NEW CLASSROOM WING AT SUNSET ELEMENTARY



985 SUNSET AVENUE, COALINGA, CA 93210

COALINGA-HURON UNIFIED SCHOOL DISTRICT

657 SUNSET ST, COALINGA, CA 93210
PROJECT TRACKING NUMBER: 62125-41

ABBREVIATIONS

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

&	AND	FIN.	FINISH	P.O.C.	POINT OF CONNECTION
∠	ANGLE	FL.	FLOOR	PR.	PAIR
@	AT	FLASH.	FLASHING	PRCST.	PRECAST
C	CENTERLINE	F.O.C.	FACE OF CONCRETE	PREFIN.	PREFINISHED
ø	DIAMETER	F.O.F.	FACE OF FINISH	PROJ.	PROJECT
#	POUND OR NUMBER	F.O.M.	FACE OF MASONRY	PT.	POINT
(E)	EXISTING	F.O.P.	FACE OF PLYWOOD	P.T.D.	PAPER TOWEL DISPENSER
(N)	NEW	F.O.S.	FACE OF STUDS	P.D.T.R.	COMBINATION PAPER TOWEL DISPENSER AND RECEPTACLE
		FRPF.	FIRE PROOF		
A.B.	ANCHOR BOLT	F.R.P.	FIBER REINFORCED PANEL	PTN.	PARTITION
A/C	AIR CONDITIONING	F.R.T.	FIRE RETARDANT TREATED	P.T.R.	PAPER TOWEL RECEPTACLE
A.C.	ASPHALT CONCRETE	FT.	FOOT OR FEET		
ACOUST.	ACOUSTICAL	FTG.	FOOTING	Q.T.	QUARRY TILE
A.D.	AREA DRAIN	FURR.	FURRING		
ADJ.	ADJUSTABLE	FUT.	FUTURE	R.	RADIUS
AGG.	AGGREGATE			R.A.	RETURN AIR
ALUM.	ALUMINUM	G.	GAS	R.B.	RUBBER BASE
ALT.	ALTERNATE	GA.	GAGE	R.D.	ROOF DRAIN
APPROX.	APPROXIMATE	GALV.	GALVANIZED	REF.	REFERENCE
ARCH.	ARCHITECTURAL (OR ARCHITECT)	G.B.	GRAB BAR	REFR.	REFRIGERATOR
		G.I.	GALVANIZED IRON	REINF.	REINFORCED
ASPH.	ASPHALT	GND.	GROUND	REQ.	REQUIRED
AUTO.	AUTOMATIC	GR.	GRADE	RESIL.	RESILIENT
		GYP.	GYPSUM	RM.	ROOM
BEL.	BELOW			R.O.	ROUGH OPENING
BET.	BETWEEN	H.	HIGH	R.O.W.	RIGHT-OF-WAY
BD.	BOARD	H.B.	HOSE BIB	RDWD.	REDWOOD
BLDG.	BUILDING	H.C.	HOLLOW CORE	RWL.	RAIN WATER LEADER
BLK.	BLOCKING	HD.	HEAD		
BM.	BEAM	HDWD.	HARDWOOD	S.	SOUTH
B.O.	BOTTOM OF	HGT.	HEIGHT	S.A.	SUPPLY AIR
BOT.	BOTTOM	H.M.	HOLLOW METAL	S.C.	SOLID CORE
B.U.R.	BUILT-UP ROOF	HORIZ.	HORIZONTAL	S.C.D.	SEAT COVER DISPENSER
BRD.	BOARD	HR.	HOUR	SCHED.	SCHEDULE
		H.V.A.C.	HEATING VENTILATING, AND AIR CONDITIONING	S.D.	STORM DRAIN
CAB.	CABINET			S.DISP.	SOAP DISPENSER
C.B.	CATCH BASIN	H.W.H.	HOT WATER HEATER	SECT.	SECTION
C.G.	CORNER GUARD			S.F.	SQUARE FOOT (FEET)
C.I.	CAST IRON	I.D.	INSIDE DIAMETER	SH.	SHELF
C.J.	CONTROL JOINT	IN.	INCHES	SHR.	SHOWER
CLG.	CEILING	INCL.	INCLUDING, INCLUDES	SHT.	SHEET
CLO.	CLOSET	INSUL.	INSULATION	SHTG.	SHEATHING
CLR.	CLEAR	INT.	INTERIOR	SIM.	SIMILAR
CNTR.	COUNTER	INV.	INVERT	S.M.S.	SHEET METAL SCREW
COL.	COLUMN	I.P.S.	IRON PIPE SIZE	S.N.D.	SANITARY NAPKIN DISPOSAL
C.M.U.	CONCRETE MASONRY UNIT			S.N.V.	SANITARY NAPKIN VENDOR
CONC.	CONCRETE	JAN.	JANITOR	S.O.V.	SHUT-OFF VALVE
CONN.	CONNECTION	JB.	JAMB	SPEC.	SPECIFICATIONS
