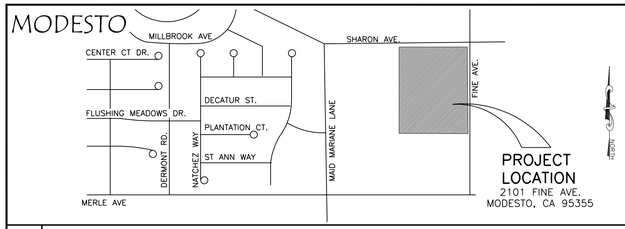


10 VICINITY MAP

1. THE INTENT OF THESE DRAWINGS IS TO INCLUDE ALL ITEMS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF THE WORK. WORDS AND ABBREVIATIONS WHICH HAVE WELL KNOWN TECHNICAL OR TRADE MEANINGS ARE USED IN THESE DRAWINGS IN ACCORDANCE WITH SUCH RECOGNIZED MEANINGS.
2. SHOULD EITHER THE DRAWINGS OR ANY PARTICULAR SPECIFICATION, AND THE GENERAL CONDITIONS CONTRADICT EACH OTHER IN ANY POINT, OR REQUIRE CLARIFICATIONS, THE CONTRACTOR MUST CALL THE SAME TO THE ATTENTION OF THE PROJECT ENGINEER /ARCHITECT AND HIS DECISION SHALL BE OBTAINED PRIOR TO THE SUBMISSION OF BIDS, OTHERWISE THE ENGINEER'S INTERPRETATION WILL GOVERN THE PERFORMANCE OF THE WORK AND NO ALLOWANCE SHALL BE MADE IN BEHALF OF THE SUBCONTRACTOR FOR ERROR OR NEGLIGENCE ON HIS PART IN THIS CONNECTION.
3. PROSPECTIVE SUBCONTRACTOR SHALL SECURE ALL DATA AT THE SITE OF THE PROPOSED CONST. SUCH AS GRADES OF LOT, CONVENIENCE OF RECEIVING AND SORTING MATERIALS, LOCATION OF PUBLIC SERVICES AND OTHER INFORMATION WHICH WILL HAVE A BEARING ON MAKING THEIR PROPOSALS OR ON THE EXECUTION OF THE WORK IF AWARDED THE CONTRACT, AND NO ALLOWANCE WILL BE MADE FOR FAILURE OF THE CONTRACTOR TO OBTAIN SUCH ON-SITE INFORMATION PRIOR TO BIDDING.
4. SHOULD ANY ERROR OR INCONSISTENCY APPEAR IN THE DRAWINGS, THE CONTRACTOR, BEFORE PROCEEDING WITH WORK, MUST CLEARLY BRING THE SAME TO THE ATTENTION OF THE PROJECT ENGINEER / ARCHITECT FOR PROPER ADJUSTMENT, AND IN NO CASE PROCEED WITH THE WORK IN UNCERTAINTY NOR WITH INSUFFICIENT DWGS.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL MEASUREMENTS AT AND IN THE PROPOSED CONSTRUCTION BUILDING OR SITE OR SURROUNDINGS. NO CHARGE OR COMPENSATION SHALL BE ALLOWED DUE TO DIFFERENCES BETWEEN ACTUAL DIMS. AND DIMENSIONS INDICATED ON THE DRAWING. ANY SUCH DISCREPANCY IN DIMENSIONS WHICH MAY BE FOUND, SHALL BE SUBMITTED TO ENGINEER FOR HIS CONSIDERATION BEFORE THE CONTRACTOR PROCEEDS WITH THE WORK IN THE AFFECTED AREA.
6. CONTRACTORS SHALL FOLLOW SIZES IN SPECS. OR FIGURES ON DWGS. IN PREFERENCE TO SCALE MEASUREMENTS, AND FOLLOW DETAILED DWGS. IN PREFERENCE TO GENERAL DRAWINGS, AND FOLLOW ACTUAL FIELD CONDITIONS.
7. WHERE IT IS OBVIOUS THAT A DRAWING ILLUSTRATES ONLY A PART OF A GIVEN WORK OF A NUMBER OF ITEMS, THE REMAINDER SHALL BE DEEMED REPETITIOUS AND SO CONSTRUCTED.
8. THE DOCUMENTS INDICATE GEN. AND TYP. DETS. OF CONSTRUCTION, WHERE CONDITIONS ARE NOT SPECIFICALLY INDICATED, DETAILS OF A CHARACTER SIMILAR TO THOSE SHOWN SHALL BE USED SUBJECT TO REVIEW BY PROJECT ENGINEER / ARCHITECT.
9. NOTHING CONTAINED HEREON SHALL BE CONSTRUED TO VIOLATE ANY APPLICABLE REGULATIONS.
10. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CCD APPROVED BY DSA AS REQUIRED BY SECTION4-338, PART 1, TITLE 24, CCR
11. BY EXECUTING THE CONTRACT, THE SUBCONTRACTOR REPRESENTS THAT HE HAS VISITED THE SITE, FAMILIARIZED HIMSELF WITH THE LOCAL CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, AND CORRELATED HIS OBSERVATIONS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND HAS READ ALL CONTRACT DWGS. INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND SITE WORK.
12. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PROVIDED ON THESE AND ALL DRAWINGS CONCUR WITH THE EXISTING CONDITIONS. DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT/ENGINEER OF RECORD AND RESOLVED PRIOR TO FURTHER CONSTRUCTION.
13. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SAFE CONST. PROCEDURES AT THE SITE AT ALL TIME.
14. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING SHOWN ON THE DWGS. OR IMPLICITLY REQD. DURING CONSTR. (TEMPORARY OR OTHERWISE) SAFETY SHALL BE MAINTAINED AT ALL TIMES ON AND OFF DUTY HOURS
15. THE PLANS AND DETAILS OF THESE DRAWINGS PROVIDE THE INTENT OF THE PROJECT. ANY QUESTIONS AND/OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT / ENGINEER OF RECORD AND RESOLVED PRIOR TO FURTHER CONSTRUCTION.
16. CONTRACTOR MAY RESERVE THE RIGHT TO SUBSTITUTE CALLED OUT NAME BRAND ITEMS WITH OTHERS OF EQUAL VALUE / QUALITY W/ PRIOR APPROVAL FROM ARCHITECT.
17. CONSTRUCTION AND DEMO. SHALL COMPLY WITH CFC 33 - FIRE LIFE SAFETY DURING CONSTRUCTION AND DEMO.
18. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
19. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DWGS., SPECIFICATIONS AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT AND STRUCTURAL ENGINEER AND APPROVED BY THE DSA. LIST DEFERRED SUBMITTAL ITEM FOR THIS PROJECT.
20. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
21. THE INTENT OF THESE DWGS. AND SPECS. IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR; SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCS. WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CCD OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK (SECTION 4-317(C), PART 1, TITLE 24, CCR)
22. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANC
23. NEW BUILDING SHALL BE PROVIDED WITH EMERGENCY RESPONDER RADIO COVERAGE IN ACCORDANCE WITH CALIFORNIA FIRE CODE SECTION 510. THE PROJECT ARCHITECT (AOR) SHALL CONTACT THE LOCAL FIRE DEPARTMENT AND/OR EMERGENCY COMMUNICATIONS AUTHORITY TO OBTAIN DESIGN, EQUIPMENT SPECIFICATIONS, TESTING AND ACCEPTANCE CRITERIA. PLANS AND REQUESTED DOCUMENTATION SHALL BE SUBMITTED TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL. UPON COMPLETION, COPIES OF THE APPROVED PLANS, EQUIPMENT DATA SHEETS, TESTING AND ACCEPTANCE DOCUMENTATION SHALL BE PROVIDED TO THE SCHOOL DISTRICT.

11 GENERAL NOTES

I find that:
- ☒ All drawings or sheets listed on the cover or index sheet
- ☐ this drawing or page

☒ is/are in general conformance with the project design, and
☒ has/have been coordinated with the project plans and specifications.

Signature — 02-20-2024 Date

Architect or Engineer designated to be in general responsible charge

David Starck
Print Name

C22903 — 12-31-25
License Number — Expiration Date

12 STATEMENT OF GENERAL CONFORMANCE

SYLVAN UNION SCHOOL DISTRICT

(2) NEW PORTABLE CLASSROOMS
FREEDOM ELEMENTARY SCHOOL

2101 FINE AVE , MODESTO, CA 95355

PROJECT TITLE

B / A-5 — SECTION OR DETAIL CUT. TOP NUMBER DENOTES LOCATION ON SHEETS AND THE BOTTOM NUMBER INDICATES THE SHEET NUMBER IT IS DRAWN.

1 / A-1

A.B.	ANCHOR BOLT	MECH.	MECHANICAL
A.F.F.	ABOVE FINISH FLOOR	MISC.	MISCELLANEOUS
BD.	BOARD	MFR.	MANUFACTURER
BOTT.	BOTTOM	MTL.	METAL
BLDG.	BUILDING	(N)	NEW
BLKG.	BLOCKING	N.T.S.	NOT TO SCALE
B.P	BITUMINOUS PAPER	O.H.	OVERHEAD
CBC	CALIFORNIA BUILDING CODE	O.C.	ON CENTER
CL OR ℄	CENTERLINE	O.D.	OUTSIDE DIMENSION
CLR.	CLEAR	OV.	OVER
CLG.	CEILING	OPP.	OPPOSITE
CMU	CONCRETE MASONRY UNIT	PAF.	POWDER ACTUATED FASTENER
COL.	COLUMN	PLYWD.	PLYWOOD
CONC.	CONCRETE	PLBG.	PLUMBING
CONST.	CONSTRUCTION	PSF	POUNDS PER SQUARE FEET
CONT.	CONTINOUS	PSI	POUNDS PER SQUARE INCH
DET.	DETAIL	PT.	POINT
DBL.	DOUBLE	P.T.	PRESSURE TREATED
DIA. OR ⌀	DIAMETER	REF.	REFRIGERATOR
DWG.	DRAWING	REINF.	REINFORCING
EA.	EACH	REQD.	REQUIRED
ELEV.	ELEVATION	R.H.W.S.	ROUND HEAD WOOD SCREW
E.N.	EDGE NAIL	SCHED.	SCHEDULE
ENCL.	ENCLOSURE	SECT.	SECTION
EQ.	EQUAL	S.D.S	SELF DRILLING SCREW
EQUIP.	EQUIPMENT	SHTG.	SHEATING
EXIST. OR (E)	EXISTING	SIM.	SIMILAR
F.D.	FLOOR DRAIN	SIM.	SIMILAR
FIN.	FINISH	SMS. OR S.M.S.	SHEET METAL SCREW
FLOUR.	FLOURESCENT	SPECS.	SPECIFICATIONS
FT.	FEET	SQ.	SQUARE
FTG.	FOOTING	STD.	STANDARD
F.F	FINISH FLOOR	STL.	STEEL
F.H.W.S	FLAT HEAD WOOD SCREW	STO.	STORAGE
F.O.S	FACE OF STUD	S.S.	STAINLESS STEEL
F.S	FLOOR SINK	SUSP.	SUSPENDED
GA	GAUGE	S.T.C. OR T.S.	STEEL TUBE COLUMN
GALV.	GALVANIZED	SYS.	SYSTEM
G.C.	GENERAL CONTRACTOR	T℄B	TOP AND BOTTOM
G.D	GARBAGE DISPOSAL	THK.	THICK
GYP. BD.	GYPSUM BOARD	TYP.	TYPICAL
H.B	HOSE BIBB	U.O.N.	UNLESS OTHERWISE NOTED
HR.	HOUR	VER.	VERIFY
HT.	HEIGHT	WD.	WOOD
INSUL.	INSULATION	WH	WATER HEATER
INT.	INTERIOR	W/	WITH
LAV.	LAVATORY	W/O	WITHOUT
MAX.	MAXIMUM		
MIN.	MINIMUM		

8 SYMBOLS AND ABBREVIATIONS

STATEMENT OF GENERAL CONFORMANCE

For architects/engineers who utilize plans including but not limited to shop drawings, prepared by other licensed design professionals and/or consultants.

(Application No. 02-122160 File No. 50-59)

☒ The drawings or sheets listed on the cover or index sheet.

☐ This drawing, page of specifications/calculations

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

1) design intent and appears to meet the appropriate requirements of Title 24, California Code Regulations and the project specifications prepared by me and
2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The 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" of Title 24, Part 1, (Title 24, Part 1, Section 4-317 (b)

PARTIAL LIST OF APPLICABLE CODES:

A. 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
B. 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)
C. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
D. 2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R. (2021 UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)
E. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R. (2021 UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)
F. 2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
G. 2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE 2022 CALIFORNIA AMENDMENTS)
H. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, (CAL GREEN) PART 11, TITLE 24 C.C.R.
J. 2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R. TITLE 19 C.C.R, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
K. AMERICANS WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG)

ADDITIONAL APPLICABLE STANDARDS:

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS
NFPA 14	STANDPIPE SYSTEMS (CA AMENDED)
NFPA 17	DRY CHEMICAL SYSTEMS
NFPA 17A	WET CHEMICAL SYSTEMS
NFPA 20	STATIONARY PUMPS
NFPA 24	PRIVATE FIRE MAINS (CA AMENDED)
NFPA 72	NATIONAL FIRE ALARM CODE (CA AMENDED);
NFPA 80	FIRE DOOR AND OTHER OPENING PROTECTIVES
NFPA 2001	CLEAN AGENT FIRE EXTINGUISHING SYSTEMS

REFERENCE CODE SECTION FOR NFPA STANDARDS - 2022 CBC (SFM) CHAPTER 35 SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS.

CONTRACTOR SHALL COMPLY WITH CFC CHAPTER 33 - FIRE SAFETY DURING DEMOLITION & CONSTRUCTION.

5 GOVERNING CODES

THIS PROJECT WILL REQUIRE DSA CLASS 2 PROJECT INSPECTOR.

INSPECTOR SHALL BE EMPLOYED BY OWNER AND APPROVED BY ARCHITECT, STRUCTURAL ENGINEER AND DSA

6 PROJECT INSPECTOR

OWNER	SYLVAN UNION SCHOOL DISTRICT 605 SYLVAN AVE, MODESTO, CA, 95350 TEL. (209) 574-5000 ATTN: LIZETT AGUILAR
PROJECT	(2) NEW PORTABLE CLASSROOM BUILDINGS FREEDOM ELEMENTARY SCHOOL 2101 FINE AVE MODESTO, CA 95355 TEL. (209) 552-3400
AGENCIES	STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES DIVISION OF THE STATE ARCHITECT 1102 Q ST. SUITE 5200 SACRAMENTO, CA 95814 TEL. (916) 445-8130 FAX (916) 323-5589
ARCHITECT	SKW & ASSOCIATES ENGINEERING • ARCHITECTURE • SURVEYING 2237 SCENIC DRIVE MODESTO, CA. 95355 TEL. (209) 523-8323 FAX (209) 529-1804
ELECTRICAL	PEZZONI ENGINEERING, INC. CONSULTING ELECTRICAL ENGINEERS 1150 9th STREET #1415 MODESTO, CA. 95354 TEL. (209) 544-4602
MODULAR BUILDING COMPANY	SILVER CREEK MODULAR 2830 BARRET AVE PERRIS, CA 92571 TEL. (951) 943-5393 FAX (951) 943-2211 ATTN: MICHAEL RODRIGUES

7 PROJECT DIRECTORY

T-1 COVER SHEET

ARCHITECTURAL:

A8-1	SITE PLAN
A8-2	ENLARGED SITE PLAN & DETAILS
A-1	FLOOR PLAN & EXTERIOR ELEVATIONS
A-2	ENLARGED RESTROOM PLANS

CIVIL:

C1.0	DEMOLITION PLAN
C2.0	GRADING PLAN
C2.1	ENLARGED GRADING PLAN
C3.0	SECTIONS AND DETAILS

ELECTRICAL:

E0.1	ELECTRICAL COVER SHEET
E0.2	FIRE ALARM DETAILS
E0.3	FIRE ALARM SYSTEMS AND SCHEDULES
E1.0	OVERALL SITE PLAN - ELECTRICAL
E2.0	PORTABLE FLOOR PLAN - ELECTRICAL
E3.1	ELECTRICAL DETAILS

(63) SHEETS TOTAL.

SILVER CREEK DRAWINGS (PC# 04-121999)
(2) 24'x40' CLASSROOM BUILDINGS

A-0N	COVER SHEET
A-1.0N	FLOOR PLAN 24X40 PROJECT SPECIFIC
E-1.0N	ELECTRICAL PLAN AND SCHEDULE 24X40 PROJECT SPECIFIC
A-0	COVER SHEET
A-0A	T & I FORMS
A-0B	T & I FORMS
A-0.1	SYMBOLS, LEGEND, ABBREVIATIONS & ADA SIGNAGE
A-0.2	SCHEDULES
A-0.3	TYPICAL KEY PLANS 24'-1.0" X 40'
A-0.53	DESIGN ENERGY VALUES WOOD FLOOR -WALL HVAC
A-0.54	PRF FORMS 24X40 - ZONE 14 WORST CASE
A-0.6A	CERTIFICATE OF COMPLIANCE FORMS
A-0.6B	CERTIFICATE OF COMPLIANCE FORMS
A-0.6C	CERTIFICATE OF COMPLIANCE FORMS
A-0.7	PV SYSTEM REQUIREMENTS, ENERGY MANDATORY MEASURES & CALGREEN SPECS
A-1.01	FLOOR PLAN 24X40
A-2.01	REFLECTED CEILING PLAN 24X40
A-2.20	CEILING DETAILS T-GRID
A-3.01	ROOF PLAN 24X40 - METAL DECK MONO OR DUAL SLOPE
A-3.50	ROOF DETAILS STANDING SEAM ROOF DECK
A-4.01	EXTERIOR ELEVATION 24X40 MONO/ DUAL SLOPE.
A-5.01	CROSS SECTION MONO SLOPE
A-5.05	CROSS SECTION
A-5.50	ARCHITECTURAL DETAILS WOOD STUD, SHTG
A-5.70	ARCHITECTURAL DETAILS FLOOR
A-5.80	ARCHITECTURAL DETAILS MISCELLANEOUS/ OPTIONS
A-5.81	ARCHITECTURAL DETAILS MISCELLANEOUS/ OPTIONS
A-6.01	INTERIOR ELEVATIONS 24X40
F-0.02	WOOD FOUNDATION PLAN 24X40 (50-15 PSF)
F-0.50	FOUNDATION DETAILS WOOD
S-0.1	STRUCTURAL SPECIFICATIONS
S-1.01	FLOOR FRAMING PLAN WOOD FLOOR
S-1.50	FLOOR FRAMING DETAILS WOOD FLOOR
S-2.01	ROOF FRAMING PLAN MONO SLOPE
S-2.50	ROOF FRAMING DETAILS MONO SLOPE
S-2.60	ROOF FRAMING DETAILS
S-2.90	ROOF FRAMING DETAILS TRUSS
S-3.01	BUILDING SECTIONS MONO SLOPE
S-5.00	WALL FRAMING ELEVATIONS WOOD STUDS
S-5.10	WALL FRAMING DETAILS WOOD STUDS
S-5.11	WALL FRAMING DETAILS WOOD STUDS
P-1.01	PLUMBING DETAILS AND SCHEDULE
M-0.1	MECHANICAL NOTES, SCHEDULES, & DETAILS
M-1.01	MECHANICAL PLAN WALL MOUNT 24X40
E1.01	ELECTRICAL PLAN AND SCHEDULE 24X40
R-1.03	RAMP LANDING
R-1.05	SWITCHBACK RAMP PLAN
R-2.01	RAMP DETAILS

1 SHEET INDEX.

SEISMIC: (EQUIVALENT LATERAL FORCE PROCEDURE)

I = 1.0 (OCCUPANCY CATEGORY II)

S_S = 0.625 S_1 = 0.254
S_{DS} = 0.541 S_{D1} = N/A

SITE CLASS: D SEISMIC DESIGN CATEGORY: D

WIND: (METHOD 1)

I = 1.0 (OCCUPANCY CATEGORY II) EXPOSURE: C

BASIC WIND SPEED: 94 MPH (NOMINAL WIND SPEED)

FLOOD ZONE: X (AREAS OF MINIMAL FLOOD HAZARD) (06099C0345F, 8/24/2021)

Note: New Portable Buildings will be transported as modules and reconnected at the project location.

2 DESIGN CRITERIA

1. CONSTRUCTION OF (2) 24x40 PORTABLE CLASSROOM BUILDINGS. (PC #04-121999)
2. NEW FIRE ALARM IN PORTABLES, CONCRETE FLATWORK, AND RELATED SITE IMPROVEMENTS.
3. NEW ELECTRICAL INFRASTRUCTURE TO CONNECT NEW PORTABLES.
4. **FIRE ALARM REPLACEMENT IN PORTABLES P1 AND P2.**

3 PROJECT DESCRIPTION

NEW PORTABLES:

(2) 24x40 PORTABLE BUILDINGS
TYPE V-B CONSTRUCTION - E OCCUPANCY, (NON-SPRINKLED)
960 SQ. FT EACH. (48 OCCUPANTS EACH).
168 SQ. FT OVERHANGS (EACH)

EXISTING PORTABLES:

(2) 24x40 PORTABLE BUILDINGS
TYPE V-B CONSTRUCTION - E OCCUPANCY, (NON-SPRINKLED)
PORTABLES P1 & P2 (AP. #02-106812)
960 SQ. FT EACH. (48 OCCUPANTS EACH).
168 SQ. FT OVERHANGS (EACH).

(2) NEW PORTABLES COMBINED	= 1,920 SQ. FT.
(2) NEW OVERHANGS	= 336 SQ. FT.
(2) EXISTING PORTABLES COMBINED	= 1,920 SQ. FT.
(2) EXISTING OVERHANGS	= 336 SQ. FT.
TOTAL	= 4,512 SQ. FT.

(COMBINED & SEPARATED BY MIN 20'-0" ON ALL SIDES)

AREA:

BASIC ALLOWABLE VB (NS), E OCC: 9,500 SF (TABLE 506.2)

TOTAL COMBINED AREA WITH OVERHANGS: 4,512 SQ. FT.

4,512 SQ. FT. < 9,500 SQ. FT. OK!

4 PROJECT DATA

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

skw & associates
architecture ◦ engineering ◦ surveying
2237 scenic drive, modesto, ca 95355 p. 209-523-8323 f. 209-758-2552

david j starck
architect
c 22903

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT — DAVID J. STARCK — C-22903 — REN. 12-31-25 — STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

COVER SHEET

REVISIONS :

BY : GZ
LIST : FREEDOM
DATE : 2-20-2024
JOB : 25M045

SHEET : T-1

ACCESSIBILITY NOTES:

1. ACCESSIBLE PATH (· · · · · · · · · ·) (A.P.) SHALL CONFORM TO THE FOLLOWING:
   - A COMMON BARRIER FREE ACCESSIBLE ROUTE AT LEAST 48" WIDE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL.
   - THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH.
   - CROSS-SLOPE DOES NOT EXCEED 2%.
   - SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5% UNLESS OTHERWISE INDICATED AS A RAMP.
   - MINIMUM 10 FC ALONG PATH FROM BUILDING TO PUBLIC WAY.
2. WALKS, SIDEWALKS AND PEDESTRIAN WAYS SHALL BE FREE OF GRATINGS WHENEVER POSSIBLE. FOR GRATINGS LOCATED IN THE SURFACE OF ANY OF THESE AREAS, GRID OPENINGS IN GRATINGS SHALL BE LIMITED TO 1/2" MAXIMUM IN THE DIRECTION OF TRAFFIC FLOW IN ALL DIRECTIONS IN PLAZAS AND LARGE OPEN AREAS.
3. GATES IN PATH OF TRAVEL MUST COMPLY WITH EXIT DOOR REQUIREMENTS PER CBC SECTION 11B-404.2.4 & 11B-404.2.6.) SPECIFY HARDWARE, KICK PLATES, 5 LBS PRESSURE TO OPERATE, STRIKE SIDE CLEARANCE, AND PANIC HARDWARE.
4. SEE SHEET AS-4, ACS-1 & ACS-2 FOR ADDITIONAL ACCESSIBLE REQUIREMENTS.
5. PROVIDE ACCESSIBILITY SIGNAGE (1BA) AT THE PRIMARY PUBLIC ENTRANCE AND SITE DIRECTIONAL SIGNAGE AT MAJOR JUNCTIONS CLARIFYING ACCESSIBLE AND NON-ACCESSIBLE ROUTES
6. CONTRACTOR SHALL VERIFY ALL BARRIERS ON THE INDICATED PATH OF TRAVEL HAVE BEEN REMOVE.

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE PATH OF TRAVEL (POT) IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESS PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITION AND STRUCTURL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF WORK 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 SO INDICATED IN THESE CONSTRUCTION DOCUMENT.

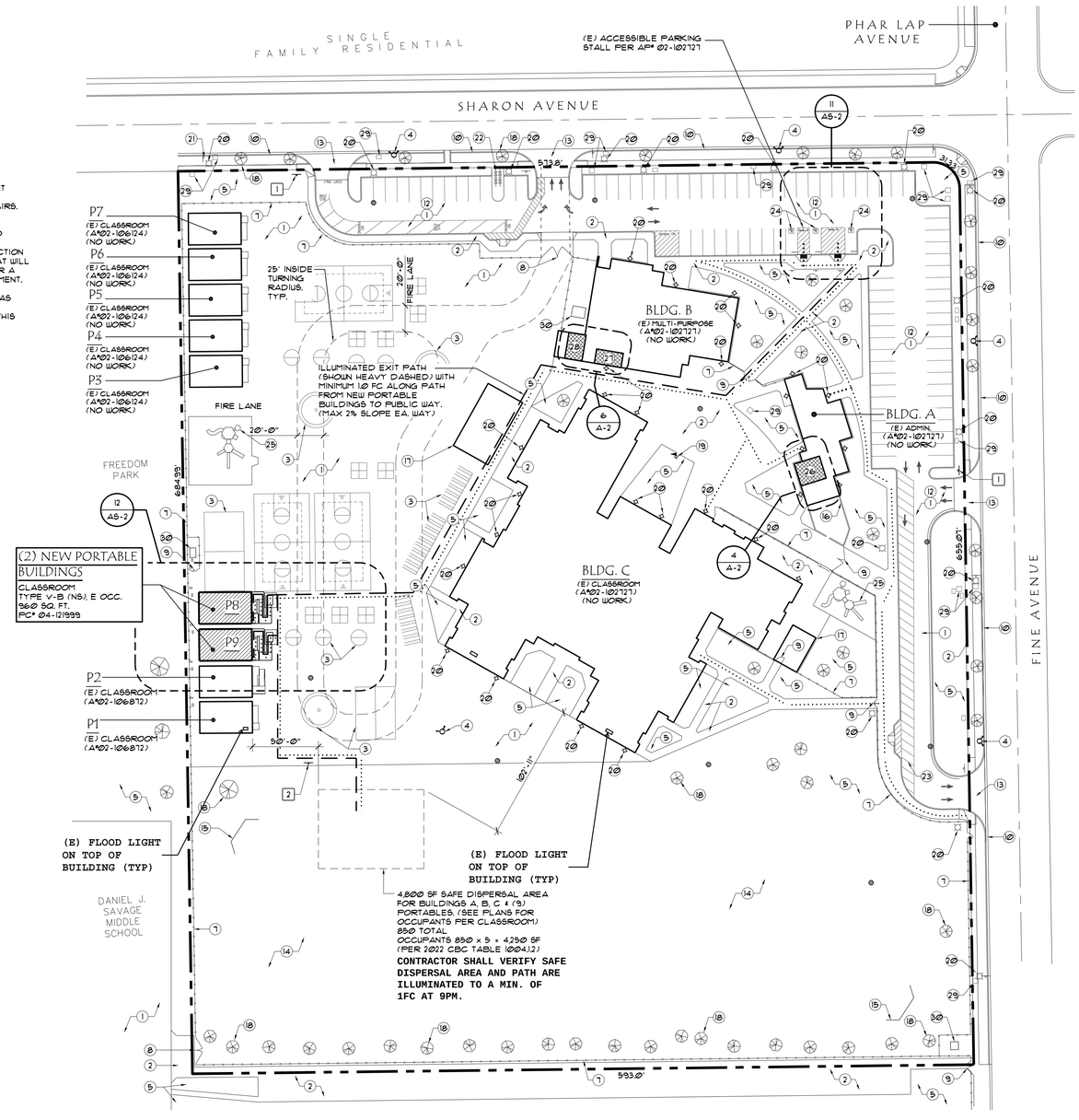
DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONST. TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

EXISTING

1. (E) ASPHALT PAVING, MAX 2% EA. WAY
2. (E) CONCRETE WALK, MAX 2% EA. WAY
3. (E) STRIPED PAVED PLAY AREA
4. (E) FIRE HYDRANT
5. (E) LANDSCAPING
6. (E) CONCRETE CURB
7. (E) CHAIN LINK FENCE
8. (E) FIRE ACCESS GATE (20'-0"w x 6'-0"h) w/ KNOX BOX
9. (E) CHAIN LINK GATE (8'-0"w x 6'-0"h)
10. (E) CURB & GUTTER
11. (E) W.I. FENCE
12. (E) PARKING LOT STRIPING (TYP.)
13. (E) CONC. DRIVE
14. (E) PLAY FIELD
15. (E) CHAIN LINK BACKSTOP
16. (E) MECHANICAL ENCLOSURE.
17. (E) SHADE STRUCTURE (AP. #02-107036)
18. (E) TREE (TYP.)
19. (E) SCHOOL FLAG POLE
20. (E) SITE LIGHTING
21. (E) SIGN
22. (E) BACKFLOW PREVENTOR
23. (E) STRIPING
24. (E) ACCESSIBLE PARKING STALL PER AP# 02-102727
25. (E) PLAYGROUND EQUIPMENT
26. (E) ACCESSIBLE STAFF R/R (AP.# 02-102727)
27. (E) ACCESSIBLE BOYS R/R (AP.# 02-102727)
28. (E) ACCESSIBLE GIRLS R/R (AP.#02-102727)
29. (E) CONCRETE PULL BOX
30. (E) TRANSFORMER & CONCRETE PAD

PROPOSED

1. NEW TOW AWAY SIGN. SEE DETAIL 9/ACS-2.
2. NEW SAFE DISPERSAL AREA SIGN. SEE DETAIL 11/ACS-2



NORTH

12 SITE PLAN

SCALE: 1" = 50'-0"

Modesto Fire Department
FIRE PREVENTION DIVISION
409 12th Street
Modesto, California 95354

Tel: (209) 571-5553 Fax: (209) 544-1652

WATERFLOW REPORT

Water Flow Requested By:	Joshua Gregoire
Address:	2237 Scienic Dr.
City:	Modesto, CA
Phone:	209-523-8323
FAX:	
E-Mail Results To:	joshua@slkwassociates.com
Project Name:	New Portables at Freedom Elementary School
Project Location:	2101 Fine Ave.
Water Tap Location:	
Location of Static Hydrant:	FH #J919 on Sharon Ave.
Location of Flow Hydrant:	FH #J918 on Sharon Ave.
Main Size:	6"
Tested By:	B. Mendenhall/ J. Ernst
Date Tested:	12/6/2023

Results Are Valid For This Project Only:
Occ. Number: 6142 **Building Permit Number:** FIR2023-00188

WATERFLOW RESULTS

☐	2.5"	pitot reading:		0 gpm Tested with 2.5" Hose Monster
		static:		gpm waterflow @ 20 psi
		residual:		
☒	4.5"	pitot reading:	24	1,622 gpm Tested with 4.5" Hose Monster
		static:	58	3,762 gpm waterflow @ 20 psi
		residual:	50	

revised: 09/14/2018

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:	SYLVAN UNION SCHOOL DISTRICT
Project Name/School:	FREEDOM ELEMENTARY SCHOOL (2) PORTABLE CLASSROOMS
Project Address:	2101 FINE AVE, MODESTO CA 95355

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: http://osfm.fire.ca.gov/FHSZ	Moderate ☐	High ☐ Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*		WIFA ☐

DSA 810
FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

CONDITION MEANS AND METHODS RESOLUTION		ALTERNATE ACCEPTED			
		Yes	No	N/A	A/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: _____ Title: _____

Signature: _____ Date: _____

LOCAL FIRE AUTHORITY (LFA) INFORMATION	
LFA Agency Name: Modesto Fire Department	
LFA Review Official: David Bickle	
Title: Fire Chief MARSHAL	Work Phone: (209) 572-9590
Work Email: FirePrevention@modestofire.com	
LFA Reviewer's Signature: _____	Date: 2/7/24

LOCAL FIRE AUTHORITY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

slkw & associates
architecture ○ engineering ○ surveying
2237 scenic drive, modesto, ca 95355 p. 209-523-8325 f. 209-758-2552

david j starck
architect
c 22305

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT DAVID J. STARCK C-22305 REN. 12-31-25 STATE OF CALIFORNIA

PROJECT TITLE:
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

SITE PLAN

REVISIONS :

BY : GZ
LIST : FREEDOM
DATE : 2-20-2024
JOB : 23M043

SHEET : AS-1

EXISTING

(1) (E) ASPHALT PAVING, MAX 2% EA. WAY

(2) (E) CONCRETE WALK, MAX 2% EA. WAY

(3) (E) STRIPED PAVED PLAY AREA

(4) (E) FIRE HYDRANT

(5) (E) LANDSCAPING

(10) (E) CONCRETE CURB

(12) (E) PARKING LOT STRIPPING (TYP.)

(29) (E) CONCRETE PULL BOX (TYP.)

(31) (E) BASKETBALL HOOP

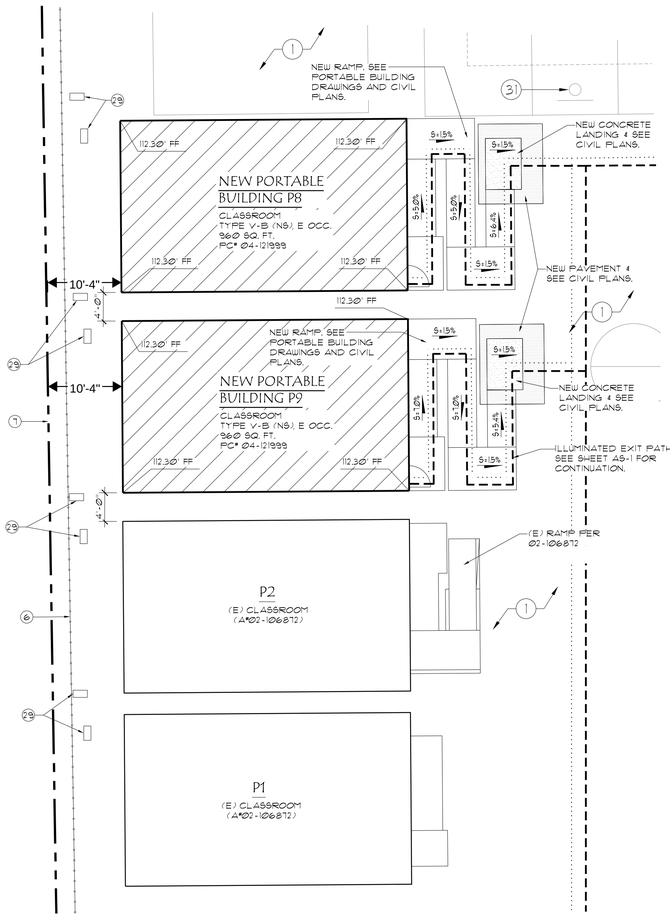
(32) (E) WHEEL STOP (TYP.)

(33) (E) ACCESSIBLE PARKING STALL SIGN PER AP# Ø2-1Ø2727.

(34) (E) ACCESSIBLE VAN PARKING STALL SIGN, Ø2-1Ø2727

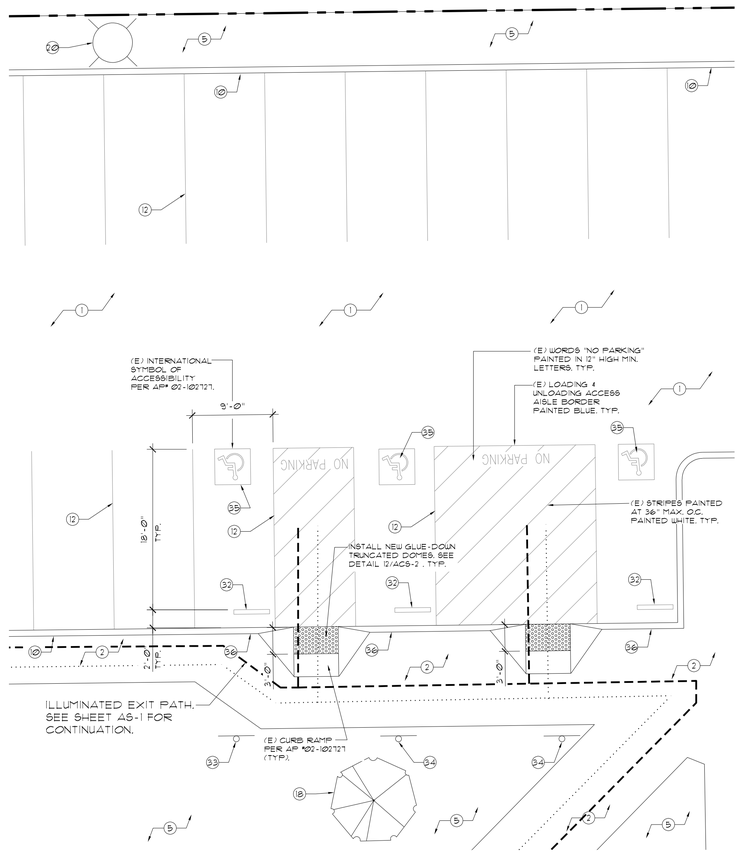
(35) (E) ACCESSIBLE PARKING STALL.

(36) (E) CONCRETE CURB PAINTED BLUE (TYP.)



NORTH

12 ENLARGED PARTIAL SITE PLAN SCALE: 1" = 10'-0"



NORTH

11 EXISTING ENLARGED PARTIAL SITE PLAN SCALE: 1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

skw & associates
architecture ◦ engineering ◦ surveying
2257 scenic drive, modesto, ca 95355 p. 209-523-8225 f. 209-758-2552

david j starck
architect
c 22903

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J. STARCK
C-22903
REN. 12-31-25
STATE OF CALIFORNIA

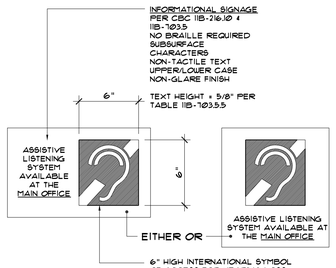
PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

ENLARGED PARTIAL SITE PLAN

REVISIONS :

BY : GZ
LIST : FREEDOM
DATE : 2-20-2024
JOB : 23M043

SHEET : AS-2

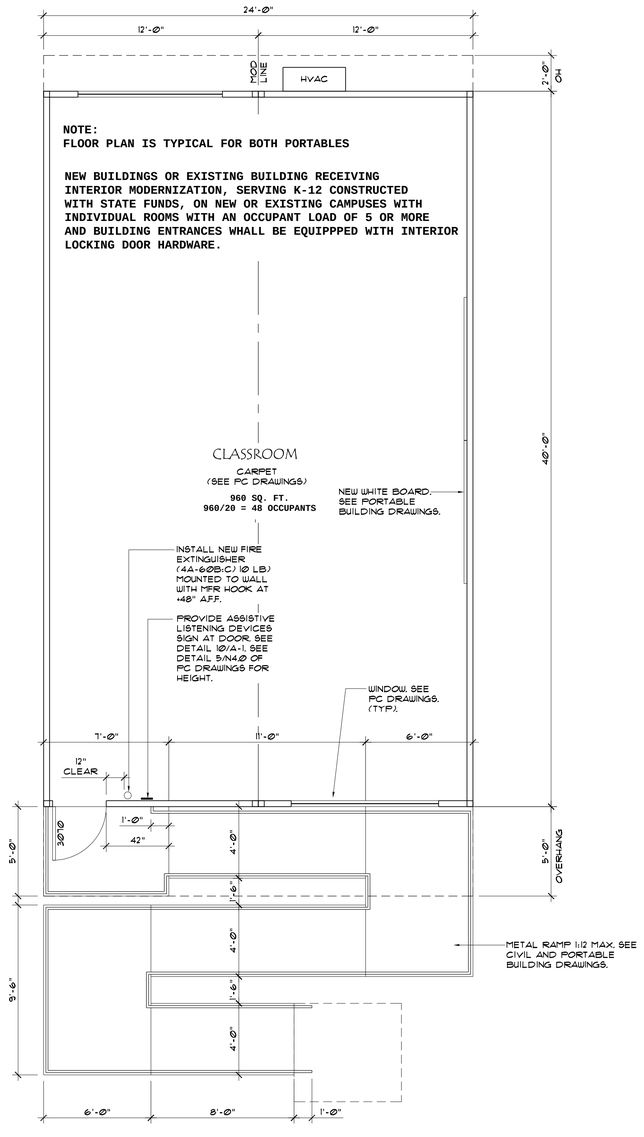


NOTES:

1. THE SIGN IS ASSISTING THE DEAF NOT THE BLIND BRAILLE NOT REQUIRED. SEE CBC 11B-219 FOR ASSISTIVE-LISTENING SYSTEM REQUIREMENTS.

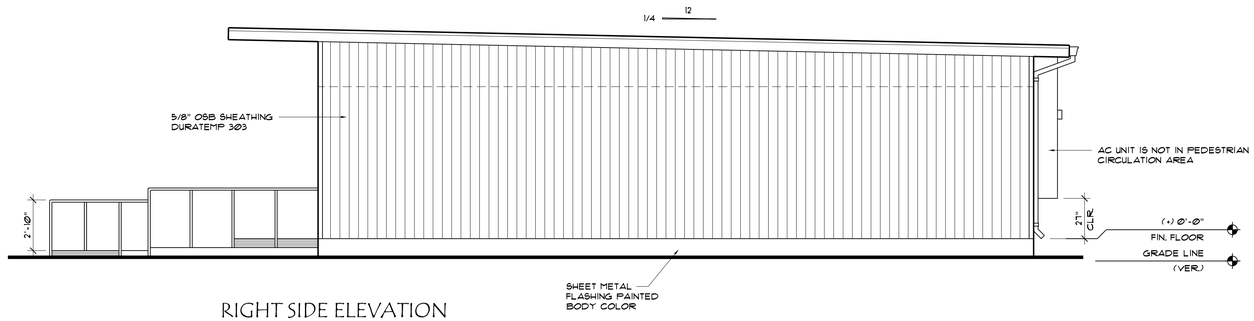
10 ASSISTIVE LISTENING DEVICES

NTS

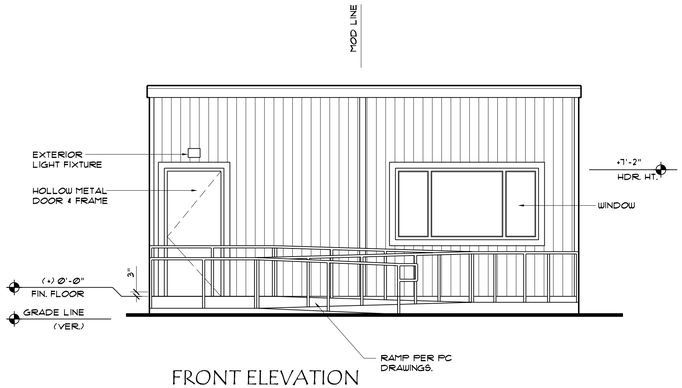


12 FLOOR PLAN

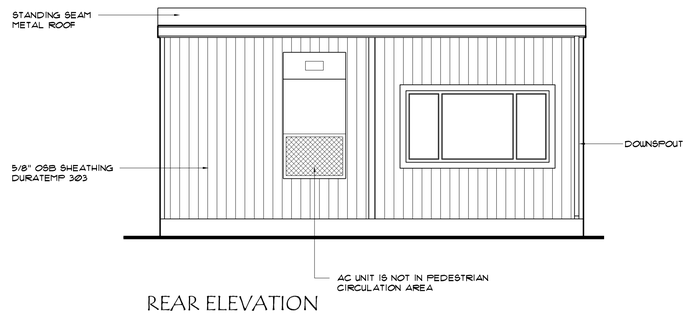
SCALE: 1/4" = 1'-0"



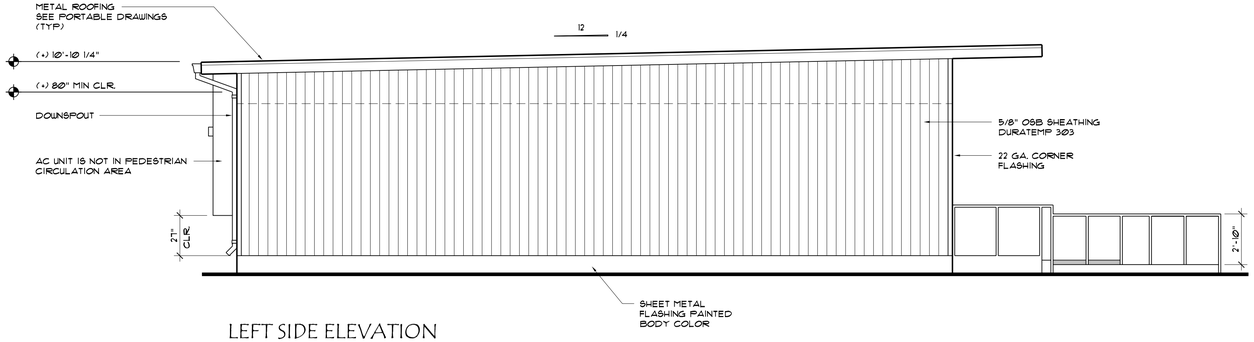
RIGHT SIDE ELEVATION



FRONT ELEVATION



REAR ELEVATION



LEFT SIDE ELEVATION

VERIFY:

1. SUB PANEL LOCATIONS. SEE DRAWINGS BY AMS MODULAR INC.
2. MAIN POWER POINT OF CONNECTION (P.O.C.) - SEE ELECTRICAL DRAWINGS.
3. SEE MODULAR BUILDING PLANS FOR ALL ADDITIONAL INFORMATION.

NOTE:

SEE SHEET ACS-1 FOR ACCESSIBLE FIXTURES MOUNTING DIMENSIONS.

9 EXTERIOR ELEVATIONS

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

skw & associates
architecture ○ engineering ○ surveying
2257 scenic drive, modesto, ca 95355 p. 209-525-8225 f. 209-758-2552

david j starck
architect
c 22905

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J STARCK
C-22905
REN. 12-31-25
STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

FLOOR PLAN AND
EXTERIOR ELEVATIONS

REVISIONS :

BY :	GZ
LIST :	FREEDOM
DATE :	2-20-2024
JOB :	23M045

SHEET :
A-1

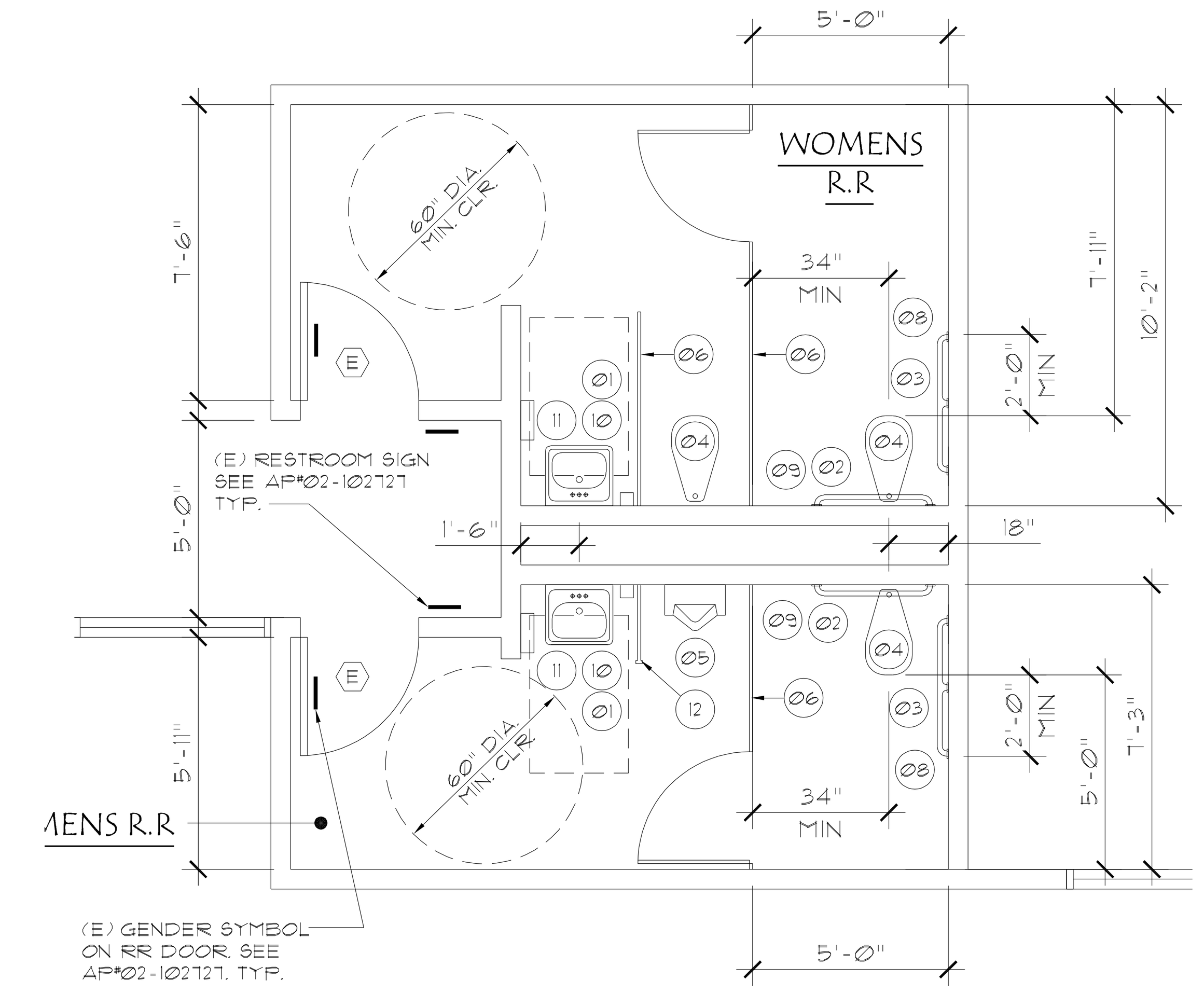
9	NOT USED

KEY NOTES:

01 (E) LAVATORY PER AP# 02-102727
02 (E) 36" GRAB BAR PER AP# 02-102727
03 (E) 42" GRAB BAR PER AP# 02-102727
04 (E) ACC. OR REG. WATER CLOSET PER AP# 02-102727
05 (E) ACC OR REGULAR URINAL PER AP# 02-102727
06 (E) TOILET PARTITION (SOLID PLASTIC) PER AP# 02-102727
07 (E) SOAP DISPENSER PER AP# 02-102727
08 (E) SURFACE MOUNTED TOILET PAPER DISPENSER. PER AP# 02-102727
09 (E) TOILET SEAT COVER DISPENSER. PER AP# 02-102727
10 (E) 2'-0"w x 2'-6"h MIRROR +40" A.F.F. MAX. (BOTT.) PER AP# 02-102727
11 (E) SURFACE MOUNTED HAND DRYER PER AP# 02-102727
12 (E) URINAL PARTITION (SOLID PLASTIC) WALL & TOP RAIL SUPPORTED AT FRONT

DOOR LEGEND:

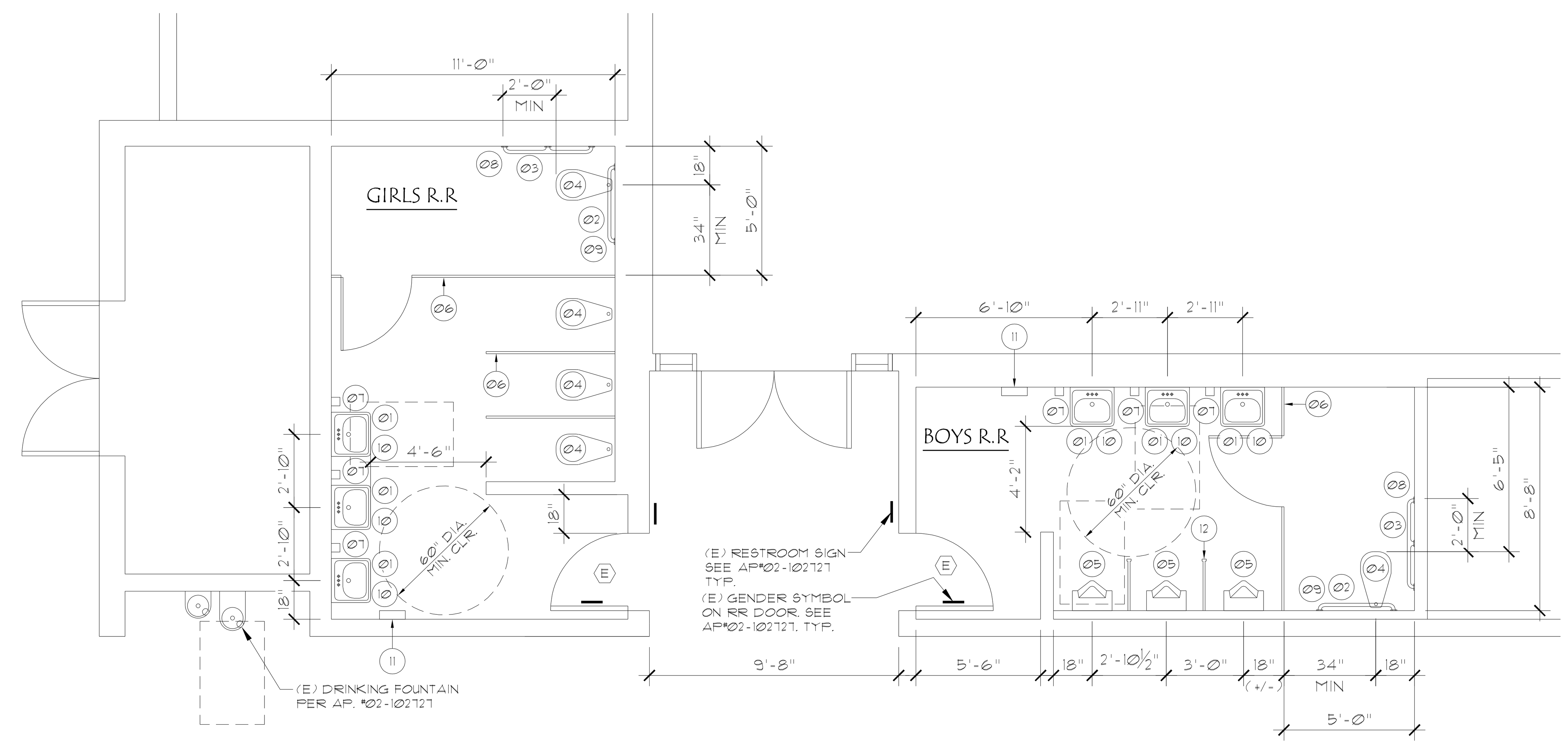
E — INDICATES AN EXISTING 3070 METAL DOOR AND FRAME TO REMAIN.



NORTH

4 EXISTING ENLARGED RESTROOM PLANS SCALE: 1/4" = 1'-0"

12	NOT USED



NORTH

6 EXISTING ENLARGED RESTROOM PLANS SCALE: 1/4" = 1'-0"

NOTE: THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AT THE JOB AND SHALL BE RESPONSIBLE FOR ALL DISCREPANCIES BETWEEN DIMENSIONS OF THE ACTUAL WORK AND THOSE SHOWN IN THE DOCUMENTS OR ARCHITECT'S APPROVED SHOP DRAWINGS. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL QUANTITIES OF MATERIAL OR EQUIPMENT CALLED FOR TO PROPERLY COMPLETE THE WORK.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

skw & associates
architecture ◦ engineering ◦ surveying
2237 scenic drive, modesto, ca 95355 p: 209·523·8323 f: 209·758·2352

david j. starck
architect
c 22903

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J. STARCK
C-22903
REN. 12·31·25
STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

ENLARGED RESTROOM PLANS

REVISIONS :

BY : GZ
LIST : FREEDOM
DATE : 2-20-2024
JOB : 23M043

SHEET : A-2

SYMBOLS LEGEND

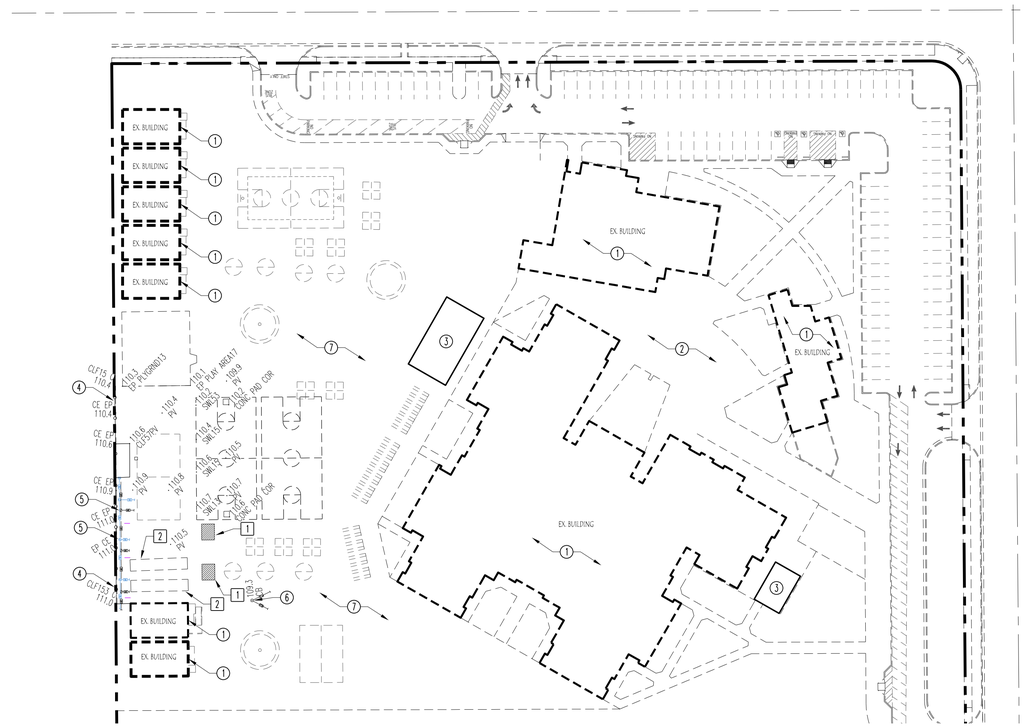
DESCRIPTION	PROPOSED	EXISTING
SANITARY SEWER	6"SS	6"SS
STORM SEWER	12"SD	12"SD
GAS LINE	2"G	2"G
WATER LINE	8"W	8"W
UNDERGROUND ELECTRICAL	UGE	UGE
OVERHEAD UTILITIES	O/H	O/H
ELECTRICAL CONDUIT	E	E
IRRIGATION LINE	12"IR	12"IR
GAS VALVE	GV	GV
WATER VALVE	WV	WV
GRADES/ELEVATIONS	147.00 FG	×147.00
PAD ELEVATION	148.4	
SLOPE/FLOW DIRECTION	SLOPE	SLOPE
CONTOUR LINE		148
CENTERLINE		
MANHOLE		
CATCH BASIN		
GAS METER	G	G
WATER METER	W	W
CURB AND GUTTER		
SIDEWALK		
DRIVEWAY		
FIRE HYDRANT		
SIGN		
SANITARY SEWER CLEAN OUT		
UTILITY POLE		
FENCE		
WHEELCHAIR RAMP		
ELECTROLIER		

LIST OF ABBREVIATIONS

ABBREV.	DESCRIPTION	ABBREV.	DESCRIPTION
AB	AGGREGATE BASE	LF	LINEAR FEET
AC	ASPHALT CEMENT	LP	LOW POINT
BC	BEGIN CURVE	MATCH	MATCH EXISTING CONDITIONS
BFP	BACKFLOW PREVENTION ASSEMBLY	MAX	MAXIMUM
BOW, BSW, BW	BACK OF SIDEWALK	MH	MANHOLE
BLDG	BUILDING	MIN	MINIMUM
C	CONCRETE	N	NORTH, NEW
CAP	CONCRETE ANGLE POINT	NTS	NOT TO SCALE
CE	CONCRETE EDGE	O/H	OVER-HEAD UTILITIES
CB	CATCH BASIN	P	PAVEMENT
C&G	CURB AND GUTTER	PL	PROPERTY LINE
CIP	CAST IRON PIPE, CAST IN PLACE	PT	POINT, POINT OF TANGENT
CL	CENTERLINE	PNT	POINT
CLF	CHAINLINK FENCE	PVC	POLYVINYL CHLORIDE
CO	CLEAN OUT	RCP	REINFORCED CONCRETE PIPE
CONC	CONCRETE	R	RADIUS, RADIAL BEARING
DEMO	DEMOLISH	REQD	REQUIRED
DET	DETAIL	S	SOUTH, SLOPE
DI	DROP INLET	SD	STORM DRAIN
DIA	DIAMETER	SDMH	STORM DRAIN MANHOLE
DIP	DUCTILE IRON PIPE	SS	SANITARY SEWER
E	EAST, EXISTING	SSMH	SANITARY SEWER MANHOLE
EC	END CURVE	STD	STANDARD
ELEC	ELECTRICAL	SW	SOUTHWEST, SIDEWALK
ELEV	ELEVATION	TBC	TOP BACK OF CURB
EP	EDGE OF PAVEMENT	TC	TOP OF CURB
EX	EXISTING	TEMP	TEMPORARY
FE	FENCE	TFOC	TOP FACE OF CURB
FF	FINISH FLOOR	THRU	THROUGH
FH	FIRE HYDRANT	VERT	VERTICAL
FL	FLOWLINE	W	WEST, WATER
FOW	FACE OF WALK, FRONT OF WALK	WV	WATER VALVE
GB	GRADE BREAK		
GS	GROUND SHOT		
GV	GAS VALVE, GATE VALVE		
INV	INVERT		
IRR	IRRIGATION		

NOTE: THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AT THE JOB AND SHALL BE RESPONSIBLE FOR ALL DISCREPANCIES BETWEEN DIMENSIONS OF THE ACTUAL WORK AND THOSE SHOWN IN THE DOCUMENTS OR ARCHITECT'S APPROVED SHOP DRAWINGS. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL QUANTITIES OF MATERIALS OR EQUIPMENT CALLED FOR TO PROPERLY COMPLETE THE WORK.

DEMOLITION PLAN


EX. BUILDING
CLF15
110.4
CE EP
110.4
110.6
CE EP
110.6
110.9
CE EP
110.9
CE EP
111.0
EP
111.0
CLF15
111.0
110.1
DI PLAY AREA17
110.2
SWLS
110.4
SWLS
110.6
SWLS
110.7
SWLS
110.8
SWLS
109.9
PV
110.4
PV
110.5
PV
110.8
PV
110.5
FF
FDN
109.5
109.9
PV
110.4
PV
110.5
PV
110.8
PV
110.5
FF
FDN
109.5
EX. BUILDING
EX. BUILDING
EX. BUILDING

CONCRETE NOTES:

1. STRUCTURAL CONCRETE SHALL TEST NOT LESS THAN 3000 PSI IN 28 DAYS,
2. CEMENT SHALL CONFORM TO A.S.T.M. C-150 TYPE 1.
3. CONCRETE AGGREGATES SHALL CONFORM TO A.S.T.M. C-33.
4. REINFORCING SHALL CONFORM TO A.S.T.M. A-615 GRADE 40, TYP. #6 OR GREATER, GRADE 60.
5. REINFORCING STEEL SHALL BE FABRICATED ACCORDING TO "MANUAL OF STANDARD PRACTICE FOR REINFORCED CONCRETE CONSTRUCTION."
6. WIRE FABRIC SHALL NOT BE USED.
7. DIMENSIONS SHOWN FOR LOCATION OF REINFORCING ARE TO THE FACE OF MAIN BARS AND DENOTE CLEAR COVERAGE. CONCRETE COVERAGE SHALL BE AS FOLLOWS:

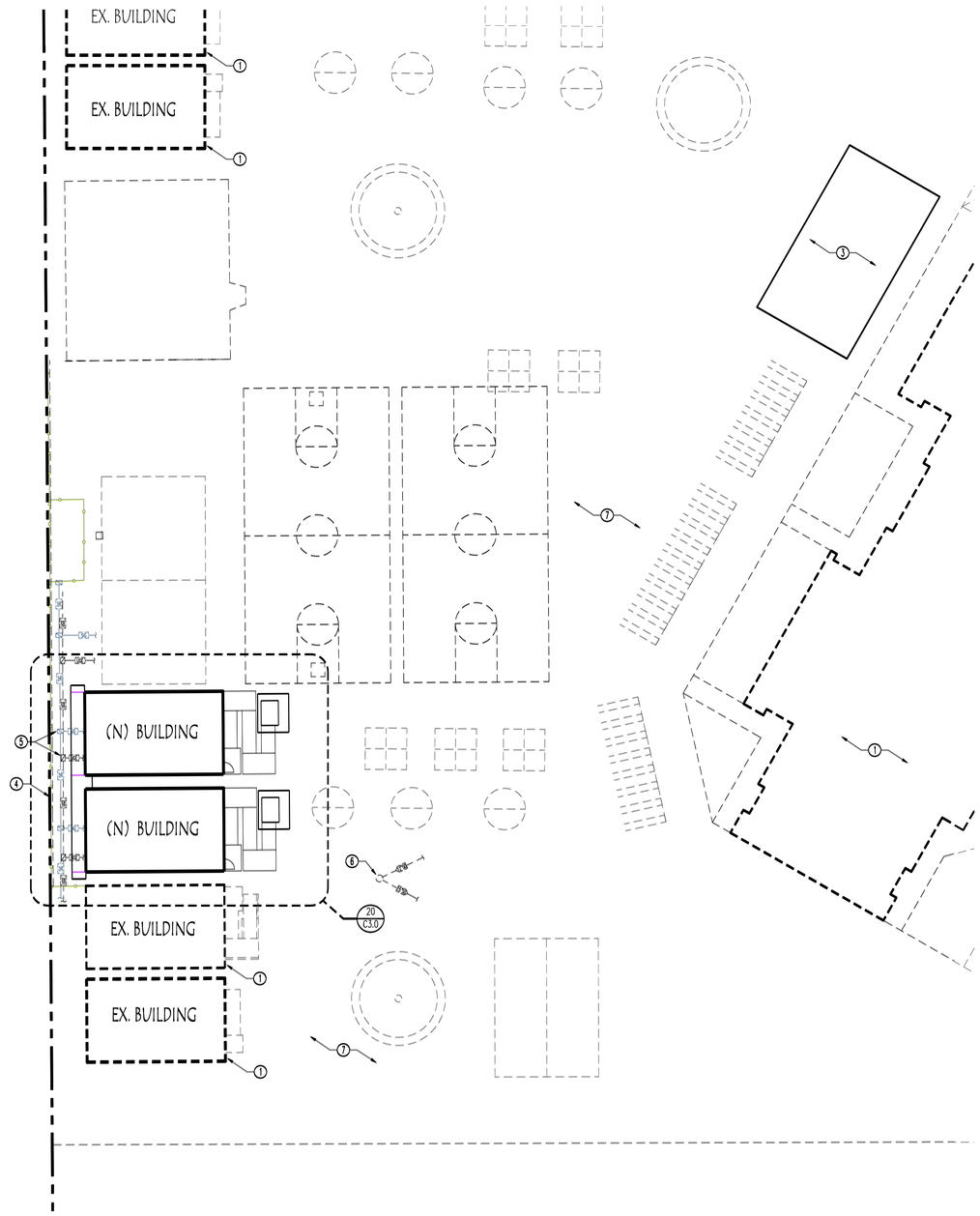
CONCRETE DEPOSITED DIRECTLY AGAINST GROUND (EXCEPT SLAB)	3"
CONCRETE EXPOSED TO GROUND BUT PLACED IN FORMS	2"
TIED COLUMNS (MAIN BARS)	2"
BEAMS (TOP BARS)	1.5"
BEAMS (ALL OTHER MAIN REINFORCING)	2"
PAN JOISTS	1"
SPIRAL COLUMNS (TO FACE OF SPIRAL REINFORCING)	1.5"
WALLS (EXTERIOR FACE)	2"
WALLS (INTERIOR FACE)	0.75"
SLABS (ON FORMS)	0.75"
SLABS (ON GROUND)	POSITION IN CENTER OF SLAB

8. SPLICES IN CONTINUOUS REINFORCEMENTS SHALL BE 32 BAR DIAMETERS AND SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN 5'-0" APART. SPLICE CONTINUOUS BARS IN SPANDRELS, GRADE BEAMS, WALL BEAMS, ETC. AS FOLLOWS: TOP BARS AT CENTER SPAN – BOTTOM BARS AT CENTER SUPPORT.
9. CONSTRUCTION JOINTS SHALL BE MADE ROUGH AFTER ALL LAITANCE HAS BEEN REMOVED FROM THE SURFACE. CONCRETE MAY BE ROUGHENED BY CHIPPING THE ENTIRE SURFACE, SAND BLASTING, OR HOWING THE SURFACE 4 TO 6 HOURS AFTER THE POUR WITH A FINE SPRAY. REMOVE ALL DEBRIS FROM THE FORMS BEFORE POURING ANY CONCRETE.. DRILL THROUGH STEEL COLUMNS AND BEAMS TO PASS HORIZONTAL REINFORCING.
10. REINFORCING, DOWELS, BOLTS, ANCHORS, SLEEVES, ETC. TO BE EMBEDDED IN CONCRETE SHALL BE SECURELY POSITIONED BEFORE PLACING CONCRETE.
11. MAXIMUM FREE FALL OF CONCRETE SHALL BE 6'-0".
12. WALLS SHALL BE POURED IN HORIZONTAL LAYERS OF 2'-0" MAX. DEPTH.
13. CONCRETE IN WALLS, PIERS OR COLUMNS SHALL BE SET AT LEAST 2 HOURS BEFORE PLACING CONCRETE IN BEAMS, SPANDRELS, OR SLABS SUPPORTED THEREON.
14. HORIZONTAL WALL BARS IN DOUBLE LAYER WALLS SHALL BE STAGGERED.
15. DOWEL ALL VERT. REBARS IN WALLS AND COLUMNS FROM FOUNDATION WITH SAME SIZE BAR.
16. MINIMUM WALL REINFORCING SHALL BE:

WALL THICKNESS	SINGLE LAYER	DOUBLE LAYER
7" OR LESS	#4 AT 12" OC EA. WAY	
8"	#4 AT 18" OC EA. WAY	#4 AT 10" OC EA. WAY

TRENCHING AND RESURFACING:

1. ALL TRENCHES SHALL BE SHORED OR PROTECTED IN ACCORDANCE WITH OSHA AND OTHER STATE AND FEDERAL SAFETY CODES, REGULATIONS AND ORDINANCES.
2. UNSTABLE MATERIAL SHALL BE EXCAVATED AND STABILIZED WITH #3 ROCK (PER ASTM 33 OR APPROVED EQUAL) OR WITH CEMENT SLURRY/CONCRETE AS APPROVED BY THE PROJECT ENGINEER.
   2.1. FOR EXISTING PAVED AREAS, BACKFILL MATERIAL SHALL BE AGGREGATE BASE (95% RELATIVE COMPACTION 2'-0" BELOW THE PAVEMENT SURFACE) AND NATIVE BACKFILL (90% RELATIVE COMPACTION FOR THE REMAINING DEPTH TO THE PIPE BEDDING).
   2.2. PLACEMENT OF AGGREGATE BASE SHALL BE IN 12" LIFTS EVENLY PLACED AND MECHANICALLY COMPACTED TO RELATIVE DENSITY AS SPECIFIED. COMPACTION TESTS SHALL BE REQUIRED AT THE DISCRETION OF THE PROJECT ENGINEER. ALL COSTS RELATED TO THESE TESTS SHALL BE BORNE BY THE OWNER/CONTRACTOR/UTILITY COMPANY WHEN SUCH TESTS ARE REQUIRED. IF RESULTS OF THESE TESTS DO NOT MEET SPECIFIED REQUIREMENTS, BACKFILL SHALL BE EXCAVATED, REPLACED, COMPACTED AND RETESTED, IN CASE OF ONE SACK SLURRY MIX OR CONTROLLED DENSITY FILL, NO COMPACTION TEST WILL BE REQUIRED.
3. DROP HAMMER SHALL NOT BE USED TO CUT PAVEMENT.
4. ALL TRENCHES SHALL BE BACKFILLED AND TEMPORARILY PAVED AT THE END OF EACH WORKING DAY. THE USE OF STEEL PLATES MUST BE APPROVED BY THE PROJECT ENGINEER AT LEAST 48 HOURS IN ADVANCE.
5. INITIAL CUT IN STREET PAVEMENT SHALL BE EQUAL TO THE WIDTH OF THE TRENCH WITH THE OPTION OF BEING JACK HAMMERED OR SAW CUT.
6. FINAL CUT IN STREET PAVEMENT SHALL BE 12" WIDER THAN THE TRENCH WIDTH AND SHALL BE MADE BY SAW CUTTING ONLY.
7. TEMPORARY BITUMINOUS SURFACING (CUT BACK) SHALL BE PLACED AND COMPACTED IMMEDIATELY ABOVE THE TRENCH FOLLOWING COMPACTION. MINIMUM DEPTH OF CUT BACK SHALL BE 2" OR AS SPECIFIED BY THE PROJECT. CUT BACK SHALL BE MAINTAINED IN GOOD CONDITION UP TO THE TIME THE FINAL PAVING IS PLACED ON TRENCH IN ACCORDANCE WITH NOTE #8.
8. FINAL PAVING ABOVE THE TRENCH SECTION SHALL BE PLACED WITHIN 14 DAYS OF ITS BACKFILL AND COMPACTION. EXTENSION MAY BE GRANTED BY THE OWNER DUE TO WEATHER CONDITIONS.
9. TEMPORARY CUT BACK SHALL BE REMOVED BEFORE PLACEMENT OF FINAL PAVING. FINAL PAVING SHALL BE PLACED ON UNDISTURBED PREVIOUSLY INSPECTED AND COMPACTED AGGREGATE BASE OR ONE SACK SLURRY MIX/ CONTROLLED DENSITY FILL. RECOMPACTION AND INSPECTION SHALL BE REQUIRED FOR ANY DISTURBED BASE OR SURFACE PRIOR TO PLACEMENT OF FINAL PAVING.
10. PROPER TRAFFIC CONTROLS AND COVERING OF TRENCHES SHALL BE MAINTAINED IN ACCORDANCE WITH THE CALTRANS STANDARD SPECIFICATIONS.
11. ASPHALT CONCRETE SHALL BE IN ACCORDANCE WITH THE CALTRANS SPECIFICATIONS.
12. ALL TRENCHES SHALL HAVE A COMPACTION TEST TO ENSURE PROPER COMPACTION, AS SPECIFIED BY THE GEOTECHNICAL ENGINEER.



KEY NOTES:

1. EX. BUILDING TO REMAIN
2. EX. CONC. SIDEWALK/FLATWORK TO REMAIN
3. EX. SHADE STRUCTURE TO REMAIN
4. EX. FENCE TO REMAIN
5. EX. UTILITY BOX TO REMAIN
6. EX. CATCH-BASIN TO REMAIN
7. EX. AC PAVEMENT TO REMAIN

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

20 | CONSTRUCTION NOTES

NOTE: THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AT THE JOB AND SHALL BE RESPONSIBLE FOR ALL DISCREPANCIES BETWEEN DIMENSIONS OF THE ACTUAL WORK AND THOSE SHOWN IN THE DOCUMENT. DK ARCHITECT'S APPROVED SHOP DRAWINGS. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL QUANTITIES OF MATERIAL OR EQUIPMENT CALLED FOR TO PROPERLY COMPLETE THE WORK.

IDENTIFICATION STAMP
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APP: 02-122160 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

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LICENSED ARCHITECT
DAVID J. STARCK
No. C-22905
REN. 11-30-2025
STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

GRADING PLAN

REVISIONS :

BY : A.S. R.H.
LIST : FREEDOM
DATE : 02-07-2024
JOB : 23M043

SHEET : C2.0

EXTERIOR FLATWORK:

1) CONCRETE FLATWORK SHALL BE 4" CONCRETE O/V COMPACTED NATIVE, WITH #3 BARS AT 18"c., CENTERED IN THE SLAB
PARKING AREA : 6" CONCRETE O/V 4" A.B. O/V COMPACTED NATIVE, WITH #3 BARS AT 18"c., CENTERED IN THE SLAB

2) INSTALL CONTINUOUS 1/2", FELT, EXPANSION JOINT WHERE NEW FLATWORK ABUTS EXISTING FLATWORK.

3) CRACK CONTROL JOINTS:

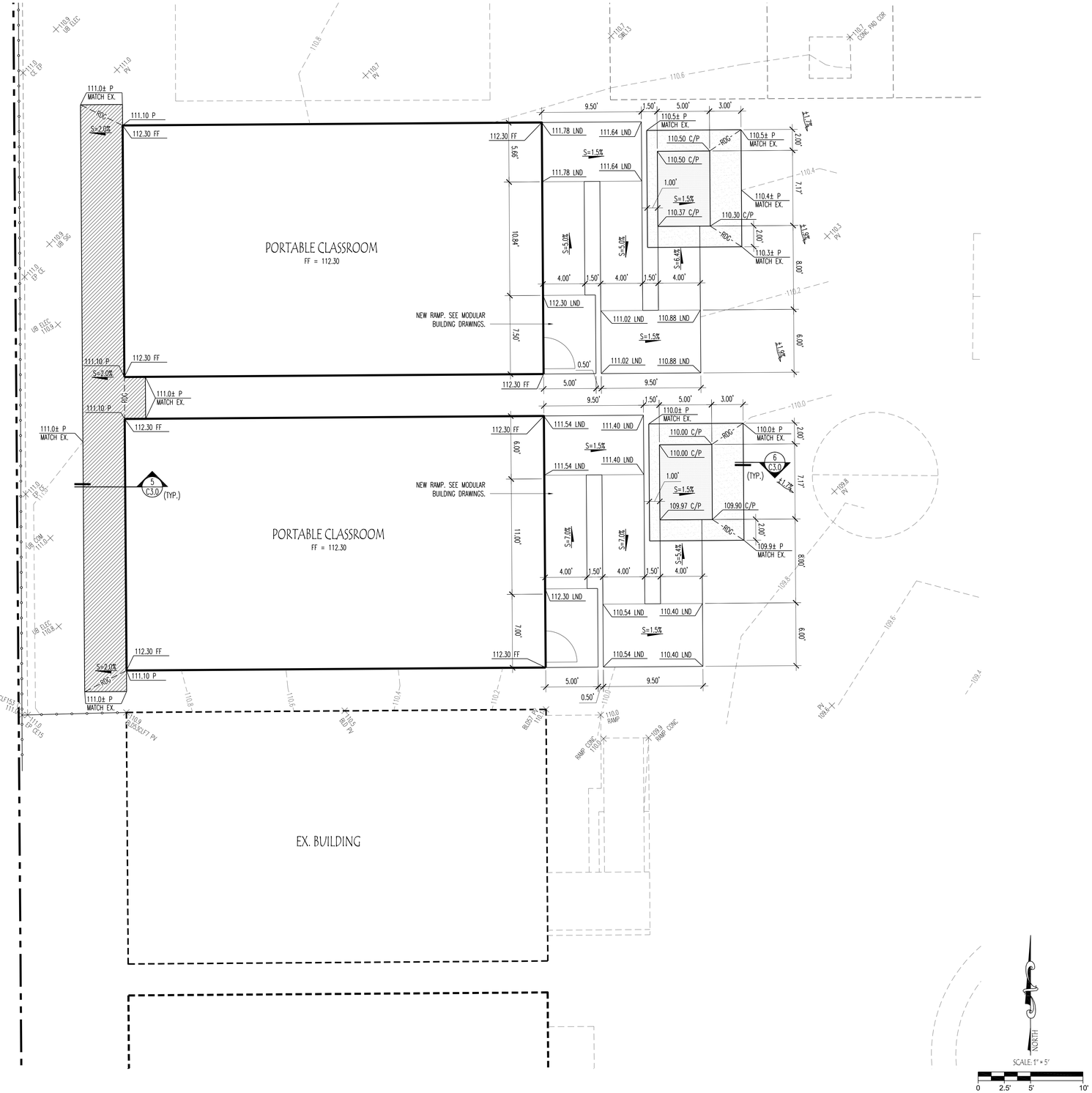
FLATWORK: EVERY 6-FT, WITH A MAXIMUM CONTROLLED AREA OF 30 SQ-FT.

CONCRETE PAVEMENT: EVERY 14-FT, WITH A MAXIMUM CONTROLLED AREA OF 200 SQ-FT.

CONCRETE FLAT WORK :

A.C. PAVEMENT :
3" AC O/V 6" AB

PAVEMENT OVERLAY :



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FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

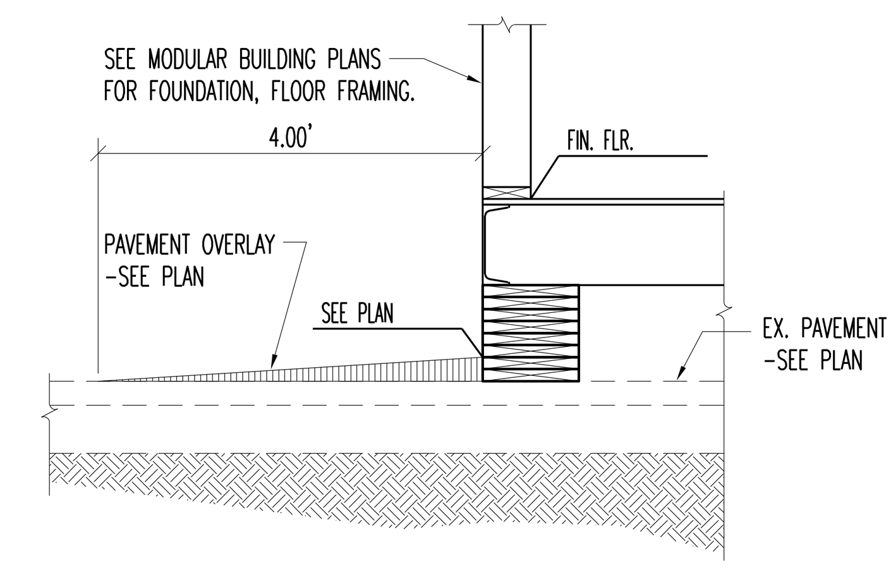
ENLARGED GRADING PLAN

REVISIONS :

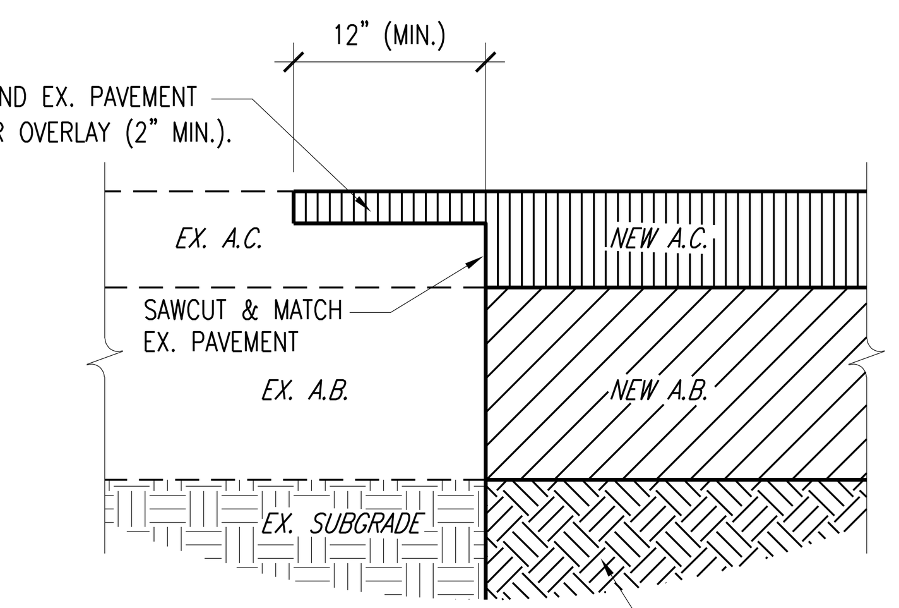
BY : A.S. R.H.
LIST : FREEDOM
DATE : 02-07-2024
JOB : 23M043

SHEET : C2.1

NOTE THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AT THE JOB AND SHALL BE RESPONSIBLE FOR ALL DISCREPANCIES BETWEEN DIMENSIONS OF THE ACTUAL WORK AND THOSE SHOWN IN THE DOCUMENTS OR ARCHITECT'S APPROVED SHOP DRAWINGS. THE CONTRACTOR SHALL ALSO BE SOLELY RESPONSIBLE FOR ALL QUANTITIES OF MATERIALS OR EQUIPMENT CALLED FOR TO PROPERLY COMPLETE THE WORK.

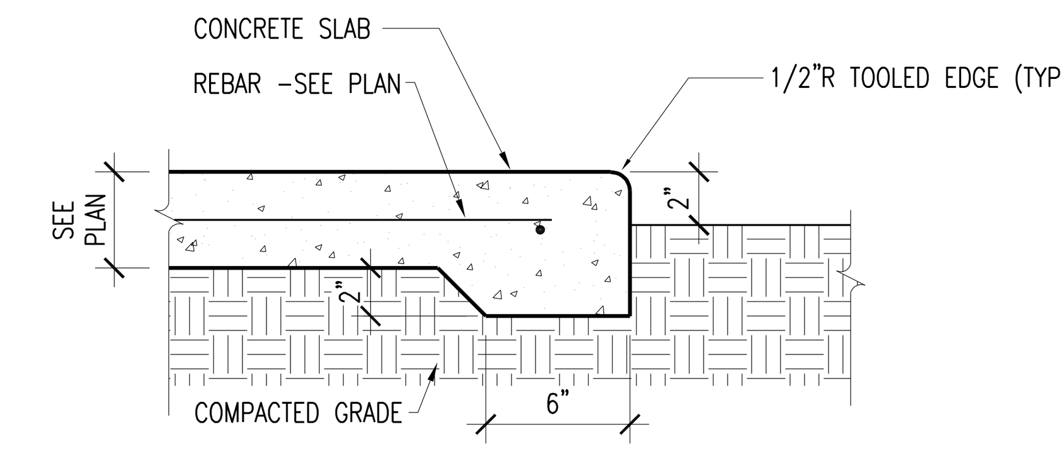


5 PAVEMENT OVERLAY
1"=1'



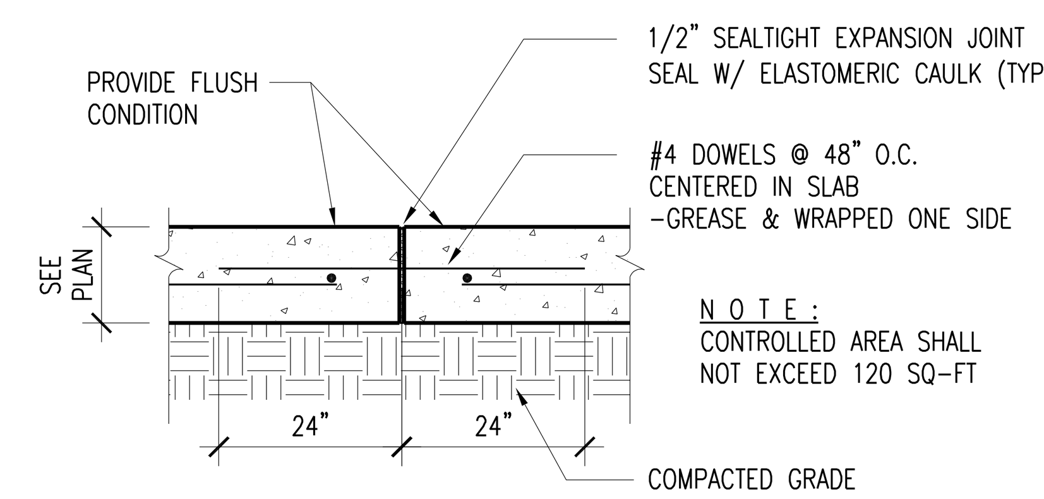
NOTES:
1) SEE PLAN FOR PAVEMENT SECTIONS.
2) SOIL COMPACTION SHALL CONFORM TO THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT.

