOR SHALL NOT MODIFY ANY FIRE RATED DOOR AND/OR DOOR FRAME. REFER TO THE ARCHITECTURAL DOOR SCHEDULE, DOOR HARDWARE SCHEDULE, AND DOOR HARDWARE SPECIFICATION FOR ADDITIONAL INFORMATION. MODIFICATION TO ANY FIRE RATED DOOR AND/OR FRAME WILL REQUIRE A RE-CERTIFICATION OF THE DOOR AND FRAME WITH THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ).
5. INSTALLING CONTRACTOR SHALL FURNISH AND INSTALL FIRESTOP MATERIALS FOR ALL CONTROLLED SECURITY DEVICES ROUGH-INS PER PROJECT REQUIREMENTS. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
6. REFER TO THE ACCESS CONTROL WIRING DIAGRAM ON 1/T0.01 FOR CABLING REQUIREMENTS.
7. INSTALLATION SHALL INCLUDE ALL POWER REQUIRED FOR SYSTEM OPERATION INCLUDING +120VAC.

KEYNOTES:
1. PROVIDE JUNCTION BOXES IN THE DOOR FRAME WHERE SHOWN ON THIS DETAIL. ROUGH-IN SHALL BE PROVIDED WHETHER THE CURRENT CONTROLLED SECURITY DEVICES UTILIZES THEM OR NOT. ALL CONDUITS SHALL BE EMT CONDUIT UNLESS OTHERWISE NOTED. FLEXIBLE CONDUIT OF ANY TYPE WILL NOT BE ACCEPTED. COORDINATE INSTALLATION WITH ON-SITE DOOR FRAME INSTALLATION CONTRACTOR.
2. ALL DOOR POSITION SWITCHES ARE REQUIRED TO BE RECESSED UNLESS OTHERWISE NOTED. ELECTRIC HINGE MONITORS ARE NOT AN ACCEPTABLE REPLACEMENT FOR THE RECESSED DOOR POSITION SWITCH.
3. DOUBLE GANG BACKBOX WITH SINGLE GANG PLASTER RING. REFER TO FLOOR PLAN(S) FOR ACTUAL CREDENTIAL READER TYPE AND ROUGH-IN LOCATIONS.
4. CONDUIT SHALL ROUTE FROM THE CREDENTIAL READER TO THE SECURE SIDE OF THE DOOR. CONDUIT SHALL ROUTE A MINIMUM OF 12" FROM THE JUNCTION BOX. PROVIDE A NYLON BUSHING ON CONDUIT END.
5. MOUNT A MINIMUM 4" SQUARE 2-1/8" DEEP JUNCTION BOX WITH BLANK COVER PLATE ON THE SECURE SIDE OF THE DOOR ABOVE ACCESSIBLE CEILING. INSTALLING CONTRACTOR SHALL SIZE THE JUNCTION BOXES PER SYSTEM INSTALLATION REQUIREMENTS AND APPLICABLE CODES. MAINTAIN ACCESS TO THE JUNCTION BOX.
6. PROVIDE A HORIZONTALLY MOUNTED SINGLE GANG BACKBOX FOR THE REQUEST TO EXIT SENSOR.
7. CONDUIT SHALL ROUTE A MINIMUM OF 12" FROM THE JUNCTION BOX.PROVIDE A NYLON BUSHING ON CONDUIT END.
8. CONDUIT INSTALLED IN PERMANENT MULLIONS ONLY. REFER TO THE ARCHITECTURAL DOOR SCHEDULE AND DOOR HARDWARE GROUPS FOR LOCATIONS THAT REQUIRE THIS ROUGH-IN. PROVIDE A NYLON BUSHING ON THE CONDUIT END.

CONTROLLED SECURITY SCHEME DOOR ROUGH-IN DETAIL

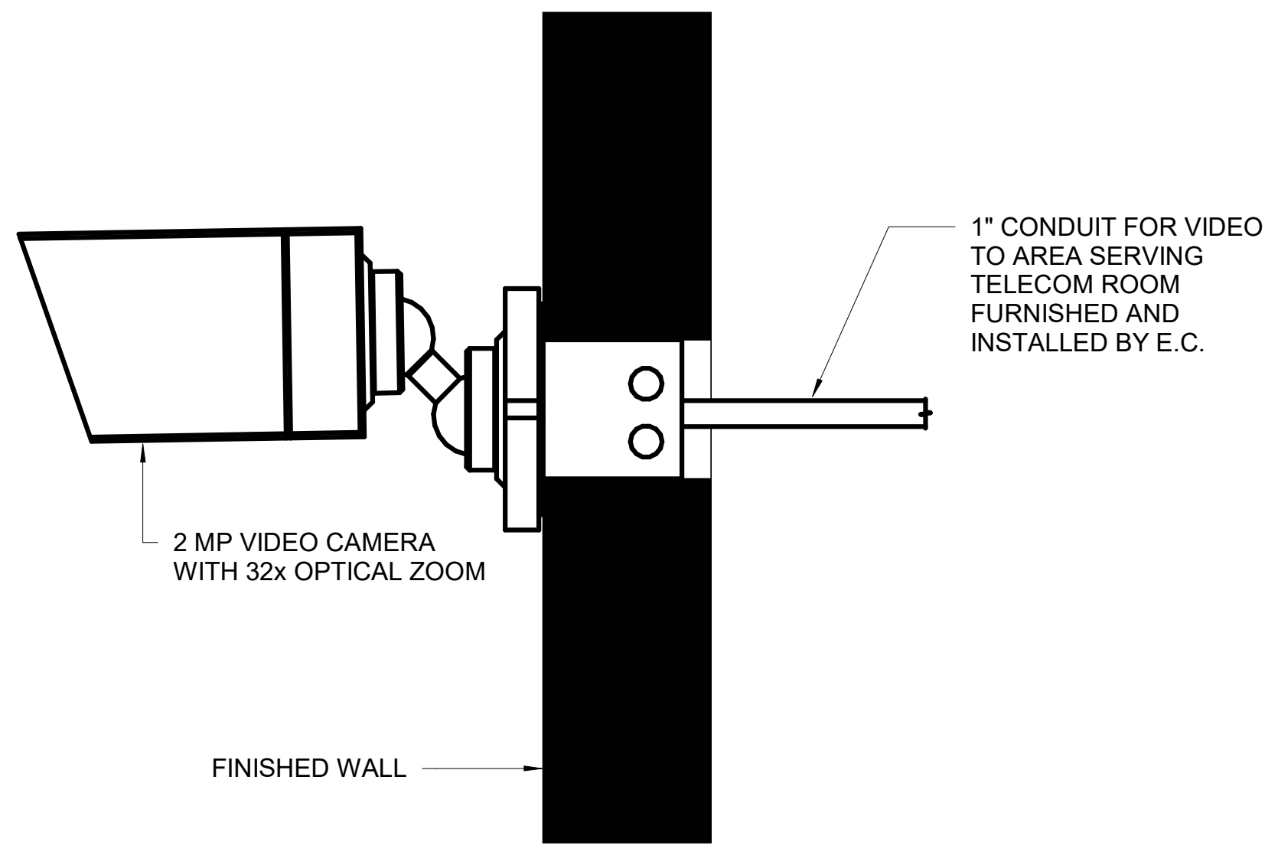
SCALE: NOT TO SCALE **01**


1
2
3
4
5
CEILING DECK
END BUSHING
TWO HOLE CONDUIT STRAP
1" CONDUIT TO CABLE TRAY OR STUBBED 12" ABOVE CEILING
JUNCTION BOX 4-11/16" X 2-1/8" DEEP WITH SINGLE-GANG RING
ONE PORT FACEPLATE
1/4" THREADED ROD (MIN)
SUPPORT BRACKET
HARDLID OR REMOVABLE CEILING TILE
WIRELESS ACCESS POINT

1. J-HOOK ABOVE ACCESSIBLE CEILING.
2. DATA CABLE ABOVE ACCESSIBLE CEILING.
3. 20' SERVICE LOOP ABOVE ACCESSIBLE CEILING NEATLY COILED AND SECURED TO J-HOOK.
4. SURFACE MOUNT DATA OUTLET ABOVE ACCESSIBLE CEILING SECURED TO BUILDING STRUCTURE.
5. DATA INSERT.

WIFI CEILING MOUNT

SCALE: NOT TO SCALE **02**


1" CONDUIT FOR VIDEO TO AREA SERVING TELECOM ROOM FURNISHED AND INSTALLED BY E.C.
2 MP VIDEO CAMERA WITH 32x OPTICAL ZOOM
FINISHED WALL

NOTES:
1. SECURE WALL MOUNT BASE PLATE TO 4X BLOCKING W/ MINIMUM (3) #14 SCREWS. . DO NOT ANCHOR TO FACE BRICK.
2. SEAL WALL MOUNT BASE PLATE TO FACE BRICK TO PREVENT WATER INFILTRATION.
3. REFER TO MANUFACTURER SPECIFICATIONS FOR INSTALLATION INFORMATION.
4. REFER TO SECURITY CAMERA REQUIREMENTS SCHEDULE SHEET T0.01 FOR CAMERA TYPE 4 AND ADDITIONAL DETAILS.

EXTERIOR CAMERA - WALL MOUNT

SCALE: N.T.S. **03**

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PBK
FOLSOM, CA
916-355-9922
www.pbk.com

BRIDGE CLASSROOM PORTABLES - MULTIPLE SITES - MILLSWOOD MIDDLE SCHOOL

LODI UNIFIED SCHOOL DISTRICT
MILLSWOOD MIDDLE SCHOOL
233 N MILLS AVENUE
LODI, CA 95242

DSA SUBMITTAL
DSA APPL. NO. : 02-123356 DSA FILE NO. : 39-50

LODI USD

DISCIPLINE

STEVEN C. MUSSER
NO. E-19817
Exp. 3-31-26

CLIENT LODI USD	
DATE 05/15/2025	PROJECT NUMBER 250048

DRAWING HISTORY

No.	Description	Date

CHECKED BY: Checker
DRAWN BY: Author

TECHNOLOGY DETAILS

T601

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5/7/2025 4:33:13 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

Sheet Number	Sheet Name
Cover	
A0.0.1	PROJECT OPTIONS SCHEDULE
A0.1	TYPICAL KEY PLAN AND SCHEDULES, GEN NOTES,
A0.2	SIGNAGE AND SYMBOLS
~~A0.3~~	~~DSA-103 T&I CONCRETE FLOORS~~
~~A0.4~~	~~DSA-103 T&I PLYWOOD FLOORS~~
A0.5	CALGREEN SPEC'S
A0.6	CAL GREEN CHECKLIST
A0.7	CAL GREEN CHECKLIST
A0.8	CAL GREEN CHECKLIST
Architectural	
A0.0	COVER SHEET
A1.0	24x40 FLOOR PLAN
~~A1.1~~	~~36x40 FLOOR PLAN~~
~~A1.2~~	~~48x40 thru 120x40 FLOOR PLAN~~
~~A2.1(A)~~	~~ARCHITECTURAL DETAILS (WOOD FRAMING SHTG FINISH)~~
A2.1(B)	ARCHITECTURAL WUI DETAILS (WOOD FRAMING SHTG FINISH)
~~A2.2~~	~~ARCHITECTURAL DETAILS (WOOD FRAMING PLASTER FINISH)~~
~~A2.5(A)~~	~~ARCHITECTURAL DETAILS (1-HR WOOD FRAMING SHTG FINISH)~~
~~A2.5(B)~~	~~ARCHITECTURAL WUI DETAILS (1-HR WOOD FRAMING SHTG FINISH)~~
~~A2.6~~	~~ARCHITECTURAL DETAILS (1-HR WOOD FRAMING PLASTER FINISH)~~
A2.7	WUI NOTES AND CRITERIA
A2.9	ARCHITECTURAL DETAILS (FLOOR)
~~A2.9.1~~	~~DETERIORATION PROT.NON-WOOD FINISH SIDING CONC FLOOR - WD STUDS~~
~~A2.9.2~~	~~DETORIORATION PRO. STUCCO EXTERIOR RINISH CONC FLOOR WD STUDS~~
~~A2.9.3~~	~~DETERIORATION PRO. NON-WOOD FINISH SIDING WOOD FLOOR - WD STUDS~~
~~A2.9.4~~	~~DETERIORATION PRO. STUCCO EXTERIOR FINISH WOOD FLR- WD STUDS~~
~~A2.9.9~~	~~DETERIORATION T-111 EXTERIOR FINISH WOOD FLR WOOD STUDS~~
~~A3.0~~	~~ADDITIONAL FIRE RATING DETAILS AND NOTES~~
A3.0.1	FIRE SEPARATION & PENETRATION DETAILS
~~A3.1~~	~~SINGLE OCC. BATHROOM~~
~~A3.1.1~~	~~SINGLE OCC. BATHROOM AGE GROUP~~
~~A3.1.2~~	~~SINGLE OCC. BATHROOM COMBINED AGE GROUP~~
A3.2	RCP
A3.2.1	CEILING NOTES
A3.3	CEILING DETAILS (T-GRID)
~~A3.4~~	~~CEILING DETAILS (GYP BOARD)~~
A4.0.1	ROOF PLAN MONO SLOPE (STANDING SEAM)
~~A4.0.2~~	~~ROOF PLAN DUAL SLOPE (STANDING SEAM)~~
A4.1	ROOF DETAILS (STANDING SEAM)
~~A4.2.1~~	~~ROOF PLAN MONO SLOPE (EPDM)~~
~~A4.2.2~~	~~ROOF PLAN DUAL SLOPE (EPDM)~~
~~A4.3~~	~~ROOF DETAILS (EPDM)~~
~~A4.4.1~~	~~ROOF PLAN w/ PARAPET MONO SLOPE (EPDM)~~
~~A4.5~~	~~ARCHITECTURAL DETAILS (PARAPET)~~
A5.0	SIDEWALL ELEVATION
A5.1	ENDWALL ELEVATIONS
A5.2	INTERIOR ELEVATIONS
A6.0	SECTION - STANDING SEAM (MONO)
~~A6.0.1~~	~~SECTION - STANDING SEAM (DUAL)~~
~~A6.1~~	~~SECTION - EPDM (DUAL)~~
A6.2	SECTION
~~A6.3~~	~~SECTION - EPDM (MONO)~~
~~A7.0~~	~~ADDITIONAL OPTION DETAILS~~
~~A7.1~~	~~ADDITIONAL OPTION DETAILS~~
A7.2	ADDITIONAL OPTION DETAILS
MEP	
E0.1	ELECTRICAL GENERAL NOTES
E1.0	ELECTRICAL PLAN 24x40
E1.1	ELECTRICAL SCHEDULES 24x40
~~E1.2~~	~~ELECTRICAL PLAN 36x40~~
~~E1.3~~	~~ELECTRICAL SCHEDULE 36x40~~
~~E1.4~~	~~ELECTRICAL PLAN 48x40 thru 120x40~~
~~E1.5~~	~~ELECTRICAL SCHEDULE 48x40~~
M0.1	MISCELLANEOUS NOTES & DETAILS
M0.2	MISCELLANEOUS NOTES & DETAILS
M2.9	24'x40' T24 CZ 14 (WALL AC)
M2.10	24'x40' T24 CZ 14 (WALL AC)
M2.11	24'x40' T24 CZ 15 (ROOF AC)
M2.12	24'x40' T24 CZ 15 (ROOF AC)
M2.13	24'x40' T24 CZ 16 (WALL AC)
M2.14	24'x40' T24 CZ 16 (WALL AC)
M3.3	ENVELOPE AND NOTES
M5.1	MECHANICAL CEILING PLAN 24x40
~~M5.2~~	~~MECHANICAL ROOF MOUNT 24x40~~
~~M6.1~~	~~MECHANICAL CEILING PLAN 36x40~~
~~M6.2~~	~~MECHANICAL ROOF MOUNT 36x40~~
~~M7.1~~	~~MECHANICAL CEILING PLAN 48x40 thru 120x40~~
~~M7.2~~	~~MECHANICAL ROOF MOUNT 48x40 thru 120x40~~
~~P1.0~~	~~TYPICAL PLUMBING DETAILS~~
Foundation	
F1.10	WOOD FOUNDATION NOTES SCHED FOR BLDG W/ 50+15
F1.11	WOOD FOUNDATION PLAN 24x40 BLDG W/ 50+15
~~F1.12~~	~~WOOD FOUNDATION 36x40 BLDG W/ 50+15~~
~~F1.13~~	~~WOOD FOUNDATION PLAN 48x40 BLDG W/ 50+15~~
~~F1.14~~	~~MODLINE "B" W/ EXTERIOR WALLS BACK-TO-BACK 100 PSF~~
~~F1.20~~	~~WOOD FOUNDATION NOTES SCHED FOR BLDG W/ 100PSF~~
~~F1.21~~	~~WOOD FOUNDATION PLAN 24x40 BLDG W/ 100 PSF~~
~~F1.22~~	~~WOOD FOUDATION PLAN 36x40 BLDG W/ 100 PSF~~
~~F1.23~~	~~WOOD FOUNDATION PLAN 48x40 BLDG W/ 100 PSF~~
~~F1.24~~	~~MODLINE "B" W/ EXTERIOR WALLS BACK-TO-BACK 100 PSF~~
~~F1.30~~	~~WOOD FOUNDATION NOTES SCHED FOR BLDG W/ 150 PSF~~
~~F1.31~~	~~WOOD FOUNDATION PLAN 24X40 BLDG W/ 150 PSF~~
~~F1.32~~	~~WOOD FOUNDATION PLAN 36x40 BLDG W/ 150 PSF~~
~~F1.33~~	~~WOOD FOUNDATION PLAN 48x40 BLDG W/ 150 PSF~~
~~F1.34~~	~~MODLINE "B" W/ EXTERIOR WALL BACK-TO-BACK 150 PSF~~
F1.40	WOOD FOUNDATION DETAILS
~~F2.10~~	~~CONCRETE FOUNDATION PLAN~~
~~F2.20~~	~~CONCRETE FOUNDATION DETAILS~~
~~F2.22~~	~~CONCRETE FOUNDATION DETAILS~~
~~F2.23~~	~~CONCRETE FOUNDATION DETAILS~~
Structural	
S0.1	STRUCTURAL GEN NOTES
~~S1.0.1~~	~~WD SHTH'G FLR FRM'G PLAN (50+15 PSF)~~
~~S1.1.1~~	~~CONC FLR FRM'G PLAN (50+15 PSF)~~
~~S1.1.3~~	~~CONC FLR FRM'G PLAN (150 PSF)~~
S1.2	STRUCTURAL DETAILS (FLOOR)
~~S3.0.1~~	~~MONO SLOPE ROOF FRM'G PLAN~~
~~S3.0.2~~	~~DUAL SLOPE ROOF FRM'G PLAN~~
S3.0.3	MONO SLOPE ROOF FRM'G PLAN CROSS-STRAP OPT.
~~S3.0.4~~	~~DUAL SLOPE ROOF FRM'G PLAN CROSS-STRAP OPT.~~
S3.1	STRUCTURAL DETAILS (ROOF)
~~S3.2~~	~~ROOF DETAILS (SOFFIT/PARAPET)~~
S3.3	ROOF PERIMETER TRUSS
S4.1	WD WALL FRAMING ELEVATIONS
S4.2	WALL DETAILS (WOOD FRAMING)
S4.4	TYP FRAMING
S4.5	FRAMING SCHEDULES
S5.0	LONG. SECTION - (MONO)
~~S5.1~~	~~LONG SECTION - (DUAL)~~
~~S6.0~~	~~AWNING FRAMING~~

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Sheet Number	Sheet Name
SR0	MODULE PLAN AND NOTES
SR1	RAMP LANDING
SR2	LANDING FRAME
SR3	FOUNDATION PLAN
SR4	RAMP ELEVATION
~~SR5~~	~~RAMP DETAILS~~
SR6	RAMP DETAILS
SR7	STAIR CONN

Grand total: 61

(125) 24x40 SERIAL NUMBERS#:

~~C-23-2962 A/B C-23-2966 A/B C-23-2970 A/B C-23-2974 A/B C-23-2978 A/B C-23-2982 A/B~~
~~C-23-2963 A/B C-23-2967 A/B C-23-2971 A/B C-23-2975 A/B C-23-2979 A/B C-23-2983 A/B~~
~~C-23-2964 A/B C-23-2968 A/B C-23-2972 A/B C-23-2976 A/B C-23-2980 A/B~~
~~C-23-2965 A/B C-23-2969 A/B C-23-2973 A/B C-23-2977 A/B C-23-2981 A/B~~

C-23-2984 A/B ~~C-23-2988 A/B C-23-2992 A/B C-23-2996 A/B C-23-3000 A/B C-23-3004 A/B C-23-3008 A/B~~
~~C-23-2985 A/B C-23-2989 A/B C-23-2993 A/B C-23-2997 A/B C-23-3001 A/B C-23-3005 A/B C-23-3009 A/B~~
~~C-23-2986 A/B C-23-2990 A/B C-23-2994 A/B C-23-2998 A/B C-23-3002 A/B C-23-3006 A/B~~
~~C-23-2987 A/B C-23-2991 A/B C-23-2995 A/B C-23-2999 A/B C-23-3003 A/B C-23-3007 A/B~~

~~C-23-3010 A/B C-23-3022 A/B C-23-3034 A/B C-23-3046 A/B C-23-3058 A/B C-23-3070 A/B C-23-3082 A/B~~
~~C-23-3011 A/B C-23-3023 A/B C-23-3035 A/B C-23-3047 A/B C-23-3059 A/B C-23-3071 A/B C-23-3083 A/B~~
~~C-23-3012 A/B C-23-3024 A/B C-23-3036 A/B C-23-3048 A/B C-23-3060 A/B C-23-3072 A/B C-23-3084 A/B~~
~~C-23-3013 A/B C-23-3025 A/B C-23-3037 A/B C-23-3049 A/B C-23-3061 A/B C-23-3073 A/B C-23-3085 A/B~~
~~C-23-3014 A/B C-23-3026 A/B C-23-3038 A/B C-23-3050 A/B C-23-3062 A/B NOT USED C-23-3074 A/B C-23-3086 A/B~~
~~C-23-3015 A/B C-23-3027 A/B C-23-3039 A/B C-23-3051 A/B C-23-3063 A/B C-23-3075 A/B C-23-3087 A/B~~
~~C-23-3016 A/B C-23-3028 A/B C-23-3040 A/B C-23-3052 A/B C-23-3064 A/B C-23-3076 A/B~~
~~C-23-3017 A/B C-23-3029 A/B C-23-3041 A/B C-23-3053 A/B C-23-3065 A/B C-23-3077 A/B~~
~~C-23-3018 A/B C-23-3030 A/B C-23-3042 A/B C-23-3054 A/B C-23-3066 A/B C-23-3078 A/B~~
~~C-23-3019 A/B C-23-3031 A/B C-23-3043 A/B C-23-3055 A/B C-23-3067 A/B C-23-3079 A/B~~
~~C-23-3020 A/B C-23-3032 A/B C-23-3044 A/B C-23-3056 A/B C-23-3068 A/B C-23-3080 A/B~~
~~C-23-3021 A/B C-23-3033 A/B C-23-3045 A/B C-23-3057 A/B C-23-3069 A/B C-23-3081 A/B~~

SEISMIC DESIGN -SITE SPECIFIC PARAMETERS

Select One

☒ Design based on Site Class $D_{default}$
No geotechnical investigation required
Ss = 0.73 Fa = 1.2

☐ Design based on site class determined per chapter 20 of ASCE 7-16
Geotechnical investigation provided
Site Class: ☐ C ☐ D ☐ E
Ss = ____ Fa = ____ per ASCE 7-16 Suppl 3, Table 11.4-1

☐ Design based on site specific ground motion hazard analysis per chapter 21 of ASCE 7-16
Short-period design spectral response parameter, S_{DS}, shall be as specified in geotechnical investigation
CGS approval required
Not eligible for OTC review
Site Class: ☐ C ☐ D ☐ E

S_{DS} = 2/3 Fa Ss = 0.73
Site Class C or D: 0.7 x S_{DS}* = 0.7 x 0.7 = 0.49 ≤ 1.307
Site Class E: S_{DS} = ____ ≤ 1.307
C_S = 0.373 used in design
Seismic Design Category: ☒ D ☐ E
* Site specific S_{DS} value before applying reduction allowed by ASCE 7 section 12.8.1.3

Acceptance tests be completed on newly installed or replacement of lighting controls, mechanical systems, fenestration, and process equipment before project completion per the California Energy Code Section 10-103. Acceptance tests must be performed by a certified Acceptance Test Technician (ATT). The Acceptance Testing procedures must be repeated, and deficiencies corrected until the installation of the specified systems conform and pass the required acceptance criteria. Completed NRCA forms shall be submitted to the project inspector and the district.

A DSA CERTIFIED INSPECTOR EMPLOYED BY THE DISTRICT (OWNER), AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-333 AND 4-342, PART 1, TITLE 24, CCR. CLASS R.B.I.P. FOR IN-PLANT INSPECTIONS.

SITE SPECIFIC:
COMPLY WITH CFC CHAPTERS 5 & 7, CBC CHAPTERS 3,5,7,11B & 14

NOTE: " THIS PC IS NOT APPROVED FOR CHAPTER 7A WILDLAND URBAN AREAS". THIS REVIEW IS PART OF THE SITE SPECIFIC PROJECT. THE APPROVAL OF THE PC DOES NOT INCLUDE THE SITE.

LODI USD
(13) 24X40

BECKMAN ES (LH)
S/N C-23-2984 A/B

CHRISTA
McAULIFFE ES (RH)
S/N C-23-2985 A/B

DELTA SIERRA ES
(LH)
S/N C-23-2986 A/B

ERMA B. REESE ES
(LH)
S/N C-23-2987 A/B

HERITAGE ES (RH)
S/N C-23-2988 A/B

LAKEWOOD ES (LH)
S/N C-23-2989 A/B

LAWRENCE ES (LH)
S/N C-23-2990 A/B

LODI USD
(13) 24X40

LEROY NICHOLS ES
(RH)
S/N C-23-2991 A/B

LIVE OAK ES (RH)
S/N C-23-2992 A/B

LOIS E
BORCHARDT ES
(LH)
S/N C-23-2993 A/B

MILLSWOOD MS
(RH)
S/N C-23-2994 A/B

VINEWOOD ES (RH)
S/N C-23-2995 A/B

WOODBRIDGE ES
(LH)
S/N C-23-2996 A/B

STOCKPILE# 347
(125) 24X40 CLASSROOMS

Class Leasing

HIGH SEISMIC
DESIGN CRITERIA

FILE #: PC-128
2022 CBC

PC # 04-12 3059
24' x 40' EXPANDABLE TO 120' x 40'

@	AT
AB	ANCHOR BOLT
ABC	AGGREGATE BASE COURSE
ABV	ABOVE
AD	AREA DRAIN
ADD	ADDENDUM
ADH	ADHESIVE
ADJ	ADJACENT, ADJUSTABLE
ADOH	ALTERNATE DIRECTION OF HOOK
AFF	ABOVE FINISHED FLOOR
AGG	AGGREGATE
ALT	ALTERNATE
ALUM	ALUMINUM
ANCH	ANCHOR (AGE)
ANOD	ANODIZED
APPRX	APPROXIMATE
ARCH	ARCHITECT (URAL)
ASPH	ASPHALT
AUTO	AUTOMATIC
B	BOTTOM
BB	BOND BEAM
BC	BOTTOM CHORD
BD	BOARD
BEG	BEGIN (ING)
BEL	BELOW
BIT	BITUMINOUS
BJT	BED JOINT
BLDG	BUILDING
BLK	BLOCK ('G, ING)
BLW	BELOW
BM	BEAM
BMK	BENCH MARK
BO*	BOTTOM OF ________
BPL	BEARING PLATE
BRD	BOARD
BRDG	BRIDGING
BRG	BEARING
BRK	BRICK
BRZ	BRONZE
BS	BOTH SIDES
BTWN	BETWEEN
BVL	BEVELED
BW	BOTH WAYS
C	CHANNEL, COMPRESSION
CAD	CADMIUM
CAM	CAMBER
C/C	CENTER TO CENTER
CEM	CEMENT
CF	CUBIC FOOT
CHAM	CHAMFER
CI	CAST IRON
CIP	CAST-IN-PLACE
CIR	CIRCLE
CIRC	CIRCUMFERENCE
CJ	CONSTRUCTION JOINT
CJT	CONTROL JOINT
CLG	CEILING
CLK	CAULK, ('G, ING)
CLKG	CAULKING
CLR	CLEAR
CLS	CLOSURE
CM	CENTIMETER
CMP	CORRUDATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CNTR	CENTER
COL	COLUMN
COG	CENTER OF GRAVITY
COMB	COMBINATION
COMP	COMPRESS (ED)(ION)(IBLE)
COMPO	COMPOSITE
CONN	CONNECT (ION)
CONC	CONCRETE
CONST	CONSTRUCT (ION) (ED)
CONT	CONTINUE, CONTINUOUS
CONTR	CONTRACTOR
COR	CORRUGATED
CP	COMPLETE PENETRATION
CPG	COPING
CPR	COPPER
CRS	COURSE (S)
CS	COUNTERSINK
CTSK	COUNTERSUNK SCREW
CU	CUBIC
CX	CONNECTION
CY	CUBIC YARD
D	DEEP, DEPTH
DBL	DOUBLE
DEF	DEFLECTION
DEG	DEGREE
DEM0	DEMOLISH, DEMOLITION
DEP	DEPRESSED
DEPT	DEPARTMENT
DET	DETAIL
DIAG	DIAGONAL
DIA	DIAMETER
DIM	DIMENSION (ED)
DIV	DIVISION
DL	DEAD LOAD
DN	DOWN
DO	DITTO
DP	DAMPROOFING
DWL	DOWEL (ED)
DWG	DRAWING, (S)
E	EAST, MODULUS OF ELASTICITY
EA	EACH
EB	EXPANSION BOLT
EF	EACH FACE
EJT	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRIC (AL)
ENCL	ENCLOSURE, ENCLOSED
ENG	ENGINEER
EQ	EQUAL, EQUALIBRIUM
EQUIP	EQUIPMENT
ESTM	ESTIMATE (ED)
EV	EXPANSION BOLT
EW	EACH WAY
EXCA	EXCAVATE (D) (ION)
(E), EXIST	EXISTING
EXMP	EXPANDED METAL PLATE
EXP	EXPOSED
EXPN	EXPANSION
EXS	EXTRA STRONG
EXT	EXTERIOR, EXTERNAL
FAS	FASTENER
FBO	FURNISHED BY OTHERS
FD	FLOOR DRAIN
FHMS	FLATHEAD MACHINE SCREW
FHS	FIRE HOSE STATION
FHWS	FLATHEAD WOOD SCREW
FIN	FINISH (ED)
FIXT	FIXTURE
FJT	FLUSH JOINT
FLR	FLOOR
FLUR	FLUORESCENT
FLEX	FLEXIBLE
FND	FOUNDATION
FO*	FACE OF ________
FP	FIREPROOF (ED)
FP'G	FIREPROOFING
FR	FRAME (D)(ING)
FRC	FIRE RESISTANT COATING
FRGD	FORGED
FRMG	FRAMING
FT	FOOT, FEET
FTG	FOOTING
FURR	FURRED, FURRING
FV	FIELD VERIFY
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GI	GALVANIZED IRON
GKT	GASKET
GL	GLASS, GLAZING
GLM	GLULAM
GP	GALVANIZED PIPE
GPM	GALLONS PER MINUTE
GPPL	GYPSUM PLASTER
GRVL	GRAVEL, GRANULAR
GRD	GRADE, GRADING
GRN	GRANITE
GSS	GALVANIZED SHEET STEEL
GT	GROUT
GVL	GRAVEL
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
H	HIGH
HBD	HARDBOARD
HC	HOLLOW CORE
HD	HEAVY DUTY
HDNR	HARDENER
HDR	HEADER
HDWR	HARDWARE
HDWD	HARDWOOD
HES	HIGH EARLY STRENGTH CEMENT
HH	HANDHOLE
HJT	HEADJOINT
HK	HOOK
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HPT	HIGH POINT
HR	HOUR
HSA	HEADED STUD ANCHOR
HSB	HIGH STRENGHT BOLT
HT	HEIGHT
HWD	HARDWOOD
ID	INSIDE DIAMETER
IN	INCHE (ES)
INCL	INCLUDE (D), INCLUDING
INSUL	INSULATE, INSULATION
INT	INTERIOR
INTM	INTERMEDIATE
INV	INVERT
JST	JOIST
JT	JOINT
K	KIP (S)
KO	KNOCKOUT
KSI	KIPS PER SQUARE INCH
L	LONG, LENGTH
LAM	LAMINATE (D)
LB	POUND, LAG BOLT
LBL	LABEL
LC	LIGHT CONTROL
LD	DEVELOPMENT LENGHT
LF	LINEAR FOOT
LH	LEFT HAND
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LPT	LOW POINT
LT	LIGHT
LTL	LINTEL
LVL	LEVEL (ING)
LW	LIGHT WEIGHT
LWC	LIGHT WEIGHT CONCRETE
LWF	LIGHT WEIGHT FILL
M	METER (S) MOMENT
MATL	MATERIAL
MAS	MASONRY
MAX	MAXIMUM
MB	MACHINE BOLT
MBR	MEMBER
MCONN	MOMENT CONNECTION
MECH	MECHANICAL
MED	MEDIUM
MET	METAL
MEMB	MEMBER
MEP	MECHANICAL, ELECTRICAL, & PLUMBING
MFD	METAL FLOOR DECKING
MFR	MANUFACTURE (R) (ED)
MID	MID, MIDDLE
MIN	MINIMUM, MINUTE
MISC	MISCELLANEOUS
MM	MILLIMETER (S)
MMB	MEMBRANE
MO	MASONRY OPENING
MOD	MODEL
MODU	MODULAR
MOV	MOVABLE
MTL	MATERIAL
ML	MODULE (MOD)LINE
N	NORTH, NEW
NAT	NATURAL
NL	NAILABLE
NMT	NONMETALLIC
NO	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OA	OVERALL
o.c.	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OHMS	OVALHEAD MACHINE SCREW
OHWS	OVALHEAD WOOD SCREW
OJ	OPEN-WEB JOINT (S)
OPH	OPPOSITE HAND
OPNG	OPENING
OPP	OPPOSITE
OFOI	OWNER FURNISHED OWNER INSTALLED
PAR	PARALLEL
PBD	PARTICLE BOARD
PCC	PRECAST CONCRETE
PCF	POUNDS PER CUBIC FOOT
PCS	PIECES
PERF	PERFORATE (D)
PERI	PERIMETER
PFB	PREFABRICATE (D)
PFS	POUNDS PER SQUARE FOOT
PL	PLATE
PLBG	PLUMBING
PLF	POUNDS PER LINEAR FOOT
P.L.	PARALLAM
PLWD	PLYWOOD
PMT	PAVEMENT
PNL	PANEL
POSTEN	POST TENSION (D)
PRETEN	PRETENSIONED
POLY	POLYETHYLENE
PR	PAIR
PRJ	PROJECT
PSC	PRESTRESSED CONCRETE
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
P.T.	PRESSURE TREATED
PTC	POST-TENSIONED CONCRETE
PTD	PAINTED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
QTY	QUANTITY
R	RADIUS, RISER
RAD	RADIUS
RD	ROOF DRAIN
RECT	RETANGULAR
REF	REFERENCE, REFER TO
REINF	REFORCE (D) (ING)
REM	REMOVE
REQD	REQUIRED
REQS	REQUIREMENTS
RETG	RETAINING
REV	REVISION, REVISED
RFG	ROOFING
RFH	ROOF HATCH
RFL	REFLECT (ED)(IVE)(OR)
RM	ROOM
RO	ROUGH OPENING
RT	FIRE RETARDANT TREATED
RT	RUBBER TILE
RTG	RATING
RVS	REVERSE SIDE
RVT	RIVET
S	SOUTH
SC	SOLID CORE
SCHED	SCHEDULE
SDL	SUPERIMPOSED DEAD LOAD
SDS	SELF DRILL SCREW
SE	STRUCTURAL ENGINEER
SDST	SELF-DRILL, SELF-TAP'G SCREW
SECT	SECTION
SF	SQUARE FOOT, SQUARE FEET
SHO	SHORE, SHORING
SHT	SHEET
SHTH	SHEATHING
SI	SQUARE INCH
SIM	SIMILAR
SL	SLOPE
SLNT	SEALANT
SMS	SHEET METAL SCREW
SOG	SLAB ON GRADE
SPA	SPACE, (ING)
SPC	SPACER
SPEC	SPECIFICATION (S)
SQ	SQUARE
SSTL	STAINLESS STEEL
STG	STAGGERED
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE
STR	STRUCTURAL
SYM	SYMETRICAL, SYMETRY
SYS	SYSTEM
T	TOP, TORSION, TREAD
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TC	TOP CHORD
TEN	TESION, TENSILE
TEMP	TEMPORARY, TEMPERATURE
THD	THREAD (ED)
THK	THICK (NESS)
TMPD	TEMPERED
TO*	TOP OF ________
TL	TOTAL LOAD
TR	TREAD
TS	TUBE STEEL
TYP	TYPICAL
UC	UNDERCUT
UGD	UNDERGROUND
UL	UNDEREWRITERS LABORATORY
UND	UNDER
UNF	UNFINISHED
UNO	UNLESS NOTED OTHERWISE
V	SHEAR FORCE, VELOCITY
VB	VAPOR BARRIER
VER	VERIFY
VERT	VERTICAL
VG	VERTICAL GRAIN
VIF	VERIFY IN FIELD
VJ	V-JOINTED
VNR	VENEER
V.T.R.	VENT THROUGH ROOF
W	WEST, WIDTH, WIDE, WIDE FLANGE
W/	WITH
W/O	WITHOUT
WD	WOOD
WI	WROUGHT IRON
WM	WIRE MESH
WP	WATERPROFFING
WPR	WATER REPELLENT
WPT	WORKING POINT
WS	WATER STOP
WT	WEIGHT
WTW	WALL TO WALL (W/W)
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

CONSTRUCTION OF CLASSROOM BUILDING (RELOCATABLE)

SCOPE OF WORK

BUILDING DESIGN

NUMBER OF STORIES: 1
OCCUPANCY: "E" ~~and "B"~~ (Design with Floor Live Load **150 psf** only must be used for occupancy B)
CONSTRUCTION TYPE: VB
FLOOR LIVE LOAD: ☒ 50+15 PSF PARTITION
☐ 100 PSF ☐ 150 PSF
FLOOR DEAD LOAD: ☒ WOOD FLOOR - 11 PSF
☐ CONC. FLOOR - 33 PSF

ROOF LIVE LOAD: 20 PSF
ROOF SNOW LOAD: 20 PSF
ROOF DEAD LOAD: 18.5 PSF (INCLUDES SPRINKLERS & 3PSF SOLAR PANEL)
RAMPLIVE LOAD: 100PSF
FLOOD DESIGN: This PC has not been designed to accommodate flood loads. If located in a zone other than X, a letter stamped and signed from a soils engineer is needed to validate the allowable soil values assumed in this PC are still applicable. (OWNER SUPPLIED)

FLOOD DESIGN DATA: PROJECT NOT LOCATED IN A FLOOD ZONE

BUILDING AREA	NO OVERHANG	WITH OVERHANG (5' @ EA. END)
ALLOWABLE AREA	☐ 24x40 960 sf	☒ 24x40 1200 sf
=9,500 sf	☐ 36x40 1440 sf	☐ 36x40 1800 sf
ACTUAL AREA	☐ 48x40 1920 sf	☐ 48x40 2400 sf
=4,800 SF	☐ 60x40 2400 sf	☐ 60x40 3000 sf
	☐ 72x40 2880 sf	☐ 72x40 3600 sf
	☐ 84x40 3360 sf	☐ 84x40 4200 sf*
	☐ 96x40 3840 sf	☐ 96x40 4800 sf*
	☐ 108x40 4320 sf*	☐ 108x40 5400 sf*
	☐ 120x40 4800 sf*	☐ 120x40 6000 sf*

*Geo-hazard site specific report must be provided and approved by CGS for building area more than 4000 sf

ALLOWABLE SOIL PRESSURE: ☒ WOOD FTG -1000PSF ☐ CONCRETE FTG 1500PSF

FOUNDATION: ☒ WOOD (conditional) ☐ CONCRETE ABOVE GRADE
☐ CONCRETE BELOW GRADE <2160sf (conditional)
☐ CONCRETE BELOW GRADE (AMM)
SEE GENERAL NOTE 14 BELOW
PC IS DESIGNED BASED ON A PINNED CONNECTION TO THE FOUNDATION.

CEC CLIMATE ZONE: 1-16
☐ CZ 1-2 RIGID R-10 / 2" ☐ CZ 3-15 RIGID R-5 / 1" ☐ CZ 16 RIGID R-15 / 4"

WIND DESIGN

ULTIMATE DESIGN SPEED: Vult = 110 mph, 3 sec GUST, Kzt = 1.0
RISK CATEGORY: II
EXPOSURE: C

EARTHQUAKE DESIGN

RISK CATEGORY: II
SEISMIC IMPORTANCE FACTOR: I = 1
MAPPED SPECTRAL RESPONSE: ☒ Ss = 2.33, ☐ Ss =2.8**
S1 = 1.99
DRIFT LIMIT: 0.02 x H_{story} x 12 = 2.82 PER TABLE 12.12-1
SITE CLASS: D-DEFAULT*
SEISMIC DESIGN CATEGORY: E
Note: For SDC (E) site specific motion analysis is not required if not in a seismic hazard zone and/or meets other exemptions in DSA IR A-4
SHORT/LONG PERIOD SITE COEFFICIENT: ☒ Fa = 1.2, ☐ Fa=1.0**, Fv = 1.7
DEISIGN SPECTRAL RESPONSE: Sds = 1.86
Sd1 = 2.26
SEISMIC RESPONSE COEFFICIENT, Cs: 0.373 (using reduced Sds as allowed by ASCE 12.8.1.3)

BASIC SEISMIC FORCE-RESISTING SYS: OMF, R = 3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE
BASE SHEAR PER 24X40 MODULE: WOOD FLOOR, LL ≤ 100, BASE SHEAR= 26.44 kip
WOOD FLOOR, LL = 150, BASE SHEAR= 39.87 kip
CONC. FLOOR, LL ≤ 100, BASE SHEAR= 34.68 kip
CONC. FLOOR, LL = 150, BASE SHEAR= 48.1□□ kip

NOTE: FOR SDC (E) SITE SPECIFIC MOTION ANALYSIS IS NOT REQUIRED IF NOT IN A SEISMIC HAZARD ZONE AND/OR MEETS OTHER EXEMPTION IN DSA IR A-4
*Site Specific Ground Motion Analysis is not required because the value of SM1 is increased by 50% in accordance with excecption of item #1 of section 11.4.8 per supplement 3 of ASCE 7-16
**Geo-Hazard report with verification of site Class D must be provided and approved by CGS for site specific ARES with Ss>2.33

PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2023

2022 California Administrative Code (CAC), Part 1, Title 24 CCR

2022 California Building Code (CBC), Part 2, Title 24 CCR

2022 California Electrical Code (CEC), Part 3, Title 24 CCR

2022 California Mechanical Code (CMC), Part 4, Title 24 CCR

2022 California Plumbing Code (CPC), Part 5, Title 24 CCR

2022 California Energy Code, Part 6, Title 24 CCR

2022 California Fire Code (CFC), Part 9, Title 24 CCR

2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR

2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR

2022 California Referenced Standards Code, Part 12, Title 24 CCR

Title 19 CCR, Public Safety, State Fire Marshal Regulations

APPLICABLE STANDARDS

For a list of applicable standards, including California amendments to the NFPA Standards, refer to CBC Chapter 35 and CFC Chapter 80.

REQUIRED PV SYSTEM SIZE (kW)

CLIMATE ZONE	24'x40'	36'x40'	48'x40'	60'x40'	72'x40'	84'x40'	96'x40'	108'x40'	120'x40'
	960	1440	1920	2400	2880	3360	3840	4320	4800
1	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
2	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
3	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
4	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
5	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
6	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
7	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
8	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
9	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
10	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
11	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
12	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
13	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
14	NONE	NONE	NONE	NONE	4.7	5.5	6.3	7.0	7.8
15	NONE	NONE	4.7	5.9	7.1	8.3	9.4	10.6	11.8
16	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
ALL ZONES	NONE	NONE	4.7	5.9	7.1	8.3	9.4	10.6	11.8

BUILDING SIZE; APPROXIMATE CONDITIONED FLOOR AREA

NOTES:
FOR SITE-SPECIFIC PROJECT, INDICATE BUILDING SIZE AND PV SYSTEM SIZE.
IF PV REQUIRES, SEE NOTE 15 UNDER GENERAL NOTES.

2 *PV SIZING CHART*

CODE	ADOPTED YEAR	ITEM
NFPA 13	2022	AUTOMATIC SPRINKLER SYSTEMS
NFPA 72	2022	NATIONAL FIRE ALARM CODE w/ CALIFORNIA AMENDMENTS

NOTE: VISUAL DEVICES PER UL STANDARD 1971

GENERAL NOTES

1. ARCHITECT OF RECORD SHALL PROVIDE FIRE ALARM DRAWINGS WITH SITE ADAPTED PROJECTS. FIRE ALARM IS NOT PART OF THIS PC.
2. THIS PC HAS BEEN STRUCTURALLY DESIGNED TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM
3. ALLOWABLE AREA IS BASED ON 10'-0" SETBACK FROM ASSUMED LINE
4. PC DESIGNED AS A SINGLE-STORY MODULAR BUILDING
5. SEE STRUCTURAL FOR SOIL TYPES & BEARING STRENGTHS
6. WORK SHALL CONFORM TO TITLE 24 OF THE CALIFORNIA CODE OF REGULATIONS
7. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USAGE
8. EXTERIOR PROJECTIONS TO BE FIRE PROTECTED WHERE REQUIRED
9. SEE A0.5 AND ENGERY CALC M-SHEETS FOR REQUIRED ENVELOPE ASSEMBLIES & HVAC SYSTEMS
10. ALL SPECIFICATIONS BASED ON PERFORMANCE AND ABLE TO BE SUBSTITUTED BY "EQUAL" PRODUCTS
11. BUILDINGS TO COMPLY WITH WILDLAND URBAN INTERFACE GUIDELINES WHERE APPLICABLE
12. BUILDING AND SITE FEATURES MUST COMPLY WITH CALGREEN CODE FOR ITS SPECIFIC LOCATION WHEN ADAPTED FOR SITE-USE
13. SHOULD THIS P.C. CLASSROOM BE DESIGNED TO CONNECT TO ANOTHER P.C. CLASSROOM, INTERIOR SOUND TRANSMISSION IN THE WALL AND FLOOR-CEILING ASSEMBLY MUST MEET A MINIMUM STC OF 40 PER CALGREEN

*14. THE CONCRETE BELOW GRADE FOUNDATION (AMM) OPTION IN THIS PC USES A DSA-APPROVED ALTERNATE MEANS OF COMPLIANCE FOR FOUNDATION DURABILITY REQUIREMENTS OF CBC SECTIONS 1402.2 AND 1403.2 FOR PROVIDING A WEATHER-RESISTANT EXTERIOR WALL ENVELOPE AND CONTINUOUS WATER-RESISTIVE BARRIER ON WALLS DOWN TO THE FOUNDATION, AND CBC SECTION 2304.12.1.2 FOR PROTECTION AGAINST DECAY AND TERMITES.

15. PC DOESN'T INCLUDE THE DESIGN OF PV RACK SYSTEM ON ROOF- A SEPARATE DESIGN AND DSA APPLICATION WILL BE REQUIRED. PV ON ROOF WILL NOT BE ALLOWED FOR OTC APPLICATION

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
EX. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
COVER SHEET

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.0

SHEET OF

PRODUCTION RELEASE STEVE B. 2/5/25 LODI- STKP #347 (1) 24X40

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

ARCHITECTURAL

⑥ General Architectural Sheets 1/4" = 1'-0" — GENERAL ARCHITECTURAL SHEETS	Sheet
COVER SHEET	A0.0
PROJECT OPTIONS SCHEDULE	A0.0.1
TYPICAL KEY PLAN AND SCHEDULE, GEN NOTES	A0.1
SIGNAGE AND SYMBOLS	A0.2
DSA-103 T&I CONCRETE FLOORS	A0.3
DSA-103 T&I PLYWOOD FLOORS	A0.4
CALGREEN SPEC'S	A0.5
CALGREEN SHEET	A0.6
CALGREEN SHEET	A0.7
CALGREEN SHEET	A0.8

⑤ Floor Plan Details 1/4" = 1'-0"	ARCHITECTURAL FLOOR PLANS	Sheet
☒ Floor Plans	☒ Floor Plan - 24'x40'	A1.0
	☐ Floor Plan - 36'x40'	A1.1
	☐ Floor Plan - 48'x40'	A1.2

① Arch Floor Framing Details 1/4" = 1'-0" — ARCHITECTURAL FLOOR FRAMING DETAILS

							Sheet
☒ Wood Floor	1	2	3	4	5	6	A2.9
☐ Concrete Floor	7	8	9	10	11	12	A2.9

② Wall Schedule 1/4" = 1'-0" — ARCHITECTURAL WALL DETAILS

Wood Studs	Detail															Sheet
	Door		ML				Window	Corner	HVAC	Top PLT	6" SEP	1-HR OPT 1	1-HR OPT 2	EXT HDR	INT HDR	
☒ Sheating	8	9	2	3	4	5	11	1	16	17	5	x	x	10A	10B	A2.1(A)
☐ Sheating	8	9	2	3	4	5	11	1	16	17	5	x	x	10A	10B	A2.1(B)
☐ Plaster	8	9		3	4	5	11	1	16	17	5	x	x	10A	10B	A2.2
☐ 1-HR Sheating	8	9	2	3	4	5	11	1	16	17	5	-	-	10A	-	A2.5(A)
☐ 1-HR Sheating	8	9	2	3	4	5	11	1	16	17	5	-	-	10A	-	A2.5(B)
☐ 1-HR Plaster	8	9	2	3	4	5	11	1	16	17	4	-	-	10A	-	A2.6
☐ Additional Fire Rating Details and Notes																A3.0
☐ Single OCC. Bathroom																A3.1
☐ Single OCC. Bathroom																A3.1.1

④ Ceiling Plans 1/4" = 1'-0"		ARCHITECTURAL CEILING PLANS	Sheet
Reflected Ceiling Plans:	☒ 24' x 40'	☒ 8 (2'x4') Recessed Light Fixture	A3.2
		☐ 12 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	A3.2
	☐ 36' x 40'	☐ 12 (2'x4') Recessed Light Fixture	A3.2
		☐ 16 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	A3.2
	☐ 48' x 40'	☐ 16 (2'x4') Recessed Light Fixture	A3.2
		☐ 18 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	A3.2
Celing Notes			A3.2.1

③ Ceiling Details 1/4" = 1'-0" — ARCHITECTURAL CEILING DETAILS

Celing Framing	Detail				Sheet
	Wall	Joists	Access	BLK'G	
☒ T-GRID	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN	A3.3
☐ Wood	1	2	5	Typ	A3.4

⑦ Roof Plans 1/4" = 1'-0"	ARCHITECTURAL ROOF PLANS	Sheet
☒ Mono		
	☐ EPDM	A4.2.1
	☒ Standing Seam	A4.0.1
	☐ Parapet	A4.4.1
☐ Dual		
	☐ EPDM	A4.2.2
	☐ Standing Seam	A4.0.2

㉒ Roof Details 1/4" = 1'-0"	ARCHITECTURAL ROOF DETAILS	Sheet
☒ Mono		
	☐ EPDM	A4.3
	☒ Standing Seam	A4.1
	☐ Parapet	A4.5
☐ Dual		
	☐ EPDM	A4.3
	☐ Standing Seam	A4.1

⑧ Arch Building Section 1/4" = 1'-0"	ARCHITECTURAL BUILDING SECTION	Sheet
☒ Mono		
	☐ EPDM	A6.3
	☒ Standing Seam	A6.0
☐ Dual		
	☐ EPDM	A6.1
	☐ Standing Seam	A6.0.1
Section		A6.2

ARCHITECTURAL

⑬ Exterior Elevations 1/4" = 1'-0" — ARCHITECTURAL EXTERIOR ELEVATIONS

		Detail		Sheet	Detail		Sheet
Exterior Elevations:	☒ 24'x40'	Left	Right		Front	Rear	
	☒ Mono Slope	1	2	A5.0	1	2	A5.1
	☐ Parapet Roof - Mono Slope	3	4	A5.0	3	4	A5.1
	☐ Dual Slope	5	6	A5.0	1	2	A5.1
	☐ 36'x40'						
	☐ Mono Slope	1	2	A5.0	5	6	A5.1
	☐ Parapet Roof - Mono Slope	3	4	A5.0	7	8	A5.1
	☐ Dual Slope	5	6	A5.0	5	6	A5.1
	☐ 48'x40'- 120'X40'						
	☐ Mono Slope	1	2	A5.0	9	10	A5.1
	☐ Parapet Roof - Mono Slope	3	4	A5.0	11	12	A5.1
	☐ Dual Slope	5	6	A5.0	9	10	A5.1

⑭ Interior Elevations 1/4" = 1'-0" — ARCHITECTURAL INTERIOR ELEVATIONS

		Detail				Sheet
Interior Elevations:		Left	Right	Front	Rear	
	☒ 24'x40'	1	2	3	4	A5.2
	☐ 36'x40'	1	2	5	6	A5.2
	☐ 48'x40' - 120'X40'	1	2	8	7	A5.2

㉓ ADDITIONAL OPTIONS DETAILS 1/4" = 1'-0" — ADDITIONAL OPTIONS DETAILS	Sheet
ADDITIONAL OPTIONS DETAILS	A7.0
ADDITIONAL OPTIONS DETAILS	A7.1
ADDITIONAL OPTIONS DETAILS	A7.2

MEP

⑨ Plumbing 1/4" = 1'-0" — PLUMBING	Sheet
☐ Plumbing Details and Schedules	P1.0

⑩ Mechanical 1/4" = 1'-0" — MECHANICAL

			Sheet	
MISCELLANEOUS NOTES & DETAILS			M0.1	
			Ceiling Plan	Roof Plan
Mechanical Plans:	☒ 24' x 40'	☒ Wall Mount	M5.1	M5.2
		☐ Roof Mount	M5.1	M5.2
	☐ 36' x 40'	☐ Wall Mount	M6.1	M6.2
		☐ Roof Mount	M6.1	M6.2
	☐ 48' x 40'	☐ Wall Mount	M7.1	M7.2
		☐ Roof Mount	M7.1	M7.2
	☐ 60' x 40'	☐ Wall Mount	A0.1	
		☐ Roof Mount		
	☐ 72' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 84' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 96' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 108' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 120' x 40'	☐ Wall Mount		
		☐ Roof Mount		

⑪ Electrical 1/4" = 1'-0" — ELECTRICAL

			Sheet	
Reflected Ceiling Plans:	☒ 24' x 40'	☒ 8 (2'x4') Recessed Light Fixture	E1.0	E1.1
		☐ 12 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 36' x 40'	☐ 12 (2'x4') Recessed Light Fixture	E1.2	E1.3
		☐ 18 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 48' x 40'	☐ 16 (2'x4') Recessed Light Fixture	E1.4	E1.5
		☐ 24 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 60' x 40'	☐ 20 (2'x4') Recessed Light Fixture		
		☐ 30 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 72' x 40'	☐ 24 (2'x4') Recessed Light Fixture		
		☐ 36 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 84' x 40'	☐ 28 (2'x4') Recessed Light Fixture		
		☐ 42 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 96' x 40'	☐ 32 (2'x4') Recessed Light Fixture		
		☐ 48 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 108' x 40'	☐ 36 (2'x4') Recessed Light Fixture		
		☐ 54 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		
	☐ 120' x 40'	☐ 40 (2'x4') Recessed Light Fixture		
		☐ 60 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light		

STRUCTURAL

⑮ Foundations Plans 1/4" = 1'-0" — FOUNDATION

		Sheet
☒ Wood Foundation Plan:	Wood Foundation NOTES SCHED FOR BLDG W/ 50+15	F1.10
	☒ 24'x40' (50+15 PSF)	F1.11
	☐ 24'x40' (100 PSF)	F1.21
	☐ 24'x40' (150 PSF)	F1.31
	☐ 36'x40' (50+15 PSF)	F1.12
	☐ 36'x40' (100 PSF)	F1.22
	☐ 36'x40' (150 PSF)	F1.32
	☐ 48'x40' (50+15 PSF)	F1.13
	☐ 48'x40' (100 PSF)	F1.23
	☐ 48'x40' (150 PSF)	F1.33
	Wood Foundation Details	F1.40
☐ Concrete Foundation Plan		F2.10
☐ Concrete Above Grade Foundation Details		F2.20
☐ Concrete Below Grade Foundation Details		F2.22
		F2.23

⑯ General Structural Sheets 1/4" = 1'-0" — GENERAL STRUCTURAL SHEETS	Sheet
STRUCTURAL GEN NOTES	S0.1

⑰ Floor Framing Plans 1/4" = 1'-0" — STRUCTURAL FLOOR FRAMING PLANS

		Sheet
☒ Wood Sheating Floor:	☒ (50+15 PSF)	S1.01
	☐ (100 PSF)	S1.02
	☐ (150 PSF)	S1.03
☐ Concrete Framing Floor:		
	☐ (50+15 PSF)	S1.1.1
	☐ (100 PSF)	S1.1.2
	☐ (150 PSF)	S1.1.3

⑲ Floor Framing Details 1/4" = 1'-0" — STRUCTURAL FLOOR FRAMING DETAILS	Sheet
☒ Wood Framing	S1.2
☐ Concrete Framing	S1.2

⑱ Roof Framing Plans 1/4" = 1'-0" — STRUCTURAL ROOF FRAMING PLANS	Sheet
☒ Mono Slope Roof Framing	S3.0.1
☐ Dual Slope Roof Framing	S3.0.2

STRUCTURAL DETAILS ROOF	Sheet
STRUCTURAL DETAILS	S3.1
ROOF DETAILS(SOFFIT/ PARRAPET)	S3.2
ROOF PERIMETER TRUSS	S3.3

⑳ Wall Framing Details 1/4" = 1'-0" — STRUCTURAL WALL FRAMING DETAILS	
☒ Wood:	Sheet
☒ Framing Elevation	S4.1
☒ Wall Details	S4.2
☒ Typ Framing:	S4.4
☒ Framing Schedule:	S4.5

㉑ Building Section 1/4" = 1'-0" — STRUCTURAL BUILDING SECTION	Sheet
☒ Mono	S5.0
☐ Dual	S5.1

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
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PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

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CLIENT

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ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
PROJECT OPTIONS SCHEDULE

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
A0.0.1

SHEET OF

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APP: 02-123356 INC:
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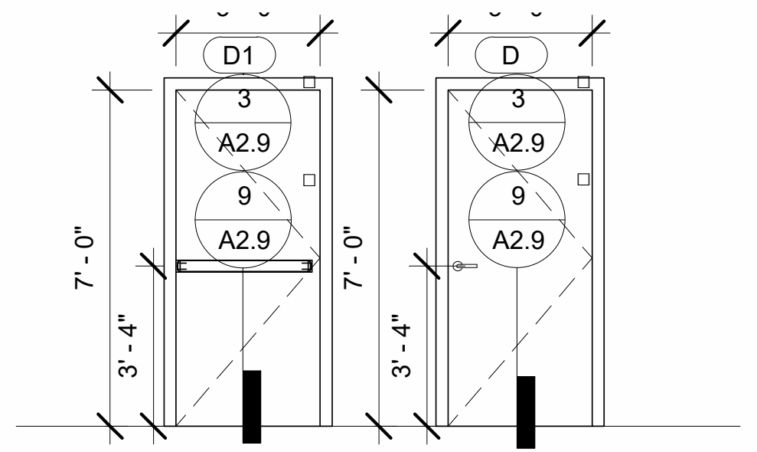
DATE: 07/07/2025

Door Schedule

Mark	Type	Width	Height	Door Material	Frame Type	Wall Thickness	Hardware
~~1~~	~~D1~~	~~3' - 0"~~	~~7' - 0"~~	~~18GA Hollow Metal~~	~~Knock Down~~	~~5 1/4"~~	~~HW1~~
2	D	3' - 0"	7' - 0"	18GA Hollow Metal	Knock Down	5 1/4"	HW2
~~3~~	~~D~~	~~3' - 0"~~	~~7' - 0"~~	~~Solid Core Wood Legacy~~	~~Knock Down~~	~~5 1/2"~~	~~HW3~~



1. ALL DOORS SHALL COMPLY WITH CBC SECTION 11B-404 AND BE 1 3/4" THK (UNO)

2. CENTER ALL DOOR LEVERS FOR ACCESS AND LOCKING @ 40" ABOVE FINISH FLOOR. ALL HARDWARE SHALL OPEN FROM THE INTERIOR AND NOT REQUIRE ANY SPECIFIC KNOWLEDGE OF THE HARDWARE OR REQUIRE ANY SPECIAL EFFORT FOR EGRESS. THE LEVER OF LEVER-ACTUATED LEVERS OR LOCKS SHALL BE CURVED WITH A RETURN TO WITHIN 1/2″ OF THE FACE OF THE DOOR TO PREVENT CATCHING ON THE CLOTHING (etc.) OF PERSONS DURING EGRESS. THE LEVER OF LEVER-ACTUATED LEVERS OR LOCKS SHALL EXTEND AT A MINIMUM OF ONE-HALF THE DOOR WIDTH.

3. PER CBC 1010.1.10 FOR ANY ROOM CONFIGURATION WHICH PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER SHALL NOT BE PROVIDED WITH A LATCH OR LOCK UNLESS IT IS PANIC HARDWARE OR FIRE EXIT HARDWARE AND COMPLY WITH ALL REQUIREMENTS OF SECTION 11B-309 OF THE CBC. ALL HARDWARE SHALL COMPLY WITH HARDWARE SCHEDULE THIS SHEET.

4. PER CBC 11B-309.4 THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS (22.2 N) MAX.

5. PER CBC 11B-404.2.8.2 DOOR SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES, THE DOOR SHALL MOVE TO THE CLOSE POSITION IN 1.5 SECONDS MINIMUM. ALL CLOSER MUST COMPLY WITH CBC 11B-404.2.8.1 - DOOR CLOSER AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS OR LESS.

6. THE MAXIMUM AREA OF EXTERIOR WALL OPENING PER CBC TABLE 705.8 AND THE FIRE PROTECTION FOR EXTERIOR WALL PER CBC TABLE 602. ALL FIRE PROTECTION BASED ON THE FIRE SEPARATION DISTANCE.

7. DOOR LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS.

8. (PH) ON PLANS THE SHEET INDICATES REQUIRED PANIC HARDWARE.

9. PROVIDE EXIT SIGNS AS REQUIRED PER CBC SECTION 1013.4. SEE DETAILS PER A0.2

10. ALL EXIT DOORS SHALL BE OPENABLE FROM INSIDE W/O ANY USE OF SPECIAL TOOLS, KNOWLEDGE OR EFFORT.

9 *Doors*

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. CLIMATE ZONE DATA INCLUDED ON LABEL
   (1) LABEL AT REAR EXTERIOR
   (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME.
   LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURERS NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, WIND SPEED, EXPOSURE CATEGORY, AND Kzt = 1.0 PER 2022 CBC

2. VINYL TACKBOARD TO HAVE A CLASS 1 FLAME SPREAD RATING AND COMPLY WITH A SMOKE DENSITY OF 175

3. VERIFIED ALL DIMENSIONS PRIOR TO CONSTRUCTION

4. SEE INTERIOR ELEVATIONS FOR ALL REQUIRED EGRESS SIGNAGE AND FIRE ALARM SYSTEM COMPONENTS

5. WHEN RELOCATING OR REMOVING INTERIOR PARTITIONS (2) EXITS OR EXIT ACCESS DOORWAYS FROM ANY SPACE SHALL BE PROVIDED. EXIT DOORS MUST BE SEPERATED BY A DISTANCE APART EQUAL TO OR NOT LESS THAN ONE-HALF OF THE MAXUMUM OVERALL DIAGONAL DIMENSION FOR ALL NONSPRINKLERED BUILDINGS. EXIT DOORS MUST BE SEPERATED BY A DISTANCE APART EQUAL TO OR NOT LESS THAN ONE-THIRD OF THE MAXUMUM OVERALL DIAGONAL DIMENSION FOR ALL SPRINKLERED BUILDINGS. ALL EXIT AND EXIT ACCESS DOORWAYS MUST COMPLY WITH CBC SECTION 1015 EXIT AND EXIT ACCESS DOORWAYS AND CBC SECTION 1016 EXIT ACCESS TRAVEL DISTANCE.

6. OCCUPANCY LOAD SIGNS SHALL BE POSTING AND COMPLY WITH CBC SECTION 1004.3

7. SEE ADDITIONAL PC FOR ACCESS RAMPS AND STAIRS. WHERE RAMP IS AGAINST THE WALL AT PLASTER EXTERIOR OR ADJACENT TO ANY ABRASIVE SURFACE THEN A SMOOTH TROWEL SURFACE MUST BE PROVIDED AT THESE LOCATIONS OR AN ALTERNATIVE APPLICATION THAT COMPLIES WITH CBC SECTION 11B-505.8

8. ALL SURFACES ADJACENT TO HANDRAILS SHALL NOT HAVE ANY SHARP, ABRASIVE, OR PROTRUDING COMPONENTS

9. HANDRAIL GRIPPING SURFACES AND ANY SURFACES ADJACENT TO THEM SHALL BE FREE OF SHARP OR ABRASIVE ELEMENTS AND SHALL HAVE ROUNDED EDGES. PER 11B-505.8

10. FOR PLASTER WALLS PROVIDE CONTROL JOINTS AT ALL MODLINES, ENDWALLS @ 2'-0 FROM EDGE, 10'-0" o/c @ SIDEWALLS, AND ABOVE AND BELOW ALL OPENING. SEE EXTERIOR ELEVATIONS. ALL MATERIALS, MEANS, METHODS, AND PROCEEDURES OF CONSTRUCTION USED TO PROTECT JOINTS SHALL COMPLY WITH FIRE RATED WALL ASSEMPLY PER CBC SECTION 703.2 - FIRE RESISTANCE RATING AND CBC SECTION 705 - EXTERIOR WALLS

11. FOR HVAC UNITS WHICH HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" AND LOCATED IN PEDESTRIAN PATH OF TRAVEL, A PROTECTION RAIL AROUND THE HVAC UNIT WILL BE PROVIDED. PER MNF INSTALLATION INSTRUCTIONS. SEE 4/A7.2 OR 5/A7.2.

2 *A0.1 GENERAL NOTES*

MOISTURE PROTECTION INSULATION:

MATERIAL:
INSULATING MATERIAL FOR WALLS, CEILINGS, AND FLOORS SHALL BE FIBERGLASS BATTS (UNFACED) AND SHALL COMPLY WITH CBC 2022.
(CLASS A = 0-25 FLAME SPREAD:) SMOKE DEVELOPMENT DENSITY LESS THAN 450.

INSULATION VALUES
SEE TITLE 24 SHEETS FOR REQUIRED INSULATION VALUES PER CLIMATE ZONE

EXTERIOR WALL INSULATION (MIN.)
☒ R-19 (2x6 STUD) JOHNS MANSVILLE OR EQUAL

INTERIOR WALL INSULATION (MIN.)
☒ R-13

FLOOR INSULATION (MIN.)
☐ CONCRETE SLAB WITH R-19 FIBERGLASS INSULATION
☒ PLYWOOD FLOOR WITH R-19 FIBERGLASS INSULATION

ROOF INSULATION (MIN.)
☐ R-36 (EPDM)
☒ R-36 CONTINUOUS R-X (STANDING SEAM)

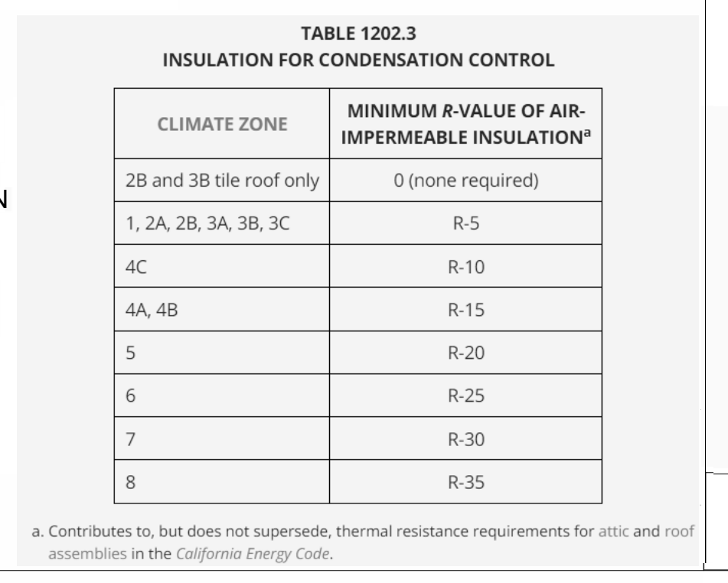


TABLE 1202.3
INSULATION FOR CONDENSATION CONTROL

CLIMATE ZONE	MINIMUM R-VALUE OF AIR-IMPERMEABLE INSULATION[a]
2B and 3B tile roof only	0 (none required)
1, 2A, 2B, 3A, 3B, 3C	R-5
4C	R-10
4A, 4B	R-15
5	R-20
6	R-25
7	R-30
8	R-35

a. Contributes to, but does not supersede, thermal resistance requirements for attic and roof assemblies in the *California Energy Code*.

3 *Insulation Specs*

Finish Schedule

Room Number	Flooring		Wall Finish				Ceiling		Notes
	Floor	Base	Front	Left	Rear	Right	Type	Ht.	
CLASSROOM	~~Carp.~~ VCT	4" TS	Tack	Tack	Tack	Tack	CP	8'-6"	
~~CLASSROOM w/ PH~~	~~Carp.~~	~~4" TS~~	~~Tack~~	~~Tack~~	~~Tack~~	~~Tack~~	~~CP~~	~~8'-6"~~	
SINGLE OCC.	SV	6" TS	FRP	FRP	FRP	FRP	CP	8'-0"	
~~SINGLE OCC.~~	~~SV~~	~~SC~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	

Abbreviations:

FLOORING
CARP: COMPLYING WITH GROUP 1; TYPE "A" OR TYPE "B"; CLASS 2; DENSITY 4600; DIRECT GLUE DOWN
SV: SHEET VINYL FLOORING
VCT: VINYL COMPOSITION TILE

BASE
4" TS: 4" TOP SET BASE
6" TS: 6" TOP SET BASE
6" SC: SELF COVE

WALLS
TACK: 1/2" VINYL TACKBOARD CLASS 1 OVER 1/2" GYPSUM BOARD BACKING
FRP: 1/8" FIBER REINFORCED PANEL OVER 1/2" WATER RESISTANT GYPSUM BOARD
GYP: 1/2" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH
PLY: 1/2" PLYWOOD FINISH
NF: NO FINISH SC: 6" SELF-COVE BASE

CEILING
CP: ACOUSTICAL LAY IN GRID CEILING PANELS
HC: 5/8" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH
GBP: 1/2" GYPSUM BOARD WASHABLE PANELS (PAINTED)

Finishes Notes

1. ALL FINISHES SHALL COMPLY WITH CBC, TITLE 19, AND C.F.C

2. PER ASTM D2047 ALL FLOORING WITH A COEFFICIENT OF FRICTION OF A MINIMUM OF 0.6 WILL BE CONSIDERED TO OBTAIN THE INTENT OF A SLIP RESISTANCE SURFACE.

3. FLOORING CONTRACTOR IS RESPONSIBLE FOR SUB-FLOORING PREPARATION. ALL PLYWOOD TO BE APA RATED AND COMPLY WITH PS1-19. PLYWOOD SURFACE TO BE CARPETED IS TO BE PLUGGED AND SANDED BY FLOORING CONTRACTOR. ALL DEFORMITIES OCCURRING DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE PLUGGED AND SANDED BY FLOOR CONTRACTOR. MATELINE JOINTS TO BE A MAX OF 1/8" AND SHALL BE PLUGGED AND SANDED BY FLOORING CONTRACTORS.

4. ALL CARPET AND FLOOR FINISH MUST COMPLY PER CBC SECTION 11B-302 FLOOR AND GROUND SURFACES. ALL CHANGES IN ELEVATION SHALL COMPLY WITH CBC SECTION 11B-303 CHANGES IN LEVELS

5 *Finishes and Materials*

HARDWARE SCHEDULE

~~**EXT CLASSROOM DOORS W/ PANIC**~~ ~~**HW1**~~

~~LOCKSET~~	~~SCHLAGE RIM CYLINDER 20022 C123 626 1-BITTED~~	~~Finish Alum or equal~~
~~EXIT DEVICE~~	~~VON DUPRIN AX -PA 99L-2 626~~	~~Finish 26D or equal~~
~~BUTTS~~	~~TAH FB179 4.5 X 4.5 NRP 626~~	~~Finish 689 or equal~~
~~CLOSER~~	~~NORTON 8501DA 689~~	~~Finish Alum or equal~~
~~WEATHER STRIP~~	~~HAGER 891SAV 3684~~	~~Finish Alum or equal~~
~~THRESHOLD~~	~~HAGER 413SA 36~~	~~Finish Alum or equal~~
~~DOOR BOTTOM~~	~~PEMCO 315CN 36~~	

EXT CLASSROOM DOORS **HW2**

LOCKSET	TAH LHV 75 SAT 626	Finish 26D or equal
LOCKSET	SCHLAGE 23-065 626 W/ SPECIAL TAIL	Finish 26D or equal
BUTTS	TAH FB179 4.5 X 4.5 NRP 626	Finish 26D or equal
CLOSER	NORTON 8501DA 689	Finish 689 or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum or equal
THRESHOLD	HAGER 413SA 36	Finish Alum or equal
DOOR BOTTOM	PEMCO 315CN 36	Finish Alum or equal

~~**INT BOYS & GIRLS RESTROOM DOORS**~~ ~~**HW3**~~

~~LOCKSET~~	~~TAH LHV 70 SAT 626~~	~~Finish 26D or equal~~
~~LOCKSET~~	~~SCHLAGE 23-065 626 W/ SPECIAL TAIL~~	~~Finish 26D or equal~~
~~BUTTS~~	~~TAH FB179 4.5 X 4.5 NRP 626~~	~~Finish 26D or equal~~
~~CLOSER~~	~~NORTON 8501DA 689~~	~~Finish 689 or equal~~
~~WEATHER STRIP~~	~~HAGER 891SAV 3684~~	~~Finish Alum or equal~~
~~THRESHOLD~~	~~HAGER 413SA 36~~	~~Finish Alum or equal~~
~~DOOR BOTTOM~~	~~PEMCO 315CN 36~~	~~Finish Alum or equal~~
~~DOOR PROTECTION PLATE~~	~~HAGER 190S 10 X 34 630~~	~~Finish Alum or equal~~

NOTE: ALL CLASSROOM DOORS SHALL BE LOCKABLE FROM INSIDE

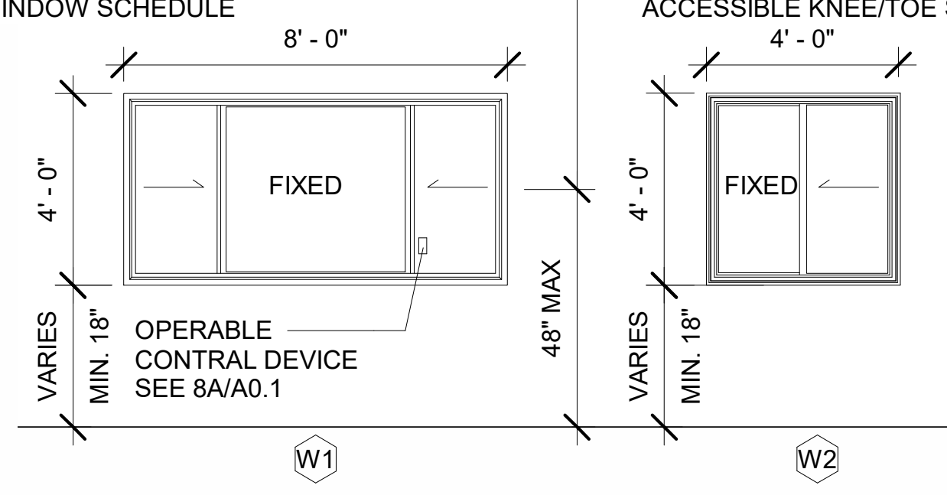
7 *Door Hardware*

Window Schedule

Mark	Type Mark	Height x Width	Function	Type Comments	Glazing	Source
A	W1	4'-0" x 8'-0"	XOX	Clear Anodized Alum. Frame	*DP	Manufacturer
~~B~~	~~W2~~	~~4'-0" x 4'-0"~~	~~XO~~	~~Clear Anodized Alum. Frame~~	~~*DP~~	~~Manufacturer~~
C	W3	21Ø		~~SOLAR TUBE~~		Manufacturer
~~D~~	~~W4~~	~~21Ø~~		~~SOLAR TUBE~~		~~Manufacturer~~

NFRC LABELS SHALL STAY ON THE FENESTRATION PRODUCTS UNTIL THE INSPECTOR HAS VERIFIED THAT THE INSTALLED U-FACTOR, SHGC, AND VT MATCH THE WINDOW SCHEDULE

SEE NOTE 1.
46" MAX w/ OBSTRUCTION FOR SIDE APPROACH
44" MAX w/ OBSTRUCTION FOR FRONT APPROACH
OVER 24" DEEP X 34" MAX HIGH OBSTRUCTION WITH ACCESSIBLE KNEE/TOE SPACE



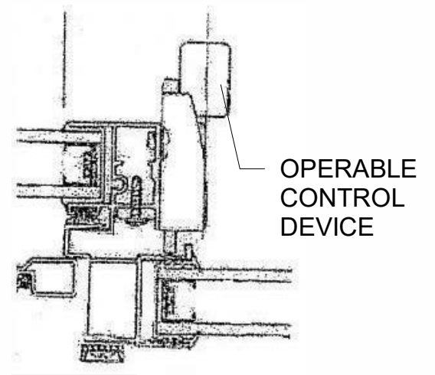
WINDOW LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS. SAFETY GLAZING MUST BE APPROPRIATELY MARKED AND IDENTIFIED.

WINDOW - 3/4" INSULATING GLASS UNIT PERFORMANCE
U-VALUE : 0.35
SHGC : 0.24
VT : 0.5

ABBREVIATIONS:
DP - DUAL PANE
T - TEMPERED GLASS

NEW BUILDINGS THAT ARE INCLUDED IN PUBLIC SCHOOLS (KINDERGARTEN THROUGH 12TH GRADE) SHALL INCLUDE LOCKS THAT ALLOW DOORS TO CLASSROOMS AND ANY ROOM WITH AN OCCUPANCY OF FIVE OR MORE PERSONS TO BE LOCKED FROM THE INSIDE. THE LOCKS SHALL CONFORM TO THE SPECIFICATION AND REQUIREMENTS FOUND IN SECTION 1010.1.9 Education Code 17075.50,

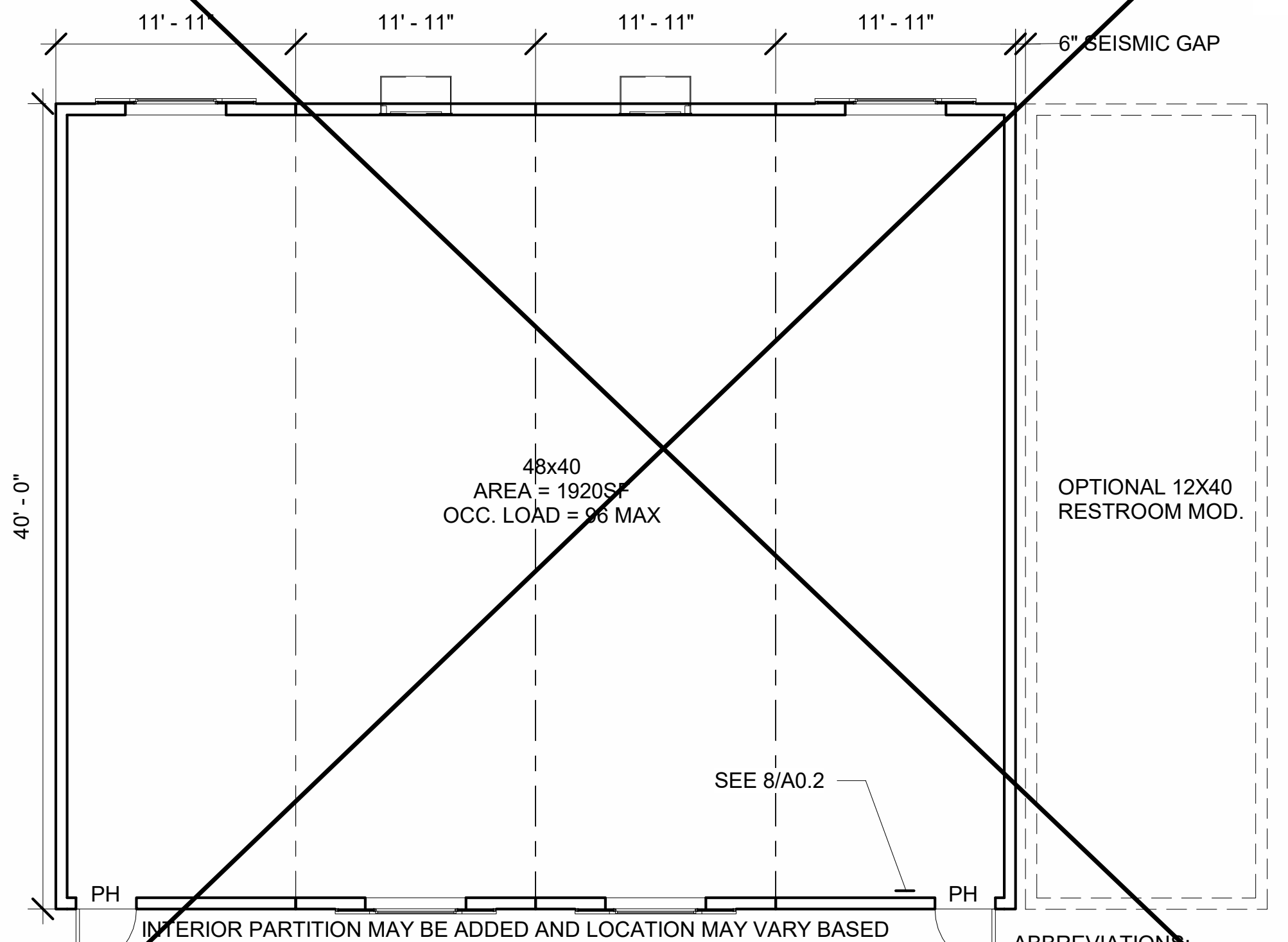
NOTE: ALL FIRE RESISTIVE ASSEMBLIES FOR PROTECTION OF OPENINGS SHALL COMPLY WITH THE PROVISIONS OF SECTION 716 CBC.



8A

8 *Windows*

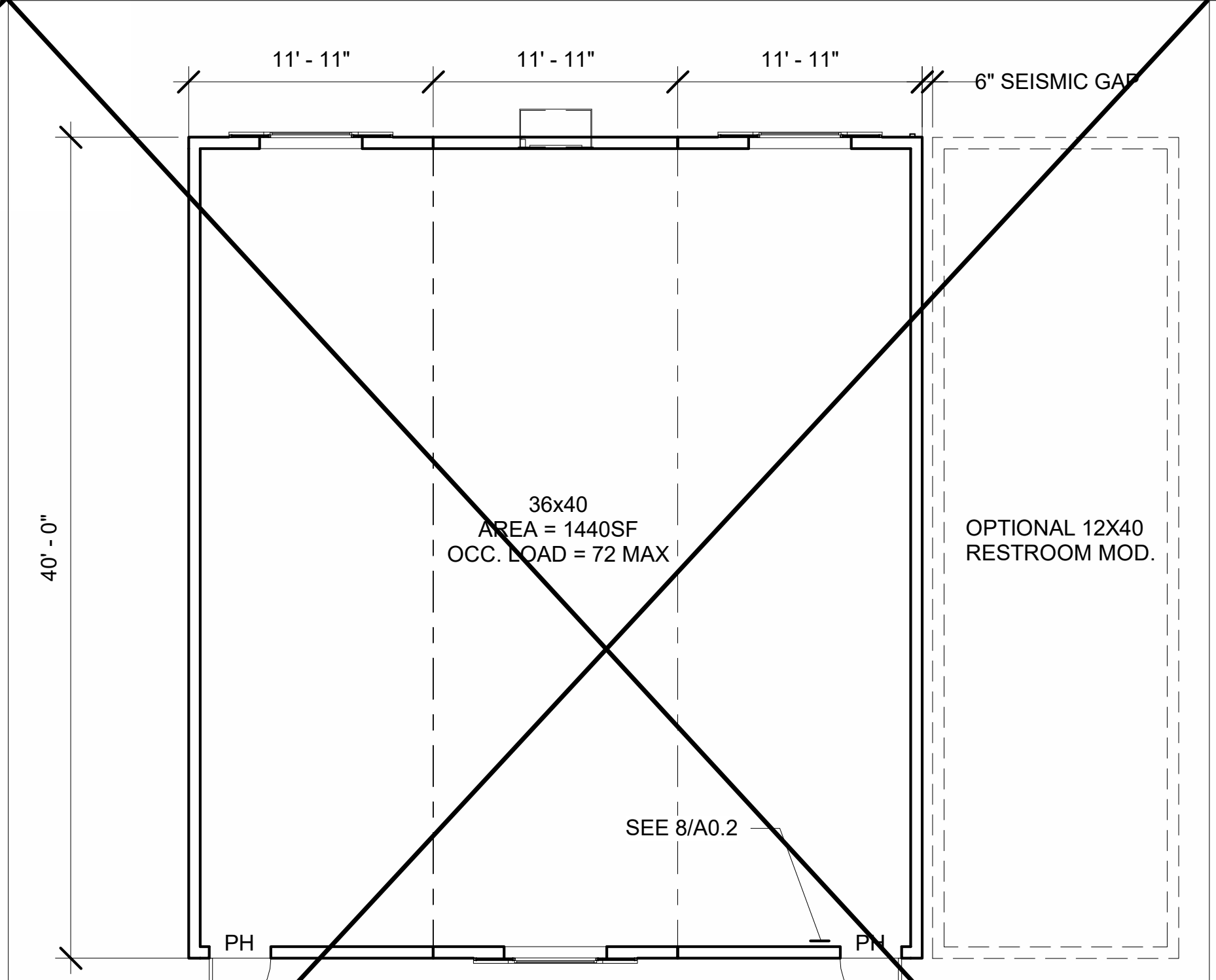
EMERGENCY EXIT AND PANIC HARDWARE: **INDICATE ON DRAWINGS AND SPECIFICATIONS COMPLIANCE WITH SFM STANDARD 12-10-3,SECTION 12-10-302**. (a) THE CROSS BAR SHALL EXTEND ACROSS NOT LESS THAN ONE-HALF THE WIDTH OF THE DOOR/GATE. (d) THE ENDS OF THE CROS-BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS. **PROVIDE CUT-SHEETS OF PANIC HARDWARE** PROVIDE THE ASSEMBLY DESIGN NUMBER FOR ALL FIRE-RATED CONSTRUCTION COMPONENTS. INSTALLATION DETAILS MUST BE COORDINATED WITH THE DESIGN NUMBERS. CUSTOM DESIGNS WHICH COMBINE COMPONENTS FROM VARIOUS DESIGNS BUT HAVE NOT BEEN TESTED AS A LISTED ASSEMBLY WILL NOT BE ACCEPTABLE.



INTERIOR PARTITION MAY BE ADDED AND LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS. SEE GENERAL NOTES THIS SHEET.
ALL PARTITION ADDED TO BE SUBMITTED FOR APPROVAL WITH SITE SPECIFIC STATE AGENCY APPROVAL.

ABBREVIATIONS:
PH - SEE HARDWARE SCHEDULE ABOVE - NO.2

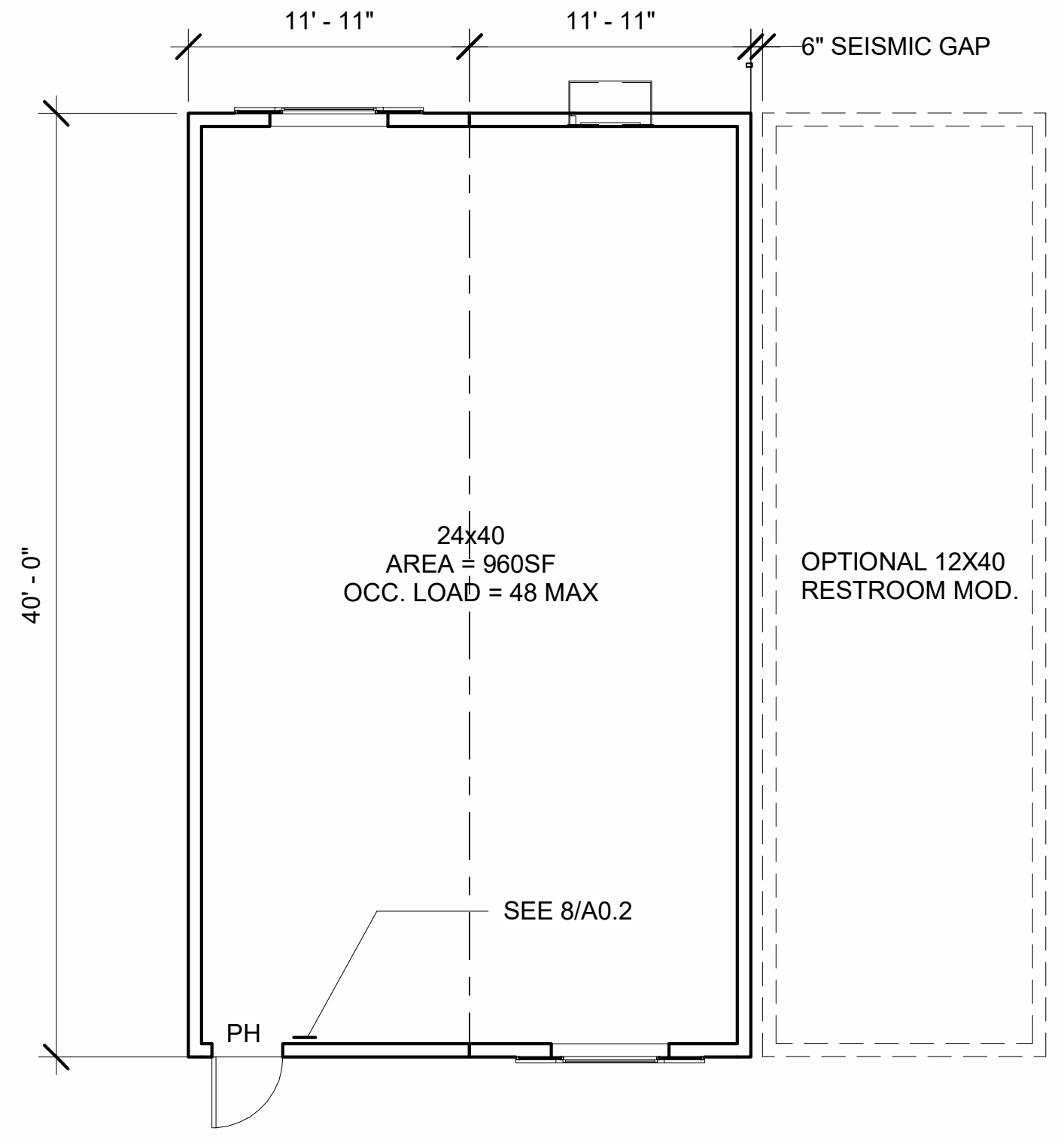
6 *48x40 (Total Area 1920sf)*



INTERIOR PARTITION MAY BE ADDED AND LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS. SEE GENERAL NOTES THIS SHEET.
ALL PARTITION ADDED TO BE SUBMITTED FOR APPROVAL WITH SITE SPECIFIC STATE AGENCY APPROVAL.

ABBREVIATIONS:
PH - SEE HARDWARE SCHEDULE ABOVE - NO.2

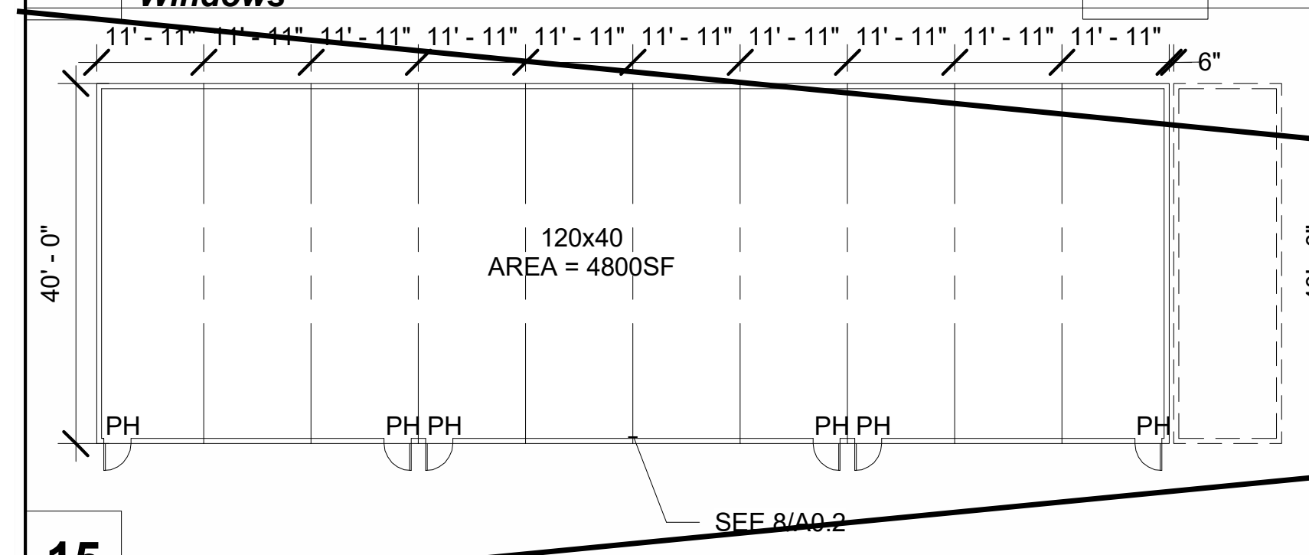
4 *36x40 (Total Area 1440sf)*



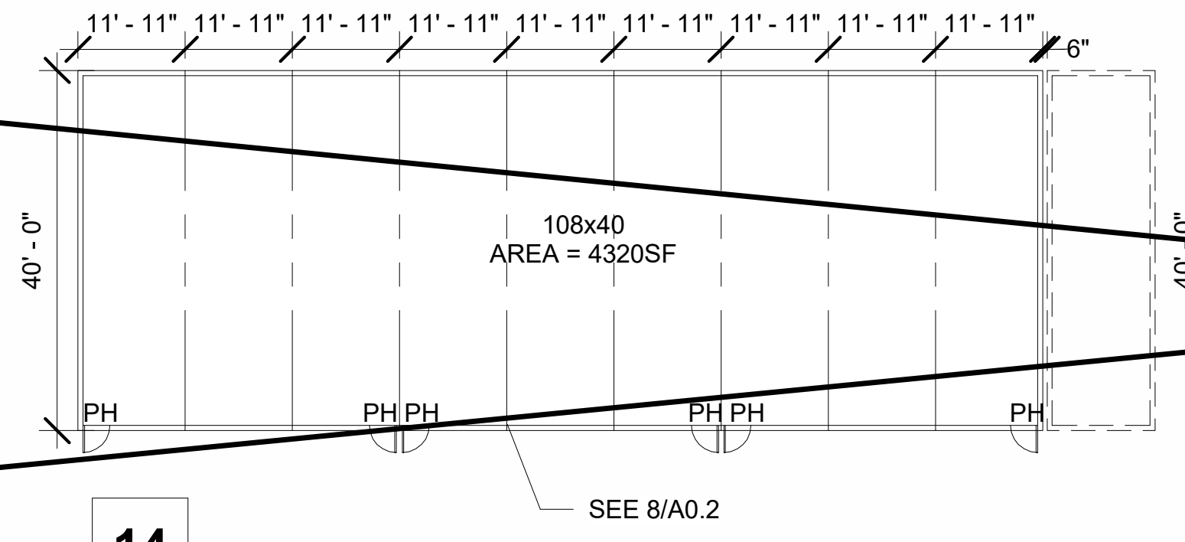
INTERIOR PARTITION MAY BE ADDED AND LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS. SEE GENERAL NOTES THIS SHEET.
ALL PARTITION ADDED TO BE SUBMITTED FOR APPROVAL WITH SITE SPECIFIC STATE AGENCY APPROVAL.

ABBREVIATIONS:
PH - SEE HARDWARE SCHEDULE ABOVE - NO.2

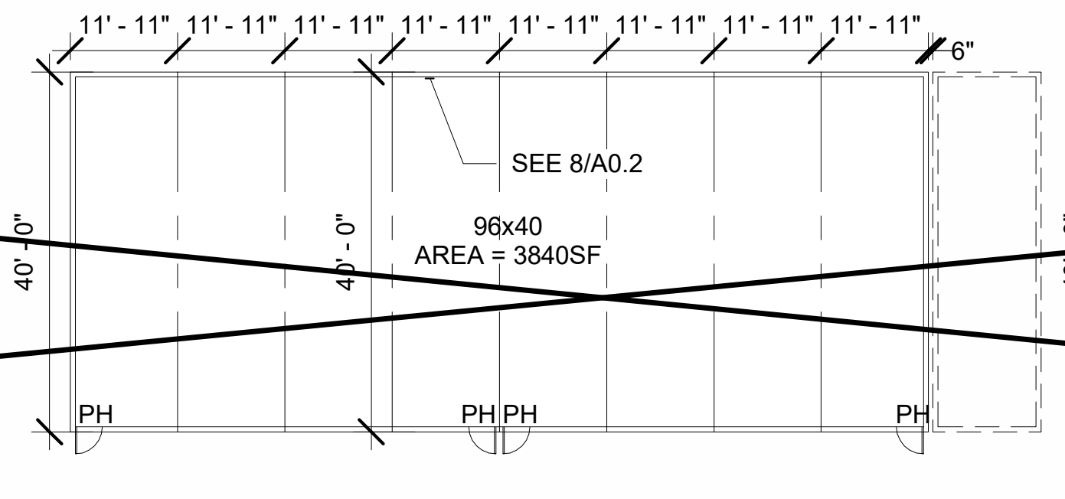
1 *24x40 (Total Area 960sf)*



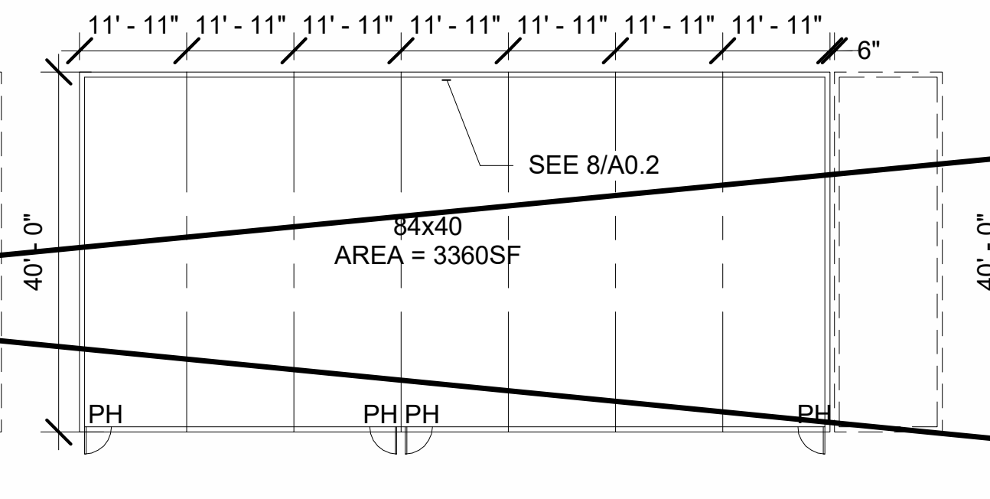
15 *120x40 (Total Area 4800sf)*



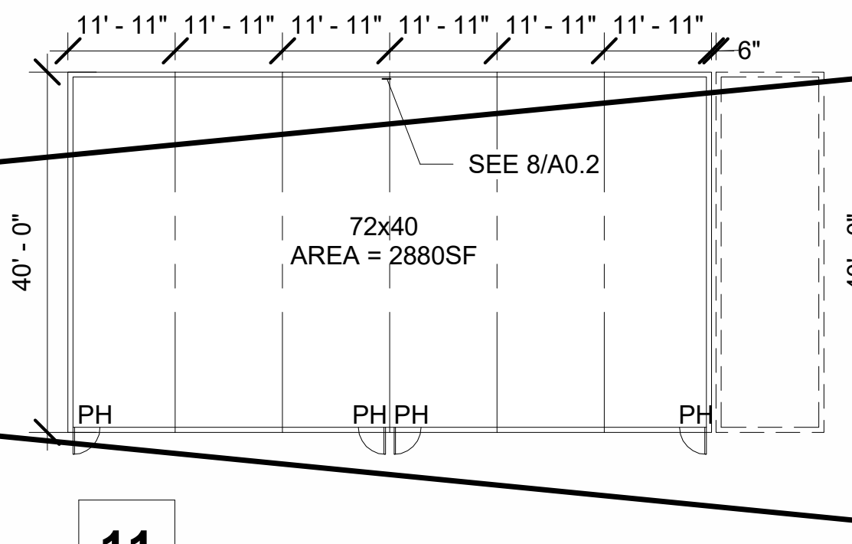
14 *108x40 (Total Area 4320sf)*



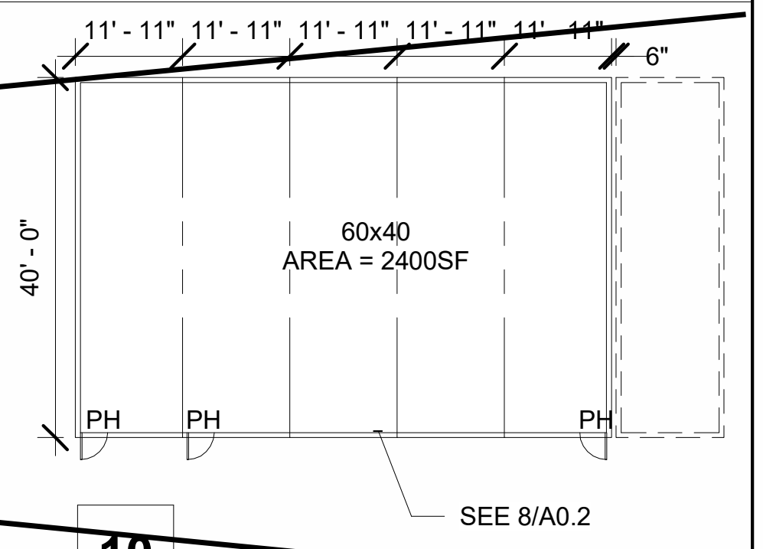
13 *96x40 (Total Area 3840sf)*



12 *84x40 (Total Area 3360sf)*



11 *72x40 (Total Area 2880sf)*



10 *60x40 (Total Area 2400sf)*

C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

6/15/2021 11:49:02 PM

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
WWW.RSTAVARES.COM

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule		
#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
TYPICAL KEY PLAN AND SCHEDULES, GEN NOTES,

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.1

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

CHAPTER 11:COMMUNICATION ELEMENTS AND FEATURES

11B.702 Fire Alarm Systems
11B.702.1 General. Fire alarm systems shall have permanently installed audible and visible alarms complying with NFPA 72 (2022 edition)
except that the maximum allowable sound level of audible notification appliances complying with section 11B.4-3.2.1 of NFPA 72 shall have a sound level no more than 110 dB at the minimum hearing distance from the audible appliance. In addition, alarms in guest rooms required to provide communication features shall comply with NFPA 72 (2022 edition)

11B.703 Signs

11B.703.1 General. Signs shall comply with 703. Where both visual and tactile characters are required, either one sign with both visual and tactile characters, or two separate signs, one with visual, and one with tactile characters, shall be provided.

11B.703.2 Raised Characters. Raised characters shall comply with 703.2 and shall be duplicated in braille complying with 703.3. Raised characters shall be installed in accordance with 703.4.

11B.703.2.1 Depth. Raised characters shall be 1/32 inch (0.8 mm) minimum above their background.

11B.703.2.2 Case. Characters shall be uppercase.

11B.703.2.3 Style. Characters shall be sans serif. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

11B.703.2.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 60 percent minimum and 110 percent maximum of the height of the uppercase letter "I".
11B.703.2.5 Character Height. Character height measured vertically from the baseline of the character shall be 5/8 inch (15.9 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

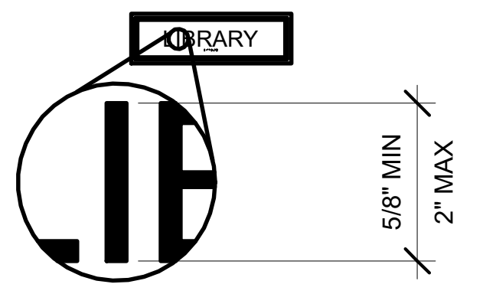


Figure 703.2.5 Height of Raised Characters

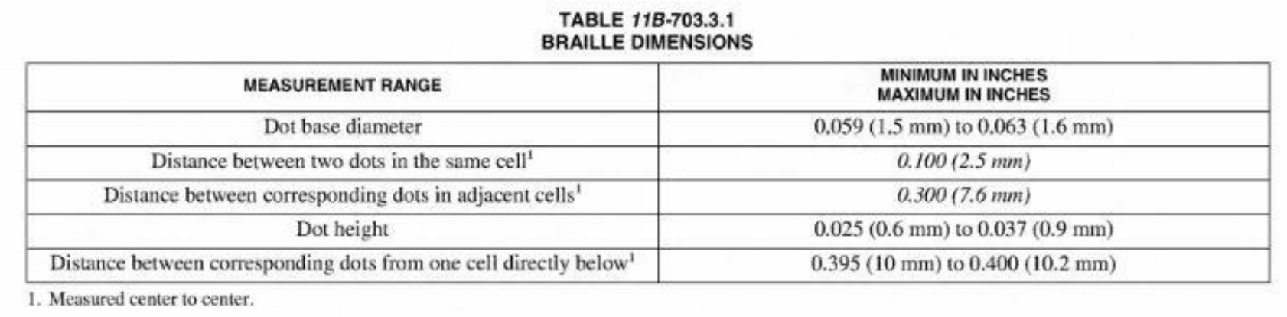


TABLE *11B*-703.3.1
BRAILLE DIMENSIONS

MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6 mm)
Distance between two dots in the same cell[1]	*0.100 (2.5 mm)*
Distance between corresponding dots in adjacent cells[1]	*0.300 (7.6 mm)*
Dot height	0.025 (0.6 mm) to 0.037 (0.9 mm)
Distance between corresponding dots from one cell directly below[1]	0.395 (10 mm) to 0.400 (10.2 mm)

1. Measured center to center.

5 1/4" = 1'-0"
Sign Notes

11B.703.2.6 Stroke Thickness for raised characters. Stroke thickness of the uppercase letter "I" shall be 15 percent maximum of the height of the character.

11B.703.2.7 Character Spacing. Character spacing shall be measured between the two closest points of adjacent raised characters within a message, excluding word spaces. Where characters have rectangular cross sections, spacing between individual raised characters shall be 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum. Where characters have other cross sections, spacing between individual raised characters shall be 1/16 inch (1.6 mm) minimum and 4 times the raised character stroke width maximum at the base of the cross sections, and 1/8 inch (3.2 mm) minimum and 4 times the raised character stroke width maximum at the top of the cross sections. Characters shall be separated from raised borders and decorative elements 3/8 inch (9.5 mm) minimum.

11B.703.2.8 Line Spacing. Spacing between the baselines of separate lines of raised characters within a message shall be 135 percent minimum and 170 percent maximum of the raised character height.

11B.703.3 Braille. Braille shall be contracted (Grade 2) and shall comply with 703.3 and 703.4.

11B.703.3.1 Dimensions and Capitalization. Braille dots shall have a domed or rounded shape and shall comply with Table 703.3.1. The indication of an uppercase letter or letters shall only be used before the first word of sentences, proper nouns and names, individual letters of the alphabet, initials, and acronyms.

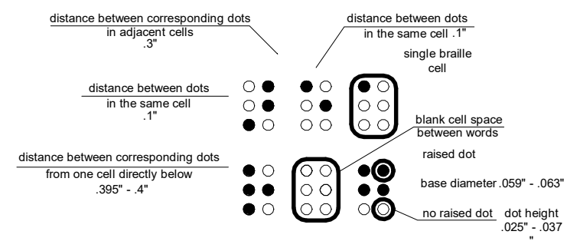

distance between corresponding dots in adjacent cells .3"
distance between dots in the same cell .1"
single braille cell
distance between dots in the same cell .1"
blank cell space between words
distance between corresponding dots from one cell directly below .395" - .4"
raised dot
base diameter .059" - .063"
no raised dot
dot height .025" - .037"

Figure 703.3.1 Braille Measurement

11B.703.3.2 Position. Braille shall be positioned below the corresponding text. If text is multi-lined, braille shall be placed below the entire text. Braille shall be separated 3/8 inch (9.5 mm) minimum from any other tactile characters and 3/8 inch (9.5 mm) minimum from raised borders and decorative elements.

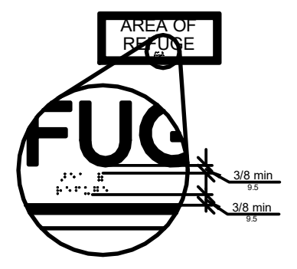
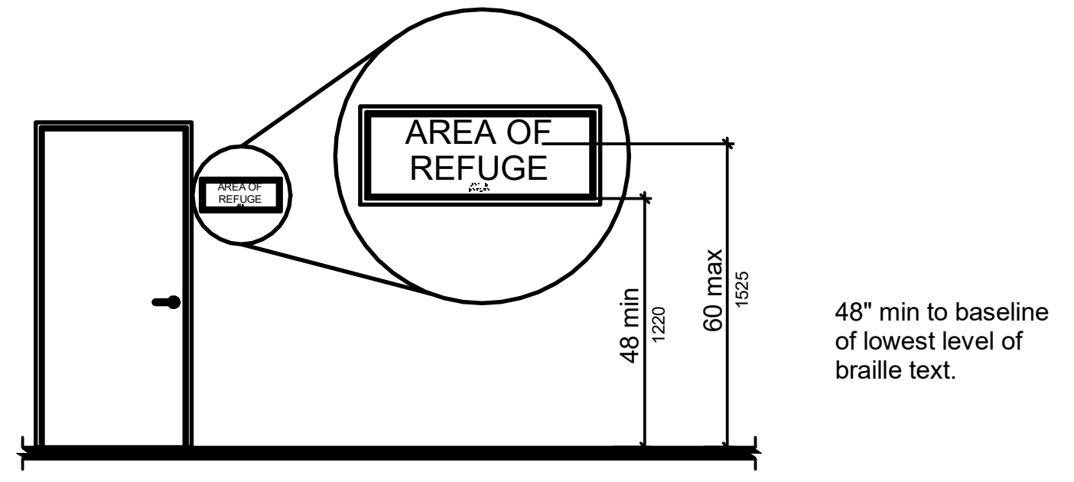


Figure 703.3.2 Position of Braille

11B.703.4 Installation Height and Location. Signs with tactile characters shall comply with 703.4.

11B.703.4.1 Height Above Finish Floor or Ground. Tactile characters on signs shall be located 48 inches (1220 mm) minimum above the finish floor or ground surface, measured from the baseline of the lowest braille character and 60 inches (1525 mm) maximum above the finish floor or ground surface, measured from the baseline of the highest tactile character.



48" min to baseline of lowest level of braille text.

Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

11B.703.4.2 Location. Where a tactile sign is provided at a door, the sign shall be located alongside the door at the latch side. Where a tactile sign is provided at double doors with one active leaf, the sign shall be located on the inactive leaf. Where a tactile sign is provided at double doors with two active leafs, the sign shall be located to the right of the right hand door. Where there is no wall space at the latch side of a single door or at the right side of double doors, signs shall be located on the nearest adjacent wall. Signs containing tactile characters shall be located so that a clear floor space of 18 inches (455 mm) minimum by 18 inches (455 mm) minimum, centered on the tactile characters, is provided beyond the arc of any door swing between the closed position and 45 degree open position.

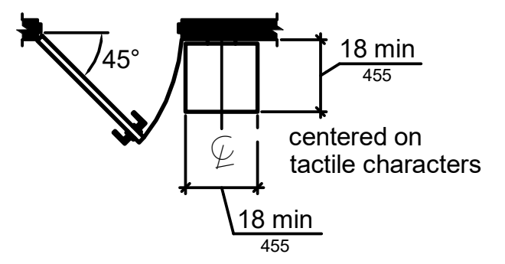


Figure 703.4.2 Location of Tactile Signs at Doors

11B.703.5 Visual Characters. Visual characters shall comply with 703.5.

11B.703.5.1 Finish and Contrast. Characters and their background shall have a non-glare finish. Characters shall contrast with their background with either light characters on a dark background or dark characters on a light background.

11B.703.5.2 Case. Characters shall be uppercase or lowercase or a combination of both.

11B.703.5.3 Style. Characters shall be conventional in form. Characters shall not be italic, oblique, script, highly decorative, or of other unusual forms.

11B.703.5.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 60 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

11B.703.5.5 Character Height. Minimum character height shall comply with Table 703.5.5. Viewing distance shall be measured as the horizontal distance between the character and an obstruction preventing further approach towards the sign. Character height shall be based on the uppercase letter "I".

11B.703.5.6 Height From Finish Floor or Ground. Visual characters shall be 40 inches (1015 mm) minimum above the finish floor or ground.

11B.703.5.7 Stroke Thickness. Stroke thickness of the uppercase letter "I" shall be 10 percent minimum and 20 percent maximum of the height of the character.

11B.703.5.8 Character Spacing. Character spacing shall be measured between the two closest points of adjacent characters, excluding word spaces. Spacing between individual characters shall be 10 percent minimum and 35 percent maximum of character height.

11B.703.5.9 Line Spacing. Spacing between the baselines of separate lines of characters within a message shall be 135 percent minimum and 170 percent maximum of the character height.

11B.703.6 Pictograms. Pictograms shall comply with 703.6.

11B.703.6.1 Pictogram Field. Pictograms shall have a field height of 6 inches (150 mm) minimum. Characters and braille shall not be located in the pictogram field.

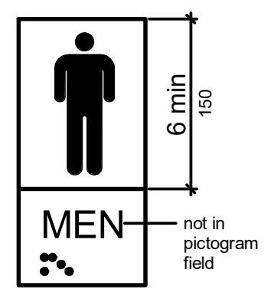
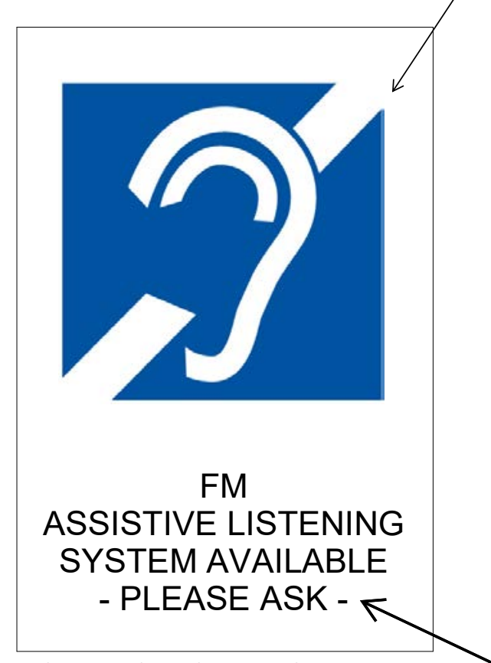


Figure 703.6.1 Pictogram Field dark-on-light.

☒	OPENING
	DETAIL REFERENCE
1 / S1	DETAIL NUMBER PAGE NUMBER
▨	CONCRETE
▨	MASONRY
▨	SAND
▨	EARTH
	SECTION REFERENCE
1 / S1	SECTION LABEL PAGE NUMBER
☒	CONTINUOUS WOOD MEMBER
▨	WOOD BLOCKING
0.00'	FIN. FLR. ELEV.
-1.00'	BOTTOM OF FOOTING ELEVATION
S——S	STEPPED FOOTING

THE "INTERNATIONAL SYMBOL FOR ACCESS FOR HEARING LOSS" PROPORTIONS SHALL BE APPROXIMATE CBC FIGURE 11B-703.7.2.4

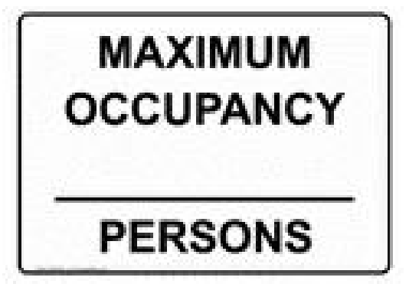


"INFORMATION TO BE PROVIDED WHEN BUILDINGS ARE SITE LOCATED"

REQUIRED PER 11B-219 & 11B-706
(SEE FLOOR PLANS FOR MORE INFO)

NOTE: TEXT ON THIS SIGN IN VISUAL

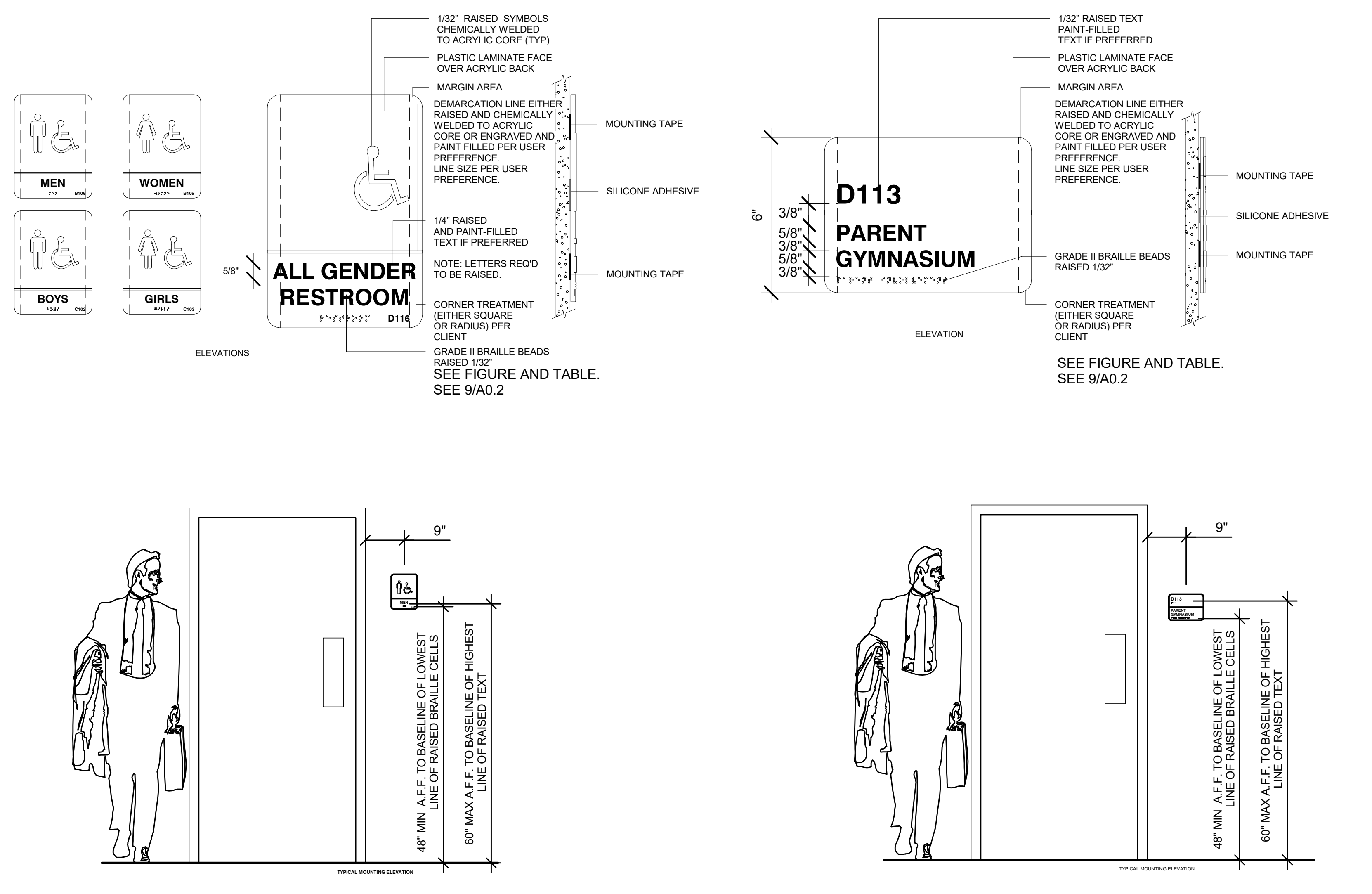
7 1" = 1'-0"
Assistive Listening System Symbol



OCCUPANT LOAD SIGN REQUIRED PER DSA BU11-08.

EVERY ROOM OR SPACE WHICH IS USED FOR ASSEMBLY, CLASSROOM, DINING OR SIMILAR PURPOSES HAVING AN OCCUPANT LOAD OF 50 OR MORE SHALL HAVE THE OCCUPANT LOAD OF THE ROOM OR SPACE POSTED IN A CONSPICUOUS PLACE, NEAR THE MAIN EXIT OR EXIT ACCESS DOORWAY

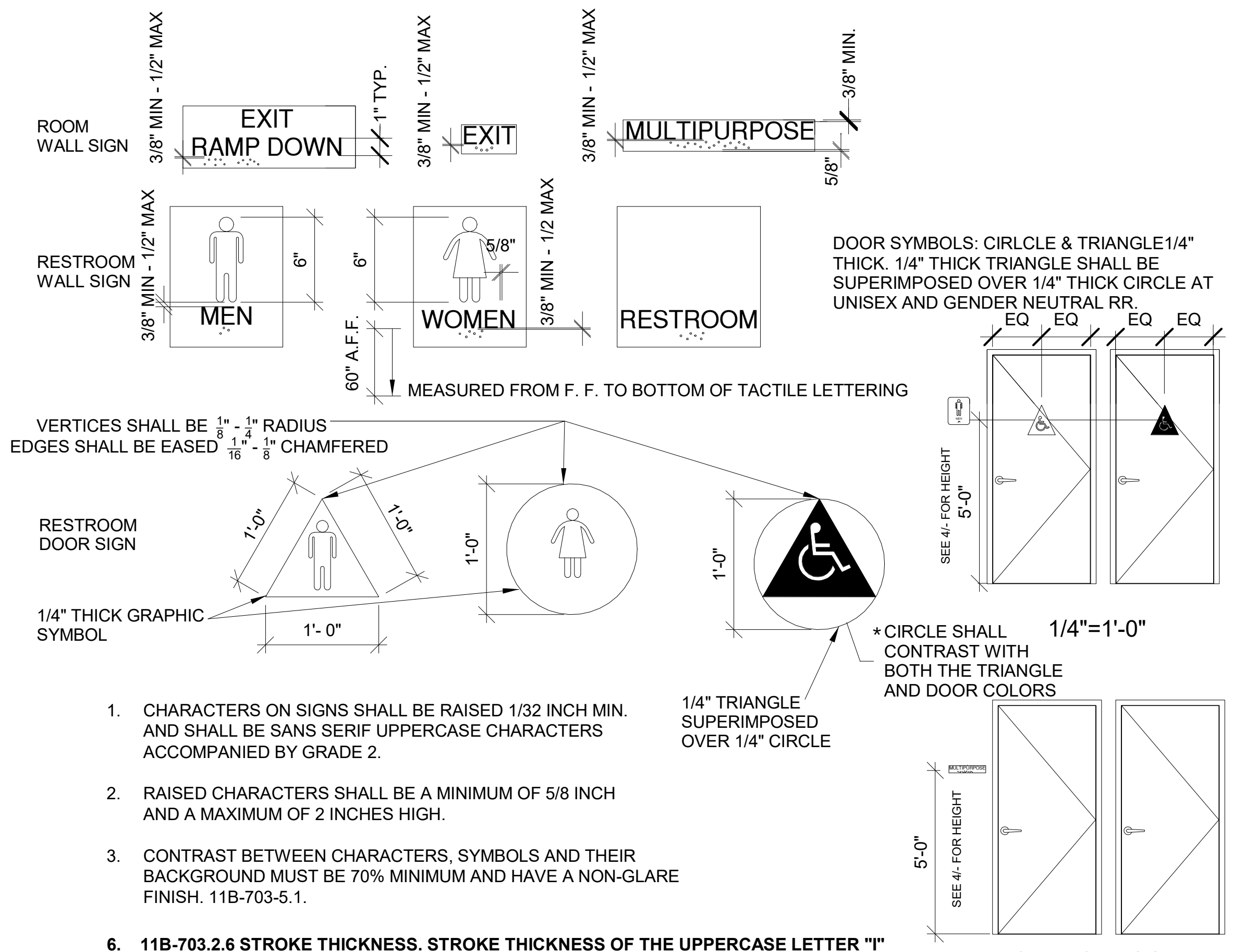
8 1" = 1'-0"
EQUIPMENT ANCHORAGE


MEN
WOMEN
BOYS
GIRLS
ELEVATIONS
1/32" RAISED SYMBOLS CHEMICALLY WELDED TO ACRYLIC CORE (TYP)
PLASTIC LAMINATE FACE OVER ACRYLIC BACK
MARGIN AREA
DEMARCATION LINE EITHER RAISED AND CHEMICALLY WELDED TO ACRYLIC CORE OR ENGRAVED AND PAINT FILLED PER USER PREFERENCE. LINE SIZE PER USER PREFERENCE.
1/4" RAISED AND PAINT-FILLED TEXT IF PREFERRED
NOTE: LETTERS REQ'D TO BE RAISED.
CORNER TREATMENT (EITHER SQUARE OR RADIUS) PER CLIENT
GRADE II BRAILLE BEADS RAISED 1/32"
MOUNTING TAPE
SILICONE ADHESIVE
MOUNTING TAPE
5/8"
ALL GENDER RESTROOM
D116
1/32" RAISED TEXT PAINT-FILLED TEXT IF PREFERRED
D113
PARENT GYMNASIUM
6"
3/8"
5/8"
3/8"
5/8"
3/8"
ELEVATION
9"
48" MIN A.F.F. TO BASELINE OF LOWEST LINE OF RAISED BRAILLE CELLS
60" MAX A.F.F. TO BASELINE OF HIGHEST LINE OF RAISED TEXT
TYPICAL MOUNTING ELEVATION

SEE FIGURE AND TABLE.
SEE 9/A0.2

SEE FIGURE AND TABLE.
SEE 9/A0.2

4 1/2" = 1'-0"
Signage*(OFOI - UNO)*


ROOM WALL SIGN
EXIT RAMP DOWN
EXIT
MULTIPURPOSE
3/8" MIN - 1/2" MAX
1" TYP.
3/8" MIN.
5/8"
RESTROOM WALL SIGN
MEN
WOMEN
RESTROOM
6"
5/8"
3/8" MIN - 1/2 MAX
60" A.F.F.
MEASURED FROM F. F. TO BOTTOM OF TACTILE LETTERING
VERTICES SHALL BE 1/8" - 1/4" RADIUS
EDGES SHALL BE EASED 1/16" - 1/8" CHAMFERED
RESTROOM DOOR SIGN
1/4" THICK GRAPHIC SYMBOL
1'-0"
1'- 0"
1/4" TRIANGLE SUPERIMPOSED OVER 1/4" CIRCLE
*CIRCLE SHALL CONTRAST WITH BOTH THE TRIANGLE AND DOOR COLORS
1/4"=1'-0"
EQ
SEE 4/- FOR HEIGHT
5'-0"

DOOR SYMBOLS: CIRLCLE & TRIANGLE1/4" THICK. 1/4" THICK TRIANGLE SHALL BE SUPERIMPOSED OVER 1/4" THICK CIRCLE AT UNISEX AND GENDER NEUTRAL RR.

1. CHARACTERS ON SIGNS SHALL BE RAISED 1/32 INCH MIN. AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2.
2. RAISED CHARACTERS SHALL BE A MINIMUM OF 5/8 INCH AND A MAXIMUM OF 2 INCHES HIGH.
3. CONTRAST BETWEEN CHARACTERS, SYMBOLS AND THEIR BACKGROUND MUST BE 70% MINIMUM AND HAVE A NON-GLARE FINISH. 11B-703-5.1.

6. 11B-703.2.6 STROKE THICKNESS. STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

NOTE: TACTILE SIGN TEXT SHALL BE CENTERED 18" CLEAR FROM STRIKE OF DOOR

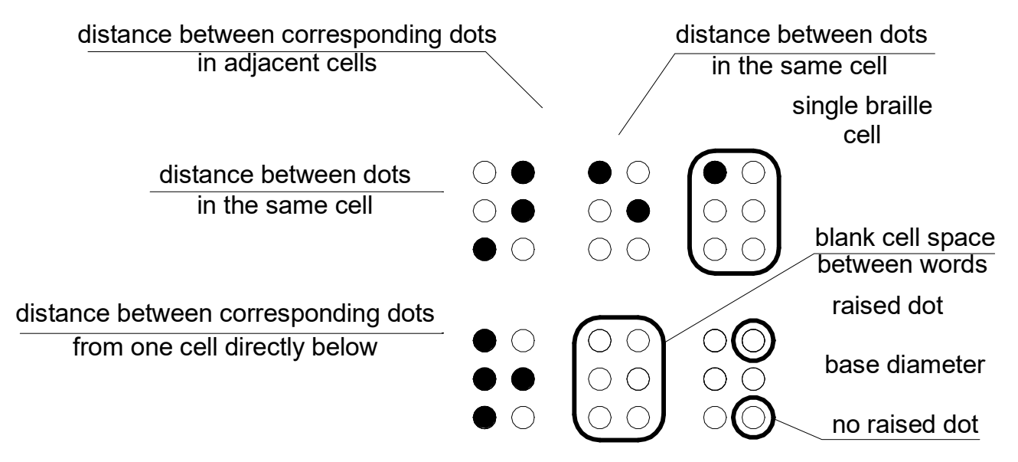
CALIFORNIA CONTRACTED BRAILLE SHALL BE USED WHENEVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS.
DOTS SHALL BE 1/10 INCH ON CENTERS IN EACH CELL WITH 2/10 INCH SPACE BETWEEN CELLS, MEASURED THE SECOND COLUMN OF DOTS IN THE FIRSTCELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL.
DOTS SHALL BE RAISED A MINIMUM OF 1/40 INCHES ABOVE THE BACKGROUND.
SEE FIGURE AND TABLE. SEE 2/A0.2

* **NOTE FOR UNISEX OR SINGLE USER RESTROOM DOOR SYMBOL:**
THE COLOR OF THE TRIANGLE SHALL CONTRAST WITH THE COLOR OF THE CIRCLE SYMBOL, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND. THE COLOR OF THE CIRCLE SYMBOL SHALL CONTRAST WITH THE COLOR OF THE DOOR OR SURFACE ON WHICH THE COMBINED CIRCLE AND TRIANGLE SYMBOL IS MOUNTED, EITHER LIGHT ON A DARK BACKGROUND OR DARK ON A LIGHT BACKGROUND.

3 1/4" = 1'-0"
Signage and Notes

BRAILLE DIMENSIONS

MEASUREMENT RANGE	MINIMUM IN INCHES MAXIUMN IN INCHES
Dot base diameter	0.059 (1.5mm) to 0.063 (1.6mm)
Distance between two dots in the same cell[1]	0.100 (2.5 mm)
Distance between corresponding dots in adjacent cells[1]	0.300 (7.6 mm)
Dot height	0.025 (0.6 mm) to 0.037 (0.09mm)
Distance between corresponding dots from once cell directly below[1]	0.395 (10 mm) to 0.400 (10.2 mm)


distance between corresponding dots in adjacent cells
distance between dots in the same cell
single braille cell
distance between dots in the same cell
blank cell space between words
distance between corresponding dots from one cell directly below
raised dot
base diameter
no raised dot

9 1/2" = 1'-0"
BRAILLE DIMENSIONS

PROJECT SPECIFIC STATE AGENCY APPROVAL
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL
~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
SIGNAGE AND SYMBOLS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.2

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number: 11-111111
School Name: 1
School District: 1
DSA File Number:
Increment Number:
Date Created: 2023-05-16 13:57:04

2022 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic – Indicates that a periodic special inspection is required	**LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.
Test – Indicates that a test is required	**PI (Project Inspector) –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1; AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.
	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Ultrasonic	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	**b.** Magnetic Particle	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

NOTE:
THE EXAMPLE OF FORM DSA-103s SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSE ONLY. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC BEING INCORPORATED INTO AND EXAMPLE FORM DSA-103s ARE TO BE CROSSED OUT ON THIS DRAWING.

3 DSA-103 PLYWOOD FLOOR (STOCKPILE)

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number: 11-111111
School Name: 1
School District: 1
DSA File Number:
Increment Number:
Date Created: 2023-05-16 14:08:48

2022 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic – Indicates that a periodic special inspection is required	**LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.
Test – Indicates that a test is required	**PI (Project Inspector) –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

Geotechnical Reports: Project does NOT have and does NOT require a geotechnical report

	S1. GENERAL:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify that: • Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. • Foundation excavations are extended to proper depth and have reached proper material. • Materials below footings are adequate to achieve the design bearing capacity.	**See Notes**	**PI**	Refer to specific items identified in the Appendix listing exemptions for limitations. Placement of controlled fill exceeding 12" depth under foundations is not permitted without a geotechnical report.
	S2. SOIL COMPACTION AND FILL:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	**Continuous**	**LOR***	* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.
☑	**b.** Compaction testing.	**Test**	**LOR***	* Under the supervision of a geotechnical engineer or LOR's engineering manager. Refer to specific items identified in the Appendix listing exemptions for limitations.
	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify use of required design mix.	**Periodic**	**SI**	**Table 1705A.3 Item 5, 1910A.1.**
☑	**b.** Identifiy, sample, and test reinforcing steel.	**Test**	**LOR**	**1910A.2;** ACI 318-19 Ch.20 and Section 26.6.1.2; DSA IR 17-10. (See Appendix (end of this form) for exemptions.)
☑	**c.** During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	**Test**	**LOR**	**Table 1705A.3 Item 6**; ACI 318-19 Sections 26.5 & 26.12.
☑	**d.** Test concrete (f'_c).	**Test**	**LOR**	**1905A.1.17;** ACI 318-19 Section 26.12.
☑	**e.** Batch plant inspection: **Continuous**	**See Notes**	**SI**	Default of '**Continuous**' per **1705A.3.3.** If approved by DSA, batch plant inspection may be reduced to '**Periodic**' subject to requirements in Section **1705A.3.3.1**, or eliminated per **1705A.3.3.2.** See IR 17-13. (See Appendix (end of this form) for exemptions.)
	C5. POST-INSTALLED ANCHORS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect installation of post-installed anchors	**See Notes**	**SI***	**1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8** (See Appendix (end of this form) for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.
☑	**b.** Test post-installed anchors.	**Test**	**LOR**	**1910A.5.** (See Appendix (end of this form) for exemptions.)
	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1; AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.
	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
☐	**d.** Verification of reinforcing steel weldability other than ASTM A706.	**Periodic**	**SI**	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☑	**e.** Inspect welding of reinforcing steel.	**Continuous**	**SI**	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**b.** Inspect single-pass fillet welds ≤ 5/16".	**Periodic**	**SI**	**Table 1705A.2.1 Item 5a.5;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Ultrasonic	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	**b.** Magnetic Particle	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291
3. Post-installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
4. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
5. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

NOTES:
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IF THERE IS A GEOTECHNICAL REPORT, THE GEOTECH ENGINEER SHOULD DO THE INSPECTION INSTEAD OF PROJECT INSPECTOR (PI).

2 DSA-103 PLYWOOD FLOOR (CONCRETE FOUNDATION)

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number: 11-111111
School Name: 11
School District: 11
DSA File Number:
Increment Number:
Date Created: 2023-05-16 14:19:31

2022 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

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Continuous – Indicates that a continuous special inspection is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative.
Periodic – Indicates that a periodic special inspection is required	**LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335.
Test – Indicates that a test is required	**PI (Project Inspector) –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA.
	SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1; AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.
	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16".	**Periodic**	**SI**	**Table 1705A.2.1 Item 5a.5;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Ultrasonic	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	**b.** Magnetic Particle	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
3. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

NOTE:
THE EXAMPLE OF FORM DSA-103s SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSE ONLY. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC BEING INCORPORATED INTO AND EXAMPLE FORM DSA-103s ARE TO BE CROSSED OUT ON THIS DRAWING.

1 DSA-103 PLYWOOD FLOOR (WOOD FOUNDATION)

PROJECT SPECIFIC STATE AGENCY APPROVAL

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
WWW.RSTAVARES.COM

PROFESSIONAL STAMP
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
RST#22088
02/16/24

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

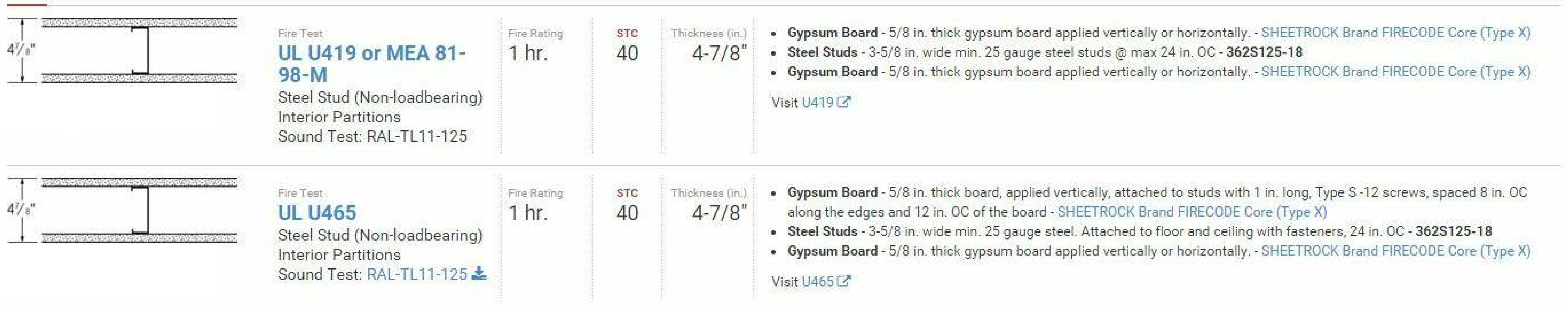
SHEET TITLE
DSA-103 T&I PLYWOOD FLOORS

PROJECT NUMBER 22088
DRAWN BY rMc/SC
CHECKED BY RH/RT
DATE
SHEET NO. A0.4
SHEET OF

6/15/2021 11:49:08 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

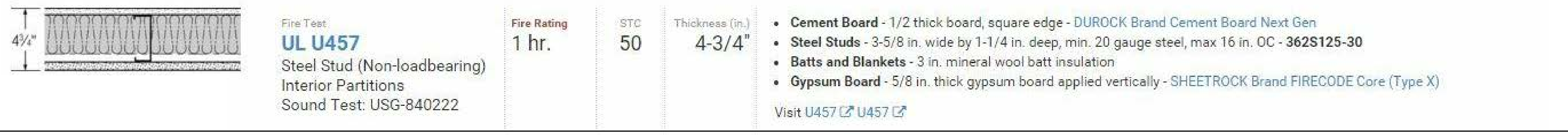
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

UL U419 OR UL U465 (OR EQ) TO BE USED FOR INT. STC RATING. WOOD STUD MAY BE USED ILO OF MTL STUD (WHEN NON-RATED WALLS ARE BEING APPLIED "X" BOARD IS NOT REQUIRED -STC RATINGS STILL APPLY)



Fire Test	Fire Rating	STC	Thickness (in.)	
UL U419 or MEA 81-98-M Steel Stud (Non-loadbearing) Interior Partitions Sound Test: RAL-TL11-125	1 hr.	40	4-7/8"	- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand FIRECODE Core (Type X) - **Steel Studs** - 3-5/8 in. wide min. 25 gauge steel studs @ max 24 in. OC - **362S125-18** - **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand FIRECODE Core (Type X) Visit U419
UL U465 Steel Stud (Non-loadbearing) Interior Partitions Sound Test: RAL-TL11-125	1 hr.	40	4-7/8"	- **Gypsum Board** - 5/8 in. thick board, applied vertically, attached to studs with 1 in. long, Type S -12 screws, spaced 8 in. OC along the edges and 12 in. OC of the board - SHEETROCK Brand FIRECODE Core (Type X) - **Steel Studs** - 3-5/8 in. wide min. 25 gauge steel. Attached to floor and ceiling with fasteners, 24 in. OC - **362S125-18** - **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand FIRECODE Core (Type X) Visit U465

UL U457 (OR EQ) TO BE USED FOR EXT. STC RATING . WOOD STUD MAY BE USED ILO OF MTL STUD



Fire Test	Fire Rating	STC	Thickness (in.)	
UL U457 Steel Stud (Non-loadbearing) Interior Partitions Sound Test: USG-840222	1 hr.	50	4-3/4"	- **Cement Board** - 1/2 thick board, square edge - DUROCK Brand Cement Board Next Gen - **Steel Studs** - 3-5/8 in. wide by 1-1/4 in. deep, min. 20 gauge steel, max 16 in. OC - **362S125-30** - **Batts and Blankets** - 3 in. mineral wool batt insulation - **Gypsum Board** - 5/8 in. thick gypsum board applied vertically - SHEETROCK Brand FIRECODE Core (Type X) Visit U457 U457

ACOUSTIC CONTROL- When the Pre-check building is site adapted, the building and site features need to comply with the CALGreen Code, Section 5.507.4 for the specific site location, and when PC building is place adjacent to another PC building, the adjoining wall section for interior sound transmission must meet the minimum requirement of a STC rating of 40 (per 2022 CALGreen Code, Section 507.4.3).

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

CLIENT

Class Leasing
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ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
CALGREEN SPEC'S

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.5

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

AIA California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y N/A RESPON. PARTY

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

301.1 SCOPE. Buildings shall be designed to include the green building measures specified as mandatory in the application checklists contained in this code. Voluntary green building measures are also included in the application checklists and may be included in the design and construction of structures covered by this code, but are not required unless adopted by a city, county, or city and county as specified in Section 101.7.

301.3 NONRESIDENTIAL ADDITIONS AND ALTERATIONS. [BSC-CG] The provisions of individual sections of Chapter 5 apply to newly constructed buildings, building additions of 1,000 square feet or greater, and/or building alterations with a permit valuation of $200,000 or above (for occupancies within the authority of California Building Standards Commission). Code sections relevant to additions and alterations shall only apply to the portions of the building being added or altered within the scope of the permitted work.

A code section will be designated by a banner to indicate where the code section only applies to newly constructed buildings [N] or to additions and/or alterations [A]. When the code section applies to both, no banner will be used.

301.3.1 Nonresidential additions and alterations that cause updates to plumbing fixtures only:

Note: On and after January 1, 2014, certain commercial real property, as defined in Civil Code Section 1101.3, shall have its noncompliant plumbing fixtures replaced with appropriate water-conserving plumbing fixtures under specific circumstances. See Civil Code Section 1101.1 *et seq.* for definitions, types of commercial real property affected, effective dates, circumstances necessitating replacement of noncompliant plumbing fixtures, and duties and responsibilities for ensuring compliance.

301.3.2 Waste Diversion. The requirements of Section 5.408 shall be required for additions and alterations whenever a permit is required for work.

301.4 PUBLIC SCHOOLS AND COMMUNITY COLLEGES. (see GBSC)
301.5 HEALTH FACILITIES. (see GBSC)

SECTION 302 MIXED OCCUPANCY BUILDINGS

302.1 MIXED OCCUPANCY BUILDINGS. In mixed occupancy buildings, each portion of a building shall comply with the specific green building measures applicable to each specific occupancy.

SECTION 303 PHASED PROJECTS

303.1 PHASED PROJECTS. For shell buildings and others constructed for future tenant improvements, only those code measures relevant to the building components and systems considered to be new construction (or newly constructed) shall apply.

303.1.1 Initial Tenant improvements. The provisions of this code shall apply only to the initial tenant improvements to a project. Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 non-residential additions and alterations.

ABBREVIATION DEFINITIONS:

HCD	Department of Housing and Community Development
BSC	California Building Standards Commission
DSA-SS	Division of the State Architect, Structural Safety
OSHPD	Office of Statewide Health Planning and Development
LR	Low Rise
HR	High Rise
AA	Additions and Alterations
N	New

CHAPTER 5
NONRESIDENTIAL MANDATORY MEASURES
DIVISION 5.1 PLANNING AND DESIGN

SECTION 5.101 GENERAL
5.101.1 SCOPE
The provisions of this chapter outline planning, design and development methods that include environmentally responsible site selection, building design, building siting and development to protect, restore and enhance the environmental quality of the site and respect the integrity of adjacent properties.

SECTION 5.102 DEFINITIONS
5.102.1 DEFINITIONS
The following terms are defined in Chapter 2 *(and are included here for reference)*

CUTOFF LUMINAIRES. Luminaires whose light distribution is such that the candela per 1000 lamp lumens does not numerically exceed 25 (2.5 percent) at an angle of 90 degrees above nadir, and 100 (10 percent) at a vertical angle of 80 degrees above nadir. This applies to all lateral angles around the luminaire.

LOW-EMITTING AND FUEL EFFICIENT VEHICLES.
Eligible vehicles are limited to the following:

1. Zero emission vehicle (ZEV), enhanced advanced technology PZEV (enhanced AT ZEV) or transitional zero emission vehicles (TZEV) regulated under CCR, Title 13, Section 1962.
2. High-efficiency vehicles, regulated by U.S. EPA, bearing a fuel economy and greenhouse gas rating od 9 oe 10 as regulated under 40 CFR Section 600 Subpart D.

NEIGHBORHOOD ELECTRIC VEHICLE (NEV). A motor vehicle that meets the definition of "low-speed vehicle" either in Section 385.5 of the Vehicle Code or in 49CFR571.500 (as it existed on July 1, 2000), and is certified to zero-emission vehicle standards.

TENANT-OCCUPANTS. Building occupants who inhabit a building during its normal hours of operation as permanent occupants, such as employees, as distinguished from customers and other transient visitors.

VANPOOL VEHICLE. Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

Note: Source: Vehicle Code, Division 1, Section 668

ZEV. Any vehicle certified to zero-emission standards.

SECTION 5.106 SITE DEVELOPMENT

☐ ☐ **5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND.** Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

5.106.1.1 Local ordinance. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

5.106.1.2 Best Management Practices (BMPs). Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Scheduling construction activity during dry weather, when possible.
   b. Preservation of natural features, vegetation, soil, and buffers around surface waters.
   c. Drainage swales or lined ditches to control stormwater flow.
   d. Mulching or hydroseeding to stabilize disturbed soils.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.).
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g Spill prevention and control.
   h. Other housekeeping BMPs acceptable to the enforcing agency.

Y N/A RESPON. PARTY

☐ ☐ **5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND.** Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale.

Note: Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

☐ ☐ **5.106.4 BICYCLE PARKING.** For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

5.106.4.1 Bicycle parking. [BSC-CG] Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack.
Exception: Additions or alterations which add nine or less visitor vehicular parking spaces.

5.106.4.1.2 Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.3 For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.5 Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2

5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

☐ ☐ **5.106.5.3 Electric vehicle (EV) charging**. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcement agency substantiating the local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section

5.106.5.3.1 EV capable spaces.
[N] EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:
1. Raceways complying with the California Electrical Code and no less that 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable and into a suitable listed cabinet, box,enclosure or equivalent. A common raceway may be used to serve multiple EV charging spaces.
2. A service panel or subpanel (s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective devices space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)^2
0-9	0	0
10-25	2	0
26-50	8	2
51-75	13	3
76-100	17	4
101-150	25	6
151-200	35	9
201 AND OVER	20% of total[1]	25% of EV capable spaces[1]

1. Where there is insufficient electrical supply.
2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count towards the total number of required EV capable spaces shown in column 2.

5.106.5.3.2 Electric vehicle charging stations (EVCS)
EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

Y N/A RESPON. PARTY

5.106.5.3.3 Use of automatic load management systems (ALMS).
ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section
5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

5.106.5.3.4 Accessible EVCS.
When EVSE is installed, accessible EVSC shall be provided in accordance with the *California Building Code*, Chapter 11B, Section 11B-228.3.
Note: For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

5.106.5.4 Electric Vehicle (EV) charging: medium-duty and heavy-duty. [N]
Construction shall comply with section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE.
Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply.
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

5.106.5.4.1 Electric vehicle charging readiness requirements for warehouse, grocery stores and retail stores with planned off-street loading spaces.
[N] In order to avoid future demolition when adding EV charging supply and distribution equipment, spare raceways(s) or busway(s) and adequate capacity for transformers(s), service panels(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include but are not limited to, the following:
1. The transformer, main service equipment and subpanel shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate on or more location(s) convenient to the planned offstreet loading space(s) reserved for medium-and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing of conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s) as shown in Table 5.106.5.4.1
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium-and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipments for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1 RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]

BUILDING TYPE	BUILDING SIZE (SQ. FT.)	NUMBER OF OFF-STREET LOADING SPACES	ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

☐ ☐ **5.106.8 LIGHT POLLUTION REDUCTION. [N].** I Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

Exceptions: [N]

1. Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.
5. Luminaires with less than 6,200 initial luminaire lumens.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS [1,2]

ALLOWABLE RATING	LIGHTING ZONE LZ0	LIGHTING ZONE LZ1	LIGHTING ZONE LZ2	LIGHTING ZONE LZ3	LIGHTING ZONE LZ4
MAXIMUM ALLOWABLE BACKLIGHT RATING [3]					
Luminaire greater than 2 mounting heights (MH) from property line	N/A	No Limit	No Limit	No Limit	No Limit
Luminaire back hemisphere is 1-2 MH from property line	N/A	B2	B3	B4	B4
Luminaire back hemisphere is 0.5-1 MH from property line	N/A	B1	B2	B3	B3
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	B0	B0	B1	B2
MAXIMUM ALLOWABLE UPLIGHT RATING (U)					
For area lighting [3]	N/A	U0	U0	U0	U0
For all other outdoor lighting,including decorative luminaires	N/A	U1	U2	U3	UR
MAXIMUM ALLOWABLE GLARE RATING [5] (G)					
MAXIMUM ALLOWABLE GLARE RATING [5] (G)	N/A	G1	G2	G3	G4
MAXIMUM ALLOWABLE GLARE RATING [5] (G)	N/A	G0	G1	G1	G2
MAXIMUM ALLOWABLE GLARE RATING [5] (G)	N/A	G0	G0	G1	G1
MAXIMUM ALLOWABLE GLARE RATING [5] (G)	N/A	G0	G0	G0	G1

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *Callifornia Administrative Code.*

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet *U*-value limits for "all other outdoor lighting"

Y N/A RESPON. PARTY

5.106.8.1 Facing- Backlight
Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.
Exception: Corners. If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property lines to determine the required backlight rating.

5.106.8.2 Facing-Glare.
For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

Note: [N]
1.See also *California Building Code*, Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways.
2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Building Code* for requirements for additions and alterations.

☐ ☐ **5.106.10 GRADING AND PAVING.** Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
   Exception: Additions and alterations not altering the drainage path.

☐ ☐ **5.106.12 SHADE TREES [DSA-SS].** Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

Exceptions: Surface parking area covered by solar photovoltaic shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.

5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

Exceptions: Playfields for organized sport activity are not included in the total area calculation.

5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

Exceptions:
1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.
2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

DIVISION 5.2 ENERGY EFFICIENCY

SECTION 5.201 GENERAL
5.201.1 Scope [BSC-CG]. ***California Energy Code [DSA-SS]*.** For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION

SECTION 5.301 GENERAL
5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance.

SECTION 5.302 DEFINITIONS
5.302.1 Definitions. The following terms are defined in Chapter 2 *(and are included here for reference)*

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

POTABLE WATER. [HCD] Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having Jurisdiction.

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

DISCLAIMER:*THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT SPECIFIC STATE AGENCY APPROVAL
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
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PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL
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~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
CAL GREEN CHECKLIST

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.6

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

AIA California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

NONRESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER, OWNER, CONTRACTOR, INSPECTOR ETC.)

Y | N/A | RESPON. PARTY

SECTION 5.303 INDOOR WATER USE

☐ ☐ **5.303.1 METERS.** Separate submeters or metering devices shall be installed for the uses described in Sections 503.1.1 and 503.1.2.

5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
   a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
   b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
   c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

☐ ☐ **5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS.** Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

☐ ☐ **5.303.3.1 Water Closets.** The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

5.303.3.2 Urinals.

☐ ☐ **5.303.3.2.1 Wall-mounted Urinals.** The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.

5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush.

☐ ☐ **5.303.3.3 Showerheads. [BSC-CG]**

5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.

Note: A hand-held shower shall be considered a showerhead.

☐ ☐ **5.303.3.4 Faucets and fountains.**

5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi].

5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.

5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

5.303.3.4.6 Pre-rinse spray value
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

☐ ☐ **5.303.4 COMMERCIAL KITCHEN EQUIPMENT.**

5.303.4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.

Note: This code section does not affect local jurisdiction authority to prohibit or require disposer installation.

5.303.5 AREAS OF ADDITION OR ALTERATION. For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.

5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.

SECTION 5.304 OUTDOOR WATER USE

☐ ☐ **5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

Notes:
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2.
2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.

☐ ☐ **5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS.** For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

Exception: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 5.401 GENERAL

5.401.1 SCOPE. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

SECTION 5.402 DEFINITIONS

5.402.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

BALANCE. To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.

BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

ORGANIC WASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste.

TEST. A procedure to determine quantitative performance of a system or equipment

SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT

5.407.1 WEATHER PROTECTION. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.

☐ ☐ **5.407.2 MOISTURE CONTROL.** Employ moisture control measures by the following methods.

5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.

5.407.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

5.407.2.2.2 Flashing. Install flashings integrated with a drainage plane.

SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING

☐ ☐ **5.408.1 CONSTRUCTION WASTE MANAGEMENT.** Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

5.408.1.2 Waste Management Company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

Note: The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

Exceptions to Sections 5.408.1.1 and 5.408.1.2:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan.
2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

☐ ☐ **5.408.2 UNIVERSAL WASTE. [A]** Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

Note: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/

5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

Exception: Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

Notes:

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
2. For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS

☐ ☐ **5.410.1 RECYCLING BY OCCUPANTS.** Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

5.410.1.1 Additions. All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

Exception: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area.

5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the *Public Resources Code*. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site.

☐ ☐ **5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over.** For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

Exceptions:

1. Unconditioned warehouses of any size.
2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

Informational Notes:

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.
2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the *California Energy Code*.

5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N] The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:
1. Environmental and sustainability goals.
2. Building sustainable goals.
3. Indoor environmental quality requirements.
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and systems expectations.
6. Building occupant and operation and maintenance (O&M) personnel expectations.

5.410.2.2 Basis of Design (BOD). [N] A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse system.

5.410.2.3 Commissioning plan. [N] Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:
1. General project information.
2. Commissioning goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
   a. An explanation of the original design intent.
   b. Equipment and systems to be tested, including the extent of tests.
   c. Functions to be tested.
   d. Conditions under which the test shall be performed.
   e. Measurable criteria for acceptable performance.
4. Commissioning team information.
5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

5.410.2.4 Functional performance testing. [N] Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

5.410.2.5 Documentation and training. [N] A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in *California Code of Regulations* (CCR), Title 8, Section 5142, and other related regulations.

5.410.2.5.1 Systems manual. [N] Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following:
1. Site information, including facility description, history and current requirements.
2. Site contact information.
3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log.
4. Major systems.
5. Site equipment inventory and maintenance notes.
6. A copy of verifications required by the enforcing agency or this code.
7. Other resources and documentation, if applicable.

5.410.2.5.2 Systems operations training. [N] A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following:
1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

5.410.2.6 Commissioning report. [N] A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.

☐ ☐ **5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet.** Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

5.410.4.2 (Reserved)

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.

5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency.

DIVISION 5.5 ENVIRONMENTAL QUALITY

SECTION 5.501 GENERAL

5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

SECTION 5.502 DEFINITIONS

5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continuous route.

A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made.

1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32^0 Fahrenheit.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

Note: See CCR, Title 17, Section 93120.1.

DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.).

DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propoelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE CHARGING STATION(S) (EVCSj). One or more spaces intended for charging electric vehicles.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest.

EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections.

GLOBAL WARMING POTENTIAL (GWP). The radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one.

GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14.

HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter.

LOW-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g O^3/g ROC).

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

PSIG. Pounds per square inch, guage.

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

SCHRADER ACCESS VALVES. Access fittings with a valve core installed.

SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.

SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units.

VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)

Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

SECTION 5.503 FIREPLACES

☐ ☐ **5.503.1 FIREPLACES.** Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits.

SECTION 5.504 POLLUTANT CONTROL

☐ ☐ **5.504.1 TEMPORARY VENTILATION.** The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

☐ ☐ **5.504.3 Covering of duct openings and protection of mechanical equipment during construction.** At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

DISCLAIMER:*THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA

RST#22088

02/16/24

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CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

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~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
CAL GREEN CHECKLIST

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.7

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

AIA California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

Y = YES
N/A = NOT APPLICABLE
RESPON. PARTY = RESPONSIBLE PARTY (ie: ARCHITECT, ENGINEER OWNER, CONTRACTOR, INSPECTOR ETC.)

Y	N/A	RESPON. PARTY
☐	☐	

☐ ☐ **5.504.4 FINISH MATERIAL POLLUTANT CONTROL.** Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

5.504.4.3.1 Aerosol Paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

TABLE 5.504.4.3 - CONT.

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	CURRENT VOC LIMIT
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH-TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS:	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:

1. Manufacturer's product specification
2. Field verification of on-site product containers

5.504.4.4 Carpet Systems.
All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.

5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

5.504.4.5.3 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:

1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

5.504.4.6 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350)

See California Department of Public Health's website for certification programs and testing labs. https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

5.504.4.7 Thermal insulation
Comply with the requirements of the California Department of Public Health, "Standard Method of the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.7.1 Verification of compliance.
Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

5.504.4.8 Acoustical ceiling and wall panels.
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, " Version 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.

5.504.4.8.1 Verification of compliance. Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions: Existing mechanical equipment.

5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

☐ ☐ **5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL.** Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

SECTION 5.505 INDOOR MOISTURE CONTROL

☐ ☐ **5.505.1 INDOOR MOISTURE CONTROL**. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

SECTION 5.506 INDOOR AIR QUALITY

☐ ☐ **5.506.1 OUTSIDE AIR DELIVERY.** For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the *California Energy Code*, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

☐ ☐ **5.506.2 CARBON DIOXIDE (CO_2) MONITORING.** For buildings or additions equipped with demand control ventilation, CO_2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

☐ ☐ **5.506.3 Carbon dioxide (CO2) monitoring in classrooms.**
(DSA-SS) Each public K-12 school classroom, as listed in Table 120.1-A of the *California Energy Code,* shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:

1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
3. A monitor shall provide notification though a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
4. The monitor or sensor shall measure carbon dioxide levels at minimum 15- minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

SECTION 5.507 ENVIRONMENTAL COMFORT

☐ ☐ **5.507.4 ACOUSTICAL CONTROL.** Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

Exception: [DSA-SS] For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

1. Within the 65 CNEL noise contour of an airport.

   Exceptions:

   1. L_{dn} or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. L_{dn} or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L_{eq} - 1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

5.507.4.2 Performance Method. For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1Hr) of 50 dBA in occupied areas during any hour of operation.

5.507.4.2.1 Site Features. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

5.507.4.2.2 Documentation of Compliance. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.

5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

SECTION 5.508 OUTDOOR AIR QUALITY

☐ ☐ **5.508.1 Ozone depletion and greenhouse gas reductions.** Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

☐ ☐ **5.508.2 Supermarket refrigerant leak reduction.** New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

Exception: Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO_2), and potentially other refrigerants.

5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack.

5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

5.508.2.1.2.1 Anchorage. One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

Exception: Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

5.508.2.2 Valves. Valves Valves and fittings shall comply with the *California Mechanical Code* and as follows.

5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use.

5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in place.

5.508.2.2.2.2.1 Chain tethers. Chain tethers to fit ovr the stem are required for valves designed to have seal caps.

Exception: Valves with seal caps that are not removed from the valve during stem operation.

5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.

5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver.

5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evacuation and charging.

5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to charging.

5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT SPECIFIC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
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REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. 53380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA

RST#22088

02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
CAL GREEN CHECKLIST

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

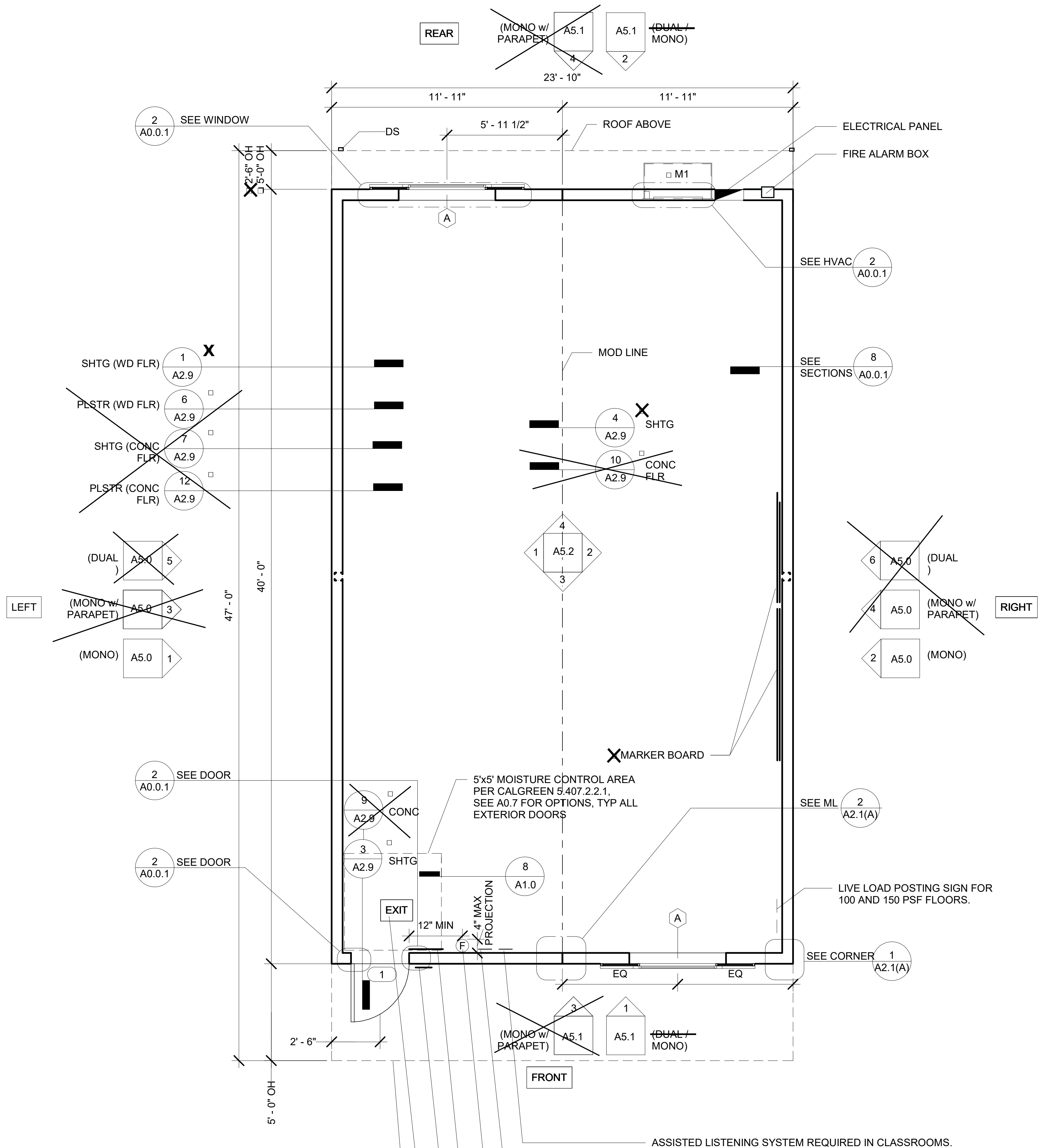
CHECKED BY
RH/RT

DATE

SHEET NO.
A0.8

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



ASSISTED LISTENING SYSTEM REQUIRED IN CLASSROOMS. PROVIDE SIGN FOR AVAILABILITY. SEE A0.2 FOR REQUIRED SIGN

OCC. LOAD SIGNAGE (SEE NOTE #6) 2 / A0.1

FIRE EXTINGUISHER - 48" MAX FROM FF TO HANDLE- SEE 3/5/8 A5.2

☐ EXIT SIGN (WALL MOUNTED) 3 / A0.2 SIGN (B)(OPTIONAL)

ROOM ID SIGN (BY OTHERS) 4 / A0.2

☐ EXIT SIGN (CEILING MOUNTED)(OPTIONAL)

ROOF ABOVE

1 1/4" = 1'-0"
24x40 Floor Plan

All rated construction (both vertical and horizontal) must be clearly defined, correctly indentified, detailed, and listed in accordance with CBC Chapters 3,5,7 and 10 (fire partitions, barriers, walls, shaft, egress protection, ceilings, opening protection, penetrations, structural members, etc). Provide and cross-reference installation details, including all components and attachment schedules for the fire-resistive materials to the framing. Shall conform in every particular with the design number specified

SECTION 915
CARBON MONOXIDE DETECTION

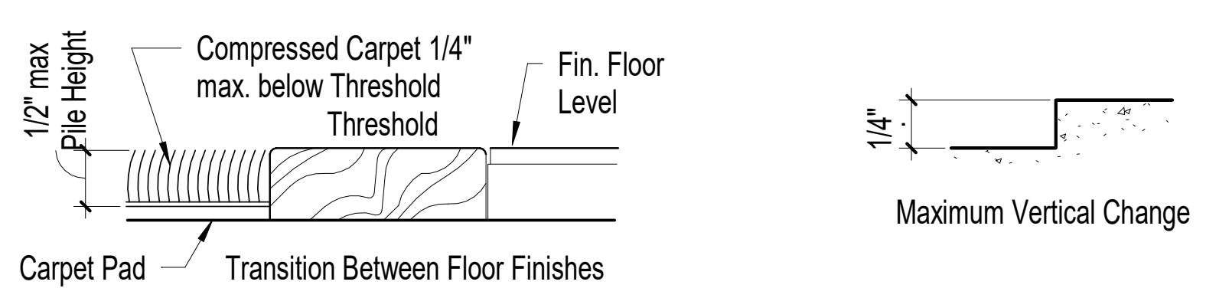
915.4 Carbon monoxide alarms. Carbon monoxide alarms shall comply with Sections 915.4.1 through 915.4.4.

