ELOP RELOCATABLE CLASSROOM BUILDING

AT HAMILTON ELEMENTARY SCHOOL
STOCKTON UNIFIED SCHOOL DISTRICT

Stockton Unified School District
Since 1852

FILE NO.: 39-69   **PTN:** 68676-357   APP: 02-122812

PROJECT ADDRESS

2245 E. 11TH ST
STOCKTON, CA 95206

PROJECT DESCRIPTION

THE PROJECT SHALL CONSIST OF THE FOLLOWING ITEMS HEREIN TO INCLUDE BUT NOT NECESSARILY LIMITED TO:

- (1) NEW 36'X40' STOCKPILE (WITH ALTERATION) #04-123793 APPROVED RELOCATABLE CLASSROOM BUILDING 'P' PURCHASED UNDER A SEPARATE CONTRACT BETWEEN THE DISTRICT AND CLASS LEASING.
- ASSOCIATED SITE WORK.
- SEE SPECIFICATION SECTION "MULTIPLE CONTRACT SUMMARY" FOR ADDITIONAL INFORMATION
- ALTERATION TO BUILDING E, F, AND H PER ELECTRICAL

MODULAR MANUFACTURER SHALL BE RESPONSIBLE FOR:

- CONSTRUCTION OF RELOCATABLE BUILDING OFF SITE AND DELIVERY TO SITE.
- WELD PLATES WILL BE PROVIDED BY CLASS LEASING AND DELIVERED TO SITE CONTRACTOR PRIOR TO DELIVERY OF BUILDING.

SITE CONTRACTOR SHALL BE RESPONSIBLE FOR:

- PREPARATION OF EXISTING SITE INCLUDING EXCAVATION AND REMOVAL OF SOIL IN PREPARATION FOR PIT-SET BUILDING WITH CONCRETE FOUNDATION AND ASSOCIATED SITE WORK INCLUDING UTILITIES.
- CONCRETE FOOTINGS AND REINFORCEMENT AS INDICATED ON THE RELOCATABLE DRAWINGS.
- OFF-LOADING OF CLASSROOM RELOCATABLE MODULES FROM DELIVERY VEHICLES, INSTALLING ON CONCRETE FOUNDATION AND ALL REQUIRED CONNECTIONS AS INDICATED ON THE RELOCATABLE DRAWINGS.
- SIGNAGE AND EXTERIOR AND INTERIOR FINISHES AS INDICATED IN THE CONSTRUCTION DOCUMENTS
- CONNECTION AND START UP OF UTILITIES INCLUDING FIRE ALARM.

PRIOR TO INSTALLATION OF MODULAR BUILDINGS AT THE SITE PER STOCKPILE APPLICATION 04-123059, THE TEAM MUST SUBMIT TO DSA THE IN-PLANT INSPECTOR INSPECTION CARD / VERIFIED REPORT FROM DSA 152-IPL FOR THE STOCKPILE APPLICATION UPLOADED TO DSABOX.

PROJECT DESCRIPTION

NONE

DEFERRED SUBMISSIONS

ENFORCING AGENCY

DIVISION OF THE STATE ARCHITECT (DSA), SACRAMENT OFFICE
AMERICAN WITH DISABILITIES ACT AND THE CALIFORNIA TITLE 24 ACCESSIBILITY GUIDELINES

FLOOD ZONE INFORMATION

FLOOD ZONE DESIGNATION: ZONE X
AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE OF FLOOD.
FLOOD INSURANCE RATE MAP (FIRM) PANEL DESIGNATION: 046077C0490F PANEL
EFFECTIVE DATE OF (FIRM): OCTOBER 16, 2009
BASE FLOOD ELEVATION (BFE): NOT REQUIRED
APPLICABLE COMMUNITY ORDINANCE SECTION: NOT REQUIRED

AGENCY & FLOOD ZONE INFORMATION

NOTE TO CONTRACTOR:
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.

ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY INSTALLING CONTRACTOR, ENGINEER/ARCHITECT OF RECORD OR THE OWNER'S AGENT.

A LISTING OF CERTIFIED ATT'S 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.

ACCEPTANCE TESTING

FIRST TIME RELOCATION DIRECTLY FROM THE STOCKPILE

THE FOLLOWING DOCUMENTS SHALL BE ON THE JOBSITE PRIOR TO INSTALLATION OF THE UNIT(S):
A. IN-PLANT VERIFIED REPORT
B. LABORATORY VERIFIED REPORT
C. WELDING VERIFIED REPORT

THE SITE INSPECTOR SHALL VERIFY THE ABOVE DOCUMENTS AND SERIAL NUMBERS ARE APPLICABLE TO EACH UNIT PRIOR TO INSTALLATION OF THE UNIT(S). UNITS WILL BE MOVED AS COMPLETED BUILDINGS.

NOTIFY ARCHITECT AND THE DIVISION OF THE STATE ARCHITECT FIELD ENGINEER IF ANY DISCREPANCIES OCCUR.

IN-PLANT INSPECTOR AND MANUFACTURER SHALL FOLLOW THE REQUIREMENTS OF DSA IR16-1 AND INCLUDE THE FOLLOWING INFORMATION ON ID TAG OF SHOP FABRICATED RELOCATABLE STRUCTURE:

1. THE DSA APPLICATION NUMBER AND CBC EDITION UNDER WHICH THE BUILDING CONSTRUCTION WAS AUTHORIZED;
2. THE MANUFACTURER OR BUILDER'S NAME;
3. THE SERIAL NUMBER;
4. THE DESIGN CLIMATE ZONES;
5. THE DESIGN LIVE LOADS FOR THE ROOF AND FLOOR;
6. THE DESIGN WIND SPEED AND EXPOSURE CATEGORY;
7. THE SEISMIC DESIGN PARAMETER Ss.

DETERIORATION OR EXISTING NON-COMPLIANT CONSTRUCTION:

IF ANY CONDITION IS DISCOVER WHICH, IF LEFT UNCORRECTED, WOULD MAKE THE BUILDING NON-COMPLIANT WITH THE REQUIREMENTS OF THE EDITION OF THE CBC IN FORCE AT THE TIME OF ORIGINAL CONSTRUCTION, THE CONDITION MUST BE CORRECTED IN ACCORDANCE WITH CURRENT CODE REQUIREMENTS. A CONSTRUCTION CHANGE DOCUMENT, (CCD) OR A SEPARATE SET OF PLANS AND SPECIFICATIONS DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK.

MODULAR MANUFACTURER BUILDING

2022 CALIFORNIA 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 EXISTING BUILDING CODE (CEBC), PART 10, 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,
TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

NFPA 13	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED) 2022 EDITION
NFPA 14	STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEM (CA AMENDED 2022 EDITION
NFPA 17	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS 2021 EDITION
NFPA 17A	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS 2021 EDITION
NFPA20	STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION 2019 EDITION
NFPA 22	STANDARD WATER TANKS FOR PRIVATE FIRE PROTECTION 2018 EDITION
NFPA 24	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED) 2022 EDITION
NFPA 72	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED) 2022 EDITION
NFPA 80	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES 2019 EDITION
NFPA 2001	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEM (CA AMENDED) 2018 EDITION
UL 300	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEM FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT 2005 (R2014)
UL 464	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES 2003 EDITION
UL 521	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS 1999 EDITION (R2005)
UL 1971	STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED (2024 EDITION)
ICC 300	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS 2017 EDITION

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

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

GOVERNING CODES

1. A COPY TITLE 24 C.C.R. PARTS 1 TO 5 SHALL BE KEPT ON THE JOB SITE AT ALL TIMES.
2. CHANGES TO THE STRUCTURAL, ACCESSIBILITY OR FIRE AND LIFE-SAFETY PORTIONS OF THE APPROVED PLANS AND SPECIFICATIONS AFTER THE WORK HAS BEEN LET SHALL BE MADE BY A CONSTRUCTION CHANGE DOCUMENT (CCD) AS REQUIRED IN SECTION 4-338, PART I, CAC, AND SHALL BE SUBMITTED TO, AND APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK. CONSTRUCTION CHANGE DOCUMENTS SHALL BE PREPARED AND SUBMITTED TO DSA IN COMPLIANCE WITH DSA INTERPRETATION OF REGULATION IR A-6.
3. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF TITLE 24 SECTION 4-335, PART 1, AND APPROVED T & I SHEET.
4. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH TITLE 24 SECTION 4-335, PART I, AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RETEST MAY BE BACK CHARGED TO THE CONTRACTOR.
5. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF THE CONCRETE PER TITLE 24 SECTION 4-331, PART I.
6. A CLASS 3 INSPECTOR REQUIRED FOR THIS PROJECT SHALL BE EMPLOYED BY OWNER AND APPROVED BY ARCHITECT, STRUCTURAL ENGINEER, AND DSA. INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-333(c). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH TITLE 24 SECTION 4-342, PART I.
7. SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH TITLE 24 SECTION 4-334, PART 1.
8. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (FORM SSS-6) IN ACCORDANCE WITH TITLE 24 SECTION 4-336, PART I.
9. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH TITLE 24 SECTION 4-333(a) AND 4-341, PART I.
10. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH TITLE 24 SECTION 4-343, PART I.
11. ALL WORK SHALL CONFORM TO 2022 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
12. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR).
13. SUBSTITUTIONS AND REQUESTS FOR INFORMATION AFFECTING STRUCTURAL SAFETY, FIRE AND LIFE SAFETY OR ACCESS COMPLIANCE SHALL BE APPROVED BY DSA PRIOR TO FABRICATION OR USE.
14. ADDENDA MUST BE SIGNED BY ARCHITECT AND APPROVED BY DSA.
15. NO CHANGES OR REVISIONS SHALL BE MADE FOLLOWING WRITTEN APPROVAL WHICH AFFECTS ACCESS COMPLIANCE ITEMS UNLESS SUCH CHANGES OR REVISIONS ARE SUBMITTED TO THE DSA FOR APPROVAL.
16. CONSTRUCTION CHANGE DOCUMENTS MUST BE SIGNED BY THE FOLLOWING:
    - ARCHITECT OR ENGINEER OF RECORD
    - STRUCTURAL ENGINEER (WHEN APPLICABLE)
    - DELEGATED PROFESSIONAL ENGINEER
17. MATERIALS AND THEIR INSTALLATION SHALL COMPLY WITH APPLICABLE CODES, STANDARDS AND MANUFACTURER'S RECOMMENDATIONS.
18. THESE PLANS AND SPECIFICATIONS WILL COMPLY WITH CFCAND CBC CHAPTER 33 FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.
19. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
20. DSA IS NOT SUBJECT TO ARBITRATION.
21. "NEW BUILDINGS 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."

GENERAL NOTES

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:. 02-122812 FILE NO:. 39-69

THE DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX SHEET

HAVE BEEN PREPARED BY OTHER DESIGN PROFESSIONALS OR CONSULTANTS WHO ARE LICENSED AND/OR AUTHORIZED TO PREPARE SUCH DRAWINGS IN THIS STATE. IT HAS BEEN EXAMINED BY ME FOR:

1. DESIGN INTENT AND APPEARS TO MEET THE APPROPRIATE REQUIREMENTS OF TITLE 24, CALIFORNIA CODE OF 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, 4-341, AND 4-344" OF TITLE 24, PART I.

I CERTIFY THAT:

☒ ALL DRAWINGS OR SHEETS LISTED ON THE COVER OR INDEX
☐ THIS DRAWING OR PAGE

IS/ARE IN GENERAL CONFORMANCE AND HAVE BEEN COORDINATED WITH THE PROJECT PLANS AND SPECIFICATIONS

ARCHITECT'S SIGNATURE JAMIE HICKMAN ARCHITECT/ PARTNER TETER, INC.	DATE: 12-5-2024
LICENSE NUMBER: C23801	EXPIRATION DATE: 07-31-25

ARCHITECT'S STATEMENT

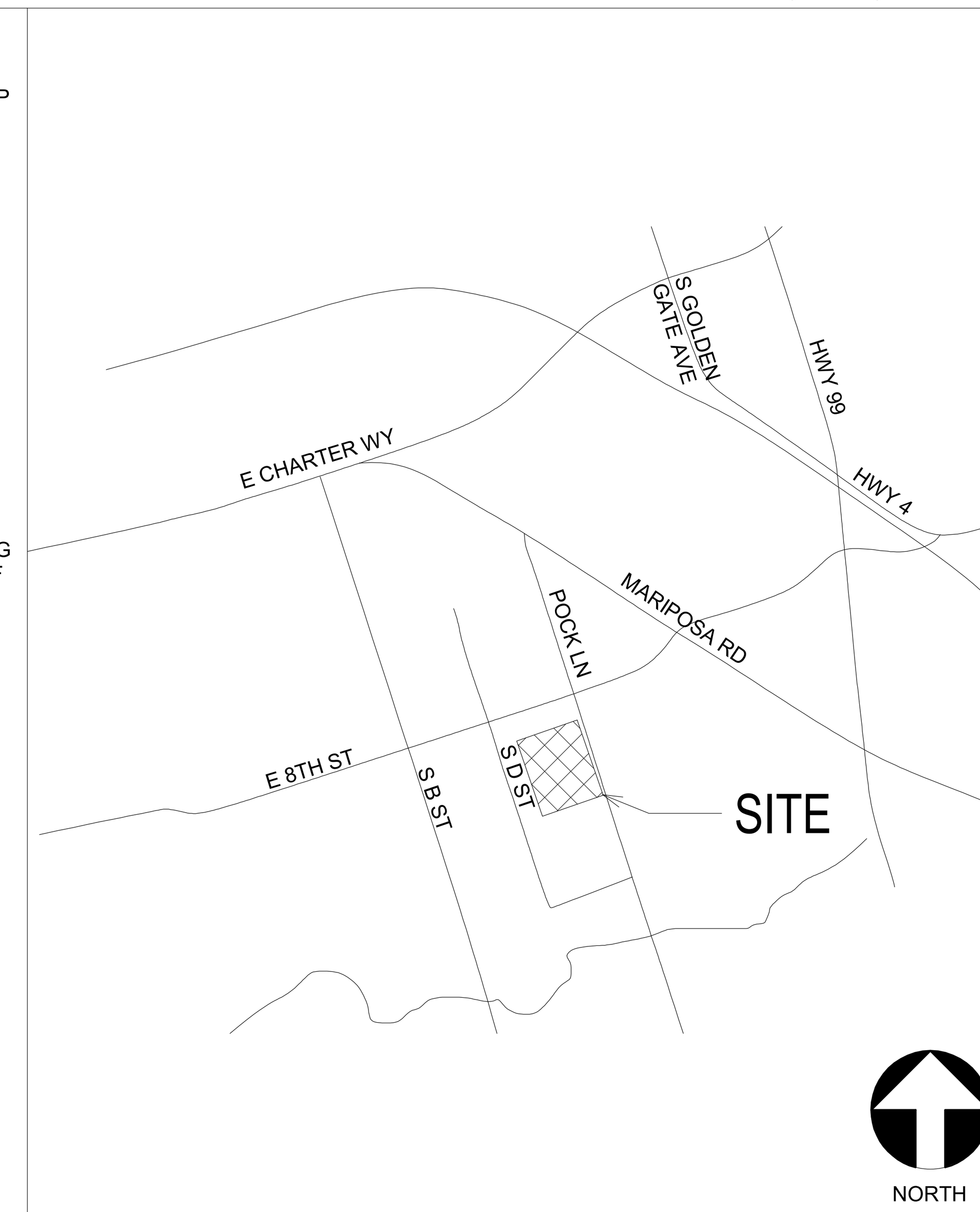
WIND DESIGN DATA [2022 CBC 1603A.1.4]

1. ULTIMATE DESIGN WIND SPEED V=93 MPH
2. RISK CATEGORY II
3. WIND EXPOSURE CATEGORY C

EARTHQUAKE DESIGN DATA [2022 CBC 1603A.1.5]
SITE COORDINATES: 37.9323783° N, -121.2496724° W

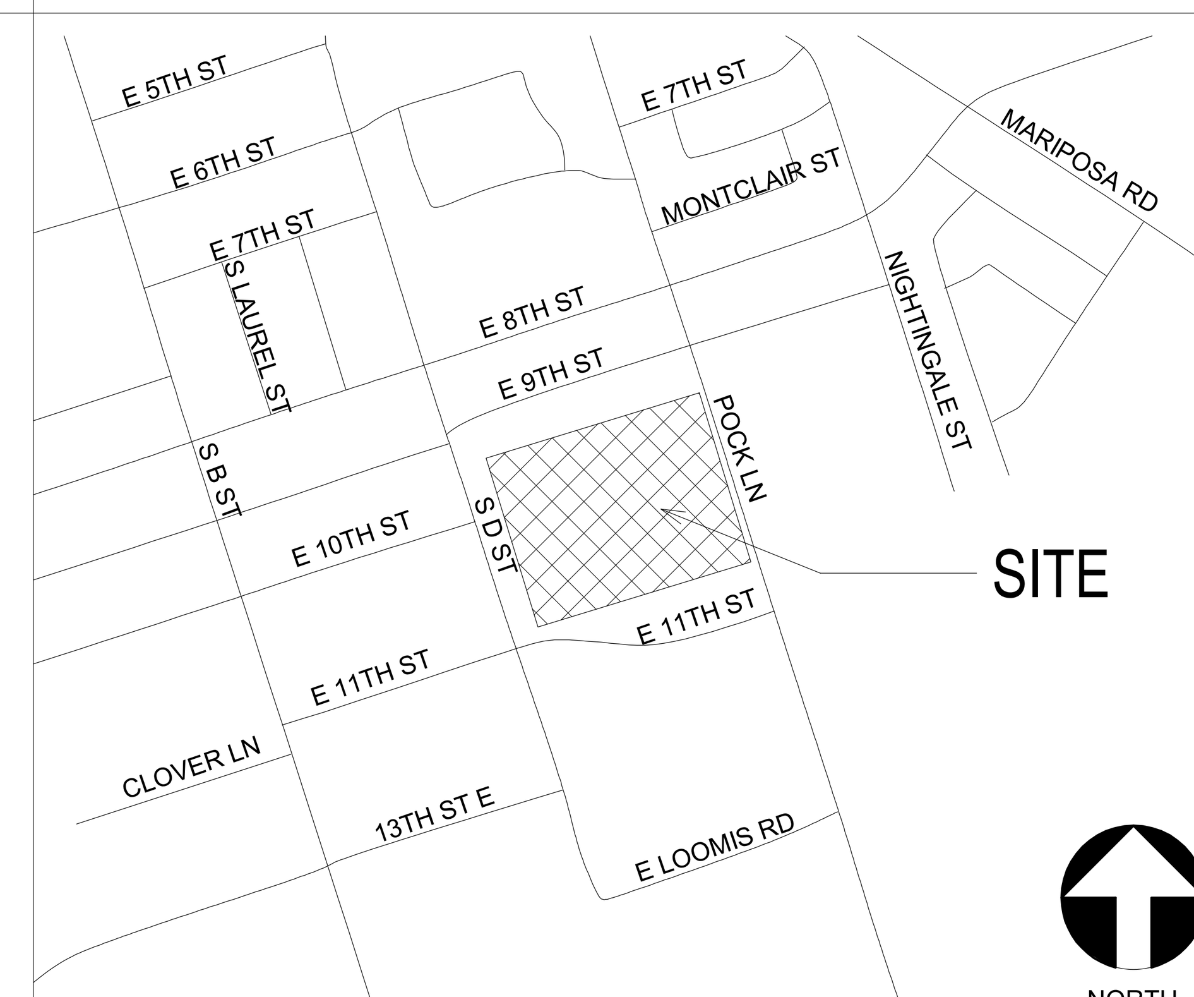
1. RISK CATEGORY II
2. SEISMIC IMPORTANCE FACTOR Ie = 1
3. MAPPED SPECTRAL RESPONSE ACCELERATION PARAMETERS
   Ss = 0.711 S_1 = 0.279
4. SITE CLASS D=(Default)
5. SITE AMPLIFICATION Fa = 1.231 Fv = NULL - SEE SECTION 11.4.8
6. SEISMIC DESIGN CATEGORY = D

WIND / SEISMIC DESIGN DATA



AREA MAP

N.T.S.



VICINITY MAP

N.T.S.

OWNER	PROJECT ARCHITECT	CIVIL ENGINEER	LANDSCAPE ARCHITECT	ELECTRICAL ENGINEER	MODULAR BUILDING
STOCKTON UNIFIED SCHOOL DISTRICT	TETER, INC.	NORTHSTAR ENGINEERING GROUP, INC.	SAM HARNED LANDSCAPE ARCHITECT	TETER, INC.	CLASS LEASING
701 N. MADISON STOCKTON, CA, 95202 (209) 933-7045	7535 N. PALM AVE., SUITE 201 FRESNO, CA 93711 (559) 437-0887	620 12TH STREET MODESTO, CALIFORNIA, 95354 T:(209) 524-3525	PO Box 2275 Oakdale, CA 95361 c:(209) 380-7376	7535 N. PALM AVE., SUITE 201 FRESNO, CA 93711 (559) 437-0887	1651 S JUANITA St. SAN JACINTO, CALIFORNIA, 92581 (951) 943-1908
CONTACT: DAVID VALERA	CONTACT: JAMES E. HICKMAN JR.	CONTACT: CHRIS VANDERVEEN	CONTACT: SAM HARNED	CONTACT: JASON MARCH	CONTACT: DREW SYLVIA
EMAIL: DVarela@stocktonusd.net	E-MAIL: jamie.hickman@teterae.com	EMAIL: CVanderVeen@nseng.net	EMAIL: sam@harnedla.com	E-MAIL: jason.march@teterae.com	E-MAIL: drew@classleasing.net

PROJECT DIRECTORY

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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MARK	DATE	DESCRIPTION
3	1/7/2025	BACKCHECK SUBMITTAL

LICENSED ARCHITECT ★ JAMES E. HICKMAN JR. ★ No. C23801 ★ REN. ★ STATE OF CALIFORNIA

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE: COVER

PROJECT NO. 23-13018.00

DRAWING: G000

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt

PLOT DATE: 1/3/2025 9:00:18 AM

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt

PLOT DATE: 1/3/2025 9:00:20 AM

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
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DATE: 1/30/2025

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MARK	DATE	DESCRIPTION
3	1/7/2025	BACKCHECK SUBMITTAL

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

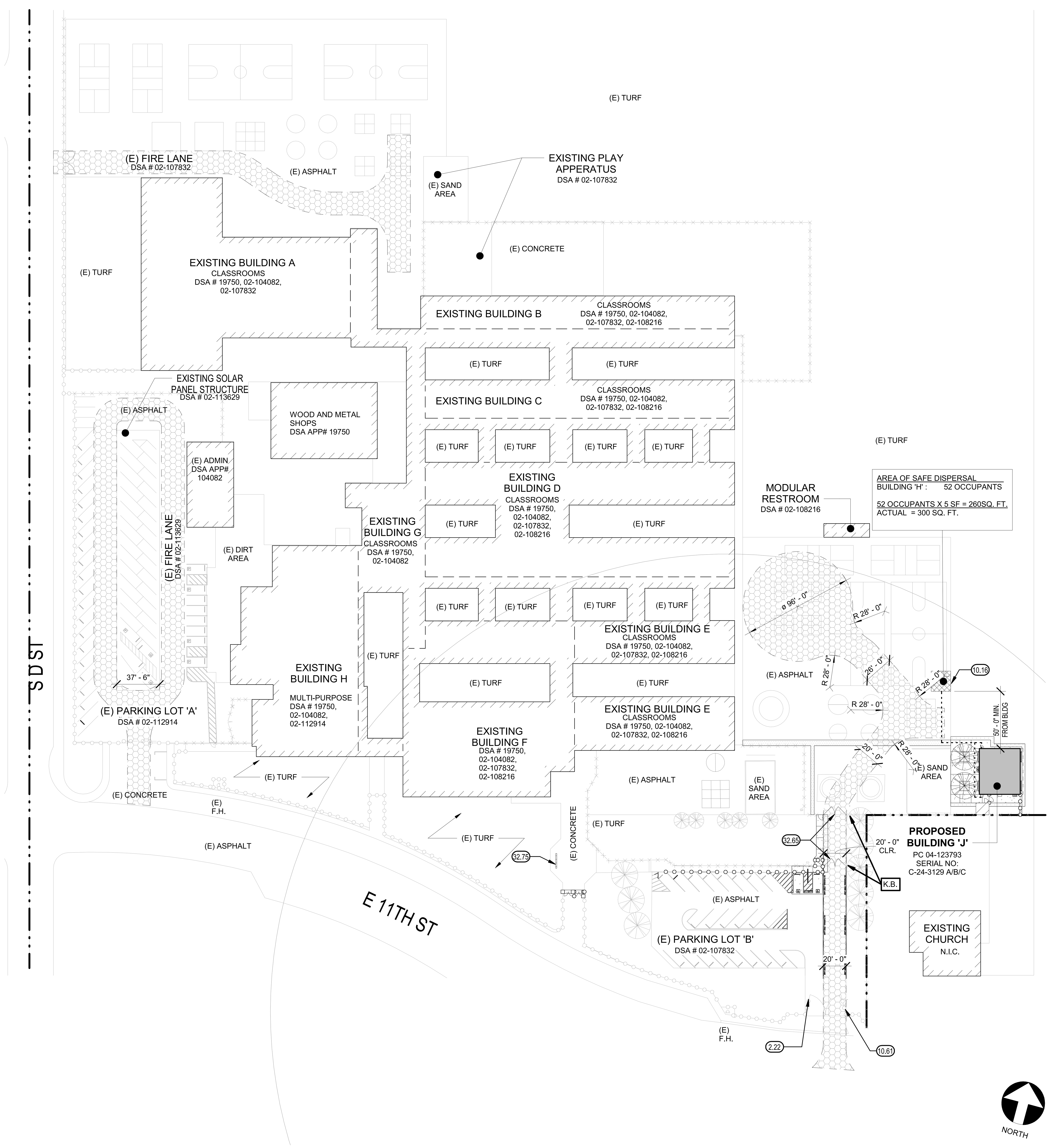
TETER

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
SHEET INDEX

PROJECT NO.
23-13018.00

DRAWING
G001



OVERALL SITE PLAN - FIRE AUTHORITY

1" = 50'-0" 12

KEYNOTES

2.22	EXISTING PAIR OF 17' - 10" DECORATIVE GATES TO REMAIN
10.16	SAFE DISPERSAL AREA SIGN, SEE 18 / A111
10.61	PROVIDE KNOX BOX - FOR ACCESS GATE. COORDINATE LOCATION WITH LOCAL FIRE AUTHORITY
32.65	PAIR OF 10'-0" CHAIN LINK SWING GATES, SEE 4 / A110
32.75	NEW (7) CAPACITY BICYCLE RACK, SEE SPECIFICATIONS

LEGEND

EXISTING BUILDING
NO SCOPE OF WORK UNDER THIS PROJECT

EXISTING CONCRETE
NO SCOPE OF WORK UNDER THIS PROJECT

PROPOSED MODULAR BUILDING
MODULAR BUILDING UNDER THIS SCOPE OF WORK, SEE MFR DWGS.

PROPOSED CONCRETE PAVING
SEE CIVIL FOR GRADING. FOR CONSTRUCTION, ISOLATION, CONTRACTION JOINTS

PROPOSED ASPHALT
SEE CIVIL FOR GRADING.

PROPOSED TURF AREA
SEE LANDSCAPE DRAWINGS
(TREES AND PLATING NOT SHOWN FOR CLARITY)

SITE INFORMATION

(N) FIRE LANE, 20' FIRE LANE BOUNDRY STRIPING TO BE PROVIDED AT PARKING LOT 'B' AS SHOWN ON SITE PLAN. "NO PARKING - FIRE LANE" STRIPING LETTERING IS TO BE PROVIDED AT PARKING LOT 'B' EVERY 35' AS SHOWN ON THE SITE PLAN.

PROPERTY LINE

EXISTING CHAIN LINK FENCING, TYP

EXIT DISCHARGE TO AREA OF SAFE DISPERSAL

(E) F.H. — (E) FIRE HYDRANT

BUILDING "J" CODE ANALYSIS

CONSTRUCTION TYPE:	V-B
OCCUPANCY CLASSIFICATION:	MIXED USE OCCUPANCY E & B - NON SEPARATED
FIRE SPRINKLERS:	NO
ALLOWABLE STORIES, HEIGHT:	E & B = 2 STORIES 40'-0"
ACTUAL STORIES, HEIGHT:	1 STORIES 12'-6"
BUILDING AREA:	E = 1,300 S.F. B = 140 S.F.
TOTAL BUILDING AREA:	1,440 S.F.
W/COVERED AREA:	1,710 S.F.
MINIMUM REQUIRED FIRE-FLOW AND FLOW DURATION FOR BUILDINGS:	TYPE V-B a = 0 S.F. - 3,600 S.F. FIRE FLOW - 1,500 MIN. PROVIDED - 1,698 > 1,500 DETERMINATION OK

ALLOWABLE AREA DETERMINATION

TABULAR AREA FACTOR:	B | NS 9,000SF
DETERMINATION: OK	(J)1,710SF < 9,000SF

BUILDING SUMMARY

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: STOCKTON UNIFIED SCHOOL DISTRICT
Project Name/School: HAMILTON ELEMENTARY SCHOOL
Project Address: 2245 E. 11TH ST. STOCKTON, CA 95206

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

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

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

School District Acceptance of Acceptable Design Alternates

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

Accepted by: ______ Title: ______

Signature: ______ Date: ______

LOCAL FIRE AUTHORITY (LFA) INFORMATION	
LFA Agency Name: San Joaquin County	
LFA Review Official: Steve Butler	
Title: Deputy Fire Warden	Work Phone: (209) 468-3166
Work Email: sbutler@sjgov.org	

LFA Reviewer's Signature: [signature] Date: 12/16/24

CITY OF STOCKTON MUNICIPAL UTILITIES
www.stocktongov.com • (209)937-8700

City of Stockton
Municipal Utilities Department
Water Field Office

7400 West Ln.
Stockton, CA 95210
(209) 937-7031
FAX: (209) 937-7034

WATERFLOW INFORMATION

Date: 05/15/2024
Requesting Company: TETER
Contact Name: DYLAN SEATON
Email: DYLAN.SEATON@TETERAE.COM
Telephone/FAX: 805.439.3353
Mailing Address: 7535 N. Palm Avenue Suite 201, Fresno, CA 93711

Project Name: HAMILTON E.S. MODULAR CLASSROOM BUILDING
Project Location: 2245 E. ELEVENTH ST., STOCKTON, CA 95206

City use only below this line...

Fire Department Dist #: MTZ 1 B
Nearest Flow Hydrant: 2245 E Eleventh st.
Water Main Size: 8"

Flow Date	Static Pressure	Residual Pressure	Discharge Size	Pitot Pressure	Flow	Flow Avail. @ 20
6-12-24	48	39	2½"	30	920	1698

Comments:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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MARK	DATE	DESCRIPTION
3	1/7/2025	BACKCHECK SUBMITTAL

LICENSED ARCHITECT — JAMES HICKMAN JR. — STATE OF CALIFORNIA [seal with signature]

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
OVERALL SITE PLAN-FIRE AUTHORITY

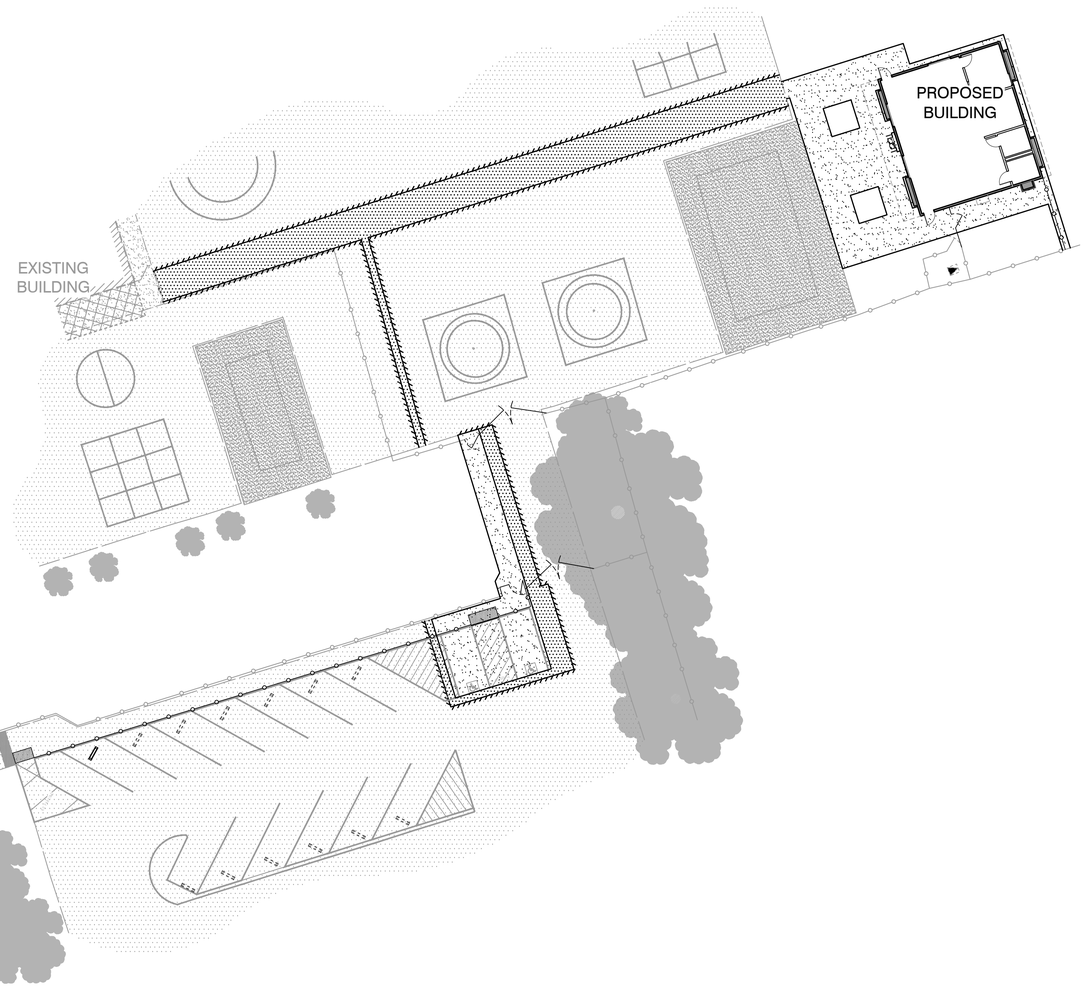
PROJECT NO.
23-13018.00

DRAWING
G100

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt

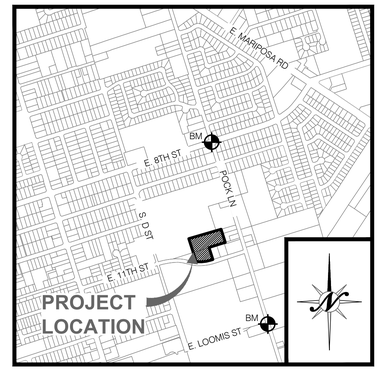
PLOT DATE: 1/3/2025 9:00:25 AM

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA



CALL BEFORE YOU DIG 811 800-227-2600

NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street Modesto, CA 95354
(209) 524-3525 Phone (209) 524-3526 Fax

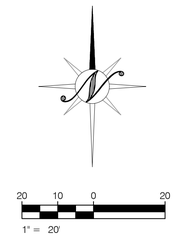


VICINITY MAP

NTS

BENCHMARK

ELEVATION:	25.16
BM	BRASS DISK MARKING COS MONUMENT STAMPED "14S-25" IN MONUMENT WELL LOCATED AT EIGHTH ST AND POCK LN. PUNCH MARK IS OFF CENTER OF DISK.
ELEVATION:	25.37
BM	BRASS DISK MARKING COS MONUMENT STAMPED "14S-26 LS6670" IN MONUMENT WELL LOCATED AT THE CENTERLINEOF POCK LN AT LOOMIS RD.



CONTACTS

A. REGULATORY AGENCY:	DIVISION OF THE STATE ARCHITECT-SACRAMENTO 1102 Q STREET, SUIT 5200 SACRAMENTO, CA 95811 T: (916) 445-8730
B. OWNER/DEVELOPER:	STOCKTON UNIFIED SCHOOL DISTRICT 56 S LINCOLN ST, STOCKTON, CA. 95203 T: (209) 933-7000
C. PROJECT LOCATION:	HAMILTON ELEMENTARY SCHOOL 2245 E 11TH ST, STOCKTON, CA. 95206
D. ENGINEER:	NORTHSTAR ENGINEERING GROUP, INC. 620 12TH STREET MODESTO, CA. 95354 T: (209) 524-3525 F: (209) 524-3526 CONTACT: CHRIS VANDERVEEN
E. ARCHITECT:	TETER, INC. 7535 N PALM AVENUE, SUITE 201 FRESNO, CA. 93711 T: (559) 437-0887 CONTACT: JAMIE HICKMAN

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2. C1.2 LEGEND AND ABBREVIATIONS
3. C1.3 GENERAL NOTES AND SPECIFICATIONS
4. C1.4 DETAILS AND CROSS SECTIONS
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SITE PLANS
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8. C2.2 TOPOGRAPHIC AND DEMOLITION PLAN
9. C3.1 DIMENSION AND PAVING PLAN
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11. C4.1 GRADING AND DRAINAGE PLAN
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EROSION CONTROL PLAN
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16. C6.2 EROSION CONTROL NOTES AND DETAILS

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DATE: 1/30/2025

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MARK	DATE	DESCRIPTION

CHRISTOPHER RIC VANDERVEEN
No. 69353
REGISTERED PROFESSIONAL ENGINEER
CIVIL
STATE OF CALIFORNIA

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

TETER

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
COVER SHEET

PROJECT NO.
23-13018

DRAWING
C1.1

LEGEND

	EXISTING	PROPOSED
BOUNDARY LINE		
CENTERLINE		
RIGHT-OF-WAY		
LOT LINE		
SECTION LINE		N/A
EASEMENT		
RIGHT-OF-WAY EASEMENT		
SETBACK LINE	N/A	
RESTRICTED ACCESS		
CENTERLINE STATION POINT		
MONUMENT		
PROPERTY CORNER		
BENCHMARK		
TREE		
BOULDER		N/A
STUMP		N/A
CONCRETE		
CURB + GUTTER		
ACCESSIBLE RAMP		
DETECTABLE WARNING SURFACE		
EDGE OF PAVEMENT		
BUILDING OVERHEAD		
RAILROAD		
BUILDING		
WHEEL STOP		
HANDRAIL		
BOLLARD	N/A	
DOOR		
VALLEY GUTTER		
WALL		
WALL		
RETAINING WALL		
FENCE - CHAINLINK/VINYL/CABLE		
FENCE - WOOD/METAL/STEEL		
FENCE - BARBED WIRE		
FENCE - PICKET		
FENCE - SPLIT RAIL		N/A
FENCE - HOGWIRE		
BARRICADE		
GUARDRAIL		N/A
ROLLING GATE		
SWING GATE		
TRENCH		N/A
SAWCUT		N/A
UTILITY REMOVAL		N/A
CONTOUR - MAJOR	32	32
CONTOUR - MINOR	32	32
DAYLIGHT CUT	N/A	
DAYLIGHT FILL	N/A	
GRADE BREAK		
PAD ELEVATION	10.0	10.0
SLOPE	0.00%	0.00%
ELEVATION TAG	00.00 CC	00.00 CC
TOE OF SLOPE		
HIGH POINT		
SIGN		
SINGLE LINE		
DOUBLE LINE		
STOP BAR/CROSSWALK		
DASHED LINE		
DOUBLE DASHED LINE		
MANHOLE		
MAILBOX	MAIL	MAIL
UTILITY STRUCTURE	US	US
WATER VALVE	WV	WV
WATER METER	WM	WM
BLOW OFF VALVE	BO	BO
BACKFLOW PREVENTER	BFP	BFP
DOUBLE CHECK DETECTOR ASSEMBLY	DCDA DCDA	DCDA DCDA
FIRE HYDRANT		
MONITORING WELL		

	EXISTING	PROPOSED
AIR RELEASE VALVE		
WATER WELL		
WATER (DOMESTIC)	8"W	8"W
WATER (NON-POTABLE WATER)	8"NPW	8"NPW
WATER (FIRE SERVICE)	8"FS	8"FS
WATER STRUCTURE ID	N/A	FH-1
IRRIGATION MANHOLE		
IRRIGATION METER	IM	IM
BACKFLOW PREVENTER	BFP	BFP
IRRIGATION CONTROL BOX	ICB	ICB
IRRIGATION CONTROL VALVE	ICV	ICV
IRRIGATION LINE	Ex12"IRR	12"IRR
GAS VALVE	GV	GV
GAS METER	GM	GM
GAS LINE	8"G	GAS 4"G
ELECTROLIER		
SITE LIGHTING		
TRAFFIC SIGNAL		N/A
TRAFFIC SIGNAL WITH STREET LIGHT		N/A
UTILITY POLE	UP	UP
UTILITY POLE WITH LIGHT	UP	UP
WIRE ANCHOR		
UTILITY BOX	UTL	UTL
TELEPHONE MAINTENANCE HOLE		
ELECTRIC MAINTENANCE HOLE		
CABLE MAINTENANCE HOLE		
TRANSFORMER		
OUTLET		N/A
UTILITY VALVE	UTL	UTL
JOINT TRENCH	JT	JT
OVERHEAD ELECTRICAL	OHE	OHE
TELEVISION/CABLE	TV	TV
UNDERGROUND ELECTRICAL	UG	UG
TELEPHONE	TEL	TEL
ELECTRICAL	E	E
MISCELLANEOUS UTILITY	U	U
SEWER MANHOLE		
ECCENTRIC SEWER MANHOLE		
SEWER CLEAN OUT		
SEPTIC TANK		
SEWER STRUCTURE ID	N/A	MH-1
SEWER (MAIN)	SS Ex12"SS	12"SS
SEWER (LATERAL)	N/A	
SEWER (FORCE MAIN)	SS Ex12"FM	12"SSFM
STORM DRAIN MANHOLE		
DEWATERING MANHOLE		
ECCENTRIC MANHOLE		
STORM DRAIN CLEAN OUT		
CURB INLET		
DRAIN INLET		
DRAIN INLET ON MANHOLE		
STORM DRAIN STRUCTURE ID	N/A	SDNN
RAINWATER LEADER	RWL	RWL
RIPRAP (ROCK DISCHARGE PAD)		
STORM DRAIN	SD Ex12"SD	12"SD
STORM DRAIN TRENCH DRAIN		
SWALE		
STORM DRAIN (LANDSCAPE SERVICES)	N/A	
ROCK TRENCH		
FRENCH DRAIN	N/A	
CULVERT		

ABBREVIATIONS

±	PLUS OR MINUS (NOT EXACT)
@	AT
Ø	DIAMETER
AB	AGGREGATE BASE
ABDN	ABANDONED
AC	ACRE, ASPHALT CONCRETE
A/C	AIR CONDITIONING
ACP	ASBESTOS CEMENT PIPE
ACM	ASBESTOS CONTAINING MATERIAL
AD	AREA DRAIN
ADA	AMERICANS W/ DISABILITIES ACT
AG	ATRIUM GRATE
AGG	AGGREGATE
ALGN	ALIGNMENT
ALT	ALTERNATE
APN	ASSESSORS PARCEL NUMBER
ARV	AIR RELEASE VALVE
ASB	AGGREGATE SUBBASE
ASPH	ASPHALT
ASR	AUTOMATIC SPRINKLER RISER
BC	BEGIN CURVE
BDRY	BOUNDARY
BFP	BACK FLOW PREVENTOR
BK	BOOK
BLDC	BUILDING CORNER
BLDG	BUILDING
BMP	BEST MANAGEMENT PRACTICES
BM	BENCHMARK
BO	BLOW OFF
BOD	BOTTOM OF DOCK
BOL	BOLLARD
BOW	BACK OF WALK
BSW	BACK OF SIDEWALK
BS	BEGIN STRIPING
BSL	BUILDING SETBACK LINE
BVC	BEGIN VERTICAL CURVE
BW	FINISHED GRADE AT BOTTOM OF WALL
C	CIVIL
CC	CONCRETE
CB	CATCH BASIN
CBL	CABLE
CDS	CONTINUOUS DEFLECTION
CG/C&G	CURB AND GUTTER
CG&S	CURB, GUTTER & SIDEWALK
CI	CAST IRON/CURB INLET
CIP	CAST IRON PIPE
℄ OR CL	CENTER LINE
CLR	CLEAR
CMH	CABLE MAINTENANCE HOLE
CMN	COMMUNICATION
CMP	CORRUGATED METAL PIPE
CO	CLEAN OUT
COMP.	COMPACTION
CONC OR CC	CONCRETE
CONST	CONSTRUCTION OR CONSTRUCT
CONF	CONFORM TO EXISTING
COS OR C.O.S	CITY OF STOCKTON
CR	CURB/CROWN
CT.	COURT/CUBIC
CU	CULVERT
CV	CHECK VALVE
CY	CUBIC YARD
D=	DELTA (CURVE)
DCDA	DOUBLE CHECK DETECTOR ASSEMBLY
DEMO	DEMOLISH
DEPT	DEPARTMENT
DI	DROP/DRAIN INLET/DUCTILE IRON
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DOM, (DOM)	DOMESTIC
DR	DRIVE
DS	DOWNSPOUT
DTL	DETAIL
DW	DOMESTIC WATER/DRYWELL/DEWATERING
DWG	DRAWING
DWY	DRIVEWAY
DYL	DOUBLE YELLOW LINE
E	EAST/EASTING COORDINATE/ELECTRIC
(E)	EXISTING
EC	END CURVE
EG	EXISTING GRADE
EL, ELEV	ELEVATION
ELB	ELECTRIC BOX
ELC/ELEC	ELECTRICAL
ELV	ELECTRIC VAULT
EM	ELECTRIC METER
EMH	ELECTRIC MAINTENANCE HOLE
EP	EDGE OF PAVEMENT
ES	END STRIPING
ESMT OR EASE	EASEMENT
EVC	END OF VERTICAL CURVE
EX OR EXIST	EXISTING
EVA	EMERGENCY VEHICLE ACCESS
(F)	FUTURE
FA	FIRE ALARM
FAB	FIRE ALARM BOX
FC, F/C	FACE OF CURB
FD	FOUND/FRENCH DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FE	FENCE
FES	FLARED END SECTION
FF	FINISH FLOOR
FFE	FINISH FLOOR ELEVATION
FG	FINISH GRADE
FH	FIRE HYDRANT
FIPT	FEMALE IRON PIPE THREAD
FL	FLOW LINE/FLANGE
FLG	FLANGE
FM	FLOWMETER/FORCE MAIN
FOUND	FOUNDATION
FS	FINISHED SURFACE, FIRE SERVICE
FSR	FIRE SPRINKLER RISER
FT	FOOT, FEET
FW	FIRE WATER
G	GAS, GROUND
GB	GRADE BREAK
GE	GROUND ELEVATION
GI	GALVANIZED IRON
GM	GAS METER
GR	GRATE
GRD	GROUND
GS	GROUND SHOT ELEVATION
GUY	GUY/GUIDE LINE
GV	GAS VALVE
H2O	WATER
HB	HOSE BIB
HMA	HOT MIX ASPHALT
HORIZ	HORIZONTAL
HT	HEIGHT
HP	HIGH POINT
HPS	HIGH PRESSURE SODIUM/SYSTEM
HT	HEIGHT
HWY	HIGHWAY
HWL	HIGH WATER LINE
IBX	IRRIGATION BOX
ICB	IRRIGATION CONTROL BOX
ICV	IRRIGATION CONTROL VALVE
IHW	IRRIGATION HEADWALL
IM	IRRIGATION METER
IMH	IRRIGATION MAINTENANCE HOLE
ID	INSIDE DIAMETER
INV	INVERT
INST	INSTALL
IRR	IRRIGATION
ISP	IRRIGATION STAND PIPE
IV	IRRIGATION VALVE
JB	JUNCTION BOX
JP	JUNCTION POLE
JT	JOINT TRENCH
JP	JOINT POLE
L, LT	LEFT
L=	LENGTH (CURVE)
LF	LINEAL/LINEAR FEET
LAT	LATERAL
LIP	LIP OF GUTTER
LN	LANE
LP	LIGHT POLE, LOW POINT
FH	FIRE HYDRANT
LS	LANDSCAPE
LSA	LANDSCAPE ARCHITECT
MA	MEDICAL AIR
MAX	MAXIMUM
MEP	MECHANICAL/ELECTRICAL/PLUMBING
MH	MAN/MAINTENANCE HOLE
MIN	MINIMUM
MIPT	MALE IRON PIPE THREAD
MJ	MECHANICAL JOINT
MPVC	MIDPOINT OF VERTICAL CURVE
MON	MONUMENT
MS	MOW STRIP
MW	MONITORING WELL
N	NORTH, NORTHING COORDINATE
(N)	NEW
NDS	NDS INC. (MANUFACTURER)
NIC	NOT INCLUDED/IN CONTRACT
NO	NUMBER
NSE	NORTHSTAR ENGINEERING
NTS	NOT TO SCALE
OC	ON CENTER
OG	ORIGINAL GROUND / GRADE
OHE	OVERHEAD ELECTRICAL
O.R.	OFFICIAL RECORDS
(P)	PROPOSED
P, PAV	PAVEMENT
PB	PULL BOX
PCC	POINT OF COMPOUND/CONVERSE CURVATURE
PCC	PORTLAND CEMENT CONCRETE
PE	PLAIN END
PED	PEDESTRIAN
PERF	PERFORATED
PG	PAGE
PG&E	PACIFIC GAS AND ELECTRIC
PH	POTHOLE
PID	POINT ID
PIV	POST/PRESSURE INDICATOR VALVE
PL	PROPERTY LINE
PM	PARKING METER, PARCEL MAP
PMH	POWER MANHOLE
PO	PUSH-ON
POC	POINT ON CURVE/POINT OF CONNECTION
POI	POINT OF INTERSECTION
PP	POWER POLE
PRC	POINT OF REVERSE CURVATURE
PROF	PROFILE
PRV	PRESSURE REDUCING VALVE
PRUE	PRIVATE UTILITY EASEMENT
PT	POINT
PT&T	PACIFIC TELEPHONE & TELEGRAPH
PUE	PUBLIC UTILITY EASEMENT
PVC	POLYVINYL CHLORIDE PIPE
R	RIGHT
R=	RADIUS
RC	RELATIVE COMPACTION
RCP	REINFORCED CONCRETE PIPE
RD	ROAD, RELATIVE DENSITY
RJ	RESTRAINED JOINT
RP	RADIUS POINT
RPPA	REDUCED PRESSURE PRINCIPLE ASSEMBLY
RSC	RECEIVING AND SUPPORT CENTER
RV	RESISTANCE VALUE
RW	RECYCLED WATER
RW, R/W, ROW	RIGHT-OF-WAY
RWL	RAINWATER LEADER
S	SOUTH, SLOPE
S.A.D.	SEE ARCHITECTURAL DRAWINGS
SBL	SETBACK LINE, SOLID BLACK LINE
SC	SAN JOAQUIN COUNTY
SCO	SEWER CLEANOUT
SD	STORM DRAIN
SDB	STORM DRAIN BASIN
SDCB	STORM DRAIN CATCH BASIN
SDCO	STORM DRAIN CLEAN OUT
SDDW	STORM DRAIN DEWATERING
SDI	STORM DRAIN INLET
SDFM	STORM DRAIN FORCE MAIN
SDMH	STORM DRAIN MAINTENANCE HOLE
S.E.D.	SEE ELECTRICAL DRAWINGS
SG	SUB-GRADE
SF	SILT FENCE SG SUBGRADE
SHT	SHEET
SIM	SIMILAR
SL	STREET LIGHT
S.L.D.	SEE LANDSCAPE DRAWINGS
SLB	STREET LIGHT BOX
SMH	SIGNAL MANHOLE
S.M.D.	SEE MECHANICAL DRAWINGS
SNS	STREET NAME SIGN
SP	SERVICE POLE
S.P.D	SEE PLUMBING DRAWINGS
SRL	SOLID RED LINE
SS	SANITARY SEWER
SSCO	SANITARY SEWER CLEAN OUT
SSFM	SANITARY SEWER FORCE MAIN
SSMH	SANITARY SEWER MAN/MAINTENANCE HOLE
SSPS	SANITARY SEWER PUMP STATION
ST	STREET, SEPTIC TANK
STA	STATION
STD	STANDARD
STL	STEEL
S/W, SW	SIDEWALK
SWL	SOLID WHITE LINE, SWALE
T	TELEPHONE
TC	TOP OF CURB
TBC	TOP BACK OF CURB
TCP	TEMPORARY CONTROL POINT
TD	TRENCH DRAIN
TEL	TELEPHONE
TELB	TELEPHONE BOX
TELV	TELEPHONE VAULT
TEMP	TEMPORARY
TFC	TOP FACE OF GRATE
TG	TOP OF GRATE
TH	THRESHOLD
THK	THICK
TI	TRAFFIC INDEX
TMH	TELEPHONE MAINTENANCE HOLE
TOD	TOP OF DOCK
TOW	TOP OF WALL
TP	TELEPHONE POLE, TEST PIT
TPE	TREE PLANTING EASEMENT
TS	TRAFFIC SIGNAL
TSB	TRAFFIC SIGNAL BOX
TSCE	TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
TSP	TRAFFIC SIGNAL POLE
TV	TELEVISION
TVR	CABLE TV RISER
TYP	TYPICAL
U/UTIL/UTL	UTILITY
UG, U/G	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
UOS	UNLESS OTHERWISE SPECIFIED
USA-B	WATER (BLUE)
USA-G	SEWER/STORM DRAIN (GREEN)
USA-M	TEMPORARY SURVEY MARKINGS (MAGENTA)
USA-O	COMMUNICATION CATV (ORANGE)
USA-P	RECLAIMED WATER IRR. SLURRY (PURPLE)
USA-R	ELECTRICAL (RED)
USA-W	PROPOSED EXCAVATION (WHITE)
USA-Y	GAS, OIL, STEAM (YELLOW)
VC	VERTICAL CURVE
VCP	VITRIFIED CLAY PIPE
VERT	VERTICAL
W	WEST, WATER
W/	WITH
WA	WALL
WB	WATER BOX
WM	WATER METER
WMB	WATER METER BOX
WOA	WASHOUT AREA
WS	WATER SERVICE
WV	WATER VALVE
WW	WATER WELL
WWF	WELDED WIRE FABRIC
WY	WAY
YD	YARD

CALL BEFORE YOU DIG USA 800-227-2600

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MARK	DATE	DESCRIPTION

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER RIC VAN...
No. C89350
CIVIL
STATE OF CALIFORNIA

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
LEGENDS AND ABBREVIATIONS

PROJECT NO.
23-13018

DRAWING
C1.2

GENERAL NOTES

1. CONTRACTOR SHALL BE AWARE THAT THE FOLLOWING NOTES LISTED BELOW ARE NORTHSTAR ENGINEERING GROUP'S TYPICAL GENERAL NOTES AND SOME NOTES MAY NOT BE APPLICABLE TO THIS PLAN SET.

2. ALL IMPROVEMENTS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE FOLLOWING: CITY OF STOCKTON ("CITY") STANDARD SPECIFICATIONS AND THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE. WHERE THERE IS A CONFLICT BETWEEN THE PLANS AND THE CITY AND/OR CALIFORNIA BUILDING CODE STANDARDS, THE CITY AND/OR CALIFORNIA BUILDING CODE STANDARDS SHALL PREVAIL. ALL WORK SHALL BE SUBJECT TO THE INSPECTION OF THE CITY OF STOCKTON.

3. PRIOR TO ANY WORK BEING PERFORMED, THE CONTRACTOR SHALL CONTACT THE APPROPRIATE REGULATORY AGENCIES FOR A PRE-CONSTRUCTION CONFERENCE. CONTRACTOR SHALL ALSO NOTIFY THE PROJECT CONTACTS LISTED ON THIS SHEET FORTY-EIGHT (48) HOURS IN ADVANCE OF SAID MEETING.

4. IT IS INTENDED THAT THESE PLANS AND SPECIFICATIONS REQUIRE ALL LABOR AND MATERIALS NECESSARY AND PROPER FOR THE WORK CONTEMPLATED AND THAT THE WORK BE COMPLETED IN ACCORDANCE WITH THEIR TRUE INTENT AND PURPOSE. THE CONTRACTOR SHALL NOTIFY NORTHSTAR ENGINEERING GROUP, INC. ("ENGINEER") IMMEDIATELY REGARDING ANY DISCREPANCIES AND AMBIGUITIES WHICH MAY EXIST IN THE PLANS AND SPECIFICATIONS. IF THE PLANS OR SPECIFICATIONS DESCRIBE PORTIONS OF THE WORK IN GENERAL TERMS BUT NOT IN COMPLETE DETAIL, IT IS UNDERSTOOD THAT ONLY THE BEST GENERAL PRACTICE IS TO PREVAIL AND THAT ONLY MATERIALS AND WORKMANSHIP OF THE FIRST QUALITY ARE TO BE USED.

5. IF NORTHSTAR ENGINEERING GROUP, INC. IS TO PERFORM ANY SURVEY STAKING, THEN CONSTRUCTION STAKING FOR GRADING, CURB, GUTTER, SIDEWALK, SANITARY SEWER, STORM DRAIN, AND WATER SHALL BE DONE UNDER THE DIRECTION OF THE ENGINEER. THE CONTRACTOR SHALL NOTIFY THE ENGINEER SEVENTY-TWO (72) HOURS IN ADVANCE OF THIS NEED FOR STAKING. ANY STAKING REQUESTED BY THE CONTRACTOR OR HIS SUBCONTRACTORS THAT IS ABOVE AND BEYOND NORMAL STANDARD STAKING NEEDS AS OUTLINED IN THE CONTRACT, WILL BE SUBJECT TO AN EXTRA BACK CHARGE TO THE CONTRACTOR.

6. THE CONTRACTOR SHALL EXERCISE DUE CAUTION AND SHALL CAREFULLY PRESERVE BENCH MARKS, REFERENCE POINTS AND ALL SURVEY STAKES, AND SHALL BEAR ALL EXPENSE FOR REPLACEMENT AND/OR ERRORS CAUSED BY THEIR UNNECESSARY LOSS OR DISTURBANCE.

7. CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.

8. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY FIELD CHANGES MADE WITHOUT WRITTEN AUTHORIZATION FROM THE CITY ENGINEER.

9. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN, OR OTHER DEVICES NECESSARY FOR PUBLIC SAFETY IN ACCORDANCE WITH THE CURRENT ISSUE OF "MANUAL OF TRAFFIC CONTROLS, WARNING SIGNS, LIGHTS, AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAY" PUBLISHED BY THE STATE OF CALIFORNIA BUSINESS AND TRANSPORTATION AGENCY. CONTRACTOR SHALL COORDINATE WITH THE GOVERNING LOCAL AGENCY TO DETERMINE IF ANY CHANGES TO THE CLASSIFICATION OR OPERATION OF A ROADWAY ARE REQUIRED DUE TO THE IMPROVEMENTS SHOWN ON THESE PLANS (SUCH AS SPEED LIMITS, INTERSECTION TYPE, ETC.) AND SHALL BE RESPONSIBLE FOR PROVIDING ALL NECESSARY INTERIM TRAFFIC MANAGEMENT MEASURES REQUIRED BY THE GOVERNING AGENCY, INCLUDING TRANSITIONAL SIGNAGE AND STRIPING IN PREPARATION OF AND TO BE INSTALLED PRIOR TO COMPLETION AND ACCEPTANCE OF ULTIMATE SIGNAGE AND STRIPING. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH IMPLEMENTING THESE MEASURES.

10. THE OFFICE OF THE CITY OF STOCKTON PUBLIC WORKS SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE OF ANY WORK.

11. CABLE TV, ELECTRICAL, GAS, AND TELEPHONE UNDERGROUND WORK SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF THE CURB, GUTTER, SIDEWALK AND PAVING.

12. THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE CITY OF STOCKTON, DEPARTMENT OF PUBLIC WORKS OR ANY OTHER APPLICABLE AGENCY PRIOR TO COMMENCEMENT OF WORK WITHIN EXISTING CITY RIGHT-OF-WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL PERMITS AND LICENSES REQUIRED FOR THE CONSTRUCTION AND COMPLETION OF THE PROJECT.

13. THE CITY OF STOCKTON OR ASSOCIATED UTILITY COMPANY AND RESIDENCES TO BE AFFECTED SHALL BE NOTIFIED IMMEDIATELY UPON ANY UTILITY SERVICE DISRUPTION OTHER THAN SPECIFIED ON THESE IMPROVEMENT PLANS AND A TWENTY-FOUR (24) HOUR NOTICE SHALL BE GIVEN FOR ANY PLANNED DISRUPTION.

14. STREET SIGNS, TRAFFIC CONTROL SIGNS, AND PAVEMENT MARKINGS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT LOCATIONS ESTABLISHED BY THE ENGINEER.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING DAMAGED EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND REPLACEMENT.

16. CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF THE REMOVAL OR RELOCATION OF ALL EXISTING UTILITIES WITH RESPECTIVE UTILITY COMPANIES.

17. ASPHALT CONCRETE SHALL BE PLACED ONLY WHEN THE ATMOSPHERIC TEMPERATURE IS ABOVE 50°F AND RISING.

18. DRAWING NUMBERS SHOWN ON THE PLANS REFER TO DRAWINGS CONTAINED IN THE CITY OF STOCKTON STANDARD SPECIFICATIONS (I.E. DWG. 30).

19. ALL TRENCHES IN PAVED AREAS SHALL BE PAVED WITH TEMPORARY PAVING, OR COVERED WITH A STEEL PLATE OF APPROPRIATE SIZE AND STRENGTH, THE SAME DAY THE PAVEMENT CUT IS MADE.

20. WHENEVER PAVEMENT IS BROKEN OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS AND PLANS, THE PAVEMENT SHALL BE REPLACED, AFTER PROPER BACK FILLING, WITH PAVEMENT MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL PAVING. THE FINISHED PAVEMENT SHALL BE SUBJECT TO THE APPROVAL OF THE CITY ENGINEER.

21. PRIOR TO COMMENCING ANY WORK, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE EACH UTILITY COMPANY LOCATED, IN THE FIELD, THEIR MAIN AND SERVICE LINES. THE CONTRACTOR SHALL NOTIFY MEMBERS OF THE UNDERGROUND SERVICE ALERT (U.S.A.) FORTY-EIGHT (48) HOURS IN ADVANCE OF PERFORMING ANY EXCAVATION WORK BY CALLING THE TOLL-FREE NUMBER (800) 227-2600. THE CONTRACTOR SHALL RECORD THE U.S.A. ORDER NUMBER. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES SO THAT NO DAMAGE RESULTS TO THEM DURING THE PERFORMANCE OF THIS CONTRACT. ANY REPAIRS NECESSARY TO DAMAGED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REQUIRED TO COOPERATE WITH OTHER CONTRACTORS AND UTILITY COMPANIES INSTALLING NEW STRUCTURES, UTILITIES AND SERVICE TO THE DEVELOPMENT.

22. PAYMENT FOR PAVEMENT WILL BE MADE ONLY FOR AREAS SHOWN ON THE PLANS. REPLACEMENT OF PAVEMENT WHICH IS BROKEN OR CUT DURING THE INSTALLATION OF THE WORK COVERED BY THESE SPECIFICATIONS AND PLANS, AND WHICH LIES OUTSIDE OF SAID AREAS, SHALL BE INDICATED IN THE CONTRACTOR'S UNIT PRICE FOR PAVEMENT, AND NO ADDITIONAL PAYMENT SHALL BE MADE FOR SUCH WORK.

23. EXCAVATIONS OF 5 FEET OR MORE IN DEPTH WILL REQUIRE AN EXCAVATION PERMIT FROM THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL SAFETY. FOR TRENCHES 5 FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL COMPLY WITH SECTION 5-1.02A OF THE CALTRANS STANDARDS, CHAPTER 9 OF THE STATE OF CALIFORNIA LABOR CODE, AND ANY LOCAL CODES OR ORDINANCES.

24. WE CALL YOUR ATTENTION TO TITLE 8 CALIFORNIA ADMINISTRATION CODE SECTION 1540 (A) (1) OF THE CONSTRUCTION SAFETY ORDERS ISSUED BY THE OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD PURSUANT TO THE CALIFORNIA OCCUPATIONS SAFETY AND HEALTH ACT OF 1973 AS AMENDED WHICH STATES: (1) PRIOR TO OPENING AN EXCAVATION EFFORT SHALL BE MADE TO DETERMINE WHETHER UNDERGROUND INSTALLATIONS; I.E. SEWER, WATER, FUEL, ELECTRICAL LINES, ETC., WILL BE ENCOUNTERED AND IF SO, WHERE SUCH UNDERGROUND INSTALLATIONS ARE LOCATED. WHEN THE EXCAVATION APPROACHES THE APPROXIMATE LOCATION OF SUCH INSTALLATION, THE EXACT LOCATION SHALL BE DETERMINED BY CAREFUL PROBING OR HAND DIGGING; AND, WHEN IT IS UNCOVERED, ADEQUATE PROTECTION SHALL BE PROVIDED FOR THE EXISTING INSTALLATION. ALL KNOWN OWNERS OF UNDERGROUND FACILITIES IN THE AREA CONCERNED SHALL BE ADVISED OF PROPOSED WORK AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE START OF ACTUAL EXCAVATION.

25. THE CONTRACTOR SHALL MAINTAIN A NEATLY MARKED SET OF FULL-SIZE AS-BUILT RECORD DRAWINGS SHOWING THE FINAL LOCATION AND LAYOUT OF ALL MECHANICAL, ELECTRICAL AND INSTRUMENTATION EQUIPMENT, PIPING AND CONDUITS, STRUCTURES AND OTHER FACILITIES. AS-BUILT RECORD DRAWINGS SHALL REFLECT CHANGE ORDERS, ACCOMMODATIONS, AND ADJUSTMENTS TO ALL IMPROVEMENTS CONSTRUCTED. WHERE NECESSARY, SUPPLEMENTAL DRAWINGS SHALL BE PREPARED AND SUBMITTED BY THE CONTRACTOR TO THE DEVELOPER AND APPROVAL AGENCY.

26. SIGNING, STRIPING AND PAVEMENT MARKINGS SHALL BE IN STRICT CONFORMANCE WITH THE CITY OF STOCKTON STANDARDS AND SPECIFICATIONS.

GENERAL NOTES (CONT)

27. PRIOR TO ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL DELIVER TO THE ENGINEER, ONE SET OF NEATLY MARKED AS-BUILT RECORD DRAWINGS SHOWING THE INFORMATION REQUIRED ABOVE. AS-BUILT RECORD DRAWINGS SHALL BE REVIEWED AND THE COMPLETE AS-BUILT RECORD DRAWING SET SHALL BE CURRENT WITH ALL CHANGES AND DEVIATIONS REDLINED AS A PRECONDITION TO THE FINAL PROGRESS PAYMENT APPROVAL AND/OR FINAL ACCEPTANCE.

28. AFTER CONSTRUCTION OF ALL IMPROVEMENTS, THE CONTRACTOR SHALL SUBMIT ONE SET OF REPRODUCIBLE PLANS. FINAL INVERT ELEVATIONS FOR SEWER AND STORM DRAIN LINES THAT ARE TO BE EXTENDED FOR FUTURE CONSTRUCTION SHALL ALSO BE SHOWN ON THE "AS-BUILT" PLANS ALL AS PROVIDED BY THE CONTRACTOR.

29. THE CONTRACTOR SHALL NOTIFY NORTHSTAR ENGINEERING AT LEAST 48 HOURS PRIOR TO BACK FILLING OF ANY PIPE WHICH STUBS TO A FUTURE PHASE OF CONSTRUCTION FOR INVERT VERIFICATION. TOLERANCE SHALL BE IN ACCORDANCE WITH THE CITY OF STOCKTON STANDARD SPECIFICATIONS.

30. WHENEVER EXISTING FACILITIES ARE REMOVED, DAMAGED, BROKEN, OR CUT IN THE INSTALLATION OF THE WORK COVERED BY THESE PLANS OR SPECIFICATIONS, SAID FACILITIES SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. AFTER PROPER BACKFILLING AND/OR CONSTRUCTION, WITH MATERIALS EQUAL TO OR BETTER THAN THE MATERIALS USED IN THE ORIGINAL EXISTING FACILITIES. THE FINISHED PRODUCT SHALL BE SUBJECT TO THE APPROVAL OF THE OWNER, THE ENGINEER, AND THE RESPECTIVE REGULATORY AGENCY.

31. DUST CONTROL SHALL BE PROVIDED AT ALL TIMES, AT THE CONTRACTOR'S EXPENSE TO MINIMIZE ANY DUST NUISANCE AND SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF STOCKTON. CONTRACTOR SHALL OBTAIN A PERMIT FROM CAL WATER FOR USE OF WATER FROM FIRE HYDRANTS FOR CONSTRUCTION PURPOSES. THE PERMIT SHALL BE APPROVED BY THE CITY OF STOCKTON FIRE DEPARTMENT.

32. CONTRACTOR SHALL PROVIDE CITY WITH A CERTIFICATE SIGNED BY A REGISTERED CIVIL ENGINEER OR LAND SURVEYOR STATING THAT ALL BUILDING PAD ELEVATIONS ARE IN ACCORDANCE WITH THE APPROVED GRADING PLAN.

33. UNLESS OTHERWISE STATED, ALL STATIONS INDICATED ON THE IMPROVEMENT PLANS ARE REFERENCED TO THE CENTERLINE OF THE STREET. ALL STATIONS OFF CENTER ARE PERPENDICULAR TO OR RADIALLY OPPOSITE CENTERLINE STATIONS, UNLESS OTHERWISE NOTED.

34. DRIVEWAYS ON STREETS TO BE LOCATED IN THE FIELD BY THE ENGINEER AT THE TIME OF CONSTRUCTION. DRIVEWAYS SHALL NOT COINCIDE WITH WHEELCHAIR RAMPS.

35. IF THE PROJECT IS SUBJECT TO THE INDIRECT SOURCE REVIEW (ISR) REQUIREMENT, THE CONTRACTOR IS REQUIRED TO KEEP DAILY RECORDS OF THE TOTAL HOURS OF OPERATION FOR EACH PIECE OF EQUIPMENT GREATER THAN 50-HORSEPOWER BEING USED ON THE PROJECT SITE DURING CONSTRUCTION. WITHIN 30 DAYS OF COMPLETING CONSTRUCTION OF EACH PROJECT PHASE, A REPORT SUMMARIZING TOTAL HOURS OF OPERATION BY EQUIPMENT TYPE, MODEL, YEAR, AND HORSEPOWER FOR EACH PIECE OF CONSTRUCTION EQUIPMENT GREATER THAN 50-HORSEPOWER MUST BE SUBMITTED TO THE AIR DISTRICT. TO ASSIST IN THIS RECORDKEEPING, THE "DETAILED FLEET TEMPLATE" IS AVAILABLE ON THE DISTRICT'S WEBSITE AT HTTP://WWW.VALLEYAIR.ORG/ISR/ISRFORMSANDAPPLICATIONS.HTM. FOR EACH PROJECT PHASE, THE DISTRICT WILL VERIFY THAT THE FLEET DETAILS ACHIEVED THE REQUIRED EMISSION REDUCTIONS. IF THE CONTRACTOR IS NOT GOING TO MEET THE STANDARDS AND/OR RECORD KEEPING REQUIRED BY THE AIR DISTRICT, THE CONTRACTOR SHALL NOTIFY THE AIR BOARD PRIOR TO CONSTRUCTION SO THE NECESSARY MITIGATION FEE SHALL BE PAID. IF THE AIR BOARD IS NOT NOTIFIED PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO PAY THE PENALTY TO THE AIR BOARD.

36. PRIOR TO FINALIZING IMPROVEMENTS AND OPENING ROADS THE CONTRACTOR SHALL COORDINATE WITH THE GOVERNING LOCAL AGENCY FOR POTENTIAL TRAFFIC SIGNAGE AND STRIPING MODIFICATIONS (FOR EXAMPLE, SPEED LIMIT CHANGES OR REDUCTIONS) BEYOND THE PROJECT LIMITS THAT ARE NECESSITATED BY THE CONSTRUCTION OF THE IMPROVEMENTS SHOWN ON THESE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SIGNAGE AND STRIPING MODIFICATIONS REQUIRED BY THE GOVERNING AGENCY.

37. ANY ASSUMPTION MADE BY THE CONTRACTOR IS NOT THE RESPONSIBILITY OF THE ENGINEER OR DESIGN CONSULTANT. CONTRACTOR SHALL SUBMIT A PRE-BID REQUEST FOR INFORMATION (RFI) FOR ANY CLARIFICATION NEEDED AND SHALL BE RESPONSIBLE FOR COMPLETING THE PROJECT AT THE CONTRACTOR'S EXPENSE FOR ANY WRONG ASSUMPTIONS MADE.

GRADING NOTES

1. EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF STOCKTON STANDARDS AND THE PROJECT SOILS REPORT. ALL FILL AREAS SHALL BE TESTED AS REQUIRED BY THE CITY OF STOCKTON AND SHALL BE PAID FOR BY THE CONTRACTOR.

2. THE DEVELOPER SHALL BE RESPONSIBLE FOR COST OF INITIAL TEST FOR MOISTURE DENSITY CURVE. IF THE FIRST TEST FAILS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COST OF ALL SUBSEQUENT CURVES AND TESTS.

3. THE CONTRACTOR SHALL REVIEW SITE PRIOR TO BIDDING. ALL VEGETATION AND DELETERIOUS MATERIALS SHALL BE REMOVED FROM THE SITE AT THE EXPENSE OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

4. THE CONTRACTOR SHALL PRESERVE ALL STAKES AND POINTS SET FOR LINES, GRADES OR MEASUREMENT OF THE WORK IN THEIR PROPER PLACES UNTIL AUTHORIZED TO REMOVE THEM BY THE ENGINEER. ALL EXPENSES INCURRED IN REPLACING STAKES THAT HAVE BEEN REMOVED WITHOUT PROPER AUTHORITY SHALL BE PAID FOR BY THE CONTRACTOR.

5. CONTRACTOR'S PRICE SHALL INCLUDE COST TO ACHIEVE A BALANCED SITE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO IMPORT AND EXPORT MATERIAL AS REQUIRED TO BALANCE SITE.

6. CONTRACTOR SHALL GRADE ALL LANDSCAPE AREAS TO WITHIN 0.10 FEET OF FINAL GRADE ELEVATIONS WITH APPROPRIATE LANDSCAPE SECTIONS INCLUDED.

7. ALL A.C. PAVING SHALL BE FOG SEALED PER SECTION 37 OF CALTRANS STANDARD SPECIFICATIONS, THE LATEST EDITION.

8. GRADE TAGS LOCATED ON CURBS REFERENCE TOP OF CURB ELEVATION UNLESS OTHERWISE NOTED. ADDITIONAL DESCRIPTIONS ARE PROVIDED TO DENOTE HORIZONTAL AND VERTICAL CHANGES IN ACCORDANCE WITH ABBREVIATIONS DEFINED ON COVER SHEET.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING HIS OWN EARTHWORK QUANTITIES FOR BIDDING, CONTRACT AND CONSTRUCTION PURPOSE. IF IT APPEARS THERE WILL BE AN EXCESS OR SHORTAGE OF MATERIAL, THE CONTRACTOR SHALL NOTIFY THE ENGINEER TO DETERMINE IF POSSIBLE GRADE ADJUSTMENTS CAN BE MADE.

10. SITE CONTRACTOR SHALL COORDINATE WITH BUILDING CONTRACTOR TO ACCOMMODATE THE PROPER CLEARANCE BETWEEN THE BOTTOM OF THE STUCCO AND THE TOP OF THE GRADE TREATMENT ALONG THE BUILDING AS APPLICABLE, IN ACCORDANCE WITH SECTION 2512.1.2. OF THE MOST CURRENT CALIFORNIA BUILDING CODE, IF THE SUBJECT BUILDING SIDING TREATMENT IS STUCCO. CONTRACTOR SHALL NOTIFY ENGINEER IF ANY GRADES ARE ADJUSTED. CONTRACTOR SHALL ALSO APPLY FLASHING WHERE APPLICABLE WITHIN AREAS OF GRADE TRANSITION.

11. ALL LANDSCAPE AREAS THAT ABUT ANY PORTION OF THE BUILDING SHALL BE GRADED SUCH THAT THE FINISHED GRADE IN LANDSCAPE AREAS SHALL BE A MINIMUM OF EIGHT INCHES (8") BELOW FINISHED FLOOR OF THE ABUTTING BUILDING AND IN NO CASE SHALL THE LANDSCAPE AREA BE GRADED OR LANDSCAPED SUCH THAT WATER DRAINS TOWARD THE BUILDING.

12. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATIONS, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES.

13. CONTRACTOR IS RESPONSIBLE FOR THE OFF HAUL AND DISPOSAL OF ANY AND ALL EXCESS DIRT FROM CONSTRUCTION SITE.

14. CONTRACTOR SHALL COORDINATE WITH THE EXISTING ADJOINING PROPERTY OWNERS PRIOR TO ANY WORK BEING STARTED THAT MAY AFFECT THEIR PROPERTY.

15. CONTRACTOR SHALL PROVIDE A SMOOTH TRANSITION FROM THE PROPOSED GRADING TO THE EXISTING FLOWLINE, CURB, CONCRETE, AND OR PAVEMENT ELEVATIONS.

16. ALL EXISTING WELLS AND SEPTIC TANKS SHALL BE REMOVED AND/OR ABANDONED PER THE REQUIREMENTS OF THE COUNTY HEALTH DEPARTMENT AND THE CITY OF STOCKTON. THIS WORK SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST.

17. CONTRACTOR SHALL VERIFY BUILDING SUBGRADE SECTIONS WITH ARCHITECT PLANS BEFORE CONSTRUCTION. IF A DISCREPANCY EXISTS, CONTRACTOR TO NOTIFY THE ENGINEER IMMEDIATELY.

18. PRIOR TO CONSTRUCTING ANY FLATWORK THE CONTRACTOR SHALL VERIFY THE FINISH FLOOR ELEVATIONS AT ALL DOORS. NOTE THAT FINISH FLOOR ELEVATIONS MAY HAVE BEEN CHANGED DUE TO FOUNDATION ADJUSTMENTS IN FIELD. CONTRACTOR SHALL HOLD ADJUSTED FINISH FLOOR GRADES, ACCOUNT FOR DOOR THRESHOLDS, AND ADJUST GRADES AS NECESSARY TO STAY IN COMPLIANCE WITH CURRENT ADA STANDARDS. CONTRACTOR SHALL NOTIFY NORTHSTAR ENGINEERING IMMEDIATELY IF ANY GRADE ADJUSTMENTS WILL CREATE ADA ACCESSIBILITY ISSUES.

GRADING NOTES (CONT)

19. THE VALUES SHOWN ON THE GRADING PLAN ARE FOR REFERENCE AND FEE PURPOSES ONLY. SINCE THE ENGINEER CANNOT CONTROL THE EXACT METHOD OR MEANS USED BY THE CONTRACTOR DURING GRADING OPERATIONS, NOR CAN THE ENGINEER GUARANTEE THE EXACT SOIL CONDITION OVER THE ENTIRE SITE, THE ENGINEER ASSUMES NO RESPONSIBILITY FOR FINAL EARTHWORK QUANTITIES.

20. THE VALUES SHOWN ON THE GRADING PLAN ARE TO AID THE CONTRACTOR IN DETERMINING THE QUANTITIES OF DIRT TO BE MOVED. THE CUT AND FILL QUANTITIES SHOWN INDICATE A THEORETICAL YARDAGE FIGURE AND ARE GIVEN ONLY AS A CONVENIENCE TO THE CONTRACTOR. THE QUANTITIES SHOWN SHALL NOT BE USED AS THE BASIS OF BID COSTS.

21. EARTHWORK QUANTITY VALUES SHOWN ON PAVING PLAN REPRESENT THE DIFFERENCE BETWEEN THE ESTIMATED EXISTING GRADES FROM ASBUILT DOCUMENTS COMPARED WITH THE SUBGRADE STRUCTURAL SECTIONS OF THE PROPOSED GRADING DESIGN. SEE STRUCTURAL SECTIONS IN HATCH LEGEND ON PAVING PLAN.

22. EARTHWORK QUANTITY CALCULATIONS DO NOT INCLUDE STRIPPING, SHRINKAGE, SWELL FACTORS OR MATERIAL FROM UTILITY TRENCH SPOILS.

NPDES NOTES

1. STORM DRAIN NPDES PERMIT TO COMPLY WITH THE STATE OF CALIFORNIA'S STATEWIDE GENERAL NPDES PERMIT, REGULATING DISCHARGES OF STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY FROM SOIL DISTURBANCES OF ONE (1) ACRE OR MORE. A NOTICE OF INTENT (NOI) TO COMPLY WITH THE TERMS OF THE GENERAL PERMIT TO DISCHARGE STORM WATER ASSOCIATED WITH CONSTRUCTION ACTIVITY MUST BE FILED AND THE APPROPRIATE FEE PAID PRIOR TO COMMENCEMENT OF CONSTRUCTION. IN ADDITION, AT THE CONCLUSION OF THE PROJECT A NOTICE OF TERMINATION (NOT) MUST ALSO BE FILED. SUBMIT THE FEE, NOI, AND NOT TO THE STATE WATER RESOURCES CONTROL BOARD UTILIZING THE STORM WATER MULTIPLE APPLICATION AND REPORT TRACKING SYSTEM (SMARTS) AT THE FOLLOWING ADDRESS:

   WWW.SMARTS.WATERBOARDS.CA.GOV

   FEES AND PAYMENTS CAN BE MADE TO THE FOLLOWING ADDRESS:

   STATE WATER RESOURCES CONTROL BOARD
   DIVISION OF WATER QUALITY
   ATTN: STORM WATER PERMIT UNIT
   P.O. BOX 1977
   SACRAMENTO, CA 95812-1977

   IF YOU HAVE ANY QUESTIONS CALL JOSEPH HENAO, WATER QUALITY CONTROL ENGINEER, CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD, AT (916) 255-3028.

THE FOLLOWING MUST BE SUBMITTED TO THE CITY PRIOR TO BEGINNING WORK AND PRIOR TO THE ISSUANCE OF AN ENCROACHMENT PERMIT:

A) TRANSMITTAL MEMO THAT INCLUDES:
   * THE NAME AND PHONE NUMBER OF THE PERSON RESPONSIBLE FOR SWPPP IMPLEMENTATION, AND
   * IF APPLICABLE, A LISTING OF THE POST-CONSTRUCTION BEST MANAGEMENT PRACTICES THAT WILL BE INSTALLED TO SATISFY THE REQUIREMENTS OF THE CITY OF STOCKTON MUNICIPAL CODE CHAPTER TITLES 13 AND 15.
   * COPY OF SWPPP MUST REMAIN ON SITE DURING CONSTRUCTION AT ALL TIMES.

B) COPY OF A SIGNED NOTICE OF INTENT FORM OR A WASTE DISCHARGE IDENTIFICATION NUMBER. WDID#: CONTRACTOR TO PROVIDE PRIOR TO CONSTRUCTION; IF REQUIRED

2. FOR SITES THAT HAVE SOIL DISTURBANCES OF 1 ACRE OR MORE AND ARE REQUIRED TO OBTAIN COVERAGE UNDER THE STATE'S CONSTRUCTION GENERAL PERMIT (CGP):
   THE CONTRACTOR SHALL COORDINATE WITH THE OWNER AND ENSURE THAT A QUALIFIED SWPPP PRACTITIONER (QSP) IS CONTRACTED TO PROVIDE QSP SERVICES THROUGHOUT THE COURSE OF CONSTRUCTION (FROM THE START OF CONSTRUCTION TO THE DATE AT WHICH THE NOTICE OF TERMINATION - NOT - IS FILED). THE QSP SHALL BE RESPONSIBLE FOR ALL APPLICABLE INSPECTIONS, TRAINING, SAMPLING, TESTING, REPORTING, CHANGES OF INFORMATION (COI), SWPPP REVISIONS, NOTICE OF TERMINATION (NOT), AND OTHER QSP-RELATED RESPONSIBILITIES AS IDENTIFIED IN THE STATE'S CGP.

DEWATERING NOTES

1. THE CONTRACTOR SHALL FURNISH, INSTALL, OPERATE AND MAINTAIN ALL MACHINERY APPLIANCES, AND EQUIPMENT TO MAINTAIN ALL EXCAVATIONS FREE FROM WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL DISPOSE OF THE WATER SO AS NOT TO CAUSE DAMAGE TO PUBLIC OR PRIVATE PROPERTY, OR TO CAUSE A NUISANCE OR MENACE TO THE PUBLIC OR VIOLATE THE LAW. THE DEWATERING SYSTEM SHALL BE INSTALLED AND OPERATED SO THAT THE GROUNDWATER LEVEL OUTSIDE THE EXCAVATION IS NOT REDUCED TO THE EXTENT WHICH WOULD CAUSE DAMAGE OR ENDANGERED ADJACENT STRUCTURES OR PROPERTY. ALL COST FOR DEWATERING SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ALL PIPE CONSTRUCTION. THE STATIC WATER LEVEL SHALL BE DRAWN DOWN A MINIMUM OF 1 FOOT BELOW THE BOTTOM OF EXCAVATIONS TO MAINTAIN THE UNDISTURBED STATE OF NATURAL SOILS AND ALLOW THE PLACEMENT OF ANY FILL TO THE SPECIFIED DENSITY. THE CONTRACTOR SHALL HAVE ON HAND, PUMPING EQUIPMENT AND MACHINERY IN GOOD WORKING CONDITION FOR EMERGENCIES AND SHALL HAVE WORKMEN AVAILABLE FOR IT'S OPERATION. DEWATERING SYSTEMS SHALL OPERATE CONTINUOUSLY UNTIL BACK FILL HAS BEEN COMPLETED TO 1 FOOT ABOVE THE NORMAL STATIC GROUNDWATER LEVEL.

2. THE CONTRACTOR SHALL CONTROL SURFACE WATER TO PREVENT ENTRY INTO EXCAVATIONS. AT EACH EXCAVATION, A SUFFICIENT NUMBER OF TEMPORARY OBSERVATION WELLS TO CONTINUOUSLY CHECK THE GROUNDWATER LEVEL SHALL BE PROVIDED.

3. THE CONTROL OF GROUNDWATER SHALL BE SUCH THAT SOFTENING OF THE BOTTOM OF EXCAVATIONS, OR FORMATION OF 'QUICK' CONDITIONS OR 'BOILS', DOES NOT OCCUR. DEWATERING SYSTEMS SHALL BE DESIGNED AND OPERATED SO AS TO PREVENT REMOVAL OF THE NATURAL SOILS. THE RELEASE OF GROUNDWATER AT ITS STATIC LEVEL SHALL BE PERFORMED IN SUCH A MANNER AS TO MAINTAIN THE UNDISTURBED STATE OF THE NATURAL FOUNDATIONS SOILS, PREVENT DISTURBANCE OF COMPACTED BACK FILL, AND PREVENT FLOTATION OR MOVEMENT OF STRUCTURES, PIPELINES AND SEWERS. IF AN NPDES (NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM) PERMIT IS REQUIRED FOR DISPOSAL OF WATER FROM CONSTRUCTION DEWATERING ACTIVITIES, IT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY DEWATERING ACTIVITIES.

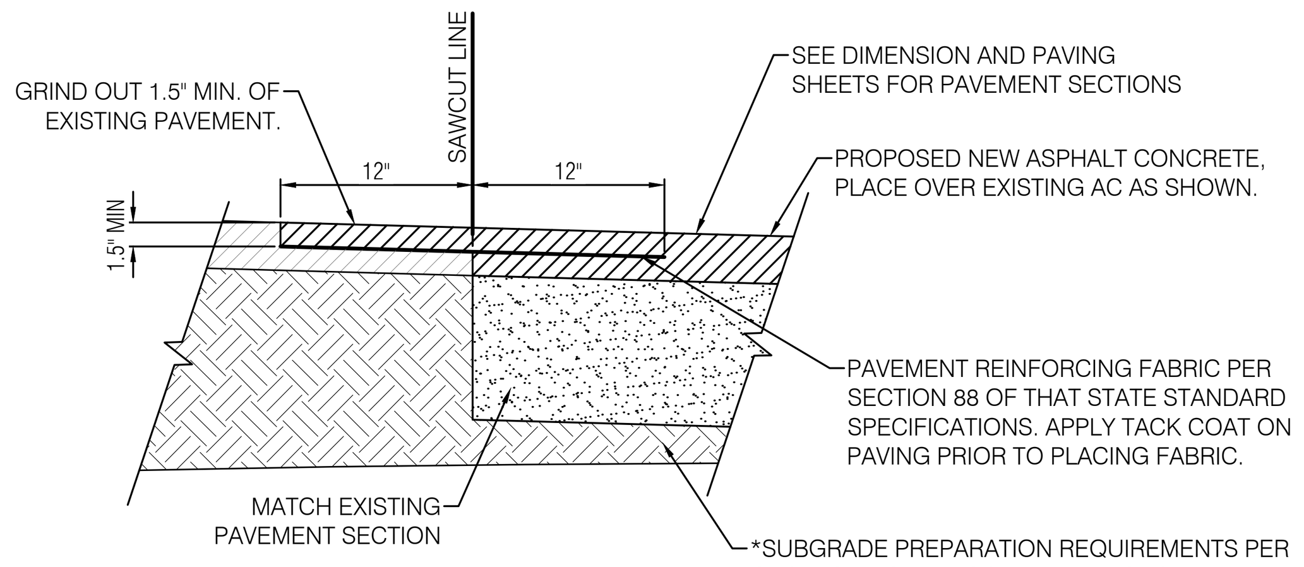
4. ONE HUNDRED PERCENT STANDBY PUMPING CAPACITY SHALL BE AVAILABLE ON SITE AT ALL TIMES AND SHALL BE CONNECTED TO THE DEWATERING SYSTEM PIPING TO PERMIT IMMEDIATE USE. IN ADDITION, STANDBY AUXILIARY EQUIPMENT AND APPLIANCES FOR ALL ORDINARY EMERGENCIES, AND COMPETENT WORKMEN FOR OPERATION AND MAINTENANCE OF ALL DEWATERING EQUIPMENT SHALL BE ON SITE AT ALL TIMES. STANDBY EQUIPMENT SHALL INCLUDE EMERGENCY POWER GENERATION AND AUTOMATIC SWITCH OVER TO THE EMERGENCY GENERATOR WHEN NORMAL POWER FAILS. DEWATERING SYSTEMS SHALL NOT BE SHUT DOWN BETWEEN SHIFTS, ON HOLIDAYS, ON WEEKENDS, OR DURING WORK STOPPAGES.

5. SUMPS SHALL BE NO DEEPER THAN 5 FEET AND SHALL BE AT THE LOW POINT OF EXCAVATION. EXCAVATION SHALL BE GRADED TO D

CITY OF STOCKTON STANDARD DETAILS

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN THE MOST UP TO DATE CITY STANDARDS FOR REFERENCE PRIOR TO AND DURING CONSTRUCTION.
2. THE LATEST COPY OF THE CITY OF STOCKTON STANDARDS SHALL BE CONSIDERED PART OF THIS PLAN SET.
3. IN THE EVENT OF A DISCREPANCY BETWEEN THIS PLAN SET AND CITY STANDARDS; THE CITY STANDARDS SHALL PREVAIL.
4. STANDARD PLAN DRAWINGS REFERENCED WITHIN THIS PLAN SET INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING DRAWINGS:

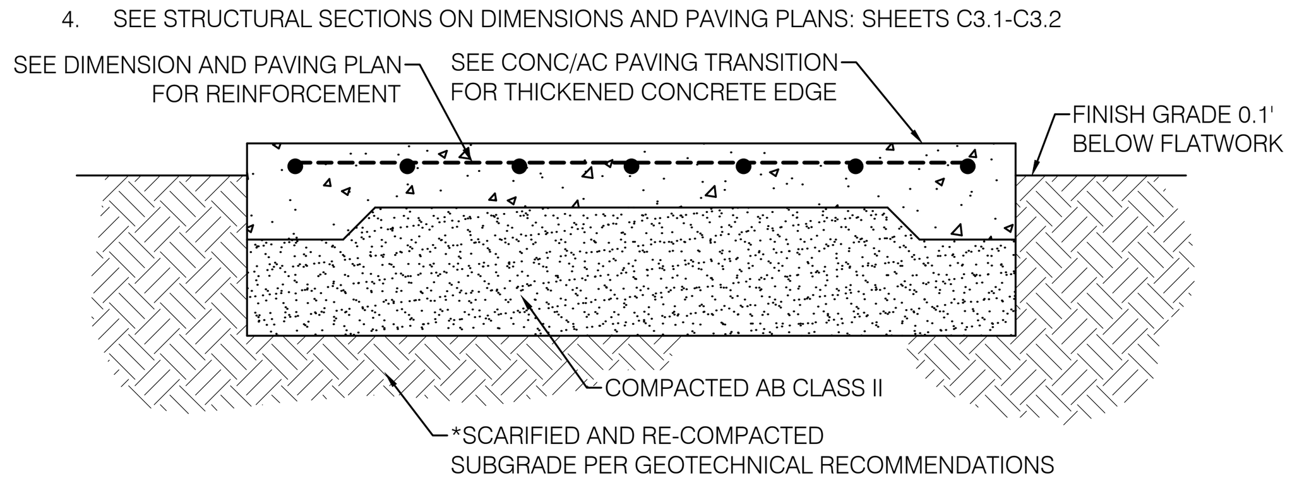
CITY OF STOCKTON:
DTL No. R-36 .... EXISTING STREET TRENCH SECTION FOR TRENCHES LARGER THAN 8"
DTL No. R-50 .... SIDEWALK DETAILS
DTL No. R-55 .... CONCRETE CURB, GUTTER & SIDEWALK CONSTRUCTION STANDARD
DTL No. S-4 .... CALIFORNIA HEALTH DEPARTMENT REQUIREMENTS
DTL No. S-18 .... CLEANOUT
DTL No. W-3 .... WATER SERVICE INSTALLATION 1",1.5" AND 2" SERVICE
DTL No. W-4 .... FITTINGS FOR WATER SERVICE
DTL No. W-11 .... VALVE BOX DETAILS
DTL No. W-12 .... THRUST BLOCK DETAILS



*NOTE:
1. *SUBGRADE PREPARATION REQUIREMENTS PER GEOTECHNICAL RECOMMENDATIONS, CITY OF STOCKTON STANDARDS AND SPECIFICATIONS, AND PROJECT SPECIFICATIONS.
2. LAP JOINT SHALL APPLY AT ALL SAWCUT LOCATIONS ALONG ALL PAVEMENT UNLESS OTHERWISE NOTED.

1 LAP JOINT DETAIL
NTS

*NOTE:
1. *SUBGRADE PREPARATION REQUIREMENTS PER GEOTECHNICAL RECOMMENDATIONS, CITY OF STOCKTON STANDARDS AND SPECIFICATIONS, AND PROJECT SPECIFICATIONS.
2. AT EXPANSION JOINT USE ½"x24" SMOOTH DOWELS, 18" OC. GREASE 1/2 THE LENGTH BEFORE CONCRETE PLACEMENT. SEE EXPANSION JOINT DETAIL 4 THIS SHEET.
3. CONSTRUCT CONTROL AND CONSTRUCTION JOINTS IN ACCORDANCE WITH CURRENT PORTLAND CEMENT ASSOCIATION GUIDELINES.
4. SEE STRUCTURAL SECTIONS ON DIMENSIONS AND PAVING PLANS: SHEETS C3.1-C3.2



2 CONCRETE FLATWORK
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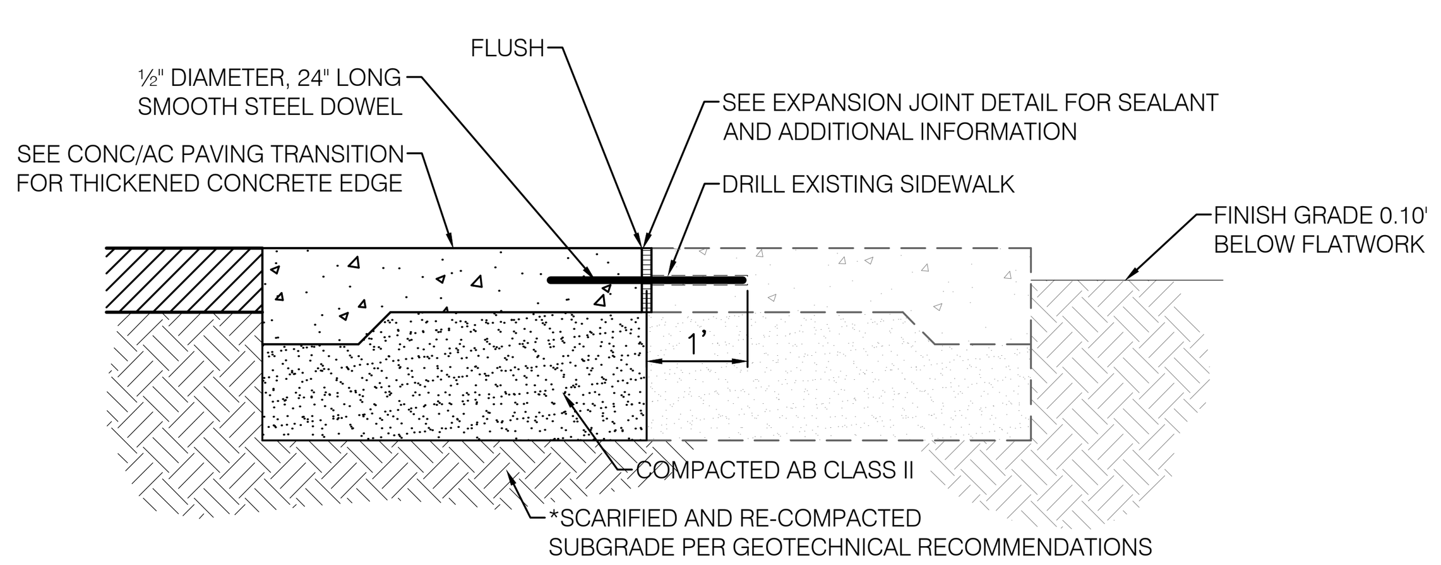
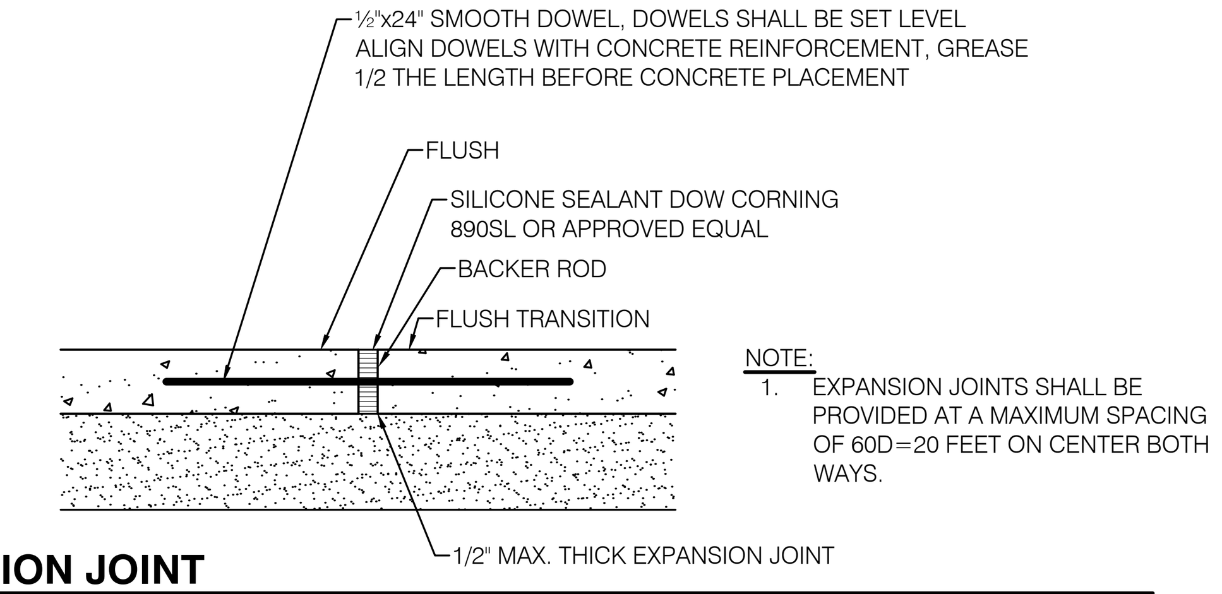


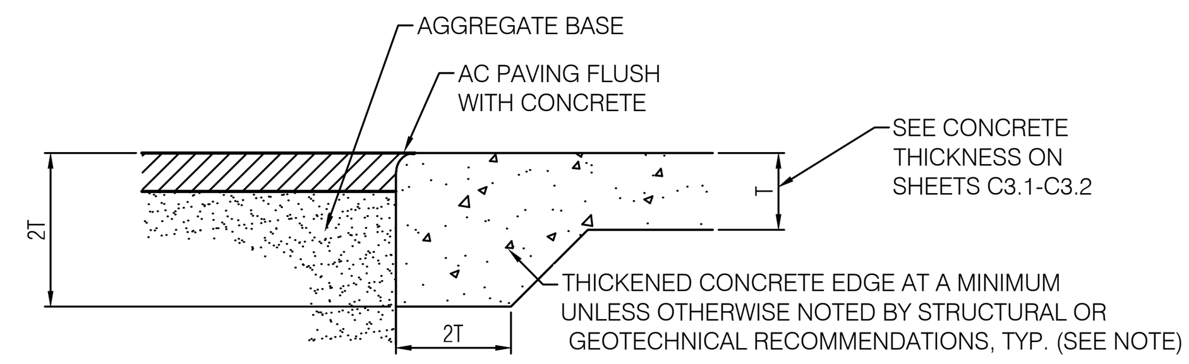
*NOTE:
1. *SUBGRADE PREPARATION REQUIREMENTS PER GEOTECHNICAL RECOMMENDATIONS, CITY OF STOCKTON STANDARDS AND SPECIFICATIONS, AND PROJECT SPECIFICATIONS.
2. AT EXPANSION JOINT USE ½"x24" SMOOTH STEEL DOWELS, 18" OC GREASE 1/2 THE LENGTH BEFORE CONCRETE PLACEMENT. SEE EXPANSION JOINT DETAIL THIS SHEET.
3. EXPANSION JOINTS SHALL BE PROVIDED AT A MAXIMUM SPACING OF 60D=20 FEET ON CENTER BOTH WAYS. CONTROL JOINTS SHALL BE PLACED AT A MAXIMUM SPACING OF 5 FEET.
4. CONSTRUCT CONTROL AND CONSTRUCTION JOINTS IN ACCORDANCE WITH CURRENT PORTLAND CEMENT ASSOCIATION GUIDELINES.
5. SEE STRUCTURAL SECTIONS ON DIMENSIONS AND PAVING PLANS: SHEETS C3.1-C3.2

3 CONCRETE FLATWORK AT EXISTING FLATWORK
NTS



NOTE:
1. EXPANSION JOINTS SHALL BE PROVIDED AT A MAXIMUM SPACING OF 60D=20 FEET ON CENTER BOTH WAYS.

4 EXPANSION JOINT
NTS



5 CONC / AC PAVING TRANSITION AND THICKENED EDGE
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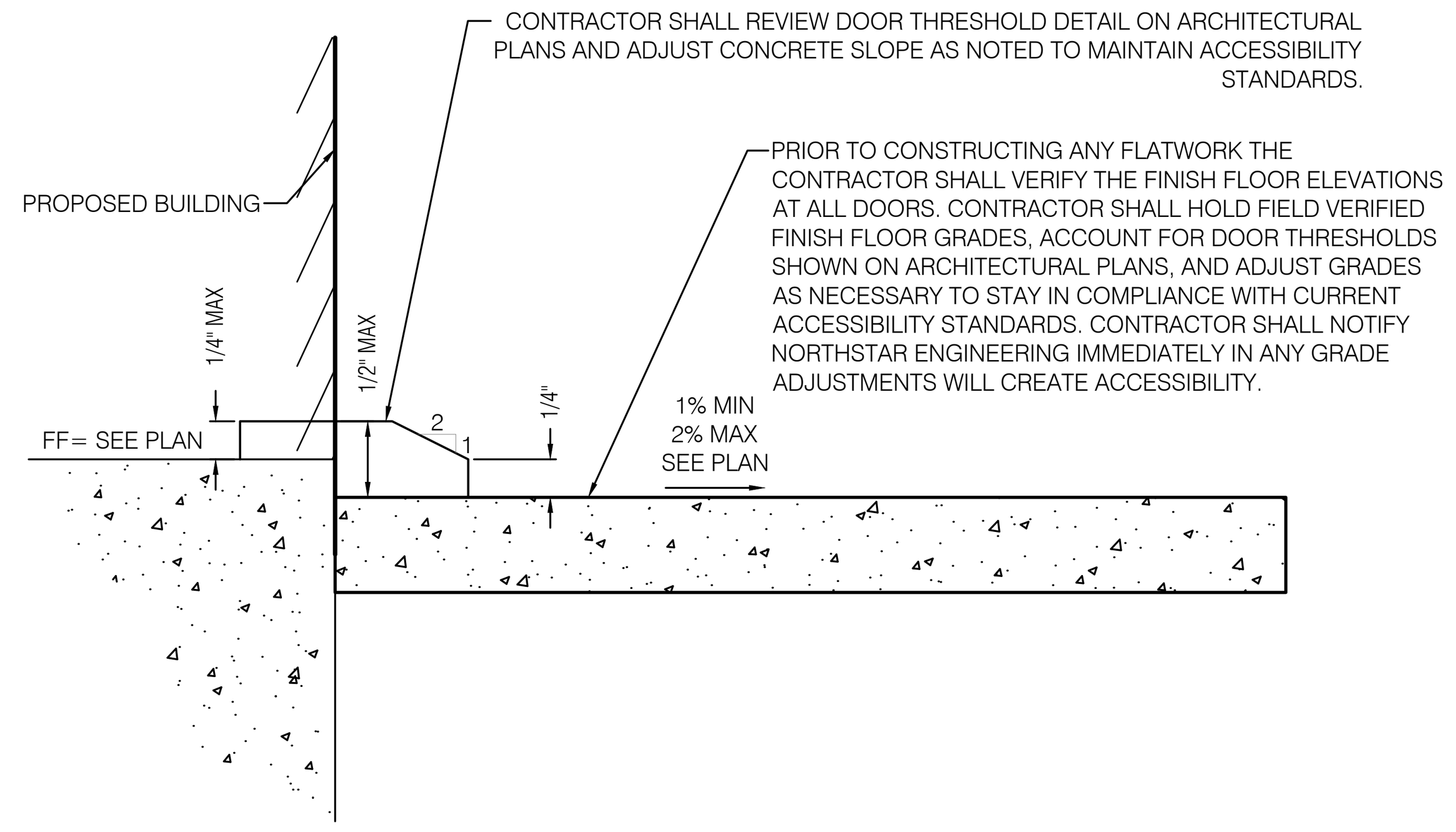
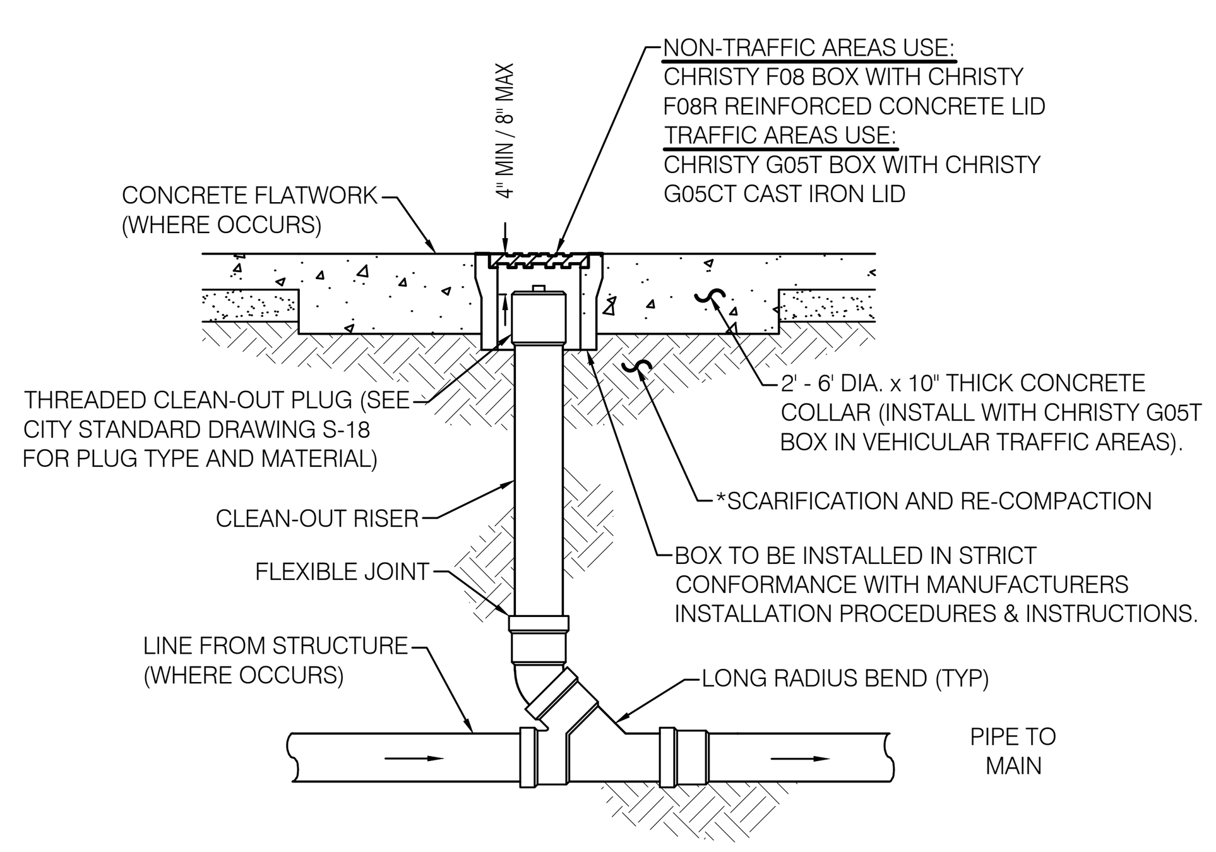


6 TYPICAL DOOR THRESHOLD AT CONCRETE LANDING
NTS



*NOTE:
1. CLEAN-OUT RISER SHALL BE THE SAME SIZE AS THE LATERAL.
2. CLEAN-OUT RIM SHALL BE FLUSH WITH GRADE, ADA COMPLIANT AND "HEEL PROOF."
3. *SUBGRADE PREPARATION REQUIREMENTS PER GEOTECHNICAL RECOMMENDATIONS, CITY OF STOCKTON STANDARDS AND SPECIFICATIONS, AND PROJECT SPECIFICATIONS.

7 TYPICAL STORM DRAIN OR SANITARY SEWER CLEAN OUT RISER
NTS

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TETER

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
DETAILS AND CROSS SECTION

PROJECT NO.
23-13018

DRAWING
C1.4

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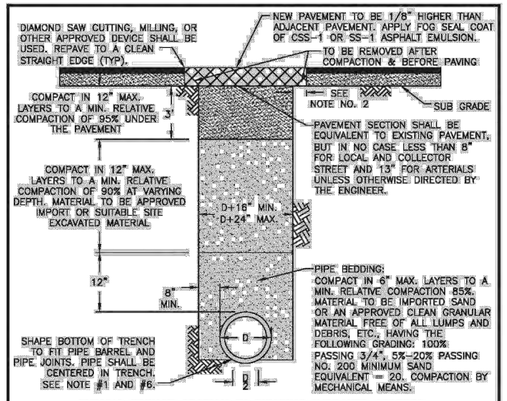
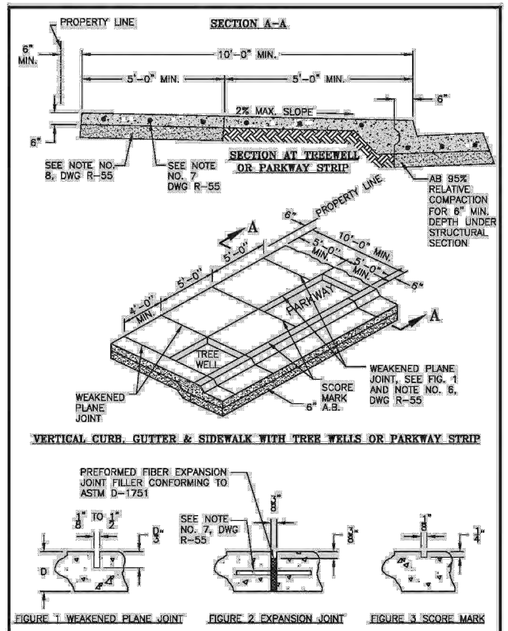


TYPICAL TRENCH SECTION IN EXISTING IMPROVED STREETS

NOTES

1. FOR RIGID PIPE, CONTRACTOR MAY, AT THEIR EXPENSE, EXCAVATE 6" BELOW THE BOTTOM OF THE PIPE AND REPLACE WITH SAND OR AGGREGATE SUBBASE IN LIEU OF SHAPING BOTTOM OF TRENCH TO FIT PIPE BARREL. JOINTS SHALL BE SHAPED IN EITHER CASE.
2. WHEN EXCAVATION IS IN EXISTING PAVED STREETS, REPLACE PAVEMENT 12" ON EACH SIDE OF EXCAVATION, TRENCH, BELL HOLE OR POT HOLES. TO BE REMOVED AFTER COMPACTION & BEFORE PAVING.
3. DEVIATION FROM ABOVE MAY BE ALLOWED WHEN APPROVED BY THE CITY ENGINEER.
4. TRENCH – WHERE THE TRENCH SECTION PARALLELS THE EXISTING CURB AND GUTTER, THE EDGE OF THE TRENCH SHALL BE A MIN. OF 1'-0" FROM LIP OF THE EXISTING GUTTER. THE PAVEMENT SHALL BE REMOVED AND REPLACED TO THE LIP OF THE GUTTER.
5. CONTROLLED DENSITY FILL (CDF) MAY BE USED IN LIEU OF SPECIFIED BACKFILL METHOD. MINIMUM TRENCH WIDTH MAY BE REDUCED TO 2-1/2" CLEAR OF EACH SIDE OF PIPE.
6. FLEXIBLE PIPE SHALL HAVE A 6" BEDDING OF GRANULAR MATERIAL AS DESCRIBED IN NOTE NO. 1.
7. ALL VERTICAL EDGES OF EXISTING ASPHALT CONCRETE SHALL BE TACK COATED.
8. PAVING SHALL CONFORM TO SECTION 100-1.06 OF THE STANDARD SPECIFICATIONS.
9. ALL JOINT PIPE REPAIRS SHALL BE BEDDED WITH A MINIMUM OF 6 INCHES OF 3/4" CRUSHED ROCK.

EXISTING STREET TRENCH SECTION FOR TRENCHES LARGER THAN 8"	REVISION NO. 6	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 11/25/03
		DRAWING NO. R-36

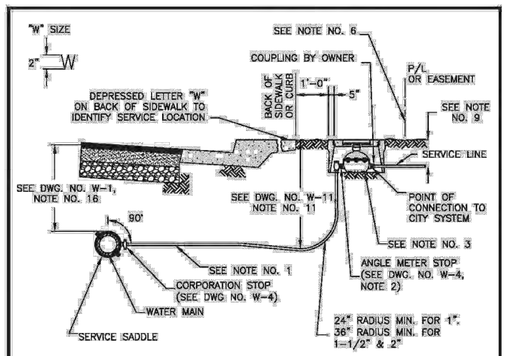


SIDEWALK DETAILS	REVISION NO. 9	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 11/25/03
		DRAWING NO. R-50

NOTES:

1. CURB, GUTTER AND SIDEWALK AND ALL P.C.C. FLATWORK SHALL HAVE A FINE HAIR LIGHT BROOM FINISH. CURB AND GUTTER PARALLEL TO THE FLOW LINE.
2. CONSTRUCT EXPANSION JOINTS 150'-0" ON CENTER MAXIMUM, AND AT RETURNS, LIGHT POLES, HYDRANTS, CATCH BASINS, BOTH SIDES OF DRIVEWAY, AND OTHER FIXED OBJECTS.
3. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE CURRENT CITY OF STOCKTON STANDARDS SPECIFICATIONS.
4. SEE DEFINITION SECTION OF STANDARD SPECIFICATIONS FOR DEFINITION OF SAND.
5. WEAKENED PLANE JOINTS AND SCORE MARKS AS SHOWN. SEE DWG R-50 FOR WEAKENED PLANE JOINT WIDTH AND DEPTH.
6. PLACE 5/8" X 24" LONG STEEL DOWELS THROUGH EVERY EXPANSION JOINT SPACED AT 1'-6" ON CENTER (MIN.) GREASED AND WRAPPED ON ONE SIDE, OFFSET 6" FROM CONCRETE EDGES, UNLESS OTHERWISE SHOWN OR SPECIFIED. MINIMUM THREE DOWELS IN 5' WIDE SIDEWALK.
7. SIDEWALK CONSTRUCTION SHALL CONFORM TO SECTION 73, STANDARD SPECIFICATIONS, CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS), EXCEPT AS MODIFIED HEREIN.
8. SUBGRADE FOR SIDEWALK SHALL BE SCARIFIED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 90% TO A DEPTH OF 6". PLACE 4" MINIMUM OF AGGREGATE SUBBASE CLASS II OR IV UNDER THE CONCRETE SECTIONS AND COMPACT TO A MINIMUM OF 90%. SUBGRADE FOR CURB, GUTTER, AND DRIVEWAYS SHALL BE SCARIFIED AND COMPACTED TO A MINIMUM RELATIVE COMPACTION OF 95% TO A DEPTH OF 6", BASE FOR CURB, GUTTER, AND DRIVEWAYS TO BE AB ONLY.
9. ALL RADII FOR ROUNDING EDGES SHALL BE 3/4" UNLESS NOTED.
10. CONCRETE SHALL BE PER SECTION 90, MINOR CONCRETE PER SPECIFICATION.
11. EXPANSION JOINTS AND WEAKENED PLANE JOINTS SHALL BE INSTALLED AS INDICATED ON THE PLANS OR STANDARD DETAILS.
12. DEPRESS A 2" HIGH LETTER 'W', 'S', OR 'I' FOR IRRIGATION SLEEVE LOCATION, 1/4" DEEP INTO THE TOP OF CURB TO INDENTIFY SERVICE LOCATIONS.
13. WATER SHALL BE USED TO ENSURE PROPER DRAINAGE OF GUTTERS AT BOTH THE FINAL WALKTHROUGH AND PRIOR TO THE EXPIRATION OF THE ONE-YEAR WARRANTY.
14. 3-5/8" X 24" LONG STEEL DOWELS MINIMUM THROUGH EVERY EXPANSION JOINT.
15. 2-5/8" X 24" LONG STEEL DOWELS MINIMUM THROUGH EVERY EXPANSION JOINT.
16. IN AN EXISTING STREET, WHENEVER THE CURB AND GUTTER ARE REMOVED, SAWCUT EXISTING STREET 1' OUT FROM LIP OF GUTTER MIN. & REPLACE WITH 8" OF ASPHALT CONCRETE, MIN., MATCHING EXISTING SECTION.

CONCRETE CURB, GUTTER & SIDEWALKS CONSTRUCTION STANDARDS	REVISION NO. 3	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 11/25/03
		DRAWING NO. R-55



TYPICAL WATER SERVICE INSTALLATION FOR CITY WATER SERVICE AREAS ONLY

NOTES:

1. 1" IPS DIA. MINIMUM LINE TO EACH LOT. 1.5" AND 2" SERVICE LINES TO BE CTS SIZE ACCORDINGLY. PLASTIC SERVICE PIPE TO BE CONTINUOUS WITH NO SPLICING ALLOWED.
2. SEE DWG. NO. W-4 FOR FITTINGS AND BOX ASSEMBLY.
3. METERS SHALL BE FURNISHED AND INSTALLED BY CITY OF STOCKTON.
4. SERVICE CONNECTION AT THE METER SHALL BE A DEPTH OF 8" MIN. TO 12" MAX.
5. THE LOCATION OF THE TAP SHALL BE A MIN. OF 24" FROM ANOTHER TAP, BELL, SPIGOT, OR OTHER FITTING.
6. METER BOX MAY BE PLACED ADJACENT TO PROPERTY OR EASEMENT LINE WITH PRIOR APPROVAL OF THE CITY ENGINEER.
7. USE CHRISTY B-12 METER BOX WITH B12 TR/PL COVER OR EQUIVALENT. ALL BOXES LOCATED IN DRIVEWAY AREAS TO HAVE TRAFFIC COVERS MEET HS20 44 LOADING WITH TOUCH READ HOLE 1-3/4" DIA. HOLE FOR T/R METER IN UPPER RIGHT OR LOWER LEFT CORNER OF LID.
8. INSTALLATION OF A BACKFLOW PREVENTION DEVICE SHALL BE REQUIRED FOR ALL CONNECTIONS TO THE CITY WATER SYSTEM, EXCEPT FOR SINGLE FAMILY RESIDENCES.
9. SERVICE LINES FROM ALL METERS TO PROPERTY LINES SHALL HAVE A MINIMUM OF 8" OF COVER FROM TOP OF SIDEWALK OR GROUND LINE.
10. MULTIPLE METER MANIFOLDS SUBJECT TO APPROVAL BY MUNICIPAL UTILITIES DEPARTMENT.

WATER SERVICE INSTALLATION 1", 1.5", AND 2" SERVICE	REVISION NO. 8	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 11/25/03
		DRAWING NO. W-3

NOTE: SEE DWG. NO. W-3 FOR DETAILS.

PLASTIC PIPE:

PLASTIC SERVICE PIPE SHALL BE ULTRA HIGH MOLECULAR WEIGHT (UHMW) P.E. 3406 CS 255-63, POLYETHYLENE (STANDARD SPECIFICATIONS 78-1.02J) AS MANUFACTURED BY ADS OR APPROVED EQUAL WITH MINIMUM PRESSURE RATING OF 160 P.S.I.

CONNECTION SHALL BE AS FOLLOWS:

1. CORPORATION STOPS

A. 6 INCH DIAMETER LINES
1" X 1" CORPORATION STOPS AS MANUFACTURED BY FORD OR EQUIVALENT COMPLETE WITH STAINLESS STEEL INSERTS FOR 1" I.D. PLASTIC PIPE.

B. 8 AND 12 INCH DIAMETER LINES
1" DIAMETER CORPORATION STOPS AS MANUFACTURED BY FORD OR EQUIVALENT COMPLETE WITH STAINLESS STEEL INSERTS FOR 1" I.D. PLASTIC PIPE.

C. ALTERNATE PRODUCT SUPPLIER
(1) 1" CORPORATION STOP. FORD NO. 1001 WITH SS INSERTS.
(2) 1" X 1" CORPORATION STOP. FORD NO. 800 PLUS A C-16-44 COMPRESSION ADAPTER WITH SS INSERTS.
(3) 1-1/2" AND 2" CORPORATION STOPS. FORD NO. FB-1000.

2. ANGLE METER STOPS

A. 1 INCH DIAMETER ANGLE METER STOPS
1" I.D. ANGLE METER STOP AS MANUFACTURED BY FORD OR EQUIVALENT COMPLETE WITH LOCK WING AND STAINLESS STEEL INSERT FOR 1" I.D. PLASTIC PIPE.

B. 1-1/2 AND 2 INCH DIAMETER ANGLE METER STOPS
ANGLE METER STOPS AS MANUFACTURED BY FORD OR EQUIVALENT SHALL BE USED WITH STAINLESS STEEL INSERTS.

C. ALTERNATE PRODUCT SUPPLIER

(1) 1" ANGLE METER STOP. FORD NO. KV63-444 WITH SS INSERT.
(2) 1-1/2" ANGLE METER STOP. FORD FV 43-666 WITH SS INSERT.
(3) 2" ANGLE METER STOP. FORD FV 43-777 WITH SS INSERT.

D. ALL 1", AND 1.5", AND 2" ANGLE METER STOPS SHALL HAVE A COMPRESSION FITTING WITH STAINLESS STEEL RESTRAINING CLAMP WITH NUT

FITTINGS FOR WATER SERVICE	REVISION NO. 4	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 01/09/02
		DRAWING NO. W-4

3. SERVICE SADDLES

ALL SERVICE SADDLES SHALL BE MANUFACTURED BY FORD WITH DOUBLE FLAT BRONZE STRAPS AND BRONZE NUTS. SERVICE SADDLE FOR ALL SIZE C-900 MAINS SHALL BE MANUFACTURED BY FORD.

4. WATER METER BOXES

1" METER BOXES SHALL BE CHRISTY B-12 BOX. FOR LIDS, SEE NOTE NO. 5.

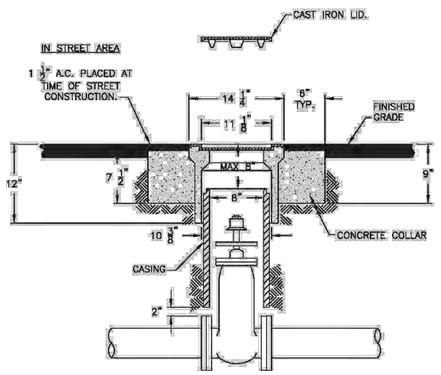
1-1/2" AND 2" METER BOXES SHALL BE CHRISTY B-36.

5. WATER METER BOX COVER

1" METER BOX COVER SHALL BE CHRISTY B-12 TR/PL COVER. ALL BOXES LOCATED IN DRIVEWAY AREAS TO HAVE TRAFFIC COVERS MEETING HS20 44 LOADING WITH TOUCH READ HOLE 1-3/4" DIA.

1-1/2" AND 2" METER BOXES SHALL HAVE CHRISTY B-36 FIBERLYTE TR/PL COVER. ALL BOXES LOCATED IN DRIVEWAY AREAS TO HAVE TRAFFIC COVERS MEETING HS20 44 LOADING WITH TOUCH READ HOLE 1-3/4" DIA.

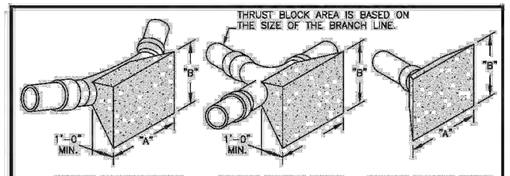
FITTINGS FOR WATER SERVICE	REVISION NO. 4	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 01/09/02
		DRAWING NO. W-4



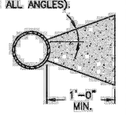
NOTES:

1. VALVE BOX AND LID SHALL BE CHRISTY NO. G5 OR EQUAL.
2. ALL LIDS SHALL HAVE MACHINED SEATING SURFACES.
3. CASING SHALL BE C900 PVC WATER PIPE OR SDR 35 PVC SEWER PIPE. CASING SHALL BE ONE CONTINUOUS PIECE.
4. FOR BLOWOFF INSTALLATION, REFER TO DRAWING NO. W-10.
5. CONCRETE COLLAR NOT REQUIRED WHEN VALVE BOX IS LOCATED IN CONCRETE SIDEWALK AREA.
6. OPERATING NUT EXTENSION REQUIRED IF DEEPER THAN 6 FEET.

VALVE BOX DETAILS	REVISION NO. 6	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 01/09/02
		DRAWING NO. W-11



TYPICAL THRUST BLOCK BEND | TYPICAL THRUST BLOCK TEE OUTLET | TYPICAL THRUST BLOCK DEAD END



TYPICAL SECTION THRU THRUST BLOCK

THRUST BLOCK AREA REQUIRED		
FITTINGS	ALLOWABLE SOIL BEARING VALUE 1000 LBS. PER SQ. FT.	
	"A"	"B"
6" LINE OR SMALLER		
22 1/2°	1'-6"	1'-6"
45°	2'-0"	2'-0"
90°	3'-0"	2'-6"
TEE OUTLET	2'-6"	2'-0"
DEAD END	2'-6"	2'-0"
8" LINE		
22 1/2°	2'-0"	2'-0"
45°	3'-0"	2'-6"
90°	4'-0"	3'-0"
TEE OUTLET	3'-0"	3'-0"
DEAD END	3'-0"	3'-0"
10" LINE		
22 1/2°	3'-0"	2'-0"
45°	3'-6"	3'-0"
90°	5'-0"	4'-0"
TEE OUTLET	4'-0"	3'-6"
DEAD END	4'-0"	3'-6"
12" LINE		
22 1/2°	3'-0"	3'-0"
45°	4'-0"	4'-0"
90°	7'-0"	4'-0"
TEE OUTLET	5'-0"	4'-0"
DEAD END	5'-0"	4'-0"

NOTES:

1. ALL THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED SOIL.
2. RESTRAINT SYSTEM FOR VERTICAL PIPE BENDS SHALL BE APPROVED BY THE CITY ENGINEER.
3. THRUST RESTRAINT SYSTEMS FOR PIPES LARGER THAN 12" SHALL BE DESIGNED ON A CASE BY CASE BASIS AND SHALL BE APPROVED BY THE CITY ENGINEER.

THRUST BLOCK DETAILS	REVISION NO. 4	APPROVED BY CITY ENGINEER: DATE: 09/27/2015
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE NONE	SUPERSEDES DWG. DATED 01/09/02
		DRAWING NO. W-12

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VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
CITY DETAILS

PROJECT NO.
23-13018

DRAWING
C1.5

STATE OF CALIFORNIA
DEPARTMENT OF HEALTH
CRITERIA FOR THE SEPARATION OF WATER MAINS WITH SANITARY SEWERS AND STORM SEWERS

A. BASIC STANDARDS

THE "CALIFORNIA WATERWORKS STANDARDS" SETS FORTH THE MINIMUM SEPARATION REQUIREMENT FOR WATER MAINS WITH SANITARY AND STORM SEWER LINES. THESE STANDARDS, CONTAINED IN SECTION 64630, TITLE 22, CALIFORNIA ADMINISTRATIVE CODE, SPECIFY:

1) PARALLEL CONSTRUCTION: THE HORIZONTAL DISTANCE BETWEEN PRESSURE WATER MAINS AND SEWER LINES SHALL BE AT LEAST 10 FEET.
2) PERPENDICULAR CONSTRUCTION (CROSSING): PRESSURE WATER MAINS SHALL BE AT LEAST ONE FOOT ABOVE SANITARY SEWER LINES WHERE THESE LINES MUST CROSS.
3) SEPARATION DISTANCES SPECIFIED ABOVE SHALL BE MEASURED FROM THE NEAREST EDGES OF THE FACILITIES.
4) WATER MAINS AND SEWER LINES MUST NOT BE INSTALLED IN THE SAME TRENCH.
5) WATER MAINS AND SEWERS OF 24 INCHES DIAMETER OR GREATER MAY CREATE SPECIAL HAZARDS BECAUSE OF THE LARGE VOLUMES OF FLOW. INSTALLATIONS OF WATER MAINS AND SEWER LINES 24 INCHES DIAMETER OR LARGER MUST BE REVIEWED AND APPROVED BY THE HEALTH AGENCY AND CITY ENGINEER PRIOR TO CONSTRUCTION.
6) WHEREVER THE WORD "SEWER" IS USED IN CONNECTION WITH ANY REQUIREMENTS AS SHOWN ON DRAWINGS S–4, PAGE 4 & 5 THE WORD SHALL APPLY EQUALLY TO SANITARY OR STORM SEWER INSTALLATIONS.

B. EXCEPTIONS TO BASIC SEPARATION STANDARDS

REFER TO STD DWG S–4, PAGE 4 & 5 FOR SEPARATION DETAILS.

LOCAL CONDITIONS, SUCH AS AVAILABLE SPACE, LIMITED SLOPE, EXISTING STRUCTURES, ETC., MAY CREATE A SITUATION WHERE THERE IS NO ALTERNATIVE BUT TO INSTALL WATER MAINS OR SEWER LINES AT A DISTANCE LESS THAN THAT REQUIRED BY THE BASIC SEPARATION STANDARDS. IN SUCH CASES, ALTERNATIVE CONSTRUCTION CRITERIA AS SPECIFIED IN SECTION C SHALL BE FOLLOWED, SUBJECT TO THE SPECIAL PROVISIONS IN SECTION D.

C. ALTERNATE CRITERIA FOR CONSTRUCTION

THE CONSTRUCTION CRITERIA FOR SEWER LINES OR WATER MAINS WHERE THE BASIC SEPARATION STANDARDS CANNOT BE ATTAINED ARE SHOWN ON DRAWINGS S–4, PAGE 4 & 5. THERE ARE TWO SITUATIONS ENCOUNTERED:

CASE 1 –– NEW SEWER LINE – NEW OR EXISTING WATER MAIN.

CASE 2 –– NEW WATER MAIN – EXISTING SEWER LINE.

FOR CASE 1, THE ALTERNATE CONSTRUCTION CRITERIA APPLY TO THE SEWER LINE.

FOR CASE 2, THE ALTERNATE CONSTRUCTION CRITERIA MAY APPLY TO EITHER OR BOTH WATER MAIN AND SEWER LINE.

THE CONSTRUCTION CRITERIA APPLY TO THE HOUSE LATERALS THAT CROSS ABOVE A PRESSURE WATER MAIN BUT NOT TO THOSE HOUSE LATERALS THAT CROSS BELOW A PRESSURE WATER MAIN.

CALIFORNIA HEALTH DEPARTMENT REQUIREMENTS	REVISION NO.	APPROVED BY CITY ENGINEER:
	4	DATE: 09/27/2016
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE	SUPERSEDES DWG. DATED	DRAWING NO.
	NONE	01/09/02	S-4

CASE 1: NEW SEWER BEING INSTALLED (DRAWING NO. S–4, PAGE 4)

ZONE — SPECIAL CONSTRUCTION REQUIRED FOR SEWER

A — SEWER LINES PARALLEL TO WATER MAINS SHALL NOT BE PERMITTED IN THIS ZONE WITHOUT APPROVAL FROM THE RESPONSIBLE HEALTH AGENCY AND WATER SUPPLIER.

B — A SEWER LINE PLACED PARALLEL TO A WATER LINE SHALL BE CONSTRUCTED OF:

1. EXTRA STRENGTH VITRIFIED CLAY PIPE WITH COMPRESSION JOINTS.
2. PLASTIC SEWER PIPE WITH RUBBER RING JOINTS (PER ASTM D3034) OR EQUIVALENT.
3. CAST OR DUCTILE IRON PIPE WITH COMPRESSION JOINTS.

C — A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF:

1. DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING AND MECHANICAL JOINTS.
2. A CONTINUOUS SECTION OF CLASS 200 (DR 14 PER AWWA C900) PLASTIC PIPE OR EQUIVALENT, CENTERED OVER THE PIPE BEING CROSSED.
3. ANY SEWER PIPE WITHIN A CONTINUOUS SLEEVE.

CASE 2: NEW WATER MAINS BEING INSTALLED (DRAWING NO. S–4, PAGE 5)

ZONE — SPECIAL CONSTRUCTION REQUIRED FOR SEWER

A — NO WATER MAINS PARALLEL TO SEWERS WITHIN 10 FEET SHALL BE CONSTRUCTED WITHOUT APPROVAL FROM THE HEALTH AGENCY.

B — IF THE SEWER PARALLELING THE WATER MAIN DOES NOT MEET THE CASE 1, ZONE B, REQUIREMENTS, THE WATER MAIN SHALL BE CONSTRUCTED OF:

1. CEMENT LINED DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING.
2. DIPPED AND WRAPPED ONE–FOURTH–INCH–THICK WELDED STEEL PIPE.
3. CLASS 200 PRESSURE RATED PLASTIC WATER PIPE (DR 14 PER AWWA C900) OR EQUIVALENT.
4. REINFORCED CONCRETE PRESSURE PIPE, STEEL CYLINDER TYPE, PER AWWA (C300–74 OR C301–79 OR C303–70).

C — IF THE SEWER CROSSING THE WATER MAIN DOES NOT MEET THE CASE 1, ZONE C, REQUIREMENTS, THE WATER MAIN SHALL HAVE NO JOINTS IN ZONE C AND BE CONSTRUCTED OF:

CALIFORNIA HEALTH DEPARTMENT REQUIREMENTS	REVISION NO.	APPROVED BY CITY ENGINEER:
	4	DATE: 09/27/2016
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE	SUPERSEDES DWG. DATED	DRAWING NO.
	NONE	01/09/02	S-4

1. CEMENT LINED DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING.
2. CLASS 200 PRESSURE RATED PLASTIC WATER PIPE (DR 14 PER AWWA C900) OR EQUIVALENT.
3. REINFORCED CONCRETE PRESSURE PIPE, STEEL CYLINDER TYPE, PER AWWA (C300–74 OR C301–79 OR C303–70). REQUIRES SPECIFIC DESIGN APPROVAL OF PIPE AND FITTING PRIOR TO POSSIBLE USE.

D — IF THE SEWER CROSSING THE WATER MAIN DOES NOT MEET THE REQUIREMENTS FOR ZONE D, CASE 1, THE WATER MAIN SHALL HAVE NO JOINTS WITHIN FOUR FEET FROM EITHER SIDE OF THE SEWER AND SHALL BE CONSTRUCTED OF:

1. CEMENT LINED DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING.
2. CLASS 200 PRESSURE RATED PLASTIC WATER PIPE (DR 14 PER AWWA C900) OR EQUIVALENT.
3. REINFORCED CONCRETE PRESSURE PIPE, STEEL CYLINDER TYPE, PER AWWA (C300–74 OR C301–79 OR C303–70). REQUIRES SPECIFIC DESIGN APPROVAL OF PIPE AND FITTING PRIOR TO POSSIBLE USE.

D SPECIAL PROVISIONS

1. THE BASIC SEPARATION STANDARDS ARE APPLICABLE UNDER NORMAL CONDITIONS FOR SEWAGE COLLECTION LINES AND WATER DISTRIBUTION MAINS. MORE STRINGENT REQUIREMENTS MAY BE NECESSARY IF CONDITIONS, SUCH AS HIGH GROUND WATER EXIST.
2. SEWER LINES SHALL NOT BE INSTALLED WITHIN 25 FEET HORIZONTALLY OF A LOW HEAD (5 PSI OR LESS PRESSURED) WATER MAIN.
3. NEW WATER MAINS AND SEWER SHALL BE PRESSURE TESTED WHERE THE CONDUITS ARE LOCATED TEN FEET APART OR LESS.
4. IN THE INSTALLATION OF WATER MAINS OR SEWER LINES, MEASURES SHOULD BE TAKEN TO PREVENT OR MINIMIZE DISTURBANCES OF THE EXISTING LINE.
5. SPECIAL CONSIDERATION SHALL BE GIVEN TO THE SELECTION OF PIPE MATERIALS IF CORROSIVE CONDITIONS ARE LIKELY TO EXIST.
6. SEWER FORCE MAINS
   a. SEWER FORCE MAINS SHALL NOT BE INSTALLED WITHIN TEN FEET (HORIZONTALLY) OF A WATER MAIN.
   b. WHEN A SEWER FORCE MAIN MUST CROSS A WATER LINE, THE FORCE MAIN SHOULD BE AS CLOSE TO PERPENDICULAR AS PRACTICAL. THE SEWER FORCE MAIN SHOULD BE AT LEAST ONE FOOT BELOW THE WATER LINE.
   c. WHEN A NEW SEWER FORCE MAIN CROSSES UNDER AN EXISTING WATER MAIN, ALL PORTIONS OF THE SEWER FORCE MAIN WITHIN TEN FEET (HORIZONTALLY) OF THE WATER MAIN SHALL BE ENCLOSED IN A CONTINUOUS SLEEVE.
   d. WHEN A NEW WATER MAIN CROSSES OVER AN EXISTING SEWER FORCE MAIN, THE WATER MAIN SHALL BE CONSTRUCTED OF PIPE MATERIALS WITH A MINIMUM RATED WORKING PRESSURE OF 200 PSI OR EQUIVALENT PRESSURE RATING.

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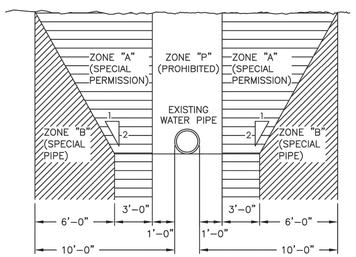
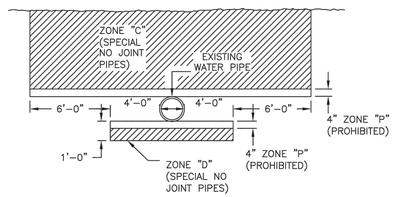
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE	SUPERSEDES DWG. DATED	DRAWING NO.
	NONE	01/09/02	S-4

SPECIAL CONSTRUCTION REQUIREMENTS
(TO BE USED ONLY WHERE REQUIRED SEPARATION CANNOT BE OBTAINDED)
CASE 1 – NEW SEWER BEING INSTALLED
ZONES A,B,C. AND D INDICATE RESTRICTED AREAS.
ZONES P INDICATE PROHIBITED USE AREAS.



PARALLEL CONSTRUCTION



PERPENDICULAR CONSTRUCTION

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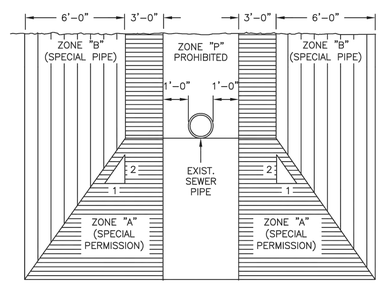
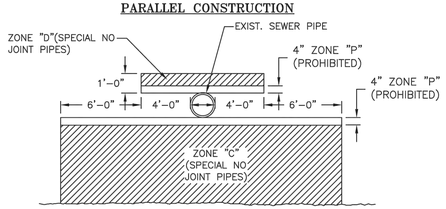
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE	SUPERSEDES DWG. DATED	DRAWING NO.
	NONE	01/09/02	S-4

SPECIAL CONSTRUCTION REQUIREMENTS
(TO BE USED ONLY WHERE REQUIRED SEPARATION CANNOT BE OBTAINDED)
CASE 2 – NEW WATER LINE BEING INSTALLED
ZONES A,B,C. AND D INDICATE RESTRICTED AREAS.
ZONES P INDICATE PROHIBITED USE AREAS.



PARALLEL CONSTRUCTION



PERPENDICULAR CONSTRUCTION

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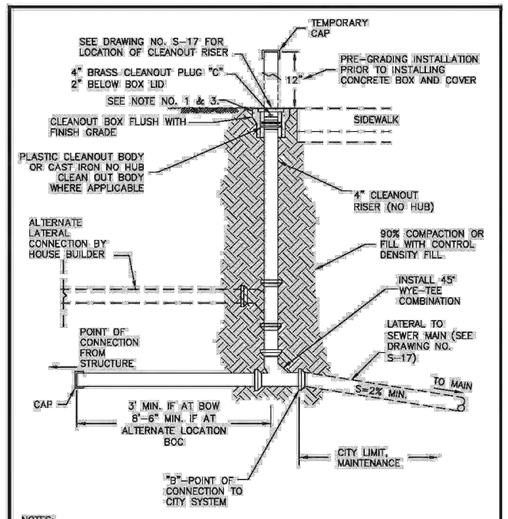
	NONE	01/09/02	S-4



NOTES:

1. ALL FACILITIES TO BE INSTALLED BY SUBDIVIDER, EXCEPT CLEANOUT, BOX AND COVER WHICH SHALL BE INSTALLED BY PLUMBER. ALL FACILITIES ABOVE POINT "B" TO BE MAINTAINED BY PROPERTY OWNER IN ACCORDANCE WITH THE UNIFORM PLUMBING CODE.
2. ALL FACILITIES BELOW POINT "B" TO BE MAINTAINED BY THE CITY THROUGH PROPERTY OWNER'S CLEANOUT "C".
3. WHEN CLEANOUT FALLS IN DRIVEWAY, INSTALL "CHRISTY" #FOBC OR "BROOKS" #1–SP WITH CAST IRON TRAFFIC COVER (OR EQUAL CONCRETE BOX AND CAST IRON COVER). "BROOKS" #3–RT WITH CAST IRON COVER MAY ALSO BE USED.

CLEANOUT	REVISION NO.	APPROVED BY CITY ENGINEER:
	7	DATE: 09/27/2016
CITY OF STOCKTON DEPARTMENT OF PUBLIC WORKS	SCALE	SUPERSEDES DWG. DATED	DRAWING NO.
	NONE	11/25/03	S-18

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CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

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CITY DETAILS

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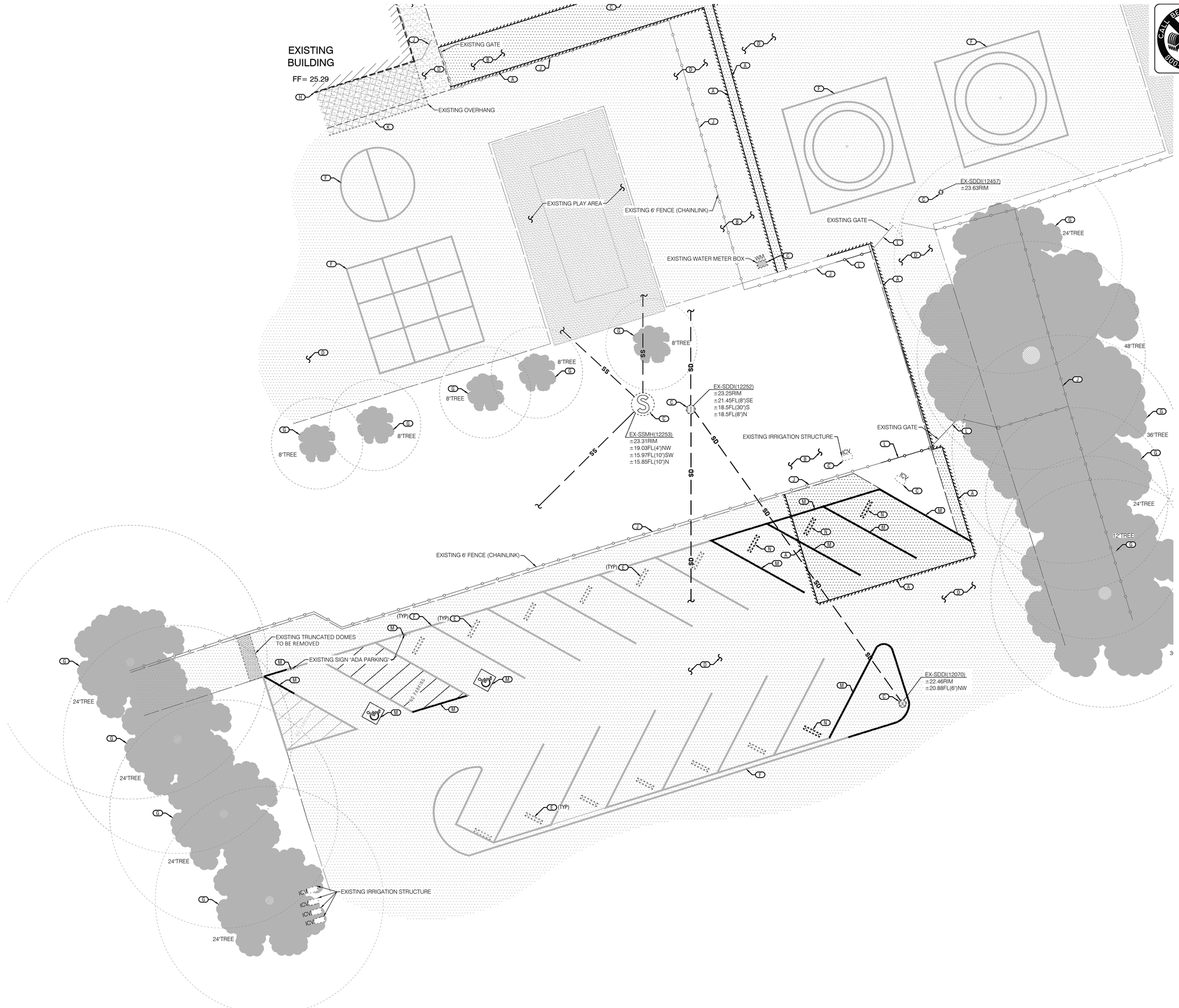

1" = 10'

LEGEND

- EXISTING CONCRETE
- EXISTING PAVEMENT
- EXISTING BUILDING OVERHANG
- EXISTING PAVEMENT TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED

KEY NOTES

- (A) SAWCUT AND REMOVE EXISTING PAVEMENT, CONCRETE, AND OR CURB AS REQUIRED PER THESE PLANS. CONTRACTOR MAY NEED TO FIELD ADJUST SAWCUT LINE TO REMOVE THE PAVEMENT OR CONCRETE SECTION AT A CLEAN EDGE OR NEAREST JOINT BASED ON FIELD CONDITIONS WHILE MAINTAINING ACCESSIBLE TRANSITION TO PROVIDE COMPLIANCE WITH ACCESSIBILITY STANDARDS, WHERE APPLICABLE. LAP JOINT PER DETAIL 1 ON SHEET C1.4 SHALL APPLY TO ALL SAWCUT LOCATIONS ALONG AC PAVEMENT, UNLESS OTHERWISE NOTED.
- (B) CONTRACTOR SHALL "USE EXTREME CAUTION" THROUGHOUT THE COURSE OF CONSTRUCTION AS ADDITIONAL UNDERGROUND LINES AND STRUCTURES NOT SHOWN ON THIS PLAN MAY EXIST AND ARE NOT CLEARLY MARKED OR VISIBLE FROM THE SURFACE. ADDITIONALLY CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING BY LOW HANGING POWER LINES. IN CONJUNCTION WITH CONTACTING USA TO LOCATE UNDERGROUND UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR UTILIZE (GPR) GROUND PENETRATING RADAR UNDERGROUND SERVICES TO IDENTIFY UTILITIES THAT MAY NOT BE VISIBLE FROM THE SURFACE.
- (C) "USE EXTREME CAUTION" CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, OVERHEAD LINES AND UNDERGROUND UTILITIES THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE. COORDINATE WITH APPROPRIATE CONSULTANT AND/OR AGENCY FOR ANY RELOCATION OR REMOVAL. CONTRACTOR SHALL ADJUST TO PROPOSED GRADE AS NECESSARY.
- (D) CONTRACTOR SHALL PROTECT EXISTING CONCRETE, CURB AND/OR PAVEMENT THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE. SEE KEYNOTE 'A' ABOVE.
- (E) CONTRACTOR SHALL PROTECT EXISTING CONCRETE WHEEL STOP THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.
- (F) CONTRACTOR SHALL PROTECT EXISTING STRIPING AND SIGNAGE THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.
- (G) CONTRACTOR SHALL PROTECT EXISTING TREE, SHRUB, AND ROOTS THROUGHOUT THE COURSE OF CONSTRUCTION. EXCAVATION AND GRADING SHOULD BE KEPT TO A MINIMUM AND NOTIFY THE OWNER IMMEDIATELY SHOULD THE TREE NEED TO BE REMOVED TO COMPLETE IMPROVEMENTS.
- (H) CONTRACTOR SHALL PROTECT EXISTING BUILDING THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.
- (J) CONTRACTOR SHALL PROTECT EXISTING FENCE, GATE AND/OR MOWSTRIP THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.
- (K) CONTRACTOR SHALL PROTECT EXISTING OVERHEAD STRUCTURES AND COLUMNS THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.
- (L) CONTRACTOR SHALL REMOVE EXISTING FENCE, GATE AND/OR MOWSTRIP, AND DISPOSE OF OFFSITE AT THE CONTRACTOR'S EXPENSE.
- (M) CONTRACTOR SHALL REMOVE EXISTING STRIPING AND/OR SIGNAGE PER CITY OF STOCKTON STANDARDS AND SPECIFICATIONS.
- (N) CONTRACTOR SHALL REMOVE EXISTING CONCRETE WHEEL STOP, AND DISPOSE OF OFFSITE AT THE CONTRACTOR'S EXPENSE.
- (P) CONTRACTOR SHALL REMOVE EXISTING PLAYGROUND EQUIPMENT AND DISPOSE OF OFFSITE AT CONTRACTOR'S EXPENSE.

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DRAWING TITLE
TOPOGRAPHIC AND DEMOLITION PLAN

PROJECT NO.
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C2.1

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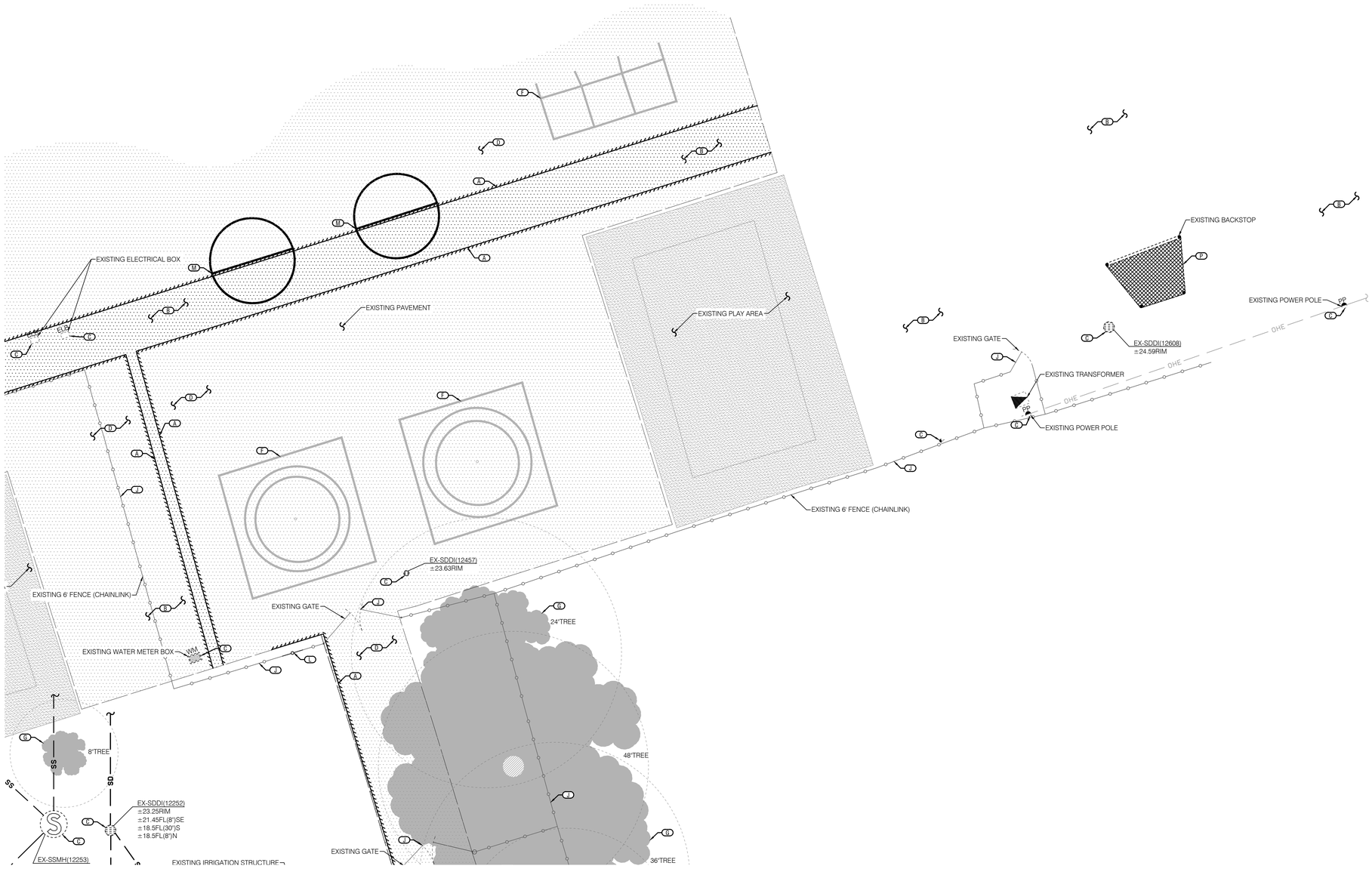
CIVIL
STATE OF CALIFORNIA



10 5 0 10
1" = 10'

LEGEND

- EXISTING CONCRETE
- EXISTING PAVEMENT
- EXISTING BUILDING OVERHANG
- EXISTING PAVEMENT TO BE REMOVED
- EXISTING CONCRETE TO BE REMOVED

KEY NOTES

(A) SAWCUT AND REMOVE EXISTING PAVEMENT, CONCRETE, AND OR CURB AS REQUIRED PER THESE PLANS. CONTRACTOR MAY NEED TO FIELD ADJUST SAWCUT LINE TO REMOVE THE PAVEMENT OR CONCRETE SECTION AT A CLEAN EDGE OR NEAREST JOINT BASED ON FIELD CONDITIONS WHILE MAINTAINING ACCESSIBLE TRANSITION TO PROVIDE COMPLIANCE WITH ACCESSIBILITY STANDARDS, WHERE APPLICABLE. LAP JOINT PER DETAIL 1 ON SHEET C1.4 SHALL APPLY TO ALL SAWCUT LOCATIONS ALONG AC PAVEMENT, UNLESS OTHERWISE NOTED.

(B) CONTRACTOR SHALL "USE EXTREME CAUTION" THROUGHOUT THE COURSE OF CONSTRUCTION AS ADDITIONAL UNDERGROUND LINES AND STRUCTURES NOT SHOWN ON THIS PLAN MAY EXIST AND ARE NOT CLEARLY MARKED OR VISIBLE FROM THE SURFACE. ADDITIONALLY CONTRACTOR SHALL USE EXTREME CAUTION WHILE WORKING BY LOW HANGING POWER LINES. IN CONJUNCTION WITH CONTACTING USA TO LOCATE UNDERGROUND UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY IT IS HIGHLY RECOMMENDED THAT THE CONTRACTOR UTILIZE (GPR) GROUND PENETRATING RADAR UNDERGROUND SERVICES TO IDENTIFY UTILITIES THAT MAY NOT BE VISIBLE FROM THE SURFACE.

(C) "USE EXTREME CAUTION" CONTRACTOR SHALL PROTECT EXISTING STRUCTURES, OVERHEAD LINES AND UNDERGROUND UTILITIES THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTORS EXPENSE. COORDINATE WITH APPROPRIATE CONSULTANT AND/OR AGENCY FOR ANY RELOCATION OR REMOVAL. CONTRACTOR SHALL ADJUST TO PROPOSED GRADE AS NECESSARY.

(D) CONTRACTOR SHALL PROTECT EXISTING CONCRETE, CURB AND/OR PAVEMENT THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE. SEE KEYNOTE 'A' ABOVE.

(E) CONTRACTOR SHALL PROTECT EXISTING CONCRETE WHEEL STOP THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTORS EXPENSE.

(F) CONTRACTOR SHALL PROTECT EXISTING STRIPING AND SIGNAGE THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.

(G) CONTRACTOR SHALL PROTECT EXISTING TREE, SHRUB, AND ROOTS THROUGHOUT THE COURSE OF CONSTRUCTION. EXCAVATION AND GRADING SHOULD BE KEPT TO A MINIMUM AND NOTIFY THE OWNER IMMEDIATELY SHOULD THE TREE NEED TO BE REMOVED TO COMPLETE IMPROVEMENTS.

(H) CONTRACTOR SHALL PROTECT EXISTING BUILDING THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.

(J) CONTRACTOR SHALL PROTECT EXISTING FENCE, GATE AND/OR MOWSTRIP THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.

(K) CONTRACTOR SHALL PROTECT EXISTING OVERHEAD STRUCTURES AND COLUMNS THROUGHOUT THE COURSE OF CONSTRUCTION AND REPAIR/REPLACE IF DAMAGED DURING CONSTRUCTION, AT CONTRACTOR'S EXPENSE.

(L) CONTRACTOR SHALL REMOVE EXISTING FENCE, GATE AND/OR MOWSTRIP, AND DISPOSE OF OFFSITE AT THE CONTRACTOR'S EXPENSE.

(M) CONTRACTOR SHALL REMOVE EXISTING STRIPING PER CITY OF STOCKTON STANDARDS AND SPECIFICATIONS.

(N) CONTRACTOR SHALL REMOVE EXISTING CONCRETE WHEEL STOP, AND DISPOSE OF OFFSITE AT THE CONTRACTOR'S EXPENSE.

(P) CONTRACTOR SHALL REMOVE EXISTING PLAYGROUND EQUIPMENT AND DISPOSE OF OFFSITE AT CONTRACTOR'S EXPENSE.

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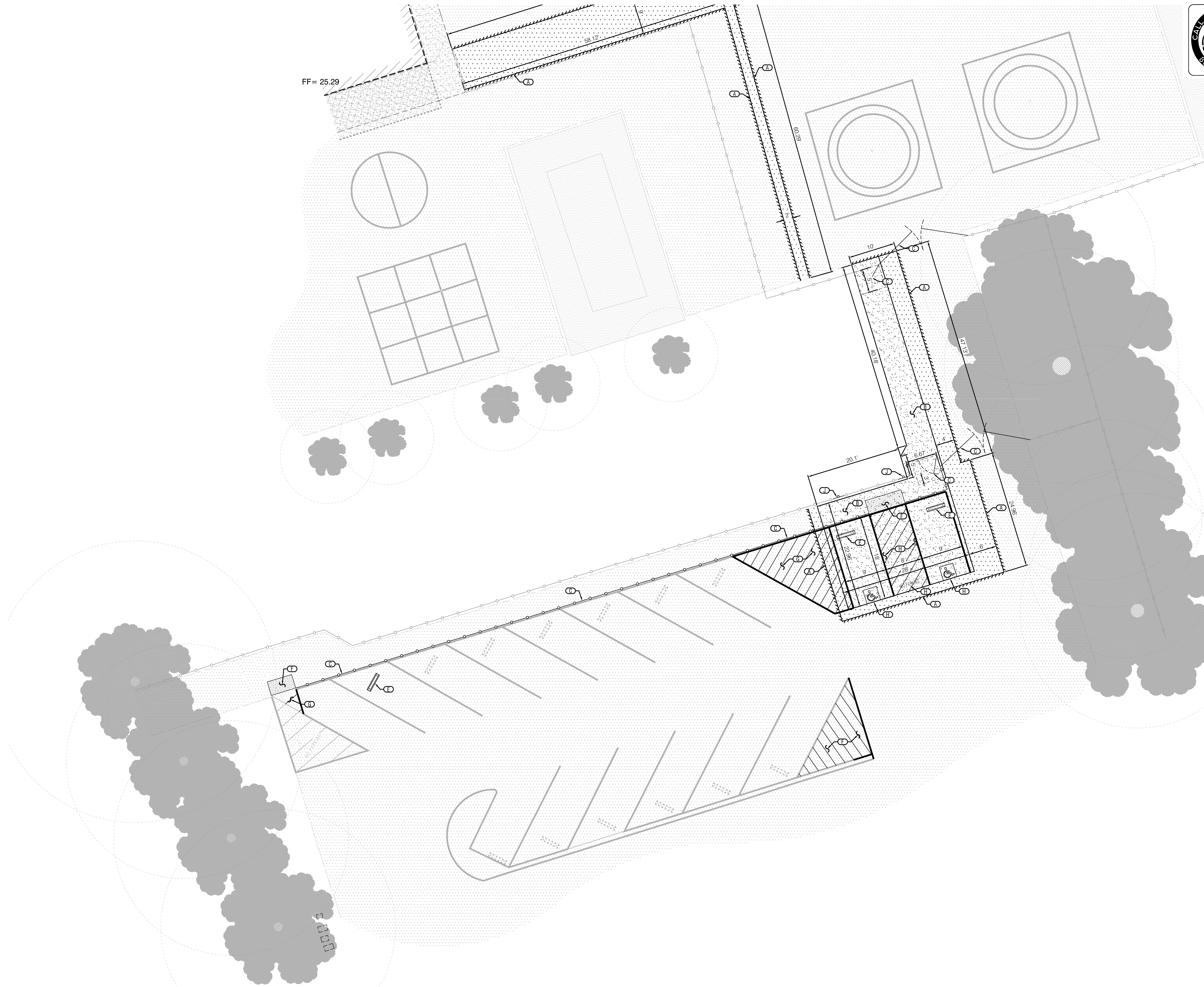
TETER

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
TOPOGRAPHIC AND DEMOLITION PLAN

PROJECT NO.
23-13018

DRAWING
C2.2



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LEGEND

EXISTING CONCRETE

EXISTING PAVEMENT

*PAVEMENT SECTION
TI = 6, R-VALUE = 5, 3"AC/15" CLASS II AB (95% RC)

*CONCRETE SECTION - PEDESTRIAN
6"AC/4" CLASS II AB (95% RC) W/ #4 REBAR @ 24" O.C., BOTH WAYS

*CONTRACTOR SHALL REVIEW GEOTECHNICAL REPORT FOR ADDITIONAL RECOMMENDATIONS INCLUDING SUBGRADE AND AGGREGATE BASE PREPARATION AND COMPACTION AND TO CONFIRM STRUCTURAL SECTIONS SHOWN ABOVE.
**SEE ARCHITECTURAL PLANS FOR SCORING AND CONTROL JOINT LOCATIONS.

KEY NOTES

SEE TOPOGRAPHIC AND DEMOLITION SHEET C2.1-2.2 FOR ADDITIONAL REMOVAL, REPLACEMENT AND PROTECTION NOTES.

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(B) ACCESSIBLE PATH OF TRAVEL NOT TO EXCEED 5.0% MAX RUNNING SLOPE AND 2.0% MAX CROSS SLOPE. ACCESSIBLE PATH OF TRAVEL DETERMINATION, ACCESSIBILITY AND SIGNAGE SHALL BE DETERMINED BY ARCHITECTURAL AND LANDSCAPE PLANS. SEE ARCHITECTURAL AND LANDSCAPE PLANS FOR DIMENSIONS AND DETAILS, INCLUDING HANDRAILS, WHERE APPLICABLE.

(C) CONTRACTOR SHALL INSTALL FENCE AND/OR GATE, AND MOW STRIP PER ARCHITECTURAL PLANS AND SPECIFICATIONS.

(D) CONTRACTOR SHALL CONSTRUCT BUILDING PER ARCHITECTURAL PLANS AND SPECIFICATIONS.

(E) CONTRACTOR SHALL INSTALL CONCRETE WHEEL STOPS PER DETAIL 17 ON SHEET A111.

(F) CONTRACTOR SHALL INSTALL DETECTABLE WARNING SURFACE PER DETAIL 16 ON SHEET A111.

(G) CONTRACTOR SHALL INSTALL STRIPING INCLUDING CROSSWALKS AS INDICATED BY THE ARCHITECT AND THE LATEST EDITIONS OF THE CALIFORNIA BUILDING CODE STANDARDS. SEE ARCHITECTURAL PLANS FOR ADDITIONAL DETAILS AND SPECIFICATIONS.

(H) CONTRACTOR SHALL INSTALL ACCESSIBLE STALL MARKINGS PER ARCHITECTURAL PLANS AND SPECIFICATIONS. SEE SHEET A111 FOR DETAILS.

(J) CONTRACTOR SHALL INSTALL ACCESSIBLE SIGNAGE PER DETAIL 13 ON SHEET A111. USE EXTREME CAUTION WHEN INSTALLING SIGN FOOTINGS AS UNDERGROUND UTILITIES MAY EXIST.