6 PAVEMENT LAP JOINT
N.T.S.



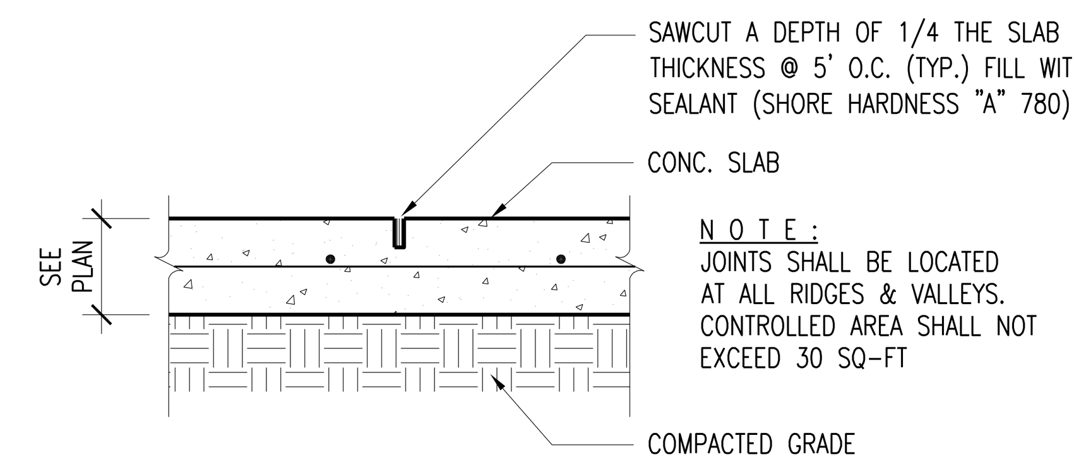
N O T E S :
1. COLD JOINTS SHALL BE PLACED EVERY 20' (MAX.)
2. CRACK CONTROL JOINTS SHALL BE PLACED EVERY 5' AT SIDEWALKS.

TYPICAL CONCRETE SLAB



N O T E :
CONTROLLED AREA SHALL NOT EXCEED 120 SQ-FT

TYPICAL COLD JOINT (CJ)



N O T E :
JOINTS SHALL BE LOCATED AT ALL RIDGES & VALLEYS. CONTROLLED AREA SHALL NOT EXCEED 30 SQ-FT

TYPICAL CRACK CONTROL JOINT (CCJ)

2 TYP. FLAT WORK DET.
1"=1'

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SECTIONS & DETAILS

REVISIONS :

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GENERAL POWER LEGEND

- CONCRETE PULL BOX –SIZE AS NOTED – LIDS AS NOTED 'P' POWER, 'S' SIGNAL, 'F' FIRE ALARM & 'D' DATA; '–T' DENOTES TRAFFIC LID
- CONDUIT –SURFACE MOUNTED OR ABOVE CEILING –EMT WITH COMPRESSION FITTING UNLESS NOTED ON PLANS
- CONDUIT –CONCEALED BELOW FLOOR IN EMT OR UNDERGROUND IN PVC SCH 40 WITH IMC ELBOWS
- HOMERUN TO PERSPECTIVE PANEL OR CABINET –BRANCH CIRCUIT WITH OUT FURTHER DESIGNATION IS A #12 WIRE CIRCUIT
- FLEX
- TERMINAL CABINET
- PANEL BOARD –SEE SCHEDULE
- MOTOR/EXHAUST FAN –N.I.E.S. –CONNECT AS REQUIRED
- DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.
- QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.
- HALF SWITCHED DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.
- HALF SWITCHED QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.
- FLOOR POWER RECEPTACLE –WALKER OR EQUAL
- 30A. –4 WIRE GROUND RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.
- GFCI DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.
- EQUIPMENT AND/OR CONTROL CONNECTION POINT. MAKE CONNECTION TO EQUIPMENT AS REQUIRED.
- JUNCTION BOX – SINGLE GANG BOX
- FUSED DISCONNECT SWITCH –SIZE AS NOTED –30A. SHOWN
- $_{HP}$ MOTOR RATED DISCONNECT SWITCH
- TELEPHONE OUTLET –SUTTLE, AT&T/LUCENT, OR EQUAL +18" ELSE WALL MOUNTED +48"
- COMBINATION TELEPHONE & DATA OUTLET –AT&T/LUCENT M–SERIES OR EQUAL +18"
- CR CARDREADER / KEYCARD – SECURITY ENTRANCE ACCESS
- I INTERCOM HANDSET –COMPATIBLE SPECIFIED SYSTEM +48"
- XX FIXTURE IDENTIFICATION –LETTER INDICATES FIXTURE TYPE –NUMERAL INDICATES LAMP QUANTITY AND WATTAGE
- PHOTO ELECTRIC CELL
- P DAYLIGHT CEILING SENSOR. WATTSTOPPER LMLS–400.
- CEILING MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. WATTSTOPPER #LMDC–100.
- WALL CORNER MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. WATTSTOPPER #LMDX–100.

GROUND / XX / NEUTRAL / WIRE SIZE / CKT. WIRE

TO TOP OF BOX (TYP)

- A$3 SINGLE POLE TOGGLE SWITCH +48" AFF
- A$3 TWO POLE TOGGLE SWITCH +48" AFF
- A$3 THREE POLE TOGGLE SWITCH +48" AFF
- A$3 FOUR POLE TOGGLE SWITCH +48" AFF

SWITCHING SUBSCRIPTS

a	DEVICE CONTROLLED
k	KEY
p	PILOT
M	OCCUPANCY SENSOR

- DIMMER SWITCH SINGLE POLE +48" TO TOP OF BOX, WATTSTOPPER #LMDM–101
- F MANUAL PULL STATION +48" A.F.F. – TYPICAL
- STROBE
- COMBINATION HORN/STROBE
- SMOKE DETECTOR
- HEAT DETECTOR

DETECTOR SUBSCRIPTS:
a ATTIC
d DUCT
u UNDER FLOOR/PLATFORM

- FACP FIRE ALARM CONTROL PANEL
- RA REMOTE ANNUNCIATOR AT CONSTANTLY ATTENDED LOCATION +48"

•SEE FIRE ALARM EQUIPMENT SCHEDULE FOR EXACT EQUIPMENT DESCRIPTION

GENERAL ELECTRICAL NOTES

1. PROVIDE ALL LABOR, MATERIALS, TOOLS, PLANT EQUIPMENT, TRANSPORTATION AND ALL PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF ALL ELECTRICAL WORK REQUIRED FOR THE COMPLETE AND OPERATING SYSTEMS AS OUTLINED WITHIN THE SCOPE OF WORK.
2. UNDERWRITERS LABORATORIES, INC., SHALL MEET THEIR REQUIREMENTS AND SHALL BEAR THEIR LABEL WHEREVER STANDARDS HAVE BEEN ESTABLISHED AND LABEL SERVICE IS REGULARLY FURNISHED BY THAT AGENCY.
3. THE SIZE AND LOCATIONS OF EQUIPMENT ARE SHOWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION AT THE SITE.
4. CONDUCTORS SHALL BE COPPER CONDUCTORS TYPE AS NOTED ON CONSTRUCTION DOCUMENTS.
5. ALL REQUIRED CONDUITS SHALL BE PROVIDED BY E.C. LOW VOLTAGE WIRING SHALL BE BY MECHANICAL CONTRACTOR, LINE VOLTAGE (50 VOLTS OR MORE) SHALL BE BY ELECTRICAL CONTRACTOR.
6. ALL CONDUITS SHALL BE SUPPORTED AND BRACED PER OPM #OPM–0052–13, THE "B–LINE/TOLCO SEISMIC RESTRAINT COMPONENTS FOR SUSPENDED UTILITIES" FOR PIPES AND CONDUITS ONLY. LAYOUT DRAWINGS, SHOWING THE BRACING/SUPPORT LOCATIONS AND REFERENCES TO DETAILS FROM THE RELEVANT OSHPD PRE–APPROVALS FOR PIPING/DUCTS/CONDUITS EXCEPT FIRE SPRINKLERS, NEED TO BE SUBMITTED FOR USE BY THE IOR AND OSHPD STAFF. THE LAYOUT DRAWINGS NEED TO BE REVIEWED AND ACCEPTED BY THE AOR AND SEOR PRIOR TO STARTING INSTALLATION OF THE BRACING/SUPPORT. IOR SHALL ENSURE THE ABOVE REQUIREMENTS ARE SATISFIED.
7. DO NOT PENETRATE STRUCTURAL MEMBERS, INCLUDING BEAMS, COLUMNS, OR FOOTINGS, WITHOUT PRIOR WRITTEN CONSENT OF THE DISTRICT'S STRUCTURAL ENGINEER. SHOULD IT BECOME NECESSARY TO PENETRATE SUCH MEMBERS, NOTIFY THE DISTRICT IN WRITING WITHOUT DELAY, PRIOR TO PROCEEDING WITH CONSTRUCTION AROUND SUCH MEMBERS.
8. ALL ELECTRICAL WORK SHALL CONFORM WITH THE 2022 CALIF. ELECTRICAL CODE CALIFORNIA TITLE 17, 19 & 24 ALONG WITH N.F.P.A. STANDARDS AND THE STATE FIRE MARSHAL'S REQUIREMENTS.
9. ALL WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF STATE & GOVERNING LOCAL FIRE CODES AND BUILDING CODES.
10. WHERE EXISTING CONSTRUCTION IS CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, AND PERFORMANCE.
11. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
12. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. GUARD ALL HAZARDS IN ACCORDANCE WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
13. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.
14. CONTRACTOR TO COORDINATE WITH OWNERS VENDORS (SUCH AS, BUT NOT LIMITED TO: SECURITY, PHONES, DATA, CLOSED CIRCUIT T.V., ETC.) AND ALLOW ACCESS TO THE CONSTRUCTION SITE.
15. ALL CONDUIT SHALL BE TYPE EMT CONDUIT UNLESS OTHERWISE NOTED. TYPE MC CABLE SHALL NOT BE USED UNLESS SPECIFICALLY NOTED ON THE CONSTRUCTION DOCUMENTS.
16. OPERATED DEVICES SUCH AS, BUT NOT LIMITED TO, TELE/DATA OUTLETS, RECEPTACLE OUTLETS AND LIGHT SWITCHES INSTALLED IN AREAS NOT RESTRICTED TO AUTHORIZED MAINTENANCE PERSONAL SHALL BE MOUNTED AT A MINIMUM OF +15" AFF., AS MEASURED FROM THE BOTTOM OF THE DEVICE OUTLET BOX, AND MAXIMUM OF +48" AFF., AS MEASURED FROM THE TOP OF THE DEVICE OUTLET BOX.
17. ALL CHANGE ORDER PROPOSALS AND CHANGE ORDERS, BOTH ADDITIVE AND DEDUCTIVE, SHALL BE BASED UPON AND BE ACCOMPANIED BY A DETAILED MATERIALS AND LABOR BREAKDOWN FOR EACH SPECIFIC TASK AND/OR ITEM. THE BREAKDOWN SHALL INCLUDE ACTUAL MATERIALS COSTS PLUS OVERHEAD AND PROFIT, AS WELL AS LABOR UNITS BASE UPON THE MOST RECENT NECA MANUAL OF LABOR UNITS (NECA INDEX #4090) OR EQUIVALENT PUBLICATION FOR EACH SPECIFIC TASK AND ITEM. LABOR COSTS SHALL BE COMPUTED AS OUTLINED WITHIN THE GENERAL CONDITIONS, BASED UPON THE NECA LABOR TABLES FOR EACH TASK REQUIRED. MATERIALS COSTS SHALL INCLUDE ACTUAL CONTRACTOR INVOICE PLUS NO MORE THAN 15% MARKUP. THE OWNER AND CONTRACTOR AGREE TO THE ABOVE CHANGE ORDER COST PROCEDURE, FOR BOTH ADDITIVE AND DEDUCTIVE CHANGE ORDERS.
18. ALL PERSONNEL WORKING WITH ENERGIZED EQUIPMENT WITHIN THE RESTRICTED ZONE PER NFPA–70E SHALL COMPLY WITH ALL NFPA–70E AND OSHA REQUIREMENTS AND BE ARC FLASH SAFETY CERTIFIED.

ELECTRICAL COMPLIANCE NOTES

THE INTENT OF THE DRAWINGS AND SPECIFICATION IS TO CONSTRUCT THE PROPOSED BUILDING IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE FOLLOWING CODES AND REGULATIONS AS APPLICABLE:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)
PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2022 CALIFORNIA BUILDING CODE (CBC)
PART 2, TITLE 24, CCR
BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC)
2022 CALIFORNIA ELECTRICAL CODE (CEC)
PART 3, TITLE 24, CCR
BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC)
2022 CALIFORNIA MECHANICAL CODE (CMC)
PART 4, TITLE 24, CCR
BASED ON THE 2021 UNIFORM MECHANICAL CODE (UMC)
2022 CALIFORNIA PLUMBING CODE (CPC)
PART 5, TITLE 24, CCR
BASED ON THE 2021 UNIFORM PLUMBING CODE (UPC)
2022 CALIFORNIA FIRE CODE (CFC)
PART 9, TITLE 24, CCR
BASED ON THE 2021 INTERNATIONAL FIRE CODE (IFC)
2022 NFPA 72, NATIONAL FIRE ALARM & SIGNALING CODE
w/ CALIFORNIA AMENDMENTS.

UNLESS OTHERWISE STATED, IT IS INTENDED THAT THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN EFFECT ON THE DATE OF THE CONTRACT. NOTHING ON THE DRAWING IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE ABOVE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

ELECTRICAL ABBREVIATIONS

Δ	DELTA CONNECTED	CR	CONTROL RELAY	HI	HIGH	NAC	NOTIFICATION APPLIANCE CIRCUIT
Y	WYE CONNECTED	CT	CURRENT TRANSFORMER	HV	HIGH VOLTAGE	NC	NORMALLY CLOSED
0	PHASE	CU	COPPER	HVAC	HEATING, VENTILATION, AIR CONDITIONING	NL	NIGHT LIGHT
A	AMPERES	DC	DIRECT CURRENT	IDF	INTERMEDIATE DISTRIBUTION FRAME	OC	ON CENTER
AC	ALTERNATING CURRENT	DISC	DISCONNECT	INCAN	INCANDESCENT	OH	OVERHEAD
ACT	ABOVE COUNTERTOP/BACKSPLASH	DIST	DISTRIBUTION	INST	INSTANTANEOUS	OL	THERMAL OVERLOAD RELAY
AFF	ABOVE FINISHED FLOOR	(E)	EXISTING	KV	KILOVOLTS	OT	OVER TEMPERATURE
AL	ALUMINUM	EC	ELECTRICAL CONTRACTOR	KVA	KILOVOLT AMPERES	OSHPD	OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
APPROX	APPROXIMATE	EL, ELEV	ELEVATION	KW	KILOWATTS	PA	PUBLIC ADDRESS
AUTO	AUTOMATIC	ELECT	ELECTRICAL	LB	ELBOW	PB	PULL BOX
AUX	AUXILIARY	EMT	ELECTRICAL METALLIC TUBING	LF	LINEAR FEET	PNL	PANEL
ALT	ALTERNATE	EOL	END OF LINE	LV	LOW VOLTAGE	PH	PHASE
AWG	AMERICAN WIRE GAUGE	ENCL	ENCLOSURE	M	MOTOR	PRI	PRIMARY
B	BARE	EP	EXPLOSION PROOF	MAX	MAXIMUM	PS	PRESSURE SWITCH
BC	BARE COPPER GROUND	EQUIP	EQUIPMENT	MCA	MINIMUM CIRCUIT AMPS	PWR	POWER
BKBD	BACKBOARD	ETC	ET CETERA	MCC	MOTOR CONTROL CENTER	(R)	REMOVE(D)
BRKR	BREAKER	EVAP	EVAPORATOR	MCM	THOUSAND CIRCULAR MILLS	RA	REMOTE ANNUNCIATOR
BLDG	BUILDING	(F)	FUTURE	MECH	MECHANICAL	REQD	REQUIRED
C	CONDUIT OR CONTRACTOR	FA	FIRE ALARM	MFG	MANUFACTURER	REQMTS	REQUIREMENTS
CAB	CABINET	FACP	FIRE ALARM CONTROL PANEL	MIN	MINIMUM	RGP	REDUNDANT GROUND PATH
CATV	CABLE TELEVISION	FLA	FULL LOAD AMPS	MPOE	MAIN POINT OF ENTRY	RM	ROOM
CKT	CIRCUIT	FLEX	FLEXIBLE	MSB	MAIN SWITCHBOARD	RECP	RECEPTACLE
CLG	CEILING	FLUOR	FLUORESCENT	N	NEUTRAL	SCH	SCHEDULE
COMM	COMMUNICATION	FS	FLOW SWITCH	(N)	NEW	SEC	SECONDS, SECONDARY
CONN	CONNECT	GALV	GALVANIZED	NA	NON–AUTOMATIC	SIG	SIGNAL
CONT	CONTINUATION OR CONTINUED	GND	GROUND			SPECS	SPECIFICATIONS
COORD	COORDINATE	GC	GENERAL CONTRACTOR				

SW	SWITCH	TEL	TELEPHONE
SWD	SWITCHED	TEMP	TEMPERATURE
SP	SPARE	TH	THERMOSTAT
STD	STANDARD	TRANSF	TRANSFORMER
STR	STRANDED	TYP	TYPICAL
SWBD	SWITCHBOARD	TSP	TWISTED SHIELDED PAIR
		UG	UNDERGROUND
		UNO	UNLESS NOTED OTHERWISE
		V	VOLTS
		VA	VOLT AMPS
		VFD	VARIABLE FREQUENCY DRIVE
		VM	VOLT METER
		W/	WITH
		W/O	WITHOUT
		WP	WEATHERPROOF
		WHD	WATT HOUR DEMAND METER
		WM	WATT METER
		WH	WATER HEATER
		XFMER	TRANSFORMER
		(XR)	REMOVE AND RELOCATE(D)

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2101 Fine Ave
Modesto, CA 95355

SHEET TITLE :
ELECTRICAL COVER SHEET

REVISIONS :

REGISTERED PROFESSIONAL ENGINEER
KEVIN L. PEZZONI
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BY : CCM/KP
LIST : FREEDOM
DATE : 02/16/2024
JOB : 25M043

SHEET : E0.1

02/16/24 12:00:04 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E0.1 TITLE SHEET.DWG cmendez

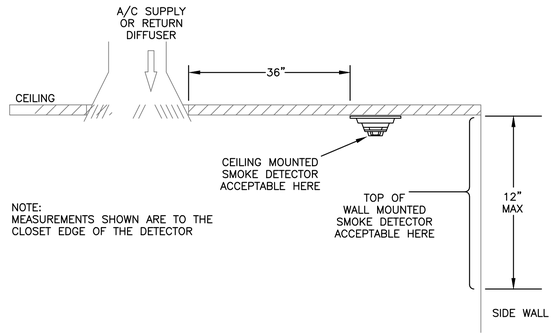
FIRE ALARM INSTALLATION NOTES

1. THE FIRE ALARM SYSTEM SHALL CONFORM TO ARTICLE 760 OF THE CALIFORNIA ELECTRICAL CODE.
2. UPON COMPLETION OF THE INSTALLATION OF THE FIRE ALARM SYSTEM, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE PERFORMED IN THE PRESENCE OF THE DSA INSPECTOR OF RECORD & LOCAL FIRE AUTHORITY.
3. ALL DRAWINGS ARE DIAGRAMMATICAL.
4. ON FACTORY PROVIDED BACK BOXES, NO ENLARGEMENTS TO THE STANDARD KNOCKOUTS SHALL BE MADE. NOR MAY THE INSTALLER ATTACH CONDUIT TO A NON–FACTORY PROVIDED KNOCKOUT WITHOUT THE EXPRESS WRITTEN CONSENT OF THE MANUFACTURER.
5. ALL FIRE ALARM DATA COMMUNICATIONS, AND INITIATING CIRCUITS SHALL BE INSTALLED UTILIZING SOLID COPPER CONDUCTORS OF A SIZE AS PER SPECIFICATIONS OR THE LOCAL ENFORCING AGENCY, WHICHEVER IS MORE STRINGENT SHALL APPLY.
6. ALL FIRE ALARM CIRCUITS ARE CONTINUOUS FROM DEVICE TO DEVICE, SPLICES ARE NOT ALLOWED UNLESS IN COVERED JUNCTION BOXES ON APPROVED TERMINAL BLOCKS.
7. COLOR CODING SHALL BE AS FOLLOWS:
   A. INITIATING CIRCUITS (CONVENTIONAL SYSTEMS ONLY) I.E. MANUAL PULL STATIONS, DETECTOR. {+ORANGE, –WHITE}
   B. WATER FLOW SWITCHES, ETC. INDICATING CIRCUITS I.E. BELLS, HORNS, STROBE UNITS, ETC. {+RED, –BLACK}
   C. POWER FOR AUXILIARY DEVICES I.E. DOOR HOLDERS, 4–WIRE SMOKE DETECTORS POWER, REMOTE RELAYS, DAMPERS, EXHAUST FANS, ETC. {+BLUE, –BLACK}
   D. ANNUNCIATION DEVICES I.E. REMOTE LAMPS, ANNUNCIATORS, ETC. {+PURPLE, –BLACK}
8. CABLING REQUIREMENTS:
   A. ALL CONDUCTORS SHALL BE TYPE THWN #14 –AMERICAN WIRE GAUGE. THWN INSULATION TYPE (MOISTURE & HEAT RESISTANT THERMOPLASTIC) SUITABLE FOR DRY & WET LOCATIONS
   B. ALL CONDUCTORS SHALL BE SOLID COPPER; STRANDED CONDUCTORS ARE PROHIBITED.
   C. ALL CONDUCTORS SHALL BE BRADY OR EQUALLY LABELED.
   D. ALL CONDUCTORS SHALL BE INSTALLED IN CONDUIT –NO OPEN WIRING.
11. IT IS THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR TO MAINTAIN AND UPDATE HIS CONSTRUCTION DRAWINGS WITH A HIGH DEGREE OF ACCURACY. MANUFACTURER/CONTRACTOR WILL PROVIDE RECORD DRAWINGS FOR THE PROJECT BASED ON THE INFORMATION CONTAINED THEREIN.
12. FIRE ALARM CONTRACTOR TO VERIFY THAT AUDIBLE FIRE ALARM SOUND LEVEL SHALL BE AT LEAST 15dBA ABOVE AVERAGE AMBIENT SOUND LEVEL IN ALL OCCUPIABLE AREAS NFPA 72 SEC. 18.4.4.1.
13. FIRE ALARM CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION AFTER COMPLETION OF OPERATIONAL ACCEPTANCE TESTS.
14. POWER CIRCUITS SHALL BE ON A DEDICATED BRANCH CIRCUIT WITH RED MARKING, WITH LOCK OUT DEVICE, AND IDENTIFIED AS "FIRE ALARM CIRCUIT CONTROL".
15. STROBES SHALL FLASH AT A RATE NOT EXCEEDING TWO FLASHES PER SECOND AND NOT LESS THAN ONE FLASH PER SECOND.
16. AUDIBLE SIGNALS INTENDED FOR OPERATION N THE PUBLIC MODE SHALL HAVE A SOUND LEVEL OF NOT LESS THAN 75dBA AT 10 FEET AND NO MORE THAN 110dBA AT THE MINIMUM HEARING DISTANCE FROM THE AUDIBLE APPLIANCE PER CEC 3501.1.
17. FINAL FIRE ALARM TESTS SHALL BE CONDUCTED WITH DSA INSPECTOR OF RECORD PRESENT. THE LOCAL FIRE AUTHORITY SHALL BE NOTIFIED OF THE DATE AND TIME OF THE FINAL TESTING AND SHALL ASSIST/WITNESS SUCH TESTING WE ABLE.
18. THE AUTOMATIC FIRE ALARM SYSTEM SHALL TRANSMIT ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72, AND AS AMENDED BY ARTICLE 91. THE SUPERVISORY STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UL OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011.
19. 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.
20. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
21. 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.
22. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.
23. 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.
24. THE ENTIRE LENS OF WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL OCCUR BETWEEN +80" MINIMUM AND +96" MAXIMUM FROM FINISHED FLOOR.
25. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE.
26. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN, EXCEPT CARBON MONOXIDE ALARM, WHICH SHALL BE TEMPORAL CODE 4 PATTERN.
27. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.

FIRE ALARM INSTALLATION NOTES (CONTINUED)

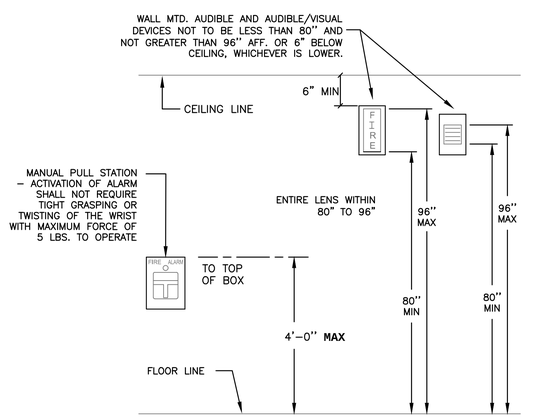
28. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
30. ALL FIRE ALARM WIRING SHALL BE FPLOR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
31. PER CEC 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.
32. 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.
33. 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.
34. 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.
35. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 7.8.2(a).
36. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
37. 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.
38. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
39. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
40. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.

PROPER MOUNTING FOR SMOKE DETECTORS



NOTE:
MEASUREMENTS SHOWN ARE TO THE CLOSET EDGE OF THE DETECTOR

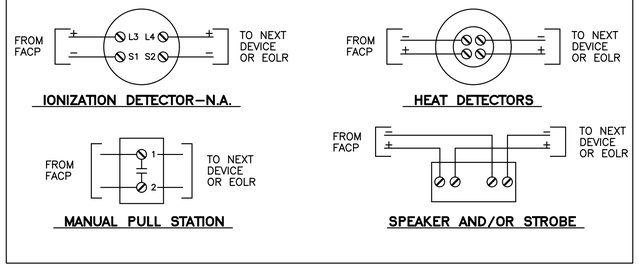
DEVICE ELEVATION DETAIL



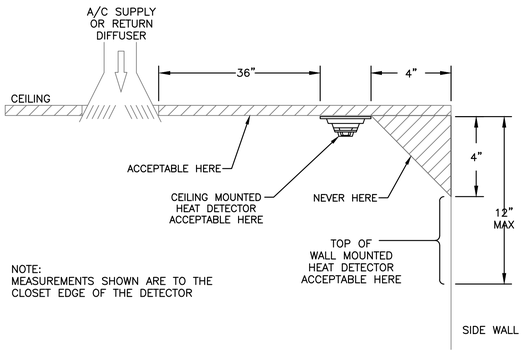
SYSTEM OPEREATIONAL MATRIX

DEVICE	SYSTEM RESULT: ACTUATE COMMON ALARM SIGNAL INDICATOR LED	ACTUATE AUDIBLE ALARM SIGNAL PIEZO SOUNDER	ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR LED	ACTUATE AUDIBLE SUPERVISORY SIGNAL PIEZO SOUNDER	ACTUATE COMMON TROUBLE SIGNAL INDICATOR LED	ACTUATE AUDIBLE TROUBLE SIGNAL PIEZO SOUNDER	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	ACTUATE AUDIBLE/VISUAL SIGNAL	SHUTDOWN DOWN HVAC WITHIN AREA	ACTUATE ANNUNCIATOR ALARM SIGNAL	ACTUATE ANNUNCIATOR SUPERVISORY SIGNAL INDICATOR	ACTUATE ANNUNCIATOR TROUBLE SIGNAL	SOUND TEMPORAL CODE 4, & SOUNDER AS DETECTOR BASE.
AREA HEAT DETECTOR	X	X					X			X		X			
AREA SMOKE DETECTOR	X	X					X			X		X			
FIRE ALARM SYSTEM AC POWER FAILURE					X	X			X					X	
FIRE ALARM SYSTEM LOW BATTERY					X	X			X					X	
OPEN CIRCUIT					X	X			X					X	
GROUND FAULT					X	X			X					X	
NOTIFICATION APPLIANCE CIRCUIT SHORT					X	X			X					X	

WIRING DIAG. & SYSTEM MATRIX



PROPER MOUNTING FOR HEAT DETECTORS



NOTE:
MEASUREMENTS SHOWN ARE TO THE CLOSET EDGE OF THE DETECTOR

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

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david j starck architect c 22905
allan v. stevenson civil engineer rce 61758

LICENSED ARCHITECT DAVID J. STARCK C 22905 EXPIRATION 12-31-25 STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fire Ave
Modesto, CA 95355

FIRE ALARM DETAILS

SHEET TITLE :

REVISIONS :

REGISTERED PROFESSIONAL ENGINEER KEVIN L. PEZZONI NO. 16269 EXP. 12/24 ELECTRICAL STATE OF CALIFORNIA

PEZZONI ENGINEERING, INC.
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1150 9TH Street Suite #1415 Modesto, CA 95354
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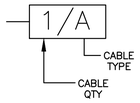
BY : CCM/KP
LIST : FREEDOM
DATE : 02/16/2024
JOB : 25MO45

SHEET : E0.2

02/16/24 12:00:10 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E0.2 FIRE ALARM DETAILS.DWG cmendez

CABLE DESIGNATIONS



NOTE: REFER TO CABLE SCHEDULE FOR CABLE TYPE SPECIFICATIONS

WIRE/CABLE COLOR CODING

CIRCUIT TYPE	THHN/THWN WIRE		NON-CONDUIT CABLE		
	+	−	JACKET	+	−
IDC	RED	BLACK	RED	RED	BLACK
SLC	N/A	N/A	RED	RED	BLACK
24V	RED	BLACK	RED	RED	BLACK
DOOR HOLDERS	PINK	PURPLE	RED	RED	BLACK
NAC (2-WIRE)					
HORN/ STROBE	WHITE	BLUE	RED	RED	BLACK
NAC (4-WIRE)					
HORN	WHITE	BLUE	RED	RED	BLACK
STROBE	YELLOW	BROWN		BROWN	BLUE

NOTE:
1: ALL WIRES AND CABLES SHALL BE TAPED INTO PAIRS AND TAGGED WITH THEIR RESPECTIVE CIRCUIT DESIGNATION AT EACH J-BOX, OUTLET BOX AND AT EACH END BY THE INSTALLING CONTRACTOR, PRIOR TO DEVICE TERMINATIONS.

2: NOT ALL CABLES ARE USED ON ALL JOBS.

MISCELLANEOUS SYMBOLS AND ABBREVIATIONS

SYM./ABBREV.	PART #	DESCRIPTION	SYM./ABBREV.	PART #	DESCRIPTION
J	(FBO)	JUNCTION BOX	EOLR	N/A	END-OF-LINE RELAY
			(FBEC)		FURNISHED BY ELECTRICAL CONTRACTOR
STB	(FBO)	SIGNAL TERMINAL BACKBOARD	(FBFS)		FURNISHED BY FIRE SPRINKLER CONTRACTOR
			(FBMC)		FURNISHED BY MECHANICAL CONTRACTOR
FTC	(FBO)	FIRE TERMINAL CABINET	(FBO)		FURNISHED BY OTHERS
			FSR		FIRE SPRINKLER RISER
	(FBO)	2#12, 1#12G THHN/THWN IN CONDUIT	IDC		INITIATING DEVICE CIRCUIT (HARDWIRED INITIATION CIRCUIT/ZONE)
	(FBO)	MECHANICAL UNIT	(N)		NEW
			N/A		NOT APPLICABLE
	(FBO)	UNDERGROUND PULLBOX	NAC		NOTIFICATION APPLIANCE CIRCUIT (SIGNALING CIRCUIT)
(X)	N/A	FUSE/FUSE BLOCK (X = AMPERAGE)	NC		NORMALLY CLOSED
			NO		NORMALLY OPEN
-W-	N/A	END-OF-LINE RESISTOR	PIV		POST INDICATOR VALVE
120V	N/A	120VAC POWER	SLC		SIGNALING LINE CIRCUIT (ADDRESSABLE INITIATION LOOP)
AFF		ABOVE FINISHED FLOOR			
C, COM		COMMON	TYP.		TYPICAL
(E)		EXISTING	UON		UNLESS OTHERWISE NOTED
EOL		END-OF-LINE RESISTOR	Z		ZONE

CABLE SCHEDULE

TYPE	DESCRIPTION	USE
CABLES INSTALLED IN CONDUIT		
A	WEST PENN D980 (2#18 SOL, UTP, FPLR)	SLC (ADDRESSABLE LOOP) INTERIOR
AE	WEST PENN AQC224 (2#18 SOL, UTP, FPL)	SLC (ADDRESSABLE LOOP) EXTERIOR
B	WEST PENN D994S (2#14 SOL, UTP, FPLR)	NAC (SIGNALING CIRCUIT) INTERIOR
BW	WEST PENN AQC226 (2#14 SOL, UTP, FPL)	NAC (SIGNALING CIRCUIT) EXTERIOR
C	WEST PENN D990S (2#16 SOL, UTP, FPLR)	SPEAKER INTERIOR
CW	WEST PENN AQC225 (2#16 SOL, UTP, FPL)	SPEAKER EXTERIOR
F	8 STRAND FIBER OPTIC CABLE 62.5um MULTI-MODE	FIBER OPTIC CABLE NETWORK
P	WEST PENN 990S	SUPERVISED POWER INTERIOR
PW	WEST PENN AQC225 (2#16 SOL, UTP, FPL)	SUPERVISED POWER EXTERIOR
M	WEST PENN D994S (2#14 SOL, UTP, FPLR)	MONITOR WIRING
N	2#14 THHN/THWN SOL	NAC (SIGNALING CIRCUIT)

CABLE DESCRIPTION ABBREVIATIONS

ABBREV.	DEFINITION	ABBREV.	DEFINITION	ABBREV.	DEFINITION
FPL	FIRE ALARM POWER-LIMITED	OS	OVERALL SHIELDED CABLE	STP	SHIELDED TWISTED PAIR
FPLP	FIRE ALARM POWER-LIMITED, PLENUM	SOL	SOLID CONDUCTOR	US	UNSHIELDED CABLE
FPLR	FIRE ALARM POWER-LIMITED, RISER	STR	STRANDED CONDUCTOR	UTP	UNSHIELDED TWISTED PAIR

FIRE ALARM SYSTEM EQUIPMENT LIST

SYMBOL	PART #	DESCRIPTION	MANUFACTURER	CSFM #	BACKBOX*		
					MOUNTING	SIZE*	TRIM RING*
FACP	4100-9701 4100-5451 4100-0623 4100-0622 4100-1241 4100-1329 4100-1311 4100-1288 4100-6052 4100-0644	MAIN FACP ES PS MASTER CONTROLLER ENGLISH IDNAC CARD NETWORK AUDIO RISER MODULE DIGITAL AUDIO RISER MODULE MESSAGE EXPANSION BOARD DIGITAL 100W AMP, 6NAC 8 CH AUDIO DIGITAL CONTROLLER 64/64 LED/SWITCH CONTROLLER EVENT REPORTING DACT 120VAC PDM HARNESS	SIMPLEX	7165-0026:**0251**	EXISTING	MFG. BOX	N/A
RA	4100-9617 4100-1244	REMOTE ANNUNCIATOR W/MICROPHONE	SIMPLEX	7300-0026:**0251**	EXISTING	MFG. BOX	N/A
NAC	4009-9201 w/IDNET MODULE	NAC EXPANDER/POWER SUPPLY	SIMPLEX	7300-0026:0214	EXISTING	MFG. BOX	N/A
	4098-9714 4098-9792	SMOKE DETECTOR DETECTOR SENSOR BASE	SIMPLEX	7272-0026:0218 7272-0026:0217	FLUSH	4" SQ DP	4-O
	4098-9734 4098-9792	HEAT DETECTOR (190degF FIXED) ATTIC MOUNTED SENSOR BASE	SIMPLEX	7270-0026:0216 7272-0026:0217	FLUSH	4" SQ DP	4-O
	49SV-APPLW	INDOOR WALL SPEAKER/STROBE (##cd=DENOTES CANDELA RATING & #.#w DENOTES WATTAGE SETTING)	SIMPLEX	7125-0026:0384	FLUSH	4" SQ DP	N/A
WP	49SO-APPLW-O	OUTDOOR SPEAKER DEVICE (#.#w DENOTES WATTAGE SETTING)	SIMPLEX	7320-0026:0501	SURFACE	MFG. BOX	N/A

* NOTES:
1. ALL REQUIRED BACKBOXES, TRIM RINGS, ENCLOSURES, COVER PLATES, ETC. ARE TO BE PROVIDED AND INSTALLED BY CONTRACTOR UNLESS SPECIFICALLY NOTED ABOVE.
2. ANY DEVIATION FROM LISTED EQUIPMENT SHALL BE APPROVED BY THE OWNER PRIOR TO "ROUGH-IN".

NAC BATTERY CALCS.

MODULE/DEVICE	QUAN.	STAND-BY LOAD	ALARM LOAD	STAND-BY LOAD	ALARM LOAD
CONTROL PANEL	1	85.0 mA	185.0 mA	85.0 mA	185.0 mA
IDNET	1	4.0 mA	4.0 mA	4.0 mA	4.0 mA
(E) DEVICES					
HORN/STROBE 75cd	5	0.0 mA	126.0 mA	0.0 mA	630.0 mA
HORN WP	2	0.0 mA	41.0 mA	0.0 mA	82.0 mA
(N) DEVICES					
SPEAKER/STROBE 75cd	4	0.0 mA	100.0 mA	0.0 mA	400.0 mA
			TOTAL =	89.0 mA	1301.0 mA

24hrs. IN STANDBY
24hr (0.089 A) = 2.136 AH
15mins. ALARM
0.250hr (1.301 A) = 0.325 AH
SUBTOTAL = 2.461 AH
AT 125% = 3.076 AH

PRESENT PWR SUPPLY: 6.20 AH (SEALED)
FUTURE CAPACITY IS: 3.25 AH

VOLTAGE DROP — CIRCUIT: S2

VOLTAGE: 24.0 V
TOTAL V.D.: 1.414 V
% DROP: 5.89%

NODE	CURRENT	CABLE LENGTH (x2)	AWG	CIRC. M.	OHM/FT	V.D.
1	0.400 A	958'	14	4110	0.00267	1.023 V
2	0.300 A	196'	14	4110	0.00267	0.157 V
3	0.200 A	304'	14	4110	0.00267	0.162 V
4	0.100 A	268'	14	4110	0.00267	0.072 V

FACP BATTERY CALCS.

MODULE/DEVICE	QUAN.	STAND-BY LOAD	ALARM LOAD	STAND-BY LOAD	ALARM LOAD
*-9701 MASTER	1	277.0 mA	321.0 mA	277.0 mA	321.0 mA
*-5451 IDNAC CARD	1	124.0 mA	230.0 mA	124.0 mA	230.0 mA
*-0623 AUDIO RISER	1	35.0 mA	35.0 mA	35.0 mA	35.0 mA
*-0622 DIGITAL RISER	1	70.0 mA	70.0 mA	70.0 mA	70.0 mA
*-1241 MESSAGE BD	1	2.0 mA	17.0 mA	2.0 mA	17.0 mA
*-1329 100W AMP	1	85.0 mA	3800.0 mA	85.0 mA	3800.0 mA
*-1311 AUDIO CONTROLLER	1	120.0 mA	450.0 mA	120.0 mA	450.0 mA
*-1288 64/64 LED/SW	1	20.0 mA	212.0 mA	20.0 mA	212.0 mA
*-6052 2DACT	1	30.0 mA	40.0 mA	30.0 mA	40.0 mA
*-9617 RA	1	95.0 mA	165.0 mA	95.0 mA	165.0 mA
(E) DEVICES					
STROBE 110cd	6	0.0 mA	166.0 mA	0.0 mA	996.0 mA
STROBE 75cd	25	0.0 mA	133.0 mA	0.0 mA	3325.0 mA
STROBE 30cd	7	0.0 mA	81.0 mA	0.0 mA	567.0 mA
STROBE 15cd	30	0.0 mA	50.0 mA	0.0 mA	1500.0 mA
WP HORN	8	0.0 mA	40.0 mA	0.0 mA	320.0 mA
HORN	33	0.0 mA	12.0 mA	0.0 mA	396.0 mA
			TOTAL =	858.0 mA	12444.0 mA

24hrs. IN STANDBY
24hr (0.858 A) = 20.592 AH
15mins. ALARM
0.250hr (12.444 A) = 3.111 AH
SUBTOTAL = 23.703 AH
AT 125% = 29.629 AH

PRESENT PWR SUPPLY: 33.00 AH (SEALED)
FUTURE CAPACITY IS: 3.37 AH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

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david j starck architect c 22905
allan v. stevenson civil engineer rce 61758

LICENSED ARCHITECT DAVID J. STARCK C-22905 REN 12-31-25 STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

SHEET TITLE :
FIRE ALARM SYSTEMS AND SCHEDULES

REVISIONS :

REGISTERED PROFESSIONAL ENGINEER KEVIN L. PEZZONI NO. 16269 EXP. 12/24 ELECTRICAL STATE OF CALIFORNIA

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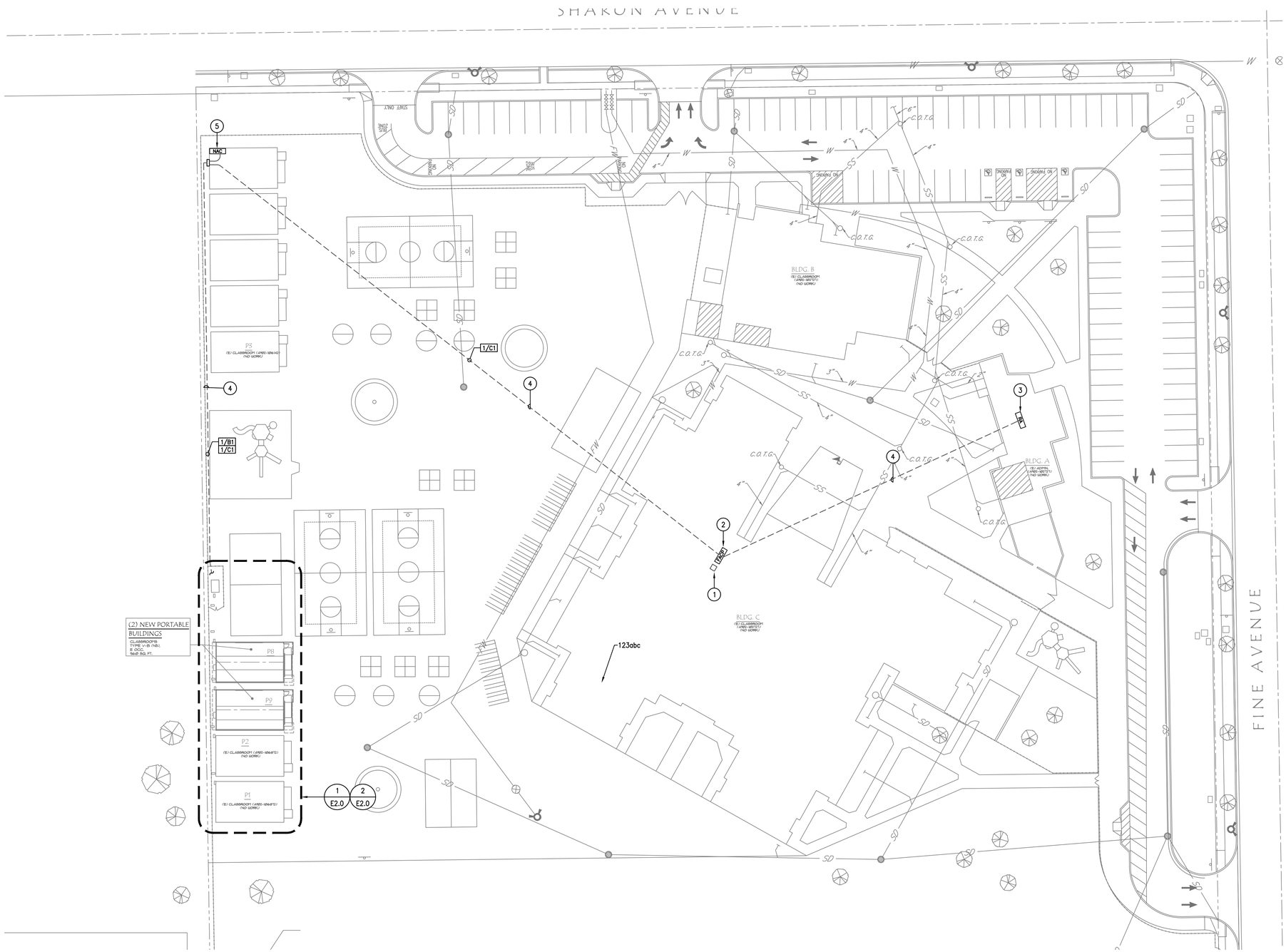
BY : CCM/KP
LIST : FREEDOM
DATE : 02/16/2024
JOB : 25M045

SHEET : **E0.3**

02/16/24 12:00:16 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E0.3 FIRE ALARM SYSTEMS AND SCHEDULES.DWG cmendez



PLAN NOTES:

1. BOGEN MC2000 HEADEND –CONNECT (N) SPEAKERS WITHIN (N) PORTABLES.
2. REPLACE INTERNAL COMPONENTS AT (E) FACP LOCATION –SEE FIRE ALARM RISER DIAGRAM FOR SCOPE OF WORK.
3. REPLACE (E) REMOTE ANNUNCIATOR AT MAIN OFFICE AREA TO BE COMPATIBLES W/(N) FACP MAINBOARD & W/MICROPHONE.
4. APPROXIMATE ROUTING OF COMMUNICATION PATHWAYS –INSTALL (N) CABLES AS REQD.
5. REPLACE (E) NAC PANEL W/(N) ADDRESS SLC NOTIFICATION MODULE –RECONNECT (E) NAC CKTS IN KIND –SEE FIRE ALARM RISER DIAGRAM FOR ADDITIONAL REQMTS.

1 OVERALL SITE PLAN – ELECTRICAL
SCALE: 1"=30'-0"

SCALE IN FEET
0 25 50 100

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

skw & associates
architecture • engineering • surveying
2257 scenic drive, modesto, ca 95355 p. 209•525•8225 f. 209•799•2552

david j. starck
architect
c. 22905

allan v. stevenson
civil engineer
rce 61758

LICENSED ARCHITECT
DAVID J. STARCK
C. 22905
REN. 12-31-25
STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

SHEET TITLE :
OVERALL SITE PLAN – ELECTRICAL

REVISIONS :

REGISTERED PROFESSIONAL ENGINEER
KEVIN L. PEZZONI
NO. 16269
EXP. 12/24
ELECTRICAL
STATE OF CALIFORNIA

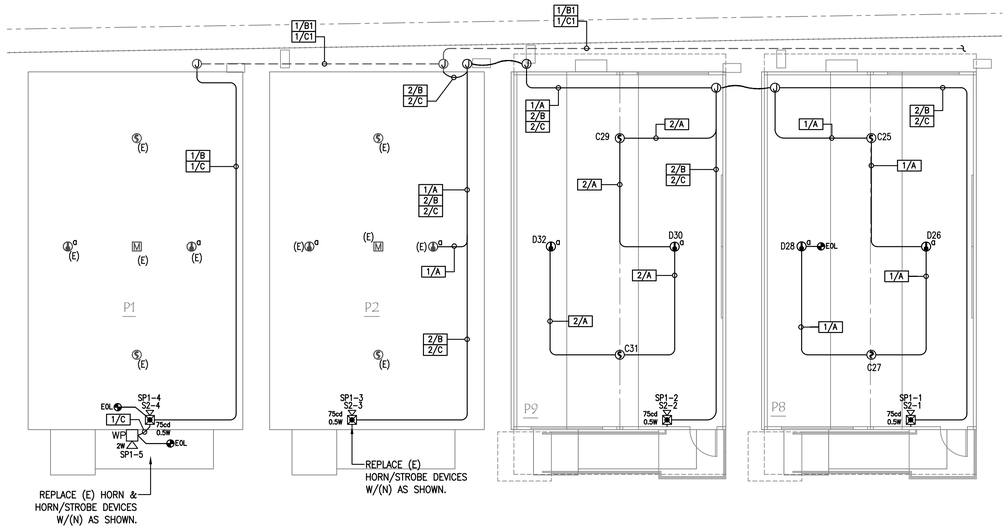
PEZZONI ENGINEERING, INC.
CONSULTING ELECTRICAL ENGINEERS
1150 9TH Street Suite #1415 Modesto, CA 95354
PHONE: 209 . 554 . 4602
HTTP://WWW.PEZENGR.COM

BY : CCM/KP
LIST : FREEDOM
DATE : 02/16/2024
JOB : 25M045

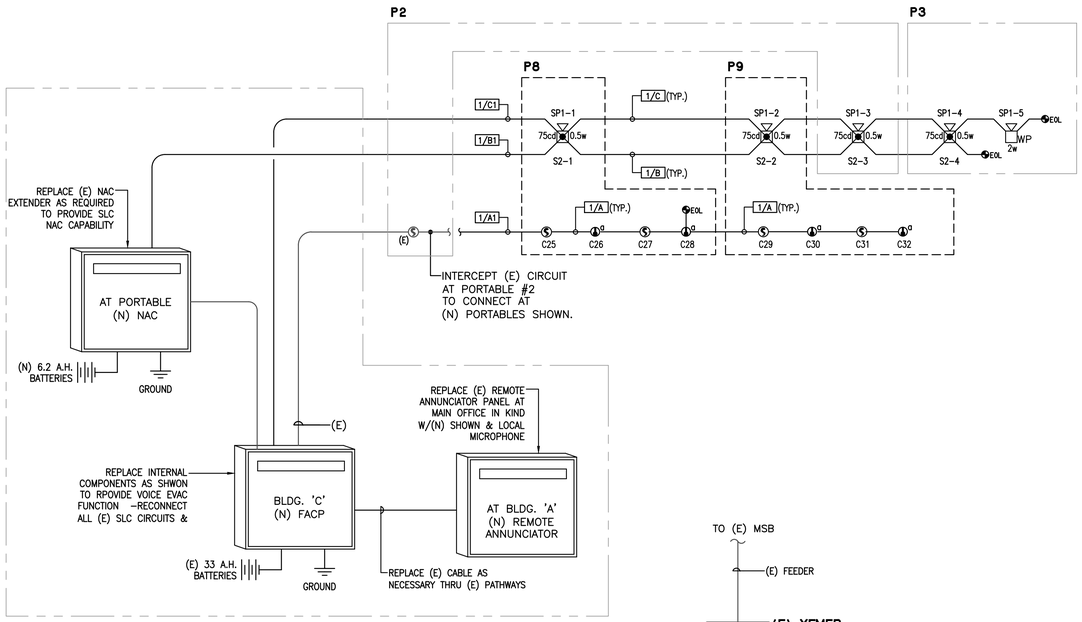
SHEET : E1.0

02/16/24 12:00:22 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E1.0 OVERALL SITE PLAN – FREEDOM.DWG cmendez
02/16/24 12:00:22 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E1.0 OVERALL SITE PLAN – FREEDOM.DWG cmendez

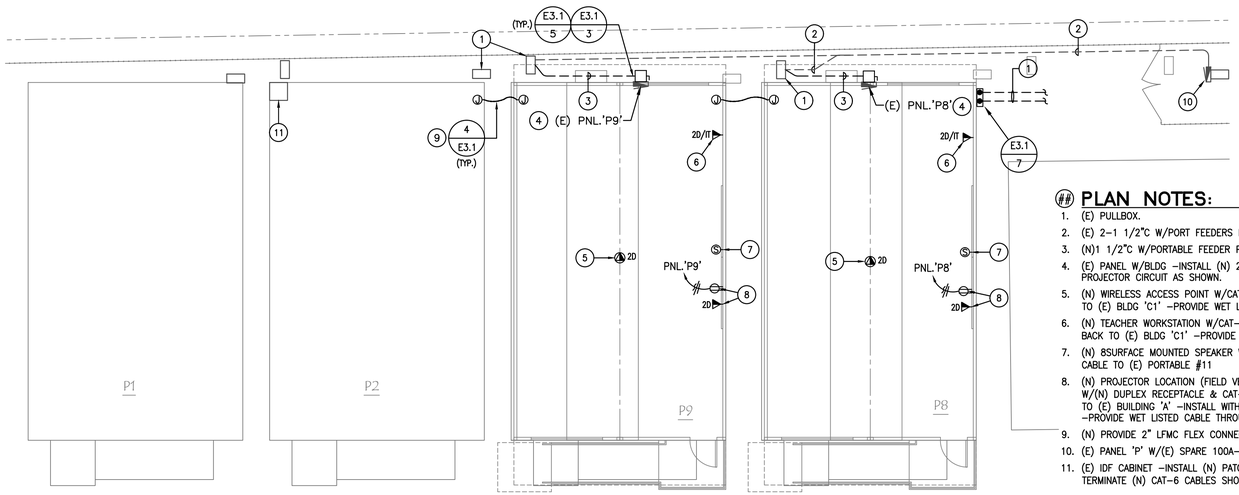
SCALE IN INCHES
0 1/16" 1/8" 1/4"



1 PORTABLES FLOOR PLAN – FIRE ALARM
SCALE: 1/8"=1'-0"



3 FIRE ALARM RISER DIAGRAM
SCALE: NTS



PLAN NOTES:
(##)

1. (E) PULLBOX.
2. (E) 2–1 1/2"C W/PORT FEEDERS PER SINGLE LINE DIAGRAM.
3. (N)1 1/2"C W/PORTABLE FEEDER PER SINGLE LINE DIAGRAM.
4. (E) PANEL W/BLDG –INSTALL (N) 20A–1P BREAKER FOR (N) PROJECTOR CIRCUIT AS SHOWN.
5. (N) WIRELESS ACCESS POINT W/CAT–6 DATA CABLES AS SHOWN BACK TO (E) BLDG 'C1' –PROVIDE WET LISTED CABLE THROUGHOUT
6. (N) TEACHER WORKSTATION W/CAT–6 DATA & TELE CABLES AS SHOWN BACK TO (E) BLDG 'C1' –PROVIDE WET LISTED CABLE THROUGHOUT
7. (N) 8SURFACE MOUNTED SPEAKER W/XFMER W/2C/16AWG STP CABLE TO (E) PORTABLE #11
8. (N) PROJECTOR LOCATION (FIELD VERIFY LOCATION) W/DISTRICT W/(N) DUPLEX RECEPTACLE & CAT–6 DATA CABLES AS SHOWN BACK TO (E) BUILDING 'A' –INSTALL WITHIN 2900 SERIES WIREMOLD (WHITE) –PROVIDE WET LISTED CABLE THROUGHOUT
9. (N) PROVIDE 2" LFMC FLEX CONNECTION BETWEEN BUILDINGS.
10. (E) PANEL 'P' W/(E) SPARE 100A–2P. BREAKERS.
11. (E) IDF CABINET –INSTALL (N) PATCH PANEL AS REQUIRED TO TERMINATE (N) CAT–6 CABLES SHOWN.

2 PORTABLES FLOOR PLAN – POWER
SCALE: 1/8"=1'-0"

4 PARTIAL SINGLE LINE DIAGRAM
SCALE: NTS

PEZZONI ENGINEERING, INC.
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PHONE: 209 . 554 . 6602
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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

skw & associates
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2257 scenic drive, modesto, ca 95355 p. 209•525•8225 f. 209•789•2552
david j. starck architect c 22905
allan v. stevenson civil engineer rce 61758

LICENSED ARCHITECT DAVID J. STARCK C 22905 REN. 12-31-24 STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

SHEET TITLE :
PORTABLE FLOOR PLAN – ELECTRICAL

REVISIONS :

REGISTERED PROFESSIONAL ENGINEER KEVIN L. PEZZONI NO. 16269 EXP. 12/24 ELECTRICAL STATE OF CALIFORNIA

BY : CCM/KP
LIST : FREEDOM
DATE : 02/16/2024
JOB : 25M045

SHEET : E2.0

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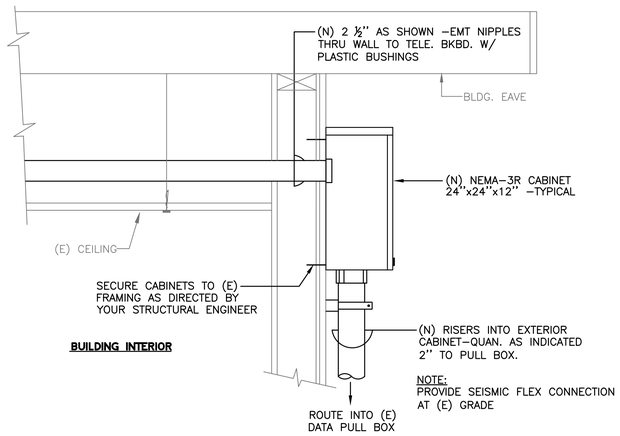
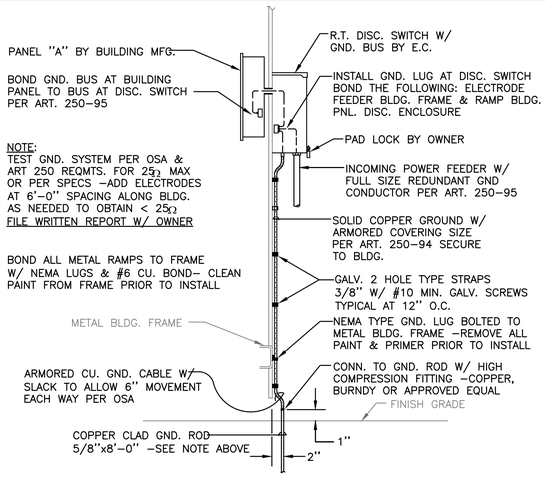


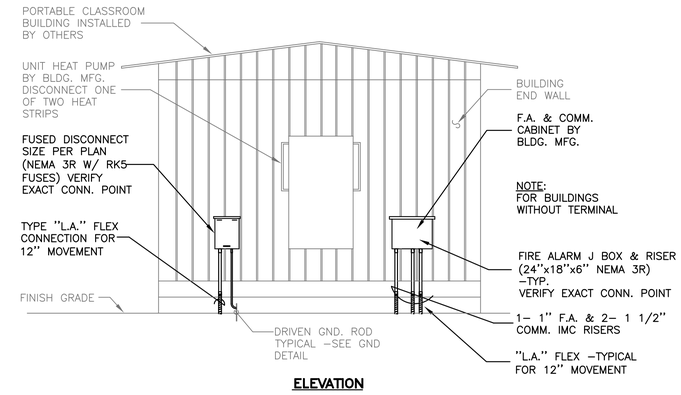
1 COMMUNICATION CONNECTION AT BLDG.

SCALE: N.T.S.



2 PORTABLE BUILDING GROUND (TYP.)

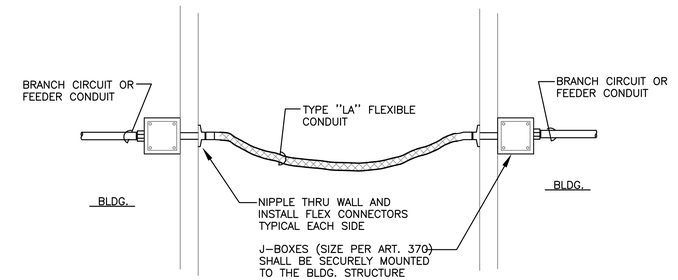
SCALE: N.T.S.



ELEVATION

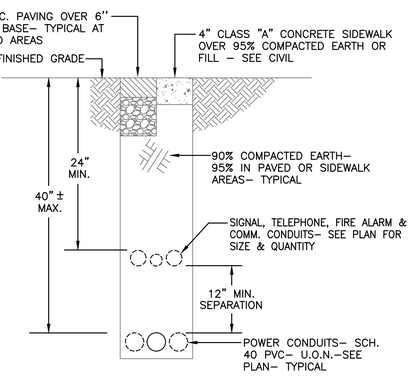
3 UNDERGROUND CONNECTION AT PORTABLE

SCALE: N.T.S.



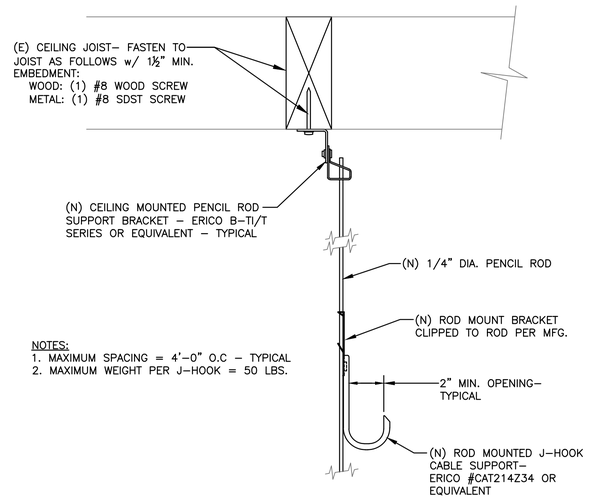
4 SEISMIC CONDUIT BETWEEN BLDGS.

SCALE: N.T.S.



5 ELECTRICAL TRENCH SECTION (TYP.)

SCALE: N.T.S.



NOTES:
1. MAXIMUM SPACING = 4'–0" O.C – TYPICAL
2. MAXIMUM WEIGHT PER J–HOOK = 50 LBS.

JOIST MOUNTED

6 CABLE SUPPORT DETAILS

SCALE: N.T.S.

skw & associates
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david j starck architect c 22905
allan v. stevenson civil engineer rce 61758

LICENSED ARCHITECT DAVID J. STARCK C-22905 REN. 12-31-24 STATE OF CALIFORNIA

PROJECT TITLE :
SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) PORTABLE CLASSROOMS
2101 Fine Ave
Modesto, CA 95355

ELECTRICAL DETAILS

SHEET TITLE :

REVISIONS :

REGISTERED PROFESSIONAL ENGINEER KEVIN L. PEZZONI NO. 16269 EXP. 12/24 ELECTRICAL STATE OF CALIFORNIA

PEZZONI ENGINEERING, INC.
CONSULTING ELECTRICAL ENGINEERS
1150 9TH Street Suite #1415 Modesto, CA 95354
PHONE: 209 . 554 . 4602
HTTP://WWW.PEZZNGR.COM

BY : CCM/KP
LIST : FREEDOM
DATE : 02/16/2024
JOB : 23M043

SHEET : E3.1

02/16/24 12:00:36 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E3.1 ELECTRICAL DETAILS.DWG cmendez
02/16/24 12:00:36 PM F:\24\060 SUSD PORTABLES AT VARIOUS\ENGR\SHEETS\060_E3.1 ELECTRICAL DETAILS.DWG cmendez

MODULAR CLASSROOM BUILDINGS
(WITH OPTIONAL RESTROOM MODULES)
BUILDING SIZE: 24' X 40'
EXPANDABLE TO 120' X 40'
PC 04-121999

BY

SILVER CREEK MODULAR, INC.
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE : (951) 943-5393 FAX : (951) 943-2211

SYLVAN UNION SCHOOL DISTRICT
FREEDOM ELEMENTARY SCHOOL
(2) 24' X 40' CLASSROOM

GENERAL NOTES

1. FIRE ALARM IS NOT PART OF THIS APPROVAL.
2. ALLOWABLE AREA IS BASED ON 10' SET BACK FROM IMAGINARY ASSUMED LINE PER 2022 CBC 705.3.
3. THIS PC IS DESIGNED STRUCTURALLY TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM.
4. PC IS DESIGNED AS A SINGLE STORY MODULAR BUILDING.
5. FOR SOILS TYPES / DESIGN BEARING STRENGTH, SEE STRUCTURAL SPECIFICATIONS.
6. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
7. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USES.
8. EXTERIOR WALL OPENINGS TO COMPLY W/ 705.8, 2022 CBC. THE USE OF UNPROTECTED OPENINGS SHALL BE VERIFIED IN THE PROJECT SPECIFIC APPLICATIONS.
9. EXTERIOR PROJECTIONS ARE TO BE FIRE PROTECTED WHERE REQUIRED BY SECTIONS 705.2 & 1405.
10. SEE SHEETS A-0.7 FOR REQUIRED BUILDING ENVELOPE ASSEMBLIES AND HVAC SYSTEM.
11. PURSUANT TO D.S.A. APPROVAL ALL PRODUCTS CAN BE SUBSTITUTED BY AN "EQUAL".
12. BUILDING(S) TO BE LOCATED IN ANY FIRE HAZARD SEVERITY ZONE OR ANY WILDLAND - URBAN INTERFACE FIRE AREA SHALL COMPLY WITH CBC CHAPTER 7A.
13. WHEN THE PRE-CHECKED BUILDING IS SITE ADAPTED, THE BUILDING AND SITE FEATURES NEED TO COMPLY WITH CALGREEN CODE, SECTION 5.507.4 FOR THE SITE SPECIFIC LOCATION.
14. IN THE EVENT THAT A PC CLASSROOM IS DESIGNED TO CONNECT TO THE SAME PC CLASSROOM, INTERIOR SOUND TRANSMISSION IN THE INTERIOR ADJOINING WALL AND FLOOR-CEILING SHALL MEET THE MINIMUM REQUIREMENTS OF THE STC RATING OF 40 PER CALGREEN CODE, SECTION 5.507.4.3.
15. FOR THE CONCRETE BELOW GRADE (AMM*) FOUNDATION OPTION THIS PC USES A DSA APPROVED ALTERNATE MEANS OF COMPLIANCE WITH THE FOUNDATION DURABILITY REQUIREMENTS OF CBC 1402.2 + 1403.2 (WEATHER-RESISTANT EXTERIOR WALL ENVELOPE AND CONTINUOUS WATER-RESTISTIVE BARRIER ON WALLS TO FOUNDATION) + 2304.12.1.2 (PROTECTION AGAINST DECAY AND TERMITES). DETAILS ARE PROVIDED ON SHEETS A-5.71 - A-5.78 AS APPLICABLE.
16. THE BUILDING PAD ELEVATION SHALL ABOVE THE DESIGN FLOOD ELEVATION.
17. WHEN THE SITE-SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A SEALED LETTER FROM A GEOTECHNICAL ENGINEER SHALL BE PROVIDED TO VALIDATE THE APPLICABILITY OF THE ALLOWABLE SOIL BEARING PRESSURES INDICATED ON THE PC DRAWINGS.
EXCEPTION: THIS LETTER IS NOT REQUIRED FOR PROJECTS LOCATED IN FLOOD ZONE D WHEN A GEOTECHNICAL REPORT IS AVAILABLE FOR IMPROVEMENTS ON THE SAME PROJECT SITE, AND IN ACCORDANCE WITH THE CURRENT CBC, WHICH CONFIRMS THAT THE SITE IS NOT IN A FLOOD HAZARD ZONE OR CONFIRMS THAT THE FLOOD HAZARD DOES NOT RESULT IN A REDUCTION OF SOIL CAPACITY VALUES.

APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA. AMENDED)	2022 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED) (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")	2022 EDITION
ACI 318	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE	2019 EDITION
ASME A17.1	(W/A17.1A CSA B44A-2019 ADDENDA) SAFETY CODE FOR ELEVATORS & ESCALATORS.	2019 EDITION

APPLICABLE CODES

LIST OF 2022 CALIFORNIA CODE OF REGULATIONS

2022 BUILDING ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
TITLE 19 C.C.R., 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.

BUILDING DATA

NUMBER OF STORIES:	1 - STORY
OCCUPANCY:	E or B
TYPE OF CONSTRUCTION:	V-B
FLOOR LIVE LOAD:	50+15 PSF PARTITION LOAD
ROOF LIVE LOAD:	20 PSF
FLOOR DEAD LOAD:	WOOD FLOOR - 11 PSF
ROOF DEAD LOAD:	18 PSF (INCLUDING SPRINKLER LOAD AND SOLAR ALLOWANCE)
SOLAR ALLOWANCE:	0.6 PSF OVER ENTIRE ROOF AREA
RAMP LIVE LOAD:	100 PSF
BUILDING AREA:	24'x40' BLDG 960 S.F.
ALLOWABLE AREA: 9,000 S.F. (ALL w/o OVERHANGS)	

FOUNDATION: WOOD (CONDITIONAL)

CEC CLIMATE ZONE: **ALL ZONES**

ALLOWABLE SOIL PRESSURE	
WOOD FOOTING (DL & DL+LL & DL+LL+SEISMIC)	1,000 psf
CONCRETE FOOTING (DL & DL+LL & DL+LL+SEISMIC)	1,500 psf

ROOF SNOW LOAD	
GROUND SNOW LOAD, P_g FROM COUNTY	0
ROOF SNOW LOAD: FLAT P_f	
SNOW EXPOSURE FACTOR C_s	-
SNOW IMPORTANCE FACTOR I_s	1.0
THERMAL FACTOR C_t	-

FLOOD DESIGN (SEE GENERAL NOTE #16 + 17)

FLOOD HAZARD AREA NO

WIND DESIGN	
BASIC WIND SPEED (3 SECOND GUST) V_{ult}	120
RISK CATEGORY	II
WIND EXPOSURE CATEGORY	C
TOPOGRAPHIC FACTOR K_{zt}	1

SEISMIC DESIGN	
LATERAL FORCE-RESISTING SYSTEM	OMF
ANALYSIS PROCEDURE	EQUIV. LATERAL FORCE
SEISMIC DESIGN CATAGORY (SDC)	**E**
SEISMIC IMPORTANCE FACTOR I_E	1.0
SEISMIC RESPONSE COEFFICIENT C_S	0.45
RESPONSE MODIFICATION COEFFICIENT R	3.5
SITE CLASS	D
MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD S_S	2.8
SHORT PERIOD SITE COEFFICIENT F_a	1.2
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD S_{DS}	2.23 +++
MAPPED SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD S_1	1.064
LONG PERIOD SITE COEFFICIENT, F_v	1.7
DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD S_{D1}	1.2
HORIZONTAL OR VERTICAL IRREGULARITY TYPES	NONE
REDUNDANCY FACTOR Rho	1.0
FUNDAMENTAL PERIOD T	< 0.5s

++ PER SUPPLEMENT 3 OF ASCE 7-16, STRUCTURES SITUATED IN SITE CLASS D WITH S1 VALUES THAT ARE EQUAL TO OR GREATER THAN 0.2 ARE EXEMPTED FROM THE GROUND MOTION HAZARD ANALYSIS. THIS EXEMPTION APPLIES WHEN THE PARAMETER SM1, DETERMINED THROUGH THE USE OF EQ. 11.4-2, IS ELEVATED BY 50% FOR ALL APPLICATIONS OF SM1

+++ FOR THE PURPOSES OF CALCULATING C_S (PER ASCE 7-16 12.8.1.3) S_{DS} = 1.56 ACTUAL PERIOD T = 0.34 SEC.

SEISMIC DESIGN FOR SITE SPECIFIC PROJECTS

SELECT ONE

☒ DESIGN BASED ON SITE CLASS $D_{default}$

NO GEOTECHNICAL INVESTIGATION REQUIRED

Ss = 0.625 Fa = 1.2

☐ DESIGN BASED ON SITE CLASS DETERMINED PER CHAPTER 20 OF ASCE 7-16

GEOTECHNICAL INVESTIGATION PROVIDED

SITE CLASS: ☐ C ☐ D

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

S_{DS} = ⅔ Fa Ss = 0.541

☒ SITE CLASS C or D: 0.7 x S_{DS}* = 0.7 x 0.541 = 0.3737 ≤ 1.56

C_S = 0.45 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

NOTE:
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.

SHEET INDEX - PROJECT SPECIFIC

SHEET INDEX - PC 04-12199

TOTAL SHEETS 48

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

COVER SHEET

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARK 29775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

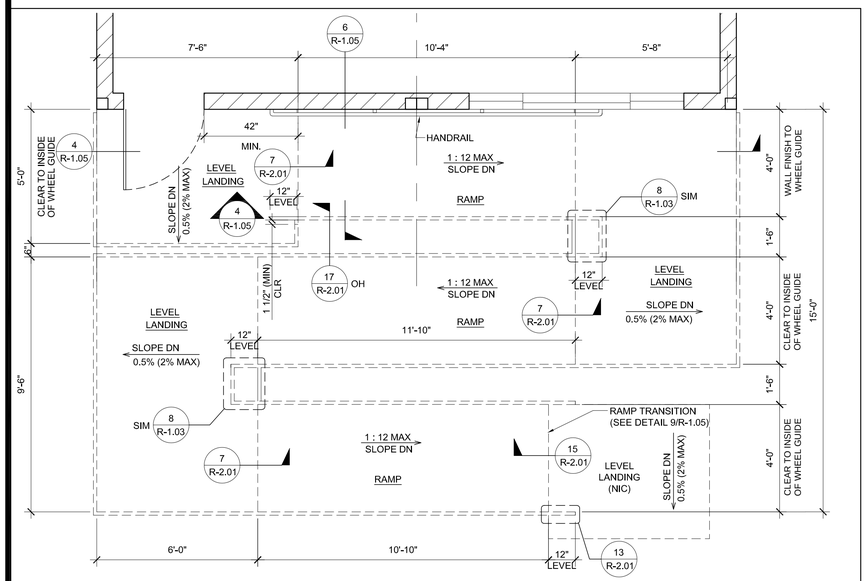
PROJECT NO: 11478
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0N

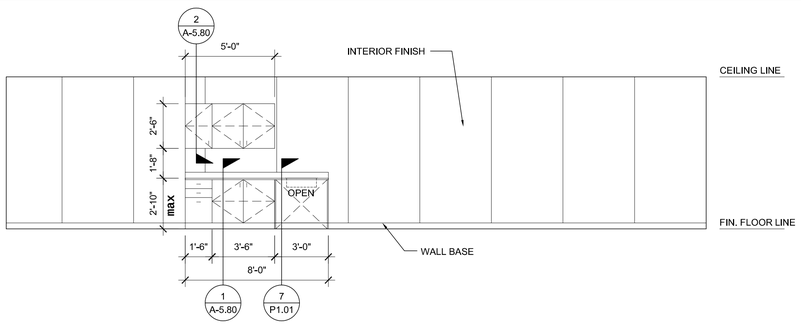
PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT	FIXTURE DESCRIPTION (AS CALLED OUT OR APPROVED EQUAL)
CS 1	CLASSROOM SINK	1/2"	-	2"	1 1/2"	JUST CRA-1725-A-GR 17"x25" w/ 4 1/2" BOWL DEPTH, WITH CHICAGO FAUCET #350 AND BUBBLER JSB-10

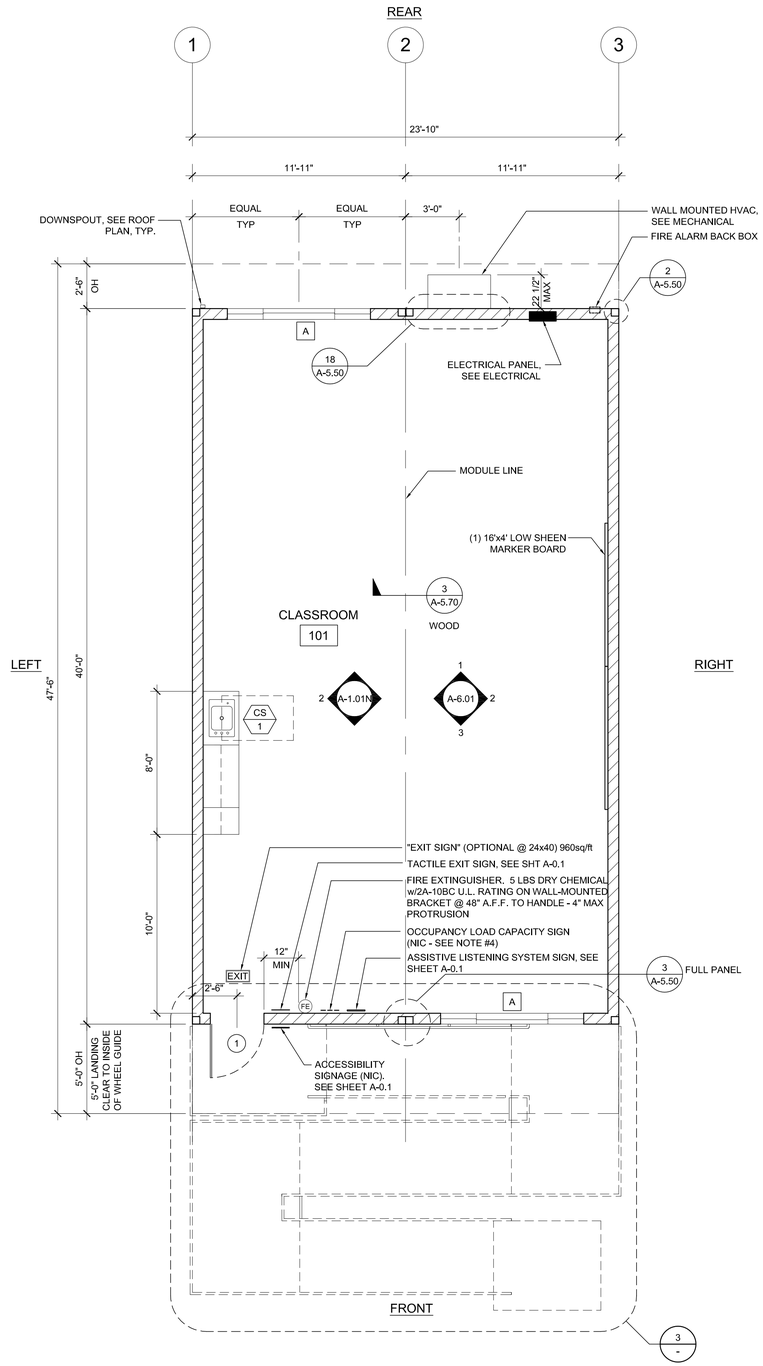


NOTE: SEE SHEET R-1.05 FOR PC APPROVED STRUCTURE AND DETAILS

ENLARGED RAMP PLAN — SCALE: 3/8" = 1' - 0" | 3



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" | 2



FLOOR PLAN — SCALE: 1/4" = 1' - 0" | 1

NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. PER IR 16-1 (4.1)
   (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURER'S NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, REQUIRED PV SYSTEM CAPACITY (kW), WIND SPEED, EXPOSURE CATEGORY, AND Kzt = 1.0 2022 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_S
2. VINYL TACKBOARD INTERIOR FINISH SHALL COMPLY WITH CBC SECTION 803.7
3. POSTING OF OCCUPANCY LOAD SIGNS SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 ART. 3.30 (NOT IN MODULAR MANUFACTURER'S SCOPE OF WORK
4. FOR BUILDINGS THAT ARE MANUFACTURED IN-PLANT, THE IN-PLANT INSPECTOR IS TO ATTACH A VERIFIED REPORT INSIDE EACH BUILDING, WHICH SHALL INDICATE THE MANUFACTURER'S NAME AND THE SERIAL NUMBER FOR EACH BUILDING MODULE AS WELL AS THE DSA FILE AND APPLICATION NUMBES, PER IR 16-1.13 (2.1)
5. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION
6. FOR CASEWORK, TEACHER WALL, OR TV BLOCKING OPTIONS, SEE SHEET A-5.80
7. DOORS SHALL PROVIDED WITH MINIMUM 4' CANOPY OR ROOF OVERHANG - SEE A/A-0.7 FOR NON-ABSORBANT WALL AND FLOOR FINISH REQUIREMENTS ADJACENT TO EXTERIOR DOORS

WALL LEGEND

NOMINAL 6" WALL STUD

A WINDOW PER SCHEDULE SHEET A-0.2

(#) DOOR PER SCHEDULE SHEET A-0.2

NOTES:
ALL EXTERIOR WALL FRAMING SHALL BE 2x6 (MIN).

2x4 WALL FRAMING NOT ALLOWED WITH WALLS OVER 9'-0" IN HEIGHT.

SYMBOLS LEGEND

60" CIRCLE CLEAR SPACE

30"x48" CLEAR SPACE

MARKING & IDENTIFICATION OF FIRE RATED CONSTRUCTION. (CBC 703.5)
FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL:

1. BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES;
2. BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND
3. INCLUDE LETTERING NOT LESS THAN 3" IN HEIGHT AND A MIN. 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING. "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER SIMILAR WORDING.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

FLOOR PLAN
24' x 40'
PROJECT SPECIFIC

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

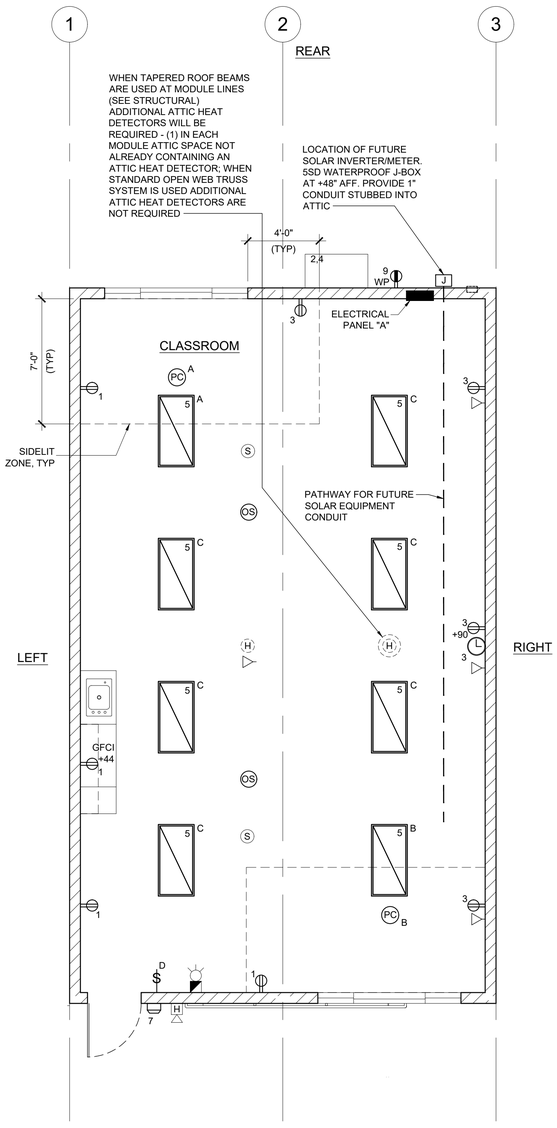
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

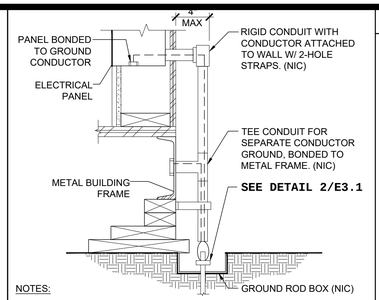
PROJECT NO: 11478
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-1.01N



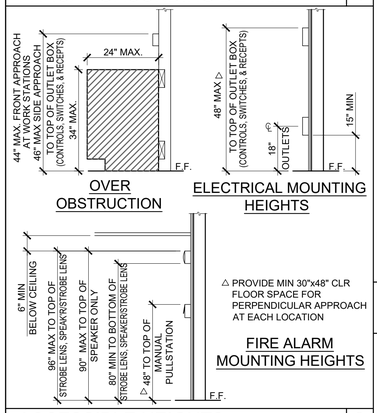
ELECTRICAL PLAN — SCALE: 1/4" = 1'-0" | 4



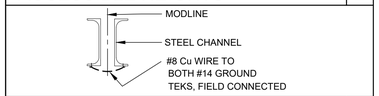
NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
3. 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)
4. ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
5. 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).

TYPICAL GROUNDING DETAIL | 1



ACCESSIBLE HEIGHTS | 2



GROUND JUMPER AT MODLINE | 3

GROUND JUMPER AT MODLINE

EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD. X 8' COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREE'S FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCES TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR. ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

FIRE ALARM NOTES

1. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM
2. PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72 SECTION 10.6.5.2

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 OR MOVABLE 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 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 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 & 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., OSHPD OPA 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 SYSTEM (E):

MP☐ MD☐ PP☐ E☑ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN SHALL BE THE LUTRON VIVE WIRELESS LIGHTING CONTROL SYSTEM.
THE SYSTEM SHALL BE CAPABLE OF PROVIDING MANUAL CONTROL, OCCUPANCY SENSING CONTROL AND DAYLIGHT HARVESTING CONTROL.

SEQUENCE:

OCCUPANT ENTERS:
ALL LIGHTS AUTOMATICALLY TURN ON TO 50% LIGHT LEVEL. OCCUPANT MAY INCREASE LIGHTS TO MAXIMUM LEVEL MANUALLY WITH WALL CONTROL.
WHEN OCCUPIED:
LIGHTING IN DAYLIT ZONES AUTOMATICALLY DIM/BRIGHTEN BASED ON DAYLIGHT AVAILABILITY.
OCCUPANT MAY MANUALLY DIM/BRIGHTEN THE LIGHTS WITH WALL CONTROL.
OCCUPANT EXITS:
ALL LIGHTS AUTOMATICALLY TURN OFF 15 MINUTES AFTER VACANCY.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 90°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" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN)
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT (U.N.O.)
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- PC — CEILING MOUNTED PHOTOCELL
- US — ULTRASONIC CEILING OCCUPANCY SENSOR. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- WS-1 — SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF
- $D — DIMMER SWITCH, AT +48" AFF. TO TOP OF OUTLET BOX
- $ — LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $3 — 3-WAY LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $K — KEYED SWITCH MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP — EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24 " AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
- GFI — GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF — ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EM — EXTERIOR LED LIGHT FIXTURE W/ 90 MIN. EMERGENCY BATTERY BACKUP WHEN 'EM' IS DESIGNATED NEXT TO FIXTURE W/ PHOTOCELL W/ 30w MAX. MOUNT AT +93" AFF
- L — CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
- EXIT — EXIT SIGN WITH 90 MIN. BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL)
- 4SD J-BOX FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULL STRING
- 4SD J-BOX FOR FIRE ALARM STROBE OR VOICE EVAC SPEAKER/STROBE (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 80" AND 96" AFF AND WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM SPEAKER/HORN WITH PULL STRING
- H — 4SD J-BOX FOR EXTERIOR FIRE ALARM SPEAKER (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULL STRING
- 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 PULL STRING
- S — 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- H — 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC 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)
- WH — 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 300 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN) 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.
- WALL MOUNTED LIGHT FIXTURE, 30 WATTS
- 4SD J-BOX FOR FUTURE DATA W/ SINGLE GANG RING W/ 1" CO STUB INTO ATTIC AND PULL STRING
- FS — DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER FLOW SWITCH.
- TS — DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER TAMPER SWITCH.
- B — DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER BELL.

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.