[F] 915.4.1 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and with-out a disconnecting switch other than that required forovercurrent protection.

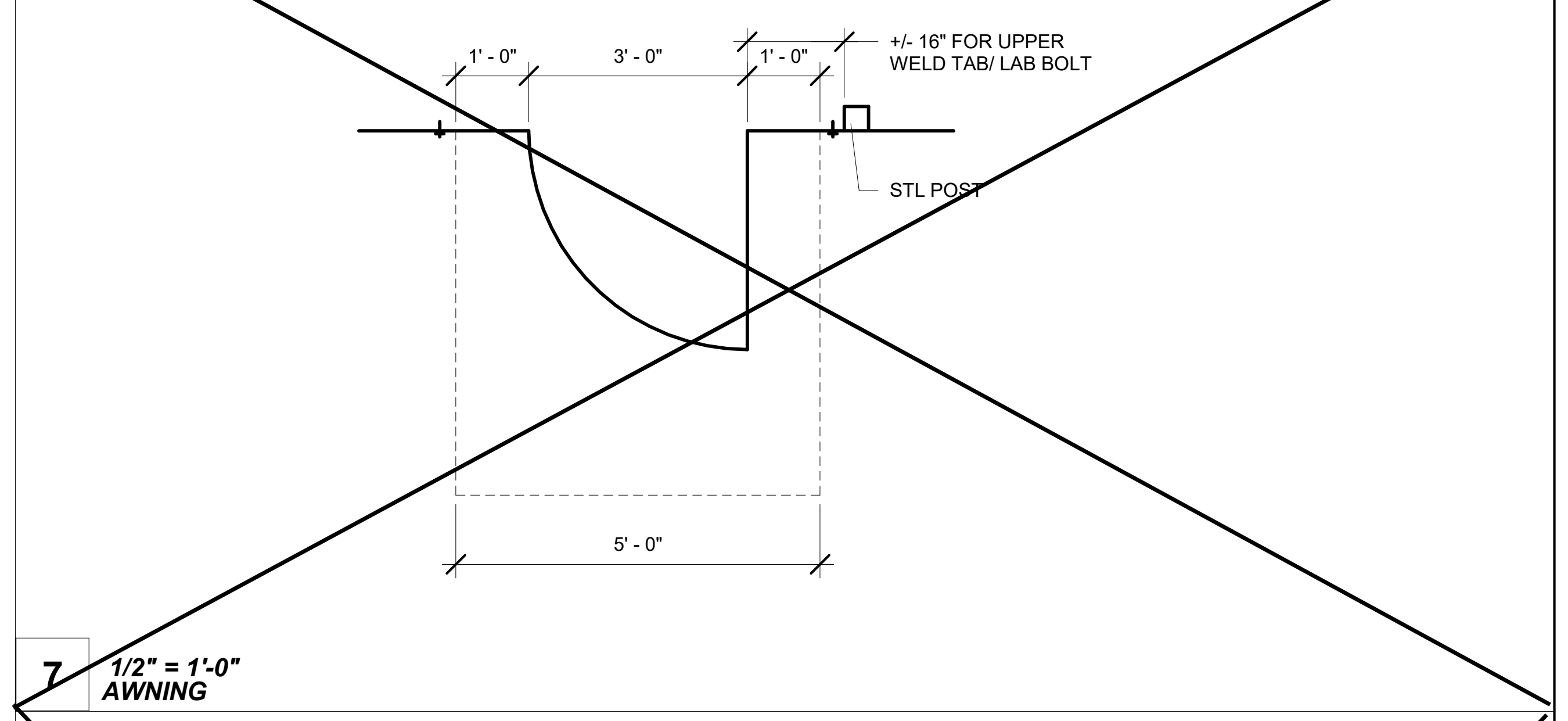
915.2.3 Group E occupancies. Carbon monoxide detection shall be installed in classrooms in Group E occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed byschool personnel.

915.3 Detection equipment. Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5.

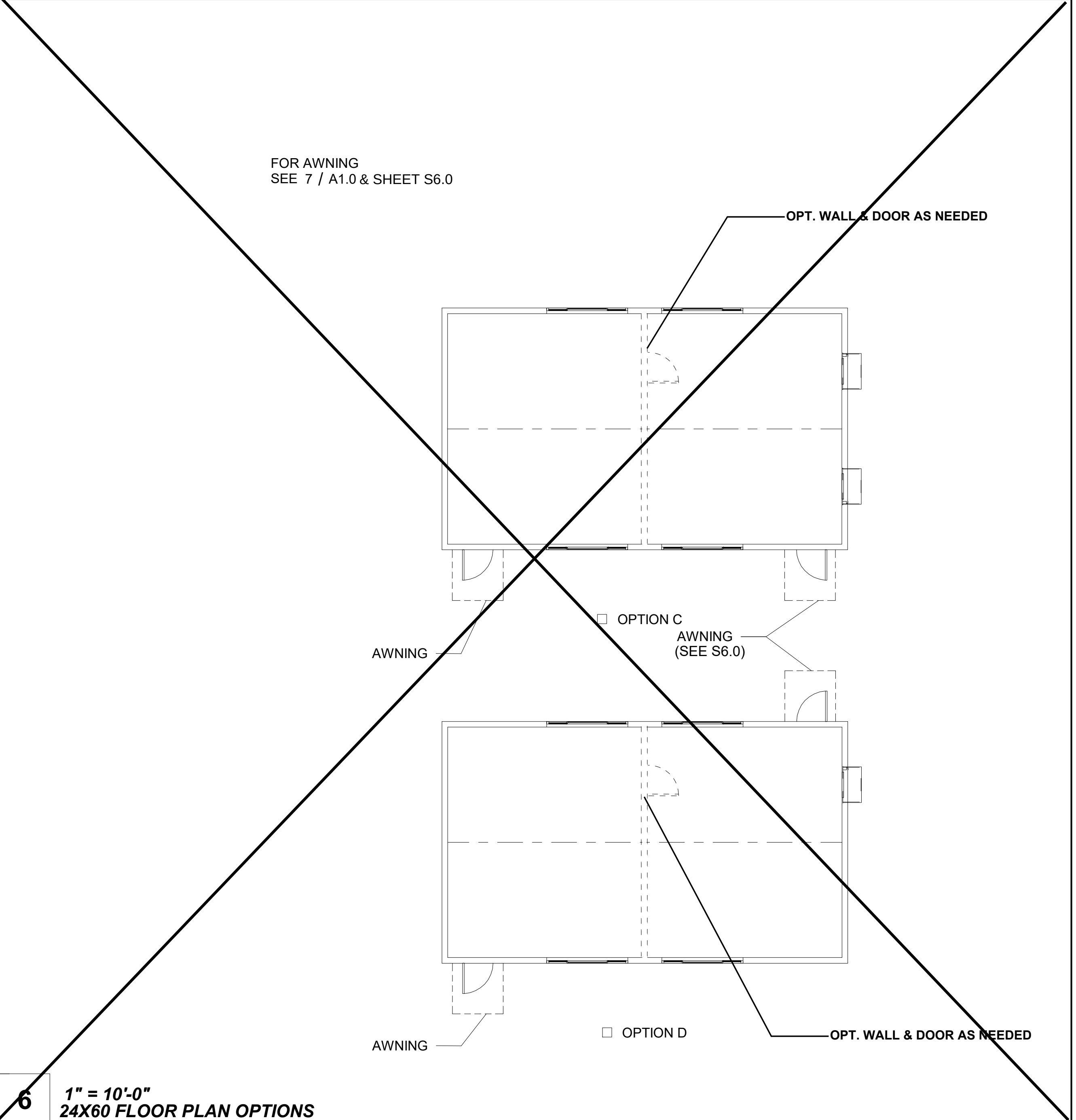
THIS BUILDING IS RIGHT HAND.
PC FLOOR PLAN SHOWN IS
MIRRORED



8 1/4" = 1'-0"
VCT TO CARPET DETAIL



7 1/2" = 1'-0"
AWNING


FOR AWNING
SEE 7 / A1.0 & SHEET S6.0
OPT. WALL & DOOR AS NEEDED
☐ OPTION C
AWNING
AWNING (SEE S6.0)
AWNING
☐ OPTION D
OPT. WALL & DOOR AS NEEDED

6 1" = 10'-0"
24X60 FLOOR PLAN OPTIONS

Wall Schedule

	Stud Size	Sheet	Notes
☒	Wood Wall Stud	S4.5	

FOR BURNING CHARACTERISTIC
SEE 3 / A0.1

5 1/4" = 1'-0"
Wall Schedule

Fire Rating Schedule

	Rating	Sheet	Notes
☐	1 HOUR - SIDING OVER WD STUDS	A2.5	
☐	1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.6	

SEE A3.0 FOR ADDITIONAL FIRE ASSEMBLY NOTES AND DETAILS

4 1/4" = 1'-0"
Fire Rating Schedule

Ext. Finish Schedule

	Finishes	Sheet	Notes
☒	SIDING OVER WD STUDS	A2.1	
☐	PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.2	

3 1/4" = 1'-0"
Ext. Finish Schedule

Roofing Schedule

"SLOPE"	EDPM	Standing Seam	Parapet	Notes
Dual	☐ A4.2.2	☐ A4.0.2	N/A	
Mono	☐ A4.2.1	☒ A4.0.1	☐ A4.4.1	

HVAC Unit

Keynote	Type	Type Comments
☒ M1	Wall Mounted HVAC	See (M)-Sheets
☐ M2	Roof Mounted HVAC	See (M)-Sheets

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PROJECT SPECIFIC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
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~~DATE: 03/13/2024~~

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MANNY D. FRISCH
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03/31/24
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
24x40 FLOOR PLAN

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A1.0

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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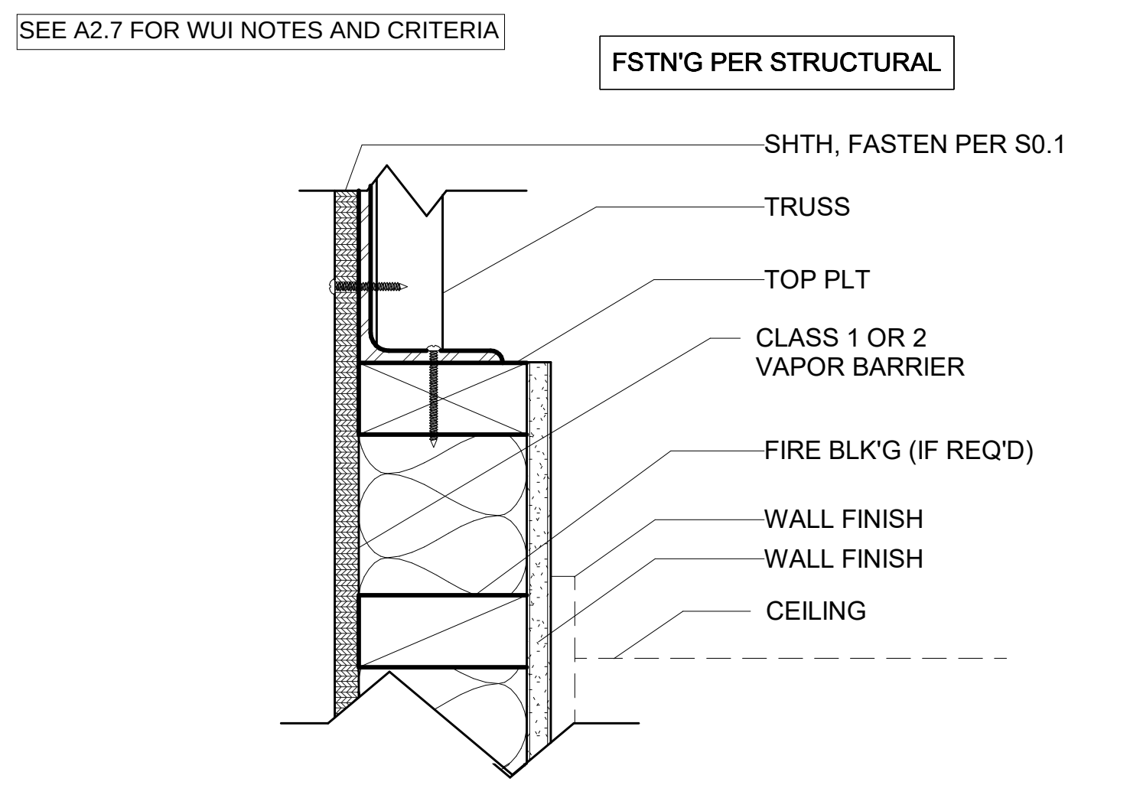
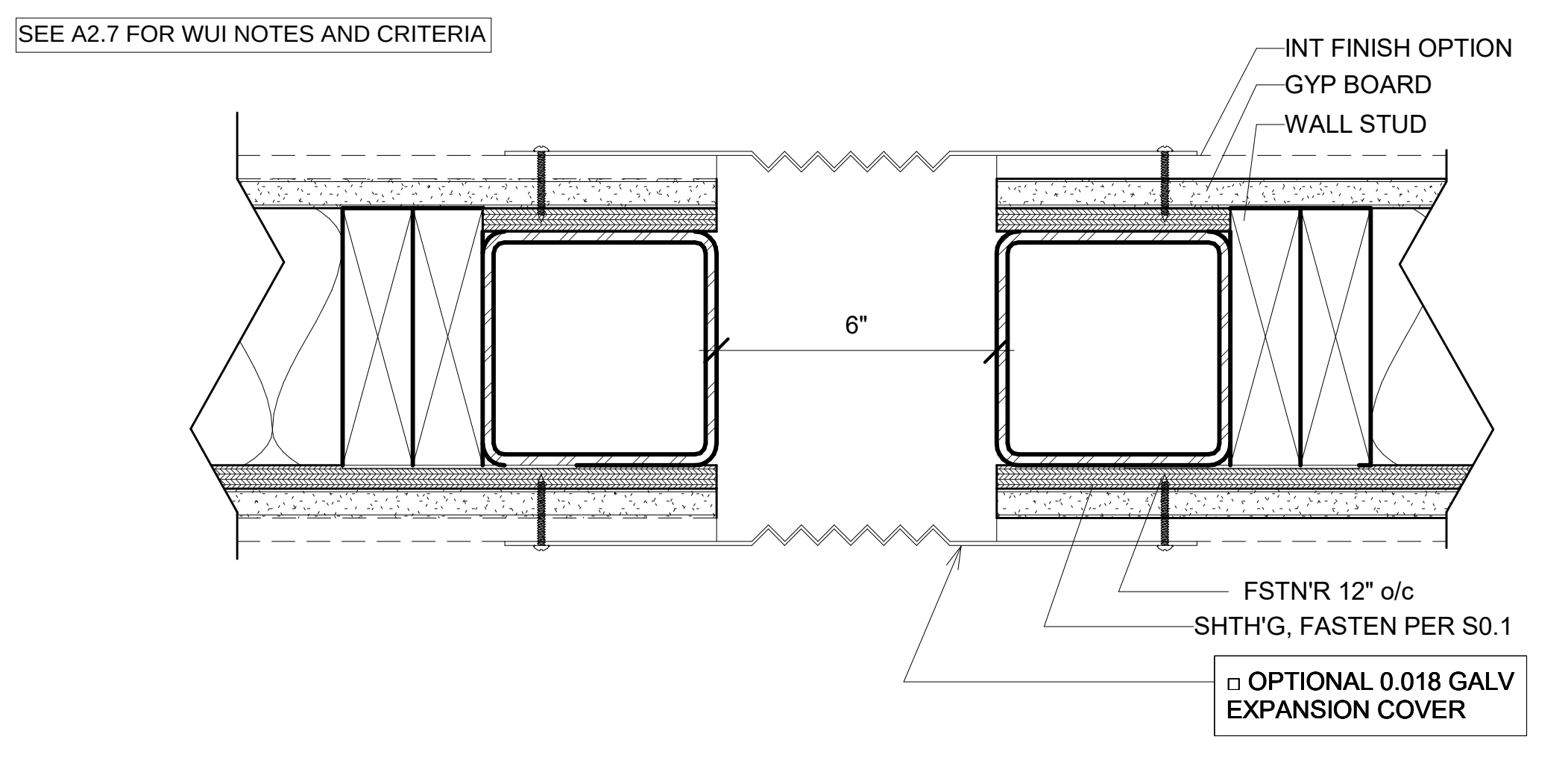
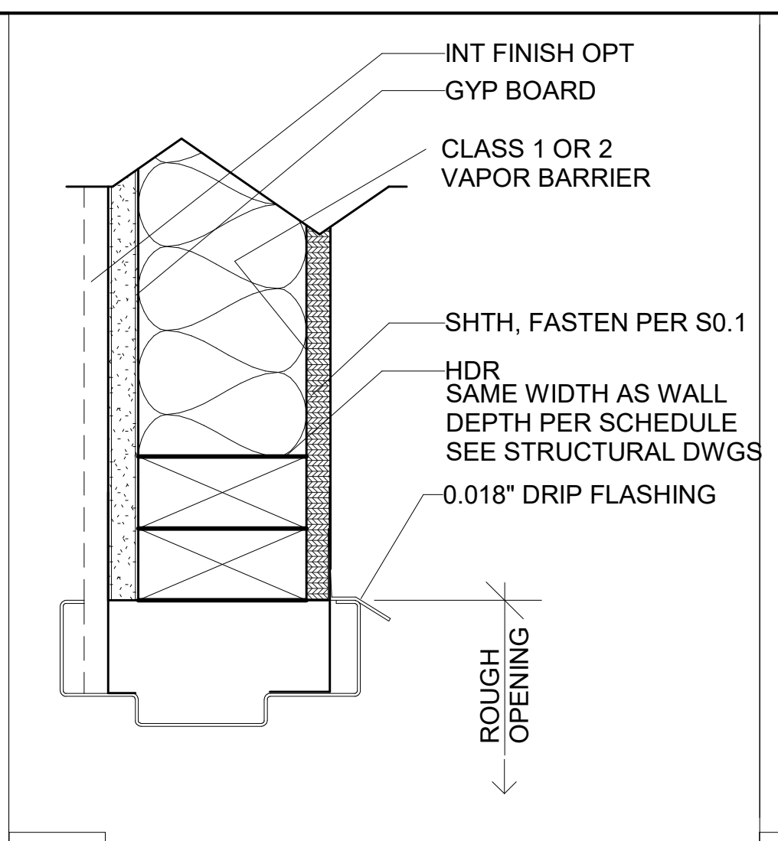
DATE: 07/07/2025



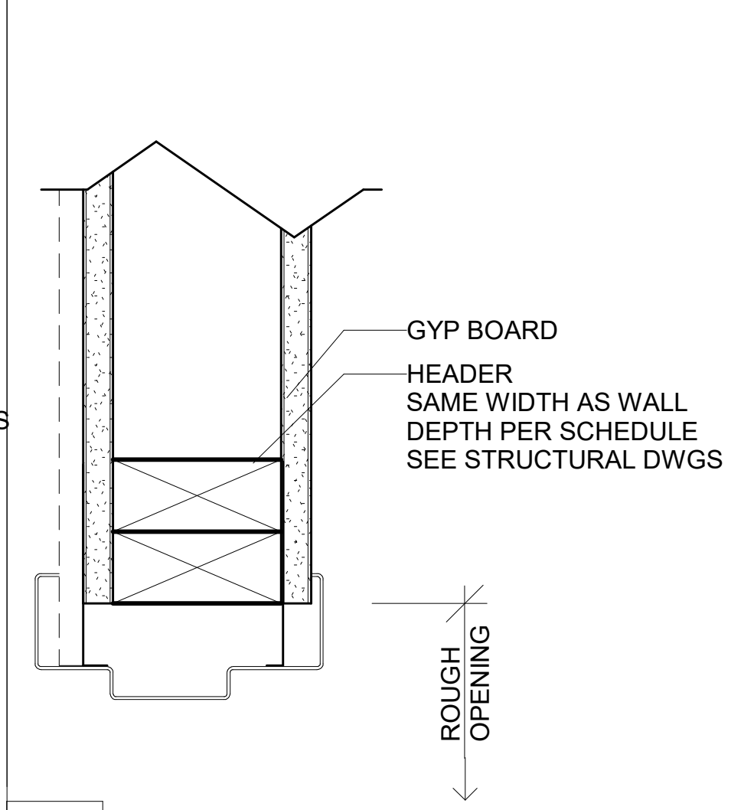
17 3" = 1'-0"
Section - Top Plate Shtg Finish



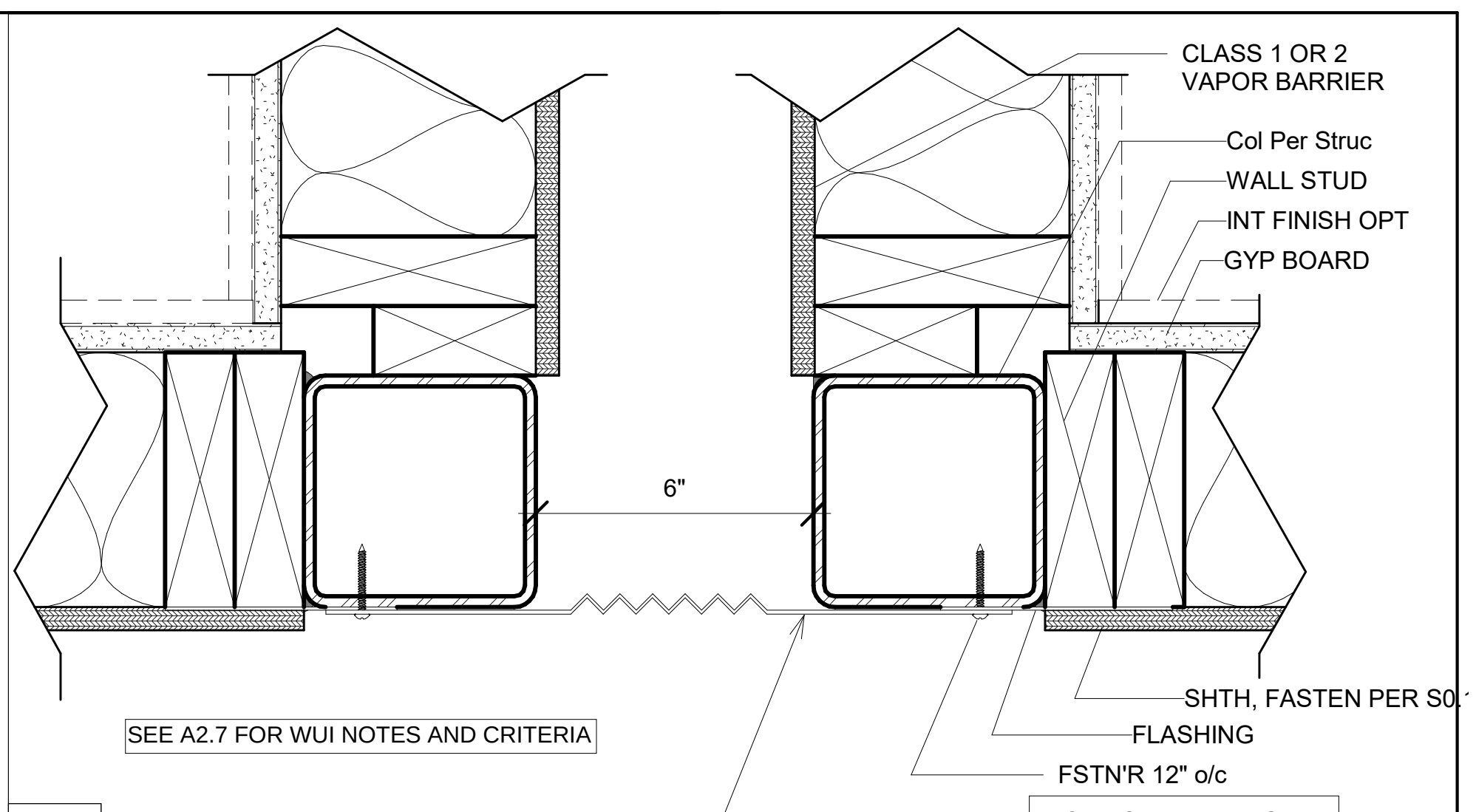
18 3" = 1'-0"
Plan - Interior Wall "OPEN" (6" Sep.) Shtg Finish



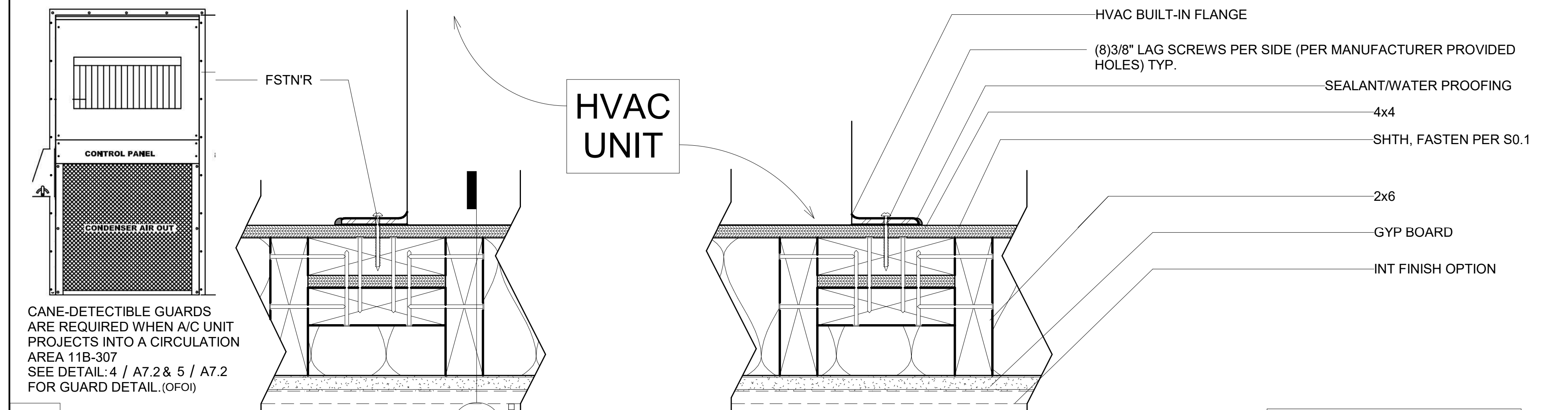
10A 3" = 1'-0"
Section - Ext Wall Hdr Door Shtg Finish



10B 3" = 1'-0"
Section - Int Wall Hdr Door Shtg Finish

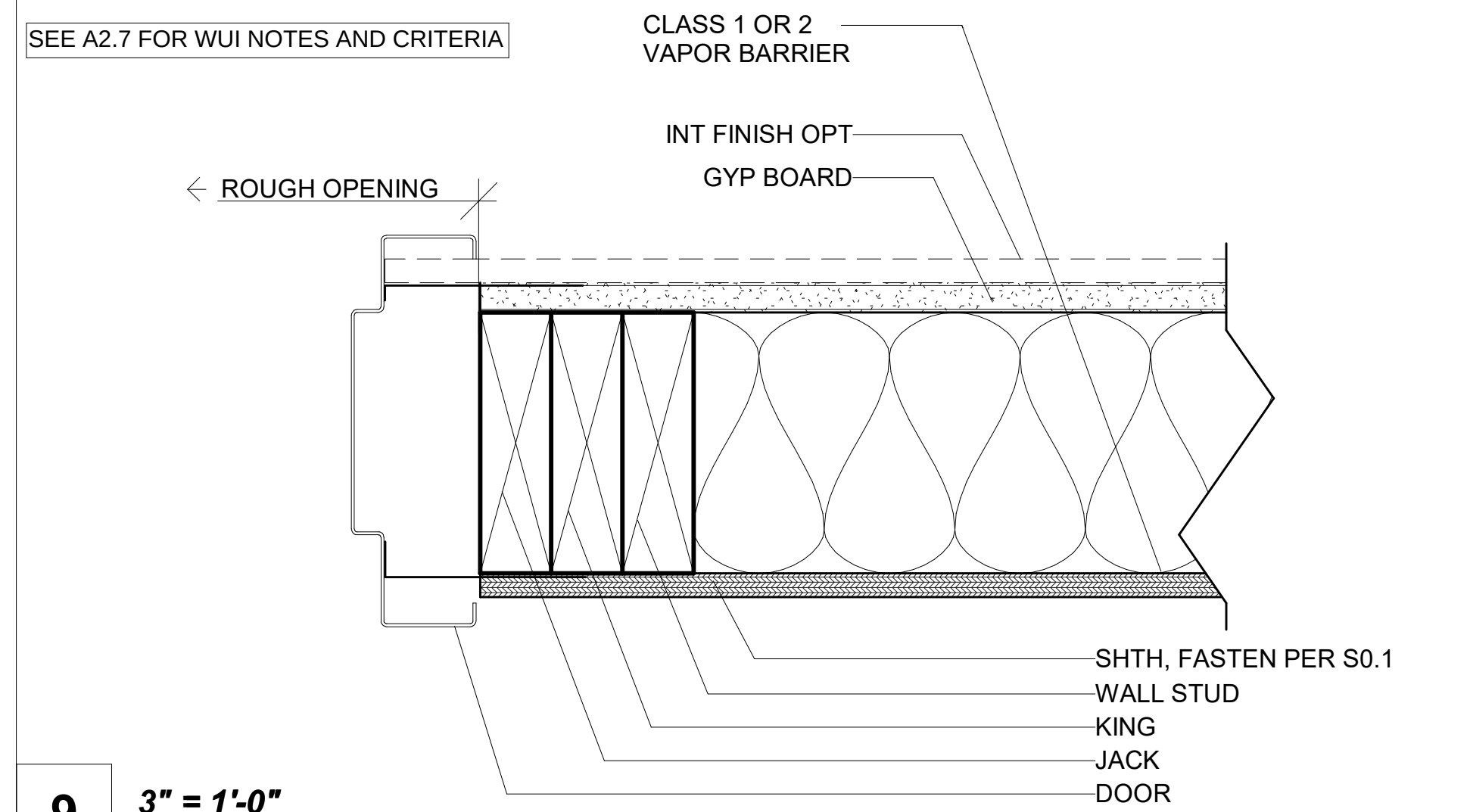


5 3" = 1'-0"
Plan - Mateline (6" Sep.) Shtg Finish

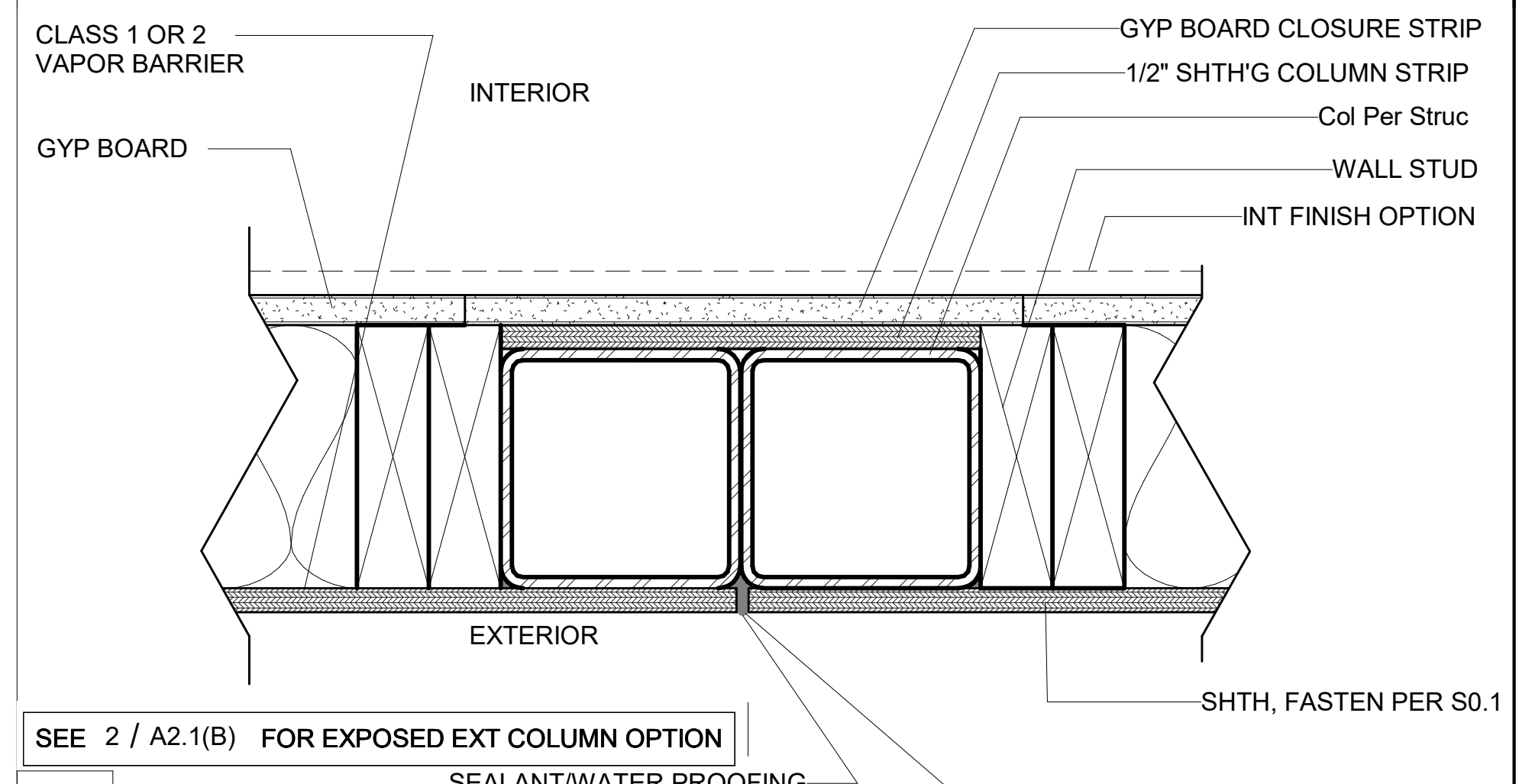


CANE-DETECTIBLE GUARDS ARE REQUIRED WHEN A/C UNIT PROJECTS INTO A CIRCULATION AREA 11B-307
SEE DETAIL: 4 / A7.2 & 5 / A7.2 FOR GUARD DETAIL.(OFOI)

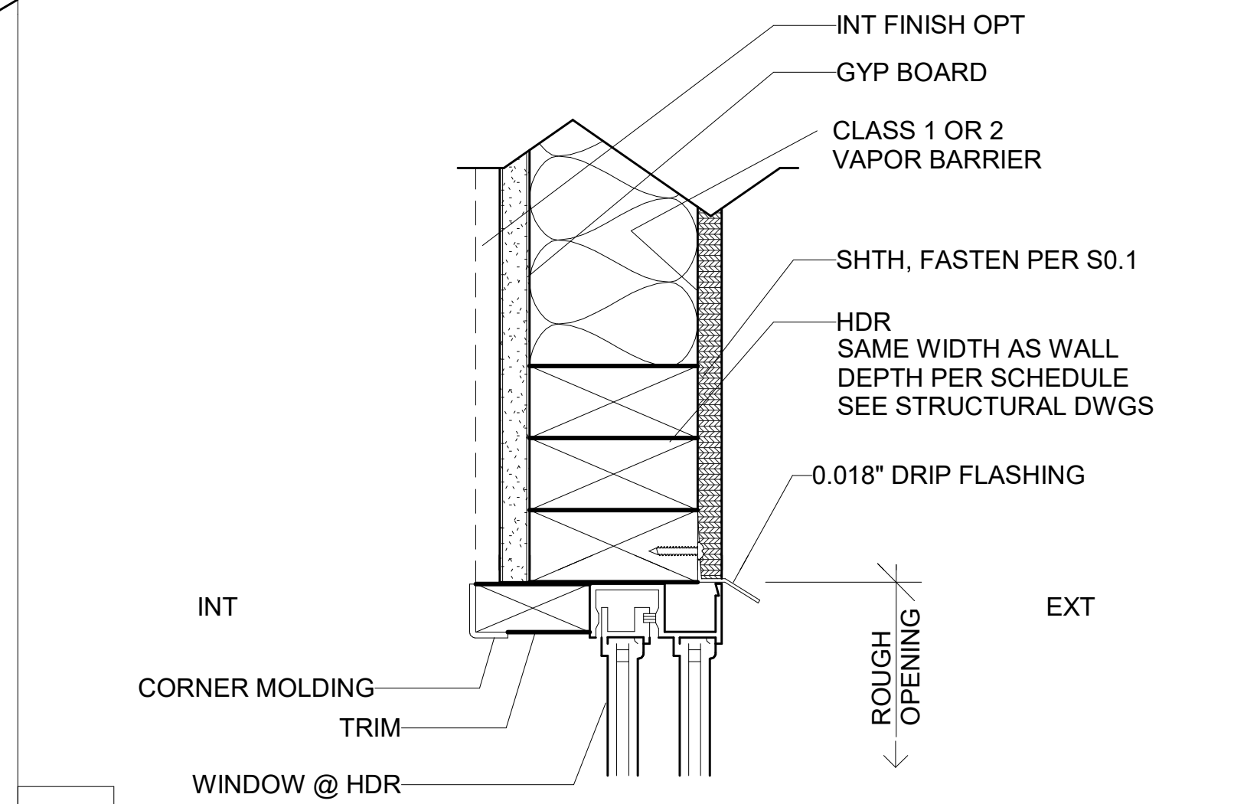
16 3" = 1'-0"
Plan - HVAC Unit Shtg Finish



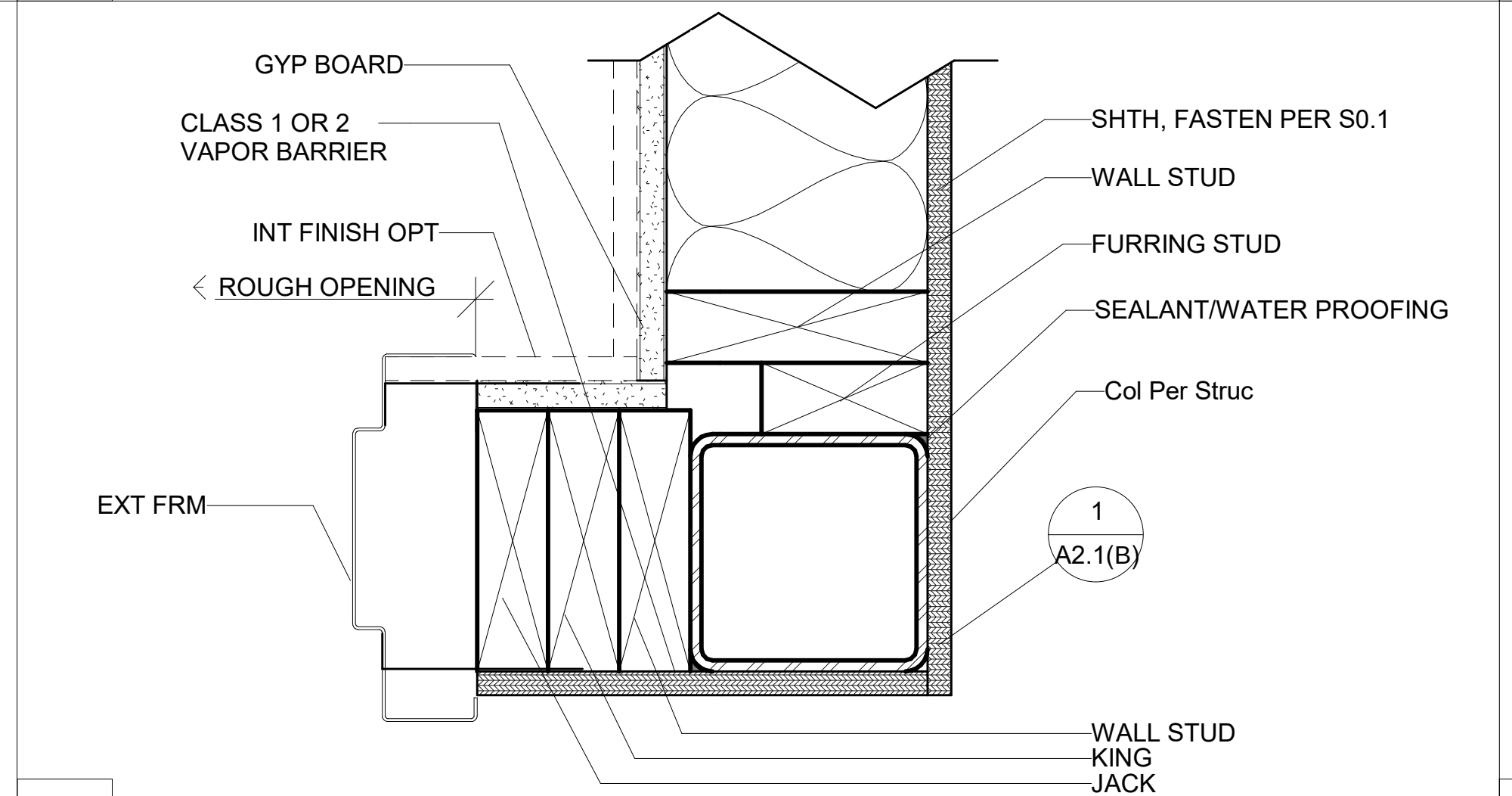
9 3" = 1'-0"
Plan - Exterior Door Jamb Shtg Finish



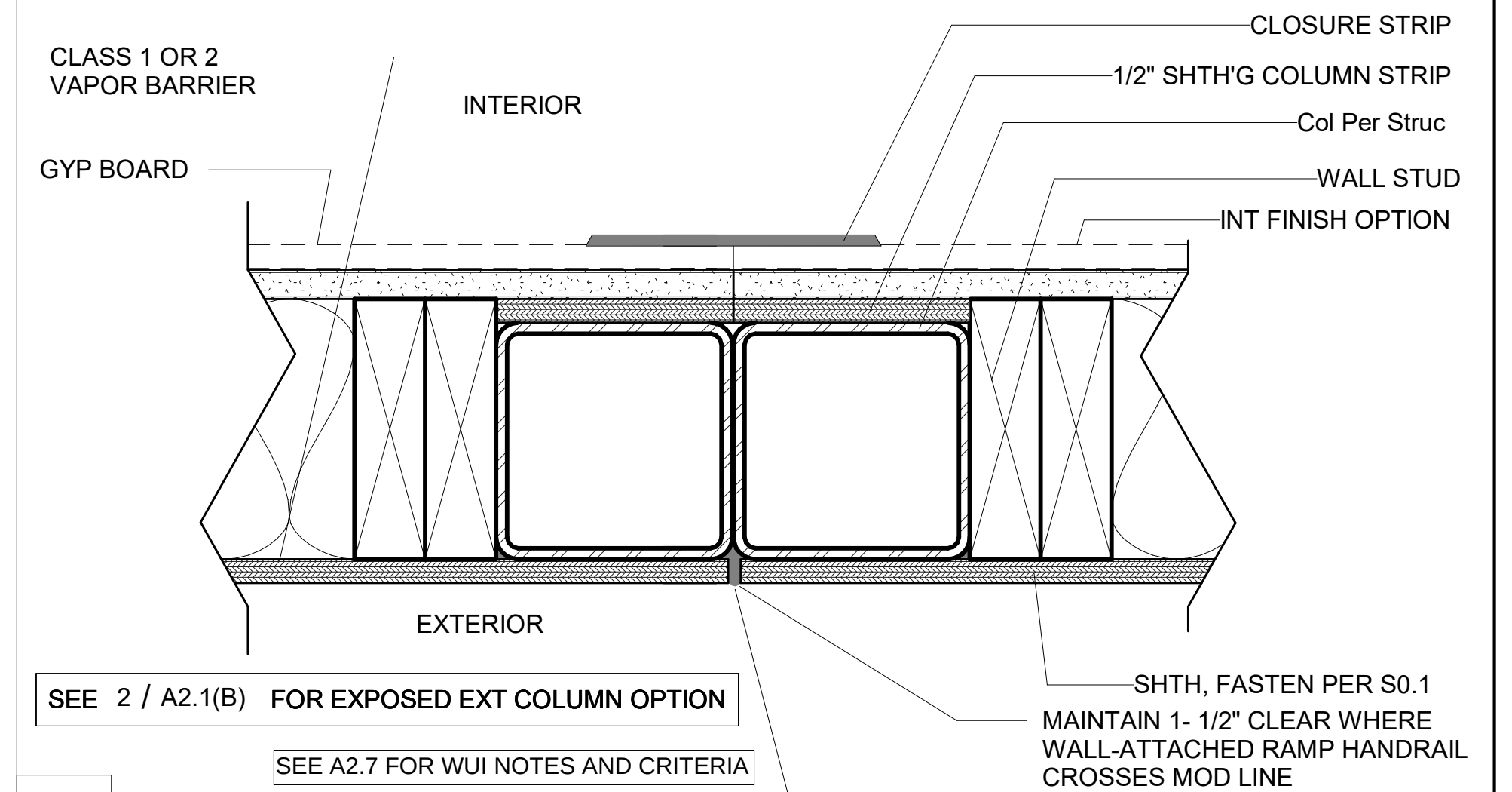
4 3" = 1'-0"
Plan - Mateline (Matline Closure Option) Shtg Finish



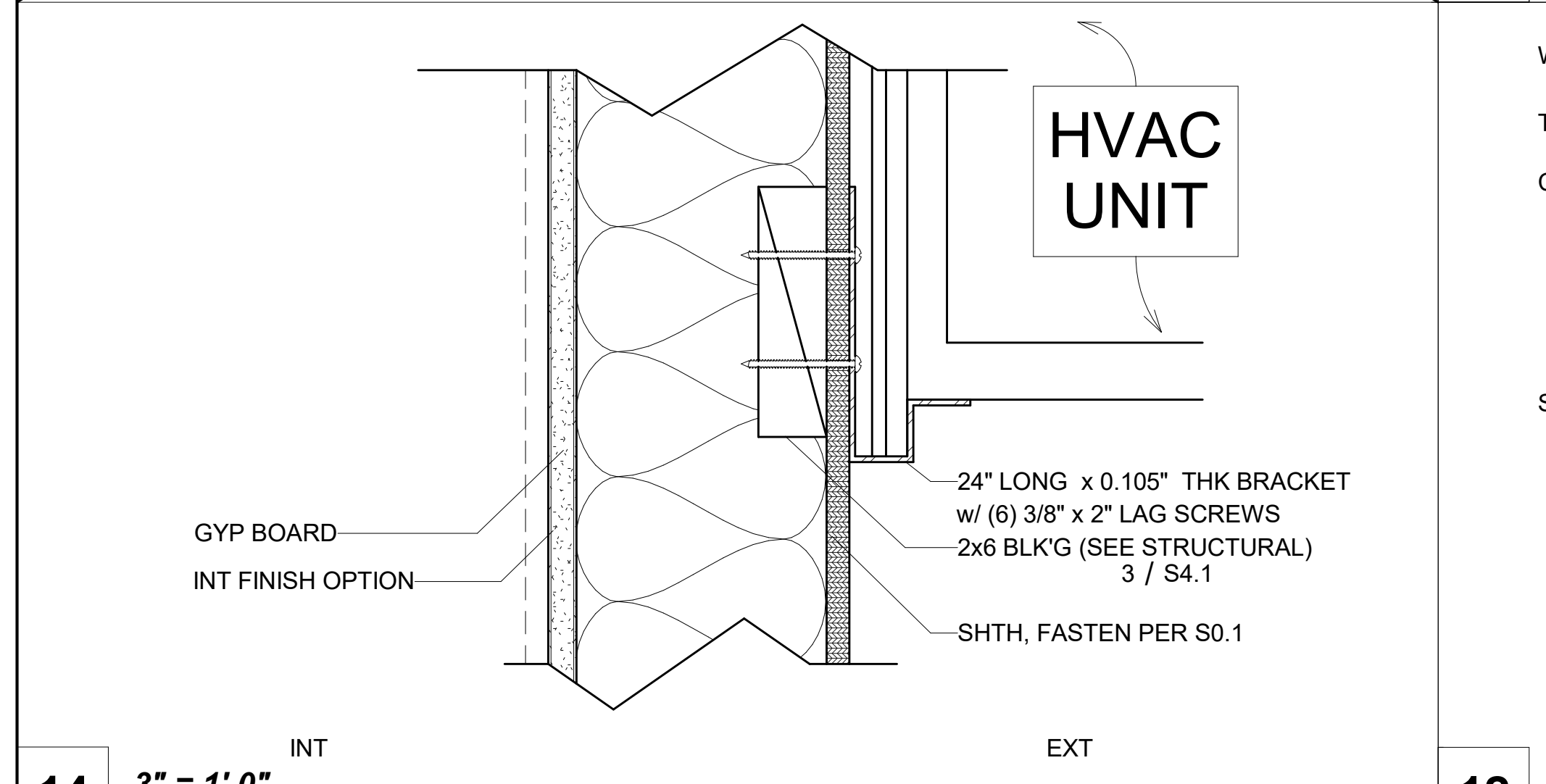
13 3" = 1'-0"
Section - Ext Wall Header @ Window Shtg Finish



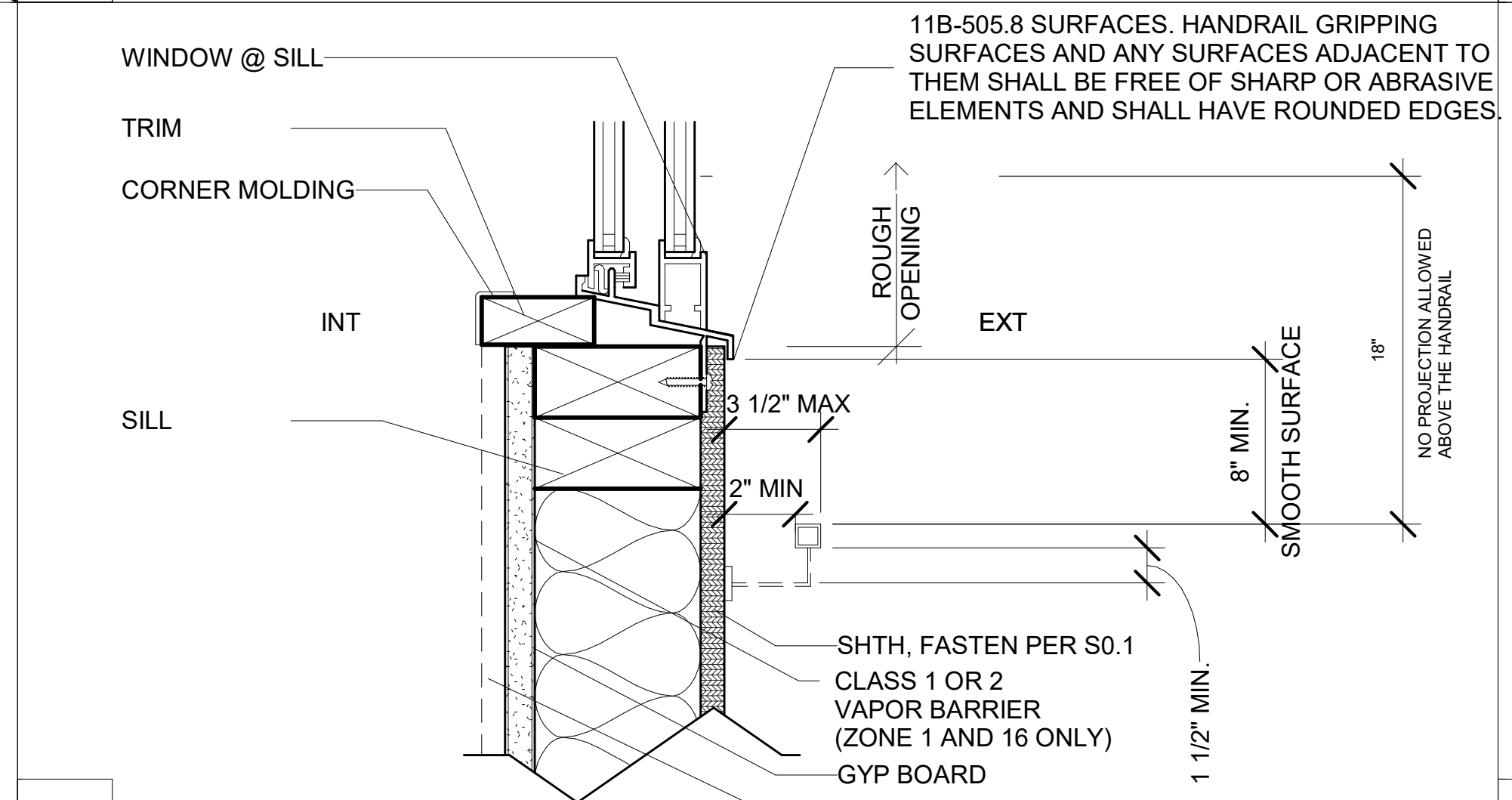
8 3" = 1'-0"
Plan - Exterior Door Jamb @ Wall Corner Shtg Finish



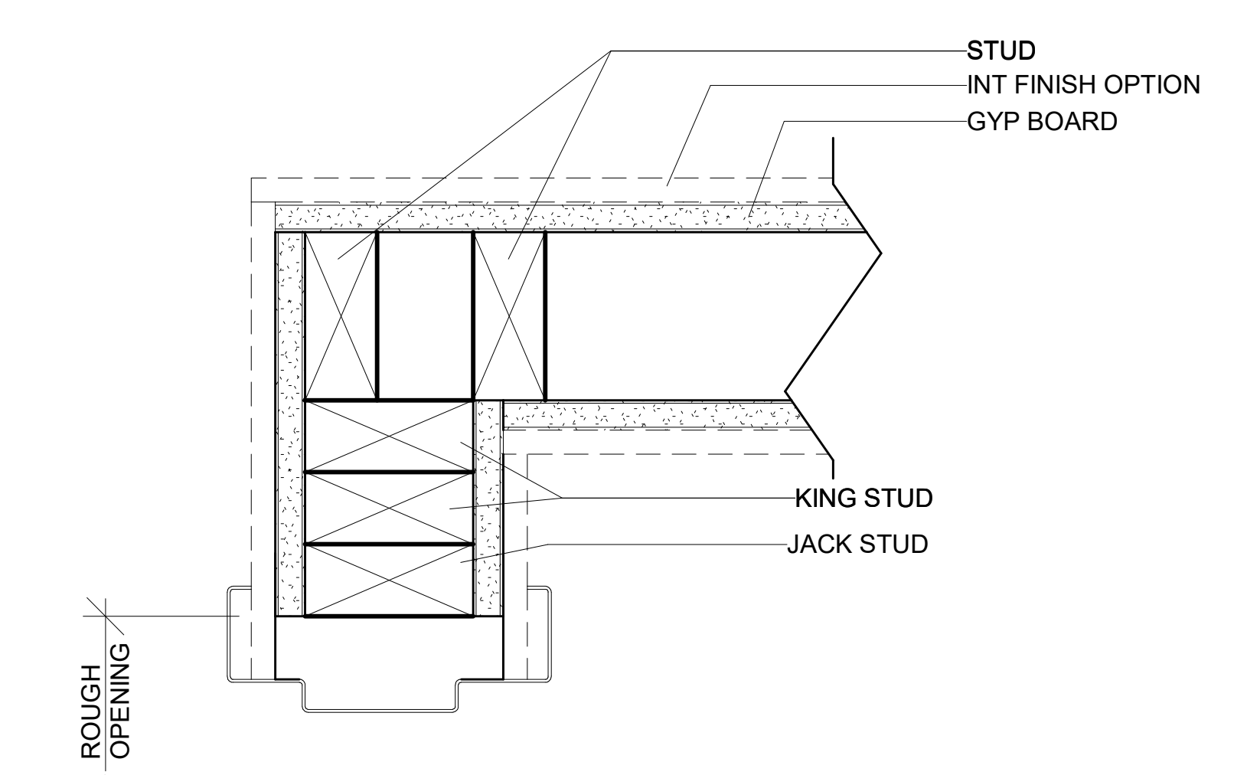
3 3" = 1'-0"
Plan - Mateline (Int Closure Strip) Shtg Finish


HVAC
UNIT
GYP BOARD
INT FINISH OPTION
24" LONG x 0.105" THK BRACKET
w/ (6) 3/8" x 2" LAG SCREWS
2x6 BLK'G (SEE STRUCTURAL)
3 / S4.1
SHTH, FASTEN PER S0.1
INT
EXT
SEE A2.7 FOR WUI NOTES AND CRITERIA

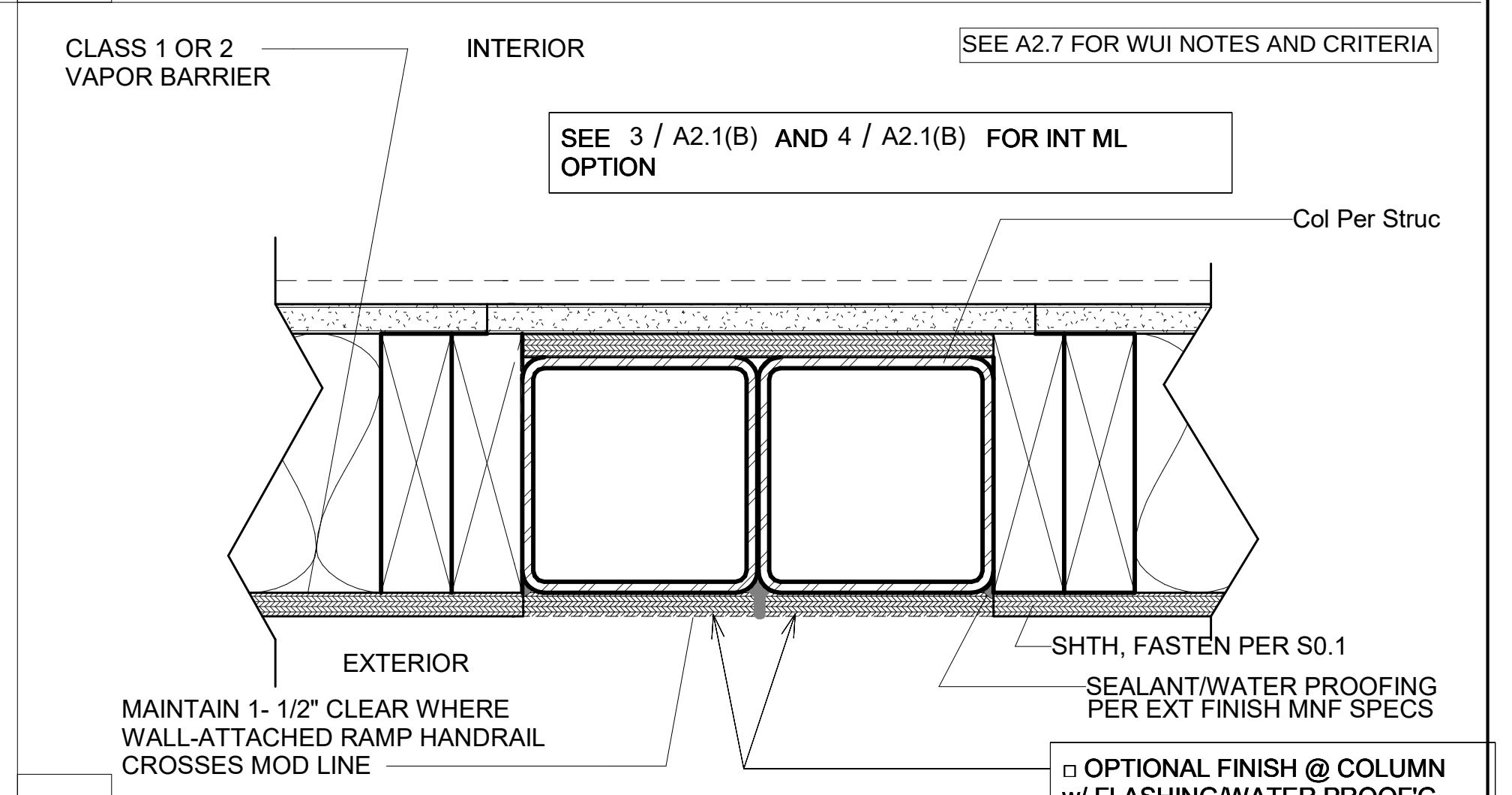
14 3" = 1'-0"
Section - Ext Wall @ HVAC Shtg Finish



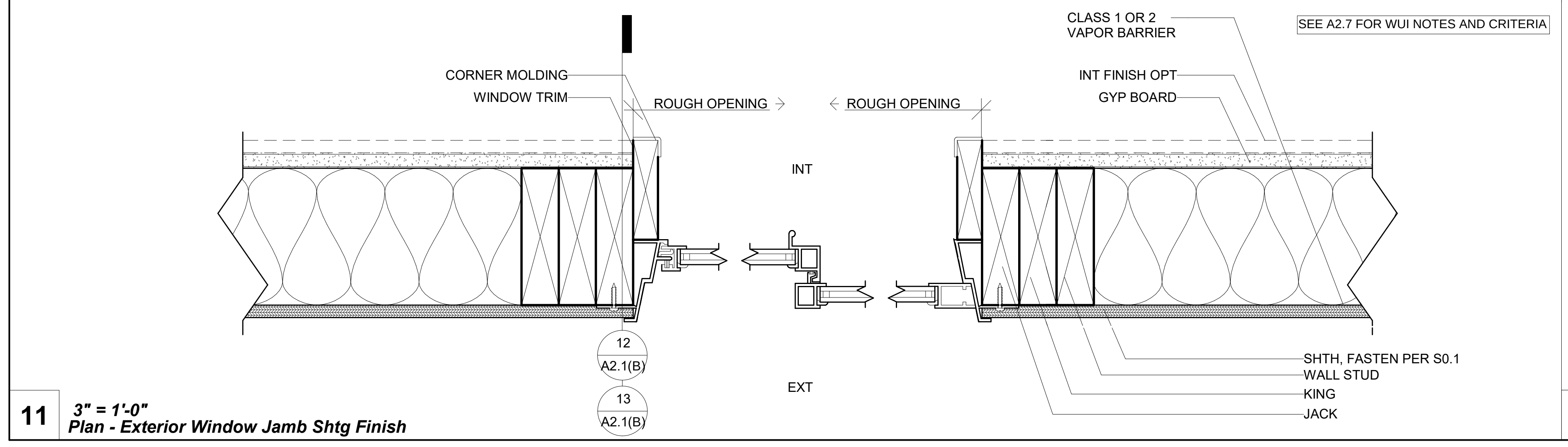
12 3" = 1'-0"
Section - Ext Wall Sill @ Window Shtg Finish



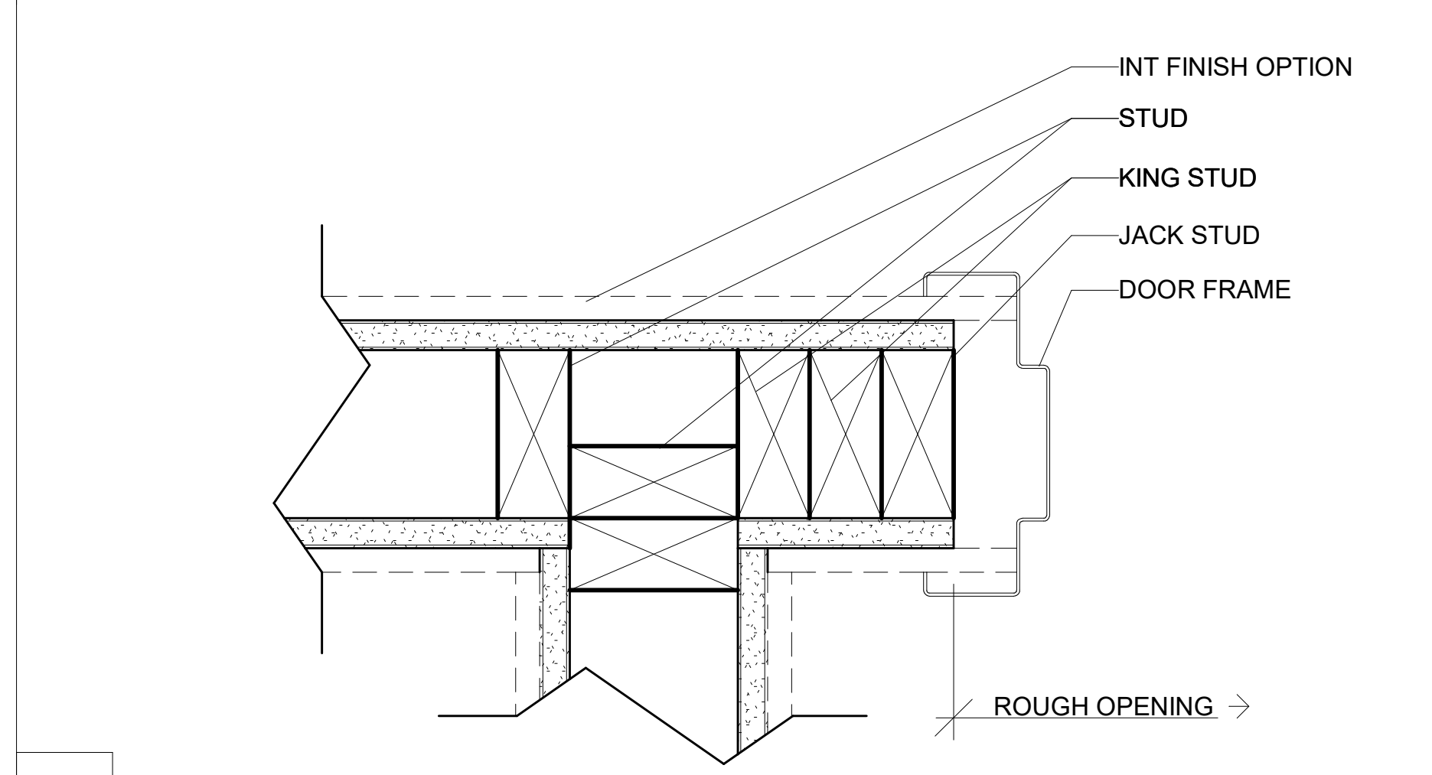
7 3" = 1'-0"
Plan - Interior Door Jamb @ Wall Corner Shtg Finish


CLASS 1 OR 2
VAPOR BARRIER
INTERIOR
SEE A2.7 FOR WUI NOTES AND CRITERIA
SEE 3 / A2.1(B) AND 4 / A2.1(B) FOR INT ML OPTION
Col Per Struc
EXTERIOR
SHTH, FASTEN PER S0.1
SEALANT/WATER PROOFING
PER EXT FINISH MNF SPECS
MAINTAIN 1- 1/2" CLEAR WHERE
WALL-ATTACHED RAMP HANDRAIL
CROSSES MOD LINE
☐ OPTIONAL FINISH @ COLUMN
w/ FLASHING/WATER PROOF'G
@ ML PER EXT FINISH MNF SPECS

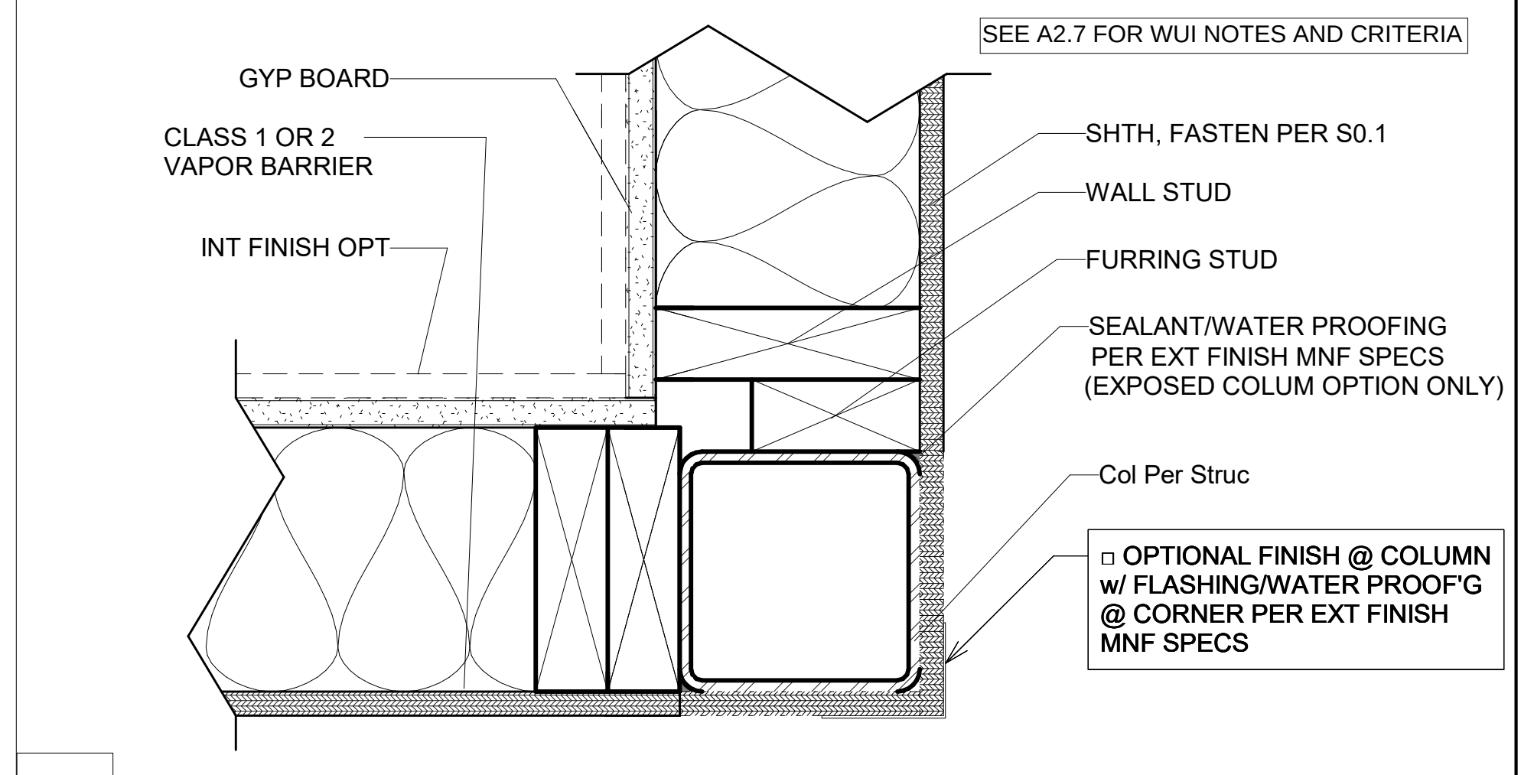
2 3" = 1'-0"
Plan - Mateline (ext exposed column mateline) Shtg Finish



11 3" = 1'-0"
Plan - Exterior Window Jamb Shtg Finish



6 3" = 1'-0"
Plan - Interior Door Jamb @ Wall Intersection Shtg Finish



1 3" = 1'-0"
Plan - Column @ Corner (ext exposed column option)

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~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

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DESIGN ◆ CONSULTING ◆ PROJECT
11777 BERNARDO PLAZA COURT, SUITE 105
SAN DIEGO, CA 92128

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REGISTERED PROFESSIONAL ENGINEER
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STATE OF CALIFORNIA
RST#22088
02/16/24

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1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
ARCHITECTURAL
WUI DETAILS
(WOOD FRAMING
SHTG FINISH)

PROJECT NUMBER
22088

DRAWN BY
rMc/SM

CHECKED BY
JA/RT

DATE

SHEET NO.
A2.1(B)
SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

Roof
Shall comply with the requirements of Chapter 7A and Chapter 15. Roofs shall have a roofing assembly installed in accordance with its listing and the manufacturer's installation instructions. Roof assemblies in the Fire Hazard Severity Zones shall be Class A rating when tested in accordance with ASTM E108 or UL790

Roof gutters
Shall be provided with the means to prevent the accumulation of leaves and debris in the gutter.

Exterior wall
The exterior wall covering or wall assembly shall comply with one of the following requirements:
Noncombustible material.
Ignition-resistant material.
Sawn lumber or glue laminated wood with the smallest minimum nominal dimension of 4 inches (102 mm). Sawn or glue-laminated planks splined, tongue-and groove, or set close together and well spiked.
Log wall construction assembly.
Wall assemblies that have been tested in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in ASTM E2707 with the conditions of acceptance shown in Section 707A.3.1.
Wall assemblies that meet the performance criteria in accordance with the test procedures for a 10-minute direct flame contact exposure test set forth in SFM Standard 12-7A-1.

Exterior windows
Exterior windows and exterior glazed door assemblies shall comply with one of the following requirements:
* Be constructed of multi pane glazing with a minimum of one tempered pane meeting the requirements of CBC Section 2406 Safety Glazing, or
* Be constructed of glass block units, or
* Have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 257, or Be tested to meet the performance requirements of SFM Standard 12-7A-2.

Exterior doors
Exterior doors shall comply with one of the following:
The exterior surface or cladding shall be of noncombustible material.
The exterior surface or cladding shall be of ignition-resistant material.
The exterior door shall be constructed of solid core wood that complies with the following requirements:
Stiles and rails shall not be less than 13/8 inches thick.
Panels shall not be less than 11/4 inches thick, except for the exterior perimeter of the panel that shall be permitted to taper to a tongue not less than 3/8 inch thick.
The exterior door assembly shall have a fire-resistance rating of not less than 20 minutes when tested according to NFPA 252.
The exterior surface or cladding shall be tested to meet the performance requirements of Section 707A.3.1 when tested in accordance with ASTM E2707.
The exterior surface or cladding shall be tested to meet the performance requirements of SFM Standard 12-7A-1

WILDFIRE URBAN INTERFACE (WUI) CRITERIA:

[PROJECT SPECIFIC BUILDING REQUIREMENTS FOR FIRE HAZARD SEVERITY ZONE CBC CHAPTER 1A.

1) ROOF COVERING: (C.B.C SECTION 705A)
26GA GALV STEEL (NON-COMBUSTIBLE) INTERLOCKED STANDING SEAM ROOF PANEL WITH NO SPACE BETWEEN ROOF PANELS AND ROOF DECKING. STANDING SEAM ROOF OVER ONE LAYER#15 ROOF FELT. (CBC 705A.2)

2) ROOF GUTTERS: (C.B.C SECTION 705A.4)
SHALL BE SCREENED WITH A CORROSION RESISTANT NON COMBUSTIBLE WIRE MESH WITH 1/4" OPENING. (OR EQUAL)

3) SOFFITS: (C.B.C SECTION 707A.5)
ROSEBURG DURATEMP SIDING. (OR EQUAL)

4) EXTERIOR WALL FINISH: (C.B.C SECTION 707A.3)
ROSEBURG DURATEMP SIDING (OR EQUAL) PER CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION OFFICE OF STATE FIRE MARSHALL PRODUCTS HANDBOOK PUBLISHED BY CALFIRE DECEMBER 14, 2021.

5) VERTICAL EXTERIOR WALL VENTS & SOFFIT VENTS: (C.B.C SEC. 706A.2)
SCREENED WITH A CORROSION RESISTANT NON COMBUSTABLE WIRE MESH WITH 1/16" (1.6MM) MIN. OPENINGS AND NOT TO EXCEDD 1/8" (3.2MM)

6) EXTERIOR WINDOWS: (C.B.C SECTION 708A.2.1)
METAL FRAME, TEMPERED GLASS, OR ASSEMBLE OF FIRE RESIST OF NOT LESS THAN 20 MINUTES.

7) EXTERIOR DOORS: (C.B.C SECTION 708.3)
NON COMBUSTIBLE METAL DOORS AND FRAME.
ASSEMBLY OF FIRE RESIST OF NOT LESS THAN 20 MINUTES

1 *1/4" = 1'-0"*
WUI NOTES

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24

02/16/24

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CLIENT

Class Leasing

1651 SOUTH JUANITA STREET
SAN JACINTO CA. 92581
VOICE (951) 943-1908 FAX (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
WUI NOTES AND CRITERIA

PROJECT NUMBER
22088

DRAWN BY
Author

CHECKED BY
Checker

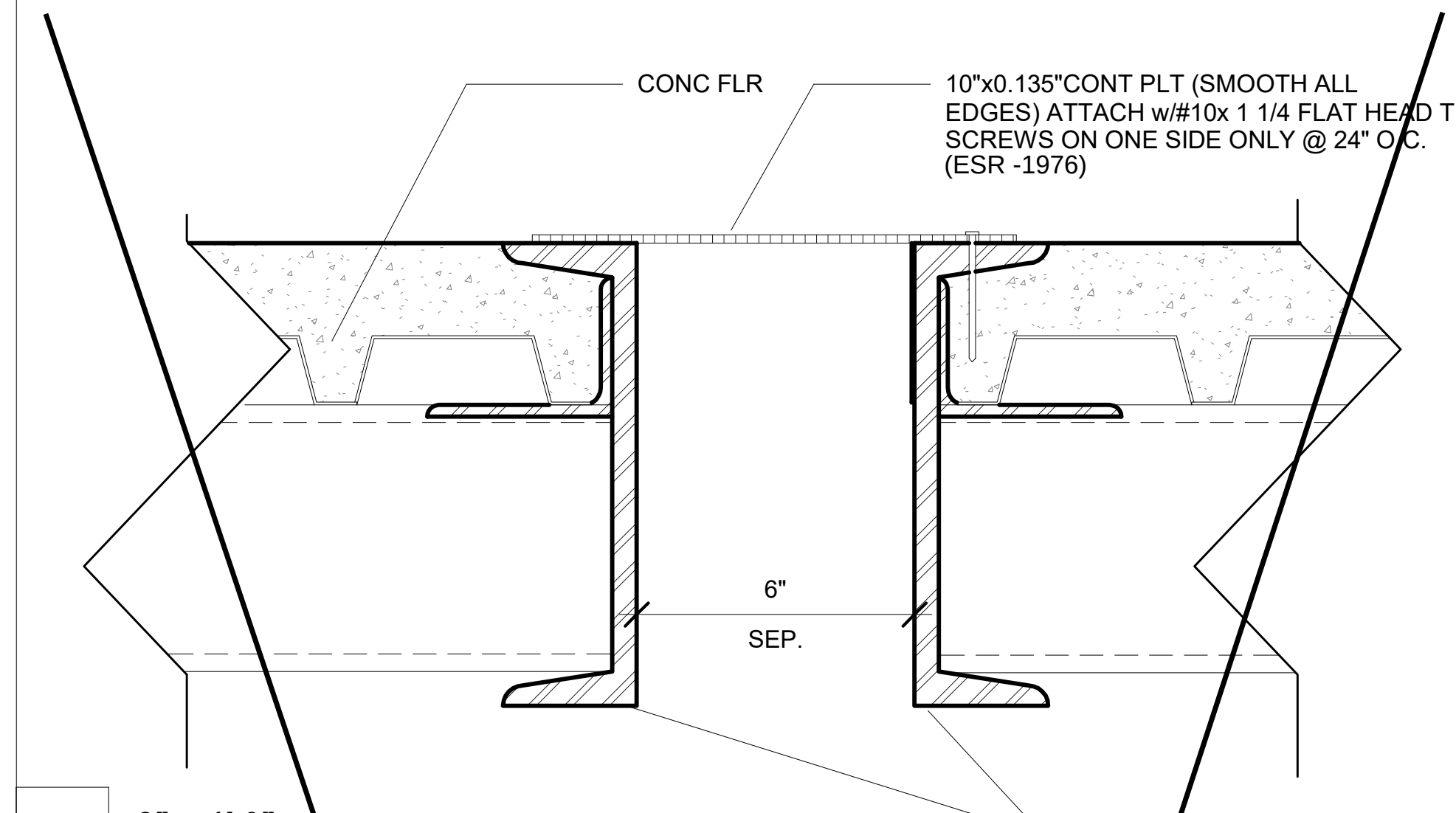
DATE
06/15/2021

SHEET NO.
A2.7

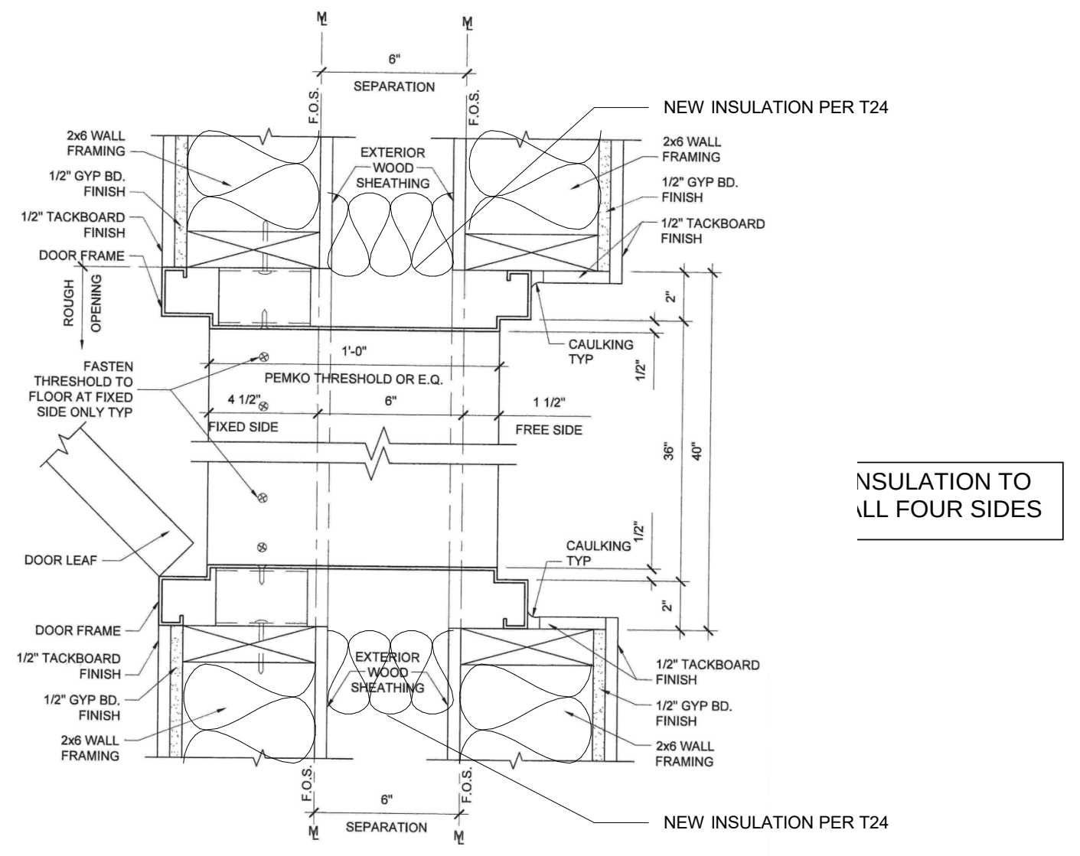
SHEET OF

10/30/2023 10:20:14 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

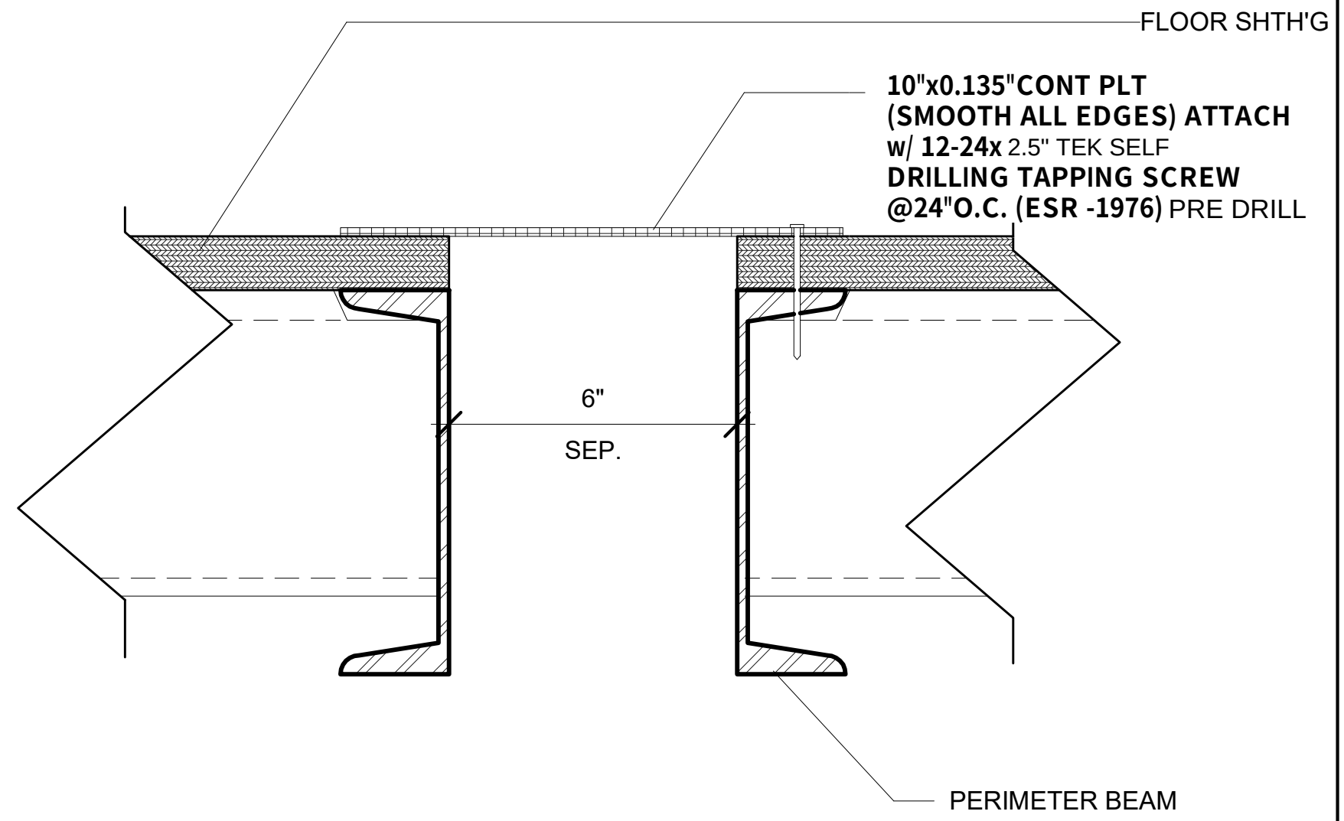
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


CONC FLR
10"x0.135"CONT PLT (SMOOTH ALL EDGES) ATTACH w/#10x 1 1/4 FLAT HEAD TEK SCREWS ON ONE SIDE ONLY @ 24" O.C. (ESR -1976)
6"
SEP.
PERIMETER BEAM

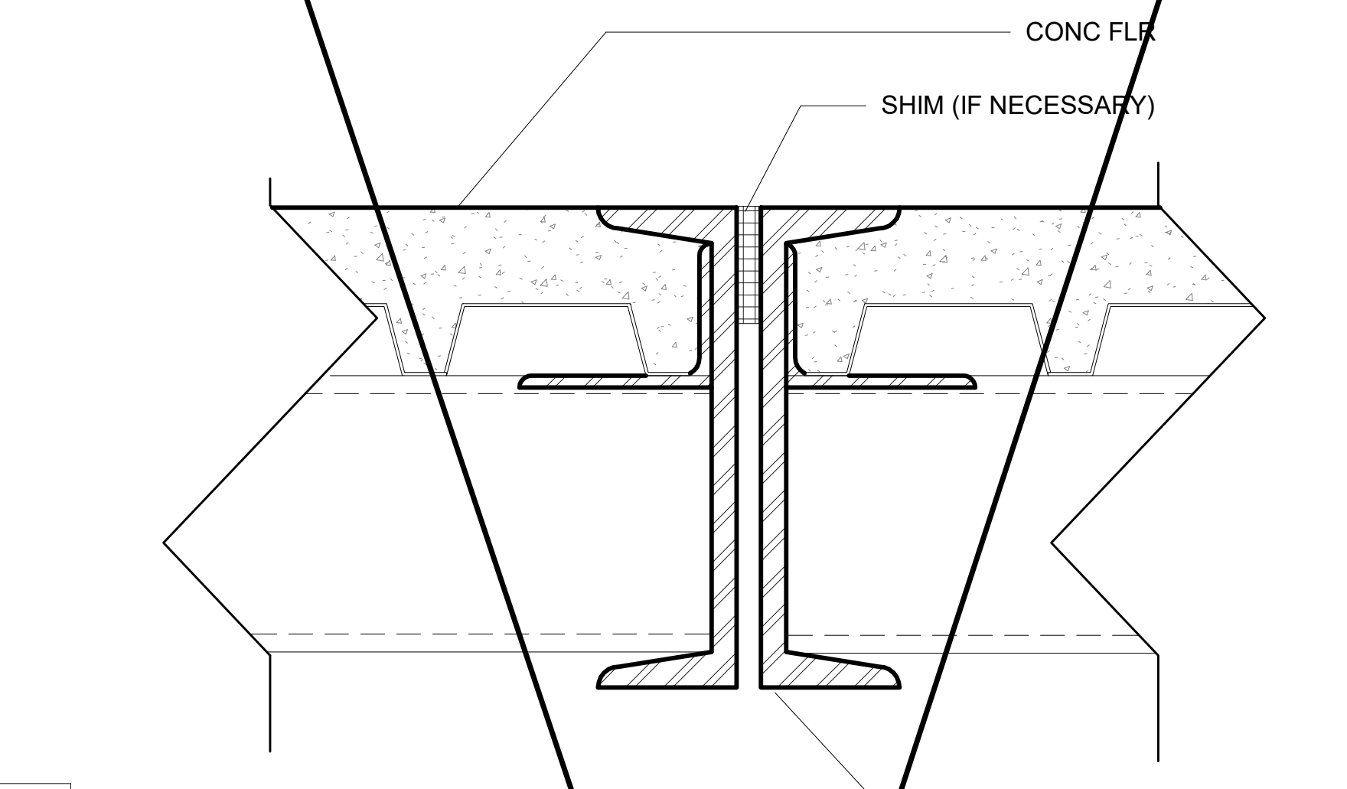
11 3" = 1'-0"
Flr @ 6" SEP. ML (CONC FLR)



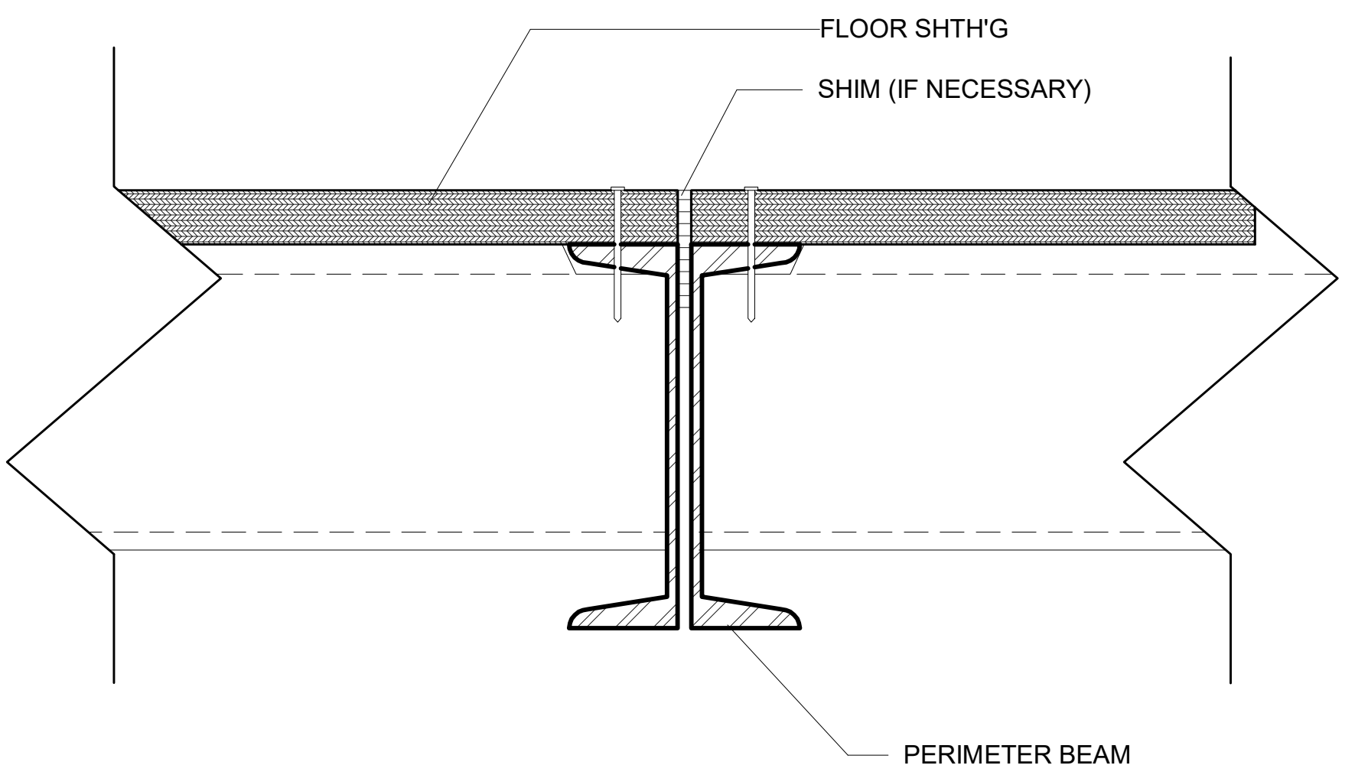
16 PASS THROUGH SEISMIC DOOR OPENING


FLOOR SHTH'G
10"x0.135"CONT PLT (SMOOTH ALL EDGES) ATTACH w/ 12-24x 2.5" TEK SELF DRILLING TAPPING SCREW @24"O.C. (ESR -1976) PRE DRILL
6"
SEP.
PERIMETER BEAM

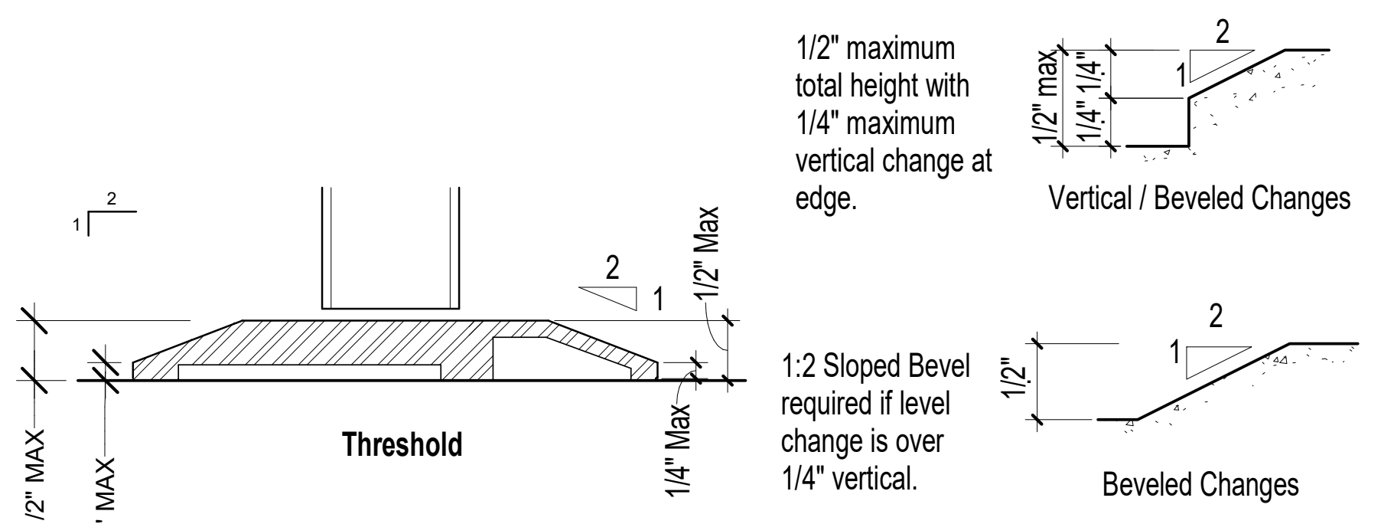
5 3" = 1'-0"
Flr @ 6" SEP. ML (WD FLR)



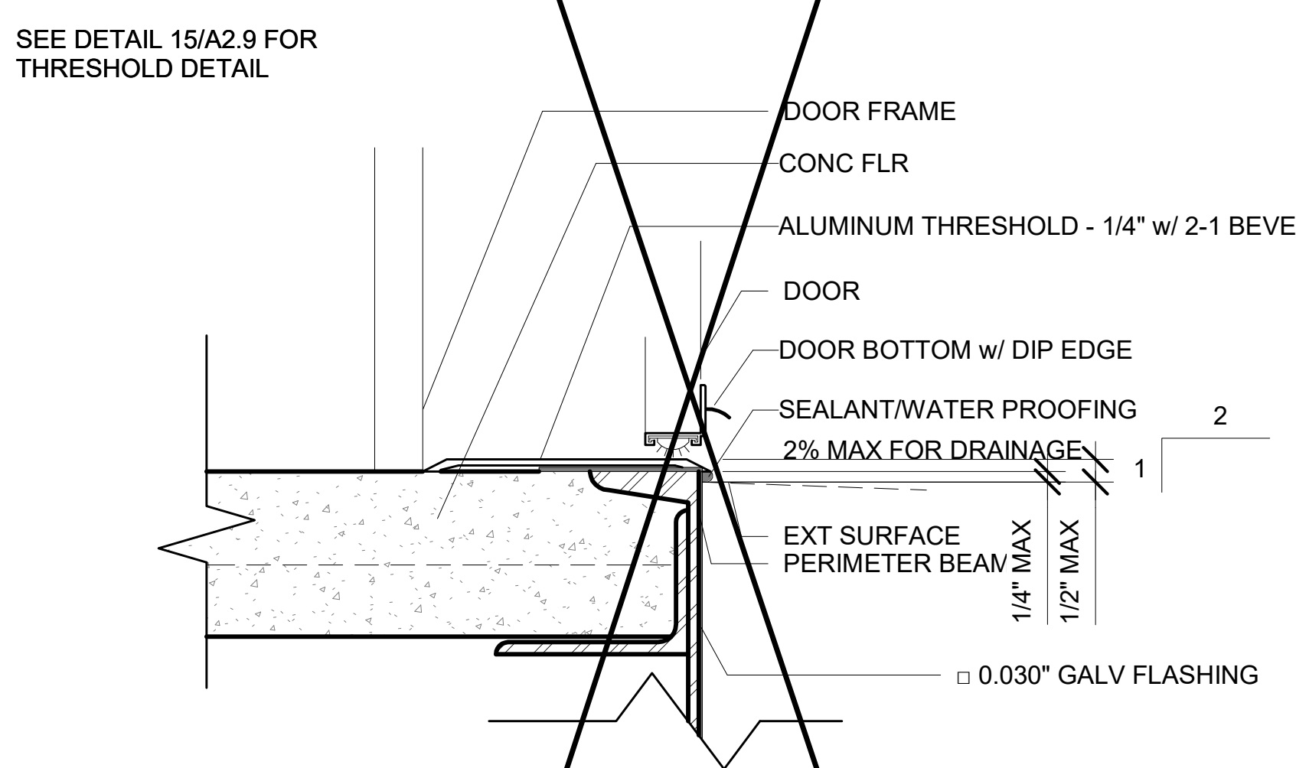
10 3" = 1'-0"
Flr @ ML (CONC FLR)



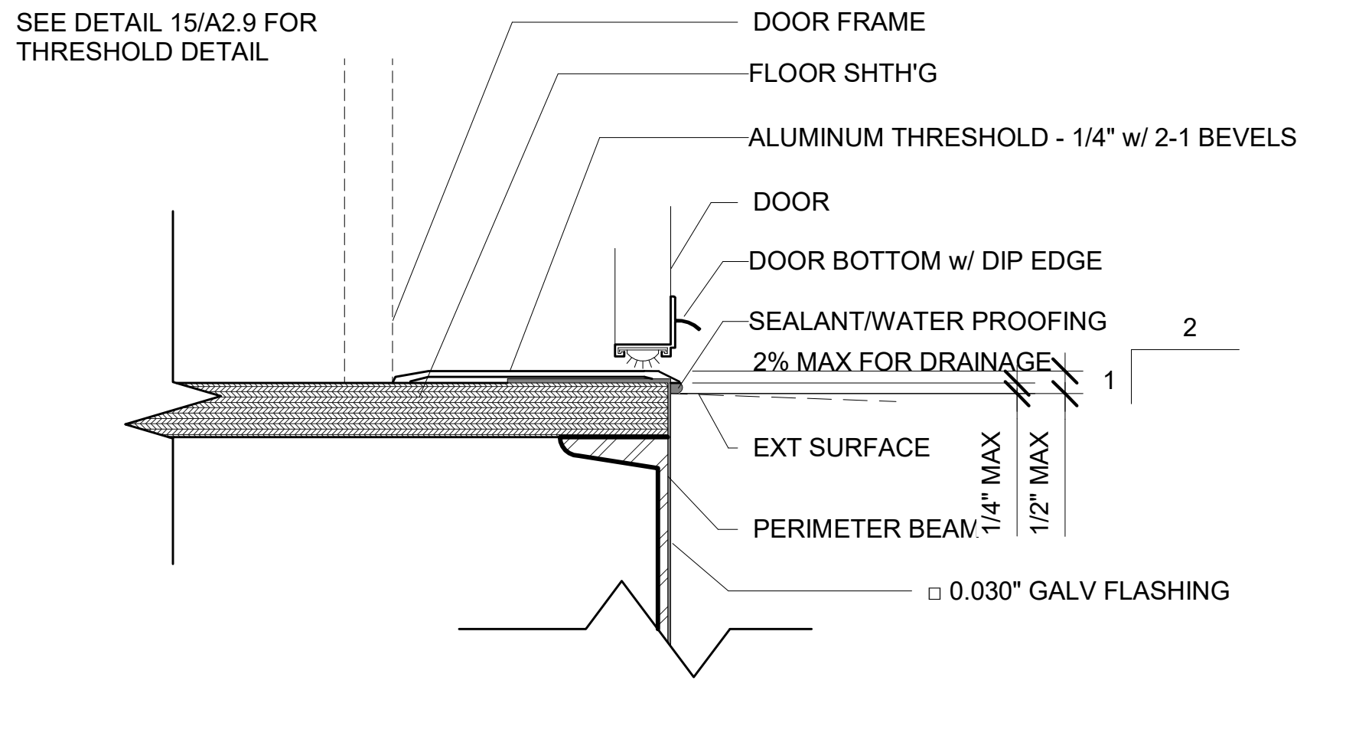
4 3" = 1'-0"
Flr @ ML (WD FLR)


1
2
Threshold
1/2" MAX
1/4" MAX
1/2" Max
1/4" Max
1/2" maximum total height with 1/4" maximum vertical change at edge.
1/2" max
1/4"
Vertical / Beveled Changes
1:2 Sloped Bevel required if level change is over 1/4" vertical.
1/2"
Beveled Changes

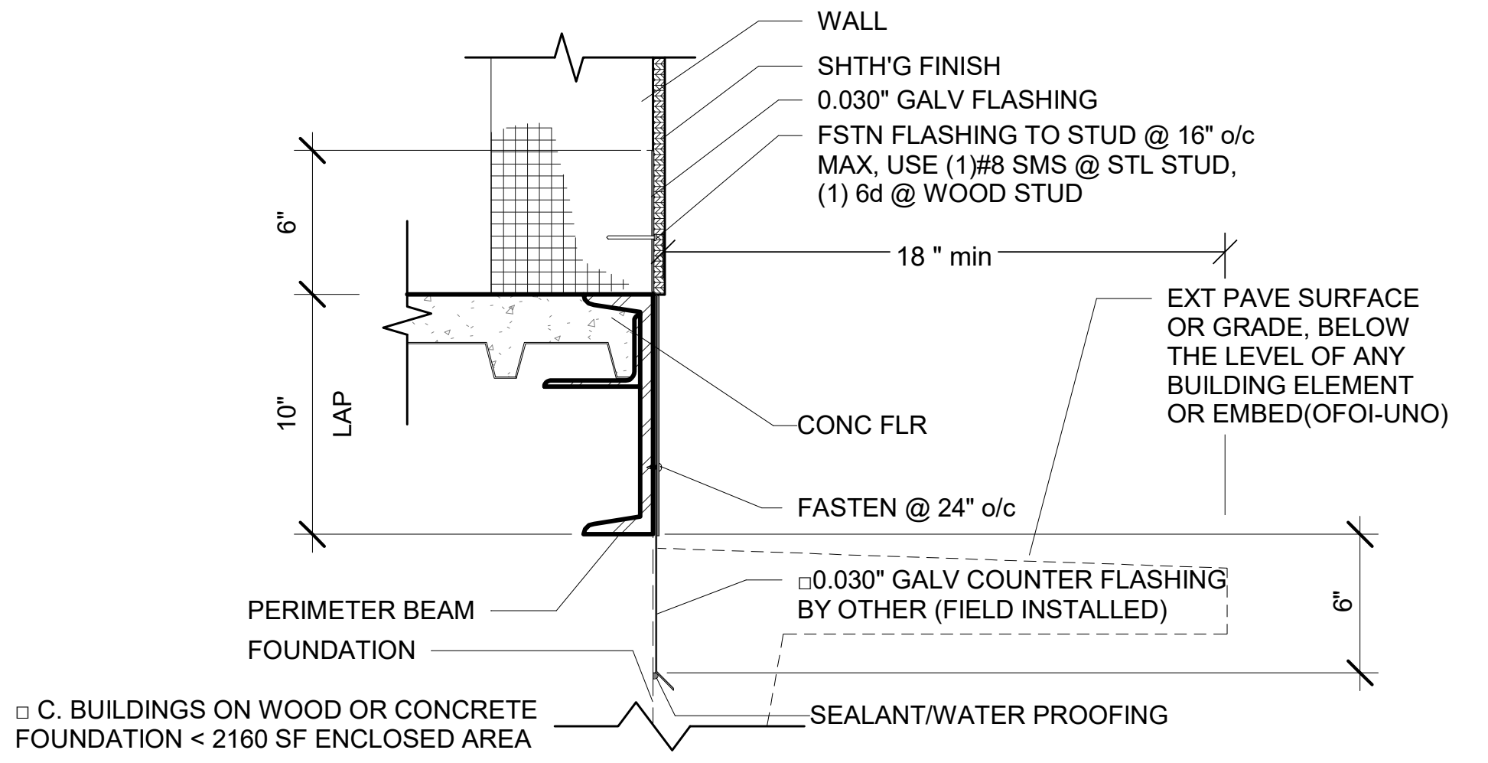
15 1/4" = 1'-0"
THRESHOLD DETAIL



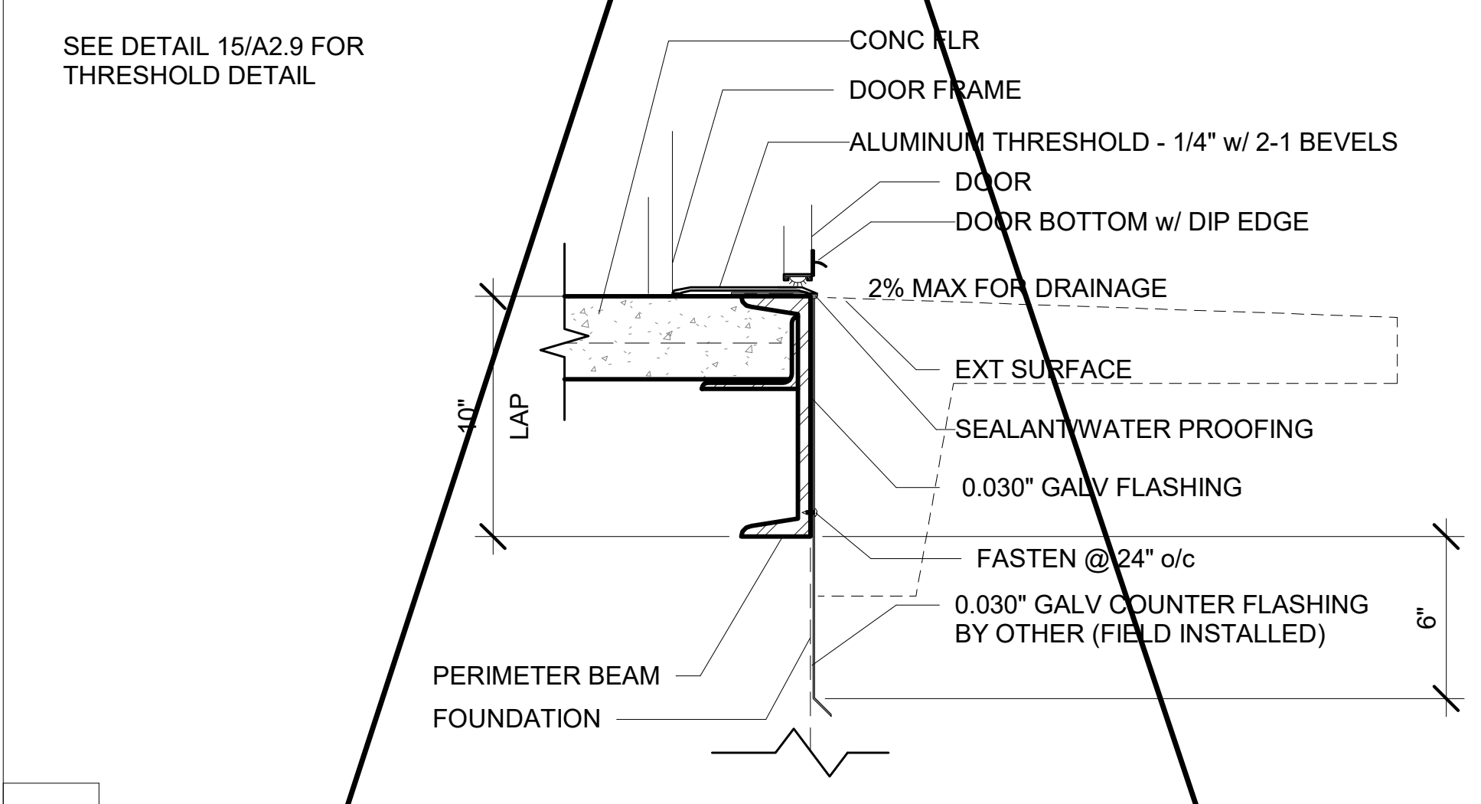
9 3" = 1'-0"
Typ Sill Plate @ Threshold (CONC FLR)*



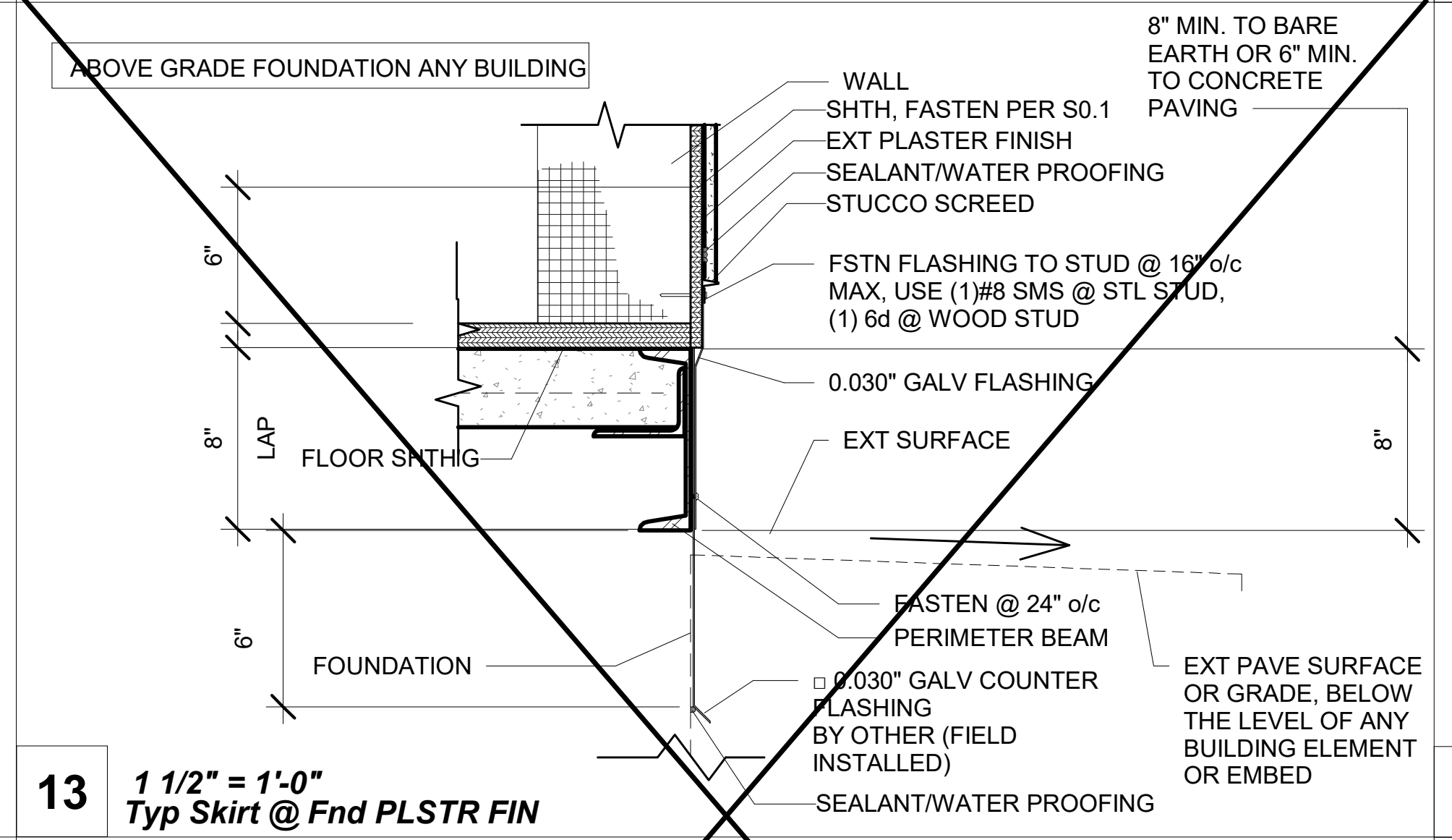
3 3" = 1'-0"
Typ Sill Plt @ Threshold (WD FLR)*


WALL
SHTH'G FINISH
0.030" GALV FLASHING
FSTN FLASHING TO STUD @ 16" o/c MAX, USE (1)#8 SMS @ STL STUD, (1) 6d @ WOOD STUD
6"
18 " min
EXT PAVE SURFACE OR GRADE, BELOW THE LEVEL OF ANY BUILDING ELEMENT OR EMBED(OFOI-UNO)
10"
LAP
CONC FLR
FASTEN @ 24" o/c
□0.030" GALV COUNTER FLASHING BY OTHER (FIELD INSTALLED)
PERIMETER BEAM
FOUNDATION
□ C. BUILDINGS ON WOOD OR CONCRETE FOUNDATION < 2160 SF ENCLOSED AREA
SEALANT/WATER PROOFING
ABOVE GRADE FOUNDATION ANY BUILDING

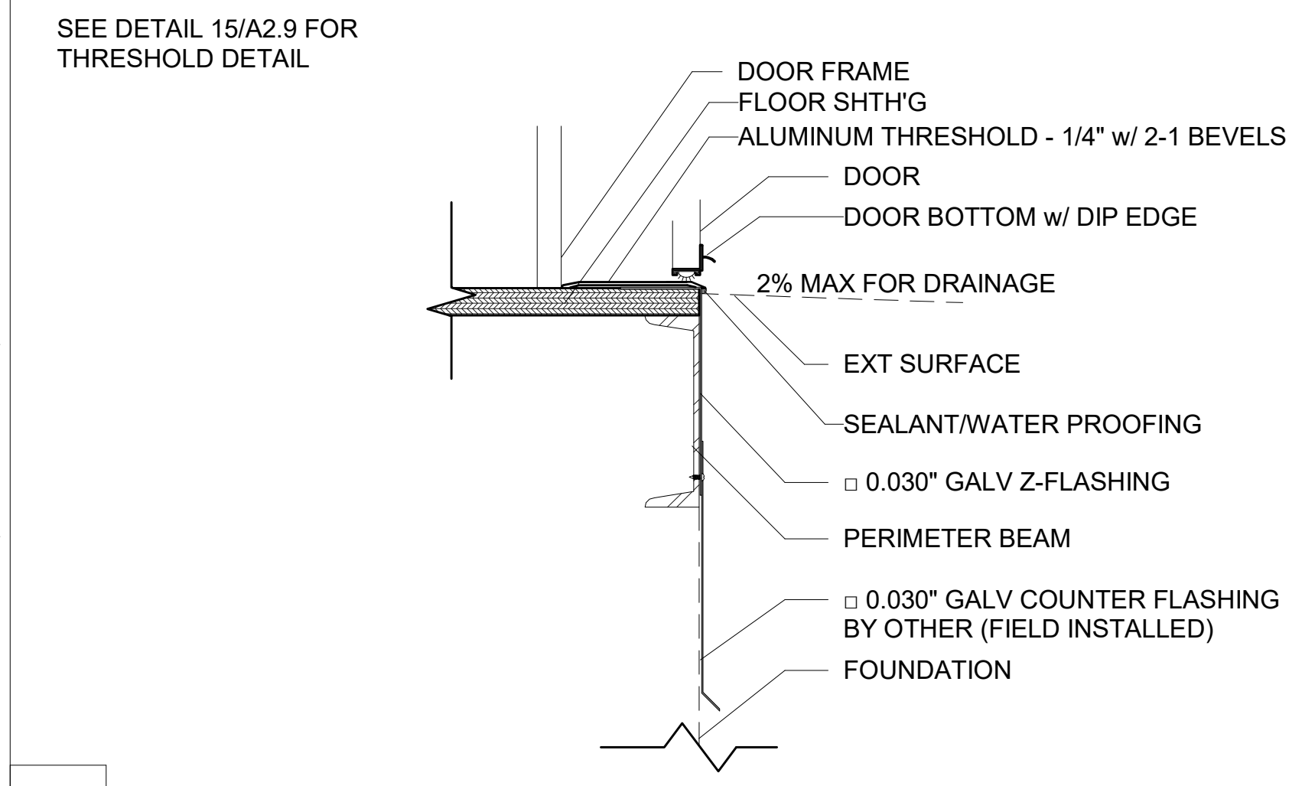
14 1 1/2" = 1'-0"
Typ Skirt @ Fnd SHTH'G FIN



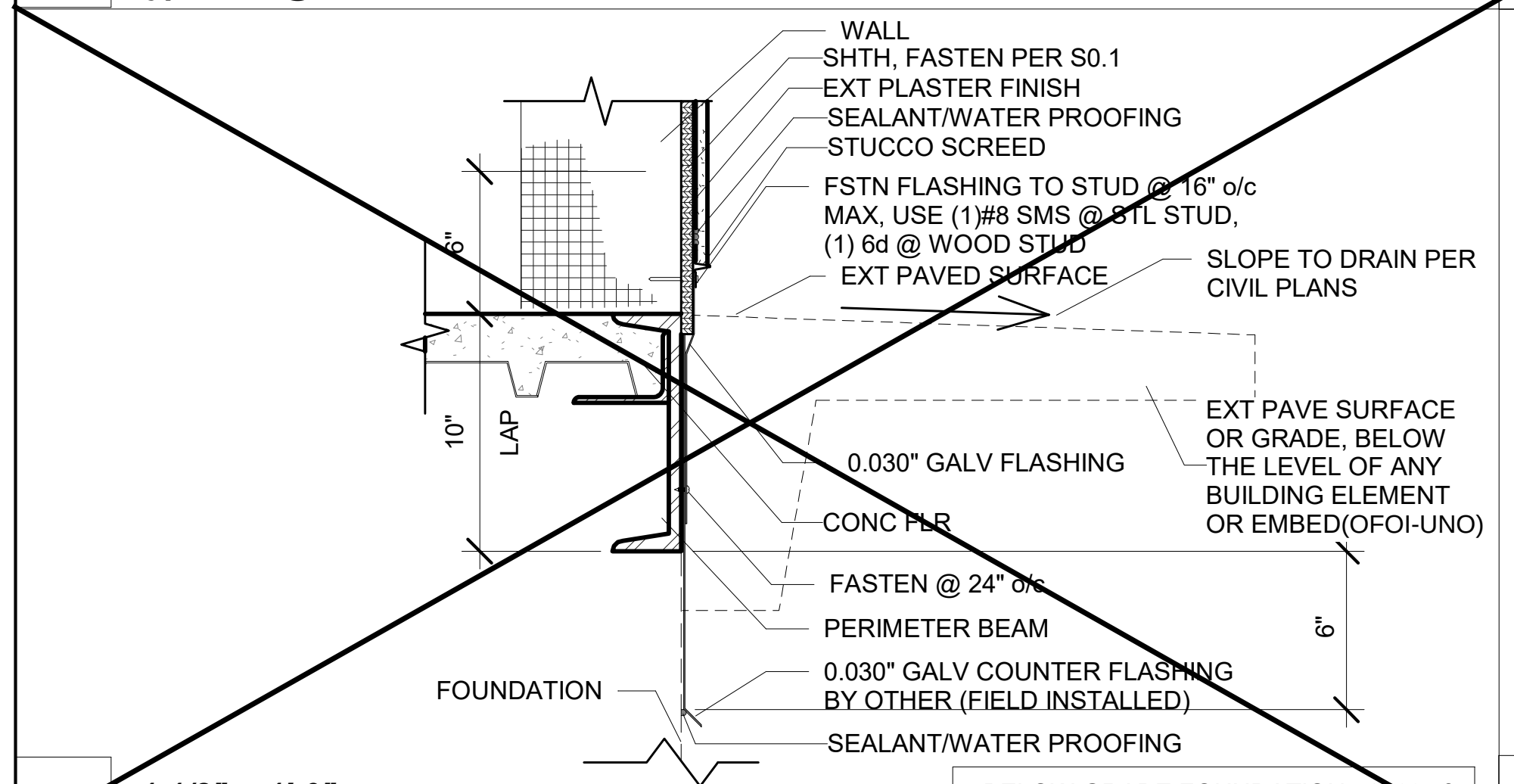
8 1 1/2" = 1'-0"
Threshold @ Fnd (CONC FLR)*


ABOVE GRADE FOUNDATION ANY BUILDING
8" MIN. TO BARE EARTH OR 6" MIN. TO CONCRETE PAVING
WALL
SHTH, FASTEN PER S0.1
EXT PLASTER FINISH
SEALANT/WATER PROOFING
STUCCO SCREED
FSTN FLASHING TO STUD @ 16" o/c MAX, USE (1)#8 SMS @ STL STUD, (1) 6d @ WOOD STUD
6"
0.030" GALV FLASHING
8"
LAP
FLOOR SHTH'G
EXT SURFACE
FASTEN @ 24" o/c
PERIMETER BEAM
FOUNDATION
□ 0.030" GALV COUNTER FLASHING BY OTHER (FIELD INSTALLED)
EXT PAVE SURFACE OR GRADE, BELOW THE LEVEL OF ANY BUILDING ELEMENT OR EMBED
SEALANT/WATER PROOFING

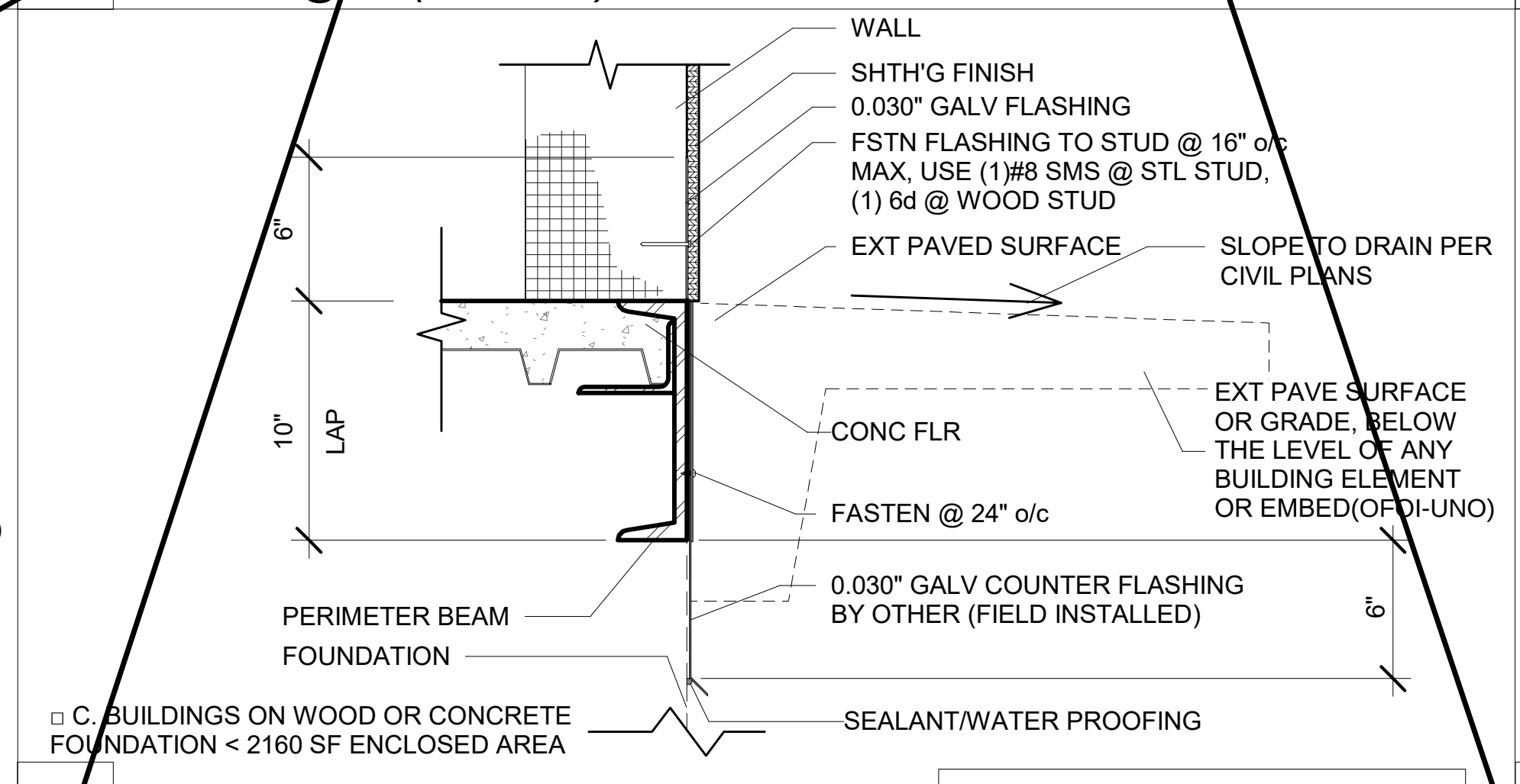
13 1 1/2" = 1'-0"
Typ Skirt @ Fnd PLSTR FIN



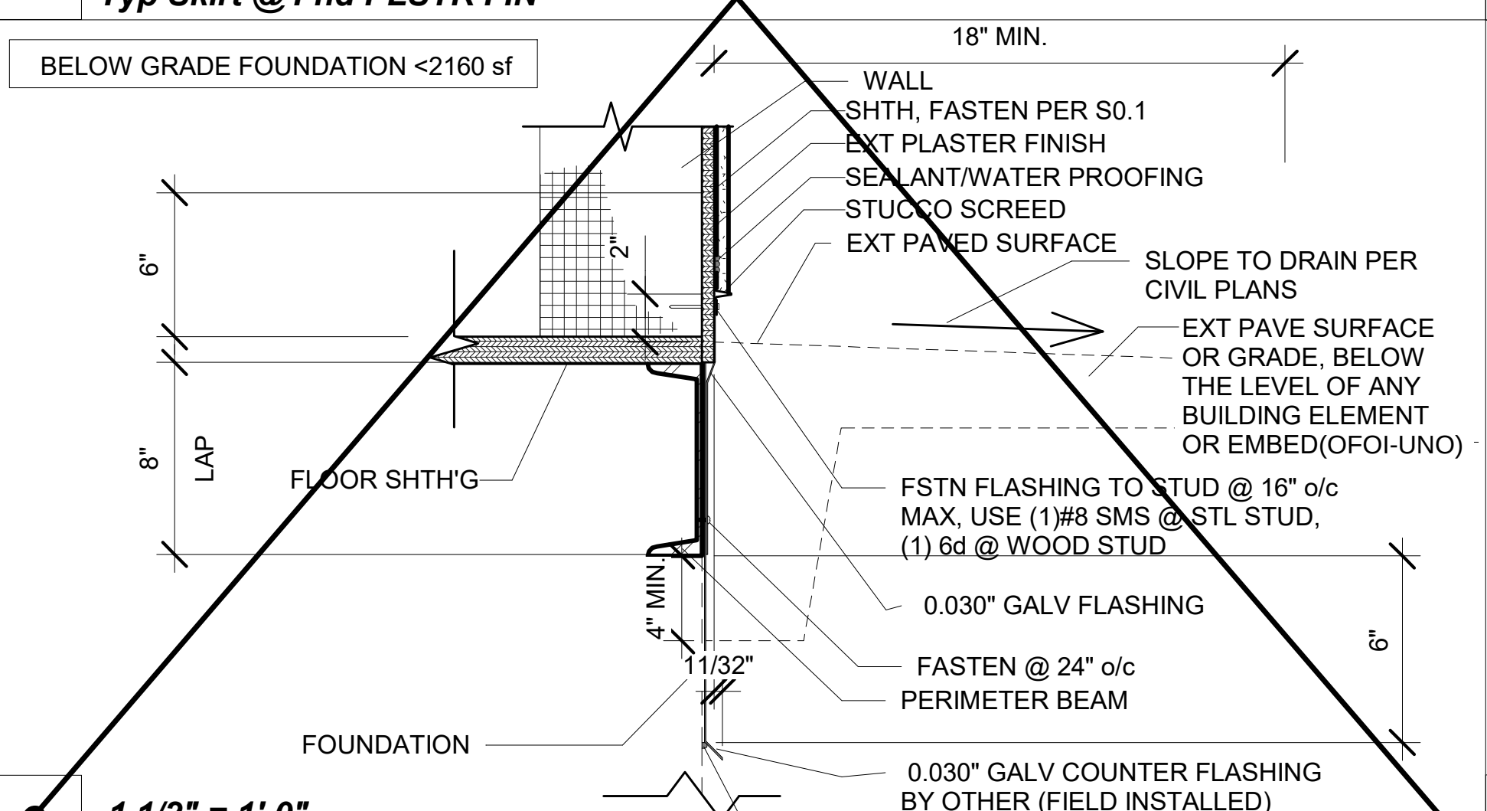
2 1 1/2" = 1'-0"
Threshold @ Fnd (WD FLR)*


WALL
SHTH, FASTEN PER S0.1
EXT PLASTER FINISH
SEALANT/WATER PROOFING
STUCCO SCREED
FSTN FLASHING TO STUD @ 16" o/c MAX, USE (1)#8 SMS @ STL STUD, (1) 6d @ WOOD STUD
EXT PAVED SURFACE
SLOPE TO DRAIN PER CIVIL PLANS
6"
10"
LAP
0.030" GALV FLASHING
EXT PAVE SURFACE OR GRADE, BELOW THE LEVEL OF ANY BUILDING ELEMENT OR EMBED(OFOI-UNO)
CONC FLR
FASTEN @ 24" o/c
PERIMETER BEAM
FOUNDATION
0.030" GALV COUNTER FLASHING BY OTHER (FIELD INSTALLED)
SEALANT/WATER PROOFING
BELOW GRADE FOUNDATION <2160 sf

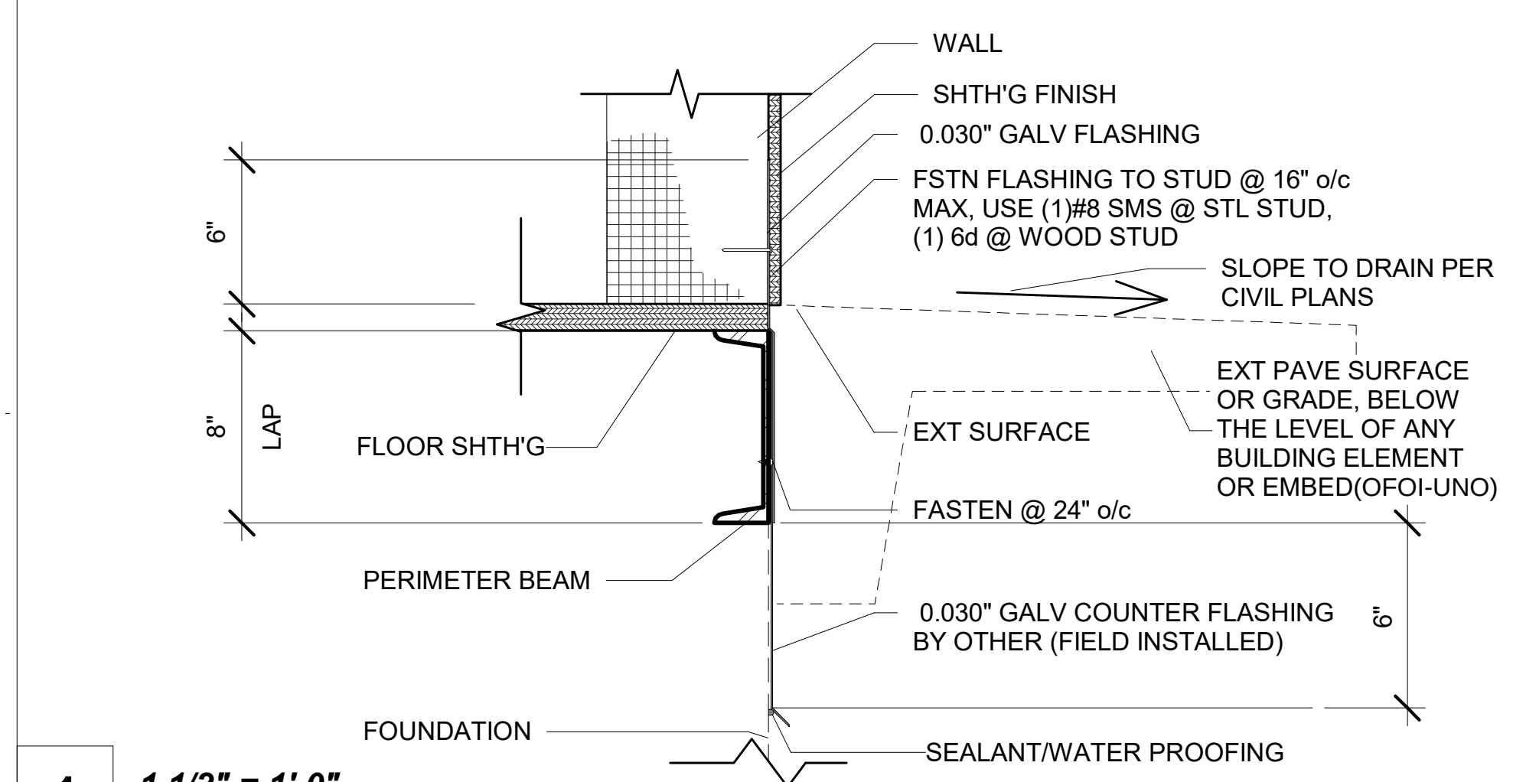
12 1 1/2" = 1'-0"
Typ Skirt @ Fnd PLSTR FIN (CONC FLR)*


WALL
SHTH'G FINISH
0.030" GALV FLASHING
FSTN FLASHING TO STUD @ 16" o/c MAX, USE (1)#8 SMS @ STL STUD, (1) 6d @ WOOD STUD
EXT PAVED SURFACE
SLOPE TO DRAIN PER CIVIL PLANS
6"
10"
LAP
CONC FLR
EXT PAVE SURFACE OR GRADE, BELOW THE LEVEL OF ANY BUILDING ELEMENT OR EMBED(OFOI-UNO)
FASTEN @ 24" o/c
0.030" GALV COUNTER FLASHING BY OTHER (FIELD INSTALLED)
PERIMETER BEAM
FOUNDATION
□ C. BUILDINGS ON WOOD OR CONCRETE FOUNDATION < 2160 SF ENCLOSED AREA
SEALANT/WATER PROOFING
BELOW GRADE FOUNDATION <2160 sf

7 1 1/2" = 1'-0"
Typ Skirt @ Fnd SHTH'G FIN (CONC FLR)*


BELOW GRADE FOUNDATION <2160 sf
18" MIN.
WALL
SHTH, FASTEN PER S0.1
EXT PLASTER FINISH
SEALANT/WATER PROOFING
STUCCO SCREED
EXT PAVED SURFACE
SLOPE TO DRAIN PER CIVIL PLANS
EXT PAVE SURFACE OR GRADE, BELOW THE LEVEL OF ANY BUILDING ELEMENT OR EMBED(OFOI-UNO)
6"
2"
8"
LAP
FLOOR SHTH'G
FSTN FLASHING TO STUD @ 16" o/c MAX, USE (1)#8 SMS @ STL STUD, (1) 6d @ WOOD STUD
0.030" GALV FLASHING
4" MIN.
11/32"
FASTEN @ 24" o/c
PERIMETER BEAM
FOUNDATION
0.030" GALV COUNTER FLASHING BY OTHER (FIELD INSTALLED)
SEALANT/WATER PROOFING

6 1 1/2" = 1'-0"
Typ Skirt @ Fnd PLSTR FIN (WD FLR)*


WALL
SHTH'G FINISH
0.030" GALV FLASHING
FSTN FLASHING TO STUD @ 16" o/c MAX, USE (1)#8 SMS @ STL STUD, (1) 6d @ WOOD STUD
SLOPE TO DRAIN PER CIVIL PLANS
6"
8"
LAP
FLOOR SHTH'G
EXT SURFACE
EXT PAVE SURFACE OR GRADE, BELOW THE LEVEL OF ANY BUILDING ELEMENT OR EMBED(OFOI-UNO)
FASTEN @ 24" o/c
PERIMETER BEAM
0.030" GALV COUNTER FLASHING BY OTHER (FIELD INSTALLED)
FOUNDATION
SEALANT/WATER PROOFING
BELOW GRADE FOUNDATION <2160 sf

1 1 1/2" = 1'-0"
Typ Skirt @ Fnd SHTH'G FIN (WD FLR)*

C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

6/15/2021 11:50:20 PM

PROJECT SPECIFIC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
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PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

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Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
ARCHITECTURAL
DETAILS
(FLOOR)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

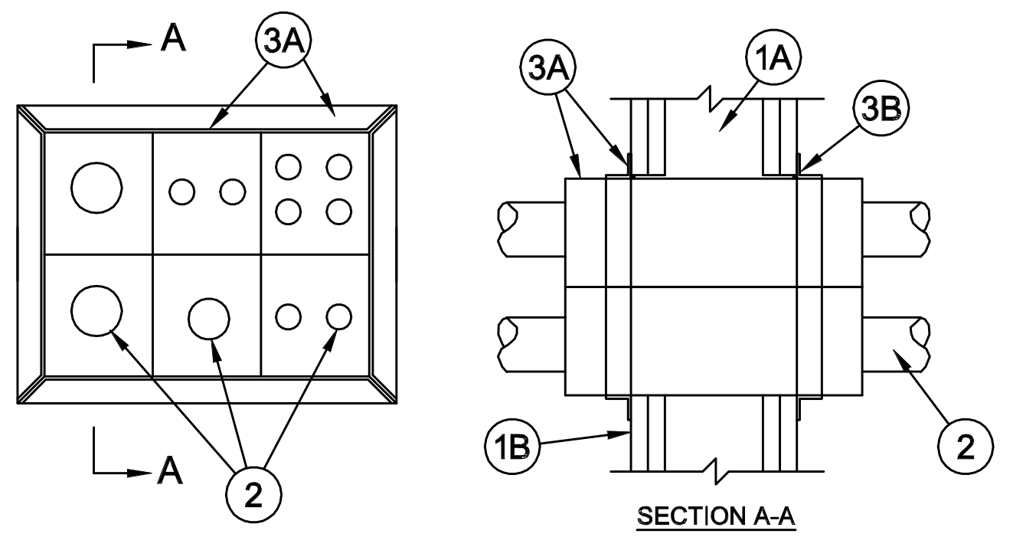
SHEET NO.
A2.9

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

System No. W-L-2448

February 26, 2008
F Ratings – 1 or 2 Hr (See Item 1)
T Rating – 0 Hr
L Rating At Ambient – 4 CFM/sq ft. (See Item 3B)
L Rating At 400 F – Less Than 1 CFM/sq ft. (See Item 3B)



1. **Wall Assembly**– The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs**– Wall framing may consist of either wood or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board*** – The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max area of opening is 98.5 in.2 (635 cm2) with a max dimension of 12-1/8 in. (308 mm) for square devices. Max diam of opening is 2-1/4 in. (57 mm) for nom 2 in. (51 mm) round devices and 4-1/4 in. (108 mm) for 4 in. (102 mm) round devices.

   The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
2. **Through Penetrants**– One or more nonmetallic pipes, conduits or tubes, as described in a single line item below, may be installed concentrically or eccentrically within each firestop device (Item 3A) without any limitations on annular space. If multiple through penetrations are installed within the firestop device, the through penetrants may be bundled together. Through penetrants to be rigidly supported on both sides of wall assembly. The following types and sizes of through penetrants may be used:
   A. **Polyvinyl Chloride (PVC) Pipe**– One nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   B. **Rigid Nonmetallic Conduit+** – One nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 352 of the National Electrical Code (NFPA No. 70).

   See **Rigid Nonmetallic, Schedule 40 and 80 PVC Conduit** (DZYR) category in the Electrical Construction Equipment Directory for names of manufacturers.

   C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe**– One nom 2 in. (51 mm) diam (or smaller) SDR11 CPVC pipe for use in closed (process or supply) piping systems.
   D. **Crosslinked Polyethylene (PEX) Tubing**– One nom 2 in. (51 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems.
   E. **Electrical Nonmetallic Tubing (ENT)+**– Max four nom 1-1/4 in. (32 mm) diam (or smaller) ENT installed in accordance with Article 362 of the National Electrical Code (NFPA No. 70).

   See **Electrical Nonmetallic Tubing** (FKHU) category in the Electrical Construction Equipment Directory for names of manufacturers.

   F. **Optical Fiber/Communications/Signaling/Coaxial Cable Raceways+**– Max four nom 1-1/4 in. (32 mm) diam (or smaller) plenum rated raceways installed in accordance with the National Electrical Code (NFPA No. 70).

   See **Optical Fiber/Communications/Signaling/Coaxial Cable Raceway** (QAZM) category in the Electrical Construction Equipment Directory for names of manufacturers.

   G. **Acrylonitrile Butadiene Styrene (ABS) Pipe**– Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid or cellular core ABS for use in closed (process or supply) or vented (drain, waste or vent) piping systems
3. **Firestop System**– The firestop system shall consist of the following:
   A. **Firestop Device***– A max of six square firestop devices may be ganged together. As an alternate, one round device may be centered within a round opening. Each device consists of a nom 2-1/2 by 2-1/2 by 10 in. (64 by 64 by 254 mm), a nom 4 by 4 by 10 in. (102 by 102 by 254 mm), a nom 2 in. (51 mm) diam by 10 in. (254 mm) or a nom 4 in. (102 mm) diam by 10 in. (254 mm) powder coated steel transit incorporating internal intumescent material, foam plugs and mounting flanges. Firestop device(s) to be installed within opening with ends projecting an equal distance beyond each surface of wall assembly in accordance with the accompanying installation instructions. The annular space between device(s) and periphery of opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3 mm). Firestop device(s) secured in place by means of fill material (Item 3B) and steel split mounting flanges sized to accommodate the firestop device. Steel split mounting flanges installed on both sides of wall after installation of fill material, and secured together with supplied steel set screws. Nom 1 in. (25 mm) thick pre-cut foam plugs sized to accommodate the through penetrant(s) and installed flush with each end of device on both sides of wall assembly.

   3M COMPANY – 3M Fire Barrier Pass-Through Device

   B. **Fill, Void or Cavity Materials* – Putty or Caulk**– Min 1/8 in. (3 mm) bead of fill material shall be applied at interface of gypsum board and firestop devices immediately prior to the installation of the mounting flanges. As an option, foam plugs may be recessed into device and the recess filled with fill material flush with the ends of the device. If three or less devices (Item 3A) are ganged together, the fill material may be optional. L Rating applies only when fill material is applied at interface of gypsum board and device(s) prior to mounting flanges and with both ends of firestop device(s) filled with nominal 1/8 in. (3.2 mm) of Moldable Putty+.

   3M COMPANY – Moldable Putty+, CP 25WB+, IC 15WB+, 3000 WT

+ Bearing the UL Listing Mark
*Bearing the UL Classification Mark

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Reproduced by Hilti Firestop Systems
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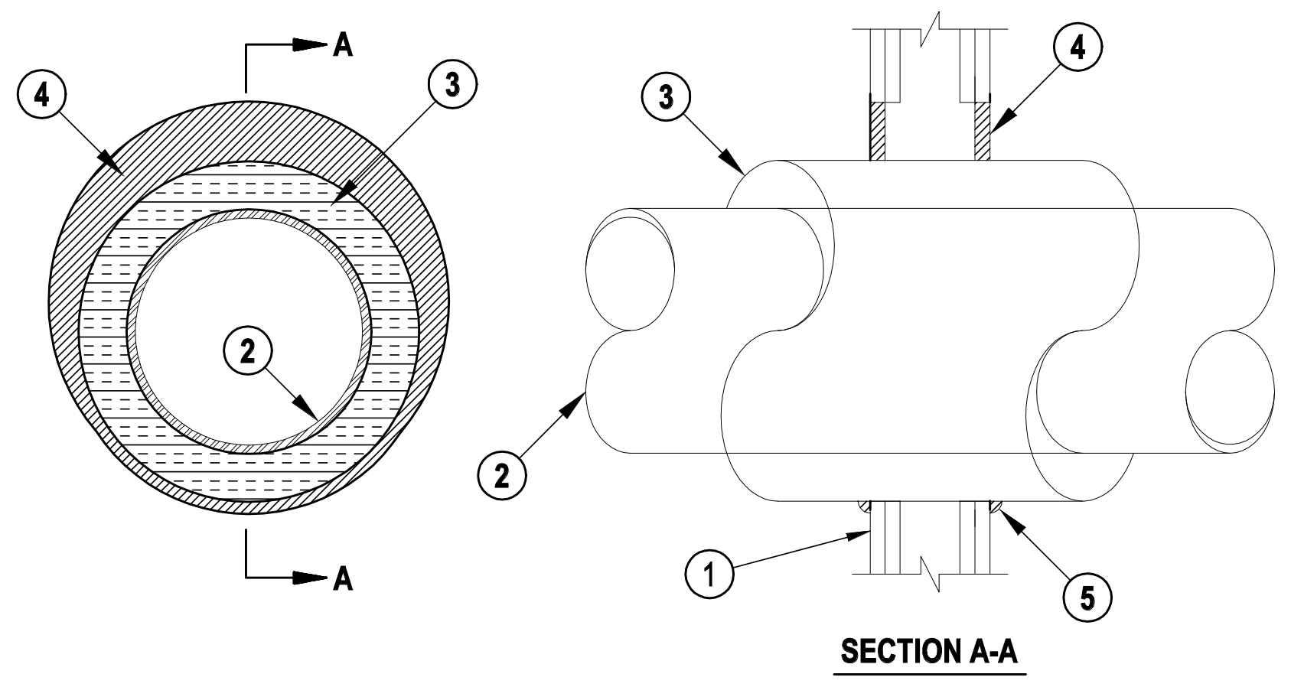
Through-Penetration Firestop Systems

System No. WL 5029

F-Rating - 1 or 2 Hr (See Item 1)
T-Rating - $\frac{1}{2}$, $\frac{3}{4}$, 1-$\frac{1}{2}$ and 1-$\frac{3}{4}$ Hr (See Item 3)
L Rating at Ambient = 4 CFM/Sq.Ft.
L Rating at 400°F = Less Than 1 CFM/Sq.Ft.

February 8, 2006



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
 A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC.
 B. Gypsum Board* — 5/8 in. thick, 4 ft wide, with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 18-5/8 in.
 The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
2. Through Penetrants — One metallic pipe or tubing to be centered within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
 A. Steel Pipe — Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
 B. Iron Pipe — Nom 12 in. diam (or smaller) cast or ductile iron pipe.
 C. Copper Tubing — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
 D. Copper Pipe — Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
3. Pipe Covering* — Nom 1, 1-1/2 or 2 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See Pipe and Equipment Covering — Materials (BRGU) category in the Building Material Directory for the names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
The hourly T Rating of the firestop system is dependent on the hourly fire rating of the wall assembly in which it is installed, the size and type of through penetrant and the pipe covering thickness, as shown in the table below:

Wall Assembly Rating Hr	Through Penetrant		Pipe Covering Thkns In.	Annular Space		T Rating Hr
	Type +	Max Diam In.		Min In.	Max In.	
1	A	4	1	0	1-1/2	1/2
1	B or C	2	1 or 1-1/2	0	1-1/2	1/2
1	A	4	1-1/2	0	1-1/2	1
1	A	12	2	0	1-7/8	3/4
1	B or C	6	2	0	1-7/8	1
2	A	4	1	0	1-1/2	1
2	B or C	4	1 or 1-1/2	0	1-1/2	1
2	B or C	6	2	0	1-7/8	1
2	A	4	1-1/2	0	1-1/2	1-3/4
2	A	12	2	0	1-7/8	1-1/2
2	B or C	6	2	0	1-7/8	1

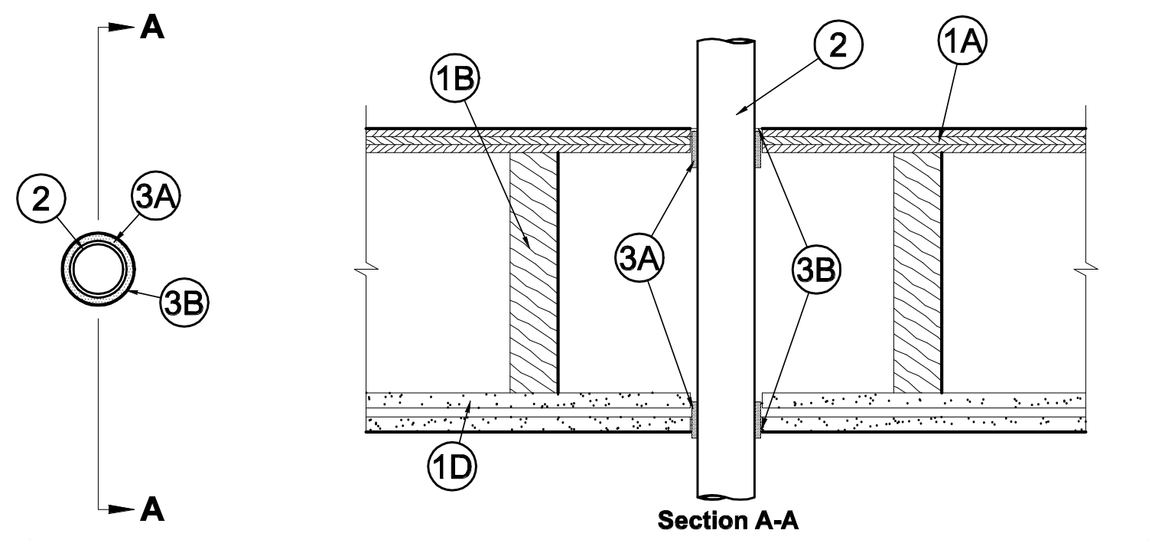
+Indicates penetrant type as itemized in Item 2.
3A. Pipe Covering* — (Not Shown) — As an alternate to Item 3, max 2 in. thick cylindrical calcium silicate (min 14 pcf) units sized to the outside diam of the pipe or tube may be used. Pipe insulation secured with stainless steel bands or min 8 AWG stainless steel wire spaced max 12 in. OC. When the alternate pipe covering is used, the T Rating shall be determined from the table above.
 See Pipe and Equipment Covering — Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall . At the point contact location between pipe covering and gypsum board, a min 1/2 in. diam bead of fill material shall be applied at the pipe covering/gypsum board interface on both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant
*Bearing the UL Classification Mark

Guide XHEZ
Through-Penetration Firestop Systems

(12/08/08)
F-C-2019 - A Card

System No. F-C-2019

F-Rating - 1 and 2 Hr (See Item 1); T-Rating - 1 and 2 Hr (See Item 1)
L Rating At Ambient - 1 CFM/sq ft; L Rating At 400 F - Less Than 1 CFM/sq ft



1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L505, L511 or L536 in the UL Fire Resistance Directory. The F and T Ratings of the firestop system are equal to the hourly fire rating of the floor-ceiling assembly. The general construction features of the floor-ceiling assembly are summarized below:

A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3 in. (76 mm).

B. Wood Joists* — For 1 hr fire-rated floor-ceiling assemblies, nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped. For 2 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in. (51 by 102 mm) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped.

C. Furring Channels — (Not Shown) — In 2 hr fire-rated assemblies, resilient galv steel furring installed perpendicular to wood joists between first and second layers of wallboard (Item 1D). Furring channels spaced max 24 in. (610 mm) OC. In 1 hr fire-rated assemblies, resilient galv steel furring installed perpendicular to wood joists between gypsum board and wood joists as specified in the individual Floor-Ceiling Design. Furring channels spaced max 24 in. (610 mm) OC.

D. Gypsum Board* — Nom 4 ft (1220 mm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. First layer of gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Second layer of gypsum board (2 hr fire-rated assembly) screw-attached to furring channels as specified in the individual Floor-Ceiling Design. Max diam of ceiling opening is 3 in. (76 mm).

2. Through Penetrants — One nonmetallic pipe or conduit to be installed approximately midway between wood joists and centered within the system. Diam of openings hole-sawed through flooring system and through gypsum board ceiling to be nom 5/8 in. (16 mm) larger than the outside diam of through-penetrant. Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used:

A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.

B. Rigid Nonmetallic Conduit+ — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).

C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.

D. Electrical Nonmetallic Tubing (ENMT)+ — Nom 2 in. (51 mm) diam (or smaller) ENMT formed from PVC and installed in accordance with Article 331 of the National Electrical Code.

3. Firestop System — The firestop system shall consist of the following:

A. Fill, Void or Cavity Material* — Wrap Strip — Nom 1/8 or 3/16 in. (3.2 or 4.8 mm) thick intumescent material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips or nom 1/4 in. (6 mm) thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. (51 mm) wide strips. One layer of wrap strip is wrapped around the through-penetrant at its egress from both sides of the floor-ceiling assembly with ends butted and held in place with two layers of 2 in. (51 mm) wide by 3 mil (0.08 mm) thick aluminum foil tape. The bottom edge of the wrap strip shall extend 5/8 in. (16 mm) below the flooring system and 1/4 in. (6 mm) below the ceiling.

SPECIFIED TECHNOLOGIES INC — SpecSeal BLU Wrap Strip, SpecSeal BLU2 Wrap Strip or SpecSeal RED Wrap Strip

B. Fill, Void or Cavity Material* — Sealant — Fill material forced into annulus to fill space to max extent possible, flush with top surface of floor and bottom surface of ceiling.

SPECIFIED TECHNOLOGIES INC — SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

+Bearing the UL Listing Mark *Bearing the UL Classification Marking

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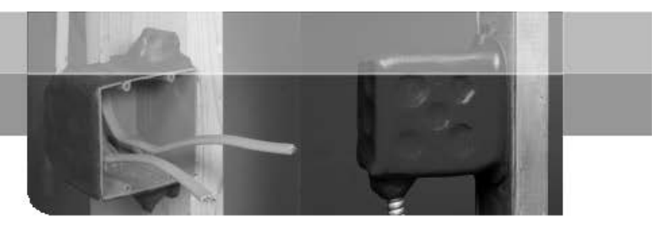


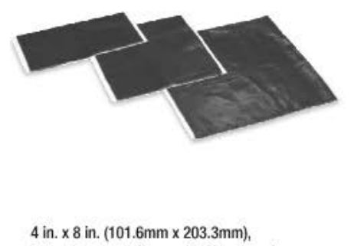
3M™ Fire Barrier Moldable Putty Pads MPP+

Product Data Sheet

1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV), the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back electrical boxes.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.



4 in. x 8 in. (101.6mm x 203.3mm),
7 in. x 7 in. (177.8mm x 177.8mm) and
9.5 in. x 9.5 in. (241.2mm x 241.3mm)
pad sizes available.

Color: ■ Dark Red

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides draft and cold smoke seal
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*
- Excellent adhesion
- Re-enterable/repairable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC
- Will not dry out or crumble
- Red color widely recognized as a fire protective product

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants.

**Minimizes noise transfer—STC-Rating of 52 when tested in STC 53-rated wall assembly.*

FIRE BARRIER
UP TO 4 HOUR
Fire Protection

SMOKE SEAL
L RATED
Meets Optional L Requirements

WALL OPENING
UP TO 2 HOUR
Fire Protection

SOUND BARRIER
STC 52
In STC 53-Rated Wall Assembly

FM APPROVED
SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APROVAL GUIDE

ULC LISTED
FILL, VOID OR CAVITY MATERIALS
90G9

UL CLASSIFIED
WALL OPENING PROTECTIVE MATERIAL FIRE RESISTANCE CLASSIFICATION SEE UL FIRE RESISTANCE DIRECTORY
90G9

UL CLASSIFIED
FILL, VOID, OR CAVITY FOR USE IN THROUGH-PENETRATION FIRESTOP SYSTEMS
SEE UL FIRE RESISTANCE DIRECTORY
90G9

2. Applications

4 in. x 8 in. (101.6mm x 203mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective to meet building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm x 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in. x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications

3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Typically Specified MasterFormat (2004)
Section 07 84 00 – Firestopping

Related Sections
Section 07 84 16 – Annular Space Protection
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 27 00 – Thermal and Moisture Protection Firestopping
Section 21 00 00 – Fire Suppression
Section 26 00 00 – Electrical

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M™ Fire Protection Products, visit: www.3M.com/firestop

3M

4. Performance & Typical Physical Properties

Color:	Dark Red
Nominal Density:	10–12 lbs./gal. (1.2–1.45kg/L)
Nominal Thickness:	1/10 in. (2.54mm)
Surface Burning (ASTM E 84):	Flame Spread 0, Smoke Development 0
Heat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413): **Tested in STC 53 rated wall assembly**	52 when tested on back-to-back electrical boxes
VOC Less H_2O and Exempt Solvents:	< 250g/L

Dimensions:	4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm)
Unit Volume:	2.52 in.^{3} (41.4cm^3)
Unit Weight:	2.7 oz (76g)
Dimensions:	7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm)
Unit Volume:	4.63 in.^{3} (76.0cm^3)
Unit Weight:	4.1 oz (116g)
Dimensions:	9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm)
Unit Volume:	6.1 in.^{3} (139.8cm^3)
Unit Weight:	7.6 oz (215g)

5. Packaging, Storage, Shelf Life

Packaging:	Corrugated cardboard box with liner between individual pads.
Storage:	3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.
Shelf Life:	3M™ Fire Barrier Moldable Putty Pads MPP+ shelf life is indefinite in original unopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not wet and are frost-free.

Installation Details: Electrical boxes must be firestopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one stud cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm. per 9.29 sq. m) — refer to listed system details and applicable local building code requirements. For electrical box installations, a minimum of 1/10 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s).

Note: Partial pads can be pieced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam.

Limitations: Over application (i.e., using excessive amount of material) of product to vertical surfaces may cause sagging, follow system details. Product is not impaired by freezing but should be warmed to 32°F (0°C) before applying.

7. Maintenance

No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Moldable Putty Pad MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty, ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at new/existing putty overlap.

8. Availability

3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack, 10 packs/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (20 pads/case) 7 in. x 7 in. 1/10 in. (177.8mm x 177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10 in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material. For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

9. Safe Handling Information

Consult product's Material Safety Data Sheet (MSDS) from country-of-use prior to handling and disposal.

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-328-1687
877-369-2923 (Fax)
www.3M.com/firestop

Important Notice to User:
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USE PUTTY AT ALL BOXES INSTALLED ON FIRE-RATED WALLS

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT
11590 W. Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
02/16/24
RST#22088

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1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

REVISIONS

#	Description	BY

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED.