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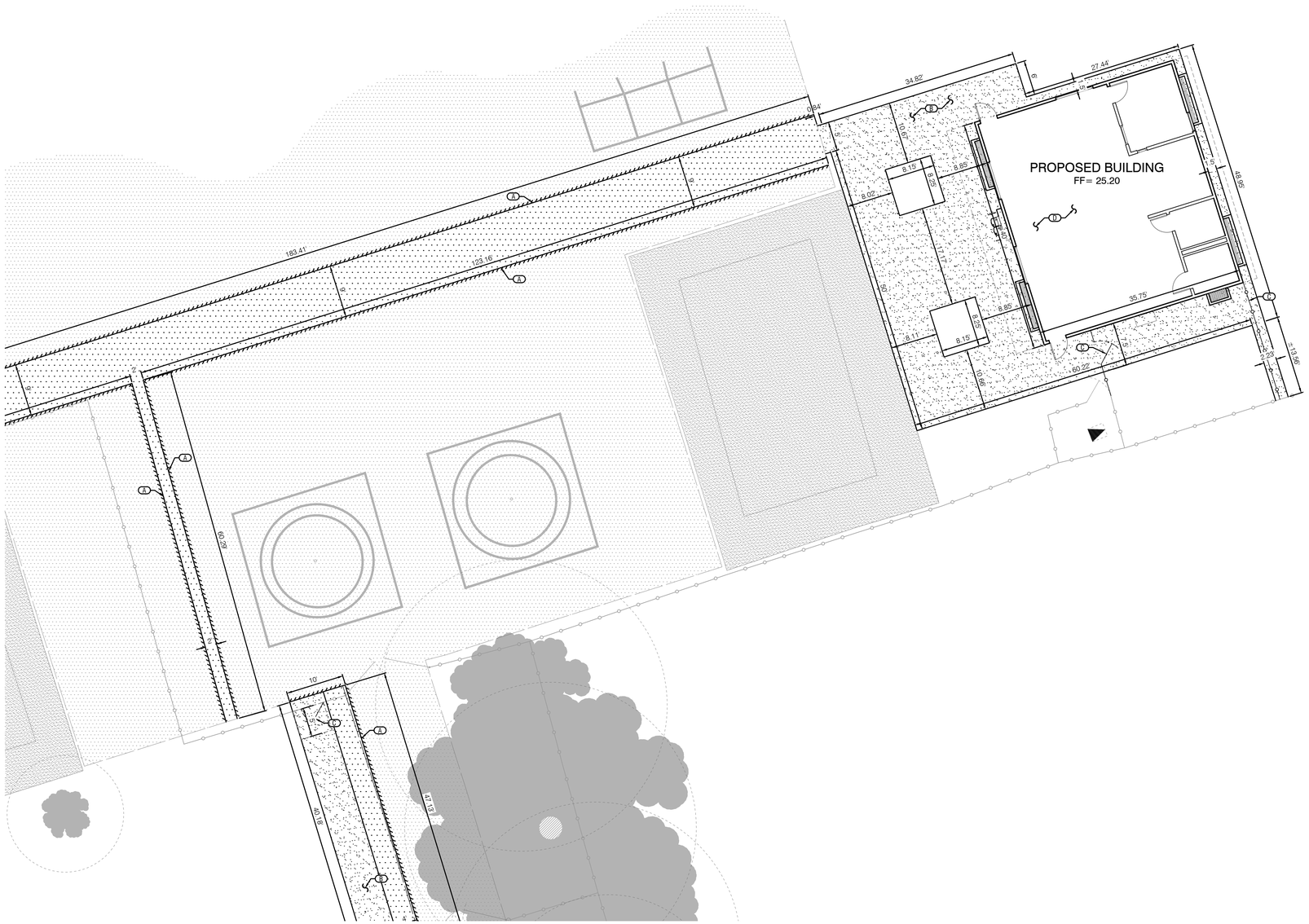
CIVIL IMPROVEMENT PLANS FOR HAMILTON ELEMENTARY SCHOOL

STOCKTON, CALIFORNIA

DRAWING TITLE
DIMENSION AND PAVING PLAN

PROJECT NO.
23-13018

DRAWING
C3.1



10 5 0 10

1" = 10'

LEGEND

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EXISTING PAVEMENT

*PAVEMENT SECTION
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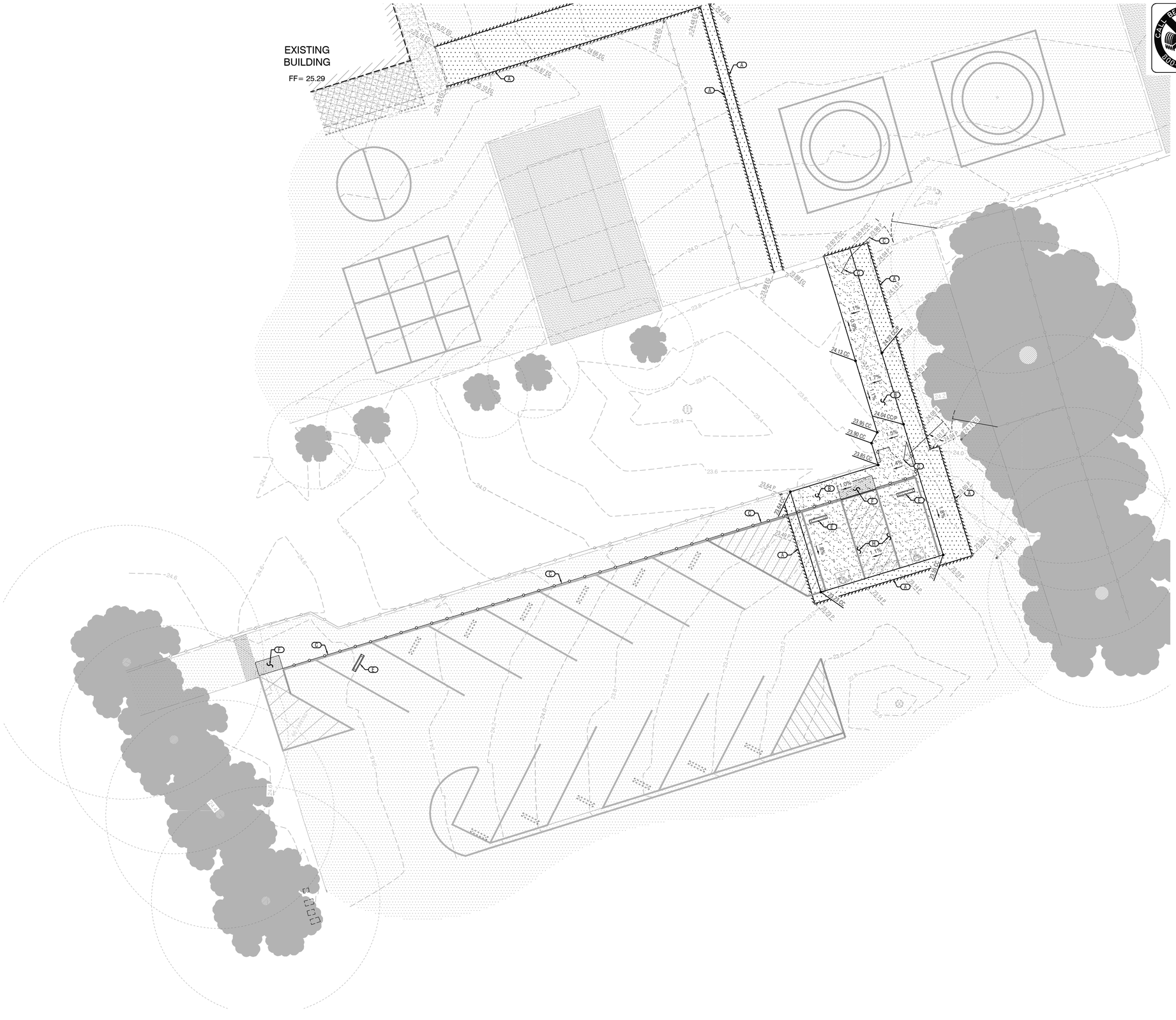
PROJECT NO.
23-13018

DRAWING
C3.2


EXISTING
BUILDING
FF= 25.29
1.5%
0.5%
1.5%
1.5%
1.5%
4.5%
1.0%
1.5%
1.5%
1.5

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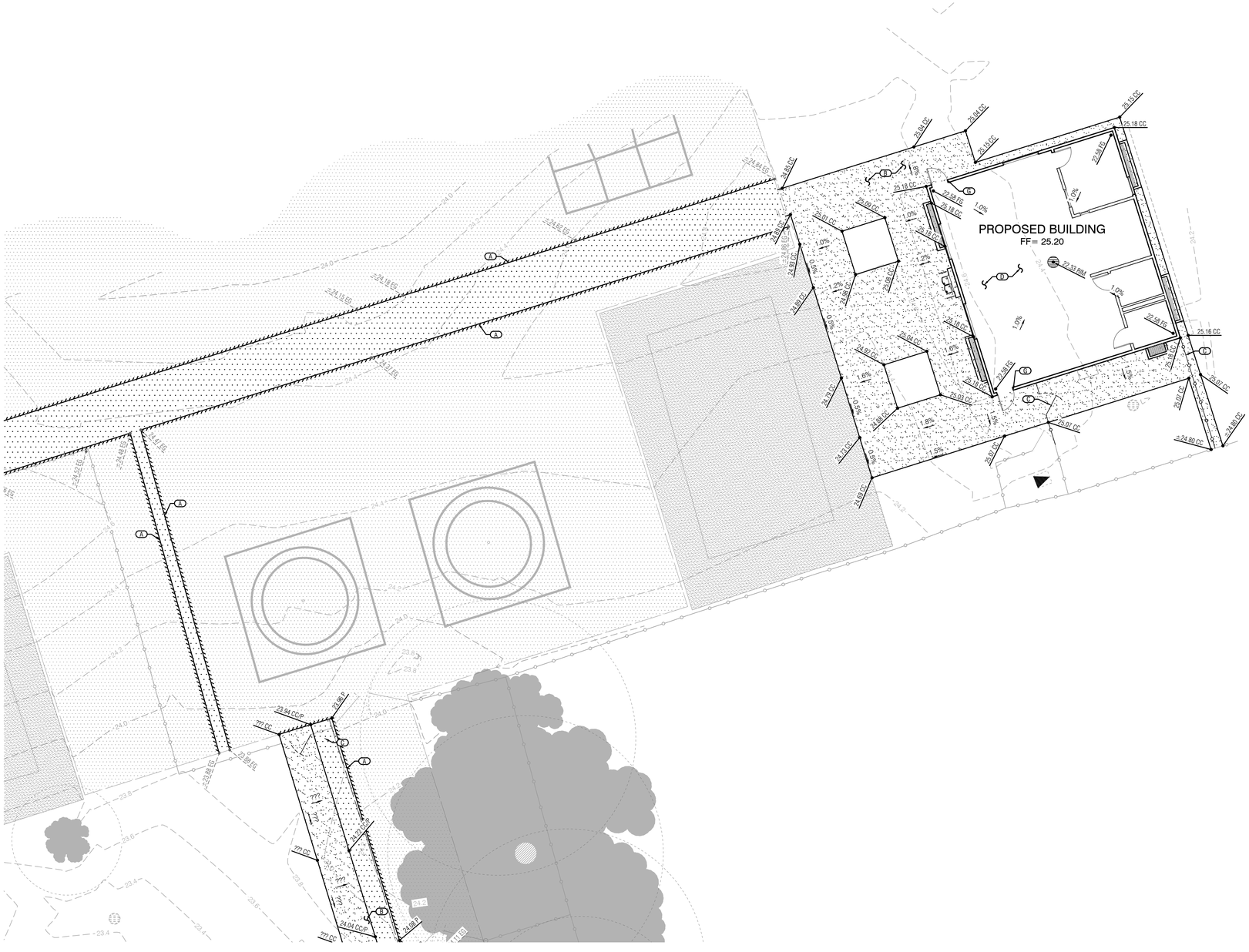

ESTIMATE OF EARTHWORK

SITE	EXCAVATION C.Y.	EMBANKMENT C.Y.
	CUT	FILL
RAW	145	4

KEY NOTES

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(F) CONTRACTOR SHALL INSTALL DETECTABLE WARNING SURFACE PER DETAIL 16 ON SHEET A111.

(G) PRIOR TO CONSTRUCTING ANY CONCRETE OR PAVEMENT THE CONTRACTOR SHALL VERIFY THE FINISH FLOOR ELEVATIONS AT ALL DOORS. CONTRACTOR SHALL HOLD FIELD VERIFIED FINISH FLOOR GRADES, ACCOUNT FOR DOOR THRESHOLDS, AND ADJUST GRADES AS NECESSARY TO STAY IN COMPLIANCE WITH CURRENT ACCESSIBLE STANDARDS. CONTRACTOR SHALL NOTIFY NORTHSTAR ENGINEERING IMMEDIATELY IF ANY GRADE ADJUSTMENTS WILL CREATE ANY ACCESSIBILITY ISSUES.

(H) CONTRACTOR SHALL CONSTRUCT ACCESSIBLE PARKING STALLS AND UNLOADING AREAS WITH A MAXIMUM 2% SLOPE IN ALL DIRECTIONS.

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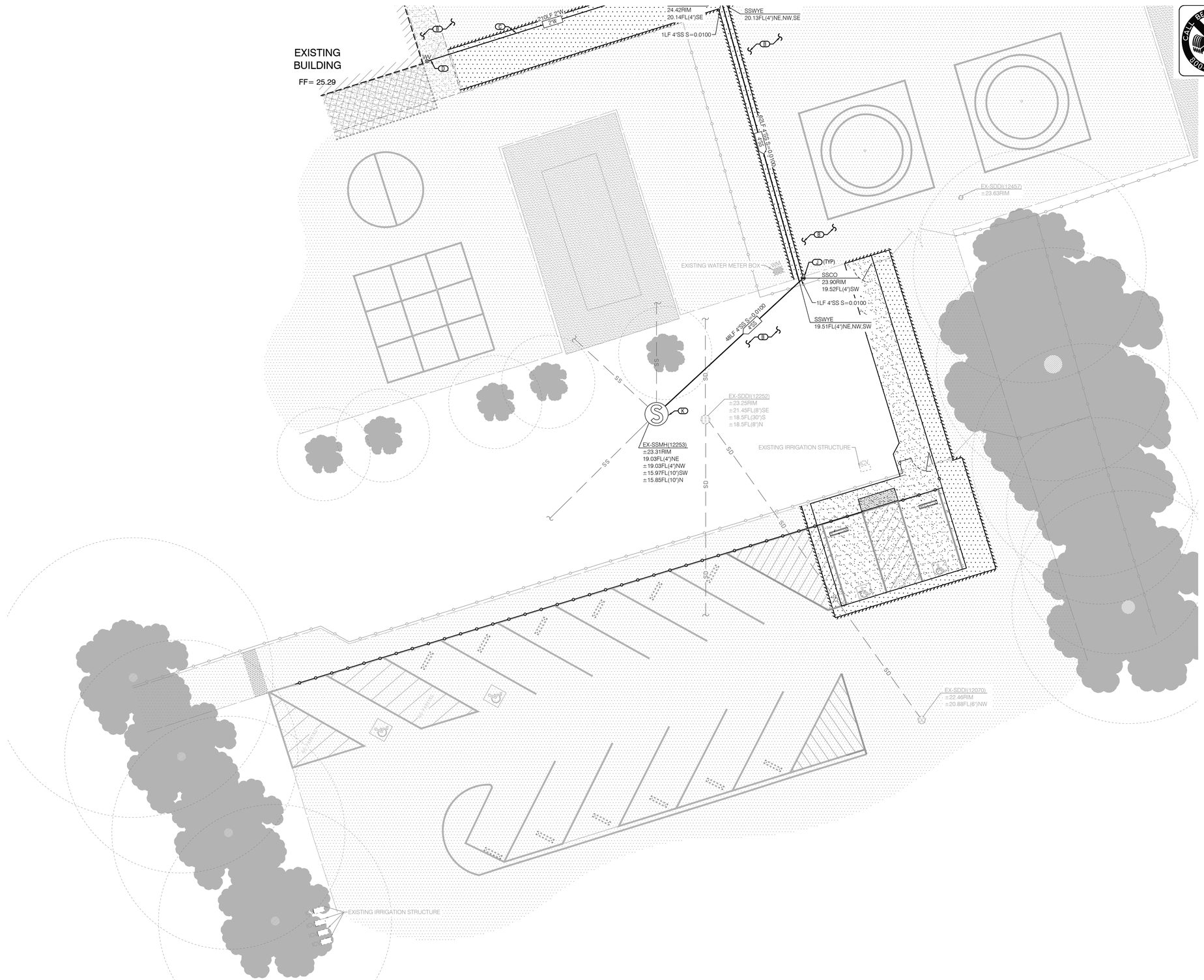
CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
GRADING AND DRAINAGE PLAN

PROJECT NO.
23-13018

DRAWING
C4.2



10 5 0 10

1" = 10'

KEY NOTES

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(B) CONTRACTOR SHALL "USE EXTREME CAUTION" THROUGHOUT THE COURSE OF CONSTRUCTION AS TO AVOID EXISTING UNDERGROUND LINES AND STRUCTURES THAT MAY CONFLICT WITH PROPOSED IMPROVEMENTS.

(C) CONTRACTOR SHALL INSTALL WATER PIPES WITH SUFFICIENT ENOUGH DEPTH TO MAINTAIN 1' MINIMUM VERTICAL CLEARANCE FORM OUTSIDE DIAMETER OF PIPES AND COMPLY WITH THE MOST CURRENT STATE HEALTH CODE AND THE CALIFORNIA BUILDING AND PLUMBING CODE STANDARDS. CONTRACTOR SHALL DEEPEN WATER PIPES AS NECESSARY AND USE EXTREME CAUTION WHEN PLACING THRUST BLOCKS AS TO AVOID CONFLICTS WITH OTHER UTILITY PIPES. CONTRACTOR SHALL INSTALL REDUCERS AS REQUIRED. WATER VALVES SHALL BE INSTALLED ON 4" WATER PIPES OR LARGER AND BALL VALVES/CORP STOPS SHOULD BE INSTALLED ON 2" WATER PIPES OR SMALLER. THRUST BLOCKS SHALL BE INSTALLED AT FIRE HYDRANTS, BLOW-OFFS, TEES, CAPS, BENDS, ENDS, AND CHANGES IN SIZE AND/OR DIRECTION. WATER SEPARATION SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 720.0 AND TABLE 7-7 OF THE CALIFORNIA PLUMBING CODE. SEE CITY OF STOCKTON STANDARD DETAIL W-12 FOR THRUST BLOCK DETAILS AND SPECIFICATIONS.

(D) CONTRACTOR SHALL CONNECT TO EXISTING DOMESTIC WATER LINE PER CITY OF STOCKTON STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL EXCAVATE EXISTING WATER LINE TO VERIFY THE HORIZONTAL AND VERTICAL ALIGNMENT PRIOR TO THE INSTALLATION OF THE PROPOSED WATER PIPE. CONTRACTOR SHALL INFORM THE ENGINEER IF THE ALIGNMENTS ARE DIFFERENT THAN SHOWN.

(E) CONTRACTOR SHALL INSTALL DRINKING FOUNTAIN PER ARCHITECTURAL PLANS AND SPECIFICATIONS.

(F) CONTRACTOR SHALL INSTALL STORM DRAINAGE LINE PER ARCHITECTURAL PLANS AND SPECIFICATIONS.

(G) CONTRACTOR SHALL INSTALL STORM DRAIN INLET PER ARCHITECTURAL PLANS AND SPECIFICATIONS.

(H) CONTRACTOR SHALL INSTALL STORM DRAIN DRY WELL PER ARCHITECTURAL PLANS AND SPECIFICATIONS.

(I) CONTRACTOR SHALL INSTALL SEWER CLEANOUT PER DETAIL 7 ON SHEET C1.4.

(K) CONTRACTOR SHALL CONNECT TO EXISTING SANITARY SEWER LINE PER CITY OF STOCKTON STANDARDS AND SPECIFICATIONS. CONTRACTOR SHALL EXCAVATE EXISTING SANITARY SEWER LINE TO VERIFY THE HORIZONTAL AND VERTICAL ALIGNMENT PRIOR TO THE INSTALLATION OF THE PROPOSED SEWER PIPE. CONTRACTOR SHALL INFORM THE ENGINEER IF THE ALIGNMENTS ARE DIFFERENT THAN SHOWN.

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STOCKTON, CALIFORNIA

DRAWING TITLE
COMPOSITE UTILITY PLAN

PROJECT NO.
23-13018

DRAWING
C5.1

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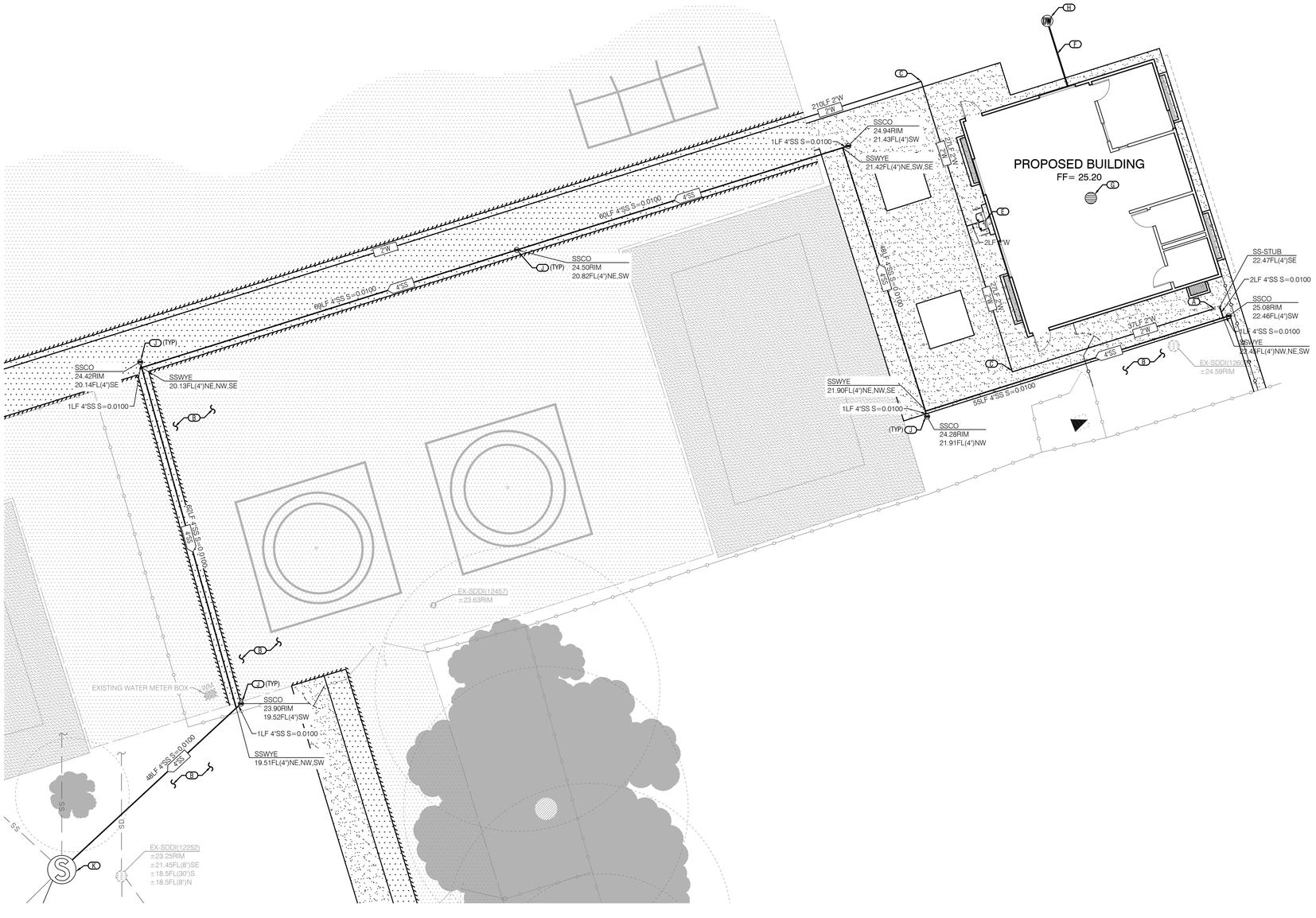

KEY NOTES

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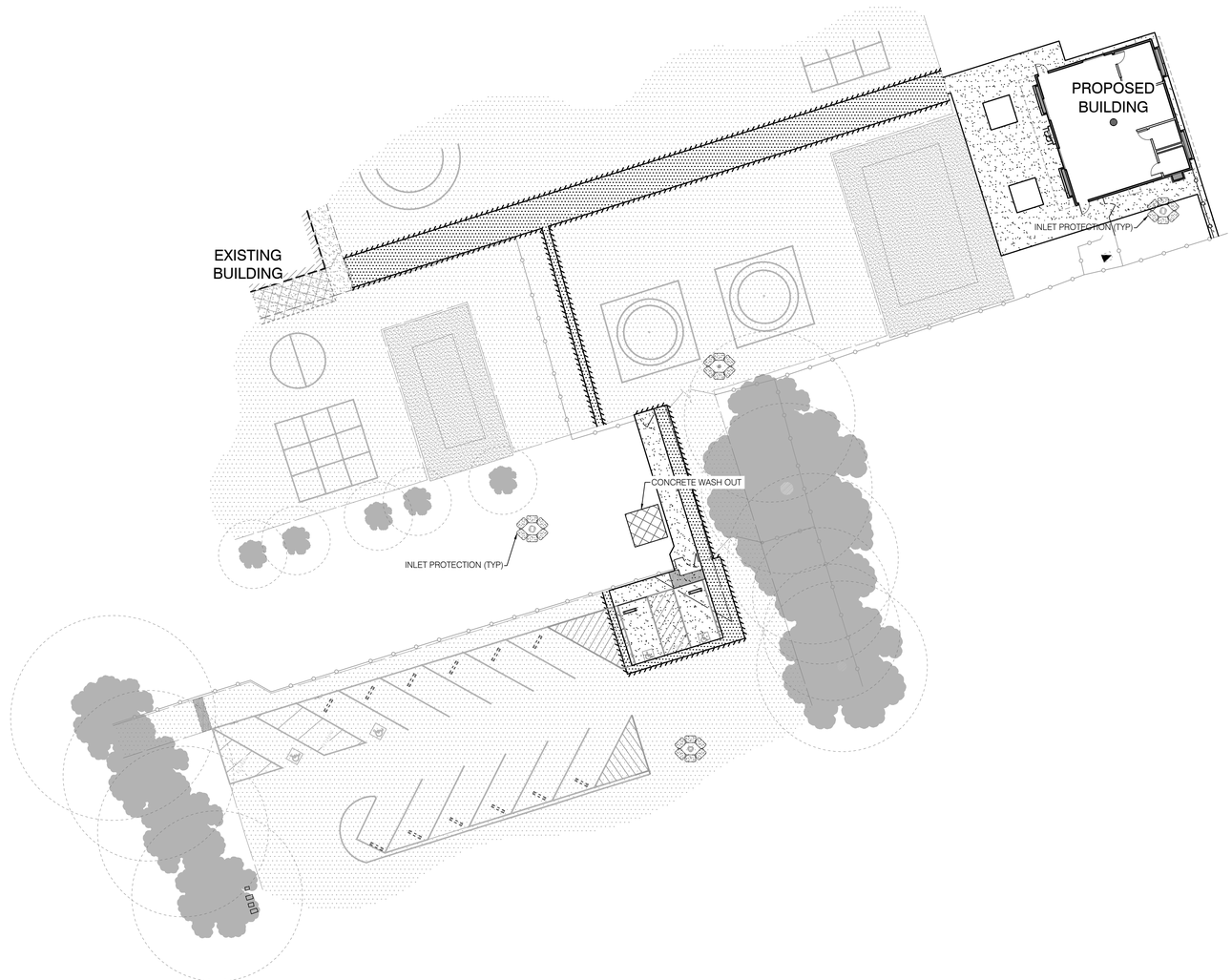

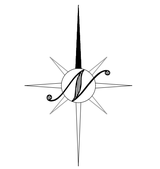

20 10 0 20
1" = 20'

LEGEND

	INLET PROTECTION (SEE DETAILS "A", "B", C, AND "D") SHALL BE PLACED AROUND ALL CATCH BASINS WITHIN THE PROJECT DRAINAGE LIMITS, INCLUDING BUT NOT LIMITED TO ALL LANDSCAPE DRAINAGE. ALSO, INLET PROTECTION SHALL BE PLACED AT THE FIRST INLET DOWNSTREAM FROM THE PROJECT SITE (ON EITHER DIRECTION).
	CONCRETE WASHOUT AREA (SEE DETAIL "E")
	STRAW WATTLE (SEE DETAIL "F") TO BE PLACED AT ALL LOCATIONS SHOWN. STRAW WATTLES SHALL ALSO BE PLACED AT THE FRONT OF ANY LOT WHERE AN UNDERCUT IS NOT PRESENT.
	TEMPORARY STABILIZED CONSTRUCTION ENTRANCE (SEE DETAIL 'H') TO BE DETERMINED BY CONTRACTOR IN FIELD.
	CONSTRUCTION STORAGE AREA. CONTRACTOR SHALL FIELD LOCATE PRIOR TO CONSTRUCTION.

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DRAWING TITLE
EROSION CONTROL PLAN

PROJECT NO.
23-13018

DRAWING
C6.1

EROSION CONTROL NOTES

1. THESE PLANS DEPICT APPROPRIATE MEASURES TO CONTROL EROSION ON THE SITE TO BE GRADED AS SHOWN ON THE PLANS THE NATIVE VEGETATION WILL BE REMOVED ONLY FROM THOSE AREAS TO BE GRADED. AREAS OUTSIDE OF AND DOWNSLOPE OF THE LIMITS OF GRADING WILL BE PROTECTED FROM SILT LADEN RUNOFF BY PERIMETER SILT FENCES AS DEPICTED ON THIS PLAN. SLOPED AREAS WHICH HAVE BEEN STRIPPED OF VEGETATION AND NEW SLOPES OVER FOUR FEET HIGH CREATED DURING THE GRADING OPERATION WILL BE TRACKWALKED & HYDROSEEDED.

2. ALL EROSION SEDIMENT STRUCTURES SHALL BE INSPECTED AFTER EACH RAINSTORM AND SHALL BE CLEANED OUT AS NECESSARY.

3. A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF GRADING. THE LOCATION IS SHOWN ON THESE PLANS. ALL CONSTRUCTION TRAFFIC ENTERING THE PAVED ROAD MUST CROSS THE ENTRANCE.

4. THE CONTRACTOR IS RESPONSIBLE FOR ALL ASPECTS OF EROSION CONTROL FOR THE LIFE OF THE PROJECT AND SHALL INSTALL AND MAINTAIN ANY DEVICES AND MEASURES NECESSARY TO THE SATISFACTION OF THE CITY ENGINEER, DURING CONSTRUCTION ACTIVITIES.

5. TO MINIMIZE EROSION OF GRADED BANKS, ALL GRADED BANKS AND STOCKPILE AREAS SHALL BE HYDROSEEDED, LANDSCAPED OR SEALED.

6. STRAW BALES, PIECES OF WOOD, FABRIC OR OTHER SUITABLE MATERIALS SHALL BE USED TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING ANY COMPLETED STORM DRAIN INLETS. THESE PROTECTION MEASURES SHALL BE MAINTAINED UNTIL THE PROJECT IS COMPLETED.

7. WHEN TEMPORARY STRUCTURES HAVE SERVED THEIR INTENDED PURPOSE AND THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED. THE EMBANKMENT AND RESULTING SEDIMENT DEPOSITS ARE TO BE LEVELED OR OTHERWISE DISPOSED OF BY THE CONTRACTOR AS RECOMMENDED BY THE SOILS ENGINEER.

8. GRADED AREAS MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE SHALL BE DIRECTED TOWARDS DRAINAGE INLETS.

9. TEMPORARY EROSION CONTROL DEVICES SHOWN ON THIS PLAN WHICH INTERFERE WITH THE WORK SHALL BE RELOCATED OR MODIFIED AS AND WHEN THE INSPECTOR SO DIRECTS AS THE WORK PROGRESSES.

10. ALL LOOSE SOIL AND DEBRIS SHALL BE REMOVED FROM THE STREET AREAS UPON STARTING OPERATIONS AND PERIODICALLY THEREAFTER AS DIRECTED BY THE INSPECTOR.

11. HYDROMULCHING OF SLOPES OVER 5' IN HEIGHT SHALL BE COMPLETED BETWEEN SEPTEMBER 1 AND OCTOBER 1 OF THE YEAR IN WHICH THEY ARE CONSTRUCTED OR IMMEDIATELY AFTER THEIR CONSTRUCTION IF THEY ARE COMPLETED AFTER OCTOBER 1ST. APPLICATION RATES SHALL BE AS FOLLOWS AS REQUIRED BY CITY OF STOCKTON:

HYDROSEED MIX: BOTANICAL NAME	(COMMON NAME)	MIN. % PURITY	MIN. % GERMINATION	LB/ACRE
ARISTIDA TERNIPES VAR. HAMULOSA	(THREE-AWN)	90%	85%	2
BROMUS CARINATUS	(CALIFORNIA BROME)	90%	85%	2
ELYMUS GLAUCUS	(BLUE WILD RYE)	90%	85%	4
ELYMUS TRACHYCAULUS SSP. TRACHYCAULUS	(SLENDER WHEATGRASS)	90%	85%	3
MELICA CALIFORNICA	(CALIFORNIA ONION GRASS)	90%	85%	2
MUHLENBERGIA RIGENS	(DEER GRASS)	90%	85%	4
NASSELLA LEPIDA	(FOOTHILL NEEDLEGRASS)	90%	85%	6
TRIFOLIUM HIRTUM	('HYKON' ROSE CLOVER)	90%	85%	10
CELLULOSE FIBER MULCH				2000
ORGANIC BINDER WITH HYDROSEED SLURRY				50
16-20-O-S FERTILIZER				300

12. WHEN DIRECTED BY THE INSPECTOR, A 12-INCH BERM SHALL BE MAINTAINED ALONG THE TOP OF THE SLOPE OF THOSE FILLS ON WHICH GRADING IS NOT IN PROGRESS.

13. STAND-BY CREWS SHALL BE ALERTED BY THE PERMITTEE OR CONTRACTOR FOR EMERGENCY WORK DURING RAINSTORMS.

14. SEWER OR STORM DRAIN TRENCHES THAT DRAIN THROUGH BASIN DIKES SHALL BE PLUGGED WITH SANDBAGS FROM TOP OF PIPE TO TOP OF DIKE.

15. ALL UTILITY TRENCHES SHALL BE BLOCKED WHEN DIRECTED BY THE DESIGN ENGINEER AT THE PRESCRIBED INTERVALS FROM THE BOTTOM TO TOP WITH DOUBLE ROW OF SANDBAGS PRIOR TO BACKFILL. SANDBAGS ARE TO BE PLACED WITH ALTERNATE HEADER AND STRETCHER COURSES. THE INTERVALS PRESCRIBED BETWEEN SANDBAG BLOCKING SHALL DEPEND ON THE SLOPE OF THE GROUND SURFACE, BUT NOT TO EXCEED THE FOLLOWING:

GRADE OF GROUND SURFACE OR STREET	INTERVAL
LESS THAN 2%	AS REQUIRED
2% TO 4%	100 FEET
4% TO 10%	50 FEET
OVER 10%	25 FEET

16. PROVIDE VELOCITY CHECK DAMS IN ALL UNPAVED STREET AREAS AT THE INTERVALS INDICATED ABOVE. VELOCITY CHECK DAMS MAY BE CONSTRUCTED OF SANDBAGS, TIMBER, OR OTHER EROSION RESISTANT MATERIALS APPROVED BY THE INSPECTOR, AND SHALL EXTEND COMPLETELY ACROSS THE STREET OR CHANNEL AT RIGHT ANGLES TO THE CENTERLINE. EARTH DIKES MAY NOT BE USED AS VELOCITY CHECK DAMS.

17. AFTER SEWER AND UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDED SLIGHTLY TO PREVENT CHANNELING OF WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS-FLOW AT FREQUENT INTERVALS WHERE TRENCHES ARE NOT ON THE CENTERLINE OF A CROWNED STREET. REMOVE ALL CHECK DAMS PRIOR TO BACKFILL.

18. TO CONTROL SEDIMENT ENTERING FIELD INLETS, PLACE TWO STRAW BALES IN THE CONCRETE V-DITCH AT THE SIDE OPENING OF THE FIELD INLET AT THE LOCATIONS SHOWN ON THIS PLAN.

19. EXCEPT AS OTHERWISE DIRECTED BY THE INSPECTOR, ALL DEVICES SHOWN SHALL BE IN PLACE AT THE END OF EACH WORKING DAY OR WHEN DIRECTED BY THE INSPECTOR.

20. ALL BASINS AND CHECK DAMS SHALL HAVE BEEN PUMPED DRY, AND ALL DEBRIS AND SILT REMOVED WITHIN 24 HOURS AFTER EACH STORM.

21. SANDBAGS SHALL BE STOCKPILED ON-SITE, READY TO BE PLACED IN POSITION WHEN RAIN FORECAST IS 40% CHANCE OR GREATER

22. EXPOSED SLOPES SHALL BE PROTECTED BY VEGETATION COVER OR FABRIC COVER AS APPROVED BY THE CITY ENGINEER.

23. WHEN PAD ELEVATION OF ADJACENT LOTS OR ELEVATION BETWEEN STREET AND LOT ARE SEPARATED BY MORE THAN 6 FEET, A MINIMUM 12" BERM SHALL BE MAINTAINED ALONG THE PROPERTY LINE SEPARATING THE LOTS, AND THE BERM SHALL DIRECT THE WATER TO THE OUTLET. VELOCITY CHECK DAMS SHALL BE INSTALLED BETWEEN THE OUTLET ON THE LOT AND THE STREET.

24. ALL EROSION CONTROL MEASURES SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE CASQA STORMWATER MANAGEMENT HANDBOOK.

25. ALL FINISHED PADS SHALL BE PROTECTED.

26. THE FOLLOWING PLANS ARE ACCURATE FOR EROSION CONTROL PURPOSES ONLY.

27. THE INFORMATION ON THIS PLAN IS INTENDED TO BE USED AS A GUIDELINE FOR THE CONTRACTOR AND SUBCONTRACTORS TO COMPLY WITH THE REQUIREMENTS OF THE STATE WATER RESOURCES CONTROL BOARD. FIELD CONDITIONS MAY NECESSITATE MODIFICATIONS TO THIS PLAN.

28. NO ONSITE FUELING SHALL TAKE PLACE.

29. SEAL OR SKIRT BETWEEN TRAILER & GRADING TO PREVENT EXPOSURE TO DRAIN.

30. STRAW WATTLES INSTALLED ON A SLOPE SHALL CONFORM TO THE GUIDELINES SPECIFIED BY THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM BEST MANAGEMENT PRACTICES.

31. EROSION RESISTANT VEGETATION SHOULD BE MAINTAINED ON THE FACE OF ALL SLOPES.

32. CONTRACTOR SHALL REFER TO THE PROJECT STORM WATER POLLUTION PLAN (SWPPP) FOR ALL PRE AND POST CONSTRUCTION EROSION CONTROL MEASURES AND BEST MANAGEMENT PRACTICES (BMPs).

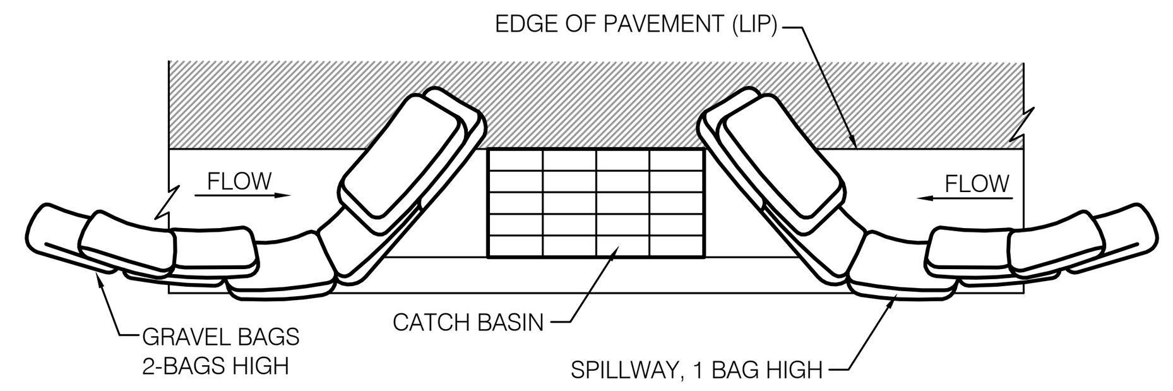
33. ALL BASINS SHALL BE HYDROSEEDED IN ACCORDANCE TO THE PROJECT SWPPP.

34. CONTRACTOR SHALL INSTALL DRAIN INLET PROTECTION FOR ALL CATCH BASINS LOCATED IN THE VICINITY OF WORK. THIS INCLUDES ANY CATCH BASINS LOCATED IN THE PUBLIC RIGHT-OF-WAY, AS WELL AS ANY ONSITE CATCH BASINS.

35. CONTRACTOR SHALL ENSURE THAT CONSTRUCTION ACTIVITIES DO NOT DEPOSIT SEDIMENT ON TO THE PUBLIC ROADWAY, SIDEWALKS AND GUTTERS.

36. CONTRACTOR SHALL USE STREET SWEEPING OR OTHER DRY SWEEPING METHODS, AS NECESSARY, TO REMOVE CONSTRUCTION RELATED SEDIMENT FROM PAVEMENT IN THE PROJECT AREA AND PROJECT ROADWAY.

37. CONTRACTOR SHALL SCHEDULE WORK FOR DRY WEATHER DAYS WHEN NO RAIN IS IN THE IMMEDIATE FORECAST.



A TYPICAL PROTECTION FOR INLET ON SUMP
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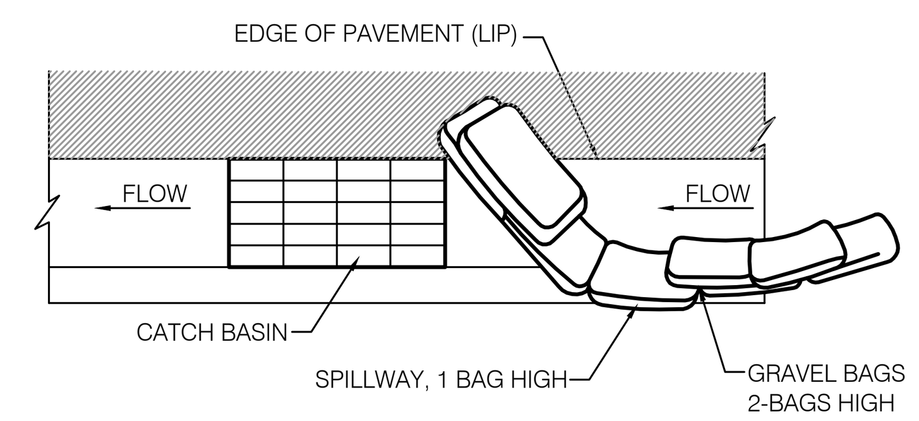


B TYPICAL PROTECTION FOR INLET ON GRADE
NTS

NOTES:

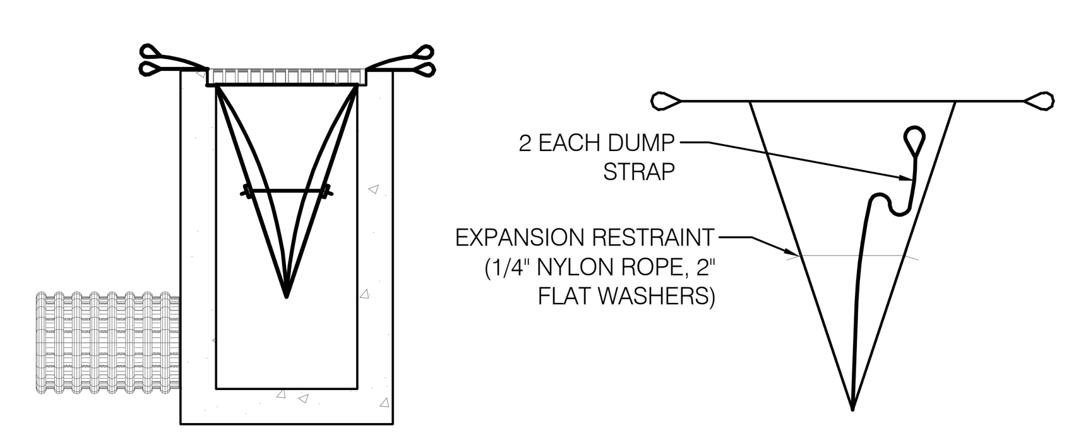
1. INTENDED FOR SHORT-TERM USE.
2. USE TO INHIBIT NON-STORM WATER FLOW.
3. ALLOW FOR PROPER MAINTENANCE AND CLEAN UP.
4. BAGS MUST BE REMOVED AFTER ADJACENT OPERATION IS COMPLETED.
5. NOT APPLICABLE IN AREAS WITH HIGH SILTS AND CLAYS WITHOUT FILTER FABRIC.

DI PROTECTION TYPE 3 - GRAVEL BAG

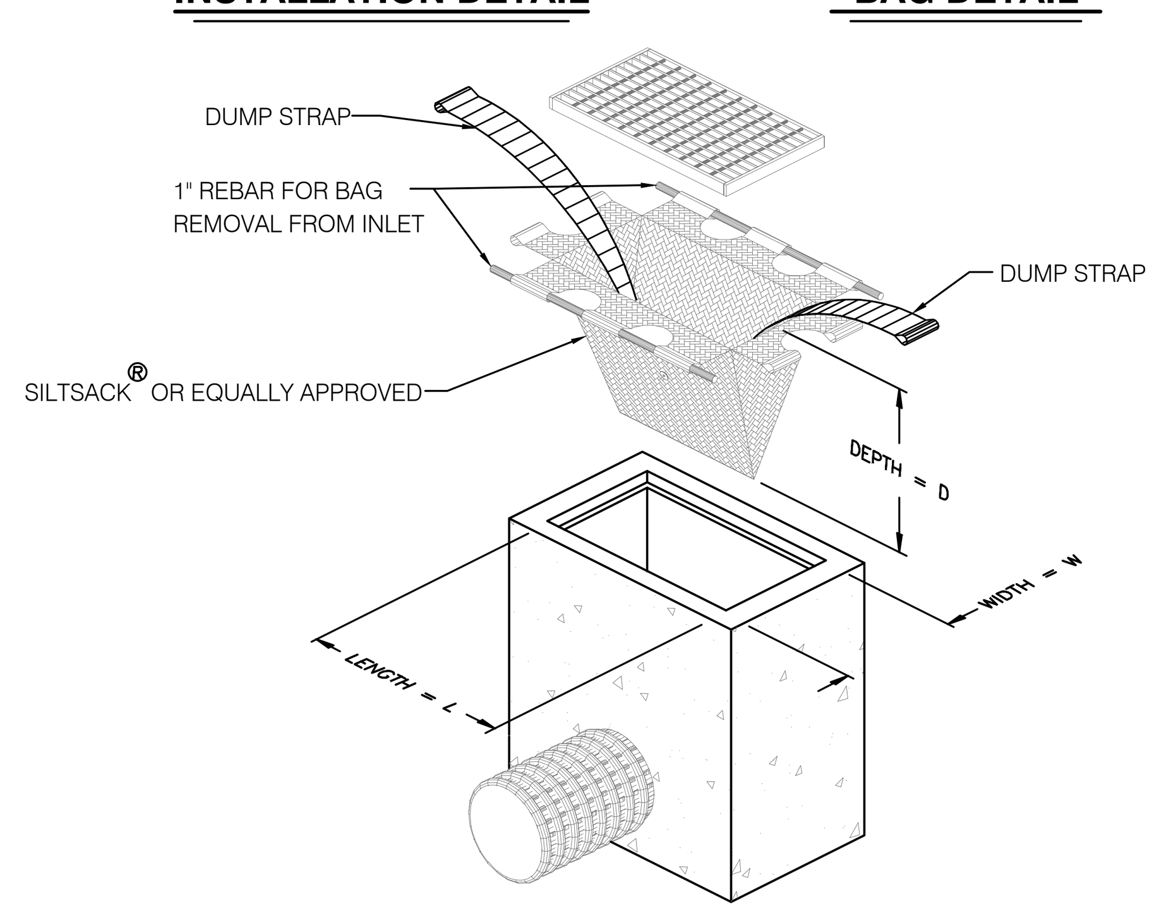
THE GRAVEL BAG BARRIER (TYPE 3) IS SHOWN IN THE FIGURES. FLOW FROM A SEVERE STORM SHOULD NOT OVERTOP THE CURB. IN AREAS OF HIGH CLAY AND SILTS, USE FILTER FABRIC AND GRAVEL AS ADDITIONAL FILTER MEDIA. GRAVEL BAGS SHOULD BE USED DUE TO THEIR HIGH PERMEABILITY.

1. USE SAND BAG MADE OF GEOTEXTILE FABRIC (NOT BURLAP) AND FILL WITH 0.75 IN. ROCK OR 0.25 IN. PEA GRAVEL.
2. CONSTRUCT ON GENTLY SLOPING STREET.
3. LEAVE ROOM UPSTREAM OF BARRIER FOR WATER TO POND AND SEDIMENT TO SETTLE.
4. PLACE SEVERAL LAYERS OF SAND BAGS - OVERLAPPING THE BAGS AND PACKING THEM TIGHTLY TOGETHER.
5. LEAVE GAP OF ONE BAG ON THE TOP ROW TO SERVE AS A SPILLWAY. FLOW FROM A SEVERE STORM (E.G., 10 YEAR STORM) SHOULD NOT OVERTOP THE CURB.
6. THIS DETAIL IS TO BE USED ON EXISTING STREETS WHERE SILTED FLOW IS TO BE INTERCEPTED (CAUGHT) PRIOR TO ENTERING THE STORM DRAIN SYSTEM. SANDBAGS CAN ALSO BE USED WHEN THE ROUGH GRADED STREETS HAVE POURED INPLACE CONCRETE SURROUNDING THE INLET TO CREATE A "FLOW LINE" WHERE A DAM CAN BE ACHIEVED TO PROTECT THE STORM SYSTEM FROM THE INFLOW OF SEDIMENT.

C DI PROTECTION - TYPE 3



INSTALLATION DETAIL   BAG DETAIL



D TYPICAL SILTSACK CONSTRUCTION
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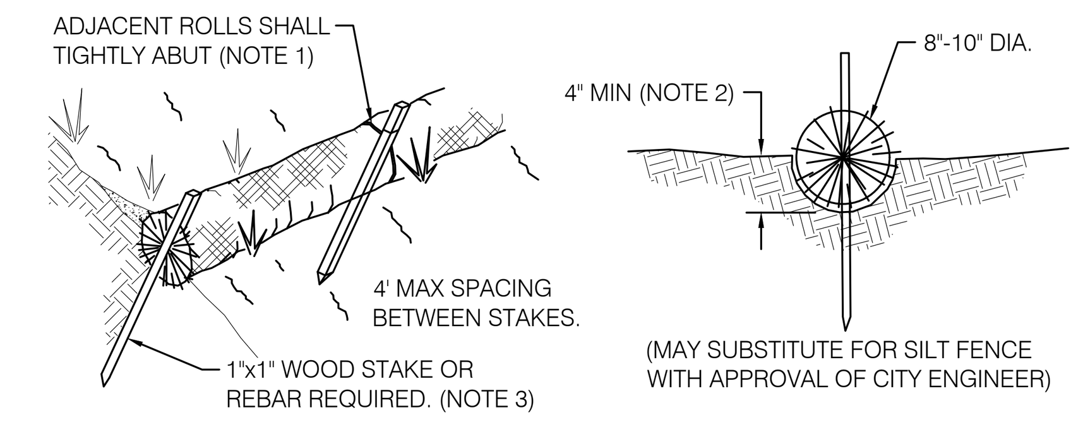

STRAW WATTLE DIKE CONSTRUCTION SPECIFICATIONS:

1. WATTLES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING.
2. EACH WATTLE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4 INCHES.
3. WATTLES SHALL BE SECURELY ANCHORED IN PLACE BY TWO STAKES OR REBARS DRIVEN THROUGH THE WATTLES. THE FIRST STAKE IN EACH WATTLE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID WATTLE TO FORCE THE WATTLES TOGETHER.
4. THE DIKE SHALL BE INSPECTED AFTER EACH STORM, AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED. THE WATTLES SHALL BE REMOVED ONCE THEY HAVE SERVED THEIR PURPOSE SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

E STRAW WATTLE DETAIL
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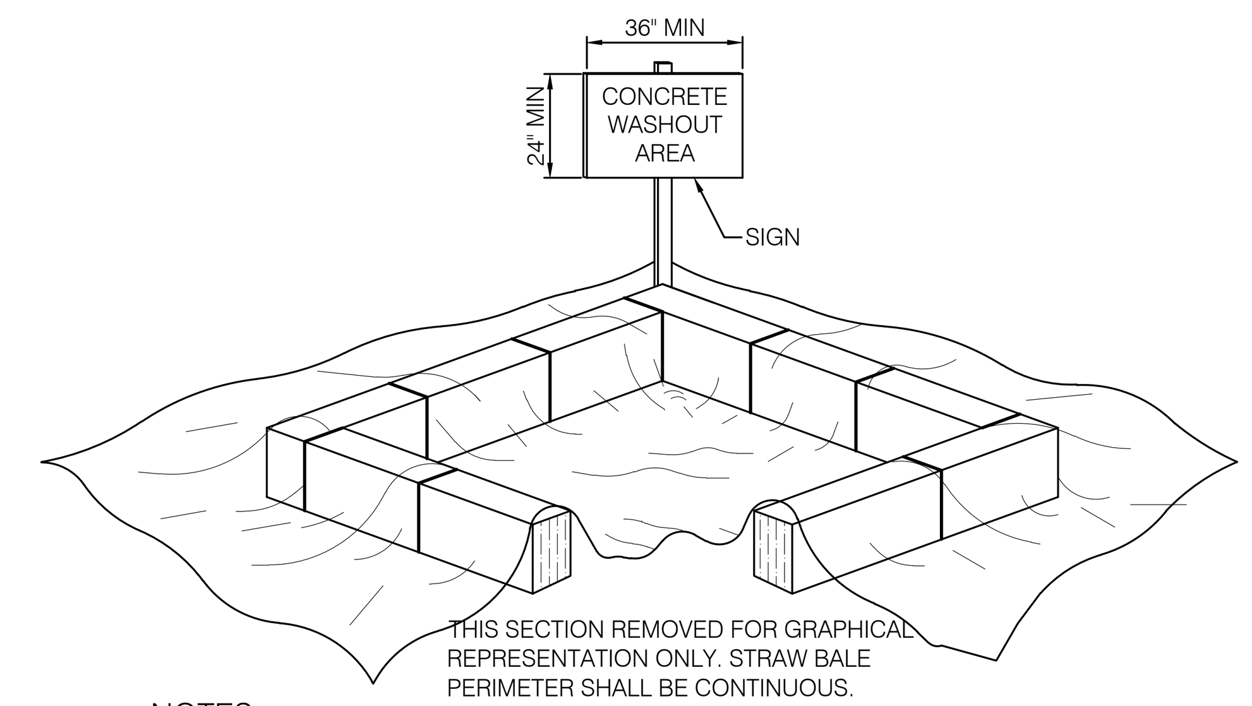
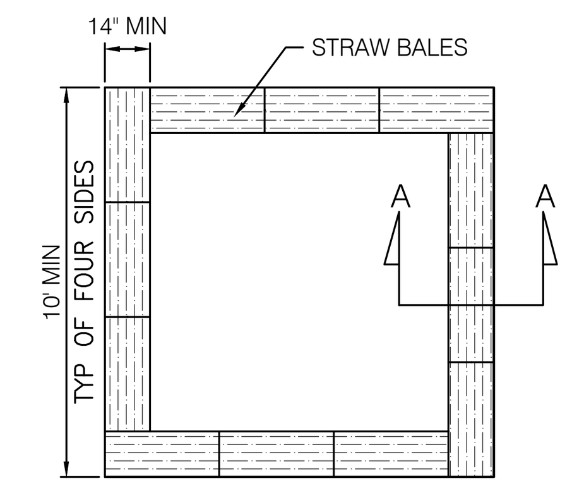
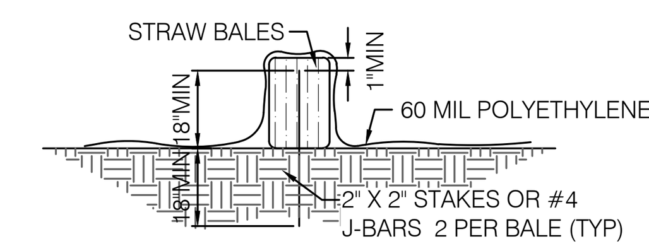




BALE CONFIGURATION

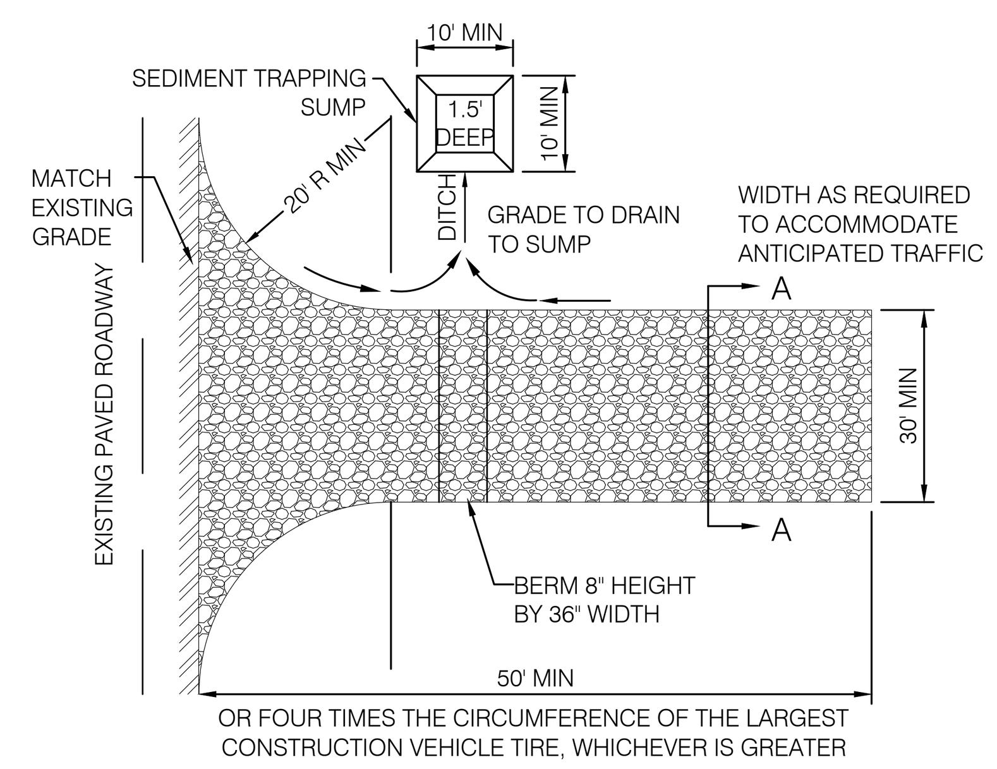


SECTION A-A

NOTES:

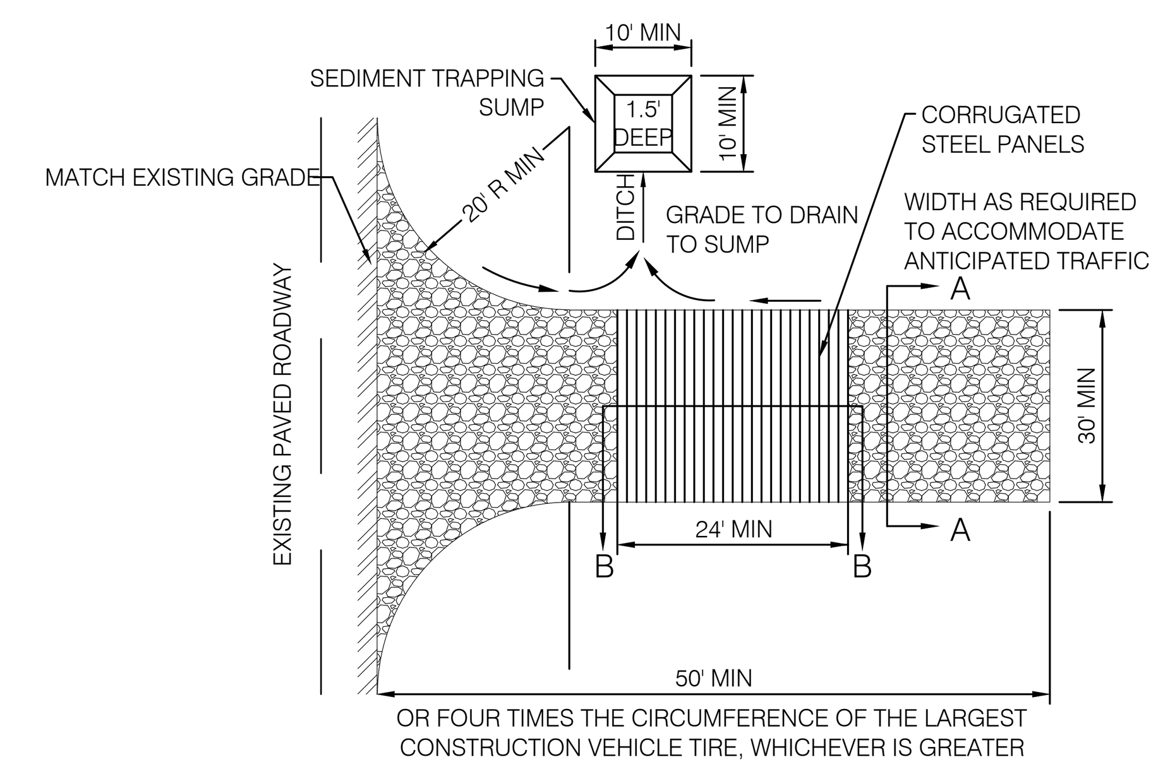
1. FACE SIGN TOWARD NEAREST STREET OR ACCESS POINT.
2. CONCRETE WASHOUT SHALL BE LOCATED BEHIND THE CURB AND 50 FEET MINIMUM FROM DRAINAGE INLETS OR WATERCOURSES.
3. CONTRACTOR SHALL CONDUCT ALL CONCRETE WASHOUT OFF-SITE.

F CONCRETE WASHOUT
NTS



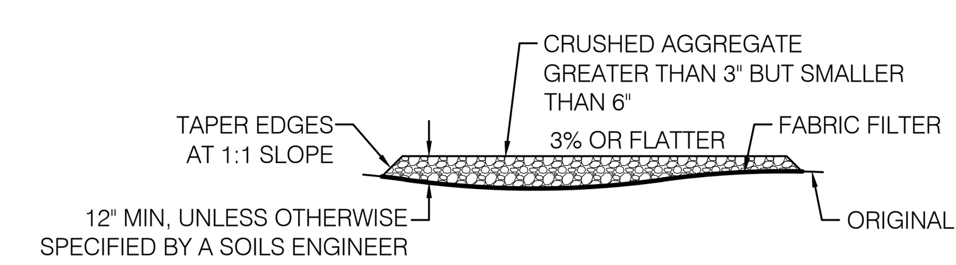
NOTE:
CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE

G1 PLAN (OPTION 1)
NTS

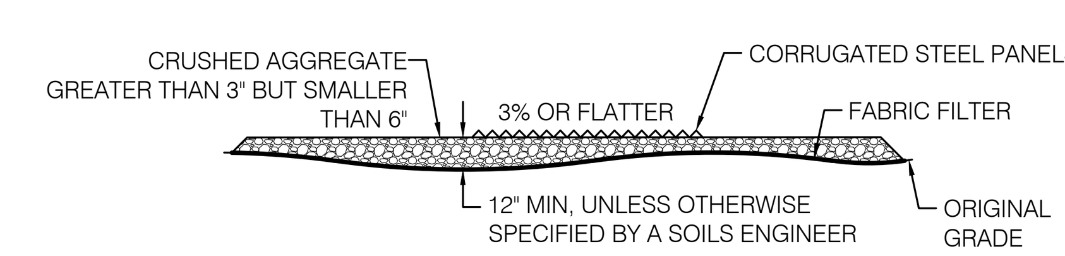


NOTE:
CONSTRUCT SEDIMENT BARRIER AND CHANNELIZE RUNOFF TO SEDIMENT TRAPPING DEVICE

G2 PLAN (OPTION 2)
NTS



SECTION A-A
NTS



SECTION B-B
NTS

TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
DESIGN AND CONSTRUCTION SPECIFICATIONS:

1. THE TEMPORARY STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE PLANS AND SPECIFICATIONS OF LATEST EDITION OF THE CALIFORNIA STORMWATER HANDBOOK, DETAIL TC-1. WHERE THERE IS A DISCREPANCY BETWEEN THIS DETAIL AND THE CALIFORNIA STORMWATER HANDBOOK, THE HANDBOOK SHALL GOVERN.
2. CONTRACTOR SHALL CONSTRUCT A STABILIZED CONSTRUCTION ENTRANCE AT EACH ENTRANCE TO THE PROJECT SITE AND SHALL BE CONSTRUCTED ON LEVEL GROUND.
3. THE MATERIAL FOR CONSTRUCTION OF THE PAD SHALL BE 3 TO 6 INCH DIA. STONE.
4. THE THICKNESS FOR THE PAD SHALL NOT BE LESS THAN 12 INCHES OR AS RECOMMENDED BY SOILS ENGINEER.
5. THE WIDTH OF THE PAD SHALL NOT BE LESS THAN 30' OR THE FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS, WHICHEVER IS GREATER.
6. THE LENGTH OF THE PAD SHALL BE AS REQUIRED, BUT NOT LESS THAN 50 FEET.
7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND, AND REPAIR AND/OR CLEAN OUT ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY SHALL BE REMOVED IMMEDIATELY.
8. WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP, SEDIMENT BASIN, OR SEDIMENT SWALE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATERCOURSE THROUGH USE OF GRAVEL BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
9. CONTRACTOR TO REMOVE AND DISPOSE OF STABILIZED CONSTRUCTION ENTRANCE UPON COMPLETION OF CONSTRUCTION.
10. CONSTRUCTION AND MAINTENANCE SHALL BE IN ACCORDANCE WITH THE 2003 CALIFORNIA STORMWATER BMP HANDBOOK.

G3 TEMPORARY STABILIZED CONSTRUCTION ENTRANCE
NTS

CALL BEFORE YOU DIG
USA
800-227-2600

NorthStar Engineering Group, Inc.
• CIVIL ENGINEERING • SURVEYING • PLANNING •
620 12th Street, Modesto, CA 95354
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MARK	DATE	DESCRIPTION

REGISTERED PROFESSIONAL ENGINEER
CHRISTOPHER RIC VANDERVEEN
No. C89350
CIVIL
STATE OF CALIFORNIA

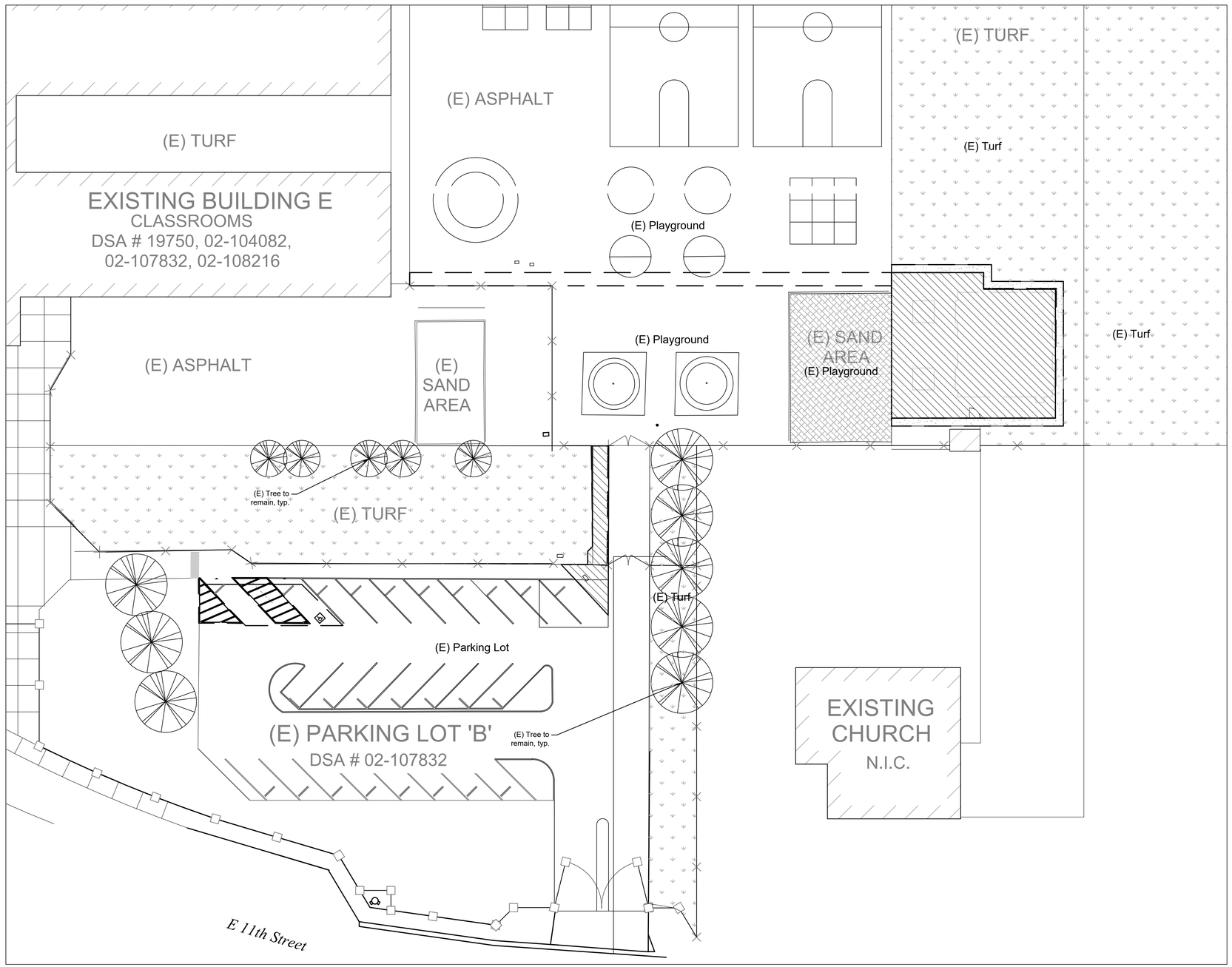
TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

CIVIL IMPROVEMENT PLANS FOR
HAMILTON ELEMENTARY SCHOOL
STOCKTON, CALIFORNIA

DRAWING TITLE
EROSION CONTROL NOTES, AND DETAILS

PROJECT NO.
23-13018

DRAWING
C6.2



LANDSCAPE DEMOLITION LEGEND

Existing turf and landscape areas to remain. Preserve and protect in place. Do not not store materials, and do not park or drive vehicles in this area. Maintain existing irrigation in operable condition throughout duration of the Work of this project.

Restore or replace planting and turf areas that are damaged as part of the Work of this project; includes any area of the campus that may not be shown in these landscape plans. All areas of repair shall be repaired to the satisfaction of the District.

In areas needing repair, Contractor shall grade damaged areas as needed to return to existing conditions and to coordinate with any proposed grading associated with this project. Any fill required shall be of a suitable quality for the purpose. Planting shall be restored with existing species. Plant maintenance for repaired areas shall be included with the plant maintenance component of the proposed work. Irrigation that is damaged shall be replaced in kind for model and manufacturer.

Area of turf renovation. See Planting Plan for work in this area.

Existing landscape to be removed.

Turf Areas: Provide min. (3) applications of approved herbicide to kill turf; applications to be minimum (1) week apart. Once turf is dead, remove turf down through root zone at a minimum. Coordinate with the work of other consultant's plans associated with this project for other Work that may be required in this area. Verify limit of demolition with District and Architect prior to start of work.

Landscape Areas: Remove all shrubs, ground cover and trees. Remove root balls and roots to a minimum 24" below grade. Fill holes or depressed areas with suitable fill and return to uniform graded level.

Contractor to remove and dispose of all debris associated with this demolition, unless otherwise approved by District.

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VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA

DRAWING TITLE
LANDSCAPE DEMOLITION PLAN

PROJECT NO.
23-13018.00
(SHLA 24-21)

DRAWING
L100

Sam Harned
Landscape
Architect
PO Box 2275
Oakdale, CA 95361
209-380-7376
www.harnedla.com

NORTH
0' 10' 20' 40'
scale: 1" = 20'-0"

\\teter-file1\Users\jesus.izazaga_TETR\Documents\12901-A-PULLIAM ELEM ELOP_jesus.izazaga.rvt
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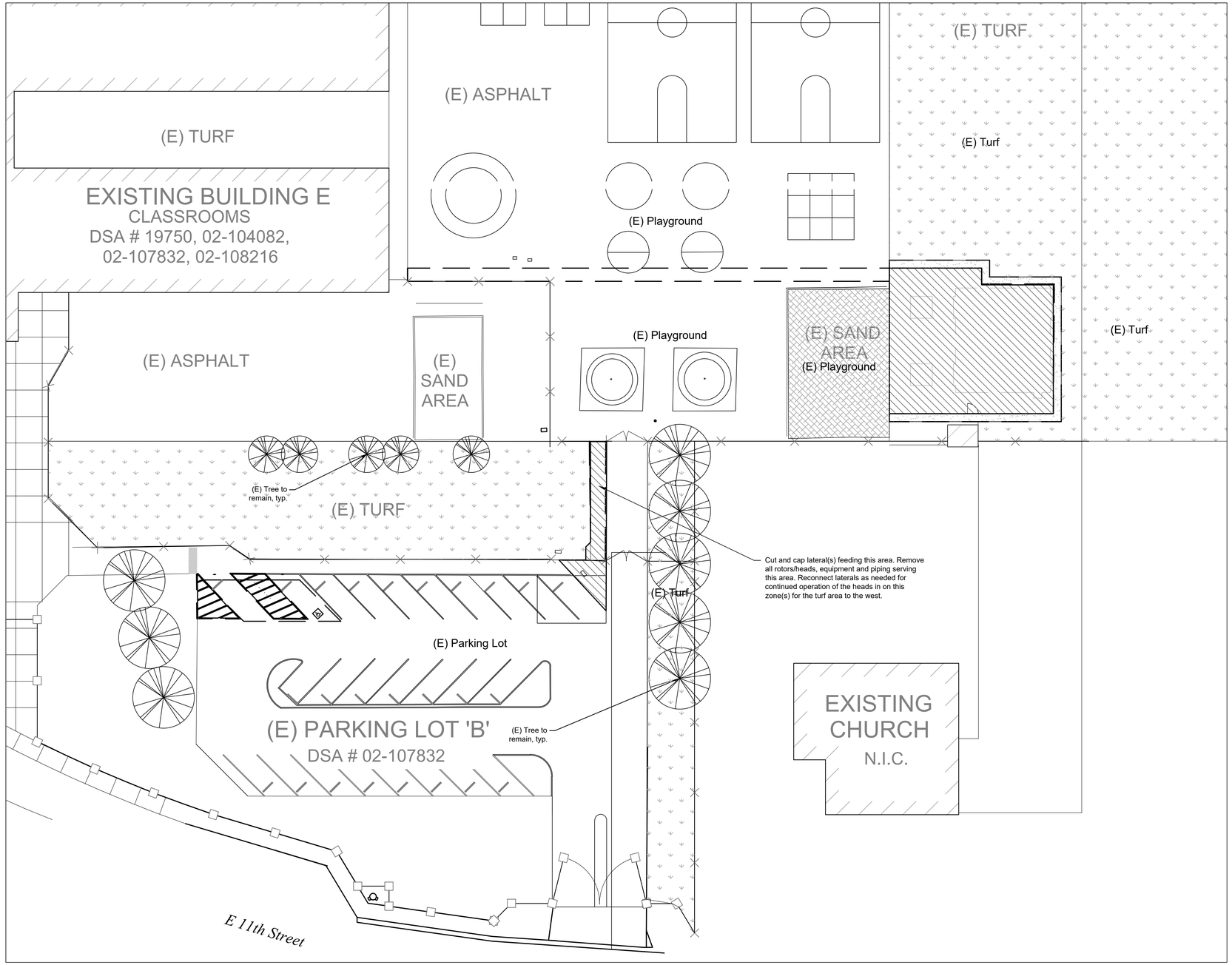

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Contractor to remove and dispose of all debris associated with this demolition, unless otherwise approved by District.

NORTH

0' 10' 20' 40'
scale: 1" = 20'-0"

Sam Harned Landscape Architect
PO Box 2275
Oakdale, CA 95361
209-380-7376
www.harnedla.com

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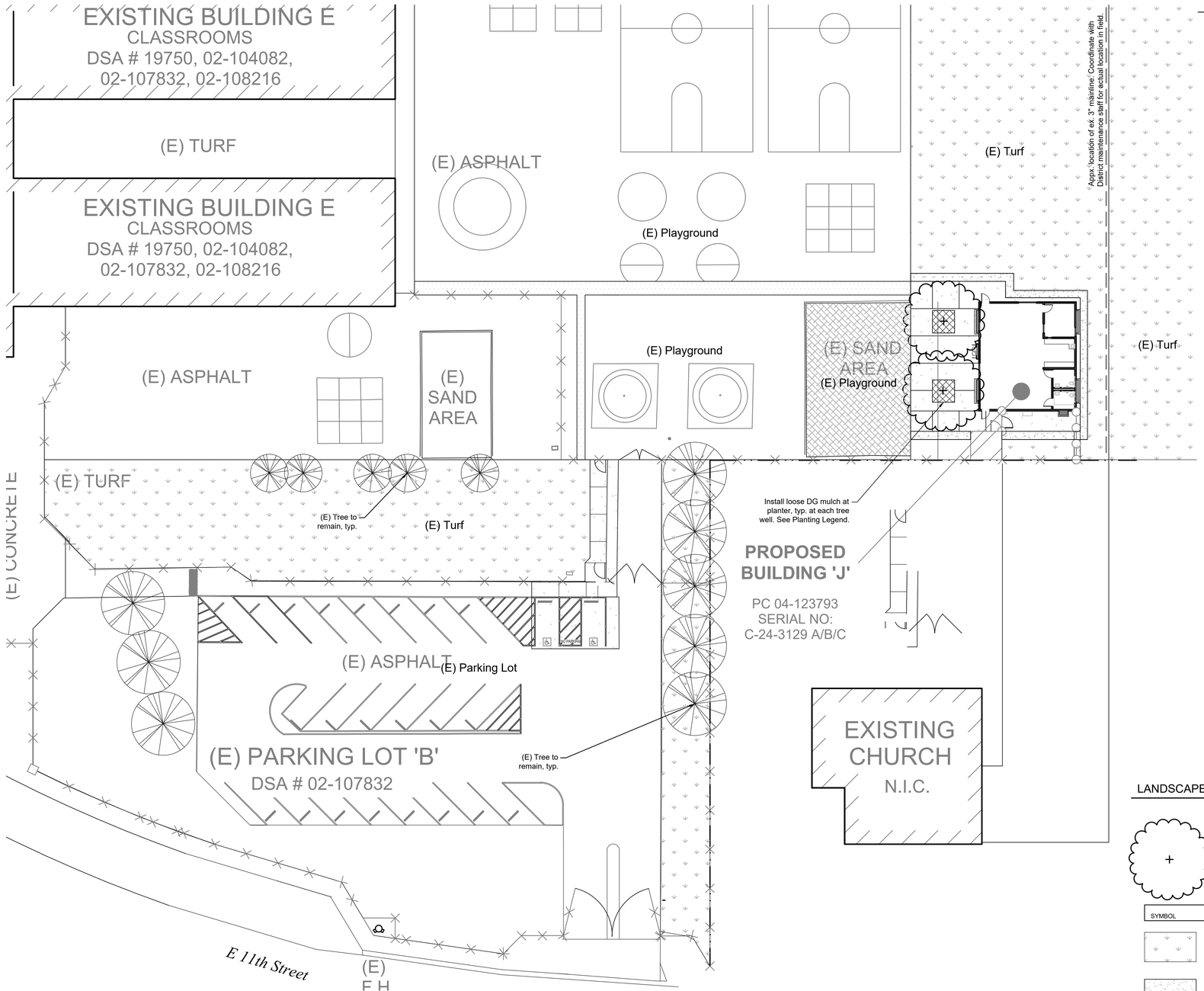
ARCHITECTS ENGINEERS CONNECTED
TETER

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA

DRAWING TITLE
IRRIGATION DEMOLITION PLAN

PROJECT NO.
23-13018.00
(SHLA 24-21)

DRAWING
L101



LANDSCAPE AREA CALCULATIONS

Rehabilitated Landscape Area:	1,092 sf.
Area of Irrigation Removed:	3,676 sf
Building Roof Shade/Overhang:	268 sf.
New Landscape Area (DG):	134 sf.

PARKING AREA SHADE

The project is not providing any new parking spaces; rather, existing parking stalls will be re-striped. No new parking spaces or parking areas landscape required or provided with this project.

PROJECT SHADE CALCULATIONS

Calculations provided to show compliance with CBC Section 5.106.12. Tree diameters per species is based on published local municipality documentation or the Sunset Western Garden Book.

Tree Type	Area at 100% (sf)	100%		75%		50%		25%		Subtotal	
		sf	qty.	sf	qty.	sf	qty.	sf	qty.		
Pistacia chinensis 'Keith Davey'	962	1,924	2	0	0	0	0	0	0	1,924	sf
						Total shade provided by trees:				1,924	sf
						Shade provided by building overhang:				268	sf
						Total shading provided:				2,192	sf
						Total Project Area for Landscape and Hardscape				3,366	sf
						Shading Provided at Landscape and Hardscape Areas (min. 20% req'd)				65	%

PLANTING NOTES

1. Examine site conditions and locate utilities prior to start of work. Report any conflicts to Owner or Landscape Architect prior to starting work. Start of work implies acceptance of site conditions.
2. Confirm all plant quantities. The quantity of symbols on the plan shall have priority over the quantity provided in the legend.
3. Contractor is responsible for maintaining current condition of existing landscape to remain. Any damage that occurs to landscape after start of work shall be repaired or replaced at no additional expense to the Owner.
4. The contractor shall be responsible for the purchasing of all material to provide a complete installation per the intent of the contract documents.
5. The contractor is responsible for the protection of all material until the project has been completely turned over to the owner.
6. Landscape Architect reserves the right to review plant material prior to planting. Plant material may be rejected at any time due to condition, form, or damage, before or after planting. Installed and then rejected material shall be replaced by the contractor at contractor expense.
7. All plant material to be nursery grown in a climate similar to that of the project site. All plant material shall:
   - 7.1. Be vigorous and of normal habit of growth.
   - 7.2. Be pest and disease free, including insects, insect eggs and larvae.
   - 7.3. Be free of girdling roots, sun scald, abrasions, disease
8. Plants shall equal or exceed the standards as outlined by the American Standards for Nursery Stock and to applicable California Agriculture Code.
9. The landscape contractor shall, prior to installation of any plant material, provide for a Soil Agronomy Report (per WELO) from an approved soils laboratory that shall include recommendations for amending and preparing soil. Provide report to landscape architect for review and further direction regarding soil amendments and preparation. Soil analysis shall include: soil texture, infiltration rate, soil pH, total soluble salts, sodium, and percent organic matter.
10. Prepare the soil by removing all rock and debris larger than 1" from planting areas; legally dispose of materials removed from this process.
11. Amend the soil per the recommendations of the Soil Agronomy Report, including any additional amendments specified by the landscape architect, prior to the installation of plant material. Provided below is a list of minimum amendments that shall be incorporated into all planting pits and broadcast into soil to depth of 12", by means of a roto-tiller or equal, per 1000 square feet. This list is provided for Bid purposes and shall be augmented as recommended by the Soils Agronomy Report.
    - 4 cyds organic amendment. Cow manure or nitrogen-treated sawdust or ground bark humus
    - 15 lbs. soil sulfur
    - 15 lbs. 15-15-15 fertilizer
12. Notify landscape architect if site soil has been lime treated. Additional testing may be required to determine extent of lime treatment, compaction, or other condition that may be deleterious to healthy plant growth.
13. Provide weed control prior to planting. Thoroughly irrigate the site to promote germination of weed seeds that may be in the soil. Once germination has taken place spray the site with approved herbicide, (Round-Up or equal) at the rate specified by the manufacturer. Reapply as needed.
14. Planting pits for trees shall be excavated per the details provided in these plans. Planting pit backfill mix for all trees and shrubs shall consist of the following:
    - 6 parts 'on-site' soil
    - 4 parts organic amendment (same as described above)
    - 1 lb./yd. of mix 12-12-12 commercial fertilizer
    - 2 lbs./cu. yd. of mix Iron Sulfate
    - 10 lbs./cu. yd. of mix Agricultural Gypsum
15. Fertilizer tablets (20-10-5) to be placed in all planting pits in the following quantities per plant container size:

1 gallon	1 tablet
5 gallon	3 tablets
15 gallon	9 tablets
24" box	9 tablets
36" box	15 tablets

16. Plant establishment period of ninety (90) days shall commence upon notice of Substantial Completion. Maintain all plant material throughout duration of plant establishment period to a point accepted by the Landscape Architect or Owner's Representative. See Planting Specifications for additional information.
17. Trees to be planted a min. of 5'-0" from edge of paving or walls, U.O.N.
    - 17.1. Tree planting shall conform to minimum distances away from lights or other utilities, as published in the local jurisdictions standards or guidelines.
18. Groundcover shall be installed continuous under all shrub masses, U.O.N.
19. Install vines with runners securely attached to the adjacent wall or trellis. Remove nursery stakes prior to completion of plant establishment period, unless otherwise directed by owner or landscape architect.
20. Prior to placing mulch, apply pre-emergent weed control, (Ronstar, or approved equal) in the amounts specified by the manufacturer.
21. Uniformly place a minimum 3" depth of recycled, organic mulch (3/4" - 1-1/2" chip size) over all shrub areas. Do not install mulch at turf areas. Color: Brown (un-dyed).
    - 21.1. "Gorilla Hair" is not acceptable unless specifically noted.
    - 21.2. Do not install bark mulch in areas of inundation (e.g. - bio-swale or basin). Place min. 3" layer of crushed aggregate mulch (¾") in these areas in place of the bark mulch. Transition back to bark mulch at top of slope, U.O.N. Submit sample for approval.

LANDSCAPE PLANTING LEGEND

ALIAS	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	SPACING	WATER USE RATING	DETAIL
PIS CHI	*Pistacia chinensis 'Keith Davey'*	Chinese Pistache	15 gal	1	As shown	Low	4 / L4

SYMBOL	DESCRIPTION
	Existing turf and landscape areas to remain. See Landscape Demolition Plan for notes.
	Area of turf renovation or replacement. Fill low or depressed areas with suitable fill and grade area to drain min. 2% away from buildings and to flow with existing and proposed grading and drainage patterns. Grade to be 1-1/2" below finish surface at paved areas.
	Install decomposed granite paving (3/8" max.), minimum 3" depth, compacted. Color: Gold. See Detail 2 / Sheet L4.
	Existing play area and play equipment. Preserve and protect in place.

NORTH

0' 10' 20' 40'
scale: 1" = 20'-0"

Sam Harned Landscape Architect
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Oakdale, CA 95361
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MARK	DATE	DESCRIPTION
	12/17/24	DSA SUBMITTAL

REGISTERED LANDSCAPE ARCHITECT
Richard Sam Harned
No. 2275
12/31/26
12/17/2024
STATE OF CALIFORNIA

TETER, INC.
ARCHITECTS ENGINEERS CONNECTED
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA

DRAWING TITLE
PLANTING PLAN

PROJECT NO.
23-13018.00
(SHLA 24-21)

DRAWING
L200

PLOT DATE: 8/12/2024 1:29:22 PM

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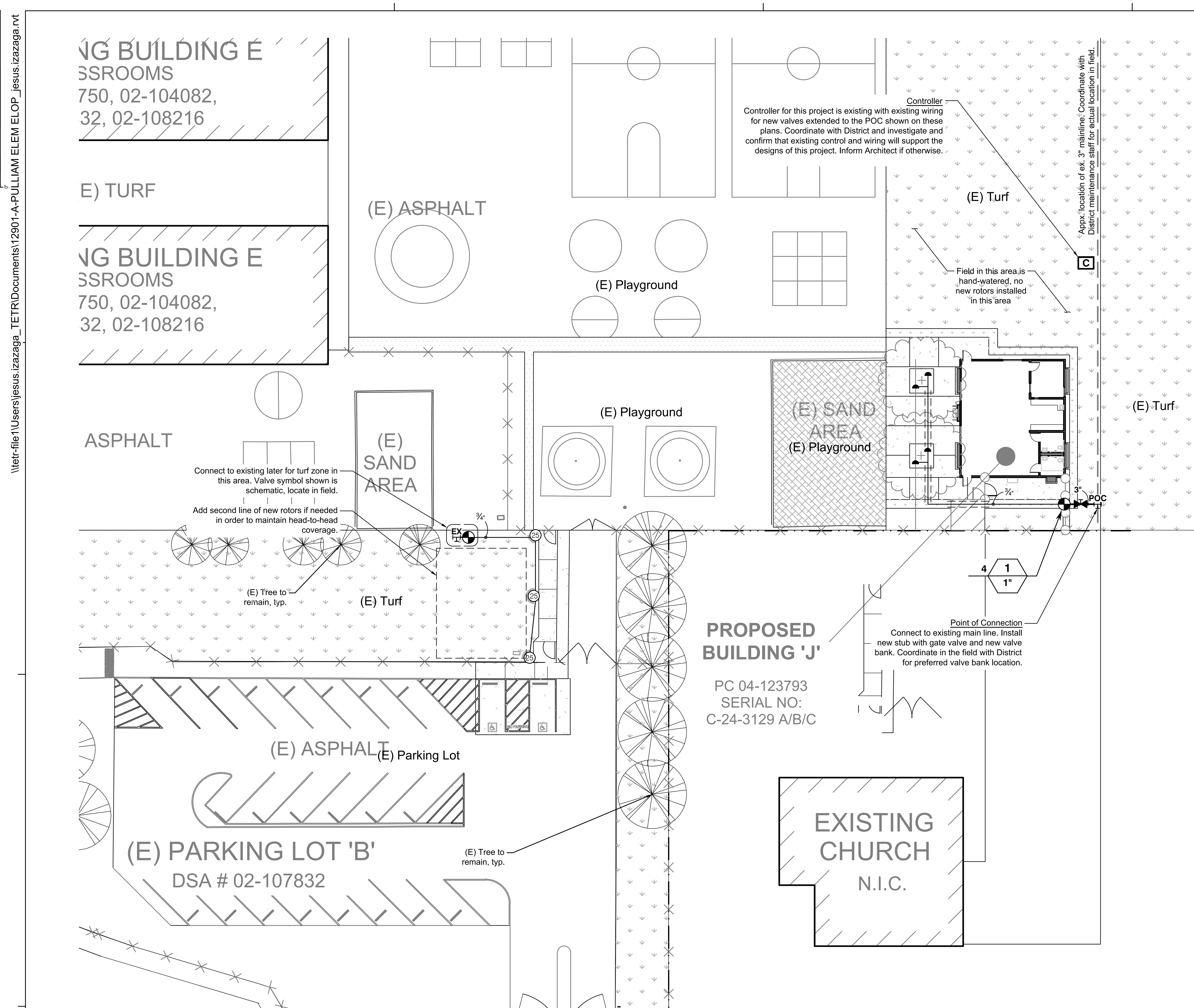

IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	ARC	PSI	GPM	RADIUS	DETAIL
●	Rain Bird 1806-PRS-1400 Flood 1404 Flood Bubbler 6in. popup with pressure regulating device. Install w/ PA-80 adapter.	360	40	1	3'	6/L300

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	PSI	GPM	RADIUS	DETAIL
(25)	Rain Bird 5006-PL-PC-SAM-R-SS-MPR 25 Turf Rotor, 6in. Pop-Up, Stainless Steel Riser, with Flow Shut-Off Device. Matched Precipitation Rotor (MPR Nozzle), Arc and Radius as per Symbol. 25 ft=red, 30 ft=green, 35ft=beige. With Seal-A-Matic Check Valve, and In-Stem Pressure Regulator.	45		23'	5/L300

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	Rain Bird PESB-PRS-D Plastic Industrial Remote Control Valve. Low Flow Operating Capability, Globe Configuration. With Pressure Regulating Module, and Scrubber Technology, size per plan.	4/L300
	Nibco T-113 Class 125 bronze gate shut off valve with wheel handle, same size as mainline pipe diameter at valve location.	3/L300
C	Existing Controller Existing controller with wiring. Coordinate with District for location and suitability to control irrigation shown with this project.	
POC	3" Mainline Existing 3" mainline with control wiring. Connect with new stub and isolation valve. Coordinate with District in field for actual location.	
EX	Point of Connection Connect to lateral of existing station.	
———	Irrigation Lateral Line: PVC Schedule 40	8/L300
— — —	Irrigation Mainline: PVC Schedule 40	8/L300
=======	Pipe Sleeve: PVC Class 200 SDR 21 Install dbl. 2" (min.) sleeves at each location on the plan. For pipes 1-1/2" and greater install sleeves at twice the diameter of the pipe.	7/L300

Valve Callout: Valve Number, Valve Flow, Valve Size

EXISTING IRRIGATION NOTES

1. The existing irrigation for the part of the turf area surrounding at the proposed building is performed manually. No new irrigation is proposed at this area for turf irrigation. The turf in this area will continue to be irrigated manually.
2. The new irrigation system for this project connects to an existing system. Contractor shall investigate the existing system and verify that it can support the design as shown; contact the landscape architect if found otherwise.
3. Modifications may be necessary to the existing system as part of the Work of this project. Contractor shall modify and reconnect all existing zones as required to provide continued water supply to the existing zones and to provide a coordinated and functional irrigation system for the overall site at completion of work.
4. The design of these plans is based on the following parameters of the existing system. Confirm and report any discrepancies to landscape architect for further clarification or direction as may be required:
   - Pressure: 70 psi
   - Available Flow: 100 gpm
5. Contractor shall investigate the existing controller to determine if it is functional and feasible for connection of new valves. Report findings to Owner's Representative and landscape architect for final determination and additional direction. Use of existing controller in place of new proposed controller may be an option pending approval by Owner.

IRRIGATION NOTES

1. Contractor shall become familiar with the drawings, specifications, and site conditions prior to beginning work. Should conflicting information be found in these documents or between these documents and site conditions, notify the Landscape Architect before proceeding with the work in question.
2. All existing utilities, water lines, and fire hydrants shall remain connected and in full continuous operation unless specifically directed otherwise.
   - 2.1. Irrigation backflow prevention device and meter are existing on this project. Verify both are in proper operation, meet current code requirements, and are sufficient for the work of these plans.
3. Irrigation plan is diagrammatic. Actual routing of pipe and location of equipment shall be determined based on field conditions and as directed by the Landscape Architect. Install pipe and equipment in landscape areas wherever possible unless specifically noted otherwise. Stake layout of mainline and primary laterals for field review and approval prior to trenching. Field adjust existing irrigation system as necessary.
4. Pipe Sizing:
   - 4.1. Minimum pipe size shall be 3/4".
   - 4.2. Unlabeled pipe segments shall be equal to the size of the segment immediately upstream.
   - 4.3. In making adjustments to irrigation zone layouts Contractor shall be responsible to determine pipe sizes as required to deliver water pressure required for each outlet device considering flow rate, elevation changes, length of run, and other factors affecting pressure loss. Maximum flows in various pipe sizes shall not exceed the following guidelines. Flows may may need to be significantly less than the maximums stated below to off-set other factors affecting pressure loss:
     - 4.3.1. 3/4": up to 8 gpm.
     - 4.3.2. 1": 8-12 gpm.
     - 4.3.3. 1-1/4": 12-22 gpm.
     - 4.3.4. 1-1/2": 22-30 gpm.
     - 4.3.5. 2": 30-50 gpm.
   - 4.4. Mainline pipe sizes shall not be changed without written approval of the Landscape Architect.
   - 4.5. Lateral line pipe runs of lengths greater than the typical distance between outlet devices shall not be made without written approval of the Landscape Architect.
5. Do not install the irrigation system as shown on the drawings when it is obvious in the field that obstructions, grade differences or differences in the area dimensions exist that might not have been considered in the engineering. Notify the Landscape Architect of all such conditions immediately upon discovery. In the event this notification is not provided, the Contractor shall assume full responsibility for all revisions necessary in response to field conditions with no additional compensation.
6. Controller(s):
   - 6.1. Locate as directed. Extend electrical service to controllers and dedicate one breaker of proper size for each controller. Provide one additional duplex outlet at each controller location.
   - 6.2. Electrical service to controllers shall be completed by a licensed electrical contractor in accordance with all applicable codes.
7. Sleeves:
   - 7.1. All pipe under existing and proposed paving shall be installed in sleeves.
   - 7.2. Sleeves are shown for contractor's convenience. Contractor shall be responsible to coordinate irrigation sleeve locations and installation with other trades.
   - 7.3. Extend all sleeves 18 inches beyond paving, cap and clearly mark by approved means to facilitate recovery.
   - 7.4. Install sleeves to accommodate future paving where indicated or as may be needed.
8. Spray Heads and Rotors:
   - 8.1. Install perpendicular to grade unless otherwise noted in plans.
9. Contractor to flush entire system and adjust all delivery devices and assemblies for complete coverage and reduced over-spray, prior to project completion.

WATER EFFICIENT LANDSCAPE ORDINANCE WORKSHEET

	Reference Evapotranspiration			49.1 in/yr	ETAF(req)	Maximum Allowed ETAF		0.45
APPENDIX B WORKSHEET	Hydro-zone	Plant Factor (PF)	Irrigation Method	Irrigation Efficiency (IE)	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU)
	Regular Landscape Areas ("RLA") - See Hydrozone Descriptions for Referenced Numbers							
	Tree	0.30	Bubbler	0.81	0.37	134 sf	49.63	1,511 gals
					Sub-totals	134.00	49.63	1,511 gals
	Special Landscape Areas ("SLA")							
	SLA1				1.00	0 sf	0.00	0 gals
					Sub-totals	0 sf	0.00	0 gals
		Total Landscape Area (RLA+SLA)				134 sf	49.63	
					ETWU Total			1,511 gals
		Maximum Allowed Water Allowance (MAWA)						1,836 gals

MAWA — **MAXIMUM ALLOWABLE WATER CALCULATION** ("MAWA")

MAWA =	(ETo)	(0.62)	[(ETAF	x LA) +	((1-ETAF)	x SLA)]
1,836 gal/yr	49.1 in/yr	0.62	0.45	134 sf	0.55	0 sf

Existing turf and landscape areas to remain. Preserve and protect in place. See Landscape Demolition Plan for additional notes.

NORTH

0' 10' 20' 40'
scale: 1" = 20'-0"

Sam Harned Landscape Architect
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LICENSED LANDSCAPE ARCHITECT — Samuel Harned — 12/31/26 — 12/17/2024 — STATE OF CALIFORNIA

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FRESNO HEADQUARTERS
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ARCHITECTS ENGINEERS CONNECTED

TETER

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA

DRAWING TITLE
IRRIGATION PLAN

PROJECT NO.
23-13018.00
(SHLA 24-21)

DRAWING
L201

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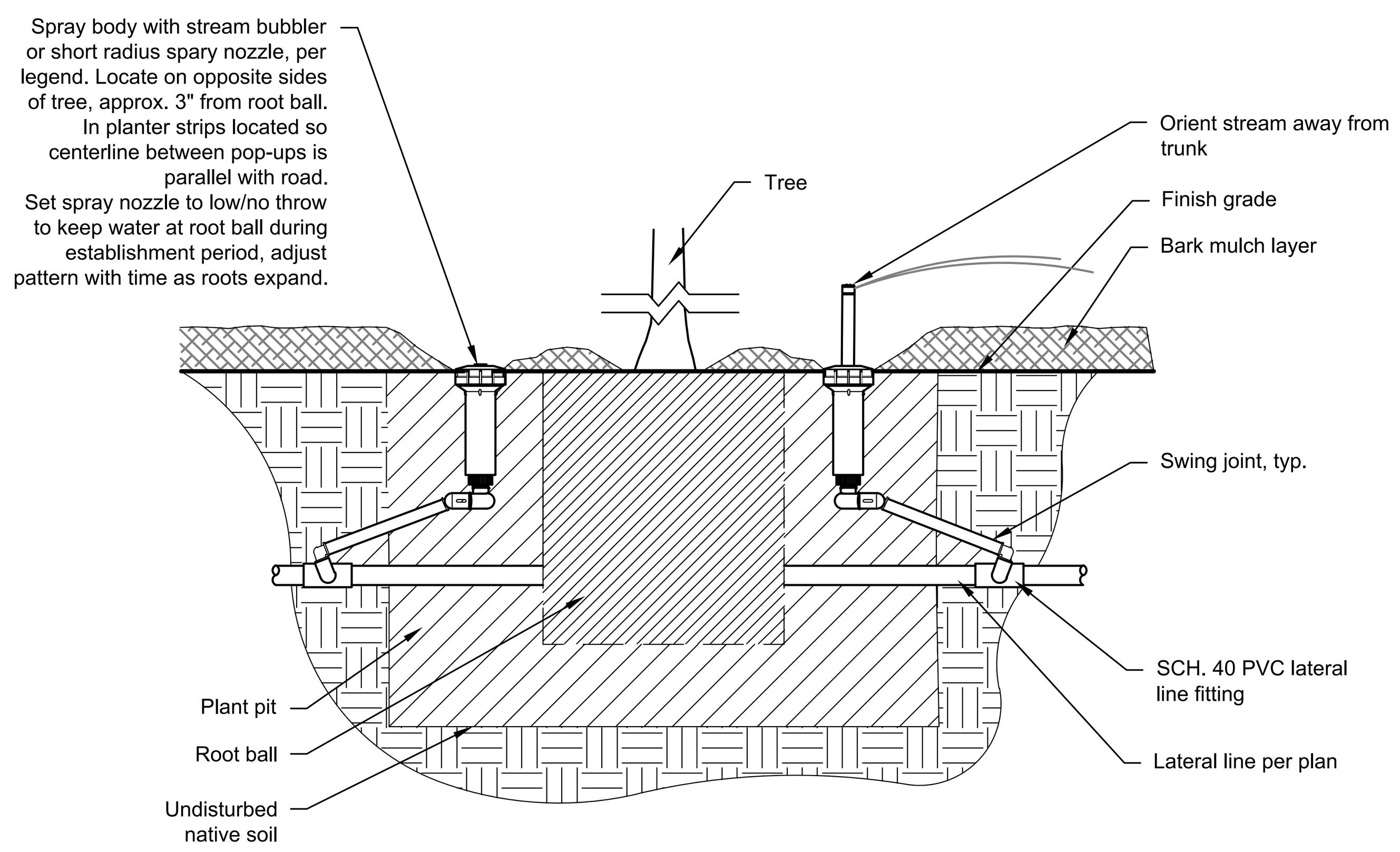
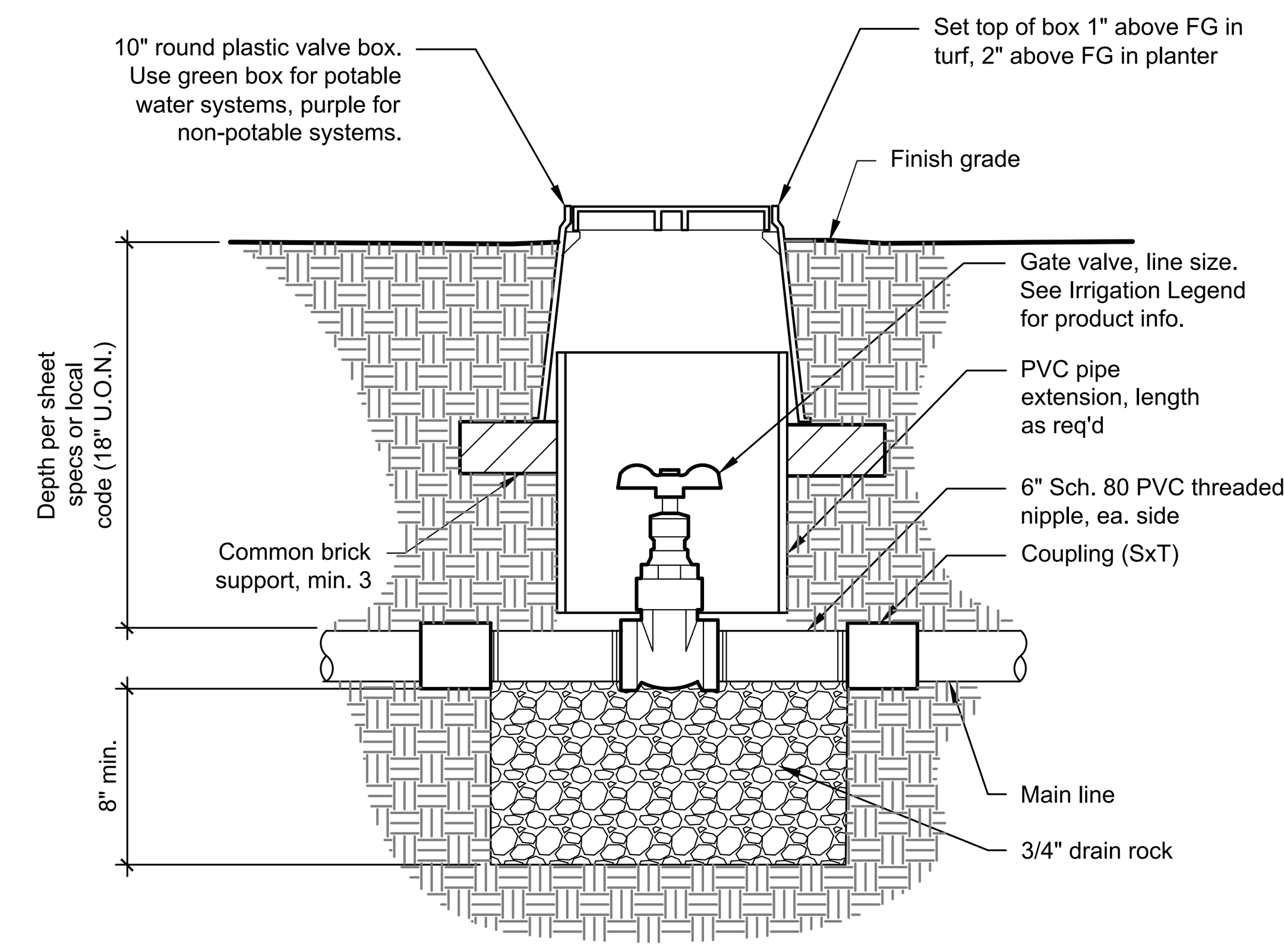


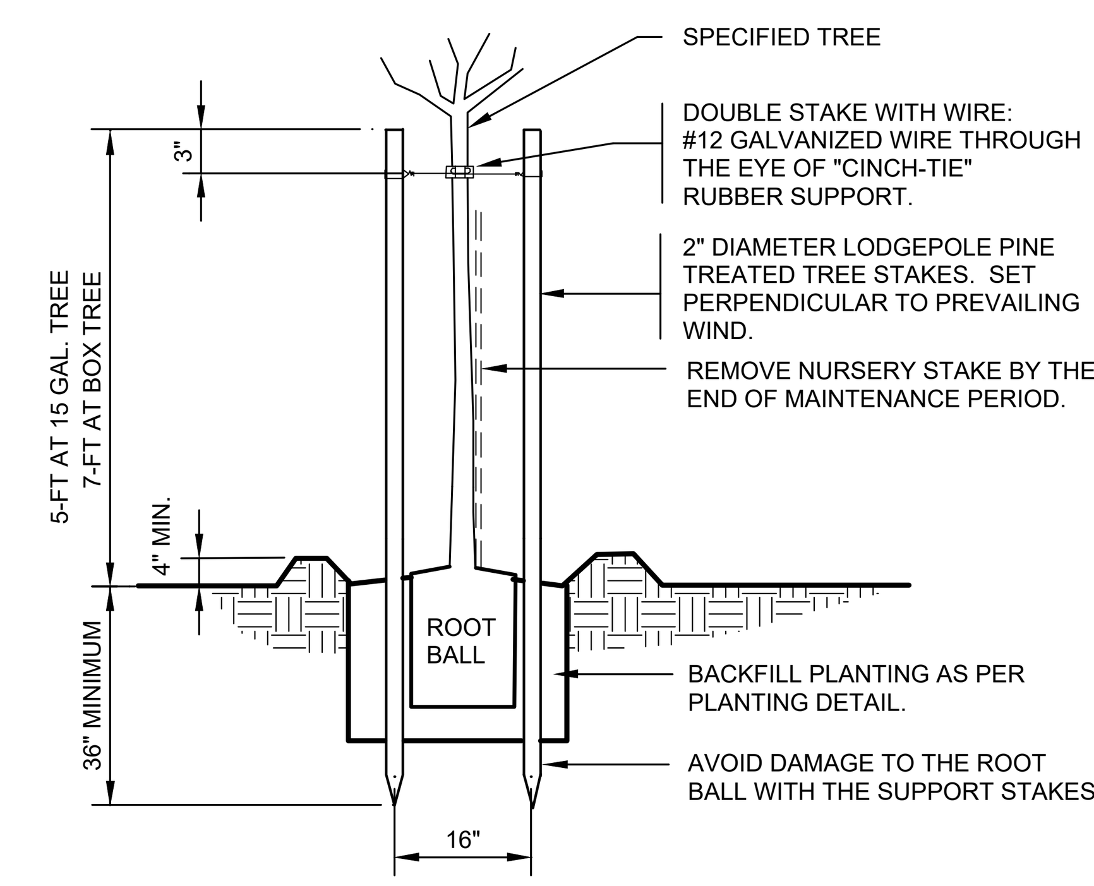
6 TREE BUBBLER - POP-UP WITH SPRAY OR STREAM NOZZLE

1" = 1" 328401-31

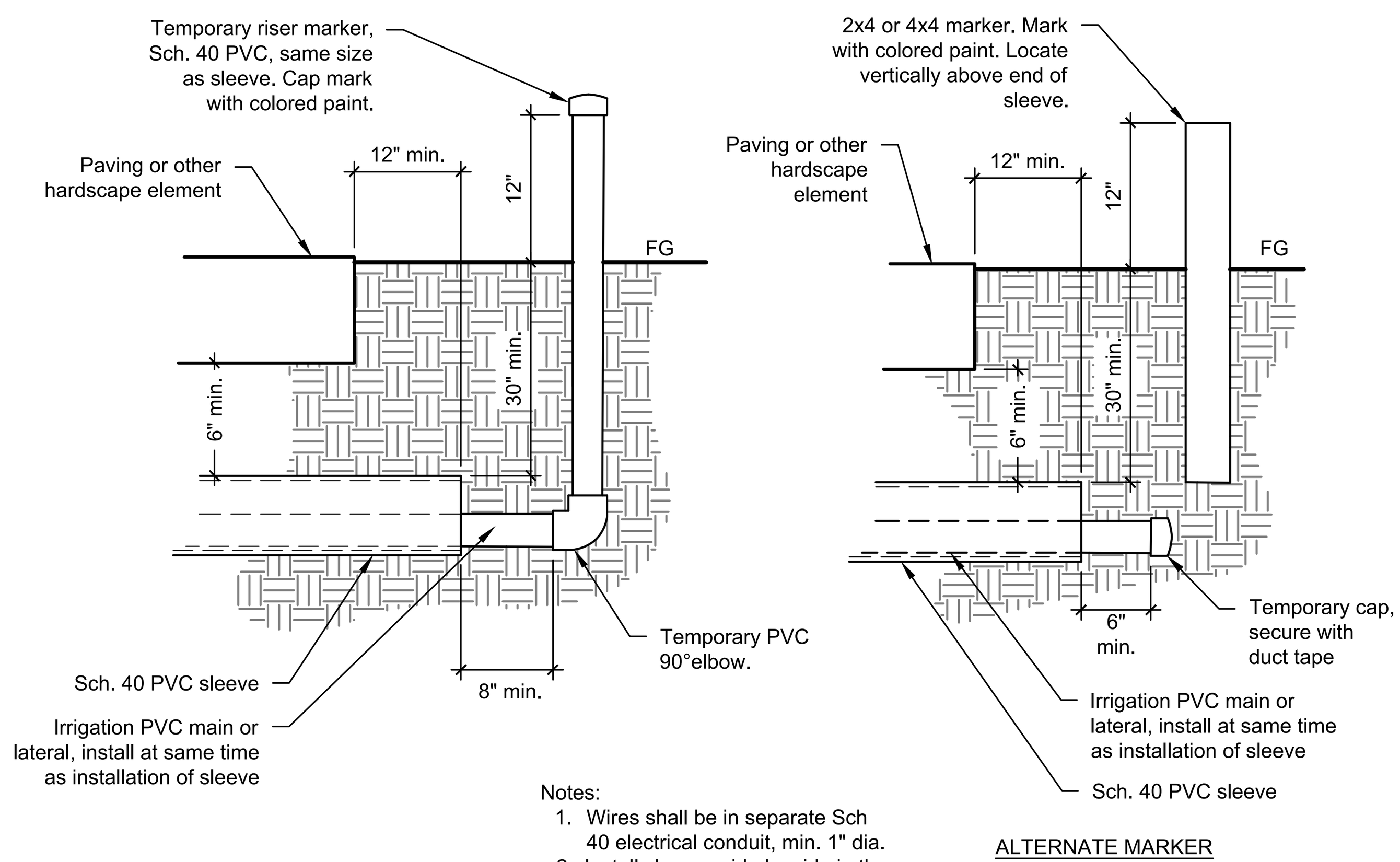


3 GATE VALVE - UP TO 3"

NTS 328401-09



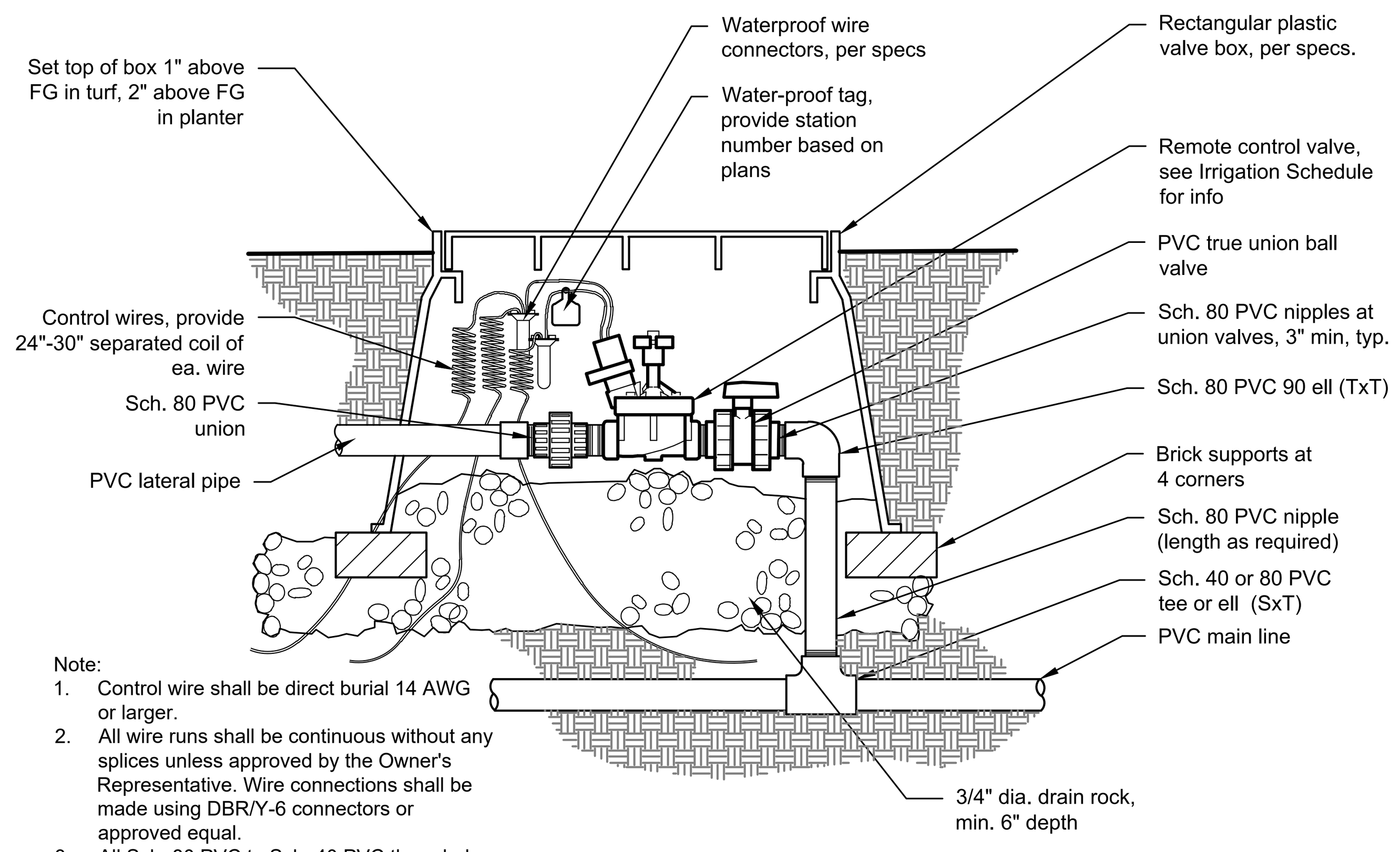
STAKING DETAIL



Notes:
1. Wires shall be in separate Sch 40 electrical conduit, min. 1" dia.
2. Install sleeves side by side in the same trench.

7 IRRIGATION SLEEVE

NTS 328401-26

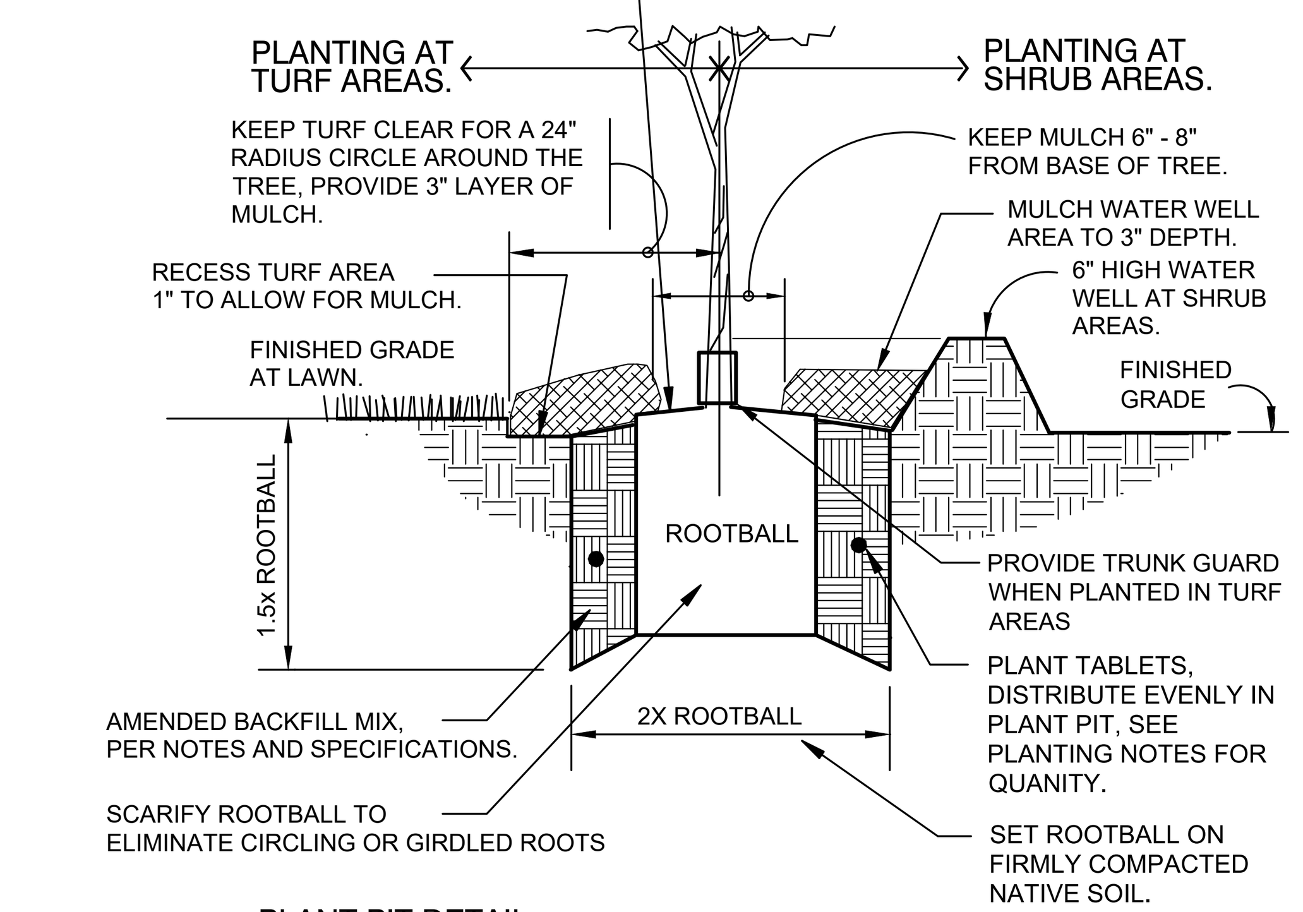


Note:
1. Control wire shall be direct burial 14 AWG or larger.
2. All wire runs shall be continuous without any splices unless approved by the Owner's Representative. Wire connections shall be made using DBR/Y-6 connectors or approved equal.
3. All Sch. 80 PVC to Sch. 40 PVC threaded connections shall be made using teflon tape.
4. Valve boxes shall be located in planting areas.

4 REMOTE CONTROL VALVE

NTS 328401-12

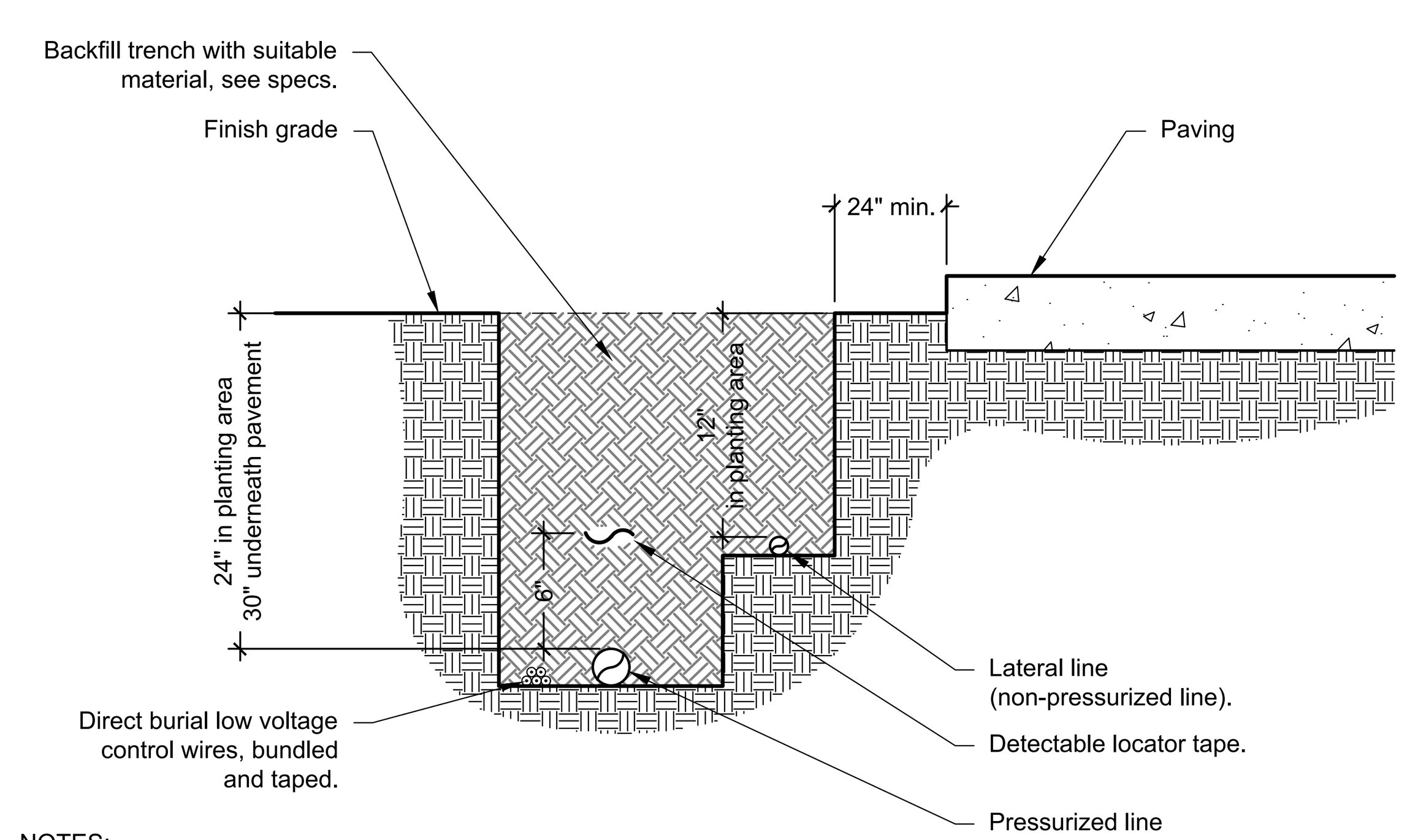
SET ROOTBALL CROWN 1 1/2" HIGHER THAN THE SURROUNDING FINISHED GRADE. SLOPE BACKFILL AWAY FROM ROOTBALL FOR POSITIVE DRAINAGE.



PLANT PIT DETAIL

1 TREE PLANTING

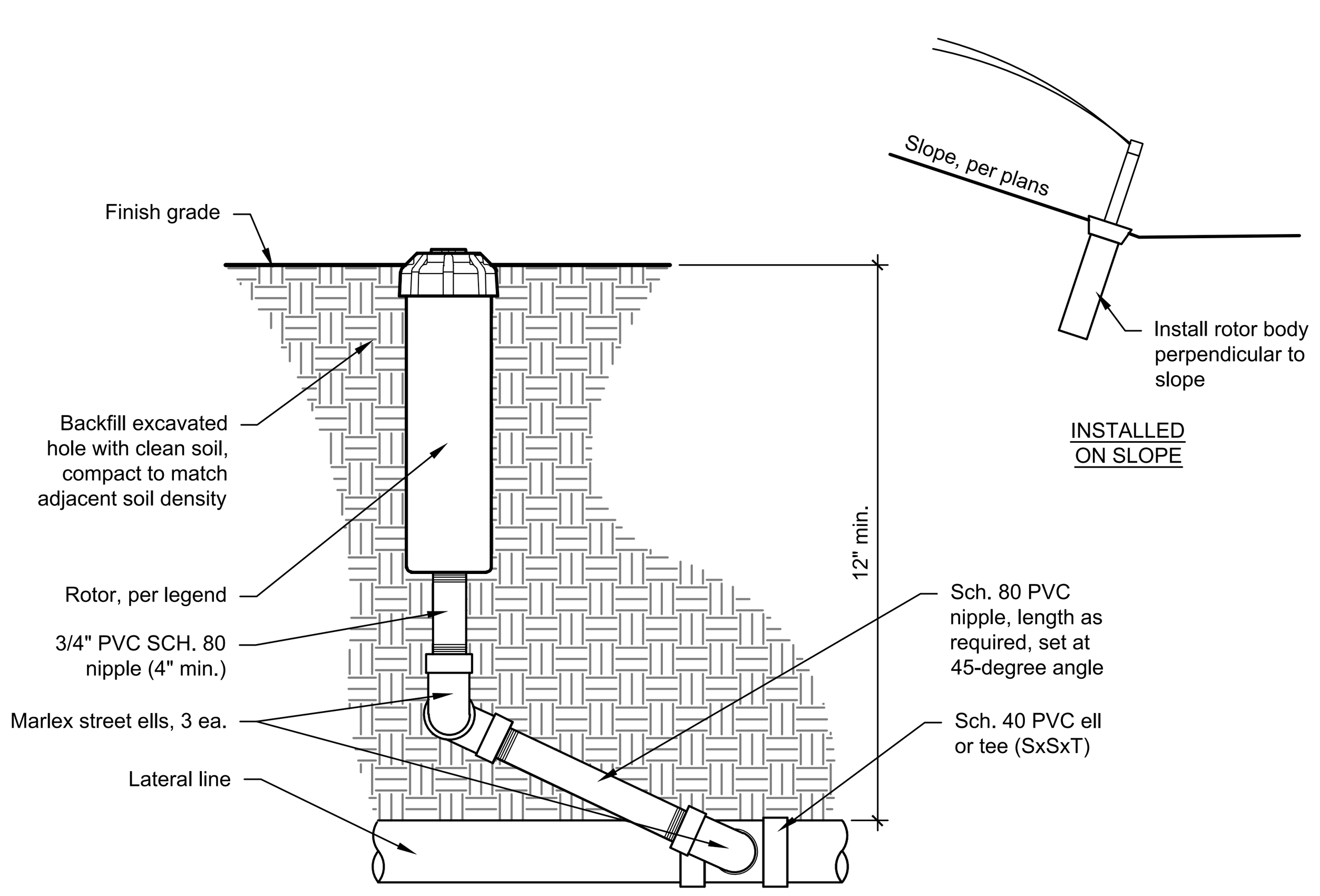
1" = 1'-0" 329301-13



NOTES:
1. See irrigation legend for mainline and lateral line pipe size and type.
2. Direct burial control wires shall be installed in Sch. 40 PVC electrical conduit if required.
3. 2-wire irrigation wire shall be installed in Sch. 40 PVC electrical conduit.
4. Detectable locator tape shall be located six inches (6") above the entire mainline run.

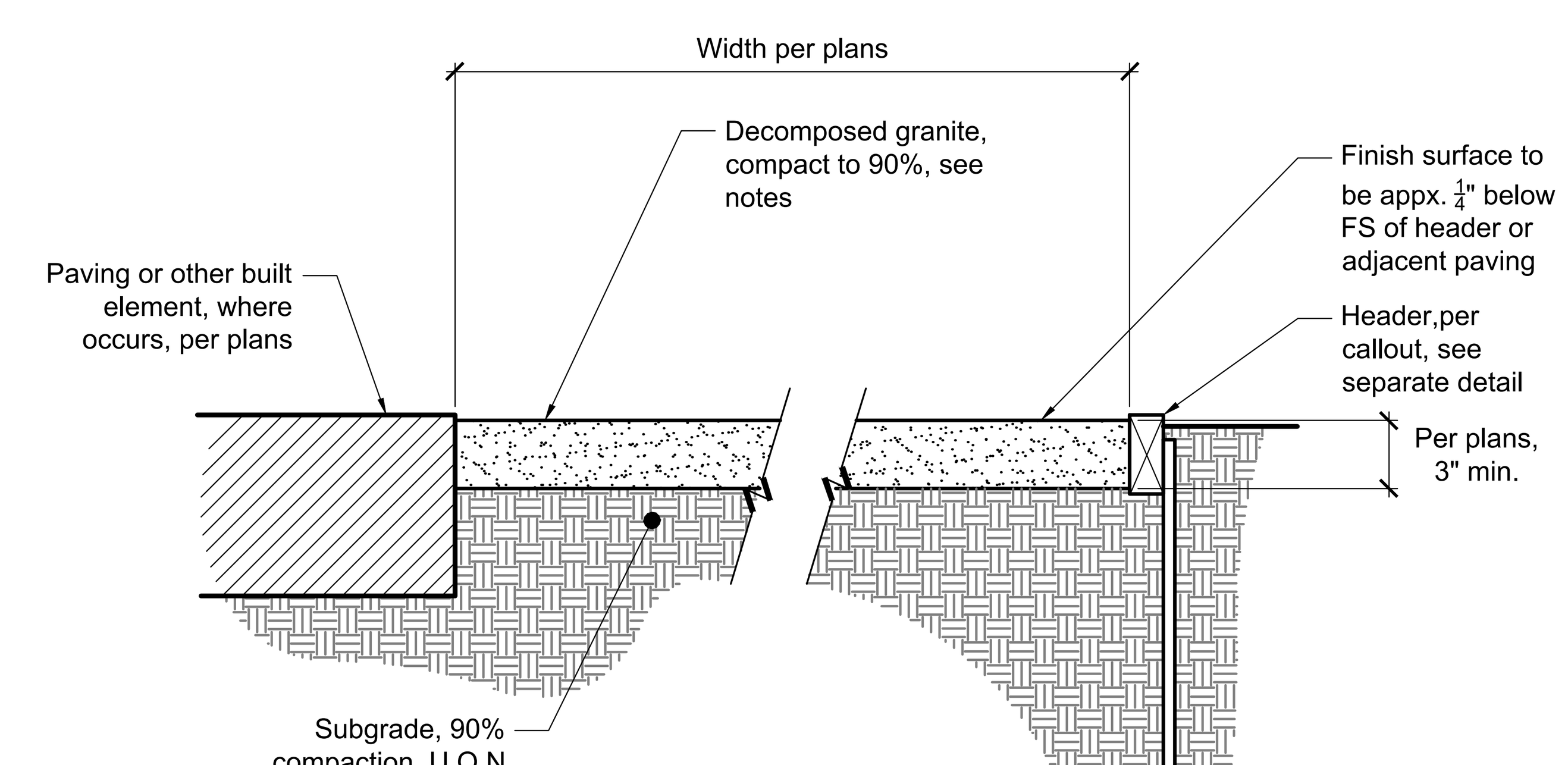
8 TRENCHING

NTS 328401-29



5 GEAR ROTOR

NTS 328401-15



NOTES:
1. Decomposed granite to be ⅜"- ¼". Color: per plans. Submit sample for approval.
2. Compaction rates provided are per ASTM D1557. Conform to compaction specified in soils report, if one is prepared for this project.

2 DECOMPOSED GRANITE (DG) PAVING

1 1/2" = 1'-0"

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Samuel Harned
12/31/26
12/17/2024
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ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
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STOCKTON, CA

DRAWING TITLE
LANDSCAPE DETAILS

PROJECT NO.
23-13018.00
(SHLA 24-21)

DRAWING
L300

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ABBREVIATIONS

ABBREVIATIONS: WHEN USED IN THESE DOCUMENTS SHALL CONFORM TO THE FOLLOWING LIST UNLESS OTHERWISE NOTED. DRAWINGS OF OTHER DISCIPLINES (SUCH AS CIVIL, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL) MAY CONTAIN SPECIFIC ABBREVIATIONS, REFERENCES, AND LEGENDS WITH INTERPRETATION INTENDED ONLY FOR THOSE DISCIPLINES.

&	AND
L	ANGLE
@	AT
℄	CENTERLINE
Ø	DIAMETER OR ROUND
⊥	PERPENDICULAR
#	POUND OR NUMBER
(E)	EXISTING
(N)	NEW
ABV.	ABOVE
A/C	AIR CONDITIONING
ACP	ASPHALT CONCRETE PAVING
ACST.	ACOUSTICAL
A.C.T.	ACOUSTIC CEILING TILE
A.B.	ANCHOR BOLT
ADA	AMERICANS WITH DISABILITIES ACT
ADAAG	ADA ACCESSIBLE GUIDELINES
ADDL.	ADDITIONAL
ADJ.	ADJUSTABLE
ADJC.	ADJACENT
A.F.F.	ABOVE FINISH FLOOR
A.F.G.	ABOVE FINISH GRADE
AGG.	AGGREGATE
ALT.	ALTERNATE
ALUM.	ALUMINUM
ANOD.	ANODIZED
A.P.C.	ACOUSTIC PANEL CEILING
APPROX.	APPROXIMATE
ARCH.	ARCHITECT(URAL)
AV	AUDIO VISUAL
BD.	BOARD
BEL.	BELOW
B.E.N	BOUNDARY EDGE NAILING
BLDG.	BUILDING
BLK.	BLOCK
BLKG.	BLOCKING
BM.	BEAM
BOT.	BOTTOM
BRG.	BEARING
BTWN.	BETWEEN
B.U.R.	BUILT-UP ROOF(ING)
C&G	CURB AND GUTTER
CAB.	CABINET
C.B.	CARRIAGE BOLT
CEM.	CEMENT
CER.	CERAMIC
C.F.	CUBIC FOOT
C.I.	CAST IRON
C.J.	CONSTRUCTION JOINT
C.L.	CENTER LINE
C.L.F.	CHAIN LINK FENCE
CLG.	CEILING
CLO.	CLOSET
CLR.	CLEAR
CL.RM.	CLASS ROOM
CMU	CONCRETE MASONRY UNIT
CTR.	COUNTER
COL.	COLUMN
CONC.	CONCRETE
CONN.	CONNECTION
CONSTR.	CONSTRUCTION
CONT.	CONTINUOUS
CONTR.	CONTRACTOR
CPT.	CARPET
CRC	COLD ROLLED CHANNEL
CTR.	CENTER
CTSK	COUNTERSUNK
C.Y.	CUBIC YARD
D.A.	DISABLED ACCESS
DBL.	DOUBLE
DEMO	DEMOLISH/ DEMOLITION
D.F.	DRINKING FOUNTAIN OR DOUGLAS FIR
DET.	DETAIL
DIAG.	DIAGONAL
DIA.	DIAMETER
DIM.	DIMENSION
DISP.	DISPENSER
DN.	DOWN
DP.	DEEP
DS	DOWN SPOUT
DWG.(S)	DRAWING
DWR.	DRAWER
E	EAST
EA.	EACH
E.F.	EXHAUST FAN
EGR.	ENGINEER
E.J.	EXPANSION JOINT
EL.	ELEVATION
ELEC.	ELECTRIC(AL)
ELEV.	ELEVATOR
EMB.	EMBEDMENT
EMER.	EMERGENCY
E.N.	EDGE NAILING
ENCL.	ENCLOSURE
EQ.	EQUAL
EQUIP.	EQUIPMENT
EVAP.	EVAPORATIVE
E.W.	EACH WAY
EXH.	EXHAUST
EXST.	EXISTING
EXP.	EXPANSION
EXT.	EXTERIOR
FA	FIRE ALARM
F.B.	FLAT BAR
F.B.O.	FURNISHED BY OWNER/OTHERS
F.D.	FLOOR DRAIN
F.D.C.	FIRE DEPARTMENT CONNECTION
FDN.	FOUNDATION
F.E.	FIRE EXTINGUISHER
F.E.C.	FIRE EXTINGUISHER CABINET
F.F.	FACTORY FINISH
F.FLR.	FINISH FLOOR
F.G.	FINISH GRADE
F.H.	FIRE HYDRANT
FHMS	FLAT HEAD MACHINE SCREW
FHWS	FLAT HEAD WOOD SCREW
FIN.	FINISH
FIXT.	FIXTURE
FLR.	FLOOR(ING)
FLASH.	FLASHING
FLUOR.	FLUORESCENT
F.O.	FACE OF
F.O.C.	FACE OF CONCRETE
F.O.F.	FACE OF FINISH
F.O.M.	FACE OF MASONRY
F.O.S.	FACE OF STUD
FRP	FIBERGLASS REIN-FORCED PANELING
F.S.	FIRE SPRINKLER(S)
F.S.H.	FIRE SPRINKLER HEAD
FT.	FOOT/FEET
FURR.	FURRING
FUT.	FUTURE
GA.	GAUGE
GALV.	GALVANIZED
G.B.	GRAB BAR
G.C.	GENERAL CONTR.
GEN.	GENERAL
G.I.	GALVANIZED IRON
GL.	GLASS
GND.	GROUND
GR.	GRADE
GYP.	GYPSUM
H.B.	HOSE BIBB
HBD.	HARDBOARD
H.C.	HOLLOW CORE
HD.	HEAD
H.D.	HEAVY DUTY
HDR.	HEADER
HDW.	HARDWARE
HDWD.	HARDWOOD
H.M.	HOLLOW METAL
H.M.D.	HOLLOW METAL DOOR
H.M.F.	HOLLOW METAL FRAME
HORIZ.	HORIZONTAL
HR.	HOUR
HT.	HEIGHT
HVAC	HEATING/VENTIL-ATING/AIR COND-ITIONING
HWY	HIGH WAY
I.D.	INSIDE DIAMETER/ DIMENSION
INFO	INFORMATION
INSUL.	INSULATION
INT.	INTERIOR
JAN.	JANITOR
JT.	JOINT
KIT.	KITCHEN
K.O.	KNOCK OUT
K.O.P.	KNOCK OUT PANEL
LAB.	LABORATORY
LAM.	LAMINATE
LAV.	LAVATORY
LB(S)	POUND (POUNDS)
L.B.	LAG BOLT
L.F.	LINEAL FOOT
L.H.	LEFT HAND
LIB.	LIBRARY
LT.	LIGHT
LT.WT.	LIGHT WEIGHT
MACH.	MACHINE
MAINT.	MAINTENANCE
MAX.	MAXIMUM
M.B.	MACHINE BOLT
M.B.M.	METAL BUILDING MANUFACTURER
MECH.	MECHANICAL
MED.	MEDIUM
MEMB.	MEMBRANE
MET.	METAL
MFR.	MANUFACTURER
MH.	MANHOLE
MKR.	MARKER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
M.O.	MASONRY OPENING
MTD.	MOUNTED
MTG.	MEETING
MULL.	MULLION
N	NORTH
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NOM.	NOMINAL
N.R.C.	NOISE REDUCTION COEFFICIENT
N.T.S.	NOT TO SCALE
OCC	OCCUPANT LOAD
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER/ DIMENSION
OFF.	OFFICE
OFCI	OWNER FURNISHED, CONTR. INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
O.F.R.D.	OVER FLOW ROOF DRAIN
O.H.	OPPOSITE HAND
O.H.C.D.	OVER HEAD COILING DOOR
O.H.M.S.	OVAL HEAD MACH. SCREW
O.H.W.S.	OVAL HEAD WOOD SCREW
OPNG.	OPENING
OPP.	OPPOSITE
O/	OVER
ORIG.	ORIGINAL
OVHD	OVER HEAD
OWJ	OPEN WEB JOIST
P.B.N.	PLYWOOD BOUNDARY NAILING
P.E.N.	PLYWOOD EDGE NAILING
P.E.S.	PLYWOOD EDGE SCREWS
P.I.V.	POST INDICATOR VALVE
P.LAM.	PLASTIC LAMINATE
P.L.	PROPERTY LINE
PL.	PLATE
PLAS.	PLASTER
PLYWD.	PLYWOOD
PR.	PAIR
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT.	POINT
P.T.D.	PAPER TOWEL DISP.
P.T.D.F.	PRESSURE TREATED DOUGLAS FIR
PTN.	PARTITION
PVC	POLYVINYL CHLORIDE
R.	RADIUS
R	THERMAL RESISTANCE
R.A.	RETURN AIR
R.D.	ROOF DRAIN
REFL.	REFLECTED
REFR.	REFRIGERATOR
REINF.	REINFORCED
REM.	REMOVE
REQD.	REQUIRED
RESIL.	RESILIENT
R.H.	RIGHT HAND
R.H.W.S.	ROUND HEAD WOOD SCREW
RM.	ROOM
R.O.	ROUGH OPENING
R.O.W.	RIGHT-OF-WAY
RWD.	REDWOOD
RWL	RAIN WATER LEADER
S	SOUTH
S.A.	SUPPLY AIR
S.C.	SOLID CORE
SCH.	SCHEDULE
S.D.	STORM DRAIN
SECT.	SECTION
SF	SQUARE FEET/FOOT
SHR.	SHOWER
SHTG.	SHEATHING
SIM.	SIMILAR
S.M.	SHEET METAL
S.O.G.	SLAB-ON-GRADE
SPEC(S).	SPECIFICATION(S)
SPKR.	SPEAKER
SQ.	SQUARE
S.S.	STAINLESS STEEL
STA.	STATION
STC	SOUND TRANS-MISSION CLASS
STD.	STANDARD
STL.	STEEL
STOR.	STORAGE
STRUCT.	STRUCTURAL
SUSP.	SUSPENDED
S.W.	SIDE WALK
SYM.	SYMMETRICAL
T.C.	TOP OF CONCRETE
TEMP.	TEMPORARY
TMPD.	TEMPERED
T&G	TONGUE AND GROOVE
THD.	THREADED
THK.	THICK
T.I.	TENANT IMPROVEMENT
TK.BD.	TACK BOARD
T.O.S.	TOP OF STEEL
T.P.	TOP OF PAVEMENT
TS	TUBE STEEL
TEL.	TELEPHONE
TTB	TELEPHONE TERM-INAL BACK BD.
TV	TELEVISION
TYP.	TYPICAL
U.G.	UNDERGROUND
U.N.O.	UNLESS NOTED OTHERWISE
UR.	URINAL
VCT	VINYL COMPOSITION TILE
VERT.	VERTICAL
VTR	VENT TO ROOF
VWC	VINYL WALL COVERING
W	WEST OR WIDTH/WIDE
W/	WITH
W.C.	WATER CLOSET
W.CH.	WHEEL CHAIR
WD.	WOOD
WDW.	WINDOW
WF	WIDE FLANGE
W.H.	WATER HEATER
W/O	WITHOUT
W.P.	WATERPROOF
W.S.	WOOD SCREW
WT.	WEIGHT
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER

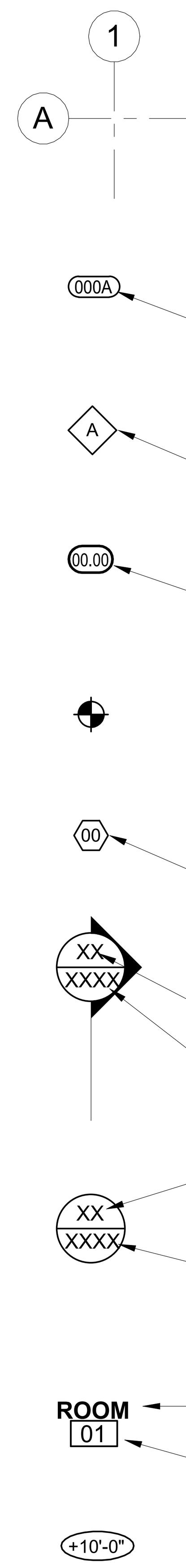
CODES AND ORGANIZATIONS

CBC	CALIFORNIA BUILDING CODE
CEC	CALIFORNIA ELECTRICAL CODE
CFC	CALIFORNIA FIRE CODE
CMC	CALIFORNIA MECHANICAL CODE
CPC	CALIFORNIA PLUMBING CODE
DSA	DIVISION OF THE STATE ARCHITECT
ICBO	INTERNATIONAL CONFERENCE OF BUILDING OFFICIALS
NSF	NATIONAL SANITATION FOUNDATION
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NEC	NATIONAL ELECTRICAL CODE

TYPICAL SYMBOLS

SYMBOLS

∡	ANGLE
Φ	DIAMETER OR ROUND
⊥	PERPENDICULAR
&	AND
@	AT
℄	CENTER LINE
#	POUND OR NUMBER



STATION LINE

DOOR SYMBOL
DOOR REFERENCE

WINDOW SYMBOL
WINDOW REFERENCE

KEYNOTE SYMBOL
KEYNOTE REFERENCE, REFER TO KEYNOTE LIST ON SHEET

WORK POINT, CONTROL POINT OR DATUM POINT

WALL SYMBOL
WALL REFERENCE

SECTION
LOCATION ON SHEET REFERENCED
SHEET NUMBER WHERE SECTION IS LOCATED

DETAIL
LOCATION ON SHEET REFERENCED
SHEET NUMBER WHERE DETAIL IS LOCATED

ROOM IDENTIFICATION
ROOM NAME
ROOM NUMBER

CEILING HEIGHT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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MARK	DATE	DESCRIPTION
3	1/7/2025	BACKCHECK SUBMITTAL

TETER, INC.
FRESNO HEADQUARTERS
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ARCHITECTS ENGINEERS CONNECTED

TETER

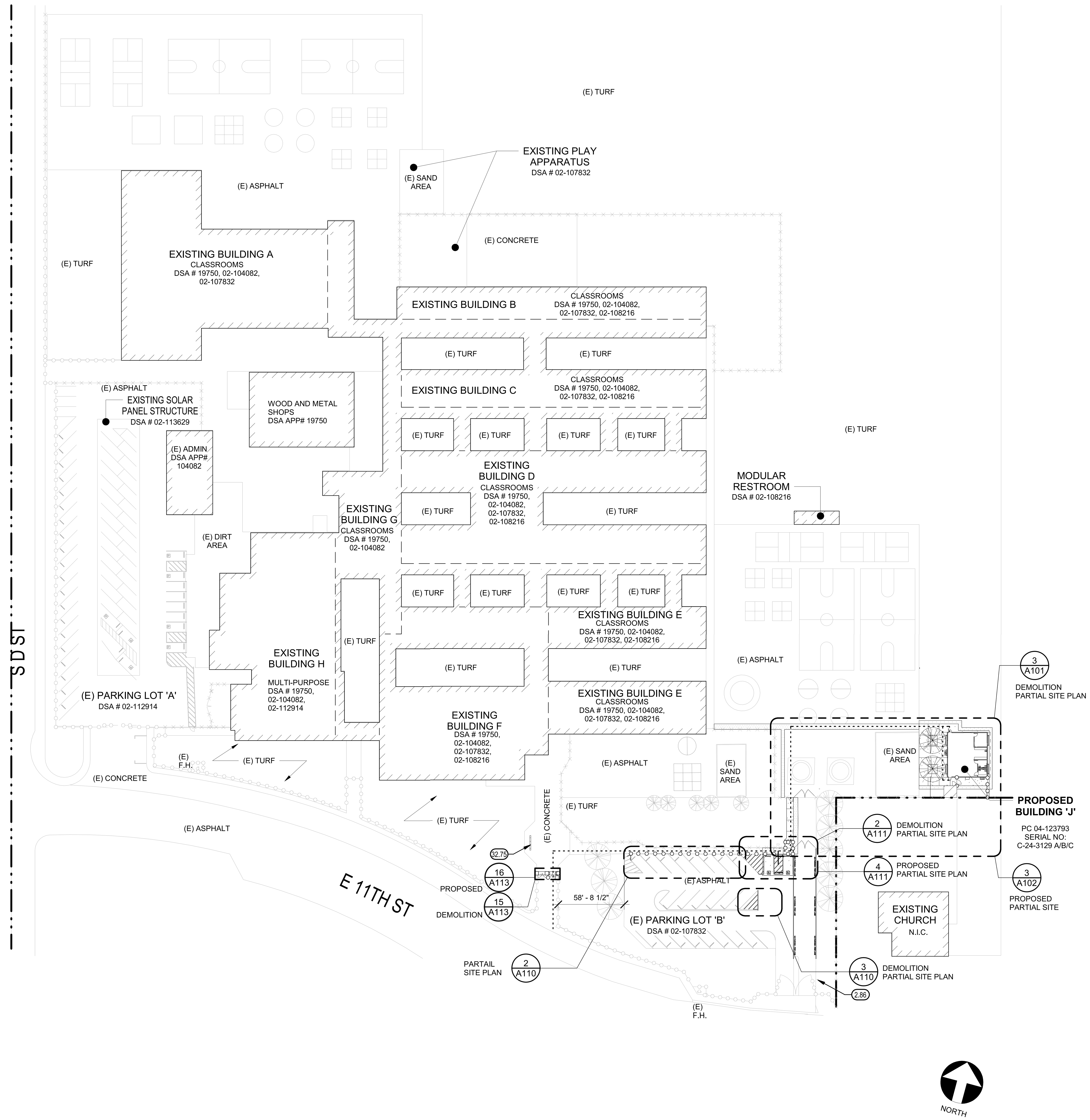
ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
LEGENDS AND ABBREVIATIONS

PROJECT NO.
23-13018.00

DRAWING
A000

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt



OVERALL SITE PLAN

1" = 50'-0" 12

PLOT DATE: 1/3/2025 11:15:27 AM

KEYNOTES

2.86 REPLACE EXISTING TOW AWAY SIGN, EXISTING PIPE POST AND FOOTING TO REMAIN, SEE 14 / A111

32.75 NEW (7) CAPACITY BICYCLE RACK, SEE SPECIFICATIONS

EXISTING PARKING LOT 'A' SUMMARY PER DSA A# 02-107832, 02-02112914		
	QTY. STALLS	SOLAR COVERED STALLS
REGULAR STALLS	28	28
ACCESSIBLE STALLS	2	2
VAN ACCESSIBLE STALL	2	1
TOTAL	32	31

EXISTING PARKING LOT 'B' SUMMARY PER DSA A# 02-107832	
	QTY. STALLS
REGULAR STALLS	23
ACCESSIBLE STALLS	1
VAN ACCESSIBLE STALL	1
TOTAL	25

PARKING LOT 'B' SUMMARY	
	QTY. STALLS
REGULAR STALLS	22
ACCESSIBLE STALLS	1
VAN ACCESSIBLE STALL	1
TOTAL	24

LEGEND

EXISTING BUILDING
NO SCOPE OF WORK UNDER THIS PROJECT

PROPOSED MODULAR BUILDING
MODULAR BUILDING UNDER THIS SCOPE OF WORK, SEE MFR DWGS.

NEW CONCRETE PAVING
SEE CIVIL DRAWINGS

NEW CONCRETE PAVING
SEE CIVIL DRAWINGS

NEW TURF AREA
SEE LANDSCAPE DRAWINGS

NEW ASPHALT
SEE CIVIL DRAWINGS

SITE INFORMATION

PROPERTY LINE

ASSUMED PROPERTY LINE

EXISTING CHAIN LINK FENCING, TYP

EXISTING DECORATIVE METAL FENCING, TYP

(E) F.H. — EXISTING FIRE HYDRANT TO REMAIN

EXISTING TREE TO REMAIN, SEE LANDSCAPE

PROPOSED TREE, SEE LANDSCAPE

NEW CHAIN LINK FENCING, TYP

ACCESSIBLE PATH OF TRAVEL (2022 C.B.C. SECTIONS 11B - 202.4 AND 11B - 401)

THE ACCESSIBLE ROUTE IS A CONTINUOUS UNOBSTRUCTED PATH CONNECTING ACCESSIBLE ELEMENTS AND SPACES OF AN ACCESSIBLE SITE, BUILDING OR FACILITY THAT CAN BE NEGOTIATED BY A PERSON WITH A DISABILITY USING A WHEELCHAIR, AND THAT IS ALSO SAFE FOR AND USABLE BY PERSONS WITH OTHER DISABILITIES. ACCESSIBLE ROUTES SHALL COMPLY WITH CBC 11B-402. IN GENERAL, EXTERIOR ACCESSIBLE ROUTES SHALL COMPLY WITH THE FOLLOWING: SHALL BE STABLE, FIRM, AND SLIP RESISTANT; HAVE A 1:20 MAXIMUM RUNNING SLOPE AND A MAXIMUM CROSS SLOPE OF 1:48 FOR WALKS; HAVE A 1:12 MAXIMUM SLOPE FOR RAMPS AND CURB RAMPS; HAVE A 1/4:12 MAXIMUM CROSS SLOPE; HAVE A 48" MINIMUM WIDTH; HAVE NO VERTICAL OFFSETS GREATER THAN 1/4"; OFFSETS BETWEEN 1/4" AND 1/2" SHALL BE BEVELED WITH A SLOPE NOT EXCEEDING 1V:2H; HAVE NO OPENINGS ALLOWING THE PASSAGE OF A 1/2" DIAMETER SPHERE; ELONGATED OPENINGS SHALL BE PERPENDICULAR TO THE DIRECTION OF TRAVEL; HAVE A MINIMUM 6" HIGH CURB OR GUARDRAIL AT EDGES WHERE THE DROP OFF EXCEEDS 4" EXCEPT WHERE ADJACENT TO VEHICULAR WAYS; BE FREE OF ELEMENTS PROJECTING MORE THAN 4" FROM WALLS BETWEEN 27" AND 80" ABOVE THE WALKING SURFACE; AND HAVE 80" MINIMUM VERTICAL CLEARANCE.

DESIGN PROFESSIONAL IN CHARGE STATEMENT:

- THE P.O.T. IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS.
- AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS, OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NONCOMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS, AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS.
- ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.
- DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY ITEMS SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

GENERAL NOTES

A. REFER TO CIVIL, LANDSCAPE, ELECTRICAL, FIRE SPRINKLER, AND PRE MANUFACTURER MODULAR DRAWINGS FOR UTILITY INFORMATION. CONTRACTOR TO COORDINATE ALL TRADES TO MAINTAIN PROPER CLEARANCES & AVOID CONFLICTS.

B. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION & DEMOLISH AND/OR REMOVE FROM THE AREA OF THE PROJECT SUBSURFACE, TREES, BRUSH, ROOTS, DEBRIS, ORGANIC MATTER, & ALL OTHER MATTER DETERMINED BY THE INSPECTOR TO BE DELETERIOUS. SUCH MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

C. PROTECT EXISTING TURF, PLANT & TREES TO REMAIN. THE CONTRACTOR IS RESPONSIBLE TO REPLACE ANY EXISTING TURF, PLANT MATERIALS OR TREES THAT ARE TO REMAIN AND BE PROTECTED AND SHALL INCLUDE BUT NOT BE LIMITED TO: EXISTING TURF, PLANT MATERIAL OR TREES THAT ARE DAMAGED DUE TO CONSTRUCTION ACTIVITIES, VEHICLE DAMAGE, AND STRESS DUE TO LACK OF WATER OR OTHER DETERIORATION. THE EXISTING AREAS TO REMAIN ARE TO BE RESTORED BY THE CONTRACTOR TO THE EXISTING CONDITION PRIOR TO THE PROJECT AT NO ADDITIONAL COST TO THE DISTRICT. THIS INCLUDES DAMAGE THAT MAY OCCUR AT ANY AREA OF THE CAMPUS DUE TO CONSTRUCTION RELATED ACTIVITIES ASSOCIATED WITH THIS CONTRACT.

D. PROPERTY DIMENSIONS AS SHOWN ARE BASED ON RECORD INFO. & SHOULD BE FIELD VERIFIED BY A PROPERTY SURVEY PRIOR TO CONSTRUCTION.

E. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF CBC AND CFC, "FIRE SAFETY DURING CONSTRUCTIONS AND DEMOLITION"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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3	1/7/2025	BACKCHECK SUBMITTAL

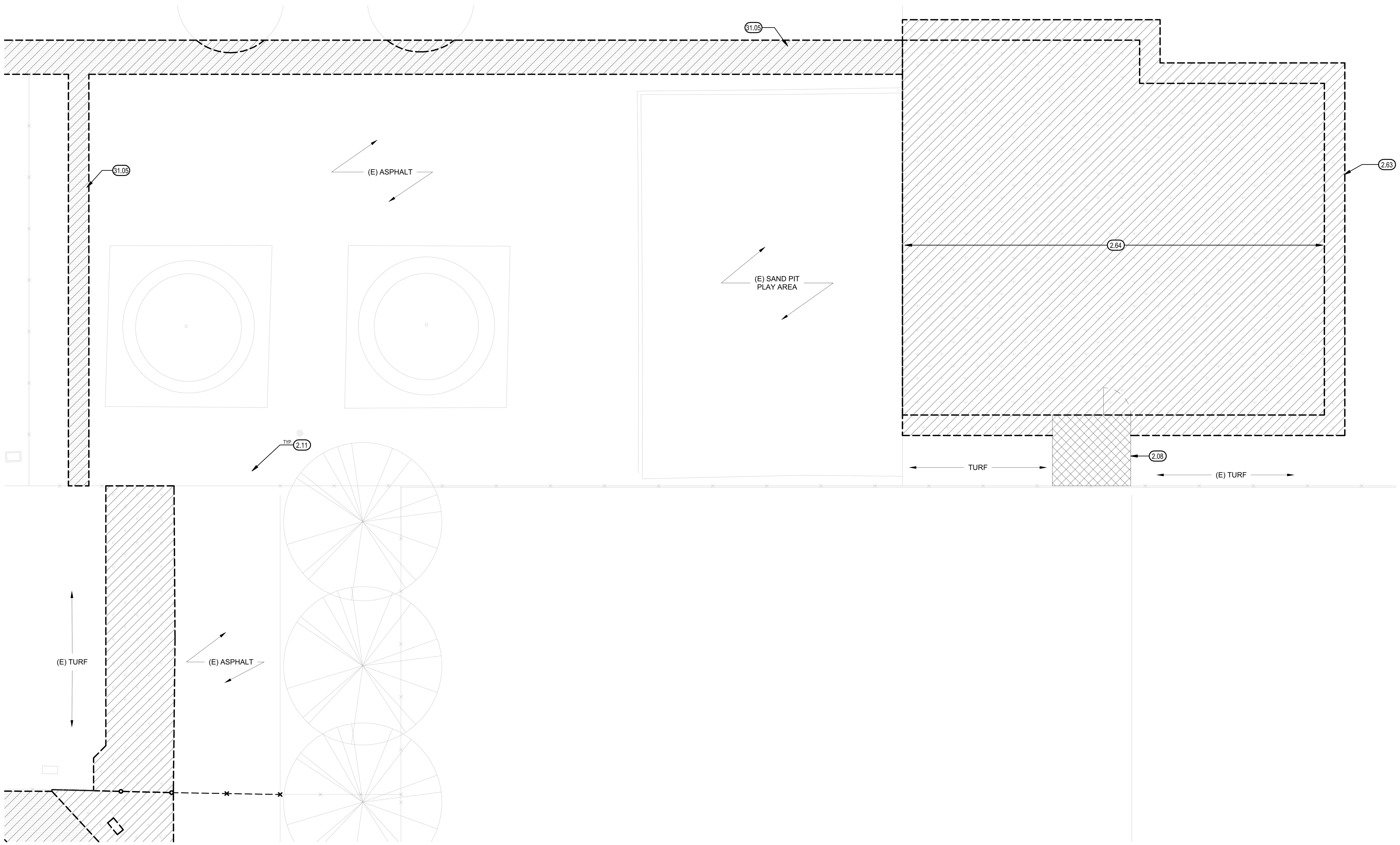
TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED
TETER

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
OVERALL SITE PLAN

PROJECT NO.
23-13018.00

DRAWING
A100



DEMOLITION PARTIAL SITE PLAN

1/8" = 1'-0" | 3

GENERAL NOTES

A. REFER TO CIVIL, LANDSCAPE, ELECTRICAL AND PRE MFR. MODULAR DRAWINGS FOR UTILITY INFORMATION. CONTRACTOR TO COORDINATE ALL TRADES TO MAINTAIN PROPER CLEARANCES & AVOID CONFLICTS.

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D. FINISH GRADE SHALL HAVE A 1.5% SLOPE AWAY FROM THE BUILDING FOR A DISTANCE NOT LESS THAN 5'-0" FROM THE BLDG.

E. PROPERTY DIMENSIONS AS SHOWN ARE BASED ON RECORD INFO. & SHOULD BE FIELD VERIFIED BY A PROPERTY SURVEY PRIOR TO CONSTRUCTION.

F. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF CBC AND CFC, "FIRE SAFETY DURING CONSTRUCTIONS AND DEMOLITION"

SITE INFORMATION

PROPERTY LINE

EXISTING CHAIN LINK FENCING, TYP

EXISTING TREE TO REMAIN, SEE LANDSCAPE

DEMOLITION LEGEND

EXISTING BUILDING
NO SCOPE OF WORK UNDER THIS PROJECT

DEMOLITION OF ASPHALT CONCRETE PAVING
SEE CIVIL FOR GRADING AND CONSTRUCTION

DEMOLITION OF EXISTING TURF AREA
SEE LANDSCAPE DRAWINGS

00.00 KEYNOTES

2.08	EXISTING TRANSFORMER TO REMAIN, SEE ELECTRICAL
2.11	EXISTING GATES TO REMAIN
2.63	REMOVE EXISTING TURF AND DISPOSE OF OFF-SITE. SCARIFY TOP 6" OF EXISTING SOIL AND RECOMPACT TO 90% RELATIVE COMPACTION. SEE LANDSCAPE.
2.64	REMOVE EXISTING TURF AND EXISTING DIRT BELOW PROPOSED BUILDING LOCATION. SEE CIVIL
31.05	REMOVE EXISTING AC PAVING FOR TRENCHING OF UTILITIES, SEE CIVIL AND ELECTRICAL

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DRAWING TITLE
DEMOLITION PARTIAL SITE PLAN

PROJECT NO.
23-13018.00

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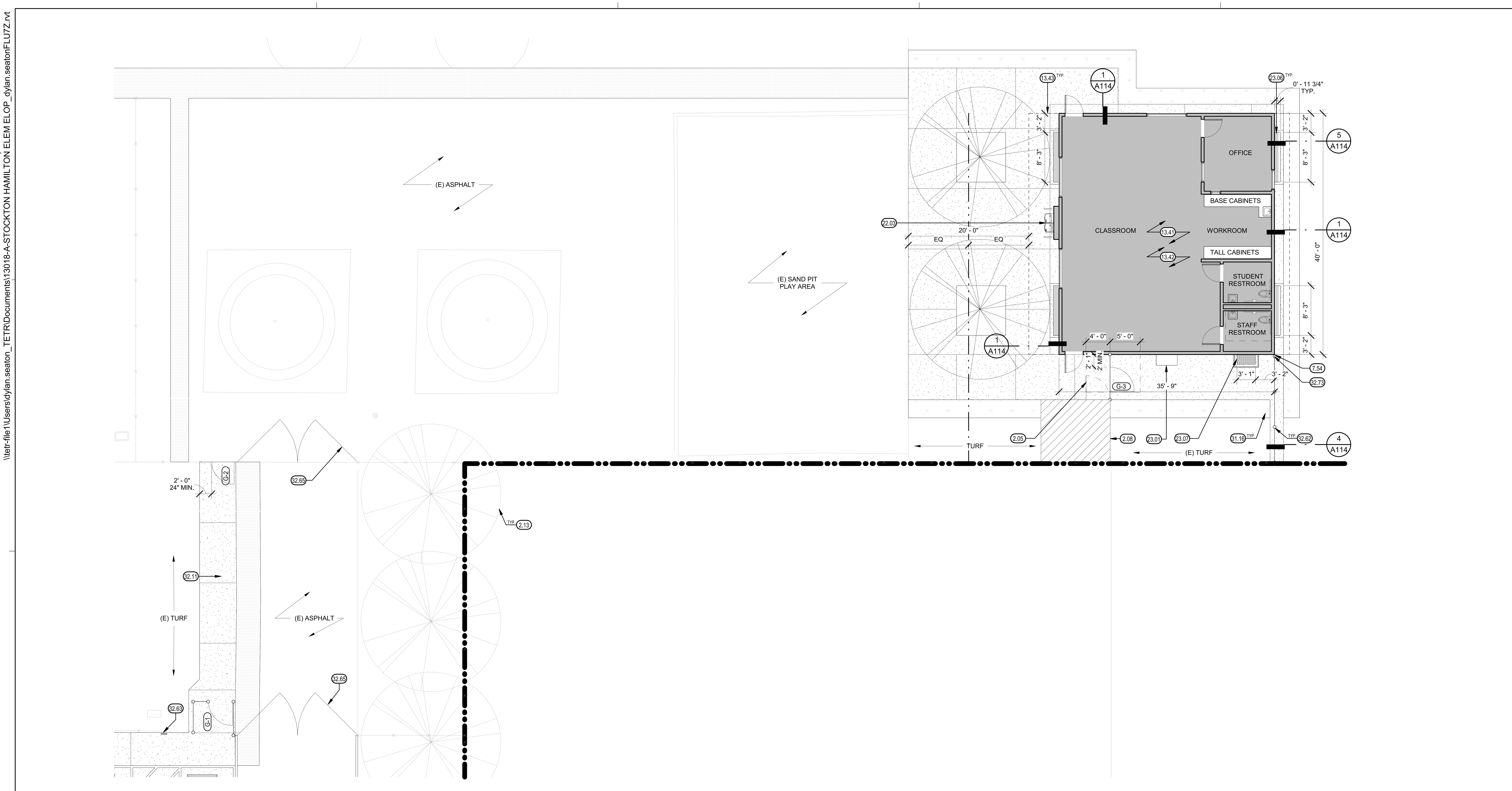

PROPOSED PARTIAL SITE PLAN

1/8" = 1'-0" 3

GENERAL NOTES

A. REFER TO CIVIL, LANDSCAPE, ELECTRICAL AND PRE MFR. MODULAR DRAWINGS FOR UTILITY INFORMATION. CONTRACTOR TO COORDINATE ALL TRADES TO MAINTAIN PROPER CLEARANCES & AVOID CONFLICTS.

B. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION & DEMOLISH AND/OR REMOVE FROM THE AREA OF THE PROJECT SUBSURFACE, TREES, BRUSH, ROOTS, DEBRIS, ORGANIC MATTER, & ALL OTHER MATTER DETERMINED BY THE INSPECTOR TO BE DELETERIOUS. SUCH MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.

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F. WORK SHALL COMPLY WITH THE PROVISIONS OF CHAPTER 33 OF CBC AND CFC, "FIRE SAFETY DURING CONSTRUCTIONS AND DEMOLITION"

LEGEND

PROPOSED MODULAR BUILDING MODULAR BUILDING UNDER THIS SCOPE OF WORK, SEE MFR DWGS.