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: WALL MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	Circuit	A	B	Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1			2	60	2	4830		1	HVAC - WALL MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3			4	-	-		4830		-
INTERIOR LIGHTING	8	960		20	1	5			6						
EXTERIOR LIGHTING	1		40	20	1	7			8						
WALL RECEPTACLE (GFI)	1	180		20	1	9			10						
DED - SOLAR READY						11			12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13			14						
A = 6690 WATTS / PHASE		1860	940									4830	4870		B = 5810 WATTS / PHASE
TOTAL = 12,500 WATTS		61 AMPS				120/208 VOLTS			1 Ø			3 WIRE			

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ELECTRICAL PLAN
AND SCHEDULE
24' x 40'
PROJECT SPECIFIC

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARK 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO: 11478
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

E-1.01N

MODULAR CLASSROOM BUILDINGS
(WITH OPTIONAL RESTROOM MODULES)
BUILDING SIZE: 24' X 40'
EXPANDABLE TO 120' X 40'
PC 04-121999

BY

SILVER CREEK MODULAR, INC.
2830 BARRETT AVE, PERRIS, CALIFORNIA 92571
PHONE : (951) 943-5393 FAX : (951) 943-2211

GENERAL NOTES

1. FIRE ALARM IS NOT PART OF THIS APPROVAL.
2. ALLOWABLE AREA IS BASED ON 10' SET BACK FROM IMAGINARY ASSUMED LINE PER 2022 CBC 705.3.
3. THIS PC IS DESIGNED STRUCTURALLY TO SUPPORT THE WEIGHT OF A FIRE SPRINKLER SYSTEM.
4. PC IS DESIGNED AS A SINGLE STORY MODULAR BUILDING.
5. FOR SOILS TYPES / DESIGN BEARING STRENGTH, SEE STRUCTURAL SPECIFICATIONS.
6. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
7. THIS PC IS NOT APPROVED FOR "A" OCCUPANCY USES.
8. EXTERIOR WALL OPENINGS TO COMPLY W/ 705.8, 2022 CBC. THE USE OF UNPROTECTED OPENINGS SHALL BE VERIFIED IN THE PROJECT SPECIFIC APPLICATIONS.
9. EXTERIOR PROJECTIONS ARE TO BE FIRE PROTECTED WHERE REQUIRED BY SECTIONS 705.2 & 1405.
10. SEE SHEETS A-0.7 FOR REQUIRED BUILDING ENVELOPE ASSEMBLIES AND HVAC SYSTEM.
11. PURSUANT TO D.S.A. APPROVAL ALL PRODUCTS CAN BE SUBSTITUTED BY AN "EQUAL".
12. BUILDING(S) TO BE LOCATED IN ANY FIRE HAZARD SEVERITY ZONE OR ANY WILDLAND - URBAN INTERFACE FIRE AREA SHALL COMPLY WITH CBC CHAPTER 7A.
13. WHEN THE PRE-CHECKED BUILDING IS SITE ADAPTED, THE BUILDING AND SITE FEATURES NEED TO COMPLY WITH CALGREEN CODE, SECTION 5.507.4 FOR THE SITE SPECIFIC LOCATION.
14. IN THE EVENT THAT A PC CLASSROOM IS DESIGNED TO CONNECT TO THE SAME PC CLASSROOM, INTERIOR SOUND TRANSMISSION IN THE INTERIOR ADJOINING WALL AND FLOOR-CEILING SHALL MEET THE MINIMUM REQUIREMENTS OF THE STC RATING OF 40 PER CALGREEN CODE, SECTION 5.507.4.3.
15. FOR THE CONCRETE BELOW GRADE (AMM*) FOUNDATION OPTION THIS PC USES A DSA APPROVED ALTERNATE MEANS OF COMPLIANCE WITH THE FOUNDATION DURABILITY REQUIREMENTS OF CBC 1402.2 + 1403.2 (WEATHER-RESISTANT EXTERIOR WALL ENVELOPE AND CONTINUOUS WATER-RESTISTIVE BARRIER ON WALLS TO FOUNDATION) + 2304.12.1.2 (PROTECTION AGAINST DECAY AND TERMITES). DETAILS ARE PROVIDED ON SHEETS A-5.71 - A-5.78 AS APPLICABLE.
16. THE BUILDING PAD ELEVATION SHALL ABOVE THE DESIGN FLOOD ELEVATION.
17. WHEN THE SITE-SPECIFIC PROJECT IS LOCATED IN A FLOOD ZONE OTHER THAN ZONE X, A SEALED LETTER FROM A GEOTECHNICAL ENGINEER SHALL BE PROVIDED TO VALIDATE THE APPLICABILITY OF THE ALLOWABLE SOIL BEARING PRESSURES INDICATED ON THE PC DRAWINGS.
EXCEPTION: THIS LETTER IS NOT REQUIRED FOR PROJECTS LOCATED IN FLOOD ZONE D WHEN A GEOTECHNICAL REPORT IS AVAILABLE FOR IMPROVEMENTS ON THE SAME PROJECT SITE, AND IN ACCORDANCE WITH THE CURRENT CBC, WHICH CONFIRMS THAT THE SITE IS NOT IN A FLOOD HAZARD ZONE OR CONFIRMS THAT THE FLOOD HAZARD DOES NOT RESULT IN A REDUCTION OF SOIL CAPACITY VALUES.

APPLICABLE STANDARDS

NFPA 13	AUTOMATIC SPRINKLER SYSTEMS (CA. AMENDED)	2022 EDITION
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED) (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")	2022 EDITION
ACI 318	BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE	2019 EDITION
ASME A17.1 (W/A17.1A CSA B44A-2019 ADDENDA)	SAFETY CODE FOR ELEVATORS & ESCALATORS.	2007 EDITION

APPLICABLE CODES

LIST OF 2022 CALIFORNIA CODE OF REGULATIONS

2022 BUILDING ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 C.C.R.
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2022 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 C.C.R.
2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 C.C.R.
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.
2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 C.C.R.
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

BUILDING DATA

NUMBER OF STORIES:	1 - STORY	
OCCUPANCY:	E or B	
TYPE OF CONSTRUCTION:	V-B	
FLOOR LIVE LOAD:	☐ 50 PSF	☑ 50+15 PSF PARTITION LOAD
	☐ 100 PSF	☐ 150 PSF
ROOF LIVE LOAD:	20 PSF	
FLOOR DEAD LOAD:	☑ WOOD FLOOR - 11 PSF	☐ CONCRETE FLOOR - 35 PSF
ROOF DEAD LOAD:	18 PSF (INCLUDING SPRINKLER LOAD AND SOLAR ALLOWANCE)	
SOLAR ALLOWANCE:	0.6 PSF OVER ENTIRE ROOF AREA	
RAMP LIVE LOAD:	100 PSF	
BUILDING AREA:	☑ 24'x40' BLDG - 960 S.F.	☐ 84'x40' BLDG - 3,360 S.F.
	☐ 36'x40' BLDG - 1,440 S.F.	☐ 96'x40' BLDG - 3,840 S.F.
	☐ 48'x40' BLDG - 1,920 S.F.	☐ 108'x40' BLDG - 4,320 S.F. ★
ALLOWABLE AREA: 9,000 S.F.	☐ 60'x40' BLDG - 2,400 S.F.	☐ 120'x40' BLDG - 4,800 S.F. ★
	☐ 72'x40' BLDG - 2,880 S.F.	★ SEE S-0.1 FOR GEOTECHNICAL REPORT REQUIREMENT
(ALL w/o OVERHANGS)		
FOUNDATION:	☑ WOOD (CONDITIONAL) ☐ CONCRETE ABOVE GRADE ☐ CONCRETE BELOW GRADE (<2,160 SF, CONDITIONAL) ☐ CONCRETE BELOW GRADE (AMM, SEE NOTE 15)	
CEC CLIMATE ZONE:	☑ ALL ZONES (1-16) ☐ SINGLE ZONE (SEE PROJECT SPECIFIC DRAWINGS)	

ALLOWABLE SOIL PRESSURE

WOOD FOOTING (DL & DL+LL & DL+LL+SEISMIC)	1,000 psf
CONCRETE FOOTING (DL & DL+LL & DL+LL+SEISMIC)	1,500 psf

ROOF SNOW LOAD

GROUND SNOW LOAD, P_g FROM COUNTY	0
ROOF SNOW LOAD: ☐ FLAT P_f OR ☐ LOW-SLOW, P_m OR ☐ SLOPED, P_s	
SNOW EXPOSURE FACTOR C_s	-
SNOW IMPORTANCE FACTOR I_s	1.0
THERMAL FACTOR C_t	-

FLOOD DESIGN (SEE GENERAL NOTE #16 + 17)

FLOOD HAZARD AREA	YES ☐ NO ☑

WIND DESIGN

BASIC WIND SPEED (3 SECOND GUST) V_{ult}	120
RISK CATEGORY	II
WIND EXPOSURE CATEGORY	C
TOPOGRAPHIC FACTOR K_{zt}	1

SEISMIC DESIGN

LATERAL FORCE-RESISTING SYSTEM	OMF
ANALYSIS PROCEDURE	EQIV. LATERAL FORCE
SEISMIC DESIGN CATAGORY (SDC)	E
SEISMIC IMPORTANCE FACTOR I_e	1.0
SEISMIC RESPONSE COEFFICIENT C_s	0.45
RESPONSE MODIFICATION COEFFICIENT R	3.5
SITE CLASS	D
MAPPED SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD S_s	2.8
SHORT PERIOD SITE COEFFICIENT F_a	1.2
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD S_{DS}	2.23 +++
MAPPED SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD S_1	1.064 ++
LONG PERIOD SITE COEFFICIENT, F_v	1.7
DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-SECOND PERIOD S_{D1}	1.2
HORIZONTAL OR VERTICAL IRREGULARITY TYPES	NONE
REDUNDANCY FACTOR Rho	1.0
FUNDAMENTAL PERIOD T	< 0.5s

++ PER SUPPLEMENT 3 OF ASCE 7-16, STRUCTURES SITUATED IN SITE CLASS D WITH S1 VALUES THAT ARE EQUAL TO OR GREATER THAN 0.2 ARE EXEMPTED FROM THE GROUND MOTION HAZARD ANALYSIS. THIS EXEMPTION APPLIES WHEN THE PARAMETER SM1, DETERMINED THROUGH THE USE OF EQ. 11.4-2, IS ELEVATED BY 50% FOR ALL APPLICATIONS OF SM1

+++ FOR THE PURPOSES OF CALCULATING C_S (PER ASCE 7-16 12.8.1.3)
S_{DS} = 1.56

FOR SITE SPECIFIC PROJECT

☐ SOLAR PV IS REQUIRED AND REFERENCE SHEET A-0.7
☐ GEOTECH REPORT IS REQUIRED

SEISMIC DESIGN FOR SITE SPECIFIC PROJECTS

SELECT ONE

☒ DESIGN BASED ON SITE CLASS $D_{default}$

NO GEOTECHNICAL INVESTIGATION REQUIRED

Ss = 0.625 Fa = 1.2

☐ DESIGN BASED ON SITE CLASS DETERMINED PER CHAPTER 20 OF ASCE 7-16

GEOTECHNICAL INVESTIGATION PROVIDED

SITE CLASS: ☐ C ☐ D

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

S_{DS} = ⅔ Fa Ss = 0.541

☒ SITE CLASS C or D: 0.7 x S_{DS}* = 0.7 x 0.541 = 0.3737 ≤ 1.56

C_S = 0.45 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

NOTE:
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.

SHEET INDEX

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

COVER SHEET

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0

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

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

2. PERFORMED BY

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 Inspector) – 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 size, types and grades comply with requirements.	Periodic	SI	Table 17AA.3 Item 3a- 3a. 2202A.1, A.SBI 3100-20 Section A3.1 & A3.2, ASI S240-20 Section A3 & A5, ASI 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 (17DSA.2.4).
*	e. Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.

S/A2. HIGH-STRENGTH BOLTS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
*	a. Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	Periodic	SI	Table 17AA.3.1 Items 1a & 1b, 2202A.1; ASC 360-16 Section A3.3, J3.1, and N3.2; ICSC 2014 Section 11.5 & 2.1; DSA IR 17-6 & DSA IR 17-9
*	b. Test high-strength bolts, nuts and washers.	Test	LOR	Table 17AA.3 Item 1c, 2213A.1; ICSC 2014 Section 7.2; DSA IR 17-6
*	c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 17AA.2.1 Item 2a, 1705A.2, 2204A.2; ASC 360-16 J3.1, J3.2, M2.5 & N5.6; ICSC 2014 Section 9.1; DSA IR 17-5
*	d. Pretensioned and slip-critical connections.	*	SI	Table 17AA.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; ASC 360-16 J3.1, J3.2, M2.5 & N5.6; ICSC 2014 Sections 9.2 & 9.3; DSA IR 17-5 * "Continuous" or "Periodic" depends on the tightening method used.

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	Table 17AA.2.1 Items 4 & 5, AWS D1.1 and AWS D1.8 for structural steel; AWS D1.3 for cold-formed steel trusses; AWS D1.4 for reinforcing steel; DSA IR 17-5
☑	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 17AA.2.1 Items 5a.1–4; ASC 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	17DSA.2.2, Table 17DSA.2.1 Items 5a.5 & 6a.6; ASC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	c. Inspect welding of stairs and railing systems.	Periodic	SI	17DSA.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	17DSA.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 17DSA.2.1 Item 5b, 17DSA.3.1, Table 17DSA.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
☑	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds < 5/16", plug and slot welds.	Continuous	SI	Table 17DSA.2.1 Items 5a.1–4; ASC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	b. Inspect single-pass fillet welds ≥ 5/16".	Periodic	SI	17DSA.2.2, Table 17DSA.2.1 Item 5a.5 & 6a.6; ASC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	c. Inspect arc-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	17DSA.2.2, Table 17DSA.2.1 Item 5a.7; ASC 360-16 (and AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☐	d. Inspect floor and roof deck welds.	Periodic	SI	17DSA.2.2, Table 17DSA.2.1 Item 6a.8; ASC 360-16 (and AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☐	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	17DSA.2.2 & AISI S240-20 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☐	f. Inspect welding of stairs and railing systems.	Periodic	SI*	17DSA.2.1, AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☐	g. Verification of reinforcing steel weldability.	Periodic	SI	17DSA.3.1, AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	h. Inspect welding of reinforcing steel.	Continuous	SI	Table 17DSA.2.1 Item 5b, 17DSA.3.1, Table 17DSA.3 Item 2, 1903A.8, AWS D1.4; DSA IR 17-3.

S/A6. NONDESTRUCTIVE TESTING:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Ultrasonic	Test	LOR	17DSA.2.1, 17DSA.2.5; ASC 341-16 J6.2, ASC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	b. Magnetic Particle	Test	LOR	17DSA.2.1, 17DSA.2.5; ASC 341-16 J6.2, ASC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	c.	Test	LOR	

S/A7. STEEL JOISTS AND TRUSSES:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify size, type and grade for all shoot and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	17DSA.2.3, Table 17DSA.2.3; AISI S1-1 DSA IR 22-3 for steel joists only. 17DSA.2.4; AWS D1.3 for cold-formed steel trusses.

S/A8. ANCHOR BOLTS AND ANCHOR RODS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Anchor bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☑	b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

S/A10. STORAGE RACK SYSTEMS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.	Periodic	SI	Table 17AA.13.7
☐	b. Fabricated storage rack elements.	Periodic	SI	17DSA.2.3; Table 17DSA.13.7
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	c. Storage rack anchorage installation.	Periodic	SI	ANSI/MH16.1 Section 7.3.2; Table 17DSA.13.7
☐	d. Completed storage rack system to indicate compliance with the approved construction documents.	Periodic	SI*	Table 17DSA.13.7 * May be preformed by the project inspector when specifically approved by DSA.

S/A11. Other Steel

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-122203
DSA File Number: 33 silver

School Name: Silver Creek Modular
Increment Number:

School District: Silver Creek
Date Created: 2023-09-25 09:27:21

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:

☐ 1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 30'-0" tall (e.g. lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.

☐ 2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:

☐ 1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below

☐ 2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.

☐ 3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.

☐ 4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

CONCRETE/MASONRY:

☐ 5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

WELDING:

☐ 1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 6'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 6'-0") to the edge of floor or roof.

☐ 2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1). fillet welds shall not be ground flush.

☐ 3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.

☐ 4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to supernstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

☐ 5. Manufactured components (e.g., Tolco, B-Line, Alcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to supernstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

☐ 6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to supernstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).

☐ 7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) <4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

Application Number: 04-122203
DSA File Number: 33 silver

School Name: Silver Creek Modular
Increment Number:

School District: Silver Creek Modular
Date Created: 2023-09-25 09:27:21

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

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:

☐ 1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 30'-0" tall (e.g. lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.

☐ 2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:

☐ 1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below

☐ 2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.

☐ 3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.

☐ 4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

CONCRETE/MASONRY:

☐ 5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

WELDING:

☐ 1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 6'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 6'-0") to the edge of floor or roof.

☐ 2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1). fillet welds shall not be ground flush.

☐ 3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.

☐ 4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to supernstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

☐ 5. Manufactured components (e.g., Tolco, B-Line, Alcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to supernstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

☐ 6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to supernstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).

☐ 7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) <4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

The example form DSA 103 sections shown on this sheet are for illustration purposes only. A form DSA 103 is to be completed for each application that this PC is being incorporated into and the example sections shown on this drawing are to be crossed out.

- UT TESTING SHALL BE PERFORMED ON 100% OF CJP GROOVE WELDS COLUMN SPLICES OR BEAM SPLICES WHERE THE MATERIAL THICKNESS BEING WELDED IS 5/16" OR GREATER.
- UT TEST SHALL NOT BE REQUIRED TO BE PERFORMED ON CJP GROOVE WELDS WHERE THE MATERIAL THICKNESS BEING WELDED IS 1/4" OR LESS.
- MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN OR TRUSS CHORD TO COLUMN CJP GROOVE WELDS.

STOCKPILE CONCRETE FLOOR, CONT. 3

PERMANENT WOOD FOUNDATION 5 | GENERAL 103-22 NOTES 4 | STOCKPILE CONCRETE FLOOR 3 | STOCKPILE WOOD FLOOR 2 | SOILS REPORT REQUIRED 1

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

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

2. PERFORMED BY

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 Inspector) – 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 size, types and grades comply with requirements.	Periodic	SI	Table 17AA.3 Item 3a- 3a. 2202A.1, A.SBI 3100-20 Section A3.1 & A3.2, ASI S240-20 Section A3 & A5, ASI 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 (17DSA.2.4).
*	e. Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.

S/A2. HIGH-STRENGTH BOLTS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
*	a. Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	Periodic	SI	Table 17AA.3.1 Items 1a & 1b, 2202A.1; ASC 360-16 Section A3.3, J3.1, and N3.2; ICSC 2014 Section 11.5 & 2.1; DSA IR 17-6 & DSA IR 17-9
*	b. Test high-strength bolts, nuts and washers.	Test	LOR	Table 17AA.3 Item 1c, 2213A.1; ICSC 2014 Section 7.2; DSA IR 17-6
*	c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 17AA.2.1 Item 2a, 1705A.2, 2204A.2; ASC 360-16 J3.1, J3.2, M2.5 & N5.6; ICSC 2014 Section 9.1; DSA IR 17-5
*	d. Pretensioned and slip-critical connections.	*	SI	Table 17AA.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2; ASC 360-16 J3.1, J3.2, M2.5 & N5.6; ICSC 2014 Sections 9.2 & 9.3; DSA IR 17-5 * "Continuous" or "Periodic" depends on the tightening method used.

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	Table 17AA.2.1 Items 4 & 5, AWS D1.1 and AWS D1.8 for structural steel; AWS D1.3 for cold-formed steel trusses; AWS D1.4 for reinforcing steel; DSA IR 17-5
☑	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 17AA.2.1 Items 5a.1–4; ASC 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	17DSA.2.2, Table 17DSA.2.1 Items 5a.5 & 6a.6; ASC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	c. Inspect welding of stairs and railing systems.	Periodic	SI	17DSA.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	17DSA.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 17DSA.2.1 Item 5b, 17DSA.3.1, Table 17DSA.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
☑	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds < 5/16", plug and slot welds.	Continuous	SI	Table 17DSA.2.1 Items 5a.1–4; ASC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	b. Inspect single-pass fillet welds ≥ 5/16".	Periodic	SI	17DSA.2.2, Table 17DSA.2.1 Item 5a.5 & 6a.6; ASC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	c. Inspect arc-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	17DSA.2.2, Table 17DSA.2.1 Item 5a.7; ASC 360-16 (and AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☐	d. Inspect floor and roof deck welds.	Periodic	SI	17DSA.2.2, Table 17DSA.2.1 Item 6a.8; ASC 360-16 (and AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☐	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	17DSA.2.2 & AISI S240-20 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☐	f. Inspect welding of stairs and railing systems.	Periodic	SI*	17DSA.2.1, AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☐	g. Verification of reinforcing steel weldability.	Periodic	SI	17DSA.3.1, AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	h. Inspect welding of reinforcing steel.	Continuous	SI	Table 17DSA.2.1 Item 5b, 17DSA.3.1, Table 17DSA.3 Item 2, 1903A.8, AWS D1.4; DSA IR 17-3.

S/A6. NONDESTRUCTIVE TESTING:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Ultrasonic	Test	LOR	17DSA.2.1, 17DSA.2.5; ASC 341-16 J6.2, ASC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	b. Magnetic Particle	Test	LOR	17DSA.2.1, 17DSA.2.5; ASC 341-16 J6.2, ASC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	c.	Test	LOR	

S/A7. STEEL JOISTS AND TRUSSES:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify size, type and grade for all shoot and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	17DSA.2.3, Table 17DSA.2.3; AISI S1-1 DSA IR 22-3 for steel joists only. 17DSA.2.4; AWS D1.3 for cold-formed steel trusses.

S/A8. ANCHOR BOLTS AND ANCHOR RODS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Anchor bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☑	b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

S/A10. STORAGE RACK SYSTEMS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.	Periodic	SI	Table 17AA.13.7
☐	b. Fabricated storage rack elements.	Periodic	SI	17DSA.2.3; Table 17DSA.13.7
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	c. Storage rack anchorage installation.	Periodic	SI	ANSI/MH16.1 Section 7.3.2; Table 17DSA.13.7
☐	d. Completed storage rack system to indicate compliance with the approved construction documents.	Periodic	SI*	Table 17DSA.13.7 * May be preformed by the project inspector when specifically approved by DSA.

S/A11. Other Steel

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:

☐ 1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 30'-0" tall (e.g. lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.

☐ 2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:

☐ 1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below

☐ 2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.

☐ 3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.

☐ 4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

CONCRETE/MASONRY:

☐ 5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

WELDING:

☐ 1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 6'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 6'-0") to the edge of floor or roof.

☐ 2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1). fillet welds shall not be ground flush.

☐ 3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.

☐ 4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to supernstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

☐ 5. Manufactured components (e.g., Tolco, B-Line, Alcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to supernstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).

☐ 6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to supernstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).

☐ 7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) <4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

Application Number: 04-122203
DSA File Number: 33 silver

School Name: Silver Creek Modular
Increment Number:

School District: Silver Creek
Date Created: 2023-09-13 22:05:10

1. Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293

1. Structural

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.

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. Identify, 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: Periodic	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.)
☐	f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/AA(d) & (e) and/or S/ASG(g) & (h) below.		

C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3
☐	b. Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 9.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	a. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.
☐	d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item B; ACI 318-14 Section 26.13

C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-19 Section 26.13.
☐	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high detectability per Table 14.2.1 of ASCE/SEI 7-16 and assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3, ACI 318-19 Section 26.13.3; ACI 550.5
☐	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3, ACI 318-19 Section 26.13.3; ACI 550.5

C4. SHOTCRETE: (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect shotcrete placement for proper application techniques.	Continuous	SI	1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3. See ACI 506.2-13 Section 3.4. ACI 506R-16.
☐	b. Sample and test shotcrete (f'c).	Test	LOR	1908A.2, 1705A.3.9

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.)

C6. OTHER CONCRETE:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:

☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:

☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

CONCRETE/MASONRY:

☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

WELDING:

☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the "Exception" language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5.5lf* thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 200lf (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Alton, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400lf and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20lf for discrete units or <5 plf for distributed systems.

2022 CBC

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	SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

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. Identify, 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: Periodic	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.)
☐	f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/AA(d) & (e) and/or S/ASG(g) & (h) below.		

C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3
☐	b. Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 9.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	a. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.
☐	d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item B; ACI 318-14 Section 26.13

C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-19 Section 26.13.
☐	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high detectability per Table 14.2.1 of ASCE/SEI 7-16 and assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3, ACI 318-19 Section 26.13.3; ACI 550.5
☐	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3, ACI 318-19 Section 26.13.3; ACI 550.5

C4. SHOTCRETE: (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect shotcrete placement for proper application techniques.	Continuous	SI	1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3. See ACI 506.2-13 Section 3.4. ACI 506R-16.
☐	b. Sample and test shotcrete (f'c).	Test	LOR	1908A.2, 1705A.3.9

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.)

C6. OTHER CONCRETE:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:

☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:

☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

CONCRETE/MASONRY:

☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

WELDING:

☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the "Exception" language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5.5lf* thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 200lf (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Alton, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400lf and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20lf for discrete units or <5 plf for distributed systems.

S/A8. ANCHOR BOLTS AND ANCHOR RODS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☑	b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

S/A10. STORAGE RACK SYSTEMS:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Material used, to verify compliance with one or more of the approved construction documents.	Periodic	SI	Table 1705A.13.7
☐	b. Fabricated storage rack elements.	Periodic	SI	1704A.2.5 Table 1705A.13.7
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	c. Storage rack anchorage	Periodic	SI	ANSI/MH16.1 Section 7.3.2; Table 1705A.13.7
☐	d. Completed storage rack system to indicate compliance with the approved construction documents.	Periodic	SI*	Table 1705A.13.7 * May be performed by the project inspector when specifically approved by DSA.

S/A11. Other Steel

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

SOILS:

☐	1. Deep foundations acting as a cantilever footing with a design based on minimum allowable pressures per CBC Table 1806A.2 and without a geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

CONCRETE/MASONRY:

☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

CONCRETE/MASONRY:

☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

WELDING:

☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the "Exception" language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5.5lf* thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 200lf (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Alton, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400lf and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20lf for discrete units or <5 plf for distributed systems.

DSA 103-22: LIST OF REQUIRED VERIFIED REPORTS, CBC 2022

Application Number: 04-122203	School Name: Silver Creek Modular	School District: Silver Creek Modular
DSA File Number: 33 silver	Increment Number:	Date Created: 2023-08-25 09:35:51

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291

2. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291

3. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292

The example form DSA 103 sections shown on this sheet are for illustration purposes only. A form DSA 103 is to be completed for each application that this PC is being incorporated into and the example sections shown on this drawing are to be crossed out.

- UT TESTING SHALL BE PERFORMED ON 100% OF CJP GROOVE WELDS COLUMN SPLICES OR BEAM SPLICES WHERE THE MATERIAL THICKNESS BEING WELDED IS 5/16" OR GREATER.
- UT TEST SHALL NOT BE REQUIRED TO BE PERFORMED ON CJP GROOVE WELDS WHERE THE MATERIAL THICKNESS BEING WELDED IS 1/4" OR LESS.
- MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25% OF ALL BEAM TO COLUMN OR TRUSS CHORD TO COLUMN CJP GROOVE WELDS.

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.

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. Identify, 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: Periodic	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.)
☐	f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/AA(d) & (e) and/or S/ASG(g) & (h) below.		

C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3
☐	b. Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 9.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	a. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.
☐	d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4, Table 1705A.3 Item B; ACI 318-14 Section 26.13

C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect fabrication of precast concrete members.	Continuous	SI	ACI 318-19 Section 26.13.
☐	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high detectability per Table 14.2.1 of ASCE/SEI 7-16 and assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3, ACI 318-19 Section 26.13.3; ACI 550.5
☐	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3, ACI 318-19 Section 26.13.3; ACI 550.5

C4. SHOTCRETE: (IN ADDITION TO SECTION C1):

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect shotcrete placement for proper application techniques.	Continuous	SI	1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3. See ACI 506.2-13 Section 3.4. ACI 506R-16.
☐	b. Sample and test shotcrete (f'c).	Test	LOR	1908A.2, 1705A.3.9

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.)

C6. OTHER CONCRETE:

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.

REFLECTED CEILING NOTES

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:	Armstrong
Evaluation Report Type and Number:	ICC ESR-1308
Main Runner Part, Model, or Catalog Number:	7301
Cross Runner Part, Model, Catalog Number:	XL7328

1.04 Seismic Wall Clip:

Manufacturer's Model:	BERC-2

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 50ksi.
2.03 Electrical metallic tube (EMT) shall be ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength (FY) of 30 ksi and minimum ultimate strength (FU) 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.
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: [RDP to indicate manufacturer, product, evaluation report number and test load for each size specified per CBC 1910A.5.4.]
4.03 Power-Actuated Fasteners shall be: [RDP to indicate manufacturer, product, evaluation report number.]
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.
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

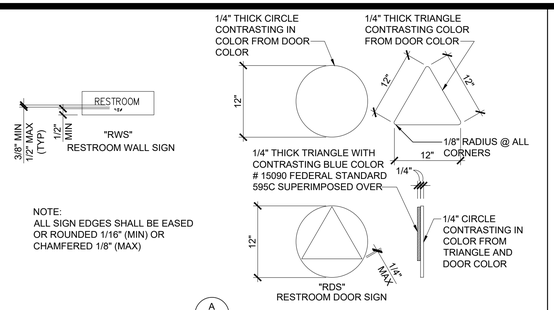
7.01 All flexible sprinkler hose fitting mounting brackets, ceiling-mounted air terminals or other services shall be positively attached to the ceiling suspension systems by mechanical means. Screws or approved fasteners are required. A minimum of two attachments are required at each component.
7.02 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.

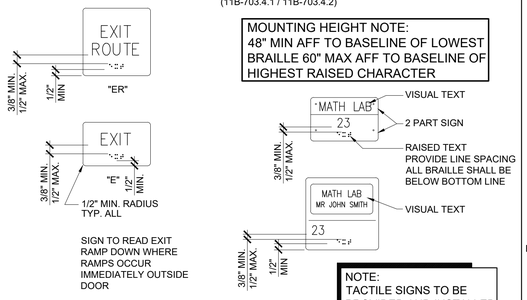
8. OTHER DEVICES WITHIN THE CEILING

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.

NOTE:
ACOUSTICAL PANELS SHALL BE 5/8" MINIMUM THICK, MINERAL FIBERBOARD OR VINYL FACED FIBERGLASS LAY-IN PANELS SQUARE EDGE AND CBC CLASS C FLAME-SPREAD 76-200; SMOKE-DEVELOPED 0-450.

NOTE:
PER CBC SECTION 718.2.1, FIRE BLOCKS MAY BE OF GYPSUM BOARD, CEMENT FIBER BOARD, BATTS OR MINERAL OR GLASS FIBER, OR OTHER APPROVED MATERIALS INSTALLED IN SUCH A MANNER AS TO BE SECURELY RETAINED IN PLACE. LOOSE-FILL INSULATION MATERIAL SHALL NOT BE USED AS A FIRE BLOCK UNLESS SPECIFICALLY TESTED IN THE FORM AND MANNER INTENDED FOR USE TO DEMONSTRATE ITS ABILITY TO REMAIN IN PLACE AND TO RETARD THE SPREAD OF FIRE AND HOT GASES. (SECTION 718.2.1). FLAME SPREAD - 25 SMOKE DEVELOPMENT - 50 MAX
FIRE BLOCKING IS NOT REQUIRED WITHIN CONCEALED SPACES CONSTRUCTED OF NON-COMBUSTIBLE MATERIALS





SIGNAGE TEMPLATES

COORDINATE WITH SIGNAGE NOTES (BELOW)

SIGNAGE NOTES

1. CHARACTER TYPE: CHARACTERS ON TACTILE SIGNS SHALL BE RAISED 1/32" (0.794 mm) MINIMUM ABOVE THEIR BACKGROUND AND SHALL BE SANS SERIF UPPERCASE CHARACTERS ACCOMPANIED BY GRADE 2 BRAILLE. (SEE NOTE 5 BELOW) 11B-703.2.1 & 11B-703.2.2 &11B-703.23.

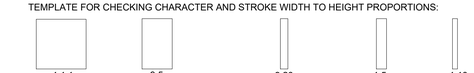
2. RAISED CHARACTER HEIGHT: CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8" (15.9 mm) MINIMUM AND 2 INCH (51 mm) MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I". 11B-703.2.5

3. FINISH AND CONTRAST: SYMBOLS OF ACCESSIBILITY AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH SYMBOLS. SYMBOLS OF ACCESSIBILITY SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER A LIGHT SYMBOL ON A DARK BACKGROUND OR A DARK SYMBOL ON A LIGHT BACKGROUND. 11B-703.7.1.

4. PROPORTIONS: RAISED CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MIN AND 110% MAX OF THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE "I" SHALL BE 15% MAX OF THE HEIGHT OF THE CHARACTER. 11B-703.2.4 + 11B-703.2.6

VISUAL CHARACTERS ON SIGNS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60% MIN AND 110% MAX OF THE HEIGHT OF THE UPPERCASE LETTER ' I '. STROKE THICKNESS OF THE UPPER CASE ' I ' SHALL BE 10% MIN. AND 20% MAX OF THE HEIGHT OF THE CHARACTER.

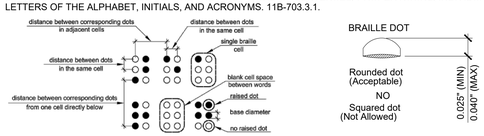
TEMPLATE FOR CHECKING CHARACTER AND STROKE WIDTH TO HEIGHT PROPORTIONS:



5. 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" (MIN) AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH (MAX). WHERE CHARACTERS HAVE OTHER CROSS SECTIONS, SPACING BETWEEN INDIVIDUAL RAISED CHARACTERS SHALL BE 1/16" (MIN) AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH (MAX) AT THE BASE OF THE CROSS SECTIONS, AND 1/8" (MIN) AND 4 TIMES THE RAISED CHARACTER STROKE WIDTH (MAX) AT THE TOP OF THE CROSS SECTIONS. CHARACTERS SHALL BE SEPARATED FROM RAISED BORDERS AND DECORATIVE ELEMENTS 3/8" (MIN). 11B-703.2.7

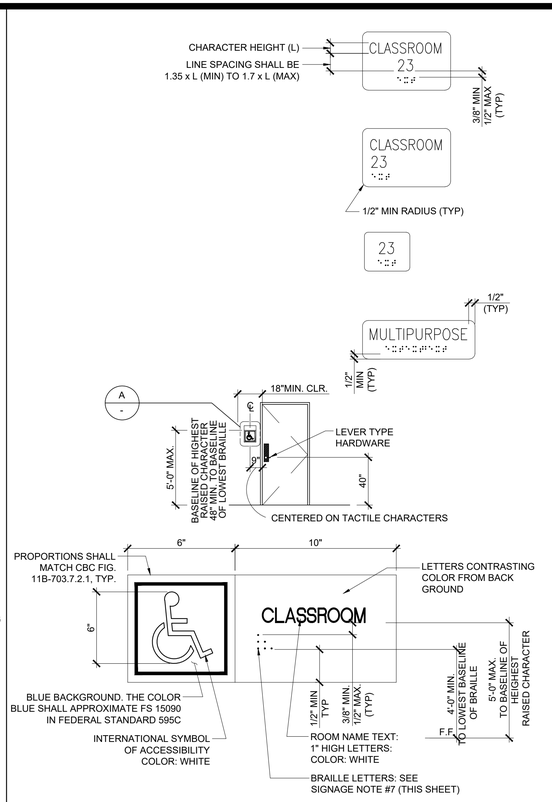
6. LINE SPACING: SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135% (MIN) AND 170% (MAX) OF THE RAISED CHARACTER HEIGHT. 11B-703.2.8

7. BRAILLE: BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4. DIMENSIONS AND CAPITALIZATION: BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH TABLE 11B-703.3.1. THE INDICATION OF AN UPPERCASE LETTER OR LETTERS SHALL ONLY BE USED BEFORE THE FIRST WORD OF SENTENCES, PROPER NOUNS, INDIVIDUAL LETTERS OF THE ALPHABET, INITIALS, AND ACRONYMS. 11B-703.3.1.



MEASUREMENT RANGE	MINIMUM IN INCHES MAXIMUM IN INCHES
Dot base diameter	0.059 (1.5 mm) to 0.063 (1.6mm)
Distance between two dots in the same cell[1] (Rhodotile-1)	*0.100 (2.5 mm)*
Distance between corresponding dots in adjacent cells[1] (Rhodotile-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] (Rhodotile-1)	0.395 (10 mm) to 0.400 (10.2 mm)

1. Measured center to center.



NOTE:
SIGN MATERIAL TO BE 1/8" THK. E.S. PLASTIC W/1/32" RAISED GRAPHICS AND LETTERS. PROVIDE MECHANICAL MOUNTING W/ VANDAL RESISTANT FASTENERS. CBC SECTION 11B-703. WHERE RAISED BOARDERS OCCUR, PROVIDE 1/2" MIN. CLEARANCE BETWEEN TOP OF BOARDER AND LOWEST LEVEL OF BRAILLE TEXT.

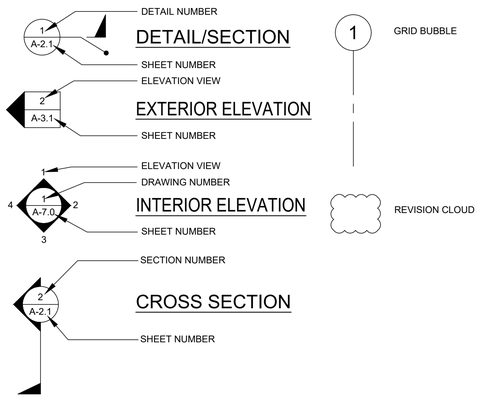
(A) ROOM IDENTIFCATION ROOM SIGNAGE (BY DISTRICT)

FOR SITE SPECIFIC LOCATIONS ARCHITECT TO PROVIDE BUILDING / ROOM IDENTIFICATION SIGNS. DETAILS AND LOCATIONS OF SIGNAGE TO BE INDICATED.

COORDINATE WITH SIGNAGE NOTES 1 THROUGH 7 ON THIS SHEET.

THIS DETAIL FOR REFERENCE ONLY

SYMBOLS LEGEND



ABBREVIATIONS

AB	ANCHOR BOLT	FIN	FINISH	℄ OR PL	PLATE
ABS	ABSOLUTE	FLR	FLOOR	PC	PRE-CHECKED
ABV	ABOVE	FN	FIELD NAILING	PLAS	PLASTER
ACC	ACCESS	FND	FOUNDATION	PLYWD	PLYWOOD
ADDL	ADDITIONAL	FOC	FACE OF CONCRETE	PNL	PANEL
ADJ	ADJACENT	FOS	FACE OF STUD	POC	POINT OF CONNECTION
AFF	ABOVE FINISH FLOOR	FTG	FOOTING	POT	PATH OF TRAVEL
AFG	ABOVE FINISH GRADE	FOF	FACE OF FINISH	PSF	POUNDS PER SQUARE FOOT
AGC	ABOVE GRADE CONCRETE			PSI	POUNDS PER SQUARE INCH
ALT	ALTERNATE	GA	GAUGE	PT	PRESSURE TREATED
AOR	ARCHITECT OF RECORD	GALV	GALVANIZE		
APPROX	APPROXIMATE	GC	GENERAL CONTRACTOR	RAG	RETURN AIR GRILLE
ARCH	ARCHITECTURAL / ARCHITECT	GR	GRADE	RD	ROOF DRAIN
		GYP	GYPSUM	REF	REFERENCE
BD	BOARD	GYP BD	GYPSUM BOARD	REINF	REINFORCE
BGC	BELOW GRADE CONCRETE			REQ'D	REQUIRED
BLDG	BUILDING	HB	HOSE BIBB	REV	REVISION
BLK	BLOCK	HD	HEAVY DUTY	RF	ROOF
BLKG	BLOCKING	HDR	HEADER	RM	ROOM
BM	BEAM	HDW	HARDWARE	RO	ROUGH OPENING
BOT	BOTTOM (OR BTM)	HF	HEM FIR	ROH	ROOF OVERHANG
BTWN	BETWEEN	HORIZ	HORIZONTAL		
BU	BUILT UP	HT	HEIGHT	SCHED	SCHEDULE
		HVAC	HEATING, VENTILATING, AND AIR CONDITIONING	SEC	SECTION
CAB	CABINET			SHT	SHEET
CBC	CALIFORNIA BUILDING CODE			SHTG	SHEATHING
CI	CAST IRON			SIM	SIMILAR
CJ	CONTROL JOINT	INCL	INCLUDED	SPEC	SPECIFICATION
CJP	COMPLETE JOINT PENETRATION	INFO	INFORMATION	SQ	SQUARE
		INT	INTERIOR	SST	STAINLESS STEEL
℄	CENTER LINE			STD	STANDARD
CLG	CEILING	J-BOX	JUNCTION BOX	STIFF	STIFFENER
CO	CLEAN OUT	JST	JOIST	STL	STEEL
COL	COLUMN	JT	JOINT	STS	SELF-TAPPING SCREW
CONC	CONCRETE			STSMS	SELF-TAPPING SHEET METAL SCREW
CONN	CONNECTION	KO	KNOCK OUT		
CONST	CONSTRUCTION				
CONT	CONTINUOUS	LAB	LABORATORY		
CPT	CARPET	LAM	LAMINATED	T&B	TOP AND BOTTOM
CSK	COUNTERSINK	LAV	LAVATORY	T&G	TONGUE AND GROOVE
CTR	CENTER	LB	POUNDS	TEL	TELEPHONE
		LT	LIGHT	THK	THICK
DBL	DOUBLE	LT WT	LIGHT WEIGHT	TOC	TOP OF COLUMN
DET	DETAIL	LVR	LOUVER	TOS	TOP OF STEEL
DF	DOUGLAS FIR			TS	TUBE STEEL
DIA OR Ø	DIAMETER	MAX	MAXIMUM	TV	TELEVISION
DIAG	DIAGONAL	MB	MACHINE BOLT	TYP	TYPICAL
DIM	DIMENSION	MED	MEDIUM		
DSA	DIVISION OF THE STATE ARCHITECT	MFR	MANUFACTURER	UBC	UNIFORM BUILDING CODE
		MIN	MINIMUM	UON	UNLESS OTHERWISE NOTED
DWG	DRAWING	MISC	MISCELLANEOUS		
		MOD	MODULE	UR	URINAL
(E)	EXISTING	MTL	METAL		
EA	EACH			VERT	VERTICAL
EJ	EXPANSION JOINT	(N)	NEW	VCT	VINYL COMPOSITION TILE
ELEV	ELEVATION	N	NORTH		
EN	END NAIL	NIC	NOT IN CONTRACT (NOT IN SILVER CREEK'S SCOPE OF WORK	W/	WITH
EQ	EQUAL			WC	WATER CLOSET
EQUIP	EQUIPMENT	NO	NUMBER	WCO	WALL CLEAN OUT
EW	EACH WAY	NTS	NOT TO SCALE	WD	WOOD
EXT	EXTERIOR			WH	WATER HEATER
		OC	ON CENTER	WIC	WOODWORK INSTITUTE OF CALIFORNIA
FA	FIRE ALARM	OD	OUTSIDE DIAMETER		
FCO	FLOOR CLEAN OUT	OH	OPPOSITE HAND	WND	WINDOW (OR WDW)
FF	FINISH FLOOR	OPNG	OPENING	W/O	WITHOUT
FG	FINISH GRADE	OPP	OPPOSITE	WP	WATER PROOF

SPECIFICATIONS

DIVISION 5 - METALS
- ALL WELDED JOINTS AND SURFACES SHALL BE GROUNDED SMOOTH, NO SHARP OR ABRASIVES CORNERS, EDGES OR SURFACES. WALL SURFACES ADJACENT TO HANDRAILS SHALL BE SMOOTH,
- ALL HANDRAILS SHALL BE ROUND OR SHALL HAVE RADIUSED EDGES (r = 1/8" MIN)

DIVISION 6 - WOOD AND PLASTICS
- ALL CABINET AND DRAWERS WILL HAVE U-SHAPED WIRE PULLS

DIVISION 9 - FINISHES
- CEILING INSTALLATION SHALL BE PER THE NOTES PROVIDED ON THIS SHEET.

DIVISION 10 - SPECIALITIES
- ALL TOILET ACCESSORIES SHALL BE INSTALLED AT THE HEIGHT AND CLEARANCES SHOWN ON SHEET P-1.01

DIVISION 22 - PLUMBING
- FAUCETS SHALL BE LEVER OPERATED (4" MIN BLADE) OR SHALL BE PUSH TYPE OR AUTOMATIC ELECTRONICALLY CONTROLLED. CONTROLS TO BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF THE WRIST TO OPERATE.
- FORCE TO ACTIVATE CONTROLS SHALL NOT BE GREATER THAN 5 LBS
- FORCE TO REMAIN OPEN FOR A MINIMUM OF 10 SECONDS WHEN SELF CLOSING VALVES ARE USED
- PIPE COVERS SHALL BE PROVIDED FOR WATER LINES AND DRAIN PIPES UNDER ACCESSIBLE SINKS AND LAVATORIES
- ACCESSIBLE SINKS SHALL NOT BE DEEPER THAN 6 1/2"

ASSISTIVE LISTENING SYSTEM

ASSISTIVE LISTENING SYSTEM SIGN
(SYMBOL PROPORTIONS SHALL MATCH CBC FIGURE 11B-703.7.2.4)

NOTES:
1. ASSISTIVE-LISTENING SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH CBC SECTIONS 11B-216.10 AND 11B-219 AND SHALL COMPLY WITH CBC SECTION 11B-706.
2. THE MINIMUM NUMBER OF RECEIVERS TO BE PROVIDED SHALL BE EQUAL TO 4% OF THE TOTAL NUMBER OF SEATS, BUT IN NO CASE LESS THAN TWO. 25% (MIN) OF RECEIVERS PROVIDED, BUT NO FEWER THAN TWO, SHALL BE HEARING AID COMPATIBLE IN ACCORDANCE WITH CBC SECTION 11B-706.3
3. SIGNAGE SHALL BE POSTED IN A PROMINENT PLACE INDICATING THE AVAILABILITY OF ASSISTIVE LISTENING DEVICES.
4. OWNER/SCHOOL DISTRICT SHALL PROVIDE A PERMANENT OR PORTABLE ASSISTIVE LISTENING SYSTEM.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

SYMBOLS LEGEND, ABBREVIATIONS & ADA SIGNAGE

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023
P.C. SHEET NUMBER	A-0.1

WILDLAND URBAN INTERFACE REQUIREMENTS ☐

WHEN THIS BUILDING IS TO BE INSTALLED WHERE THE REQUIREMENTS OF CHAPTER 7A OF THE 2022 CBC ARE APPLICABLE COMPLIANCE WITH THE APPLICABLE REQUIREMENTS SHALL BE AS OUTLINED BELOW:

CHAPTER 7A REQUIREMENTS:

705A ROOFING

705A.1 - ROOF SHALL BE CLASS 'A'.
705A.2 - NOT APPLICABLE. NO VOIDS OCCUR, ROOF IS APPLIED DIRECTLY.
705A.3 - NOT APPLICABLE. NO VALLEYS OCCUR.
705A.4 - LEAF GUARDS/COVERS SHALL BE PROVIDED AT ALL GUTTERS.

706A VENTS

706A.2 - THE UNDER-FLOOR ACCESS AND VENT OPENINGS SHALL BE COVERED WITH CORROSION RESISTANT WIRE MESH WITH A CLEAR OPENING NOT EXCEEDING 1/8".
706A.3 - THE SOFFIT VENTS SHALL BE VULCAN TECHNOLOGIES MODEL #VE OR VSC SOFFIT VENT COVERS (PER CASFM LISTING 8165-2192:0100).

707A EXTERIOR COVERINGS

707A.3 - EXTERIOR WALL FINISH SHALL BE PLASTER (NON-COMBUSTIBLE) OVER 1/2" OSB OVER STUDS OR 19/32" DURATEMP SIDING OVER STUDS (PER SFM LISTING# 8140-2031:0004).
707A.4 - NOT APPLICABLE. NO OPEN ROOF EAVES OCCUR.
707A.5 - SOFFIT FINISH SHALL BE PLASTER (NON-COMBUSTIBLE) OVER FRAMING OR ALLURA FIBER-CEMENT PANELS (NON-COMBUSTIBLE) (PER ESR-1668).
707A.6 - NOT APPLICABLE. DOES NOT OCCUR
707A.7 - NOT APPLICABLE. DOES NOT OCCUR
707A.8 - NOT APPLICABLE. DOES NOT OCCUR
707A.9 - NOT APPLICABLE. DOES NOT OCCUR

708A EXTERIOR DOORS AND WINDOWS

708A.2 - NOT APPLICABLE. DOES NOT OCCUR
708A.3 - EXTERIOR DOORS AND FRAMES ARE NON-COMBUSTIBLE (HOLLOW METAL).
708A.4 - NOT APPLICABLE.

709A - DECKING - THE EXTERIOR DECKING (WHERE APPLICABLE) IS A NON-COMBUSTIBLE STEEL FRAME AND DECK. SKIRTING MATERIAL (WHERE APPLICABLE) SHALL BE 19/32" DURATEMP SIDING (PER SFM LISTING# 8140-2031:0004).

710A - NOT APPLICABLE.

WINDOW SCHEDULE

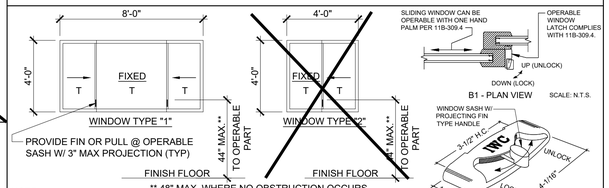
WINDOW NO.	TYPE	SIZE WIDTH	SIZE HEIGHT	FRAME MAT.	OPERABLE	MAX U-FACTOR	REQUIRED SHGC	MIN VT	NFRC RATED	GLASS SPECS	NOTES
A	1	8'-0"	4'-0"	ANOD	YES	0.520	0.350	0.610	YES	DP	
~~B~~	~~2~~	~~4'-0"~~	~~4'-0"~~	~~ANOD~~	~~YES~~	~~0.520~~	~~0.350~~	~~0.610~~	~~YES~~	~~DP~~	

WINDOW FINISH

ANOD: CLEAR ANODIZED ALUMINUM FRAME
DP: 3/16" MINIMUM DUAL PANE TEMPERED GLASS OF SOLAR GRAY - 3/16" ENERGYSHIELD
T: TEMPERED GLASS

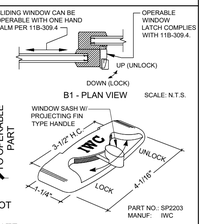
NOTES:
1. ALL OPERABLE SASH SHALL HAVE SCREENS.
2. TEMPORARY NFRC LABELS SHALL STAY ON WINDOWS UNTIL PROJECT INSPECTOR HAS VERIFIED INSTALLED FENESTRATION MATCHES WINDOW SCHEDULE ON PLAN.

WINDOW TYPE



** 48" MAX. WHERE NO OBSTRUCTION OCCURS

NOTE:
1. OPERABLE WINDOW CONTROLS SHALL COMPLY WITH CBC 11B.309.4 AND SHALL NOT REQUIRE TIGHT GRASPING,PINCHING OR TWISTING OF THE WRIST.
2. WINDOW CONTROLS SHALL NOT REQUIRE MORE THAN 5LBS OF FORCE TO OPEREATE
3. THE REQUIRED FORCE TO PUSH/PULL THE WINDOW PANEL SHALL NOT EXCEED 5LBS
4. ALL SAFETY GLAZING SHALL BE IDENTIFIED PER CBC CHAPTER 24.



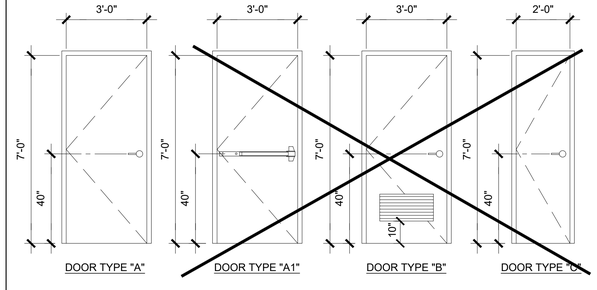
DOOR SCHEDULE

DOOR NO	WIDTH	HEIGHT	DOOR TYPE	QTY	DOOR MAT/FIN	FRAME MAT/FIN	HARDWARE SET	LOCKABLE FROM INT.	NOTES*
1	3'-0"	7'-0"	A		HM	KD	HW - 1	YES	
~~1D~~	~~3'-0"~~	~~7'-0"~~	~~A1~~		~~HM~~	~~KD~~	~~HW - 2~~	~~YES~~	
~~2~~	~~3'-0"~~	~~7'-0"~~	~~A~~		~~SCL~~	~~KD~~	~~HW - 3~~	~~NO~~	
3	3'-0	7'-0	B		HM	KD	HW - 4	NO	
~~4~~	3'-0	7'-0	B		HM	KD	HW - 5	NO	NO CLOSER REQ'D.
~~5~~	2'-0	7'-0	C		HM	KD	HW - 6	NO	

DOOR MATERIAL AND FINISH ABBREVIATIONS

HM: 18GA HOLLOW METAL
WF: 16GA WELDED FRAME
AL: ALUMINUM
SST: STAINLESS STEEL
KD: KNOCK DOWN FRAME
SCL: SOLID CORE WOOD LEGACY
HC: HOLLOW CORE WOOD
PT: PAINTED
* EXTERIOR DOORS TO BE UNINSULATED SINGLE LAYER DOORS W/ U-FACTOR OF 1.450 MAX

DOOR TYPES & NOTES



1. DOOR HANDLE FOR LOCKSETS AND PANIC HARDWARE TO BE CENTED AT 40" AFF
2. HARDWARE TO BE OPENED FROM THE INSIDE WITHOUT ANY SPECIAL KNOWLEDGE OR EFFORT. LEVERS TO RETURN TO WITHIN 1/2" OF DOOR.
3. ALL DOORS SHALL BE 1 3/4" THICK U.N.O.
4. CLOSER SHALL BE SET FOR MAXIMUM OPENING PRESSURE OF 5 LBS AT EXTERIOR AND INTERIOR DOORS.
5. PANIC HARDWARE IS REQUIRED TO BE INSTALLED WHEN THE CONFIGURATION OF ANY ROOM PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER.
6. ALL HARDWARE SHALL COMPLY WITH SILVER CREEK'S SPECS ON THIS SHEET AND CBC SECTIONS 11B-206.5,11B-404.1 & 1010.
7. DOOR CLOSER SHALL BE ADJUSTED TO SO THAT FROM AN OPEN POSITION OF 90°, THE DOOR WILL TAKE AT LEAST 5 SECONDS TO MOVE TO A POINT 12° FROM THE LATCH, MEASURED TO THE LANDING SIDE OF THE DOOR.
8. PANIC AND FIRE EXIT HARDWARE. WHERE THIS TYPE HARDWARE IS INSTALLED, IT SHALL COMPLY WITH THE FOLLOWING:
   - THE ACTUATING PORTION OF THE RELEASING DEVICE SHALL EXTEND AT LEASE ONE-HALF OF THE DOOR LEAF WIDTH.
   - THE MAXIMUM FORCE TO ACTIVATE ANY OPERABLE PART SHALL NOT EXCEED 5 LBS PER THE 2022 CBC, PANIC HARDWARE SHALL COMPLY WITH CBC SECTION 1010.1.10
9. ALL HAND ACTIVATED HARDWARE SHALL BE LEVER TYPE, PANIC BARS, PUSH/PULL TYPE OR 'U' SHAPED HANDLES.
10. ALL HAND ACTIVATED HARDWARE SHALL BE EASY TO OPERATE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING OR TWISTING OF WRIST TO OPERATE.
11. FLOOR STOP SHALL BE LOCATED 4" MAX FROM FACE OF WALL.

FINISH SCHEDULE

ROOM NAME	FLOORING FLOOR	FLOORING BASE	WALL FINISH FRONT	WALL FINISH LEFT	WALL FINISH REAR	WALL FINISH RIGHT	CEILING	CEILING HT	NOTES
CLASSROOM 101	CARP	4" TS	TACK	TACK	TACK	TACK	CP	8'-6"	
~~CLASSROOM 102~~	~~CARP~~	~~4" TS~~	~~TACK~~	~~TACK~~	~~TACK~~	~~TACK~~	~~CP~~	~~8'-6"~~	
~~TOILET 200~~	~~SV~~	~~6" TS~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GP~~	~~8'-0"~~	~~SEE 10/A-5.70~~
~~GIRLS 134~~	~~SV~~	~~SS~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	~~SEE 10/A-5.70~~
~~BOYS 135~~	~~SV~~	~~SS~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	~~SEE 10/A-5.70~~
~~STAFF 106~~	~~SV~~	~~SS~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	~~SEE 10/A-5.70~~
~~STAFF 107~~	~~SV~~	~~SS~~	~~FRP~~	~~FRP~~	~~FRP~~	~~FRP~~	~~GBP~~	~~8'-0"~~	~~SEE 10/A-5.70~~
~~PLUMBING CHASE~~	---	---	---	---	---	---	---	---	

FLOOR, WALL, CEILING MATERIALS

FLOORING
CARP: CARPET PER STATE OF CALIFORNIA SPECIFICATIONS COMPLYING WITH GROUP 1; TYPE "A" OR TYPE "B"; CLASS 2; DENSITY 4600; DIRECT GLUE DOWN
SV: SHEET VINYL FLOORING W/ FULLY SEALED JOINTS
VCT: VINYL COMPOSITION TILE

BASE
4" TS: 4" TOP SET BASE
6" TS: 6" TOP SET BASE
SC: 6" SELF-COVE BASE, CONTINUE FLOOR MATERIAL UP THE WALL PER 10/A-5.70

WALLS
TACK: 1/2" VINYL TACKBOARD CLASS 1 OVER ½" GYPSUM BOARD BACKING
FRP: 1/8" FIBER REINFORCED PANEL OVER ½" WATER RESISTANT GYPSUM BOARD
GYP: 1/2" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH
PLY: 1/2" PLYWOOD FINISH
NF: NO FINISH

CEILING
CP: ACOUSTICAL LAY IN GRID CEILING PANELS (SEE SPECIFICATION NOTES ON REFLECTED CEILING PLAN)
HC: 5/8" GYPSUM BOARD; TAPE; TEXTURE; PAINTED FINISH (HARD LID CEILING)
GBP: 1/2" GYPSUM BOARD WASHABLE PANELS (PAINTED)

FINISH NOTES

1. ALL FINISHES SHALL COMPLY WITH CBC, CFC AND TITLE 19 CCR.
2. PREPARATION FOR SUB-FLOOR TO ACCEPT FINISH FLOORING IS BY FLOORING CONTRACTOR. PLYWOOD SUB-FLOOR IS 2.4.1. PLYWOOD. OUTER PLYWOOD IS PLUGGED AND TOUCH SANDED. ANY DEFORMITIES DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR. THE JOINT AT THE MODLINE SHALL NOT BE LARGER THAN 1/8" AND SHALL BE FILLED AND SANDED BY FLOORING CONTRACTOR.
3. RESILIENT FLOORING DEMONSTRATING A COEFFICIENT OF FRICTION OF AT LEAST 0.6 PER ASTM D2047, WILL BE ACCEPTED AS MEETING THE INTENT OF SLIP RESISTANCE.
4. CARPET SHALL HAVE A LEVEL LOOP, TEXTURED LOOP, LEVEL CUT, OR LEVEL CUT / UNCUT PILE TEXTURE AND MAXIMUM PILE HEIGHT OF 1/2" PER THE 2022 CBC. CARPET EDGED SHALL COMPLY WITH THE 2022 CBC

DOOR HARDWARE

CLASSROOM - EXTERIOR DOOR HW-1

LOCKSET	TAL LHV75-LFIC SAT	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAL BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
CLOSER	TAL DC851 DA	Finish 689	or equal
WEATHER STRIP	COLUMBIA 3340S 3684 (ON DR FRAME)	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal

DOOR W/ PANIC HARDWARE - EXTERIOR DOOR HW-2

EXIT DEVICE	VON DUPRIN AX-99L-PA-2	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123 W/ 20-079	Finish 626	or equal
BUTTS	TAL BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
CLOSER	TAL DC851 DA	Finish 689	or equal
WEATHER STRIP	COLUMBIA 3340S 3684 (ON DR FRAME)	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal

EMERGENCY EXIT AND PANIC HARDWARE IS TO COMPLY 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 CROSS-BAR SHALL BE CURVED, GUARDED OR OTHERWISE DESIGNED TO PREVENT CATCHING ON THE CLOTHING OF PERSONS DURING EGRESS.

STAFF RESTROOM / SINGLE-OCCUPANCY - INTERIOR DOOR HW-3

LOCKSET	TAL LHV40 SAT	Finish 626	or equal
BUTTS	TAL BB179 4 ½" x 4 ½" NRP	Finish 626	or equal

BOYS & GIRLS RESTROOM - EXTERIOR DOOR HW-4

LOCKSET	TAL LHV70-LFIC SAT	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAL BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
CLOSER	TAL DC851 DA	Finish 689	or equal
WEATHER STRIP	COLUMBIA 3340S 3684 (ON DR FRAME)	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal
LOUVER	ANEMO 24 X 12	Finish Bronze	or equal

STAFF RESTROOM - EXTERIOR DOOR HW-5

LOCKSET	SCHLAGE L9496J-06A X 09-509 X L583-363	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAL BB179 4 ½" x 4 ½" NRP	Finish 626	or equal
WEATHER STRIP	COLUMBIA 3340S 3684 (ON DR FRAME)	Finish Alum	or equal
THRESHOLD	COLUMBIA 4920 36"	Finish Alum	or equal
DOOR BOTTOM	COLUMBIA 2590 36"	Finish Alum	or equal
LOUVER	ANEMO 24 x 12	Finish Bronze	or equal

CHASE EXTERIOR DOOR - INTERIOR DOOR HW-6

LOCKSET	TAL LHV70 LFIC SAT	Finish 626	or equal
I/C CORE	SCHLAGE 23-030 C123	Finish 626	or equal
BUTTS	TAL BB179 4 ½" x 4 ½" NRP	Finish 626	or equal

INSULATION SPECIFICATIONS

MOISTURE PROTECTION INSULATION:

DESCRIPTION OF WORK: THE FURNISHING AND INSTALLING OF ALL INSULATION FOR ALL CEILING, FLOOR AREAS, PIPES AND EXTERIOR WALLS. (CLASS A = 0-25 FLAME SPREAD:) SMOKE DEVELOPMENT DENSITY LESS THAN 450.

MATERIAL:
INSULATING MATERIAL FOR WALLS SHALL BE FIBERGLASS BATTS (UNFACED) AND SHALL COMPLY WITH CBC 720.1, 720.2, 720.3, 720.5 AND 720.7. INSULATION SHALL BE AS MANUFACTURED BY OWENS-CORNING, JOHNS-MANVILLE, OR EQUAL.

INSULATING MATERIAL FOR ROOFS SHALL BE CLOSED CELL SPRAY FOAM AND SHALL COMPLY WITH CBC 720.1, 720.2, 720.3, 720.5 AND 720.7. INSULATION SHALL HAVE A MINIMUM R-VALUE OF R-6 PER EACH INCH OF THICKNESS, AN AIR PERMEANCE RATE OF NOT MORE THAN 0.02 L/s AT 75 Pa, AND A WATER VAPOR TRANSMISSION RATE OF NOT MORE THAN 0.9 PERMS. THE FOAM SHALL BE APPLIED TO FILL ALL VOIDS IN THE ROOF FRAMING MEMBERS.

MIN INSULATION VALUES:

WOOD STUD EXTERIOR WALL INSULATION (MIN.)
☐ R-13 (4" WALL @ UNCONDITIONED RESTROOM MODULE ONLY)
☑ R-19 (6" WALL)
☐ R-30 (8" WALL)

~~STEEL STUD EXTERIOR WALL INSULATION (MIN.)~~
☐ R-13 (4" WALL @ UNCONDITIONED RESTROOM MODULE ONLY)
☐ R-19 BATT + R-8.8 (MIN) CONTINUOUS RIGID FOAM INSULATION ON THE INTERIOR SIDE OF THE WALL ((6" WALL)
☐ R-30 BATT + R-8.8 (MIN) CONTINUOUS RIGID FOAM INSULATION ON THE INTERIOR SIDE OF THE WALL (8" WALL)

INTERIOR WALL INSULATION (MIN.)
R-13

FLOOR INSULATION
☐ NONE (CONCRETE MASS)
☐ R-11 (MIN) + CONCRETE MASS
☑ R-19 (MIN)

ROOF INSULATION (MIN.)
R-30 (5" MIN. DEPTH) CLOSED CELL SPRAY FOAM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

SCHEDULES

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

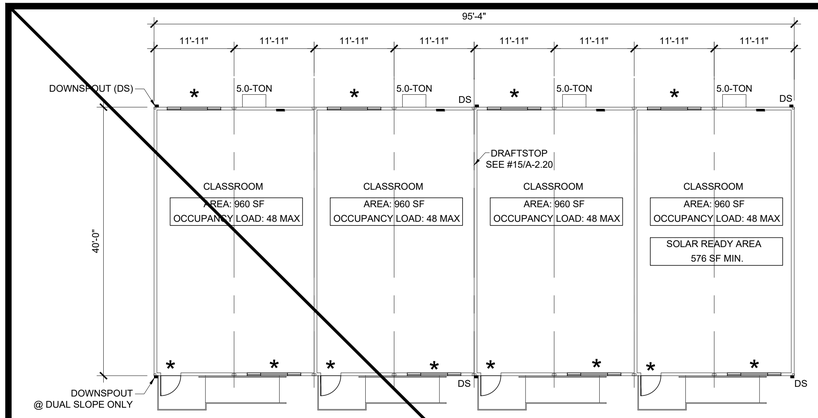
MODULAR BUILDING DESIGN PROFESSIONAL

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-0.2

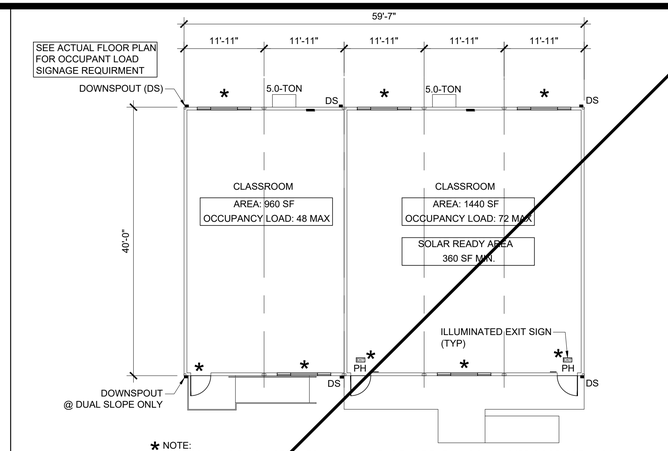


SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

✱ NOTE:
1. DOOR / WINDOW PLACEMENTS MAY VARY. IF AREA OF THE WINDOW AND/OR DOOR OPENINGS IN ANY WALL EXCEEDS WHAT IS SHOWN ON THIS PLAN A NEW PROJECT SPECIFIC ENERGY CALCULATION SHALL BE PROVIDED.
2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.

DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

96' x 40' KEY PLAN (TOTAL AREA - 3840 SF) SCALE: 3/32" = 1' - 0" | 7



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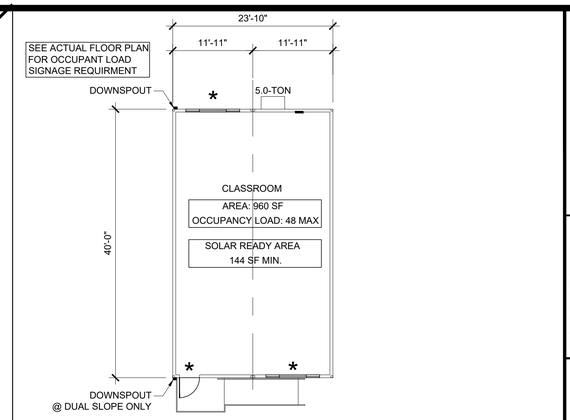
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

60' x 40' KEY PLAN (TOTAL AREA - 2400 SF) SCALE: 3/32" = 1' - 0" | 4



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

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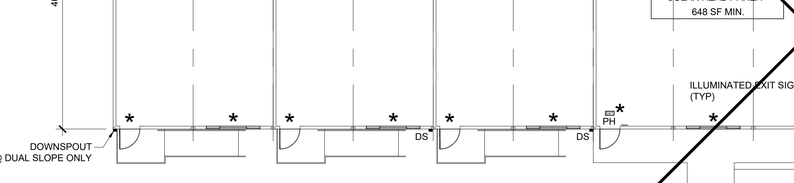
24' x 40' KEY PLAN (TOTAL AREA - 960 SF) SCALE: 3/32" = 1' - 0" | 1



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

✱ NOTE:
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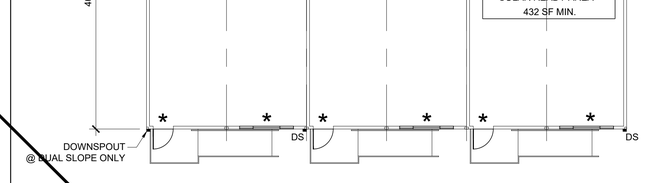
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

108' x 40' KEY PLAN (TOTAL AREA - 4320 SF) SCALE: 3/32" = 1' - 0" | 8



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

✱ NOTE:
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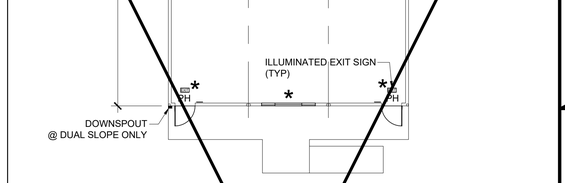
72' x 40' KEY PLAN (TOTAL AREA - 2880 SF) SCALE: 3/32" = 1' - 0" | 5



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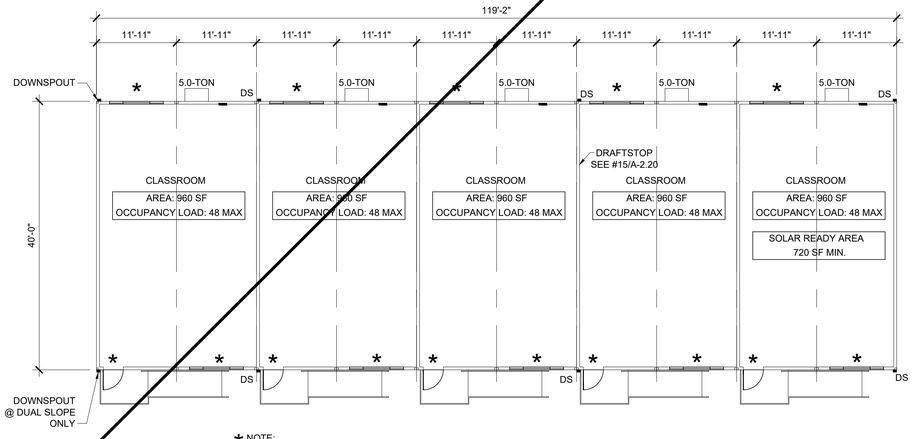
36' x 40' KEY PLAN (TOTAL AREA - 1440 SF) SCALE: 3/32" = 1' - 0" | 2



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

✱ NOTE:
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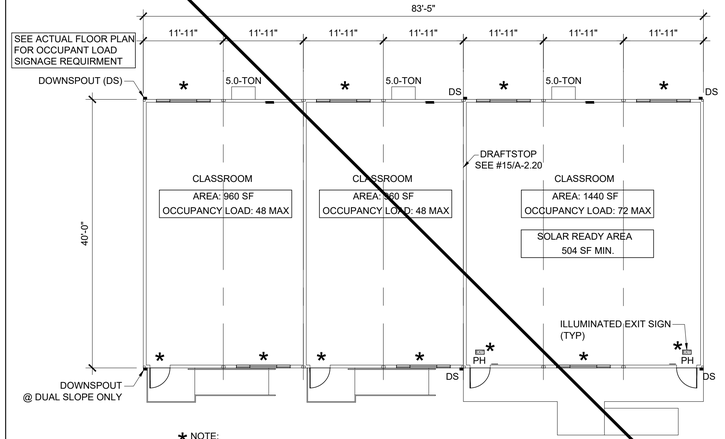
DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

120' x 40' KEY PLAN (TOTAL AREA - 4800 SF) SCALE: 3/32" = 1' - 0" | 9



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

DRAFT STOP NOT REQUIRED W/ FIRE SPRINKLERS

✱ NOTE:
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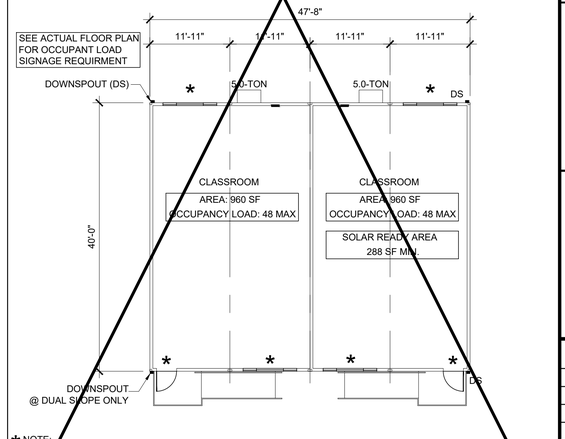
3. PROVIDE PANIC HARDWARE FOR ROOMS WITH TWO OR MORE EXIT DOORS.
4. PROVIDE TACTILE EXIT SIGN, PER DETAIL ON SHEET A-0.1, (TYP), SEE FLOOR PLAN SHT. FOR LOCATIONS

84' x 40' KEY PLAN (TOTAL AREA - 3360 SF) SCALE: 3/32" = 1' - 0" | 6



SEE ACTUAL FLOOR PLAN FOR OCCUPANT LOAD SIGNAGE REQUIRMENT

✱ NOTE:
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2. OPT. INTERIOR PARTITIONS MAY BE ADDED FOR BLDGS. WITH FLOOR LIVE LOADS OF 50+15, 100, OR 150 PSF AND SHALL BE SUBMITTED TO DSA FOR REVIEW. REFER TO STRUCTURAL DWGS. FOR WALL ATTACHMENT.

48' x 40' KEY PLAN (TOTAL AREA - 1920 SF) SCALE: 3/32" = 1' - 0" | 3

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

TYPICAL KEY PLANS
24' - 120' x 40'

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-0.3

Zone Zip Code (Weather Station)	Rotation	☑ 24x40 (1) 5-ton unit						
		TDV Eff.	%	TDV Total	%	Source EN.	%	Result
Zone 14 92301 (PALMDALE)	30	75.68	18.0%	75.68	18.0%	6.98	19.3%	0.0%
	75	78.22	18.3%	78.22	18.3%	7.26	19.8%	0.0%
	120	78.82	18.5%	78.82	18.5%	7.27	19.8%	0.0%
	165	69.06	16.8%	69.06	16.8%	6.39	17.9%	0.0%
	210	72.38	17.4%	72.38	17.4%	6.65	18.5%	0.0%
	255	74.24	17.7%	74.24	17.7%	6.87	19.0%	0.0%
	300	75.17	17.9%	75.17	17.9%	6.93	19.2%	0.0%
	345	68.01	16.6%	68.01	16.6%	6.32	17.9%	0.0%
Zone 15 92225 (PALM SPRINGS)	30	72.14	16.8%	72.14	16.8%	6.79	20.9%	0.0%
	75	76.94	17.6%	76.94	17.6%	7.22	21.9%	0.0%
	120	78.02	17.8%	78.02	17.8%	7.34	22.2%	0.0%
	165	67.89	16.1%	67.89	16.1%	6.41	20.1%	0.0%
	210	68.26	16.1%	68.26	16.1%	6.53	20.3%	0.0%
	255	70.52	16.4%	70.52	16.4%	6.80	20.9%	0.0%
	300	67.87	15.9%	67.87	15.9%	6.61	20.5%	0.0%
	345	65.76	15.6%	65.76	15.6%	6.27	19.7%	0.0%
Zone 16 96006 (BLUE CANYON)	30	53.58	15.0%	53.58	15.0%	19.96	33.1%	0.0%
	75	56.56	15.7%	56.56	15.7%	20.06	33.2%	0.0%
	120	54.70	15.2%	54.70	15.2%	19.96	33.0%	0.0%
	165	43.85	12.6%	43.85	12.6%	19.58	32.7%	0.0%
	210	57.00	15.8%	57.00	15.8%	20.16	33.3%	0.0%
	255	60.18	16.5%	60.18	16.5%	20.16	33.3%	0.0%
	300	56.39	15.6%	56.39	15.6%	19.88	33.0%	0.0%
	345	46.54	13.3%	46.54	13.3%	19.52	32.7%	0.0%

☐ 36x40 (1) 5-ton unit						
TDV Eff.	%	TDV Total	%	Source EN.	%	Result
95.31	26.2%	95.31	26.2%	8.77	28.3%	PASS
98.31	26.5%	98.31	26.5%	9.05	28.8%	PASS
97.91	26.5%	97.91	26.5%	8.99	28.7%	PASS
88.70	25.0%	88.70	25.0%	8.13	26.9%	PASS
95.51	26.3%	95.51	26.3%	8.75	28.3%	PASS
98.80	26.7%	98.80	26.7%	9.07	28.9%	PASS
98.08	26.6%	98.08	26.6%	8.98	28.7%	PASS
87.68	24.8%	87.68	24.8%	8.04	26.7%	PASS
7.51	2.6%	7.51	2.6%	0.51	2.5%	PASS
6.59	2.2%	6.59	2.2%	0.52	2.6%	PASS
7.89	2.7%	7.89	2.7%	0.55	2.7%	PASS
16.78	5.6%	16.78	5.6%	0.56	2.8%	PASS
15.35	5.2%	15.35	5.2%	0.46	2.3%	PASS
8.56	2.9%	8.56	2.9%	0.66	3.3%	PASS
8.02	2.7%	8.02	2.7%	0.56	2.8%	PASS
8.18	2.8%	8.18	2.8%	0.43	2.2%	PASS
70.82	22.8%	70.82	22.8%	19.50	38.6%	PASS
74.47	23.6%	74.47	23.6%	19.55	38.6%	PASS
70.44	22.6%	70.44	22.6%	19.31	38.2%	PASS
63.49	21.0%	63.49	21.0%	19.05	38.0%	PASS
71.64	23.0%	71.64	23.0%	19.51	38.6%	PASS
74.64	23.7%	74.64	23.7%	19.54	38.6%	PASS
70.14	22.5%	70.14	22.5%	19.32	38.3%	PASS
63.68	21.0%	63.68	21.0%	19.10	38.1%	PASS

☐ **48x40**
(2) 5-ton units

(2) 24x40 CLASSROOMS

☐ **60x40**
(2) 5-ton units

(1) 24x40 CLASSROOM +
(1) 36x40 CLASSROOM

☐ **72x40**
(3) 5-ton units

(3) 24x40 CLASSROOMS

☐ **84x40**
(3) 5-ton units

(2) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **96x40**
(4) 5-ton units

(4) 24x40 CLASSROOMS

☐ **108x40**
(4) 5-ton units

(3) 24x40 CLASSROOMS +
(1) 36x40 CLASSROOM

☐ **120x40**
(5) 5-ton units

(5) 24x40 CLASSROOMS

Envelope Min Design - Zone: 1-16		
Buildings: All		
Assembly	U-Value	Insulation R-Value
Walls:	0.062	R-19 batt
Floor:	0.054	R-19 batt
Roof:	0.055	R-30 Foam

HVAC Min Design - Zone: 1-16	
Building: 24 x 40	
Tonnage	5
Min. EER / COP	11.0/3.3
Outside Air	See Ventilation Calcs on Mechanical Plans
Occupancy Sensor	Yes
DCV/ Economizer	Yes
Cooling Stages (Min.)	1
Allowable Mechanical Unit (See Equipment Schedule)	SPVU 1 STANDARD; SPVU 2 OPTIONAL

HVAC Min Design - Zone: 1-16	
Buildings: 36 x 40	
Tonnage	5
Min. EER / COP	11.0/3.3
Outside Air	See Ventilation Calcs on Mechanical Plans
Occupancy Sensor	Yes
DCV/ Economizer	Yes
Cooling Stages (Min.)	2
Allowable Mechanical Unit (See Equipment Schedule)	SPVU 2 STANDARD

LEGEND
Occupancy Sensor: Ceiling mounted occupancy sensor with dimming controls. Automatic on for low level lighting only, full by manual activation.
DCV: Demand Control Ventilation

NOTES:
- Interior lights shall be dimmable LED fixtures, 51 Watts Max per fixtures, 4 fixtures per module per floor
- Windows shall be NFRC #INT-A-73-00213-00011 or equal, U-Factor = 0.520 (Max), SHGC = 0.350 (Max), Visual Transmittance = 0.610 (Min)
- Doors shall be hollow metal, uninsulated single layer doors (Min), U-Factor = 1.450 (Max)
- Refer to sheet A-0.2 For windows specifications
- Refer to sheet A-0.2 For insulation specifications
- Refer to sheets A-0.3 for mechanical layout per classroom
- Refer to Mechanical plans for more info
- Where Steel stud walls are used the exterior wall assembly shall be as follows:
  U-Value 0.062 (max) - provide 6" (Nominal) studs @ 24" oc with R-19 batt cavity insulation and continious 1.5" rigid foam insulation (R=8.8 min) on the interior side of the wall.

DESIGN ENERGY VALUES BY BUILDING SIZE - WOOD FLOOR - WALL HVAC

ENERGY SPECS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:
SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:
DESIGN ENERGY VALUES
WOOD FLOOR - WALL HVAC

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☐ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-0.53

Project Name: 04-121999 - 24x40 - CONC FLR - RF HVAC | **Date Prepared:** 2023-07-17

A. General Information

1	Project Name	04-121999 - 24x40 - CONC FLR - RF HVAC			
2	Run Title				
3	Project Location	- specify -			
4	City	- specify -	5	Standards Version	Compliance 2022
6	Zip code	92301	7	Compliance Software (version)	CBECC 2022.2.1 SP1 (1298)
8	Climate Zone	14	9	Building Orientation (deg)	345
10	Building Type(s)	• Relocable Public School Building for use in all climate zones Occupancy: E	11	Weather File	PALMDALE_STFY20.epw
12	Project Scope	• New complete scope	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	960	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	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		00 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		00 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		00 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		00 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
				00 Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

C1. COMPLIANCE SUMMARY

	COMPLIES[1]		
	Time Dependent Valuation (TDV)		Source Energy Use
	Efficiency[2] (kBtu/ft² - yr)	Total[3] (kBtu/ft² - yr)	Total[3] (kBtu/ft² - yr)
Standard Design	410.64	410.64	35.39
Proposed Design	351.62	351.62	29.35
Compliance Margins	**59.02**	**59.02**	**6.04**
	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/ft² - yr)

	COMPLIES[1]		
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[2]
Space Heating	31.03	28.78	2.25
Space Cooling	107.73	107.28	0.45
Indoor Fans	178.08	131.18	46.9
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	61.19	61.28	-0.09
Indoor Lighting	32.61	23.1	9.51
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**410.64**	**351.62**	**59.02 (14.4%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**410.64**	**351.62**	**59.02 (14.4%)**

[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)[2]
Receptacle	67.93	67.93	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**478.57**	**419.55**	**59.02 (12.3%)**

[1] Notes: This table is not used for Energy Code Compliance.

C4. SOURCE ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual SOURCE Energy Use, kBtu/ft² /yr)

	COMPLIES[1]		
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[2]
Space Heating	4.6	4.17	0.43
Space Cooling	4.04	4.1	-0.06
Indoor Fans	17.7	12.77	4.93
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	6.48	6.49	-0.01
Indoor Lighting	2.57	1.82	0.75
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**35.39**	**29.35**	**6.04 (17.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**35.39**	**29.35**	**6.04 (17.1%)**

[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)[2]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**40.31**	**34.27**	**6.04 (15%)**

[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	1	0.9	0.1	---	---	---
Space Cooling	2.7	2.6	0.1	---	---	---
Indoor Fans	6	4.4	1.6	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	2.3	2.3	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**13.2**	**11**	**2.2**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**13.2**	**11**	**2.2**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**15.7**	**13.5**	**2.2**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	55.8	47.98	7.82	14.01
NET EUI[1]	55.8	47.98	7.82	14.01

[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.

D5. 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(b) 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.
• Project is claiming Exception 2 to Section 140.10(b): No battery storage system requirements with less than 10 kWh rated capacity.
• Project is claiming Exception 3 to Section 140.10(b): No battery storage system required for tenant spaces less than or equal to 5,000 ft2.

G3. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01 Opaque Surfaces & Orientation	02 Total Gross Surface Area (ft²)	03 Total Fenestration Area (ft²)	04 Window to Wall Ratio (%)
North-Facing[1]	276	32	11.59
East-Facing[2]	440	0	0
South-Facing[3]	252	32	12.7

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).

G3. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01 Opaque Surfaces & Orientation	02 Total Gross Surface Area (ft²)	03 Total Fenestration Area (ft²)	04 Window to Wall Ratio (%)
West-Facing[4]	440	0	0
Total	**1408**	**64**	**4.55**
Roof	960	0	0

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 Building Story Name	02 Air Barrier
BuildingStory 1	Air barrier - not verified

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01 Surface Name	02 Construction Type	03 Area (ft²)	04 Framing Type	05 Cavity R-Value	06 Continuous R-Value Interior	06 Continuous R-Value Exterior	07 Units	08 Value	09 Description of Assembly Layers	10 Status[1]
2x6 T111 WALL	Exterior Wall	1,408	Wood	19	N/A	N/A	U-factor	0.0619	Wood siding - 1/2 in. Vapor seal - plastic film - 1/16 in. SCI - 2x6 WD STUD WALL @ 16 16 OC Gypsum Board - 1/2 in. Acoustic Tile - 1/2 in.	N
SCI MTL ROOF	Roof	960	Metal	30	N/A	N/A	U-factor	0.0554	Metal Standing Seam - 1/16 in. Building Paper - 1/16 in. Plywood - 3/4 in. SCI - STL JOIST ROOF R-30 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
SCI CONC FLOOR	Exterior Floor	960	N/A	0	N/A	N/A	U-factor	0.1153	Vented Crawl Space Concrete - 80 lb/ft3 - 4 in. Linoleum/cork tile - 1/4 in.	N

[1] Status: N - New, A - Altered, E - Existing

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01 Assembly Name	02 Area (ft²)	03 Overall U-factor	04 Status[1]
SCI - STD HM DOOR	21	1.45	N

[1] Status: N - New, A - Altered, E - Existing

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01 Fenestration Assembly Name	02 Fenestration Type/ Product Type / Frame Type	03 Certification Method[1]	04 Assembly Method	05 Area (ft²)	06 Overall U-factor	07 Overall SHGC	08 Overall VT	09 Status[2]
NFRC #NT-A-73-00213-00011	Vertical fenestration Operable window N/A	NFRC	Site built	64	0.52	0.35	0.61	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. DHY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01 Equipment Name	02 Equipment Type	03 Qty	04 Heating: Total Heating Output (kBtu/h)	05 Heating: Supp Heat Output (kBtu/h)	06 Heating: Efficiency Unit	07 Heating: Efficiency	08 Cooling: Total Cooling Output (kBtu/h)	09 Cooling: Efficiency Unit	10 Cooling: Efficiency	11 Economizer Type (if present)	12 Status[1]
AirSystem 101	Single Zone Heat Pump (SZHP) Air System	1	57	0	N/A	NA	57	EER SEER	12 15	Fixed DB	N

[1] Status: N - New, A - Altered, E - Existing

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01 Name or Item Tag	02 Qty	03 Design OA CFM	04 Supply Fan: CFM	05 Supply Fan: Power	06 Supply Fan: Power Units	07 Supply Fan: Control	08 Return / Relief Fan: Fan Type	09 Return / Relief Fan: CFM	10 Return / Relief Fan: Power	11 Return / Relief Fan: Power Units	12 Return / Relief Fan: Control	13 Status[1]
AirSystem 101	1	468	1,750	0.9	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 System Name	02 Equipment Type	03 Interlocks per 140.4(k)[1]	04 Other Special Features and Controls
AirSystem 101	Single Zone Heat Pump (SZHP) 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 Zone Name	02 Mechanical Ventilation: Ventilation Function	02 Mechanical Ventilation: # of People	02 Mechanical Ventilation: Supply OA CFM	03 Exhaust CFM	04 Conditioned Area (sf)	05 DCV or Occupant Sensor Controls, or Both
ThermalZone 101	Education - Classrooms (ages 9-18)	31.2	468	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01 System ID	02 System Type	03 Qty	04 Ashrae Cpacity (kBtu/h): Heating	05 Ashrae Cpacity (kBtu/h): Cooling	06 Airflow (cfm): Design	07 Airflow (cfm): Min.	08 Min. Ratio	09 Fan: Power	10 Fan: Power Units	11 Cycles	12 VSD
TerminalUnit 101	Uncontrolled	1	N/A	N/A	1,750	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01 Occupancy Type[1]	02 Conditioned Floor Area[2] (ft²)	03 Installed Lighting Power (Watts)	04 Lighting Control Credits (Watts)	05 Additional (Custom) Allowance: Area Category Footnotes (Watts)	06 Additional (Custom) Allowance: Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	408	0	0	0
Building Totals:	**960**	**408**	**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 Name or Item Tag	02 Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, T32TS, one dimmable electronic ballast)	03 Installed Watts (Conditioned): Watts per luminaire	04 Installed Watts (Conditioned): How is Wattage determined	05 Installed Watts (Conditioned): Total Number of Luminaires	06 Installed Watts (Conditioned): Installed Watts
SCI - 2x4 LED	---	51	According to	8	408

[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 Area Description	02 Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	03 Type of Lighting Control	04 Power Adjustment Factor (PAF)	05 Luminaire Item Tag	06 Watts per Luminaire	07 # of Luminaires	08 Lighting Controlled (Watts)	09 Control Credit (Watts)
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	2	102	0
Classroom 101	Classroom, Lecture, or Training Vocational	N/A	N/A	SCI - 2x4 LED	51	6	306	0
						Lighting Control Credits (Conditioned) Total (Watts):		**0**

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

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
Plumbing	NRCI-PLB-01-E - Must be submitted for all buildings
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.
Indoor Lighting	NRCA-LTI-03-A - Automatic Daylight 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-03-A - Constant Volume Single Zone HVAC
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.
Mechanical	NRCA-MCH-12-A FDD for Packaged Direct Expansion Units
Mechanical	NRCA-MCH-13-A Automatic FDD for Air Handling Units and Zone Terminal Units Acceptance
Mechanical	NRCA-MCH-19-A Occupancy Sensor Controls

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

Building Component	Form/Title
Mechanical	NRCV-MCH-27 Indoor Air Quality & Mechanical Ventilation

Documentation Author's Declaration Statement

I. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: SILVER CREEK	Documentation Author Signature:
Company: SILVER CREEK	Signature Date:
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: _	Phone: 951-943-5393

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 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: JOHN STARLIN	Responsible Designer Signature:
Company: SILVER CREEK	
Address: 2830 BARRETT AVE	Date Signed:
City/State/Zip: PERRIS , CA 92571	License #: 2475
Phone: 951-943-5393	Title: Engineer — Scope: Envelope
Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:
Company: SILVER CREEK	
Address: 2830 BARRETT AVE	Date Signed:
City/State/Zip: PERRIS , CA 92571	License #: 2475
Phone: 951-943-5393	Title: Engineer — Scope: Lighting

Responsible Designer Name: JOHN STARLIN	Responsible Designer Signature:
Company: SILVER CREEK	
Address: 2830 BARRETT AVE	Date Signed:
City/State/Zip: PERRIS , CA 92571	License #: 2475
Phone: 951-943-5393	Title: Engineer — Scope: Mechanical

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

THESE DRAWINGS AND ALL MATERIAL CONTAINED HEREIN ARE THE PROPERTY OF SILVER CREEK MODULAR, INC (SCM Inc) AND SHALL NOT BE REPRODUCED, COPIED OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY AND SHALL NOT BE USED IN WHOLE OR IN PART TO

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-CXR-E
This document is used to demonstrate compliance with mandatory commissioning requirements in 120.8 for nonresidential buildings and hotel/motel or mixed-use buildings with nonresidential spaces. This document does not demonstrate compliance with commissioning requirements within Title 24, Part 11, which need to be documented separately if they apply.		
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:**	(Page 1 of 6)
Project Address:	**Date Prepared:**	2023-01-31T18:53:26-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Perris	04	Building Size (ft²)	960
02	Occupancy Type	Nonresidential	05	Nonresidential Conditioned Floor Area (ft²)	< 10,000 ft²
03	Project Type	Newly constructed	06	HVAC System Type	Unitary or packaged equipment each serving one zone
			07	Climate Zone	10

B. PROJECT SCOPE

Based on project information provided in Table A, Table B indicates which commissioning related requirements apply per 120.8. Table B is not editable by the user.