CONSTR.	CONSTRUCTION	JT.	JOINT	SQ.	SQUARE
CONT.	CONTINUOUS	JST	JOIST	ST.STL.	STAINLESS STEEL
CONTR.	CONTRACTOR			S.S.	SERVICE SINK
CORR.	CORRIDOR	K.	KITCHEN	S.T.	SELF TAPPING
CTR.	CENTER			STA.	STATION
CTSK.	COUNTERSUNK	L.	LONG	STD.	STANDARD
C.Y.	CUBIC YARD	LAB.	LABORATORY	STL.	STEEL
		LAM.	LAMINATE	STOR.	STORAGE
DBL.	DOUBLE	LAV.	LAVATORY	STRUCT.	STRUCTURAL
DEPT.	DEPARTMENT	LKR.	LOCKER	SUSP.	SUSPENDED
DET.	DETAIL	LT.	LIGHT	S.V.	SHEET VINYL
D.F.	DRINKING FOUNTAIN			S.Y.	SQUARE YARD
D.I.	DROP INLET	MAX.	MAXIMUM	SYM.	SYMMETRICAL
DIA	DIAMETER	M.B.	MACHINE BOLT		
DIAG.	DIAGONAL	M.C.	MEDICINE CABINET	T.B.	TOWEL BAR
DIM.	DIMENSION	MATL.	MATERIAL	T.C.	TERMINAL CABINET
DISP.	DISPENSER	MECH.	MECHANICAL	TEL.	TELEPHONE
DN.	DOWN	MET.	METAL	TEMP.	TEMPERED
D.O.	DOOR OPENING	MFR.	MANUFACTURER	TERR.	TERRAZO
DP.	DEEP	MH.	MANHOLE	T&G	TONGUE AND GROOVE
DR.	DOOR	MIN.	MINIMUM	THK.	THICK
DS.	DOWNSPOUT	MISC.	MISCELLANEOUS	T.P.D.	TOILET PAPER DISPENSER
DW.	DOMESTIC WATER	M.O.	MASONRY OPENING	T.O.M.	TOP OF MASONRY
DWG.	DRAWING	MOD.	MODULE, MODULAR	T.P.L.	TOP OF PLATE
DWR.	DRAWER	MTD.	MOUNTED	T.O.S.	TOP OF STEEL
		MUL.	MULLION	TRD.	TREAD
E.	EAST			T.S.R.	TOP SET RUBBER
EA.	EACH	N.	NORTH	T.V.	TELEVISION
E.J.	EXPANSION JOINT	N.I.C.	NOT IN CONTRACT (N.I.C. ITEMS NOT PART OF THIS APPROVAL)	T.W.	TOP OF WALL
ELEV.	ELEVATION			TYP.	TYPICAL
ELEC.	ELECTRICAL				
EMBED.	EMBEDMENT	NO. OR #	NUMBER	UNF.	UNFINISHED
ENCL.	ENCLOSURE	NOM.	NOMINAL	U.O.N.	UNLESS OTHERWISE NOTED
ENGR.	ENGINEER	N.T.S.	NOT TO SCALE	UR.	URINAL
E.P.B.	ELECTRICAL PANEL BOARD				
EQ.	EQUAL	O/	OVER	V.B.	VINYL BASE
EQUIP.	EQUIPMENT	O.A.	OVERALL	V.C.T.	VINYL COMPOSITION TILE
E.W.C.	ELECTRIC WATER COOLER	OBS.	OBSCURE	VCTB	VINYL COVERED TACKBOARD
EXP.	EXPANSION	O.C.	ON CENTER	VWC	VINYL WALLCOVERING
EXIST.	EXISTING	O.D.	OUTSIDE DIAMETER	VERT.	VERTICAL
EXT	EXTERIOR	OFF.	OFFICE	VEST.	VESTIBULE
		OPP. HD.	OPPOSITE HAND		
F.A.	FIRE ALARM	O.H.M.S.	OVAL HEAD MACHINE SCREW	W.	WEST
F.B.	FLAT BAR	O.H.W.S.	OVAL HEAD WOOD SCREW	W/	WITH
F.D.	FLOOR DRAIN	OPNG.	OPENING	W.C.	WATER CLOSET
FDN.	FOUNDATION	OPP.	OPPOSITE	WWF	WELDED WIRE FABRIC
F.E.	FIRE EXTINGUISHER	P.E.N.	PLYWOOD EDGE NAILING	WD.	WOOD
F.E.C.	FIRE EXTINGUISHER AND CABINET	PL.	PLATE	W/O	WITHOUT
		P. LAM.	PLASTIC LAMINATE	WP.	WATERPROOF
F.F.E.	FINISH FLOOR ELEVATION	PL.	PLATE	W.R.	WATER RESISTANT
F.H.C.	FIRE HOSE CABINET	PLAS.	PLASTER	W.S.	WOOD SCREW
F.H.M.S.	FLAT HEAD MACHINE SCREW	PLUMB.	PLUMBING	WSCT.	WAINSCOT
F.H.W.S.	FLAT HEAD WOOD SCREW	PLYWD.	PLYWOOD	WT.	WEIGHT