PROJECT TITLE
PC 2022 CBC:24' x 40' EXPANDABLE TO 120' x 40'

EL DORADO 160# SNOW LOAD

SHEET TITLE
FIRE SEPARATION & PENETRATION DETAILS

PROJECT NUMBER
22073

DRAWN BY
rMc

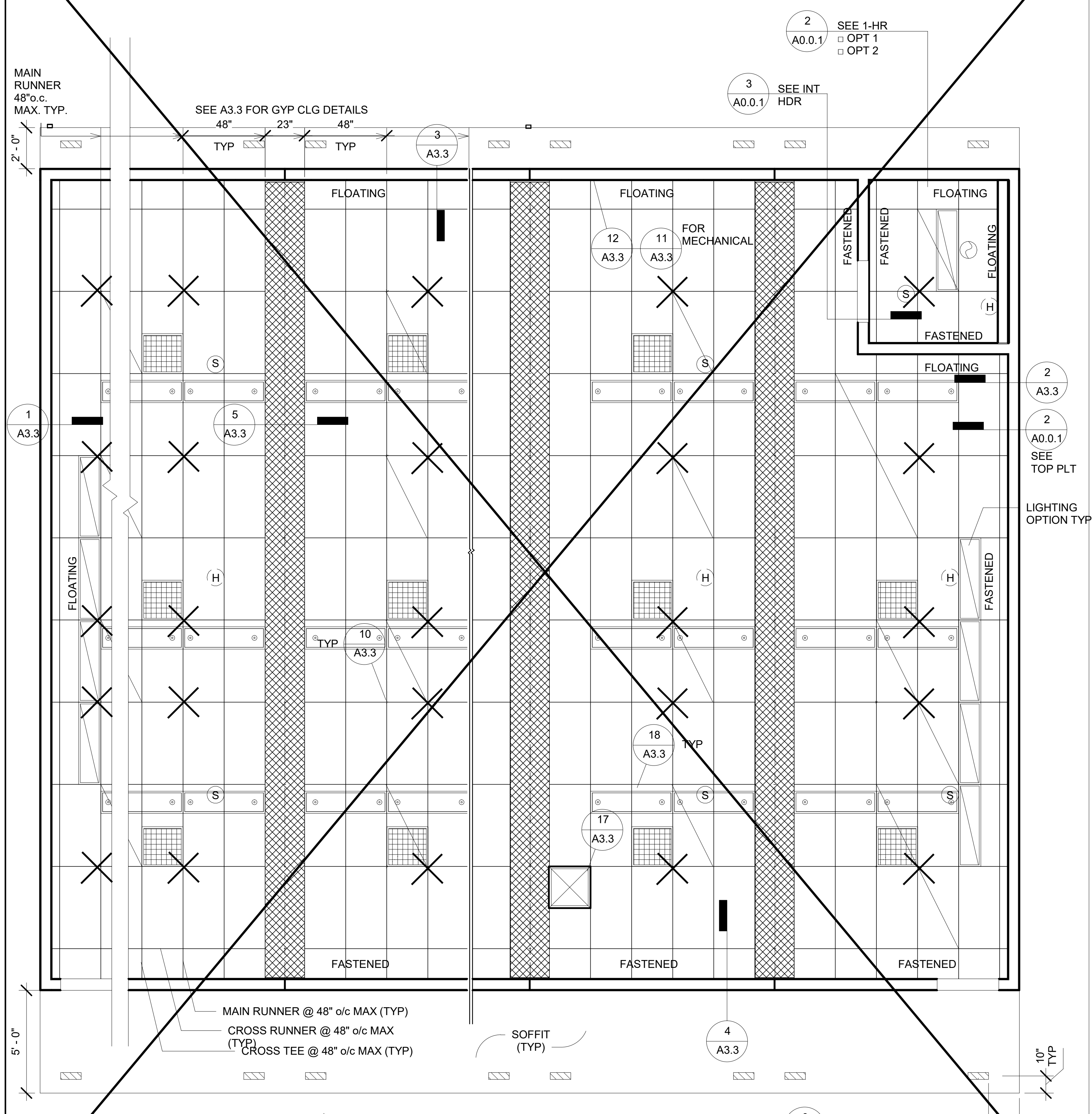
CHECKED BY
RT/AR

DATE
06/07/2021

SHEET NO.
A3.0.1

SHEET OF SHEETS

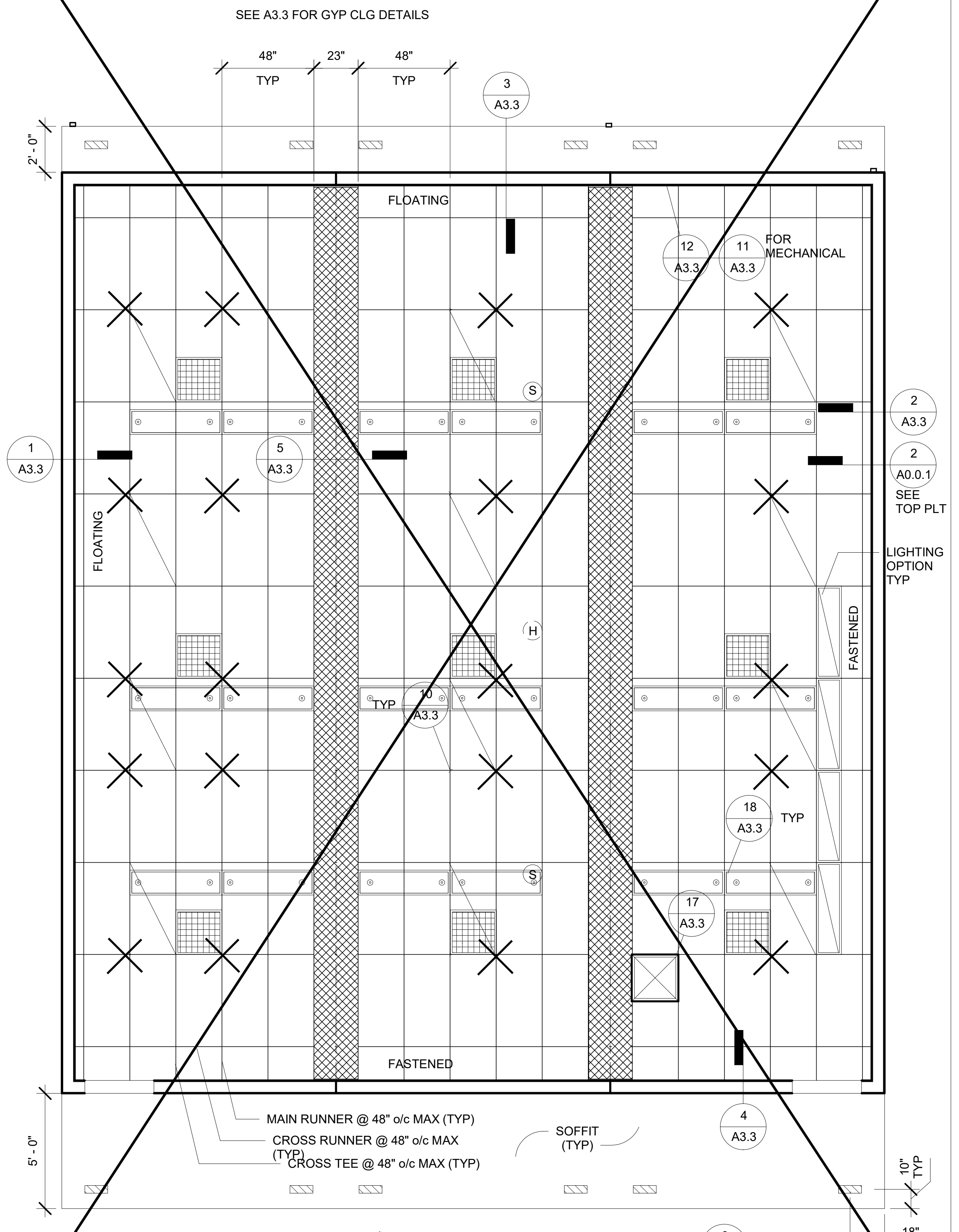
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



NOTE: SEE 10 / 14 / 15 / A3.3
FOR TYP WIRE BRACE CONNECTION
SEE A3.2.1 FOR CLG NOTES

3 A0.0.1 SEE EXT HDR

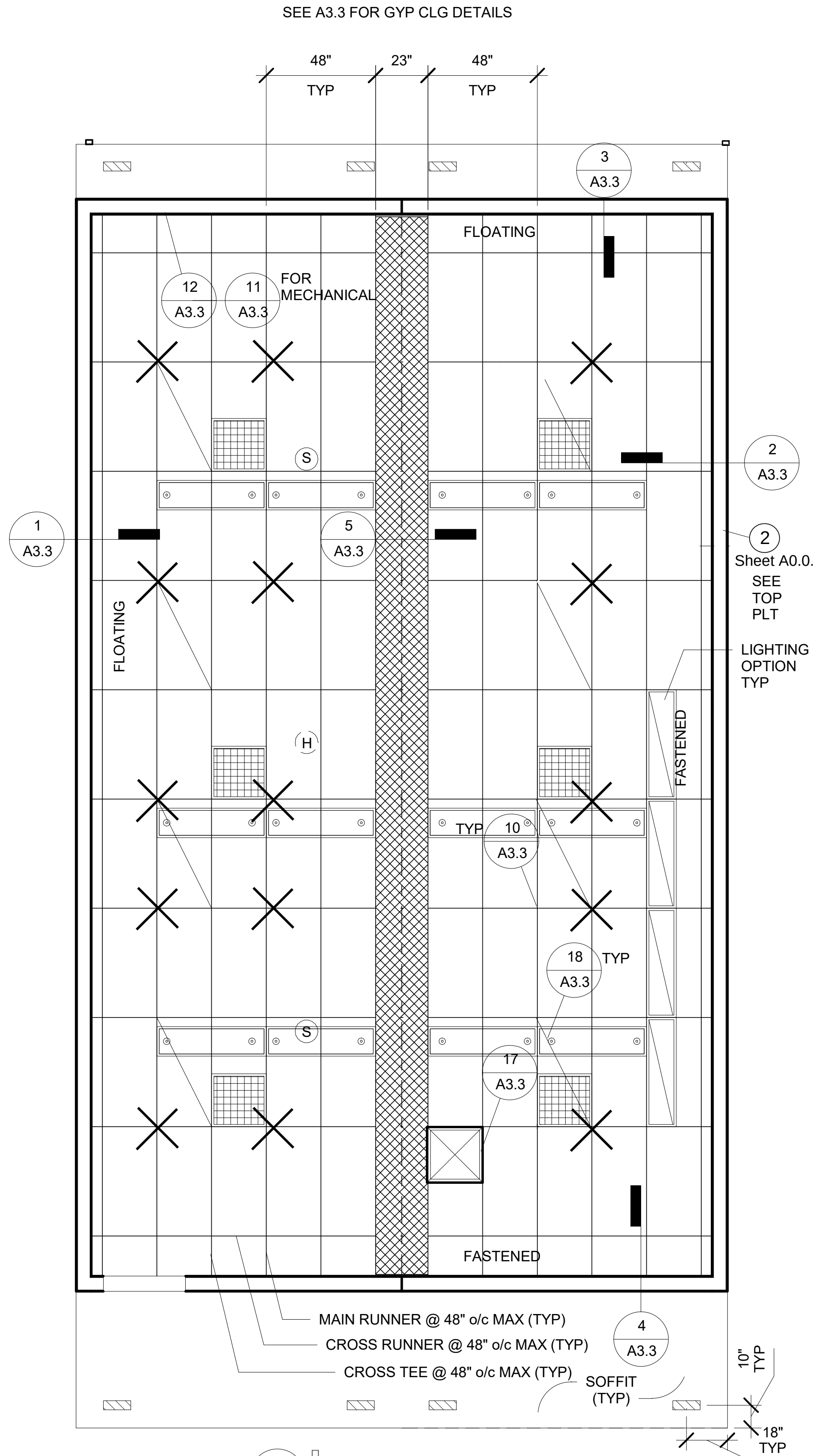
3 *1/4" = 1'-0"*
48x40 thru 120x40 RCP(A)



NOTE: SEE 10 / 14 / 15 / A3.3
FOR TYP WIRE BRACE CONNECTION
SEE A3.2.1 FOR CLG NOTES

3 A0.0.1 SEE EXT HDR

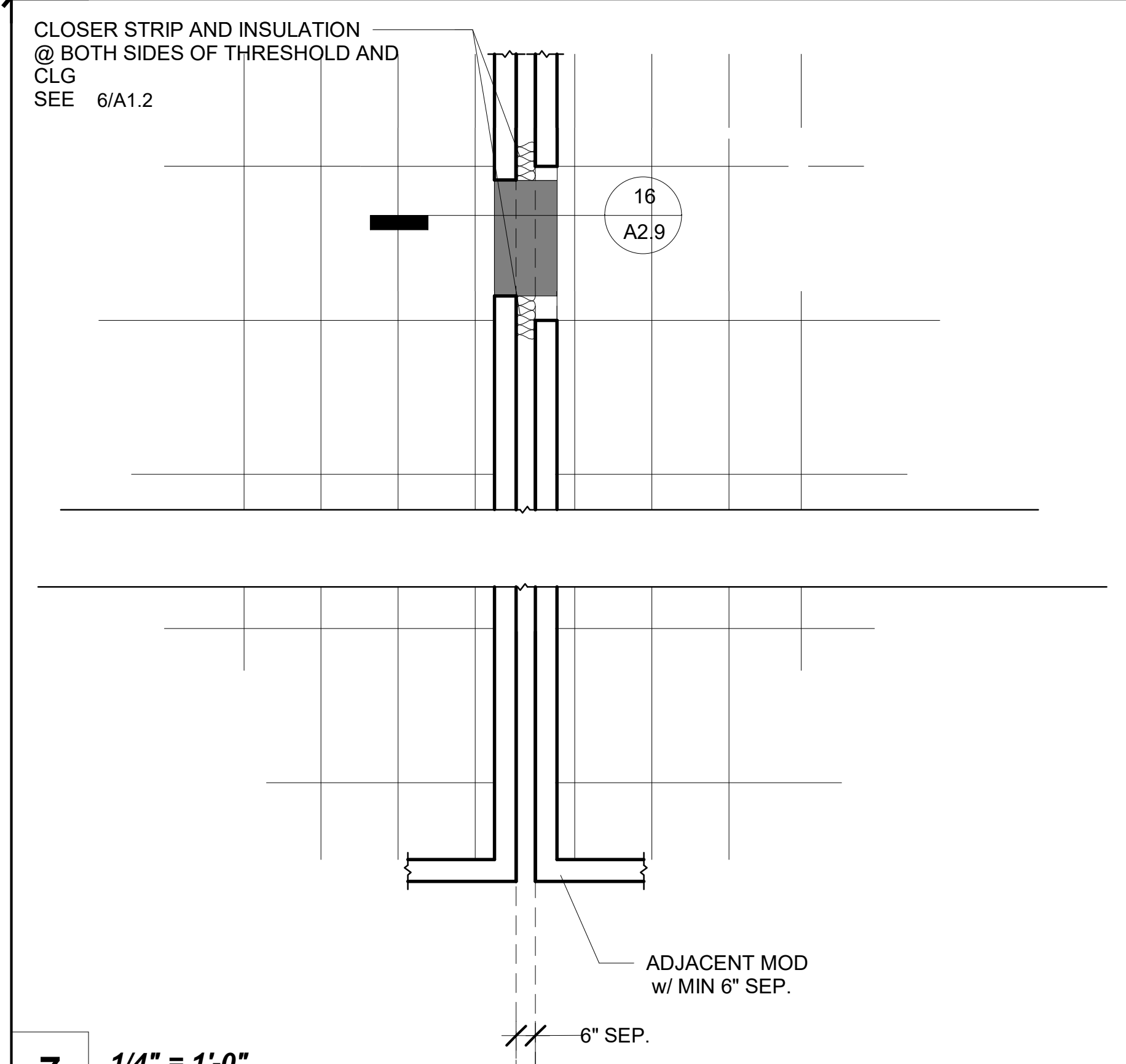
2 *1/4" = 1'-0"*
36x40 RCP(A)



SEE EXT HDR 10A A2.1(A)

Sds > 1.15 = SPLAY WIRE MUST BE ON 8x12 GRID MAX
NOTE: SEE 10 / 14 / 15 / A3.3
FOR TYP WIRE BRACE CONNECTION
SEE A3.2.1 FOR CLG NOTES

1 *1/4" = 1'-0"*
24x40 RCP(A)

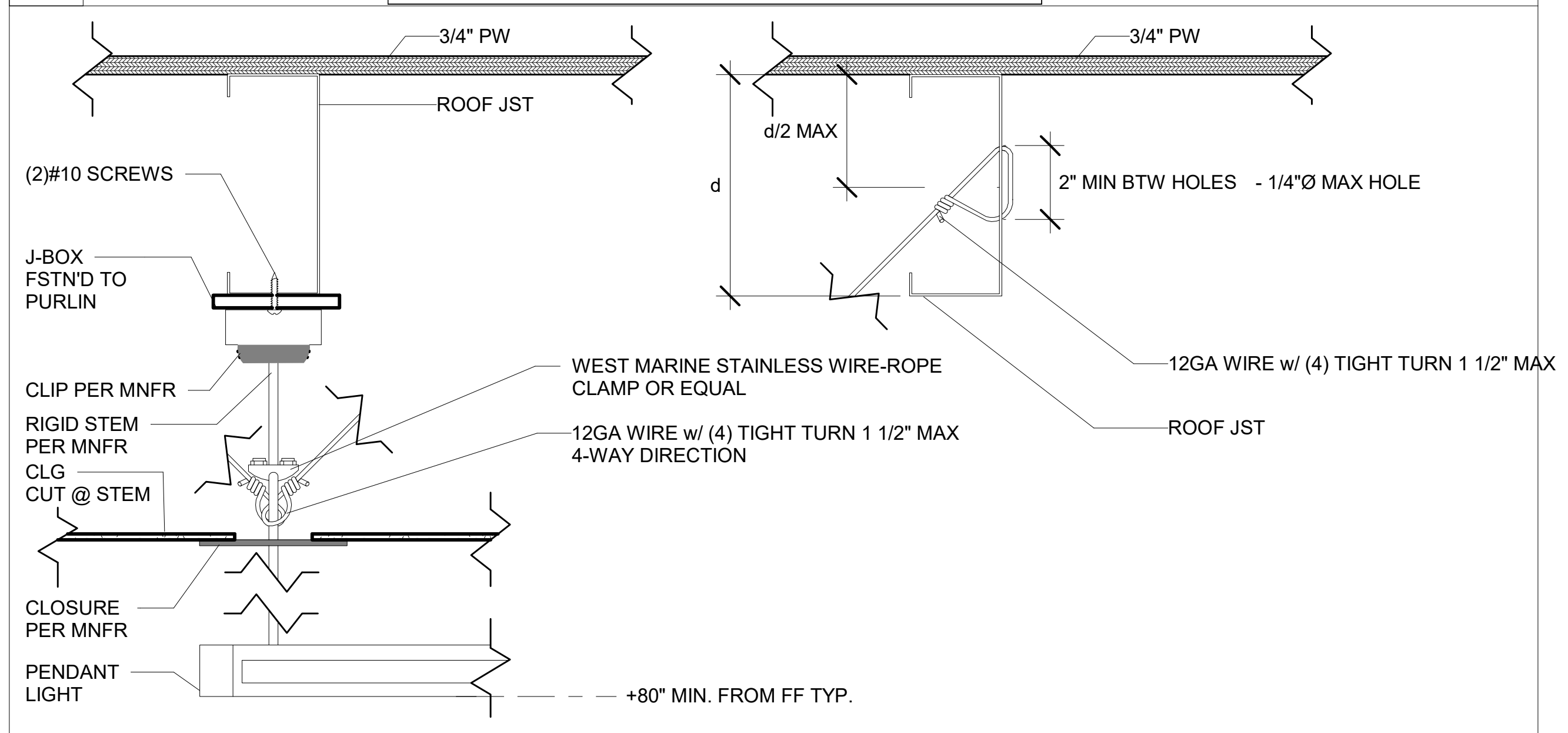

CLOSER STRIP AND INSULATION @ BOTH SIDES OF THRESHOLD AND CLG
SEE 6/A1.2
16 A2.9
ADJACENT MOD w/ MIN 6" SEP.
6" SEP.

7 *1/4" = 1'-0"*
RCP - Optional Opening

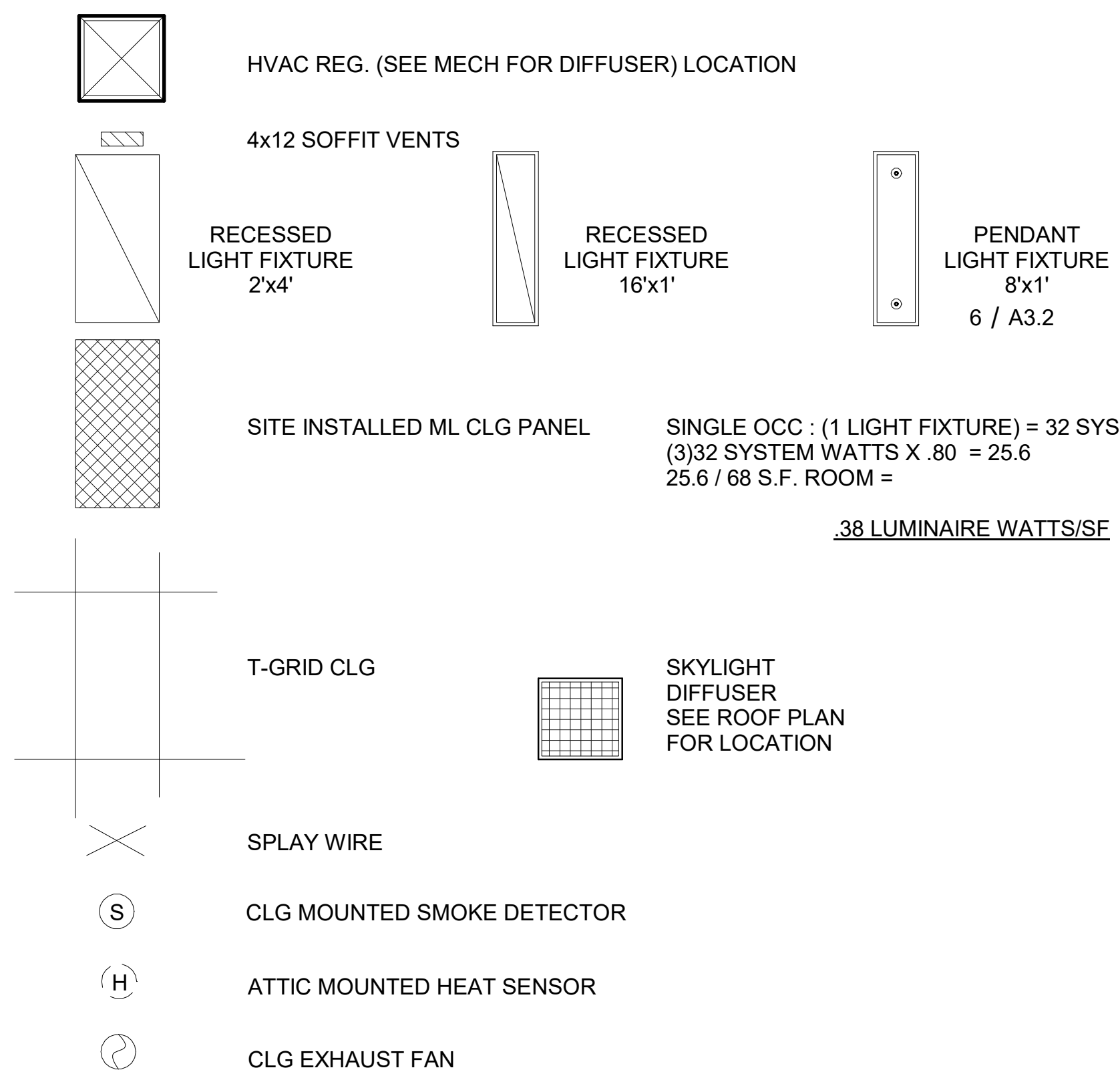
MAIN RUNNER 7301
4' CROSS T #: XL7341
2' CROSS T #: XL7328

STANDARD 7/8" WALL ANGLE CLIP w/ BERC-2 CLIP (ICC #ESR-1308)
2" WALL ANGLE: 7810 (OPTIONAL)

5 *1/4" = 1'-0"*
T-Bar Sched


3/4" PW
ROOF JST
(2)#10 SCREWS
J-BOX FSTN'D TO PURLIN
CLIP PER MNFR
RIGID STEM PER MNFR
CLG CUT @ STEM
WEST MARINE STAINLESS WIRE-ROPE CLAMP OR EQUAL
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX 4-WAY DIRECTION
CLOSURE PER MNFR
PENDANT LIGHT
+80" MIN. FROM FF TYP.
3/4" PW
d/2 MAX
d
2" MIN BTW HOLES - 1/4"Ø MAX HOLE
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
ROOF JST

6 *3" = 1'-0"*
Section - Pendant Mounting Detail


HVAC REG. (SEE MECH FOR DIFFUSER) LOCATION
4x12 SOFFIT VENTS
RECESSED LIGHT FIXTURE 2'x4'
RECESSED LIGHT FIXTURE 16'x1'
PENDANT LIGHT FIXTURE 8'x1'
6 / A3.2
SITE INSTALLED ML CLG PANEL
T-GRID CLG
SKYLIGHT DIFFUSER SEE ROOF PLAN FOR LOCATION
SPLAY WIRE
CLG MOUNTED SMOKE DETECTOR
ATTIC MOUNTED HEAT SENSOR
CLG EXHAUST FAN

SINGLE OCC : (1 LIGHT FIXTURE) = 32 SYSTEM WATTS
(3)32 SYSTEM WATTS X .80 = 25.6
25.6 / 68 S.F. ROOM =

.38 LUMINAIRE WATTS/SF

4 *1/4" = 1'-0"*
RCP Legend

6/15/2021 11:50:56 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W BERNARDO COURT, SUITE 100
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Ex. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
02/16/24
RST#22088

CLIENT

Class Leasing
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Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
RCP

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A3.2

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

1. CEILING SYSTEM GENERAL NOTES

1.01 Ceiling system components shall comply with ASTM C635 and Section 5.1 of ASTM E580.

1.02 The ceiling grid system must be rated heavy duty as defined by ASTM C635.

1.03 Ceiling systems. The following ceiling system(s) is/are part of the scope of this project:
Manufacturer: ARMSTONG (OR EQUAL)
Product Name: PRELUDE XL AND PRELUDE XL HIGH RECYLED CONTENT(HRC)
Evaluation Report Type and Number: ICC ESR#1308
Main Runner Part, Model, or Catalog Number: 7301
Cross Runner Part, Model, Catalog Number: 4" CROSS T # XL7341 / 2" CROSS T # XL7328

1.04 Seismic Wall Clip: STANDARD 7/8" WALL ANGLE CLIP w/ BERC2 CLIP
Manufacturer's Model: 7810

1.05 Ceiling panels shall not support any luminaires, air terminals or devices.

1.06 For ceiling installations utilizing acoustical tile panels of mineral or glass fiber, it is not mandatory to provide ¾" clearance between the acoustical tile panels and the wall on the sides of the ceiling which are free to slip. For all other ceiling panel types, provide ¾" clearance between the ceiling panel and the wall on the sides of the ceiling free to slip. Clearance between ceiling grid runners/members and walls shall comply with the details on these drawings regardless of ceiling tile material.

2. MATERIALS

2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.

2.02 Galvanized sheet steel (including that used for metal stud and track compression struts/post) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) and heavier shall have a minimum yield strength of 50 ksi. ←

2.03 Electrical metallic tube (EMT) shall be ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength (F_Y) of 30 ksi and minimum ultimate strength (F_U) of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES

3.01 Separate all ceiling hanger and bracing wires at least 6 inches from all unbraced ducts, pipes, conduit, etc.

3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit and equipment.

Detail Title:		Detail No.
CEILING NOTES	REV: 09/21/2015 REV: 03/2022	1.00

3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.

3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.

3.05 Hanger and bracing wire anchorage to the structure shall be installed in such a manner that the direction of the anchorage aligns closely with the direction of the wire (e.g., bracing wire ceiling clips must be bent as shown in the details and rotated as required to align closely with the direction of the wire, screw eyes in wood must be installed so they align closely with the direction of the wire, etc.).

4. FASTENERS AND WELDING

4.01 Sheet metal screws shall comply with ASTM C1513 and ASME B18.6.3. Penetration of screws through joined material shall not be less than three exposed threads.

4.02 Expansion anchors shall be: NA

4.03 Power-Actuated Fasteners shall be: NA

4.04 If not otherwise specified in the evaluation report, power-actuated fasteners installed in steel shall be installed so the entire pointed end of the fastener is driven through the steel member

4.05 Power-actuated fasteners in concrete or masonry are not permitted for bracing wires.

4.06 Concrete reinforcement and prestressing tendons shall be located by non-destructive means prior to installing post-installed anchors.

4.07 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING

5.01 All field testing must be performed in the presence of the project inspector.

5.02 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power-actuated fasteners in concrete shall be field tested for 200 pounds in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1910A.5.

5.03 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1910A.5.

6. LUMINAIRES

6.01 All luminaires shall be positively attached to the ceiling suspension systems by mechanical means to resist a horizontal force equal to the weight of the luminaire. A minimum of two screws or approved fasteners are required at each luminaire, per ASTM E580 Section 5.3.1.

6.02 Surface-mounted luminaires shall be attached to the main runner with at least two positive clamping devices. The clamping device shall completely surround the supporting ceiling runner and be made of steel with a minimum thickness of #14 gauge. Rotational spring catches do not comply. A #12 gauge slack safety wire shall be connected from each clamping device to the structure above. Provide additional supports when a luminaire is 8 feet or longer or exceeds 56 pounds. Maximum spacing between supports shall not exceed 8 feet.

Detail Title:		Detail No.
CEILING NOTES	REV: 09/21/2015 REV: 03/2022	1.00

6.03 Luminaires weighing less than or equal to 10 pounds may be supported directly on the ceiling runners, shall have a minimum of one #12 gauge slack safety wire connected from the fixture housing to the structure above.

6.04 Luminaires weighing greater than 10 pounds but less than or equal to 56 pounds may be supported directly on the ceiling runners, but they shall have a minimum of two #12 gauge slack safety wires connected from the fixture housing at diagonal corners to the structure above.

Exception: All luminaires greater than two by four feet weighing less than 56 pounds shall have a #12 gauge slack safety wire at each corner.

6.05 All luminaires weighing greater than 56 pounds shall be independently supported by not less than four taut #12 gauge hanger wires (one at each corner) attached from the fixture housing to the structure above or other approved hangers. The four taut #12 gauge wires or other approved hangers, including their attachment to the structure above, shall be capable of supporting four times the weight of the fixture.

7. SERVICES WITHIN THE CEILING

7.01 All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals or other services shall be positively attached to the ceiling suspension systems by mechanical means. Screws or approved fasteners are required. A minimum of two attachments are required at each component.

7.02 Ceiling-mounted air terminals or other services weighing less than or equal to 20 pounds shall have one #12 gauge slack safety wire attached from the terminal or service to the structure above.

7.03 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 20 pounds but less than or equal to 56 pounds shall have two #12 gauge slack safety wires (at diagonal corners) connected from the terminal or service to the structure above.

7.04 Flexible sprinkler hose fittings, ceiling-mounted air terminals or other services weighing more than 56 pounds shall be supported directly from the structure above by not less than four taut #12 gauge hanger wires attached from the terminal or service to the structure above or other approved hangers.

8. OTHER DEVICES WITHIN THE CEILING

8.01 All lightweight miscellaneous devices, such as strobe lights, occupancy sensors, speakers, exit signs, etc., shall be attached to the ceiling grid. In addition, devices weighing more than 10 pounds shall have a #12 gauge slack safety wire anchored to the structure above. Devices weighing more than 20 pounds shall be supported independently from the structure above.

Detail Title:		Detail No.
CEILING NOTES	REV: 09/21/2015 REV: 03/2022	1.00

NOTE:
BERG2 2" BEAM-END RETAINING CLIP -Allows you to create a code-compliant Seismic D, E, F ceiling installation while eliminating the need to use 2" wall molding or spreader bars.

NOTE:
1.ITEMS SHOWN WITH A MFR CALLOUT MAY BE SUBSTITUTED WITH AN OR EQUAL OR GREATER PRODUCT WITH DSA APPROVAL

TABLE 1: LATERAL FORCE BRACE ASSEMBLY SPACING

Design Spectral Acceleration Parameter, (S_{DS})	Brace Assembly Spacing	
	z/h ≤ 0.5[a]	z/h > 0.5[a,b]
$S_{DS} \leq 1.15$	12'-0" x 12'-0"	12'-0" x 12'-0"
$1.15 < S_{DS} \leq 1.73$	12'-0" x 12'-0"	8'-0" x 12'-0"
$S_{DS} > 1.73$	8'-0" x 12'-0"	8'-0" x 8'-0"

Footnotes:
a. Where, as defined in ASCE 7 Section 13.3.1:
z = height in structure of point of attachment of ceiling with respect to the base.
h = average roof height of the structure with respect to the base.
b. It shall be permitted to use the brace assembly spacing for "z/h > 0.5" for the full building height.

SEE ALT SHEET FOR FINAL CONFIGURATION OF CEILING AND S_{DS} VALUE SITE SPECIFIC

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~~APP: 04-123059 PC~~
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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

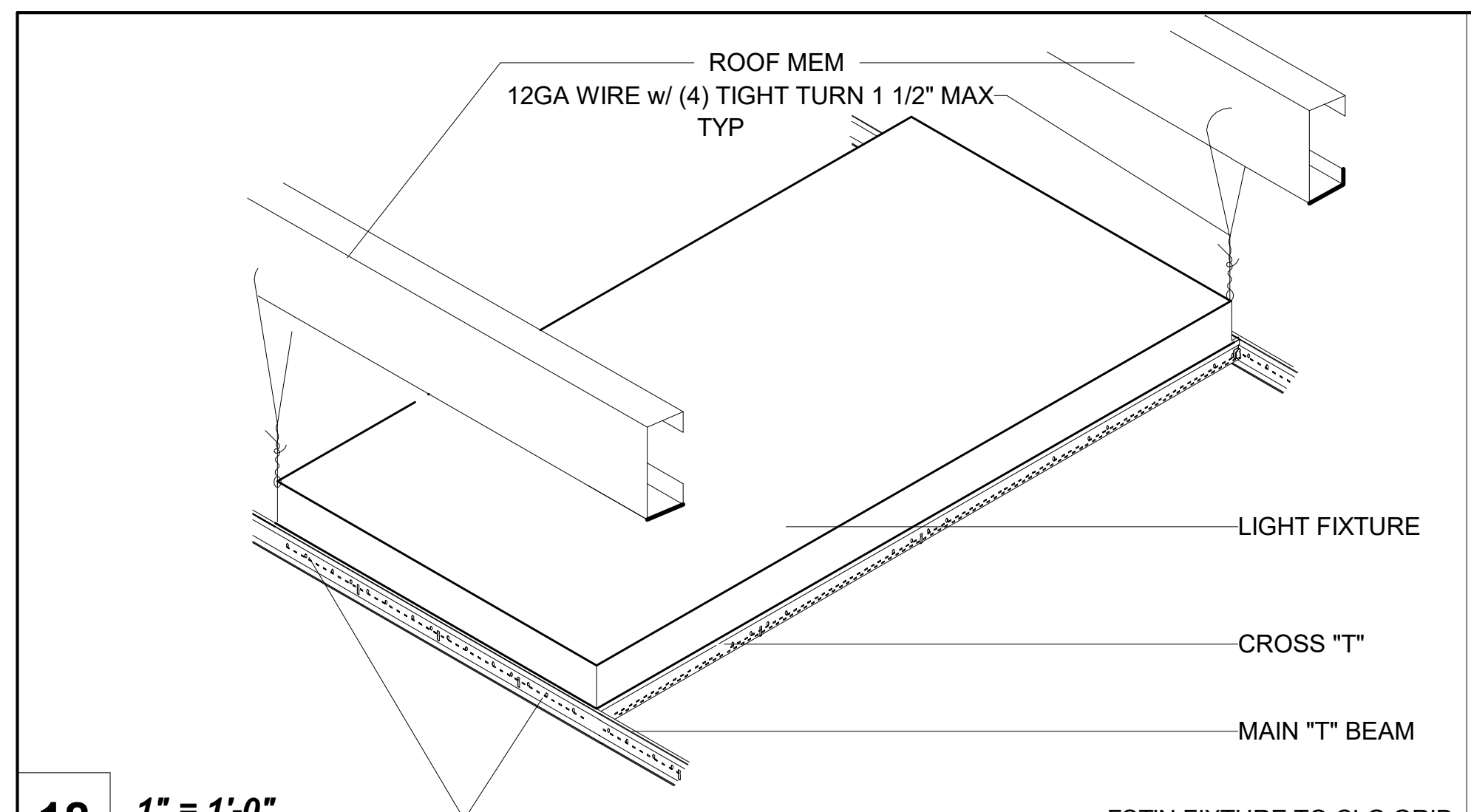
PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
CEILING NOTES

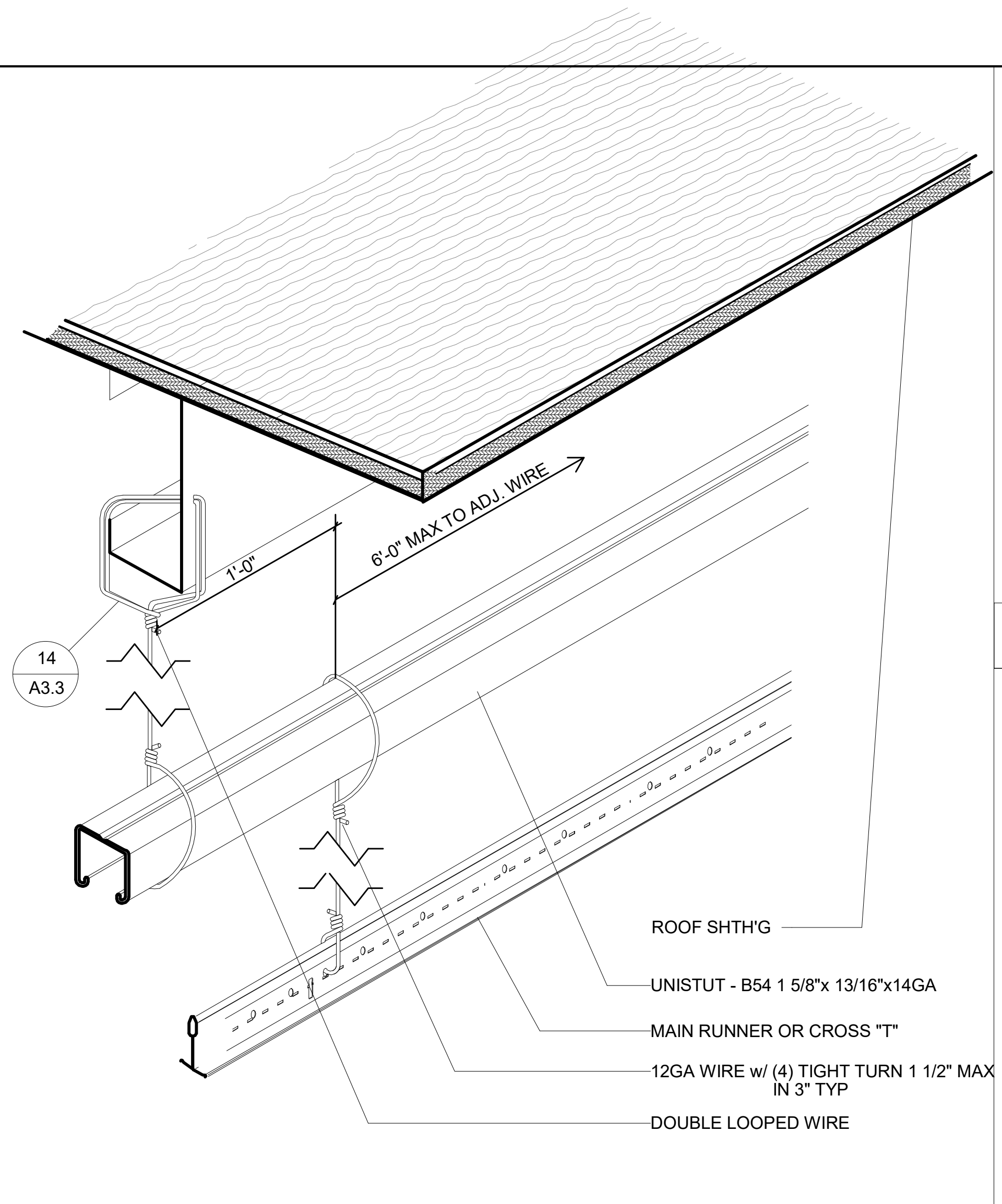
PROJECT NUMBER
22088
DRAWN BY
rMc/SC
CHECKED BY
RH/RT
DATE

SHEET NO.
A3.2.1
SHEET OF

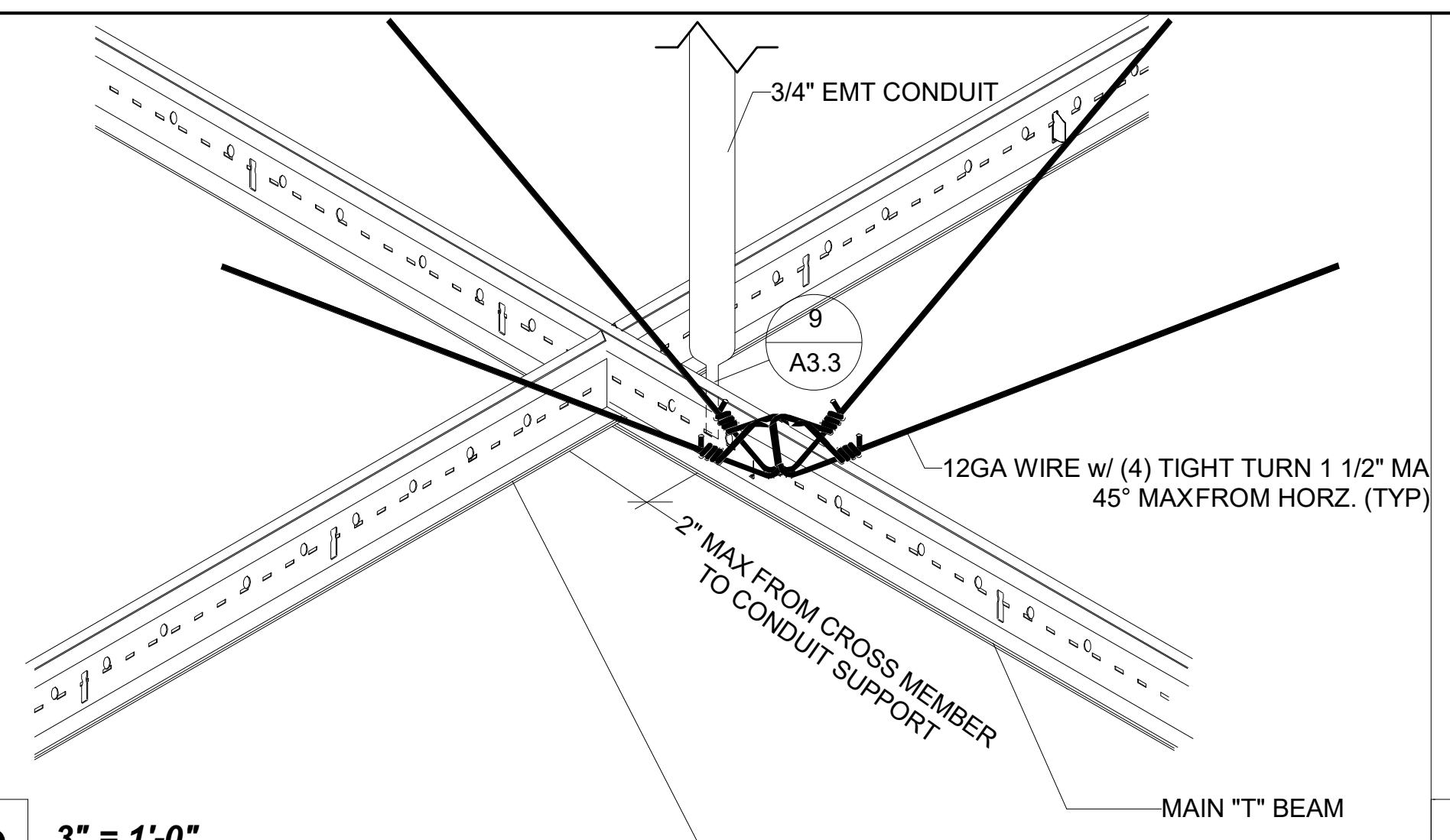
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


ROOF MEM
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX TYP
LIGHT FIXTURE
CROSS "T"
MAIN "T" BEAM
FST'N FIXTURE TO CLG GRID w/ (2)#8 STSMS (EA SIDE)

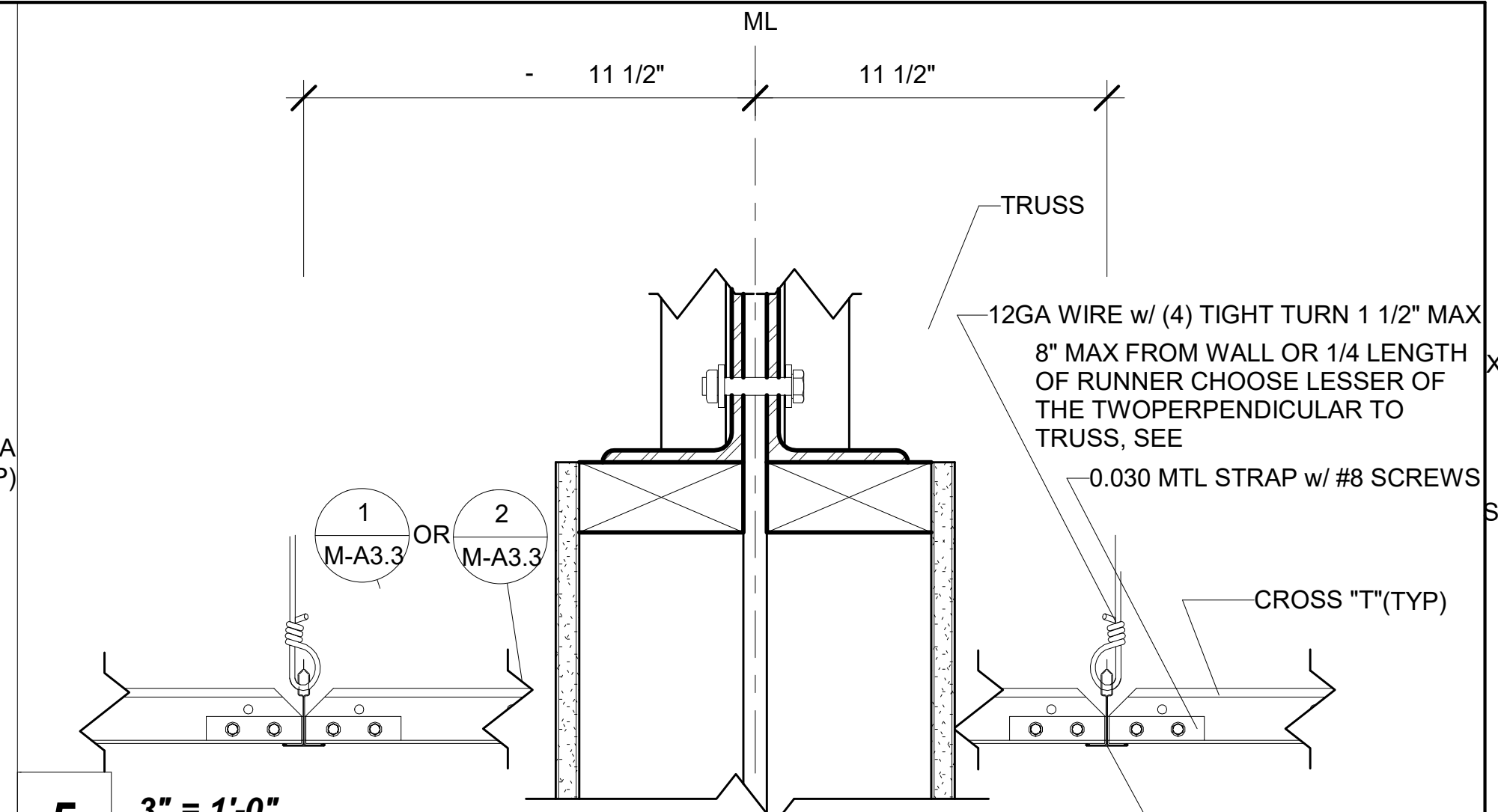
18 1" = 1'-0"
ISO - Light Fixture



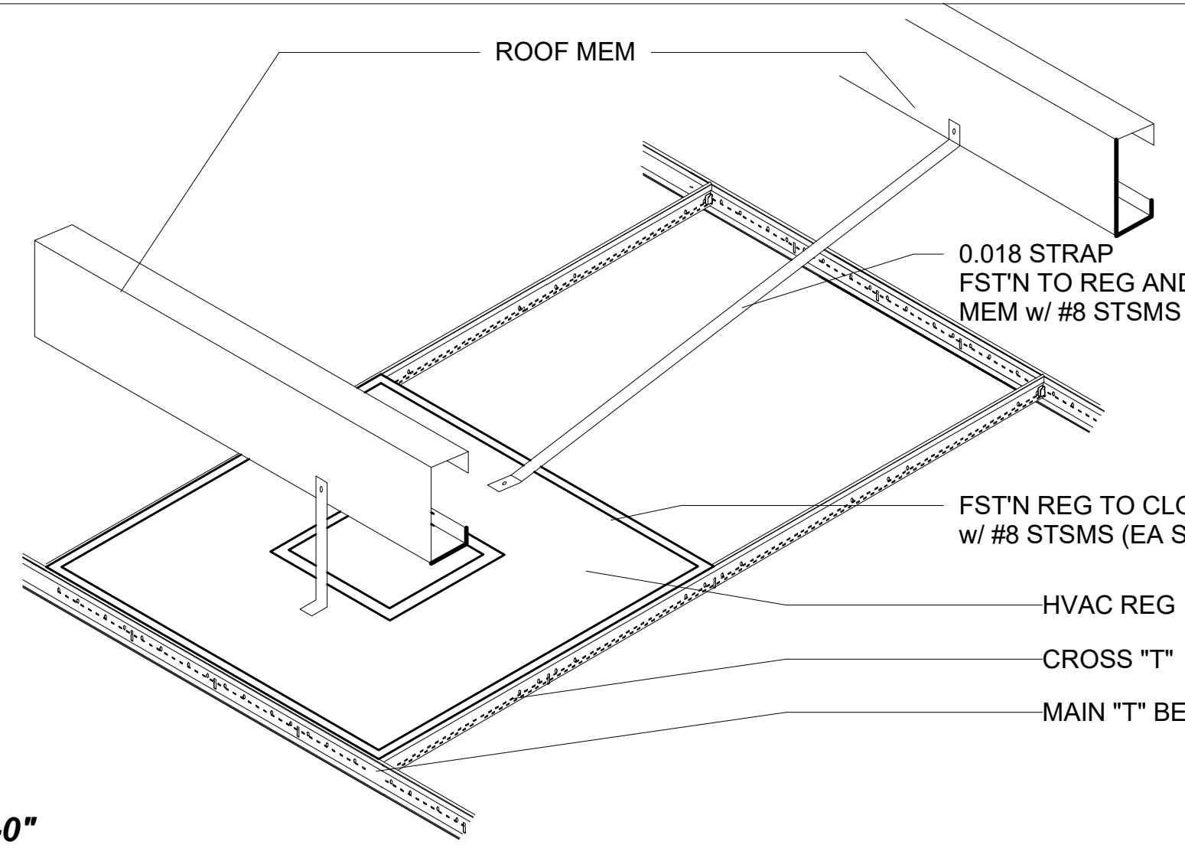
12 3" = 1'-0"
ISO - Trapeze Condition


3/4" EMT CONDUIT
9
A3.3
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MA 45° MAXFROM HORZ. (TYP)
2" MAX FROM CROSS MEMBER TO CONDUIT SUPPORT
MAIN "T" BEAM
CROSS "T"

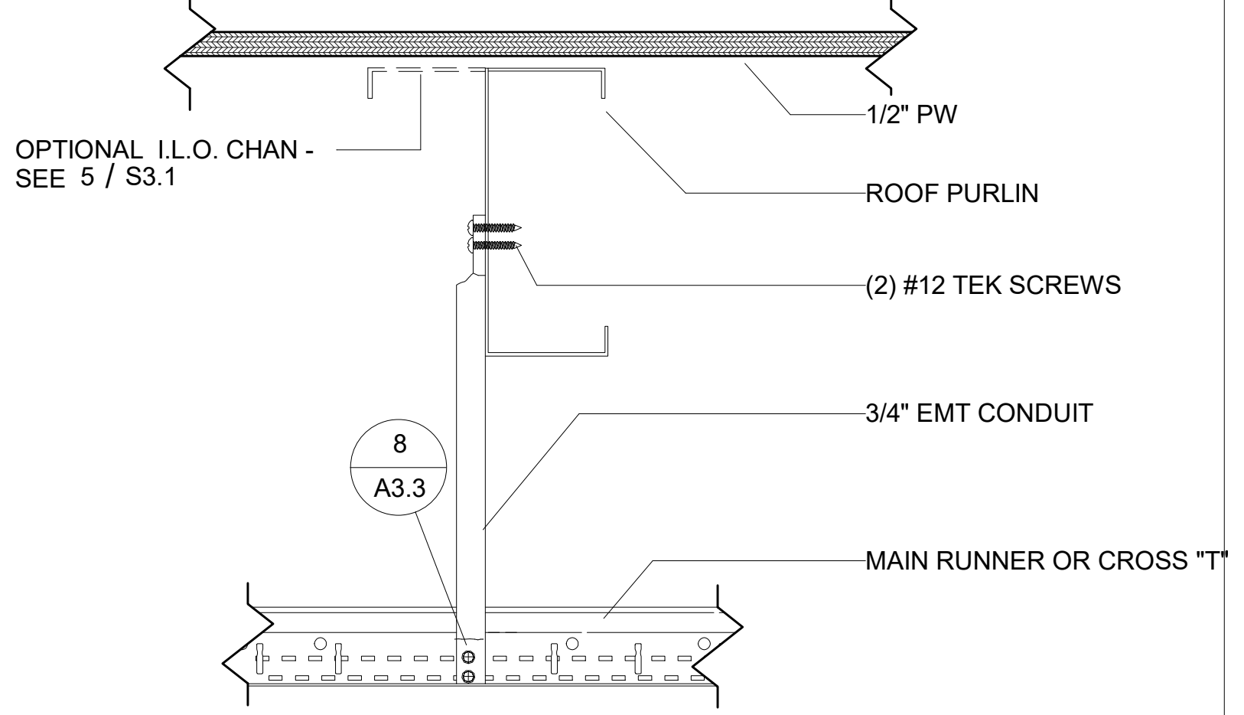
10 3" = 1'-0"
ISO - 4-Way Seismic Splay


ML
11 1/2"
11 1/2"
TRUSS
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
8" MAX FROM WALL OR 1/4 LENGTH OF RUNNER CHOOSE LESSER OF THE TWOPERPENDICULAR TO TRUSS, SEE
0.030 MTL STRAP w/ #8 SCREWS
1
M-A3.3
OR
2
M-A3.3
CROSS "T"(TYP)
MAIN "T" BEAM

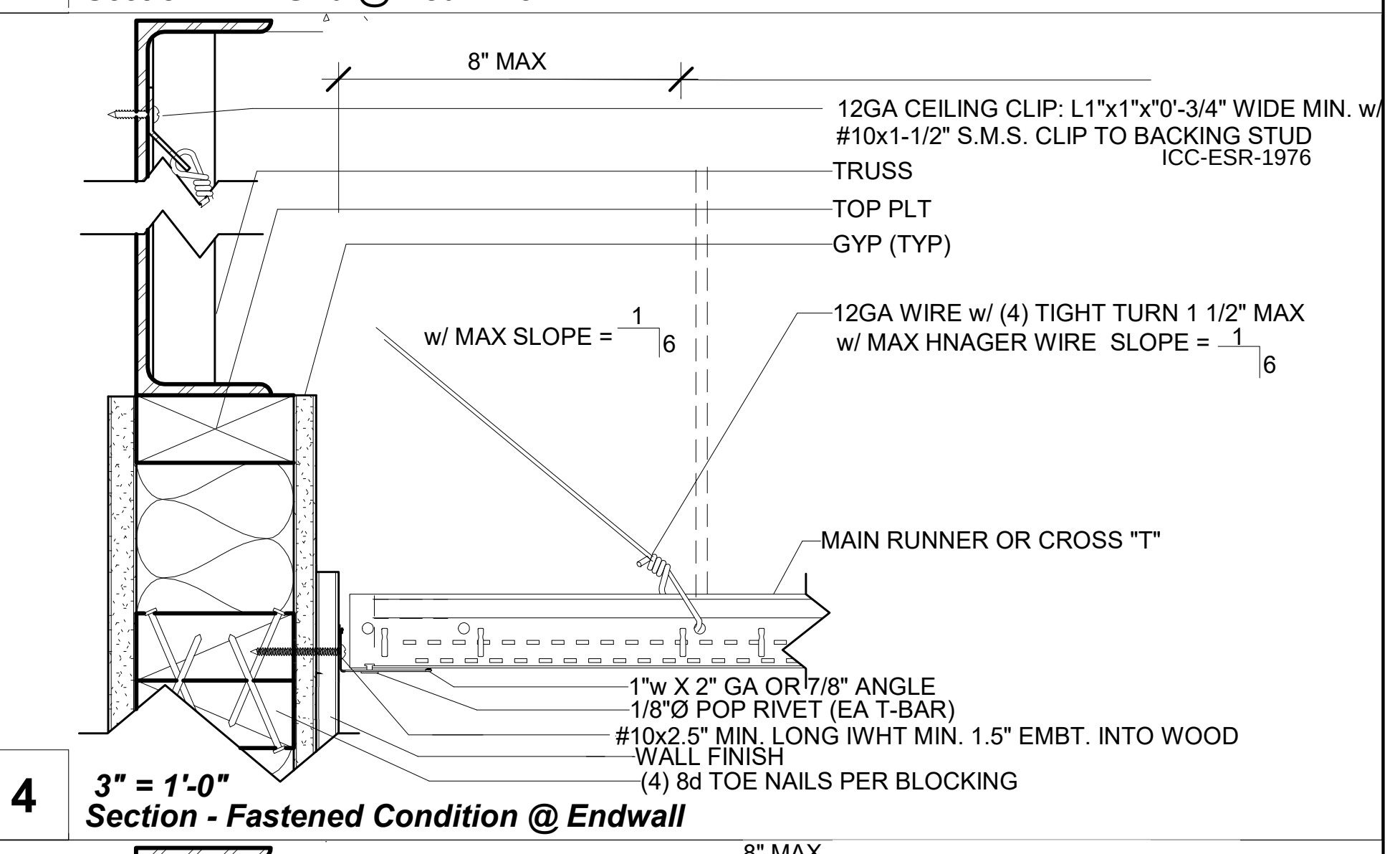
5 3" = 1'-0"
Section - "T" Grid @ Mod Line


ROOF MEM
0.018 STRAP FST'N TO REG AND ROOF MEM w/ #8 STSMS
FST'N REG TO CLG GRID w/ #8 STSMS (EA SIDE)
HVAC REG
CROSS "T"
MAIN "T" BEAM

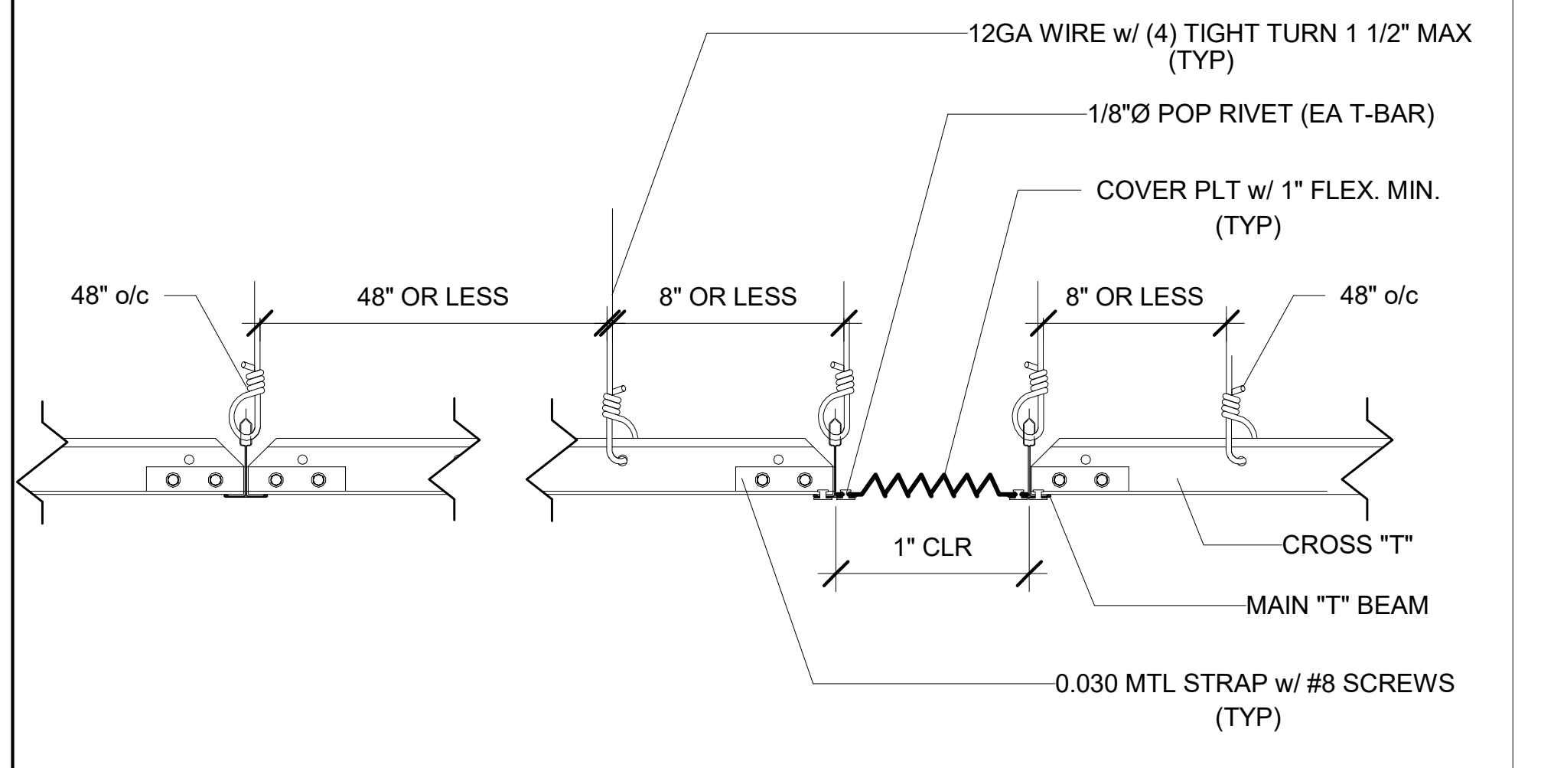
17 1" = 1'-0"
ISO - HVAC Reg Mount



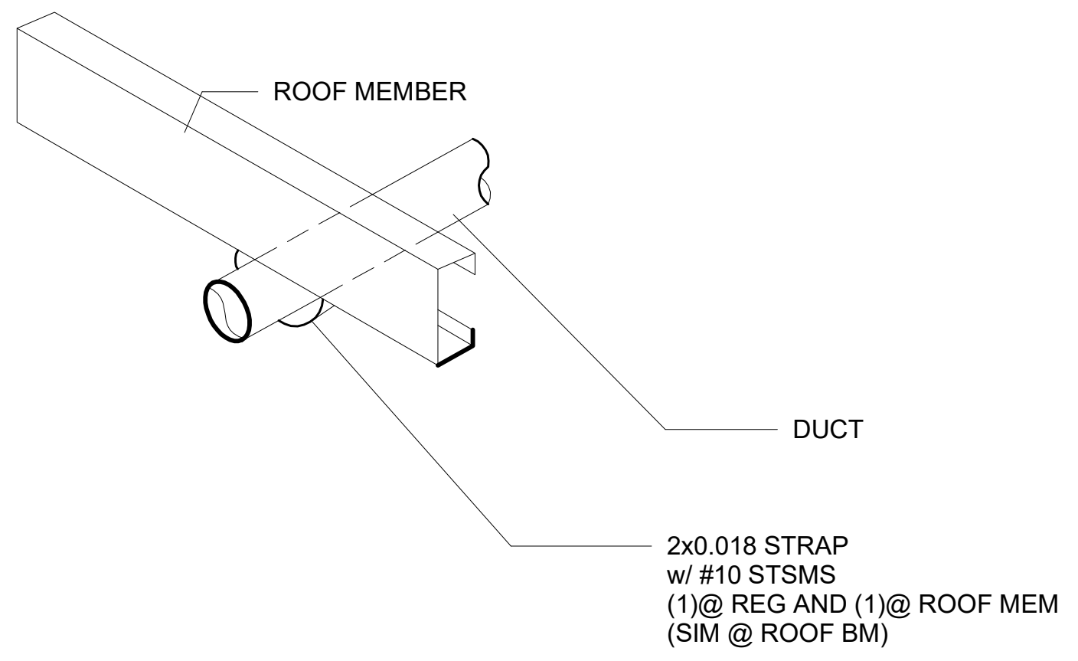
9 3" = 1'-0"
Elevation - Compression Strut


8" MAX
12GA CEILING CLIP: L1"x1"x"0'-3/4" WIDE MIN. w/ #10x1-1/2" S.M.S. CLIP TO BACKING STUD ICC-ESR-1976
TRUSS
TOP PLT
GYP (TYP)
w/ MAX SLOPE = 1/6
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX w/ MAX HNAGER WIRE SLOPE = 1/6
MAIN RUNNER OR CROSS "T"
1"w X 2" GA OR 7/8" ANGLE
1/8"Ø POP RIVET (EA T-BAR)
#10x2.5" MIN. LONG IWHT MIN. 1.5" EMBT. INTO WOOD
WALL FINISH
(4) 8d TOE NAILS PER BLOCKING

4 3" = 1'-0"
Section - Fastened Condition @ Endwall


12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX (TYP)
1/8"Ø POP RIVET (EA T-BAR)
COVER PLT w/ 1" FLEX. MIN. (TYP)
48" o/c
48" OR LESS
8" OR LESS
8" OR LESS
48" o/c
1" CLR
CROSS "T"
MAIN "T" BEAM
0.030 MTL STRAP w/ #8 SCREWS (TYP)

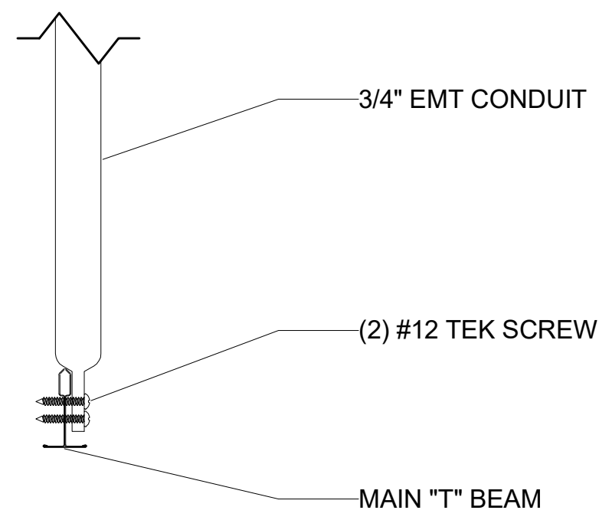
16 3" = 1'-0"
Section - "T" Grid @ Mod Line


ROOF MEMBER
DUCT
2x0.018 STRAP w/ #10 STSMS (1)@ REG AND (1)@ ROOF MEM (SIM @ ROOF BM)

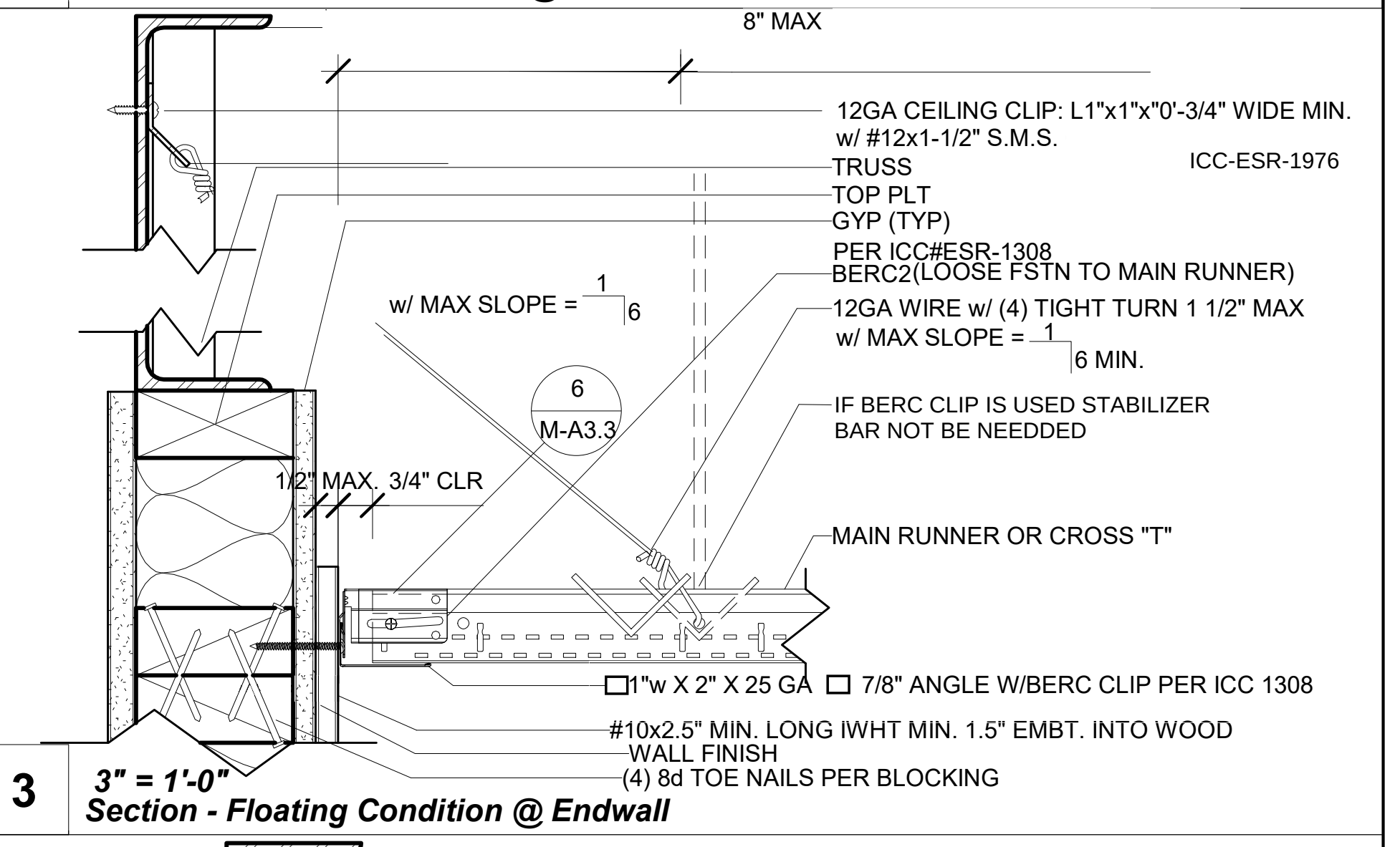
11 1" = 1'-0"
ISO - Duct Connection

NOTE:
CRIMP CONDUIT AND ATTACH TO MAIN RUNNER WITHIN 2" OF CROSS RUNNER

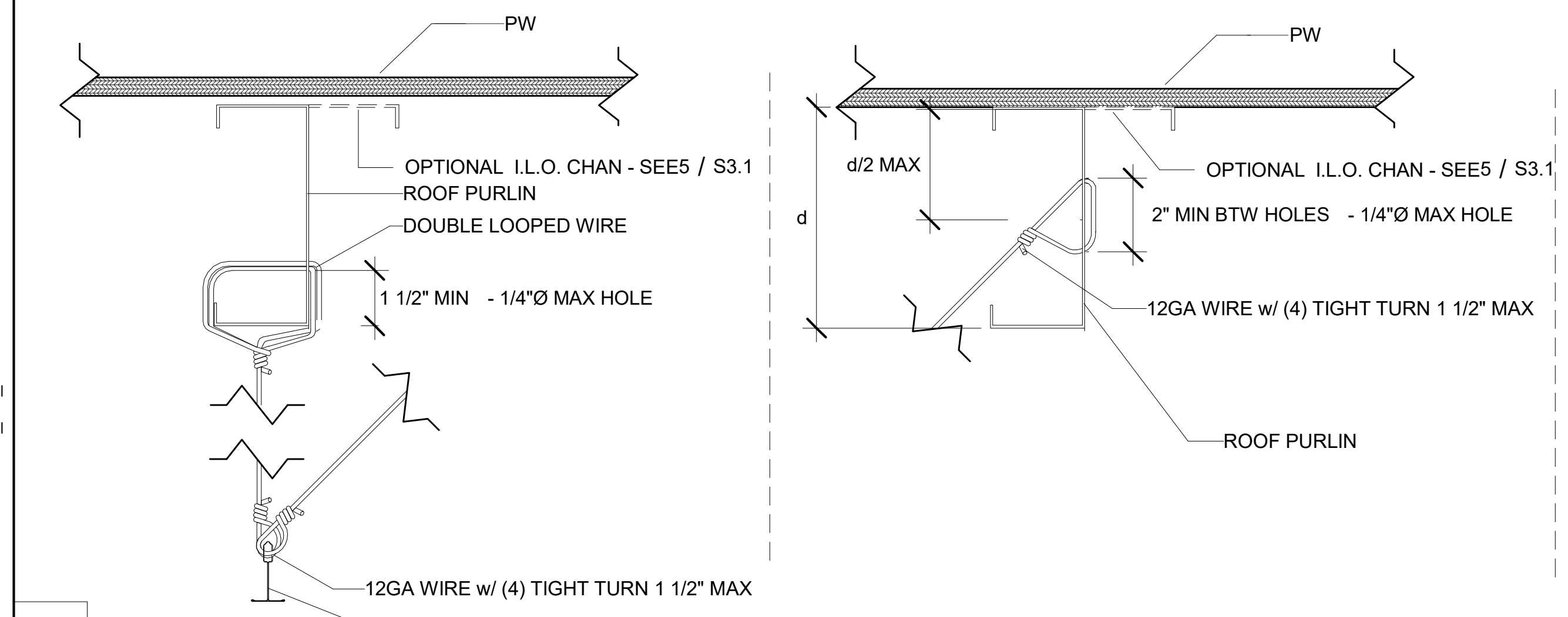
CONDUIT MAY BE CRIMPED AND ATTACHED ON EITHER SIDE OF "T" BAR PER CONDITION AND LOCATION



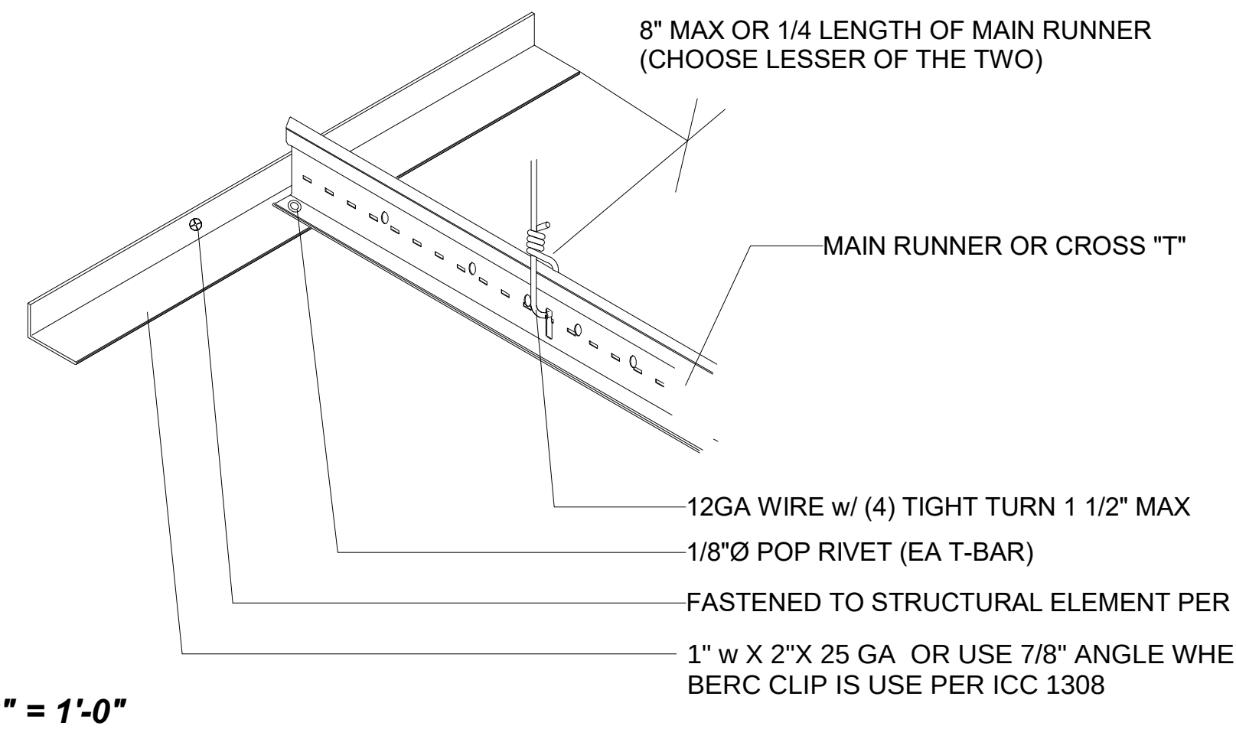
8 3" = 1'-0"
Section - Compression Strut


8" MAX
12GA CEILING CLIP: L1"x1"x"0'-3/4" WIDE MIN. w/ #12x1-1/2" S.M.S.
ICC-ESR-1976
TRUSS
TOP PLT
GYP (TYP)
PER ICC#ESR-1308
BERC2(LOOSE FSTN TO MAIN RUNNER)
w/ MAX SLOPE = 1/6
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX w/ MAX SLOPE = 1/6 MIN.
6
M-A3.3
IF BERC CLIP IS USED STABILIZER BAR NOT BE NEEDDED
1/2" MAX. 3/4" CLR
MAIN RUNNER OR CROSS "T"
☐1"w X 2" X 25 GA ☐ 7/8" ANGLE W/BERC CLIP PER ICC 1308
#10x2.5" MIN. LONG IWHT MIN. 1.5" EMBT. INTO WOOD
WALL FINISH
(4) 8d TOE NAILS PER BLOCKING

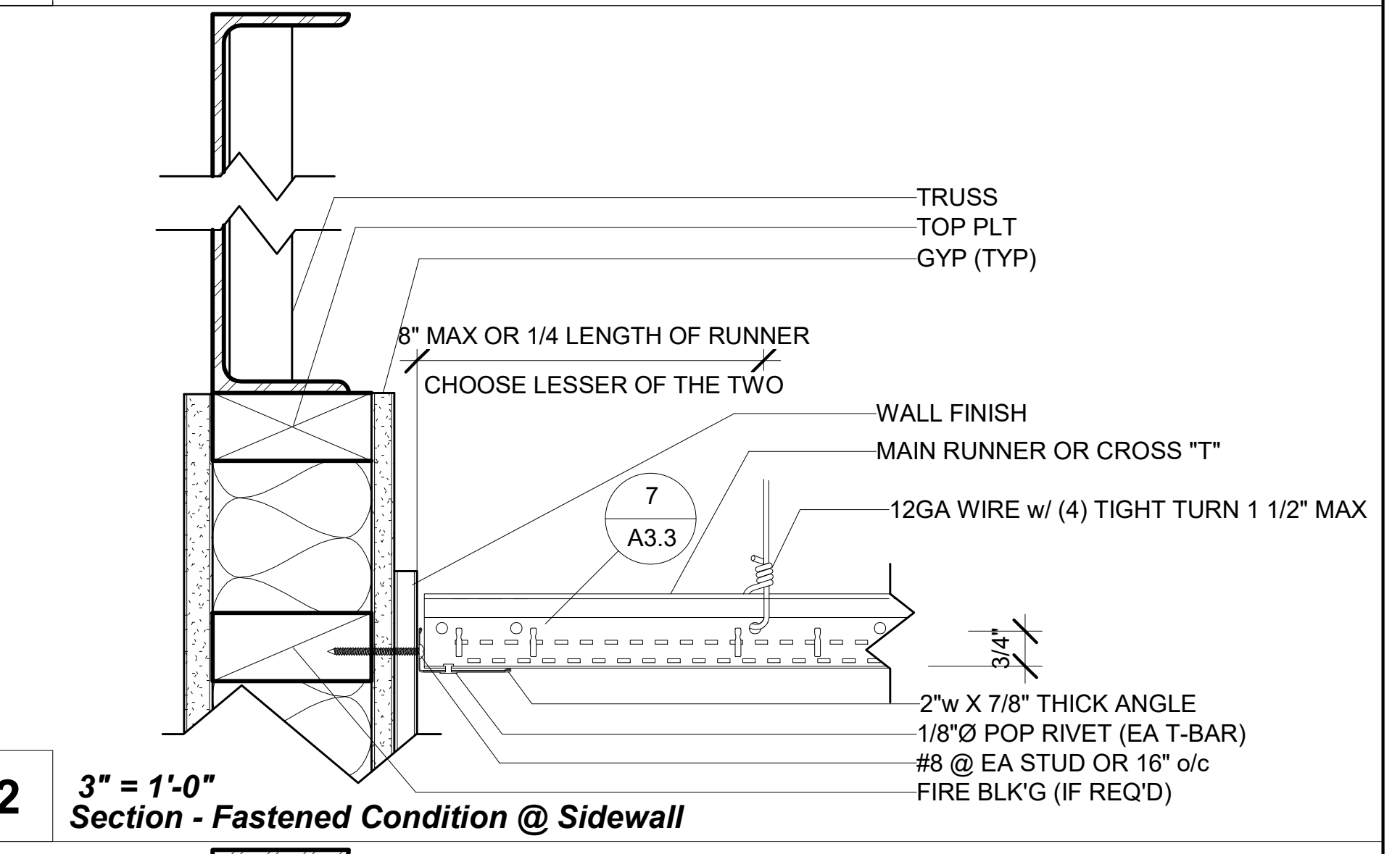
3 3" = 1'-0"
Section - Floating Condition @ Endwall


PW
OPTIONAL I.L.O. CHAN - SEE5 / S3.1
ROOF PURLIN
DOUBLE LOOPED WIRE
1 1/2" MIN - 1/4"Ø MAX HOLE
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
MAIN "T" BEAM
PW
d/2 MAX
d
OPTIONAL I.L.O. CHAN - SEE5 / S3.1
2" MIN BTW HOLES - 1/4"Ø MAX HOLE
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
ROOF PURLIN

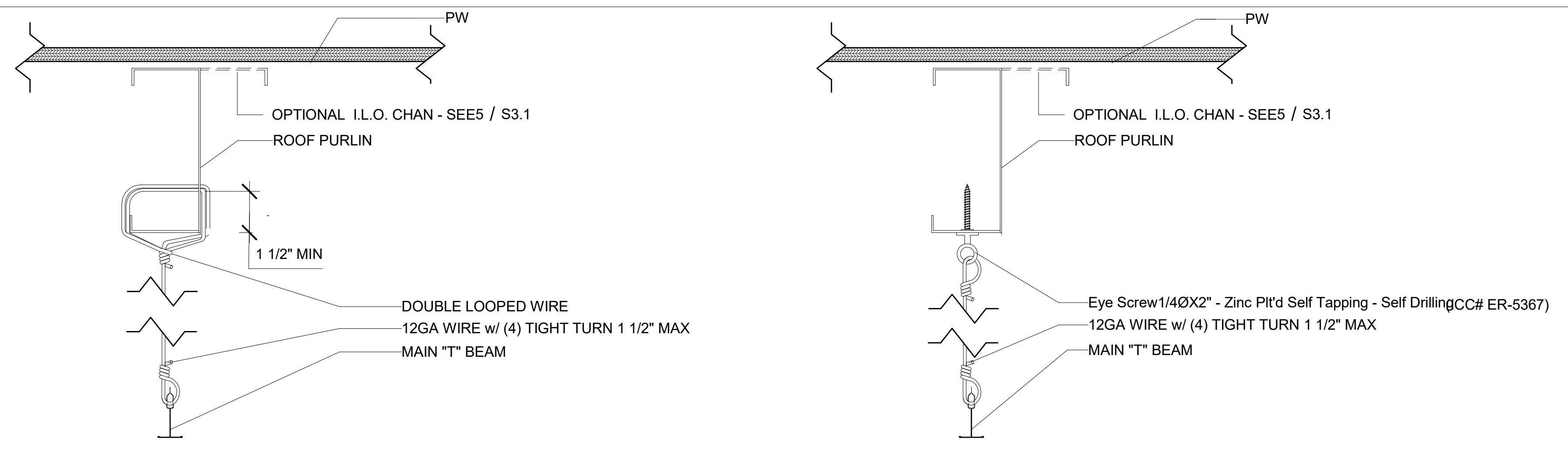
15 3" = 1'-0"
Section - Brace Wire Detail


8" MAX OR 1/4 LENGTH OF MAIN RUNNER (CHOOSE LESSER OF THE TWO)
MAIN RUNNER OR CROSS "T"
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
1/8"Ø POP RIVET (EA T-BAR)
FASTENED TO STRUCTURAL ELEMENT PER 2/A3.3
1" w X 2"X 25 GA OR USE 7/8" ANGLE WHEN BERC CLIP IS USE PER ICC 1308

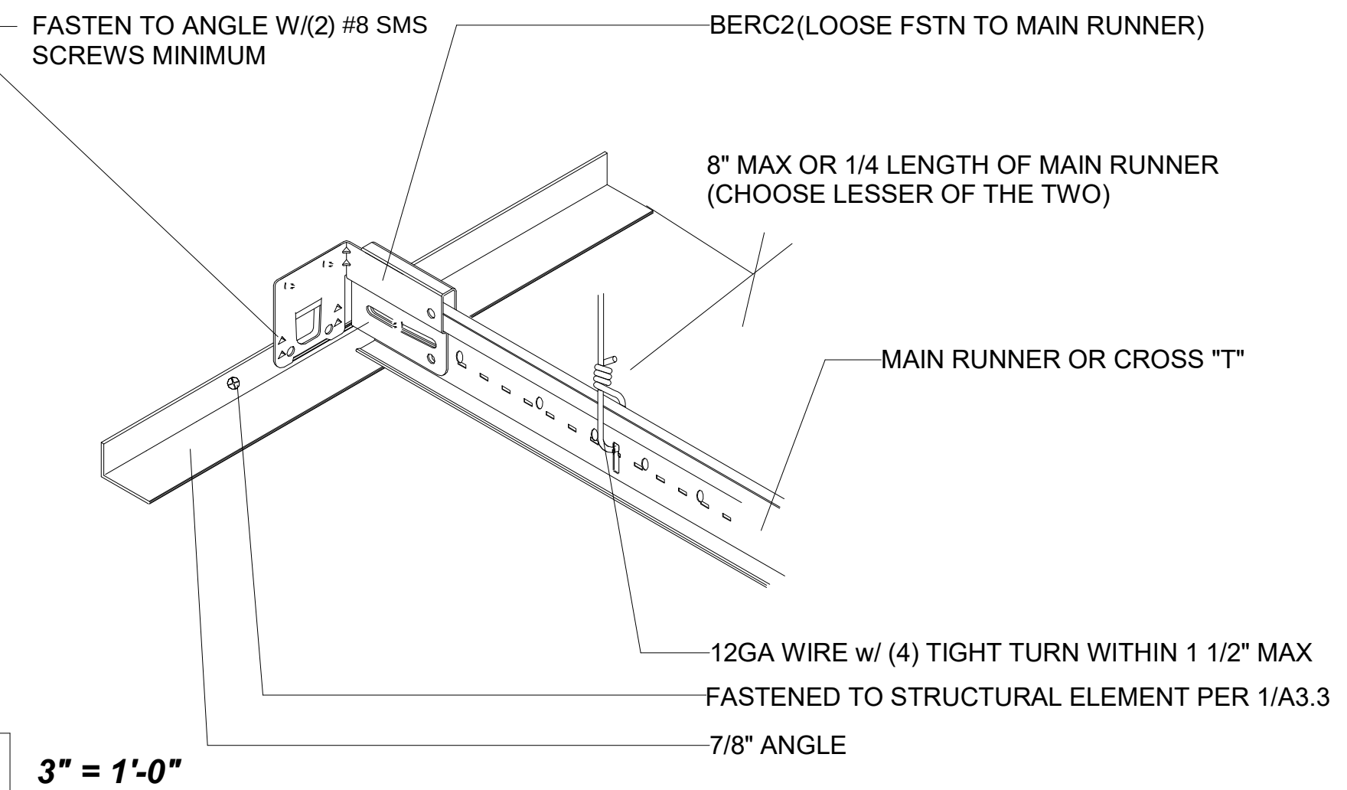
7 3" = 1'-0"
Fixed Condition w/ 7/8" Angle



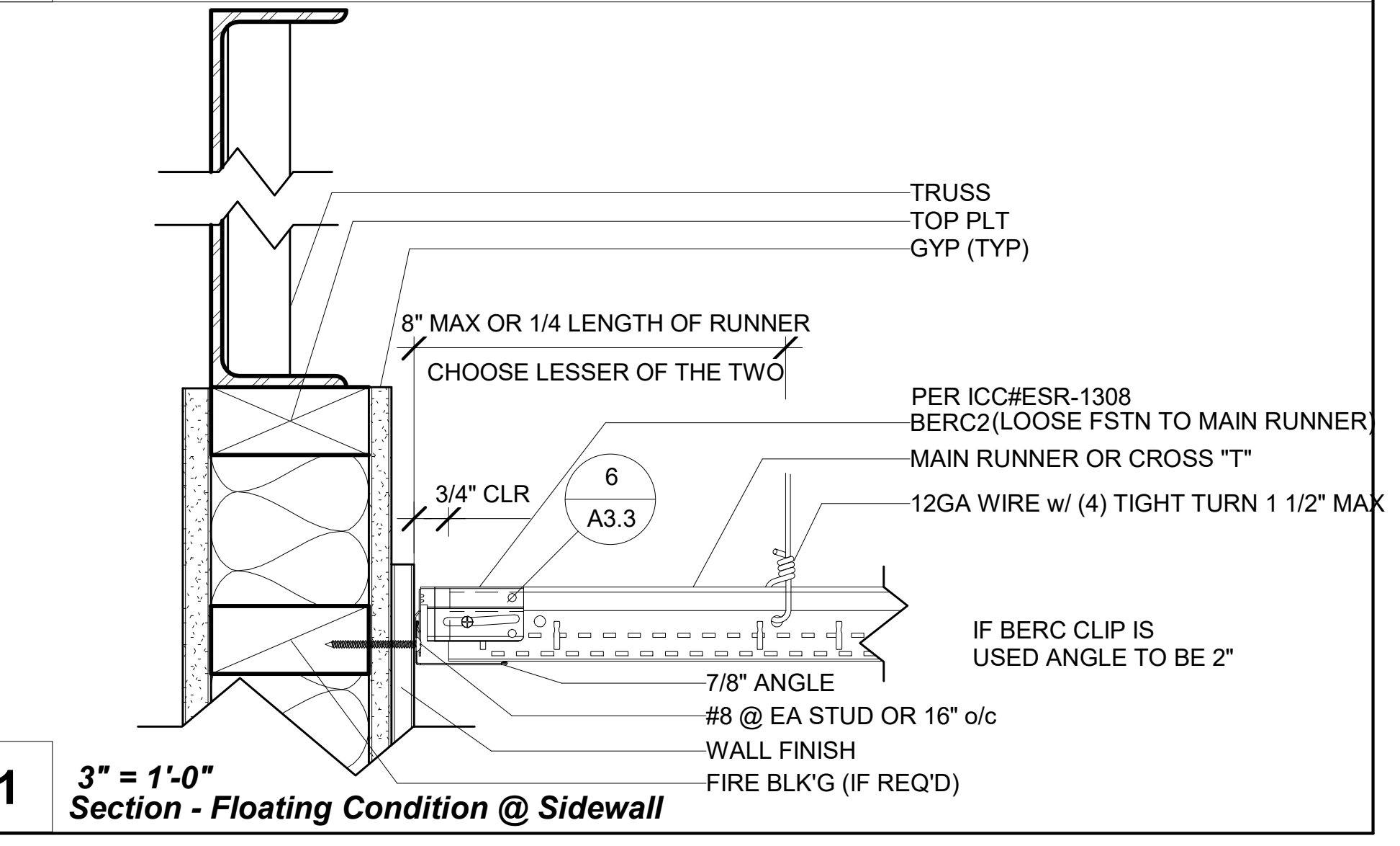
2 3" = 1'-0"
Section - Fastened Condition @ Sidewall


PW
OPTIONAL I.L.O. CHAN - SEE5 / S3.1
ROOF PURLIN
1 1/2" MIN
DOUBLE LOOPED WIRE
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
MAIN "T" BEAM
PW
OPTIONAL I.L.O. CHAN - SEE5 / S3.1
ROOF PURLIN
Eye Screw1/4ØX2" - Zinc Plt'd Self Tapping - Self Drilling(ICC# ER-5367)
12GA WIRE w/ (4) TIGHT TURN 1 1/2" MAX
MAIN "T" BEAM

14 3" = 1'-0"
Section - Hanger Wire Detail


FASTEN TO ANGLE W/(2) #8 SMS SCREWS MINIMUM
BERC2(LOOSE FSTN TO MAIN RUNNER)
8" MAX OR 1/4 LENGTH OF MAIN RUNNER (CHOOSE LESSER OF THE TWO)
MAIN RUNNER OR CROSS "T"
12GA WIRE w/ (4) TIGHT TURN WITHIN 1 1/2" MAX
FASTENED TO STRUCTURAL ELEMENT PER 1/A3.3
7/8" ANGLE

6 3" = 1'-0"
Floating Condition w/ 7/8" Angle



1 3" = 1'-0"
Section - Floating Condition @ Sidewall

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PROJECT SPECIFIC STATE AGENCY APPROVAL

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ORIGINAL PC STATE AGENCY APPROVAL

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Revision Schedule

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PRE-CHECK (PC) DOCUMENT

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PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
CEILING DETAILS
(T-GRID)

PROJECT NUMBER
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DRAWN BY
rMc/SC

CHECKED BY
RH/RT

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SHEET NO.
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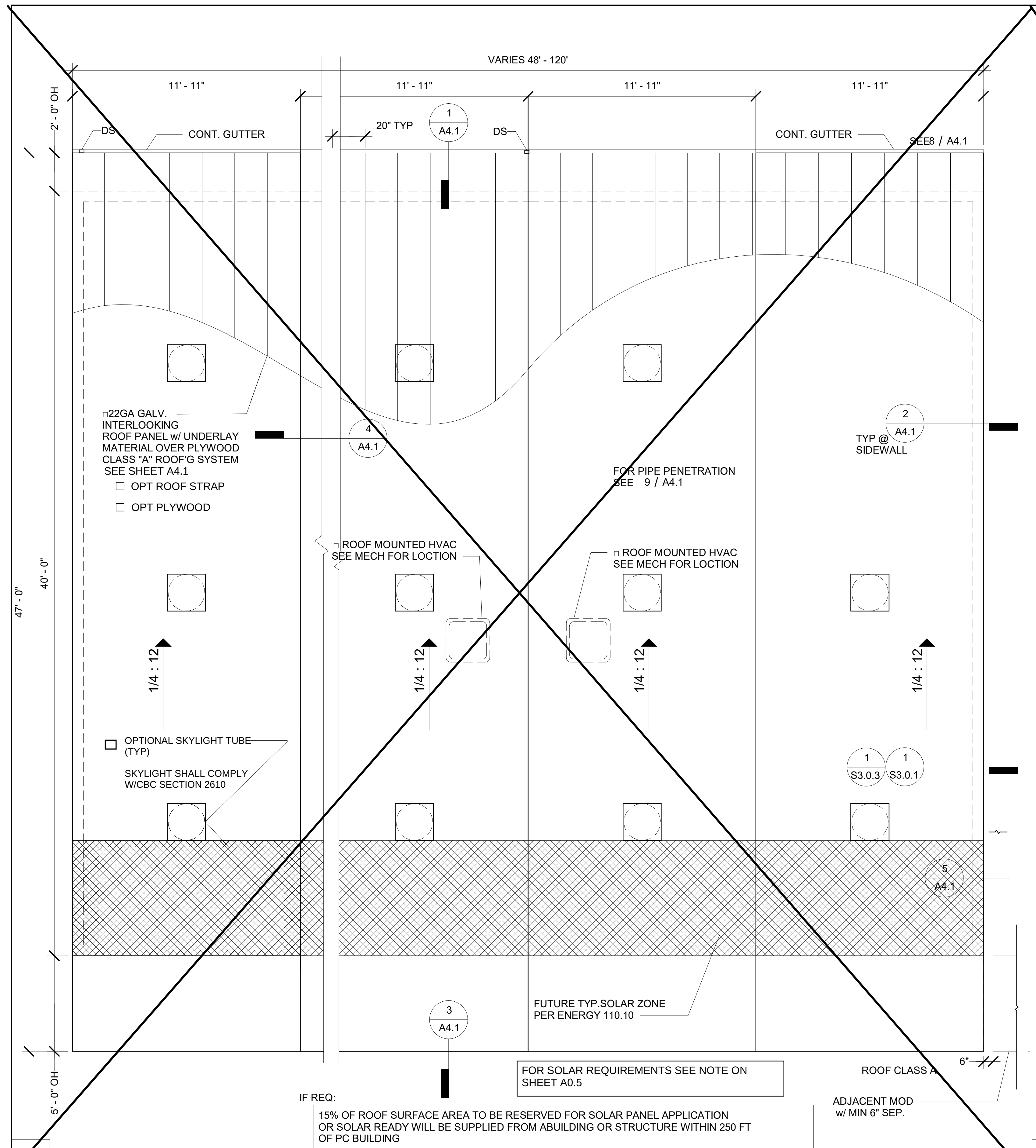
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

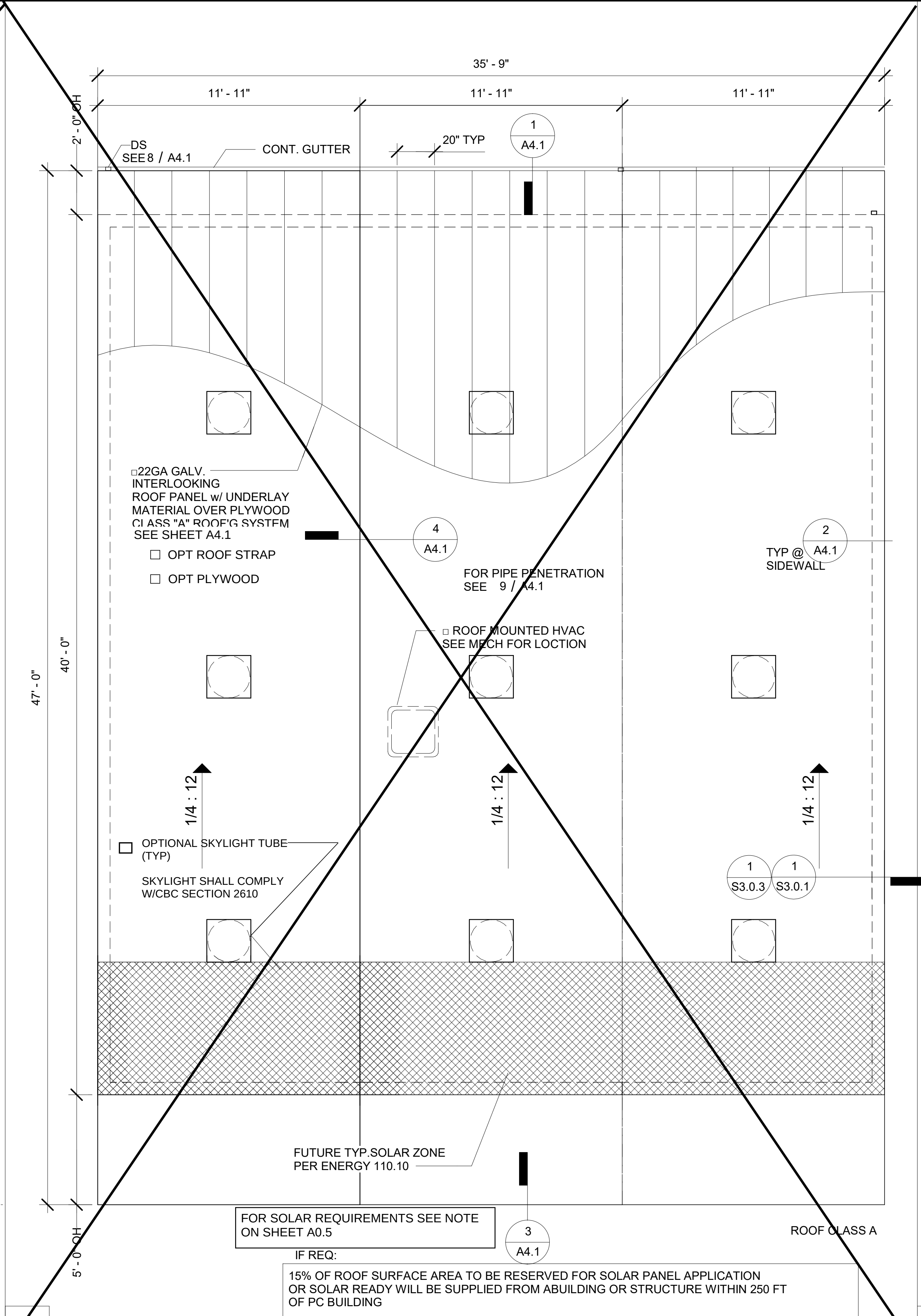

VARIES 48' - 120'
11' - 11"
11' - 11"
11' - 11"
11' - 11"
2' - 0" OH
40' - 0"
47' - 0"
5' - 0" OH
DS
CONT. GUTTER
20" TYP
1 / A4.1
DS
CONT. GUTTER
SEE 8 / A4.1
☐22GA GALV. INTERLOOKING ROOF PANEL w/ UNDERLAY MATERIAL OVER PLYWOOD CLASS "A" ROOF'G SYSTEM SEE SHEET A4.1
☐ OPT ROOF STRAP
☐ OPT PLYWOOD
4 / A4.1
FOR PIPE PENETRATION SEE 9 / A4.1
2 / A4.1
TYP @ SIDEWALL
☐ ROOF MOUNTED HVAC SEE MECH FOR LOCTION
☐ ROOF MOUNTED HVAC SEE MECH FOR LOCTION
1/4 : 12
1/4 : 12
1/4 : 12
1/4 : 12
☐ OPTIONAL SKYLIGHT TUBE (TYP)
SKYLIGHT SHALL COMPLY W/CBC SECTION 2610
1 / S3.0.3
1 / S3.0.1
5 / A4.1
FUTURE TYP.SOLAR ZONE PER ENERGY 110.10
3 / A4.1
ROOF CLASS A
6"
ADJACENT MOD w/ MIN 6" SEP.
IF REQ:

FOR SOLAR REQUIREMENTS SEE NOTE ON SHEET A0.5

15% OF ROOF SURFACE AREA TO BE RESERVED FOR SOLAR PANEL APPLICATION OR SOLAR READY WILL BE SUPPLIED FROM ABUILDING OR STRUCTURE WITHIN 250 FT OF PC BUILDING

ENTIRE ROOF SURFACE IS DESIGNED STRUCTURALLY TO ACCOMMODATE SOLAR PANELS = 3PSF

3 *1/4" = 1'-0"*
48x40 thru 120x40 Roof Plan (Mt Mono)

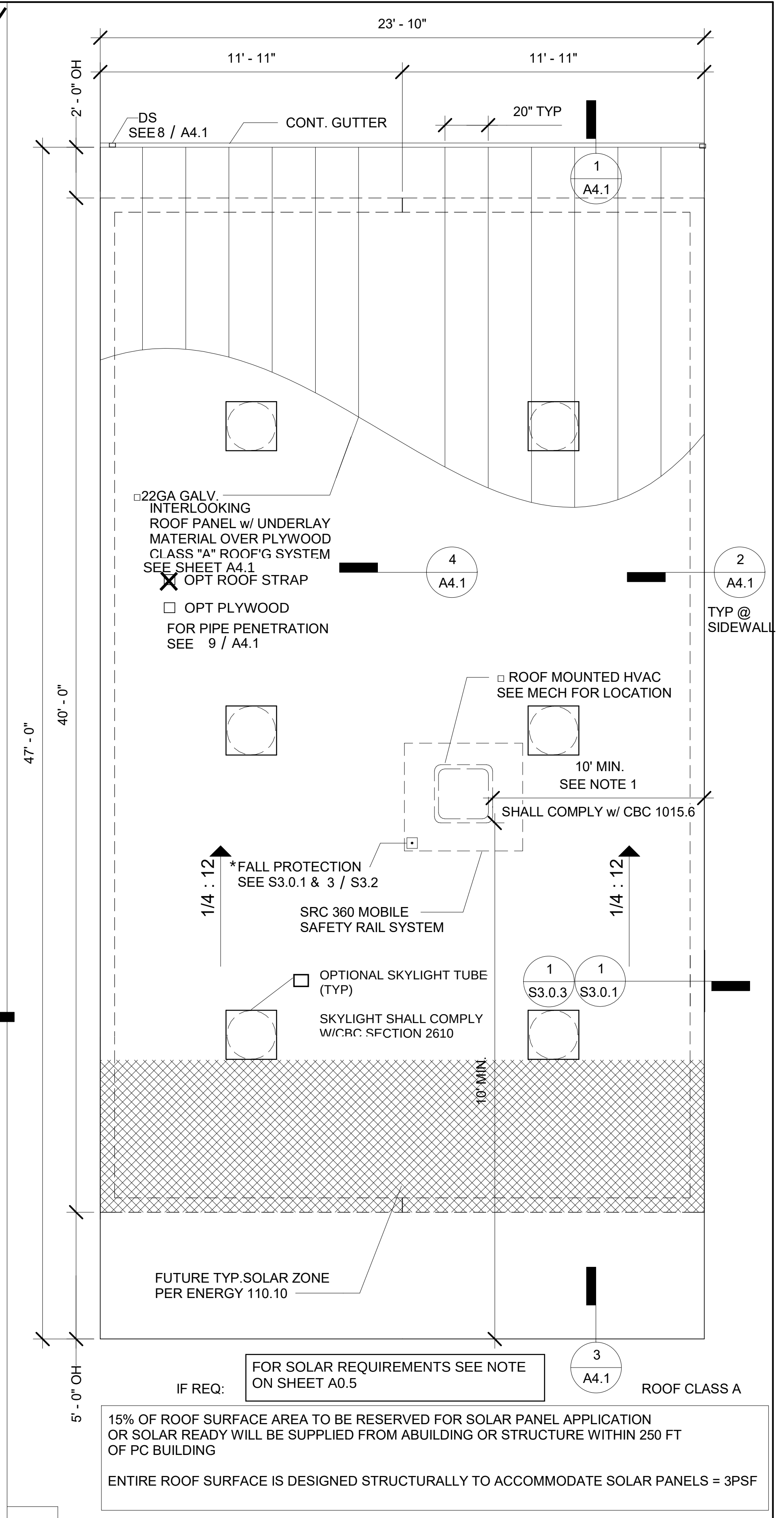

35' - 9"
11' - 11"
11' - 11"
11' - 11"
2' - 0" OH
40' - 0"
47' - 0"
5' - 0" OH
DS
SEE 8 / A4.1
CONT. GUTTER
20" TYP
1 / A4.1
☐22GA GALV. INTERLOOKING ROOF PANEL w/ UNDERLAY MATERIAL OVER PLYWOOD CLASS "A" ROOF'G SYSTEM SEE SHEET A4.1
☐ OPT ROOF STRAP
☐ OPT PLYWOOD
4 / A4.1
FOR PIPE PENETRATION SEE 9 / A4.1
2 / A4.1
TYP @ SIDEWALL
☐ ROOF MOUNTED HVAC SEE MECH FOR LOCTION
1/4 : 12
1/4 : 12
1/4 : 12
☐ OPTIONAL SKYLIGHT TUBE (TYP)
SKYLIGHT SHALL COMPLY W/CBC SECTION 2610
1 / S3.0.3
1 / S3.0.1
FUTURE TYP.SOLAR ZONE PER ENERGY 110.10
3 / A4.1
ROOF CLASS A
IF REQ:

FOR SOLAR REQUIREMENTS SEE NOTE ON SHEET A0.5

15% OF ROOF SURFACE AREA TO BE RESERVED FOR SOLAR PANEL APPLICATION OR SOLAR READY WILL BE SUPPLIED FROM ABUILDING OR STRUCTURE WITHIN 250 FT OF PC BUILDING

ENTIRE ROOF SURFACE IS DESIGNED STRUCTURALLY TO ACCOMMODATE SOLAR PANELS = 3PSF

2 *1/4" = 1'-0"*
36x40 Roof Plan (Mlt Mono)


23' - 10"
11' - 11"
11' - 11"
2' - 0" OH
40' - 0"
47' - 0"
5' - 0" OH
DS
SEE 8 / A4.1
CONT. GUTTER
20" TYP
1 / A4.1
☐22GA GALV. INTERLOOKING ROOF PANEL w/ UNDERLAY MATERIAL OVER PLYWOOD CLASS "A" ROOF'G SYSTEM SEE SHEET A4.1
☒ OPT ROOF STRAP
☐ OPT PLYWOOD
FOR PIPE PENETRATION SEE 9 / A4.1
4 / A4.1
2 / A4.1
TYP @ SIDEWALL
☐ ROOF MOUNTED HVAC SEE MECH FOR LOCATION
10' MIN. SEE NOTE 1
SHALL COMPLY w/ CBC 1015.6
*FALL PROTECTION SEE S3.0.1 & 3 / S3.2
SRC 360 MOBILE SAFETY RAIL SYSTEM
1/4 : 12
1/4 : 12
☐ OPTIONAL SKYLIGHT TUBE (TYP)
SKYLIGHT SHALL COMPLY W/CBC SECTION 2610
1 / S3.0.3
1 / S3.0.1
10' MIN.
FUTURE TYP.SOLAR ZONE PER ENERGY 110.10
3 / A4.1
IF REQ:
ROOF CLASS A

FOR SOLAR REQUIREMENTS SEE NOTE ON SHEET A0.5

15% OF ROOF SURFACE AREA TO BE RESERVED FOR SOLAR PANEL APPLICATION OR SOLAR READY WILL BE SUPPLIED FROM ABUILDING OR STRUCTURE WITHIN 250 FT OF PC BUILDING

ENTIRE ROOF SURFACE IS DESIGNED STRUCTURALLY TO ACCOMMODATE SOLAR PANELS = 3PSF

1 *1/4" = 1'-0"*
24x40 Roof Plan (Mtl Mono)

Note: For conditioned structures, roofing must be installed IAW 2019 CBC SECTION 1202.3

1202.3 Unvented Attic and Unvented Enclosed Rafter Assemblies

Unvented attics and unvented enclosed roof framing assemblies created by ceilings applied directly to the underside of the roof framing members/rafters and the structural roof sheathing at the top of the roof framing members shall be permitted where all of the following conditions are met:

1. The unvented attic space is completely within the building thermal envelope.
2. No interior Class I vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly or on the ceiling side of the unvented enclosed roof framing assembly.
3. Where wood shingles or shakes are used, not less than a 1/4-inch (6.4 mm) vented airspace separates the shingles or shakes and the roofing underlayment above the structural sheathing.
4. In Climate Zones 14 and 16, any air-impermeable insulation shall be a Class II vapor retarder or shall have a Class II vapor retarder coating or covering in direct contact with the underside of the insulation.

   See the California Energy Code, Figure 100.1-A — California Climate Zones.

   4.1. **[HCD 1 & HCD 2]** In Climate Zones 14 and 16, a Class I or Class II vapor retarder shall be installed on the indirectly conditioned space side of all insulation in an unvented attic with air-permeable insulation, for condensation control.

5. Insulation shall be located in accordance with the following:

   5.1. Item 5.1.1, 5.1.2, 5.1.3 or 5.1.4 shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing. No insulation shall be required when roof tiles, wood shingles or wood shakes, or any other roofing system using battens and no continuous underlayment is installed. A continuous underlayment shall be considered to exist if sheathing, roofing paper or any continuous layer having a perm rate of no more than one perm under the dry cup method is present.

   5.1.1. Where only air-impermeable insulation is provided, it shall be applied in direct contact with the underside of the structural roof sheathing.

   5.1.2. Where air-permeable insulation is provided inside the building thermal envelope, it shall be installed in accordance with

   Item 5.1.1. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing in accordance with the R-values in Table 1202.3 for condensation control.

   5.1.3. Where both air-impermeable and air-permeable insulation are provided, the air-impermeable insulation shall be applied in direct contact with the underside of the structural roof sheathing and shall be in accordance with the R-values in Table 1202.3 for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation.

   5.1.4. Alternatively, sufficient rigid board or sheet insulation shall be installed directly above the structural roof sheathing to maintain the monthly average temperature of the underside of the structural roof sheathing above 45°F (7°C). For calculation purposes, an interior air temperature of 68°F (20°C) is assumed and the exterior air temperature is assumed to be the monthly average outside air temperature of the three coldest months.

   5.2. Where preformed insulation board is used as the air-impermeable insulation layer, it shall be sealed at the perimeter of each individual sheet interior surface to form a continuous layer.

Exceptions:

1. Section 1202.3 does not apply to special use structures or enclosures such as swimming pool enclosures, data processing centers, hospitals or art galleries.
2. Section 1202.3 does not apply to enclosures in Climate Zones 14 and 16 that are humidified beyond 35 percent during the three coldest months.

TABLE 1202.3
INSULATION FOR CONDENSATION CONTROL

CLIMATE ZONE	MINIMUM *R*-VALUE OF AIR-IMPERMEABLE INSULATION[a]
2B and 3B tile roof only	0 (none required)
1, 2A, 2B, 3A, 3B, 3C	R-5
4C	R-10
4A, 4B	R-15
5	R-20
6	R-25
7	R-30
8	R-35

a. Contributes to, but does not supersede, thermal resistance requirements for attic and roof assemblies in the *California Energy Code*.

NOTE: PER CBC 1015.6, - EXCEPTION, GUARDRAILS ARE NOT REQUIRED WHERE PERMANENT FALL RESTRAINT ANCHORAGE DEVICES ARE AFFIXED & SHALL BE PLACED NOT MORE THAN 10FT FROM THE ROOF EDGE.

ROOFS SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 7A AND CHAPTER 15. ROOFS SHALL HAVE A ROOFING ASSEMBLY INSTALLED IN ACCORDANCE WITH ITS LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

* IF ROOF MOUNTED UNIT IS APPLIED

PV AREA FOR FIRE ACCESS REQ'T (PER IR 16-8)

3.2.1 General Requirements: A PV System shall be typically considered equipment. There is typically not an occupancy group classification, building area limitation, or type of construction assignment to a PV system.
a) PV equipment supported by non-combustible framing installed in locations dedicated for building frontage used for area increases per California Building Code (CBC), Chapter 5, Section 506, shall be limited in size and may be allowed on a case by case basis. Maximum area that may be allowed for such systems shall not exceed 1/3 of the horizontal projected area of each frontage.
b) Open sided PV systems and framing that are non-combustible and without use underneath may be considered equipment and may be placed next to
DSA IR 16-8 Solar Photovoltaic and Thermal
(updated 01-25-17) Systems Review and Approval Requirements Page 11 of 19
property lines. Signs may be required on or near the system prohibiting any use or storage underneath the equipment.
c) Combustible PV systems and framing and those with use underneath such as for assembly or parking, may need to comply with 2022 CBC, Table 602. These structures may include those that do and that do not have a roof underneath the PV system.
d) PV systems (both the frame and the array) shall not be placed in fire department access roads. (Per Title 24 CCR, Division 1, Chapter 1, Section 3.05 and 2022 CFC Chapter 5, Section 503.)
e) Access to a public way or safe dispersal area shall not be obstructed by the system or system framing. (CBC 1027.6 and 442.3)
f) PV systems that cover a lunch area or similar (occupant load less than 50), that are not used for assembly purposes shall be considered equipment. Playgrounds would also fall into this category regardless of total occupant load.
g) Any PV system that is installed above an assembly use (i.e. Group A-3 or A-5 occupancy classification) shall be considered an open sided building structure and all or portions of CBC provisions apply on a case by case basis. Such areas might include an outdoor amphitheater, bleacher or grandstand seating with concentrated occupant loads and heavy use.
h) Fire Department concern for the installation of roof mounted PV systems will be addressed by DSA review to the State Fire Marshal Solar Photovoltaic Installation Guideline available at:
http://osfm.fire.ca.gov/pdf/reports/solarphotovoltaicguideline.pdf
i) When a PV system, without riser framework, is installed directly on a rated roof assembly with a required classification greater than "Class C" found in CBC, Chapter 15, and f

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
ROOF PLAN MONO SLOPE (STANDING SEAM)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

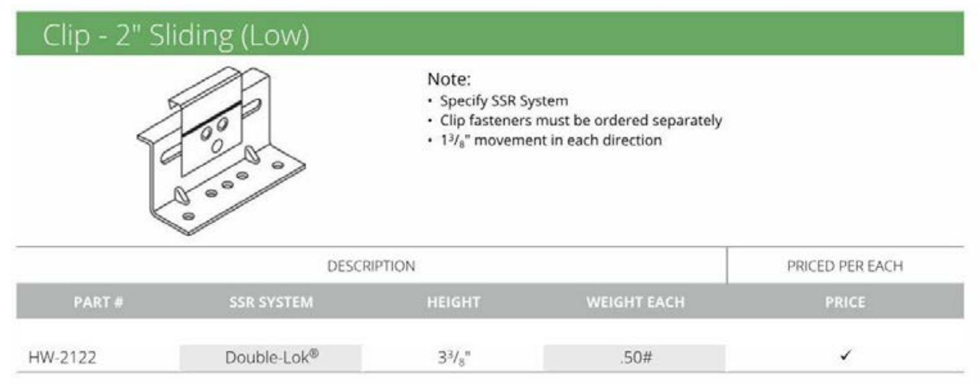
CHECKED BY
RH/RT

DATE

SHEET NO.
A4.0.1

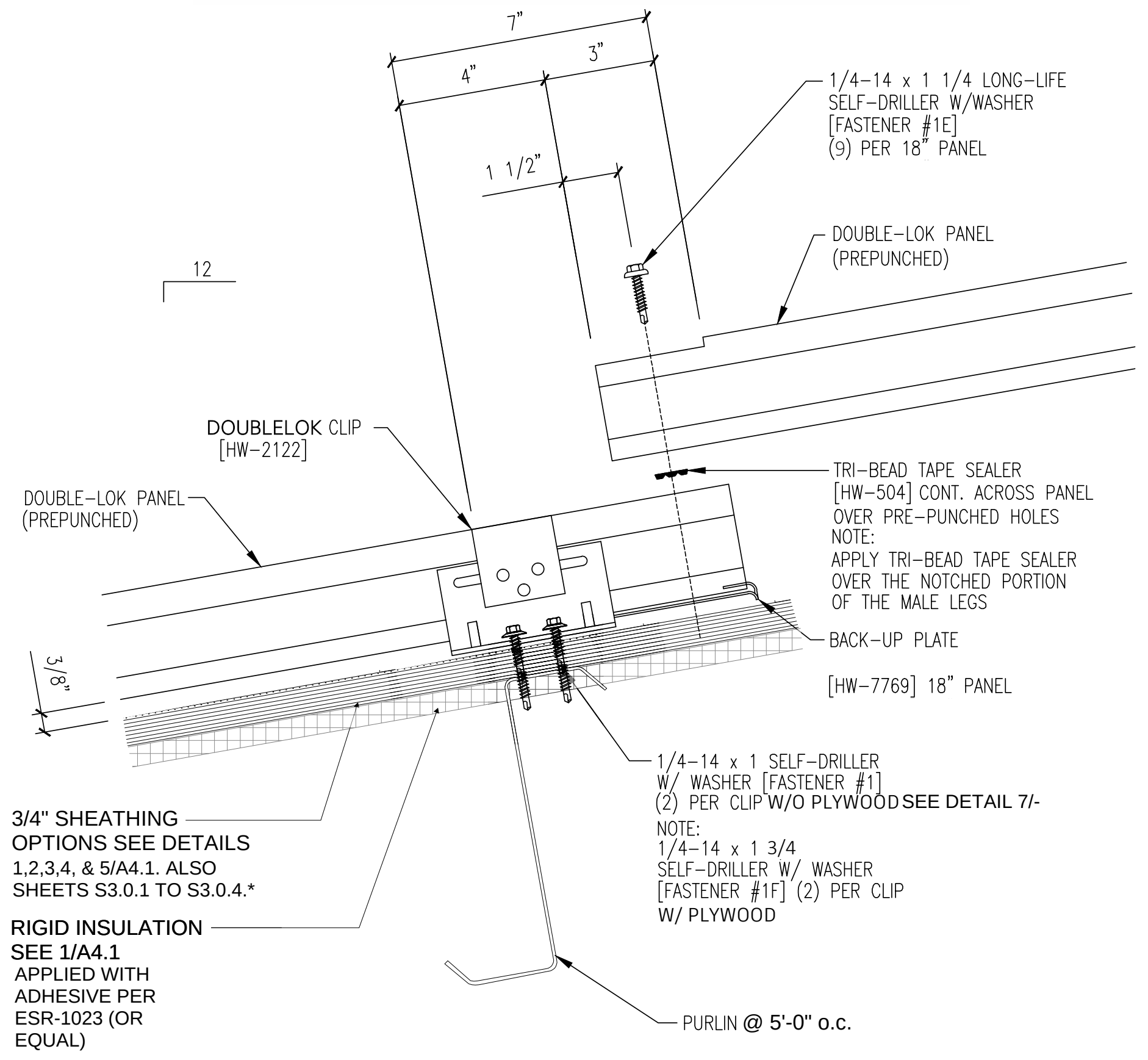
SHEET OF

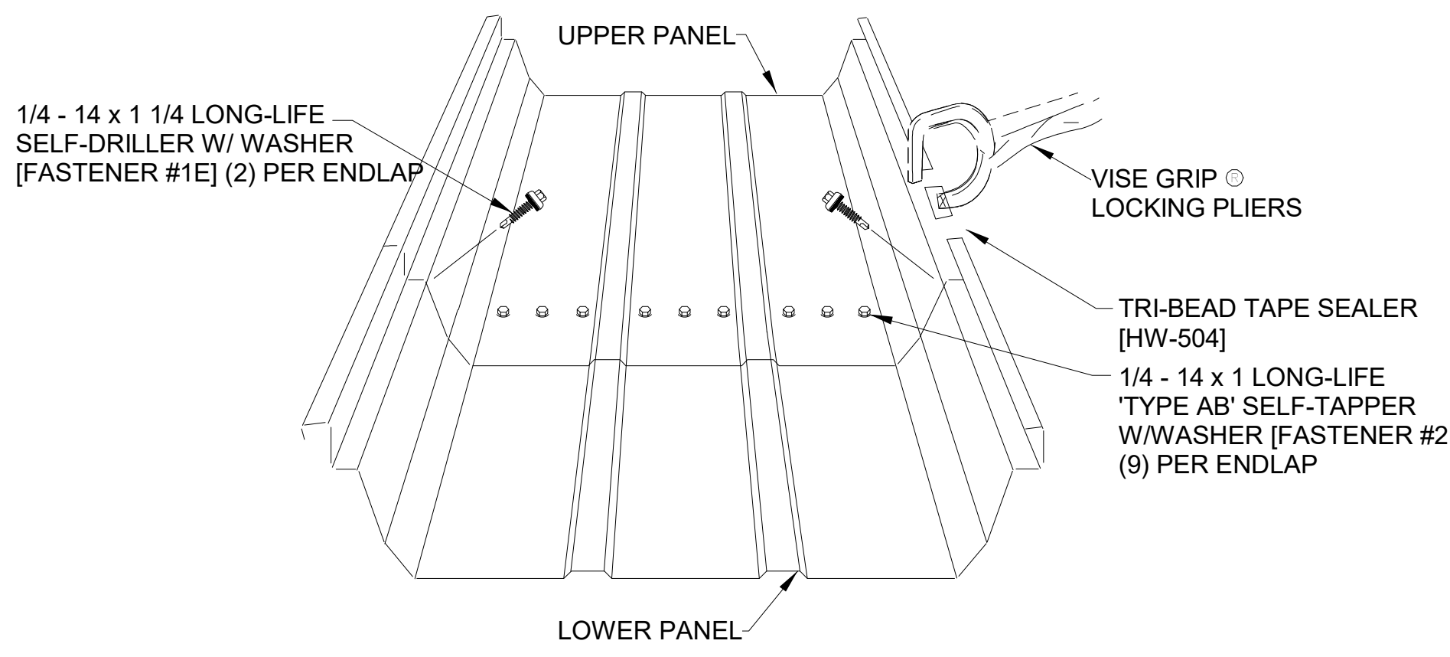
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


Clip - 2" Sliding (Low)

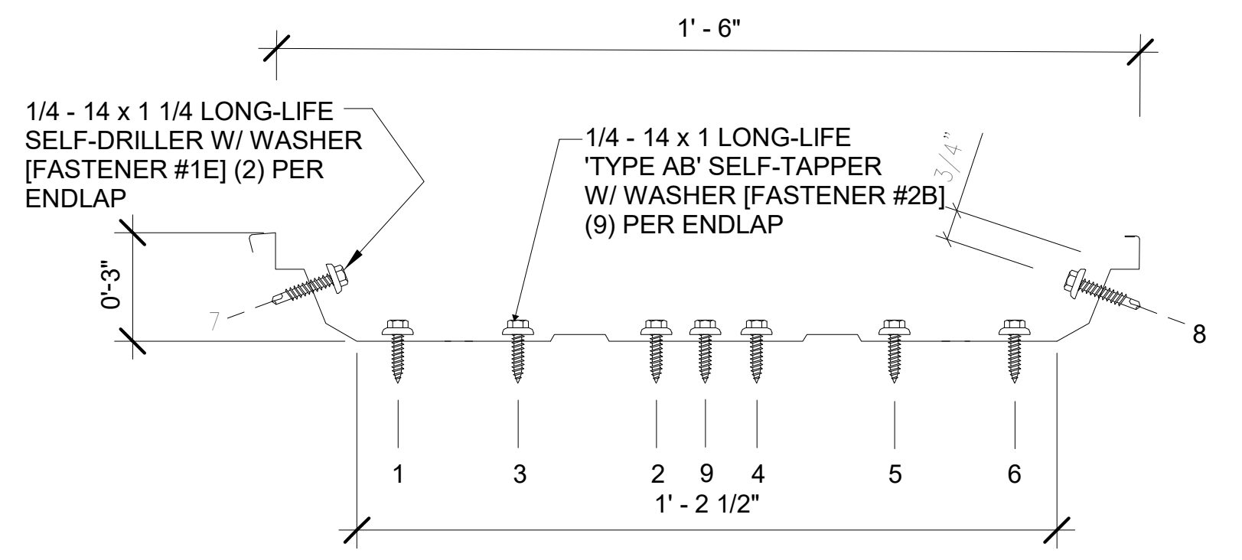
Note:
- Specify SSR System
- Clip fasteners must be ordered separately
- 1 3/8" movement in each direction

DESCRIPTION				PRICED PER EACH
PART #	SSR SYSTEM	HEIGHT	WEIGHT EACH	PRICE
HW-2122	Double-Lok®	3 3/8"	.50#	✓


7"
4"
3"
1 1/2"
12
1/4-14 x 1 1/4 LONG-LIFE SELF-DRILLER W/WASHER [FASTENER #1E] (9) PER 18" PANEL
DOUBLE-LOK PANEL (PREPUNCHED)
DOUBLELOK CLIP [HW-2122]
DOUBLE-LOK PANEL (PREPUNCHED)
TRI-BEAD TAPE SEALER [HW-504] CONT. ACROSS PANEL OVER PRE-PUNCHED HOLES NOTE: APPLY TRI-BEAD TAPE SEALER OVER THE NOTCHED PORTION OF THE MALE LEGS
BACK-UP PLATE
[HW-7769] 18" PANEL
3/8"
3/4" SHEATHING OPTIONS SEE DETAILS 1,2,3,4, & 5/A4.1. ALSO SHEETS S3.0.1 TO S3.0.4.*
RIGID INSULATION SEE 1/A4.1 APPLIED WITH ADHESIVE PER ESR-1023 (OR EQUAL)
1/4-14 x 1 SELF-DRILLER W/ WASHER [FASTENER #1] (2) PER CLIP W/O PLYWOOD SEE DETAIL 7/-
NOTE: 1/4-14 x 1 3/4 SELF-DRILLER W/ WASHER [FASTENER #1F] (2) PER CLIP W/ PLYWOOD
PURLIN @ 5'-0" o.c.


UPPER PANEL
1/4 - 14 x 1 1/4 LONG-LIFE SELF-DRILLER W/ WASHER [FASTENER #1E] (2) PER ENDLAP
VISE GRIP ® LOCKING PLIERS
TRI-BEAD TAPE SEALER [HW-504]
1/4 - 14 x 1 LONG-LIFE 'TYPE AB' SELF-TAPPER W/WASHER [FASTENER #2B] (9) PER ENDLAP
LOWER PANEL

PANEL INSTALLATION SEQUENCE


1' - 6"
1/4 - 14 x 1 1/4 LONG-LIFE SELF-DRILLER W/ WASHER [FASTENER #1E] (2) PER ENDLAP
1/4 - 14 x 1 LONG-LIFE 'TYPE AB' SELF-TAPPER W/ WASHER [FASTENER #2B] (9) PER ENDLAP
3/4"
0'-3"
7
8
1
3
2
9
4
5
6
1' - 2 1/2"

FASTENER SEQUENCE @ ENDLAP

18" DOUBLE-LOK 22GA STANDING SEAM PANEL BY MBCI

NEG		POS	
t	= 0.0299"	t	= 0.0299"
S_x	= 0.1846 IN^3	S_x	= 0.2154 IN^3
I_x	= 0.2718 IN^4	I_x	= 0.4968 IN^4
F_Y	= 50 KSI	F_Y	= 50 KSI

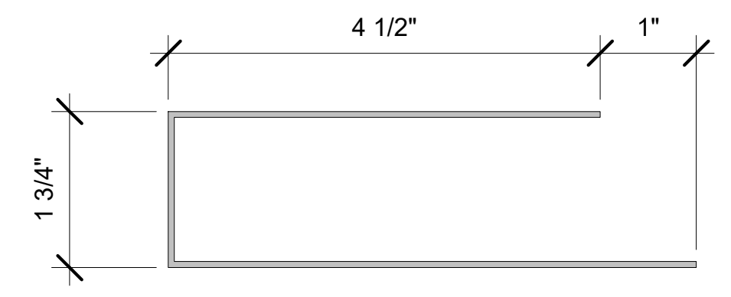
FOR ALL METAL ROOFING SYSTEMS USE OR EQUAL

* PLYWOOD UNDERLAY IS USED PER S3.0.1 & S3.0.2 CONDITIONS AND IS OPTIONAL AT THE METAL DECK CONDITIONS PER S3.0.3 & S3.0.4

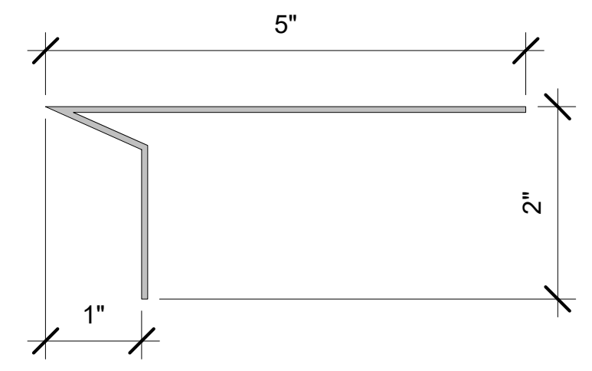
MIAMI-DADE COUNTY
NOA NO. 21-0615.07

15

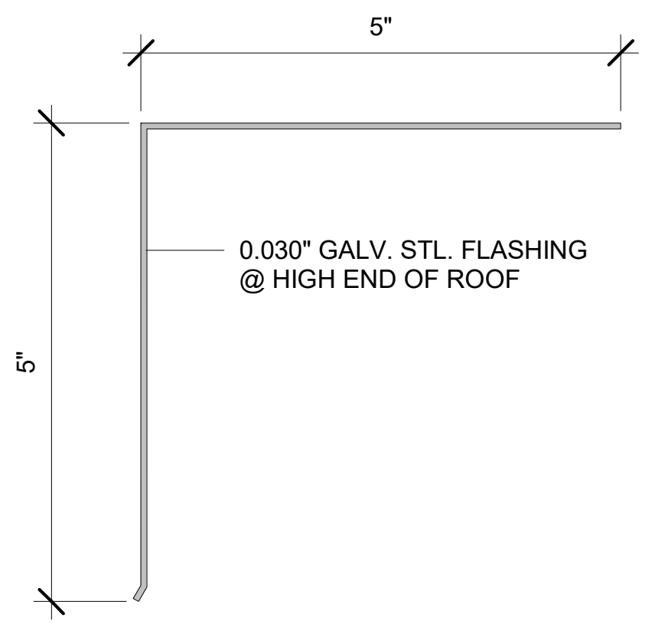
6/15/2021 11:51:15 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt



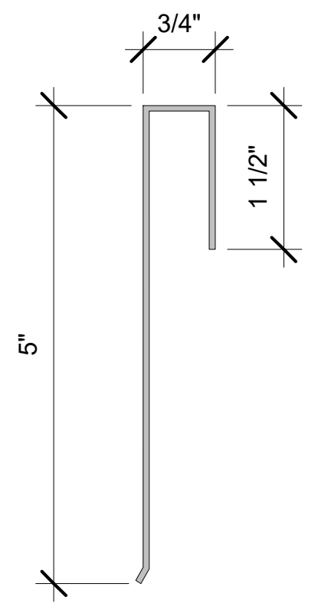
14 **6" = 1'-0"**
FLASHING @ ROOF HIGH SIDE



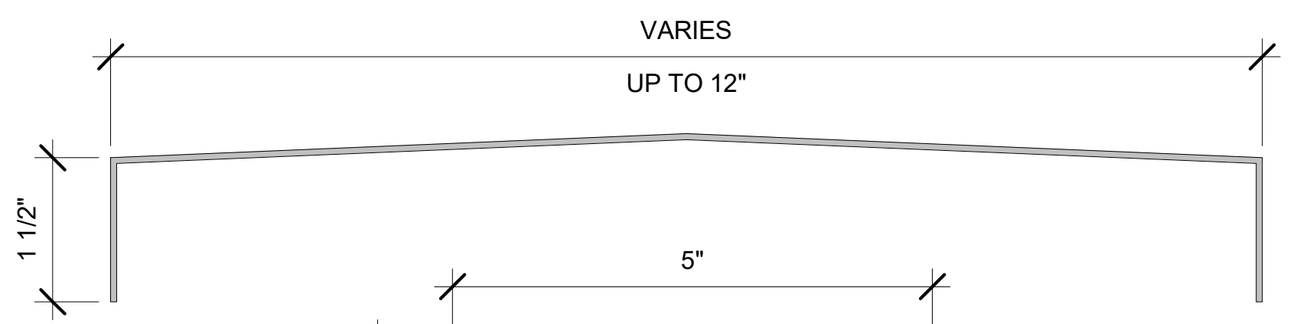
13 **6" = 1'-0"**
FLASHING @ ROOF LOW SIDE

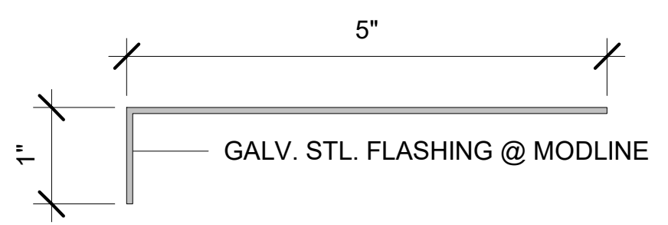


12 **6" = 1'-0"**
ROOF FLASHING



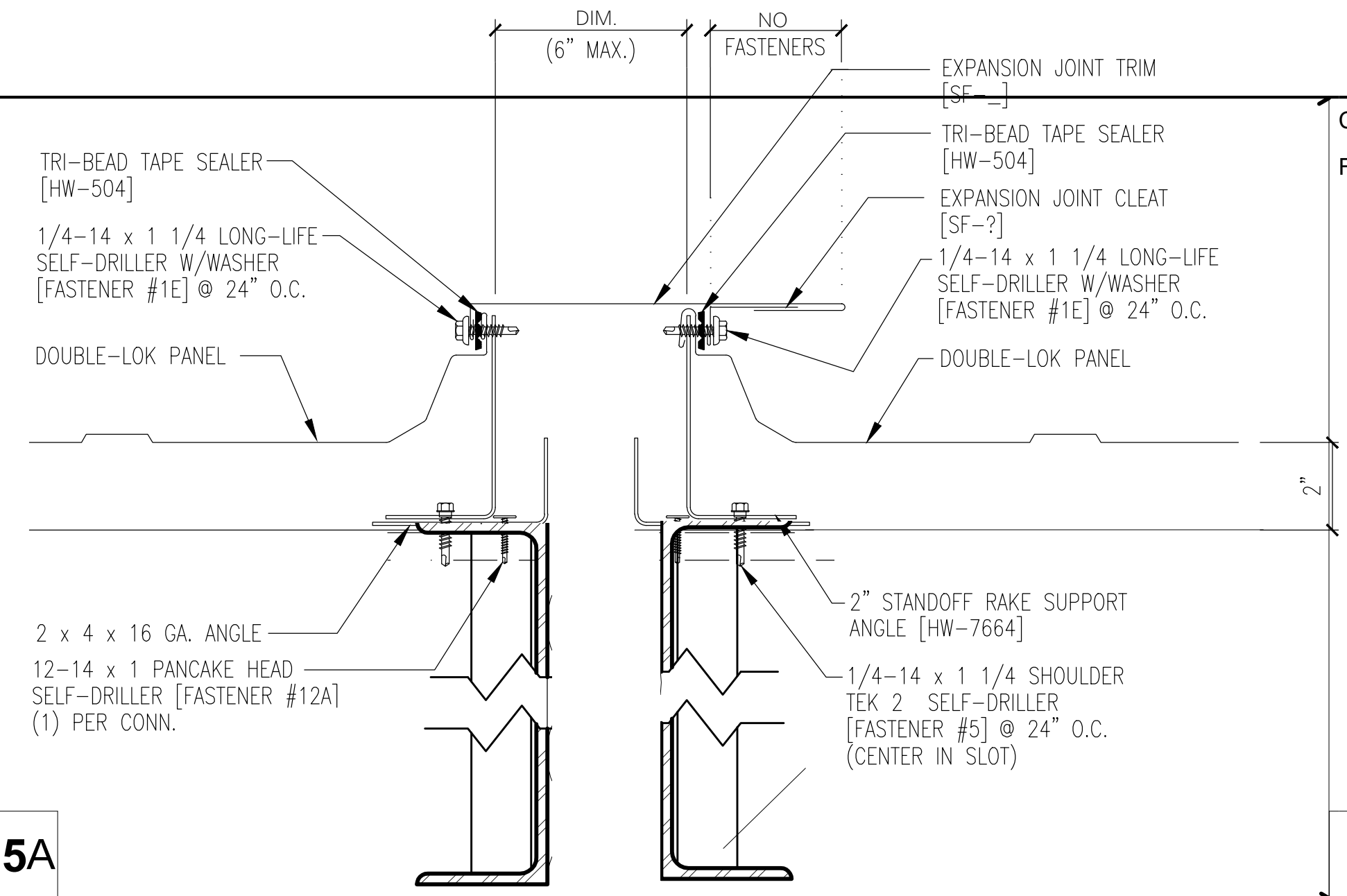
11 **6" = 1'-0"**
ROOF FLASHING @ SIDEWALL



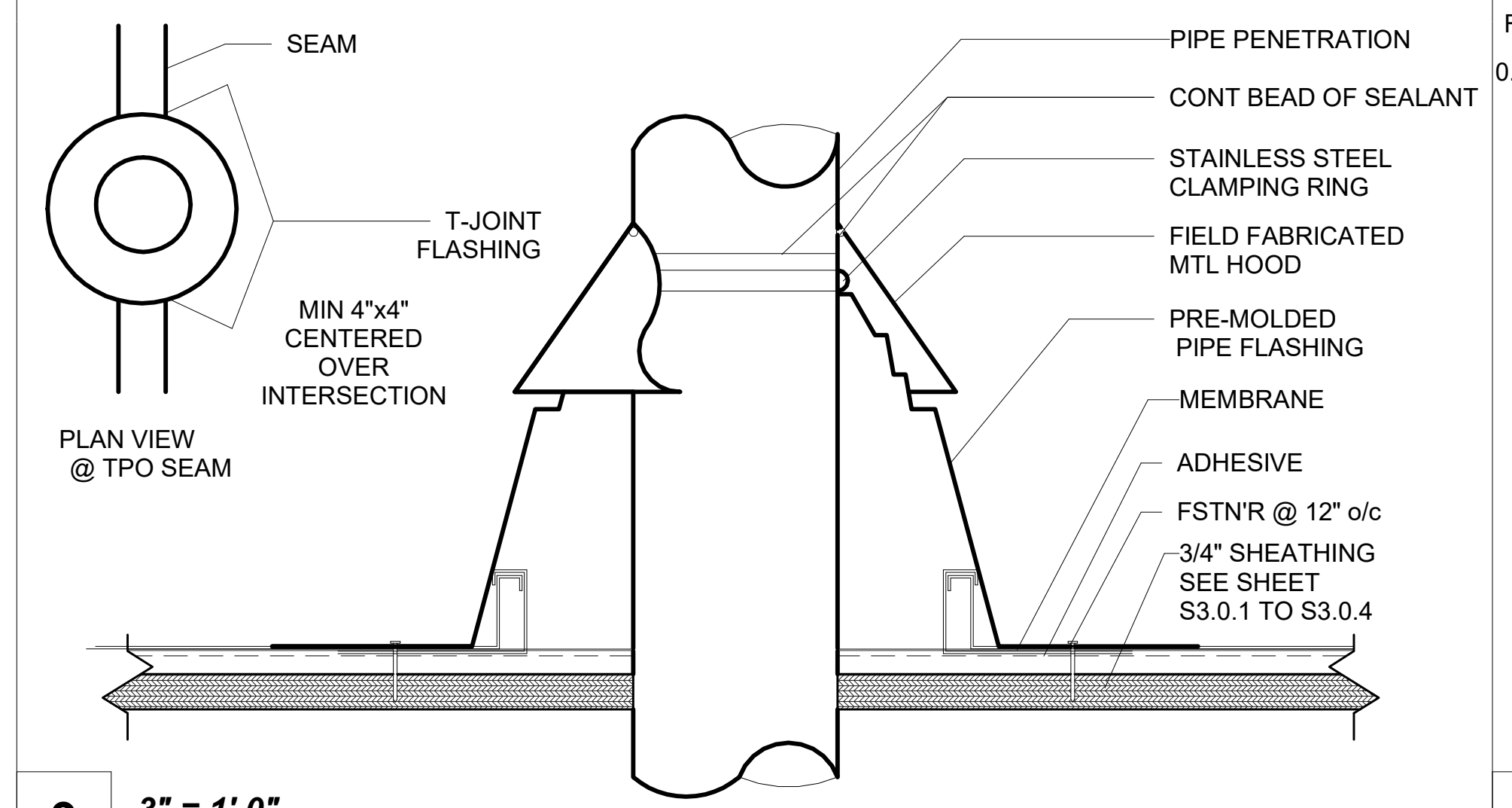


10A **6" = 1'-0"**
FLASHING @ MODLINE WALL

10 **6" = 1'-0"**
ROOF CAP @ MODLINE

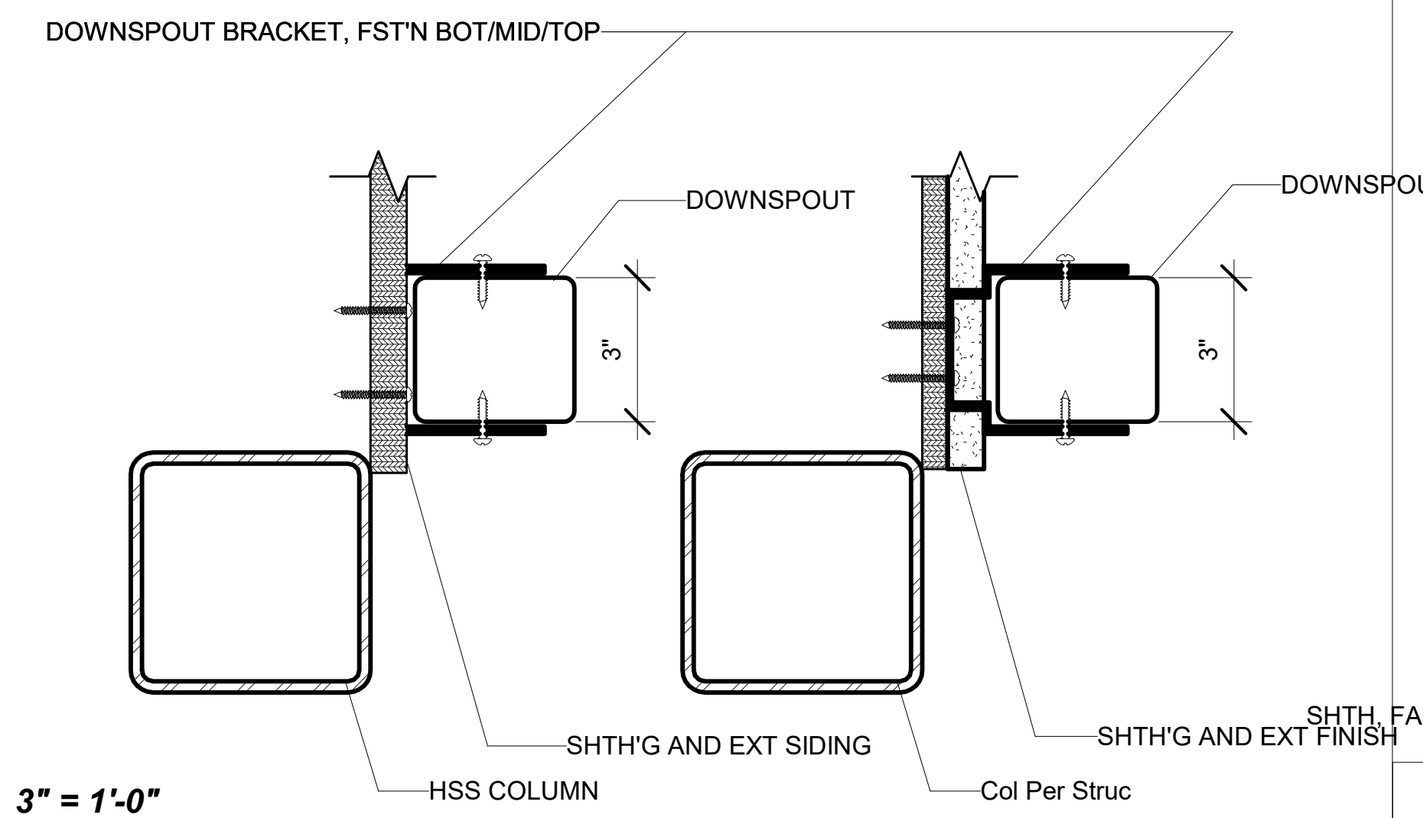

DIM. (6" MAX.)
NO FASTENERS
EXPANSION JOINT TRIM [SF-_]
TRI-BEAD TAPE SEALER [HW-504]
EXPANSION JOINT CLEAT [SF-?]
1/4-14 x 1 1/4 LONG-LIFE SELF-DRILLER W/WASHER [FASTENER #1E] @ 24" O.C.
DOUBLE-LOK PANEL
TRI-BEAD TAPE SEALER [HW-504]
1/4-14 x 1 1/4 LONG-LIFE SELF-DRILLER W/WASHER [FASTENER #1E] @ 24" O.C.
DOUBLE-LOK PANEL
2"
2 x 4 x 16 GA. ANGLE
12-14 x 1 PANCAKE HEAD SELF-DRILLER [FASTENER #12A] (1) PER CONN.
2" STANDOFF RAKE SUPPORT ANGLE [HW-7664]
1/4-14 x 1 1/4 SHOULDER TEK 2 SELF-DRILLER [FASTENER #5] @ 24" O.C. (CENTER IN SLOT)

5A

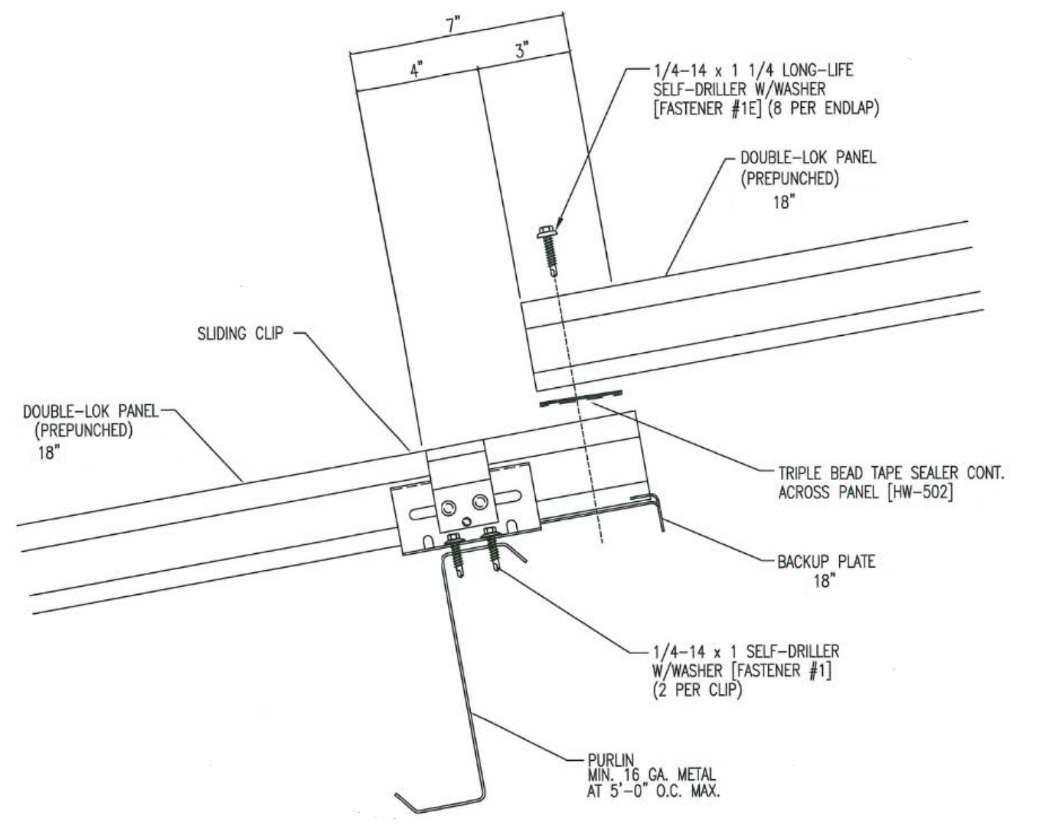


9 **3" = 1'-0"**
Pipe Penetration Standing Seam

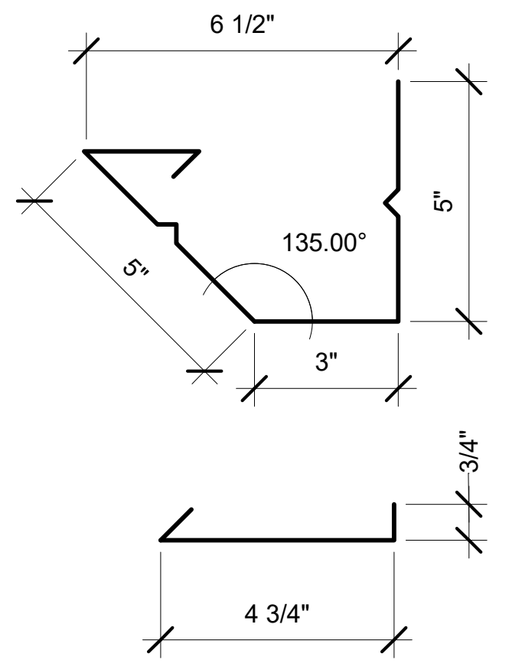
ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS



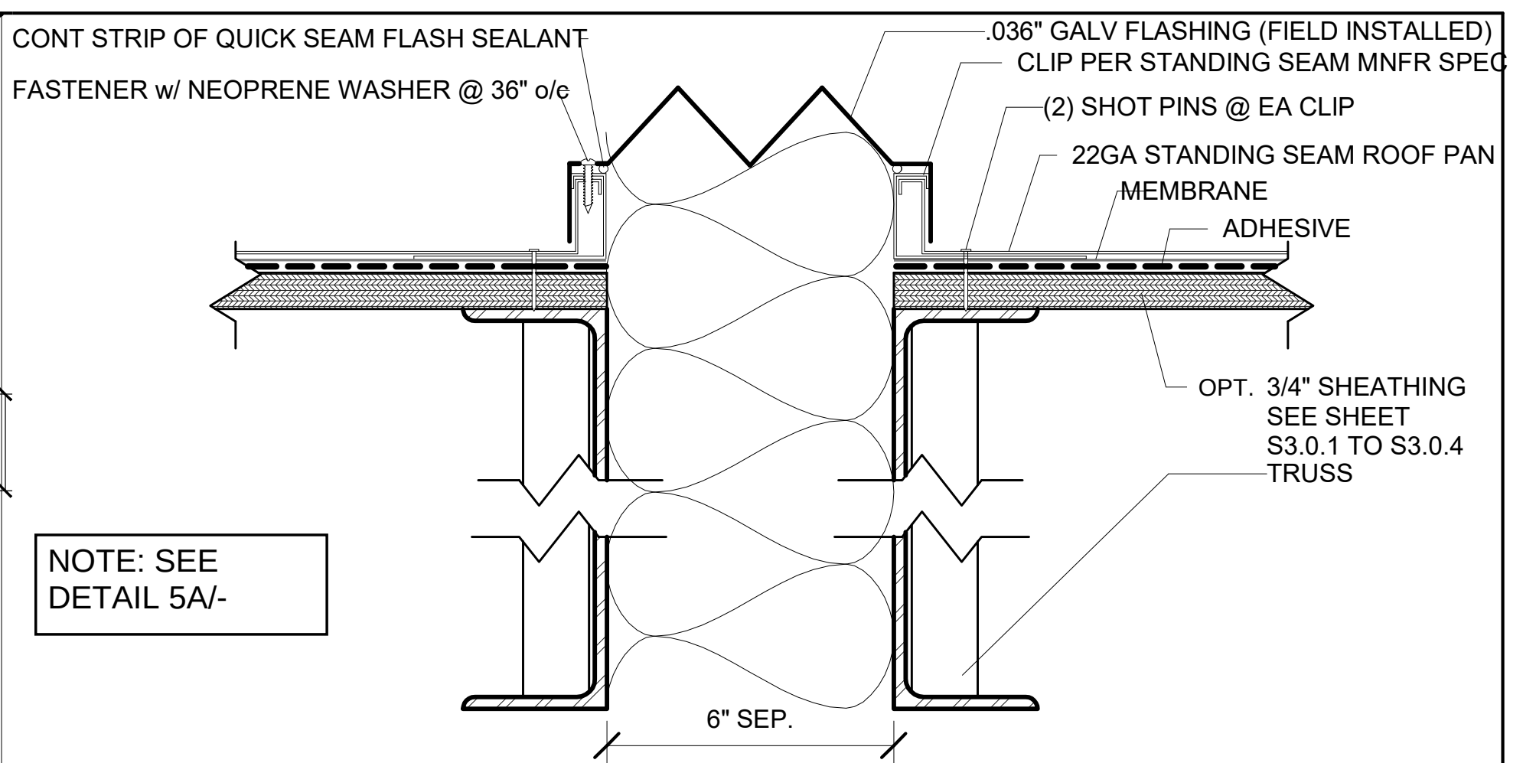
8 **3" = 1'-0"**
Downspout Mount1


7"
4"
3"
1/4-14 x 1 1/4 LONG-LIFE SELF-DRILLER W/WASHER [FASTENER #1E] (8 PER ENDLAP)
DOUBLE-LOK PANEL (PREPUNCHED) 18"
SLIDING CLIP
DOUBLE-LOK PANEL (PREPUNCHED) 18"
TRIPLE BEAD TAPE SEALER CONT. ACROSS PANEL [HW-502]
BACKUP PLATE 18"
1/4-14 x 1 SELF-DRILLER W/WASHER [FASTENER #1] (2 PER CLIP)
PURLIN MIN. 16 GA. METAL AT 5'-0" O.C. MAX.

7



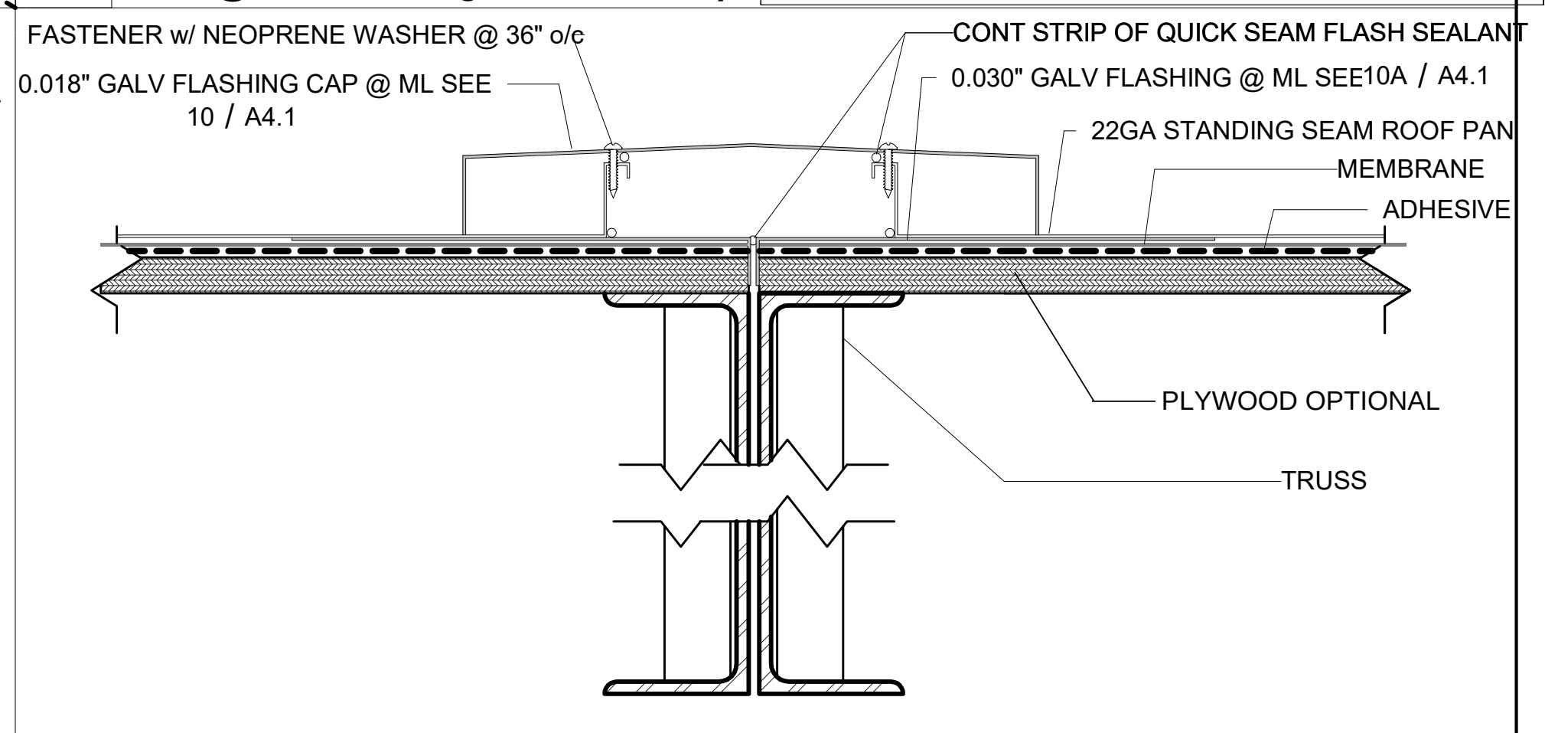
6 **3" = 1'-0"**
Gutter and Strap1


CONT STRIP OF QUICK SEAM FLASH SEALANT
FASTENER w/ NEOPRENE WASHER @ 36" o/c
.036" GALV FLASHING (FIELD INSTALLED)
CLIP PER STANDING SEAM MNFR SPEC
(2) SHOT PINS @ EA CLIP
22GA STANDING SEAM ROOF PAN
MEMBRANE
ADHESIVE
OPT. 3/4" SHEATHING SEE SHEET S3.0.1 TO S3.0.4
TRUSS
6" SEP.