Commissioning Requirements per 120.8

01	Table F: Design Review Kickoff	120.8(d)1 and 120.8(d)2	The design review kickoff meeting establishes who will play the role of the design reviewer, the project schedule and identify owner's requirements. This meeting should be conducted during schematic design.
02	Table G: Owner's Project Requirements (OPR)	120.8(b)	This requirement does not apply.
03	Table H: Basis of Design (BOD)	120.8(c)	This requirement does not apply.
04	Table I: Design Review	120.8(d) and 120.8(e)	The design reviewer(s) reviews the construction documents for clarity, completeness, and adherence to the owner's goals. Commissioning measures must be included in the construction documents to facilitate the design review and commissioning process. For projects with >= 10,000 ft² of nonresidential conditioned floor area, the design review is for adherence with the Owner's Project Requirements (OPR) and Basis of Design (BOD). This should be conducted during design.
05	Table J: Commissioning Plan	120.8(f)	This requirement does not apply.
06	Table K: Functional Performance Testing	120.8(g)	This requirement does not apply.
07	Table L: Documentation and Training	120.8(h)	This requirement does not apply.
08	Table M: Commissioning Report	120.8(i)	This requirement does not apply.

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C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with commissioning requirements per 120.8. This table is not editable by the user. If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

01	02	03	04	05	06	07	08	09
Design Kickoff Review	Owner's Project Requirements	Basis of Design	Design Review	Commissioning Plan	Functional Performance Testing	Documentation and Training	Commissioning Report	Compliance Results
Table F	Table G	Table H	Table I	*Table J*	Table K	Table L	Table M	
Yes			Yes					COMPLIES
10	Design Reviewer(s) for the project include:			John Starlin				COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-CXR-E
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F. DESIGN REVIEW KICKOFF MEETING

This table indicates that the design reviewer meets the qualification requirements per Title 24, Part 1 Section 10-103(a)1 and demonstrates compliance with design review kickoff requirements per 120.8(d)2. This meeting should occur during the Schematic Design phase of the project.

Design Review Kickoff Meeting Details

01	Date of Design Review Kickoff Meeting			2022-12-05	
02	Meeting Attendees: (one person may play multiple roles)				
☒	Owner/Facility Manager:	Ryan McIntosh	☐	Design Reviewer(s):	
☐	Project Manager:		☒	Design Architect/ Engineer(s):	John Starlin
☐	Contractor:		☐	Certified Acceptance Test Tech(s):	
☐	Commissioning Provider:		☒	Energy/ T24 Part 6 Consultant:	John Starlin

Design Reviewer Qualifications per Title 24 Part 1 Section 10-103(a)1

	The design reviewer(s) must be licensed professional engineers or licensed architects, or licensed contractors representing services performed by or under the direct supervision of a licensed engineer or architect, as specified in the provisions of Division 3 of the Business and Professions Code.	Do the Design Reviewer(s) meet these qualifications?	
03	In addition, for buildings with < 10,000 ft², the design reviewer(s) may be the engineer or architect of record. The design reviewer(s) may also be a qualified in-house engineer or architect with no other project involvement or a third party engineer, architect or contractor.	Yes ●	No ○
04	The design reviewer(s) for this project will be:	John Starlin	

Preliminary Construction Schedule

		Start Date	Completion Date
05	Schematic Design	2022-12-05	2022-12-05
06	Design Development	2022-12-05	2022-12-05
07	Construction Documents	2022-12-05	2023-02-24
08	Construction	2024-01-01	2024-01-01
09	Building Turnover	2024-01-01	2024-01-01

Project Goals Related to Energy Efficiency

10	Operational Costs	Code Minimum performance
11	Desired Building Lifespan	30 - 50 years.
12	Equipment Lifecycle	Industry standard.
13	Project Energy Efficiency Goals	Code Minimum performance

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F. DESIGN REVIEW KICKOFF MEETING

14	Envelope Goals	Code minimum performance.
15	HVAC System Goals	Code minimum performance.
16	Indoor Lighting System Goals	Code minimum performance.
17	Outdoor Lighting System Goals	Code minimum performance.
18	Water Heating System Goals	Code minimum performance.
19	Equipment and System Specifications	Industry standard equipment.
20	Operations and Maintenance	No specific requirements.

G. OWNER'S PROJECT REQUIREMENTS (OPR)

This section does not apply to this project.

H. BASIS OF DESIGN (BOD)

This section does not apply to this project.

I. CONSTRUCTION DOCUMENT DESIGN REVIEW CHECKLIST

This table is only completed if a design review document is not attached to permit application to demonstrate compliance with 120.8(b) and 120.8(e). For buildings with >= 10,000 ft² conditioned floor area, the design review will ensure the construction documents meet the Owner's Project Requirements (Table G.) and the Basis of Design Documents (Table H.). For buildings with < 10,000 ft² conditioned floor area, the design review will ensure the construction documents meet the goals documented in Table F. during the Design Review Kickoff.

		YES	NO
01	Attaching Completed Design Review Documentation?	○	●

Design Review Checklist

02	Envelope Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
03	HVAC System Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
04	HVAC Controls Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
05	Indoor Lighting System Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
06	Indoor Lighting Controls Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.

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CERTIFICATE OF COMPLIANCE		NRCC-CXR-E
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Project Address:	**Date Prepared:**	2023-01-31T18:53:26-05:00

I. CONSTRUCTION DOCUMENT DESIGN REVIEW CHECKLIST

07	Outdoor Lighting System and Controls Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
08	Water Heating System Design	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.
09	Other Systems and Features	The design represents the typical PC building design with updates (as applicable) for the 2022 code cycle.

J. COMMISSIONING PLAN

This section does not apply to this project.

K. FUNCTIONAL PERFORMANCE TESTING

This section does not apply to this project.

L. DOCUMENTATION AND TRAINING

This section does not apply to this project.

M. COMMISSIONING REPORT

This section does not apply to this project.

N. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

There are no forms required for this project.

O. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

STATE OF CALIFORNIA
Nonresidential Building Commissioning
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-CXR-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:**	(Page 6 of 6)
Project Address:	**Date Prepared:**	2023-01-31T18:53:26-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

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: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii		
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:**	(Page 1 of 4)
Project Address:	**Date Prepared:**	2023-01-31T18:53:58-05:00

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
			03	Occupancy Types Within Project:	Classroom

B. PROJECT SCOPE

This table includes electrical systems that are within the scope of the permit application.

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[1]	Rating[2] (kVA)	Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Site feeder	Add/Alt to feeders and branch circuits only	---	☐	☐	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.5/ 160.5, and mechanical, Indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	☐

[1] *FOOTNOTES: Adding only new feeders and branch circuits triggers Voltage Drop 130.5(c)/160.6(c), no other requirements from 130.5/160.6 are required.*
[2] *If common use areas in a multifamily are submetered, rating is for submeter size serving common use areas.*
[3] *Applicable if the utility company is providing a metering system that indicates instantaneous kW demand and kWh for a utility-defined period.*

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:**	(Page 2 of 4)
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C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through J. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

01		02		03		04	05	06
Service Electrical Metering 130.5(a)/ 160.6(a) (See Table F)	AND	Separation for Monitoring 130.5(b)/ 160.6(b) (See Table G)	AND	Voltage Drop 130.5(c)/ 160.6(c) (See Table H)	AND	Controlled Receptacles 130.5(d)/ 160.6(d) (See Table I)	Electric Ready 160.9 (See Table J)	**Compliance Results**
	AND		AND	Yes	AND			COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Pii/ 180.2(b)4Bvic.

01	02		03	04	05	
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method		Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
					Pass	Fail
Site feeder	☒ Voltage drop less than 5%	☐ Permitted by CA Elec Code (Exception to 130.5(c))*	Contractor Responsible		☐	☐

** NOTES: If "Permitted by CA Elec Code " * is selected under Compliance Method above, please indicate where the exception applies in the space provided below.*

[1] *FOOTNOTES: Voltage drop calculations may be attached to the permit application outside the construction documents if allowed by the Authority Having Jurisdiction. Select "attached" if applicable. If calculations will be the responsibility of the installing contractor, select "Contractor Responsible".*

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
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K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-ELC-E - Must be submitted for all buildings

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name: SILVER CREEK PC - TYPICAL CLASSROOM	**Report Page:**	(Page 4 of 4)
Project Address:	**Date Prepared:**	2023-01-31T18:53:58-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

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: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

CERTIFICATE OF COMPLIANCE, NONRESIDENTIAL BUILDING COMMISSIONING

CERTIFICATE OF COMPLIANCE, ELECTRICAL POWER DISTRIBUTION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

CERTIFICATE OF COMPLIANCE FORMS

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.6A

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 1 of 8)
Project Address:		Date Prepared: 2023-01-31T18:54:22-05:00

This document is used to demonstrate compliance with requirements in 110.9, 130.0, 130.2, 140.7, and 141.0(b)2L for outdoor lighting scopes using the prescriptive path for nonresidential and hotel/motel occupancies. It is also used to document compliance with requirements in 160.5, 170.2(e)6, 180.1(a) and 180.2(b)4Bv for outdoor lighting scopes using the prescriptive path for multifamily and mixed-use occupancies. Multifamily includes dormitory and senior living facilities.

A. GENERAL INFORMATION

01	Project Location (city)	Perris	04	Total Illuminated Hardscape Area (ft²)	60
02	Climate Zone	10			
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):				
☐	LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Urban Clusters	☐	LZ-4: High - Must be reviewed by CA Energy Commission for Approval	
☐	LZ-1: Low - Rural Areas	☒ LZ-3: Moderately High - Urban Areas			
05	Occupancy Types within Project				
• Classroom					

B. PROJECT SCOPE

This table includes outdoor lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv for alterations.

My Project Consists of:

01	02
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)? ○ Yes ○ No

03	04	05
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%		

Please proceed to Table C. Outdoor Lighting Fixture Schedule to define the project's luminaires.

[1] *FOOTNOTES: % of Existing Luminaires Being Altered = (Sum Total of Luminaires Being Added or Altered / Existing Luminaires within the Scope of the Permit Application) x 100.*

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

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C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through N. Note: If any cell on this table says "COMPLIES with Exceptional Conditions" refer to Table D. Exceptional Conditions for guidance or see applicable Table referenced below.

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results		
01		02		03		04		05		06		07	08	09
General Hardscape Allowance 140.7(d1) / 170.2(e)6 (See Table I)	+	Per Application Allowance 140.7(d2) / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d2) (See Table K)	+	Ornamental 140.7(d2) / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d2) / 170.2(e)6 (See Table M)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥ **Total Actual** (Watts)	**07 must be >= 08**
258.06	+	19	+	---	+	---	+	---	OR	---	=	277.06	≥ 30	COMPLIES
Shielding Compliance (See Table G for Details)														N/A
Controls Compliance (See Table H for Details)														COMPLIES

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

Selections made in Certificates of Installation Table have been changed by the permit applicant. See Table E. Additional Remarks for permit applicant's explanation.

E. ADDITIONAL REMARKS

This table includes remarks made by the permit applicant to the Authority Having Jurisdiction.

(NRCI-LTO-01-E Explanation) 1

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

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Project Address:		Date Prepared: 2023-01-31T18:54:22-05:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

For new or altered lighting systems demonstrating compliance with 140.7 / 170.2(e)6 all new luminaires being installed and any existing luminaires remaining or being moved within the spaces covered by the permit application are included in the Table below. For altered lighting systems using the Existing Power method per 141.0(b)2L only new luminaires being installed and replacement luminaires being installed as part of the project scope are included (ie, existing luminaires remaining or existing luminaires being moved are not included). Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires[3]	Luminaire Status[3]	Excluded per 140.7(a) / 170.2(e)6A	Design Watts	Cutoff Req. > 6,200 initial lumen output 130.2(b) / 160.5(c)1*	Field Inspector	
										Pass	Fail
F-1	0 Watt LED Wallpack	☐ Linear	30	Mfr. Spec	1	New	☐	30	NA: < 6200 lumens	☐	☐
							Total Design Watts:	30			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a statue; EXCEPTION 2 to 130.2(b)

[1] *FOOTNOTES: Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b)*
[2] *For linear luminaires, wattage should be indicated as W/ft instead of Watts/luminaire. Total linear feet should be indicated in column 05 instead of number of luminaires.*
[3] *Select "New" for new luminaires in a new outdoor lighting project, or for added luminaires in an alteration. Select "Altered" for replacement luminaires in an alteration. Select "Existing to Remain" for existing luminaires within the project scope that are not being altered and are remaining. Select "Existing Reinstalled" for existing luminaires which are being removed and reinstalled as part of the project scope.*
[4] *Compliance with mandatory shielding requirements is required for luminaires with initial lumen output >= 6,200 unless exempted by 130.2(b)/ 160.5(c)*

G. SHIELDING REQUIREMENTS (BUG)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

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Project Address:		Date Prepared: 2023-01-31T18:54:22-05:00

H. OUTDOOR LIGHTING CONTROLS

This table demonstrates compliance with controls requirements for all new or altered luminaires installed as part of the permit application. For alteration projects, luminaires which are existing to remain (ie untouched) and luminaires which are removed and reinstalled (wiring only) do not need to be included in this table even if they are within the spaces covered by the permit application.
Outdoor lighting for nonresidential buildings, parking garages and common service areas in multifamily buildings must be documented separately from outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit

Mandatory Controls for Nonresidential Occupancies, Parking Garages & Common Areas in Multifamily Buildings

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
Entry: "F-1"	Photocontrol	Provided	NA: Facade, etc. >=24 ft	☐	☐

[1] *FOOTNOTE: Text has been abbreviated, please refer to Table 160.5-A to confirm compliance with the specific light source technologies listed.*
[2] *Authority having jurisdiction may ask for cutsheets or other documentation to confirm compliance of light source.*
[3] *Recessed luminaires marked for use in fire-rated installations, and recessed luminaires installed in non-insulated ceilings are excepted from I and iii.*

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 5 of 8)
Project Address:		Date Prepared: 2023-01-31T18:54:22-05:00

I. LIGHTING POWER ALLOWANCE (per 140.7 / 170.2(e))

This table includes areas using allowance calculations per 140.7 / 170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-B while "Use it or lose it" Allowances are per Table 140.7-B /Table 170.2-S. Indicate which allowances are being used to expand sections for user input. Luminaires that qualify for one of the "Use it or lose it" allowances shall not qualify for another "Use it or lose it" allowance. Outdoor lighting attached to multifamily buildings and controlled from the inside of a dwelling unit are included in Table H. and are not included here. All other multifamily outdoor lighting is included here.

01				
	"Use it or lose it" Allowance (select all that apply)			(select all that apply)
☒ General Hardscape Allowance Table I (below)	☒ Per Application Table J	☐ Sales Frontage Table K	☐ Ornamental Table L	☐ Per Specific Area Table M

Calculated General Hardscape Lighting Power Allowance per Table 140.7-A for Nonresidential & Hotel/Motel

02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Entry	60	0.021	1.26	34	0.2	6.8	8.06
				Initial Wattage Allowance for Entire Site (Watts):			250
				Instances of Initial Wattage Allowance (LZ 0 only)[1]			
				Total General Hardscape Allowance (Watts):			258.06

J. LIGHTING ALLOWANCE: PER APPLICATION

This table includes areas using the wattage allowance per application from Table 140.7-B / Table 170.2-S.

01	02	03	04	05	06	07	08	09	10
Area Description	Application per Table 140.7-B[1]	CALCULATED ALLOWANCE (Watts)			DESIGN WATTS				Additional Allowance (Watts)
		# of Locations	Allowance per Location[2]	Extra Allowance (Watts)	Luminaire Name or Item Tag	Watts per Luminaire	# of Luminaires	Design Watts	
Entry Door	Building Entrance/Exit	1	19	19	F-1	30	1	30	19
					Total Design Watts for this Area:			30	
					Total Allowance (Watts) All Areas:				19

[1] *FOOTNOTES: Primary entrance applications are only available for senior care facilities, healthcare facilities, police stations, hospitals, fire stations, and emergency vehicle facilities.*
[2] *The Allowance per Location for ATMs is 100W for the first ATM and 35W for each additional per Table 140.7-B /Table 170.2-S.*
[3] *For luminaires indicated in Table F as linear, wattage in column 07 is W/lf instead of Watts/luminaire. Total linear feet should be indicated in column 08 instead of number of luminaires.*

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

M. LIGHTING ALLOWANCE: PER SPECIFIC AREA

This section does not apply to this project.

N. EXISTING CONDITIONS POWER ALLOWANCE (alterations only)

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 6 of 8)
Project Address:		Date Prepared: 2023-01-31T18:54:22-05:00

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-LTO-E - Must be submitted for all buildings

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTO-02-A - Must be submitted for all outdoor lighting controls except for alterations where controls are added to <= 20 luminaires.	Entry: "F-1"

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-16-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

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: John Starin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-16-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

CERTIFICATE OF COMPLIANCE, OUTDOOR LIGHTING

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 1 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

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.

A. GENERAL INFORMATION

01	Project Location (city)	Perris	02	Climate Zone	10
03	Occupancy Types Within Project (select all that apply):				
• Classroom sinks and restroom lavatories					

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 140.7 / 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 in newly constructed building)	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.

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 2 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

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	WH-1	Exception to 140.5(c)/ 170.2(d)3	Exceptions Do Not Apply	☐	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
WH-1	Consumer Rated Electric Instantaneous (<=12kW)	<=2	10,264	0 <= GPM <1.7	0.91	0.91	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.

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 3 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

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

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 4 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

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 (dgte/) 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.

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-PLB-E - Must be submitted for all buildings

CERTIFICATE OF COMPLIANCE, WATER HEATER SYSTEM

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-PLB-E
Project Name:	SILVER CREEK PC - TYPICAL CLASSROOM	Report Page: (Page 5 of 6)
Project Address:		Date Prepared: 2023-02-02T16:17:35-05:00

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.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-16-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

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: John Starin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-16-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

CERTIFICATE OF COMPLIANCE FORMS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-0.6B

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-PV	Report Page: (Page 5 of 5)
Project Address:	Date Prepared: 2023-02-17T18:05:07-05:00

This document is used to demonstrate compliance with prescriptive PV and battery requirements in 140.10/ 170.2 for nonresidential, multifamily and mixed-use buildings and prescriptive solar thermal requirements in 170.2(i)3C for multifamily and hotel/ motel occupancies. When PV/battery/solar thermal requirements don't apply or are traded using the performance approach, this document demonstrates compliance with mandatory solar readiness requirements in 110.10/ 160.8 for newly constructed buildings which are either multifamily ten stories or fewer, hotel/motel ten stories or fewer or all other nonresidential buildings three stories or fewer. It is also used to demonstrate compliance with solar readiness in 110.10/ 160.8 for additions to nonresidential, multifamily or hotel/motel building types which add more than 2,000 ft² of roof area. Alterations, or additions of less than 2,000 ft² of roof area, are not required to comply with solar readiness, solar PV and battery requirements and do not need to complete this document.

Project Name: 40- PC-PV	Report Page: (Page 1 of 5)
Project Address:	Date Prepared: 2023-02-17T18:05:07-05:00

A. GENERAL INFORMATION

01	Project Location (city)	N/A	04	Building Occupancies	School or Classroom
02	Climate Zone	15	05	Construction Type	New construction
03	Conditioned Floor Area (ft²)	4800	06	Number of Stories	Bldg <= 3 stories

B. PROJECT SCOPE

The compliance path the project is using to comply per 110.10(b)1B/ 140.10/ 170.2(g and h) is indicated below.

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)

	01
☐	Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)
☐	Exception to PV and Battery: Not enough Solar Access Roof Area
☐	Exception to PV and Battery: Required PV < 4kW
☐	Exception to PV and Battery: No contiguous Solar Access Roof Area
☐	Exception to PV and Battery: Can't meet snow load
☐	Exception to PV and Battery: Multi-tenant without VNEM or Community Solar
☐	The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-PV	Report Page: (Page 2 of 5)
Project Address:	Date Prepared: 2023-02-17T18:05:07-05:00

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)3C (Multifamily and hotel/ motel occupancies only)

	01
☐	The project includes a hotel/motel or multifamily occupancy with a gas or propane central water-heating system (serves 2+ dwelling units) and includes a permanently installed domestic solar water-heating system to comply with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H. Compliance meets Exception 2 to solar ready requirements in 110.10(b).

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D for guidance or see the applicable Table referenced below.

Allocated Solar Zone			Installed PV System			Installed SWH System			Smart Tstat and Alternative EE Measure		Compliance Results
01	02		03	04		05	06		07	08	
Required Minimum Area (ft²)	Designated Area (ft²)	OR	Required Minimum DC Power Rating (Watts)	Designed DC Power Rating (Watts)	OR	Required Minimum Solar Savings Fraction	Designed/Rated Solar Savings Fraction	OR	IA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	
(See Table F)			(See Tables G or J)			(See Table H)			(See Table I)		
171 <=	172	OR	0 <=	0	OR			OR			COMPLIES
N/A			Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).								COMPLIES
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table J.											Not Applicable

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table is includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-PV	Report Page: (Page 3 of 5)
Project Address:	Date Prepared: 2023-02-17T18:05:07-05:00

F. ALLOCATED SOLAR ZONE

This section does not apply to this project.

G. PERMANENTLY INSTALLED SOLAR PV FOR SOLAR READY EXCEPTION

This section does not apply to this project.

H. PERMANENTLY INSTALLED SOLAR HOT WATER SYSTEMS

This section does not apply to this project.

I. SMART THERMOSTATS AND ALTERNATIVE EFFICIENCY MEASURE FOR SOLAR READY EXCEPTION

This section does not apply to this project.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-PV	Report Page: (Page 4 of 5)
Project Address:	Date Prepared: 2023-02-17T18:05:07-05:00

J. PHOTOVOLTAIC (PV) AND BATTERY SYSTEMS

This table documents compliance with prescriptive photovoltaic and battery system requirements in 140.10/ 170.2(g and h). Unless the project meets one of the listed exceptions, or trades-off PV in an energy model using performance path, 140.10/ 170.2(g and h) requires installed photovoltaic and battery systems for newly constructed buildings. The installed PV systems must meet the minimum requirements in Joint Appendix 11.

Photovoltaic (PV) System

01	02	03	04	05	06	07	08
Occupancy	Conditioned Floor Area (ft²)	Area of New Roof[1] (ft²)	Roof Area < 70% Solar Access[2] (ft²)	Plansheet or Document showing Solar Access Calculations	Occupied Roof Area[3] (ft²)	Solar Access Roof Area (SARA) (ft²)	Min Size of PV System Required (kWdc)
School or Classroom	4,800	5,700	0	Sheet A-0.7	0	5,700	11.8
						Total Min Size PV System Required for all Spaces (kWdc):	11.81
						Total Size PV System in Design (kWdc):	11.81

[1]*FOOTNOTES: Includes the area of the building's roof space capable of structurally supporting a PV system and the area of all roof space on covered parking areas, carports, and all other newly constructed structures on the site that are compatible with supporting a PV system per Title 24, Part 2 Section 1511.2.*
[2]*Solar access must be determined using CEC-approved solar access calculation tools found at https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards/solar-assessment-tools.*
[3]*As specified by CBC Section 503.1.4.*

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Form/Title
NRCI-SAB-01-E - Must be submitted for all buildings that must comply with solar readiness or PV/Battery requirements.

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

CERTIFICATE OF COMPLIANCE, SOLAR & BATTERY - PV

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-PV	Report Page: (Page 1 of 5)
Project Address:	Date Prepared: 2023-02-17T18:05:07-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

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: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90125-0223-0002 Report Generated: 2023-02-17 15:05:11

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-Solar Ready	Report Page: (Page 1 of 7)
Project Address:	Date Prepared: 2023-02-17T18:06:54-05:00

A. GENERAL INFORMATION

01	Project Location (city)	N/A	04	Building Occupancies	School or Classroom
02	Climate Zone	15	05	Construction Type	New construction
03	Conditioned Floor Area (ft²)	960	06	Number of Stories	Bldg <= 3 stories

B. PROJECT SCOPE

The compliance path the project is using to comply per 110.10(b)1B/ 140.10/ 170.2(g and h) is indicated below.

Compliance with Solar Readiness Requirements in 110.10(b)1B

	01
☒	Provide Solar Ready Area no exceptions	The project has allocated a solar zone on the roof plan per requirements in §110.10(b), as documented in Table F.
☐	Exception to Solar Ready Area: Installed Solar Photovoltaic System	The project includes a permanently installed solar electric system having a nameplate DC power rating, measured under Standard Test Conditions, of no less than one watt per square foot of roof area as documented in Table G.
☐	Exception to Solar Ready Area: Installed Solar Water Heating System	The project is a hotel/motel or high-rise multifamily occupancy and includes a permanently installed domestic solar water-heating system complying with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H.
☐	Exception to Solar Ready Area: Smart Thermostat and Alternative Energy Efficiency Measure	The project is a multifamily occupancy where all thermostats in each dwelling unit comply with §110.12(a) AND at least one additional measure listed in Exception 4 to §110.10(b)1B is installed, as documented in Table I.
☐	Exception to Solar Ready Area: Roof is designed for vehicular traffic, parking or for heliport	Plan sheet showing roof designed for vehicular traffic, parking or heliport
☐	Exception to Solar Ready Area: Roof too small	The project is new construction and has a total roof area <= 533 square feet[1]
☐	Exception to Solar Ready Area: Number of building stories	The project is nonresidential > 3 stories or multifamily/ hotel/motel > 10 stories.

[1]*FOOTNOTE: Buildings with roof area <=533 ft² would have a required solar zone < 80 ft² and are therefore exempt per 110.10(b)1.*

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-Solar Ready	Report Page: (Page 2 of 7)
Project Address:	Date Prepared: 2023-02-17T18:06:54-05:00

Compliance with Solar Photovoltaic (PV) and Battery Requirements in 140.10/ 170.2(g and h)

	01
☐	Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)
☐	Exception to PV and Battery: Not enough Solar Access Roof Area
☒	Exception to PV and Battery: Required PV < 4kW
☐	Exception to PV and Battery: No contiguous Solar Access Roof Area
☐	Exception to PV and Battery: Can't meet snow load
☐	Exception to PV and Battery: Multi-tenant without VNEM or Community Solar
☐	The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.

Compliance with Solar Thermal Water Heating Requirements in 170.2(d)3C (Multifamily and hotel/ motel occupancies only)

	01
☐	The project includes a hotel/motel or multifamily occupancy with a gas or propane central water-heating system (serves 2+ dwelling units) and includes a permanently installed domestic solar water-heating system to comply with 170.2(d)3C and Reference Residential Appendix RA4, as documented in Table H. Compliance meets Exception 2 to solar ready requirements in 110.10(b).

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-Solar Ready	Report Page: (Page 3 of 7)
Project Address:	Date Prepared: 2023-02-17T18:06:54-05:00

C. COMPLIANCE RESULTS

Results in this table are automatically calculated from data input and calculations in Tables F through I. Note: If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D for guidance or see the applicable Table referenced below.

Allocated Solar Zone			Installed PV System			Installed SWH System			Smart Tstat and Alternative EE Measure		Compliance Results
01	02		03	04		05	06		07	08	
Required Minimum Area (ft²)	Designated Area (ft²)	OR	Required Minimum DC Power Rating (Watts)	Designed DC Power Rating (Watts)	OR	Required Minimum Solar Savings Fraction	Designed/Rated Solar Savings Fraction	OR	IA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	
(See Table F)			(See Tables G or J)			(See Table H)			(See Table I)		
171 <=	172	OR	0 <=	0	OR			OR			COMPLIES
N/A			Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10(c).								COMPLIES
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table J.											Not Applicable

D. EXCEPTIONAL CONDITIONS

This table is auto-filled with uneditable comments because of selections made or data entered in tables throughout the form.

E. ADDITIONAL REMARKS

This table is includes remarks made by the permit applicant to the Authority Having Jurisdiction.

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-Solar Ready	Report Page: (Page 4 of 7)
Project Address:	Date Prepared: 2023-02-17T18:06:54-05:00

F. ALLOCATED SOLAR ZONE

This table is completed if the project is designating a solar zone to comply with §110.10(b)1B. New construction consider the total roof area; Additions consider newly added roof area. This table demonstrates that the project has designated the minimum area required for the Allocated Solar Zone, and also that the requirements for Solar Zone Subareas have been met. Each subarea must be shown on a roof plan or documented in construction documents. The solar zones must also comply with fire code requirements, including, but not limited to, setback and pathway requirements. Requirements for interconnection pathways must also be included in construction documents, and the location is specified in this table.

Required Minimum Solar Zone

01	02	03	04	05	06			07	08
Minimum Solar Zone Area Calculation Method	Total New or Added Roof Area (ft²)	Total New or Added Roof Area Covered with Skylights (ft²)	Minimum Solar Zone Based on Total or Added Roof Area (0.15 x (Roof-Sky(ft)) (ft²)	Method/ Tools Used to Determine Annual Solar Access for Potential Zones[1]	Potential Solar Zone Areas: Roof areas with >= 70% Solar Access			Minimum Solar Zone Based on Potential Zone (0.5 x (Total Potential Zone)) (ft²)	Required Minimum Solar Zone Area (ft²)
					Low-Sloped Area (<= 2:12 pitch) (ft²)	Steep-Sloped Area (> 2:12 pitch) Oriented 90° - 300 ° (ft²)	Total Potential Solar Zone Area (ft²)		
Total New or Added Roof Area	1140	0	171						171

Designated Solar Zone Subareas

09	10	11	12	13	14	15	16	17	18	19
Subarea Name or Tag	Building Plan Reference	Roof or Overhang Slope (Low <= 2:12 pitch) (Steep > 2:12 pitch)	Is Steep-Sloped Roof or Overhang between 90 and 300 degrees?	Subarea Complies with Title 24, Part 9	Solar Zone Subarea Free of Obstructions per §110.10(b)3 A	Subarea is Required Distance from Potential Obstructions per §110.10(b)3 B	Is the Smallest Dimension 5 feet or greater?	Min. Area Required per Subarea (ft²)	Designated Area (ft²)	Subarea Complies?
Solar Zone	Roof plans sheets A-3.xx	Low slope		Yes	Yes	Yes	Yes	80	172	COMPLIES

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

STATE OF CALIFORNIA
Solar And Battery CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
Project Name: 40- PC-Solar Ready	Report Page: (Page 7 of 7)
Project Address:	Date Prepared: 2023-02-17T18:06:54-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name: Ryan McIntosh	Documentation Author Signature:
Company: Silver Creek Industries, LLC	Signature Date: 02-20-2023
Address: 2830 Barrett Ave	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

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: John Starlin	Responsible Designer Signature:
Company: Silver Creek Industries, LLC	Date Signed: 02-20-2023
Address: 2830 Barrett Ave	License: 2475
City/State/Zip: Perris/CA/92571	Phone: (951) 943-53931

Registration Number: | Generated Date/Time: | Documentation Software: Energy Code Ace

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Report Version: 2022.0.000 Schema Version: rev 20220101 | Compliance ID: 90123-0223-0003 Report Generated: 2023-02-17 15:06:58

CERTIFICATE OF COMPLIANCE, SOLAR & BATTERY - SOLAR READY AREAS

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

CERTIFICATE OF COMPLIANCE FORMS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLIN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

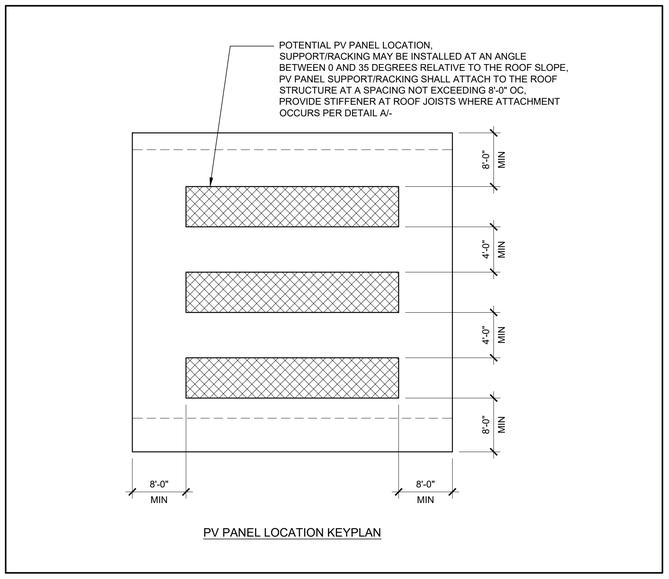
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

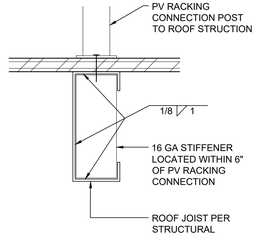
A-0.6C

NOTE:
THE PC ROOF STRUCTURE HAS BEEN DESIGNED TO SUPPORT THE MASS OF A PV SYSTEM (TOTAL ALLOWANCE IS EQUAL TO 0.6 POUNDS x THE TOTAL ROOF AREA) TO BE DESIGNED AND INSTALLED UNDER THE PROJECT SPECIFIC APPLICATION.

THE PC ROOF STRUCTURE HAS BEEN DESIGNED TO ACCOMMODATE THE POTENTIAL UPLIFT ON THE ROOF FRAMING MEMBERS WHEN THE PV SYSTEM IS INSTALLED PER THE EDGE CLEARANCE AND SPACING AS INDICATED BELOW.



PV PANEL LOCATION KEYPLAN



STIFFENER AT PV RACKING CONNECTION SCALE : 3" = 1'-0" | A

REQUIRED PV SYSTEM SIZE (kW)

CLIMATE ZONE	BUILDING SIZE								
	24'x40'	36'x40'	48'x40'	60'x40'	72'x40'	84'x40'	96'x40'	108'x40'	120'x40'
	APPROXIMATE CONDITIONED FLOOR AREA								
	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

THE PRESCRIPTIVE MINIMUM REQUIRED PV SYSTEM SIZE IS INDICATED IN THE CHART ABOVE. THE ACTUAL PV SYSTEM SHALL BE INCLUDED IN THE PROJECT SPECIFIC DRAWING PACKAGE. ALL PV SYSTEM COMPONENT, CONNECTIONS AND DETAILING SHALL BE INCLUDED IN THE PROJECT SPECIFIC DRAWING PACKAGE.

WHERE THE PROJECT SPECIFIC DRAWING PACKAGE INDICATES THAT THE BUILDING IS BEING APPROVED FOR A SPECIFIC CLIMATE ZONE THE (MINIMUM) PV SYSTEM SIZE SHALL BE AS INDICATED FOR THAT CLIMATE ZONE IN THE CHART ABOVE. WHERE THE BUILDING IS INTENDED TO BE ELIGIBLE FOR RELOCATION TO ANY CLIMATE ZONE THE (MINIMUM) PV SYSTEM SIZE SHALL BE AS INDICATED IN THE "ALL ZONES" ROW.

PV SYSTEM SIZING AND INSTALLATION REQUIREMENTS | 3

CALIFORNIA ENERGY CODE - MANDATORY MEASURES

INTERIOR LIGHTING MANDATORY MEASURES:

- ALL LIGHTING CONTROL DEVICES AND SYSTEMS, BALLASTS, AND LUMINAIRES SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.9.
- ALL LUMINAIRES SHALL BE FACTORY-LABELED PER SECTION 130.0(c).
- EACH ROOM AND AREA WITH FLOOR-TO-CEILING WALLS IN THIS BUILDING SHALL BE EQUIPPED WITH MANUAL ON AND OFF LIGHTING CONTROLS PER SECTION 130.1(a).
- ALL ROOMS AND AREAS 100 SF OR GREATER AND WITH MORE THAN 0.5 WATT PER SF OF LIGHTING LOAD WITH 2 OR MORE LUMINAIRES SHALL BE CONTROLLED WITH MULTI-LEVEL SWITCHING FOR UNIFORM REDUCTION OF LIGHTING WITHIN THE ROOM. CONTROL STEPS SHALL MEET REQUIREMENTS IN TABLE 130.1-A.
- PROVIDE VACANCY SENSOR OR PARTIAL-ON OCCUPANCY SENSOR IN ALL ROOMS.
- ALL GENERAL LIGHTING IN PRIMARY SIDELIT DAYLIT ZONES AND SKYLIT DAYLIT ZONES IN ENCLOSED SPACES WITH 120 WATTS, OR MORE IN COMBINED PRIMARY/SKYLIT ZONES AND 24 SF, OR MORE OF FENESTRATION, SHALL BE CONTROLLED WITH AUTOMATIC DAYLIGHTING CONTROLS PER SECTION 130.1(d).

OUTDOOR LIGHTING MANDATORY MEASURES:

- ALL LIGHTING CONTROL DEVICES AND SYSTEMS, BALLASTS, AND LUMINAIRES SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.9.
- ALL LUMINAIRES SHALL BE FACTORY-LABELED PER SECTION 130.0(c).
- ALL OUTDOOR LIGHTING SHALL BE OPERATED WITH CONTROLS WHICH AUTOMATICALLY TURNS OFF OUTDOOR LIGHTING WHEN DAYLIGHT IS AVAILABLE PER SECTION 130.2(c).
- ALL OUTDOOR LIGHTING SHALL BE INDEPENDENTLY CONTROLLED FROM OTHER ELECTRICAL LOADS WHICH ARE CONTROLLED BY AN AUTOMATIC SCHEDULING CONTROL PER SECTION 130.2(c).

SPACE CONDITIONING EQUIPMENT MANDATORY MEASURES:

- ALL SPACE CONDITIONING EQUIPMENT SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.2.
- MECHANICAL VENTILATION SHALL BE PROVIDED PER SECTION 120.1.
- ALL SPACE CONDITIONING CONTROLS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 120.2.
- ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 120.4.

BUILDING ENVELOPE MANDATORY MEASURES:

- ALL FENESTRATION PRODUCTS AND EXTERIOR DOORS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.6.
- ALL JOINTS, PENETRATIONS AND OTHER OPENINGS IN THE BUILDING ENVELOPE SHALL BE SEALED TO LIMIT INFILTRATION AND EXFILTRATION PER SECTION 110.7.
- ALL INSULATION, ROOFING PRODUCTS AND RADIANT BARRIERS SHALL MEET THE APPLICABLE REQUIREMENTS OF SECTION 110.8.
- THE WEIGHTED AVERAGE U-FACTOR OF THE ROOF ASSEMLY SHALL NOT EXCEED 0.075 PER SECTION 120.7(a).
- THE WEIGHTED AVERAGE U-FACTOR OF THE EXTERIOR WALL ASSEMBLY SHALL NOT EXCEED 0.110 PER SECTION 120.7(b).
- THE WEIGHTED AVERAGE U-FACTOR OF THE FLOOR ASSEMBLY SHALL NOT EXCEED 0.071 PER SECTION 120.7(c).

SOLAR READY AND ELECTRICAL DISTRIBUTION MANDATORY MEASURES:

- A SOLAR ZONE SHALL BE PROVIDED ON THE ROOF OF THE BUILDING PER SECTION 110.10(b).
- A PATHWAY SHALL BE PROVIDED FROM THE SOLAR ZONE TO AN INDICATED LOCATION SUITABLE FOR THE FUTURE INSTALLATION OF INVERTERS AND METERING EQUIPMENT PER SECTION 110.10(c).
- ELECTRICAL SERVICE METERING SHALL UTILIZE A PERMANENTLY INSTALLED METERING SYSTEM PER SECTION 130.5(a).
- SEPERATION OF ELECTRICAL CIRCUITS SHALL NOT BE REQUIRED WHERE ELECTRICAL SERVICE OR FEEDER IS RATED AT 50 KVA OR LESS PER SECTION 130.5(b).
- THE VOLTAGE DROP TO THE FARTHEST CONNECTED LOAD OR OUTLET SHALL NOT EXCEED 5% PER SECTION 130.5(c).

THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).

MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

A LISTING OF CERTIFIED ATT CAN BE FOUND AT
HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE
-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE

THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

THIS LIST OF REQUIRED ACCEPTANCE TESTS FOR THE PROJECT IS FOUND IN THE LAST PAGES OF THE ENERGY COMPLIANCE REPORTS (T24) UNDER DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE.

CALIFORNIA ENERGY CODE - MANDATORY MEASURES | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

PV SYSTEM REQUIREMENTS, ENERGY MANDATORY MEASURES & CALGREEN SPEC'S

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

CONSTRUCTION WASTE MANAGEMENT PLAN

A. DEFINITIONS
1. CONSTRUCTION AND DEMOLITION (C&D) WASTE: INCLUDES ALL NON-HAZARDOUS SOLID WASTES RESULTING FROM CONSTRUCTION, REMODELING, ALTERATIONS, REPAIR, AND DEMOLITION. INCLUDES MATERIAL THAT IS RECYCLED, REUSED, SALVAGED OR DISPOSED AS GARBAGE.
2. RECYCLING: THE PROCESS OF SORTING, CLEANING, TREATING, AND RECONSTITUTING MATERIALS FOR THE PURPOSE OF USING THE MATERIAL IN THE MANUFACTURE OF A NEW PRODUCT.
3. CO-MINGLED C&D RECYCLING: THE PROCESS OF COLLECTING MIXED RECYCLABLE MATERIALS IN ONE CONTAINER ON-SITE. THE CONTAINER IS TAKEN TO A MATERIAL RECOVERY FACILITY WHERE MATERIALS ARE SEPARATED FOR RECYCLING.

B. PERFORMANCE REQUIREMENTS
1. GENERAL: WASTE MATERIAL GENERATED DURING PROJECTS SHALL BE RECYCLED OR REUSED WHENEVER PRACTICABLE. DIVERT A MINIMUM OF 90% C&D WASTE, BY WEIGHT, FROM THE LANDFILL BY A CO-MINGLED C&D RECYCLING FACILITY.
   I. C&D WASTE MATERIALS THAT SHALL BE SALVAGED, REUSED OR RECYCLED INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:
   CONCRETE, METALS, WINDOW GLASS, WOOD, GYPSUM BOARD, CARPETING AND PAD, CEILING TILES

C. QUALITY ASSURANCE
1. PRECONSTRUCTION CONFERENCE: REVIEW METHODS AND PROCEDURES RELATED TO WASTE MANAGEMENT INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING:
   I. REVIEW AND DISCUSS WASTE MANAGEMENT PLAN INCLUDING RESPONSIBILITIES OF WASTE MANAGEMENT COORDINATOR.
   II. REVIEW REQUIREMENTS FOR DOCUMENTING QUANTITIES OF EACH TYPE OF MATERIALS THAT WILL BE SALVAGED, RECYCLED OR DISPOSED OF AS WASTE.
   III. REVIEW PROCEDURES FOR PERIODIC WASTE COLLECTION AND TRANSPORTATION TO RECYCLING AND DISPOSAL FACILITIES.
   IV. REVIEW WASTE MANAGEMENT REQUIREMENTS FOR EACH TRADE.

D. WASTE MANAGEMENT PLAN
1. INDENTIFY AND CONTRACT WITH A WASTE MANAGEMENT SERVICES PROVIDER OR ASSIGN RESPONSIBILITY TO INHOUSE WASTE MANAGEMENT PROJECT ADMINISTRATOR.
2. RESPONSIBLE PARTY SHALL DEVELOP AND PROVIDE A PLAN WHICH INCLUDES THE FOLLOWING INFORMATION:
   I. TYPES OF C&D WASTE EXPECTED TO BE GENERATED DURING DEMOLITION AND CONSTRUCTION.
   II. PROPOSED METHODS FOR C&D WASTE SALVAGE, REUSE, RECYCLING AND DISPOSAL.
   III. PROPOSED METHODS FOR SALVAGE, REUSE, RECYCLING AND DISPOSAL DURING CONSTRUCTION INCLUDING, BUT NOT LIMITED TO, ONE OR MORE OF THE FOLLOWING:
   A. REQUIRING SUBCONTRACTORS TO TAKE THEIR C&D WASTE TO A RECYCLING FACILITY,
   B. CONTRACTING WITH A RECYCLING HAULER TO HAUL RECYCLABLE C&D WASTE TO AN APPROVED RECYCLING OR MATERIAL RECOVERY FACILITY,
   C. PROCESSING AND REUSING MATERIALS ON-SITE

E. WASTE MANAGEMENT REPORT
1. WASTE MANAGEMENT SERVICES PROVIDER OR ADMINISTRATOR SHALL SUBMIT A CUMULATIVE WASTE MANAGEMENT REPORT ON A REGULAR BASIS WHICH INCLUDES:
   I. A RECORD OF THE TYPE AND QUANTITY, BY WEIGHT, OF EACH MATERIAL SALVAGED, REUSED, RECYCLED OR DISPOSED.
   II. TOTAL QUANTITY OF WASTE RECYCLED AS A PERCENTAGE OF TOTAL WASTE.
   III. DISPOSAL RECEIPTS: COPY OF RECEIPTS ISSUED BY A DISPOSAL FACILITY FOR C&D WASTE THAT IS DISPOSED IN A LANDFILL.
   IV. RECYCLING RECEIPTS: COPY OF RECEIPTS ISSUED BY APPROVED RECYCLING FACILITIES FOR COMINGLED MATERIALS. INCLUDE WEIGHT TICKETS FROM THE RECYCLING HAULER OR MATERIAL RECOVERY FACILITY AND VERIFICATION OF THE RECYCLING RATE FOR CO-MINGLED LOADS AT THE FACILITY.
   V. SALVAGED MATERIALS DOCUMENTATION: TYPES AND QUANTITIES, BY WEIGHT, FOR MATERIALS SALVAGED FOR REUSE ON SITE, SOLD OR DONATED TO A THIRD PARTY.

F. CONSTRUCTION WASTE MANAGEMENT, GENERAL REQUIREMENTS
1. USE DETAILED MATERIAL ESTIMATES TO REDUCE RISK OF UNPLARMED AND POTENTIALLY WASTEFUL CUTS.
2. TO THE GREATEST EXTENT POSSIBLE, INCLUDE IN MATERIAL PURCHASING AGREEMENTS A WASTE REDUCTION PROVISION REQUESTING THAT MATERIALS AND EQUIPMENT BE DELIVERED IN PACKAGING MADE OF RECYCLABLE MATERIAL, THAT THEY REDUCE THE AMOUNT OF PACKAGING, THAT PACKAGING BE TAKEN BACK FOR REUSE OR RECYCLING, AND TO TAKE BACK ALL UNUSED PRODUCT. INSURE THAT SUBCONTRACTORS REQUIRE THE SAME PROVISIONS IN THEIR PURCHASE AGREEMENTS.
3. CONDUCT REGULAR VISUAL INSPECTIONS OF DUMPSTERS AND RECYCLING BINS TO REMOVE CONTAMINANTS.
4. A MINIMUM OF 65% (BY WEIGHT) OF THE NON-HAZARDOUS CONSTRUCTION WASTE SHALL BE RECYCLED AND/OR SALVAGED FOR REUSE.
5. CONSTRUCTION WASTE MATERIALS SHALL BE COLLECTED IN CO-MINGLED CONTAINERS EXCEPT STEEL AND WOOD SHALL BE COLLECTED SEPARATELY.
6. CONSTRUCTION WASTE SHALL BE HAULED, SEPARATED, AND MEASURED BY CR+R (OR AN EQUAL WASTE MANAGEMENT COMPANY). A REPORT SHALL BE PROVIDED INDICATING THE DIVERSION RATE (BY VOLUME).

G. REMOVAL OF CONSTRUCTION WASTE MATERIALS, GENERAL REQUIREMENTS
1. REMOVE C&D WASTE MATERIALS FROM PROJECT SITE ON A REGULAR BASIS. DO NOT ALLOW C&D WASTE TO ACCUMULATE ON-SITE.
2. TRANSPORT C&D WASTE MATERIALS OFF PROPERTY AND LEGALLY DISPOSE OF THEM.
3. BURNING OF C&D WASTE IS NOT PERMITTED.

IEQ PLAN

A. CONSTRUCTION PHASE:
1. FILTERS
   I. ALL MECHANICAL EQUIPMENT WHICH REQUIRES A FILTER SHALL NOT BE OPERATED WITHOUT A FILTER IN PLACE.
   II. ALL FILTERS SHALL HAVE A MERV RATING OF 13 OR GREATER (2" THICK).
   III. A PRESSURE GAUGE SHALL BE INSTALLED AT ALL MECHANICAL EQUIPMENT REQUIRING FILTERS WHICH MEASURES THE PRESSURE DROP ACROSS THE FILTER AND WHICH IS MARKED TO INDICATE WHEN THE FILTER REQUIRES CLEANING OR REPLACEMENT
2. PROTECTION OF MATERIALS
   I. ALL BUILDING MATERIALS SHALL BE PROTECTED FROM WEATHER AND OTHER MOISTURE SOURCES WHEN RECOMMENDED BY THE MANUFACTURER.
   II. ANY POROUS MATERIAL WITH VISIBLE MICROBIAL GROWTH SHALL NOT BE INSTALLED.
   III. ANY OTHER MATERIAL WITH VISIBLE MICROBIAL GROWTH SHALL BE THOROUGHLY CLEAN AND DECONTAMINATED PRIOR TO INSTALLATION.
3. PROTECTION OF INTERIOR ENVIRONMENT
   I. WHENEVER POSSIBLE ALL SANDING, CUTTING GRINDING OR OTHER ACTIVITIES WHICH WILL GENERATE AIRBORNE PARTICLES SHALL BE PERFORMED AWAY FROM THE BUILDING.
   II. WHERE AIRBORNE PARTICLE GENERATING ACTIVITIES CANNOT BE PERFORMED AWAY FROM THE BUILDING PROTECTIVE MEASURES SHALL BE TAKE TO SEAL INTERIOR AREAS TO REDUCE OR ELIMINATE PARTICLE TRANSFER.
   III. ANY TEMPORARILY UNFILLED EXTERIOR OPENINGS SHALL BE PROTECTED WITH PLASTIC SHEETING, OR OTHER BARRIER, TO PREVENT THE MOISTURE AND OTHER CONTAMINANTS FROM ENTERING THE BUILDING.
   IV. ALL WELDING SHALL BE PERFORMED PRIOR TO THE INSTALLATION OF EXTERIOR WALLS WHEREVER POSSIBLE.
4. DUCT SYSTEM CONSTRUCTION
   I. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED PER THE SMACNA HV AC DUCT CONSTRUCTION STANDARDS FOR METAL AND FLEXIBLE DUCTWORK.
   II. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED PER THE SMACNA FIBROUS GLASS DUCT CONSTRUCTION STANDARDS.
   III. THE DUCT SYSTEMS SHALL BE CONSTRUCTED AND INSTALLED NFPA 90A & NFPA 90B.
   IV. ONCE INSTALLED ALL OPEN DUCTS AND REGISTERS SHALL BE PROTECTED WITH PLASTIC SHEETING, OR OTHER BARRIER, UNTIL THE BUILDING HAS BEEN COMPLETELY INSTALLED AND ENCLOSED AND THE MECHANICAL SYSTEM IS READY TO BE STARTED.
   V. ALL OIL FILM SHALL BE REMOVED FROM DUCTS PRIOR TO INSTALLATION.
   VI. ALL DUST AND DIRT SHALL BE REMOVED FROM BOTH THE INTERIOR AND EXTERIOR OF ALL DUCTS PRIOR TO INSTALLATION.
5. MATERIALS INSTALLATION
   I. NATURAL OR TEMPORARY MECHANICAL VENTILATION SHALL BE PROVIDED WHEN MATERIALS WHICH EMIT VOLATILE ORGANIC COMPOUNDS (VOC) ARE INSTALLED.
   II. NATURAL OR TEMPORARY MECHANICAL VENTILATION SHALL BE CONTINUED UNTIL SUCH A TIME THAT THE VOC EMISSIONS HAVE DISSIPATED.
   III. ANY TEMPORARY VENTILATION SHALL BE EXHAUSTED TO THE EXTERIOR OF THE BUILDING.
   IV. WHEN TEMPORARY MECHANICAL VENTILATION IS USED A CONSTRUCTION FILTER SHALL BE INSTALLED WITH MERV RATING OF NOT LESS THAN 13 (2" THICK). THE CONSTRUCTION FILTER SHALL BE REPLACED PRIOR TO OCCUPANCY.
   V. MATERIALS INSTALLATION SHALL BE SEQUENCED WHENEVER POSSIBLE TO ALLOW FOR THE INSTALLATION OF VOC EMITTING MATERIALS PRIOR TO THE INSTALLATION OF POROUS AND FIBROUS MATERIALS.
   VI. MATERIALS WHICH EMIT A SIGNIFICANT AMOUNT OF VOCS OR ODORS SHALL BE STORED IN A MANNER WHICH ALLOWS FOR OFF-GASSING, IN A DRY AND WELL VENTILATION AREA, PRIOR TO INSTALLATION.
   VII. CARPETED SURFACES SHALL BE VACUUMED PER THE CRI/GREEN LABEL VACUUM CLEANER PROGRAM REQUIREMENTS AT COMPLETION OF CONSTRUCTION AND PRIOR TO OCCUPANCY.

LOW EMITTING MATERIALS + MOISTURE MANAGEMENT

SEALANTS AND CAULKS
ALL ADHESIVES, SEALANTS AND CAULKS APPLIED IN THE PROJECT'S INTERIOR SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.1. PRODUCTS IN THIS CATEGORY INCLUDE BUT ARE NOT LIMITED TO CARPET, RESILIENT AND WOOD FLOORING ADHESIVES; BASE COVE ADHESIVES; CERAMIC TILE ADHESIVES; DRYWALL AND PANEL ADHESIVES; AEROSOL ADHESIVES; ADHESIVE PRIMERS; ACOUSTICAL SEALANTS; FIRE STOP SEALANTS; HVAC DUCT SEALANTS, SEALANT PRIMERS; AND CAULKS.

PAINTS & COATINGS
ALL PAINTS AND ARCHITECTURAL COATINGS APPLIED IN THE PROJECT'S INTERIOR SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.3. PRODUCTS IN THIS CATEGORY INCLUDE BUT ARE NOT LIMITED TO SEALERS, STAINS, CLEAR WOOD FINISHES, FLOOR SEALERS AND COATINGS, WATERPROOFING SEALERS, PRIMERS, FLAT PAINTS AND COATINGS, NON-FLAT PAINTS AND COATINGS, AND RUST PREVENTATIVE COATINGS.

RESILIENT FLOORING SYSTEMS
ALL FLOORING SYSTEMS SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.6.

COMPOSITE WOOD
ALL OF THE COMPOSITE WOOD PRODUCTS INSTALLED IN THE PROJECT SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.5. COMPOSITE WOOD PRODUCTS IN THIS CATEGORY ARE DEFINED IN THE CALIFORNIA AIR RESOURCES BOARD (CARE) AIRBORNE TOXIC CONTROL MEASURE (ATCM) TO REDUCE FORMALDEHYDE EMISSIONS FROM COMPOSITE WOOD PRODUCTS (SECTONS 93120-93120.12, TITLE 17, CALIFORNIA CODE OF REGULATIONS. THE AFFECTED PRODUCTS INCLUDE HARDWOOD PLYWOOD, PLYWOOD WITH DECORATIVE SOFTWOOD VENEER, LAMINATED PRODUCTS WITH A COMPOSITE WOOD CORE OR PLATFORM, PARTICLEBOARD, MEDIUM DENSITY FIBERBOARD (MDF), AND FINISHED GOODS FABRICATED FROM THESE PRODUCTS.

CEILING & WALL SYSTEMS
ALL CEILING AND WALL SYSTEMS INSTALLED IN THE PROJECT'S INTERIOR TOTALING 90% OR MORE OF THE TOTAL AREAS OF SUCH PRODUCTS SHALL MEET THESE REQUIREMENTS. CEILING AND WALL SYSTEMS INCLUDE BUT ARE NOT LIMITED TO CEILING INSULATION INSTALLED WITHIN THE STRUCTURAL ENVELOP, WALL INSULATION, ACOUSTICAL CEILING PANELS, GYPSUM BOARD WALL PANELS, TACKABLE WALL PANELS, AND WALL COVERINGS. CERAMIC TILE AND OTHER ORGANIC-FREE METAL- OR MINERAL-BASED WALL COVERINGS ARE AVAILABLE FOR CREDIT WITHOUT ANY TESTING REQUIREMENTS. SITE APPLIED ADHESIVES AND SEALANTS AND SITE APPLIED PAINTS AND COATINGS ASSOCIATED WITH CEILING AND WALL SYSTEMS ARE TREATED UNDER OPTIONS 1 AND 2, RESPECTIVELY. CEILING AND WALL SYSTEMS SHALL BE TESTED AND EVALUATED FOR EMISSIONS OF VOCS OF CONCERN WITH RESPECT TO CHRONIC INHALATION EXPOSURES FOLLOWING THE SPECIFICATIONS OF THE CDPH STANDARD METHOD V1.1. THE SEPARATE COMPONENTS OR DISTINCT LAYERS OF THESE SYSTEMS SHALL BE MODELED TO THE STANDARD PRACTICE SCHOOL CLASSROOM USING THE CLASSROOM CEILING AREA AND/OR WALL AREA AS APPROPRIATE. FOR SYSTEMS CONSISTING OF MORE THAN ONE DISTINCT LAYER (E.G., WALLS COMPRISED OF INSULATION, WALL PANEL AND WALL COVERING), ALL LAYERS SHALL INDIVIDUALLY MEET THE REQUIREMENTS OF THE STANDARD PRACTICE.

CARPET SYSTEMS
ALL CARPET SYSTEMS SHALL MEET THE REQUIREMENTS OF THE 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.504.4.4. ALL CARPET SHALL BE PER THE CARPET AND RUG INSTITUTE'S GREEN LABEL PLUS PROGRAM OR SHALL BE LISTED IN THE CHPS HIGH PERFORMANCE PRODUCT DATABASE. ALL CARPET PAD SHALL BE PER THE CARPET AND RUG INSTITUTE GREEN LABEL PROGRAM.

PRIMARY EXTERIOR DOORS
ALL WALL AND FLOOR SURFACES WITHIN 24" OF A PRIMARY EXTERIOR DOOR SHALL BE NON-ABSORBANT. SEE DETAIL A/- FOR TYPICAL FLOOR AND WALL FINISH DIAGRAM.

ALL PRIMARY EXTERIOR DOORS SHALL BE PROTECTED BY AN OVERHANG, AWNING OR SIMILAR ELEMENT NOT LESS THAN 48" IN DEPTH.

OUTDOOR AIR QUALITY

HVAC, REFRIGERATION AND FIRE SUPPRESSION SYSTEMS SHALL NOT CONTAIN CFCs OR HALONS.

ACOUSTICAL CONTROL

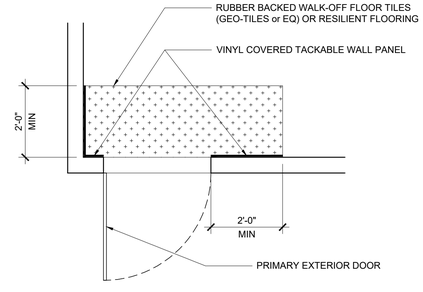
INTERIOR WALLS BETWEEN CLASSROOMS AND ADJACENT SPACES (WHERE OCCURS) SHALL BE FULL HEIGHT TO THE UNDERSIDE OF THE STRUCTURE ABOVE AND SHALL HAVE A STC RATING OF NOT LESS THAN 40. ONE OF THE FOLLOWING ASSEMBLY SHALL BE USED:

☐ 2x4 (MIN) STUDS @ 24" O.C. WITH 1 LAYER OF 1/2" GYP BD. EA SIDE OF WALL & 3 1/2" BATT INSULATION, ADDITIONAL LAYERS OF FINISH MATERIAL MAY BE INSTALLED OVER THE GYP BD., GYP BD SHALL BE FASTENED TO THE STUDS w/ 1-1/4" TYPE W SCREWS AT 12" OC, JOINTS SHALL BE STAGGERED (DESIGN #NGC 2012065)(STC-42)

☐ 2x4 (MIN) STUDS @ 16" O.C. WITH 2 LAYER OF 5/8" TYPE "X" GYP BD. EA SIDE OF WALL & 3 1/2" BATT INSULATION, ADDITIONAL LAYERS OF FINISH MATERIAL MAY BE INSTALLED OVER THE GYP BD., BASE LAYER OF GYP BD SHALL BE FASTENED TO THE STUDS w/1-7/8" 6d COATED NAILS AT 6" OC, FACE LAYER OF GYP BD SHALL BE FASTENED TO THE STUDS w/2-3/8" 8d COATED NAILS AT 8" OC, VERTICAL JOINTS SHALL OCCUR OVER A STUD, STAGGER JOINTS EACH LAYER AND EACH SIDE (DESIGN #NGC 2364) (STC-41)

WHEN THE PRE-CHECKED BUILDING IS SITE ADAPTED, THE BUILDINGS CONSTRUCTED PER THIS PC SHALL MEET THE REQUIREMENTS OF THE 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE, CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 11, SECTION 5.507.4. THE ARCHITECT OF RECORD FOR THE PROJECT SITE THE PC BUILDING IS TO BE INSTALLED UPON SHALL IDENTIFY ANY ADDITIONAL NOISE TRANSMISSION MEASURES WHICH ARE REQUIRED BASED UPON THE NOISE LEVEL PRESENT AT THE PROJECT SITE. IF NECESSARY EXTERIOR WALL, ROOF AND WINDOW ASSEMBLIES MEETING THE STC AND OR OITC RATINGS SPECIFIED IN SECTIONS 5.507.4.1 + 5.507.4.1.1 SHALL BE UTILIZED.

WHEN THE PC BUILDING IS PLACED ADJACENT TO ANOTHER BUILDING, A SEPARATION (AIR GAP) OF NOT LESS THAN 6" SHALL BE PROVIDED.

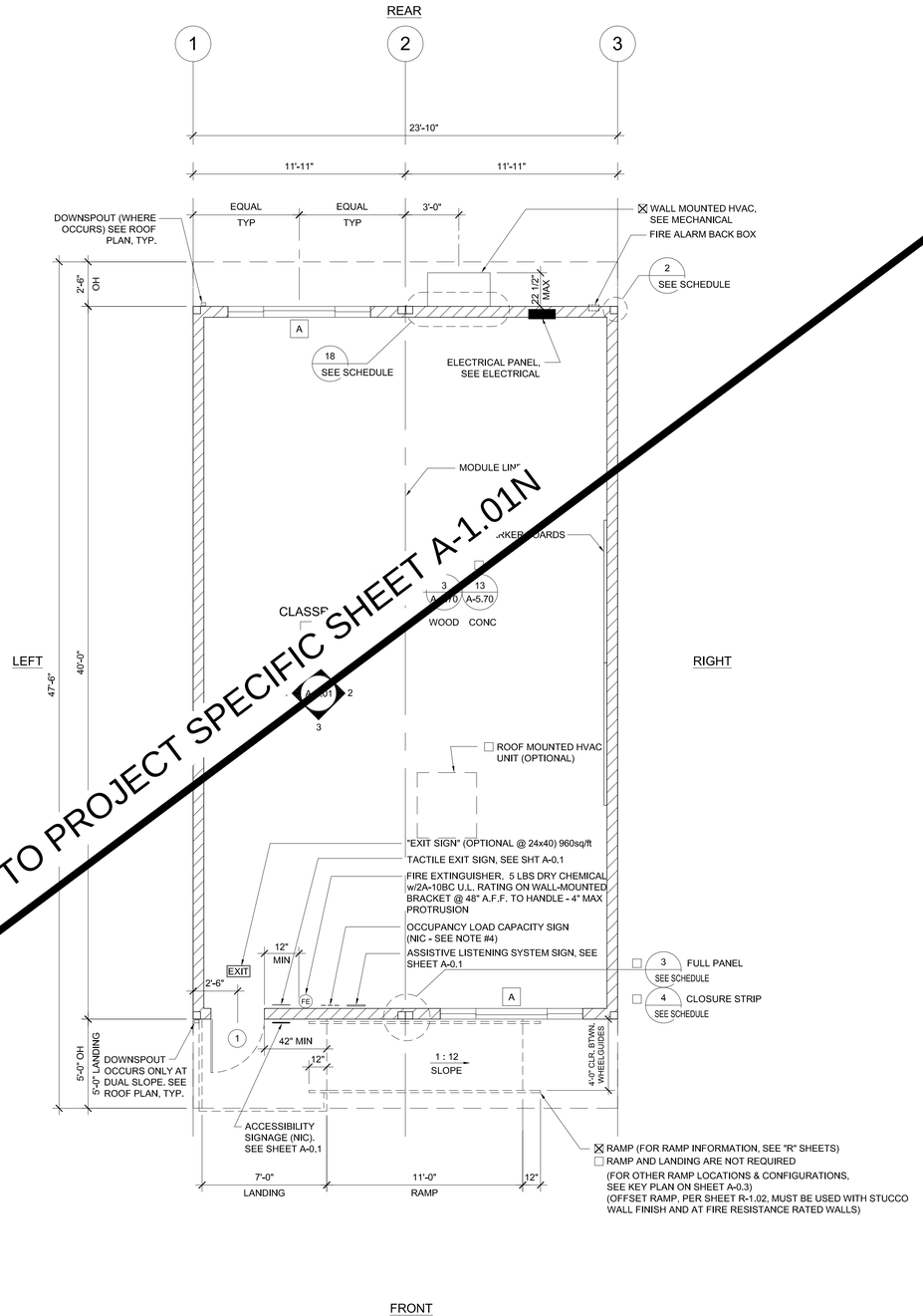


A PRIMARY EXTERIOR WALL FINISH DIAGRAM

CALGREEN SPECIFICATIONS | 2

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSI



NOTES

1. PLACE (2) PERMANENT METAL IDENTIFICATION LABELS ON EACH MODULE. PER IR 16-1 (4.1)
   (1) LABEL AT REAR EXTERIOR AND (1) LABEL ABOVE CEILING LINE AT INTERIOR FRAME. LABELS WILL BE MECHANICALLY FASTENED AND SHOW THE DSA APPLICATION NUMBER, MANUFACTURER'S NAME AND SERIAL NUMBER, DESIGN LIVE LOAD FOR ROOF AND FLOOR FRAMING, REQUIRED PV SYSTEM CAPACITY (kW), WIND SPEED, EXPOSURE CATEGORY, AND Kzt = 1.0 2022 CBC, DESIGN CLIMATE ZONE, SEISMIC PARAMETER = S_S
2. VINYL TACKBOARD INTERIOR FINISH SHALL COMPLY WITH CBC SECTION 803.7
3. LOCATIONS OF DOORS AND WINDOWS MAY VARY PER JOB. (IF THE NUMBER OF WINDOWS INCREASE, A NEW TITLE 24 SHALL BE SUBMITTED TO DSA)
4. POSTING OF OCCUPANCY LOAD SIGNS SHALL COMPLY WITH CALIFORNIA CODE OF REGULATIONS (CCR) TITLES 19 ART. 3.30 (NOT IN MODULAR MANUFACTURER'S SCOPE OF WORK
5. IF BUILDING IS TO BE RELOCATED, SEE RELOCATION SHEETS
6. FOR BUILDINGS THAT ARE MANUFACTURED IN-PLANT, THE IN-PLANT INSPECTOR IS TO ATTACH A VERIFIED REPORT INSIDE EACH BUILDING, WHICH SHALL INDICATE THE MANUFACTURER'S NAME AND THE SERIAL NUMBER FOR EACH BUILDING MODULE AS WELL AS THE DSA FILE AND APPLICATION NUMBES, PER IR 16-1.13 (2.1)
7. ALL FIXTURE HEIGHTS TO BE VERIFIED PRIOR TO CONSTRUCTION
8. INTERIOR WALLS MAY BE ADDED TO FLOOR PLAN. SEE STRUCTURAL
9. FOR CASEWORK, TEACHER WALL, OR TV BLOCKING OPTIONS, SEE SHEET A-5.80
10. INTERIOR WALLS BETWEEN CLASSROOMS AND ADJACENT SPACES (WHERE OCCURS) SHALL BE FULL HEIGHT TO THE UNDERSIDE OF THE STRUCTURE ABOVE AND SHALL HAVE A STC RATING OF NOT LESS THAN 40. SEE SHEET A-0.7 FOR WALL ASSEMBLY
11. TOILET ROOM FLOORING AND BASE SHALL BE INSTALLED PER 10/A-5.70 IN LIEU OF PROVIDING A CURB (IR 23-2)
12. DOORS SHALL PROVIDED WITH MINIMUM 4' CANOPY OR ROOF OVERHANG

DETAIL SCHEDULE

FINISH:	SHEET #:
☐ SIDING OVER WOOD STUDS	A-5.50
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.51
☐ SIDING OVER STEEL STUDS	A-5.60
☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.61

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
☐ 1 HOUR - SIDING OVER WOOD STUDS	A-5.52
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS	A-5.53
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS	A-5.63

WALL LEGEND

- NOMINAL 4" WALL STUD ☐
- NOMINAL 6" WALL STUD ☐
- NOMINAL 8" WALL STUD ☐
- (A) WINDOW PER SCHEDULE SHEET A-0.2
- (#) DOOR PER SCHEDULE SHEET A-0.2

NOTES:
ALL EXTERIOR WALL FRAMING SHALL BE 2x6 (OR 6" NOMINAL STEEL STUD) (MIN). EXCEPTION: AT UNCONDITIONED RESTROOM MODULES.

2x4 (OR 4" NOMINAL STEEL STUD) WALL FRAMING NOT ALLOWED WITH PLASTER WALL FINISH AT UNCONDITIONED RESTROOM MODULES WITH WALLS OVER 9'-0" IN HEIGHT.

THIS PLAN MAY INCLUDE THE VARIOUS EXERCISABLE OPTIONS APPLICABLE TO THE PC SUCH AS PARTITION WALLS, PLUMBING, ETC. FOR REFERENCE PURPOSES. OPTIONS CAN BE APPLIED AS REQUIRED TO THE PC'S BUILDING SIZES.

SYMBOLS LEGEND

- 60" CIRCLE CLEAR SPACE
- 30"x48" CLEAR SPACE

MARKING & IDENTIFICATION OF FIRE RATED CONSTRUCTION. (CBC 703.5)
FIRE WALLS, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL REQUIRED TO HAVE PROTECTED OPENINGS OR PENETRATIONS SHALL BE EFFECTIVELY AND PERMANENTLY IDENTIFIED WITH SIGNS OR STENCILING. SUCH IDENTIFICATION SHALL:

1. BE LOCATED IN ACCESSIBLE CONCEALED FLOOR, FLOOR-CEILING OR ATTIC SPACES;
2. BE LOCATED WITHIN 15 FEET OF THE END OF EACH WALL AND AT INTERVALS NOT EXCEEDING 30 FEET MEASURED HORIZONTALLY ALONG THE WALL OR PARTITION; AND
3. INCLUDE LETTERING NOT LESS THAN 3" IN HEIGHT AND A MIN. 3/8" STROKE IN A CONTRASTING COLOR INCORPORATING THE SUGGESTED WORDING. "FIRE AND/OR SMOKE BARRIER - PROTECT ALL OPENINGS" OR OTHER SIMILAR WORDING.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

FLOOR PLAN
24' x 40'

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

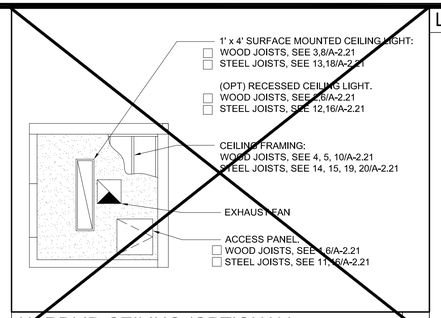
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

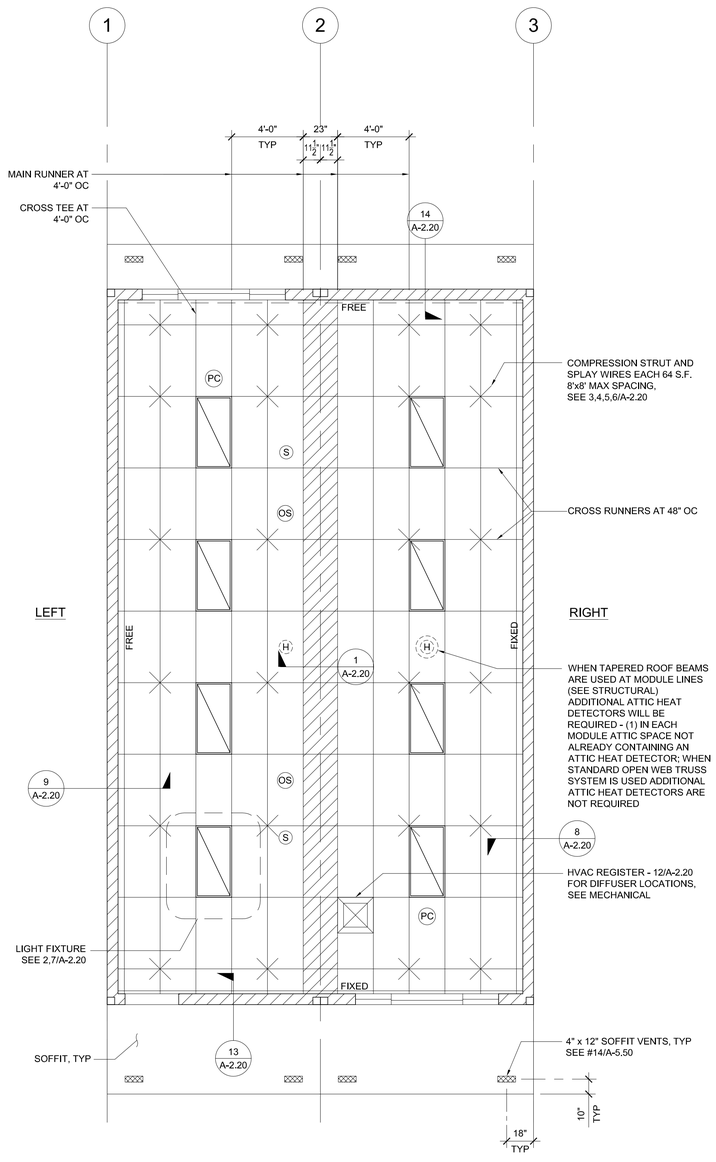
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER
A-1.01



HARDLID CEILING (OPTIONAL) SCALE: 1/4" = 1'-0" | 1A

REAR



NOTE:
CEILING TO BE 8'-6" AFF (UNO)

FRONT

REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" | 1

LEGEND

- T-BAR CEILING
- FIELD INSTALLED PANEL AT MODULE LINE
- 2' x 4' RECESSED LIGHT FIXTURE, HATCHING DENOTES EMERGENCY LIGHT FIXTURE (SEE ELECTRICAL PLAN)
- "OPTIONAL" 1' x 4' RECESSED LIGHT FIXTURE
- SPLAY WIRE
- RETURN AIR REGISTER
- SUPPLY AIR REGISTER
- CEILING EXHAUST FAN
- (OS) CEILING MOUNTED OCCUPANCY SENSOR
- (PC) CEILING MOUNTED PHOTOCELL
- (S) CEILING MOUNTED SMOKE DETECTOR
- (H) ATTIC MOUNTED HEAT DETECTOR

NOTE:
FOR ALL REFLECTED CEILING NOTES SEE SHEET A-0.1

T-BAR SCHEDULE

ARMSTRONG PART NUMBERS ICC-ES ESR-1308

MAIN RUNNER: 7301
4' CROSS TEE: XL7341
2' CROSS TEE: XL7328

STANDARD 7/8" WALL ANGLE WITH BERC-2 CLIP (ICC #ESR-1308) 2"
WALL ANGLE: 7810 (OPTIONAL)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024
PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

REFLECTED CEILING PLAN
24' x 40'

REVISIONS
1.
2.
3.
4.
5.