NEW TURF AREA SEE LANDSCAPE DRAWINGS

NEW CONCRETE PAVING SEE CIVIL DRAWINGS

NEW ASPHALT SEE LANDSCAPE DRAWINGS

PEDESTRIAN GATE SCHEDULE

MARK	CLEAR WIDTH	HEIGHT	MATERIAL	FINISH	HARDWARE SET	DETAIL	REMARK
G-1	4'-0"	6'-0"	GCL	GAL	4	14 / A112	
G-2	3'-8"	6'-0"	GCL	GAL	5	13 / A112	
G-3	4'-0"	6'-0"	GCL	GAL	6	13 / A112	

KEY
GCL GALVANIZED CHAINLINK (G-X) GATE, SEE GATE SCHEDULE
GAL GALVANIZED

SITE INFORMATION

PROPERTY LINE
ASSUMED PROPERTY LINE
EXISTING CHAIN LINK FENCING, TYP
NEW CHAIN LINK FENCING, TYP
(N) GN GENDER NEUTRAL STUDENT RESTROOM
(N) S GENDER NEUTRAL STAFF RESTROOM
EXISTING TREE
PROPOSED TREE, SEE LANDSCAPE DRAWINGS

(00.00) KEYNOTES

2.05 EXISTING CHAIN LINK GATE
2.08 EXISTING TRANSFORMER TO REMAIN, SEE ELECTRICAL
2.13 EXISTING TREE TO REMAIN
7.54 SHEET METAL DOWNSPOUT
13.41 CONNECT BUILDING TO EXISTING UTILITIES, SEE CIVIL, ELECTRICAL, AND SHEET A113
13.42 NEW MODULAR CONCRETE FOUNDATION. SET EACH CORNER OF BUILDING PAD AT 0'-0". SEE MANUFACTURER AND CIVIL DRAWINGS.
13.43 DASHED LINE INDICATES ROOF OVERHANG ABOVE. SEE MANUFACTURER DRAWINGS
22.03 HIGH-LOW DRINKING FOUNTAIN AND DETAIL 8 / A802
23.01 HVAC UNIT, SEE NEW RELOCATABLE CLASSROOM BUILDING DRAWINGS
23.06 FOUNDATION VENT 5 / A114
23.07 ACCESS VENT, SEE DETAIL 5 / A114
31.16 EXISTING TURF AREA ADJACENT TO PROPOSED BUILDING TO BE REPAIRED OR PROVIDE NEW SOD AS REQUIRED, SEE CIVIL AND LANDSCAPE
32.11 4" CONCRETE PAVING/WALK, SEE CIVIL
32.62 CHAIN LINK FENCING, 6'-0" FT HIGH, SEE 4 / A112
32.63 CHAIN LINK PEDESTRIAN GATE, ACCESSIBLE, SEE 2 / A112
32.65 PAIR OF 10'-0" CHAIN LINK SWING GATES, SEE 4 / A110
32.73 CHAIN LINK FENCE AT BUILDING, SEE 20 / A112

IDENTIFICATION STAMP
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TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
PROPOSED PARTIAL SITE PLAN

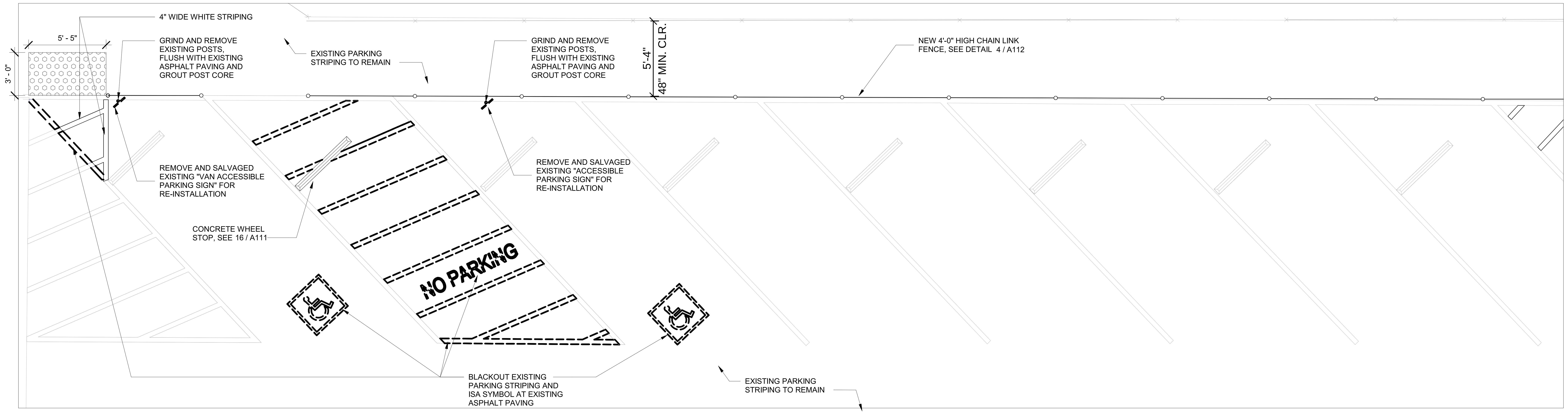
PROJECT NO.
23-13018.00

DRAWING
A102

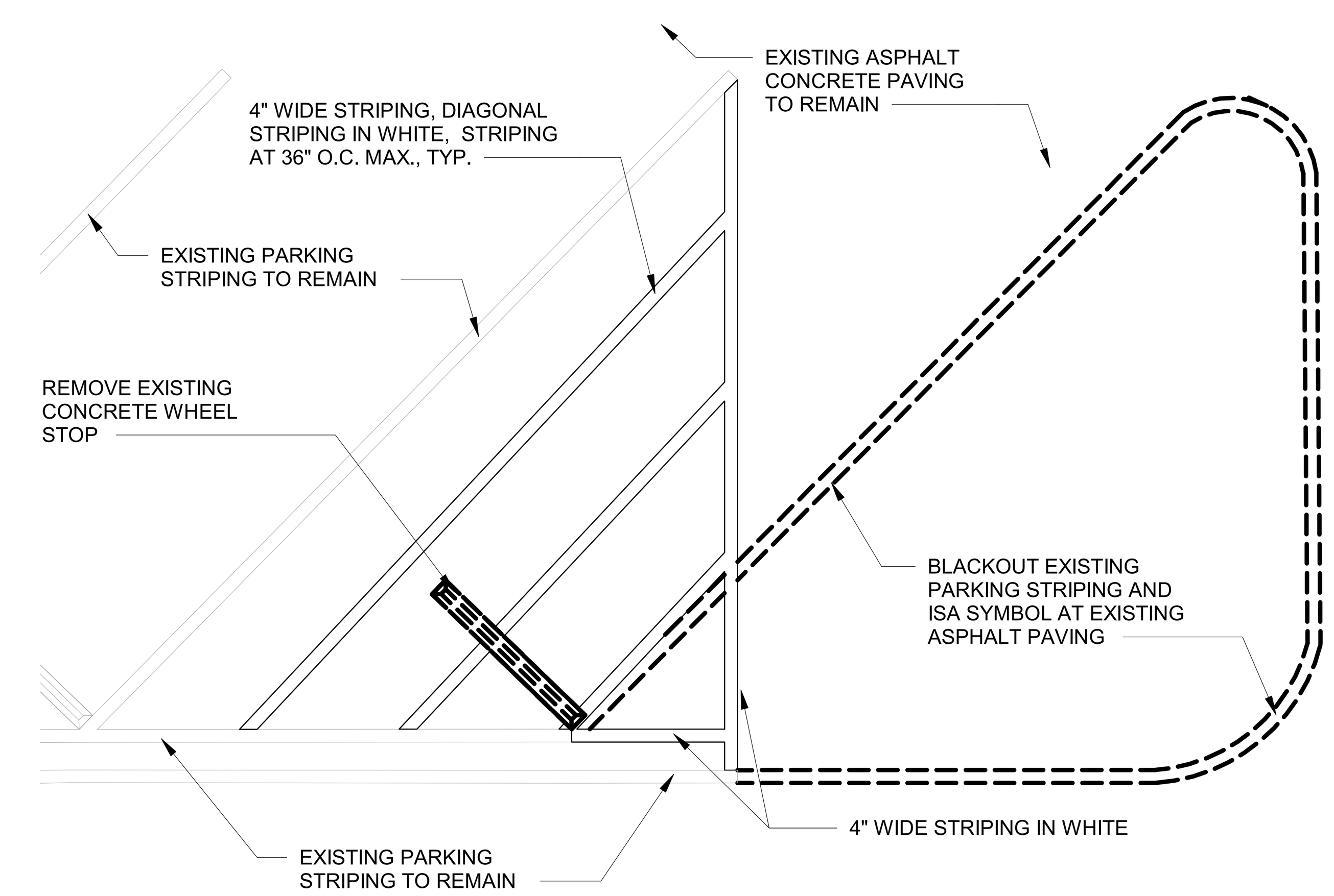
\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt

PLOT DATE: 1/3/2025 11:15:30 AM

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt



DEMOLITION AND PROPOSED PARKING STALLS — 1/4" = 1'-0" — 2



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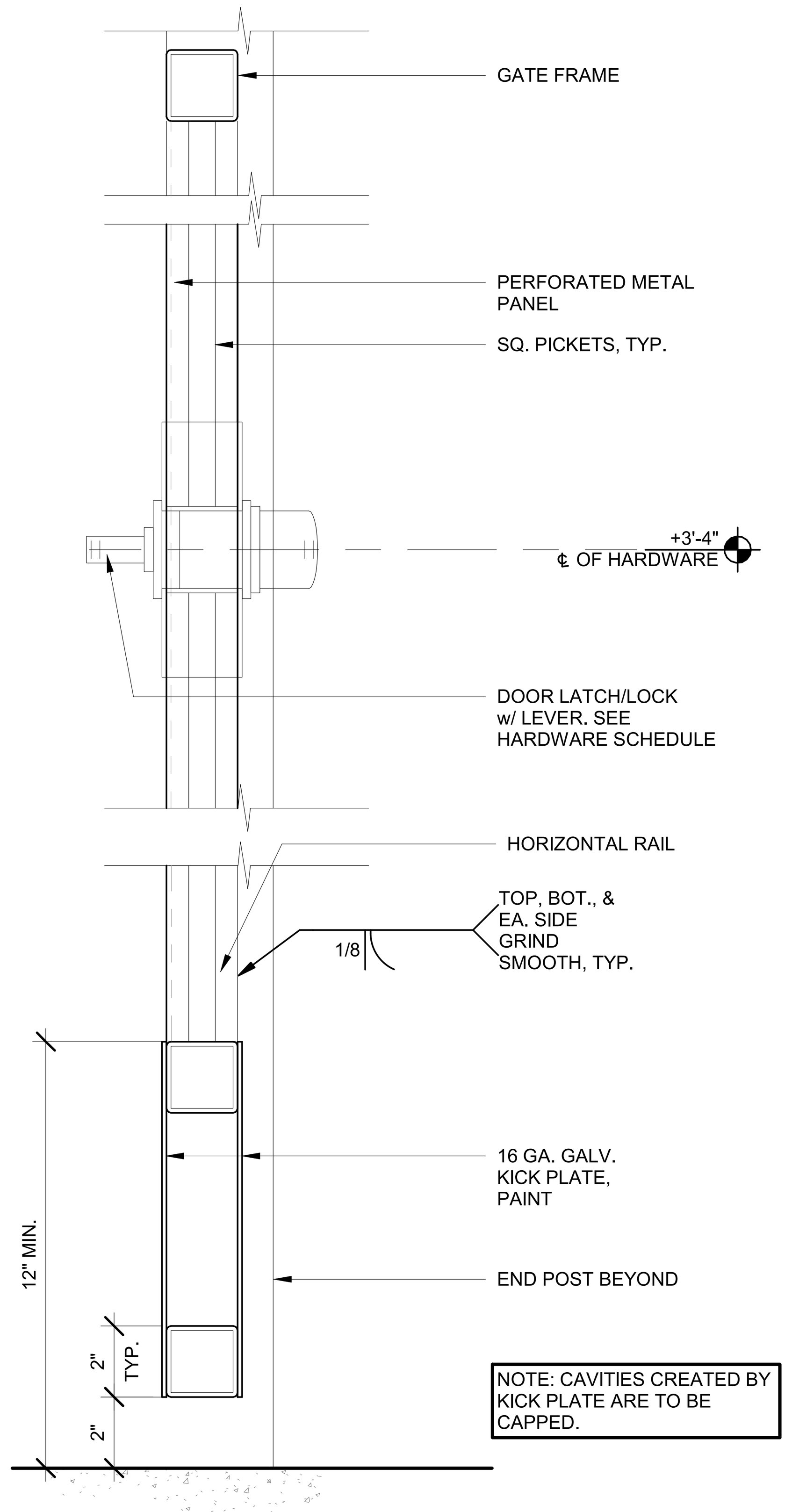
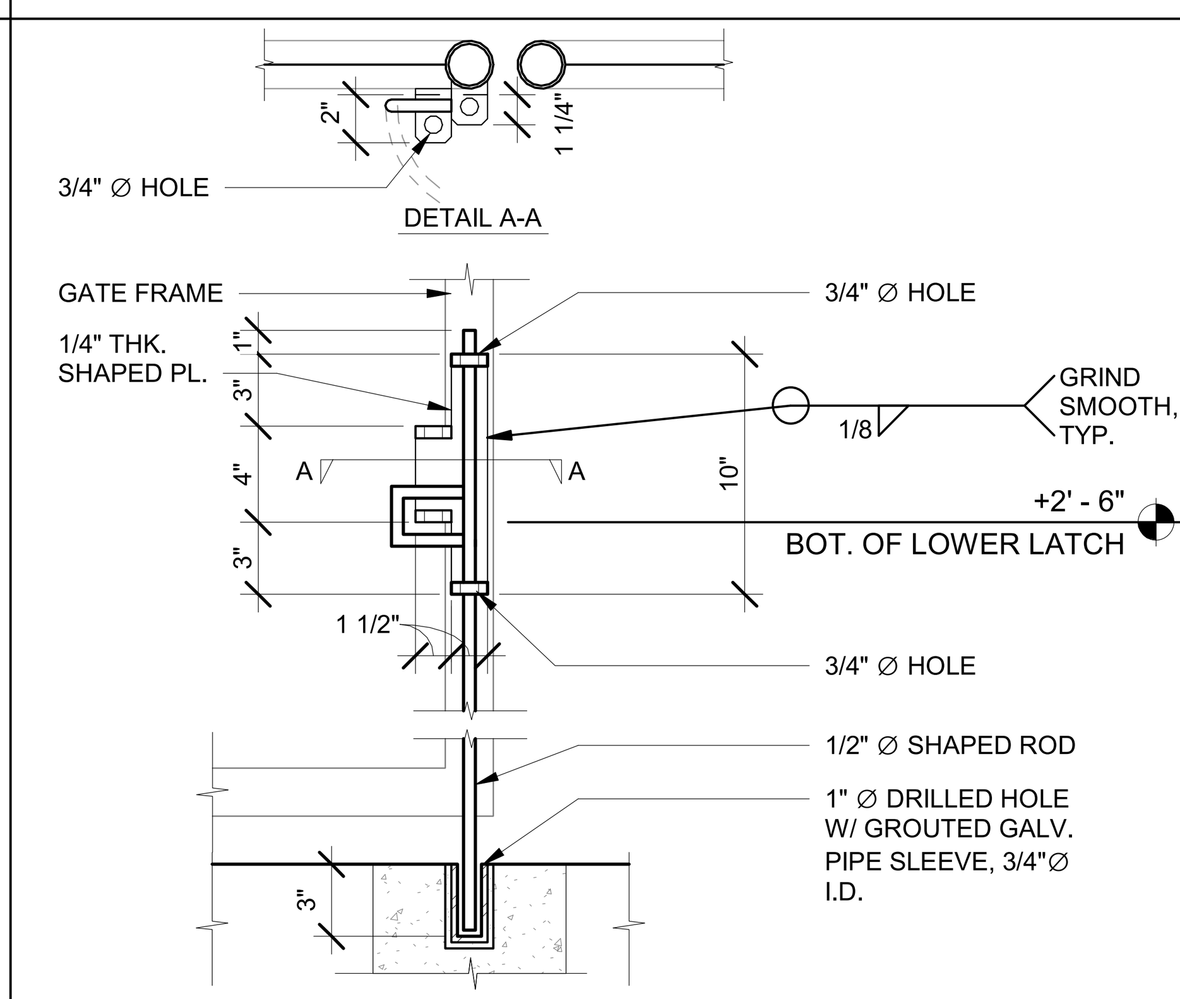
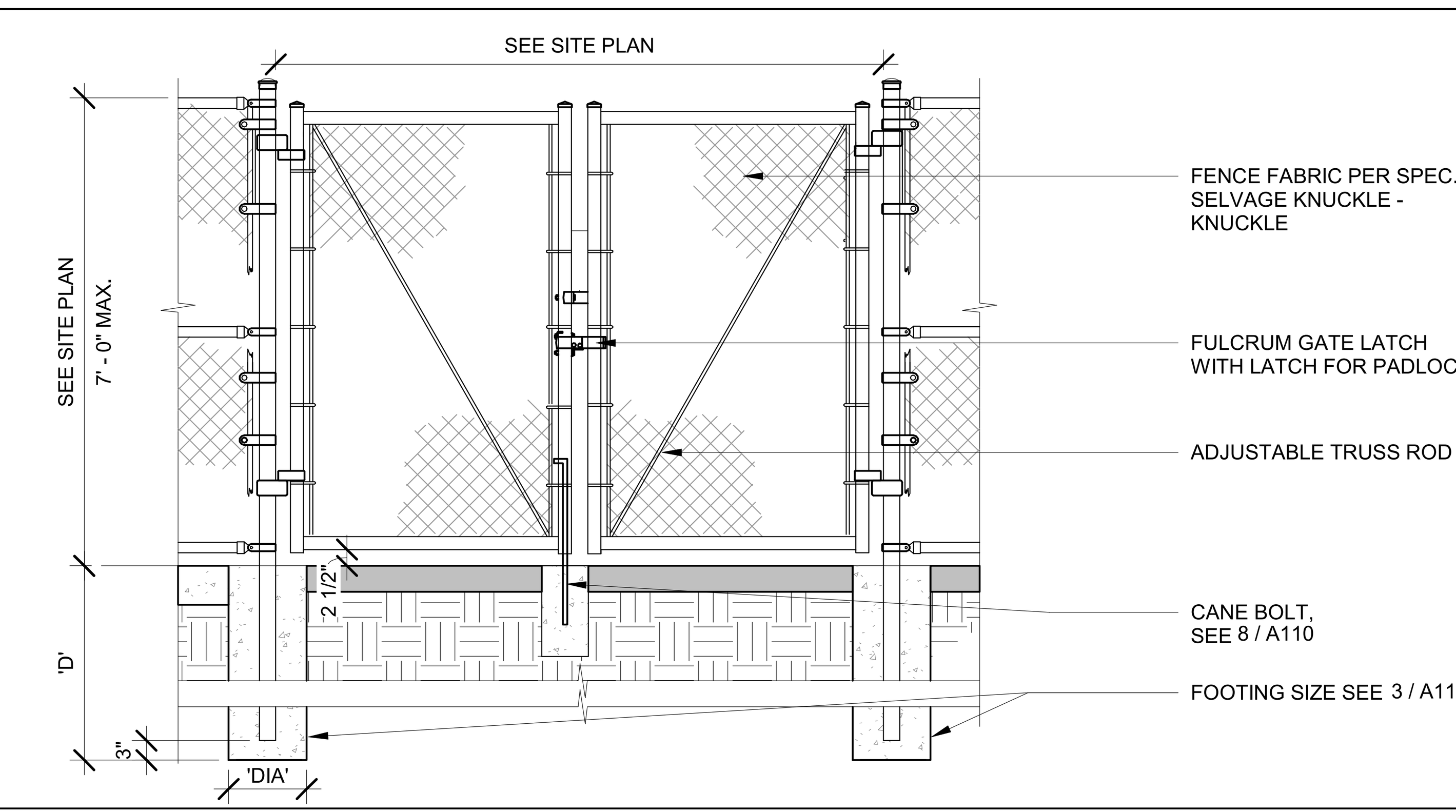


GATE ORNAMENTAL — 3" = 1'-0" — 20



CANE BOLT — 1 1/2" = 1'-0" — 8



PAIR OF CHAIN LINK GATE — 1/2" = 1'-0" — 4

PLOT DATE: 1/21/2025 3:32:23 PM

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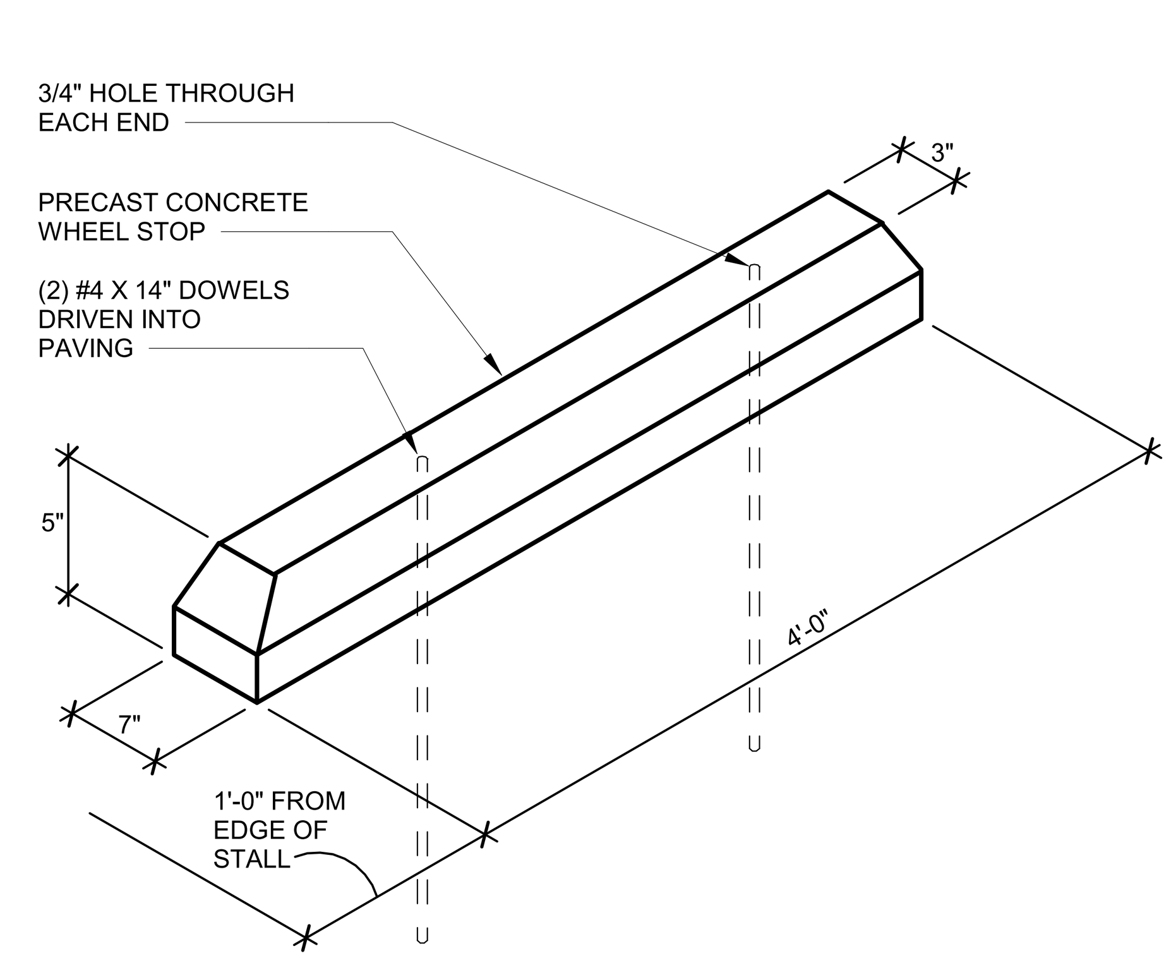
2245 E 11TH ST.
STOCKTON, CA 95206

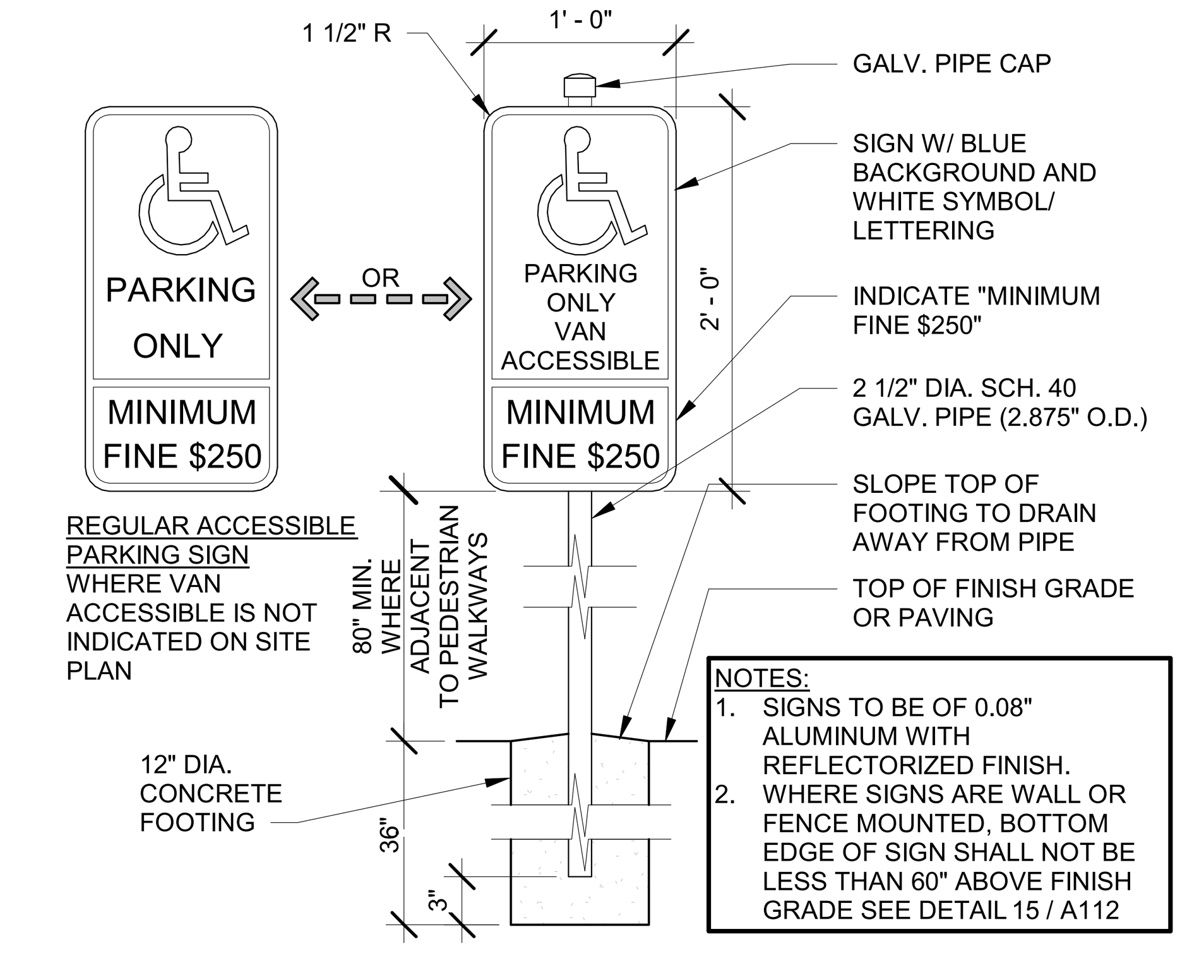
DRAWING TITLE
SITE DETAILS

PROJECT NO.
23-13018.00

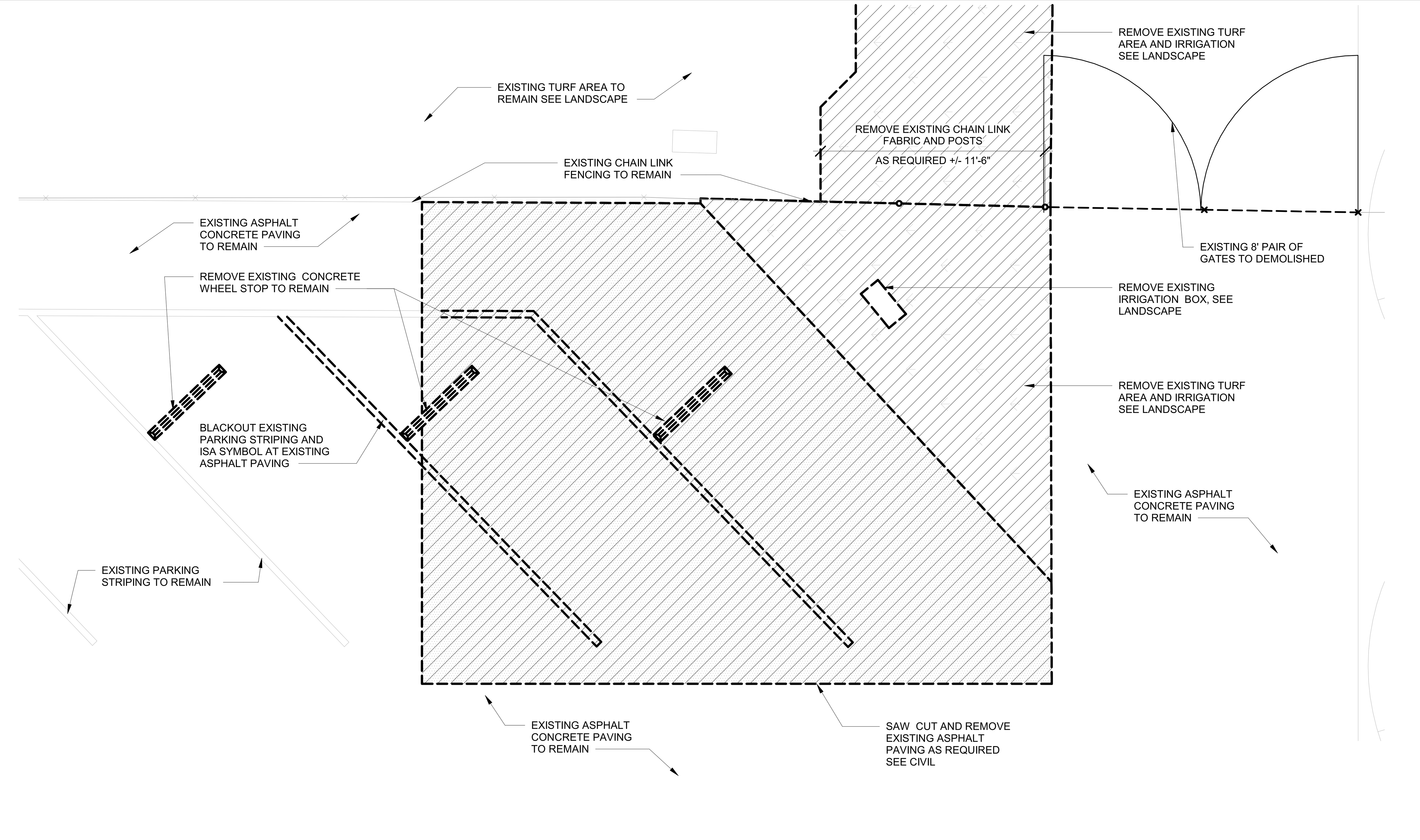
DRAWING
A110



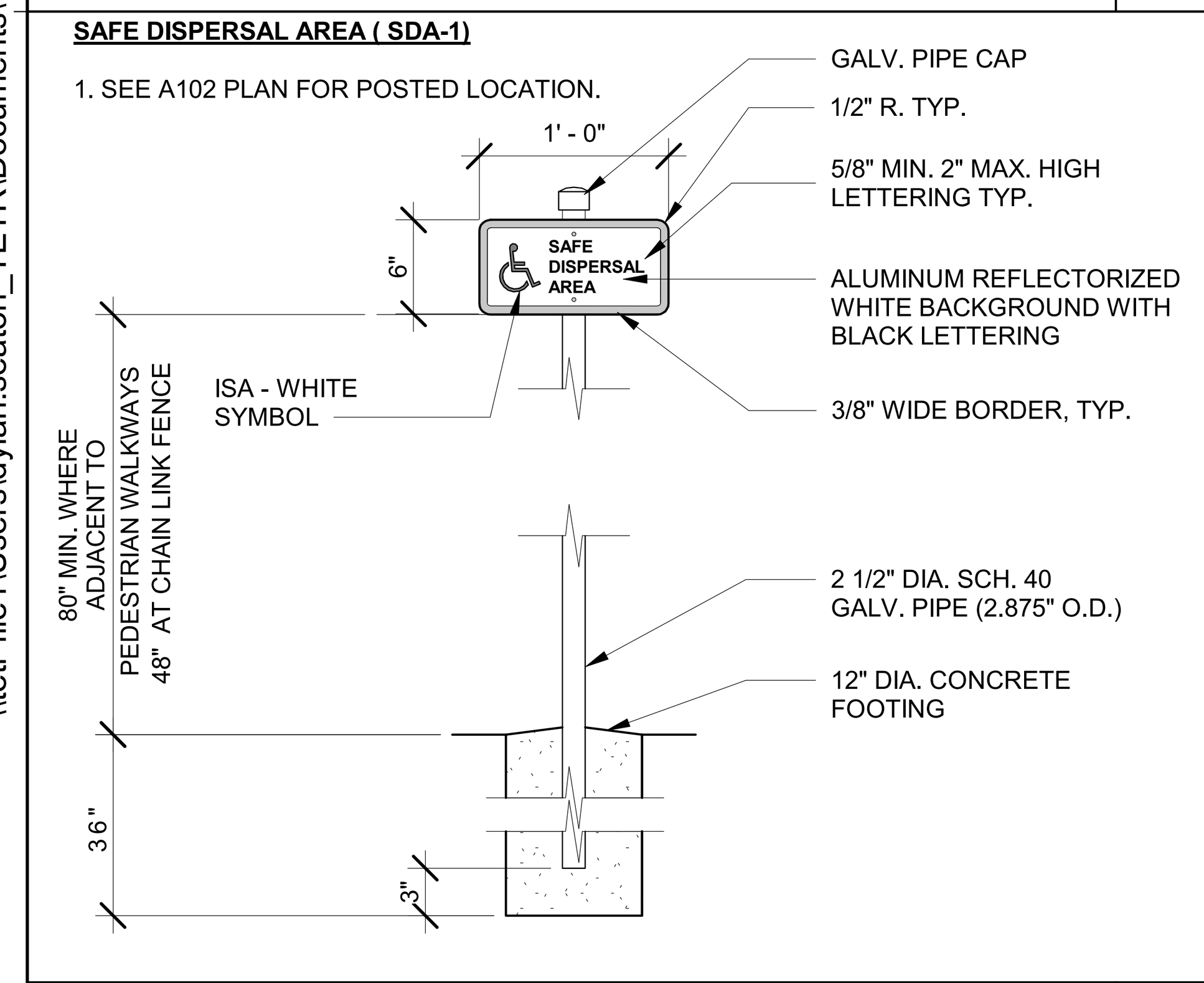
WHEEL STOP 12" = 1'-0" 17



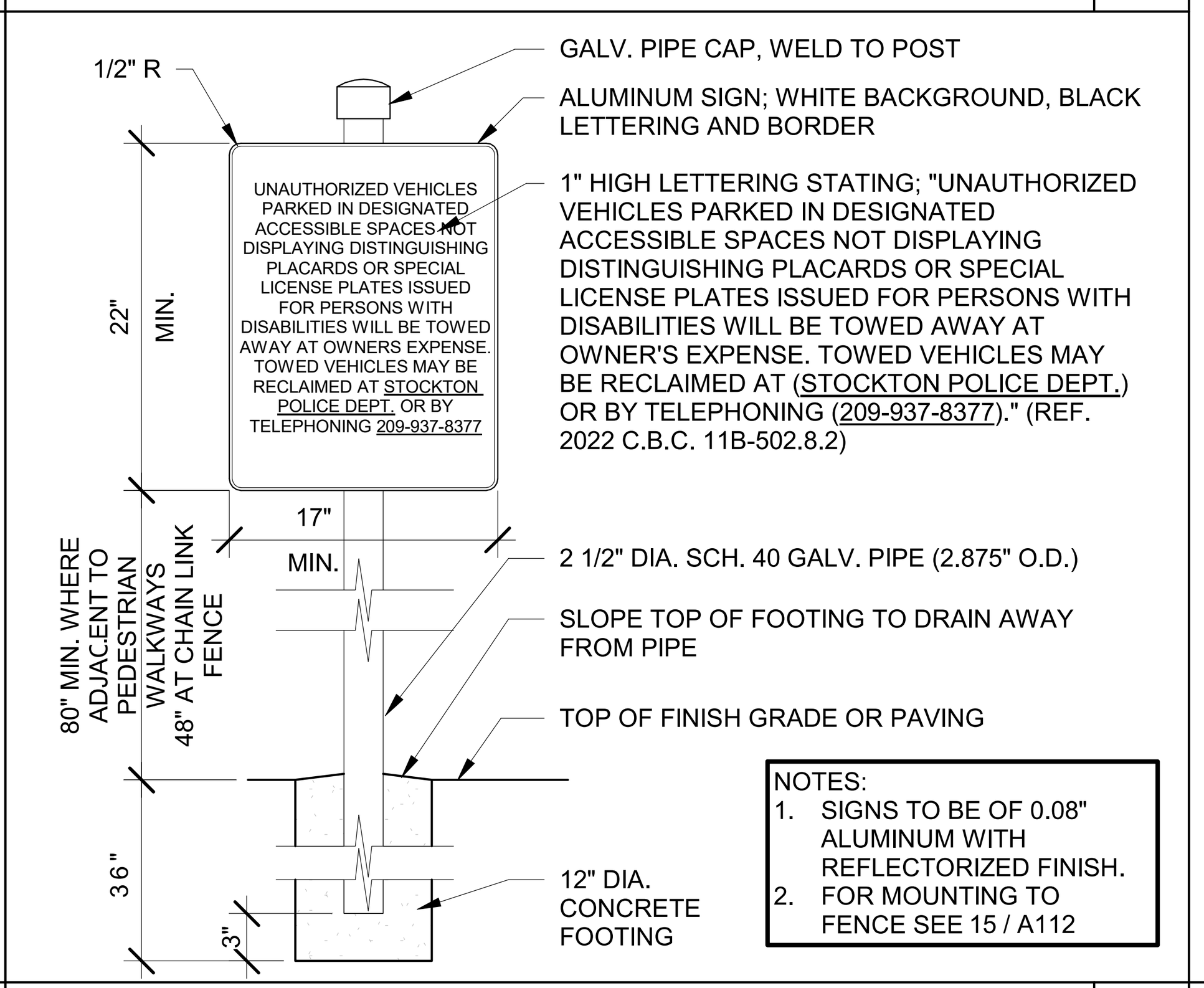
PARKING STALL SIGNAGE 1" = 1'-0" 13



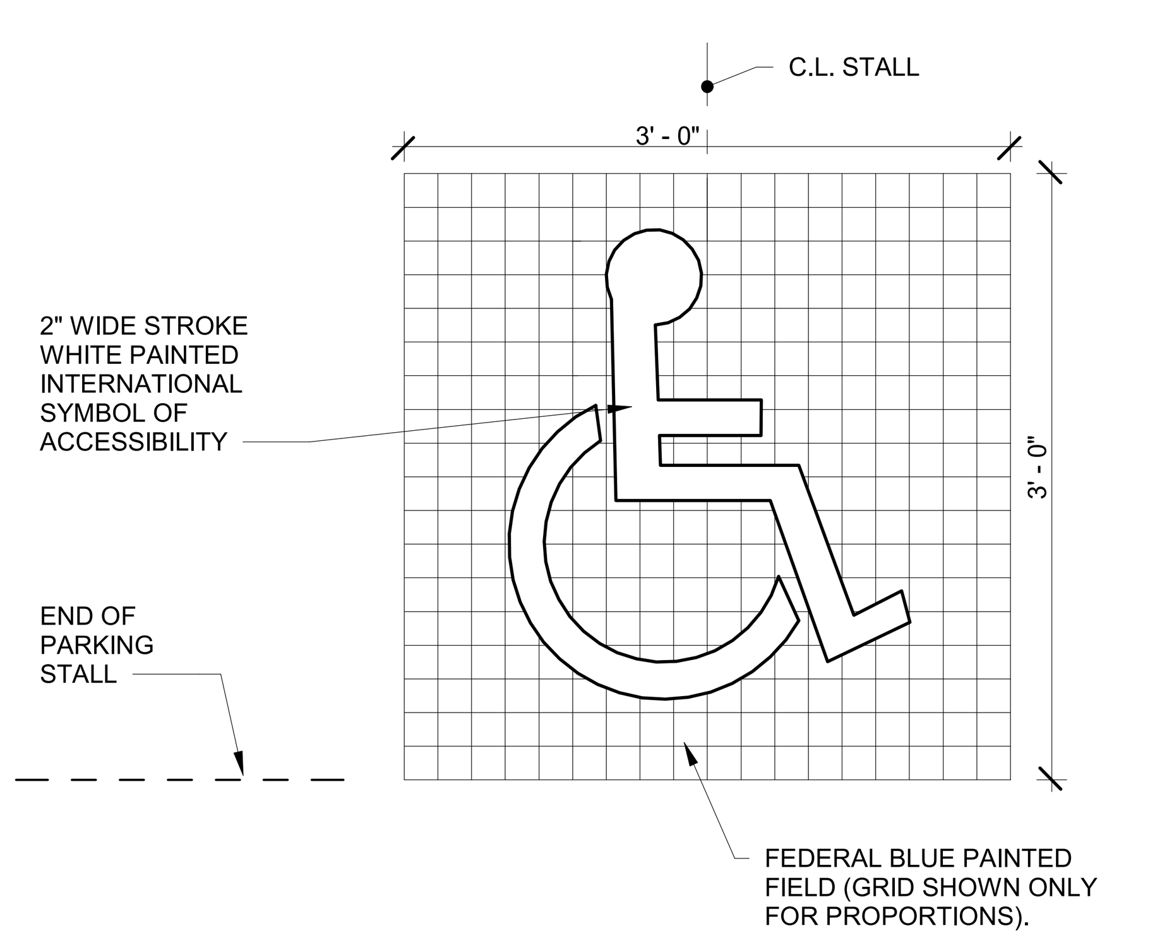
DEMOLITION PARKING STALLS 1/4" = 1'-0" 2



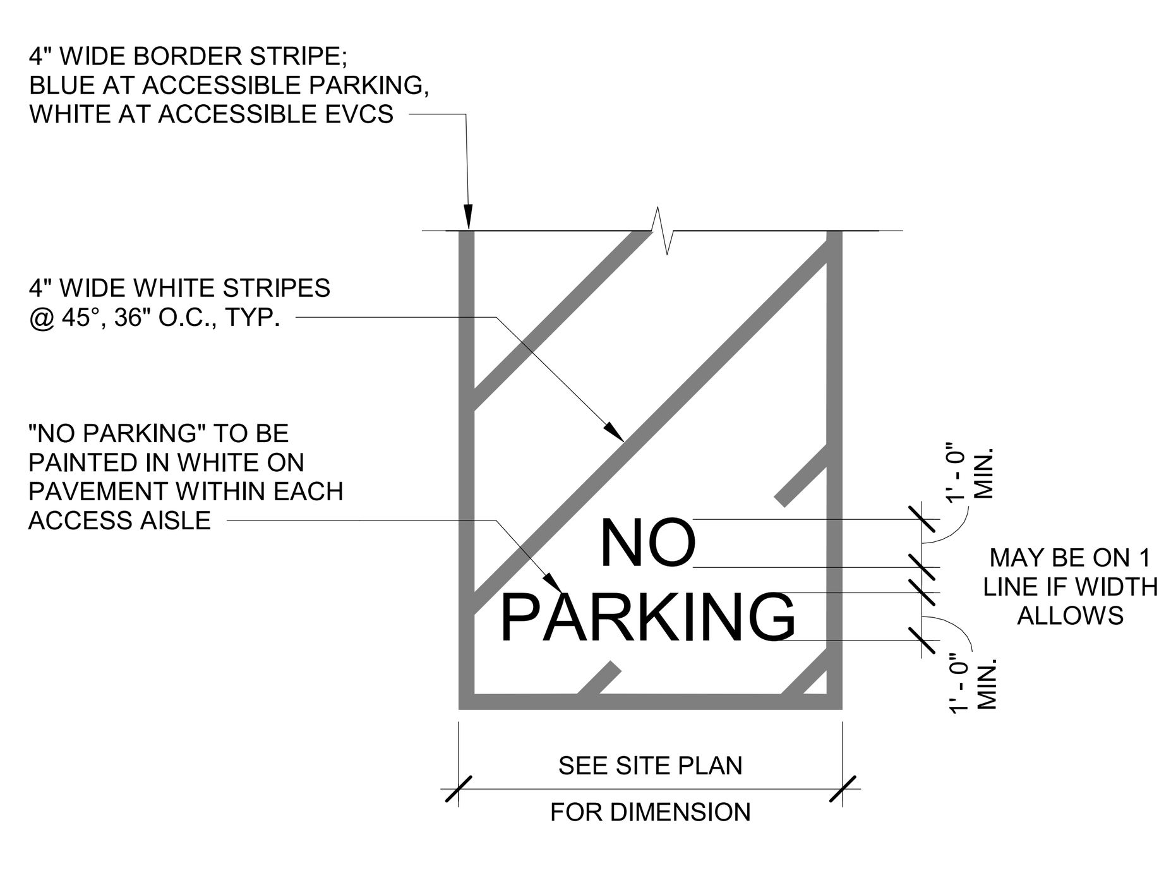
SAFE DISPERSAL AREA SIGN 1" = 1'-0" 18



PARKING LOT ENTRANCE SIGN 1" = 1'-0" 14



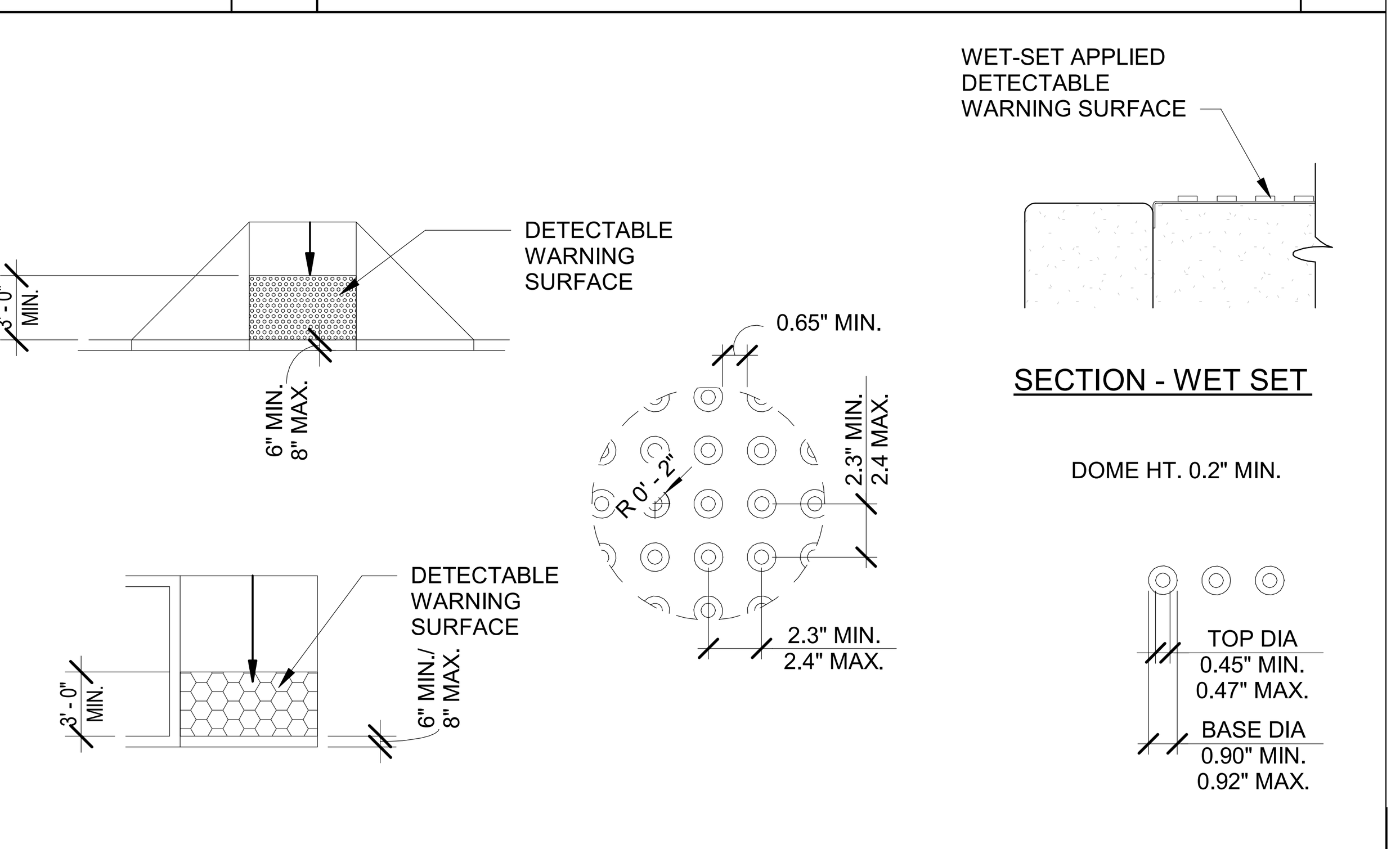
ACCESS. INTERNATIONAL SIGN 1 1/2" = 1'-0" 19



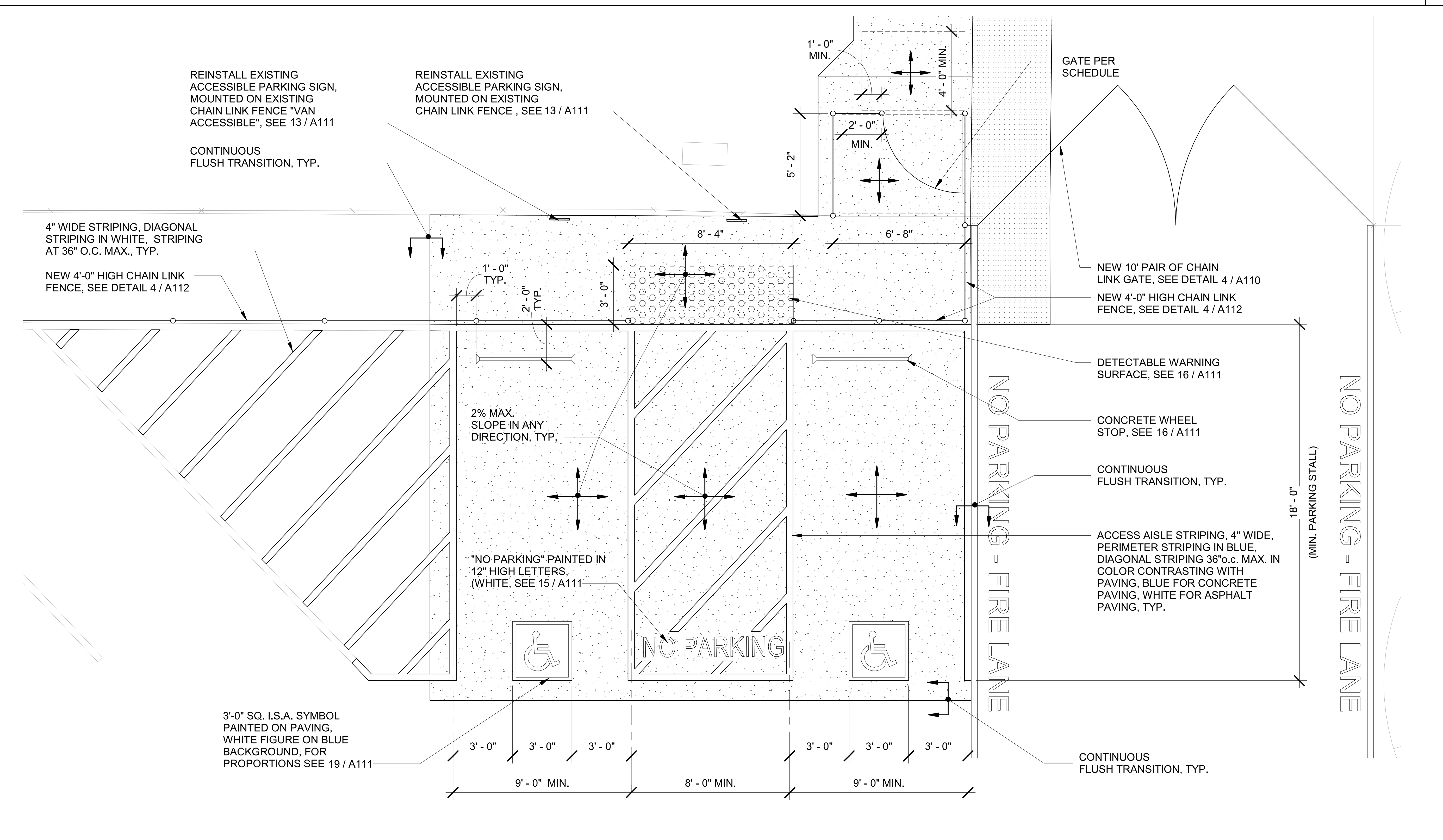
ACCESSIBLE AISLE STRIPING 1/4" = 1'-0" 15

NOTES:

1. DETECTABLE WARNING SURFACES SHALL BE YELLOW AND APPROXIMATE FC33538 OF FEDERAL STANDARD 595C.
2. DETECTABLE WARNINGS SHALL EXTEND 3' MIN. IN THE DIRECTION OF TRAVEL .
3. DETECTABLE WARNING SURFACES SHALL EXTEND THE FULL WIDTH OF WALKS/RAMPS, LESS 2" MAX. AT EACH SIDE
4. REFER TO 2022 CBC 11B-705 FOR ADDITIONAL INFORMATION.
5. CONDITIONS SIMILAR FOR DETECTABLE WARNING SURFACES INSTALLED AT LEVEL SURFACES.



DETECTABLE WARNING SURFACES, TYP.1 1/2" = 1'-0" 16



PROPOSED ACCESSIBLE PARKING STALLS 1/4" = 1'-0" 4

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt

PLOT DATE: 1/3/2025 11:15:32 AM

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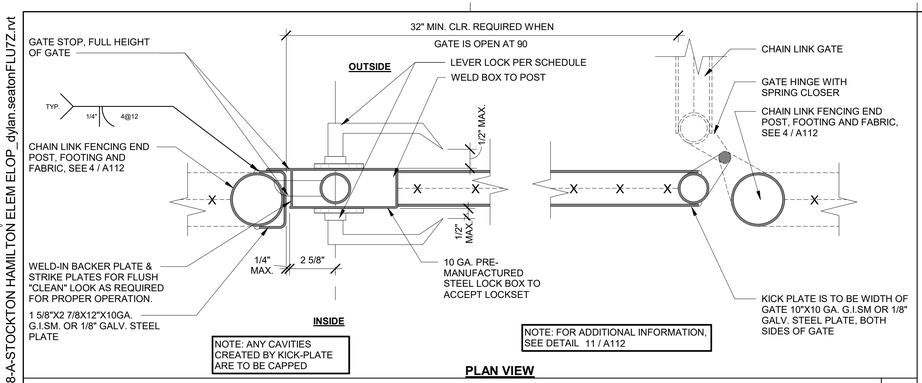
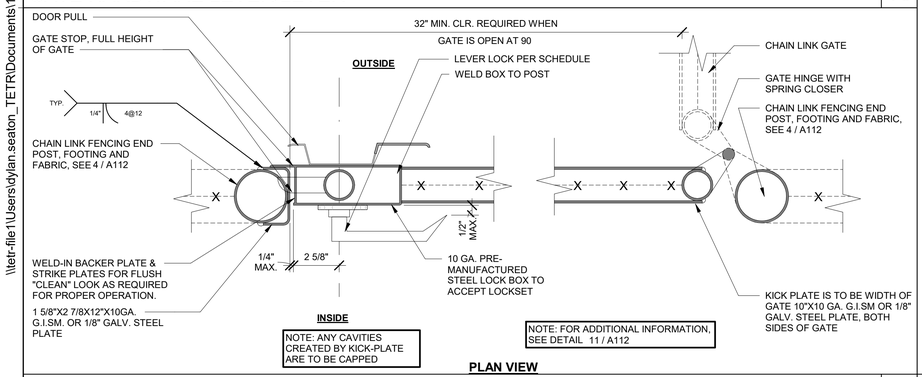
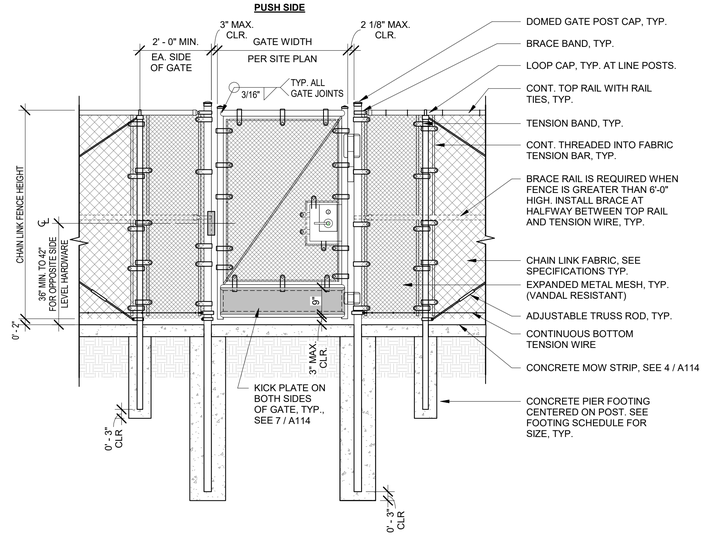


GATE HARDWARE LEVER/LEVER — 3" = 1'-0" — 13

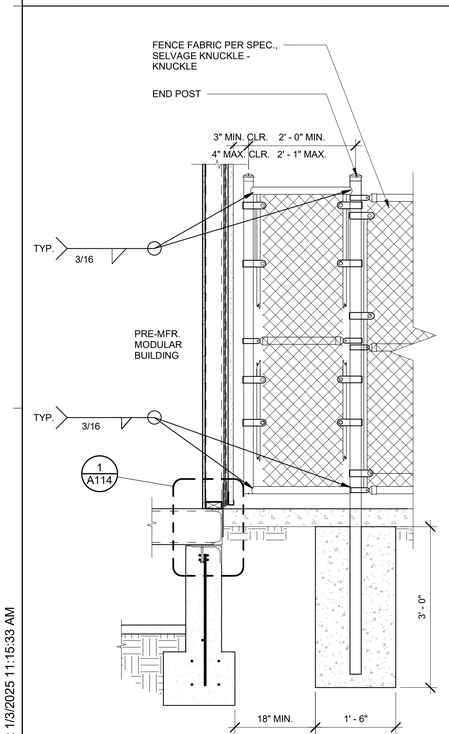


GATE HARDWARE LEVER/PULL — 3" = 1'-0" — 14

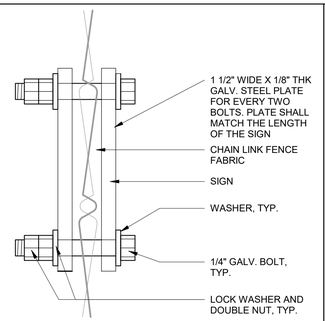


NOTE: FOR C.L. POST & FOOTING SCHEDULE SEE DETAIL 3 / A112

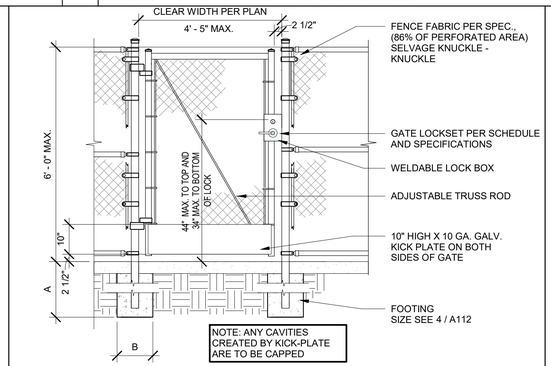
C.L. SWING GATE - ACCESSIBLE — 1/2" = 1'-0" — 2



CHAIN LINK AT BUILDING — 3/4" = 1'-0" — 20



SIGN MOUNTING AT C.L. — 3" = 1'-0" — 15



GATE WITH LEVEL HARDWARE — 1/2" = 1'-0" — 11

6'-0" TALL CHAIN LINK FENCE	MEMBER SIZE	'DIA'	'D'
LINE POSTS 10'-0" O.C. MAX.	*1.90"ø O.D. 2.72 PLF*	*12"ø*	*48"*
CORNER AND END POST	*2.375"ø O.D. 3.65 PLF*	*12"ø*	*48"*
GATE POSTS FOR LEAF TO 6'-0" WIDE	*2.875"ø O.D. 5.79 PLF*	*18"ø*	*54"*
GATE POSTS FOR LEAF 6'-0" TO 10'-0" WIDE	*4.00"ø O.D. 9.11 PLF*	*24"ø*	*54"*
TOP AND BRACE RAILS	*1.66"ø O.D. 2.27 PLF*	--	--

6'-0" TALL DECORATIVE METAL FENCE	MEMBER SIZE	'DIA'	'D'
LINE POSTS 10'-0" O.C. MAX.	*3X3X11 GA*	*12"ø*	*30"*
CORNER AND END POST	*3X3X11 GA*	*12"ø*	*36"*
GATE POSTS FOR LEAF TO 6'-0" WIDE	*HSS 6X6X3/8"*	*12"ø*	*42"*
GATE POSTS FOR LEAF 6'-0" TO 10'-0" WIDE	*HSS 6X6X3/8"*	*16"ø*	*48"*
TOP AND BRACE RAILS	--	--	--

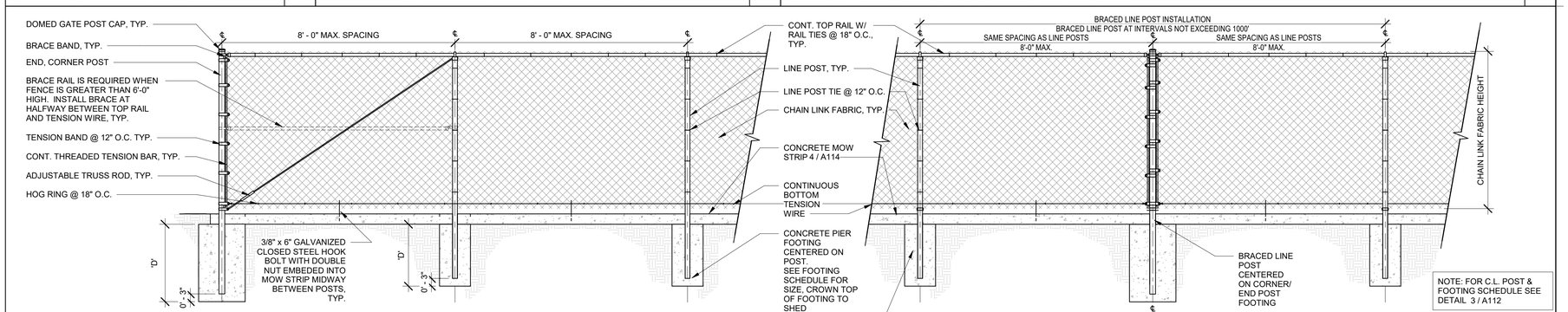
4'-0" TALL CHAIN LINK FENCE	MEMBER SIZE	'DIA'	'D'
LINE POSTS 10'-0" O.C. MAX.	*1.90"ø O.D. 2.72 PLF*	*10"ø*	*48"*
CORNER AND END POST	*2.375"ø O.D. 3.65 PLF*	*10"ø*	*48"*
GATE POSTS FOR LEAF TO 6'-0" WIDE	*2.875"ø O.D. 5.79 PLF*	*18"ø*	*48"*
GATE POSTS FOR LEAF 6'-0" TO 10'-0" WIDE	*4.00"ø O.D. 9.11 PLF*	*18"ø*	*54"*
TOP AND BRACE RAILS	*1.66"ø O.D. 2.27 PLF*	--	--

GENERAL NOTE:

BASIS OF DESIGN: HOOVER FENCE COMPANY, LOCK-TOP STYLE FENCE SLATS. SLATS ARE TO BE 2" SHORTER THAN OVERALL HEIGHT OF FENCE. COLOR TO BE SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.

CONCRETE SETTING MATERIALS SHALL COMPLY WITH ASTM C 150 AND ASTM C 94, UNLESS OTHERWISE NOTED.
A. STRENGTH: 3,000 PSI AT 28 DAYS
B. AGGREGATE SIZE: 1-1/2" MAXIMUM
C. SLUMP: 4"
D. WATER CEMENT RATIO: 0.53 MAXIMUM

C.L. FENCE POST & FOOTING SCHEDULE — 1/2" = 1'-0" — 3



NOTE: FOR C.L. POST & FOOTING SCHEDULE SEE DETAIL 3 / A112

C.L. FENCE ELEVATION — 1/2" = 1'-0" — 4

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DRAWING
A112

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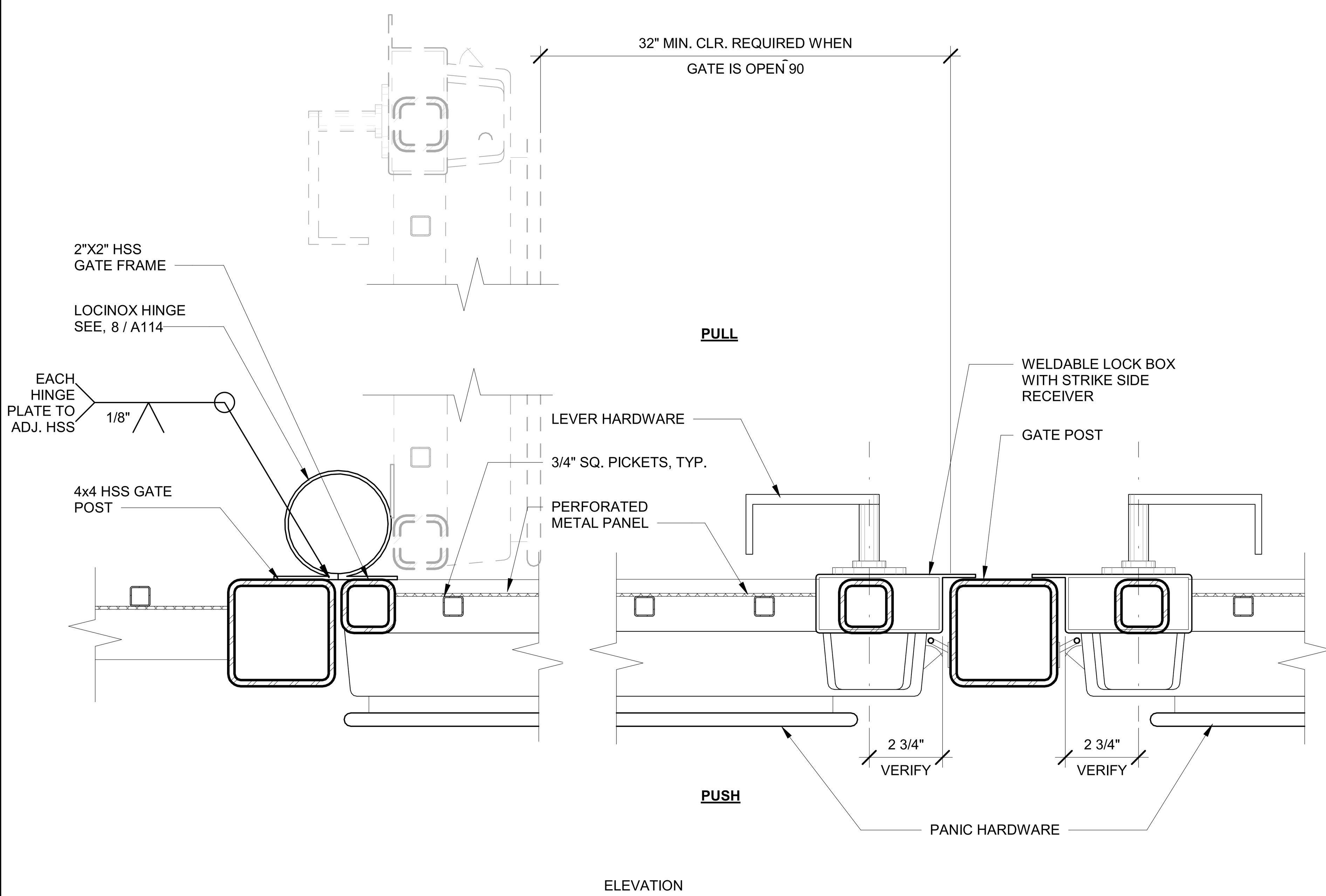
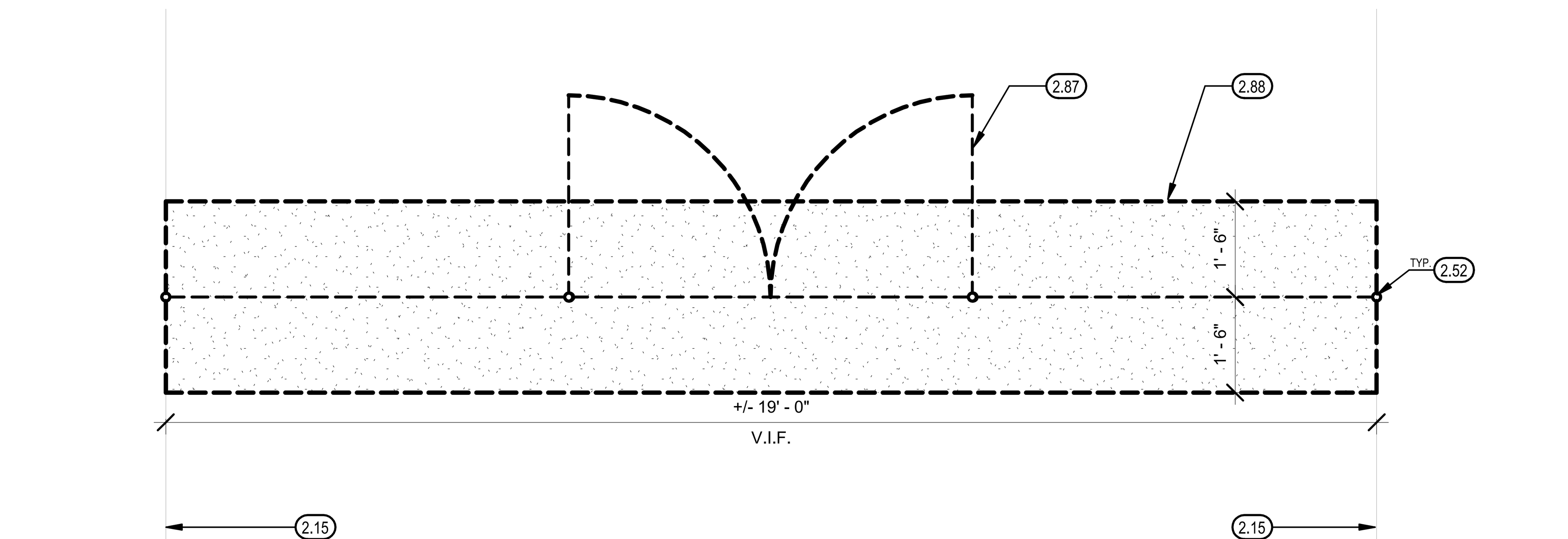
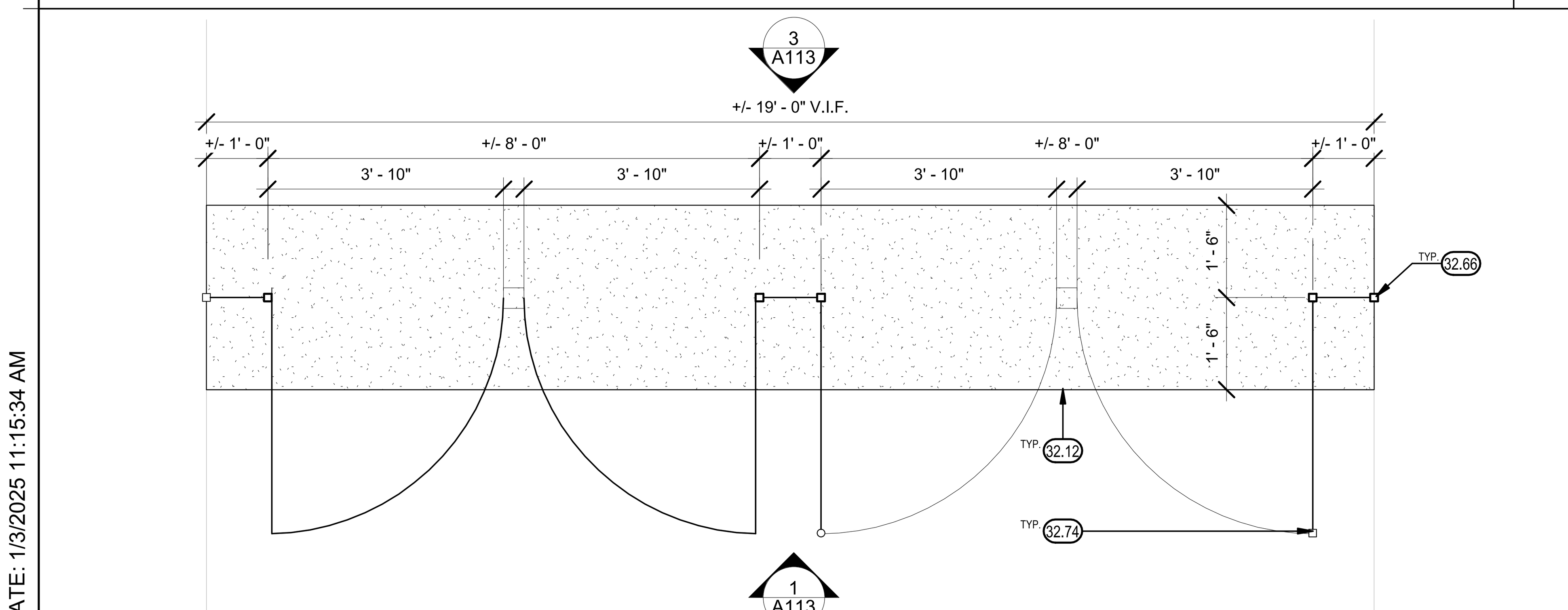
NOTE:
FOR EXPOSED WELDS PROVIDE SMOOTH AND BLENDED FINISH.



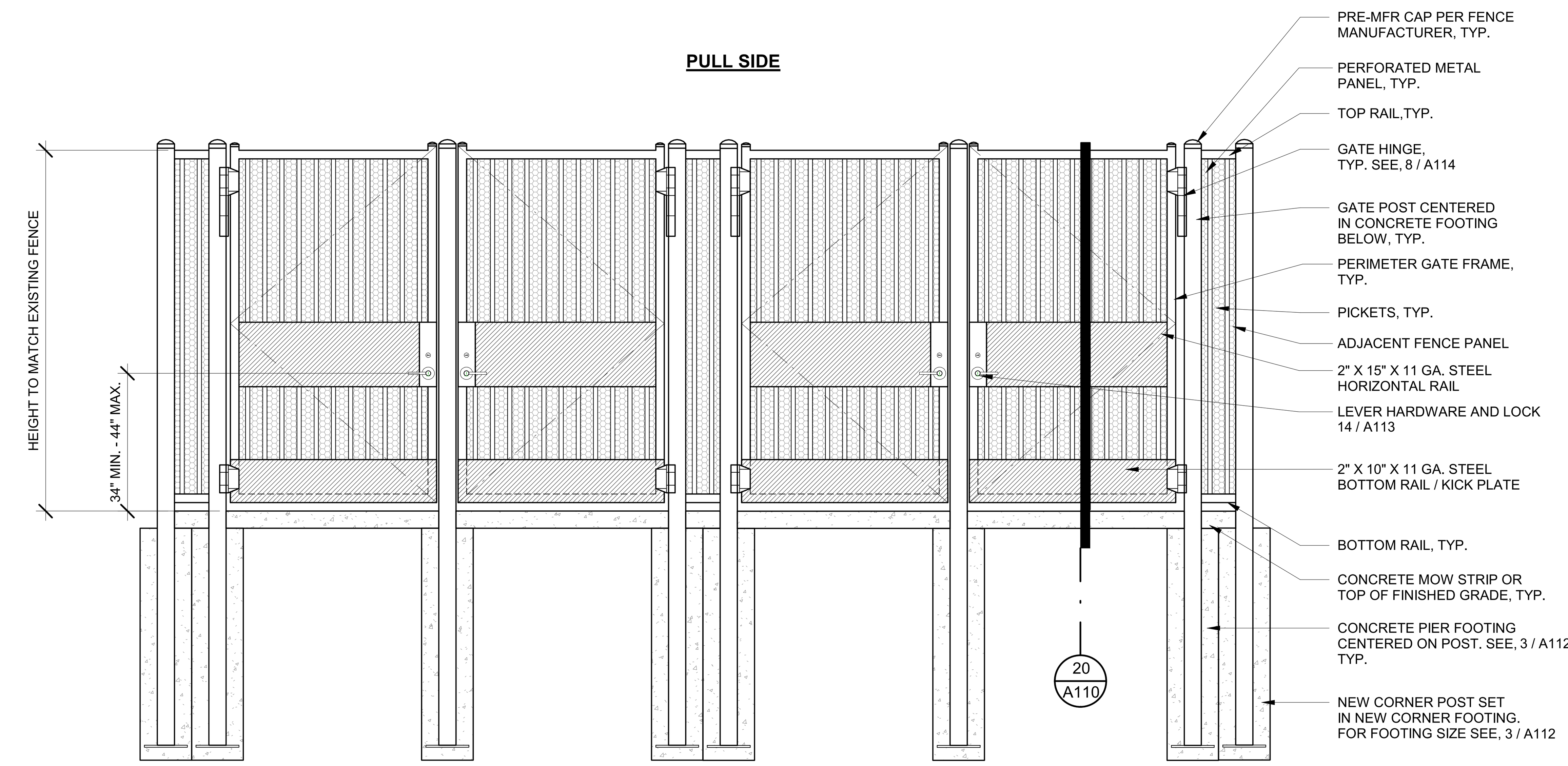
GATE PANIC HARDWARE - DECORATIVE METAL 3" = 1'-0" 14



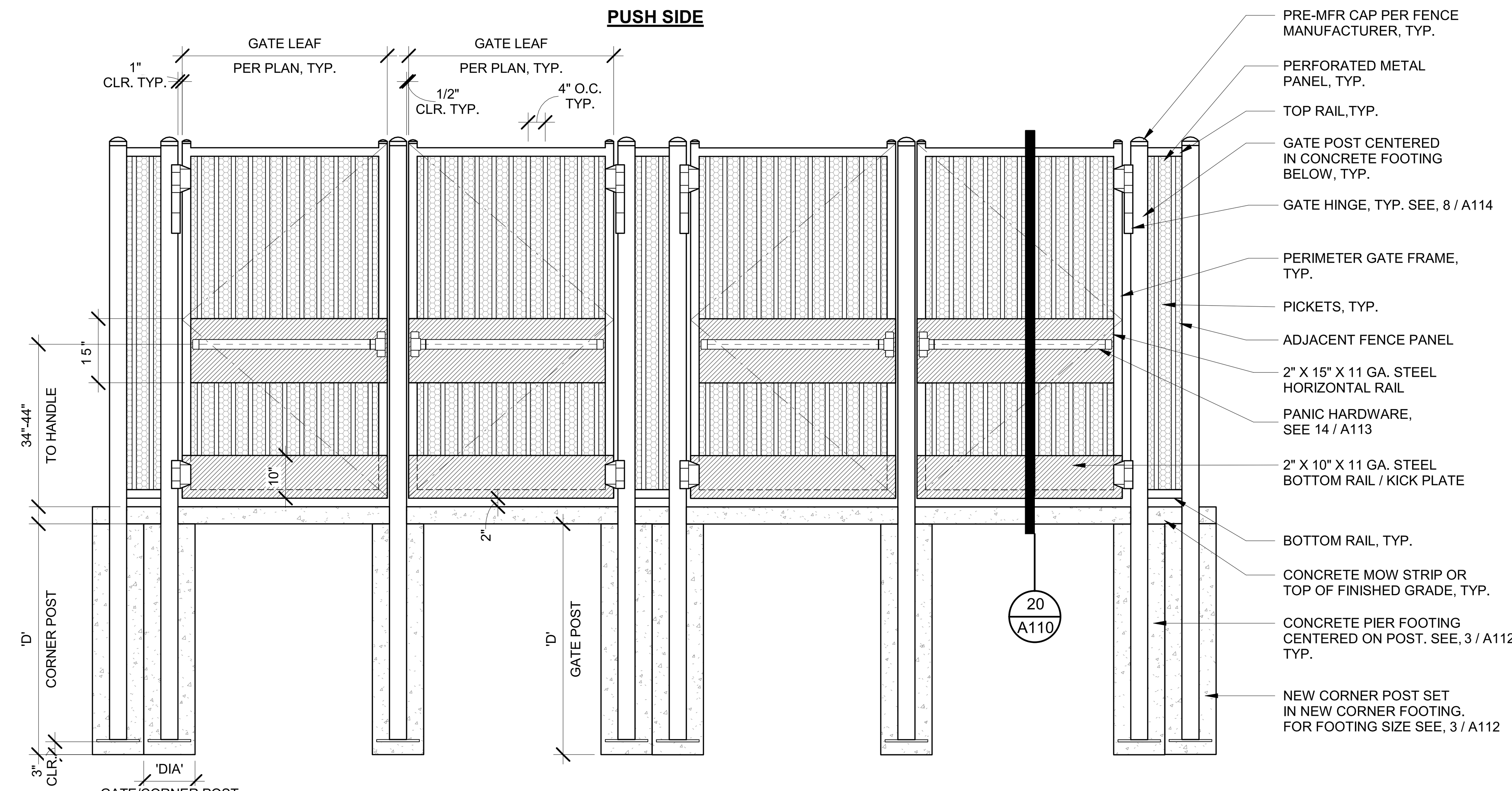
ACCESSIBLE GATES - PLAN VIEW DEMO 1/2" = 1'-0" 15



ACCESSIBLE GATES - PLAN VIEW PROPOSED 1/2" = 1'-0" 16



DECORATIVE METAL DOUBLE SWING GATE - ACCESSIBLE PULL SIDE 1/2" = 1'-0" 1



DECORATIVE METAL DOUBLE SWING GATE - ACCESSIBLE PUSH SIDE 1/2" = 1'-0" 3

KEYNOTES

2.15 EXISTING DECORATIVE METAL FENCE TO REMAIN

2.52 EXISTING CORNER POST AND FOOTING TO BE DEMOLISHED. TOP AND BOTTOM RAILS OF FENCE LINE TO REMAIN WILL BE CUT CLEAN FROM POST AND SUPPORTED DURING CONSTRUCTION, TYP OF BOTH SIDES OF THE DEMOLISHED FENCE RUN

2.87 REMOVE EXISTING ACCESSIBLE GATES

2.88 SAWCUT AND REMOVE CONCRETE FOR DEMOLITION OF EXISTING FENCE/GATE POLES

32.12 PATCH CONCRETE PAVING TO MATCH EXISTING, SEE CIVIL

32.66 NEW CORNER POST AND FOOTING TO BE INSTALLED. EXISTING RAILS TO BE WELDED TO NEW POSTS.

32.74 DECORATIVE ACCESSIBLE DOUBLE GATES, SEE 1 / A113

NOTE:
1. ALL WELDS SHALL BE CLEANED UP AND PRESENTABLE BEFORE PAINTING TO MATCH FENCE FINISH FOR PROTECTION FROM WEATHER.

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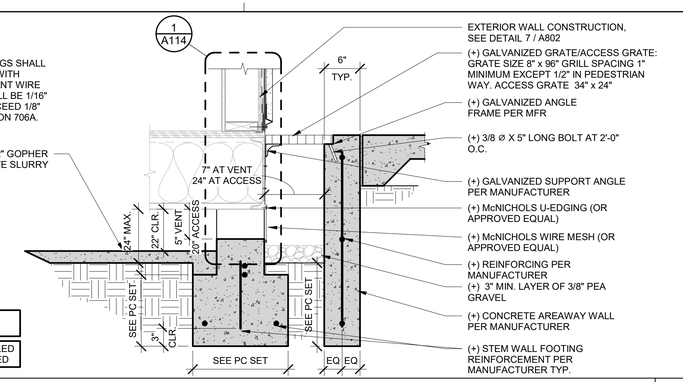
FOUNDATION VENT

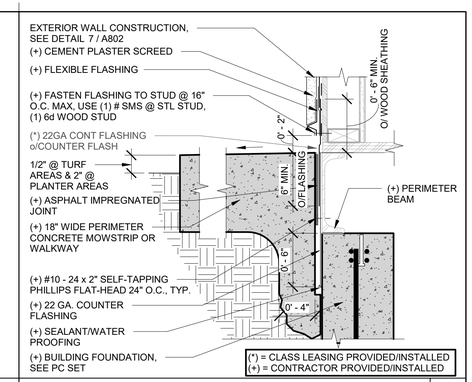
VENTILATION OPENINGS SHALL BE FULLY COVERED WITH CORROSION RESISTANT WIRE MESH, OPENING SHALL BE 1/16" MIN. AND NOT TO EXCEED 1/8" MAX. PER CBC SECTION 706A.

FOR ADDITIONAL INFORMATION, SEE DETAIL 8/F2.20

(*) = CLASS LEASING PROVIDED/INSTALLED
(+) = CONTRACTOR PROVIDED/INSTALLED

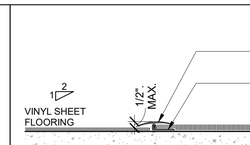


VENT / ACCESS SECTION, BELOW GRADE — 1" = 1'-0" — 5



(*) = CLASS LEASING PROVIDED/INSTALLED
(+) = CONTRACTOR PROVIDED/INSTALLED

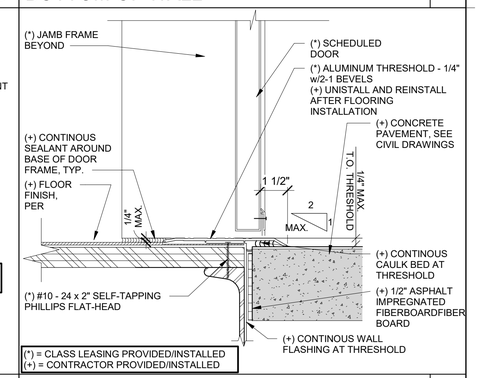
BOTTOM OF WALL — 1 1/2" = 1'-0" — 1



VS TO CARPET

NOTE: FLOOR MATERIAL TRANSITIONS OCCUR @ CENTERLINE OF DOORS WHERE APPLICABLE

FLOOR TRANSITIONS — 3" = 1'-0" — 6



(*) = CLASS LEASING PROVIDED/INSTALLED
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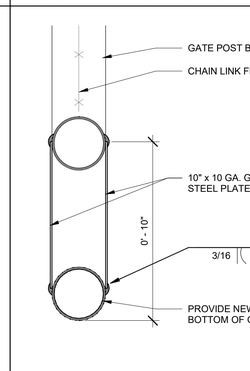
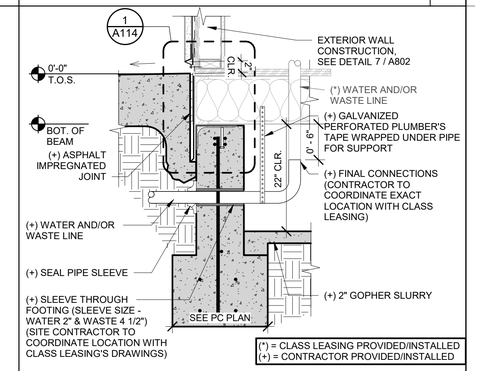
TYPICAL EXTERIOR THRESHOLD — 3" = 1'-0" — 2

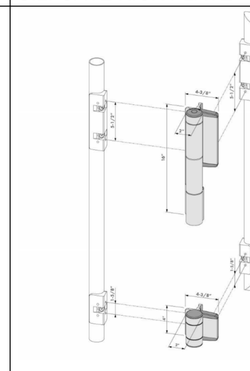


C.L. GATE KICK PLATE — 3" = 1'-0" — 7

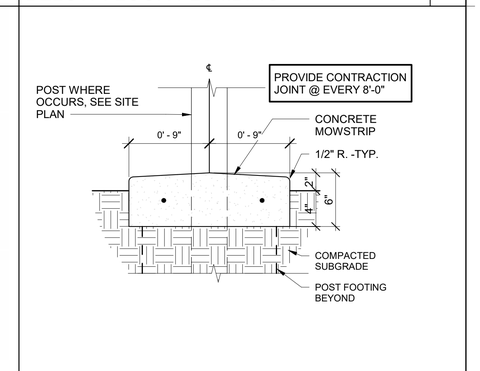


(*) = CLASS LEASING PROVIDED//INSTALLED
(+) = CONTRACTOR PROVIDED/INSTALLED

BELOW FLOOR PLUMBING — 1" = 1'-0" — 3



GATE HINGE — 12" = 1'-0" — 8



CONCRETE MOW STRIP @ FENCE — 1 1/2" = 1'-0" — 4

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3	1/7/2025	BACKCHECK SUBMITTAL

TETER, INC.
ARCHITECTS ENGINEERS CONNECTED
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO

ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

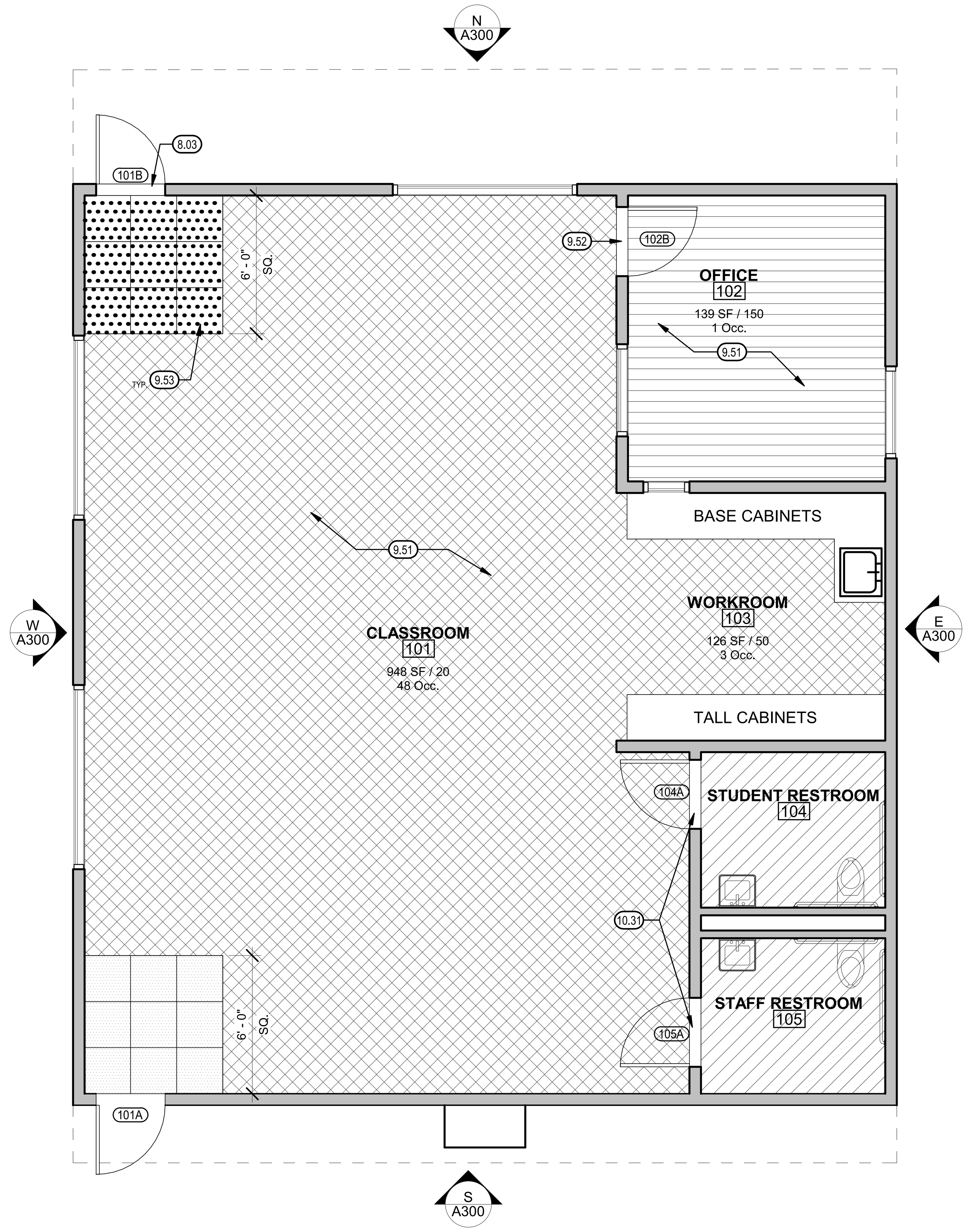
DRAWING TITLE
SITE DETAILS

PROJECT NO.
23-13018.00

DRAWING
A114

PLOT DATE: 1/3/2025 11:15:35 AM

FLOOR PLAN



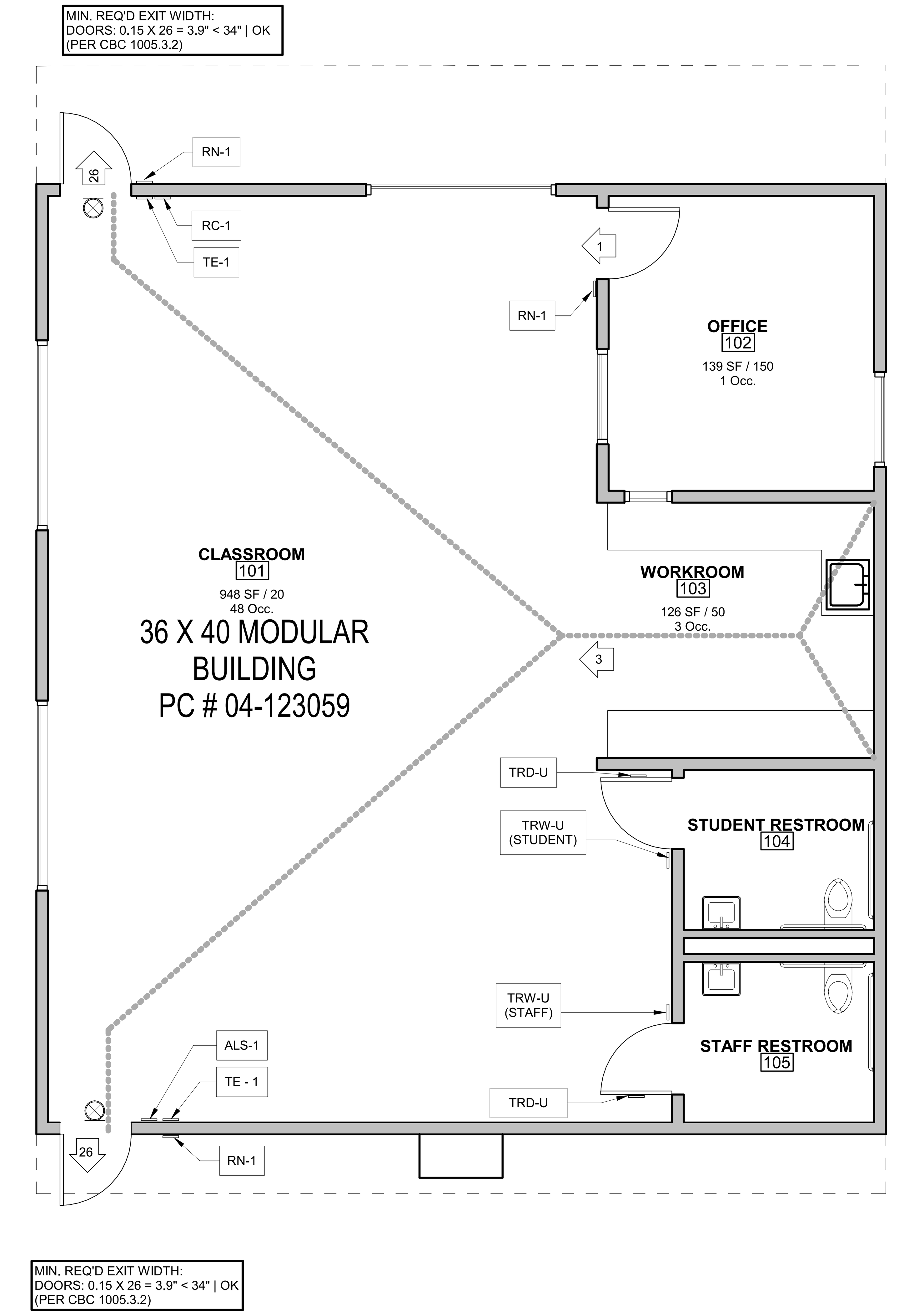
FINISH FLOOR MATERIAL LEGEND

CPT-M	CARPET WALK-OFF MAT (PROVIDED AND INSTALLED BY SITE CONTRACTOR)	
CPT-1	CARPET (PROVIDED AND INSTALLED BY SITE CONTRACTOR)	
RVT-1	RESILIENT VINYL FLOOR TILE (PROVIDED AND INSTALLED BY SITE CONTRACTOR)	
SV-1	ROLLED SHEET VINYL W/ 6" COVE (PROVIDED AND INSTALLED BY CLASS LEASING)	

NORTH

FLOOR PLAN 1/4" = 1'-0" 11

EXIT ANALYSIS AND SIGNAGE PLAN



NORTH

EXIT ANALYSIS AND SIGNAGE PLAN 1/4" = 1'-0" 2

KEYNOTES

(00.00)

8.03	EXTERIOR THRESHOLD AT DOOR BY SITE CONTRACTOR, SEE 2 / A114
9.51	RUBBER TOP SET BASE ON ALL WALLS - BY SITE CONTRACTOR, SEE 15 / A800
9.52	FLOOR TRANSITION STRIP BY SITE CONTRACTOR, SEE 13 / A800
9.53	FLUSH TRANSITION BETWEEN CARPETS, SEE 14 / A800
10.31	FLOORING TRANSITION STRIP BY SITE CONTRACTOR, SEE 13 / A800

DOOR HARDWARE SCHEDULE

ROOM DOOR #	ROOM NAME	HARDWARE	REMARKS
101A	CLASSROOM	01	A, B
101B	CLASSROOM	01	A, B
102B	OFFICE	02	A, B
104A	GENDER NEUTRAL RR	03	A, B
105A	GENDER NEUTRAL RR	03	A, B

REMARKS:

A. SITE CONTRACTOR SHALL SALVAGE AND REMOVE HARDWARE FROM DOORS AND RETURN TO DISTRICT.

B. SITE CONTRACTOR SHALL PROVIDE NEW HARDWARE AS INDICATED IN THE SPECIFICATIONS

DOOR HARDWARE SCHEDULE

SIGNAGE LEGEND

FOR TYPICAL IDENTIFICATION AND TACTILE SIGNAGE, SEE DETAIL 4 / A800

(RN - 1) PROVIDE ROOM IDENTIFICATION SIGN

(TE - 1) PROVIDE EXIT SIGNAGE AT INTERIOR SIDE OF DOOR

(ALS - 1) PROVIDE ASSISTED LISTENING SIGNAGE AT INTERIOR SIDE OF DOOR

(TRW-U) PROVIDE WALL MOUNTED TOILET ROOM SIGNAGE AT EXTERIOR SIDE OF DOOR, LABELED "STAFF RESTROOM"

(TRW-U) PROVIDE WALL MOUNTED TOILET ROOM SIGNAGE AT EXTERIOR SIDE OF DOOR, LABELED "STUDENT RESTROOM"

(TRD - S) PROVIDE DOOR MOUNTED TOILET ROOM SIGNAGE

(TRD - U) PROVIDE DOOR MOUNTED TOILET ROOM SIGNAGE

(RC - 1) ROOM CAPACITY SIGN

EXIT ANALYSIS LEGEND

- PATH OF EGRESS TRAVEL
- (XX) NUMBER OF OCCUPANTS EXITING
- ROOM 101 — ROOM NAME & NUMBER
- ROOM AREA
- 150 SF / 50 — OCCUPANT LOAD FACTOR
- 00 Occ. — CALCULATED OCCUPANT LOAD
- ILLUMINATED EXIT SIGNS, SEE ELECTRICAL FOR ADDITIONAL INFORMATION

GENERAL NOTES

1. OWNER TO PROVIDE EMERGENCY EVACUATION SIGNAGE PER CFC 403.2, 403.4 AND 403.5, AS APPLICABLE, PRIOR TO OCCUPANCY OF THE BUILDINGS OR CAMPUS.
2. EGRESS WIDTH COMPONENT (CBC SECTION 1005.3.2) : 0.2"/OCC.; A 36" WIDE DOOR HAS A CLEAR WIDTH OF 33" MIN. AND WILL ACCOMMODATE 165 OCCUPANTS.

ASSISTIVE LISTENING: CLASSROOM 48 OCC

48 X 4% = 2 RECEIVERS MIN.

OWNER TO PROVIDE 2 RECEIVERS, 2 TO BE HEARING AID COMPATIBLE

TOTAL OCCUPANTS: 54

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HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
FLOOR PLAN

PROJECT NO.
23-13018.00

DRAWING
A200

\\tetr-file1\Users\dylan.seaton_TETR\Documents\13018-A-STOCKTON HAMILTON ELEM ELOP_dylan.seatonFLU7Z.rvt

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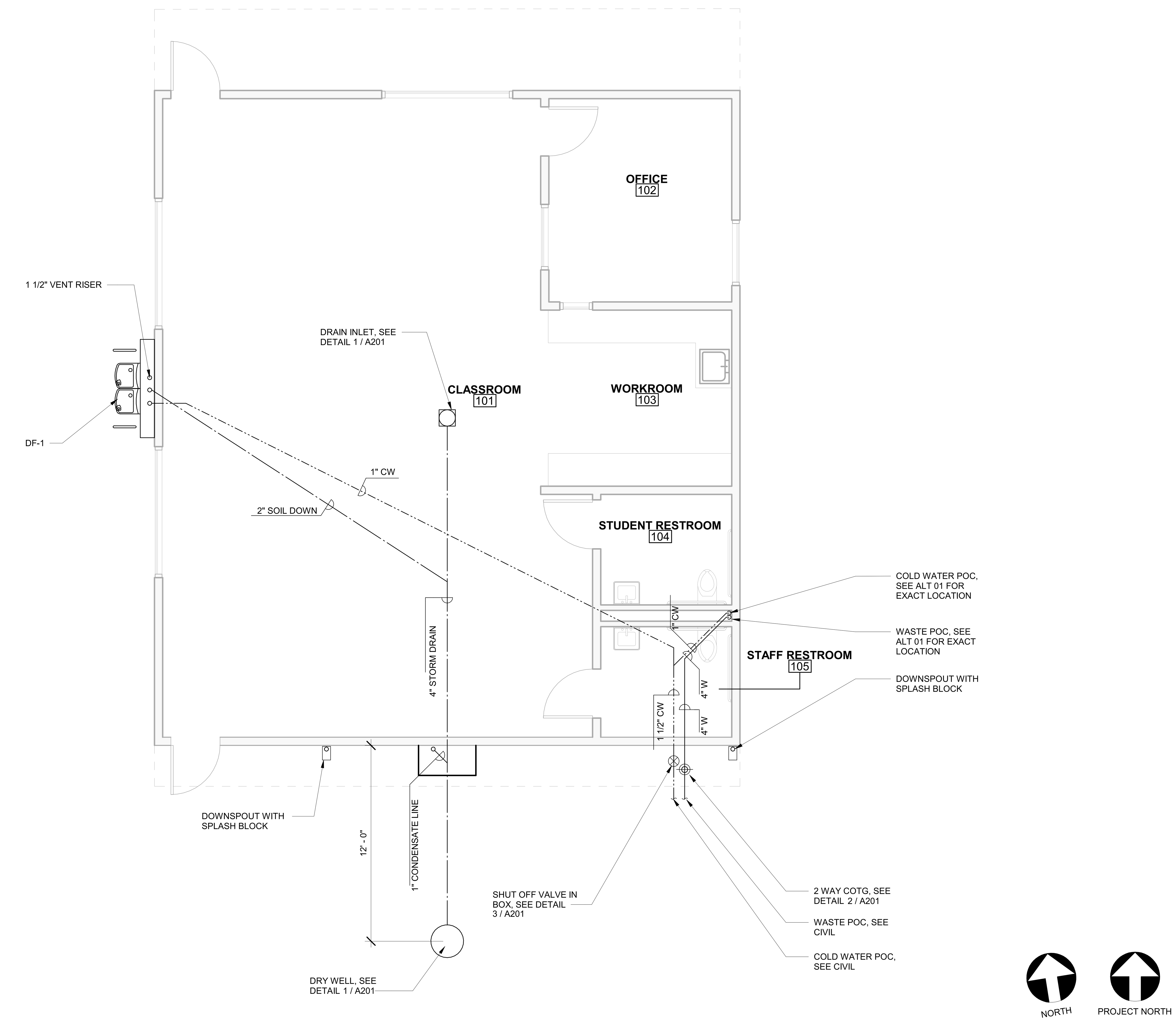
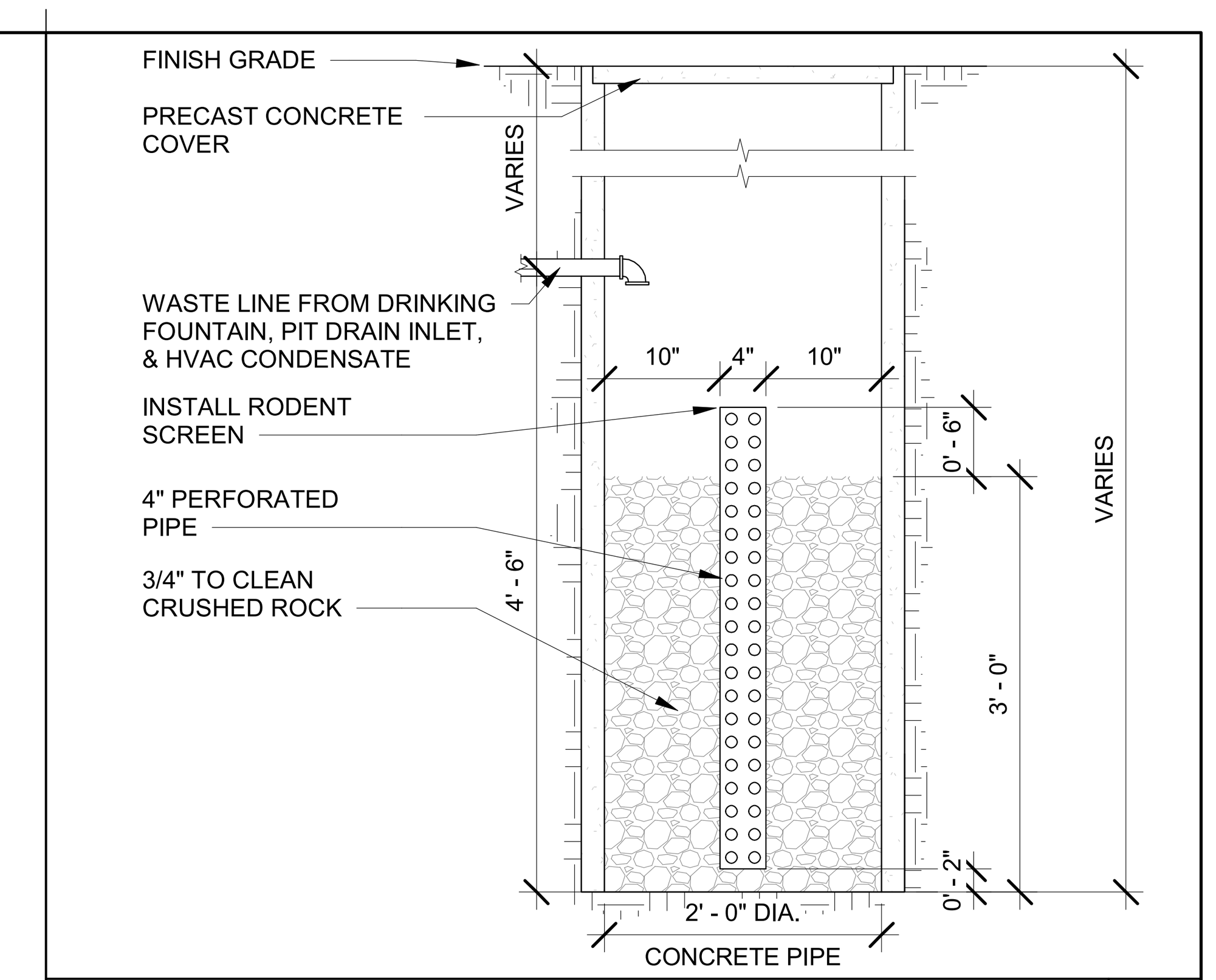
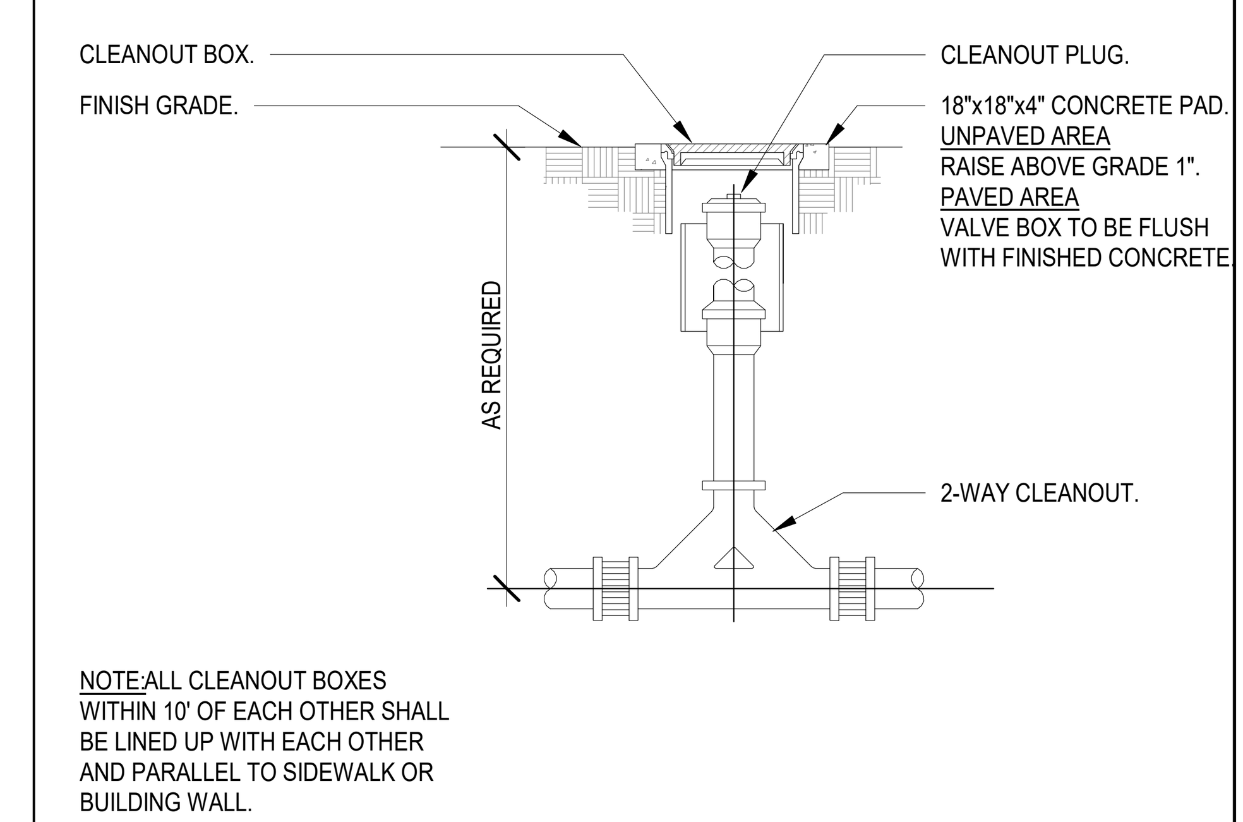


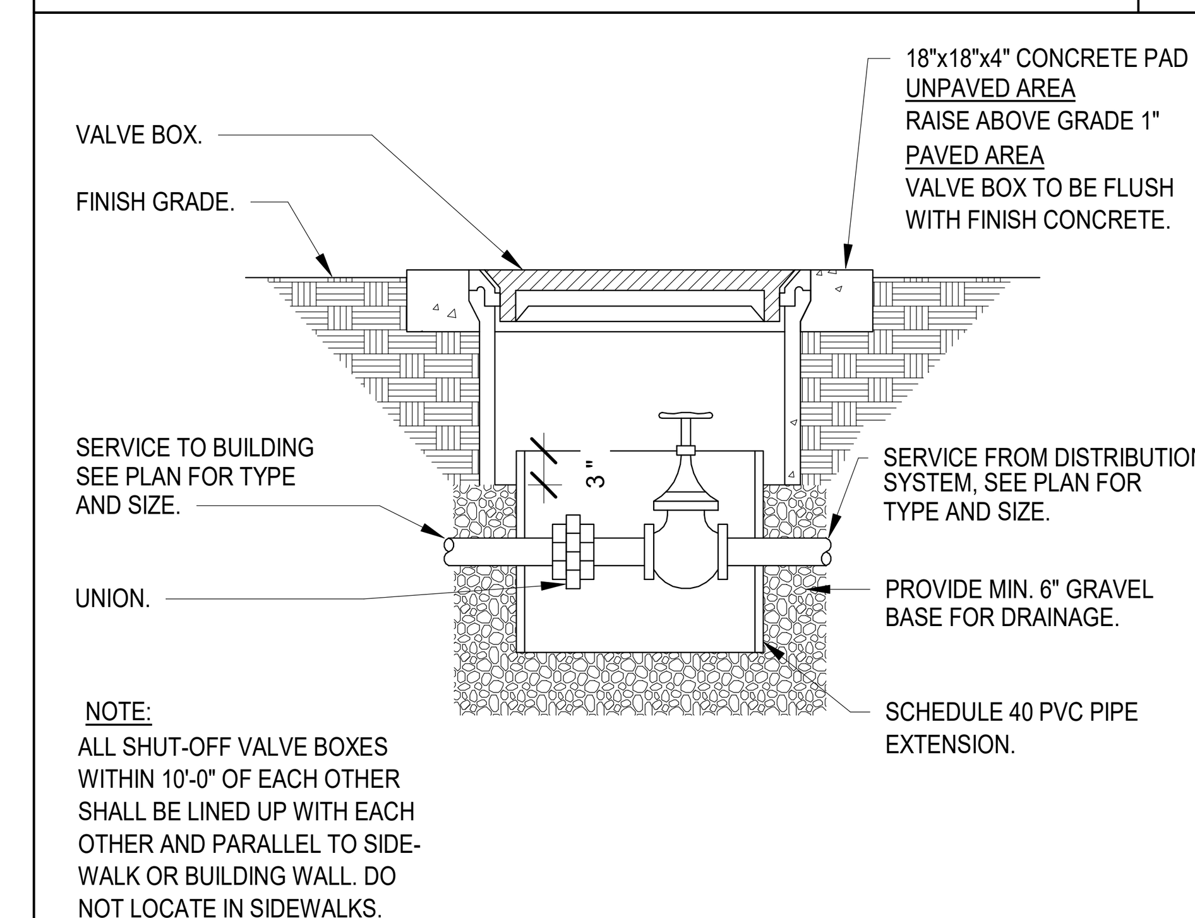
PLUMBING FLOOR PLAN 1/4" = 1'-0" 7



DRY WELL 3/4" = 1'-0" 1



2-WAY CLEANOUT TO GRADE 1" = 1'-0" 2



SOV IN BOX 1" = 1'-0" 3

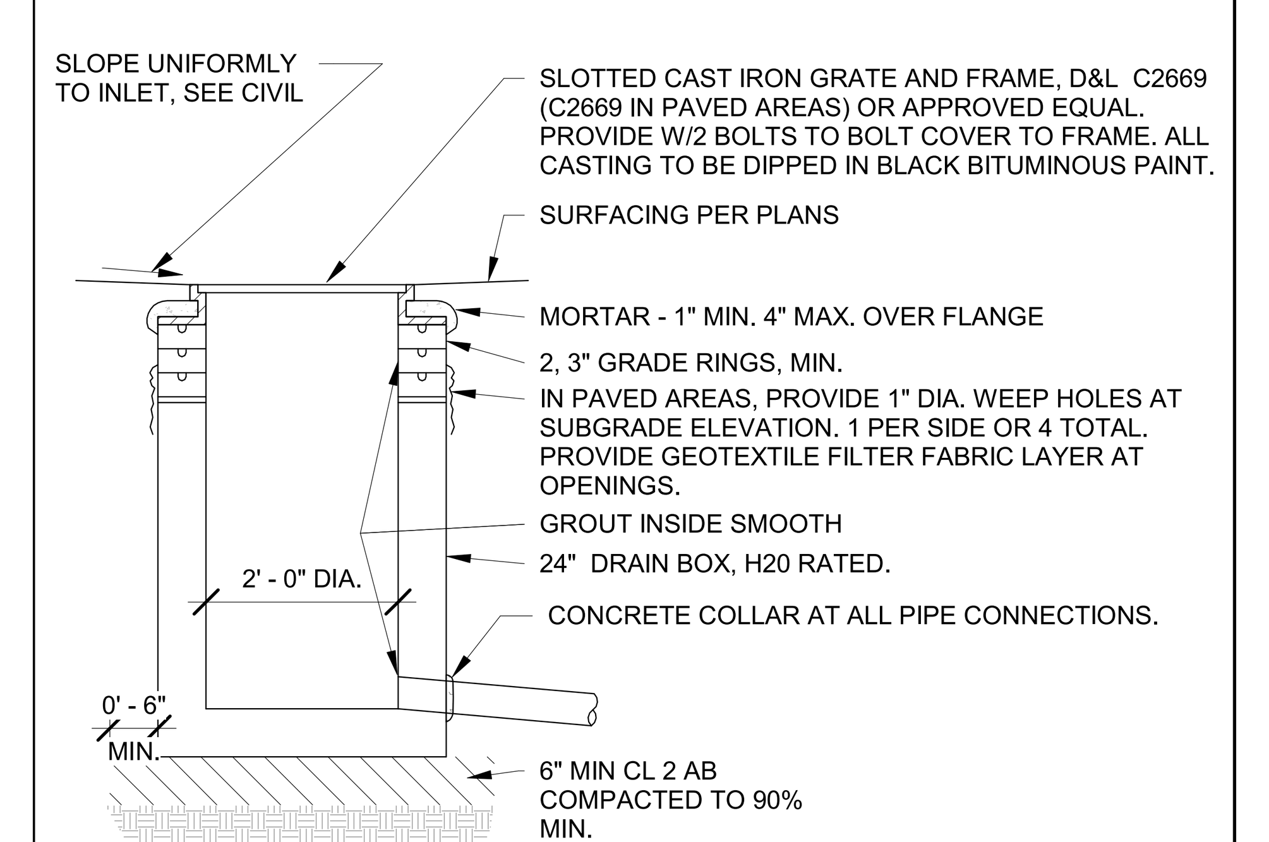
MARK	FIXTURE	S OR W	V	CW	DESCRIPTION
DF-1	DRINKING FOUNTAIN W/BOTTLE FILLER ADA	2"	1-1/2"	1"	MURDOCK DRINKING FOUNTAIN/BOTTLE FILLER, A172-UG-VR-D1-BF SERIES BASE MODEL A172400S-UG-VR-D1 BARRIER FREE, VANDAL RESISTANT, UNIVERSAL BI-LEVEL,WALL MOUNTED DRINKING FOUNTAIN WITH VANDAL RESISTANT, PUSHBUTTON OPERATED BOTTLE FILLER,STAINLESS STEEL BUBBLER, BOTTLE FILLER WITH PUSH BUTTON OPERATION

PLUMBING GENERAL NOTES

1. COORDINATION OF WORK: LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY.
2. THE ACTUAL LOCATION OF ALL MATERIALS, PIPING, DUCTWORK, FIXTURES, EQUIPMENT, SUPPORTS, ETC. SHALL BE CAREFULLY PLANNED, PRIOR TO INSTALLATION OF ANY WORK TO AVOID ALL INTERFERENCES WITH EACH OTHER, OR WITH STRUCTURAL, ELECTRICAL, ARCHITECTURAL OR OTHER ELEMENTS.
3. VERIFY THE PROPER VOLTAGE AND PHASE OF ALL EQUIPMENT WITH THE ELECTRICAL PLANS. ALL CONFLICTS SHALL BE CALLED TO THE ATTEN TION OF THE ARCHITECT AND THE ENGINEER PRIOR TO THE INSTALLATION OF ANY WORK OR THE ORDERING OF ANY EQUIPMENT.
4. ALL DRAWINGS AND SPECIFICATIONS ARE TO BE CONSIDERED PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS PRIOR TO ANY CONSTRUCTION, INCLUDING ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENT SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER OR THE OWNER REPRESENTATIVE.
5. MINIMUM SLOPE FOR SEWER IS 1/4"PER FT, UNLESS OTHERWISE NOTED.
6. ALL ROOF PENETRATIONS SHALL BE COMPATIBLE WITH ROOF SYSTEM WITH AS FEW PENETRATIONS AS POSSIBLE.
7. MINIMUM DOMESTIC WATER PIPE SIZE TO BE 3/4" UNLESS OTHERWISE NOTED. USE A REDUCING ELL AT FIXTURE, IF NECESSARY.
8. ALL PLUMBING FIXTURES, VALVES, FAUCETS, FIXTURE STOPS, ETC. WHICH PROVIDE WATER FOR HUMAN CONSUMPTION MUST MEET THE "LEAD FREE" REQUIREMENT FOR THE STATE OF CALIFORNIA.
9. PIPING DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.

PLUMBING LEGEND

- DOMESTIC COLD WATER
- SOIL OR WASTE
- PIPE TURN UP
- PIPE TURN DOWN



DROP INLET 1/2" = 1'-0" 4

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ELOP RELOCATABLE CLASSROOM
HAMILTON ELEMENTARY
2245 E 11TH ST.
STOCKTON, CA 95206

DRAWING TITLE
PLUMBING FLOOR PLAN

PROJECT NO.
23-13018.00

DRAWING
A201

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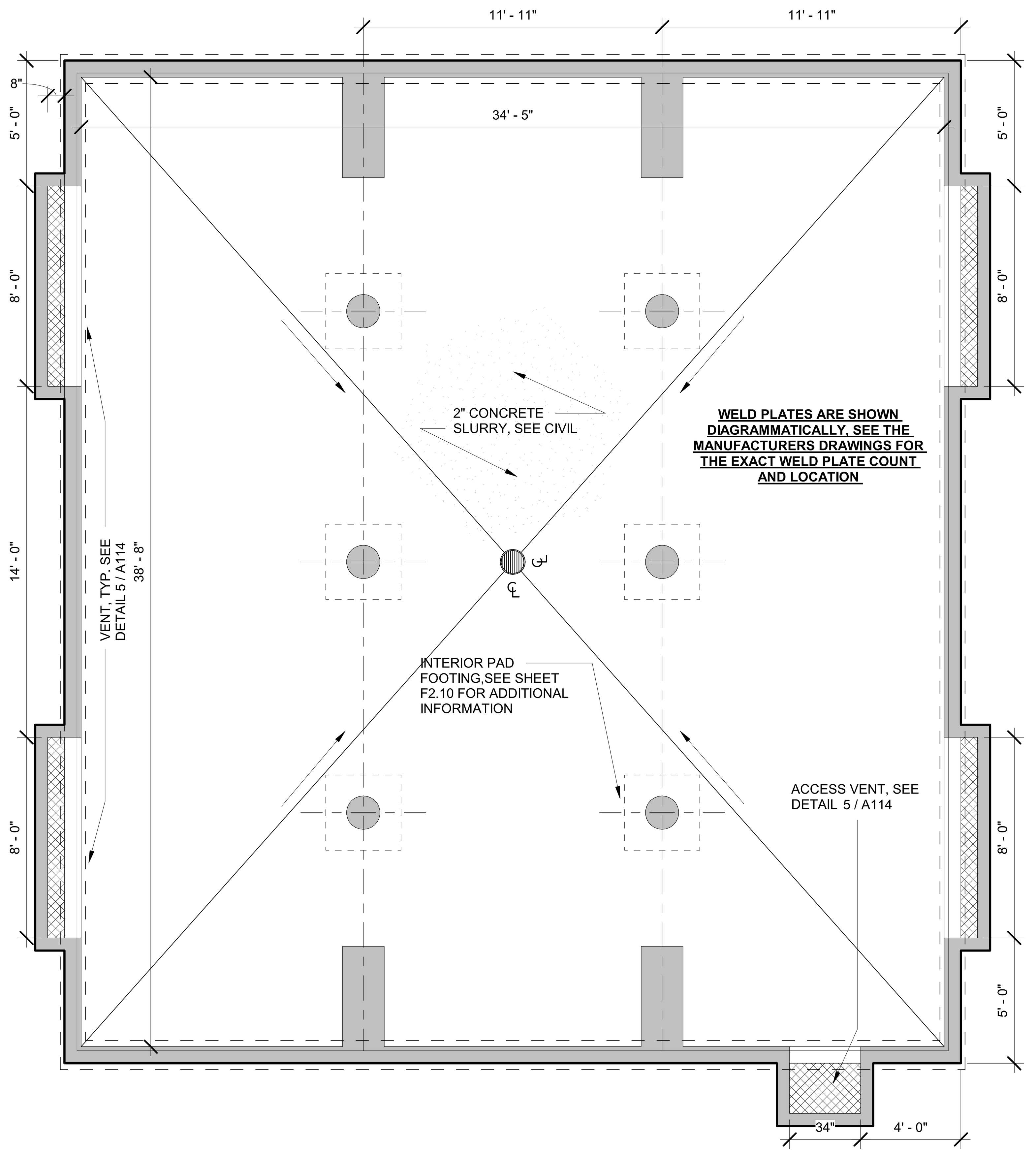
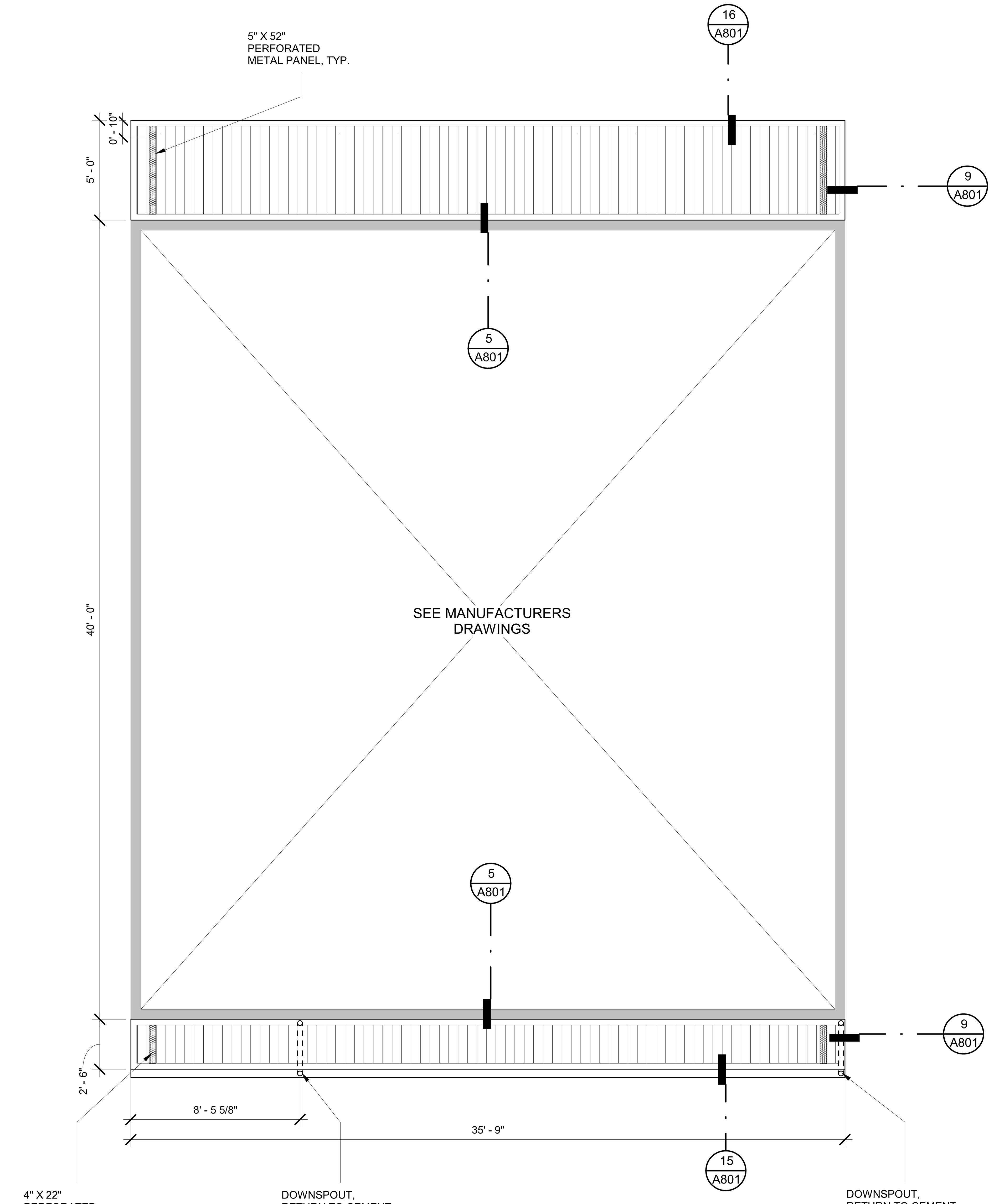


FOUNDATION PLAN - VENTING

1/4" = 1'-0" | 1



REFLECTED CEILING PLAN - VENTING

1/4" = 1'-0" | 3

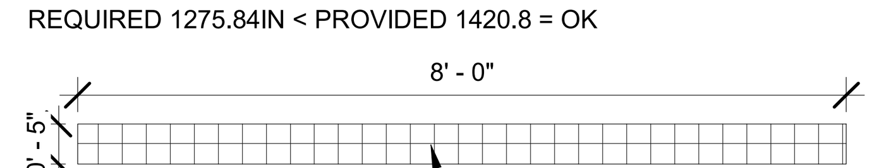
GENERAL NOTES

1. MODULAR MANUFACTURER WILL PROVIDE THE WELD PLATES TO THE SITE CONTRACTOR, THE SITE CONTRATOR IS RESPONSIBLE FOR THE PLACEMENT OF THE WELD PLATES.
2. SITE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING THE BUILDING FOUNDATION AS SHOWN IN THE MANUFACTURERS DRAWINGS.
3. SITE CONTRACTOR IS TO MEASURE AND VERIFY EXACT BUILDING SIZE AT THE MANUFACTURERS WAREHOUSE PRIOR TO THE EXCAVATION AND THE PLACMENT OF BUILDING FOUNDATION.
4. SITE CONTRACTOR IS RESPPONSIBLE FOR THE OFFLOADING AND INSTALLATION OF THE RELOCATABLE MODULES ON THE BUILDING FOUNDATION.

PIT VENT CALCULATION

PIT SIZE 34'-5" X 38'-8"
1330SF ÷ 150 = 8.86SF
8.86SF X 144= 1275.84
VENT 5" X 96" = 480" X .74 = 355.2
355.2 X 4 = 1420.8

REQUIRED 1275.84IN < PROVIDED 1420.8 = OK



McNICHOLS WIRE MESH (OR APPROVED EQUAL)

MESH TYPE: SQUARE
CONSTRUCTION TYPE: WOVEN
PRIMARY MATERIAL: STAINLESS STEEL
WEAVE: WOVEN
PERCENT OPEN AREA: 74%

OVERHANG VENT CALCULATION

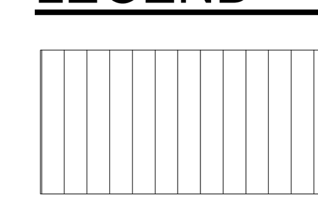
OVERHANG 2'-6" X 35'-9"
89SF ÷ 150 =.59SF
.59SF X 144 = 84.96IN
4" X 22" = 88"
48" X 2 = 176IN

REQUIRED 84.96IN < PROVIDED 176 = OK

OVERHANG 5'-0" X 35'-9"
89SF ÷ 150 =1.18SF
1.18SF X 144 = 169.92IN
4" X 52" = 208"
208" X 2 = 416IN

REQUIRED 169.92IN < PROVIDED 416 = OK

LEGEND



METAL PANELS
LATITUDE SERIEAS WALL PANELS
LW6S SYMMETRICAL PROFILE

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2245 E 11TH ST.
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DRAWING TITLE
VENTING FLOOR PLANS

PROJECT NO.
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A202

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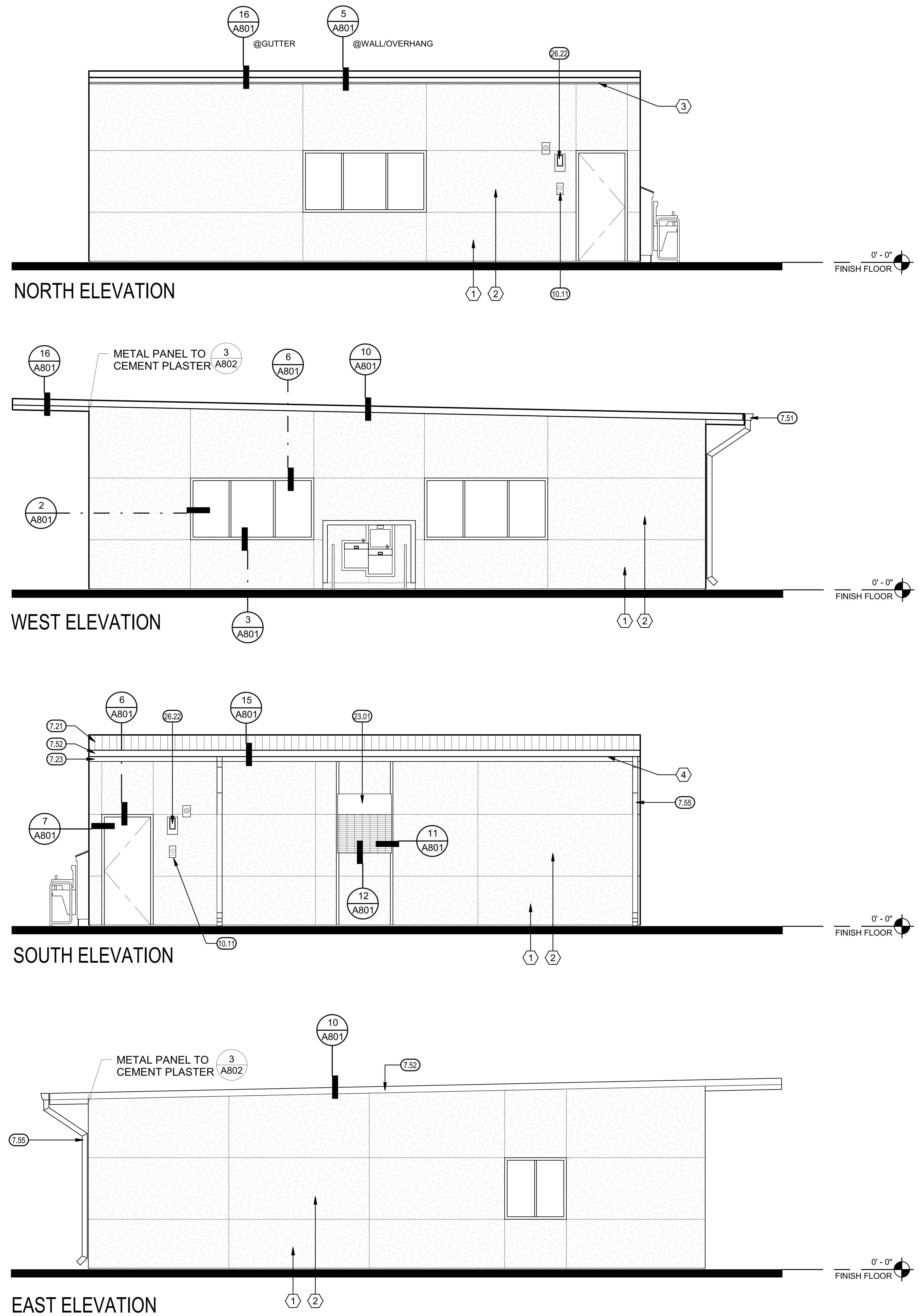

EXTERIOR ELEVATIONS

1/4" = 1' - 0"

KEYNOTES

7.21	STANDING SEAM METAL ROOF AND FLASHING, PROVIDED AND INSTALLED OFF SITE BY CLASS LEASING, SEE RELOCATABLE DRAWINGS FOR ADDITIONAL INFORMATION
7.23	METAL SOFFIT PANELS TO BE PROVIDED AND INSTALLED BY SITE CONTRACTOR
7.51	GUTTER PROVIDED BY CLASS LEASING, SITE CONTRACTOR TO REMOVE AND SALVAGE FOR RE-INSTALLATION AFTER FINISHES HAVE BEEN INSTALLED
7.52	PRE-FINISHED METAL FLASHING TRIM PROVIDED AND INSTALLED BY CLASS LEASING OFF SITE. SITE CONTRACTOR TO REMOVE AND SALVAGE FOR RE-INSTALLATION AFTER FINISHES HAVE BEEN INSTALLED.
7.55	SHEET METAL DOWN SPOUT (SPILL AT GRADE) AND BRACKETS PROVIDED BY CLASS LEASING. SITE CONTRACTOR TO REMOVE AND SALVAGE FOR RE-INSTALLATION AFTER FINISHES HAVE BEEN INSTALLED.
10.11	SIGNAGE BY SITE CONTRACTOR, SEE SIGNAGE PLAN ON A200 FOR ADDITIONAL INFORMATION
23.01	HVAC UNIT, SEE NEW RELOCATABLE CLASSROOM BUILDING DRAWINGS
26.22	EXTERIOR LIGHT PROVIDED BY CLASS LEASING. SITE CONTRACTOR TO REMOVE AND SALVAGE FOR RE-INSTALLATION AFTER FINISHES HAVE BEEN INSTALLED

GENERAL NOTES

A. CEMENT PLASTER EXPANSION AND CONTROL JOINT PATTERN SHALL BE REVIEWED WITH THE ARCHITECT PRIOR TO INSTALLATION.

EXTERIOR FINISH SCHEDULE

MARK	MATERIAL	DETAIL
1	CEMENT PLASTER SYSTEM, EXTERIOR PAINT: MATCH EXISTING CAMPUS COLORS	7 / A802
2	CEMENT PLASTER SYSTEM, PAINT 2 EXTERIOR PAINT: MATCH EXISTING CAMPUS COLORS	7 / A802
3	METAL PANEL SYSTEM: LATITUDE SERIES (PAN RIB D 6" COVERAGE 1" REVEAL) EXTERIOR COLOR: MATCH EXISTING CAMPUS COLORS	2 / A802
4	METAL SHEET METAL FLASHING AND DOWNSPOUT EXTERIOR COLOR: MATCH EXISTING CAMPUS COLORS	15 / A801

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EXTERIOR ELEVATIONS

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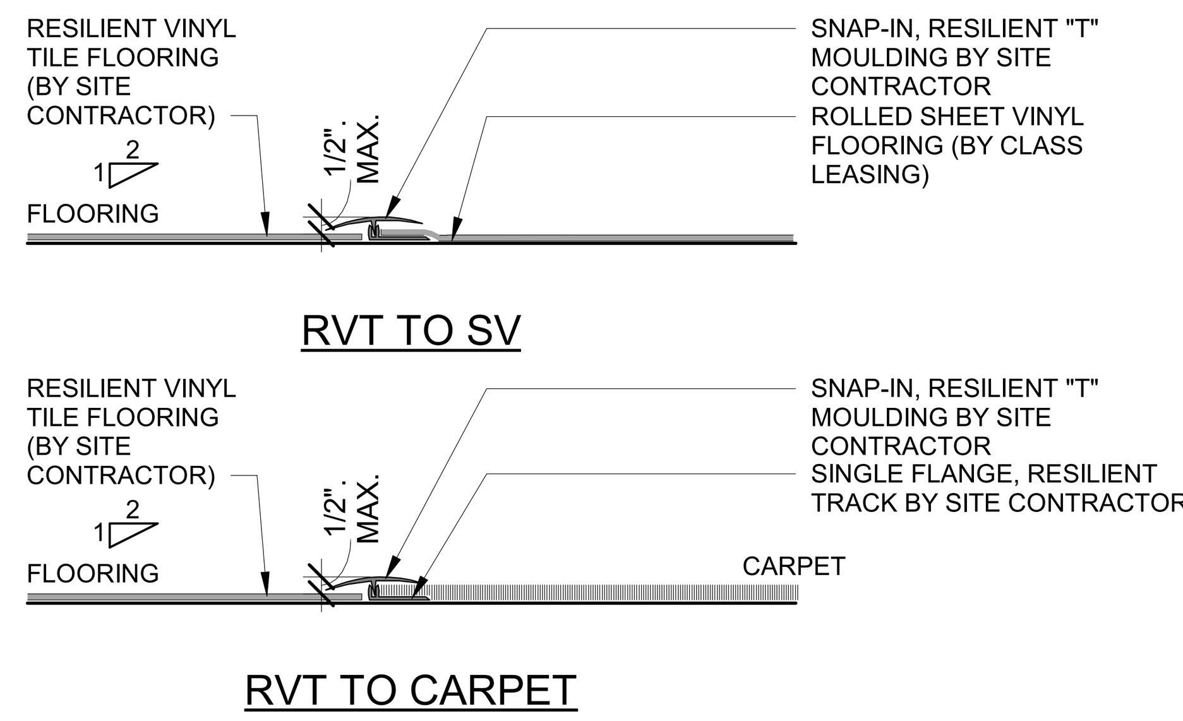
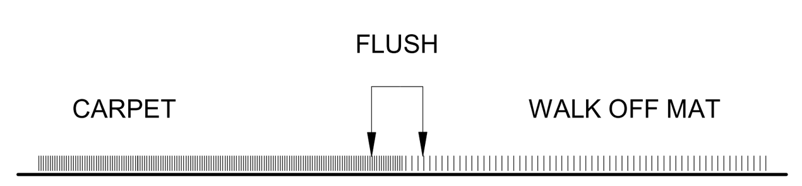
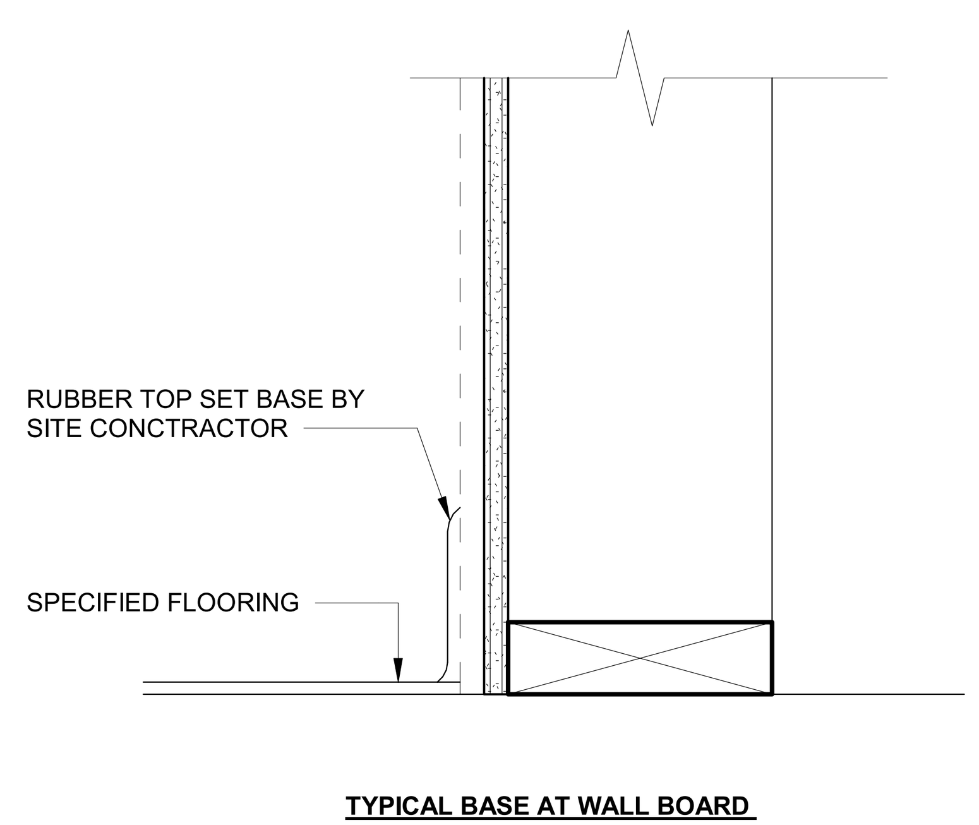


NOTE: FLOOR MATERIAL TRANSITIONS OCCUR @ CENTERLINE OF DOORS WHERE APPLICABLE

FLOOR TRANSITION — 3" = 1'-0" — 13



CARPET TO WALK OFF MAT — 3" = 1'-0" — 14

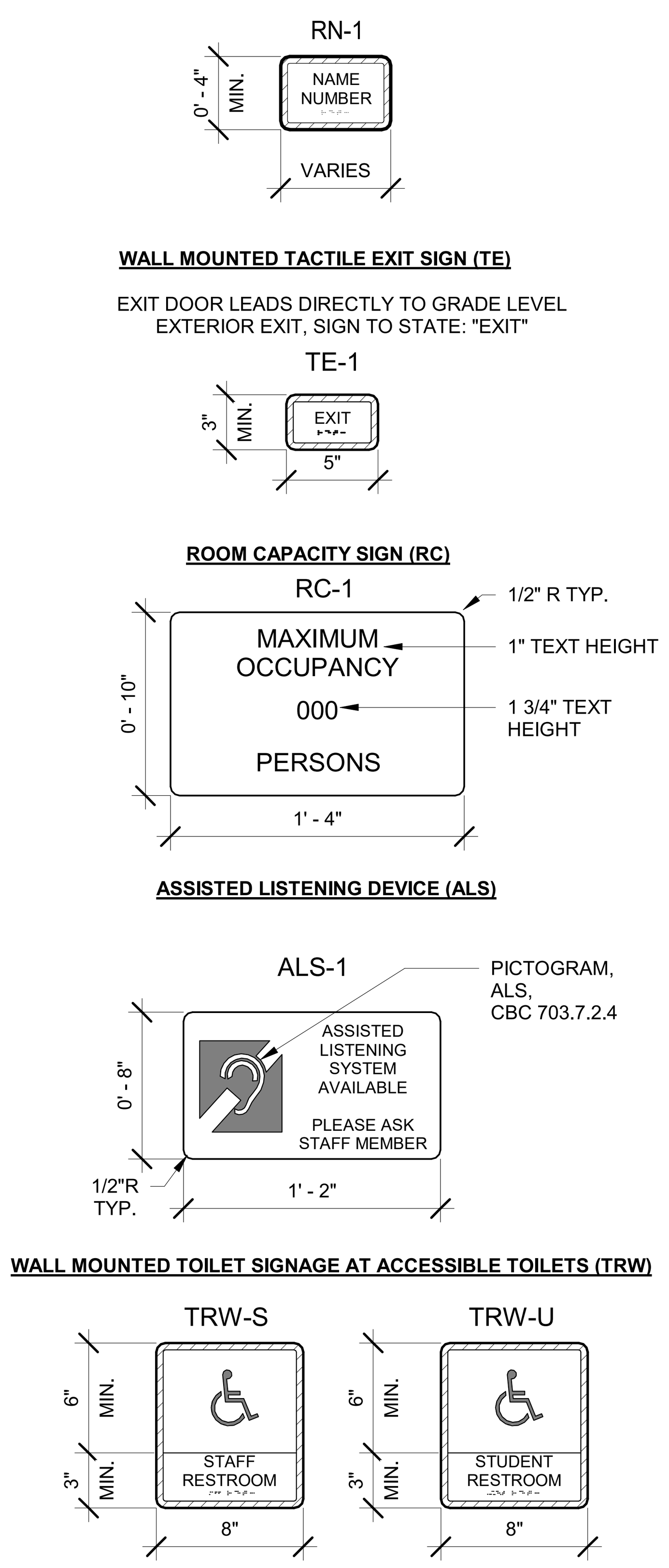


R.T.B. AT WALL — 3" = 1'-0" — 15

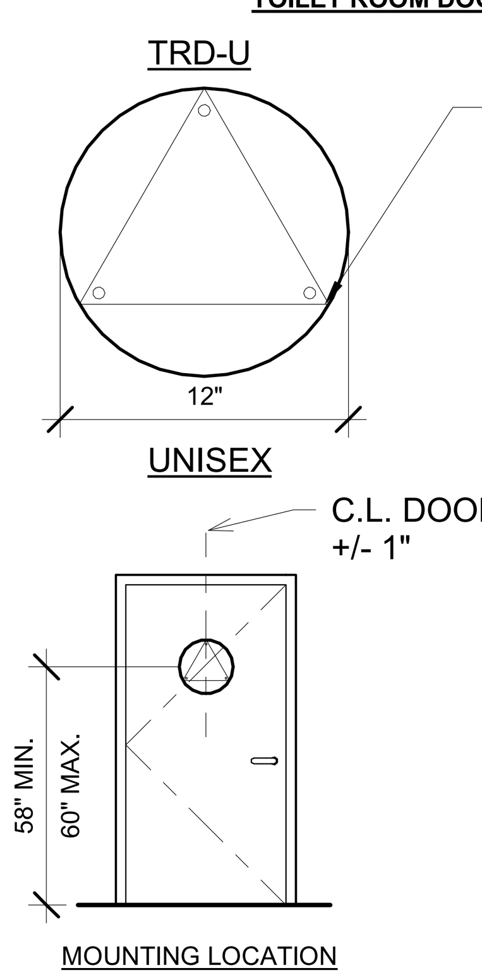
TYPICAL SIGNAGE

WALL MOUNTED IDENTIFICATION SIGNAGE @ FUNCTIONAL ROOMS (RN)

COORDINATE ROOM NAME AND NUMBER WITH OWNER PRIOR TO FABRICATION.
DO NOT USE IDENTIFICATION FOUND ON THE DRAWINGS, U.N.O.



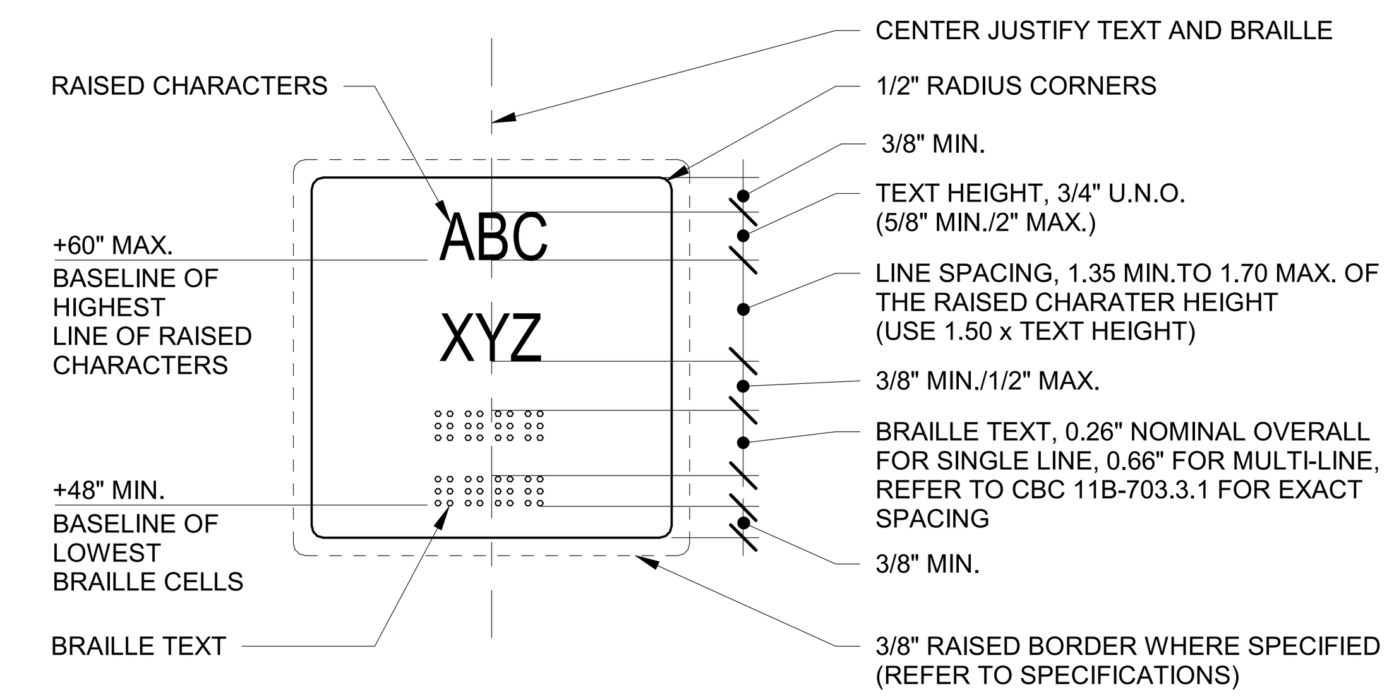
TOILET ROOM DOOR IDENTIFICATION SYMBOL (TRD)



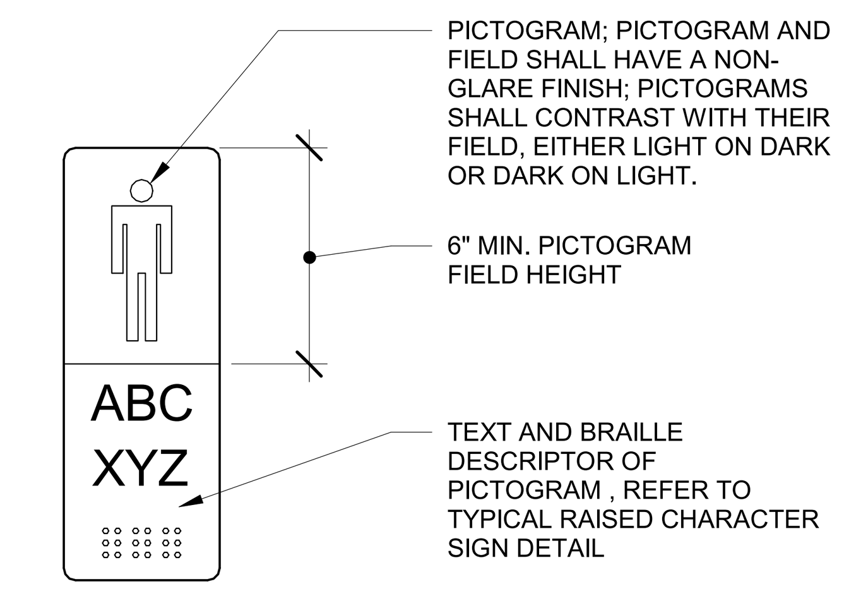
NOTES:
1. SYMBOLS SHALL BE 1/4" THICK; UNISEX SYMBOLS SHALL CONSIST OF A 1/4" THICK TRIANGLE ON A 1/4" THICK CIRCLE.
2. THE COLOR OF THE SYMBOL SHALL CONTRAST WITH THE COLOR OF THE DOOR; FOR UNISEX SIGNS, THE COLOR OF THE CIRCLE SHALL CONTRAST WITH THE DOOR AND THE COLOR OF THE TRIANGLE SHALL CONTRAST WITH THE CIRCLE; CONTRAST SHALL BE LIGHT ON DARK OR DARK ON LIGHT.
3. SYMBOLS SHALL NOT CONTAIN BRAILLE OR WRITTEN TEXT.
4. PICTOGRAMS ARE NOT A REQUIRED FEATURE BUT MAY BE INCLUDED.
5. EDGES OF SYMBOLS SHALL BE EASED OR ROUNDED AT 1/16" MINIMUM OR CHAMFERED AT 1/8" MAXIMUM. VERTICES OF TRIANGLES SHALL BE RADIUSED BETWEEN 1/8" MIN./ 1/4" MAX.
6. SYMBOLS SHALL BE LOCATED ON DOORS TO TOILET ROOMS, WHERE NO DOORS ARE PROVIDED, SYMBOLS SHALL BE LOCATED ON THE WALL ADJACENT TO THE ENTRANCE OPENING.

TABLE 11B-703.5.5 (VISUAL CHARACTER HEIGHT)

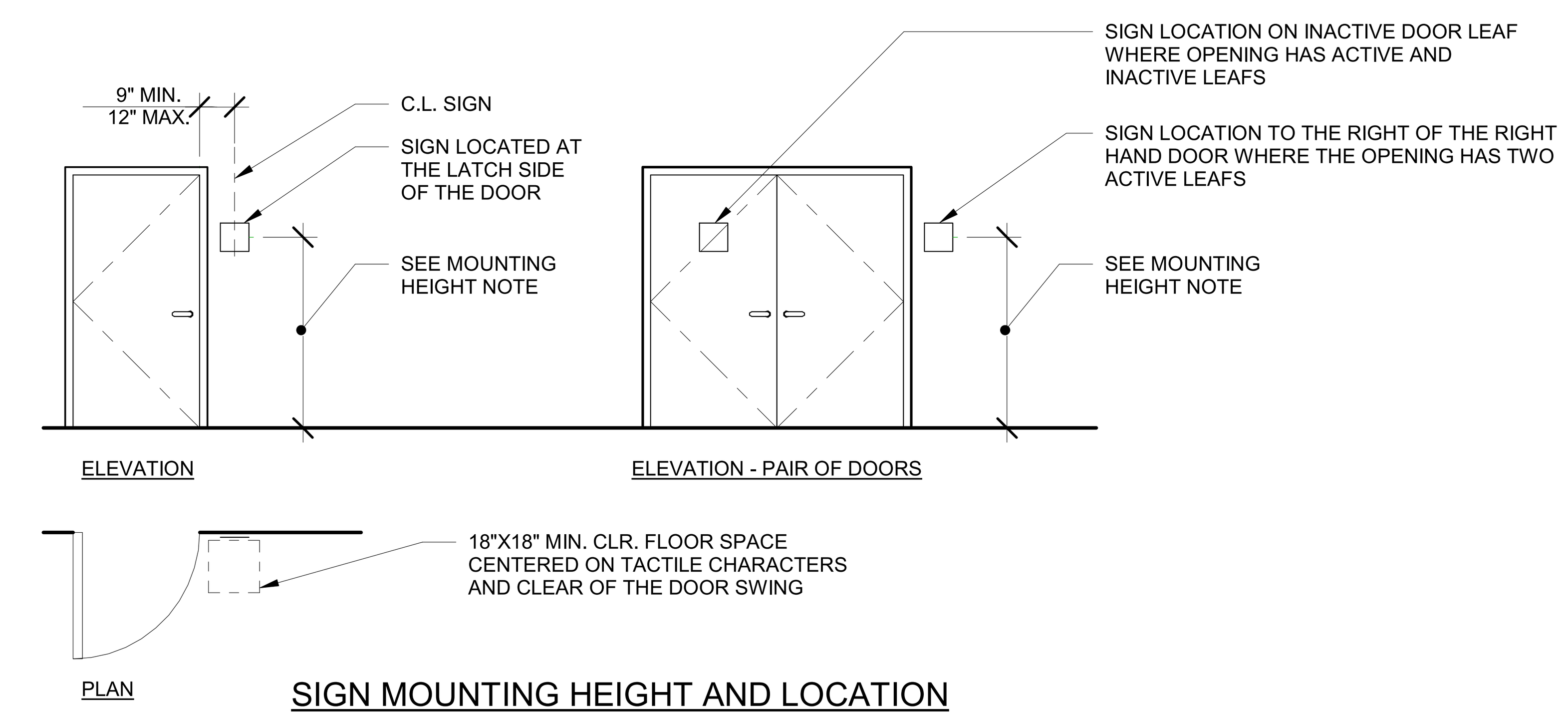
HEIGHT TO FINISH FLOOR OR GROUND FROM BASELINE OF CHARACTER	HORIZONTAL VIEWING DISTANCE	MINIMUM CHARACTER HEIGHT
40 INCHES TO LESS THAN OR EQUAL TO 70 INCHES	LESS THAN 72 INCHES	5/8 INCHES
	72 INCHES AND GREATER	5/8 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 72 INCHES
GREATER THAN 70 INCHES TO LESS THAN OR EQUAL TO 120 INCHES	LESS THAN 180 INCHES	2 INCHES
	180 INCHES AND GREATER	2 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 180 INCHES
GREATER THAN 120 INCHES	LESS THAN 21 FEET	3 INCHES
	21 FEET AND GREATER	3 INCHES, PLUS 1/8 INCH PER FOOT OF VIEWING DISTANCE ABOVE 21 FOOT



TYPICAL ROOM IDENTIFICATION OR TACTILE EXIT SIGN



SIGN WITH PICTOGRAM



SIGN MOUNTING HEIGHT AND LOCATION

NOTES:

GENERAL: SIGNAGE SHALL COMPLY WITH CBC SECTION 11B-703, RAISED CHARACTER SIGNS SHALL COMPLY WITH CBC 11B-703.2, 11B-703.3 AND 11B-703.4

RAISED CHARACTERS (CBC 11B-703.2): RAISED CHARACTERS (TEXT) SHALL COMPLY WITH CBC SECTION 11B-703.2 AND SHALL BE DUPLICATED IN BRAILLE. RAISED CHARACTERS SHALL BE UPPER CASE AND BE RAISED 1/32-INCH MINIMUM ABOVE THEIR BACKGROUND. CHARACTERS SHALL BE SANS SERIF AND NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OTHER UNUSUAL FORMS. CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I". CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8-INCH MINIMUM AND 2 INCHES MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER "I". STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER. TEXT SHALL BE IN A HORIZONTAL FORMAT. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

BRAILLE (CBC 11B-703.3): BRAILLE SHALL BE CONTRACTED (GRADE 2) AND SHALL COMPLY WITH CBC SECTIONS 11B-703.3. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND SHALL COMPLY WITH CBC TABLE 703.3.1. BRAILLE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, CENTER JUSTIFIED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8 INCH MINIMUM AND 1/2 INCH MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8 INCH MINIMUM AND FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

MOUNTING HEIGHT (CBC 11B-703.4.1): TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST BRAILLE CELLS AND 60 INCHES MAXIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FORM THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS.

LOCATION (CBC 11B-703.4.2): SIGNS SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT A CLEAR FLOOR SPACE OF 18 INCHES MINIMUM BY 18 INCHES MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSED POSITION AND 45 DEGREE OPEN POSITION. WHERE PROVIDED, SIGNS IDENTIFYING PERMANENT ROOMS AND SPACES SHALL BE LOCATED AT THE ENTRANCE TO, AND OUTSIDE OF THE ROOM OR SPACE. WHERE PROVIDED, SIGNS IDENTIFYING EXITS SHALL BE LOCATED AT THE EXIT DOOR WHEN APPROACHED IN THE DIRECTION OF EGRESS TRAVEL.

PICTOGRAMS (CBC 11B-703.6): PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6 INCHES MINIMUM, CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD. PICTOGRAMS AND THEIR FIELD SHALL HAVE A NON-GLARE FINISH, PICTOGRAMS SHALL CONTRAST WITH THEIR FIELD WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD. PICTOGRAMS SHALL HAVE TEXT DESCRIPTORS LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD AND BRAILLE TRANSLATION BELOW TEXT DESCRIPTION, TEXT DESCRIPTORS SHALL COMPLY WITH CBC SECTIONS 11B-703.2, 11B-703.3, AND 11B-703.4.1.

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GENERAL NOTES:

1. INFORMATIONAL SIGNAGE SHALL COMPLY WITH CBC 11B-703.5
2. INFORMATIONAL SIGNS ARE NOT REQUIRED TO HAVE RAISED CHARACTERS AND ACCOMPANYING BRAILLE.
3. LETTERING TO BE 3/4" HIGH MIN. U.N.O.

FINISH AND CONTRAST (CBC 11B-703.5.1): VISUAL CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH. CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTERS ON A LIGHT BACKGROUND.

CASE (CBC 11B-703.5.2): CHARACTERS SHALL BE UPPERCASE OR LOWERCASE OR A COMBINATION OF BOTH.

STYLE (CBC 11B-703.5.3): CHARACTERS SHALL BE CONVENTIONAL IN FORM. CHARACTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.

CHARACTER PROPORTIONS (CBC 11B-703.5.4): CHARACTERS SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER "O" IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER "I".

CHARACTER HEIGHT (CBC 11B-703.5.5): MINIMUM CHARACTER HEIGHT SHALL COMPLY WITH TABLE 11B-703.5.5. VIEWING DISTANCE SHALL BE MEASURED AS THE HORIZONTAL DISTANCE BETWEEN THE CHARACTER AND AN OBSTRUCTION PREVENTING FURTHER APPROACH TOWARDS THE SIGN. CHARACTER HEIGHT SHALL BE BASED ON THE UPPERCASE LETTER "I".

STROKE THICKNESS (CBC 11B-703.5.7): STROKE THICKNESS OF THE UPPERCASE LETTER "I" SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.

CHARACTER SPACING (CBC 11B-703.5.8): CHARACTER SPACING SHALL BE MEASURED BETWEEN THE TWO CLOSEST POINTS OF ADJACENT CHARACTERS, EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 PERCENT MAXIMUM OF CHARACTER HEIGHT.

LINE SPACING (CBC 11B-703.5.9): SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.

FORMAT (CBC 11B-703.5.10): TEXT SHALL BE IN A HORIZONTAL FORMAT.

PICTOGRAMS (CBC 11B-703.6): PICTOGRAMS SHALL HAVE A FIELD HEIGHT OF 6 INCHES MINIMUM, CHARACTERS AND BRAILLE SHALL NOT BE LOCATED IN THE PICTOGRAM FIELD. PICTOGRAMS AND THEIR FIELD SHALL HAVE A NON-GLARE FINISH, PICTOGRAMS SHALL CONTRAST WITH THEIR FIELD WITH EITHER A LIGHT PICTOGRAM ON A DARK FIELD OR A DARK PICTOGRAM ON A LIGHT FIELD. PICTOGRAMS SHALL HAVE TEXT DESCRIPTORS LOCATED DIRECTLY BELOW THE PICTOGRAM FIELD AND BRAILLE TRANSLATION BELOW TEXT DESCRIPTION, TEXT DESCRIPTORS SHALL COMPLY WITH CBC SECTIONS 11B-703.2, 11B-703.3, AND 11B-703.4.1.