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PROJECT SCOPE

THIS WORK INCLUDES A NEW CLASSROOM BLDG., AND RELATED ON-SITE/ OFF-SITE DEVELOPMENT.

NOTE:
NEW BUILDING SHALL BE PROVIDED WITH EMERGENCY RESPONDER RADIO COVERAGE IN ACCORDANCE WITH CALIFORNIA FIRE CODE SECTION 510. THE PROJECT ARCHITECT (AOR) SHALL CONTACT THE LOCAL FIRE DEPARTMENT AND/OR EMERGENCY COMMUNICATIONS AUTHORITY TO OBTAIN DESIGN, EQUIPMENT SPECIFICATIONS, TESTING AND ACCEPTANCE CRITERIA. PLANS AND REQUESTED DOCUMENTATION SHALL BE SUBMITTED TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL. UPON COMPLETION, COPIES OF THE APPROVED PLANS, EQUIPMENT DATA SHEETS, TESTING AND ACCEPTANCE DOCUMENTATION SHALL BE PROVIDED TO THE SCHOOL DISTRICT.

DEFERRED APPROVALS

1. NONE

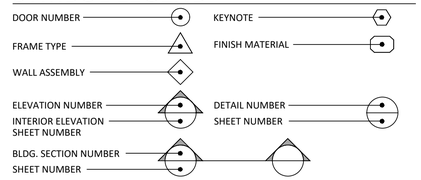
APPLICABLE CODES

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PLANS, SPECIFICATIONS AND THE FOLLOWING REGULATIONS :

1. 2022 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24 CCR.
2. 2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR.
3. 2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR.
4. 2022 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 CCR.
5. 2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR.
6. 2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR.
7. 2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 CCR.
8. 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR.
9. 2022 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR.
10. TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
11. 2022 NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE, (CA AMENDED)

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

SYMBOL LEGEND



GENERAL NOTES

1. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN SO DETAILED IN THE DRAWING OR ACCEPTED BY THE ARCHITECT WITH THE APPROVAL OF DSA REPRESENTATIVE. CONTRACTOR TO PROVIDE ALL DEMOLITION AND REPLACEMENT OF HARDSCAPE/TURF IN KIND AS REQUIRED FOR INSTALLATION AND/OR DEMOLITION OF SITE UTILITIES WHERE THEY OCCUR BELOW EXISTING HARDSCAPE/TURF
2. CHANGES TO THE STRUCTURAL, ACCESSIBLITY OR FIRE AND LIFE SAFETY PORTIONS OF THE APPROVED PLANS AND SPECIFICATIONS AFTER THE WORK HAS BEEN AWARDED SHALL BE MADE BY A CONSTRUCTION CHANGE DOCUMENTOR ADDENDA AS REQUIRED IN SECTION 4-338, PART 1, 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. A CLASS 2 PROJECT INSPECTOR REQUIRED, EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT, ARCHITECT/ ENGINEER OF RECORD, & STRUCTURAL ENGINEER WHEN APPLICABLE. PROJECT INSPECTOR SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
4. A DSA ACCEPTED TESTING LAB, EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT, SHALL CONDUCT ALL THE TESTS AND INSPECTIONS FOR THE PROJECT.
5. SUBSTITUTIONS, ADDENDA, OR CONSTRUCTION CHANGE DOCUMENTS THAT AFFECT FLS, ACS, & SSS NEED TO BE APPROVED BY DSA PRIOR TO FABRICATION & INSTALLATION. SIGNED BY A/E OF RECORD PER DSA IR A-6 AND SECTION 338(c) PART 1, TITLE 24 CCR.
6. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OR ATERATION, 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 SPECS, 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.
7. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
8. TITLE 24, PARTS 1-5 MUST BE KEPT ON THE SITE DURING CONSTRUCTION
9. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION SHALL COMPLY WITH CBC CH. 33 AND CFC CH. 33.
10. ARCHITECT OF RECORD (AOR) SHALL CONTACT THE LOCAL FIRE DEPARTMENT AND/OR EMERGENCY COMMUNICATIONS AUTHORITY TO OBTAIN DESIGN AND EQUIPMENT SPECIFICATIONS, AND TESTING AND ACCEPTANCE CRITERIA. IT IS THE RESPONSIBILITY OF THE AOR TO SUBMIT PLANS AND REQUIRED DOCUMENTATION, AND APPLICABLE FEES, TO THE LOCAL AUTHORITY HAVING JURISDICTION FOR REVIEW AND APPROVAL. UPON COMPLETION COPIES OF THE APPROVED PLANS, EQUIPMENT DATA SHEETS, AND PROOF OF TESTING AND ACCEPTANCE DOCUMENTATION SHALL BE PROVIDED TO THE SCHOOL DISTRICT. THE PROJECT INSPECTOR SHALL VERIFY THAT DOCUMENTATION IS PROVIDED TO THE SCHOOL DISTRICTS.
11. 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 INSURE THE NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

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

11.2 MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT.

11.3 ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR EOR, AOR OR OWNER'S AGENT.

11.4 A LIST OF CERTIFIED ATT CAN BE FOUND AT:
http://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certified-provider-program/acceptance

11.5 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.

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

SHEET INDEX (131 SHEETS TOTAL)

GENERAL INFORMATION
G1 COVER SHEET, SHEET INDEX, & VICINITY MAP
FC1 FIRE CODE SITE PLAN, CODE SUMMARY

CIVIL
C0.1 CIVIL COVERSHEET
C1.1 PARTIAL TOPOGRAPHIC SURVEY
C3.1 GRADING AND DRAINAGE PLAN
C3.2 ENLARGED GRADING DETAILS
C4.1 STORM DRAIN PLAN
C5.1 PAVING PLAN
C6.1 OFFSITE DEMOLITION PLAN
C6.2 OFFSITE IMPROVEMENTS
C7.1 ONSITE CIVIL DETAILS
C7.2 ONSITE CIVIL DETAILS
C7.3 OFFSITE DETAILS
C7.4 OFFSITE DETAILS

LANDSCAPE
LA1 PLANTING PLAN
LA2 PLANTING LEGEND
LA3 PLANTING DETAILS
IR1 IRRIGATION DEMOLITION PLAN
IR2 IRRIGATION PLAN
IR3 IRRIGATION DETAILS
IR4 IRRIGATION DETAILS