NOTE: SEE DETAIL 5A/-

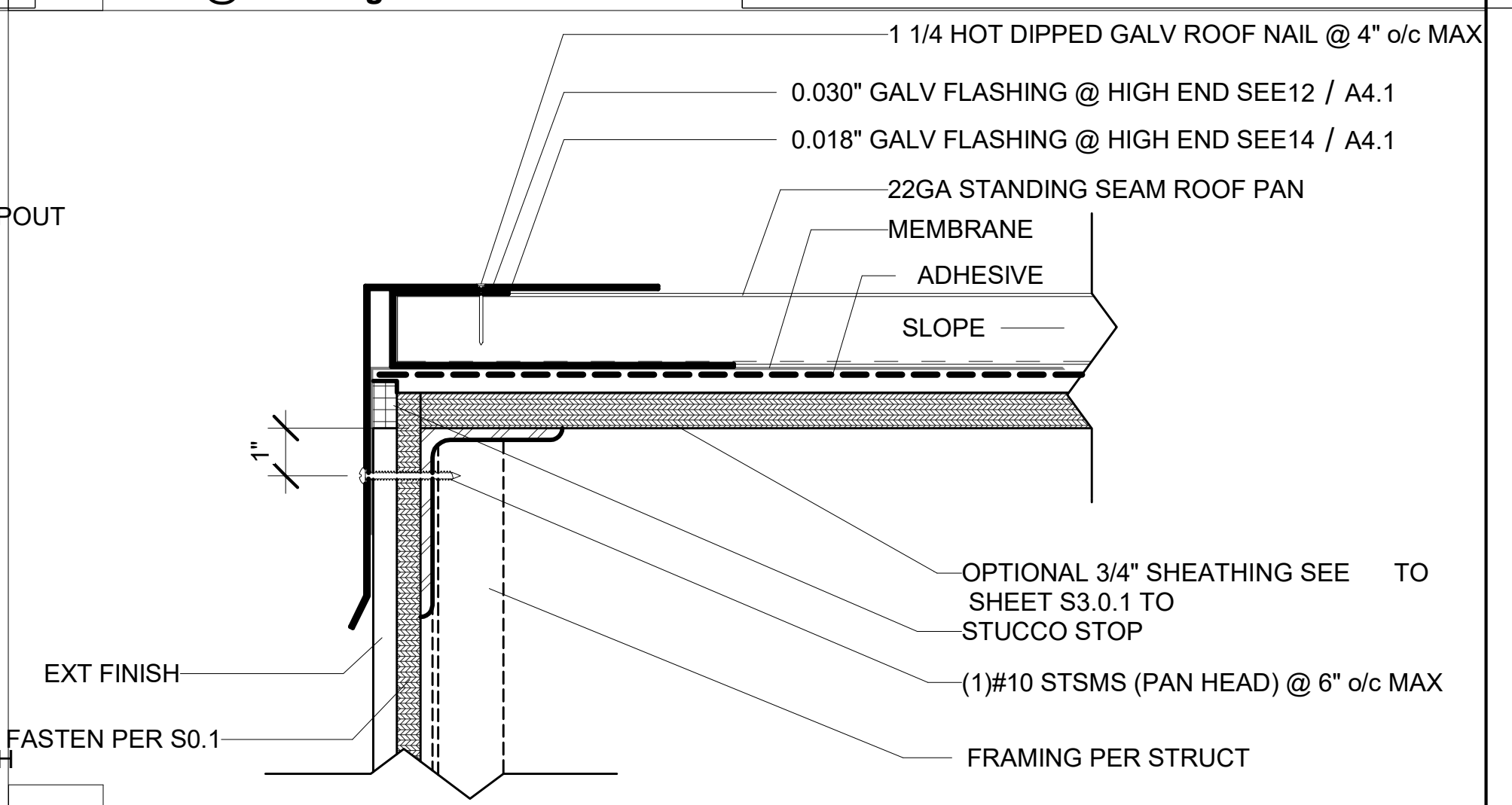
5 **3" = 1'-0"**
Roof @ Mateline Std'g Seam w/ 6" Sep

ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS


FASTENER w/ NEOPRENE WASHER @ 36" o/c
0.018" GALV FLASHING CAP @ ML SEE 10 / A4.1
CONT STRIP OF QUICK SEAM FLASH SEALANT
0.030" GALV FLASHING @ ML SEE10A / A4.1
22GA STANDING SEAM ROOF PAN
MEMBRANE
ADHESIVE
PLYWOOD OPTIONAL
TRUSS

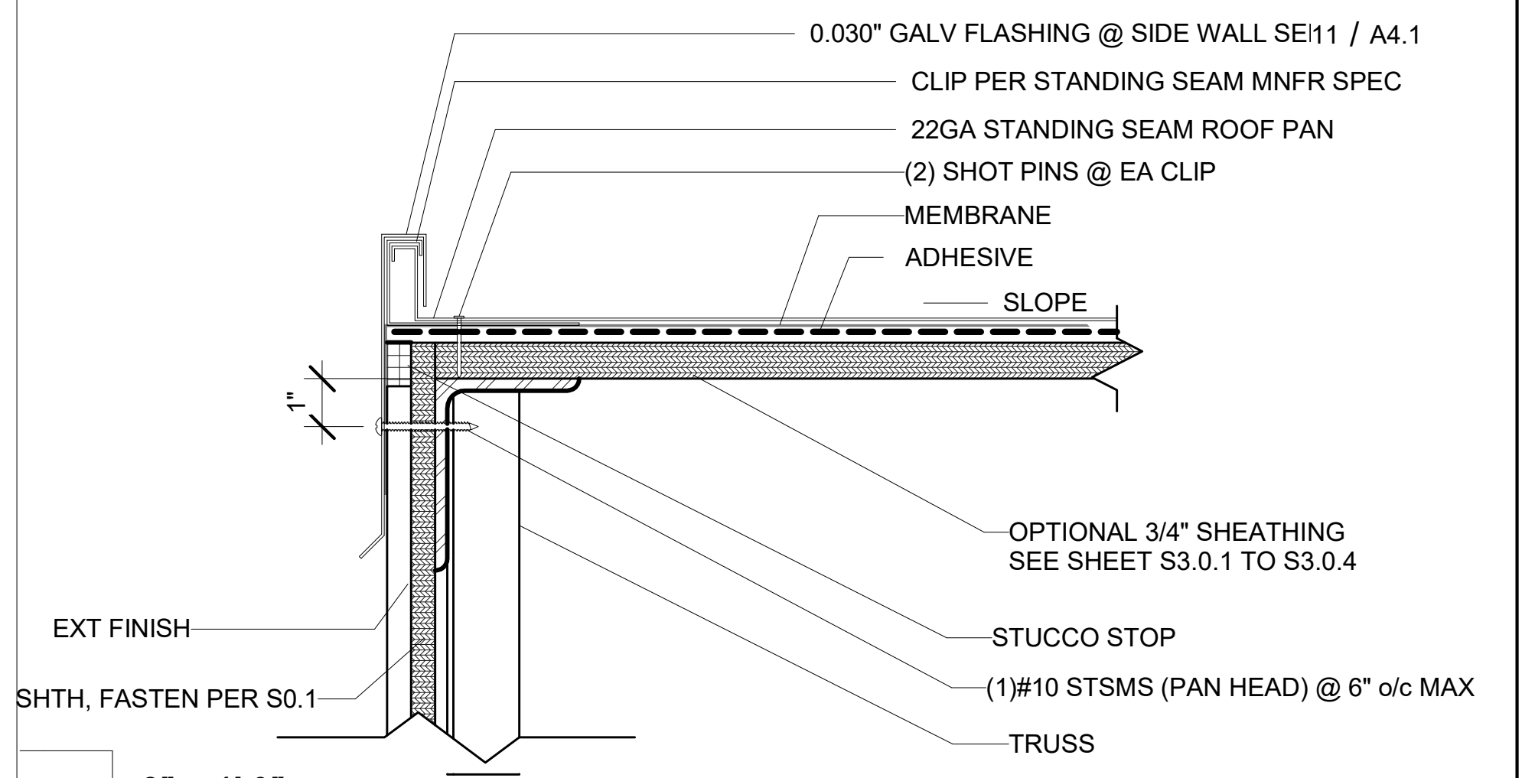
4 **3" = 1'-0"**
Roof @ Standing Seam Mateline

ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS


1 1/4 HOT DIPPED GALV ROOF NAIL @ 4" o/c MAX
0.030" GALV FLASHING @ HIGH END SEE12 / A4.1
0.018" GALV FLASHING @ HIGH END SEE14 / A4.1
22GA STANDING SEAM ROOF PAN
MEMBRANE
ADHESIVE
SLOPE
1"
OPTIONAL 3/4" SHEATHING SEE TO SHEET S3.0.1 TO
STUCCO STOP
(1)#10 STSMS (PAN HEAD) @ 6" o/c MAX
EXT FINISH
SHTH, FASTEN PER S0.1
FRAMING PER STRUCT

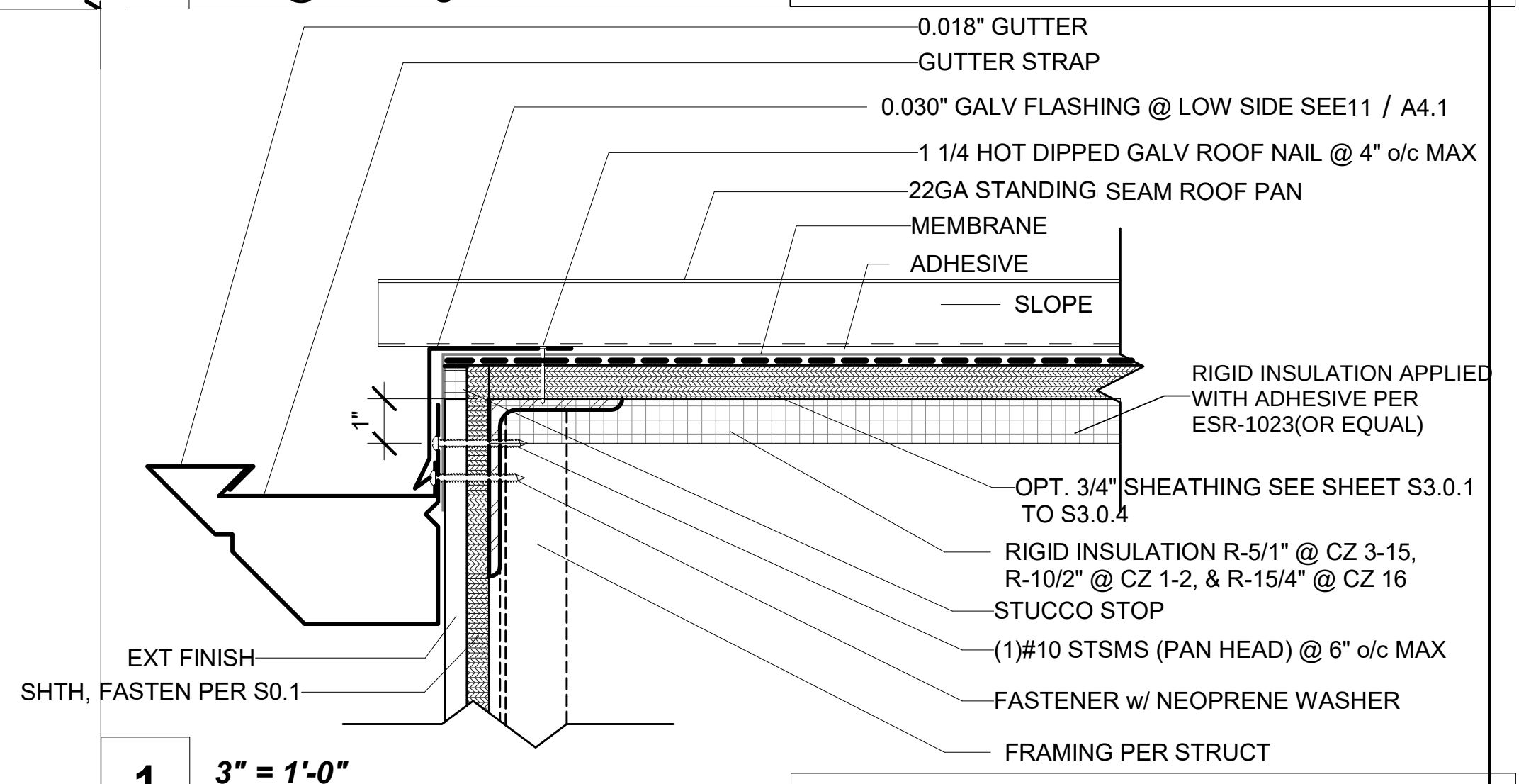
3 **3" = 1'-0"**
Roof @ Endwall Std'g Seam (High End)

ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS


0.030" GALV FLASHING @ SIDE WALL SEE11 / A4.1
CLIP PER STANDING SEAM MNFR SPEC
22GA STANDING SEAM ROOF PAN
(2) SHOT PINS @ EA CLIP
MEMBRANE
ADHESIVE
SLOPE
1"
OPTIONAL 3/4" SHEATHING SEE SHEET S3.0.1 TO S3.0.4
EXT FINISH
STUCCO STOP
SHTH, FASTEN PER S0.1
(1)#10 STSMS (PAN HEAD) @ 6" o/c MAX
TRUSS

2 **3" = 1'-0"**
Roof @ Standing Seam Sidwall

ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS


0.018" GUTTER
GUTTER STRAP
0.030" GALV FLASHING @ LOW SIDE SEE11 / A4.1
1 1/4 HOT DIPPED GALV ROOF NAIL @ 4" o/c MAX
22GA STANDING SEAM ROOF PAN
MEMBRANE
ADHESIVE
SLOPE
RIGID INSULATION APPLIED WITH ADHESIVE PER ESR-1023(OR EQUAL)
1"
OPT. 3/4" SHEATHING SEE SHEET S3.0.1 TO S3.0.4
RIGID INSULATION R-5/1" @ CZ 3-15, R-10/2" @ CZ 1-2, & R-15/4" @ CZ 16
STUCCO STOP
(1)#10 STSMS (PAN HEAD) @ 6" o/c MAX
EXT FINISH
SHTH, FASTEN PER S0.1
FASTENER w/ NEOPRENE WASHER
FRAMING PER STRUCT

1 **3" = 1'-0"**
Roof @ Endwall Std'g Seam (Low End)

ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
ROOF DETAILS (STANDING SEAM)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A4.1

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

Ext. Finish Schedule

	Finishes	Sheet	Notes
☒	SIDING OVER WD STUDS	A2.1	
☐	PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.2	

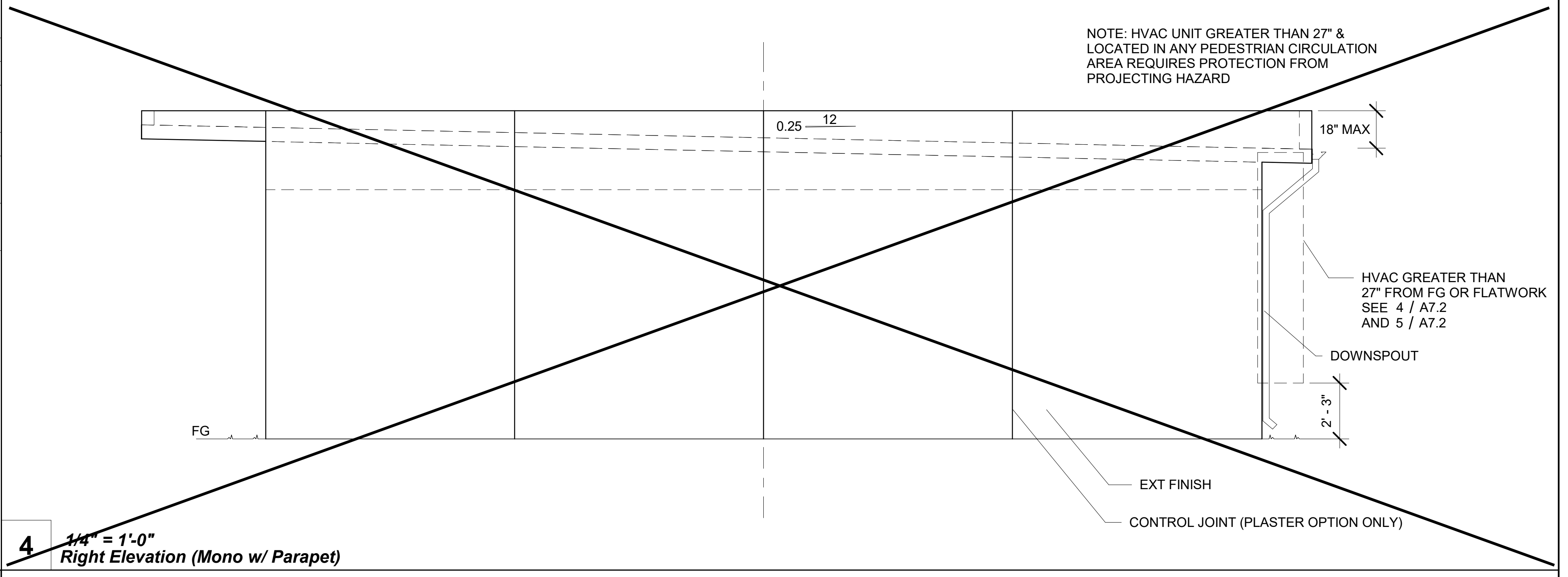
9 *1/4" = 1'-0"*
Ext. Finish Scedule

Fire Rating Schedule

	Rating	Sheet	Notes
☐	1 HOUR - SIDING OVER WD STUDS	A2.5	
☐	1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.6	

SEE A3.0 FOR ADDITIONAL FIRE ASSEMBLY NOTES AND DETAILS

10 *1/4" = 1'-0"*
Fire Rating Scedule


NOTE: HVAC UNIT GREATER THAN 27" & LOCATED IN ANY PEDESTRIAN CIRCULATION AREA REQUIRES PROTECTION FROM PROJECTING HAZARD
0.25
12
18" MAX
HVAC GREATER THAN 27" FROM FG OR FLATWORK SEE 4 / A7.2 AND 5 / A7.2
DOWNSPOUT
FG
2' - 3"
EXT FINISH
CONTROL JOINT (PLASTER OPTION ONLY)

4 *1/4" = 1'-0"*
Right Elevation (Mono w/ Parapet)

SEE A0.1 FOR GENERAL NOTES

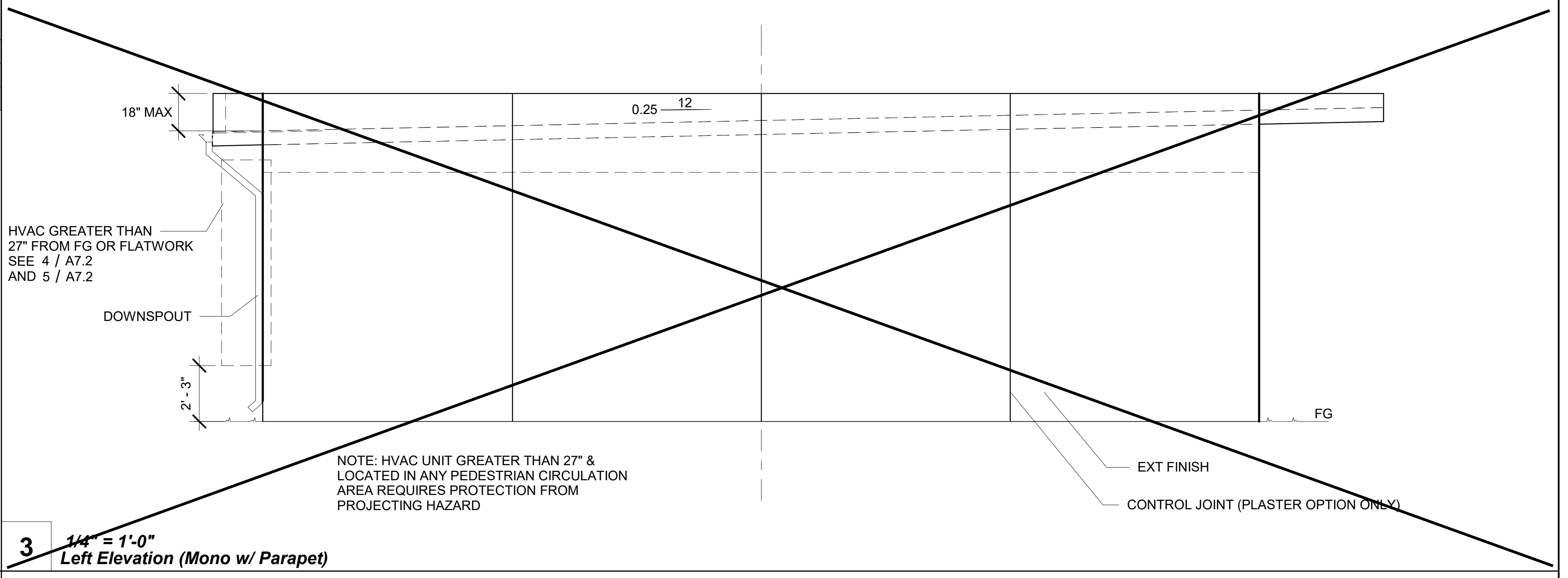
7 *3" = 1'-0"*
Notes A5.0

Wall Schedule

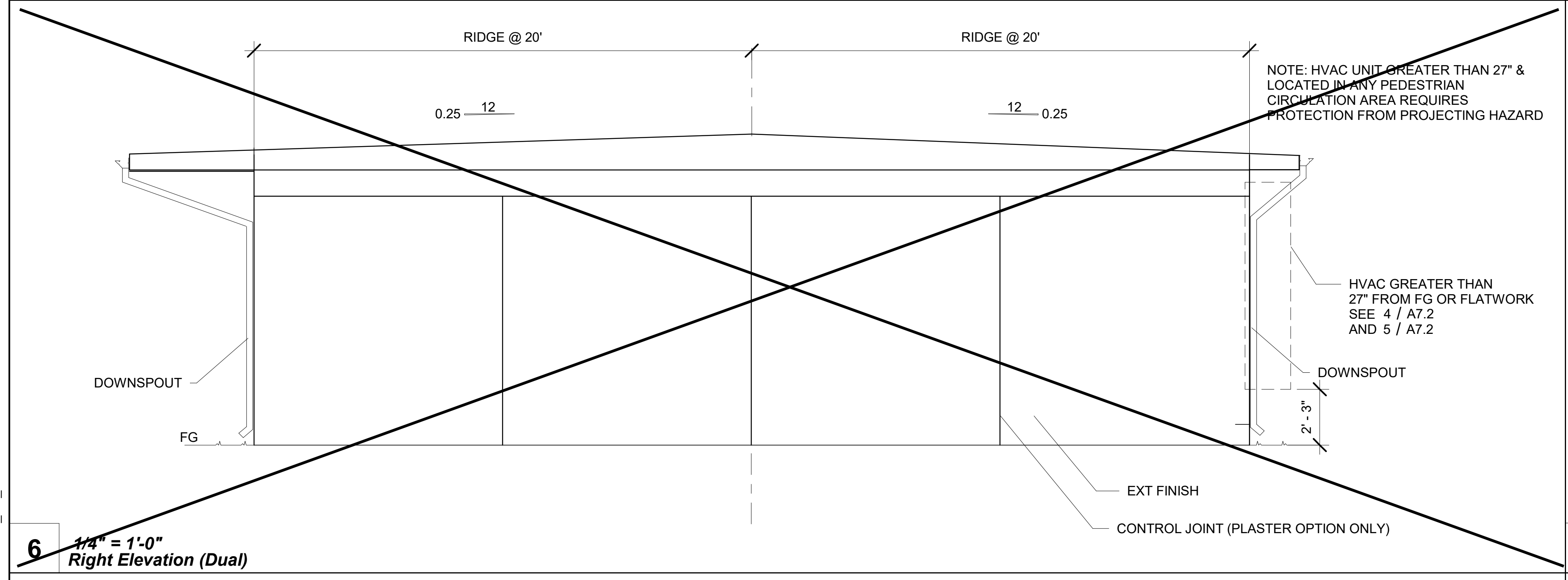
	Stud Size	Sheet	Notes
X	Wood Wall Stud	S4.5	

FOR WUI DETAILS SEE
SHEETS: A2.1(B)
A2.3(B)
A2.5(B)
A2.7(B)

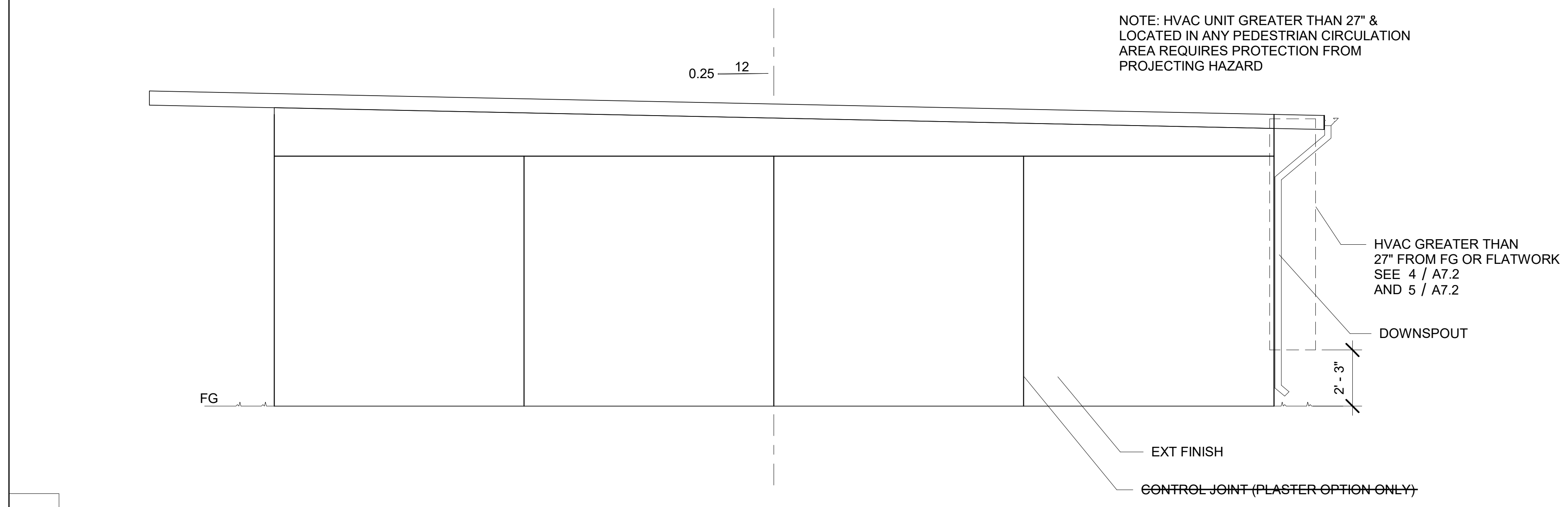
8 *1/4" = 1'-0"*
Wall Schedule


18" MAX
0.25
12
HVAC GREATER THAN 27" FROM FG OR FLATWORK SEE 4 / A7.2 AND 5 / A7.2
DOWNSPOUT
2' - 3"
FG
EXT FINISH
CONTROL JOINT (PLASTER OPTION ONLY)
NOTE: HVAC UNIT GREATER THAN 27" & LOCATED IN ANY PEDESTRIAN CIRCULATION AREA REQUIRES PROTECTION FROM PROJECTING HAZARD

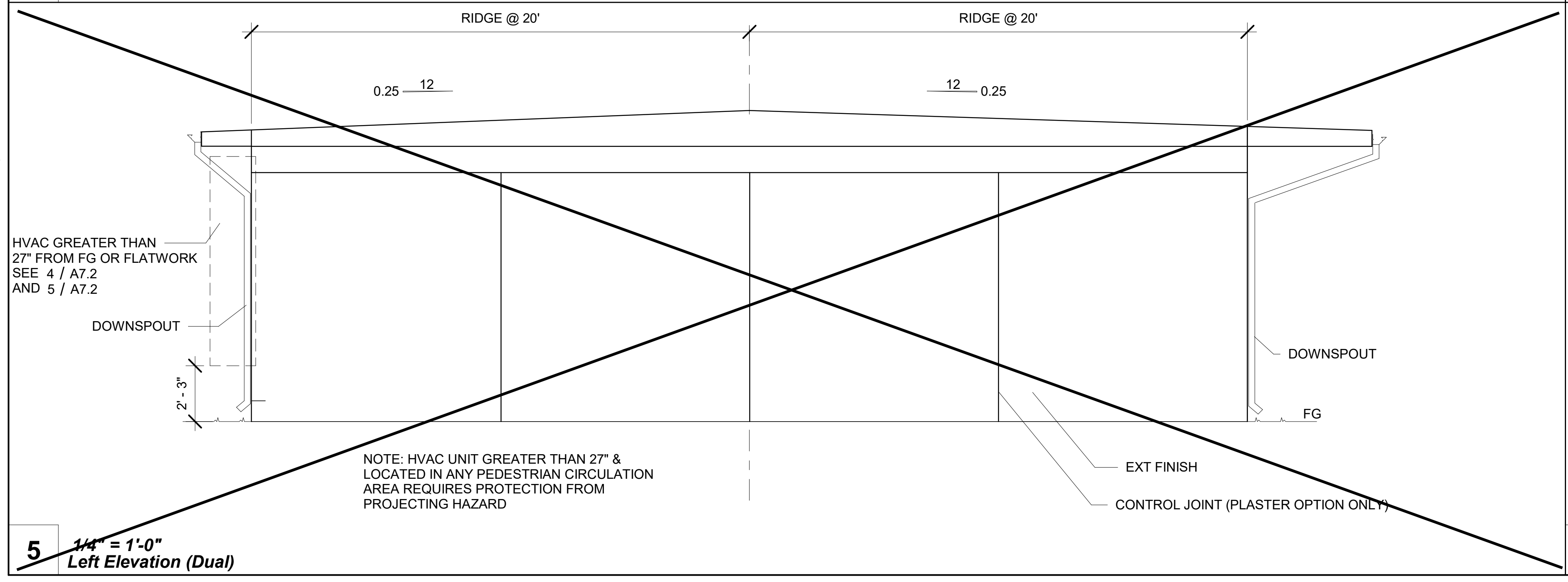
3 *1/4" = 1'-0"*
Left Elevation (Mono w/ Parapet)


RIDGE @ 20'
RIDGE @ 20'
0.25
12
12
0.25
NOTE: HVAC UNIT GREATER THAN 27" & LOCATED IN ANY PEDESTRIAN CIRCULATION AREA REQUIRES PROTECTION FROM PROJECTING HAZARD
HVAC GREATER THAN 27" FROM FG OR FLATWORK SEE 4 / A7.2 AND 5 / A7.2
DOWNSPOUT
DOWNSPOUT
FG
2' - 3"
EXT FINISH
CONTROL JOINT (PLASTER OPTION ONLY)

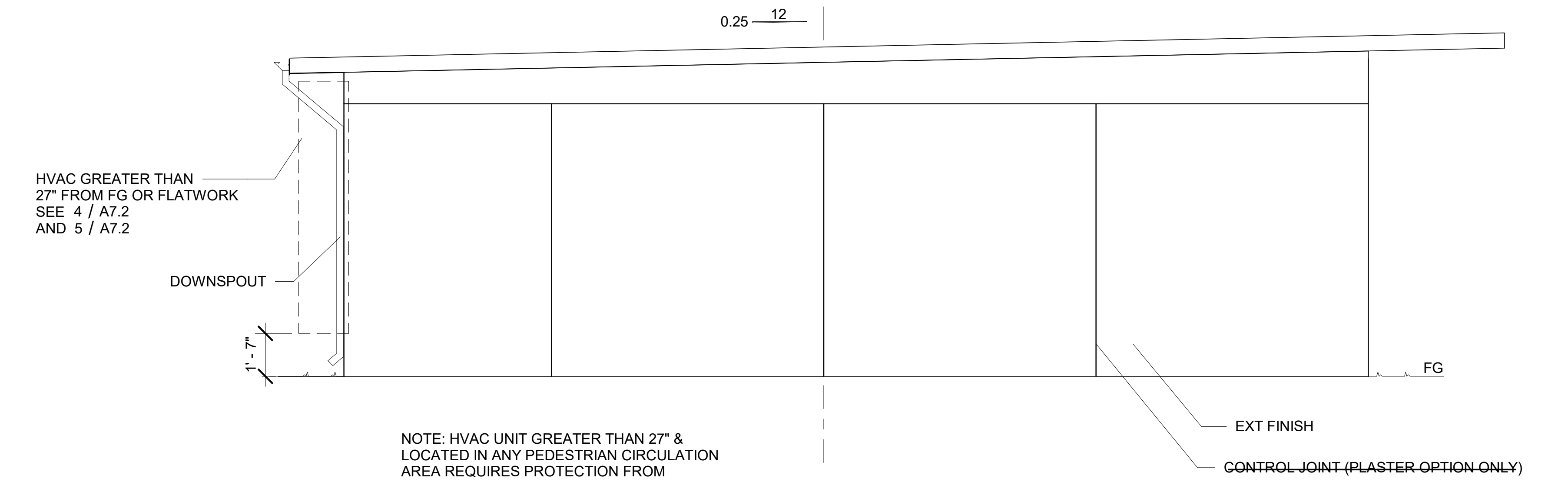
6 *1/4" = 1'-0"*
Right Elevation (Dual)


NOTE: HVAC UNIT GREATER THAN 27" & LOCATED IN ANY PEDESTRIAN CIRCULATION AREA REQUIRES PROTECTION FROM PROJECTING HAZARD
0.25
12
HVAC GREATER THAN 27" FROM FG OR FLATWORK SEE 4 / A7.2 AND 5 / A7.2
DOWNSPOUT
FG
2' - 3"
EXT FINISH
~~CONTROL JOINT (PLASTER OPTION ONLY)~~

2 *1/4" = 1'-0"*
Right Elevation (Mono)


RIDGE @ 20'
RIDGE @ 20'
0.25
12
12
0.25
HVAC GREATER THAN 27" FROM FG OR FLATWORK SEE 4 / A7.2 AND 5 / A7.2
DOWNSPOUT
2' - 3"
DOWNSPOUT
FG
NOTE: HVAC UNIT GREATER THAN 27" & LOCATED IN ANY PEDESTRIAN CIRCULATION AREA REQUIRES PROTECTION FROM PROJECTING HAZARD
EXT FINISH
CONTROL JOINT (PLASTER OPTION ONLY)

5 *1/4" = 1'-0"*
Left Elevation (Dual)


0.25
12
HVAC GREATER THAN 27" FROM FG OR FLATWORK SEE 4 / A7.2 AND 5 / A7.2
DOWNSPOUT
1' - 7"
FG
EXT FINISH
~~CONTROL JOINT (PLASTER OPTION ONLY)~~
NOTE: HVAC UNIT GREATER THAN 27" & LOCATED IN ANY PEDESTRIAN CIRCULATION AREA REQUIRES PROTECTION FROM PROJECTING HAZARD

1 *1/4" = 1'-0"*
Left Elevation (Mono)

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
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11590 W Bernardo Court, Suite 100
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www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
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STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
SIDEWALL
ELEVATION

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

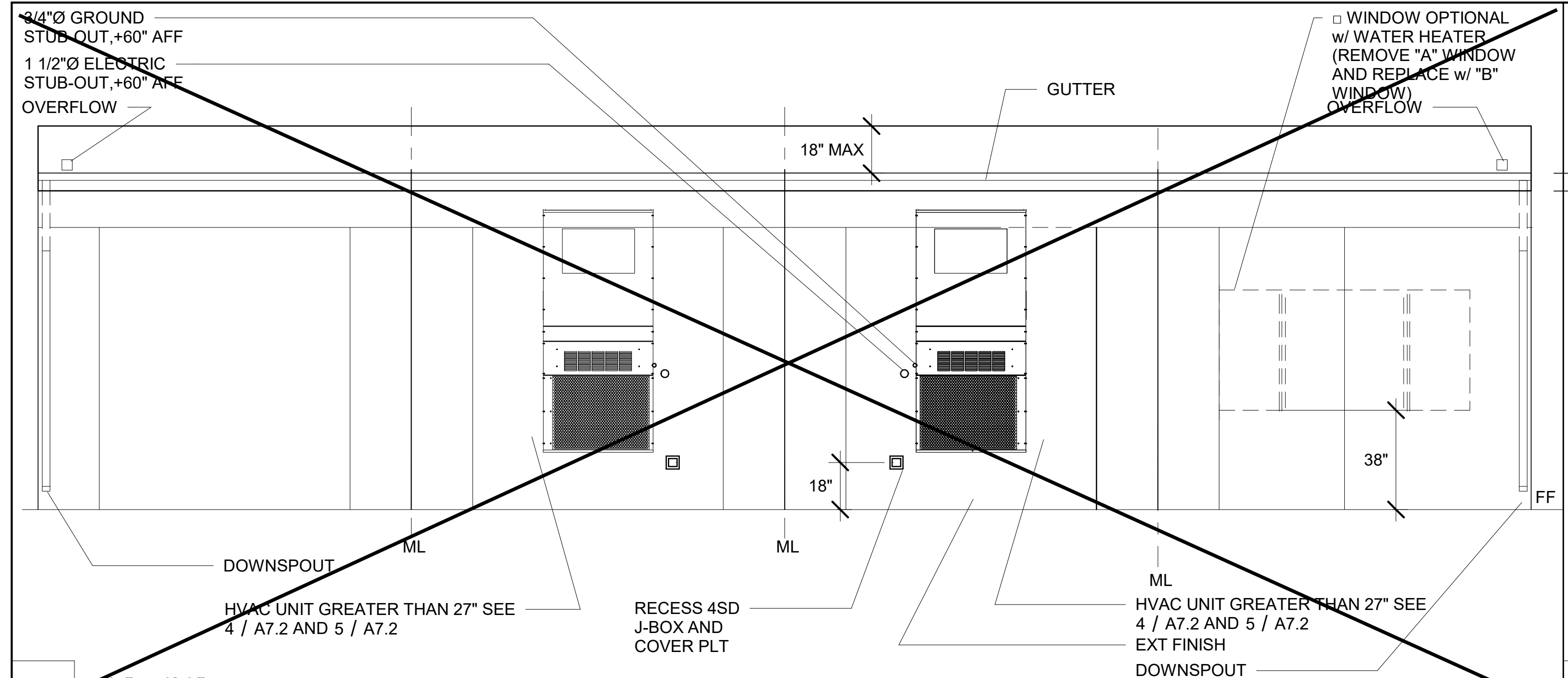
DATE

SHEET NO.
A5.0

SHEET OF

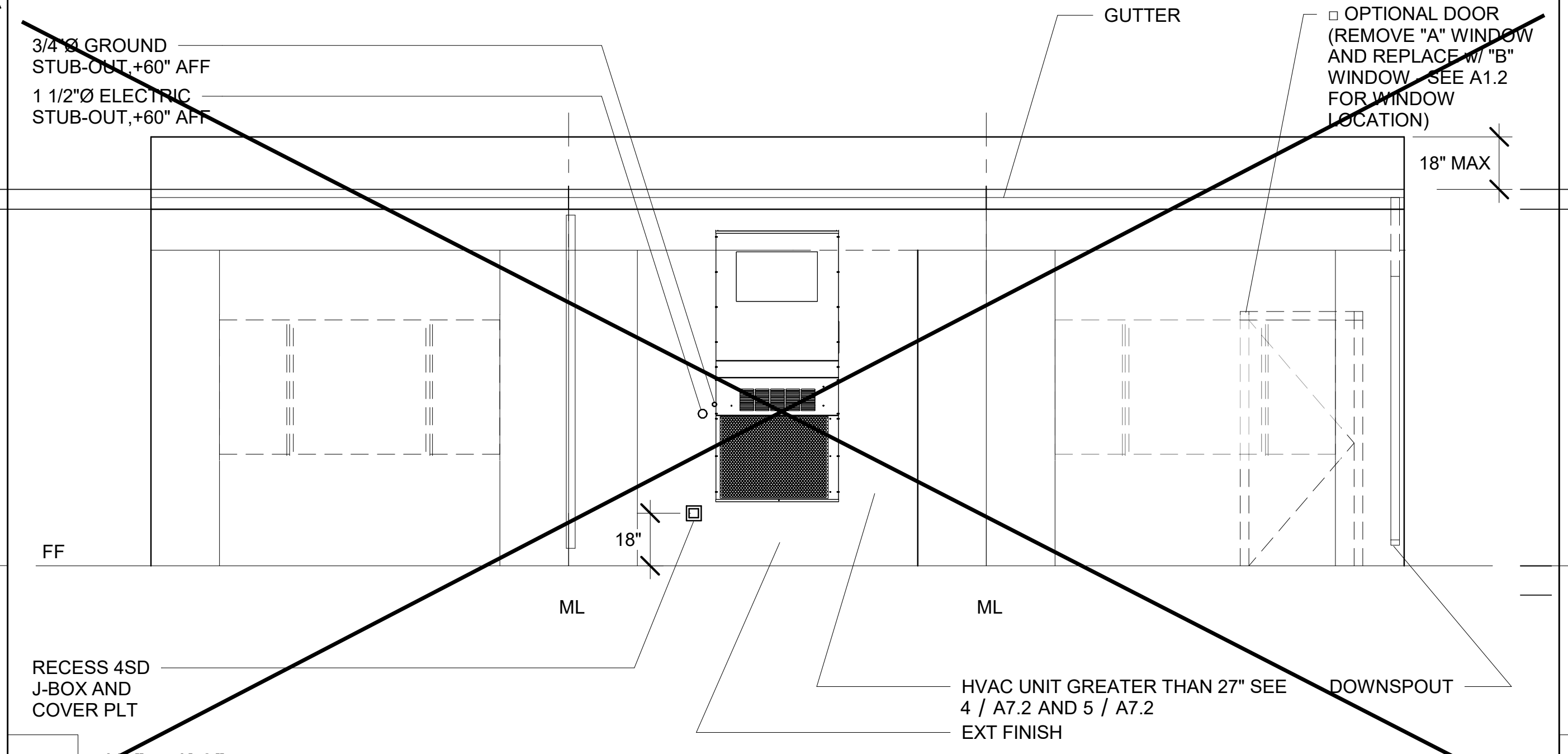
6/15/2021 11:51:35 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


3/4"Ø GROUND STUB-OUT,+60" AFF
1 1/2"Ø ELECTRIC STUB-OUT,+60" AFF
OVERFLOW
GUTTER
18" MAX
□ WINDOW OPTIONAL w/ WATER HEATER (REMOVE "A" WINDOW AND REPLACE w/ "B" WINDOW)
OVERFLOW
38"
18"
FF
ML
ML
ML
DOWNSPOUT
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
RECESS 4SD J-BOX AND COVER PLT
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
EXT FINISH
DOWNSPOUT

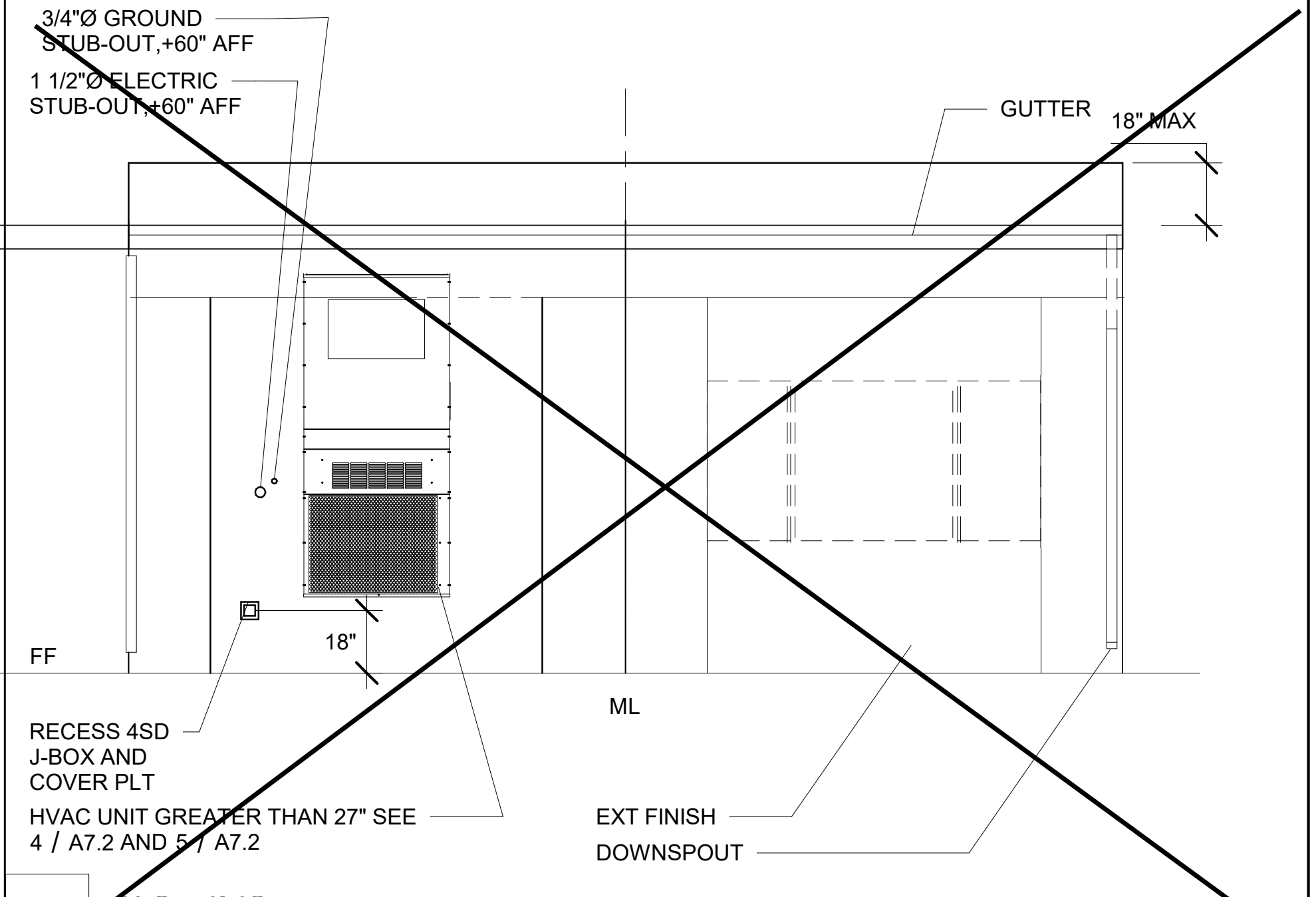
~~12 1/4" = 1'-0" 48x40 Rear w/ Parapet Elevation (Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


3/4"Ø GROUND STUB-OUT,+60" AFF
1 1/2"Ø ELECTRIC STUB-OUT,+60" AFF
GUTTER
□ OPTIONAL DOOR (REMOVE "A" WINDOW AND REPLACE w/ "B" WINDOW - SEE A1.2 FOR WINDOW LOCATION)
18" MAX
18"
FF
ML
ML
RECESS 4SD J-BOX AND COVER PLT
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
EXT FINISH
DOWNSPOUT

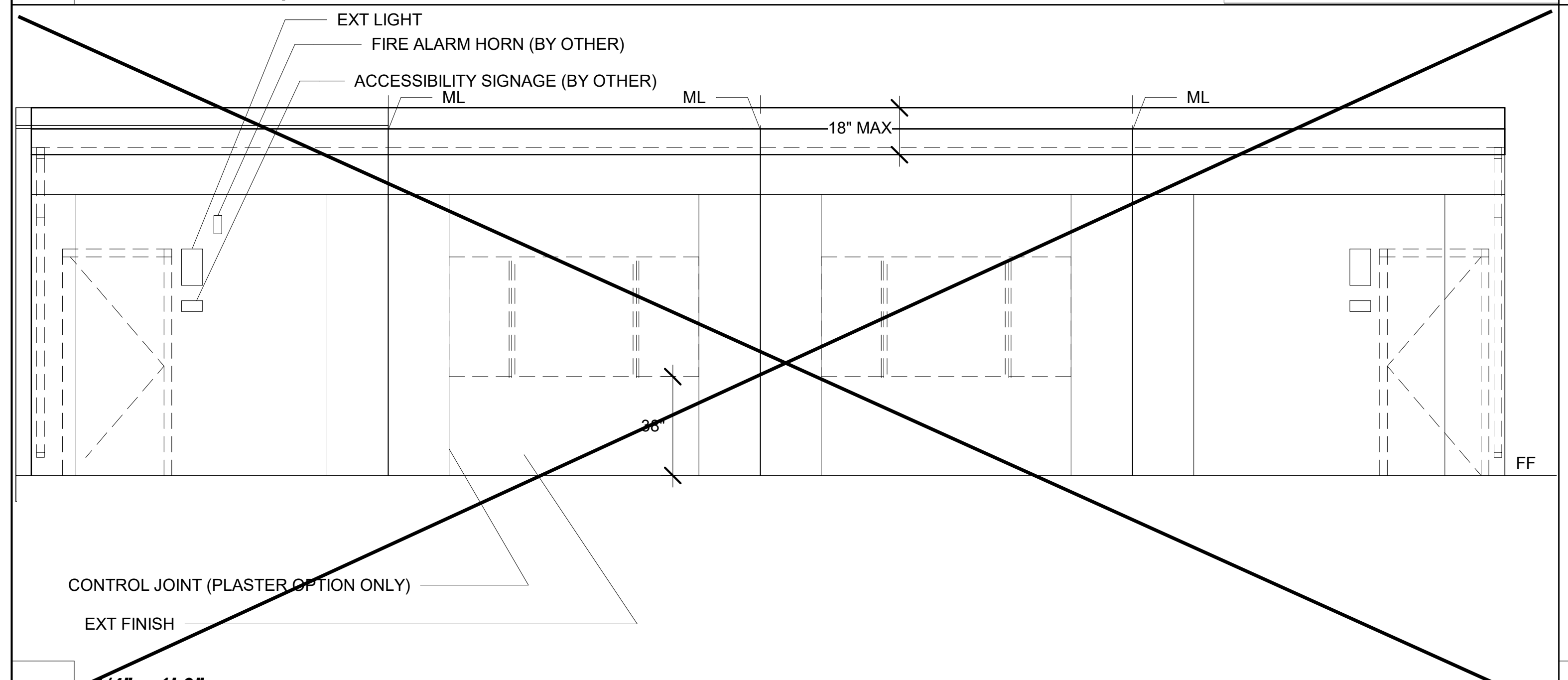
~~8 1/4" = 1'-0" 36x40 Rear Elevation w/ Parapet (Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


3/4"Ø GROUND STUB-OUT,+60" AFF
1 1/2"Ø ELECTRIC STUB-OUT,+60" AFF
GUTTER
18" MAX
18"
FF
ML
RECESS 4SD J-BOX AND COVER PLT
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
EXT FINISH
DOWNSPOUT

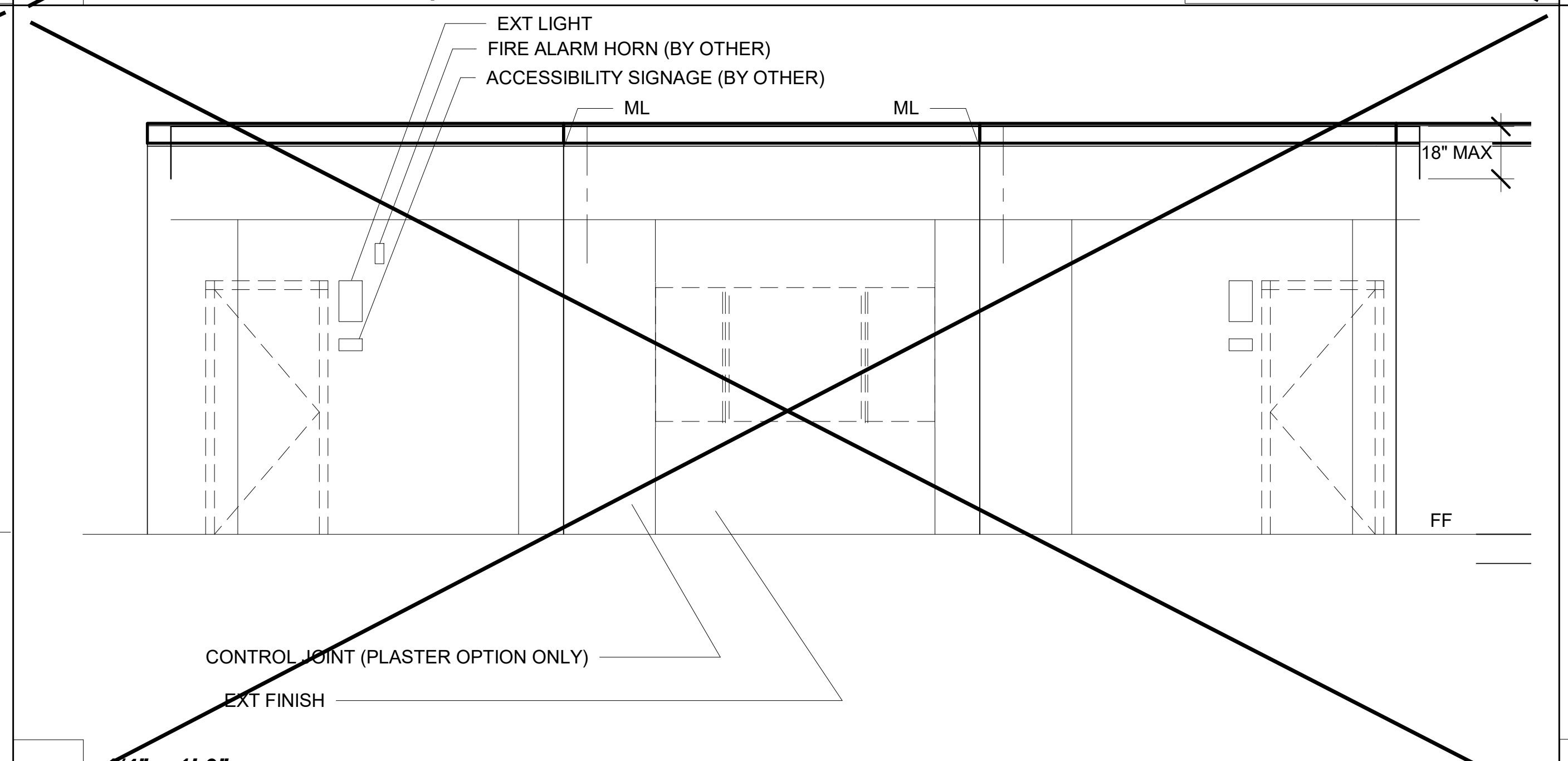
~~4 1/4" = 1'-0" 24x40 Rear Elevation w/ Parapet (Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


EXT LIGHT
FIRE ALARM HORN (BY OTHER)
ACCESSIBILITY SIGNAGE (BY OTHER)
ML
ML
ML
18" MAX
38"
FF
CONTROL JOINT (PLASTER OPTION ONLY)
EXT FINISH

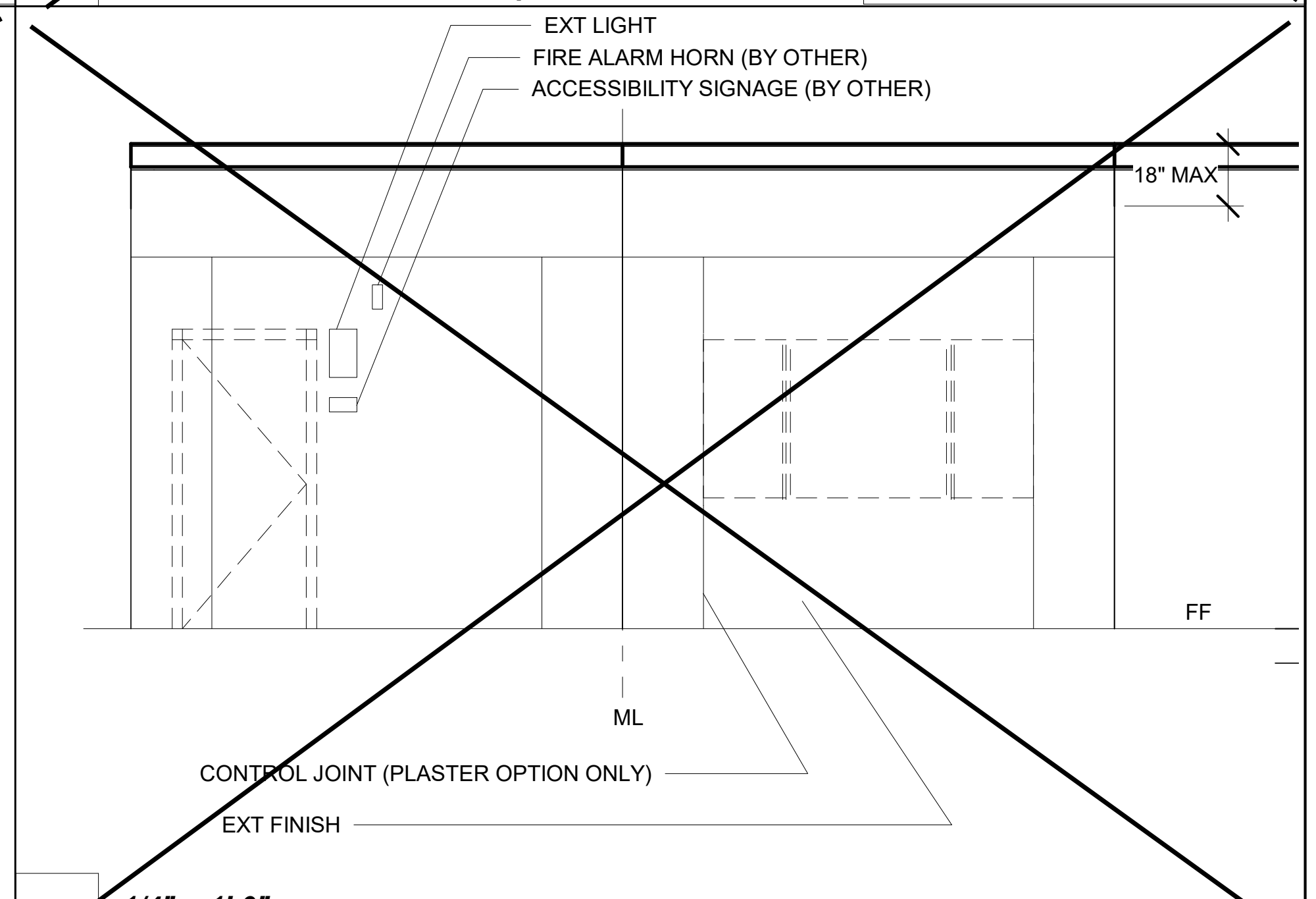
~~11 1/4" = 1'-0" 48x40 Front w/ Parapet Elevation (Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


EXT LIGHT
FIRE ALARM HORN (BY OTHER)
ACCESSIBILITY SIGNAGE (BY OTHER)
ML
ML
18" MAX
FF
CONTROL JOINT (PLASTER OPTION ONLY)
EXT FINISH

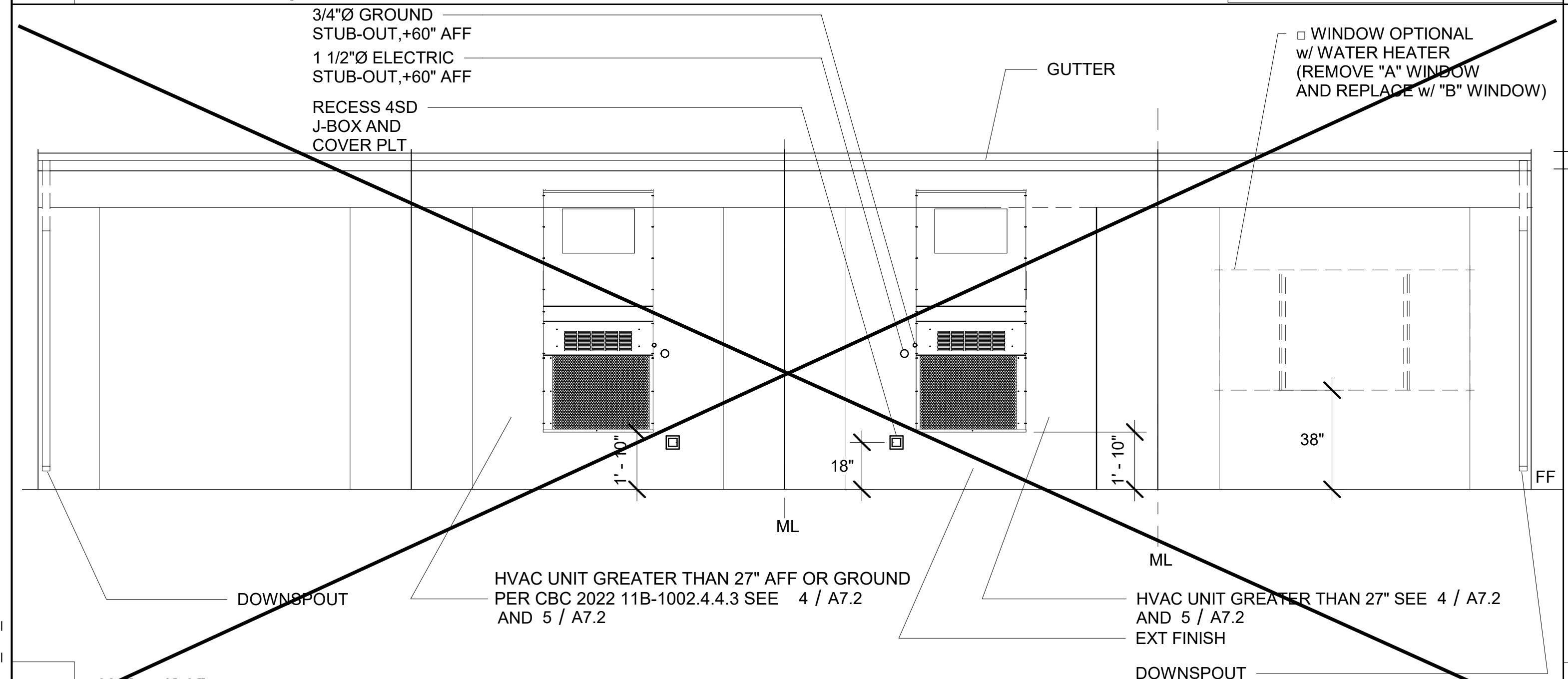
~~7 1/4" = 1'-0" 36x40 Front Elevation w/ Parapet (Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


EXT LIGHT
FIRE ALARM HORN (BY OTHER)
ACCESSIBILITY SIGNAGE (BY OTHER)
18" MAX
FF
ML
CONTROL JOINT (PLASTER OPTION ONLY)
EXT FINISH

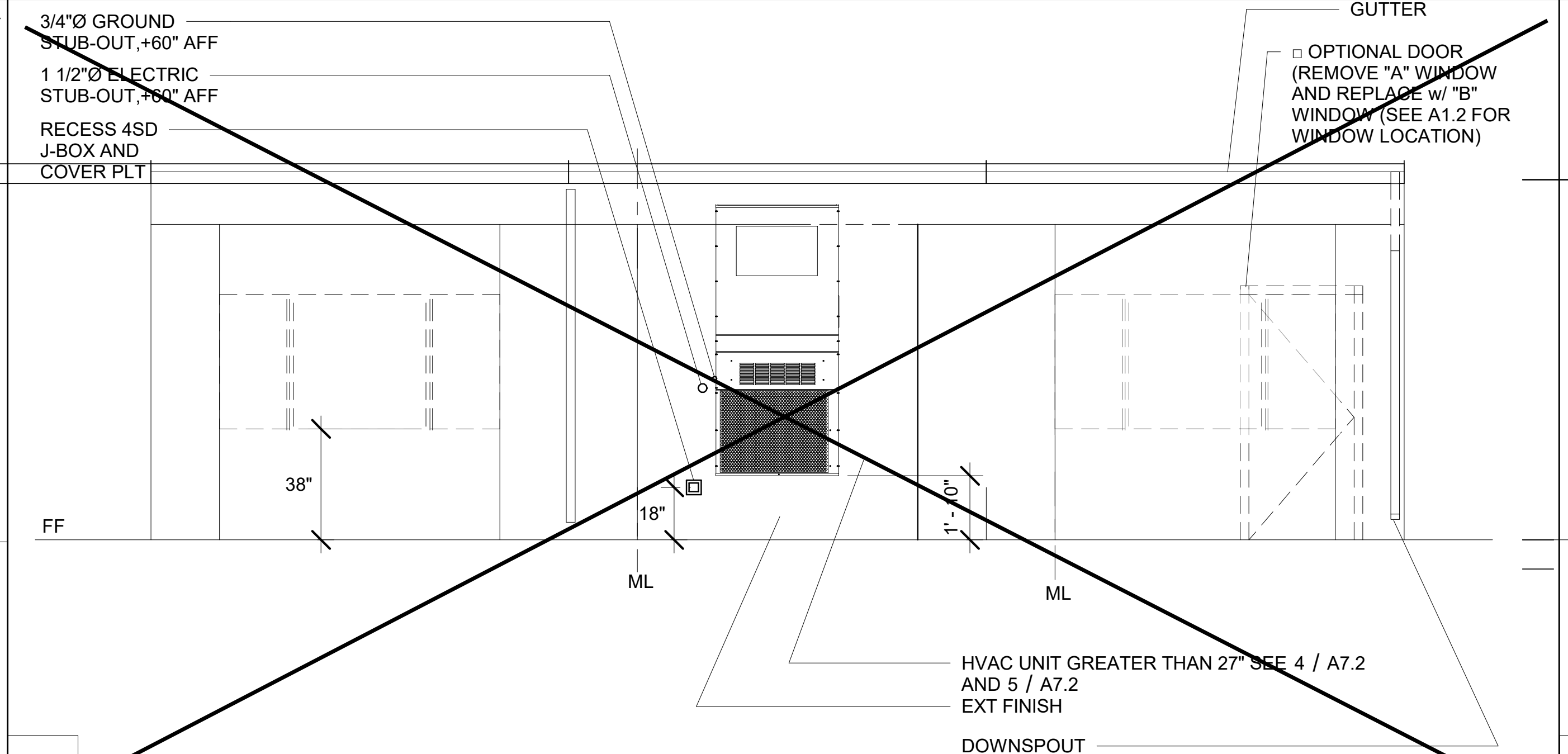
~~3 1/4" = 1'-0" 24x40 Front Elevation w/ Parapet (Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


3/4"Ø GROUND STUB-OUT,+60" AFF
1 1/2"Ø ELECTRIC STUB-OUT,+60" AFF
RECESS 4SD J-BOX AND COVER PLT
GUTTER
□ WINDOW OPTIONAL w/ WATER HEATER (REMOVE "A" WINDOW AND REPLACE w/ "B" WINDOW)
1' - 10"
18"
1' - 10"
38"
FF
ML
ML
DOWNSPOUT
HVAC UNIT GREATER THAN 27" AFF OR GROUND PER CBC 2022 11B-1002.4.4.3 SEE 4 / A7.2 AND 5 / A7.2
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
EXT FINISH
DOWNSPOUT

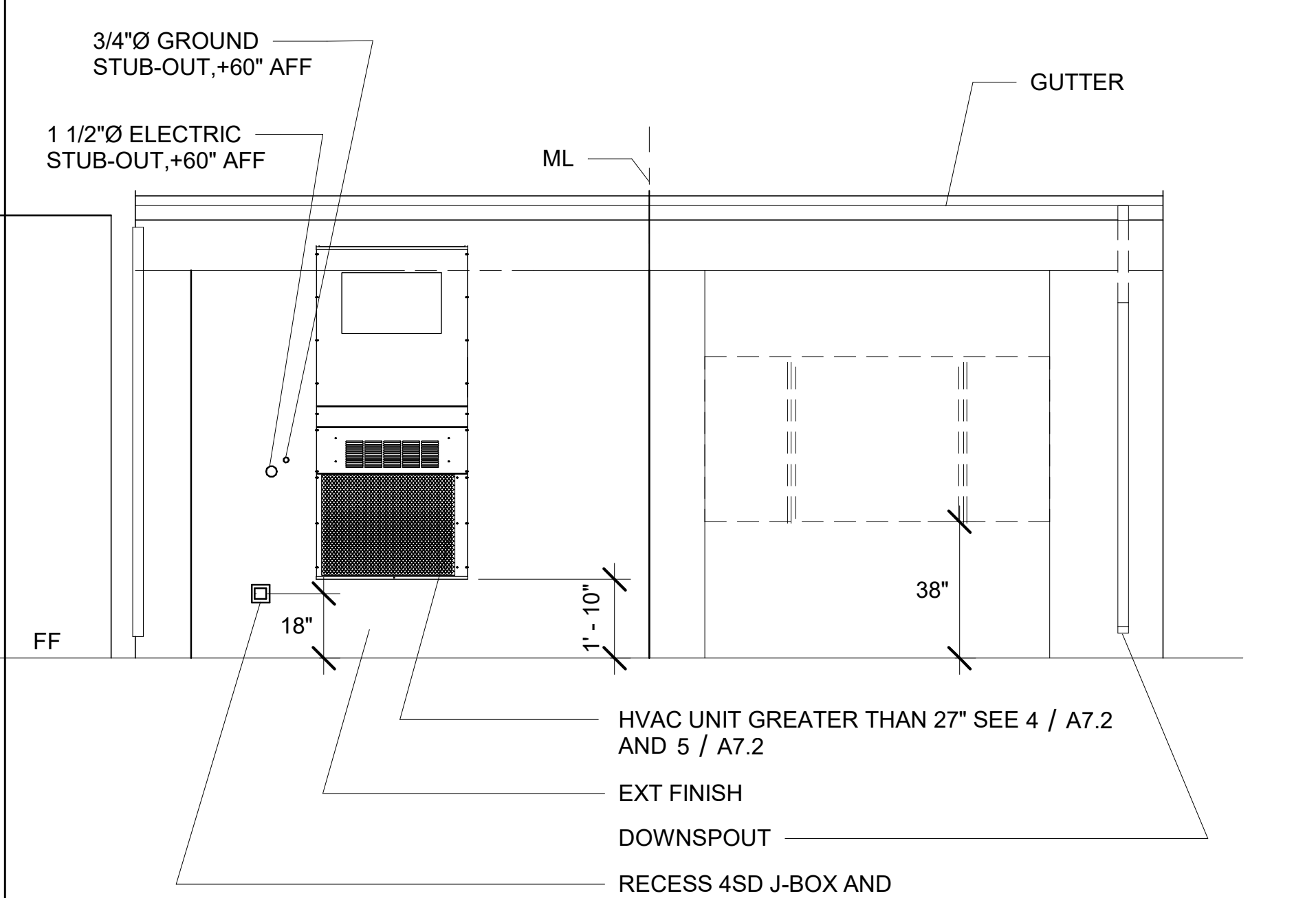
~~10 1/4" = 1'-0" 48x40 Rear Elevation (Dual/Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


GUTTER
3/4"Ø GROUND STUB-OUT,+60" AFF
1 1/2"Ø ELECTRIC STUB-OUT,+60" AFF
RECESS 4SD J-BOX AND COVER PLT
□ OPTIONAL DOOR (REMOVE "A" WINDOW AND REPLACE w/ "B" WINDOW (SEE A1.2 FOR WINDOW LOCATION)
38"
18"
1' - 10"
FF
ML
ML
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
EXT FINISH
DOWNSPOUT

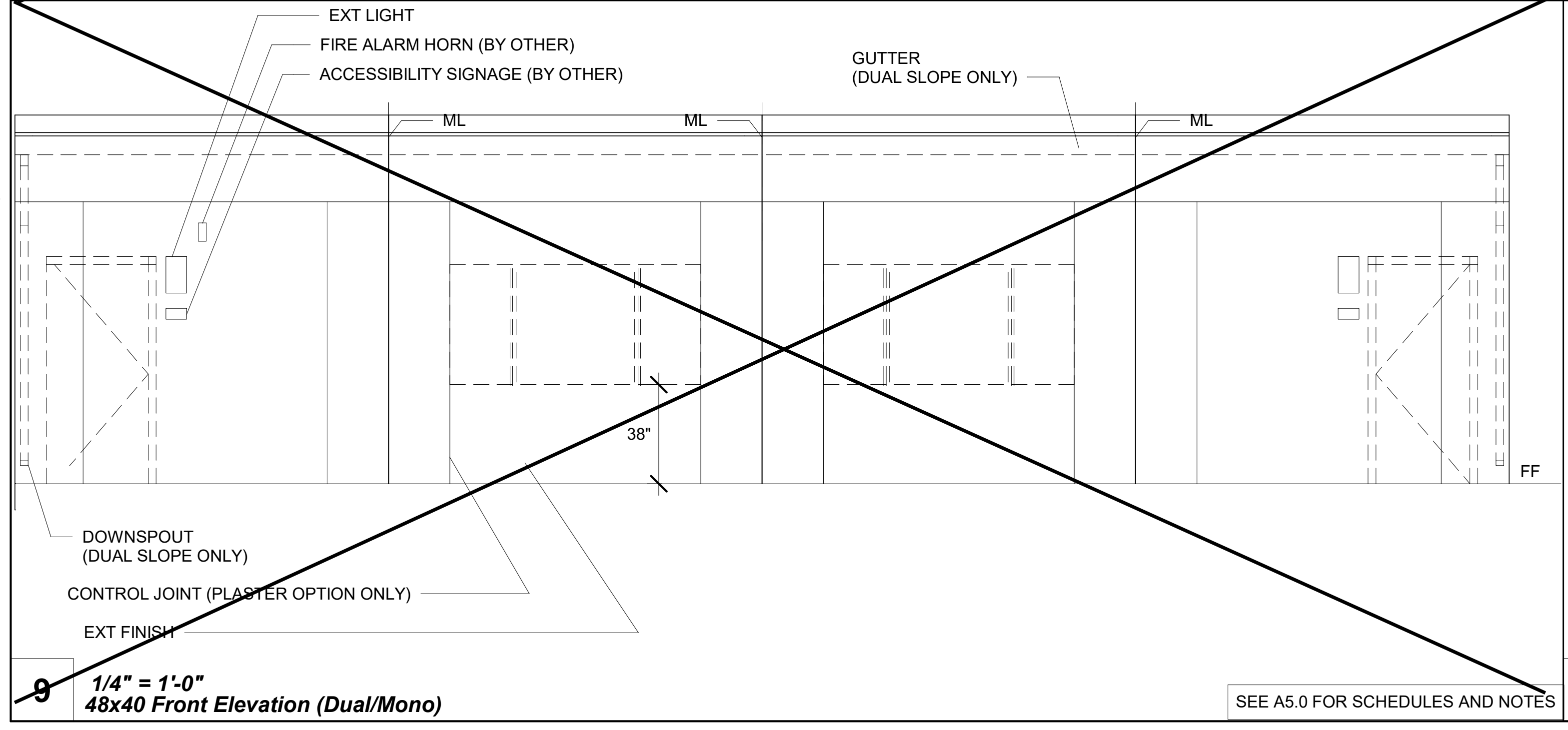
~~6 1/4" = 1'-0" 36x40 Rear Elevation (Dual/Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


3/4"Ø GROUND STUB-OUT,+60" AFF
1 1/2"Ø ELECTRIC STUB-OUT,+60" AFF
ML
GUTTER
18"
1' - 10"
38"
FF
HVAC UNIT GREATER THAN 27" SEE 4 / A7.2 AND 5 / A7.2
EXT FINISH
DOWNSPOUT
RECESS 4SD J-BOX AND COVER PLT

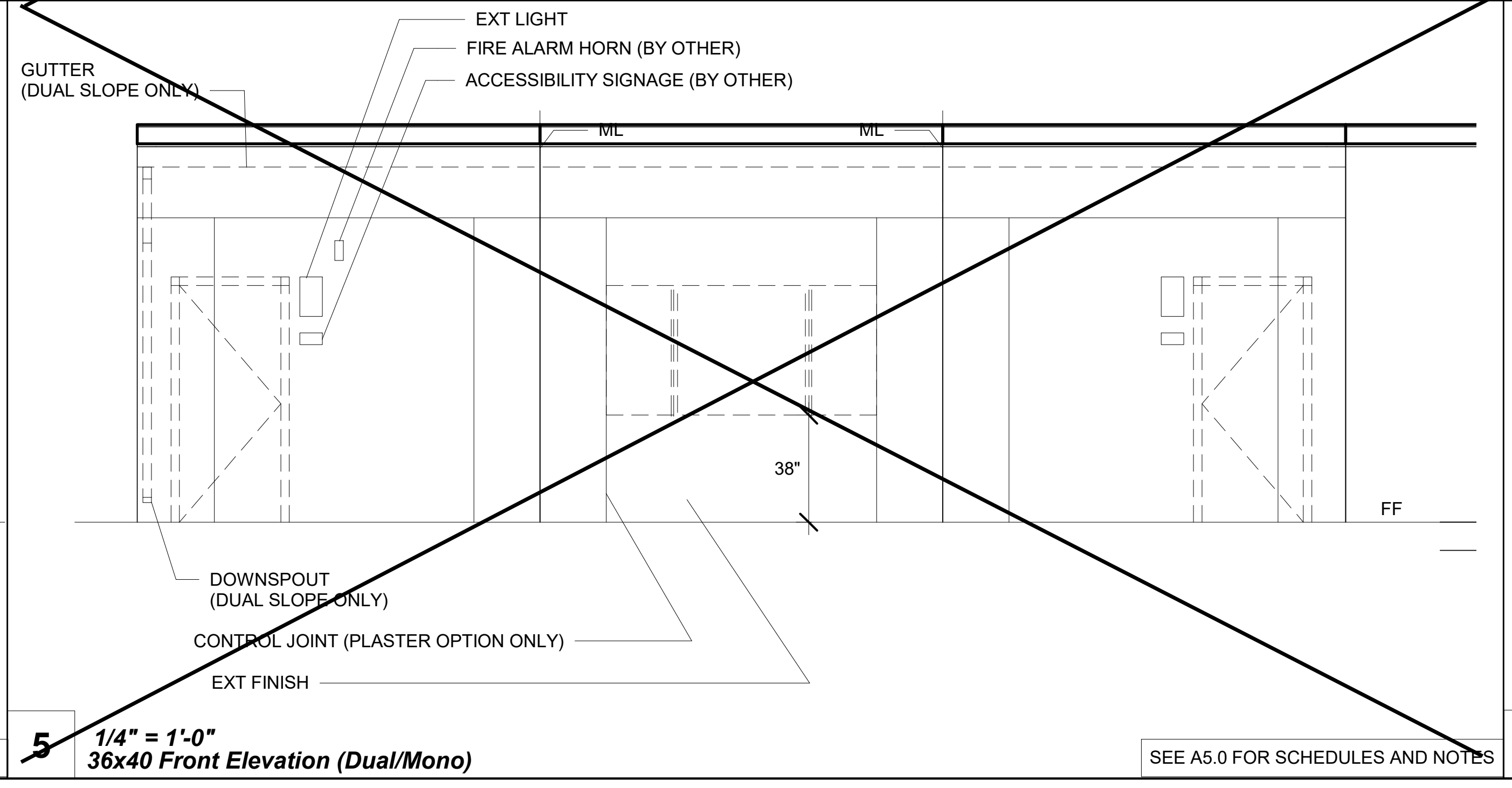
2 1/4" = 1'-0" 24x40 Rear Elevation (~~Dual~~/Mono)

SEE A5.0 FOR SCHEDULES AND NOTES


EXT LIGHT
FIRE ALARM HORN (BY OTHER)
ACCESSIBILITY SIGNAGE (BY OTHER)
GUTTER (DUAL SLOPE ONLY)
ML
ML
ML
38"
FF
DOWNSPOUT (DUAL SLOPE ONLY)
CONTROL JOINT (PLASTER OPTION ONLY)
EXT FINISH

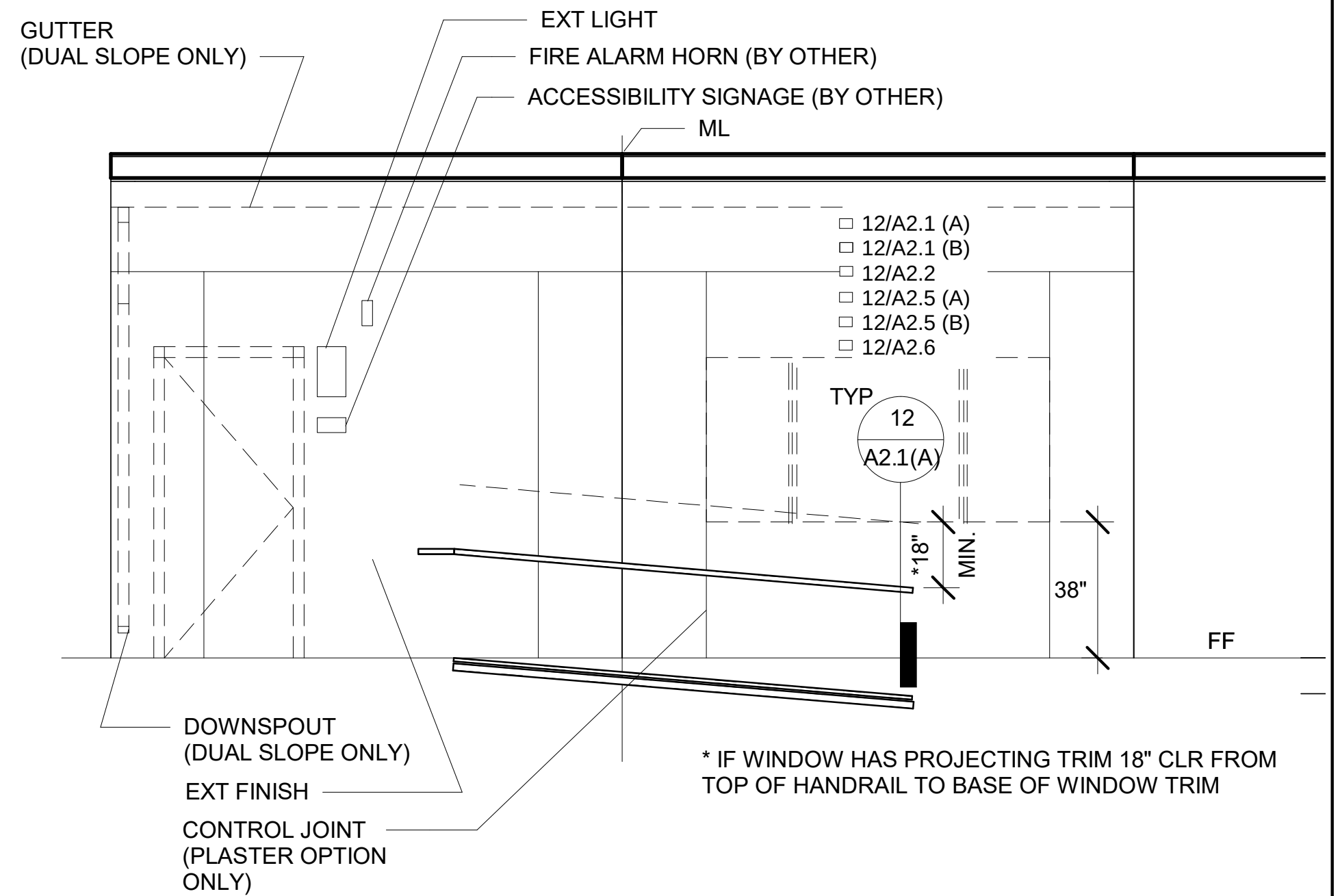
~~9 1/4" = 1'-0" 48x40 Front Elevation (Dual/Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~


EXT LIGHT
FIRE ALARM HORN (BY OTHER)
ACCESSIBILITY SIGNAGE (BY OTHER)
GUTTER (DUAL SLOPE ONLY)
ML
ML
38"
FF
DOWNSPOUT (DUAL SLOPE ONLY)
CONTROL JOINT (PLASTER OPTION ONLY)
EXT FINISH

~~5 1/4" = 1'-0" 36x40 Front Elevation (Dual/Mono)~~

~~SEE A5.0 FOR SCHEDULES AND NOTES~~



* IF WINDOW HAS PROJECTING TRIM 18" CLR FROM TOP OF HANDRAIL TO BASE OF WINDOW TRIM

1 1/4" = 1'-0" 24x40 Front Elevation (~~Dual~~/Mono)

SEE A5.0 FOR SCHEDULES AND NOTES

6/15/2021 11:51:44 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA

RST#22088

02/16/24

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

~~ORIGINAL PC STATE AGENCY APPROVAL~~

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
ENDWALL
ELEVATIONS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

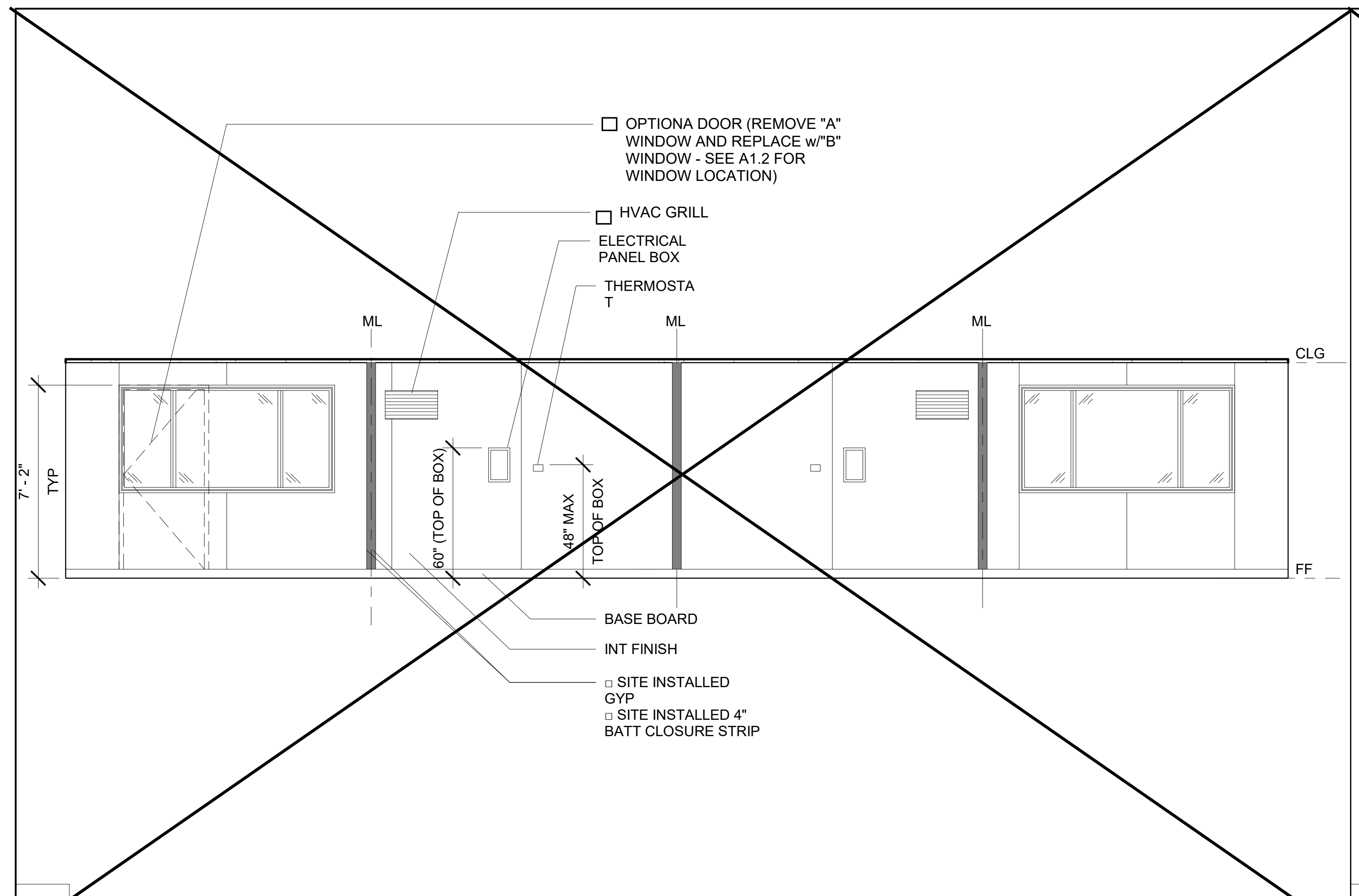
CHECKED BY
RH/RT

DATE

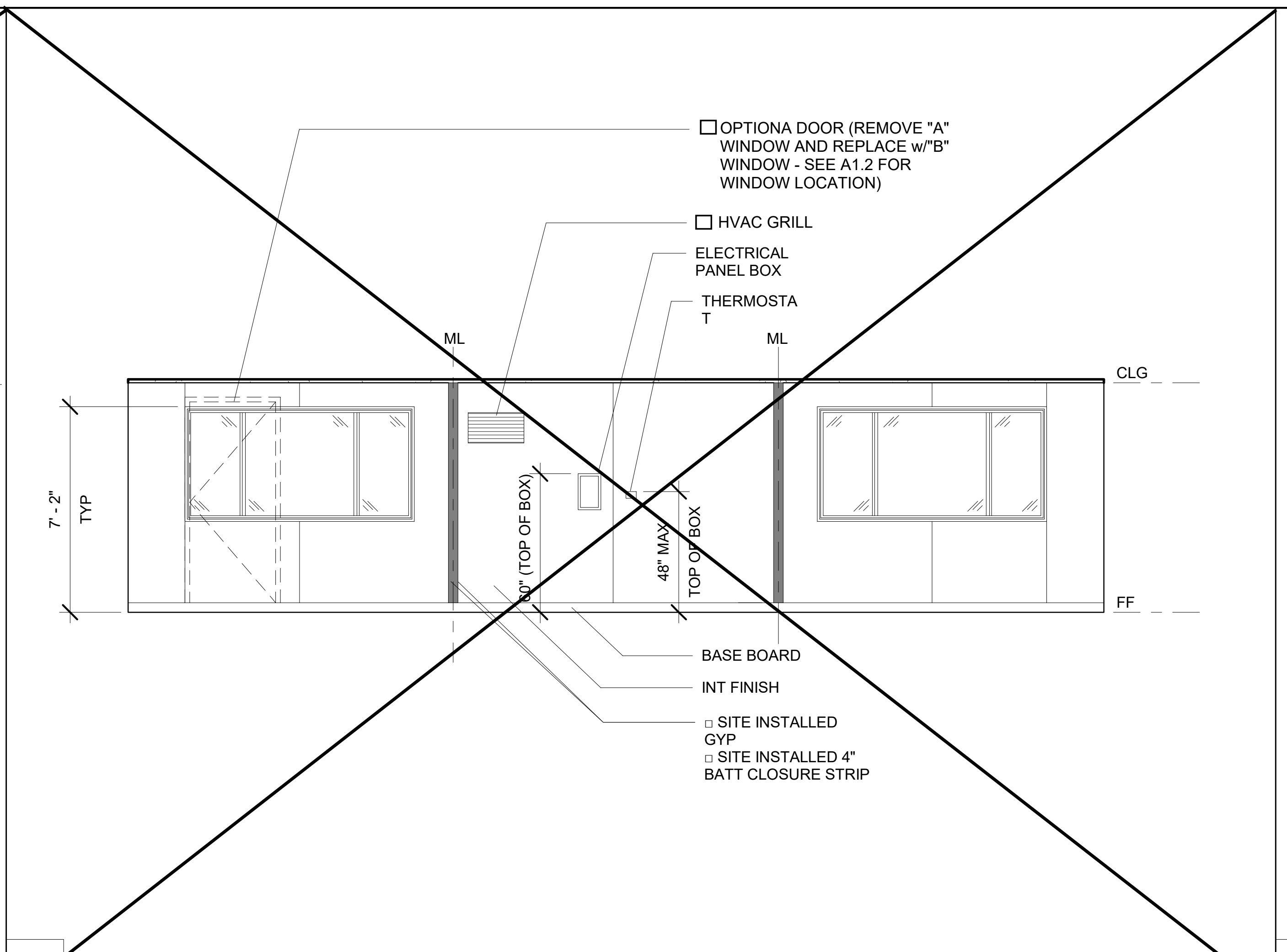
SHEET NO.
A5.1

SHEET OF

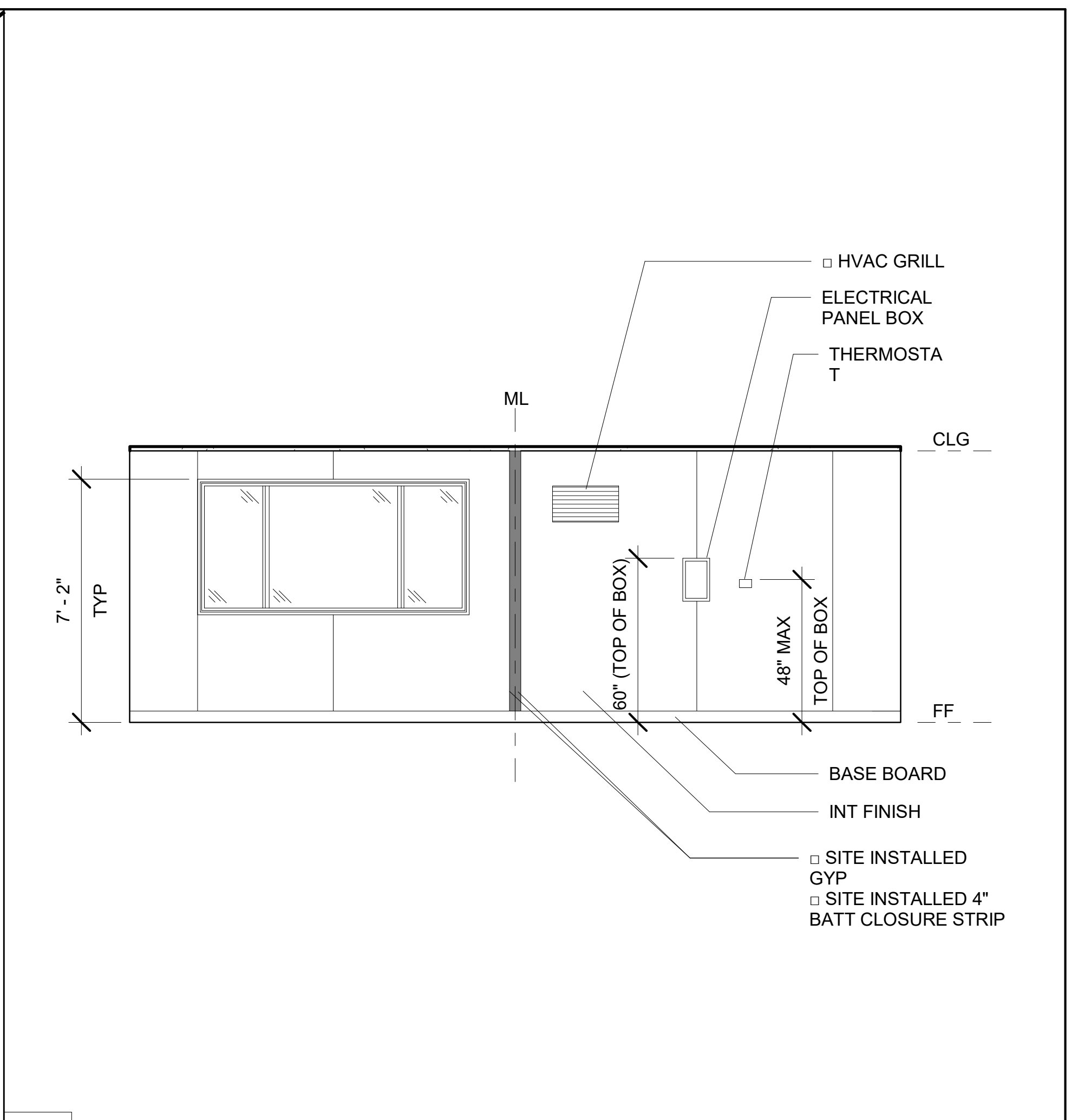
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



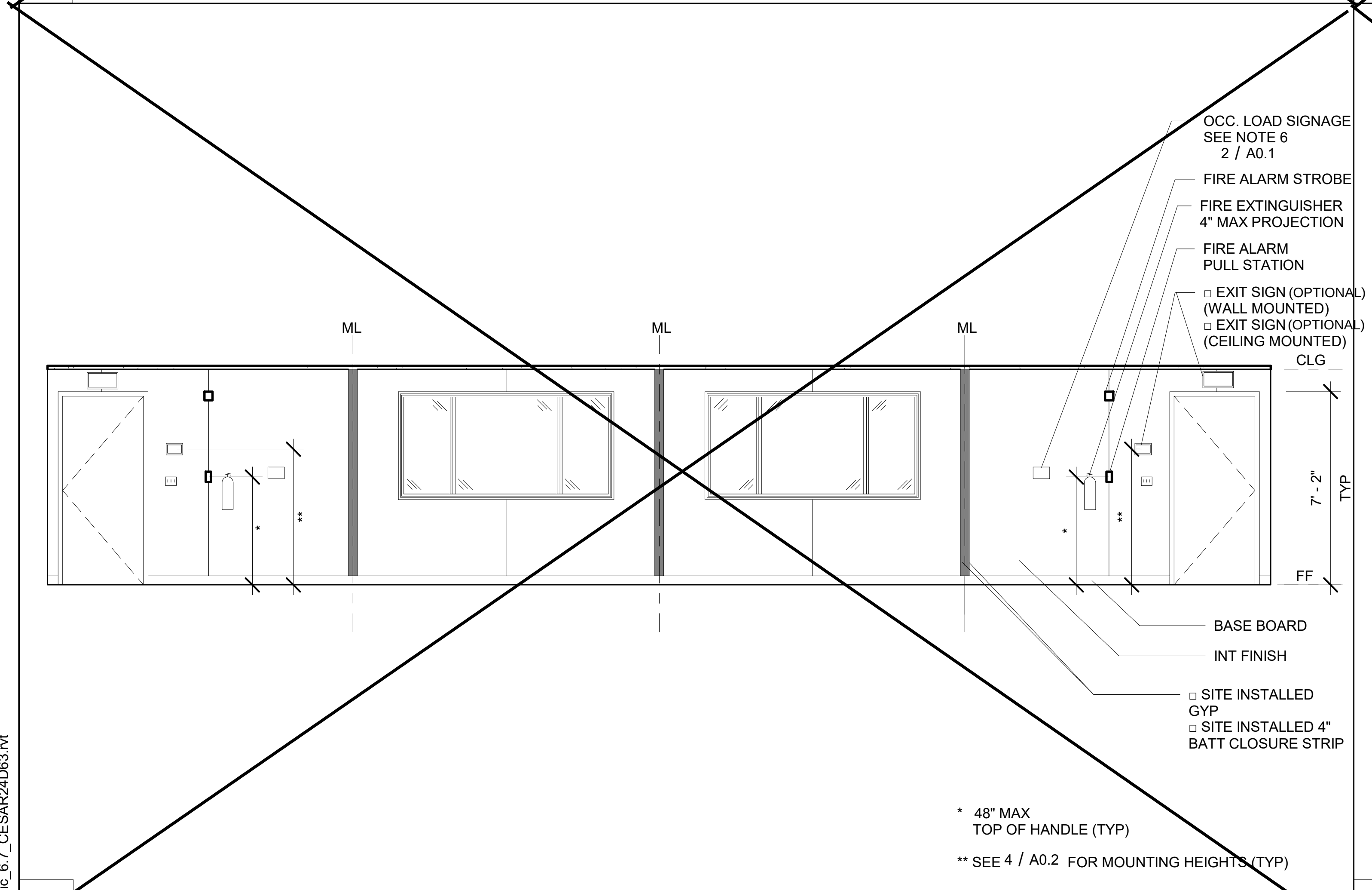
7 1/4" = 1'-0"
48x40 Rear Interior Elevation



6 1/4" = 1'-0"
36x40 Rear Interior Elevation

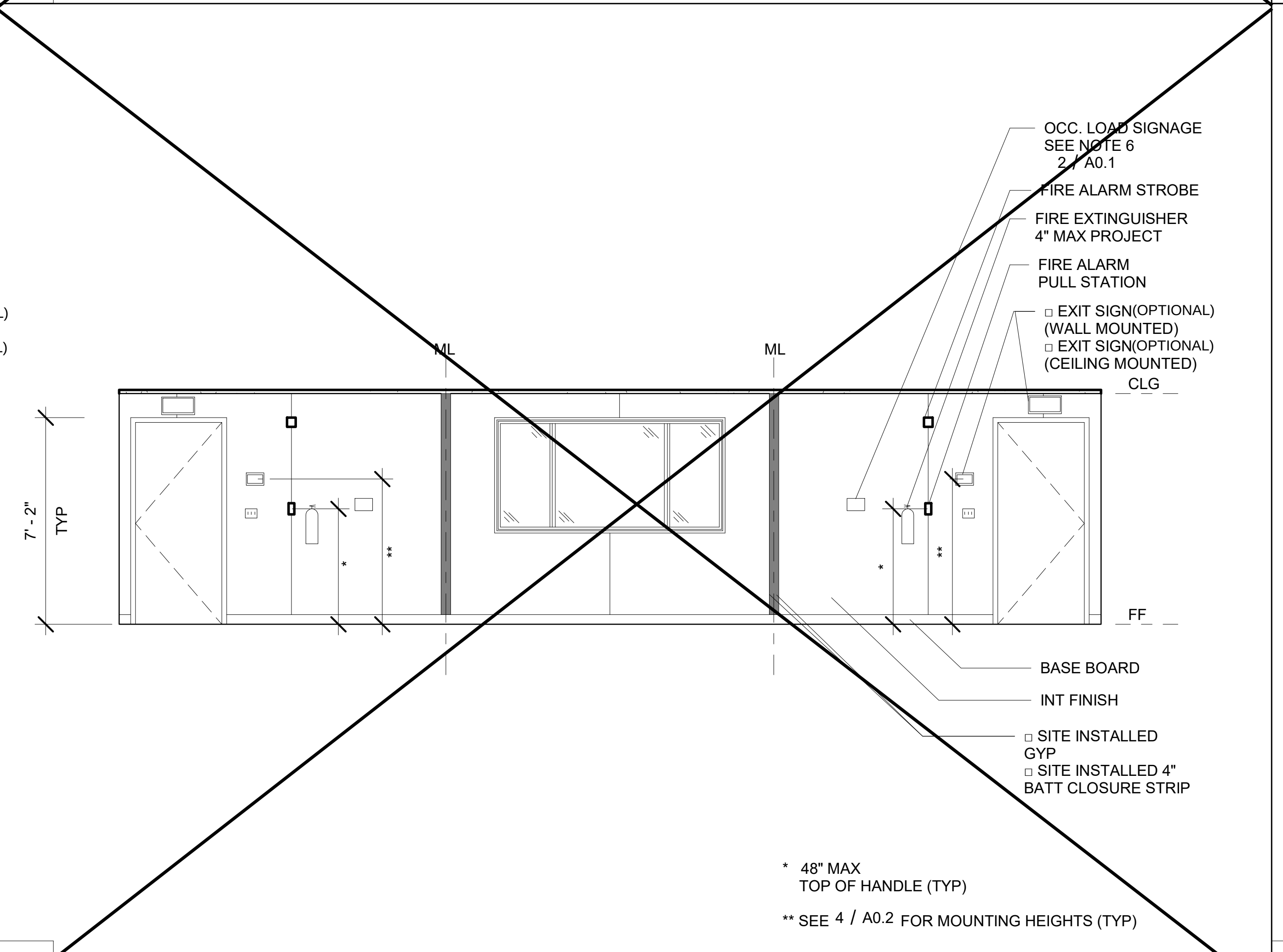


4 1/4" = 1'-0"
24x40 Rear Interior Elevation



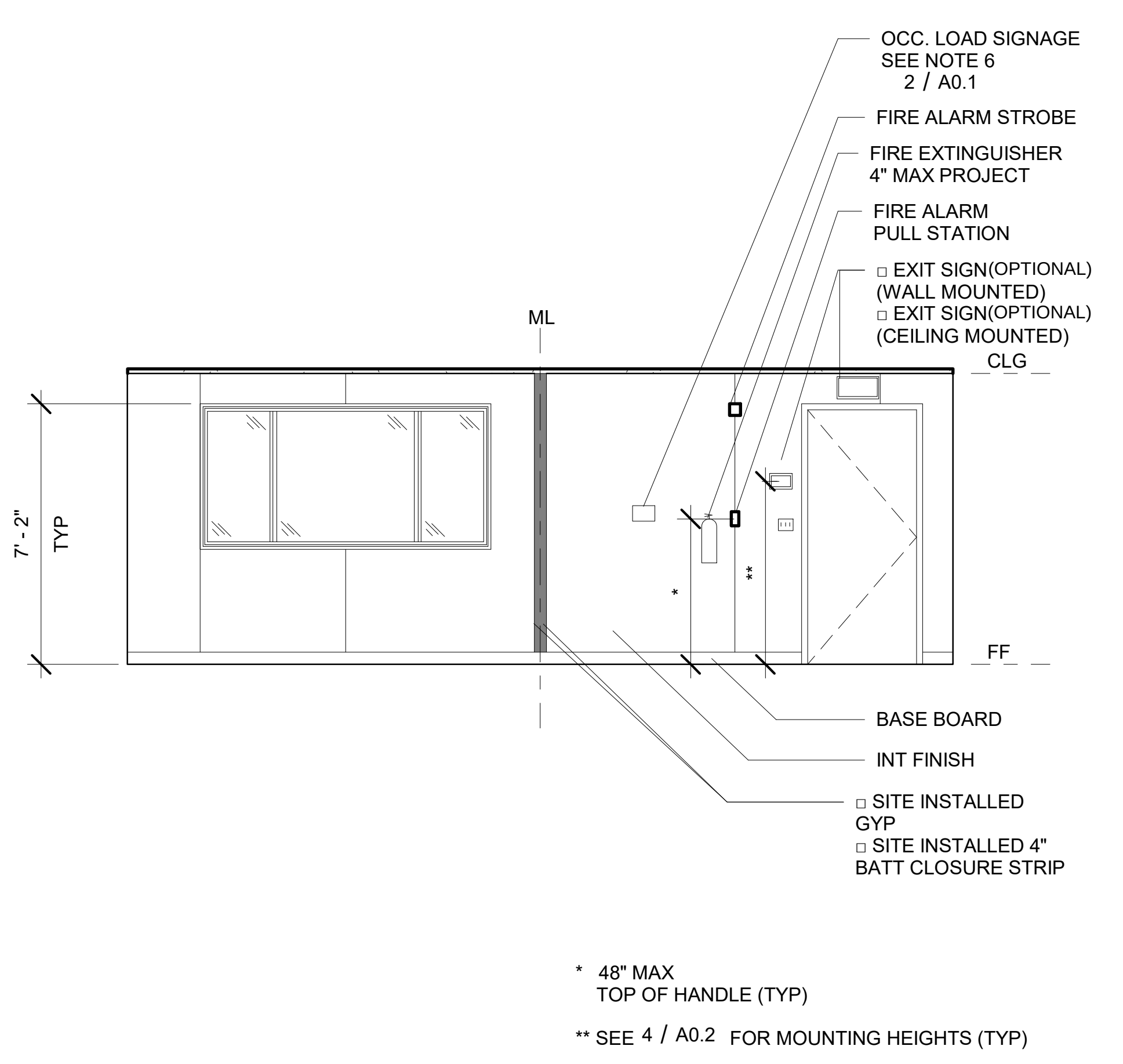
OCC. LOAD SIGNAGE SEE NOTE 6 2 / A0.1
FIRE ALARM STROBE
FIRE EXTINGUISHER 4" MAX PROJECTION
FIRE ALARM PULL STATION
□ EXIT SIGN(OPTIONAL) (WALL MOUNTED)
□ EXIT SIGN(OPTIONAL) (CEILING MOUNTED)
ML
ML
ML
CLG
7' - 2"
TYP
FF
BASE BOARD
INT FINISH
□ SITE INSTALLED GYP
□ SITE INSTALLED 4" BATT CLOSURE STRIP
* 48" MAX TOP OF HANDLE (TYP)
** SEE 4 / A0.2 FOR MOUNTING HEIGHTS (TYP)

8 1/4" = 1'-0"
48x40 Front Interior Elevation



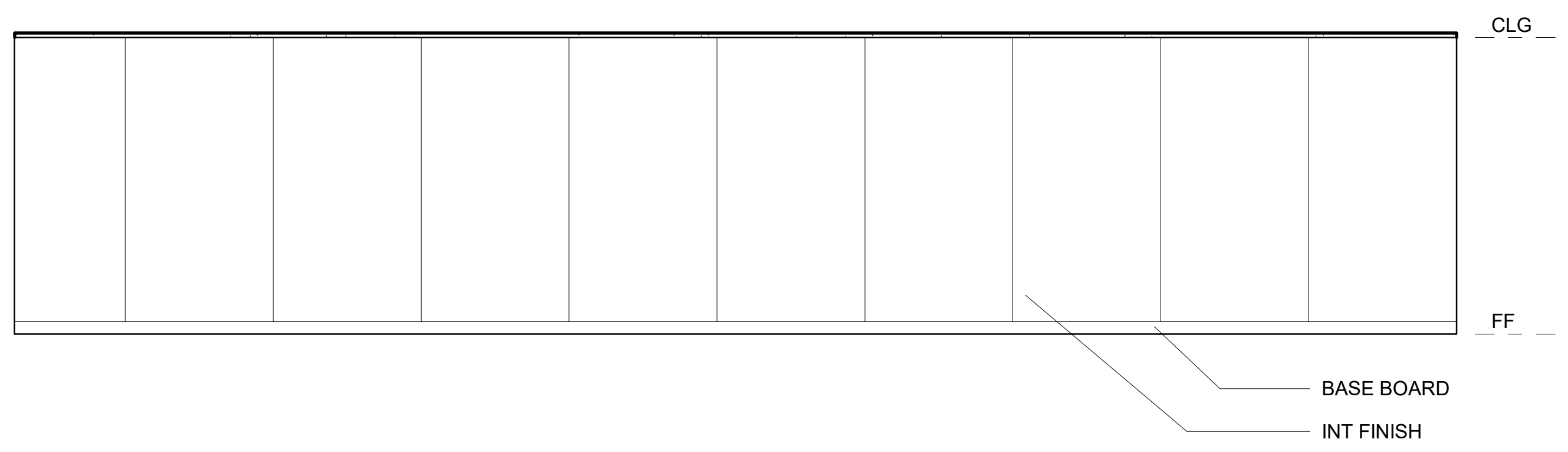
OCC. LOAD SIGNAGE SEE NOTE 6 2 / A0.1
FIRE ALARM STROBE
FIRE EXTINGUISHER 4" MAX PROJECT
FIRE ALARM PULL STATION
□ EXIT SIGN(OPTIONAL) (WALL MOUNTED)
□ EXIT SIGN(OPTIONAL) (CEILING MOUNTED)
ML
ML
CLG
7' - 2"
TYP
FF
BASE BOARD
INT FINISH
□ SITE INSTALLED GYP
□ SITE INSTALLED 4" BATT CLOSURE STRIP
* 48" MAX TOP OF HANDLE (TYP)
** SEE 4 / A0.2 FOR MOUNTING HEIGHTS (TYP)

5 1/4" = 1'-0"
36x40 Front Interior Elevation

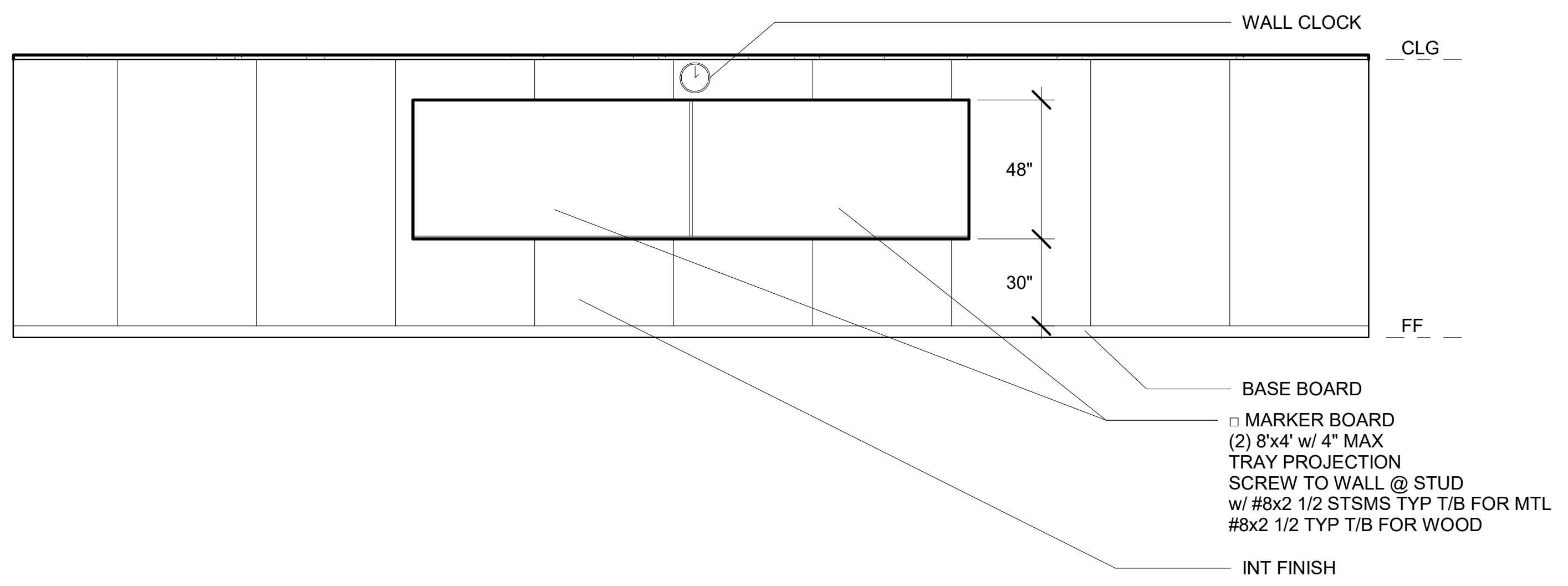


OCC. LOAD SIGNAGE SEE NOTE 6 2 / A0.1
FIRE ALARM STROBE
FIRE EXTINGUISHER 4" MAX PROJECT
FIRE ALARM PULL STATION
□ EXIT SIGN(OPTIONAL) (WALL MOUNTED)
□ EXIT SIGN(OPTIONAL) (CEILING MOUNTED)
ML
CLG
7' - 2"
TYP
FF
BASE BOARD
INT FINISH
□ SITE INSTALLED GYP
□ SITE INSTALLED 4" BATT CLOSURE STRIP
* 48" MAX TOP OF HANDLE (TYP)
** SEE 4 / A0.2 FOR MOUNTING HEIGHTS (TYP)

3 1/4" = 1'-0"
24x40 Front Interior Elevation



1 1/4" = 1'-0"
Interior Elevation (Left)



WALL CLOCK
CLG
48"
30"
FF
BASE BOARD
□ MARKER BOARD (2) 8'x4' w/ 4" MAX TRAY PROJECTION SCREW TO WALL @ STUD w/ #8x2 1/2 STSMS TYP T/B FOR MTL #8x2 1/2 TYP T/B FOR WOOD
INT FINISH

2 1/4" = 1'-0"
Interior Elevation (Right)

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~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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CLIENT

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1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
INTERIOR
ELEVATIONS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A5.2
SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PROJECT SPECIFIC STATE AGENCY APPROVAL

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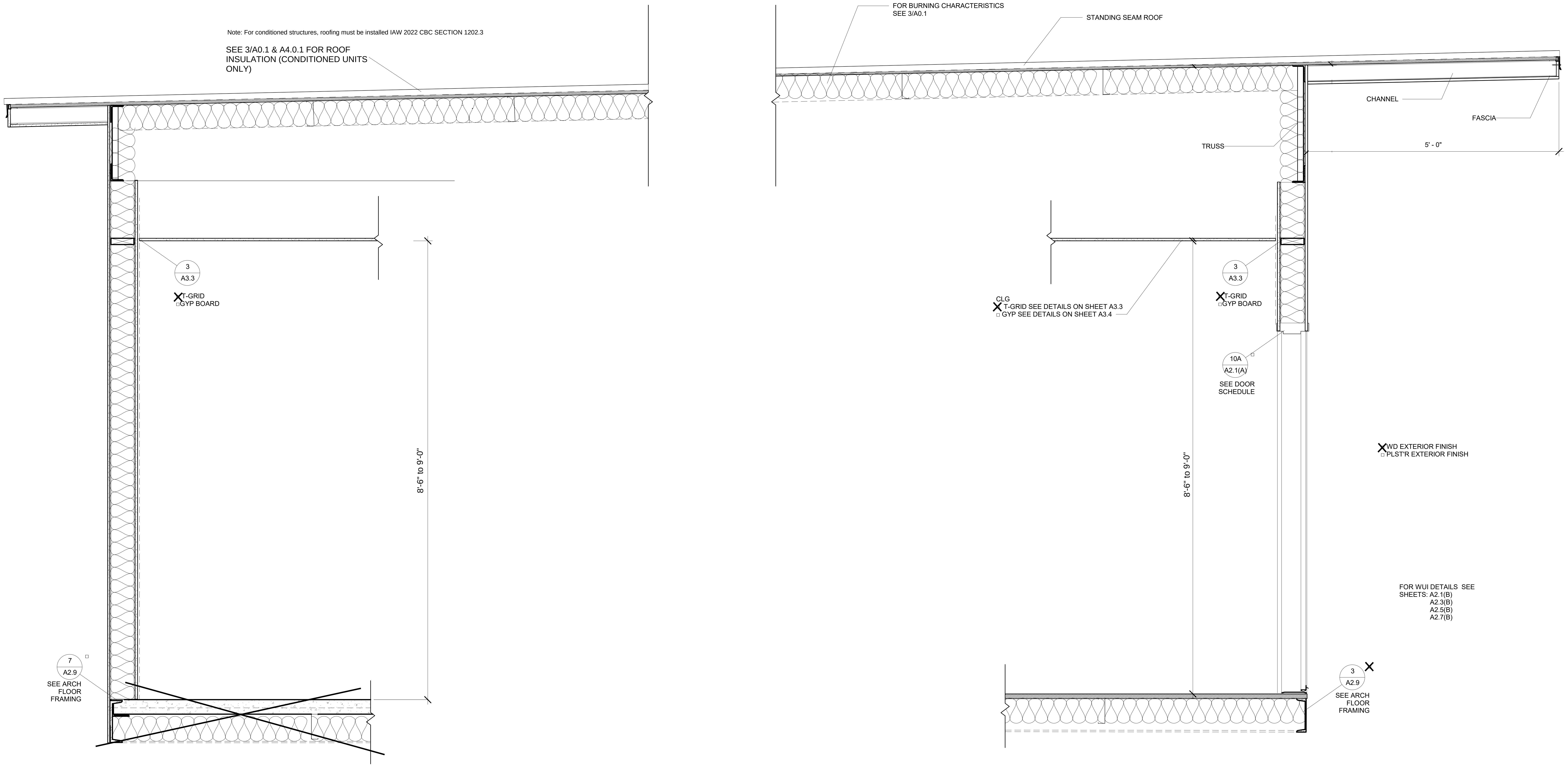
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~


Note: For conditioned structures, roofing must be installed IAW 2022 CBC SECTION 1202.3
SEE 3/A0.1 & A4.0.1 FOR ROOF INSULATION (CONDITIONED UNITS ONLY)
FOR BURNING CHARACTERISTICS SEE 3/A0.1
STANDING SEAM ROOF
CHANNEL
FASCIA
TRUSS
5' - 0"
3
A3.3
☒ T-GRID
☐ GYP BOARD
CLG
☒ T-GRID SEE DETAILS ON SHEET A3.3
☐ GYP SEE DETAILS ON SHEET A3.4
3
A3.3
☒ T-GRID
☐ GYP BOARD
10A
A2.1(A)
SEE DOOR SCHEDULE
☒ WD EXTERIOR FINISH
☐ PLST'R EXTERIOR FINISH
8'-6" to 9'-0"
8'-6" to 9'-0"
FOR WUI DETAILS SEE SHEETS: A2.1(B)
A2.3(B)
A2.5(B)
A2.7(B)
7
A2.9
SEE ARCH FLOOR FRAMING
3
A2.9
SEE ARCH FLOOR FRAMING

1 — *1" = 1'-0"*
Section (EPDM)2

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San Diego, CA 92127
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RST#22088
02/16/24

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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
SECTION - STANDING SEAM (MONO)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A6.0

SHEET OF

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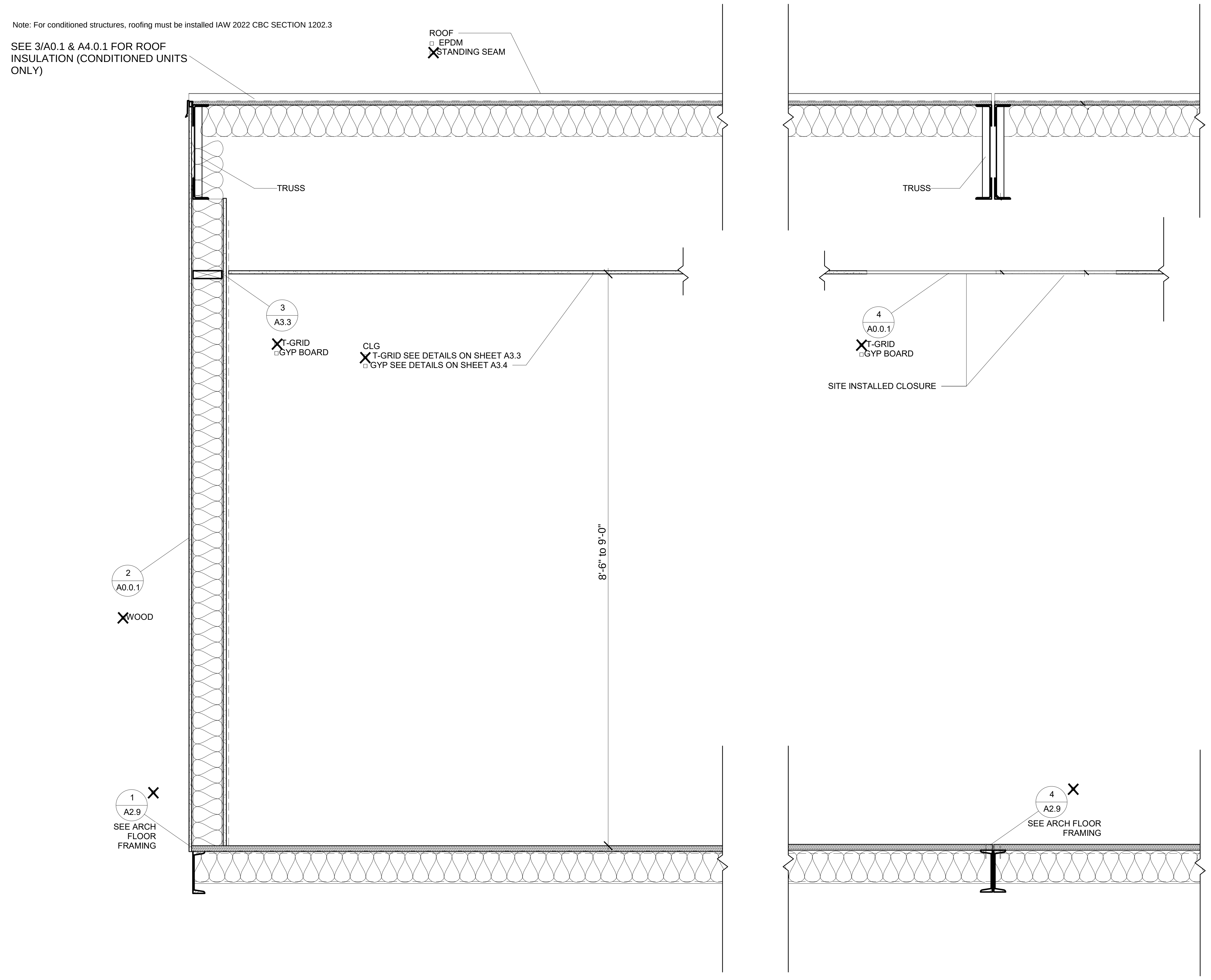
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

Note: For conditioned structures, roofing must be installed IAW 2022 CBC SECTION 1202.3

SEE 3/A0.1 & A4.0.1 FOR ROOF INSULATION (CONDITIONED UNITS ONLY)



FOR WUI DETAILS SEE
SHEETS: A2.1(B)
A2.3(B)
A2.5(B)
A2.7(B)

1 1" = 1'-0"
Latitudinal Section

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PROJECT SPECIFIC STATE AGENCY APPROVAL

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RST#22088

02/16/24

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~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
SECTION

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

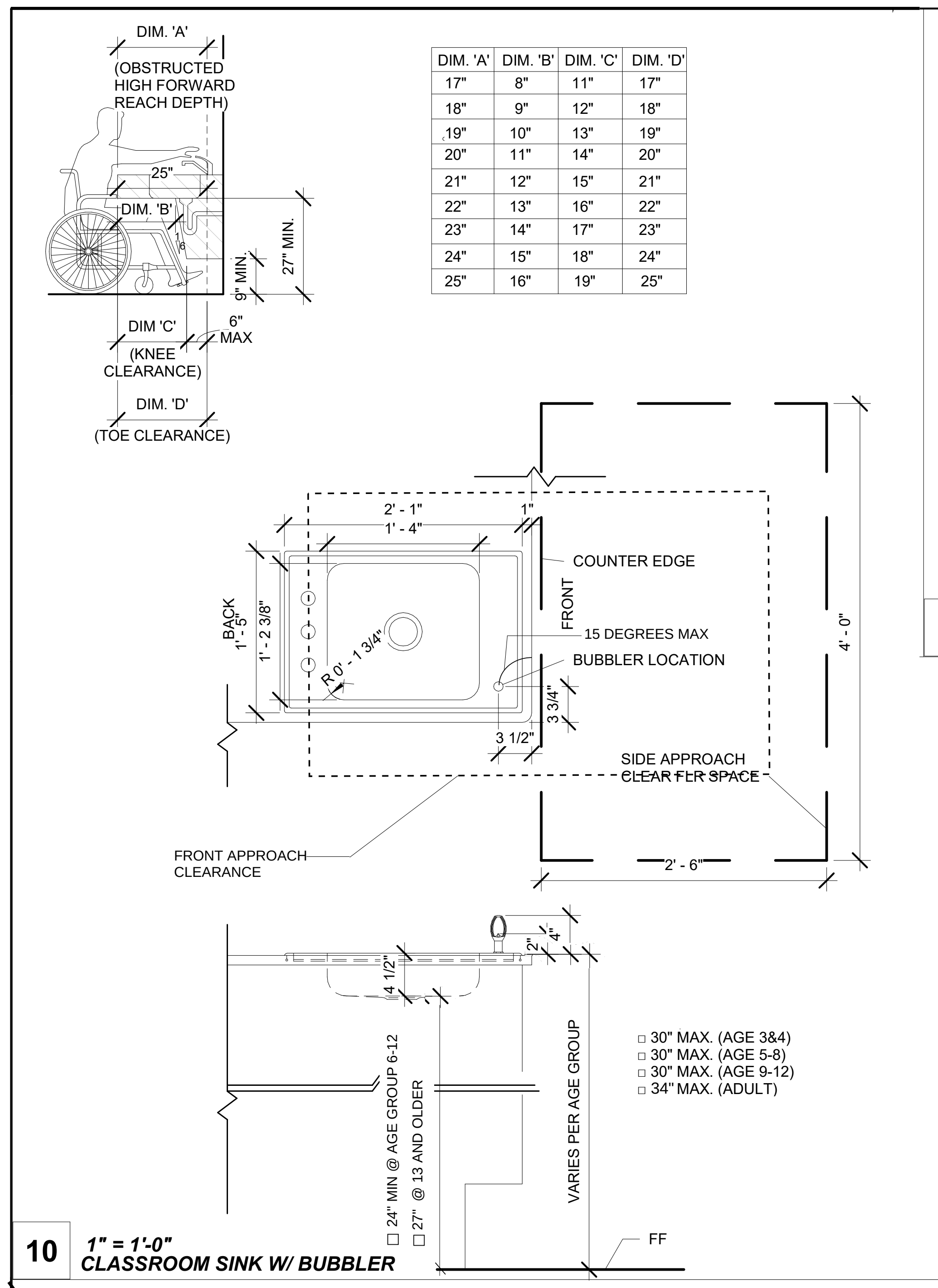
CHECKED BY
RH/RT

DATE

SHEET NO.
A6.2

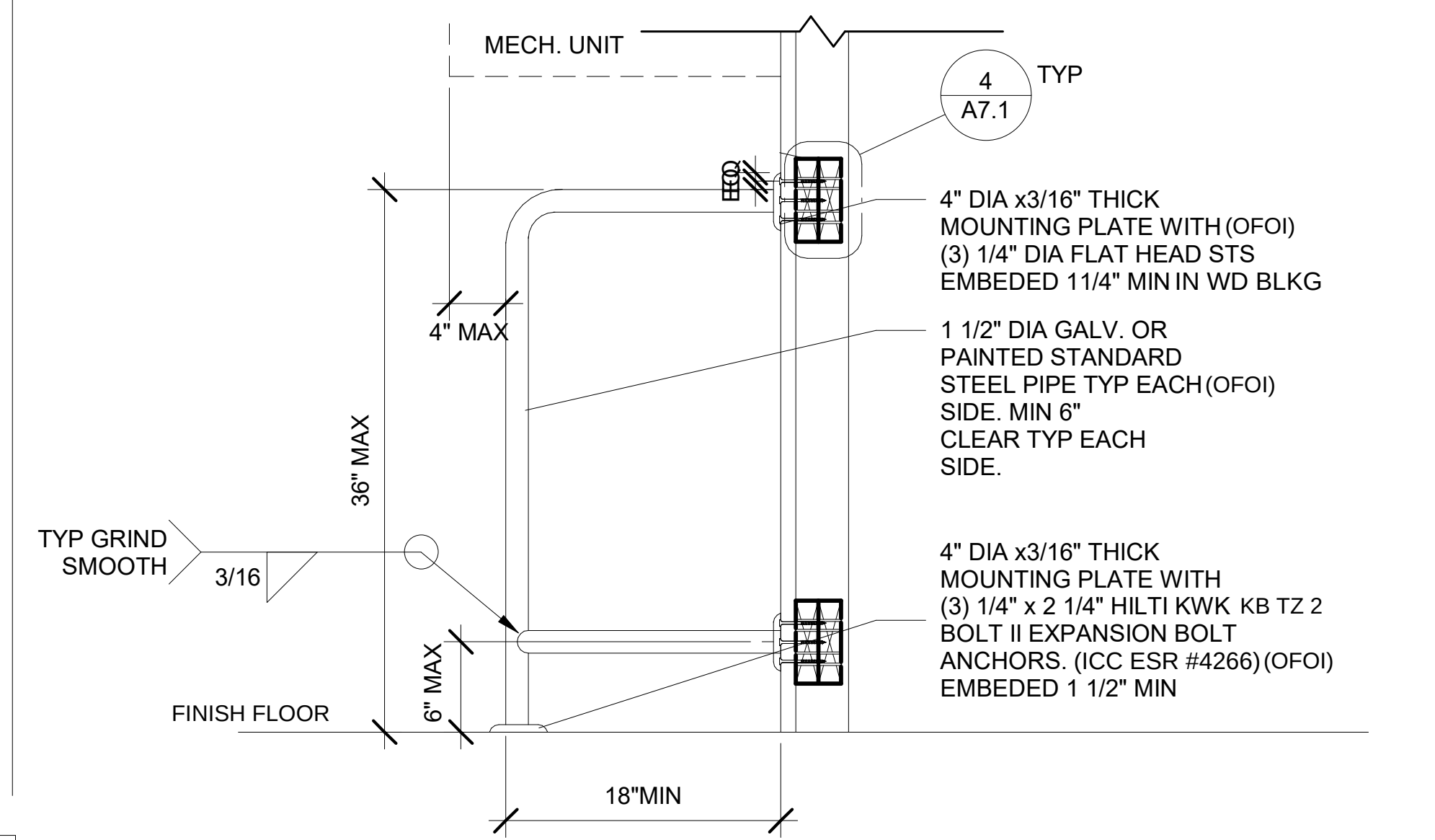
SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



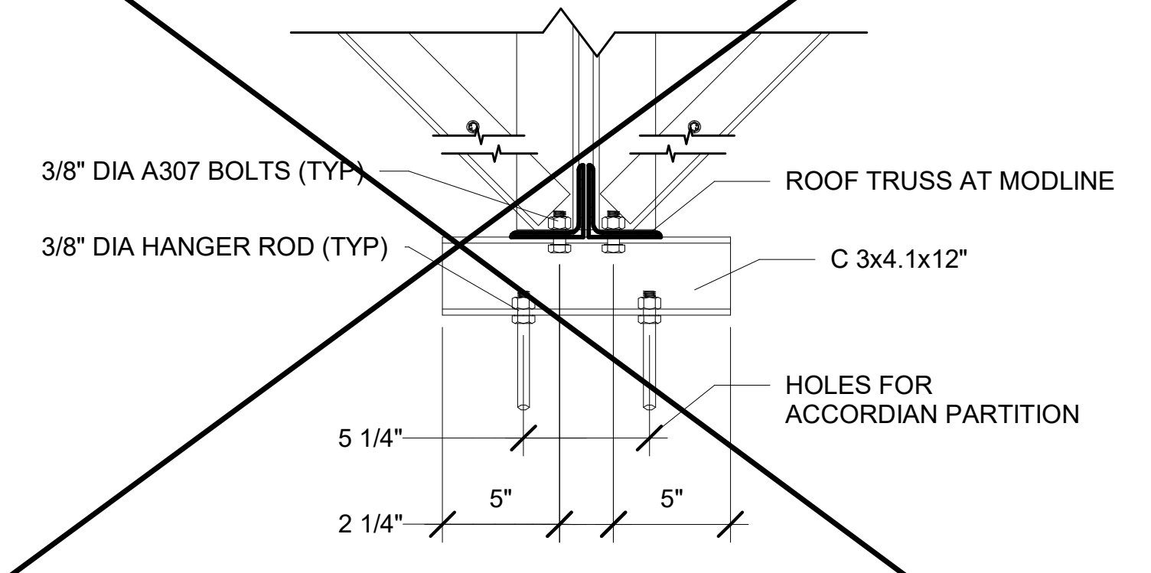
DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'
17"	8"	11"	17"
18"	9"	12"	18"
19"	10"	13"	19"
20"	11"	14"	20"
21"	12"	15"	21"
22"	13"	16"	22"
23"	14"	17"	23"
24"	15"	18"	24"
25"	16"	19"	25"

10 1" = 1'-0"
CLASSROOM SINK W/ BUBBLER



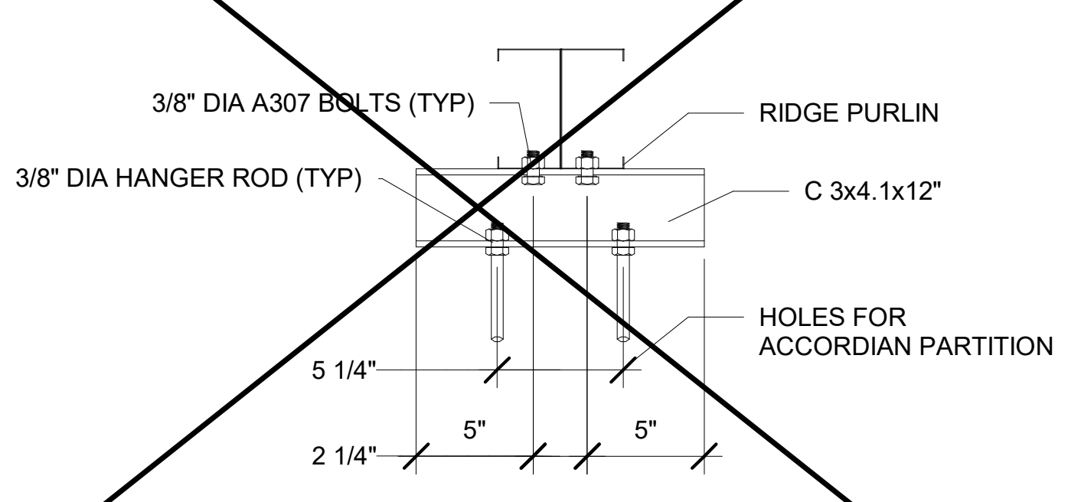
MECH. UNIT
4
A7.1
TYP
4" DIA x3/16" THICK MOUNTING PLATE WITH (OFOI) (3) 1/4" DIA FLAT HEAD STS EMBEDED 11/4" MIN IN WD BLKG
4" MAX
1 1/2" DIA GALV. OR PAINTED STANDARD STEEL PIPE TYP EACH (OFOI) SIDE. MIN 6" CLEAR TYP EACH SIDE.
36" MAX
TYP GRIND SMOOTH
3/16
4" DIA x3/16" THICK MOUNTING PLATE WITH (3) 1/4" x 2 1/4" HILTI KWK KB TZ 2 BOLT II EXPANSION BOLT ANCHORS. (ICC ESR #4266) (OFOI) EMBEDED 1 1/2" MIN
6" MAX
FINISH FLOOR
18"MIN

5 1" = 1'-0"
HVAC BARRIER at wood stud



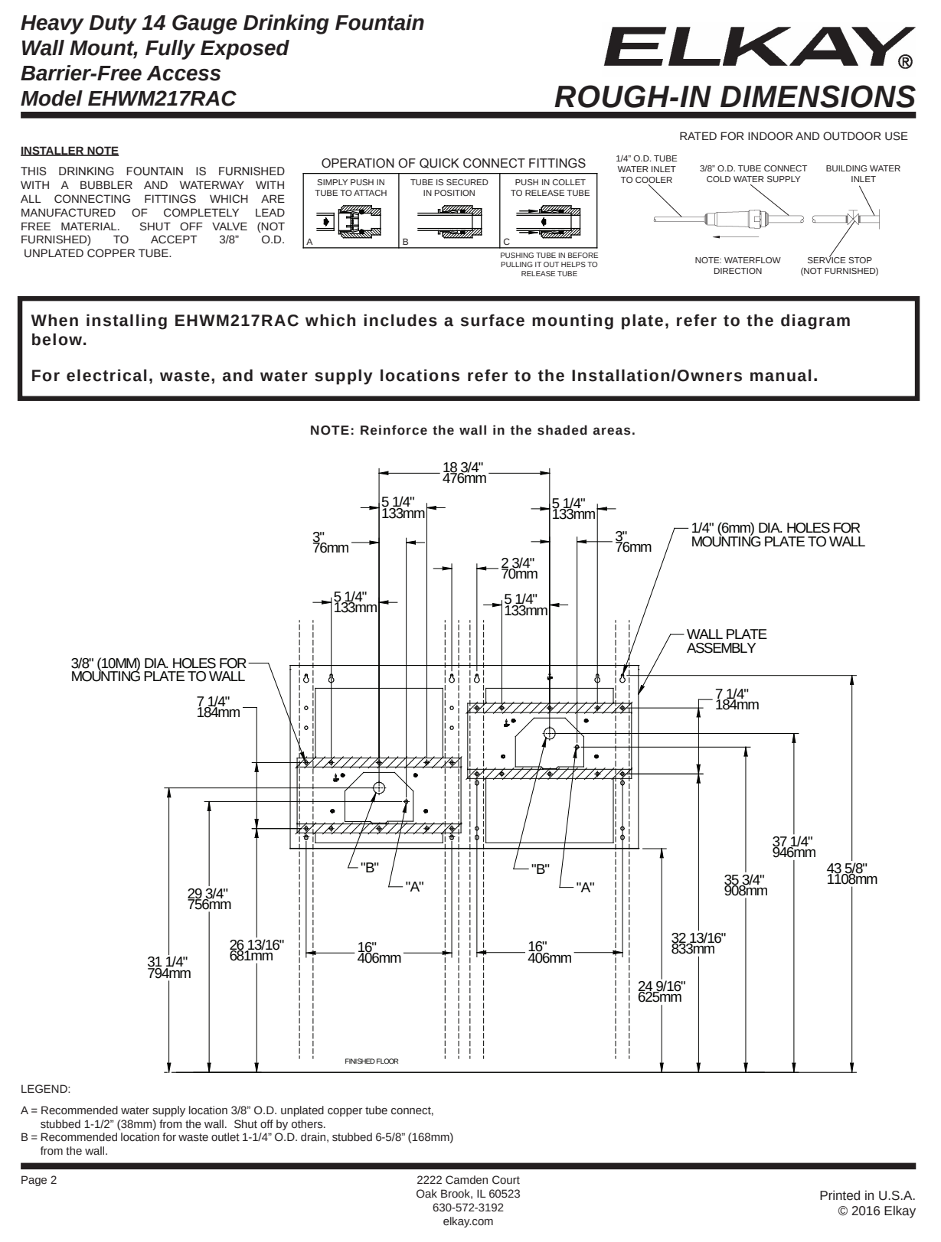
3/8" DIA A307 BOLTS (TYP)
3/8" DIA HANGER ROD (TYP)
ROOF TRUSS AT MODLINE
C 3x4.1x12"
HOLES FOR ACCORDIAN PARTITION
5 1/4"
2 1/4"
5"
5"

2 1 1/2" = 1'-0"
ACCORDIAN DOOR - TOP CONN AT TRUSS



3/8" DIA A307 BOLTS (TYP)
3/8" DIA HANGER ROD (TYP)
RIDGE PURLIN
C 3x4.1x12"
HOLES FOR ACCORDIAN PARTITION
5 1/4"
2 1/4"
5"
5"

1 1 1/2" = 1'-0"
ACCORDIAN DOOR - TOP CONN AT PURLIN



Heavy Duty 14 Gauge Drinking Fountain
Wall Mount, Fully Exposed
Barrier-Free Access
Model EHWM217RAC

ELKAY®
ROUGH-IN DIMENSIONS

RATED FOR INDOOR AND OUTDOOR USE

INSTALLER NOTE

THIS DRINKING FOUNTAIN IS FURNISHED WITH A BUBBLER AND WATERWAY WITH ALL CONNECTING FITTINGS WHICH ARE MANUFACTURED OF COMPLETELY LEAD FREE MATERIAL. SHUT OFF VALVE (NOT FURNISHED) TO ACCEPT 3/8" O.D. UNPLATED COPPER TUBE.

OPERATION OF QUICK CONNECT FITTINGS

A	B	C
SIMPLY PUSH IN TUBE TO ATTACH	TUBE IS SECURED IN POSITION	PUSH IN COLLET TO RELEASE TUBE

PUSHING TUBE IN BEFORE PULLING IT OUT HELPS TO RELEASE TUBE

1/4" O.D. TUBE WATER INLET TO COOLER
3/8" O.D. TUBE CONNECT COLD WATER SUPPLY
BUILDING WATER INLET
NOTE: WATERFLOW DIRECTION
SERVICE STOP (NOT FURNISHED)

When installing EHWM217RAC which includes a surface mounting plate, refer to the diagram below.

For electrical, waste, and water supply locations refer to the Installation/Owners manual.

NOTE: Reinforce the wall in the shaded areas.

LEGEND:

A = Recommended water supply location 3/8" O.D. unplated copper tube connect, stubbed 1-1/2" (38mm) from the wall. Shut off by others.
B = Recommended location for waste outlet 1-1/4" O.D. drain, stubbed 6-5/8" (168mm) from the wall.

Page 2

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Oak Brook, IL 60523
630-572-3192
elkay.com

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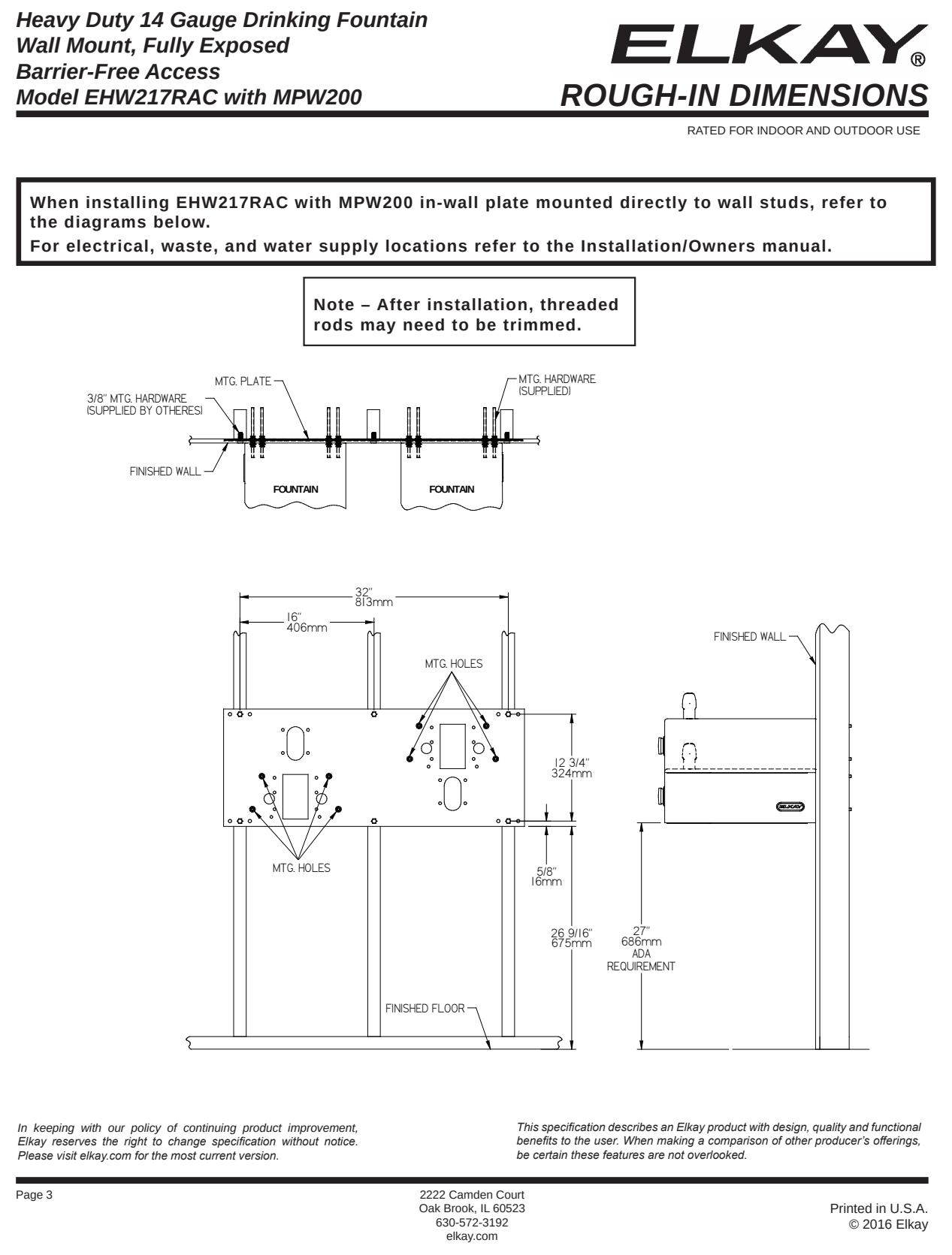

Heavy Duty 14 Gauge Drinking Fountain
Wall Mount, Fully Exposed
Barrier-Free Access
Model EHW217RAC with MPW200

ELKAY®
ROUGH-IN DIMENSIONS

RATED FOR INDOOR AND OUTDOOR USE

When installing EHW217RAC with MPW200 in-wall plate mounted directly to wall studs, refer to the diagrams below.
For electrical, waste, and water supply locations refer to the Installation/Owners manual.

Note – After installation, threaded rods may need to be trimmed.

In keeping with our policy of continuing product improvement, Elkay reserves the right to change specification without notice. Please visit elkay.com for the most current version.

This specification describes an Elkay product with design, quality and functional benefits to the user. When making a comparison of other producer's offerings, be certain these features are not overlooked.

Page 3

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Oak Brook, IL 60523
630-572-3192
elkay.com

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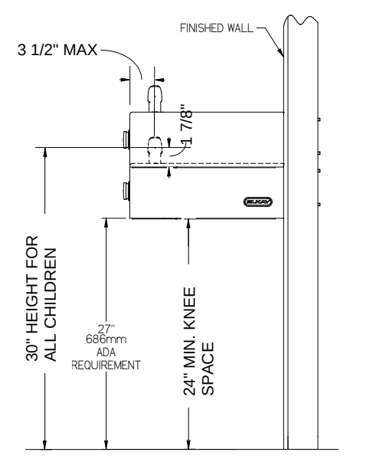
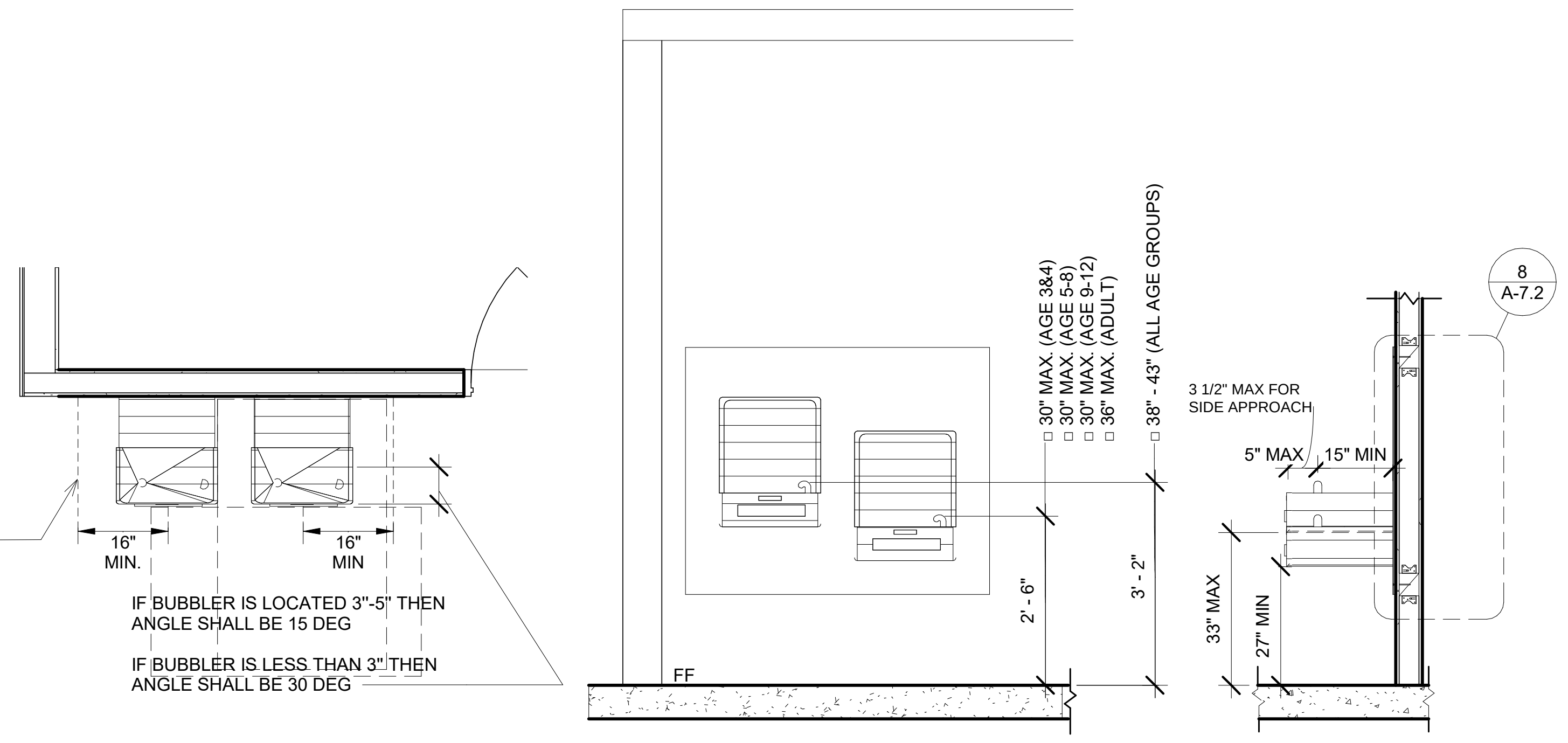
NOTES FOR THIS OWNER FURMINSHED OWNER INSTALLED DRINKING FOUNTAIN:

1. FINAL PRODUCT SELECTION IS OWNER RESPONSIBILITY.
2. MOUNTING REQUIREMENTS WILL VARY BY MANUFACTURER'S INSTALLATION INSTRUCTIONS
3. THE ELKAY SHEETS PROVIDED IN THIS SET ARE FOR EXAMPLE PURPOSES ONLY.
4. FINAL PRODUCT SELECTION MUST BE SUBMITTED ALONG WITH SITE SPECIFIC CONSTRUCTION APPLICATION FOR REVIEW
5. MOUNTING HARDWARE SHALL PROVIDE A MINIMUM OF 2" PENETRATION INTO WOOD FRAMING
.



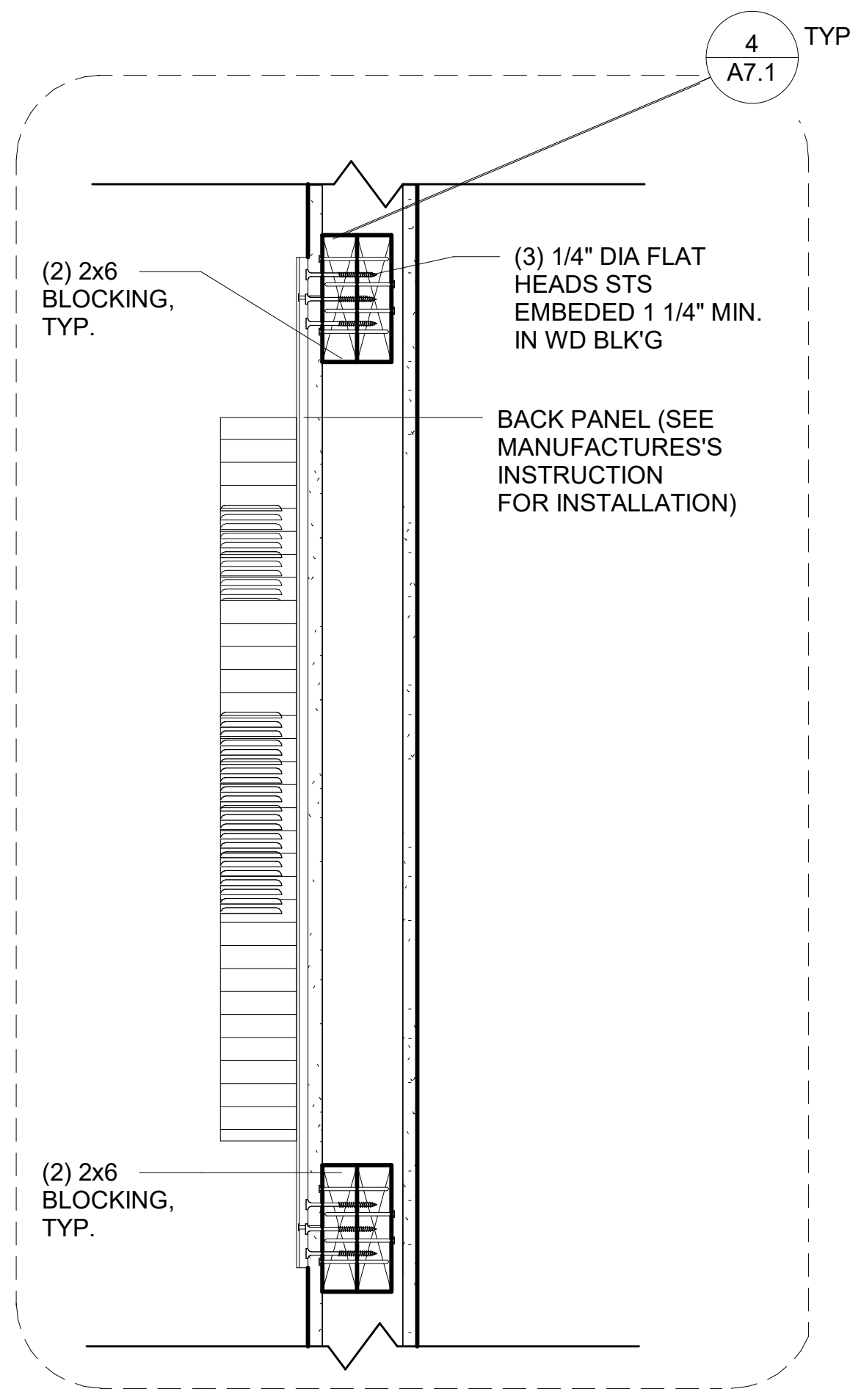
6 NTS
ELKAY EXAMPLE OF MOUNTING ELEVATION

11B-602.6 WATER FLOW. THE SPOUT PROVIDE A FLOW OF WATER 4 INCHES (102mm) high minimum and shall be located 5 inches (127 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (76 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (76 mm) and inches (127 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum



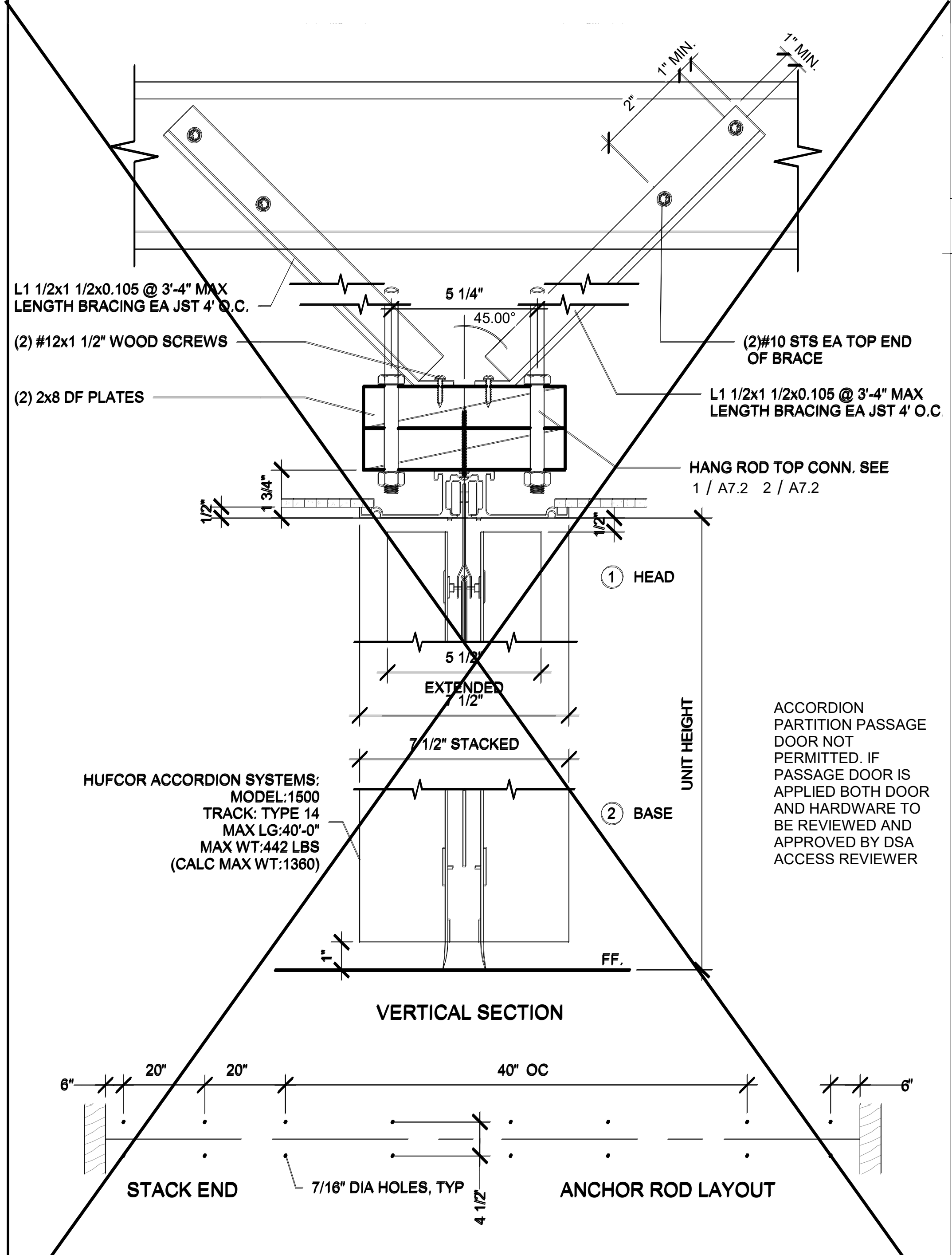
BARRIER TYP EACH SIDE OF FOUNTAIN SEE DETAILS 4 AND 5 THIS SHEET
BARRIER TO BE 24" FROM DOOR PULL SIDE
16" MIN.
16" MIN
IF BUBBLER IS LOCATED 3"-5" THEN ANGLE SHALL BE 15 DEG
IF BUBBLER IS LESS THAN 3" THEN ANGLE SHALL BE 30 DEG
FF
☐ 30" MAX. (AGE 3&4)
☐ 30" MAX. (AGE 5-8)
☐ 30" MAX. (AGE 9-12)
☐ 36" MAX. (ADULT)
☐ 38" - 43" (ALL AGE GROUPS)
2' - 6"
3' - 2"
8
A-7.2
3 1/2" MAX FOR SIDE APPROACH
5" MAX
15" MIN
33" MAX
27" MIN

7 1/2" = 1'-0"
Drinking Fountain Blocking Detail wood stud



4
A7.1
TYP
(2) 2x6 BLOCKING, TYP.
(3) 1/4" DIA FLAT HEADS STS EMBEDED 1 1/4" MIN. IN WD BLK'G
BACK PANEL (SEE MANUFACTURES'S INSTRUCTION FOR INSTALLATION)
(2) 2x6 BLOCKING, TYP.

8 1 1/2" = 1'-0"
Section Cut 1A/A-5.2



1" MIN.
1" MIN.
2"
L1 1/2x1 1/2x0.105 @ 3'-4" MAX LENGTH BRACING EA JST 4' O.C.
5 1/4"
45.00°
(2) #12x1 1/2" WOOD SCREWS
(2)#10 STS EA TOP END OF BRACE
(2) 2x8 DF PLATES
L1 1/2x1 1/2x0.105 @ 3'-4" MAX LENGTH BRACING EA JST 4' O.C.
HANG ROD TOP CONN. SEE 1 / A7.2 2 / A7.2
1 3/4"
1/2"
1/2"
① HEAD
5 1/2"
EXTENDED
7 1/2"
7 1/2" STACKED
UNIT HEIGHT
HUFCOR ACCORDION SYSTEMS: MODEL:1500 TRACK: TYPE 14 MAX LG:40'-0" MAX WT:442 LBS (CALC MAX WT:1360)
② BASE
1"
FF.
VERTICAL SECTION
6"
20"
20"
40" OC
6"
STACK END
7/16" DIA HOLES, TYP
4 1/2"
ANCHOR ROD LAYOUT

ACCORDION PARTITION PASSAGE DOOR NOT PERMITTED. IF PASSAGE DOOR IS APPLIED BOTH DOOR AND HARDWARE TO BE REVIEWED AND APPROVED BY DSA ACCESS REVIEWER

3 3" = 1'-0"
OPTION FOR ACCORDION PARTITION ATTACHMENT

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DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

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PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24

RST#22088

02/16/24

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CLIENT

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ORIGINAL PC STATE AGENCY APPROVAL

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
ADDITIONAL OPTION DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A7.2

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED			
			1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 75 DEG. C. COPPER)

1 CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS			
			#12	#10	#8	#6
4SS	1 1/4"x4" SQ	18.0	8	7	6	0
4S	1 1/2"x4" SQ	21.0	9	8	7	0
4SD	2 1/8"x4" SQ	30.3	13	12	10	6
4SX	2 7/8"x4" SQ	43.5	23	21	17	10
5SD	2 1/8"x4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8"x4-11/16" SQ	86.0	38	34	28	17
664	4"x6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

2 JUNCTION BOX SIZE TABLE

915.4 CARBON MONOXIDE ALARMS. CARBON MONOXIDE ALARMS SHALL COMPLY WITH SECTIONS 915.4.1 THROUGH 915.4.4.

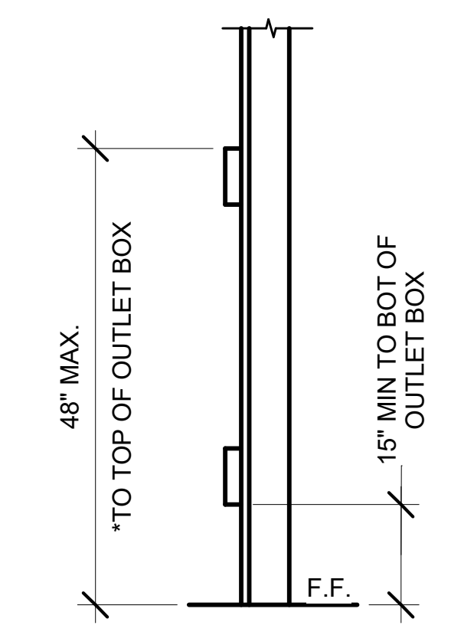
[F] 915.4.1 POWER SOURCE. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE, AND WHEN PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM BATTERY. WIRING SHALL BE PERMANENT AND WITH-OUT A DISCONNECTING SWITCH OTHER THAN REQUIRED FOR OVERCURRENT PROTECTION.

915.2.3 GROUP E OCCUPANCIES. CARBONS MONOXIDE DETECTION SHALL BE INSTALLED IN CLASSROOMS IN GROUP E OCCUPANCIES. CARBON MONOXIDE ALARM SIGNALS SHALL BE AUTOMATICALLY TRANSMITTED TO AN ON-SITE LOCATION THAT IS STAFFED BY SCHOOL PERSONNEL.

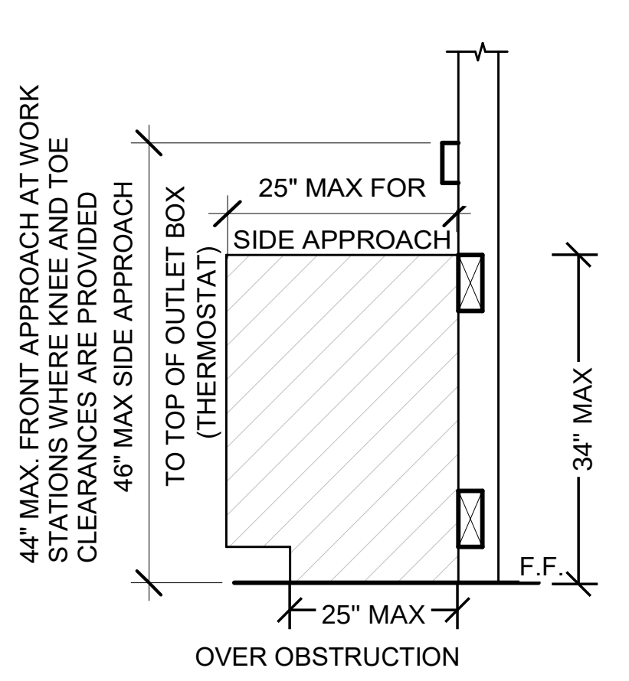
915.3 DETECTION EQUIPMENT. CARBON MONOXIDE DETECTION REQUIRED BY SECTIONS 915.1 THROUGH 915.2.3 SHALL BE PROVIDED BY CARBON MONOXIDE DETECTION SYSTEMS COMPLYING WITH SECTION 915.5.