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023
PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

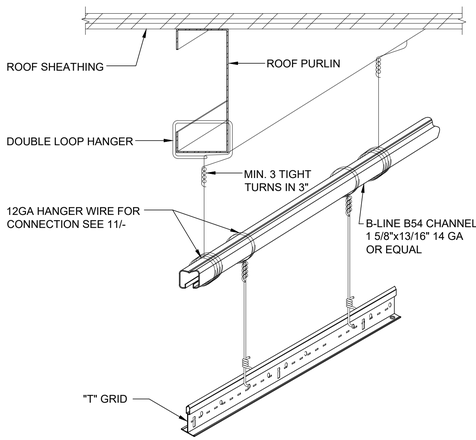
REGISTERED PROFESSIONAL ENGINEER JOHN W STARUN 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

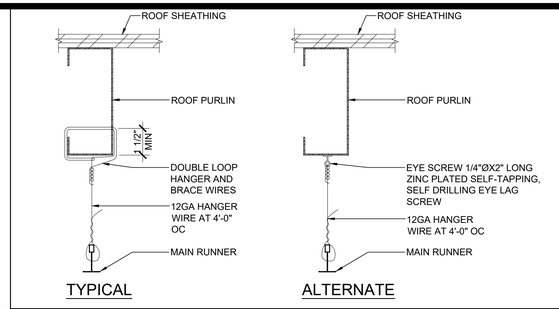
P.C. SHEET NUMBER

A-2.01

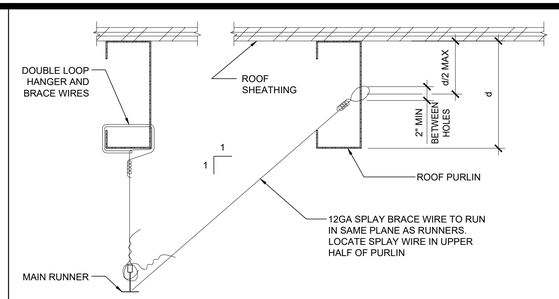


NOTE:
LOCATION MAY VARY (SEE NOTE "C" ON SHEET A-0.1)

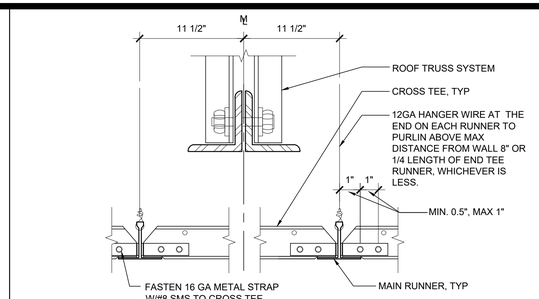
TRAPEZE DETAIL 17



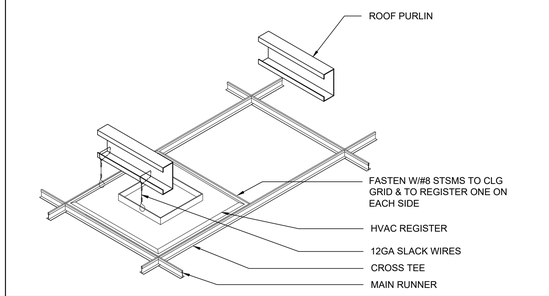
HANGER WIRE DETAIL SCALE : 3"=1'-0" 11



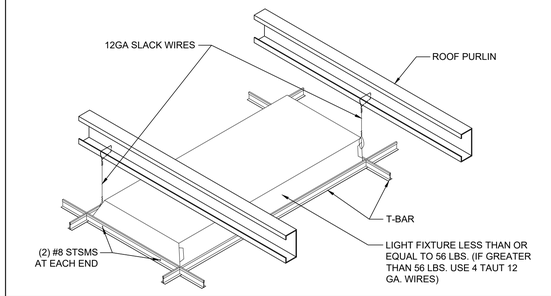
SPLAY BRACING WIRE SCALE : 3"=1'-0" 6



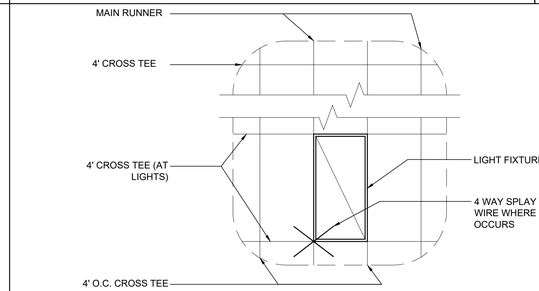
GRID AT MODLINE SCALE : 3"=1'-0" 1



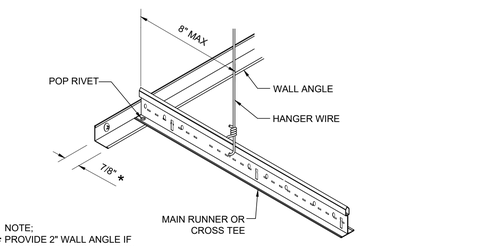
HVAC REGISTER MOUNTING SCALE : NTS 12



LIGHT FIXTURE MOUNTING SCALE : NTS 7

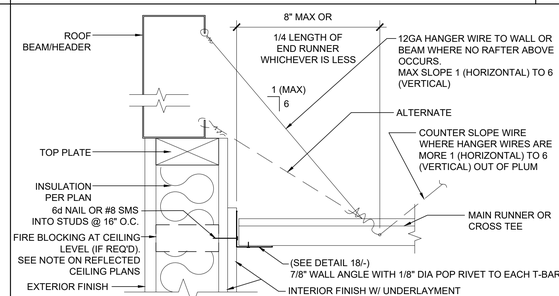


4' CROSS TEE AT LIGHTS SCALE : 3/8"=1'-0" 2

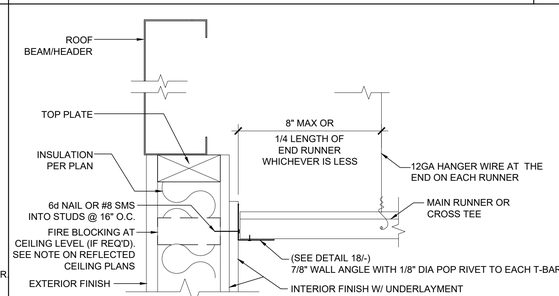


NOTE:
* PROVIDE 2" WALL ANGLE IF BERC2 CLIP IS NOT USED ON FREE SIDES

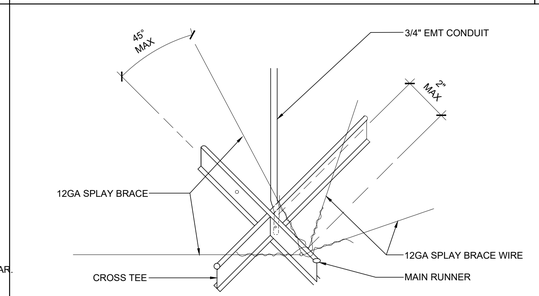
FIXED SIDE SCALE : NTS 18



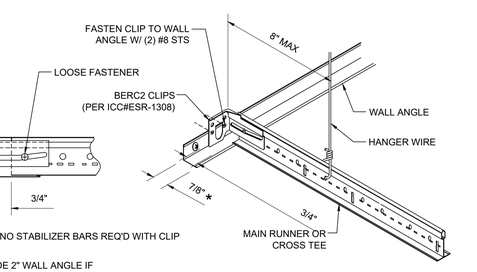
HANGER WIRE - FIXED SIDE (ENDWALL) SCALE : 3"=1'-0" 13



HANGER WIRE - FIXED SIDE (SIDEWALL) SCALE : 3"=1'-0" 8



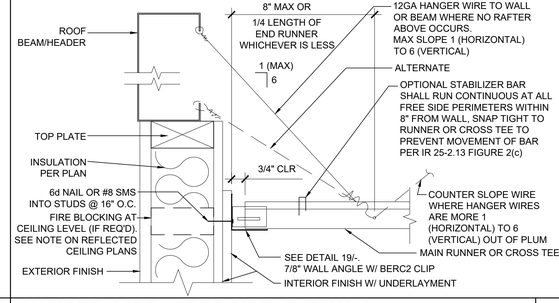
SEISMIC SPLAY - 4 WAY SCALE : NTS 3



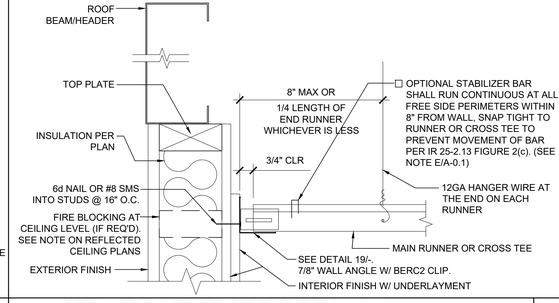
NOTE: NO STABILIZER BARS REQ'D WITH CLIP

NOTE;
* PROVIDE 2" WALL ANGLE IF BERC2 CLIP IS NOT USED

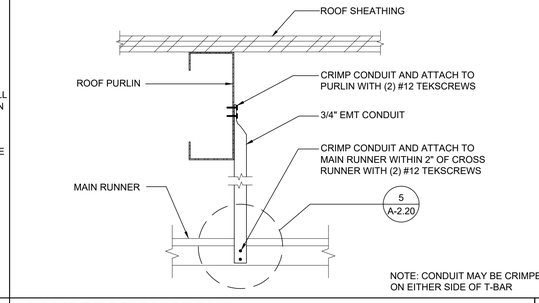
FREE SIDE SCALE : NTS 19



HANGER WIRE - FREE SIDE (ENDWALL) SCALE : 3"=1'-0" 14

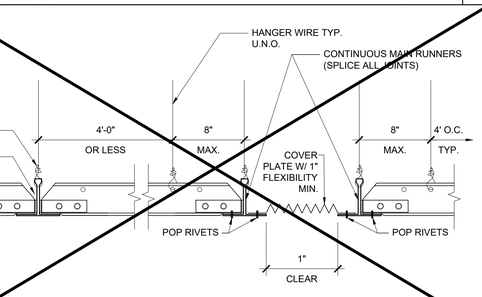


HANGER WIRE - FREE SIDE (SIDEWALL) SCALE : 3"=1'-0" 9

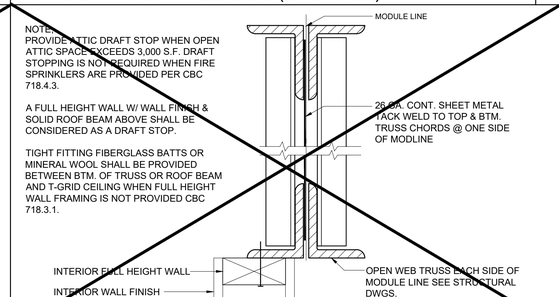


NOTE: CONDUIT MAY BE CRIMPED ON EITHER SIDE OF T-BAR

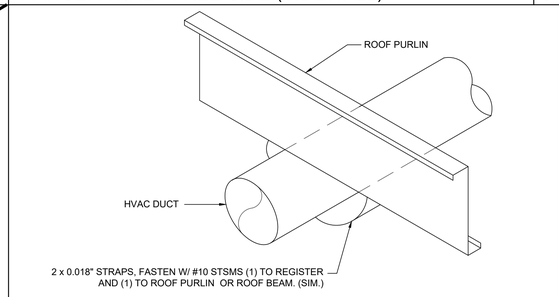
COMPRESSION STRUT SCALE : 3"=1'-0" 4



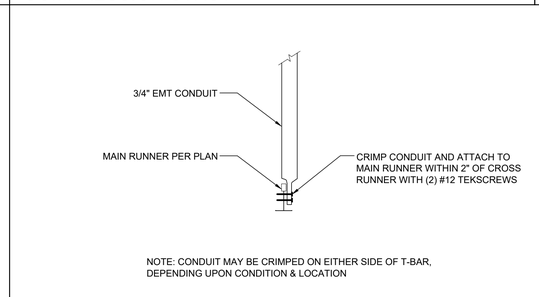
GRID SEISMIC SEPARATION JOINT SCALE : 3"=1'-0" 20



ATTIC DRAFT STOP SCALE : 3"=1'-0" 15



HVAC DUCTWORK MOUNTING SCALE: NTS 10



NOTE: CONDUIT MAY BE CRIMPED ON EITHER SIDE OF T-BAR, DEPENDING UPON CONDITION & LOCATION

COMPRESSION STRUT SCALE : 3"=1'-0" 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

CEILING DETAILS
T-GRID

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023
PC STATE AGENCY APPROVAL~~

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

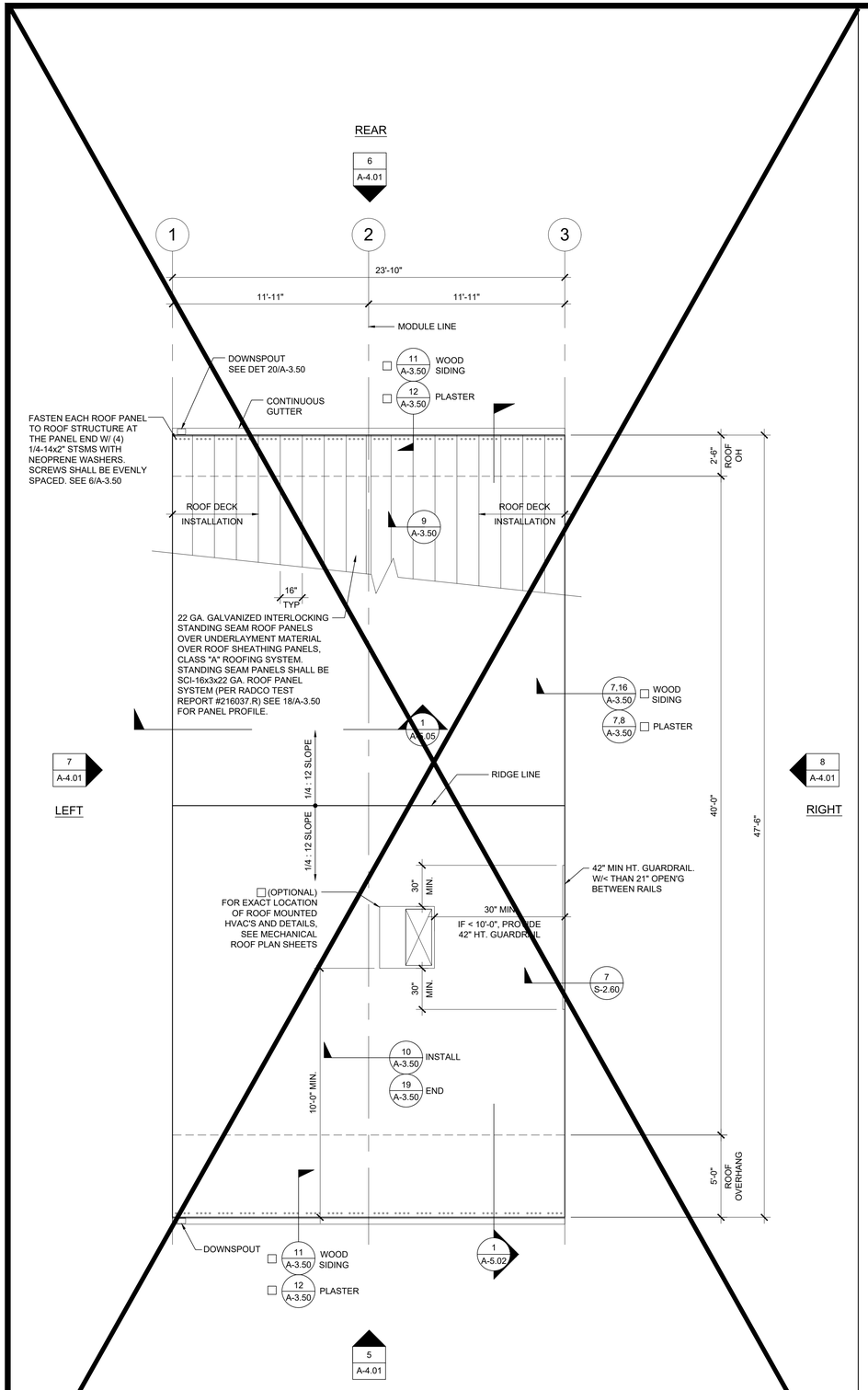
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

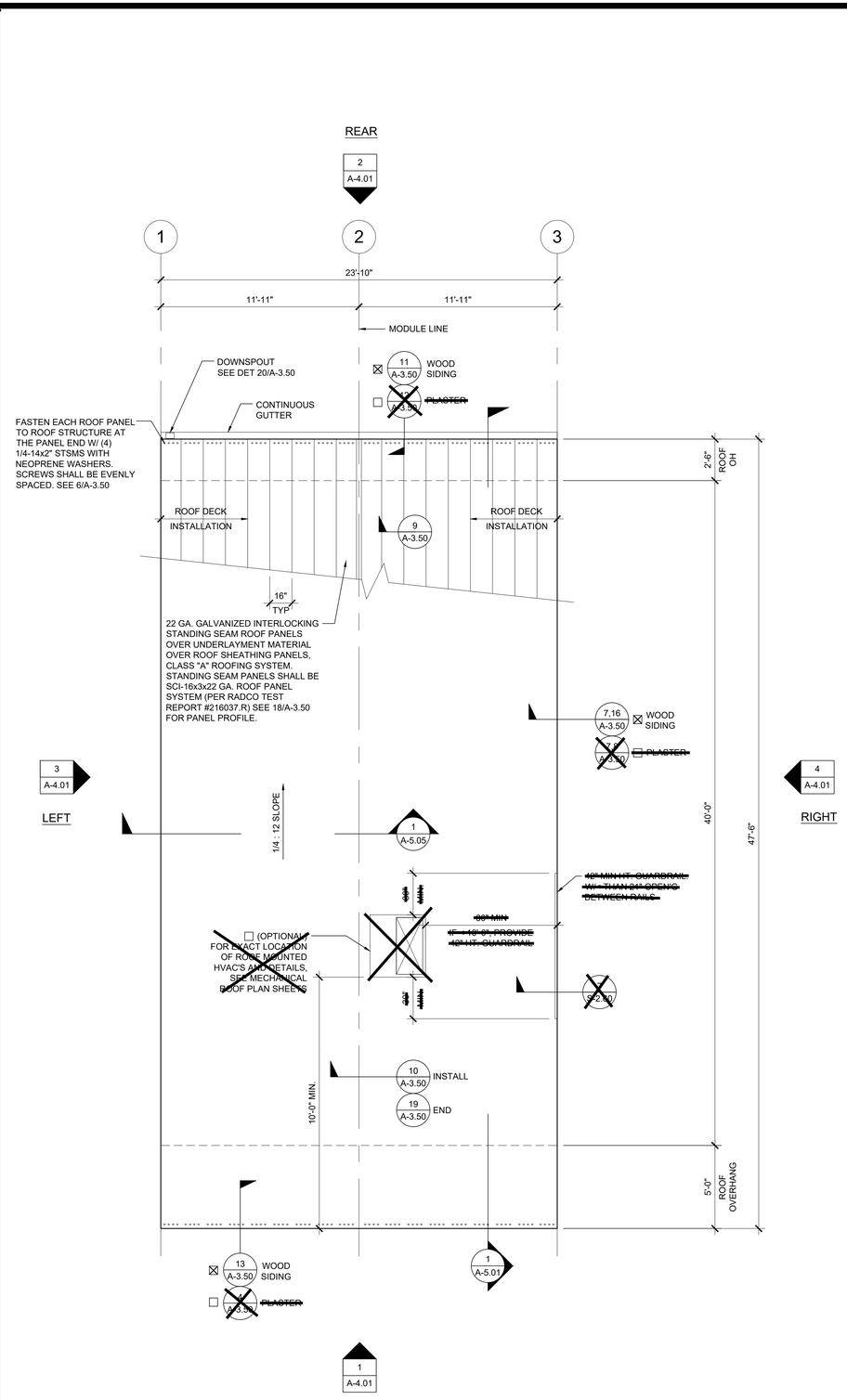
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

A-2.20



ROOF PLAN - METAL DECK - DUAL SLOPE SCALE: 1/4" = 1'-0" 2

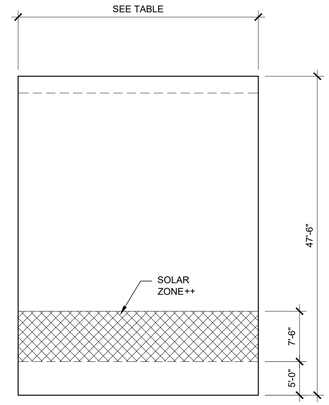


ROOF PLAN - METAL DECK - MONO SLOPE SCALE: 1/4" = 1'-0" 1

NOTES

1. BUILDINGS SHALL HAVE ROOF COVERINGS AS SPECIFIED IN CBC TABLE 1505.1 - CLASS A.
2. LOCATIONS OF DRAFTSTOP AND/OR FULL HEIGHT PARTITIONS AS REQUIRED PER CBC-718.4.3 SHALL BE SHOWN ON PROJECT SPECIFIC PLANS LOCATED AT MODULE LINES.
3. ALL ROOFTOP EQUIPMENT THAT REQUIRES SERVICE & ROOF ACCESS HATCHES MUST BE A MIN. OF 10'-0" AWAY FROM ALL ROOF EDGES TO OPENING EDGES. OR A GUARDRAIL SHALL BE PROVIDED PER 7/S-2.60
4. SEE DETAIL "A" (THIS SHEET) FOR ROOF SYSTEM UPLIFT CAPACITY

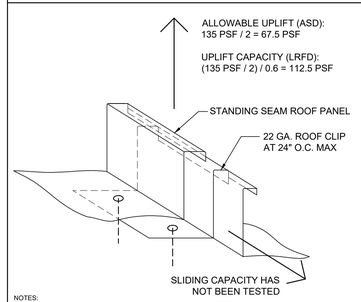
SOLAR ZONE



KEYPLAN

SOLAR ZONE CALCULATION TABLE		
BUILDING SIZE	REQUIRED SOLAR ZONE	PROVIDED SOLAR ZONE
24'-0" x 40'-0"	172 SF	178 SF
~~40'-0" x 40'-0"~~	~~250 SF~~	~~267 SF~~
~~40'-0" x 40'-0"~~	~~244 SF~~	~~256 SF~~
~~60'-0" x 40'-0"~~	~~430 SF~~	~~445 SF~~
~~72'-0" x 40'-0"~~	~~516 SF~~	~~534 SF~~
~~84'-0" x 40'-0"~~	~~602 SF~~	~~620 SF~~
~~80'-0" x 40'-0"~~	~~580 SF~~	~~712 SF~~
~~108'-0" x 40'-0"~~	~~774 SF~~	~~801 SF~~
~~120'-0" x 40'-0"~~	~~860 SF~~	~~890 SF~~
ROOF AREA PER MODULE	=	567 SF
REQUIRED SOLAR ZONE	=	86 SF
PROVIDED SOLAR ZONE	=	89 SF

++ NOTE: ACTUAL SOLAR ZONE LOCATION AND SIZE MAY VARY. MINIMUM ZONE AREA SHALL BE PER THE TABLE ABOVE.



NOTES:

1. THE ALLOWABLE UPLIFT VALUES PROVIDED ABOVE ARE BASED ON TESTING PERFORMED IN ACCORDANCE WITH UL STANDARD 1897 (UPLIFT TEST FOR ROOF COVERING SYSTEM).

   TEST REPORT:
   TI RADCO (RADCO, A TWINING COMPANY)
   REPORT # 216037.R
   DATE: 6.22.2021

2. THE ULTIMATE LOAD DETERMINED BY TESTING = 135 PSF.
   A SAFETY FACTOR OF 2.0 HAS BEEN USED IN CALCULATING THE ALLOWABLE VALUES.

3. PV PANEL ATTACHMENT OPTION IS NOT INCLUDED WITHIN THIS PC.

4. THE CLIP SLIDING CAPACITY HAS NOT BEEN TESTED. IF PV PANELS ARE INSTALLED THE SLIDING CAPACITY OF THE ROOF PANEL SYSTEM MUST BE DETERMINED BY FIELD TESTING FOR ROOF SLOPES OF NOT LESS THAN 7 DEGREES.
   EXCEPTION: WHERE THE SLIDING LOAD FOR SEISMIC AND WIND FORCES ON THE PV PANEL SYSTEM IS LESS THAN THE DISPLACED DESIGN LIVE LOAD SLIDING COMPONENT PER DSA IR 16-8 (SECTION 5.1.1.2).

5. CONVERSION FROM ALLOWABLE UPLIFT (ASD) TO UPLIFT CAPACITY (LRFD) IS BASED ON ASD WIND PRESSURE = 0.6 x (LFRD WIND PRESSURE).

ROOF SYSTEM CAPACITY SCALE: NTS A

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
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DATE: 2/27/2024
PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ROOF PLAN
24'x40' - METAL DECK
MONO OR DUAL SLOPE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

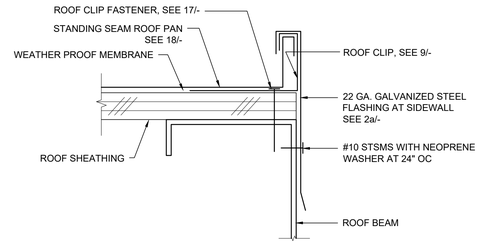
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

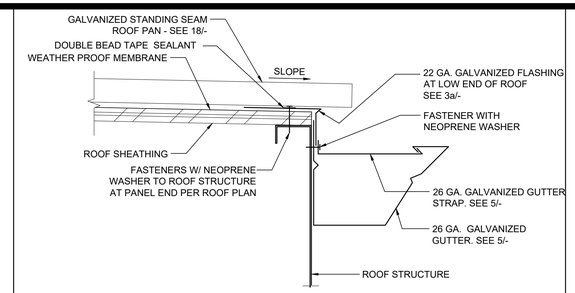
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
A-3.01



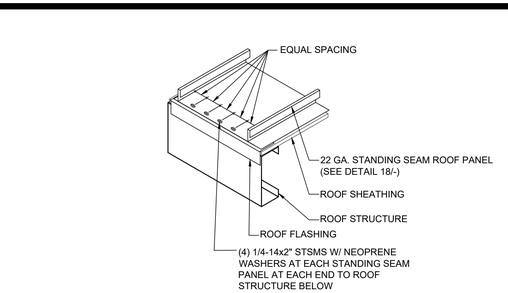
REF: A3.01, ~~A3.02, A3.03, A3.04~~

ROOF FLASHING AT SIDEWALL — SCALE : 6"=1'-0" — 16



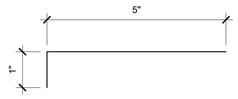
REF: A3.01, ~~A3.02, A3.03, A3.04~~

GUTTER AT ROOF FASCIA BEAM — SCALE : 3"=1'-0" — 11



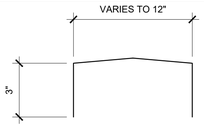
REF: A3.50

STANDING SEAM PANEL AT ENDS — SCALE : NTS — 6



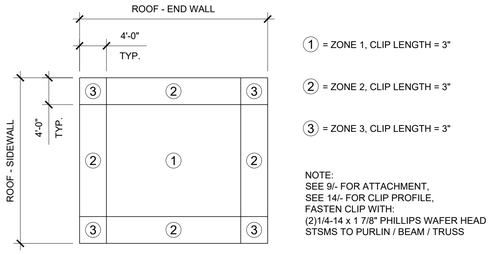
REF: A3.50

FLASHING AT MODULE LINE WALL — SCALE : 6"=1'-0" — 1a



REF: A3.50

0.018" ROOF CAP AT MODULE LINE — SCALE : 6"=1'-0" — 1b



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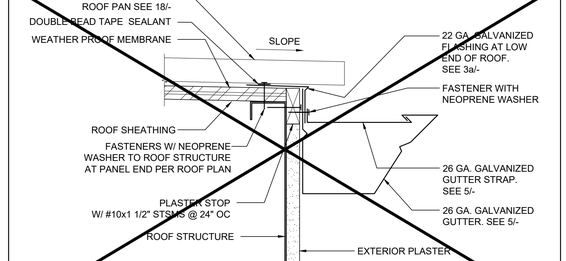
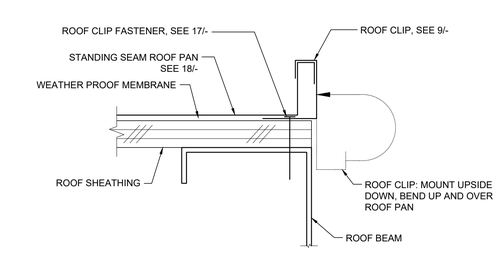
ROOF CLIP ZONES — NTS — 17



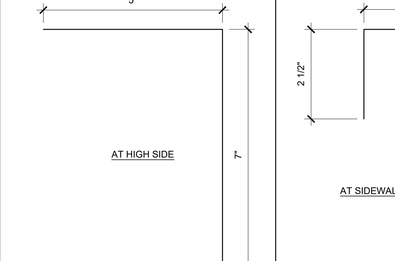
REF: A3.01, A3.02, A3.03, A3.04

GUTTER AT ROOF FASCIA BEAM — SCALE : 3"=1'-0" — 12



REF: A3.01, ~~A3.02, A3.03, A3.04~~

STARTER ROOF PAN CONNECTION — SCALE : 6"=1'-0" — 7



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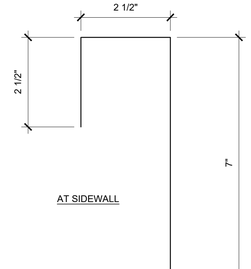
ROOF FLASHING — SCALE : 6"=1'-0" — 2b



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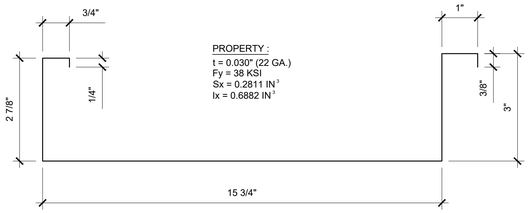
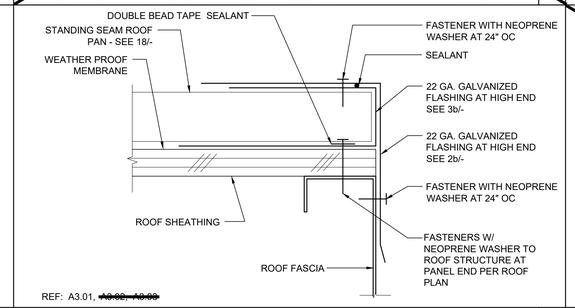
ROOF FLASHING — SCALE : 6"=1'-0" — 2a



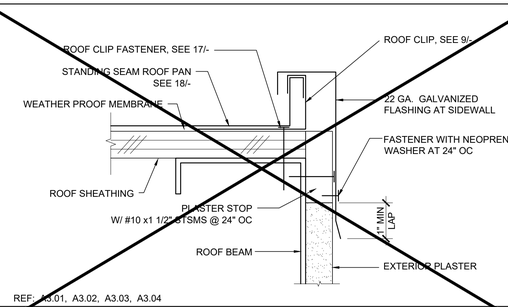
REF: A3.50

ROOF DECK PROFILE — SCALE : NTS — 18



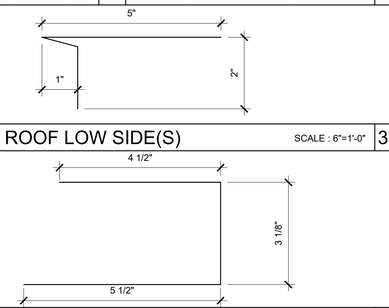
REF: A3.01, ~~A3.02, A3.03~~

ROOF FLASHING AT HIGH SIDE — SCALE : 6"=1'-0" — 13



REF: A3.01, A3.02, A3.03, A3.04

ROOF FLASHING AT SIDEWALL — SCALE : 6"=1'-0" — 8

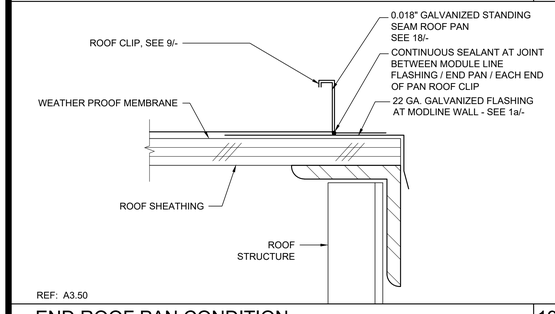


REF: A3.50

FLASHING AT ROOF LOW SIDE(S) — SCALE : 6"=1'-0" — 3a

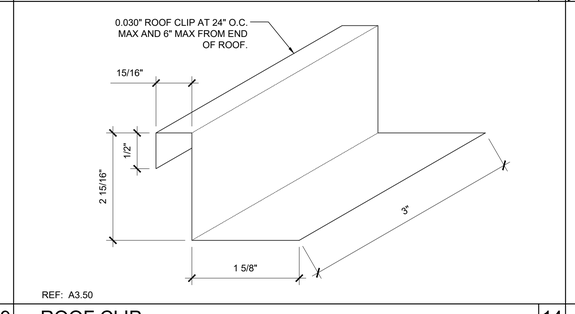
REF: A3.50

FLASHING AT ROOF HIGH SIDE — SCALE : 6"=1'-0" — 3b



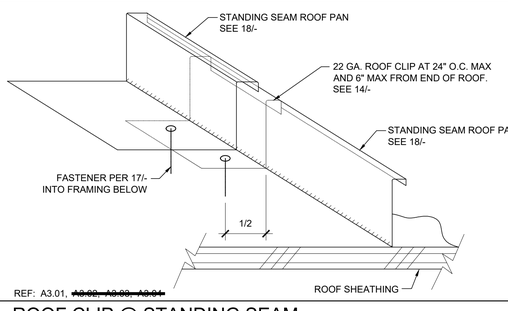
REF: A3.50

END ROOF PAN CONDITION — SCALE : 6"=1'-0" — 19



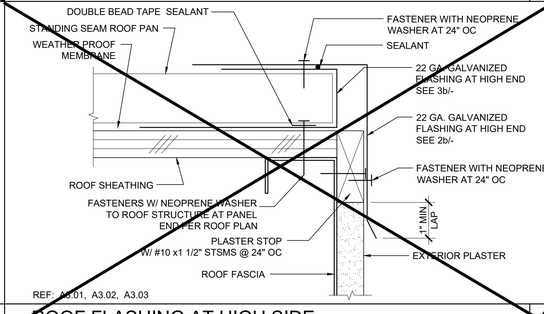
REF: A3.50

ROOF CLIP — SCALE : 1'-0"=1'-0" — 14



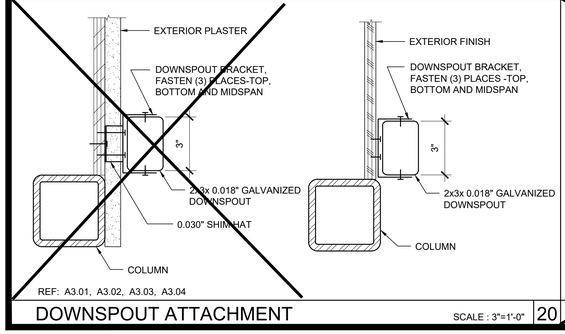
REF: A3.01, ~~A3.02, A3.03, A3.04~~

ROOF CLIP @ STANDING SEAM — SCALE : NTS — 9



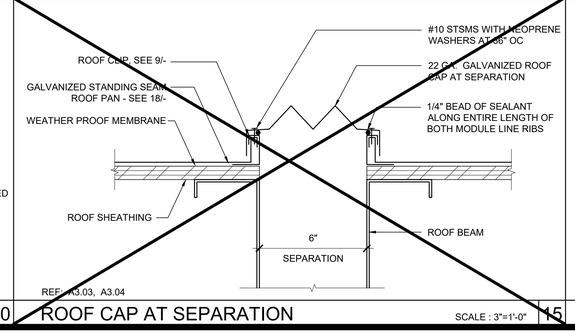
REF: A3.01, A3.02, A3.03

ROOF FLASHING AT HIGH SIDE — SCALE : 6"=1'-0" — 4



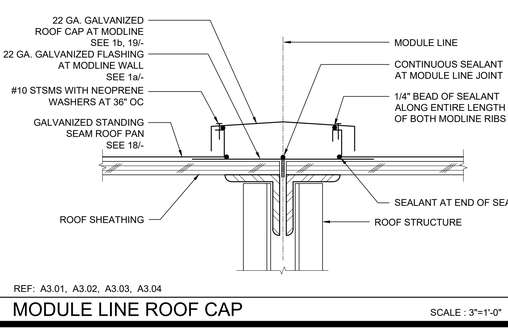
REF: A3.01, A3.02, A3.03, A3.04

DOWNSPOUT ATTACHMENT — SCALE : 3"=1'-0" — 20



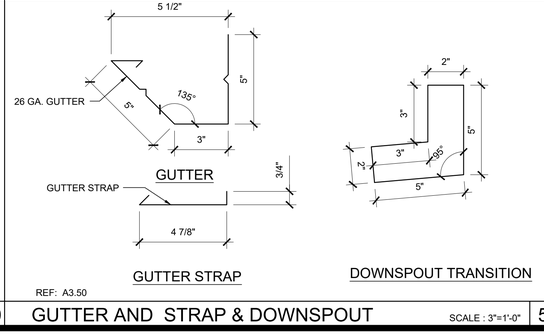
REF: A3.03, A3.04

ROOF CAP AT SEPARATION — SCALE : 3"=1'-0" — 15



REF: A3.01, A3.02, A3.03, A3.04

MODULE LINE ROOF CAP — SCALE : 3"=1'-0" — 10



REF: A3.50

GUTTER AND STRAP & DOWNSPOUT — SCALE : 3"=1'-0" — 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ROOF DETAILS
STANDING SEAM
ROOF DECK

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

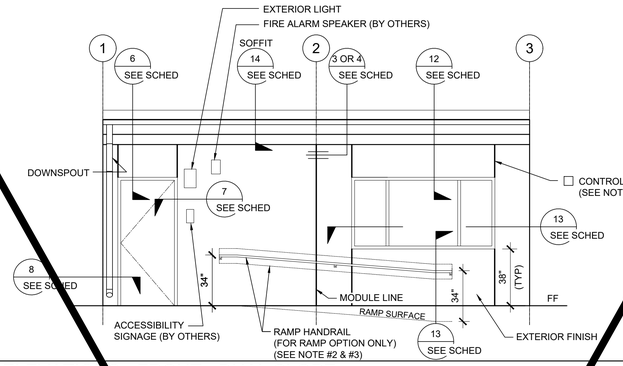
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24175
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

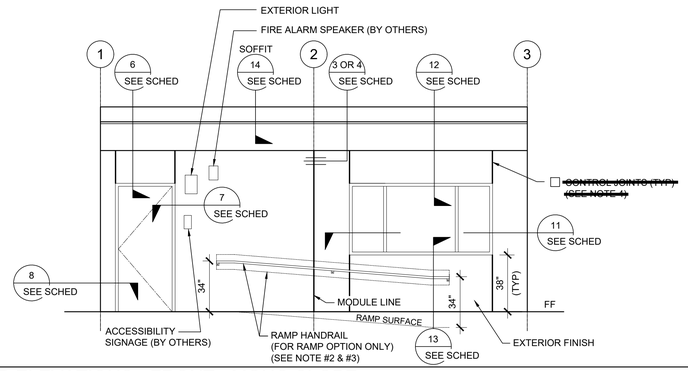
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

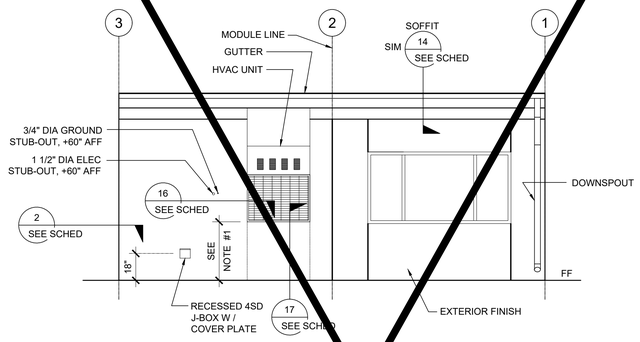
A-3.50



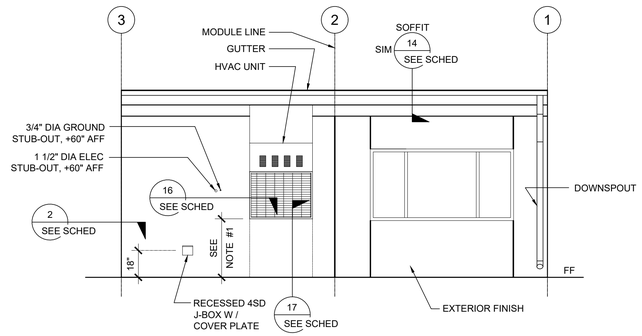
EXTERIOR ELEVATIONS - FRONT - DUAL SLOPE — SCALE: 1/4" = 1' - 0" — 5



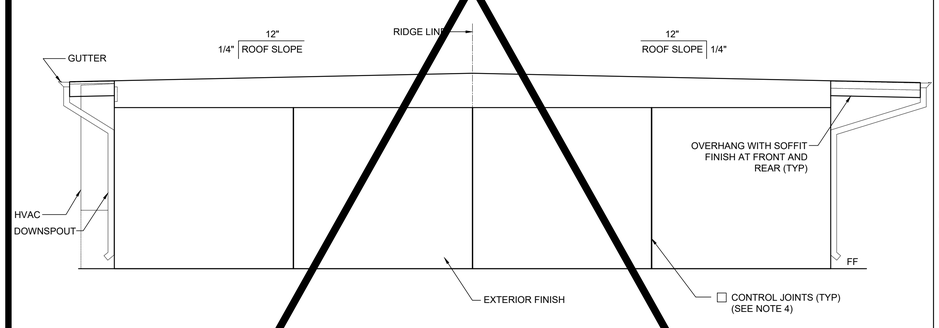
EXTERIOR ELEVATIONS - FRONT - MONO SLOPE — SCALE: 1/4" = 1' - 0" — 1



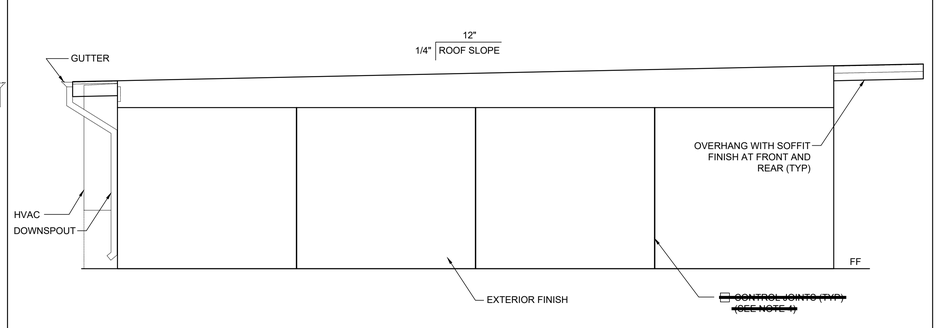
EXTERIOR ELEVATIONS - REAR - DUAL SLOPE — SCALE: 1/4" = 1' - 0" — 6



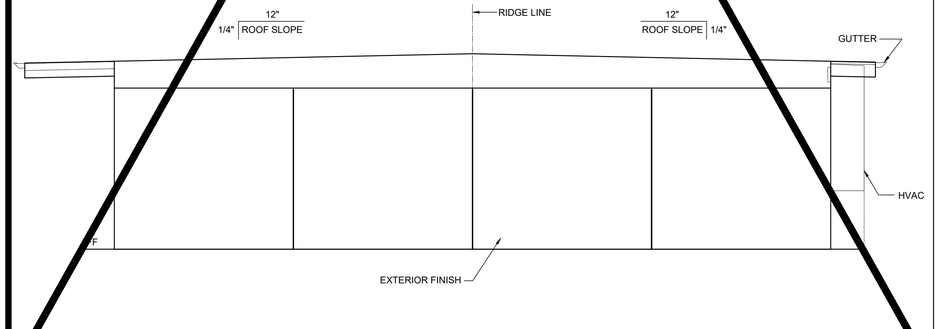
EXTERIOR ELEVATIONS - REAR - MONO SLOPE — SCALE: 1/4" = 1' - 0" — 2



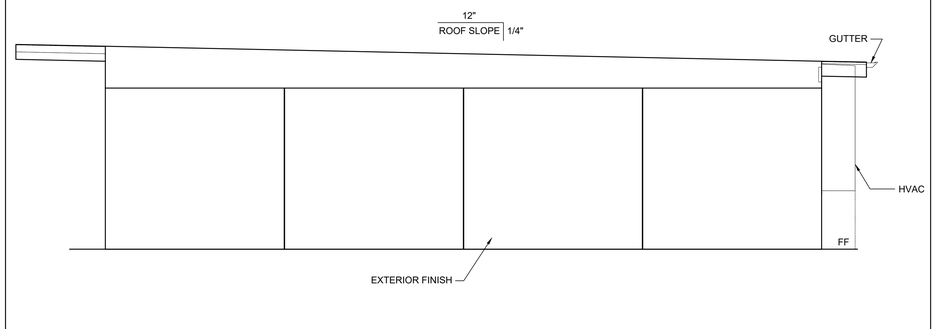
EXTERIOR ELEVATIONS - LEFT - DUAL SLOPE — SCALE: 1/4" = 1' - 0" — 7



EXTERIOR ELEVATIONS - LEFT - MONO SLOPE — SCALE: 1/4" = 1' - 0" — 3



EXTERIOR ELEVATIONS - RIGHT - DUAL SLOPE — SCALE: 1/4" = 1' - 0" — 8



EXTERIOR ELEVATIONS - RIGHT - MONO SLOPE — SCALE: 1/4" = 1' - 0" — 4

NOTES (EXTERIOR ELEVATION)

1. PROVIDE PROTECTION RAIL AROUND HVAC UNIT(S) IF LOCATED IN A PEDESTRIAN WAY IF THE HEIGHT FROM GRADE TO BOTTOM OF UNIT EXCEEDS 27" (NIC). REFERENCE TO DET. # 2/A5.81 FOR WOOD STUDS, # 17/A5.81 FOR STEEL STUDS
2. RAMP (WHERE OCCURS), NOT SHOWN FOR CLARITY.
3. WALL BEYOND HANDRAIL SHALL NOT HAVE ANY SHARP OR ABRASIVE SURFACE ADJACENT TO HANDRAILS. (GRIND SMOOTH ALL METAL RAILING CONNECTIONS - SMOOTH SURFACE TO EXTEND 18" ABOVE HANDRAIL)
4. ~~FOR PLASTER ONLY: PROVIDE CONTROL JOINT AT EACH MODULINE, ON END WALLS, 18'-9" OC AT SIDE WALLS, AND / OR ABOVE AND BELOW OPENINGS. WHERE FIRE RATED WALLS ARE REQUIRED, MATERIALS AND METHODS OF CONSTRUCTION, USED TO PROVIDE JOINTS WILL COMPLY WITH CBC SECTION 705.2 AND 705.~~
5. EXTERIOR PROJECTIONS SHALL COMPLY W/ SECTION 705 AND 1406, 2022 CBC
6. PROVIDE AN OFFSET RAMP (PER SHEET R-1.02) WHEN A RAMP IS REQUIRED ADJACENT TO A STUCCO WALL AND/OR FIRE RESISTANCE RATED EXTERIOR WALL.

DETAIL SCHEDULE

FINISH:	SHEET #:
☑ SIDING OVER WOOD STUDS	A-5.50
~~☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.51~~
☐ SIDING OVER STEEL STUDS	A-5.60
~~☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.61~~

FIRE RATED DETAIL SCHEDULE

FIRE PROTECTION:	SHEET #:
~~☐ 1 HOUR - SIDING OVER WOOD STUDS~~	~~A-5.52~~
~~☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.53~~
~~☐ 1 HOUR - SIDING OVER STEEL STUDS~~	~~A-5.62~~
~~☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.63~~

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

EXTERIOR ELEVATION
24' X 40'
MONO / DUAL SLOPE

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023~~

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24575
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-4.01

DETAIL SCHEDULE

FINISH:	SHEET #:
☑ SIDING OVER WOOD STUDS	A-5.50
☐ ~~PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.51~~
☐ ~~SIDING OVER STEEL STUDS~~	~~A-5.60~~
☐ ~~PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.61~~

FIRE RATED DETAIL SCHEDULE

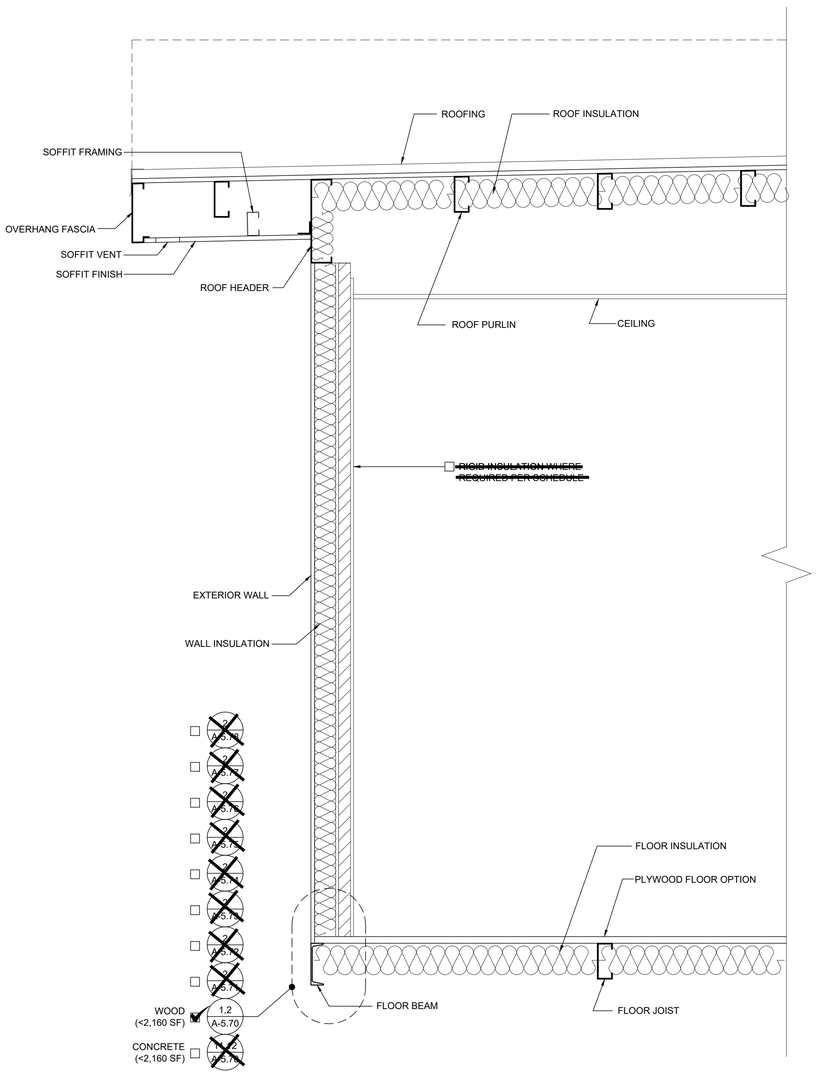
FINISH:	SHEET #:
☐ ~~1 HOUR - SIDING OVER WOOD STUDS~~	~~A-5.52~~
☐ ~~1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.53~~
☐ ~~1 HOUR - SIDING OVER STEEL STUDS~~	~~A-5.62~~
☐ ~~1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.63~~

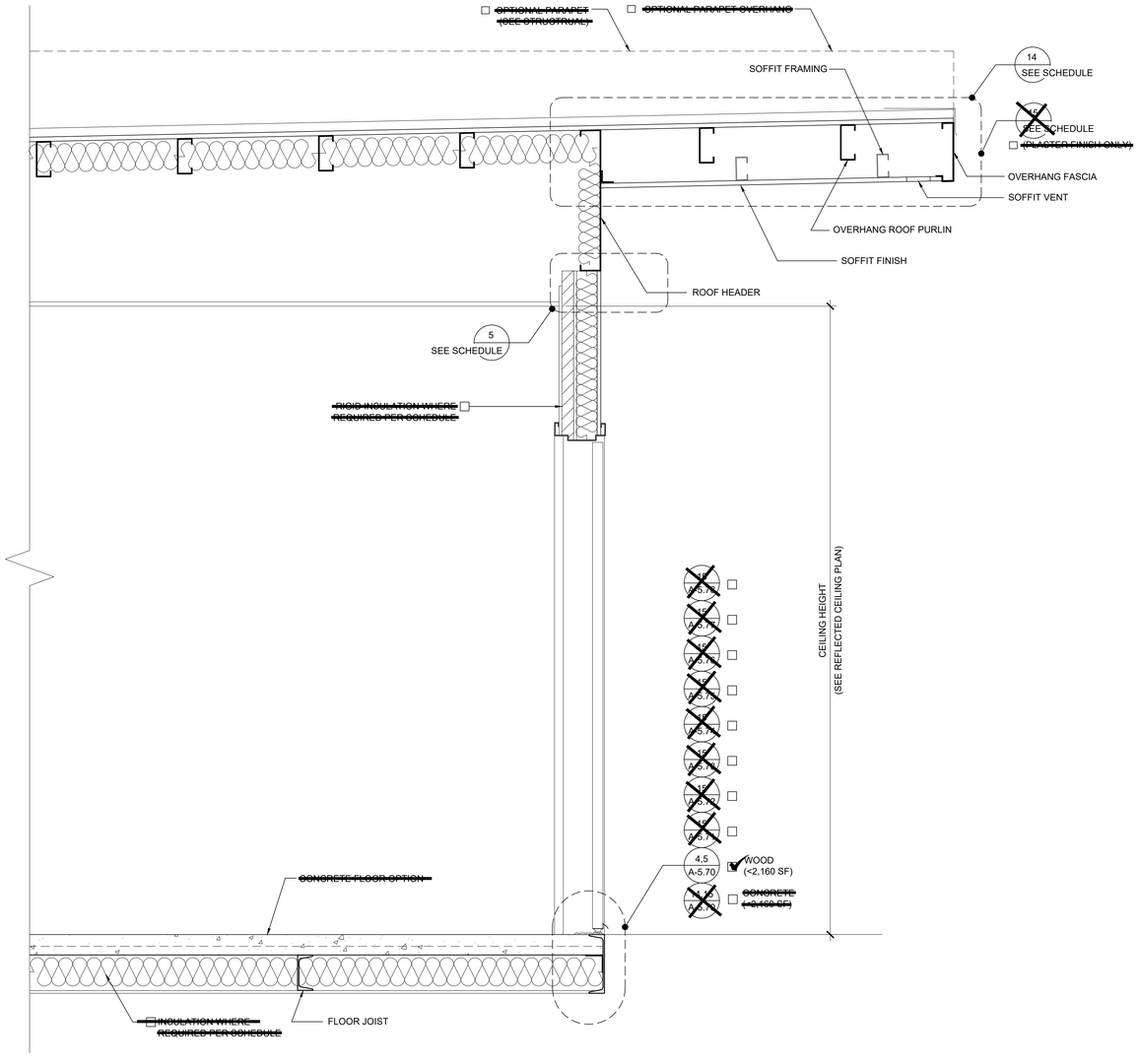
FLOOR OPTION

☑ WOOD FLOOR
☐ ~~CONCRETE FLOOR~~

NOTES

SEALANTS AND CAULKING:
GENERAL: FURNISH AND INSTALL ALL SEALANTS AND CAULKING AS REQUIRED TO PROVIDE A WEATHERTIGHT BUILDING AND TO LIMIT AIR LEAKAGE.
MATERIALS: SEALANT SHALL BE AN ACRYLIC LATEX OR SILICONE CAULKING.
APPLICATIONS: AT JOINTS WHERE SHOWN, APPLY SEALANT AS FOLLOWS - JOINTS SHALL BE CLEAN, DRY, AND FREE FROM DUST, WAX, AND FOREIGN MATERIALS. SEALANT SHALL BE APPLIED WITH A GUN IN A STRICT COMPLIANCE WITH MANUFACTURER'S DIRECTIONS. COMPLETELY FILL THE JOINT AND FIRMLY TOOL AGAINST THE BACKING, MAKING A SMOOTH CONVEX BEAD.
COLOR: COLOR OF MATERIAL SHALL MATCH THAT OF ADJACENT FINISHED SURFACES.
ALL EXTERIOR JOINTS, PENETRATIONS AND OTHER OPENINGS SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.





BUILDING SECTION

SCALE: 1" = 1'- 0" | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

CROSS SECTION
MONO SLOPE

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023~~

~~PC STATE AGENCY APPROVAL~~

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-5.01

DETAIL SCHEDULE

FINISH:	SHEET #:
☑ SIDING OVER WOOD STUDS	A-5.50
~~☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.51~~
☐ SIDING OVER STEEL STUDS	A-5.60
~~☐ PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.61~~

FIRE RATED DETAIL SCHEDULE

FINISH:	SHEET #:
~~☐ 1 HOUR - SIDING OVER WOOD STUDS~~	~~A-5.52~~
~~☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH WOOD STUDS~~	~~A-5.53~~
☐ 1 HOUR - SIDING OVER STEEL STUDS	A-5.62
~~☐ 1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY WITH STEEL STUDS~~	~~A-5.63~~

FLOOR OPTION

☑ WOOD FLOOR
☐ ~~CONCRETE FLOOR~~

NOTES

SEALANTS AND CAULKING:
GENERAL: FURNISH AND INSTALL ALL SEALANTS AND CAULKING AS REQUIRED TO PROVIDE A WEATHERTIGHT BUILDING AND TO LIMIT AIR LEAKAGE.
MATERIALS: SEALANT SHALL BE AN ACRYLIC LATEX OR SILICONE CAULKING.
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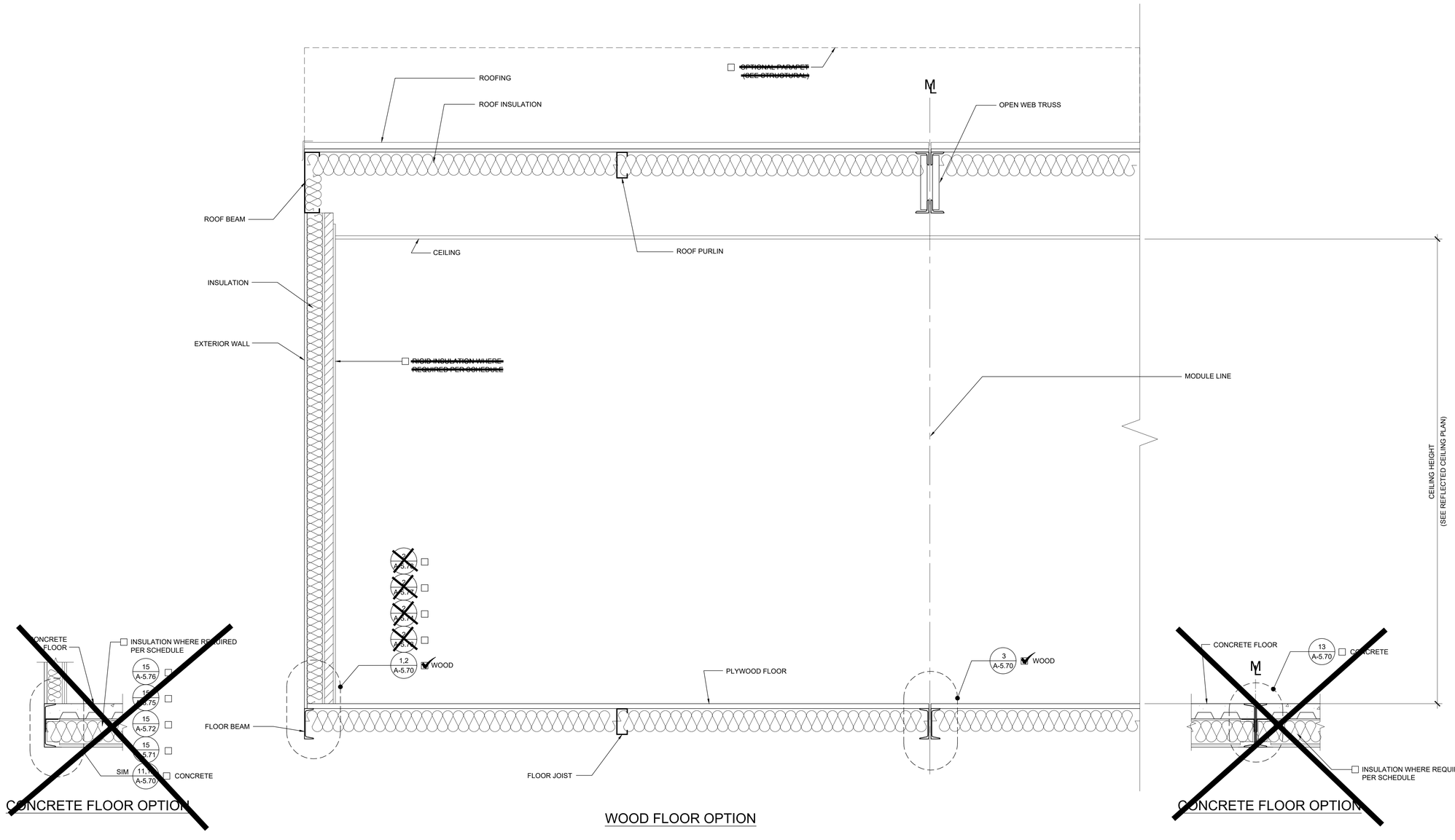
COLOR: COLOR OF MATERIAL SHALL MATCH THAT OF ADJACENT FINISHED SURFACES.
ALL EXTERIOR JOINTS, PENETRATIONS AND OTHER OPENINGS SHALL BE CAULKED, GASKETED, WEATHER-STRIPPED OR OTHERWISE SEALED.



BUILDING SECTION

SCALE: 1" = 1'-0" | 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

CROSS SECTION

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 24-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023
PC STATE AGENCY APPROVAL~~

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

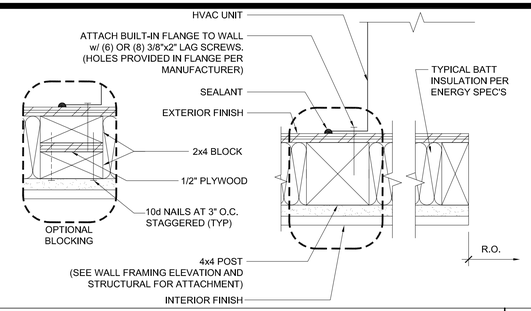
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

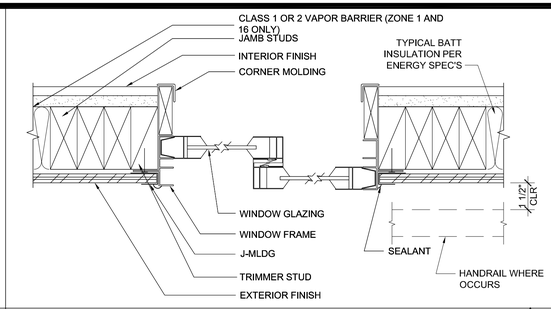
P.C. SHEET NUMBER

A-5.05



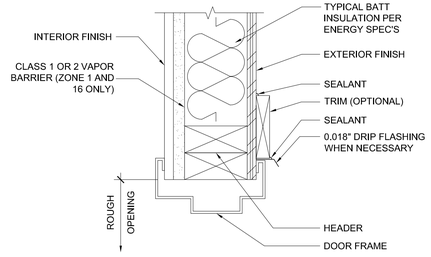
HVAC MOUNT AT JAMBS

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



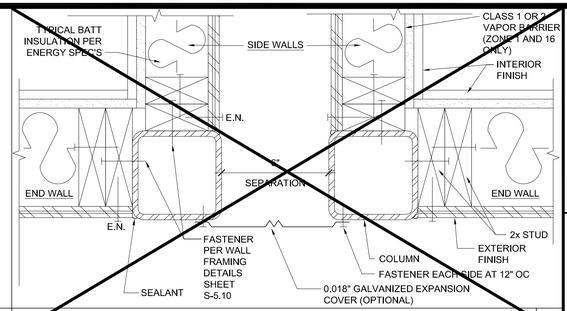
WINDOW SECTION AT JAMBS

SCALE : 3"=1'-0" | 11



EXTERIOR DOOR HEADER

SCALE : 3"=1'-0" | 6

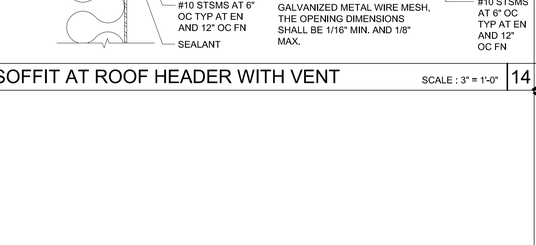


CLOSURE BETWEEN BUILDINGS

SCALE : 3"=1'-0" | 1

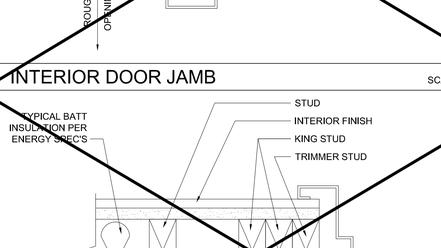
HVAC UNIT AT BOTTOM

SCALE : 3"=1'-0" | 17



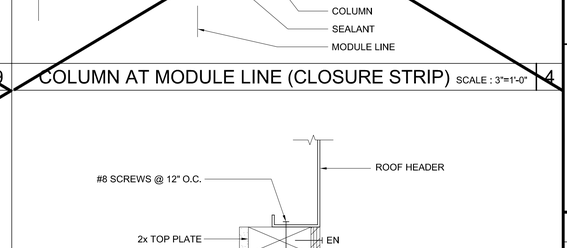
WINDOW HEADER

SCALE : 3"=1'-0" | 12



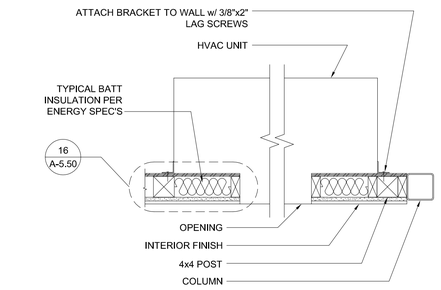
EXTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 7



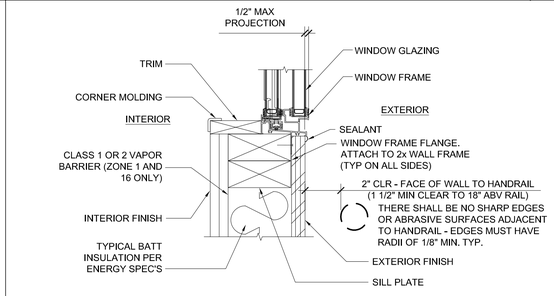
COLUMN AT CORNER

SCALE : 3"=1'-0" | 2



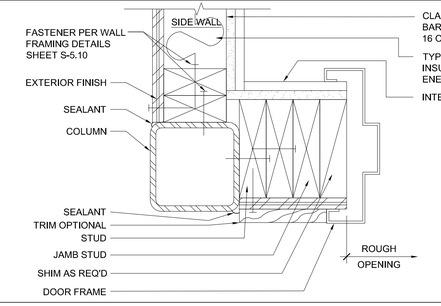
HVAC UNIT (PLAN)

SCALE : 1"=1'-0" | 18



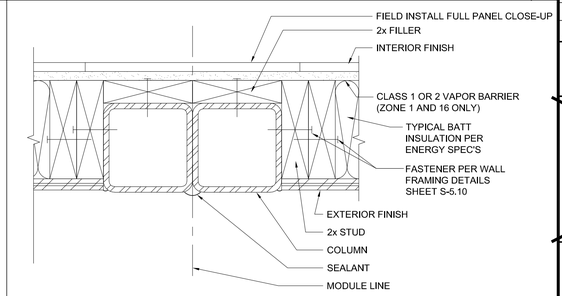
WINDOW SILL

SCALE : 3"=1'-0" | 13



COLUMN AT CORNER

SCALE : 3"=1'-0" | 8

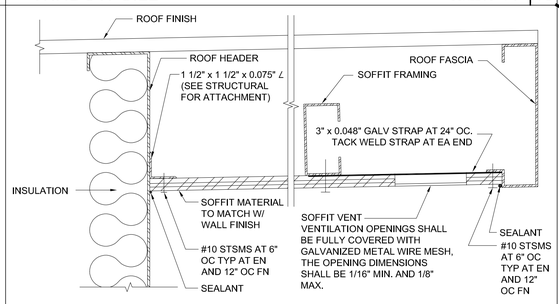


COLUMN AT MODULE LINE (FULL PANEL CLOSE-UP)

SCALE : 3"=1'-0" | 3

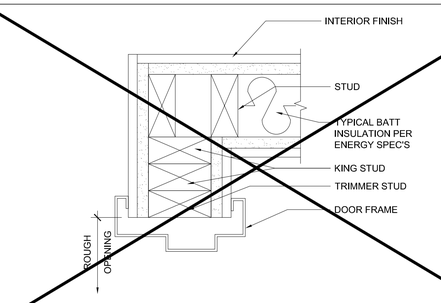
NOT USED

19



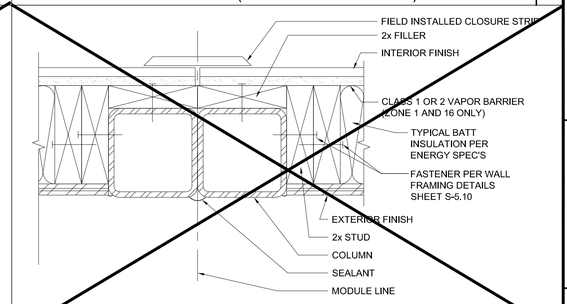
SOFFIT AT ROOF HEADER WITH VENT

SCALE : 3" = 1'-0" | 14



INTERIOR DOOR JAMB

SCALE : 3"=1'-0" | 9



COLUMN AT MODULE LINE (CLOSURE STRIP)

SCALE : 3"=1'-0" | 4

NOT USED

20

NOT USED

15

INTERIOR DOOR JAMBS

SCALE : 3"=1'-0" | 10

TOP PLATE AT ROOF HEADER

SCALE : 3" = 1'-0" | 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ARCHITECTURAL DETAILS
WOOD STUD - SHTG

REVISIONS

1.
2.
3.
4.
5.

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

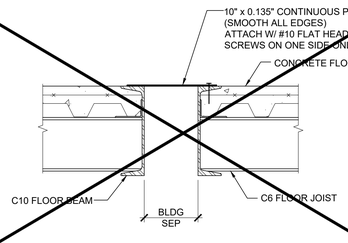
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

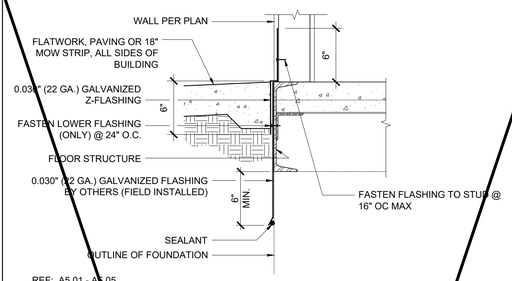
P.C. SHEET NUMBER

A-5.50



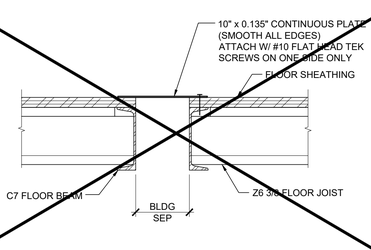
REF: A1.03

16 FLOOR AT SEPARATION (CONCRETE FLR) SCALE : 1 1/2"=1'-0"



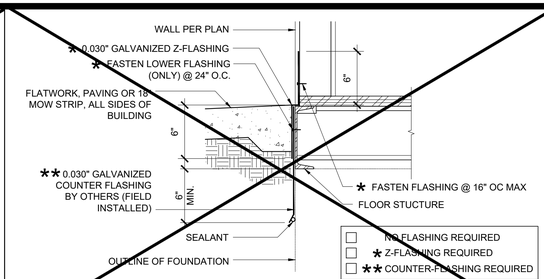
REF: A5.01 - A5.05

11 SKIRT FLASHING (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0"



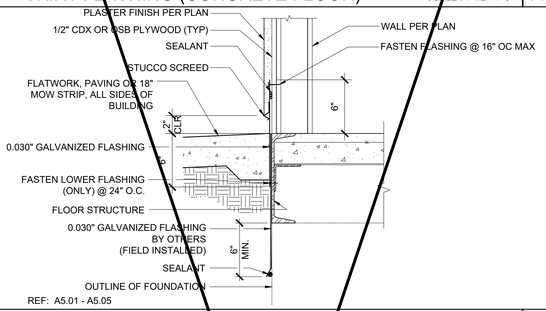
REF: A1.03

6 FLOOR AT SEPARATION (WOOD FLOOR) SCALE : 1 1/2"=1'-0"



REF: A5.01 - A5.05

1 SKIRT FLASHING (WOOD FLOOR) SCALE : 1 1/2"=1'-0"



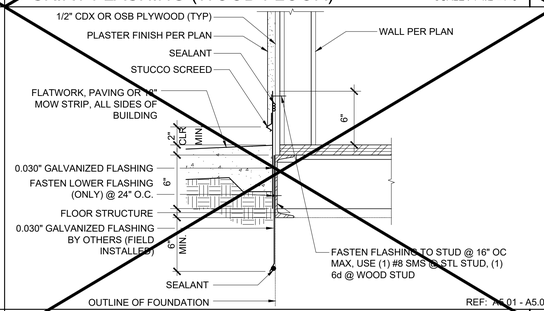
REF: A5.01 - A5.05

17 SKIRT FLASHING (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0"

NOTE:

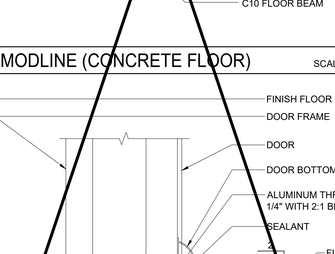
1. WHEN THE BUILDING IS INSTALLED AT GROUND LEVEL (BELOW GRADE FOUNDATION OPTION) DETAILS 1,2,5,11,12+15 CAN ONLY BE USED WHERE THE BUILDING SIZE DOES NOT EXCEED 2,160 SF. SEE SHEETS A-5.71 THRU A-5.78 FOR ALTERNATE FLASHING DETAILS FOR BUILDINGS LARGER THAN 2,160 SF.
2. THE DETAILS ON SHEETS A-5.71 THRU A-5.78 MAY BE USED FOR BUILDINGS LESS THAN 2,160 SF.
3. FOR BUILDINGS INSTALLED ON ABOVE GRADE FOUNDATION SYSTEMS (WOOD FOUNDATION OR CONCRETE FOUNDATION WITH ABOVE GRADE STEMWALL) THE DETAILS SHOWN ON THIS SHEET MAY BE USED FOR ANY SIZE BUILDING.
4. FOR BUILDINGS INSTALLED ON ABOVE GRADE FOUNDATION SYSTEMS (WOOD FOUNDATION OR CONCRETE FOUNDATION WITH ABOVE GRADE STEMWALL) THE FLATWORK/PAVING/MOW STRIP WHICH IS INDICATED IN THE DETAILS ON THIS SHEET SHALL BE OMITTED.

7



REF: A5.01 - A5.05

2 SKIRT FLASHING (WOOD FLOOR) SCALE : 1 1/2"=1'-0"

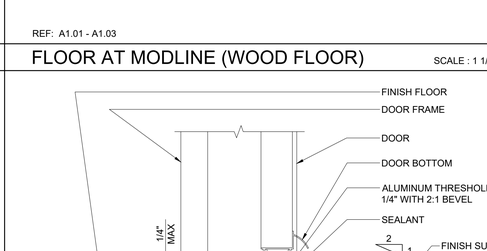


REF: A1.01 - A1.03

18 FLOOR AT MODLINE (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0"

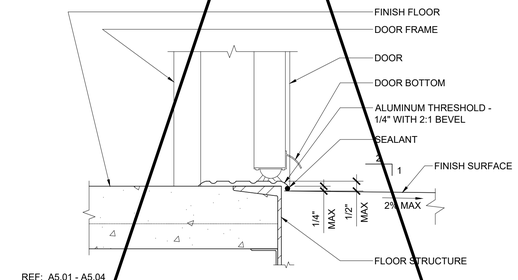
13

8



REF: A1.01 - A1.03

3 FLOOR AT MODLINE (WOOD FLOOR) SCALE : 1 1/2"=1'-0"



REF: A5.01 - A5.04

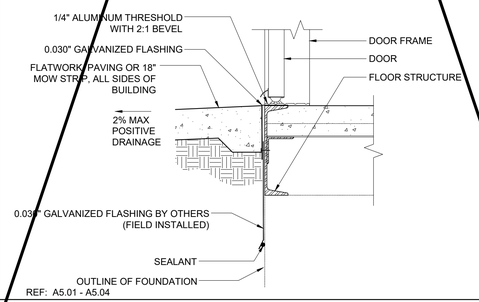
19 THRESHOLD SCALE : 3"=1'-0"

14

9

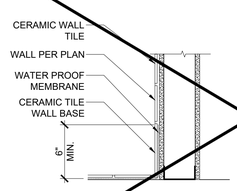
REF: A5.01 - A5.04

4 THRESHOLD SCALE : 3"=1'-0"

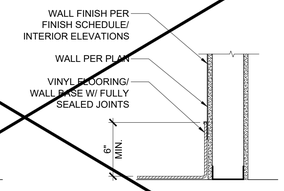


REF: A5.01 - A5.04

20 TYPICAL SILL AT FLOOR (CONCRETE FLOOR) SCALE : 1 1/2"=1'-0"



15 WALL BASE AT TOILET ROOMS SCALE : 1 1/2"=1'-0"



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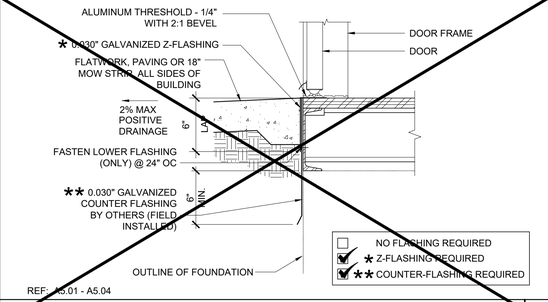

REF: A5.01 - A5.04

5 TYPICAL SILL AT FLOOR (WOOD FLOOR) SCALE : 1 1/2"=1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ARCHITECTURAL DETAILS
FLOOR

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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IDENTIFICATION STAMP
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

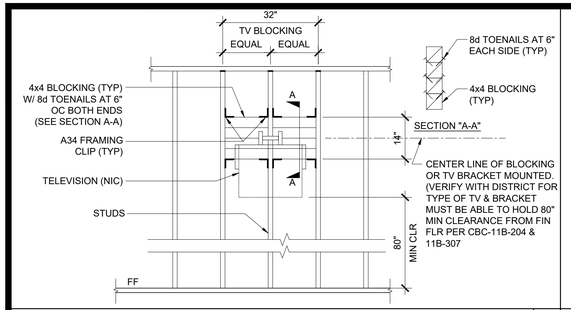
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

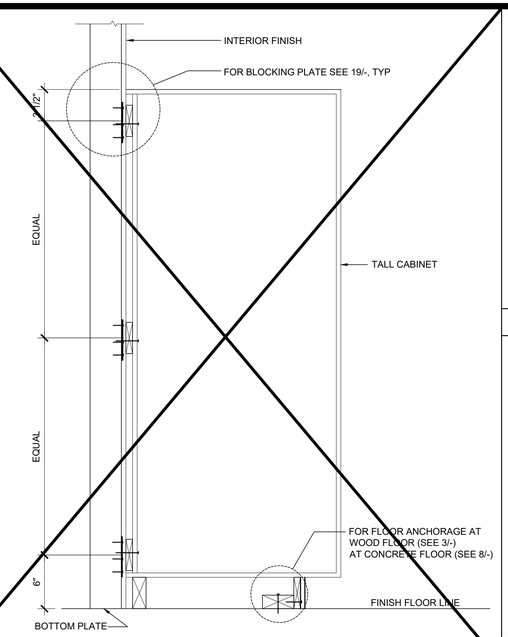
P.C. SHEET NUMBER

A-5.70

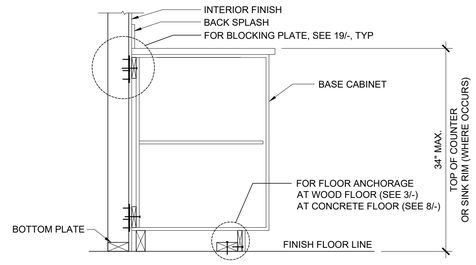


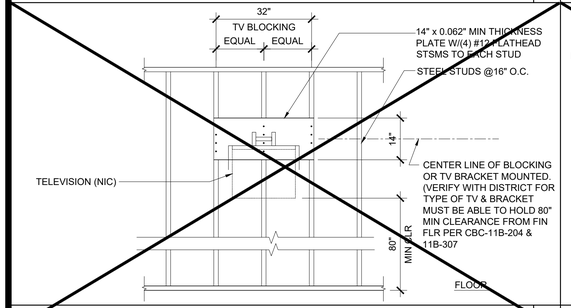
T.V. BLOCKING ATTACHMENT AT WOOD STUD — SCALE : 1/2" = 1'-0" — 16

NOT USED — 11

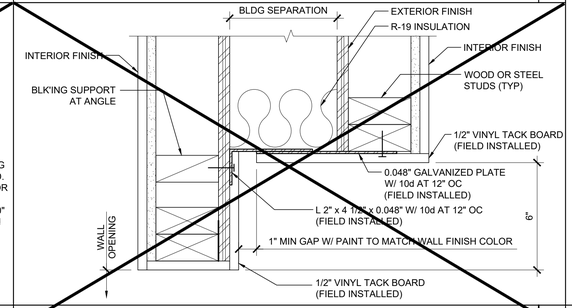


BASE CABINET WALL ANCHORAGE — SCALE : 1" = 1'-0" — 1

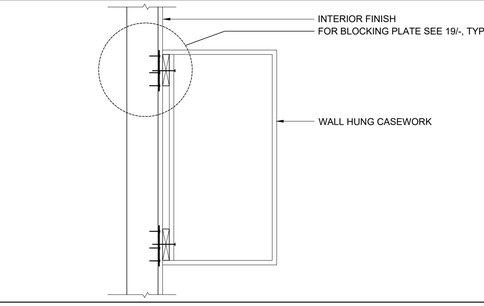




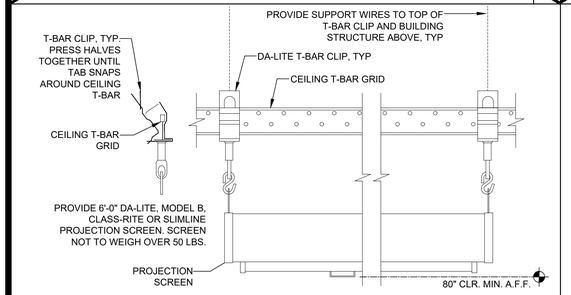
T.V. BLOCKING ATTACHMENT AT STEEL STUD — SCALE : 1/2" = 1'-0" — 17



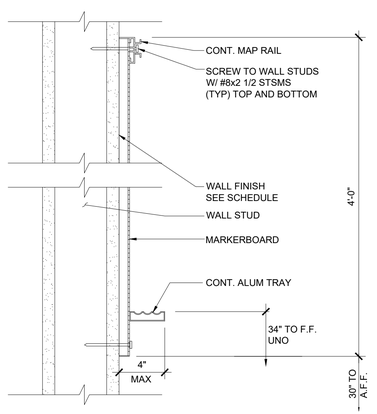
WALL OPENING AT HEADER AND JAMB — SCALE : 3"=1'-0" — 12



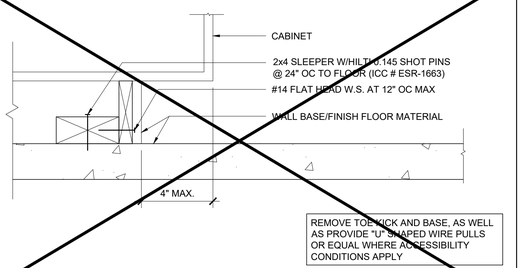
WALL HUNG ANCHORAGE CABINET — SCALE : 1 1/2" = 1'-0" — 2



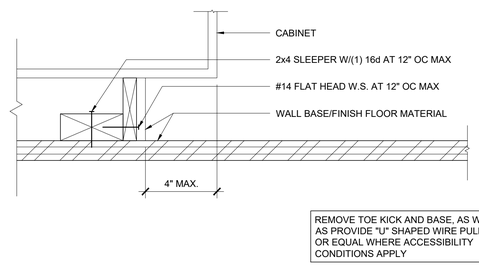
PROJECTION SCREEN MOUNTING — SCALE : NTS — 18



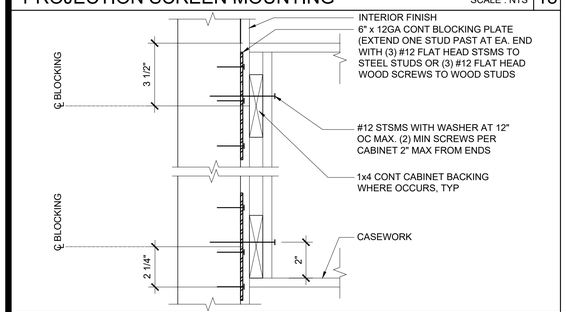
MARKER BOARD ATTACHMENT — SCALE : 3" = 1'-0" — 14



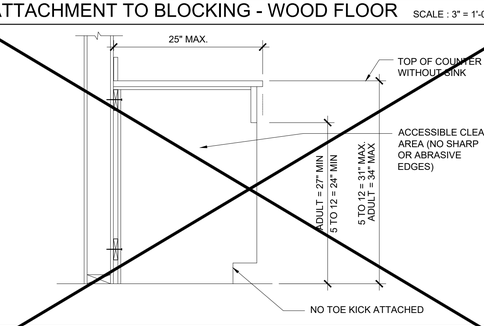
ATTACHMENT TO BLOCKING - CONC. FLOOR — SCALE : 3" = 1'-0" — 8



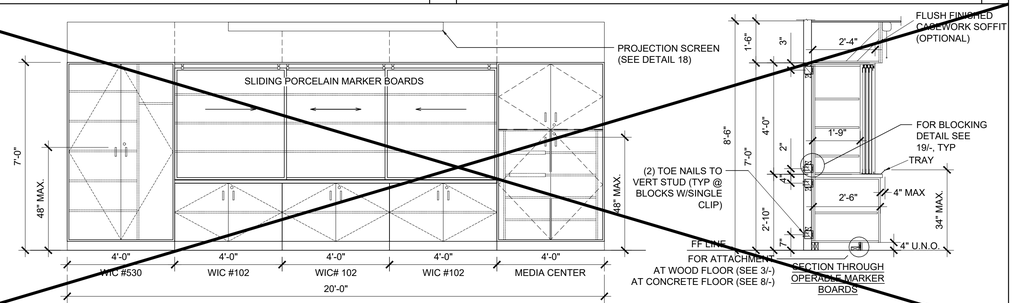
ATTACHMENT TO BLOCKING - WOOD FLOOR — SCALE : 3" = 1'-0" — 3



ATTACHMENT TO BLOCKING PLATE — SCALE : 3" = 1'-0" — 19



ACCESSIBLE COUNTER — SCALE : 1" = 1'-0" — 4



TEACHING WALL - ELEVATION / SECTION - OPTION — SCALE : 3/8" = 1'-0" — 15

NOT USED — 10

NOT USED — 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ARCHITECTURAL DETAILS
MISCELLANEOUS/OPTIONS

REVISIONS

1.
2.
3.
4.
5.

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

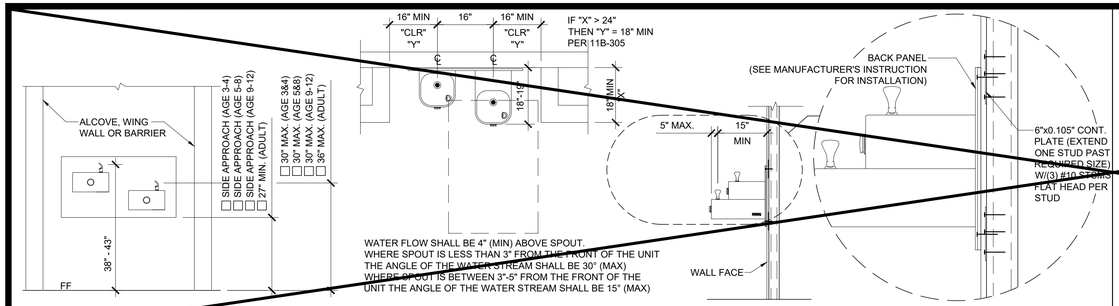
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

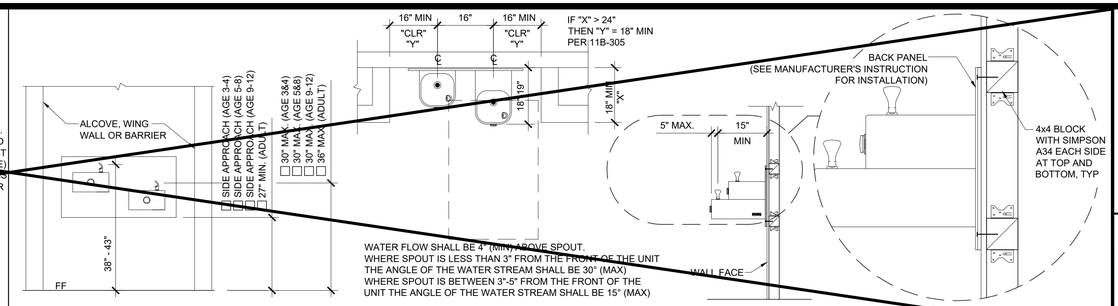
P.C. SHEET NUMBER

A-5.80



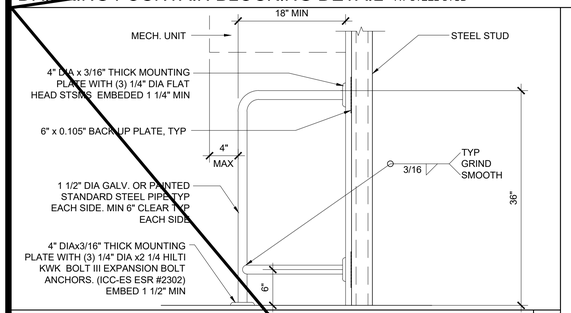
DRINKING FOUNTAIN BLOCKING DETAIL AT STEEL STUD

SCALE : 1/2" = 1'-0" | 11



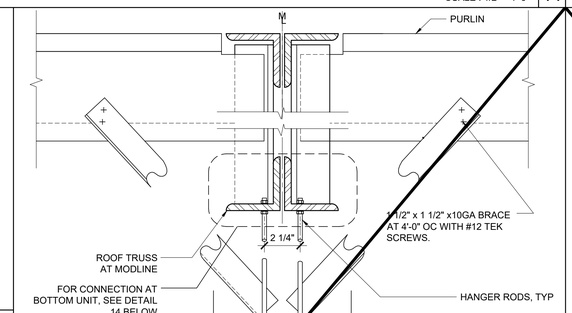
DRINKING FOUNTAIN BLOCKING DETAIL AT WOOD STUD

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



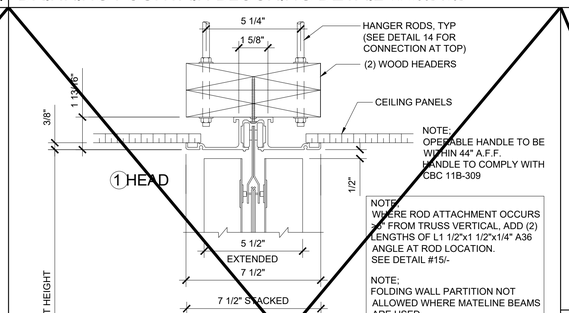
HVAC BARRIER - OPT. D.F. BARRIER AT STEEL STUD

SCALE : 1" = 1'-0" | 17



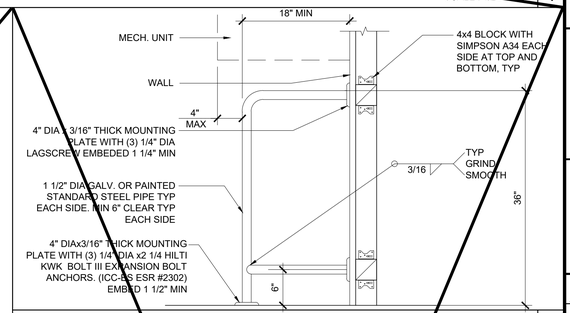
FOLDING WALL PARTITION ATTACH @ TOP UNIT

SCALE : 3" = 1'-0" | 13



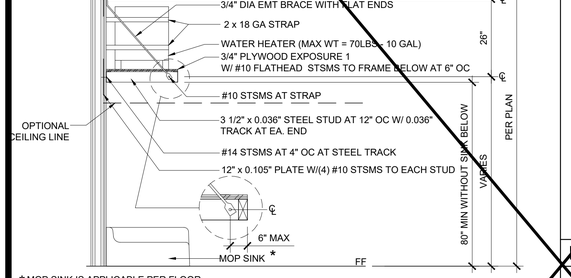
ACCORDION PARTITION ATTACHMENT

SCALE: 3" = 1'-0" | 8

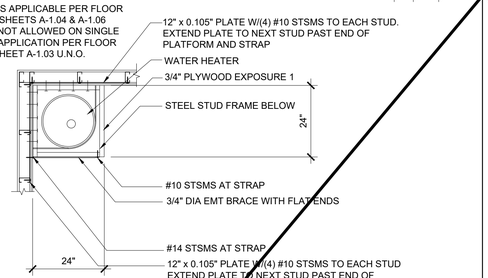


HVAC BARRIER - OPT. D.F. BARRIER AT WOOD STUD

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

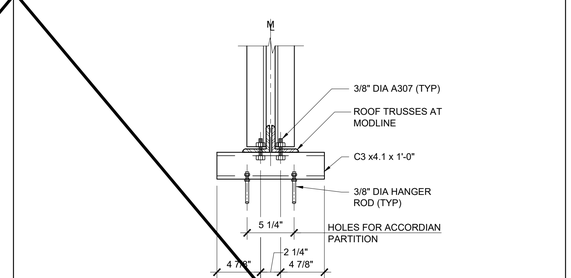


* MOP SINK IS APPLICABLE PER FLOOR PLANS ON SHEETS A-1.04 & A-1.06
MOP SINK NOT ALLOWED ON SINGLE STAFF RR APPLICATION PER FLOOR PLAN ON SHEET A-1.03 U.N.O.



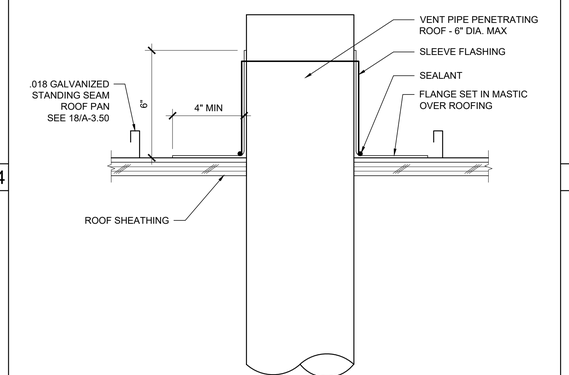
WATER HEATER SHELF AT STEEL STUD

SCALE : 1/2" = 1'-0" | 19



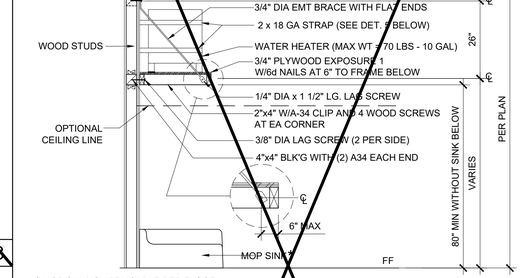
ACCORDIAN DOOR - TOP CONN AT TRUSS

SCALE : 1 1/2" = 1'-0" | 14

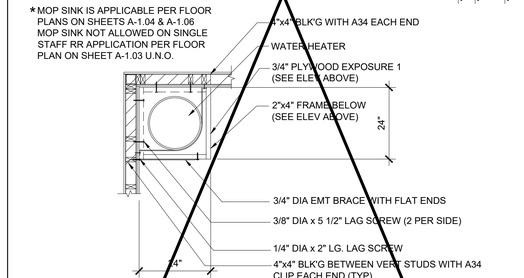


PIPE PENETRATION THROUGH ROOF

SCALE : 3"=1'-0" | 10

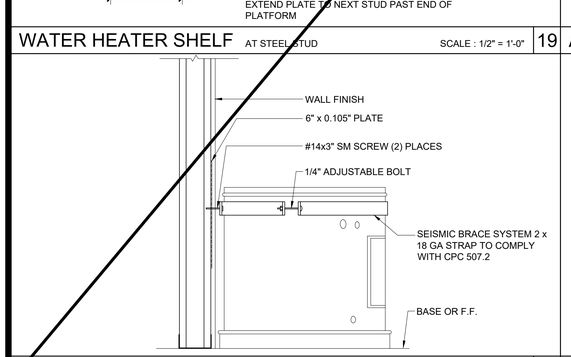


* MOP SINK IS APPLICABLE PER FLOOR PLANS ON SHEETS A-1.04 & A-1.06
MOP SINK NOT ALLOWED ON SINGLE STAFF RR APPLICATION PER FLOOR PLAN ON SHEET A-1.03 U.N.O.