SITE DEVELOPMENT
SD1 DEMO SITE PLAN
SD2 OVERALL SITE PLAN
SD3 SITE PLAN
SD4 ENLARGED SITE PLANS & SITE DETAILS
SD5 SITE DETAILS
SD6 SITE DETAILS
SD7 ENLARGED GATE PLAN & DETAILS

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A1 OVERALL FLOOR PLAN, FLOOR PLAN
A2 FLOOR PLAN, ENLARGED FLOOR PLANS
A3 EXTERIOR ELEVATIONS
A4 EXTERIOR ELEVATIONS
A5 OVERALL REFLECTED CEILING PLAN, REFLECTED CEILING PLAN
A6 REFLECTED CEILING PLAN
A7 OVERALL ROOF PLAN, ROOF PLAN
A8 ROOF PLAN
A9 SECTIONS
A10 INTERIOR ELEVATIONS
A11 INTERIOR ELEVATIONS
A12 INTERIOR ELEVATIONS
A13 FINISH SCHEDULE
A14 WALL ASSEMBLIES
A15 DOOR SCHEDULE
A16 FRAME TYPES
A17 FRAME DETAILS
A18 MILLWORK DETAILS
A19 TYPICAL DETAILS
A20 DETAILS
A21 DETAILS

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S1.2 TYPICAL NOTES AND DETAILS
S1.3 TYPICAL NOTES AND DETAILS
S1.4 TYPICAL NOTES AND DETAILS
S1.5 TYPICAL NOTES AND DETAILS
S1.6 TYPICAL NOTES AND DETSILS
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S2.4 FOOTING DETAILS
S3.1 PARTIAL ROOF PLAN
S3.2 PARTIAL ROOF PLAN
S4.1 PARTIAL CEILING FRAMING PLAN
S4.2 PARTIAL CEILING FRAMING PLAN
S5.1 BUILDING SECTIONS
S5.2 BUILDING SECTIONS
S6.1 SHEAR WALL ELEVATIONS
S6.2 SHEAR WALL ELEVATIONS
S6.3 SHEAR WALL ELEVATIONS
S7.1 FRAMING DETAILS
S7.2 FRAMING DETAILS
S7.3 FRAMING DETAILS
S7.4 FRAMING DETAILS

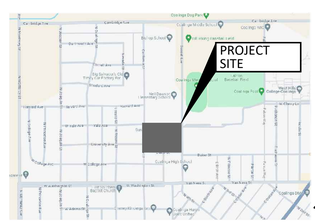
PLUMBING
P5.1 PLUMBING SITE PLAN
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P2.0 ENLARGED PLUMBING PLAN
P2.1 ENLARGED PLUMBING PLAN
P3.0 BLDG. F ENLARGED PLUMBING PLAN
P4.0 PLUMBING DETAILS
P4.1 PLUMBING DETAILS
P5.0 PLUMBING SCHEDULES

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F1.1 FIRE SPRINKLER PLAN
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F3.1 INSTALLATION DETAILS
F3.2 SITE FIRE DETAILS
F4.0 STRUCTURAL DETAILS

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M4.0 HVAC ROOF PLAN
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M6.1 HVAC SCHEDULES
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M7.1 TITLE 24
M7.2 TITLE 24
M7.3 TITLE 24

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EG1.2 INDOOR LIGHTING COMPLIANCE
EG1.3 OUTDOOR LIGHTING COMPLIANCE
EG1.4 POWER COMPLIANCE
EG1.5 SOLAR AND BATTERY STORAGE COMPLIANCE
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ES1.2 ENLARGED SITE ELECTRICAL PLAN - DEMOLITION
ES1.3 ENLARGED SITE ELECTRICAL PLAN - NEW
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E3.2 FIRE ALARM NOTIFICATION PLAN
E4.1 FIRE ALARM CODES, NOTES AND SPECIFICATIONS
E4.2 FIRE ALARM SYSTEM RISER DIAGRAM AND CALCULATIONS
E4.3 FIRE ALARM DETAILS
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E5.2 DETAILS
E5.3 DETAILS
E5.4 DETAILS
E5.5 SOLAR DETAILS AND NOTES
E5.6 SOLAR NOTES
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TELECOM
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TS1.2 PARTIAL ENLARGED SITE SIGNALS PLANS
T1.1 SIGNALS PLAN



VICINITY MAP

COALINGA- HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210
N.T.S.

APPROVALS
FILE # 10-28
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

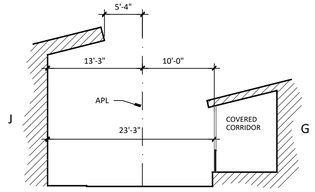
REVISIONS

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(559) 627.0530 Office
(559) 627.1926 Fax