TYPICAL IDENTIFICATION AND TACTILE SIGNAGE — 1 1/2" = 1'-0" — 4

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2245 E 11TH ST.
STOCKTON, CA 95206

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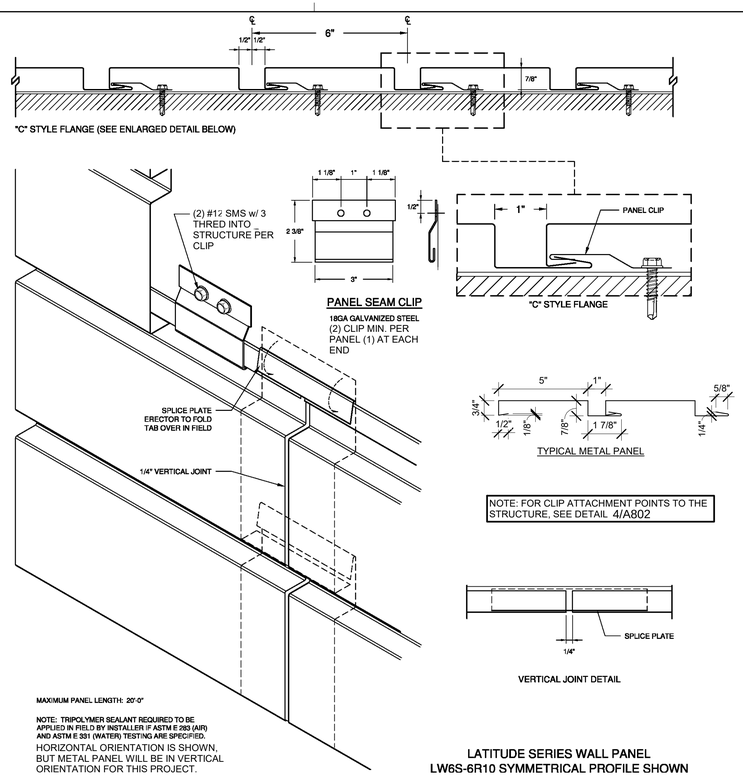
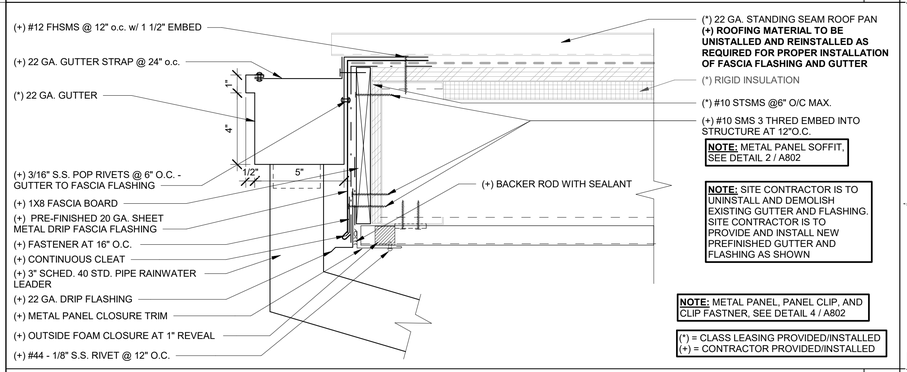
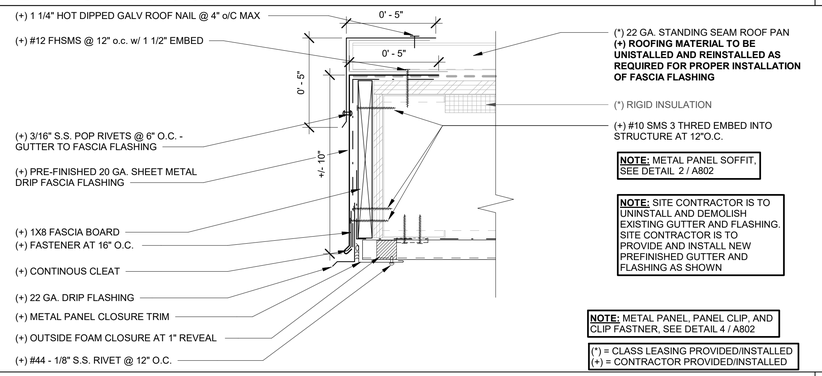


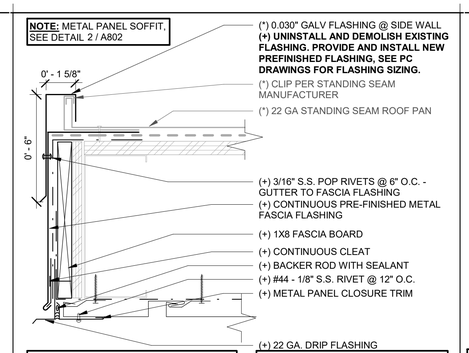
METAL PANEL SYSTEM — N.T.S. — 14



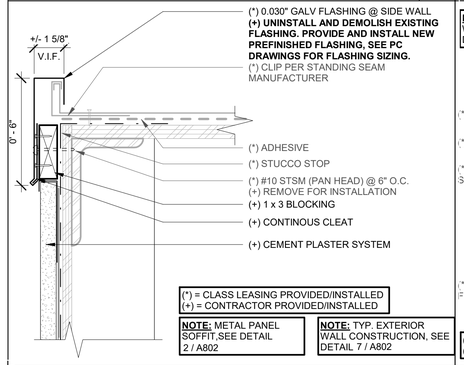
GUTTER AT STANDING SEAM — 3" = 1'-0" — 15



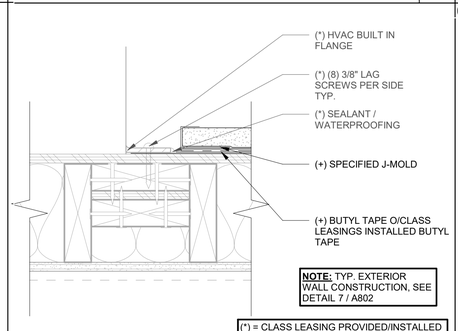
METAL ROOF AT HIGH END — 3" = 1'-0" — 16



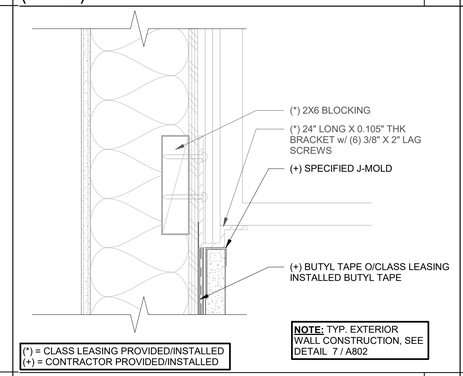
MTL. ROOFING TO MTL. PANEL — 3" = 1'-0" — 9



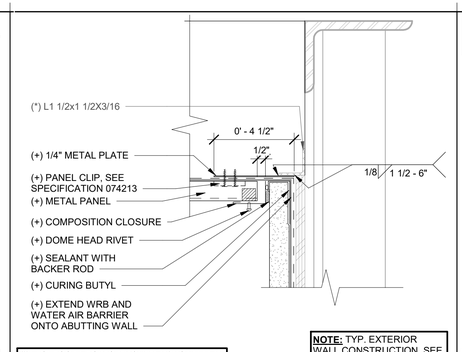
METAL ROOFING TO PLASTER — 3" = 1'-0" — 10



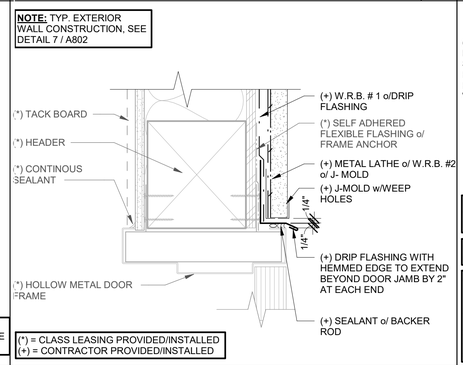
HVAC AT CEMENT PLASTER (JAMB) — 3" = 1'-0" — 11



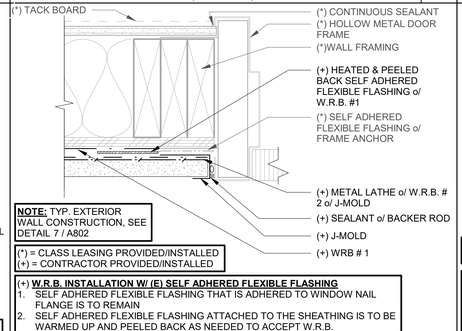
HVAC AT CEMENT PLASTER (SILL) — 3" = 1'-0" — 12



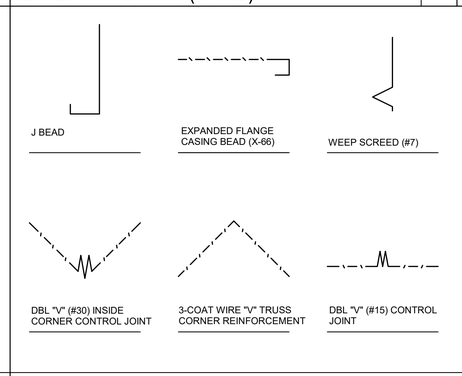
METAL PANEL AT STUCCO — 3" = 1'-0" — 5



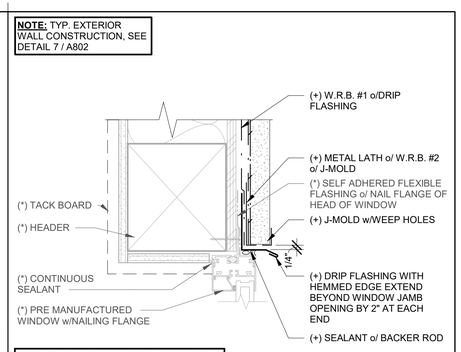
EXTERIOR DOOR (HEAD) — 3" = 1'-0" — 6



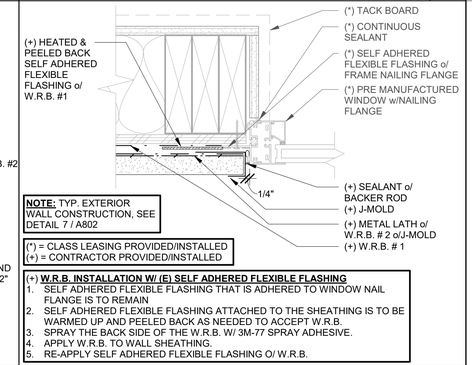
EXTERIOR DOOR (JAMB) — 3" = 1'-0" — 7



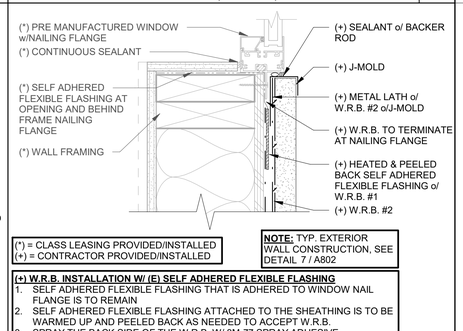
TYPICAL CEMENT PLASTERING ACCESSORIES (NOT ALL SHOWN) — 12" = 1'-0" — 4



EXTERIOR WINDOW (HEAD) — 3" = 1'-0" — 1



EXTERIOR WINDOW (JAMB) — 3" = 1'-0" — 2



EXTERIOR WINDOW (SILL) — 3" = 1'-0" — 3

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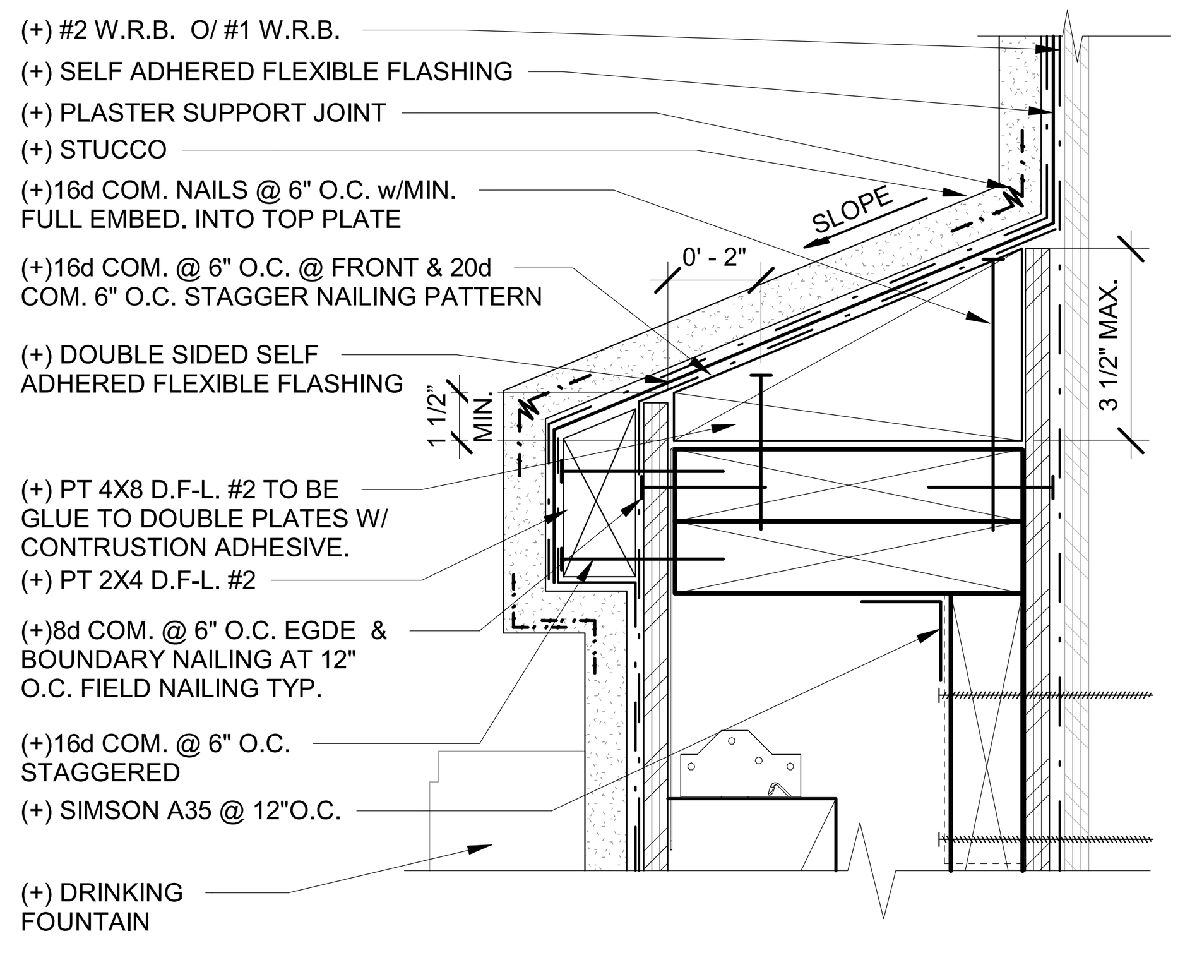
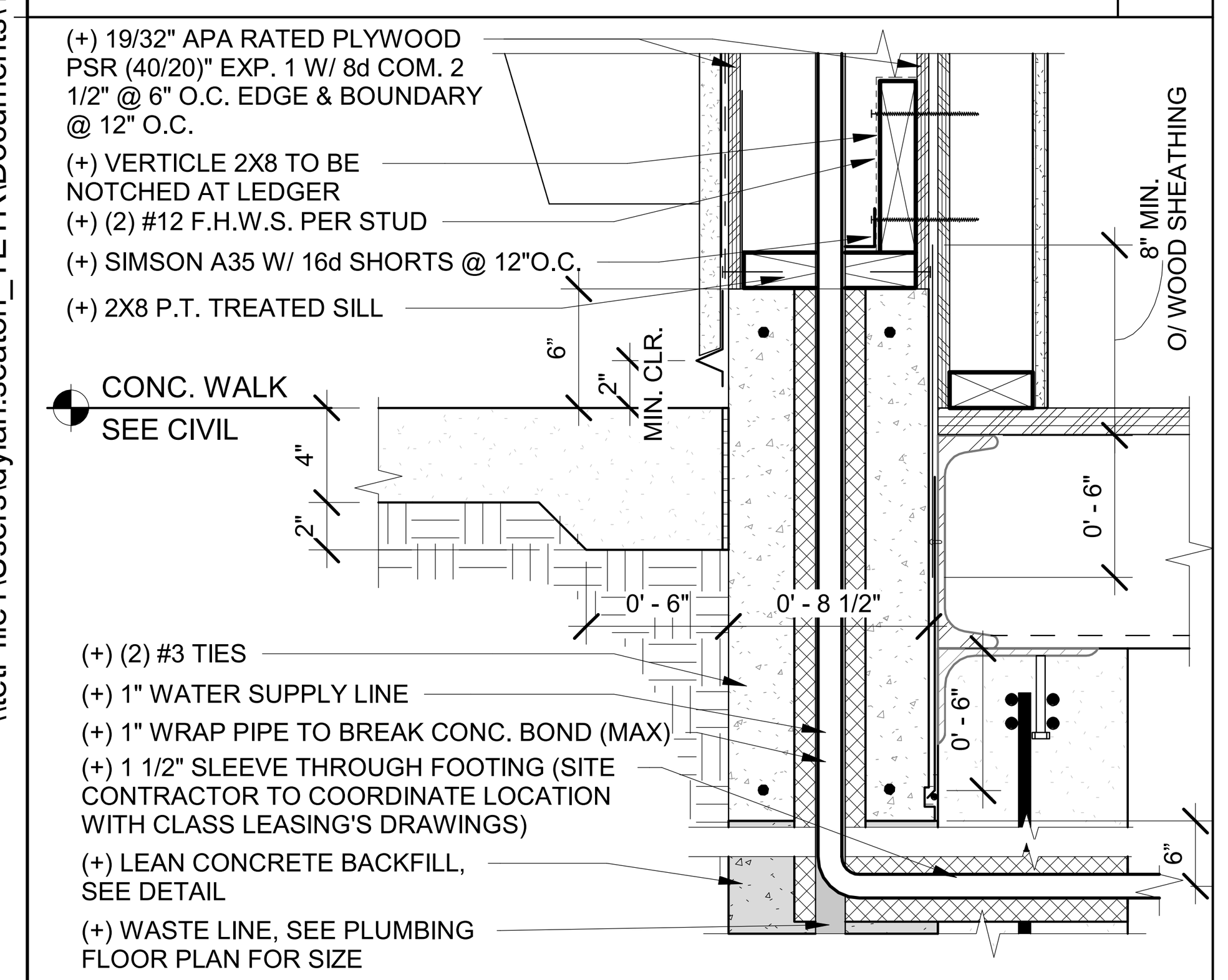
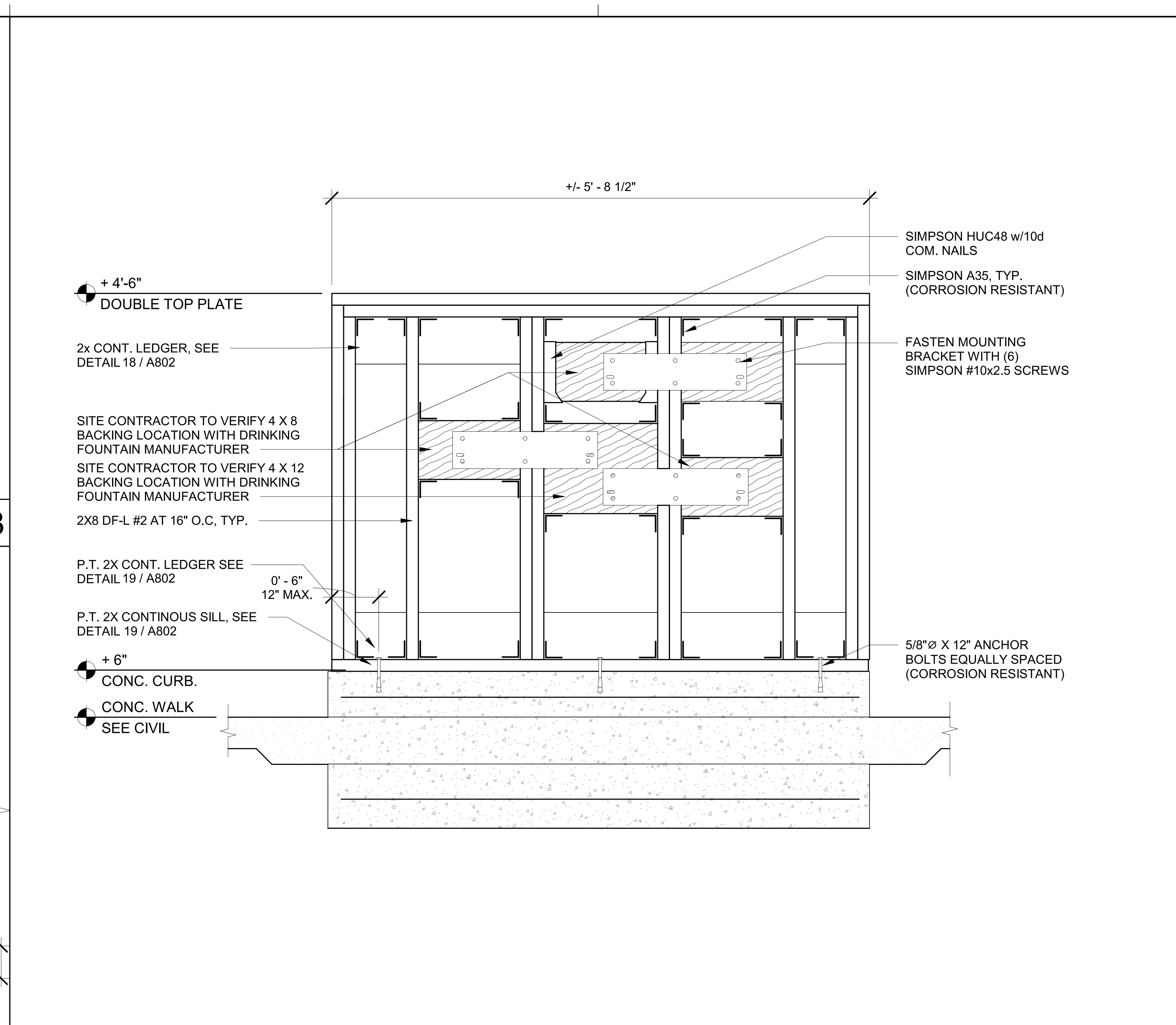


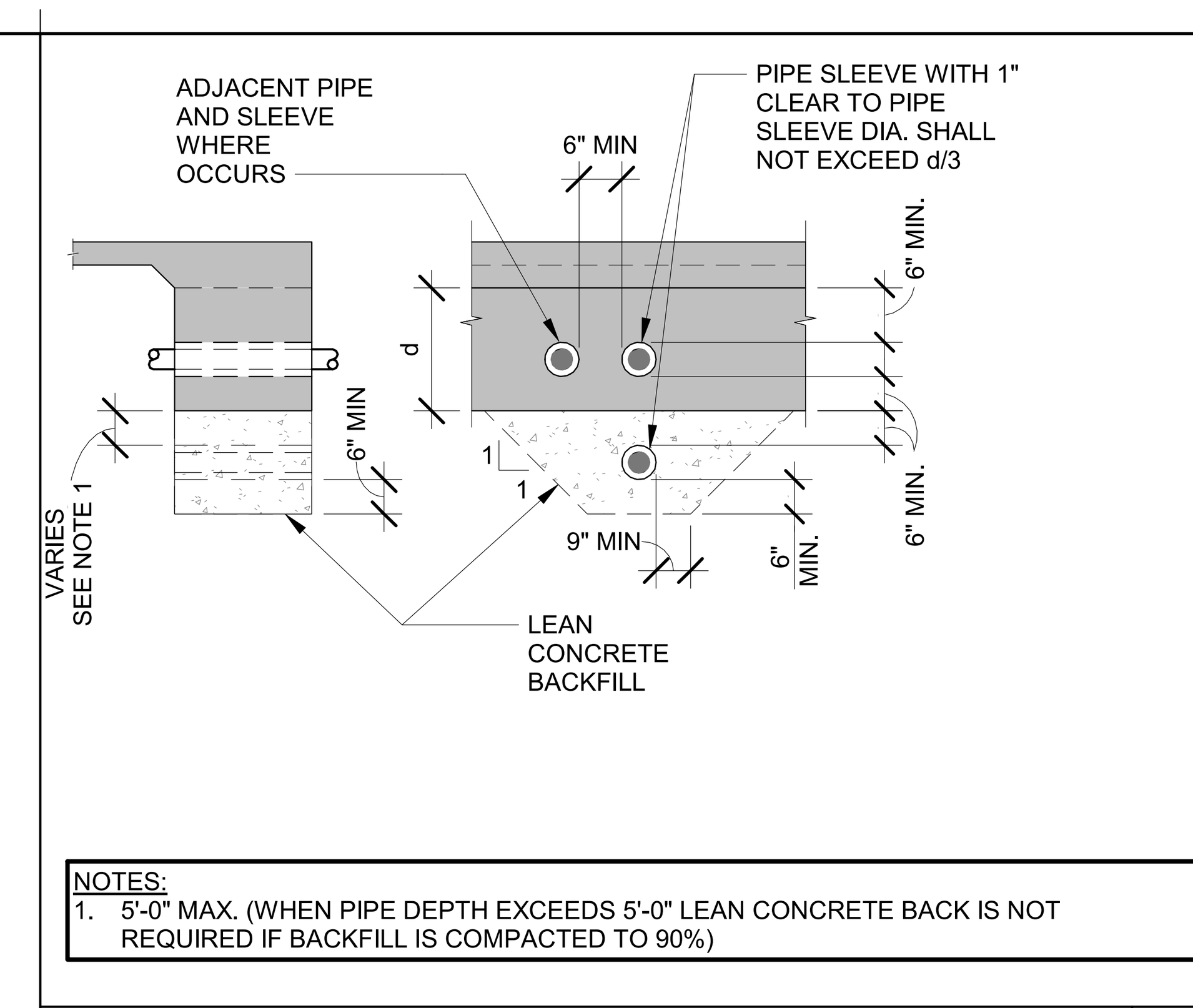
HEAD WALL AT D.F. 3" = 1'-0" 18



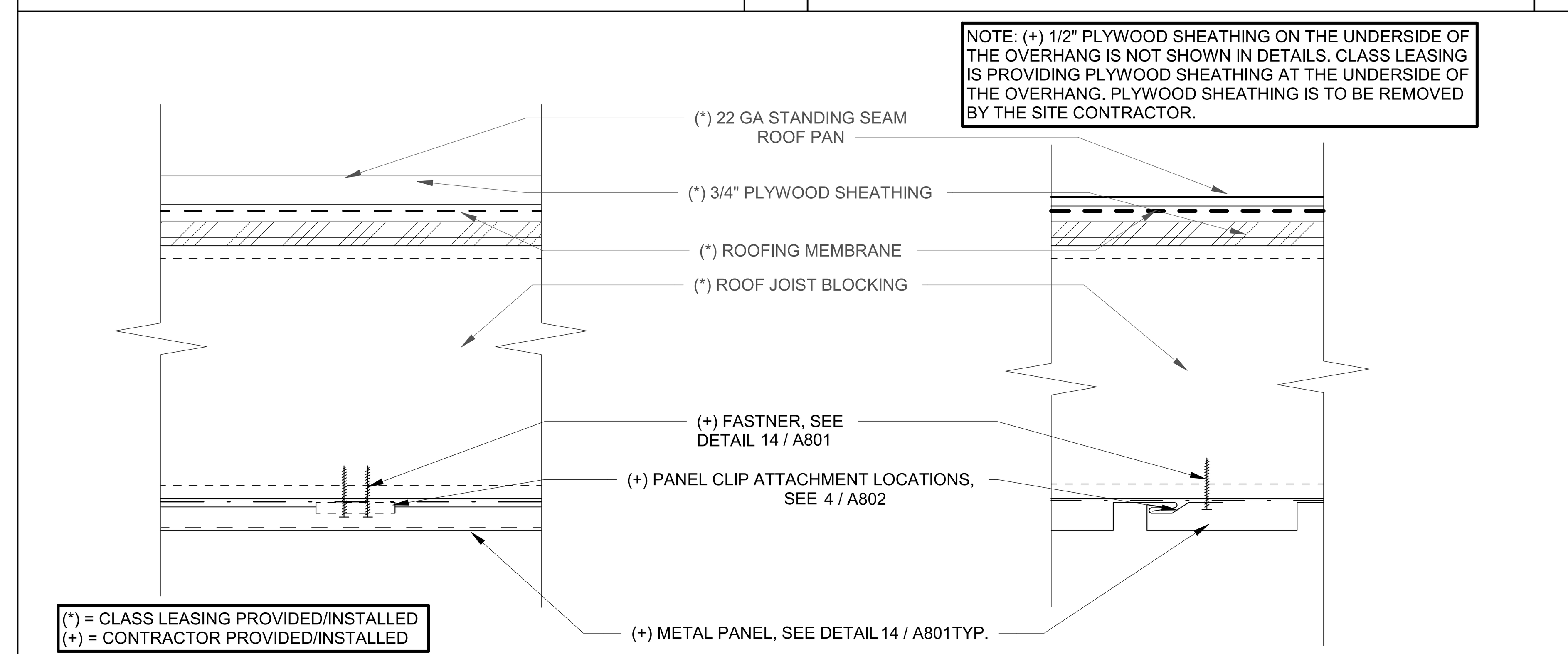
FOOTING AT D.F. 1 1/2" = 1'-0" 19



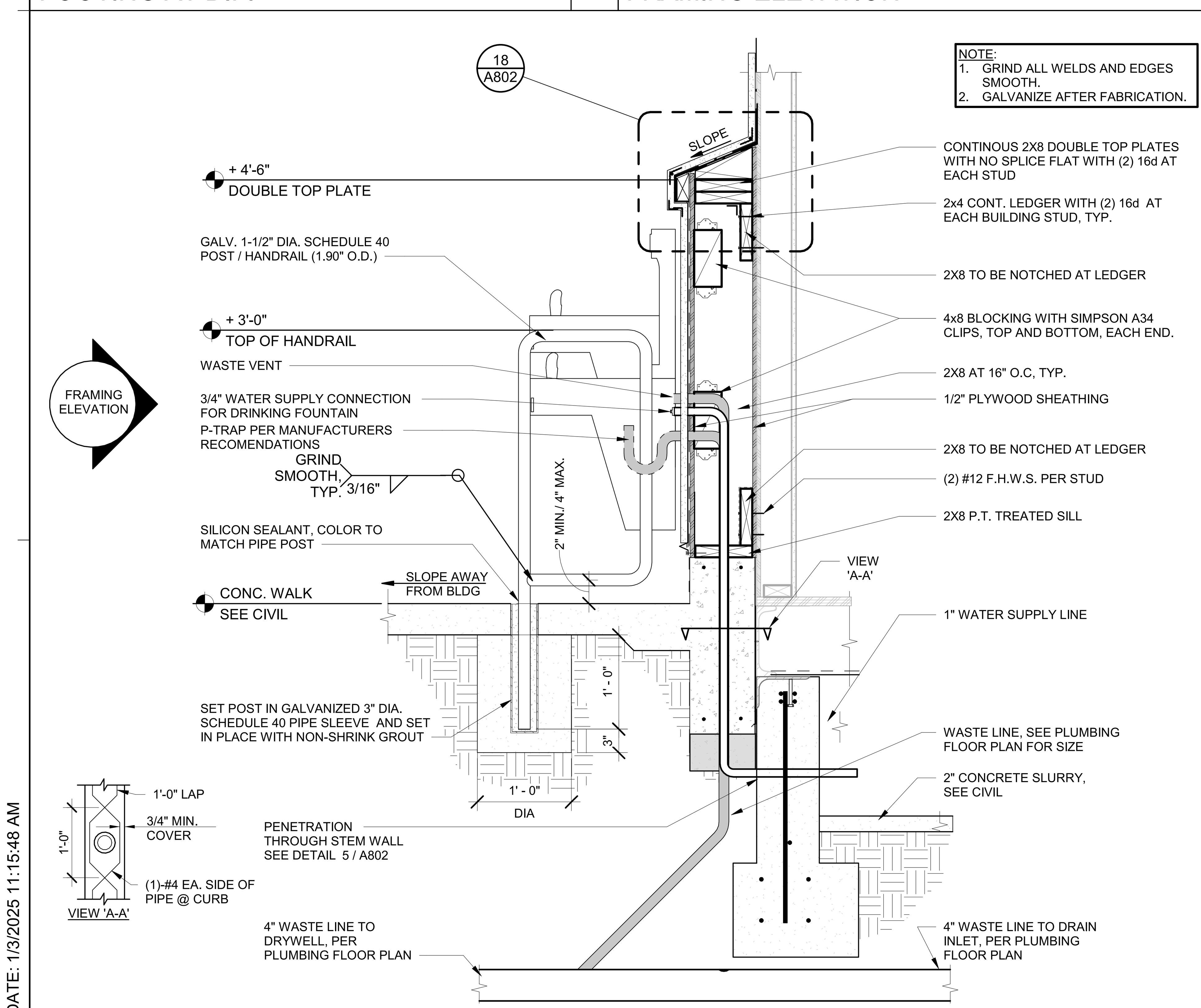
FRAMING ELEVATION 1" = 1'-0" 6



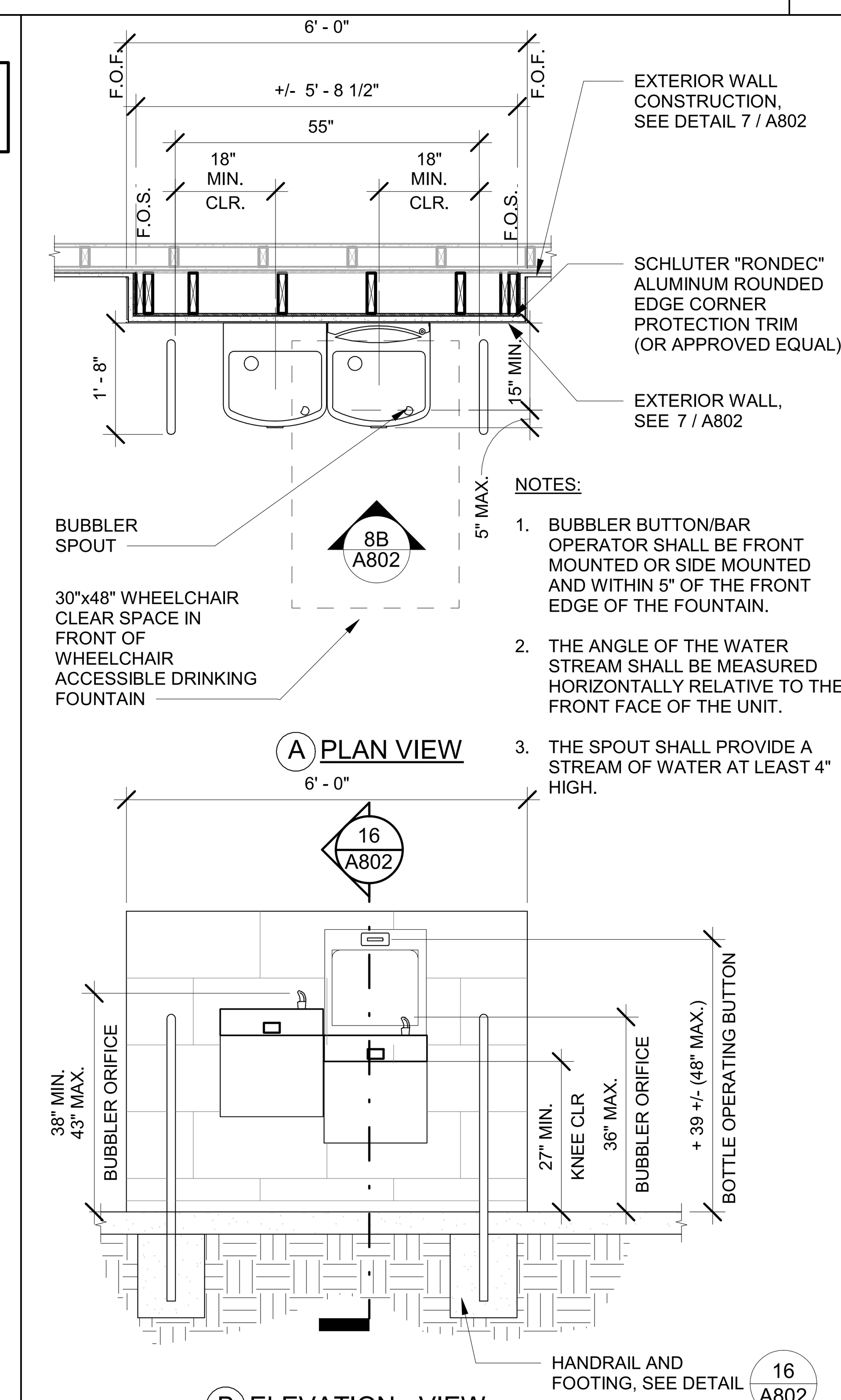
PIPES THROUGH FOOTING 12" = 1'-0" 5



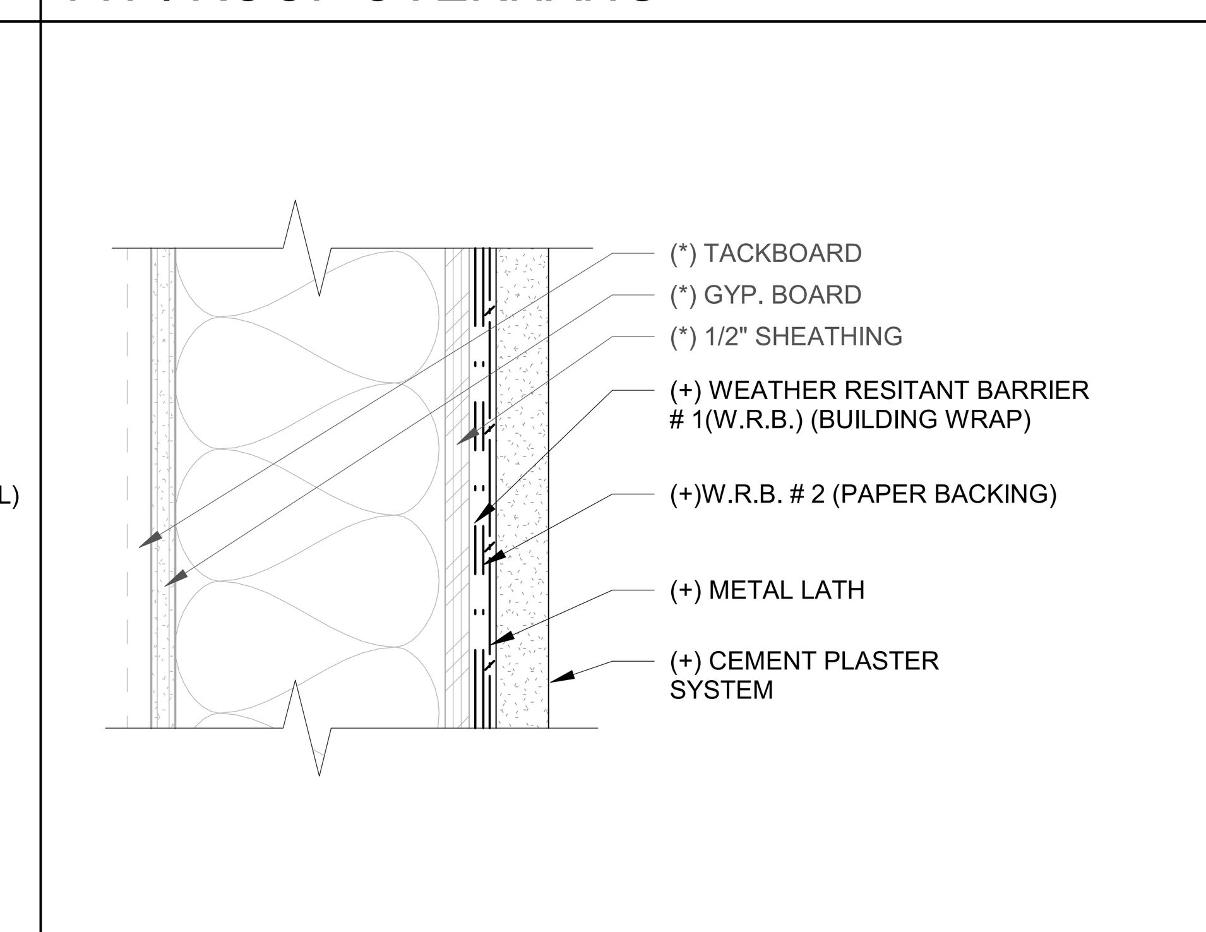
TYP. ROOF OVERHANG 3" = 1'-0" 2



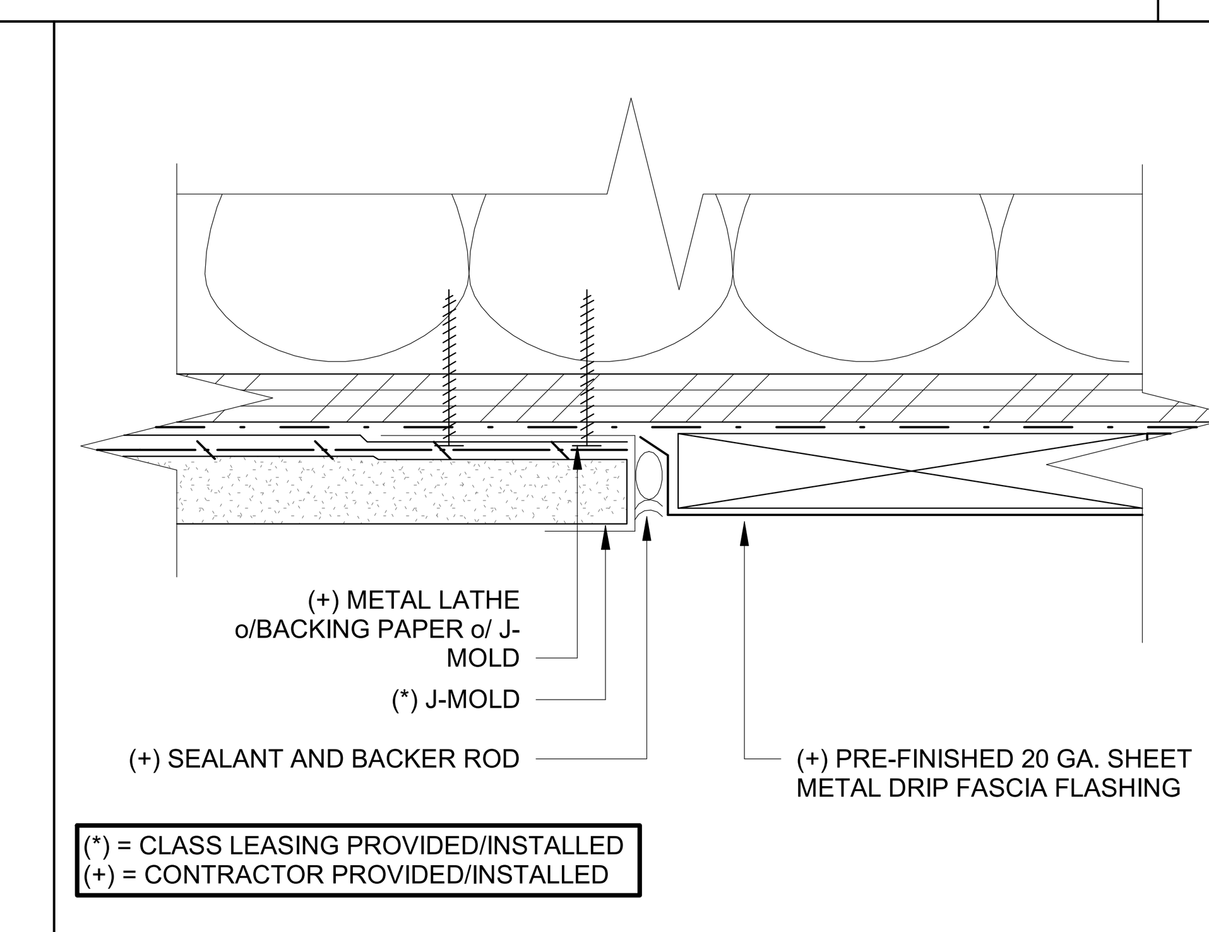
HANDRAIL AND FOOTING AT DRINKING FOUNTAIN 1" = 1'-0" 16



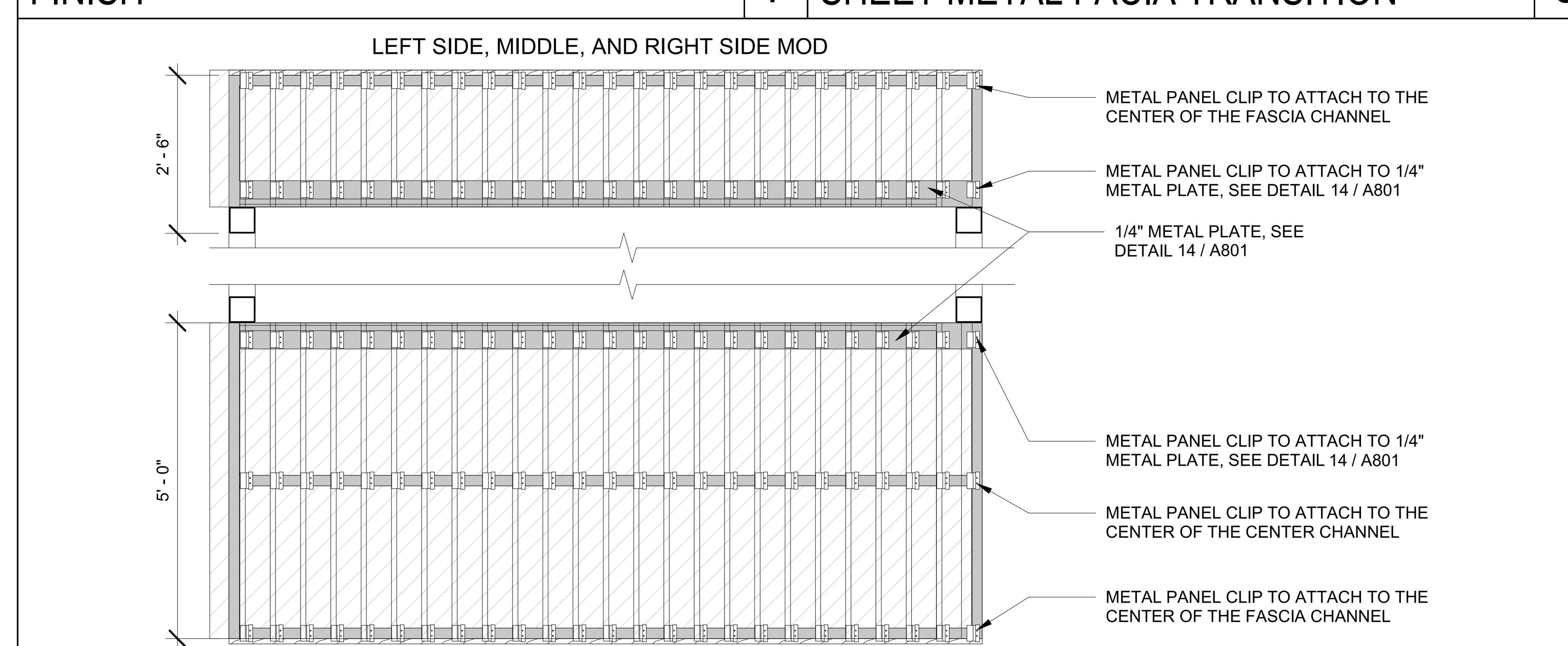
ACCESSIBLE DRINKING FOUNTAIN - PLAN & ELEVATION 1/2" = 1'-0" 8



TYP. CEMENT PLASTER EXTERIOR FINISH 3" = 1'-0" 7



VERTICAL CEMENT PLASTER TO SHEET METAL FACIA TRANSITION 6" = 1'-0" 3



CLIP ATTACHMENT POINTS 1/2" = 1'-0" 4

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ELOP RELOCATABLE CLASSROOM
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2245 E 11TH ST.
STOCKTON, CA 95206

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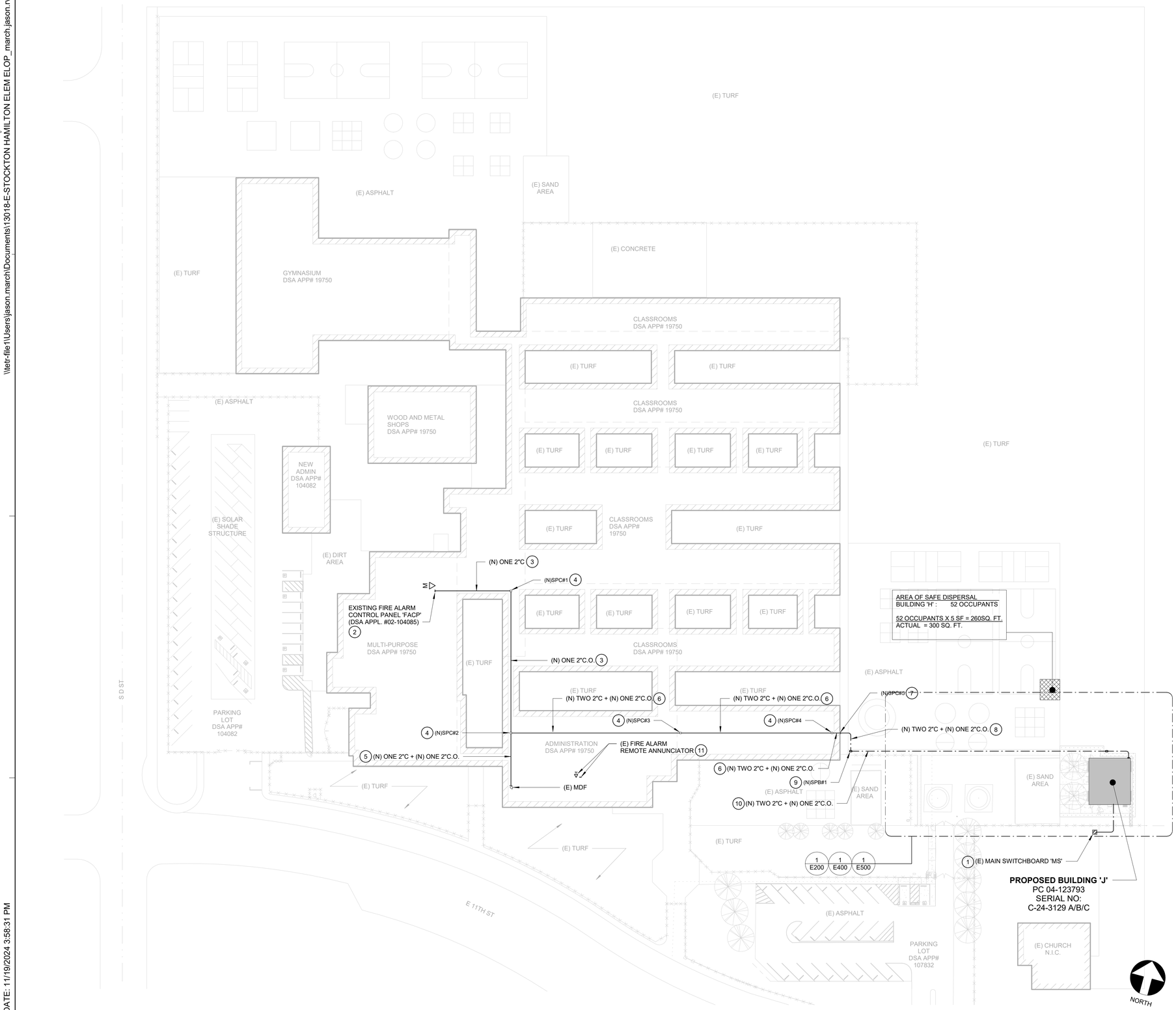

KEYNOTES

1. UTILIZE (E) CIRCUIT BREAKER AT (E) MAIN SWITCHBOARD 'MS', AND RUN (N) FEEDER TO (N) RELOCATABLE BUILDING PER ENLARGED POWER & LIGHTING PLAN 1/E200.
2. PROVIDE (N) AUDIO SOURCE UNIT WITH PAGING MICROPHONE AT (E) FIRE ALARM CONTROL PANEL FOR (N) AUDIO RISER CIRCUIT.
3. PROVIDE ONE (N) 2"C WITH ONE 'FAS' CABLE (ADDRESSABLE SLC LOOP), AND ONE 'FXS' CABLE, (AUDIO RISER). RUN ON ROOF AND PROVIDE CONDUIT SUPPORT PER DETAIL 12/E600.
4. PROVIDE (N) 16" X 14" X 6" DEEP NEMA TYPE 4 ENCLOSURE WITH LIFT OFF COVER, ON ROOF.
5. PROVIDE ONE (N) 2"C WITH ONE 'SFO' CABLE FROM (E) MDF, AND ONE (N) 2"C.O. RUN IN ATTIC, AND THEN ON ROOF WITH CONDUIT SUPPORT PER DETAIL 12/E600.
6. PROVIDE ONE (N) 2"C WITH ONE 'FAS' CABLE AND ONE 'FXS' CABLE, ONE (N) 2"C WITH ONE 'SFO' CABLE, AND ONE (N) 2"C.O. RUN ON ROOF WITH CONDUIT SUPPORT PER DETAIL 12/E600.
7. PROVIDE (N) 18" SQ. X 6" DEEP NEMA 3R SCREW COVER CAN HIGH ON EXTERIOR BUILDING WALL.
8. PROVIDE ONE (N) 2"C WITH ONE 'FAS' CABLE AND ONE 'FXS' CABLE, ONE (N) 2"C WITH ONE 'SFO' CABLE, AND ONE (N) 2"C.O. DROP DOWN EXTERIOR BUILDING WALL AND THEN RUN UNDERGROUND TO NEW UNDERGROUND PULL BOX. REFER TO GENERAL NOTES FOR TRENCHING.
9. PROVIDE (N) UNDERGROUND SIGNAL PULL BOX PER DETAIL 8/E600.
10. PROVIDE ONE (N) 2"C WITH ONE 'FAS' CABLE AND ONE 'FXS' CABLE, ONE (N) 2"C WITH ONE 'SFO' CABLE, AND ONE (N) 2"C.O., TO (N) RELOCATABLE BUILDING PER ENLARGED SIGNAL PLAN 1/E400, AND ENLARGED FIRE ALARM PLAN 1/E500. REFER TO GENERAL NOTES FOR TRENCHING.
11. (E) FIRE ALARM REMOTE ANNUNCIATOR (EDWARDS #3-LCDANN). DISCONNECT AND REMOVE INTERNAL COMPONENTS, AND PRESERVE COMPONETS AND CIRCUITING FOR REINSTALLATION AND RECONNECTION. REMOVE (E) BACKBOX AND REPLACE WITH (N) BACKBOX (EDWARDS #4ANN/B). FURNISH, INSTALL, AND CONNECT (N) REMOTE MICROPHONE (EDWARDS #3-REMICA), AND REINSTALL AND RECONNECT (E) REMOTE ANNUNCIATOR .

GENERAL NOTES

A. PROVIDE ELECTRICAL FEEDERS PER SINGLE LINE DIAGRAM.

B. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.

C. SITE CONDUITS OF TRADE SIZE 2" AND LARGER SHALL BE GROUPED AND INSTALLED PER DETAIL 7/E600. SITE CONDUITS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINAL GRADE TO TOP OF CONDUIT.

D. SPECIAL PRECAUTION SHALL BE TAKEN WHEN TRENCHING TO LOCATE, PROTECT AND PRESERVE EXISTING UNDERGROUND UTILITIES. ANY DAMAGE CAUSED DURING THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED.

ELECTRICAL SITE PLAN

1" = 40'-0"

1

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REGISTERED PROFESSIONAL ENGINEER JASON MARCH No. E 24283 12-31-25 ELECTRICAL

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ARCHITECTS ENGINEERS CONNECTED
FRESNO HEADQUARTERS
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TETER

STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
STOCKTON, CA

DRAWING TITLE
ELECTRICAL SITE PLAN

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E100

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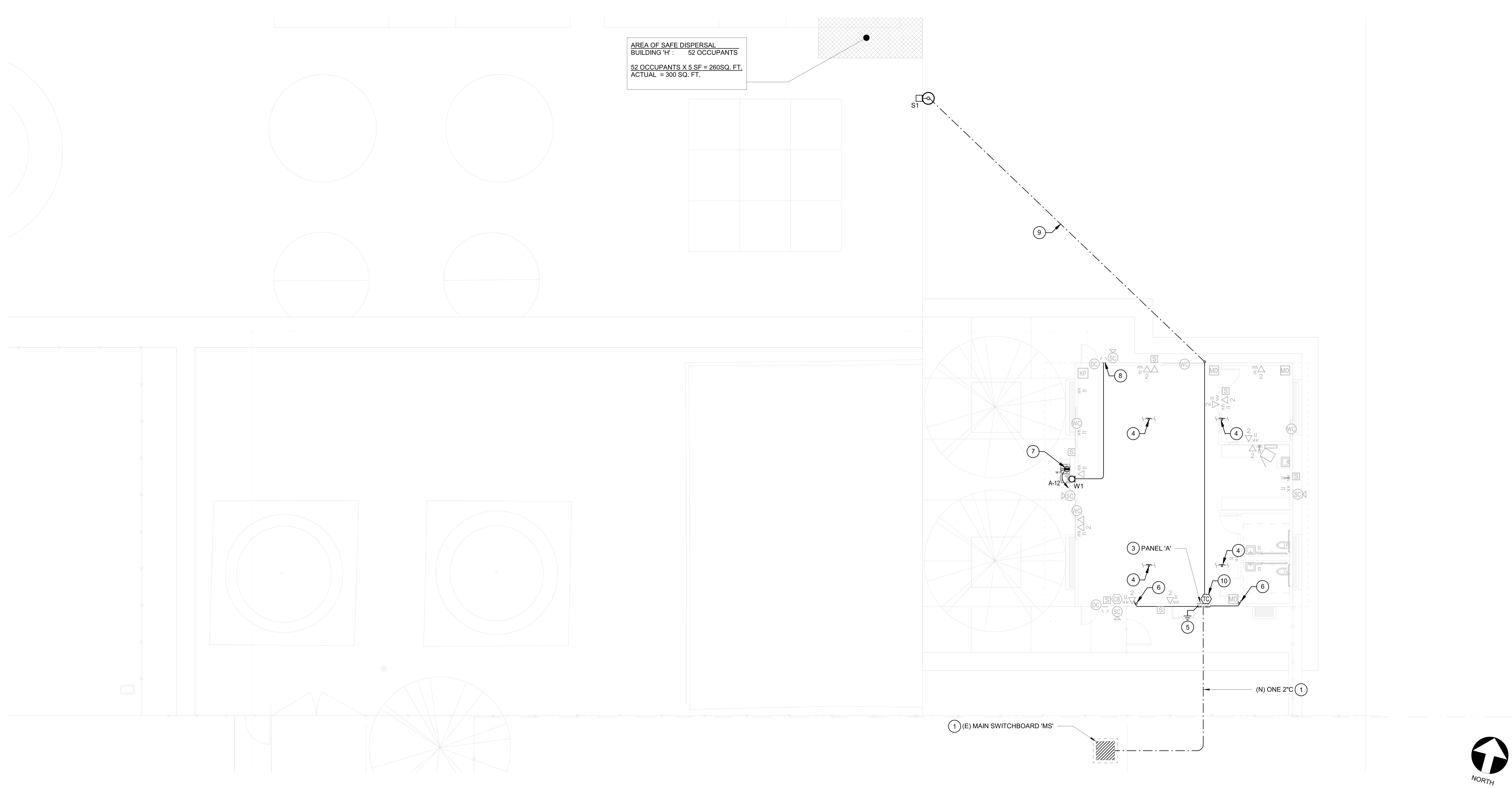

ENLARGED POWER & LIGHTING PLAN

1/8" = 1'-0" 1

KEYNOTES

1. UTILIZE (E) 100A, 2-POLE CIRCUIT BREAKER AT (E) MAIN SWITCHBOARD 'MS', AND CONNECT (N) FEEDER TO (N) RELOCATABLE BUILDING.
2. PROVIDE ONE (N) 2"C WITH 3 #2 CU THWN, AND 1 #6 CU GND. REFER TO GENERAL NOTES FOR TRENCHING.
3. CONNECT PANEL AT NEW RELOCATABLE BUILDING PER SINGLE LINE DIAGRAM 2/E600.
4. RECONNECT (E) POWER AND LIGHTING BRANCH CIRCUIT CONNECTIONS BETWEEN BUILDING MODULES.
5. PROVIDE SYSTEM GROUND FACILITIES PER DETAILS 3/E600 AND 4/E600.
6. PROVIDE GROUNDING LUGS ON BOTH SIDES OF RIGID METAL BEAMS AND BOND SECTIONS OF RELOCATABLE BUILDING TOGETHER WITH 1 #6 CU BONDING JUMPER.
7. PROVIDE (N) WEATHERPROOF G.F.C.I. DUPLEX RECEPTACLE FOR DRINKING FOUNTAINS, AND CONNECT TO NEW BRANCH CIRCUIT.
8. EXTEND LIGHT FIXTURE CIRCUIT FROM EXISTING LIGHT FIXTURE.
9. PROVIDE ONE 1"C WITH 2#12 CU THWN AND 1#12 CU GND.
10. PROVIDE TWO CIRCUIT INTERMATIC ASTRONOMIC TIME CLOCK. PROVIDE CIRCUIT TO POLE MOUNTED LIGHT FIXTURE THROUGH ASTRONOMIC TIMECLOCK.

GENERAL NOTES

A. PROVIDE ELECTRICAL FEEDERS PER SINGLE LINE DIAGRAM.

B. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.

C. TRENCH AND BACKFILL PER ARCHITECTURAL PLANS, SPECIFICATIONS, AND DETAIL 7/E600. SITE CONDUITS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINAL GRADE TO TOP OF CONDUIT.

D. SPECIAL PRECAUTION SHALL BE TAKEN WHEN TRENCHING TO LOCATE, PROTECT AND PRESERVE EXISTING UNDERGROUND UTILITIES. ANY DAMAGE CAUSED DURING THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED.

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ARCHITECTS ENGINEERS CONNECTED

STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
STOCKTON, CA

DRAWING TITLE
ENLARGED POWER & LIGHTING PLAN

PROJECT NO.
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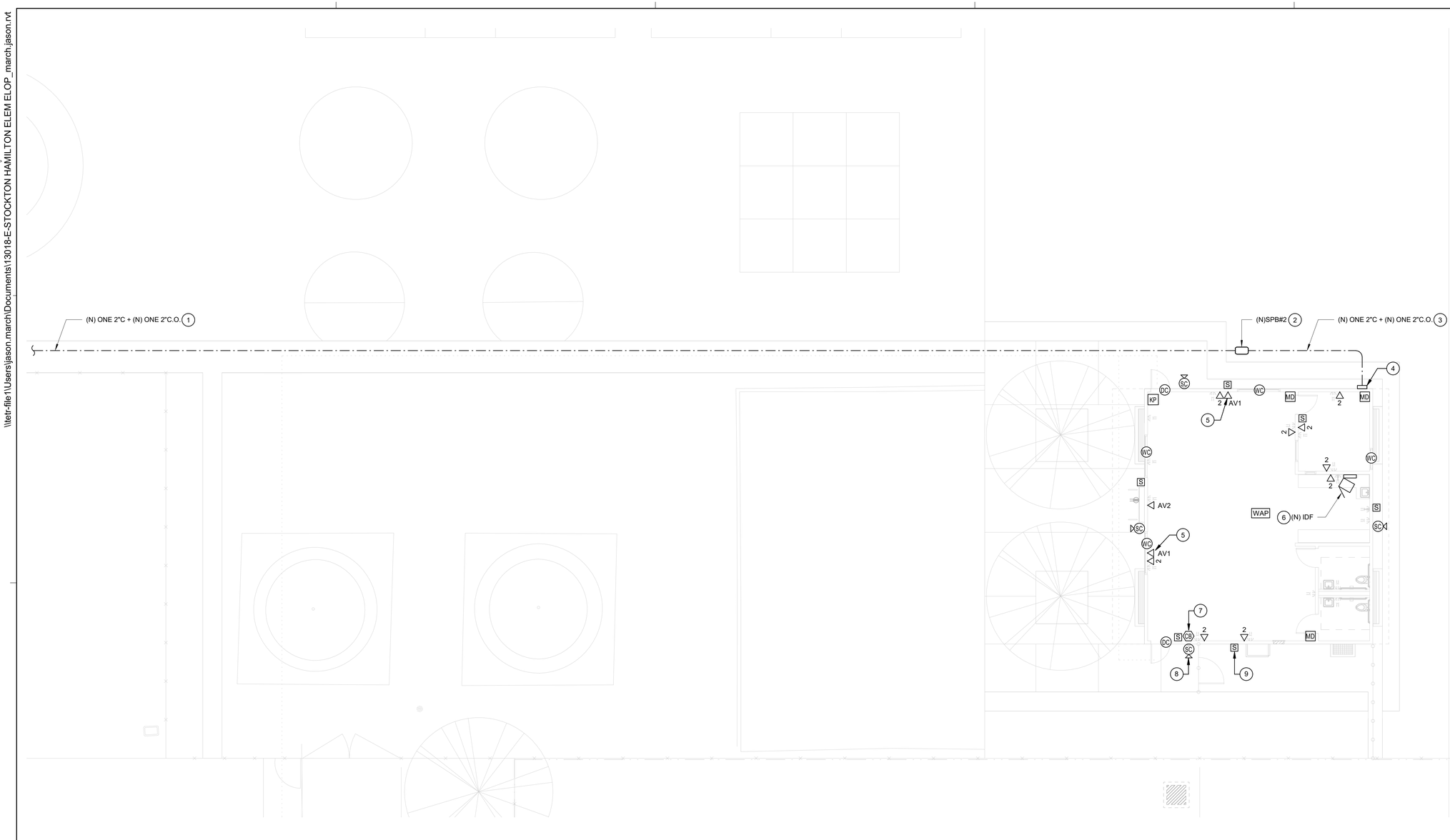

ENLARGED SIGNAL PLAN

1/8" = 1'-0" | 1

KEYNOTES

1. PROVIDE ONE (N) 2"C WITH ONE 'SFO' CABLE, AND ONE (N) 2"C.O. FROM (E) MDF AT ADMINISTRATION BUILDING, PER ELECTRICAL SITE PLAN 1/E100. REFER TO GENERAL NOTES FOR TRENCHING.
2. PROVIDE (N) UNDERGROUND SIGNAL PULL BOX PER DETAIL 8/E600.
3. PROVIDE ONE (N) 2"C WITH ONE 'SFO' CABLE, AND ONE (N) 2"C.O. REFER TO GENERAL NOTES FOR TRENCHING.
4. PROVIDE (N) 18" SQ. X 6" DEEP NEMA TPYE 3R SCREW COVER CAN HIGH ON EXTERIOR BUILDING WALL AT NEW RELOCATABLE BUILDING, WITH 2"C SLEEVE INTO ACCESSIBLE ATTIC SPACE. VERIFY EXACT LOCATION WITH OWNER AT SITE.
5. PROVIDE ONE (N) TYPE 'H' CABLE AND ROUTE TO BOX 'AV2'.
6. MOUNT (N) IDF CABINET HIGH ON WALL, BELOW CEILING, PER DETAIL 13/E600.
7. PROVIDE ONE TYPE 'D' CABLE BACK TO IDF, FROM CALL BUTTON.
8. PROVIDE ONE TYPE 'D' CABLE BACK TO IDF. TYPICAL OF ALL SECURITY CAMERA LOCATIONS.
9. PROVIDE ONE TYPE 'D' CABLE BACK TO IDF. TYPICAL OF ALL INTERIOR AND EXTERIOR SPEAKER LOCATIONS.

GENERAL NOTES

A. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.

B. TRENCH AND BACKFILL PER ARCHITECTURAL PLANS, SPECIFICATIONS, AND DETAIL 7/E600. SITE CONDUITS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINAL GRADE TO TOP OF CONDUIT.

C. SPECIAL PRECAUTION SHALL BE TAKEN WHEN TRENCHING TO LOCATE, PROTECT AND PRESERVE EXISTING UNDERGROUND UTILITIES. ANY DAMAGE CAUSED DURING THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED.

SECURITY AND ACCESS ROUGH-IN NOTES

A. SECURITY AND ACCESS SYSTEM ROUGH-IN REQUIREMENTS:

a. AT DOOR CONTACT LOCATIONS - DRILL 1/2" HOLE IN STRIKE SIDE OF DOOR FRAME AND THROUGH HEADER. INSTALL A PULL WIRE BETWEEN OPENING IN DOOR FRAME AND ACCESSIBLE ATTIC.

b. AT MOTION DETECTOR LOCATIONS - INSTALL A SINGLE-GANG OUTLET BOX WITH A SINGLE-GANG TRIM-RING IN WALL AT 84" A.F.F., INSTALL ONE 1/2"C INTO ACCESSIBLE ATTIC SPACE, INSTALL A PULL WIRE BETWEEN OUTLET BOX AND ACCESSIBLE ATTIC.

c. AT KEYPAD LOCATIONS - INSTALL A SINGLE-GANG OUTLET BOX WITH A SINGLE-GANG TRIM-RING IN WALL AT 48" A.F.F. TO TOP OF BOX, INSTALL ONE 3/4"C INTO ACCESSIBLE ATTIC SPACE, INSTALL A PULL WIRE BETWEEN OUTLET BOX AND ACCESSIBLE ATTIC.

d. AT CARD READER LOCATIONS - INSTALL A SINGLE-GANG OUTLET BOX WITH A SINGLE-GANG TRIM-RING IN WALL AT 48" A.F.F. TO TOP OF BOX, INSTALL ONE 3/4"C INTO ACCESSIBLE ATTIC SPACE, INSTALL A PULL WIRE BETWEEN OUTLET BOX AND ACCESSIBLE ATTIC.

TELECOMMUNICATION CABLING NOTES

A. CONDUIT AND JUNCTION BOXES PROVIDED BY BUILDING MANUFACTURER.

B. PROVIDE THREADED SET SCREW CONNECTORS WITH POLYPROPYLENE BUSHINGS AT EACH END OF CONDUIT SYSTEMS USED FOR TELECOMMUNICATION CABLE INSTALLATION. BUSHINGS SHALL BE INSTALLED AND INSPECTED PRIOR TO CABLE INSTALLATION

C. EACH TELECOMMUNICATION CABLE SHALL BE HOMERUN FROM THE TELECOMMUNICATION OUTLET TO A PATCH PANEL LOCATED AT THE (N) IDF IN THIS BUILDING.

D. TELECOMMUNICATION CABLES SHALL BE NEATLY BUNDLED WITH VELCRO STRAPS AT 36"O.C.

E. TELECOMMUNICATION CABLES SHALL BE INDEPENDENTLY SUPPORTED FROM J-HOOKS WITHIN THE ACCESSIBLE ATTIC SPACE WHERE THEY ARE NOT WITHIN CONDUIT.

F. TELECOMMUNICATION CABLES SHALL BE TERMINATED WITH MODULAR JACKS ON PATCH PANELS IN THE TELECOMMUNICATION ENCLOSURE AND ON MODULAR JACKS AT THE TELECOMMUNICATION OUTLETS.

G. TELECOMMUNICATION CABLE SERVING WIRELESS ACCESS POINTS SHALL BE TERMINATED WITH PLUG TYPE CONNECTORS AT THE LOCATION OF THE WIRELESS ACCESS POINT.

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TETER, INC.
ARCHITECTS ENGINEERS CONNECTED
FRESNO HEADQUARTERS
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STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
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ENLARGED SIGNAL PLAN

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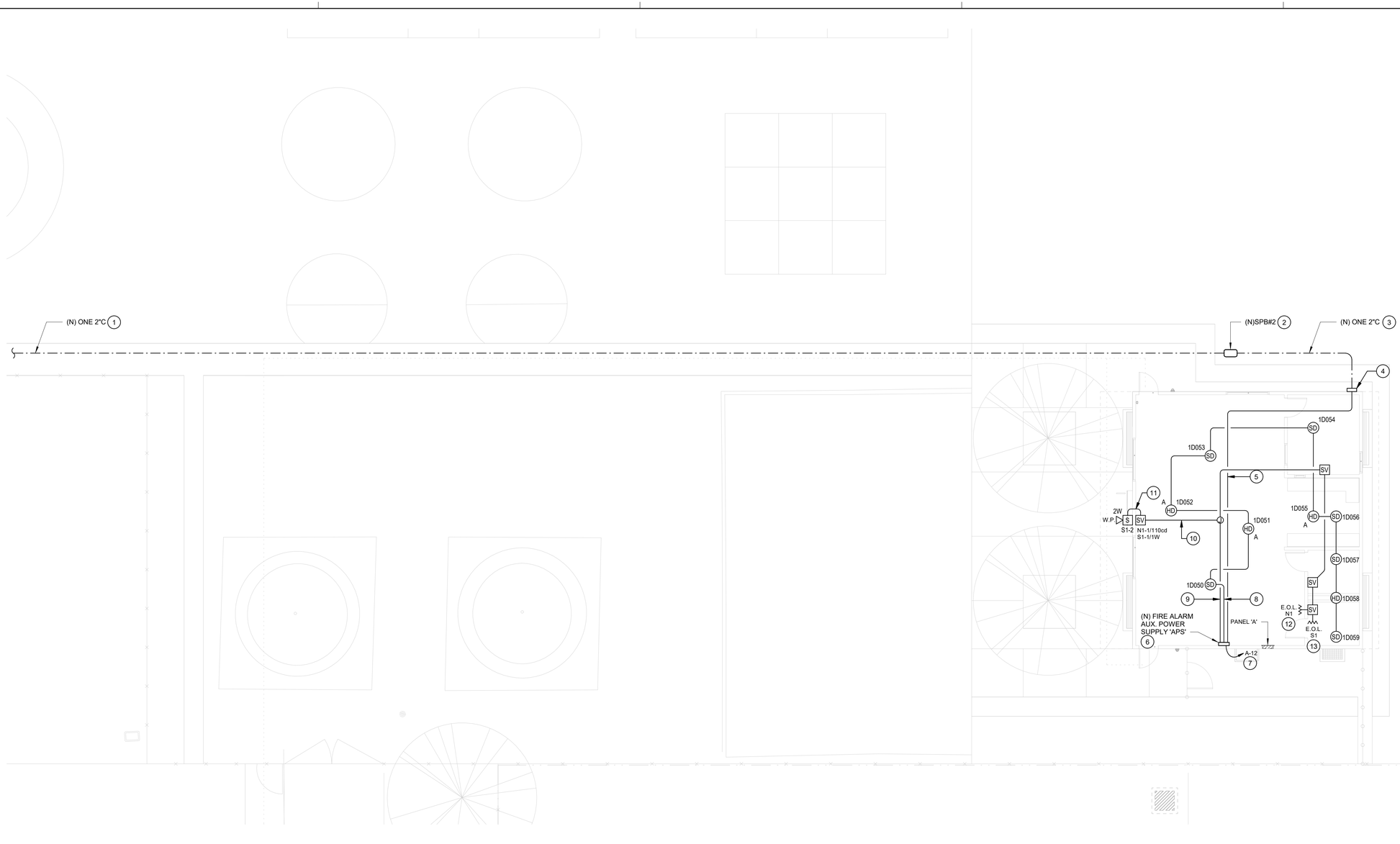

ENLARGED FIRE ALARM PLAN

1/8" = 1'-0" | 1

KEYNOTES

1. PROVIDE ONE (N) 2"C WITH ONE 'FAS' CABLE (ADDRESSABLE SLC LOOP), AND ONE 'FXS' CABLE (AUDIO RISER) FROM (E) FIRE ALARM CONTROL PANEL 'FACP' IN MULTI-USE BUILDING, PER ELECTRICAL SITE PLAN 1/E100. RUN IN JOINT TRENCH WITH (N) SIGNAL CONDUIT. REFER TO GENERAL NOTES FOR TRENCHING.
2. PROVIDE (N) UNDERGROUND SIGNAL PULL BOX PER ENLARGED SIGNAL PLAN 1/E400.
3. PROVIDE ONE (N) 2"C WITH ONE 'FAS' CABLE, AND ONE 'FXS' CABLE. RUN IN JOINT TRENCH WITH (N) SIGNAL CONDUIT. REFER TO GENERAL NOTES FOR TRENCHING.
4. (N) NEMA TPYE 3R SCREW COVER CAN HIGH ON EXTERIOR BUILDING WALL AT NEW RELOCATABLE BUILDING PER ENLARGED SIGNAL PLAN 1/E400.
5. PROVIDE ONE (N) 1"C WITH ONE 'FAS' CABLE, AND ONE 'FXS' CABLE.
6. PROVIDE (N) FIRE ALARM AUXILIARY POWER SUPPLY AND CONNECT TO (N) ADDRESSABLE SLC LOOP AND (N) AUDIO RISER CIRCUIT FROM (E) FIRE ALARM CONTROL PANEL 'FACP' PER FIRE ALARM RISER DIAGRAM 2/E710. MOUNT PER DETAIL 9/E710.
7. CONNECT TO DEDICATED BRANCH CIRCUIT BREAKER AT ELECTRICAL PANEL WITH 1/2"C - 2 #12 CU THWN, AND 1 #12 CU GND. REFER TO FIRE ALARM RISER DIAGRAM 2/E710 FOR BRANCH CIRCUIT REQUIREMENTS.
8. PROVIDE ONE (N) 3/4"C WITH ONE 'FA' CABLE IN ACCESSIBLE ATTIC SPACE. TYPICAL BETWEEN ADDRESSABLE INITIATION DEVICES.
9. PROVIDE ONE (N) 3/4"C WITH ONE 'FS' CABLE, AND ONE 'FV' CABLE, IN ACCESSIBLE ATTIC SPACE. TYPICAL BETWEEN SPEAKER/STROBES (U.O.N.).
10. PROVIDE ONE (N) 3/4"C WITH TWO 'FS' CABLES AND TWO 'FV' CABLES (SPEAKER AND STROBE CIRCUITS, DOWN/BACK) IN ACCESSIBLE ATTIC SPACE.
11. PROVIDE ONE (N) 3/4"C WITH TWO 'FS' CABLES (SPEAKER CIRCUIT ONLY, DOWN/BACK).
12. PROVIDE 'END-OF-LINE' RESISTOR AT LAST VISUAL NOTIFICATION APPLIANCE ON NAC CIRCUIT #N1.
13. PROVIDE 'END-OF-LINE' RESISTOR AT LAST SPEAKER ON SPEAKER CIRCUIT 'S1'.

GENERAL NOTES

A. PENETRATIONS THROUGH WALLS, CEILINGS, FLOORS, AND/OR ROOFS SHALL BE SEALED.

B. TRENCH AND BACKFILL PER ARCHITECTURAL PLANS, SPECIFICATIONS, AND DETAIL 7/E600. SITE CONDUITS SHALL BE INSTALLED A MINIMUM OF 36" BELOW FINAL GRADE TO TOP OF CONDUIT.

C. SPECIAL PRECAUTION SHALL BE TAKEN WHEN TRENCHING TO LOCATE, PROTECT AND PRESERVE EXISTING UNDERGROUND UTILITIES. ANY DAMAGE CAUSED DURING THE COURSE OF CONSTRUCTION SHALL BE IMMEDIATELY REPAIRED.

FIRE ALARM SYSTEM INSTALLATION NOTES

A. THE LOCATION OF AUTOMATIC DETECTORS, MANUAL PULL STATIONS AND OTHER FIRE ALARM EQUIPMENT AND DEVICES, AS SHOWN ON PLAN, ARE FOR REFERENCE ONLY, AND DO NOT CONSTITUTE SHOP DRAWINGS WHICH ARE REQUIRED FOR REVIEW AND APPROVAL.

B. ALL DRAWINGS ARE DIAGRAMMATIC ONLY, AND SHALL NOT BE USED IN DETERMINING ACTUAL CONDUIT ROUTING. THE CONTRACTOR SHALL VERIFY ALL CONDUIT ROUTING CONDITIONS AT THE PROJECT SITE AS CONSTRUCTION PROGRESSES.

C. ALL FIRE ALARM DATA, COMMUNICATIONS AND INITIATING CIRCUITS SHALL BE INSTALLED UTILIZING SOLID COPPER CONDUCTORS WITH OUTER COVERING COLORS PER THE SPECIFICATIONS AND AS SHOWN ON THE DRAWINGS. ALL SMOKE DAMPER AND REMOTE TROUBLE INDICATOR CIRCUITS SHALL BE YELLOW. ALL CIRCUITS SHALL BE INDIVIDUALLY LABELED, BOTH AT THE DEVICE END AND AT THE SIGNAL TERMINAL CABINET AND/OR FIRE ALARM MASTER PANEL TERMINATION POINT.

D. ALL FIRE ALARM CIRCUITS SHALL BE CONTINUOUS FROM DEVICE TO DEVICE. SPLICES ARE NOT ALLOWED UNLESS IN COVERED JUNCTION BOXES ON APPROVED TERMINAL BLOCKS. 'T' TAPPING IS ALLOWED ONLY IN INITIATION LOOPS CONNECTING ADDRESSABLE DEVICES AND ONLY UNDER THESE CONDITIONS. UNDER NO CIRCUMSTANCES SHALL 'T' TAPPING BE PERMITTED BETWEEN CONVENTIONAL DEVICES.

E. SMOKE DETECTORS SHALL BE INSTALLED AWAY FROM AIR SUPPLY GRILLES AT A MINIMUM DISTANCE OF 3' PER NFPA 72 29.8.3.4 OR GREATER AS RECOMMENDED BY THE MANUFACTURER.

F. CONTRACTOR SHALL SYNCHRONIZE TWO OR MORE STROBES IN ONE ROOM AND TWO OR MORE SPEAKERS WITHIN HEARING OF EACH OTHER.

G. THE FIRE ALARM SYSTEM SHALL CONFORM TO THE 2022 CALIFORNIA ELECTRICAL CODE (CEC) ARTICLE 760 AND THE 2022 CALIFORNIA FIRE CODE (CFC) § 105.7 & § 907, AND CALIFORNIA BUILDING CODE (CBC) 907.

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REGISTERED PROFESSIONAL ENGINEER
JASON E. MARCH
No. E 24283
12-31-25
ELECTRICAL
STATE OF CALIFORNIA

TETER, INC.
ARCHITECTS ENGINEERS CONSULTANTS
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO

TETER

STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
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STOCKTON, CA

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ENLARGED FIRE ALARM PLAN

PROJECT NO.
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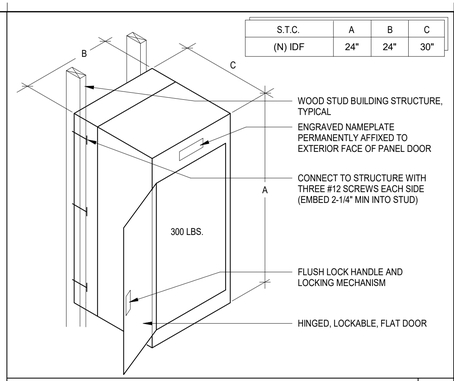
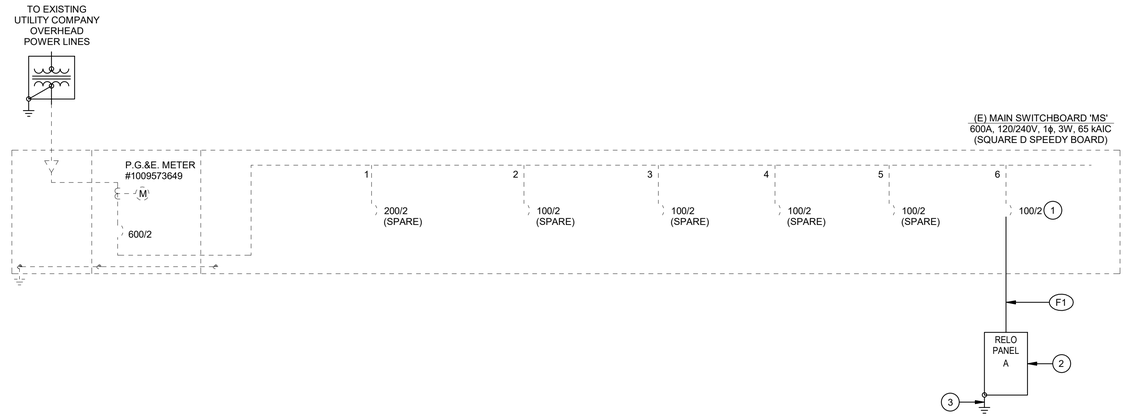


S.T.C.	A	B	C
(N) IDF	24"	24"	30"

IDF MOUNTING N.T.S. 13



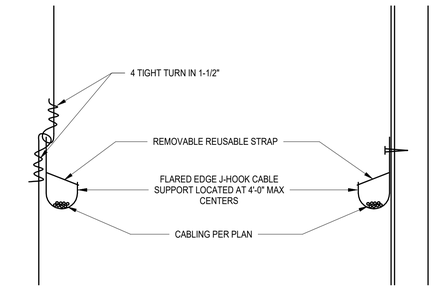
KEYNOTES

1. UTILIZE (E) 100A, 2-POLE CIRCUIT BREAKER AT (E) MAIN SWITCHBOARD 'MS', AND CONNECT (N) FEEDER.
2. CONNECT PANEL AT (N) RELOCATABLE BUILDING.
3. PROVIDE GROUNDING ELECTRODE SYSTEM AT RELOCATABLE BUILDING POWER PANEL PER DETAILS 3/E600 AND 4/E600.

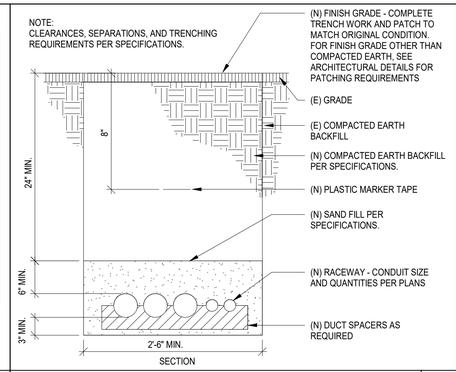
FEEDER SCHEDULE

FEEDER	ORIGIN	DESTINATION	CONDUIT	CONDUCTORS	CALCULATED VOLTAGE DROP	REMARKS
F1	(E) MAIN SWITCHBOARD 'MSB'	RELOCATABLE PANEL 'A'	ONE 2"C	3 #2 CU THWN, 1 #6 CU GND	0.48%	FEEDER

SINGLE LINE DIAGRAM N.T.S. 2



J-HOOK MOUNTING N.T.S. 11

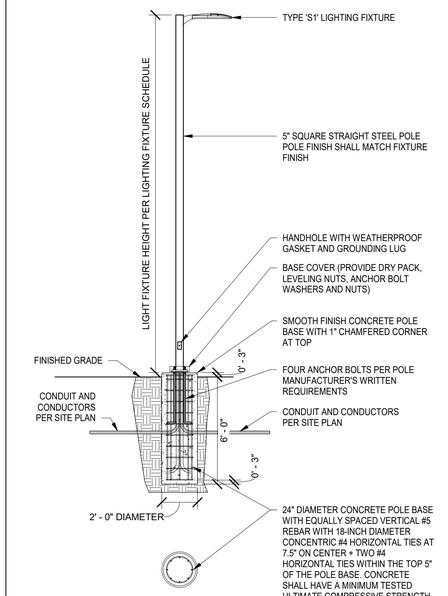


TYPICAL TRENCH SECTION N.T.S. 7

NOTES:

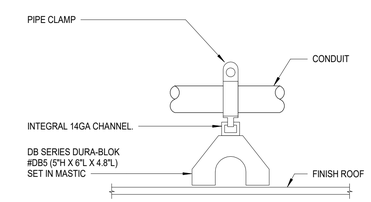
1. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
2. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELECTRICAL PANEL, AND TO METAL BUILDING FRAME (CEC 250.22). IN ADDITION TO THE RELOCATABLE BUILDING GROUND DETAIL ON THIS SHEET, BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52).
3. ALL MODULES OF METAL FRAME BUILDINGS SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING).
4. PROVIDE TWO GROUND RODS NOT LESS THAN 6' APART.
5. WHERE MODULAR BUILDINGS ARE INSTALLED ON CONCRETE FOUNDATIONS, A UFER GROUND SHALL BE INSTALLED IN THE FOOTING PER CEC 250.52(A) (3).
6. OTHER GROUNDING METHODS IDENTIFIED IN CEC 250 SHALL BE ACCEPTABLE MEANS TO ACHIEVE ADEQUATE GROUNDING OF METAL BUILDINGS IN COMPLIANCE WITH THE ABOVE.

GROUNDING SYSTEM NOTES N.T.S. 3



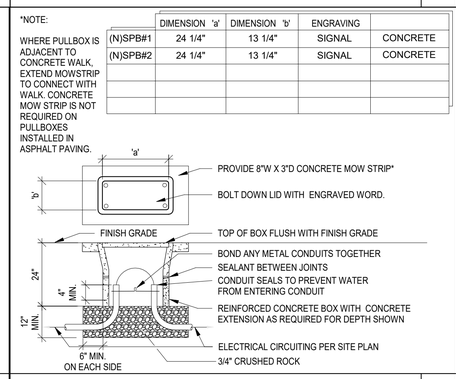
NOTE: LIGHT POLES LESS THAN 25' ABOVE ADJACENT GRADE ARE NOT PART OF THIS APPROVAL

POLE FIXTURE SINGLE HEAD FLUSH N.T.S. 15



NOTES:
1. MAXIMUM 5' SPACING.
2. MAXIMUM CONDUIT SIZE = 2"

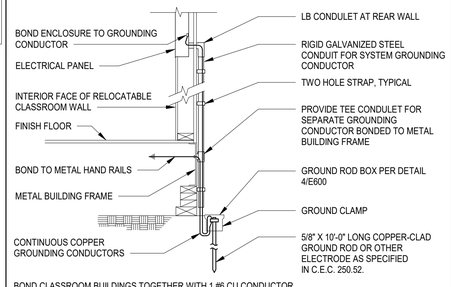
CONDUIT SUPPORT ON ROOF N.T.S. 12



	DIMENSION 'a'	DIMENSION 'b'	ENGRAVING	
(N)SPB#1	24 1/4"	13 1/4"	SIGNAL	CONCRETE
(N)SPB#2	24 1/4"	13 1/4"	SIGNAL	CONCRETE

U.G. PULL BOX N.T.S. 8

THE GROUNDING ELECTRODE SYSTEM SHALL BE TESTED BY THE FALL OF POTENTIAL METHOD AS SPECIFIED IN IEEE STANDARD 81-1983 AND SHOWN TO BE 5 OHMS OR LESS. A COPY OF THE TEST REPORT, SIGNED BY THE PROJECT INSPECTOR WHO WITNESSED THE TEST, SHALL BE SUBMITTED TO THE ARCHITECT AND ELECTRICAL ENGINEER.



BOND CLASSROOM BUILDINGS TOGETHER WITH 1 #6 CU CONDUCTOR WHERE RELOCATABLES OCCUR SIDE BY SIDE.

RELOCATABLE BUILDING GROUND N.T.S. 4

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STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
STOCKTON, CA

DRAWING TITLE
ELECTRICAL DETAILS

PROJECT NO.
23-13018.00

DRAWING
E600

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FIRE ALARM SYSTEM DESCRIPTION

THE FIRE ALARM SYSTEM DESCRIBED BY THESE DRAWINGS AND ASSOCIATED SPECIFICATIONS IS A MANUAL AND AUTOMATIC SYSTEM. THIS SYSTEM UTILIZES SMOKE DETECTORS ON CEILINGS AND IN THE ROOMS HOUSING THE FIRE ALARM SYSTEM EQUIPMENT, WITH HEAT DETECTORS INSTALLED IN ATTICS. THE SYSTEM IS ADDRESSABLE AND IS WIRED CLASS 'B' WITHIN THE BUILDINGS AND CLASS 'B' BETWEEN BUILDINGS.

FIRE ALARM APPROVAL

THE FIRE ALARM SYSTEM DESIGN IS A "COMPLETE PLAN SUBMITTAL" PER DSA FIRE ALARM SUBMITTAL GUIDELINES. THE CONTRACTOR SHALL INSTALL THE SYSTEM AS SHOWN AND AS HEREIN SPECIFIED. IF ANY SUBSTITUTION OF FIRE ALARM EQUIPMENT IS TO BE REQUESTED, SUCH REQUEST SHALL BE MADE A MINIMUM OF TWO WEEKS PRIOR TO PROJECT BID DATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING THE SUBSTITUTION PER THE DSA GUIDELINES AND SHALL PAY ALL ADDITIONAL COSTS REQUIRED TO ACCOMMODATE REVIEW OF THE SUBSTITUTED FIRE ALARM SYSTEM BY DSA, WHETHER OR NOT SUCH APPROVAL IS GIVEN. THE CONTRACTOR'S SUBMITTAL SHALL INCLUDE MANUFACTURER'S CATALOG CUT SHEETS AND CSFM LISTING SHEETS FOR THE INDIVIDUAL COMPONENTS COMPRISING THE SUBSTITUTED FIRE ALARM SYSTEM, BATTERY LOAD CALCULATIONS AND VOLTAGE DROP CALCULATIONS FOR EACH SIGNALING CIRCUIT.

APPLICABLE CODES AND STANDARDS

2022 CA BUILDING CODE - CCR, TITLE 24, PART 2, VOLUMES 1 & 2
(2021 IBC AND CALIFORNIA AMENDMENTS)
2022 CA ELECTRICAL CODE - CCR, TITLE 24, PART 3
(2020 NEC AND CALIFORNIA AMENDMENTS)
2022 CA MECHANICAL CODE - CCR, TITLE 24, PART 4
(2021 UMC AND CALIFORNIA AMENDMENTS)
2022 CA PLUMBING CODE - CCR, TITLE 24, PART 5
(2021 UPC AND CALIFORNIA AMENDMENTS)
2022 CA FIRE CODE - CCR, TITLE 24, PART 9
(2021 IFC AND CALIFORNIA AMENDMENTS)
2022 CA REFERENCE STANDARDS CODE - CCR, TITLE 24, PART 12
2022 NFPA 13, INSTALLATION OF SPRINKLER SYSTEMS AND 2022 CALIFORNIA AMENDMENTS
2022 NFPA 72, NATIONAL FIRE ALARM CODE, AND 2022 CALIFORNIA AMENDMENTS
PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS - CCR, TITLE 19
DSA GUIDELINES FOR FIRE AND LIFE SAFETY SYSTEMS, DIVISION OF THE STATE ARCHITECT OFFICE OF REGULATION SERVICES.

FIRE ALARM GENERAL NOTES

1. UNDERGROUND AND EXTERIOR CONDUITS WILL HAVE WATERTIGHT FITTINGS. (CEC 110.11 AND CEC 300.6)
2. OUTLETS ON OPPOSITE SIDES OF A FIRE RATED WALL SHALL BE INSTALLED WITH A MINIMUM HORIZONTAL SPACING OF TWO FEET.
3. FIRE ALARM DEVICE MOUNTING HEIGHTS SHALL BE AS FOLLOWS:
   a. PULL STATION - OPERABLE PART OF A MANUALLY ACTUATED ALARM INITIATING DEVICE SHALL BE NOT LESS THAN 42" FROM FINISHED FLOOR; AND TOP OF BOX SHALL NOT BE MORE THAN 48" FROM FINISHED FLOOR. (CBC 11B 308.1.1, NFPA 72 17.14.5)
   b. INTERIOR AUDIBLE NOTIFICATION APPLIANCE - AT LEAST 90" TO THE TOP OF DEVICE ABOVE FINISHED FLOOR AND NOT LESS THAN 6" BELOW FINISHED CEILING. (NFPA 72 18.4.8.1)
   c. WALL-MOUNTED STROBE OR SPEAKER/STROBE - AT LEAST 80" TO BOTTOM OF LENS AND NOT GREATER THAN 96" TO TOP OF LENS ABOVE FINISHED FLOOR. (NFPA 72 18.5.5.1)
4. AUDIBLE SIGNAL DEVICES OF A FIRE ALARM SYSTEM INTENDED TO ALERT ALL OCCUPANTS SHALL BE SO LOCATED AND UNOBSTRUCTED AS TO CAUSE A LEVEL OF AUDIBILITY OF AT LEAST 15 dBA ABOVE AVERAGE AMBIENT SOUND LEVEL BUT NOT LESS THAN 75 dBA AT TEN FEET, OR MORE THAN 110 dBA IN TOTAL. (NFPA 72 18.4.3.1, 18.4.1.2 AND CFC 907.5.2.1.2)
5. AMBIENT NOISE LEVELS SHALL BE CONSTRUED TO MEAN THAT WHICH CAN NORMALLY BE EXPECTED TO EXIST WHEN THE FACILITY, BUILDING, ROOM OR AREA IS FUNCTIONING UNDER NORMAL OPERATIVE OR WORKING CONDITIONS. (CFC 907.5.2.1.1)
6. AUDIBLE DEVICES SHALL SOUND THE CA UNIFORM FIRE ALARM SIGNAL IN TEMPORAL MODE. PROVIDE AT LEAST ONE EXTERIOR AUDIBLE DEVICE ON BUILDING FOR E OCCUPANCIES. (CFC 907.5.2.1.3)
7. EMERGENCY VOICE/ALARM COMMUNICATION SYSTEM SHALL COMPLY WITH CBC 907.2.3 AND NFPA 72 24.4.2
8. VISUAL DEVICES SHALL NOT EXCEED TWO FLASHES PER SECOND AND SHALL NOT BE SLOWER THAN ONE FLASH EVERY SECOND. (NFPA 72 18.5.3.1)
9. AUTOMATIC SMOKE DETECTION SHALL BE PROVIDED AT THE LOCATION OF EACH FIRE ALARM CONTROL UNIT, NOTIFICATION APPLIANCE CIRCUIT POWER EXTENDER AND SUPERVISING STATION TRANSMITTING EQUIPMENT TO PROVIDE NOTIFICATION OF FIRE AT THAT LOCATION. (NFPA 72 10.4.4)
10. BRANCH CIRCUITS PROTECTING FIRE ALARM EQUIPMENT SHALL BE LABELED PER NFPA 72 10.6.5.2.2 AND SHALL INCLUDE A LISTED CIRCUIT BREAKER LOCKING DEVICE PER NFPA 72 10.6.5.4
11. COMPLETE THE NFPA 72 RECORD OF COMPLETION, TESTING ALL DEVICES AND APPLIANCES. PROVIDE A COPY OF THE COMPLETED RECORD OF COMPLETION TO THE OWNER (SCHOOL DISTRICT), ARCHITECT, LOCAL FIRE AUTHORITY, AND DSA VIA THE PROJECT INSPECTOR. TESTING OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE LOCAL FIRE AUTHORITY AND THE DSA INSPECTOR OF RECORD (IOR). FINAL TEST SHALL INCLUDE READ OUT VERIFICATION FORM FROM CENTER STATION.
12. THE AUTOMATIC ALARM SYSTEM SHALL BE INSTALLED, TESTED, AND MAINTAINED IN ACCORDANCE WITH THE STATE FIRE MARSHAL'S REGULATIONS (CFC 907.8.5, NFPA 72 14.4.1.1, NFPA 72 14.5)

FIRE ALARM CODES AND NOTES N.T.S. 19

FIRE ALARM SYSTEM EQUIPMENT LEGEND

SYMBOL	DESCRIPTION
(E) FACP	EXISTING FIRE ALARM CONTROL PANEL 'FACP': EDWARDS EST3 SERIES W/ AUTOMATIC CHARGING SYSTEM C.S.F.M. #7165-1657:0186
3-ASU	NEW AUDIO SOURCE UNIT EDWARDS #3-ASU; C.S.F.M. #7165-1657:0186 (MOUNT INSIDE EXISTIN FIRE ALARM CONTROL PANEL 'FACP')
3-ZA20X	NEW 20W ZONE AMPLIFIER EDWARDS #3-ZA20X; C.S.F.M. #7165-1657:0186 (MOUNT INSIDE EXISTING FIRE ALARM CONTROL PANEL 'FACP')
3-LCDANN	EXISTING FIRE ALARM REMOTE ANNUNCIATOR EDWARDS #3-LCDANN; C.S.F.M. #7120-1657:0193 (MOUNT INSIDE NEW BACKBOX - EDWARDS #4ANN/B)
3-REMICA	NEW FIRE ALARM REMOTE MICROPHONE EDWARDS #3-REMICA; C.S.F.M. #7120-1657:0193 (MOUNT INSIDE NEW BACKBOX - EDWARDS #4ANN/B)
(N) APS	NEW FIRE ALARM AUXILIARY POWER SUPPLY 'APS' WITH AUTOMATIC CHARGING SYSTEM, AND INTEGRAL AUDIO AMPLIFIER : EDWARDS #APS-10A, C.S.F.M. #7300-1657:0229 EDWARDS #SIGA-AA50, C.S.F.M. #7300-1657:0121
CS	NEW ADDRESSABLE SYNCRONIZATION OUTPUT MODULE : EDWARDS #SIGA-CC1S, C.S.F.M.#7300-1657:0121 (MOUNT INSIDE NEW FIRE ALARM AUXILIARY POWER SUPPLY 'APS')
SD	NEW ADDRESSABLE SMOKE DETECTOR AND BASE (ON CEILING): EDWARDS #SIGA-OSD; C.S.F.M. #7272-1657:0511 EDWARDS #SIGA-SB; C.S.F.M. #7300-1657:0120
HD	NEW ADDRESSABLE HEAT DETECTOR AND BASE (ON CEILING): EDWARDS #SIGA-HRD; C.S.F.M. #7270-1657:0333 EDWARDS #SIGA-SB; C.S.F.M. #7300-1657:0120
HD A	NEW ADDRESSABLE HEAT DETECTOR AND BASE (IN ATTIC): EDWARDS #SIGA-HRD; C.S.F.M. #7270-1657:0333 EDWARDS #SIGA-SB; C.S.F.M. #7300-1657:0120
SV XX	NEW SPEAKER/STROBE ANNUNCIATOR - WALL MOUNTED (XX REPRESENTS CANDELA) EDWARDS #G4SVRF; C.S.F.M. #7320-1657:0516
S WP	NEW VOICE EVACUATION SYSTEM SPEAKER (OUTDOOR - WEATHERPROOF) EDWARDS #WG4RF-S, WG4RTS C.S.F.M. #7320-1657:0289

FIRE ALARM LEGEND N.T.S. 13

SB575 - GREEN OAKS FAMILY ACADEMY ELEMENTARY SCHOOL FIRE PROTECTION ACT REQUIREMENTS FOR AUTOMATIC FIRE ALARM SYSTEMS

THE FIRE DETECTION AND ALARM SYSTEM FOR THE AREAS AND/OR BUILDINGS WITHIN THE SCOPE OF WORK OF THIS PROJECT:

- ☒ COMPLIES WITH SB575
  - ☒ A FULLY-AUTOMATIC SYSTEM HAS BEEN DESIGNED FOR ALL AREAS, OR
  - ☐ THE AREAS AND/OR BUILDINGS ARE SPRINKLERED ABOVE THE CEILING, SO HEAT DETECTORS ARE EXEMPTED FROM ABOVE-CEILING AREAS. THE SYSTEM IS OTHERWISE FULLY AUTOMATIC.
  - ☒ AN AUTOMATIC DIALER TO A UL-APPROVED CENTRAL STATION:
    - ☒ IS EXISTING, OR
    - ☐ IS INCLUDED AS PART OF THIS PROJECT.
- ☐ IS EXEMPT FROM SB575
  - ☐ THE TOTAL PROJECT CONSTRUCTION VALUE IS LESS THAN $200,000, OR
  - ☐ THE PROJECT CONSISTS OF ONLY MODULAR BUILDINGS WHICH ARE TEMPORARY. THESE BUILDINGS SHALL BE REMOVED NO MORE THAN THREE YEARS FROM THE INSTALLATION DATE UNLESS A THREE-YEAR EXTENSION IS APPROVED BY DSA, OR
  - ☐ THE PROJECT IS NOT FUNDED UNDER CHAPTER 12.5 OF THE LEROY F. GREENE SCHOOL FACILITIES ACT. IT WILL BE 100% FUNDED BY LOCAL FUNDS.

SB575 N.T.S. 14

FIRE ALARM MONITORING NOTE

AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION AS REQUIRED BY NFPA 72 AS AMENDED BY CFC CHAPTER 80. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX OR UUJS BY UNDERWRITERS LABORATORY OR SHALL MEET THE REQUIREMENTS OF FACTORY MUTUAL RESEARCH APPROVAL STANDARD 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

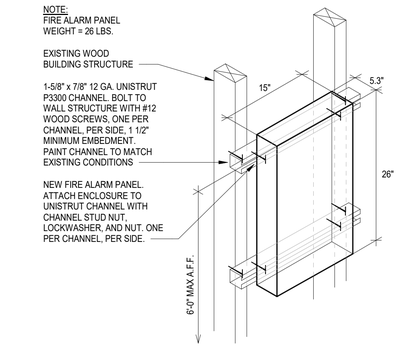
FIRE ALARM MONITORING NOTE N.T.S. 15

FIRE ALARM SYSTEM OPERATIONAL MATRIX

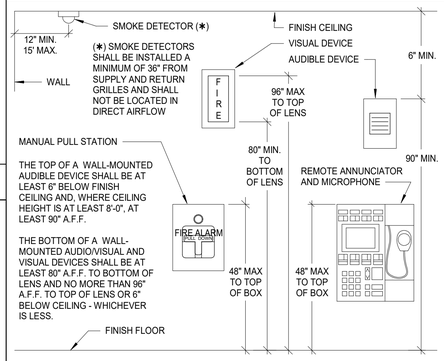
DEVICE	ACTIVATE EVACUATION SIGNALS/STROBES	SHUTDOWN FIRE/SMOKE DAMPER, OR ACTIVATE SMOKE VENT RELEASE	SHUTDOWN HVAC EQUIPMENT	ANNUNCIATE AT BUILDING FACP AND ALL REMOTE ANNUNCIATORS	SEND SIGNAL TO CENTRAL STATION
FIRE ALARM PANEL SYSTEM TROUBLE				X	X
SMOKE DETECTOR	X			X	X
HEAT DETECTOR	X			X	X

FIRE ALARM OPERATIONAL MATRIX N.T.S. 16

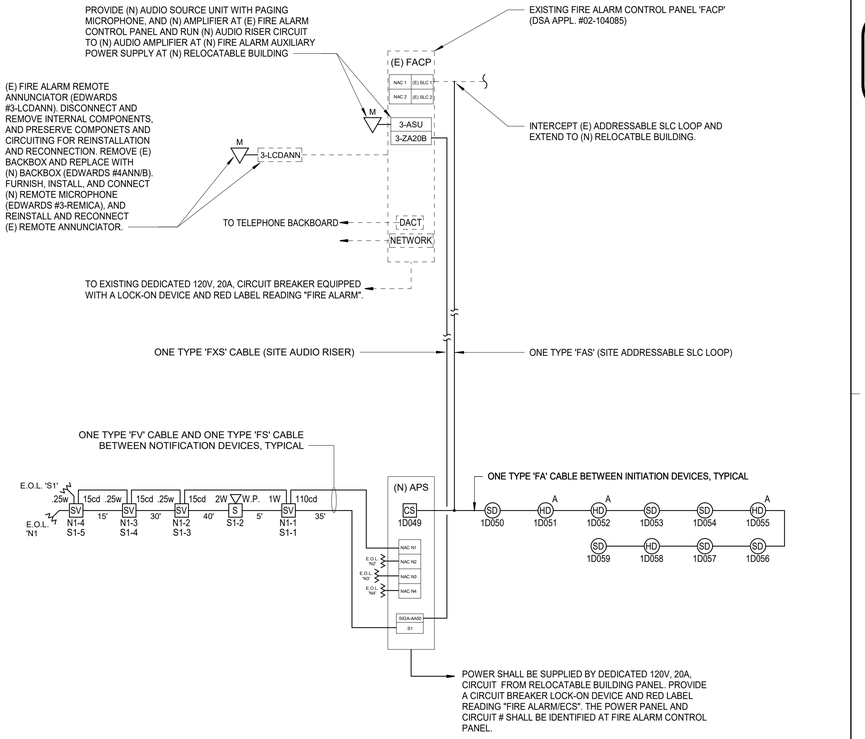
NOTE:
FIRE ALARM PANEL WEIGHT = 26 LBS.



FIRE ALARM PANEL MOUNTING N.T.S. 9



FIRE ALARM DEVICE ELEVATIONS N.T.S. 10



FIRE ALARM RISER DIAGRAM N.T.S. 2

EXISTING FIRE ALARM CONTROL PANEL 'FACP' BATTERY CALCULATIONS

QTY.	DEVICE	DESCRIPTION	STANDBY CURRENT	ALARM CURRENT/DEVICE	ALARM CURRENT
1	EST3	(E) Fire Aalrm Control Panel - Base panel (1)	-----	-----	-----
1	3-PPS/M	(E) Power Supply (2)	-----	-----	-----
1	3-CPU1	(E) Central Processor	0.155	0.165	0.165
1	3-RS485B	(E) Communications Card	0.098	0.098	0.098
1	3-LCD	(E) LCD Module	0.040	0.042	0.042
1	3-SSDC1	(E) Dual SIGA Controller (3)	**0.264**	**0.336**	**0.336**
2	3-IDC8/4	(E) Hardwired Module	0.096	0.408	0.816
1	3-MODCOM	(E) DACT Module	0.060	0.095	0.095
1	**3-ASU**	**(N) Audio Source Unit**	**0.800**	**0.800**	**0.800**
1	**3-ZA20x**	**(N) 20W Zone Amplifier**	**0.062**	**1.120**	**1.120**
1	3-LCDANN	(E) Remote Annunciator	0.048	0.050	0.050
1	**3-REMICA**	**(N) Remote Microphone**	**0.064**	**0.064**	**0.064**
1	**4ANN/B**	**(N) Backbox for Remote Annunciator and Remote Microphone**	-----	-----	-----
1	N/A	(E) Notification Appliance Load	0.000	3.530	3.530
6	**SIGA2-OSD**	**(N) Addressable Smoke Detectors**	-----	-----	**------- (4)**
4	**SIGA2-HRS**	**(N) Addressable Heat Detectors**	-----	-----	**------- (4)**
		TOTALS	**1.687**		**7.116**

TOTAL ALARM AMP-HOURS (15 MIN.) =	0.25	HR	x	7.116	A	=	1.7790	A-H
TOTAL STANDBY AMP-HOURS (24 HRS) =	24	HR	x	1.687	A	=	40.4880	A-H
TOTAL REQUIRED AMP-HOURS =						=	**42.2670**	**A-H**
TOTAL DESIGN AMP-HOURS WITH 25% SAFETY FACTOR =						=	**52.8338**	**A-H**
EXISTING BATTERIES							**55.000**	**A-H**

EXISTING FIRE ALARM CONTROL PANEL 'FACP-A' NOTES:

1) FIRE ALARM CONTROL PANEL STANDBY AND ALARM CURRENT IS A CUMLATIVE TOTAL OF ALL INTERNAL COMPONENTS LISTED BELOW.
2) THE POWER SUPPLY IS CONNECTED TO A DEDICATED 120V CIRCUIT. THERE IS NO STANDBY OR ALARM CURRENT DRAW ON THE SYSTEM BATTERIES.
3) THE SIGA DEVICE CONTROLLER IS CALCUALTED WITH THE MAXIMUM SIGNATURE ADDRESSABLE DEVICE LOAD (TOTAL CAPACITY FOR ALL ADDRESSABLE DEVICES).
4) STANDBY AND ALARM CURRENT FOR NEW INITIATION DEVICES ARE INCLUDED IN STANDBY AND ALARM CURRENT FOR THE DUAL SIGA CONTROLLER.

(N) FIRE ALARM AUXILIARY POWER SUPPLY 'APS' BATTERY CALCULATION

QTY.	DEVICE	DESCRIPTION	STANDBY CURRENT	ALARM CURRENT/DEVICE	ALARM CURRENT
1	APS-F	(N) Fire Alarm Auxiliary Power Supply, Edwards #APS10A	0.1050	0.2700	0.2700
1	SIGA-AA50	(N) Fire Alarm Amplifier, Edwards #SIGA-AA50 (2)	0.0020	2.8000	2.8000
		STROBE CURRENT (NAC N1)			
3	SV15	(N) Multi-Candela Speaker Strobe (15cd) Edwards #G4SVRF	--------	0.0280	0.0840
1	SV110	(N) Multi-Candela Speaker Strobe (110cd) #G4SVRF	--------	0.0280	0.0280
		SPEAKER CURRENT (CKT S1)			
3	SP-1/4W	Multi-Candela Speaker Strobe (.25w) Edwards #G4SVRF	--------	--------	------- (3)
1	SP-1W	Multi-Candela Speaker Strobe (1w) Edwards #G4SVRF	--------	--------	------- (3)
1	SP-2W	Exterior Weatherproof Speaker (2W) Edwards #WG4RF-S/WG4RTS	--------	--------	------- (3)
		TOTALS	0.1070	3.1260	3.1820

TOTAL ALARM AMP-HOURS (15 MIN.) =	0.25	HR	x	3.182	A	=	0.7955	A-H
TOTAL STANDBY AMP-HOURS (24 HRS) =	24	HR	x	0.107	A	=	2.5680	A-H
TOTAL REQUIRED AMP-HOURS =						=	**3.3635**	**A-H**
TOTAL DESIGN AMP-HOURS WITH 25% SAFETY FACTOR =						=	**4.2044**	**A-H**
EXISTING BATTERIES							**7.000**	**A-H**

EXISTING FIRE ALARM AUXILIARY POWER SUPPLY 'APS-F' NOTES:

2) THE SIGA AA50 AMPLIFIER IS CALCUALTED WITH THE MAXIMUM AUDIO DEVICE LOAD (CAPACITY FOR ALL SPEAKERS).
3) SPEAKER ALARM CURRENT IS INCLUDED IN THE MAXIMUM OUTPUT OF THE SIGA-AA50 AMPLIFIER.

NAC 'N1' VOLTAGE DROP CALCULATION

QTY.	DEVICE	DESCRIPTION	STANDBY CURRENT	ALARM CURRENT/DEVICE	ALARM CURRENT
3	SV15	Multi-Candela Speaker Strobe (15cd) Edwards #G4SVRF		0.0280	0.0840
1	SV110	Multi-Candela Speaker Strobe (110cd) Edwards #G4SVRF		0.0280	0.0280
		TOTAL CURRENT ADDED TO CIRCUIT		0.056	0.112

LENGTH OF WIRE FROM FACP TO LAST DEVICE (IN FEET) =			**125**
ACTUAL SIZE OF WIRE INSTALLED =	**12** AWG	**6530** CIRCULAR MILS	
CALCULATED VOLTAGE DROP (IN VDC) =			**0.046**
CIRCUIT VOLTAGE CALCULATED AT LAST DEVICE (IN VDC) =			**24 VDC**
PERCENT VOLTAGE DROP (%) =			**0.19 %**

VOLTAGE DROP FORMULA:
VOLTAGE DROP = 2 X 10.8 x LENGTH OF CIRCUIT TO FARTHEST DEVICE x CURRENT
WIRE SIZE IN C.M.
COMPUTED WITH TOTAL CURRENT ON CIRCUIT AT MAXIMUM LENGTH (CLASS A CIRCUIT).

dB LINE LOSS CALCULATION

SPEAKER VOLTAGE = 70

SPEAKERS	DEVICE POWER (WATTS)	SIGNAL CKT S1 QTY.	SIGNAL CKT S1 WATTS	SIGNAL CKT S2 QTY.	SIGNAL CKT S2 WATTS	SPEAKER QTY TOTAL.	MIN. AMP SIZE (WATTS)
SPEAKER - 1/4 WATT TAP	0.25	3	0.75	0	0	3	4.5
SPEAKER - 1/2 WATT TAP	0.5	0	0	0	0	0	
SPEAKER - 1 WATT TAP	1	1	1	0	0	1	
SPEAKER - 2 WATT TAP	2	1	2	0	0	1	
TOTAL POWER ON CKT (P) WATTS			3.75		0		
LOAD RESISTANCE (LR) OHMS			1307		-		
TOTAL WIRE LENGTH (D) FT			125		0		
WIRE SIZE			14 AWG		14 AWG		
TOTAL WIRE RESISTANCE (WR) OHMS			0.815		-		
POWER LOSS (PL) dB			**-0.01**		-		

FORMULAS
WIRE RESISTANCE (R) (OHMS/Kft)*
18 AWG = 8.08
16 AWG = 5.08
14 AWG = 3.26
12 AWG = 2.05
*VALUES PER NFPA 70

TOTAL WIRE RESISTANCE (WR) = (R / 1000) * D
LOAD RESISTANCE (LR) = (SPEAKER VOLTAGE)^2 / P
POWER LINE LOSS (PL) = 10 * LOG (1- (WR / (WR+LR)))

BATTERY AND VOLTAGE DROP CALCULATIONS N.T.S. 4

PLOT DATE: 11/19/2024 3:58:38 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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MARK	DATE	DESCRIPTION
B	11/22/24	DSA BACKCHECK

REGISTERED PROFESSIONAL ENGINEER JASON M. MARCH No. E 24283 12-31-2025 ELECTRICAL STATE OF CALIFORNIA

TETER, INC.
ARCHITECTS ENGINEERS CONSULTANTS
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO

STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
STOCKTON, CA

DRAWING TITLE
FIRE ALARM RISER DIAGRAM & CALCULATIONS

PROJECT NO.
23-13018.00

DRAWING
E710

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FIRE ALARM CABLE SCHEDULE

CABLE DESIGNATION	DESCRIPTION	MANUFACTURER & CATALOG #	OUTER JACKET COLOR	SYSTEM	USE
'FXS'	1 PR, #14 AWG STRANDED UNSHIELDED AQUASEAL FPL	WEST PENN #AQ226	BLACK	FIRE ALARM	SITE AUDIO RISER CABLE - EXTERIOR/OUTDOOR
'FAS'	1 PR, #16 AWG STRANDED UNSHIELDED AQUASEAL FPL	WEST PENN #AQC225	BLACK	FIRE ALARM	SITE ADDRESSABLE SLC LOOP CABLE - EXTERIOR/OUTDOOR
'FA'	1 PR, #16 AWG SOLID UNSHIELDED FPL	WEST PENN #D990	RED	FIRE ALARM	ADDRESSABLE SLC LOOP CABLE - INTERIOR
'FS'	1 PR, #14 AWG SOLID SHIELDED, FPLP	WEST PENN #60992B	RED	FIRE ALARM	AUDIBLE (SPEAKER) NOTIFICATION APPLIANCE CIRCUIT - INTERIOR
'FV'	1 PR, #12 SOLID UNSHIELDED FPLP	WEST PENN #60995B	RED	FIRE ALARM	VISUAL (STROBE) NOTIFICATION APPLIANCE CIRCUIT - INTERIOR

FIRE ALARM CABLE SCHEDULE N.T.S. 13

TELECOMMUNICATION CABLE SCHEDULE

CABLE DESIGNATION	DESCRIPTION	MANUFACTURER & CATALOG #	OUTER JACKET COLOR	SYSTEM	USE
'SFO'	6-STRAND SINGLE-MODE FIBER OPTIC CABLE	CORNING SMF-28e+ OR EQUIVALENT	BLACK	DATA	SITE OPTICAL FIBER DATA NETWORK
'D'	4 UTP #24 AWG CATEGORY 6 FILLED OUTDOOR	COMMSCOPE MEDIA 6 #6NF4+	BLACK	DATA	HORIZONTAL DATA CABLE - OUTDOOR
'H'	ACTIVE FIBER OPTIC HDMI CABLE	CHROMIS #AOC-18G-R-OBXP OR EQUIVALENT	BLACK	VIDEO	BUILDING HDM1 CABLE M/M

TELLECOMMUNICATIONS CABLE SCHEDULE N.T.S. 14

LIGHTING FIXTURE SCHEDULE

FIXTURE DESIGNATION	FIXTURE VOLTAGE	FIXTURE WATTAGE	MOUNTING	DRIVER & COLOR TEMP	DESCRIPTION	MANUFACTURER	CATALOG #
	0 V	0					
S1	120 V	69	POLE PER 18/E600	LED - 4000K	SINGLE HEAD POLE MOUNTED SITE LIGHT + 12'-6" x 5" SQUARE STRAIGHT STEEL POLE WITH HANDHOLE	LITHONIA	DSX0 LED-P3-40K-80CRI-T5LG-MVOLT-SPA-PIR-DDBXD + SSS-12-6-5G-DM19AS-CPL12/15B-EHH15D-DDBXD
W1	120 V	32	WALL MOUNTED	LED - 4000K	WALL MOUNTED LED LIGHT FIXTURE, +8'AFF (13.5 LBS)	LITHONIA	WDGE2 LED-P3-40K-80CRI-TFTM-MVOLT-SRM

LIGHT FIXTURE SCHEDULE N.T.S. 14

CODES, RULES & REGULATIONS

ALL WORK SHOWN HEREIN SHALL COMPLY WITH THE CURRENT REGULATIONS OF THE CALIFORNIA STATE FIRE MARSHAL, CALIFORNIA BUILDING CODE, TITLES 8 AND 19 THROUGH 24, SERVING UTILITY RULES AND ALL OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS SHALL BE INTERPRETED AS TO PERMIT ANY WORK NOT IN CONFORMANCE WITH THESE CODES, RULES AND REGULATIONS. WHERE WORK OF A GREATER DEGREE IS INDICATED IN THESE PLANS OR SPECIFICATIONS, THAT REQUIREMENT SHALL GOVERN SUCH WORK.

C.E.C. TITLE 24 COMPLIANCE

THE LIGHTING AND LIGHTING CONTROL SYSTEMS DESIGN DEPICTED HEREIN IS IN COMPLIANCE WITH REQUIREMENTS OF THE CURRENT CALIFORNIA ENERGY COMMISSION EFFICIENCY STANDARDS FOR NONRESIDENTIAL BUILDINGS.

GENERAL NOTES (TYPICAL)

1. REFER TO THE ARCHITECTURAL REFLECTED CEILING PLAN FOR THE EXACT LOCATION OF ALL CEILING MOUNTED ELECTRICAL EQUIPMENT.
2. REFER TO THE MECHANICAL AND PLUMBING PLANS FOR THE EXACT LOCATION OF ALL MECHANICAL, HVAC AND PLUMBING EQUIPMENT.
3. VERIFY THE EXACT LOCATION OF ALL FLOOR BOXES AND ASSOCIATED TRENCH, BACKFILL AND SAWCUTTING REQUIREMENTS WITH THE ARCHITECT PRIOR TO COMMENCEMENT OF ANY ROUGH -IN WORK FOR THIS EQUIPMENT.
4. COORDINATE ELECTRICAL PANEL AND TERMINAL CABINET LOCATIONS AND ROUTING OF UNDERGROUND CONDUITS WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS PRIOR TO COMMENCEMENT OF ANY ROUGH-IN WORK FOR THIS EQUIPMENT.
5. COORDINATE ALL ELECTRICAL WORK WITH OTHER TRADES WHOSE WORK WILL IMPACT PLACEMENT OR CONNECTION OF ELECTRICALLY POWERED EQUIPMENT REGARDLESS OF RESPONSIBILITY FOR SUPPLYING EQUIPMENT.

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, MOVEABLE 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 FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT 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 2019 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

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

ELECTRICAL DISTRIBUTION SYSTEMS:

SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) #OPM-0052-13, "SEISMIC BRACING AND SUPPORT SYSTEMS"

GENERAL NOTES N.T.S. 12

ELECTRICAL SYMBOL LEGEND

DIMENSIONS INDICATED ARE MEASURED TO CENTERLINE OF ENCLOSURE, UNLESS OTHERWISE NOTED
NOTE: SOME SYMBOLS SHOWN MAY NOT APPLY TO THIS PROJECT

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
E.P.	DENOTES EXPLOSION PROOF CONSTRUCTION	$_a	SINGLE POLE AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N. (LOWER CASE SUBSCRIPT INDICATES CONTROLLED SWITCHLEG OF CIRCUIT)
D.T.	DENOTES DUST TIGHT CONSTRUCTION	$_2	TWO POLE AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
O.C.	DENOTES SPACING DIMENSION ON CENTER LINE OF DEVICE	$_3	THREE WAY AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
R.T.	DENOTES RAIN TIGHT CONSTRUCTION	$_4	FOUR WAY AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
U.G.	DENOTES UNDERGROUND INSTALLATION	$_M	HORSEPOWER RATED AC SNAP SWITCH @ +48" TO TOP OF BOX U.O.N.
V.P.	DENOTES VAPOR TIGHT CONSTRUCTION	$_P	SINGLE POLE AC SNAP SWITCH WITH PILOT LAMP @ +48" TO TOP OF BOX U.O.N.
W.P.	DENOTES WEATHERPROOF CONSTRUCTION	$_T	DIGITAL TIMER SWITCH, FLUSH MOUNTED @ +48" TO TOP OF BOX U.O.N.
W.T.	DENOTES WATER TIGHT CONSTRUCTION	$_A	SINGLE POLE AC SNAP SWITCH @ +48" TO TOP OF BOX, U.O.N.
A.F.F.	DENOTES ABOVE FINISHED FLOOR	$_K	KEY OPERATED AC SNAP SWITCH @ +48" TO TOP OF BOX U.O.N.
A.F.G.	DENOTES ABOVE FINISHED GRADE	$	WALL SWITCH WITH INTEGRAL OCCUPANCY SENSOR @ +48" TO TOP OF BOX, U.O.N.
F.B.O.	DENOTES FURNISHED BY OTHERS	M	OCCUPANCY SENSOR - CEILING MOUNTED
U.O.N.	DENOTES UNLESS OTHERWISE NOTED	M_W	OCCUPANCY SENSOR - WALL MOUNTED @ +90" TO TOP OF BOX, U.O.N.
(E)	DENOTES EXISTING TO REMAIN, NO WORK U.O.N.	P	LIGHTING CONTROL SYSTEM DIMMING/POWER PACK MOUNTED IN ATTIC
(N)	DENOTES NEW	RP	LIGHTING CONTROL SYSTEM PLUG LOAD RELAY PACK MOUNTED IN ATTIC
1	ELECTRICAL KEYNOTES: DENOTES KEYNOTE #1 OF NOTES ON SAME SHEET	C1	LIGHTING CONTROL SYSTEM 2-BUTTON DIMMING WALL SWITCH @ +48" TO TOP OF BOX, U.O.N.
A-3	CIRCUIT HOME RUN: DENOTES PANEL A, CKT. #3, - 3/4"C. MINIMUM, U.O.N.	C4	LIGHTING CONTROL SYSTEM 4-BUTTON DIMMING WALL SWITCH @ +48" TO TOP OF BOX, U.O.N.
1	CIRCUIT FEEDER: DENOTES FEEDER 'F1' PER SYSTEM FEEDER SCHEDULE	C1_L	LIGHTING CONTROL SYSTEM DIMMING WALL SWITCH WITH LOCKING COVER @ +48" TO TOP OF BOX, U.O.N.
———	CONDUIT IN ATTIC/WALL: DENOTES 3/4"C-2#12 AWG CU THWN, 1#12 CU GND, U.O.N.	DS	LIGHTING CONTROL SYSTEM DAYLIGHT SENSOR - CEILING MOUNTED
— · —	CONDUIT IN FLOOR/U.G.: DENOTES 3/4"C-2#12 AWG CU THWN, 1#12 CU GND, U.O.N.	NB	LIGHTING CONTROL SYSTEM NETWORK BRIDGE
- - - -	DENOTES EXISTING CONDUIT RUN TO REMAIN	NG	LIGHTING CONTROL SYSTEM NETWORK GATEWAY
—∃	CONDUIT RUN - STUBBED, CAPPED AND LABELED.	AD	LIGHTING CONTROL SYSTEM AUTOMATED DEMAND RESPONSE MODULE
—//	CONDUIT RUN: DENOTES 3/4"C - 3 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.	TC	LIGHTING CONTROL SYSTEM TIME CLOCK
—//—	CONDUIT RUN: DENOTES 3/4"C - 4 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.	PC	PHOTOCELL CONTROL MOUNTED ON ROOF
—////	CONDUIT RUN: DENOTES 3/4"C - 5 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.	T	LOW VOLTAGE CONTROL TRANSFORMER
—////	CONDUIT RUN: DENOTES 1"C - 6 #12 AWG CU THWN + 1 #12 CU GND, U.O.N.		
	SEPARATE POWER AND DATA FLOOR BOXES (2)		ELECTRICAL PANELBOARD PER PLANS, FLUSH MOUNTED IN WALL (4)
	FLUSH FLOOR BOX WITH DEVICE(S) INSTALLED PER PLANS, U.O.N. (2)		ELECTRICAL PANELBOARD PER PLANS, SURFACE MOUNTED ON WALL
	TAMPER-RESISTANT SINGLE RECEPTACLE IN WALL @ +18", U.O.N.		TERMINAL CABINET PER PLANS, FLUSH MOUNTED IN WALL (5)
	TAMPER-RESISTANT DUPLEX RECEPTACLE IN WALL @ +18", U.O.N.		TERMINAL CABINET PER PLANS, SURFACE MOUNTED ON WALL
	TAMPER-RESISTANT DUPLEX GFI RECEPTACLE, IN WALL @ 18", U.O.N.		LIGHTING CONTROL PANEL PER PLANS, FLUSH MOUNTED IN WALL (5)
	TAMPER-RESISTANT SWITCHED GFCI RECEPTACLE IN WALL @ +18" A.F.F. U.O.N. (OCC. SENSOR OR WALL SWITCH CONTOLLED)		LIGHTING CONTROL PANEL PER PLANS, SURFACE MOUNTED ON WALL
WP	TAMPER-RESISTANT WEATHER RESISTANT (W/R) DUPLEX GFCI RECEPTACLE W/ W.P. COVER @+18", U.O.N.		FIRE ALARM PANEL PER PLANS, FLUSH MOUNTED IN WALL (5)
	TAMPER-RESISTANT DUPLEX ISOLATED GROUND RECEPTACLE IN WALL @ +18", U.O.N. (7)		FIRE ALARM PANEL PER PLANS, SURFACE MOUNTED ON WALL
	TAMPER-RESISTANT QUADRUPLEX RECEPTACLE IN WALL @ +18", U.O.N.		
	SPECIAL PURPOSE ELECTRICAL OUTLET PER PLAN IN WALL @ 18" U.O.N.	SWP	EXTERIOR SPEAKER (WALL MOUNTED), ELEVATION AS NOTED
	DUPLEX RECEPTACLE FLUSH IN CEILING	S	SPEAKER IN CEILING, U.O.N.
	TAMPER-RESISTANT QUADRUPLEX RECEPTACLE IN WALL @ +18" A.F.F., U.O.N. ONE UNSWITCHED RECEPTACLE AND ONE SWITCHED (OCC. SENSOR CONTROLLED) RECEPTACLE	S	SPEAKER/CLOCK IN COMMON BACKBOX PER PLAN @ 12" BELOW CEILING, U.O.N.
	JUNCTION BOX		WALL CLOCK PER PLAN @ 12" BELOW CEILING, U.O.N.
	JUNCTION BOX WITH FLEXIBLE CONDUIT CONNECTION TO EQUIPMENT	S	SPEAKER ON WALL @ 12" BELOW CEILING, U.O.N. (3)
	NON-FUSIBLE DISCONNECT SWITCH	MD	INTRUSION ALARM SYSTEM MOTION DETECTOR (WALL MOUNTED) (3)
	FUSIBLE DISCONNECT SWITCH	DC	INTRUSION ALARM SYSTEM MAGNETIC DOOR CONTACT (3)
	FUSIBLE DISCONNECT SWITCH WITH INTEGRAL MAGNETIC STARTER	WC	INTRUSION ALARM SYSTEM MAGNETIC WINDOW CONTACT (3)
	ELECTRIC MOTOR	GB	INTRUSION ALARM SYSTEM GLASS BREAK DETECTOR (3)
	EXHAUST FAN OR FRACTIONAL HORSEPOWER MOTOR	KP	INTRUSION ALARM SYSTEM KEYPAD (WALL MOUNTED) (3)
	SURFACE MOUNTED RACEWAY, MOUNT @ +18" A.F.F. U.ON.	CR	INTRUSION ALARM SYSTEM CARD READER (WALL MOUNTED) (3)
	RECESSED LED LIGHTING FIXTURE	FR	INTRUSION ALARM SYSTEM FOB READER (WALL MOUNTED) (3)
	RECESSED LED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	SC	SECURITY CAMERA (WALL MOUNTED) ROUGH-IN LOCATION PER PLAN (3)
	SURFACE MOUNTED LED LIGHTING FIXTURE		
	SURFACE MOUNTED LED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	SD	FIRE ALARM SMOKE DETECTOR ON CEILING, U.O.N.
	SURFACE MOUNTED LED STRIP LIGHT	HD	FIRE ALARM HEAT DETECTOR ON CEILING, U.O.N.
	SURFACE MOUNTED LED STRIP LIGHT WITH EMERGENCY BATTERY BACKUP	HDA	FIRE ALARM HEAT DETECTOR IN ATTIC U.O.N.
	POST TOP MOUNTED LIGHTING FIXTURE	DD	FIRE ALARM DUCT DETECTOR IN HVAC DUCT
	WALL MOUNTED LIGHTING FIXTURE	DR	FIRE ALARM DOOR RELEASE
	WALL MOUNTED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	CR	FIRE ALARM ADDRESSABLE CONTROL RELAY MODULE
	CEILING MOUNTED LIGHTING FIXTURE	CS	FIRE ALARM ADDRESSABLE INPUT/OUTPUT MODULE
	CEILING MOUNTED LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	AM	FIRE ALARM INDIVIDUAL ADDRESSABLE MODULE
	RECESSED LIGHTING FIXTURE	SM	FIRE ALARM SYNC MODULE
	RECESSED FIXTURE WITH EMERGENCY BATTERY BACKUP	F	FIRE ALARM MANUAL PULL STATION @ +48" TO TOP OF BOX, U.O.N.
	SURFACE MOUNTED ROUND LIGHTING FIXTURE	WF	FIRE ALARM WATERFLOW DETECTION SWITCH
	SURFACE MOUNTED ROUND LIGHTING FIXTURE WITH EMERGENCY BATTERY BACKUP	WT	FIRE ALARM ADDRESSABLE WATERFLOW / TAMPER SWITCH MODULE
	ILLUMINATED EXIT SIGN MOUNTED ON CEILING	TS	FIRE ALARM TAMPER SWITCH
	ILLUMINATED EXIT SIGN MOUNTED ON WALL	V	FIRE ALARM VISUAL ALARM UNIT (WALL@ +80" MINIMUM, U.O.N.)
	LOW LEVEL PHOTOLUMINESCENT EXIT SIGN MOUNTED ON WALL	V	FIRE ALARM VISUAL ALARM UNIT (CEILING)
	POLE MOUNTED EXTERIOR LIGHTING FIXTURE	AV	FIRE ALARM HORN/STROBE ALARM UNIT (WALL @ +80" MINIMUM, U.O.N.)
		AV	FIRE ALARM VISUAL ALARM UNIT (CEILING)
2/2	COMBINATION VOICE AND DATA OUTLET IN WALL, WITH TWO 'D' CABLES TO IDF + TWO 'T' CABLES TO TELEPHONE BACKBOARD (1) (6)	H	INTERIOR FIRE ALARM HORN (WALL @ +10'-0", U.O.N.)
X	DATA OUTLET IN WALL @ +18", U.O.N., WITH 'D' CABLES TO IDF OR MDF (SUBSCRIPT INDICATES QUANTITY OF CABLES AND STATION SIDE JACKS) (1) (6)	H	EXTERIOR FIRE ALARM HORN (EXTERIOR WALL)
TV	TELEVISION OUTLET IN WALL @ +18", U.O.N. (1)	SV	VOICE EVACUATION SPEAKER/STROBE ALARM UNIT (WALL @ +80" MINIMUM, U.O.N.)
M	MICROPHONE OUTLET IN WALL @ +18", U.O.N. (1)	SV	VOICE EVACUATION SPEAKER/STROBE ALARM UNIT (CEILING)
S	SPEAKER OUTLET IN WALL @ +18", U.O.N. (1)	S	EXTERIOR VOICE EVACUATION SPEAKER (EXTERIOR WALL)
IC	INTERCOMMUNICATIONS HANDSET ON WALL @ +48" TO TOP OF BOX U.O.N.		FIRE ALARM CIRCUIT END OF LINE RESISTOR
WAP	WIRELESS ACCESS POINT LOCATION, PROVIDE TWO TYPE 'D' CABLES TO IDF OR MDF		

ELECTRICAL SYMBOLS NOTES:

(1) RUN 1"C CONCEALED IN WALL AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING, U.O.N.

(2) RUN 1"C TO NEAREST WALL, THEN RISE CONCEALED IN WALL AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING, U.O.N. FOR SINGLE SYSTEMS INDIVIDUAL FLOORBOXES. WHERE MULTIPLE SYSTEMS OCCUR WITHIN A COMMON FLOOR BOX, RUN TWO 1"C PER ABOVE.

(3) SYSTEM IS ROUGH IN ONLY, PROVIDE BACKBOX, BLANK COVERPLATE AND CONDUIT STUB PER DETAIL PLANS.

(4) IN ADDITION TO CONDUITS SHOWN ON PLANS, STUB ONE 1 1/4"C, ONE 1"C, AND TWO 3/4"C (SPARE) INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING, U.O.N. THIS REQUIREMENT APPLIES TO EACH POWER AND LIGHTING PANEL INDICATED FLUSH MOUNTED ON POWER PLAN.

(5) IN ADDITION TO CONDUITS SHOWN ON PLANS, STUB ONE 1"C AND TWO 3/4"C (SPARE) INTO ACCESSIBLE ATTIC SPACE ABOVE NEAREST T-BAR CEILING U.O.N. REQUIREMENT APPLIES TO EACH SIGNAL SYSTEM T.C. INDICATED FLUSH MOUNTED ON SIGNAL PLAN.

(6) 4S BACKBOX WITH SINGLE GANG TRIM AND COVERPLATE.

(7) ORANGE DEVICE (ISOLATED GROUND DUPLEX RECEPT. ONLY) WITH ENGRAVED WORDING ON COVER PLATE ABOVE ISOLATED GROUND RECEPT.: "COMPUTER ONLY".

SYMBOL LEGEND AND NOTES N.T.S. 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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MARK	DATE	DESCRIPTION
B	11/22/24	DSA BACKCHECK

REGISTERED PROFESSIONAL ENGINEER JASON MARCH No. E 24283 12-31-2025 ELECTRICAL

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
STOCKTON, CA

DRAWING TITLE
ELECTRICAL LEGEND, NOTES, & SCHEDULES

PROJECT NO.
23-13018.00

DRAWING
E800

PLOT DATE: 11/19/2024 3:58:41 PM

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
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.	
Project Name:	**Report Page: (Page 1 of 8)**
Project Address:	**Date Prepared:** 11/18/2024

A. GENERAL INFORMATION

01	Project Location (city)	Stockton	04	Total Illuminated Hardscape Area (ft²)	2741
02	Climate Zone	12			
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				
• All Other Occupancies					

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 F. 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
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CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
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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	OR	06	=	07		08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)		Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)		**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
303	+	—	+	—	+	—	+	—	OR	—	=	303	≥	101	COMPLIES
Shielding Compliance (See Table G for Details)															COMPLIES
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.

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name:	**Report Page: (Page 3 of 8)**
	Date Prepared: 11/18/2024

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 i.e, 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[4]	Field Inspector	
										Pass	Fail
S1	S1	☐ Linear	69	Mfr. Spec	1	New	☐	69	Provided	☐	☐
W1	W1	☐ Linear	32	Mfr. Spec	1	New	☐	32	NA: < 6200 lumens	☐	☐
							Total Design Watts:	101			

* NOTES: Selections with a * require a note in the space below explaining how compliance is achieved.
EX: Luminaire is lighting a stair; 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)

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G. SHIELDING REQUIREMENTS (BUG)

This table includes fixtures of >=6,200 initial lumens indicated on Table F as needing to comply with Shielding Requirements. Maximum lumens can be found in Title 24, Part 11, Section 5.106.8.

01	02	03	04	05	06	07	08	09	10	11	12	
		Backlight Rating[2]			Uplight Rating[2]			Glare Rating (Lumens)[2]			Field Inspector	
Name or Item Tag	Complete Luminaire Description	Mounting Height[1]	Max Allowable Backlight Rating[3]	Backlight Rating Per Design	Lighting type	Max Allowable Uplight Rating[3]	Uplight Rating Per Design	Mounting Height[1]	Max Allowable Glare Rating[3]	Glare Rating Per Design	Pass	Fail
S1	S1	Back hemisphere is 1 - 2 MH from prop line	B3	B3	All other outdoor lighting, including decorative	U2	U0	> 2 MH from property line	G2	G1	☐	☐

[1] FOOTNOTES: Mounting Height is labeled MH in this table.
[2] Authority Having Jurisdiction may ask for Luminaire cut sheets or other documentation to confirm luminaire type, uplight ratings and glare ratings used for compliance per 130.2(b)/ 160.5(c)
[3] BUG ratings with a lower number than the 'Max Allowable' are compliant. Ex. If Max Allowable is Bug Rating B4, then B0, B1, B2 and B3 are all compliant.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
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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
Pedestrian Hardscape	Astronomical Timer	Provided	FacadeGTE24Ft	☐	☐
Pedestrian Hardscape	Astronomical Timer	Provided	NA: Each Luminaire <= 40 Watts	☐	☐

[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 ii and iii.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name:	**Report Page: (Page 6 of 8)**
	Date Prepared: 11/18/2024

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-A 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 Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
Area Description	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
Pedestrian Hardscape	2741	0.019	52.1	341	0.2	51.2	103
Initial Wattage Allowance for Entire Site (Watts):							200
Instances of Initial Wattage Allowance (LZ 0 only)[1]							
Total General Hardscape Allowance (Watts):							303

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

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.

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name:	**Report Page: (Page 7 of 8)**
	Date Prepared: 11/18/2024

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.

O. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

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

P. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selection has been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP). For more information visit: http://www.energy.ca.gov/title24/attcp/providers.html

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.	Pedestrian Hardscape; Pedestrian Hardscape;

STATE OF CALIFORNIA
Outdoor Lighting CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name:	**Report Page: (Page 8 of 8)**
Project Address:	**Date Prepared:** 11/18/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jason March	Documentation Author Signature:
Company: Teter Architects & Engineers	Signature Date: 2024-11-18
Address: 10000 Stockdale Hwy #350	CEA/HERS Certification Identification (if applicable): 45D3-E54B-7F91-2C98-D6AB-CBA0-0AEE-883B-FC4A-3D90-D8EB-0C15-086E-E5F5-4DCC-5DA0
City/State/Zip: Bakersfield Ca 93311	Phone: 661.843-8400

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: Jason March	Responsible Designer Signature:
Company: Teter Architects & Engineers	Date Signed: 2024-11-18
Address: 10000 Stockdale Hwy #350	License: E24293
City/State/Zip: Bakersfield Ca 93311	Phone: 661.843-8400

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

Teter, Inc. expressly reserves its common law copyright and other property rights in these plans. This document, the ideas and designs incorporated herein, as an instrument of professional service, is not to be used in whole or in part, for any other project without prior written authorization.

MARK	DATE	DESCRIPTION
B	11/22/24	DSA BACKCHECK

REGISTERED PROFESSIONAL ENGINEER JASON MARCH No. E 24293 12-31-25 ELECTRICAL STATE OF CALIFORNIA

TETER, INC.
FRESNO HEADQUARTERS
VISALIA | BAKERSFIELD | MODESTO | SAN LUIS OBISPO
ARCHITECTS ENGINEERS CONNECTED

TETER

STOCKTON UNIFIED SCHOOL DISTRICT
HAMILTON ELEM ELOP
2245 E. 11TH ST.
STOCKTON, CA

DRAWING TITLE
CALIFORNIA ENERGY COMPLIANCE FORMS

PROJECT NO.
23-13018.00

DRAWING
E900

PLOT DATE: 11/19/2024 3:58:44 PM

\\tet-file1\Users\jason.march\Documents\13018-E-STOCKTON HAMILTON ELEM ELOP_march.jason.rvt

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

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

Grand total: ~~124~~ 67

ALT-D1 SCHEDULES AND DETAILS
ALT-01 FLOOR PLAN & REFLECTED CEILING PLAN
ALT-02 ELECTRICAL PLAN & MECHANICAL PLAN
ALT-03 ROOF PLAN & PLUMBING PLAN
ALT-04 FIRE ALARM
ALT-05 INTERIOR ELEVATIONS
ALT-06 EXTERIOR ELEVATIONS

STOCKPILE 351
(24)36x40

C-24-3112 A/B/C	C-24-3120 A/B/C	C-24-3128 A/B/C
C-24-3113 A/B/C	C-24-3121 A/B/C	C-24-3129 A/B/C
C-24-3114 A/B/C	C-24-3122 A/B/C	C-24-3130 A/B/C
C-24-3115 A/B/C	C-24-3123 A/B/C	C-24-3131 A/B/C
C-24-3116 A/B/C	C-24-3124 A/B/C	C-24-3132 A/B/C
C-24-3117 A/B/C	C-24-3125 A/B/C	C-24-3133 A/B/C
C-24-3118 A/B/C	C-24-3126 A/B/C	C-24-3134 A/B/C
C-24-3119 A/B/C	C-24-3127 A/B/C	C-24-3135 A/B/C

SEISMIC DESIGN -SITE SPECIFIC PARAMETERS

Select One

☒ Design based on Site Class $D_{default}$
No geotechnical investigation required
Ss = .711 Fa = 1.2

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

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

S_{DS} = 2/3 Fa Ss = .711
Site Class C or D: 0.7 x S_{DS}* = 0.7 x .583 = .408 ≤ 1.307
Site Class E: S_{DS} = _____ ≤ 1.307
C_s = 0.373 used in design
Seismic Design Category: ☐ D ☐ E
* Site specific S_{DS} value before applying reduction allowed by ASCE 7 section 12.8.1.3

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

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

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

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

Class Leasing

HIGH SEISMIC
DESIGN CRITERIA

FILE #: PC-128
2022 CBC

PC # 04-123059
24' x 40' EXPANDABLE TO 120' x 40'

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

CONSTRUCTION OF CLASSROOM BUILDING (RELOCATABLE)

SCOPE OF WORK

BUILDING DESIGN

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

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

FLOOD DESIGN DATA: PROJECT NOT LOCATED IN A FLOOD ZONE

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

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

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

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

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

SEE ALT-D1

WIND DESIGN

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

EARTHQUAKE DESIGN

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

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

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

PARTIAL LIST OF APPLICABLE CODES AS OF January 1, 2023

2022 California Administrative Code (CAC), Part 1, Title 24 CCR
2022 California Building Code (CBC), Part 2, Title 24 CCR
2022 California Electrical Code (CEC), Part 3, Title 24 CCR
2022 California Mechanical Code (CMC), Part 4, Title 24 CCR
2022 California Plumbing Code (CPC), Part 5, Title 24 CCR
2022 California Energy Code, Part 6, Title 24 CCR
2022 California Fire Code (CFC), Part 9, Title 24 CCR
2022 California Existing Building Code (CEBC), Part 10, Title 24 CCR
2022 California Green Building Standards Code (CALGreen), Part 11, Title 24 CCR
2022 California Referenced Standards Code, Part 12, Title 24 CCR
Title 19 CCR, Public Safety, State Fire Marshal Regulations

APPLICABLE STANDARDS

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

REQUIRED PV SYSTEM SIZE (kW)								
CLIMATE ZONE	BUILDING SIZE: APPROXIMATE CONDITIONED FLOOR AREA							
	24'x40' 960	36'x40' 1440	48'x40' 1920	60'x40' 2400	72'x40' 2880	84'x40' 3360	96'x40' 3840	108'x40' 4320	120'x40' 4800
1	NONE	NONE	NONE	NONE	NONE	4.3	4.9	5.5	6.1
2	NONE	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	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	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

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

2 ***PV SIZING CHART***

CODE	ADOPTED YEAR	ITEM
NFPA 13

ARCHITECTURAL

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

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

① Arch Floor Framing Details 1/4" = 1'-0"	ARCHITECTURAL FLOOR FRAMING DETAILS							Sheet
☒ Wood Floor	1	2	3	4	5	6		A2.9
☐ Concrete Floor	7	8	9	10	11	12		A2.9

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

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

③ Ceiling Details 1/4" = 1'-0"	ARCHITECTURAL CEILING DETAILS					
Celing Framing	Detail					Sheet
	Wall	Joists	Access	BLK'G		
☒ T-GRID	SEE PLAN	SEE PLAN	SEE PLAN	SEE PLAN		A3.3
☐ Wood	1	2	5	Typ		A3.4

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

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

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

ARCHITECTURAL

⑬ Exterior Elevations 1/4" = 1'-0"	ARCHITECTURAL EXTERIOR ELEVATIONS	Detail		Sheet	Detail		Sheet
Exterior Elevations:	☐ 24'x40'	Left	Right		Front	Rear	
	☐ Mono Slope	1	2	A5.0	1	2	A5.1
	☐ Parapet Roof - Mono Slope	3	4	A5.0	3	4	A5.1
	☐ Dual Slope	5	6	A5.0	1	2	A5.1
	☒ 36'x40'						
	☒ Mono Slope	1	2	A5.0	5	6	A5.1
	☐ Parapet Roof - Mono Slope	3	4	A5.0	7	8	A5.1
	☐ Dual Slope	5	6	A5.0	5	6	A5.1
	☐ 48'x40' - 120'X40'						
	☐ Mono Slope	1	2	A5.0	9	10	A5.1
	☐ Parapet Roof - Mono Slope	3	4	A5.0	11	12	A5.1
	☐ Dual Slope	5	6	A5.0	9	10	A5.1

⑭ Interior Elevations 1/4" = 1'-0"	ARCHITECTURAL INTERIOR ELEVATIONS	Detail				Sheet
Interior Elevations:		Left	Right	Front	Rear	
	☐ 24'x40'	1	2	3	4	A5.2
	☒ 36'x40'	1	2	5	6	A5.2
	☐ 48'x40' - 120'X40'	1	2	8	7	A5.2

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

MEP

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

⑩ Mechanical 1/4" = 1'-0"	MECHANICAL		Sheet	
MISCELLANEOUS NOTES & DETAILS			M0.1	
			Ceiling Plan	Roof Plan
Mechanical Plans:	☐ 24' x 40'	☐ Wall Mount	M5.1	M5.2
		☐ Roof Mount	M5.1	M5.2
	☒ 36' x 40'	☒ Wall Mount	M6.1	M6.2
		☐ Roof Mount	M6.1	M6.2
	☐ 48' x 40'	☐ Wall Mount	M7.1	M7.2
		☐ Roof Mount	M7.1	M7.2
	☐ 60' x 40'	☐ Wall Mount	A0.1	
		☐ Roof Mount		
	☐ 72' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 84' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 96' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐ 108' x 40'	☐ Wall Mount		
		☐ Roof Mount		
	☐120' x 40'	☐ Wall Mount		
		☐ Roof Mount		

⑪ Electrical 1/4" = 1'-0"	ELECTRICAL	Sheet	
Reflected Ceiling Plans:	☐ 24' x 40'	☐ 8 (2'x4') Recessed Light Fixture	
		☐ 12 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	E1.0 E1.1
	☒ 36' x 40'	☐ 12 (2'x4') Recessed Light Fixture	
		☐ 18 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	E1.2 E1.3
	☐ 48' x 40'	☐ 16 (2'x4') Recessed Light Fixture	
		☐ 24 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	E1.4 E1.5
	☐ 60' x 40'	☐ 20 (2'x4') Recessed Light Fixture	
		☐ 30 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	
	☐ 72' x 40'	☐ 24 (2'x4') Recessed Light Fixture	
		☐ 36 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	
	☐ 84' x 40'	☐ 28 (2'x4') Recessed Light Fixture	
		☐ 42 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	
	☐ 96' x 40'	☐ 32 (2'x4') Recessed Light Fixture	
		☐ 48 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	
	☐ 108' x 40'	☐ 36 (2'x4') Recessed Light Fixture	
		☐ 54 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	
	☐ 120' x 40'	☐ 40 (2'x4') Recessed Light Fixture	
		☐ 60 (1'x8') Pendant Light w/ 4 (1'x16') Recessed Light	

STRUCTURAL

⑮ Foundations Plans 1/4" = 1'-0"	FOUNDATION	Sheet
☒ Wood Foundation Plan:	Wood Foundation NOTES SCHED FOR BLDG W/ 50+15	F1.10
	☐ 24'x40' (50+15 PSF)	F1.11
	☐ 24'x40' (100 PSF)	F1.21
	☐ 24'x40' (150 PSF)	F1.31
	☒ 36'x40' (50+15 PSF)	F1.12
	☐ 36'x40' (100 PSF)	F1.22
	☐ 36'x40' (150 PSF)	F1.32
	☐ 48'x40' (50+15 PSF)	F1.13
	☐ 48'x40' (100 PSF)	F1.23
	☐ 48'x40' (150 PSF)	F1.33
	Wood Foundation Details	F1.40
☒ Concrete Foundation Plan		F2.10
☒ Concrete Above Grade Foundation Details		F2.20
☒ Concrete Below Grade Foundation Details		F2.22
		F2.23

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

⑰ Floor Framing Plans 1/4" = 1'-0"	STRUCTURAL FLOOR FRAMING PLANS	Sheet
☒ Wood Sheating Floor:	☒ (50+15 PSF)	S1.01
	☐ (100 PSF)	S1.02
	☐ (150 PSF)	S1.03
☐ Concrete Framing Floor:		
	☐ (50+15 PSF)	S1.1.1
	☐ (100 PSF)	S1.1.2
	☐(150 PSF)	S1.1.3

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

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

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

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

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
ANTHONY D. TAVARES
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA

02/16/24

RST#22088

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

PROJECT OPTIONS SCHEDULE

PROJECT NUMBER: 22088

DRAWN BY: rMc/SC

CHECKED BY: RH/RT

DATE: 06/15/2021

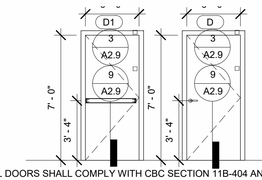
SHEET NO.: A0.0.1

SHEET OF

C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CES4R24D63.rvt
9/7/2023 11:29:29 AM

Door Schedule

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



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

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

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

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

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

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

7. DOOR LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS.

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

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

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

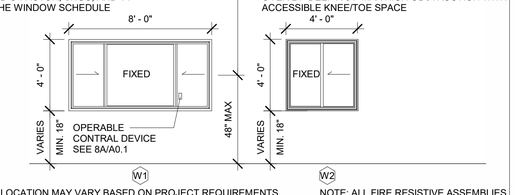
9 ***Doors***

Window Schedule

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

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

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



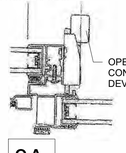
WINDOW LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS. SAFETY GLAZING MUST BE APPROPRIATELY MARKED AND IDENTIFIED.

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

ABBREVIATIONS:
DP - DUAL PANE
T - TEMPERED GLASS

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

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



8 ***Windows***

8A

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

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

3. VERIFIED ALL DIMENSIONS PRIOR TO CONSTRUCTION

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

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

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

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

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

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

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

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

2 ***A0.1 GENERAL NOTES***

MOISTURE PROTECTION INSULATION:

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

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

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

INTERIOR WALL INSULATION (MIN.)
× R-13

FLOOR INSULATION (MIN.)
□ CONCRETE SLAB WITH R-19 FIBERGLASS INSULATION
× PLYWOOD FLOOR WITH R-19 FIBERGLASS INSULATION

ROOF INSULATION (MIN.)
□ R-36 (EPDM)''
× R-36 CONTINUOUS R-X (STANDING SEAM)

SEE ALT-D1

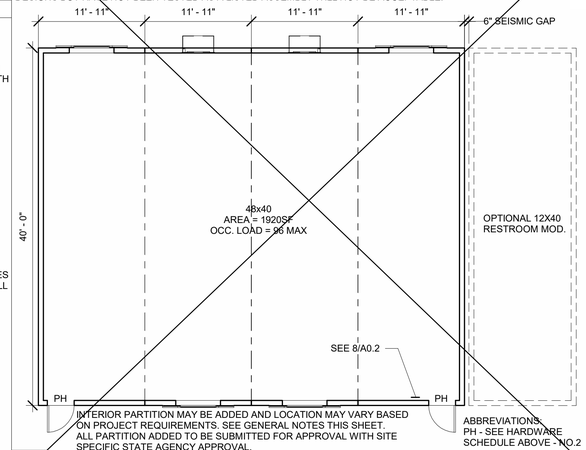
TABLE 1202.3
INSULATION FOR CONDENSATION CONTROL

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

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

3 ***Insulation Specs***

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



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

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

6 ***48x40 (Total Area 1920sf)***

Finish Schedule

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

Abbreviations:

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

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

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

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

Finishes Notes

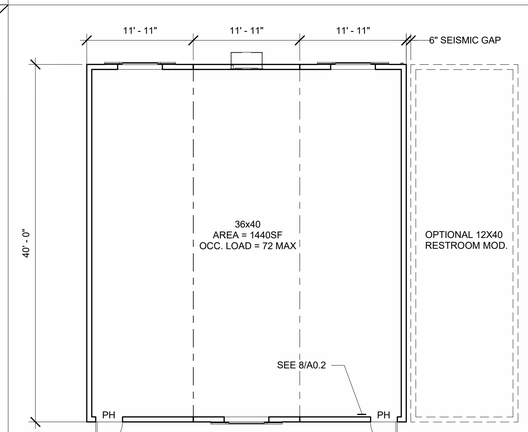
1. ALL FINISHES SHALL COMPLY WITH CBC, TITLE 19, AND C.F.C

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

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

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

5 ***Finishes and Materials***



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

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

4 ***36x40 (Total Area 1440sf)***

HARDWARE SCHEDULE

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

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

EXT CLASSROOM DOORS — **HW2**

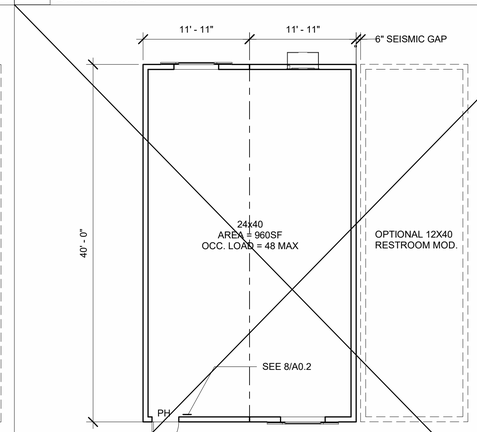
LOCKSET	TAH LHV 75 SAT 626	Finish 26D or equal
LOCKSET	SCHLAGE 23-065 626 W/ SPECIAL TAIL	Finish 26D or equal
BUTTS	TAH FB179 4.5 X 4.5 NRP 626	Finish 26D or equal
CLOSER	NORTON 8501DA 689	Finish 689 or equal
WEATHER STRIP	HAGER 891SAV 3684	Finish Alum or equal
THRESHOLD	HAGER 413SA 36	Finish Alum or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

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

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

NOTE: ALL CLASSROOM DOORS SHALL BE LOCKABLE FROM INSIDE

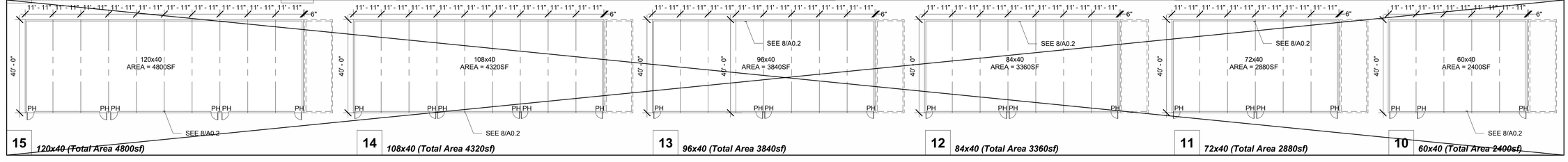
7 ***Door Hardware***



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

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

1 ***24x40 (Total Area 960sf)***



15 ***120x40 (Total Area 4800sf)*** **14** ***108x40 (Total Area 4320sf)*** **13** ***96x40 (Total Area 3840sf)*** **12** ***84x40 (Total Area 3360sf)*** **11** ***72x40 (Total Area 2880sf)*** **10** ***60x40 (Total Area 2400sf)***

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
TYPICAL KEY PLAN AND SCHEDULES, GEN NOTES,

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.1
SHEET OF

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CHAPTER 11:COMMUNICATION ELEMENTS AND FEATURES

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

11B.703 Signs

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

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

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

11B.703.2.2 Case. Characters shall be uppercase.

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

11B.703.2.4 Character Proportions. Characters shall be selected from fonts where the width of the uppercase letter "O" is 60 percent minimum and 110 percent maximum of the height of the uppercase letter "I".

11B.703.2.5 Character Height. Character height measured vertically from the baseline of the character shall be 5/8 inch (15.9 mm) minimum and 2 inches (51 mm) maximum based on the height of the uppercase letter "I".

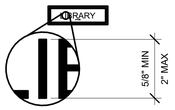


Figure 703.2.5 Height of Raised Characters

TABLE 11B-703.3.1
BRAILLE DIMENSIONS

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

1. Measured center to center.

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

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

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

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

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

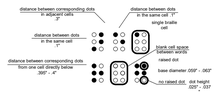


Figure 703.3.1 Braille Measurement

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

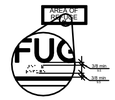
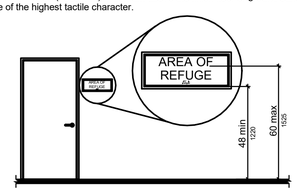


Figure 703.3.2 Position of Braille

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

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



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

Figure 703.4.1 Height of Tactile Characters Above Finish Floor or Ground

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

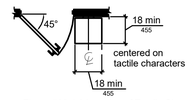


Figure 703.4.2 Location of Tactile Signs at Doors

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

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

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

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

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

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

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

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

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

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

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

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

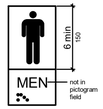
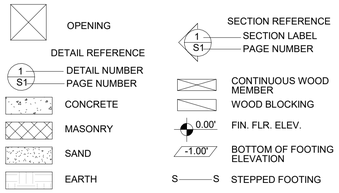


Figure 703.6.1 Pictogram Field
dark-on-light.

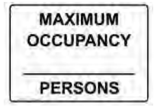


THE "INTERNATIONAL SYMBOL FOR ACCESS FOR HEARING LOSS" PROPORTIONS SHALL BE APPROXIMATE CBC FIGURE 11B-703.7.2.4

"INFORMATION TO BE PROVIDED WHEN BUILDINGS ARE SITE LOCATED"

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

NOTE: TEXT ON THIS SIGN IN VISUAL



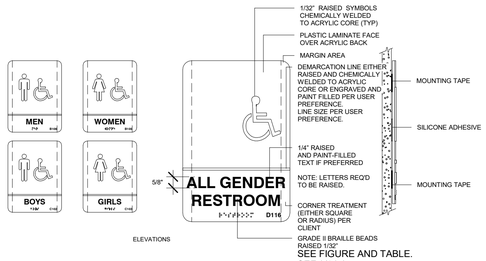
OCCUPANT LOAD SIGN REQUIRED PER DSA BU11-08.

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

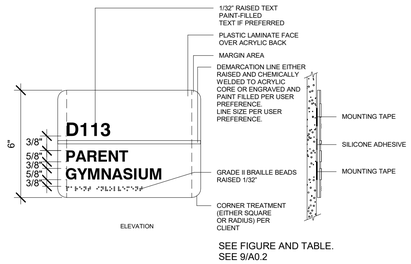
7 *1" = 1'-0"*
Assistive Listening System Symbol

8 *1" = 1'-0"*
EQUIPMENT ANCHORAGE

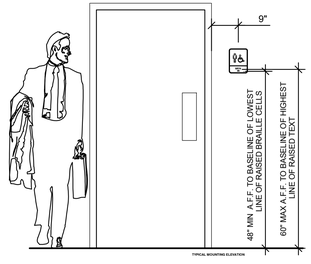
5 *1/4" = 1'-0"*
Sign Notes

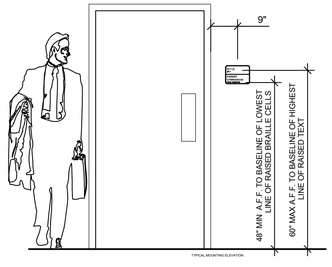


SEE FIGURE AND TABLE.
SEE 9/A0.2

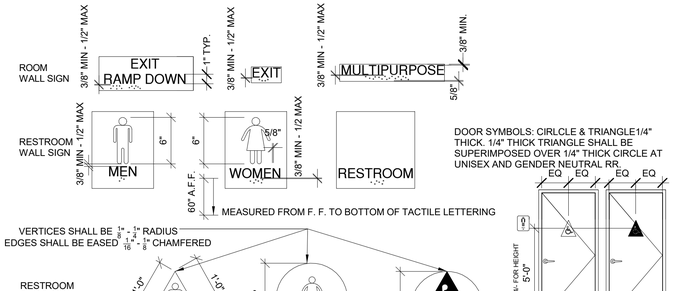


SEE FIGURE AND TABLE.
SEE 9/A0.2





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



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

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

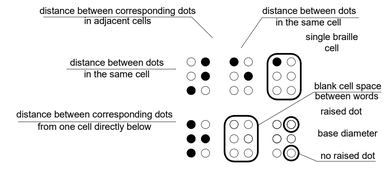
CALIFORNIA CONTRACTED BRAILLE SHALL BE USED WHENEVER BRAILLE IS REQUIRED IN OTHER PORTIONS OF THESE STANDARDS.
DOTS SHALL BE 1/10 INCH ON CENTERS IN EACH CELL WITH 2/10 INCH SPACE BETWEEN CELLS, MEASURED THE SECOND COLUMN OF DOTS IN THE FIRSTCELL TO THE FIRST COLUMN OF DOTS IN THE SECOND CELL.
DOTS SHALL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

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

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

BRAILLE DIMENSIONS

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



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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
SIGNAGE AND SYMBOLS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.2
SHEET OF

6/15/2021 11:49:05 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MathFile - Low Seismic_6.7_CESAR24D63.rvt

☐ DEFAULT CONCRETE MIX DESIGN FOR BELOW GRADE NORMAL WEIGHT CONCRETE						
CONCRETE ELEMENT	MAXIMUM W/CM RATIO	MINIMUM COMPRESSIVE STRENGTH, f'c (PSI)	CEMENTITIOUS MATERIALS - TYPES (ASTM C150)	MAX AGGREGATE SIZE	TARGET AIR CONTENT (%) ☒ CONCRETE NOT EXPOSED TO FREEZING AND THAWING CYCLES	TARGET AIR CONTENT (%) ☐ CONCRETE EXPOSED TO FREEZING AND THAWING CYCLES
FOUNDATION	0.45	4,500	TYPE V PLUS POZZOLAN OR SLAG CEMENT	1" +/- 1/4"	N/A	6
FOUNDATION VENTS & ACCESS WELLS	0.45	4,500	TYPE V PLUS POZZOLAN OR SLAG CEMENT	3/8"	N/A	7.5
				1/2"	N/A	7
				1" +/- 1/4"	N/A	6

NOTES:
(1) THE DEFAULT CONCRETE MIX DESIGN REQUIREMENTS MAY BE SELECTED AND USED FOR CONSTRUCTION PROVIDED THE THE PC DRAWINGS DO NOT REQUIRE A SITE-SPECIFIC GEOTECHNICAL REPORT THAT QUANTIFIES SULFATE CONTENT IN THE SOIL (IR PC-6, SECTION 5.5.1)
(2) DOCUMENTATION OF CONCRETE MIXTURES CHARACTERISTICS SHALL BE IN ACCORDANCE WITH ACI, SECTION 26.4.4
(3) CEMENT SHALL BE CERTIFIED PER TITLE 24, PART 2, SECTION 1910A.1
(4) THE FOUNDATION DESIGN HAS BEEN PREPARED USING A MINIMUM 28-DAY COMPRESSIVE CONCRETE STRENGTH (f'c) OF 3500 PSI

1 *SCALE*
DEFAULT CONCRETE MIX DESIGN

EXPOSURE CATEGORY: FREEZING AND THAWING (F)							
EXPOSURE CLASS		CONDITION	MAXIMUM W/CM	MINIMUM f'c	REQUIRED AIR CONTENT: MAX AGGREGATE SIZE (IN)	REQUIRED AIR CONTENT: TARGET AIR CONTENT (%)	LIMITS ON CEMENTITIOUS MATERIALS
☒	F0	CONCRETE NOT EXPOSED TO FREEZING-AND-THAWING CYCLES	0.55	3500	N/A	N/A	N/A
☐	F1	CONCRETE EXPOSED TO FREEZING-AND-THAWING CYCLES WITH LIMITED EXPOSURE TO WATER	0.55	3500	3/8"	6	N/A
					1/2"	5.5	
					3/4"	5	
					1"	4.5	
					1 1/2"	4.5	
☐	F2	CONCRETE EXPOSED TO FREEZING-AND-THAWING CYCLES WITH FREQUENT EXPOSURE TO WATER	0.45	4500	3/8"	7.5	N/A
					1/2"	7	
					3/4"	6	
					1"	6	
					1 1/2"	5.5	
☐	F3	CONCRETE EXPOSED TO FREEZING-AND-THAWING CYCLES WITH FREQUENT EXPOSURE TO WATER AND EXPOSURE TO DEICING CHEMICALS	0.4	5000	3/8"	7.5	ACI 318, SECTION 26.4.2.2(b)
					1/2"	7	
					3/4"	6	
					1"	6	
					1 1/2"	5.5	

☒ A.1 WITH OUT GEOTECH REPORT
Maximum water/cement ratio of 0.45; minimum compressive strength of 4,500 pounds per square inch (psi); Type V cement plus pozzolan or slag cement complying with Footnote 7 of ACI table 19.3.2.1; prohibition of admixtures containing calcium chloride; and 4" max slump.

☐ A.2 Optional (Site-Specific) concrete Strength: WITH GEOTECH REPORT
When the PC drawings require a site-specific geotechnical report that quantifies sulfate content in the soil, the PC drawings shall require a concrete mix shall comply with one of the following based on the exposure class for each category from ACI 318 Table 19.3.2.1 below
***(The minimum compressive strength shall not be less than 3500 psi with 4" max Slump)**

EXPOSURE CATEGORY: SULFATE (S)									
EXPOSURE CLASS		CONDITION: WATER-SOLUBLE SULFATE (SO_4^{2-}) IN SOIL, PERCENT BY MASS	CONDITION: DISSOLVED SULFATE (SO_4^{2-}) IN WATER, PPM	MAXIMUM W/CM	MINIMUM f'c	CEMENTITIOUS MATERIALS TYPES: ASTM C150	CEMENTITIOUS MATERIALS TYPES: ASTM C595	CEMENTITIOUS MATERIALS TYPES: ASTM C1157	CALCIUM CHLORIDE ADMIXTURE
☐	S0	$SO_4^{2-} < 0.10$	$SO_4^{2-} < 150$	0.55	3500	NO TYPE RESTRICTION	NO TYPE RESTRICTION	NO TYPE RESTRICTION	NO RESTRICTION
☐	S1	$0.10 \le SO_4^{2-} < 0.20$	$150 \le SO_4^{2-} < 1500$ OR SEAWATER	0.50	4000	II	TYPES WITH (MS) DESIGNATION	MS	NO RESTRICTION
☐	S2	$0.20 \le SO_4^{2-} \le 2.0$	$1500 \le SO_4^{2-} \le 10,000$	0.45	4500	V	TYPES WITH (HS) DESIGNATION	HS	NOT PERMITTED
☐	S3 (OPTION 1)	$SO_4^{2-} > 2.0$	$SO_4^{2-} > 10,000$	0.45	4500	V PLUS POZZOLAN OR SLAG CEMENT	TYPES WITH (HS) DESIGNATION PLUS POZZOLAN OR SLAG CEMENT	HS PLUS POZZOLAN OR SLAG CEMENT	NOT PERMITTED
☐	S3 (OPTION 2)	$SO_4^{2-} > 2.0$	$SO_4^{2-} > 10,000$	0.50	5000	V	TYPES WITH (HS) DESIGNATION	HS	NOT PERMITTED

EXPOSURE CATEGORY: IN CONTACT WITH WATER (W)					
EXPOSURE CLASS		CONDITION	MAXIMUM W/CM	MINIMUM f'c	ADDITIONAL REQUIREMENTS
☐	W0	CONCRETE DRY IN SERVICE OR CONCRETE IN CONTACT WITH WATER AND LOW PERMEABILITY IS NOT REQUIRED	0.55	3500	N/A
☐	W1	CONCRETE IN CONTACT WITH WATER AND LOW PERMEABILITY IS REQUIRED	0.50	3500	AGGREGATES ARE NOT ALKALI-SILCA OR ALKALI-CARBONATE REACTIVE
☐	W2	CONCRETE IN CONTACT WITH WATER AND LOW PERMEABILITY IS REQUIRED	0.50	4000	AGGREGATES ARE NOT ALKALI-SILCA OR ALKALI-CARBONATE REACTIVE

EXPOSURE CATEGORY: CORROSION PROTECTION OF REINFORCEMENT						
EXPOSURE CLASS		CONDITION	MAXIMUM W/CM	MINIMUM f'c	MAXIMUM WATER-SOLUBLE CHLORIDE ION (CL) CONTENT IN CONCRETE, PERCENT BY WEIGHT OF CEMENT (NON-PRESTRESSED CONCRETE)	ADDITIONAL REQUIREMENTS
☐	C0	CONCRETE NOT EXPOSED TO MOISTURE OR TO AN EXTERNAL SOURCE OF	0.55	3500	1.00	N/A
☐	C1	CONCRETE EXPOSED TO MOISTURE BUT NOT TO AN EXTERNAL SOURCE OF CHLORIDES	0.55	3500	0.30	N/A
☐	C2	CONCRETE EXPOSED TO MOISTURE AND AN EXTERNAL SOURCE OF CHLORIDES (DEICING	0.40	5000	0.15	CONCRETE COVER PER ACI 318, SECTION 20.5

NOTES:
(1) THE ALTERNATIVE CONCRETE MIX DESIGN REQUIREMENTS MAY BE SELECTED AND USED FOR CONSTRUCTION PROVIDE A SITE-SPECIFIC GEOTECHNICAL REPORT HAS BEEN PROVIDED AND CONFIRMS ALL APPLICABLE EXPOSURE CLASS PER ACI 318, SECTION 19.3
(2) DOCUMENTATION OF CONCRETE MIXTURES CHARACTERISTICS SHALL BE IN ACCORDANCE WITH ACI, SECTION 26.4.4
(3) CEMENT SHALL BE CERTIFIED PER TITLE 24, PART 2, SECTION 1910A.1
(4) THE FOUNDATION DESIGN HAS BEEN PREPARED USING A MINIMUM 28-DAY COMPRESSIVE CONCRETE STRENGTH (f'c) OF 3500 PSI
(5) FOR SITE-SPECIFIC LOCATIONS WITH MULTIPLE EXPOSURE CLASSES IDENTIFIED IN THE GEOTECHNICAL EXPLORATION REPORT, THE GREATER f'c ASSOCIATED WITH THE APPLICABLE EXPOSURE CLASS SHALL BE USED FOR CONSTRUCTION

SCALE
ALTERNATIVE CONCRETE MIX-DESIGN: SITE-SPECIFIC

NOT IN USE

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6/15/2021 1:49:06 PM

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

Application Number: 11-111111 **School Name:** 1 **School District:** 1
DSA File Number: **Increment Number:** **Date Created:** 2023-05-16 13:25:31

2022 CBC

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

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

KEY TO COLUMNS

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

	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify use of required design mix.	**Periodic**	**SI**	**Table 1705A.3 Item 5, 1910A.1.**
☑	**b.** Identifiy, sample, and test reinforcing steel.	**Test**	**LOR**	**1910A.2;** ACI 318-19 Ch.20 and Section 26.6.1.2; DSA IR 17-10. (See Appendix (end of this form) for exemptions.)
☑	**c.** During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	**Test**	**LOR**	**Table 1705A.3 Item 6**; ACI 318-19 Sections 26.5 & 26.12.
☑	**d.** Test concrete (f'c).	**Test**	**LOR**	**1905A.1.17;** ACI 318-19 Section 26.12.
☑	**e.** Batch plant inspection: **Continuous**	**See Notes**	**SI**	Default of **'Continuous'** per **1705A.3.3**. If approved by DSA, batch plant inspection may be reduced to **'Periodic'** subject to requirements in Section **1705A.3.3.1,** or eliminated per **1705A.3.3.2.** See IR 17-13. (See Appendix (end of this form) for exemptions.)
	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1; AISI S100-20 Section A3.1 & A3.2, AISI S240-20 Section A3 & A5, AISI S220-20 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5**; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.
	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Ultrasonic	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	**b.** Magnetic Particle	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. 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

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

2 DSA-103 CONCRETE FLOOR (STOCKPILE)

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

Application Number: 11-111111 **School Name:** 1 **School District:** 1
DSA File Number: **Increment Number:** **Date Created:** 2023-05-16 13:35:53

2022 CBC

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

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

KEY TO COLUMNS

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

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

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

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

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

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

1 DSA-103 CONCRETE FLOOR (CONCRETE FOUNDATION)

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

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

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

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

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

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

SHEET TITLE
DSA-103 T&I CONCRETE FLOORS

PROJECT NUMBER 22088
DRAWN BY rMc/SC
CHECKED BY RH/RT
DATE
SHEET NO. A0.3
SHEET OF

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

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

2022 CBC

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

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

KEY TO COLUMNS

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

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

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

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

3 DSA-103 PLYWOOD FLOOR (STOCKPILE)

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

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

2022 CBC

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

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

KEY TO COLUMNS

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

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

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

1. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
2. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291
3. Post-installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
4. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
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IF THERE IS A GEOTECHNICAL REPORT, THE GEOTECH ENGINEER SHOULD DO THE INSPECTION INSTEAD OF PROJECT INSPECTOR (PI).