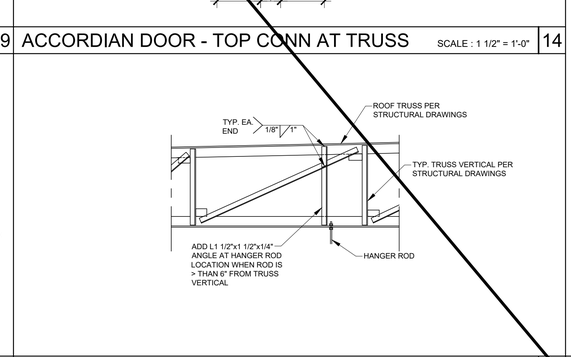
WATER HEATER SHELF AT WOOD STUD

SCALE : 1/2" = 1'-0" | 4



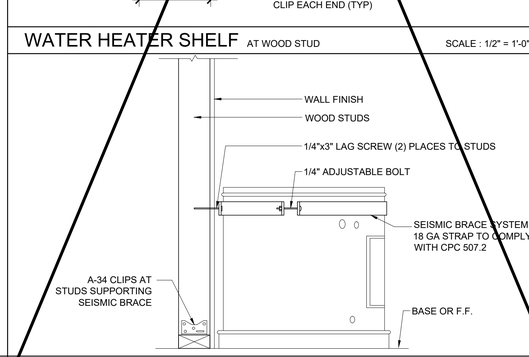
WATER HEATER BRACING AT STEEL STUD

SCALE : 1 1/2" = 1'-0" | 20



TRUSS SUPPORT @ HANGER ROD

15



WATER HEATER BRACING AT WOOD STUD

SCALE : 1 1/2" = 1'-0" | 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ARCHITECTURAL DETAILS
MISCELLANEOUS/OPTIONS

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

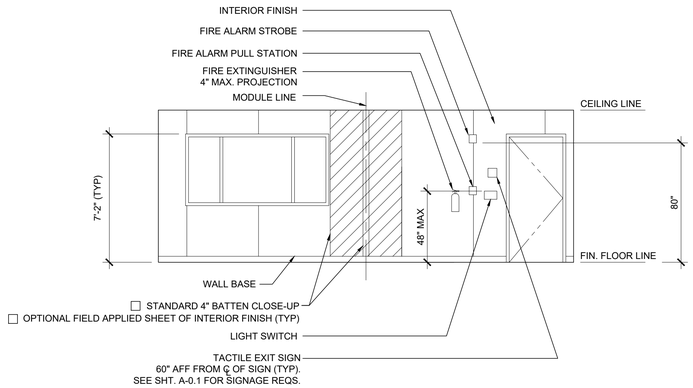
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24078 STRUCTURAL STATE OF CALIFORNIA

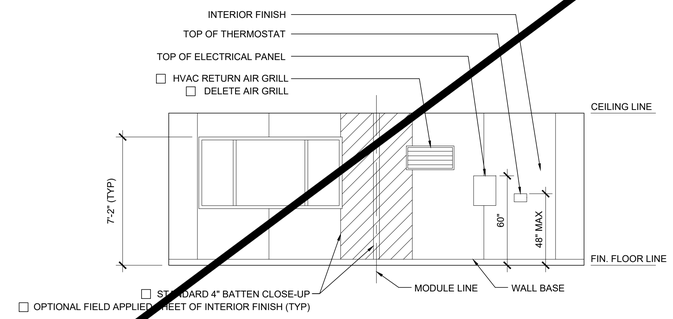
SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

A-5.81

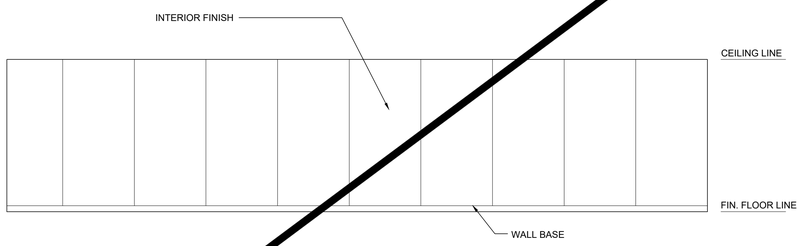


FRONT ELEVATION — SCALE: 1/4" = 1' - 0" | 3

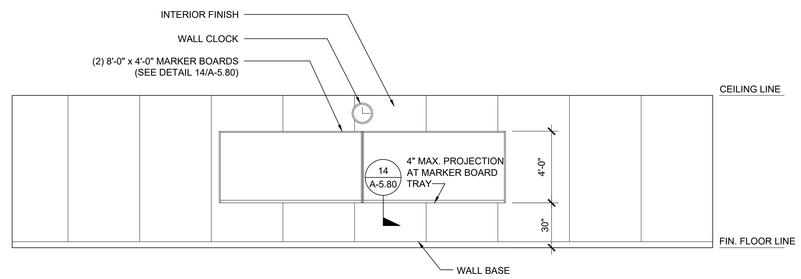


REAR ELEVATION — SCALE: 1/4" = 1' - 0" | 1

REFER TO PROJECT SPECIFIC SHEET A-6.01N



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" | 4



SIDE ELEVATION — SCALE: 1/4" = 1' - 0" | 2

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

INTERIOR ELEVATION
24' x 40'

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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IDENTIFICATION STAMP
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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

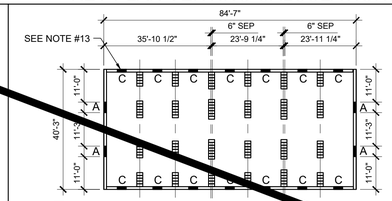
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

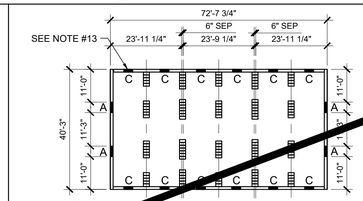
P.C. SHEET NUMBER

A-6.01

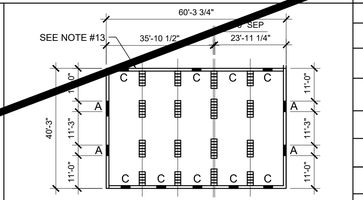
KEY PLAN VENTING CALCULATIONS w/o PARAPET



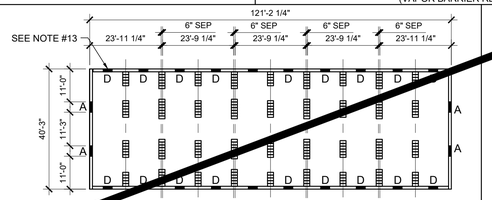
☐ 85' x 40' BUILDING: 3400 SF / 150 = 22.66 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(14) - "C" VENT = 15.75 SF
22.75 SF TOTAL VENTILATION (> 22.66 SF)
(VAPOR BARRIER REQUIRED)



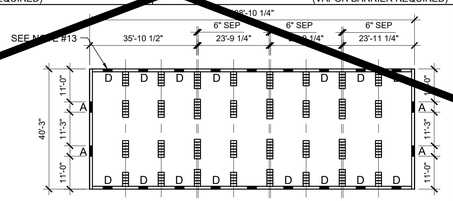
☐ 73'-0" x 40' BUILDING: 2920 SF / 150 = 19.46 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(12) - "C" VENT = 13.50 SF
20.50 SF TOTAL VENTILATION (> 19.46 SF)
(VAPOR BARRIER REQUIRED)



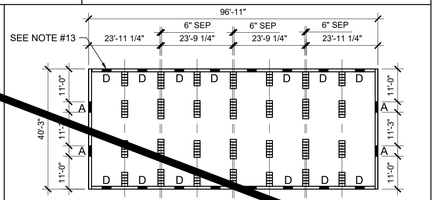
☐ 60'-6" x 40' BUILDING: 2420 SF / 150 = 16.13 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(8) - "C" VENT = 10.12 SF
17.12 SF TOTAL VENTILATION (> 16.13 SF)



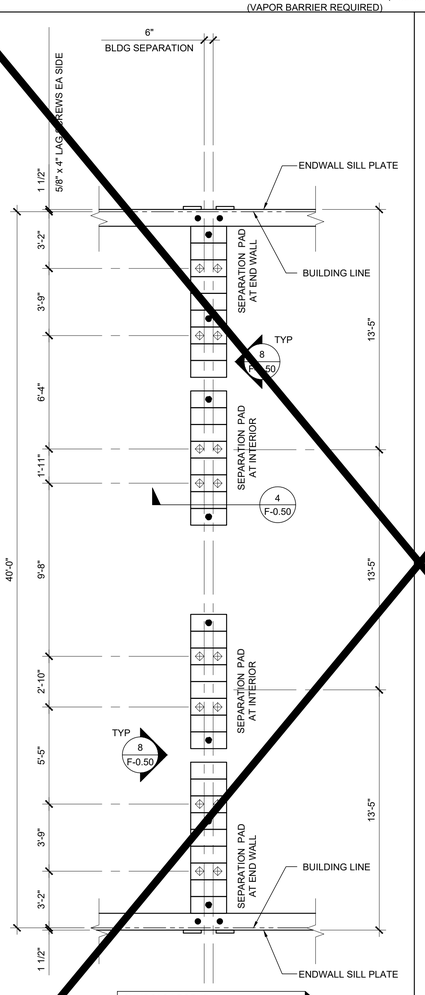
☐ 122'-0" x 40' BUILDING: 4880 SF / 150 = 32.53 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(18) - "D" VENT = 27.00 SF
34.00 SF TOTAL VENTILATION (> 32.53 SF)
(VAPOR BARRIER REQUIRED)



☐ 109'-6" x 40' BUILDING: 4380 SF / 150 = 29.2 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(15) - "D" VENT = 22.5 SF
29.50 SF TOTAL VENTILATION (> 29.2 SF)
(VAPOR BARRIER REQUIRED)



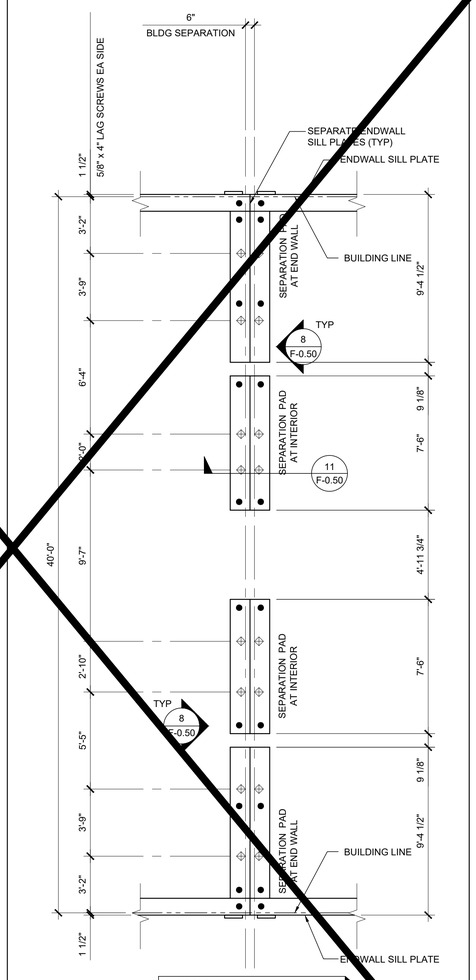
☐ 97'-6" x 40' BUILDING: 3900 SF / 150 = 26 SF VENT REQ'D
(4) - "A" VENT = 7.00 SF
(13) - "D" VENT = 19.50 SF
26.5 SF TOTAL VENTILATION (> 26 SF)
(VAPOR BARRIER REQUIRED)



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

CONTINUOUS SILL PLATES

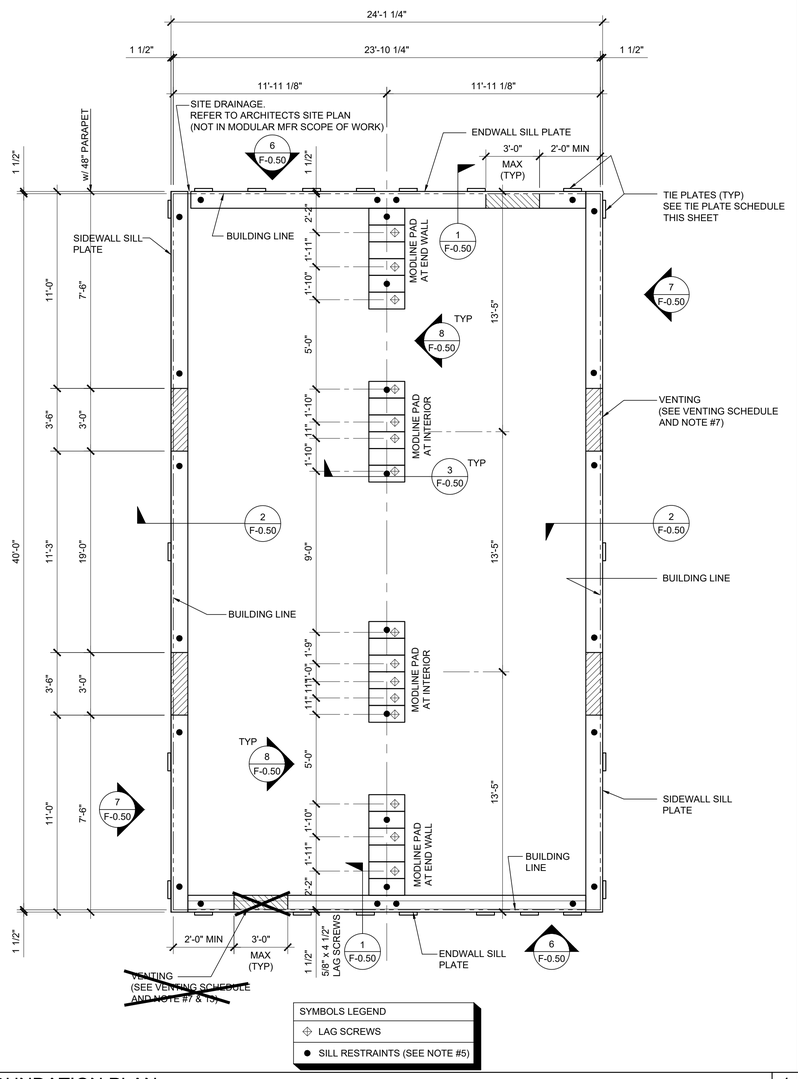
FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 3



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

SEPARATE SILL PLATES

FOOTING AT SEPARATION SCALE: 1/4" = 1' - 0" 2



SYMBOLS LEGEND
LAG SCREWS
SILL RESTRAINTS (SEE NOTE #5)

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

KEY PLAN VENTING SCHEDULE

VENT "A" (SIDEWALL): 3'-6" x 6" = 1.75 S.F. VENTILATION
"VENT OPENING BELOW CONT UPPER PLATE"

VENT "B" (ENDWALL): 3'-0" x 3" = 0.68 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATE"

VENT "C" (ENDWALL): 3'-0" x 4 1/2 " = 1.125 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

VENT "D" (ENDWALL): 3'-0" x 6" = 1.5 S.F. VENTILATION

(OPTIONAL AT MULTIPLE BLDG SETS) "VENT OPENING ABOVE CONT. SILL AND BLOCK PLATES"

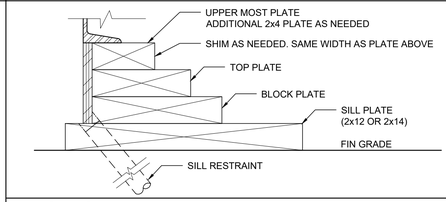
NOTE:
@ BUILDINGS WITH PARAPETS UP TO 48" HIGH, SIDE WALL VENTS CHANGE FROM 3'-6" TO 3'-0", SEE VENTING SCHEDULE

WOOD FOUNDATION PLATE SCHEDULE

50 + 15 PSF

PLATES	END WALL	SIDE WALL	MODLINE PAD AT END WALL	MODLINE PAD AT INTERIOR	SEPARATION PAD AT ENDWALL ☐ SEPARATE	SEPARATION PAD AT ENDWALL ☐ CONTINUOUS	SEPARATION PAD AT INTERIOR ☐ SEPARATE	SEPARATION PAD AT INTERIOR ☐ CONTINUOUS
ADDITIONAL (AS NEEDED)	2x4	2x4	2x6	2x6	(2) ROWS OF 2x4	2x12	(2) ROWS OF 2x4	2x12
TOP	2x6	2x6	2x8	2x8	(2) ROWS OF 2x6	2x12	(2) ROWS OF 2x6	2x12
BLOCK	2x8	2x8	2x10	2x10	(2) ROWS OF 2x8	2x12	(2) ROWS OF 2x8	2x12
SILL	2x12 (2x14)[15]	2x12 (2x14)[15]	(6) 2x12 x 2'-0"	(6) 2x12 x 2'-0"	(2) ROWS OF 2x14	(9) 2x12 x 2'-0"	(2) ROWS OF 2x14	(8) 2x12 x 2'-0"

FOUNDATION PLATE DESCRIPTION



NOTES

1. BUILDINGS OVER 2,160 SF, MUST BE INSTALLED ON A PERMANENT CONCRETE FOUNDATION PER IR 16-1 ITEM 1.4.
2. FOUNDATION PLAN HAS A 1/4" ADDED AT EACH MODULE LINE AND DOES NOT MATCH THE FLOOR PLAN. ADDITIONAL LENGTH ADDED FOR GROWTH THAT IS EXPERIENCED WHEN SETTING MULTIPLE MODULAR FLOORS.
3. FOUNDATION VENTS THAT OCCUR UNDER RAMP LANDINGS, PROVIDE AN EQUAL AREA OF SCREENED VENT IN LANDING SKIRT.
4. WOOD SILL (FOOTING) PLATES SHALL BE PRESSURE TREATED HEM-FIR AND MAY BEAR DIRECTLY ON SOIL OR PAVED SURFACE. GRASS OR TURF SHALL BE CLEARED TO BARE SOIL UNDER THE ENTIRE AREA OF THE BUILDING BY OTHERS. THE WOOD SILL FOOTING PLATE MAY SUPPORT CONTINUOUS BLOCKING AND SHEATHING SKIRT WHICH NEED NOT BE TREATED.
5. SILL RESTRAINT:
   THE FOUNDATION SHALL BE DESIGNED TO PREVENT SLIDING ON THE SUPPORTING SURFACE BY ATTACHING THE WOOD FOUNDATION PLATES FOR THE BUILDING, RAMPS AND STAIRS TO THE GROUND WITH RESTRAINING DEVICES. AN ACCEPTABLE DESIGN WOULD INCORPORATE ONE-INCH DIAMETER STANDARD WEIGHT (1.315" ACTUAL O.D.) HOT 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 CORNER IN BOTH DIRECTIONS AND A MINIMUM OF TWO PIPES / RODS PER DISCONTINUOUS FOUNDATIONS STRIP. PIPES SHOULD PENETRATE INTO SOIL, CONCRETE, AND/OR PAVING A MINIMUM OF 12" MEASURED VERTICALLY. ALTERNATE OR EQUIVALENT DESIGNS, WHEN PROVIDED WITH STRUCTURAL CALCULATIONS AND DETAILS, WILL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL.
6. STACKED WOOD MEMBERS FOR FOUNDATIONS AND PRESSURE TREATED LUMBER SHALL BE NAILED WITH HOT DIPPED GALVANIZED PER ASTM A-153.
7. VENTILATION OPENINGS SHALL BE COVERED FOR EITHER HEIGHT AND WIDTH WITH CORROSION - RESISTANT WIRE MESH, WITH A CLEAR "THROUGH" DIMENSION NOT EXCEEDING 1/8" ACTING AS A VERMIN BARRIER.
8. VENTING CALCULATION REQUIREMENTS FOR MULTIPLE BUILDING SETS MUST BE CALCULATED WITH OVERALL SQUARE FOOTAGE INCLUDING SEPARATION.
9. FOR FOUNDATION ANCHORAGE ON CONCRETE PAD, SEE DETAIL 15/F0.50.
10. IF OPTIONAL ENDWALL VENTS ARE APPLIED, SILL PLATE AND BLOCK PLATE MUST BE CONTINUOUS. VENT OPENINGS SHALL BE BROKEN ABOVE THE BLOCK PLATE.
11. FOR FOUNDATION SPLICE - SEE 5/F-0.50.
12. CRAWLSPACE VAPOR RETARDERS (WHERE INDICATED):
    THE OPTIONAL TOTAL AREA OF VENTILATION OPENINGS IS PERMITTED TO BE REDUCED TO 1/1500 FACTOR WITH AN APPROVED VAPOR RETARDER MATERIAL PER CBC SECTION 1202.4.1.2.
    MATERIALS:
    GROUND SURFACE COVERED WITH AN APPROVED VAPOR RETARDER MATERIAL; MUST HAVE A PERM RATING OF ONE OR LESS; SHOULD BE CONTINUOUS; POLYETHELYNE FILM (≥ 6 MIL); POOL LINER (PUNCTURE RESISTANT); AND POLYETHELYNE FILM WITH RAT SLAB.
    INSTALLATION RECOMMENDATIONS:
    OVERLAP JOINTS BY 6 INCHES; TAPE OR SEAL ALL JOINTS; ATTACH VAPOR RETARDER OVER SILL PLATE PER 10/F0.50; SEAL TO ALL PIERS AND OTHER PENETRATIONS.
13. ENDWALL VENTS (IF REQ'D) SHALL BE LOCATED A MIN OF 24" FROM BUILDING CORNERS. MAXIMUM ONE ENDWALL VENT PER 12'-0" MODULE.
14. CONCRETE FLOOR LOAD IS INCLUDED IN THE CONCRETE FOUNDATION OPTION FOR FOUNDATION & ANCHORAGE DESIGN, I.E. THERE IS NO CONCRETE FLOOR FOR WOOD FOUNDATION OPTION. THERE IS CONCRETE FLOOR FOR CONCRETE FOUNDATION OPTION.
15. IF PARAPET IS HIGHER THAN 18", COMBINATION REQUIRES A 2 X 14" OR 2 X 16" SILL PLATE @ EXTERIOR OF BUILDING.
16. 150 PSF FLOOR LIVE LOAD OPTION CANNOT BE USED WITH THE STUCCO WALL OR PARAPET OPTION.
17. VENTS AT MODLINE FOUNDATIONS. THE MINIMUM CRITERIA REQUIREMENT AS FOLLOWS:
    A. VENTS HAVE A MINIMUM OF 2 SILL /BLOCKING PLATES BENEATH.
    B. VENTS ARE A MAXIMUM OF 6'-0" LONG x 3" MIN. HIGH.
    C. VENTS ARE SPACED A MINIMUM OF 8'-0" APART (EDGE TO EDGE) AND 24" MIN. FROM CORNERS.
18. WHERE THE BUILDING OCCURS ON OR ADJACENT TO A SLOPE (GREATER THAN 33%) THE SETBACK SHALL COMPLY WITH CBC SECTION 1808A.7. THE MINIMUM SETBACK AT THE TOP OF THE SLOPE SHALL BE NOT LESS THAN SMALLER OF 40'-0" OR 1/3 THE HEIGHT OF THE SLOPE. THE MINIMUM SETBACK AT THE BOTTOM OF THE SLOPE SHALL BE NOT LESS THAN THE SMALLER OF 15'-0" OR 1/2 THE HEIGHT OF THE SLOPE. THE SETBACK DISTANCES INDICATED HERE MAY BE REDUCED WHEN A SITE SPECIFIC GEOTECHNICAL REPORT IS PROVIDED.

NAILING SCHEDULE

BUILDING SIZE	(2) 16d BOX NAILS PLATE TO PLATE ATTACHMENT BELOW UPPER MOST PLATE
24' x 40'	5" OC AT ENDWALL - 1 / F-0.50 12" OC AT SIDEWALL - 2 / F-0.50 10" OC AT SEPARATION - 4 / F-0.50

VENTING SCHEDULE

	BUILDING SIZE	BUILDING AREA	REQ. VENTING	SIDE VENTING	END VENTING	TOTAL VENTING SUPPLIED
W/O PARAPET	24' x 40'	960 SF	6.4 SF (1/150)	3'-6" x 6" = (4) 1.75 SF/EA	-	7.0 SF
W/ PARAPET	24' x 40'	960 SF	6.4 SF (1/150)	3'-0" x 6" = (4) 1.5 SF/EA (6 SF TOTAL)	2'-0" x 3" = (2) 0.5 SF/EA (1 SF TOTAL)	7.5 SF SEE NOTE #8

TIE PLATE SCHEDULE

BUILDING SIZE	SIDE WALL TIE PLATES	END WALL TIE PLATES	TOTAL NUMBER OF TIE PLATES
24' x 40'	4	7	22

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PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

WOOD FOUNDATION PLAN
24x40
(50+15 PSF)

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
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2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

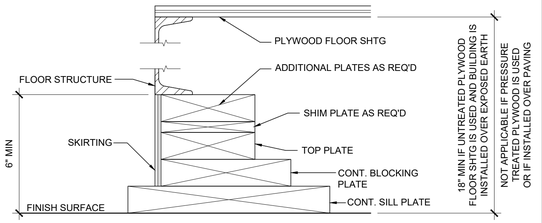
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

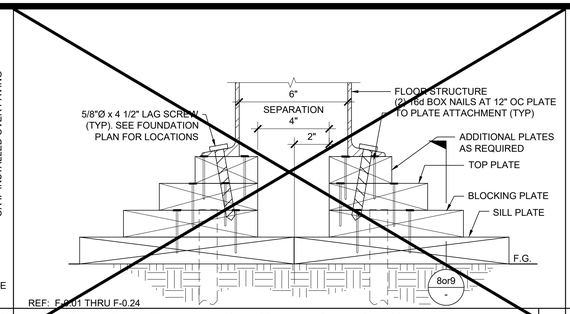
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
F-0.02



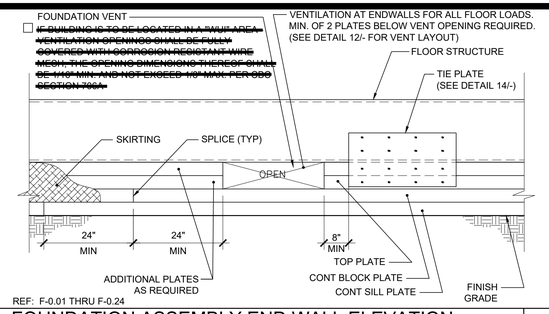
NOTE:
SEE SCHEDULE ON SHEET S-1.01 TO DETERMINE IF PRESSURE TREATED PLYWOOD FLOOR SHTG IS BEING PROVIDED

CLEARANCE TO PLYWOOD SHTG
SCALE : 3"=1'-0" | 16



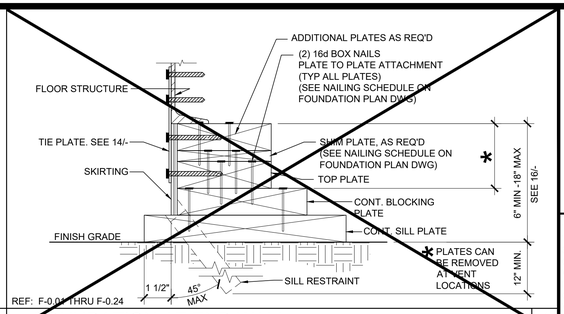
REF: F-0.01 THRU F-0.24

FOUNDATION AT ADJACENT BUILDING
SCALE : 3"=1'-0" | 11



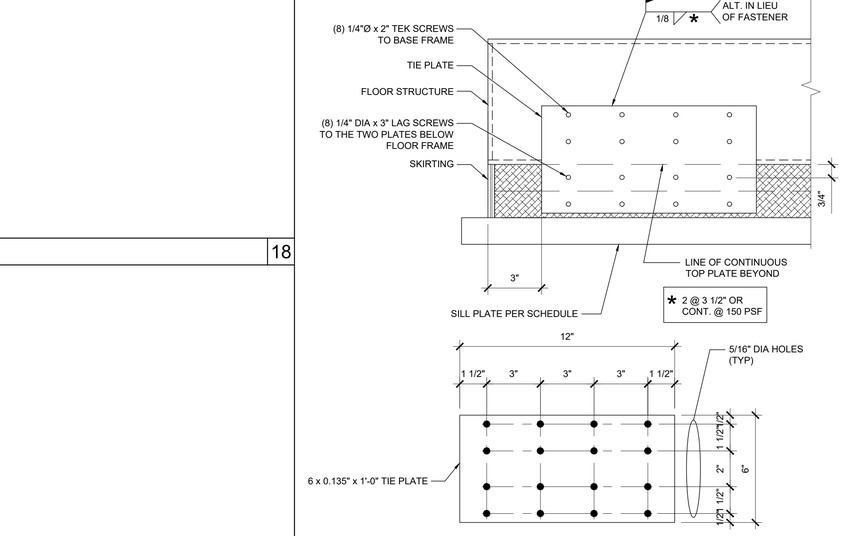
REF: F-0.01 THRU F-0.24

FOUNDATION ASSEMBLY END WALL ELEVATION
SCALE : 1 1/2"=1'-0" | 6

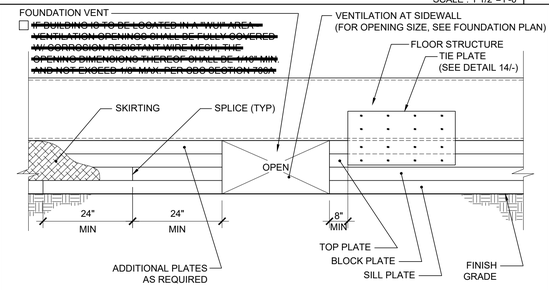


REF: F-0.01 THRU F-0.24

FOUNDATION AT END WALL
SCALE : 3"=1'-0" | 1

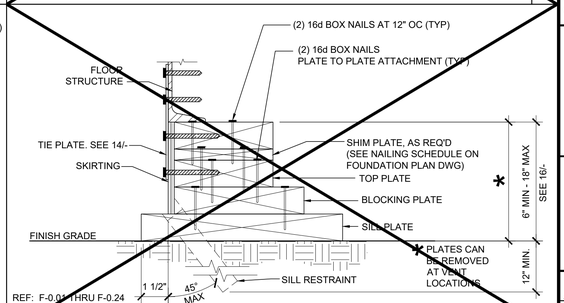


END WALL VENT
SCALE : 1 1/2"=1'-0" | 17



REF: F-001 - F-003, F-011 - F013, F-021 - F023

FOUNDATION ASSEMBLY SIDEWALL ELEVATION
SCALE : 1 1/2"=1'-0" | 7

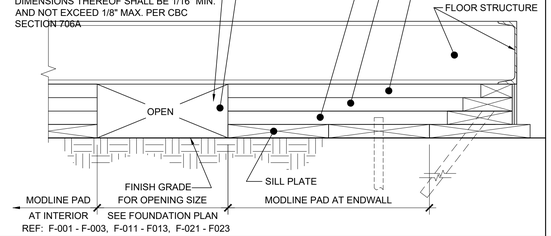


REF: F-0.01 THRU F-0.24

FOUNDATION AT SIDE WALL
SCALE : 3"=1'-0" | 2

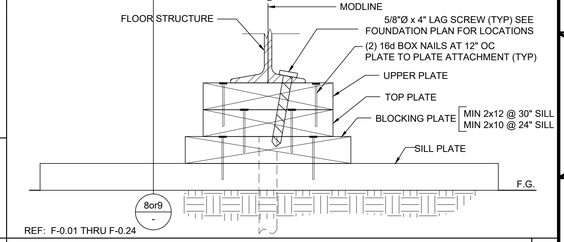
REF: F-0.01 THRU F-0.24

TIE PLATE
SCALE : 3"=1'-0" | 19



REF: F-001 - F-003, F-011 - F013, F-021 - F023

FOUNDATION AT MODLINE & SEPARATION
SCALE : 1 1/2"=1'-0" | 8

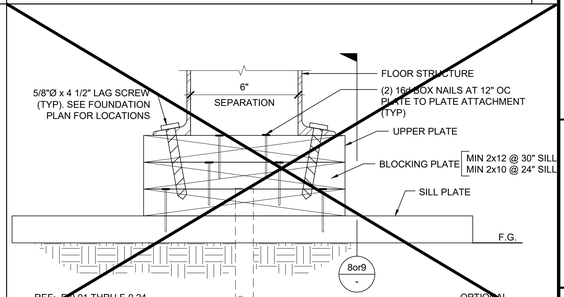


REF: F-0.01 THRU F-0.24

FOUNDATION AT MODLINE
SCALE : 3"=1'-0" | 3

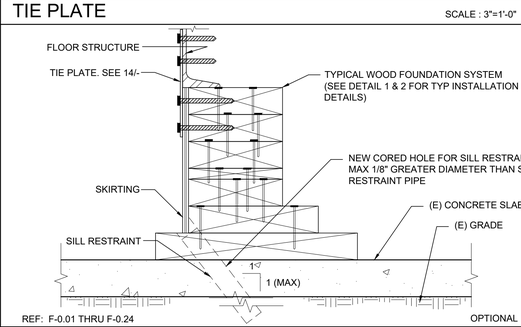
REF: F-0.04, F-0.14, F-0.24

VENT ELEV. AT MODLINE & SEP FOR 150 PSF
SCALE : 3"=1'-0" | 9



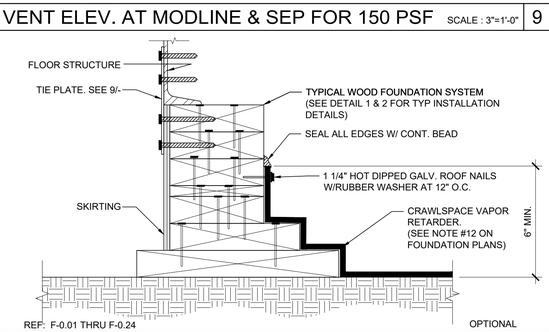
REF: F-0.01 THRU F-0.24 OPTIONAL

FOUNDATION AT ADJACENT BUILDING
SCALE : 3"=1'-0" | 4



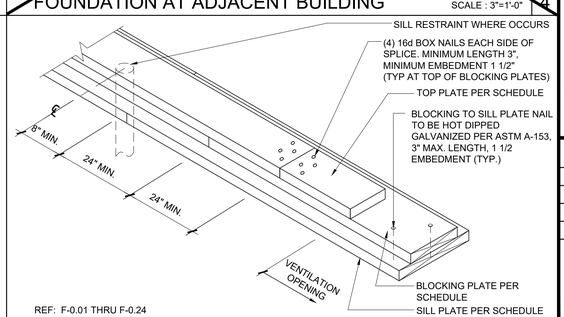
REF: F-0.01 THRU F-0.24 OPTIONAL

FOUNDATION ANCHORAGE AT CONCRETE PAD
SCALE : 3"=1'-0" | 15



REF: F-0.01 THRU F-0.24 OPTIONAL

CRAWLSPACE VAPOR RETARDER
SCALE : 3"=1'-0" | 10



REF: F-0.01 THRU F-0.24

FOUNDATION SPLICE
SCALE : NTS | 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

FOUNDATION DETAILS
WOOD

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

F-0.50

STRUCTURAL SPECIFICATIONS

FOUNDATIONS:

GEOTECHNICAL INVESTIGATIONS SHALL BE CONDUCTED IN ACCORDANCE WITH SECTIONS 1803A.3 THROUGH 1803A.8. EXCEPTIONS, 1) GEOTECHNICAL REPORTS ARE NOT REQUIRED FOR ONE-STORY, WOOD-FRAME AND LIGHT-STEEL-FRAME BUILDINGS OF TYPE II OR TYPE V CONSTRUCTION AND 4,000 SQUARE FEET OR LESS IN FLOOR AREA, NOT LOCATED WITHIN EARTHQUAKE FAULT ZONES OR SEISMIC HAZARD ZONES AS SHOWN IN THE MOST RECENTLY PUBLISHED MAPS FROM THE CALIFORNIA GEOLOGICAL SURVEY (CGS) OR IN SEISMIC HAZARD ZONES AS DEFINED IN THE SAFETY ELEMENT OF THE LOCAL GENERAL PLAN, 2) A PREVIOUS REPORT FOR A SPECIFIC SITE MAY BE RESUBMITTED, PROVIDED THAT A REEVALUATION IS MADE AND THE REPORT IS FOUND TO BE CURRENTLY APPROPRIATE. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1806A.2 PER CBC SECTION 1803A.2

CONCRETE

PROVIDE NECESSARY SHIMS ON FOOTINGS NOT LEVEL WITHIN THE 1/2" ALLOWABLE TOLERANCE. THE DISTRICT SHALL PROVIDE CLEAR AND UNOBSTRUCTED ACCESS TO THE SITE. THE DISTRICT IS RESPONSIBLE FOR ALL SURVEYING, STAKING THE BUILDING CORNERS, SETTING THE FINISH FLOOR ELEVATION, RIGGING, CRANING, EXCAVATION, SPOIL REMOVAL, AND BACKFILL.

THE FOUNDATION AND THE METHOD OF FASTENING THE UNITS SHALL BE AS SHOWN ON DRAWINGS WHERE APPLICABLE. HIGH STRENGTH GROUT SHALL BE EMBECO 885 NON-SHRINK, METALLIC AGGREGATE GROUT OR A DSA APPROVED EQUAL.

THE DESIGN OF CONRETE FOUNDATIONS WILL BE AS FOLLOWS:

1. FURNISH AND INSTALL ALL CONCRETE WORK AS SHOWN ON THE DRAWINGS AND AS SPECIFIED.
2. EXCEPT AS MODIFIED BY THE REQUIREMENTS SPECIFIED HEREIN AND / OR THE DETAILS ON THE DRAWINGS, ALL WORK INCLUDED IN THIS SECTION SHALL CONFORM TO THE APPLICABLE PROVISIONS OF CODES AND STANDARDS.
   a) ALL WORK AND MATERIALS SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS, AND CHAPTER 19A.
   b) AMERICAN CONCRETE INSTITUTE (ACI): BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE, ACI 318-19
   c) SOCIETY FOR TESTING AND MATERIALS (ASTM): THE SPECIFICATIONS AND STANDARDS HEREINAFTER REFERENCED TO SHALL BE OF THE LATEST EDITION.
3. CONCRETE FOUNDATION TESTS AND INSPECTIONS SHALL BE THE RESPONSIBILITY OF THE ARCHITECT AND OR INSPECTOR.
4. DESIGN MIXES SHALL BE AS FOLLOWS:

   ☐ WHERE A GEOTECHNICAL REPORT IS NOT PROVIDED:
   MINIMUM COMPRESSIVE STRENGTH = 5,000 PSI
   MAXIMUM WATER/CEMENT RATIO = 0.40
   CEMENT TYPE = V COMPLYING WITH ACI 319-19, TABLE 19.3.2.1, FOOTNOTE 8
   NORMAL WEIGHT
   NO ADMIXTURES CONTAINING CALCIUM CHLORIDE

   ☐ WHERE A GEOTECHNICAL REPORT IS PROVIDED WHICH INDICATES ONE OF THE FOLLOWING EXPOSURE CLASSIFICATIONS (F0, F1, S0, S1, W0, W1, C0, C1)
   MINIMUM COMPRESSIVE STRENGTH = 4,000 PSI
   MAXIMUM WATER/CEMENT RATIO = 0.50
   CEMENT TYPE = II/V
   NORMAL WEIGHT

   NOTE: WHERE CONCRETE IS EXPOSED TO THAW AND FREEZE CYCLES IT SHALL BE AIR ENTRAINED PER ACI 318 SECTION 19.3.3.1.

5. FORMS SHALL BE SUBSTANTIAL, PLUMB, LEVEL, SQUARE, TRUE TO LINE, WATER TIGHT AND ACCURATE TO THE DIMENSIONS REQUIRED.
6. THE ARCHITECT SHALL APPROVE LOCATION OF:
   a) OPENINGS FOR MECHANICAL AND ELECTRICAL: PROVIDE FOR OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED AND INSTALL SLEEVES AS MAY BE REQUIRED.
   b) OPENINGS FOR VENT WELLS FOR UNDER FLOOR VENTILATION: PROVIDE FOR ALL OPENINGS IN THE CONCRETE WITH THE TRADE(S) INVOLVED. INSTALL ALL SLEEVES AS MAY BE REQUIRED.
7. VARIANCE IN TOP OF STEMWALL AND/OR ANCHOR PLATE SURFACE SHALL BE NO MORE THAN 1/16" IN 10 FEET
8. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, AND EMBEDDED ITEMS ARE TO BE SECURELY TIED IN PLACE BEFORE CONCRETE IS POURED "WET SETTING" IS NOT ALLOWED.
9. REFER TO ARCHITECTURAL, ELECTRICAL, AND MECHANICAL PLANS FOR SLEEVES, INSERTS CURBS, DEPRESSED AREAS, AND ETC.
10. CONCRETE MIX REQUIRED: CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGN FOR FOOTINGS TO PROFESSIONAL OF RECORD FOR APPROVAL PRIOR TO POURING CONCRETE.

1705A.3.3. WAIVER OF BATCH PLAN INSPECTION.

A. WHEN BATCH PLANT INSPECTION IS WAIVED, THE FOLLOWING REQUIREMENTS SHALL APPLY:

1. QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCHING AT THE START OF DAY.
2. LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTITY AND CERTIFY TO EACH LOAD BY A TICKET.
3. BATCH TICKETS, INCLUDING ACTUAL MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD AND SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH 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 , IT'S LOAD, TIME OF RECEIPT AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.

REINFORCING STEEL:

1. MATERIAL: ALL REINFORCING STEEL SHALL BE BILLET STEEL PER ASTM A-615 MIN. GRADE 60. EXCEPT #3 ANCHOR REINFORCEMENT SHALL BE GRADE 40.
2. SPLICES: ALL SPLICES SHALL BE LAPPED A MINIMUM 48" #5 BARS AND 30" #4 BARS UNLESS OTHERWISE DETAILED. SPLICES SHALL BE STAGGERED A MINIMUM OF 24" FROM ADJACENT HORIZONTAL BARS.
3. REINFORCING FABRICATION AND PLACEMENT: FABRICATION AND PLACING OF REINFORCING SHALL CONFORM TO THE "CODE OF STANDARD PRACTICE AND SPECIFICATIONS FOR PLACING REINFORCEMENT OF THE CONCRETE REINFORCING STEEL INSTITUTE".
4. MINIMUM COVERAGE: ALL REINFORCING SHALL HAVE THE FOLLOWING MINIMUM COVERAGE WITH CONCRETE:

LOCATION	AMOUNT
FORMED EARTH	2"
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
WALL-EXPOSED FACE	
#5 OR SMALLER	2"
#6 OR LARGER	2"
WALL-UNEXPOSED FACE	3/4"

5. HOOKS SHALL BE STAGGERED IN ALTERNATING DIRECTIONS.

STRUCTURAL STEEL:

1. ALL STRUCTURAL STEEL OTHER THAN TUBE AND PIPE COLUMNS SHALL CONFORM TO ASTM A-36.
2. TUBE COLUMNS SHALL CONFORM TO ASTM A500 GRADE B, OR A1085
3. PIPE COLUMNS SHALL CONFORM TO ASTM A501 OR ASTM A53, TYPE E OR S, GRADE B. OR A1085
4. TUBE STEEL USED FOR RAMPS & STAIRS SHALL CONFORM TO ASTM A513 GRADE MT1020 OR BETTER

STEEL FRAME BUILDING/STEEL FRAME CONSTRUCTION SHALL MEET THE MINIMUM DESIGN REQUIREMENTS OF STUD SPACING, ETC. PER LATEST EDITION OF 2022 CALIFORNIA BUILDING CODE. ALL WORK AND MATERIALS SHALL CONFORM TO THE "SPECIFICATION FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS" AND "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES," AMERICAN INSTITUTE OF STEEL CONSTRUCTION: TITLE 24, CCR, AND UNIFORM BUILDING CODE. STRUCTURAL STEEL SHALL BE MADE EITHER THE OPEN-HEARTH OR ELECTRIC FURNACE PROCESS ONLY AND SHALL CONFORM TO THE "SPECIFICATION FOR STRUCTURAL STEEL" ASTM DESIGNATION A36, CURRENT EDITION.

ROOF FRAMING, FLOOR FRAMING, AND WALL FRAMING SHALL BE PER MANUFACTURER'S PC PLANS AND PER APPLICABLE CODES.

ALL STRUCTURAL MEMBERS BELOW THE SUB-FLOOR, IE, GIRDERS, JOISTS, HEADERS, BLOCKING, SHALL BE STEEL. MINIMUM JOIST SPACING SHALL BE PER PLAN.

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE AISC STANDARD SPECIFICATIONS, THE APPLICABLE REGULATORY AGENCY AND THE AMERICAN IRON AND STEEL INSTITUTE SPECIFICATIONS FOR DESIGN OR LIGHT GAUGE STEEL STRUCTURAL MEMBERS. WELDING: SHALL COMPLY WITH THE PERTINENT PROVISIONS OF THE APPLICABLE REGULATORY AGENCY. ALL WELDING SHALL BE DONE BY OPERATORS WHO ARE QUALIFIED AS PRESCRIBED IN THE "QUALIFICATION PROCEDURE" OF THE AMERICAN WELDING SOCIETY TO PERFORM THE TYPE OF WORK REQUIRED.

STEEL SHALL BE COATED WITH ONE SHOP COAT OF MANUFACTURER'S STANDARD CHASSIS PAINT OR EQUAL.

BOLTS:

ALL COMMON BOLTS AND ANCHOR BOLTS SHALL CONFORM TO ASTM A-307.

STRUCTURAL WELDING: SPECIAL INSPECTOR REQUIRED

GENERAL: DURING THE WELDING OF ANY MEMBER OR CONNECTION THAT IS DESIGNED TO RESIST LOADS AND FORCES REQUIRED BY THIS CODE.

ALL WELDS USED IN PRIMARY MEMBERS AND CONNECTIONS IN THE LATERAL FORCE-RESISTING SYSTEMS SHALL BE MADE WITH A FILLER METAL THAT HAS A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT/LBS AT MINUS 20 DEGREES F AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.

ALL STRUCTURAL WELDING SHALL BE BY "ELECTRIC ARC PROCESS" PER AWS STANDARD CODE FOR ARC AND GAS WELDING IN BUILDING CONSTRUCTION. ALL LIGHT GAUGE STEEL (SHEET STEEL) SHALL BE WELDED PER AWS D1.3. ALL REINFORCING STEEL SHALL BE WELDED WITH LOW HYDROGEN RODS PER AWS D1.4, OR REINFORCING STEEL SHALL CONFORM TO ASTM A-706. ALL SHOP WELDED MUST BE PERFORMED BY "APPROVED" WELDERS IN A SHOP OF A LICENSED FABRICATOR. ALL FIELD WELDING SHALL BE PERFORMED BY "APPROVED" WELDERS. ELECTRODES SHALL BE E70XX FOR STRUCTURAL STEEL AND REBAR AND SHALL BE E60XX FOR LIGHT GAUGE STEEL. ★ (SEE OPTIONAL PROCESS)

THE SPECIAL INSPECTOR NEED NOT BE CONTINUOUSLY PRESENT DURING WELDING OF THE FOLLOWING ITEMS, PROVIDED THE MATERIALS, WELDING PROCEDURES AND QUALIFICATION OF WELDERS ARE VERIFIED PRIOR TO THE START OF WORK: PERIODIC INSPECTIONS ARE MADE OF WORK IN PROGRESS, AND A VISUAL INSPECTION OF ALL WELDS IS MADE PRIOR TO SHIPMENT OF SHOP WELDING.

a) FLOOR AND ROOF DECK WELDING.
b) WELDED STUDS WHEN USED FOR STRUCTURAL DIAPHRAGM OR COMPOSITE SYSTEMS.
c) WELDED SHEET STEEL FOR COLD-FRAMED STEEL FRAMING MEMBERS SUCH AS STUDS AND JOISTS WHICH ARE NOT PART OF AN ORDINARY MOMENT FRAME.
d) SINGLE PASS FILLET WELDS NOT EXCEEDING 5/16".

MATERIAL SHALL BE IDENTIFIED BY MARKING OR STAMPING THE I.D. NUMBER ON STRUCTURAL STEEL COMPONENTS BY LICENSED FABRICATION SHOP.

ALL BUTT, BEVEL, GROOVE, VEE, U AND J WELDS SHALL BE PREQUALIFIED COMPLETE PENETRATION WELDS.

FILLER MATERIAL FOR WELDING: SHIELDED METAL-ARC: AWS A5.1 OR 15.5 E70XX ELECTRODES.

HOLES IN STRUCTURAL STEEL SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.

STRUCTURAL STEEL SHALL BE THOROUGHLY CLEANED BY SCRAPING OR WIRE BRUSHING AND SHOP PRIMED.

ALL STEEL WORK, INCLUDING WELD AND CONNECTIONS EXCEPT WHERE ENTIRELY ENCASED IN CONCRETE SHALL BE GIVEN ONE COAT OF ACCEPTABLE METAL PROTECTION WELL WORKED INTO JOINTS AND OPEN SPACES.
★ OPTIONAL USE OF: FCAW PROCESS: E71T-8 FOR STRUCTURAL/REBAR (MEETS ALL CHARPY REQUIREMENTS)
E71T-11 FOR METAL DECKING

COLD-FORMED STEEL FRAMING:
STRUCTURAL LIGHT GAUGE STEEL FRAMING AND ACCESSORIES SHALL BE FABRICATED IN ACCORDANCE WITH ASTM A-1011/A GRADE AS LISTED BELOW, SEE PLAN FOR MINIMUM YIELD.
MATERIAL THICKNESS 0.060" OR LESS: ASTM A-1011/A GRADE 33 (UNO)
MATERIAL THICKNESS 0.060" OR GREATER: ASTM A-1011/A GRADE 50

SHEET STEEL DESIGNATION (GAUGE)	MINIMUM DELIVERED THICKNESS (INCHES)
26	0.017
22	0.029
20	0.034
18	0.046
16	0.057
14	0.071
12	0.100
11	0.114
10	0.128

LIGHT GAUGE STEEL STUDS AND TRACKS SHALL COMPLY WITH ASTM A-1003 STRUCTURAL GRADE 33 TYPE H

ALL WELDING SHALL BE IN CONFORMANCE WITH AWS D1.3, "STRUCTURAL WELDING CODE - SHEET STEEL". QUALIFICATION OF WELDERS SHALL BE IN ACCORDANCE WITH AWS D1.1, CHAPTER 5, PART C, "WELDER QUALIFICATIONS".

BOLTS, SCREWS, ETC. EXPOSED TO THE EXTERIOR SHALL BE GALVANIZED

MACHINE BOLTS USED SHALL CONFORM TO SPECIFICATIONS OF ASTM STANDARD A-307.

NTD:
(b) CJP GROOVE WELD NDT
ULTRASONIC TESTING SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16 in. (8mm) THICK OR GREATER. ULTRASONIC TESTING IN MATERIALS LESS THAN 5/16 in. (8 mm) THICK IS NOT REQUIRED. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS.

WOOD:

FRAMING: ALL FRAMING LUMBER SHALL BE GRADE MARKED BY AN APPROVED GRADING AGENCY AND SHALL BE OF THE FOLLOWING MINIMUM GRADES OR BETTER, PER WCLB RULES #16. MOISTURE CONTENT = 19% MAX.
PLATES AND BLOCKING - STANDARD GRADE OR BETTER
STUDS AND HEADER = HF #2, OR DF #2, OR BETTER

SHEATHING:

AMERICAN PLYWOOD ASSOCIATION PS 1-07. EACH SHEET SHALL BE GRADE MARKED BY THE AMERICAN PLYWOOD ASSOCIATION, AND SHALL CONFORM TO THE REQUIREMENTS OF STANDARD GRADE GROUP 1 OR BETTER GRADE STAMPED AND IDENTIFIED UNDER THE PROCEDURES AND QUALIFICATIONS SET FORTH BY PS 1-07.

1. PLYWOOD SUB FLOOR: 1 1/8" T&G UNBLOCKED PLYWOOD. PROVIDE SEAMLESS WOVEN POLYFLEX BOTTOM BOARD FOR MOISTURE PROTECTION
2. PLYWOOD ROOF DECK: APA RATED 3/4" T&G OSB OR EQUIVALENT RATED SHEATHING WITH APPROVAL FROM DSA
3. EXTERIOR WALL SIDING:
   i. STANDARD: 5/8" DURATEMP OR 5/8" SMART PANEL
   ii. OPTIONAL: 5/8" MDO
   iii. OPTIONAL: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO 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 STEEL, SILICON BRONZE OR COPPER PER CBC SECTION 2304.10.1.1

TREATED WOOD:

ALL WOOD INCLUDING WOOD SHEATHING IN CONTACT WITH CONCRETE OR MASONRY AND LOCATED LESS THAN 18" FROM EXPOSED EARTH SHALL BE "PRESERVATIVE TREATED" OR SHALL BE "NATURALLY DURABLE" MATERIAL PER (CBC SECTION 2304.12.1.2).
1. ALL ROUGH LUMBER SHALL BE DF #2 OR BETTER.
2. WOOD FASTENERS OTHER THAN SCREWS.
   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 2304.10.5.1

CONTINUOUS INSPECTION:

PROJECT INSPECTOR TO PROVIDE CONTINUOUS FIELD INSPECTION.

IN-PLANT INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION IN-PLANT

METALS, STRUCTURAL, AND MISC. STEEL:

CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND SERVICES REQUIRED FOR STRUCTURES AND MISCELLANEOUS STEEL AS SPECIFIED AND INDICATED IN THE DRAWINGS.

STEEL SHEETS: STEEL SHEETS FOR LIGHT GAUGE STEEL SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-1011/A, GRADE 40 U.O.N. SHEET METAL GRAVEL STOPS AND FLASHINGS SHALL BE MINIMUM 0.030 THICKNESS AND SHALL BE GALVANIZED.

ERECTION:
ALL STRUCTURAL STEEL SHALL BE ERECTED TRUE, STRAIGHT, PLUMB AND TO ITS DESIGNED LOCATION. TEMPORARY BRACING OR SHORING SHALL BE INSTALLED WHEREVER NECESSARY TO TAKE CARE OF LOADS TO WHICH THE STRUCTURE MAY BE SUBJECTED, INCLUDING ERECTION EQUIPMENT AND THE OPERATION OF SAME. CONNECTIONS SHALL BE ADEQUATE TO WITHSTAND STRESSES TO WHICH THEY ARE NORMALLY SUBJECTED. CONNECTIONS SHALL BE STEEL, EXCEPT AS OTHERWISE NOTED. FIELD CONNECTIONS SHALL BE BOLTED OR WELDED AS SHOWN ON THE DRAWINGS.

SHOP PAINT:

* EXPOSED STEEL COATED WITH ONE SHOP COAT OF PRIMER.
* NON-EXPOSED STEEL COATED WITH ON SHOP COAT OF PRIMER.
* ALL SURFACES THOROUGHLY CLEANED BY EFFECTIVE MEANS PRIOR TO APPLICATION OF SHOP COATS.

POWER DRIVEN FASTENERS FOR SILL PLATE, WOOD NAILERS TO STEEL COLUMNS, AND SHEET METAL TO STRUCTURAL STEEL:

ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, OR 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.

WOOD ROUGH CARPENTRY:

THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS AND STEPS NECESSARY TO PROTECT ALL COMPLETED, SEMI-COMPLETED, AND TEMPORARY WORK FROM COMMENCEMENT OF PROJECT TO COMPLETE, SEMI-COMPLETION OF SAME ANY PORTION OF THE WORK DAMAGED OR DISFIGURED SHALL BE SATISFACTORILY REPAIRED OR REPLACED AND THE WORK AS A WHOLE LEFT WITHOUT BLEMISH AT FINAL ACCEPTANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING ALL NECESSARY MEASUREMENTS AT THE BUILDING, THE ACCURATE FITTING OF ALL WORK AND PROPER ACCOMMODATION OF OTHER TRADES.

DESCRIPTION OF WORK:
THIS SECTION INCLUDES FURNISHING OF ALL LABOR, MATERIAL, TOOLS, EQUIPMENT, TRANSPORTATION, AND FACILITIES TO COMPLETE ROUGH CARPENTRY AS INDICATED IN THE DRAWINGS AND AS SPECIFIED HEREIN.

WORKMANSHIP:
ALL WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE BEST PRACTICE, SHALL BE ACCURATE AS TO MEASUREMENT AND SHALL BE CAREFULLY DONE, PLYWOOD SHEATHING SUBFLOOR SHALL PROVIDE A SMOOTH UNIFORM SURFACE CAPABLE PROPERLY ACCEPTING A CARPET FINISH.

ROOF DIAPHRAGM:
3/4" T&G APA RATED SHEATHING - STRUCTURE 1 EXPOSURE 1
SPAN RATING 48/24 MIN.
FASTEN TO ROOF JOISTS AND BEAMS W/ #10 X 1 1/4" LG. SELF DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 4" OC AT BOUNDARIES, 6" OC AT EDGES, AND 12" OC FIELD SCREWS. MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.

FLOOR DIAPHRAGM:
1 1/8" PLYWOOD - STURD-I-FLOOR
EXTERIOR - TONGUE AND GROOVE EDGES
SPAN RATING: 48"
FASTEN TO FLOOR JOISTS AND BEAMS W/ #10 - 24 X 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS MIN. 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.

@ 150-PSF ((FULLY BLOCKED))
FASTEN TO SHEET METAL SUPPORTS w/ #10 - 24 x 1 3/4 LG. SELF-DRILLING, SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS AT 4" O.C. BOUNDARIES + CONT. PANEL EDGES, 6" O.C. @ ALL OTHER PANEL EDGES 12" O.C. INTERMEDIATE.
ALL EDGES OF ALL PANELS SHALL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33 MILS WITH A MINIMUM WIDTH OF 1.5 INCHES. SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR
STRENGTH: 3000 PSI MIN
TYPE: I OR II
DENSITY: 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" O.C.

REFERENCE STANDARDS NOTES:

INTENT OF DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE STATE OF CALIFORNIA, CALIFORNIA CODE OF REGULATIONS, PART 1, 2, 3, 4, 5, 6, 9, AND 12, SUB-CHAPTER 1. CALIFORNIA BUILDING CODE, 2022 EDITION, MANUAL OF STEEL CONSTRUCTION, (AISC) 15TH EDITION, AMERICAN WELDING SOCIETY, STRUCTURAL WELDING CODE, AWS D1.1, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION STANDARD, (AITC) 109 ARCHITECTURAL SHEET METAL MANUAL, AIA FILE NO. 12-L (SMACNA) LATEST ADOPTED EDITION UNLESS OTHERWISE NOTED.

WORKMANSHIP:
WORKMANSHIP AND MATERIALS SHALL BE SUCH THAT BUILDING WILL BE WEATHERTIGHT AND WATERTIGHT.

INSPECTIONS:
A PROJECT 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 4-342, PART 1, TITLE 24, CCR.

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

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 BE NOT LESS THAN 3" IN OVERALL LENGTH. THE ABOVE NAILS SHALL ALSO BE ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIRED EMBEDMENT IS MAINTAINED.

CONNECTION AND FASTENERS:
ALL CONNECTIONS AND FASTENERS AS STATED ON THESE DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT PRODUCT WITH ICC REPORTS AND APPROVAL BY DSA.

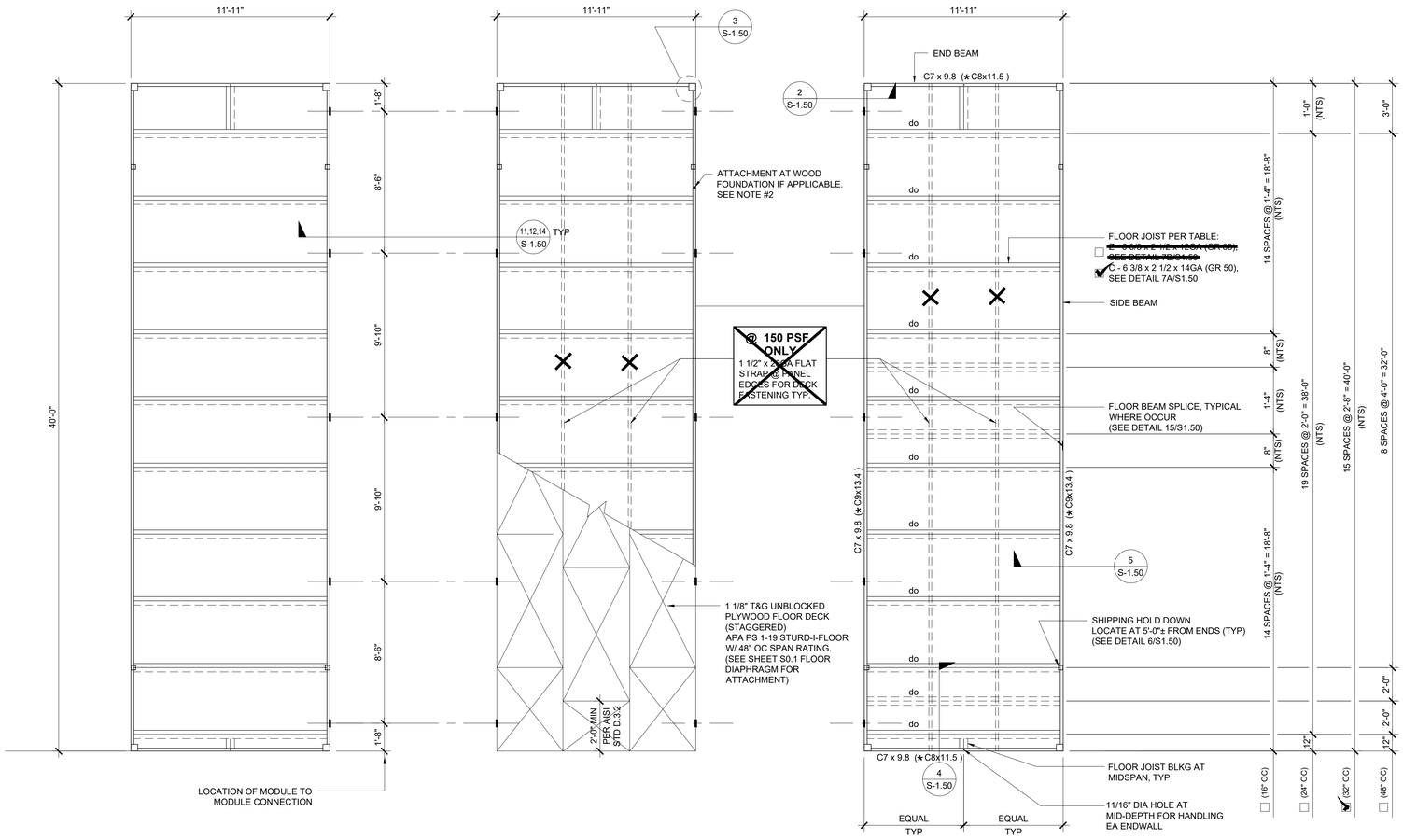
CONNECTION OF LAG SCREWS:
AS REQUIRED PER ANSI / AF&FA NDS-2012, LAG SCREWS MUST BE INSTALLED INTO A PRE-DRILLED PILOT HOLE WITH A STANDARD WASHER AND TURNED WITH A WRENCH. DO NOT DRIVE IN WITH A HAMMER. OVER-TORQUING CAN SIGNIFICANTLY REDUCE THE LATERAL RESISTANCE OF THE LAG SCREW AND SHOULD BE AVOIDED.

FASTENING SCHEDULE (2022 CBC TABLE 2304.10.1)

DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER	SPACING AND LOCATION
Roof		
1. Blocking between ceiling joists, rafters or trusses to top plate or other framing below	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Each end, toenail
Blocking between rafters or truss not at the wall top plate, to rafter or truss	2-8d common (2 1/2" × 0.131") 2-3" × 0.131" nails 2-3" 14 gage staples	Each end, toenail
	2-16 d common (3 1/2" × 0.162") 3-3" × 0.131" nails 3-3" 14 gage staples	End nail
Flat blocking to truss and web filler	16d common (3 1/2" × 0.162") @ 6" o.c. 3" × 0.131" nails @ 6" o.c. 3" × 14 gage staples @ 6" o.c	Face nail
2. Ceiling joists to top plate	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Each joist, toenail
3. Ceiling joist not attached to parallel rafter, laps over partitions (no thrust) (see Section 2308.7.3.1, Table 2308.7.3.1)	3-16d common (3 1/2" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown; or	Face nail
4. Ceiling joist attached to parallel rafter (heel joint) (see Section 2308.7.3.1, Table 2308.7.3.1)	Per Table 2308.7.3.1	Face nail
5. Collar tie to rafter	3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Face nail
6. Rafter or roof truss to top plate (See Section 2308.7.5, Table 2308.7.5)	3-10 common (3" × 0.148"); or 3-16d box (3 1/2" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131 nails; or 4-3" 14 gage staples, 7/16" crown	Toenail[c]
7. Roof rafters to ridge valley or hip rafters; or roof rafter to 2-inch ridge beam	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown; or	End nail
	3-10d common (3" × 0.148"); or 4-16d box (31/2" × 0.135"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	Toenail
Wall		
8. Stud to stud (not at braced wall panels)	16d common (3 1/2" × 0.162");	24" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	16" o.c. face nail
9. Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	16d box (3 1/2" × 0.135"); or	12" o.c. face nail
	3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	12" o.c. face nail
10. Built-up header (2" to 2" header)	16d common (3 1/2" × 0.162"); or	16" o.c. each edge, face nail
	16d box (3 1/2" × 0.135")	12" o.c. each edge, face nail
11. Continuous header to stud	4-8d common (2 1/2" × 0.131"); or 4-10d box (3" × 0.128")	Toenail
12. Top plate to top plate	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c face nail
13. Top plate to top plate, at end joints	8-16d common (3 1/2" × 0.162"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails; or 12-3" 14 gage staples, 7/16" crown	Each side of end joint, face nail (minimum 24" lap splice length each side of end joint)
14. Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3 1/2" × 0.162"); or	16" o.c. face nail
	16d box (3 1/2" × 0.135"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	12" o.c. face nail
15. Bottom plate to joist, rim joist, band joist or blocking at braced wall panels	2-16d common (3 1/2" × 0.162"); or 3-16d box (3 1/2" × 0.135"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown	16" o.c. face nail
16. Stud to top or bottom plate	4-8d common(2 1/2" × 0.131"; or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" 14 gage staples, 7/16" crown; or	Toenail
	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	End nail
17. Top plates, laps at corners and intersections	2-16d common (3 1/2" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Face nail
18. 1" brace to each stud and plate	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128"); or 2-3" × 0.131" nails; or 2-3" 14 gage staples, 7/16" crown	Face nail
19. 1" × 6" sheathing to each bearing	2-8d common (2 1/2" × 0.131"); or 2-10d box (3" × 0.128")	Face nail
20. 1" × 8" and wider sheathing to each bearing	3-8d common (2 1/2" × 0.131"); or 3-10d box (3" × 0.128")	Face nail
Floor		
21. Joist to sill, top plate, or girder	3-8d common (2 1/2" × 0.131"); or floor 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails; or 3-3" 14 gage staples, 7/16" crown	Toenail
22. Rim joist, band joist, or blocking to top plate, sill or other framing below	8d common (2 1/2" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails; or 3" 14 gage staples, 7/16" crown	6" o.c., toenail
23. 1" × 6" subfloor or less to each joist	2-8d

NOTE:
* SEE BEAM AND COLUMN SCHEDULE ON SHEETS S-3.01 ~~THRU S-3.02~~ FOR APPLICABLE FLOOR BEAM SIZE

REAR



LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

FRONT

NOTES:

1. FOR FLOOR BLOCKING SEE DETAILS 4,7B / S-1.50 (STD), 4,7A / S-1.50 (ALT)
2. FOR BUILDINGS ON WOOD FOUNDATION SYSTEMS, PROVIDE 11/16" DIA. HOLE AT BOTTOM FLANGE OF FLOOR BEAM FOR LAG SCREW ATTACHMENT TO FOUNDATION PLATES BELOW. FOR EXACT HOLE LOCATIONS, SEE FOUNDATION PLAN.
3. FLOOR SHEATHING SHALL BE PRESSURE TREATED WOOD OR NATURALLY DURABLE IF BOTTOM OF PLYWOOD IS LESS THAN 18" CLEAR FROM EXPOSED EARTH.
4. HSS COLUMN SCHEDULES ON SHEETS S-3.01 ~~THRU S-3.02~~

FLOOR JOIST TABLE

	LIVE LOAD PSF	JOIST SPACING	
		CLASSROOM ☑	OFFICE ☐
☐	50	48"	48" DBL JOIST
☐	50	32"	32" DBL JOIST
☐	50	24"	24" DBL JOIST
☐	50	16"	16" DBL JOIST
☑	50 + 15	32"	
☐	50 + 15	24"	
☐	50 + 15	16"	
☐	100	24"	
☐	100	16"	
☐	150	16"	

FLOOR SHEATHING

☐ PRESSURE TREATED
☑ NON-PRESSURE TREATED

NOTE:
PRESSURE TREATED SHEATHING SHALL ONLY BE PROVIDED WHEN WOOD FOUNDATIONS ARE USED AND EXPOSED EARTH OCCURS WITHIN THE FOUNDATION AT A DISTANCE OF LESS THAN 18" BELOW THE UNDERSIDE OF THE FLOOR SHEATHING. SEE 16/F-0.50 FOR ADDITIONAL INFORMATION.

FLOOR FRAMING PLAN

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

FLOOR FRAMING PLAN
WOOD FLOOR

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

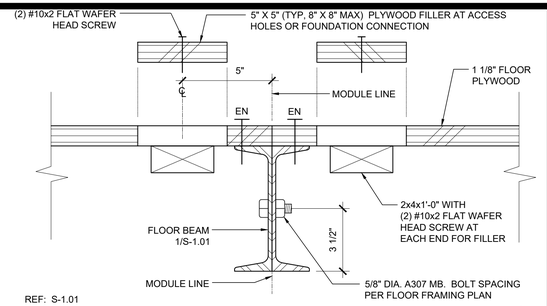
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

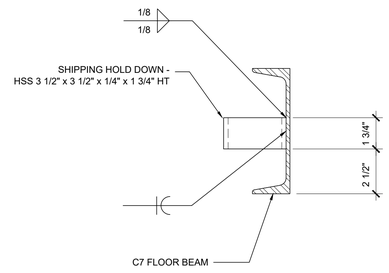
P.C. SHEET NUMBER

S-1.01



REF: S-1.01

16 MODULE LINE - BOLTED CONNECTION SCALE : 3" = 1'-0"

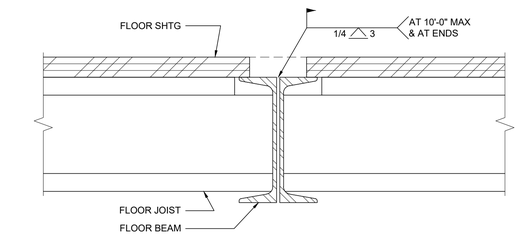


REF: S-1.01

11 SHIPPING HOLD DOWN DETAIL SCALE : 3"=1'-0"

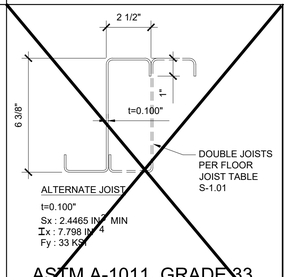
6

1



REF: S-1.01

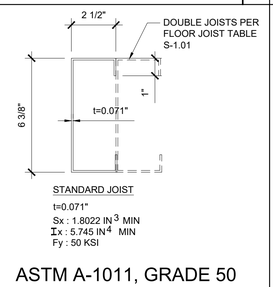
17 MODULE LINE CONNECTION (OPTION 1) SCALE : 3"=1'-0"



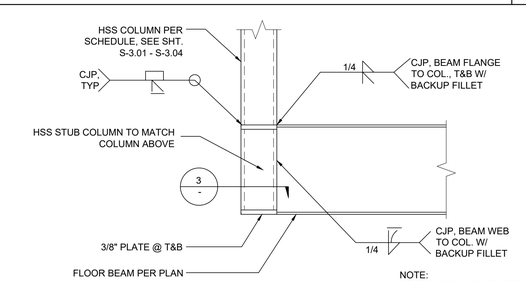
REF: S-1.01

12 FLOOR JOIST SCALE : 3" = 1'-0"

7B

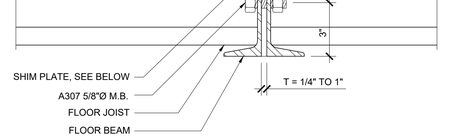


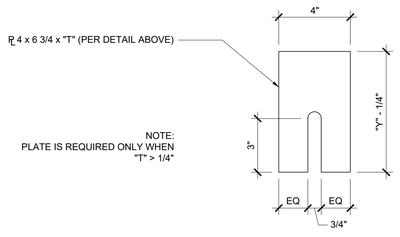
7A FLOOR JOIST SCALE : 3" = 1'-0"



REF: S-1.01

2 FLOOR BEAM TO COLUMN CONNECTION SCALE : 1 1/2" = 1'-0"





REF: S-1.01

19 MODULE LINE CONNECTION (OPTION 2) SCALE : 3"=1'-0"

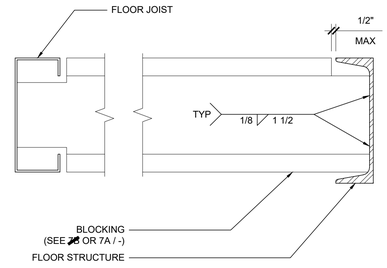
14

FLOOR JOIST HOLES (OPTIONAL) SCALE : 1/8" = 1'-0"

8

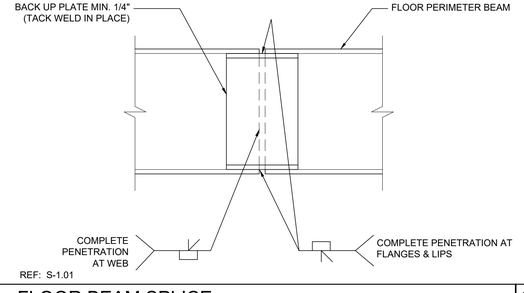
REF: S-1.01

3 CORNER CONNECTION SCALE : 3" = 1'-0"



REF: S-1.01

4 BLOCKING TO END BEAM SCALE : 3" = 1'-0"



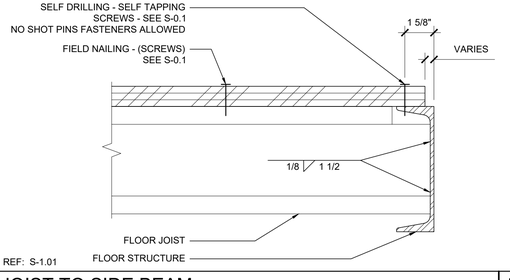
REF: S-1.01

20 FLOOR BEAM SPLICE SCALE : 3" = 1'-0"

15

NOT USED

10



REF: S-1.01

JOIST TO SIDE BEAM SCALE : 3" = 1'-0"

5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

FLOOR FRMING DETILS
WOOD FLOOR

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

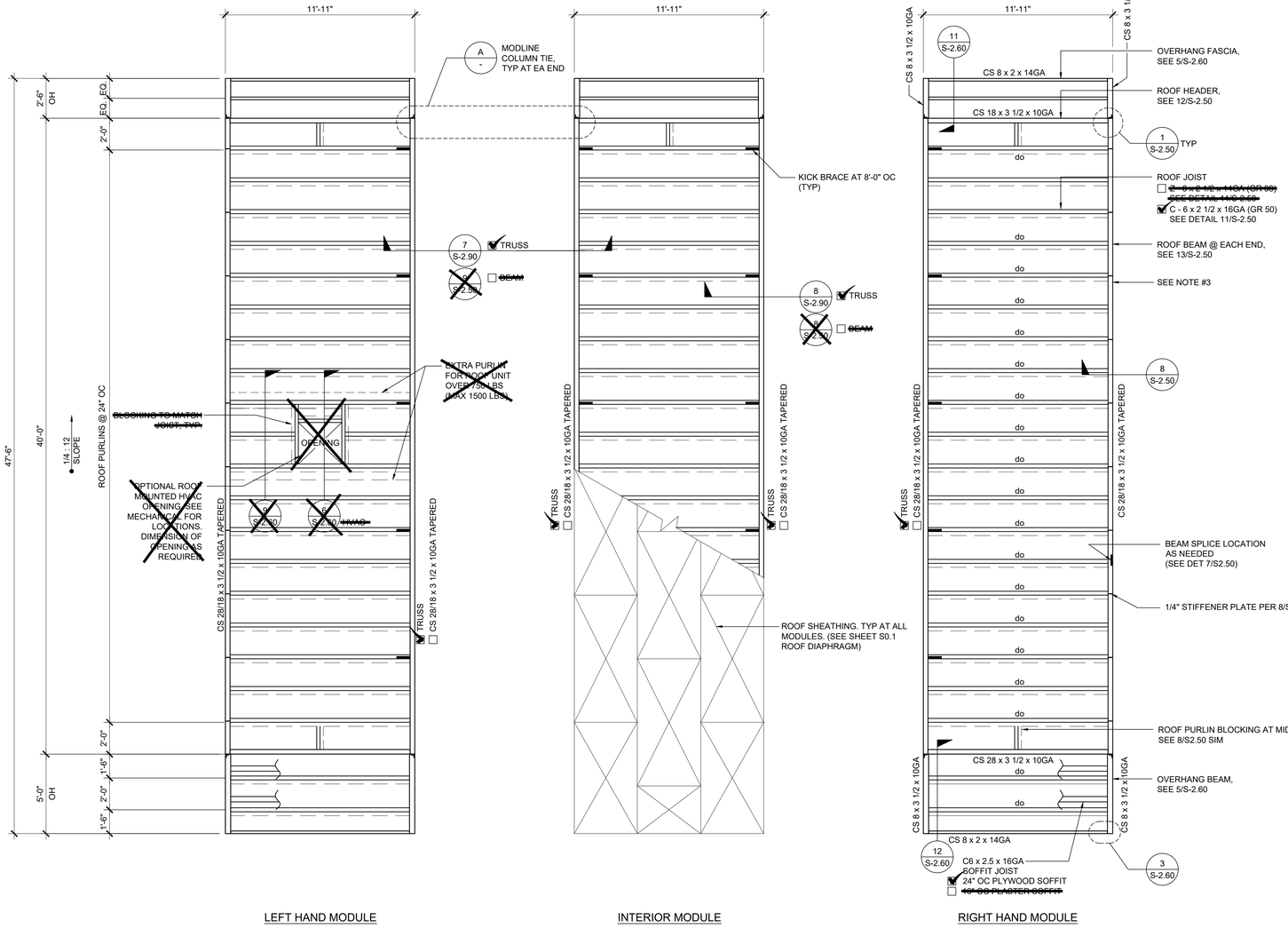
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

S-1.50



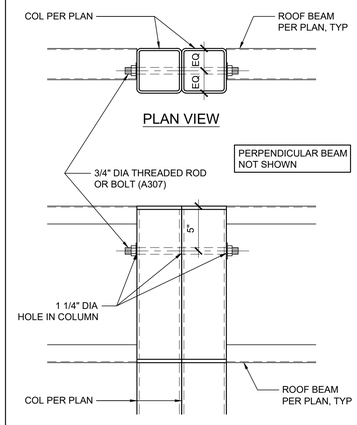
LEFT HAND MODULE

INTERIOR MODULE

RIGHT HAND MODULE

NOTES

1. FOR WALL MOUNTED HVAC UNIT, PROVIDE OPENING THROUGH REAR ROOF HEADER WHERE IT OCCURS. SEE FLOOR PLAN FOR HVAC LOCATION. SEE 5,15 / S-2.50 ~~OR 6,16/S-2.50~~ FOR DETAILS
2. PROVIDE ADDITIONAL JOIST FOR FIRE SPRINKLER LINE AS NEEDED. LOCATION OF FIRE SPRINKLER PURLIN TO BE DETERMINED BY SITE STIFFENER PLATE OR ANGLE BRACE REQUIRED AT THIS LOCATION. FOR FIRE SPRINKLER LINE SIDE BEAM PENETRATION, SEE 14 / S-2.50 ~~OR 11 / S-2.50~~ DETAILS.
3. FOR OPTIONAL SIDE BEAM OPENING SEE 10, 15/S-2.50 ~~OR 10, 16/S-2.50~~ FOR DETAILS



SECTION VIEW

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ROOF FRAMING PLAN
MONO SLOPE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 01-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

S-2.01

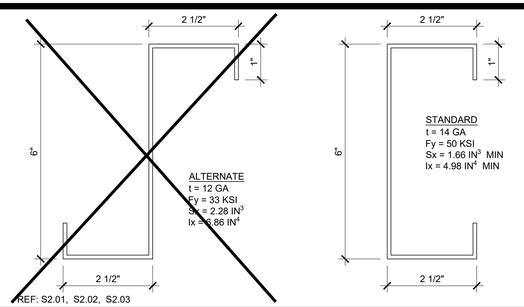
ROOF FRAMING PLAN

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

NOT USED 16

ROOF PURLIN

SCALE : 6"=1'-0" 11

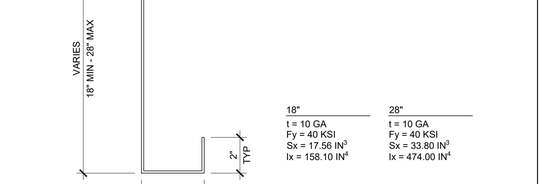


REF: S2.01, S2.02, S2.03

NOT USED 17

ROOF HEADER

SCALE : NTS 12

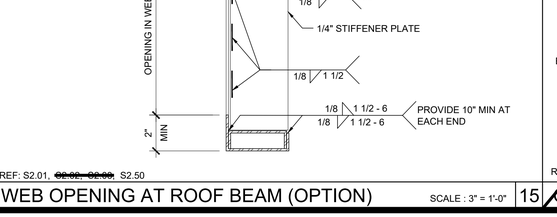


REF: S2.01, ~~S2.02, S2.03~~

NOT USED 18

SIDE BEAM

SCALE : NTS 13

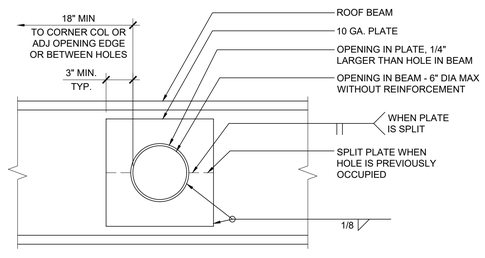


REF: S2.01, ~~S2.02, S2.03~~, S2.50

NOT USED 19

SIDEWALL BEAM PENETRATION

SCALE : 1 1/2"=1'-0" 14



REF: S2.01, ~~S2.02, S2.03~~

NOT USED 20

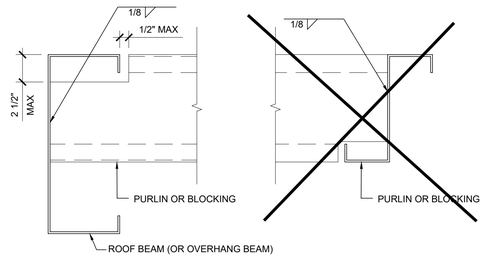
WEB OPENING AT ROOF BEAM (OPTION)

SCALE : 3" = 1'-0" 15

REF: S2.01, ~~S2.02, S2.03~~, S2.50

TYPICAL PURLIN CONNECTION DETAIL

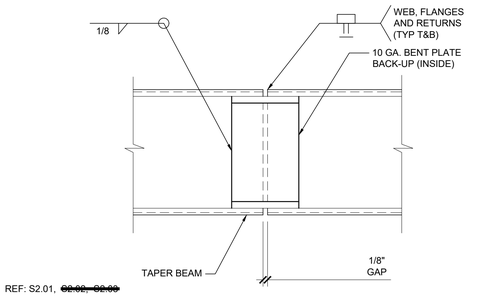
SCALE : 3" = 1'-0" 6



REF: ~~S2.02~~

BEAM SPLICE

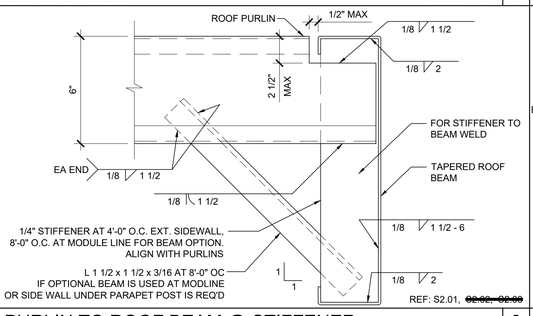
SCALE: 3" = 1'-0" 7



REF: S2.01, ~~S2.02, S2.03~~

PURLIN TO ROOF BEAM @ STIFFENER

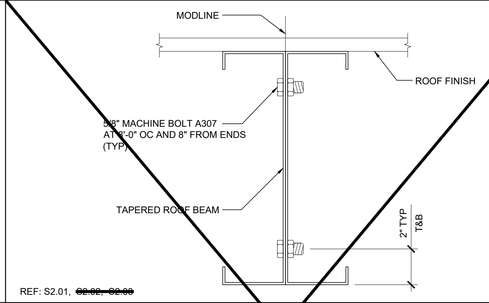
SCALE : 3"=1'-0" 8



REF: S2.01, ~~S2.02, S2.03~~

MODULE CONNECTION AT ROOF (OPTION)

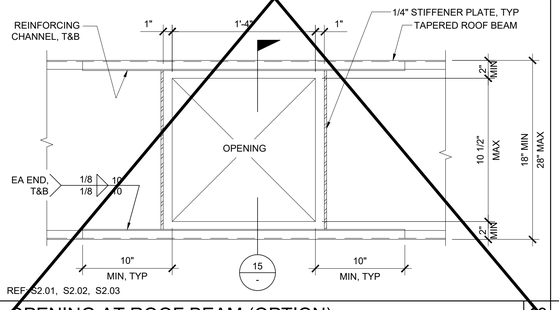
SCALE : 3"=1'-0" 9



REF: S2.01, ~~S2.02, S2.03~~

OPENING AT ROOF BEAM (OPTION)

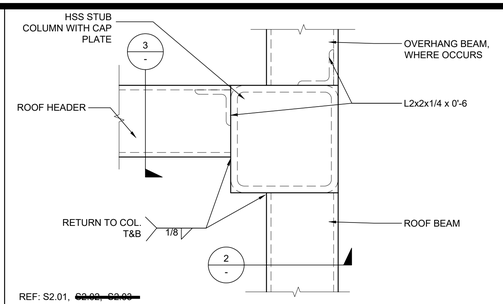
SCALE : 1 1/2" = 1'-0" 10



REF: S2.01, S2.02, S2.03

COLUMN AT ROOF - PLAN

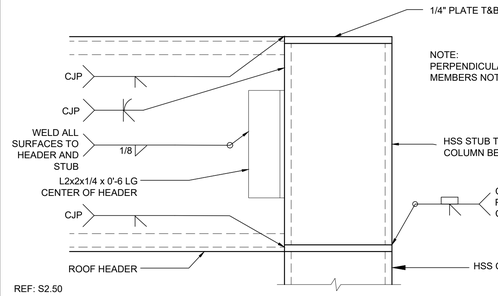
SCALE : 3" = 1'-0" 1



REF: S2.01, ~~S2.02, S2.03~~

COLUMN AT ROOF - SECTION

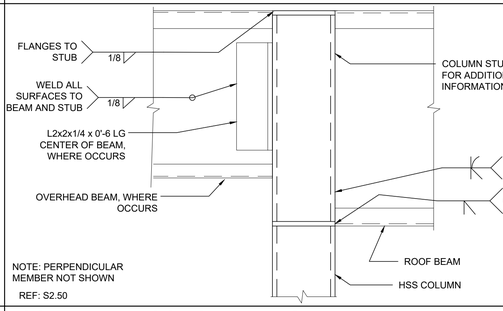
SCALE : 3" = 1'-0" 2



REF: S2.50

COLUMN AT ROOF OVERHANG

SCALE : 3" = 1'-0" 3

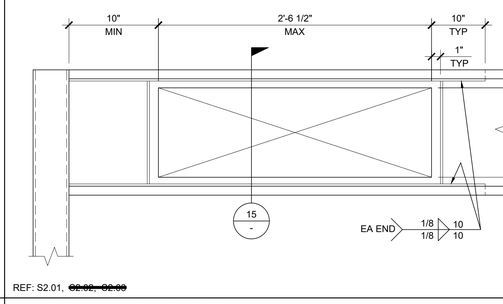


REF: S2.50

NOT USED 4

COLUMN AT ROOF - ELEVATION

SCALE : 3" = 1'-0" 4



REF: S2.01, ~~S2.02, S2.03~~

OPENING AT HEADER

SCALE : 1 1/2"=1'-0" 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ROOF FRAMING DETAILS
MONO SLOPE

REVISIONS

1 2 3 4 5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

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DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24475
STRUCTURAL
STATE OF CALIFORNIA

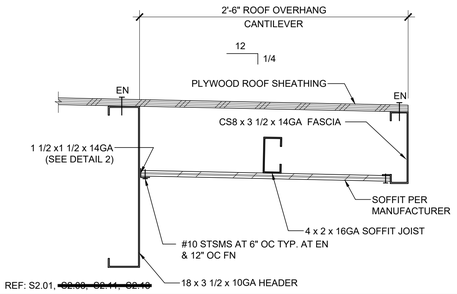
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

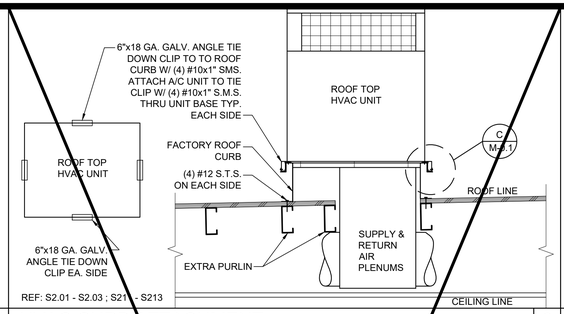
S-2.50

NOT USED | 16



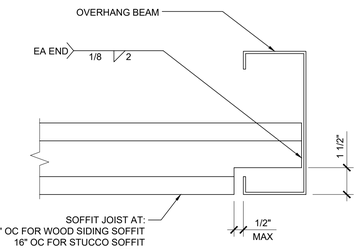
REF: S2.01, ~~S2.03, S2.11, S2.13~~

REAR OVERHANG SECTION SCALE : 1 1/2" = 1'-0" | 11



REF: S2.01 - S2.03 ; S211 - S213

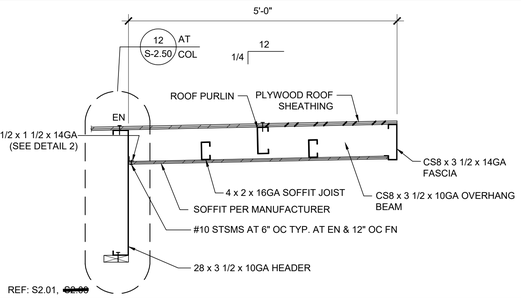
HVAC CURB ATTACHMENT SCALE : 3/4" = 1'-0" | 6



REF: S3.01

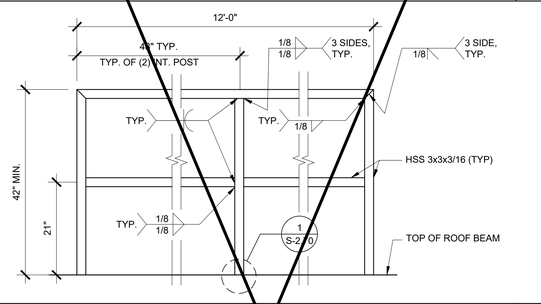
SOFFIT JOIST TO OVERHANG BEAM SCALE : 3"=1'-0" | 1

NOT USED | 17

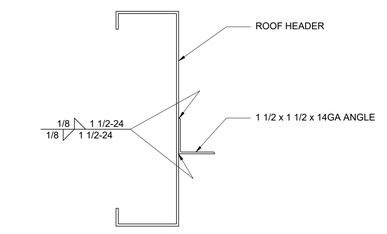


REF: S2.01, ~~S2.03~~

FRONT OVERHANG SECTION - MONO SLOPE SCALE: 3/4" = 1'-0" | 12

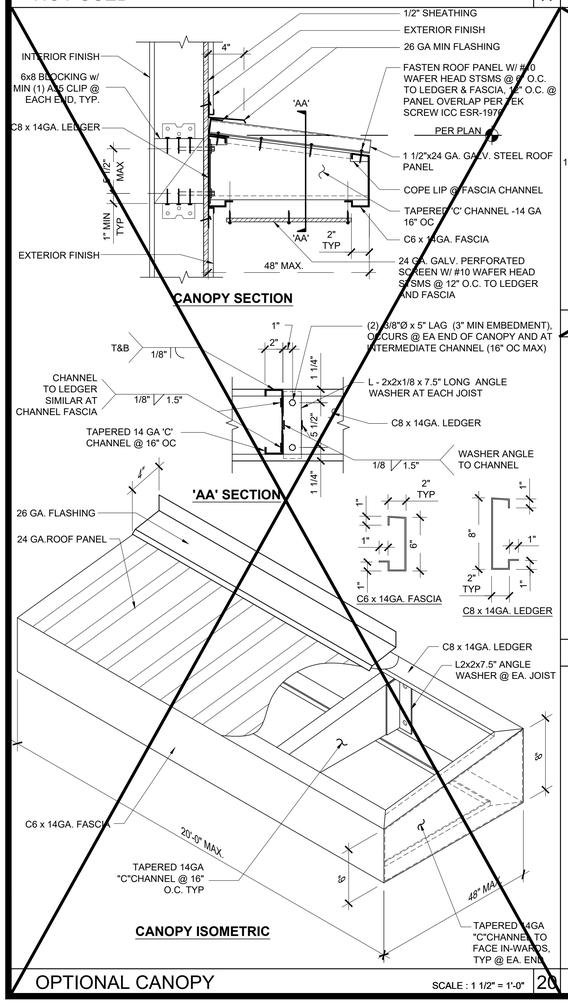


GUARDRAIL AT SIDEWALL SCALE : 3/4"=1'-0" | 7

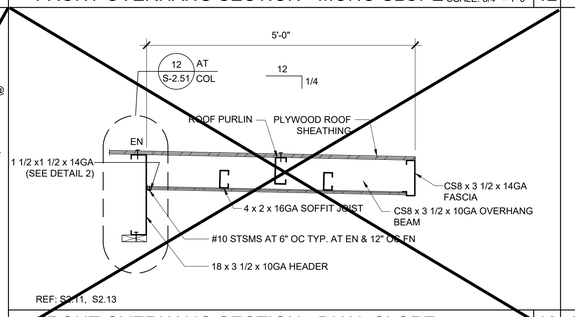


REF: S3.01

SOFFIT ANGLE TO HEADER CONNECTION SCALE : 3"=1'-0" | 2



OPTIONAL CANOPY SCALE : 1 1/2" = 1'-0" | 20

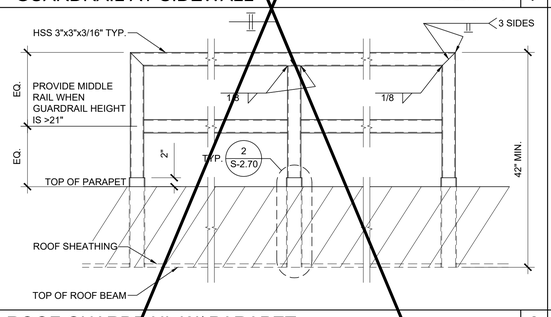


REF: S2.11, S2.13

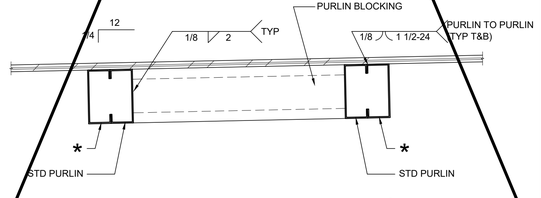
FRONT OVERHANG SECTION - DUAL SLOPE SCALE: 3/4" = 1'-0" | 13

NOT USED | 14

NOT USED | 15



ROOF GUARDRAIL W/ PARAPET SCALE : 3/4" = 1'-0" | 8

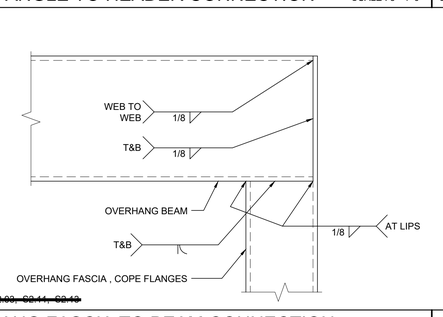


REF: S2.01 - S2.03 ; S211 - S213

★EXTRA PURLIN FOR HVAC
ROOF UNIT OVER 750 LBS.