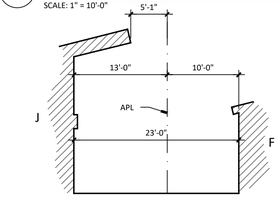
TITLE
COVER SHEET, SHEET INDEX, VICINITY MAP

G1

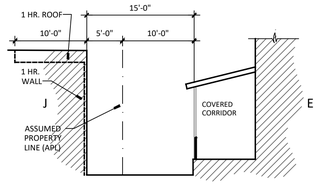
PROJECT 24001



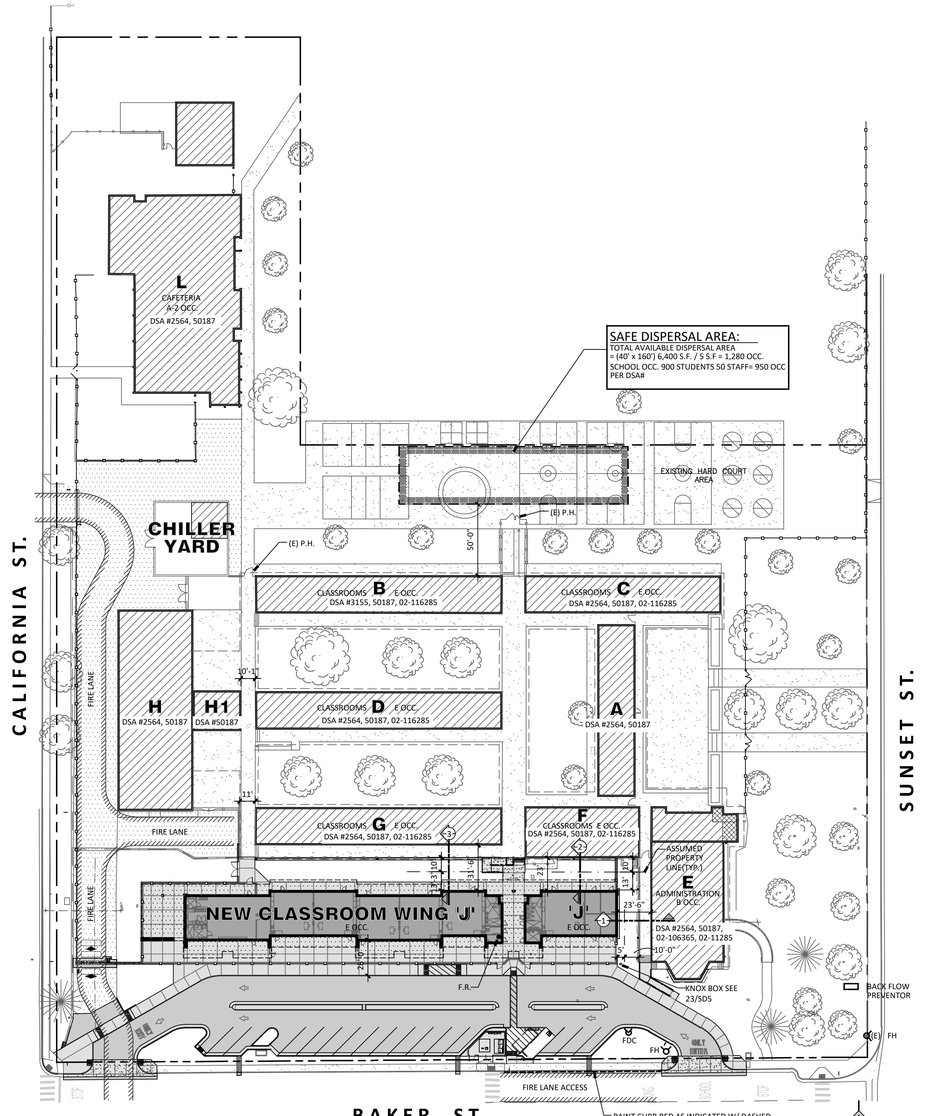
3 PROFILE SECTION
SCALE: 1" = 10'-0"



2 PROFILE SECTION
SCALE: 1" = 10'-0"



1 PROFILE SECTION
SCALE: 1" = 10'-0"



FIRE CODE SITE PLAN
1" = 50'-0"

BUILDING CODE SUMMARY

BUILDING DESIGNATION	BUILDING NAME	OCCUPANCY CLASSIFICATION (CBC CHAPTER 3)	ALLOWABLE BUILDING AREA (CBC TABLE 506.2)	ACTUAL BUILDING AREA CBC 202			CONSTRUCTION TYPE (CBC TABLE 503)	SEPARATION OF OCCUPANCIES (CBC 503.3)	ACTUAL BUILDING HEIGHT	ALLOWABLE BUILDING HEIGHT (CBC TABLE 504.3)	ACTUAL # OF STORIES	ALLOWABLE # OF STORIES (CBC TABLE 504.4)	BUILDING SEPARATION (FIRE WALLS) (CBC 706.1)	AUTOMATIC FIRE SPRINKLER SYSTEM (CBC 903)	USE OF FIRE SPRINKLERS	FRONTAGE INCRESE If = [F /P - 0.25] W / 30 (CBC 506.2)	AREA MODIFICATION Aa = { At + [At x If] + [At x Is] } (CBC 506.2)	MINIMUM REQUIRED FIRE FLOW (CFC TABLE BB105.1)	FIRE RESISTANCE RATINGS FOR EXTERIOR WALLS BASED ON FIRE SEPARATION DISTANCE (CBC TABLE 705.5)	FIRE RESISTANCE RATINGS REQUIREMENTS CBC TABLE 601		CHECK DRAFT STOP REQUIREMENTS FOR "A" & "E" OCC. FULLY SPRINKLERED BLDGS. ATTIC AREA MAY NOT EXCEED 9000 S.F. OR 100' LONGEST DISTENCE OR 3000 S.F. NON-SPRINKLERED
				BUILDING AREA	OVERHANG AREA	(BLDG + O.H.) TOTAL AREA														CONSTRUCTION TYPE	VB	
BLDG. 'J'	CLASSROOM BUIDING	E	38,000 SF	9,250 SF	6,950 SF	16,200 SF	VB	N/A	22'-4"	40'-0"	1	1	N/A	YES CBC 903.2.3	AREA INCREASE CBC 506.3	NOT USED	NOT USED	CONST. TYPE: VB TOTAL AREA: 16,200 SF FLOW: 3,500 GPM MIN. PER BB105.1=1,500 GPM DURATION: 3 HOURS	CONSTRUCTION TYPE: VB SEPARATION DISTANCE: >10': E OCC. NO RATING <10': E OCC. 1 HOUR	INTERIOR BEARING WALLS	0	OK
																				INTERIOR NON-BEARING WALLS	0	
																				FLOOR CONSTRUCTION	0	
																				ROOF CONSTRUCTION	0	