3 CARBON MONOXIDE DETECTION - SECTION 915

* SEE DETAIL 2/M0.2

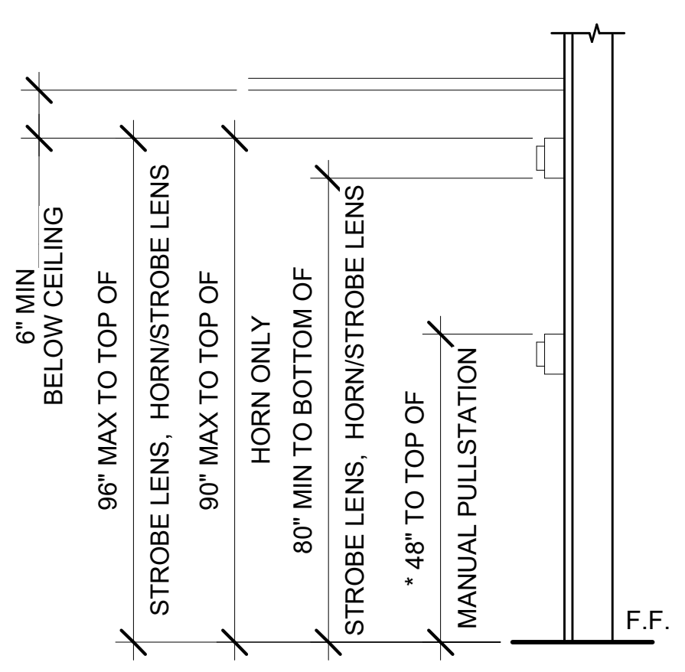


* 30"x48" MIN CLR FLOOR SPACE AT EACH LOCATION FOR PERPENDICULAR APPROACH


44" MAX. FRONT APPROACH AT WORK STATIONS WHERE KNEE AND TOE CLEARANCES ARE PROVIDED
46" MAX SIDE APPROACH
TO TOP OF OUTLET BOX (THERMOSTAT)
25" MAX FOR SIDE APPROACH
34" MAX
F.F.
25" MAX
OVER OBSTRUCTION

THE KNEE/TOE SPACE MUST EXTEND TO THE SAME DEPTH AS THE ACCESSIBLE OUTLET/SWITCH LOCATED ABOVE- 25" MAX 11.B308.2.2

4 MOUTING ELEV.


6" MIN BELOW CEILING
96" MAX TO TOP OF STROBE LENS, HORN/STROBE LENS
90" MAX TO TOP OF HORN ONLY
80" MIN TO BOTTOM OF STROBE LENS, HORN/STROBE LENS
* 48" TO TOP OF MANUAL PULLSTATION
F.F.

NOTES:

1. PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION.

2. THE SWITCH OR SWITCHES INSTALLED IN EMERGENCY LIGHTING CIRCUITS SHALL BE SO ARRANGED THAT ONLY AUTHORIZED PERSONNEL WILL HAVE CONTROL OF EMERGENCY LIGHTING. (CEC art. 700.20)

3. PROVIDE SPACE ON ELECTRICAL PANEL FOR LOCK-ON BREAKER, IDENTIFIED WITH RED MARKING, FOR 120 VOLTS FIRE ALARM CIRCUIT, WITH BREAKER LABELED AS FIRE ALARM CIRCUIT, CEC 760.41 (B). BREAKER AND CIRCUIT PROVIDED AND INSTALLED ON SITE BY OTHERS.

4. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES TO BE PROVIDED AND INTERCONNECTED TO THE FIRE ALARM SYSTEMS ON SITE BY OTHERS.

5. APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM SYSTEM FOR ALL SITES, THE FIRE ALARM SYSTEM AND COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

5 FIRE ALARM MOUNTING HEIGHTS

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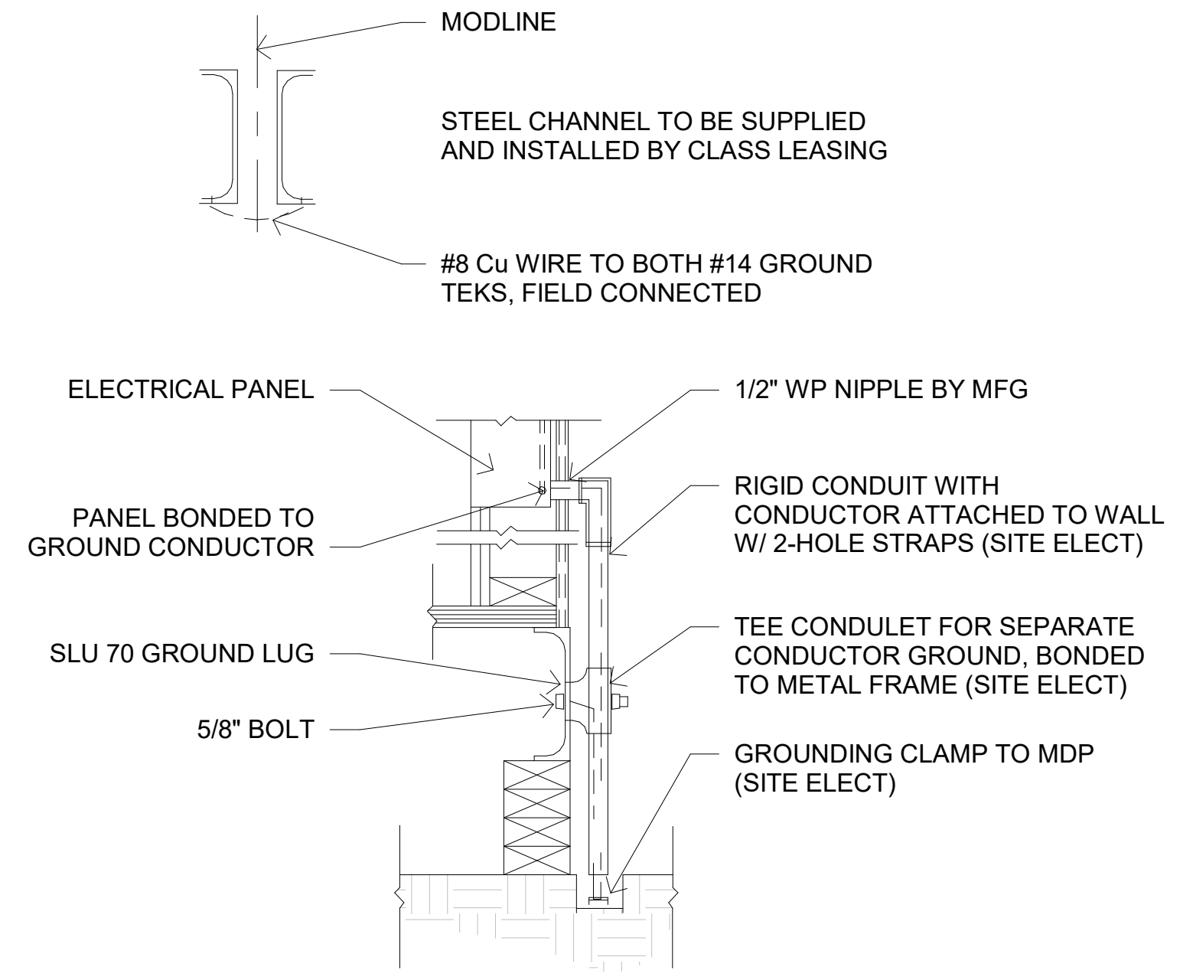
ACCEPTANCE TESTS BE COMPLETED ON NEWLY INSTALLED OR REPLACEMENT OF LIGHTING CONTROLS BEFORE PROJECT COMPLETION PER THE CALIFORNIA ENERGY CODE SECTION 10-103. ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED ACCEPTANCE TEST TECHNICIAN (ATT). THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCES CORRECTED UNTIL THE INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. COMPLETED NRCA FORMS SHALL BE SUBMITTED TO THE PROJECT INSPECTOR AND THE DISTRICT


MODLINE
STEEL CHANNEL TO BE SUPPLIED AND INSTALLED BY CLASS LEASING
#8 Cu WIRE TO BOTH #14 GROUND TEKS, FIELD CONNECTED
ELECTRICAL PANEL
PANEL BONDED TO GROUND CONDUCTOR
SLU 70 GROUND LUG
5/8" BOLT
1/2" WP NIPPLE BY MFG
RIGID CONDUIT WITH CONDUCTOR ATTACHED TO WALL W/ 2-HOLE STRAPS (SITE ELECT)
TEE CONDULET FOR SEPARATE CONDUCTOR GROUND, BONDED TO METAL FRAME (SITE ELECT)
GROUNDING CLAMP TO MDP (SITE ELECT)

NOTES:

1. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)

2. TESTING FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6 FEET, UNTIL RESISTANCE REDUCES TO 25 OHMS OR LESS. GROUND TEST MUST BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.56

3. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.

4. ALL MODULES OF STEEL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP & STAIRS.

5. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66

6. EACH BUILDING SHALL BE GROUNDED SEPARARELY WITH A ¾" ROUND X 8 FEET COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTOOM IS FOUND, DRIVE ROD AT 45 DEGREES MAXIMUM FROM THE VERTICAL OR HAVE IT BURIED IN A TRENCH 30" DEEP MINIMUM.

ACCEPTANCE TESTS BE COMPLETED ON NEWLY INSTALLED OR REPLACEMENT OF LIGHTING CONTROLS BEFORE PROJECT COMPLETION PER THE CALIFORNAI ENERGY CODE SECTION 10-103. ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED ACCEPTANCE TEST TECHNICIAN (ATT). THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES CORRECTED UNTIL THE INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. COMPLETED NRCA FORMS SHALL BE SUBMITTED TO THE PROJECT INSPECTOR AND THE DISTRICT.

6 TYPICAL GROUNDING DETAILS

REFER TO DSA IR 16-8 & STATE FIRE MARSHAL SOLAR PHOTOVOLTAIC INSTALLATION GUIDELINE

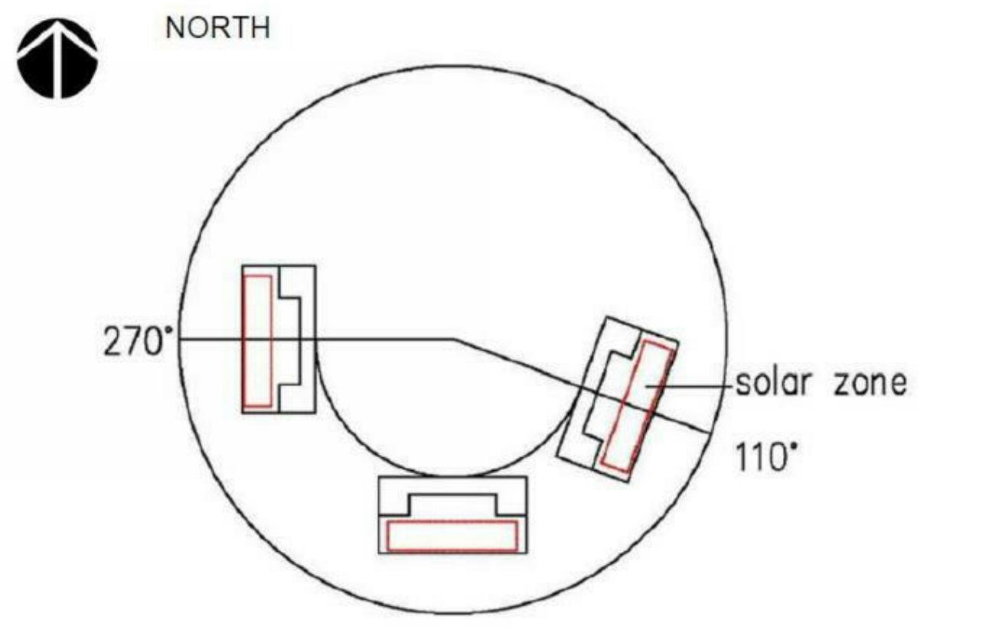
REFER TO **SECTION 110.10 - MANDATORY REQUIREMENTS FOR SOLAR READY BUILDINGS**
SOLAR ZONE AREAS WILL VARY DEPENDING ON PC BUILDING LOCATION.

MINIMUM AREA:

15% OF ROOF AREA (EXCLUDING ANY SKYLIGHT AREA) TO BE RESERVED FOR SOLAR PANEL APPLICATION OR SOLAR READY WILL BE SUPPLIED FROM A BUILDING OR STRUCTURE WITHIN 250 FT OF PC BUILDING.

ORIENTATION:

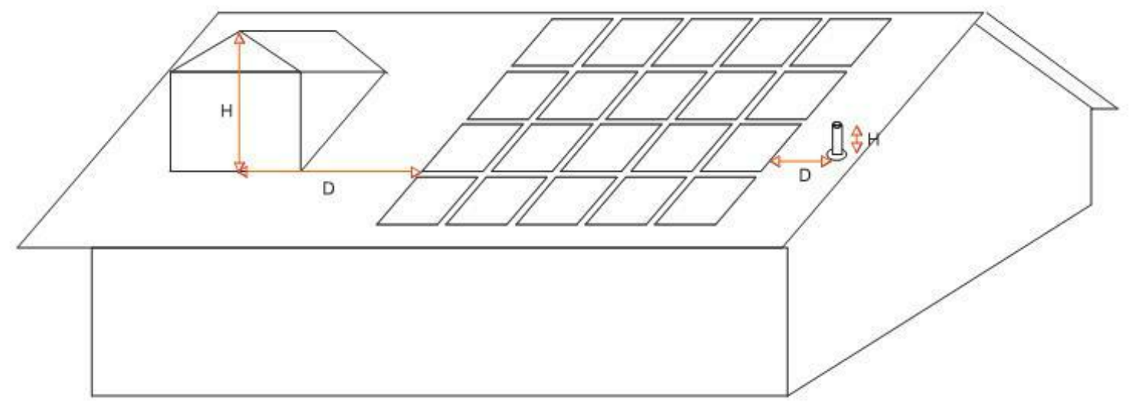
ALL SECTIONS OF THE SOLAR ZONE LOCATED ON STEEP-SLOPED ROOFS GREATER THAN 2:12 SHALL BE ORIENTED BETWEEN 110 DEGREES AND 270 DEGREES OF TRUE NORTH.



SHADING:

ANY OBSTRUCTION, LOCATED ON THE ROOF OR ANY OTHER PART OF THE BUILDING THAT PROJECTS ABOVE THE SOLAR ZONE SHALL BE LOCATED AT A SUFFICIENT HORIZONTAL DISTANCE AWAY FROM THE SOLAR ZONE, IN ORDER TO REDUCE THE RESULTING SHADING OF THE SOLAR ZONE. FOR EACH OBSTRUCTION, THE HORIZONTAL DISTANCE ("D") FROM THE OBSTRUCTION TO THE SOLAR ZONE SHALL BE AT LEAST TWO TIMES THE HEIGHT DIFFERENCE ("H") BETWEEN THE HIGHEST POINT OF THE OBSTRUCTION AND THE HORIZONTAL PROJECTION OF THE NEAREST POINT OF THE SOLAR ZONE.

D ≥ 2 x H



SOURCE: CALIFORNIA ENERGY COMMISSION

STRUCTURAL DESIGN LOADS:

ENTIRE ROOF SURFACE IS DESIGNED STRUCTURALLY TO ACCOMMODATE SOLAR PANELS = 3 PSF

INTERCONNECTION PATHWAYS:

THE LOCATION FOR INVERTERS AND METERING EQUIPMENT AND A PATHWAY FOR ROUTING OF CONDUIT FROM THE SOLAR ZONE TO THE POINT OF INTERCONNECTION WITH THE ELECTRICAL SERVICE WILL VARY DEPENDING ON PC BUILDING LOCATION.

7 SOLAR ZONE AREA

LEGEND

▬	ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT
⬚	ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
▭	WALL MOUNTED HVAC UNIT, SEE MECHANICAL DWGS
◪	100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
HW	4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
H	4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC BUT NOT MORE THAN 25'-0" FROM TWO PERPENDICULAR WALL AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
Ⓢ	4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM BUT NOT MORE THAN 15'-0" TO A PERPENDICULAR WALL AND 30'-0" BETWEEN THEM. PROVIDE A 6'-O" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
▭	RECESSED 4SD J-BOX W/ COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING
▽	4SD J-BOX WITH SINGLE GANG RING FOR DATA USE. (DEVICE BY OTHERS) MOUNT AT +18" AFF WITH 3/4" CONDUIT STUBBED TO ATTIC
H	4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULLSTRING
○	4SD J-BOX/SINGLE GANG MUD RING FOR FIRE ALARM STROBE (DEVICE BY OTHERS). BOTTOM OF LENS 80" MIN TOP OF LENS 96" MAX AFF WITH 3/4"CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING
◩	4SD J-BOX/ SINGLE GANG MUD RING FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF CONTROL BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING
EXIT	EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. FLS 90' BACK UP. CLASSROOMS WITH ONE EXTERIOR DOOR-OPTIONAL.
◷	CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
⊟	EXTERIOR LED LIGHT FIXTURE. 30w MAX WITH PHOTOCELL MOUNT AT +93" AFF
◐ ROOF	ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
◐ GFI	GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
◐ WP	EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24" AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
⦶	DUPLEX (WALL MOUNTED) RECEPTACLE 15A-125V-3 WIRE. MOUNT AT +15" AFF U.O.N. TO BOTTOM OF OUTLET BOX
$ 3	3-WAY LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWITCH BOX
$	LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWTICH BOX
$ D	SINGLE BUTTON DIMMER SWITCH, AT +48" AFF, TO TOP OF SWITCH BOX, WATTSTOPPER #LMDM-101 OR EQUAL
WS-1	SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT. AS NEEDED
US	ULTRASONIC CEILING OCCUPANCY SENSOR. WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS. AS NEEDED
PC	CEILING MOUNTED PHOTOCELL, WATTSTOPPER #LMLS-500 OR EQUAL AS NEEDED
OS	CEILING MOUNTED OCCUPANCY SENSOR. WATTSTOPPER #LMPC-100 OR EQUAL. AS NEEDED
S	4SD J-BOX WITH SINGLE GANG RING FOR SPEAKER USE. (DEVICE BY OTHERS) MOUNT AT +96" AFF WITH 3/4" CONDUIT STUBBED TO ATTIC
C	4SD J-BOX WITH SINGLE GANG RING FOR CAMERA USE. (DEVICE BY OTHERS) MOUNT AT +96" AFF WITH 3/4" CONDUIT STUBBED TO ATTIC
W	4SD J-BOX WITH DOUBLE GANG RING FOR WIFI USE. (DEVICE BY OTHERS) MOUNT IN CIELING WITH 3/4" CONDUIT STUBBED TO ATTIC
▯	2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN LIGHT FIXTURE WITH DIMMABLE BALLAST DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ WATTAGE: 48W (48" LG) OR EQUAL
◩	2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN LIGHT FIXTURE WITH DIMMABLE BALLAST DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ WATTAGE: 48W (48" LG) OR EQUAL EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE Equipped WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.

MIN. + 15" TO BOTTOM OF BOX

NOTE: SEE 4/A3.2 FOR PHOTOMETRIC DATA

8 1" = 1'-0" ELECTRICAL LEGEND

1. INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) - 2020 EDITION AND NATIONAL FIRE PROTECTION ASSOCIATION FIRE CODES (NFPA). AND 2022 CBC ELECTRICAL CODE.
2. ELECTRICAL EQUIPMENT LOCATIONS INDICATED ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE VERIFIED AND ADJUSTED FOR FIELD CONDITIONS.
3. RECEPTACLES AND TELEPHONE/DATA OUTLETS SHALL BE INSTALLED 18" AFF TO THE CENTER OF THE DEVICE, UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL FIELD TEST AND PROVIDE TEST REPORT VERIFYING THAT RECEPTACLES ARE WIRED AND FUCTION PROPERLY.
5. CONTRACTOR SHALL LABEL EACH RECEPTACLE, LIGHT FIXTURE, TOGGLE SWITCH, SAFETY SWITCH AND OCCUPANCY SENSOR WITH PANEL NAME AND BRANCH CIRCUIT ID.
6. WEATHERPROOF RECEPTACLES SHALL BE TYPE TO PROTECT RECEPTACLE FROM WEATHER WHEN PLUG INSERTED.
7. THE MATERIAL REQUIRED FOR THE WORK SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED, UNLESS SPECIFICALLY NOTED OTHERWISE. CONTRACTOR SHALL ASSUME NOTES LISTING MATERIAL AND/OR EQUIPMENT BEGIN WITH THE WORDS "SUPPLY AND INSTALL" U.O.N.".
8. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE SUBMITTING MATERIAL AND BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS AT THE SITE. BY THE ACT OF SUBMITTING PROPOSED MATERIALS FOR THE WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS RESENT AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT WILL BE CONSIDERED AS VALID, DUE TO FAILURE TO ALLOW FOR CONDITIONS, WHICH MAY EXIST.
9. CONTRACTOR'S SCOPE SHALL INCLUDE ALL WORK SHOWN ON THE PLANS AND SPECIFICATIONS. SUBSTITUTION REQUESTS FOR EQUIPMENT SPECIFIED SHALL BE SUBMITTED FOR CONSIDERATION TO THE OWNER AND ENGINEER IN WRITING. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, AND THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ANY CHARGES RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK, THE OWNER, ENGINEER OF RECORD, OR THE WORK OF OTHER CONTRACTORS.
10. COORDINATE ALL WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT.
11. UNINTERRUPTED EXISTING ELECTRICAL POWER SHALL BE MAINTAINED TO OTHER TRADES FOR TEMPORARY POWER AREAS OF THE SITE DURING CONSTRUCTION. PROVIDE ANY TEMPORARY SERVICES AS MAY BE REQUIRED. IDENTIFY AT BID TIME.
12. ALL PENETRATIONS IN RATED WALLS (INDICATED IN ARCHITECTURAL LIFE SAFETY PLANS), ARE TO BE INSTALLED USING THE APPROPRIATE UL RATED PENETRATION ASSEMBLIES.
13. EQUIPMENT SHALL BE LISTED, LABELED OR CERTIFIED FOR ITS USE BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) AS RECOGNIZED BY THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AN HEALTH ADMINISTRATION.
14. ALL ELECTRICAL EQUIPMENT CONNECTORS SHALL BE 75° RATED.
15. ALL ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.

    A. ALL PERMANENT EQUIPMENT AND COMPONENTS.
    B. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
    C. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.
16. THE ATTACHMENT OF THE FOLLOWING ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

    A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
    B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
17. FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT I NSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.
18. ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, 13.6.5.6 AND 2022 CBC SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26
19. THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPA #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.
20. COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AN BRACING OF THE PIPE, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS.
21. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
22. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
23. NON-CURRENT CARRYING METAL PARTS OF THE SYSTEM SHALL BE PROPERLY GROUNDED TO COMPLY WITH NEC REQUIREMENTS.
24. EACH BUILDING SHALL BE GROUNDED SEPARARELY WITH A ¾" ROUND X 8 FEET COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTOOM IS FOUND, DRIVE ROD AT 45 DEGREES MAXIMUM FROM THE VERTICAL OR HAVE IT BURIED IN A TRENCH 30" DEEP MINIMUM.
25. TESTING FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6 FEET, UNTIL RESISTANCE REDUCES TO 25 OHMS OR LESS. GROUND TEST MUST BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250
26. PROVIDE A GREEN WIRE GROUND CONDUCTOR IN ALL CONDUITS WITH POWER OR LIGHTING CONDUCTORS.
27. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
28. CHECK RESISTANT TO GROUND ROD. IF RESISTANCE EXCEEDS 25 OHMS. INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).
29. ALL MODULES OF STEEL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP & STAIRS.
30. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
31. PER CEC210.8(B) ALL RECEPTACLES AT THE FOLLOWING LOCATIONS SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) - (1) BATHROOMS, (2) KITCHENS, (3) SINKS (WITHIN 6 FT), (4) INDOOR WET AREAS, (5) LOCKER ROOMS, (6) GARAGE, SERVICE BAYS OR SIMILAR, (7) ROOFTOPS, (8) OUTDOORS.
32. IF CLOSED BY GWB INSTALL ONE ATTIC HEAT DETECTOR PER MODULE: WHEN STANDARD OPEN WEB TRUSS SYSTEM IS USED ADDITIONAL ATTIC HEAT DETECTORS ARE NOT REQUIRED.

9 ELECTRICAL GENERAL NOTES

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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CLIENT

1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
ELECTRICAL GENERAL NOTES

PROJECT NUMBER
22088

DRAWN BY
AM

CHECKED BY
RT

DATE

SHEET NO.
E0.1

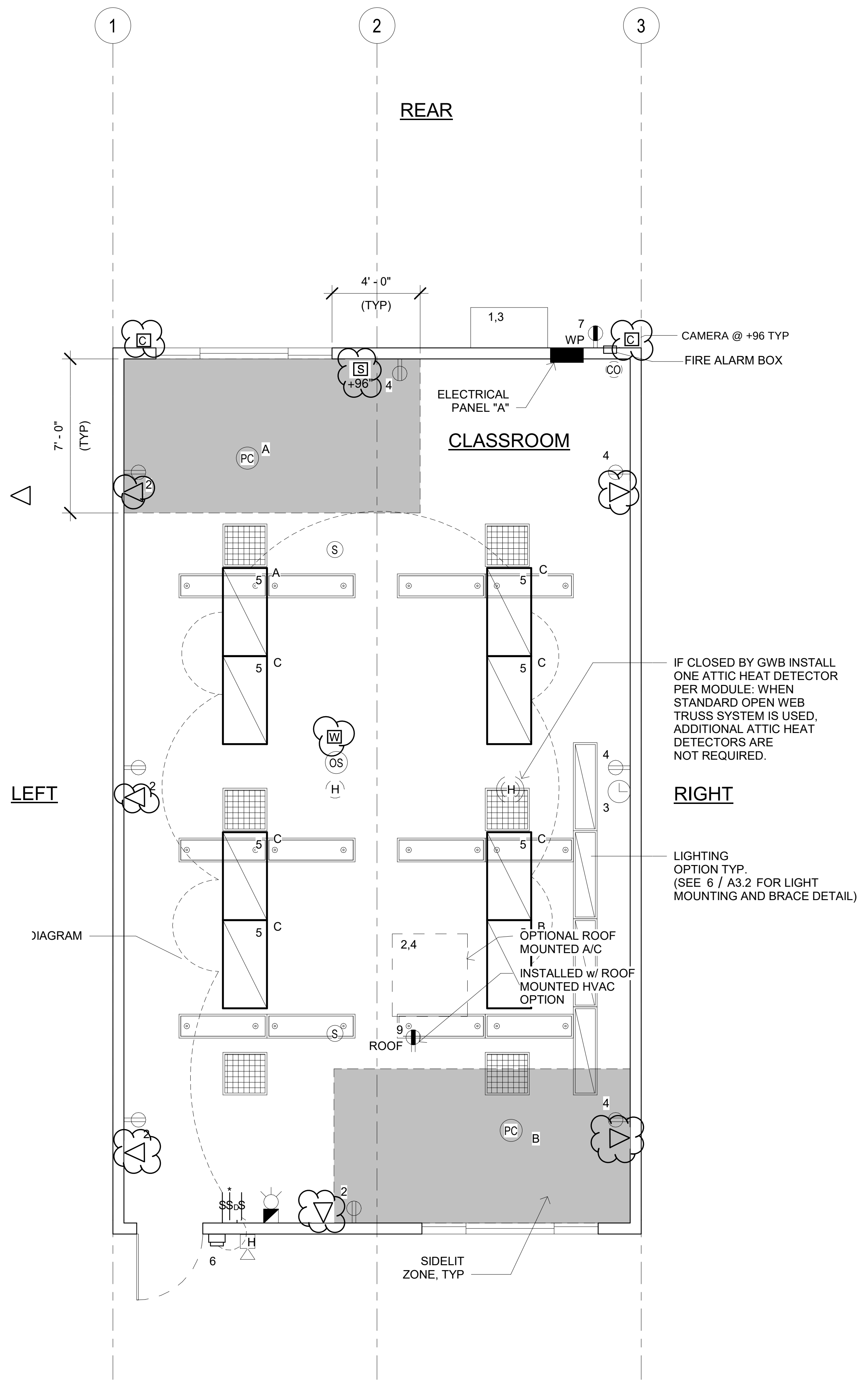
SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

SYMBOL

▦ SOLAR TUBE DIFFUSER

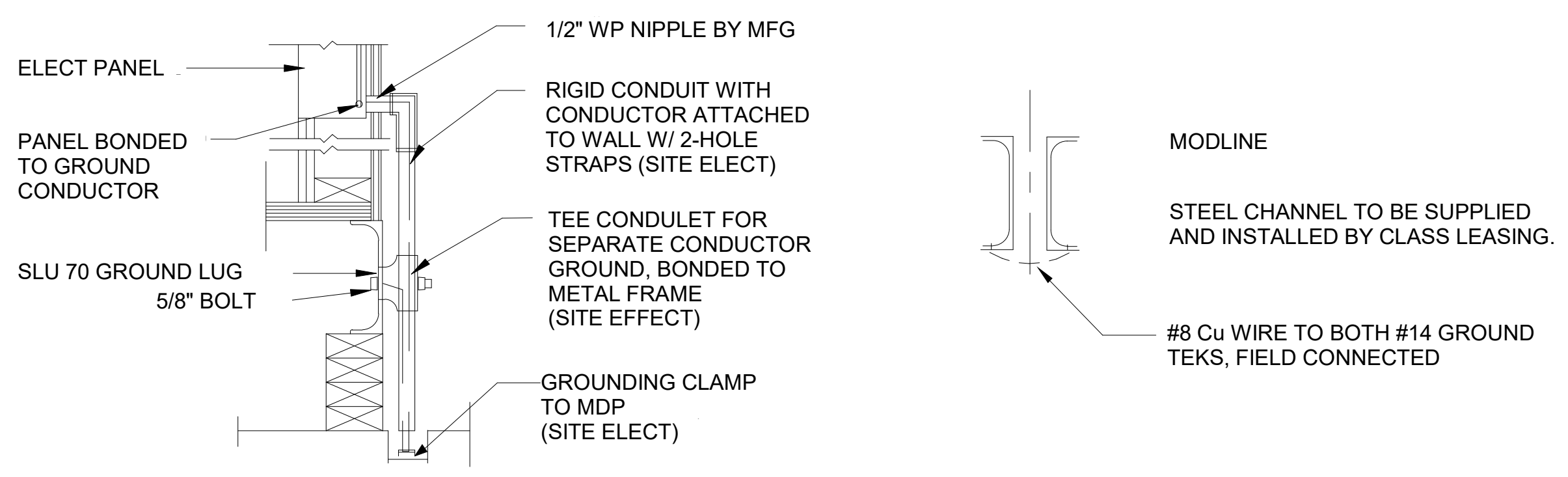
TUBE SIZE=21"(530mm)
LIGHT COVERAGE AREA=250-300ft² (23-28m)


1
2
3
REAR
4' - 0"
(TYP)
1,3
7
WP
CAMERA @ +96 TYP
FIRE ALARM BOX
C
S
+96"
4
CO
ELECTRICAL PANEL "A"
CLASSROOM
7' - 0"
(TYP)
PC
A
2
S
5
C
IF CLOSED BY GWB INSTALL ONE ATTIC HEAT DETECTOR PER MODULE: WHEN STANDARD OPEN WEB TRUSS SYSTEM IS USED, ADDITIONAL ATTIC HEAT DETECTORS ARE NOT REQUIRED.
W
OS
H
LEFT
RIGHT
3
LIGHTING OPTION TYP. (SEE 6 / A3.2 FOR LIGHT MOUNTING AND BRACE DETAIL)
DIAGRAM
2,4
B
OPTIONAL ROOF MOUNTED A/C
INSTALLED w/ ROOF MOUNTED HVAC OPTION
9
ROOF
PC
B
$$D$
6
SIDELIT ZONE, TYP

NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

FRONT

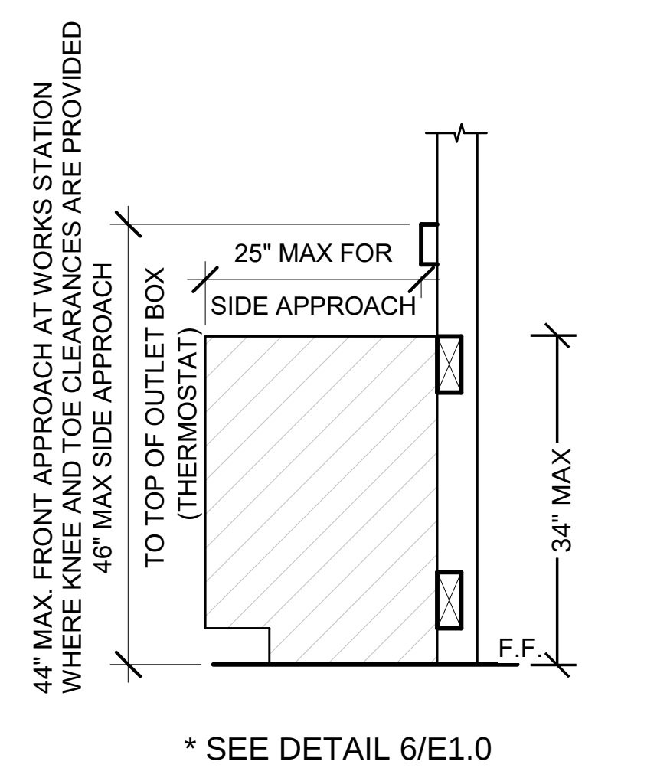
1 *1/4" = 1'-0"*
ELECTRICAL PLAN


ELECT PANEL
PANEL BONDED TO GROUND CONDUCTOR
SLU 70 GROUND LUG
5/8" BOLT
1/2" WP NIPPLE BY MFG
RIGID CONDUIT WITH CONDUCTOR ATTACHED TO WALL W/ 2-HOLE STRAPS (SITE ELECT)
TEE CONDULET FOR SEPARATE CONDUCTOR GROUND, BONDED TO METAL FRAME (SITE EFFECT)
GROUNDING CLAMP TO MDP (SITE ELECT)
MODLINE
STEEL CHANNEL TO BE SUPPLIED AND INSTALLED BY CLASS LEASING.
#8 Cu WIRE TO BOTH #14 GROUND TEKS, FIELD CONNECTED

NOTES:

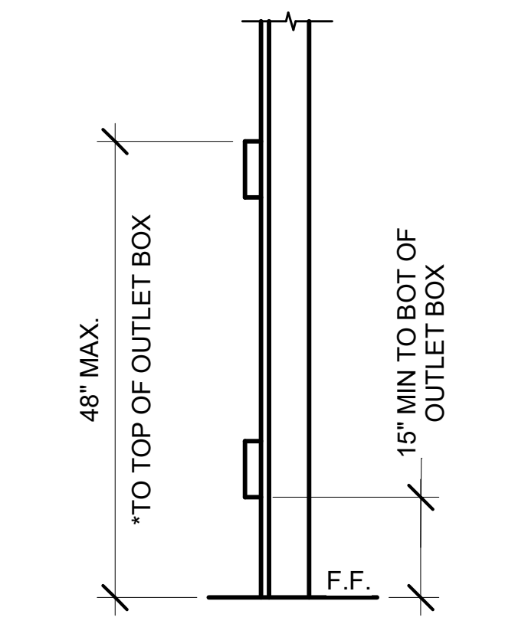
1. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
2. CHECK RESISTANT TO GROUND ROD. IF RESISTANCE EXCEEDS 25 OHMS. INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).
3. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
4. ALL MODULES OF STEEL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP & STAIRS.
5. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66

2 *1 1/2" = 1'-0"*
TYPICAL GROUNDING DETAIL


44" MAX. FRONT APPROACH AT WORKS STATION WHERE KNEE AND TOE CLEARANCES ARE PROVIDED
46" MAX SIDE APPROACH
TO TOP OF OUTLET BOX (THERMOSTAT)
25" MAX FOR
SIDE APPROACH
34" MAX
F.F.

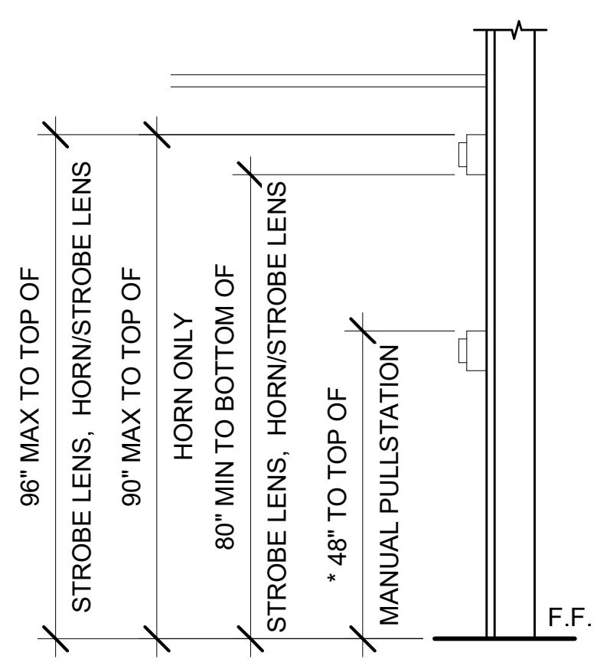
* SEE DETAIL 6/E1.0

3 *1" = 1'-0"*
ELEV. @ WORKSTATION



* 30"x48" MIN CLR FLOOR SPACE AT EACH LOCATION FOR PERPENDICULAR APPROACH

4 *1" = 1'-0"*
MOUTING ELEV.



* PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION

THE SWITCH OR SWITCHES INSTALLED IN EMERGENCY LIGHTING CIRCUITS SHALL BE SO ARRANGED THAT ONLY AUTHORIZED PERSONNEL WILL HAVE CONTROL OF EMERGENCY LIGHTING. (CEC art. 700.20)

5 *1" = 1'-0"*
FIRE ALARM MOUNTING HEIGHTS

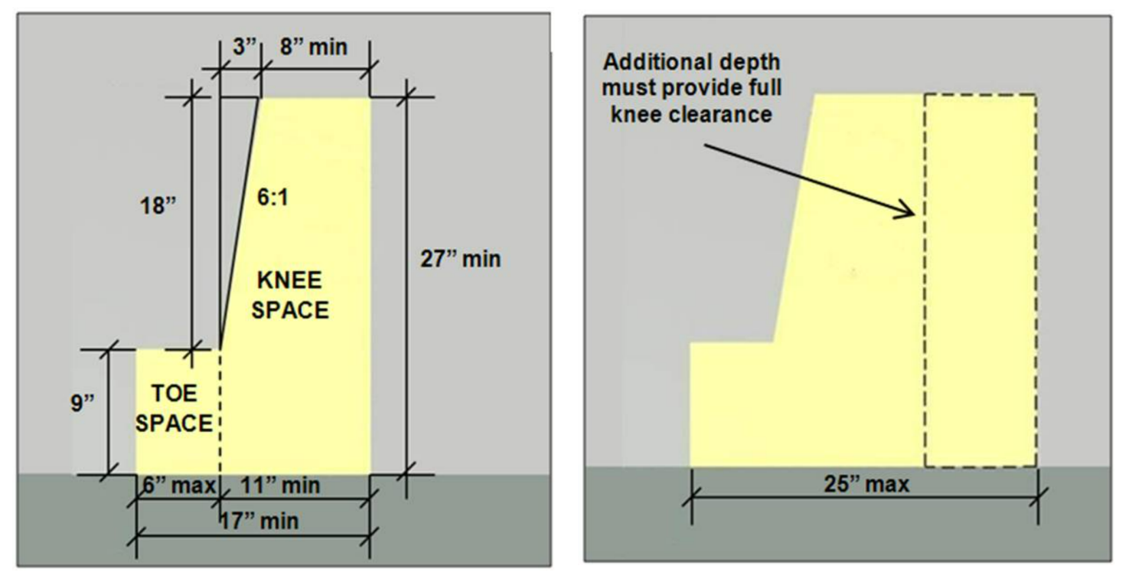
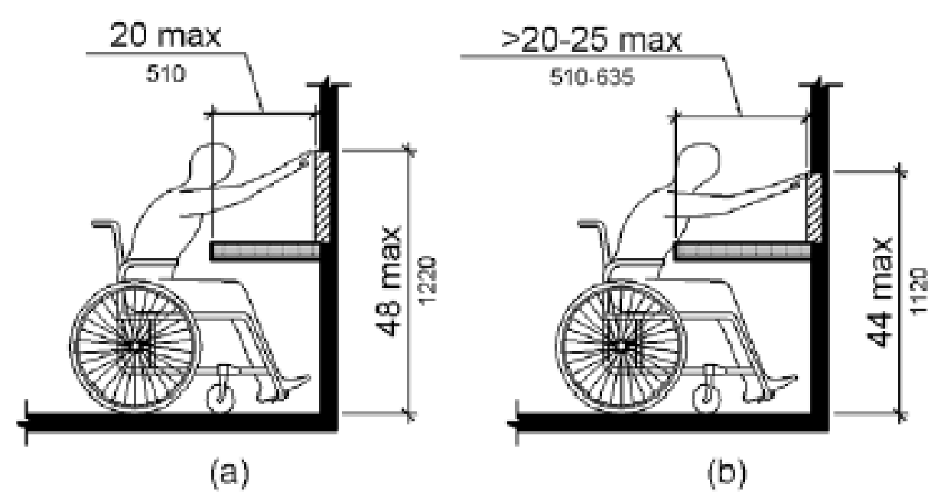


Figure 308.2.2 Obstructed High Forward Reach



(a) (b)

6 **TOE SPACE CLEARANCE**

GENERAL GROUNDING NOTES

EACH BUILDING SHALL BE GROUNDED SEPARARELY WITH A ¾" ROUND X 8 FEET COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTOOM IS FOUND, DRIVE ROD AT 45 DEGREES MAXIMUM FROM THE VERTICAL OR HAVE IT BURIED IN A TRENCH 30" DEEP MINIMUM.

TESTING FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6 FEET, UNTIL RESISTANCE REDUCES TO 25 OHMS OR LESS. GROUND TEST MUST BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

MP☐ MD☐ PP☐ E☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM #) #_______________.

FIRE ALARM NOTES

PROVIDE SPACE ON ELECTRICAL PANEL FOR LOCK-ON BREAKER, IDENTIFIED WITH RED MARKING, FOR 120 VOLTS FIRE ALARM CIRCUIT, WITH BREAKER LABELED AS FIRE ALARM CIRCUIT, CEC 760.41 (B).
BREAKER AND CIRCUIT PROVIDED AND INSTALLED ON SITE BY OTHERS.

SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES TO BE PROVIDED AND INTERCONNECTED TO THE FIRE ALARM SYSTEMS ON SITE BY OTHERS

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM SYSTEM FOR ALL SITES, THE FIRE ALARM SYSTEM AND COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 75 DEG. C. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED			
			1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS			
			#12	#10	#8	#6
4SS	1 1/4"x4" SQ	18.0	8	7	6	0
4S	1 1/2"x4" SQ	21.0	9	8	7	0
4SD	2 1/8"x4" SQ	30.3	13	12	10	6
4SX	2 7/8"x4" SQ	43.5	23	21	17	10
5SD	2 1/8"x4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8"x4-11/16" SQ	86.0	38	34	28	17
664	4"x6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

PROJECT SPECIFIC STATE AGENCY APPROVAL
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~~DATE: 03/13/2024~~

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02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL
~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
ELECTRICAL PLAN
24x40

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
E1.0

SHEET OF

6/15/2021 11:52:06 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

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APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PANEL A 24" x40"	120/208 VOLTS, 1ϕ, 3 WIRE					MAIN LUGS ONLY		PANEL BOX= 100A		
	LOADCENTER	RECESSED					GRD & NEUTRAL BARS		AMP BUS	
	VOLTAMPS		10000 AIC					VOLTAMPS		
DESCRIPTION	ϕ A	ϕ B	C/B	CKT	ϕ	CKT	C/B	ϕA	ϕ B	DESCRIPTION
AC WALL MOUNTED	6670		30	1	A	2	20	720		OUTLETS
———		6670	30	3	B	4	20		720	OUTLETS
GENERAL LIGHTING	720		20	5	A	6	20	40		EXTERIOR LIGHT
EXTERIOR GFI/WP		180	20	7	B	8	20			
			20	9	A	10	20	40		FIRE ALARM
DED SOLAR READY										
DED SOLAR READY										
SUBTOTAL	ϕ A 7390	ϕ B 6850						ϕA 800	ϕ B 720	SUBTOTAL
TOTAL	8190	7570	8190 /120 VOLTS= 68.25 76.25 AMPS + .94= 77.19 AMPS							

1 1" = 1'-0"
ELECTRICAL PANEL_WALL MOUNTED

PANEL A 24" x40"	120/208 VOLTS, 1 ϕ, 3 WIRE					MAIN LUGS ONLY		PANEL BOX= 100A		
	LOADCENTER	RECESSED					GRD & NEUTRAL BARS		AMP BUS	
	VOLTAMPS		10000 AIC					VOLTAMPS		
DESCRIPTION	ϕ A	ϕ B	C/B	CKT	ϕ	CKT	C/B	ϕA	ϕ B	DESCRIPTION
AC Roof Mounted	7360		30	1	A	2	20	720		OUTLETS
———		7360	30	3	B	4	20		720	OUTLETS
GENERAL LIGHTING	720		20	5	A	6	20	40		EXTERIOR LIGHT
EXTERIOR GFI/WP		180	20	7	B	8	20			
			20	9	A	10	20	40		FIRE ALARM
DED SOLAR READY										
DED SOLAR READY										
SUBTOTAL	ϕ A 8080	ϕ B 7540						ϕA 800	ϕ B 720	SUBTOTAL
TOTAL	8880	8260	8880 /120 VOLTS= 74 74 AMPS + 18.5= 92.5 AMPS							

2 1" = 1'-0"
ELECTRICAL PANEL_ROOF MOUNTED

LEGEND

■	ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT	
⬚	ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS	
▭	WALL MOUNTED HVAC UNIT, SEE MECHANICAL DWGS	
◪	100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH	
WH	4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT	
H	4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC BUT NOT MORE THAN 25'-0" FROM TWO PERPENDICULAR WALL AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)	
S	4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM BUT NOT MORE THAN 15'-0" TO A PERPENDICULAR WALL AND 30'-0" BETWEEN THEM. PROVIDE A 6'-O" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)	
▭	RECESSED 4SD J-BOX W/ COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING	
H	4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULLSTRING	
○	4SD J-BOX/SINGLE GANG MUD RING FOR FIRE ALARM STROBE (DEVICE BY OTHERS). BOTTOM OF LENS 80" MIN TOP OF LENS 96" MAX AFF WITH 3/4"CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING	
◩	4SD J-BOX/ SINGLE GANG MUD RING FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF CONTROL BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING	
EXIT	EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. FLS 90' BACK UP. CLASSROOMS WITH ONE EXTERIOR DOOR-OPTIONAL.	
◷	CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE	
⊓	EXTERIOR LED LIGHT FIXTURE. 30w MAX WITH PHOTOCELL MOUNT AT +93" AFF	
ROOF	ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE	MIN. + 15" TO BOTTOM OF BOX
GFI	GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS	
WP	EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24" AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)	
⦶	DUPLEX (WALL MOUNTED) RECEPTACLE 15A-125V-3 WIRE. MOUNT AT +15" AFF U.O.N. TO BOTTOM OF OUTLET BOX	
$ 3	3-WAY LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWITCH BOX	
$	LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWTICH BOX	
$ D	SINGLE BUTTON DIMMER SWITCH, AT +48" AFF, TO TOP OF SWITCH BOX, WATTSTOPPER #LMDM-101 OR EQUAL	
WS-1	SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT.	
US	ULTRASONIC CEILING OCCUPANCY SENSOR. WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.	
PC	CEILING MOUNTED PHOTOCELL, WATTSTOPPER #LMLS-500 OR EQUAL	
OS	CEILING MOUNTED OCCUPANCY SENSOR. WATTSTOPPER #LMPC-100 OR EQUAL.	
▯	2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN LIGHT FIXTURE WITH DIMMABLE BALLAST DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ WATTAGE: 48W (48" LG) OR EQUAL	
◩	2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN LIGHT FIXTURE WITH DIMMABLE BALLAST DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ WATTAGE: 48W (48" LG) OR EQUAL EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE Equipped WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.	

NOTE: SEE 4/A3.2 FOR PHOTOMETRIC DATA

3 1" = 1'-0"
LEGEND

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

R&S TAVARES ASSOCIATES
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MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
ELECTRICAL SCHEDULES 24x40

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
E1.1

SHEET OF

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

ABB.	DESCRIPTION	SYMBOL
WM	WALL MOUNTED UNIT (SEE SCHEDULE THIS SHEET)	WM-1
RM	ROOF MOUNTED UNIT (SEE SCHEDULE THIS SHEET)	RM-1
P.O.C	POINT OF CONNECTION	P.O.C
CO	CARBON MONOXIDE SENSOR	CO
BT	BYPASS TIMER	BT
STAT	THERMOSTAT	T
UC	UNDERCUT DOOR	→ UC
MVD	MANUAL VOLUME DAMPER	—┼
FD	FIRE DAMPER	—●
VTR	VENT THRU ROOF	◯
ER	EXHAUST CEILING REGISTER	⊠
CR	RETURN CEILING REGISTER	⧅
CD	SUPPLY CEILING DIFFUSER	⊠
(L)	LINED DUCTWORK	═
EAD	EXHAUST AIR DUCT	▨
RAD	RETURN AIR DUCT	▨
SAD	SUPPLY AIR DUCT	⊠
EF	EXHAUST FAN	EF -
CO2	CARBON DIOXIDE SENSOR	CO2

1 1" = 1'-0"
LEGEND

CEILING MOUNTED EXHAUST FAN

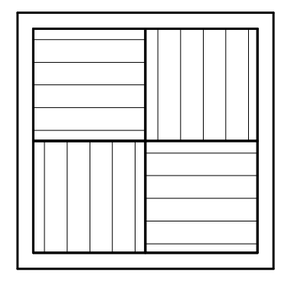
SYM.	USE	MFR/MODEL	CFM	SOUND LEVEL	SP	VOLTS	Ø	POWER	WGT#	NOTES
EF A	BATHROOM EXHAUST	*BROAN L100	109	1.0 SONES	0.25	120	1	87 WATTS	22.80#	WITH BROAN ROOF CAP #634. PROVIDE 6" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF B	BATHROOM EXHAUST	*BROAN L200	210	2.0 SONES	0.25	120	1	127 WATTS	23#	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF C	BATHROOM EXHAUST	*BROAN L300	308	2.8 SONES	0.25	120	1	212 WATTS	23.1O#	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF D	BATHROOM EXHAUST	*BROAN 676	100	4.0 SONES	0.25	120	1	156 WATTS	7#	WITH BROAN ROOF CAP #636. PROVIDE 4" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.

*OR APPROVED EQUAL.

2 1" = 1'-0"
CEILING MOUNTED EXHAUST FAN SCHEDULE

PERFORATED FACE GRILLE SCHEDULE (SUPPLY)

16x16-4W



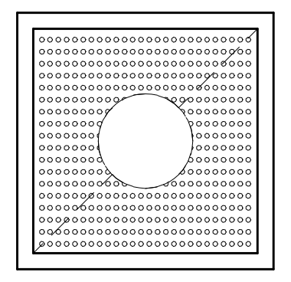
T-BAR SUPPLY

Fixed Curve Blade, 4-way throw
(WITH INTEGRAL DAMPER)

NECK SIZE	CFM (RANGE)	NOTES
6"Ø	0-150	SEE DETAIL FOR MAKE AND MODEL
8"Ø	150-230	SEE DETAIL FOR MAKE AND MODEL
10"Ø	230-350	SEE DETAIL FOR MAKE AND MODEL
12"Ø	350-460	SEE DETAIL FOR MAKE AND MODEL
14"Ø	460-640	SEE DETAIL FOR MAKE AND MODEL

3 1" = 1'-0"
PFG SCHED (SUPPLY)

PERFORATED FACE GRILLE SCHEDULE (RETURN)



T-BAR RETURN

Perforated Face

Shoemaker 105P with 24 ga. 45 deg.

NECK SIZE	CFM (RANGE)	NOTES
6"Ø	0-230	SEE MECH CLG PLAN FOR SIZE
10"Ø	230-460	SEE MECH CLG PLAN FOR SIZE
12"Ø	350-460	SEE MECH CLG PLAN FOR SIZE
14"Ø	460-710	SEE MECH CLG PLAN FOR SIZE
16"Ø	277-1664	SEE MECH CLG PLAN FOR SIZE

TESTS TO BE COMPLETED ON NEWLY INSTALLED OR REPLACEMENT OF MECHANICAL SYSTEMS BEFORE PROJECT COMPLETION PER THE CALIFORNIA ENERGY CODE SECTION 10-103. ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTITIED ACCEPTANCE TEST TECHNICIAN(ATT). THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES CORRECTED UNTIL THE INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. COMPLETED NRCA FORMS SHALL BE SUBMITTED TO THE PROJECT INSPECTOR AND THE DISTRICT.

4 1" = 1'-0"
PFG SCHED (RETURN)

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MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA-APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26, AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G., HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN
3. 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVING A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH THE ABOVE REQUIREMENTS.

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2022 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

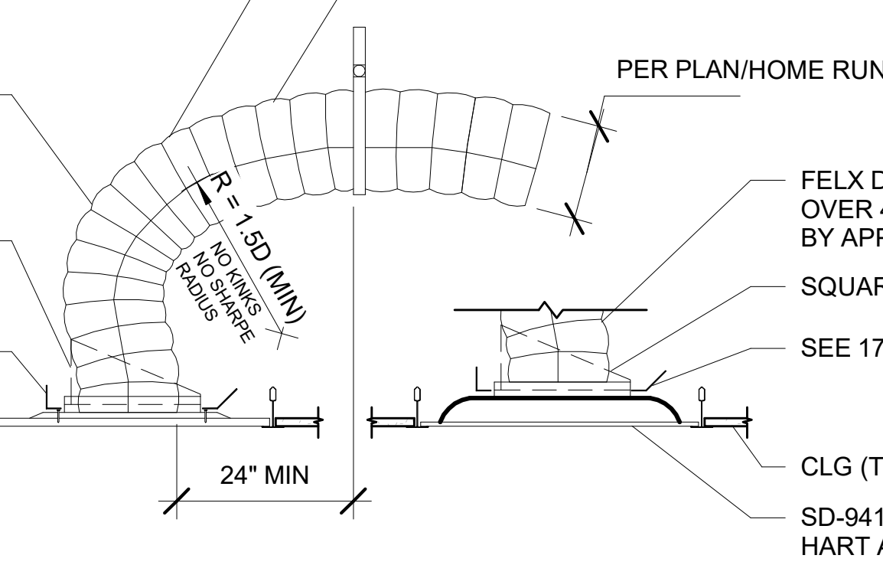
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

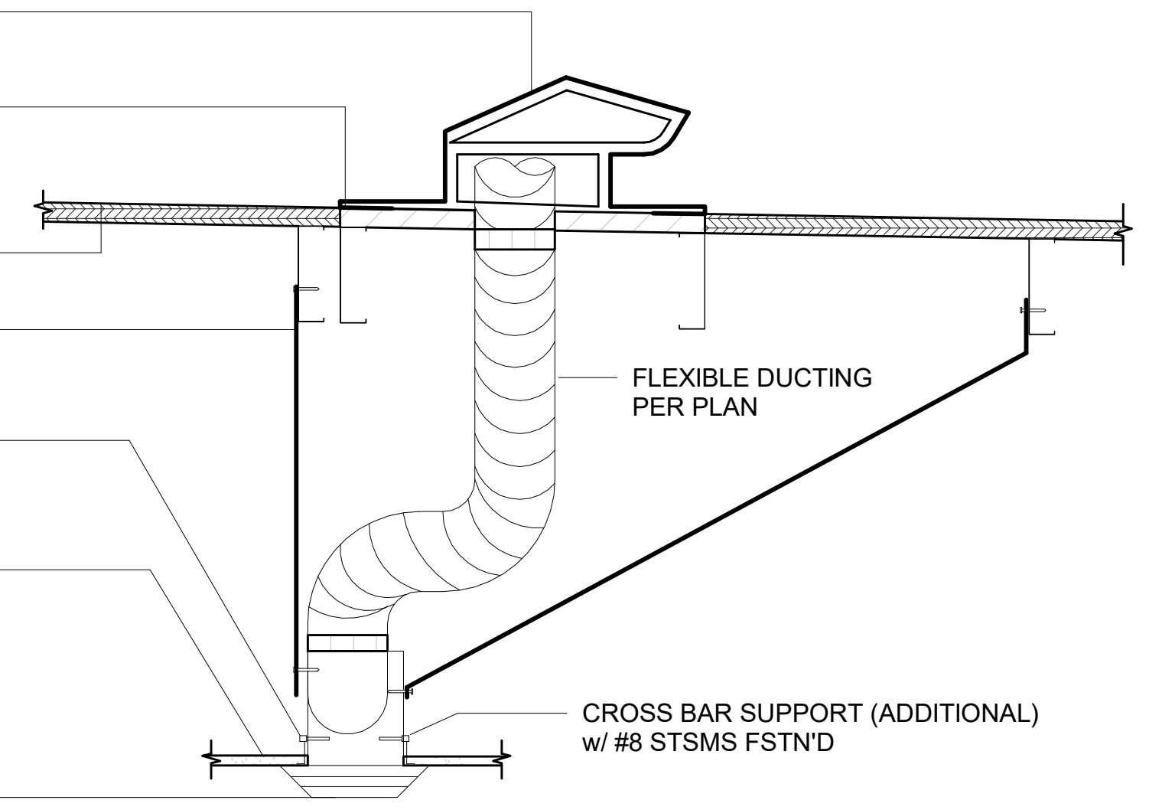
MP☒ MD☒ PP☐ E☐ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM #) #__________________.

5 1" = 1'-0"
EQUIPMENT ANCHORAGE

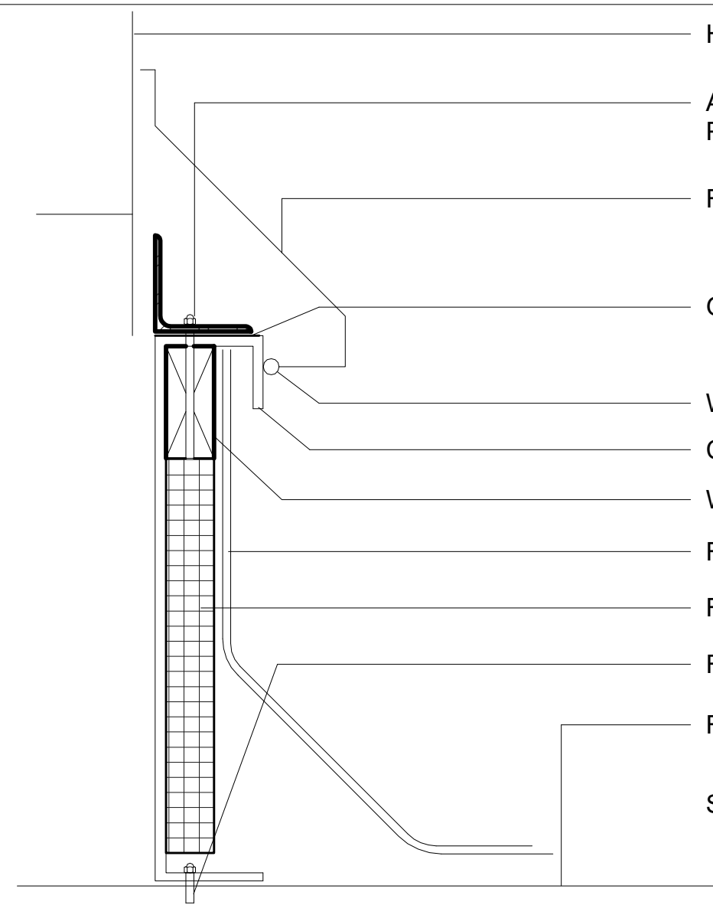


CONN. w/ SMOOTH RADIUS AND NECESSARY SUPPORT TO ACHIEVE CONTINUOUS SMOOTH AIR FLOW TO REGISTER / DIFFUSER
FLEX DUCT.
PER PLAN/HOME RUN
FLEX DUCT TO BE PULLED OVER 45° FITTING AND SECURED BY APPROVED METHOD
R = 1.5D (MIN)
NO KINKS NO SHARPE RADIUS
SQUARE TO ROUND FITTING
FELX DUCT TO BE PULLED OVER 45° FITTING AND SECURED BY APPROVED METHOD
SQUARE TO ROUND FITTING
SEE 17 / A3.3 FOR STRAP REPORT
SEE 17 / A3.3 FOR STRAP SUPPORT
CEILING TILE
T-GRID TYP SEE
24" MIN
CLG (TYP)
SD-9419 HART AND COOLEY SUPPLY REG. SEE SCHED THIS SHEET

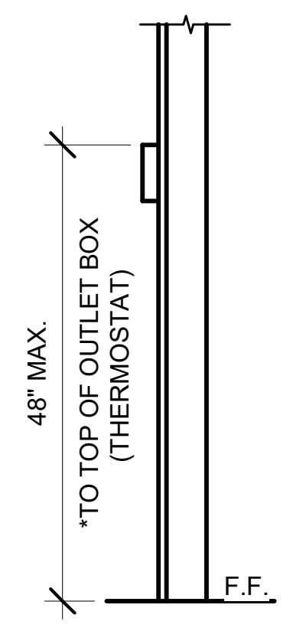


ROOF CAP PER SCHEDULE (THIS SHEET) ATTACH PER MFR.
MASTIC SET FLANGE ALL 4-SIDES (CONT.)
SHTG AND ROOFING
STRAP(2-SIDES) AND FSTN'G PER 17 / A3.3
FAN MOUNT w/ (2)#8 STSMS FSTN'R TO 2'-0" CROSSBAR
T-GRID CLG AND PANEL
EXHAUST FAN
FLEXIBLE DUCTING PER PLAN
CROSS BAR SUPPORT (ADDITIONAL) w/ #8 STSMS FSTN'D

SEE ISOMETRIC DETAIL 17/A3.3 FOR STRAPS

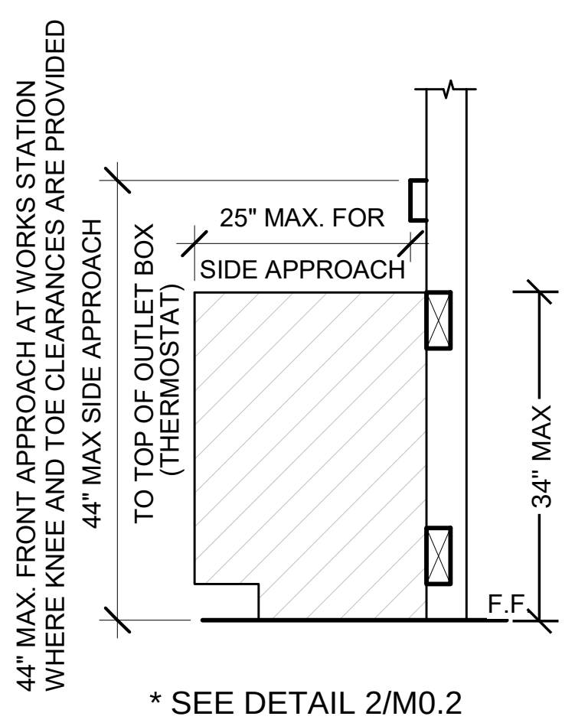


HVAC UNIT
ANGLE & FASTENING PER STRUCTURAL 3 / S4.0 3 / S4.1
FLASHING
GASKET
WATERPROOFING PER MFR.
CURB PER MFR.
WOOD NAILER
ROOFING MATERIAL
RIGID INSULATION
FASTENING PER STRUCTURAL PLANS
ROOF
SEE DETAIL 19/S3.1 FOR FSTN'G



* 30"x48" MIN CLR FLOOR SPACE AT EACH LOCATION FOR PERPENDICULAR APPROACH

9 1" = 1'-0"
MOUNTING ELEV.



44" MAX. FRONT APPROACH AT WORKS STATION WHERE KNEE AND TOE CLEARANCES ARE PROVIDED
44" MAX SIDE APPROACH
TO TOP OF OUTLET BOX (THERMOSTAT)
25" MAX. FOR SIDE APPROACH
34" MAX
F.F.

* SEE DETAIL 2/M0.2

10 1" = 1'-0"
ELEV. @ WORKSTATION

10.6 EER and 11 EER

SINGLE PACKAGE VERTICAL HEAT PUMP SCHEDULE

	STANDARD	OPTION #I
TAG	WM-1	WM-1
NOMINAL TONNAGE	3.0 TONS	4.0 TONS
MANUFACTURER	**BARD	**BARD
MODEL#	W36HB-A	W48HC-A
CFM	1150	1500
STATIC PRESSURE	0.15	0.2
MIN OSA	365	548
DRIVE	DIRECT	DIRECT
MCA	20.4	58
MOCP	30	60
VOLTAGE	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#6/#10
DESIGN RETURN AIR (DB/WB)	80/67	80/67
SENSIBLE COOLING @ 95º F (PART/FULL)	24.00/28.00	25.900/36.00
TOTAL COOLING @ 95º F (PART/FULL)	32.00/36.00	34.000/45.500
HEATING CAP. BTUH @ 47º F (PART/FULL)	29.200/32.200	29.200/41.500
HEATING CAP. BTUH @ 17º F	20.000	26.000
OPERATING WEIGHT	380#	550#
EER	11.10	11.00
COP @ 47º F	3.30	3.00
COP @ 17º F	-	2.00

14 SEER

SINGLE PACKAGE ROOF TOP HEAT PUMP SCHEDULE

	STANDARD	OPTION #I
TAG	RM-1	RM-1
NOMINAL TONNAGE	3.0 TONS	4 TONS
MANUFACTURER	**CARRIER	**CARRIER
MODEL#	50VTC48	50VTC48
CFM	1200	1500
STATIC PRESSURE	0.15	0.4
MIN OSA	365	548
DRIVE	BELT	BELT
MCA	59	64
MOCP	60	74
VOLTAGE	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#4/#8
DESIGN RETURN AIR (DB/WB)	80/67	80/67
SENSIBLE COOLING @ 95º F	30.500	35.260
TOTAL COOLING @ 95º F	35.600	49.600
HEATING CAP. BTUH @ 47º F	35.500	45.5000
HEATING CAP. BTUH @ 17º F	18.400	28.600
OPERATING WEIGHT	572#	560#
SEER	14.00	14.00
HSPF	8.1	8.0
COP @ 47º F	3.4	3.4
COP @ 17º F	2.3	2.4

ATTACHMENT 3: Mechanical Equipment List

This attachment summarizes all the HVAC equipment and controls required for each size modular building.

Indicate NA for all non-applicable boxes.

LIST OF MECHANICAL EQUIPMENT

Any substitutions of equipment made to the approved PC must be equal or better than the equipment listed below.

Modular size and equipment type					Responsible for programing/commissioning (builder or HVAC contractor)
HVAC Equipment Make and Model Equipment ID on Plans					NA
HVAC Equipment Efficiency Cooling Heating Phase					NA
BTUH Heating Cooling					NA
Indoor/Blower Fan BHP/HP CFM @ at ? inch WC					NA
Strip Heating Maximum allowed or Not Allowed if not modeled					NA
Thermostat (Sensor) Make and Model Setback – § 110.2(c) Heat Pumps – § 110.2(b)					(Responsible Person) Required Acceptance Test NRCA-MCH-03-A
Shut-off and Reset Make and Model Occupancy Sensor or 4 hr override – § 120.2(e)					(Responsible Person) Required Acceptance Test NRCA-MCH-03-A
Economizer Equipment Make and Model – § 140.4(e)					(Responsible Person) Required Acceptance Test NRCA-MCH-02-A and 05-A
Economizer Controls Make and Model – § 140.4(e)					(Responsible Person) Required Acceptance Test NRCA-MCH-02-A and 05-A
Economizer Fault Detection Software Make and Model - § 120.2(i)					(Responsible Person) Required Acceptance Test NRCA-MCH-12-A or 13-A
Outside Air In CFM from T24 - § 120.1(c)3					(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Ventilation Kit If economizer is not used specify Make and Model.					(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Demand Control Ventilation Co2 Sensor with ppm display Make and Model - §120.1(d)4					(Responsible Person) Required Acceptance Test NRCA-MCH-06-A
Minimum DCV Outside Air in CFM .15 X conditioned floor area – § 120.1(d)4E					(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Demand Shed Thermostat or Controls Make Model If DDC to the zone § 120.2(h)					(Responsible Person) Required Acceptance Test NRCA-MCH-11-A

HVAC SCHEDULE

BUILDING SIZE		# OF HVAC	
		3 1/2 TON HVAC	4 TON HVAC
☒	24' x 40'	1	
☐	36' x 40'		1
☐	48' x 40'	2	
☐	60' x 40'		2
☐	72' x 40'	3	
☐	84' x 40'		3
☐	96' x 40'	4	
☐	108' x 40'		4
☐	120' x 40'	5	

MERV 13 AND 2-INCH DEPTH PER ENERGY CODE 120.1(C)1. FILTERS REQ'D FOR ALL UNITS

HVAC NOTES
1. SET BACK THERMOSTAT SHALL BE PROVIDED
2. MINIMUM OUTSIDE AIR 15 CFM PER OCCUPANT AND THE UNIT SHALL UTILIZE DEMAND CONTROL VENTILATION
3. MODEL NUMBERS FOR HEAT PUMP UNITS WITH OPTIONAL 5.0 AUXILIARY HEAT STRIPS, WHEN THE HEAT STRIP IS NOT USED, THE MCA AND MOCP MUST BE VERIFIED AND HEAT STRIPS LARGER THAN THE SIZES SHOWN MAY NOT BE USED.

120.1(D)
THERMOSTAT SHALL BE PROGRAMED WITH EXPECTED OCCUPIED TIMES.AIR HANDLER FAN WILL BE PROGRAMED TO RUN DURING ALL OCCUPIED TIMES.PRE-OCCUPANCY PURGE SHALL BE PROGRAMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED.

FOR ROOF MOUNTED HVAC UNITS A GASKET SHALL BE PLACED BETWEEN THE CURB AND THE HVAC UNIT.MASTIC SEALANT SHALL BE USED TO SEAL ALL SEAMS BETWEEN THE HVAC UNIT AND THE CURB. THE SUPPLY AND RETURN DUCTS SHALL BE ATTACHED TO THE CURB AND MASTIC SHALL BE USED TO SEAL THE DUCTS TO THE CURB. THE SUPPLY AND RETURN DUCTS SHALL BE THE SAME SIZE AND ALIGN WITH THE HVAC UNIT.

FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4.

DUCT INSTALLATION AND PLENUMS SHALL MEET THE REQUIREMENTS OF ENERGY CODE SECTION 120.4 AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
HORIZONTAL FLEX DUCT SHALL BE SUPPORTED AT A MAXIMUM 4 FT INTERVALS, WITH HANGING STRAPS A MINIMUM 1 1/2 IN. WIDE.
DUCTS MUST BE PULLED TIGHT WITH A MAXIMUM SAG OF ½" PER FOOT OF HORIZONTAL RUN.
DUCT SHALL NOT BE KINKED OR CRUSHED.
BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.

SECTION 915
CARBON MONOXIDE DETECTION

915.2.3 Group E occupancies. Carbon monoxide detection shall be installed in classrooms in Group E occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed byschool personnel.

915.3 Detection equipment. Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5.

CFC 915.1 - Classrooms which contain a fuel-burning appliance or a fuel-burning fireplace or are supplied by a forced-air furnace shall be provided with a carbon monoxide detexction system. Provide a carbon monoxide detection system

GENERAL NOTE:
UTLILITIES THAT SPAN BETWEEN UNITS OR ACROSS SEISMIC SEPARATION JOINTS MUST BE DESIGNED WITH A FLEXIBLE CONNECTION THAT CAN ACCOMMODATE DIFFERENTIAL MOVEMENTS

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
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SS ☑ FLS ☑ ACS ☑
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PROFESSIONAL STAMP
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APP: 04-123059 PC
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SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
MISCELLANEOUS
NOTES & DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
M0.1

SHEET OF

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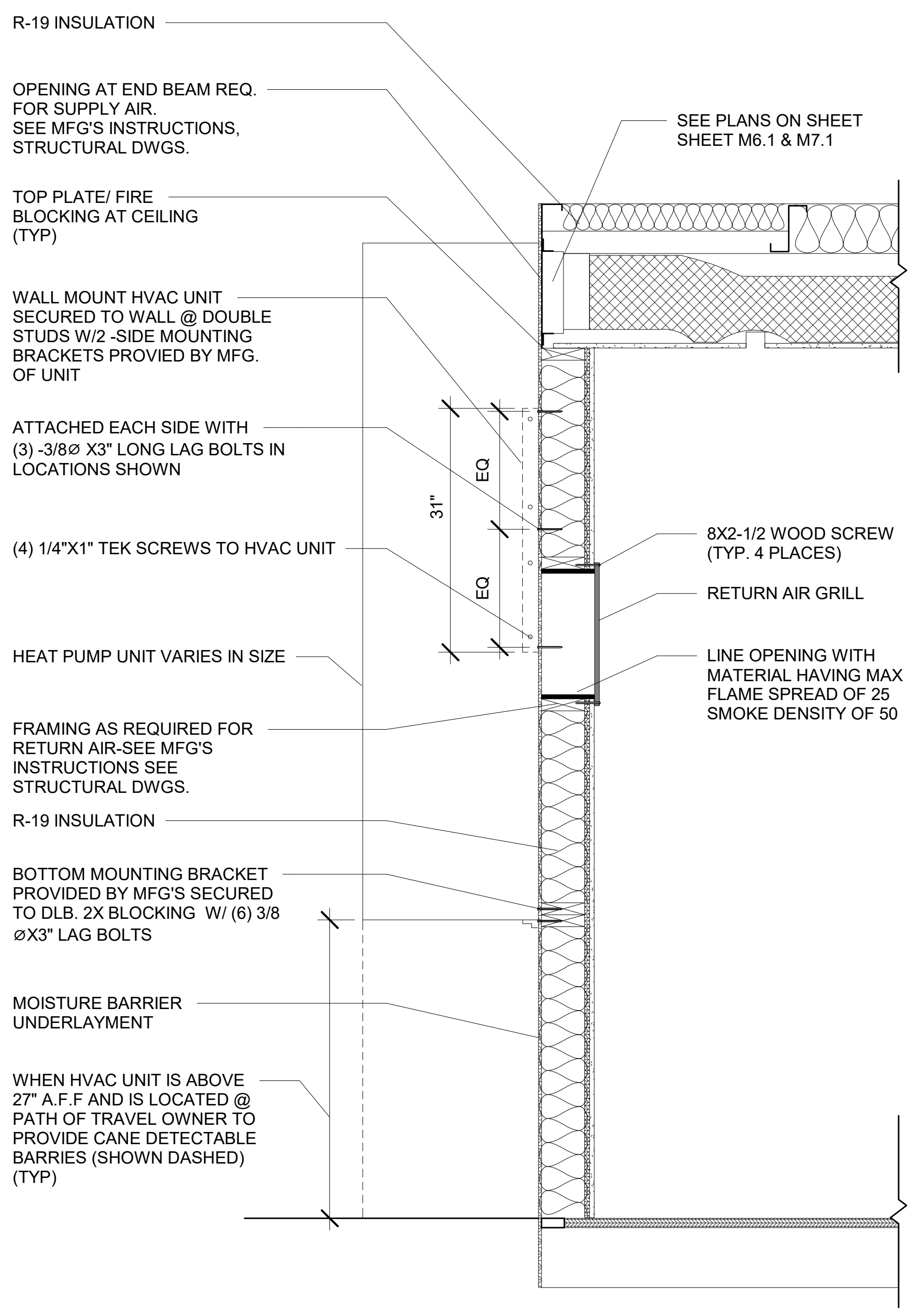
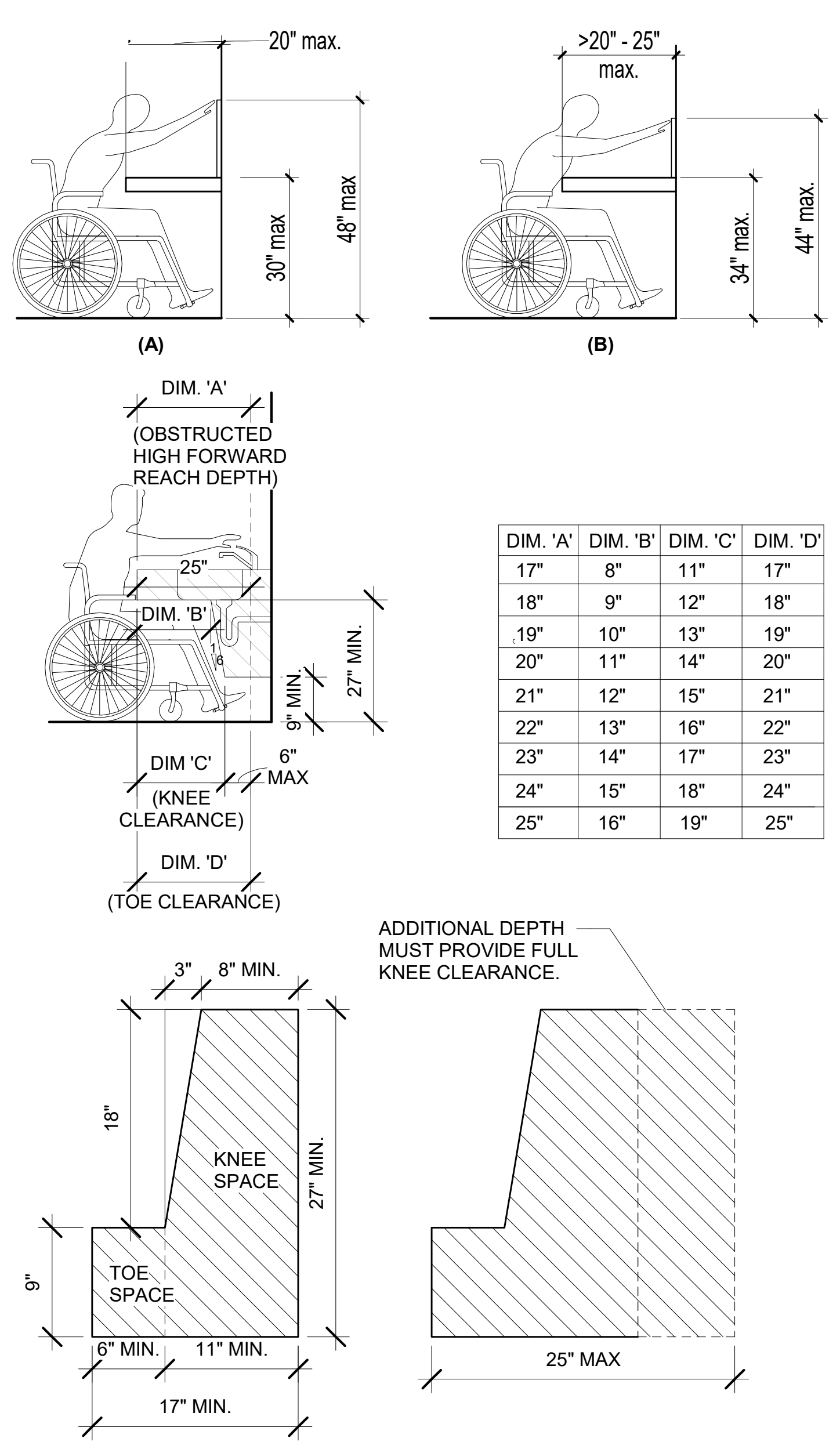

R-19 INSULATION
OPENING AT END BEAM REQ. FOR SUPPLY AIR. SEE MFG'S INSTRUCTIONS, STRUCTURAL DWGS.
TOP PLATE/ FIRE BLOCKING AT CEILING (TYP)
WALL MOUNT HVAC UNIT SECURED TO WALL @ DOUBLE STUDS W/2 -SIDE MOUNTING BRACKETS PROVIED BY MFG. OF UNIT
ATTACHED EACH SIDE WITH (3) -3/8Ø X3" LONG LAG BOLTS IN LOCATIONS SHOWN
(4) 1/4"X1" TEK SCREWS TO HVAC UNIT
HEAT PUMP UNIT VARIES IN SIZE
FRAMING AS REQUIRED FOR RETURN AIR-SEE MFG'S INSTRUCTIONS SEE STRUCTURAL DWGS.
R-19 INSULATION
BOTTOM MOUNTING BRACKET PROVIDED BY MFG'S SECURED TO DLB. 2X BLOCKING W/ (6) 3/8 ØX3" LAG BOLTS
MOISTURE BARRIER UNDERLAYMENT
WHEN HVAC UNIT IS ABOVE 27" A.F.F AND IS LOCATED @ PATH OF TRAVEL OWNER TO PROVIDE CANE DETECTABLE BARRIES (SHOWN DASHED) (TYP)
SEE PLANS ON SHEET SHEET M6.1 & M7.1
8X2-1/2 WOOD SCREW (TYP. 4 PLACES)
RETURN AIR GRILL
LINE OPENING WITH MATERIAL HAVING MAX FLAME SPREAD OF 25 SMOKE DENSITY OF 50
31"
EQ
EQ

1 *3/4" = 1'-0"*
HVAC @ WALL SECTION

FIGURE 308.2.2. OBSTRUCTED HIGH FORWARD REACH



DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'
17"	8"	11"	17"
18"	9"	12"	18"
19"	10"	13"	19"
20"	11"	14"	20"
21"	12"	15"	21"
22"	13"	16"	22"
23"	14"	17"	23"
24"	15"	18"	24"
25"	16"	19"	25"

2 ***TOE SPACE CLEARANCE***

120.1(D)
THERMOSTAT SHALL BE PROGRAMED WITH EXPECTED OCCUPIED TIMES.AIR HANDLER FAN WILL BE PROGRAMED TO RUN DURING ALL OCCUPIED TIMES.PRE-OCCUPANCY PURGE SHALL BE PROGRAMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED.

FOR ROOF MOUNTED HVAC UNITS A GASKET SHALL BE PLACED BETWEEN THE CURB AND THE HVAC UNIT.MASTIC SEALANT SHALL BE USED TO SEAL ALL SEAMS BETWEEN THE HVAC UNIT AND THE CURB.
THE SUPPLY AND RETURN DUCTS SHALL BE ATTACHED TO THE CURB AND MASTIC SHALL BE USED TO SEAL THE DUCTS TO THE CURB.
THE SUPPLY AND RETURN DUCTS SHALL BE THE SAME SIZE AND ALIGN WITH THE HVAC UNIT.

FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4.

DUCT INSTALLATION AND PLENUMS SHALL MEET THE REQUIREMENTS OF ENERGY CODE SECTION 120.4 AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
HORIZONTAL FLEX DUCT SHALL BE SUPPORTED AT A MAXIMUM 4 FT INTERVALS, WITH HANGING STRAPS A MINIMUM 1 1/2 IN. WIDE.
DUCTS MUST BE PULLED TIGHT WITH A MAXIMUM SAG OF ½" PER FOOT OF HORIZONTAL RUN.
DUCT SHALL NOT BE KINKED OR CRUSHED.
BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.

UPON SITE PLACEMENT OR SITE CONSTRUCTION, THE OPERATION AND MAINTENANCE DOCUMENTATION FOR ALL MECHANICAL AND LIGHTING SYSTEMS AND CONTROLS SHALL BE PROVIDED BY THE MODULAR BUILDING MANUFACTURER, OR THE GENERAL CONTRACTOR FOR THE PERMANENT MODULAR RELOCATABLE BUILDING AND DELIVERED TO THE OWNER.

AT THE TIME OF ROUGH INSTALLATION, DURING IN THE FACTORY OR ON THE CONSTRUCTION SITE, DURING SHIPMENT (IF APPLICABLE) AND UNTIL FINAL STARTUP OF THE HEATING COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED DISTRIBUTION COMPONENT OPENINGS SHALL BE PROCTED TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM

3 *1/4" = 1'-0"*
MECHANICAL NOTES

ATTACHMENT 3: Mechanical Equipment List

This attachment summarizes all the HVAC equipment and controls required for each size modular building.

Indicate NA for all non-applicable boxes.

LIST OF MECHANICAL EQUIPMENT

Any substitutions of equipment made to the approved PC must be equal or better than the equipment listed below.

Modular size and equipment type	4.0 TON WM HVAC	5.0 TON WM HVAC	3 TON WM HVAC	Responsible for programing/commissioning (builder or HVAC contractor)
HVAC Equipment Make and Model	BARD W46HC-A	BARD W60H1	BARD W36 HB	NA
BTUH Heating Cooling	41,500 45,500	51,000 55,500	38,500 40,000	NA
Indoor/Blower Fan BHP/HP CFM @ at ? inch WC	1/3-825-2 2.5 24"-2900	1/3-825-2 4.1 24"-3700	1/3-825-2 2.5 24"-2900	NA
Strip Heating Maximum allowed or Not Allowed if not modeled	PER TITLE 24	PER TITLE 24	PER TITLE 24	NA
Minimum allowed SEER, EER, HSPF and/or COP, and Phase	14, 11, 3.40, 3	14, 11, 3.30 ,3	14, 11, 3.40, 3	NA
Thermostat Make and Model Setback – § 110.2(c) Heat Pumps – § 110.2(b)	BARD #8403-061 C48H1	BARD #8403-061 C60H1	BARD #8403-061 C42H1	(Responsible Person) Required Acceptance Test NRCA-MCH-03-A
Shut-off and Reset Make and Model Occupancy Sensor or 4 hr override – § 120.2(e)	STANDARD BUILT-IN	STANDARD BUILT-IN	STANDARD BUILT-IN	(Responsible Person) Required Acceptance Test NRCA-MCH-03-A
Economizer Equipment Make and Model – § 140.4(e)	ECON-NC5	ECON-NC5	ECON-NC5	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A and 05-A
Economizer Controls Make and Model – § 140.4(e)	ECON-WD5	ECON-WD5	ECON-WD5	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A and 05-A
Economizer Fault Detection Software Make and Model - § 120.2(i)	ECON-DB5	ECON-DB5	ECON-DB5	(Responsible Person) Required Acceptance Test NRCA-MCH-12-A or 13-A
Outside Air In CFM - § 120.1(c)3	PER TITLE 24	PER TITLE 24	PER TITLE 24	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Ventilation Kit If economizer is not installed specify Make and Model.	N/A	N/A	N/A	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Demand Control Ventilation Co2 Sensor with ppm display Make and Model - §120.1(d)4	PER BARD SPECIFICAIONS	PER BARD SPECIFICAIONS	PER BARD SPECIFICAIONS	(Responsible Person) Required Acceptance Test NRCA-MCH-06-A
Minimum Designed Outside Air in CFM - § 120.1(c)3	PER TITLE 24	PER TITLE 24	PER TITLE 24	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Demand Shed Thermostat Make Model If DDC to the zone § 120.2(h)				(Responsible Person) Required Acceptance Test NRCA-MCH-11-A

NOTE: SEE M0.1 AND CUT SHEETS FOR ADDITIONAL EQUIPMENT OPTIONS

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
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PROFESSIONAL STAMP

MANNY D. FRISCH
No. 53380
Exp. 03/31/24
STRUCTURAL
RST#22088
02/16/24

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

SEQUENCE OF OPERATIONS

BARD W48HC-A

Sequence of Operation

Cooling

Circuit R-Y1 makes at thermostat pulling in compressor contactor, starting the compressor and outdoor motor. (See ***NOTE*** under **Condenser Fan Operation** concerning models equipped with low ambient control.) The G (indoor motor) circuit is automatically completed by the thermostat on any call for cooling operation or can be energized by manual fan switch on subbase for constant air circulation. On a call for 2nd stage heating, circuit R-W2 makes at the thermostat pulling in heat contactor for the strip heat and blower operation. On a call for third stage heat, R-W3 makes bringing on second heat contactor, if so equipped.

Heating

A 24V solenoid coil on reversing valve controls heating cycle operation. Two thermostat options, one allowing "Auto" changeover from cycle to cycle and the other constantly energizing solenoid coil during heating season—thus eliminating pressure equalization noise except during defrost, are to be used.

On "Auto" option, a circuit is completed from R-B/W1 and R-Y1 on each heating "on" cycle, energizing reversing valve solenoid and pulling in compressor contactor, starting compressor and outdoor motor. R-G also make starting indoor blower motor. Heat pump heating cycle now in operation.

The second option has no "Auto" changeover position, but instead energizes the reversing valve solenoid constantly whenever the system switch on subbase is placed in "Heat" position, the "B" terminal being constantly energized from R. A thermostat demand for heat completes R-Y1 circuit, pulling in compressor contactor starting compressor and outdoor motor. R-G also make starting indoor blower motor.

On a call for 2nd stage heating, circuit R-W2 makes at the thermostat pulling in the heat contactor for the strip heat and blower operation. On a call for third stage heat, R-B/W1 breaks, dropping out heat pump, and R-W3 makes, bringing on second heat contactor, if so equipped.

Balanced Climate™ Mode

Balanced Climate™ is a great comfort feature that can easily be applied under any normal circumstances. If the Bard air conditioning system is being set up in a typical environment where 72°F is the lowest cooling setpoint, remove the Y1/Y2 jumper and install a 2-stage cooling thermostat. This will increase the humidity removal up to 35% and provide a much more comfortable environment. This mode will also increase the supply temperature when in heating mode. When Balanced Climate mode is activated, it is employed in both heating and cooling modes.

NOTE: *Units with mechanical dehumidification require an additional connection to be made when enabling Balanced Climate. Refer to dehumidification supplemental instructions for this step.*

If the application is likely to require air conditioning operation below 60°F outdoor conditions, a low ambient control (LAC) kit must be installed. The LAC kit is equipped with an outdoor temperature switch that disables Balanced Climate mode when the outdoor temperature drops below 50°F. This prevents potential evaporator coil freeze up issues. The LAC kit also comes with an evaporator freeze protection thermostat that cuts out the compressor if the evaporator begins to freeze up.

If the unit is being installed with any ventilation package, a Bard LAC kit must be installed. Failure to utilize an LAC with any air conditioner can cause coil freeze up.

Balanced Climate can readily be applied to duct-free (supply and return air grille) applications. It may also be applied to ducted applications with **limited static of 0.20" ESP (total including both supply and return statics)**. Consult Bard Application Engineering for details prior to implementation.

CAUTION: *Balanced Climate is not a replacement for a dehumidification (hot gas reheat) unit for extreme applications, but rather an enhancement feature for limited climates and applications.*

BARD C60HC1 & C42HC1

Sequence of Operation

Cooling Stage 1 – Circuit R-Y makes at thermostat pulling in compressor contactor, starting the compressor and outdoor motor. The G (indoor motor) circuit is automatically completed on any call for cooling operation or can be energized by manual fan switch on subbase for constant air circulation.

Cooling Stage 2 – Circuit R-Y1 makes at the thermostat, energizing the 2nd stage solenoid in the compressor. Default position is not energized. Compressor will run at low capacity until this solenoid is energized.

Heating Stage 1 – A 24V solenoid coil on reversing valve controls heating cycle operation. Two thermostat options, one allowing "Auto" changeover from cycle to cycle and the other constantly energizing solenoid coil during heating season and thus eliminating pressure equalization noise except during defrost, are to be used. On "Auto" option, a circuit is completed from R-B and R-Y on each heating "on" cycle, energizing reversing valve solenoid and pulling in compressor contactor starting compressor and outdoor motor. R-G also make, starting indoor blower motor. Heat pump heating cycle now in operation. The second option has no "Auto" changeover position, but instead energizes the reversing valve solenoid constantly whenever the system switch on subbase is placed in "Heat" position, the "B" terminal being constantly energized from R. A thermostat demand for Stage 1 heat completes R-Y circuit, pulling in compressor contactor and starting compressor and outdoor motor. R-G also make, starting indoor blower motor.

Heating Stage 2 – Circuit R-Y2 makes at the thermostat, energizing the 2nd stage solenoid in the compressor.

Pressure Service Ports

High and low pressure service ports are installed on all units so that the system operating pressures can be observed. Pressure tables 6A and 6B cover all models. It is imperative to match the correct pressure table to the unit by model number.

This unit employs high-flow Coremax valves instead of the typical Shrader type valves.

WARNING! Do NOT use a Schrader valve core removal tool with these valves. Use of such a tool could result in eye injuries or refrigerant burns!

To change a Coremax valve without first removing the refrigerant, a special tool is required which can be obtained at www.fastestinc.com/en/SCCA07H. See the replacement parts manual for replacement core part numbers.

CARRIER 50VTC48L

OPERATION

Sequence of Operation—When free cooling is not available, the compressor will be controlled by the thermostat. When free cooling is available, the outdoor–air damper is modulated by the Economizer control to provide a 50° to 55°F (10° to 12.8°C) supply–air temperature into the zone. As the supply–air temperature fluctuates above 55° (12.8°C) or below 50°F (10°C), the dampers will be modulated (open or close) to bring the supply–air temperature back within the set points. For Economizer operation, there must be a thermostat call for the fan (G). This will move the damper to its minimum position during the occupied mode.

NOTE: The DCV Max potentiometer must be closed (CCW) when not using CO_2 sensor.

Above 50°F (10°C) supply–air temperature, the dampers will modulate from 100% open to the minimum open position. From 50°F to 45°F (10° to 7.2°C) supply–air temperature, the dampers will maintain at the minimum open position. Below 45°F (7.2°C), the dampers will be completely shut. As the supply–air temperature rises, the dampers will come back open to the minimum open position once the supply–air temperature rises to 48°F (8.9°C). If power exhaust is installed, as the outdoor–air damper opens and closes, the power exhaust fans will be energized and deenergized. If field–installed accessory CO_2 sensors are connected to the Economizer control, a demand controlled ventilation strategy will begin to operate. As the CO_2 level in the zone increases above the CO_2 set point, the minimum position of the damper will be increased proportionally. As the CO_2 level decreases because of the increase in fresh air, the outdoor–air damper will be proportionally closed. Damper position will follow the higher demand condition from DCV mode or free cooling mode. Damper movement from full closed to full open (or vice versa) will take between 1 1/2 and 2 1/2 minutes. If free cooling can be used as determined from the appropriate changeover command (dry bulb, enthalpy curve, or differential enthalpy), a call for cooling (Y1 closes at the thermostat) will cause the control to modulate the dampers open to maintain the supply air temperature set point at 50° to 55°F (10° to 12.8°C). As the supply air temperature drops below the set point range of 50° to 55°F (10° to 12.8°C), the control will modulate the outdoor–air dampers closed to maintain the proper supply–air temperature.

TABLE 140.4-E AIR ECONOMIZER HIGH LIMIT SHUT OFF CONTROL REQUIREMENTS

Device Type[a]	Climate Zones	Required High Limit (Economizer Off When):	
		Equation[b]	Description
Fixed Dry Bulb	1, 3, 5, 11-16	$T_{OA} > 75°F$	Outdoor air temperature exceeds 75°F
	2, 4, 10	$T_{OA} > 73°F$	Outdoor air temperature exceeds 73°F
	6, 8, 9	$T_{OA} > 71°F$	Outdoor air temperature exceeds 71°F
	7	$T_{OA} > 69°F$	Outdoor air temperature exceeds 69°F
Differential Dry Bulb	1, 3, 5, 11-16	$T_{OA} > T_{RA}°F$	Outdoor air temperature exceeds return air temperature
	2, 4, 10	$T_{OA} > T_{RA}-2°F$	Outdoor air temperature exceeds return air temperature minus 2°F
	6, 8, 9	$T_{OA} > T_{RA}-4°F$	Outdoor air temperature exceeds return air temperature minus 4°F
	7	$T_{OA} > T_{RA}-6°F$	Outdoor air temperature exceeds return air temperature minus 6°F
Fixed Enthalpy[c] + Fixed Drybulb	All	$h_{OA} > 28$ Btu/lb[c] or $T_{OA} > 75°F$	Outdoor air enthalpy exceeds 28 Btu/lb of dry air[c] or Outdoor air temperature exceeds 75°F

[a] Only the high limit control devices listed are allowed to be used and at the setpoints listed. Others such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, may not be used in any Climate Zone for compliance with Section 140.4(e)1 unless approval for use is provided by the Energy Commission Executive Director.

[b] Devices with selectable (rather than adjustable) setpoints shall be capable of being set to within 2°F and 2 Btu/lb of the setpoint listed.

[c] At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. As an example, at approximately 6,000 foot elevation, the fixed enthalpy limit is approximately 30.7 Btu/lb.

ALL ECONOMIZERS MUST BE PROGRAMMED IN THE FIELD BY THE HVAC CONTRACTOR TO THE TEMPERATURE IN TABLE 140.4-E

PC DESIGN REVIEW INFORMATION
TItle 24, Part 6, Energy Code
DSA Application #: 04-121369
Calculation Date/Time of Energy Report: 2023-07-26 XX
Model Name and Option: 24'x40' PC (Wood Frame Walls)
Total Floor Area: 960 ft²
HVAC System Type: Wall Mounted A/C

Climate Zone 14 (Palmdale)

Azimuth (Front Orientation)		Standard Design	Proposed Design	Margin	Margin %	Worst Case
30°	TDV-E	366.40	297.14	69.26	18.9028%	
	TDV-T	366.40	297.14	69.26	18.9028%	
	SOURCE	36.24	30.65	5.59	15.4249%	
75°	TDV-E	358.72	295.30	63.42	17.6795%	**
	TDV-T	358.72	295.30	63.42	17.6795%	**
	SOURCE	35.63	30.56	5.07	14.2296%	**
120°	TDV-E	363.47	296.43	67.04	18.4444%	
	TDV-T	363.47	296.43	67.04	18.4444%	
	SOURCE	36.01	30.64	5.37	14.9125%	
165°	TDV-E	366.46	297.42	69.04	18.8397%	
	TDV-T	366.46	297.42	69.04	18.8397%	
	SOURCE	36.22	30.64	5.58	15.4059%	
210°	TDV-E	366.40	297.14	69.26	18.9028%	
	TDV-T	366.40	297.14	69.26	18.9028%	
	SOURCE	36.24	30.65	5.59	15.4249%	
255°	TDV-E	358.72	295.30	63.42	17.6795%	**
	TDV-T	358.72	295.30	63.42	17.6795%	**
	SOURCE	35.63	30.56	5.07	14.2296%	**
300°	TDV-E	363.47	296.44	67.03	18.4417%	
	TDV-T	363.47	296.44	67.03	18.4417%	
	SOURCE	36.01	30.64	5.37	14.9125%	
345°	TDV-E	366.46	297.42	69.04	18.8397%	
	TDV-T	366.46	297.42	69.04	18.8397%	
	SOURCE	36.22	30.64	5.58	15.4059%	

Climate Zone 15 (Palm Springs)

Azimuth (Front Orientation)		Standard Design	Proposed Design	Margin	Margin %	Worst Case
30°	TDV-E	378.51	303.65	74.86	19.7775%	
	TDV-T	378.51	303.65	74.86	19.7775%	
	SOURCE	33.26	26.66	6.60	19.8437%	
75°	TDV-E	369.92	301.77	68.15	18.4229%	**
	TDV-T	369.92	301.77	68.15	18.4229%	**
	SOURCE	32.57	26.55	6.02	18.4833%	**
120°	TDV-E	370.43	302.74	67.69	18.2734%	
	TDV-T	370.43	302.74	67.69	18.2734%	
	SOURCE	32.71	26.64	6.07	18.5570%	
165°	TDV-E	378.42	303.43	74.99	19.8166%	
	TDV-T	378.42	303.43	74.99	19.8166%	
	SOURCE	33.23	26.65	6.58	19.8014%	
210°	TDV-E	378.51	303.65	74.86	19.7775%	
	TDV-T	378.51	303.65	74.86	19.7775%	
	SOURCE	33.26	26.66	6.60	19.8437%	
255°	TDV-E	369.92	301.77	68.15	18.4229%	**
	TDV-T	369.92	301.77	68.15	18.4229%	**
	SOURCE	32.57	26.55	6.02	18.4833%	**
300°	TDV-E	370.43	302.74	67.69	18.2734%	
	TDV-T	370.43	302.74	67.69	18.2734%	
	SOURCE	32.71	26.64	6.07	18.5570%	
345°	TDV-E	378.42	303.43	74.99	19.8166%	
	TDV-T	378.42	303.43	74.99	19.8166%	
	SOURCE	33.23	26.65	6.58	19.8014%	

Climate Zone 16 (Blue Canyon)

Azimuth (Front Orientation)		Standard Design	Proposed Design	Margin	Margin %	Worst Case
30°	TDV-E	307.24	278.52	28.72	9.3477%	**
	TDV-T	307.24	278.52	28.72	9.3477%	**
	SOURCE	54.83	41.05	13.78	25.1322%	**
75°	TDV-E	341.77	272.69	69.08	20.2124%	
	TDV-T	341.77	272.69	69.08	20.2124%	
	SOURCE	65.39	40.97	24.42	37.3452%	
120°	TDV-E	307.35	273.40	33.95	11.0460%	
	TDV-T	307.35	273.40	33.95	11.0460%	
	SOURCE	54.88	41.01	13.87	25.2733%	
165°	TDV-E	309.02	273.26	35.76	11.5721%	
	TDV-T	309.02	273.26	35.76	11.5721%	
	SOURCE	54.91	41.02	13.89	25.2959%	
210°	TDV-E	307.24	273.52	33.72	10.9751%	
	TDV-T	307.24	273.52	33.72	10.9751%	
	SOURCE	54.83	41.05	13.78	25.1322%	
255°	TDV-E	341.77	272.69	69.08	20.2124%	
	TDV-T	341.77	272.69	69.08	20.2124%	
	SOURCE	65.39	40.97	24.42	37.3452%	
300°	TDV-E	307.35	273.40	33.95	11.0460%	
	TDV-T	307.35	273.40	33.95	11.0460%	
	SOURCE	54.88	41.01	13.87	25.2733%	
345°	TDV-E	309.02	273.26	35.76	11.5721%	
	TDV-T	309.02	273.26	35.76	11.5721%	
	SOURCE	54.91	41.02	13.89	25.2959%	

Reference: Energy Code, Appendix NA4, Table NA4-3
***** In the event that there are identical percentages, select one.
******This table is not currently generated by the energy software.
Least Compliance Margin Orientation

Notes:
<

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
MISCELLANEOUS NOTES & DETAILS

PROJECT NUMBER
22088

DRAWN BY
Author

CHECKED BY
Checker

DATE

SHEET NO.
M0.2

SHEET OF

C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

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APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

BUILDING ENERGY ANALYSIS REPORT

PROJECT:
24X40 (PC 04-121369) - Wall AC
Climate Zone 14
Palmdale, CA

Project Designer:
R & S Tavares Associates
11590 W. Bernardo Court, Suite 100
San Diego, Ca. 92127

Report Prepared by:
LAL B. SAHGAL
LSA CONSULTING ENGINEERS
83, WINDSWEPT WAY
MISSION VIEJO, CA 92692
(949) 830-4746

Job Number:

Date:
7/26/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 1 of 17)

Project Name:	24X40 (PC 04-121369) - Wall AC	**Date Prepared:**	2023-07-25

A. General Information

1	Project Name	24X40 (PC 04-121369) - Wall AC			
2	Run Title	Title 24 Analysis			
3	Project Location	Climate Zone 14			
4	City	Palmdale	5	Standards Version	Compliance 2022
6	Zip code	99999	7	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	14	9	Building Orientation (deg)	75
10	Building Type(s)	• Nonresidential	11	Weather File	PALMDALE_STYP20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	960	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	960	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 2 of 17)

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						**Building Components Complying Prescriptively**	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

---

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 3 of 17)

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		**Source Energy Use**
	Efficiency[1] (kBtu/ft² - yr)	**Total[2] (kBtu/ft² - yr)**	**Total[2] (kBtu/ft² - yr)**
Standard Design	358.72	358.72	30.7
Proposed Design	295.31	295.31	25.64
Compliance Margins	**63.41**	**63.41**	**5.06**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 4 of 17)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	**Standard Design (TDV)**	**Proposed Design (TDV)**	**Compliance Margin (TDV)[1]**
Space Heating	25.61	42	-16.39
Space Cooling	93.22	95.25	-2.03
Indoor Fans	152.65	81.72	70.93
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	54.63	54.6	0.03
Indoor Lighting	32.61	21.74	10.87
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**358.72**	**295.31**	**63.41 (17.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**358.72**	**295.31**	**63.41 (17.7%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 5 of 17)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	**Standard Design (TDV)**	**Proposed Design (TDV)**	**Compliance Margin (TDV)[1]**
Receptacle	67.93	67.93	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**426.65**	**363.24**	**63.41 (14.9%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 6 of 17)

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

COMPLIES[2]

Energy Component	**Standard Design (SOURCE)**	**Proposed Design (SOURCE)**	**Compliance Margin (SOURCE)[1]**
Space Heating	3.73	6.14	-2.41
Space Cooling	3.47	3.65	-0.18
Indoor Fans	14.94	8.15	6.79
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	5.99	5.99	0
Indoor Lighting	2.57	1.71	0.86
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**30.7**	**25.64**	**5.06 (16.5%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**30.7**	**25.64**	**5.06 (16.5%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 7 of 17)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	**Standard Design (SOURCE)**	**Proposed Design (SOURCE)**	**Compliance Margin (SOURCE)[1]**
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**35.62**	**30.56**	**5.06 (14.2%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E
Nonresidential Performance Compliance Method (Page 8 of 17)

C7. ENERGY USE SUMMARY

Energy Component	**Standard Design Site (MWh)**	**Proposed Design Site (MWh)**	**Margin (MWh)**	**Standard Design Site (MBtu)**	**Proposed Design Site (MBtu)**	**Margin (MBtu)**
Space Heating	0.8	1.3	-0.5	---	---	---
Space Cooling	2.3	2.3	0	---	---	---
Indoor Fans	5.2	2.8	2.4	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	2	2	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**11.5**	**9.2**	**2.3**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**11.5**	**9.2**	**2.3**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**14**	**11.7**	**2.3**	**0**	**0**	**0**

PROJECT SPECIFIC STATE AGENCY APPROVAL

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~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

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MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
24'x40' T24 CZ 14 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
M2.9

SHEET OF

C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

9/7/2023 11:16:14 AM

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C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	49.76	41.58	8.18	16.44
NET EUI[1]	49.76	41.58	8.18	16.44

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	240	32	13.33
East-Facing[2]	400	0	0
South-Facing[3]	240	32	13.33
West-Facing[4]	400	0	0
Total	**1280**	**64**	**5**
Roof	960	14	1.46

Notes
[1] North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2] East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3] South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4] West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-19 Wood Framed Wall7	Exterior Wall	1,280	Wood	19	N/A	N/A	U-factor	0.0605	Wood siding - 1/2 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in. Softwood - 1.5 in.	N
R-19 Metal Floor Crawlspa14	Exterior Floor	960	Metal	19	N/A	N/A	U-factor	0.0588	Vented Crawl Space Composite-2 Plywood - 1/2 in. Carpet - 3/4 in.	N
Standing Seam R-38 Metal16	Roof	960	N/A	36	N/A	N/A	U-factor	0.06	Metal Standing Seam - 1/16 in. Composite-3	N

[1] Status: N - New, A - Altered, E - Existing

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Sierra Pacific Windows	Vertical fenestration Operable window N/A	NFRC	Manufactured	64	0.35	0.24	0.5	N
Sola tube	Skylight Fixed window N/A	NFRC	Manufactured	14	0.39	0.37	0.65	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
AC-1	Single Package VHP Air System	1	34.37	13.65	COP	3.3	34.56	EER	11	Fixed DB	N

[1] Status: N - New, A - Altered, E - Existing

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
AC-1	1	364.8	1,100	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] Status: N - New, A - Altered, E - Existing

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AC-1	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-First Floor	Education - Classrooms (ages 9-18)	24	364.8	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	
1-First Floor-Trm	Uncontrolled	1	N/A	N/A	1,100	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	384	0	0	0
Building Totals:	**960**	**384**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI--E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
L-1	2x4 LED Panel	48	According to	8	384

[1] If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-First Floor	Classroom, Lecture, or Training Vocational	N/A	N/A	L-1	48	8	384	0
							Lighting Control Credits (Conditioned) Total (Watts)	**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	**Shut-Off Controls 130.1(c) & 160.5(b)4C**
Required	**Required**

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature:
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO, CA 92692	Phone: (949) 830-4746

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:
Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature:	
Company: LSA Consulting Engineers		
Address: 83, Windswept Way	Date Signed:	
City/State/Zip: Mission Viejo, Ca. 92692	License #: M26885	
Phone:	Title:	Scope:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name 24X40 (PC 04-121369) - Wall AC	Date 7/26/2023
System Name AC-1	Floor Area 960

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	33,000
Total Output (Btuh)	33,000
Output (Btuh/sqft)	34.4
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	37.5
Total Output (sqft/Ton)	320.0
Air System	
CFM per System	1,100
Airflow (cfm)	1,100
Airflow (cfm/sqft)	1.15
Airflow (cfm/Ton)	366.7
Outside Air (%)	33.2%
Outside Air (cfm/sqft)	0.38

Note: values above given at ARI conditions

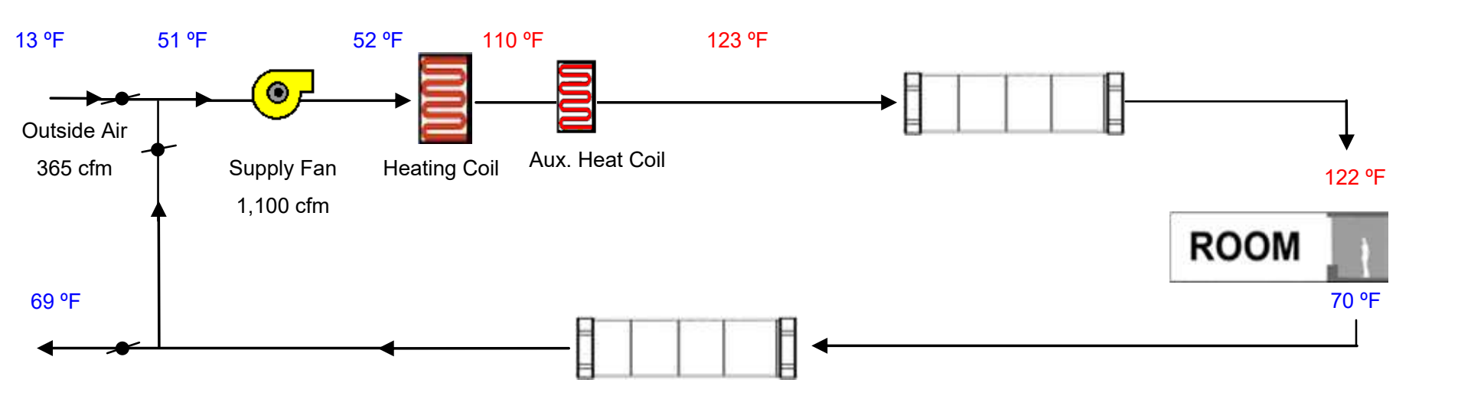
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,054	28,927	9,600	230	11,785
Return Vented Lighting		0			
Return Air Ducts		1,446			589
Return Fan		0			0
Ventilation	365	9,547	-5,338	365	20,216
Supply Fan		1,535			-1,535
Supply Air Ducts		1,446			589
TOTAL SYSTEM LOAD		42,901	4,262		31,644

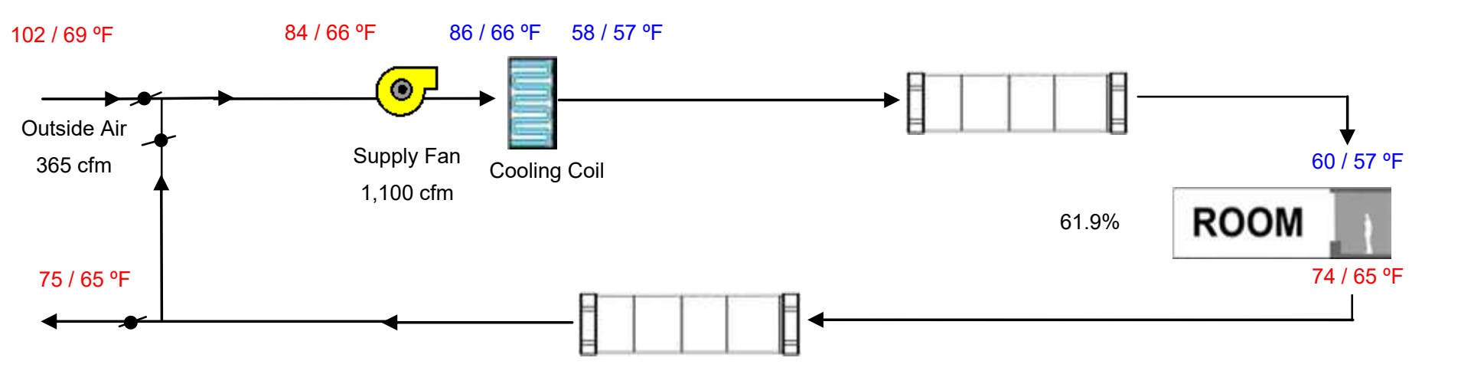
HVAC EQUIPMENT SELECTION

Bard W36HB	29,467	4,973		13,777
HP Supplemental Coil				13,648
Total Adjusted System Output (Adjusted for Peak Design conditions)	29,467	4,973		27,425
TIME OF SYSTEM PEAK	Jul 3 PM			Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



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REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
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DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
24'x40' T24 CZ 14 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
M2.10

SHEET OF

9/7/2023 11:16:14 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

BUILDING ENERGY ANALYSIS REPORT

PROJECT:
24X40 (PC 04-121369) - Wall AC
Climate Zone 15
Palm Springs, CA

Project Designer:
R & S Tavares Associates
11590 W. Bernardo Court, Suite 100
San Diego, Ca. 92127

Report Prepared by:
LAL B. SAHGAL
LSA CONSULTING ENGINEERS
83, WINDSWEPT WAY
MISSION VIEJO, CA 92692
(949) 830-4746

Job Number:

Date:
7/26/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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HVAC System Heating and Cooling Loads Summary 20

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 1 of 17)**

Project Name:	**24X40 (PC 04-121369) - Wall AC**	**Date Prepared:**	**2023-07-25**

A. General Information

1	Project Name	24X40 (PC 04-121369) - Wall AC			
2	Run Title	Title 24 Analysis			
3	Project Location	Climate Zone 15			
4	City	Palm Springs	**5**	Standards Version	Compliance 2022
6	Zip code	99999	**7**	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	15	**9**	Building Orientation (deg)	75
10	Building Type(s)	• Nonresidential	**11**	Weather File	PALM-SPRINGS_STYP20.epw
12	Project Scope	• New complete scope	**13**	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	960	**15**	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	**17**	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	960	**19**	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 2 of 17)**

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						**Building Components Complying Prescriptively**	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

---

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 3 of 17)**

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		**Source Energy Use**
	Efficiency[1] (kBtu/ft^2 - yr)	**Total[2] (kBtu/ft^2 - yr)**	**Total[2] (kBtu/ft^2 - yr)**
Standard Design	369.92	369.92	27.65
Proposed Design	301.78	301.78	21.62
Compliance Margins	**68.14**	**68.14**	**6.03**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 4 of 17)**

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES[2]

Energy Component	**Standard Design (TDV)**	**Proposed Design (TDV)**	**Compliance Margin (TDV)[1]**
Space Heating	5.43	9.65	-4.22
Space Cooling	152.4	156.74	-4.34
Indoor Fans	140.88	74.91	65.97
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	38.99	39	-0.01
Indoor Lighting	32.22	21.48	10.74
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**369.92**	**301.78**	**68.14 (18.4%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**369.92**	**301.78**	**68.14 (18.4%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 5 of 17)**

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	**Standard Design (TDV)**	**Proposed Design (TDV)**	**Compliance Margin (TDV)[1]**
Receptacle	66.69	66.69	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**436.61**	**368.47**	**68.14 (15.6%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 6 of 17)**

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES[2]

Energy Component	**Standard Design (SOURCE)**	**Proposed Design (SOURCE)**	**Compliance Margin (SOURCE)[1]**
Space Heating	0.73	1.33	-0.6
Space Cooling	7.45	7.45	0
Indoor Fans	12.67	6.9	5.77
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	4.23	4.23	0
Indoor Lighting	2.57	1.71	0.86
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**27.65**	**21.62**	**6.03 (21.8%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**27.65**	**21.62**	**6.03 (21.8%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 7 of 17)**

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	**Standard Design (SOURCE)**	**Proposed Design (SOURCE)**	**Compliance Margin (SOURCE)[1]**
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**32.57**	**26.54**	**6.03 (18.5%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method **(Page 8 of 17)**

C7. ENERGY USE SUMMARY

Energy Component	**Standard Design Site (MWh)**	**Proposed Design Site (MWh)**	**Margin (MWh)**	**Standard Design Site (MBtu)**	**Proposed Design Site (MBtu)**	**Margin (MBtu)**
Space Heating	0.1	0.3	-0.2	---	---	---
Space Cooling	4.5	4.5	0	---	---	---
Indoor Fans	4.8	2.5	2.3	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	1.5	1.5	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**12.1**	**9.6**	**2.5**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**12.1**	**9.6**	**2.5**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**14.6**	**12.1**	**2.5**	**0**	**0**	**0**

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W. Bernardo Court, Suite 100
San Diego, CA 92127
Phone: (858) 444-3344
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
24'x40' T24 CZ 15 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
rMc/CG

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
M2.11

SHEET OF

9/7/2023 11:16:15 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

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APP: 02-123356 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft^2 / yr)	Proposed Design (kBtu/ft^2 / yr)	Margin (kBtu/ft^2 / yr)	Margin Percentage
GROSS EUI[1]	51.89	43.01	8.88	17.11
NET EUI[1]	51.89	43.01	8.88	17.11

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft^2)	Total Fenestration Area (ft^2)	Window to Wall Ratio (%)
North-Facing[1]	240	32	13.33
East-Facing[2]	400	0	0
South-Facing[3]	240	32	13.33
West-Facing[4]	400	0	0
Total	**1280**	**64**	**5**
Roof	960	14	1.46

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft^2)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-19 Wood Framed Wall7	Exterior Wall	1,280	Wood	19	N/A	N/A	U-factor	0.0605	Wood siding - 1/2 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in. Softwood - 1.5 in.	N
R-19 Metal Floor Crawlspa14	Exterior Floor	960	Metal	19	N/A	N/A	U-factor	0.0588	Vented Crawl Space Composite-2 Plywood - 1/2 in. Carpet - 3/4 in.	N
Standing Seam R-38 Metal16	Roof	960	N/A	36	N/A	N/A	U-factor	0.06	Metal Standing Seam - 1/16 in. Composite-3	N

[1] Status: N - New, A - Altered, E - Existing

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft^2)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Sierra Pacific Windows	Vertical fenestration Operable window N/A	NFRC	Manufactured	64	0.35	0.24	0.5	N
Sola tube	Skylight Fixed window N/A	NFRC	Manufactured	14	0.39	0.37	0.65	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
AC-1	Single Package VHP Air System	1	34.37	13.65	COP	3.3	34.56	EER	11	Fixed DB	N

[1] Status: N - New, A - Altered, E - Existing

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
AC-1	1	364.8	1,100	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] Status: N - New, A - Altered, E - Existing

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AC-1	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-First Floor	Education - Classrooms (ages 9-18)	24	364.8	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	
1-First Floor-Trm	Uncontrolled	1	N/A	N/A	1,100	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft^2)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	384	0	0	0
Building Totals:	**960**	**384**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI--E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft^2 in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
L-1	2x4 LED Panel	48	According to	8	384

[1]If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-First Floor	Classroom, Lecture, or Training Vocational	N/A	N/A	L-1	48	8	384	0
							Lighting Control Credits (Conditioned) Total (Watts)	**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	**Shut-Off Controls 130.1(c) & 160.5(b)4C**
Required	**Required**

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature:
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO, CA 92692	Phone: (949) 830-4746

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:
Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature:	
Company: LSA Consulting Engineers		
Address: 83, Windswept Way	Date Signed:	
City/State/Zip: Mission Viejo, Ca. 92692	License #: M26885	
Phone:	Title:	Scope:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name: 24X40 (PC 04-121369) - Wall AC	Date: 7/26/2023
System Name: AC-1	Floor Area: 960

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	33,000
Total Output (Btuh)	33,000
Output (Btuh/sqft)	34.4
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	37.5
Total Output (sqft/Ton)	320.0
Air System	
CFM per System	1,100
Airflow (cfm)	1,100
Airflow (cfm/sqft)	1.15
Airflow (cfm/Ton)	366.7
Outside Air (%)	33.2%
Outside Air (cfm/sqft)	0.38

Note: values above given at ARI conditions

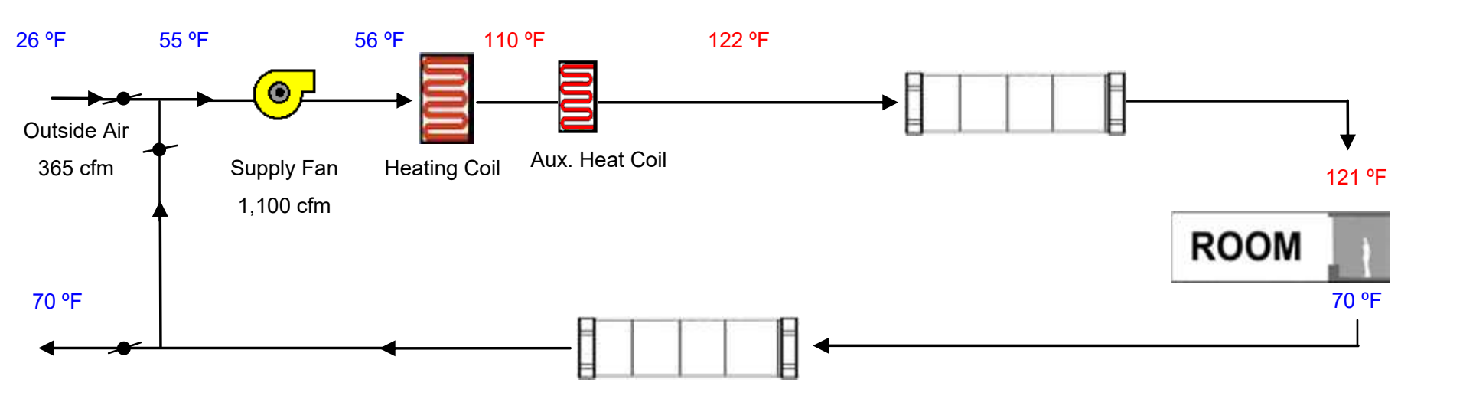
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	1,653	31,075	9,600	167	9,097
Return Vented Lighting		0			
Return Air Ducts		1,554			455
Return Fan		0			0
Ventilation	365	14,619	-1,514	365	16,924
Supply Fan		1,535			-1,535
Supply Air Ducts		1,554			455
TOTAL SYSTEM LOAD		50,337	8,086		25,396

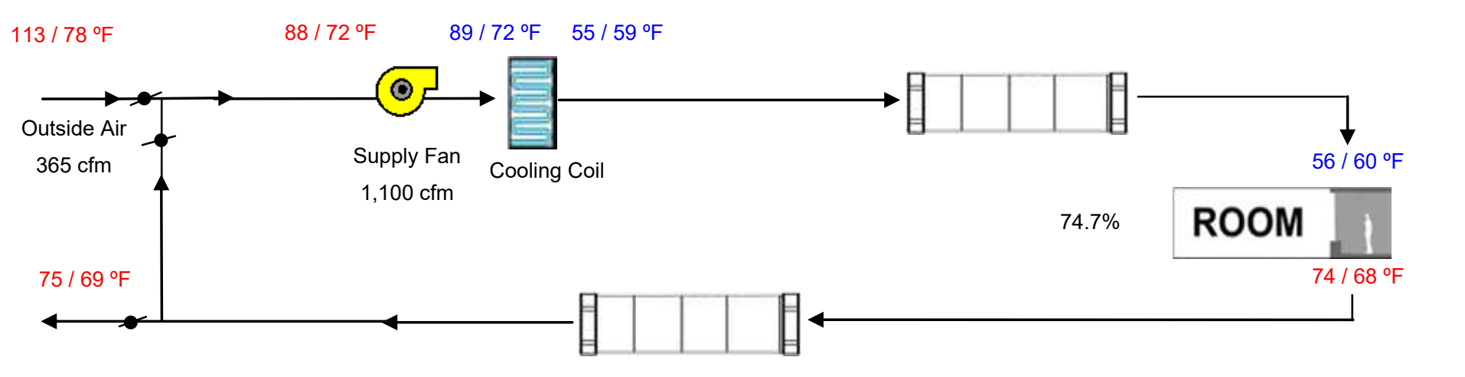
HVAC EQUIPMENT SELECTION

Bard W36HB	26,824	9,056		20,611
HP Supplemental Coil				13,648
Total Adjusted System Output (Adjusted for Peak Design conditions)	26,824	9,056		34,259
TIME OF SYSTEM PEAK	Jul 3 PM			Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



PROJECT SPECIFIC STATE AGENCY APPROVAL

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STRUCTURAL
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DATE: 02/20/2024~~

Revision Schedule		
#	Description	Date

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
24'x40' T24 CZ 15 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
rMc/CG

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
M2.12

SHEET OF

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9/7/2023 11:16:16 AM

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APP: 02-123356 INC:
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DATE: 07/07/2025

BUILDING ENERGY ANALYSIS REPORT

PROJECT:

24X40 (PC 04-121369) - Wall AC
Climate Zone 16
Blue Canyon, CA

Project Designer:

R & S Tavares Associates
11590 W. Bernardo Court, Suite 100
San Diego, Ca. 92127

Report Prepared by:

LAL B. SAHGAL
LSA CONSULTING ENGINEERS
83, WINDSWEPT WAY
MISSION VIEJO, CA 92692
(949) 830-4746

Job Number:

Date:

7/26/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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Form NRCC/LMCC-PRF-E Certificate of Compliance 3
HVAC System Heating and Cooling Loads Summary 20

Project Name: 24X40 (PC 04-121369) - Wall AC **Date Prepared:** 2023-07-26

A. General Information

1	Project Name	24X40 (PC 04-121369) - Wall AC			
2	Run Title	Title 24 Analysis			
3	Project Location	Climate Zone 16			
4	City	Blue Canyon	**5**	Standards Version	Compliance 2022
6	Zip code	99999	**7**	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	16	**9**	Building Orientation (deg)	30
10	Building Type(s)	• Nonresidential	**11**	Weather File	BLUE-CANYON_STYP20.epw
12	Project Scope	• New complete scope	**13**	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	960	**15**	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	**17**	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	960	**19**	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						**Building Components Complying Prescriptively**	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

---

C1. COMPLIANCE SUMMARY

COMPLIES^3

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency^1 (kBtu/ft^2 - yr)	Total^2 (kBtu/ft^2 - yr)	Total^2 (kBtu/ft^2 - yr)
Standard Design	307.23	307.23	49.92
Proposed Design	273.51	273.51	36.13
Compliance Margins	**33.72**	**33.72**	**13.79**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft^2 - yr)

COMPLIES^2

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)^1
Space Heating	51.5	114.86	-63.36
Space Cooling	19.06	18.57	0.49
Indoor Fans	169.42	83.19	86.23
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	36.19	36.19	0
Indoor Lighting	31.06	20.7	10.36
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**307.23**	**273.51**	**33.72 (11%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**307.23**	**273.51**	**33.72 (11%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS^1

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)^1
Receptacle	63.66	63.66	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**370.89**	**337.17**	**33.72 (9.1%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft^2 /yr)

COMPLIES^2

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)^1
Space Heating	16.26	11.75	4.51
Space Cooling	1.3	1.31	-0.01
Indoor Fans	16.75	8.32	8.43
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	13.04	13.04	0
Indoor Lighting	2.57	1.71	0.86
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**49.92**	**36.13**	**13.79 (27.6%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**49.92**	**36.13**	**13.79 (27.6%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS^1

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)^1
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**54.84**	**41.05**	**13.79 (25.1%)**

[1] *Notes: This table is not used for Energy Code Compliance.*

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.1	3	-2.9	16.4	---	---
Space Cooling	0.8	0.7	0.1	---	---	---
Indoor Fans	5.6	2.8	2.8	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	---	---	---	13.6	13.6	0
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**7.7**	**7.3**	**0.4**	**30**	**13.6**	**16.4**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**7.7**	**7.3**	**0.4**	**30**	**13.6**	**16.4**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**10.2**	**9.8**	**0.4**	**30**	**13.6**	**16.4**

PROJECT SPECIFIC STATE AGENCY APPROVAL

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
24'x40' T24 CZ 16 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
Author

CHECKED BY
Checker

DATE
06/15/2021

SHEET NO.
M2.13

SHEET OF

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C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	67.5	49	18.5	27.41
NET EUI[1]	67.5	49	18.5	27.41

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	400	0	0
East-Facing[2]	240	32	13.33
South-Facing[3]	400	0	0
West-Facing[4]	240	32	13.33
Total	**1280**	**64**	**5**
Roof	960	14	1.46

Notes
[1] North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2] East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3] South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4] West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-19 Wood Framed Wall7	Exterior Wall	1,280	Wood	19	N/A	N/A	U-factor	0.0605	Wood siding - 1/2 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in. Softwood - 1.5 in.	N
R-19 Metal Floor Crawlspa14	Exterior Floor	960	Metal	19	N/A	N/A	U-factor	0.0588	Vented Crawl Space Composite-2 Plywood - 1/2 in. Carpet - 3/4 in.	N
Standing Seam R-38 Metal16	Roof	960	N/A	36	N/A	N/A	U-factor	0.06	Metal Standing Seam - 1/16 in. Composite-3	N

[1] Status: N - New, A - Altered, E - Existing

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Sierra Pacific Windows	Vertical fenestration Operable window N/A	NFRC	Manufactured	64	0.35	0.24	0.5	N
Sola tube	Skylight Fixed window N/A	NFRC	Manufactured	14	0.39	0.37	0.65	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
AC-1	Single Package VHP Air System	1	34.37	13.65	COP	3.3	34.56	EER	11	Fixed DB	N

[1] Status: N - New, A - Altered, E - Existing

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
AC-1	1	364.8	1,100	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

[1] Status: N - New, A - Altered, E - Existing

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AC-1	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-First Floor	Education - Classrooms (ages 9-18)	24	364.8	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	
1-First Floor-Trm	Uncontrolled	1	N/A	N/A	1,100	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	384	0	0	0
Building Totals:	**960**	**384**	**0**	**0**	**0**

[1] See Table 140.6-C
[2] See NRCC-LTI--E for unconditioned spaces
[3] Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
L-1	2x4 LED Panel	48	According to	8	384

[1] If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-First Floor	Classroom, Lecture, or Training Vocational	N/A	N/A	L-1	48	8	384	0
							Lighting Control Credits (Conditioned) Total (Watts)	**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	**Shut-Off Controls 130.1(c) & 160.5(b)4C**
Required	**Required**

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature:
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO, CA 92692	Phone: (949) 830-4746

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:
Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature:	
Company: LSA Consulting Engineers		
Address: 83, Windswept Way	Date Signed:	
City/State/Zip: Mission Viejo, Ca. 92692	License #: M26885	
Phone:	Title:	Scope:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name 24X40 (PC 04-121369) - Wall AC	Date 7/26/2023
System Name AC-1	Floor Area 960

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	33,000
Total Output (Btuh)	33,000
Output (Btuh/sqft)	34.4
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	37.5
Total Output (sqft/Ton)	320.0
Air System	
CFM per System	1,100
Airflow (cfm)	1,100
Airflow (cfm/sqft)	1.15
Airflow (cfm/Ton)	366.7
Outside Air (%)	33.2%
Outside Air (cfm/sqft)	0.38

Note: values above given at ARI conditions

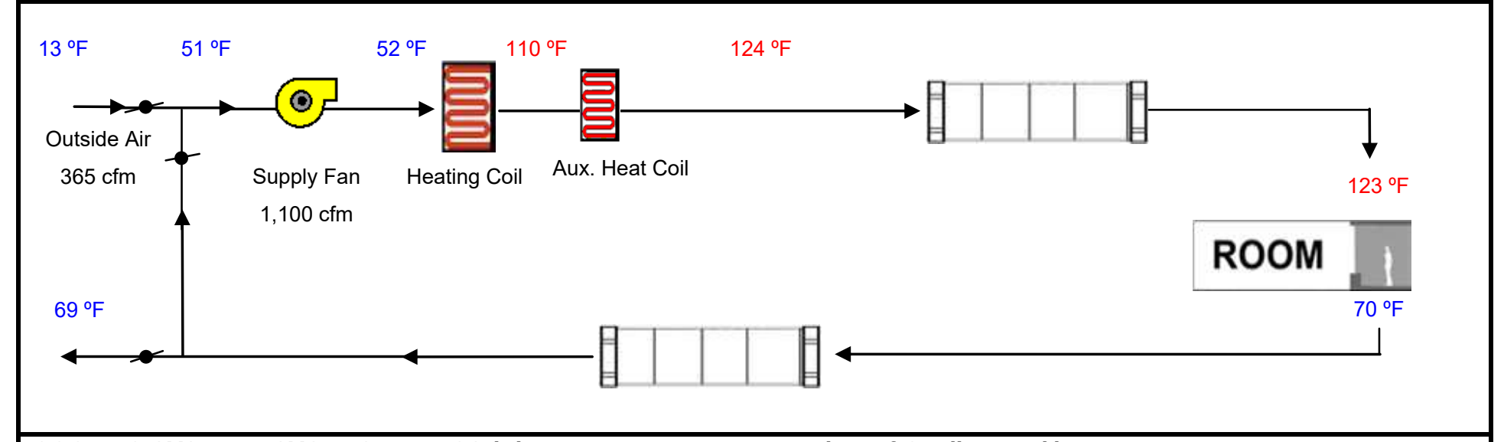
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	1,209	26,482	9,600	248	11,785
Return Vented Lighting		0			
Return Air Ducts		1,324			589
Return Fan		0			0
Ventilation	365	3,129	-1,167	365	18,296
Supply Fan		1,535			-1,535
Supply Air Ducts		1,324			589
TOTAL SYSTEM LOAD		33,795	8,433		29,724

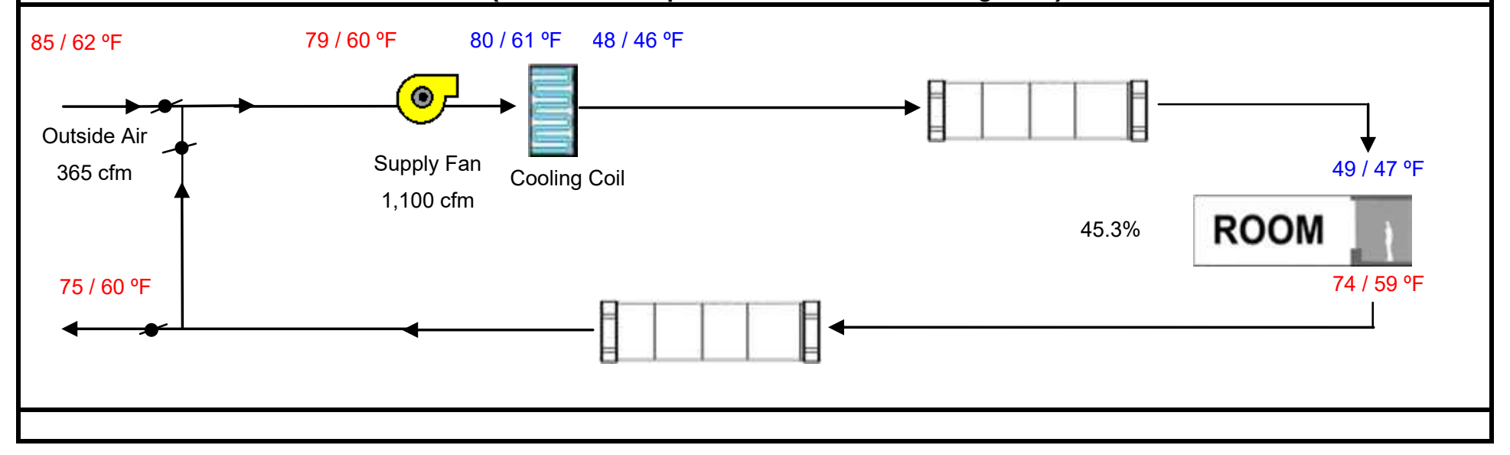
HVAC EQUIPMENT SELECTION

Bard W36HB	31,415	2,901	13,777
HP Supplemental Coil			13,648
Total Adjusted System Output (Adjusted for Peak Design conditions)	31,415	2,901	27,425
TIME OF SYSTEM PEAK		Jul 3 PM	Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
02/16/24
RST#22088

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL
~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
24'x40' T24 CZ 16 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
Author

CHECKED BY
Checker

DATE
06/15/2021

SHEET NO.
M2.14

SHEET OF

C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

9/7/2023 11:16:17 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

ENVELOPE MANDATORY MEASURES: NONRESIDENTIAL — ENV-MM

Project Name	Date
120X40 (PC 04-116504) - Wall AC	6/23/2018

DESCRIPTION

Building Envelope Measures:

§110.8(a):	Installed insulating material shall have been certified by the manufacturer to comply with the California Quality Standards for insulating material, Title 20 Chapter 4, Article 3.
§110.8(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.
§110.8(g):	Heated slab floors shall be insulated according to the requirements in Table 110.8-A.
§110.7(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed.
§110.6(a):	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft.² of window area, 0.3 cfm/ft.² of door area for residential doors, 0.3 cfm/ft.² of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft.² for nonresidential double doors (swinging).
§110.6(a):	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor.
§110.6(a) :	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fenestration, or the applicable default SHGC.
§110.6(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).
§120.7(a):	The opaque portions of the roof/ceiling that separates conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-Factor requirements as follows: **Metal Building-** The weighted average U-factor of the roof assembly shall not exceed 0.098. **Wood Framed and Others-** The weighted average U-factor of the roof assembly shall not exceed 0.075.
§120.7(b):	The opaque portions of walls that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-factor as follows: **Metal Building-** The weighted average U-factor of the wall assembly shall not exceed 0.113. **Metal Framed-** The weighted average U-factor of the wall assembly shall not exceed 0.151. **Light Mass Walls-** A 6 inch or greater Hollow Core Concrete Masonry Unit shall have a U-factor not to exceed 0.440. **Heavy Mass Walls-** An 8 inch or greater Hollow Core Concrete Masonry Unit shall have a U-factor not to exceed 0.690. **Wood Framed and Others-** The weighted average U-factor of the wall assembly shall not exceed 0.110. **Spandrel Panels and Opaque Curtain Wall-** The weighted average U-factor of the spandrel panels and opaque curtain wall assembly shall not exceed 0.280. **Demising Walls-**. The opaque portions of framed demising walls shall meet the requirements of Item A or B below: A. Wood framed walls shall be insulated to meet a U-factor not greater than 0.099. B. Metal Framed walls shall be insulated to meet a U-factor not greater than 0.151.
§120.7(c):	The opaque portions of floors and soffits that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-Factor requirements as follows: **Raised Mass Floors-** Shall have a minimum of 3 inches of lightweight concrete over a metal deck or the weighted average U-factor of the floor assembly shall not exceed 0.269. **Other Floors-**The weighted average U-factor of the floor assembly shall not exceed 0.071.

STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-PLB-E
This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.			
Project Name: 24X40 (PC 04-121369) - Wall AC		**Report Page:**	(Page 1 of 6)
Project Address:	Climate Zone 14	**Date Prepared:**	9/7/2023

A. GENERAL INFORMATION

01	Project Location (city)	Palmdale	02	Climate Zone	14
03	Occupancy Types Within Project (select all that apply):				

- Classroom

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140./ 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03		
My project consists of (check all that apply):	System Type[1,2]	System Components		
☒ New system (DHW system being installed for the first time)	Individual System (serving nonresidential spaces)	☒ Equipment	☒ Distribution	☒ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment	☐ Distribution	☐ Controls

[1]FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.
[2] Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.
[3] DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	**Compliance Results**
Table F	Table G	Table H	
Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Generated Date/Time: Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4958-0923-0242
Report Generated: 2023-09-07 12:06:05

STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name: 24X40 (PC 04-121369) - Wall AC	**Report Page:**	(Page 3 of 6)
	Date Prepared:	9/7/2023

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Mandatory Pipe Insulation All Occupancies

13	☐	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see blow) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	☒	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
15	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft² per °F)	Insulation Mean Rating Temp (°F)	Nominal Pipe Diameter (in)			
			< 1	1 to < 1.5	1.5 to < 4	1.5 to < 4 Multifamily & Hotel/Motel
			Minimum Insulation Required			
105-140	0.22 - 0.28	100	1.0 in or R-7.7	1.5 in or R-12.5	1.5 in or R-11	2.0 in or R-16

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CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
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STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name: 24X40 (PC 04-121369) - Wall AC	**Report Page:**	(Page 5 of 6)
	Date Prepared:	9/7/2023

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

Generated Date/Time: Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
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STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name: 24X40 (PC 04-121369) - Wall AC	**Report Page:**	(Page 2 of 6)
	Date Prepared:	9/7/2023

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1/ 180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03		04		05		06		
System Name	A O Smith DEL-10	Exception to 140.5(c)/ 170.2(d)3		☐	Gas Service Water Heating System >= 1MMBtu/h[1]	Capacity-weighted Average Efficiency %		

07	08	09	10		11	12	13	14	15
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
A O Smith DEL-10	Consumer Rated Electric Storage	10	5,120	FHR >=75	0.95	0.93	UEF		

[1]FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	☐	☐	☒	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	☐	☐	☒	New state buildings 60% of energy for service water heating from site solar energy or recovered energy per 110.3(c)5
20	☐	☐	☒	Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6
21	☐	☐	☒	School buildings < 25,000 ft² and < 4 stories must install a heat pump water heating system per 140.5(a)1. Water heating systems serving an individual bathroom space may be an instantaneous electric water heater.

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STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name: 24X40 (PC 04-121369) - Wall AC	**Report Page:**	(Page 4 of 6)
	Date Prepared:	9/7/2023

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	☒	☐	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	☐	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0.
03	☐	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☐	☒	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	☐	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d).
06	☐	☐	☒	Combustion air positive shut-off shall be provided per 160.4(3).on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	☐	☐	☒	Boiler combustion air fans with motor >= 10 hp shall meet one of the following • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	☐	☐	☒	Newly installed boilers with an input capacity {d:gte/] 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

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Report Version: 2022.0.000
Schema Version: rev 20220101
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Report Generated: 2023-09-07 12:06:05

STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-PLB-E
Project Name: 24X40 (PC 04-121369) - Wall AC		**Report Page:**	(Page 6 of 6)
Project Address:	Climate Zone 14	**Date Prepared:**	9/7/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature: Lal Sahgal
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/ HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO CA 92692	Phone: (949) 830-4746

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature: Lal Sahgal
Company: LSA Consulting Engineers	Date Signed: 2023-09-07
Address: 83, Windswept Way	License: M26885
City/State/Zip: Mission Viejo Ca. 92692	Phone:

Generated Date/Time: Documentation Software: EnergyPro
CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance
Report Version: 2022.0.000
Schema Version: rev 20220101
Compliance ID: EnergyPro-4958-0923-0242
Report Generated: 2023-09-07 12:06:05

Mandatory Measures: The following notes (items) represent the Mandatory Measures for all buildings.

Heat pumps with supplementary electric resistance heaters shall have controls:

1) That prevent supplementary heater operation when the heating load can be met by the heat pump alone; and

2) In which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.

Sec. 110.2 (b)

The minimum rate of outdoor air required per Section 120.1 (b) 2 shall be supplied to each space at all time the space is usually occupied.

Sec. 120.1 (c) 3

The Lesser of the minimum rate of outdoor air required by Sec. 120.1 (b) 2, or three complete air changes shall be supplied to the entire building during the one-hour period immediately before the building is normally occupied.

Sec. 120.1 (c) 2

Hotel/Motel Guest Room Thermostats shall have numeric temperature set points in degrees F; and set point stops accessible only to authorized personnel, to restrict over-heating and over-cooling.

Sec. 120.2 (c)

All air distribution system ducts and plenums, including, but not limited to, building cavities, mechanical closets, air-handler boxes and support platforms used as ducts or plenums, shall be installed, sealed and insulated to meet the requirements of chapter 6 of the 2001 CMC. Supply-air and return-air ducts conveying heated or cooled air shall be insulated to a minimum installed level of R-8, unless ducts are in conditioned space.

Sec. 120.4 (a)

The thermostatic controls for HVAC systems shall meet the following requirements as applicable:

a) Each space conditioning zone shall be controlled by an individual thermostatic control that responds to temperature within the zone and meets the applicable requirements of Subsection (b).

b) Each Thermostatic control required by Subsection (a) shall be capable of being set locally or remotely by adjustment or selection of sensors to control:

    1) Comfort heating down to 55°F or lower.

    2) Comfort Cooling up to 85°F or higher.

    3) Both heating and cooling, the thermostatic controls shall be capable of providing a temperature range or dead band of at least 5°F within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum.

Sec. 120.2 (a) & (b)

1) Outdoor air supply and exhaust equipment shall be installed with dampers that automatically close upon fan shutdown.

Sec. 120.2 (f)

2) Demand Control Ventilation Devices (CO2 sensors) shall be installed in accordance with Sec. 120.1 (c) 4.

Sec. 120.1 (c) 4

3) Each space-conditioning system shall be installed with controls that comply with Items 1 and 2 below:

    1) Are capable of automatically shutting off the system during periods of non-use and shall have:
        a) An automatic time switch control device complying with Sec. 119(c), with an accessible manual override that allows operation of the system for up to 4 hours; or
        b) An occupancy sensor; or
        c) A four-hour timer that can be manually operated.
        d) EXCEPTION: Mechanical systems serving retail stores and associated malls, restaurants, grocery stores, churches, and theaters equipped with 7-day programmable timers.

    2) Automatically restart and temporarily operate the system as required to maintain:
        a) A setback heating thermostat set point, if the system provides mechanical heating; and
        EXCEPTION: Area with the design winter outdoor temperature of greater than 32°F.
        b) A setup cooling thermostat set point, if the system provides mechanical cooling.

        EXCEPTION: Area with the design summer outdoor temperature of less than 100°F.
        EXCEPTION: Systems serving hotel/motel guest rooms, if they have a readily accessible manual shut-off switch.

Sec. 120.2 (e)

4) The piping for all space conditioning and service water heating systems shall be insulated in accordance with TABLE 123-A.

Sec. 120.3

5) Service water heating systems and equipment shall meet the applicable requirements of the Appliance Efficiency Regulations as required by Sec. 110.1.

Sec. 110.3 (b)

6) Service hot water systems with circulating pumps or with electrical heat trace systems shall be capable of automatically turning off the system.

Sec. 110.3 (c) 2

7) Lavatories in public restrooms shall have controls that limit the water supply temperature to 110°F.

Sec. 110.3 (c) 3

PROJECT SPECIFIC STATE AGENCY APPROVAL

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PROFESSIONAL STAMP

MANNY D. FRISCH
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RST#22088
02/16/24

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CLIENT

Class Leasing
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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
ENVELOPE AND NOTES

PROJECT NUMBER
22088

DRAWN BY
rMc/CG

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RH/RT

DATE

SHEET NO.
M3.3

SHEET OF

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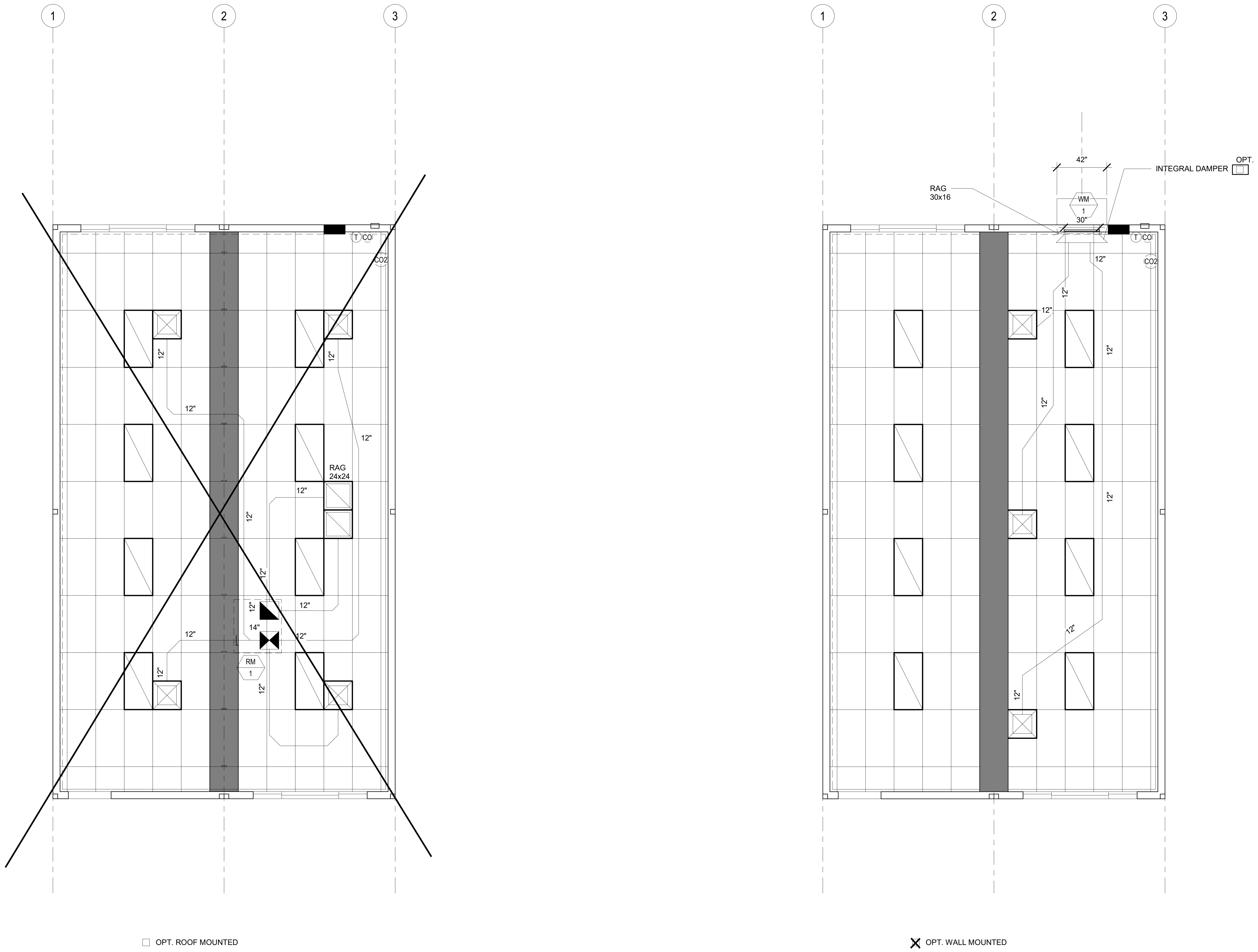
DATE: 07/07/2025



☐ OPT. ROOF MOUNTED

☒ OPT. WALL MOUNTED

1 *1/4" = 1'-0"*
24x40 RM-1 MECH PLANS

6/15/2021 11:53:32 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

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Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
MECHANICAL
CEILING PLAN
24x40

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
M5.1

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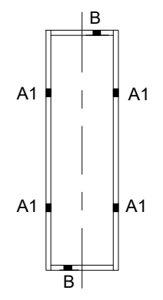
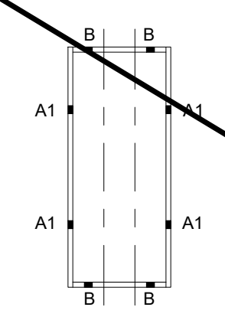


VENT AREA REQ = $\frac{960}{150}$ SF = 6.4 SF

VENT AREA AVAIL = (4)2.175 + (2)*1.875 = 12.5 SF

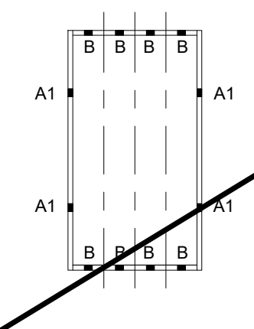
NET AREA AVAIL = 0.6 * 12.5 = 7.5 SF



~~VENT AREA REQ = 1440/150 SF = 9.6 SF~~

~~VENT AREA AVAIL (4)2.175 + (4)*1.875 = 16.25 SF~~

~~NET AREA = 0.6 * 16.25 = 9.75 SF~~



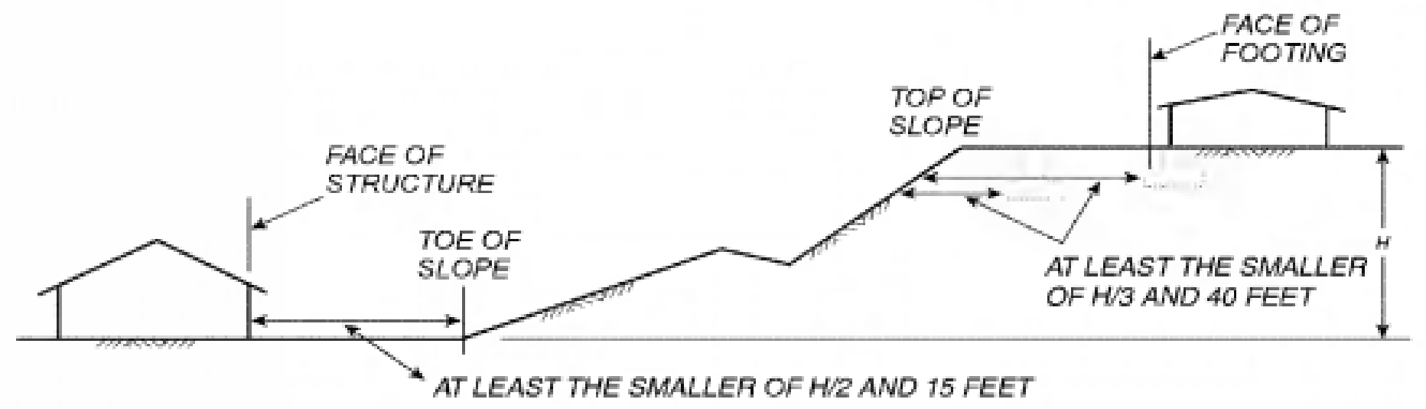
~~VENT AREA REQ = 1920/150 SF = 12.8 SF~~

~~VENT AREA AVAIL (4)2.175 + (8)*1.875 = 23.75 SF~~

~~NET AREA = 0.6 * 23.75 = 14.25 SF~~

NOTE: WOOD FOUNDATION EXPANDABLE TO 48x40

1 **50+15 VENTING LAYOUT**


FACE OF STRUCTURE
TOE OF SLOPE
TOP OF SLOPE
FACE OF FOOTING
H
AT LEAST THE SMALLER OF H/3 AND 40 FEET
AT LEAST THE SMALLER OF H/2 AND 15 FEET

For SI: 1 foot = 304.8 mm.

FIGURE 1808.7.1
FOUNDATION CLEARANCES FROM SLOPES

3 ***1/4" = 1'-0"***
FOUNDATION SETBACKS

1. WOOD FOUNDATION CONSTRUCTION IS ALLOWED FOR BUILDINGS WITH 2160 SF AND UNDER.
2. SILL PLATES SHALL BE OF FOUNDATION GRADE REDWOOD OR PRESERVATIVE PRESURE TREATED MATERIAL AND IS ALLOWED TO REST DIRECTLY ON SOIL OR PAVEMENT. MATERIALS ABOVE THE SILL PLATES ARE NOT CONTROLLED BY THIS REQUIREMENT.
3. VENTS THAT OCCUR INSIDE RAMP BOUNDARIES SHALL REQUIRE A VENT OF EQUAL SIZE AT RAMP SKIRTING.
4. TO PREVENT SLIDING; A 1 INCH G.S. SCHEDULE 40 PIPE (1.315" ACTUAL O.D.) SHALL BE ATTACHED TO SILL PLATE AND ANCHORED INTO THE EARTH W/ 12" MIN EMBEDMENT (PROJECTED VERTICALLY) @ 10' - 0" MAX O.C. AND SHALL BE LOCATED A MAXIMIUM OF 2'-0" FROM CORNERS
5. STACKED FOUNDATION MEMBERS SHALL BE FASTENED TO ONE ANOTHER W/ CORROSION RESISTANT NAILS.
6. WOOD FOUNDATION HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING PRESSURE OF 1,000 PSF IN ABSENSE OF A SOILS INVESTIGATION REPORT PROVIDED BY A LICENSED GEOTECHNICAL ENGINEER.
7. REFER TO ARCHITECT'S SITE PLAN FOR DRAINAGE.