2 DSA-103 PLYWOOD FLOOR (CONCRETE FOUNDATION)

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

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

2022 CBC

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

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

KEY TO COLUMNS

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

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

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

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

1 DSA-103 PLYWOOD FLOOR (WOOD FOUNDATION)

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

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

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
DSA-103 T&I PLYWOOD FLOORS

PROJECT NUMBER 22088

DRAWN BY rMc/SC

CHECKED BY RH/RT

DATE

SHEET NO. A0.4

SHEET OF

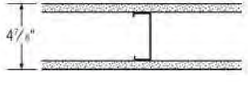
UL U419 OR UL U465 (OR EQ) TO BE USED FOR INT. STC RATING. WOOD STUD MAY BE USED ILO OF MTL STUD (WHEN NON-RATED WALLS ARE BEING APPLIED "X" BOARD IS NOT REQUIRED -STC RATINGS STILL APPLY)

Fire Test: **UL U419 or MEA 81-98-M**
Steel Stud (Non-loadbearing)
Interior Partitions
Sound Test: RAL-TL11-125

Fire Rating	STC	Thickness (in.)
1 hr.	40	4-7/8"

- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand FIRECODE Core (Type X)
- **Steel Studs** - 3-5/8 in. wide min. 25 gauge steel studs @ max 24 in. OC - **362S125-18**
- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand FIRECODE Core (Type X)

Visit U419



Fire Test: **UL U465**
Steel Stud (Non-loadbearing)
Interior Partitions
Sound Test: RAL-TL11-125

Fire Rating	STC	Thickness (in.)
1 hr.	40	4-7/8"

- **Gypsum Board** - 5/8 in. thick board, applied vertically, attached to studs with 1 in. long, Type S -12 screws, spaced 8 in. OC along the edges and 12 in. OC of the board - SHEETROCK Brand FIRECODE Core (Type X)
- **Steel Studs** - 3-5/8 in. wide min. 25 gauge steel. Attached to floor and ceiling with fasteners, 24 in. OC - **362S125-18**
- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically or horizontally. - SHEETROCK Brand FIRECODE Core (Type X)

Visit U465

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

Fire Test: **UL U457**
Steel Stud (Non-loadbearing)
Interior Partitions
Sound Test: USG-840222

Fire Rating	STC	Thickness (in.)
1 hr.	50	4-3/4"

- **Cement Board** - 1/2 thick board, square edge - DUROCK Brand Cement Board Next Gen
- **Steel Studs** - 3-5/8 in. wide by 1-1/4 in. deep, min. 20 gauge steel, max 16 in. OC - **362S125-30**
- **Batts and Blankets** - 3 in. mineral wool batt insulation
- **Gypsum Board** - 5/8 in. thick gypsum board applied vertically - SHEETROCK Brand FIRECODE Core (Type X)

Visit U457 U457

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
11590 W Bernardo Court, Suite 100
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PROFESSIONAL STAMP

RECORDED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. C-53380
03/31/24
CIVIL STRUCTURAL
STATE OF CALIFORNIA
RST#22088

02/16/24

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CLIENT

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Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

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

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

SHEET TITLE
CALGREEN SPEC'S

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.5
SHEET OF

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2022 CALIFORNIA GREEN BUILDING STANDARDS CODE

NONRESIDENTIAL MANDATORY MEASURES, SHEET 1 (January 2023)

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

CHAPTER 3
GREEN BUILDING
SECTION 301 GENERAL

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

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

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

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

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

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

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

SECTION 302 MIXED OCCUPANCY BUILDINGS

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

SECTION 303 PHASED PROJECTS

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

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

ABBREVIATION DEFINITIONS:

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

CHAPTER 5
NONRESIDENTIAL MANDATORY MEASURES

DIVISION 5.1 PLANNING AND DESIGN

SECTION 5.101 GENERAL

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

SECTION 5.102 DEFINITIONS

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

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

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

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

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

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

VANPOOL VEHICLE. Eligible vehicles are limited to any motor vehicle, other than a motortruck or truck tractor, designed for carrying more than 10 but not more than 15 persons including the driver, which is maintained and used primarily for the nonprofit work-related transportation of adults for the purpose of ridesharing.

Note: Source: Vehicle Code, Division 1, Section 668

ZEV. Any vehicle certified to zero-emission standards.

SECTION 5.106 SITE DEVELOPMENT

5.106.1 STORM WATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB LESS THAN ONE ACRE OF LAND. Newly constructed projects and additions which disturb less than one acre of land, and are not part of a larger common plan of development or sale, shall prevent the pollution of storm water runoff from the construction activities through one or more of the following measures:

5.106.1.1 Local ordinance. Comply with a lawfully enacted storm water management and/or erosion control ordinance.

5.106.1.2 Best Management Practices (BMPs). Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMPs.

1. Soil loss BMPs that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Scheduling construction activity during dry weather, when possible.
   b. Preservation of natural features, vegetation, soil, and buffers around surface waters.
   c. Drainage swales or lined ditches to control stormwater flow.
   d. Mulching or hydroseeding to stabilize disturbed soils.
   e. Erosion control to protect slopes.
   f. Protection of storm drain inlets (gravel bags or catch basin inserts).
   g. Perimeter sediment control (perimeter silt fence, fiber rolls).
   h. Sediment trap or sediment basin to retain sediment on site.
   i. Stabilized construction exits.
   j. Wind erosion control.
   k. Other soil loss BMPs acceptable to the enforcing agency.
2. Good housekeeping BMPs to manage construction equipment, materials, non-stormwater discharges and wastes that should be considered for implementation as appropriate for each project include, but are not limited to, the following:
   a. Dewatering activities.
   b. Material handling and waste management.
   c. Building materials stockpile management.
   d. Management of washout areas (concrete, paints, stucco, etc.).
   e. Control of vehicle/equipment fueling to contractor's staging area.
   f. Vehicle and equipment cleaning performed off site.
   g. Spill prevention and control.
   h. Other housekeeping BMPs acceptable to the enforcing agency.

5.106.2 STORMWATER POLLUTION PREVENTION FOR PROJECTS THAT DISTURB ONE OR MORE ACRES OF LAND. Comply with all lawfully enacted stormwater discharge regulations for projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of a larger common plan of development sale.

Note: Projects that (1) disturb one acre or more of land, or (2) disturb less than one acre of land but are part of the larger common plan of development or sale must comply with the post-construction requirements detailed in the applicable National Pollutant Discharge Elimination System (NPDES) General permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities issued by the State Water Resources Control Board or the Lahontan Regional Water Quality Control Board (for projects in the Lake Tahoe Hydrologic Unit).

The NPDES permits require postconstruction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration, and infiltration through nonstructural controls, such as Low Impact Development (LID) practices, and conversation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

5.106.4 BICYCLE PARKING. For buildings within the authority of California Building Standards Commission as specified in Section 103, comply with Section 5.106.4.1. For buildings within the authority of the Division of the State Architect pursuant to Section 105, comply with Section 5.106.4.2

5.106.4.1 Bicycle parking. [BSC-CG] Comply with Sections 5.106.4.1.1 and 5.106.4.1.2; or meet the applicable local ordinance, whichever is stricter.

5.106.4.1.1 Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5% of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack.
Exception: Additions or alterations which add nine or less visitor vehicular parking spaces.

5.106.4.1.2 Long-term bicycle parking. For new buildings with tenant spaces that have 10 or more tenant-occupants, provide secure bicycle parking for 5 percent of the tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.3 For additions or alterations that add 10 or more tenant-occupant vehicular parking spaces, provide secure bicycle parking for 5 percent of the tenant vehicular parking spaces being added, with a minimum of one bicycle parking facility.

5.106.4.1.4 For new shell buildings in phased projects provide secure bicycle parking for 5 percent of the anticipated tenant-occupant vehicular parking spaces with a minimum of one bicycle parking facility.

5.106.4.1.5 Acceptable bicycle parking facility for Sections 5.106.4.1.2, 5.106.4.1.3, and 5.106.4.1.4 shall be convenient from the street and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

Note: Additional information on recommended bicycle accommodations may be obtained from Sacramento Area Bicycle Advocates.

5.106.4.2 Bicycle parking. [DSA-SS] For public schools and community colleges, comply with Sections 5.106.4.2.1 and 5.106.4.2.2

5.106.4.2.1 Student bicycle parking. Provide permanently anchored bicycle racks conveniently accessed with a minimum of four two-bike capacity racks per new building.
5.106.4.2.2 Staff bicycle parking. Provide permanent, secure bicycle parking conveniently accessed with a minimum of two staff bicycle parking spaces per new building. Acceptable bicycle parking facilities shall be convenient from the street or staff parking area and shall meet one of the following:

1. Covered, lockable enclosures with permanently anchored racks for bicycles;
2. Lockable bicycle rooms with permanently anchored racks; or
3. Lockable, permanently anchored bicycle lockers.

5.106.5.3 Electric vehicle (EV) charging. [N] Construction to provide electric vehicle infrastructure and facilitate electric vehicle charging shall comply with Section 5.106.5.3.1 and shall be provided in accordance with regulations in the California Building Code and the California Electrical Code.

Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcement agency substantiating the local utility infrastructure design requirements directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.
2. Parking spaces accessible only by automated mechanical car parking systems are not required to comply with this code section.

5.106.5.3.1 EV capable spaces.
[N] EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:
1. Raceways complying with the California Electrical Code and no less that 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable and into a suitable listed cabinet, box,enclosure or equivalent. A common raceway may be used to serve multiple EV charging spaces.
2. A service panel or subpanel (s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.
3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply full rated amperage at each EV capable space.
4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective devices space(s) as "EV CAPABLE". The raceway termination location shall be permanently and visibly marked as "EV CAPABLE."

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by an enforcement agency. See vehicle Code Section 22511.2 for further details.

TABLE 5.106.5.3.1

TOTAL NUMBER OF ACTUAL PARKING SPACES	NUMBER OF REQUIRED EV CAPABLE SPACES	NUMBER OF EVCS (EV CAPABLE SPACES PROVIDED WITH EVSE)^2
0-9	0	0
10-25	2	0
26-50	8	2
51-75	13	3
76-100	17	4
101-150	25	6
151-200	35	9
201 AND OVER	20% of total[1]	25% of EV capable spaces[1]

1. Where there is insufficient electrical supply.
2. The number of required EVCS (EV capable spaces provided with EVSE) in column 3 count towards the total number of required EV capable spaces shown in column 2.

5.106.5.3.2 Electric vehicle charging stations (EVCS)
EV capable spaces shall be provided with EVSE to create EVCS in the number indicated in Table 5.106.5.3.1. The EVCS required by Table 5.106.5.3.1 may be provided with EVSE in any combination of Level 2 and Direct Current Fast Charging (DCFC), except that at least one Level 2 EVSE shall be provided.

One EV charger with multiple connectors capable of charging multiple EVs simultaneously shall be permitted if the electrical load capacity required by Section 5.106.5.3.1 for each EV capable space is accumulatively supplied to the EV charger.

The installation of each DCFC EVSE shall be permitted to reduce the minimum number of required EV capable spaces without EVSE by five and reduce proportionally the required electrical load capacity to the service panel or subpanel.

5.106.5.3.3 Use of automatic load management systems (ALMS).
ALMS shall be permitted for EVCS. When ALMS is installed, the required electrical load capacity specified in Section
5.106.5.3.1 for each EVCS may be reduced when serviced by an EVSE controlled by an ALMS. Each EVSE controlled by an ALMS shall deliver a minimum 30 amperes to an EV when charging one vehicle and shall deliver a minimum 3.3 kW while simultaneously charging multiple EVs.

5.106.5.3.4 Accessible EVCS.
When EVSE is installed, accessible EVSC shall be provided in accordance with the *California Building Code*, Chapter 11B, Section 11B-228.3.
Note: For EVCS signs, refer to Caltrans Traffic Operations Policy Directive 13-01 (Zero Emission Vehicle Signs and Pavement Markings) or its successor(s).

5.106.5.4 Electric Vehicle (EV) charging: medium-duty and heavy-duty. [N]
Construction shall comply with section 5.106.5.4.1 to facilitate future installation of electric vehicle supply equipment (EVSE). Construction for warehouses, grocery stores and retail stores with planned off-street loading spaces shall also comply with Section 5.106.5.4.1 for future installation of medium- and heavy-duty EVSE.
Exceptions:
1. On a case-by-case basis where the local enforcing agency has determined compliance with this section is not feasible based upon one of the following conditions:
   a. Where there is no local utility power supply.
   b. Where the local utility is unable to supply adequate power.
   c. Where there is evidence suitable to the local enforcing agency substantiating that additional local utility infrastructure design requirements, directly related to the implementation of Section 5.106.5.3, may adversely impact the construction cost of the project.

When EVSE(s) is/are installed, it shall be in accordance with the *California Building Code*, the *California Electrical Code* and as follows:

5.106.5.4.1 Electric vehicle charging readiness requirements for warehouse, grocery stores and retail stores with planned off-street loading spaces.
[N] In order to avoid future demolition when adding EV charging supply and distribution equipment, spare raceways(s) or busway(s) and adequate capacity for transformers(s), service panels(s) or subpanel(s) shall be installed at the time of construction in accordance with the California Electrical Code. Construction plans and specifications shall include but are not limited to, the following:
1. The transformer, main service equipment and subpanel shall meet the minimum power requirement in Table 5.106.5.4.1 to accommodate the dedicated branch circuits for the future installation of EVSE.
2. The construction documents shall indicate on or more location(s) convenient to the planned offstreet loading space(s) reserved for medium-and heavy-duty ZEV charging cabinets and charging dispensers, and a pathway reserved for routing conduit from the termination of the raceway(s) or busway(s) to the charging cabinet(s) and dispenser(s) as shown in Table 5.106.5.4.1
3. Raceway(s) or busway(s) originating at a main service panel or a subpanel(s) serving the area where potential future medium-and heavy-duty EVSE will be located and shall terminate in close proximity to the potential future location of the charging equipments for medium- and heavy-duty vehicles.
4. The raceway(s) or busway(s) shall be sufficient size to carry the minimum additional system load to the future location of the charging for medium- and heavy-duty ZEVs as shown in Table 5.106.5.4.1.

TABLE 5.106.5.4.1 RACEWAY CONDUIT AND PANEL POWER REQUIREMENTS FOR MEDIUM- AND HEAVY-DUTY EVSE [N]

BUILDING TYPE	BUILDING SIZE (SQ. FT.)	NUMBER OF OFF-STREET LOADING SPACES	ADDITIONAL CAPACITY REQUIRED (KVA) FOR RACEWAY & BUSWAY AND TRANSFORMER & PANEL
Grocery	10,000 to 90,000	1 or 2	200
		3 or Greater	400
	Greater than 90,000	1 or Greater	400
Retail	10,000 to 135,000	1 or 2	200
		3 or Greater	400
	Greater than 135,000	1 or Greater	400
Warehouse	20,000 to 256,000	1 or 2	200
		3 or Greater	400
	Greater than 256,000	1 or Greater	400

5.106.8 LIGHT POLLUTION REDUCTION. [N]. I Outdoor lighting systems shall be designed and installed to comply with the following:

1. The minimum requirements in the California Energy Code for Lighting Zones 0-4 as defined in Chapter 10, Section 10-114 of the California Administrative Code; and
2. Backlight (B) ratings as defined in IES TM-15-11 (shown in Table A-1 in Chapter 8);
3. Uplight and Glare ratings as defined in California Energy Code (shown in Tables 130.2-A and 130.2-B in Chapter 8) and
4. Allowable BUG ratings not exceeding those shown in Table 5.106.8, [N] or Comply with a local ordinance lawfully enacted pursuant to Section 101.7, whichever is more stringent.

Exceptions: [N]

1. Luminaires that qualify as exceptions in Sections 130.2 (b) and 140.7 of the California Energy Code.
2. Emergency lighting.
3. Building facade meeting the requirements in Table 140.7-B of the California Energy Code, Part 6.
4. Custom lighting features as allowed by the local enforcing agency, as permitted by Section 101.8 Alternate materials, designs and methods of construction.
5. Luminaires with less than 6,200 initial luminaire lumens.

TABLE 5.106.8 [N] MAXIMUM ALLOWABLE BACKLIGHT, UPLIGHT AND GLARE (BUG) RATINGS 1,2

ALLOWABLE RATING	LIGHTING ZONE LZ0	LIGHTING ZONE LZ1	LIGHTING ZONE LZ2	LIGHTING ZONE LZ3	LIGHTING ZONE LZ4
MAXIMUM ALLOWABLE BACKLIGHT RATING 3					
Luminaire greater than 2 mounting heights (MH) from property line	N/A	No Limit	No Limit	No Limit	No Limit
Luminaire back hemisphere is 1-2 MH from property line	N/A	B2	B3	B4	B4
Luminaire back hemisphere is 0.5-1 MH from property line	N/A	B1	B2	B3	B3
Luminaire back hemisphere is less than 0.5 MH from property line	N/A	B0	B0	B1	B2
MAXIMUM ALLOWABLE UPLIGHT RATING (U)					
For area lighting 3	N/A	U0	U0	U0	U0
For all other outdoor lighting,including decorative luminaires	N/A	U1	U2	U3	UR
MAXIMUM ALLOWABLE GLARE RATING 3 (G)					
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G1	G2	G3	G4
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G0	G1	G1	G2
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G0	G0	G1	G1
MAXIMUM ALLOWABLE GLARE RATING 3 (G)	N/A	G0	G0	G0	G1

1. IESNA Lighting Zones 0 and 5 are not applicable; refer to Lighting Zones as defined in the *California Energy Code* and Chapter 10 of the *California Administrative Code.*

2. For property lines that abut public walkways, bikeways, plazas and parking lots, the property line may be considered to be 5 feet beyond the actual property line for purpose of determining compliance with this section. For property lines that abut public roadways and public transit corridors, the property line may be considered to be the centerline of the public roadway or public transit corridor for the purpose of determining compliance with this section.

3. General lighting luminaires in areas such as outdoor parking, sales or storage lots shall meet these reduced ratings. Decorative luminaries located in these areas shall meet *U*-value limits for "all other outdoor lighting"

5.106.8.1 Facing- Backlight
Luminaries within 2MH of a property line shall be oriented so that the nearest property line is behind the fixture, and shall comply with the backlight rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point of that property line.
Exception: Corners. If two property lines (or two segments of the same property line) have equidistant point to the luminaire, then the luminaire may be oriented so that the intersection of the two lines (the corner) is directly behind the luminaire. The luminaire shall still use the distance to the nearest points(s) on the property lines to determine the required backlight rating.

5.106.8.2 Facing-Glare.
For luminaires covered by 5.106.8.1, if a property line also exists within or extends into the front hemisphere within 2MH of the luminaire then the luminaire shall comply with the more stringent glare rating specified in Table 5.106.8 based on the lighting zone and distance to the nearest point on the nearest property line within the front hemisphere.

Note: [N]
1.See also *California Building Code*, Chapter 12, Section 1205.6 for college campus lighting requirements for parking facilities and walkways.
2.Refer to Chapter 8 (Compliance Forms, Worksheets and Reference Material) for IES TM-15-11 Table A-1, *California Energy Code* Tables 130.2-A and 130.2-B.
3. Refer to the *California Building Code* for requirements for additions and alterations.

5.106.10 GRADING AND PAVING. Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings. Examples of methods to manage surface water include, but are not limited to, the following:

1. Swales.
2. Water collection and disposal systems.
3. French drains.
4. Water retention gardens.
5. Other water measures which keep surface water away from buildings and aid in groundwater recharge.
Exception: Additions and alterations not altering the drainage path.

5.106.12 SHADE TREES [DSA-SS]. Shade Trees shall be planted to comply with Sections 5.106.12.1, 5.106.12.2, and 5.106.12.3. Percentages shown shall be measured at noon on the summer solstice. Landscape irrigation necessary to establish and maintain tree health shall comply with Section 5.304.6.

5.106.12.1 Surface parking areas. Shade tree plantings, minimum #10 container size or equal, shall be installed to provide shade over 50 percent of the parking area within 15 years.

Exceptions: Surface parking area covered by solar photovoltaic shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.

5.106.12.2 Landscape areas. Shade tress plantings, minimum #10 container size or equal shall be installed to provide shade of 20% of the landscape area within 15 years.

Exceptions: Playfields for organized sport activity are not included in the total area calculation.

5.106.12.3. Hardscape areas. Shade tree plantings, minimum #10 container size or equal shall be installed to provide shade over 20 percent of the hardscape area within 15 years.

Exceptions:
1. Walks, hardscape areas covered by solar photovoltaic shade structures or shade structures with roofing materials that comply with Table A5.106.11.2.2 in Appendix A5 shall be permitted in whole or in part in lieu of shade tree planting.
2. Designated and marked play areas of organized sport activity are not included in the total area calculation.

DIVISION 5.2 ENERGY EFFICIENCY

SECTION 5.201 GENERAL

5.201.1 Scope [BSC-CG]. *California Energy Code [DSA-SS].* For the purposes of mandatory energy efficiency standards in this code, the California Energy Commission will continue to adopt mandatory building standards.

DIVISION 5.3 WATER EFFICIENCY AND CONSERVATION

SECTION 5.301 GENERAL

5.301.1 Scope. The provisions of this chapter shall establish the means of conserving water use indoors, outdoors and in wastewater conveyance.

SECTION 5.302 DEFINITIONS

5.302.1 Definitions. The following terms are defined in Chapter 2 *(and are included here for reference)*

EVAPOTRANSPIRATION ADJUSTMENT FACTOR (ETAF) [DSA-SS]. An adjustment factor when applied to reference evapotranspiration that adjusts for plant factors and irrigation efficiency, which ae two major influences on the amount of water that needs to be applied to the landscape.

FOOTPRINT AREA [DSA-SS]. The total area of the furthest exterior wall of the structure projected to natural grade, not including exterior areas such as stairs, covered walkways, patios and decks.

METERING FAUCET. A self-closing faucet that dispenses a specific volume of water for each actuation cycle. The volume or cycle duration can be fixed or adjustable.

GRAYWATER. Pursuant to Health and Safety Code Section 17922.12, "graywater" means untreated wastewater that has not been contaminated by any toilet discharge, has not been affected by infectious, contaminated, or unhealthy bodily wastes, and does not present a threat from contamination by unhealthful processing, manufacturing, or operating wastes. "Graywater" includes, but is not limited to wastewater from bathtubs, showers, bathroom washbasins, clothes washing machines and laundry tubs, but does not include waste water from kitchen sinks or dishwashers.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). The California ordinance regulating landscape design, installation and maintenance practices that will ensure commercial, multifamily and other developer installed landscapes greater than 2500 square feet meet an irrigation water budget developed based on landscaped area and climatological parameters.

MODEL WATER EFFICIENT LANDSCAPE ORDINANCE (MWELO). [HCD] The California model ordinance (California Code of Regulations, Title 23, Division 2, Chapter 2.7), regulating landscape design, installation and maintenance practices. Local agencies are required to adopt the updated MWELO, or adopt a local ordinance at least as effective as the MWELO.

POTABLE WATER. Water that is drinkable and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards. See definition in the California Plumbing Code, Part 5.

POTABLE WATER. [HCD] Water that is satisfactory for drinking, culinary, and domestic purposes, and meets the U.S. Environmental Protection Agency (EPA) Drinking Water Standards and the requirements of the Health Authority Having Jurisdiction.

RECYCLED WATER. Water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur [Water Code Section 13050 (n)]. Simply put, recycled water is water treated to remove waste matter attaining a quality that is suitable to use the water again.

SUBMETER. [HCD 1] A secondary device beyond a meter that measures water consumption of an individual rental unit within a multiunit residential structure or mixed-use residential and commercial structure. (See Civic Code Section 1954.202 (g) and Water code Section 517 for additional details.)

WATER BUDGET. Is the estimated total landscape irrigation water use which shall not exceed the maximum applied water allowance calculated in accordance with the Department of Water Resources Model Efficient Landscape Ordinance (MWELO).

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
CAL GREEN CHECKLIST

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.6
SHEET OF

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 2 (January 2023)

AIA California

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

Y | N/A | RESPON. PARTY

SECTION 5.303 INDOOR WATER USE
5.303.1 METERS. Separate submeters or metering devices shall be installed for the uses described in Sections 503.1.1 and 503.1.2.

5.303.1.1 Buildings in excess of 50,000 square feet. Separate submeters shall be installed as follows:

1. For each individual leased, rented or other tenant space within the building projected to consume more than 100 gal/day (380 L/day), including, but not limited to, spaces used for laundry or cleaners, restaurant or food service, medical or dental office, laboratory, or beauty salon or barber shop.
2. Where separate submeters for individual building tenants are unfeasible, for water supplied to the following subsystems:
   a. Makeup water for cooling towers where flow through is greater than 500 gpm (30 L/s).
   b. Makeup water for evaporative coolers greater than 6 gpm (0.04 L/s).
   c. Steam and hot water boilers with energy input more than 500,000 Btu/h (147 kW).

5.303.1.2 Excess consumption. A separate submeter or metering device shall be provided for any tenant within a new building or within an addition that is projected to consume more than 1,000 gal/day.

5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following:

5.303.3.1 Water Closets. The effective flush volume of all water closets shall not exceed 1.28 gallons per flush. Tank-type water closets shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Tank-Type toilets.

Note: The effective flush volume of dual flush toilets is defined as the composite, average flush volume of two reduced flushes and one full flush.

5.303.3.2 Urinals.
5.303.3.2.1 Wall-mounted Urinals. The effective flush volume of wall-mounted urinals shall not exceed 0.125 gallons per flush.

5.303.3.2.2 Floor-mounted Urinals. The effective flush volume of floor-mounted or other urinals shall not exceed 0.5 gallons per flush.

5.303.3.3 Showerheads. [BSC-CG]
5.303.3.3.1 Single showerhead. Showerheads shall have a maximum flow rate of not more than 1.8 gallons per minute at 80 psi. Showerheads shall be certified to the performance criteria of the U.S. EPA WaterSense Specification for Showerheads.

5.303.3.3.2 Multiple showerheads serving one shower. When a shower is served by more than one showerhead, the combined flow rate of all the showerheads and/or other shower outlets controlled by a single valve shall not exceed 1.8 gallons per minute at 80 psi, or the shower shall be designed to allow only one shower outlet to be in operation at a time.
Note: A hand-held shower shall be considered a showerhead.

5.303.3.4 Faucets and fountains.

5.303.3.4.1 Nonresidential Lavatory faucets. Lavatory faucets shall have a maximum flow rate of not more than 0.5 gallons per minute at 60 psi.

5.303.3.4.2 Kitchen faucets. Kitchen faucets shall have a maximum flow rate of not more than 1.8 gallons per minute at 60 psi. Kitchen faucets may temporarily increase the flow above the maximum rate, but not to exceed 2.2 gallons per minute at 60 psi, and must default to a maximum flow rate of 1.8 gallons per minute at 60 psi.

5.303.3.4.3 Wash fountains. Wash fountains shall have a maximum flow rate of not more than1.8 gallons per minute/20 [rim space (inches) at 60 psi].

5.303.3.4.4 Metering faucets. Metering faucets shall not deliver more than 0.20 gallons per cycle.

5.303.3.4.5 Metering faucets for wash fountains. Metering faucets for wash fountains shall have a maximum flow rate of not more than 0.20 gallons per minute/20 [rim space (inches) at 60 psi].

Note: Where complying faucets are unavailable, aerators or other means may be used to achieve reduction.

5.303.3.4.6 Pre-rinse spray value
When installed, shall meet the requirements in the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) Table H-2, Section 1605.3 (h)(4)(A), and Section 1607 (d)(7), and shall be equipped with an integral automatic shutoff.

FOR REFERENCE ONLY: The following table and code section have been reprinted from the *California Code of Regulations*, Title 20 (Appliance Efficiency Regulations), Section 1605.1 (h)(4) and Section 1605.3 (h)(4)(A).

TABLE H-2

STANDARDS FOR COMMERCIAL PRE-RINSE SPRAY VALUES MANUFACTURED ON OR AFTER JANUARY 28, 2019

PRODUCT CLASS [spray force in ounce force (ozf)]	MAXIMUM FLOW RATE (gpm)
Product Class 1 (≤ 5.0 ozf)	1.00
Product Class 2 (> 5.0 ozf and ≤ 8.0 ozf)	1.20
Product Class 3 (> 8.0 ozf)	1.28

5.303.4 COMMERCIAL KITCHEN EQUIPMENT.

5.303.4.1 Food Waste Disposers. Disposers shall either modulate the use of water to no more than 1 gpm when the disposer is not in use (not actively grinding food waste/no-load) or shall automatically shut off after no more than 10 minutes of inactivity. Disposers shall use no more than 8 gpm of water.
Note: This code section does not affect local jurisdiction authority to prohibit or require disposer installation.

5.303.5 AREAS OF ADDITION OR ALTERATION. For those occupancies within the authority of the California Building Standards Commission as specified in Section 103, the provisions of Section 5.303.3 and 5.303.4 shall apply to new fixtures in additions or areas of alteration to the building.

5.303.6 STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. Plumbing fixtures and fittings shall be installed in accordance with the *California Plumbing Code*, and shall meet the applicable standards referenced in Table 1701.1 of the *California Plumbing Code* and in Chapter 6 of this code.

SECTION 5.304 OUTDOOR WATER USE
5.304.1 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. Nonresidential developments shall comply with a local water efficient landscape ordinance or the current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO), whichever is more stringent.

Notes:
1. The Model Water Efficient Landscape Ordinance (MWELO) is located in the California Code of Regulations, Title 23, Chapter 2.7, Division 2.
2. MWELO and supporting documents, including a water budget calculator, are available at: https://www.water.ca.gov/.

5.304.6 OUTDOOR POTABLE WATER USE IN LANDSCAPE AREAS. For public schools and community colleges, landscape projects as described in Sections 5.304.6.1 and 5.304.6.2 shall comply with the California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, *California Code of Regulations*, except that the evapotranspiration adjustment factor (ETAF) shall be 0.65 with an additional water allowance for special landscape areas (SLA) of 0.35.

Exception: Any project with an aggregate landscape area of 2,500 square feet or less may comply with the prescriptive measures contained in Appendix D of the MWELO.

5.304.6.1 Newly constructed landscapes. New construction projects with an aggregate landscape area equal to or greater than 500 square feet.

5.304.6.2 Rehabilitated landscapes. Rehabilitated landscape projects with an aggregate landscape area equal to or greater than 1,200 square feet.

DIVISION 5.4 MATERIAL CONSERVATION AND RESOURCE EFFICIENCY

SECTION 5.401 GENERAL
5.401.1 SCOPE. The provisions of this chapter shall outline means of achieving material conservation and resource efficiency through protection of buildings from exterior moisture, construction waste diversion, employment of techniques to reduce pollution through recycling of materials, and building commissioning or testing and adjusting.

SECTION 5.402 DEFINITIONS
5.402.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ADJUST. To regulate fluid flow rate and air patterns at the terminal equipment, such as to reduce fan speed or adjust a damper.

BALANCE. To proportion flows within the distribution system, including sub-mains, branches and terminals, according to design quantities.

BUILDING COMMISSIONING. A systematic quality assurance process that spans the entire design and construction process, including verifying and documenting that building systems and components are planned, designed, installed, tested, operated and maintained to meet the owner's project requirements.

ORGANIC WASTE. Food waste, green waste, landscape and pruning wste, nonhazardous wood waste, and food soiled paper waste that is mixed in with food waste.

TEST. A procedure to determine quantitative performance of a system or equipment

SECTION 5.407 WATER RESISTANCE AND MOISTURE MANAGEMENT
5.407.1 WEATHER PROTECTION. Provide a weather-resistant exterior wall and foundation envelope as required by California Building Code Section 1402.2 (Weather Protection), manufacturer's installation instructions or local ordinance, whichever is more stringent.

5.407.2 MOISTURE CONTROL. Employ moisture control measures by the following methods.

5.407.2.1 Sprinklers. Design and maintain landscape irrigation systems to prevent spray on structures.

5.407.2.2 Entries and openings. Design exterior entries and/or openings subject to foot traffic or wind-driven rain to prevent water intrusion into buildings as follows:

5.407.2.2.1 Exterior door protection. Primary exterior entries shall be covered to prevent water intrusion by using nonabsorbent floor and wall finishes within at least 2 feet around and perpendicular to such openings plus at least one of the following:

1. An installed awning at least 4 feet in depth.
2. The door is protected by a roof overhang at least 4 feet in depth.
3. The door is recessed at least 4 feet.
4. Other methods which provide equivalent protection.

5.407.2.2.2 Flashing. Install flashings integrated with a drainage plane.

SECTION 5.408 CONSTRUCTION WASTE REDUCTION, DISPOSAL AND RECYCLING
5.408.1 CONSTRUCTION WASTE MANAGEMENT. Recycle and/or salvage for reuse a minimum of 65% of the non-hazardous construction and demolition waste in accordance with Section 5.408.1.1, 5.408.1.2 or 5.408.1.3; or meet a local construction and demolition waste management ordinance, whichever is more stringent.

5.408.1.1 Construction waste management plan. Where a local jurisdiction does not have a construction and demolition waste management ordinance, submit a construction waste management plan that:

1. Identifies the construction and demolition waste materials to be diverted from disposal by efficient usage, recycling, reuse on the project or salvage for future use or sale.
2. Determines if construction and demolition waste materials will be sorted on-site (source-separated) or bulk mixed (single stream).
3. Identifies diversion facilities where construction and demolition waste material collected will be taken.
4. Specifies that the amount of construction and demolition waste materials diverted shall be calculated by weight or volume, but not by both.

5.408.1.2 Waste Management Company. Utilize a waste management company that can provide verifiable documentation that the percentage of construction and demolition waste material diverted from the landfill complies with this section.

Note: The owner or contractor shall make the determination if the construction and demolition waste material will be diverted by a waste management company.

Exceptions to Sections 5.408.1.1 and 5.408.1.2:

1. Excavated soil and land-clearing debris.
2. Alternate waste reduction methods developed by working with local agencies if diversion or recycle facilities capable of compliance with this item do not exist.
3. Demolition waste meeting local ordinance or calculated in consideration of local recycling facilities and markets.

5.408.1.3 Waste stream reduction alternative. The combined weight of new construction disposal that does not exceed two pounds per square foot of building area may be deemed to meet the 65% minimum requirement as approved by the enforcing agency.

5.408.1.4 Documentation. Documentation shall be provided to the enforcing agency which demonstrates compliance with Sections 5.408.1.1, through 5.408.1.3. The waste management plan shall be updated as necessary and shall be accessible during construction for examination by the enforcing agency.

Notes:

1. Sample forms found in "A Guide to the California Green Building Standards Code (Nonresidential)" located www.dgs.ca.gov/BSC/Resources/Page-Content/Building-Standards-Commission-Resources-List-Folder/CALGreen may be used to assist in documenting compliance with the waste management plan.
2. Mixed construction and demolition debris processors can be located at the California Department of Resources Recycling and Recovery (CalRecycle).

5.408.2 UNIVERSAL WASTE. [A] Additions and alterations to a building or tenant space that meet the scoping provisions in Section 301.3 for nonresidential additions and alterations, shall require verification that Universal Waste items such as fluorescent lamps and ballast and mercury containing thermostats as well as other California prohibited Universal Waste materials are disposed of properly and are diverted from landfills. A list of prohibited Universal Waste materials shall be included in the construction documents.

Note: Refer to the Universal Waste Rule link at: http://www.dtsc.ca.gov/universalwaste/

5.408.3 EXCAVATED SOIL AND LAND CLEARING DEBRIS. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting primarily from land clearing shall be reused or recycled. For a phased project, such material may be stockpiled on site until the storage site is developed.

Exception: Reuse, either on or off-site, of vegetation or soil contaminated by disease or pest infestation.

Notes:

1. If contamination by disease or pest infestation is suspected, contact the County Agricultural Commissioner and follow its direction for recycling or disposal of the material.
2. For a map of know pest and/or disease quarantine zones, consult with the California Department of Food and Agriculture. (www.cdfa.ca.gov)

SECTION 5.410 BUILDING MAINTENANCE AND OPERATIONS
5.410.1 RECYCLING BY OCCUPANTS. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste, and metals or meet a lawfully enacted local recycling ordinance, if more restrictive.

Exception: Rural jurisdictions that meet and apply for the exemption in Public Resources Code 42649.82 (a)(2)(A) et seq. shall also be exempt from the organic waste portion of this section.

5.410.1.1 Additions. All additions conducted within a 12-month period under single or multiple permits, resulting in an increase of 30% or more in floor area, shall provide recycling areas on site.

Exception: Additions within a tenant space resulting in less than a 30% increase in the tenant space floor area.

5.410.1.2 Sample ordinance. Space allocation for recycling areas shall comply with Chapter 18, Part 3, Division 30 of the *Public Resources Code*. Chapter 18 is known as the California Solid Waste Reuse and Recycling Access Act of 1991 (Act).

Note: A sample ordinance for use by local agencies may be found in Appendix A of the document at the CalRecycle's web site.

5.410.2 COMMISSIONING. [N] New buildings 10,000 square feet and over. For new buildings 10,000 square feet and over, building commissioning shall be included in the design and construction processes of the building project to verify that the building systems and components meet the owner's or owner representative's project requirements. Commissioning shall be performed in accordance with this section by trained personnel with experience on projects of comparable size and complexity. For I-occupancies that are not regulated by OSHPD or for I-occupancies and L-occupancies that are not regulated y the California Energy Code Section 100.0 Scope, all requirements in Sections 5.410.2 through 5.410.2.6 shall apply.

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting systems and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements

Commissioning requirements shall include:

1. Owner's or Owner representative's project requirements.
2. Basis of design.
3. Commissioning measures shown in the construction documents.
4. Commissioning plan.
5. Functional performance testing.
6. Documentation and training.
7. Commissioning report.

Exceptions:

1. Unconditioned warehouses of any size.
2. Areas less than 10,000 square feet used for offices or other conditioned accessory spaces within unconditioned warehouses.
3. Tenant improvements less than 10,000 square feet as described in Section 303.1.1.
4. Open parking garages of any size, or open parking garage areas, of any size, within a structure.

Note: For the purposes of this section, unconditioned shall mean a building, area, or room which does not provide heating and or air conditioning.

Informational Notes:

1. IAS AC 476 is an accreditation criteria for organizations providing training and/or certification of commissioning personnel. AC 476 is available to the Authority Having Jurisdiction as a reference for qualifications of commissioning personnel. AC 476 des not certify individuals to conduct functional performance tests or to adjust and balance systems.

2. Functional performance testing for heating, ventilation, air conditioning systems and lighting controls must be performed in compliance with the *California Energy Code*.

5.410.2.1 Owner's or Owner Representative's Project Requirements (OPR). [N] The expectations and requirements of the building appropriate to its phase shall be documented before the design phase of the project begins. This documentation shall include the following:
1. Environmental and sustainability goals.
2. Building sustainable goals.
3. Indoor environmental quality requirements.
4. Project program, including facility functions and hours of operation, and need for after hours operation.
5. Equipment and systems expectations.
6. Building occupant and operation and maintenance (O&M) personnel expectations.

5.410.2.2 Basis of Design (BOD). [N] A written explanation of how the design of the building systems meets the OPR shall be completed at the design phase of the building project. The Basis of Design document shall cover the following systems:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse system.

5.410.2.3 Commissioning plan. [N] Prior to permit issuance a commissioning plan shall be completed to document how the project will be commissioned. The commissioning plan shall include the following:
1. General project information.
2. Commissioning goals.
3. Systems to be commissioned. Plans to test systems and components shall include:
   a. An explanation of the original design intent.
   b. Equipment and systems to be tested, including the extent of tests.
   c. Functions to be tested.
   d. Conditions under which the test shall be performed.
   e. Measurable criteria for acceptable performance.
4. Commissioning team information.
5. Commissioning process activities, schedules and responsibilities. Plans for the completion of commissioning shall be included.

5.410.2.4 Functional performance testing. [N] Functional performance tests shall demonstrate the correct installation and operation of each component, system and system-to-system interface in accordance with the approved plans and specifications. Functional performance testing reports shall contain information addressing each of the building components tested, the testing methods utilized, and include any readings and adjustments made.

5.410.2.5 Documentation and training. [N] A Systems Manual and Systems Operations Training are required, including Occupational Safety and Health Act (OSHA) requirements in *California Code of Regulations* (CCR), Title 8, Section 5142, and other related regulations.

5.410.2.5.1 Systems manual. [N] Documentation of the operational aspects of the building shall be completed within the systems manual and delivered to the building owner or representative. The systems manual shall include the following:
1. Site information, including facility description, history and current requirements.
2. Site contact information.
3. Basic operations and maintenance, including general site operating procedures, basic troubleshooting, recommended maintenance requirements, site events log.
4. Major systems.
5. Site equipment inventory and maintenance notes.
6. A copy of verifications required by the enforcing agency or this code.
7. Other resources and documentation, if applicable.

5.410.2.5.2 Systems operations training. [N] A program for training of the appropriate maintenance staff for each equipment type and/or system shall be developed and documented in the commissioning report and shall include the following:
1. System/equipment overview (what it is, what it does and with what other systems and/or equipment it interfaces).
2. Review and demonstration of servicing/preventive maintenance.
3. Review of the information in the Systems Manual.
4. Review of the record drawings on the system/equipment.

5.410.2.6 Commissioning report. [N] A report of commissioning process activities undertaken through the design and construction phases of the building project shall be completed and provided to the owner or representative.

5.410.4 TESTING AND ADJUSTING. New buildings less than 10,000 square feet. Testing and adjusting of systems shall be required for new buildings less than 10,000 square feet or new systems to serve an addition or alteration subject to Section 303.1.

5.410.4.2 (Reserved)

Note: For energy-related systems under the scope (Section 100) of the California Energy Code, including heating, ventilation, air conditioning (HVAC) systems and controls, indoor lighting system and controls, as well as water heating systems and controls, refer to California Energy Code Section 120.8 for commissioning requirements and Sections 120.5, 120.6, 130.4, and 140.9(b)3 for additional testing requirements of specific systems.

5.410.4.2 Systems. Develop a written plan of procedures for testing and adjusting systems. Systems to be included for testing and adjusting shall include at a minimum, as applicable to the project:

1. Renewable energy systems.
2. Landscape irrigation systems.
3. Water reuse systems.

5.410.4.3 Procedures. Perform testing and adjusting procedures in accordance with manufacturer's specifications and applicable standards on each system.

5.410.4.3.1 HVAC balancing. In addition to testing and adjusting, before a new space-conditioning system serving a building or space is operated for normal use, the system shall be balanced in accordance with the procedures defined by the Testing Adjusting and Balancing Bureau National Standards; the National Environmental Balancing Bureau Procedural Standards; Associated Air Balance Council National Standards or as approved by the enforcing agency.

5.410.4.4 Reporting. After completion of testing, adjusting and balancing, provide a final report of testing signed by the individual responsible for performing these services.

5.410.4.5 Operation and maintenance (O & M) manual. Provide the building owner or representative with detailed operating and maintenance instructions and copies of guaranties/warranties for each system. O & M instructions shall be consistent with OSHA requirements in CCR, Title 8, Section 5142, and other related regulations.

5.410.4.5.1 Inspections and reports. Include a copy of all inspection verifications and reports required by the enforcing agency.

DIVISION 5.5 ENVIRONMENTAL QUALITY

SECTION 5.501 GENERAL
5.501.1 SCOPE. The provisions of this chapter shall outline means of reducing the quantity of air contaminants that are odorous, irritating, and/or harmful to the comfort and well-being of a building's installers, occupants and neighbors.

SECTION 5.502 DEFINITIONS
5.502.1 DEFINITIONS. The following terms are defined in Chapter 2 *(and are included here for reference)*

ARTERIAL HIGHWAY. A general term denoting a highway primarily for through traffic usually on a continuous route.

A-WEIGHTED SOUND LEVEL (dBA). The sound pressure level in decibels as measured on a sound level meter using the internationally standardized A-weighting filter or as computed from sound spectral data to which A-weighting adjustments have been made.

1 BTU/HOUR. British thermal units per hour, also referred to as Btu. The amount of heat required to raise one pound of water one degree Fahrenheit per hour, a common measure of heat transfer rate. A ton of refrigeration is 12,000 Btu, the amount of heat required to melt a ton (2,000 pounds) of ice at 32^0 Fahrenheit.

COMMUNITY NOISE EQUIVALENT LEVEL (CNEL). A metric similar to the day-night average sound level (Ldn), except that a 5 decibel adjustment is added to the equivalent continuous sound exposure level for evening hours (7pm to 10pm) in addition to the 10 dB nighttime adjustment used in the Ldn.

COMPOSITE WOOD PRODUCTS. Composite wood products include hardwood plywood, particleboard and medium density fiberboard. "Composite wood products" does not include hardboard, structural plywood, structural panels, structural composite lumber, oriented strand board, glued laminated timber, timber, prefabricated wood I–joists or finger–jointed lumber, all as specified in California Code of Regulations (CCR), Title 17, Section 93120.1(a).

Note: See CCR, Title 17, Section 93120.1.

DAY-NIGHT AVERAGE SOUND LEVEL (Ldn). The A-weighted equivalent continuous sound exposure level for a 24-hour period with a 10 dB adjustment added to sound levels occurring during nighttime hours (10p.m. to 7 a.m.).

DECIBEL (db). A measure on a logarithmic scale of the magnitude of a particular quantity (such as sound pressure, sound power, sound intensity) with respect to a reference quantity.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, such as passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, electric motorcycles, and the like, primarily powered by an electric motor that draws current from a rechargeable storage battery, fuel cell, photovoltaic array, or other source of electric current. Plug-in hybrid electric vehicles (PHEV) are considered electric vehicles. For purposes of the *California Electrical Code*, off-road, self-propoelled electric vehicles, such as industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, boats, and the like, are not included.

ELECTRIC VEHICLE CHARGING STATION(S) (EVCSj). One or more spaces intended for charging electric vehicles.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). The conductors, including the ungrounded, grounded, and equipment grounding conductors and the electric vehicle connectors, attachment plugs, and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ENERGY EQUIVALENT (NOISE) LEVEL (Leq). The level of a steady noise which would have the same energy as the fluctuating noise level integrated over the time of period of interest.

EXPRESSWAY. An arterial highway for through traffic which may have partial control of access, but which may or may not be divided or have grade separations at intersections.

FREEWAY. A divided arterial highway with full control of access and with grade separations at intersections.

GLOBAL WARMING POTENTIAL (GWP). The radiative forcing impact of one mass-based unit of a given greenhouse gas relative to an equivalent unit of carbon dioxide over a given period of time. Carbon dioxide is the reference compound with a GWP of one.

GLOBAL WARMING POTENTIAL VALUE (GWP VALUE). A 100-year GWP value published by the Intergovernmental Panel on Climate Change (IPCC) in either its Second Assessment Report (SAR) (IPCC, 1995); or its Fourth Assessment A-3 Report (AR4) (IPCC, 2007). The SAR GWP values are found in column "SAR (100-yr)" of Table 2.14.; the AR4 GWP values are found in column "100 yr" of Table 2.14.

HIGH-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that is: (a) a chlorofluorocarbon, a hdrochlorofluorocarbon, a hydrofluorocarbon, a perfluorocarbon, or any compound or blend of compounds, with a GWP value equal to or greater than 150, or (B) any ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

LONG RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.5 times the pipe diameter.

LOW-GWP REFRIGERANT. A compound used as a heat transfer fluid or gas that: (A) has a GWP value less than 150, and (B) is not an ozone depleting substance as defined in Title 40 of the Code of Federal Regulations, Part 82, sec.82.3 (as amended March 10, 2009).

MERV. Filter minimum efficiency reporting value, based on ASHRAE 52.2–1999.

MAXIMUM INCREMENTAL REACTIVITY (MIR). The maximum change in weight of ozone formed by adding a compound to the "Base REactive Organic Gas (ROG) Mixture" per weight of compound added, expressed to hundreths of a gram (g O^3/g ROC).

PRODUCT-WEIGHTED MIR (PWMIR). The sum of all weighted-MIR for all ingredients in a product subject to this article. The PWMIR is the total product reactivity expressed to hundredths of a gram of ozone formed per gram of product (excluding container and packaging).

PSIG. Pounds per square inch, guage.

REACTIVE ORGANIC COMPOUND (ROC). Any compound that has the potential, once emitted, to contribute to ozone formation in the troposphere.

SCHRADER ACCESS VALVES. Access fittings with a valve core installed.

SHORT RADIUS ELBOW. Pipe fitting installed between two lengths of pipe or tubing to allow a change of direction, with a radius 1.0 times the pipe diameter.

SUPERMARKET. For the purposes of Section 5.508.2, a supermarket is any retail food facility with 8,000 square feet or more conditioned area, and that utilizes either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units.

VOC. A volatile organic compound broadly defined as a chemical compound based on carbon chains or rings with vapor pressures greater than 0.1 millimeters of mercury at room temperature. These compounds typically contain hydrogen and may contain oxygen, nitrogen and other elements. See CCR Title 17, Section 94508(a)
.
Note: Where specific regulations are cited from different agencies such as SCAQMD, ARB, etc., the VOC definition included in that specific regulation is the one that prevails for the specific measure in question.

SECTION 5.503 FIREPLACES
5.503.1 FIREPLACES. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed woodstove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances.

5.503.1.1 Woodstoves. Woodstoves and pellet stoves shall comply with U.S. EPA New Source Performance Standards (NSPS) emission limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits.

SECTION 5.504 POLLUTANT CONTROL
5.504.1 TEMPORARY VENTILATION. The permanent HVAC system shall only be used during construction if necessary to condition the building or areas of addition or alteration within the required temperature range for material and equipment installation. If the HVAC system is used during construction, use return air filters with a Minimum Efficiency Reporting Value (MERV) of 8, based on ASHRAE 52.2-1999, or an average efficiency of 30% based on ASHRAE 52.1-1992 Replace all filters immediately prior to occupancy, or, if the building is occupied during alteration, at the conclusion of construction.

5.504.3 Covering of duct openings and protection of mechanical equipment during construction. At the time of rough installation and during storage on the construction site until final startup of the heating, cooling and ventilation equipment, all duct and other related air distribution component openings shall be covered with tape, plastic, sheetmetal or other methods acceptable to the enforcing agency to reduce the amount of dust, water and debris which may enter the system.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

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

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule		
#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
CAL GREEN CHECKLIST

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A0.7

SHEET OF

AIA California

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
NONRESIDENTIAL MANDATORY MEASURES, SHEET 3 (January 2023)

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

Y | N/A | RESPON. PARTY

5.504.4 FINISH MATERIAL POLLUTANT CONTROL. Finish materials shall comply with Sections 5.504.4.1 through 5.504.4.6.

5.504.4.1 Adhesives, sealants and caulks. Adhesives, sealants, and caulks used on the project shall meet the requirements of the following standards:

1. Adhesives, adhesive bonding primers, adhesive primers, sealants, sealant primers and caulks shall comply with local or regional air pollution control or air quality management district rules where applicable, or SCAQMD Rule 1168 VOC limits, as shown in Tables 5.504.4.1 and 5.504.4.2. Such products also shall comply with the Rule 1168 prohibition on the use of certain toxic compounds (chloroform, ethylene dichloride, methylene chloride, perchloroethylene and trichloroethylene), except for aerosol products as specified in subsection 2, below.

2. Aerosol adhesives, and smaller unit sizes of adhesives, and sealant or caulking compounds (in units of product, less packaging, which do not weigh more than one pound and do not consist of more than 16 fluid ounces) shall comply with statewide VOC standards and other requirements, including prohibitions on use of certain toxic compounds, of *California Code of Regulations*, Title 17, commencing with Section 94507.

TABLE 5.504.4.1 - ADHESIVE VOC LIMIT[1,2]

Less Water and Less Exempt Compounds in Grams per Liter

ARCHITECTURAL APPLICATIONS	CURRENT VOC LIMIT
INDOOR CARPET ADHESIVES	50
CARPET PAD ADHESIVES	50
OUTDOOR CARPET ADHESIVES	150
WOOD FLOORING ADHESIVES	100
RUBBER FLOOR ADHESIVES	60
SUBFLOOR ADHESIVES	50
CERAMIC TILE ADHESIVES	65
VCT & ASPHALT TILE ADHESIVES	50
DRYWALL & PANEL ADHESIVES	50
COVE BASE ADHESIVES	50
MULTIPURPOSE CONSTRUCTION ADHESIVES	70
STRUCTURAL GLAZING ADHESIVES	100
SINGLE-PLY ROOF MEMBRANE ADHESIVES	250
OTHER ADHESIVES NOT SPECIFICALLY LISTED	50
SPECIALTY APPLICATIONS	
PVC WELDING	510
CPVC WELDING	490
ABS WELDING	325
PLASTIC CEMENT WELDING	250
ADHESIVE PRIMER FOR PLASTIC	550
CONTACT ADHESIVE	80
SPECIAL PURPOSE CONTACT ADHESIVE	250
STRUCTURAL WOOD MEMBER ADHESIVE	140
TOP & TRIM ADHESIVE	250
SUBSTRATE SPECIFIC APPLICATIONS	
METAL TO METAL	30
PLASTIC FOAMS	50
POROUS MATERIAL (EXCEPT WOOD)	50
WOOD	30
FIBERGLASS	80

1. IF AN ADHESIVE IS USED TO BOND DISSIMILAR SUBSTRATES TOGETHER, THE ADHESIVE WITH THE HIGHEST VOC CONTENT SHALL BE ALLOWED.

2. FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THIS TABLE, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168, www.arb.ca.gov/DRDB/SC/CURHTML/R1168.PDF

TABLE 5.504.4.2 - SEALANT VOC LIMIT

Less Water and Less Exempt Compounds in Grams per Liter

SEALANTS	CURRENT VOC LIMIT
ARCHITECTURAL	250
MARINE DECK	760
NONMEMBRANE ROOF	300
ROADWAY	250
SINGLE-PLY ROOF MEMBRANE	450
OTHER	420
SEALANT PRIMERS	
ARCHITECTURAL	
NONPOROUS	250
POROUS	775
MODIFIED BITUMINOUS	500
MARINE DECK	760
OTHER	750

NOTE: FOR ADDITIONAL INFORMATION REGARDING METHODS TO MEASURE THE VOC CONTENT SPECIFIED IN THESE TABLES, SEE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1168.

5.504.4.3 Paints and coatings. Architectural paints and coatings shall comply with VOC limits in Table 1 of the ARB Architectural Coatings Suggested Control Measure, as shown in Table 5.504.4.3, unless more stringent local limits apply. The VOC content limit for coatings that do not meet the definitions for the specialty coatings categories listed in Table 5.504.4.3 shall be determined by classifying the coating as a Flat, Nonflat or Nonflat-High Gloss coating, based on its gloss, as defined in Subsections 4.21, 4.36 and 4.37 of the 2007 California Air Resources Board Suggested Control Measure, and the corresponding Flat, Nonflat or Nonflat-High Gloss VOC limit in Table 5.504.4.3 shall apply.

5.504.4.3.1 Aerosol Paints and coatings. Aerosol paints and coatings shall meet the PWMIR Limits for ROC in Section 94522(a)(3) and other requirements, including prohibitions on use of certain toxic compounds and ozone depleting substances, in Sections 94522(c)(2) and (d)(2) of *California Code of Regulations*, Title 17, commencing with Section 94520; and in areas under the jurisdiction of the Bay Area Air Quality Management District additionally comply with the percent VOC by weight of product limits of Regulation 8 Rule 49.

TABLE 5.504.4.3 - CONT.

GRAMS OF VOC PER LITER OF COATING, LESS WATER & LESS EXEMPT COMPOUNDS

COATING CATEGORY	CURRENT VOC LIMIT
SPECIALTY COATINGS	
ALUMINUM ROOF COATINGS	400
BASEMENT SPECIALTY COATINGS	400
BITUMINOUS ROOF COATINGS	50
BITUMINOUS ROOF PRIMERS	350
BOND BREAKERS	350
CONCRETE CURING COMPOUNDS	350
CONCRETE/MASONRY SEALERS	100
DRIVEWAY SEALERS	50
DRY FOG COATINGS	150
FAUX FINISHING COATINGS	350
FIRE RESISTIVE COATINGS	350
FLOOR COATINGS	100
FORM-RELEASE COMPOUNDS	250
GRAPHIC ARTS COATINGS (SIGN PAINTS)	500
HIGH-TEMPERATURE COATINGS	420
INDUSTRIAL MAINTENANCE COATINGS	250
LOW SOLIDS COATINGS[1]	120
MAGNESITE CEMENT COATINGS	450
MASTIC TEXTURE COATINGS	100
METALLIC PIGMENTED COATINGS	500
MULTICOLOR COATINGS	250
PRETREATMENT WASH PRIMERS	420
PRIMERS, SEALERS, & UNDERCOATERS	100
REACTIVE PENETRATING SEALERS	350
RECYCLED COATINGS	250
ROOF COATINGS	50
RUST PREVENTATIVE COATINGS	250
SHELLACS:	
CLEAR	730
OPAQUE	550
SPECIALTY PRIMERS, SEALERS & UNDERCOATERS	100
STAINS	250
STONE CONSOLIDANTS	450
SWIMMING POOL COATINGS	340
TRAFFIC MARKING COATINGS	100
TUB & TILE REFINISH COATINGS	420
WATERPROOFING MEMBRANES	250
WOOD COATINGS	275
WOOD PRESERVATIVES	350
ZINC-RICH PRIMERS	340

1. GRAMS OF VOC PER LITER OF COATING, INCLUDING WATER & EXEMPT COMPOUNDS

2. THE SPECIFIED LIMITS REMAIN IN EFFECT UNLESS REVISED LIMITS ARE LISTED IN SUBSEQUENT COLUMNS IN THE TABLE.

3. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, ARCHITECTURAL COATINGS SUGGESTED CONTROL MEASURE, FEB. 1, 2008. MORE INFORMATION IS AVAILABLE FROM THE AIR RESOURCES BOARD.

5.504.4.3.2 Verification. Verification of compliance with this section shall be provided at the request of the enforcing agency. Documentation may include, but is not limited to, the following:
1. Manufacturer's product specification
2. Field verification of on-site product containers

5.504.4.4 Carpet Systems.
All carpet installed in the building interior shall meet the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers." Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.1 Carpet cushion. All carpet cushion installed in the building interior shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers,"Version 1.2, January 2017 (Emission testing method for California Specifications 01350).

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.4.2 Carpet adhesive. All carpet adhesive shall meet the requirements of Table 5.504.4.1.

5.504.4.5 Composite wood products. Hardwood plywood, particleboard and medium density fiberboard composite wood products used on the interior or exterior of the buildings shall meet the requirements for formaldehyde as specified in ARB's Air Toxics Control Measure (ATCM) for Composite Wood (17 CCR 93120 et seq.). Those materials not exempted under the ATCM must meet the specified emission limits, as shown in Table 5.504.4.5.

5.504.4.5.3 Documentation. Verification of compliance with this section shall be provided as requested by the enforcing agency. Documentation shall include at least one of the following:
1. Product certifications and specifications.
2. Chain of custody certifications.
3. Product labeled and invoiced as meeting the Composite Wood Products regulation (see CCR, Title 17, Section 93120, et seq.).
4. Exterior grade products marked as meeting the PS-1 or PS-2 standards of the Engineered Wood Association, the Australian AS/NZS 2269 or European 636 3S standards.
5. Other methods acceptable to the enforcing agency.

TABLE 5.504.4.5 - FORMALDEHYDE LIMITS[1]

MAXIMUM FORMALDEHYDE EMISSIONS IN PARTS PER MILLION

PRODUCT	CURRENT LIMIT
HARDWOOD PLYWOOD VENEER CORE	0.05
HARDWOOD PLYWOOD COMPOSITE CORE	0.05
PARTICLE BOARD	0.09
MEDIUM DENSITY FIBERBOARD	0.11
THIN MEDIUM DENSITY FIBERBOARD[2]	0.13

1. VALUES IN THIS TABLE ARE DERIVED FROM THOSE SPECIFIED BY THE CALIFORNIA AIR RESOURCES BOARD, AIR TOXICS CONTROL MEASURE FOR COMPOSITE WOOD AS TESTED IN ACCORDANCE WITH ASTM E 1333. FOR ADDITIONAL INFORMATION, SEE CALIFORNIA CODE OF REGULATIONS, TITLE 17, SECTIONS 93120 THROUGH 93120.12.

2. THIN MEDIUM DENSITY FIBERBOARD HAS A MAXIMUM THICKNESS OF 5/16 INCHES (8 MM).

5.504.4.6 Resilient flooring systems. Where resilient flooring is installed, at least 80 percent of floor area receiving resilient flooring shall meet the requirements of the California Department of Public Health,"Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers," Version 1.2, January 2017 (Emission testing method for California Specifications 01350)

See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.6.1 Verification of compliance. Documentation shall be provided verifying that resilient flooring materials meet the pollutant emission limits.

5.504.4.7 Thermal insulation
Comply with the requirements of the California Department of Public Health, "Standard Method of the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, "Version 1.2, January 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.
https://www.cdph.ca.gov/Programs/CCDPHP/DEODC/EHLB/IAQ/Pages/VOC.aspx#material

5.504.4.7.1 Verification of compliance.
Documentation shall be provided verifying that thermal insulation materials meet the pollutant emission limits.

5.504.4.8 Acoustical ceiling and wall panels.
Comply with the requirements of the California Department of Public Health, "Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers, " Version 1.2, January 2017 (Emission testing method for California Specification 01350).
See California Department of Public Health's website for certification programs and testing labs.

5.504.4.8.1 Verification of compliance. Documentation shall be provided verifying that acoustical finish materials meet the pollutant emission limits.

5.504.5.3 Filters. In mechanically ventilated buildings, provide regularly occupied areas of the building with air filtration media for outside and return air that provides at least a Minimum Efficiency Reporting Value (MERV) of 13. MERV 13 filters shall be installed prior to occupancy, and recommendations for maintenance with filters of the same value shall be included in the operation and maintenance manual.

Exceptions: Existing mechanical equipment.

5.504.5.3.1 Labeling. Installed filters shall be clearly labeled by the manufacturer indicating the MERV rating.

5.504.7 ENVIRONMENTAL TOBACCO SMOKE (ETS) CONTROL. Where outdoor areas are provided for smoking, prohibit smoking within 25 feet of building entries, outdoor air intakes and operable windows and within the building as already prohibited by other laws or regulations; or as enforced by ordinances, regulations or policies of any city, county, city and county, California Community College, campus of the California State University, or campus of the University of California, whichever are more stringent. When ordinances, regulations or policies are not in place, post signage to inform building occupants of the prohibitions.

SECTION 5.505 INDOOR MOISTURE CONTROL

5.505.1 INDOOR MOISTURE CONTROL. Buildings shall meet or exceed the provisions of California Building Code, CCR, Title 24, Part 2, Sections 1202 (Ventilation) and Chapter 14 (Exterior Walls). For additional measures, see Section 5.407.2 of this code.

SECTION 5.506 INDOOR AIR QUALITY

5.506.1 OUTSIDE AIR DELIVERY. For mechanically or naturally ventilated spaces in buildings, meet the minimum requirements of Section 120.1 (Requirements For Ventilation) of the *California Energy Code*, or the applicable local code, whichever is more stringent, and Division 1, Chapter 4 of CCR, Title 8.

5.506.2 CARBON DIOXIDE (CO_2) MONITORING. For buildings or additions equipped with demand control ventilation, CO_2 sensors and ventilation controls shall be specified and installed in accordance with the requirements of the California Energy Code, Section 120(c)(4).

5.506.3 Carbon dioxide (CO2) monitoring in classrooms.
(DSA-SS) Each public K-12 school classroom, as listed in Table 120.1-A of the *California Energy Code,* shall be equipped with a carbon dioxide monitor or sensor that meets the following requirements:
1. The monitor or sensor shall be permanently affixed in a tamper-proof manner in each classroom between 3 and 6 feet (914 mm and 1829 mm) above the floor and at least 5 feet (1524 mm) away from door and operable windows.
2. When the monitor or sensor is not integral to an Energy Management Control System (EMCS), the monitor or sensor shall display the carbon dioxide readings on the device. When the sensor is integral to an EMCS, the carbon dioxide readings shall be available to and regularly monitored by facility personnel.
3. A monitor shall provide notification though a visual indicator on the monitor when the carbon dioxide levels in the classroom have exceeded 1,100ppm. A sensor integral to an EMCS shall provide notification to facility personnel through a visual and/or audible indicator when the carbon dioxide levels in the classroom have exceeded 1,100ppm.
4. The monitor or sensor shall measure carbon dioxide levels at minimum 15- minute intervals and shall maintain a record of previous carbon dioxide measurements of not less than 30 days duration.
5. The monitor or sensor used to measure carbon dioxide levels shall have the capacity to measure carbon dioxide levels with a range of 400ppm to 2000ppm or greater.
6. The monitor or sensor shall be certified by the manufacturer to be accurate within 75ppm at 1,000ppm carbon dioxide concentration and shall be certified by the manufacturer to require calibration no more frequently than once every 5 years.

SECTION 5.507 ENVIRONMENTAL COMFORT

5.507.4 ACOUSTICAL CONTROL. Employ building assemblies and components with Sound Transmission Class (STC) values determined in accordance with ASTM E 90 and ASTM E 413, or Outdoor-Indoor Sound Transmission Class (OITC) determined in accordance with ASTM E 1332, using either the prescriptive or performance method in Section 5.507.4.1 or 5.507.4.2.

Exception: Buildings with few or no occupants or where occupants are not likely to be affected by exterior noise, as determined by the enforcement authority, such as factories, stadiums, storage, enclosed parking structures and utility buildings.

Exception: [DSA-SS] For public schools and community colleges, the requirements of this section and all subsections apply only to new construction.

5.507.4.1 Exterior noise transmission, prescriptive method. Wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall meet a composite STC rating of at least 50 or a composite OITC rating of no less than 40, with exterior windows of a minimum STC of 40 or OITC of 30 in the following locations:

1. Within the 65 CNEL noise contour of an airport.

   Exceptions:

   1. L_{dn} or CNEL for military airports shall be determined by the facility Air Installation Compatible Land Use Zone (AICUZ) plan.
   2. L_{dn} or CNEL for other airports and heliports for which a land use plan has not been developed shall be determined by the local general plan noise element.

2. Within the 65 CNEL or L_{dn} noise contour of a freeway or expressway, railroad, industrial source or fixed-guideway source as determined by the Noise Element of the General Plan.

5.507.4.1.1. Noise exposure where noise contours are not readily available. Buildings exposed to a noise level of 65 dB L_{eq} - 1-hr during any hour of operation shall have building, addition or alteration exterior wall and roof-ceiling assemblies exposed to the noise source meeting a composite STC rating of at least 45 (or OITC 35), with exterior windows of a minimum STC of 40 (or OITC 30).

5.507.4.2 Performance Method. For buildings located as defined in Section 5.507.4.1 or 5.507.4.1.1, wall and roof-ceiling assemblies exposed to the noise source making up the building or addition envelope or altered envelope shall be constructed to provide an interior noise environment attributable to exterior sources that does not exceed an hourly equivalent noise level (Leq-1Hr) of 50 dBA in occupied areas during any hour of operation.

5.507.4.2.1 Site Features. Exterior features such as sound walls or earth berms may be utilized as appropriate to the building, addition or alteration project to mitigate sound migration to the interior.

5.507.4.2.2 Documentation of Compliance. An acoustical analysis documenting complying interior sound levels shall be prepared by personnel approved by the architect or engineer of record.

5.507.4.3 Interior sound transmission. Wall and floor-ceiling assemblies separating tenant spaces and tenant spaces and public places shall have an STC of at least 40.

Note: Examples of assemblies and their various STC ratings may be found at the California Office of Noise Control: www.toolbase.org/PDF/CaseStudies/stc_icc_ratings.pdf.

SECTION 5.508 OUTDOOR AIR QUALITY

5.508.1 Ozone depletion and greenhouse gas reductions. Installations of HVAC, refrigeration and fire suppression equipment shall comply with Sections 5.508.1.1 and 5.508.1.2.

5.508.1.1 Chlorofluorocarbons (CFCs). Install HVAC, refrigeration and fire suppression equipment that do not contain CFCs.

5.508.1.2 Halons. Install HVAC, refrigeration and fire suppression equipment that do not contain Halons.

5.508.2 Supermarket refrigerant leak reduction. New commercial refrigeration systems shall comply with the provisions of this section when installed in retail food stores 8,000 square feet or more conditioned area, and that utilize either refrigerated display cases, or walk-in coolers or freezers connected to remote compressor units or condensing units. The leak reduction measures apply to refrigeration systems containing high-global-warming potential (high-GWP) refrigerants with a GWP of 150 or greater. New refrigeration systems include both new facilities and the replacement of existing refrigeration systems in existing facilities.

Exception: Refrigeration systems containing low-global warming potential (low-GWP) refrigerant with a GWP value less than 150 are not subject to this section. Low-GWP refrigerants are nonozone-depleting refrigerants that include ammonia, carbon dioxide (CO_2), and potentially other refrigerants.

5.508.2.1 Refrigerant piping. Piping compliant with the California Mechanical Code shall be installed to be accessible for leak protection and repairs. Piping runs using threaded pipe, copper tubing with an outside diameter (OD) less than 1/4 inch, flared tubing connections and short radius elbows shall not be used in refrigerant systems except as noted below.

5.508.2.1.1 Threaded pipe. Threaded connections are permitted at the compressor rack.

5.508.2.1.2 Copper pipe. Copper tubing with an OD less than 1/4 inch may be used in systems with a refrigerant charge of 5 pounds or less.

5.508.2.1.2.1 Anchorage. One-fouth-inch OD tubing shall be securely clamped to a rigid base to keep vibration levels below 8 mils.

5.508.2.1.3 Flared tubing connections. Double-flared tubing connections may be used for pressure controls, valve pilot lines and oil.

Exception: Single-flared tubing connections may be used with a multiring seal coated with industrial sealant suitable for use with refrigerants and tightened in accordance with manufacturer's recommendations.

5.508.2.1.4 Elbows. Short radius elbows are only permitted where space limitations prohibit use of long radius elbows.

5.508.2.2 Valves. Valves Valves and fittings shall comply with the *California Mechanical Code* and as follows.

5.508.2.2.1 Pressure relief valves. For vessels containing high-GWP refrigerant, a rupture disc shall be installed between the outlet of the vessel and the inlet of the pressure relief valve.

5.508.2.2.1.1 Pressure detection. A pressure gauge, pressure transducer or other device shall be installed in the space between the rupture disc and the relief valve inlet to indicate a disc rupture or discharge of the relief valve.

5.508.2.2.2 Access valves. Only Schrader access valves with a brass or steel body are permitted for use.

5.508.2.2.2.1 Valve caps. For systems with a refrigerant charge of 5 pounds or more, valve caps shall be brass or steel and not plastic.

5.508.2.2.2.2 Seal caps. If designed for it, the cap shall have a neoprene O-ring in place.

5.508.2.2.2.2.1 Chain tethers. Chain tethers to fit ovr the stem are required for valves designed to have seal caps.

Exception: Valves with seal caps that are not removed from the valve during stem operation.

5.508.2.3 Refrigerated service cases. Refrigerated service cases holding food products containing vinegar and salt shall have evaporator coils of corrosion-resistant material, such as stainless steel; or be coated to prevent corrosion from these substances.

5.508.2.3.1 Coil coating. Consideration shall be given to the heat transfer efficiency of coil coating to maximize energy efficiency.

5.508.2.4 Refrigerant receivers. Refrigerant receivers with capacities greater than 200 pounds shall be fitted with a device tha indicates the level of refrigerant in the receiver.

5.508.2.5 Pressure testing. The system shall be pressure tested during installation prior to evacuation and charging.

5.508.2.5.1 Minimum pressure. The system shall be charged with regulated dry nitrogen and appropriate tracer gas to bring system pressure up to 300 psig minimum.

5.508.2.5.2 Leaks. Check the system for leaks, repair any leaks, and retest for pressure using the same gauge.

5.508.2.5.3 Allowable pressure change. The system shall stand, unaltered, for 24 hours with no more than a +/- one pound pressure change from 300 psig, measured with the same gauge.

5.508.2.6 Evacuation. The system shall be evacuated after pressure testing and prior to charging.

5.508.2.6.1 First vacuum. Pull a system vacuum down to at least 1000 microns (+/- 50 microns), and hold for 30 minutes.

5.508.2.6.2 Second vacuum. Pull a second system vacuum to a minimum of 500 microns and hold for 30 minutes.

5.508.2.6.3 Third vacuum. Pull a third vacuum down to a minimum of 300 microns, and hold for 24 hours with a maximum drift of 100 microns over a 24-hour period.

CHAPTER 7
INSTALLER & SPECIAL INSPECTOR QUALIFICATIONS

702 QUALIFICATIONS

702.1 INSTALLER TRAINING. HVAC system installers shall be trained and certified in the proper installation of HVAC systems including ducts and equipment by a nationally or regionally recognized training or certification program. Uncertified persons may perform HVAC installations when under the direct supervision and responsibility of a person trained and certified to install HVAC systems or contractor licensed to install HVAC systems. Examples of acceptable HVAC training and certification programs include but are not limited to the following:

1. State certified apprenticeship programs.
2. Public utility training programs.
3. Training programs sponsored by trade, labor or statewide energy consulting or verification organizations.
4. Programs sponsored by manufacturing organizations.
5. Other programs acceptable to the enforcing agency.

702.2 SPECIAL INSPECTION [HCD]. When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition to other certifications or qualifications acceptable to the enforcing agency, the following certifications or education may be considered by the enforcing agency when evaluating the qualifications of a special inspector:

1. Certification by a national or regional green building program or standard publisher.
2. Certification by a statewide energy consulting or verification organization, such as HERS raters, building performance contractors, and home energy auditors.
3. Successful completion of a third party apprentice training program in the appropriate trade.
4. Other programs acceptable to the enforcing agency.

Notes:

1. Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.
2. HERS raters are special inspectors certified by the California Energy Commission (CEC) to rate homes in California according to the Home Energy Rating System (HERS).

[BSC-CG] When required by the enforcing agency, the owner or the responsible entity acting as the owner's agent shall employ one or more special inspectors to provide inspection or other duties necessary to substantiate compliance with this code. Special inspectors shall demonstrate competence to the satisfaction of the enforcing agency for the particular type of inspection or task to be performed. In addition, the special inspector shall have a certification from a recognized state, national or international association, as determined by the local agency. The area of certification shall be closely related to the primary job function, as determined by the local agency.

Note: Special inspectors shall be independent entities with no financial interest in the materials or the project they are inspecting for compliance with this code.

703 VERIFICATIONS

703.1 DOCUMENTATION. Documentation used to show compliance with this code shall include but is not limited to, construction documents, plans, specifications, builder or installer certification, inspection reports, or other methods acceptable to the enforcing agency which demonstrate substantial conformance. When specific documentation or special inspection is necessary to verify compliance, that method of compliance will be specified in the appropriate section or identified applicable checklist.

DISCLAIMER: *THIS DOCUMENT IS PROVIDED AND INTENDED TO BE USED AS A MEANS TO INDICATE AREAS OF COMPLIANCE WITH THE CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE. DUE TO THE VARIABLES BETWEEN BUILDING DEPARTMENT JURISDICTIONS, THIS CHECKLIST IS TO BE USED ON AN INDIVIDUAL PROJECT BASIS AND MAY BE MODIFIED BY THE END USER TO MEET THOSE INDIVIDUAL NEEDS. THE END USER ASSUMES ALL RESPONSIBILITY ASSOCIATED WITH THE USE OF THIS DOCUMENT, INCLUDING VERIFICATION WITH THE FULL CODE.*

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PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ♦ CONSULTING ♦ PROJECT MGT
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PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. S3380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

Revision Schedule

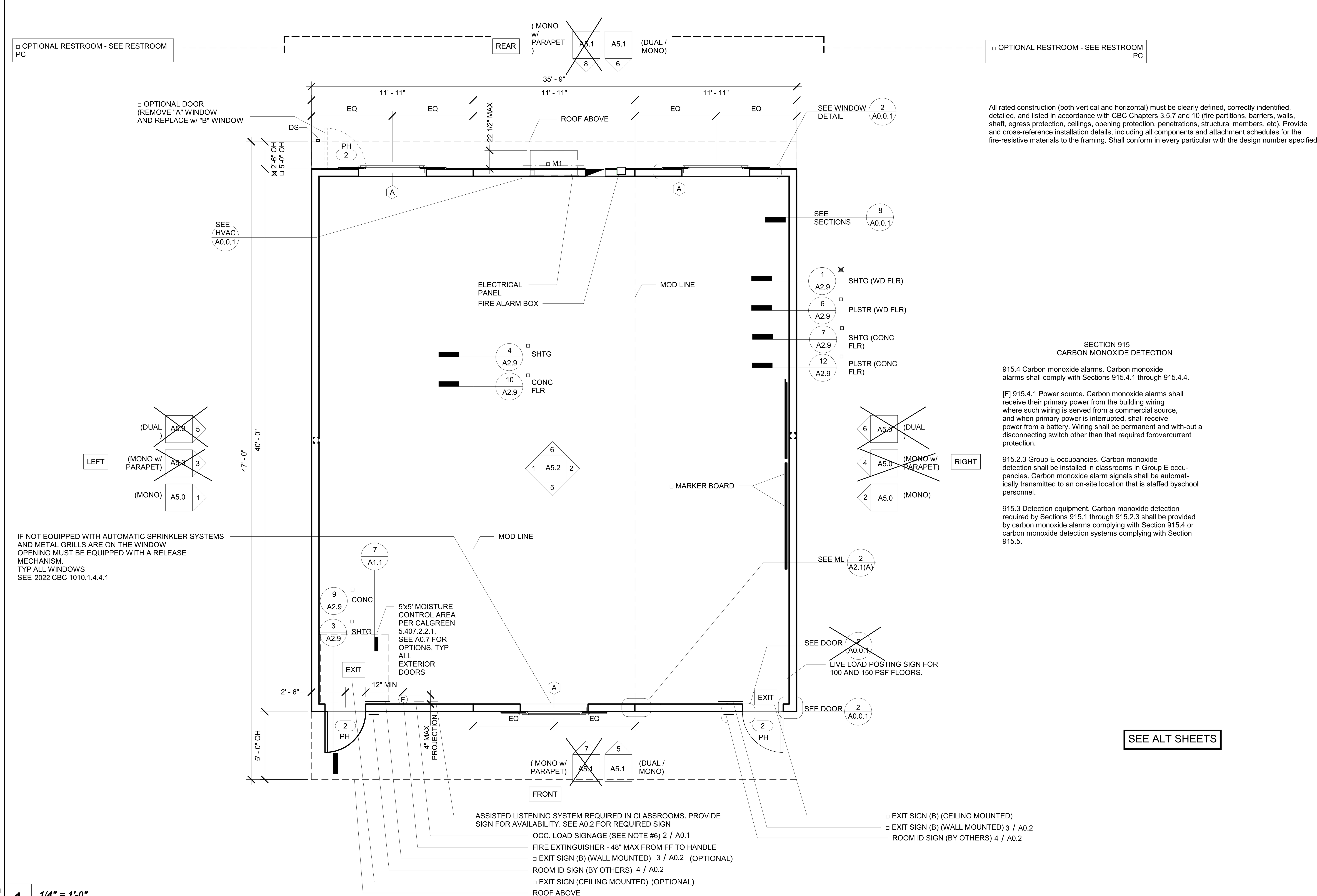
#	Description	Date

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

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

SHEET TITLE
CAL GREEN CHECKLIST

PROJECT NUMBER 22088
DRAWN BY rMc/SC
CHECKED BY RH/RT
DATE
SHEET NO. A0.8
SHEET OF



1 — 1/4" = 1'-0" *36x40 Floor Plan*

All rated construction (both vertical and horizontal) must be clearly defined, correctly indentified, detailed, and listed in accordance with CBC Chapters 3,5,7 and 10 (fire partitions, barriers, walls, shaft, egress protection, ceilings, opening protection, penetrations, structural members, etc). Provide and cross-reference installation details, including all components and attachment schedules for the fire-resistive materials to the framing. Shall conform in every particular with the design number specified

SECTION 915
CARBON MONOXIDE DETECTION

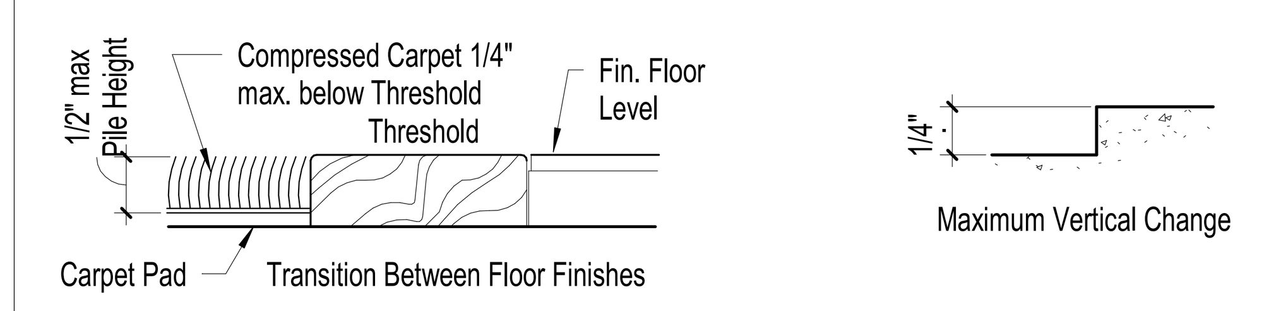
915.4 Carbon monoxide alarms. Carbon monoxide alarms shall comply with Sections 915.4.1 through 915.4.4.

[F] 915.4.1 Power source. Carbon monoxide alarms shall receive their primary power from the building wiring where such wiring is served from a commercial source, and when primary power is interrupted, shall receive power from a battery. Wiring shall be permanent and with-out a disconnecting switch other than that required forovercurrent protection.

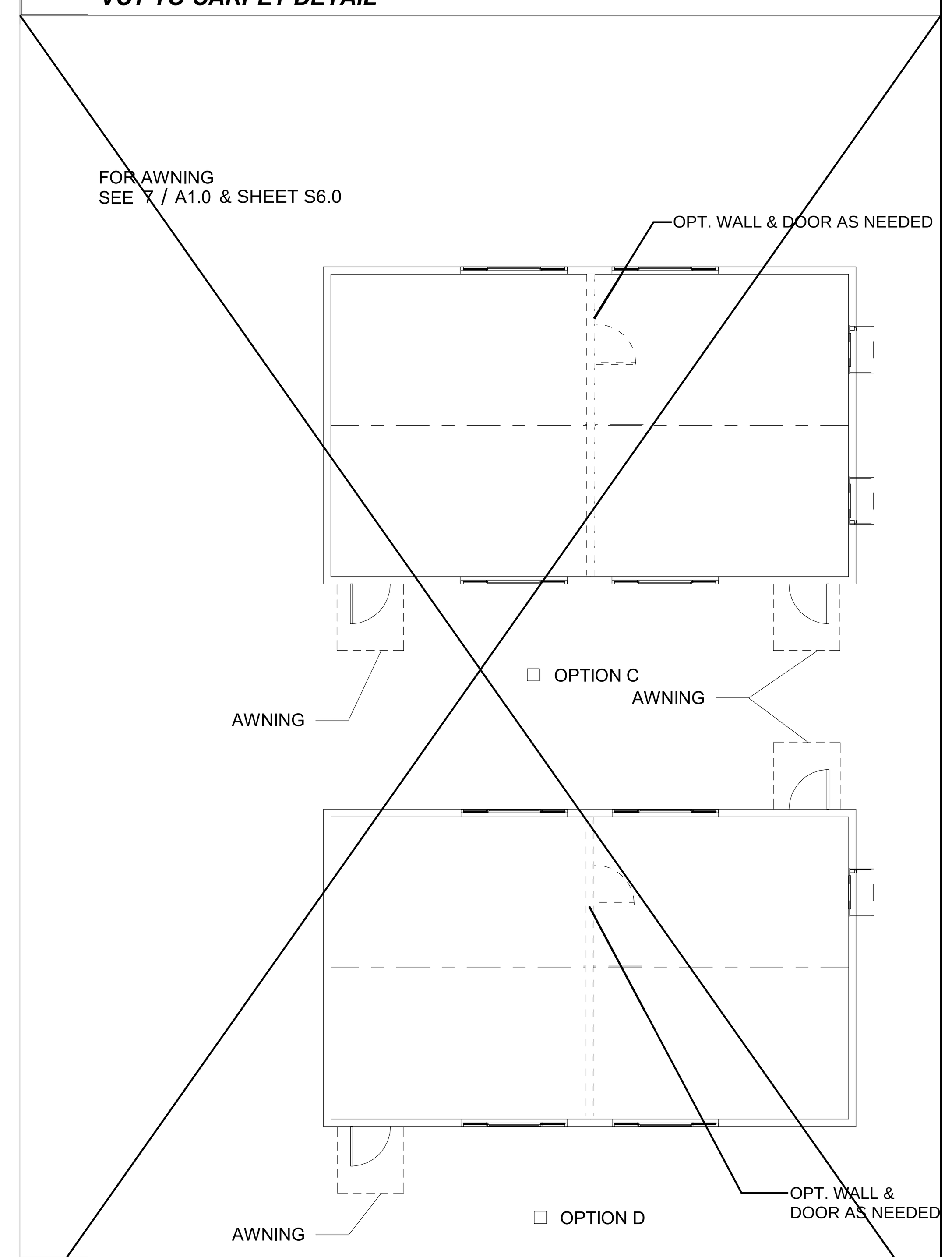
915.2.3 Group E occupancies. Carbon monoxide detection shall be installed in classrooms in Group E occu-pancies. Carbon monoxide alarm signals shall be automat-ically transmitted to an on-site location that is staffed byschool personnel.

915.3 Detection equipment. Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5.

SEE ALT SHEETS



7 — 1/4" = 1'-0" *VCT TO CARPET DETAIL*



6 — 1" = 10'-0" *36X40 FLOOR PLAN OPTIONS*

Wall Schedule

	Stud Size	Sheet	Notes
x	Wood Wall Stud	S4.5	
			FOR BURNING CHARACTERISTIC SEE 3 / A0.1

5 — 1/4" = 1'-0" *Wall Schedule*

Fire Rating Schedule

	Rating	Sheet	Notes
☐	1 HOUR - SIDING OVER WD STUDS	A2.5	
☐	1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.6	

SEE A3.0 FOR ADDITIONAL FIRE ASSEMBLY NOTES AND DETAILS

4 — 1/4" = 1'-0" *Fire Rating Schedule*

Ext. Finish Schedule

	Finishes	Sheet	Notes
x	SIDING OVER WD STUDS	A2.1	
☐	PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.2	

3 — 1/4" = 1'-0" *Ext. Finish Schedule*

Roofing Schedule

"SLOPE"	EDPM	Standing Seam	Parapet	Notes
Dual	☐ A4.2.2	☐ A4.0.2	N/A	
Mono	☐ A4.2.1	x A4.0.1	☐ A4.4.1	

HVAC Unit

Keynote	Type	Type Comments
x M1	Wall Mounted HVAC	See (M)-Sheets
☐ M2	Roof Mounted HVAV	See (M)-Sheets

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER MANNY D. FRISCH S3380 03/31/24 STRUCTURAL STATE OF CALIFORNIA
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
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PROJECT TITLE
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SHEET TITLE
36x40 FLOOR PLAN

PROJECT NUMBER 22088
DRAWN BY rMc/SC
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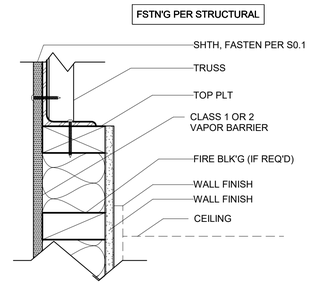
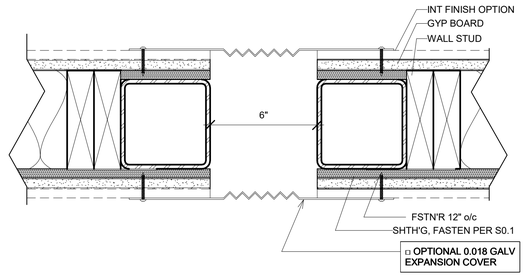
DATE

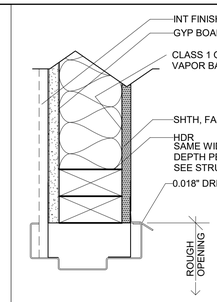
SHEET NO.
A1.1
SHEET OF



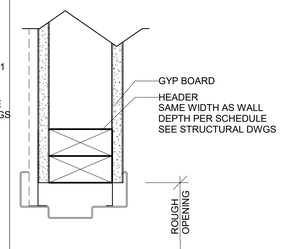
17 *3" = 1'-0"*
Section - Top Plate Shtg Finish



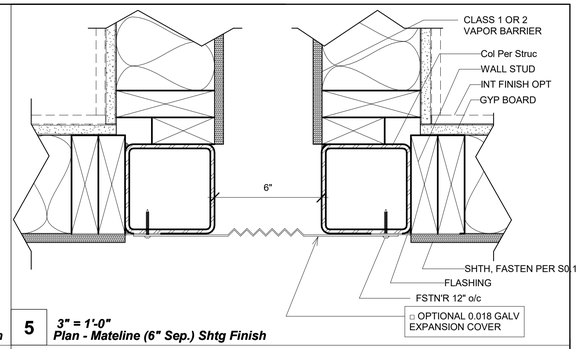
18 *3" = 1'-0"*
Plan - Interior Wall "OPEN" (6" Sep.) Shtg Finish



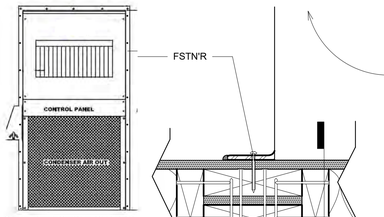
10A *3" = 1'-0"*
Section - Ext Wall Hdr Door Shtg Finish



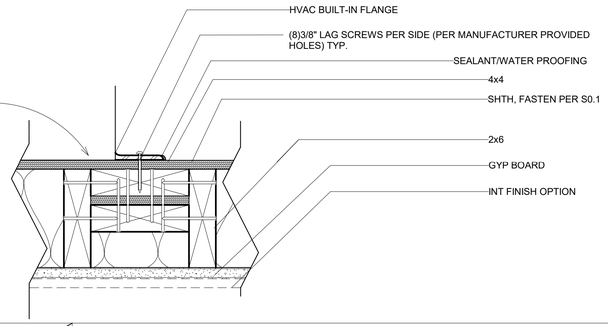
10B *3" = 1'-0"*
Section - Int Wall Hdr Door Shtg Finish



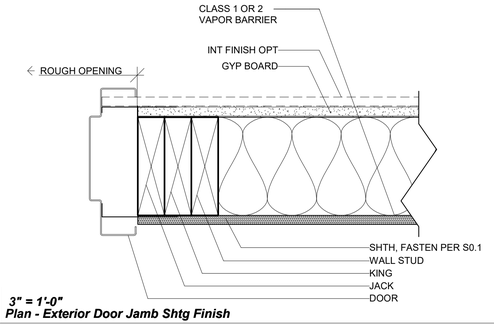
5 *3" = 1'-0"*
Plan - Mateline (6" Sep.) Shtg Finish



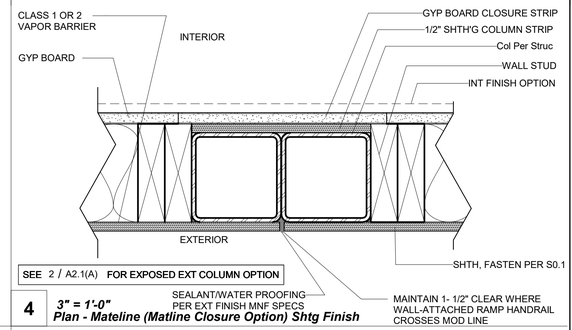
CANE-DETECTIBLE GUARDS
ARE REQUIRED WHEN A/C UNIT
PROJECTS INTO A CIRCULATION
AREA 11B-307
SEE DETAIL: 4 / A7.2& 5 / A7.2
FOR GUARD DETAIL. (OFOI)



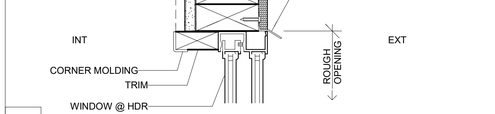
16 *3" = 1'-0"*
Plan - HVAC Unit Shtg Finish



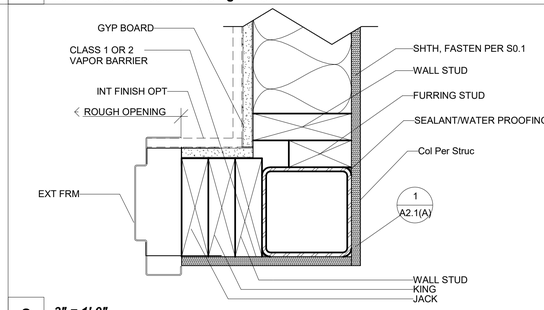
9 *3" = 1'-0"*
Plan - Exterior Door Jamb Shtg Finish



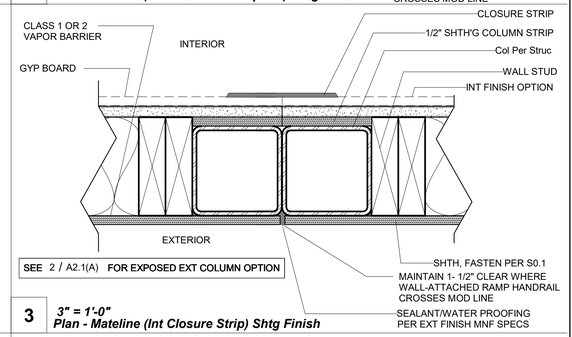
4 *3" = 1'-0"*
Plan - Mateline (Matline Closure Option) Shtg Finish



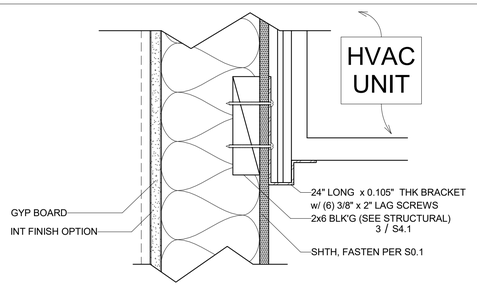
13 *3" = 1'-0"*
Section - Ext Wall Header @ Window Shtg Finish



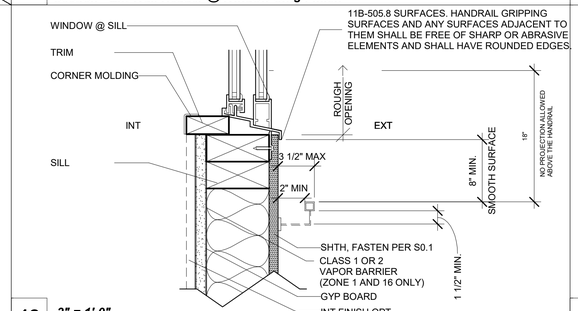
8 *3" = 1'-0"*
Plan - Exterior Door Jamb @ Wall Corner Shtg Finish



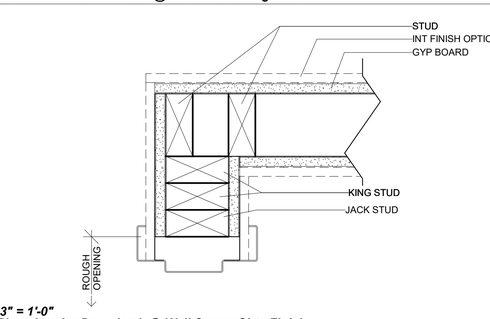
3 *3" = 1'-0"*
Plan - Mateline (Int Closure Strip) Shtg Finish



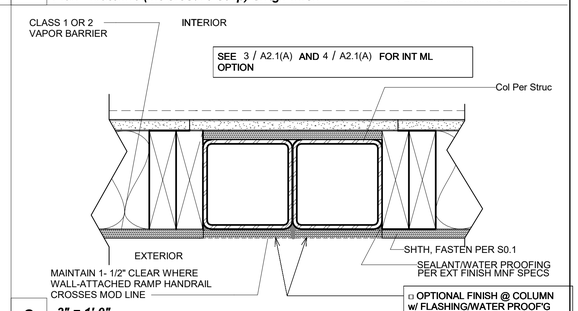
14 *3" = 1'-0"*
Section - Ext Wall @ HVAC Shtg Finish



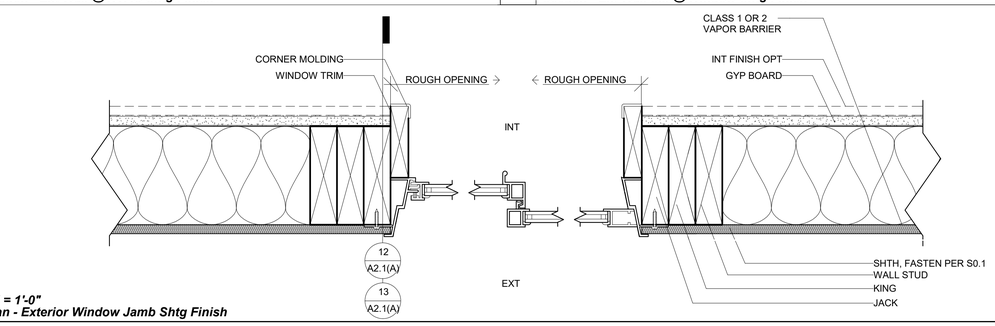
12 *3" = 1'-0"*
Section - Ext Wall Sill @ Window Shtg Finish



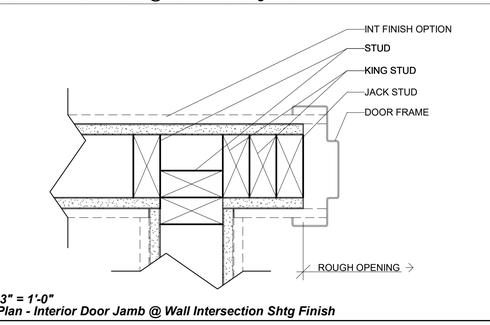
7 *3" = 1'-0"*
Plan - Interior Door Jamb @ Wall Corner Shtg Finish



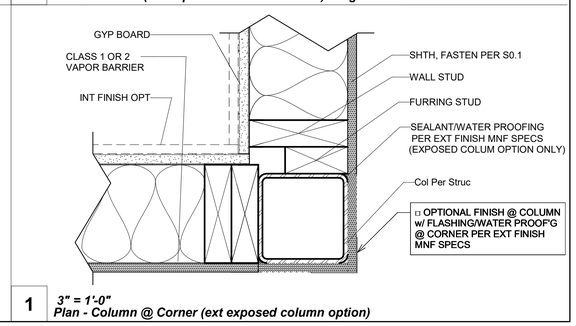
2 *3" = 1'-0"*
Plan - Mateline (ext exposed column mateline) Shtg Finish



11 *3" = 1'-0"*
Plan - Exterior Window Jamb Shtg Finish



6 *3" = 1'-0"*
Plan - Interior Door Jamb @ Wall Intersection Shtg Finish



1 *3" = 1'-0"*
Plan - Column @ Corner (ext exposed column option)

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
C 53380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ARCHITECTURAL DETAILS (WOOD FRAMING SHTG FINISH)

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

RH/RT

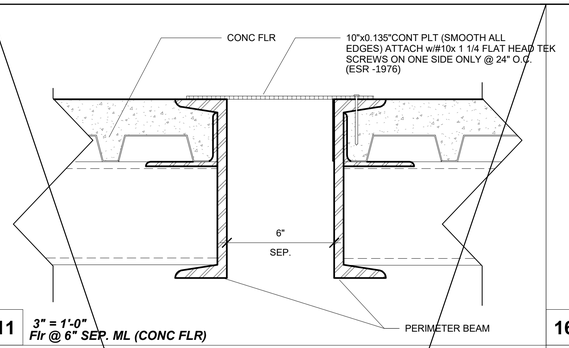
DATE

SHEET NO.

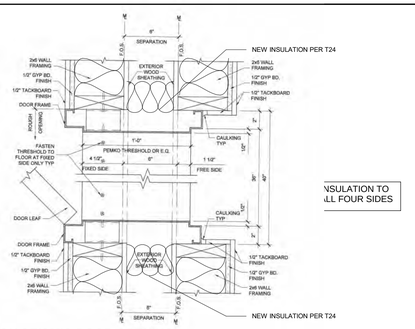
A2.1(A)

SHEET OF

6/15/2021 11:49:32 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CES\AR24D63.rvt

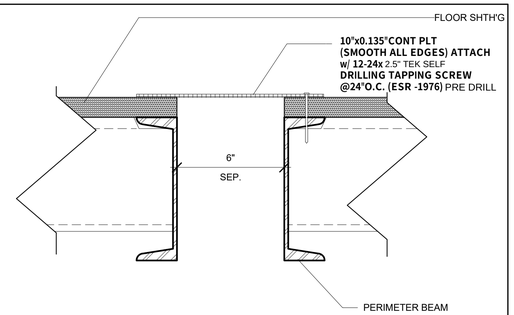


11 *3" = 1'-0"*
Flr @ 6" SEP. ML (CONC FLR)

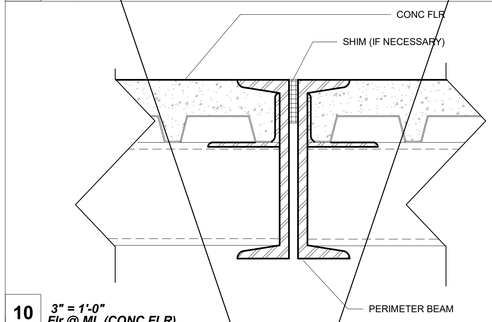


NSULATION TO
LL FOUR SIDES

16 ***PASS THROUGH SEISMIC DOOR OPENING***



5 *3" = 1'-0"*
Flr @ 6" SEP. ML (WD FLR)



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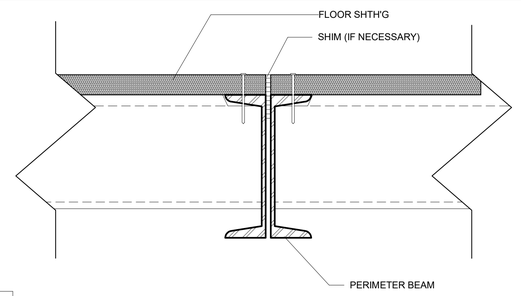
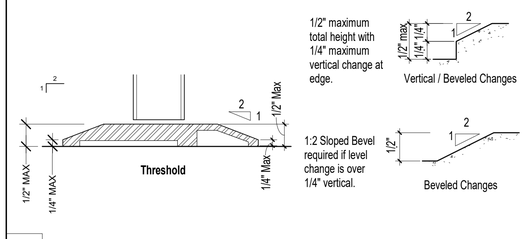
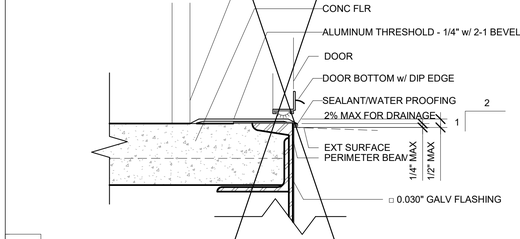
Flr @ ML (CONC FLR)



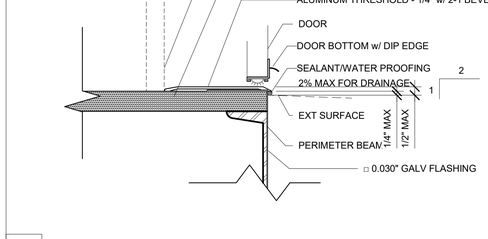
4 *3" = 1'-0"*
Flr @ ML (WD FLR)



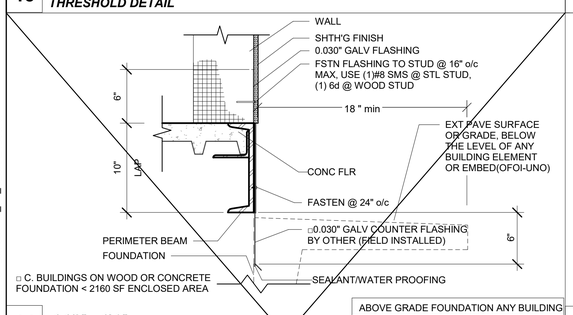
15 *1/4" = 1'-0"*
THRESHOLD DETAIL



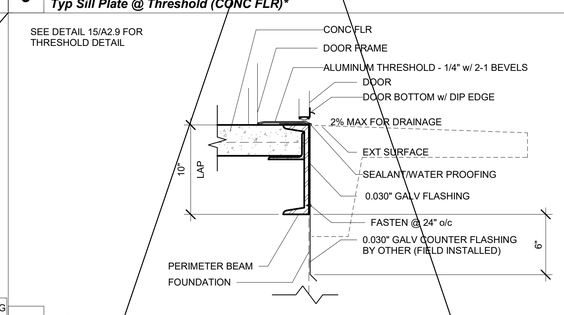
9 *3" = 1'-0"*
Typ Sill Plate @ Threshold (CONC FLR)*



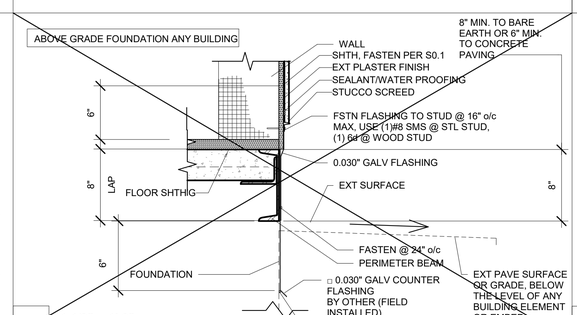
3 *3" = 1'-0"*
Typ Sill Plt @ Threshold (WD FLR)*



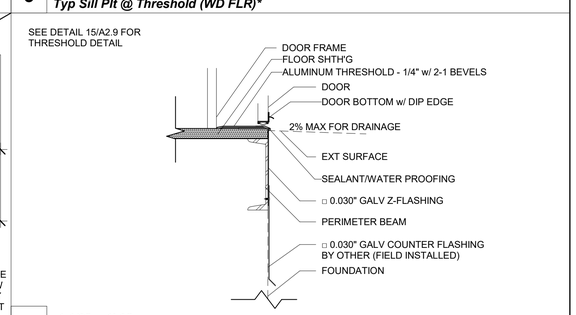
14 *1 1/2" = 1'-0"*
Typ Skirt @ Fnd SHTH'G FIN



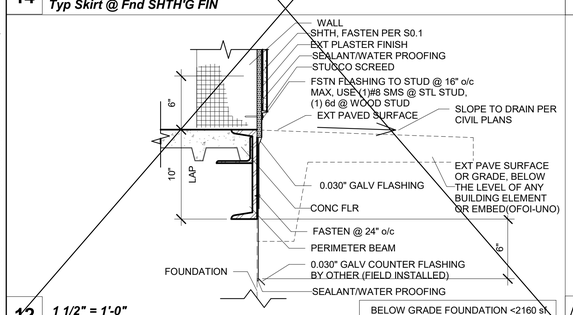
8 *1 1/2" = 1'-0"*
Threshold @ Fnd (CONC FLR)*



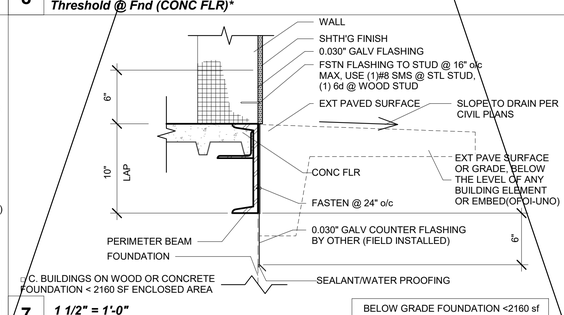
13 *1 1/2" = 1'-0"*
Typ Skirt @ Fnd PLSTR FIN



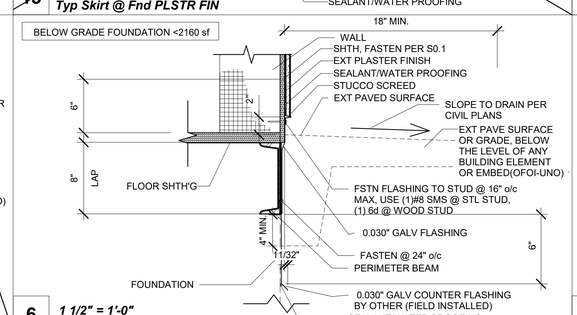
2 *1 1/2" = 1'-0"*
Threshold @ Fnd (WD FLR)*



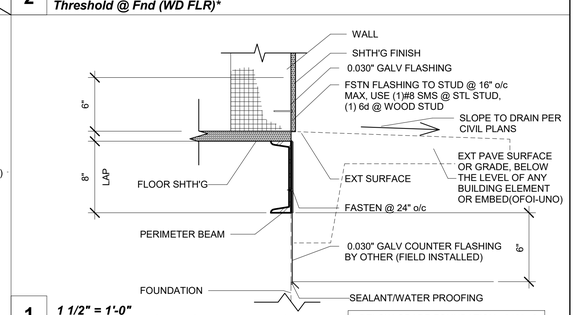
12 *1 1/2" = 1'-0"*
Typ Skirt @ Fnd PLSTR FIN (CONC FLR)*



7 *1 1/2" = 1'-0"*
Typ Skirt @ Fnd SHTH'G FIN (CONC FLR)*



6 *1 1/2" = 1'-0"*
Typ Skirt @ Fnd PLSTR FIN (WD FLR)*



1 *1 1/2" = 1'-0"*
Typ Skirt @ Fnd SHTH'G FIN (WD FLR)*

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. 63380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ARCHITECTURAL DETAILS (FLOOR)

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

RH/RT

DATE

SHEET NO.

A2.9

SHEET OF

6/15/2021 11:50:20 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6-7_CES4R24D63.rvt

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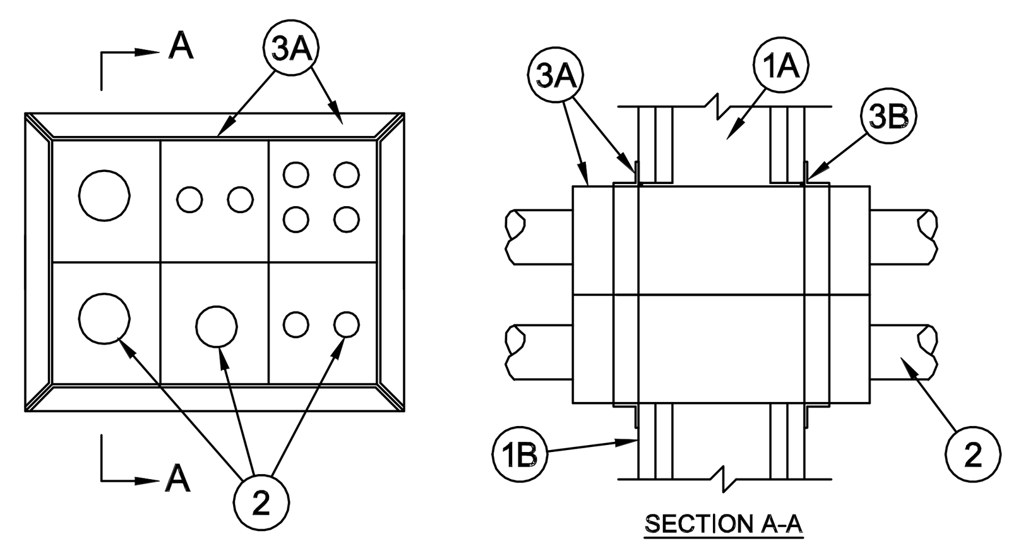
5/31/2022 7:23:55 AM

System No. W-L-2448
February 26, 2008
F Ratings – 1 or 2 Hr (See Item 1)
T Rating – 0 Hr
L Rating At Ambient – 4 CFM/sq ft. (See Item 3B)
L Rating At 400 F – Less Than 1 CFM/sq ft. (See Item 3B)



1. **Wall Assembly**– The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:
   A. **Studs**– Wall framing may consist of either wood or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.
   B. **Gypsum Board*** – The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max area of opening is 98.5 in.2 (635 cm2) with a max dimension of 12-1/8 in. (308 mm) for square devices. Max diam of opening is 2-1/4 in. (57 mm) for nom 2 in. (51 mm) round devices and 4-1/4 in. (108 mm) for 4 in. (102 mm) round devices.

The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.

2. **Through Penetrants**– One or more nonmetallic pipes, conduits or tubes, as described in a single line item below, may be installed concentrically or eccentrically within each firestop device (Item 3A) without any limitations on annular space. If multiple through penetrations are installed within the firestop device, the through penetrants may be bundled together. Through penetrants to be rigidly supported on both sides of wall assembly. The following types and sizes of through penetrants may be used:
   A. **Polyvinyl Chloride (PVC) Pipe**– One nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
   B. **Rigid Nonmetallic Conduit**+ – One nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 352 of the National Electrical Code (NFPA No. 70).
   See **Rigid Nonmetallic, Schedule 40 and 80 PVC Conduit** (DZYR) category in the Electrical Construction Equipment Directory for names of manufacturers.
   C. **Chlorinated Polyvinyl Chloride (CPVC) Pipe**– One nom 2 in. (51 mm) diam (or smaller) SDR11 CPVC pipe for use in closed (process or supply) piping systems.
   D. **Crosslinked Polyethylene (PEX) Tubing**– One nom 2 in. (51 mm) diam (or smaller) SDR 9 PEX tubing for use in closed (process or supply) piping systems.
   E. **Electrical Nonmetallic Tubing (ENT)**+ – Max four nom 1-1/4 in. (32 mm) diam (or smaller) ENT installed in accordance with Article 362 of the National Electrical Code (NFPA No. 70).
   See **Electrical Nonmetallic Tubing** (FKHU) category in the Electrical Construction Equipment Directory for names of manufacturers.
   F. **Optical Fiber/Communications/Signaling/Coaxial Cable Raceways**+ – Max four nom 1-1/4 in. (32 mm) diam (or smaller) plenum rated raceways installed in accordance with the National Electrical Code (NFPA No. 70).
   See **Optical Fiber/Communications/Signaling/Coaxial Cable Raceway** (QAZM) category in the Electrical Construction Equipment Directory for names of manufacturers.
   G. **Acrylonitrile Butadiene Styrene (ABS) Pipe**– Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid or cellular core ABS for use in closed (process or supply) or vented (drain, waste or vent) piping systems
3. **Firestop System**– The firestop system shall consist of the following:
   A. **Firestop Device*** – A max of six square firestop devices may be ganged together. As an alternate, one round device may be centered within a round opening. Each device consists of a nom 2-1/2 by 2-1/2 by 10 in. (64 by 64 by 254 mm), a nom 4 by 4 by 10 in. (102 by 102 by 254 mm), a nom 2 in. (51 mm) diam by 10 in. (254 mm) or a nom 4 in. (102 mm) diam by 10 in. (254 mm) powder coated steel transit incorporating internal intumescent material, foam plugs and mounting flanges. Firestop device(s) to be installed within opening with ends projecting an equal distance beyond each surface of wall assembly in accordance with the accompanying installation instructions. The annular space between device(s) and periphery of opening shall be min 0 in. (0 mm, point contact) to max 1/8 in. (3 mm). Firestop device(s) secured in place by means of fill material (Item 3B) and steel split mounting flanges sized to accommodate the firestop device. Steel split mounting flanges installed on both sides of wall after installation of fill material, and secured together with supplied steel set screws. Nom 1 in. (25 mm) thick pre-cut foam plugs sized to accommodate the through penetrant(s) and installed flush with each end of device on both sides of wall assembly.
   3M COMPANY – 3M Fire Barrier Pass-Through Device
   B. **Fill, Void or Cavity Materials* – Putty or Caulk**– Min 1/8 in. (3 mm) bead of fill material shall be applied at interface of gypsum board and firestop devices immediately prior to the installation of the mounting flanges. As an option, foam plugs may be recessed into device and the recess filled with fill material flush with the ends of the device. If three or less devices (Item 3A) are ganged together, the fill material may be optional. L Rating applies only when fill material is applied at interface of gypsum board and device(s) prior to mounting flanges and with both ends of firestop device(s) filled with nominal 1/8 in. (3.2 mm) of Moldable Putty+.
   3M COMPANY – Moldable Putty+, CP 25WB+, IC 15WB+, 3000 WT

+ Bearing the UL Listing Mark
*Bearing the UL Classification Mark

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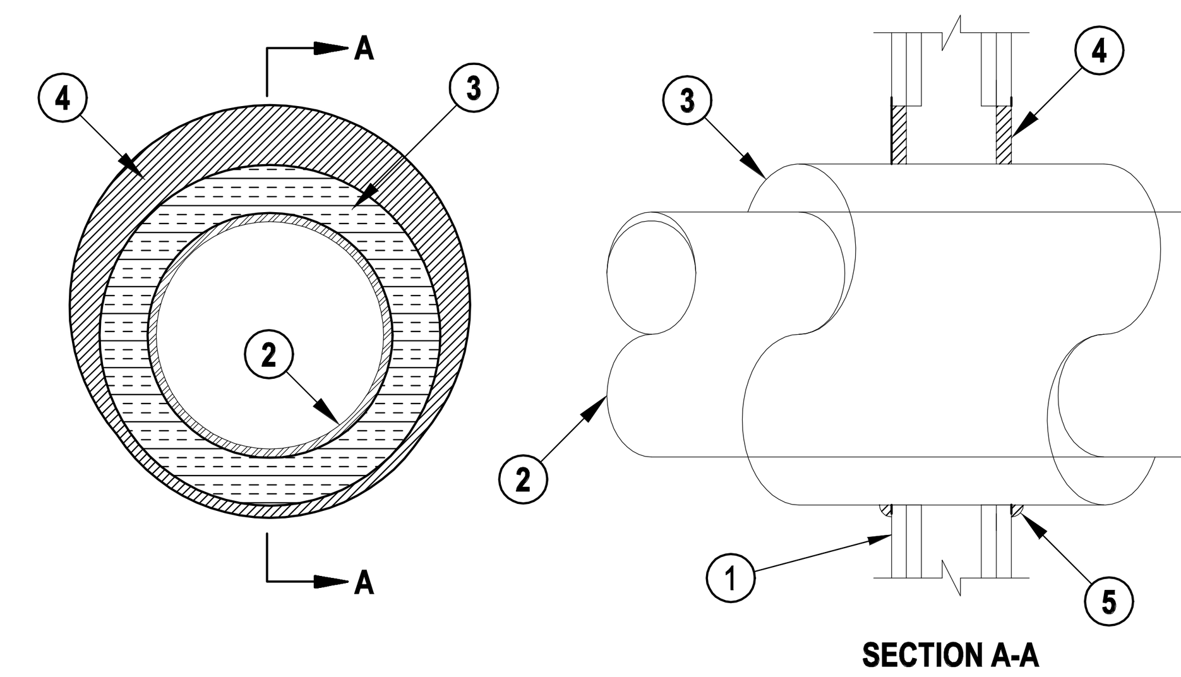
Reproduced by Hilti Firestop Systems
Courtest of Underwriters Laboratory, Inc.
Through-Penetration Firestop Systems

System No. WL 5029
F-Rating - 1 or 2 Hr (See Item 1)
T-Rating - 1/2, 3/4, 1-1/2 and 1-3/4 Hr (See Item 3)
L Rating at Ambient = 4 CFM/Sq.Ft.
L Rating at 400°F = Less Than 1 CFM/Sq.Ft.

February 8, 2006



1. Wall Assembly — The 1 or 2 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:
A. Studs — Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 2-1/2 in. wide and spaced max 24 in. OC.
B. Gypsum Board* — 5/8 in. thick, 4 ft wide, with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design. Max diam of opening is 18-5/8 in.
The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed.
2. Through Penetrants — One metallic pipe or tubing to be centered within the firestop system. Pipe or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes or tubing may be used:
A. Steel Pipe — Nom 12 in. diam (or smaller) Schedule 10 (or heavier) steel pipe.
B. Iron Pipe — Nom 12 in. diam (or smaller) cast or ductile iron pipe.
C. Copper Tubing — Nom 6 in. diam (or smaller) Type L (or heavier) copper tubing.
D. Copper Pipe — Nom 6 in. diam (or smaller) Regular (or heavier) copper pipe.
3. Pipe Covering* — Nom 1, 1-1/2 or 2 in. thick hollow cylindrical heavy density (min 3.5 pcf) glass fiber units jacketed on the outside with an all service jacket. Longitudinal joints sealed with metal fasteners or factory-applied self-sealing lap tape. Transverse joints secured with metal fasteners or with butt tape supplied with the product.

See Pipe and Equipment Covering — Materials (BRGU) category in the Building Material Directory for the names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
The hourly T Rating of the firestop system is dependent on the hourly fire rating of the wall assembly in which it is installed, the size and type of through penetrant and the pipe covering thickness, as shown in the table below:

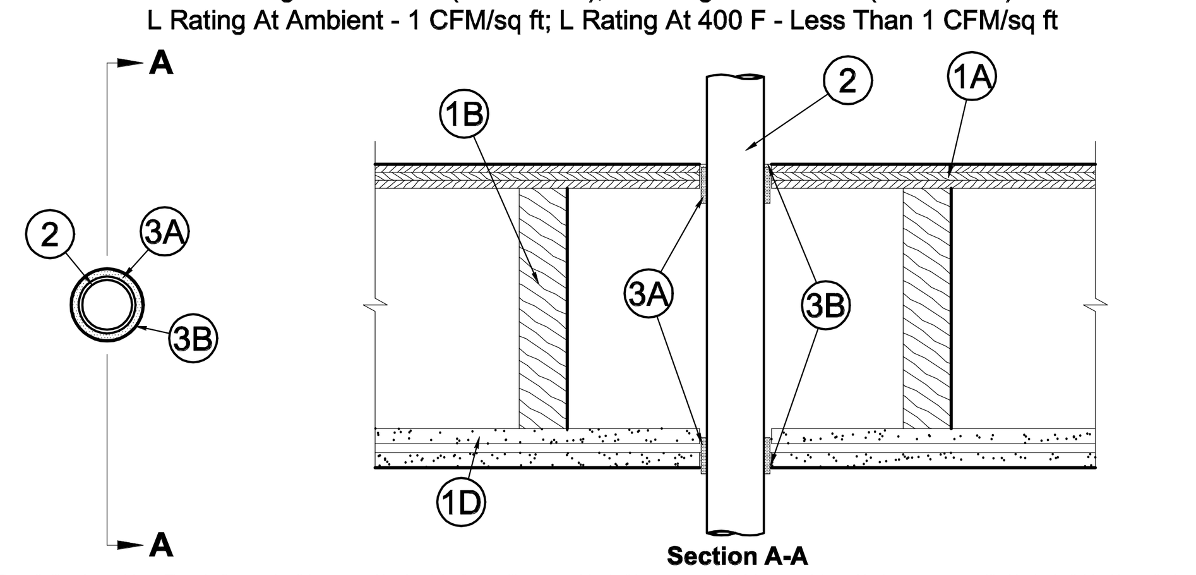
Wall Assembly Rating Hr	Through Penetrant		Pipe Covering Thkns In.	Annular Space		T Rating Hr
	Type +	Max Diam In.		Min In.	Max In.	
1	A	4	1	0	1-1/2	1/2
1	B or C	2	1 or 1-1/2	0	1-1/2	1/2
1	A	4	1-1/2	0	1-1/2	1
1	A	12	2	0	1-7/8	3/4
1	B or C	6	2	0	1-7/8	1
2	A	4	1	0	1-1/2	1
2	B or C	4	1 or 1-1/2	0	1-1/2	1
2	B or C	6	2	0	1-7/8	1
2	A	4	1-1/2	0	1-1/2	1-3/4
2	A	12	2	0	1-7/8	1-1/2
2	B or C	6	2	0	1-7/8	1

+Indicates penetrant type as itemized in Item 2.
3A. Pipe Covering* — (Not Shown) — As an alternate to Item 3, max 2 in. thick cylindrical calcium silicate (min 14 pcf) units sized to the outside diam of the pipe or tube may be used. Pipe insulation secured with stainless steel bands or min 8 AWG stainless steel wire spaced max 12 in. OC. When the alternate pipe covering is used, the T Rating shall be determined from the table above.
See Pipe and Equipment Covering — Materials (BRGU) category in the Building Materials Directory for names of manufacturers. Any pipe covering material meeting the above specifications and bearing the UL Classification Marking with a Flame Spread Index of 25 or less and a Smoke Developed Index of 50 or less may be used.
4. Fill, Void or Cavity Material* — Sealant — Min 5/8 in. thickness of fill material applied within the annulus, flush with both surfaces of wall . At the point contact location between pipe covering and gypsum board, a min 1/2 in. diam bead of fill material shall be applied at the pipe covering/gypsum board interface on both surfaces of wall.
HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC — FS-One Sealant
*Bearing the UL Classification Mark

Guide XHEZ
Through-Penetration Firestop Systems

(12/08/08)
F-C-2019 - A Card

System No. F-C-2019
F-Rating - 1 and 2 Hr (See Item 1); T-Rating - 1 and 2 Hr (See Item 1)
L Rating At Ambient - 1 CFM/sq ft; L Rating At 400 F - Less Than 1 CFM/sq ft



1. Floor-Ceiling Assembly — The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The 2 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in Design Nos. L505, L511 or L536 in the UL Fire Resistance Directory. The F and T Ratings of the firestop system are equal to the hourly fire rating of the floor-ceiling assembly. The general construction features of the floor-ceiling assembly are summarized below:
A. Flooring System — Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3 in. (76 mm).
B. Wood Joists* — For 1 hr fire-rated floor-ceiling assemblies, nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members* with bridging as required and with ends firestopped. For 2 hr fire-rated floor-ceiling assemblies, nom 2 by 10 in. (51 by 102 mm) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped.
C. Furring Channels — (Not Shown) — In 2 hr fire-rated assemblies, resilient galv steel furring installed perpendicular to wood joists between first and second layers of wallboard (Item 1D). Furring channels spaced max 24 in. (610 mm) OC. In 1 hr fire-rated assemblies, resilient galv steel furring installed perpendicular to wood joists between gypsum board and wood joists as specified in the individual Floor-Ceiling Design. Furring channels spaced max 24 in. (610 mm) OC.
D. Gypsum Board* — Nom 4 ft (1220 mm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. First layer of gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Second layer of gypsum board (2 hr fire-rated assembly) screw-attached to furring channels as specified in the individual Floor-Ceiling Design. Max diam of ceiling opening is 3 in. (76 mm).
2. Through Penetrants — One nonmetallic pipe or conduit to be installed approximately midway between wood joists and centered within the system. Diam of openings hole-sawed through flooring system and through gypsum board ceiling to be nom 5/8 in. (16 mm) larger than the outside diam of through-penetrant. Pipe or conduit to be rigidly supported on both sides of the floor-ceiling assembly. The following types and sizes of nonmetallic pipes or conduits may be used:
A. Polyvinyl Chloride (PVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
B. Rigid Nonmetallic Conduit+ — Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA No. 70).
C. Chlorinated Polyvinyl Chloride (CPVC) Pipe — Nom 2 in. (51 mm) diam (or smaller) SDR 13.5 CPVC pipe for use in closed (process or supply) piping systems.
D. Electrical Nonmetallic Tubing (ENMT)+ — Nom 2 in. (51 mm) diam (or smaller) ENMT formed from PVC and installed in accordance with Article 331 of the National Electrical Code.
3. Firestop System — The firestop system shall consist of the following:
A. Fill, Void or Cavity Material* — Wrap Strip — Nom 1/8 or 3/16 in. (3.2 or 4.8 mm) thick intumescent material faced on both sides with a plastic film, supplied in 2 in. (51 mm) wide strips or nom 1/4 in. (6 mm) thick intumescent material faced on both sides with a plastic film, supplied in 1-1/2 in. (51 mm) wide strips. One layer of wrap strip is wrapped around the through-penetrant at its egress from both sides of the floor-ceiling assembly with ends butted and held in place with two layers of 2 in. (51 mm) wide by 3 mil (0.08 mm) thick aluminum foil tape. The bottom edge of the wrap strip shall extend 5/8 in. (16 mm) below the flooring system and 1/4 in. (6 mm) below the ceiling.
SPECIFIED TECHNOLOGIES INC — SpecSeal BLU Wrap Strip, SpecSeal BLU2 Wrap Strip or SpecSeal RED Wrap Strip
B. Fill, Void or Cavity Material* — Sealant — Fill material forced into annulus to fill space to max extent possible, flush with top surface of floor and bottom surface of ceiling.
SPECIFIED TECHNOLOGIES INC — SpecSeal Series SSS Sealant or SpecSeal LCI Sealant

+Bearing the UL Listing Mark *Bearing the UL Classification Marking

3M™ Fire Barrier Moldable Putty Pads MPP+
Product Data Sheet

1. Product Description

3M™ Fire Barrier Moldable Putty Pads MPP+ are a one-part, ready-to-use, intumescent wall-opening protective. When properly applied to the back of electrical outlet boxes, 3M™ Fire Barrier Moldable Putty Pads MPP+ help control the spread of fire, smoke and noxious gases through fire-restive walls and partitions. Installed in accordance with the UL wall-opening protective listing (UL Category CLIV), the product helps achieve up to 2-hour ratings in a variety of wall constructions. 3M™ Fire Barrier Moldable Putty Pads MPP+ can effectively provide protection for back-to-back electrical boxes.

3M™ Fire Barrier Moldable Putty Pads MPP+ are also used as a firestop material in through-penetration firestop systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ help to maintain a firestop penetration seal for up to 4 hours. 3M™ Fire Barrier Moldable Putty Pads MPP+ exhibit excellent adhesion to a full range of construction substrates and penetrants. The pads are easily molded by hand (no mixing required). In addition to its fire-resistant properties, the 1/10th in. (2.54mm) thick pads have airborne sound reduction characteristics which helps minimize sound transmission through assemblies requiring an STC rating.

FIRE BARRIER: UP TO 4 HOUR Fire Protection
SMOKE SEAL: L RATED Meets Optional L Requirements
WALL OPENING: UP TO 2 HOUR Fire Protection
SOUND BARRIER: STC 52 In STC 53-Rated Wall Assembly

FM APPROVED
SUBJECT TO THE CONDITIONS OF APPROVAL AS A WALL & FLOOR PENETRATION FIRESTOP WHEN INSTALLED AS DESCRIBED IN THE CURRENT EDITION OF THE FMRC APPROVAL GUIDE

ULC LISTED
FILL, VOID OR CAVITY MATERIALS 90G9

CLASSIFIED UL
WALL OPENING PROTECTIVE MATERIAL FIRE RESISTANCE CLASSIFICATION SEE UL FIRE RESISTANCE DIRECTORY 90G9

CLASSIFIED UL
FILL, VOID, OR CAVITY FOR USE IN THROUGH PENETRATION FIRESTOP SYSTEMS SEE UL FIRE RESISTANCE DIRECTORY 90G9

Color: ■ Dark Red

4 in. x 8 in. (101.6mm x 203.3mm), 7 in. x 7 in. (177.8mm x 177.8mm) and 9.5 in. x 9.5 in. (241.2mm x 241.3mm) pad sizes available.

Product Features

- Firestop tested up to 4 hours in accordance with ASTM E 814 (UL 1479) & CAN/ULC-S115
- Wall opening protective tested up to 2 hours in accordance with UL 263
- Provides draft and cold smoke seal
- Pliable and conformable—molds easily into required shape
- Helps reduce noise transfer*
- Excellent adhesion
- Re-enterable/repairable
- Halogen-free and solvent-free
- Excellent aging properties
- Low VOC
- Will not dry out or crumble
- Red color widely recognized as a fire protective product

Meets the intent of LEED® VOC regulations—helps reduce the quantity of indoor air contaminants that may be odorous, irritating and harmful to the comfort and well-being of the installers and occupants.

**Minimizes noise transfer—STC-Rating of 52 when tested in STC 53-rated wall assembly*

2. Applications

4 in. x 8 in. (101.6mm x 203mm) 3M™ Fire Barrier Moldable Putty Pads MPP+ are typically used as a wall opening protective to meet building requirements, for protection of membrane penetrations made by listed steel or non-metallic electrical boxes. It is also used to seal gaps between cables in multiple penetrations (including fiber optic inner duct) and to firestop cable bundles, insulated pipe, electrical conduit and metal pipe. Larger sized pads, 7 in. x 7 in. and 9.5 in x 9.5 in. (177.8mm x 177.8mm and 241.2mm x 241.2mm) are widely used to firestop metallic and non-metallic electrical outlet boxes up to 14 in. x 4.5 in. by 2-1/2 in. (355.6mm x 114.3mm x 63.5mm) deep. For larger applications, pads can be molded together by hand.

3. Specifications

3M™ Fire Barrier Moldable Putty Pads MPP+ shall be a one component, ready-to-use, intumescent elastomer capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and shall be applicable to overhead, vertical and horizontal firestops. Under normal conditions, 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be noncorrosive to metal and compatible with synthetic cable jackets. The putty shall be listed by independent test agencies such as UL, Intertek or FM. 3M™ Fire Barrier Moldable Putty Pads MPP+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems and CAN/ULC S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Barrier Moldable Putty Pads MPP+ meets the requirements of the IBC, NFPA 5000, NEC (NFPA 70), NFPA 101 and NCB (Canada) Building Codes.

Typically Specified MasterFormat (2004)
Section 07 84 00 Firestopping

Related Sections
Section 07 84 16 Annular Space Protection
Section 07 86 00 – Smoke Seals
Section 07 87 00 – Smoke Containment Barriers
Section 07 27 00 – Thermal and Moisture Protection Firestopping
Section 21 00 00 – Fire Suppression
Section 26 00 00 – Electrical

For technical support relating to 3M™ Fire Protection Products and Systems, call: 1-800-328-1687
For more information on 3M™ Fire Protection Products, visit: www.3M.com/firestop

3M

4. Performance & Typical Physical Properties

Color:	Dark Red
Nominal Density:	10–12 lbs./gal. (1.2–1.45kg/L)
Nominal Thickness:	1/10 in. (2.54mm)
Surface Burning (ASTM E 84):	Flame Spread 0, Smoke Development 0
Heat Expansion:	Begins at 350°F (177°C) Significant at 400°F (204°C) Free Expansion is Nominal 3 times
STC (ASTM E 90 and ASTM E 413): **Tested in STC 53 rated wall assembly**	52 when tested on back-to-back electrical boxes
VOC Less H_2O and Exempt Solvents:	< 250g/L

Dimensions:	4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm)
Unit Volume:	2.52 in.³ (41.4cm³)
Unit Weight:	2.7 oz (76g)
Dimensions:	7 in. x 7 in. x 1/10 in. (177.8mm x 177.8mm x 2.5mm)
Unit Volume:	4.63 in.³ (76.0cm³)
Unit Weight:	4.1 oz (116g)
Dimensions:	9.5 in. x 9.5 in. x 1/10 in. (241.3mm x 241.3mm x 2.5mm)
Unit Volume:	6.1 in.³ (139.8cm³)
Unit Weight:	7.6 oz (215g)

5. Packaging, Storage, Shelf Life

Packaging: Corrugated cardboard box with liner between individual pads.

Storage: 3M™ Fire Barrier Moldable Putty Pads MPP+ should be stored indoors in dry conditions.

Shelf Life: 3M™ Fire Barrier Moldable Putty Pads MPP+ shelf life is indefinite in original unopened containers. Product will not dry or crumble in opened containers. Normal stock and stock rotation practices are recommended.

6. Installation Techniques

Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for Applicable UL, Intertek or other third-party drawings and system details.

Preparatory Work: The surface of the electrical box, or opening and any penetrating items should be cleaned (i.e. free of dust, grease, oil, loose materials, rust or other substances) to allow for the proper adhesion of the 3M™ Fire Barrier Moldable Putty+ Pad. Ensure that the surface of the substrates are not wet and are frost-free.

Installation Details: Electrical boxes must be firestopped under the following conditions: boxes larger than 16 sq. in. (103 sq. cm), if horizontal spacing between boxes is less than 24 in. (609.6mm), when multiple boxes are located in one stud cavity or if the aggregate of all boxes exceeds 100 sq. in. per 100 sq. ft. (645 sq. cm. per 9.29 sq. m) — refer to listed system details and applicable local building code requirements. For electrical box installations, a minimum of 1/10 in. (2.5mm) thick putty application is required. 3M™ Fire Barrier Moldable Putty Pads MPP+ are to be installed to completely cover the exterior of the outlet box (except for the side against the stud). To firestop penetrations, install the applicable depth of backing material (if required), remove the desired amount of putty from the pad, form (if necessary) and install as detailed within the listed system. Make sure that putty is in complete contact with the substrate and penetrating item(s).

Note: Partial pads can be pieced together and the seams between partial pads should overlap a minimum of 1/8 in. with the seams worked with the fingertips to create adhesion at the seam.

Limitations: Over application (i.e., using excessive amount of material) of product to vertical surfaces may cause sagging, follow system details. Product is not impaired by freezing but should be warmed to 32°F (0°C) before applying.

7. Maintenance

No maintenance is expected when installed in accordance with the applicable UL, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M™ Fire Barrier Moldable Putty Pad MPP+ is damaged, the following procedure will apply: remove damaged putty, clean the affected area and install the proper thickness of putty, ensuring it bonds to the substrate and adjacent putty (product from damaged area can be reused if it is free from contaminants). Putty can be molded together at new/existing putty overlap.

8. Availability

3M™ Fire Barrier Moldable Putty Pads MPP+ are available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M™ Fire Barrier Moldable Putty Pads MPP+ are available in the following sizes: (10 pads/pack, 10 packs/case) 4 in. x 8 in. x 1/10 in. (101.6mm x 203.2mm x 2.5mm), (20 pads/case) 7 in. x 7 in. 1/10 in. (177.8mm x 177.8mm x 2.5mm), (20 pads/case) 9.5 in. x 9.5 in. 1/10 in. (241.3mm x 241.3mm x 2.5mm); red-colored firestop material. For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3M.com/firestop.

9. Safe Handling Information

Consult product's Material Safety Data Sheet (MSDS) from country-of-use prior to handling and disposal.

3M
Industrial Adhesives and Tapes Division
3M Center, Building 225-3S-06
St. Paul, MN 55144-1000
800-328-1687
877-369-2923 (Fax)
www.3M.com/firestop

Important Notice to User:
Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed. **Product Use:** Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely responsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of application. **Warranty and Limited Remedy:** 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. **Limitation of Liability:** Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

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USE PUTTY AT ALL BOXES INSTALLED ON FIRE-RATED WALLS

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
S3380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

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

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

REVISIONS		
#	Description	BY

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

PROJECT TITLE
PC 2022 CBC:24' x 40' EXPANDABLE TO 120' x 40'
EL DORADO 160# SNOW LOAD

SHEET TITLE
FIRE SEPARATION & PENETRATION DETAILS

PROJECT NUMBER
22073

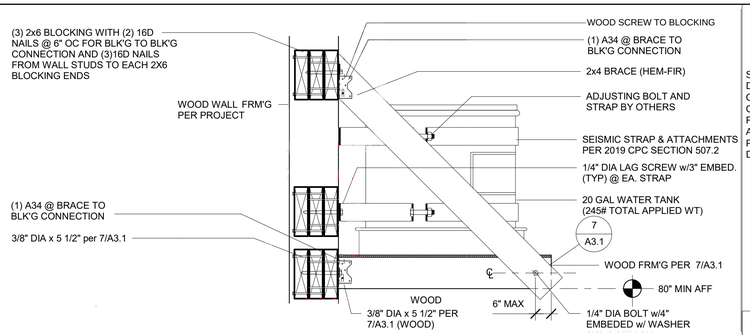
DRAWN BY
rMc

CHECKED BY
RT/AR

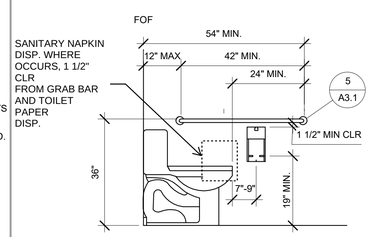
DATE
06/07/2021

SHEET NO.
A3.0.1

SHEET OF SHEETS



9 *1 1/2" = 1'-0"*
Water Heater Tank Bracing



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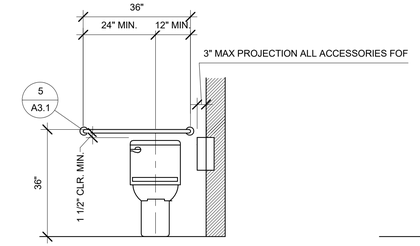
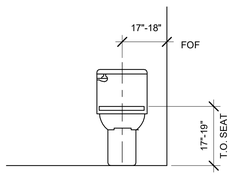


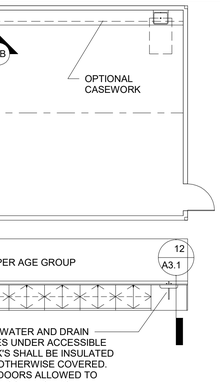
(FRONT VIEW)



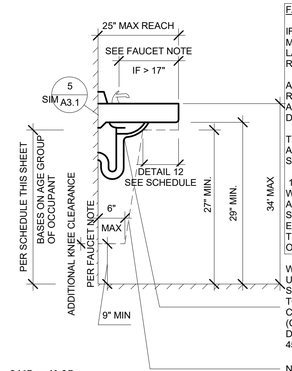
(FRONT VIEW)

NOTES:
A. FLUSH VALVE TO BE PLACED ON ACCESSIBLE CLR SIDE
B. ALL DIMENSION TO BE PER PROJECT BASED ON AGE OF OCCUPANT
C. ALL DIMENSION PER ADA
- STANDARD DIMENSIONS SHALL NOT BE USED IN SIGLE OCC. BATHROOM

4 *1/2" = 1'-0"*
Tank Toilet(12 AND OLDER)



10 *1/8" = 1'-0"*
Optional Casework



FAUCET NOTE

IF THE FAUCET CONTROLS ARE LOCATED MORE THAN 17" FROM THE FACE OF THE LAVATORY ADDITIONAL KNEE SPACE IS REQUIRED TO BE ADDED .

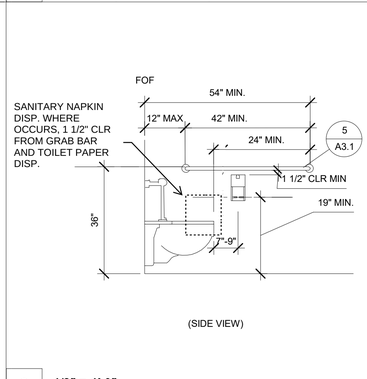
A PERSON IN WHEELCHAIR FORWARD REACH OVER AN OBSTRUCTION MUST ALSO BE PROVIDED IN KNEE/TOE SPACE DEPTH.

THE ADDITIONAL CLEARANCE IS TO BE ADDED TO THE KNEE SPACE NOT THE TOE SPACE. (SEE

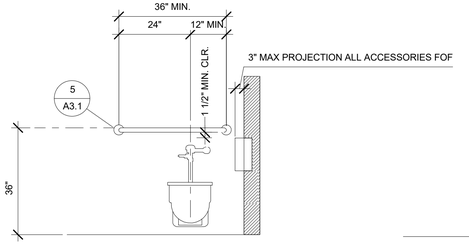
11B-308.2.2 OBSTRUCTED HIGH REACH. WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION. THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION.

WATER SUPPLY AND DRAIN PIPES UNDER ACCESSIBLE SINK SHALL BE INSULATED OR CONFIGURED TO PROTECT AGAINST CONTACT PER CBC 11B.606.5
(CLASS 1 = 0-25 FLAME SPREAD:) SMOKE DEVELOPMENT DENSITY LESS THAN 450.PER CBC 11B.606.5

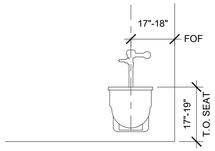
8 *3/4" = 1'-0"*
Accessible Lavatory



(SIDE VIEW)



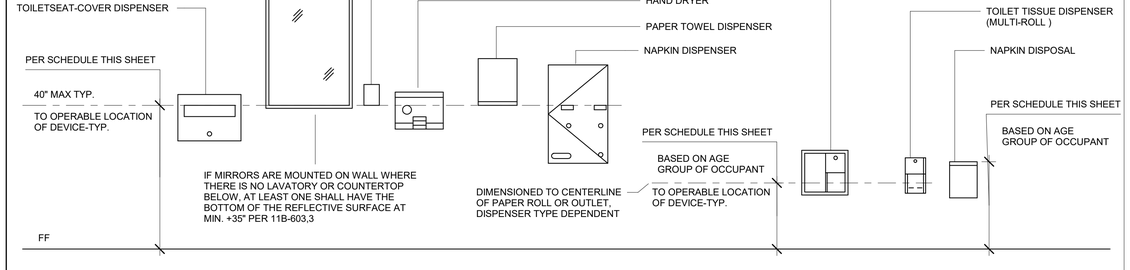
(FRONT VIEW)



(FRONT VIEW)

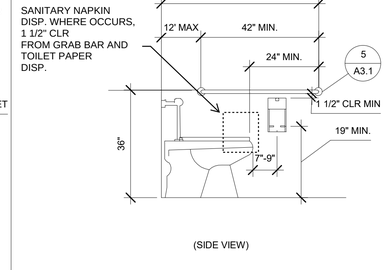
NOTES:
A. FLUSH VALVE TO BE PLACED ON ACCESSIBLE CLR SIDE
B. ALL DIMENSION TO BE PER PROJECT BASED ON AGE OF OCCUPANT
C. ALL DIMENSION PER ADA/CBC
- STANDARD DIMENSIONS SHALL NOT BE USED IN SINGLE OCC. BATHROOM

3 *1/2" = 1'-0"*
Wall Mounted Toilet (12 AND OLDER)

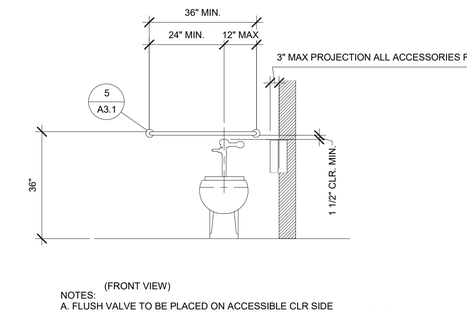


MAXIMUM 3" PROJECTION FOR ALL ACCESSORIES (UNO)

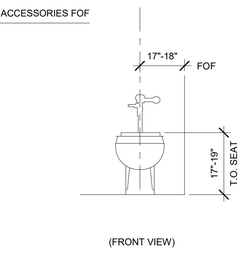
6 *1/2" = 1'-0"*
Mounting Heights



(SIDE VIEW)



(FRONT VIEW)



(FRONT VIEW)

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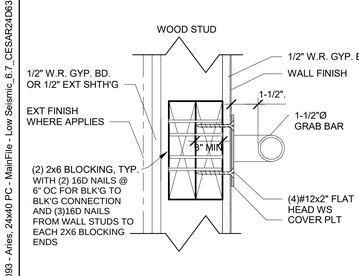
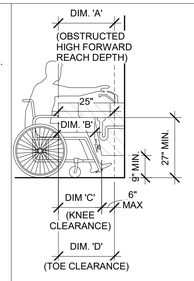
B. ALL DIMENSION TO BE PER PROJECT BASED ON AGE OF OCCUPANT
C. ALL DIMENSION PER ADA/CBC
- STANDARD DIMENSIONS SHALL NOT BE USED IN SINGLE OCC. BATHROOM

2 *1/2" = 1'-0"*
Floor Mounted Toilet (12 AND OLDER)



5 *3" = 1'-0"*
Grab Bar Mounting



DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'
17"	8"	11"	17"
18"	9"	12"	18"
19"	10"	13"	19"
20"	11"	14"	20"
21"	12"	15"	21"
22"	13"	16"	22"
23"	14"	17"	23"
24"	15"	18"	24"
25"	16"	19"	25"

12 *3/8" = 1'-0"*
MOUNTING SCHEDULE

RECOMMENDED ACCESSIBLE MOUNTING HEIGHT PER CBC 11B609.4 & TABLE 11B604.9

TYPE / AGE GROUP	☒ ADA & AGES 12 AND UP	2022 CBC REF
TOILET CENTERING FROM WALL	17" - 18"	S 11B-604.2 **
TOILET SEAT HEIGHT	17" - 19"	S 11B-604.4 **
TOILET FRONT CLEARANCE	48"	S 11B-604.2
GRAB BAR HEIGHT (TOP OF BAR)	33" - 36"	S 11B-604.3.1 **
TOILET PAPER IN FRONT OF TOILET	7" - 9"	S 11B-604.7.1
TOILET PAPER DISPENSER HEIGHT (CENTER)	19" MIN.	S 11B-604.7.1 **
NAPKIN DISPOSAL		S 11B-604.7.2
NAPKIN DISPOSAL HEIGHT (TO TOP)	SEE DETAIL #2,#3, #4	S 11B-604.7.2
MIRROR HEIGHT (TO REFLECTIVE SURFACE)	40" MAX ***	S 11B-603.3
TOILET SEAT COVER DISPENSER HEIGHT ①	40"	S 11B-603.5
LAVATORY/SINK (TOP)- RIM	34" MAX.	S 11B-606.2 & 3
LAVATORY/SINK @ APRON	29" MIN.	S 11B-606.2
LAVATORY/SINK KNEE CLEARANCE	27" MIN	F 11B-306.3 S 11B-606.2
SOAP DISPENSER ①	40" MAX.	S 11B-603.5
HAND DRYER (TOP OF CONTROL) ①	40" MAX.	S 11B-603.5
NAPKIN DISPENSER HEIGHT (TOP OF CONTROL/ DISPENSER) ①	40" MAX.	S 11B-603.5
PAPER TOWEL DISPENSER HEIGHT ①	40" MAX.	S 11B-603.5
TOE CLEARANCE @ TOILET PARTITION	9" MIN	S 11B-604.8.1.4
URINAL HEIGHT	17" MAX	S 11B-605.2
URINAL PROJECTION	13 1/2" MIN	S 11B-605.2
FLUSH CONTROL HEIGHT	44" MAX	S 11B-605.4
HIGH D.F. SPOUT HEIGHT	38" TO 43"	S 11B-602.7
LOW D.F. APPROACH SPOUT HEIGHT, AND SPOUT LOCATION FROM FRONT EDGE OF THE UNIT INCLUDING BUMPERS	FRONT APPROACH PER 11B-306, 36" MAX. AFF, & 5" MAX FROM FRONT EDGE OF THE UNIT	S 11B-602.2 -EXCEPTION S 11B-602.4 S 11B-602.5
D.F. OPERABLE PARTS	6" MAX FROM FRONT EDGE OF THE UNIT	S 11B-602.3
CANTILEVER D.F. PROJECTION	18" TO 19"	S 11B-602.9
SHELF HEIGHT (WITHIN WATER CLOSET) AFF	40" TO 48"	S 11B-604.8.3
KNEE CLEARANCE @ 9" AFF	11" MIN	S 11B-306.3
KNEE CLEARANCE @ 27" AFF	8" MIN	S 11B-306.3

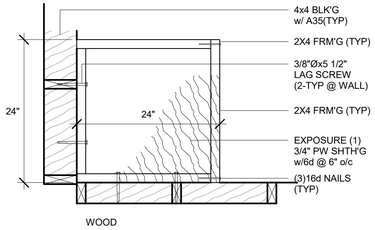
* shall comply with Section 11B-309.4 and shall be wall mounted and located on the sidewall between the rear wall of the toilet and the toilet paper dispenser, adjacent to the toilet paper dispenser. The disposal unit shall be located below the grab bar with the opening of the disposal unit 19 inches minimum (483 mm) above the finish floor.

** also referenced in CBC Table 11B-604.9

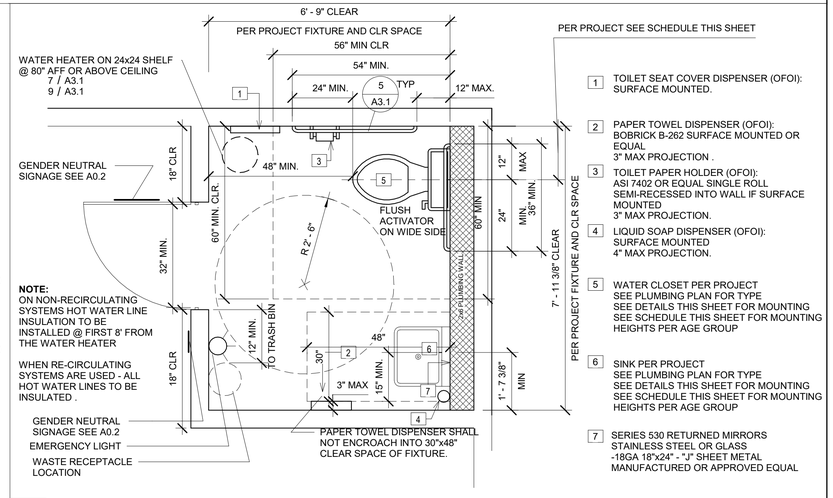
*** 40" Maximum above lavatory or countertop; 35" Maximum not above lavatory nor countertop

① OFOI - OWNER FUNISHED - OWNER INSTALLED

SEE 12/A3.1.1 MOUNTING HEIGHT NOTES



7 *1" = 1'-0"*
Water Heater Shelf Framing



1 TOILET SEAT COVER DISPENSER (OFOI): SURFACE MOUNTED.

2 PAPER TOWEL DISPENSER (OFOI): BOBRICK B-262 SURFACE MOUNTED OR EQUAL 3" MAX PROJECTION .

3 TOILET PAPER HOLDER (OFOI): ASI 7402 OR EQUAL SINGLE ROLL SEMI-RECESSED INTO WALL IF SURFACE MOUNTED 3" MAX PROJECTION.

4 LIQUID SOAP DISPENSER (OFOI): SURFACE MOUNTED 4" MAX PROJECTION.

5 WATER CLOSET PER PROJECT SEE PLUMBING PLAN FOR TYPE SEE DETAILS THIS SHEET FOR MOUNTING SEE SCHEDULE THIS SHEET FOR MOUNTING HEIGHTS PER AGE GROUP

6 SINK PER PROJECT SEE PLUMBING PLAN FOR TYPE SEE DETAILS THIS SHEET FOR MOUNTING SEE SCHEDULE THIS SHEET FOR MOUNTING HEIGHTS PER AGE GROUP

7 SERIES 530 RETURNED MIRRORS STAINLESS STEEL OR GLASS -18GA 18"x24" - "J" SHEET METAL MANUFACTURED OR APPROVED EQUAL

1 *1/2" = 1'-0"*
Accessible Single Gender Neutral Occ Bathroom Plan (AGE GROUP 12 AND OLDER)

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. 23380
03/31/24
CIVIL
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
SINGLE OCC. BATHROOM

PROJECT NUMBER
22088

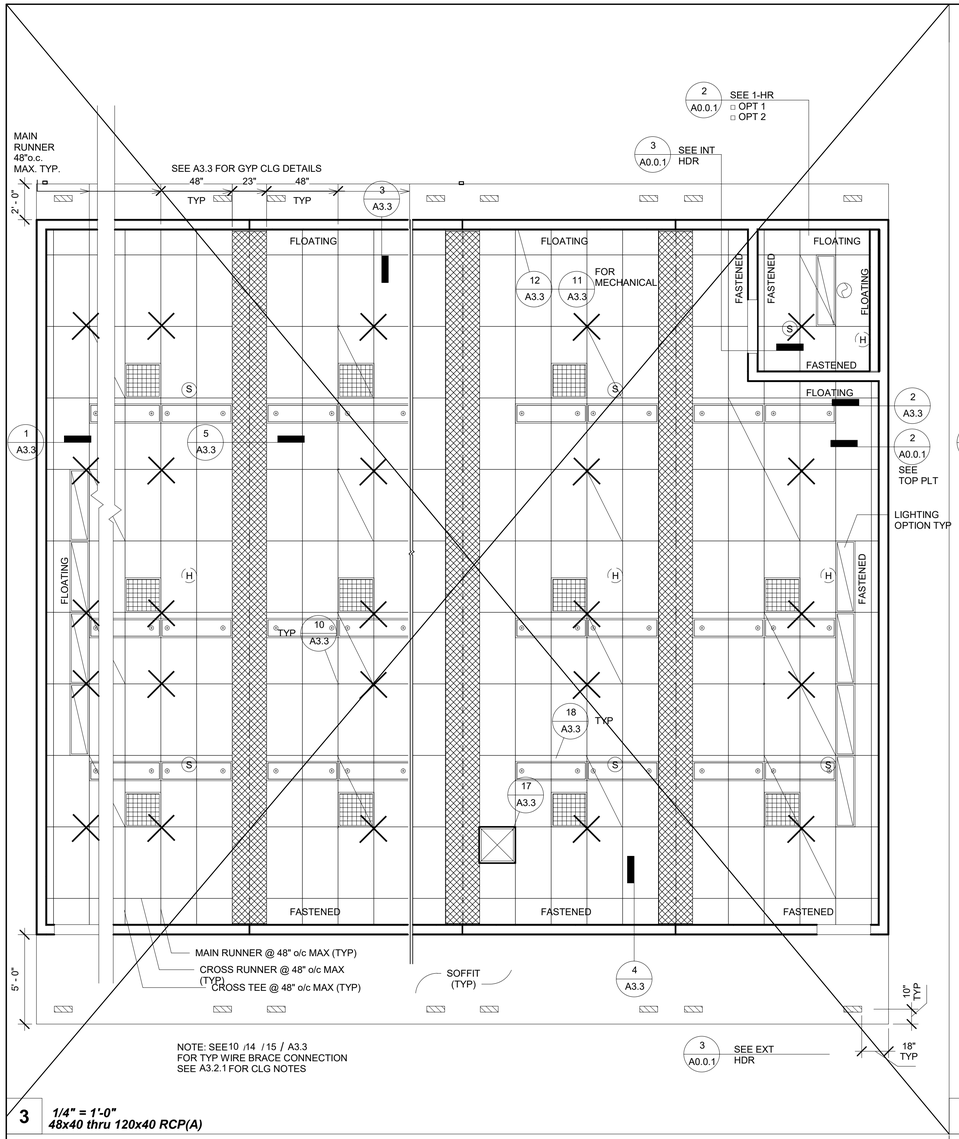
DRAWN BY
rMc/SC

CHECKED BY
RH/RT

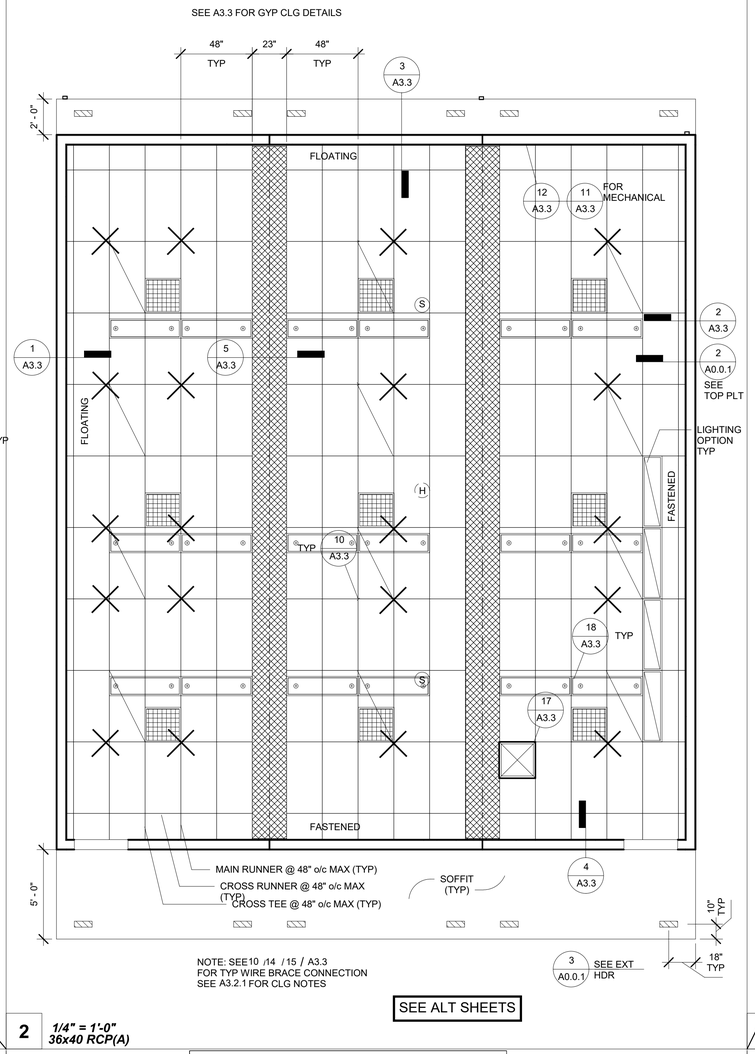
DATE

SHEET NO.
A3.1
SHEET OF

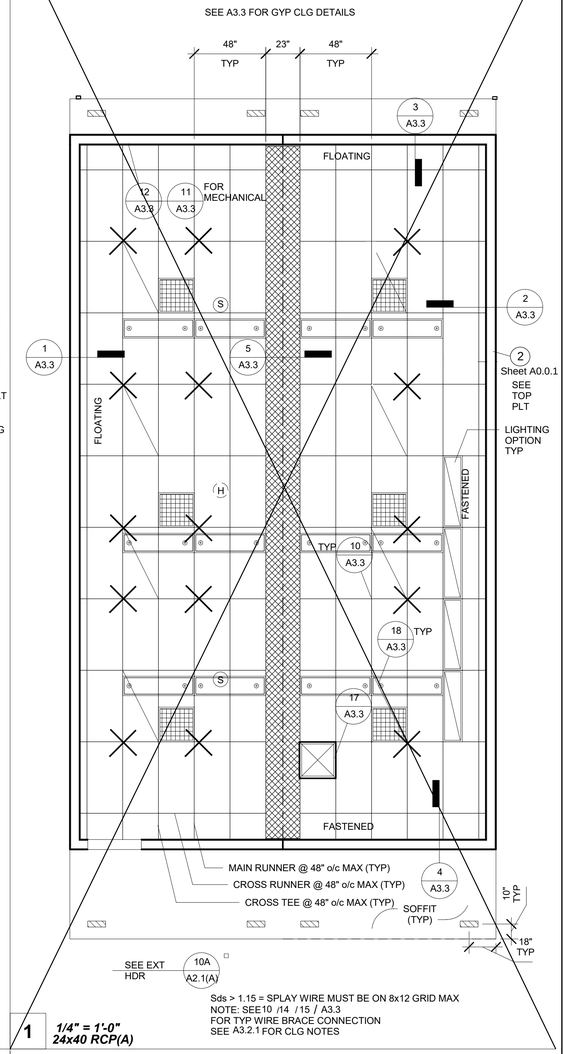
6/15/2021 11:50:49 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt



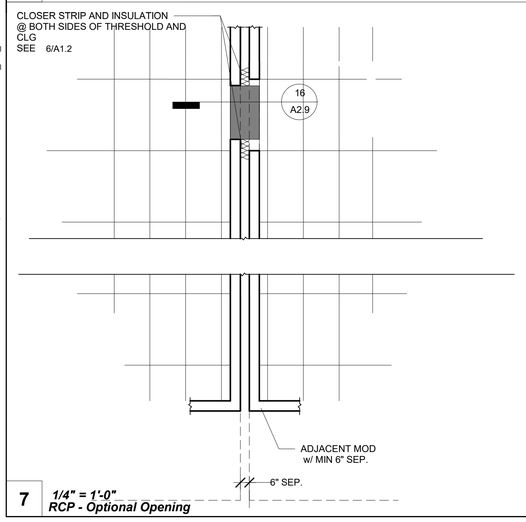
3 *1/4" = 1'-0"*
48x40 thru 120x40 RCP(A)



2 *1/4" = 1'-0"*
36x40 RCP(A)



1 *1/4" = 1'-0"*
24x40 RCP(A)

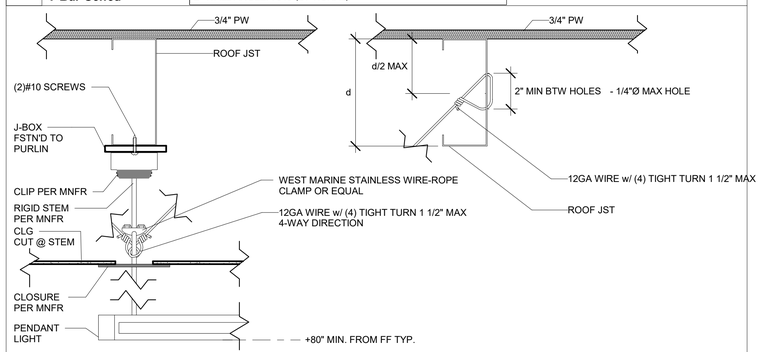


7 *1/4" = 1'-0"*
RCP - Optional Opening

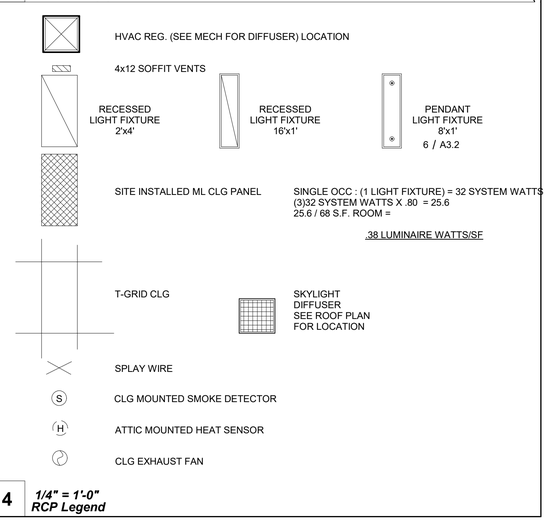
MAIN RUNNER 7301
4' CROSS T #: XL7341
2' CROSS T #: XL7328

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

5 *1/4" = 1'-0"*
T-Bar Sched



6 *3" = 1'-0"*
Section - Pendant Mounting Detail



4 *1/4" = 1'-0"*
RCP Legend

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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CLIENT

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

RCP

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

RH/RT

DATE

SHEET NO.

A3.2

SHEET OF

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1. CEILING SYSTEM GENERAL NOTES

1.01 Ceiling system components shall comply with ASTM C635 and Section 5.1 of ASTM E580.

1.02 The ceiling grid system must be rated heavy duty as defined by ASTM C635.

1.03 Ceiling systems. The following ceiling system(s) is/are part of the scope of this project:

Manufacturer:	ARMSTONG (OR EQUAL)
Product Name:	PRELUDE XL AND PRELUDE XL HIGH RECYLED CONTENT(HRC)
Evaluation Report Type and Number:	ICC ESR#1308
Main Runner Part, Model, or Catalog Number:	7301
Cross Runner Part, Model, Catalog Number:	4" CROSS T # XL7341 / 2" CROSS T # XL7328

1.04 Seismic Wall Clip: STANDARD 7/8" WALL ANGLE CLIP w/ BERC2 CLIP

Manufacturer's Model: 7810

1.05 Ceiling panels shall not support any luminaires, air terminals or devices.

1.06 For ceiling installations utilizing acoustical tile panels of mineral or glass fiber, it is not mandatory to provide ¾" clearance between the acoustical tile panels and the wall on the sides of the ceiling which are free to slip. For all other ceiling panel types, provide ¾" clearance between the ceiling panel and the wall on the sides of the ceiling free to slip. Clearance between ceiling grid runners/members and walls shall comply with the details on these drawings regardless of ceiling tile material.

2. MATERIALS

2.01 Ceiling wire shall be Class 1 zinc coated (galvanized) carbon steel conforming to ASTM A641. Wire shall be #12 gauge (0.106" diameter) with soft temper and minimum ultimate tensile strength = 70 ksi.

2.02 Galvanized sheet steel (including that used for metal stud and track compression struts/post) shall conform to ASTM A653, or other equivalent sheet steel listed in Section A3.1 of the North American Specification for the Design of Cold-Formed Steel Structural Members, (AISI S100). Material 43 mil (18 gauge) and lighter shall have minimum yield strength of 33 ksi. Material 54 mil (16 gauge) and heavier shall have a minimum yield strength of 50 ksi.

2.03 Electrical metallic tube (EMT) shall be ANSI C80.3/UL 797 carbon steel with G90 galvanizing. EMT shall have minimum yield strength (F_Y) of 30 ksi and minimum ultimate strength (F_U) of 48 ksi.

3. ATTACHMENT OF HANGER AND BRACING WIRES

3.01 Separate all ceiling hanger and bracing wires at least 6 inches from all unbraced ducts, pipes, conduit, etc.

3.02 Hanger and bracing wires shall not attach to or bend around obstructions including but not limited to piping, ductwork, conduit and equipment.

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CEILING NOTES	REV: 03/2022	1.00

NOTE:
BERG2 2" BEAM-END RETAINING CLIP -Allows you to create a code-compliant Seismic D, E, F ceiling installation while eliminating the need to use 2" wall molding or spreader bars.

TABLE 1: LATERAL FORCE BRACE ASSEMBLY SPACING

Design Spectral Acceleration Parameter, (S_{DS})	Brace Assembly Spacing	
	z/h ≤ 0.5[a]	z/h > 0.5[a,b]
S_{DS} ≤ 1.15	12'-0" x 12'-0"	12'-0" x 12'-0"
1.15 < S_{DS} ≤ 1.73	12'-0" x 12'-0"	8'-0" x 12'-0"
S_{DS} > 1.73	8'-0" x 12'-0"	8'-0" x 8'-0"

Footnotes:
a. Where, as defined in ASCE 7 Section 13.3.1:
z = height in structure of point of attachment of ceiling with respect to the base.
h = average roof height of the structure with respect to the base.
b. It shall be permitted to use the brace assembly spacing for "z/h > 0.5" for the full building height.

SEE ALT SHEET FOR FINAL CONFIGURATION OF CEILING AND S_{DS} VALUE SITE SPECIFIC

3.03 Hanger wires that are more than one (horizontal) in six (vertical) out of plumb shall have counter-sloping wires.

3.04 Slack safety wires shall be considered hanger wires for installation and testing requirements.

3.05 Hanger and bracing wire anchorage to the structure shall be installed in such a manner that the direction of the anchorage aligns closely with the direction of the wire (e.g., bracing wire ceiling clips must be bent as shown in the details and rotated as required to align closely with the direction of the wire, screw eyes in wood must be installed so they align closely with the direction of the wire, etc.).

4. FASTENERS AND WELDING

4.01 Sheet metal screws shall comply with ASTM C1513 and ASME B18.6.3. Penetration of screws through joined material shall not be less than three exposed threads.

4.02 Expansion anchors shall be: NA

4.03 Power-Actuated Fasteners shall be: NA

4.04 If not otherwise specified in the evaluation report, power-actuated fasteners installed in steel shall be installed so the entire pointed end of the fastener is driven through the steel member

4.05 Power-actuated fasteners in concrete or masonry are not permitted for bracing wires.

4.06 Concrete reinforcement and prestressing tendons shall be located by non-destructive means prior to installing post-installed anchors.

4.07 Welding shall be in accordance with AWS D1.3 using E60XX series electrodes.

5. TESTING

5.01 All field testing must be performed in the presence of the project inspector.

5.02 Post-installed anchors in concrete used to support hanger wires shall be tested at a frequency of 10 percent. Power-actuated fasteners in concrete shall be field tested for 200 pounds in tension. All other post-installed anchors in concrete shall be tested in accordance with CBC Section 1910A.5.