NOTES AND LEGEND :

- NEW BUILDING
- EXISTING BUILDING
- 20' WIDE FIRE LANE
- PERIMETER (P)
- FRONTAGE (F)
- PROPERTY LINE
- ASSUMED PROPERTY LINE
- "OCC." BUILDING OCCUPANCY PER CBC CHAPTER 3.
- FH FIRE HYDRANT
- FDC FIRE DEPARTMENT CONNECTION ASSEMBLY
- F.R. FIRE SPRINKLER RISER

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: COALINGA-HURON UNIFIED SCHOOL DISTRICT

Project Name/School: SUNSET ELEMENTARY SCHOOL

Project Address: 985 SUNSET AVE, COALINGA, CA 93210

FIRE & LIFE SAFETY INFORMATION

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

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 suppresston 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: JOHNNY GARZA Title: ASSISTANT SUPERINTENDENT

Signature: _____ Date: 2-6-25

LOCAL FIRE AUTHORITY (LFA) INFORMATION

LFA Agency Name: COALINGA FIRE PREVENTION

LFA Review Official: JUSTIN MILLIGAN

Title: BATTALION CHIEF Work Phone: 559-935-1652

Work Email: JMILLIGAN@COALINGA.COM

LFA Reviewer's Signature: _____ Date: 2/5/2025

*FIRE ACCESS LANES ARE GREATER THAN 150 FEET FROM ALL PORTIONS OF THE NEW BUILDING. LFA ACCEPTS PROPOSED PROXIMITY OF FIRE ACCESS LANES FROM THE NEW BUILDING

Hydrant Flow Test Summary

Test Date 04/03/24

Location
Sunset Ave. and Baker St.

Tested by
Coalinga Fire Department
Fire Prevention Division
300 W. Elm Ave., Coalinga, CA 93210

Completed by: James Ramsey

Notes
NFPA 291 (2022) sections 4.9.3a and 4.10.2/4.10.3; Coalinga Fire (C=0.75) * (C=0.83) Pumper outlet coefficient per NFPA 291 table 4.10.2. [Overall Outlet Coefficient: C=0.6225]

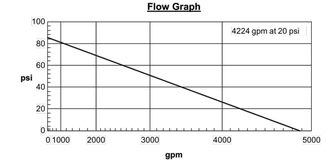
Summary only, refer to the official Coaling Fire Dept. report.

Read Hydrant
86 psi **static pressure**
74 psi **residual pressure**
2 ft **hydrant elevation**

Flow Hydrant(s)

Outlet	Elev	Size	C	Pitot Pressure	Flow
#1	2	4.5	0.6225	20	1682 gpm

Flow Graph



APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34290 REN. 05-31-25 STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0539 Office
(559) 627.1926 Fax

TITLE
FIRE CODE SITE PLAN, CODE SUMMARY

FC1

PROJECT 24001

SYMBOL LEGEND

	FIRE HYDRANT
	WATER VALVE
	EXISTING LIGHT POLE
	SIGN
	CHAIN LINK FENCE
	FLOW ARRROW AS NOTED ON PLANS
	MANHOLE
	GUY WIRE
0.00	PROPOSED ELEVATION
(0.00)	EXISTING ELEVATION

UTILITIES

E	UNDERGROUND ELECTRIC
F	FIRE LINE (WATER)
FO	UNDERGROUND FIBER OPTIC LINE
G	UNDERGROUND GAS LINE
IRR	UNDERGROUND IRRIGATION LINE
SD	STORM DRAIN
SS	SANITARY SEWER
T	UNDERGROUND TELEPHONE LINE
TV	UNDERGROUND CABLE TELEVISION LINE
W	WATER

LEGEND: WHEN USED IN THESE CIVIL DRAWINGS SHALL CONFORM TO THE ABOVE LIST, UNLESS NOTED OTHERWISE. OTHER SHEETS WITHIN THESE PLANS MAY CONTAIN SPECIFIC REFERENCES AND LEGENDS WITH INTERPRETATIONS INTENDED ONLY FOR THOSE SHEETS.

BENCHMARK

VERTICAL DATUM & BENCHMARKS:

THE VERTICAL DATUM USED FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) BASED ON THE CALIFORNIA SURVEYING AND DRAFTING, INC. VIRTUAL SURVEY NETWORK.

TBM NO 1: CHISELED PLUS IN TOP OF CURB, EAST RETURN, SOUTHEAST CORNER OF CALIFORNIA ST. & BAKER ST.

ELEV = 675.96 (NAVD 88).

TBM NO. 2: CHISELED PLUS IN TOP OF CURB, WEST RETURN, SOUTHWEST CORNER OF SUNSET ST. & BAKER ST.