7 ***1/4" = 1'-0"***
NOTES FOR 50+15

KEY PLAN VENTING SCHEDULE

VENT "A1" (SIDEWALL): 3'-6" x 7.5" = **2.188 SF VENTILATION AVAILABLE**

VENT "B" (ENDWALL): 3'-0" x 7.5" = **1.875 SF VENTILATION AVAILABLE**

SEE 2/F1.40 FOR REFERENCE

9 ***1/4" = 1'-0"***
KEY PLAN VENTING SCHEDULE FOR 50+15 PSF

(2) 16d NAILS SILL TO BASE CONNECTION FOR 50+15 SEE 7 / F1.10

	ENDWALL	SIDEWALL	SEPERATION
24x40	7" O.C	12" O.C	12" O.C
36x40	7" O.C	12" O.C	12" O.C
48x40	7" O.C	12" O.C	12" O.C

6 ***1/4" = 1'-0"***
NAILING SCHEDULE FOR 50+15

WOOD FOUNDATION PLATE SCHEDULE

50 + 15 PSF

PLATES	END WALL	SIDE WALL	MODLINE ENDS	MODLINE INTERIOR	ML "B" ENDS	ML "B" INTERIOR	SEPERATION ENDS	SEPERATION INTERIOR
BOOSTER	2x4	2x4	2x6	2x6	2x8	2x8	2x4	2x4
TOP	2x6	2x6	2x8	2x8	2x10	2x10	2x6	2x6
BASE	2x8	2x8	2x10	2x10	2x12	2x12	2x8	2x8
SILL	2x12	2x12	(6) 2x12, 24" LONG	(6) 2x12, 24" LONG	(8) 2x12, 24" LONG	(8) 2x12, 24" LONG	2x12	2x12

* MODLINE "B" - MODLINE W/ EXT. WALLS BACK-TO-BACK SEE F1.14

8 ***1/4" = 1'-0"***
WOOD FOUNDATION PLATE SCHEDULE FOR 50+15

TIE PLATE SCHEDULE

	END WALL	SIDE WALL
24x40	5	3
36x40	7	3
48x40	10	3

4 ***1/4" = 1'-0"***
TIE PLATE SCHEDULE FOR 50+15

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RST#22088
02/16/24

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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
WOOD FOUNDATION NOTES SCHED FOR BLDG W/ 50+15

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
F1.10

SHEET OF

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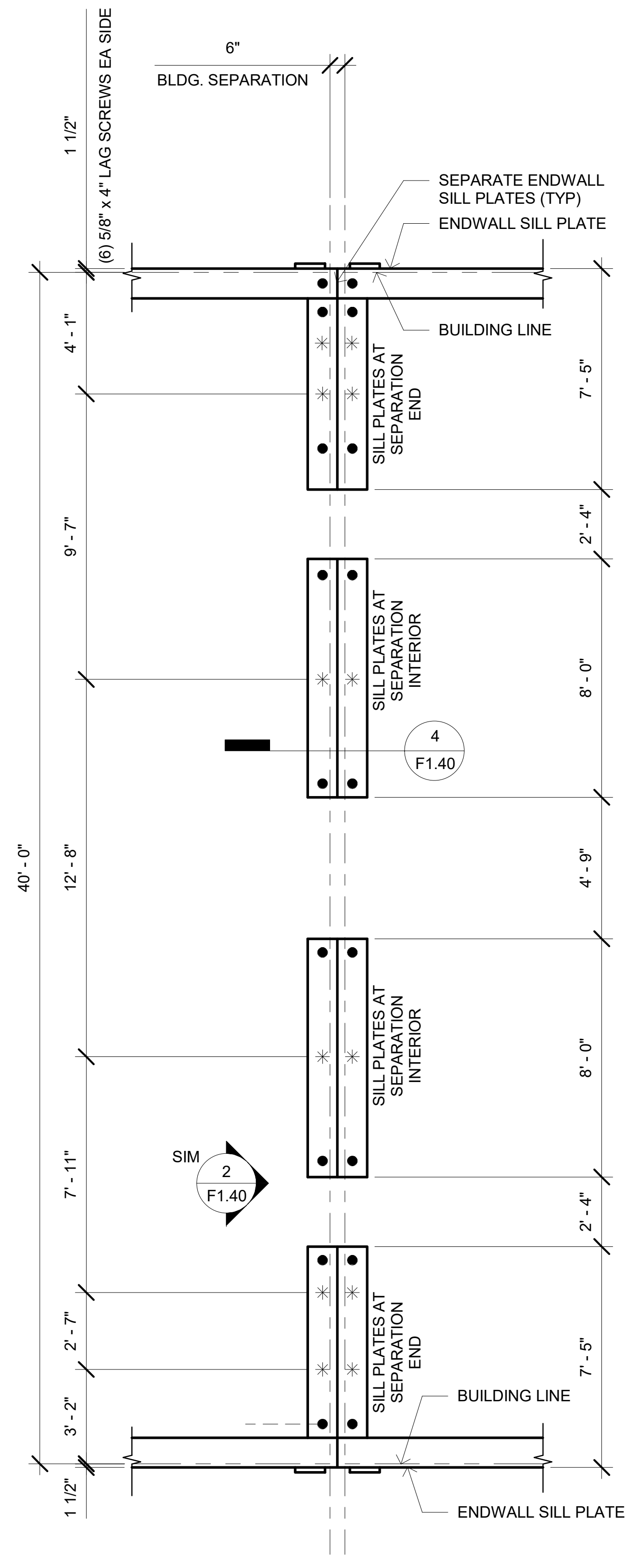
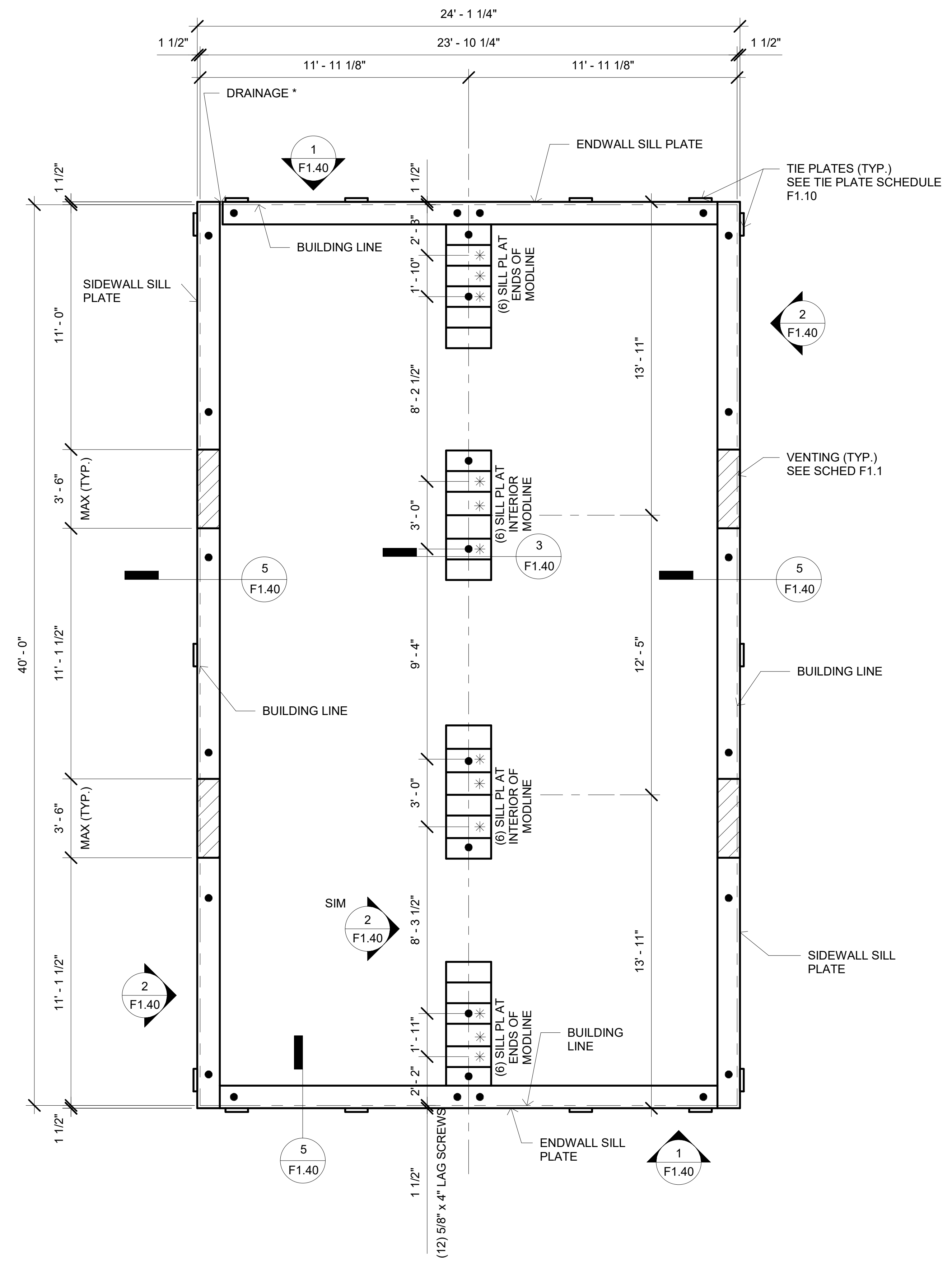


SYMBOLS LEGEND
✳ LAG SCREWS (6 TOTAL EACH SIDE)
● SILL RESTRAINTS (SEE NOTE #4, 7 / F1.10)

3 *1/4" = 1'-0"*
FOOTING AT SEPARATION



* REFER TO ARCHITECTURAL SITE PLAN FOR DRAINAGE

SYMBOLS LEGEND
✳ LAG SCREWS (12 TOTAL)
● SILL RESTRAINTS (SEE NOTE #4, 7 / F1.10)

2 *1/4" = 1'-0"*
24x40 FOUNDATION PLAN

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Exp. 03/31/24
STRUCTURAL
Manny Frisch
RST#22088
02/16/24

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Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
WOOD FOUNDATION PLAN 24x40 BLDG W/ 50+15

PROJECT NUMBER
22088

DRAWN BY
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DATE

SHEET NO.
F1.11

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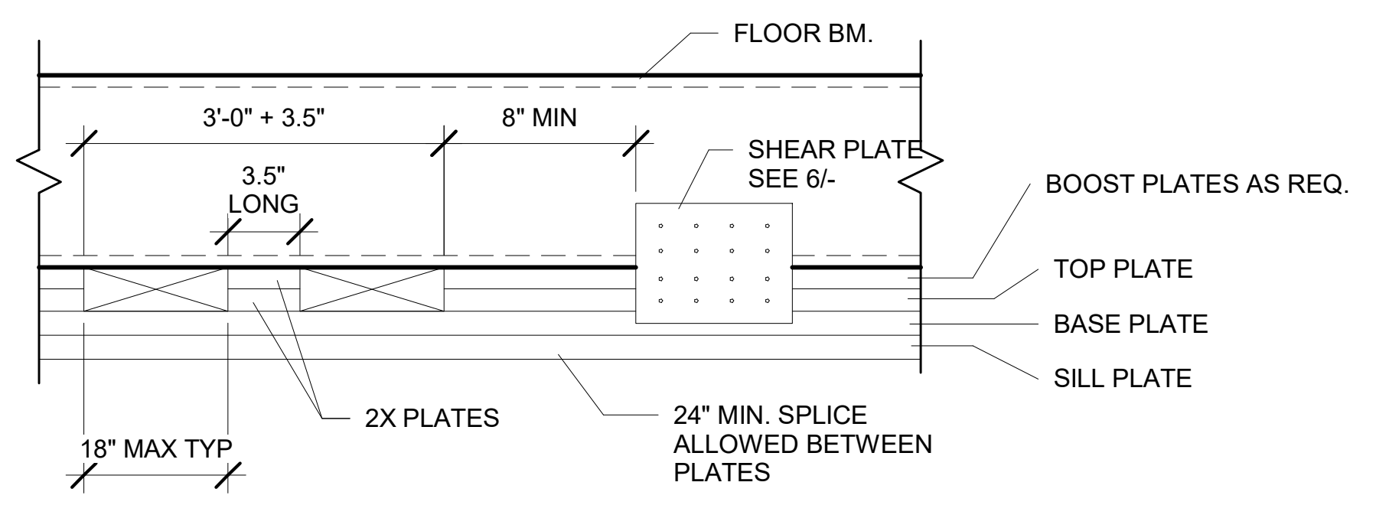
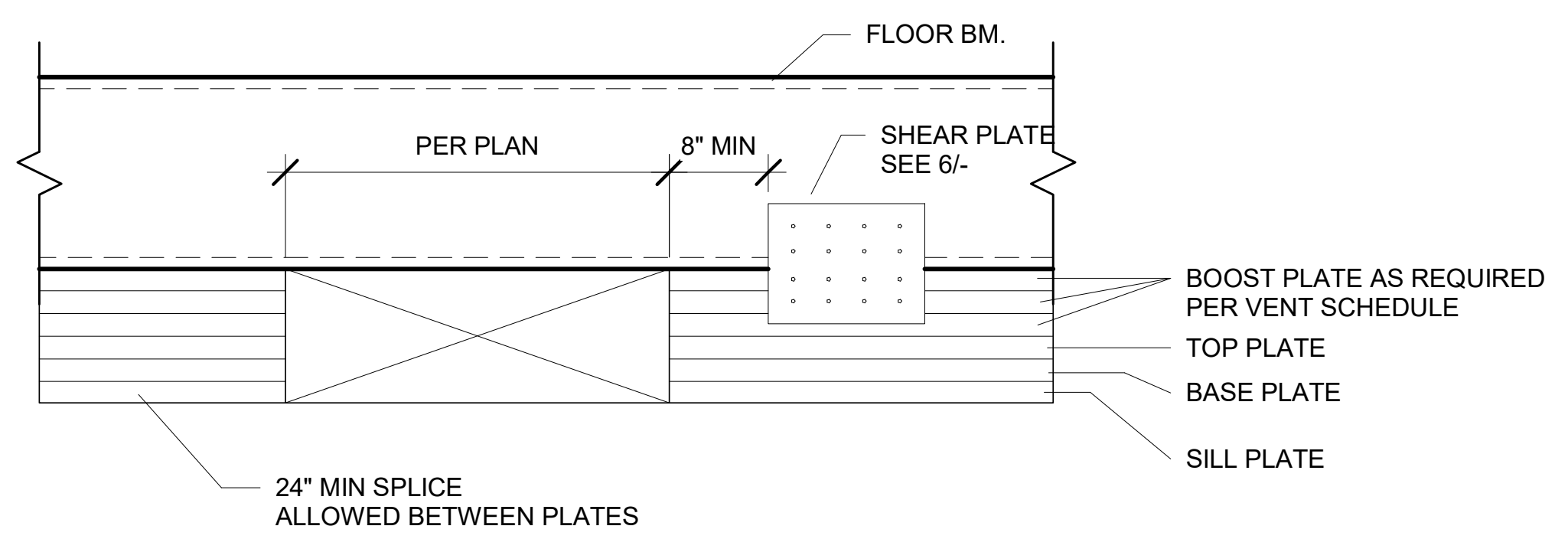
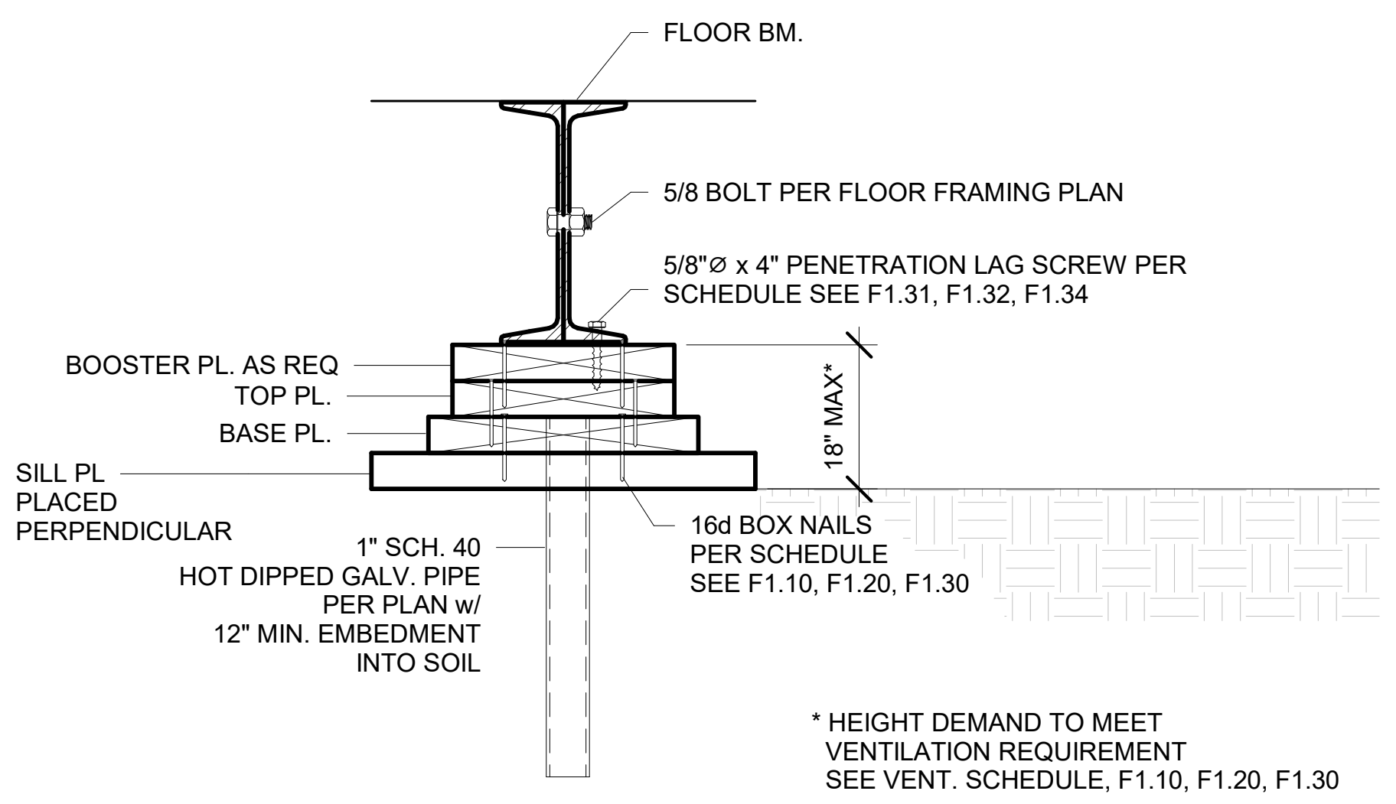


1 *1 1/2" = 1'-0"*
VENT OPENING OVER BASE PLATE

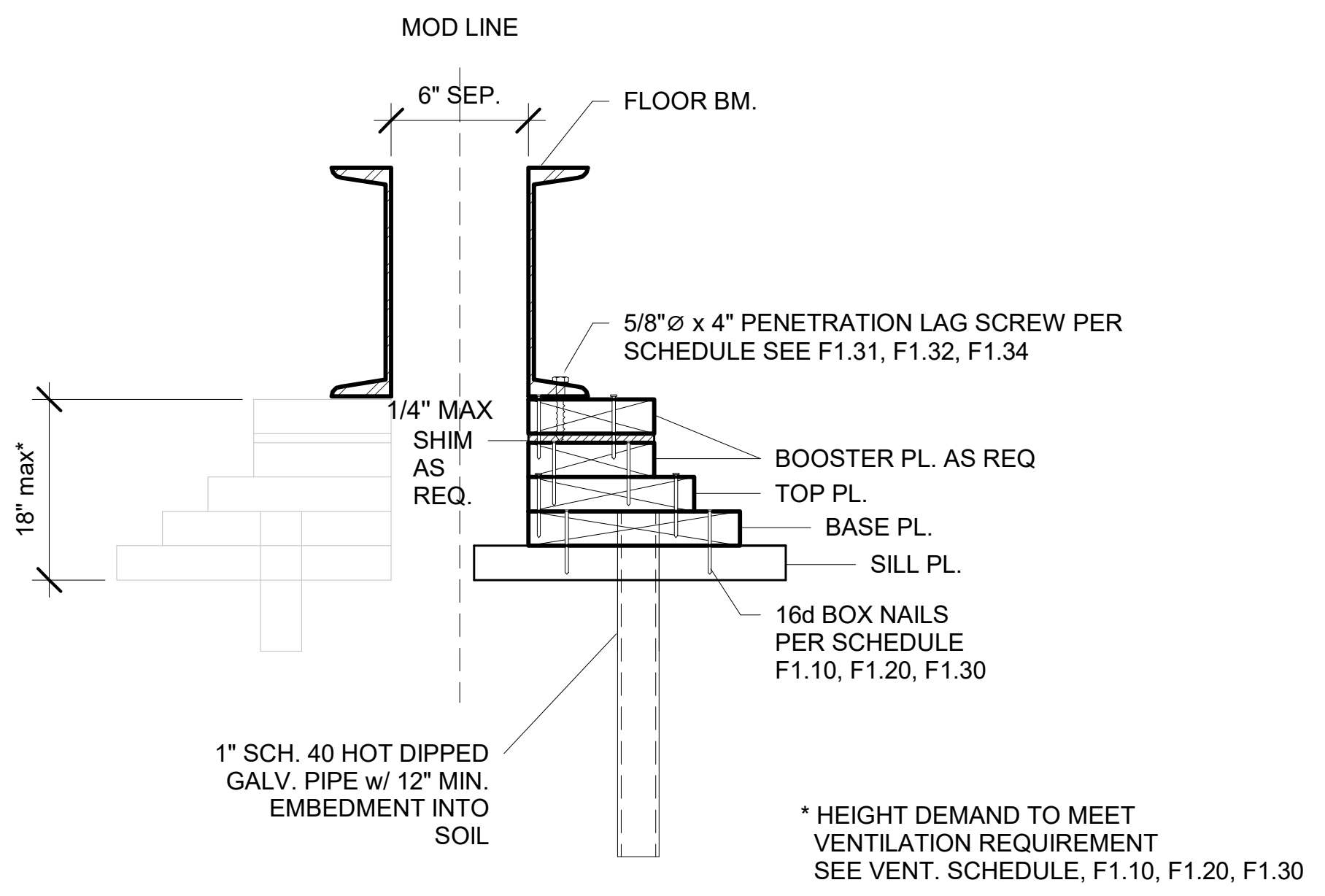

FLOOR BM.
PER PLAN
8" MIN
SHEAR PLATE SEE 6/-
BOOST PLATE AS REQUIRED PER VENT SCHEDULE
TOP PLATE
BASE PLATE
SILL PLATE
24" MIN SPLICE ALLOWED BETWEEN PLATES

2 *1 1/2" = 1'-0"*
VENT OPENING @ SIDEWALL OR MODLINE @ SEPERATION


FLOOR BM.
5/8 BOLT PER FLOOR FRAMING PLAN
5/8"Ø x 4" PENETRATION LAG SCREW PER SCHEDULE SEE F1.31, F1.32, F1.34
BOOSTER PL. AS REQ
TOP PL.
BASE PL.
SILL PL PLACED PERPENDICULAR
18" MAX*
1" SCH. 40 HOT DIPPED GALV. PIPE PER PLAN w/ 12" MIN. EMBEDMENT INTO SOIL
16d BOX NAILS PER SCHEDULE SEE F1.10, F1.20, F1.30

* HEIGHT DEMAND TO MEET
VENTILATION REQUIREMENT
SEE VENT. SCHEDULE, F1.10, F1.20, F1.30

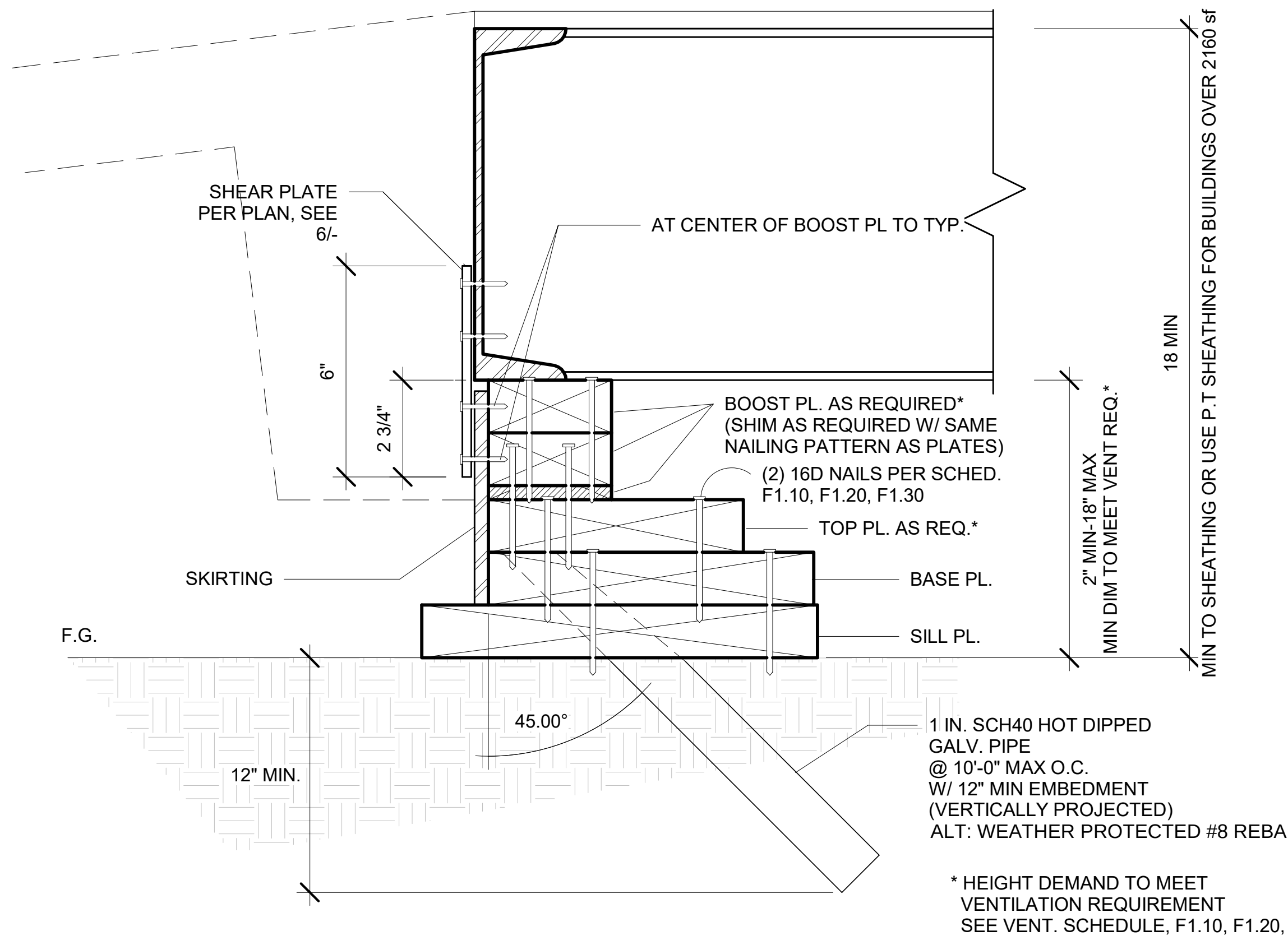
3 *1 1/2" = 1'-0"*
FOUNDATION PAD AT MOD LINE


MOD LINE
6" SEP.
FLOOR BM.
5/8"Ø x 4" PENETRATION LAG SCREW PER SCHEDULE SEE F1.31, F1.32, F1.34
18" max*
1/4" MAX SHIM AS REQ.
BOOSTER PL. AS REQ
TOP PL.
BASE PL.
SILL PL.
16d BOX NAILS PER SCHEDULE F1.10, F1.20, F1.30
1" SCH. 40 HOT DIPPED GALV. PIPE w/ 12" MIN. EMBEDMENT INTO SOIL

* HEIGHT DEMAND TO MEET
VENTILATION REQUIREMENT
SEE VENT. SCHEDULE, F1.10, F1.20, F1.30

4 *1 1/2" = 1'-0"*
FOUNDATION PAD AT SEPARATION

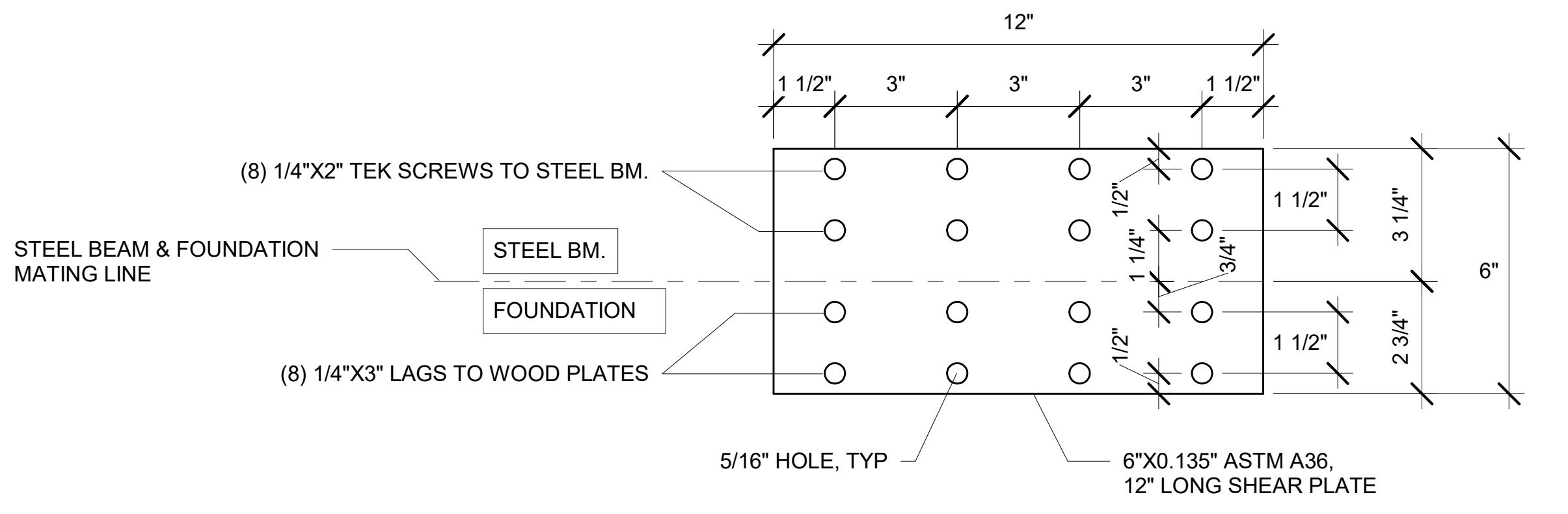
*NOTE: WHERE GRADE IS INSTALLED FLUSH WITH FLOOR ELEVATION,
PROVIDE FLASHING AND DRAINAGE PER 1C OR 6C/A2.9


SHEAR PLATE PER PLAN, SEE 6/-
AT CENTER OF BOOST PL TO TYP.
6"
2 3/4"
BOOST PL. AS REQUIRED* (SHIM AS REQUIRED W/ SAME NAILING PATTERN AS PLATES)
(2) 16D NAILS PER SCHED. F1.10, F1.20, F1.30
TOP PL. AS REQ.*
BASE PL.
SILL PL.
SKIRTING
F.G.
45.00°
12" MIN.
2" MIN-18" MAX MIN DIM TO MEET VENT REQ.*
18 MIN
MIN TO SHEATHING OR USE P.T SHEATHING FOR BUILDINGS OVER 2160 sf
1 IN. SCH40 HOT DIPPED GALV. PIPE @ 10'-0" MAX O.C. W/ 12" MIN EMBEDMENT (VERTICALLY PROJECTED) ALT: WEATHER PROTECTED #8 REBAR

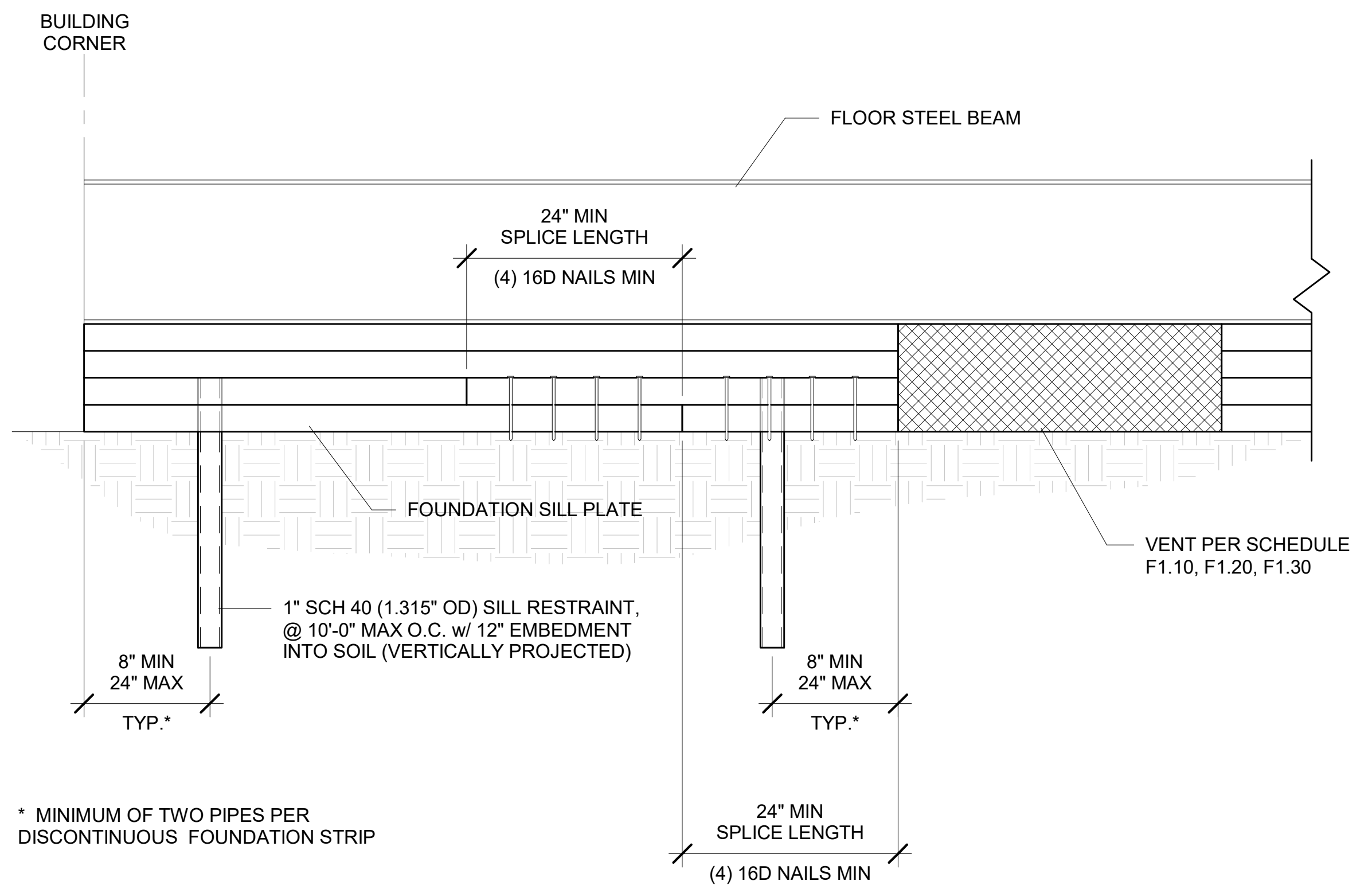
* HEIGHT DEMAND TO MEET
VENTILATION REQUIREMENT
SEE VENT. SCHEDULE, F1.10, F1.20, F1.30

NOTE:
(BASED ON DSA IR-16-1, SECTIONS 2.2.3, 2.3 AND 2.4, ANY BUILDING UNDER 2160 SQFT MAY BE LOWER THAN 18", THE REQUIREMENT FOR PRESERVATIVE FLOOR FINISH SHEATHING OR WALL FRAMING DOES NOT APPLY. A WAIVER OF DURABILITY WILL BE SUBMITTED FOR APPROVAL BY THE CLIENT'S APPOINTED AGENT.)

5 *3" = 1'-0"*
SILL PLATE PROFILE


12"
1 1/2"
3"
3"
3"
1 1/2"
(8) 1/4"X2" TEK SCREWS TO STEEL BM.
STEEL BEAM & FOUNDATION MATING LINE
STEEL BM.
FOUNDATION
(8) 1/4"X3" LAGS TO WOOD PLATES
1/2"
1 1/4"
3/4"
1/2"
1 1/2"
1 1/2"
3 1/4"
2 3/4"
6"
5/16" HOLE, TYP
6"X0.135" ASTM A36, 12" LONG SHEAR PLATE

6 *3" = 1'-0"*
SHEAR PLATE



* MINIMUM OF TWO PIPES PER
DISCONTINUOUS FOUNDATION STRIP

7 *1 1/2" = 1'-0"*
Splice at Sills

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PROJECT SPECIFIC STATE AGENCY APPROVAL

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REGISTERED PROFESSIONAL ENGINEER
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STRUCTURAL
STATE OF CALIFORNIA
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RST#22088

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DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
WOOD
FOUNDATION
DETAILS

PROJECT NUMBER
22088

DRAWN BY
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CHECKED BY
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DATE

SHEET NO.
F1.40

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DATE: 07/07/2025

STRUCTRUAL STEEL:

A. ALL WORK, UNLESS MODIFIED BY THE CONCTRACT DOCUMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT AISC SPECIFICATIONS AND STANDARDS.
B. STEEL SHAPES SHALL COMFORM TO THE FOLLOWING STANDARD:

a.	STRUCTURAL HSS COLUMNS:	ASTM A500 GRADE B
b.	STRUCTURAL W-SHAPES:	ASTM A992 GRADE 50
c.	TUBE STEEL:	ASTM A500 GRADE A
d.	ALL OTHER:	ASTM A36

C. FABRICATION, ERECTION, AND SHOP PAINTING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AISC *CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES*.
D. HOLES IN STRUCTURAL STEEL SHALL NOT BE PERMITTED, UNLESS SPECIFIED IN THE STRUCTURAL DRAWINGS

~~CONCRETE~~

~~A. ALL CONCRETE WORK, UNLESS MODIFIED BY CONTRACT DOCUMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 19A, CBC 2022 AND ACI 318-19.~~

~~B. TESTS AND INSPECTION SHALL BE PERFORMED BY A TESTING LABORATRY CONTRACTED BY THE DISTRICT.~~

~~C. MIX DESIGN SHALL BE SUBMITTED FOR QUALIFICATION AND PROVIDE A 28-DAY COMPRESSIVE STRENGTH F'C OF 3500 PSI, COMPOSED OF NORMAL WEIGHT TYPE I PORTALAND CEMENT IN CONFORMANCE WITH ASTM C150.~~

~~D. FORMWORK SHALL RESULT IN FINAL STRUCTURE THAT CONFORMS TO SHAPES, LINES, AND DIMENSIONS AS REQUIRED BY THE CONTRACT DOCUMENTS.~~

~~E. LOCATIONS OF VENTS AND OPENINGS FOR MECHANICAL AND ELECTRICAL USE SHALL BE VERIFIED BY ARCHITECT.~~

~~F. EMBEDMENT OF MATERIALS NOT HARMFULL TO CONCRETE AND WITHIN LIMITATIONS OF SECTION 20.6, ACI-318-19 SHALL BE PERMITTED. REFER TO OTHER DISCIPLINES FOR LOCATION OF CONDUIT, PIPES, FITTINGS, SLEEVES, ETC.~~

~~G. IS CONTINUOUS BATCH PLANT INSPECTION WAIVED PER CBC 1705A3.3. WHEN CONTINUOUS BATCH PLANT INSPECTION WAIVED, THE FOLLOWING PERIODIC INSPECTION SHALL BE REQUIRED:(INSPECTIONS PROVIDED BY DISTRICT)~~

1. ~~QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCH AT THE START OF THE DAY.~~
2. ~~LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTIFY AND CERTIFY TO EACH LOAD BY A BATCH TICKET.~~
3. ~~BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH THE LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR WILL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD, AND TIME OF RECEIPT, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.~~

~~H. ANCHOR BOLTS, AND REINFORCING STEEL SHALL BE SECURELY TIED BEFORE CONCRETE IS POURED.~~

CONCRETE MIX

IN ADDITION TO THOSE REQUIREMENTS DICTATED BY THE PC DESIGN, THE CONCRETE MIX USED IN THE FOUNDATION ELEMENTS SHALL COMPLY WITH THE DURABILITY REQUIREMENTS OF AMERICAN CONCRETE INSTITUTE (ACI) 318 SECTION 19.3. THE PC DRAWINGS SHALL ACCOUNT FOR THE DEPENDENCY OF THESE DURABILITY REQUIREMEMNTS ON SITE-SPECIFIC CHARACTERISTICS.

A. WHEN THE PC DRAWINGS DO NOT REQUIRE A SITE-SPECIFIC GEOTECHNICAL REPORT THAT QUANTIFIES SULFATE CONTENT IN THE SOIL, THE PC DRAWINGS SHALL REQUIRE A CONCRETE MIX SHALL COMPLYING WITH ONE OF THE FOLLOWING PER ACI 318 TABLE 19.3.2.1. SEE THIS SHEET A.1 & A.2 FOR OPTIONS

B. MAXIMUM WATER/CEMENT RATION OF 0.45; MINIMUM COMPRESSIVE STRENGTH OF 4,500 POUNDS PER SQUARE INCH (PSI); TYPE V CEMENT PLUS POZZOLAN OR SLAG CEMENT COMPLYING WITH FOOTNOTE 7; AND PROHIBITION OF ADMIXTURES CONTAINING CALCIUM CHLORIDE

C. MAXIMUM WATER/CEMENT RATIO OF 0.40; MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI; TYPE V CEMENT COMPLYING WITH FOOTNOTE 8; AND PROHIBITION OF ADMIXTURES CONTAING CALCIUM CHLORIDE.

D. WHEN THE PC DRAWINGS REQUIRE A SITE-SPECIFIC GEOTECHNICAL REPORT THAT QUANTIFIES SULFATE CONTENT IN THE SOIL, THE PC DRAWINGS SHALL CLEARLY STATE THE EXPOSURE CLASS FOR EACH CATAGORY (I.E., F, S, W, AND C) OR COMBINATION THEREOF THE PC DESIGN IS APPROVED FOR. THE MAXIMUM WATER/CEMENT RATIO, MINIMUM COMPRESSIVE STRENGTH, CEMENTITOUS MATERIAL REQUIREMENTS, AND ADMIXTURE LIMITATIONS SHALL BE STATED ON THE PC DRAWINGS FOR EACH APPROVED CASE.

E. BOTH APPROACHES GIVEN SECTIONS 5.5.1 AND 5.5.2 ABOVE CAN BE INCLUDED ON THE PC DRAWINGS AS ALTERNATE OPTIONS IN ACCORDANCE WITH SECTION 1.4 ABOVE

F. CONCRETE EXPOSE TO THAW AND FREEZE CYCLES SHALL BE AIR ENTRAINED PER ACI 318 SECTION 19.3.3.1

STEEL REINFORCEMENT

A. DEFORMED BARS SHALL CONFORM TO ASTM A615.
B. fy= 60,000 PSI, FOR ALL BARS EXEPT FOR #3 BARS, fy= 40,000 PSI.
C. PROVIDE A MINIMUM CONCRETE COVER FOR REINFORCEMENT EMBEDDED IN:
  a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH = 3"
  b. CONCRETE EXPOSED TO EARTH OR WEATHER FOR #5 BARS OR SMALLER = 1.5"
D. IN SPLICE LENGTHS SHALL BE A MINIMUM OF 48" FOR #5 BARS, AND 30" FOR #4 BARS UNLESS OTHERWISE SPECIFIED DRAWINGS.

BOLTS

A. ALL BOLTS AND ANCHOR BOLTS SHALL COMFORM TO ASTM A-307
B. BOLTS EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED BY THE HOT-DIP OR MECHANICAL PROCESS

WELDING

A. ALL WELDING SAHLL BE IN COMFORMANCE TO:
  a. AWS D1.1, EXCEPT AS MODIFIED IN SECTION J2, AISC-360 FOR STEEL
  b. AWS D1.3 FOR LIGHT GAUGE STEEL
  c. AWS D1.4 FOR REINFORCING STEEL

B. ELECTRODE CLASSIFICATION:
  a. E70XX FOR STEEL AND CONCRETE STEEL REINFORCEMENT
  b. E60XX FOR LIGHT GAUGE STEEL

C. WELDS SHALL BE CAPABLE OF PRODUCING THE FOLLOWING V-NOTCH TOUGHNESS AS DETERMINED BY APPROPRIATE AWS A5 CLASSIFICATION TEST METHOD OR MANUFACTURER CERTIFICATION:
  a. LATERAL FORCE RESISTING SYSTEM (LFRS) = 20 FT-LB AT 0 DEGREE F
  b. COMPLETE JOINT PENETRATION GROOVE WELD = 20 FT-LB AT 40 DEGREE F

D. SHOP AND FIELD WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.

E. INSPECTION:
  a. PERIODIC INSPECTION OF FILLET WELDS LESS THAN OR EQUAL TO 5/16", FLOOR AND ROOF DECK WELDS.
  b. CONTINUOUS INSPECTION FOR OTHER WELDS.

F. NONDESTRUCTIVE TESTING (NDT):
  a. ULTRASONIC TESTING SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16" OR THICK OR GREATER. ULTRASONIC TESTING NOT REQUIRED FOR MATERIALS LESS THAN 5/16" THICK. TESTING FREQUENCY MAY BE REDUCED TO 25%, PROVIDED PROVISIONS SET FORTH IN SECTION N5.5e, AISC-360 IS MET.
  b. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS. TESTING FREQUENCY MAY BE REDUCED TO 10%, PROVIDED PROVISIONS SET FORTH IN J6.2g, AISC-341 IS MET.

12" = 1'-0"
STRUCTURAL NOTES

FOUNDATIONS

GEOTECHNICAL INVESTIGATION SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 1803A.1 THROUGH 1803A.8 BY GEOTECHNICAL ENGINEER CONTRACTED BY THE DISTRICT. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TALBLE 1806A.2, WHERE GEOTECHNINCAL REPORTS IS NOT REQUIRED PER SECT 1803A.2. A MAXIMUM ALLOWABLE SOIL PRESSURE OF 1000 PSF AND 1500 PSF SHALLBE PERMITTED FOR TEMPORARY W AND PERMANENT CONCRETE FOUNDATIONS RESPECTIVELY IN ACCORDANCE WITH SECTION 4.6, IR 16-1

A PREVIIOUS REPORT FOR A SPECIFIC SITE MAY BE RESUBMITTED. THE ALLOWABLE FOUNDATIONA AND LATERAL SOIL PRESSURE VALUES ARE ALLOWED A 33% INCREASE FOR SHORT TERM WIND AND SEIMIC LOADS.

THE DISTRCT SHALL BE RESPONSIBLE FOR EXCAVATION, BACKFILL, SETTING ELEVATIONS, CRANING AND RIGGING. PROVIDE SHIMS TO LEVEL BUILDING WITHIN 1/2" TOLERANCE.

COLD-FORMED STEEL:

A. ALL WORK SHALL, UNLESS MODIFIED BY THE CONCTRACT DOCUMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT AISI SPECIFICATIONS AND STANDARDS.

B. MATERIAL SPECIFICATION:
  a. ASTM A-1011/A, GRADE 33 FOR MATERIALS THICKNESS 0.120 OR LESS UNLESS OTHERWISE NOTI
  b ASTM A-1003, GRADE 33 TYPE H FOR LIGHT GUAGE STUDS AND TRACKS
  c. SHAPES SHALL BE DIMENSIONED TO SSMA SPECIFICATIONS.

C. SCREWS EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED

~~STEEL DECK~~

~~MINIMUM THICKNESS PERMITTED FOR FLOOR STEEL DECKS IS 20GA. PER DSA IR 16-1, 1.2.1, MINIMUM THICKNESS OF NON-STRUCTURAL STEEL ROOF DECKING IS 20GA. STANDING SEAM ROOF PANELS ARE GRADE 40 SHEET STEEL WITH ALUMINUM ZINC COATING CONFORMING TO ASTM A792 AND AZ55.~~

CHANGES

CHANGES AFFECTING STRUCTURAL PORTION OF THE APPROVED PC SHALL NEED DSA APPROVAL AND SHALL BE CLASSIFIED AS CCD CATEFORY A.

WOOD

ALL FRAMING LUMBER SHALL BE GRADE MARKED BY AN APPROVED GRADING AGENCY

SHEATHING:

EACH SHEET SHALL BE GRADE MARKED BY THE AMERICAN PLYWOOD ASSOCIATION IN ACCORDANCE WITH THE PROCEDURES AND QUALIFICATIONS SET FORTH BY PS 1-19.

1. SUB FLOOR: 1 1/8" T&G UNBLOCKED PLYWOOD, SHALL PROVIDE A SMOOTH AND UNIFORM SURFACE CAPABLE OF ACCEPTING CARPET FINISH
2. PLYWOOD ROOF DECK OPTION: APA RATED 3/4" T&G OSB OR EQUIVALENT RATED SHEATHING
3. EXTERIOR WALL SIDING:
   - I. STANDARD: 5/8" DURATEMP OR 5/8" SMART PANEL
   - II. OPTION: 5/8" MOD
   - III. OPTION: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO FINISH
   - IV. OPTION: 1/2" OSB OR CDX PLYWOOD FOR HARDIE BOARD (LAP SIDING) FINISH

4. EXTERIOR WALL SIDING ATTACHMENT:

   FASTENERS USED FOR THE ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE HOT-DIPPED GALVANIZED, MECHANICALLY DEPOSITED ZINC-COATED, STAINLESS, SILICON BRONZE OR COPPER PER CBC SECTION 2304.10.1.1

   FASTEN TO WOOD FRAMING WITH 8D BOX NAILS @ 6" E.N., 12" F.N.
   FASTEN TO LIGHT GAGE METAL FRAMING WITH #8 WAFER HEAD STSMS @ 6" E.N., 12" F.N.
   FASTEN TO STRUCTURAL STEEL WITH #12 STSMS OR 0.145 DIAM SHOT PINS @ 12" O.C.

TREATED WOOD:

ALL WOOD LOCATED WITHIN 6" OF EXPOSED EARTH SHALL BE "PRESERVATIVE TREATED" OR SHALL BE "NATURALLY DURABLE" MATERIAL IN ACCORDANCE WITH CBC SECTION 2304.12.1.2.
1. ALL ROUGH LUMBER SHALL BE DF #2 OR BETTER.
2. ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, AND RAMSET POWER DRIVEN FASTENERS (ICC # ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.
3. FASTENERS, INCLUDING NUTS AND WASHERS, IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC 2304.10.1.1

ROOF DIAPHRAGM:

3/4" T&G RATED SHEATHING UNBLOCKED DIAPHRAGM, EXPOSURE 1, 48/24 SPAN RATING
FASTEN AT METAL SUPPORTS W/ #10 x 1 1/4" SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS @ 6" BN/CON. EDGE, 6" EN, AND 12" O.C. FN. PROVIDE A MINIMUM OF 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.
NOTE: ALL PANEL EDGES SHALL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33MILS WITH A MINIMUM WIDTH OF 1.5 INCHES AND SHALL BE EITHER INSTALLED BELOW SHEATHING. FOR OTHER THAN STEEL SHEATHING, THE SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

FLOOR DIAPHRAGM:

1 1/8" PLYWOOD UNBLOCKED DIAPHRAGM - STURD-I-FLOOR T&G RATED SHEATHING, EXTERIOR, 48" oc SPAN RATING
FASTEN AT METAL SUPPORTS W/ #10 - 24 x 2" SELF-TAPPING PHILLIPS FLAT-HEAD
ZINC COATED TEKS @ 6" O.C. BN/CON. EDGE, 6" O.C. EN, 12" FN. PROVIDE A MINIMUM OF 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2
NOTE: ALL PANEL EDGES SHALL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33MILS WITH A MINIMUM WIDTH OF 1.5 INCHS AND SHALL BE EITHER INSTALLED BELOW SHEATHING. FOR OTHER THAN STEEL SHEATHING, THE SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR
STRENGTH: 3500 PSI
TYPE: I OR II
DESINTY: 110 PCF - MAX

DIMENSION LUMBER ATTACHMENT TO STEEL FRAMING:

2 x STUDS AT CORNER STEEL COLUMNS (NAILING STUD)
USE: #10 - 24 x 2 1/2" LG. SELF-DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD WITH WASHER ZINC COATED TEK SCREWS AT 24" OC.

NAILING NOTES:

1. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED
2. MACHINE APPLIED 16d FASTENERS SHALL HAVE AN EMBEDMENT OF NOT LESS THAN 1 1/2" INTO THE SECOND MEMBER, AND SHALL NOT BE LESS THAN 3" IN OVERALL LENGTH.
3. NAILS SHALL BE ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIREMENT EMBEDMENT IS MAINTAINEI

CONNECTIONS AND FASTENERS:

ALL CONNECTIONS AND FASTENERS IN DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT PRODUCT PROVIDING REPORTS ARE SUBMITTED TO AND APPROVED BY DSA.

CONNECTIONS LAG SCREWS:

LAG SCREWS SHALL BE INSTALLED WITH WASHER AND TURNED BY WRENCH, OVER-TORQUING SHALL BE AVOIDED. PRE-DRILLED CLEARANCE AND LEAD HOLE SHALL BE REQUIRED AS DESCRIBED BELOW:

a) THE CLEARANCE HOLE FOR THE UNTHREADED PORTION OR THE SHANK SHALL HAVE SAME DEPTH AND DIAMETER.

b) THE LEAD HOLE FOR THE THREADED PORTION OF THE SHANK SHALL HAVE SAME DEPTH AND
65% TO 85% OF SHANK DIAMETER FOR LUMBER WITH SPECIFC GRAVITY OF, G > 0.6
60% TO 75% OF SHANK DIAMETER FOR LUMBER WITH SPECIFC GRAVITY OF, 0.5 < G ≤ 0.6
40% TO 70% OF SHANK DIAMETER FOR LUMBER WITH SPECIFC GRAVITY OF, G ≤ 0.5

LEAD OR CLEARANCE HOLES SHALL NOT BE REQUIRED FOR 3/8" DIAMETER OR SMALLER LAG SCREWS.

NAILING SCHEDULE: (ALL NAILS SHALL BE COMMON OR BOX NAILS, GALVANIZED WHERE EXPOSED) PER CBC TABLE 2304.10.2

CONNECTION	COMMON FASTENERS			BOX NAIL FASTENERS			LOCATION
	QTY	SIZE	SPACING O.C.	QTY	SIZE	SPACING O.C.	
1. JOIST TO SILL OR GIRDER	3-	8d		3-	10d		TOENAIL
2. BRIDGING TO JOIST	2-	8d		2-	10d		TOENAIL EA. END
3. 1X6 OR LESS SUBFLOOR TO EA. JOIST	2-	8d		2-	10d		FACE NAIL
4. WIDER THAN 1X6 SUBFLOOR TO EA. JOIST	3-	8d		3-	10d		FACE NAIL
5. 2" SUBFLOOR TO JOIST	2-	16d		N/A	N/A	N/A	BLIND & FACE NAIL
6. SOLE PLT. TO JOIST OR BLK'G TO EA. JOIST		16d	@ 16"		16d	@ 12"	FACE NAIL
SOLE PLT. TO JOIST OR BLK'G @ BRACED WALL PANEL	3-	16d	@ 16"	3-	16d	@ 16"	TYP. FACE NAIL
7. TOP PLT. TO STUD	2-	16d		3-	10d		END NAIL
8. STUD TO SOLE PLT.	2-	16d		3-	10d		END NAIL
OR	4-	8d		4-	10d		TOENAIL
9. DOUBLE STUDS		16d	@ 24"		10d	@ 16"	FACE NAIL
10. DOUBLE TOP PLT.		16d	@ 16"		10d	@ 12"	TYP. FACE NAIL
DOUBLE TOP PLT.	8-	16d	MIN. U.N.O.	12-	10d		24" MIN LAP SPLICE
11. BLKG. BTW. JOIST OR RAFTERS TO TOP PLT.	3-	8d		3-	10d		TOENAIL
12. RIM JOIST TO TOP PLT.		8d	@ 6"		10d	@ 6"	TOENAIL
13. TOP PLT., LAPS & INTERSECTIONS	2-	16d		3-	10d		FACE NAIL
14. CONT. HDR. 2 PIECES		16d	@ 16"				ALONG EDGE
15. CLG. JOIST TO PLT.	3-	8d		3-	10d		EA. JOIST, TOENAIL
16. CONT. HDR. TO STUD	4-	8d		4-	10d		TOENAIL
17. CLG. JOIST LAP OVER PARTITIONS	3-	16d		4-	10d		FACE NAIL
18. CLG. JOIST PARALLEL TO RAFTERS	3-	16d		SEE TABLE 2308.7.3.1			FACE NAIL
19. RAFTER TO PLT.	3-	8d		3-	16d		TOENAIL[c]
20. 1" DIA. BRACE TO EZ. STUD & PLT.	2-	8d		2-	10d		FACE NAIL
21. 1X8 SHT'G. TO EA. BRG.	3-	8d		3-	10d		FACE NAIL
22. WIDER THAN 1X8 SHT'G TO BRG.	3-	8d		3-	10d		FACE NAIL
23. BUILT-UP CORNER STUDS		16d	@ 24"				FACE NAIL
24. BUILT-UP GIRDERS & BEAMS		20d	@ 32"		10d	@ 24"	FACE NAIL @ TOP & BTM. STAGR. ON OPP. SIDES
	2-	20d		N/A	N/A	N/A	FACE NAIL @ ENDS & @ EA. SPLICE
25. 2" PLANKS	2-	16d		N/A	N/A	N/A	@ EA. BRG.
26. COLLAR TIE TO RAFTER	3-	10d		4-	10d		FACE NAIL
27. JACK RAFTER TO HIP	3-	10d		4-	16d		TOENAIL
28. ROOF RAFTER TO 2X RIDGE	2-	16d		3-	10d		END NAIL
29. JOIST TO BAND JOIST	3-	16d		4-	10d		END NAIL
30. 4X BLOCKING TO STUDS	1-	A34		N/A	N/A	N/A	FACE NAIL
OR	4-	8d		4-	10d		TOENAIL

A.) NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPGHRAMS AND SHEAR WALLS, REFER TO SECTION 2305 NAILS. FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.

B.)SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).

C.) WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.

D.) RSRS-01 IS A ROOF SHEATHING RING SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM F1667

DECIMAL AND GAUGE CHARTS

FRACTION	DECIMAL
1/32	0.03125
1/16	0.0625
3/32	0.09375
1/8	0.125
5/32	0.15625
3/16	0.1875
7/32	0.21875
1/4	0.25
9/32	0.28125
5/16	0.3125
11/32	0.34375
3/8	0.375
13/32	0.40625
7/16	0.4375
15/32	0.46875
1/2	0.5
17/32	0.53125
9/16	0.5625
19/32	0.59375
5/8	0.625
21/32	0.65625
11/16	0.6875
23/32	0.71875
3/4	0.75
25/32	0.78125
13/16	0.8125
27/32	0.84375
7/8	0.875
29/32	0.90625
15/16	0.9375
31/32	0.96875
1	1

PENNY	GAUGE	DEC.
60d, 40d	4	0.2242
30d	5	0.2092
20d	6	0.1943
	7	0.1793
16d	8	0.1644
12d, 10d	9	0.1495
8d	10	0.1345
6d	11	0.1196

PROJECT SPECIFIC STATE AGENCY APPROVAL
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT
11777 BERNARDO PLAZA COURT, SUITE 105
SAN DIEGO, CA 92128

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL
~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 60' EXPANDABLE TO 72' x 60'

SHEET TITLE
STRUCTURAL GEN NOTES

PROJECT NUMBER
22088

DRAWN BY
rMc/SM

CHECKED BY
JA/RT

DATE

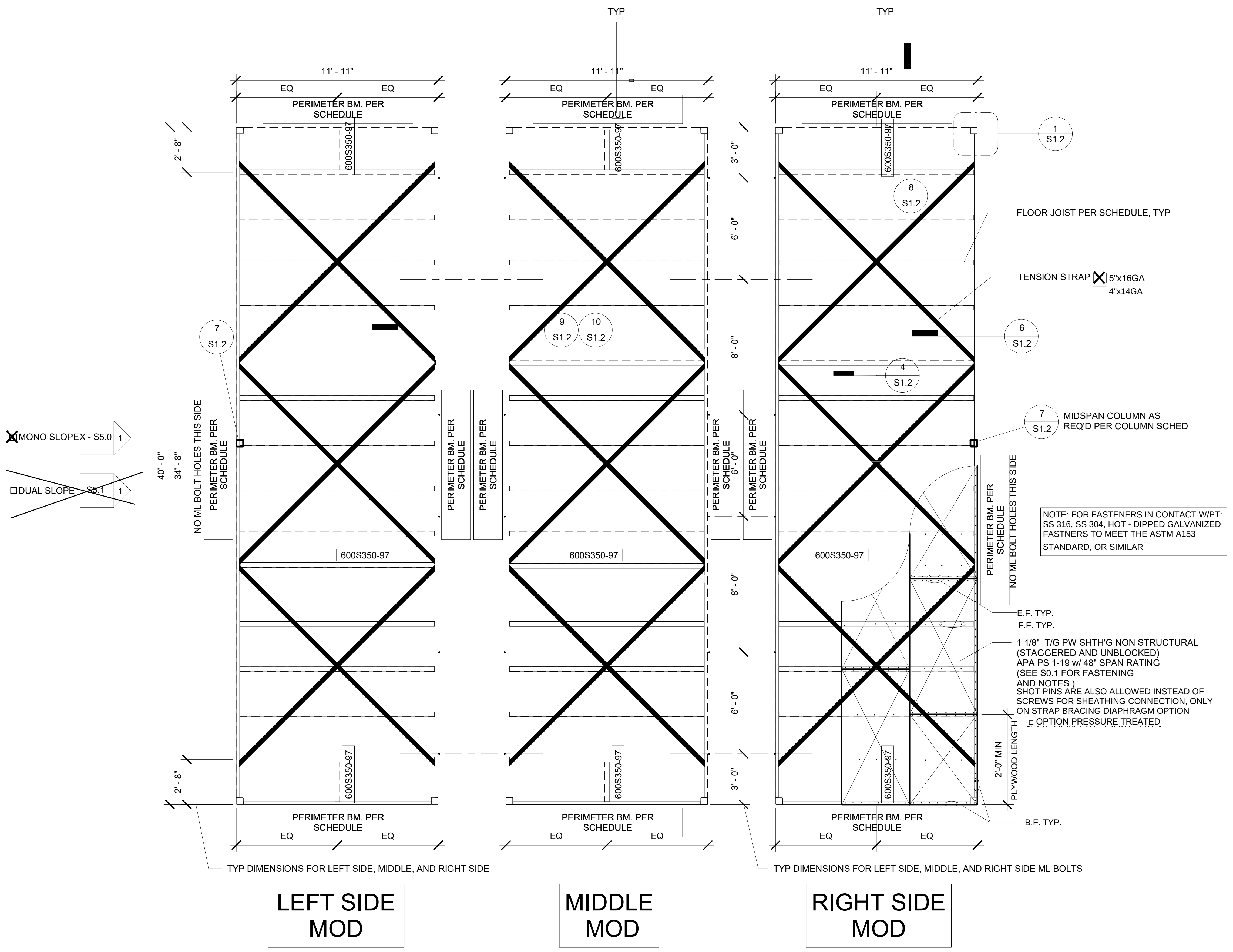
SHEET NO.
S0.1

SHEET OF

C:\Users\User\Documents\20133 - Aries, 24x60 PC -High Seismic_MainFile_detached_CESAR24D63.rvt
6/16/2021 7:18:48 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

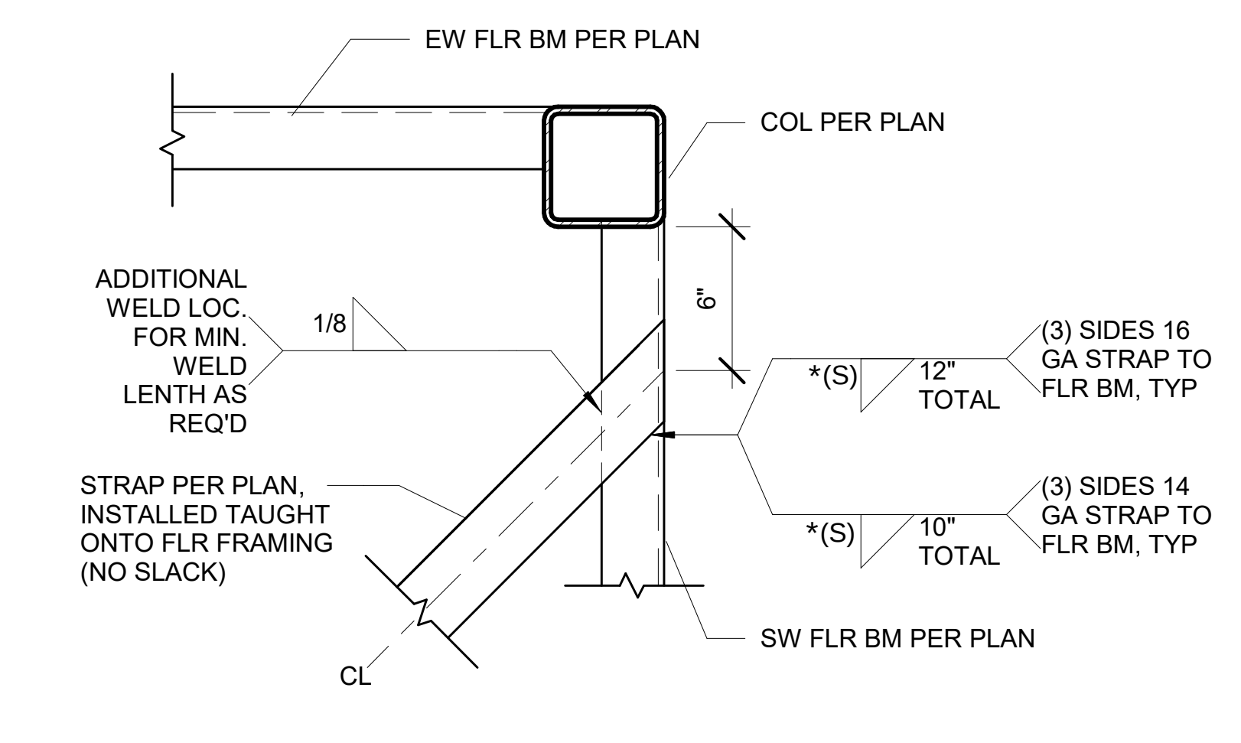
6/2/2022 9:46:43 AM \\192.168.10.2\Clients\2022\22073 - Class Leasing, El Dorado Cty OE - S Lake Tahoe MS 160lb Snow load#Main Files\REVIT\RST#22073 - Class Leasing, PC 24x40 to 120x40 HS_Eldorado Cty OE - 160# Snow Load_MainFile_detached.rvt



NOTE: FOR FASTENERS IN CONTACT W/PT: SS 316, SS 304, HOT - DIPPED GALVANIZED FASTNERS TO MEET THE ASTM A153 STANDARD, OR SIMILAR

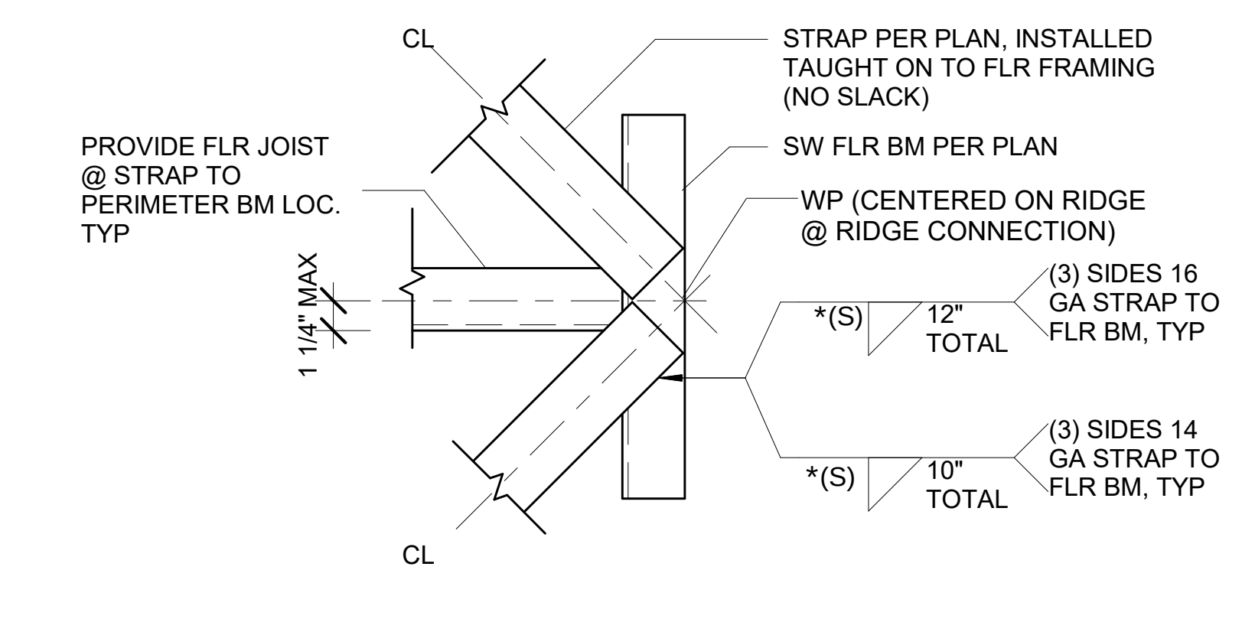
1 1/8" T/G PW SHTH'G NON STRUCTURAL (STAGGERED AND UNBLOCKED) APA PS 1-19 w/ 48" SPAN RATING (SEE S0.1 FOR FASTENING AND NOTES)
SHOT PINS ARE ALSO ALLOWED INSTEAD OF SCREWS FOR SHEATHING CONNECTION, ONLY ON STRAP BRACING DIAPHRAGM OPTION
☐ OPTION PRESSURE TREATED

1 *1/4" = 1'-0"*
WD Shth'g Flr Framing Plan (50+15 PSF) CROSS-STRAP OPT.


EW FLR BM PER PLAN
COL PER PLAN
ADDITIONAL WELD LOC. FOR MIN. WELD LENTH AS REQ'D
1/8
6"
*(S) 12" TOTAL
(3) SIDES 16 GA STRAP TO FLR BM, TYP
*(S) 10" TOTAL
(3) SIDES 14 GA STRAP TO FLR BM, TYP
STRAP PER PLAN, INSTALLED TAUGHT ONTO FLR FRAMING (NO SLACK)
SW FLR BM PER PLAN
CL

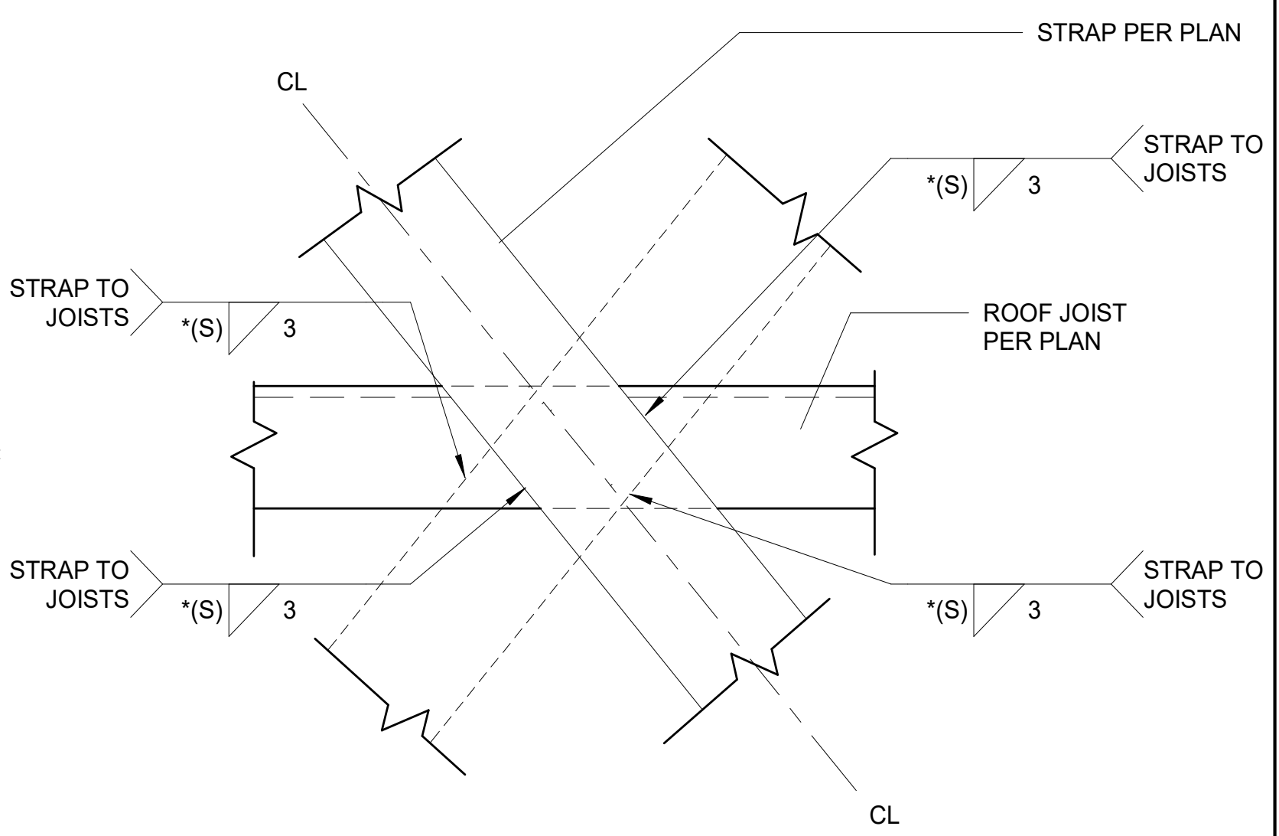
* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

2 ***1 1/2" = 1'-0"***
FLOOR BRACING STRAP @ ENDWALL


CL
STRAP PER PLAN, INSTALLED TAUGHT ON TO FLR FRAMING (NO SLACK)
SW FLR BM PER PLAN
PROVIDE FLR JOIST @ STRAP TO PERIMETER BM LOC. TYP
WP (CENTERED ON RIDGE @ RIDGE CONNECTION)
1 1/4" MAX
*(S) 12" TOTAL
(3) SIDES 16 GA STRAP TO FLR BM, TYP
*(S) 10" TOTAL
(3) SIDES 14 GA STRAP TO FLR BM, TYP
CL

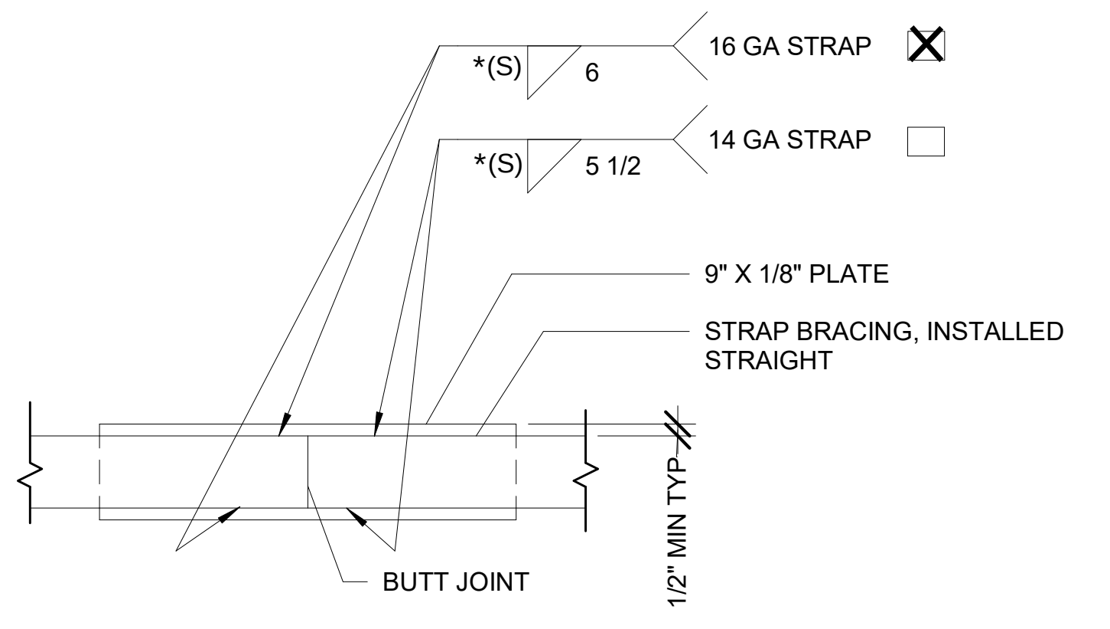
* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

3 ***1 1/2" = 1'-0"***
FLOOR STRAP BRACING @ SIDEWALL



* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

4 ***3" = 1'-0"***
STRAP TO JOIST CONNECTION



* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

5 ***1 1/2" = 1'-0"***
STRAP SPLICE DETAIL

NOTE: ALL PANEL EDGES SHLL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33MILS WITH A MINIMUM WIDTH OF 1.5 INCHES AND SHALL BE INSTALLED BELOW SHEATHING. FOR OTHER THAN STEEL SHEATHING, THE SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

Floor Joist Schedule

FLL	JOIST	SPACING
☒ 50+15 PSF[1]	600S350-97	32" O.C.
~~☐ 100 PSF[1]~~	~~600S350-97~~	~~24" O.C.~~
~~☐ 150 PSF[2]~~	~~600S350-97~~	~~16" O.C.~~

FOOTNOTES:
1. APPLICABLE FOR OCCUPANCY E
2. APPLICABLE FOR OCCUPANCY E &B

Perimeter Floor Beam Schedule

HT	No Plaster Walls	~~Plaster Walls~~	~~w/ Parapet, 18" max~~
☒ 9'	C10x15.3	~~C10x15.3~~	~~C10x15.3~~
☐ 10'	C10x15.3	~~C10x15.3~~	~~C10x15.3~~

NOTE: SPLICE AT FLOOR BEAM PERMITTED PER 3/S1.2

Column Schedule

HT	No Plaster Walls	~~Plaster Walls~~	~~w/ Parapet, 18" max~~
☒ 9'	5x5x1/4	~~5x5x1/4~~	~~6x6X1/4~~
☐ 10'	6x6x1/4	~~6x6x1/4~~	~~6x6X1/4~~
			~~3x3X3/16 mid-span column~~

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
WWW.RSTAVARES.COM

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

REVISIONS

#	Description	BY

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

EL DORADO 160# SNOW LOAD

SHEET TITLE
WD SHTH'G FLR
FRAMING PLAN
CROSS-STRAP OPT.
50 + 15 PSF
100 PSF
150 PSF

PROJECT NUMBER
22073

DRAWN BY
Author

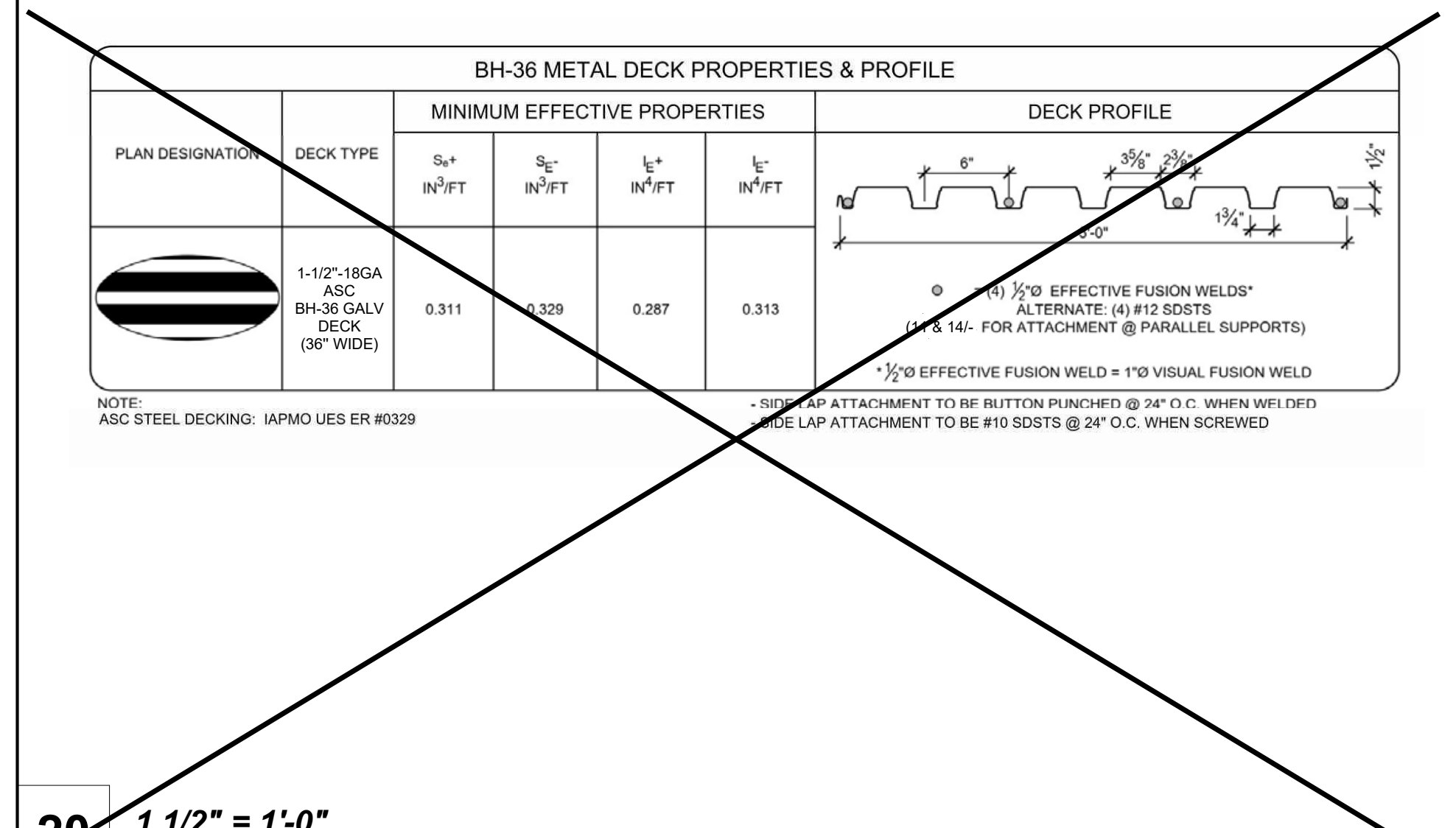
CHECKED BY
Checker

DATE
06/07/2021

SHEET NO.
S1.0.4

SHEET OF SHEETS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

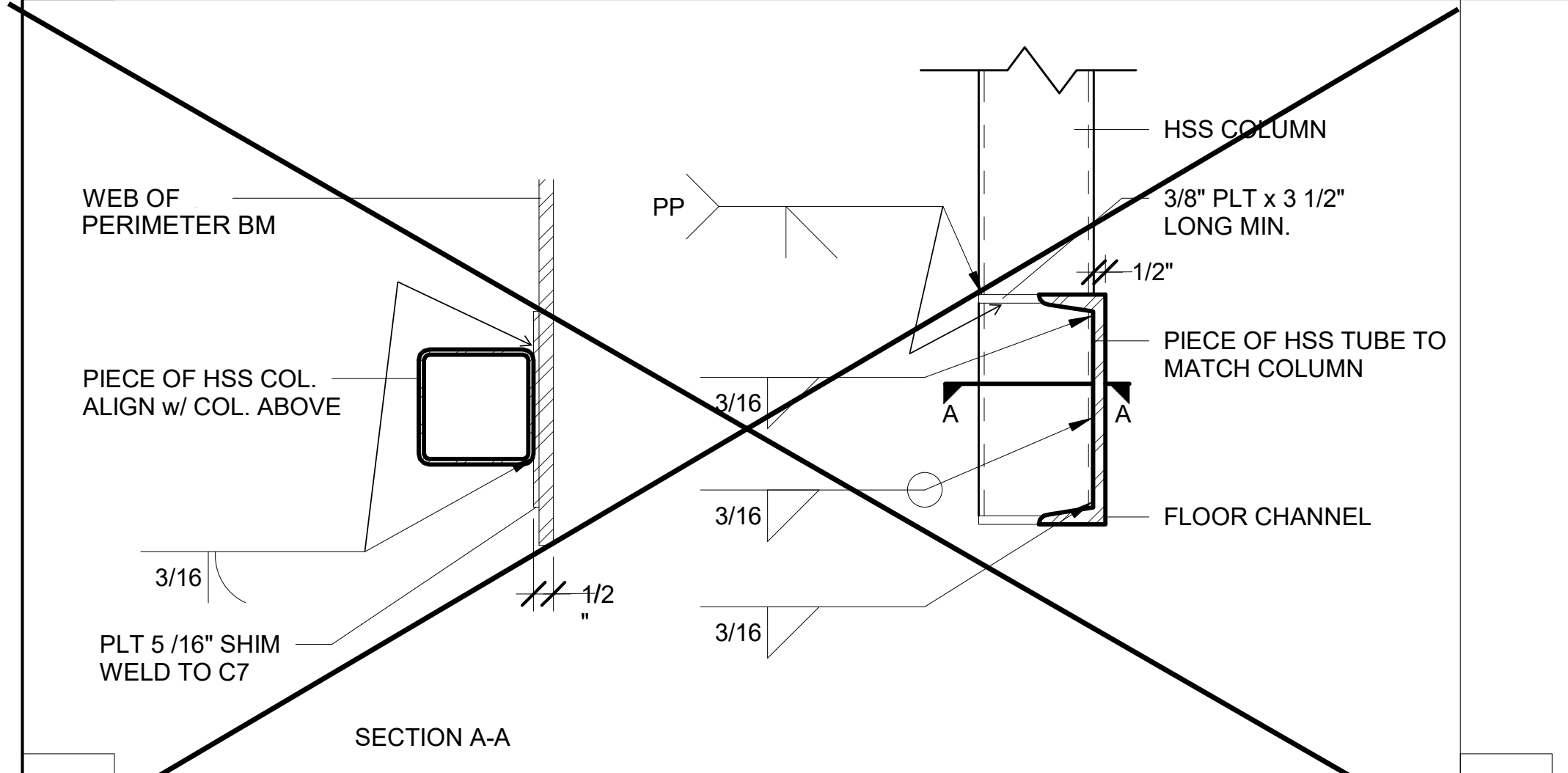

BH-36 METAL DECK PROPERTIES & PROFILE
6"
3 5/8"
2 3/8"
1 3/4"
1 1/2"
3'-0"

PLAN DESIGNATION	DECK TYPE	MINIMUM EFFECTIVE PROPERTIES				DECK PROFILE
		S_e+ IN³/FT	S_E- IN³/FT	I_E+ IN⁴/FT	I_E- IN⁴/FT	
	1-1/2"-18GA ASC BH-36 GALV DECK (36" WIDE)	0.311	0.329	0.287	0.313	(4) 1/2"Ø EFFECTIVE FUSION WELDS* ALTERNATE: (4) #12 SDSTS (1 & 14/- FOR ATTACHMENT @ PARALLEL SUPPORTS) * 1/2"Ø EFFECTIVE FUSION WELD = 1"Ø VISUAL FUSION WELD

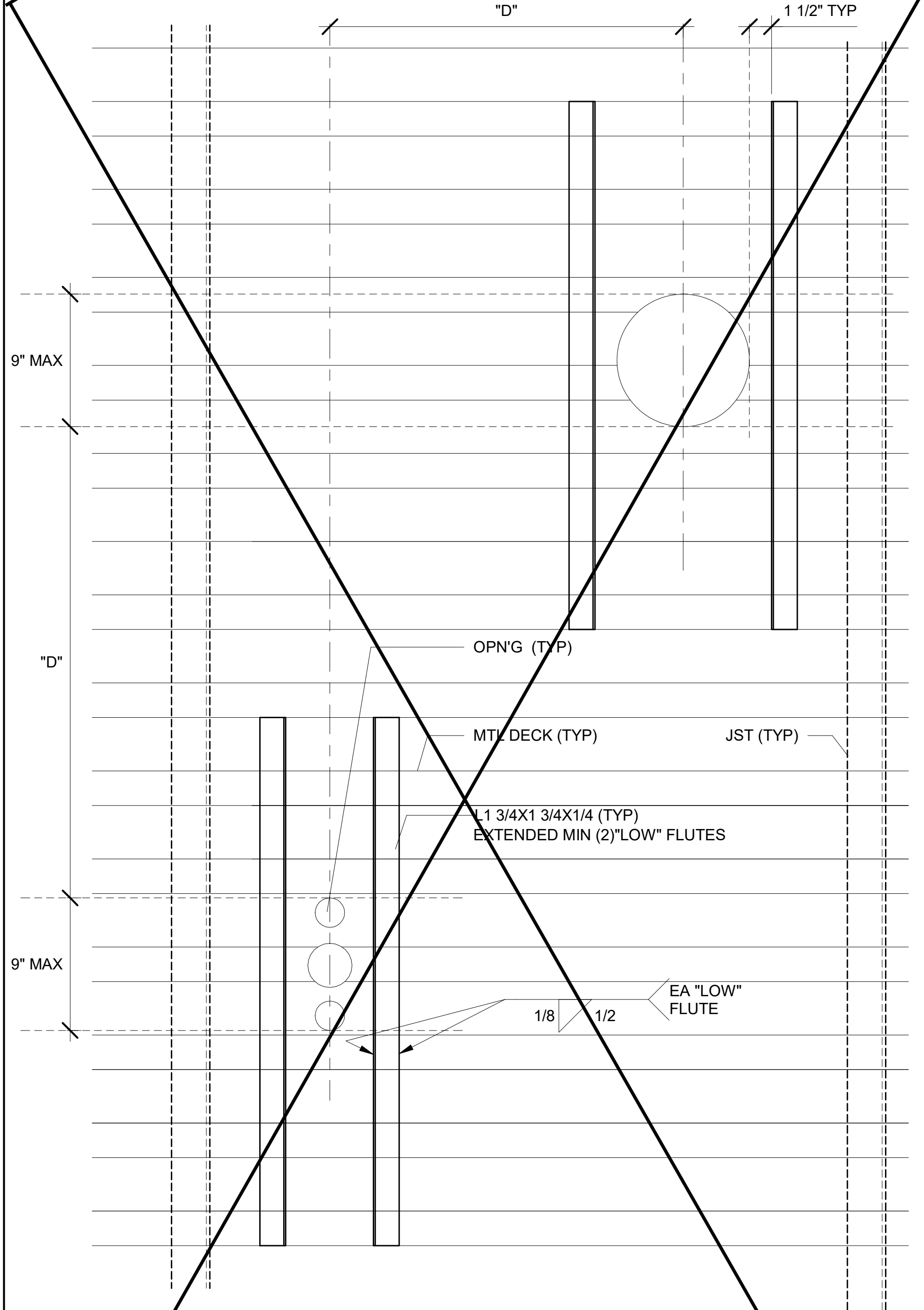
NOTE:
ASC STEEL DECKING: IAPMO UES ER #0329

- SIDE LAP ATTACHMENT TO BE BUTTON PUNCHED @ 24" O.C. WHEN WELDED
- SIDE LAP ATTACHMENT TO BE #10 SDSTS @ 24" O.C. WHEN SCREWED

20 1 1/2" = 1'-0"
BH-36 Metal Deck Properties & Profile


WEB OF PERIMETER BM
PP
HSS COLUMN
3/8" PLT x 3 1/2" LONG MIN.
1/2"
PIECE OF HSS COL. ALIGN w/ COL. ABOVE
PIECE OF HSS TUBE TO MATCH COLUMN
A
A
3/16
3/16
3/16
FLOOR CHANNEL
3/16
1/2"
PLT 5 /16" SHIM WELD TO C7
SECTION A-A

7 1 1/2" = 1'-0"
Mid-Span Column Connection



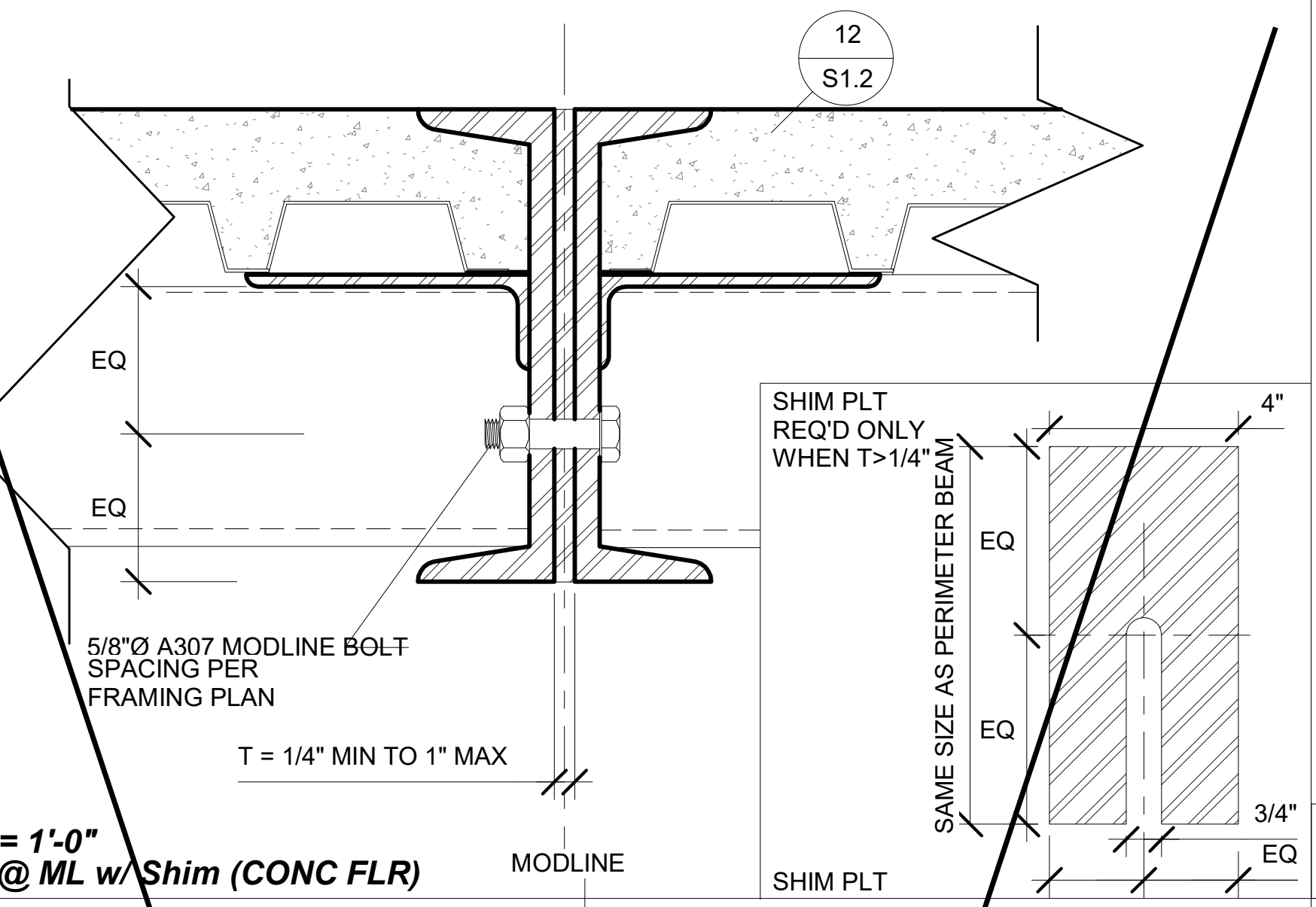
1. THIS DETAIL IS FOR USE ONLY FOR OPENINGS OR OPENING GROUPS THAT ARE 0'-9" OR SMALLER.

2. OPENINGS 2"Ø OR LESS NOT OCCURING IN THE LOWER FLUTE DO NOT REQUIRE REINFORCING AND MAY BE CORED THRU THE CONCRETE.

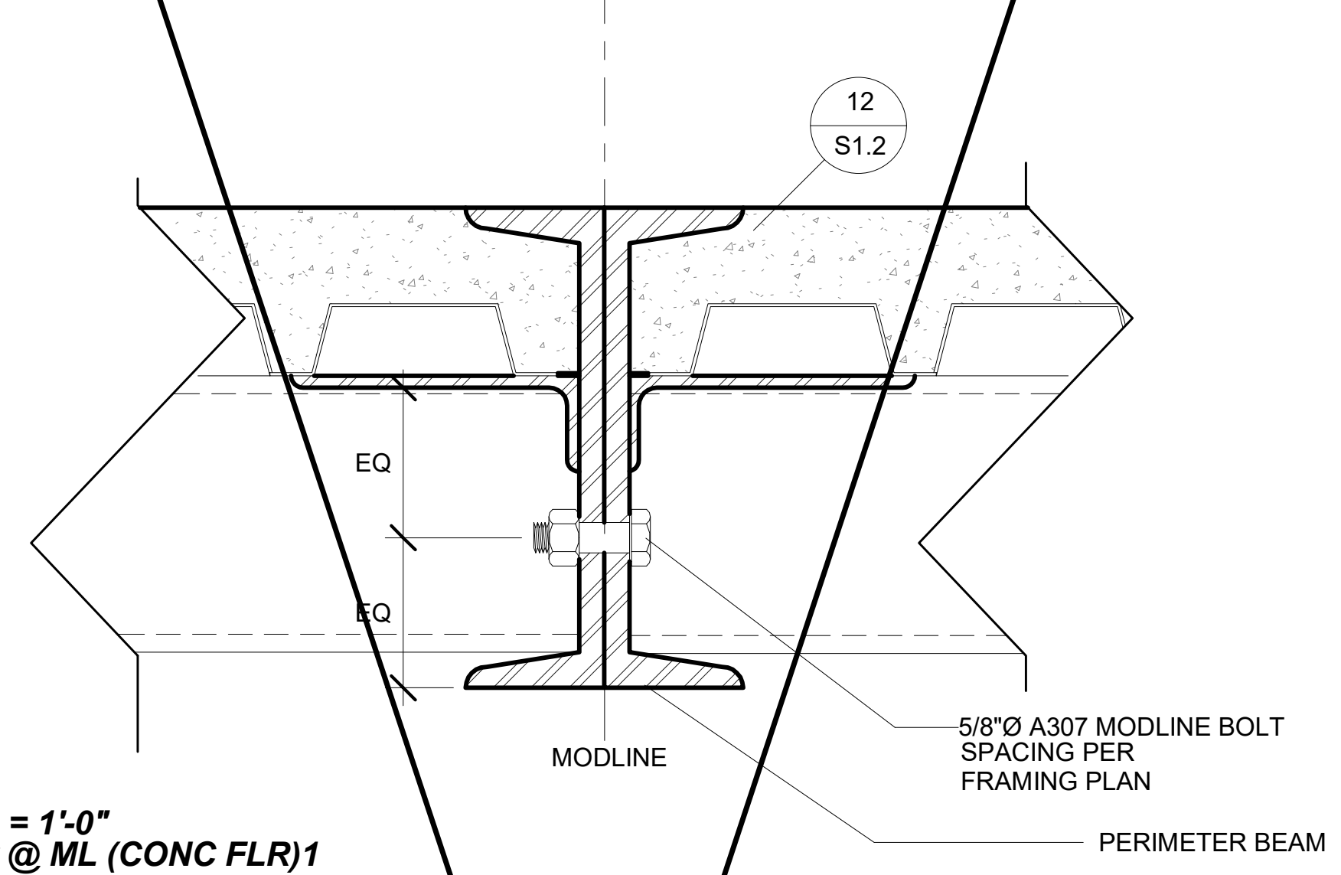
3. IF "D" IS LESS THAN 32" THEN THE GROUP OF OPENINGS MUST BE BLOCKED OUT WITH ADDITIONAL FRAMING.

4. PRIOR TO CONCRETE POUR, BLOCK OUT THE OPENINGS. AFTER THE CONCRETE HAS BEEN CURED THE DECK MAY BE CUT.

16 1 1/2" = 1'-0"
Typ Deck Penetrations (CONC FLR)

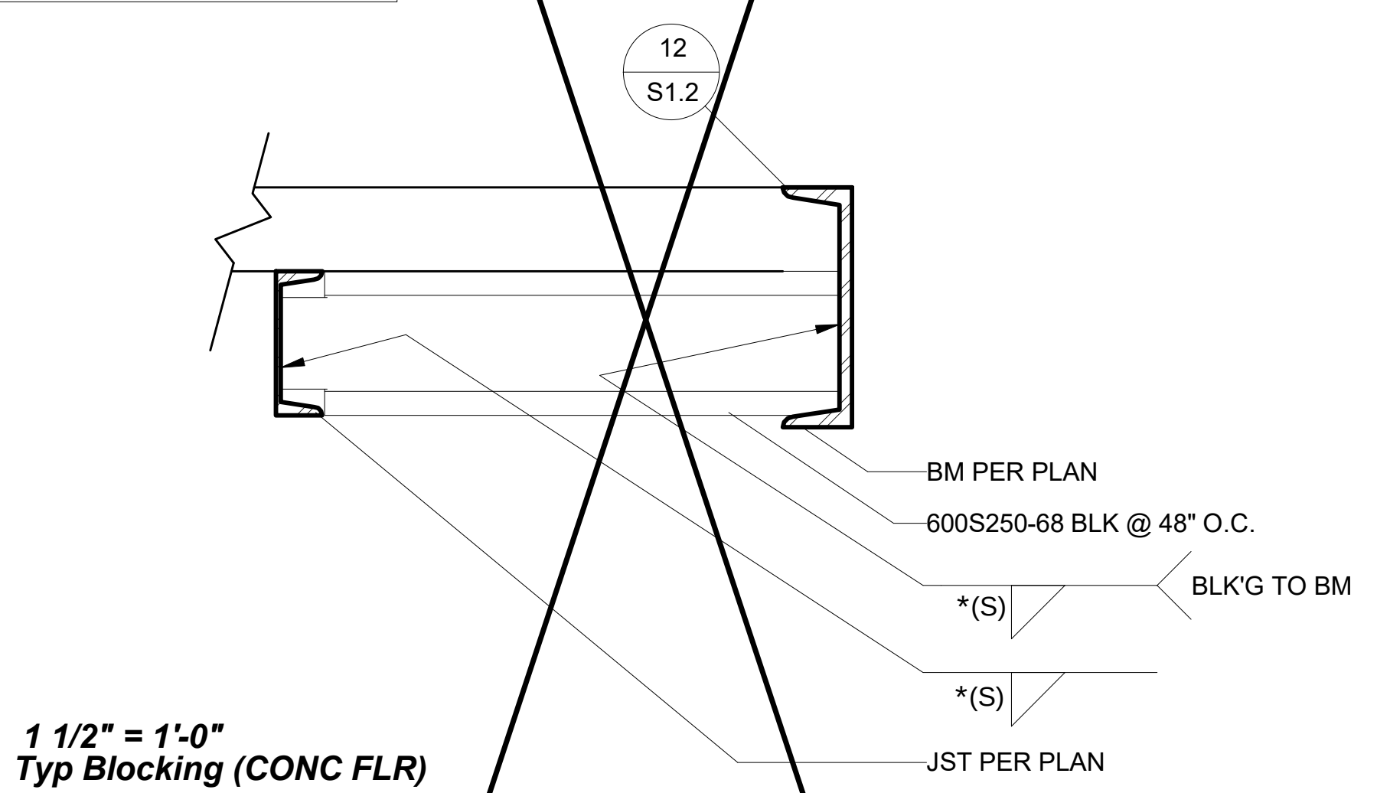

12
S1.2
EQ
EQ
5/8"Ø A307 MODLINE BOLT SPACING PER FRAMING PLAN
T = 1/4" MIN TO 1" MAX
MODLINE
SHIM PLT REQ'D ONLY WHEN T>1/4"
4"
SAME SIZE AS PERIMETER BEAM
EQ
EQ
3/4"
EQ
SHIM PLT

15 3" = 1'-0"
Flr @ ML w/ Shim (CONC FLR)

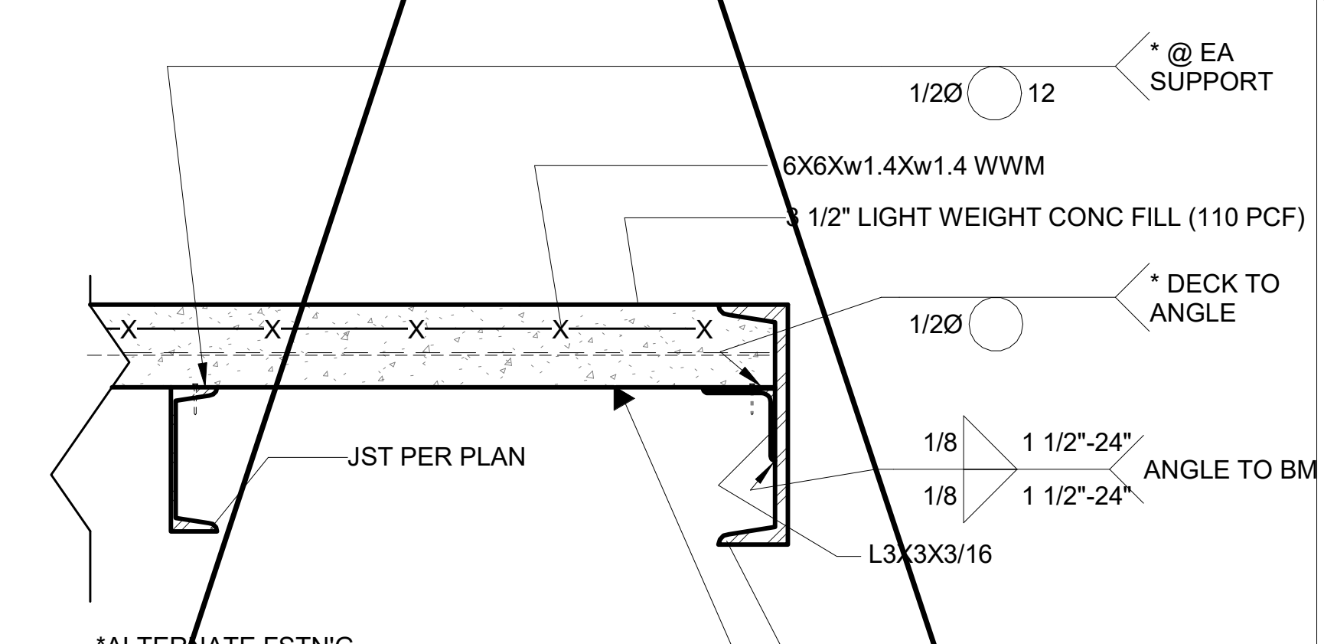


14 3" = 1'-0"
Flr @ ML (CONC FLR)1

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



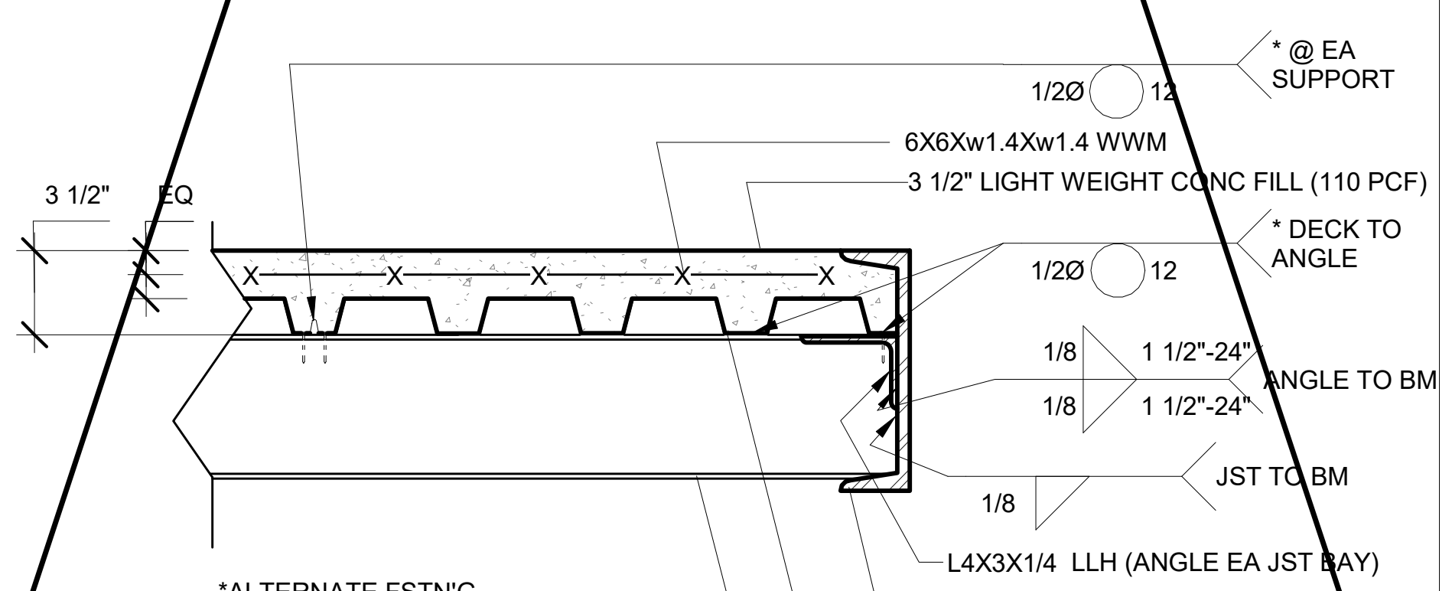
13 1 1/2" = 1'-0"
Typ Blocking (CONC FLR)



*ALTERNATE FSTN'G
☐ OPTIONAL HILTIXEDN19THQ12 SHOT PIN @ 12" o/c (4)PER DECK UNIT (4/36") TYP (ICC #ESR-2197)

☐ - SIDE LAP ATTACHMENT TO BE BUTTON PUNCHED @ 24" O.C. WHEN WELDED
- SIDE LAP ATTACHMENT TO BE #10 SDSTS @ 24" O.C. WHEN SCREWED

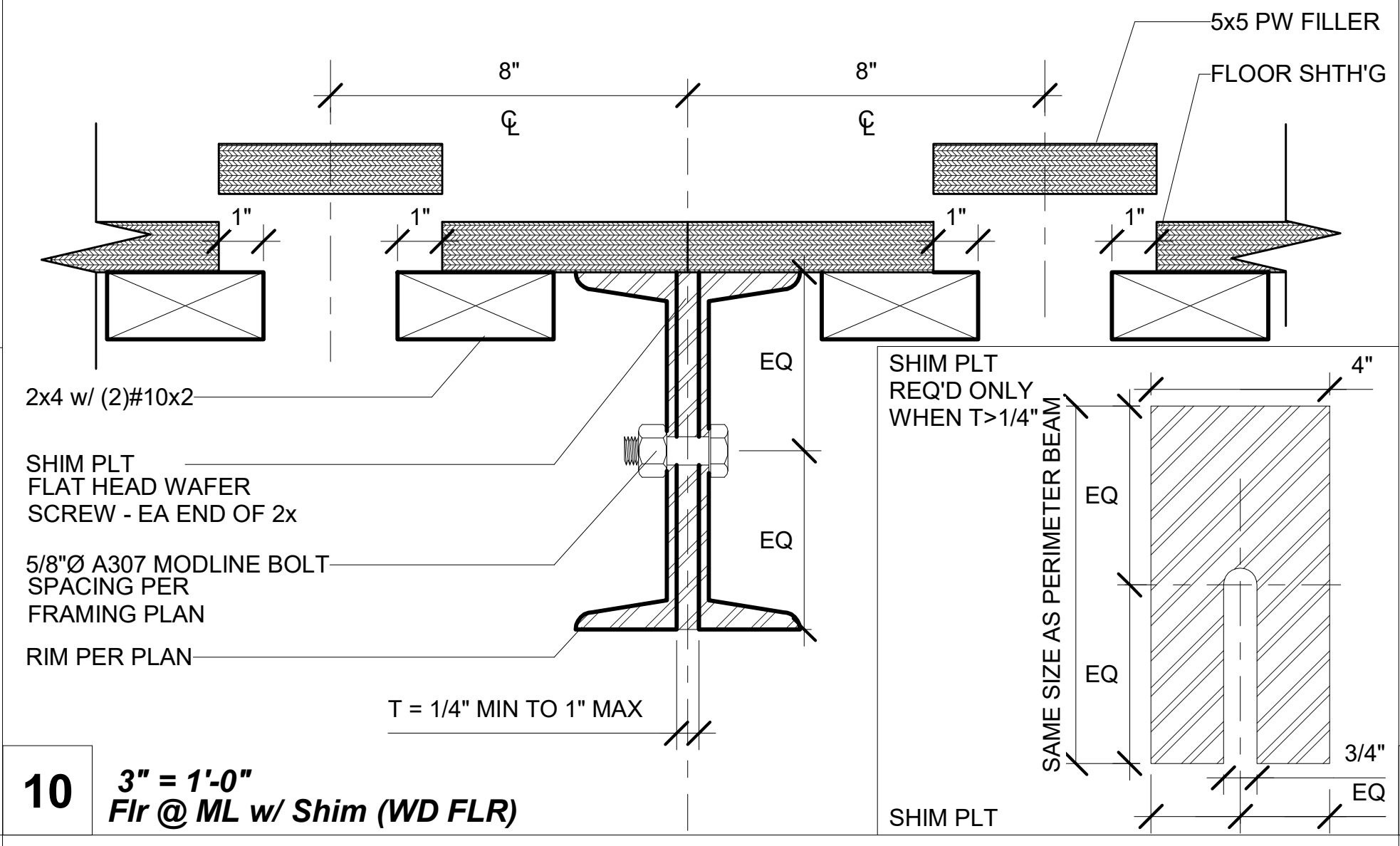
12 1 1/2" = 1'-0"
Typ End Beam Connection @ Rim (CONC FLR)



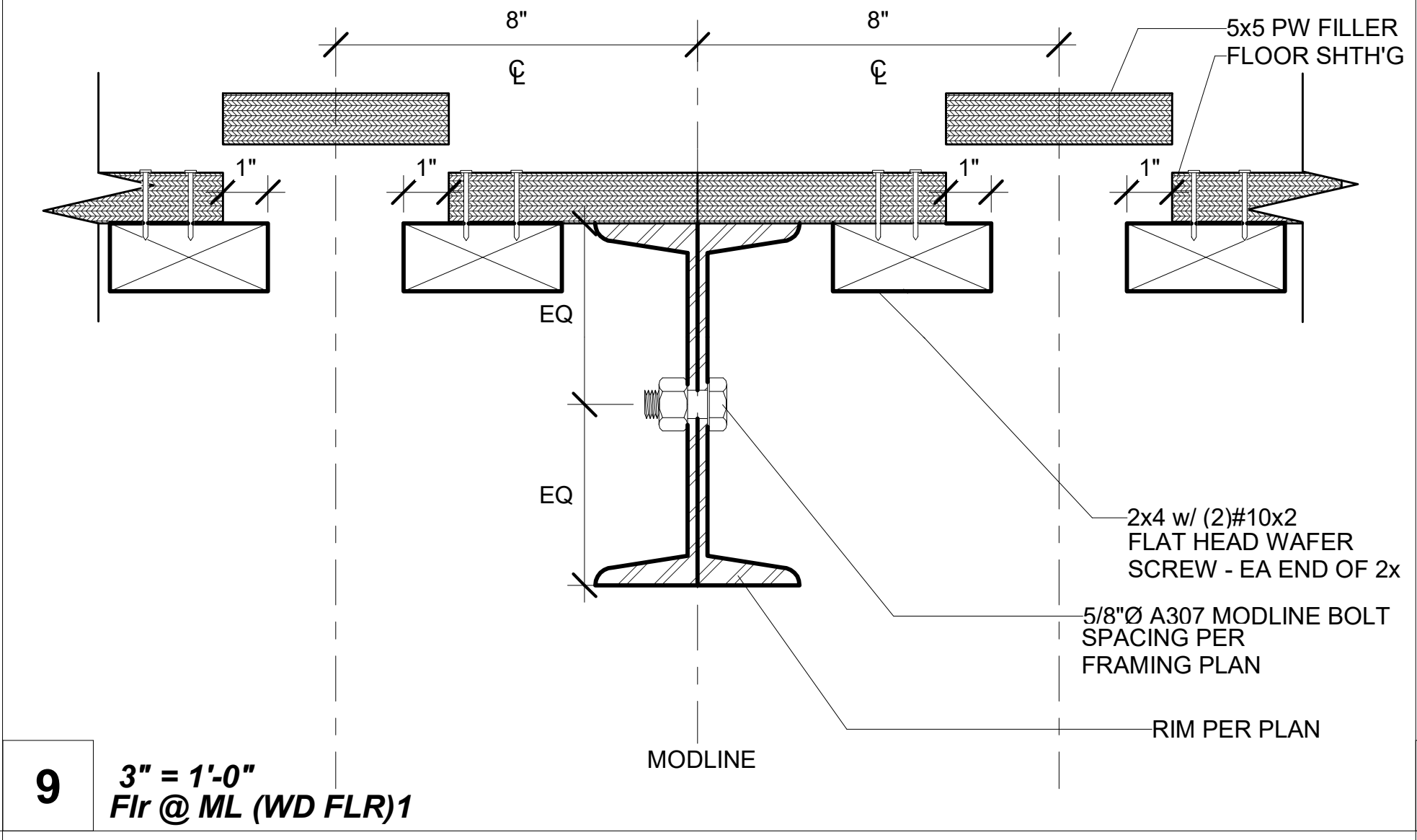
*ALTERNATE FSTN'G
☐ OPTIONAL HILTIXEDN19THQ12 SHOT PIN @ 12" o/c (4)PER DECK UNIT (4/36") TYP (ICC #ESR-2197)

☐ - SIDE LAP ATTACHMENT TO BE BUTTON PUNCHED @ 24" O.C. WHEN WELDED
- SIDE LAP ATTACHMENT TO BE #10 SDSTS @ 24" O.C. WHEN SCREWED

11 1 1/2" = 1'-0"
Typ Side Beam Connection @ Rim (CONC FLR)

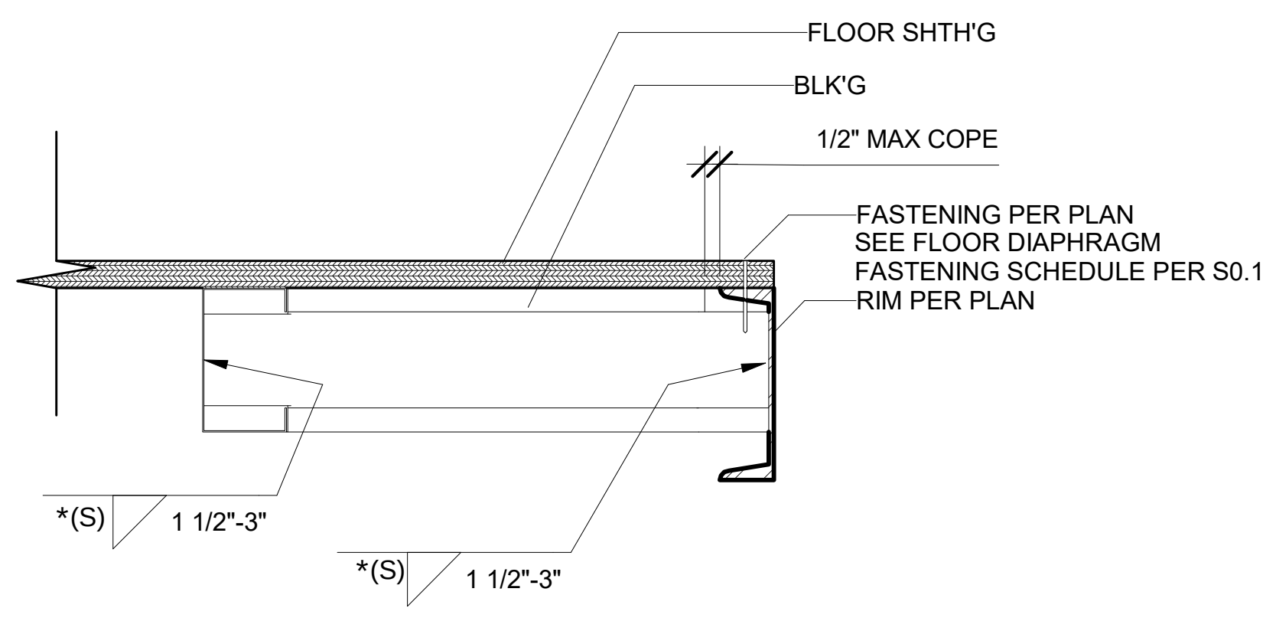

5x5 PW FILLER
FLOOR SHTH'G
8"
8"
℄
℄
1"
1"
1"
1"
2x4 w/ (2)#10x2
EQ
EQ
SHIM PLT FLAT HEAD WAFER SCREW - EA END OF 2x
5/8"Ø A307 MODLINE BOLT SPACING PER FRAMING PLAN
RIM PER PLAN
T = 1/4" MIN TO 1" MAX
SHIM PLT REQ'D ONLY WHEN T>1/4"
4"
SAME SIZE AS PERIMETER BEAM
EQ
EQ
3/4"
EQ
SHIM PLT

10 3" = 1'-0"
Flr @ ML w/ Shim (WD FLR)


8"
8"
℄
℄
5x5 PW FILLER
FLOOR SHTH'G
1"
1"
1"
1"
EQ
EQ
2x4 w/ (2)#10x2 FLAT HEAD WAFER SCREW - EA END OF 2x
5/8"Ø A307 MODLINE BOLT SPACING PER FRAMING PLAN
RIM PER PLAN
MODLINE

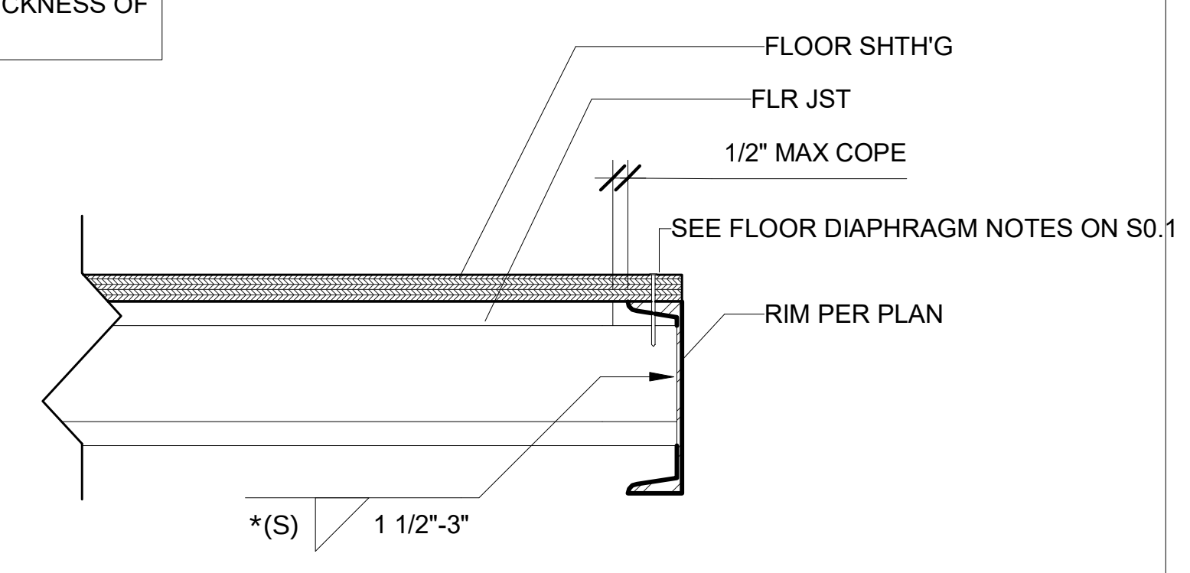
9 3" = 1'-0"
Flr @ ML (WD FLR)1

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

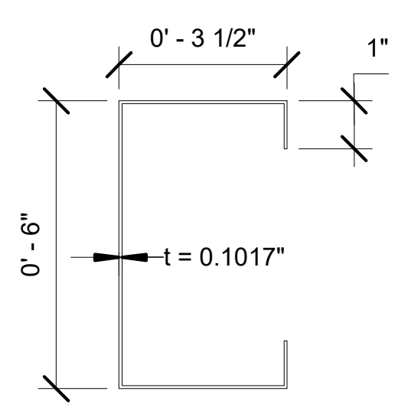


8 1 1/2" = 1'-0"
Typ Blk'g Connection @ Rim (WD FLR)

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



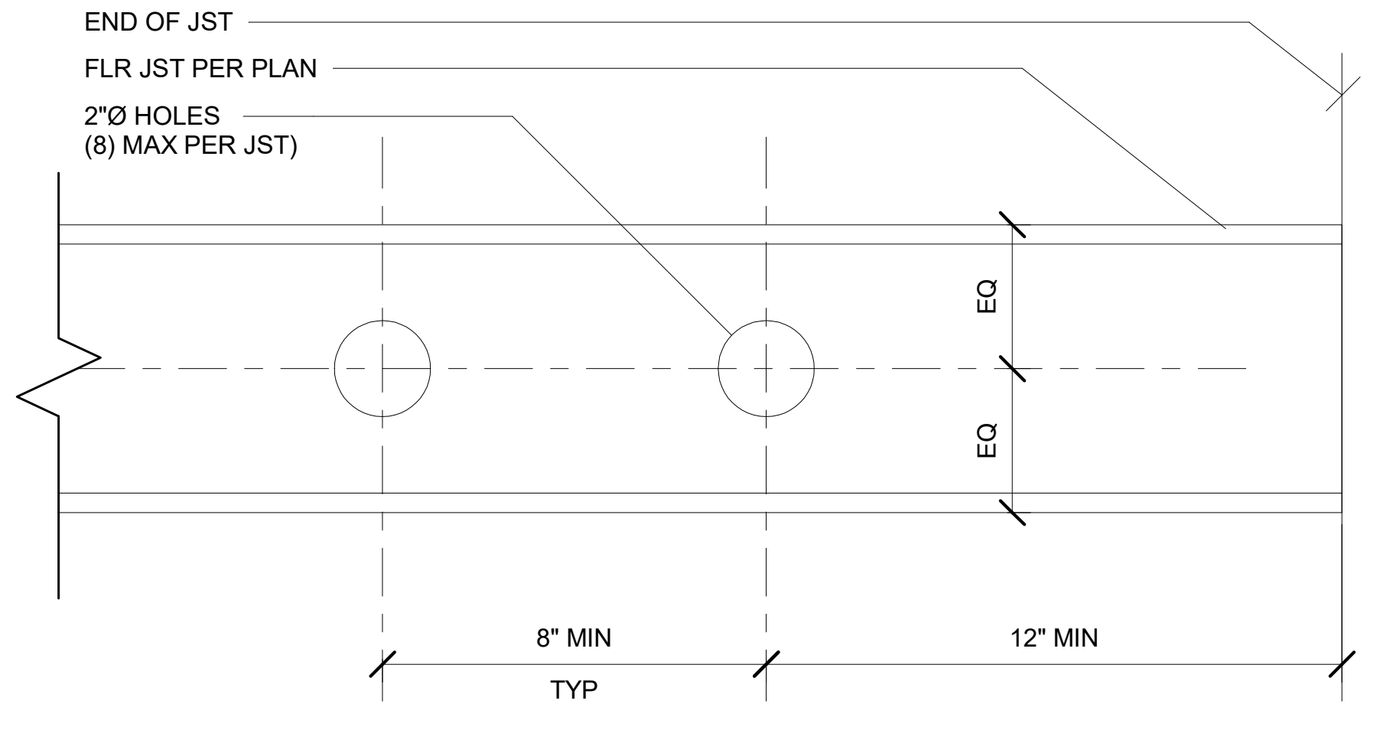
6 1 1/2" = 1'-0"
Typ Joist Connection @ Rim (WD FLR)



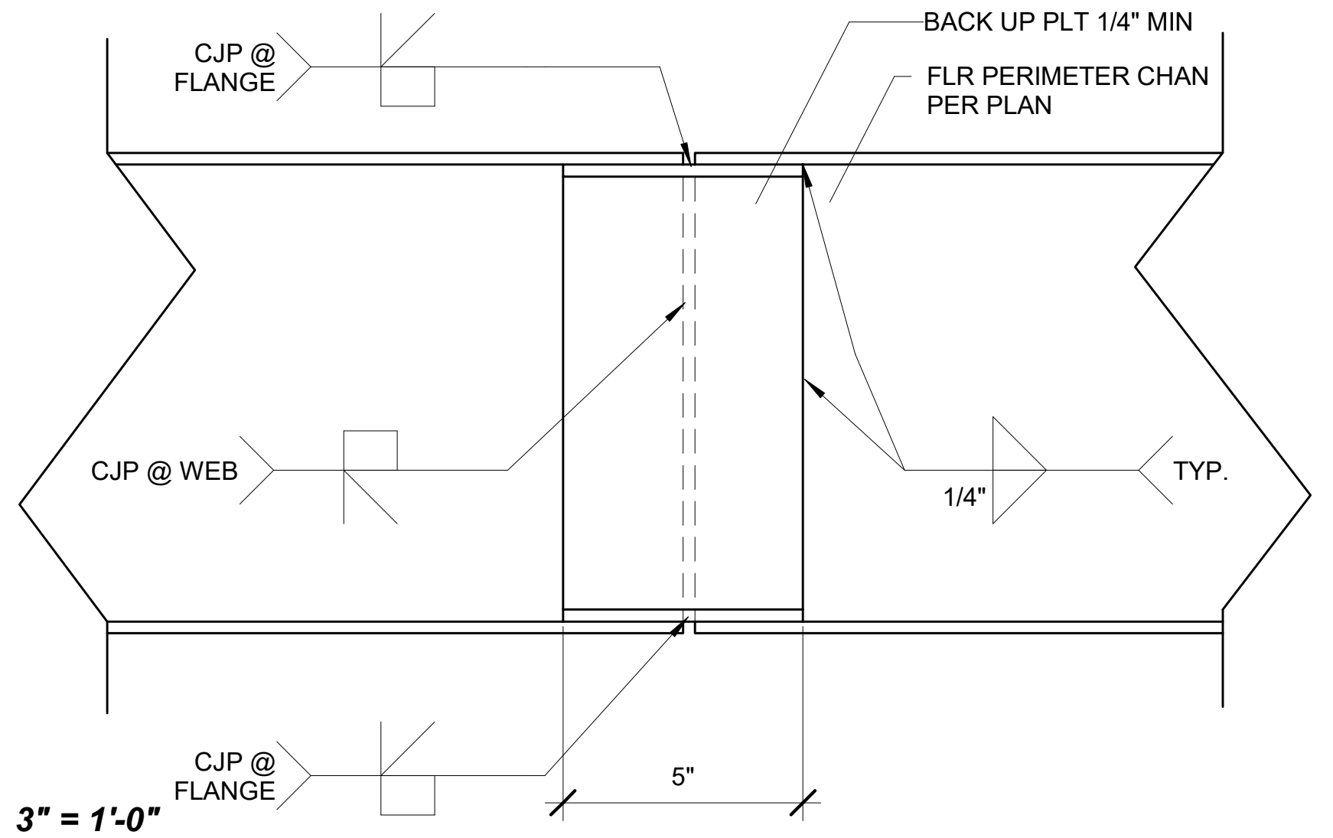
CHANNEL JOIST SECTION PROPERTIES
A-1011, GRADE 33

t = 0.1017"
S_x = 2.822 IN³
I_x = 8.631 IN⁴
F_Y = 33 KSI

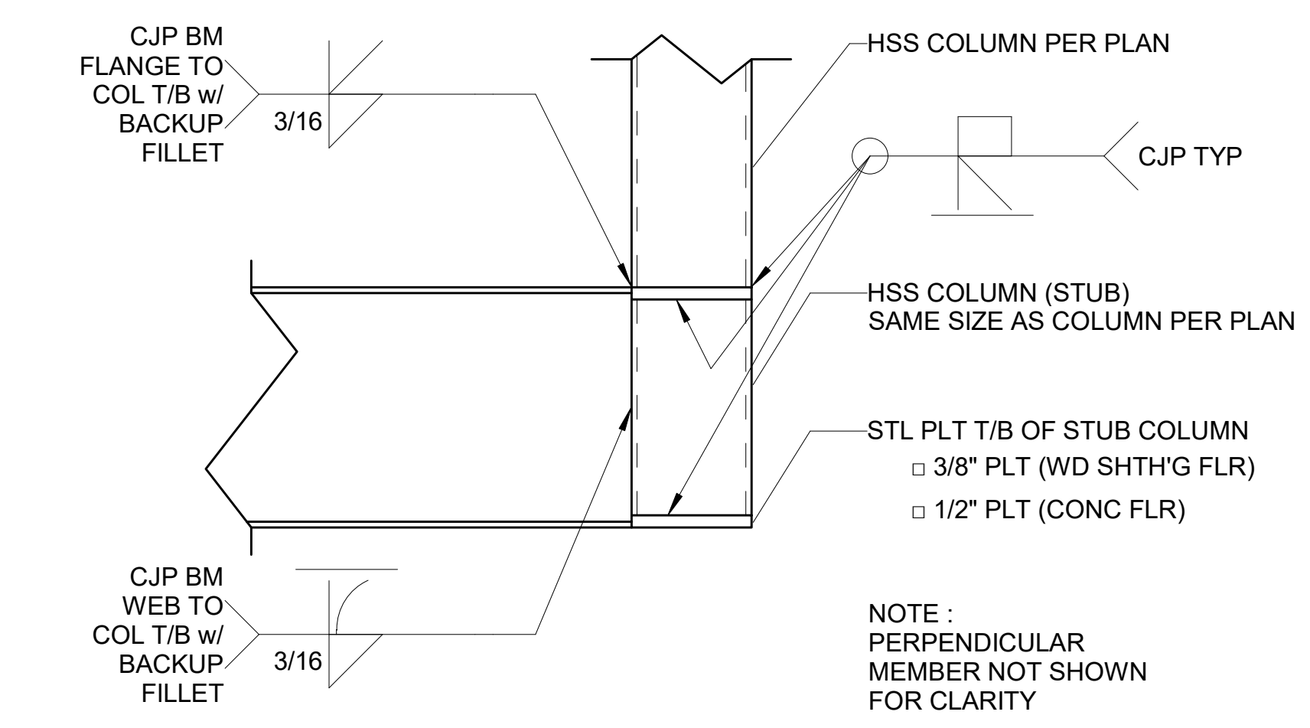
5 3" = 1'-0"
Channel Joist Section Properties (600S350-97)



4 3" = 1'-0"
Elevation - Allowable Jst Holes

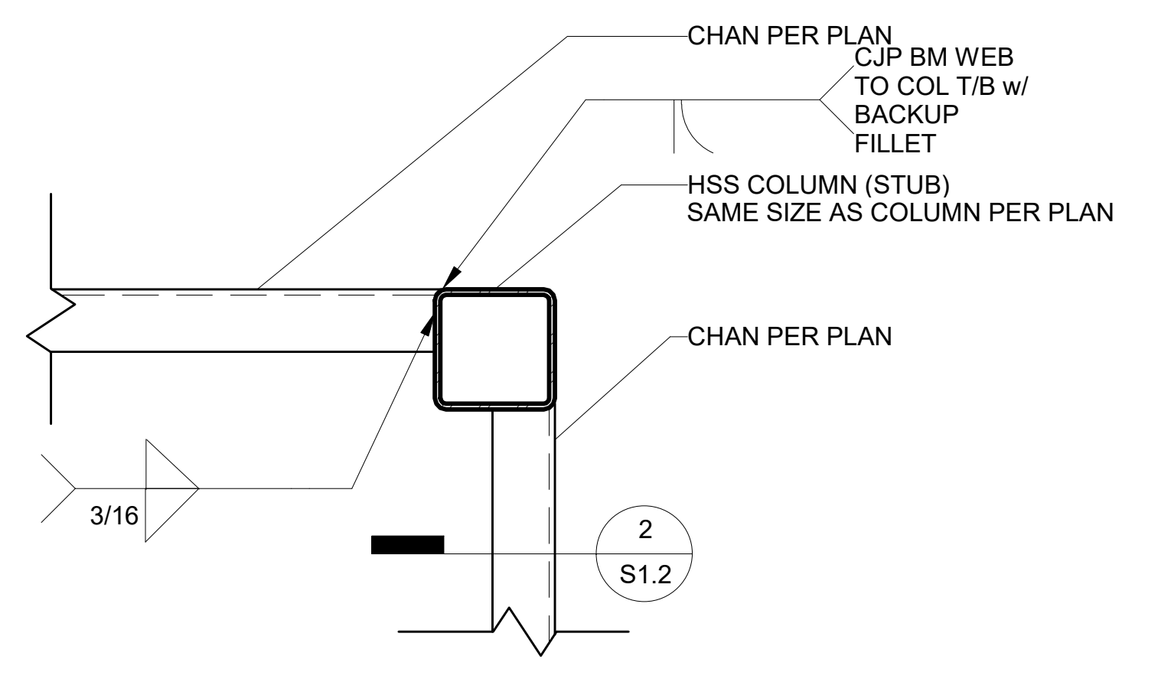


3 3" = 1'-0"
Flr Perimeter Beam Splice


CJP BM FLANGE TO COL T/B w/ BACKUP FILLET
3/16
HSS COLUMN PER PLAN
CJP TYP
HSS COLUMN (STUB) SAME SIZE AS COLUMN PER PLAN
STL PLT T/B OF STUB COLUMN
□ 3/8" PLT (WD SHTH'G FLR)
□ 1/2" PLT (CONC FLR)
CJP BM WEB TO COL T/B w/ BACKUP FILLET
3/16

NOTE :
PERPENDICULAR MEMBER NOT SHOWN FOR CLARITY

2 1 1/2" = 1'-0"
Typ Flr Bm to Column Connection


CHAN PER PLAN
CJP BM WEB TO COL T/B w/ BACKUP FILLET
HSS COLUMN (STUB) SAME SIZE AS COLUMN PER PLAN
CHAN PER PLAN
3/16
2
S1.2

1 1 1/2" = 1'-0"
Typ Corner Connection

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
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SAN DIEGO, CA 92127
WWW.RSTAVARES.COM

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

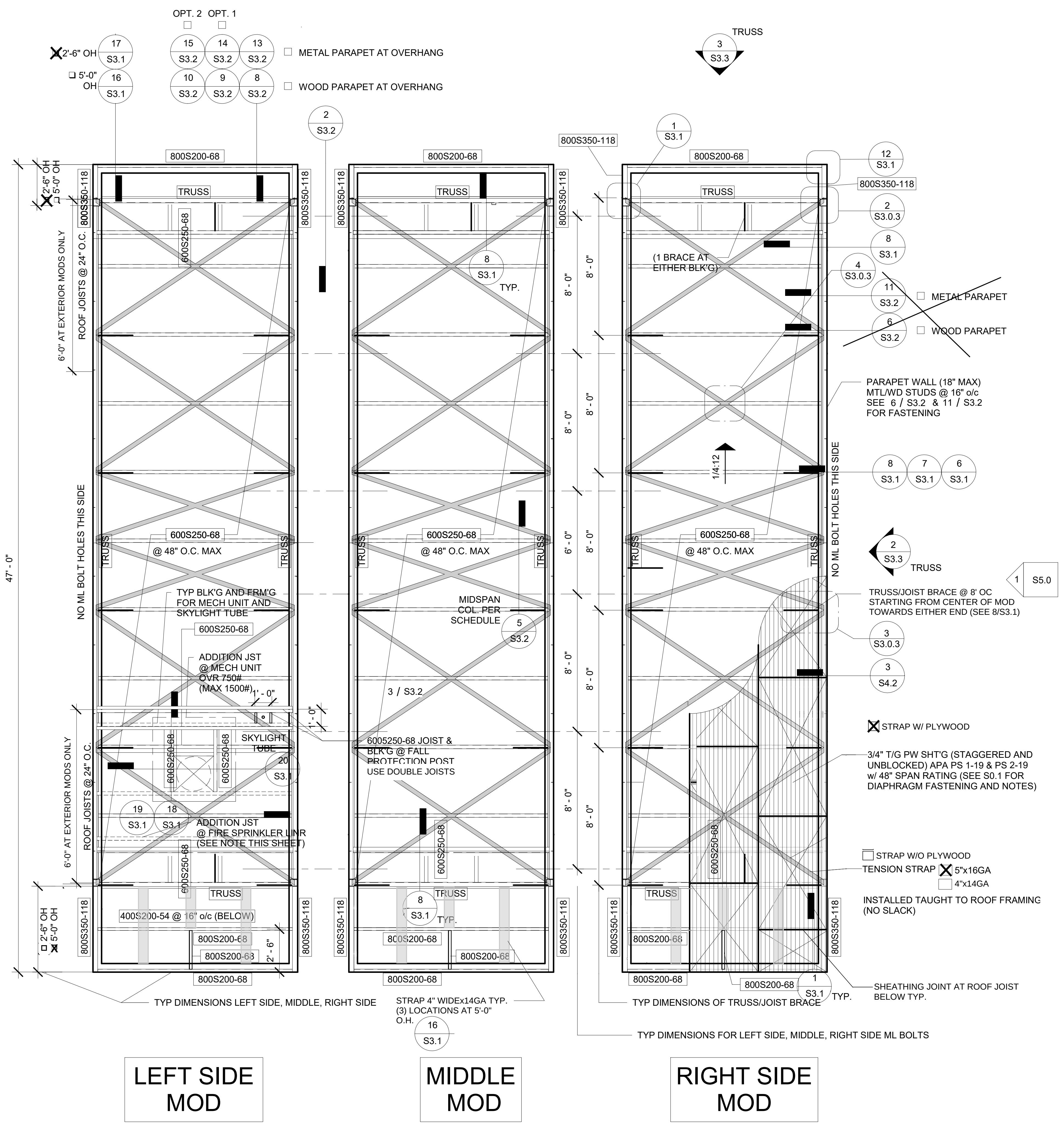
PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
STRUCTURAL
DETAILS
(FLOOR)

PROJECT NUMBER: 22088
DRAWN BY: rMc/SC
CHECKED BY: JA/RT
DATE:
SHEET NO.: S1.2
SHEET OF

C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt
6/8/2021 1:52:34 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


OPT. 2 OPT. 1
☒ 2'-6" OH
☐ 5'-0" OH
17 S3.1
16 S3.1
15 S3.2
14 S3.2
13 S3.2
10 S3.2
9 S3.2
8 S3.2
☐ METAL PARAPET AT OVERHANG
☐ WOOD PARAPET AT OVERHANG
2 S3.2
3 S3.3 TRUSS
1 S3.1
800S200-68
800S350-118
TRUSS
12 S3.1
2 S3.0.3
8 S3.1
4 S3.0.3
11 S3.2
6 S3.2
☐ METAL PARAPET
☐ WOOD PARAPET
(1 BRACE AT EITHER BLK'G)
8 S3.1 TYP.
600S250-68
6'-0" AT EXTERIOR MODS ONLY
ROOF JOISTS @ 24" O.C.
NO ML BOLT HOLES THIS SIDE
47' - 0"
8' - 0"
6' - 0"
1/4:12
PARAPET WALL (18" MAX) MTL/WD STUDS @ 16" o/c SEE 6 / S3.2 & 11 / S3.2 FOR FASTENING
8 S3.1
7 S3.1
6 S3.1
600S250-68 @ 48" O.C. MAX
2 S3.3 TRUSS
1 S5.0
TRUSS/JOIST BRACE @ 8' OC STARTING FROM CENTER OF MOD TOWARDS EITHER END (SEE 8/S3.1)
3 S3.0.3
3 S4.2
TYP BLK'G AND FRM'G FOR MECH UNIT AND SKYLIGHT TUBE
MIDSPAN COL. PER SCHEDULE
5 S3.2
ADDITION JST @ MECH UNIT OVR 750# (MAX 1500#)
3 / S3.2
1'-0"
SKYLIGHT TUBE
20 S3.1
600S250-68 JOIST & BLK'G @ FALL PROTECTION POST USE DOUBLE JOISTS
19 S3.1
18 S3.1
ADDITION JST @ FIRE SPRINKLER LINR (SEE NOTE THIS SHEET)
☒ STRAP W/ PLYWOOD
3/4" T/G PW SHT'G (STAGGERED AND UNBLOCKED) APA PS 1-19 & PS 2-19 w/ 48" SPAN RATING (SEE S0.1 FOR DIAPHRAGM FASTENING AND NOTES)
☐ STRAP W/O PLYWOOD
TENSION STRAP ☒ 5"x16GA ☐ 4"x14GA
INSTALLED TAUGHT TO ROOF FRAMING (NO SLACK)
☒ 2'-6" OH
☐ 5'-0" OH
400S200-54 @ 16" o/c (BELOW)
800S200-68
2'-6"
TYP.
1 S3.1 TYP.
SHEATHING JOINT AT ROOF JOIST BELOW TYP.
TYP DIMENSIONS LEFT SIDE, MIDDLE, RIGHT SIDE
STRAP 4" WIDEx14GA TYP. (3) LOCATIONS AT 5'-0" O.H.
16 S3.1
TYP DIMENSIONS OF TRUSS/JOIST BRACE
TYP DIMENSIONS FOR LEFT SIDE, MIDDLE, RIGHT SIDE ML BOLTS
LEFT SIDE MOD
MIDDLE MOD
RIGHT SIDE MOD

NOTES:

FIRE SPRINKLER
ADDITIONAL ROOF JOIST FOR FIRE SPRINKLER LINE AS REQ'D
LOCATION OF FIRE SPRINKLER AND ADDITIONAL JOIST TO BE DETERMINED

PV REQUIREMENTS:

1.7 REQUIRED PHOTOVOLTAIC (PV) SYSTEMS

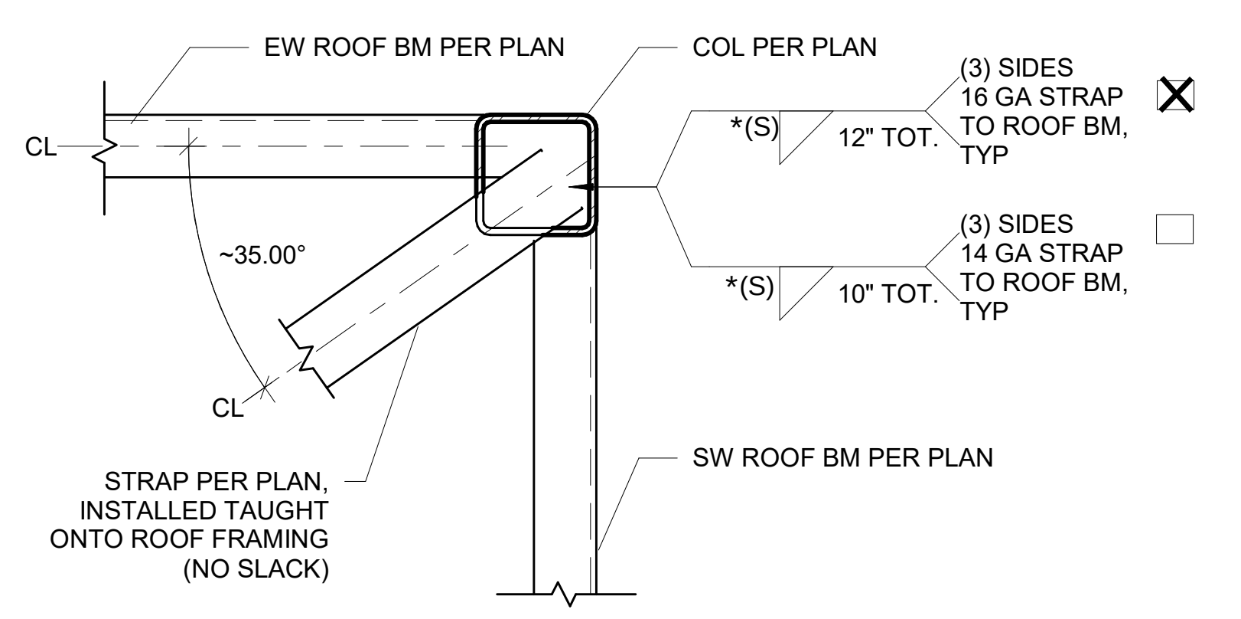
WHEN A PV SYSTEM IS REQUIRED BY THE CALIFORNIA ENERGY CODE FOR A PC BUILDING CONFIGURATION, THE PV SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH IR 16-8: SOLAR PHOTOVOLTAIC AND THERMAL SYSTEMS REVIEW AND APPROVAL REQUIREMENTS. THE PC DESIGN SHALL SHOW THAT THE STRUCTURE CAN SUPPORT THE REQUIRED SYSTEM LOADS WHEN THE BUILDING IS SUPPORTING THE PV SYSTEM. IF THE PV SYSTEM IS REQUIRED IT WILL BE SUBMITTED WITH THE SITE SPECIFIC APPLICATION

8.3 REQUIRED PHOTOVOLTAIC (PV) SYSTEMS ENERGY REVIEW

WHEN A PV SYSTEM IS REQUIRED PER THE CALIFORNIA ENERGY CODE FOR A PC CONFIGURATION, THE SYSTEM POWER REQUIREMENTS SHALLL BE CLEARLY DELINEATED ON THE PC PLANS IN THE DESIGN INFORMATION SECTION FOR THE PC. SEE SECTION 1.7 ABOVE FOR DESIGN AND SUBMITTAL REQUIREMENTS OF THE PV SYSTEM.

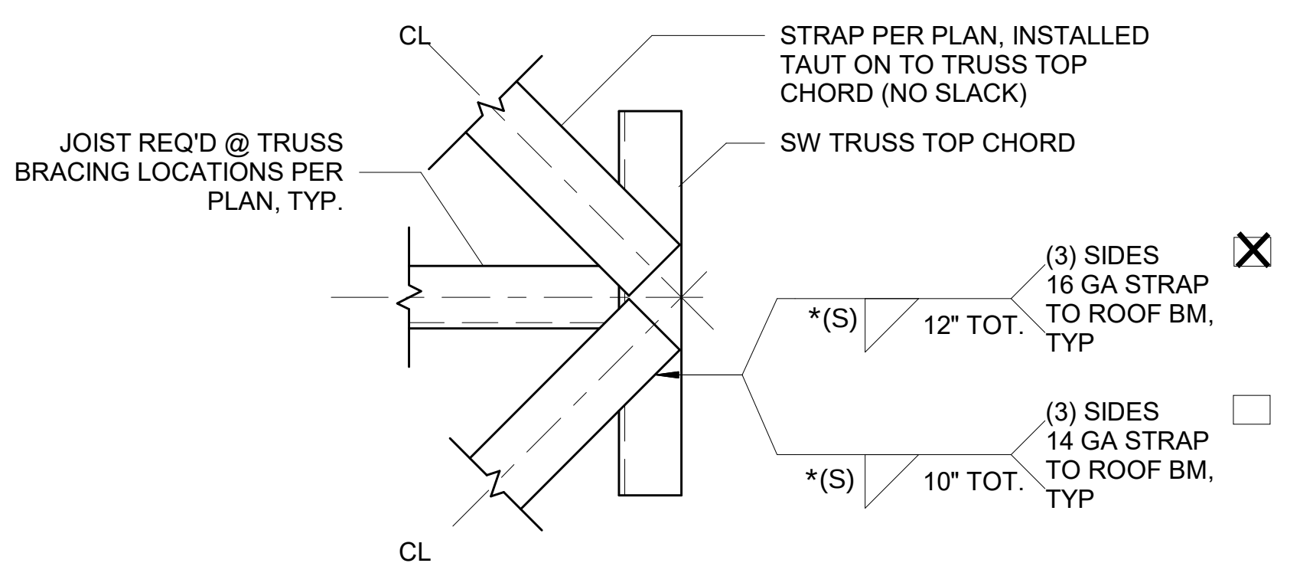
1 *1/4" = 1'-0"*
Mono Roof Framing Plan

10/25/2022 3:45:46 PM M:\2022\22088 - Class Leasing, 24x40 to 120x40 High Seismic 2022 PC\REVIT\source file detached 22095 for S3.0.3 and S3.0.4\source file detached 22095 for S3.0.3 and S3.0.4.rvt


EW ROOF BM PER PLAN
COL PER PLAN
CL
~35.00°
*(S) 12" TOT.
(3) SIDES 16 GA STRAP TO ROOF BM, TYP ☒
*(S) 10" TOT.
(3) SIDES 14 GA STRAP TO ROOF BM, TYP ☐
CL
STRAP PER PLAN, INSTALLED TAUGHT ONTO ROOF FRAMING (NO SLACK)
SW ROOF BM PER PLAN

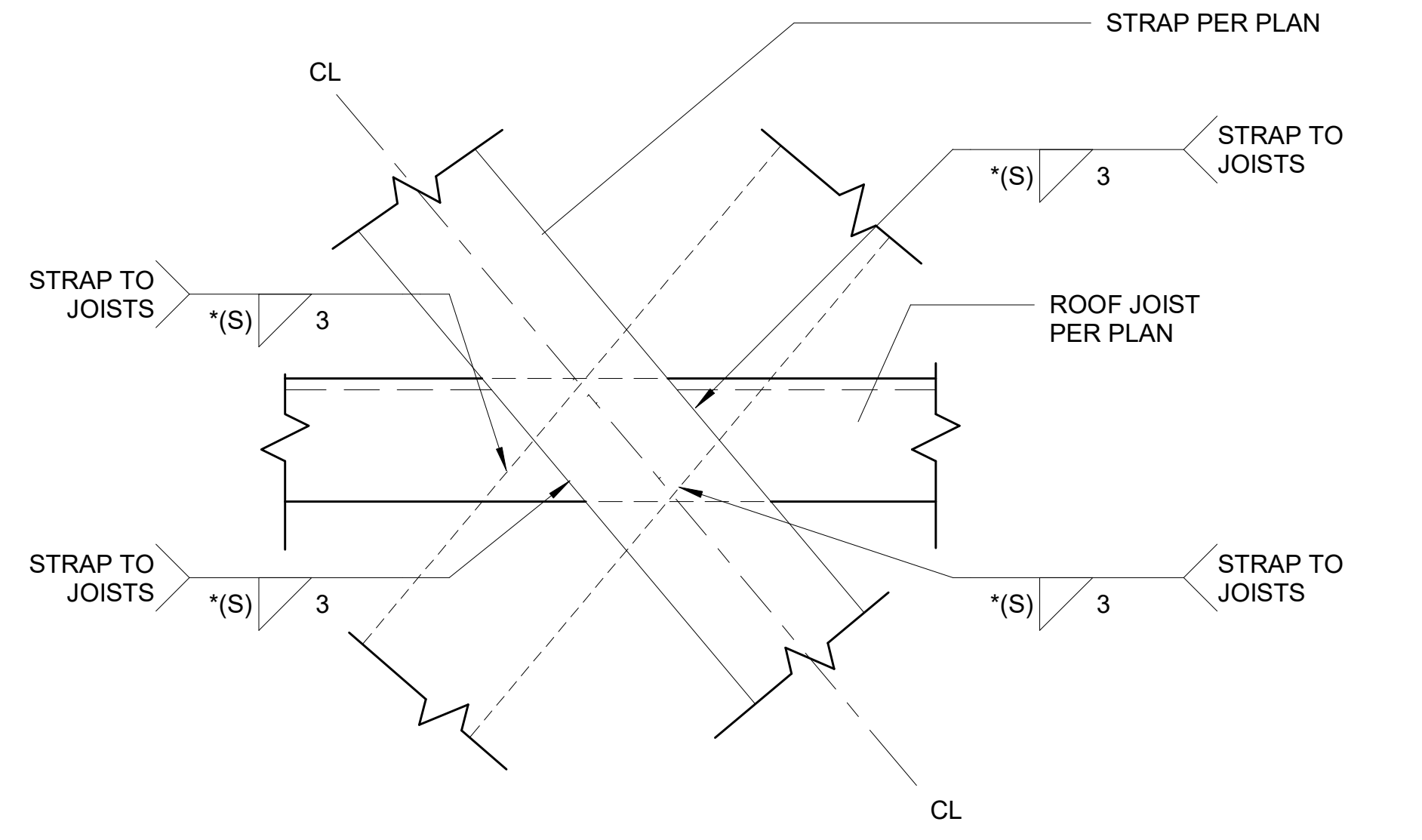
* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

2 *1 1/2" = 1'-0"*
ROOF BRACING STRAP @ ENDWALL


CL
STRAP PER PLAN, INSTALLED TAUT ON TO TRUSS TOP CHORD (NO SLACK)
SW TRUSS TOP CHORD
JOIST REQ'D @ TRUSS BRACING LOCATIONS PER PLAN, TYP.
*(S) 12" TOT.
(3) SIDES 16 GA STRAP TO ROOF BM, TYP ☒
*(S) 10" TOT.
(3) SIDES 14 GA STRAP TO ROOF BM, TYP ☐
CL

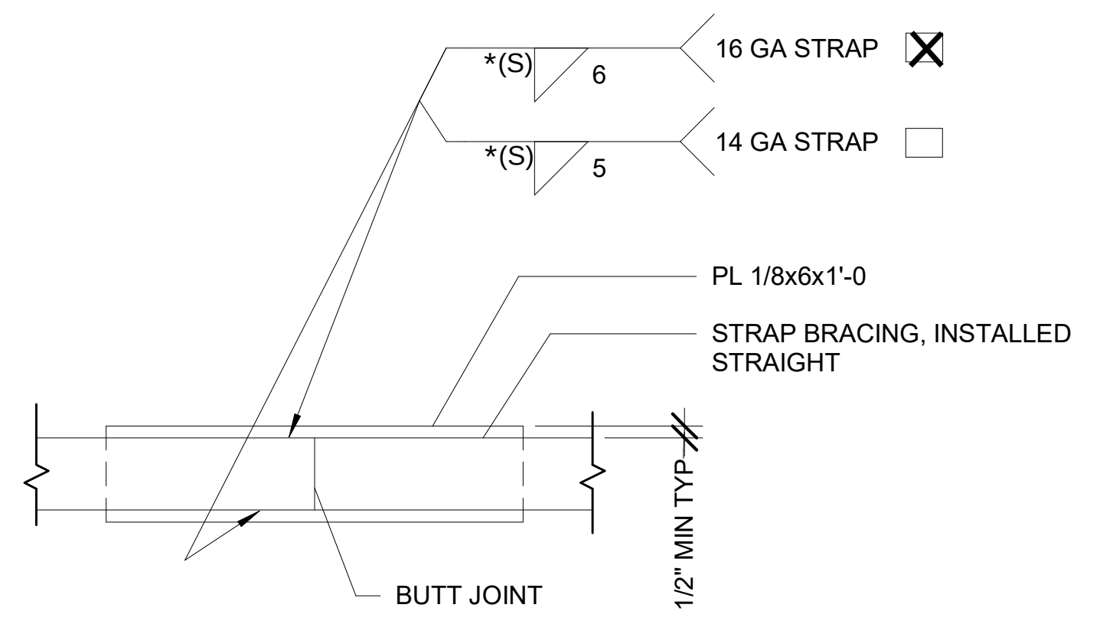
* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

3 *1 1/2" = 1'-0"*
ROOF STRAP BRACING @ SIDEWALL



* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

4 *3" = 1'-0"*
STRAP TO JOIST CONNECTION (ROOF)



* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

5 *1 1/2" = 1'-0"*
STRAP SPLICE DETAIL (ROOF)

PROJECT SPECIFIC STATE AGENCY APPROVAL
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP
MANNY D. FRISCH
No. S3380
03/31/24
RST#22088
02/16/24

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT
Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL
~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) ALTERNATE DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
MONO SLOPE
ROOF FRM'G PLAN
CROSS-STRAP
OPT.