5.03 Post-installed anchors in concrete used to attach bracing wires shall be tested at a frequency of 50 percent in accordance with CBC Section 1910A5.

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

Detail Title:	REV: 09/21/2015	Detail No.
CEILING NOTES	REV: 03/2022	1.00

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.

Detail Title:	REV: 09/21/2015	Detail No.
CEILING NOTES	REV: 03/2022	1.00

NOTE:
1.ITEMS SHOWN WITH A MFR CALLOUT MAY BE SUBSTITUTED WITH AN OR EQUAL OR GREATER PRODUCT WITH DSA APPROVAL

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ● CONSULTING ● PROJECT MGT
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www.rstavares.com

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER MANNY D. FRANCISCO 03380 03/31/24 CIVIL STRUCTURAL STATE OF CALIFORNIA
RST#22088
02/16/24

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CLIENT

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
CEILING NOTES

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A3.2.1

SHEET OF

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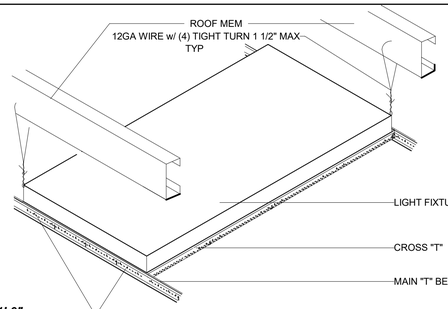
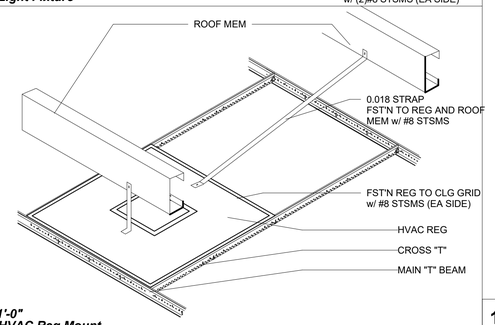
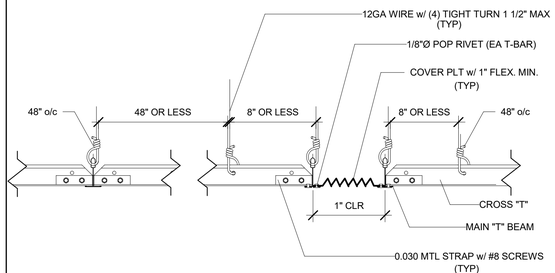


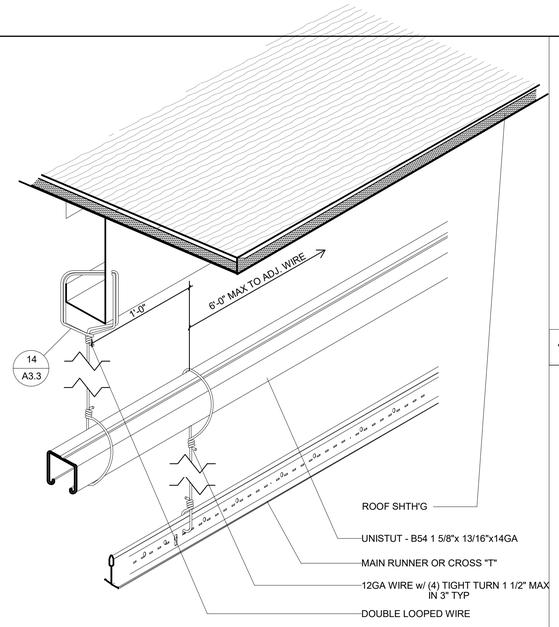
18 *1" = 1'-0"*
ISO - Light Fixture



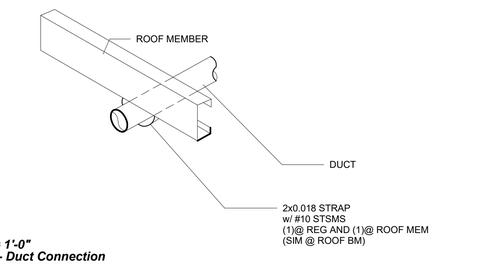
17 *1" = 1'-0"*
ISO - HVAC Reg Mount



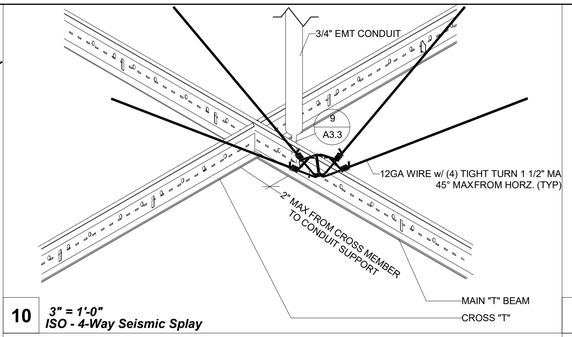
16 *3" = 1'-0"*
Section - "T" Grid @ Mod Line



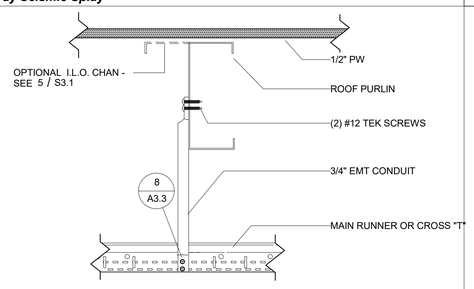
12 *3" = 1'-0"*
ISO - Trapeze Condition



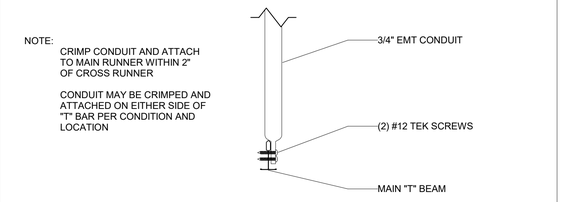
11 *1" = 1'-0"*
ISO - Duct Connection



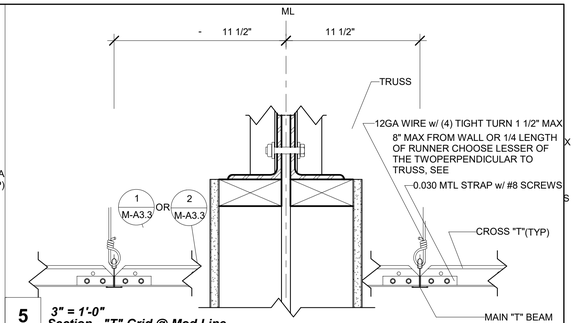
10 *3" = 1'-0"*
ISO - 4-Way Seismic Splay



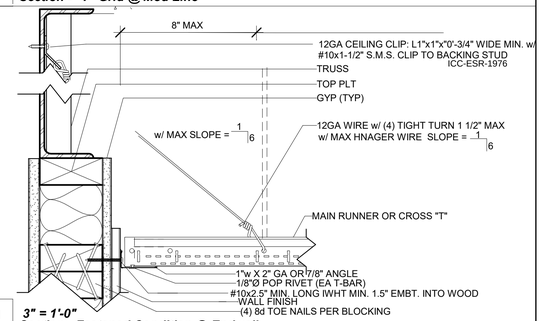
9 *3" = 1'-0"*
Elevation - Compression Strut



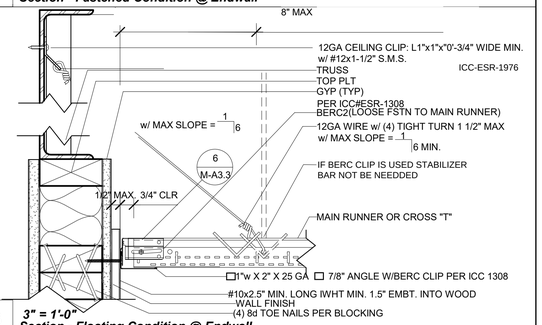
8 *3" = 1'-0"*
Section - Compression Strut



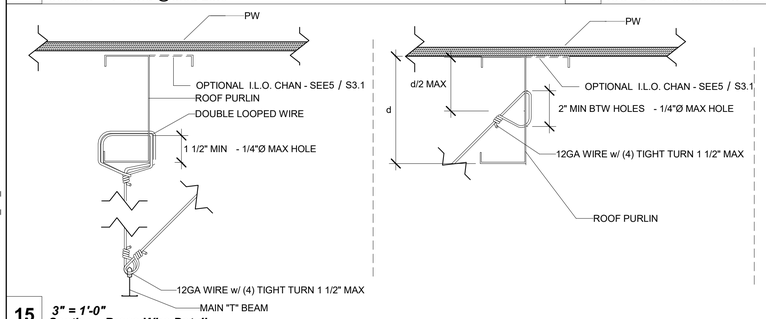
5 *3" = 1'-0"*
Section - "T" Grid @ Mod Line



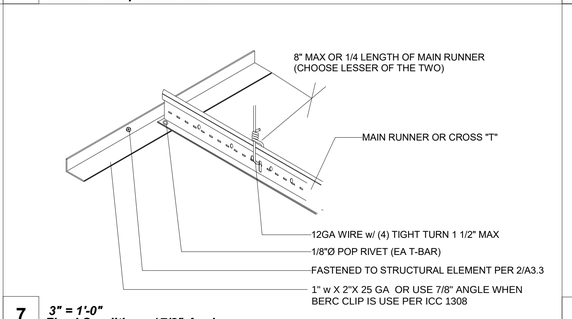
4 *3" = 1'-0"*
Section - Fastened Condition @ Endwall



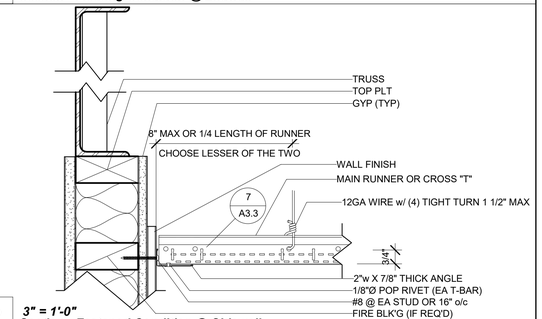
3 *3" = 1'-0"*
Section - Floating Condition @ Endwall



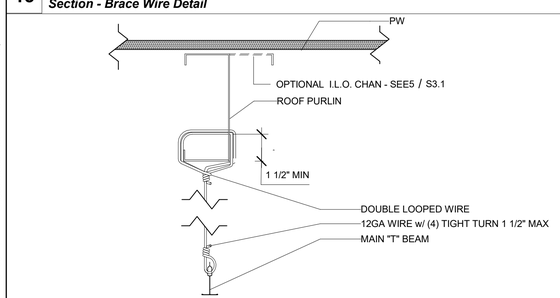
15 *3" = 1'-0"*
Section - Brace Wire Detail

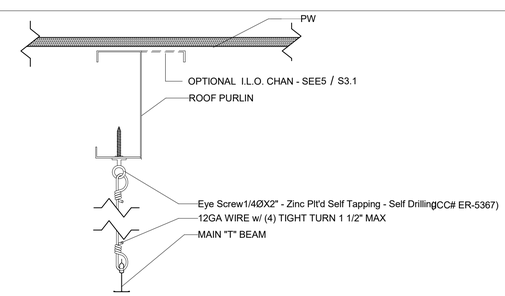


7 *3" = 1'-0"*
Fixed Condition w/ 7/8" Angle

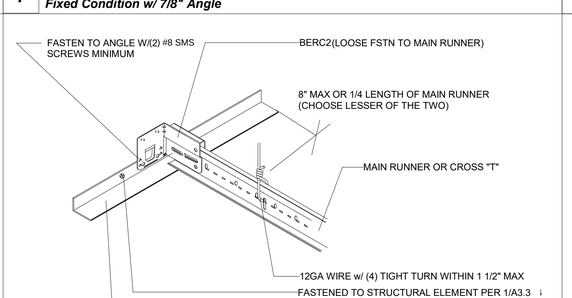


2 *3" = 1'-0"*
Section - Fastened Condition @ Sidewall

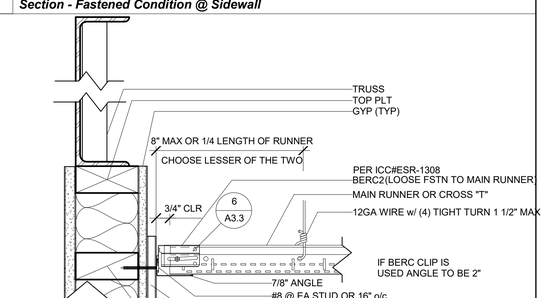




14 *3" = 1'-0"*
Section - Hanger Wire Detail



6 *3" = 1'-0"*
Floating Condition w/ 7/8" Angle



1 *3" = 1'-0"*
Section - Floating Condition @ Sidewall

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

CEILING DETAILS (T-GRID)

PROJECT NUMBER 22088

DRAWN BY rMc/SC

CHECKED BY RH/RT

DATE

SHEET NO. A3.3

SHEET OF

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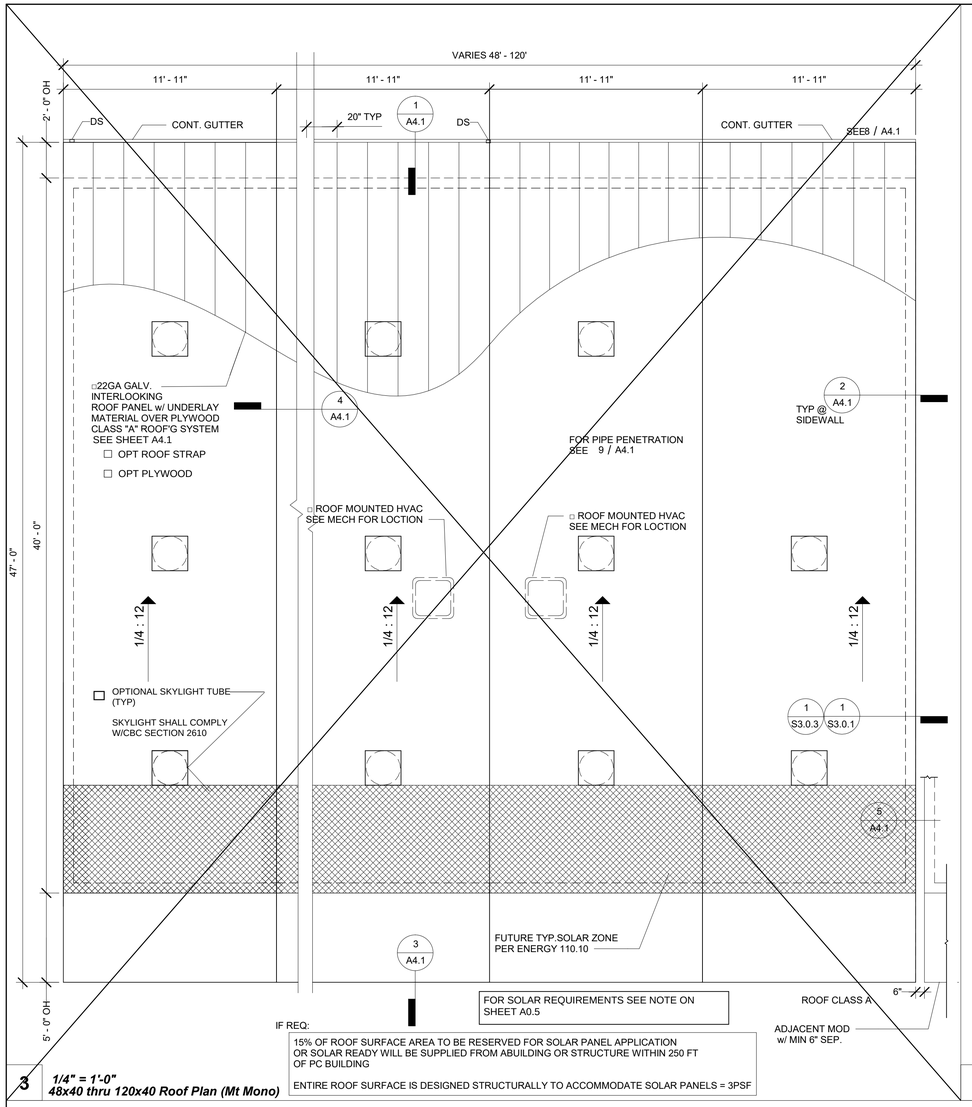
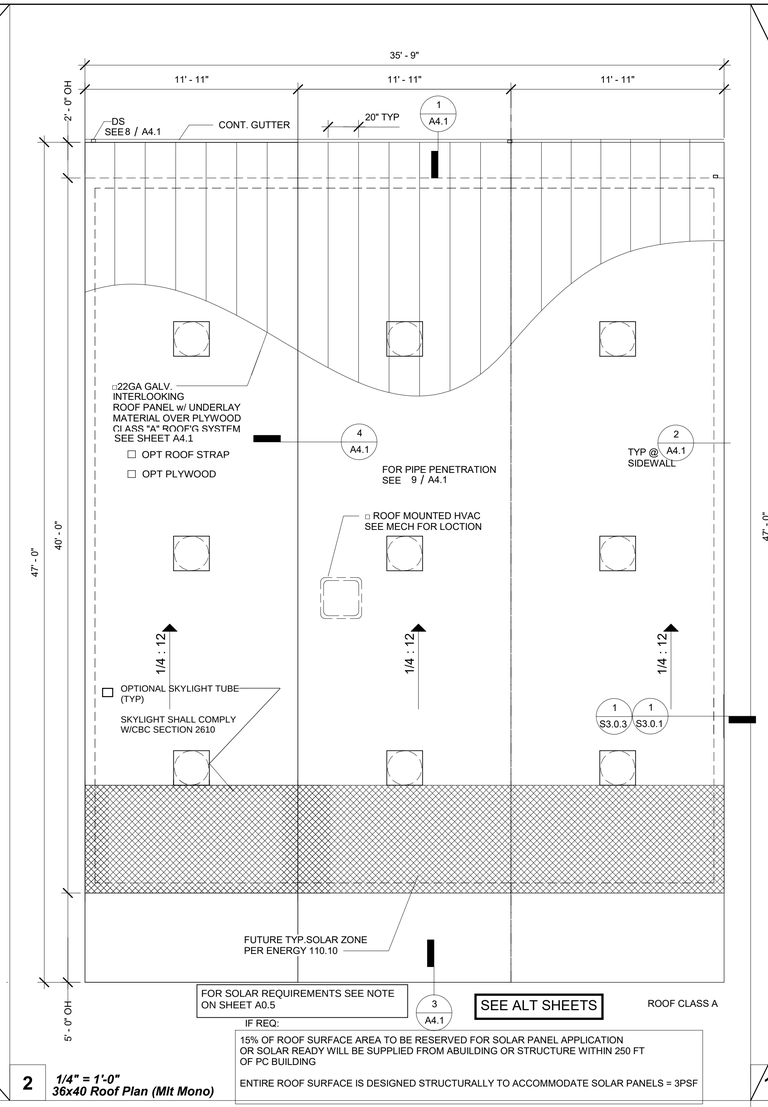
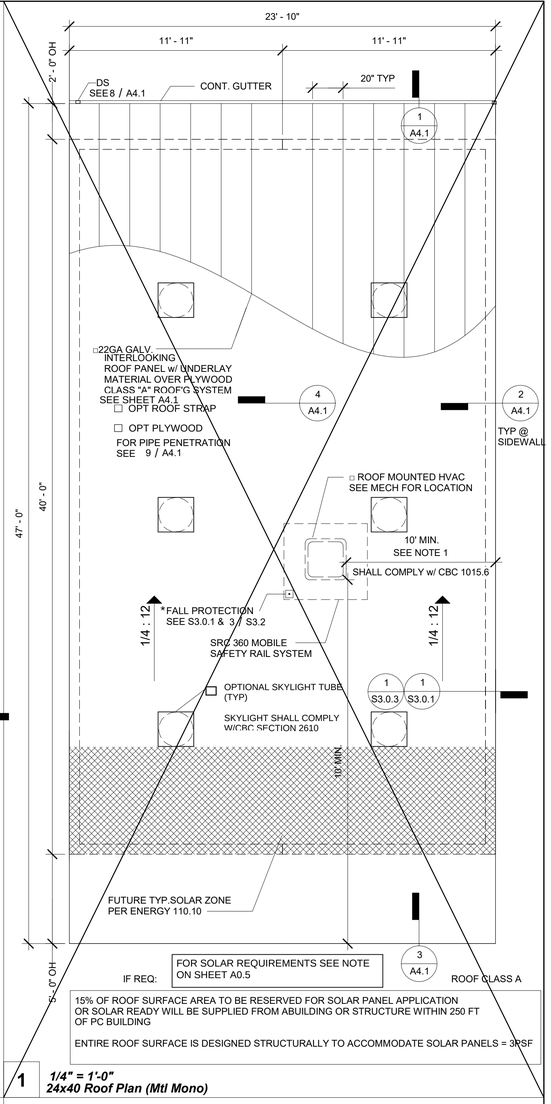
6/15/2021 11:51:03 PM



3 *1/4" = 1'-0"*
48x40 thru 120x40 Roof Plan (Mt Mono)



2 *1/4" = 1'-0"*
36x40 Roof Plan (Mlt Mono)



1 *1/4" = 1'-0"*
24x40 Roof Plan (Mtl Mono)

Note: For conditioned structures, roofing must be installed IAW 2019 CBC SECTION 1202.3

1202.3 Unvented Attic and Unvented Enclosed Rafter Assemblies

Unvented attics and unvented enclosed roof framing assemblies created by ceilings applied directly to the underside of the roof framing members/rafters and the structural roof sheathing at the top of the roof framing members shall be permitted where all of the following conditions are met:

1. The unvented attic space is completely within the building thermal envelope.
2. No interior Class I vapor retarders are installed on the ceiling side (attic floor) of the unvented attic assembly or on the ceiling side of the unvented enclosed roof framing assembly.
3. Where wood shingles or shakes are used, not less than a 1/4-inch (6.4 mm) vented airspace separates the shingles or shakes and the roofing underlayment above the structural sheathing.
4. In Climate Zones 14 and 16, any air-impermeable insulation shall be a Class II vapor retarder or shall have a Class II vapor retarder coating or covering in direct contact with the underside of the insulation.

   See the California Energy Code, Figure 100.1-A — California Climate Zones.

   4.1. **[HCD 1 & HCD 2]** In Climate Zones 14 and 16, a Class I or Class II vapor retarder shall be installed on the indirectly conditioned space side of all insulation in an unvented attic with air-permeable insulation, for condensation control.
5. Insulation shall be located in accordance with the following:

   5.1. Item 5.1.1, 5.1.2, 5.1.3 or 5.1.4 shall be met, depending on the air permeability of the insulation directly under the structural roof sheathing. No insulation shall be required when roof tiles, wood shingles or wood shakes, or any other roofing system using battens and no continuous underlayment is installed. A continuous underlayment shall be considered to exist if sheathing, roofing paper or any continuous layer having a perm rate of no more than one perm under the dry cup method is present.

   5.1.1. Where only air-impermeable insulation is provided, it shall be applied in direct contact with the underside of the structural roof sheathing.

   5.1.2. Where air-permeable insulation is provided inside the building thermal envelope, it shall be installed in accordance with

   Item 5.1.1. In addition to the air-permeable insulation installed directly below the structural sheathing, rigid board or sheet insulation shall be installed directly above the structural roof sheathing in accordance with the R-values in Table 1202.3 for condensation control.

   5.1.3. Where both air-impermeable and air-permeable insulation are provided, the air-impermeable insulation shall be applied in direct contact with the underside of the structural roof sheathing and shall be in accordance with the R-values in Table 1202.3 for condensation control. The air-permeable insulation shall be installed directly under the air-impermeable insulation.

   5.1.4. Alternatively, sufficient rigid board or sheet insulation shall be installed directly above the structural roof sheathing to maintain the monthly average temperature of the underside of the structural roof sheathing above 45°F (7°C). For calculation purposes, an interior air temperature of 68°F (20°C) is assumed and the exterior air temperature is assumed to be the monthly average outside air temperature of the three coldest months.

   5.2. Where preformed insulation board is used as the air-impermeable insulation layer, it shall be sealed at the perimeter of each individual sheet interior surface to form a continuous layer.

Exceptions:

1. Section 1202.3 does not apply to special use structures or enclosures such as swimming pool enclosures, data processing centers, hospitals or art galleries.
2. Section 1202.3 does not apply to enclosures in Climate Zones 14 and 16 that are humidified beyond 35 percent during the three coldest months.

TABLE 1202.3
INSULATION FOR CONDENSATION CONTROL

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

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

NOTE: PER CBC 1015.6, - EXCEPTION, GUARDRAILS ARE NOT REQUIRED WHERE PERMANENT FALL RESTRAINT ANCHORAGE DEVICES ARE AFFIXED & SHALL BE PLACED NOT MORE THAN 10FT FROM THE ROOF EDGE.

ROOFS SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 7A AND CHAPTER 15. ROOFS SHALL HAVE A ROOFING ASSEMBLY INSTALLED IN ACCORDANCE WITH ITS LISTING AND THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

* IF ROOF MOUNTED UNIT IS APPLIED

PV AREA FOR FIRE ACCESS REQ'T (PER IR 16-8)

3.2.1 General Requirements: A PV System shall be typically considered equipment. There is typically not an occupancy group classification, building area limitation, or type of construction assignment to a PV system.
a) PV equipment supported by non-combustible framing installed in locations dedicated for building frontage used for area increases per California Building Code (CBC), Chapter 5, Section 506, shall be limited in size and may be allowed on a case by case basis. Maximum area that may be allowed for such systems shall not exceed 1/3 of the horizontal projected area of each frontage.
b) Open sided PV systems and framing that are non-combustible and without use underneath may be considered equipment and may be placed next to DSA IR 16-8 Solar Photovoltaic and Thermal (updated 01-25-17) Systems Review and Approval Requirements Page 11 of 19 property lines. Signs may be required on or near the system prohibiting any use or storage underneath the equipment.
c) Combustible PV systems and framing and those with use underneath such as for assembly or parking, may need to comply with 2022 CBC, Table 602. These structures may include those that do and that do not have a roof underneath the PV system.
d) PV systems (both the frame and the array) shall not be placed in fire department access roads. (Per Title 24 CCR, Division 1, Chapter 1, Section 3.05 and 2022 CFC Chapter 5, Section 503.)
e) Access to a public way or safe dispersal area shall not be obstructed by the system or system framing. (CBC 1027.6 and 442.3)
f) PV systems that cover a lunch area or similar (occupant load less than 50), that are not used for assembly purposes shall be considered equipment. Playgrounds would also fall into this category regardless of total occupant load.
g) Any PV system that is installed above an assembly use (i.e. Group A-3 or A-5 occupancy classification) shall be considered an open sided building structure and all or portions of CBC provisions apply on a case by case basis. Such areas might include an outdoor amphitheater, bleacher or grandstand seating with concentrated occupant loads and heavy use.
h) Fire Department concern for the installation of roof mounted PV systems will be addressed by DSA review to the State Fire Marshal Solar Photovoltaic Installation Guideline available at: http://osfm.fire.ca.gov/pdf/reports/solarphotovoltaicguideline.pdf
i) When a PV system, without riser framework, is installed directly on a rated roof assembly with a required classification greater than "Class C" found in CBC, Chapter 15, and f

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. C-83380
03/31/24
CIVIL
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ROOF PLAN MONO SLOPE (STANDING SEAM)

PROJECT NUMBER 22088

DRAWN BY rMc/SC

CHECKED BY RH/RT

DATE

SHEET NO. A4.0.1

SHEET OF

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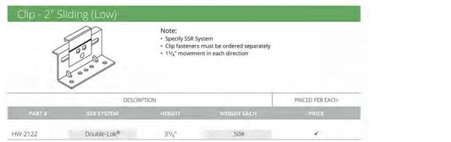
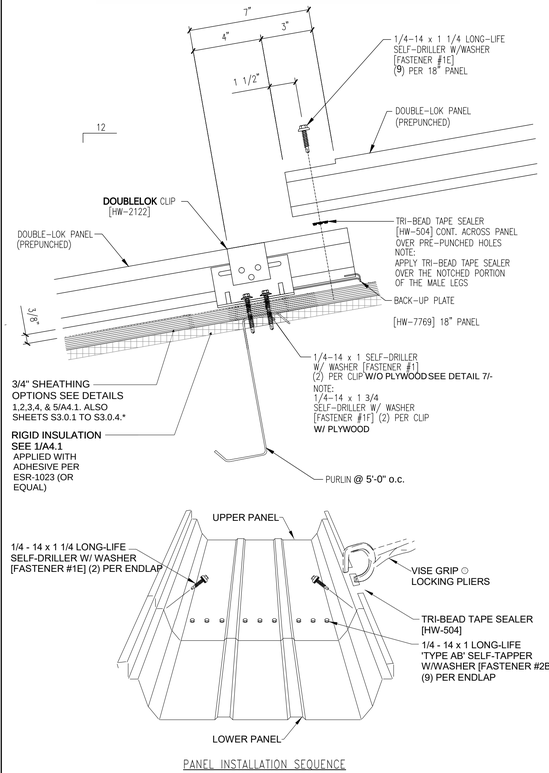
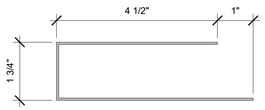
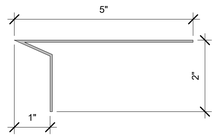




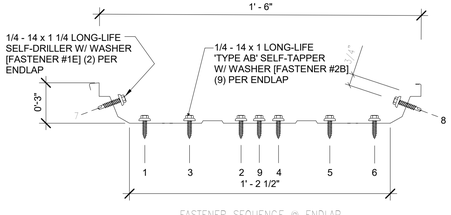
14 ***6" = 1'-0"***
FLASHING @ ROOF HIGH SIDE



13 ***6" = 1'-0"***
FLASHING @ ROOF LOW SIDE



PANEL INSTALLATION SEQUENCE



FASTENER SEQUENCE @ ENDLAP

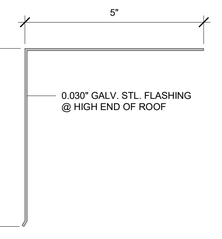
18" DOUBLE-LOK 22GA STANDING SEAM PANEL BY MBCI			
NEG.		POS.	
t	= 0.0299"	t	= 0.0299"
S_x	= 0.1846 IN^3	S_x	= 0.2154 IN^3
I_x	= 0.2718 IN^4	I_x	= 0.4968 IN^4
F_y	= 50 KSI	F_y	= 50 KSI

FOR ALL METAL ROOFING SYSTEMS USE OR EQUAL

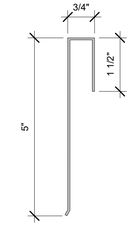
* PLYWOOD UNDERLAY IS USED PER S3.0.1 & S3.0.2 CONDITIONS AND IS OPTIONAL AT THE METAL DECK CONDITIONS PER S3.0.3 & S3.0.4

15

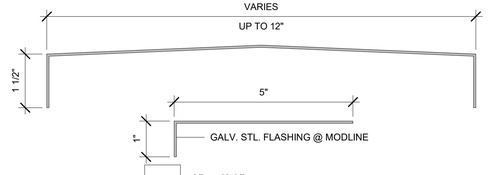
MIAMI-DADE COUNTY
NOA NO. 21-0615.07



12 ***6" = 1'-0"***
ROOF FLASHING

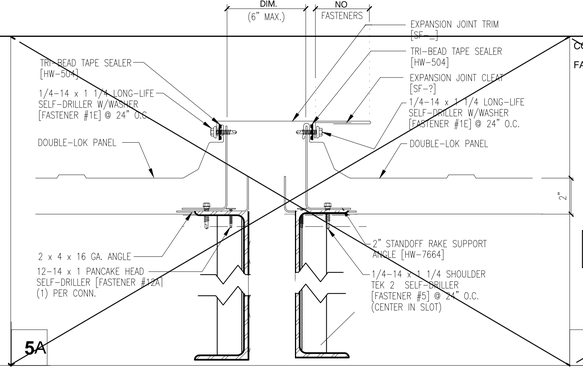


11 ***6" = 1'-0"***
ROOF FLASHING @ SIDEWALL



10A ***6" = 1'-0"***
FLASHING @ MODLINE WALL

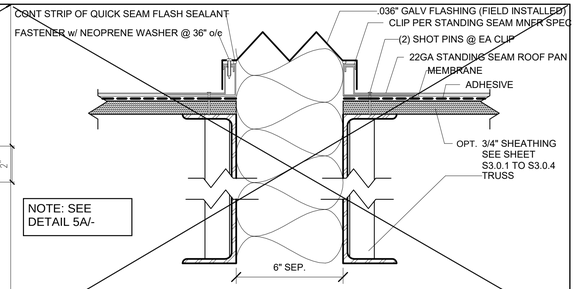
10 ***6" = 1'-0"***
ROOF CAP @ MODLINE

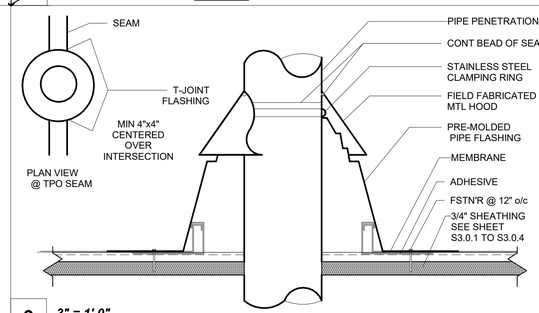


5A

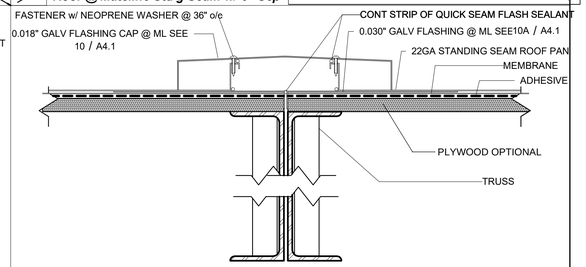
NOTE: SEE DETAIL 5A/-

5 ***3" = 1'-0"***
Roof @ Mateline Std'g Seam w/ 6" Sep ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS

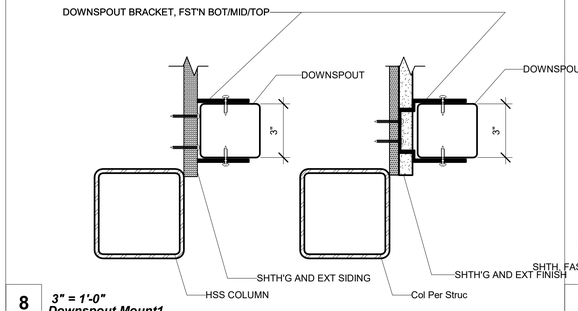




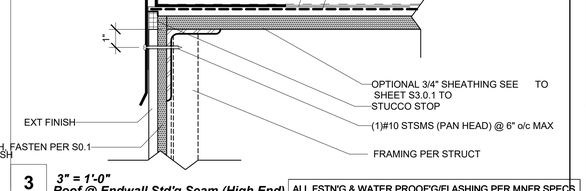
9 ***3" = 1'-0"***
Pipe Penetration Standing Seam ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS



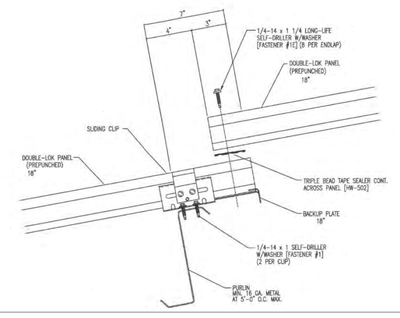
4 ***3" = 1'-0"***
Roof @ Standing Seam Mateline ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS



8 ***3" = 1'-0"***
Downspout Mount1



3 ***3" = 1'-0"***
Roof @ Endwall Std'g Seam (High End) ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS



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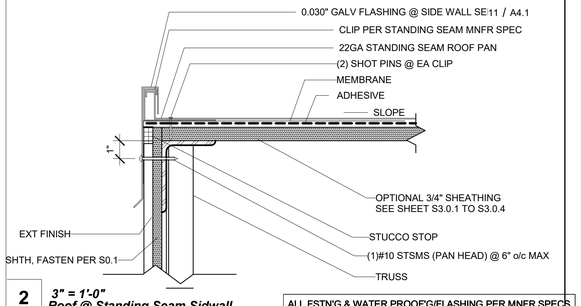
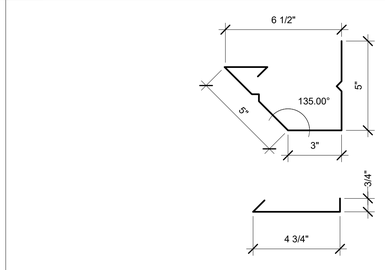
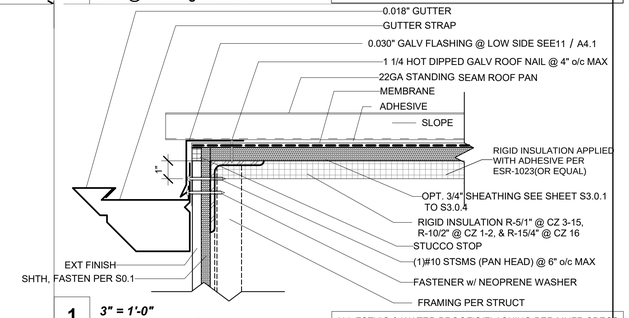


2 ***3" = 1'-0"***
Roof @ Standing Seam Sidwall ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS



6 ***3" = 1'-0"***
Gutter and Strap1



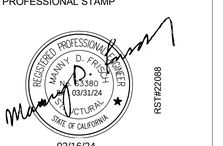
1 ***3" = 1'-0"***
Roof @ Endwall Std'g Seam (Low End) ALL FSTN'G & WATER PROOF'G/FLASHING PER MNFR SPECS

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP



02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
ROOF DETAILS (STANDING SEAM)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A4.1

SHEET OF

6/15/2021 11:51:15 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

Ext. Finish Schedule

	Finishes	Sheet	Notes
☒	SIDING OVER WD STUDS	A2.1	
☐	PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.2	

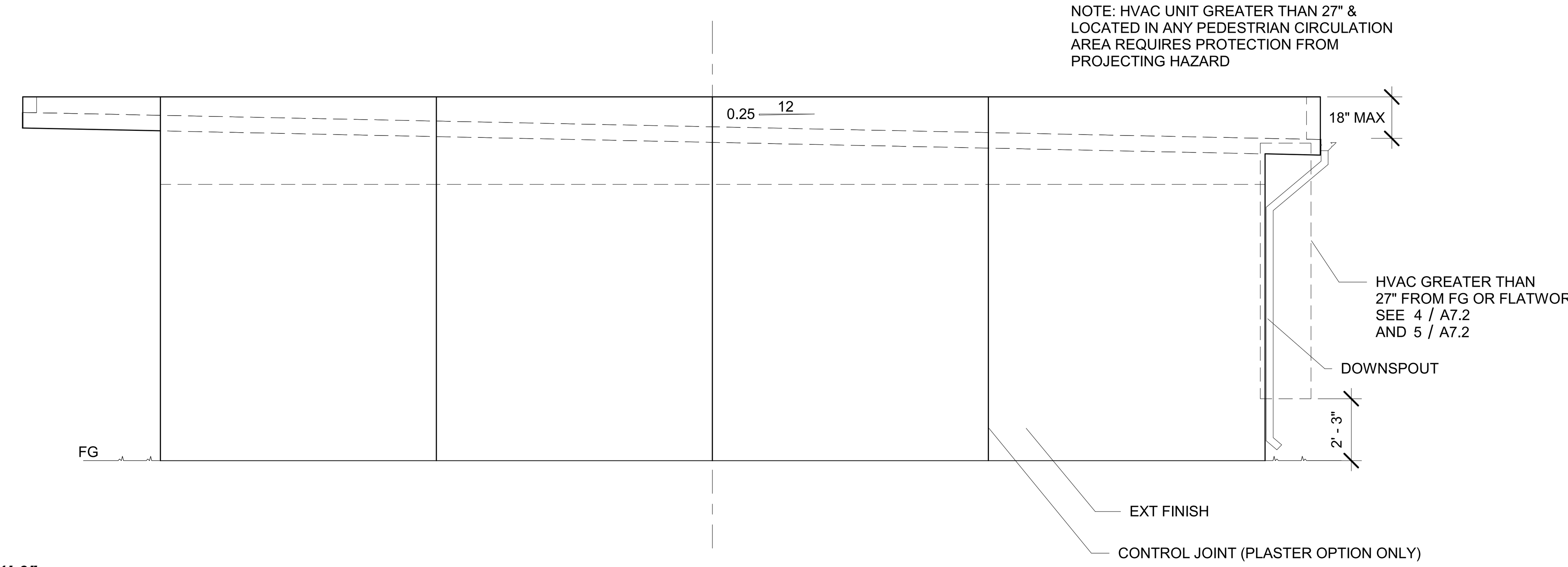
9 *1/4" = 1'-0"*
Ext. Finish Scedule

Fire Rating Schedule

	Rating	Sheet	Notes
☐	1 HOUR - SIDING OVER WD STUDS	A2.5	
☐	1 HOUR - PLASTER OVER 1/2" OSB OR 1/2" CDX PLY w/ WD STUDS	A2.6	

SEE A3.0 FOR ADDITIONAL FIRE ASSEMBLY NOTES AND DETAILS

10 *1/4" = 1'-0"*
Fire Rating Scedule



4 *1/4" = 1'-0"*
Right Elevation (Mono w/ Parapet)

SEE A0.1 FOR GENERAL NOTES

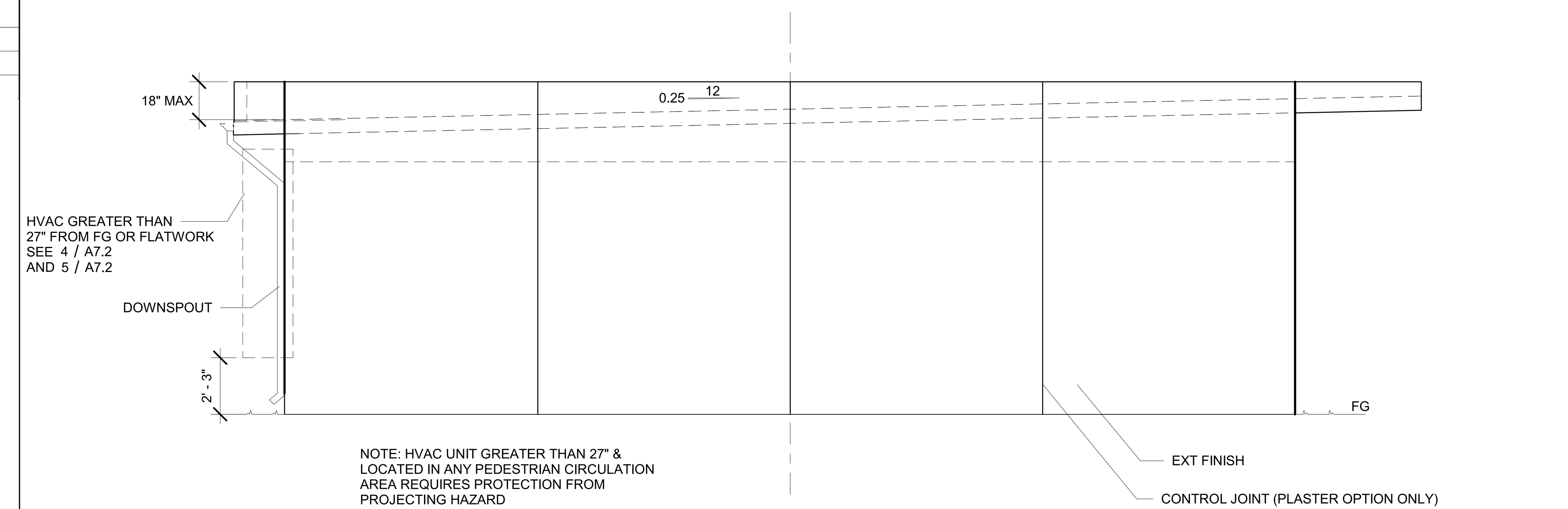
7 *3" = 1'-0"*
Notes A5.0

Wall Schedule

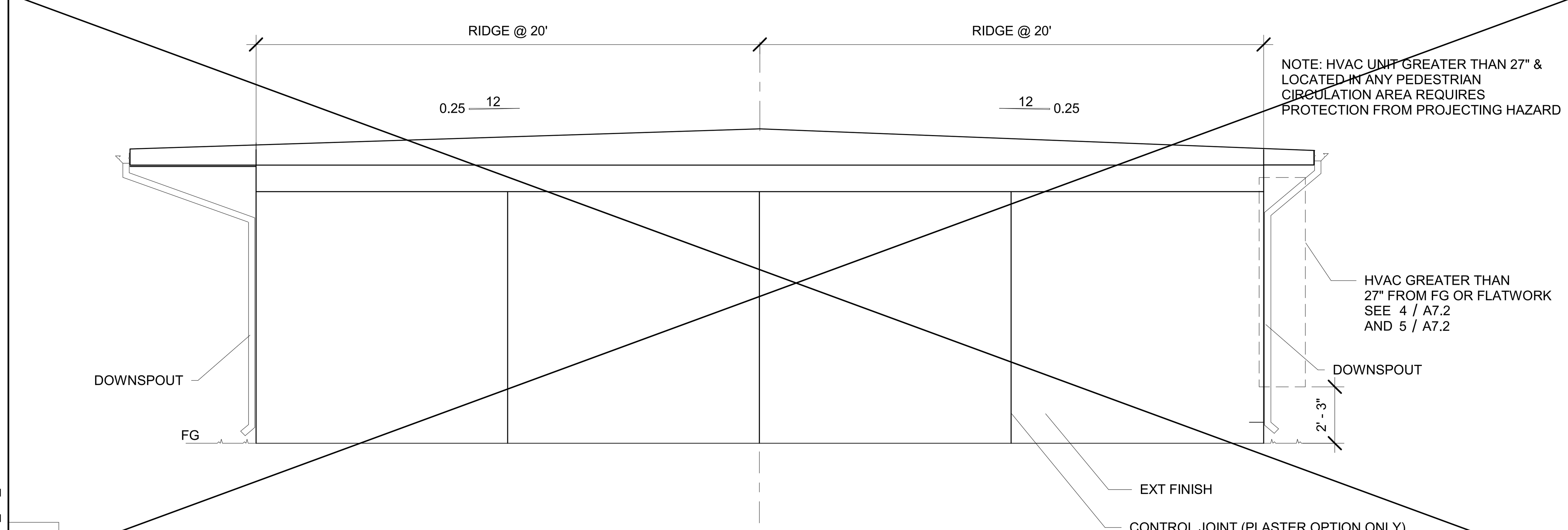
	Stud Size	Sheet	Notes
☒	Wood Wall Stud	S4.5	

FOR WUI DETAILS SEE SHEETS: A2.1(B)
A2.3(B)
A2.5(B)
A2.7(B)

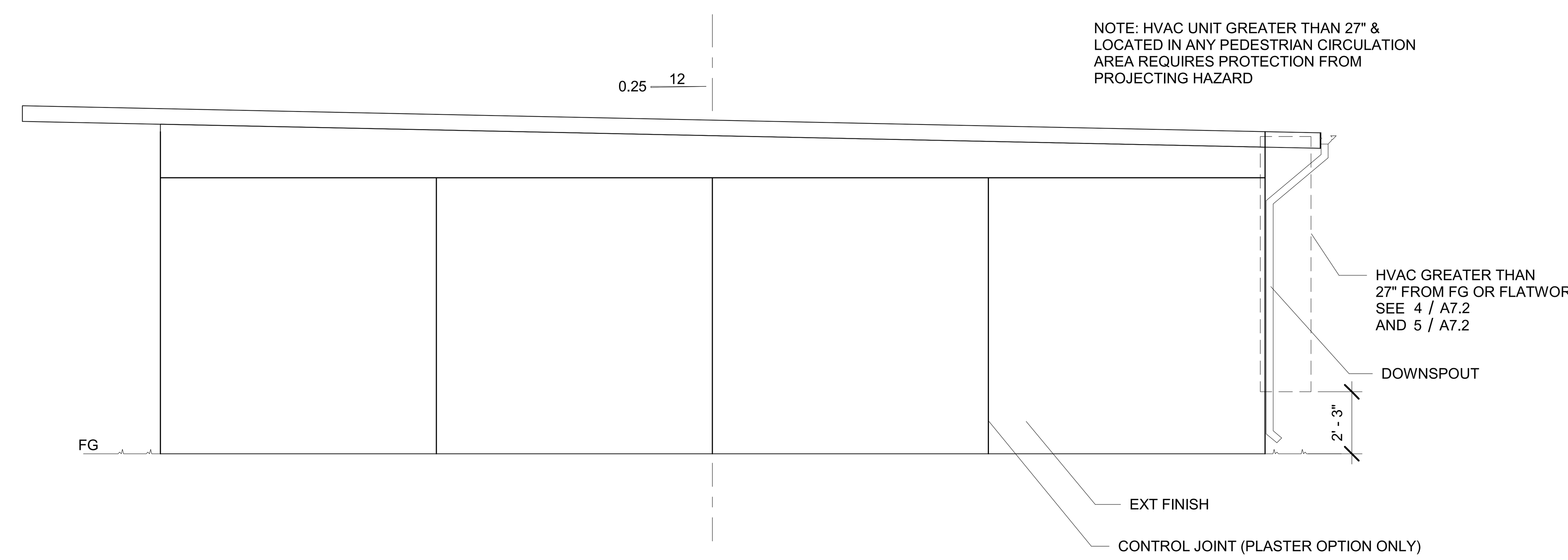
8 *1/4" = 1'-0"*
Wall Schedule



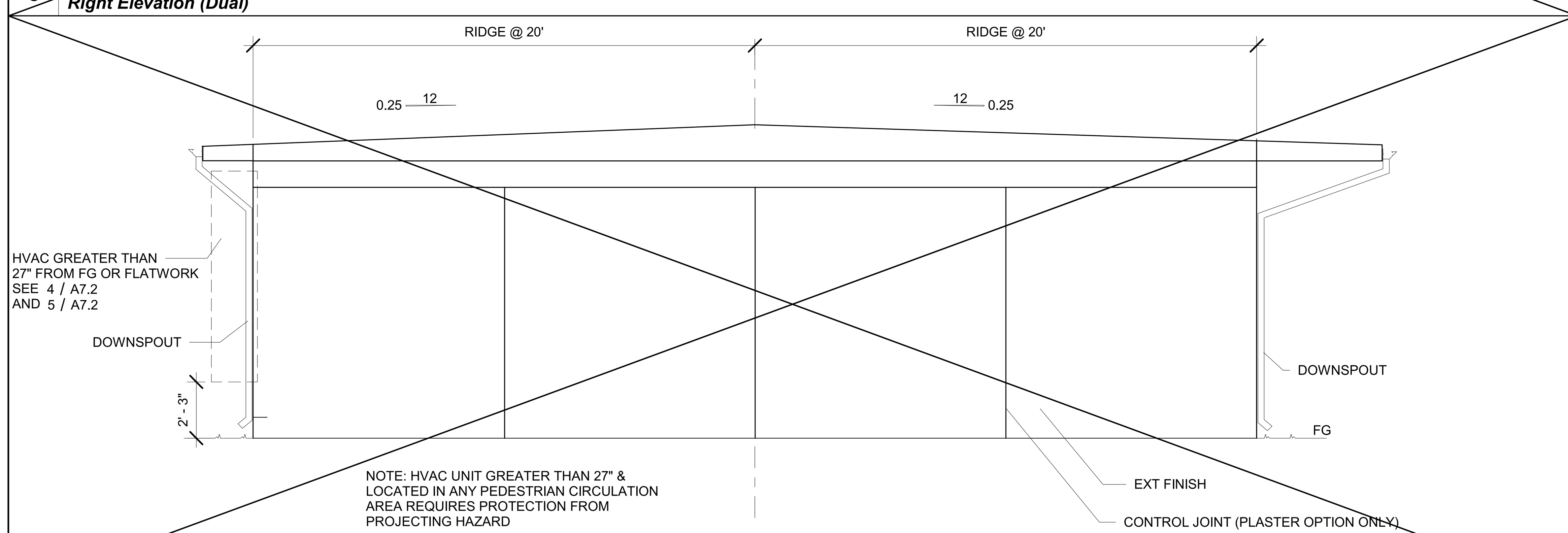
3 *1/4" = 1'-0"*
Left Elevation (Mono w/ Parapet)



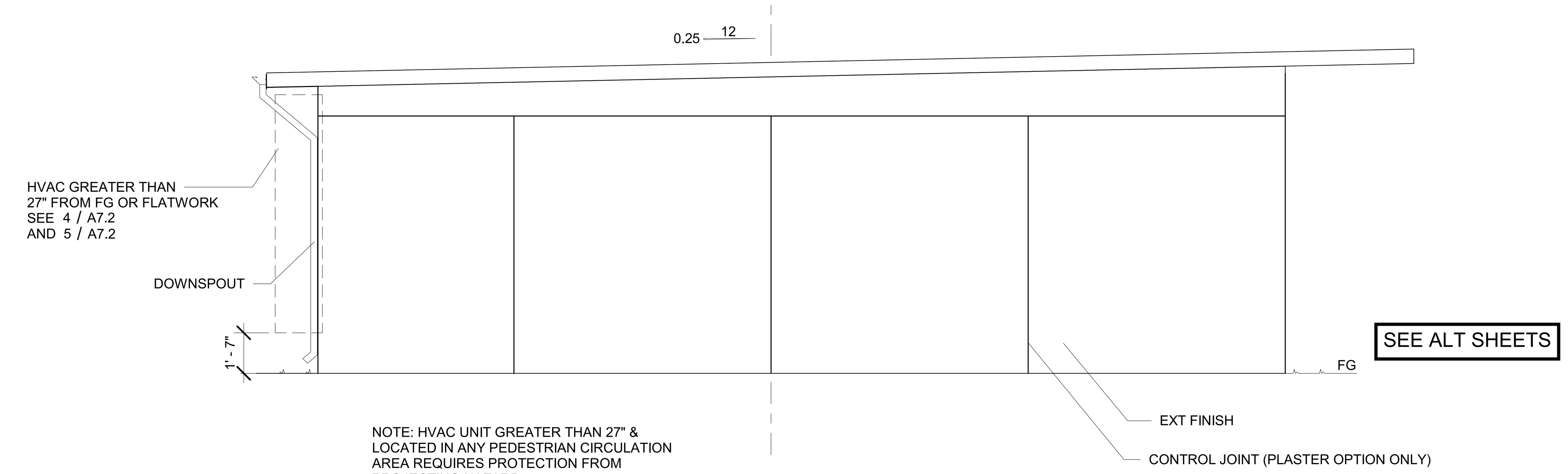
6 *1/4" = 1'-0"*
Right Elevation (Dual)



2 *1/4" = 1'-0"*
Right Elevation (Mono)



5 *1/4" = 1'-0"*
Left Elevation (Dual)



SEE ALT SHEETS

1 *1/4" = 1'-0"*
Left Elevation (Mono)

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PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN • CONSULTING • PROJECT MGT
11590 W BERNARDO COURT, SUITE 100
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WWW.RSTAVARES.COM

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER MANNY D. FRISCH S3380 03/31/24 STRUCTURAL STATE OF CALIFORNIA
RST#22088
02/16/24

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Class Leasing
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Voice (951) 943-1908 Fax (951)943-5768

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

Revision Schedule

#	Description	Date

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

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

SHEET TITLE
SIDEWALL ELEVATION

PROJECT NUMBER
22088

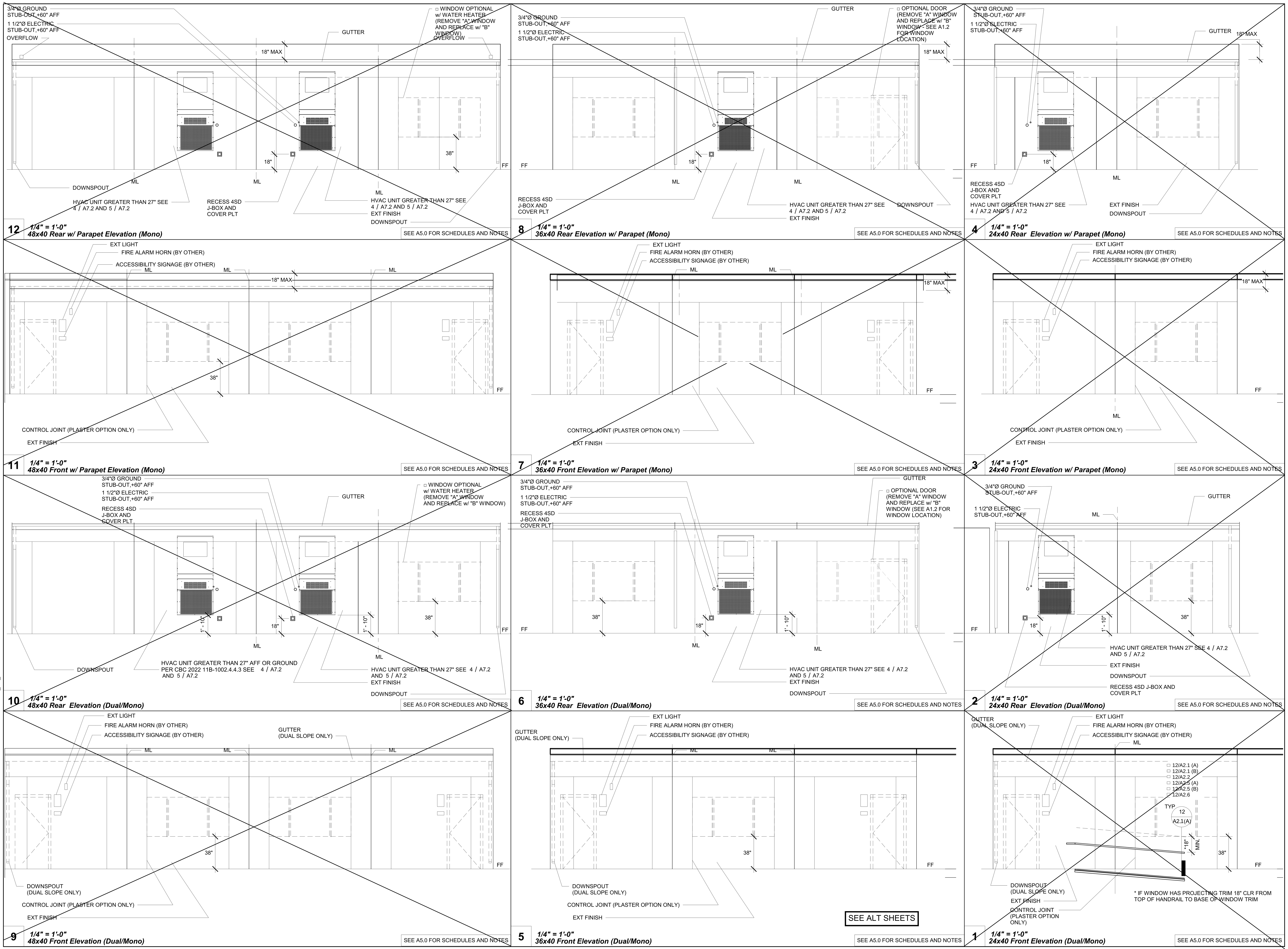
DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A5.0

SHEET OF



PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
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11590 W Bernardo Court, Suite 100
San Diego, CA 92127
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
S3380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

Revision Schedule

#	Description	Date

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

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

SHEET TITLE
ENDWALL ELEVATIONS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A5.1

SHEET OF

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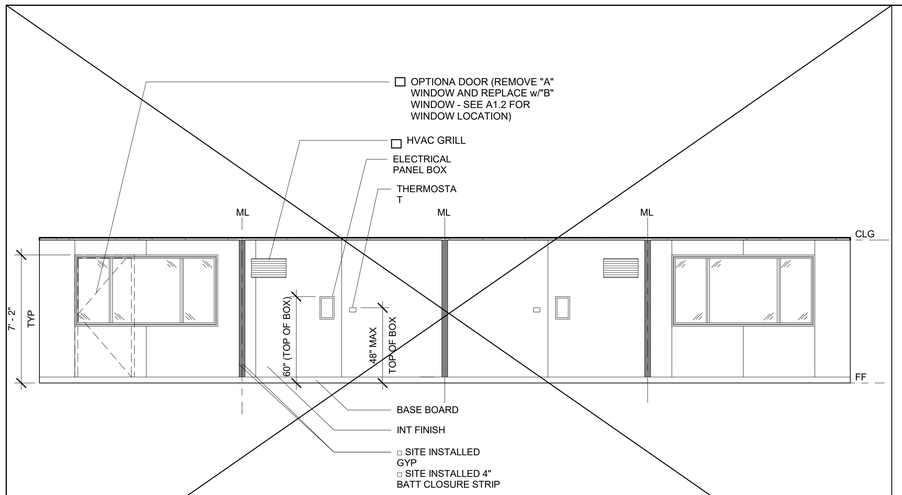
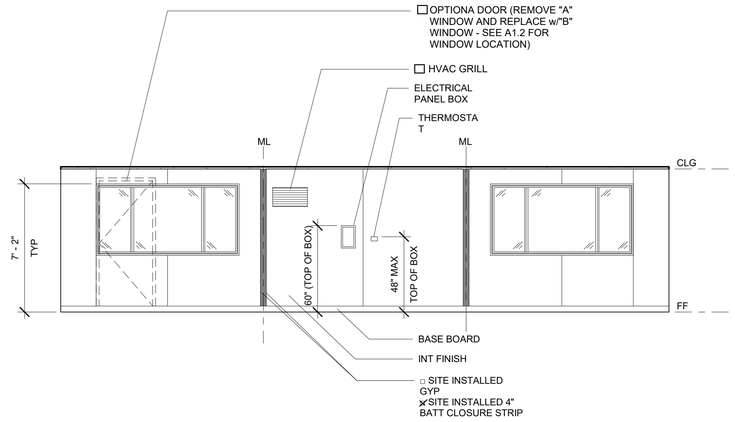
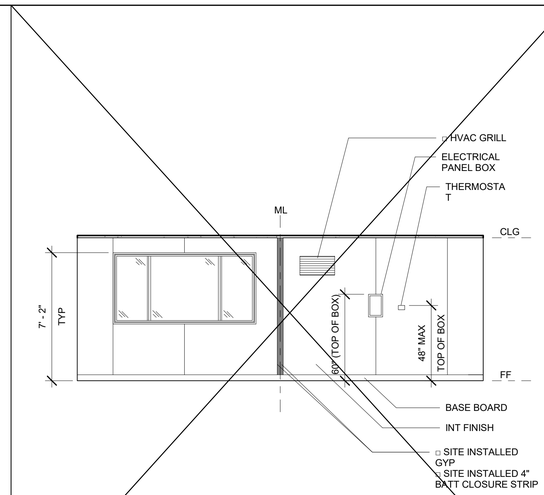


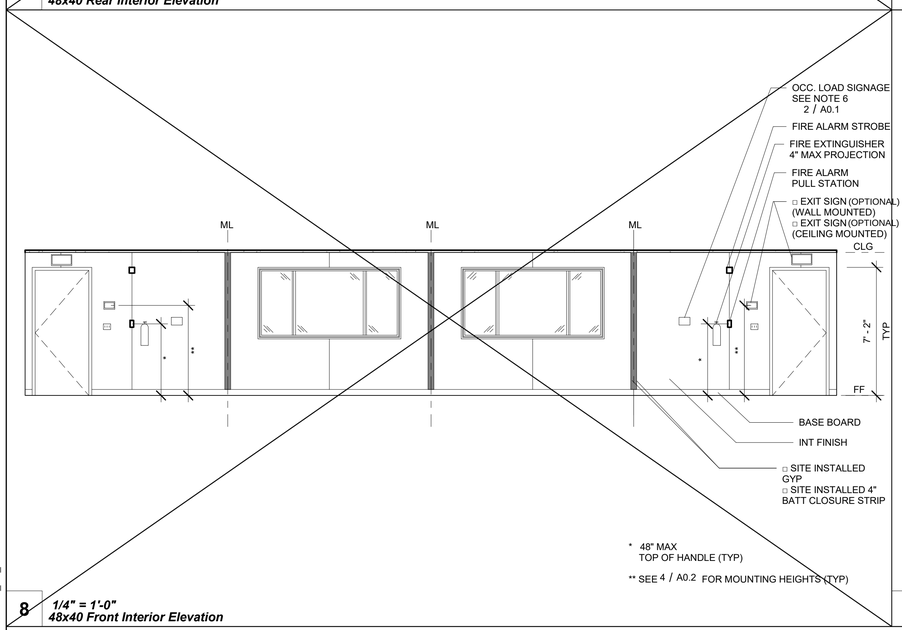
7 *1/4" = 1'-0"*
48x40 Rear Interior Elevation



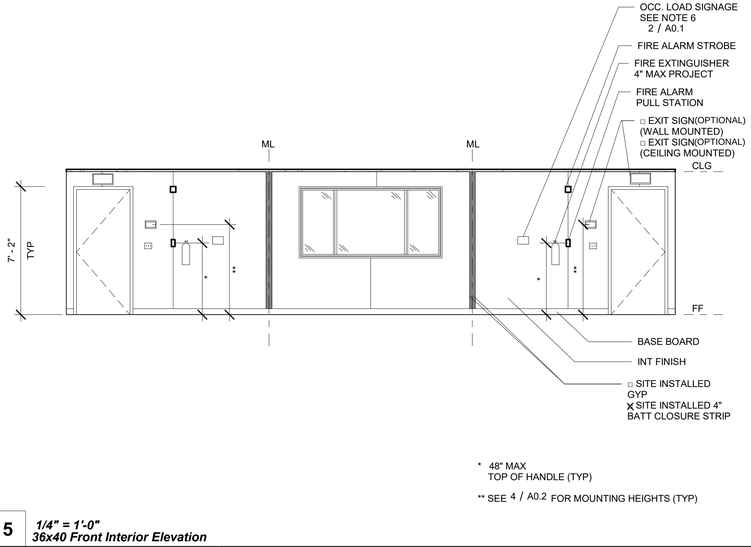
6 *1/4" = 1'-0"*
36x40 Rear Interior Elevation



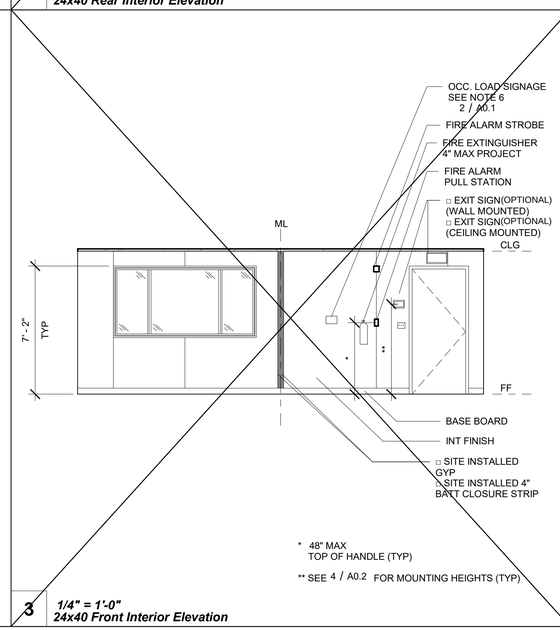
4 *1/4" = 1'-0"*
24x40 Rear Interior Elevation



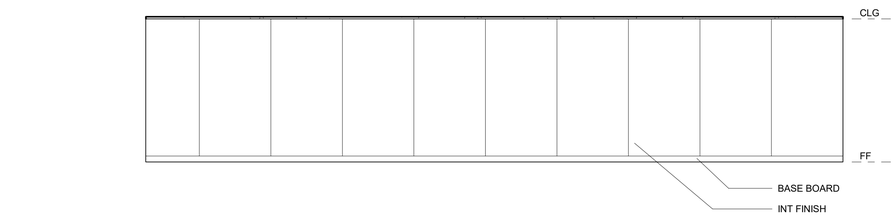
8 *1/4" = 1'-0"*
48x40 Front Interior Elevation



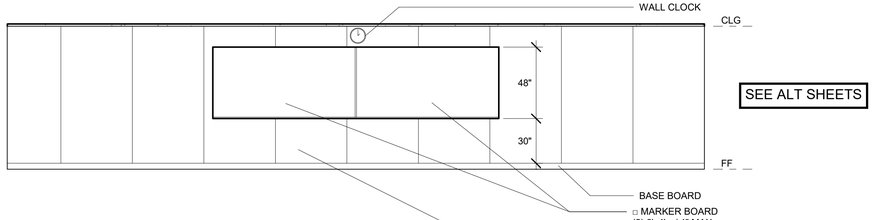
5 *1/4" = 1'-0"*
36x40 Front Interior Elevation



3 *1/4" = 1'-0"*
24x40 Front Interior Elevation



1 *1/4" = 1'-0"*
Interior Elevation (Left)



SEE ALT SHEETS

2 *1/4" = 1'-0"*
Interior Elevation (Right)

6/15/2021 11:51:46 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6_7_CES4R24D63.rvt

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. C-53380
03/31/24
CIVIL
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
INTERIOR ELEVATIONS

PROJECT NUMBER
22088

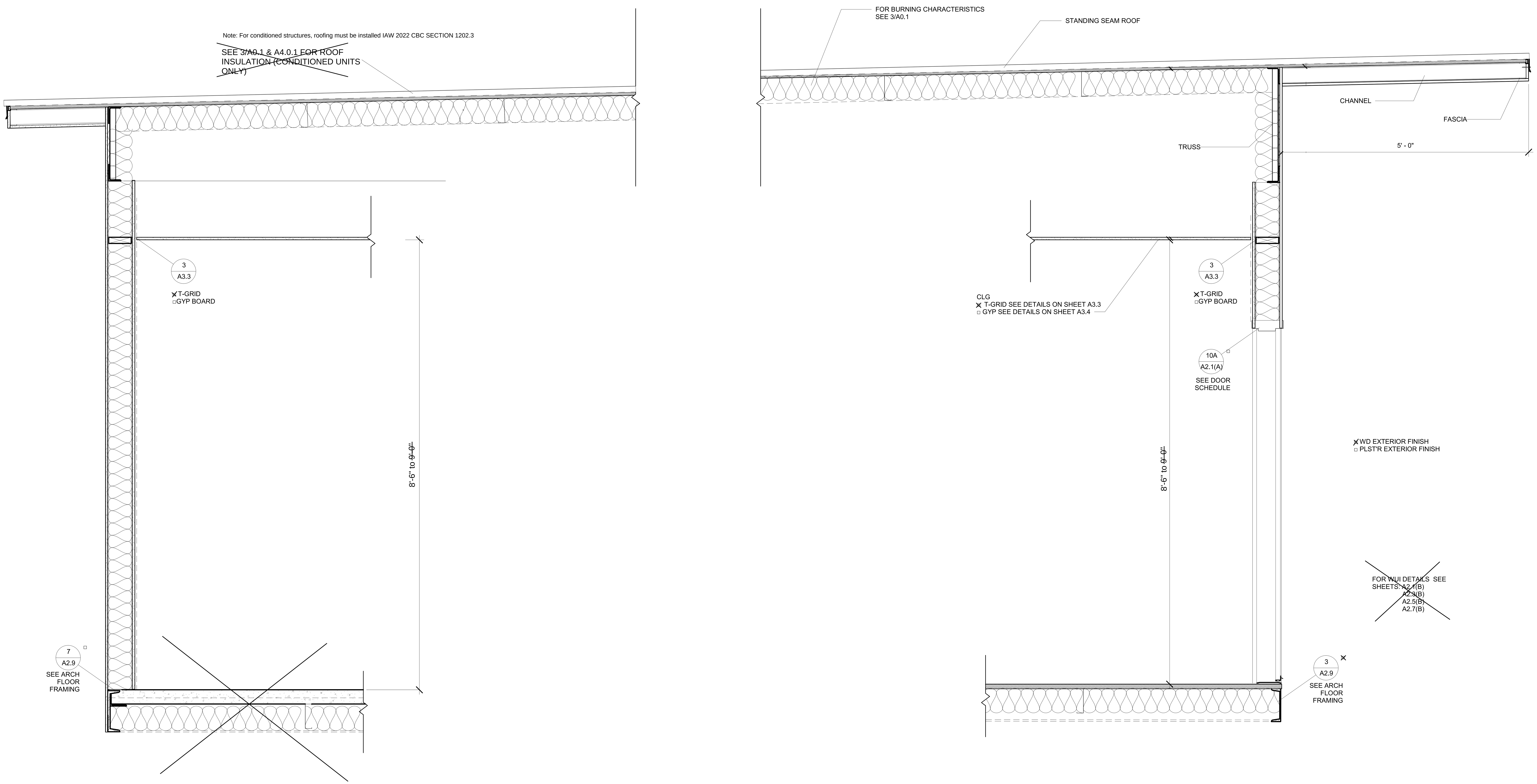
DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A5.2

SHEET OF



1 1" = 1'-0"
Section (EPDM)2

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PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
S3380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
SECTION - STANDING SEAM (MONO)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

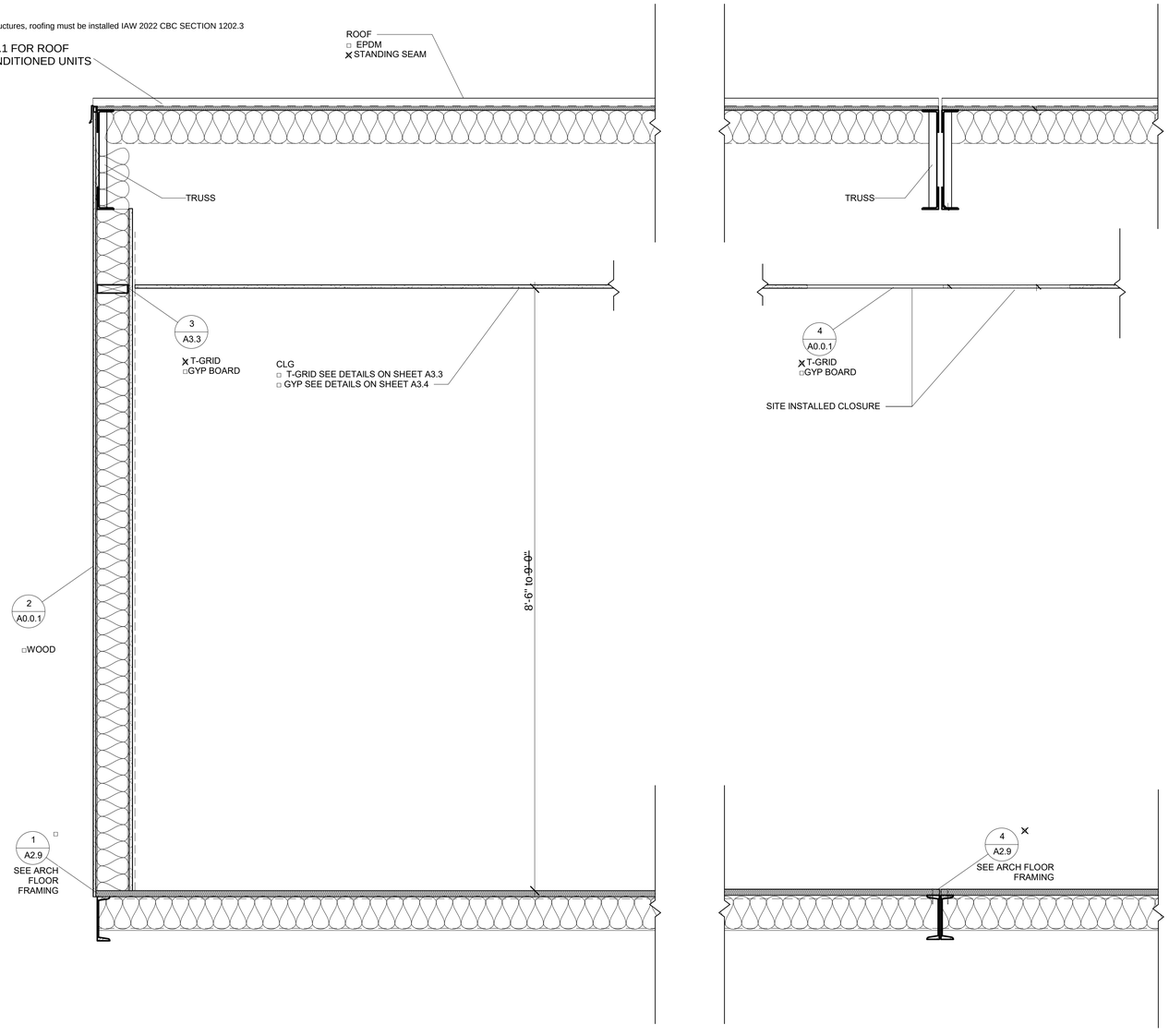
DATE

SHEET NO.
A6.0

SHEET OF

Note: For conditioned structures, roofing must be installed IAW 2022 CBC SECTION 1202.3

SEE 3/A0.1 & A4.0.1 FOR ROOF INSULATION (CONDITIONED UNITS ONLY)



FOR WUI DETAILS SEE SHEETS: A2.1(B) A2.3(B) A2.5(B) A2.7(B)

1 ***1" = 1'-0"***
Latitudinal Section

6/15/2021 11:51:52 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
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San Diego, CA 92127
www.rstavares.com

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RST#22088

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APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

SECTION

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

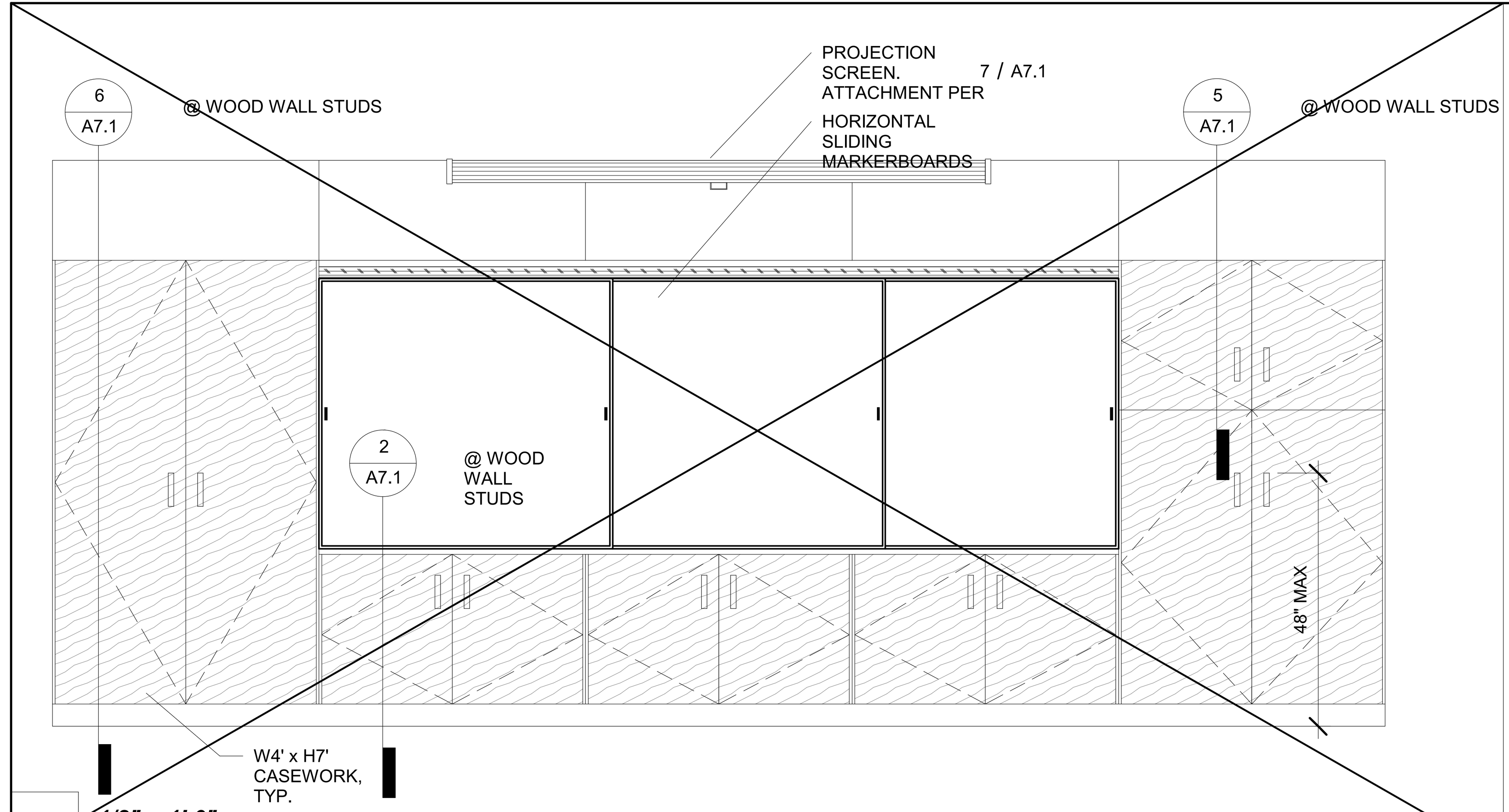
RH/RT

DATE

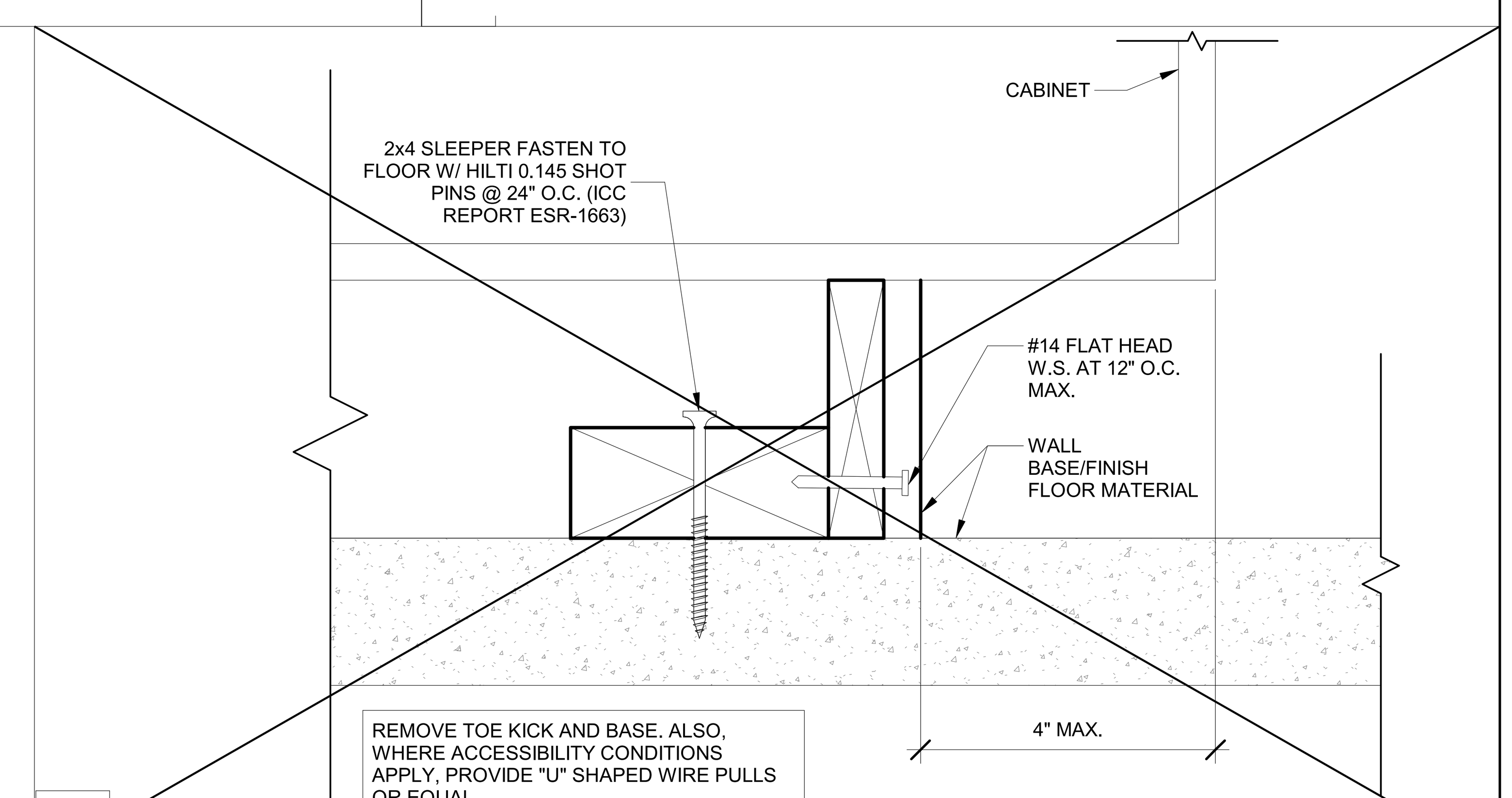
SHEET NO.

A6.2

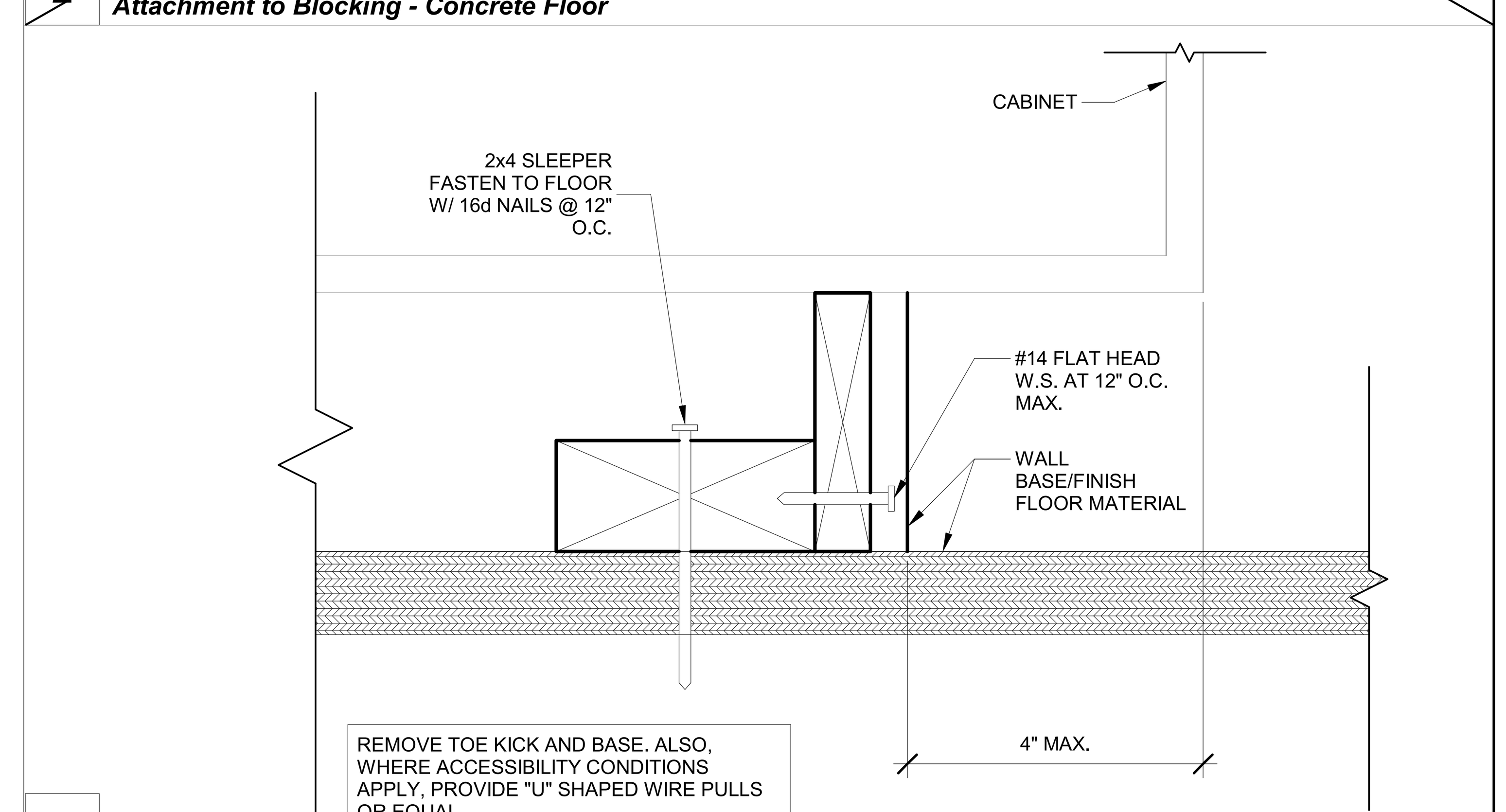
SHEET OF



8 *1/2" = 1'-0"*
Teaching Wall - Elevation/Section



2 *6" = 1'-0"*
Attachment to Blocking - Concrete Floor



1 *6" = 1'-0"*
Attachment to Blocking - Wood Floor

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
S3380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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APP: 04-123059 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☒ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
ADDITIONAL OPTION DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
A7.0

SHEET OF

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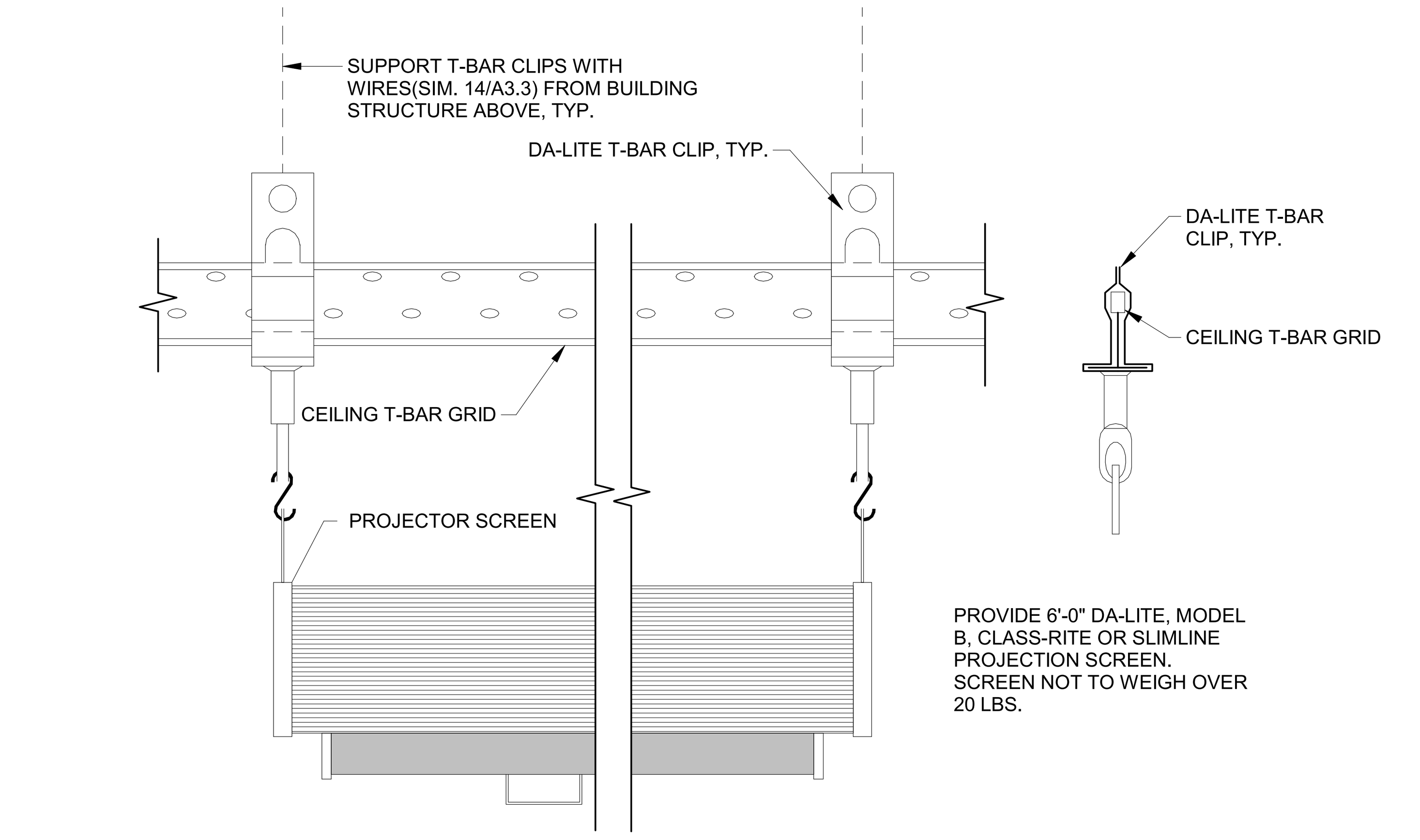
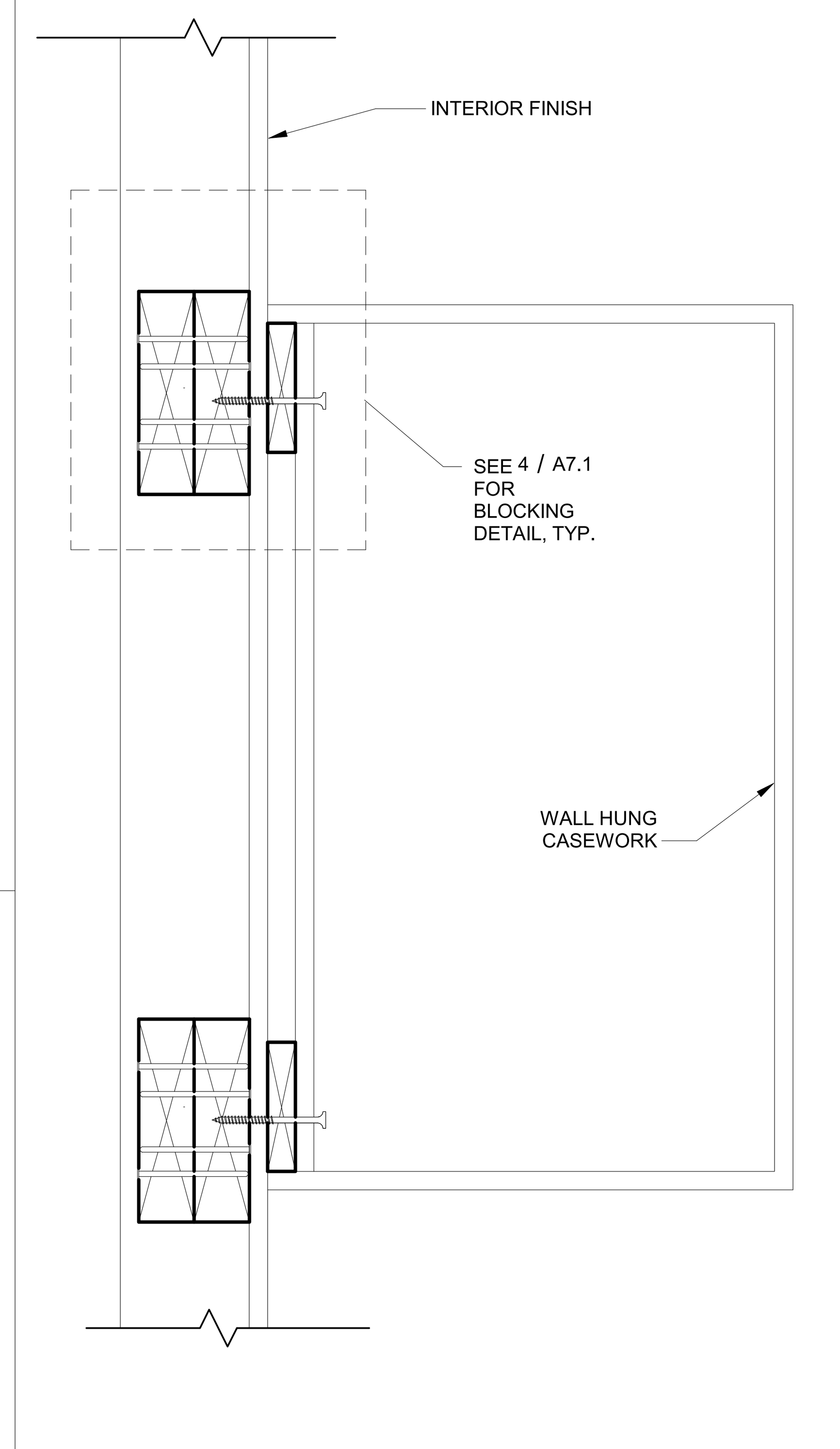
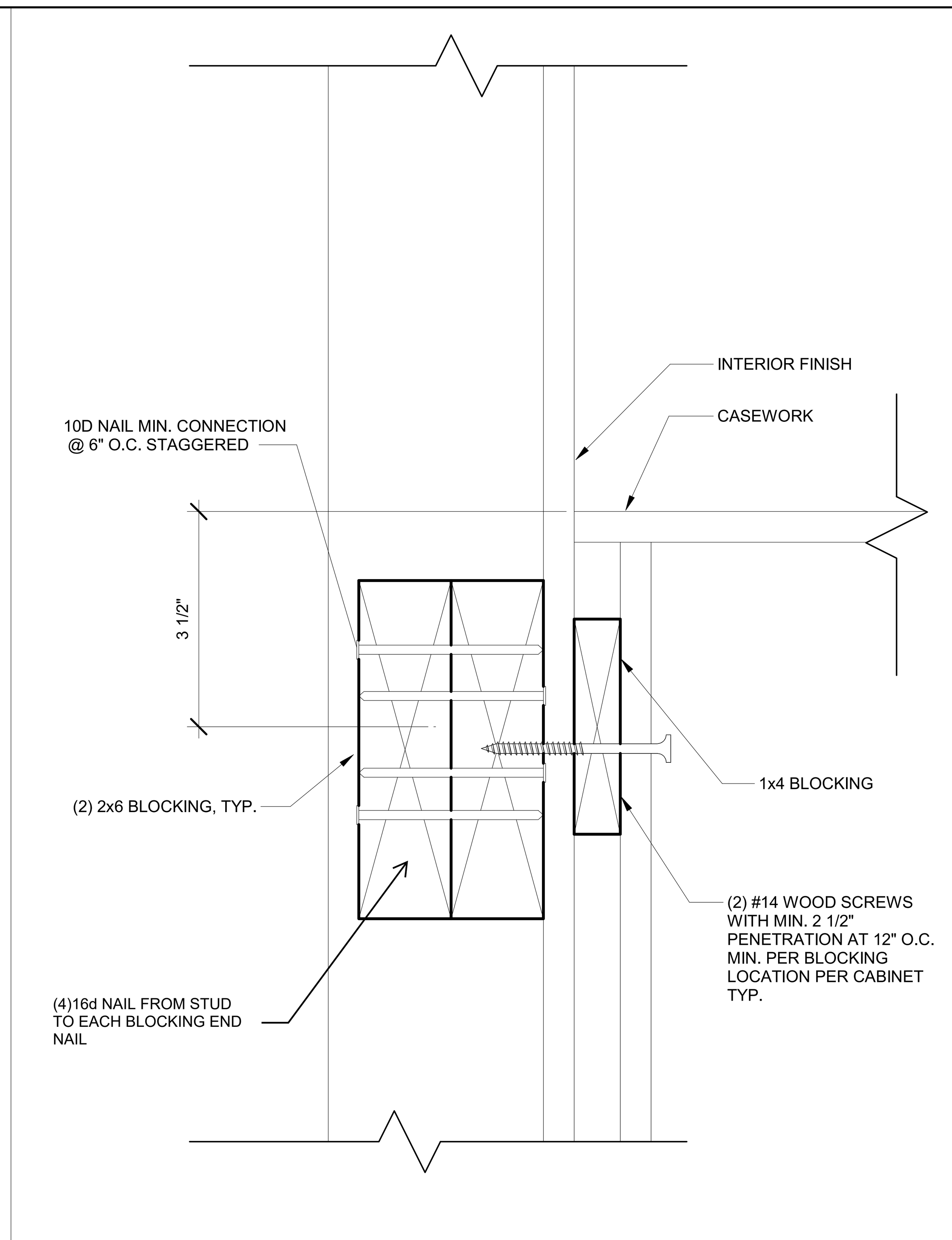


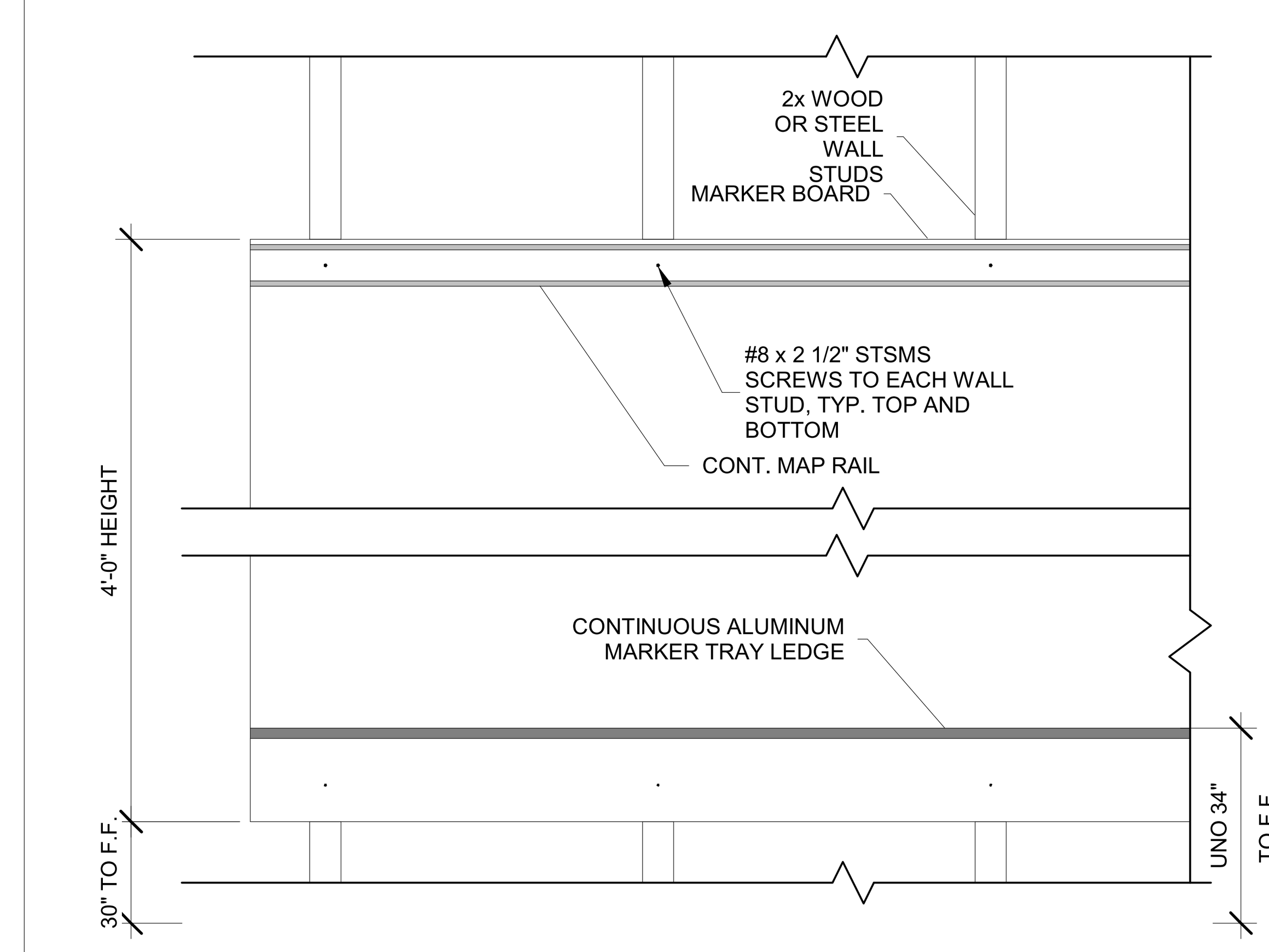
7 *1 1/2" = 1'-0"*
Projection Screen Mounting



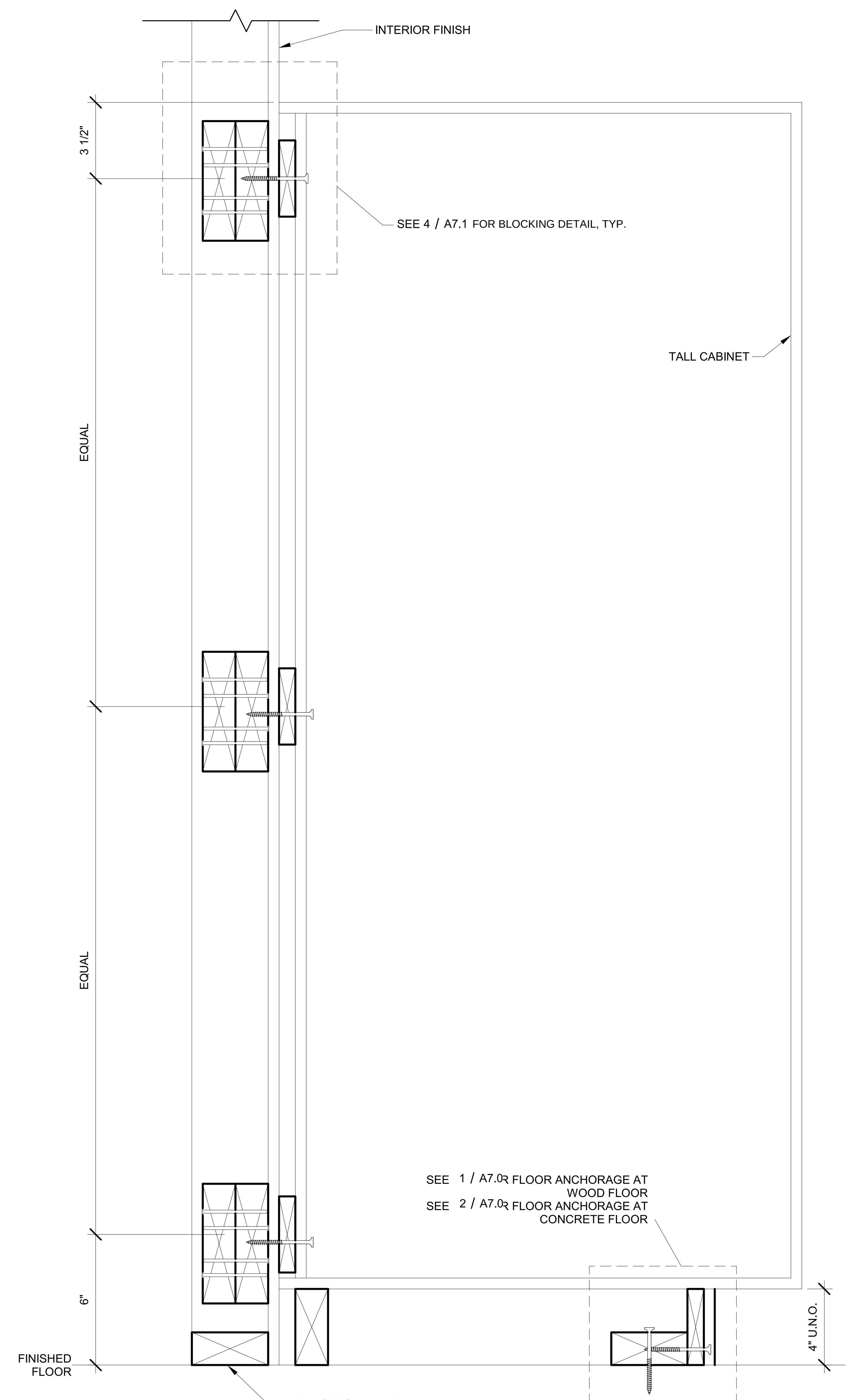
5 *3" = 1'-0"*
Wall Hung Anchorage Cabinet at Wood Stud



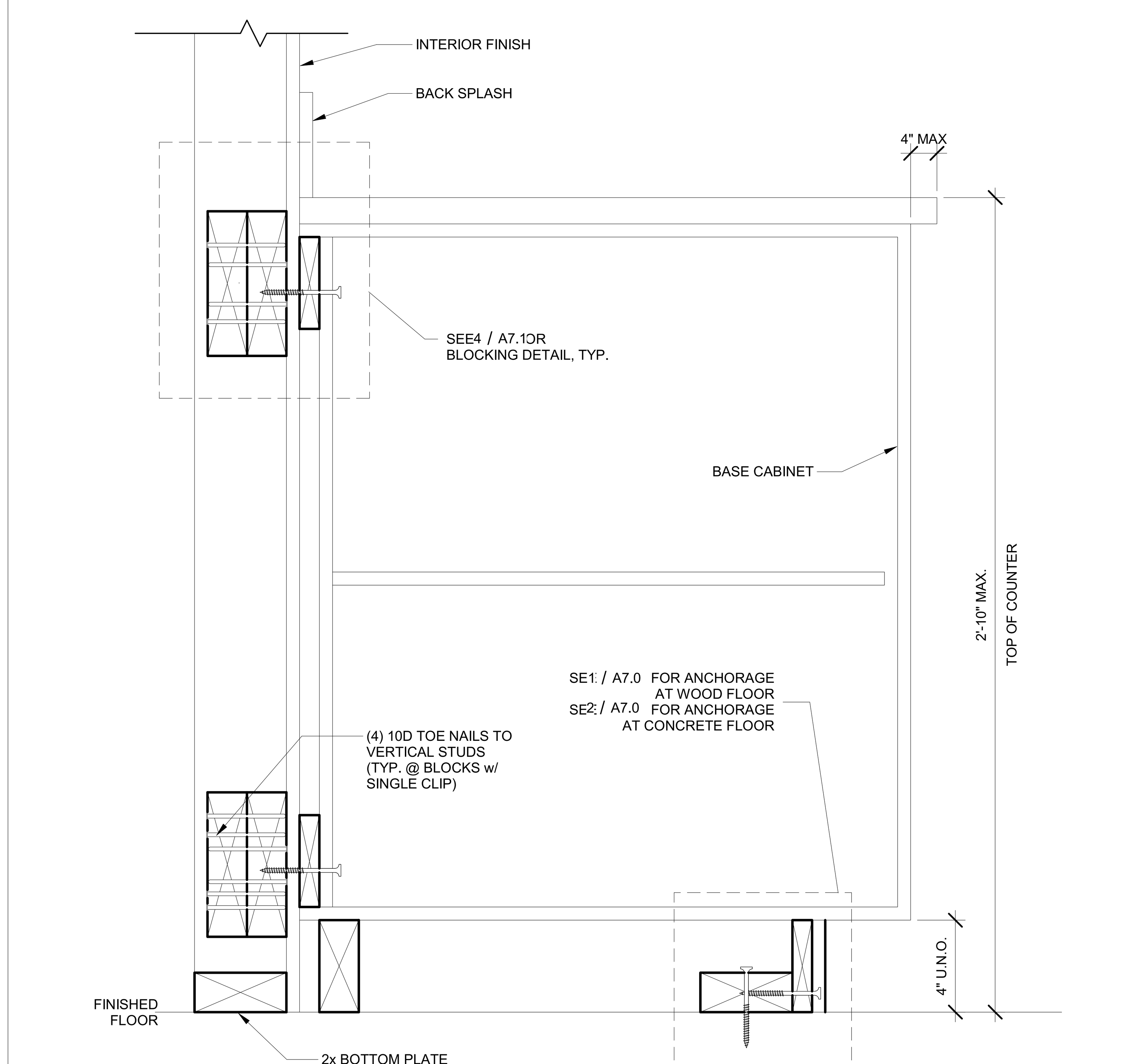
4 *6" = 1'-0"*
Attachment to Blocking at Wood Stud



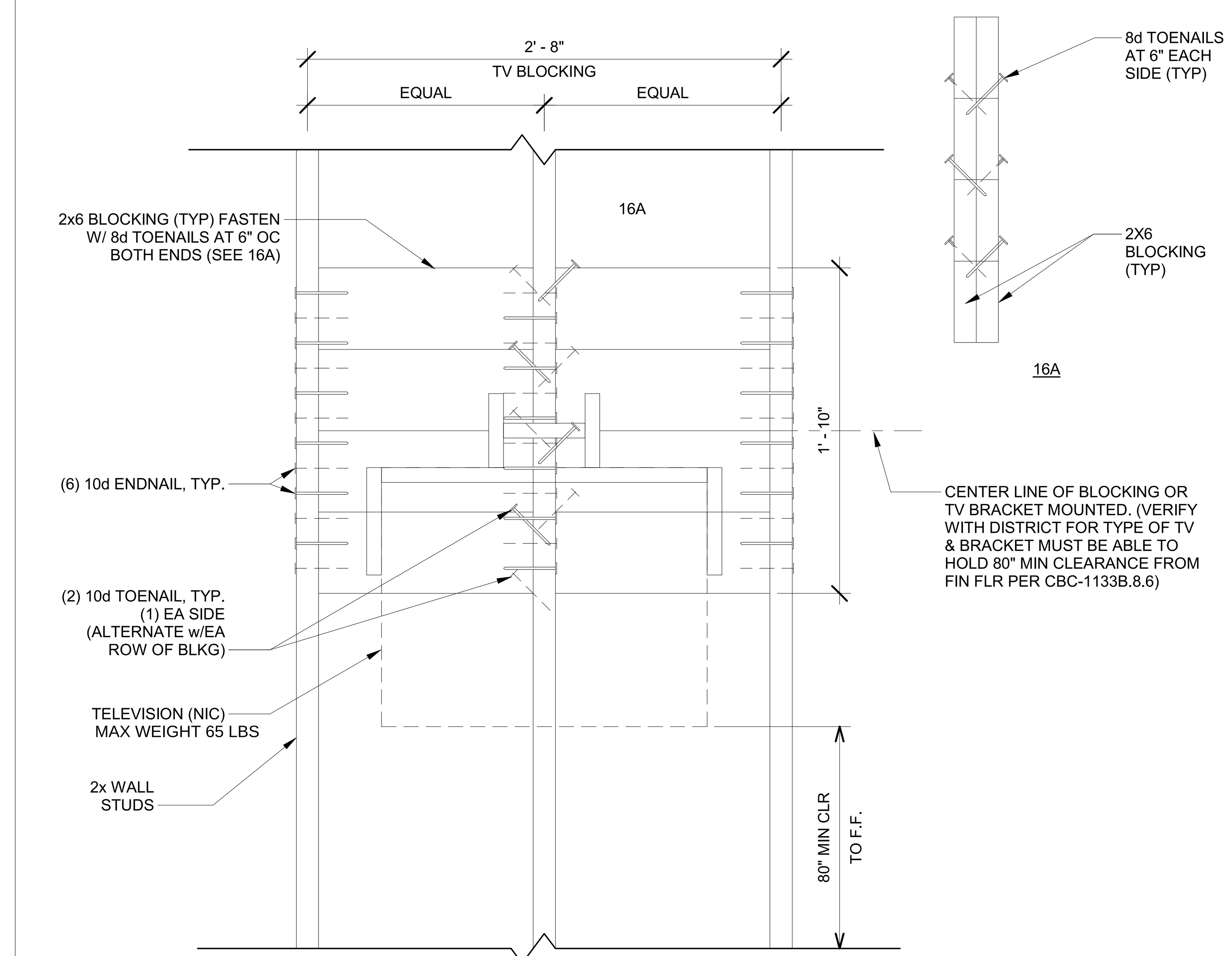
3 *1 1/2" = 1'-0"*
Marker Board Attachment



6 *3" = 1'-0"*
Tall Cabinet Wall Anchorage at Wood Stud



2 *3" = 1'-0"*
Base Cabinet Wall Anchorage at Wood Stud



1 *1 1/2" = 1'-0"*
T.V. Blocking Attachment at Wood Stud

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN • CONSULTING • PROJECT MGT
11590 W BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
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PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
S3380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
02/16/24
RST#22088

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CLIENT

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
ADDITIONAL OPTION DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

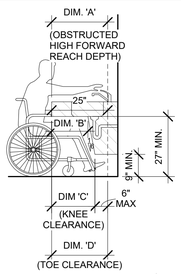
CHECKED BY
RH/RT

DATE

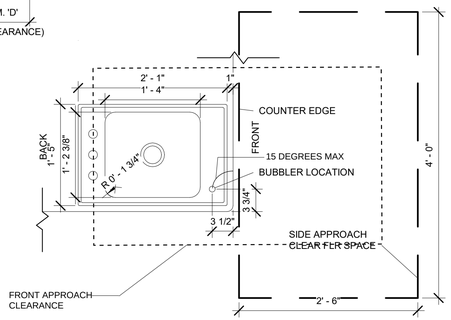
SHEET NO.
A7.1

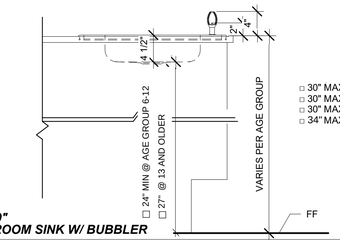
SHEET OF

6/15/2021 11:51:58 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

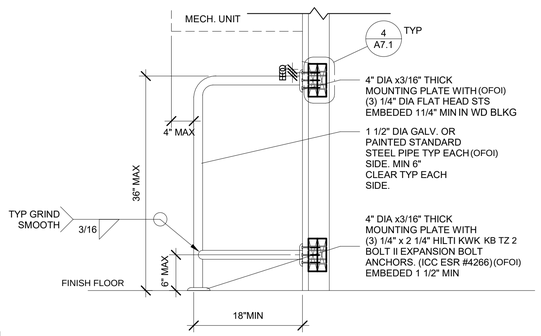


DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'
17"	8"	11"	17"
18"	9"	12"	18"
19"	10"	13"	19"
20"	11"	14"	20"
21"	12"	15"	21"
22"	13"	16"	22"
23"	14"	17"	23"
24"	15"	18"	24"
25"	16"	19"	25"

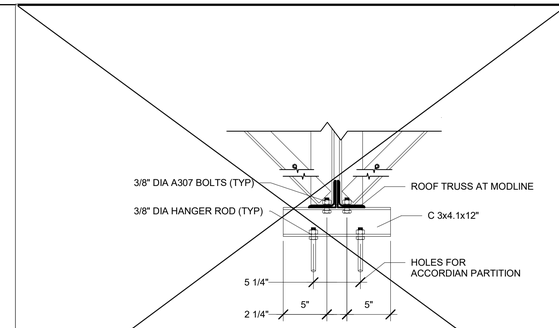




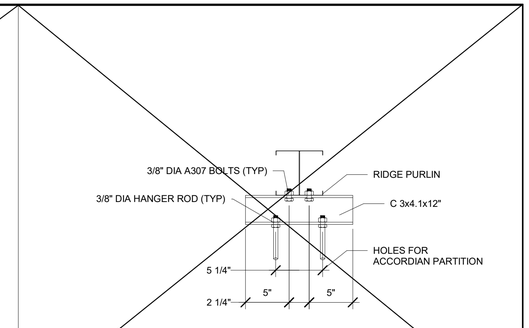
10 *1" = 1'-0"*
CLASSROOM SINK W/ BUBBLER



5 *1" = 1'-0"*
HVAC BARRIER at wood stud



2 *1 1/2" = 1'-0"*
ACCORDIAN DOOR - TOP CONN AT TRUSS



1 *1 1/2" = 1'-0"*
ACCORDIAN DOOR - TOP CONN AT PURLIN

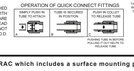
Heavy Duty 14 Gauge Drinking Fountain
Wall Mount, Fully Exposed
Barrier-Free Access
Model EHWM217RAC

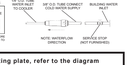
ELKAY®
ROUGH-IN DIMENSIONS
RATED FOR INDOOR AND OUTDOOR USE

INSTALLER NOTE

THIS DRINKING FOUNTAIN IS FURNISHED WITH A BUBBLER AND WATERWAY WITH ALL CONNECTING FITTINGS WHICH ARE CONCEALED WITHIN THE UNIT. THE ONLY FIELD MATERIAL THAT OFF VALVE (NOT FURNISHED) TO ACCEPT 3/8" O.D. UNPLATED COPPER TUBE.

OPERATION OF QUICK CONNECT FITTINGS

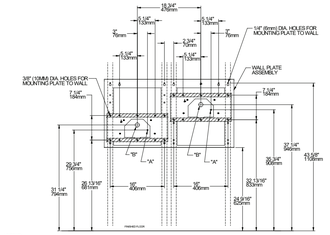




When installing EHWM217RAC which includes a surface mounting plate, refer to the diagram below.

For electrical, waste, and water supply locations refer to the Installation/Owners manual.

NOTE: Reinforce the wall in the shaded areas.



LEGEND:
A = Recommended water supply location 3/8" O.D. unplated copper tube connect, stubbed 1-1/2" (38mm) from the wall. Shut off by others.
B = Recommended location for waste outlet 1-1/4" O.D. drain, stubbed 6-3/8" (158mm) from the wall.

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Oak Brook, IL 60523
630-572-3192
elkay.com

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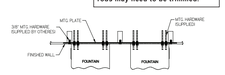
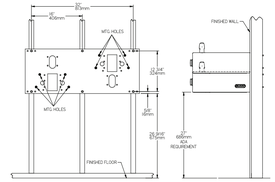
Heavy Duty 14 Gauge Drinking Fountain
Wall Mount, Fully Exposed
Barrier-Free Access
Model EHW217RAC with MPW200

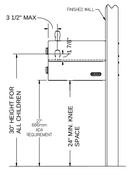
ELKAY®
ROUGH-IN DIMENSIONS
RATED FOR INDOOR AND OUTDOOR USE

When installing EHW217RAC with MPW200 in-wall plate mounted directly to wall studs, refer to the diagrams below.
For electrical, waste, and water supply locations refer to the Installation/Owners manual.

Note – After installation, threaded rods may need to be trimmed.







In keeping with our policy of continuing product improvement, Elkay reserves the right to change specifications without notice. Please visit elkay.com for the most current version.

This describes an Elkay product with design, quality and functional to the user. When making a comparison of other producer's offerings, be certain these features are not overlooked.

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Oak Brook, IL 60523
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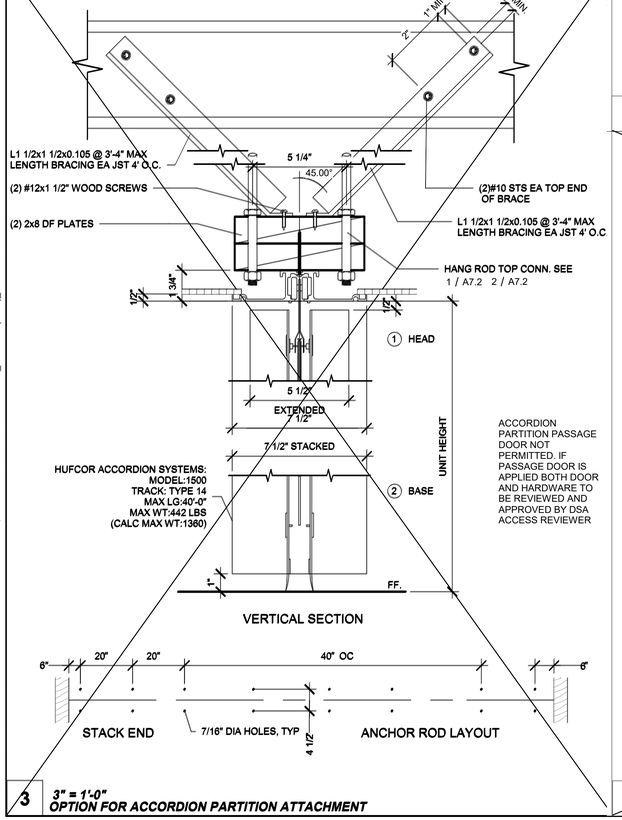
6 *NTS*
ELKAY EXAMPLE OF MOUNTING ELEVATION

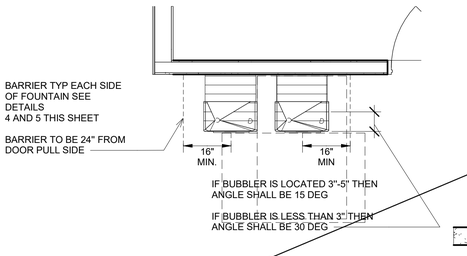
NOTES FOR THIS OWNER FURMINSHED OWNER INSTALLED DRINKING FOUNTAIN:

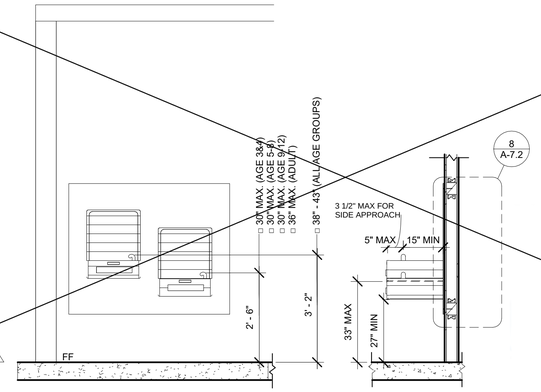
1. FINAL PRODUCT SELECTION IS OWNER RESPONSIBILITY.
2. MOUNTING REQUIREMENTS WILL VARY BY MANUFACTURER'S INSTALLATION INSTRUCTIONS
3. THE ELKAY SHEETS PROVIDED IN THIS SET ARE FOR EXAMPLE PURPOSES ONLY.
4. FINAL PRODUCT SELECTION MUST BE SUBMITTED ALONG WITH SITE SPECIFIC CONSTRUCTION APPLICATION FOR REVIEW
5. MOUNTING HARDWARE SHALL PROVIDE A MINIMUM OF 2" PENETRATION INTO WOOD FRAMING
.

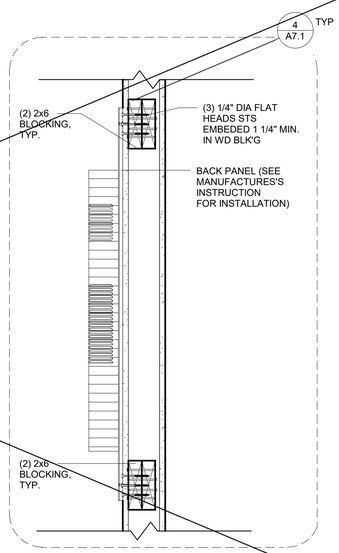


3 *3" = 1'-0"*
OPTION FOR ACCORDION PARTITION ATTACHMENT

11B-602.6 WATER FLOW. THE SPOUT PROVIDE A FLOW OF WATER 4 INCHES (102mm) high minimum and shall be located 5 inches (127 mm) maximum from the front of the unit. The angle of the water stream shall be measured horizontally relative to the front face of the unit. Where spouts are located less than 3 inches (76 mm) of the front of the unit, the angle of the water stream shall be 30 degrees maximum. Where spouts are located between 3 inches (76 mm) and inches (127 mm) maximum from the front of the unit, the angle of the water stream shall be 15 degrees maximum







8 *1 1/2" = 1'-0"*
Section Cut 1A/A-5.2

7 *1/2" = 1'-0"*
Drinking Fountain Blocking Detail wood stud

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

RST#22088

02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ADDITIONAL OPTION DETAILS

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

RH/RT

DATE

SHEET NO.

A7.2

SHEET OF

8/1/2023 1:37:47 PM C:\Users\Users\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED 1/2" C	3/4" C	1" C	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 75 DEG. C. COPPER)

1 CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS #12	#10	#8	#6
4SS	1 1/4"x4" SQ	18.0	8	7	6	0
4S	1 1/2"x4" SQ	21.0	9	8	7	0
4SD	2 1/8"x4" SQ	30.3	13	12	10	6
4SX	2 7/8"x4" SQ	43.5	23	21	17	10
5SD	2 1/8"x4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8"x4-11/16" SQ	86.0	38	34	28	17
664	4"x6" SQ	144.0	64	57	48	28

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

2 JUNCTION BOX SIZE TABLE

915.4 CARBON MONOXIDE ALARMS. CARBON MONOXIDE ALARMS SHALL COMPLY WITH SECTIONS 915.4.1 THROUGH 915.4.4.

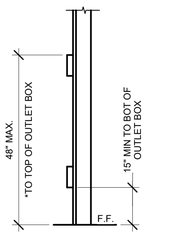
[F] 915.4.1 POWER SOURCE. CARBON MONOXIDE ALARMS SHALL RECEIVE THEIR PRIMARY POWER FROM THE BUILDING WIRING WHERE SUCH WIRING IS SERVED FROM A COMMERCIAL SOURCE, AND WHEN PRIMARY POWER IS INTERRUPTED, SHALL RECEIVE POWER FROM BATTERY. WIRING SHALL BE PERMANENT AND WITH-OUT A DISCONNECTING SWITCH OTHER THAN REQUIRED FOR OVERCURRENT PROTECTION.

915.2.3 GROUP E OCCUPANCIES. CARBONS MONOXIDE DETECTION SHALL BE INSTALLED IN CLASSROOMS IN GROUP E OCCUPANCIES. CARBON MONOXIDE ALARM SIGNALS SHALL BE AUTOMATICALLY TRANSMITTED TO AN ON-SITE LOCATION THAT IS STAFFED BY SCHOOL PERSONNEL.

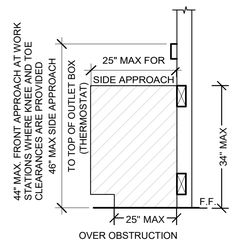
915.3 DETECTION EQUIPMENT. CARBON MONOXIDE DETECTION REQUIRED BY SECTIONS 915.1 THROUGH 915.2.3 SHALL BE PROVIDED BY CARBON MONOXIDE DETECTION SYSTEMS COMPLYING WITH SECTION 915.5.

3 CARBON MONOXIDE DETECTION - SECTION 915

* SEE DETAIL 2/M0.2



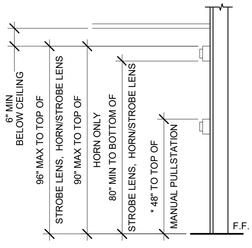
* 30"x48" MIN CLR FLOOR SPACE AT EACH LOCATION FOR PERPENDICULAR APPROACH



OVER OBSTRUCTION

THE KNEE/TOE SPACE MUST EXTEND TO THE SAME DEPTH AS THE ACCESSIBLE OUTLET/SWITCH LOCATED ABOVE- 25" MAX 11.B308.2.2

4 MOUTING ELEV.



NOTES:

1. PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION.

2. THE SWITCH OR SWITCHES INSTALLED IN EMERGENCY LIGHTING CIRCUITS SHALL BE SO ARRANGED THAT ONLY AUTHORIZED PERSONNEL WILL HAVE CONTROL OF EMERGENCY LIGHTING. (CEC art. 700.20)

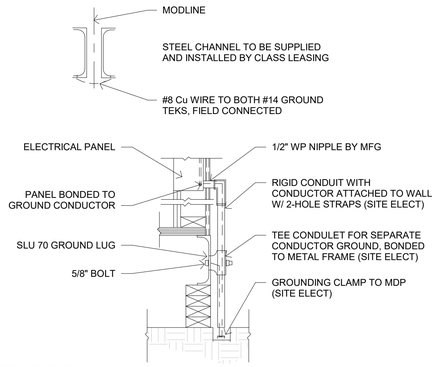
3. PROVIDE SPACE ON ELECTRICAL PANEL FOR LOCK-ON BREAKER, IDENTIFIED WITH RED MARKING, FOR 120 VOLTS FIRE ALARM CIRCUIT, WITH BREAKER LABELED AS FIRE ALARM CIRCUIT, CEC 760.41 (B). BREAKER AND CIRCUIT PROVIDED AND INSTALLED ON SITE BY OTHERS.

4. SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES TO BE PROVIDED AND INTERCONNECTED TO THE FIRE ALARM SYSTEMS ON SITE BY OTHERS.

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

5 FIRE ALARM MOUNTING HEIGHTS

ACCEPTANCE TESTS BE COMPLETED ON NEWLY INSTALLED OR REPLACEMENT OF LIGHTING CONTROLS BEFORE PROJECT COMPLETION PER THE CALIFORNIA ENERGY CODE SECTION 10-103. ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED ACCEPTANCE TEST TECHNICIAN (ATT). THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES CORRECTED UNTIL THE INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. COMPLETED NRCA FORMS SHALL BE SUBMITTED TO THE PROJECT INSPECTOR AND THE DISTRICT



NOTES:

1. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)

2. TESTING FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6 FEET, UNTIL RESISTANCE REDUCES TO 25 OHMS OR LESS. GROUND TEST MUST BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250.56

3. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.

4. ALL MODULES OF STEEL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP & STAIRS.

5. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66

6. EACH BUILDING SHALL BE GROUNDED SEPARARELY WITH A ¾" ROUND X 8 FEET COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTOOM IS FOUND, DRIVE ROD AT 45 DEGREES MAXIMUM FROM THE VERTICAL OR HAVE IT BURIED IN A TRENCH 30" DEEP MINIMUM.

ACCEPTANCE TESTS BE COMPLETED ON NEWLY INSTALLED OR REPLACEMENT OF LIGHTING CONTROLS BEFORE PROJECT COMPLETION PER THE CALIFORNAI ENERGY CODE SECTION 10-103. ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED ACCEPTANCE TEST TECHNICIAN (ATT). THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES CORRECTED UNTIL THE INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. COMPLETED NRCA FORMS SHALL BE SUBMITTED TO THE PROJECT INSPECTOR AND THE DISTRICT.

6 TYPICAL GROUNDING DETAILS

REFER TO DSA IR 16-8 & STATE FIRE MARSHAL SOLAR PHOTOVOLTAIC INSTALLATION GUIDELINE

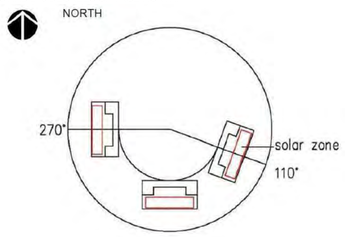
REFER TO **SECTION 110.10 - MANDATORY REQUIREMENTS FOR SOLAR READY BUILDINGS**
SOLAR ZONE AREAS WILL VARY DEPENDING ON PC BUILDING LOCATION.

MINIMUM AREA:

15% OF ROOF AREA (EXCLUDING ANY SKYLIGHT AREA) TO BE RESERVED FOR SOLAR PANEL APPLICATION OR SOLAR READY WILL BE SUPPLIED FROM A BUILDING OR STRUCTURE WITHIN 250 FT OF PC BUILDING.

ORIENTATION:

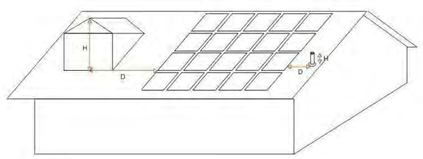
ALL SECTIONS OF THE SOLAR ZONE LOCATED ON STEEP-SLOPED ROOFS GREATER THAN 2:12 SHALL BE ORIENTED BETWEEN 110 DEGREES AND 270 DEGREES OF TRUE NORTH.



SHADING:

ANY OBSTRUCTION, LOCATED ON THE ROOF OR ANY OTHER PART OF THE BUILDING THAT PROJECTS ABOVE THE SOLAR ZONE SHALL BE LOCATED AT A SUFFICIENT HORIZONTAL DISTANCE AWAY FROM THE SOLAR ZONE, IN ORDER TO REDUCE THE RESULTING SHADING OF THE SOLAR ZONE. FOR EACH OBSTRUCTION, THE HORIZONTAL DISTANCE ("D") FROM THE OBSTRUCTION TO THE SOLAR ZONE SHALL BE AT LEAST TWO TIMES THE HEIGHT DIFFERENCE ("H") BETWEEN THE HIGHEST POINT OF THE OBSTRUCTION AND THE HORIZONTAL PROJECTION OF THE NEAREST POINT OF THE SOLAR ZONE.

D ≥ 2 x H



SOURCE: CALIFORNIA ENERGY COMMISSION

STRUCTURAL DESIGN LOADS:

ENTIRE ROOF SURFACE IS DESIGNED STRUCTURALLY TO ACCOMMODATE SOLAR PANELS = 3 PSF

INTERCONNECTION PATHWAYS:

THE LOCATION FOR INVERTERS AND METERING EQUIPMENT AND A PATHWAY FOR ROUTING OF CONDUIT FROM THE SOLAR ZONE TO THE POINT OF INTERCONNECTION WITH THE ELECTRICAL SERVICE WILL VARY DEPENDING ON PC BUILDING LOCATION.

7 SOLAR ZONE AREA

LEGEND

ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT

ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS

WALL MOUNTED HVAC UNIT, SEE MECHANICAL DWGS

100 CFM CEILING MOUNTED EXHAUST FAN.
INTERLOCKED WITH LIGHT SWITCH

HM — 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT
4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC BUT NOT MORE THAN 25'-0" FROM TWO PERPENDICULAR WALL AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)

H — 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM BUT NOT MORE THAN 15'-0" TO A PERPENDICULAR WALL AND 30'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)

S — RECESSED 4SD J-BOX W/ COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING

H — 4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULLSTRING

4SD J-BOX/SINGLE GANG MUD RING FOR FIRE ALARM STROBE (DEVICE BY OTHERS).
BOTTOM OF LENS 80" MIN TOP OF LENS 96" MAX AFF WITH 3/4"CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING

4SD J-BOX/ SINGLE GANG MUD RING FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF CONTROL BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING

EXIT — EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. FLS 90' BACK UP. CLASSROOMS WITH ONE EXTERIOR DOOR-OPTIONAL.

CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE

EXTERIOR LED LIGHT FIXTURE. 30w MAX WITH PHOTOCELL MOUNT AT +93" AFF

ROOF — ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE

GFI — GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS

WP — EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24" AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)

DUPLEX (WALL MOUNTED) RECEPTACLE 15A-125V-3 WIRE. MOUNT AT +15" AFF U.O.N. TO BOTTOM OF OUTLET BOX

MIN. + 15" TO BOTTOM OF BOX

$3 — 3-WAY LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWITCH BOX

$ — LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWTICH BOX

$D — SINGLE BUTTON DIMMER SWITCH, AT +48" AFF, TO TOP OF SWITCH BOX, WATTSTOPPER #LMDM-101 OR EQUAL

WS-1 — SINGLE SWITCH WALL OCCUPANCY SENSOR.
WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED
AT +44" AFF AND USE FOR OPEN ROOM (OR RESTROOM)
LESS THAN 100 SQ FT W/ (1) CIRCUIT.AS NEEDED

US — ULTRASONIC CEILING OCCUPANCY SENSOR.
WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.AS NEEDED

PC — CEILING MOUNTED PHOTOCELL, WATTSTOPPER #LMLS-500 OR EQUAL AS NEEDED

OS — CEILING MOUNTED OCCUPANCY SENSOR.
WATTSTOPPER #LMPC-100 OR EQUAL.AS NEEDED

2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN
LIGHT FIXTURE WITH DIMMABLE BALLAST
DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ
WATTAGE: 48W (48" LG) OR EQUAL

2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN
LIGHT FIXTURE WITH DIMMABLE BALLAST
DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ
WATTAGE: 48W (48" LG) OR EQUAL
EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE Equipped WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.

NOTE: SEE 4/A3.2 FOR PHOTOMETRIC DATA

8 1" = 1'-0" ELECTRICAL LEGEND

1. INSTALLATION SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE (NEC) - 2020 EDITION AND NATIONAL FIRE PROTECTION ASSOCIATION FIRE CODES (NFPA). AND 2022 CBC ELECTRICAL CODE.
2. ELECTRICAL EQUIPMENT LOCATIONS INDICATED ARE SHOWN DIAGRAMMATICALLY, EXACT LOCATION SHALL BE VERIFIED AND ADJUSTED FOR FIELD CONDITIONS.
3. RECEPTACLES AND TELEPHONE/DATA OUTLETS SHALL BE INSTALLED 18" AFF TO THE CENTER OF THE DEVICE, UNLESS NOTED OTHERWISE.
4. CONTRACTOR SHALL FIELD TEST AND PROVIDE TEST REPORT VERIFYING THAT RECEPTACLES ARE WIRED AND FUCTION PROPERLY.
5. CONTRACTOR SHALL LABEL EACH RECEPTACLE, LIGHT FIXTURE, TOGGLE SWITCH, SAFETY SWITCH AND OCCUPANCY SENSOR WITH PANEL NAME AND BRANCH CIRCUIT ID.
6. WEATHERPROOF RECEPTACLES SHALL BE TYPE TO PROTECT RECEPTACLE FROM WEATHER WHEN PLUG INSERTED.
7. THE MATERIAL REQUIRED FOR THE WORK SHALL BE CONTRACTOR FURNISHED AND CONTRACTOR INSTALLED, UNLESS SPECIFICALLY NOTED OTHERWISE. CONTRACTOR SHALL ASSUME NOTES LISTING MATERIAL AND/OR EQUIPMENT BEGIN WITH THE WORDS "SUPPLY AND INSTALL" U.O.N.".
8. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE SUBMITTING MATERIAL AND BECOME THOROUGHLY FAMILIAR WITH ACTUAL EXISTING CONDITIONS AT THE SITE. BY THE ACT OF SUBMITTING PROPOSED MATERIALS FOR THE WORK, THE CONTRACTOR SHALL BE DEEMED TO HAVE MADE SUCH STUDY AND EXAMINATION AND TO ACCEPT ALL CONDITIONS RESENT AT THE SITE. NO REQUEST FOR ADDITIONAL PAYMENT WILL BE CONSIDERED AS VALID, DUE TO FAILURE TO ALLOW FOR CONDITIONS, WHICH MAY EXIST.
9. CONTRACTOR'S SCOPE SHALL INCLUDE ALL WORK SHOWN ON THE PLANS AND SPECIFICATIONS. SUBSTITUTION REQUESTS FOR EQUIPMENT SPECIFIED SHALL BE SUBMITTED FOR CONSIDERATION TO THE OWNER AND ENGINEER IN WRITING. ALL SUBSTITUTIONS MUST BE REVIEWED BY THE ENGINEER. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR COMPLYING WITH THE REQUIREMENTS OF THE DRAWINGS AND SPECIFICATIONS, AND THE CONTRACTOR SHALL BE RESPONSIBLE AT HIS OWN EXPENSE FOR ANY CHARGES RESULTING FROM HIS PROPOSED SUBSTITUTIONS WHICH AFFECT OTHER PARTS OF HIS OWN WORK, THE OWNER, ENGINEER OF RECORD, OR THE WORK OF OTHER CONTRACTORS.
10. COORDINATE ALL WORK WITH OTHER TRADES. OBTAIN ALL DRAWINGS THAT WILL REQUIRE COORDINATION AND PROVIDE ALL ELECTRICAL CONNECTIONS REQUIRED WHETHER SHOWN ON ELECTRICAL DRAWINGS OR NOT.
11. UNINTERRUPTED EXISTING ELECTRICAL POWER SHALL BE MAINTAINED TO OTHER TRADES FOR TEMPORARY POWER AREAS OF THE SITE DURING CONSTRUCTION. PROVIDE ANY TEMPORARY SERVICES AS MAY BE REQUIRED. IDENTIFY AT BID TIME.
12. ALL PENETRATIONS IN RATED WALLS (INDICATED IN ARCHITECTURAL LIFE SAFETY PLANS), ARE TO BE INSTALLED USING THE APPROPRIATE UL RATED PENETRATION ASSEMBLIES.
13. EQUIPMENT SHALL BE LISTED, LABELED OR CERTIFIED FOR ITS USE BY A NATIONALLY RECOGNIZED TESTING LABORATORY (NRTL) AS RECOGNIZED BY THE U.S. DEPARTMENT OF LABOR, OCCUPATIONAL SAFETY AN HEALTH ADMINISTRATION.
14. ALL ELECTRICAL EQUIPMENT CONNECTORS SHALL BE 75° RATED.
15. ALL ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC, SECTIONS 1616A.1.18 THROUGH 1616A.1.26 AND ASCE 7-10 CHAPTER 13, 26 AND 30.
    A. ALL PERMANENT EQUIPMENT AND COMPONENTS.
    B. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
    C. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.
16. THE ATTACHMENT OF THE FOLLOWING ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
    A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.
    B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
17. FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE STRUCTURAL ENGINEER OF RECORD AND THE DSA DISTRICT STRUCTURAL ENGINEER. THE PROJECT I NSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.
18. ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-10 SECTION 13.6.8, 13.6.7, 13.6.5.6 AND 2022 CBC SECTIONS 1616A.1.23, 1616A.1.24, 1616A.1.25 AND 1616A.1.26
19. THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE OSHPD PRE-APPROVALS (OPA #) AS MODIFIED TO SATISFY ANCHORAGE REQUIREMENTS OF ACI 318, APPENDIX D.
20. COPIES OF THE MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AN BRACING OF THE PIPE, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS.
21. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.
22. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.
23. NON-CURRENT CARRYING METAL PARTS OF THE SYSTEM SHALL BE PROPERLY GROUNDED TO COMPLY WITH NEC REQUIREMENTS.
24. EACH BUILDING SHALL BE GROUNDED SEPARARELY WITH A ¾" ROUND X 8 FEET COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTOOM IS FOUND, DRIVE ROD AT 45 DEGREES MAXIMUM FROM THE VERTICAL OR HAVE IT BURIED IN A TRENCH 30" DEEP MINIMUM.
25. TESTING FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6 FEET, UNTIL RESISTANCE REDUCES TO 25 OHMS OR LESS. GROUND TEST MUST BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250
26. PROVIDE A GREEN WIRE GROUND CONDUCTOR IN ALL CONDUITS WITH POWER OR LIGHTING CONDUCTORS.
27. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)
28. CHECK RESISTANT TO GROUND ROD. IF RESISTANCE EXCEEDS 25 OHMS. INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).
29. ALL MODULES OF STEEL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP & STAIRS.
30. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66
31. PER CEC210.8(B) ALL RECEPTACLES AT THE FOLLOWING LOCATIONS SHALL HAVE GROUND-FAULT CIRCUIT INTERRUPTER (GFCI) - (1) BATHROOMS, (2) KITCHENS, (3) SINKS (WITHIN 6 FT), (4) INDOOR WET AREAS, (5) LOCKER ROOMS, (6) GARAGE, SERVICE BAYS OR SIMILAR, (7) ROOFTOPS, (8) OUTDOORS.
32. IF CLOSED BY GWB INSTALL ONE ATTIC HEAT DETECTOR PER MODULE: WHEN STANDARD OPEN WEB TRUSS SYSTEM IS USED ADDITIONAL ATTIC HEAT DETECTORS ARE NOT REQUIRED.

9 ELECTRICAL GENERAL NOTES

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ★ CONSULTING ★ PROJECT MGT
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
PHONE| (858) 444-3344
WWW.RSTAVARES.COM

PROFESSIONAL STAMP

02/16/24

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

CLIENT

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Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ELECTRICAL GENERAL NOTES

PROJECT NUMBER 22088

DRAWN BY AM

CHECKED BY RT

DATE

SHEET NO. E0.1

SHEET OF

6/15/2021 11:52:03 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D63.rvt

SYMBOL

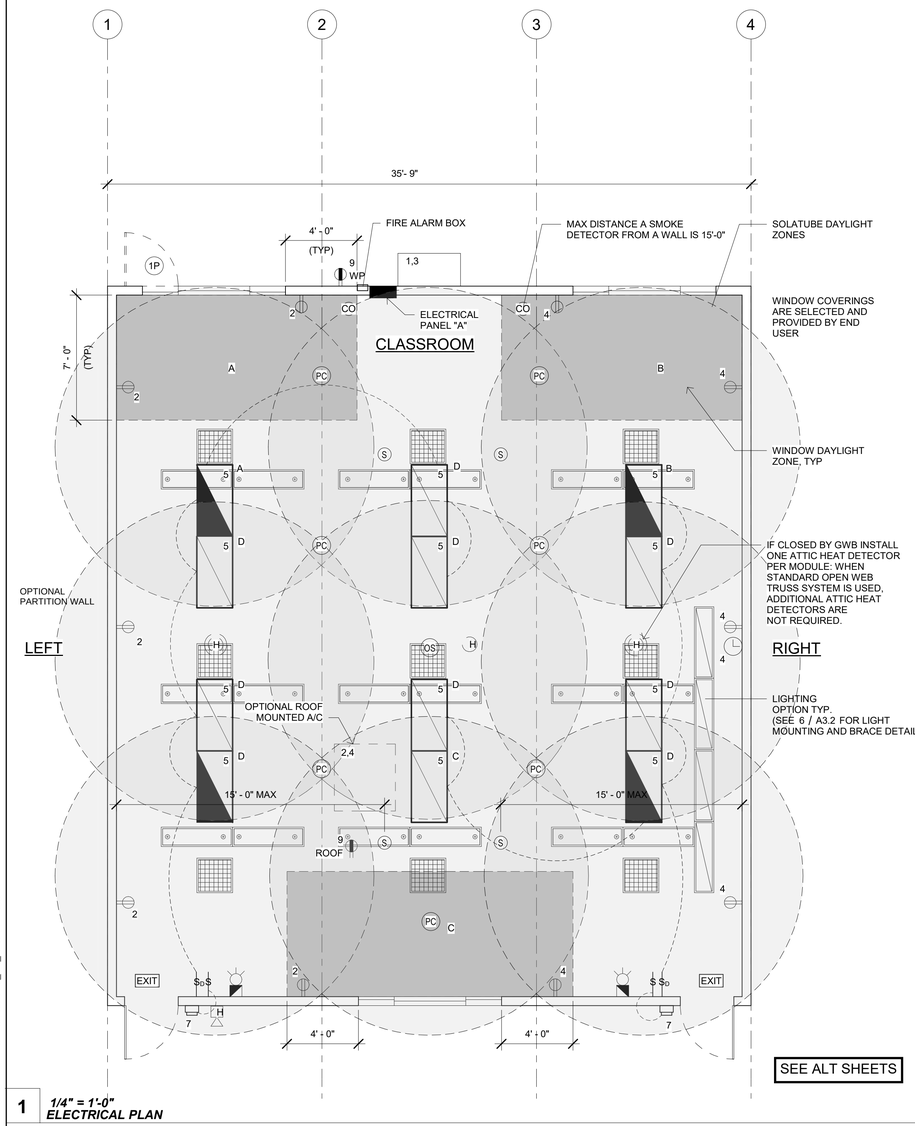
SOLAR TUBE DIFFUSER

TUBE SIZE=21(530mm)

LIGHT COVERAGE AREA=250-300ft² (23-28mm)

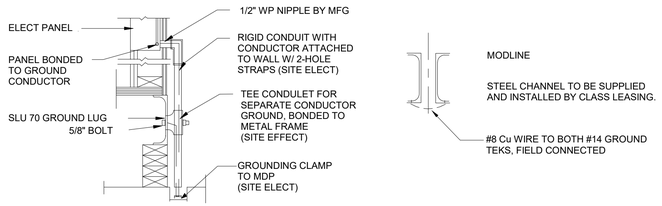
NOTE: PROVIDE A MINIMUM OF 72 SF SOLAR READY AREA PER MODULE. AREA TO BE A MINIMUM OF 5' IN ANY DIRECTION WITH A MINIMUM SPACE OF 80 SF PER BUILDING.

MULTI-LEVEL SWITCHING IS REQUIRED FOR AREAS GREATER THAN 100SF. SWITCHES WIRED SO THAT INTERIOR LIGHTING CAN BE TURNED FULLY ON, HALF OFF, OR COMPLETELY OFF. ALL MULTI-LEVEL SWITCHES ARE EQUIPPED WITH A SLIDE FOR CONTINUOUS DIMMING.



SEE ALT SHEETS

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



NOTES:

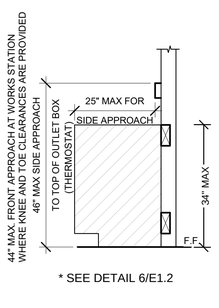
1. BOND SEPARATE CONDUCTORS FROM GROUND ROD TO ELEC'L. PANEL & TO METAL BUILDING FRAME (CEC 250.52) IN ADDITION TO THE DETAIL SHOWN ABOVE. BOND THE ELECTRICAL GROUND TO METAL UNDERGROUND WATER PIPE IN DIRECT CONTACT WITH THE EARTH FOR 10 FT. OR MORE, IF AVAILABLE (CEC 250.52)

2. CHECK RESISTANT TO GROUND ROD. IF RESISTANCE EXCEEDS 25 OHMS. INSTALL ADDITIONAL GROUND RODS WITH CONDUCTORS AS SHOWN SEPARATED AT LEAST 6'-0" UNTIL RESISTANCE IS REDUCED TO 25 OHMS OR LESS (CEC 250.56).

3. ELEC. TRADE SHALL CHECK AREA FOR EXISTING CONDUITS, SEWER, GAS & WATER PIPING BEFORE DRIVING GROUND RODS.

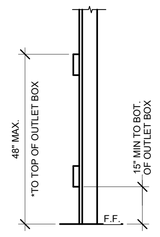
4. ALL MODULES OF STEEL FRAME BLDGS. SHALL BE ELECTRICALLY BONDED TOGETHER (BOLTING ONLY IS NOT ACCEPTABLE BONDING). BONDING SHALL INCLUDE METAL RAMP & STAIRS.

5. SIZE OF CONDUCTORS SHALL COMPLY WITH CEC TABLE 250.66



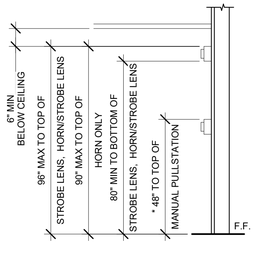
* SEE DETAIL 6/E1.2

3 *1" = 1'-0"*
ELEV. @ WORKSTATION



* 30"x48" MIN CLR FLOOR SPACE AT EACH LOCATION FOR PERPENDICULAR APPROACH

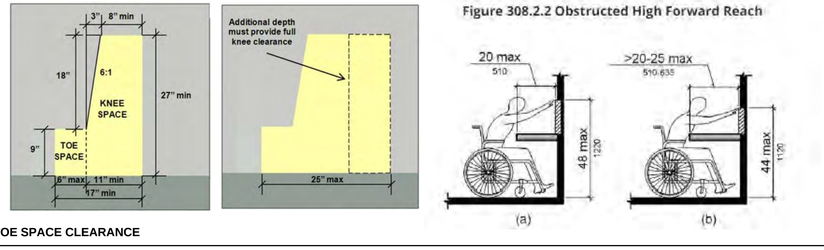
4 *1" = 1'-0"*
MOUNTING ELEV.



* PROVIDE MIN 30"x48" CLR FLOOR SPACE FOR PERPENDICULAR APPROACH AT EACH LOCATION

THE SWITCH OR SWITCHES INSTALLED IN EMERGENCY LIGHTING CIRCUITS SHALL BE SO ARRANGED THAT ONLY AUTHORIZED PERSONNEL WILL HAVE CONTROL OF EMERGENCY LIGHTING. (CEC art. 700.20)

5 *1" = 1'-0"*
FIRE ALARM MOUNTING HEIGHTS



6 **TOE SPACE CLEARANCE**

GENERAL GROUNDING NOTES

EACH BUILDING SHALL BE GROUNDED SEPARARELY WITH A ¾" ROUND X 8 FEET COPPERCLAD STEEL GROUND ROD. WHERE ROCK BOTOOM IS FOUND, DRIVE ROD AT 45 DEGREES MAXIMUM FROM THE VERTICAL OR HAVE IT BURIED IN A TRENCH 30" DEEP MINIMUM.

TESTING FOR RESISTANCE TO GROUND, IF RESISTANCE EXCEEDS 25 OHMS INSTALL ADDITIONAL GROUND RODS SEPARATED AT LEAST 6 FEET, UNTIL RESISTANCE REDUCES TO 25 OHMS OR LESS. GROUND TEST MUST BE DONE IN THE PRESENCE OF THE PROJECT INSPECTOR AND ALL GROUNDING SHALL BE IN ACCORDANCE WITH CEC ARTICLE 250

MEP COMPONENT ANCHORAGE NOTE

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

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

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

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

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

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM #) #_____.

FIRE ALARM NOTES

PROVIDE SPACE ON ELECTRICAL PANEL FOR LOCK-ON BREAKER, IDENTIFIED WITH RED MARKING, FOR 120 VOLTS FIRE ALARM CIRCUIT, WITH BREAKER LABELED AS FIRE ALARM CIRCUIT, CEC 760.41 (B).
BREAKER AND CIRCUIT PROVIDED AND INSTALLED ON SITE BY OTHERS.

SMOKE AND HEAT DETECTOR CONDUIT AND DEVICES TO BE PROVIDED AND INTERCONNECTED TO THE FIRE ALARM SYSTEMS ON SITE BY OTHERS

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

CONDUIT FILL AND CONDUCTOR CAPACITY TABLE

(ALL CONDUCTORS SHALL BE TYPE THHN/THWN 75 DEG. C. COPPER)

WIRE SIZE	CAPACITY	WIRE TYPE	NO. OF CONDUCTOR PERMITTED			
			1/2" C	3/4" C	1" C.	1 1/4" C
#12	20A	THHN	9	16	25	45
#10	30A	THHN	5	10	16	28
#8	45A	THHN	2	5	8	14
#6	65A	THHN	1	3	5	10
#4	85A	THHN	1	2	4	7

JUNCTION BOX SIZE TABLE

BOX	SIZE	CU. IN.	MAX NO. OF CONDUCTORS			
			#12	#10	#8	#6
4SS	1 1/4"x4" SQ	18.0	8	7	6	0
4S	1 1/2"x4" SQ	21.0	9	8	7	0
4SD	2 1/8"x4" SQ	30.3	13	12	10	6
4SX	2 7/8"x4" SQ	43.5	23	21	17	10
5SD	2 1/8"x4-11/16" SQ	42.0	18	16	14	6
5SX	3 7/8"x4-11/16" SQ	86.0	38	34	28	17
664	4"x6" SQ	144.0	64	57	48	28

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

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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CLIENT

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1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
ELECTRICAL PLAN
36x40

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
E1.2
SHEET OF

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PANEL A= 100A	120/208 VOLTS, 1 ϕ, 3 WIRE				MAIN LUGS ONLY					
	LOADCENTER	RECESSED					GRD & NEUTRAL BARS		AMP BUS	
	VOLTAMPS		10000 AIC					VOLTAMPS		
DESCRIPTION	ϕ A	ϕ B	C/B	CKT	ϕ	CKT	C/B	ϕA	ϕ B	DESCRIPTION
AC WALL MOUNTED- 5 TON	7705		30	1	A	2	20	900		OUTLETS
		7705	30	3	B	4	20		1080	OUTLETS
GENERAL LIGHTING	1440		20	5	A	6	20	180		EXTERIOR GFI/WP
EXTERIOR LIGHTING		80	20	7	B	8	20		180	ROOF GFI/WP
DED SOLAR READY										
DED SOLAR READY										
SUBTOTAL	ϕ A 9145	ϕ B 7785						ϕ A 1080	ϕ B 1260	SUBTOTAL
TOTAL	10225	9045	10225/120 VOLTS=81.21 81.21+ 1.7= 82.91							

SEE ALT SHEETS

2 1" = 1'-0"
ELECTRICAL PANEL_WALL MOUNTED

PANEL A= 100A	120/208 VOLTS, 1 ϕ, 3 WIRE				MAIN LUGS ONLY					
	LOADCENTER	RECESSED					GRD & NEUTRAL BARS		AMP BUS	
	VOLTAMPS		10000 AIC					VOLTAMPS		
DESCRIPTION	ϕ A	ϕ B	C/B	CKT	ϕ	CKT	C/B	ϕA	ϕ B	DESCRIPTION
AC ROOF MOUNTED- 5 TON	8280		30	1	A	2	20	900		OUTLETS
		8280	30	3	B	4	20		1080	OUTLETS
GENERAL LIGHTING	1440		20	5	A	6	20	180		EXTERIOR GFI/WP
EXTERIOR LIGHTING		80	20	7	B	8	20		180	ROOF GFI/WP
DED SOLAR READY										
DED SOLAR READY										
SUBTOTAL	ϕ A 9720	ϕ B 8360						ϕ A 1080	ϕ B 1260	SUBTOTAL
TOTAL	10800	9620	10800/120 VOLTS= 90 90 + 1.15= 9115							

3 1" = 1'-0"
ELECTRICAL PANEL_ROOF MOUNTED

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LEGEND

ELECTRICAL PANEL AT +60" AFF TO TOP OF ELECTRICAL PANEL WITH 1 1/2" DIA POWER STUB OUT

ROOF MOUNTED HVAC UNIT-SEE MECHANICAL DWGS

WALL MOUNTED HVAC UNIT, SEE MECHANICAL DWGS

100 CFM CEILING MOUNTED EXHAUST FAN. INTERLOCKED WITH LIGHT SWITCH

HM — 4SD J-BOX FOR WATER HEATER LOCATE ABOVE CEILING W/ COVER PLATE, HARD WIRE TO UNIT

H — 4SD J-BOX IN ATTIC FOR ATTIC MOUNTED HEAT DETECTOR (DEVICE BY OTHERS). MAXIMUM 35'-0" FROM ANY POINT IN ATTIC BUT NOT MORE THAN 25'-0" FROM TWO PERPENDICULAR WALL AND 50'-0" BETWEEN THEM. PROVIDE A 6'-0" CONDUIT FROM EACH J-BOX TO HEAT DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)

S — 4SD J-BOX IN ATTIC FOR CEILING MOUNTED SMOKE DETECTOR (DEVICE BY OTHERS). MAXIMUM 21'-0" FROM ANY POINT IN ROOM BUT NOT MORE THAN 15'-0" TO A PERPENDICULAR WALL AND 30'-0" BETWEEN THEM. PROVIDE A 6'-O" CONDUIT FROM EACH J-BOX TO SMOKE DETECTOR LOCATION. CONDUIT & CONNECTION TO CEILING DEVICE & DEVICE BY OTHERS (ALARM NOTE #1)

RECESSED 4SD J-BOX W/ COVER PLATE FOR FUTURE FIRE ALARM SYSTEM BY OTHERS. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF BOX AND PROVIDE 1" CO STUB TO ATTIC SPACE WITH PULLSTRING

H — 4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +90" AFF TO TOP OF DEVICE WITH 3/4" CONDUIT STUBBED TO ATTIC WITH PULLSTRING

4SD J-BOX/SINGLE GANG MUD RING FOR FIRE ALARM STROBE (DEVICE BY OTHERS). BOTTOM OF LENS 80" MIN TOP OF LENS 96" MAX AFF WITH 3/4"CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING

4SD J-BOX/ SINGLE GANG MUD RING FOR FIRE ALARM PULL STATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO TOP OF CONTROL BOX WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING

EXIT — EXIT SIGN WITH BATTERY BACK UP. EXIT SIGN REQUIRED FOR CLASSROOMS WITH TWO OR MORE EXTERIOR DOORS. FLS 90' BACK UP. CLASSROOMS WITH ONE EXTERIOR DOOR-OPTIONAL.

CLOCK OUTLET AT +90" AFF TO CENTERLINE OF DEVICE

EXTERIOR LED LIGHT FIXTURE. 30w MAX WITH PHOTOCELL MOUNT AT +93" AFF

ROOF — ROOF MOUNTED WEATHER PROOF GFI RECEPTACLE

GFI — GROUND FAULT CIRCUIT INTERRUPT RECEPTACLE WITHIN 6'-0" OF ALL SINKS

WP — EXTERIOR WEATHER PROOF GFI RECEPTACLE AT +24" AFF FOR A/C SERVICES (MAX 25'-0" FROM UNITS)

DUPLEX (WALL MOUNTED) RECEPTACLE 15A-125V-3 WIRE. MOUNT AT +15" AFF U.O.N. TO BOTTOM OF OUTLET BOX

MIN. + 15" TO BOTTOM OF BOX

$ 3 — 3-WAY LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWITCH BOX

$ — LIGHT SWITCH. MOUNT AT+48" AFF TO TOP OF SWTICH BOX

$ D — SINGLE BUTTON DIMMER SWITCH, AT +48" AFF, TO TOP OF SWITCH BOX, WATTSTOPPER #LMDM-101 OR EQUAL

WS-1 — SINGLE SWITCH WALL OCCUPANCY SENSOR. WATTSTOPPER PW-100 OR EQUAL. SENSOR TO BE MOUNTED AT +44" AFF AND USE FOR OPEN ROOM (OR RESTROOM) LESS THAN 100 SQ FT W/ (1) CIRCUIT.

US — ULTRASONIC CEILING OCCUPANCY SENSOR. WATTSTOPPER W-500A OR EQUAL. SENSOR TO BE CONNECTED TO KEYED LIGHT SWITCHES FOR MANUAL OVERRIDE AND USE FOR RESTROOM W/ PARTITIONS.

PC — CEILING MOUNTED PHOTOCELL, WATTSTOPPER #LMLS-500 OR EQUAL

OS — CEILING MOUNTED OCCUPANCY SENSOR. WATTSTOPPER #LMPC-100 OR EQUAL.

2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN LIGHT FIXTURE WITH DIMMABLE BALLAST DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ WATTAGE: 48W (48" LG) OR EQUAL

2x4 CEILING LIGHT WITH (3) LED PANELIGHT, LAY-IN LIGHT FIXTURE WITH DIMMABLE BALLAST DIMI LIGHTING-MODEL DM-P72448W-40K-ZZ WATTAGE: 48W (48" LG) OR EQUAL EACH LIGHT FIXTURE WHICH IS INDICATED AS BEING AN EMERGENCY LIGHT SHALL HAVE A BALLAST BATTERY PACK INSTALLED ON THE FIXTURE. THE BATTERY PACK SHALL PROVIDE POWER TO A SINGLE LAMP WITHIN THE FIXTURE FOR NO LESS THAN 90 MINUTES. ANY LIGHT FIXTURE Equipped WITH A BATTERY PACK SHALL BE WIRED IN SUCH A MANNER THAT THE BATTERY WILL BE ACTIVATED IMMEDIATELY UPON LOSS OF POWER TO THE FIXTURE. ADDITIONALLY THE BATTERY PACK SHALL BE OPERATED USING BATTERY POWER LIGHTING CONTROL SWITCHES AND SENSORS SHALL NOT BE ABLE TO SHUT THE FIXTURE OFF.

NOTE: SEE 4/A3.2 FOR PHOTOMETRIC DATA

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRISCH
No. 53380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ELECTRICAL SCHEDULE 36x40

PROJECT NUMBER 22088

DRAWN BY rMc/SC

CHECKED BY RH/RT

DATE

SHEET NO.

E1.3

SHEET OF

ABB.	DESCRIPTION	SYMBOL
WM	WALL MOUNTED UNIT (SEE SCHEDULE THIS SHEET)	WM-1
RM	ROOF MOUNTED UNIT (SEE SCHEDULE THIS SHEET)	RM-1
P.O.C	POINT OF CONNECTION	P.O.C
CO	CARBON MONOXIDE SENSOR	CO
BT	BYPASS TIMER	BT
STAT	THERMOSTAT	T
UC	UNDERCUT DOOR	UC
MVD	MANUAL VOLUME DAMPER	
FD	FIRE DAMPER	
VTR	VENT THRU ROOF	
ER	EXHAUST CEILING REGISTER	
CR	RETURN CEILING REGISTER	
CD	SUPPLY CEILING DIFFUSER	
(L)	LINED DUCTWORK	
EAD	EXHAUST AIR DUCT	
RAD	RETURN AIR DUCT	
SAD	SUPPLY AIR DUCT	
EF	EXHAUST FAN	EF -
CO2	CARBON DIOXIDE SENSOR	CO2

1 *1" = 1'-0"*
LEGEND

CEILING MOUNTED EXHAUST FAN

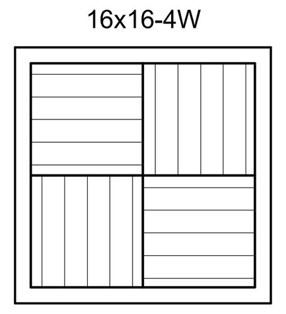
SYM.	USE	MFR/MODEL	CFM	SOUND LEVEL	SP	VOLTS	Ø	POWER	WGT#	NOTES
EF A	BATHROOM EXHAUST	∗BROAN L100	109	1.0 SONES	0.25	120	1	87 WATTS	22.80#	WITH BROAN ROOF CAP #634. PROVIDE 6" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF B	BATHROOM EXHAUST	∗BROAN L200	210	2.0 SONES	0.25	120	1	127 WATTS	23#	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF C	BATHROOM EXHAUST	∗BROAN L300	308	2.8 SONES	0.25	120	1	212 WATTS	23.1O#	WITH BROAN ROOF CAP #634. PROVIDE 8" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.
EF D	BATHROOM EXHAUST	∗BROAN 676	100	4.0 SONES	0.25	120	1	156 WATTS	7#	WITH BROAN ROOF CAP #636. PROVIDE 4" DIA. EXHAUST DUCT UP TO ROOF. INTERLOCK WITH LIGHT SWITCH.

∗OR APPROVED EQUAL.

2 *1" = 1'-0"*
CEILING MOUNTED EXHAUST FAN SCHEDULE

PERFORATED FACE GRILLE SCHEDULE (SUPPLY)

16x16-4W



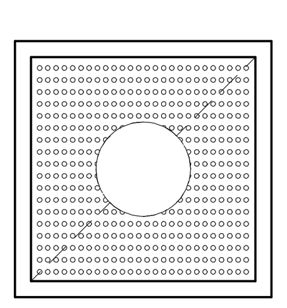
T-BAR SUPPLY

Fixed Curve Blade, 4-way throw
(WITH INTEGRAL DAMPER)

NECK SIZE	CFM (RANGE)	NOTES
6"Ø	0-150	SEE DETAIL FOR MAKE AND MODEL
8"Ø	150-230	SEE DETAIL FOR MAKE AND MODEL
10"Ø	230-350	SEE DETAIL FOR MAKE AND MODEL
12"Ø	350-460	SEE DETAIL FOR MAKE AND MODEL
14"Ø	460-640	SEE DETAIL FOR MAKE AND MODEL

3 *1" = 1'-0"*
PFG SCHED (SUPPLY)

PERFORATED FACE GRILLE SCHEDULE (RETURN)



T-BAR RETURN

Perforated Face
Shoemaker 105P with 24 ga. 45 deg.

NECK SIZE	CFM (RANGE)	NOTES
6"Ø	0-230	SEE MECH CLG PLAN FOR SIZE
10"Ø	230-460	SEE MECH CLG PLAN FOR SIZE
12"Ø	350-460	SEE MECH CLG PLAN FOR SIZE
14"Ø	460-710	SEE MECH CLG PLAN FOR SIZE
16"Ø	277-1664	SEE MECH CLG PLAN FOR SIZE

TESTS TO BE COMPLETED ON NEWLY INSTALLED OR REPLACEMENT OF MECHANICAL SYSTEMS BEFORE PROJECT COMPLETION PER THE CALIFORNIA ENERGY CODE SECTION 10-103. ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTITIED ACCEPTANCE TEST TECHNICIAN(ATT). THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES CORRECTED UNTIL THE INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA. COMPLETED NRCA FORMS SHALL BE SUBMITTED TO THE PROJECT INSPECTOR AND THE DISTRICT.