ELEV = 675.31 (NAVD 88).

VERTICAL DATUM NOTE:

1, ADD 600.00 FEET TO ELEVATIONS SHOWN ON PLAN TO OBTAIN DATUM BASED ON NORTH AMERICAN VERTICAL DATUM 1988.

CONSTRUCTION STAKING

CONSTRUCTION STAKING LIABILITY WAIVER

THESE IMPROVEMENT PLANS HAVE BEEN PREPARED WITH THE INTENT THAT THE FIRM OF LANE ENGINEERS, INC. WILL BE PERFORMING THE CONSTRUCTION STAKING FOR THE COMPLETE PROJECT. IF ANYONE OTHER THAN THE DESIGN ENGINEER IS EMPLOYED TO USE THESE PLANS FOR THE PURPOSE OF CONSTRUCTION STAKING, NOTICE IS HEREBY GIVEN THAT LANE ENGINEERS, INC. WILL NOT ASSUME ANY RESPONSIBILITY FOR ERRORS OR OMISSIONS, IF ANY, WHICH MIGHT OCCUR AND COULD HAVE BEEN AVOIDED, CORRECTED, OR MITIGATED IF THE FIRM OF LANE ENGINEERS, INC. HAD PERFORMED THE CONSTRUCTION STAKING WORK.

STANDARD GENERAL NOTES

1. THE CONTRACTOR AGREES THAT, IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THE PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY. THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS. THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD OWNER AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXEMPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF ENGINEER.
2. THE CONTRACTOR SHALL ACCEPT THE SITE IN ITS PRESENT CONDITION AND DEMOLISH AND/OR REMOVE FROM THE AREA OF DESIGNATED PROJECT EARTHWORK ALL STRUCTURES, BOTH SURFACE AND SUBSURFACE, TREES, BRUSH, ROOTS, DEBRIS, ORGANIC MATTER, AND ALL OTHER MATTER DETERMINED BY THE INSPECTOR TO BE DELETERIOUS. SUCH MATERIAL SHALL BE REMOVED FROM THE SITE BY THE CONTRACTOR.
3. EXCAVATIONS SHALL BE ADEQUATELY SHORED, BRACED AND SHEETED SO THAT THE EARTH WILL NOT SLIDE OR SETTLE AND SO THAT ALL EXISTING IMPROVEMENTS OF ANY KIND WILL BE FULLY PROTECTED FROM DAMAGE. ANY DAMAGE RESULTING FROM A LACK OF ADEQUATE SHORING, BRACING AND SHEETING, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND HE SHALL EFFECT NECESSARY REPAIRS OR RECONSTRUCTION AT HIS OWN EXPENSE. WHERE THE EXCAVATION FOR A CONDUIT TRENCH, AND/OR STRUCTURE IS FIVE FEET OR MORE IN DEPTH, THE CONTRACTOR SHALL PROVIDE ADEQUATE SHEETING, WHICH SHALL CONFORM TO THE APPLICABLE CONSTRUCTION SAFETY ORDERS OF THE DIVISION OF INDUSTRIAL SAFETY OF THE STATE OF CALIFORNIA. THE CONTRACTOR SHALL ALWAYS COMPLY WITH OSHA REQUIREMENTS.
4. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN PERMITS NECESSARY TO PERFORM THE WORK SHOWN IN THESE PLANS FROM THE APPROPRIATE AGENCIES.
5. THE CONTRACTOR SHALL TAKE EFFECTIVE ACTION TO PREVENT THE FORMATION OF AN AIRBORNE DUST NUISANCE AND SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS FAILURE TO DO SO.
6. THE CONTRACTOR SHALL PROVIDE FOR INGRESS AND EGRESS FOR PRIVATE PROPERTY ADJACENT TO WORK THROUGHOUT THE PERIOD OF CONSTRUCTION.
7. THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR SAFETY. TRAFFIC CONTROL AND ALL TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE WITH THE "MANUAL OF TRAFFIC CONTROLS FOR CONSTRUCTION AND MAINTENANCE ZONES", LATEST EDITION AS PUBLISHED BY THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION.
8. THE CONTRACTOR SHALL POST EMERGENCY TELEPHONE NUMBERS FOR POLICE, FIRE, AMBULANCE, AND THOSE AGENCIES RESPONSIBLE FOR MAINTENANCE OF UTILITIES IN THE VICINITY OF JOBSITE.
9. ALL RETURN RADII AND CURB DATA ARE TO FACE OF CURB UNLESS SHOWN OR NOTED OTHERWISE.
10. ALL QUANTITIES AND PAY ITEMS ARE AND WILL BE BASED ON HORIZONTAL MEASUREMENTS.
11. LENGTHS OF SANITARY SEWERS AND STORM DRAINS ARE HORIZONTAL DISTANCES FROM CENTER TO CENTER OF STRUCTURES, ROUNDED OFF TO THE NEAREST FOOT.
12. EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 2 WORKING DAYS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES. CALL UNDERGROUND SERVICE ALERT (U.S.A.), AT 1-800-227-2600. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED AND MERGED IN THE CONTRACT UNIT PRICE.
13. ALL EXISTING UTILITIES AND IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE LOCAL AGENCY ENGINEER, AT THE CONTRACTOR'S SOLE EXPENSE.
14. ANY RELOCATION OF PUBLIC UTILITIES SHALL BE CONDUCTED IN ACCORDANCE WITH ANY AND ALL REQUIREMENTS OF THE UTILITY COMPANY, INCLUDING FEES, BONDS, PERMITS AND WORKING CONDITIONS, ETC.
15. IF ARCHAEOLOGICAL MATERIALS ARE UNCOVERED DURING GRADING, TRENCHING OR OTHER EXCAVATION, EARTHWORK WITHIN 100 FEET OF THESE MATERIALS SHALL BE STOPPED UNTIL A PROFESSIONAL ARCHAEOLOGIST WHO IS CERTIFIED BY THE SOCIETY OF CALIFORNIA ARCHAEOLOGY (SCA) AND/OR THE SOCIETY OF PROFESSIONAL ARCHAEOLOGY (SOPA) HAS HAD AN OPPORTUNITY TO EVALUATE THE SIGNIFICANCE OF THE FIND AND SUGGEST APPROPRIATE MITIGATION MEASURES, IF THEY ARE DEEMED NECESSARY.
16. LANE ENGINEERS, INC. DOES NOT SPECIFY NOR RECOMMEND THE USE OR INSTALLATION OF ANY MATERIAL OR EQUIPMENT WHICH IS MADE FROM, OR WHICH CONTAINS ASBESTOS FOR USE IN THE CONSTRUCTION OF THESE IMPROVEMENTS. ANY PARTY INSTALLING OR USING SUCH MATERIALS OR EQUIPMENT SHALL BE SOLELY RESPONSIBLE FOR ALL INJURIES, DAMAGES, OR LIABILITIES, OF ANY KIND, CAUSED BY THE USE OF SUCH MATERIALS OR EQUIPMENT. THE PROVISIONS OF THIS NOTE SHALL APPLY UNLESS THEY ARE EXPRESSLY WAIVED IN WRITING BY LANE ENGINEERS, INC..
17. SHOULD IT APPEAR THAT THE WORK TO BE DONE OR ANY MATTER RELATIVE THERETO IS NOT SUFFICIENTLY DETAILED OR EXPLAINED ON THESE PLANS, THE CONTRACTOR SHALL CONTACT MANGINI ASSOCIATES, INC. (559) 627-0530 FOR SUCH FURTHER EXPLANATIONS AS MAY BE NECESSARY.
18. THE CONTRACTOR SHALL MEET AND FOLLOW ALL NPDES REQUIREMENTS IN EFFECT AT THE TIME OF CONSTRUCTION.
19. CONTRACTOR SHALL COMPLY WITH SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT (SJVAPCD) REGULATION VIII TO LIMIT FUGITIVE DUST.
20. APPROPRIATE APPROVAL SHALL BE OBTAINED PRIOR TO PROCEEDING WITH ANY WORK IN THE VICINITY OF IRRIGATION DITCHES, CREEKS AND ASSOCIATED IRRIGATION FACILITIES WHETHER OR NOT SHOWN ON THESE PLANS.