PROJECT NUMBER
22088

DRAWN BY
MJM

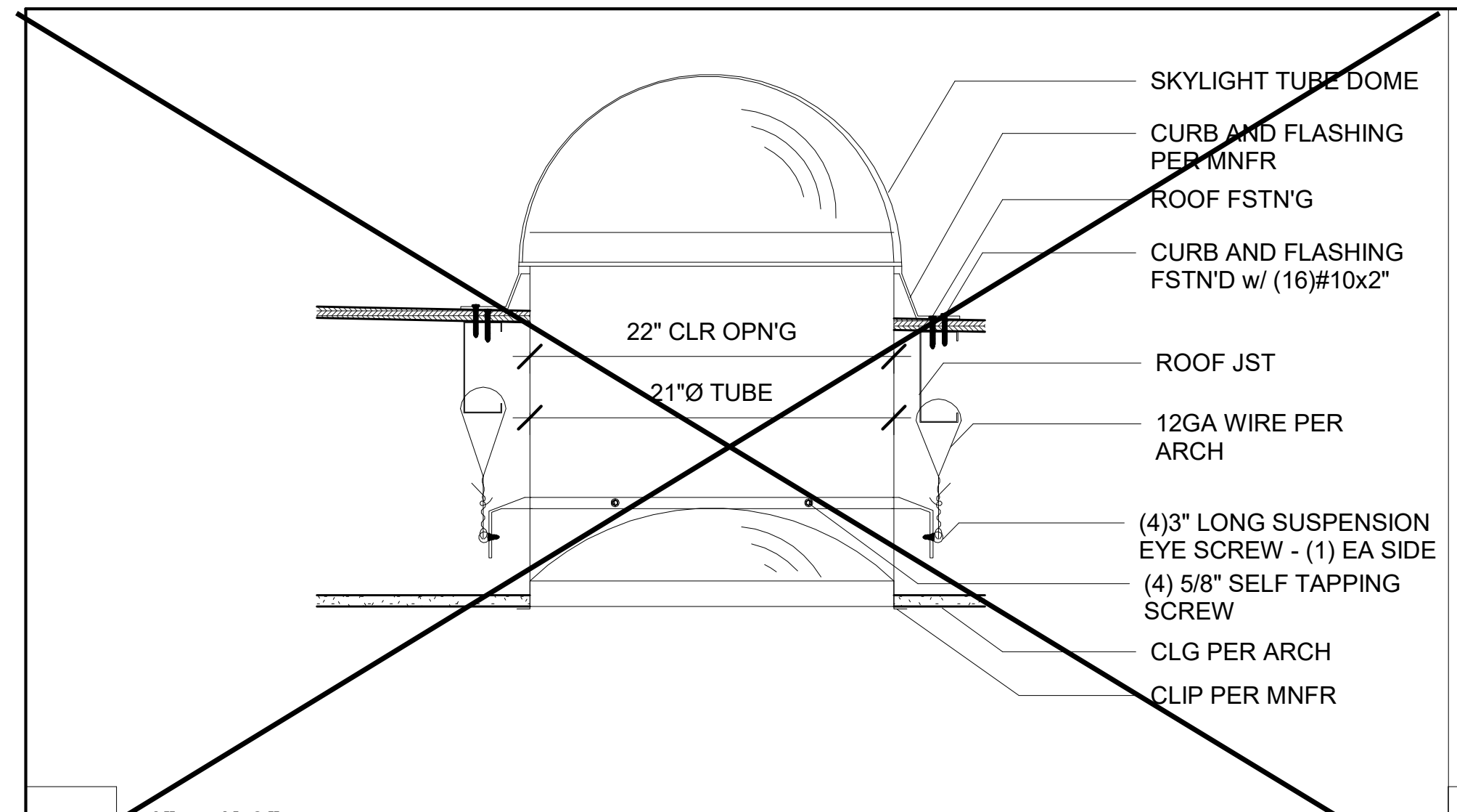
CHECKED BY
RH/rMc

DATE
06/07/2021

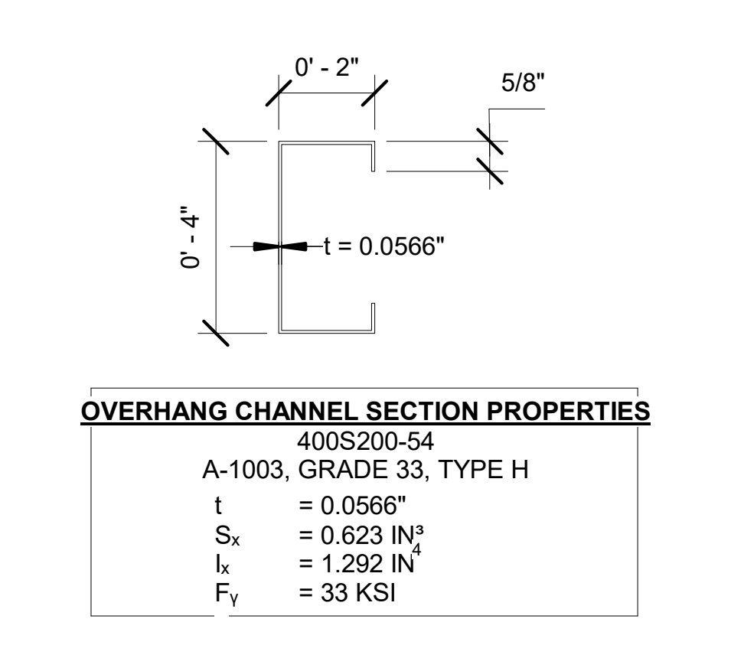
SHEET NO.
S3.0.3

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

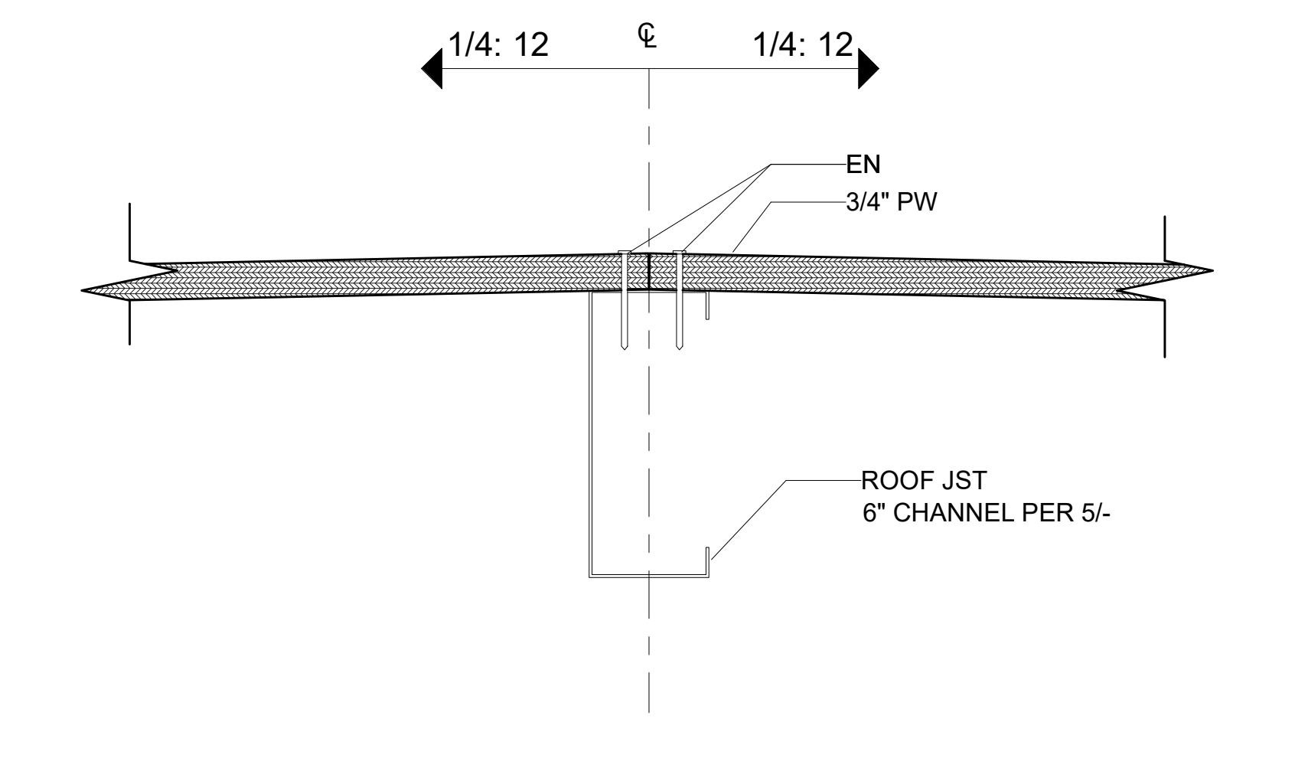

SKYLIGHT TUBE DOME
CURB AND FLASHING PER MNFR
ROOF FSTN'G
CURB AND FLASHING FSTN'D w/ (16)#10x2"
22" CLR OPN'G
21"Ø TUBE
ROOF JST
12GA WIRE PER ARCH
(4)3" LONG SUSPENSION EYE SCREW - (1) EA SIDE
(4) 5/8" SELF TAPPING SCREW
CLG PER ARCH
CLIP PER MNFR

20 *1" = 1'-0"*
SKYLIGHT TUBE

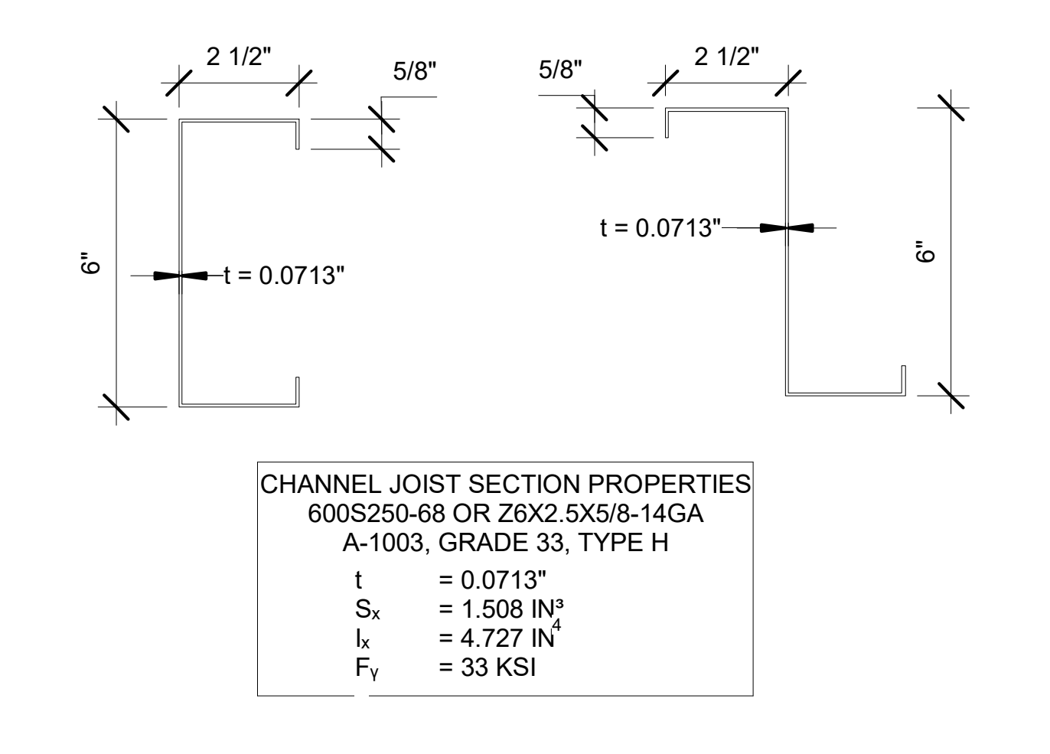


OVERHANG CHANNEL SECTION PROPERTIES
400S200-54
A-1003, GRADE 33, TYPE H
t = 0.0566"
S_x = 0.623 IN^3
I_x = 1.292 IN^4
F_Y = 33 KSI

15 *3" = 1'-0"*
Soffit Channel Section Properties

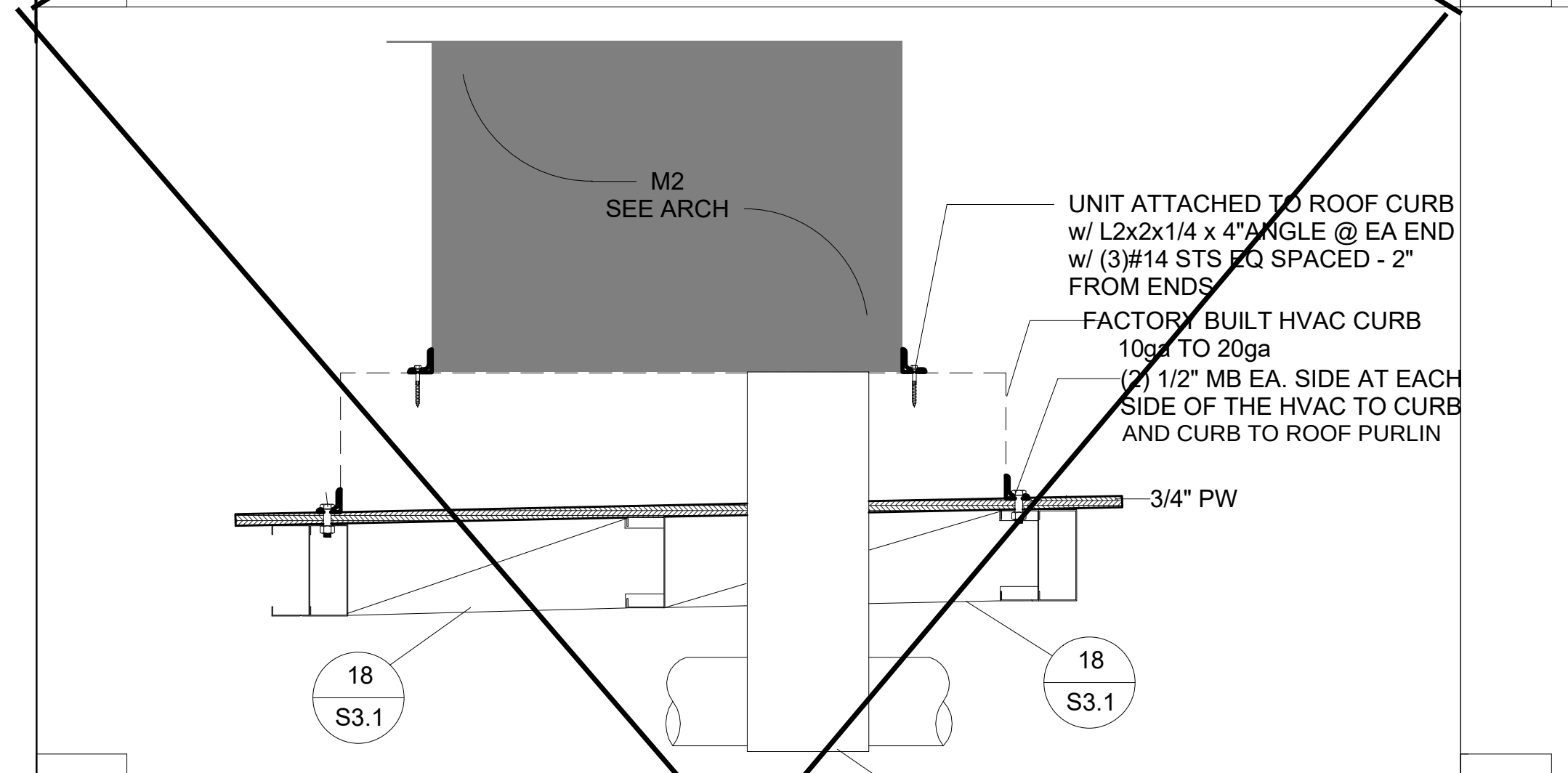


10 *3" = 1'-0"*
Roof @ Ridge

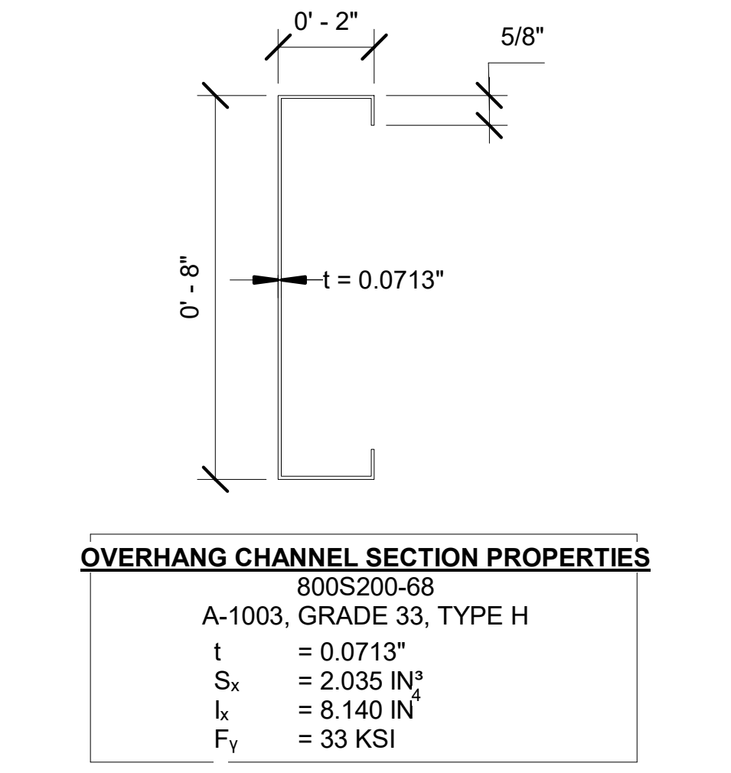


CHANNEL JOIST SECTION PROPERTIES
600S250-68 OR Z6X2.5X5/8-14GA
A-1003, GRADE 33, TYPE H
t = 0.0713"
S_x = 1.508 IN^3
I_x = 4.727 IN^4
F_Y = 33 KSI

5 *3" = 1'-0"*
Roof Channel Joist Section Properites

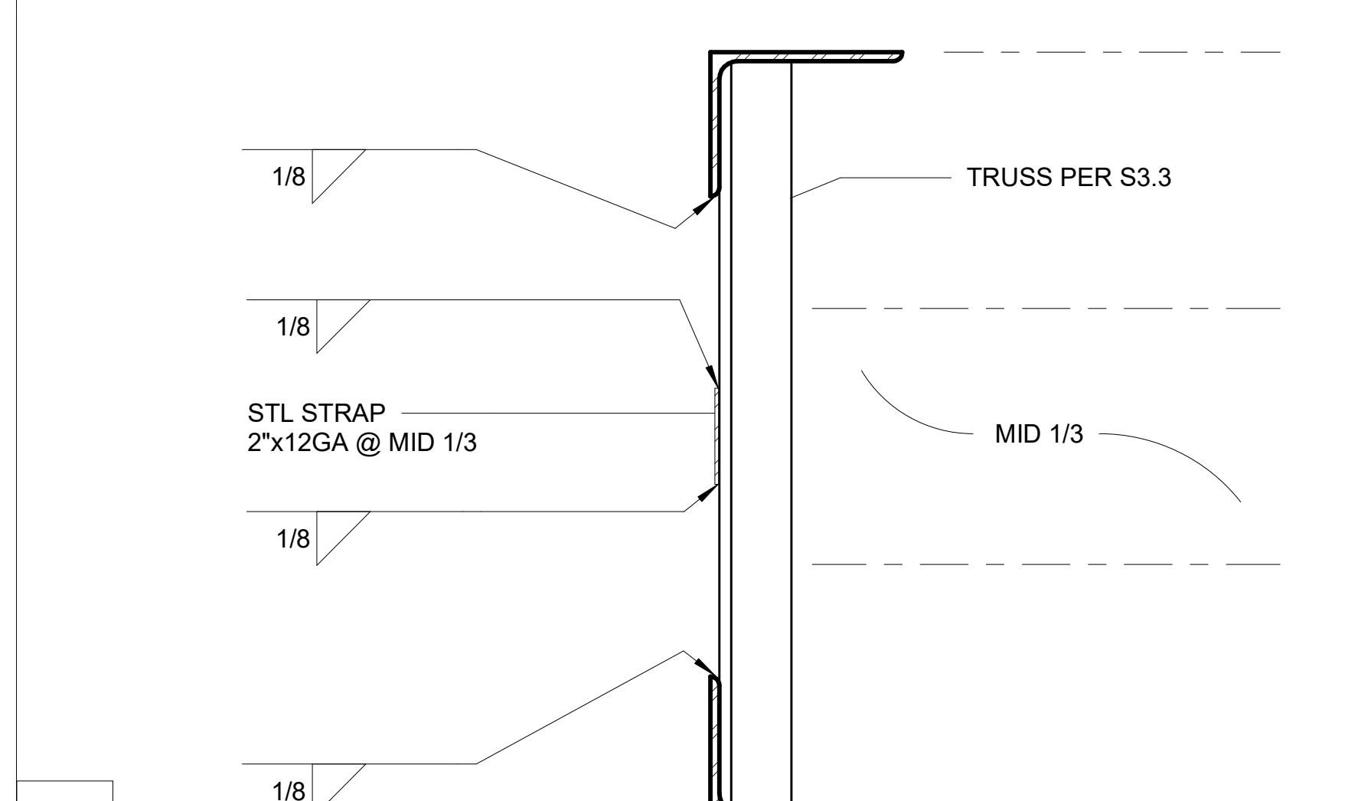

M2
SEE ARCH
UNIT ATTACHED TO ROOF CURB w/ L2x2x1/4 x 4"ANGLE @ EA END w/ (3)#14 STS EQ SPACED - 2" FROM ENDS
FACTORY BUILT HVAC CURB 10ga TO 20ga
(2) 1/2" MB EA. SIDE AT EACH SIDE OF THE HVAC TO CURB AND CURB TO ROOF PURLIN
3/4" PW
18
S3.1
18
S3.1
SUPPLY AND RETURN

19 *1" = 1'-0"*
HVAC

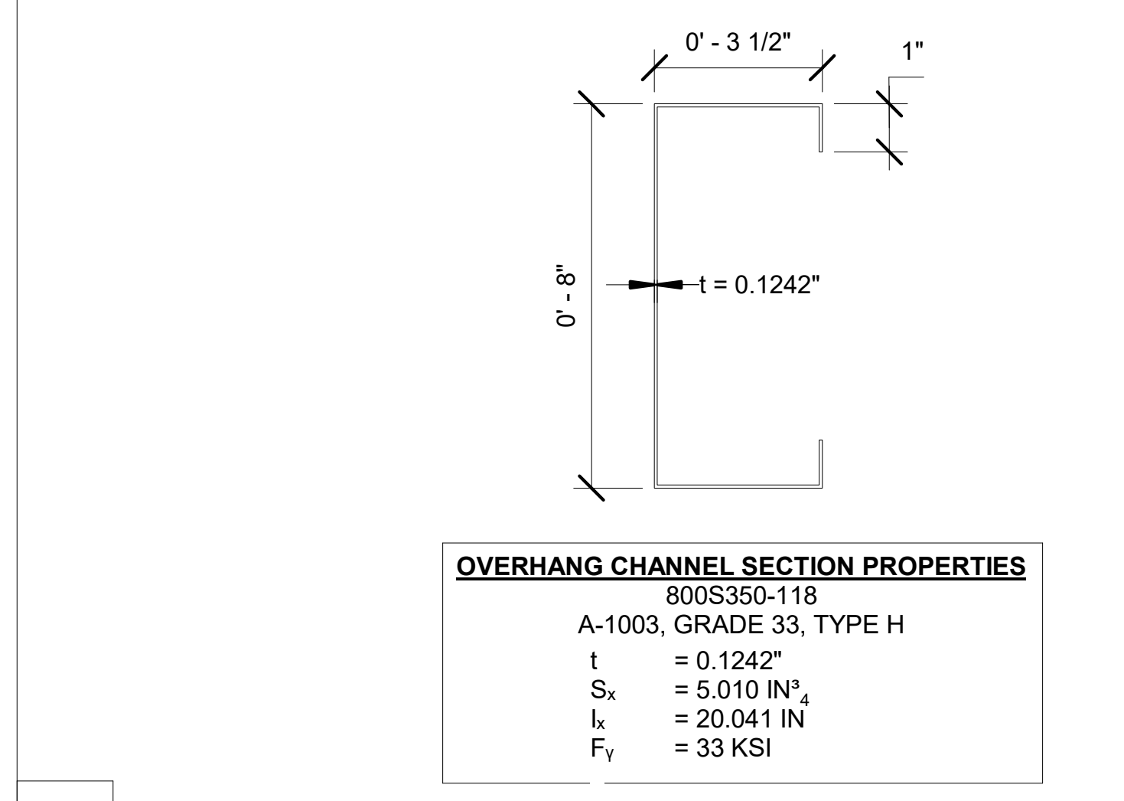


OVERHANG CHANNEL SECTION PROPERTIES
800S200-68
A-1003, GRADE 33, TYPE H
t = 0.0713"
S_x = 2.035 IN^3
I_x = 8.140 IN^4
F_Y = 33 KSI

14 *3" = 1'-0"*
Fascia Channel Section Properties

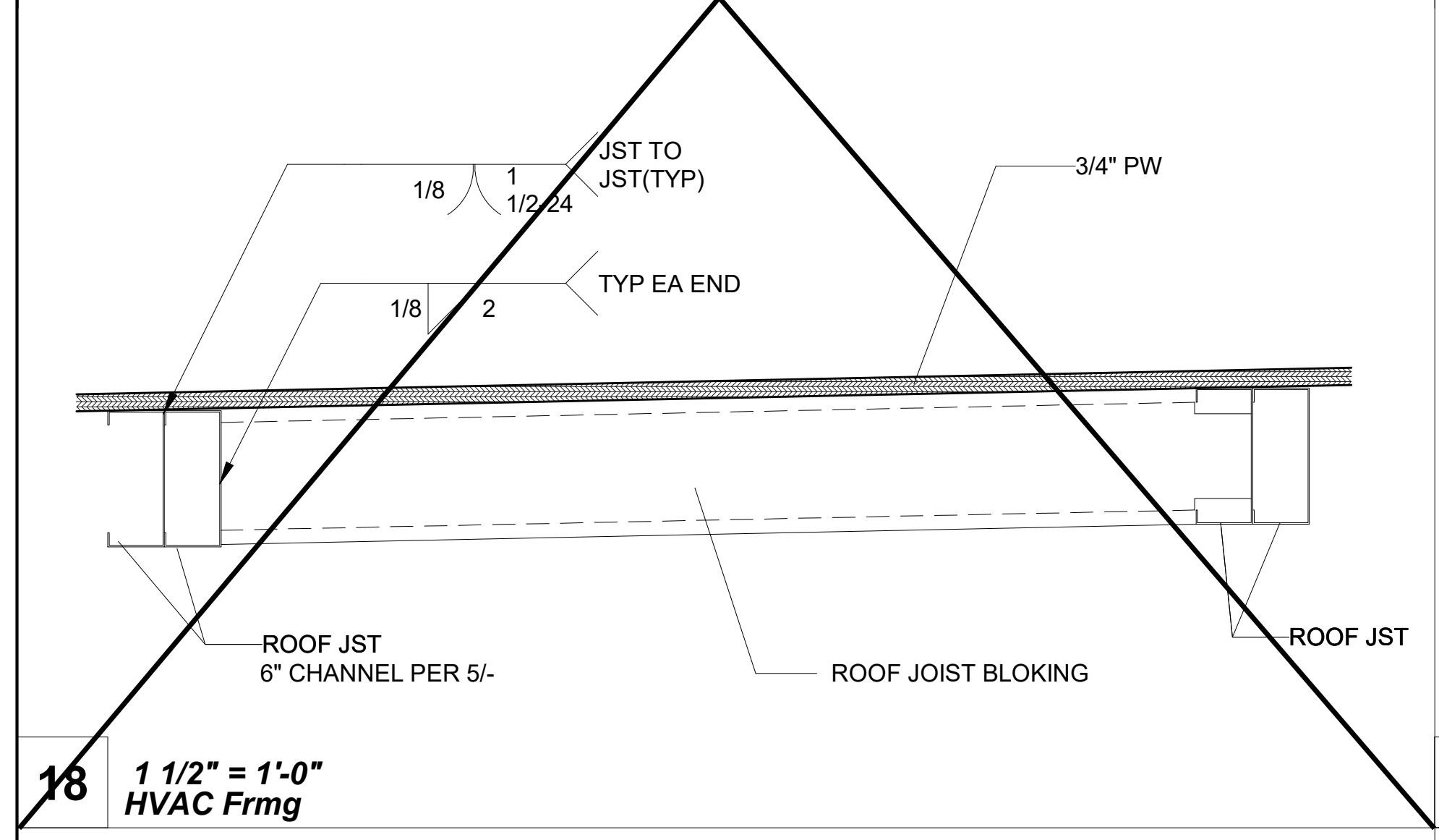


9 *3" = 1'-0"*
Strap to Truss

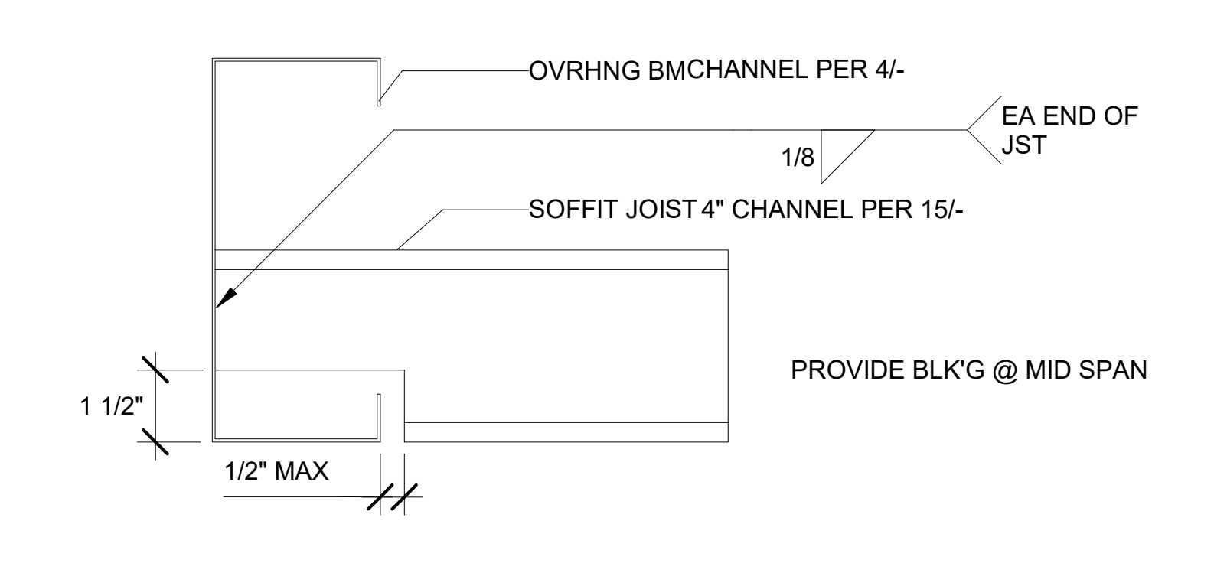


OVERHANG CHANNEL SECTION PROPERTIES
800S350-118
A-1003, GRADE 33, TYPE H
t = 0.1242"
S_x = 5.010 IN^3
I_x = 20.041 IN^4
F_Y = 33 KSI

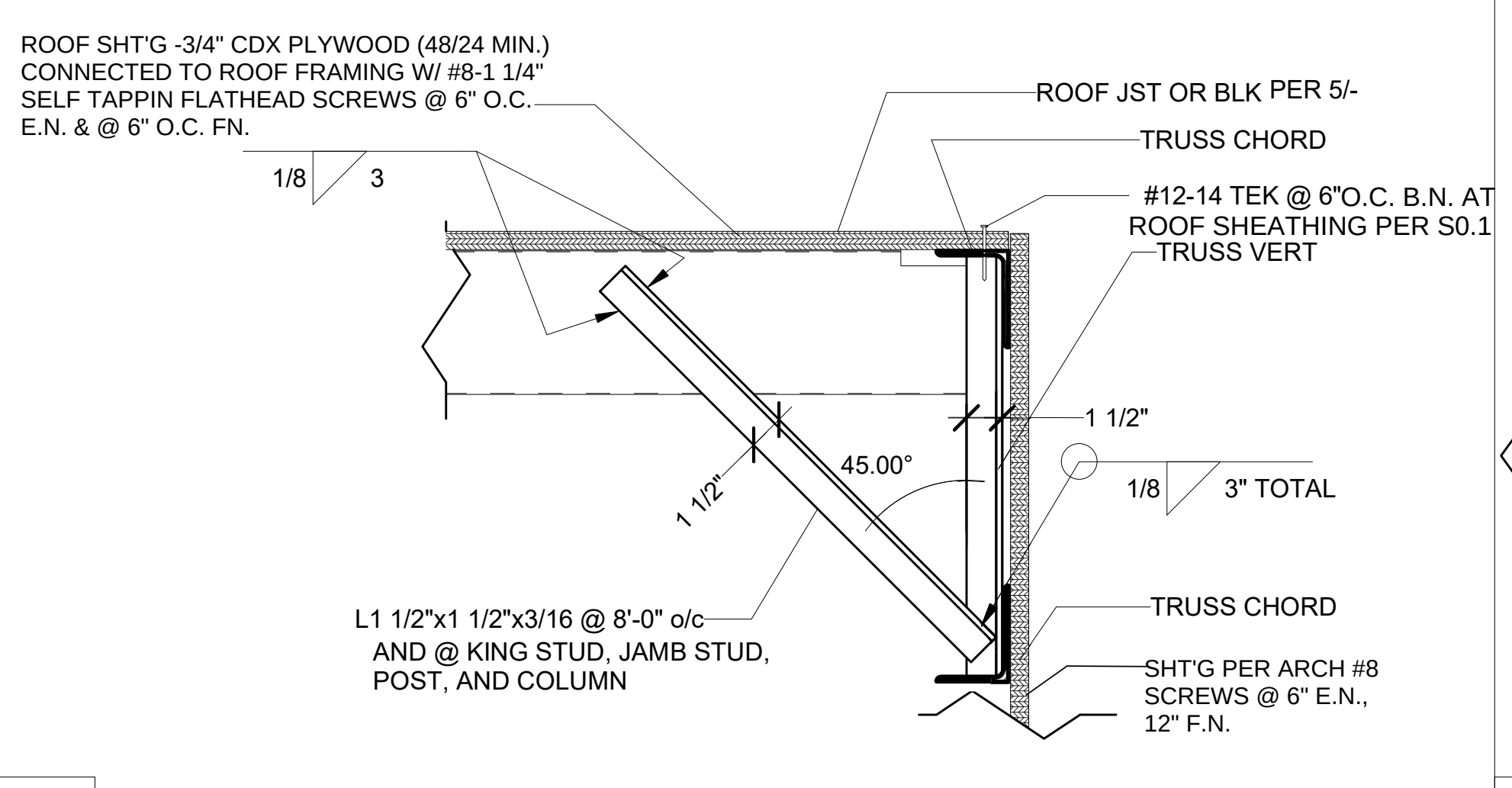
4 *3" = 1'-0"*
Overhang Beam Section Properites



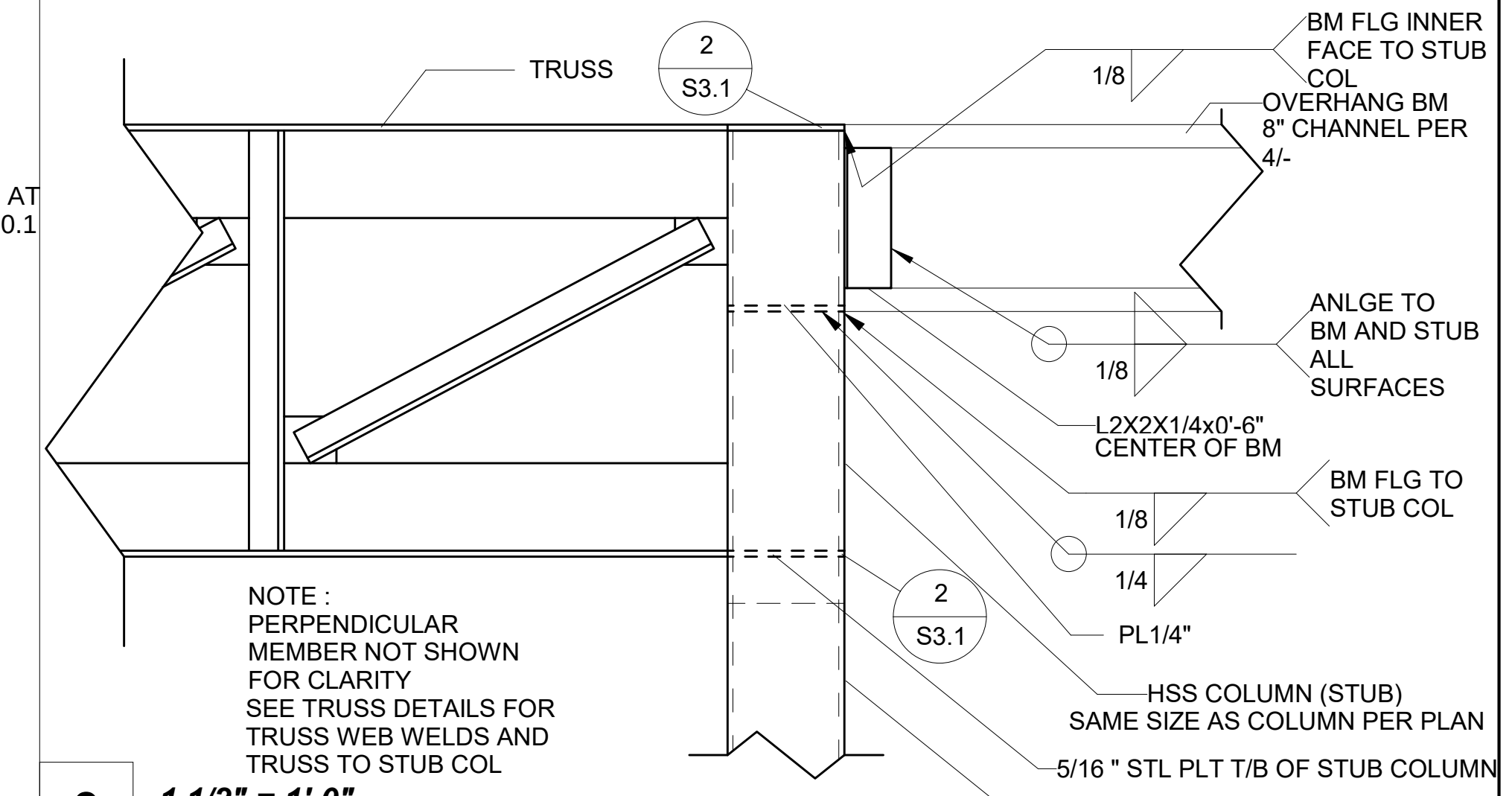
18 *1 1/2" = 1'-0"*
HVAC Frmg



13 *3" = 1'-0"*
Typ Soffit Joist Connection

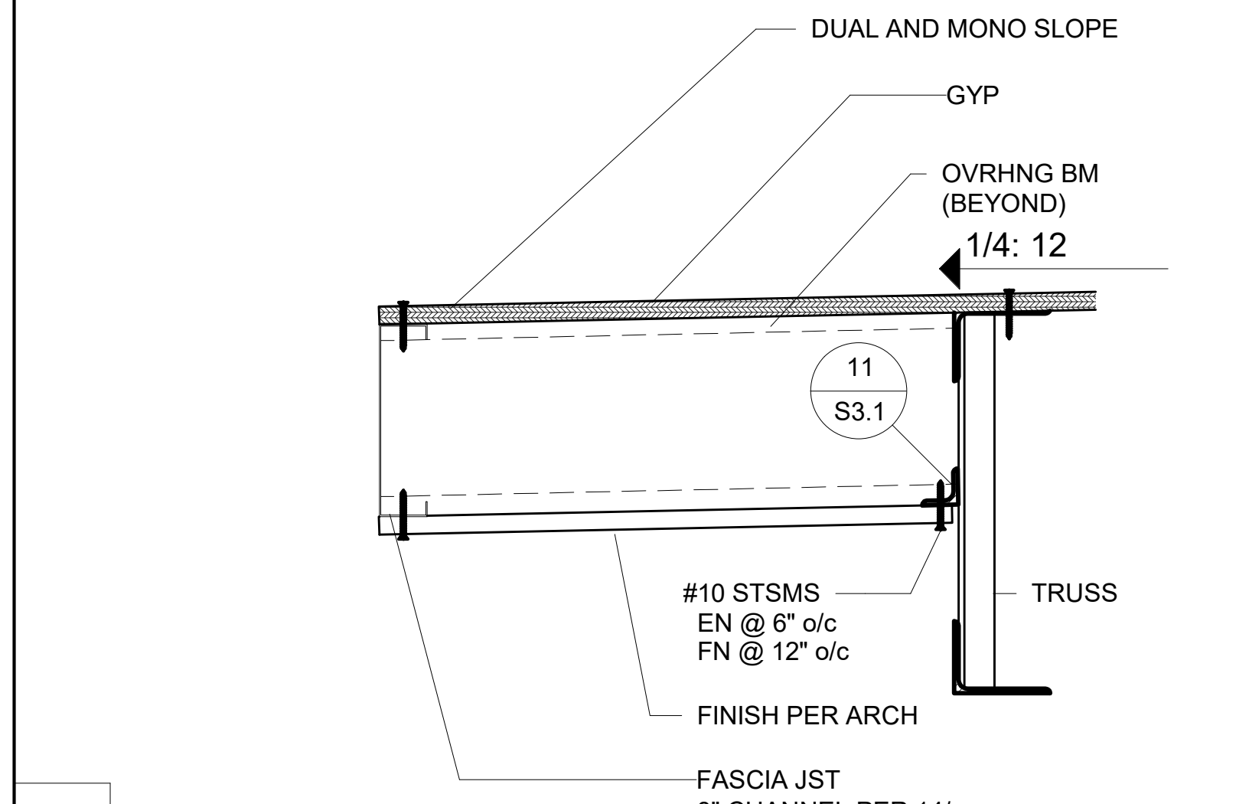

ROOF SHT'G -3/4" CDX PLYWOOD (48/24 MIN.) CONNECTED TO ROOF FRAMING W/ #8-1 1/4" SELF TAPPIN FLATHEAD SCREWS @ 6" O.C. E.N. & @ 6" O.C. FN.
1/8
3
ROOF JST OR BLK PER 5/-
TRUSS CHORD
#12-14 TEK @ 6"O.C. B.N. AT ROOF SHEATHING PER S0.1
TRUSS VERT
1 1/2"
45.00°
1 1/2"
1/8
3" TOTAL
L1 1/2"x1 1/2"x3/16 @ 8'-0" o/c AND @ KING STUD, JAMB STUD, POST, AND COLUMN
TRUSS CHORD
SHT'G PER ARCH #8 SCREWS @ 6" E.N., 12" F.N.

8 *1 1/2" = 1'-0"*
Typ Roof Jst Bracing

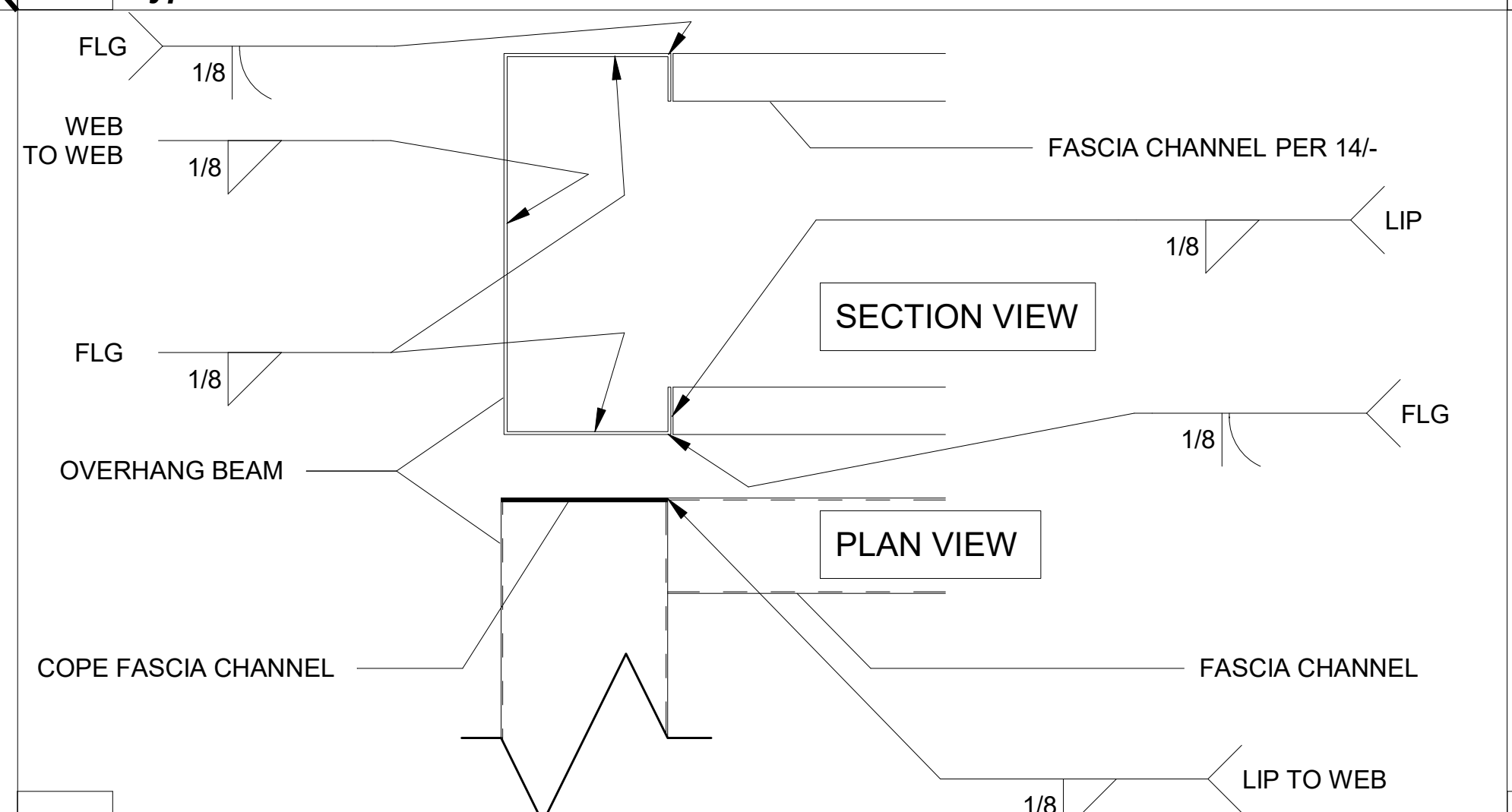

TRUSS
2
S3.1
1/8
BM FLG INNER FACE TO STUB COL
OVERHANG BM 8" CHANNEL PER 4/-
1/8
ANLGE TO BM AND STUB ALL SURFACES
L2X2X1/4x0'-6" CENTER OF BM
1/8
BM FLG TO STUB COL
1/4
2
S3.1
PL1/4"
HSS COLUMN (STUB) SAME SIZE AS COLUMN PER PLAN
5/16 " STL PLT T/B OF STUB COLUMN
HSS COLUMN PER PLAN

NOTE :
PERPENDICULAR
MEMBER NOT SHOWN
FOR CLARITY
SEE TRUSS DETAILS FOR
TRUSS WEB WELDS AND
TRUSS TO STUB COL

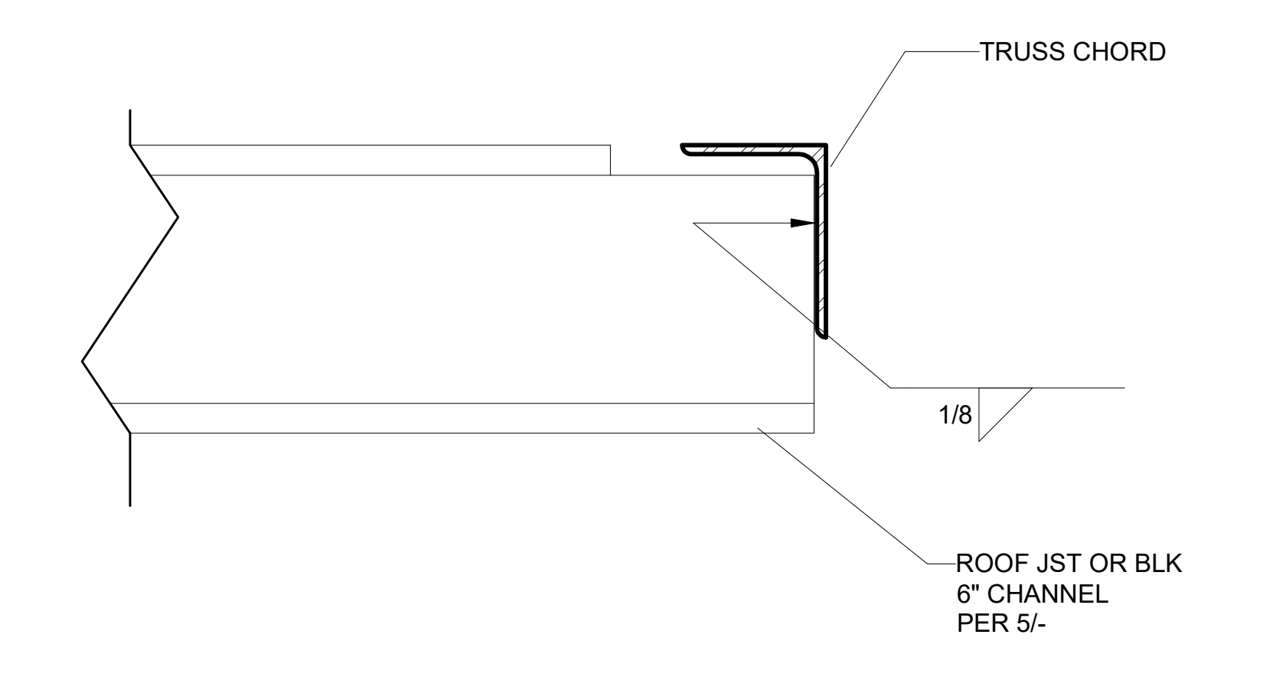
3 *1 1/2" = 1'-0"*
Typ Overhang Beam to Column Connection



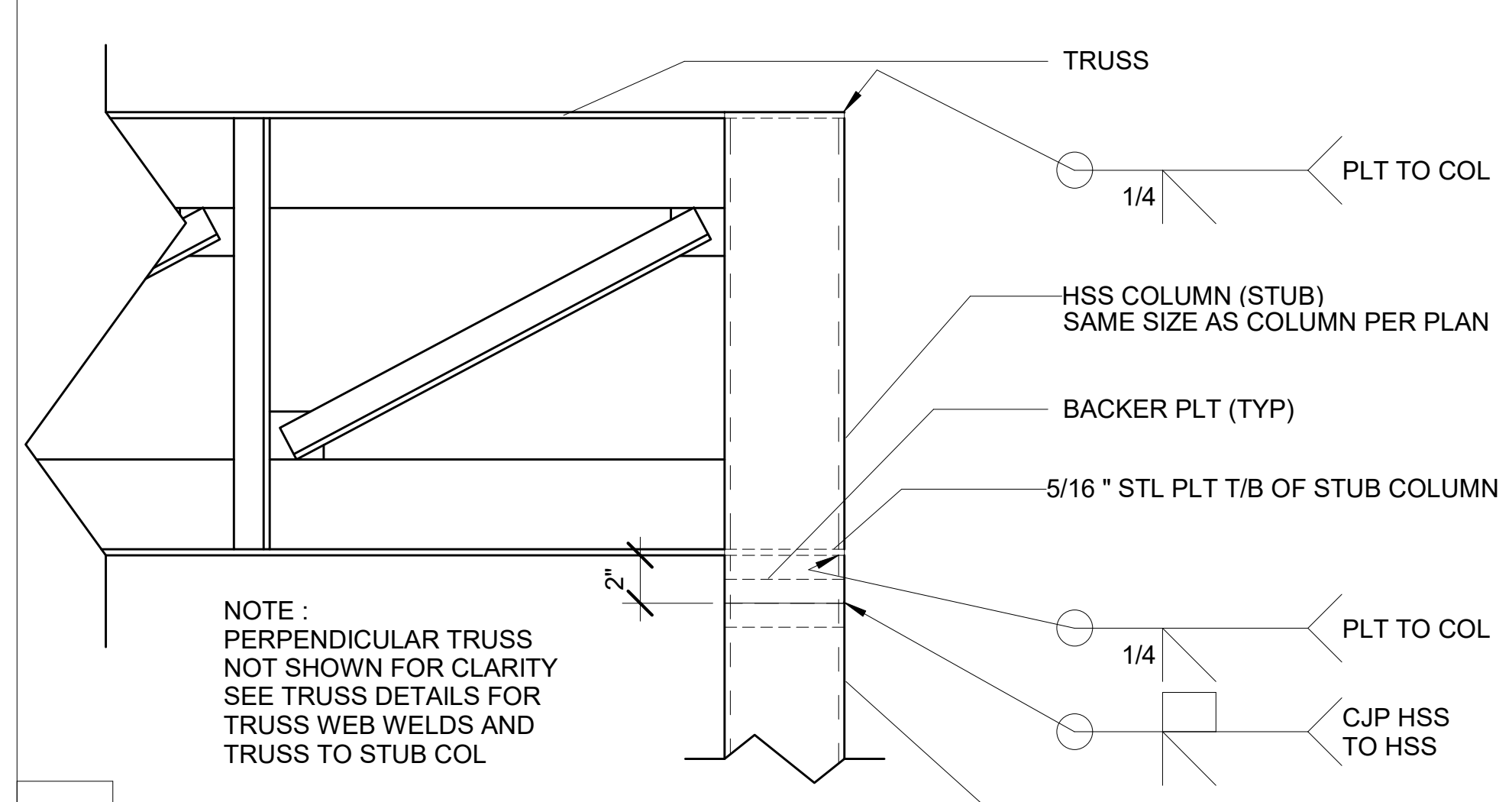
17 *1 1/2" = 1'-0"*
2'-6" Overhang @ Endwall



12 *3" = 1'-0"*
Fascia to Overhang Beam

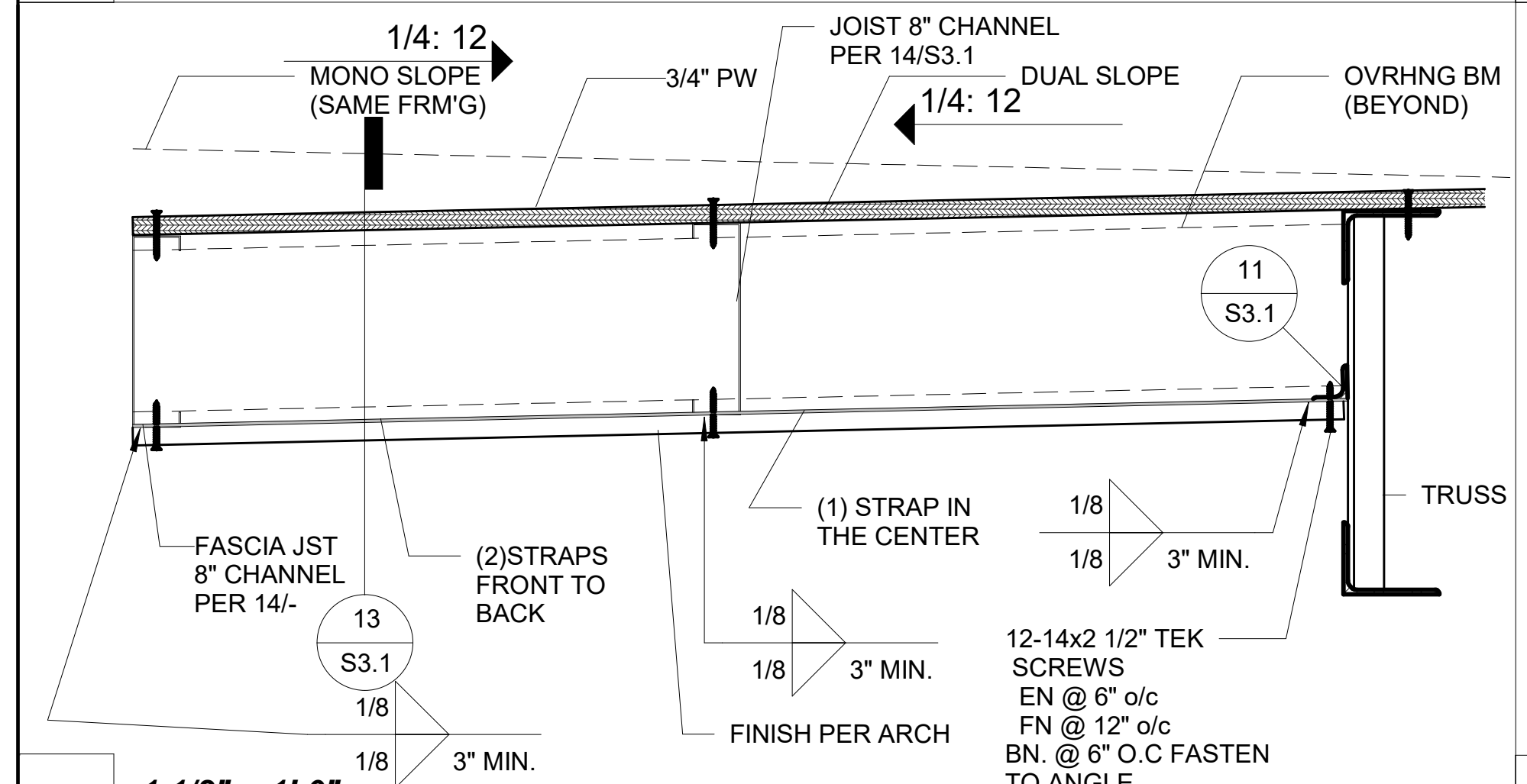


7 *3" = 1'-0"*
Typ Roof Joist Connection @ Truss Chord

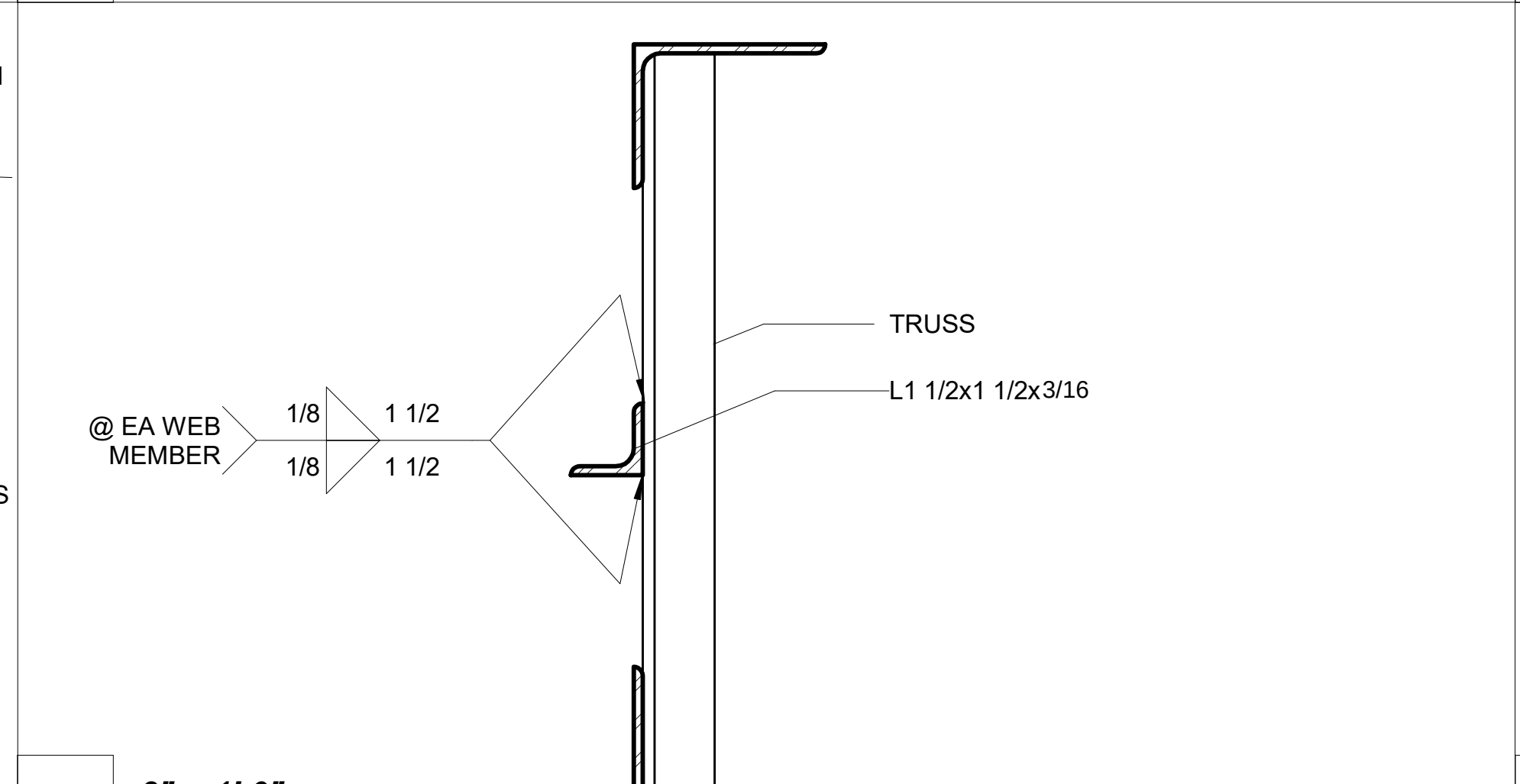


NOTE :
PERPENDICULAR TRUSS
NOT SHOWN FOR CLARITY
SEE TRUSS DETAILS FOR
TRUSS WEB WELDS AND
TRUSS TO STUB COL

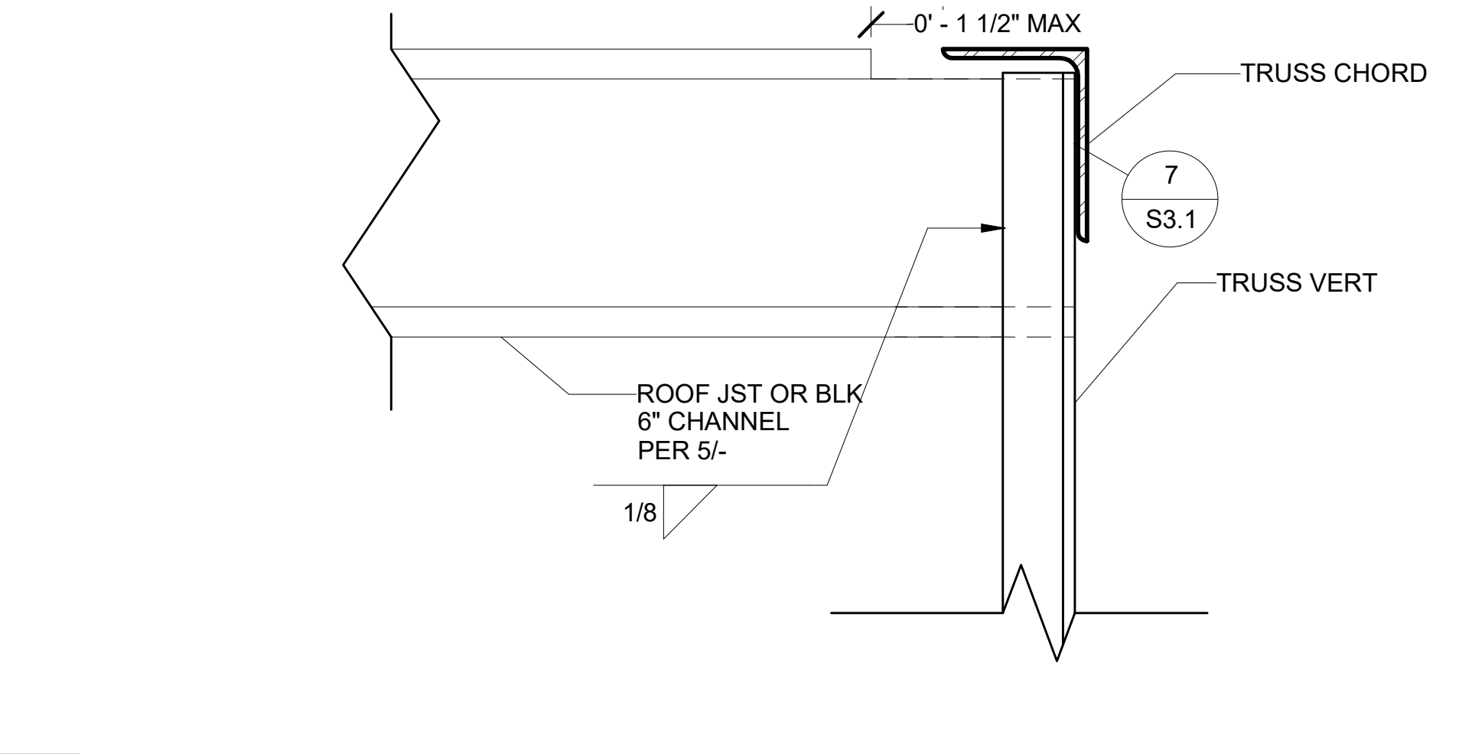
2 *1 1/2" = 1'-0"*
Typ Stub Column Connection



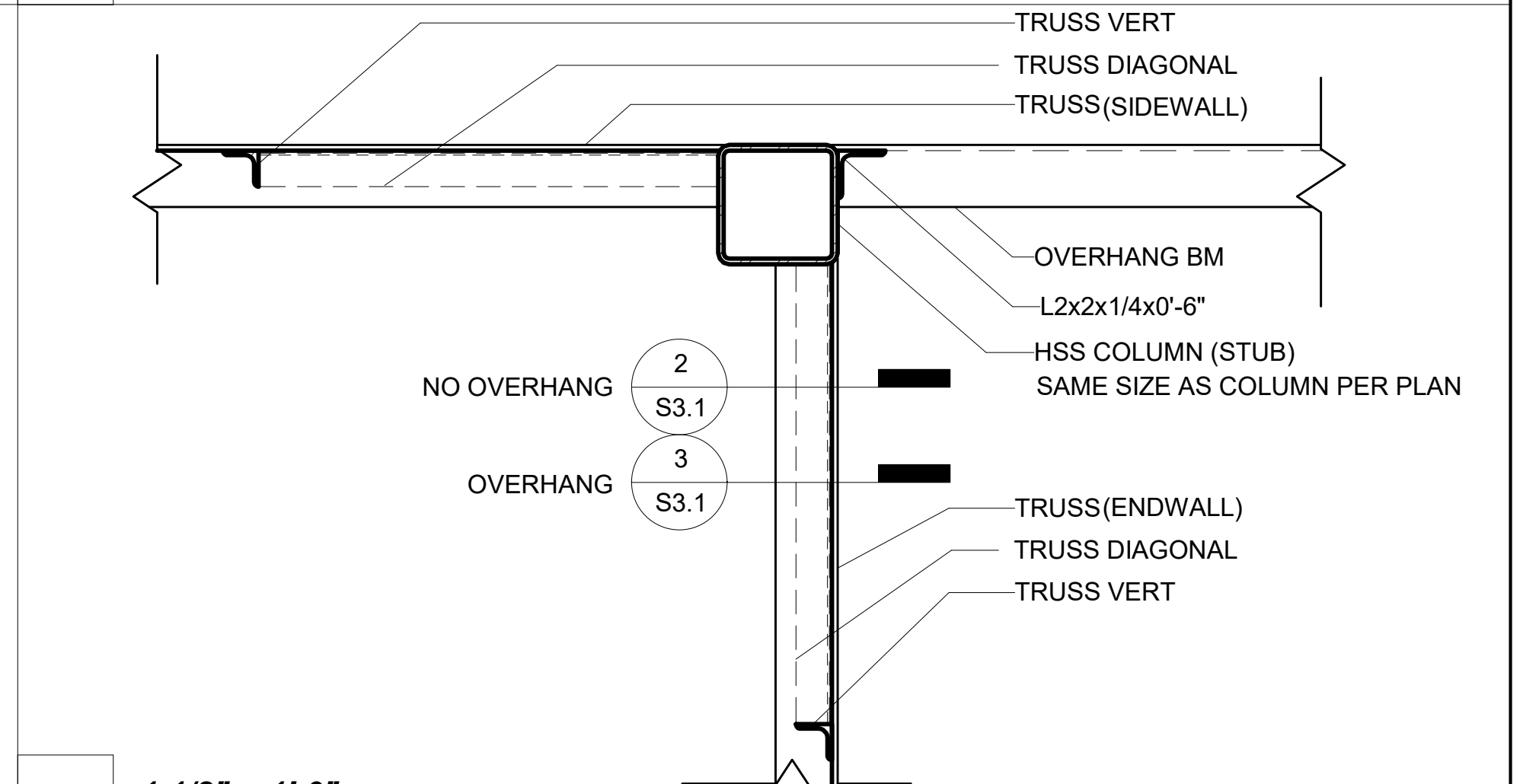
16 *1 1/2" = 1'-0"*
5'-0" Overhang @ Endwall



11 *3" = 1'-0"*
Angle to Truss



6 *3" = 1'-0"*
Typ Roof Joist Connection @ Truss Vert



1 *1 1/2" = 1'-0"*
Typ Corner Connection @ Roof

C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt

6/8/2021 1:52:44 AM

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
RST#22088
02/16/24

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CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
STRUCTURAL
DETAILS
(ROOF)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
S3.1

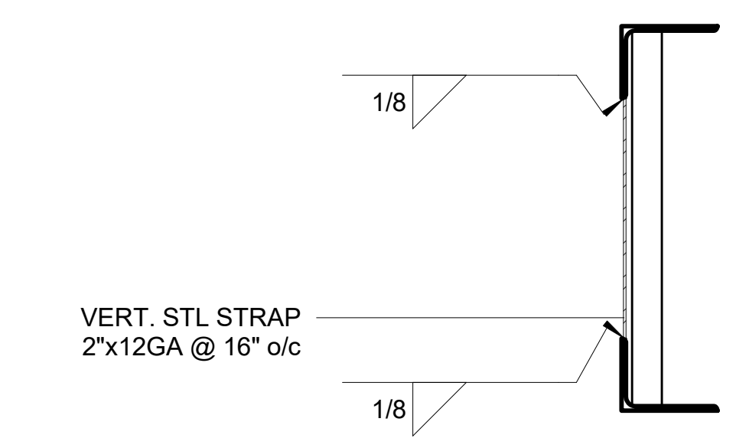
SHEET OF

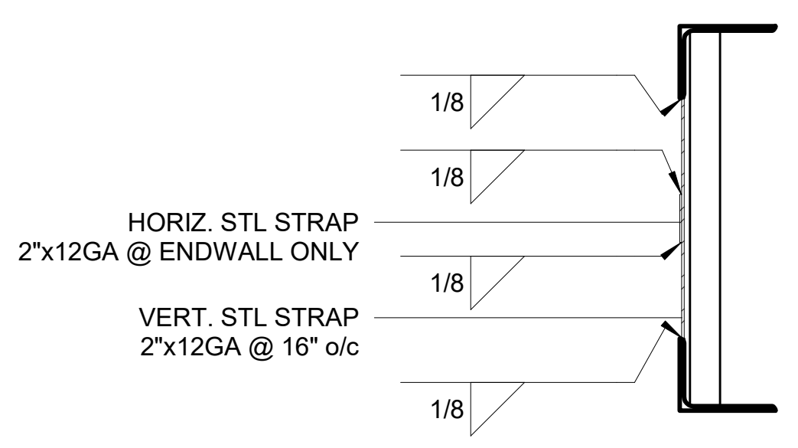
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

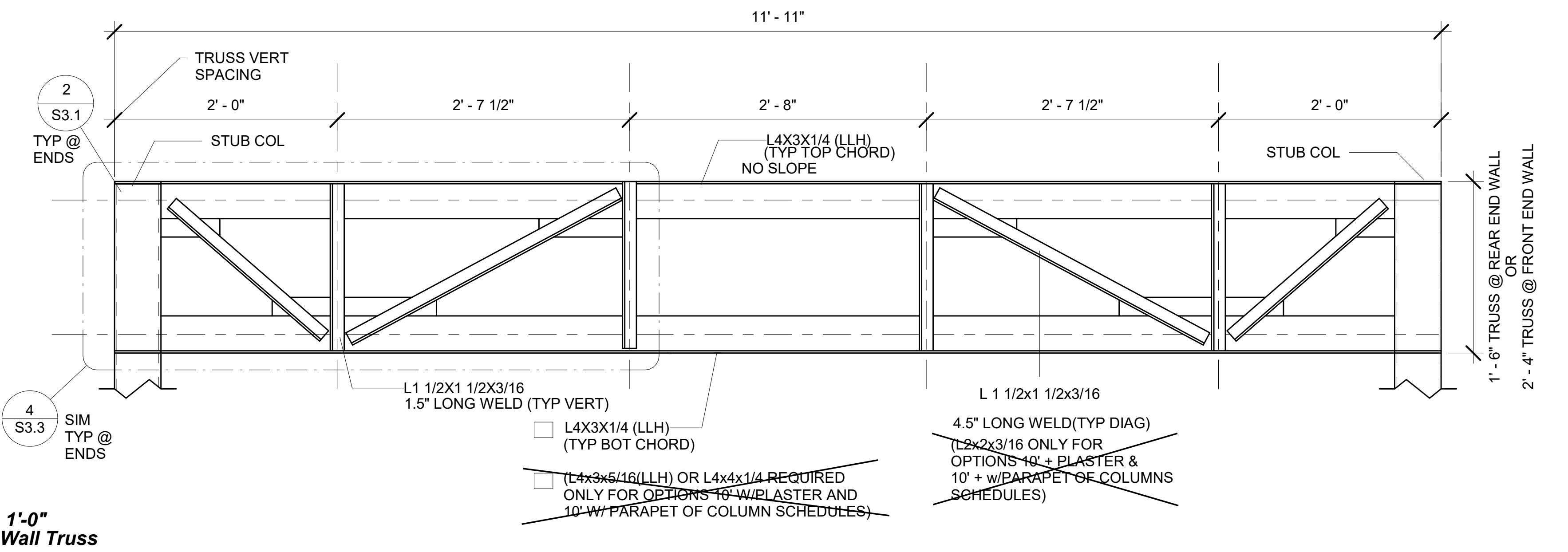
TABLE A-SECTION CENTROID	
SECTION	CENTROID C
L4X3 (LLV)	1 1/4"
L4X3 (LLH)	3/4"
L2X2X3/16	9/16"
L1.5X1.5X3/16	7/16"

NOTE: SEE DETAIL 8 / S3.3

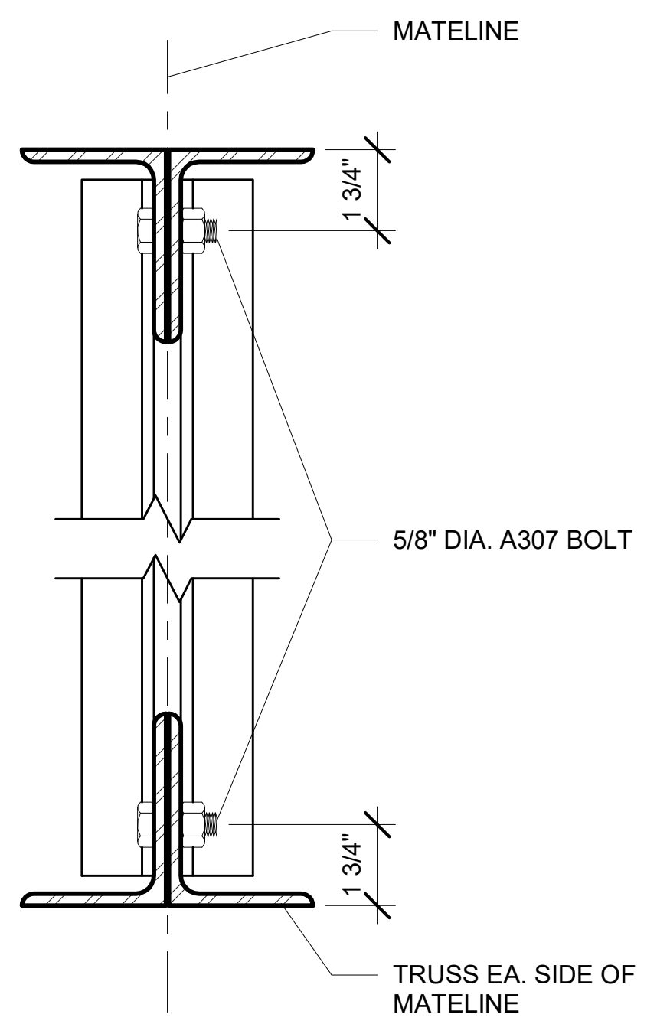
12 1/2" = 1'-0"
TABLE A - SECTION CENTROID



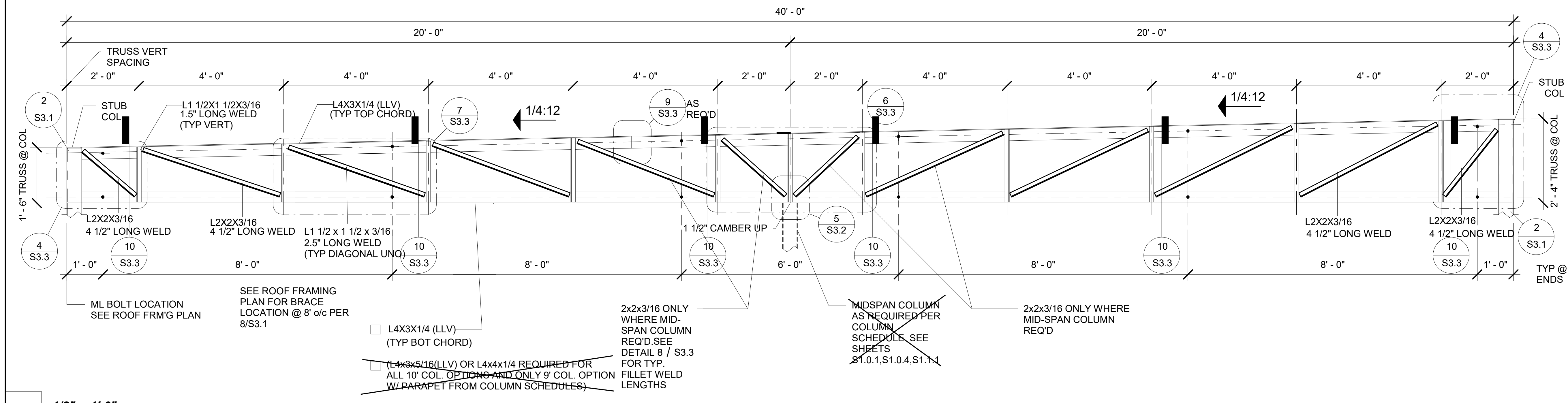




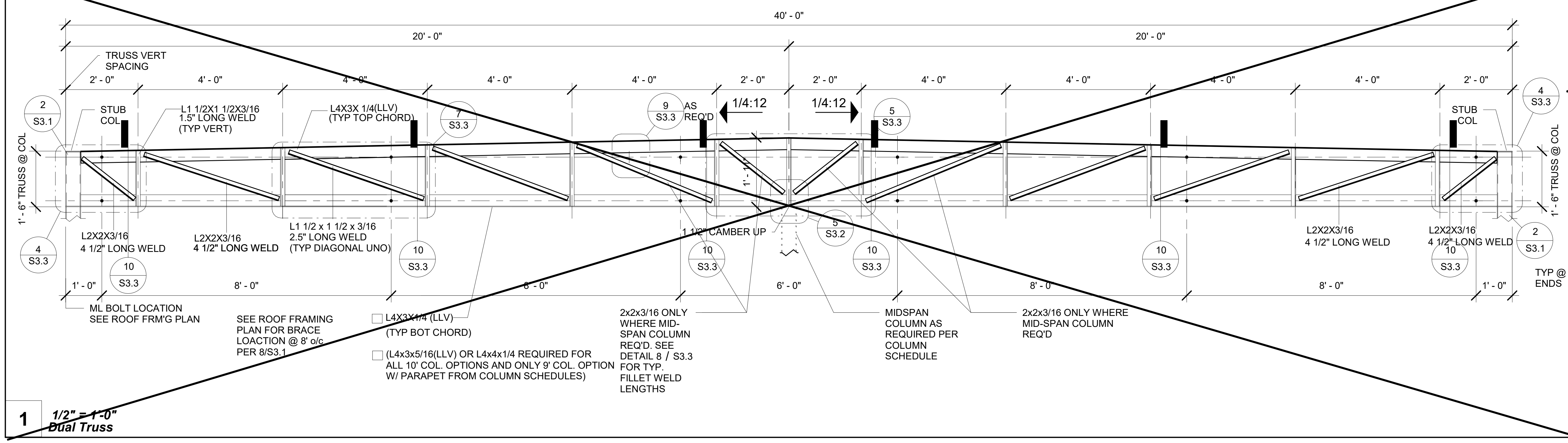
3 1" = 1'-0"
End Wall Truss



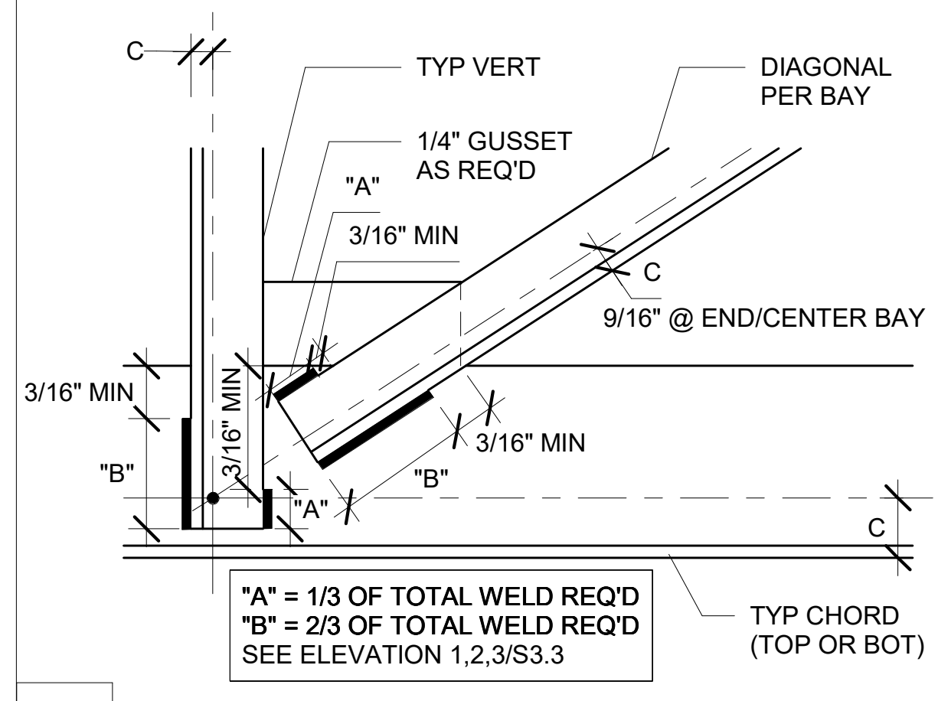
10 3" = 1'-0"
TRUSS CONN. @ MATELINE



2 1/2" = 1'-0"
Mono Truss

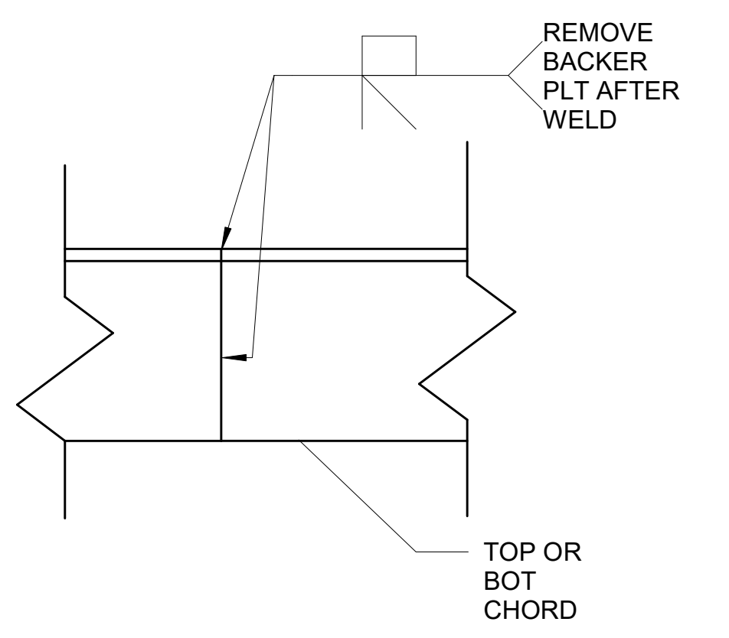


1 1/2" = 1'-0"
Dual Truss

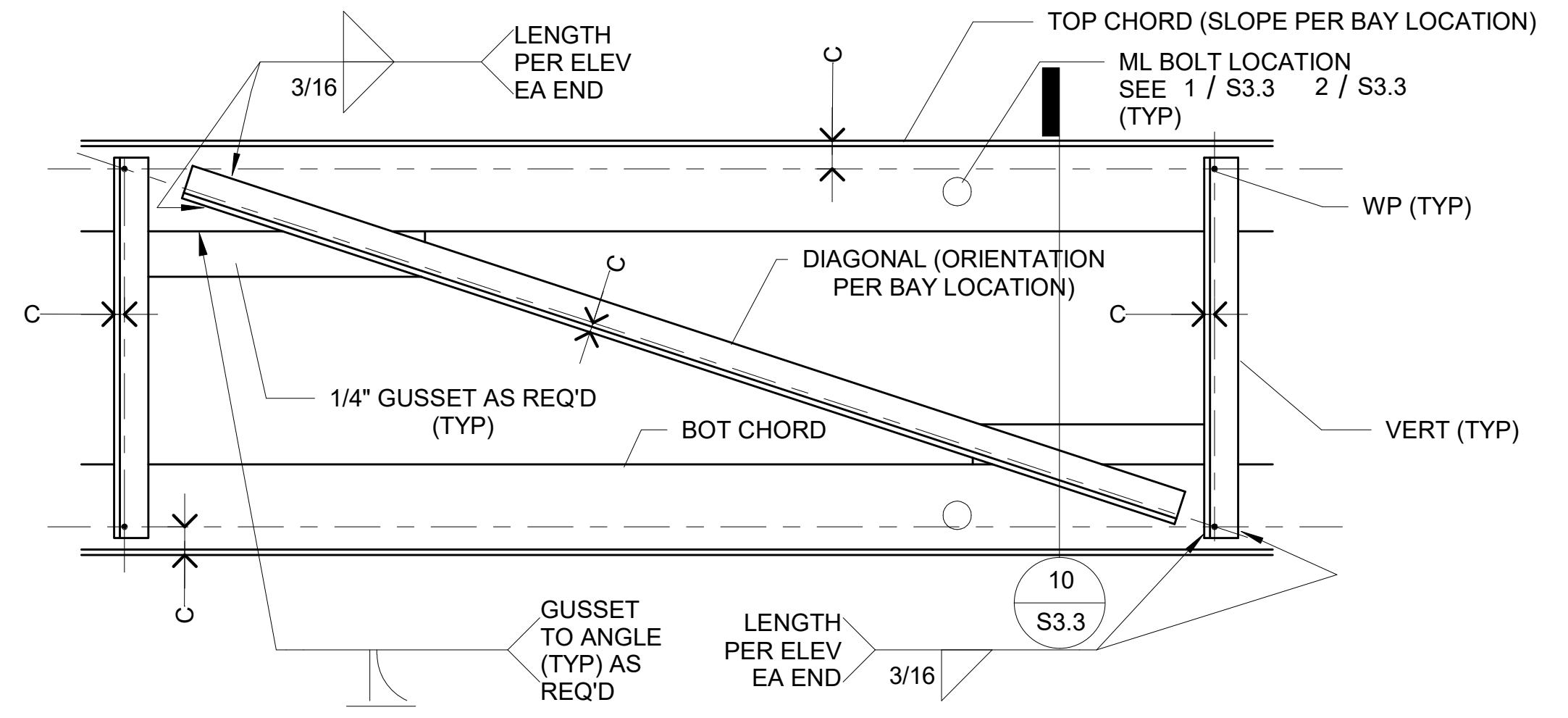


"A" = 1/3 OF TOTAL WELD REQ'D
"B" = 2/3 OF TOTAL WELD REQ'D
SEE ELEVATION 1,2,3/S3.3

8 3" = 1'-0"
Typ Fillet Weld Lengths

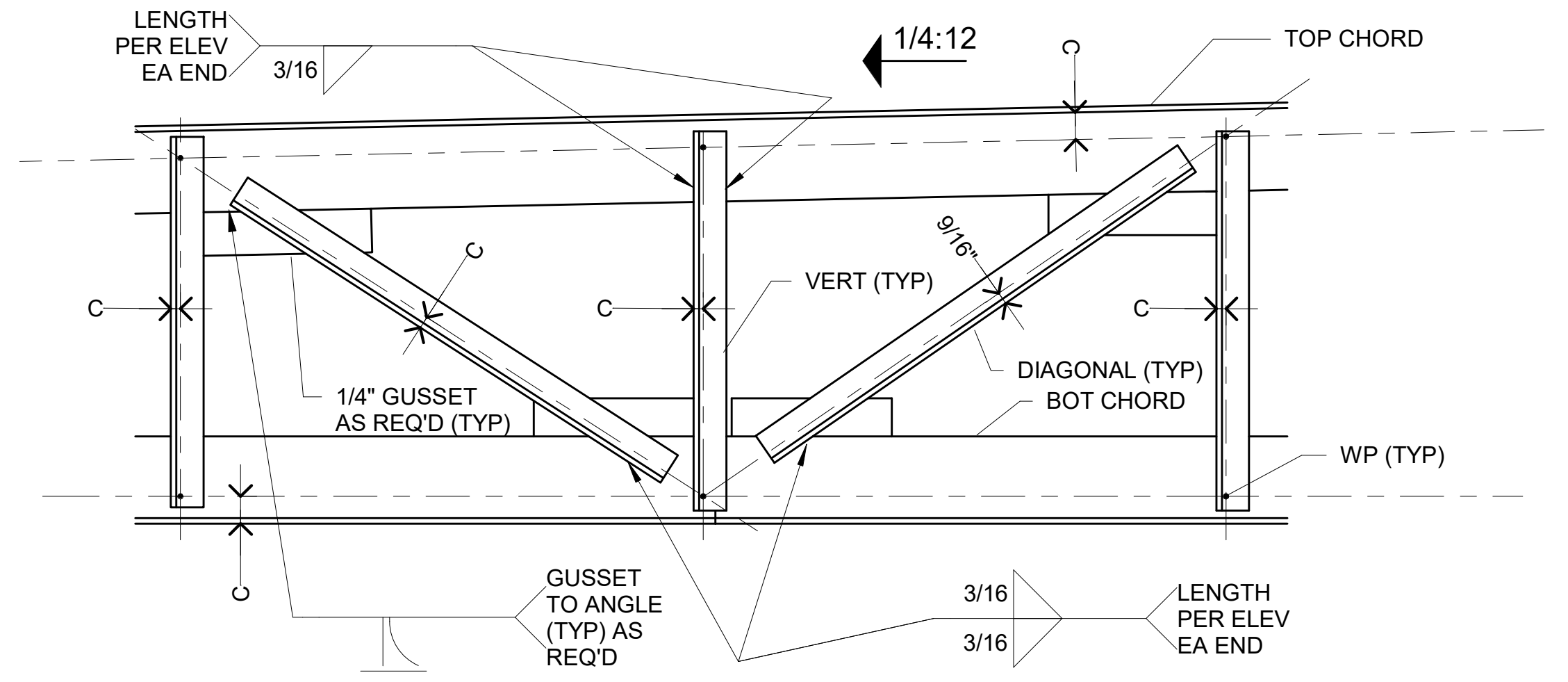


9 3" = 1'-0"
Typ Truss Chord Splice



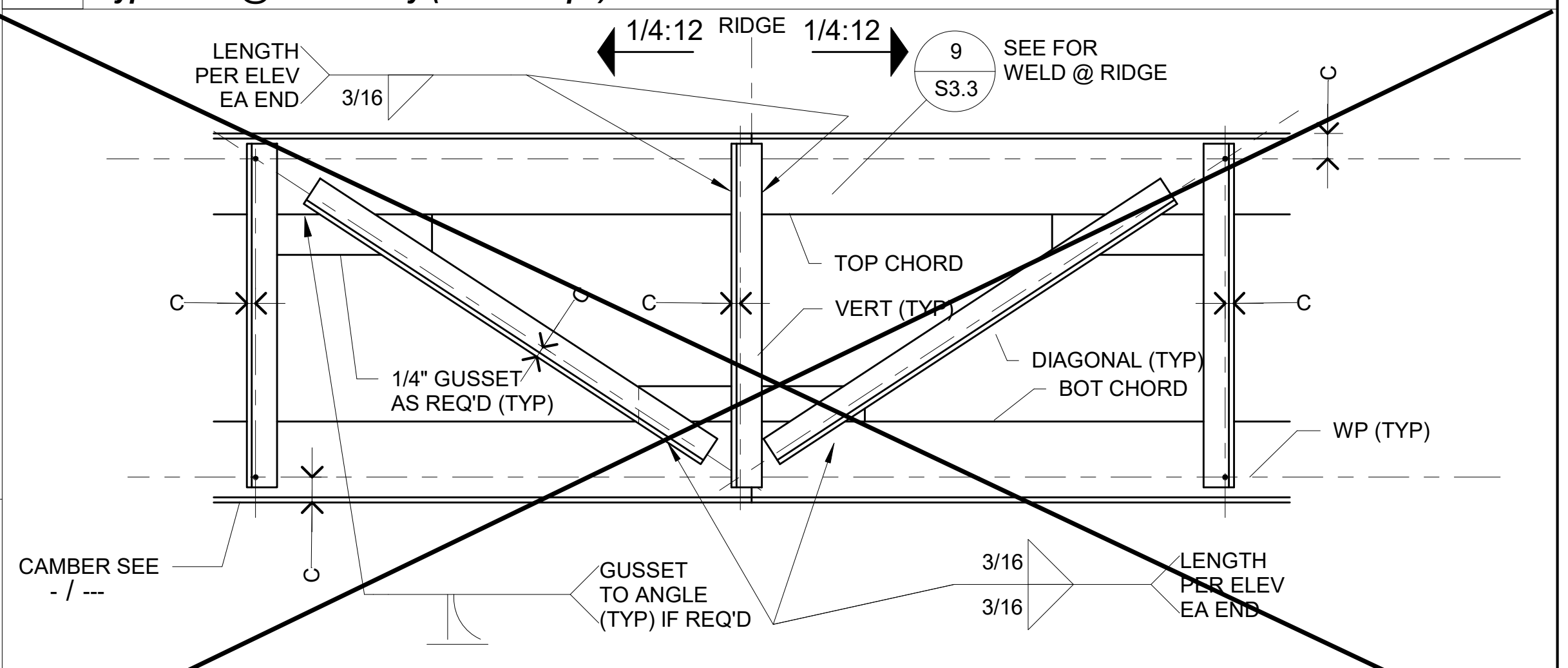
NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

7 1 1/2" = 1'-0"
Typ Truss Bay



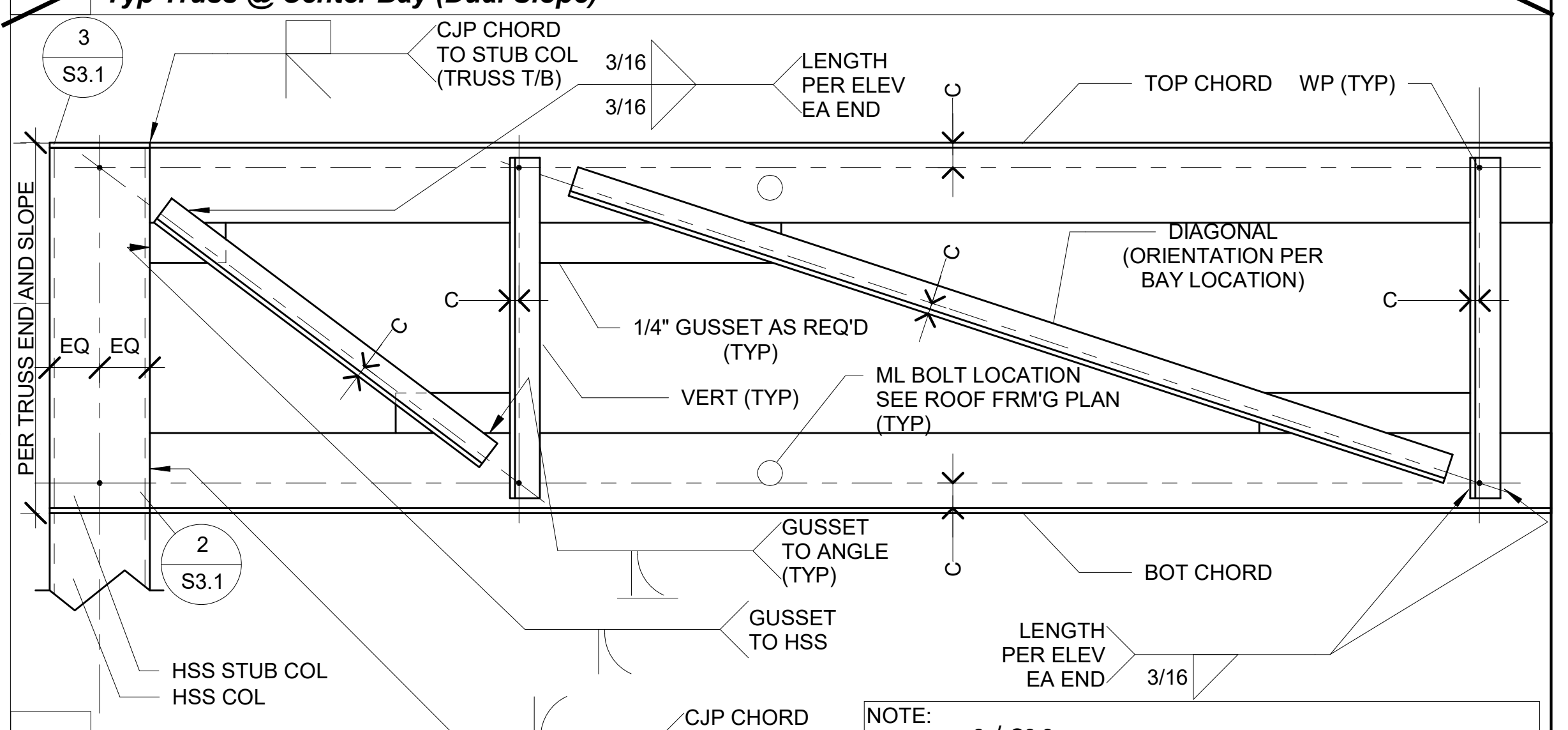
NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

6 1 1/2" = 1'-0"
Typ Truss @ Center Bay (Mono Slope)



NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

5 1 1/2" = 1'-0"
Typ Truss @ Center Bay (Dual Slope)



NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

4 1 1/2" = 1'-0"
Typ End Bay to Stub Conn

M:\2022\22088 - Class Leasing, 24x40 to 120x40 High Seismic 2022 PC\REVIT\22088- 2022.09.updated S3.3 with truss cross-section detail and call outs- source 20093.rvt

9/22/2022 11:10:42 AM

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
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PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
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02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC: 24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
ROOF PERIMETER
TRUSS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

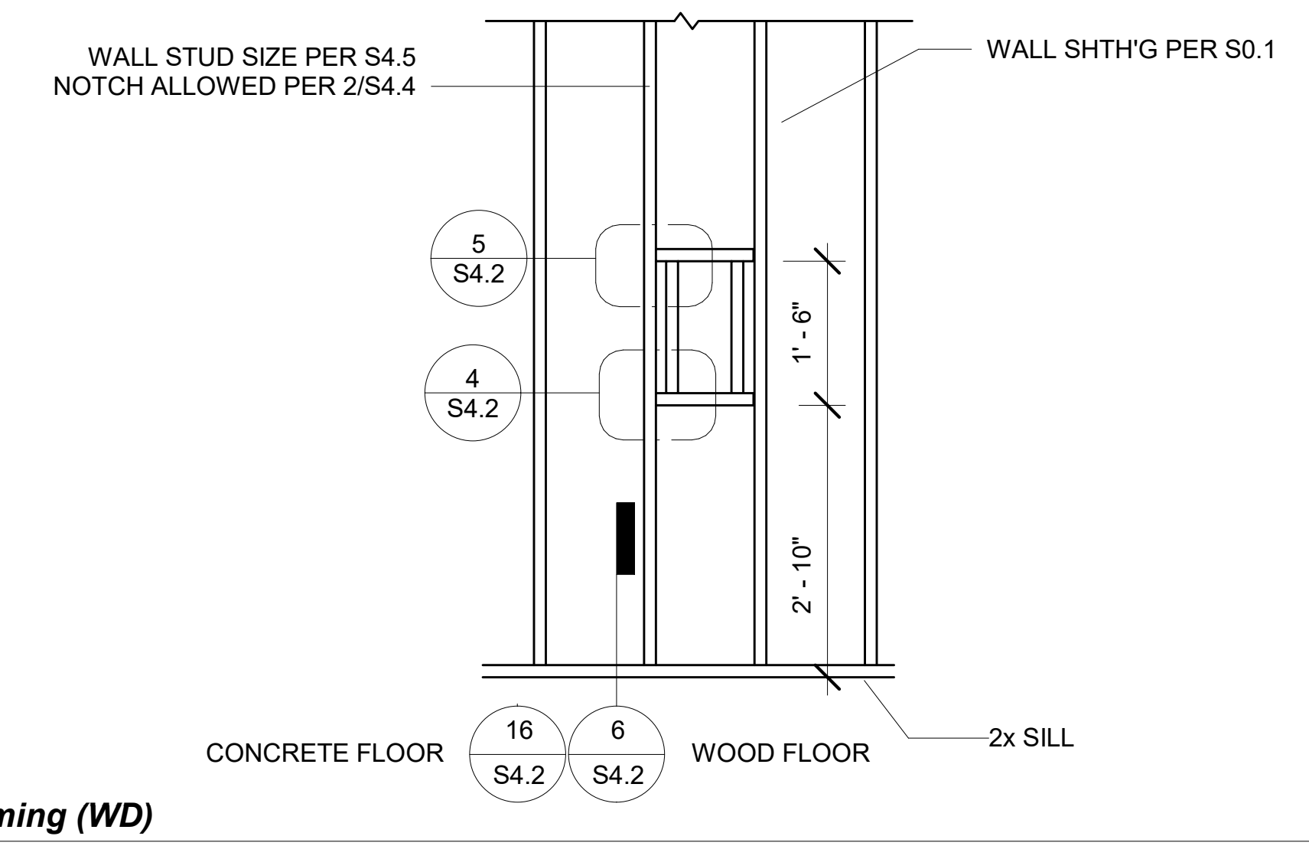
CHECKED BY
RH/RT

DATE

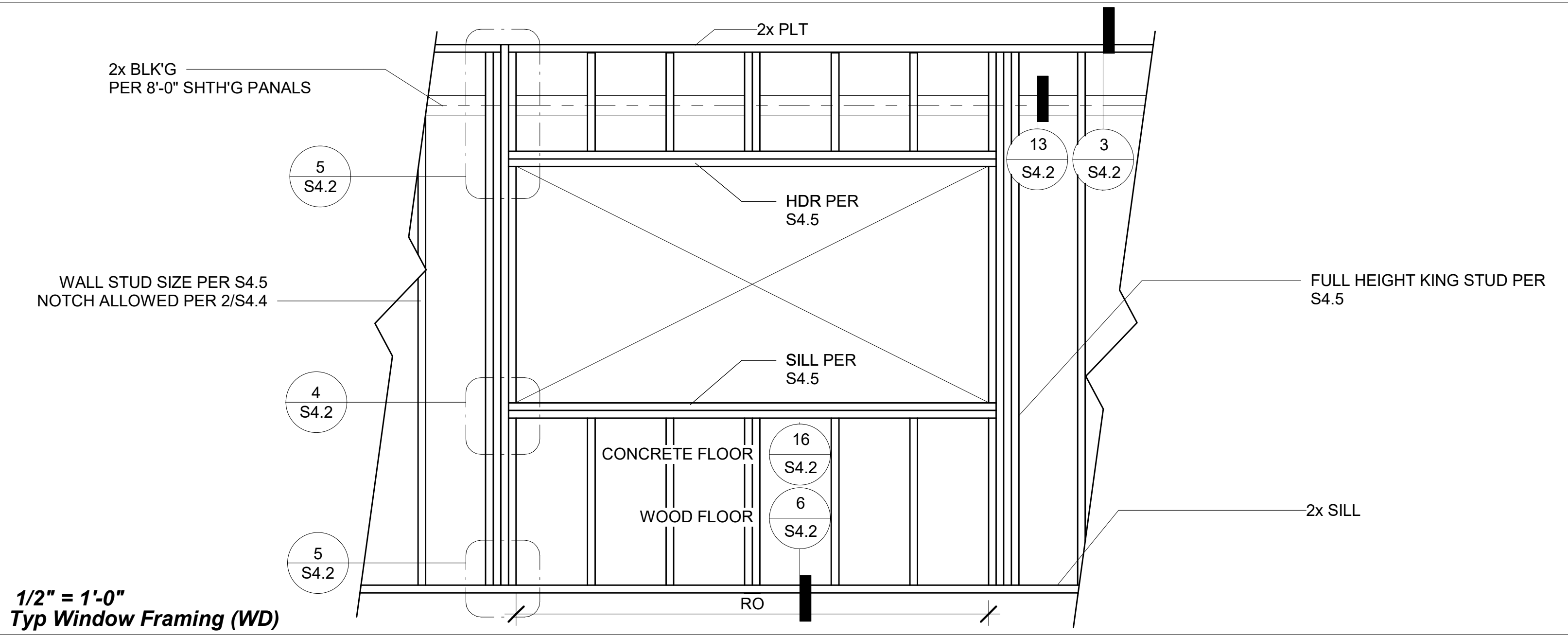
SHEET NO.
S3.3

SHEET OF

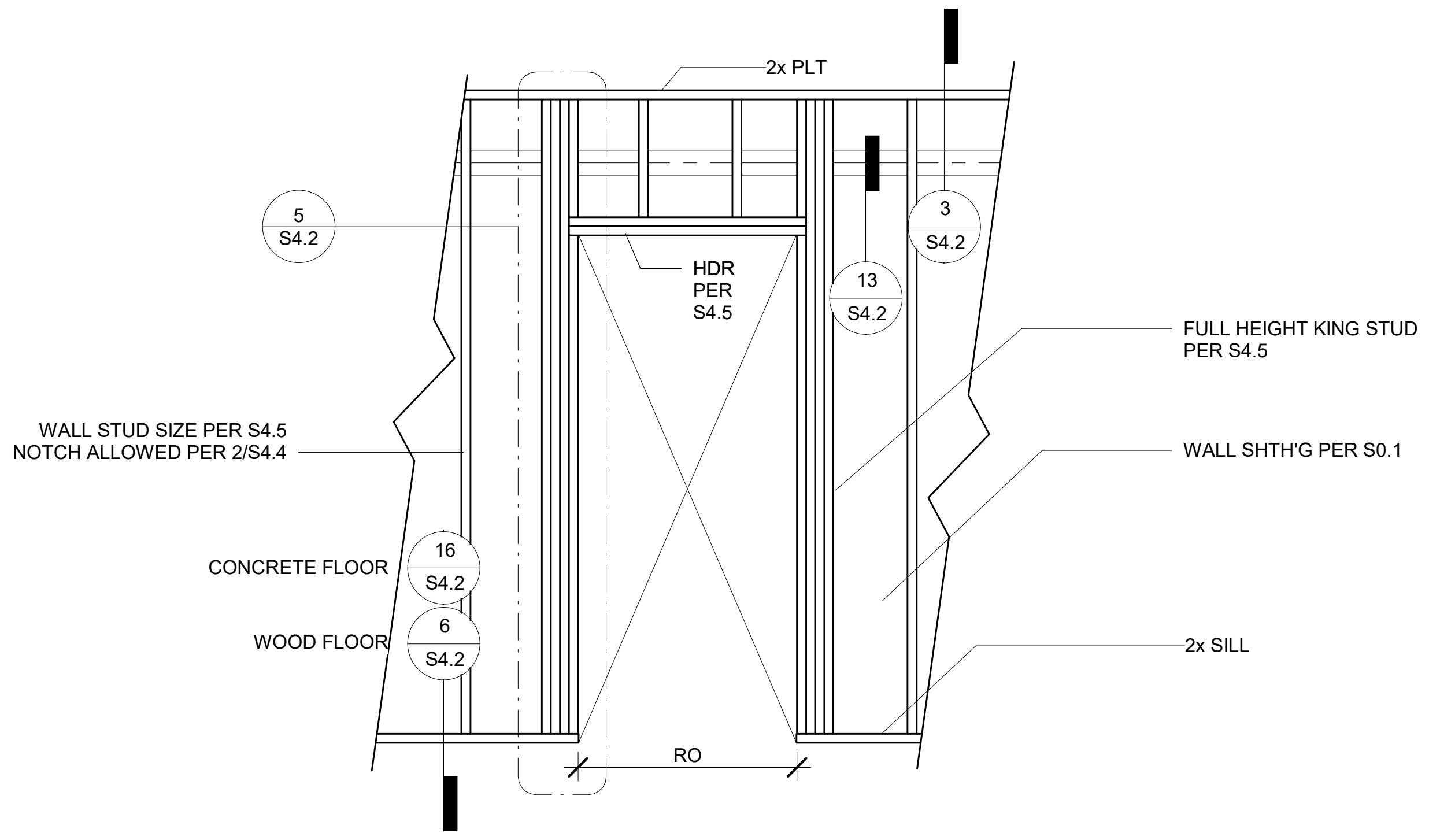
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



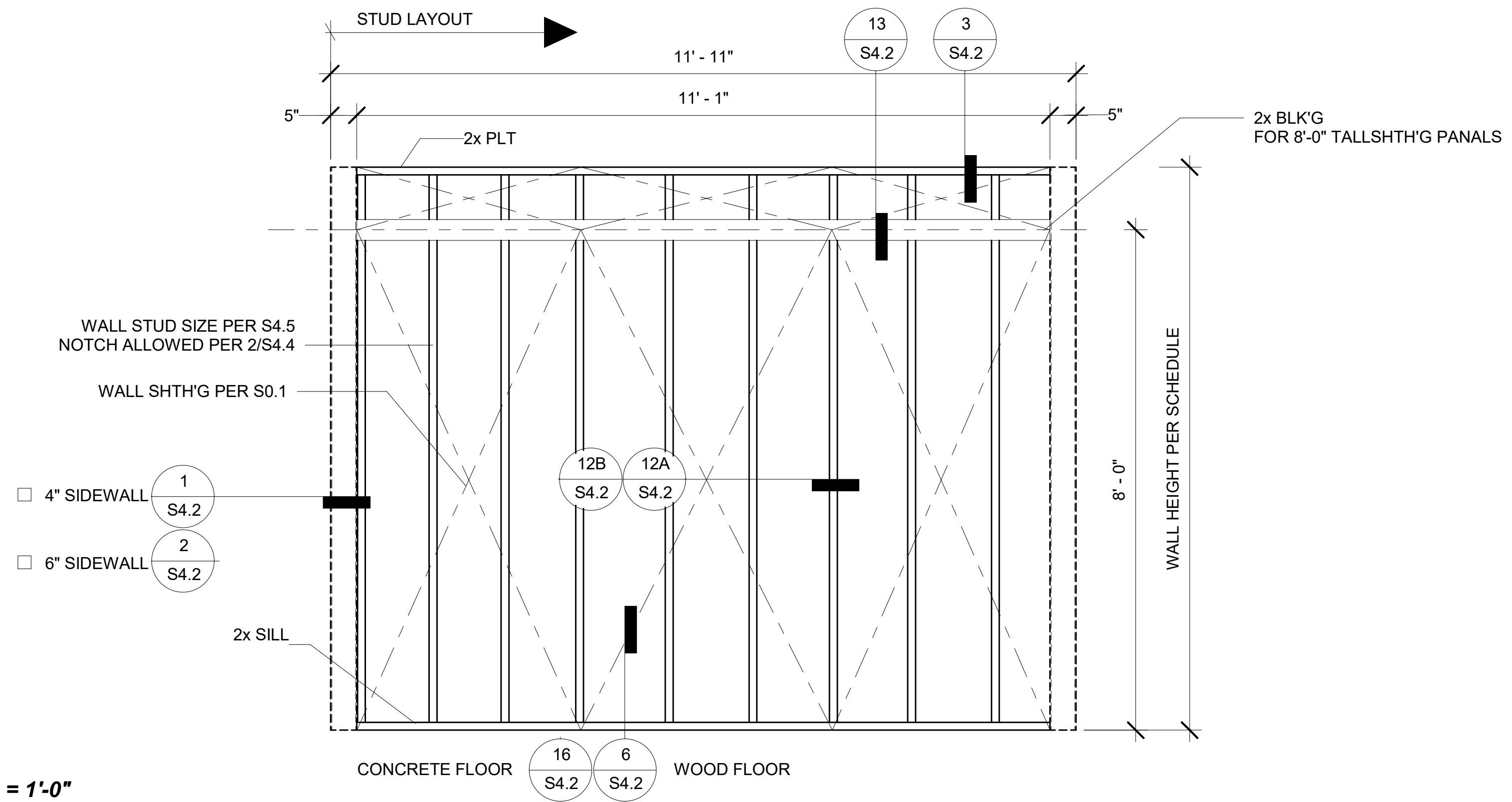
6 *1/2" = 1'-0"*
Typ Fire Extinguisher Framing (WD)



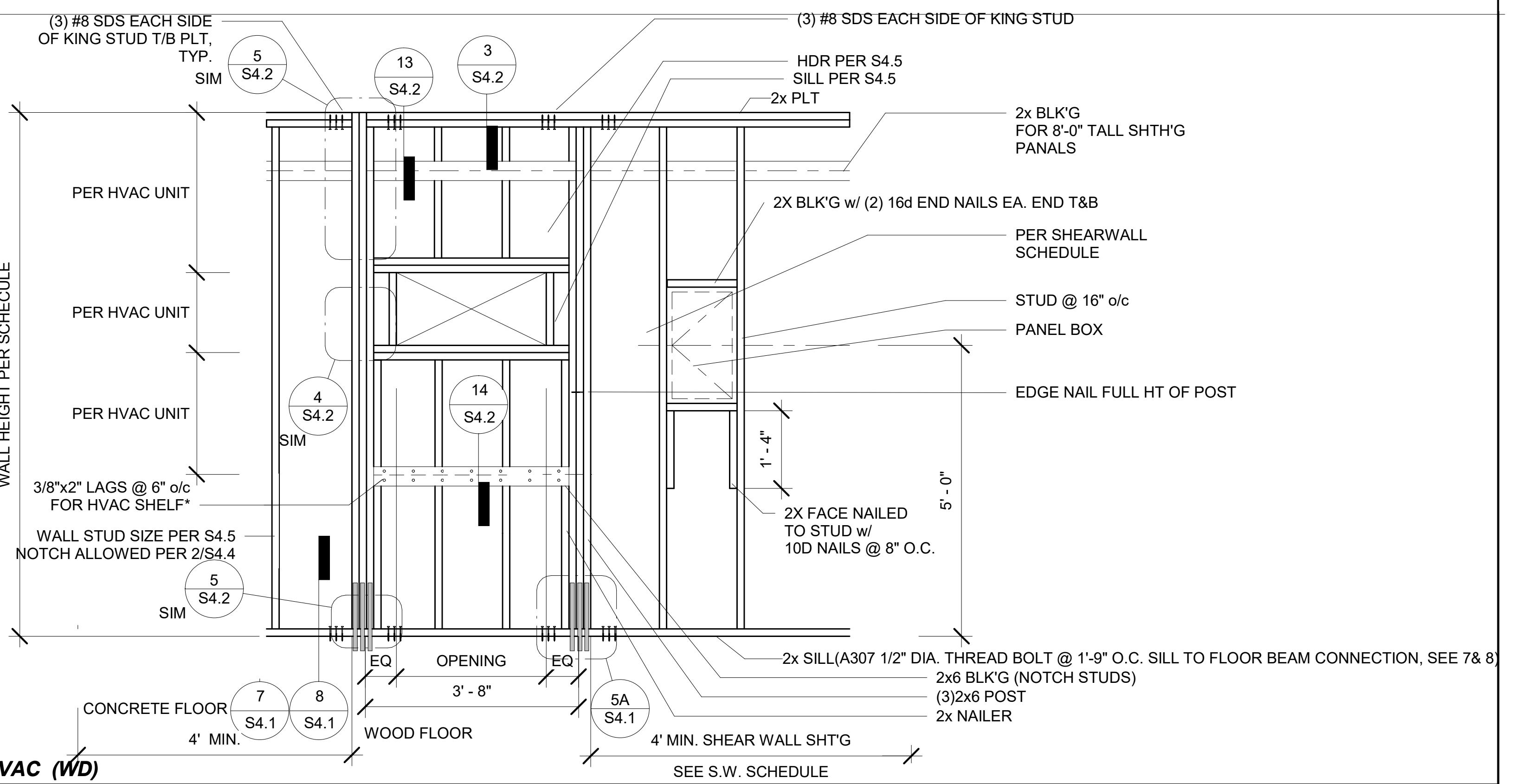
4 *1/2" = 1'-0"*
Typ Window Framing (WD)



5 *1/2" = 1'-0"*
Typ Door Framing (WD)

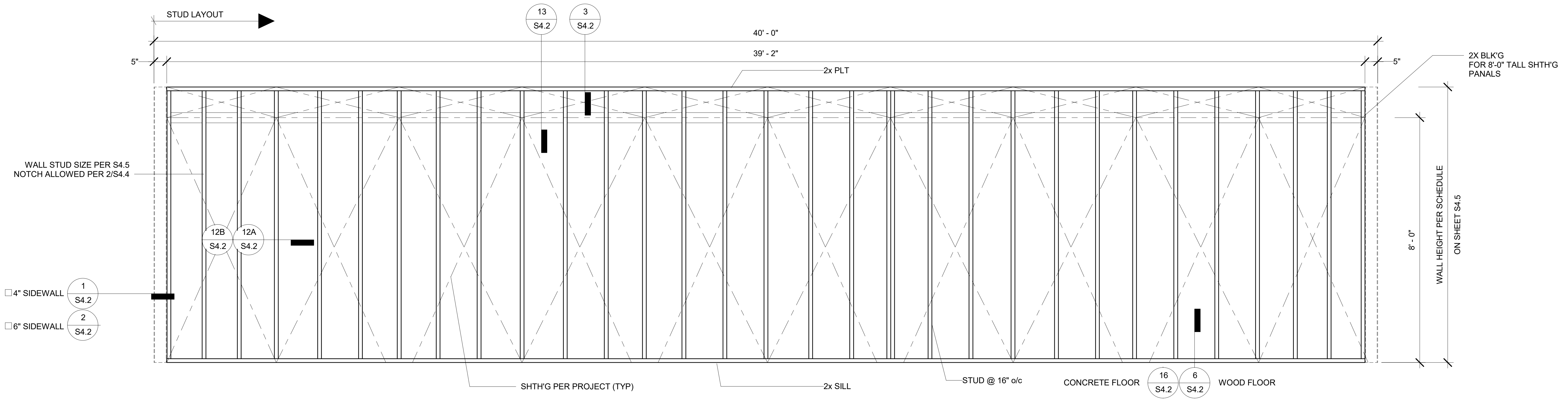


2 *1/2" = 1'-0"*
Typ Endwall Framing (WD)



*SEE A2 SHEET SERIES DETAILS
FOR HVAC FRAMING
ATTACHMENT DETAILING

3 *1/2" = 1'-0"*
Typ Endwall Framing @ HVAC (WD)



1 *1/2" = 1'-0"*
Typ Sidewall Framing (WD)

6/8/2021 1:52:57 AM
C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24063.rvt

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. 63380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
WD WALL
FRAMING
ELEVATIONS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

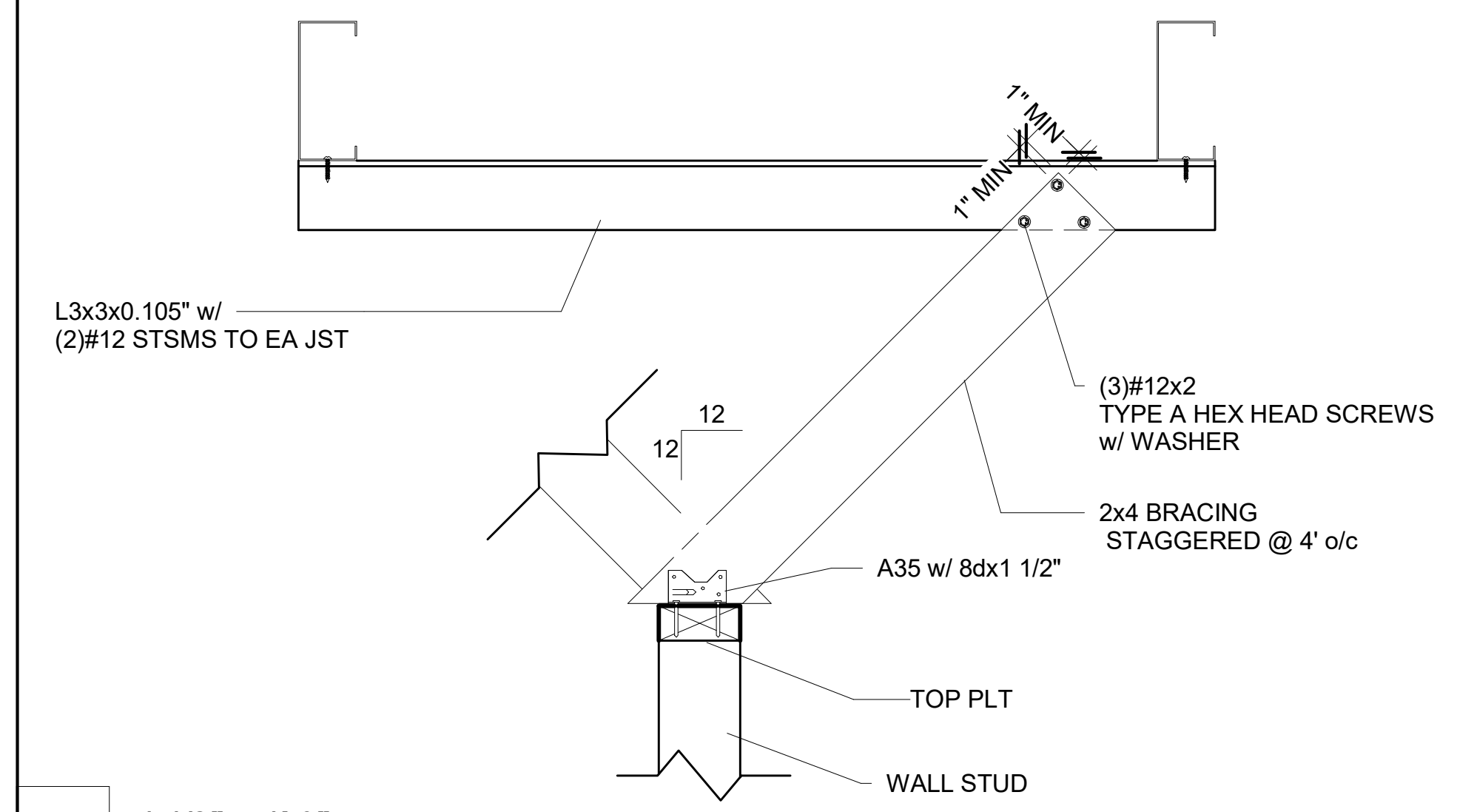
CHECKED BY
JA/RT

DATE

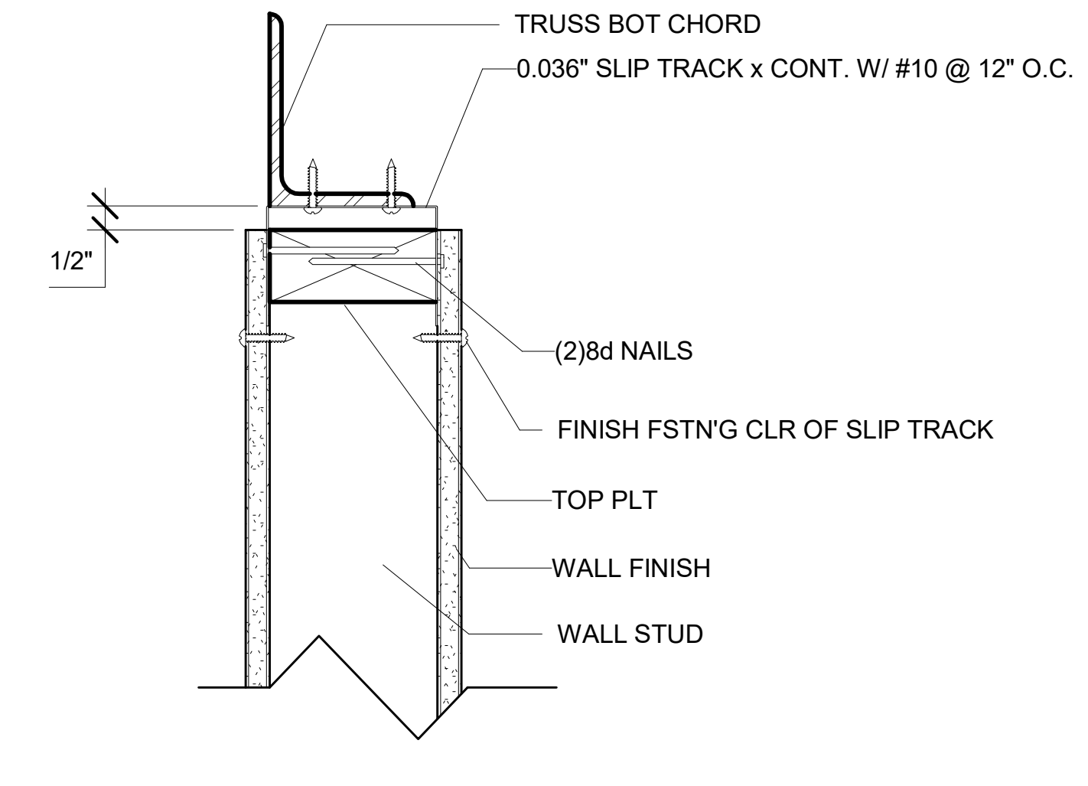
SHEET NO.
S4.1

SHEET OF

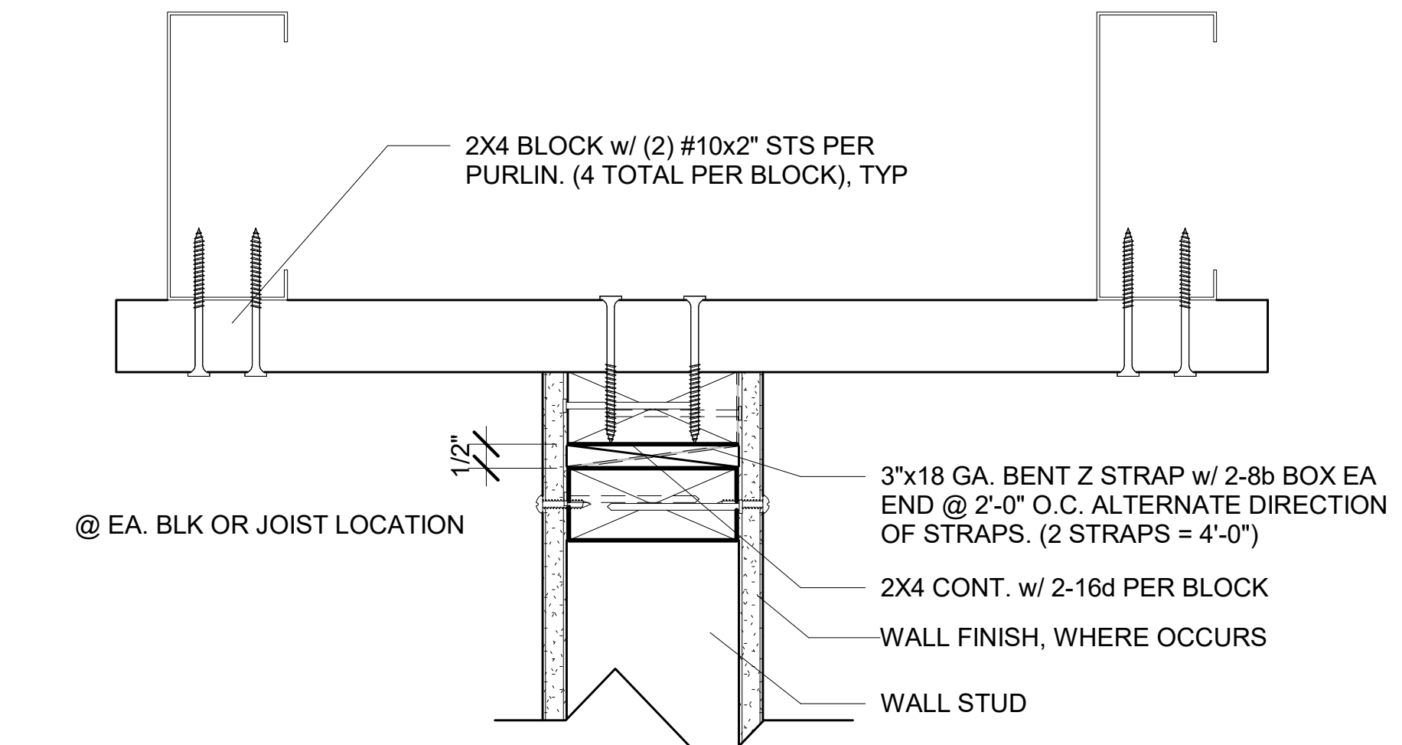
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


L3x3x0.105" w/ (2)#12 STSMS TO EA JST
1" MIN.
1" MIN.
12
12
(3)#12x2 TYPE A HEX HEAD SCREWS w/ WASHER
2x4 BRACING STAGGERED @ 4' o/c
A35 w/ 8dx1 1/2"
TOP PLT
WALL STUD

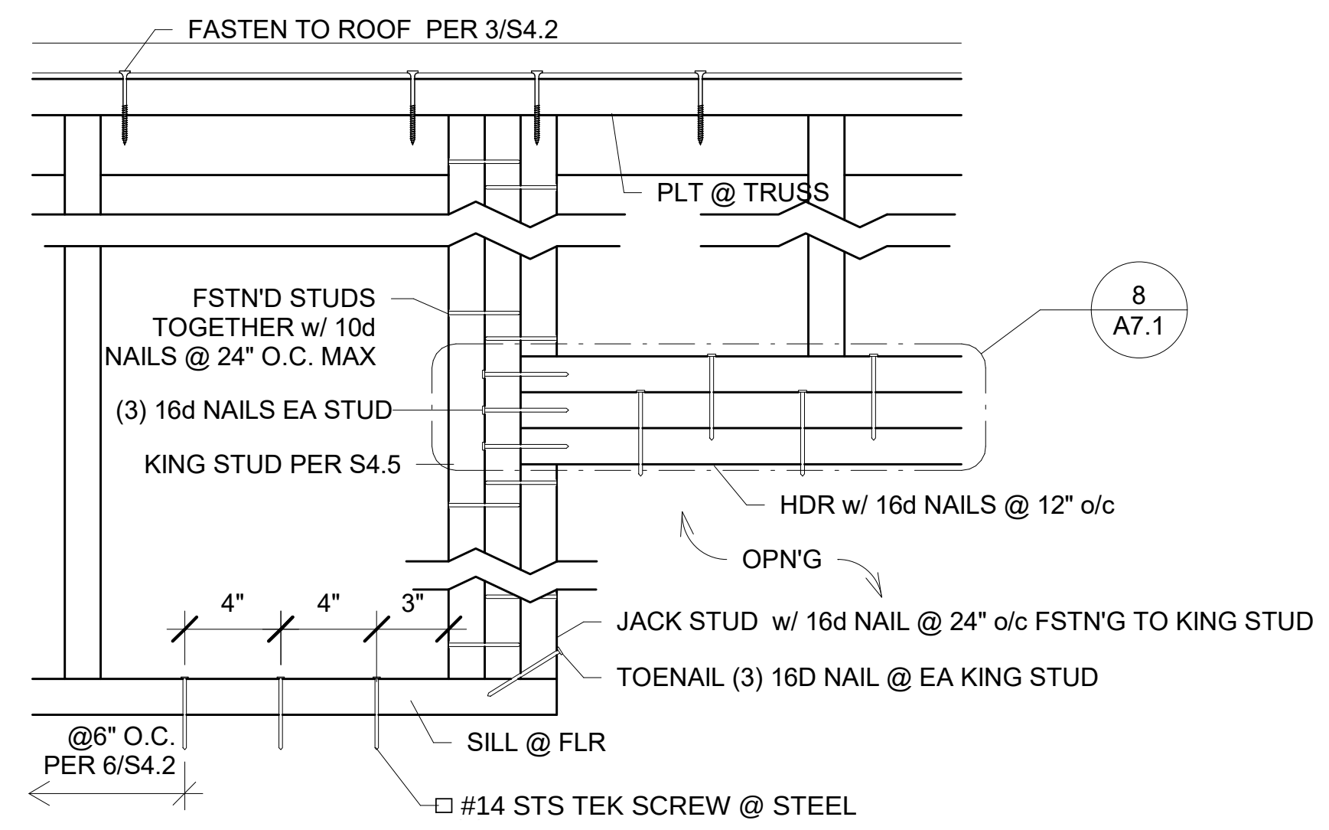
20 *1 1/2" = 1'-0"*
Sections - Interior Partition w/ Brace to Blk'g (WD)


TRUSS BOT CHORD
0.036" SLIP TRACK x CONT. W/ #10 @ 12" O.C.
1/2"
(2)8d NAILS
FINISH FSTN'G CLR OF SLIP TRACK
TOP PLT
WALL FINISH
WALL STUD

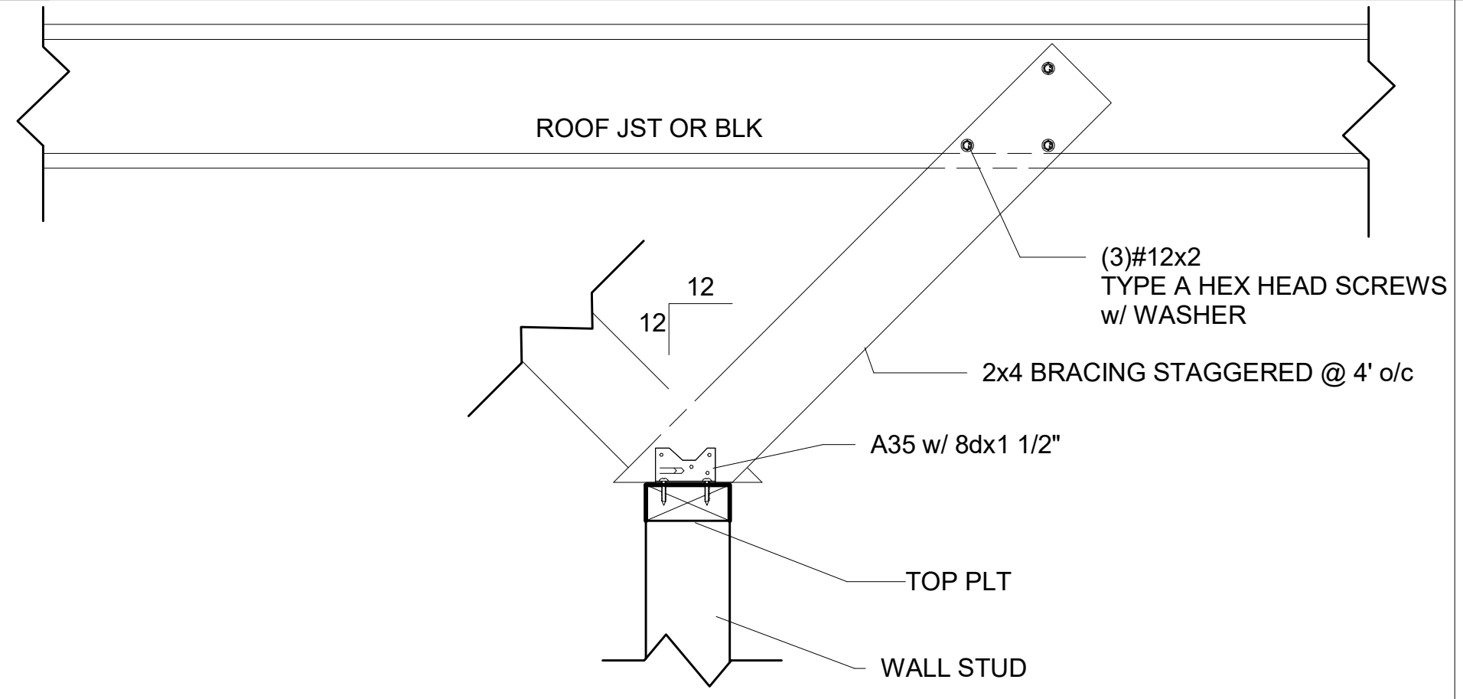
15 *3" = 1'-0"*
Section - Interior Wall Top Plate @ Truss (ML)


2X4 BLOCK w/ (2) #10x2" STS PER PURLIN. (4 TOTAL PER BLOCK), TYP
1/2"
@ EA. BLK OR JOIST LOCATION
3"x18 GA. BENT Z STRAP w/ 2-8b BOX EA END @ 2'-0" O.C. ALTERNATE DIRECTION OF STRAPS. (2 STRAPS = 4'-0")
2X4 CONT. w/ 2-16d PER BLOCK
WALL FINISH, WHERE OCCURS
WALL STUD

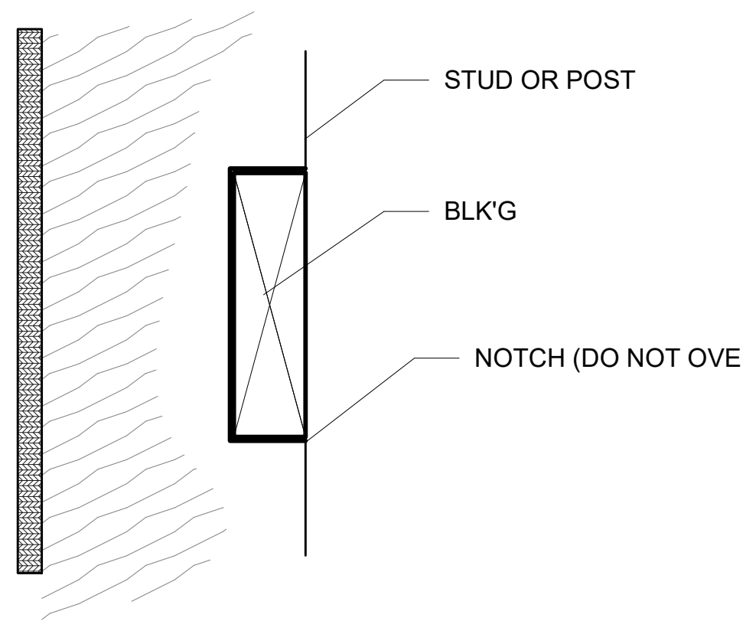
10 *3" = 1'-0"*
Sections - Interior Partition @ Blk'g (WD)


FASTEN TO ROOF PER 3/S4.2
PLT @ TRUSS
FSTN'D STUDS TOGETHER w/ 10d NAILS @ 24" O.C. MAX
(3) 16d NAILS EA STUD
KING STUD PER S4.5
8
A7.1
HDR w/ 16d NAILS @ 12" o/c
OPN'G
4"
4"
3"
JACK STUD w/ 16d NAIL @ 24" o/c FSTN'G TO KING STUD
TOENAIL (3) 16D NAIL @ EA KING STUD
@6" O.C. PER 6/S4.2
SILL @ FLR
□ #14 STS TEK SCREW @ STEEL
□ SHOT PINS PER S0.1 @ STEEL RIM OR CONCRETE FLR

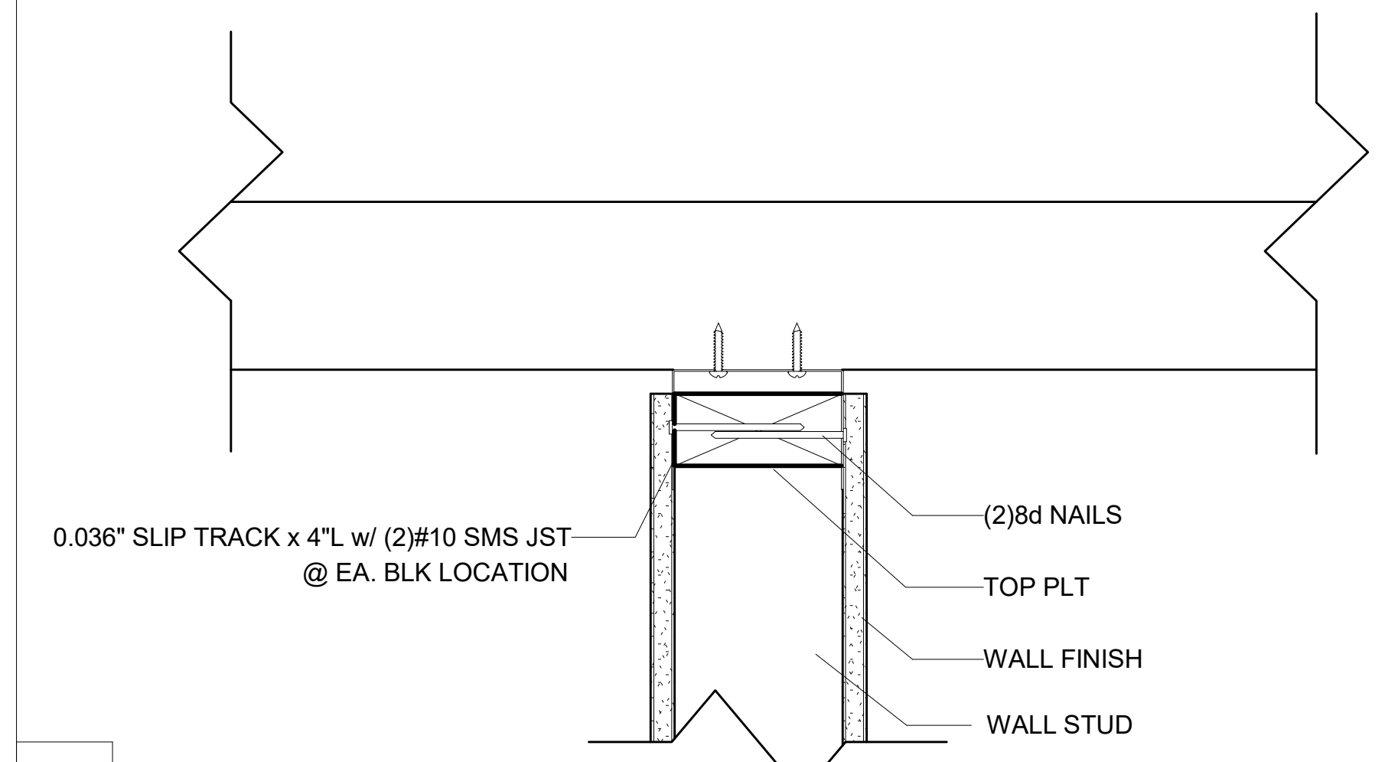
5 *1 1/2" = 1'-0"*
Elevation - Window/Door Hdr and Sill


ROOF JST OR BLK
12
12
(3)#12x2 TYPE A HEX HEAD SCREWS w/ WASHER
2x4 BRACING STAGGERED @ 4' o/c
A35 w/ 8dx1 1/2"
TOP PLT
WALL STUD

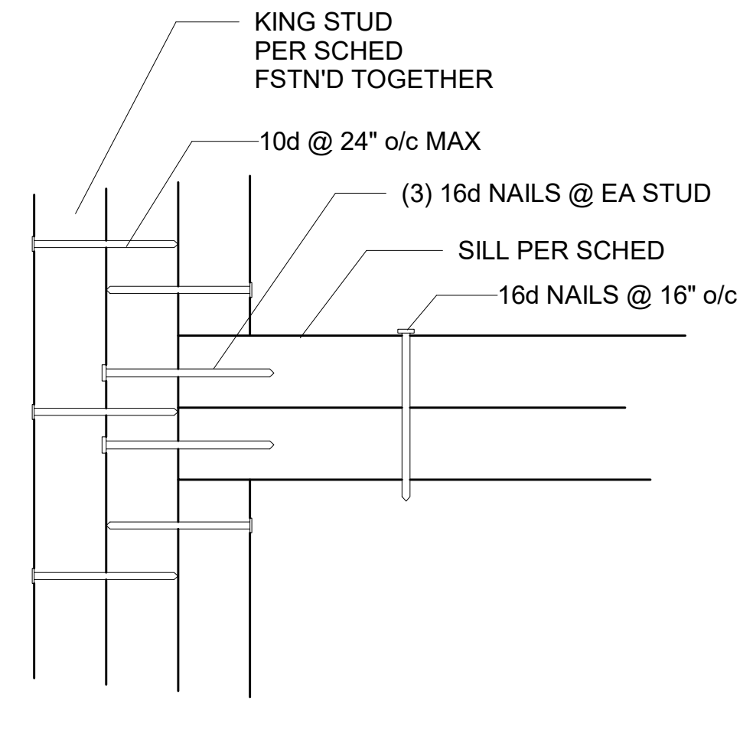
19 *1 1/2" = 1'-0"*
Sections - Interior Partition w/ Brace (WD)



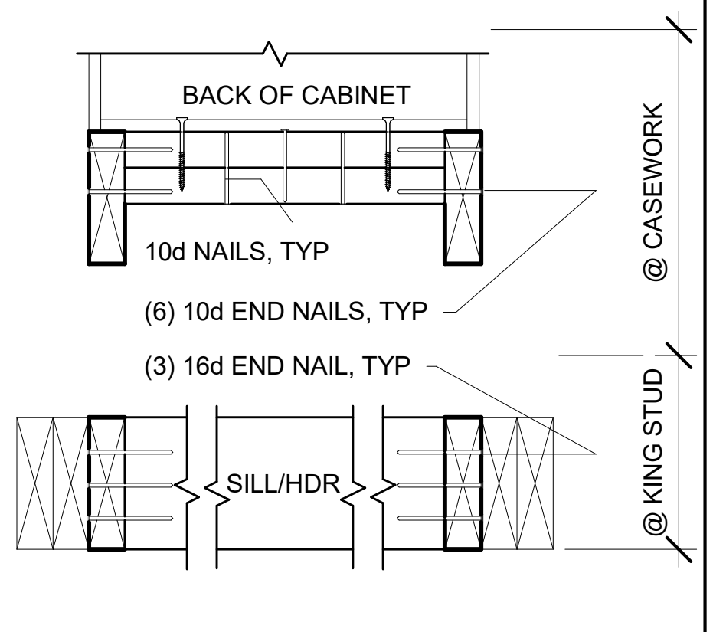
14 *3" = 1'-0"*
Notch Stud @ Blk'g


0.036" SLIP TRACK x 4"L w/ (2)#10 SMS JST @ EA. BLK LOCATION
(2)8d NAILS
TOP PLT
WALL FINISH
WALL STUD

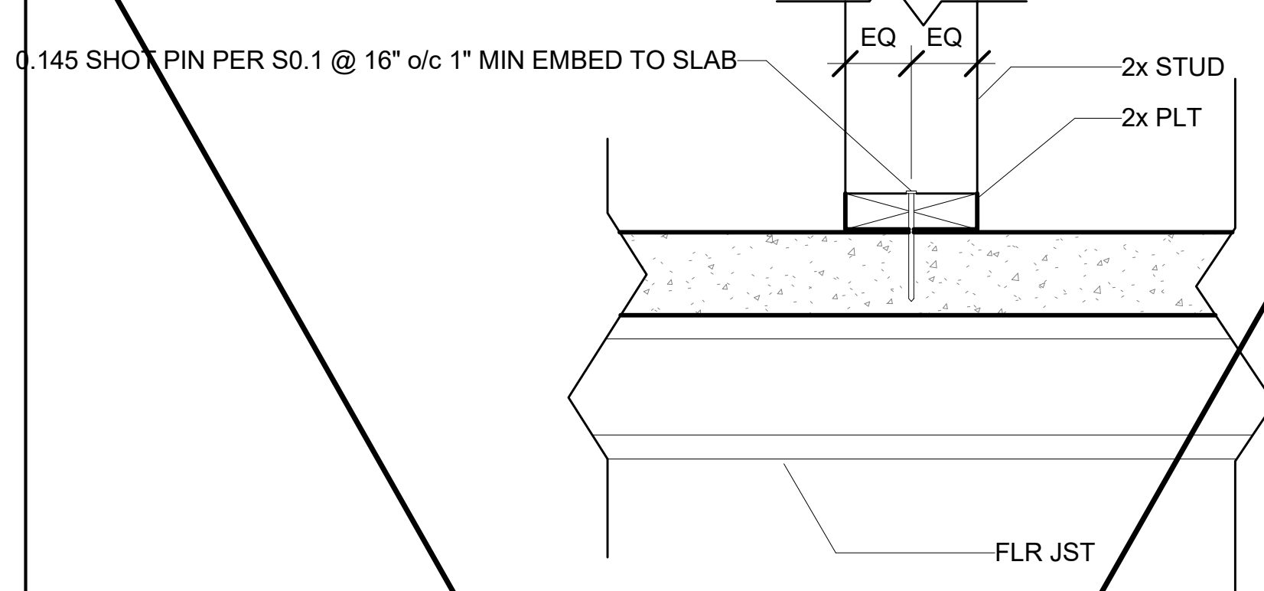
9 *1 1/2" = 1'-0"*
Sections - Interior Partition @ Jst (WD)



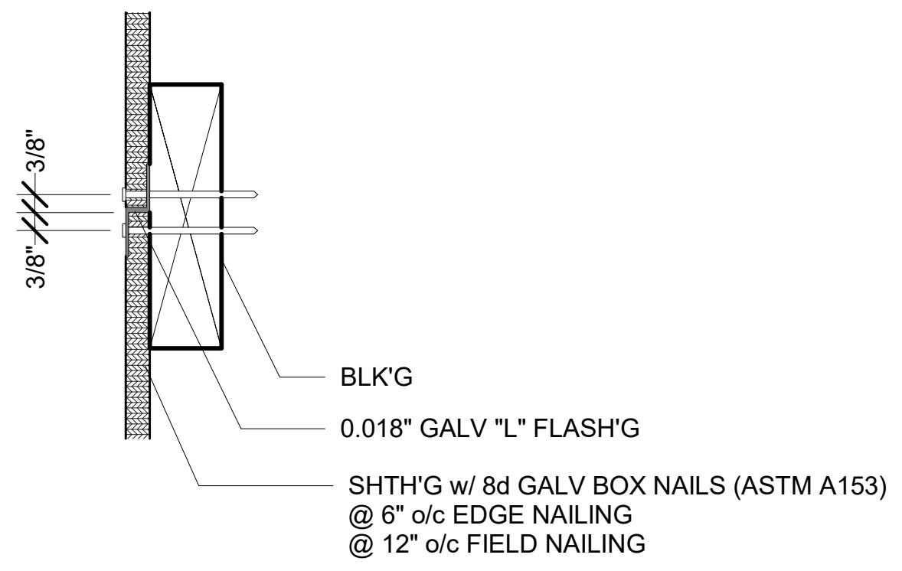
4 *3" = 1'-0"*
Elevation - Ext Wall Sill @ Window



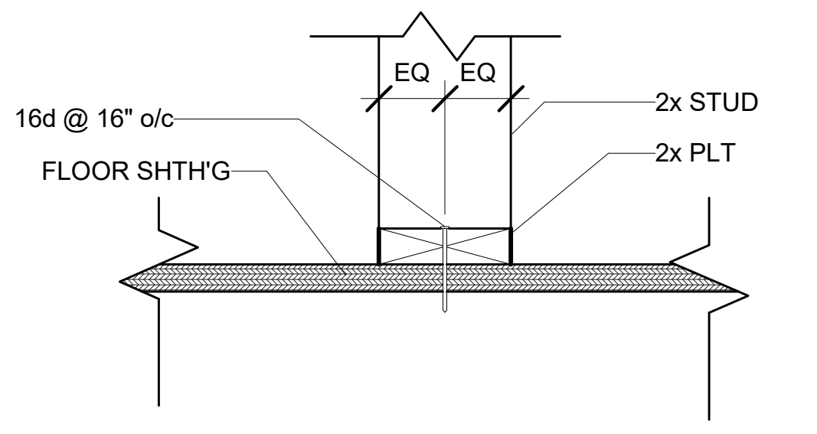
12 *1 1/2" = 1'-0"*
CASEWORK END NAIL PLAN



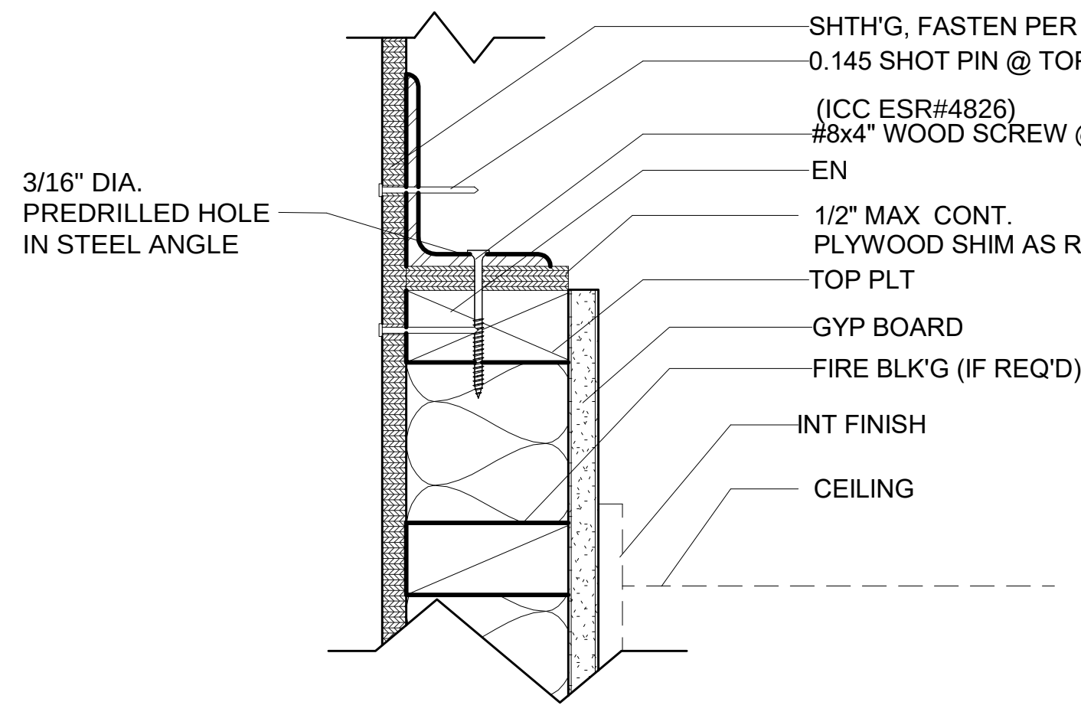
18 *1 1/2" = 1'-0"*
Typ Partition Sill Connection (CONC)


3/8"
3/8"
BLK'G
0.018" GALV "L" FLASH'G
SHTH'G w/ 8d GALV BOX NAILS (ASTM A153) @ 6" o/c EDGE NAILING @ 12" o/c FIELD NAILING

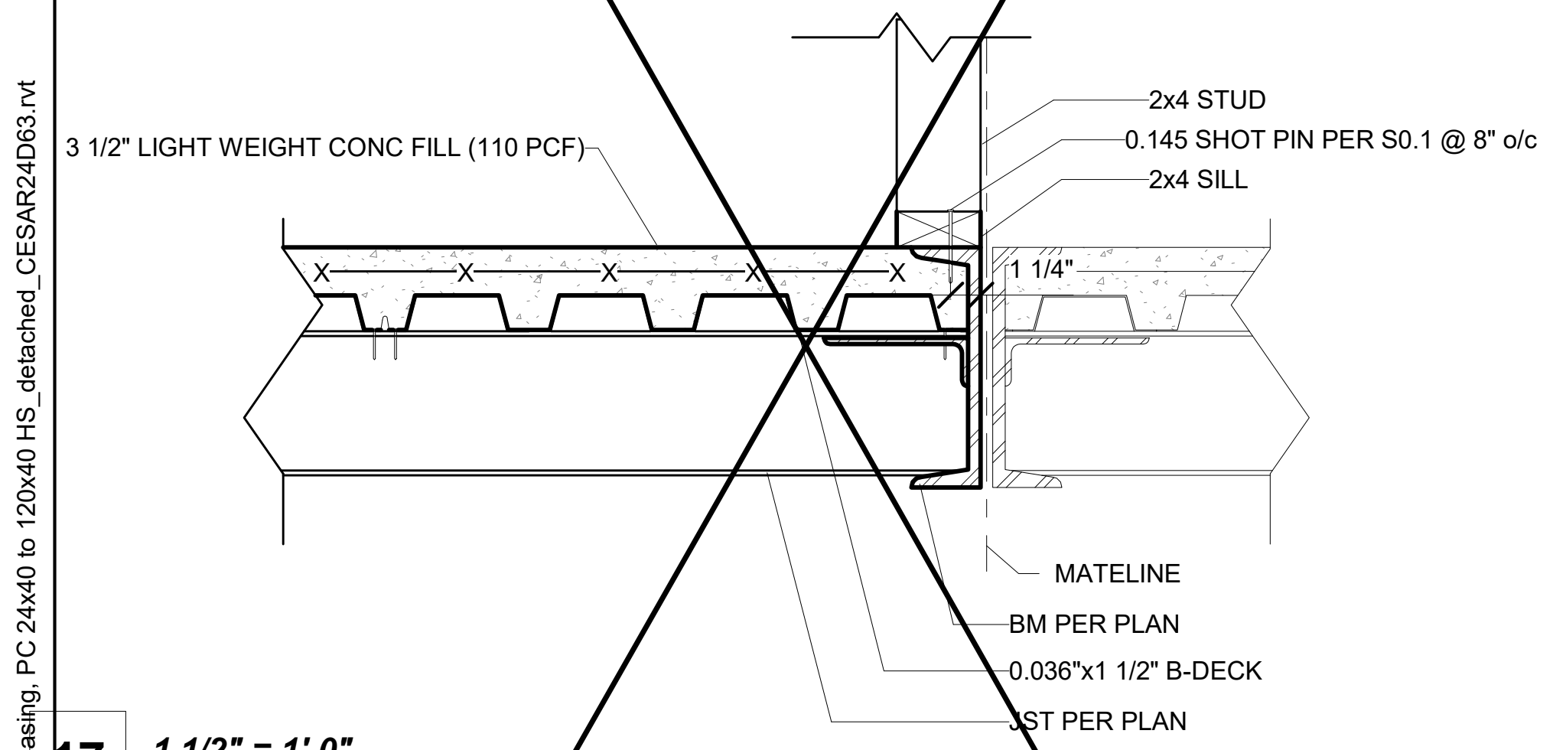
13 *3" = 1'-0"*
Shth'g @ Blk'g



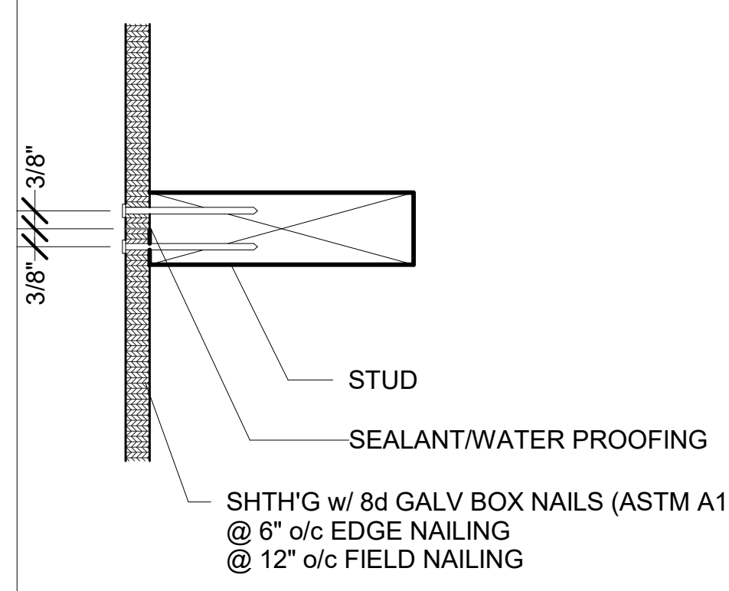
8 *1 1/2" = 1'-0"*
Typ Partition Sill Connection (WD)


3/16" DIA. PREDRILLED HOLE IN STEEL ANGLE
SHTH'G, FASTEN PER S0.1
0.145 SHOT PIN @ TOP/ BOT CHORD (ICC ESR#4826)
#8x4" WOOD SCREW @ 12" o/C
EN
1/2" MAX CONT. PLYWOOD SHIM AS REQ'D
TOP PLT
GYP BOARD
FIRE BLK'G (IF REQ'D)
INT FINISH
CEILING

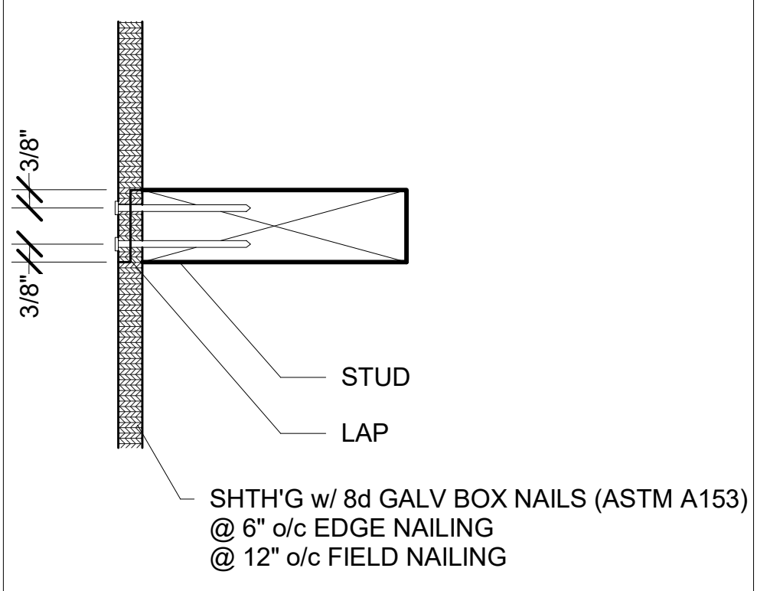
3 *3" = 1'-0"*
Section - Exterior Wall Top Plate @ Truss (WD)



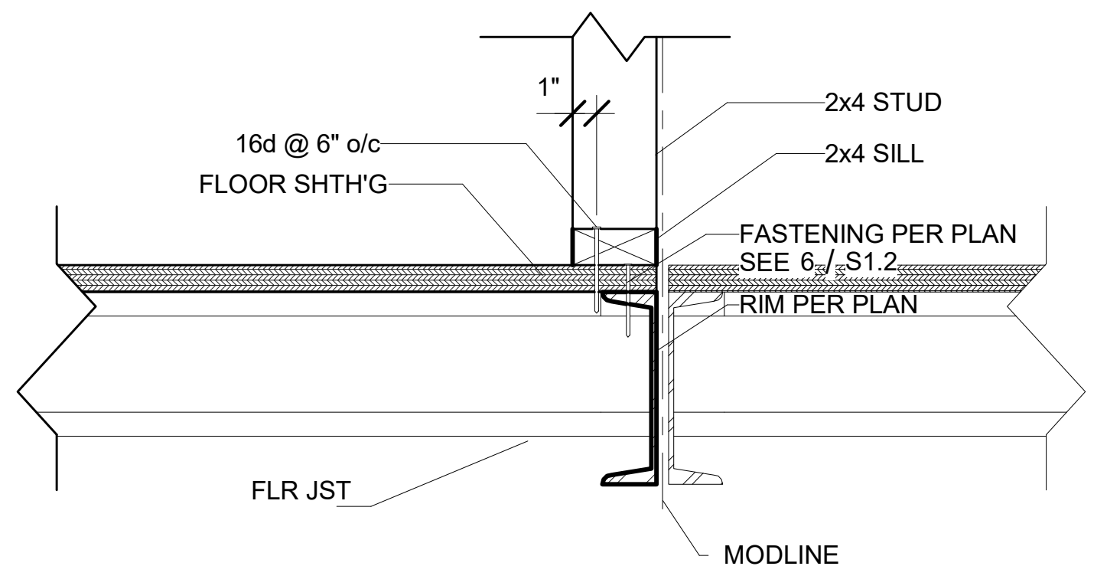
17 *1 1/2" = 1'-0"*
Wall Sill Plt Connection @ Interior Sidewall (CONC)


3/8"
3/8"
STUD
SEALANT/WATER PROOFING
SHTH'G w/ 8d GALV BOX NAILS (ASTM A153) @ 6" o/c EDGE NAILING @ 12" o/c FIELD NAILING

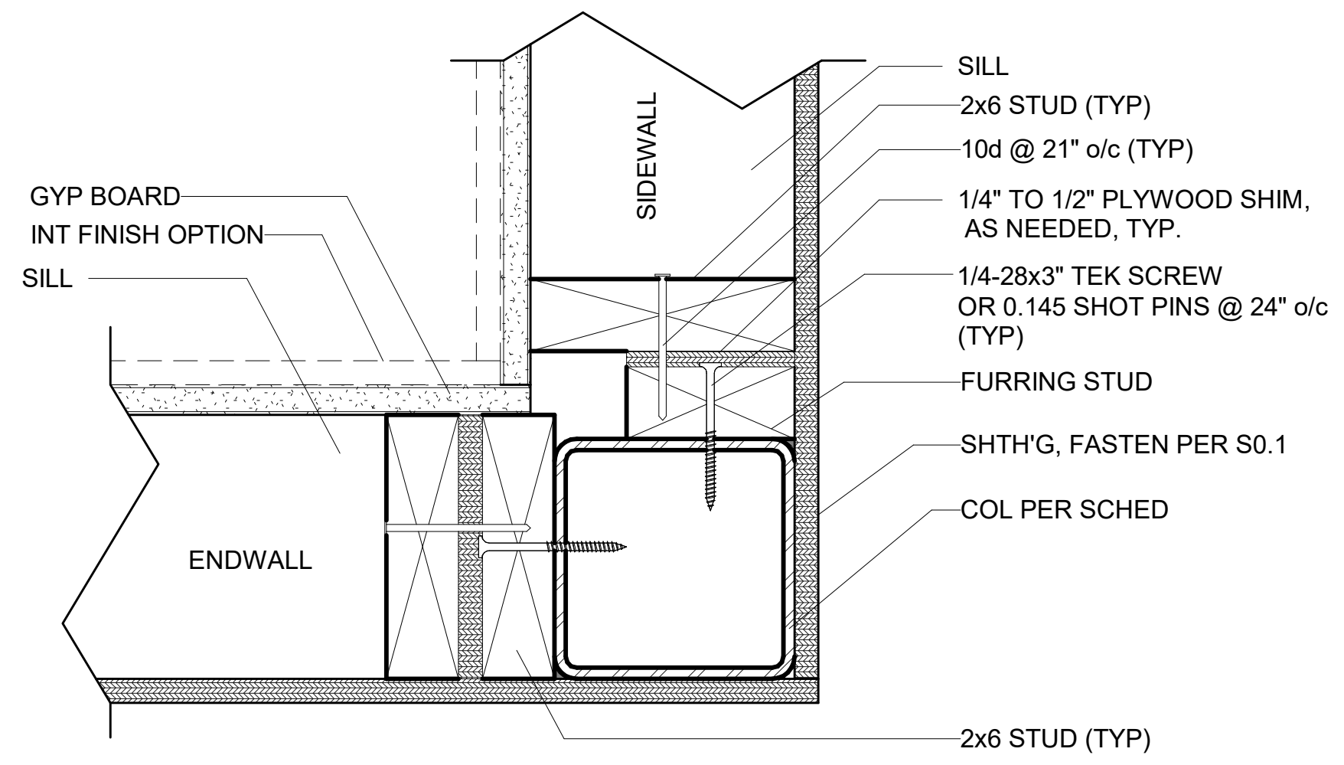
12A *3" = 1'-0"*
Shth'g @ Butt Jnt


3/8"
3/8"
STUD
LAP
SHTH'G w/ 8d GALV BOX NAILS (ASTM A153) @ 6" o/c EDGE NAILING @ 12" o/c FIELD NAILING

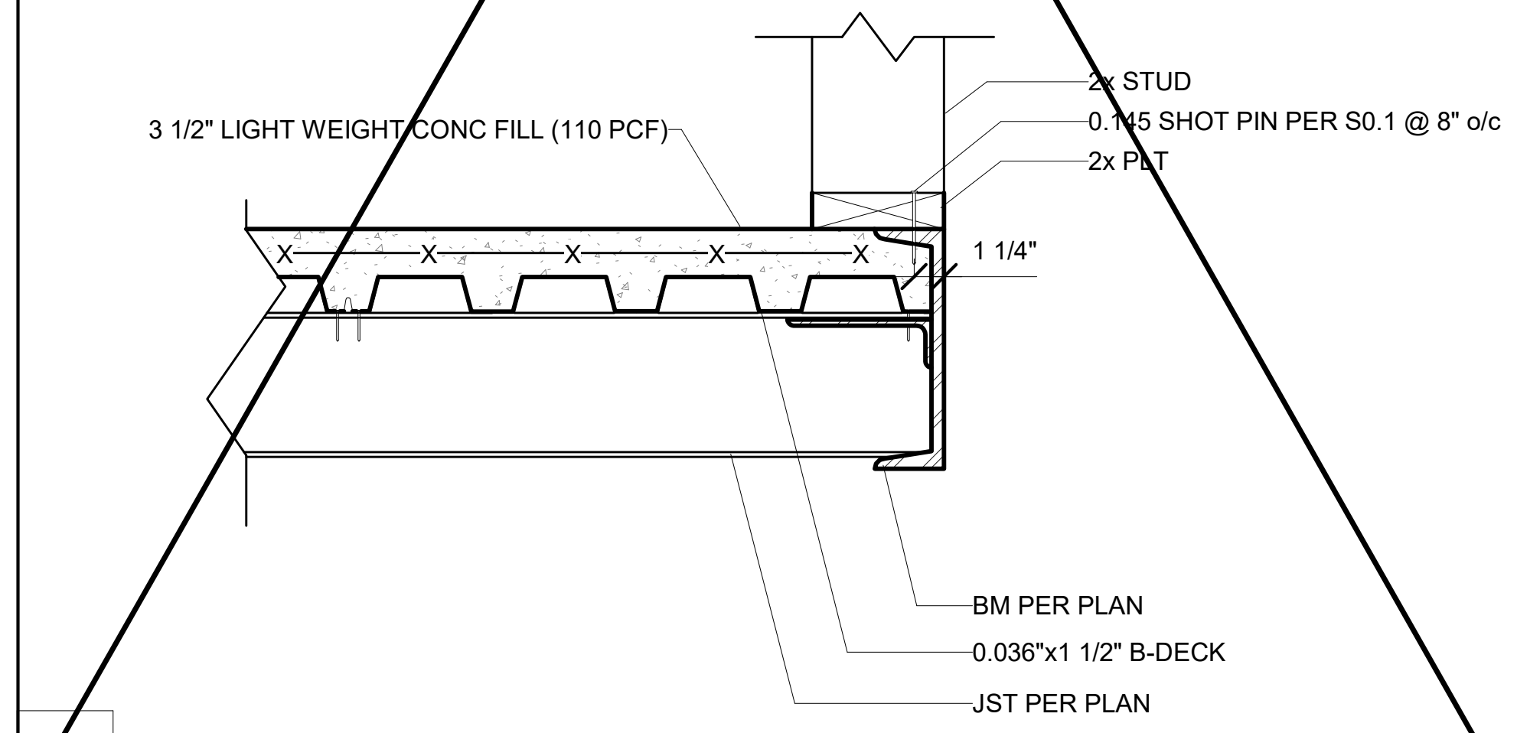
12B *3" = 1'-0"*
Shth'g @ Lap Jnt



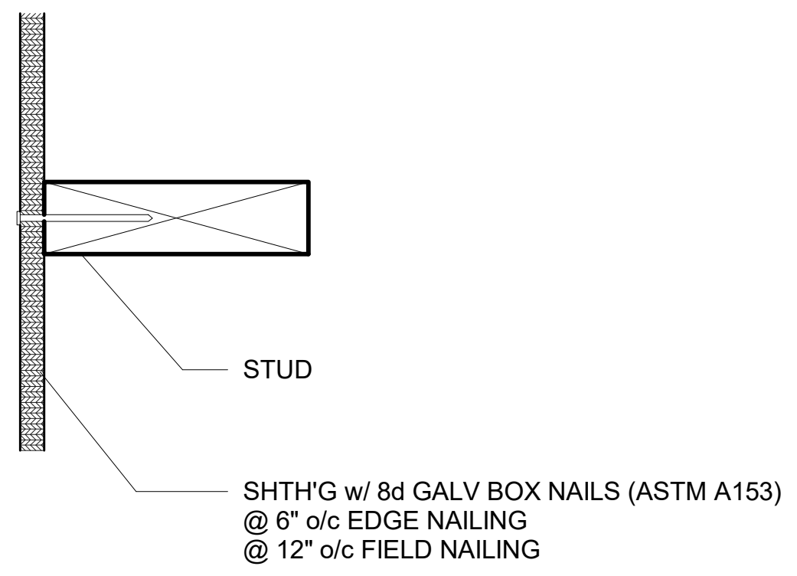
7 *1 1/2" = 1'-0"*
2x4 Wall Sill Connection @ Interior Sidewalls (WD)



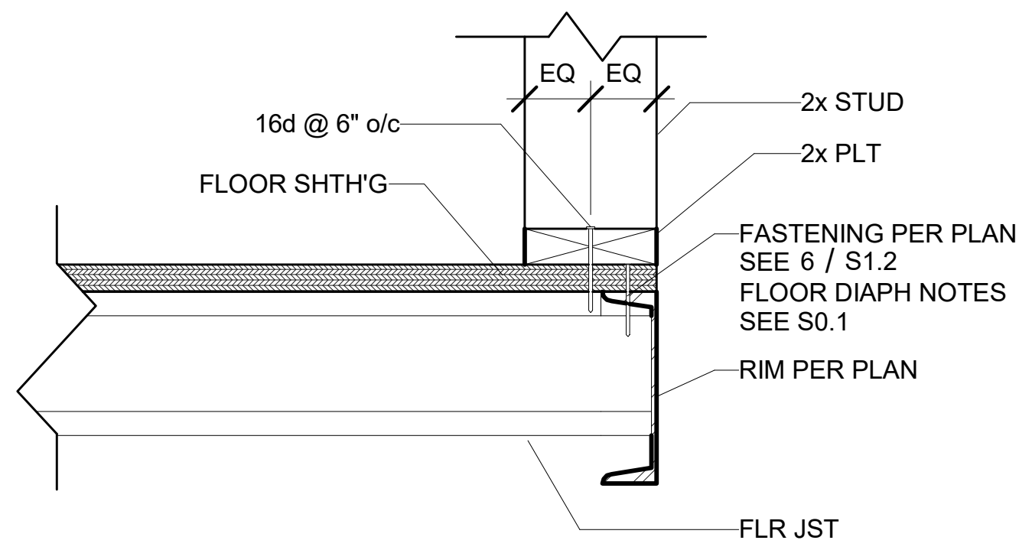
2 *3" = 1'-0"*
2x6 Framing @ Column (WD)


3 1/2" LIGHT WEIGHT CONC FILL (110 PCF)
2x STUD
0.145 SHOT PIN PER S0.1 @ 8" o/c
2x PLT
1 1/4"
BM PER PLAN
0.036"x1 1/2" B-DECK
JST PER PLAN

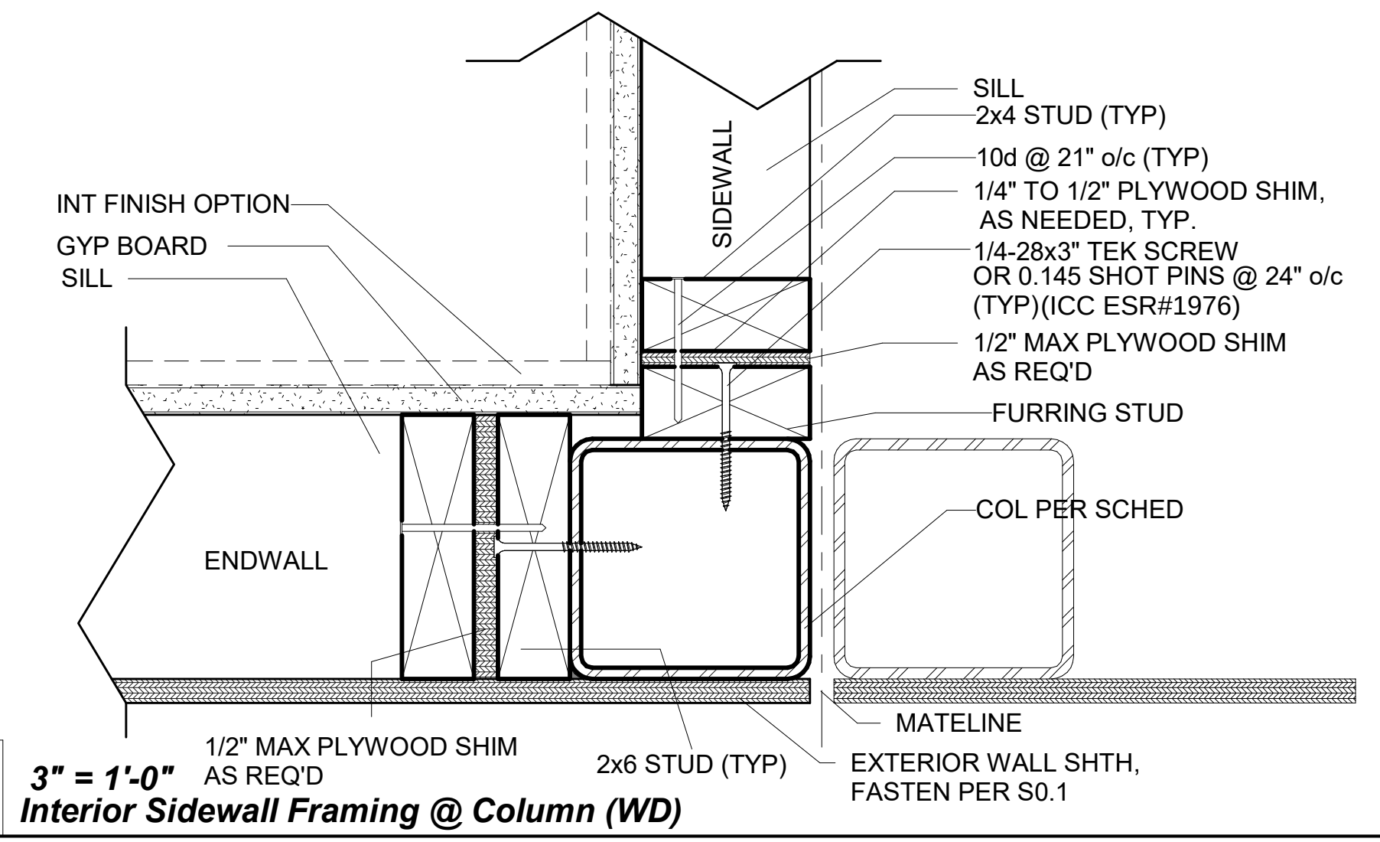
16 *1 1/2" = 1'-0"*
Wall Sill Plt Connection @ Exterior Rim (CONC)


STUD
SHTH'G w/ 8d GALV BOX NAILS (ASTM A153) @ 6" o/c EDGE NAILING @ 12" o/c FIELD NAILING

11 *3" = 1'-0"*
Shth'g @ Stud Conn



6 *1 1/2" = 1'-0"*
Wall Sill Connection @ Exterior Rim (WD)


INT FINISH OPTION
GYP BOARD
SILL
SIDEWALL
ENDWALL
SILL
2x4 STUD (TYP)
10d @ 21" o/c (TYP)
1/4" TO 1/2" PLYWOOD SHIM, AS NEEDED, TYP.
1/4-28x3" TEK SCREW OR 0.145 SHOT PINS @ 24" o/c (TYP)(ICC ESR#1976)
1/2" MAX PLYWOOD SHIM AS REQ'D
FURRING STUD
COL PER SCHED
MATELINE
1/2" MAX PLYWOOD SHIM AS REQ'D
2x6 STUD (TYP)
EXTERIOR WALL SHTH, FASTEN PER S0.1

1 *3" = 1'-0"*
Interior Sidewall Framing @ Column (WD)

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6/8/2021 1:53:00 AM

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
03/31/24
RST#22088
02/16/24

THE PLANS, IDEAS & DESIGNS SHOWN ON THESE DRAWINGS ARE THE PROPERTY OF R&S TAVARES ASSOCIATES, INC. DEVISED SOLELY FOR THIS CONTRACT. THESE PLANS SHALL NOT BE USED, IN WHOLE OR IN PART, FOR ANY PURPOSE FOR WHICH THEY WERE NOT INTENDED WITHOUT THE EXPRESS WRITTEN CONSENT OF R&S TAVARES ASSOCIATES, INC. ©

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
WALL DETAILS
(WOOD FRAMING)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

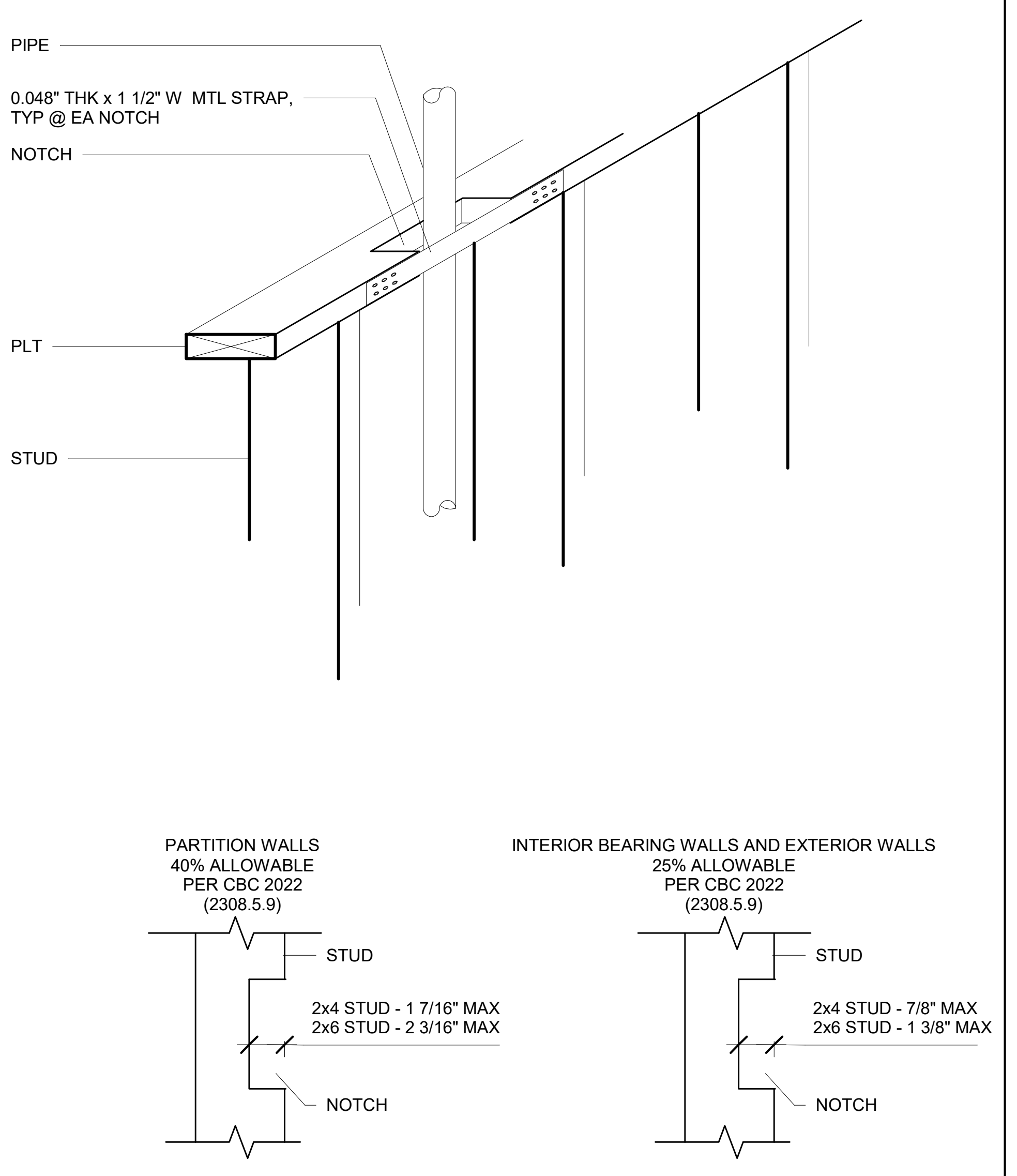
CHECKED BY
JA/RT

DATE

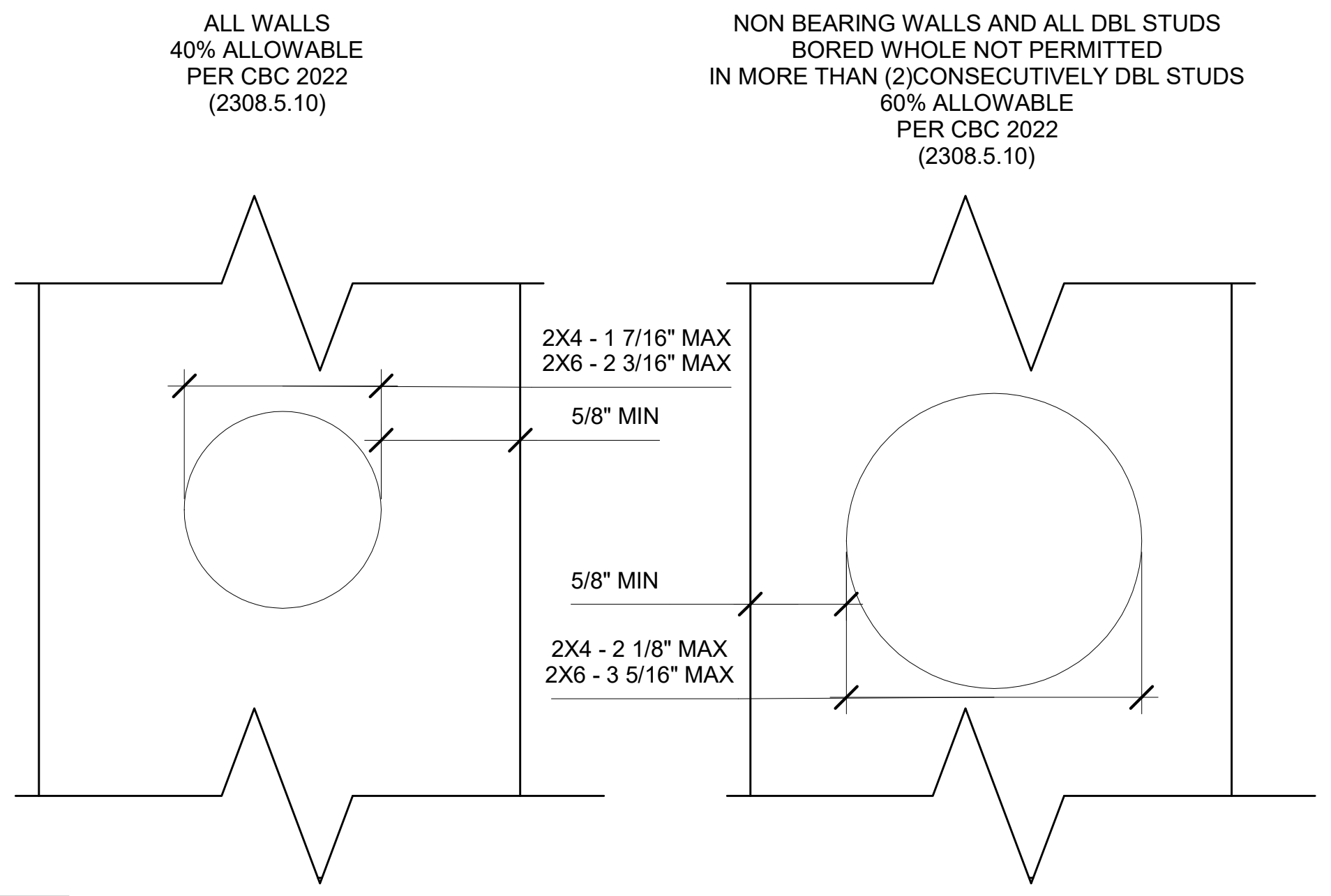
SHEET NO.
S4.2

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



2 *1 1/2" = 1'-0"*
Plt Notch



1 *6" = 1'-0"*
Stud Penetration

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA

RST#22088

02/16/24

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CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
TYP FRAMING

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
S4.4

SHEET OF

6/8/2021 1:53:06 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

2x4 Interior Wall Opening Schedule

COL HEIGHT	OPN'G SIZE	HDR			SILL			FULL HEIGHT KING STUD		
		Lumber	Number	Type	Lumber	Number	Type	Lumber	Number	Type
9FT	3070	HF / SYP	1	#2	-	-	-	HF	2	#2
		DF / SYP	1	#2	-	-	-	DF	2	#2
	4070	HF / SYP	1	#2	-	-	-	HF	2	#2
		DF / SYP	1	#2	-	-	-	DF	2	#2
	6040	HF / SYP	2	#2	DF	2	#2	HF	2	#2
		DF / SYP	2	#2	DF	2	#2	DF	2	#2
	8040	HF / SYP	3	#2	HF	3	#2	HF	2	#2
		DF / SYP	3	#2	DF	3	#2	DF	2	#2
~~10FT~~	~~3070~~	~~HF / SYP~~	~~1~~	~~#2~~	~~-~~	~~-~~	~~-~~	~~HF~~	~~2~~	~~#2~~
		~~DF / SYP~~	~~1~~	~~#2~~	~~-~~	~~-~~	~~-~~	~~DF~~	~~2~~	~~#2~~
	~~4070~~	~~HF / SYP~~	~~1~~	~~#2~~	~~-~~	~~-~~	~~-~~	~~HF~~	~~2~~	~~#2~~
		~~DF / SYP~~	~~1~~	~~#2~~	~~-~~	~~-~~	~~-~~	~~DF~~	~~2~~	~~#2~~
	~~6040~~	~~HF / SYP~~	~~2~~	~~#2~~	~~HF~~	~~2~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF / SYP~~	~~2~~	~~#2~~	~~DF~~	~~2~~	~~#2~~	~~DF~~	~~2~~	~~#2~~
	~~8040~~	~~HF / SYP~~	~~3~~	~~#2~~	~~HF~~	~~3~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF / SYP~~	~~3~~	~~#2~~	~~DF~~	~~3~~	~~#2~~	~~DF~~	~~2~~	~~#2~~

2x6 Exterior Wall Opening Schedule (SHTH'G FINISH)

COL HEIGHT	OPN'G SIZE	HDR			SILL			FULL HEIGHT KING STUD		
		Lumber	Number	Type	Lumber	Number	Type	Lumber	Number	Type
9FT	3070	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	4070	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	6040	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	8040	HF / SYP	1	#2	HF	1	#2	HF	2	#2
		DF / SYP	1	#2	DF	1	#2	DF	2	#2
~~10FT~~	~~3070~~	~~HF / SYP~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~
		~~DF / SYP~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~4070~~	~~HF / SYP~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~
		~~DF / SYP~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~6040~~	~~HF / SYP~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF / SYP~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~2~~	~~#2~~
	~~8040~~	~~HF / SYP~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
			~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~2~~	~~#2~~

~~2x6 Exterior Wall Opening Schedule (PLASTER FINISH)~~

~~COL HEIGHT~~	~~OPN'G SIZE~~	~~HDR~~			~~SILL~~			~~FULL HEIGHT KING STUD~~		
		~~Lumber~~	~~Number~~	~~Type~~	~~Lumber~~	~~Number~~	~~Type~~	~~Lumber~~	~~Number~~	~~Type~~
~~9FT~~	~~3070~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~4070~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~6040~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~8040~~	~~HF~~	~~2~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~2~~	~~#2~~
~~10FT~~	~~3070~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~4070~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~
	~~6040~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~2~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~2~~	~~#2~~
	~~8040~~	~~HF~~	~~2~~	~~#2~~	~~HF~~	~~1~~	~~#2~~	~~HF~~	~~3~~	~~#2~~
		~~DF~~	~~1~~	~~#2~~	~~DF~~	~~1~~	~~#2~~	~~DF~~	~~2~~	~~#2~~

2x4 Interior Wall Framing Schedule

COL HEIGHT	Typical Location				4ft From Building Corner			
	Lumber	Number	Type	Spacing	Lumber	Number	Type	Spacing
9	HF	1	#2	16" O.C.	-	-	-	-
	DF	1	#2	16" O.C.	-	-	-	-
~~10~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~-~~	~~-~~	~~-~~	~~-~~
	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~-~~	~~-~~	~~-~~	~~-~~

2x6 Exterior Wall Framing Schedule (SHTH'G FINISH)

COL HEIGHT	Typical Location				4ft From Building Corner			
	Lumber	Number	Type	Spacing	Lumber	Number	Type	Spacing
9	HF	1	#2	16" O.C.	HF	1	#2	16" O.C.
	DF	1	#2	16" O.C.	DF	1	#2	16" O.C.
~~10~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~
	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~

~~2x6 Exterior Wall Framing Schedule (PLASTER FINISH)~~

~~COL HEIGHT~~	~~Typical Location~~				~~4ft From Building Corner~~			
	~~Lumber~~	~~Number~~	~~Type~~	~~Spacing~~	~~Lumber~~	~~Number~~	~~Type~~	~~Spacing~~
~~9~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~
	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~
~~10~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~HF~~	~~1~~	~~#2~~	~~16" O.C.~~
	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~	~~DF~~	~~1~~	~~#2~~	~~16" O.C.~~

NOTE: SEE DETAIL 1 ON SHEETS A2.1 - A2.6

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24

RST#22088

02/16/24

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40'
EXPANDABLE TO
120' x 40'

SHEET TITLE
FRAMING
SCHEDULES

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

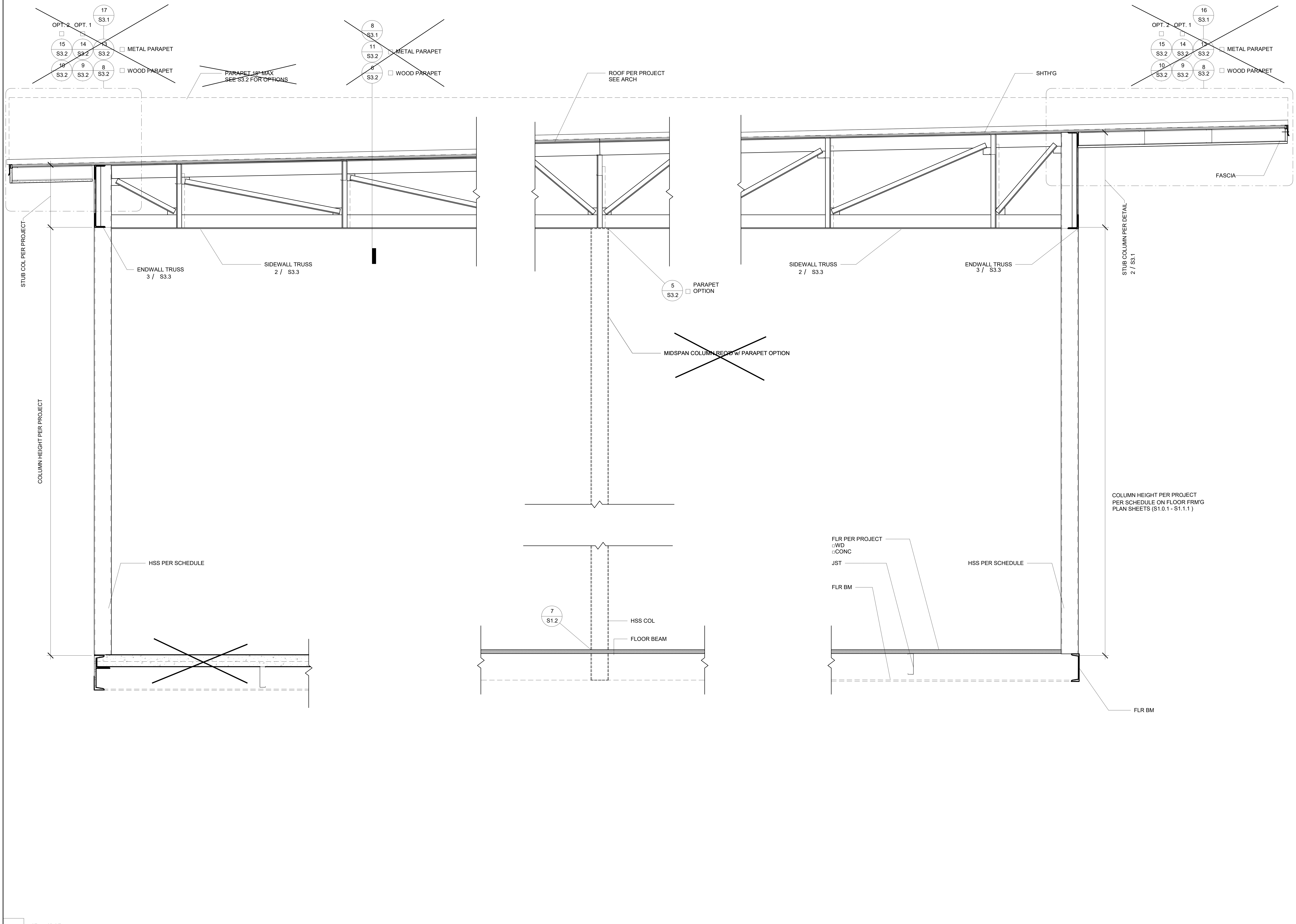
DATE

SHEET NO.
S4.5

SHEET OF

6/8/2021 1:53:06 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



1 1" = 1'-0"
Structural Section (MONO)

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Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
PC 2022 CBC:24' x 40' EXPANDABLE TO 120' x 40'

SHEET TITLE
LONG. SECTION - (MONO)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
S5.0

SHEET OF

TEST MARK (For DSA Use Only) Pr
the Session the Plan Reviewer shal
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"INCORPORATE". If Back-check m
color does not change to green, the
back-check menu. For guidance on
menu, refer to "_DSA EPR Support >
Check Menu"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020

LIST OF APPLICABLE CODES

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022 CALIFORNIA GREEN BUILDING STANDARD CODE (CALGREEEN), PART 11, TITLE 24 CCR
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

*CALIFORNIA ADMINISTRATIVE CODE, PART1, CHAPTER 10, ADMINISTRATIVE REGULATIONS FOR THE CALIFORNIA ENERGY COMMISSION (CEC)

GENERAL NOTES

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATION SHALL BE MADE BY AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT(CCD) BY DSA AS REQUIRED BY SECTION 4-338 PART1, TITLE 24, CCR

A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT(OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. DUTIES OF INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1 TITLE 24, CCR

COMPLETE ACCESS IS A DIVISION OF INTEGRATED STAIR SYSTEMS INC. WITH CORPORATE OFFICES LOCATED IN 1345 RYAN RD, BUCKLEY, WA 98321, (360) 829-4220

DESIGN LOADS

LIVE LOAD:	100 PSF (4.8 kPa)
HANDRAIL IMPACT:	200 LBS (0.9kN)
HANDRAIL DIST. LOAD:	50 PLF (0.7 kN/m)
RISK CATAGORY:	III
SEISMIC:	Ss=2.80g, S1=1.99g, R=1.25, SITE CLASS D
LATERAL RESISTING SYST:	OTHER STRUCTURES SIMILAR TO BUILDINGS
WIND:	110 MPH, 3 SEC GUST EXPOSURE "C", Kzt=1.0
SEIS IMPORTANCE FACTOR:	Ie=1.25, Iw=1.0 Cs=1.493
DESIGN BASE SHEAR, V:	1493 W
SNOW LOAD:	0 PSF (0 kPa)
SOIL ALLOWABLE BEARING:	1,000 PSF (4.8 kPa

MATERIALS

SQUARE STEEL TUBE	ASTM A513 GR. C	Fy= 33 KSI (345 MPa
RAMP OVERHANG POST	ASTM A500 B	Fy= 46 KSI

*ALL STEEL TO BE COATED WITH GALVANIZED RUST INHIBITING COATING

WOOD FOUNDATION SHALL BE OF FOUNDATION GRADE REDWOOD OR PRESERVATIVE PRESSURE TREATED HEM-FIR #2 AND IS ALLOWED TO REST DIRECTLY ON SOIL OR PAVEMENT.