4 *1" = 1'-0"*
PFG SCHED (RETURN)

MEP COMPONENT ANCHORAGE NOTE

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

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

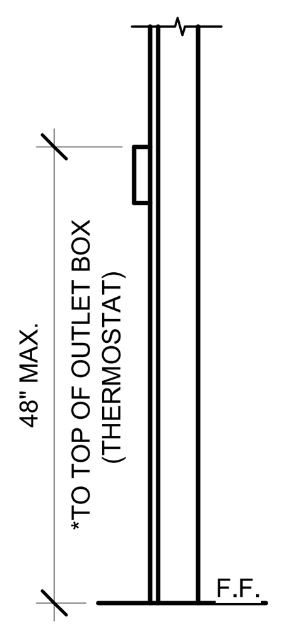
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL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

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

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

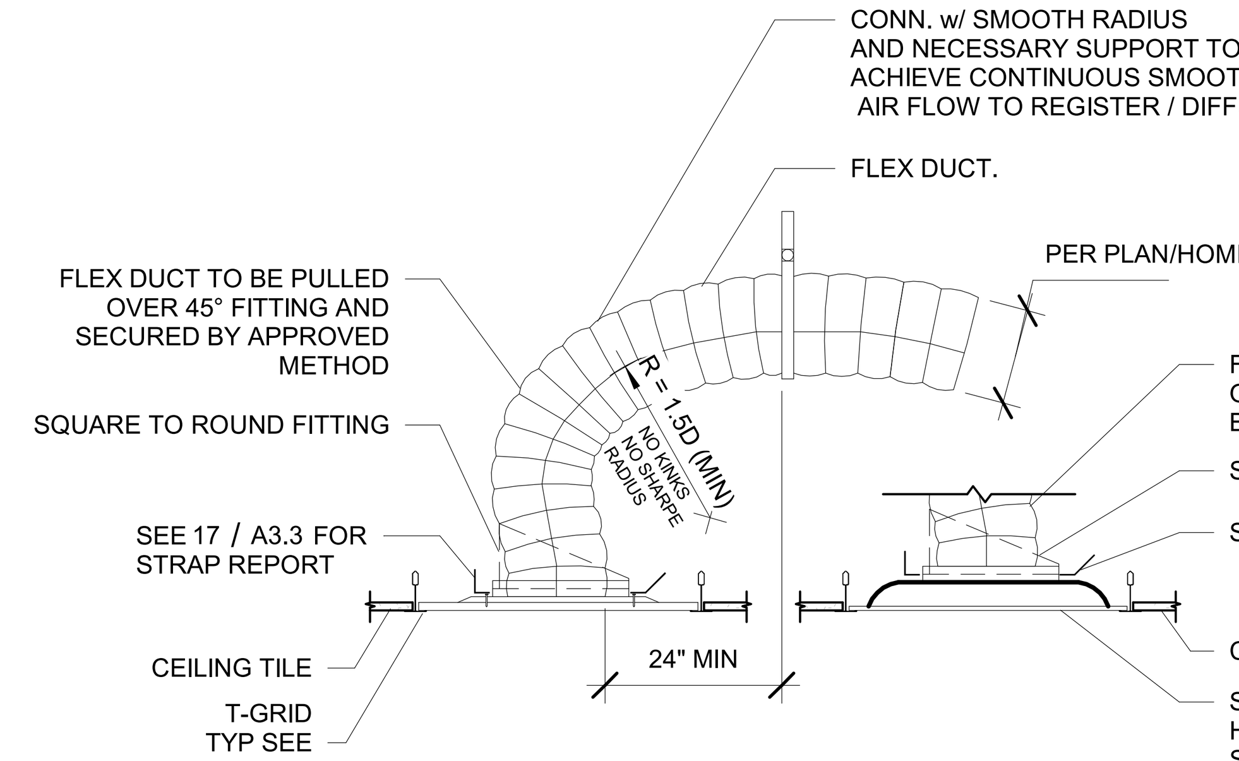
MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH HCAI PREAPPROVAL (OPM #) #__________________.

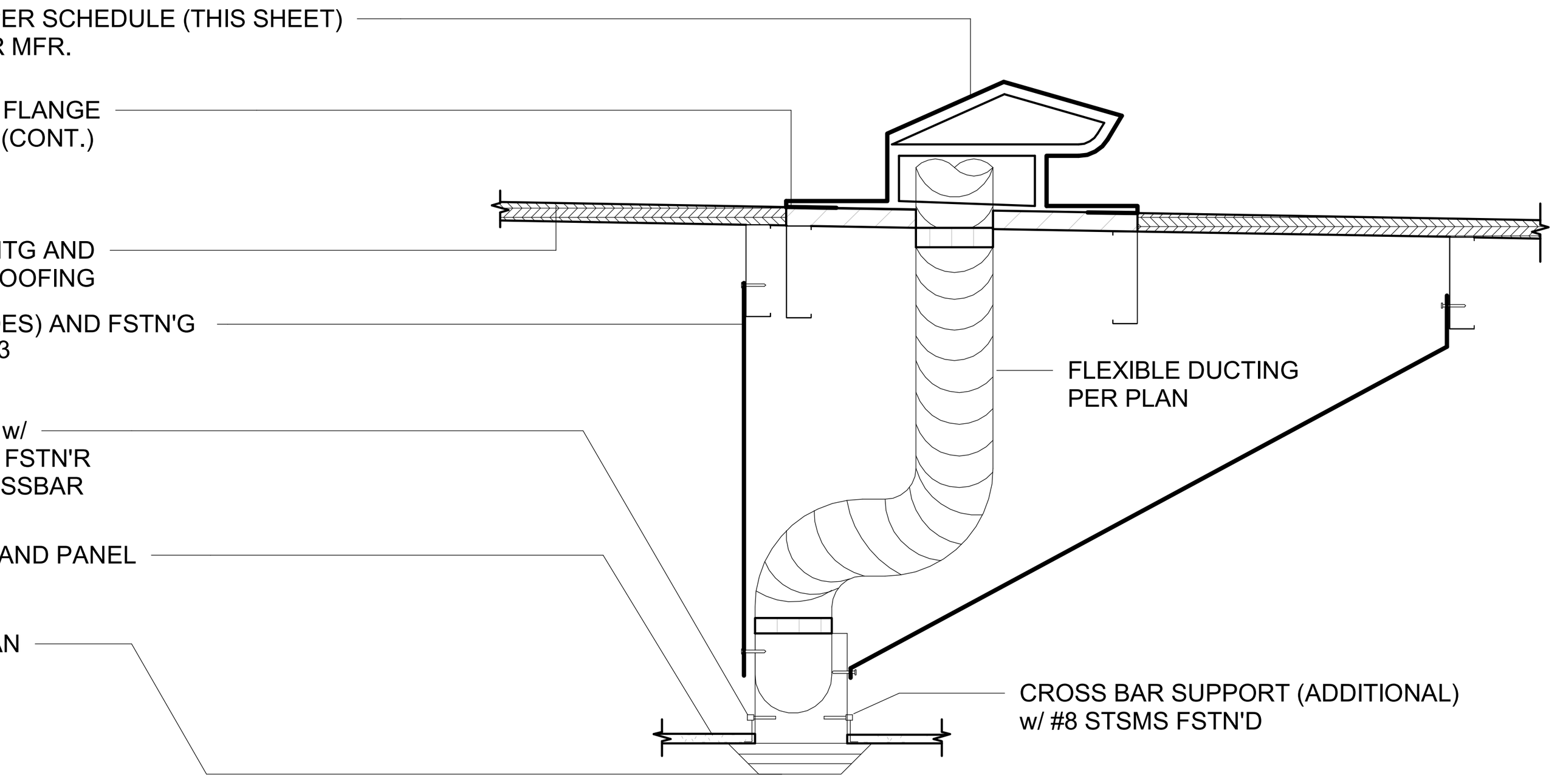
5 *1" = 1'-0"*
EQUIPMENT ANCHORAGE

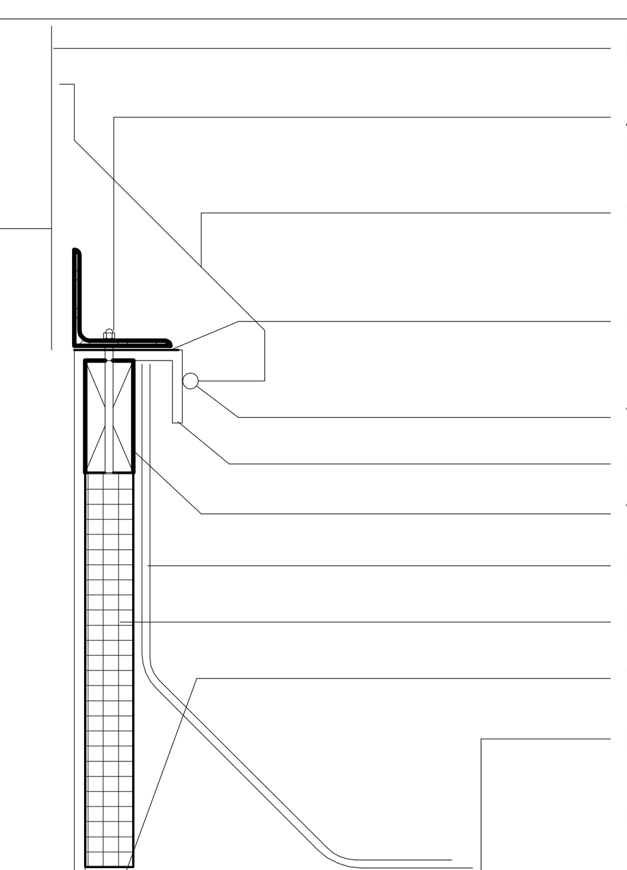


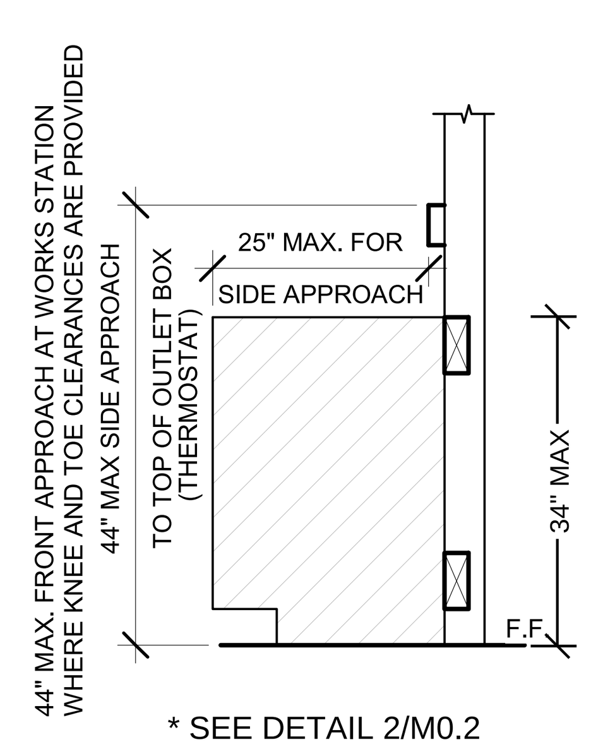
* 30"x48" MIN CLR FLOOR SPACE AT EACH LOCATION FOR PERPENDICULAR APPROACH

9 *1" = 1'-0"*
MOUNTING ELEV.









* SEE DETAIL 2/M0.2

10 *1" = 1'-0"*
ELEV. @ WORKSTATION

10.6 EER and 11 EER

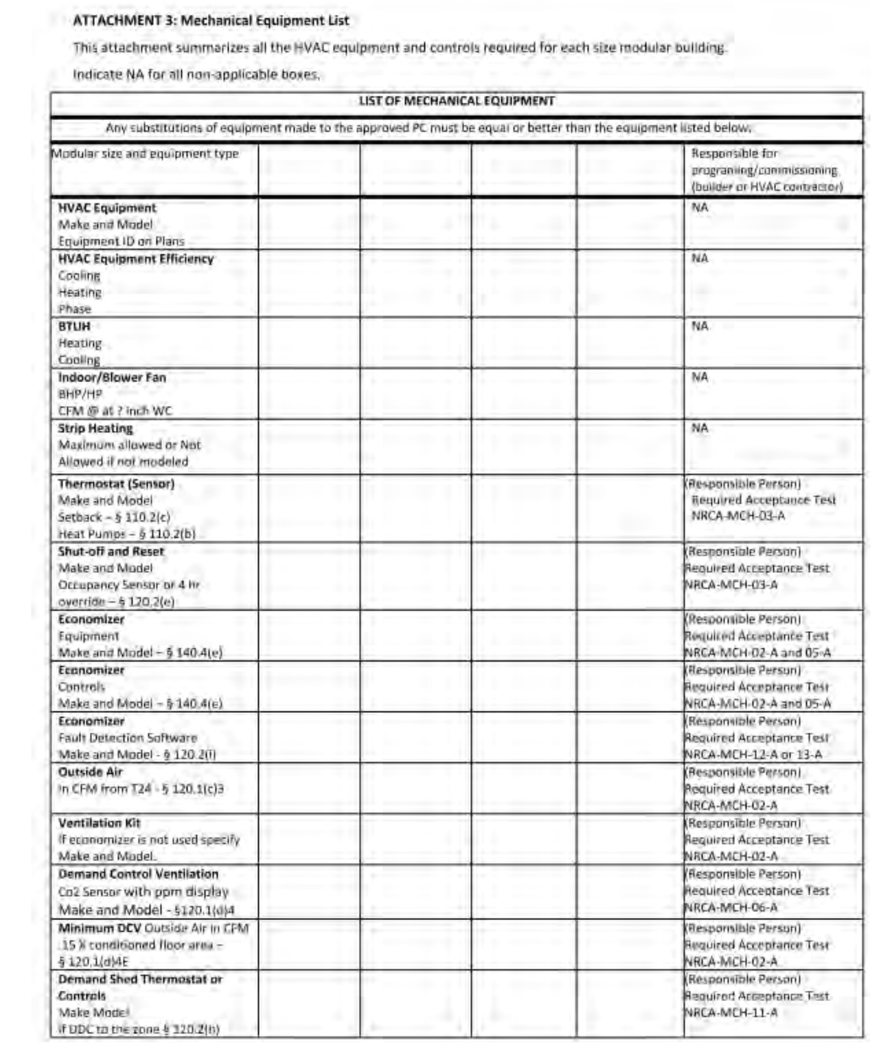
SINGLE PACKAGE VERTICAL HEAT PUMP SCHEDULE

	STANDARD	OPTION #I
TAG	WM-1	WM-1
NOMINAL TONNAGE	3.0 TONS	4.0 TONS
MANUFACTURER	**BARD	**BARD
MODEL#	W36HB-A	W48HC-A
CFM	1150	1500
STATIC PRESSURE	0.15	0.2
MIN OSA	365	548
DRIVE	DIRECT	DIRECT
MCA	20.4	58
MOCP	30	60
VOLTAGE	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#6/#10
DESIGN RETURN AIR (DB/WB)	80/67	80/67
SENSIBLE COOLING @ 95° F (PART/FULL)	24.00/28.00	25.900/36.00
TOTAL COOLING @ 95° F (PART/FULL)	32.00/36.00	34.000/45.500
HEATING CAP. BTUH @ 47° F (PART/FULL)	29.200/32.200	29.200/41.500
HEATING CAP. BTUH @ 17° F	20.000	26.000
OPERATING WEIGHT	380#	550#
EER	11.10	11.00
COP @ 47° F	3.30	3.00
COP @ 17° F	-	2.00

14 SEER

SINGLE PACKAGE ROOF TOP HEAT PUMP SCHEDULE

	STANDARD	OPTION #I
TAG	RM-1	RM-1
NOMINAL TONNAGE	3.0 TONS	4 TONS
MANUFACTURER	**CARRIER	**CARRIER
MODEL#	50VTC48	50VTC48
CFM	1200	1500
STATIC PRESSURE	0.15	0.4
MIN OSA	365	548
DRIVE	BELT	BELT
MCA	59	64
MOCP	60	74
VOLTAGE	208/230-1	208/230-1
WIRE SIZE (PWR/GRND)	#6/#10	#4/#8
DESIGN RETURN AIR (DB/WB)	80/67	80/67
SENSIBLE COOLING @ 95° F	30.500	35.260
TOTAL COOLING @ 95° F	35.600	49.600
HEATING CAP. BTUH @ 47° F	35.500	45.5000
HEATING CAP. BTUH @ 17° F	18.400	28.600
OPERATING WEIGHT	572#	560#
SEER	14.00	14.00
HSPF	8.1	8.0
COP @ 47° F	3.4	3.4
COP @ 17° F	2.3	2.4



HVAC SCHEDULE

BUILDING SIZE		# OF HVAC 3 1/2 TON HVAC	4 TON HVAC
☐	24' x 40'	1	
✕	36' x 40'		1
☐	48' x 40'	2	
☐	60' x 40'		2
☐	72' x 40'	3	
☐	84' x 40'		3
☐	96' x 40'	4	
☐	108' x 40'		4
☐	120' x 40'	5	

MERV 13 AND 2-INCH DEPTH PER ENERGY CODE 120.1(C)1. FILTERS REQ'D FOR ALL UNITS

HVAC NOTES
1. SET BACK THERMOSTAT SHALL BE PROVIDED
2. MINIMUM OUTSIDE AIR 15 CFM PER OCCUPANT AND THE UNIT SHALL UTILIZE DEMAND CONTROL VENTILATION
3. MODEL NUMBERS FOR HEAT PUMP UNITS WITH OPTIONAL 5.0 AUXILIARY HEAT STRIPS, WHEN THE HEAT STRIP IS NOT USED, THE MCA AND MOCP MUST BE VERIFIED AND HEAT STRIPS LARGER THAN THE SIZES SHOWN MAY NOT BE USED.

120.1(D)
THERMOSTAT SHALL BE PROGRAMED WITH EXPECTED OCCUPIED TIMES.AIR HANDLER FAN WILL BE PROGRAMED TO RUN DURING ALL OCCUPIED TIMES.PRE-OCCUPANCY PURGE SHALL BE PROGRAMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED.

FOR ROOF MOUNTED HVAC UNITS A GASKET SHALL BE PLACED BETWEEN THE CURB AND THE HVAC UNIT.MASTIC SEALANT SHALL BE USED TO SEAL ALL SEAMS BETWEEN THE HVAC UNIT AND THE CURB. THE SUPPLY AND RETURN DUCTS SHALL BE ATTACHED TO THE CURB AND MASTIC SHALL BE USED TO SEAL THE DUCTS TO THE CURB. THE SUPPLY AND RETURN DUCTS SHALL BE THE SAME SIZE AND ALIGN WITH THE HVAC UNIT.

FLEXIBLE AIR DUCTS AND CONNECTORS SHALL BE NOT MORE THAN 5 FEET IN LENGTH AND SHALL NOT BE USED IN LIEU OF RIGID ELBOWS OR FITTINGS. FLEXIBLE AIR DUCTS SHALL BE PERMITTED TO BE USED AS AN ELBOW AT A TERMINAL DEVICE PER ENERGY CODE 120.4.

DUCT INSTALLATION AND PLENUMS SHALL MEET THE REQUIREMENTS OF ENERGY CODE SECTION 120.4 AND THE MANUFACTURERS INSTALLATION INSTRUCTIONS.
HORIZONTAL FLEX DUCT SHALL BE SUPPORTED AT A MAXIMUM 4 FT INTERVALS, WITH HANGING STRAPS A MINIMUM 1 1/2 IN. WIDE. DUCTS MUST BE PULLED TIGHT WITH A MAXIMUM SAG OF ½" PER FOOT OF HORIZONTAL RUN.
DUCT SHALL NOT BE KINKED OR CRUSHED.
BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.

SECTION 915
CARBON MONOXIDE DETECTION

915.2.3 Group E occupancies. Carbon monoxide detection shall be installed in classrooms in Group E occupancies. Carbon monoxide alarm signals shall be automatically transmitted to an on-site location that is staffed byschool personnel.

915.3 Detection equipment. Carbon monoxide detection required by Sections 915.1 through 915.2.3 shall be provided by carbon monoxide alarms complying with Section 915.4 or carbon monoxide detection systems complying with Section 915.5.

CFC 915.1 - Classrooms which contain a fuel-burning appliance or a fuel-burning fireplace or are supplied by a forced-air furnace shall be provided with a carbon monoxide detection system. Provide a carbon monoxide detection system

GENERAL NOTE:
UTILITIES THAT SPAN BETWEEN UNITS OR ACROSS SEISMIC SEPARATION JOINTS MUST BE DESIGNED WITH A FLEXIBLE CONNECTION THAT CAN ACCOMMODATE DIFFERENTIAL MOVEMENTS

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER MANNY D. FRISCH M33380 03/31/24 MECHANICAL STATE OF CALIFORNIA
02/16/24
RST#22088

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

CLIENT

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

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

Revision Schedule		
#	Description	Date

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

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

SHEET TITLE
MISCELLANEOUS NOTES & DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

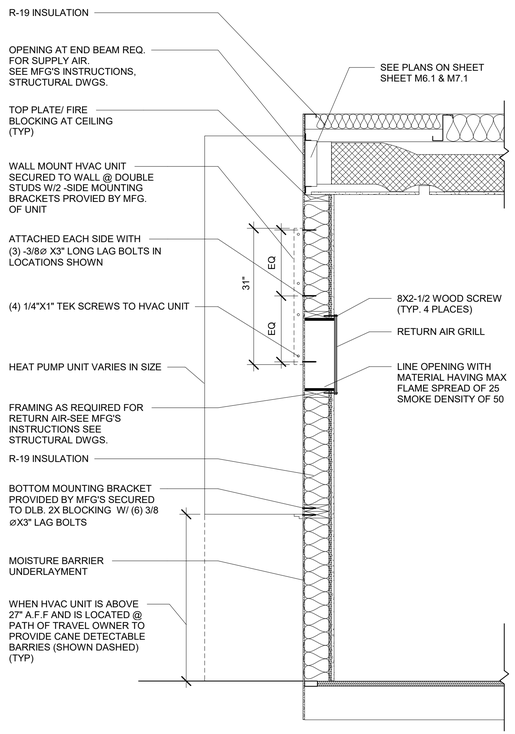
CHECKED BY
RH/RT

DATE

SHEET NO.
M0.1

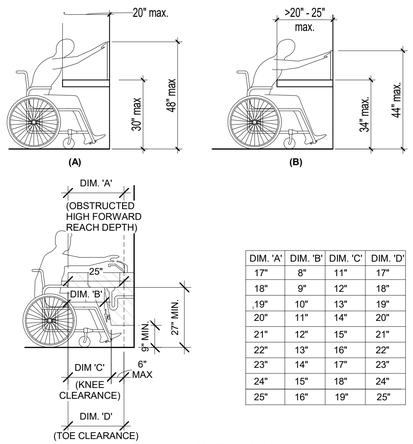
SHEET OF

C:\Users\User\Documents\20093 - Aries, 24x40 PC - Low Seismic_6.7_CESAR24063.rvt
6/15/2021 11:53:12 PM

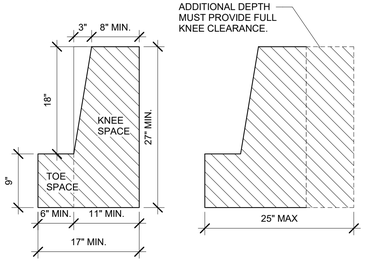


1 ***3/4" = 1'-0"***
HVAC @ WALL SECTION

FIGURE 308.2.2. OBSTRUCTED HIGH FORWARD REACH



DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'
17"	8"	11"	17"
18"	9"	12"	18"
,19"	10"	13"	19"
20"	11"	14"	20"
21"	12"	15"	21"
22"	13"	16"	22"
23"	14"	17"	23"
24"	15"	18"	24"
25"	16"	19"	25"



2 ***TOE SPACE CLEARANCE***

120.1(D)
THERMOSTAT SHALL BE PROGRAMED WITH EXPECTED OCCUPIED TIMES.AIR HANDLER FAN WILL BE PROGRAMED TO RUN DURING ALL OCCUPIED TIMES.PRE-OCCUPANCY PURGE SHALL BE PROGRAMED ONE HOUR PRIOR TO THE MODULAR BUILDING BEING NORMALLY OCCUPIED.

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DUCTS MUST BE PULLED TIGHT WITH A MAXIMUM SAG OF ½" PER FOOT OF HORIZONTAL RUN.
DUCT SHALL NOT BE KINKED OR CRUSHED.
BEND/RADIUS EQUAL TO THE DUCT DIAMETER OR GREATER.

UPON SITE PLACEMENT OR SITE CONSTRUCTION, THE OPERATION AND MAINTENANCE DOCUMENTATION FOR ALL MECHANICAL AND LIGHTING SYSTEMS AND CONTROLS SHALL BE PROVIDED BY THE MODULAR BUILDING MANUFACTURER, OR THE GENERAL CONTRACTOR FOR THE PERMANENT MODULAR RELOCATABLE BUILDING AND DELIVERED TO THE OWNER.

AT THE TIME OF ROUGH INSTALLATION, DURING IN THE FACTORY OR ON THE CONSTRUCTION SITE, DURING SHIPMENT (IF APPLICABLE) AND UNTIL FINAL STARTUP OF THE HEATING COOLING AND VENTILATING EQUIPMENT, ALL DUCT AND OTHER RELATED DISTRIBUTION COMPONENT OPENINGS SHALL BE PROCTED TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM

3 ***1/4" = 1'-0"***
MECHANICAL NOTES

ATTACHMENT 3: Mechanical Equipment List

This attachment summarizes all the HVAC equipment and controls required for each size modular building.

Indicate NA for all non-applicable boxes.

LIST OF MECHANICAL EQUIPMENT

Any substitutions of equipment made to the approved PC must be equal or better than the equipment listed below.

Modular size and equipment type	4.0 TON WM HVAC	5.0 TON WM HVAC	3 TON WM HVAC	Responsible for programing/commissioning (builder or HVAC contractor)
HVAC Equipment Make and Model	BARD W46HC-A	BARD W60H1	BARD W36 HB	NA
BTUH Heating Cooling	41,500 45,500	51,000 55,500	38,500 40,000	NA
Indoor/Blower Fan BHP/HP CFM @ at ? inch WC	1/3-825-2 2.5 24"-2900	1/3-825-2 4.1 24"-3700	1/3-825-2 2.5 24"-2900	NA
Strip Heating Maximum allowed or Not Allowed if not modeled	PER TITLE 24	PER TITLE 24	PER TITLE 24	NA
Minimum allowed SEER, EER, HSPF and/or COP, and Phase	14, 11, 3.40, 3	14, 11, 3.30 ,3	14, 11, 3.40, 3	NA
Thermostat Make and Model Setback – § 110.2(c) Heat Pumps – § 110.2(b)	BARD #8403-061 C48H1	BARD #8403-061 C60H1	BARD #8403-061 C42H1	(Responsible Person) Required Acceptance Test NRCA-MCH-03-A
Shut-off and Reset Make and Model Occupancy Sensor or 4 hr override – § 120.2(e)	STANDARD BUILT-IN	STANDARD BUILT-IN	STANDARD BUILT-IN	(Responsible Person) Required Acceptance Test NRCA-MCH-03-A
Economizer Equipment Make and Model – § 140.4(e)	ECON-NC5	ECON-NC5	ECON-NC5	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A and 05-A
Economizer Controls Make and Model – § 140.4(e)	ECON-WD5	ECON-WD5	ECON-WD5	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A and 05-A
Economizer Fault Detection Software Make and Model - § 120.2(i)	ECON-DB5	ECON-DB5	ECON-DB5	(Responsible Person) Required Acceptance Test NRCA-MCH-12-A or 13-A
Outside Air In CFM - § 120.1(c)3	PER TITLE 24	PER TITLE 24	PER TITLE 24	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Ventilation Kit If economizer is not installed specify Make and Model.	N/A	N/A	N/A	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Demand Control Ventilation Co2 Sensor with ppm display Make and Model - §120.1(d)4	PER BARD SPECIFICAIONS	PER BARD SPECIFICAIONS	PER BARD SPECIFICAIONS	(Responsible Person) Required Acceptance Test NRCA-MCH-06-A
Minimum Designed Outside Air in CFM - § 120.1(c)3	PER TITLE 24	PER TITLE 24	PER TITLE 24	(Responsible Person) Required Acceptance Test NRCA-MCH-02-A
Demand Shed Thermostat Make Model If DDC to the zone § 120.2(h)				(Responsible Person) Required Acceptance Test NRCA-MCH-11-A

NOTE: SEE M0.1 AND CUT SHEETS FOR ADDITIONAL EQUIPMENT OPTIONS

SEQUENCE OF OPERATIONS

BARD W48HC-A

Sequence of Operation

Cooling

Circuit R-Y1 makes at thermostat pulling in compressor contactor, starting the compressor and outdoor motor. (See ***NOTE*** under **Condenser Fan Operation** concerning models equipped with low ambient control.) The G (indoor motor) circuit is automatically completed by the thermostat on any call for cooling operation or can be energized by manual fan switch on subbase for constant air circulation. On a call for 2nd stage heating, circuit R-W2 makes at the thermostat pulling in heat contactor for the strip heat and blower operation. On a call for third stage heat, R-W3 makes bringing on second heat contactor, if so equipped.

Heating

A 24V solenoid coil on reversing valve controls heating cycle operation. Two thermostat options, one allowing "Auto" changeover from cycle to cycle and the other constantly energizing solenoid coil during heating season—thus eliminating pressure equalization noise except during defrost, are to be used.

On "Auto" option, a circuit is completed from R-B/W1 and R-Y1 on each heating "on" cycle, energizing reversing valve solenoid and pulling in compressor contactor, starting compressor and outdoor motor. R-G also make starting indoor blower motor. Heat pump heating cycle now in operation.

The second option has no "Auto" changeover position, but instead energizes the reversing valve solenoid constantly whenever the system switch on subbase is placed in "Heat" position, the "B" terminal being constantly energized from R. A thermostat demand for heat completes R-Y circuit, pulling in compressor contactor and starting compressor and outdoor motor. R-G also make, starting indoor blower motor.

On a call for 2nd stage heating, circuit R-W2 makes at the thermostat pulling in the heat contactor for the strip heat and blower operation. On a call for third stage heat, R-B/W1 breaks, dropping out heat pump, and R-W3 makes, bringing on second heat contactor, if so equipped.

Balanced Climate™ Mode

Balanced Climate™ is a great comfort feature that can easily be applied under any normal circumstances. If the Bard air conditioning system is being set up in a typical environment where 72°F is the lowest cooling setpoint, remove the Y1/Y2 jumper and install a 2-stage cooling thermostat. This will increase the humidity removal up to 35% and provide a much more comfortable environment. This mode will also increase the supply temperature when in heating mode. When Balanced Climate mode is activated, it is employed in both heating and cooling modes.

NOTE: *Units with mechanical dehumidification require an additional connection to be made when enabling Balanced Climate. Refer to dehumidification supplemental instructions for this step.*

If the application is likely to require air conditioning operation below 60°F outdoor conditions, a low ambient control (LAC) kit must be installed. The LAC kit is equipped with an outdoor temperature switch that disables Balanced Climate mode when the outdoor temperature drops below 50°F. This prevents potential evaporator coil freeze up issues. The LAC kit also comes with an evaporator freeze protection thermostat that cuts out the compressor if the evaporator begins to freeze up.

If the unit is being installed with any ventilation package, a Bard LAC kit must be installed. Failure to utilize an LAC with any air conditioner can cause coil freeze up.

Balanced Climate can readily be applied to duct-free (supply and return air grille) applications. It may also be applied to ducted applications with **limited static of 0.20" ESP (total including both supply and return statics)**. Consult Bard Application Engineering for details prior to implementation.

CAUTION: *Balanced Climate is not a replacement for a dehumidification (hot gas reheat) unit for extreme applications, but rather an enhancement feature for limited climates and applications.*

BARD C60HC1 & C42HC1

Sequence of Operation

Cooling Stage 1 – Circuit R-Y makes at thermostat pulling in compressor contactor, starting the compressor and outdoor motor. The G (indoor motor) circuit is automatically completed on any call for cooling operation or can be energized by manual fan switch on subbase for constant air circulation.

Cooling Stage 2 – Circuit R-Y1 makes at the thermostat, energizing the 2nd stage solenoid in the compressor. Default position is not energized. Compressor will run at low capacity until this solenoid is energized.

Heating Stage 1 – A 24V solenoid coil on reversing valve controls heating cycle operation. Two thermostat options, one allowing "Auto" changeover from cycle to cycle and the other constantly energizing solenoid coil during heating season and thus eliminating pressure equalization noise except during defrost, are to be used. On "Auto" option, a circuit is completed from R-B and R-Y on each heating "on" cycle, energizing reversing valve solenoid and pulling in compressor contactor starting compressor and outdoor motor. R-G also make, starting indoor blower motor. Heat pump heating cycle now in operation. The second option has no "Auto" changeover position, but instead energizes the reversing valve solenoid constantly whenever the system switch on subbase is placed in "Heat" position, the "B" terminal being constantly energized from R. A thermostat demand for Stage 1 heat completes R-Y circuit, pulling in compressor contactor and starting compressor and outdoor motor. R-G also make, starting indoor blower motor.

Heating Stage 2 – Circuit R-Y2 makes at the thermostat, energizing the 2nd stage solenoid in the compressor.

Pressure Service Ports

High and low pressure service ports are installed on all units so that the system operating pressures can be observed. Pressure tables 6A and 6B cover all models. It is imperative to match the correct pressure table to the unit by model number.

This unit employs high-flow Coremax valves instead of the typical Shrader type valves.

WARNING! Do NOT use a Schrader valve core removal tool with these valves. Use of such a tool could result in eye injuries or refrigerant burns!

To change a Coremax valve without first removing the refrigerant, a special tool is required which can be obtained at www.fastenstinc.com/en/SCCA07H. See the replacement parts manual for replacement core part numbers.

CARRIER 50VTC48L

OPERATION

Sequence of Operation—When free cooling is not available, the compressor will be controlled by the thermostat. When free cooling is available, the outdoor-air damper is modulated by the Economizer control to provide a 50° to 55°F (10° to 12.8°C) supply-air temperature into the zone. As the supply-air temperature fluctuates above 55° (12.8°C) or below 50°F (10°C), the dampers will be modulated (open or close) to bring the supply-air temperature back within the set points. For Economizer operation, there must be a thermostat call for the fan (G). This will move the damper to its minimum position during the occupied mode.

NOTE: The DCV Max potentiometer must be closed (CCW) when not using CO_2 sensor.

Above 50°F (10°C) supply-air temperature, the dampers will modulate from 100% open to the minimum open position. From 50°F to 45°F (10° to 7.2°C) supply-air temperature, the dampers will maintain at the minimum open position. Below 45°F (7.2°C), the dampers will be completely shut. As the supply-air temperature rises, the dampers will come back open to the minimum open position once the supply-air temperature rises to 48°F (8.9°C). If power exhaust is installed, as the outdoor-air damper opens and closes, the power exhaust fans will be energized and deenergized. If field-installed accessory CO_2 sensors are connected to the Economizer control, a demand controlled ventilation strategy will begin to operate. As the CO_2 level in the zone increases above the CO_2 set point, the minimum position of the damper will be increased proportionally. As the CO_2 level decreases because of the increase in fresh air, the outdoor-air damper will be proportionally closed. Damper position will follow the higher demand condition from DCV mode or free cooling mode. Damper movement from full closed to full open (or vice versa) will take between 1 1/2 and 2 1/2 minutes. If free cooling can be used as determined from the appropriate changeover command (dry bulb, enthalpy curve, or differential enthalpy), a call for cooling (Y1 closes at the thermostat) will cause the control to modulate the dampers open to maintain the supply air temperature set point at 50° to 55°F (10° to 12.8°C). As the supply air temperature drops below the set point range of 50° to 55°F (10° to 12.8°C), the control will modulate the outdoor-air dampers closed to maintain the proper supply-air temperature.

TABLE 140.4-E AIR ECONOMIZER HIGH LIMIT SHUT OFF CONTROL REQUIREMENTS

Device Type[a]	Climate Zones	Required High Limit (Economizer Off When): Equation[b]	Description
Fixed Dry Bulb	1, 3, 5, 11-16	$T_{OA} > 75°F$	Outdoor air temperature exceeds 75°F
	2, 4, 10	$T_{OA} > 73°F$	Outdoor air temperature exceeds 73°F
	6, 8, 9	$T_{OA} > 71°F$	Outdoor air temperature exceeds 71°F
	7	$T_{OA} > 69°F$	Outdoor air temperature exceeds 69°F
Differential Dry Bulb	1, 3, 5, 11-16	$T_{OA} > T_{RA}°F$	Outdoor air temperature exceeds return air temperature
	2, 4, 10	$T_{OA} > T_{RA}-2°F$	Outdoor air temperature exceeds return air temperature minus 2°F
	6, 8, 9	$T_{OA} > T_{RA}-4°F$	Outdoor air temperature exceeds return air temperature minus 4°F
	7	$T_{OA} > T_{RA}-6°F$	Outdoor air temperature exceeds return air temperature minus 6°F
Fixed Enthalpy[c] + Fixed Drybulb	All	$h_{OA} > 28$ Btu/lb[c] or $T_{OA} > 75°F$	Outdoor air enthalpy exceeds 28 Btu/lb of dry air[c] or Outdoor air temperature exceeds 75°F

[a] Only the high limit control devices listed are allowed to be used and at the setpoints listed. Others such as Dew Point, Fixed Enthalpy, Electronic Enthalpy, and Differential Enthalpy Controls, may not be used in any Climate Zone for compliance with Section 140.4(e)1 unless approval for use is provided by the Energy Commission Executive Director.

[b] Devices with selectable (rather than adjustable) setpoints shall be capable of being set to within 2°F and 2 Btu/lb of the setpoint listed.

[c] At altitudes substantially different than sea level, the Fixed Enthalpy limit value shall be set to the enthalpy value at 75°F and 50% relative humidity. As an example, at approximately 6,000 foot elevation, the fixed enthalpy limit is approximately 30.7 Btu/lb.

ALL ECONOMIZERS MUST BE PROGRAMMED IN THE FIELD BY THE HVAC CONTRACTOR TO THE TEMPERATURE IN TABLE 140.4-E

PC DESIGN REVIEW INFORMATION
Title 24, Part 6, Energy Code
DSA Application #: 04-123369
Calculation Date/Time of Energy Report: 2023-07-26 XX
Model Name and Option: 24'x40' PC (Wood Frame Walls)
Total Floor Area: 960 ft²
HVAC System Type: Wall Mounted A/C

Climate Zone 14 (Palmdale)

Azimuth (Front Orientation)		Standard Design	Proposed Design	Margin	Margin %	Worst Case
30°	TDV-E	366.40	297.14	69.26	**18.9028%**	
	TDV-T	366.40	297.14	69.26	**18.9028%**	
	SOURCE	36.24	30.65	5.59	**15.4249%**	
75°	TDV-E	358.72	295.30	63.42	**17.6793%**	**
	TDV-T	358.72	295.30	63.42	**17.6793%**	**
	SOURCE	35.63	30.56	5.07	**14.2296%**	**
120°	TDV-E	363.47	296.43	67.04	**18.4444%**	
	TDV-T	363.47	296.43	67.04	**18.4444%**	
	SOURCE	36.01	30.64	5.37	**14.9125%**	
165°	TDV-E	366.46	297.42	69.04	**18.8397%**	
	TDV-T	366.46	297.42	69.04	**18.8397%**	
	SOURCE	36.22	30.64	5.58	**15.4059%**	
210°	TDV-E	366.40	297.14	69.26	**18.9028%**	
	TDV-T	366.40	297.14	69.26	**18.9028%**	
	SOURCE	36.24	30.65	5.59	**15.4249%**	
255°	TDV-E	358.72	295.30	63.42	**17.6793%**	**
	TDV-T	358.72	295.30	63.42	**17.6793%**	**
	SOURCE	35.63	30.56	5.07	**14.2296%**	**
300°	TDV-E	363.47	296.44	67.03	**18.4417%**	
	TDV-T	363.47	296.44	67.03	**18.4417%**	
	SOURCE	36.01	30.64	5.37	**14.9125%**	
345°	TDV-E	366.46	297.42	69.04	**18.8397%**	
	TDV-T	366.46	297.42	69.04	**18.8397%**	
	SOURCE	36.22	30.64	5.58	**15.4059%**	

Climate Zone 15 (Palm Springs)

Azimuth (Front Orientation)		Standard Design	Proposed Design	Margin	Margin %	Worst Case
30°	TDV-E	378.51	303.65	74.86	**19.7775%**	
	TDV-T	378.51	303.65	74.86	**19.7775%**	
	SOURCE	33.26	26.66	6.60	**19.8437%**	
75°	TDV-E	369.92	301.77	68.15	**18.4229%**	**
	TDV-T	369.92	301.77	68.15	**18.4229%**	**
	SOURCE	32.57	26.55	6.02	**18.4831%**	**
120°	TDV-E	370.43	302.74	67.69	**18.2734%**	
	TDV-T	370.43	302.74	67.69	**18.2734%**	
	SOURCE	32.71	26.64	6.07	**18.5570%**	
165°	TDV-E	378.42	303.43	74.99	**19.8166%**	
	TDV-T	378.42	303.43	74.99	**19.8166%**	
	SOURCE	33.23	26.65	6.58	**19.8014%**	
210°	TDV-E	378.51	303.65	74.86	**19.7775%**	
	TDV-T	378.51	303.65	74.86	**19.7775%**	
	SOURCE	33.26	26.66	6.60	**19.8437%**	
255°	TDV-E	369.92	301.77	68.15	**18.4229%**	**
	TDV-T	369.92	301.77	68.15	**18.4229%**	**
	SOURCE	32.57	26.55	6.02	**18.4831%**	**
300°	TDV-E	370.43	302.74	67.69	**18.2734%**	
	TDV-T	370.43	302.74	67.69	**18.2734%**	
	SOURCE	32.71	26.64	6.07	**18.5570%**	
345°	TDV-E	378.42	303.43	74.99	**19.8166%**	
	TDV-T	378.42	303.43	74.99	**19.8166%**	
	SOURCE	33.23	26.65	6.58	**19.8014%**	

Climate Zone 16 (Blue Canyon)

Azimuth (Front Orientation)		Standard Design	Proposed Design	Margin	Margin %	Worst Case
30°	TDV-E	307.24	278.52	28.72	**9.3477%**	**
	TDV-T	307.24	278.52	28.72	**9.3477%**	**
	SOURCE	54.83	41.05	13.78	**25.1322%**	**
75°	TDV-E	341.77	272.69	69.08	**20.2124%**	
	TDV-T	341.77	272.69	69.08	**20.2124%**	
	SOURCE	65.39	40.97	24.42	**37.3452%**	
120°	TDV-E	307.35	273.40	33.95	**11.0460%**	
	TDV-T	307.35	273.40	33.95	**11.0460%**	
	SOURCE	54.88	41.01	13.87	**25.2731%**	
165°	TDV-E	309.02	273.26	35.76	**11.5721%**	
	TDV-T	309.02	273.26	35.76	**11.5721%**	
	SOURCE	54.91	41.02	13.89	**25.2959%**	
210°	TDV-E	307.24	273.52	33.72	**10.9751%**	
	TDV-T	307.24	273.52	33.72	**10.9751%**	
	SOURCE	54.83	41.05	13.78	**25.1322%**	
255°	TDV-E	341.77	272.69	69.08	**20.2124%**	
	TDV-T	341.77	272.69	69.08	**20.2124%**	
	SOURCE	65.39	40.97	24.42	**37.3452%**	
300°	TDV-E	307.35	273.40	33.95	**11.0460%**	
	TDV-T	307.35	273.40	33.95	**11.0460%**	
	SOURCE	54.88	41.01	13.87	**25.2731%**	
345°	TDV-E	309.02	273.26	35.76	**11.5721%**	
	TDV-T	309.02	273.26	35.76	**11.5721%**	
	SOURCE	54.91	41.02	13.89	**25.2959%**	

Reference: Energy Code, Appendix NA4, Table NA4-3 Notes:
* In the event that there are identical percentages, select one.
**This table is not currently generated by the energy software.
Least Compliance Margin Orientation

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ● CONSULTING ● PROJECT MGT
11590 W. BERNARDO COURT, SUITE 100
SAN DIEGO, CA 92127
PHONE: (858) 444-3344
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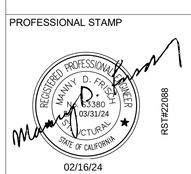
PROFESSIONAL STAMP



02/16/24

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CLIENT

Class Leasing
1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PROJECT NUMBER
22088

DRAWN BY
Author

CHECKED BY
Checker

DATE

SHEET NO.
M0.2
SHEET OF

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
MISCELLANEOUS NOTES & DETAILS

6/15/2021 11:53:14 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MathFlo - Low Seismic_6.7_CESAR24D83.rvt

BUILDING ENERGY ANALYSIS REPORT

PROJECT:
24X40 (PC 04-121369) - Wall AC
Climate Zone 14
Palmdale, CA

Project Designer:
R & S Tavares Associates
11590 W. Bernardo Court, Suite 100
San Diego, Ca. 92127

Report Prepared by:
LAL B. SAHGAL
LSA CONSULTING ENGINEERS
83, WINDSWEPT WAY
MISSION VIEJO, CA 92692
(949) 830-4746

Job Number:

Date:
7/26/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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Form NRCC/LMCC-PRF-E Certificate of Compliance	3
HVAC System Heating and Cooling Loads Summary	20

Project Name: 24X40 (PC 04-121369) - Wall AC **Date Prepared:** 2023-07-25

A. General Information

1	Project Name	24X40 (PC 04-121369) - Wall AC		
2	Run Title	Title 24 Analysis		
3	Project Location	Climate Zone 14		
4	City	Palmdale	5 Standards Version	Compliance 2022
6	Zip code	99999	7 Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	14	9 Building Orientation (deg)	75
10	Building Type(s)	• Nonresidential	11 Weather File	PALMDALE_STYP20.epw
12	Project Scope	• New complete scope	13 Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (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 Hot Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).
	MultiFam	Not Included		☒	Not Included	
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e) — NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e) — NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e) — NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11 — NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8 — NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10 — NRCC-SAB-E is required

C1. COMPLIANCE SUMMARY

	COMPLIES[3]		
	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	358.72	358.72	30.7
Proposed Design	295.31	295.31	25.64
Compliance Margins	**63.41**	**63.41**	**5.06**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

	COMPLIES[2]		
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	25.61	42	-16.39
Space Cooling	93.22	95.25	-2.03
Indoor Fans	152.65	81.72	70.93
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	54.63	54.6	0.03
Indoor Lighting	32.61	21.74	10.87
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**358.72**	**295.31**	**63.41 (17.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**358.72**	**295.31**	**63.41 (17.7%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	67.93	67.93	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**426.65**	**363.24**	**63.41 (14.9%)**

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

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

	COMPLIES[2]		
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	3.73	6.14	-2.41
Space Cooling	3.47	3.65	-0.18
Indoor Fans	14.94	8.15	6.79
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	5.99	5.99	0
Indoor Lighting	2.57	1.71	0.86
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**30.7**	**25.64**	**5.06 (16.5%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**30.7**	**25.64**	**5.06 (16.5%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**35.62**	**30.56**	**5.06 (14.2%)**

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

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.8	1.3	-0.5	---	---	---
Space Cooling	2.3	2.3	0	---	---	---
Indoor Fans	5.2	2.8	2.4	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	2	2	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**11.5**	**9.2**	**2.3**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**11.5**	**9.2**	**2.3**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**14**	**11.7**	**2.3**	**0**	**0**	**0**

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
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PROFESSIONAL STAMP
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MAJANT D. PANCHAL
No. 53380
Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
02/16/24
RST#22088

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

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

SHEET TITLE
24'x40' T24 CZ 14 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
M2.9
SHEET OF

9/7/2023 11:16:14 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	49.76	41.58	8.18	16.44
NET EUI[1]	49.76	41.58	8.18	16.44

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	240	32	13.33
East-Facing[2]	400	0	0
South-Facing[3]	240	32	13.33
West-Facing[4]	400	0	0
Total	**1280**	**64**	**5**
Roof	960	14	1.46

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-19 Wood Framed Wall7	Exterior Wall	1,280	Wood	19	N/A	N/A	U-factor	0.0605	Wood siding - 1/2 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in. Softwood - 1.5 in.	N
R-19 Metal Floor Crawlspa14	Exterior Floor	960	Metal	19	N/A	N/A	U-factor	0.0588	Vented Crawl Space Composite-2 Plywood - 1/2 in. Carpet - 3/4 in.	N
Standing Seam R-38 Metal16	Roof	960	N/A	36	N/A	N/A	U-factor	0.06	Metal Standing Seam - 1/16 in. Composite-3	N

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

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Sierra Pacific Windows	Vertical fenestration Operable window N/A	NFRC	Manufactured	64	0.35	0.24	0.5	N
Sola tube	Skylight Fixed window N/A	NFRC	Manufactured	14	0.39	0.37	0.65	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
AC-1	Single Package VHP Air System	1	34.37	13.65	COP	3.3	34.56	EER	11	Fixed DB	N

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

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
			Supply Fan				Return / Relief Fan					
Name or Item Tag	Qty	Design OA CFM	CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	Status[1]
AC-1	1	364.8	1,100	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AC-1	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
	Mechanical Ventilation					
Zone Name	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
1-First Floor	Education - Classrooms (ages 9-18)	24	364.8	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
			Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	System Type	Qty	Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	VSD
1-First Floor-Trm	Uncontrolled	1	N/A	N/A	1,100	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
				Additional (Custom) Allowance	
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	384	0	0	0
Building Totals:	**960**	**384**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI--E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
		Installed Watts (Conditioned)			
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
L-1	2x4 LED Panel	48	According to	8	384

[1]If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-First Floor	Classroom, Lecture, or Training Vocational	N/A	N/A	L-1	48	8	384	0
						Lighting Control Credits (Conditioned) Total (Watts)		0

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	Shut-Off Controls 130.1(c) & 160.5(b)4C
Required	Required

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature:
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO, CA 92692	Phone: (949) 830-4746

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:
Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature:	
Company: LSA Consulting Engineers		
Address: 83, Windswept Way	Date Signed:	
City/State/Zip: Mission Viejo, Ca. 92692	License #: M26885	
Phone:	Title:	Scope:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
24X40 (PC 04-121369) - Wall AC	7/26/2023
System Name	**Floor Area**
AC-1	960

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	33,000
Total Output (Btuh)	33,000
Output (Btuh/sqft)	34.4
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	37.5
Total Output (sqft/Ton)	320.0
Air System	
CFM per System	1,100
Airflow (cfm)	1,100
Airflow (cfm/sqft)	1.15
Airflow (cfm/Ton)	366.7
Outside Air (%)	33.2%
Outside Air (cfm/sqft)	0.38

Note: values above given at ARI conditions

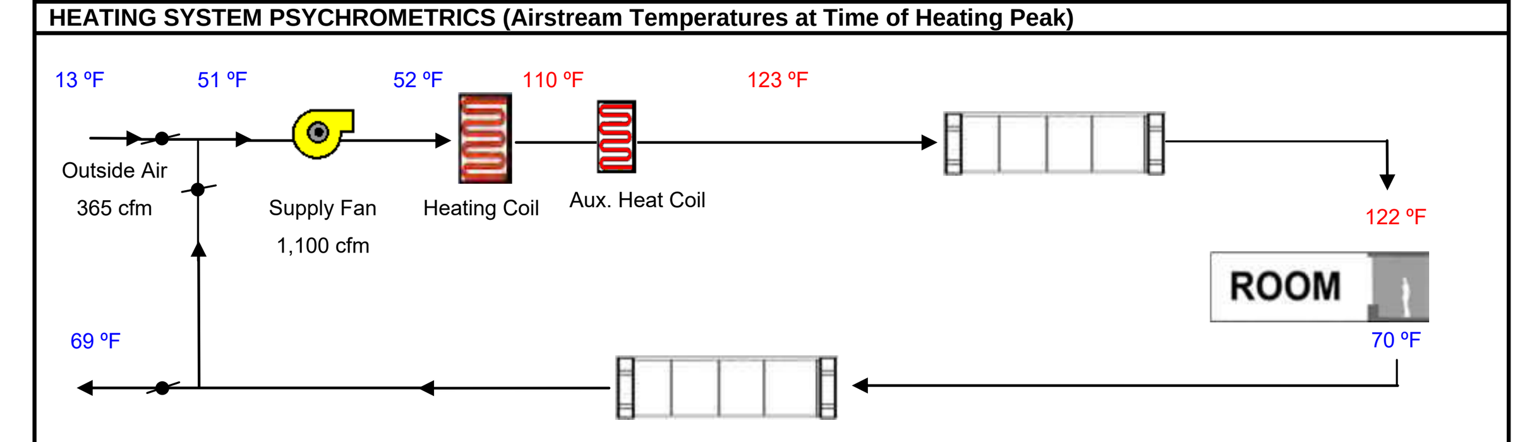
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	2,054	28,927	9,600	230	11,785
Return Vented Lighting		0			
Return Air Ducts		1,446			589
Return Fan		0			0
Ventilation	365	9,547	-5,338	365	20,216
Supply Fan		1,535			-1,535
Supply Air Ducts		1,446			589
TOTAL SYSTEM LOAD		42,901	4,262		31,644

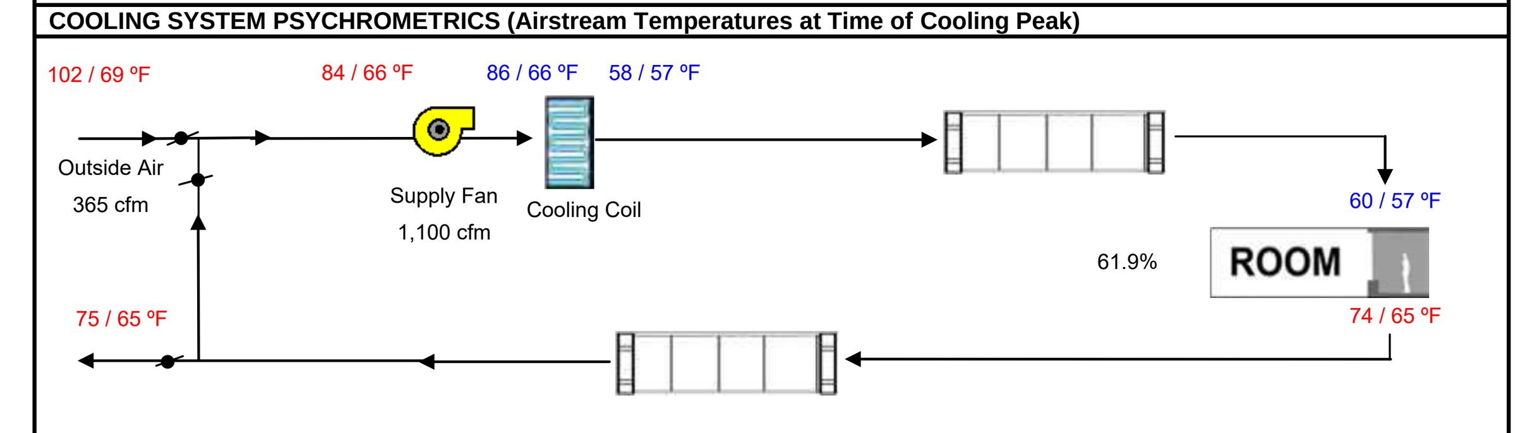
HVAC EQUIPMENT SELECTION

	Sensible	Latent	Sensible
Bard W36HB	29,467	4,973	13,777
HP Supplemental Coil			13,648
Total Adjusted System Output (Adjusted for Peak Design conditions)	29,467	4,973	27,425
TIME OF SYSTEM PEAK		Jul 3 PM	Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC
A separate project application for construction is required

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

SHEET TITLE
24'x40' T24 CZ 14 (WALL AC)

PROJECT NUMBER 22088
DRAWN BY rMc/SC
CHECKED BY RH/RT
DATE 06/15/2021
SHEET NO. M2.10
SHEET OF

C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt
9/7/2023 11:16:14 AM

BUILDING ENERGY ANALYSIS REPORT

PROJECT:
24X40 (PC 04-121369) - Wall AC
Climate Zone 15
Palm Springs, CA

Project Designer:
R & S Tavares Associates
11590 W. Bernardo Court, Suite 100
San Diego, Ca. 92127

Report Prepared by:
LAL B. SAHGAL
LSA CONSULTING ENGINEERS
83, WINDSWEPT WAY
MISSION VIEJO, CA 92692
(949) 830-4746

Job Number:

Date:
7/26/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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Form NRCC/LMCC-PRF-E Certificate of Compliance	3
HVAC System Heating and Cooling Loads Summary	20

Project Name: 24X40 (PC 04-121369) - Wall AC **Date Prepared:** 2023-07-25

A. General Information

1	Project Name	24X40 (PC 04-121369) - Wall AC		
2	Run Title	Title 24 Analysis		
3	Project Location	Climate Zone 15		
4	City	Palm Springs	5 Standards Version	Compliance 2022
6	Zip code	99999	7 Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	15	9 Building Orientation (deg)	75
10	Building Type(s)	• Nonresidential	11 Weather File	PALM-SPRINGS_STYP20.epw
12	Project Scope	• New complete scope	13 Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (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		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	**Total[2] (kBtu/ft² - yr)**	**Total[2] (kBtu/ft² - yr)**
Standard Design	369.92	369.92	27.65
Proposed Design	301.78	301.78	21.62
Compliance Margins	**68.14**	**68.14**	**6.03**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	5.43	9.65	-4.22
Space Cooling	152.4	156.74	-4.34
Indoor Fans	140.88	74.91	65.97
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	38.99	39	-0.01
Indoor Lighting	32.22	21.48	10.74
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**369.92**	**301.78**	**68.14 (18.4%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**369.92**	**301.78**	**68.14 (18.4%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	66.69	66.69	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**436.61**	**368.47**	**68.14 (15.6%)**

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

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

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	0.73	1.33	-0.6
Space Cooling	7.45	7.45	0
Indoor Fans	12.67	6.9	5.77
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	4.23	4.23	0
Indoor Lighting	2.57	1.71	0.86
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**27.65**	**21.62**	**6.03 (21.8%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**27.65**	**21.62**	**6.03 (21.8%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**32.57**	**26.54**	**6.03 (18.5%)**

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

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.1	0.3	-0.2	---	---	---
Space Cooling	4.5	4.5	0	---	---	---
Indoor Fans	4.8	2.5	2.3	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	1.5	1.5	0	---	---	---
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**12.1**	**9.6**	**2.5**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**12.1**	**9.6**	**2.5**	**0**	**0**	**0**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**14.6**	**12.1**	**2.5**	**0**	**0**	**0**

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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STATE OF CALIFORNIA
02/16/24
RST #22088

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

Revision Schedule

#	Description	Date

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

SHEET TITLE
24'x40' T24 CZ 15 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
rMc/CG

CHECKED BY
RH/RT

DATE
06/15/2021

SHEET NO.
M2.11
SHEET OF

9/7/2023 11:16:15 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	51.89	43.01	8.88	17.11
NET EUI[1]	51.89	43.01	8.88	17.11

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	240	32	13.33
East-Facing[2]	400	0	0
South-Facing[3]	240	32	13.33
West-Facing[4]	400	0	0
Total	**1280**	**64**	**5**
Roof	960	14	1.46

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-19 Wood Framed Wall7	Exterior Wall	1,280	Wood	19	N/A	N/A	U-factor	0.0605	Wood siding - 1/2 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in. Softwood - 1.5 in.	N
R-19 Metal Floor Crawlspa14	Exterior Floor	960	Metal	19	N/A	N/A	U-factor	0.0588	Vented Crawl Space Composite-2 Plywood - 1/2 in. Carpet - 3/4 in.	N
Standing Seam R-38 Metal16	Roof	960	N/A	36	N/A	N/A	U-factor	0.06	Metal Standing Seam - 1/16 in. Composite-3	N

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

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Sierra Pacific Windows	Vertical fenestration Operable window N/A	NFRC	Manufactured	64	0.35	0.24	0.5	N
Sola tube	Skylight Fixed window N/A	NFRC	Manufactured	14	0.39	0.37	0.65	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
AC-1	Single Package VHP Air System	1	34.37	13.65	COP	3.3	34.56	EER	11	Fixed DB	N

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

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
AC-1	1	364.8	1,100	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AC-1	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-First Floor	Education - Classrooms (ages 9-18)	24	364.8	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	
1-First Floor-Trm	Uncontrolled	1	N/A	N/A	1,100	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	384	0	0	0
Building Totals:	**960**	**384**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI--E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
L-1	2x4 LED Panel	48	According to	8	384

[1]If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-First Floor	Classroom, Lecture, or Training Vocational	N/A	N/A	L-1	48	8	384	0
						Lighting Control Credits (Conditioned) Total (Watts)		0

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	Shut-Off Controls 130.1(c) & 160.5(b)4C
Required	Required

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature:
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO, CA 92692	Phone: (949) 830-4746

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:
Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature:	
Company: LSA Consulting Engineers		
Address: 83, Windswept Way	Date Signed:	
City/State/Zip: Mission Viejo, Ca. 92692	License #: M26885	
Phone:	Title:	Scope:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name: 24X40 (PC 04-121369) - Wall AC — Date: 7/26/2023
System Name: AC-1 — Floor Area: 960

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	33,000
Total Output (Btuh)	33,000
Output (Btuh/sqft)	34.4
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	37.5
Total Output (sqft/Ton)	320.0
Air System	
CFM per System	1,100
Airflow (cfm)	1,100
Airflow (cfm/sqft)	1.15
Airflow (cfm/Ton)	366.7
Outside Air (%)	33.2%
Outside Air (cfm/sqft)	0.38

Note: values above given at ARI conditions

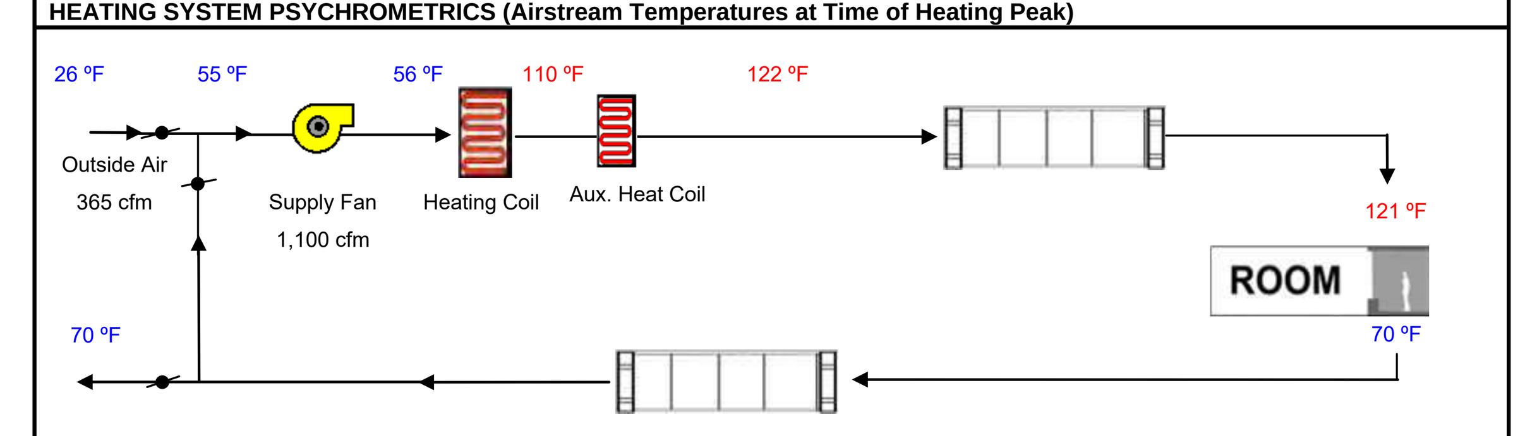
SYSTEM LOAD

	COIL COOLING PEAK			COIL HTG. PEAK	
	CFM	Sensible	Latent	CFM	Sensible
Total Room Loads	1,653	31,075	9,600	167	9,097
Return Vented Lighting		0			
Return Air Ducts		1,554			455
Return Fan		0			0
Ventilation	365	14,619	-1,514	365	16,924
Supply Fan		1,535			-1,535
Supply Air Ducts		1,554			455
TOTAL SYSTEM LOAD		50,337	8,086		25,396

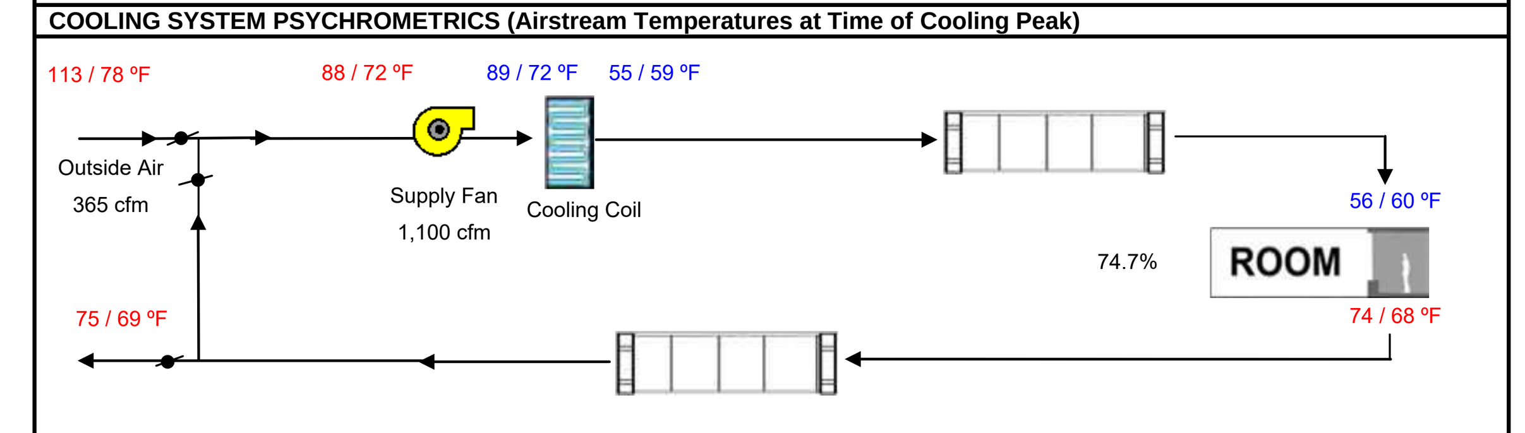
HVAC EQUIPMENT SELECTION

Bard W36HB	26,824	9,056	20,611
HP Supplemental Coil			13,648
Total Adjusted System Output (Adjusted for Peak Design conditions)	26,824	9,056	34,259
TIME OF SYSTEM PEAK	Jul 3 PM		Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT MGT
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San Diego, CA 92127
Phone: (858) 444-3344
www.rstavares.com

PROFESSIONAL STAMP

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

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

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

SHEET TITLE
24'x40' T24 CZ 15 (WALL AC)

PROJECT NUMBER: 22088
DRAWN BY: rMc/CG
CHECKED BY: RH/RT
DATE: 06/15/2021
SHEET NO.: M2.12

SHEET OF

C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt
9/7/2023 11:16:16 AM

BUILDING ENERGY ANALYSIS REPORT

PROJECT:
24X40 (PC 04-121369) - Wall AC
Climate Zone 16
Blue Canyon, CA

Project Designer:
R & S Tavares Associates
11590 W. Bernardo Court, Suite 100
San Diego, Ca. 92127

Report Prepared by:
LAL B. SAHGAL
LSA CONSULTING ENGINEERS
83, WINDSWEPT WAY
MISSION VIEJO, CA 92692
(949) 830-4746

Job Number:

Date:
7/26/2023

The EnergyPro computer program has been used to perform the calculations summarized in this compliance report. This program has approval and is authorized by the California Energy Commission for use with both the Residential and Nonresidential 2022 Building Energy Efficiency Standards.

This program developed by EnergySoft, LLC – www.energysoft.com.

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Form NRCC/LMCC-PRF-E Certificate of Compliance 3
HVAC System Heating and Cooling Loads Summary 20

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 1 of 17)**
Project Name: 24X40 (PC 04-121369) - Wall AC | **Date Prepared:** 2023-07-26

A. General Information

1	Project Name	24X40 (PC 04-121369) - Wall AC		
2	Run Title	Title 24 Analysis		
3	Project Location	Climate Zone 16		
4	City	Blue Canyon	5 Standards Version	Compliance 2022
6	Zip code	99999	7 Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	16	9 Building Orientation (deg)	30
10	Building Type(s)	• Nonresidential	11 Weather File	BLUE-CANYON_STYP20.epw
12	Project Scope	• New complete scope	13 Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (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		

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 2 of 17)**

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Performance	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (see Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☐	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☒	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 3 of 17)**

C1. COMPLIANCE SUMMARY

COMPLIES[3]

	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	**Total[2] (kBtu/ft² - yr)**	**Total[2] (kBtu/ft² - yr)**
Standard Design	307.23	307.23	49.92
Proposed Design	273.51	273.51	36.13
Compliance Margins	**33.72**	**33.72**	**13.79**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 4 of 17)**

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	51.5	114.86	-63.36
Space Cooling	19.06	18.57	0.49
Indoor Fans	169.42	83.19	86.23
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	36.19	36.19	0
Indoor Lighting	31.06	20.7	10.36
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**307.23**	**273.51**	**33.72 (11%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**307.23**	**273.51**	**33.72 (11%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 5 of 17)**

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	63.66	63.66	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**370.89**	**337.17**	**33.72 (9.1%)**

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 6 of 17)**

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

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	16.26	11.75	4.51
Space Cooling	1.3	1.31	-0.01
Indoor Fans	16.75	8.32	8.43
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	13.04	13.04	0
Indoor Lighting	2.57	1.71	0.86
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**49.92**	**36.13**	**13.79 (27.6%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**49.92**	**36.13**	**13.79 (27.6%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 7 of 17)**

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**54.84**	**41.05**	**13.79 (25.1%)**

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

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**
Nonresidential Performance Compliance Method — **(Page 8 of 17)**

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.1	3	-2.9	16.4	---	---
Space Cooling	0.8	0.7	0.1	---	---	---
Indoor Fans	5.6	2.8	2.8	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	---	---	---	13.6	13.6	0
Indoor Lighting	1.2	0.8	0.4	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**7.7**	**7.3**	**0.4**	**30**	**13.6**	**16.4**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**7.7**	**7.3**	**0.4**	**30**	**13.6**	**16.4**
Receptacle	2.5	2.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**10.2**	**9.8**	**0.4**	**30**	**13.6**	**16.4**

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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Exp. 03/31/24
STRUCTURAL
STATE OF CALIFORNIA
02/16/24
RST#22088

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

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

SHEET TITLE
24'x40' T24 CZ 16 (WALL AC)

PROJECT NUMBER
22088

DRAWN BY
Author

CHECKED BY
Checker

DATE
06/15/2021

SHEET NO.
M2.13
SHEET OF

9/7/2023 11:16:17 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	67.5	49	18.5	27.41
NET EUI[1]	67.5	49	18.5	27.41

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

- The project uses the Simplified Geometry Performance Modeling Approach which is not capable of modeling daylighting controls and assumes the prescriptive Secondary Daylit Control requirements are met. PRESCRIPTIVE COMPLIANCE documentation (form NRCC-LTI-02-E) for the requirements of section 140.6(d) Automatic Daylighting Controls in Secondary Daylit Zones is required.
- The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
- Project is claiming Exception 2 to Section 140.10(a): No PV system is required where the required PV system size is less than 4 kWdc.

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	Total Gross Surface Area (ft²)	Total Fenestration Area (ft²)	Window to Wall Ratio (%)
North-Facing[1]	400	0	0
East-Facing[2]	240	32	13.33
South-Facing[3]	400	0	0
West-Facing[4]	240	32	13.33
Total	**1280**	**64**	**5**
Roof	960	14	1.46

Notes
[1]North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),
[2]East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),
[3]South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),
[4]West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
R-19 Wood Framed Wall7	Exterior Wall	1,280	Wood	19	N/A	N/A	U-factor	0.0605	Wood siding - 1/2 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in. Softwood - 1.5 in.	N
R-19 Metal Floor Crawlspa14	Exterior Floor	960	Metal	19	N/A	N/A	U-factor	0.0588	Vented Crawl Space Composite-2 Plywood - 1/2 in. Carpet - 3/4 in.	N
Standing Seam R-38 Metal16	Roof	960	N/A	36	N/A	N/A	U-factor	0.06	Metal Standing Seam - 1/16 in. Composite-3	N

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

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Sierra Pacific Windows	Vertical fenestration Operable window N/A	NFRC	Manufactured	64	0.35	0.24	0.5	N
Sola tube	Skylight Fixed window N/A	NFRC	Manufactured	14	0.39	0.37	0.65	N

[1] Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.
[2] Status: N - New, A - Altered, E - Existing

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
AC-1	Single Package VHP Air System	1	34.37	13.65	COP	3.3	34.56	EER	11	Fixed DB	N

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

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
AC-1	1	364.8	1,100	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
AC-1	Single Package VHP Air System	No	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People	Supply OA CFM	Exhaust CFM		
1-First Floor	Education - Classrooms (ages 9-18)	24	364.8	0	960	DCV

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	MIn.	Min. Ratio	Power	Power Units	Cycles	
1-First Floor-Trm	Uncontrolled	1	N/A	N/A	1,100	N/A	0	N/A	N/A	N/A	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	960	384	0	0	0
Building Totals:	**960**	**384**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI--E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

K2. INDOOR CONDITIONED LIGHTING SCHEDULE

Luminaire Schedule (includes all permanent installed lighting in conditioned space, and portable lighting over 0.3 w/ft² in offices)

01	02	03	04	05	06
Name or Item Tag	Complete Luminaire Description (i.e. 3-lamp fluorescent troffer, F32T8, one dimmable electronic ballast)	Installed Watts (Conditioned)			
		Watts per luminaire	How is Wattage determined	Total Number of Luminaires	Installed Watts
L-1	2x4 LED Panel	48	According to	8	384

[1]If lighting power densities were used in the compliance model Building Departments will need to check prescriptive forms for Luminaire Schedule details.

K3. INDOOR CONDITIONED LIGHTING CONTROL CREDITS

Lighting Control Credits Schedule (includes all lighting controls installed in conditioned space for compliance credit per 140.6(a)2 and Table 140.6-A)

01	02	03	04	05	06	07	08	09
Area Description	Primary Function Area (must meet requirements of Table 140.6-A and 170.2-L)	Type of Lighting Control	Power Adjustment Factor (PAF)	Luminaire Item Tag	Watts per Luminaire	# of Luminaires	Lighting Controlled (Watts)	Control Credit (Watts)
S-1-First Floor	Classroom, Lecture, or Training Vocational	N/A	N/A	L-1	48	8	384	0
							Lighting Control Credits (Conditioned) Total (Watts)	0

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

Building Level Controls

01	02
Mandatory Demand Response 110.12(c)	Shut-Off Controls 130.1(c) & 160.5(b)4C
Required	Required

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-01-E - Must be submitted for all buildings
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Indoor Lighting	NRCA-LTI-02-A - Occupancy Sensors and Automatic Time Switch Controls.
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

Documentation Author's Declaration Statement

1. I certify that this Certificate of Compliance documentation is accurate and complete.	
Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature:
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO, CA 92692	Phone: (949) 830-4746

Responsible Person's Declaration statement

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:
Responsible Designer Name:	Responsible Designer Signature:	
Company: R & S Tavares Associates		
Address: 11590 W. Bernardo Court, Suite 100	Date Signed:	
City/State/Zip: San Diego, Ca. 92127	License #:	
Phone:	Title:	Scope:

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature:	
Company: LSA Consulting Engineers		
Address: 83, Windswept Way	Date Signed:	
City/State/Zip: Mission Viejo, Ca. 92692	License #: M26885	
Phone:	Title:	Scope:

HVAC SYSTEM HEATING AND COOLING LOADS SUMMARY

Project Name	Date
24X40 (PC 04-121369) - Wall AC	7/26/2023
System Name: AC-1	Floor Area: 960

ENGINEERING CHECKS

Number of Systems	1
Heating System	
Output per System	33,000
Total Output (Btuh)	33,000
Output (Btuh/sqft)	34.4
Cooling System	
Output per System	36,000
Total Output (Btuh)	36,000
Total Output (Tons)	3.0
Total Output (Btuh/sqft)	37.5
Total Output (sqft/Ton)	320.0
Air System	
CFM per System	1,100
Airflow (cfm)	1,100
Airflow (cfm/sqft)	1.15
Airflow (cfm/Ton)	366.7
Outside Air (%)	33.2%
Outside Air (cfm/sqft)	0.38

Note: values above given at ARI conditions

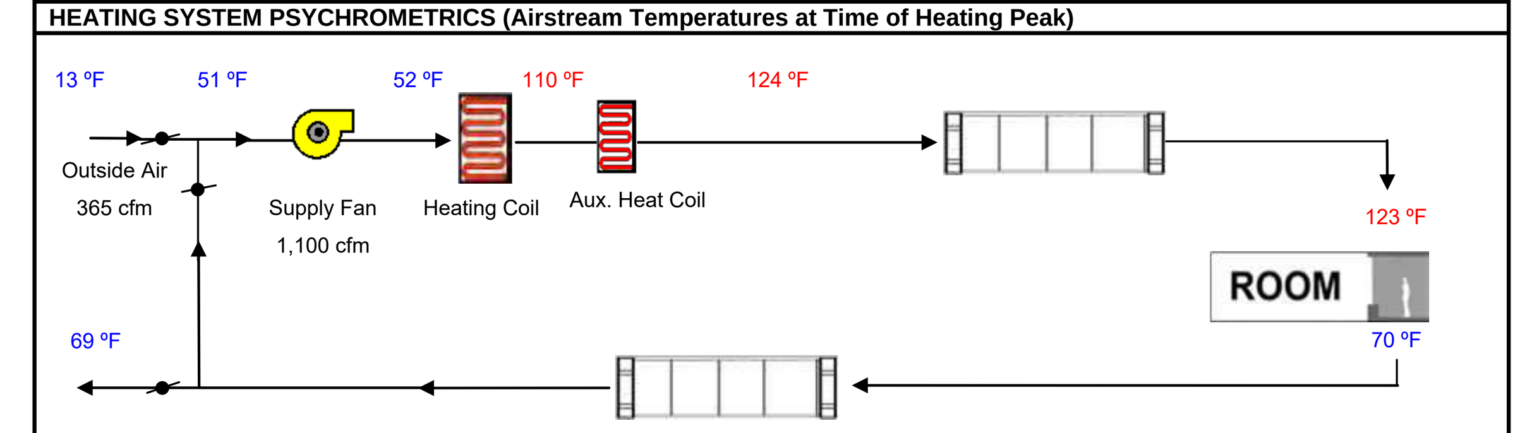
SYSTEM LOAD

	COIL COOLING PEAK CFM	COIL COOLING PEAK Sensible	COIL COOLING PEAK Latent	COIL HTG. PEAK CFM	COIL HTG. PEAK Sensible
Total Room Loads	1,209	26,482	9,600	248	11,785
Return Vented Lighting		0			
Return Air Ducts		1,324			589
Return Fan		0			0
Ventilation	365	3,129	-1,167	365	18,296
Supply Fan		1,535			-1,535
Supply Air Ducts		1,324			589
TOTAL SYSTEM LOAD		33,795	8,433		29,724

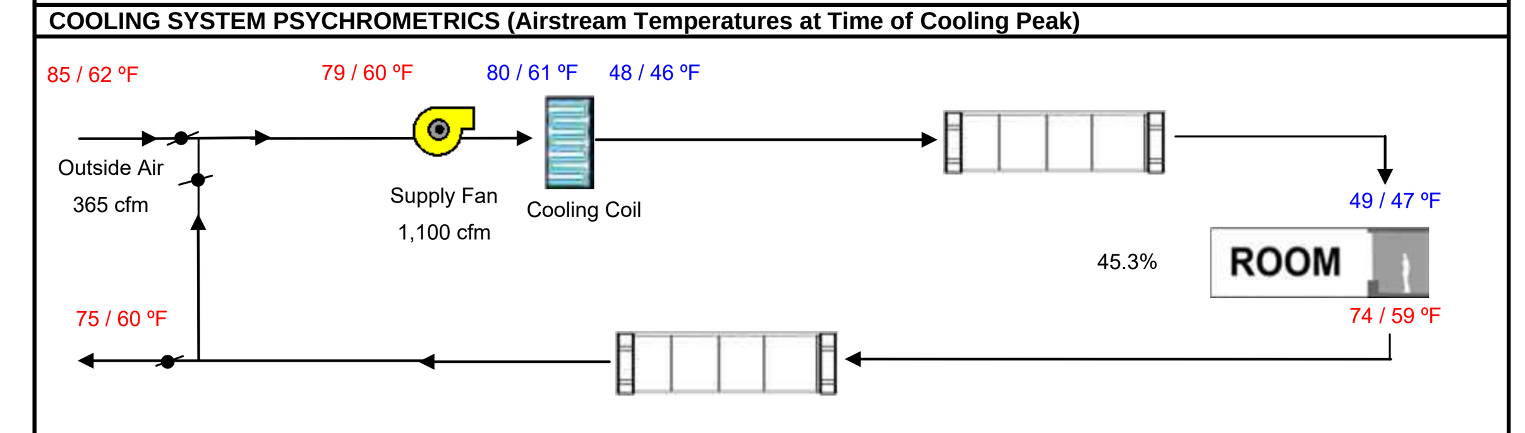
HVAC EQUIPMENT SELECTION

	Sensible	Latent	Sensible
Bard W36HB	31,415	2,901	13,777
HP Supplemental Coil			13,648
Total Adjusted System Output (Adjusted for Peak Design conditions)	31,415	2,901	27,425
TIME OF SYSTEM PEAK		Jul 3 PM	Jan 1 AM

HEATING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Heating Peak)



COOLING SYSTEM PSYCHROMETRICS (Airstream Temperatures at Time of Cooling Peak)



PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

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

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

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

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT
CODE: 2019 CBC
A separate project application for construction is required

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

SHEET TITLE
24'x40' T24 CZ 16 (WALL AC)

PROJECT NUMBER 22088
DRAWN BY Author
CHECKED BY Checker
DATE 06/15/2021
SHEET NO. M2.14
SHEET OF

C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt
9/7/2023 11:16:17 AM

ENVELOPE MANDATORY MEASURES: NONRESIDENTIAL — ENV-MM

Project Name: *120X40 (PC 04-116504) - Wall AC* | Date: *6/23/2018*

DESCRIPTION

Building Envelope Measures:

§110.8(a):	Installed insulating material shall have been certified by the manufacturer to comply with the California Quality Standards for insulating material, Title 20 Chapter 4, Article 3.
§110.8(c):	All Insulating Materials shall be installed in compliance with the flame spread rating and smoke density requirements of Sections 2602 and 707 of Title 24, Part 2.
§110.8(g):	Heated slab floors shall be insulated according to the requirements in Table 110.8-A.
§110.7(a):	All Exterior Joints and openings in the building that are observable sources of air leakage shall be caulked, gasketed, weatherstripped or otherwise sealed.
§110.6(a):	Manufactured fenestration products and exterior doors shall have air infiltration rates not exceeding 0.3 cfm/ft.^{2} of window area, 0.3 cfm/ft.^{2} of door area for residential doors, 0.3 cfm/ft.^{2} of door area for nonresidential single doors (swinging and sliding), and 1.0 cfm/ft.^{2} for nonresidential double doors (swinging).
§110.6(a):	Fenestration U-factor shall be rated in accordance with NFRC 100, or the applicable default U-factor.
§110.6(a) :	Fenestration SHGC shall be rated in accordance with NFRC 200, or NFRC 100 for site-built fenestration, or the applicable default SHGC.
§110.6(b):	Site Constructed Doors, Windows and Skylights shall be caulked between the unit and the building, and shall be weatherstripped (except for unframed glass doors and fire doors).
§120.7(a):	The opaque portions of the roof/ceiling that separates conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-Factor requirements as follows: **Metal Building-** The weighted average U-factor of the roof assembly shall not exceed 0.098. **Wood Framed and Others-** The weighted average U-factor of the roof assembly shall not exceed 0.075.
§120.7(b):	The opaque portions of walls that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-factor as follows: **Metal Building-** The weighted average U-factor of the wall assembly shall not exceed 0.113. **Metal Framed-** The weighted average U-factor of the wall assembly shall not exceed 0.151. **Light Mass Walls-** A 6 inch or greater Hollow Core Concrete Masonry Unit shall have a U-factor not to exceed 0.440. **Heavy Mass Walls-** An 8 inch or greater Hollow Core Concrete Masonry Unit shall have a U-factor not to exceed 0.690. **Wood Framed and Others-** The weighted average U-factor of the wall assembly shall not exceed 0.110. **Spandrel Panels and Opaque Curtain Wall-** The weighted average U-factor of the spandrel panels and opaque curtain wall assembly shall not exceed 0.280. **Demising Walls-** The opaque portions of framed demising walls shall meet the requirements of Item A or B below; A. Wood framed walls shall be insulated to meet a U-factor not greater than 0.099. B. Metal Framed walls shall be insulated to meet a U-factor not greater than 0.151.
§120.7(c):	The opaque portions of floors and soffits that separate conditioned spaces from unconditioned spaces or ambient air shall meet the applicable U-Factor requirements as follows: **Raised Mass Floors-** Shall have a minimum of 3 inches of lightweight concrete over a metal deck or the weighted average U-factor of the floor assembly shall not exceed 0.269. **Other Floors-**The weighted average U-factor of the floor assembly shall not exceed 0.071.

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-PLB-E**

This document is used to demonstrate compliance for nonresidential occupancies with requirements in 110.1, 110.3, 120.3, and 140.5, and with requirements in 141.0 for additions and alterations, for domestic water heating scopes using the prescriptive path. For high-rise residential and hotel/motel occupancies compliance is demonstrated with requirements in 110.1, 110.3, 160.4 and 170.2(d), and with requirements 180.1 for additions and 180.2 for alterations.

Project Name:	24X40 (PC 04-121369) - Wall AC	**Report Page:**	**(Page 1 of 6)**
Project Address:	Climate Zone 14	**Date Prepared:**	9/7/2023

A. GENERAL INFORMATION

01	Project Location (city)	Palmdale	02	Climate Zone	14
03	Occupancy Types Within Project (select all that apply):				
• Classroom					

B. PROJECT SCOPE

This table includes domestic water heating systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive paths outlined in 140 / 170.2(d) and 141.0(a)/ 180.1, or 141.0(b)2N / 180.2 for additions or alterations. Solar water heating systems are documented on the NRCC-SAB compliance document. Combined hydronic water heating systems are documented on the NRCC-MCH compliance document.

01	02	03
My project consists of (check all that apply):	System Type[1,2]	System Components
☒ New system (DHW system being installed for the first time)	Individual System (serving nonresidential spaces)	☒ Equipment ☒ Distribution ☒ Controls
☐ System Alteration (equipment, distribution or controls)		☐ Equipment ☐ Distribution ☐ Controls

[1]*FOOTNOTES: Point of use water heaters, or other non-central systems used to serve nonresidential spaces, are considered individual systems.*
[2] *Dwelling units refers to hotel/motel guest rooms and units in a multifamily residential occupancy.*
[3] *DHW systems serving 2 or more dwelling units are considered "Central Systems" for multifamily occupancies*

C. COMPLIANCE RESULTS

Table C will indicate if the project data input into the compliance document is compliant with water heating requirements. If this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. or the table indicated as not compliant for guidance.

01	02	03	04
Domestic Hot Water Equipment	Distribution Systems	Controls	**Compliance Results**
Table F	Table G	Table H	
Yes	Yes	Yes	COMPLIES

D. EXCEPTIONAL CONDITIONS

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

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-PLB-E**

Project Name:	24X40 (PC 04-121369) - Wall AC	**Report Page:**	**(Page 3 of 6)**
		Date Prepared:	9/7/2023

G. DOMESTIC HOT WATER DISTRIBUTION SYSTEM

This table is used to demonstrate compliance for nonresidential occupancies with distribution requirements in 120.3 and 140.5. For multifamily and hotel/motel occupancies, compliance is demonstrated with requirements 110.3(c), 160.4, 170.2(d).

Mandatory Pipe Insulation All Occupancies

13	☐	For systems serving dwelling units, pipe insulation must meet the minimum insulation requirements in Table 160.4-A (see blow) except: • Piping that penetrates framing members shall not be required to have pipe insulation for the distance of the framing penetration. Piping that penetrates metal framing shall use grommets, plugs, wrapping or other insulating material to assure that no contact is made with the metal framing. Insulation shall abut securely against all framing members • Piping installed in interior or exterior walls shall not be required to have pipe insulation if all of the requirements are met for compliance with Quality Insulation Installation (QII) as specified in the Reference Residential Appendix RA3.5. • Piping surrounded with a minimum of 1 inch of wall insulation, 2 inches of crawlspace insulation, or 4 inches of attic insulation, shall not be required to have pipe insulation.
14	☒	For systems serving nonresidential spaces, pipe insulation for the following applications is specified to comply with Table 120.3-A (see below) per 120.3: • Recirculating system piping, including supply and return piping of the water heater • The first 8 ft of hot and cold outlet piping, including between storage tank and heat trap, for a nonrecirculating storage system • Pipes that are externally heated
15	☐	Insulation shall be protected from damage, including that due to sunlight, moisture, equipment maintenance, and wind. Insulation exposed to weather shall be installed with a cover suitable for outdoor service per 120.3(b) / 160.4(f). Pipe insulation buried below grade must be installed in a water proof and non-crushable casing or sleeve.

TABLE 120.3-A / 160.4-A PIPE INSULATION THICKNESS

Fluid Temperature Range (°F)	Conductivity Range (Btu-in per hour per ft^2 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

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Generated Date/Time: Report Version: 2022.0.000 Schema Version: rev 20220101 | Documentation Software: EnergyPro Compliance ID: EnergyPro-4958-0923-0242 Report Generated: 2023-09-07 12:06:05

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-PLB-E**

Project Name:	24X40 (PC 04-121369) - Wall AC	**Report Page:**	**(Page 4 of 6)**
		Date Prepared:	9/7/2023

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	☒	☐	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	☐	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0.
03	☐	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☐	☒	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	☐	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(e).
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.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Generated Date/Time: Report Version: 2022.0.000 Schema Version: rev 20220101 | Documentation Software: EnergyPro Compliance ID: EnergyPro-4958-0923-0242 Report Generated: 2023-09-07 12:06:05

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-PLB-E**

Project Name:	24X40 (PC 04-121369) - Wall AC	**Report Page:**	**(Page 5 of 6)**
		Date Prepared:	9/7/2023

I. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selection have been changed by permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online

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

J. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

K. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

There are no forms required for this project.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Generated Date/Time: Report Version: 2022.0.000 Schema Version: rev 20220101 | Documentation Software: EnergyPro Compliance ID: EnergyPro-4958-0923-0242 Report Generated: 2023-09-07 12:06:05

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-PLB-E**

Project Name:	24X40 (PC 04-121369) - Wall AC	**Report Page:**	**(Page 6 of 6)**
Project Address:	Climate Zone 14	**Date Prepared:**	9/7/2023

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: LAL B. SAHGAL	Documentation Author Signature: *Lal Sahgal*
Company: LSA CONSULTING ENGINEERS	Signature Date:
Address: 83, WINDSWEPT WAY	CEA/ HERS Certification Identification (if applicable): M26885
City/State/Zip: MISSION VIEJO CA 92692	Phone: (949) 830-4746

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:
1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: Lal Sahgal	Responsible Designer Signature: *Lal Sahgal*
Company: LSA Consulting Engineers	Date Signed: 2023-09-07
Address: 83, Windswept Way	License: M26885
City/State/Zip: Mission Viejo Ca. 92692	Phone:

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance | Generated Date/Time: Report Version: 2022.0.000 Schema Version: rev 20220101 | Documentation Software: EnergyPro Compliance ID: EnergyPro-4958-0923-0242 Report Generated: 2023-09-07 12:06:05

E. ADDITIONAL REMARKS

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

F. DOMESTIC HOT WATER EQUIPMENT

This table is used to demonstrate compliance with mandatory equipment requirements in 110.1 and 110.3. Compliance with prescriptive requirements in 140.5(c) / 170.2(d) must also be demonstrated and with 141.0 / 180.1/ 180.2 for addition and alteration scopes.

Equipment Schedule: Water Heating Efficiency and Standby Loss

03	04		05		06			
System Name	A O Smith DEL-10	Exception to 140.5(c)/ 170.2(d)3		☐	Gas Service Water Heating System >= 1MMBtu/h[1]	Capacity-weighted Average Efficiency %		
07	08	09	10		11	12	13	14	15
Name or Item Tag	Equipment Type	Volume (gal)	Rated Input Capacity (Btu/h)	Max GPM/ First Hour Rating (FHR)	Rated Efficiency	Minimum Efficiency Required	Efficiency Unit	Designed Standby Loss	Maximum Standby Loss
A O Smith DEL-10	Consumer Rated Electric Storage	10	5,120	FHR >=75	0.95	0.93	UEF		

[1]*FOOTNOTE: In systems >= 1MMBtu/h with multiple units, gas water heaters with input capacity > 100,000 Btu/h may meet 90% Et requirements via an input capacity-weighted average.*

Water Heating Equipment All Occupancies

	Yes	No	Not Applicable	Requirement
18	☐	☐	☒	Unfired storage tank insulation shall have Internal + External >=R-16 OR External >=R-3.5. Label required per 110.3(c)3
19	☐	☐	☒	New state buildings 60% of energy for service water heating from *site solar energy or recovered energy* per 110.3(c)5
20	☐	☐	☒	Isolation valves for instantaneous water heater with input rating >6.8 kBTUH or 2 kW has been specified per 110.3(c)6
21	☐	☐	☒	School buildings < 25,000 ft^2 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.

Mandatory Measures: The following notes (items) represent the Mandatory Measures for all buildings.

Heat pumps with supplementary electric resistance heaters shall have controls:

1) That prevent supplementary heater operation when the heating load can be met by the heat pump alone; and

2) In which the cut-on temperature for compression heating is higher than the cut-on temperature for supplementary heating, and the cut-off temperature for compression heating is higher than the cut-off temperature for supplementary heating.

Sec. 110.2 (b)

The minimum rate of outdoor air required per Section 120.1 (b) 2 shall be supplied to each space at all time the space is usually occupied.

Sec. 120.1 (c) 3

The Lesser of the minimum rate of outdoor air required by Sec. 120.1 (b) 2, or three complete air changes shall be supplied to the entire building during the one-hour period immediately before the building is normally occupied.

Sec. 120.1 (c) 2

Hotel/Motel Guest Room Thermostats shall have numeric temperature set points in degrees F; and set point stops accessible only to authorized personnel, to restrict over-heating and over-cooling.

Sec. 120.2 (c)

All air distribution system ducts and plenums, including, but not limited to, building cavities, mechanical closets, air-handler boxes and support platforms used as ducts or plenums, shall be installed, sealed and insulated to meet the requirements of chapter 6 of the 2001 CMC. Supply-air and return-air ducts conveying heated or cooled air shall be insulated to a minimum installed level of R-8, unless ducts are in conditioned space.

Sec. 120.4 (a)

The thermostatic controls for HVAC systems shall meet the following requirements as applicable:

a) Each space conditioning zone shall be controlled by an individual thermostatic control that responds to temperature within the zone and meets the applicable requirements of Subsection (b).

b) Each Thermostatic control required by Subsection (a) shall be capable of being set locally or remotely by adjustment or selection of sensors to control:

1) Comfort heating down to 55°F or lower.

2) Comfort Cooling up to 85°F or higher.

3) Both heating and cooling, the thermostatic controls shall be capable of providing a temperature range or dead band of at least 5°F within which the supply of heating and cooling energy to the zone is shut off or reduced to a minimum.

Sec. 120.2 (a) & (b)

1) Outdoor air supply and exhaust equipment shall be installed with dampers that automatically close upon fan shutdown.

Sec. 120.2 (f)

2) Demand Control Ventilation Devices (CO2 sensors) shall be installed in accordance with Sec. 120.1 (c) 4.

Sec. 120.1 (c) 4

3) Each space-conditioning system shall be installed with controls that comply with Items 1 and 2 below:

1) Are capable of automatically shutting off the system during periods of non-use and shall have:

a) An automatic time switch control device complying with Sec. 119(c), with an accessible manual override that allows operation of the system for up to 4 hours; or
b) An occupancy sensor; or
c) A four-hour timer that can be manually operated.
d) EXCEPTION: Mechanical systems serving retail stores and associated malls, restaurants, grocery stores, churches, and theaters equipped with 7-day programmable timers.

2) Automatically restart and temporarily operate the system as required to maintain:
a) A setback heating thermostat set point, if the system provides mechanical heating; and
EXCEPTION: Area with the design winter outdoor temperature of greater than 32°F.
b) A setup cooling thermostat set point, if the system provides mechanical cooling.

EXCEPTION: Area with the design summer outdoor temperature of less than 100°F.
EXCEPTION: Systems serving hotel/motel guest rooms, if they have a readily accessible manual shut-off switch.

Sec. 120.2 (e)

4) The piping for all space conditioning and service water heating systems shall be insulated in accordance with TABLE 123-A.

Sec. 120.3

5) Service water heating systems and equipment shall meet the applicable requirements of the Appliance Efficiency Regulations as required by Sec. 110.1.

Sec. 110.3 (b)

6) Service hot water systems with circulating pumps or with electrical heat trace systems shall be capable of automatically turning off the system.

Sec. 110.3 (c) 2

7) Lavatories in public restrooms shall have controls that limit the water supply temperature to 110°F.

Sec. 110.3 (c) 3

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
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MANNY D. FRANCO
C-33380
03/31/24
CIVIL
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
ENVELOPE AND NOTES

PROJECT NUMBER
22088

DRAWN BY
rMc/CG

CHECKED BY
RH/RT

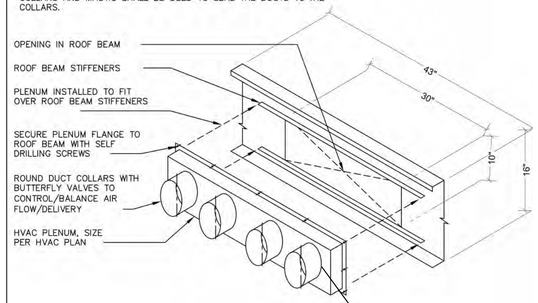
DATE

SHEET NO.
M3.3
SHEET OF

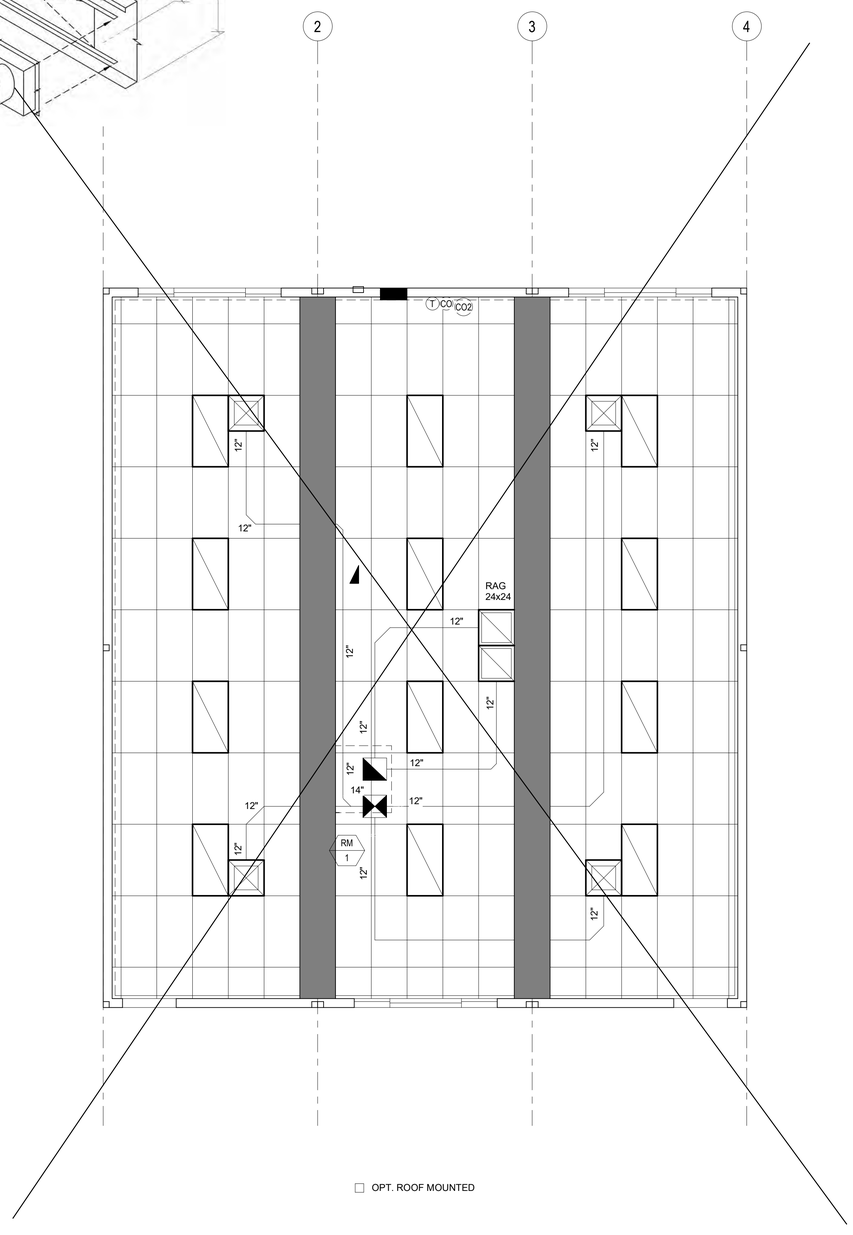
8/4/2021 4:23:31 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_michael433S6.rvt

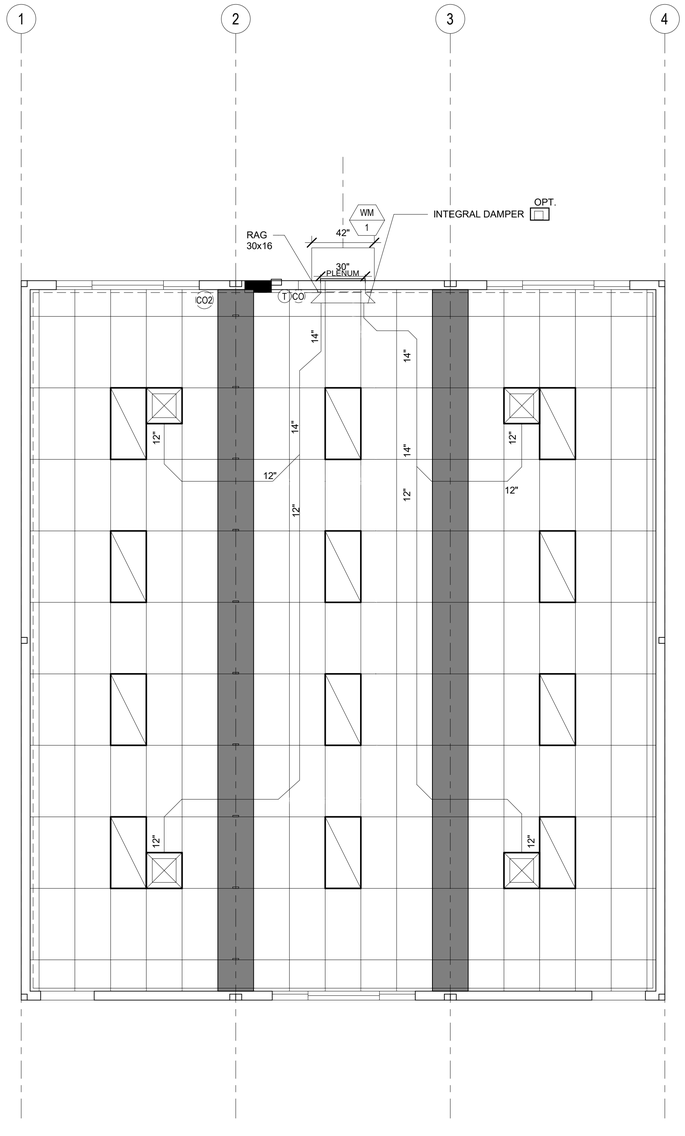
NOTES:

1) MASTIC SEALANT SHALL BE USED TO SEAL ALL SEAMS BETWEEN THE PLENUM AND ROOF BEAM.
2) THE SUPPLY DUCTS SHALL BE ATTACHED TO THE PLENUM COLLARS AND MASTIC SHALL BE USED TO SEAL THE DUCTS TO THE COLLARS.



6 ***NTS***
WALL MT. HVAC PLENUM





SEE ALT SHEETS

1 ***1/4" = 1'-0"***
36x40 WM-1 MECH PLAN

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
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RST#22088

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APP: 04-123059 PC
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SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
MECHANICAL CEILING PLAN 36x40

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

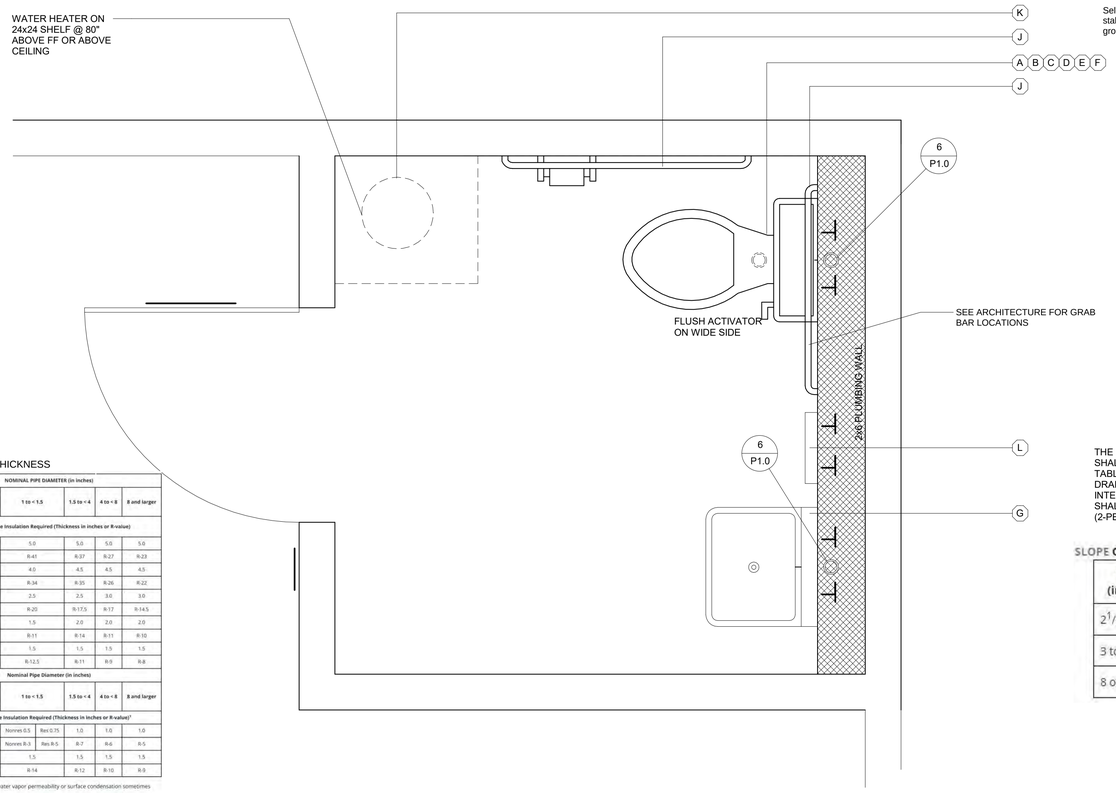
CHECKED BY
RH/RT

DATE

SHEET NO.
M6.1

SHEET OF

6/15/2021 11:53:35 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CESAR24D83.rvt



Selected check box applies to the bathrooms with multiple stalls. the single toilet options are fixed at 12 and up age groups. All D.F. will match the selected age group.

***AGE GROUP	DIMS
☐ ADA; ADULT	18"
☐ 12 AND UP	18"
☐ 9 THROUGH 12	15" TO 17"
☐ 5 THROUGH 8	12" TO 15"
☐ 3 AND 4	12"

(IAW CBC 11B-604.2 AND TABLE 11B-604.9) TYP. WHERE APPLIES. SEE A3.1 MOUNTING TABLE.

THE SLOPE OF A HORIZONTAL DRAINAGE PIPE SHALL BE NOT LESS THAN THAT INDICATED IN TABLE 704.1 EXCEPT THAT WHERE THE DRAINAGE PIPING IS UPSTREAM OF A GREASE INTERCEPTOR, THE SLOPE OF THE PIPING SHALL BE NOT LESS THAN 1/4 INCH PER FOOT (2-PERCENT SLOPE).

SLOPE OF HORIZONTAL DRAINAGE PIPE

SIZE (inches)	MINIMUM SLOPE (inch per foot)
2 1/2 or less	1/4[a]
3 to 6	1/8[a]
8 or larger	1/16[a]

PLUMBING FIXTURE SCHEDULE

SYMBOL	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT	FIXTURE DESCRIPTION (AS CALLED OUT OR EQUAL)
A	[ADULT] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO ADA PF9403, (1.28 GPF) ALT: AMERICAN STANDARD ADA 2758.128, 17" HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
B	[AGE 9 - 12] WATER CLOSET TANK TYPE (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO STANDARD PF9300, (1.28 GPF) ALT: AMERICAN STANDARD 2832.128, 16" HIGH, VITREOUS CHINA ELONGATED RIM, TANK TYPE; 12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
C	[AGE 3 - 8] WATER CLOSET TANK TYPE (ACCESSIBLE & NON-ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO PF1704BB, (1.28 GPF) ALT: AMERICAN STANDARD 2315.016 BABY DEVORO 10" HIGH, 10" ROUGH-IN, VITREOUS CHINA ELONGATED RIM, TANK TYPE; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT
D	[ADULT] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO ADA PF1723, (1.28 GPF) ALT: AMERICAN STANDARD ADA 3043.001 "MADERA" 16 3/4" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 10" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
E	[AGE 9 - 12] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO STANDARD PF1721, (1.28 GPF) ALT: AMERICAN STANDARD 2234.001 "MADERA" 15" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET,12" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
F	[AGE 3 - 8] WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE & NON-ACCESSIBLE)	1"	-	3"	2"	STD: PROFLO PF1700BB (1.28 GPF) ALT: AMERICAN STANDARD BABY DEVORO 2282.010 VITREOUS CHINA ELONGATED RIM, 10" ROUGH-IN LOW CONSUMPTION CLOSET BOWL; OLSONITE 126CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSH VALVE
G	LAV (ACCESSIBLE)	1/2"	-	2"	1 1/2"	STD: AMERICAN STANDARD 0355.012 LUCERNE ALT: CRANE 1412-20 "HARWICH" 20x18" VITREOUS CHINA JAY R SMITH #722 CONCEALED HANGER; VALLEY #NL805IPS SINGLE HANDLE FAUCET (AMERICAN STANDARD 9141.011 TO BE USED FOR AGES 5-8) (0.5 GPM)
H	FLOOR DRAIN	-	-	2"	1 1/2"	JAY R SMITH #2005YA-02-P050-NB. FLOOR DRAIN TAPPED FOR PRIMER. 5" NICKEL BRONZE STRAINER w/ 1/2" MAX. STRAINER OPENINGS IN ALL DIRECTIONS
I	TRAP PRIMER	1/2"	-	-	-	PR-500 WITH 8"x12" LOCKABLE BOX, 1/2" BALL SHUT-OFF VALVE, AND PPP DU-U FRESH WATER DISTRIBUTION SYSTEM
J	GRAB BAR	-	-	-	-	BOBRICK B-6806-1-1/2 OC STAINLESS STEEL GRAB BAR - STAIN FINISH; 36" LONG ON BACK AND 42" ON SIDE
K	WATER HEATER	3/4"	3/4"	-	-	☐ A.O. SMITH #DEL-6 (6 GALLON) ☐ A.O. SMITH #DEL-10 (10 GALLON)
L	"INSTANT WATER HEATER	1/2"	1/2"	-	-	EEMAX #SP3012, 120V, 3.0KW, 25A

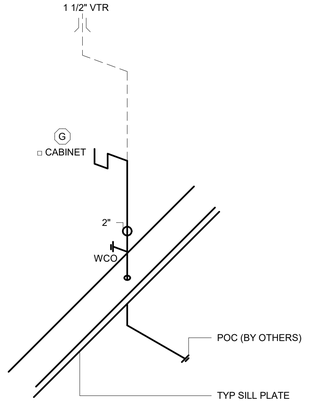
GENERAL NOTE:
UTLILITIES THAT SPAN BETWEEN UNITS OR ACROSS SEISMIC SEPARATION JOINTS MUST BE DESIGNED WITH A FLEXIBLE CONNECTION THAT CAN ACCOMMODATE DIFFERENTIAL MOVEMENTS

TABLE 120.3-A PIPE INSULATION THICKNESS

FLUID OPERATING TEMPERATURE RANGE (°F)	FLUID CONDUCTIVITY: CONDUCTIVITY (in Btu·inch/(ft²·°F))	FLUID CONDUCTIVITY: MEAN RATING TEMPERATURE (°F)	NOMINAL PIPE DIAMETER (in inches)				
			< 1	1 to < 1.5	1.5 to < 4	4 to < 8	8 and larger
Space heating and Service Water Heating Systems (Steam, Steam Condensate, Refrigerant, Space Heating, Service Hot Water)			Minimum Pipe Insulation Required (Thickness in inches or R-value)				
Above 350	0.32–0.34	250	Inches	4.5	5.0	5.0	5.0	5.0
			R-value	R-37	R-41	R-37	R-27	R-23
251–350	0.29–0.32	200	Inches	3.0	4.0	4.5	4.5	4.5
			R-value	R-24	R-34	R-35	R-26	R-22
201–250	0.27–0.30	150	Inches	2.5	2.5	2.5	3.0	3.0
			R-value	R-21	R-20	R-17.5	R-17	R-14.5
141–200	0.25–0.29	125	Inches	1.5	1.5	2.0	2.0	2.0
			R-value	R-11.5	R-11	R-14	R-11	R-10
105–140	0.22–0.28	100	Inches	1.0	1.5	1.5	1.5	1.5
			R-value	R-7.7	R-12.5	R-11	R-9	R-8

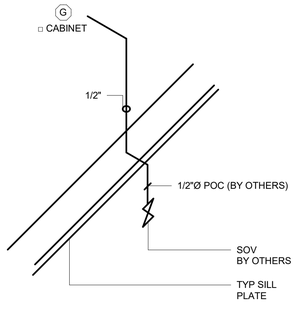
FLUID OPERATING TEMPERATURE RANGE (°F)	INSULATION CONDUCTIVITY: CONDUCTIVITY (in Btu·inch/(ft²·°F))	INSULATION CONDUCTIVITY: MEAN RATING TEMPERATURE (°F)	Nominal Pipe Diameter (in inches)					
			< 1		1 to < 1.5	1.5 to < 4	4 to < 8	8 and larger
Space cooling systems (chilled water, refrigerant and brine)			Minimum Pipe Insulation Required (Thickness in inches or R-value)[1]					
40–60	0.21–0.27	75	Inches	Nonres 0.5	Res 0.75	Nonres 0.5	Res 0.75	1.0	1.0	1.0
			R-value	Nonres R-3	Res R-4	Nonres R-3	Res R-5	R-7	R-6	R-5
Below 40	0.20–0.26	50	Inches	1.0		1.5	1.5	1.5	1.5
			R-value	R-8.5		R-14	R-12	R-10	R-9	

1. These thicknesses are based on energy efficiency considerations only. Issues such as water vapor permeability or surface condensation sometimes require vapor retarders or additional insulation.



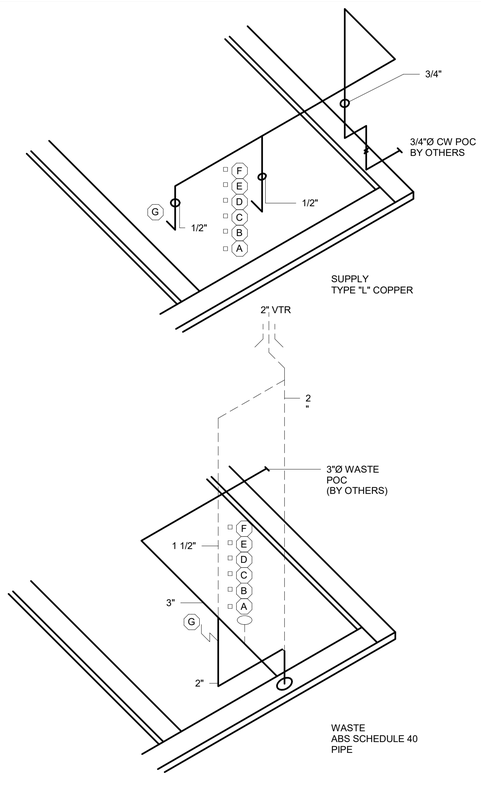
ABS SCHEDULE 40 PIPE

5 *1/2" = 1'-0"*
LAV WASTE

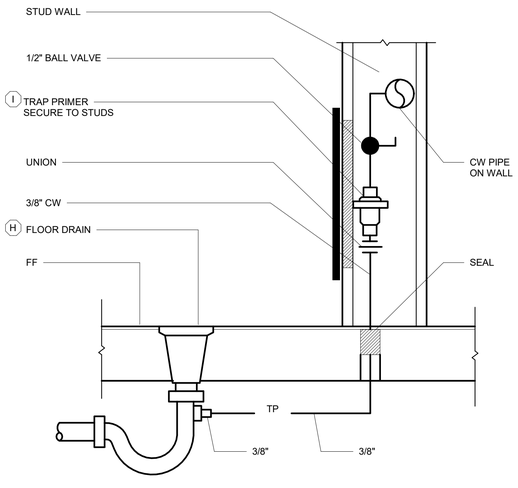


TYPE 'L' COPPER

3 *1/2" = 1'-0"*
LAV COLD WATER SUPPLY



9 *1/2" = 1'-0"*
SINGLE OCC PLUMBING ISO



PIPES INSULATION PER CODE 120.3 AND TABLE 120.3-A
- 1/2" INSULATION R-3 AROUND MIN.

6 *1/2" = 1'-0"*
TRAP PRIMER TO FLOOR DRAIN

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
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WWW.RSTAVARES.COM

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ORIGINAL PC STATE AGENCY APPROVAL

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APP: 04-123059 PC
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SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
TYPICAL PLUMBING DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
RH/RT

DATE

SHEET NO.
P1.0

SHEET OF

AAA

6/15/2021 11:53:44 PM C:\Users\User\Documents\20093 - Aries, 24x40 PC - MainFile - Low Seismic_6.7_CES\AR24D63.rvt

VENTILATION PLAN AND SCHEDULE

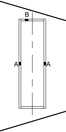
VENT "A" 7.83' W x 0.42' H = 3.26 SF

VENT "B" 2.83' W x 1.50' H = 4.25 SF ACCESS

VENT "C" 4.00' W x 0.42' H = 1.8 SF

VENT A2=5.55 SF

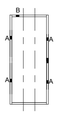
VENT C2=2.83 SF



VENT AREA REQ = 960 SF / 150 = 6.4 SF

VENT AREA AVAIL = (2) 3.26 SF + (1) 4.25 SF = 10.77 SF

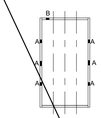
NET AREA AVAIL = 0.6 * 10.77 SF = 6.5 SF



VENT AREA REQ = 1440 SF / 150 = 9.6 SF

VENT AREA AVAIL = (4) 3.26 SF + (1) 4.25 SF = 18.962 SF

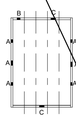
NET AREA AVAIL = 0.6 * 18.962 SF = 11.377 SF



VENT AREA REQ = 1920 SF / 150 = 12.8 SF

VENT AREA AVAIL = (6) 3.26 SF + (1) 4.25 SF = 23.82 SF

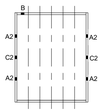
NET AREA AVAIL = 0.6 * 23.82 SF = 14.29 SF



VENT AREA REQ = 2400 SF / 150 = 16 SF

VENT AREA AVAIL = (6) 3.26 SF + (1) 4.25 SF + (2) 1.8 = 27.153 SF

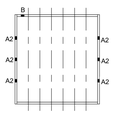
NET AREA AVAIL = 0.6 * 27.15 SF = 16.3 SF



VENT AREA REQ = 2880 SF / 150 = 19.2 SF

VENT AREA AVAIL = (2) 5.55 SF + (1) 4.25 SF + (2) 2.83 = 32.1 SF

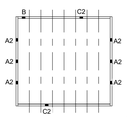
NET AREA AVAIL = 0.6 * 32.1 SF = 19.258 SF



VENT AREA REQ = 3360 SF / 150 = 22.4 SF

VENT AREA AVAIL = (6) 5.55 SF + (1) 4.25 SF = 37.52 SF

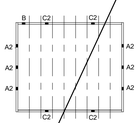
NET AREA AVAIL = 0.6 * 37.52 SF = 22.51 SF



VENT AREA REQ = 3840 SF / 150 = 25.6 SF

VENT AREA AVAIL = (6) 5.55 SF + (1) 4.25 SF + (2) 2.833 = 37.52 SF

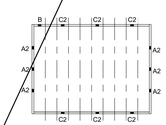
NET AREA AVAIL = 0.6 * 37.52 SF = 25.91 SF



VENT AREA REQ = 4320 SF / 150 = 28.8 SF

VENT AREA AVAIL = (6) 5.55 SF + (1) 4.25 SF + (4) 2.833 = 48.86 SF

NET AREA AVAIL = 0.6 * 48.86 SF = 29.314 SF



VENT AREA REQ = 4800 SF / 150 = 32 SF

VENT AREA AVAIL = (6) 5.55 SF + (1) 4.25 SF + (6) 2.833 = 54.52 SF

NET AREA AVAIL = 0.6 * 54.52 SF = 32.71 SF

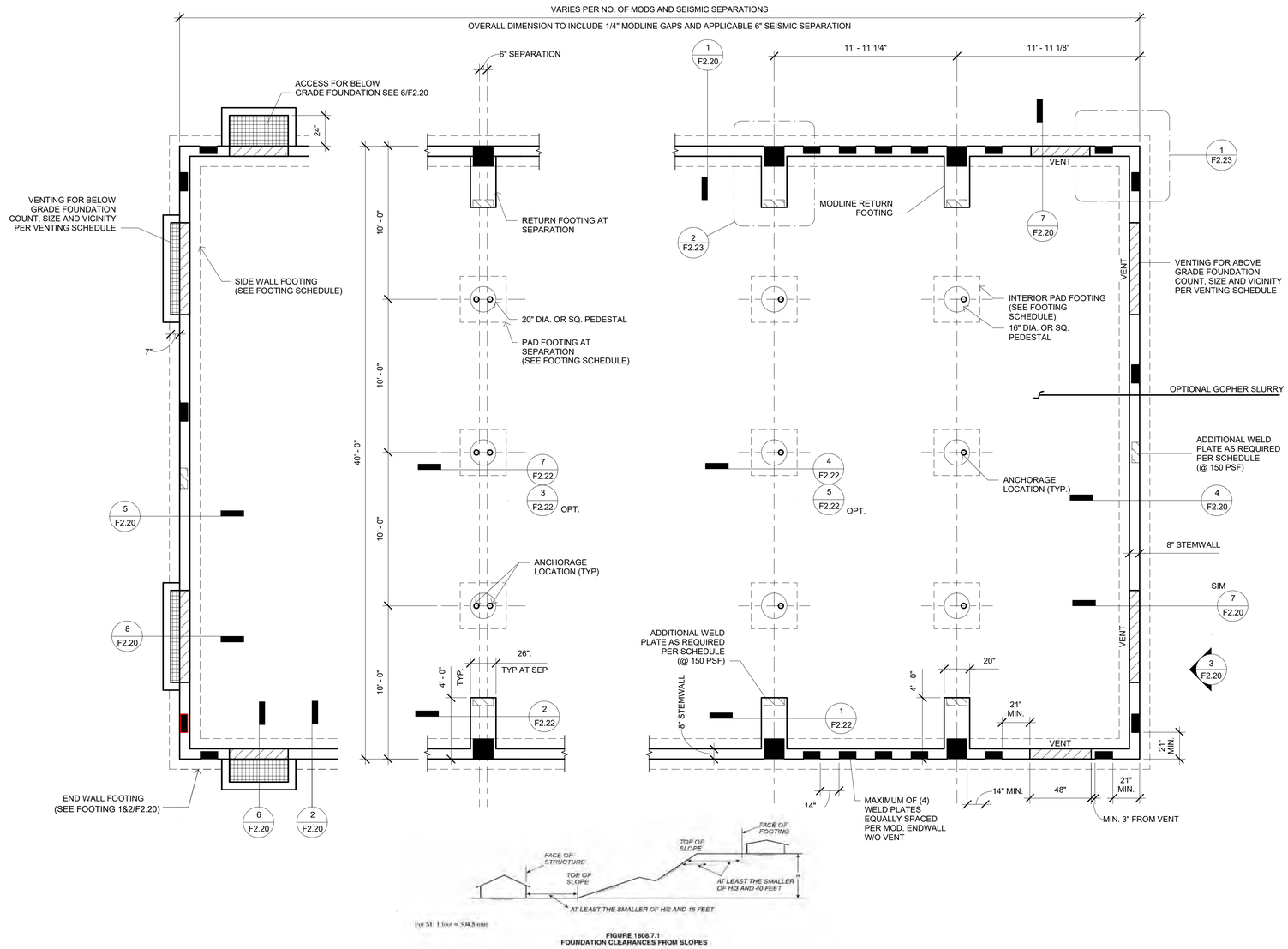


FIGURE 1808.7.1
FOUNDATION CLEARANCES FROM SLOPES

NOTES:

1. THE FOUNDATION DESIGN CONSIDERS AN ALLOWABLE SOIL BEARING PRESSURE OF 1,500 PSF FOR LOCATIONS THAT DO NOT REQUIRE A SOILS INVESTIGATION REPORT.
2. DISTRICT SHALL BE RESPONSIBLE IN ISSUING AND CONTRACTING A SOILS INVESTIGATION THROUGH A QUALIFIED GEOTECHNICAL ENGINEER FOR LOCATIONS DEEMED QUALIFIED BY CBC 1803A.2.
3. WELD PLATES SAHLL BE PLACED PER PLAN AT 21" MINIMUM FROM BUILDING CORNERS AND 14" MINIMUM FROM ADJACENT WELD PLATE.
4. WELD PLATES WITHIN 21" FROM VENT SHALL REQUIRE REINFORCEMENT HAIRPINNED AROUND THE ANCHOR BOLT CLOSEST TO THE VENT. SEE DETAIL 1/F2.23
5. FOUNDATION OVERALL CONSIDERS A 1/4" GAP AT EVERY MODLINE AND 6" SEISMIC SEPARATION GAP WHEN APPLICABLE.
6. SIZE OF UNDER-FLOOR VENITIALATION CONSIDERS A RATIO OF 1:150 FOR THE TOTAL AREA OF OPENEINGS TO CRAWL SPACE AREA. CRAWL SPACE AREAS FITTED WITH A VAPOR BARIER IN ACCORDANCE WITH IBC, 1203.3.2 SHALL BE PERMITTED A RATIO ADJUSTMENT TO 1:1500.
7. VENTILLATION OPENING SHALL BE COVERED WITH CORROSION RESITANT WIRE WITH THE LEAST DIMENSION NOT GREATER THAN 1/8".

FOOTING SCHEDULE (WOOD FLOOR)

DESIGN FLOOR LIVE LOAD	SIDEWALL FOOTING	ENDWALL FOOTING	INTERIOR PAD FOOTING	PAD FOOTING @ SEPARATION
☒ 50 + 15 PSF	12" WIDE (2) #5 CONT T&B	14" WIDE (3) #5 CONT T&B	3' - 0" SQ (3) #5 EW	3' - 8" SQ (4) #5 EW
☐ 100 PSF	12" WIDE (2) #5 CONT T&B	16" WIDE (3) #5 CONT T&B	3' - 4" SQ (3) #5 EW	4' - 2" SQ (4) #5 EW
☐ 150 PSF	14" WIDE (2) #5 CONT T&B	16" WIDE (3) #5 CONT T&B	4' - 0" SQ (4) #5 EW	4' - 8" SQ (4) #5 EW

FOOTING SCHEDULE (CONCRETE FLOOR)

DESIGN FLOOR LIVE LOAD	SIDEWALL FOOTING	ENDWALL FOOTING	INTERIOR PAD FOOTING	PAD FOOTING @ SEPARATION
☐ 50 + 15 PSF	12" WIDE (2) #5 CONT T&B	14" WIDE (3) #5 CONT T&B	3' - 2" SQ (3) #5 EW	4' - 0" SQ (4) #5 EW
☐ 100 PSF	12" WIDE (2) #5 CONT T&B	16" WIDE (3) #5 CONT T&B	3' - 6" SQ (3) #5 EW	4' - 6" SQ (4) #5 EW
☐ 150 PSF	14" WIDE (2) #5 CONT T&B	16" WIDE (3) #5 CONT T&B	4' - 2" SQ (4) #5 EW	4' - 10" SQ (5) #5 EW

SYMBOLS LEGEND

- L6X4X3/8, 14" LONG WELD PLATE PER SCHEDULE BELOW (SEE 6 / F2.23)
- ADDITIONAL WELD PLATES (FOR 150 PSF OPTION)
- 16"x16"x3/8" WELD PLATE, SEE DETAIl4 / F2.23
- VENT — UNDER FLOOR VENTILATION, SEE VENTILATION SCHEDULE

WELD PLATE SCHEDULE

		L6x4x3/8, 14" LONG		16x3/8 SQ PL
		≤ 100 PSF	150 PSF	≤ 150 PSF
EACH SIDEWALL		3	4	-
EACH MODLINE		-	2	2
EACH END-WALL	24x40	5	7	
	36x40	6	7/10	
	48x40	7	10/13	
	60x40	9	12	
	72x40	10	14	
	84x40	12	17	
	96x40	13	19	
	108x40	15	21	
	120x40	16	23	

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

CONCRETE FOUNDATION PLAN

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

JA/RT

DATE

SHEET NO.

F2.10

SHEET OF

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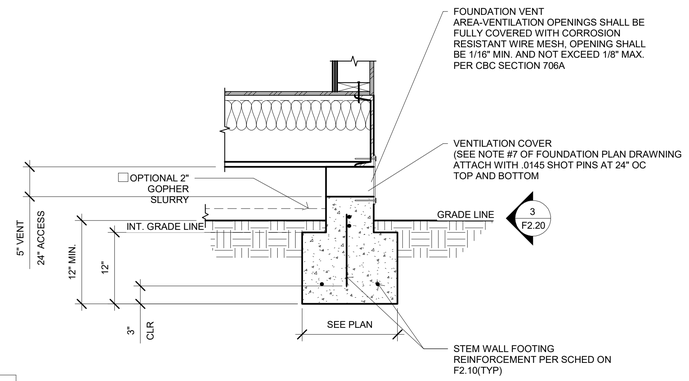
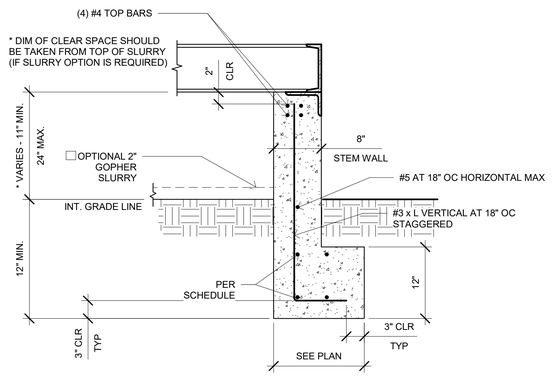
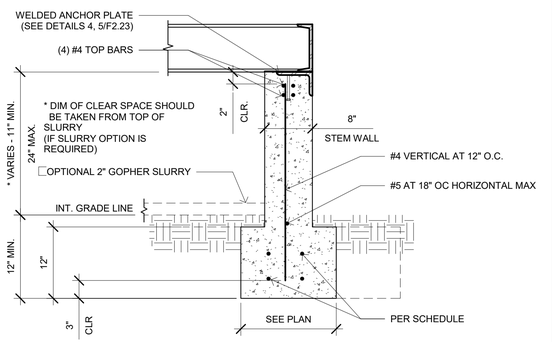


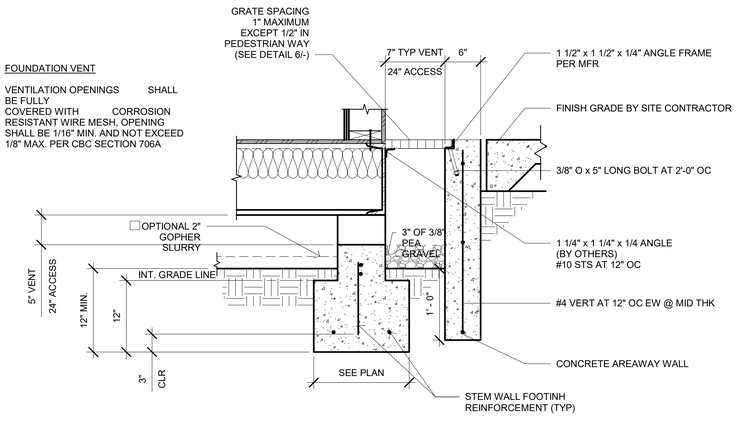
7 *1" = 1'-0"*
VENT/ACCESS SECTION, ABOVE GRADE



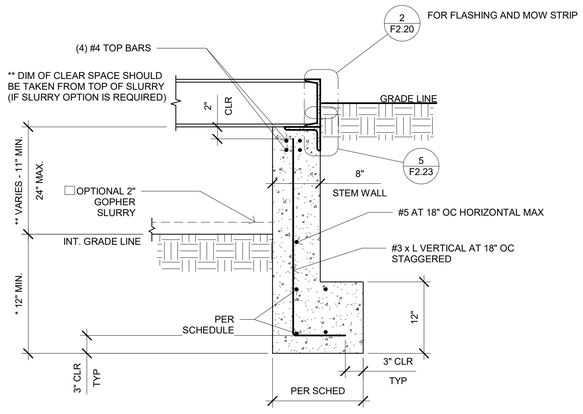
4 *1" = 1'-0"*
SIDE WALL FOOTING, ABOVE GRADE



1 *1" = 1'-0"*
END WALL FOOTING, ABOVE GRADE

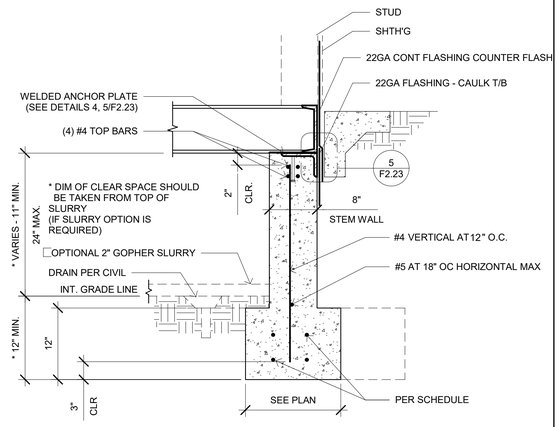


8 *1" = 1'-0"*
VENT/ACCESS SECTION, BELLOW GRADE



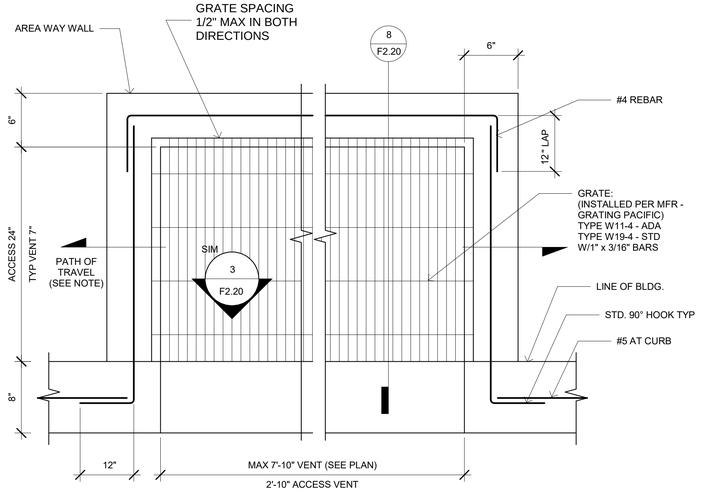
*MINIMUM FOOTING DEPTH w/ INSULATION AT EXTERIOR FOOTINGS.
WHEN INSULATION IS NOT PROVIDED, MIN. FOOTING DEPTH SHALL BE 18" BELOW INT. GRADE

5 *1" = 1'-0"*
SIDE WALL FOOTING, BELOW GRADE

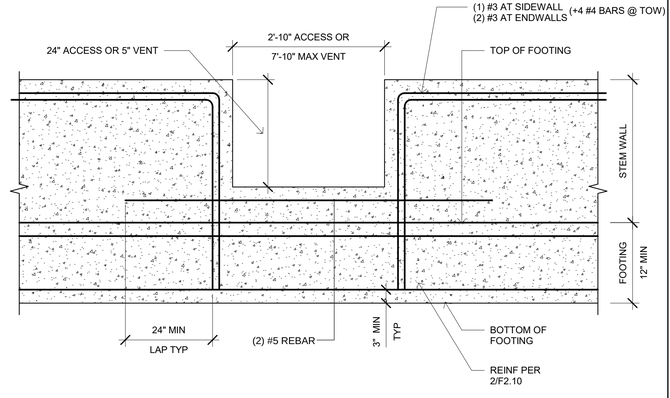


*MINIMUM FOOTING DEPTH w/ INSULATION AT EXTERIOR FOOTINGS.
WHEN INSULATION IS NOT PROVIDED, MIN. FOOTING DEPTH SHALL BE 18" BELOW INT. GRADE

2 *1" = 1'-0"*
END WALL FOOTING, BELOW GRADE



6 *1 1/2" = 1'-0"*
ACCESS VENT FOR BELLOW GRADE FOUDATION



3 *3/4" = 1'-0"*
VENT OPENING

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
CONCRETE FOUNDATION DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
F2.20

SHEET OF

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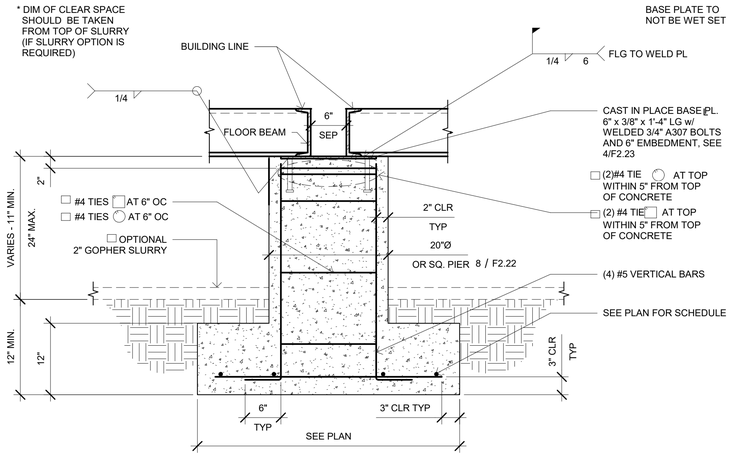
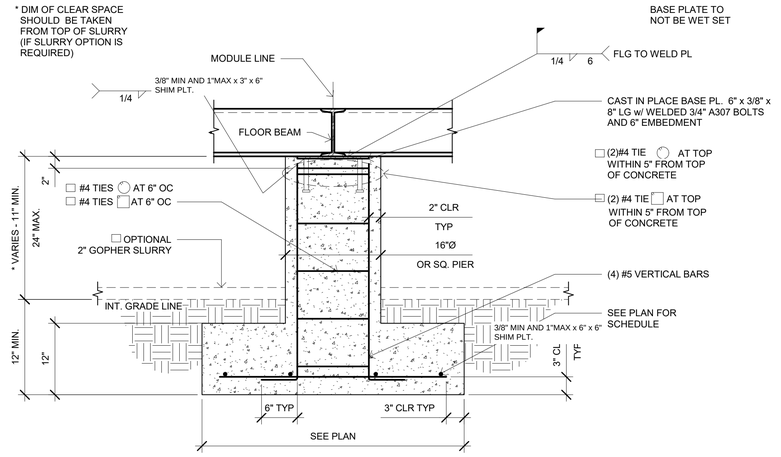
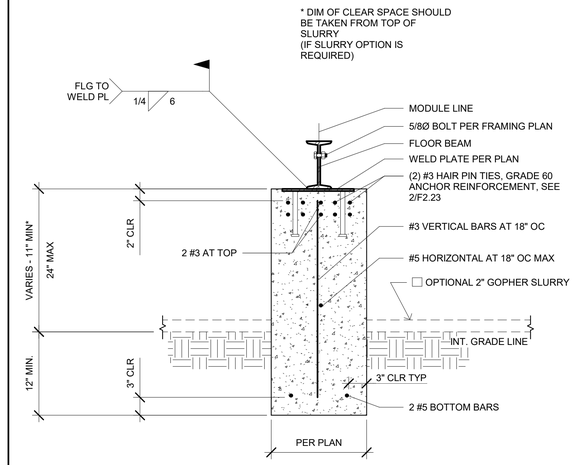


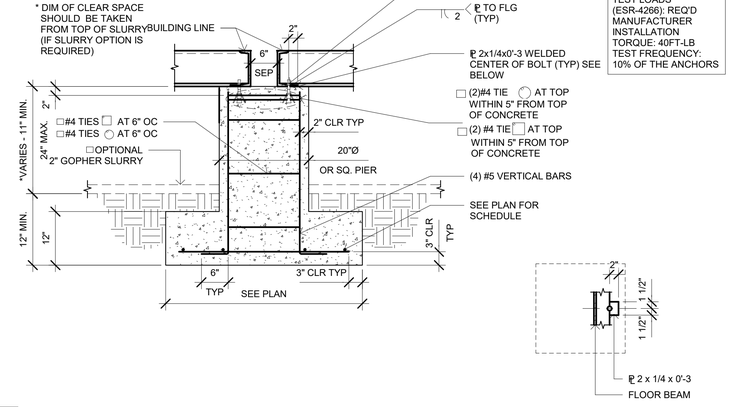
7 *1" = 1'-0"*
INTERIOR PAD FOOTING (AT SEPARATION)



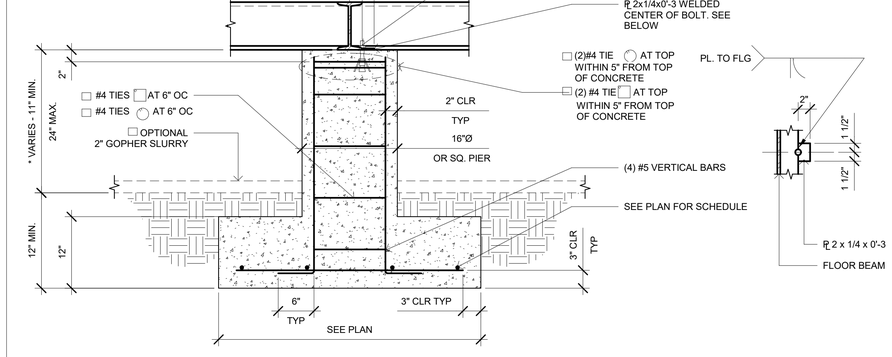
4 *1" = 1'-0"*
INTERIOR PAD FOOTING (ATTACHMENT AT PLATE)



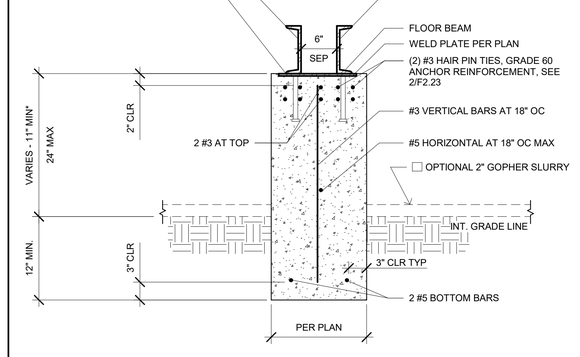
1 *1" = 1'-0"*
INTERIOR RETURN FOOTING



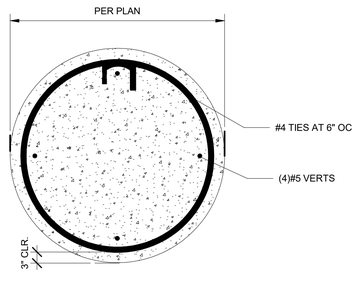
3 *3/4" = 1'-0"*
OPT. INTERIOR PAD FOOTING (AT SEPARATION)



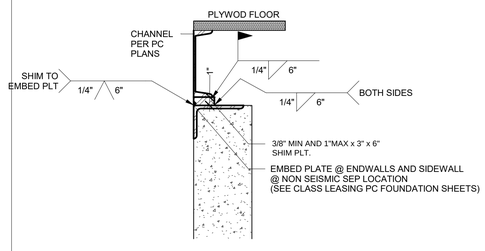
5 *1" = 1'-0"*
OPT. INTERIOR PAD FOOTING (ATTACHMENT AT PLATE)



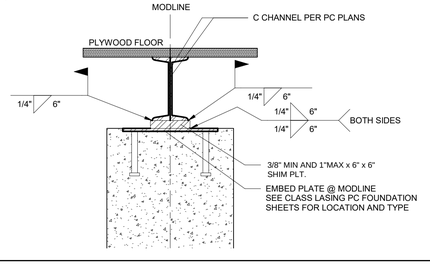
2 *1" = 1'-0"*
INTERIOR RETURN FOOTING AT SEPARATION



8 *1 1/2" = 1'-0"*
TYP. CIRCULART FTG.



* NOTE: PLYWOOD FLOOR OPTION SHOWN FOR CLARITY-DETAILING APPLIES TO CONCRETE FLOORS TYPICAL



2 ***SHIM DETAILS***

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER MANNY D. FRANCO C-33380 03/31/24 CIVIL STRUCTURAL STATE OF CALIFORNIA
RST#22088
02/16/24

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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
CONCRETE FOUNDATION DETAILS

PROJECT NUMBER
22088

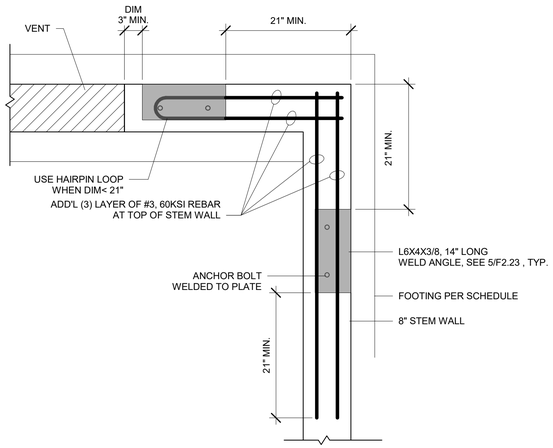
DRAWN BY
rMc/SC

CHECKED BY
JA/RT

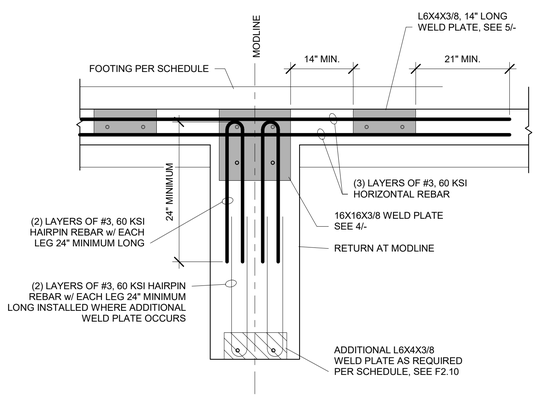
DATE

SHEET NO.
F2.22
SHEET OF

6/20/2023 8:33:00 AM C:\Users\User\Documents\22088- Aries, 24x40 PC - MainFile - Low Seismic_detached (2022)_CESAR24D63.rvt

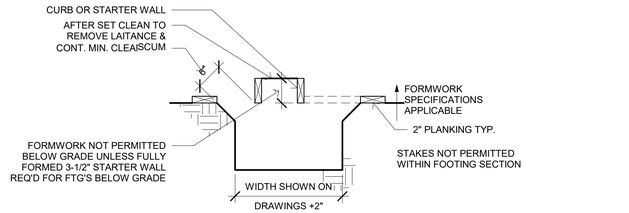


1 *1" = 1'-0"*
WELD PLATE AT CORNER



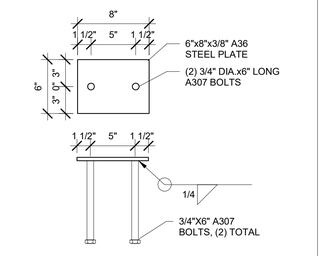
2 *3/4" = 1'-0"*
RETURN AT MOD LINE

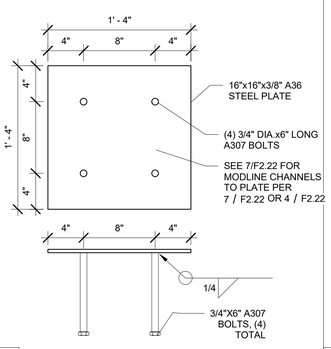
* NOTE: PLYWOOD FLOOR OPTION SHOWN FOR CLARITY-DETAILING APPLIES TO CONCRETE FLOORS TYPICAL



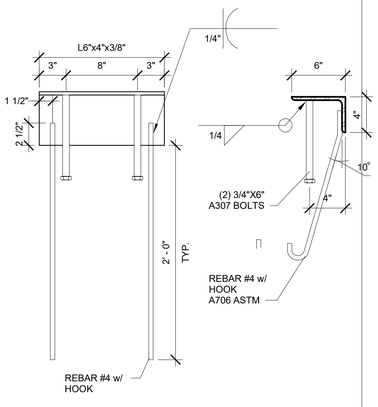
"FOUNDATION CONCRETE MAY BE PLACED DIRECTLY INTO NEAT EXCAVATIONS PROVIDED THE FOUNDATION TRENCH WALLS ARE STABLE AS DETERMINED BY THE ARCHITECT (STRUCTURAL ENGINEER). SUBJECT TO THE APPROVAL OF THE DIVISION OF THE STATE ARCHITECT. IN SUCH CASE THE MINIMUM FORMWORK SHOWN ON THE DRAWINGS IS MANDATORY TO INSURE CLEAN EXCAVATIONS IMMEDIATELY PRIOR TO AND DURING THE PLACING OF CONCRETE."

3 *3/4" = 1'-0"*
MANDATORY MINIMUM FORMWORK (UNLESS FULLY FORMED)

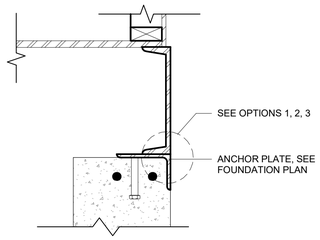


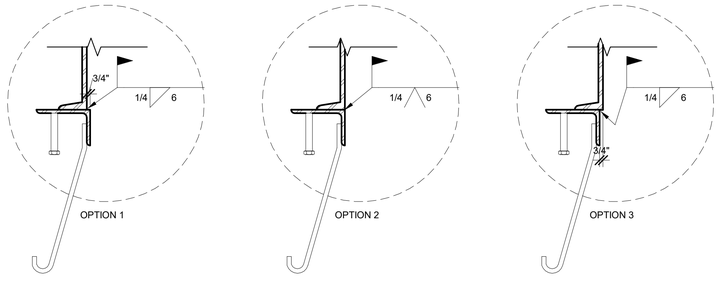


4 *1 1/2" = 1'-0"*
EMBEDDED PLATE DETAILS

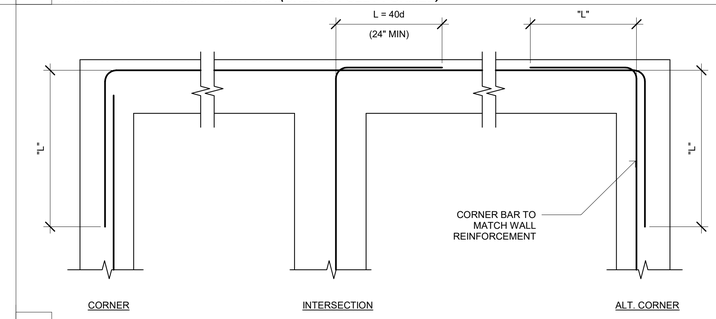


6 *1 1/2" = 1'-0"*
WELD ANGLE DETAIL3

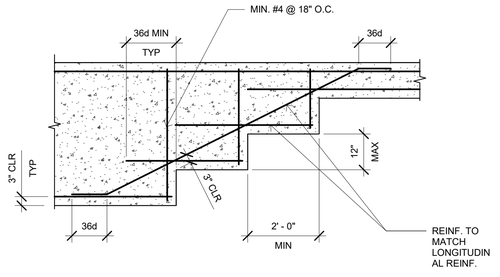




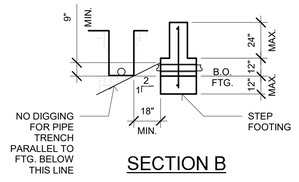
5 *1 1/2" = 1'-0"*
FOUNDATION - WELDED4



7 *3/4" = 1'-0"*
TYPICAL REINFORCING AT CORNER AND INTERSECTIONS



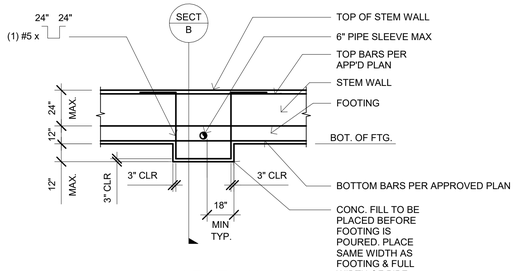
10 *1/2" = 1'-0"*
TYPICAL STEPPED FOOTING



SECTION B

NOTES:

1. ALL PIPES SHALL BE ENCASED IN SLEEVES W/ 1" CLEAR SPACE AROUND PIPE. SEAL AND MAKE WATERTIGHT WITH PLASTIC MATERIAL (REF CPC SECTION 313.10 SLEEVES)



SECTION A

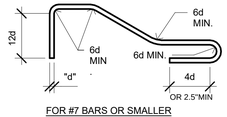
8 *1/4" = 1'-0"*
PIPE SLEEVE THRU FOUNDATION FOOTING

STANDARD HOOKS FOR PRIMARY REINFORCEMENT	
BAR SIZE, No.	MINIMUM FINISHED BEND DIAMETER[a]
3 THROUGH 8	$6d_b$
9 THROUGH 11	$8d_b$
14 AND 18	$10d_b$

(a) MEASURED ON INSIDE OF BAR

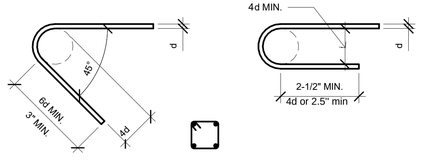
STANDARD HOOKS FOR STIRRUPS AND TIE REINFORCEMENT	
BAR SIZE, No.	MINIMUM FINISHED BEND DIAMETER[b]
3 THROUGH 5	$4d_b$
6 THROUGH 8	$6d_b$

(b) MEASURED ON INSIDE OF BAR

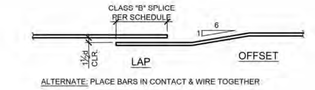


FOR #7 BARS OR SMALLER

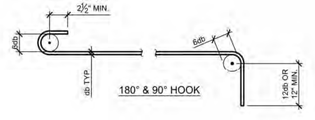
TYP. REINF. BENDING DETAIL



STIRRUP AND TIE HOOK STANDARD HOOK



ALTERNATE: PLACE BARS IN CONTACT & WIRE TOGETHER



BAR SIZE #	DEVELOPMENT LENGTH[3]			TYPICAL CLASS B LAP SPLICE LENGTH[4]					
	3000 PSI (IN)	3500 PSI (IN)	4000+ PSI (IN)	3000 PSI		3500 PSI		4000+ PSI	
				TOP[2] (IN)	BOTTOM (IN)	TOP[2] (IN)	BOTTOM (IN)	TOP[2] (IN)	BOTTOM (IN)
3	13	12	12	21	16	20	16	20	16
4	17	16	15	28	22	26	20	24	19
5	21	20	18	35	27	33	25	30	24
6	25	23	22	42	32	39	30	36	28

NOTES:
1. THE ABOVE TABLE IS BASED ON GRADE 60 STEEL.
2. TOP BARS ARE ANY BARS WITH MORE THAN 12" OF CONCRETE PLACED BELOW.
3. DEVELOPMENT LENGTH IS CALCULATED FOR TYP. BARS - ψ_t=1.0
4. LAP SPLICES IN ADJACENT BARS SHALL BE STAGGERED, UNLESS OTHERWISE NOTED.

9 *1 1/2" = 1'-0"*
TYPICAL REINFORCING BENDING DETAILS

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCO
No. S-3380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088

02/16/24

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
CONCRETE FOUNDATION DETAILS

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
F2.23

SHEET OF

6/16/2021 7:45:17 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt

STRUCTRUAL STEEL:

A. ALL WORK, UNLESS MODIFIED BY THE CONCTRACT DOCUMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT AISC SPECIFICATIONS AND STANDARDS.
B. STEEL SHAPES SHALL COMFORM TO THE FOLLOWING STANDARD:
  a. STRUCTURAL HSS COLUMNS: ASTM A500 GRADE B
  b. STRUCTURAL W-SHAPES: ASTM A992 GRADE 50
  c. TUBE STEEL: ASTM A500 GRADE A
  d. ALL OTHER: ASTM A36

C. FABRICATION, ERECTION, AND SHOP PAINTING SHALL BE IN ACCORDANCE WITH THE PROVISIONS OF THE AISC *CODE OF STANDARD PRACTICE FOR STEEL BUILDING AND BRIDGES*.
D. HOLES IN STRUCTURAL STEEL SHALL NOT BE PERMITTED, UNLESS SPECIFIED IN THE STRUCTURAL DRAWINGS

CONCRETE

A. ALL CONCRETE WORK, UNLESS MODIFIED BY CONTRACT DOCUMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 19A, CBC 2022 AND ACI 318-19.

B. TESTS AND INSPECTION SHALL BE PERFORMED BY A TESTING LABORATRY CONTRACTED BY THE DISTRICT.

C. MIX DESIGN SHALL BE SUBMITTED FOR QUALIFICATION AND PROVIDE A 28-DAY COMPRESSIVE STRENGTH F'C OF 3500 PSI, COMPOSED OF NORMAL WEIGHT TYPE I PORTALAND CEMENT IN CONFORMANCE WITH ASTM C150.

D. FORMWORK SHALL RESULT IN FINAL STRUCTURE THAT CONFORMS TO SHAPES, LINES, AND DIMENSIONS AS REQUIRED BY THE CONTRACT DOCUMENTS.

E. LOCATIONS OF VENTS AND OPENINGS FOR MECHANICAL AND ELECTRICAL USE SHALL BE VERIFIED BY ARCHITECT.

F. EMBEDMENT OF MATERIALS NOT HARMFULL TO CONCRETE AND WITHIN LIMITATIONS OF SECTION 20.6, ACI-318-19 SHALL BE PERMITTED. REFER TO OTHER DISCIPLINES FOR LOCATION OF CONDUIT, PIPES, FITTINGS, SLEEVES, ETC.

G. IS CONTINUOUS BATCH PLANT INSPECTION WAIVED PER CBC 1705A3.3. WHEN CONTINUOUS BATCH PLANT INSPECTION WAIVED, THE FOLLOWING PERIODIC INSPECTION SHALL BE REQUIRED:(INSPECTIONS PROVIDED BY DISTRICT)

  1. QUALIFIED TECHNICIAN OF THE TESTING LABORATORY SHALL CHECK THE FIRST BATCH AT THE START OF THE DAY.
  2. LICENSED WEIGHMASTER TO POSITIVELY IDENTIFY MATERIALS AS TO QUANTIFY AND CERTIFY TO EACH LOAD BY A BATCH TICKET.
  3. BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY A TRUCK DRIVER WITH THE LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR WILL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD, AND TIME OF RECEIPT, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND WILL TRANSMIT A COPY OF THE DAILY RECORD TO THE ENFORCEMENT AGENCY.

H. ANCHOR BOLTS, AND REINFORCING STEEL SHALL BE SECURELY TIED BEFORE CONCRETE IS POURED.

CONCRETE MIX

IN ADDITION TO THOSE REQUIREMENTS DICTATED BY THE PC DESIGN, THE CONCRETE MIX USED IN THE FOUNDATION ELEMENTS SHALL COMPLY WITH THE DURABILITY REQUIREMENTS OF AMERICAN CONCRETE INSTITUTE (ACI) 318 SECTION 19.3. THE PC DRAWINGS SHALL ACCOUNT FOR THE DEPENDENCY OF THESE DURABILITY REQUIREMEMNTS ON SITE-SPECIFIC CHARACTERISTICS.

A. WHEN THE PC DRAWINGS DO NOT REQUIRE A SITE-SPECIFIC GEOTECHNICAL REPORT THAT QUANTIFIES SULFATE CONTENT IN THE SOIL, THE PC DRAWINGS SHALL REQUIRE A CONCRETE MIX SHALL COMPLYING WITH ONE OF THE FOLLOWING PER ACI 318 TABLE 19.3.2.1. SEE THIS SHEET A.1 & A.2 FOR OPTIONS

B. MAXIMUM WATER/CEMENT RATION OF 0.45; MINIMUM COMPRESSIVE STRENGTH OF 4,500 POUNDS PER SQUARE INCH (PSI); TYPE V CEMENT PLUS POZZOLAN OR SLAG CEMENT COMPLYING WITH FOOTNOTE 7; AND PROHIBITION OF ADMIXTURES CONTAINING CALCIUM CHLORIDE

C. MAXIMUM WATER/CEMENT RATIO OF 0.40; MINIMUM COMPRESSIVE STRENGTH OF 5,000 PSI; TYPE V CEMENT COMPLYING WITH FOOTNOTE 8; AND PROHIBITION OF ADMIXTURES CONTAING CALCIUM CHLORIDE.

D. WHEN THE PC DRAWINGS REQUIRE A SITE-SPECIFIC GEOTECHNICAL REPORT THAT QUANTIFIES SULFATE CONTENT IN THE SOIL, THE PC DRAWINGS SHALL CLEARLY STATE THE EXPOSURE CLASS FOR EACH CATAGORY (I.E., F, S, W, AND C) OR COMBINATION THEREOF THE PC DESIGN IS APPROVED FOR. THE MAXIMUM WATER/CEMENT RATIO, MINIMUM COMPRESSIVE STRENGTH, CEMENTITOUS MATERIAL REQUIREMENTS, AND ADMIXTURE LIMITATIONS SHALL BE STATED ON THE PC DRAWINGS FOR EACH APPROVED CASE.

E. BOTH APPROACHES GIVEN SECTIONS 5.5.1 AND 5.5.2 ABOVE CAN BE INCLUDED ON THE PC DRAWINGS AS ALTERNATE OPTIONS IN ACCORDANCE WITH SECTION 1.4 ABOVE

F. CONCRETE EXPOSE TO THAW AND FREEZE CYCLES SHALL BE AIR ENTRAINED PER ACI 318 SECTION 19.3.3.1

STEEL REINFORCEMENT

A. DEFORMED BARS SHALL CONFORM TO ASTM A615.
B. fy= 60,000 PSI, FOR ALL BARS EXEPT FOR #3 BARS, fy= 40,000 PSI.
C. PROVIDE A MINIMUM CONCRETE COVER FOR REINFORCEMENT EMBEDDED IN:
  a. CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH = 3"
  b. CONCRETE EXPOSED TO EARTH OR WEATHER FOR #5 BARS OR SMALLER = 1.5"
D. IN SPLICE LENGTHS SHALL BE A MINIMUM OF 48" FOR #5 BARS, AND 30" FOR #4 BARS UNLESS OTHERWISE SPECIFIED DRAWINGS.

BOLTS

A. ALL BOLTS AND ANCHOR BOLTS SHALL COMFORM TO ASTM A-307
B. BOLTS EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED BY THE HOT-DIP OR MECHANICAL PROCESS

WELDING

A. ALL WELDING SAHLL BE IN COMFORMANCE TO:
  a. AWS D1.1, EXCEPT AS MODIFIED IN SECTION J2, AISC-360 FOR STEEL
  b. AWS D1.3 FOR LIGHT GAUGE STEEL
  c. AWS D1.4 FOR REINFORCING STEEL

B. ELECTRODE CLASSIFICATION:
  a. E70XX FOR STEEL AND CONCRETE STEEL REINFORCEMENT
  b. E60XX FOR LIGHT GAUGE STEEL

C. WELDS SHALL BE CAPABLE OF PRODUCING THE FOLLOWING V-NOTCH TOUGHNESS AS DETERMINED BY APPROPRIATE AWS A5 CLASSIFICATION TEST METHOD OR MANUFACTURER CERTIFICATION:
  a. LATERAL FORCE RESISTING SYSTEM (LFRS) = 20 FT-LB AT 0 DEGREE F
  b. COMPLETE JOINT PENETRATION GROOVE WELD = 20 FT-LB AT 40 DEGREE F

D. SHOP AND FIELD WELDING SHALL BE PERFORMED BY AWS CERTIFIED WELDERS.

E. INSPECTION:
  a. PERIODIC INSPECTION OF FILLET WELDS LESS THAN OR EQUAL TO 5/16", FLOOR AND ROOF DECK WELDS.
  b. CONTINUOUS INSPECTION FOR OTHER WELDS.

F. NONDESTRUCTIVE TESTING (NDT):
  a. ULTRASONIC TESTING SHALL BE PERFORMED ON 100 PERCENT OF CJP GROOVE WELDS IN MATERIALS 5/16" OR THICK OR GREATER. ULTRASONIC TESTING NOT REQUIRED FOR MATERIALS LESS THAN 5/16" THICK. TESTING FREQUENCY MAY BE REDUCED TO 25%, PROVIDED PROVISIONS SET FORTH IN SECTION N5.5e, AISC-360 IS MET.
  b. MAGNETIC PARTICLE TESTING SHALL BE PERFORMED ON 25 PERCENT OF ALL BEAM-TO-COLUMN CJP GROOVE WELDS. TESTING FREQUENCY MAY BE REDUCED TO 10%, PROVIDED PROVISIONS SET FORTH IN J6.2g, AISC-341 IS MET.

FOUNDATIONS

GEOTECHNICAL INVESTIGATION SHALL BE CONDUCTED IN ACCORDANCE WITH SECTION 1803A.1 THROUGH 1803A.8 BY GEOTECHNICAL ENGINEER CONTRACTED BY THE DISTRICT. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TALBLE 1806A.2, WHERE GEOTECHNINCAL REPORTS IS NOT REQUIRED PER SECT 1803A.2. A MAXIMUM ALLOWABLE SOIL PRESSURE OF 1000 PSF AND 1500 PSF SHALLBE PERMITTED FOR TEMPORARY W AND PERMANENT CONCRETE FOUNDATIONS RESPECTIVELY IN ACCORDANCE WITH SECTION 4.6, IR 16-1

A PREVIIOUS REPORT FOR A SPECIFIC SITE MAY BE RESUBMITTED. THE ALLOWABLE FOUNDATIONA AND LATERAL SOIL PRESSURE VALUES ARE ALLOWED A 33% INCREASE FOR SHORT TERM WIND AND SEIMIC LOADS.

THE DISTRCT SHALL BE RESPONSIBLE FOR EXCAVATION, BACKFILL, SETTING ELEVATIONS, CRANING AND RIGGING. PROVIDE SHIMS TO LEVEL BUILDING WITHIN 1/2" TOLERANCE.

COLD-FORMED STEEL:

A. ALL WORK SHALL, UNLESS MODIFIED BY THE CONCTRACT DOCUMENTS, SHALL BE PERFORMED IN ACCORDANCE WITH CURRENT AISI SPECIFICATIONS AND STANDARDS.

B. MATERIAL SPECIFICATION:
  a. ASTM A-1011/A, GRADE 33 FOR MATERIALS THICKNESS 0.120 OR LESS UNLESS OTHERWISE NOTI
  b ASTM A-1003, GRADE 33 TYPE H FOR LIGHT GUAGE STUDS AND TRACKS
  c. SHAPES SHALL BE DIMENSIONED TO SSMA SPECIFICATIONS.

C. SCREWS EXPOSED TO THE ELEMENTS SHALL BE GALVANIZED

STEEL DECK

MINIMUM THICKNESS PERMITTED FOR FLOOR STEEL DECKS IS 20GA. PER DSA IR 16-1, 1.2.1, MINIMUM THICKNESS OF NON-STRUCTURAL STEEL ROOF DECKING IS 26GA. STANDING SEAM ROOF PANELS ARE GRADE 40 SHEET STEEL WITH ALUMINUM ZINC COATING CONFORMING TO ASTM A792 AND AZ55.

CHANGES

CHANGES AFFECTING STRUCTURAL PORTION OF THE APPROVED PC SHALL NEED DSA APPROVAL AND SHALL BE CLASSIFIED AS CCD CATEFORY A.

WOOD

ALL FRAMING LUMBER SHALL BE GRADE MARKED BY AN APPROVED GRADING AGENCY

SHEATHING:

EACH SHEET SHALL BE GRADE MARKED BY THE AMERICAN PLYWOOD ASSOCIATION IN ACCORDANCE WITH THE PROCEDURES AND QUALIFICATIONS SET FORTH BY PS 1-19.

1. SUB FLOOR: 1 1/8" T&G UNBLOCKED PLYWOOD, SHALL PROVIDE A SMOOTH AND UNIFORM SURFACE

   CAPABLE OF ACCEPTING CARPET FINISH
2. PLYWOOD ROOF DECK OPTION: APA RATED 3/4" T&G OSB OR EQUIVALENT RATED SHEATHING
3. EXTERIOR WALL SIDING:
  I. STANDARD: 5/8" DURATEMP OR 5/8" SMART PANEL
  II. OPTION: 5/8" MOD
  III. OPTION: 1/2" OSB OR CDX PLYWOOD FOR PLASTER/STUCCO FINISH
  IV. OPTION: 1/2" OSB OR CDX PLYWOOD FOR HARDIE BOARD (LAP SIDING) FINISH

4. EXTERIOR WALL SIDING ATTACHMENT:

   FASTENERS USED FOR THE ATTACHMENT OF EXTERIOR WALL COVERINGS SHALL BE HOT-DIPPED GALVANIZED, MECHANICALLY DEPOSITED ZINC-COATED, STAINLESS, SILICON BRONZE OR COPPER PER CBC SECTION 2304.10.1.1

   FASTEN TO WOOD FRAMING WITH 8D BOX NAILS @ 6" E.N., 12" F.N.
   FASTEN TO LIGHT GAGE METAL FRAMING WITH #8 WAFER HEAD STSMS @ 6" E.N., 12" F.N.
   FASTEN TO STRUCTURAL STEEL WITH #12 STSMS OR 0.145 DIAM SHOT PINS @ 12" O.C.