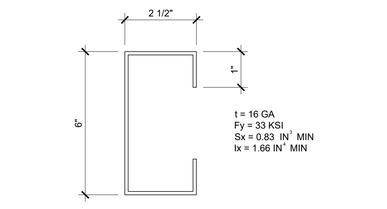
NOT USED | 9

DOUBLE PURLINS AT HVAC SCALE: 1 1/2" = 1'-0" | 9



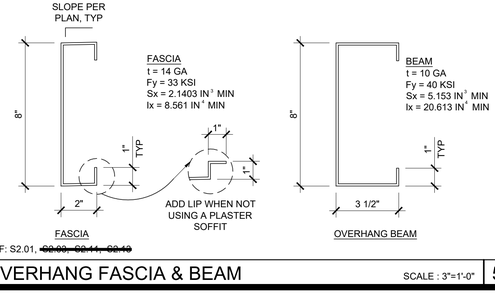
REF: S2.01, ~~S2.03, S2.11, S2.13~~

OVERHANG FASCIA TO BEAM CONNECTION SCALE : 6"=1'-0" | 3



REF: S2.01, ~~S2.03, S2.11, S2.13,~~ S3.01

SOFFIT JOIST SCALE : 6"=1'-0" | 4



REF: S2.01, ~~S2.03, S2.11, S2.13~~

OVERHANG FASCIA & BEAM SCALE : 3"=1'-0" | 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ROOF FRAMING DETAILS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

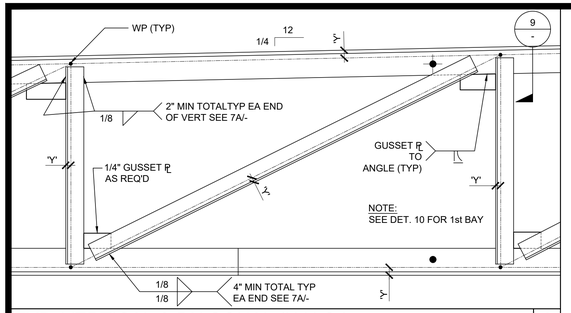
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24175
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

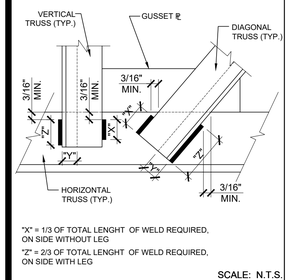
P.C. SHEET NUMBER

S-2.60



TYP. VERTICAL & DIAGONAL (U.N.O.)

SCALE: 1 1/2" = 1' - 0" | 6

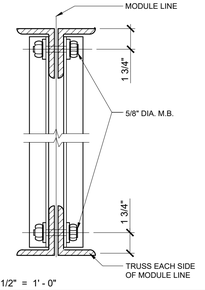


"X" = 1/3 OF TOTAL LENGHT OF WELD REQUIRED, ON SIDE WITHOUT LEG

"Z" = 2/3 OF TOTAL LENGHT OF WELD REQUIRED, ON SIDE WITH LEG

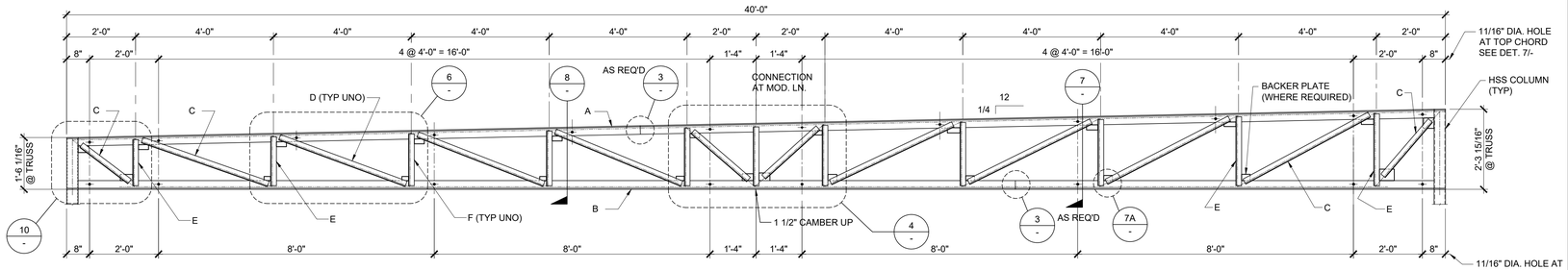
SCALE: N.T.S.

FILLET WELD TERMINATION | 7A



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

CONNECTION @ MODULE LINE | 7



MONO SLOPE TRUSS

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

NOTES:

1. SEE SHEET S-0.1 FOR STEEL GRADES.
2. REQUIRED ELECTRODES FOR ALL WELDS TO BE E-70
3. VOLTAGE & AMPERAGE SHALL BE PER ELECTRODE MANUFACTURERS SPECIFICATIONS
4. BOLTS AND NUTS GRADES TO BE A307

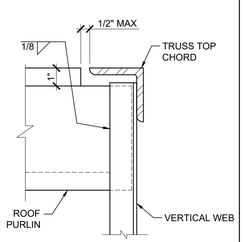
REF: ROOF FRAMING PLAN

TRUSS MARK:			Y=
A	TOP CHORD	4" x 4" x 3/8" (LLV)	1 1/4
B	BOTTOM CHORD	4" x 4" x 3/8" (LLV)	1 1/4
C	END DIAGONALS (2 EACH END)	2" x 2" x 10 GA.	9/16
D	TYPICAL DIAGONALS	1 1/2" x 1 1/2" x 10 GA.	7/16
E	END VERTICAL (2 EACH END)	1 1/2" x 1 1/2" x 10 GA.	7/16
F	TYPICAL VERTICALS	1 1/2" x 1 1/2" x 10 GA.	7/16

NOTE; "Y" MAY BE 1/4" MAX. OUT OF ALIGNMENT

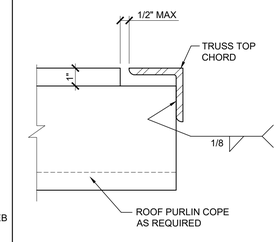
BRACE @ TRUSS & MATING LINE

SCALE: 1 1/2" = 1' - 0" | 8



SCALE: 3" = 1' - 0"

PURLIN TO VERT. ANGLE CONN. | 9B



PURLIN TO TRUSS CONN. SCALE: 3"=1'- 0" | 9A

TRUSS TO COLUMN / OH FRAME CONN. SCALE: 1 1/2" = 1' - 0" | 10

VERT. & DIAG. AT MID-POINT SCALE: 1 1/2" = 1' - 0" | 5

VERT. & DIAG. AT MID- POINT SCALE: 1 1/2" = 1' - 0" | 4

OPTIONAL

NOTE:

CHORD SPLICE MAY OCCUR AT ANY POINT ON THE TOP OR BOTTOM CHORD AS LONG AS FULL PENETRATION WELD AND BACKUP PLATES ARE USED

TRUSS CHORD SPLICE SCALE: 3" = 1' - 0" | 3

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PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ROOF FRAMING DETAILS
TRUSS

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
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DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

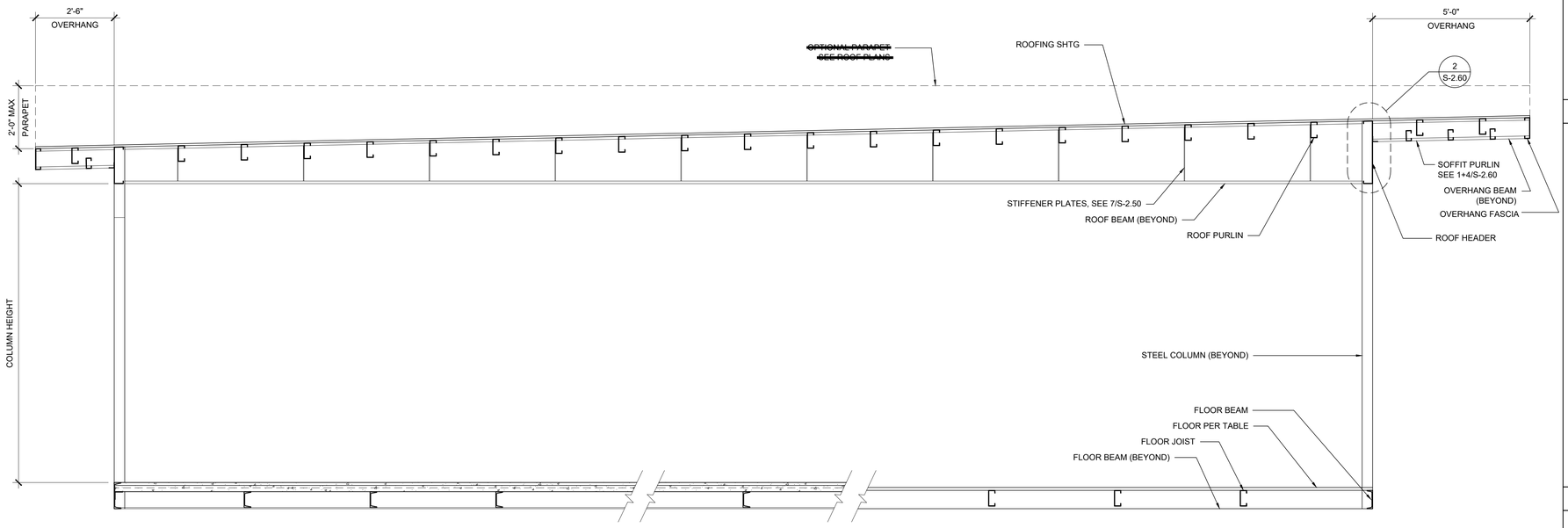
REGISTERED PROFESSIONAL ENGINEER JOHN 'W STARLING' 24575 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

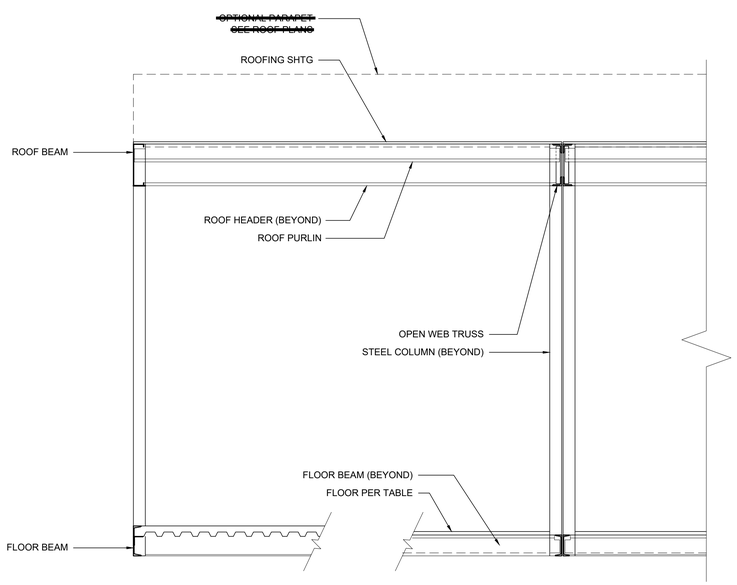
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

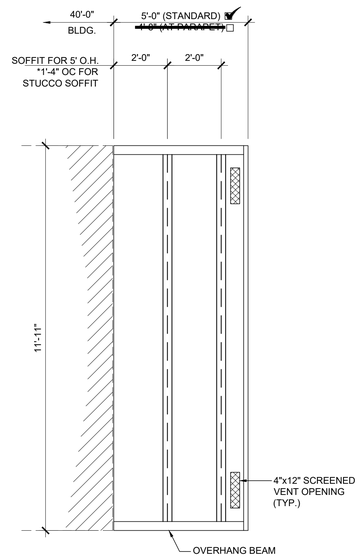
S-2.90



BUILDING SECTION — SCALE: 1/2" = 1'-0" | 1



BUILDING SECTION — SCALE: 1/2" = 1'-0" | 3



ENCL. SOFFIT PLAN-OPT. — SCALE: 3/8" = 1'-0" | 2

NOTES

1. ALL INFORMATION SUCH AS DETAILS, SECTIONS, CONNECTIONS, AND MATERIAL ATTACHMENT SHALL BE REFERENCED FROM OTHER SHEETS WITHIN THIS SET WHERE IT APPLIES.

FLOOR CONSTRUCTION

- [x] WOOD FLOOR
- [ ] CONCRETE FLOOR

HSS COLUMN SCHEDULE

COLUMN HEIGHT	NO PARAPET	ROOF W/ PARAPET
[x] 9'-0"	[x] 6 x 6 x 1/4	[ ] 6 x 6 x 1/4 ★
[ ] 9'-6"	[ ] 6 x 6 x 1/4	[ ] 6 x 6 x 1/4 ★
[ ] 10'-0"	[ ] 6 x 6 x 1/4	[ ] 6 x 6 x 1/4 ★
[ ] 10'-6"	[ ] 6 x 6 x 1/4	[ ] 6 x 6 x 1/4 ★

FLOOR BEAM

C7x9.8 (TYP) PERIMETER BEAM FOR WOOD FLOOR
★ C9x13.4 PERIMETER BEAM FOR WOOD FLOOR
~~STANDS TYP. PERIMETER BEAM FOR CONCRETE FLOOR~~

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FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

BUILDING SECTIONS
MONO SLOPE

REVISIONS
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3
4
5

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Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

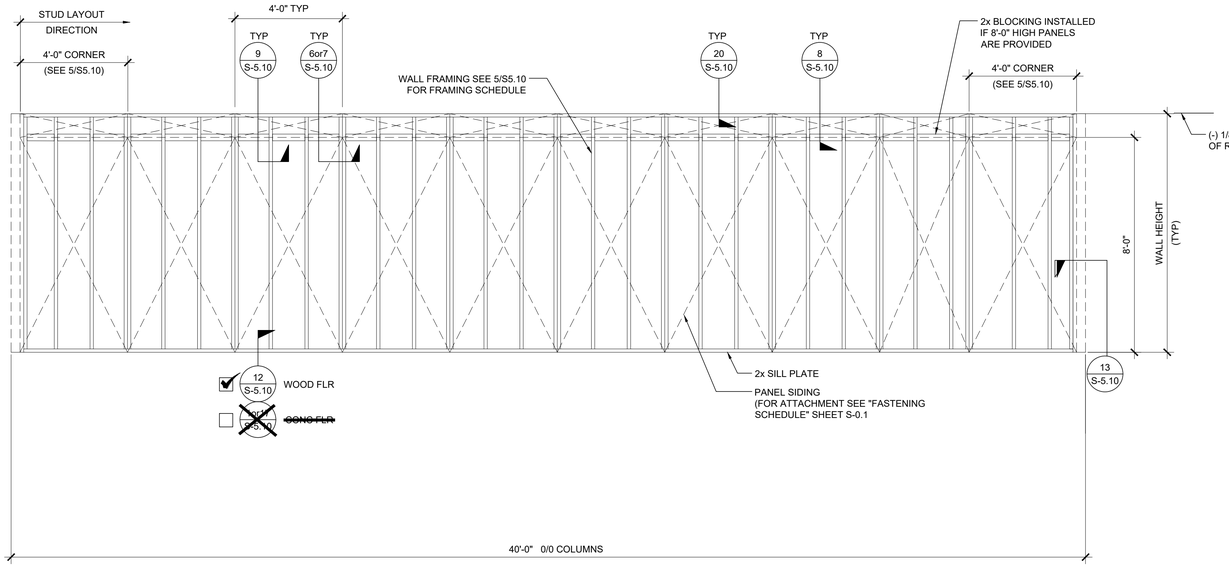
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24575
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

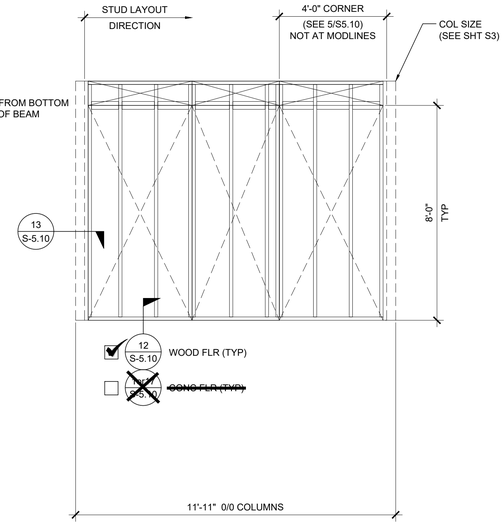
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

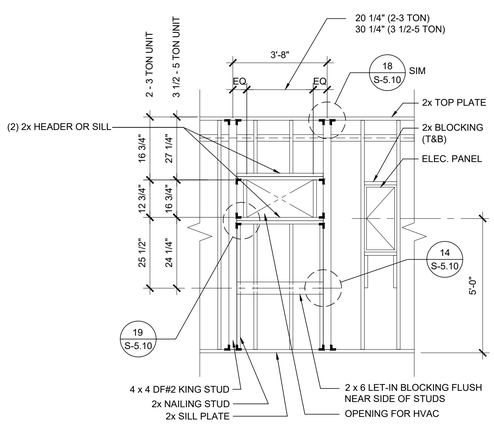
S-3.01



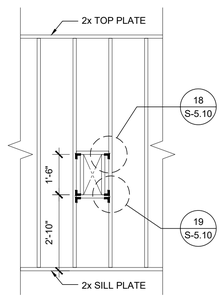
TYPICAL SIDE WALL



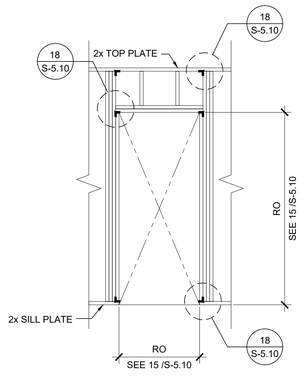
TYPICAL END WALL



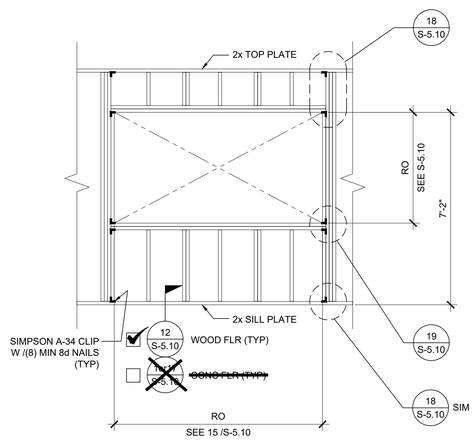
TYPICAL HVAC



FIRE EXTINGUISHER CABINET BLOCKOUT



TYPICAL DOOR



TYPICAL WINDOW

NOTES

WALL HEIGHT SCHEDULE

COLUMN HEIGHT	9'-0"	9'-6"	10'-0"	10'-6"
~~CONCRETE FLOOR~~	~~8'-11 7/8"~~	~~9'-5 7/8"~~	~~9'-11 7/8"~~	~~10'-5 7/8"~~
WOOD FLOOR	8'-10 3/4"	9'-4 3/4"	9'-10 3/4"	10'-4 3/4"

NOTE:
ALL EXTERIOR WALL FRAMING SHALL BE 2x6 (MIN).
~~EXCEPTION: UNCONDITIONED RESTROOM MODULES MAY UTILIZE 2x4 FRAMING.~~

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

WALL FRAMING ELEVATIONS
WOOD STUDS

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023~~

~~PC STATE AGENCY APPROVAL~~

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

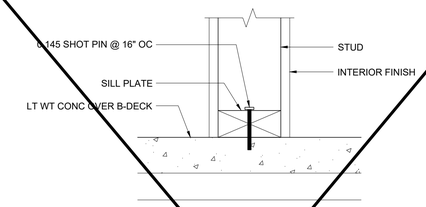
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24775 STRUCTURAL STATE OF CALIFORNIA

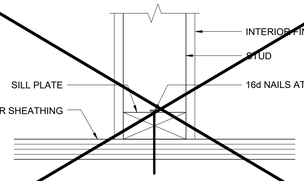
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

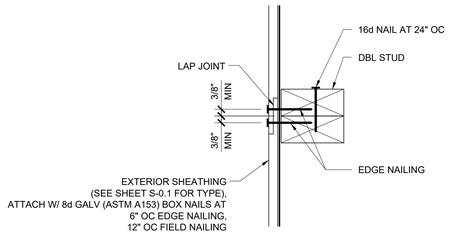
P.C. SHEET NUMBER
S-5.00



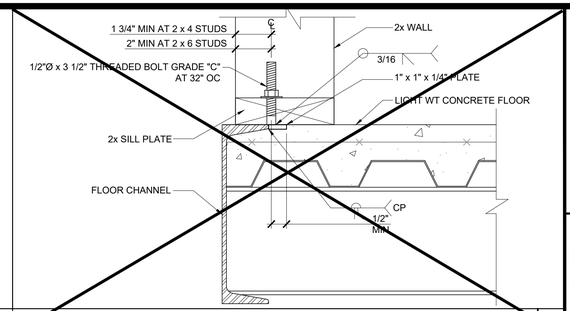
PARTITION CONNECTION AT CONC FLOOR
SCALE : 3"=1'-0" | 16



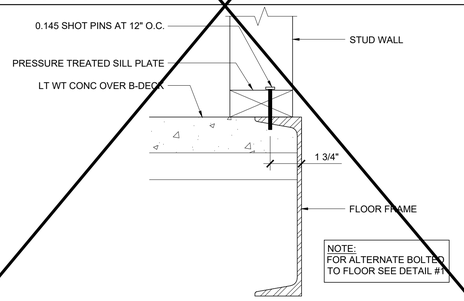
PARTITION CONNECTION AT WOOD FLOOR
SCALE : 3"=1'-0" | 11



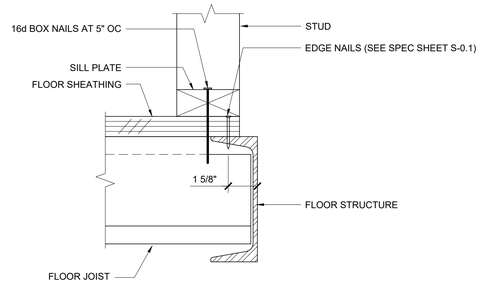
VERTICAL SHEATHING LAP JOINT
SCALE : 3"=1'-0" | 6



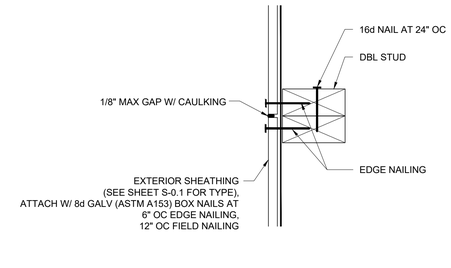
OPTIONAL BOLTED WALL TO FLOOR
SCALE : NTS | 1



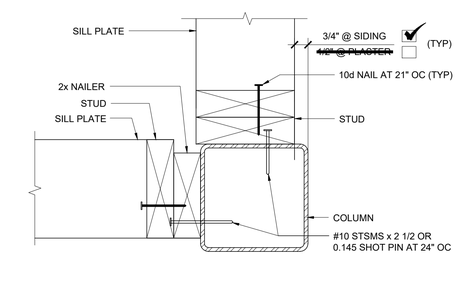
WALL SILL AT CONCRETE FLOOR
SCALE : 3"=1'-0" | 17



WALL SILL AT WOOD FLOOR
SCALE : 3"=1'-0" | 12



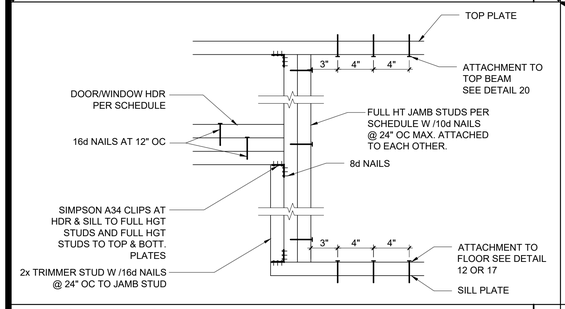
VERTICAL SHEATHING BUTT JOINT
SCALE : 3"=1'-0" | 7



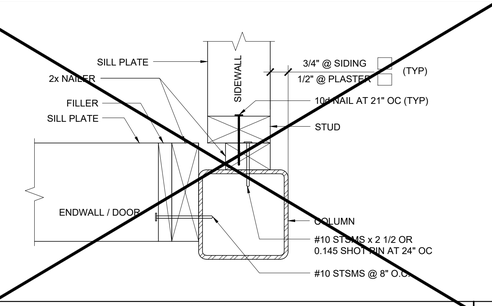
COLUMN AT ENDWALL (2x6)
SCALE : 3"=1'-0" | 2

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
LESS THAN 9'-6"	3070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2
		PLASTER	(2	2X4	DF	#2		N/A			(3)	2X4	DF	#2
COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
9'-6" TO 10'-6"	3070	NO PLASTER	(1)	2X4	HF	#2		N/A			(2)	2X4	HF	#2
		NO PLASTER (OPT)	(1)	2X4	DF	#2		N/A			(2)	2X4	DF	#2

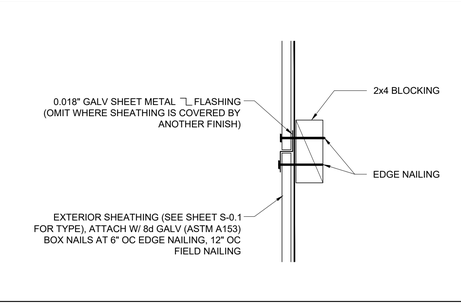
NOTE:
OPENINGS LARGER THAN 3'x7' ARE NOT PERMITTED IN 2x4 WALLS WITH PLASTER FINISH.



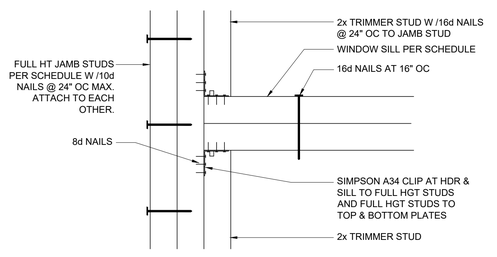
DOOR/WINDOW HEADER AND JAMB
SCALE : 1 1/2"=1'-0" | 18



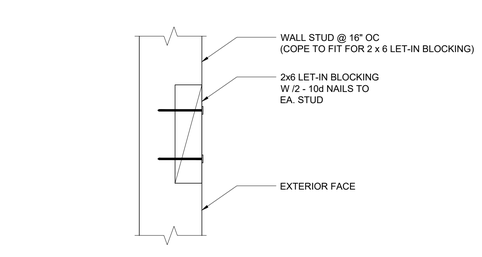
COLUMN AT ENDWALL (2x4)
SCALE : 3"=1'-0" | 13



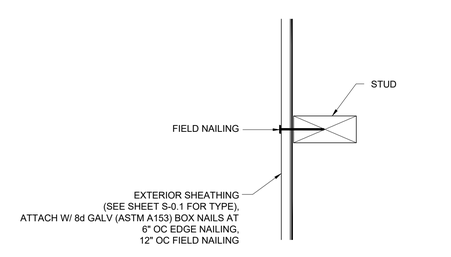
HORIZONTAL SHEATHING JOINT
SCALE : 3"=1'-0" | 8



WINDOW SILL AND JAMB
SCALE : 3"=1'-0" | 19



LET-IN BLOCK ATTACHMENT
SCALE : 3"=1'-0" | 14



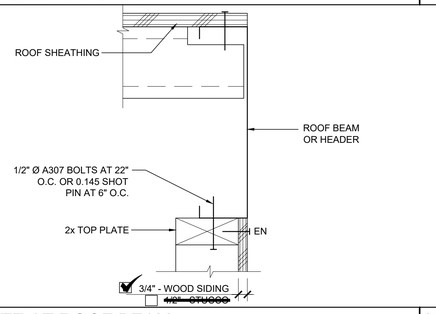
SECTION AT SHEATHING TO STUD ATTACHMENT
SCALE : 3"=1'-0" | 9

2x4 OPENING STUDS SCHEDULE
4

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4" CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
LESS THAN 9'-6"	NO PLASTER	(1)	2X4	HF	#2	16" OC	(1)	2X4	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	16" OC
	PLASTER	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	10" OC
9'-6" TO 10'-6"	NO PLASTER	(1)	2X4	HF	#2	16" OC	(1)	2X4	HF	#2	12" OC
	NO PLASTER (OPT)	(1)	2X4	DF	#2	16" OC	(1)	2X4	DF	#2	16" OC

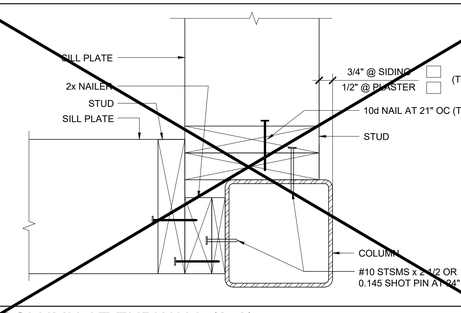
NOTES:
1. 2X4 WALL FRAMING NOT PERMITTED FOR STUCCO FINISH WALLS OVER 9'-0" TALL
2. 2X4 EXTERIOR WALL FRAMING IS ONLY PERMITTED AT UNCONDITIONED RESTROOM MODULES
3. 2X4 INTERIOR WALLS SHALL BE HF #2 (OR BETTER) AND SHALL BE SPACED NOT MORE THAN 24" OC MAX

2x4 WALL FRAMING SCHEDULE
5



TOP PLATE AT ROOF BEAM
SCALE : 3" = 1'-0" | 20

NOT USED
15



COLUMN AT ENDWALL (2x8)
SCALE : 3"=1'-0" | 10

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

WALL FRAMING DETAILS
WOOD STUDS

REVISIONS
1
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5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

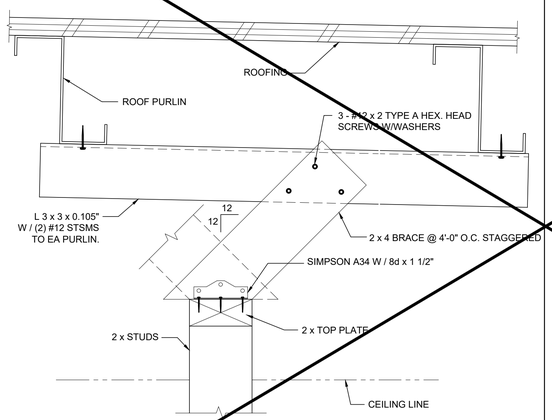
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARK
2025
STRUCTURAL
STATE OF CALIFORNIA

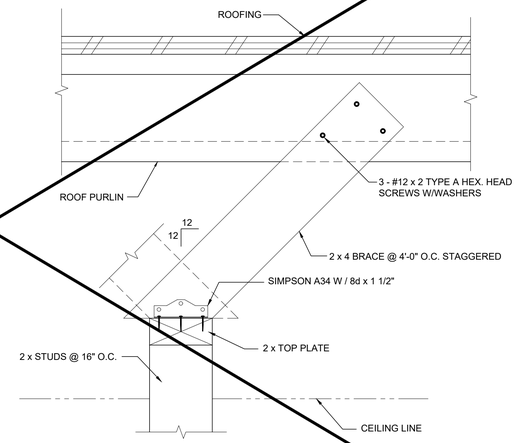
SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

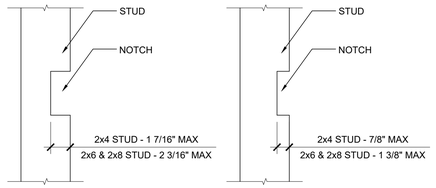
P.C. SHEET NUMBER
S-5.10

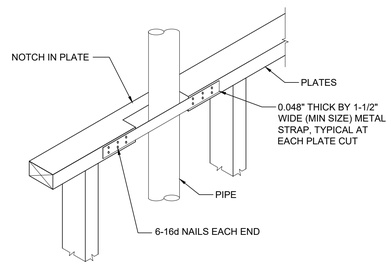


INTERIOR PARTITION SCALE : 3" = 1'-0" 14

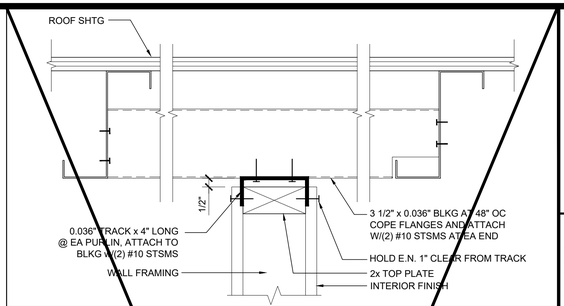


INTERIOR PARTITION SCALE : 3" = 1'-0" 12

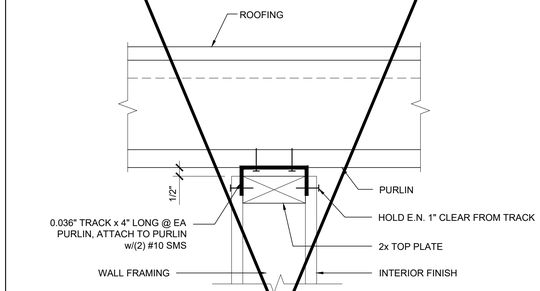




CUTTING AND NOTCHING SCALE : 1 1/2" = 1'-0" 7



FULL HEIGHT INTERIOR PARTITION SCALE : 3" = 1'-0" 1



FULL HEIGHT INTERIOR PARTITION SCALE : 3" = 1'-0" 2

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
UP TO 10'-6"	3070	ANY	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
	4070	ANY	(1)	2X6	HF	#2		N/A			(1)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2		N/A			(1)	2X6	DF	#2
	6040	ANY	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2
	8040	ANY	(1)	2X6	HF	#2	(1)	2X6	HF	#2	(2)	2X6	HF	#2
		ANY (OPT)	(1)	2X6	DF	#2	(1)	2X6	DF	#2	(2)	2X6	DF	#2

2x6 OPENING STUDS SCHEDULE 19

COLUMN HEIGHT	OPENING SIZE	EXT FINISH	HEADER				SILL				FULL HEIGHT KING STUD			
			NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE	NUMBER	SIZE	LUMBER	TYPE
UP TO 10'-6"	3070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	4070	NO PLASTER	(1)	2X8	HF	#2		N/A			(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2		N/A			(1)	2X8	DF	#2
	6040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2
	8040	NO PLASTER	(1)	2X8	HF	#2	(1)	2X8	HF	#2	(1)	2X8	HF	#2
		NO PLASTER (OPT)	(1)	2X8	DF	#2	(1)	2X8	DF	#2	(1)	2X8	DF	#2

2x8 OPENING STUDS SCHEDULE 14

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4" CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
UP TO 10'-6"	NO PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC
	W/ PLASTER	(1)	2X6	HF	#2	16" OC	(1)	2X6	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X6	DF	#2	16" OC	(1)	2X6	DF	#2	16" OC

NOTE:
1. INTERIOR WALLS MAY BE 2x6 HF #2 (OR BETTER) SPACED AT NOT MORE THAN 24" OC.

2x6 WALL FRAMING SCHEDULE 20

COLUMN HEIGHT	EXT FINISH	WOOD WALL FRAMING					4" CORNER OF WOOD WALL FRAMING (ZONE 5)				
		NUMBER	SIZE	LUMBER	TYPE	OC	NUMBER	SIZE	LUMBER	TYPE	OC
UP TO 10'-6"	NO PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	NO PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC
	W/ PLASTER	(1)	2X8	HF	#2	16" OC	(1)	2X8	HF	#2	16" OC
	W/ PLASTER (OPT)	(1)	2X8	DF	#2	16" OC	(1)	2X8	DF	#2	16" OC

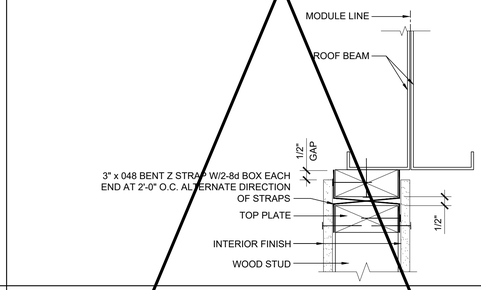
NOTES:
1. EXTERIOR STUD SPACING SHOWN IN THE TABLE ABOVE IS TYPICAL, HOWEVER 2x8 STUDS (HF #2 OR BETTER) MAY BE SPACED AT NOT MORE THAN 24" OC.
2. INTERIOR WALLS MAY BE 2x6 HF #2 (OR BETTER) SPACED AT NOT MORE THAN 24" OC.

2x8 WALL FRAMING SCHEDULE 15

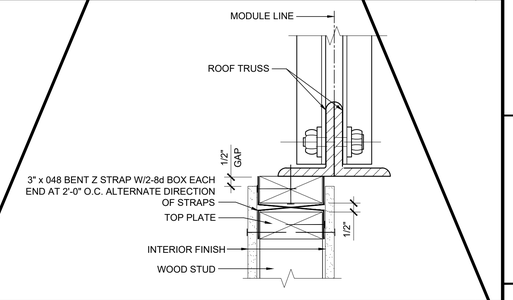
BORED HOLES SCALE : 1 1/2" = 1'-0" 8

NOT USED 9

NOT USED 10



INTERIOR PARTITION WALL TO ROOF BEAM SCALE : 3"=1'-0" 3



INTERIOR PARTITION WALL TO ROOF TRUSS SCALE : 3"=1'-0" 4

NOT USED 5

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

WALL FRAMING DETAILS
WOOD STUDS

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PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

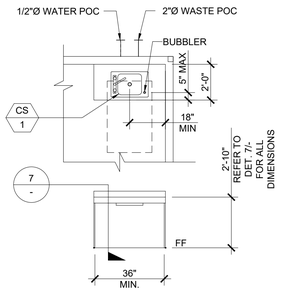
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24075 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

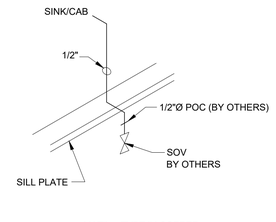
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

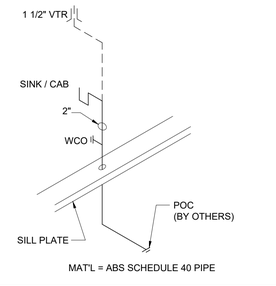
S-5.11



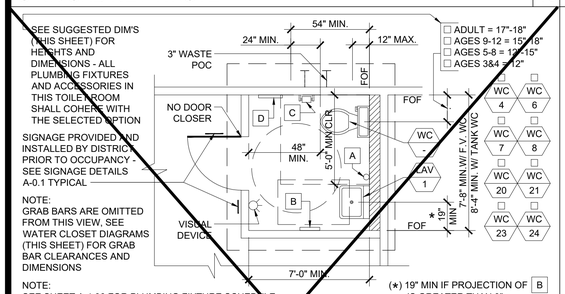
TYPICAL SINK CABINET 11



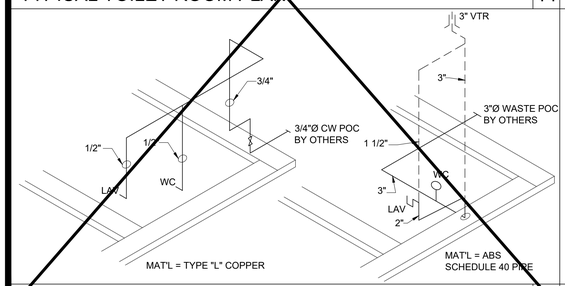
SINK CABINET COLD WATER SUPPLY SCALE: N.T.S. 12



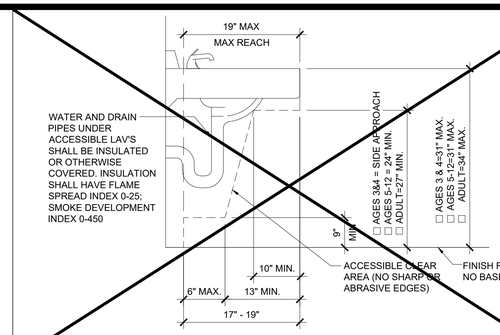
SINK CABINET WASTE 13



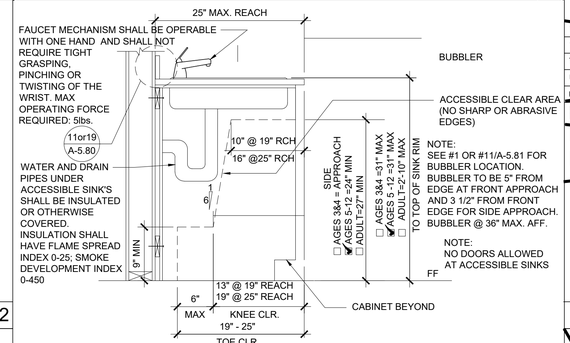
TYPICAL TOILET ROOM PLAN 14



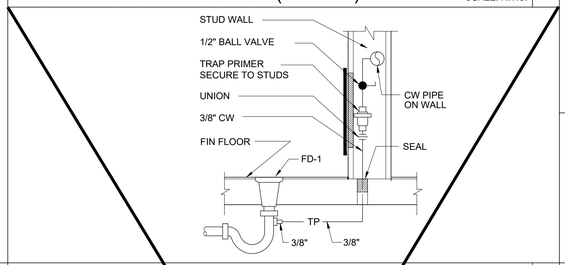
TOILET ROOM COLD WATER SUPPLY AND WASTE 15



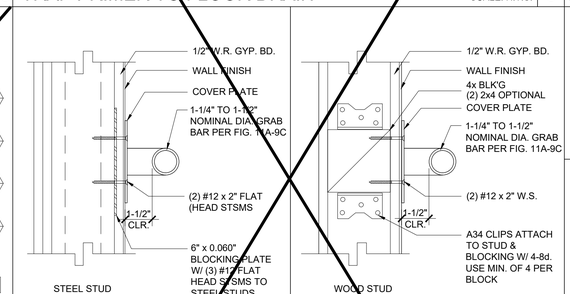
ACCESSIBLE LAV CLEARANCE SCALE: N.T.S. 6



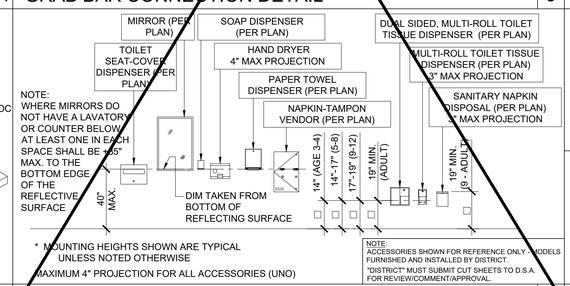
ACCESSIBLE SINK CABINET (OPTION) SCALE: N.T.S. 7



TRAP PRIMER TO FLOOR DRAIN SCALE: N.T.S. 8



GRAB BAR CONNECTION DETAIL 9



TOILET ACCESSORIES MOUNTING HEIGHTS 10

THE DIVISION OF THE STATE ARCHITECT, OFFICE OF REGULATION SERVICES ACCEPTS THE FOLLOWING DIMENSIONS AS ADEQUATELY SERVING THE NEEDS OF CHILDREN IN PROJECTS UNDER THEIR JURISDICTION. THESE DIMENSIONS ARE BASED ON CBC TABLE 11B-604.9 SUGGESTED DIMENSIONS FOR SERVING CHILDREN AGES 3 TO 12.

ACCESSIBILITY DIMENSIONS	11B-604.9 SUGGESTED DIMS			
	ADULT	AGES 9 THROUGH 12	AGES 5 THROUGH 8	AGES 3 AND 4
TOILET CENTERING FROM WALL	17" - 18"	15" - 18"	12" - 15"	12"
TOILET SEAT HEIGHT (DIM TO TOP OF SEAT)	17" - 19"	15" - 17"	12" - 15"	11" - 12"
GRAB BAR HEIGHT (TO TOP)	33" - 36"	25" - 27"	20" - 25"	18" - 20"
TOILET PAPER IN FRONT OF TOILET	7" - 9"	7" - 9"	7" - 9"	7" - 9"
NAPKIN DISPOSAL	**	**	N/A	N/A
MIRROR HEIGHT (TO BOTTOM OF GLASS)	40" MAX.	40" MAX.	36" MAX.	32" MAX.
DISPENSER HEIGHT	19" MIN.	17" - 19"	14" - 17"	11" - 12"
LAVATORY/SINK TOP HEIGHT	34" MAX.	31" MAX.	31" MAX.	24" MAX. SIDE APPROACH
LAVATORY/SINK KNEE CLEARANCE	27" MIN.	24" MIN.	24" MIN.	SIDE APPROACH
URINAL LIP HEIGHT	17" MAX.	17" MAX.	15" MAX.	9" MIN.
URINAL FLUSH HANDLE HEIGHT	44" MAX.	44" MAX.	37" MAX. *	32" MAX. *
DRINKING FOUNTAIN BUBBLER HT. (LOW)	36" MAX.	30" MAX.	30" MAX.	30" MAX.
DRINKING FOUNTAIN KNEE CLEARANCE	27" MIN.	SIDE APPROACH	SIDE APPROACH	SIDE APPROACH
HANDRAIL HEIGHT (TO TOP)	34" - 38"	34" - 38"	34" - 38"	34" - 38"

STANDARD DIMENSIONS	ALTERNATE HEIGHT (DIMS)			
	ADULT	AGES 9 THROUGH 12	AGES 5 THROUGH 8	AGES 3 AND 4
TOILET CENTERING FROM WALL/PARTITION	15" MIN	15" MIN	15" MIN	15" MIN
TOILET SEAT HEIGHT/DIM TO TOP OF SEAT	15"	15"	15"	15"
TOILET CLEARANCE/FRONT	24"	24"	24"	24"
URINAL LIP HEIGHT	24"	24"	16"	16"
URINAL CENTER FROM WALL/PARTITION	12"	12"	12"	12"

PLUMBING ACCESSORIES (REF. ONLY-MODELS FURNISHED AND INSTALLED BY DISTRICT U.N.O.)

A SOAP DISPENSER: LIQUID SOAP DISPENSER 4" MAX. PROJECTION

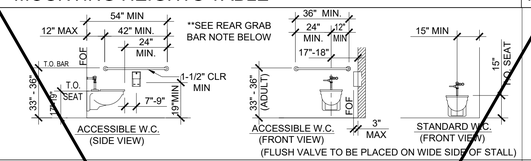
B PAPER TOWEL DISPENSER/TRASH BIN COMBO: SURFACE MOUNTED 4" MAX. PROJECTION CANNOT ENCROACH INTO 30X48 CLEAR SPACE OF FIXTURE

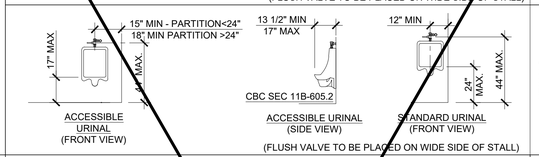
C TOILET PAPER HOLDER: SINGLE ROLL SEMI-RECESSED OR 3 MAX PROJECTION

D TOILET SEAT DISPENSER: SURFACE MOUNTED

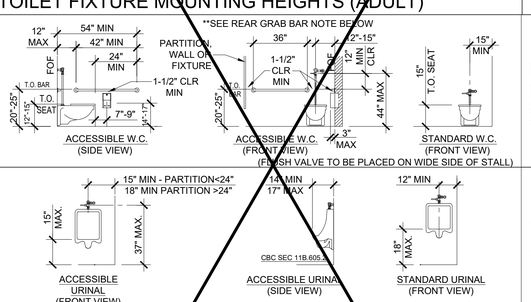
* 44" MAX. PER CODE
** MOUNTED BETWEEN BACK WALL AND TOILET PAPER DISP.

MOUNTING HEIGHTS TABLE 19

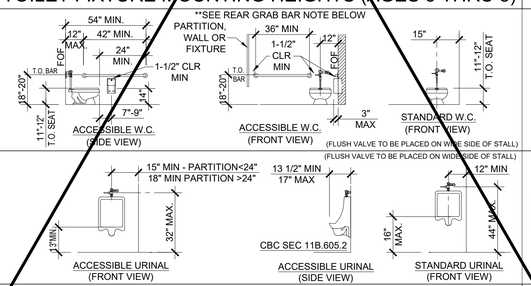




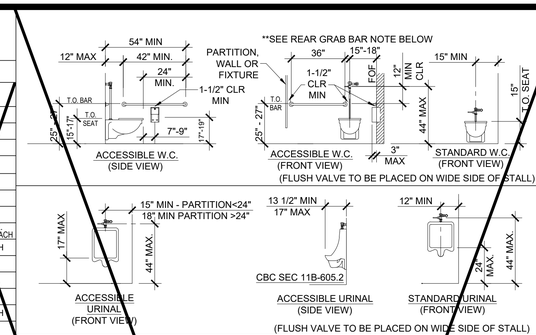
TOILET FIXTURE MOUNTING HEIGHTS (ADULT) 3

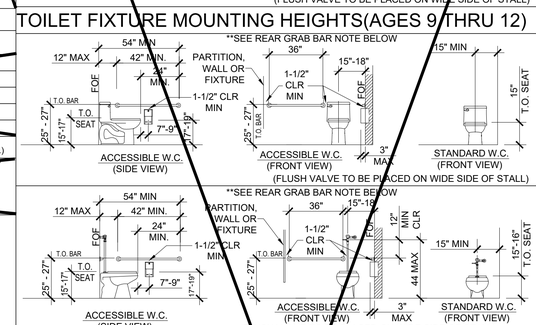


TOILET FIXTURE MOUNTING HEIGHTS (AGES 5 THRU 8) 4



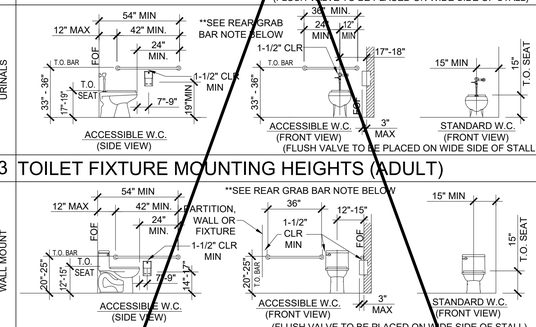
TOILET FIXTURE MOUNTING HEIGHTS (AGES 3 AND 4) 5

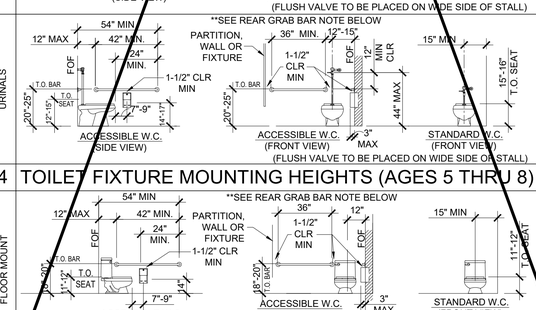




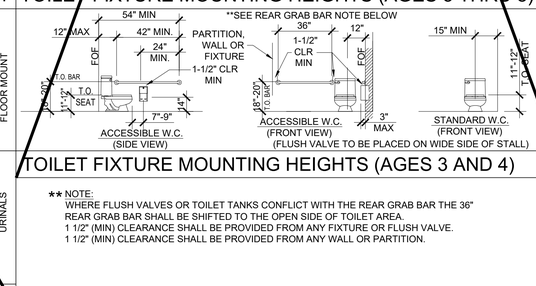
TOILET FIXTURE MOUNTING HEIGHTS (AGES 9 THRU 12) 1

TOILET FIXTURE MOUNTING HEIGHTS (AGES 9 THRU 12) 2





TOILET FIXTURE MOUNTING HEIGHTS (AGES 5 THRU 8) 17



TOILET FIXTURE MOUNTING HEIGHTS (AGES 3 AND 4) 18

** NOTE:
WHERE FLUSH VALVES OR TOILET TANKS CONFLICT WITH THE REAR GRAB BAR THE 36" REAR GRAB BAR SHALL BE SHIFTED TO THE OPEN SIDE OF TOILET AREA.
1 1/2" (MIN) CLEARANCE SHALL BE PROVIDED FROM ANY FIXTURE OR FLUSH VALVE.
1 1/2" (MIN) CLEARANCE SHALL BE PROVIDED FROM ANY WALL OR PARTITION.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

PLUMBING DETAILS AND SCHEDULE

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARULA
24275
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

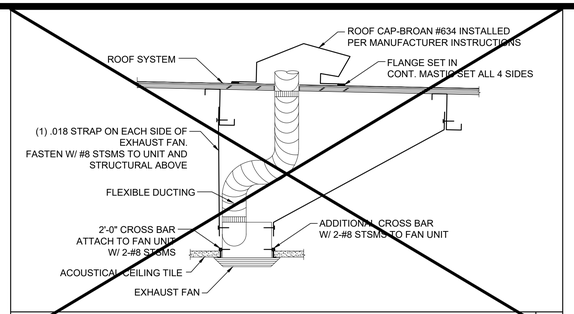
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

P-1.01

LEGEND

SYMBOL	ABB.	DESCRIPTION
	SAD	SUPPLY AIR DUCT
	RAD	RETURN AIR DUCT
	EAD	EXHAUST AIR DUCT
	(L)	LINED DUCTWORK
	CD	SUPPLY CEILING DIFFUSER
	CR	RETURN CEILING REGISTER
	ER	EXHAUST CEILING REGISTER
	VTR	VENT THRU ROOF
	FD	FIRE DAMPER
	MVD	MANUAL VOLUME DAMPER
UC	UC	UNDERCUT DOOR
T	STAT	THERMOSTAT
BT	BT	BYPASS TIMER
	P.O.C	POINT OF CONNECTION
CO		CO^2 SENSOR



EXHAUST FAN INSTALLATION — SCALE : 1"=1'-0"

CEILING MOUNTED EXHAUST FAN SCHEDULE

SYM.	LOCATION	SERVICE	MANUF.	MODEL	CFM	SONES	SP	ELECTRICAL VOLTS	Ø	POWER	WGT	REMARKS
EF 1	CEILING	TOILET EXHAUST	BROAN *	L100	109	1.0	0.25	120	1	87 WATTS	22.80 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 6" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 2	CEILING	TOILET EXHAUST	BROAN *	L200	210	2.0	0.25	120	1	127 WATTS	23.0 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF 3	CEILING	TOILET EXHAUST	BROAN *	L300	308	2.8	0.25	120	1	212 WATTS	23.10 LBS.	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.

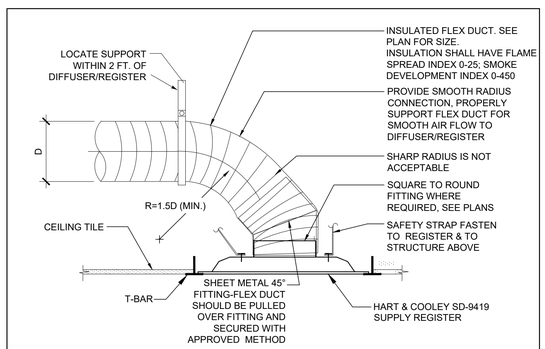
* OR APPROVED EQUAL.

PERFORATED FACE GRILLE SCHEDULE (SUPPLY)

ITEM	NECK SIZE	RANGE CFM	MFG & MODEL #
T-BAR SUPPLY 16X16-4W	6"Ø	0 - 150	Fixed Curve Blade, 4-way throw
	8"Ø	150 - 230	For lay-in T-bar ceilings use Harth & Cooley SD-9419 . (Sizes as shown on Mech Plan)
	10"Ø	230 - 350	
	12"Ø	350 - 460	
	14"Ø	460 - 640	

PERFORATED FACE GRILLE SCHEDULE (RETURN)

ITEM	NECK SIZE	RANGE CFM	MFG & MODEL #
T-BAR RETURN	6"Ø	0 - 230	Perforated face
	10"Ø	230 - 460	For lay-in T-bar ceilings use Shoemaker 105P with 24 ga., 45 deg. angle. (Sizes as shown on Mech Plan.)
	14"Ø	460 - 710	



T-BAR SUPPLY REGISTER AND SIDE OUTLET BOX DETAIL

N.T.S.

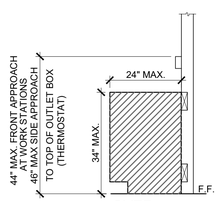
SUPPLY CEILING DIFFUSER MOUNTING — SCALE: NONE — D

DUCT NOTES:

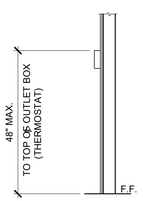
1. ALL DUCTING SHALL BE INSULATED WITH MIN OF R-4.2.
2. DUCT INSTALLATION AND PLENUMS SHALL MEET THE REQUIREMENTS OF ENERGY CODE SECTION 120.4 AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
3. HORIZONTAL FLEX DUCT SHALL BE SUPPORTED AT A MAXIMUM 4 FT INTERVALS, WITH HANGING STRAPS A MINIMUM 1 1/2" WIDE.
4. DUCTS MUST BE PULLED TIGHT WITH A MAXIMUM SAG OF 1/2" PER FOOT OF HORIZONTAL RUN.
5. DUCT SHALL NOT BE KINKED OR CRUSHED.
6. BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.

GENERAL NOTES:

1. THERMOSTAT SHALL BE PROGRAMMED WITH EXPECTED OCCUPIED TIMES.
2. AIR HANDLER FAN WILL BE PROGRAMMED TO RUN DURING ALL OCCUPIED TIMES.
3. PRE-OCCUPANCY PURGE SHALL BE PROGRAMMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED PER ENERGY CODE 120.1(D)1.
4. ECONOMIZERS SHALL BE PROGRAMMED FOR HIGH LIMIT SHUT OFF PER TABLE 140.4-E.
5. THE OUTDOOR AIR C02 CONCENTRATION SHALL BE ASSUMED TO BE 400 ppm.



OVER OBSTRUCTION



MOUNTING HEIGHTS

△ PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION

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.C

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 TRAVERSE 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 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 SECTION 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 QUIDE (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 THE DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT 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 #) #----------.

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 Dry-bulb	All	$h_{OA} > 28$ Btu/lb or $T_{OA} > 75°F$	Outdoor air enthalpy exceeds 28 Btu/lb of dry air[d] 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.

Heat Pump Sequence of Operations

Description:
Constant Volume Unit, DX cooling and heating, and outside air economizer.

General:
Each unit shall be directly controlled and monitored by a programmable logic Thermostat Controller.

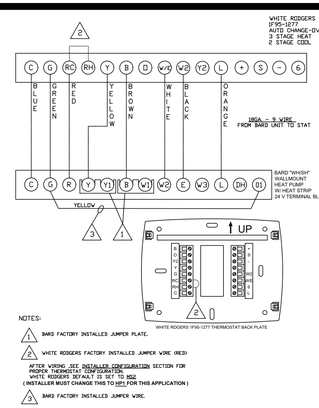
1. **Required Algorithms and Schedules:**
   Time Schedule
   Setpoint Schedule (temperature)
2. **Occupancy Status:**
   The occupancy status is determined by an occupancy sensor.
3. **Demand Control Ventilation:**
   The indoor CO2 concentration is monitored with a sensor in each room.

Sequence of Operation during Occupied Hours:

1. **Supply Fan Control Mode:**
   The supply fan will operate:
   A. During scheduled hours.
   B. When occupancy is detected.
2. **Economizer Control Mode:**
   The outside air damper will be wired through an interposing relay and interlocked to the supply fan. When the supply fan is operating the economizer damper will be set to the default position except where:
   A. The demand control ventilation system determines that the CO2 concentrations can reduce the outside air rate.
   B. During cooling mode when the outside air temperature sensor indicates that the damper position may be adjusted to increase the outside air rate.
3. **Operating Mode:**
   The thermostat shall be programmed to Auto Mode. When Auto Mode is active, the thermostat algorithm will automatically select either a heating or cooling mode based on the present space temperature value.
4. **Heating Mode:** The heating stages will be energized when the fan is running, the operating mode is auto, and the space temperature is below the occupied heating setpoint. The heating stages will be de-energized as the space temperature achieves the heating setpoint.
5. **Cooling Mode:** The cooling stages will be energized when the fan is running, the operating mode is auto, and the space temperature is above the occupied cooling setpoint. The cooling stages will be de-energized as the space temperature achieves the cooling setpoint.

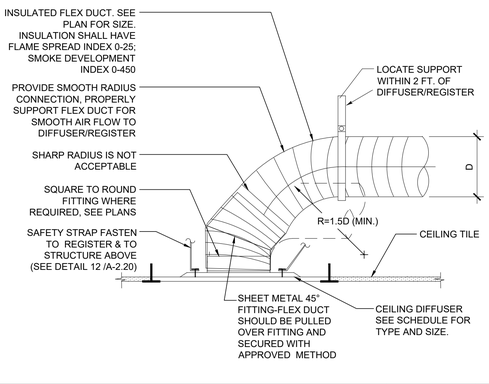
Sequence of Operation during Unoccupied Hours:

1. **Supply Fan:**
   The fan will be cycled on if the space temperature is outside the heating and cooling unoccupied set points.
2. **Economizer Control:**
   The outside air damper will be wired through an interposing relay and interlocked to the supply fan. When the supply fan is on, the dampers are forced to the minimum position. When the supply fan is off, the damper will close.
3. **Pre-Occupancy Purge**
   In the hour prior to scheduled normal occupancy the supply fan shall operate for a duration sufficient in length to provide not less than 3 complete air changes.

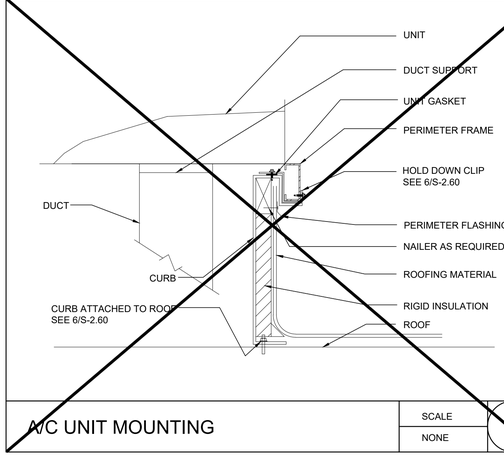


NOTES:
1. BARD FACTORY INSTALLED JUMPER PLATE.
2. WHITE RODGERS FACTORY INSTALLED JUMPER WIRE (RED)
   AFTER WIRING, SEE INSTALLER CONFIGURATION SECTION FOR PROPER THERMOSTAT SETTINGS.
   (INSTALLER MUST CHANGE THIS TO HP1 FOR THIS APPLICATION)
3. BARD FACTORY INSTALLED JUMPER WIRE.

UNIT TO THERMOSTAT WIRING — SCALE: NONE — A



RETURN CEILING DIFFUSER MOUNTING — SCALE: NONE — B



A/C UNIT MOUNTING — SCALE: NONE — C

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

MECHANICAL NOTES, SCHEDULES, & DETAILS

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

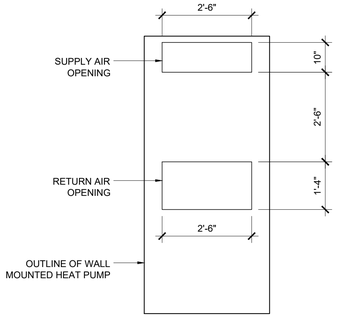
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 24975 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

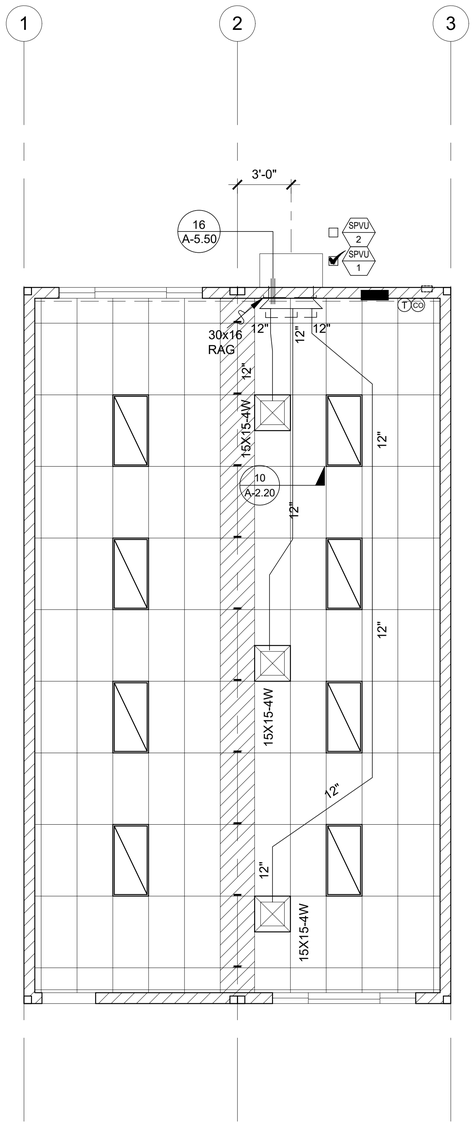
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER

M-0.1



WALL MOUNTED HEAT PUMP DIAGRAM	SCALE	A
	NONE	



MECHANICAL PLAN - STANDARD 4 LIGHT CONFIGURATION

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

WALL MOUNTED MECHANICAL EQUIPMENT SCHEDULE			
	SPVU-1	SPVU-2	
HVAC Equipment Make and Model	BARD #W60HC-A00VN	BARD #T60S1-A00VN	
Nominal Tonnage	5	5	
BTUH:			
Heating	52,500	56,000	
Cooling	54,500	52,000	
Indoor/Blower Fan:			
BHP/HP	0.75/0.75	0.75/0.75	
CFM	1,750	1,650	
Strip Heating	NA	NA	
SEER	NA	NA	
EER	11.0	11.0	
HSPF	NA	NA	
COP	3.3	3.3	
Voltage	230/208-1	230/208-1	
MCA	42	42	
MCOP	60	60	
Wire Size (Pwr/ Grnd)	8 / 10	8 / 10	
Thermostat:			
Make and Model	Venstar #T4900SCH	Venstar #T4900SCH	
Setback	Yes	Yes	
Heat Pumps	Yes	Yes	
Shut-off and Reset:	Occupancy Sensor	Occupancy Sensor	
Economizer:			
Make and Model	Integrated	Integrated	
Controls	Fixed Dry Bulb	Fixed Dry Bulb	
Fault Detection	Yes	Yes	
Outside Air Damper Position	Varies	Varies	
Demand Control Ventilation	Yes	Yes	
Minimum DCV Outside Air in CFM	0.15 CFM / SF	0.15 CFM / SF	
Minimum Designed Outside Air in CFM	See Below	See Below	
Demand Shed Thermostat	NA	NA	
Operating Weight	595 #	660 #	

NOTES:
PROVIDE SET-BACK THERMOSTAT.
DESIGNED MINIMUM OUTSIDE AIR SHALL BE NO LESS THAN 15 CFM PER EXPECTED OCCUPANT
PROVIDE AN OCCUPANCY SENSOR WITH AN AUTOMATIC SHUT DOWN CONTROLS
PROVIDE 2" MERV 13 FILTER
AIR HANDLERS WITH OTHER VOLTAGES SHALL BE ACCEPTABLE.
AIR HANDLERS OTHER THAN THE MAKE AND MODEL LISTED ABOVE SHALL BE ACCEPTABLE WHEN THE NOMINAL TONNAGE IS EQUAL TO THE INDICATED TONNAGE AND THE EER AND COP VALUES ARE NO LESS THAN THOSE SHOWN ABOVE.
PROVIDE A C02 SENSOR WITH LCD DISPLAY (CARROER #33ZCSPT02LCD-01 or EQUAL) ADJACENT TO THE THERMOSTAT MOUNTED AT + 48" AFF.
PROVIDE A HONEYWELL JADE CONTROL SYSTEM (or EQUAL) CAPABLE OF OUTPUTTING FDD ALARMS TO THE THEMOSTAT PER ENERGY CODE SECTION 120.2(j).
ECONOMIZERS SHALL HAVE AN INTEGRATED BARAMETRIC DAMPER OR OTHER MEANS OF EXHAUSTING THE BUILDING WHEN THE SYSTEM IS DELIVERING 100% OUTSIDE AIR.

MECHANICAL EQUIPMENT SCHEDULE

NOTE:
THIS MECHANICAL SYSTEM SHALL PROVIDE A MINIMUM OUTSIDE AIR RATE OF 0.38 CFM / SF OR 15 CFM PER OCCUPANT, WHICHEVER IS GREATER. THE BUILDING MANUFACTURER SHALL VERIFY THE EXPECTED OCCUPANT LOAD WITH THE SCHOOL DISTRICT PRIOR TO SELECTION OF THE MECHANICAL EQUIPMENT. THE SELECTED EQUIPMENT SHALL BE CAPABLE OF MEETING THE OUTSIDE AIR REQUIREMENTS UNDER PEAK DESIGN CONDITIONS FOR THE CLIMATE ZONE IN WHICH THE BUILDING WILL BE LOCATED. AT THE TIME OF OCCUPANCY, THE BUILDING MANUFACTURER SHALL PROVIDE TO THE BUILDING OWNER A CALCULATION INDICATING THE VOLUMES OF OUTSIDE AIR AND OF RECIRCULATED AIR THAT THE VENTILATION SYSTEM HAS BEEN DESIGNED TO PROVIDE.

VENTILATION CALCULATIONS:

24' X 40' CLASSROOM

MINIMUM REQUIRED VENTILATION
ROOM AREA = 960 SF
REQUIRED VENTILATION RATE = 0.38 CFM / SF
REQUIRED OUTSIDE AIR VOLUME = 960 X 0.38 = 365 CFM

VENTILATION AS DESIGNED
BUILDING AREA = 960 SF
OCCUPANCY FOR EGRESS PURPOSES = 960 / 20 = 48 OCCUPANTS
EXPECTED # OF OCCUPANTS = 48 OCCUPANTS X 0.65 = 31 OCCUPANTS
REQUIRED VENTILATION RATE = 15 CFM / OCCUPANT
REQUIRED OUTSIDE AIR VOLUME = 31 X 15 = 465 CFM

NOTE:
THE DEMAND CONTROL VENTILLATION SYSTEM SHALL NOT BE REQUIRED TO PROVIDE THE OUTSIDE AIR IN EXCESS OF THE DESIGNED VOLUME INDICATED ABOVE.. THE DEMAND CONTROL VENTILLATION SYSTEM SHALL NOT REDUCE THE OUTSIDE AIR TO LESS THAN 25% OF THE DESIGNED VOLUME INDICATED ABOVE.

NOTE:
BUILDING MANUFACTURER SHALL LEAVE FOR THE BUILDING OWNER, AT OCCUPANCY, OPERATING INFORMATION FOR ALL APPLICABLE MECHANICAL AND ELECTRICAL FEATURES, MATERIALS, COMPONENTS, AND DEVICES INSTALLED IN THE BUILDING RELATED TO EFFICIENT ENERGY USE. IN ADDITION, THE BUILDING MANUFACTURER SHALL LEAVE MAINTENANCE INFORMATION FOR ALL FEATURES, MATERIALS, COMPONENTS, AND MANUFACTURED DEVICES THAT REQUIRE ROUTINE MAINTENANCE FOR EFFICIENT OPERATION OF THE MECHANICAL AND LIGHTING SYSTEMS.

NOTE:
THE OCCUPANCY SENSOR USED TO CONTROL THE HVAC EQUIPMENT SHALL BE SEPARATE FROM THE OCCUPANCY SENSOR USED TO CONTROL THE LIGHTING SYSTEM. THIS SENSOR MAY BE INTEGRATED INTO THE THERMOSTAT OR MAY BE A SEPARATE DEVICE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

MECHANICAL PLAN
WALL MOUNT
24' x 40'

REVISIONS
1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION
FOR CONSTRUCTION IS REQUIRED

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DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

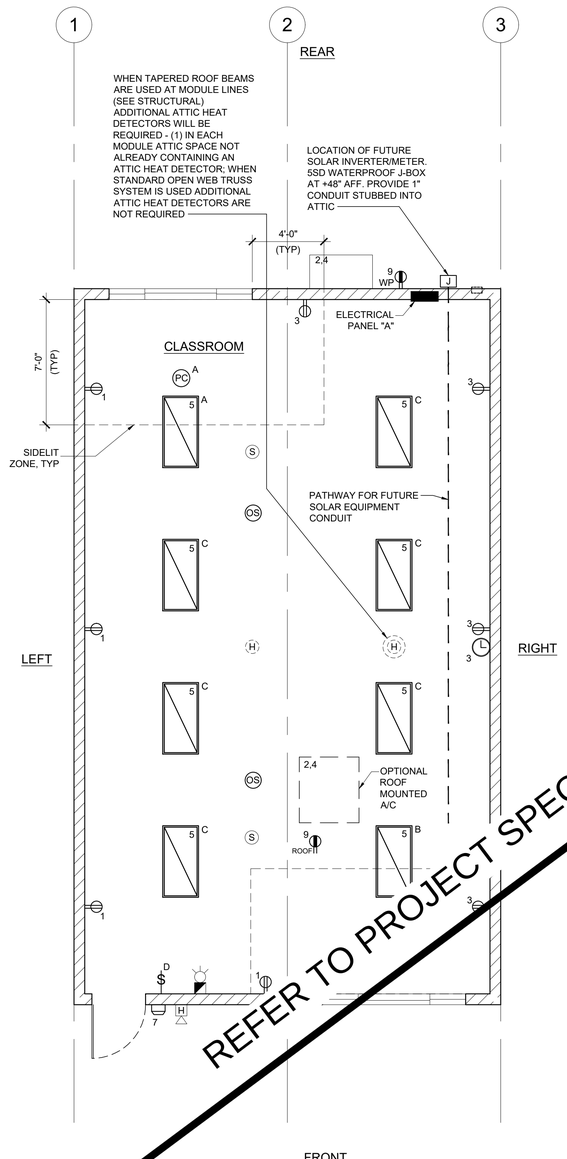
REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
29775
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

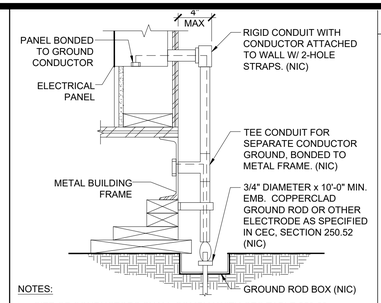
P.C. SHEET NUMBER

M-1.01



ELECTRICAL PLAN

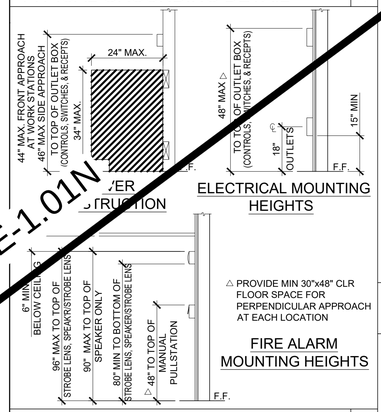
SCALE: 1/4" = 1'-0" | 4



NOTES:

1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
3. 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)
4. ALL MODULES OF METAL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP.
5. 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).

TYPICAL GROUNDING DETAIL | 1

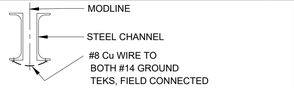


ELECTRICAL MOUNTING HEIGHTS

△ PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION

FIRE ALARM MOUNTING HEIGHTS

ACCESSIBLE HEIGHTS | 2



GROUND JUMPER AT MODLINE | 3

GROUND JUMPER AT MODLINE

EACH BUILDING SHALL BE SEPARATELY GROUNDED WITH A 3/4" RD. X 8' COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTTOM IS ENCOUNTERED, ROD SHALL BE DRIVEN AT AN ANGLE NOT TO EXCEED 45 DEGREES FROM THE VERTICAL OR SHALL BE BURIED IN A TRENCH THAT IS AT LEAST 30" DEEP (BY SITE ELECTRICAL).

TESTING: TEST FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS, INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCES TO 25 OHMS OR LESS. (BY SITE ELECTRICAL).

APPROVAL OF THIS PLAN DOES NOT CONSTITUTE APPROVAL OF THIS FIRE ALARM FOR ALL SITES. THE FIRE ALARM SYSTEM AND/OR COMPONENTS MAYBE REQUIRED TO BE CHANGED DUE TO SITE LOCATION EXISTING CONDITIONS OR INCOMPATIBLE COMPONENTS.

GROUND MG TEST SHALL BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR. ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.

FIRE ALARM NOTES

1. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES PROVIDED AND INTERCONNECTED BY OTHERS TO FIRE ALARM SYSTEM
2. PROVIDE DEDICATED FIRE ALARM 120 VOLT CIRCUIT CONNECTED TO LOCKED-ON BREAKER. THE CIRCUIT BREAKER SHALL BE LOCKED-ON WITH APPROVED LOCKING DEVICE, MARKED RED AND IDENTIFIED AS "FIRE ALARM CONTROL CIRCUIT". NFPA 72 SECTION 10.6.5.2

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 OR MOVABLE 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 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 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 & 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., OSHPD OPA 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 SYSTEM (E):

MP☐ MD☐ PP☐ E☑ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

LIGHTING CONTROL SYSTEM SEQUENCE OF OPERATIONS

THE LIGHTING CONTROL SYSTEM BASIS OF DESIGN SHALL BE THE LUTRON VIVE WIRELESS LIGHTING CONTROL SYSTEM.
THE SYSTEM SHALL BE CAPABLE OF PROVIDING MANUAL CONTROL, OCCUPANCY SENSING CONTROL AND DAYLIGHT HARVESTING CONTROL.

SEQUENCE:

OCCUPANT ENTERS:
ALL LIGHTS AUTOMATICALLY TURN ON TO 50% LIGHT LEVEL. OCCUPANT MAY INCREASE LIGHTS TO MAXIMUM LEVEL MANUALLY WITH WALL CONTROL.
WHEN OCCUPIED:
LIGHTING IN DAYLIT ZONES AUTOMATICALLY DIM/BRIGHTEN BASED ON DAYLIGHT AVAILABILITY.
OCCUPANT MAY MANUALLY DIM/BRIGHTEN THE LIGHTS WITH WALL CONTROL.
OCCUPANT EXITS:
ALL LIGHTS AUTOMATICALLY TURN OFF 15 MINUTES AFTER VACANCY.

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 90°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" x 4" SQ	18.0	8	7	6	0
4S	1 1/2" x 4" SQ	21.0	9	8	7	0
4SD	2 1/8" x 4" SQ	30.3	13	12	10	6
4SX	2 7/8" x 4" SQ	43.5	23	21	17	10
5SD	2 1/8" x 4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8" x 4-11/16" SQ	86.0	38	34	28	17
664	4" x 6" SQ	144.0	64	57	48	28

* DEDUCT ONE CONDUCTOR FOR (1) OR MORE GROUNDING CONDUCTORS ENTERING THE BOX

LEGEND

- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN)
- WALL MOUNTED HVAC UNIT. SEE MECHANICAL DWGS
- ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS
- ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT (U.N.O.)
- OS — CEILING MOUNTED OCCUPANCY SENSOR
- PC — CEILING MOUNTED PHOTOCELL
- US — ULTRASONIC CEILING OCCUPANCY SENSOR. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.
- WS-1 — SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF
- $D — DIMMER SWITCH, AT +48" AFF. TO TOP OF OUTLET BOX
- $ — LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $3 — 3-WAY LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- $K — KEYED SWITCH MOUNT AT +48" AFF TO TOP OF OUTLET BOX
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP — EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24 " AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)
- GFI — GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS
- ROOF — ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE
- EM — EXTERIOR LED LIGHT FIXTURE W/ 90 MIN. EMERGENCY BATTERY BACKUP WHEN 'EM' IS DESIGNATED NEXT TO FIXTURE W/ PHOTOCELL W/ 30w MAX. MOUNT AT +93" AFF
- L — CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE
- EXIT — EXIT SIGN WITH 90 MIN. BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. CLASSROOMS WITH ONE EXTERIOR DOOR - OPTIONAL)
- 4SD J-BOX FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF OUTLET BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULL STRING
- 4SD J-BOX FOR FIRE ALARM STROBE OR VOICE EVAC SPEAKER (DEVICE BY OTHERS). BOTTOM OF LENS SHALL BE BETWEEN 80" AND 96" AFF AND WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULL STRING
- H — 4SD J-BOX FOR EXTERIOR FIRE ALARM SPEAKER (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULL STRING
- 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 PULL STRING
- S — 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)
- H — 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC 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)
- WH — 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
- 100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 300 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH
- 2x4 CEILING RECESSED LIGHT, LED LIGHT FIXTURE WITH DIMMING WATTAGE: 51 WATTS (MAX), 5000L (MIN) 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.
- WALL MOUNTED LIGHT FIXTURE, 30 WATTS
- 4SD J-BOX FOR FUTURE DATA W/ SINGLE GANG RING W/ 1" CO STUB INTO ATTIC AND PULL STRING
- FS — DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER FLOW SWITCH.
- TS — DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER TAMPER SWITCH.
- B — DEDICATED CIRCUIT w/ LOCK ON DEVICE FOR FIRE SPRINKLER BELL.