WELDS

WELDING SHALL BE IN ACCORDANCE WITH AWS D.1.1-10 USING E70XX ELECTRODES FOR STEEL
AND AWS D1.2 AND A5.10 FOR ALUMINUM, USING ALMIGWELD ER4043

BOLTS, SCREWS AND NAILS

STEEL TO STEEL CONNECTIONS: ASTM A307 CARBON STEEL BOLTS SHALL BE GRADE 5 ZINC PLATED, HOT DIPPED GALVANIZED TO ASTM A153 OR ELECTROGALVANIZED TO ASTM B63.3. FASTENER SHALL BE LUBRICATED TO ELIMINATE GALLING. ALL STEEL MEMBERS IN CONTACT WITH ALUMINIUM SHALL BE ZINC COATED TO ELIMINATE GALVANIC REACTION.

STEEL TO STEEL & WOOD CONNECTIONS: ANSI/ASME STEEL LAG SCREWS, STEEL STANDARD WOOD SCREWS, WOOD TO WOOD CONNECTION: ASTM STANDARD COMMOM STEEL NAIL.

ITW RED HEAD CONCRETE WEDGE ANCHORS SHALL BE INSTALLED PER RECOMMENDATION SHOWN IN ESR-2427

HANDRAIL NOTES:

1) MANEUVERING CLEARANCE ON EXTERIOR PULL SIDE OF DOOR SHALL BE 42" TYPICAL (610MM) MINIMUM WITH 60" (1524MM) MINIMUM LANDING IN FRONT OF DOOR.

2) HANDRAILS SHALL BE CONTINUOUS ALONG BOTH SIDES. HANDRAILS SHALL BE PARALLEL WITH THE SURFACE AND PROJECT 12" (301MM) ON BEYOND TOP OF RISER AND 12" (301MM) PLUS 1 TREAD AT BOTTOM RISER. AT RAMPS WHERE HANDRAIL ARE NOT CONTINUOUS BETWEEN RUNS THE HANDRAIL SHALL EXTEND HORIZONTALLY ABOVE THE LANDING 12" (301MM) MINIMUM BEYOND THE BEGINNING AND ENDING OF RAMPS

3) TOP OF HANDRAILS SHALL BE MOUNTED BETWEEN 34" (864MM) AND 38" (965MM) ABOVE THE WALKING SURFACE, ONE CONSISTENT HEIGHT, BEIGINNING TO END.

4) CLEARANCE BETWEEN HANDRAIL AND WALL SHALL BE A MINIMUM OF 1-1/2" (38MM).

5) GUARDS ARE TO BE DESIGNED FOR A CONCENTRATED LOAD OF 200 LBF (0.9 kN) APPLIED @ ANY POINT AND ANY DIRECTION ALONG THE RAIL OR A UNIFORM LOAD OF 50 PLF (0.7 kN/m) APPLIED HORIZONTALLY @ HANDRAIL HEIGHT.

7) HANDRAILS SHALL HAVE A CIRCULAR CROSS SECTION WITH AN OUTSIDE DIAMETER OF 1-1/4" (31.75MM) MINIMUM AND NOT GREATER THAN 2" (51MM) MAXIMUM. **11B-505.7.2** NON-CIRCULAR CROSS SECTIONS. HANDRAIL GRIPPING SURFACES WITH A NON-CIRCULAR CROSS SECTION SHALL HAVE A PERIMETER DIMENSION OF 4 INCHES (102 MM) MINIMUM AND 6¼ INCHES (159 MM) MAXIMUM, AND A CROSS-SECTION DIMENSION OF 2 ¼ INCHES (57 MM) MAXIMUM.

8) GRIPPING SURFACE SHALL BE CONTINUOUS ALONG THIER LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES.

9) HANDRAILS SHALL NOT ROTATE IN THEIR FITTINGS.

10) ENDS OF HANDRAILS SHALL RETURN SMOOTHLY TO FLOOR, WALL OR POST.

RAMP NOTES

1) RAMPS SHALL CONFORM TO CBC 2022 TITLE 24 PART 2, CHAPTER 11B, 11B-405

2) RAMP SHALL HAVE A RUNNING SLOPE NOT STEEPER THAN 1:12 (8.33% SLOPE) FOR A MAXIMUM RISE OF 30" (762MM)

3) THE MAXIMUM VERTICAL RISE OF RAMP RUN SHALL BE 30" (762MM) MAXIMUM

4) RAMPS SHALL HAVE LANDING AT BOTTOM AND TOP OF EACH RAMP RUN

5) THE SLOPE ON LANDINGS SHALL NOT BE STEEPER THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2% SLOPE) IN ANY DIRECTION

6) LANDING SHALL HAVE A WIDTH AT LEAST AS WIDE AS THE WIDEST RAMP RUN LEADING TO THE LANDING AND A MINIMUM LENGTH OF 60" IN THE DIRECTION OF TRAVEL @ TOP LANDING - 72" MIN @ BOT LANDING

7) CHANGES IN DIRECTION OF TRAVEL SHALL HAVE A LANDING 60" WIDE BY 72" LONG (1524MM x 1829MM) MINIMUM, WITH WITH THE LENGTH BEING IN THE DIRCTION OF DOWNWARD TRAVEL AND CHANGES IN DIRECTION

8) MANEUVERING CLEARANCE ON LANDING ADJACENT TO DOORWAYS SHALL BE NO LESS THAN 42" WITH DOOR IN ANY POSITION AND SHALL NOT BE REDUCED BY MORE THAN 3" WHEN DOOR IS FULLY OPENED

9) WALKING SURFACE SHALL BE ROUGHED OR SHALL BE OF SLIP RESISTANT DIAMOND PLATE ALUMINUM AND ALL LANDINGS TO BE DESIGNED TO NOT RETAIN STANDING WATER - 2.083 MAX SLOPE ANY DIRECTION

ADDITIONAL NOTES

CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR

SCOPE OF WORK

CONSTRUCTION OF RAMP AND STAIRS BUILDINGS (RELOCATABLE)

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number: **School Name:** **School District:**

DSA File Number: **Increment Number:** **Date Created:**

2022 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE (Geotechnical Engineer)** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR (Laboratory of Record)** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI (Project Inspector) –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI (Special Inspection)** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

	C5. POST-INSTALLED ANCHORS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect installation of post-installed anchors	**See Notes**	**SI***	**1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8** (See Appendix (end of this form) for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.
☐	**b.** Test post-installed anchors.	**Test**	**LOR**	**1910A.5.** (See Appendix (end of this form) for exemptions.)
	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1; AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5**; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.
	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4**; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6**; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291

2. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

THE EXAMPLE OF FORM DSA-103s SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSE ONLY. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE FORM DSA-103s ARE TO BE CROSSED OUT ON THIS DRAWING.

1 *1 1/2" = 1'-0"*
Notes

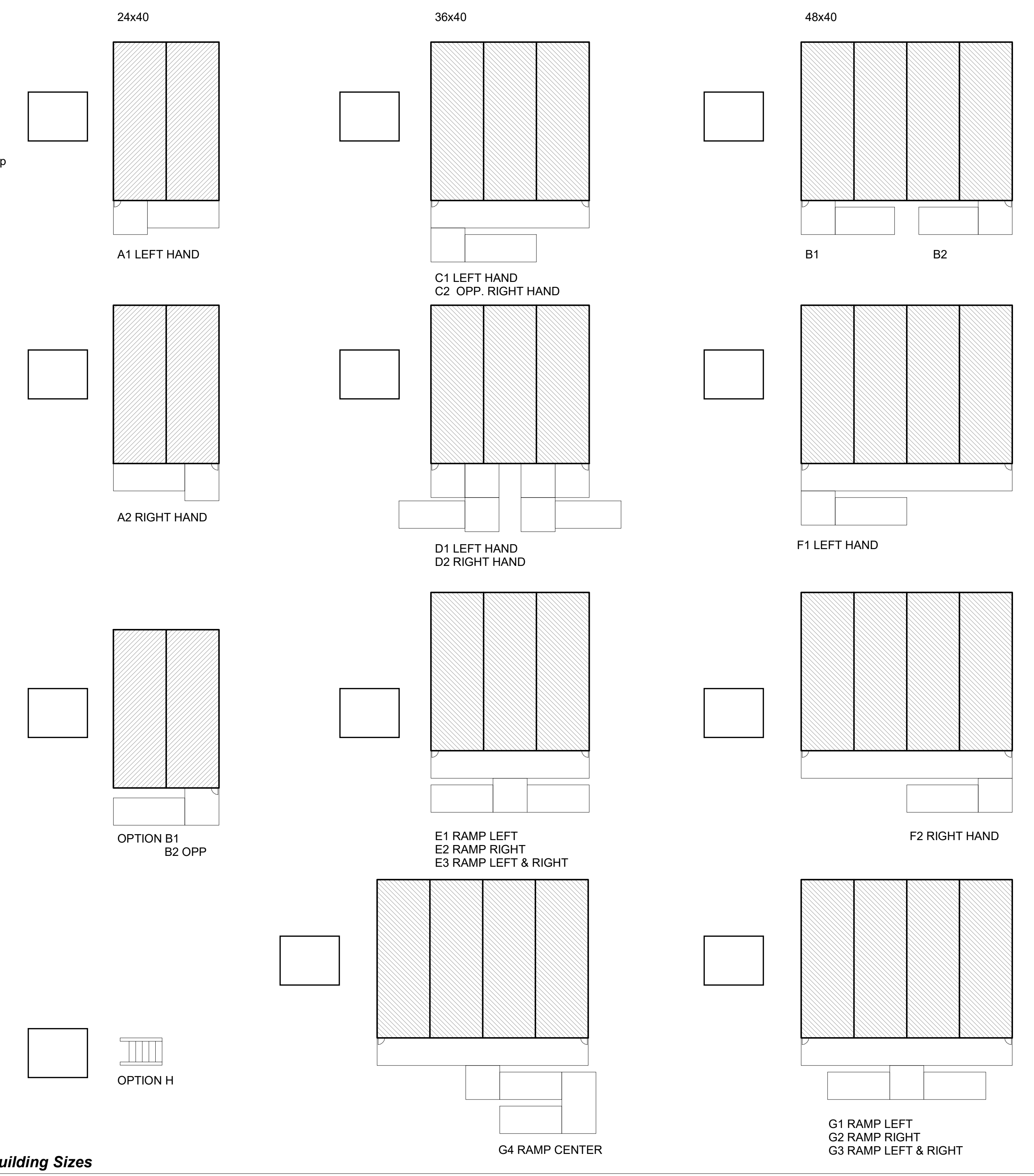
Ramp Option Schedule:

option1 : ramp & landing @ building
(plan view 1/SR1)

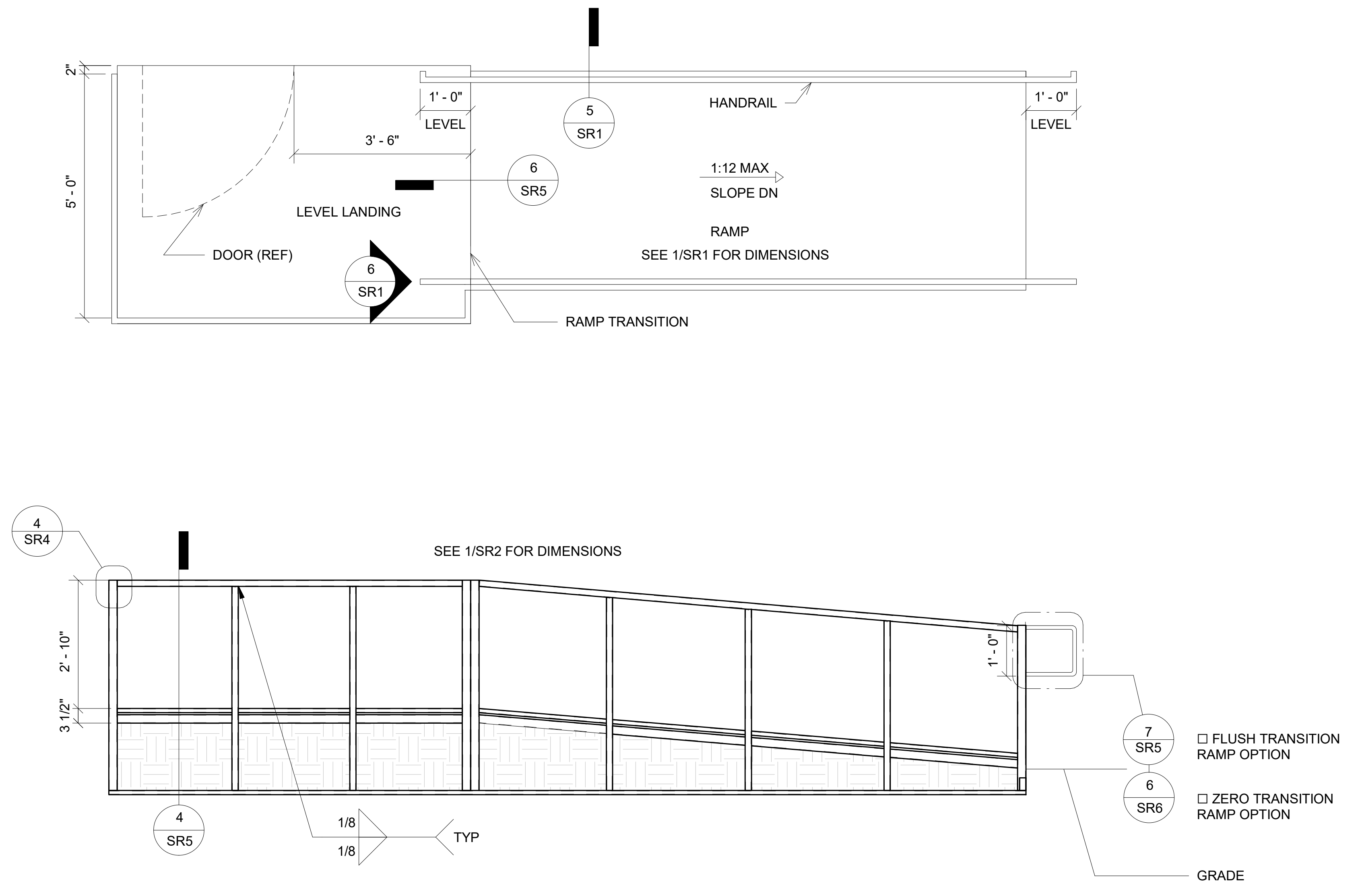
option 2 : ramp and landing with offset ramp
(plan view 2/SR1)

option 3: ramp and platform landing
(plan view 3/SR1)

option 4 : ramp and landing with switch back ramp
(plan view 4/SR1)



2 ***Ramps Options w/ Different Building Sizes***



3 *1/2" = 1'-0"*
Standard Ramp

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

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ORIGINAL PC STATE AGENCY APPROVAL

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~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

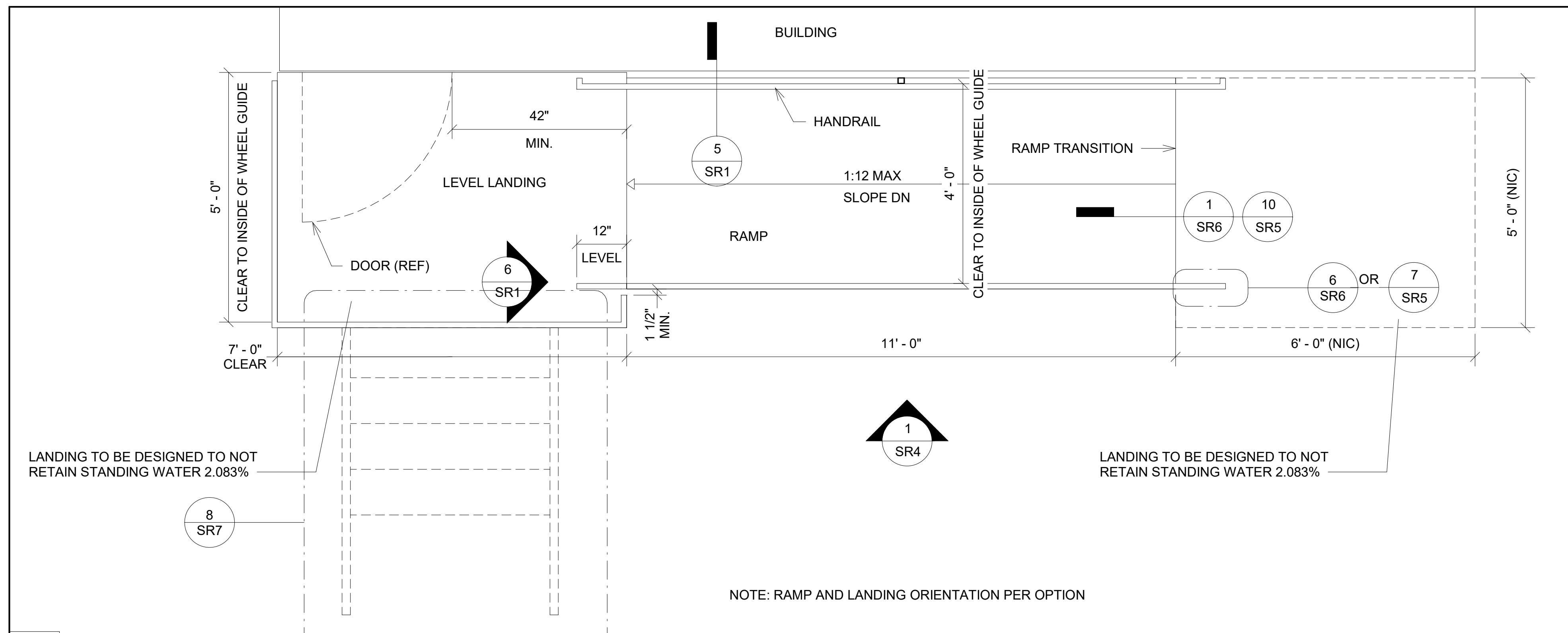
PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Module Plan and Notes
(COVER SHEET)

PROJECT NUMBER: 22079
DRAWN BY: SM
CHECKED BY: rMc
DATE: 6/15/2021
SHEET NO.: SR0
SHEET OF

6/15/2021 7:29:24 PM M:\2020\22116 - Class Leasing, 24x40 - 120x40 2022 CBC Updates\REVIT\RST#22116 - Aries, Ramps and Stairs PC.rvt

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

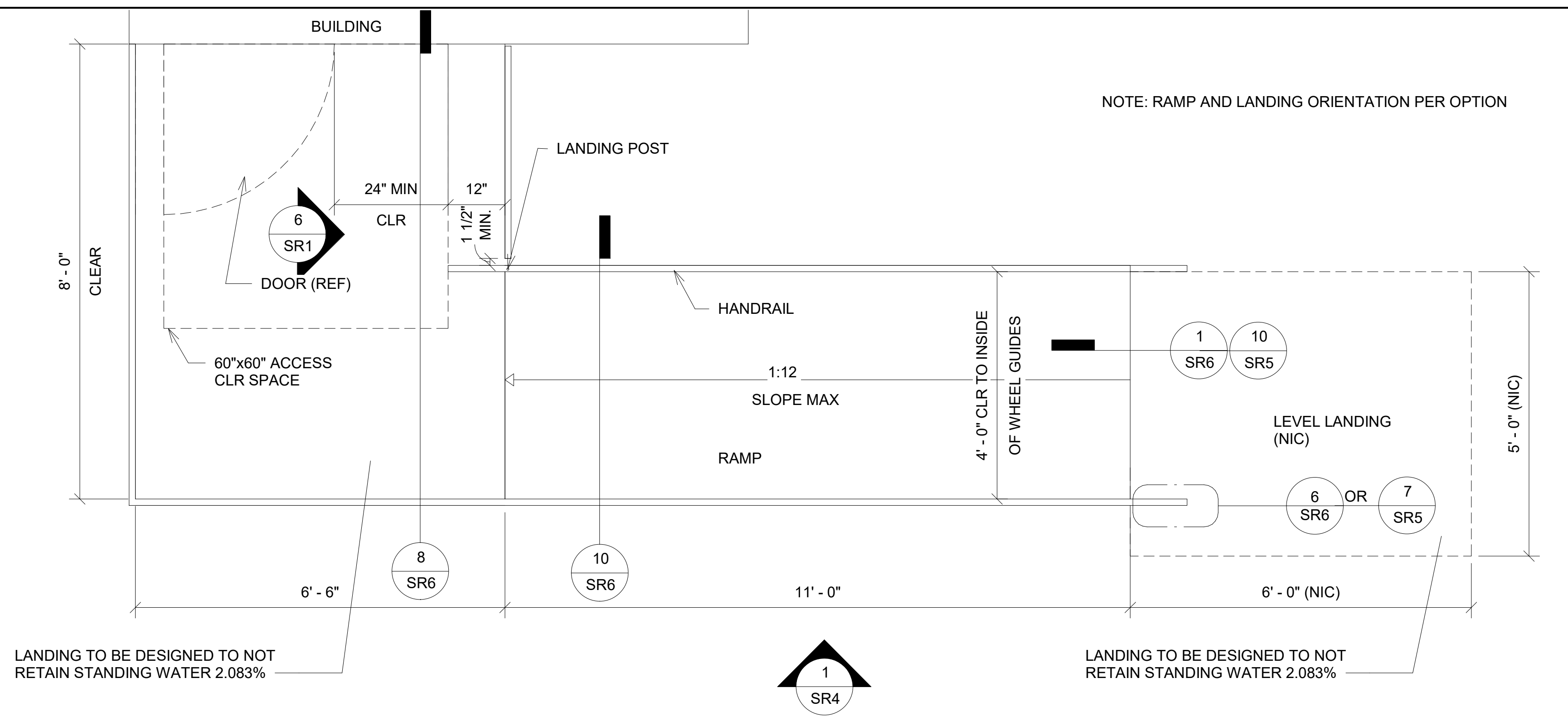


LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 2.083%

LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 2.083%

NOTE: RAMP AND LANDING ORIENTATION PER OPTION

1 *1/2" = 1'-0"*
Ramp & Landing @ Building



NOTE: RAMP AND LANDING ORIENTATION PER OPTION

LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 2.083%

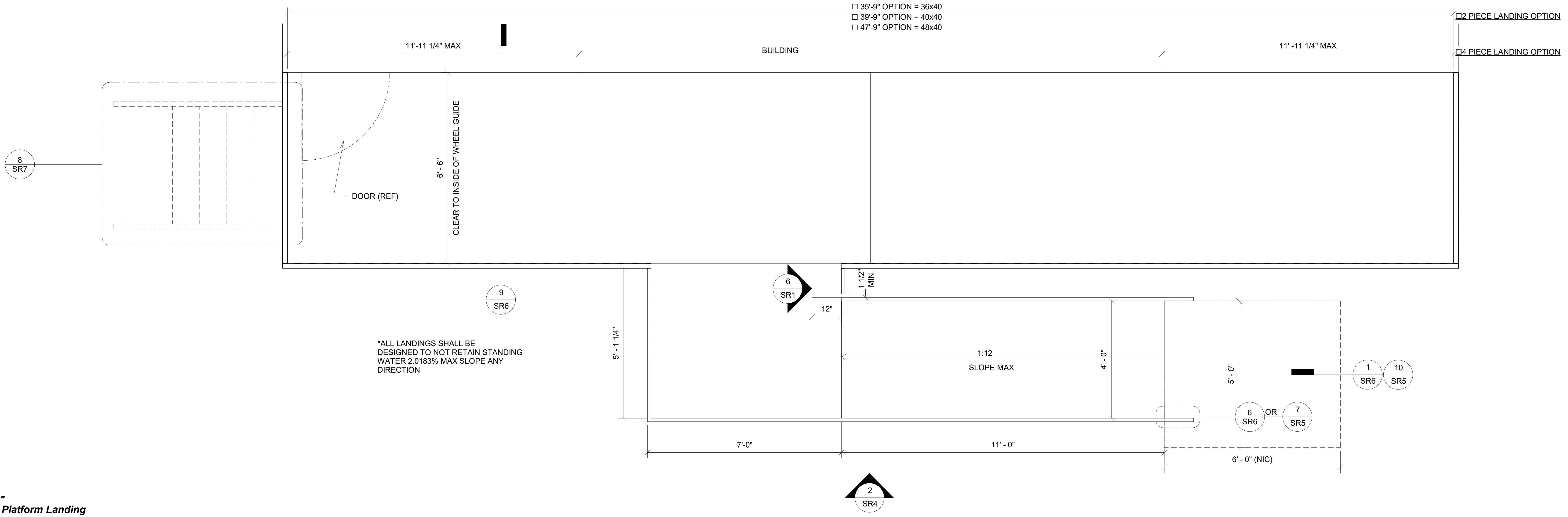
LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 2.083%

2 *1/2" = 1'-0"*
Ramp & Landing w/ Offset Ramp

☐ 35'-9" OPTION = 36x40
☐ 39'-9" OPTION = 40x40
☐ 47'-9" OPTION = 48x40

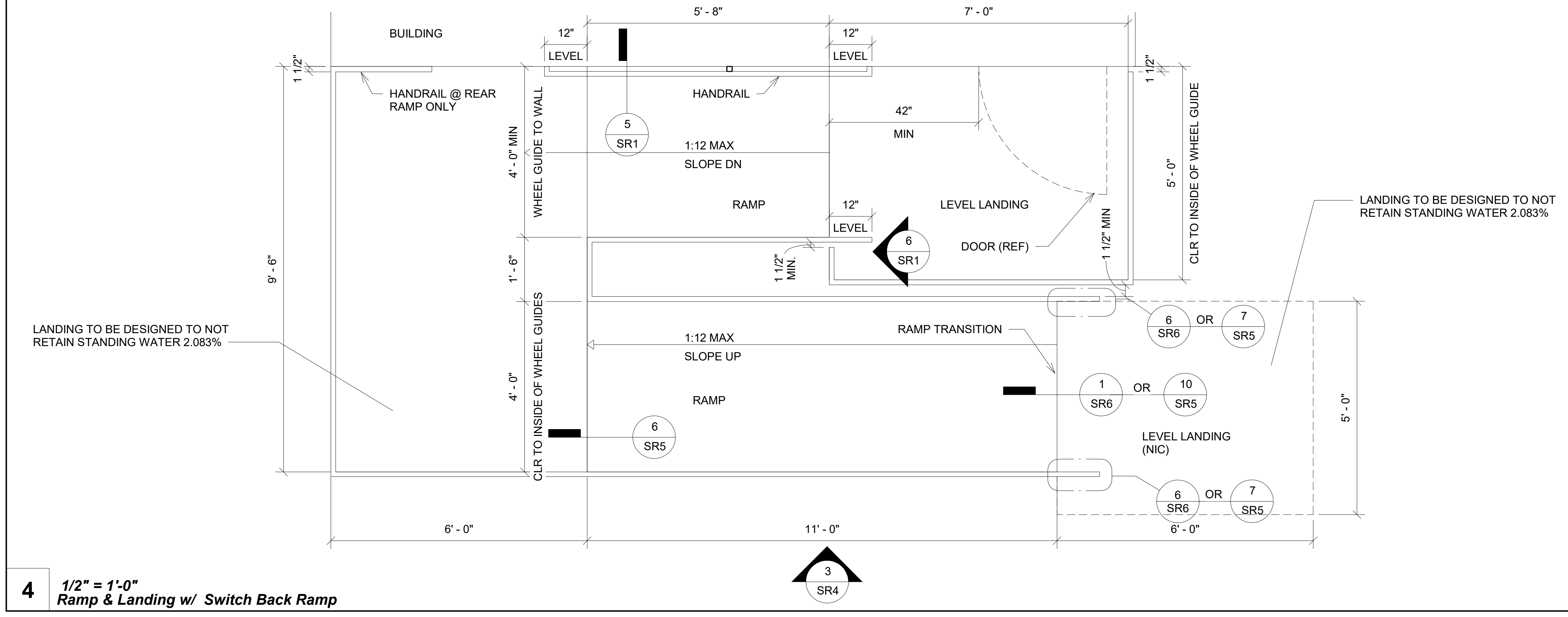
☐2 PIECE LANDING OPTION

☐4 PIECE LANDING OPTION



*ALL LANDINGS SHALL BE DESIGNED TO NOT RETAIN STANDING WATER 2.0183% MAX SLOPE ANY DIRECTION

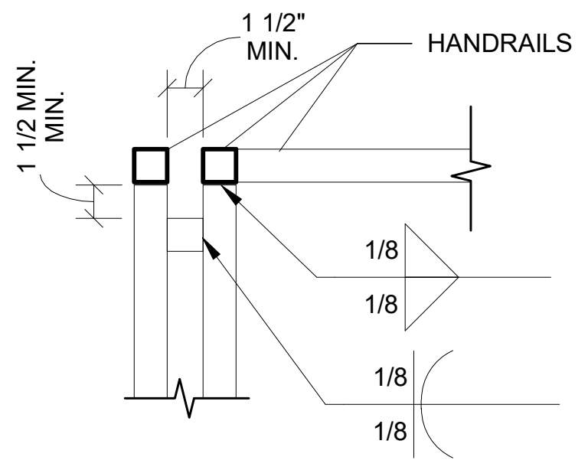
3 *1/2" = 1'-0"*
Ramp and Platform Landing



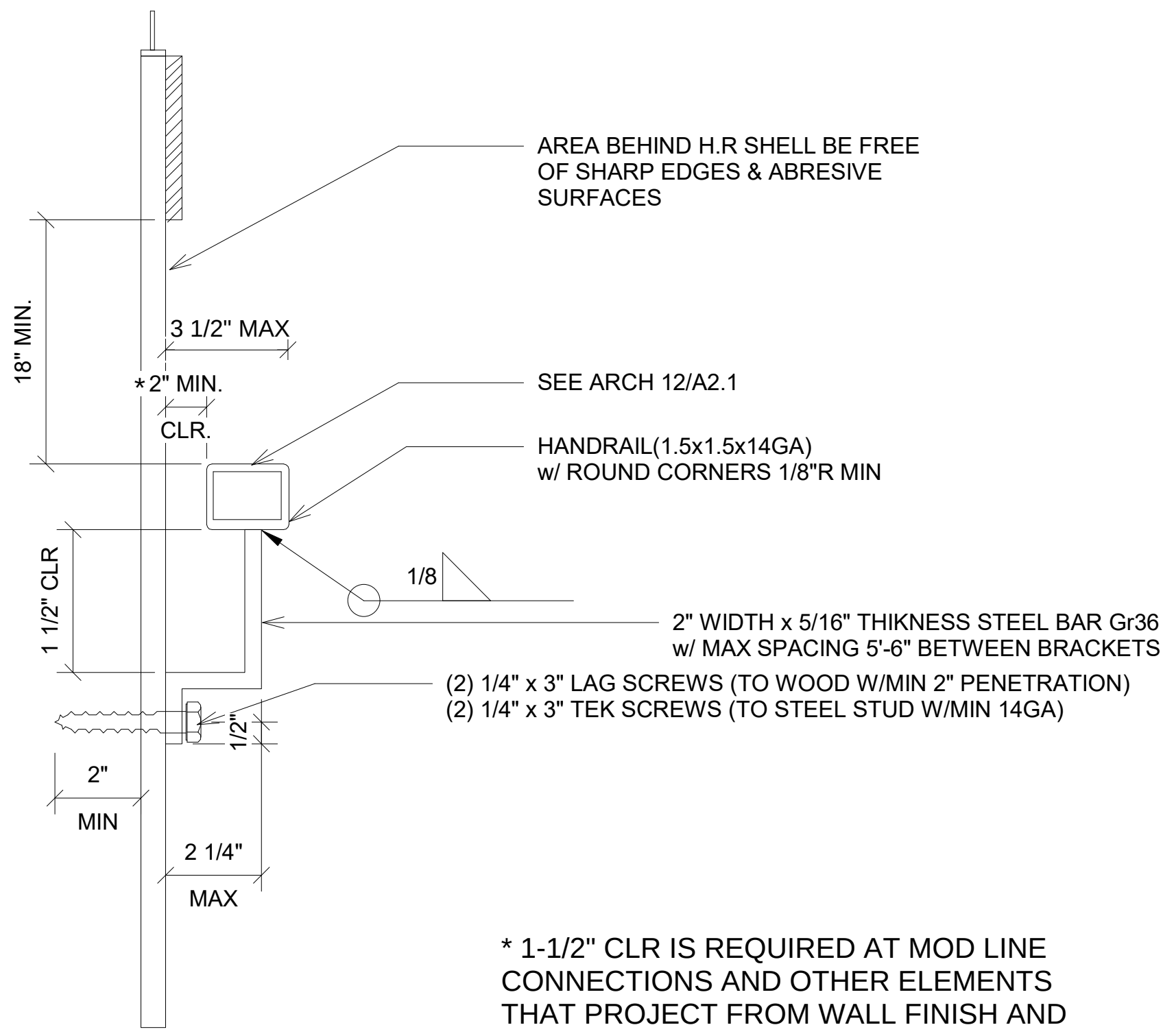
LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 2.083%

LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 2.083%

4 *1/2" = 1'-0"*
Ramp & Landing w/ Switch Back Ramp



6 *1 1/2" = 1'-0"*
RAMP & LANDING CONNECTION @ RAILS


AREA BEHIND H.R SHELL BE FREE OF SHARP EDGES & ABRESIVE SURFACES
18" MIN.
3 1/2" MAX
*2" MIN.
CLR.
SEE ARCH 12/A2.1
HANDRAIL(1.5x1.5x14GA) w/ ROUND CORNERS 1/8"R MIN
1/8
1 1/2" CLR
2" WIDTH x 5/16" THIKNESS STEEL BAR Gr36 w/ MAX SPACING 5'-6" BETWEEN BRACKETS
(2) 1/4" x 3" LAG SCREWS (TO WOOD W/MIN 2" PENETRATION)
(2) 1/4" x 3" TEK SCREWS (TO STEEL STUD W/MIN 14GA)
1/2"
2"
MIN
2 1/4"
MAX

* 1-1/2" CLR IS REQUIRED AT MOD LINE CONNECTIONS AND OTHER ELEMENTS THAT PROJECT FROM WALL FINISH AND THAT HANDRAIL MUST BE CONTINUOUS (CANNOT CURVE AROUND PROJECTION)

5 *3" = 1'-0"*
Handrail

M:\2020\20093 - Class Leasing, 24x40 - 120x40 2022 CBC Updates\REVIT\RST#20093 - Aries, Ramps and Stairs PC.rvt

6/15/2021 7:29:25 PM

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA

Manny D. Frisch

02/16/24

CLIENT

Class Leasing
1320 W. Oleander Ave. Perris CA 92571-7408
VOICE (951) 943-1908FAXFax (951) 943-5768

~~ORIGINAL PC STATE AGENCY APPROVAL~~

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Ramp and Landing Plan

PROJECT NUMBER
22079

DRAWN BY
SM

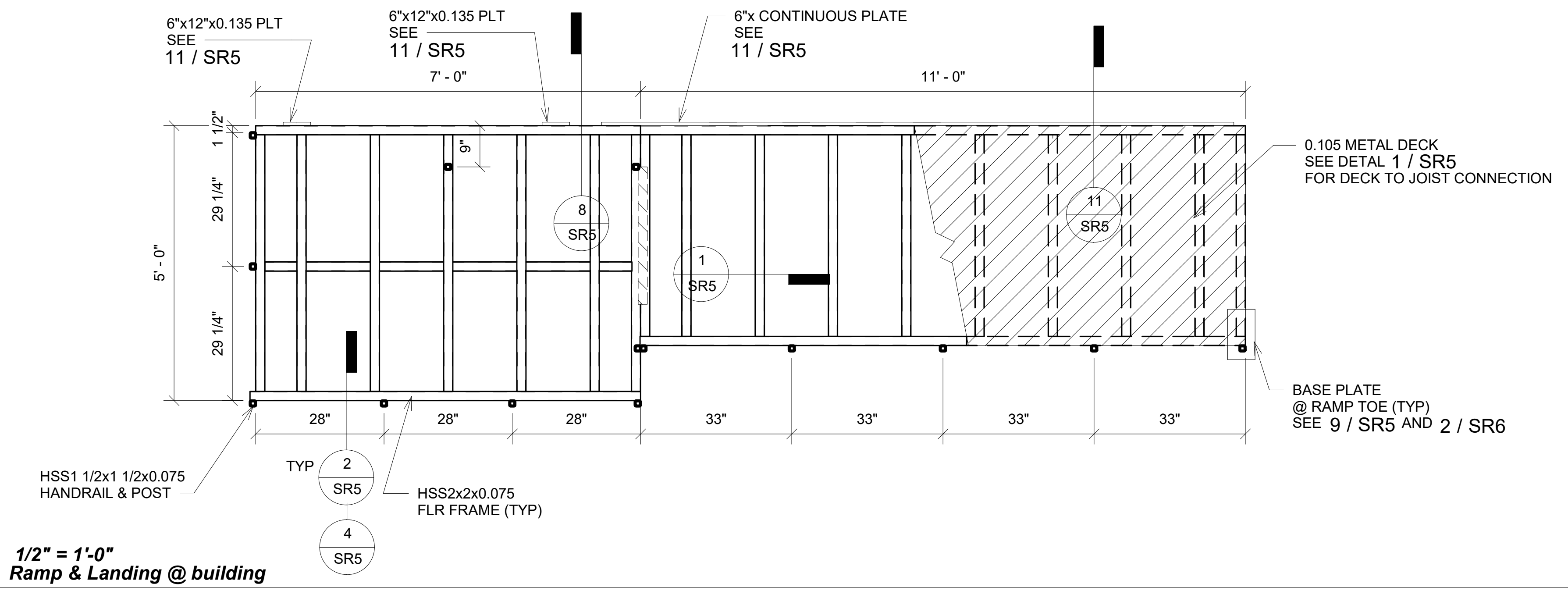
CHECKED BY
rMc

DATE
12/23/2022

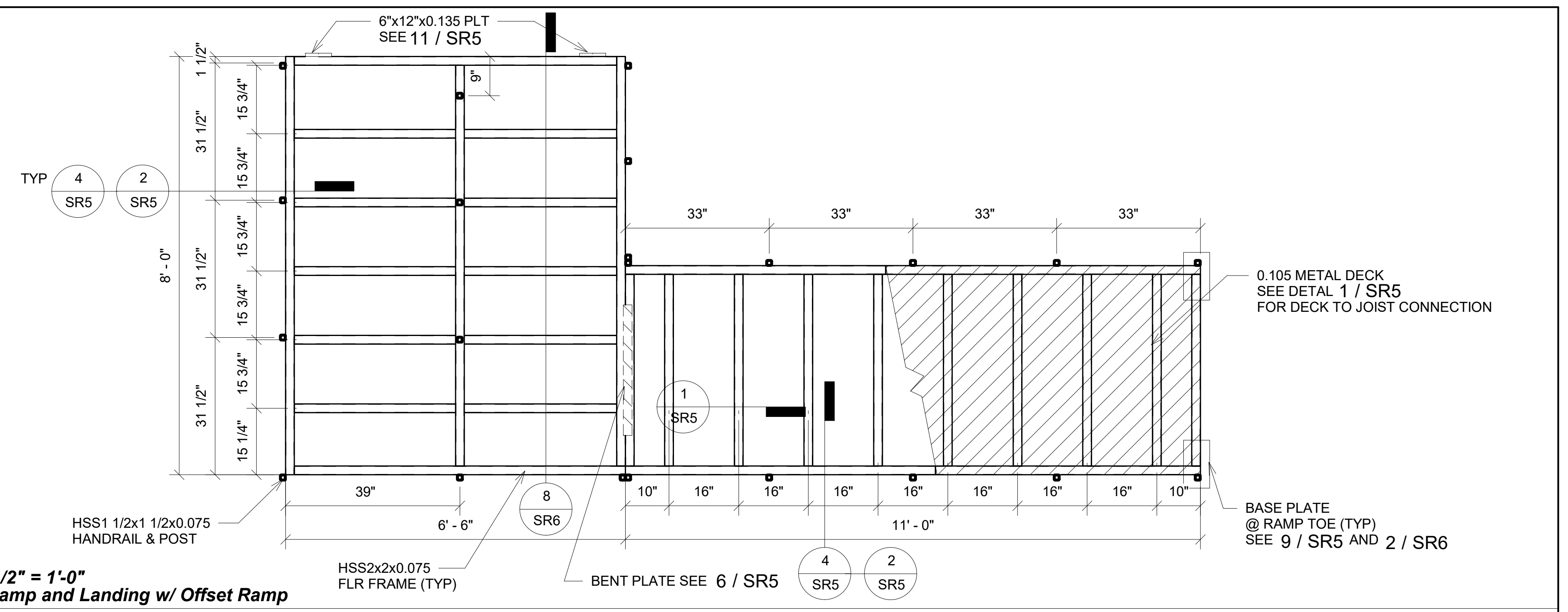
SHEET NO.
SR1

SHEET OF

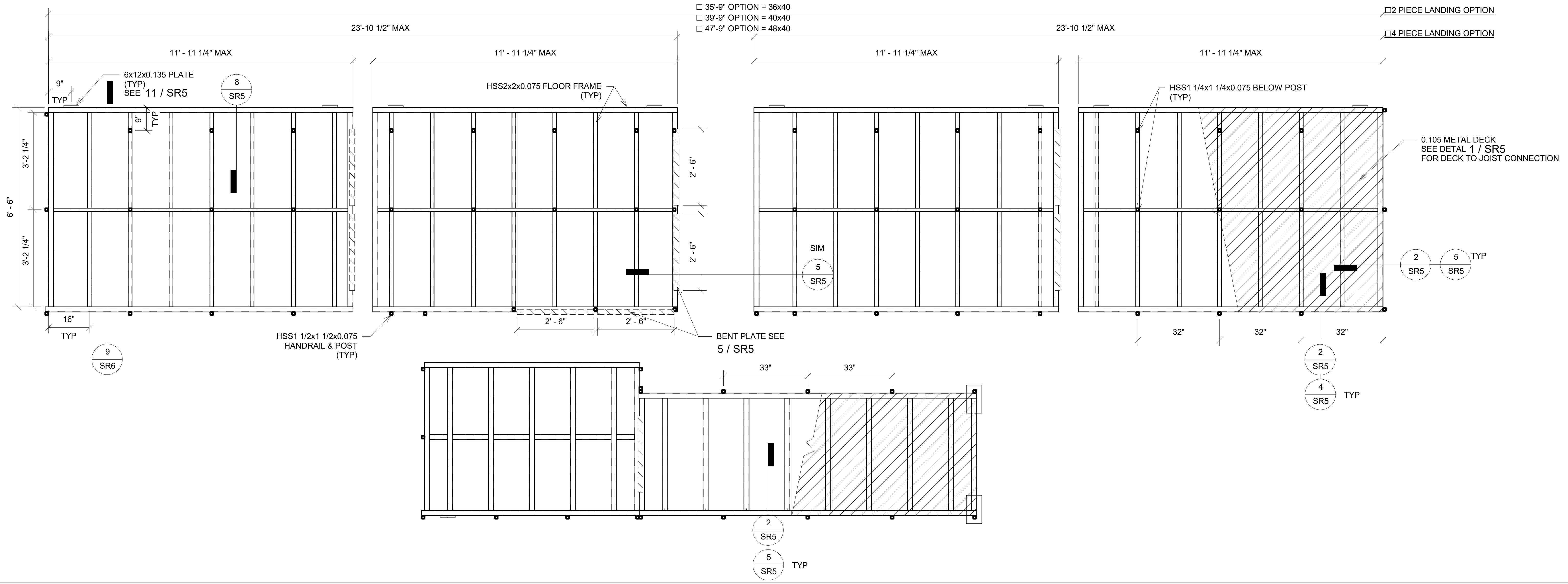
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



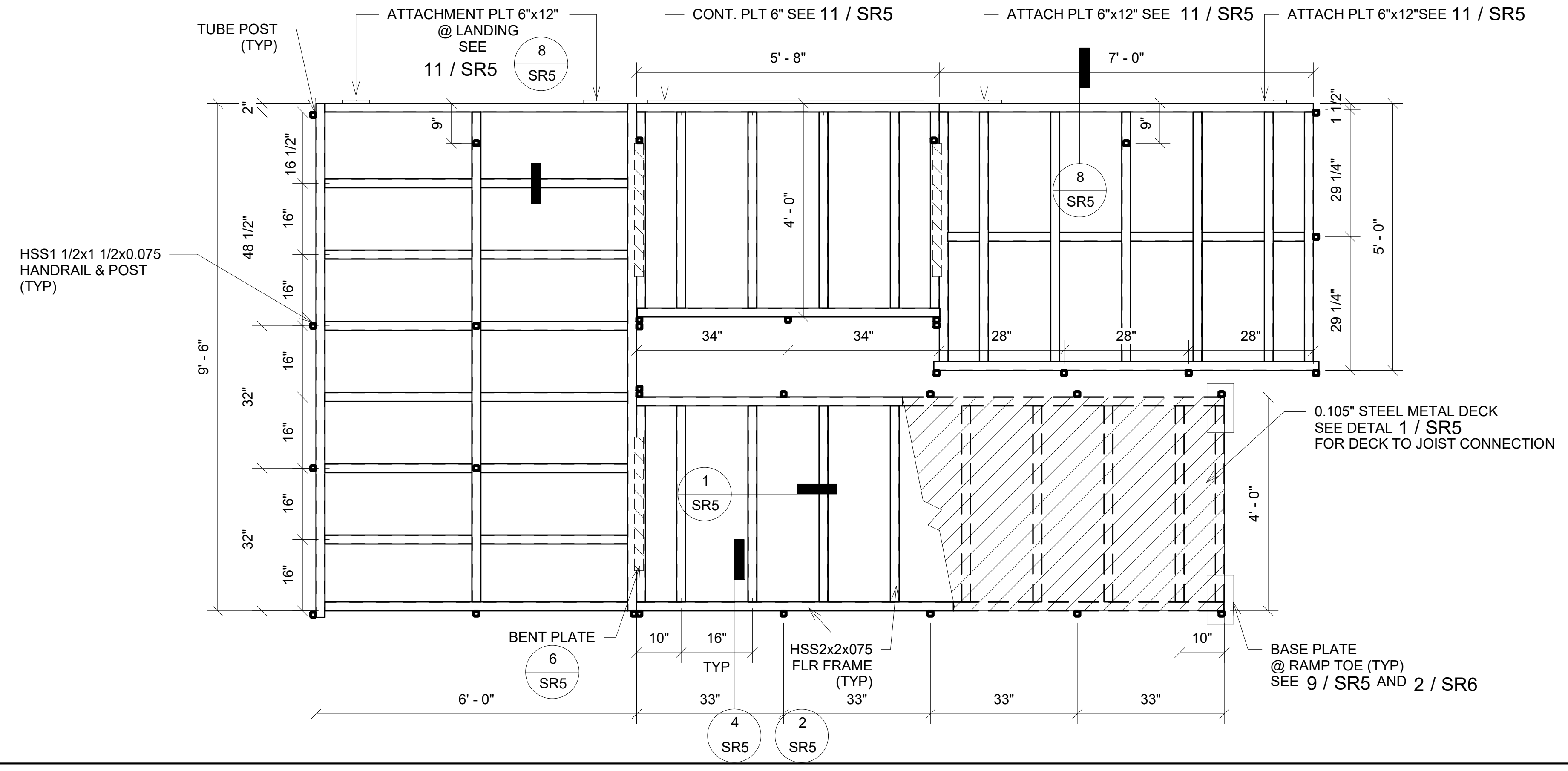
1 *1/2" = 1'-0"*
Ramp & Landing @ building



2 *1/2" = 1'-0"*
Ramp and Landing w/ Offset Ramp



3 *1/2" = 1'-0"*
Ramp & Platform Landing Frame



4 *1/2" = 1'-0"*
Ramp & Landing w/ Switch Back Ramp

~~PROJECT SPECIFIC STATE AGENCY APPROVAL~~

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024~~

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PROFESSIONAL STAMP

MANNY D. FRISCH
No. S3380
Exp. 03/31/24
02/16/24

CLIENT

Class Leasing
1320 W. Oleander Ave. Perris CA 92571-7408
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ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024~~

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Ramp and Landing Framing

PROJECT NUMBER
22079

DRAWN BY
SM

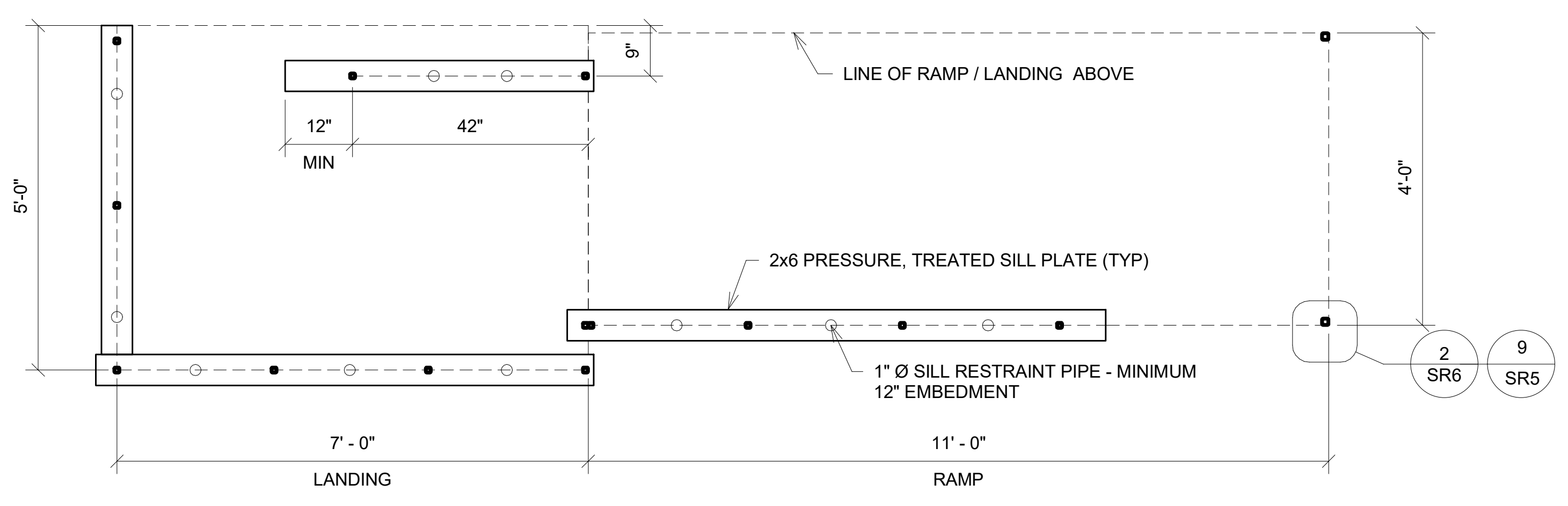
CHECKED BY
BR/rMc

DATE
12/23/2022

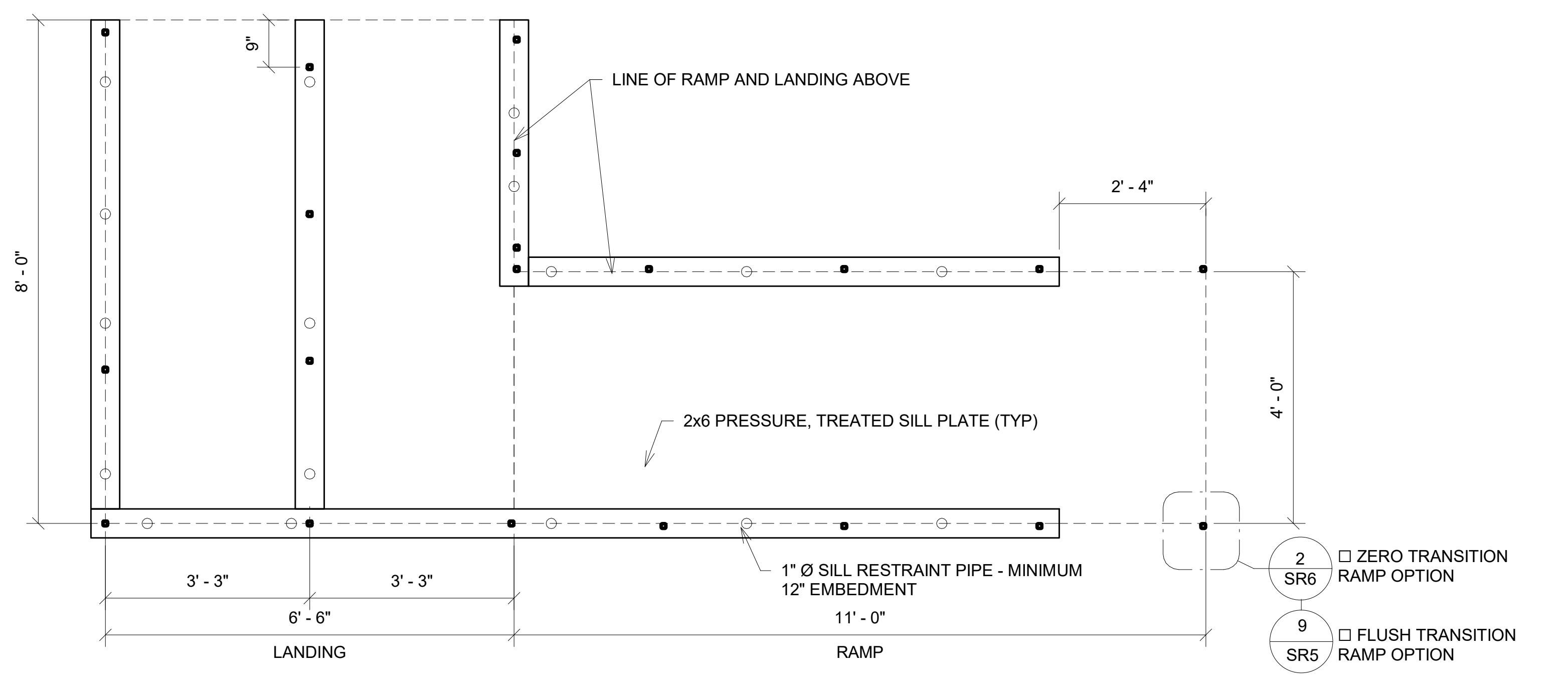
SHEET NO.
SR2

SHEET OF

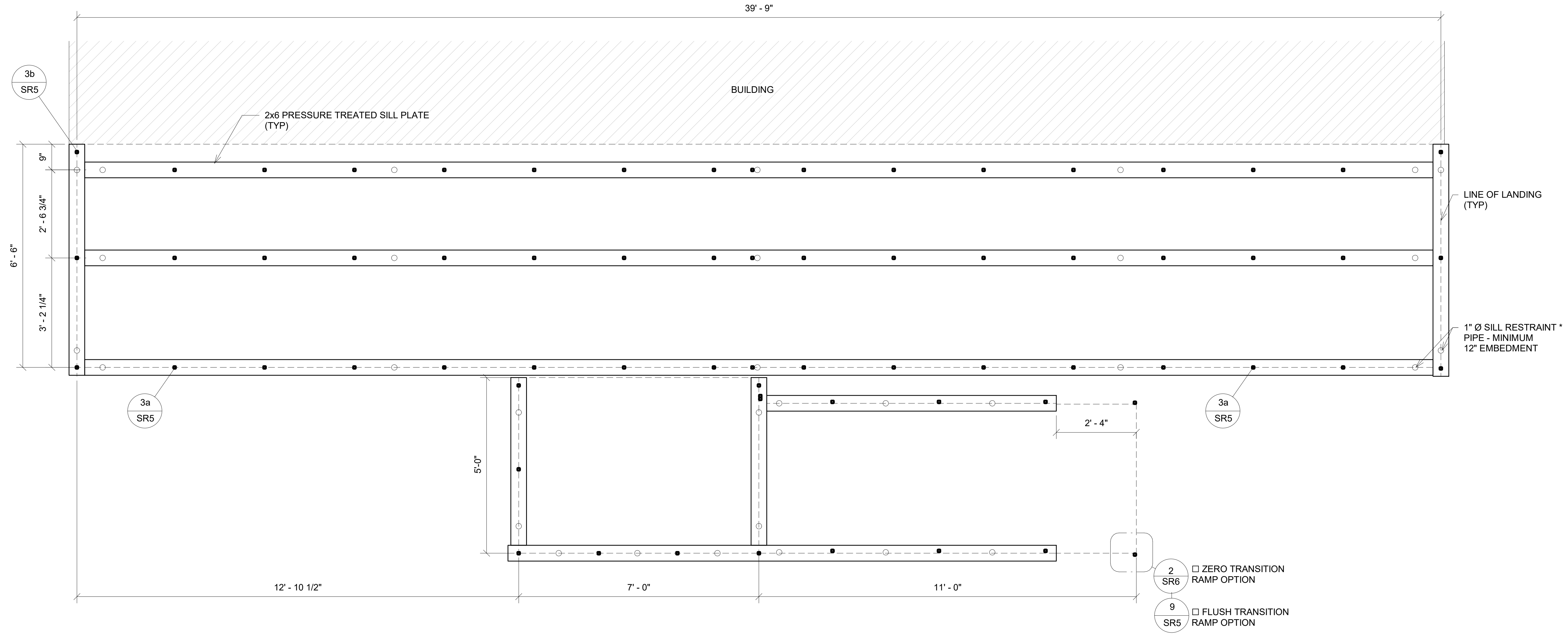
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025


9"
LINE OF RAMP / LANDING ABOVE
12"
42"
MIN
5'-0"
4'-0"
2x6 PRESSURE, TREATED SILL PLATE (TYP)
1" Ø SILL RESTRAINT PIPE - MINIMUM 12" EMBEDMENT
2 SR6
9 SR5
7' - 0"
11' - 0"
LANDING
RAMP

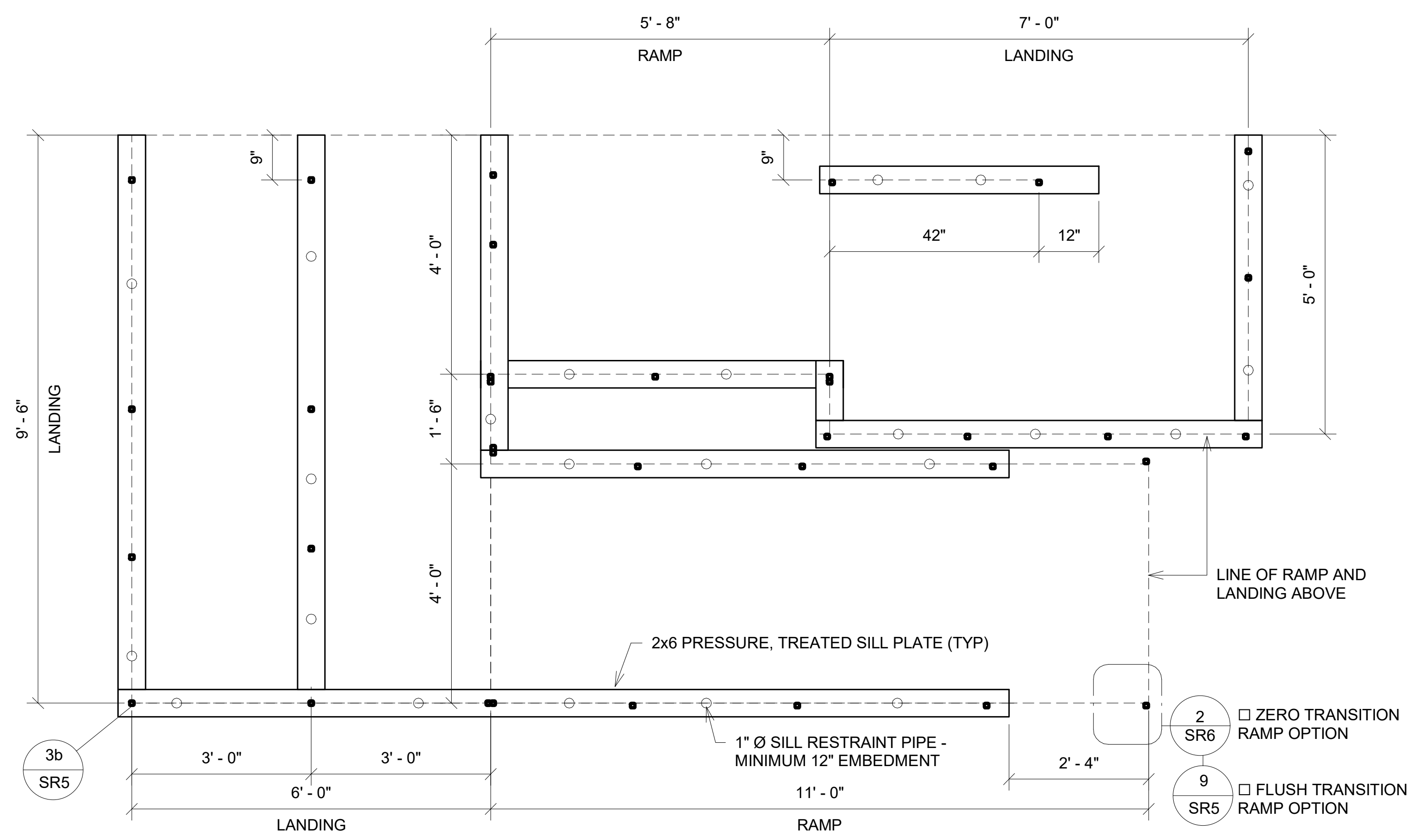
1 *1/2" = 1'-0"*
Sill Plan For Ramp & Landing


9"
LINE OF RAMP AND LANDING ABOVE
8' - 0"
2' - 4"
4' - 0"
2x6 PRESSURE, TREATED SILL PLATE (TYP)
1" Ø SILL RESTRAINT PIPE - MINIMUM 12" EMBEDMENT
2 SR6 ☐ ZERO TRANSITION RAMP OPTION
9 SR5 ☐ FLUSH TRANSITION RAMP OPTION
3' - 3"
3' - 3"
6' - 6"
11' - 0"
LANDING
RAMP

2 *1/2" = 1'-0"*
Sill Plan For Ramp & Landing Offset


39' - 9"
3b SR5
BUILDING
2x6 PRESSURE TREATED SILL PLATE (TYP)
9"
2' - 6 3/4"
6' - 6"
3' - 2 1/4"
LINE OF LANDING (TYP)
1" Ø SILL RESTRAINT * PIPE - MINIMUM 12" EMBEDMENT
3a SR5
3a SR5
5'-0"
2' - 4"
2 SR6 ☐ ZERO TRANSITION RAMP OPTION
9 SR5 ☐ FLUSH TRANSITION RAMP OPTION
12' - 10 1/2"
7' - 0"
11' - 0"

3 *1/2" = 1'-0"*
Platform Sill Plan For Ramp & Landing


5' - 8"
7' - 0"
RAMP
LANDING
9"
9"
42"
12"
4'- 0"
5' - 0"
1' - 6"
4'- 0"
9' - 6"
LANDING
LINE OF RAMP AND LANDING ABOVE
2x6 PRESSURE, TREATED SILL PLATE (TYP)
1" Ø SILL RESTRAINT PIPE - MINIMUM 12" EMBEDMENT
2 SR6 ☐ ZERO TRANSITION RAMP OPTION
9 SR5 ☐ FLUSH TRANSITION RAMP OPTION
3b SR5
3' - 0"
3' - 0"
6' - 0"
2' - 4"
11' - 0"
LANDING
RAMP

4 *1/2" = 1'-0"*
Sill Plan For Ramp & Landing Switchback

* "RESTRAINING PIPES / RODS SPECS"
ONE INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL 0.0) NOT DIPPED GALVANIZED PIPES OR ONE INCH DIAMETER SOLID STEEL RODS SPACED AT NOT MORE THAN 10'-0" o/c.
ONE PIPE / ROD SHALL BE LOCATED A MAXIMUM OF TWO FEET FROM EACH CORNERIN BOTH DIRECTIONS AND MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATION STRIP.
PIPES SHOULD PENETRATE INTO SOIL AND/OR PAVING A MIN. OF 12" MEASURED VERTICALLY.
PER DSA IR 16-1

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PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP. 04-123316 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/13/2024

R&S TAVARES ASSOCIATES
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www.rstavares.com

PROFESSIONAL STAMP

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No. S3380
Exp. 03/31/24
02/16/24

CLIENT
Class Leasing
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VOICE (951) 943-1908 FAX Fax (951) 943-5768

ORIGINAL PC STATE AGENCY APPROVAL

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required

PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Foundation Plan

PROJECT NUMBER
22079

DRAWN BY
SM

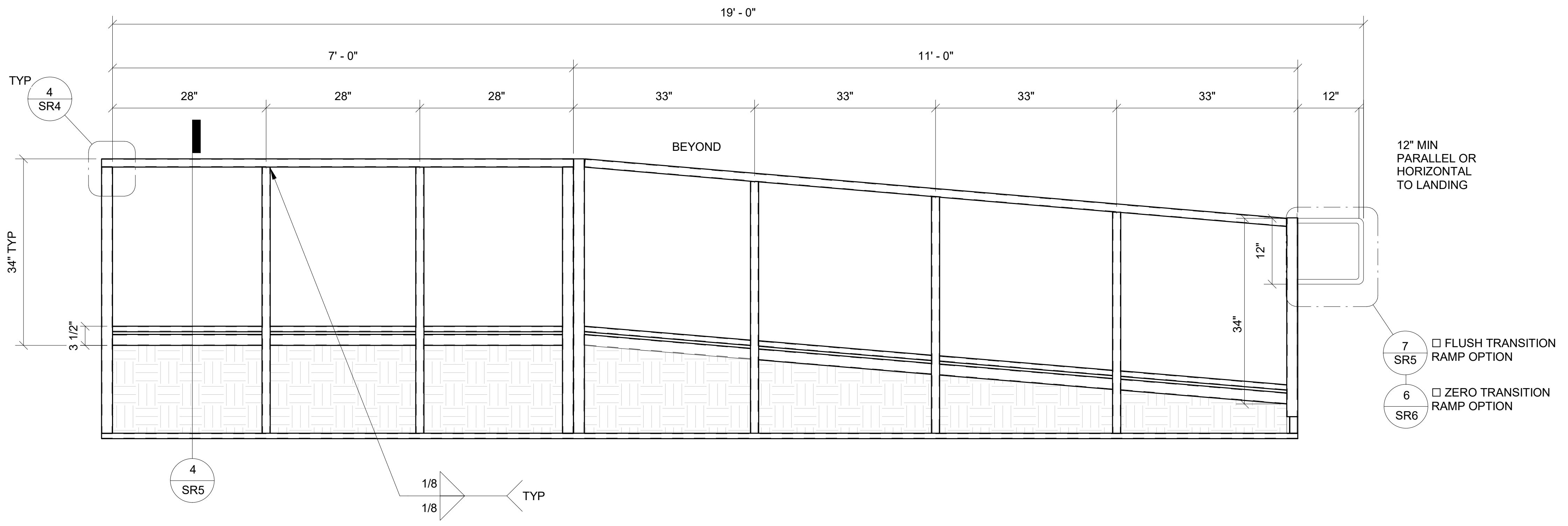
CHECKED BY
rMc

DATE
12/23/2022

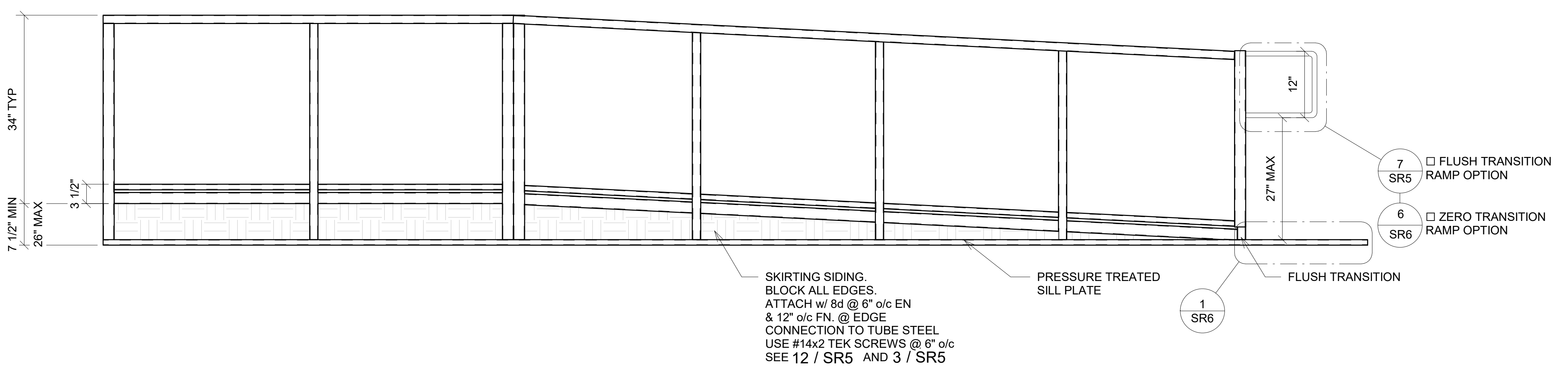
SHEET NO.
SR3

SHEET OF

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025

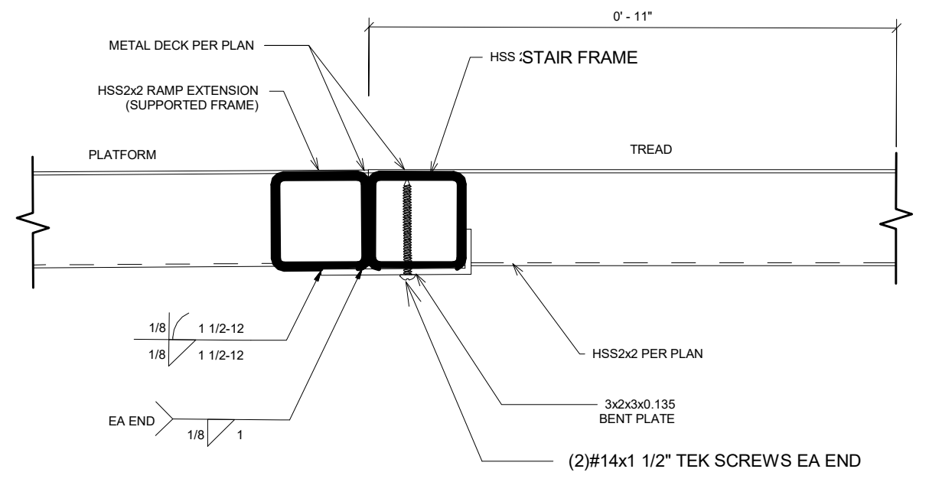


1 *3/4" = 1'-0"*
Ramp & Landing Elevation

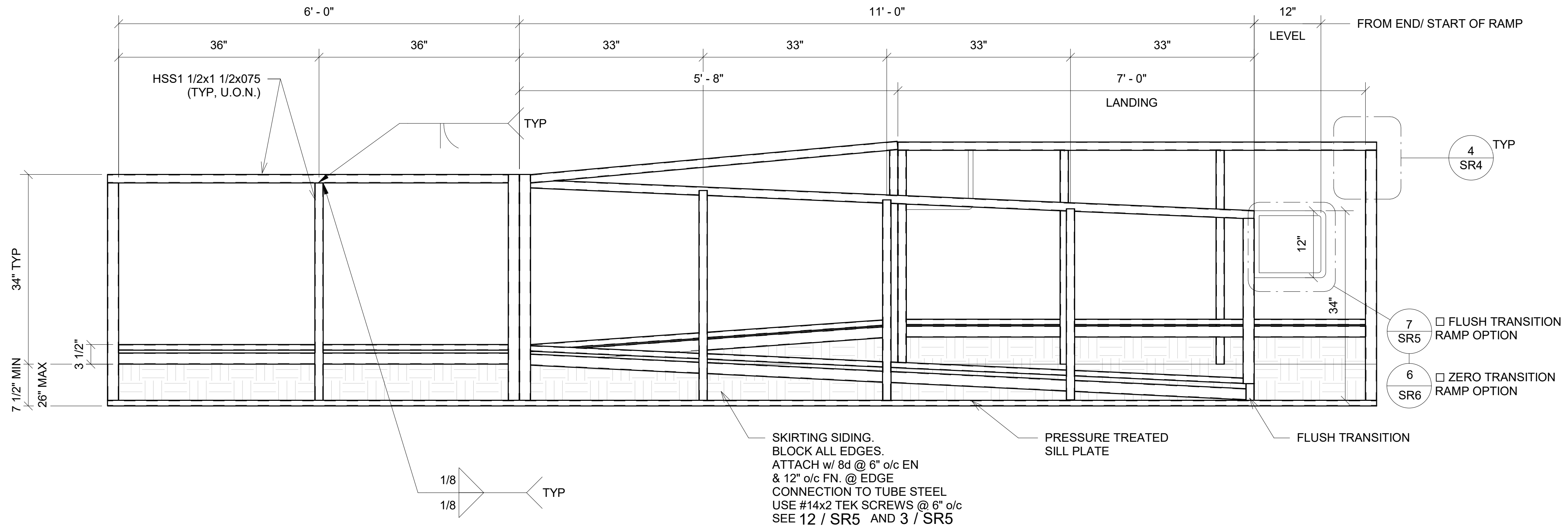


SKIRTING SIDING.
BLOCK ALL EDGES.
ATTACH w/ 8d @ 6" o/c EN
& 12" o/c FN. @ EDGE
CONNECTION TO TUBE STEEL
USE #14x2 TEK SCREWS @ 6" o/c
SEE 12 / SR5 AND 3 / SR5

2 *3/4" = 1'-0"*
Ramp & Landing Elevation Option X Copy 1

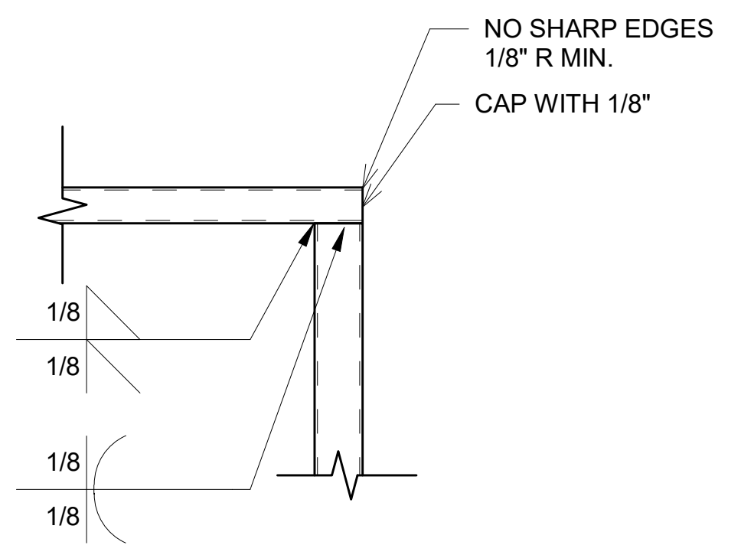


5 *3" = 1'-0"*
Conn @ Platform



SKIRTING SIDING.
BLOCK ALL EDGES.
ATTACH w/ 8d @ 6" o/c EN
& 12" o/c FN. @ EDGE
CONNECTION TO TUBE STEEL
USE #14x2 TEK SCREWS @ 6" o/c
SEE 12 / SR5 AND 3 / SR5

3 *3/4" = 1'-0"*
Ramp & Landing Elevation Option X



4 *1 1/2" = 1'-0"*
Ramp & Landing Elevation Option X1 - Callout 1

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PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
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PROFESSIONAL STAMP

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No. S3380
Exp. 03/31/24
Manny D. Frisch
02/16/24

CLIENT

Class Leasing
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VOICE (951) 943-1908 FAX Fax (951) 943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Ramp and Landing / Stair Framing Elevation

PROJECT NUMBER
22079

DRAWN BY
SM

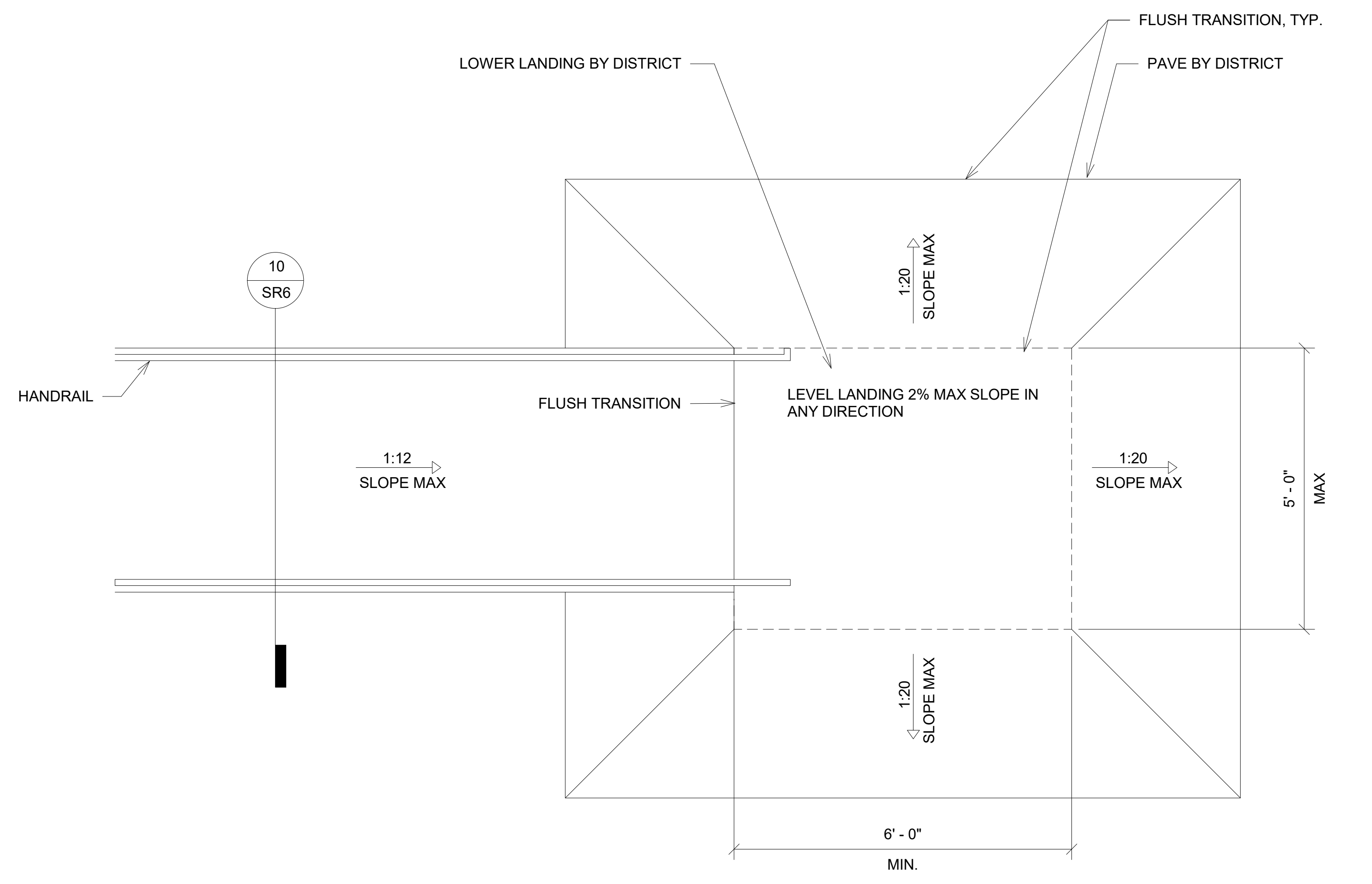
CHECKED BY
rMc

DATE
12/23/2022

SHEET NO.
SR4

SHEET OF

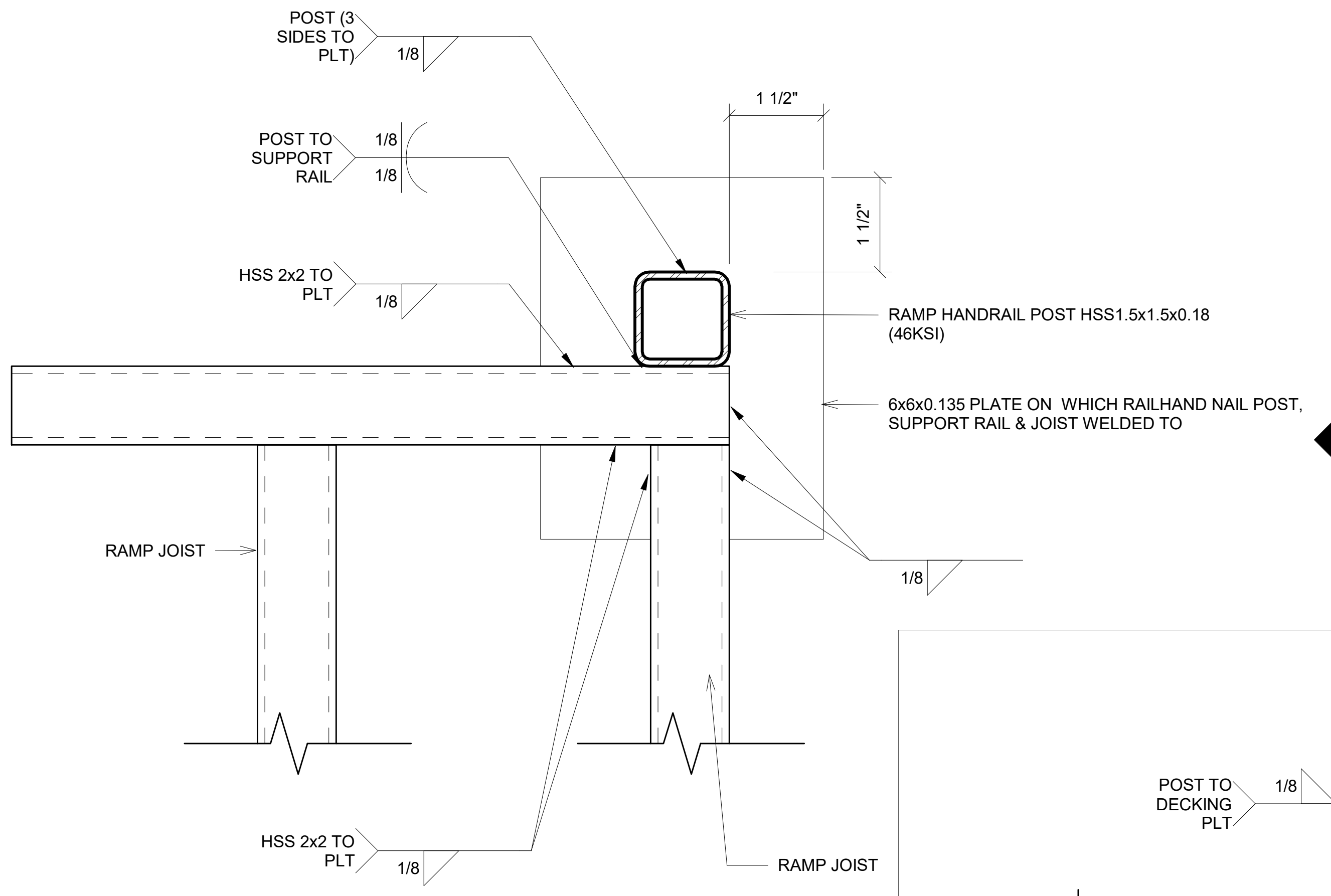
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



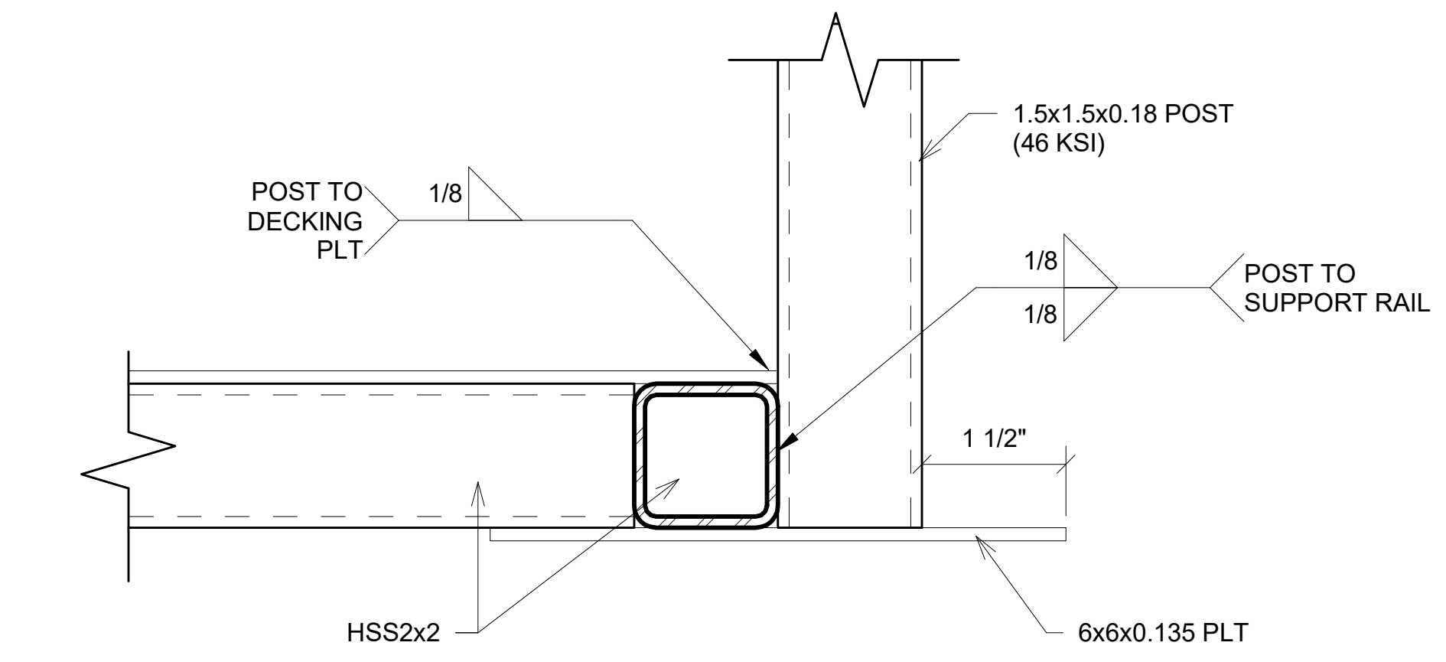
NOTE:
1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAIL.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT EXCEED 1:12 REQUIRE REMOVAL OF 12" HANDRAIL EXTENSION AND ADDITIONAL HANDRAILING BY DISTRICT. (THIS CONDITION REQUIRES A SITE SPECIFIC DETAIL PROVIDED BY ARCHITECT TO DEMOSTRATE ACCESSIBLE RAMP)

LANDING TO BE DESIGNED TO NOT RETAIN STANDING WATER 1% 1% 2.083 MAX SLOPE

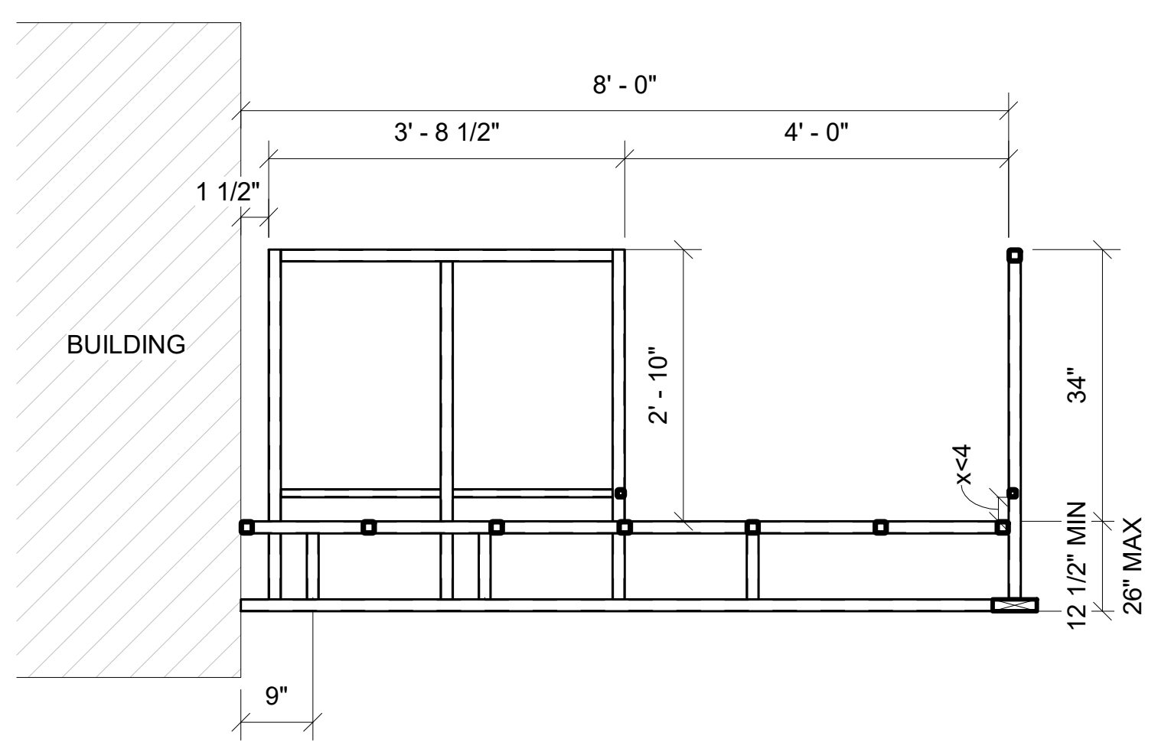
7 *1/2" = 1'-0"*
Ramp Transition



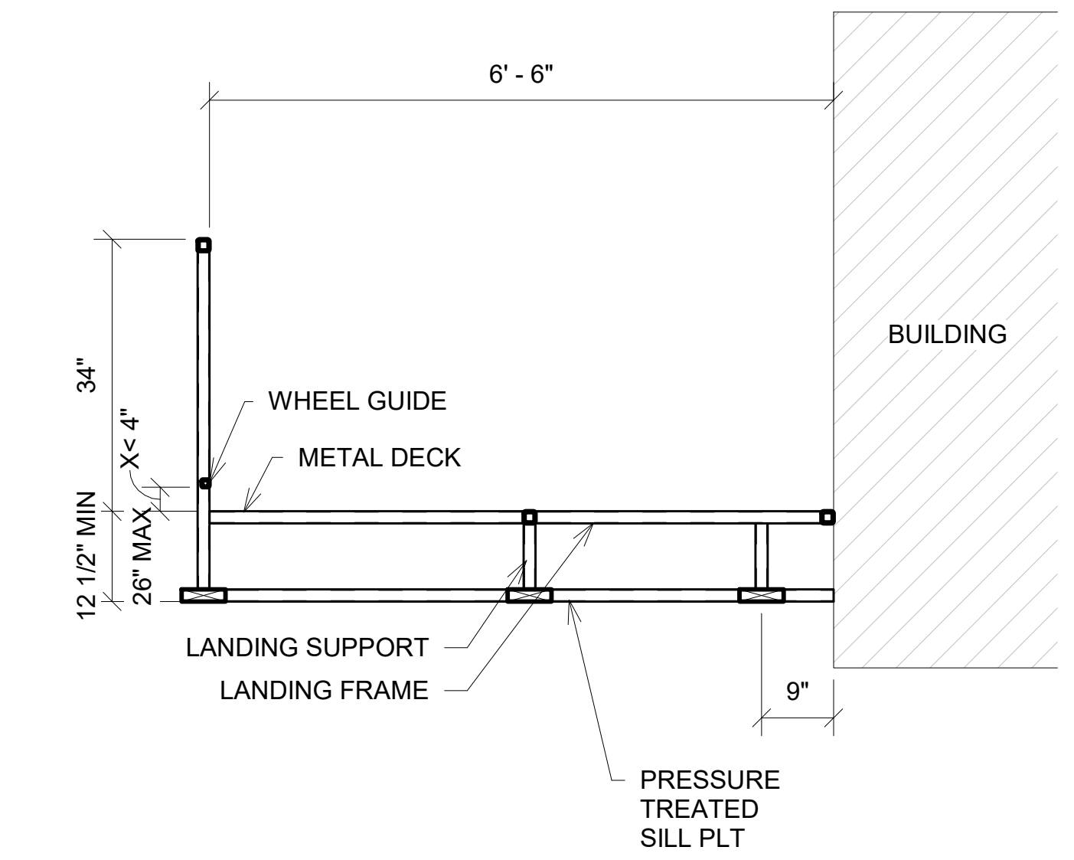
2 *6" = 1'-0"*
Base Plt @ Ramp Toe For Zero Transition



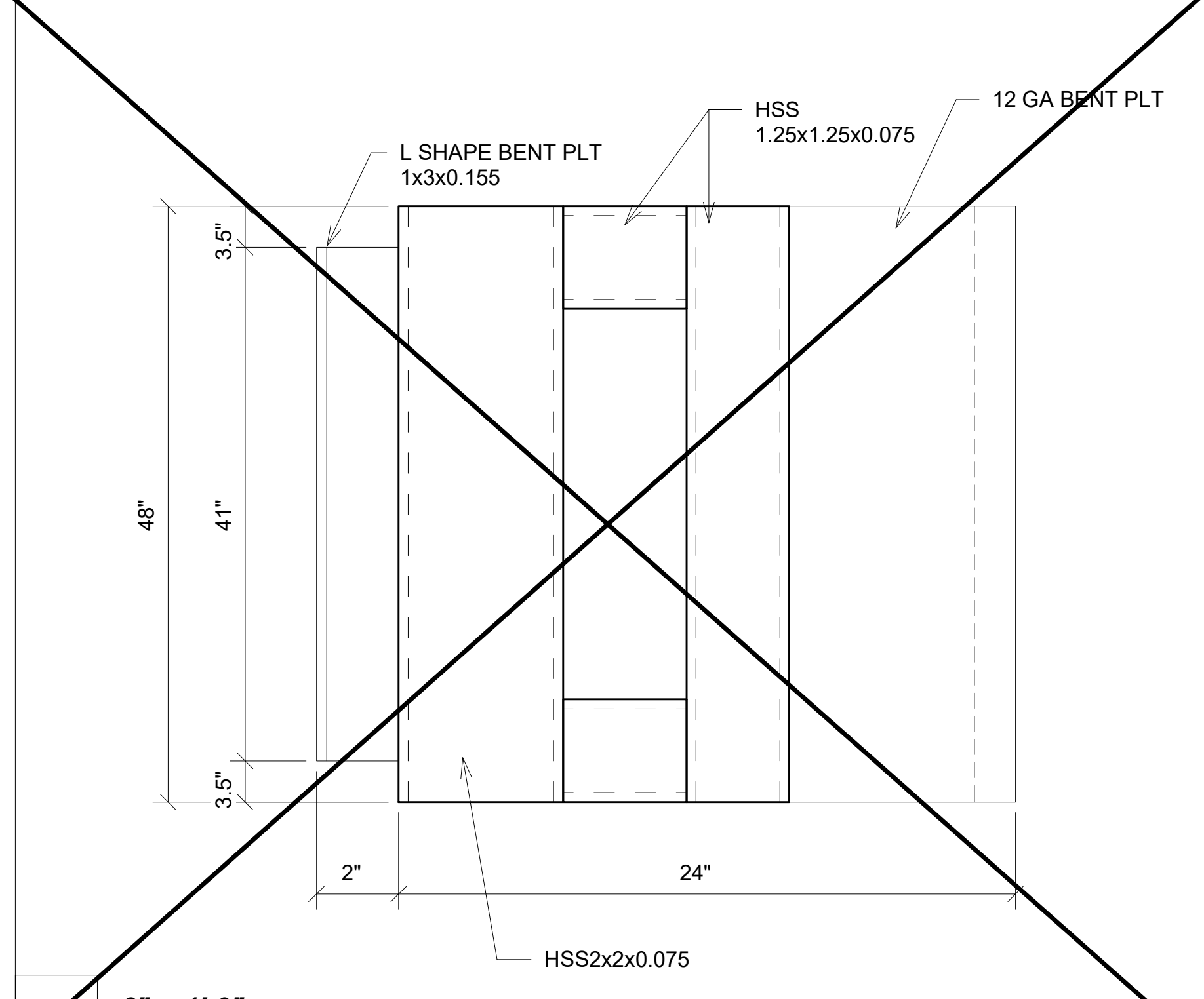
3 *6" = 1'-0"*
Base Plt @ Ramp Toe Low Zero Side View



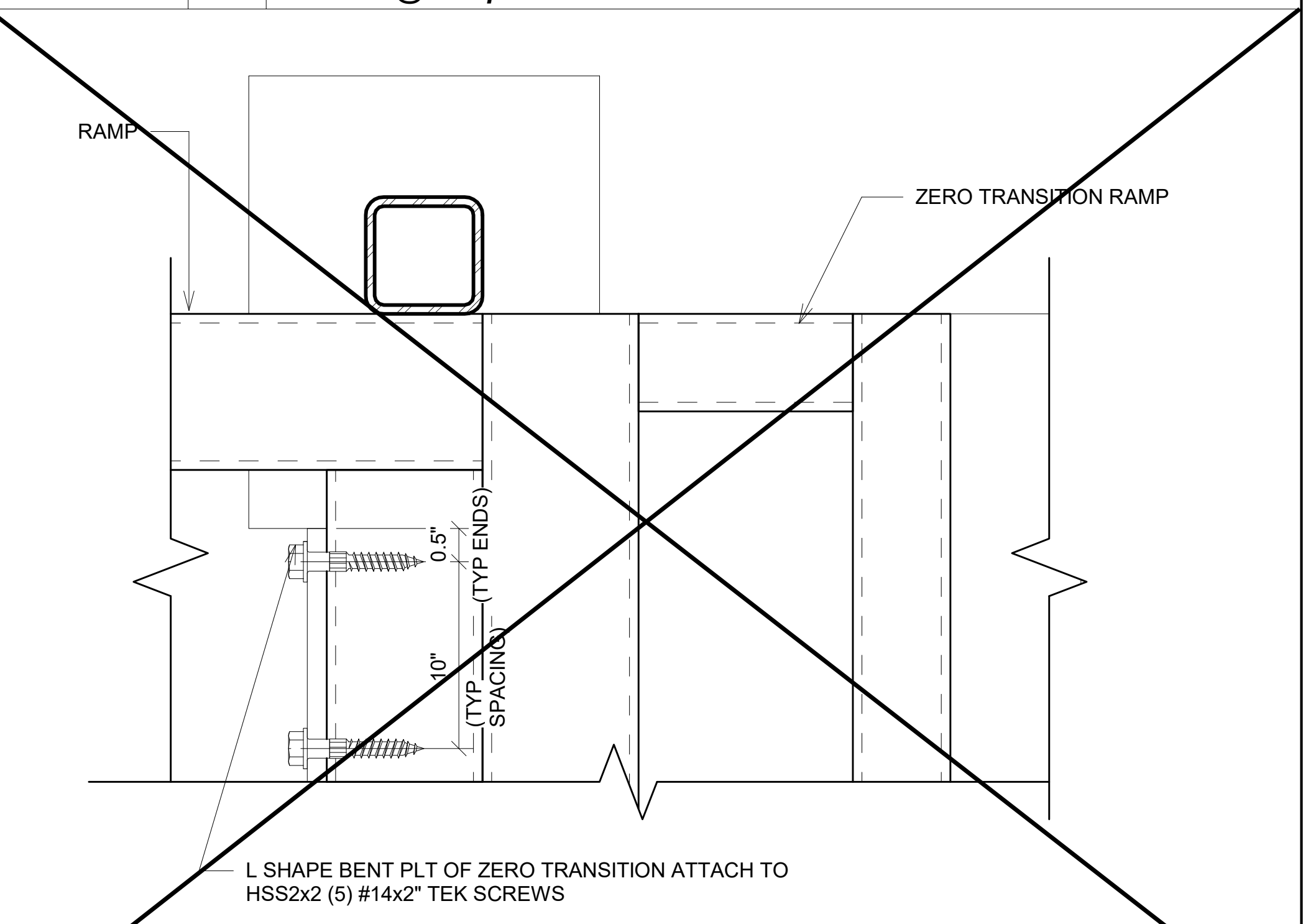
8 *1/2" = 1'-0"*
Section @ Landing



9 *1/2" = 1'-0"*
Section @ Landing

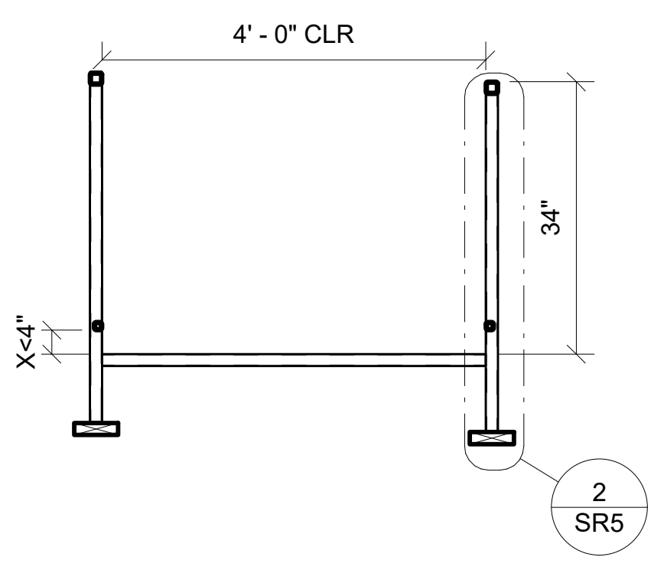


4 *6" = 1'-0"*
Top View Ramp Zero Transition



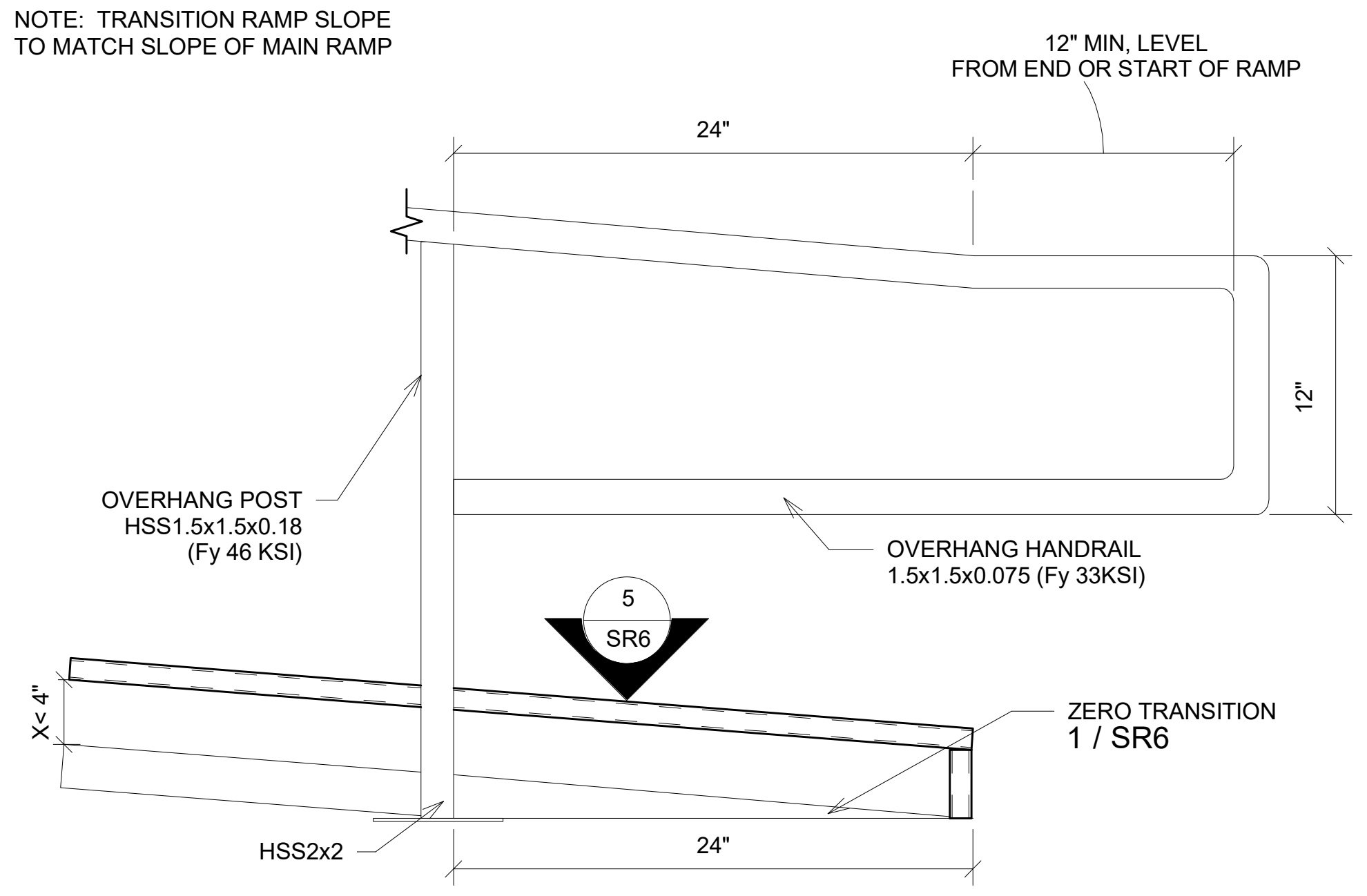
L SHAPE BENT PLT OF ZERO TRANSITION ATTACH TO HSS2x2 (5) #14x2" TEK SCREWS

5 *6" = 1'-0"*
Zero Transition Ramp Connection



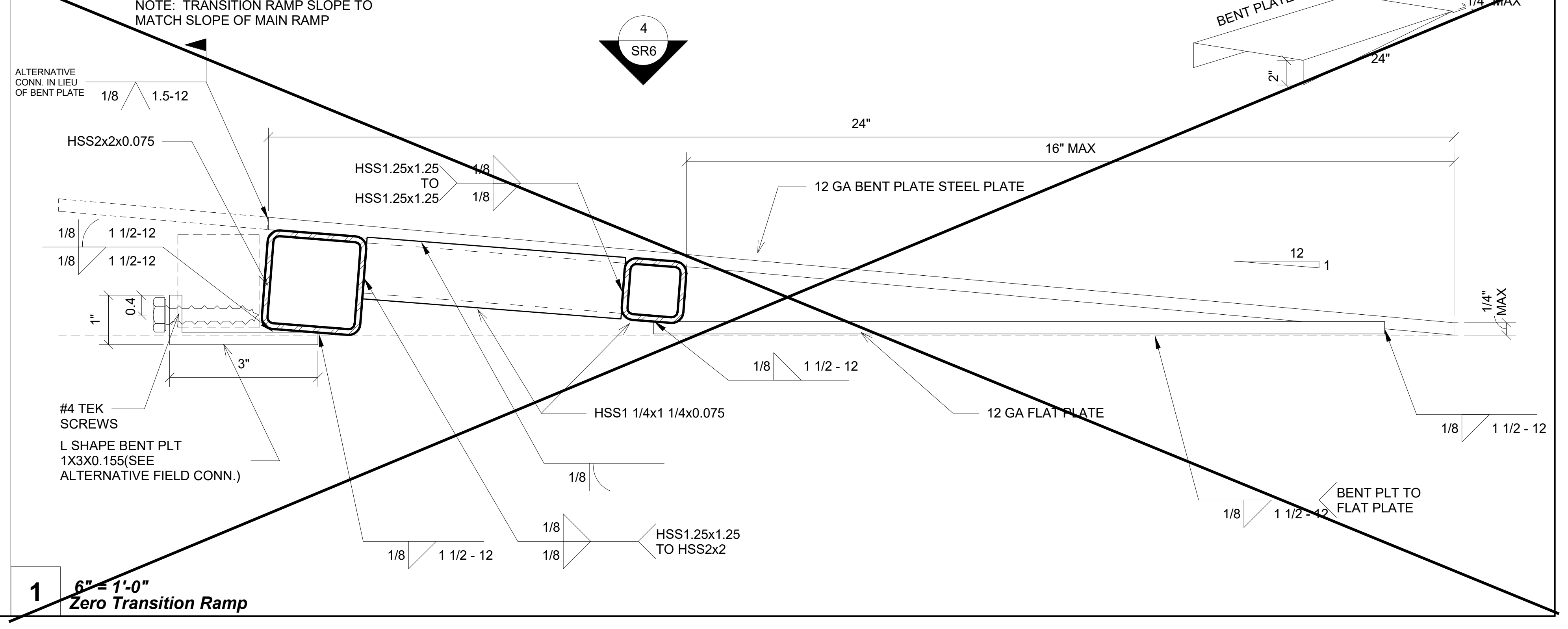
10 *1/2" = 1'-0"*
Section @ Ramp

NOTE: TRANSITION RAMP SLOPE TO MATCH SLOPE OF MAIN RAMP


24"
12" MIN, LEVEL FROM END OR START OF RAMP
12"
OVERHANG POST HSS1.5x1.5x0.18 (Fy 46 KSI)
OVERHANG HANDRAIL 1.5x1.5x0.075 (Fy 33KSI)
5
SR6
X< 4"
ZERO TRANSITION 1 / SR6
HSS2x2
24"

6 *1 1/2" = 1'-0"*
Extend Handrail @ Bottom End For Zero Transition Ramp

NOTE: TRANSITION RAMP SLOPE TO MATCH SLOPE OF MAIN RAMP



1 *6" = 1'-0"*
Zero Transition Ramp

6/15/2021 7:29:30 PM M:\2020\20093 - Class Leasing, 24x40 - 120x40 2022 CBC Updates\REVIT\RST#20093 - Aries, Ramps and Stairs PC.rvt

PROJECT SPECIFIC STATE AGENCY APPROVAL

~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
WWW.RSTAVARES.COM

PROFESSIONAL STAMP

No. S3380
Exp. 03/31/24
02/16/24

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CLIENT

Class Leasing
1320 W. Oleander Ave. Perris CA 92571-7408
VOICE (951) 943-1908FAXFax (951) 943-5768

ORIGINAL PC STATE AGENCY APPROVAL

~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Ramp Details

PROJECT NUMBER
22079

DRAWN BY
SM

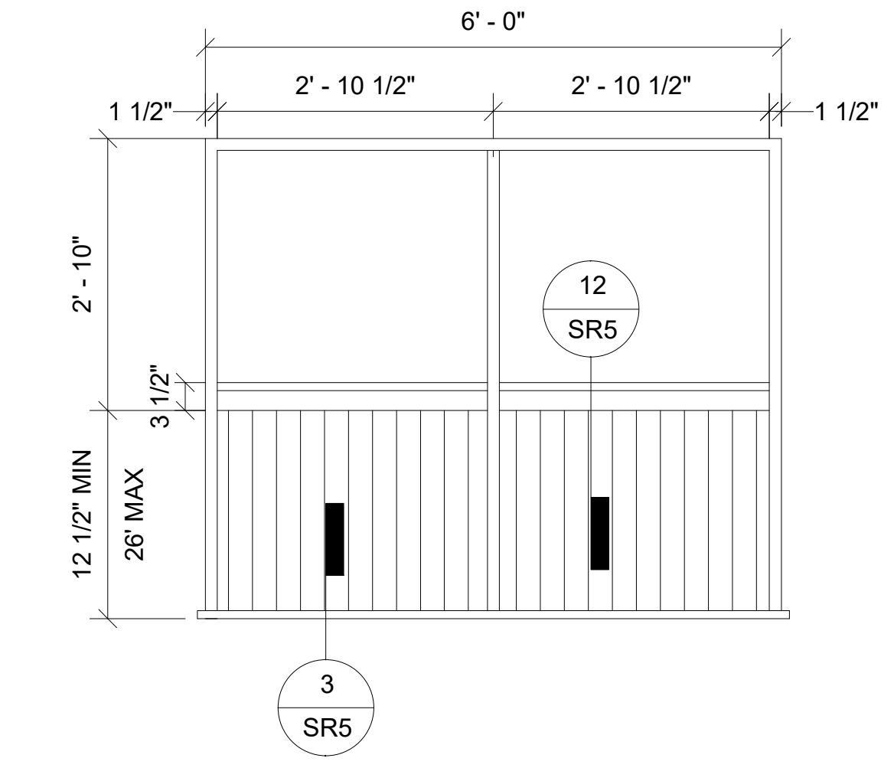
CHECKED BY
rMc

DATE
12/23/2022

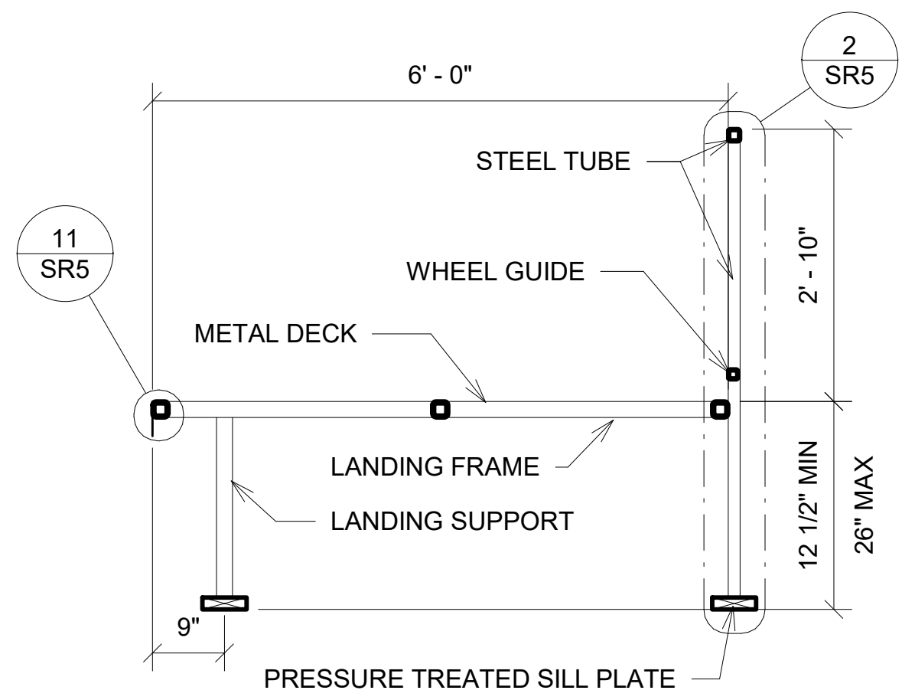
SHEET NO.
SR6

SHEET OF

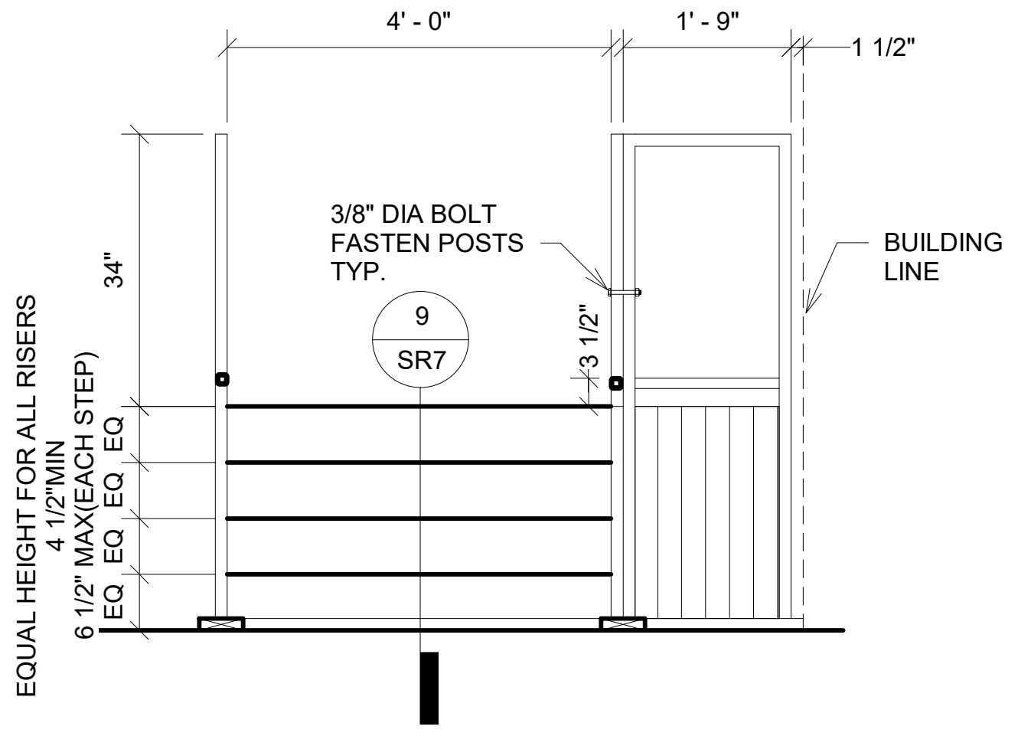
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-123356 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 07/07/2025



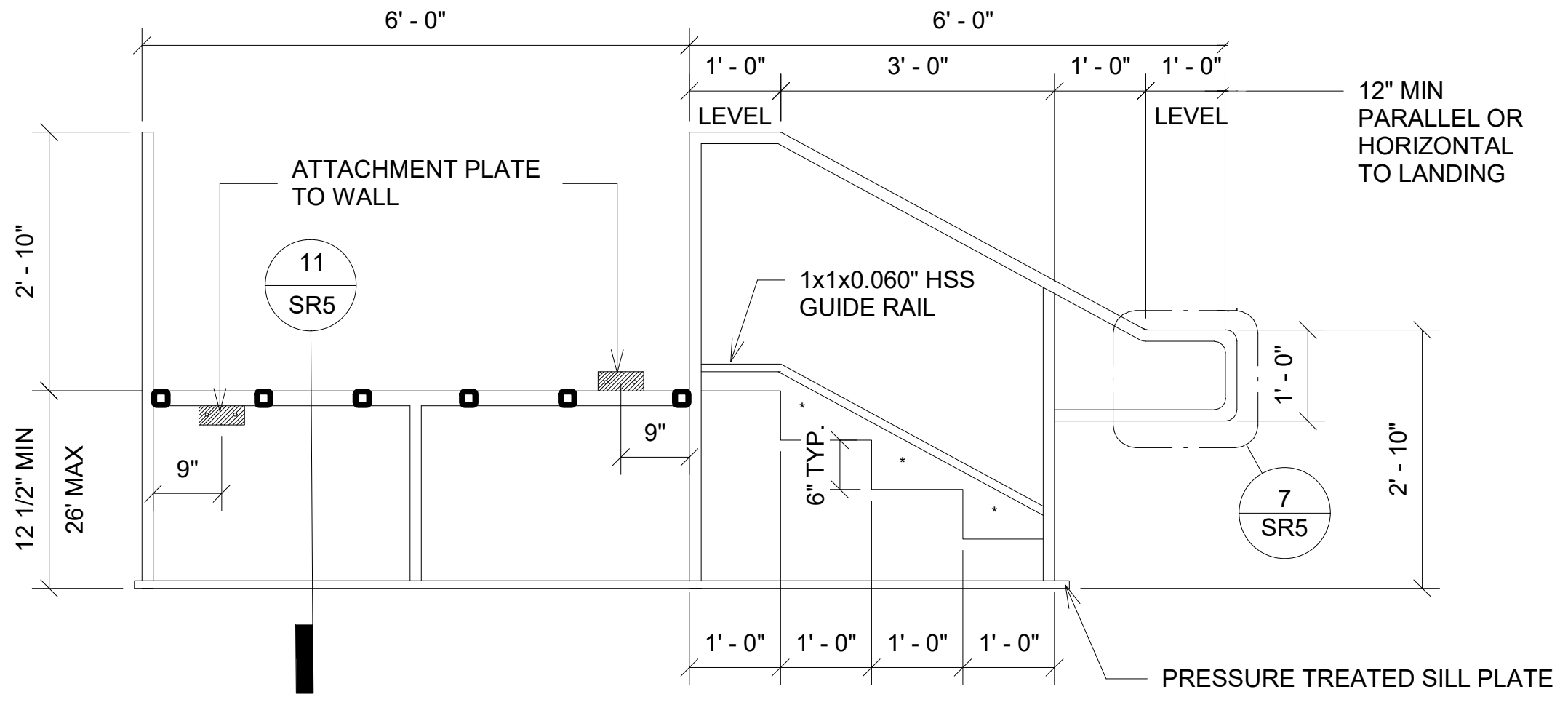
1 1/2" = 1'-0"
LANDING ELEVATION VIEW



2 1/2" = 1'-0"
LANDING SECTION

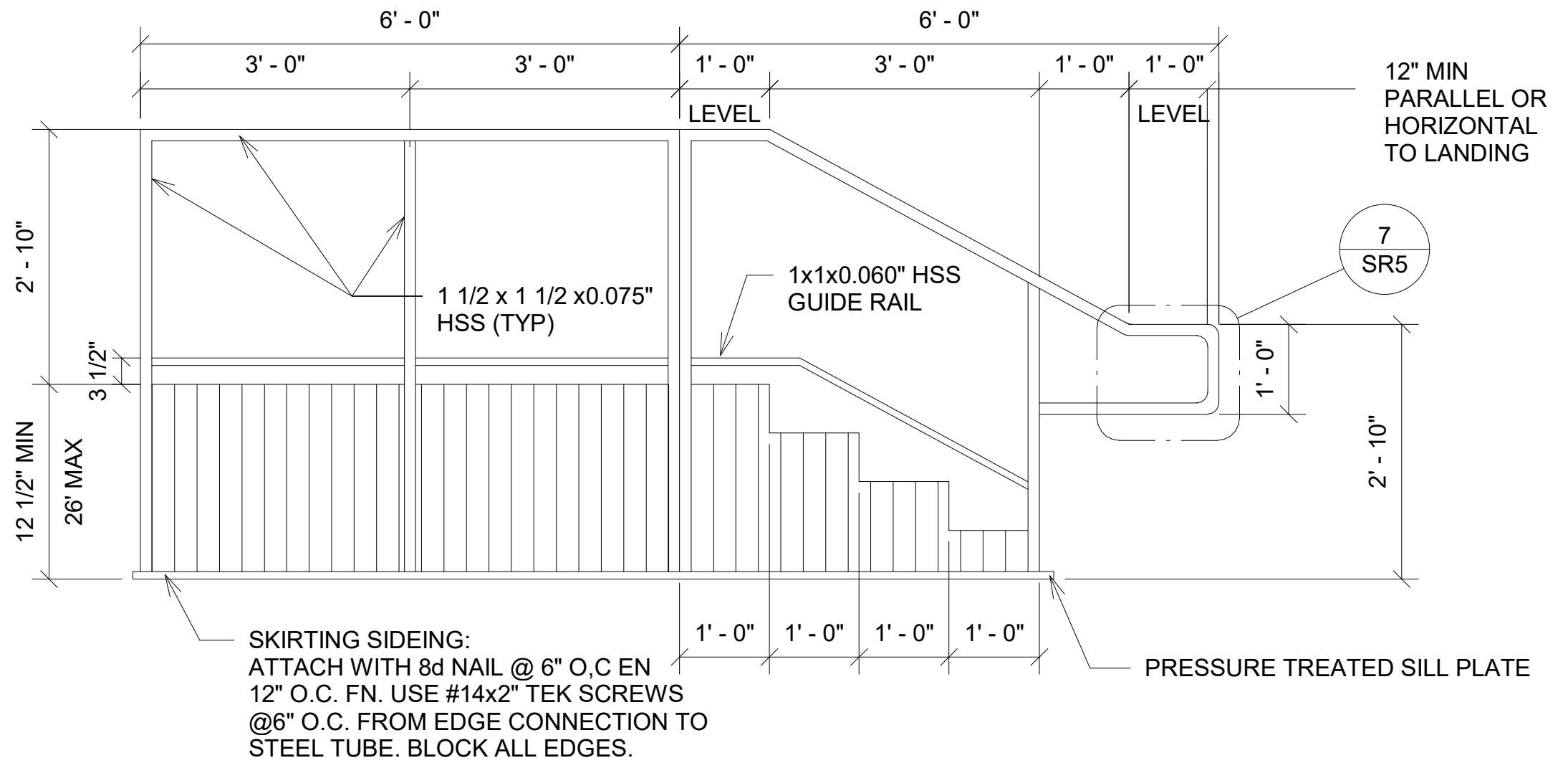


6 1/2" = 1'-0"
STEPS ELEVATION

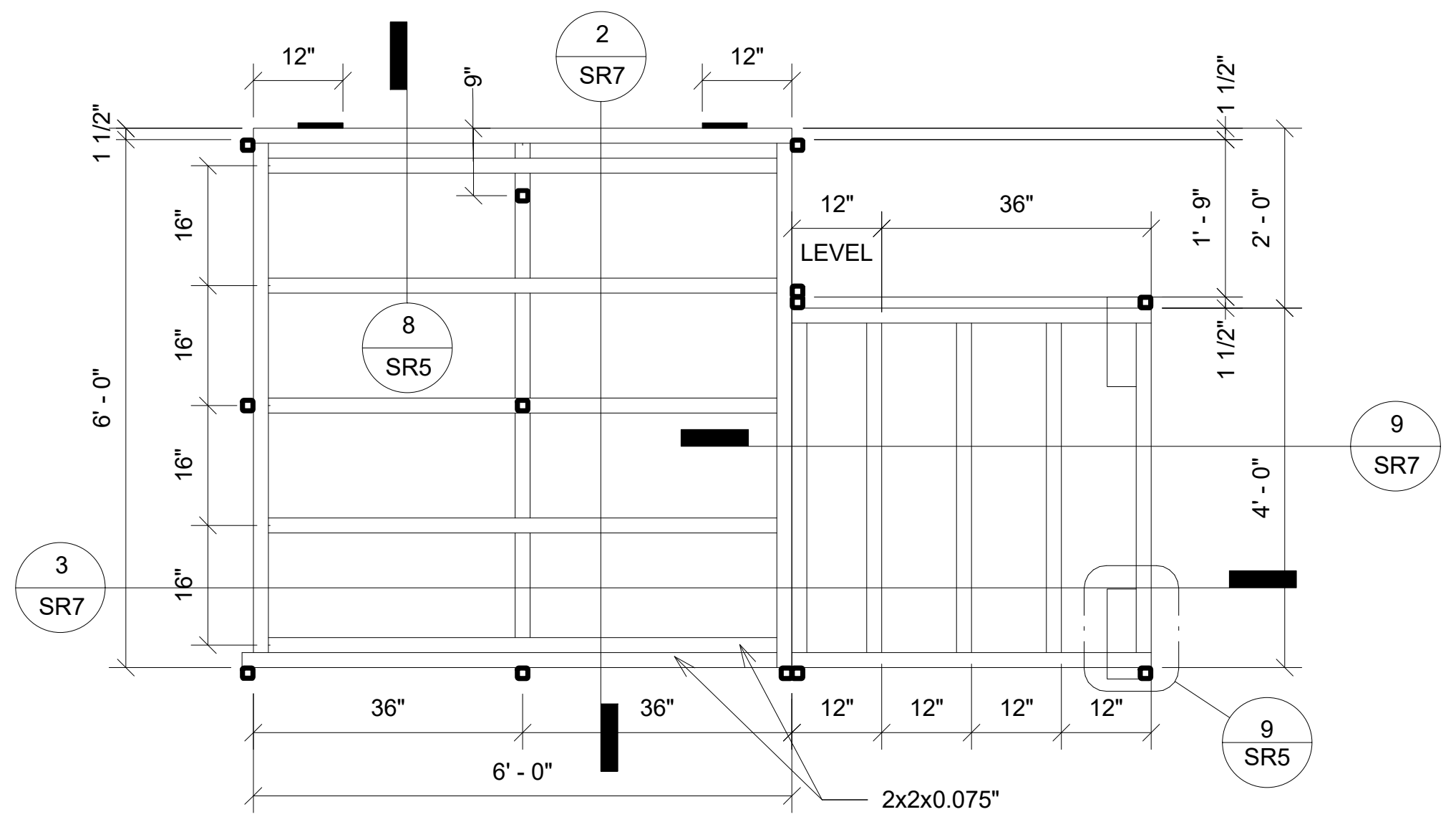


*THE TRIANGULAR OPENING AT THE OPEN SIDES OF A STAIR,FORMED BY THE RISER, TREAD, AND BOTTOM RAIL SHALL NOT ALLOW PASSAGE OF A SPHERE 6 INCHES IN DIAMETER PER CBC 1015.4(TYP)

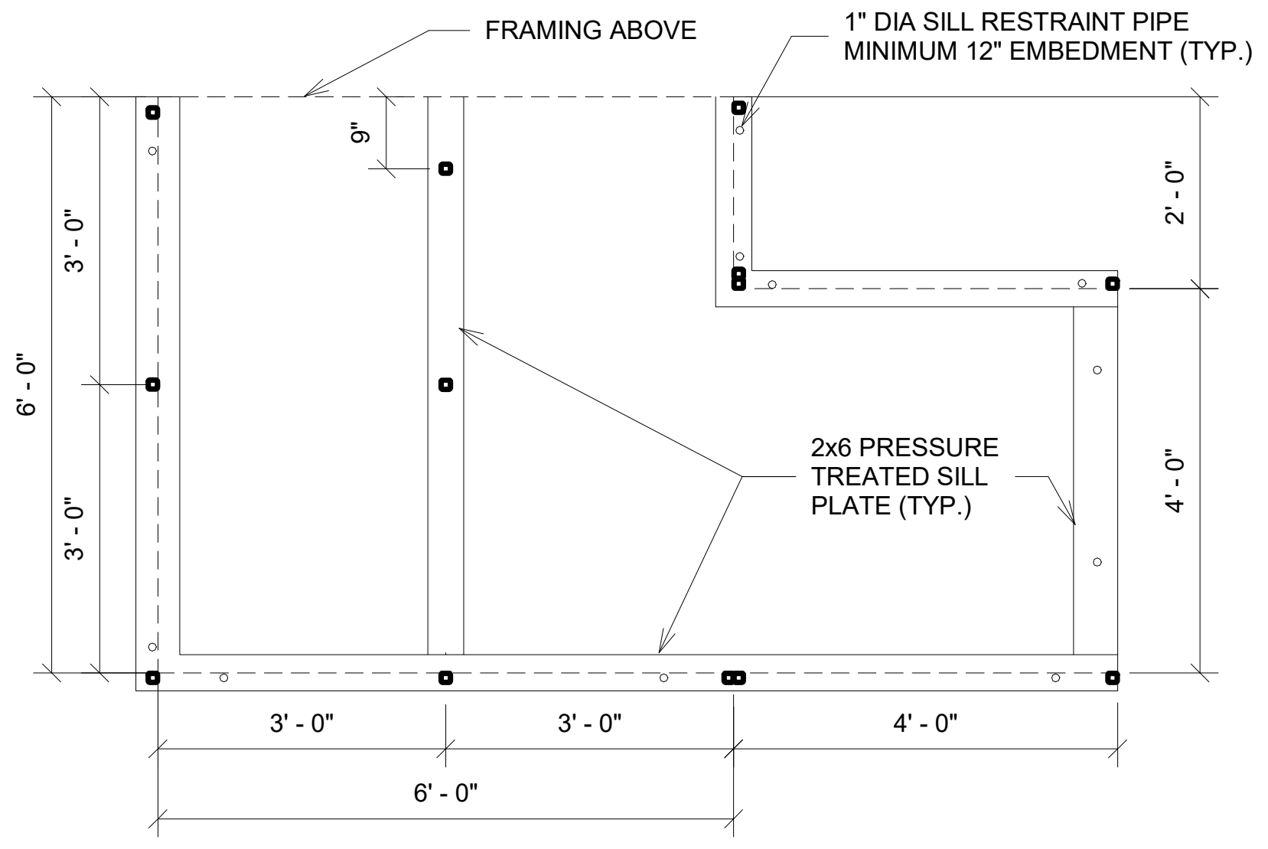
3 1/2" = 1'-0"
STEP AND LANDING SECTION



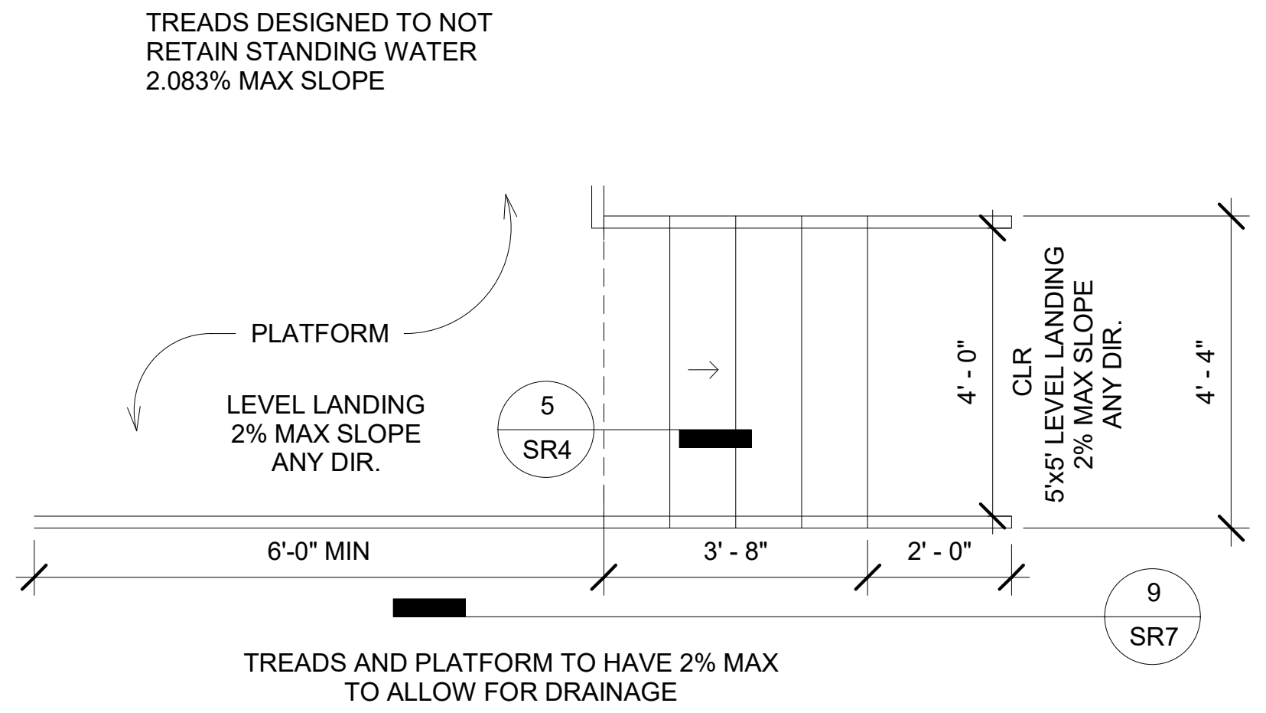
4 1/2" = 1'-0"
STEPS AND LANDING SECTION



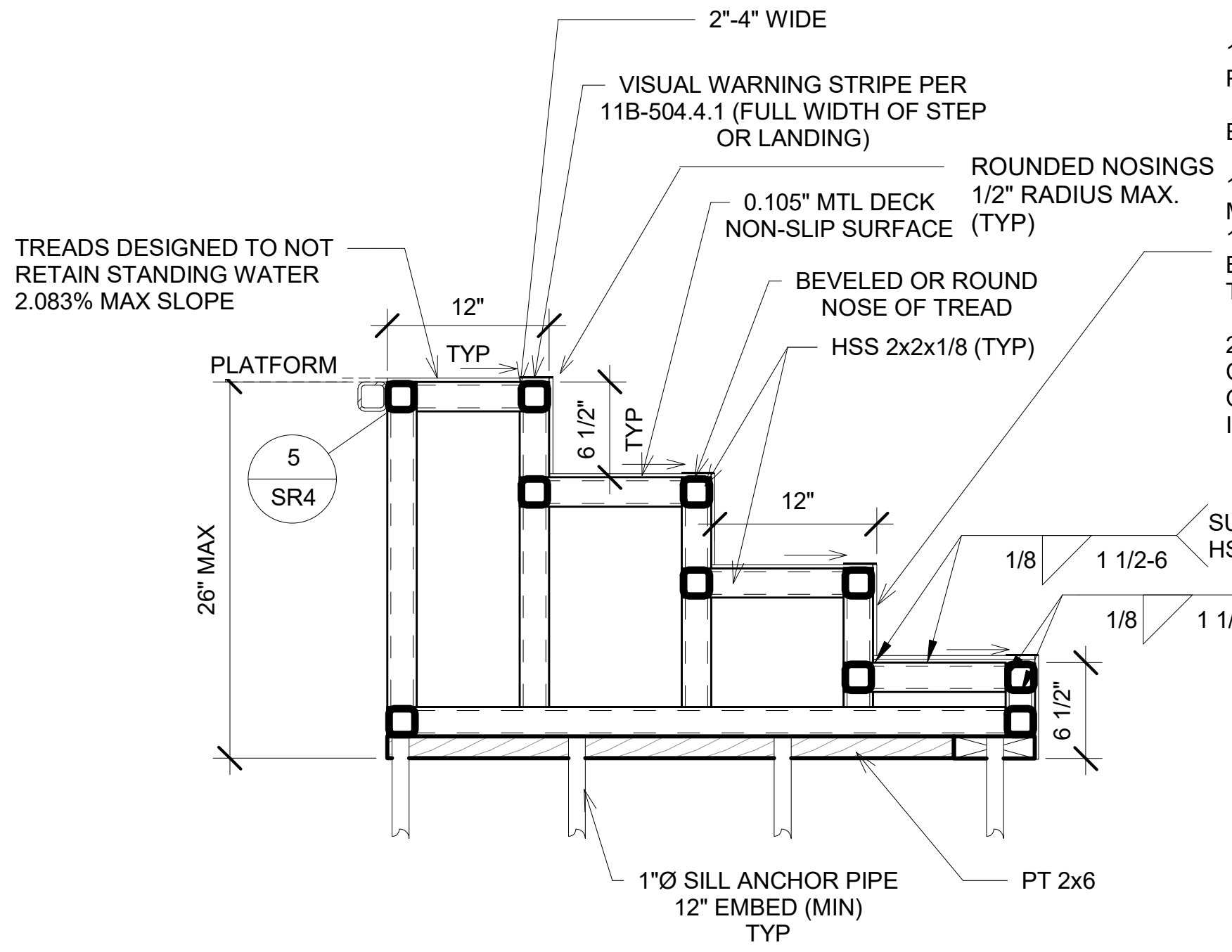
5 1/2" = 1'-0"
STEPS/LANDING FRAMING PLAN



7 1/2" = 1'-0"
SILL PLAN



8 3/8" = 1'-0"
Stair



11B-504.3 OPEN RISERS. OPEN RISERS ARE NOT PERMITTED.

EXCEPTIONS:

1. ON EXTERIOR STAIRWAYS, AN OPENING OF NOT MORE THAN 1/2 INCH (12.7 MM) MAY BE PERMITTED BETWEEN THE BASE OF THE RISER AND THE TREAD.

2. ON EXTERIOR STAIRWAYS, RISERS CONSTRUCTED OF GRATING CONTAINING OPENINGS OF NOT MORE THAN 1/2 INCH (12.7 MM) MAY BE PERMITTED.

9 1" = 1'-0"
Stair Elev

6/15/2021 7:29:30 PM M:\2020\20093 - Class Leasing, 24x40 - 120x40 2022 CBC Updates\REVIT\RST#20093 - Arles, Ramps and Stairs PC.rvt

PROJECT SPECIFIC STATE AGENCY APPROVAL
~~IDENTIFICATION STAMP~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP. 04-123316 INC:~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑~~
~~DATE: 03/13/2024~~

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
San Diego, CA 92127
www.rstavares.com

PROFESSIONAL STAMP
Manny D. Frisch
No. S3380
Exp. 03/31/24
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL
~~APPROVED~~
~~DIV. OF THE STATE ARCHITECT~~
~~APP: 04-123059 PC~~
~~REVIEWED FOR~~
~~SS ☑ FLS ☑ ACS ☑ CG ☑~~
~~DATE: 02/20/2024~~

Revision Schedule

#	Description	Date22079

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE
RAMPS PC
CLASS LEASING
PC#04-121419

SHEET TITLE
Stair Conn

PROJECT NUMBER
22079

DRAWN BY
rMc

CHECKED BY
BR

DATE
12/23/2022

SHEET NO.
SR7

SHEET OF