TREATED WOOD:

ALL WOOD LOCATED WITHIN 6" OF EXPOSED EARTH SHALL BE "PRESERVATIVE TREATED" OR SHALL BE "NATURALLY DURABLE" MATERIAL IN ACCORDANCE WITH CBC SECTION 2304.12.1.2.
1. ALL ROUGH LUMBER SHALL BE DF #2 OR BETTER.
2. ALL POWER DRIVEN FASTENERS SHALL BE HILTI FASTENERS ICC# ESR-1663, AND RAMSET POWER DRIVEN FASTENERS (ICC # ESR-1799), OR SIMPSON POWER DRIVEN FASTENERS ICC #ESR-2138, OR OTHER EQUIVALENT PRODUCTS WITH ICC REPORTS AND APPROVED BY DSA.
3. FASTENERS, INCLUDING NUTS AND WASHERS, IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL, STAINLESS STEEL, SILICON BRONZE OR COPPER PER CBC 2304.10.1.1

ROOF DIAPHRAGM:

3/4" T&G RATED SHEATHING UNBLOCKED DIAPHRAGM, EXPOSURE 1, 48/24 SPAN RATING
FASTEN AT METAL SUPPORTS W/ #10 x 1 1/4" SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS SCREWS @ 6" BN/CON. EDGE, 6" EN, AND 12" O.C. FN. PROVIDE A MINIMUM OF 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2.
NOTE: ALL PANEL EDGES SHALL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33MILS WITH A MINIMUM WIDTH OF 1.5 INCHES AND SHALL BE EITHER INSTALLED BELOW SHEATHING. FOR OTHER THAN STEEL SHEATHING, THE SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

FLOOR DIAPHRAGM:

1 1/8" PLYWOOD UNBLOCKED DIAPHRAGM - STURD-I-FLOOR T&G RATED SHEATHING, EXTERIOR, 48" oc SPAN RATING
FASTEN AT METAL SUPPORTS W/ #10 - 24 x 2" SELF-TAPPING PHILLIPS FLAT-HEAD ZINC COATED TEKS @ 6" O.C. BN/CON. EDGE, 6" O.C. EN, 12" FN. PROVIDE A MINIMUM OF 3/8" EDGE DISTANCE FOR FASTENERS TO PLYWOOD EDGE PER CBC SECTION 2306.2
NOTE: ALL PANEL EDGES SHALL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33MILS WITH A MINIMUM WIDTH OF 1.5 INCHS AND SHALL BE EITHER INSTALLED BELOW SHEATHING. FOR OTHER THAN STEEL SHEATHING, THE SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

CONCRETE FLOOR DATA: LIGHTWEIGHT CONCRETE FLOOR
STRENGTH: 3500 PSI
TYPE: I OR II
DESINTY: 110 PCF - MAX

DIMENSION LUMBER ATTACHMENT TO STEEL FRAMING:

2 x STUDS AT CORNER STEEL COLUMNS (NAILING STUD)
USE: #10 - 24 x 2 1/2" LG. SELF-DRILLING SELF-TAPPING PHILLIPS FLAT-HEAD WITH WASHER ZINC COATED TEK SCREWS AT 24" OC.

NAILING NOTES:

1. ALL NAILS SHALL BE COMMON UNLESS OTHERWISE NOTED
2. MACHINE APPLIED 16d FASTENERS SHALL HAVE AN EMBEDMENT OF NOT LESS THAN 1 1/2" INTO THE SECOND MEMBER, AND SHALL NOT BE LESS THAN 3" IN OVERALL LENGTH.
3. NAILS SHALL BE ACCEPTABLE FOR HAND NAILING, PROVIDED THE REQUIREMENT EMBEDMENT IS MAINTAINEI

CONNECTIONS AND FASTENERS:

ALL CONNECTIONS AND FASTENERS IN DRAWINGS CAN BE SUBSTITUTED BY AN EQUIVALENT PRODUCT PROVIDING REPORTS ARE SUBMITTED TO AND APPROVED BY DSA.

CONNECTIONS LAG SCREWS:

LAG SCREWS SHALL BE INSTALLED WITH WASHER AND TURNED BY WRENCH, OVER-TORQUING SHALL BE AVOIDED. PRE-DRILLED CLEARANCE AND LEAD HOLE SHALL BE REQUIRED AS DESCRIBED BELOW:

a) THE CLEARANCE HOLE FOR THE UNTHREADED PORTION OR THE SHANK SHALL HAVE SAME DEPTH AND DIAMETER.

b) THE LEAD HOLE FOR THE THREADED PORTION OF THE SHANK SHALL HAVE SAME DEPTH AND
   65% TO 85% OF SHANK DIAMETER FOR LUMBER WITH SPECIFC GRAVITY OF, $G > 0.6$
   60% TO 75% OF SHANK DIAMETER FOR LUMBER WITH SPECIFC GRAVITY OF, $0.5 < G \leq 0.6$
   40% TO 70% OF SHANK DIAMETER FOR LUMBER WITH SPECIFC GRAVITY OF, $G \leq 0.5$

LEAD OR CLEARANCE HOLES SHALL NOT BE REQUIRED FOR 3/8" DIAMETER OR SMALLER LAG SCREWS.

NAILING SCHEDULE: (ALL NAILS SHALL BE COMMON OR BOX NAILS, GALVANIZED WHERE EXPOSED) PER CBC TABLE 2304.10.2

CONNECTION	COMMON FASTENERS QTY SIZE	COMMON FASTENERS SPACING O.C.	BOX NAIL FASTENERS QTY SIZE	BOX NAIL FASTENERS SPACING O.C.	LOCATION
1. JOIST TO SILL OR GIRDER	3- 8d		3- 10d		TOENAIL
2. BRIDGING TO JOIST	2- 8d		2- 10d		TOENAIL EA. END
3. 1X6 OR LESS SUBFLOOR TO EA. JOIST	2- 8d		2- 10d		FACE NAIL
4. WIDER THAN 1X6 SUBFLOOR TO EA. JOIST	3- 8d		3- 10d		FACE NAIL
5. 2" SUBFLOOR TO JOIST	2- 16d		N/A N/A	N/A	BLIND & FACE NAIL
6. SOLE PLT. TO JOIST OR BLK'G TO EA. JOIST	16d	@ 16"	16d	@ 12"	FACE NAIL
SOLE PLT. TO JOIST OR BLK'G @ BRACED WALL PANEL	3- 16d	@ 16"	3- 16d	@ 16"	TYP. FACE NAIL
7. TOP PLT. TO STUD	2- 16d		3- 10d		END NAIL
8. STUD TO SOLE PLT.	2- 16d		3- 10d		END NAIL
OR	4- 8d		4- 10d		TOENAIL
9. DOUBLE STUDS	16d	@ 24"	10d	@ 16"	FACE NAIL
10. DOUBLE TOP PLT.	16d	@ 16"	10d	@ 12"	TYP. FACE NAIL
DOUBLE TOP PLT.	8- 16d	MIN. U.N.O.	12- 10d		24" MIN LAP SPLICE
11. BLKG. BTW. JOIST OR RAFTERS TO TOP PLT.	3- 8d		3- 10d		TOENAIL
12. RIM JOIST TO TOP PLT.	8d	@ 6"	10d	@ 6"	TOENAIL
13. TOP PLT., LAPS & INTERSECTIONS	2- 16d		3- 10d		FACE NAIL
14. CONT. HDR. 2 PIECES	16d	@ 16"			ALONG EDGE
15. CLG. JOIST TO PLT.	3- 8d		3- 10d		EA. JOIST, TOENAIL
16. CONT. HDR. TO STUD	4- 8d		4- 10d		TOENAIL
17. CLG. JOIST LAP OVER PARTITIONS	3- 16d		4- 10d		FACE NAIL
18. CLG. JOIST PARALLEL TO RAFTERS	3- 16d		SEE TABLE 2308.7.3.1		FACE NAIL
19. RAFTER TO PLT.	3- 8d		3- 16d		TOENAIL[C]
20. 1" DIA. BRACE TO EZ. STUD & PLT.	2- 8d		2- 10d		FACE NAIL
21. 1X8 SHT'G. TO EA. BRG.	3- 8d		3- 10d		FACE NAIL
22. WIDER THAN 1X8 SHT'G TO BRG.	3- 8d		3- 10d		FACE NAIL
23. BUILT-UP CORNER STUDS	16d	@ 24"			FACE NAIL
24. BUILT-UP GIRDERS & BEAMS	20d	@ 32"	10d	@ 24"	FACE NAIL @ TOP & BTM. STAGR. ON OPP. SIDES
	2- 20d		N/A N/A	N/A	FACE NAIL @ ENDS & @ EA. SPLICE
25. 2" PLANKS	2- 16d		N/A N/A	N/A	@ EA. BRG.
26. COLLAR TIE TO RAFTER	3- 10d		4- 10d		FACE NAIL
27. JACK RAFTER TO HIP	3- 10d		4- 16d		TOENAIL
28. ROOF RAFTER TO 2X RIDGE	2- 16d		3- 10d		END NAIL
29. JOIST TO BAND JOIST	3- 16d		4- 10d		END NAIL
30. 4X BLOCKING TO STUDS	1- A34		N/A N/A	N/A	FACE NAIL
OR	4- 8d		4- 10d		TOENAIL

A.) NAILS SPACED AT 6 INCHES AT INTERMEDIATE SUPPORTS WHERE SPANS ARE 48 INCHES OR MORE. FOR NAILING OF WOOD STRUCTURAL PANEL AND PARTICLEBOARD DIAPGHRAMS AND SHEAR WALLS, REFER TO SECTION 2305 NAILS. FOR WALL SHEATHING ARE PERMITTED TO BE COMMON, BOX OR CASING.
B.)SPACING SHALL BE 6 INCHES ON CENTER ON THE EDGES AND 12 INCHES ON CENTER AT INTERMEDIATE SUPPORTS FOR NONSTRUCTURAL APPLICATIONS. PANEL SUPPORTS AT 16 INCHES (20 INCHES IF STRENGTH AXIS IN THE LONG DIRECTION OF THE PANEL, UNLESS OTHERWISE MARKED).
C.) WHERE A RAFTER IS FASTENED TO AN ADJACENT PARALLEL CEILING JOIST IN ACCORDANCE WITH THIS SCHEDULE AND THE CEILING JOIST IS FASTENED TO THE TOP PLATE IN ACCORDANCE WITH THIS SCHEDULE, THE NUMBER OF TOENAILS IN THE RAFTER SHALL BE PERMITTED TO BE REDUCED BY ONE NAIL.
D.) RSRS-01 IS A ROOF SHEATHING RING SHANK NAIL MEETING THE SPECIFICATIONS IN ASTM F1667

DECIMAL AND GAUGE CHARTS

FRACTION	DECIMAL
1/32	0.03125
1/16	0.0625
3/32	0.09375
1/8	0.125
5/32	0.15625
3/16	0.1875
7/32	0.21875
1/4	0.25
9/32	0.28125
5/16	0.3125
11/32	0.34375
3/8	0.375
13/32	0.40625
7/16	0.4375
15/32	0.46875
1/2	0.5
17/32	0.53125
9/16	0.5625
19/32	0.59375
5/8	0.625
21/32	0.65625
11/16	0.6875
23/32	0.71875
3/4	0.75
25/32	0.78125
13/16	0.8125
27/32	0.84375
7/8	0.875
29/32	0.90625
15/16	0.9375
31/32	0.96875
1	1

PENNY	GAUGE	DEC.
60d, 40d	4	0.2242
30d	5	0.2092
20d	6	0.1943
	7	0.1793
16d	8	0.1644
12d, 10d	9	0.1495
8d	10	0.1345
6d	11	0.1196

12" = 1'-0"
STRUCTURAL NOTES

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ◆ CONSULTING ◆ PROJECT
11777 BERNARDO PLAZA COURT, SUITE 105
SAN DIEGO, CA 92128

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

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

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

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

Revision Schedule

#	Description	Date

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

PROJECT TITLE
PC 2022 CBC: 24' x 60' EXPANDABLE TO 72' x 60'

SHEET TITLE
STRUCTURAL GEN NOTES

PROJECT NUMBER
22088

DRAWN BY
rMc/SM

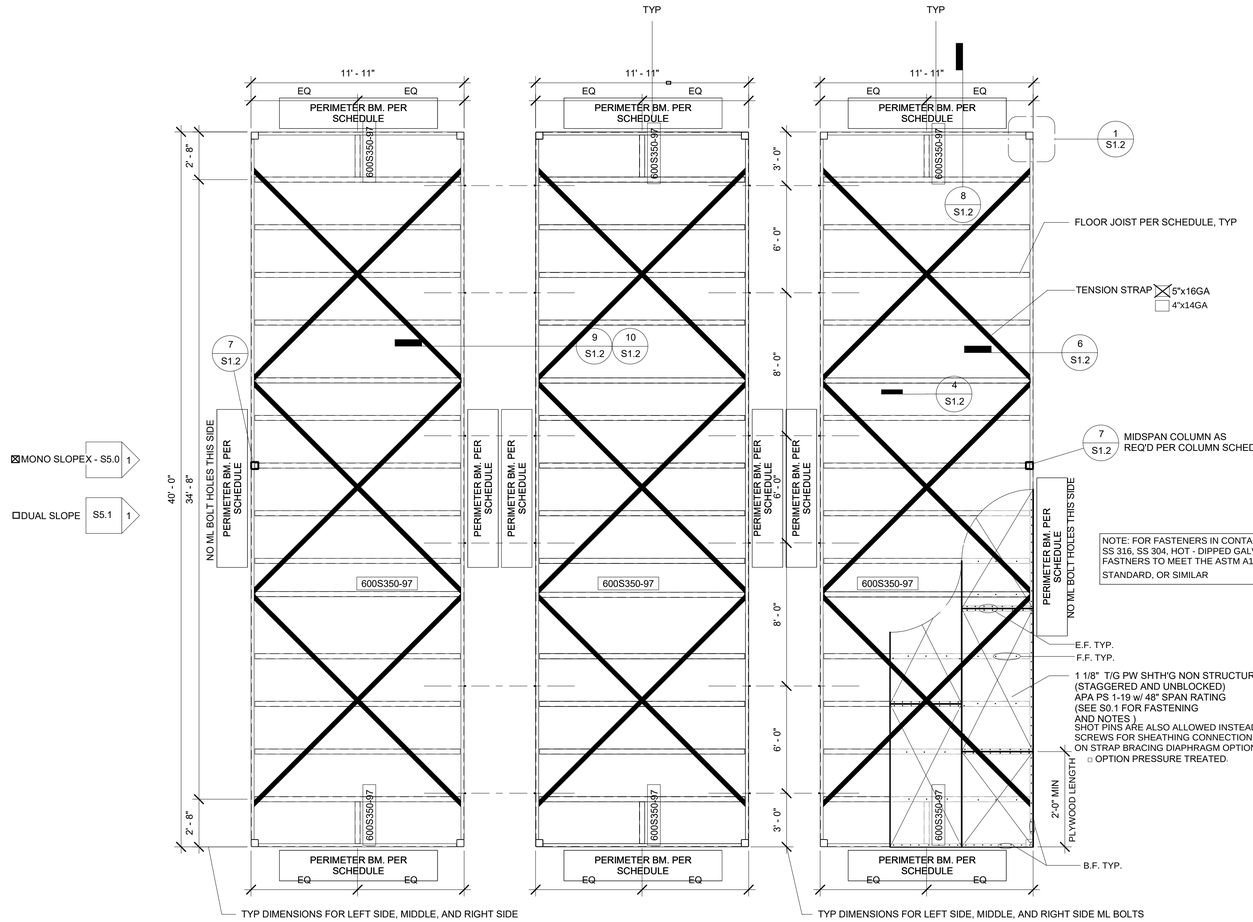
CHECKED BY
JA/RT

DATE

SHEET NO.
S0.1

SHEET OF

C:\Users\User\Documents\20133 - Aries, 24x60 PC -High Seismic MainFile_detached_CESAR24D63.rvt
6/16/2021 7:18:48 AM



1 *1/4" = 1'-0"*
WD Shth'g Flr Framing Plan (50+15 PSF) CROSS-STRAP OPT.

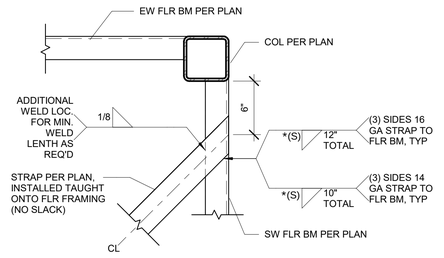
Floor Joist Schedule		
FLL	JOIST	SPACING
⊠ 50+15 PSF[1]	600S350-97	32" O.C.
□ 100 PSF[1]	600S350-97	24" O.C.
□ 150 PSF[2]	600S350-97	16" O.C.

FOOTNOTES:
1. APPLICABLE FOR OCCUPANCY E
2. APPLICABLE FOR OCCUPANCY E &B

Perimeter Floor Beam Schedule			
HT	No Plaster Walls	Plaster Walls	w/ Parapet, 18" max
⊠ 9'	C10x15.3	C10x15.3	C10x15.3
□ 10'	C10x15.3	C10x15.3	C10x15.3

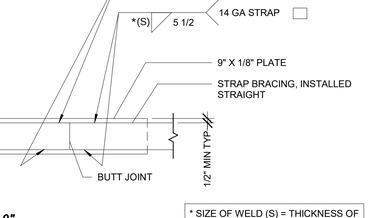
NOTE: SPLICE AT FLOOR BEAM PERMITTED PER 3/S1.2

Column Schedule			
HT	No Plaster Walls	Plaster Walls	w/ Parapet, 18" max
⊠ 9'	5x5x1/4	5x5x1/4	6x6X1/4
□ 10'	6x6x1/4	6x6x1/4	6x6X1/4
			3x3X3/16 mid-span column



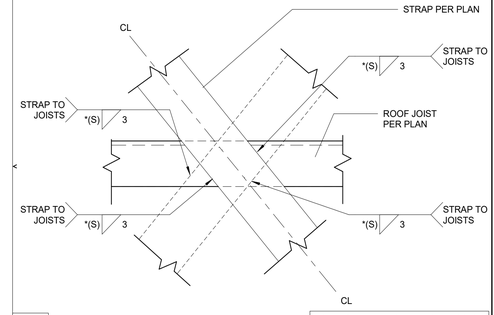
2 *1 1/2" = 1'-0"*
FLOOR BRACING STRAP @ ENDWALL

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



3 *1 1/2" = 1'-0"*
FLOOR STRAP BRACING @ SIDEWALL

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



4 *3" = 1'-0"*
STRAP TO JOIST CONNECTION

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

5 *1 1/2" = 1'-0"*
STRAP SPLICE DETAIL

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

NOTE: ALL PANEL EDGES SHLL BE ATTACHED TO FRAMING MEMBERS OR BLOCKING. WHERE USED AS BLOCKING, FLAT STRAPPING SHALL BE A MINIMUM THICKNESS OF 33MILS WITH A MINIMUM WIDTH OF 1.5 INCHES AND SHALL BE INSTALLED BELOW SHEATHING. FOR OTHER THAN STEEL SHEATHING, THE SCREWS SHALL BE INSTALLED THROUGH THE SHEATHING TO THE BLOCKING.

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER MANNY D. FRANCISCO C-53380 03/31/24 STRUCTURAL STATE OF CALIFORNIA
RST#22088
02/16/24

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

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

REVISIONS

#	Description	BY

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

EL DORADO 160# SNOW LOAD

SHEET TITLE
WD SHTH'G FLR FRAMING PLAN CROSS-STRAP OPT.
50 + 15 PSF
100 PSF
150 PSF

PROJECT NUMBER
22073

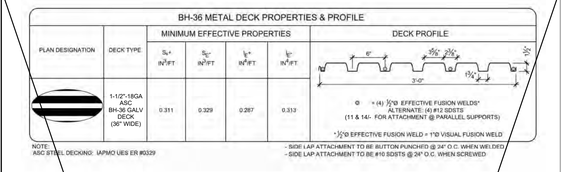
DRAWN BY
Author

CHECKED BY
Checker

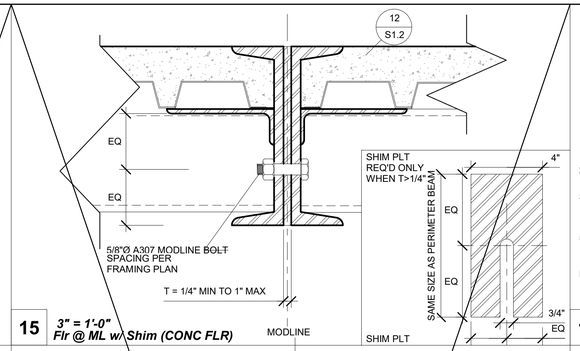
DATE
06/07/2021

SHEET NO.
S1.0.4
SHEET OF SHEETS

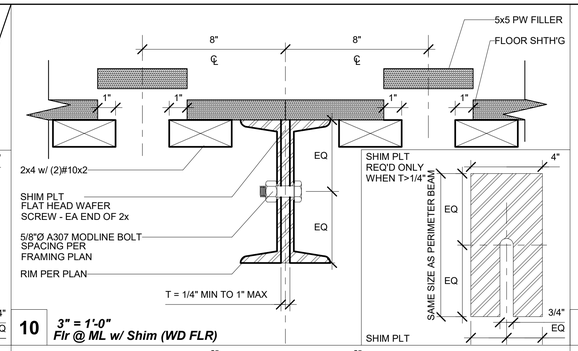
6/2/2022 9:46:43 AM \\192.168.10.2\Clients\2022\22073 - Class Leasing, El Dorado Cty OE - S Lake Tahoe MS 160lb Snow load\#Main Files\REVIT\RST#22073 - Class Leasing, PC 24x40 to 120x40 HS_Eldorado Cty OE - 160# Snow Load_MainFile_detached.rvt



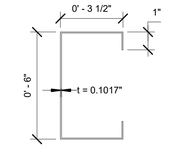
20 *1 1/2" = 1'-0"*
BH-36 Metal Deck Properties & Profile



15 *3" = 1'-0"*
Flr @ ML w\ Shim (CONC FLR)



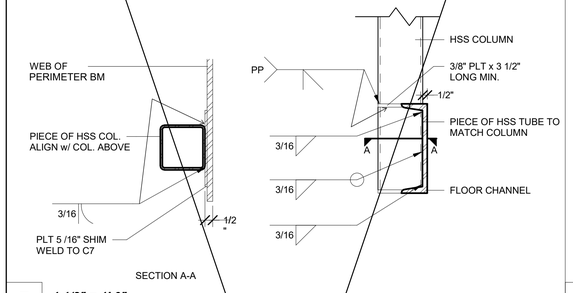
10 *3" = 1'-0"*
Flr @ ML w/ Shim (WD FLR)



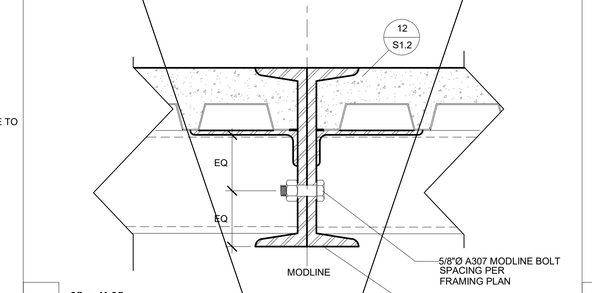
CHANNEL JOIST SECTION PROPERTIES
A-1011, GRADE 33

t	= 0.1017"
S_x	= 2.822 IN^3
I_x	= 8.631 IN^4
F_y	= 33 KSI

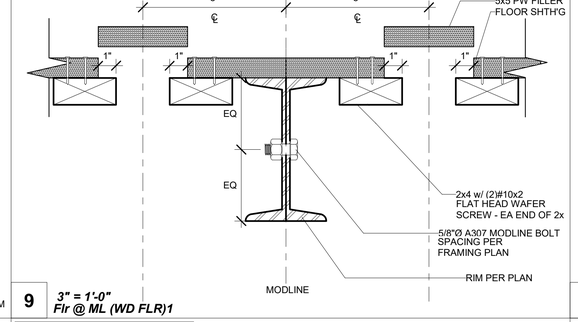
5 *3" = 1'-0"*
Channel Joist Section Properties (600S350-97)



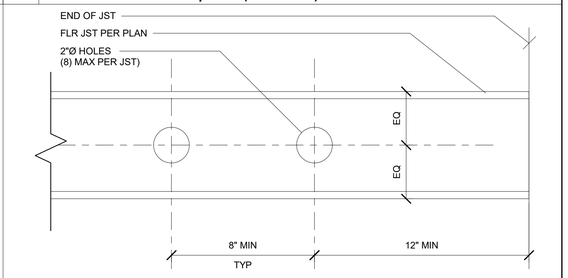
7 *1 1/2" = 1'-0"*
Mid-Span Column Connection



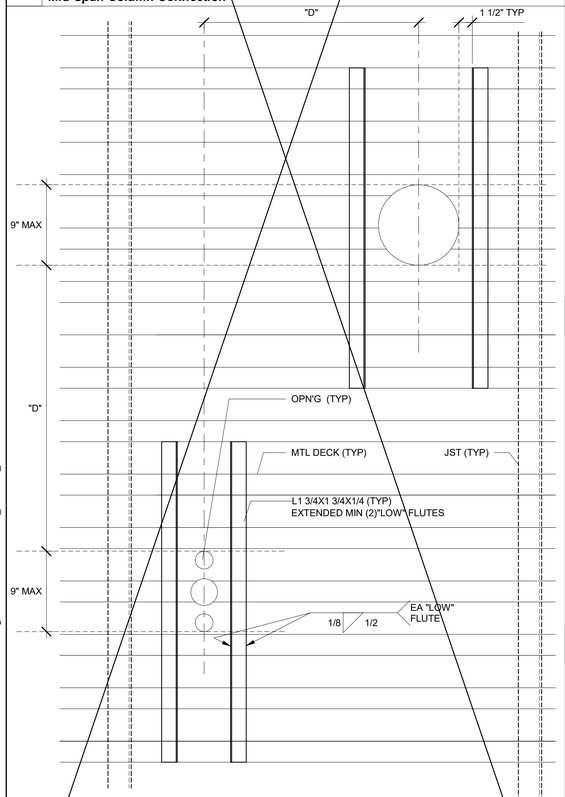
14 *3" = 1'-0"*
Flr @ ML (CONC FLR)1



9 *3" = 1'-0"*
Flr @ ML (WD FLR)1



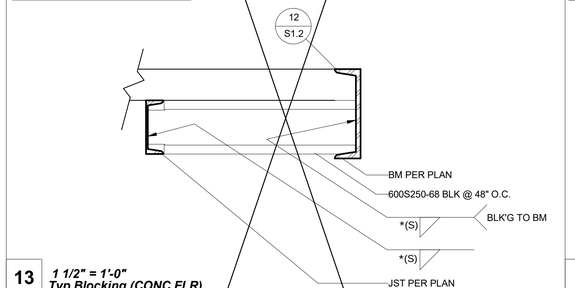
4 *3" = 1'-0"*
Elevation - Allowable Jst Holes



1. THIS DETAIL IS FOR USE ONLY FOR OPENINGS OR OPENING GROUPS THAT ARE 0'-9" OR SMALLER.
2. OPENINGS 2"Ø OR LESS NOT OCCURING IN THE LOWER FLUTE DO NOT REQUIRE REINFORCING AND MAY BE CORED THRU THE CONCRETE.
3. IF "D" IS LESS THAN 32" THEN THE GROUP OF OPENINGS MUST BE BLOCKED OUT WITH ADDITIONAL FRAMING.
4. PRIOR TO CONCRETE POUR, BLOCK OUT THE OPENINGS. AFTER THE CONCRETE HAS BEEN CURED THE DECK MAY BE CUT.

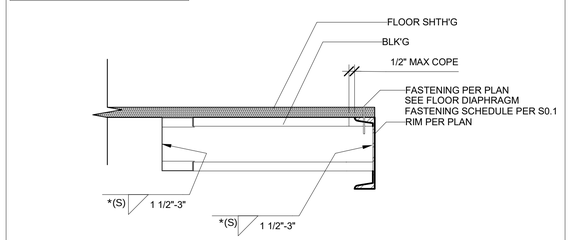
16 *1 1/2" = 1'-0"*
Typ Deck Penetrations (CONC FLR)

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

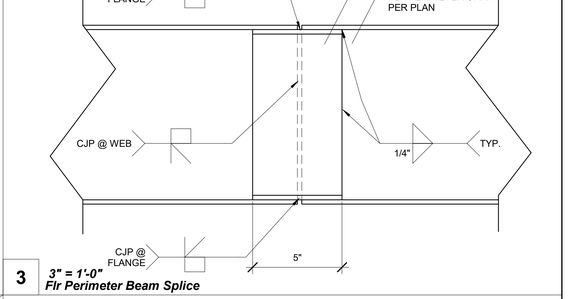


13 *1 1/2" = 1'-0"*
Typ Blocking (CONC FLR)

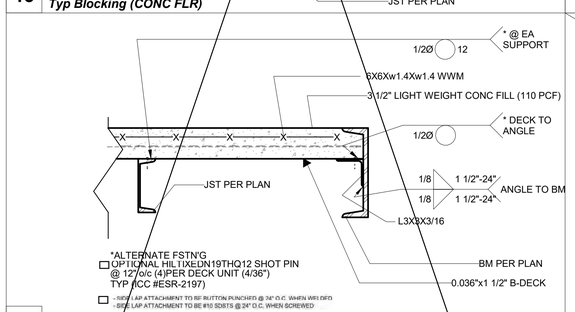
* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



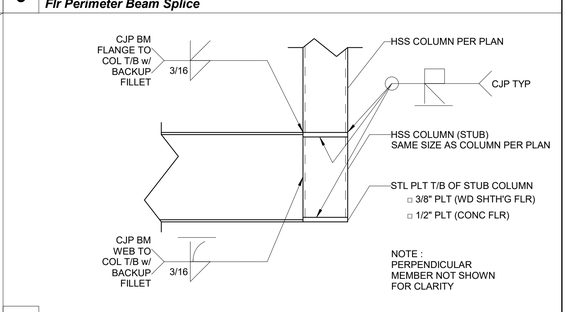
8 *1 1/2" = 1'-0"*
Typ Blk'g Connection @ Rim (WD FLR)



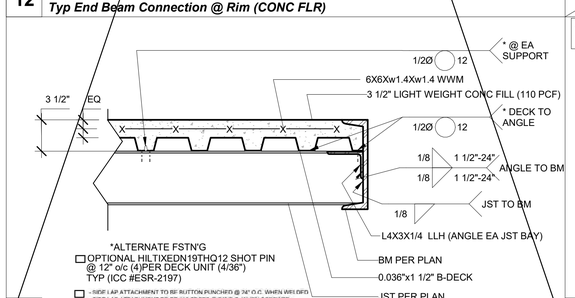
3 *3" = 1'-0"*
Flr Perimeter Beam Splice



12 *1 1/2" = 1'-0"*
Typ End Beam Connection @ Rim (CONC FLR)

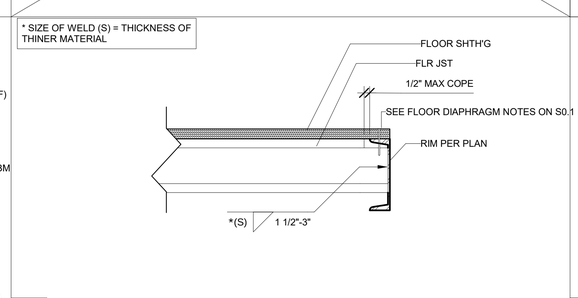


2 *1 1/2" = 1'-0"*
Typ Flr Bm to Column Connection

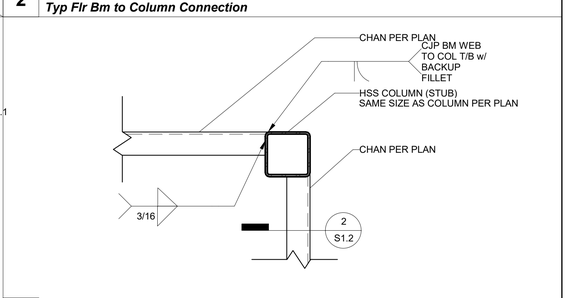


11 *1 1/2" = 1'-0"*
Typ Side Beam Connection @ Rim (CONC FLR)

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



6 *1 1/2" = 1'-0"*
Typ Joist Connection @ Rim (WD FLR)



1 *1 1/2" = 1'-0"*
Typ Corner Connection

C:\Users\UserDocuments\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CES&R24D63.rvt
6/8/2021 1:52:34 AM

PROJECT SPECIFIC STATE AGENCY APPROVAL
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. C-33380
03/31/24
CIVIL
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

ORIGINAL PC STATE AGENCY APPROVAL
APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-123058 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☑
DATE: 02/20/2024

Revision Schedule

#	Description	Date

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

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

SHEET TITLE
STRUCTURAL DETAILS (FLOOR)

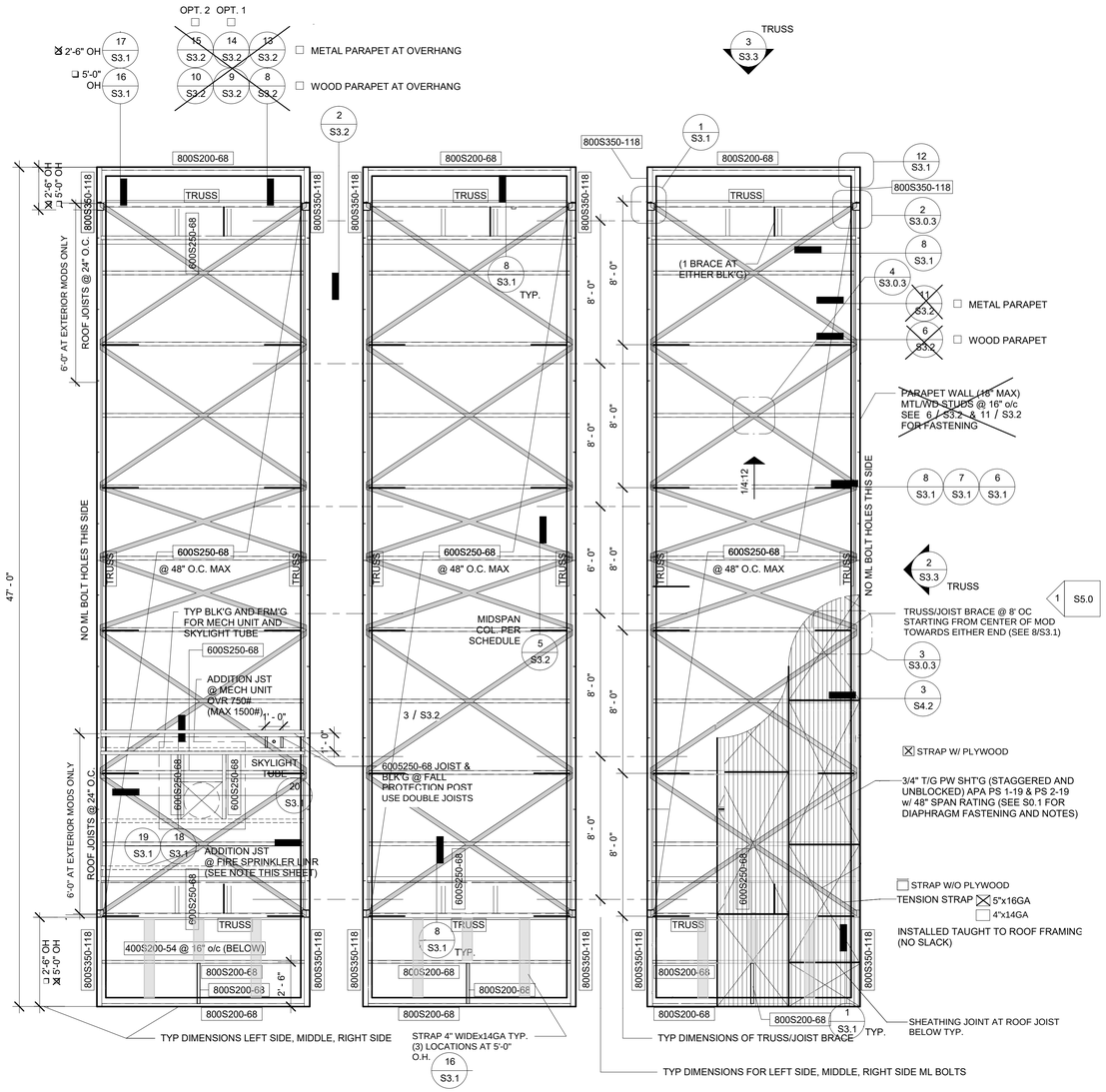
PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
S1.2
SHEET OF



NOTES:

FIRE SPRINKLER
ADDITIONAL ROOF JOIST FOR FIRE SPRINKLER LINE AS REQ'D
LOCATION OF FIRE SPRINKLER AND ADDITIONAL JOIST TO BE DETERMINED

PV REQUIREMENTS:

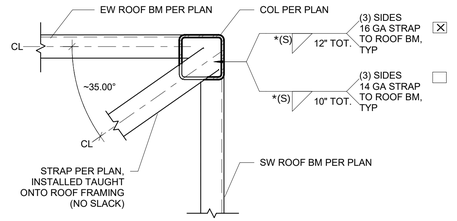
1.7 REQUIRED PHOTOVOLTAIC (PV) SYSTEMS

WHEN A PV SYSTEM IS REQUIRED BY THE CALIFORNIA ENERGY CODE FOR A PC BUILDING CONFIGURATION, THE PV SYSTEM DESIGN SHALL BE IN ACCORDANCE WITH IR 16-8: SOLAR PHOTOVOLTAIC AND THERMAL SYSTEMS REVIEW AND APPROVAL REQUIREMENTS. THE PC DESIGN SHALL SHOW THAT THE STRUCTURE CAN SUPPORT THE REQUIRED SYSTEM LOADS WHEN THE BUILDING IS SUPPORTING THE PV SYSTEM. IF THE PV SYSTEM IS REQUIRED IT WILL BE SUBMITTED WITH THE SITE SPECIFIC APPLICATION

8.3 REQUIRED PHOTOVOLTAIC (PV) SYSTEMS ENERGY REVIEW

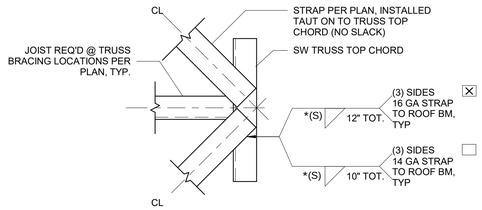
WHEN A PV SYSTEM IS REQUIRED PER THE CALIFORNIA ENERGY CODE FOR A PC CONFIGURATION, THE SYSTEM POWER REQUIREMENTS SHALLL BE CLEARLY DELINEATED ON THE PC PLANS IN THE DESIGN INFORMATION SECTION FOR THE PC. SEE SECTION 1.7 ABOVE FOR DESIGN AND SUBMITTAL REQUIREMENTS OF THE PV SYSTEM.

1 *1/4" = 1'-0"*
Mono Roof Framing Plan



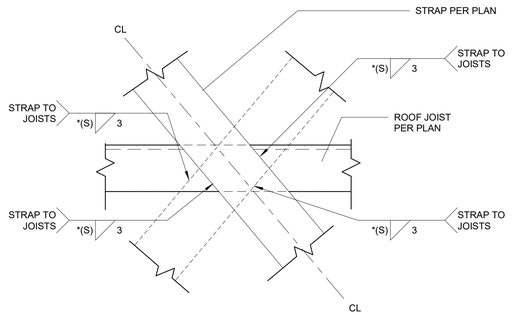
2 *1 1/2" = 1'-0"*
ROOF BRACING STRAP @ ENDWALL

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



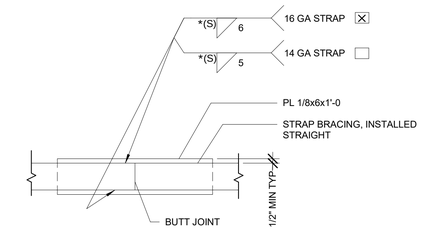
3 *1 1/2" = 1'-0"*
ROOF STRAP BRACING @ SIDEWALL

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



4 *3" = 1'-0"*
STRAP TO JOIST CONNECTION (ROOF)

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL



5 *1 1/2" = 1'-0"*
STRAP SPLICE DETAIL (ROOF)

* SIZE OF WELD (S) = THICKNESS OF THINER MATERIAL

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
C 53380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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

CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) ALTERNATE DOCUMENT

CODE: 2019 CBC

A separate project application for construction is required

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

SHEET TITLE
MONO SLOPE ROOF FRM'G PLAN CROSS-STRAP OPT.

PROJECT NUMBER
22088

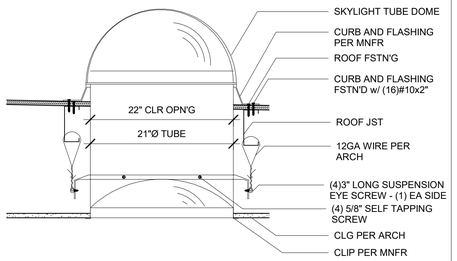
DRAWN BY
MJM

CHECKED BY
RH/rMc

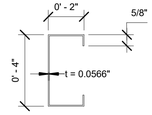
DATE
06/07/2021

SHEET NO.
S3.0.3
SHEET OF

10/25/2022 3:45:46 PM M:\2022\22088 - Class Leasing, 24x40 to 120x40 High Seismic 2022 PC\REVIT\source file detached 22095 for S3.0.3 and S3.0.4\source file detached 22095 for S3.0.3 and S3.0.4.rvt



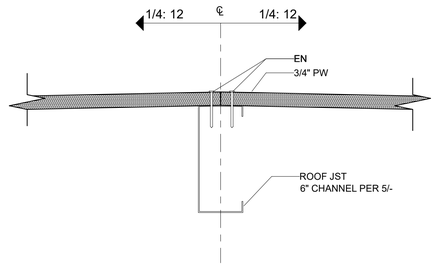
20 *1" = 1'-0"*
SKYLIGHT TUBE



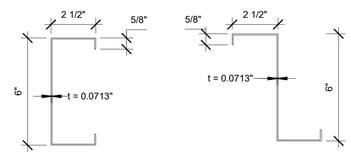
OVERHANG CHANNEL SECTION PROPERTIES
400S200-54
A-1003, GRADE 33, TYPE H

t	= 0.0566"
S_x	= 0.623 IN^3
I_x	= 1.292 IN^4
F_y	= 33 KSI

15 *3" = 1'-0"*
Soffit Channel Section Properties



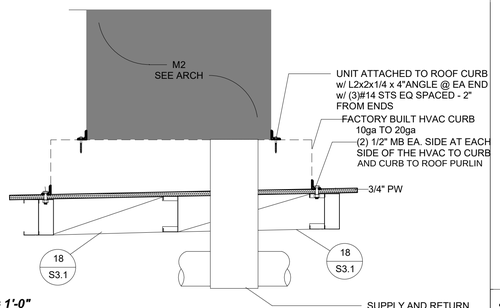
10 *3" = 1'-0"*
Roof @ Ridge



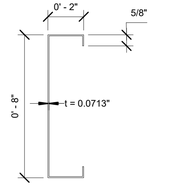
CHANNEL JOIST SECTION PROPERTIES
600S250-68 OR Z6X2.5X5/8-14GA
A-1003, GRADE 33, TYPE H

t	= 0.0713"
S_x	= 1.508 IN^3
I_x	= 4.727 IN^4
F_y	= 33 KSI

5 *3" = 1'-0"*
Roof Channel Joist Section Properites



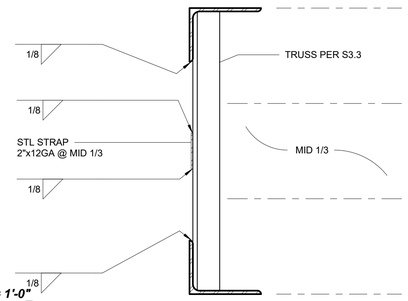
19 *1" = 1'-0"*
HVAC



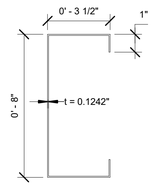
OVERHANG CHANNEL SECTION PROPERTIES
800S200-68
A-1003, GRADE 33, TYPE H

t	= 0.0713"
S_x	= 2.035 IN^3
I_x	= 8.140 IN^4
F_y	= 33 KSI

14 *3" = 1'-0"*
Fascia Channel Section Properties



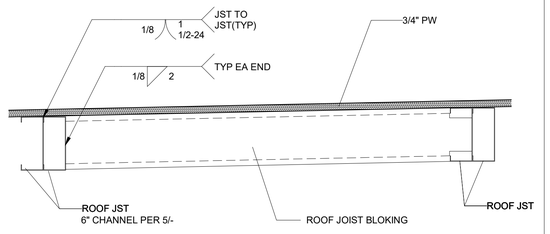
9 *3" = 1'-0"*
Strap to Truss



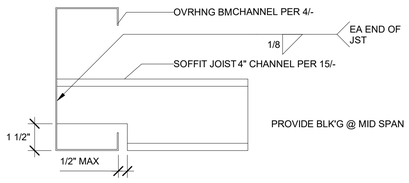
OVERHANG CHANNEL SECTION PROPERTIES
800S350-118
A-1003, GRADE 33, TYPE H

t	= 0.1242"
S_x	= 5.010 IN^3
I_x	= 20.041 IN
F_y	= 33 KSI

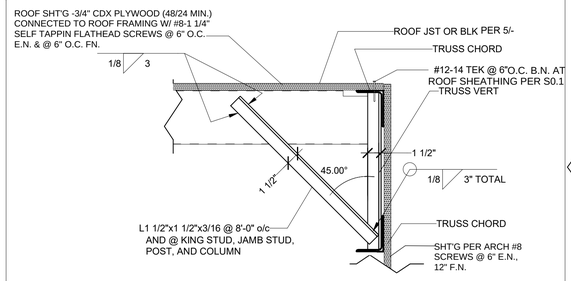
4 *3" = 1'-0"*
Overhang Beam Section Properites



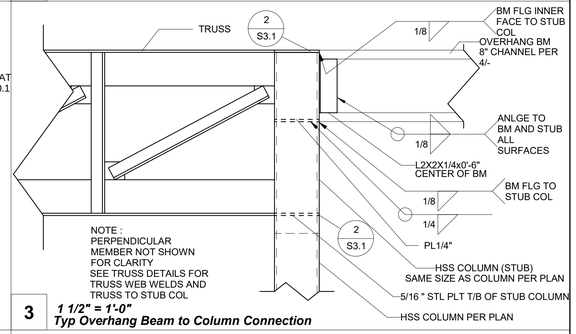
18 *1 1/2" = 1'-0"*
HVAC Frmg



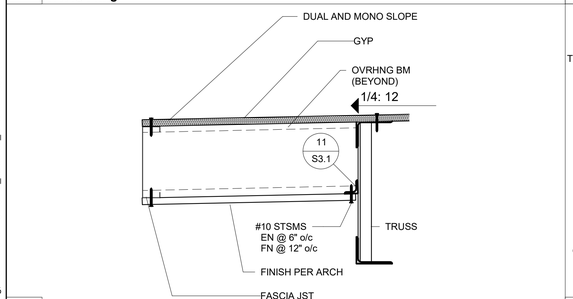
13 *3" = 1'-0"*
Typ Soffit Joist Connection



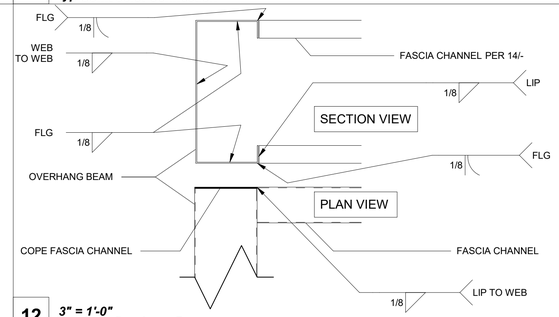
8 *1 1/2" = 1'-0"*
Typ Roof Jst Bracing



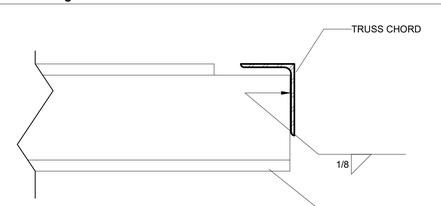
3 *1 1/2" = 1'-0"*
Typ Overhang Beam to Column Connection



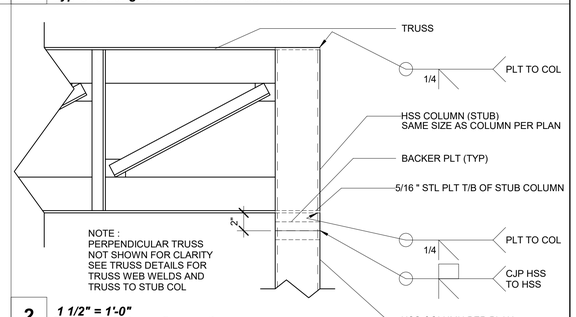
17 *1 1/2" = 1'-0"*
2'-6" Overhang @ Endwall



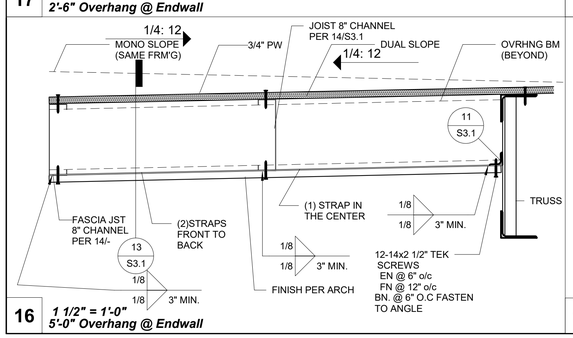
12 *3" = 1'-0"*
Fascia to Overhang Beam



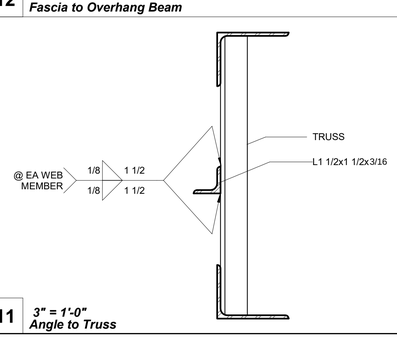
7 *3" = 1'-0"*
Typ Roof Joist Connection @ Truss Chord



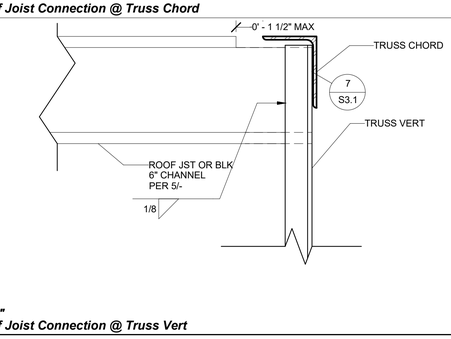
2 *1 1/2" = 1'-0"*
Typ Stub Column Connection



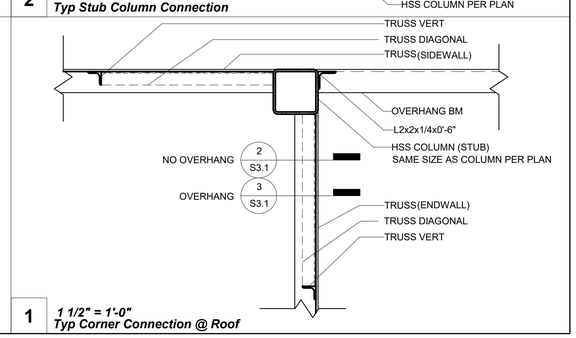
16 *1 1/2" = 1'-0"*
5'-0" Overhang @ Endwall



11 *3" = 1'-0"*
Angle to Truss



6 *3" = 1'-0"*
Typ Roof Joist Connection @ Truss Vert



1 *1 1/2" = 1'-0"*
Typ Corner Connection @ Roof

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
STRUCTURAL DETAILS (ROOF)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

SHEET NO.
S3.1

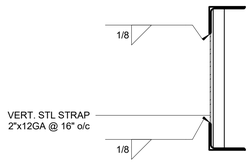
SHEET OF

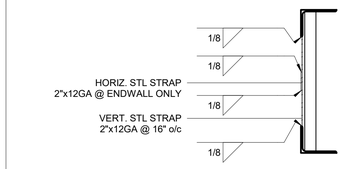
C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt
6/8/2021 1:52:44 AM

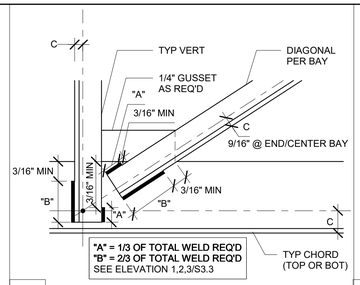
TABLE A-SECTION CENTROID	
SECTION	CENTROID C
L4X3 (LLV)	1 1/4"
L4X3 (LLH)	3/4"
L2X2X3/16	9/16"
L1.5X1.5X3/16	7/16"

NOTE: SEE DETAIL 8 / S3.3

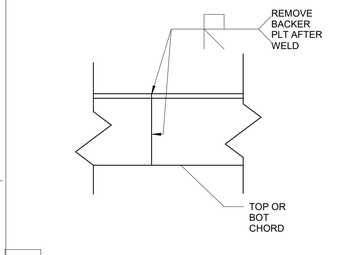
12 *1/2" = 1'-0"*
TABLE A - SECTION CENTROID



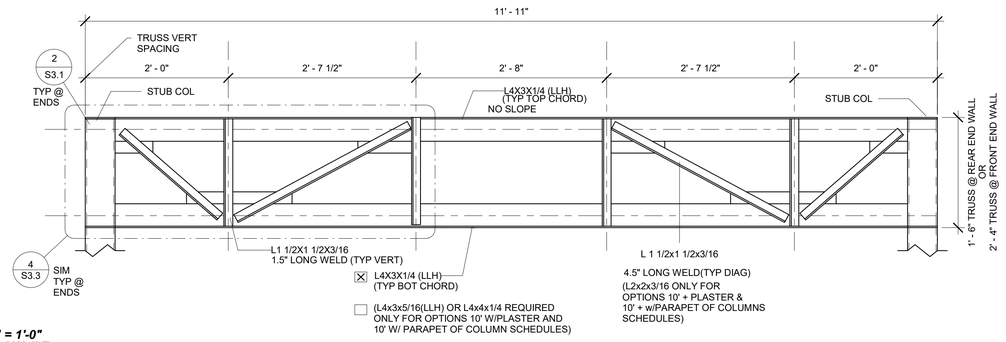




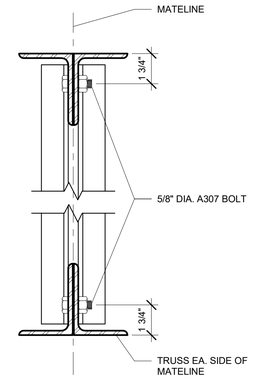
8 *3" = 1'-0"*
Typ Fillet Weld Lengths



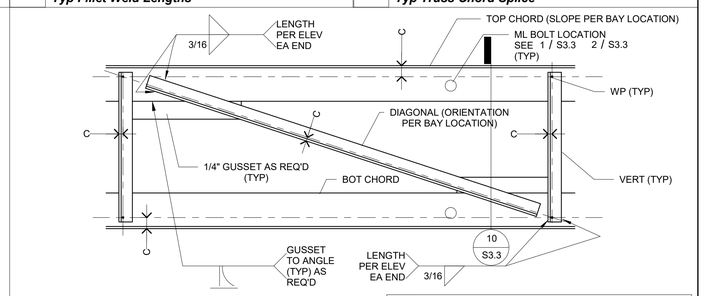
9 *3" = 1'-0"*
Typ Truss Chord Splice



3 *1" = 1'-0"*
End Wall Truss

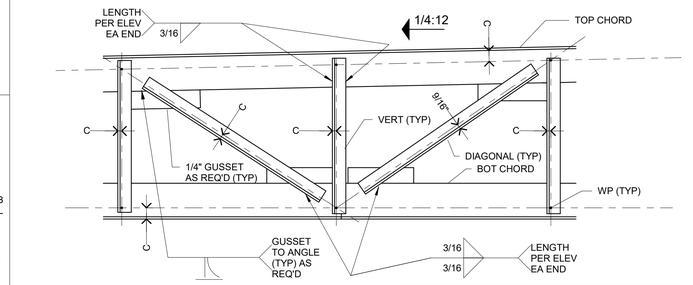


10 *3" = 1'-0"*
TRUSS CONN. @ MATELINE



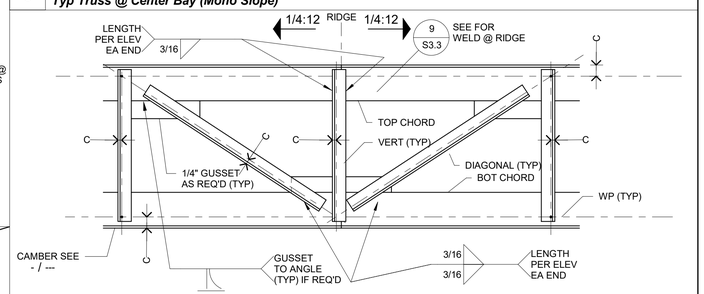
NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

7 *1 1/2" = 1'-0"*
Typ Truss Bay



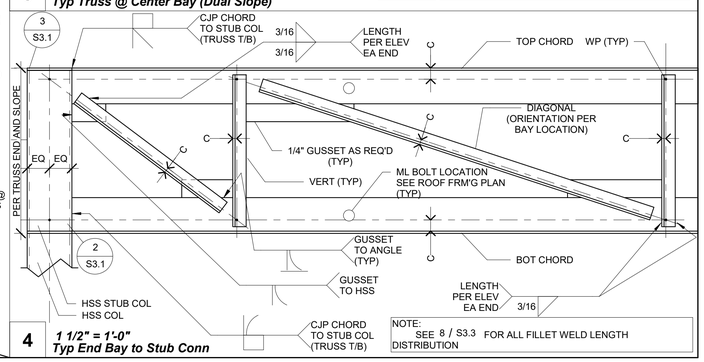
NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

6 *1 1/2" = 1'-0"*
Typ Truss @ Center Bay (Mono Slope)



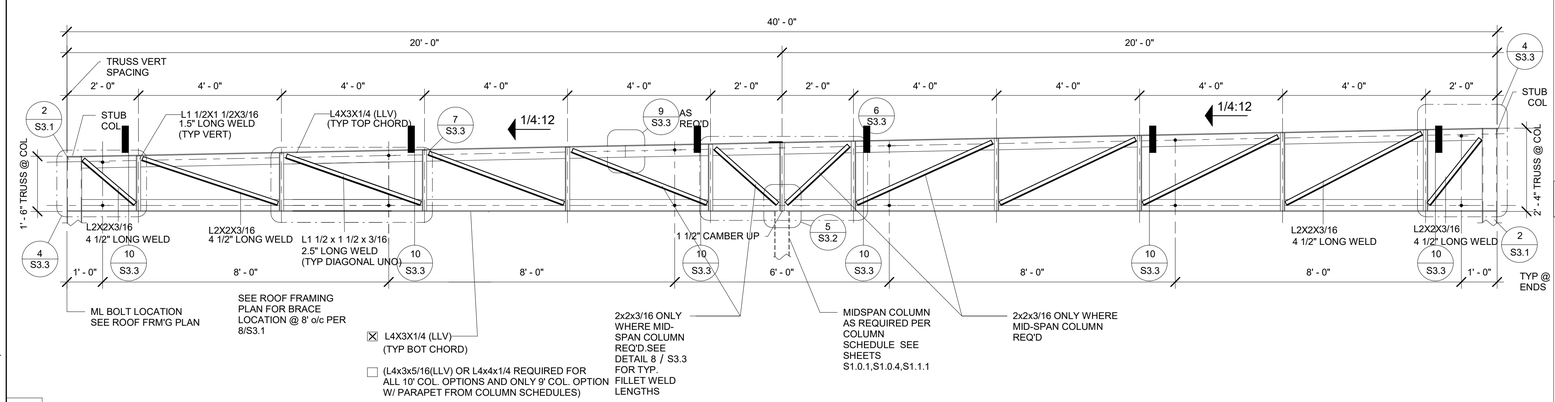
NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

5 *1 1/2" = 1'-0"*
Typ Truss @ Center Bay (Dual Slope)

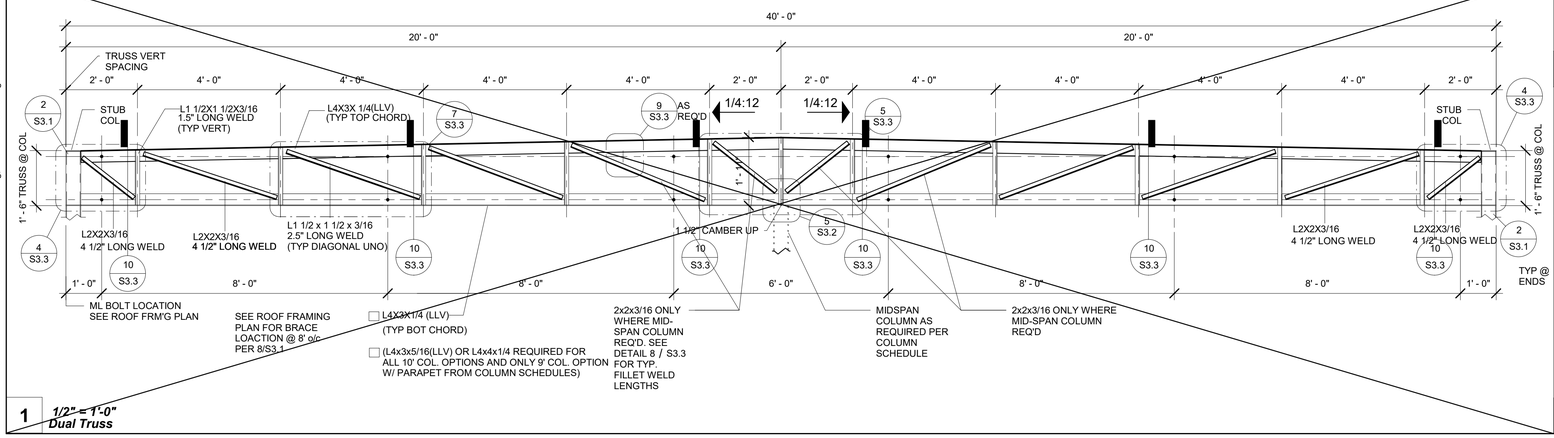


NOTE:
SEE 8 / S3.3 FOR ALL FILLET WELD LENGTH DISTRIBUTION

4 *1 1/2" = 1'-0"*
Typ End Bay to Stub Conn



2 *1/2" = 1'-0"*
Mono Truss



1 *1/2" = 1'-0"*
Dual Truss

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

CODE: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

ROOF PERIMETER TRUSS

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

RH/RT

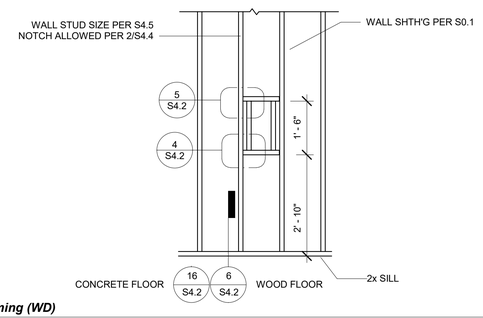
DATE

SHEET NO.

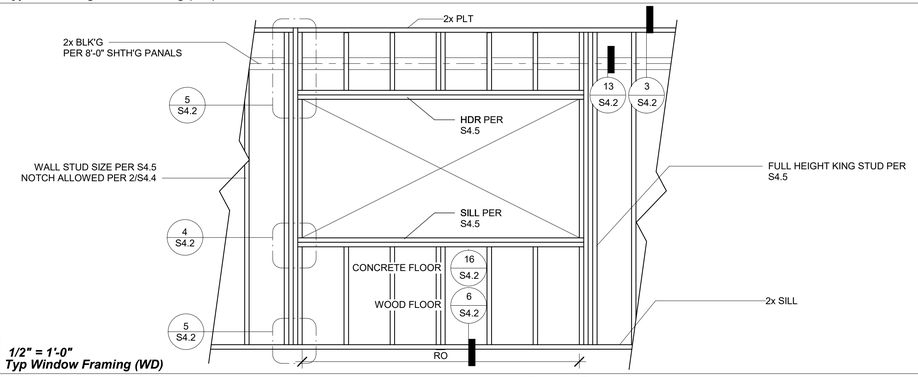
S3.3

SHEET OF

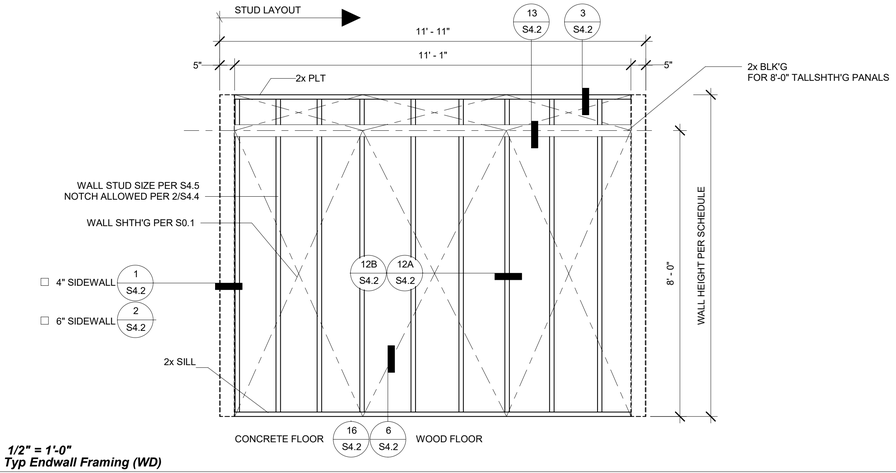
9/22/2022 11:10:42 AM M:\2022\22088 - Class Leasing, 24x40 to 120x40 High Seismic 2022 PC\REVIT\22088- 2022.09.updated S3.3 with truss cross-section detail and call outs- source 20093.rvt



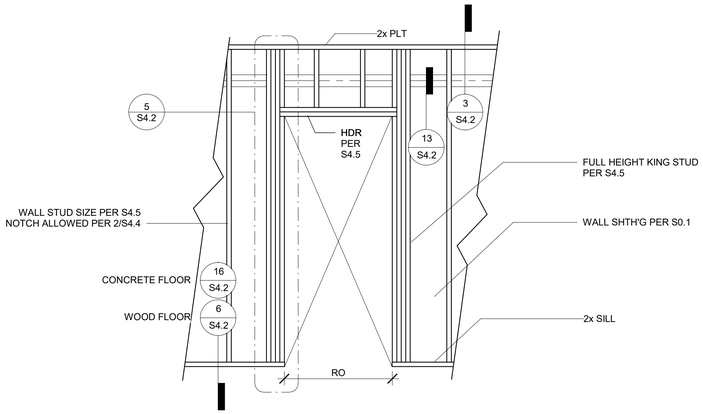
6 *1/2" = 1'-0"*
Typ Fire Extinguisher Framing (WD)



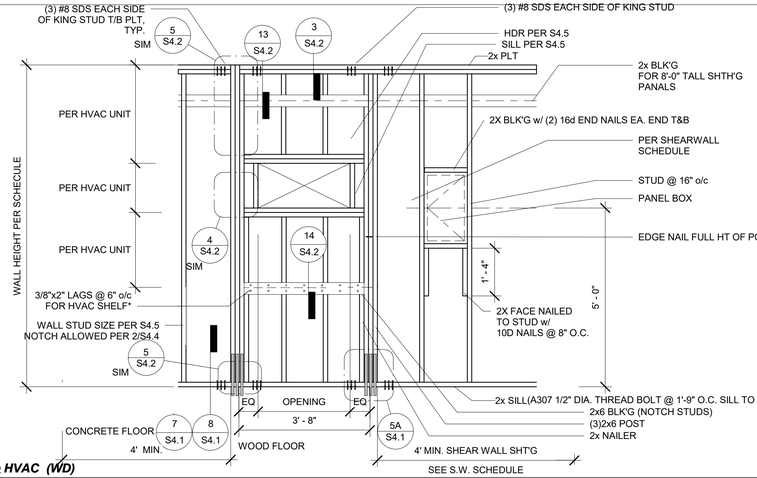
4 *1/2" = 1'-0"*
Typ Window Framing (WD)



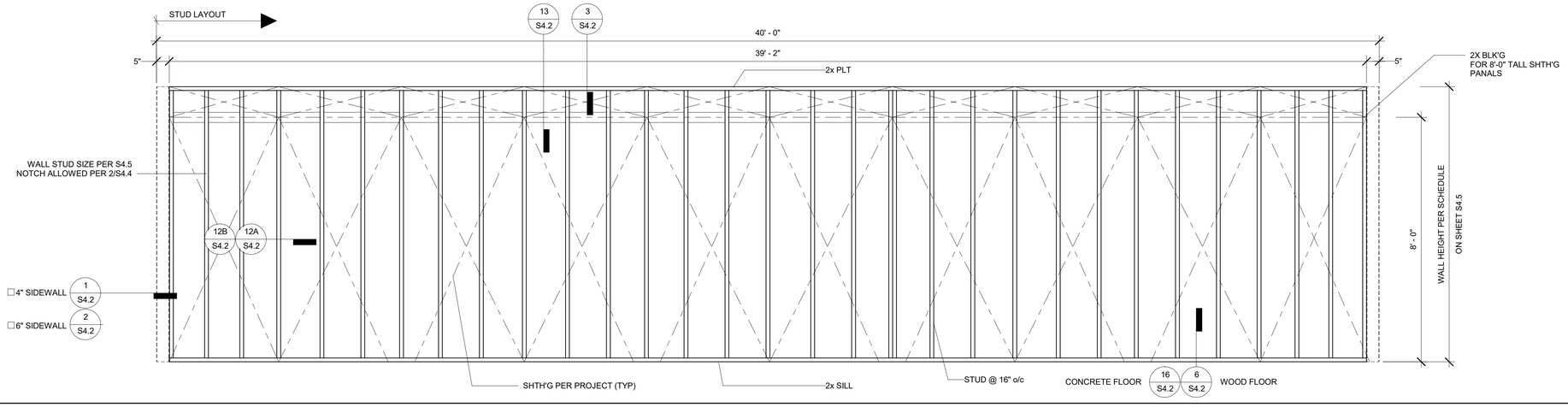
2 *1/2" = 1'-0"*
Typ Endwall Framing (WD)



5 *1/2" = 1'-0"*
Typ Door Framing (WD)



3 *1/2" = 1'-0"*
Typ Endwall Framing @ HVAC (WD)



1 *1/2" = 1'-0"*
Typ Sidewall Framing (WD)

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

WD WALL FRAMING ELEVATIONS

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

JA/RT

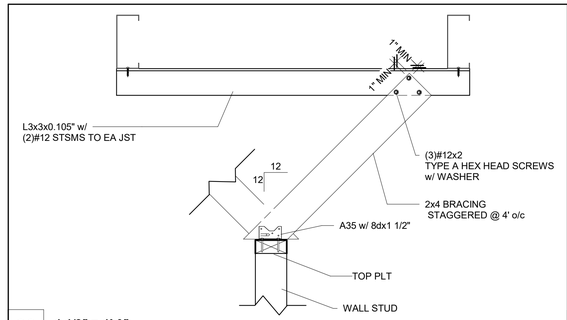
DATE

SHEET NO.

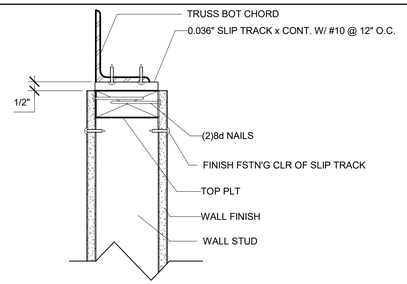
S4.1

SHEET OF

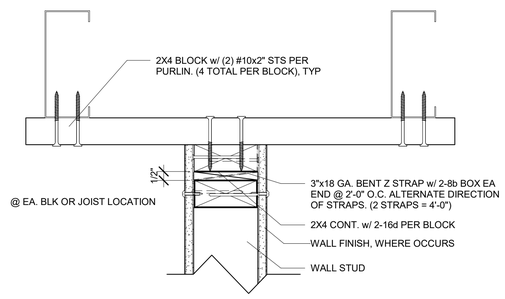
6/8/2021 1:52:57 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CES&R24D63.rvt



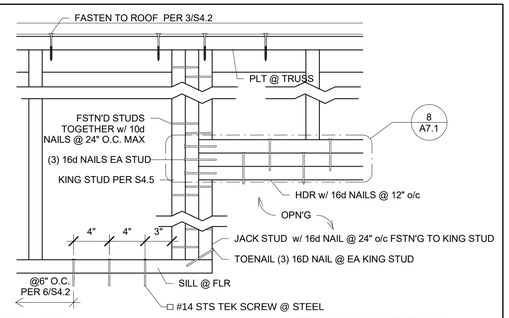
20 *1 1/2" = 1'-0"*
Sections - Interior Partition w/ Brace to Blk'g (WD)



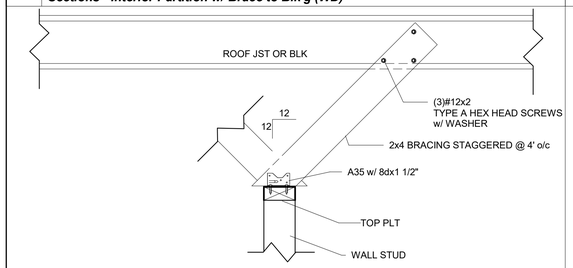
15 *3" = 1'-0"*
Section - Interior Wall Top Plate @ Truss (ML)



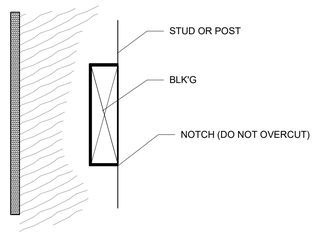
10 *3" = 1'-0"*
Sections - Interior Partition @ Blk'g (WD)



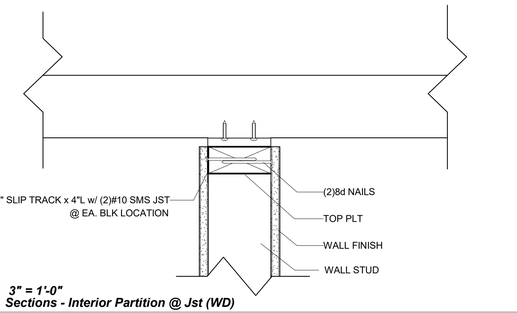
5 *1 1/2" = 1'-0"*
Elevation - Window/Door Hdr and Sill



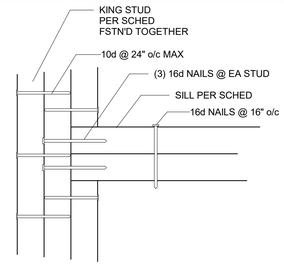
19 *1 1/2" = 1'-0"*
Sections - Interior Partition w/ Brace (WD)



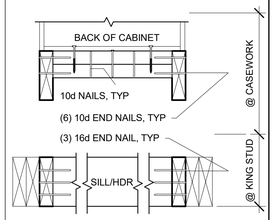
14 *3" = 1'-0"*
Notch Stud @ Blk'g



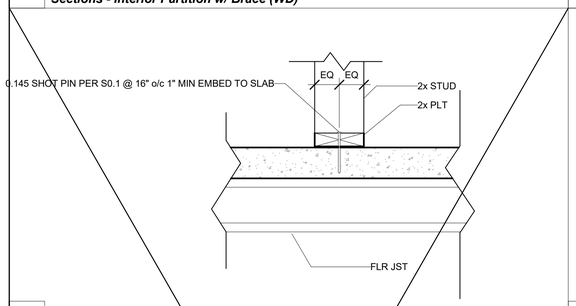
9 *3" = 1'-0"*
Sections - Interior Partition @ Jst (WD)



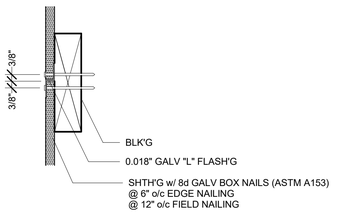
4 *3" = 1'-0"*
Elevation - Ext Wall Sill @ Window



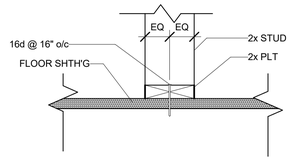
12 *1 1/2" = 1'-0"*
CASEWORK END NAIL PLAN



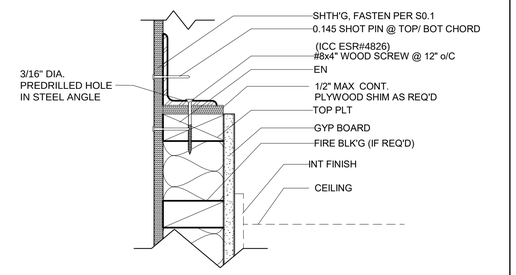
18 *1 1/2" = 1'-0"*
Typ Partition Sill Connection (CONC)



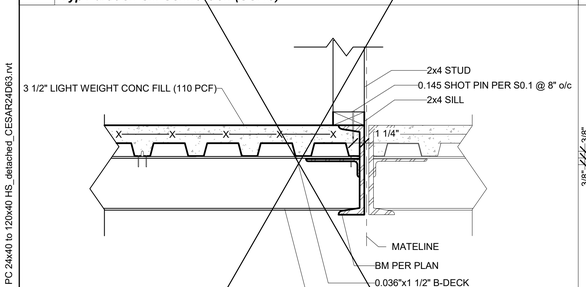
13 *3" = 1'-0"*
Shth'g @ Blk'g



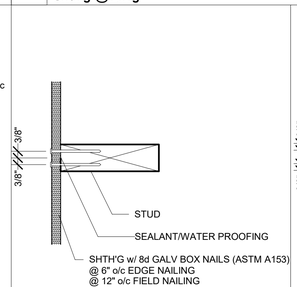
8 *1 1/2" = 1'-0"*
Typ Partition Sill Connection (WD)



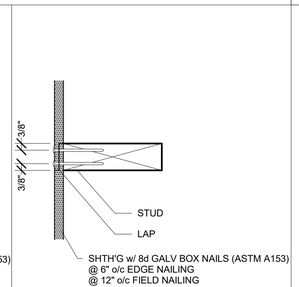
3 *3" = 1'-0"*
Section - Exterior Wall Top Plate @ Truss (WD)



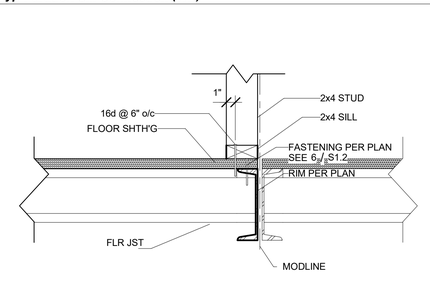
17 *1 1/2" = 1'-0"*
Wall Sill Plt Connection @ Interior Sidewall (CONC)



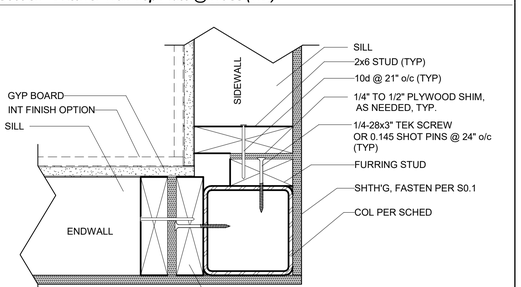
12A *3" = 1'-0"*
Shth'g @ Butt Jnt



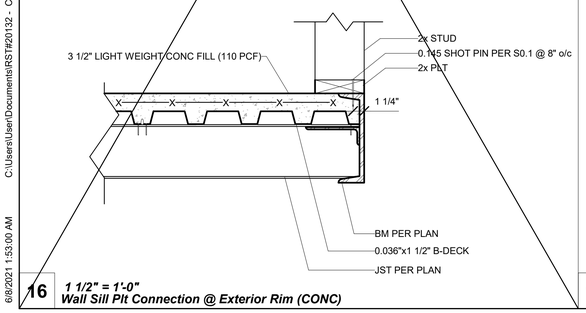
12B *3" = 1'-0"*
Shth'g @ Lap Jnt



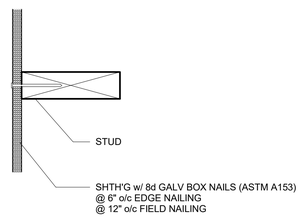
7 *1 1/2" = 1'-0"*
2x4 Wall Sill Connection @ Interior Sidewalls (WD)



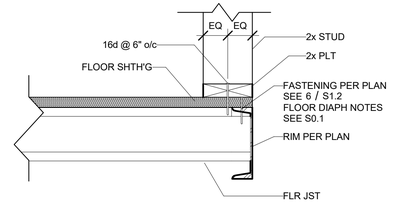
2 *3" = 1'-0"*
2x6 Framing @ Column (WD)



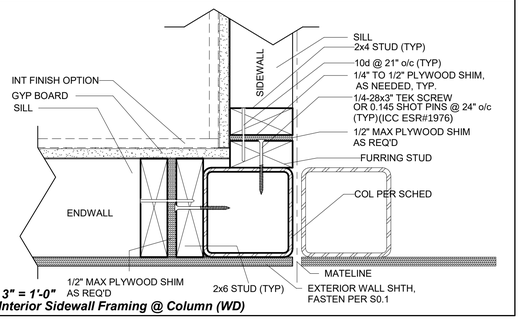
16 *1 1/2" = 1'-0"*
Wall Sill Plt Connection @ Exterior Rim (CONC)



11 *3" = 1'-0"*
Shth'g @ Stud Conn



6 *1 1/2" = 1'-0"*
Wall Sill Connection @ Exterior Rim (WD)



1 *3" = 1'-0"*
Interior Sidewall Framing @ Column (WD)

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6/8/2021 1:53:00 AM

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. 23380
03/31/24
STRUCTURAL
STATE OF CALIFORNIA
RST#22088
02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
WALL DETAILS (WOOD FRAMING)

PROJECT NUMBER
22088

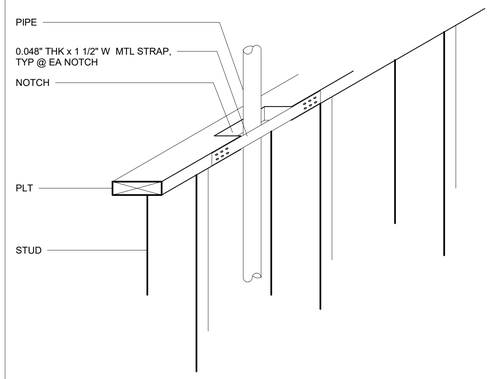
DRAWN BY
rMc/SC

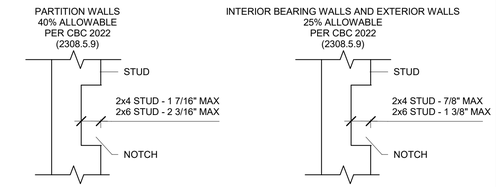
CHECKED BY
JA/RT

DATE

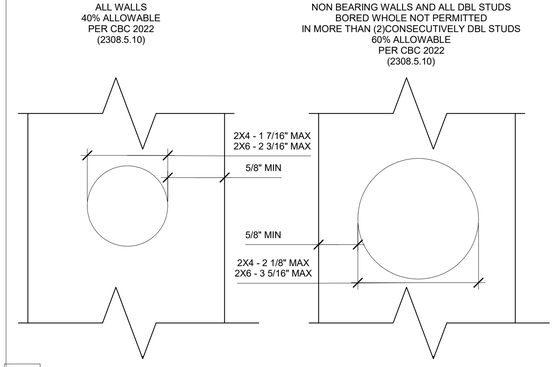
SHEET NO.
S4.2

SHEET OF





2 ***1 1/2" = 1'-0"***
Plt Notch



1 ***6" = 1'-0"***
Stud Penetration

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

RST#22088

02/16/24

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1651Juanita Street, San Jacinto, CA 92583
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ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

TYP FRAMING

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

JA/RT

DATE

SHEET NO.

S4.4

SHEET OF

6/8/2021 1:53:06 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt

2x4 Interior Wall Opening Schedule

COL HEIGHT	OPN'G SIZE	HDR			SILL			FULL HEIGHT KING STUD		
		Lumber	Number	Type	Lumber	Number	Type	Lumber	Number	Type
9FT	3070	HF / SYP	1	#2	-	-	-	HF	2	#2
		DF / SYP	1	#2	-	-	-	DF	2	#2
	4070	HF / SYP	1	#2	-	-	-	HF	2	#2
		DF / SYP	1	#2	-	-	-	DF	2	#2
	6040	HF / SYP	2	#2	DF	2	#2	HF	2	#2
		DF / SYP	2	#2	DF	2	#2	DF	2	#2
	8040	HF / SYP	3	#2	HF	3	#2	HF	2	#2
		DF / SYP	3	#2	DF	3	#2	DF	2	#2
10FT	3070	HF / SYP	1	#2	-	-	-	HF	2	#2
		DF / SYP	1	#2	-	-	-	DF	2	#2
	4070	HF / SYP	1	#2	-	-	-	HF	2	#2
		DF / SYP	1	#2	-	-	-	DF	2	#2
	6040	HF / SYP	2	#2	HF	2	#2	HF	2	#2
		DF / SYP	2	#2	DF	2	#2	DF	2	#2
	8040	HF / SYP	3	#2	HF	3	#2	HF	2	#2
		DF / SYP	3	#2	DF	3	#2	DF	2	#2

2x6 Exterior Wall Opening Schedule (SHTH'G FINISH)

COL HEIGHT	OPN'G SIZE	HDR			SILL			FULL HEIGHT KING STUD		
		Lumber	Number	Type	Lumber	Number	Type	Lumber	Number	Type
9FT	3070	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	4070	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	6040	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	8040	HF / SYP	1	#2	HF	1	#2	HF	2	#2
		DF / SYP	1	#2	DF	1	#2	DF	2	#2
10FT	3070	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	4070	HF / SYP	1	#2	HF	1	#2	HF	1	#2
		DF / SYP	1	#2	DF	1	#2	DF	1	#2
	6040	HF / SYP	1	#2	HF	1	#2	HF	2	#2
		DF / SYP	1	#2	DF	1	#2	DF	2	#2
	8040	HF / SYP	1	#2	HF	1	#2	HF	2	#2
			1	#2	DF	1	#2	DF	2	#2

2x6 Exterior Wall Opening Schedule (PLASTER FINISH)

COL HEIGHT	OPN'G SIZE	HDR			SILL			FULL HEIGHT KING STUD		
		Lumber	Number	Type	Lumber	Number	Type	Lumber	Number	Type
9FT	3070	HF	1	#2	HF	1	#2	HF	1	#2
		DF	1	#2	DF	1	#2	DF	1	#2
	4070	HF	1	#2	HF	1	#2	HF	1	#2
		DF	1	#2	DF	1	#2	DF	1	#2
	6040	HF	1	#2	HF	1	#2	HF	2	#2
		DF	1	#2	DF	1	#2	DF	1	#2
	8040	HF	2	#2	HF	1	#2	HF	2	#2
		DF	1	#2	DF	1	#2	DF	2	#2
10FT	3070	HF	1	#2	HF	1	#2	HF	2	#2
		DF	1	#2	DF	1	#2	DF	1	#2
	4070	HF	1	#2	HF	1	#2	HF	2	#2
		DF	1	#2	DF	1	#2	DF	1	#2
	6040	HF	1	#2	HF	1	#2	HF	2	#2
		DF	1	#2	DF	1	#2	DF	2	#2
	8040	HF	2	#2	HF	1	#2	HF	3	#2
		DF	1	#2	DF	1	#2	DF	2	#2

2x4 Interior Wall Framing Schedule

COL HEIGHT	Typical Location				4ft From Building Corner			
	Lumber	Number	Type	Spacing	Lumber	Number	Type	Spacing
9	HF	1	#2	16" O.C.	-	-	-	-
	DF	1	#2	16" O.C.	-	-	-	-
10	HF	1	#2	16" O.C.	-	-	-	-
	DF	1	#2	16" O.C.	-	-	-	-

2x6 Exterior Wall Framing Schedule (SHTH'G FINISH)

COL HEIGHT	Typical Location				4ft From Building Corner			
	Lumber	Number	Type	Spacing	Lumber	Number	Type	Spacing
9	HF	1	#2	16" O.C.	HF	1	#2	16" O.C.
	DF	1	#2	16" O.C.	DF	1	#2	16" O.C.
10	HF	1	#2	16" O.C.	HF	1	#2	16" O.C.
	DF	1	#2	16" O.C.	DF	1	#2	16" O.C.

2x6 Exterior Wall Framing Schedule (PLASTER FINISH)

COL HEIGHT	Typical Location				4ft From Building Corner			
	Lumber	Number	Type	Spacing	Lumber	Number	Type	Spacing
9	HF	1	#2	16" O.C.	HF	1	#2	16" O.C.
	DF	1	#2	16" O.C.	DF	1	#2	16" O.C.
10	HF	1	#2	16" O.C.	HF	1	#2	16" O.C.
	DF	1	#2	16" O.C.	DF	1	#2	16" O.C.

NOTE: SEE DETAIL 1 ON SHEETS A2.1 - A2.6

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

R&S TAVARES ASSOCIATES
DESIGN ♦ CONSULTING ♦ PROJECT MGT
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Voice (951) 943-1908 Fax (951)943-5768

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

PROJECT TITLE

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

SHEET TITLE

FRAMING SCHEDULES

PROJECT NUMBER

22088

DRAWN BY

rMc/SC

CHECKED BY

JA/RT

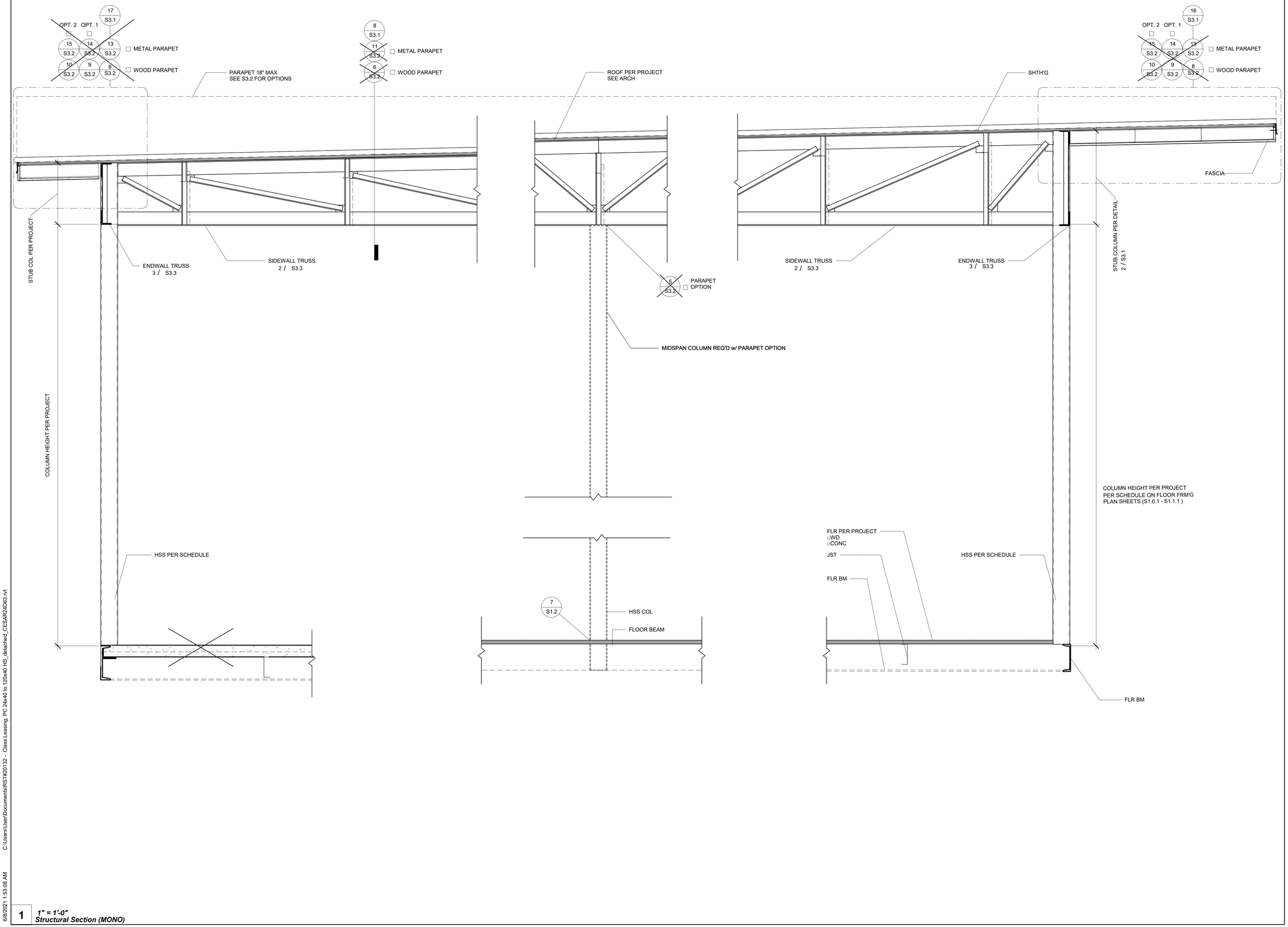
DATE

SHEET NO.

S4.5

SHEET OF

6/8/2021 1:53:06 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CES&R24D63.rvt



1 ***1" = 1'-0"***
Structural Section (MONO)

PROJECT SPECIFIC STATE AGENCY APPROVAL

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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

PROFESSIONAL STAMP

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FRANCISCO
No. C-53380
03/31/24
CIVIL
STRUCTURAL
STATE OF CALIFORNIA

RST#22088

02/16/24

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CLIENT

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

ORIGINAL PC STATE AGENCY APPROVAL

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

Revision Schedule

#	Description	Date

PRE-CHECK (PC) DOCUMENT

Code: 2022 CBC

A separate project application for construction is required

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

SHEET TITLE
LONG. SECTION - (MONO)

PROJECT NUMBER
22088

DRAWN BY
rMc/SC

CHECKED BY
JA/RT

DATE

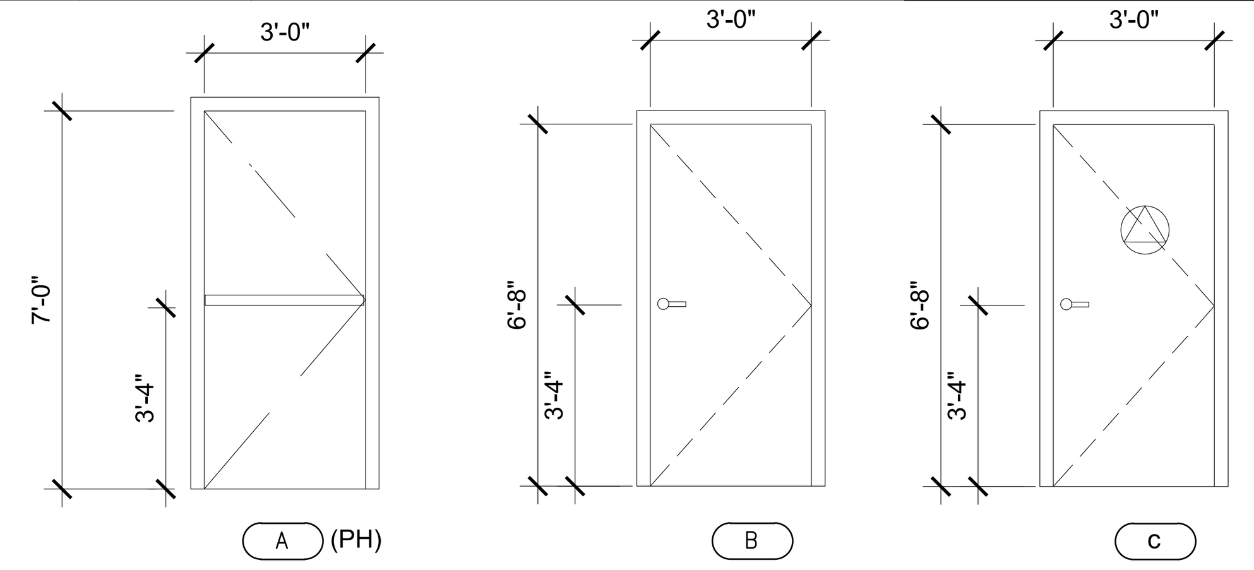
SHEET NO.
S5.0

SHEET OF

6/8/2021 1:53:08 AM C:\Users\User\Documents\RST#20132 - Class Leasing, PC 24x40 to 120x40 HS_detached_CESAR24D63.rvt

DOOR SCHEDULE 3

MARK	TYPE	WIDTH	HEIGHT	DOOR MATERIAL	FRAME TYPE	WALL THICKNESS	HARDWARE		QTY.
D1	A	3'-0"	7'-0"	SOLID CORE	KD	7 1/4"	HW1		2
D2	B	3'-0"	6'-8"	18 GA HOLLOW METAL	16 GA HOLLOW METAL KD	5 1/4"	HW2		1
D3	C	3'-0"	6'-8"	18 GA HOLLOW METAL	16 GA HOLLOW METAL KD	5 1/4"	HW3		2



1. ALL DOORS SHALL COMPLY WITH CBC SECTION 11B-404 AND 1-3/4" THK (UNO)
2. CENTER ALL DOOR LEVERS FOR ACCESS AND LOCKING @ 40" ABOVE FINISH FLOOR. ALL HARDWARE SHALL OPEN FROM THE INTERIOR AND NOT REQUIRE ANY SPECIFIC KNOWLEDGE OF THE HARDWARE OR REQUIRE ANY SPECIAL EFFORT FOR EGRESS. THE LEVER OF LEVER-ACTUATED LEVERS OR LOCKS SHALL BE CURVED WITH A RETURN TO WITHIN 1/2" OF THE FACE OF THE DOOR TO PREVENT CATCHING ON THE CLOTHING (ETC.) OF PERSONS DURING EGRESS. THE LEVER OF LEVER-ACTUATED LEVERS OR LOCKS SHALL EXTEND AT A MINIMUM OF ONE-HALF THE DOOR WIDTH.
3. PER CBC 1010.1.10 FOR ANY ROOM CONFIGURATION WHICH PROVIDES AN OCCUPANT LOAD OF 50 OR GREATER SHALL NOT BE PROVIDED WITH A LATCH OR LOCK UNLESS IT IS PANIC HARDWARE OR FIRE EXIT HARDWARE AND COMPLY WITH ALL REQUIREMENTS OF SECTION 11B-309 OF THE CBC. ALL HARDWARE SHALL COMPLY WITH HARDWARE SCHEDULE THIS SHEET.
4. PER CBC 11B-309.4 THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS (22.2N) MAX.
5. PER CBC 11B-404.2.8.2 DOOR SPRING HINGES SHALL BE ADJUSTED SO THAT FROM THE OPEN POSITION OF 70 DEGREES. THE DOOR SHALL MOVE TO THE CLOSE POSITION IN 1.5 SECONDS MINIMUM. ALL CLOSER MUST COMPLY WITH CBC 11B-404.2.8.1 - DOOR CLOSER AND GATE CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME REQUIRED TO MOVE THE DOOR TO A POSITION OF 12 DEGREES FROM THE LATCH IS 5 SECONDS MINIMUM.
6. (PH) ON PLANS THE SHEET INDICATED REQUIRED PANIC HARDWARE.
7. PROVIDE EXIT SIGNS AS REQUIRED PER CBC SECTION 1013.4. SEE DETAILS PER A0.2
8. ALL EXIT DOORS SHALL BE OPENABLE FROM INSIDE W/O ANY USE OF SPECIAL TOOLS, KNOWLEDGE OR EFFORT.

NEW BUILDINGS THAT ARE INCLUDED IN PUBLIC SCHOOLS (KINDERGARTEN THROUGH 12TH GRADE) SHALL INCLUDE LOCKS THAT ALLOW DOORS TO CLASSROOMS AND ANY ROOM WITH AN OCCUPANCY OF FIVE OR MORE PERSONS TO BE LOCKED FROM THE INSIDE. THE LOCKS SHALL CONFORM TO THE SPECIFICATIONS AND REQUIREMENTS FOUND IN SECTION 1010.1.9 EDUCATION CODE 17.075.50.

DOOR HARDWARE 4

HARDWARE SCHEDULE

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

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

INT OFFICE DOORS — **HW2**

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

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

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

NOTE: ALL CLASSROOM DOORS SHALL BE LOCKABLE FROM INSIDE

ABBREVIATIONS:

FLOORING

CARP: COMPLYING WITH GROUP 1; TYPE "A" OR TYPE "B"; CLASS 2; DENSITY 4600; DIRECT GLUE DOWN (OFOI) MATERIAL TO BE USED TO HAVE A CLASS A FIRE CLASSIFIACTION

SV: SHEET VINYL FLOORING MATERIAL TO BE USED TO HAVE A CLASS A FIRE CLASSIFIACTION

BASE

4" TS: 4" TOP SET BASE

6" INT: 6" INTEGRAL SHEET VINYL BASE

WALL

TACK: ½" VINYL TACKBOARD CLASS A OVER ½" GYPSUM BOARD BACKING

FRP: ⅛" FIBER REINFORCED PANEL OVER ½" WATER RESISTANT GYPSUM BOARD

CEILING

(A) : ACOUSTICAL LAY IN 2'x4' GRID CEILING PANELS - (#755B OR #562) MATERIAL TO BE USED TO HAVE A CLASS A FIRE CLASSIFIACTION

(B) : 2'x4' WASHABLE CEILING PANELS - #2910 MATERIAL TO BE USED TO HAVE A CLASS A FIRE CLASSIFIACTION

FINISHES NOTES

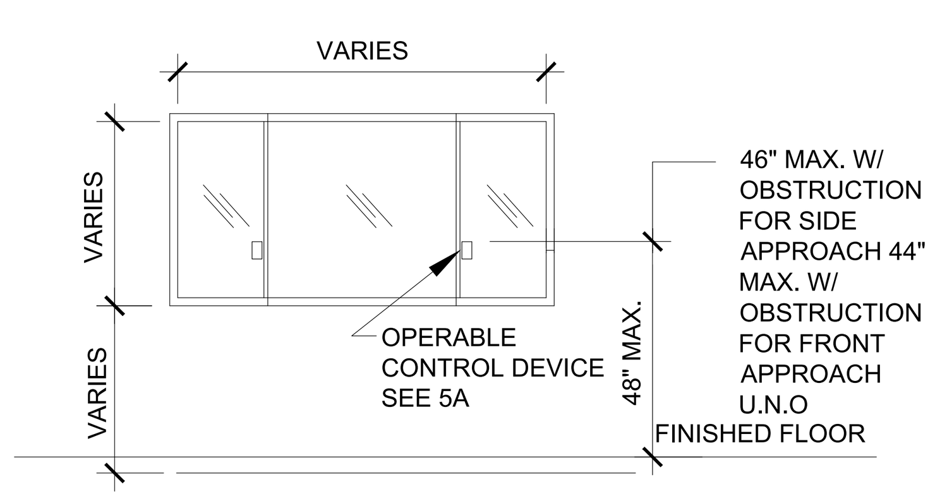
1. ALL FINISHES SHALL COMPLY WITH CBC, TITLE 19, AND C.F.C.
2. PER ASTM D2047 ALL FLOORING WITH A COEFFICIENT OF FRICTION OF A MINIMUM OF 0.6 WILL BE CONSIDERED TO OBTAIN THE INTENT OF A SLIP RESISTANCE SURFACE.
3. FLOORING CONTRACTOR IS RESPONSIBLE FOR SUB-FLOORING PREPARATION. ALL PLYWOOD TO BE APA RATED AND COMPLY WITH PS1-09. PLYWOOD SURFACE TO BE CARPETED IS TO BE PLUGGED AND SANDED BY FLOORING CONTRACTOR. ALL DEFORMITIES OCCURRING DUE TO STANDARD CONSTRUCTION PRACTICES SHALL BE PLUGGED AND SANDED BY FLOOR CONTRACTOR. MATELINE JOINTS TO BE A MAX OF ⅛" AND SHALL BE PLUGGED AND SANDED BY FLOORING CONTRACTORS.
4. ALL CARPET AND FLOOR FINISH MUST COMPLY PER CBC SECTION 11B-302 FLOOR AND GROUND SURFACES. ALL CHANGES IN ELEVATION SHALL COMPLY WITH CBC SECTION 11B-303 CHANGES IN LEVELS.
5. VINYL TACKBOARD TO HAVE A CLASS A FLAME SPREAD RATING AND COMPLY WITH A SMOKE DEVELOPMENT OF 175
6. ALL FINISH PRODUCT ARE SUPPLIED AS NOTED OR AS AN EQUAL PRODUCT. SHALL BE SUPPLIED.
7. OFOI- OWNER FURNISHED OWNER INSTALLED.
8. ALL PRODUCTS ARE TO BE PROVIDED AS NOTED AND ARE ABLE TO BE SUPPLIED AS OR EQUAL.

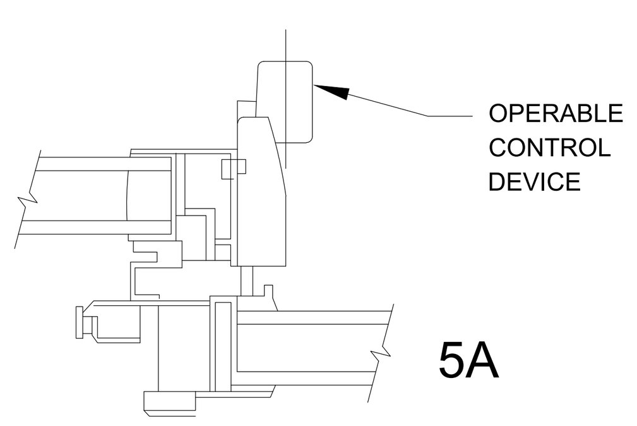
WINDOWS SCHEDULE 2

TYPE MARK	WIDTH X HEIGHT	FUNCTION	TYPE COMMENTS	GLAZING	WALL THICKNESS	QTY.	REMARKS
W1	8'-0" X 4'-0"	X0X	CLEAR BRONZE ALUM. FRAME	*DP	6"	3	BOTH PANES TEMPERED
W2	4'-0" X 4'-0"	X0	CLEAR BRONZE ALUM. FRAME	*DP	6"	1	BOTH PANES TEMPERED
W3	4'-0" X 4'-0"	X	CLEAR BRONZE ALUM. FRAME	*SP	4"	1	TEMPERED
W4	2'-0" X 4'-0"	X	CLEAR BRONZE ALUM. FRAME	*SP	4"	1	TEMPERED

WINDOW LOCATION MAY VARY BASED ON PROJECT REQUIREMENTS.

WINDOW - 3/4" INSULATING GLASS UNIT PERFORMANCE
U-VALUE: 0.35
SHGC: 0.24
VT: 0.5
*SP = SINGLE PANE
*DP = DUAL PANE

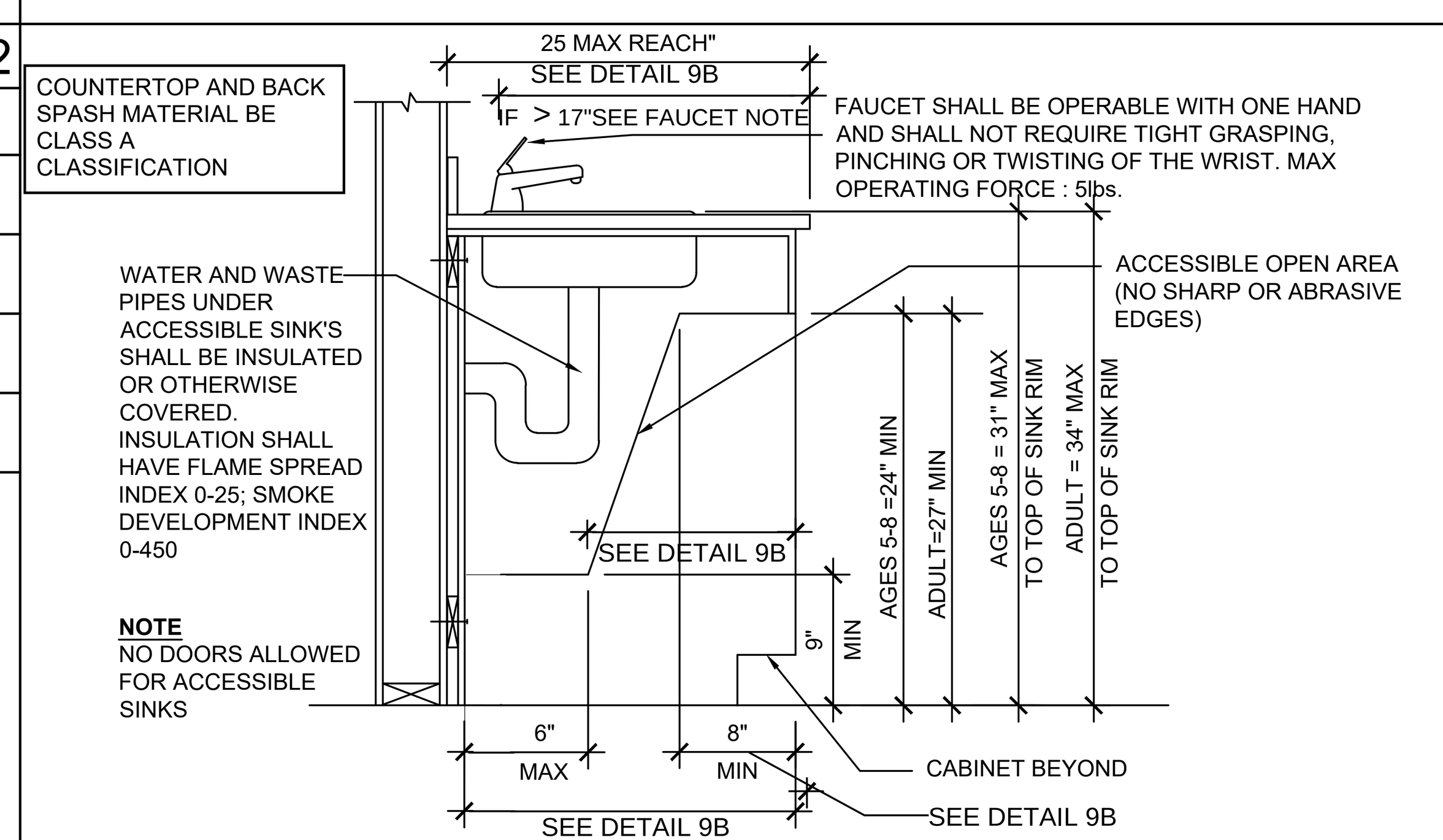




5A

FINISH SCHEDULE 1

BUILDING	ROOM # / NAME	FLOORING: FLOOR	FLOORING: BASE	WALL FINISH: WALL FINISH TYPE	CEILING: TYPE	CEILING: HEIGHT	NOTES
36x40 CLASSROOM BUILDING	CLASSROOM	CARP.	4" TS	TACK	(A)	8'-6"	
	OFFICE	CARP.	4" TS	TACK	(A)	8'-6"	
	WET AREA	CARP.	4" TS	TACK	(A)	8'-6"	
	TOILET 1	SV	6" INT	FRP	(B)	8'-0"	
	TOILET 2	SV	6" INT	FRP	(B)	8'-0"	



FAUCET NOTE

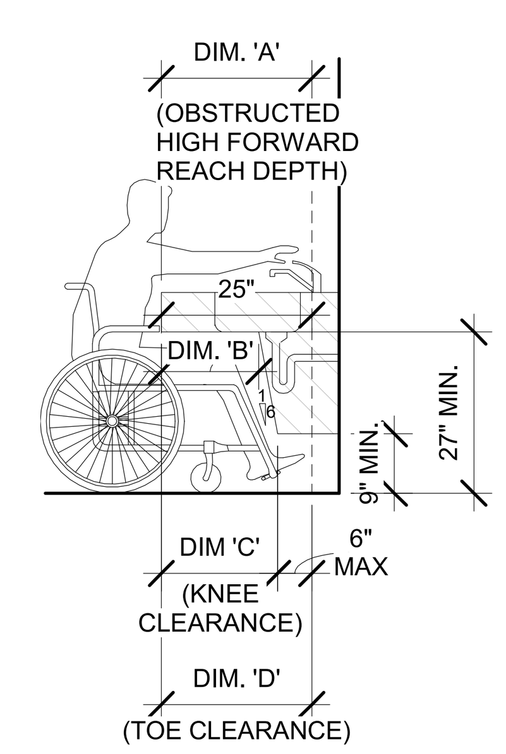
IF THE FAUCET CONTROLS ARE LOCATED MORE THAN 17" FROM THE FACE OF THE SINK ADDITIONAL KNEE SPACE IS REQUIRED TO BE ADDED.

A PERSON IN WHEELCHAIR FORWARD REACH OVER AN OBSTRUCTION MUST ALSO BE PROVIDED IN KNEE/TOE SPACE DEPTH

THE ADDITIONAL CLEARANCE IS TO BE ADDED TO THE KNEE SPACE NOT THE TOE SPACE.

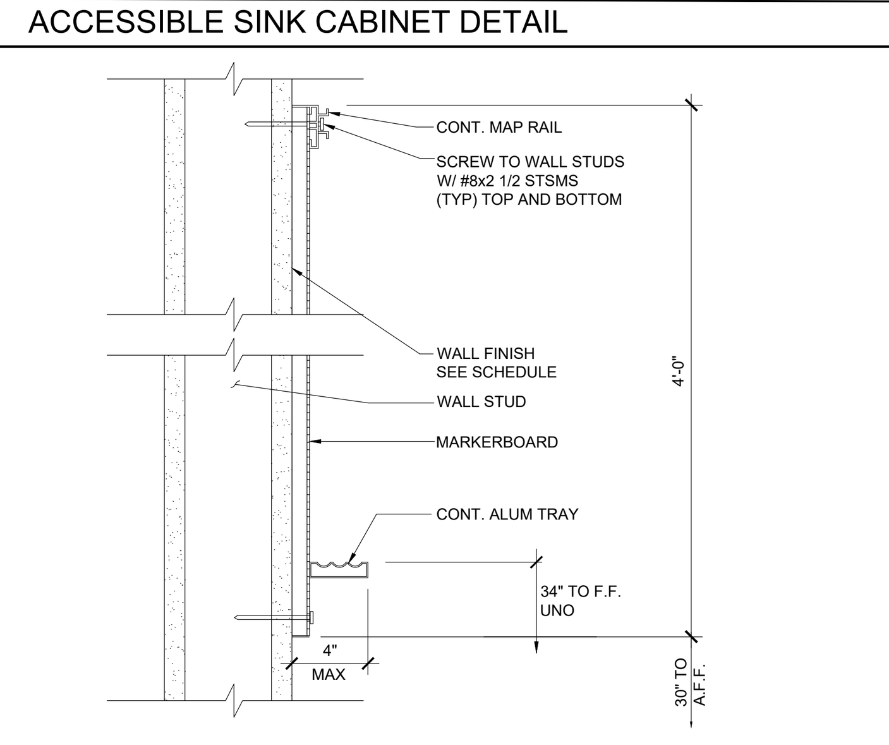
11B-308.2.2 OBSTRUCTED HIGH REACH. WHERE A HIGH FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR FLOOR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH OVER THE OBSTRUCTION

ACCESSIBLE SINK CABINET DETAIL 9



DIM. 'A'	DIM. 'B'	DIM. 'C'	DIM. 'D'
17"	8"	11"	17"
18"	9"	12"	18"
.19"	10"	13"	19"
20"	11"	14"	20"
21"	12"	15"	21"
22"	13"	16"	22"
23"	14"	17"	23"
24"	15"	18"	24"
25"	16"	19"	25"

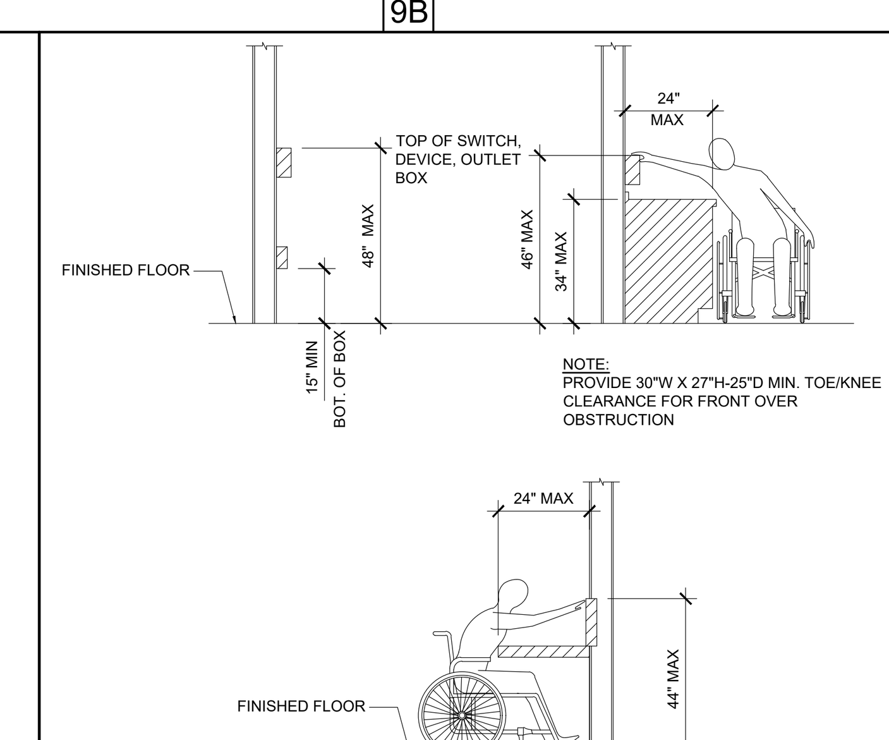
9B



MARKER BOARD ATTACHMENT 5

NOT USED

6



ADA MOUNTING HEIGHT DETAIL 7

ROOF	-	R-36 UNFACED
EXTERIOR WALL	-	R-19 UNFACED
INTERIOR WALL	-	R-13 UNFACED
FLOOR	-	R-19 UNFACED

INSULATION TO BE CLASS A FIRE RATING

INSULLATION 8

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 1/30/2025

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Class Leasing
1651 S. Juanita St. San Jacinto, CA 92583-5003
VOICE (951)943-1908 FAX (951)943-5768

ENGINEER

07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

SHEET TITLE:
SCHEDULES AND DETAILS

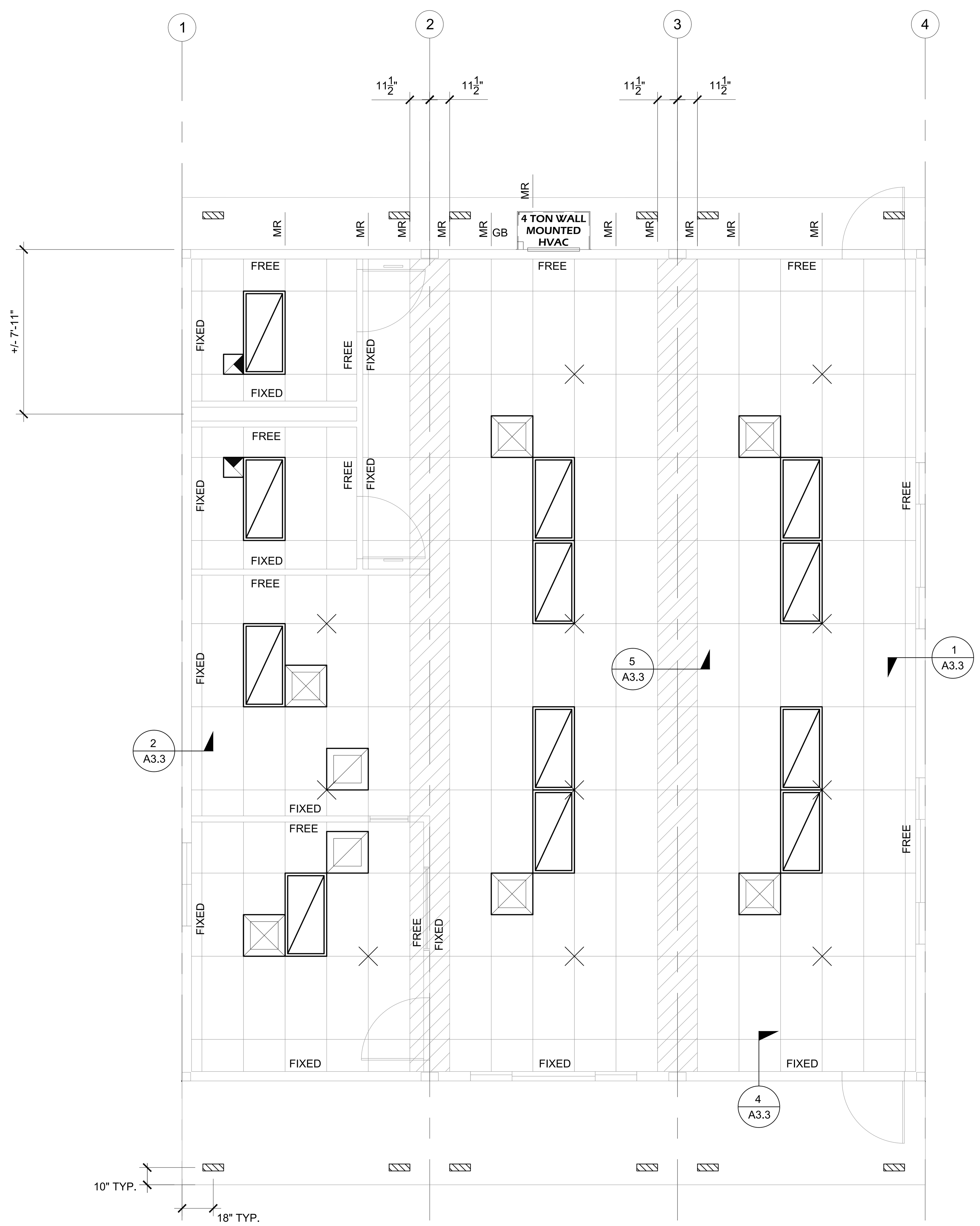
DATE: 06-27-24

DRAWN BY: -

SCALE: AS SHOWN

JOB: -

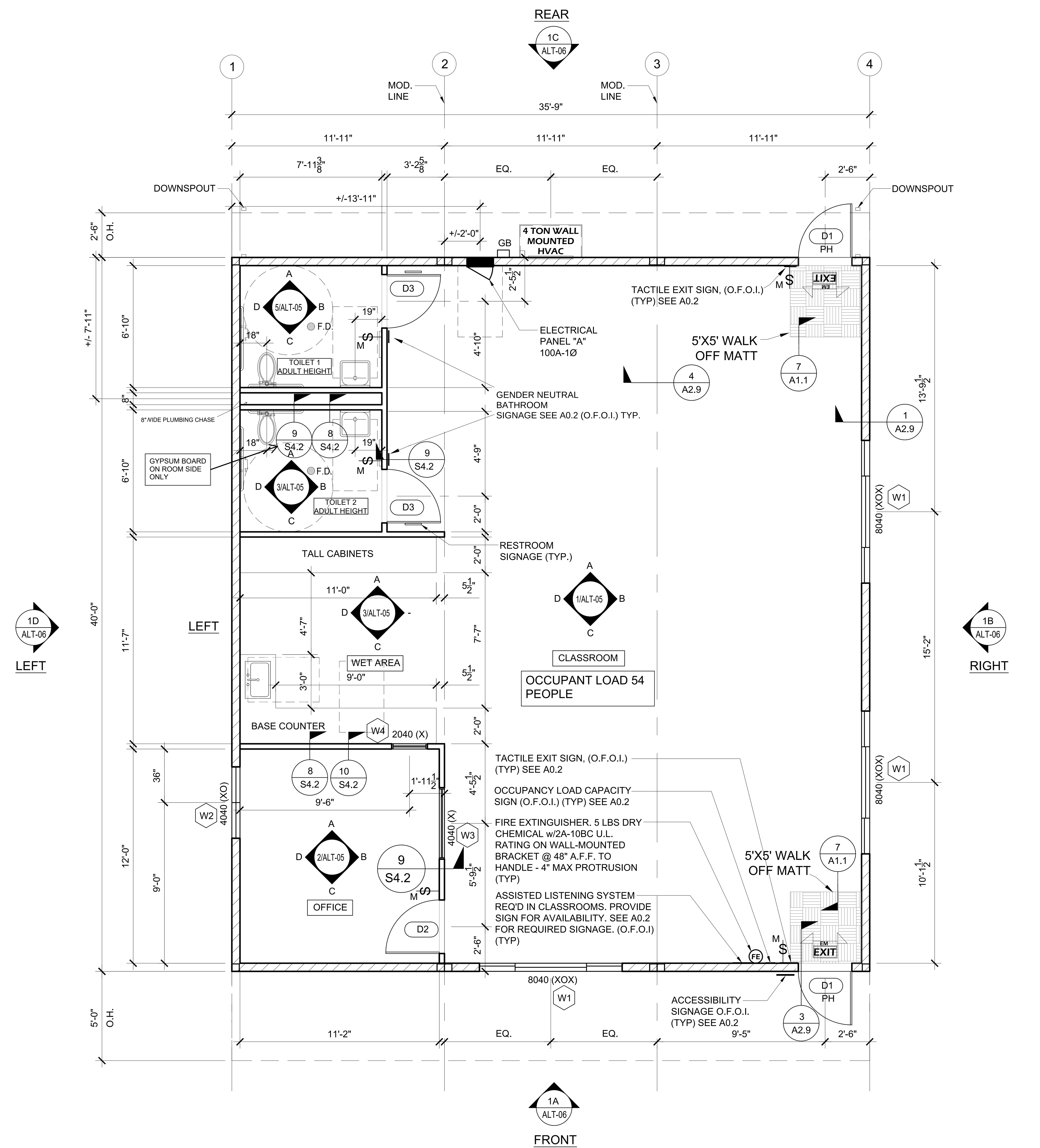
SHEET NO: ALT-D1



RCP LEGEND

(grid symbol)	8'-6" T-GRID CLG	(fixture symbol)	RECESSED LIGHT FIXTURE 2'x4' SINGLE OCC.) 1 LIGHT FIXTURE = 32 SYSTEM WATTS (3)32 SYSTEM WATTS X .80 = 25.6 25.6 / 68 S.F. ROOM = 38 LUMINAIRE WATTS/SF
MR	MAIN RUNNERS		
(vent symbol)	4"x12" SOFTFIT VENTS	X	SPLAY WIRE / STRUT TIE

REF.: DSA A# - } REFLECTED CEILING PLAN SCALE: 1/4" = 1'-0" 2



WALL LEGEND

- 2X6 EXTERIOR WALL SEE ALT-D1 FOR INSULATION INFO
- 2X4 INTERIOR WALL SEE ALT-D1 FOR INSULATION INFO

DETAIL LEGEND

- W1 — WINDOW REFERENCE - SEE ALT D1
- D1 — DOOR REFERENCE - SEE ALT -D1

NOTES

1. DIMENSIONS SHOWN ARE TO FACE OF STUD TYPICAL U.N.O.)
2. M/L - MODLINE
3. FOS - FACE OF STEEL

REF.: DSA A# - } FLOOR PLAN SCALE: 1/4" = 1'-0" 1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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SS ☑ FLS ☑ ACS ☑
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Class Leasing
1651 S. Juanita St. San Jacinto, CA 92583-5003
VOICE (951)943-1908 FAX (951)943-5768

ENGINEER

REGISTERED PROFESSIONAL ENGINEER MANNY D. F... Exp. 03/31/26 STRUCTURAL STATE OF CALIFORNIA
07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

SHEET TITLE:
FLOOR PLAN & REFLECTED CEILING PLAN

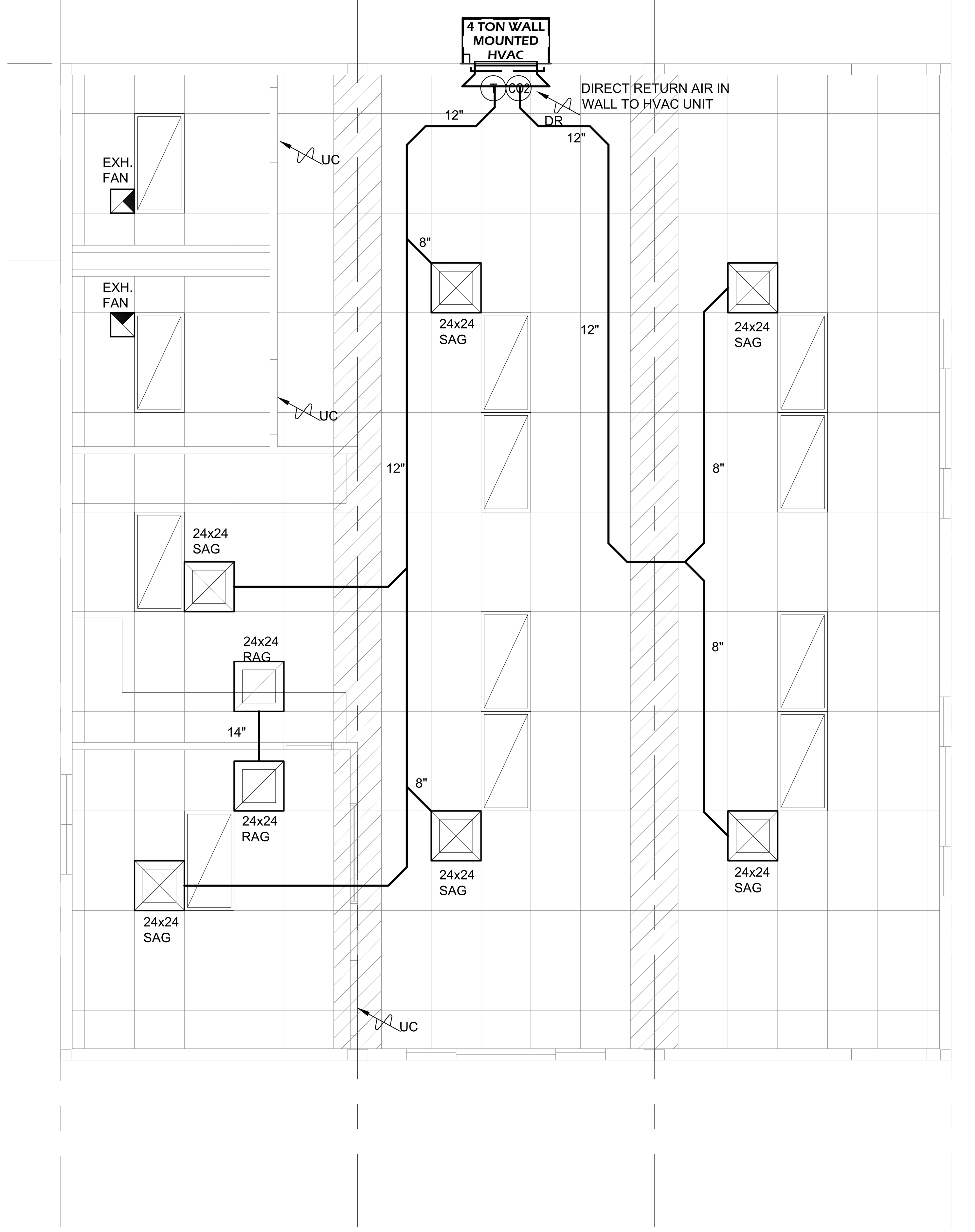
DATE: 06-27-24

DRAWN BY: -

SCALE: AS SHOWN

JOB: -

SHEET NO:
ALT-01



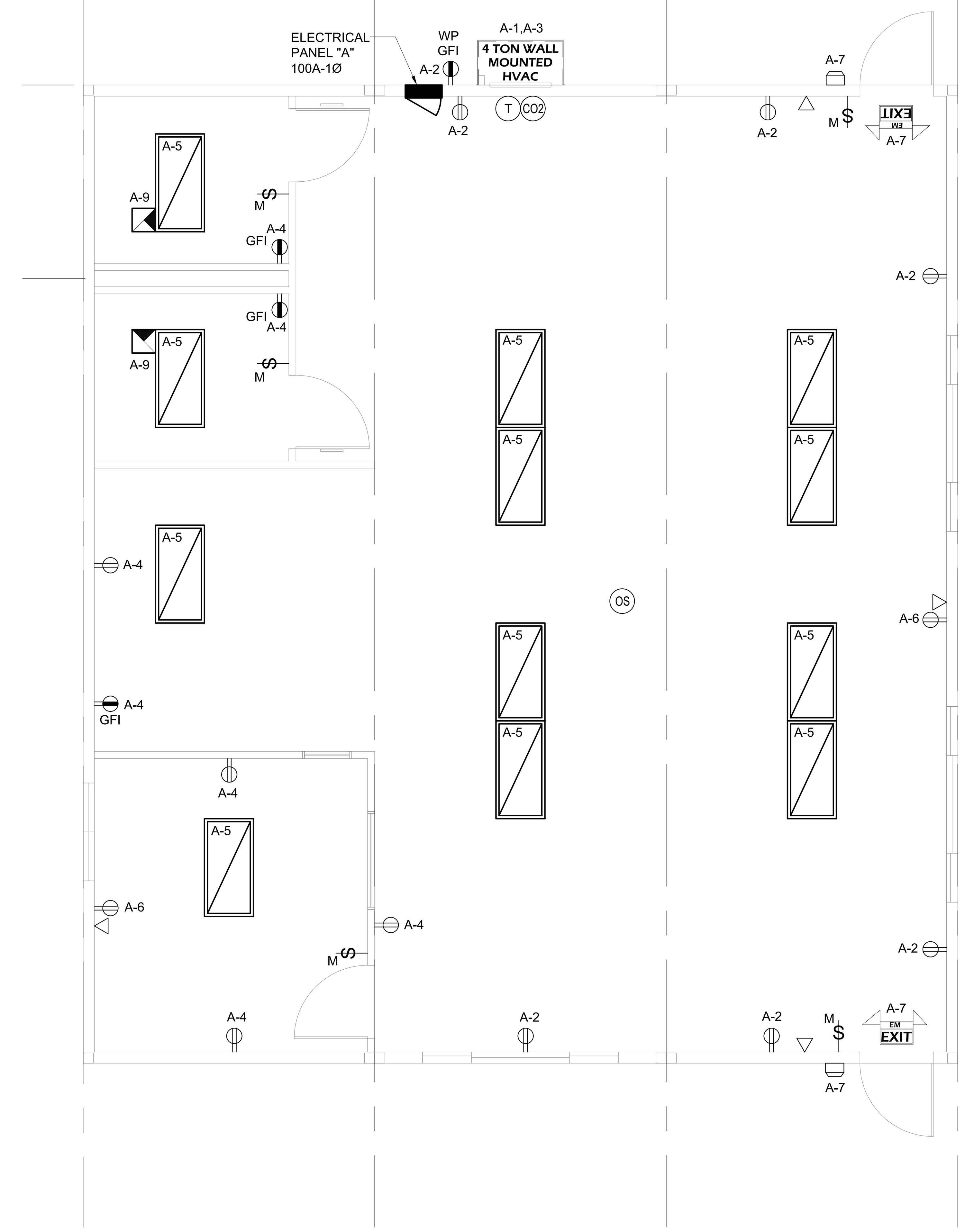
MECHANICAL LEGEND

- SUPPLY DUCT
- 12" — NUMBER INDICATES DUCT SIZE
- SUPPLY REGISTER WITH INTEGRAL DAMPER
- RETURN AIR GRILLE
- EXHAUST FAN
- T — THERMOSTAT
- CO2 — CARBON DIOXIDE
- DR — DIRECT RETURN AIR GRILL
- UC — UNDERCUT DOOR

REF.: DSA A# - }

MECHANICAL PLAN

SCALE: 1/4" = 1'-0" 2



PANEL: A S/N:				PHASE: SINGLE		VOLTS: 120/240		BUSS: 100 AMP		MAIN: 100A				LOCATION: INTERIOR			FEED: BACK				MOUNTING: RECESSED
OBJECT DESCRIPTION	WATT PER	NO. OF	LCL	WATTS A	WATTS B	BRK	POLE	WIRE SIZE	CKT NO	LEG A	LEG B	CKT NO	WIRE SIZE	POLE	BRK	WATTS A	WATTS B	LCL	NO OF	WATT PER	OBJECT DESCRIPTION
4 TON A/C	5428	1	x	5428		60	2	#6	1	X		2	#12	1	20	1260			7	180	RECEPT DUPLEX/GFI/WP
4 TON A/C	5428	/	x		5428	/	/	#6	3		X	4	#12	1	20		1260		7	180	RECEPT DUPLEX/GFI/WP
INT. LIGHTS	48	12	x	576		20	1	#12	5	X		6	#12	1	20	1000			2	500	RECEPTS DATA
EXIT /EXTERIOR LIGHTS	60	4	x		240	#	1	#12	7		X	8	#12	1	20		0				OWNER INSTALLS
EXHAUST FANS	144	2	x	288		20	1	#12	9	X		10	#12	1	20	0					OWNER INSTALLS
SPACE					0				11		X	12	#12	1	20		40		1	40	FIRE ALARM
	LEG TOTALS			6292	5668											2260	1300	LEG TOTALS			
LCL=2990+15520=18510																					
TOTAL WATTS=18510							LEG BALANCE =		10.2%								TOTAL AMPS:		77.13		

ELECTRICAL LEGEND

- 2x4 CEILING LED LIGHT FIXTURE WITH ELECTRONIC BALLAST
- ELECTRICAL PANEL AT +60" AFF TO TOP OF PANEL WITH 1-1/2" DIA POWER STUB OUT
- $M — MOTION LIGHT SWITCH. MOUNT AT +48" AFF TO TOP OF DEVICE (11B-308.1.1)
- EXIT — EXIT SIGN WITH BATTERY BACK UP AND BUGEYE EMERGENCY LIGHT. EXIT SIGN REQUIRED FOR TWO OR MORE EXTERIOR DOORS
- DUPLEX (WALL MOUNTED) RECEPTACLE 15A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE
- WP GFI — DUPLEX GFI (WALL MOUNTED) RECEPTACLE 20A - 125V - 3 WIRE. MOUNT AT +18" AFF U.O.N. TO CENTERLINE OF DEVICE (OUTLETS @ 44" AFF TO TOP OF BOX ROTATED 90 DEGRESS)
- EXTERIOR LIGHT FIXTURE. MOUNT AT +80" AFF WITH 90 MIN BATTERY BACK UP
- OS — CEILING MOUNTED OCCUPANCY SENSOR WATTSTOPPER #LMPC-100 OR EQUAL
- 4SD TWO-GANG RING J-BOX FOR FUTURE DATA - 3/4" CO STUB INTO ATTIC WITH PULLSTRING

REF.: DSA A# - }

ELECTRICAL PLAN

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

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ENGINEER

REGISTERED PROFESSIONAL ENGINEER
No. S3384
Exp. 03/31/26
STRUCTURAL
STATE OF CALIFORNIA
07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

SHEET TITLE:
ELECTRICAL PLAN & MECHANICAL PLAN

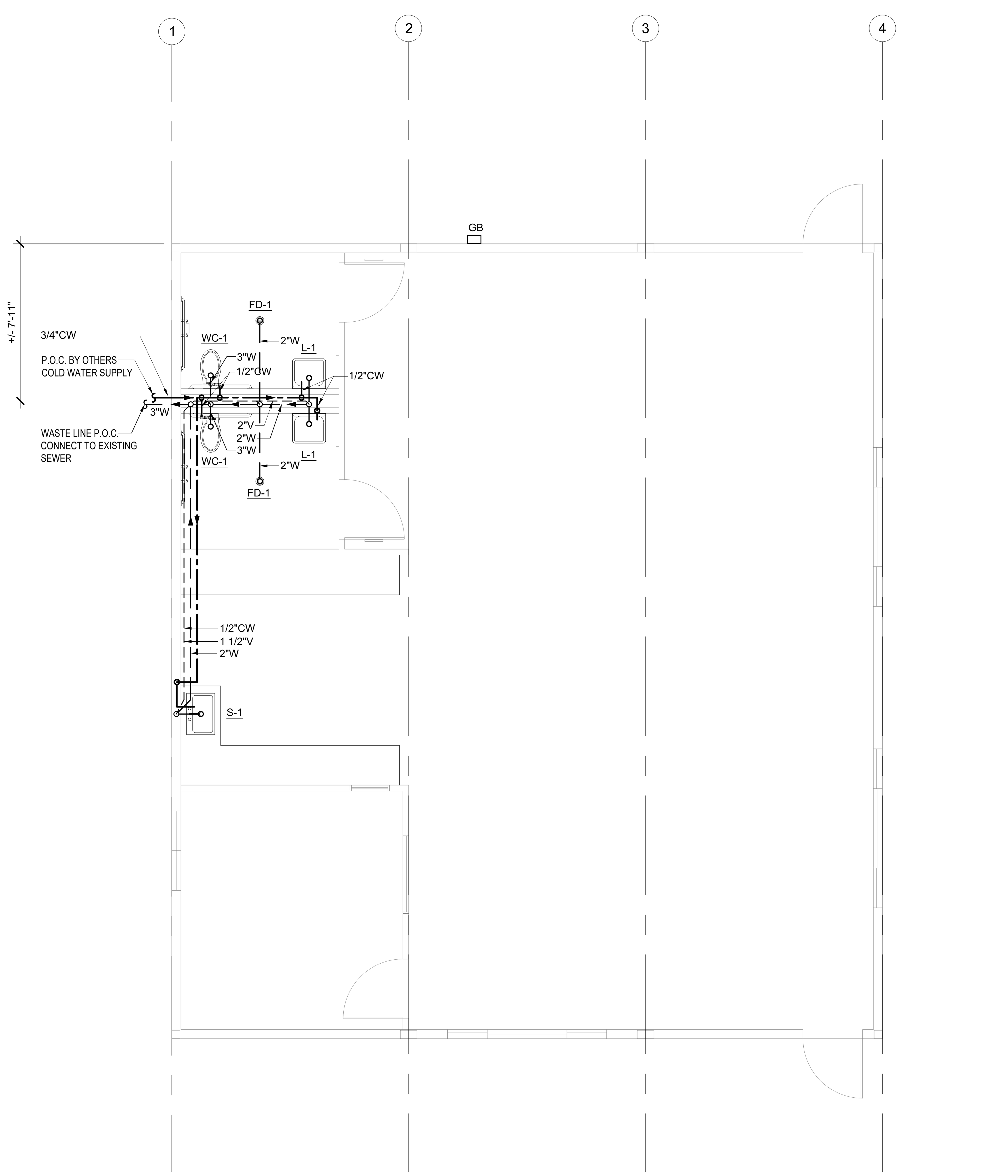
DATE: 06-27-24

DRAWN BY: -

SCALE: AS SHOWN

JOB: -

SHEET NO:
ALT-02



PLUMBING LEGEND

— — — —	WASTE
– – – – – –	VENT
——— — — ———	COLD WATER

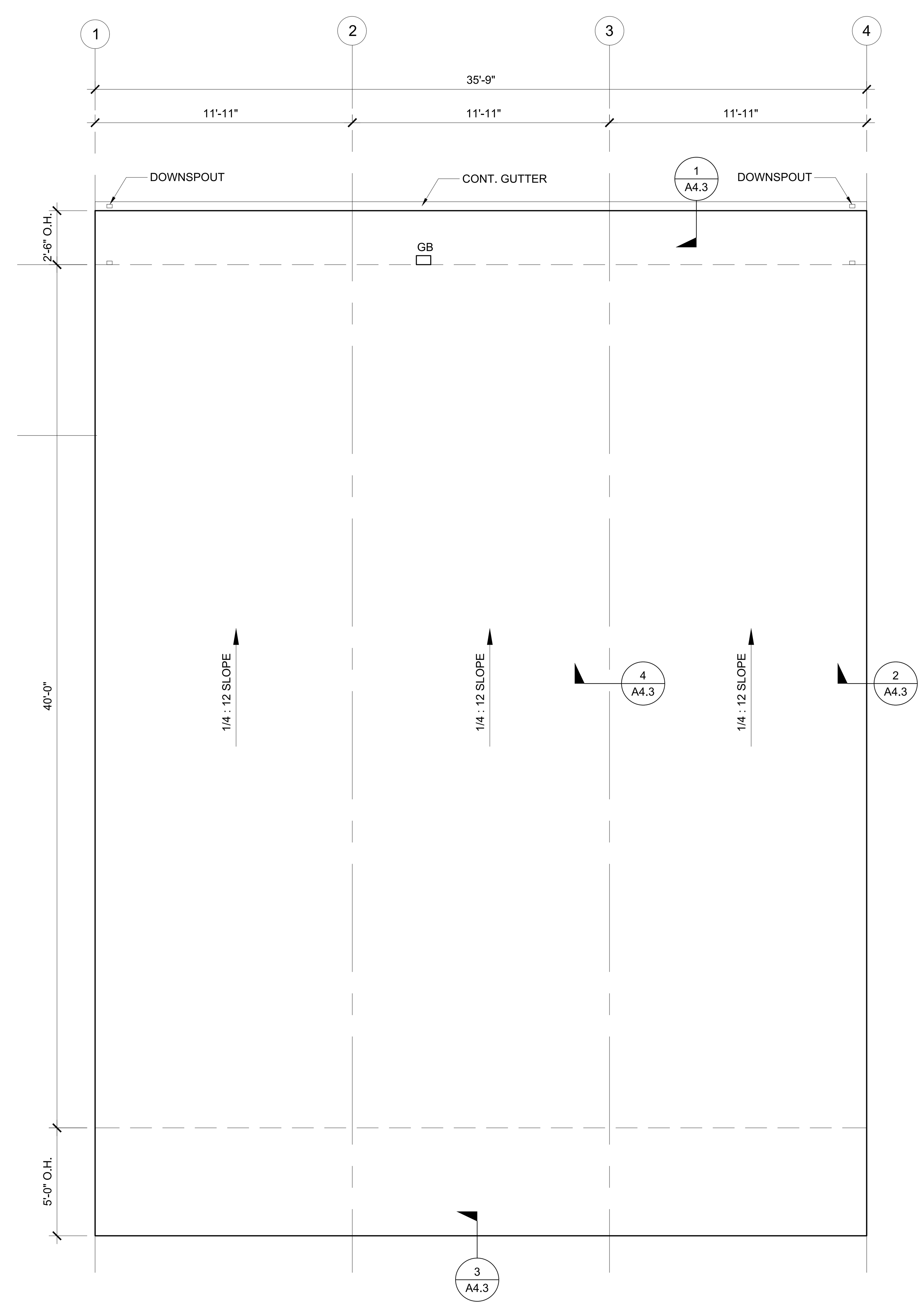
PLUMBING FIXTURE SCHEDULE

NAME	FIXTURE	COLD WATER	HOT WATER	WASTE	VENT	FIXTURE DESCRIPTION
WC-1	WATER CLOSET FLOOR MTD/FLUSH (ACCESSIBLE)	1/2"	-	3"	2"	STD: PROFLO ADA PF1723, (1.28 GPF) ALT: AMERICAN STANDARD ADA 3043.001 "MADERA" 16 3/4" HIGH, VITREOUS CHINA ELONGATED RIM, SIPHON JET, 10" ROUGH-IN; OLSONITE 10CC SOLID OPEN WHITE ELONGATED PLASTIC SEAT; SLOAN ROYAL #111-1.28 LOW CONSUMPTION FLUSHOMETER VALVE
S-1	SINK	1/2"	-	2"	1 1/2"	ACCESSIBLE FAUCET WITH BUBBLER- 31" JUST MANUFACTURING COMPANY MODEL # CRA-ADA-1725-A-GR. WITH A SINK DEPTH 5". TO BE USED FOR AGES 12 AND UP
L-1	LAVATORY (ACCESSIBLE)	1/2"	-	2"	1 1/2"	STD: AMERICAN STANDARD 0355.012 LUCERNE ALT: CRANE 1412-20 "HARWICH" 20x18" VITREOUS CHINA JAY R SMITH #722 CONCEALED HANGER; VALLEY #NL805IPS SINGLE HANDLE FAUCET (AMERICAN STANDARD 9141.011 TO BE USED FOR AGES 5-8) (0.5 GPM)
FD-1	FLOOR DRAIN	-	-	2"	1 1/2"	JAY R. SMITH #2005 YA-02-P050-NB. FLOOR DRAIN TAPPED FOR PRIMER. 5" NICKEL BRONZE STRAINER W/ 1/2" MAX. STRAINER OPENINGS ALL DIRECTIONS.

REF.: DSA A# - }

PLUMBING PLAN

SCALE: 1/4" = 1'-0" 2



REF.: DSA A# - }

ROOF PLAN

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122812 INC:
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SS ☑ FLS ☑ ACS ☑
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REVISIONS	BY
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Class Leasing
1651 S. Juanita St. San Jacinto, CA 92583-5003
VOICE (951)943-1908 FAX (951)943-5768

ENGINEER

REGISTERED PROFESSIONAL ENGINEER
MANNY D. F...
No. S3369
Exp. 03/31/26
STRUCTURAL
STATE OF CALIFORNIA
07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

SHEET TITLE:
ROOF PLAN & PLUMBING PLAN

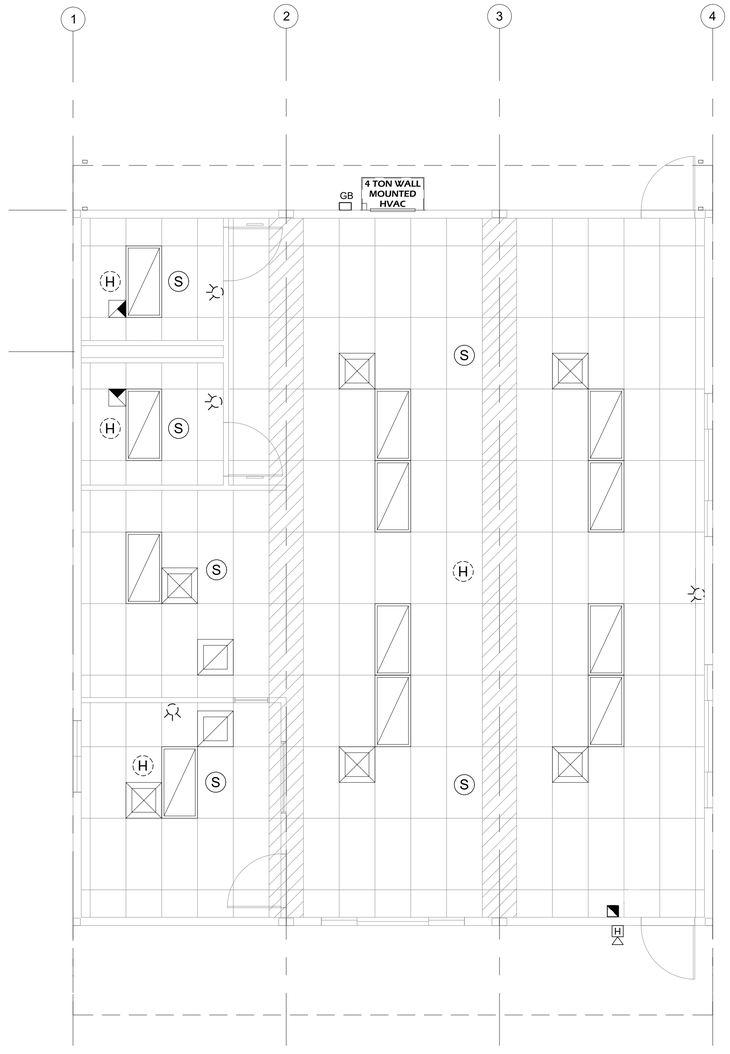
DATE: 06-27-24

DRAWN BY: -

SCALE: AS SHOWN

JOB: -

SHEET NO:
ALT-03



FIRE ALARM LEGEND

GB	FIRE ALARM GUTTER BOX WITH BLANK METAL COVER PLATE-RECESSED 4SD BOX W/3/4" CONDUIT AND PULLSTRING. FIRE ALARM SYSTEM IS A CLOSED SYSTEM 3/4" CONDUIT, 4SD J-BOXES AND PULLSTRING THROUGHT-TYPICAL. ALL DEVICES, WIRING AND INSTALLATION IS NOT IN MODULAR MANUFACTURERS SCOPE OF WORK.
(H)	HEAT DETECTOR 4-SD J-BOX ONLY
(S)	SMOKE DETECTOR 4-SD J-BOX ONLY - IN CEILING
H	4SD J-BOX FOR EXTERIOR FIRE ALARM HORN (DEVICE BY OTHERS). MOUNT AT +96" AFF TO CENTERLINE OF DEVICE WITH 3/4" CONDUIT TO FIRE ALARM BACKBOX WITH PULLSTRING
	4SD J-BOX FOR FIRE ALARM STROBE/HORN (DEVICE BY OTHERS). MOUNT AT +80" AFF TO BOTTOM OF DEVICE WITH 3/4" CONDUIT TO EXTERIOR FIRE ALARM HORN WITH PULLSTRING
	4SD J-BOX FOR FIRE ALARM PULLSTATION (DEVICE BY OTHERS). MOUNT AT +48" AFF TO PULL HANDLE OF DEVICE WITH 3/4" CONDUIT TO FIRE ALARM STROBE WITH PULLSTRING

REF.: DSA A# - }

SCALE: 1/4" = 1'-0" 2

REF.: DSA A# - }

FIRE ALARM

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

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Class Leasing
1651 S. Juanita St. San Jacinto, CA 92583-5003
VOICE (951)943-1908 FAX (951)943-5768

ENGINEER

REGISTERED PROFESSIONAL ENGINEER
MANNY D. FERNANDEZ
No. S3380
Exp. 03/31/26
STRUCTURAL
STATE OF CALIFORNIA
07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

SHEET TITLE:
FIRE ALARM

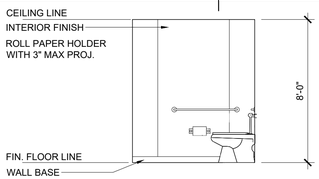
DATE: 06-27-24

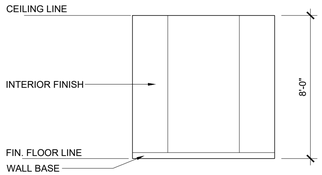
DRAWN BY: -

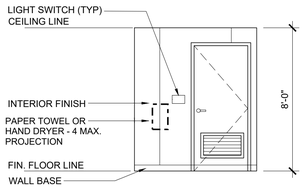
SCALE: AS SHOWN

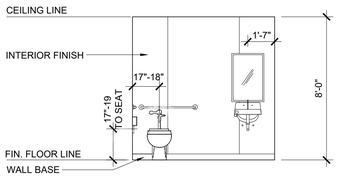
JOB: -

SHEET NO:
ALT-04



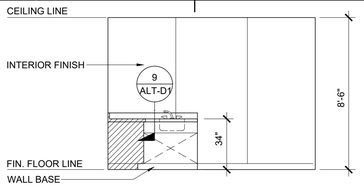




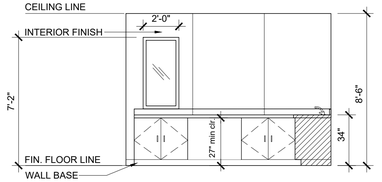


SEE SHEET A3.1 FOR FIXTURE MOUNTING HEIGHTS

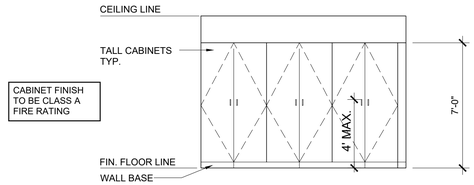
INT. ELEVATIONS - TOILET 2 AGE GROUP 12 AND UP | SCALE: 1/4" = 1'-0" | 3



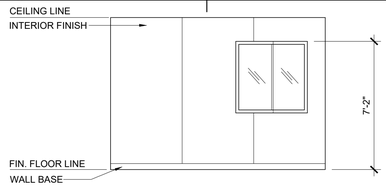
CABINET FINISH TO BE CLASS A FIRE RATING

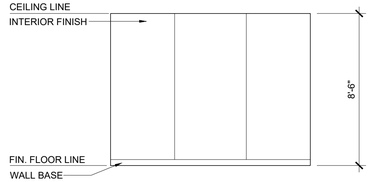


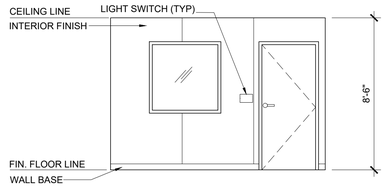
CABINET FINISH TO BE CLASS A FIRE RATING

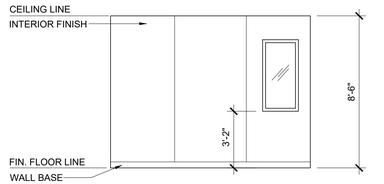


INT. ELEVATIONS - WET AREA | SCALE: 1/4" = 1'-0" | 3

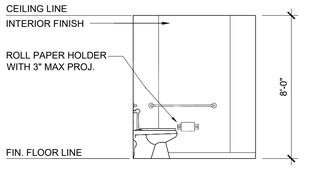


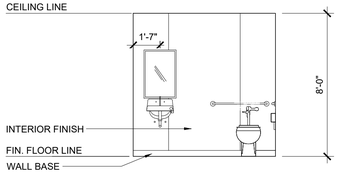


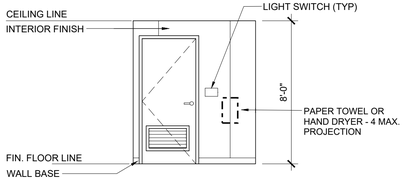


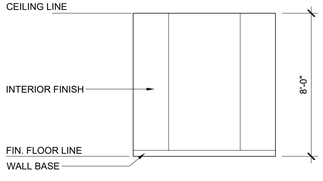


INT. ELEVATIONS - OFFICE | SCALE: 1/4" = 1'-0" | 2



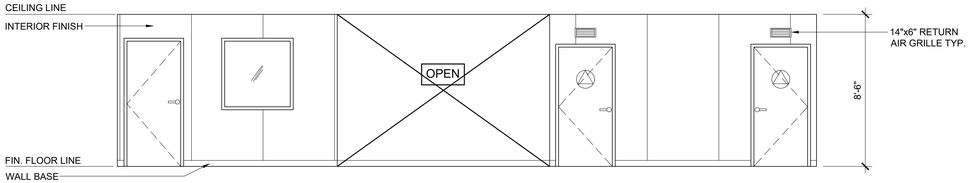


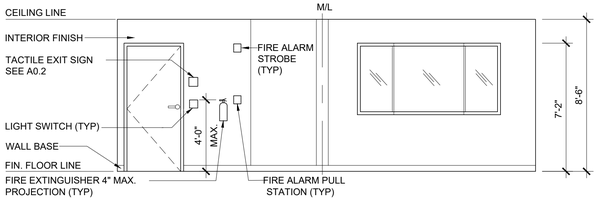


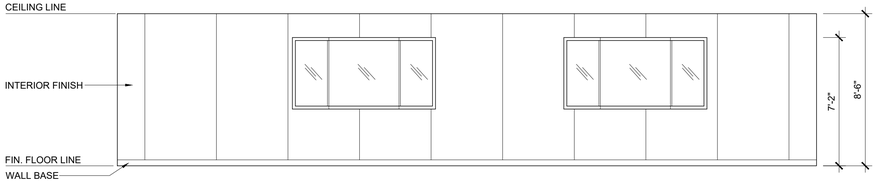


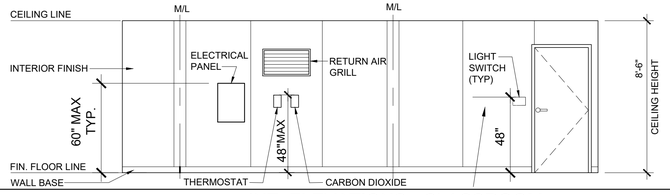
SEE SHEET A3.1 FOR FIXTURE MOUNTING HEIGHTS

INT. ELEVATIONS - TOILET 1 AGE GROUP 12 AND UP | SCALE: 1/4" = 1'-0" | 5









INT. ELEVATIONS - CLASSROOM | SCALE: 1/4" = 1'-0" | 1

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Class L Leasing
1651 S. Juanita St. San Jacinto, CA 92583-5003
VOICE (951)943-1908 FAX (951)943-5768

ENGINEER

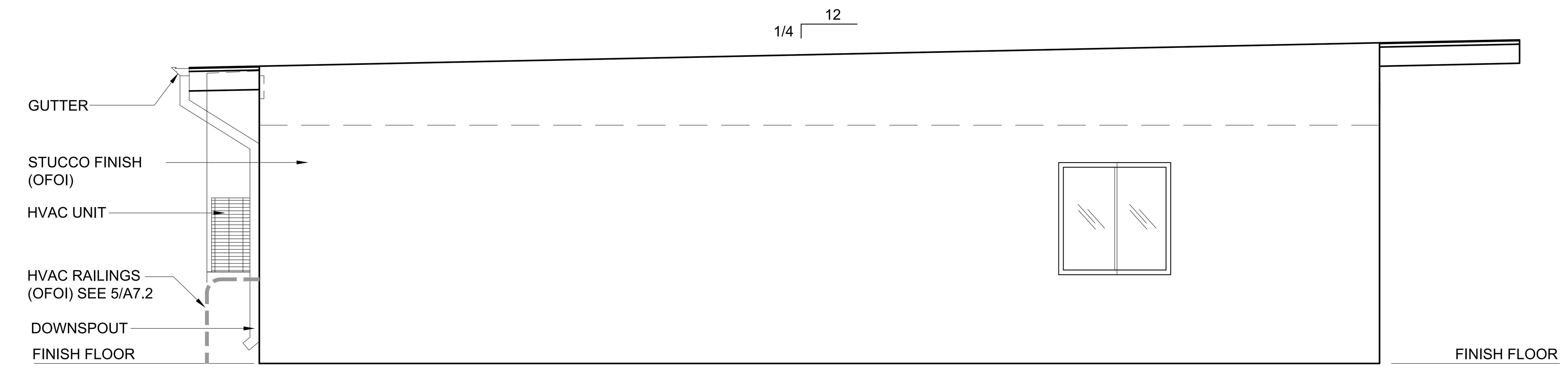
REGISTERED PROFESSIONAL ENGINEER
MANNY D. FLORES
No. S3380
Exp. 03/31/26
STRUCTURAL
STATE OF CALIFORNIA
07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

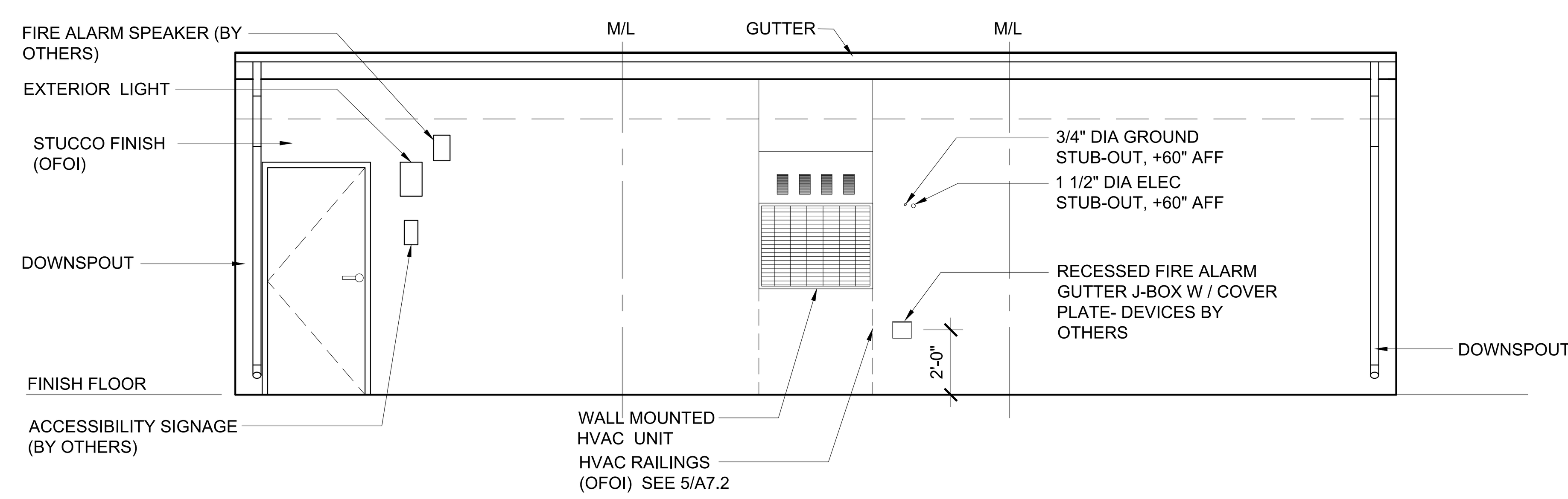
SHEET TITLE:
INTERIOR ELEVATIONS

DATE: 06-27-24
DRAWN BY: -
SCALE: AS SHOWN
JOB: -
SHEET NO: ALT-05



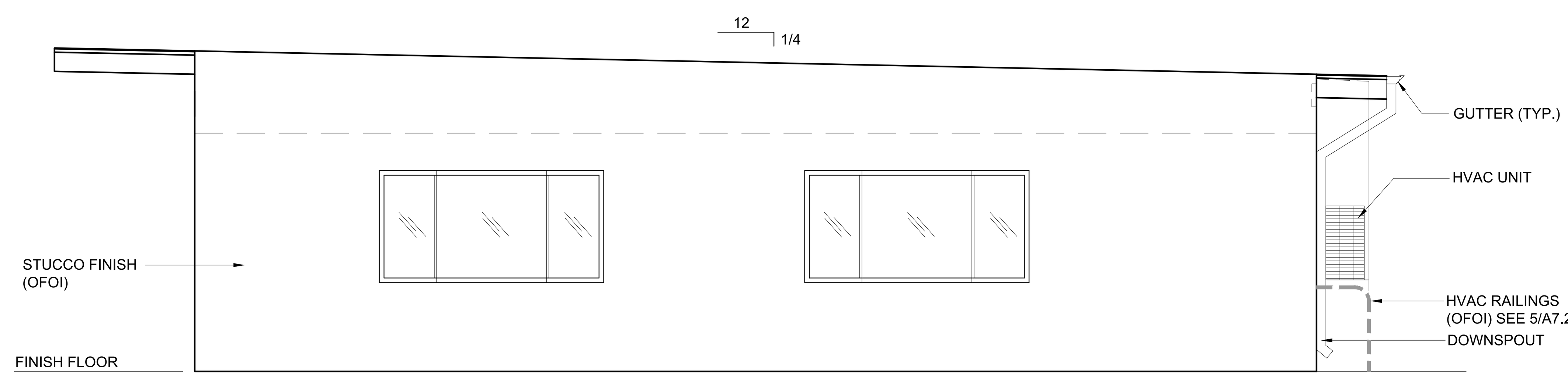
EXTERIOR ELEVATIONS - LEFT

D



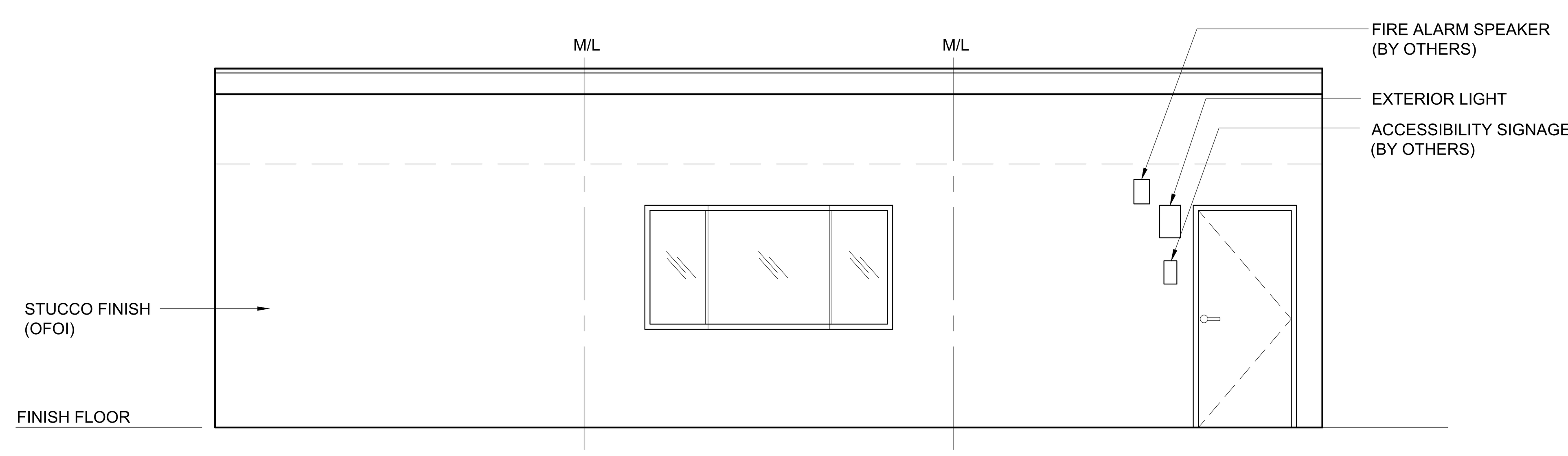
EXTERIOR ELEVATIONS - REAR

C



EXTERIOR ELEVATIONS - RIGHT

B



A

REF.: DSA A# } SHEET A5.0 & A5.1

EXTERIOR ELEVATIONS - FRONT

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

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VOICE (951)943-1908 FAX (951)943-5768

ENGINEER

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MANNY D. F...
S 3365
Exp. 03/31/26
STRUCTURAL
STATE OF CALIFORNIA
07/08/24

AOR

STOCKTON USD
36x40 CLASSROOM BUILDING

SHEET TITLE:
EXTERIOR ELEVATIONS

DATE: 06-27-24

DRAWN BY:

SCALE: AS SHOWN

JOB:

SHEET NO:
ALT-06