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.

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: WALL MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: FLUSH

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	A Circuit	B Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1	2	60	2	4830		1	HVAC - WALL MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3	4	-	-		4830		-
INTERIOR LIGHTING	8	960		20	1	5	6						
EXTERIOR LIGHTING	1		40	20	1	7	8						
WALL RECEPTACLE (GFI)	1	180		20	1	9	10						
DED - SOLAR READY						11	12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13	14						
A = 5390 WATTS / PHASE		1860	940							4830	4870		B = 5810 WATTS / PHASE
TOTAL = 12,500 WATTS		61 AMPS		120/208 VOLTS		1 Ø				3 WIRE			

ELECTRICAL PANEL

VOLTS: 120/208 V | PANEL: "A" ROOF MOUNTED HVAC | FEED: REAR
MAIN: 100 A | LOCATION: INTERIOR ACCESS | MOUNTING: RECESSED

LOAD	QTY	WATTS AØ	WATTS BØ	BREAKER Amps	BREAKER P	A Circuit	B Circuit	BREAKER Amps	BREAKER P	WATTS AØ	WATTS BØ	QTY	LOAD
RECEPTACLES	4	720		20	1	1	2	60	2	4542		1	HVAC - ROOF MOUNT
RECEPTACLES/CLOCK	5		900	20	1	3	4	-	-		4542		-
INTERIOR LIGHTING	8	960		20	1	5	6						
EXTERIOR LIGHTING	1		40	20	1	7	8						
ROOF RECEPTACLE (GFI)	1	180		20	1	9	10						
DED - SOLAR READY						11	12	20	1		40		FIRE ALARM CONTROL PANEL (FIRE ALARM NOTE #2)
DED - SOLAR READY						13	14						
A = 6402 WATTS / PHASE		1860	940							4542	4582		B = 5522 WATTS / PHASE
TOTAL = 11,924 WATTS		57 AMPS		120/208 VOLTS		1 Ø				3 WIRE			

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

ELECTRICAL PLAN
AND SCHEDULE
24' x 40'

REVISIONS

1
2
3
4
5

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

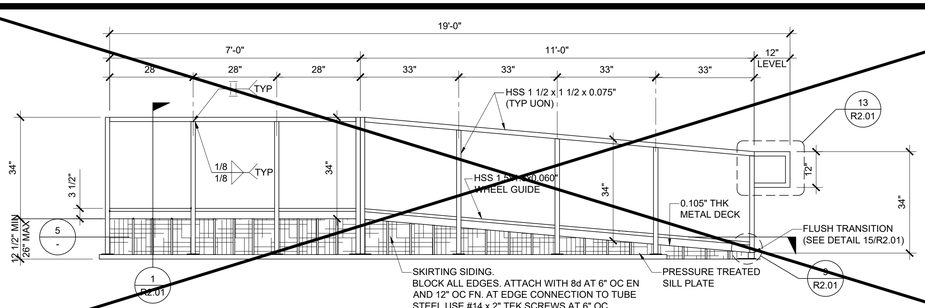
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
24475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

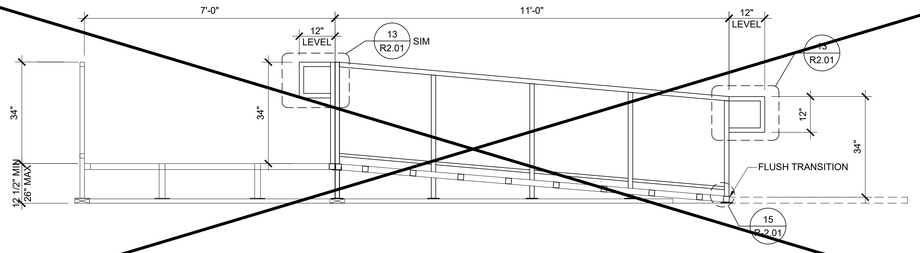
PROJECT NO:
DRAWN BY:
SCALE: AS NOTED
DATE: 02-27-2023

P.C. SHEET NUMBER
E-1.01



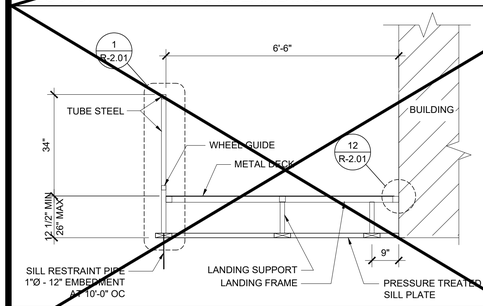
RAMP AND LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 4



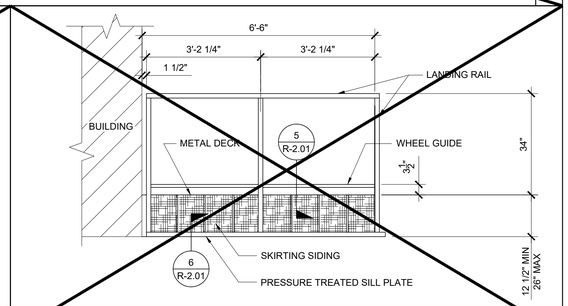
SECTION AT RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 5



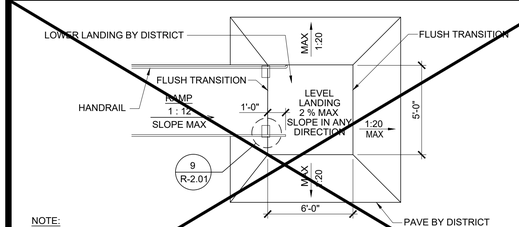
SECTION AT LANDING

SCALE : 1/2" = 1'-0" | 9



LANDING ELEVATION

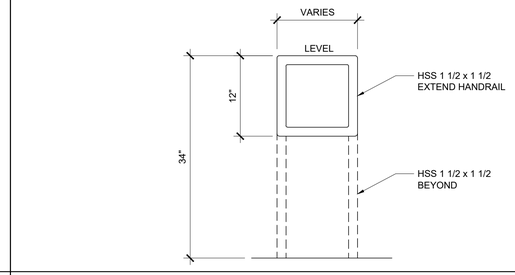
SCALE : 1/2" = 1'-0" | 6



NOTE:
1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO 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 DEMONSTRATE ACCESSIBLE RAMP.)

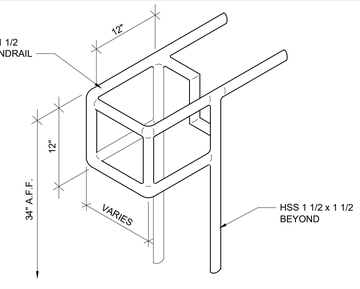
RAMP TRANSITION

SCALE: NTS | 10



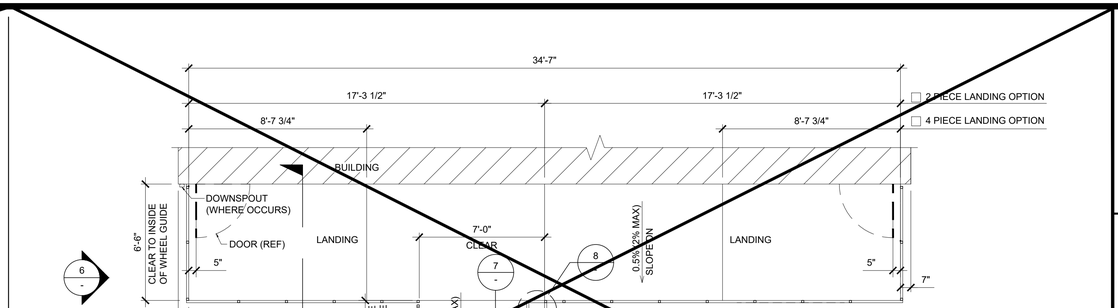
RETURN EXTEND HANDRAIL ELEVATION

SCALE : 1" = 1'-0" | 7



RETURN EXTEND HANDRAIL ISOMETRIC

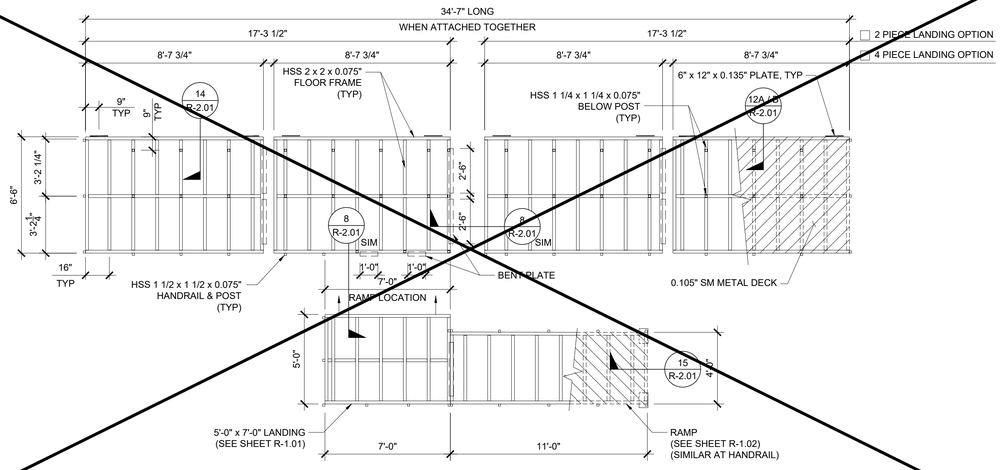
SCALE : NTS | 8



NOTE:
THIS LANDING DESIGN IS FOR USE AT THE 40'-0" MODULE SIDEWALL.
IF THIS LANDING DESIGN IS USED AT THE 12'-0" MODULE ENDWALL THEN THE EDGE OF THE LANDING SHALL BE 7" CLEAR (MIN) FROM THE CORNER OF THE BUILDING.

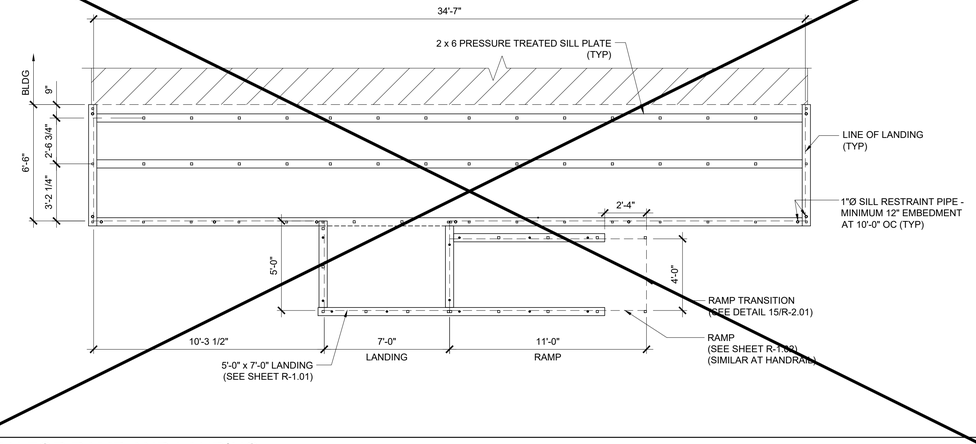
LANDING PLAN

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



LANDING FRAME

SCALE : 1/4" = 1'-0" | 2



SILL PLAN FOR RAMP AND LANDING

SCALE : 1/4" = 1'-0" | 3

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

RAMP LANDING

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023

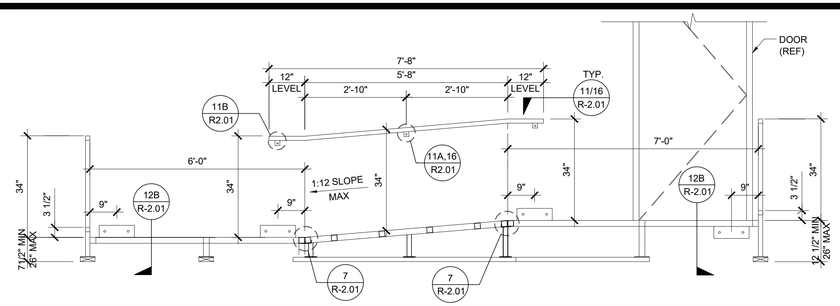
PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

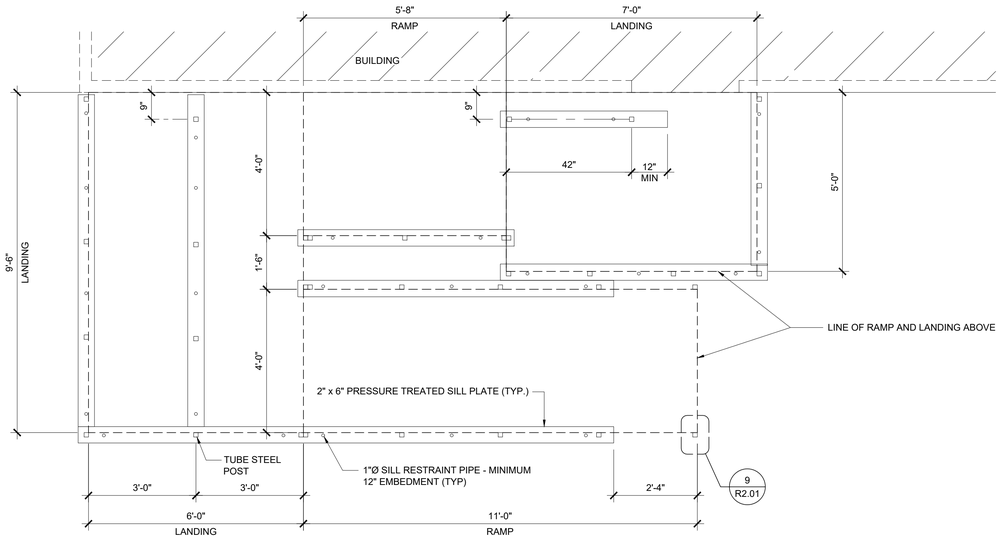
REGISTERED PROFESSIONAL ENGINEER JOHN W STARLING 2475 STRUCTURAL STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023
P.C. SHEET NUMBER	R-1.03



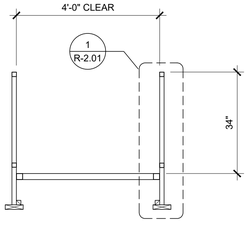
SECTION AT RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 4



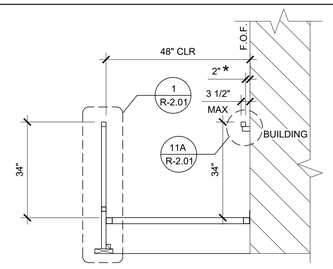
SILL PLAN FOR RAMP AND LANDING

SCALE : 1/2" = 1'-0" | 5



SECTION AT RAMP

SCALE : 1/2" = 1'-0" | 8

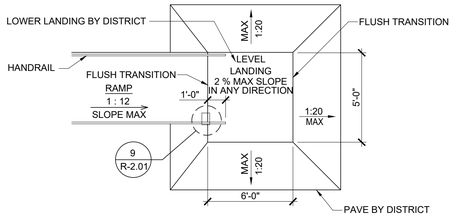


NOTE (*)

1. ALL SURFACES SHALL BE SMOOTH WITH NO SHARP CORNERS, PER CBC 11B-505.8 WALL TO BE SMOOTH AND TO EXTEND 8" ABOVE HANDRAIL

SECTION AT RAMP

SCALE : 1/2" = 1'-0" | 6

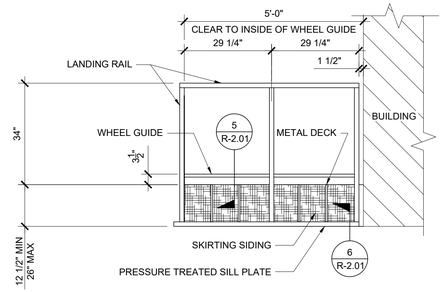


NOTE:

1. 1:20 TRANSITION OFF OF LOWER LANDING REQUIRES NO HANDRAILS.
2. TRANSITIONS EXCEEDING 1:20 BUT NOT TO 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 DEMONSTRATE ACCESSIBLE RAMP.)

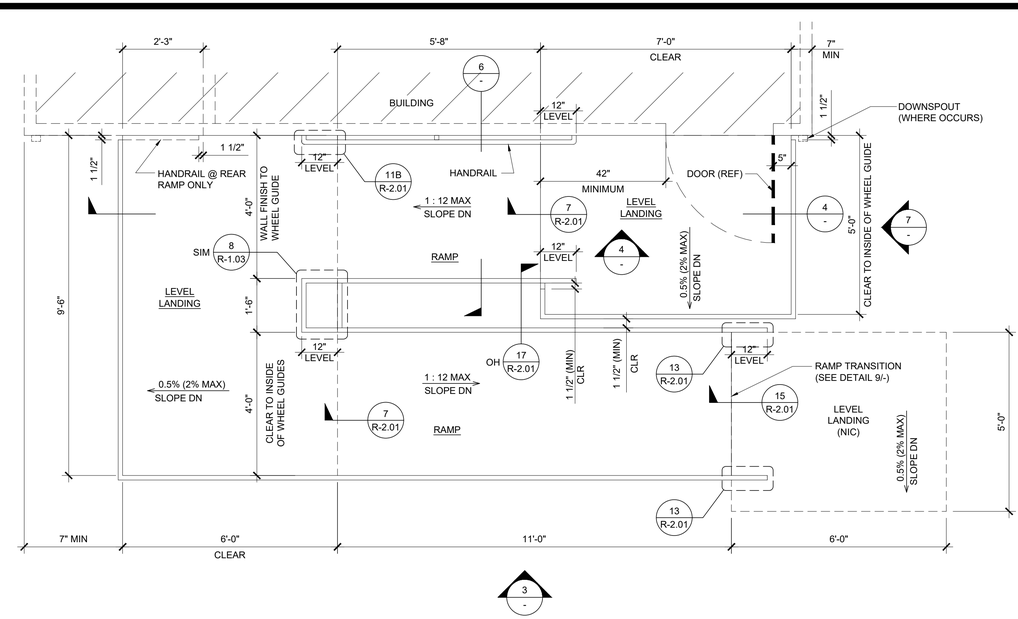
RAMP TRANSITION

SCALE: NTS | 9



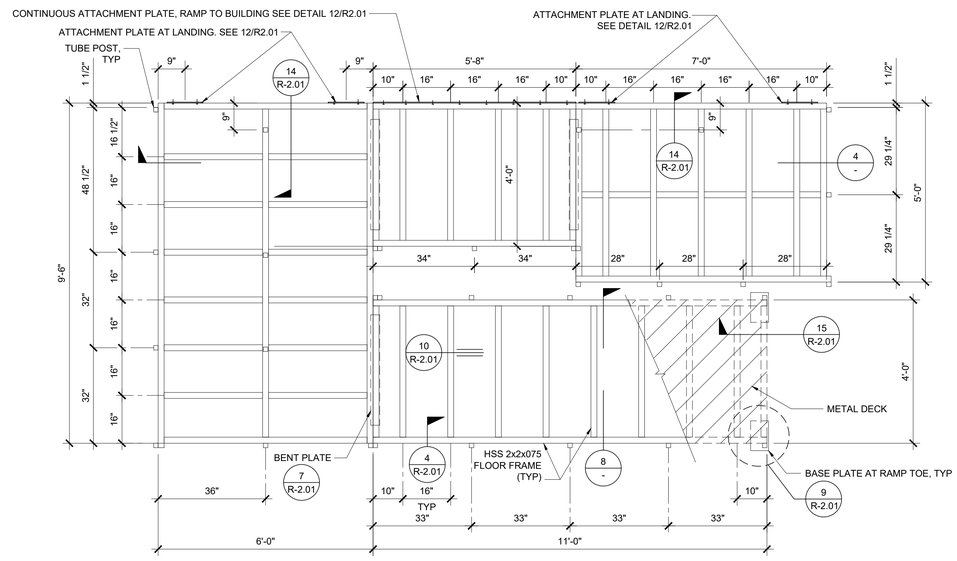
LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 7



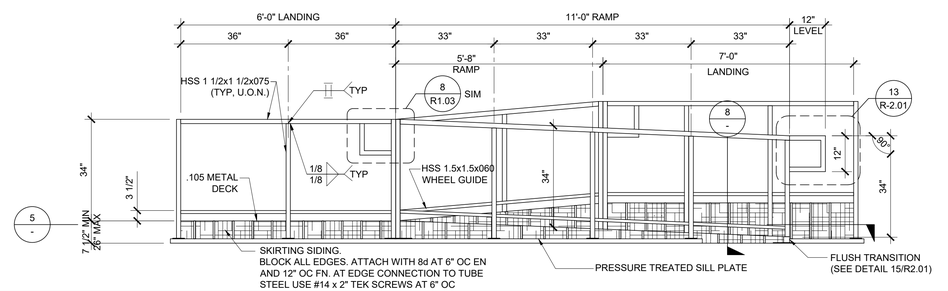
RAMP AND LANDING AT BUILDING

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



RAMP FRAMING PLAN

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



RAMP AND LANDING ELEVATION

SCALE : 1/2" = 1'-0" | 3

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

SWITCHBACK RAMP PLAN

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

~~IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023~~

~~PC STATE AGENCY APPROVAL~~

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

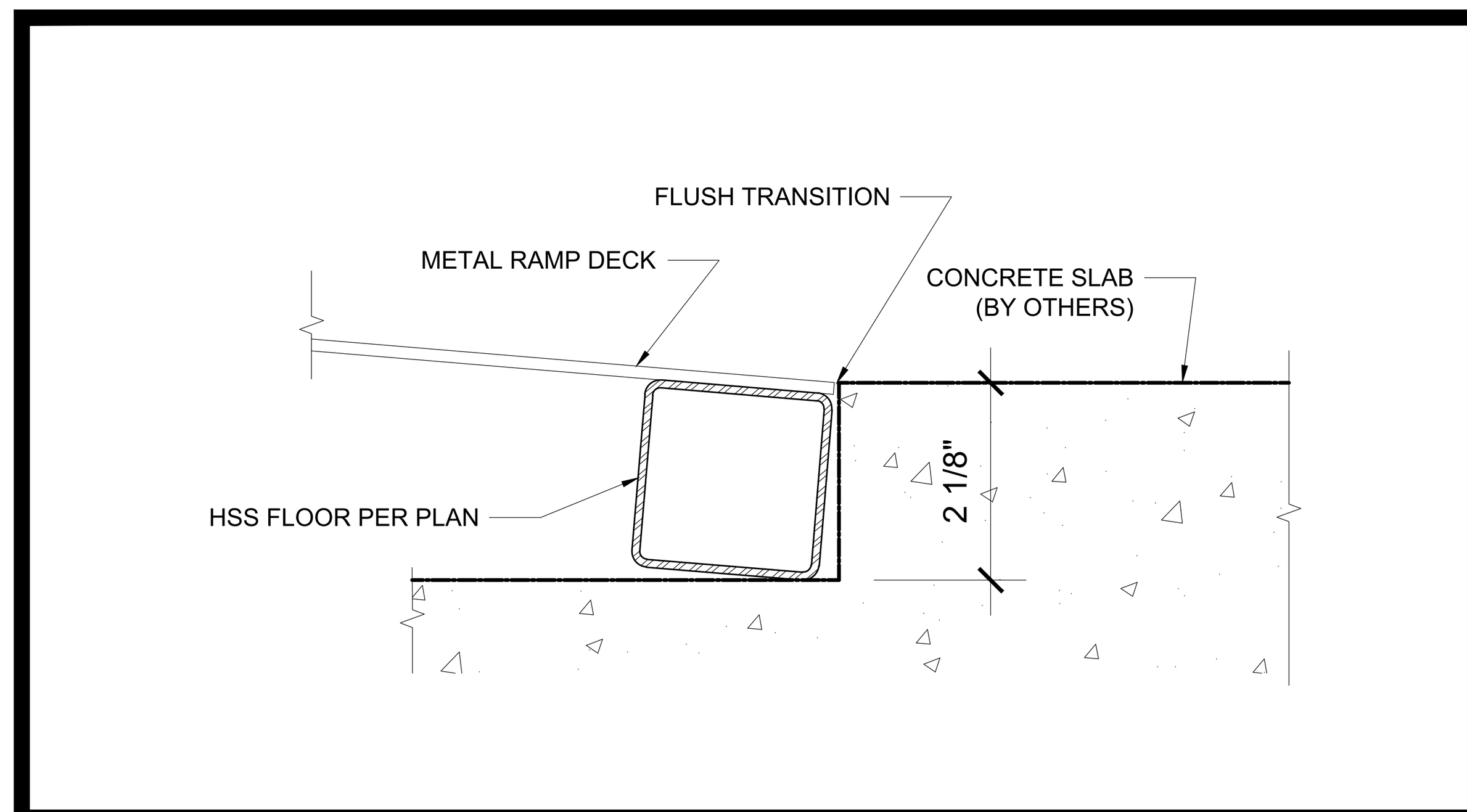
MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLING
2475
STRUCTURAL
STATE OF CALIFORNIA

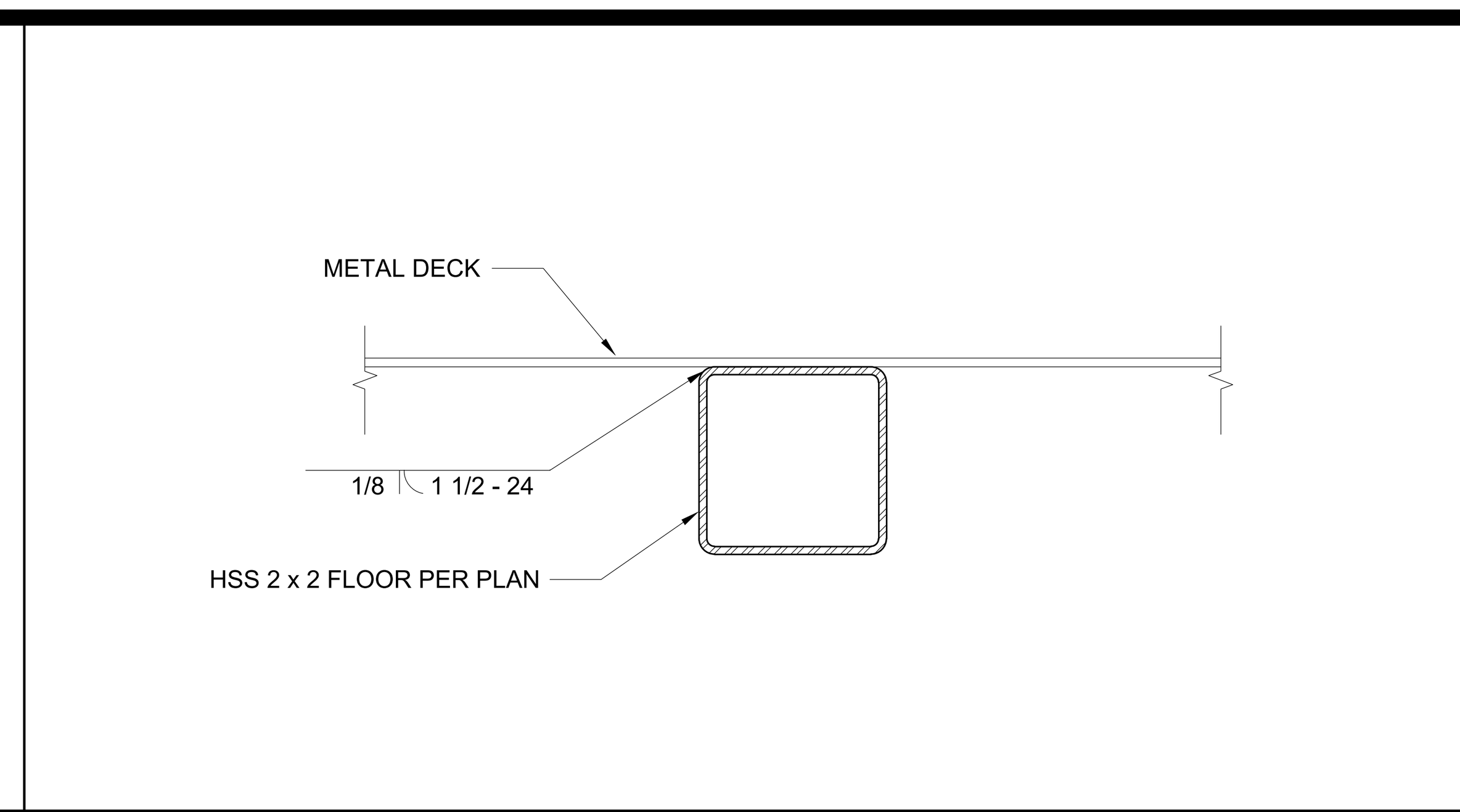
SILVER CREEK INDUSTRIES	24' x 40' PC
PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

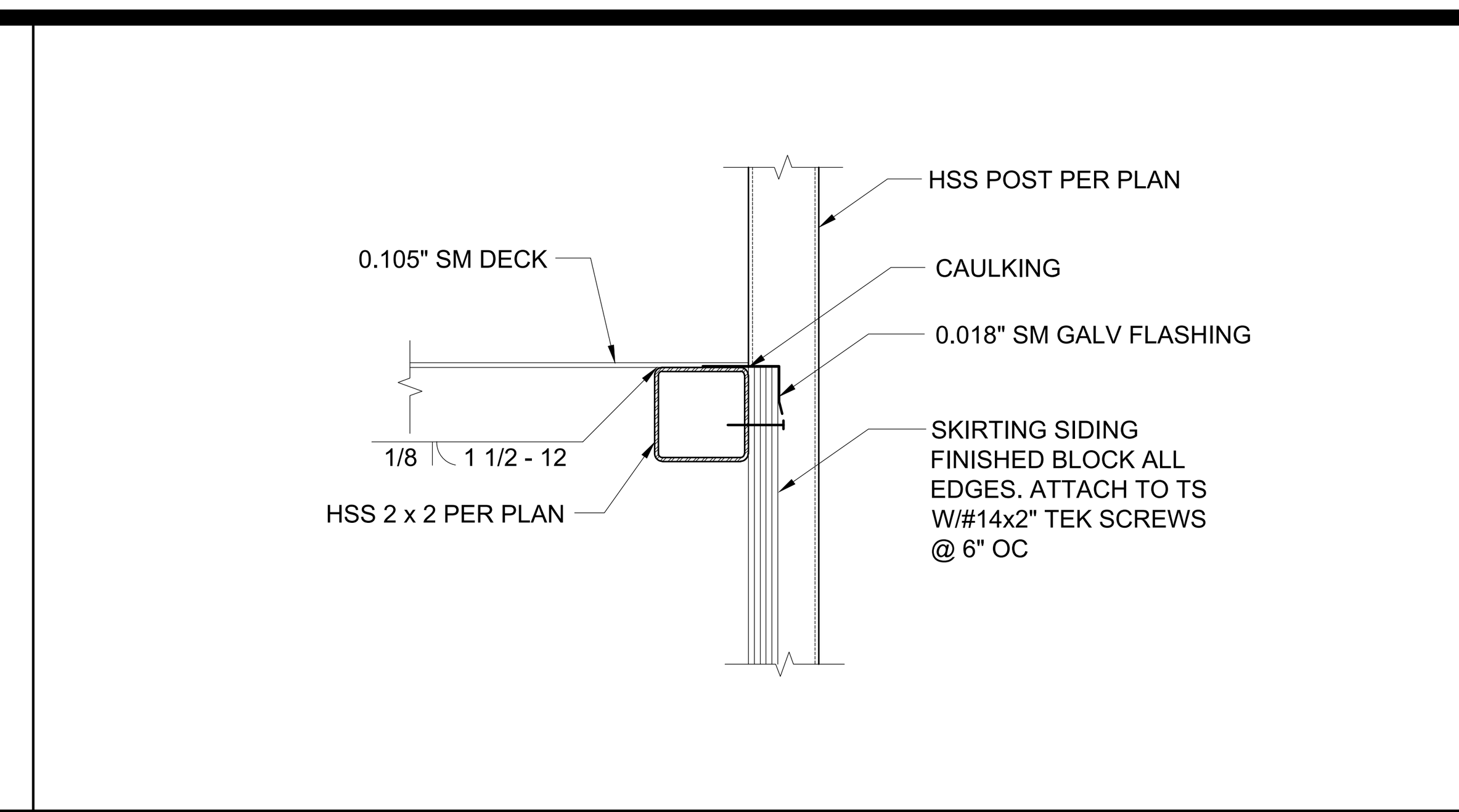
R-1.05



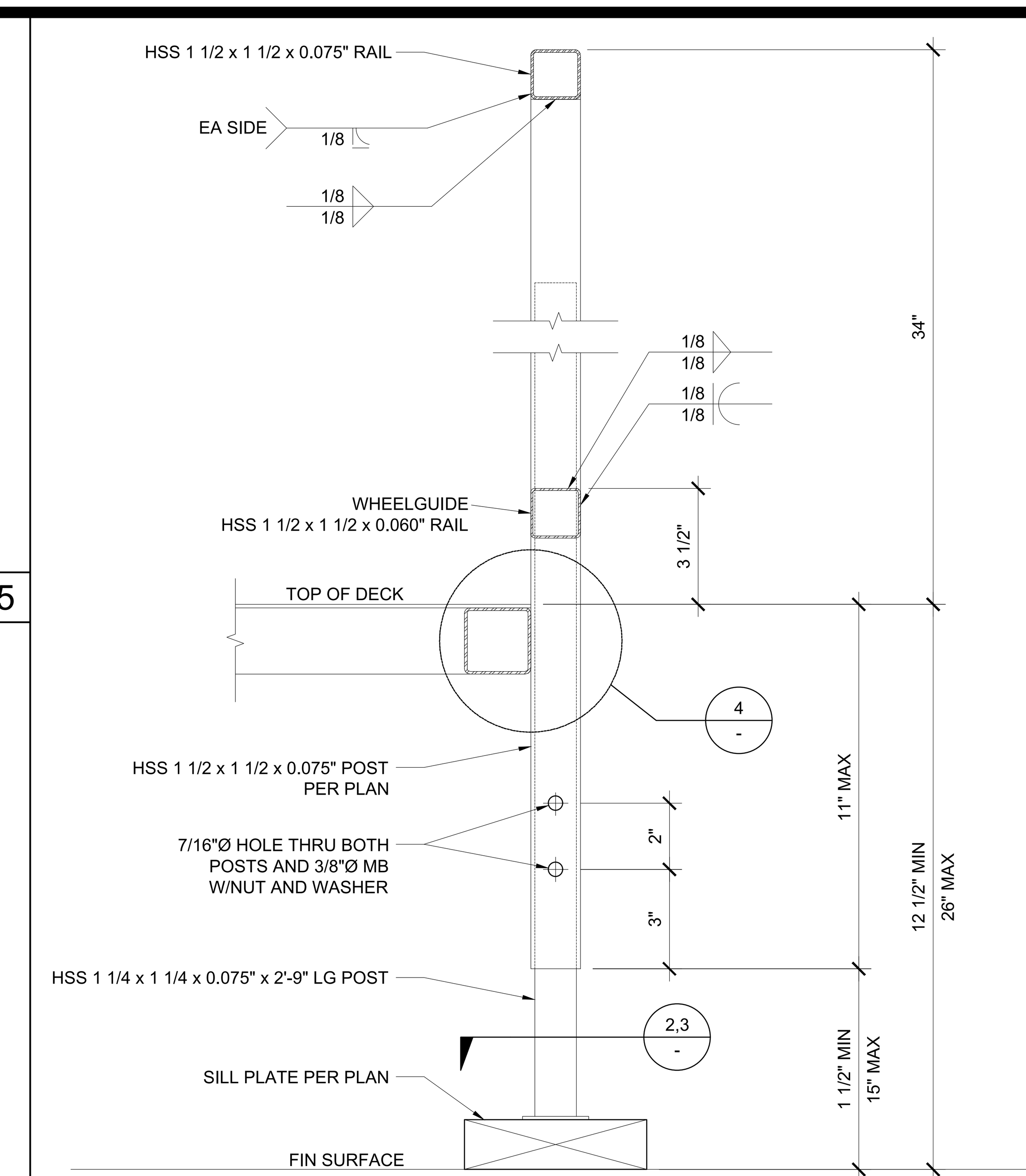
FLUSH TRANSITION AT BOTTOM OF RAMP SCALE : 6" = 1'-0" 15



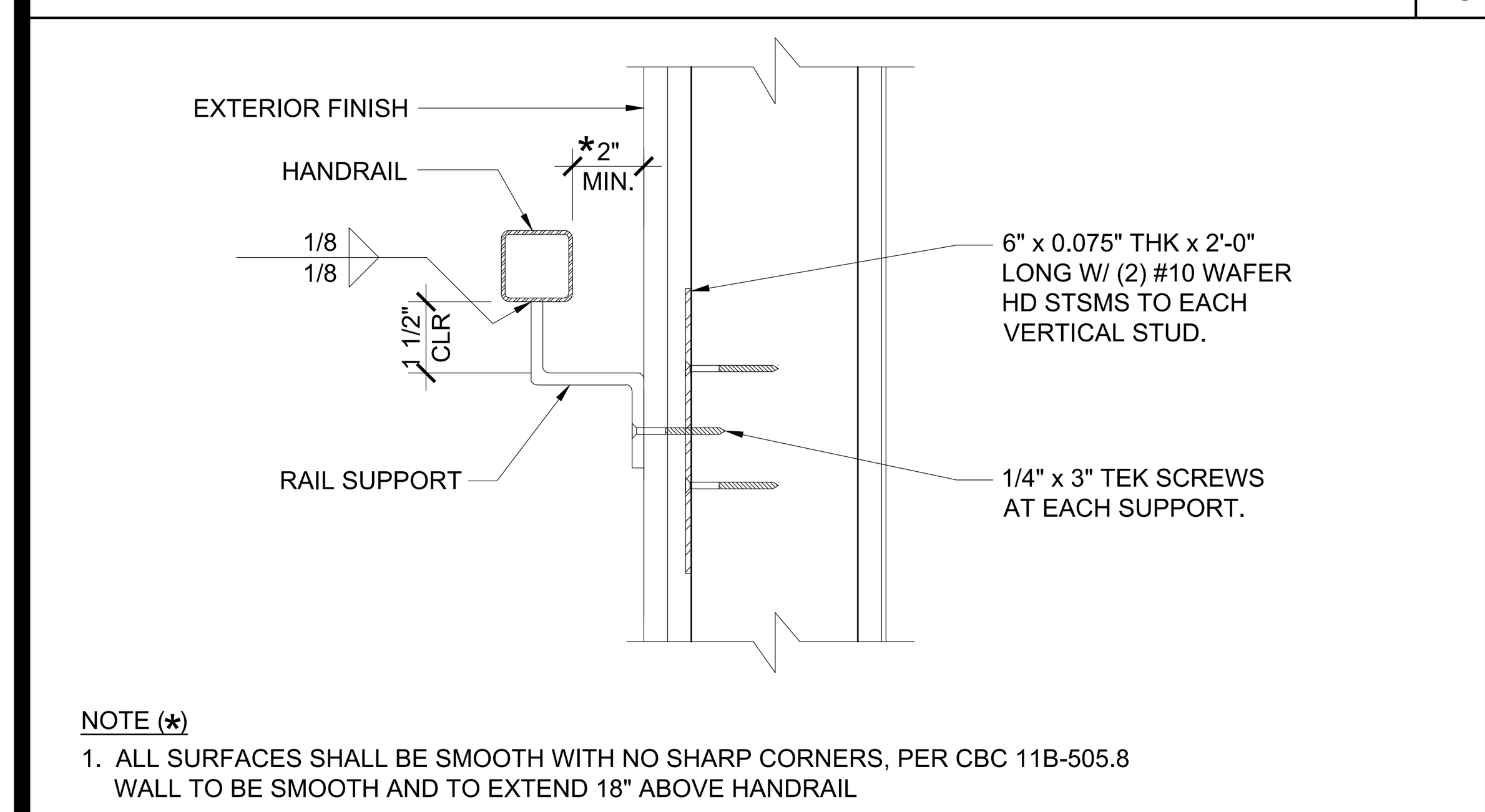
DECK TO FRAME SCALE : 6" = 1'-0" 10



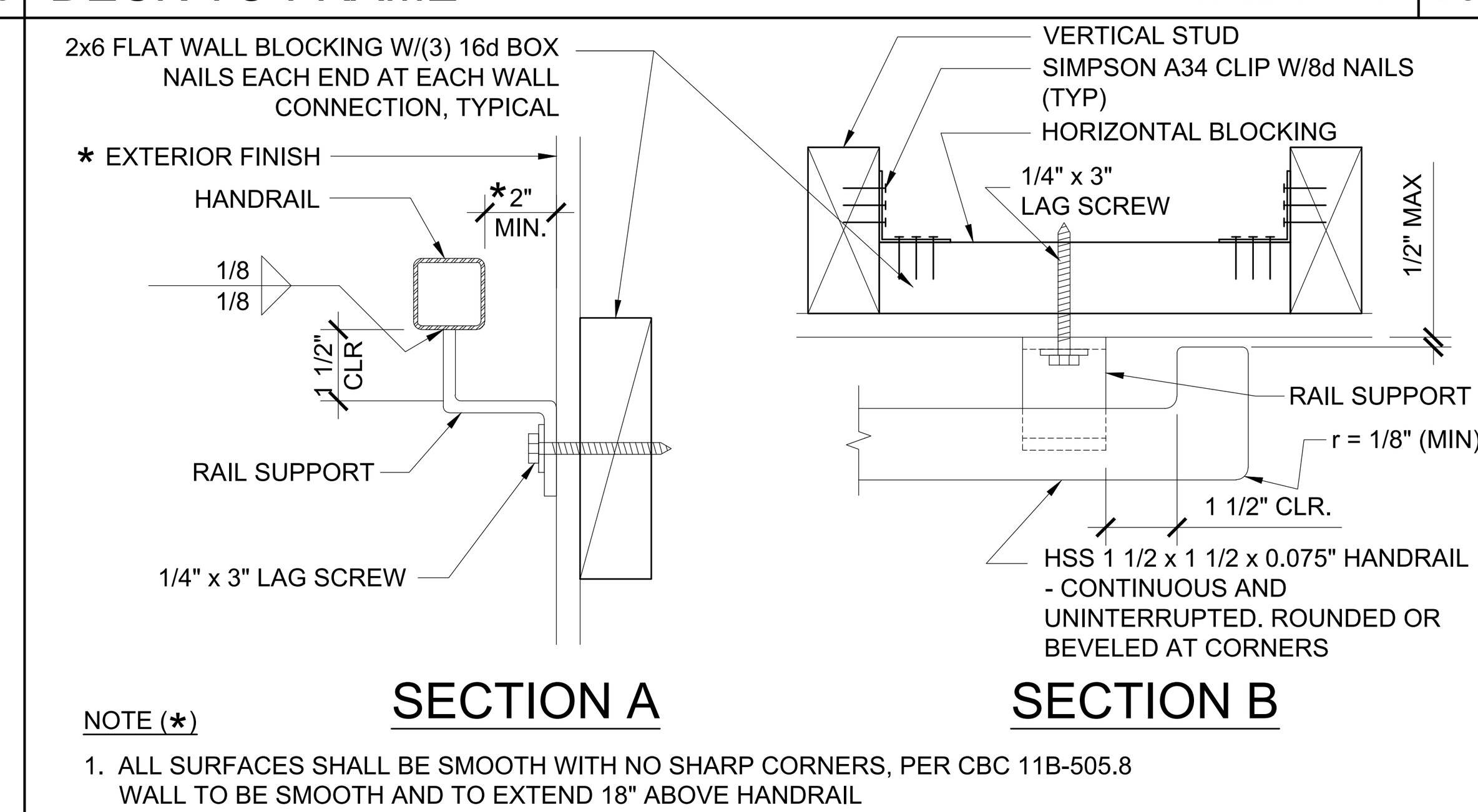
SKIRT FLASHING SCALE : 3" = 1'-0" 5



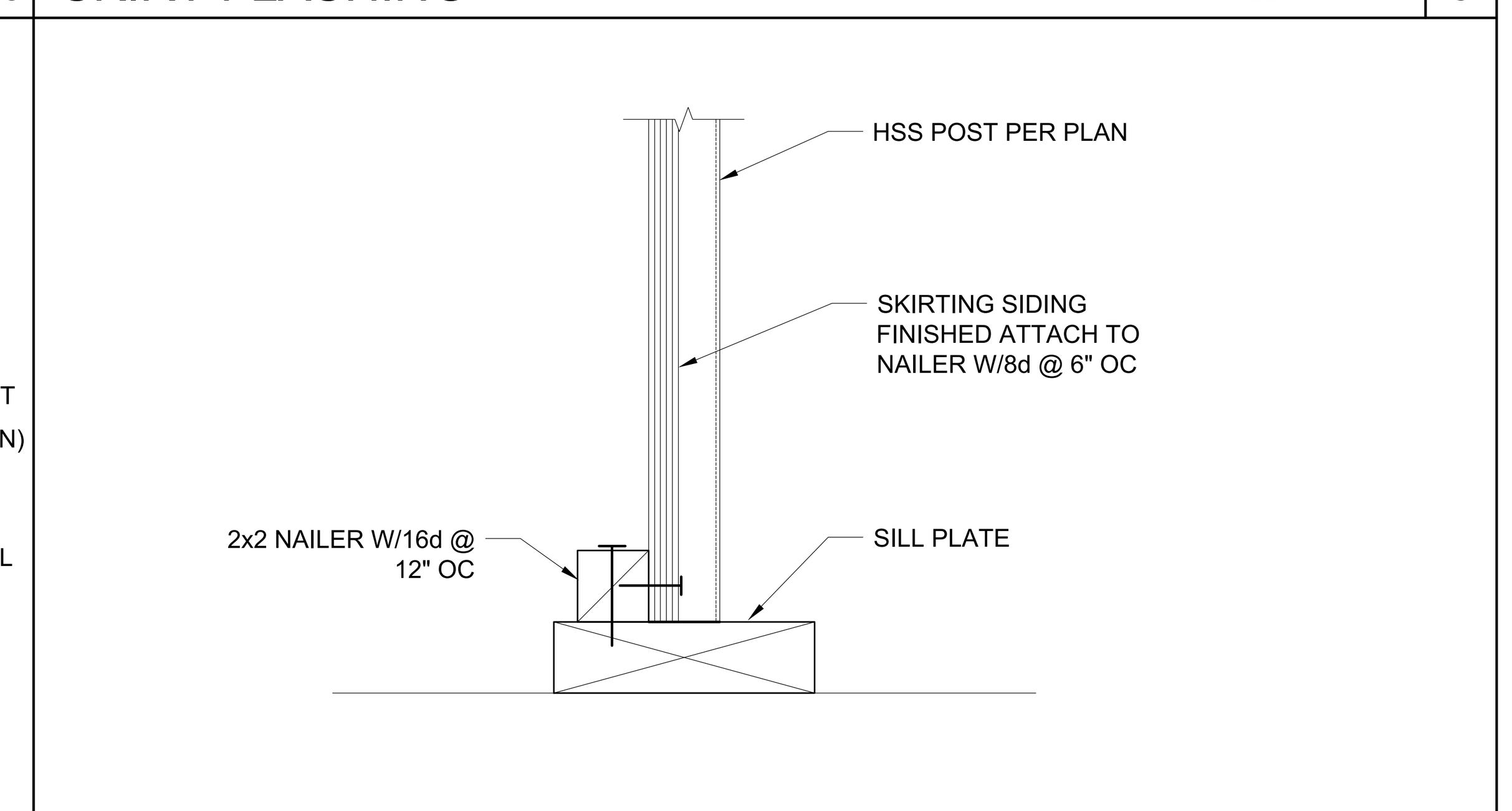
ADJUSTABLE LEG SCALE : 3" = 1'-0" 1



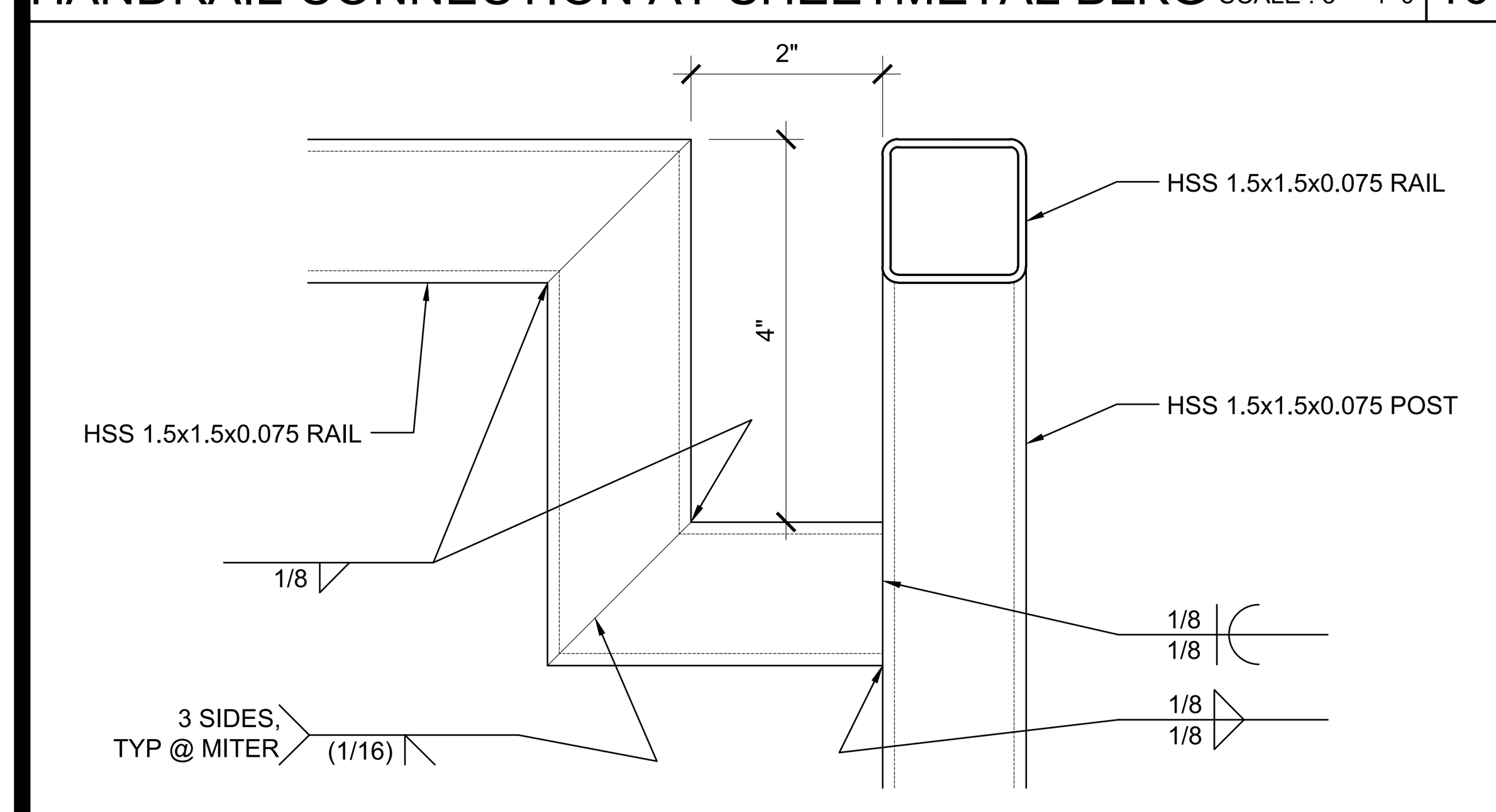
HANDRAIL CONNECTION AT SHEETMETAL BLKG SCALE : 3" = 1'-0" 16



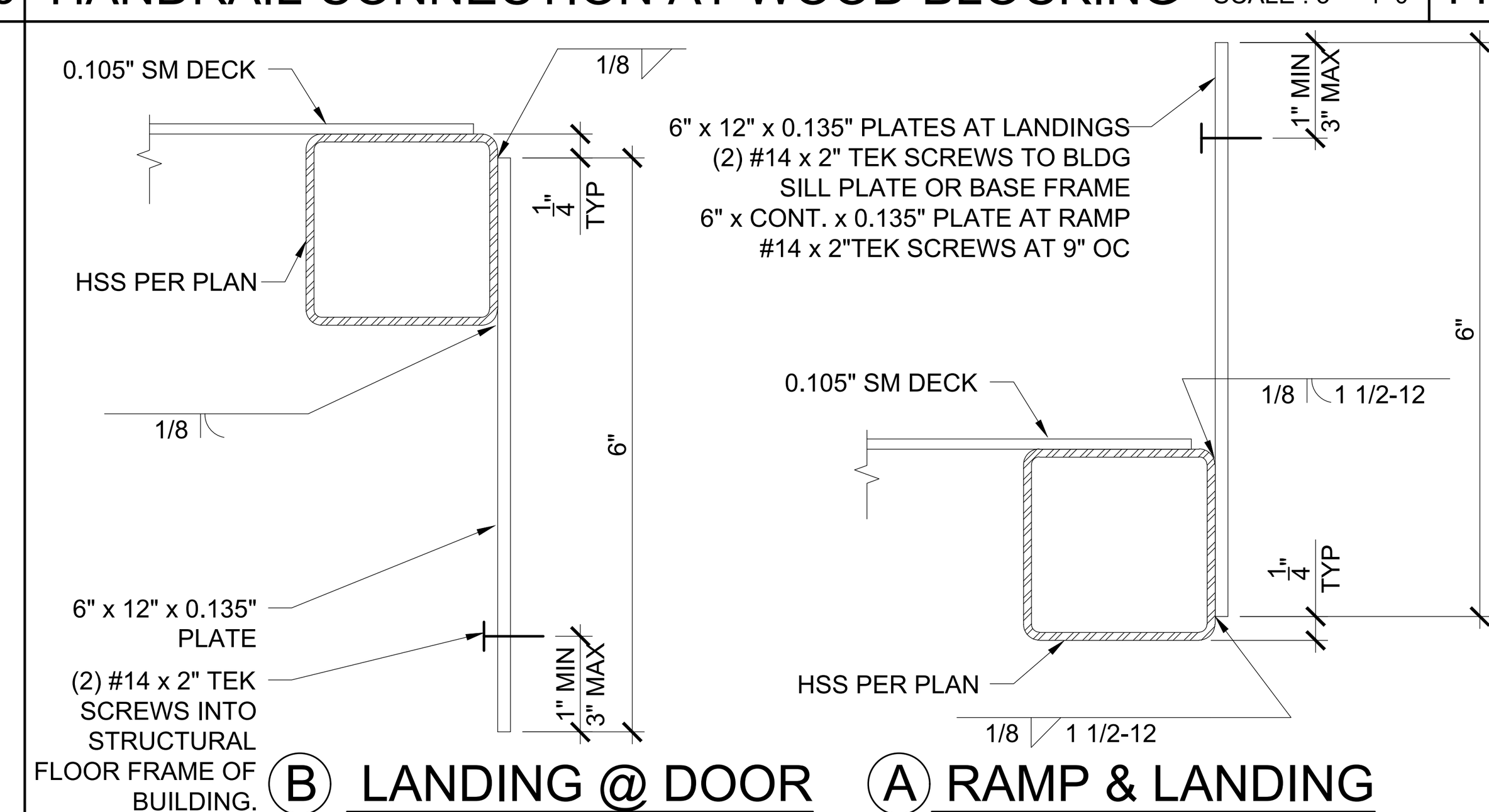
HANDRAIL CONNECTION AT WOOD BLOCKING SCALE : 3" = 1'-0" 11



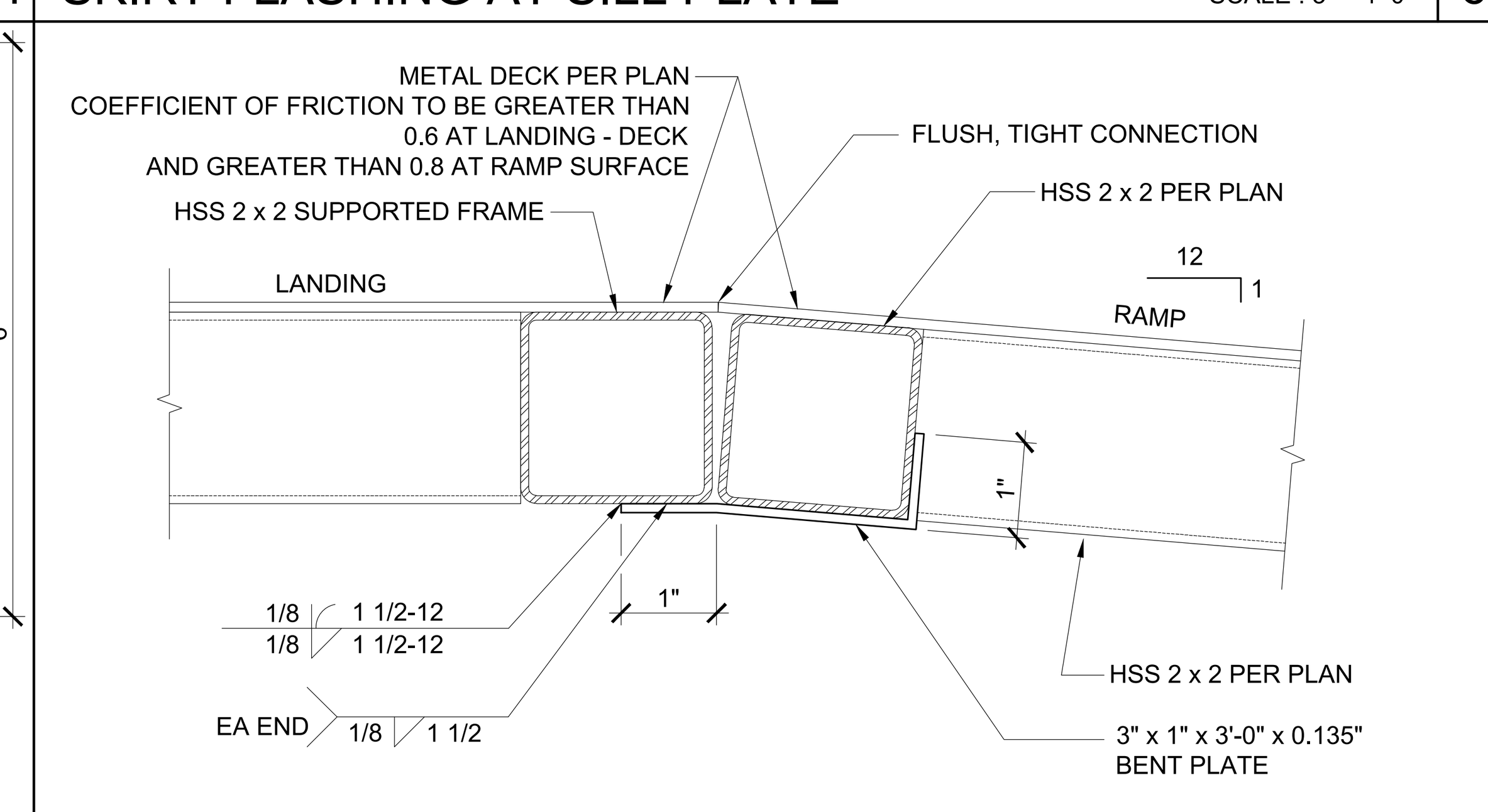
SKIRT FLASHING AT SILL PLATE SCALE : 3" = 1'-0" 6



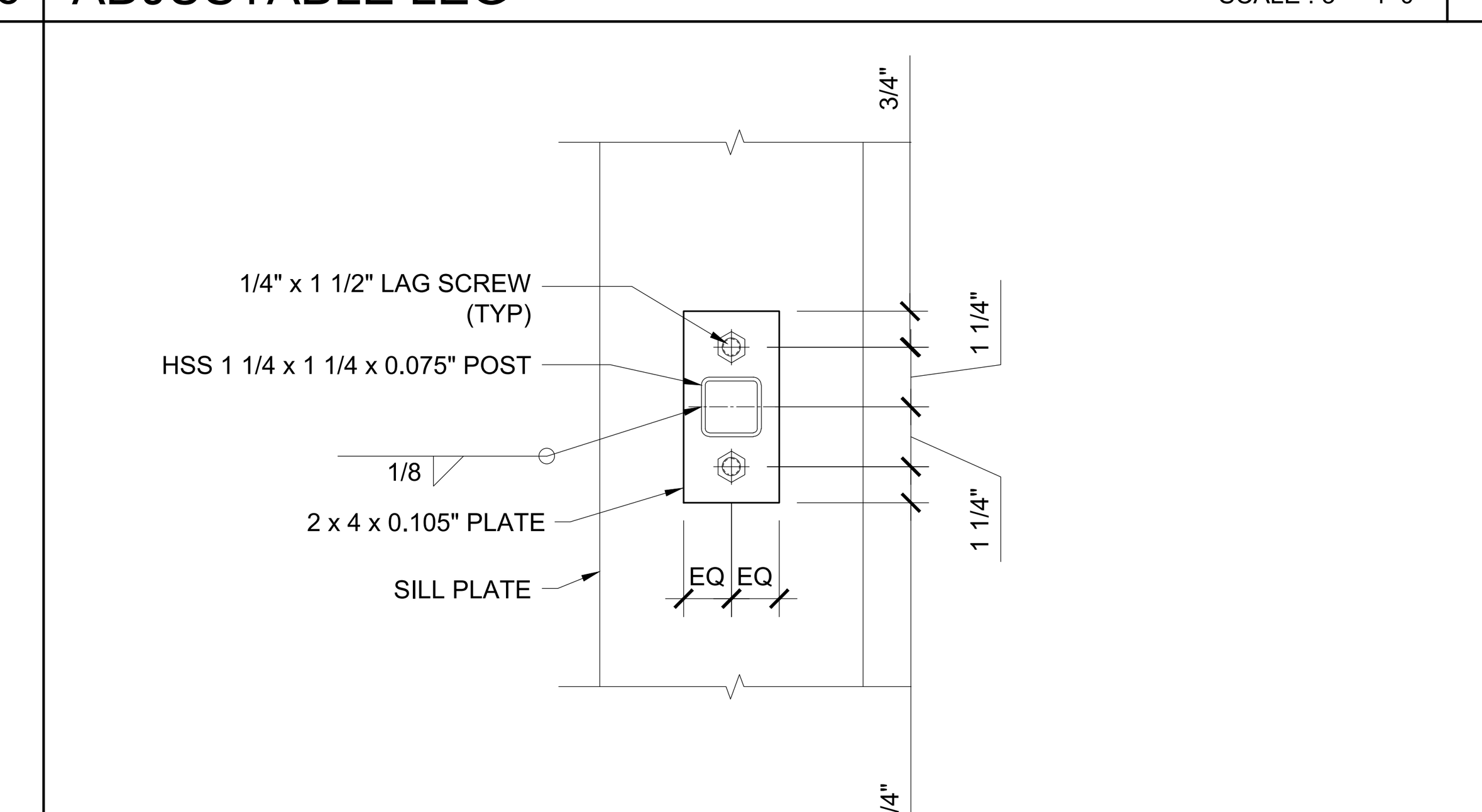
RAIL NOTCH AT HANDRAIL SCALE : 6" = 1'-0" 17



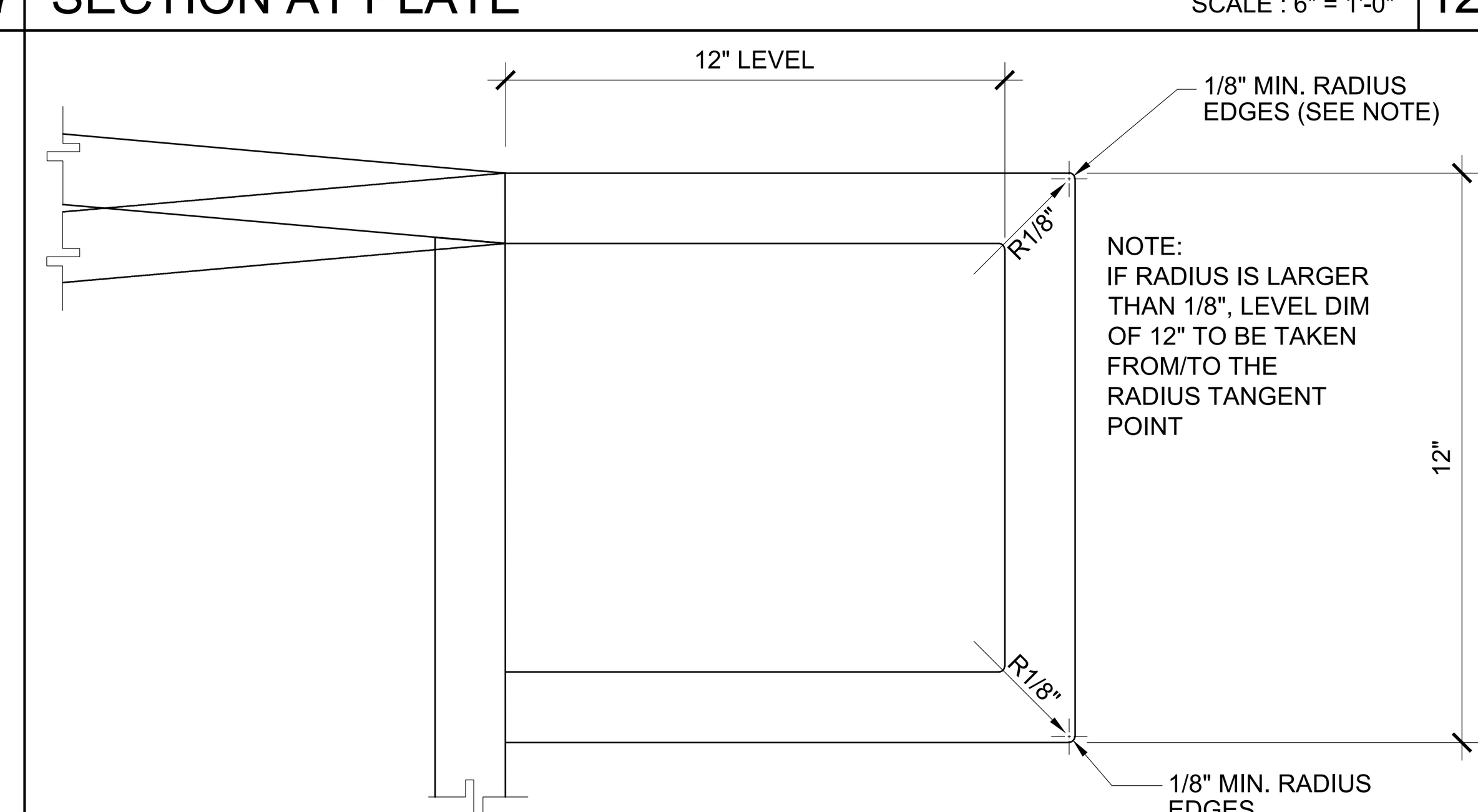
SECTION AT PLATE SCALE : 6" = 1'-0" 12



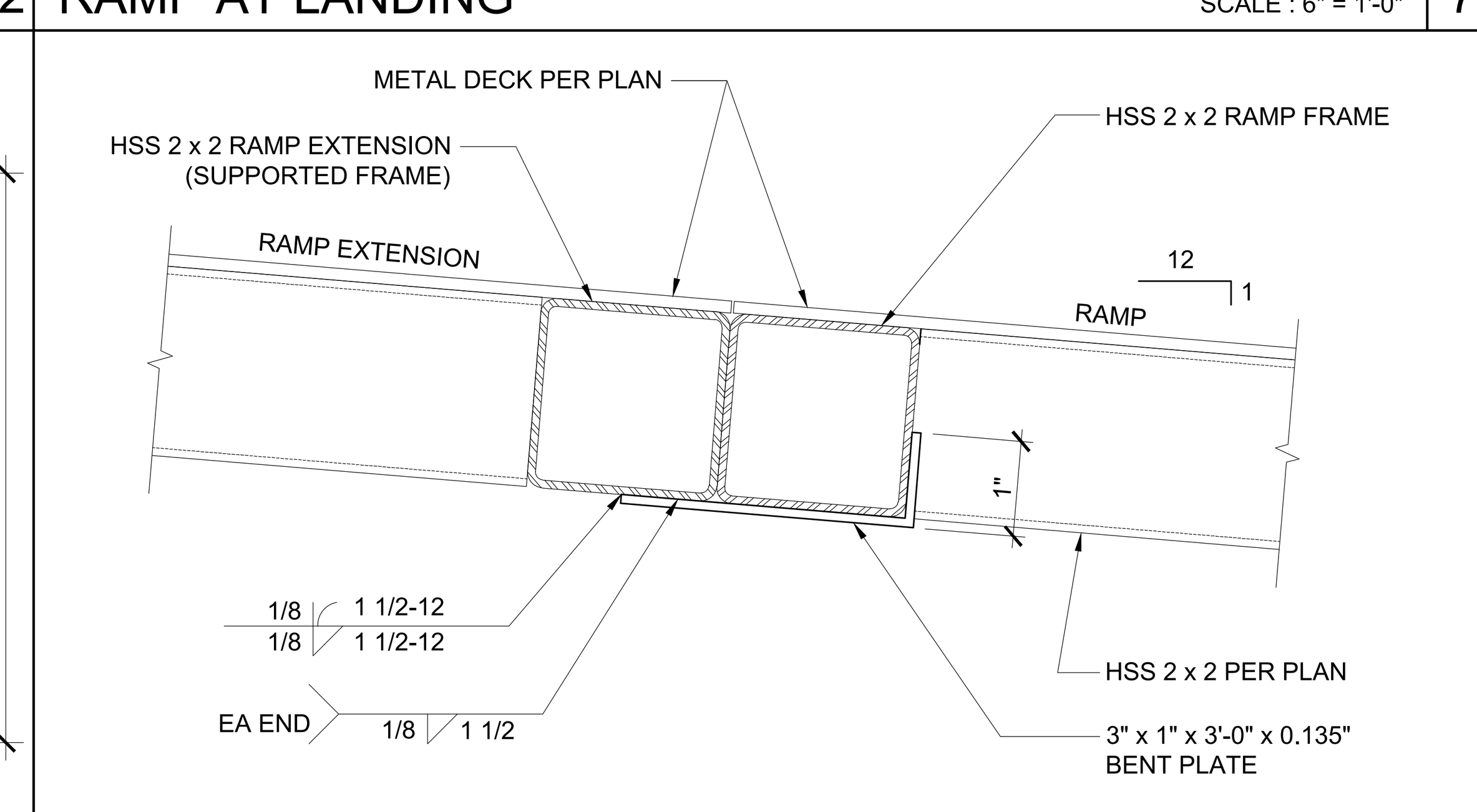
RAMP AT LANDING SCALE : 6" = 1'-0" 7



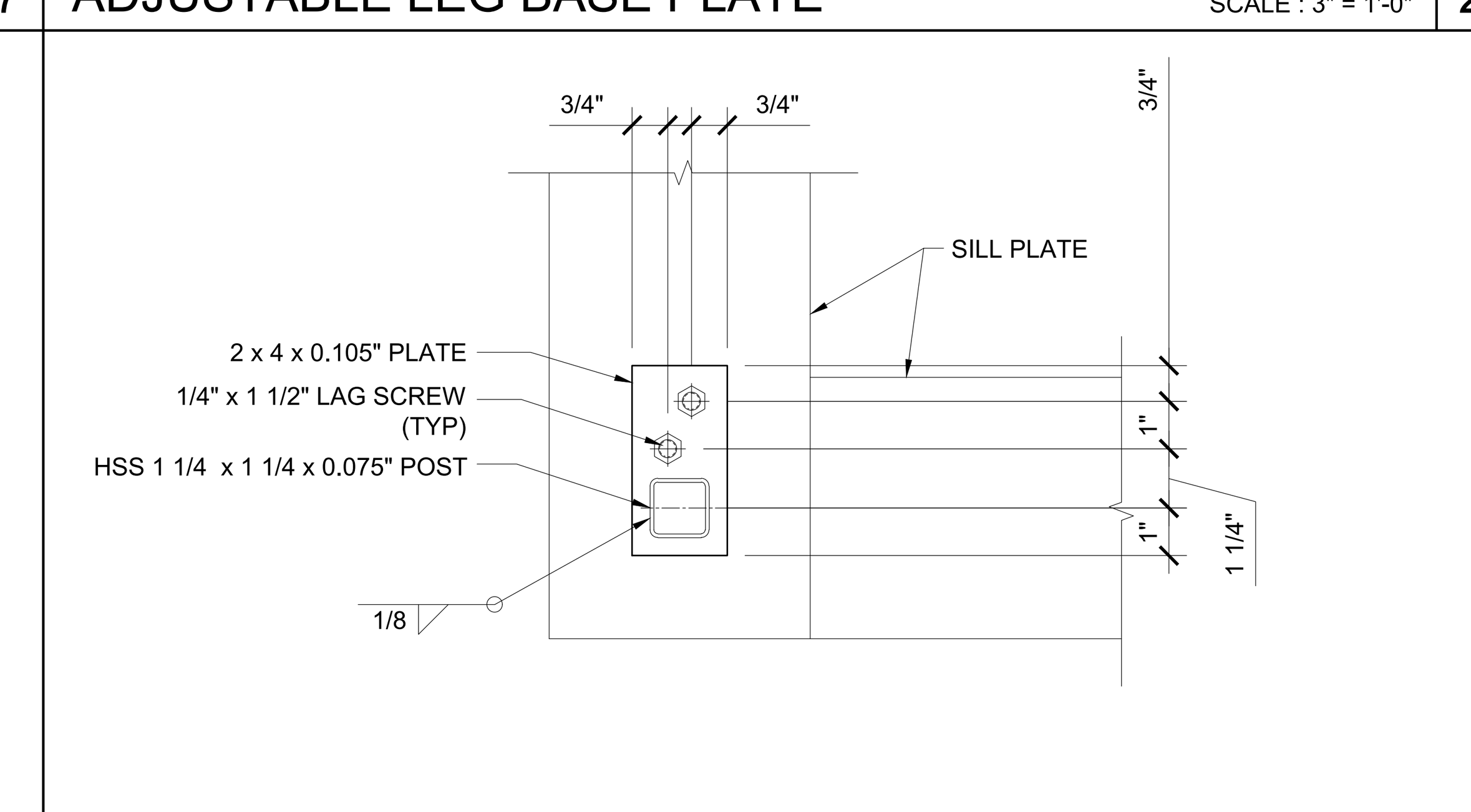
ADJUSTABLE LEG BASE PLATE SCALE : 3" = 1'-0" 2



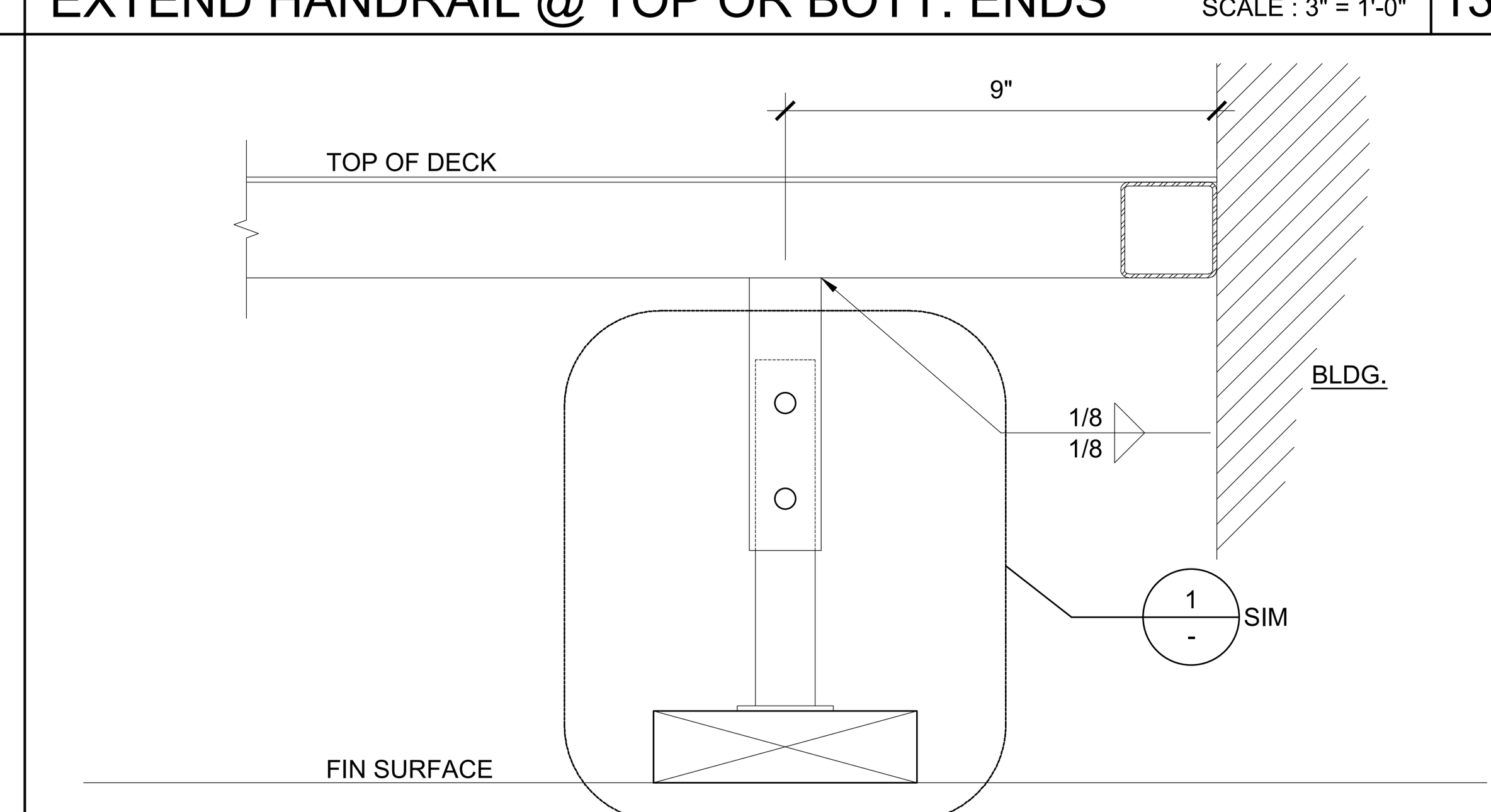
EXTEND HANDRAIL @ TOP OR BOTT. ENDS SCALE : 3" = 1'-0" 13



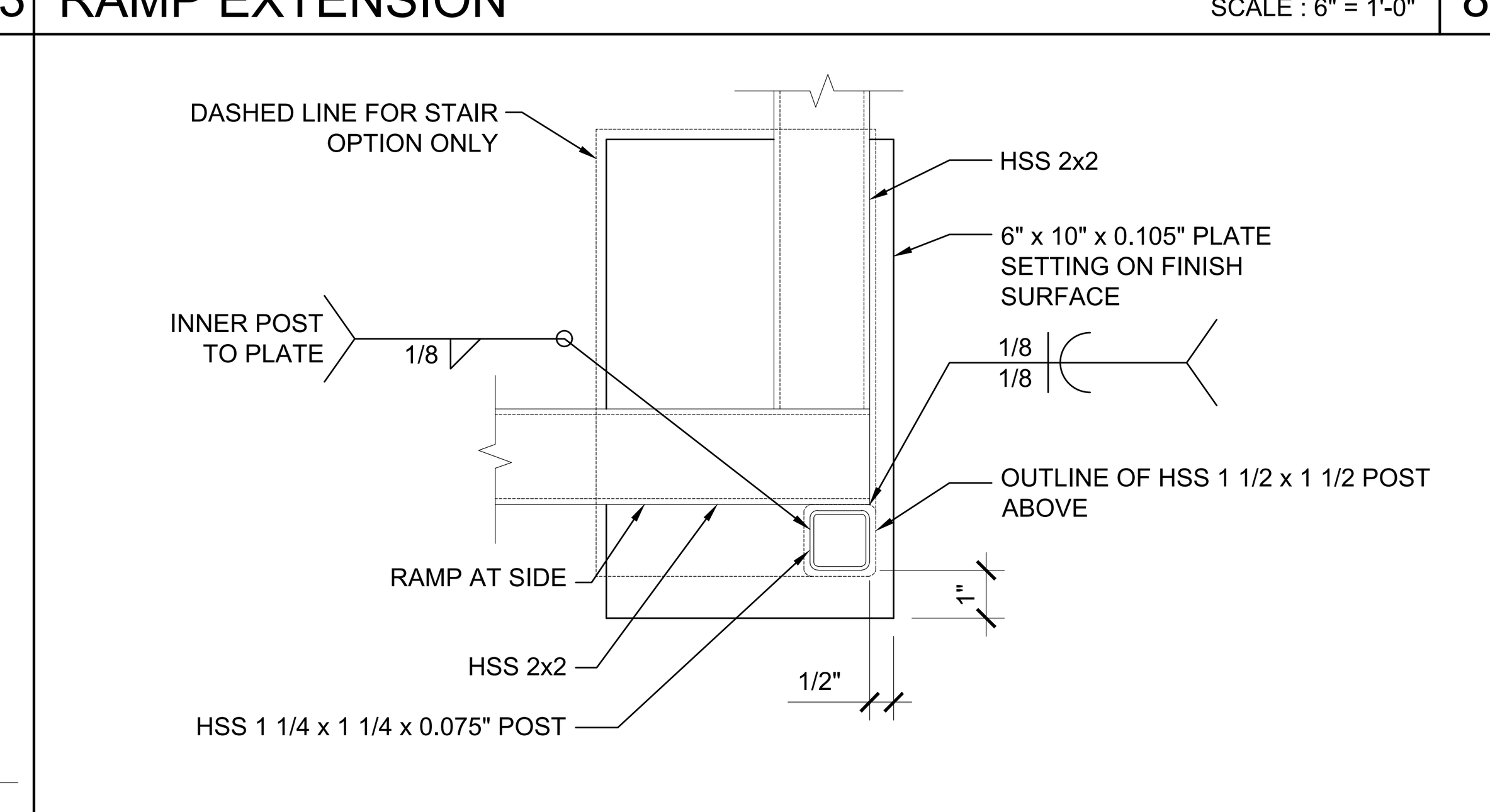
RAMP EXTENSION SCALE : 6" = 1'-0" 8



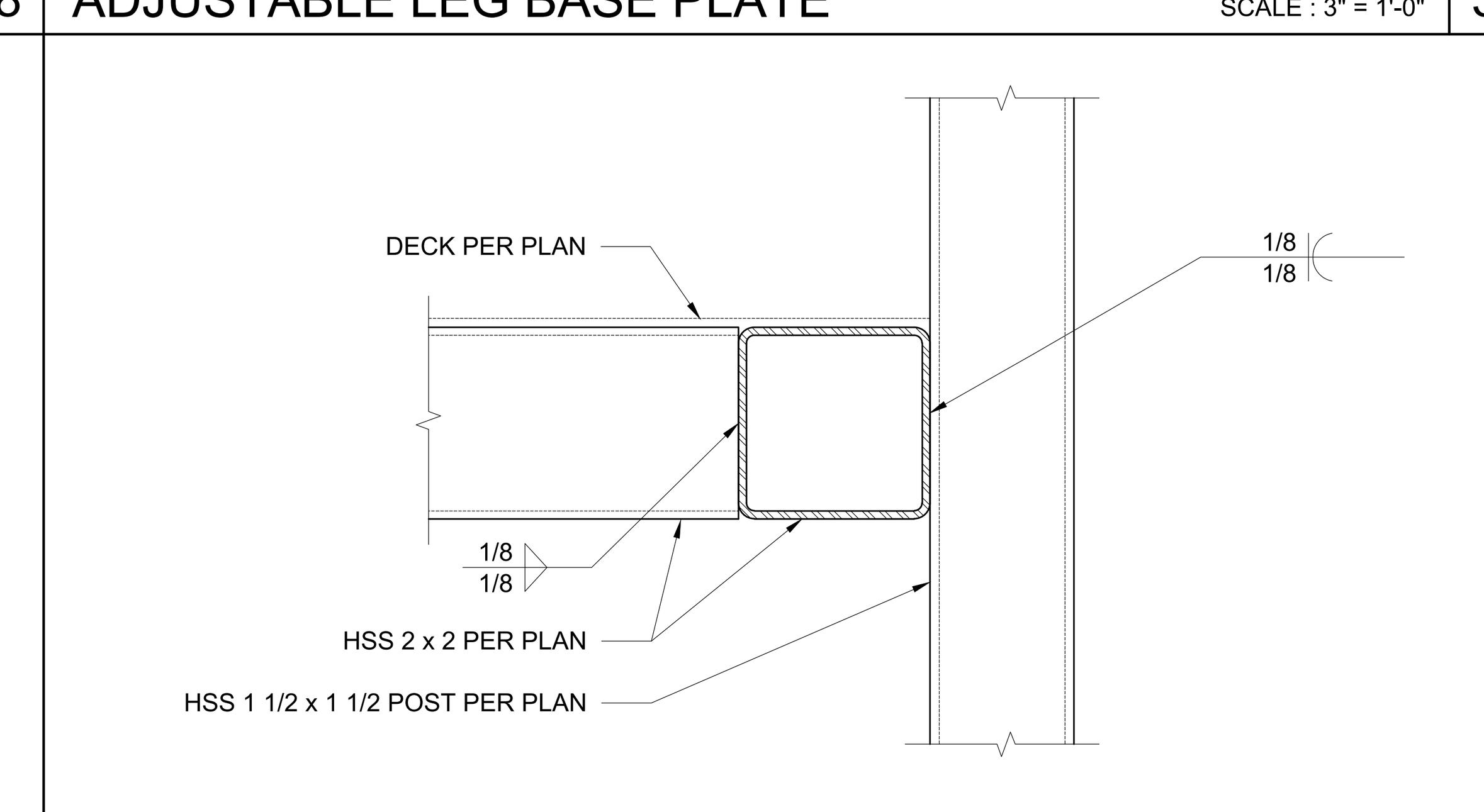
ADJUSTABLE LEG BASE PLATE SCALE : 3" = 1'-0" 3



INTERIOR LANDING LEG SECTION SCALE : 3" = 1'-0" 14



BASE PLATE AT RAMP TOE SCALE : 3" = 1'-0" 9



GUARDRAIL POST ATTACHMENT SCALE : 6" = 1'-0" 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122160 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 2/27/2024

PROJECT SPECIFIC STATE AGENCY APPROVAL

PROJECT NAME:

SYLVAN USD
FREEDOM E.S.
(2) 24' x 40'
CLASSROOM BUILDINGS

SHEET TITLE:

RAMP DETAILS

REVISIONS

1	
2	
3	
4	
5	

PRE-CHECK (PC) DOCUMENT
CODE: 2022 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

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DIV. OF THE STATE ARCHITECT
APP: 04-121999 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 08/31/2023~~

PC STATE AGENCY APPROVAL

Silver Creek
2830 BARRETT AVE PERRIS, CALIFORNIA 92571
PHONE: 951-943-5393 FAX: 951-943-2211

MODULAR BUILDING DESIGN PROFESSIONAL

REGISTERED PROFESSIONAL ENGINEER
JOHN W STARLIN
2475
STRUCTURAL
STATE OF CALIFORNIA

SILVER CREEK INDUSTRIES
24' x 40' PC

PROJECT NO:	
DRAWN BY:	
SCALE:	AS NOTED
DATE:	02-27-2023

P.C. SHEET NUMBER

R-2.01