CIVIL ABBREVIATIONS

&	AND	M	METER(S)
@	AT	MAS	MASONRY
℄	CENTERLINE	MAX	MAXIMUM
Ø	DIAMETER OR ROUND	MECH	MECHANICAL
⊥	PERPENDICULAR	MED	MEDIUM
#	POUND OR NUMBER	MET	METAL
( )	EXISTING DATA	MFR	MANUFACTURER
N	NORTH	MH	MAN HOLE
S	SOUTH	MIN	MINIMUM
W	WEST	MISC	MISCELLANEOUS
E	EAST	MM	MILLIMETER(S)
AB	AGGREGATE BASE	MTL	MATERIAL
ABV	ABOVE	MTR	METER
AC	ASPHALT CONCRETE	N	NORTH
ACC	ACCESSIBLE	NE	NORTH EAST
ACP	ASBESTOS CEMENT PIPE	NAT	NATURAL
AD	AREA DRAIN	NIC	NOT IN CONTRACT
ADJ	ADJUSTABLE	NTS	NOT TO SCALE
ADJT	ADJACENT	OC	ON CENTER
ALT	ALTERNATE	OD	OUTSIDE DIAMETER
APPROX	APPROXIMATE	OG	ORIGINAL GROUND
ARCH	ARCHITECT(URAL)	OH	OPPOSITE HAND
BC	BEGINNING OF CURVE	OPNG	OPENING
BCR	BEGINNING OF CURB RETURN	OPP	OPPOSITE
BLDG	BUILDING	P	TOP OF PAVING
BM	BENCH MARK	PAR	PARALLEL
BO	BLOW OFF	PC	PROPERTY CORNER
BOT	BOTTOM	PCC	POINT OF COMPOUND CURVATURE
BTWN	BETWEEN	PERI	PERIMETER
BW	BOTH WAYS	PK	PARKING
C	TOP OF CONCRETE	P/L	PROPERTY LINE
CB	CATCH BASIN	POC	POINT OF CONNECTION
CEM	CEMENT	PP	POWER POLE
CF	CUBIC FOOT	PRC	POINT OF REVERSE CURVATURE
CI	CAST IRON	PRKG	PARKING
CIP	CAST IRON PIPE	PROP	PROPERTY
CIPC	CAST-IN-PLACE CONCRETE	PT	POINT
CIR	CIRCLE	PVC	POLYVINYL CHLORIDE
CJ	CONTROL JOINT	PVMT	PAVEMENT
CAP	CORRUGATED ALUMINUM PIPE	R	RIDGE
CMP	CORRUGATED METAL PIPE	RAD	RADIUS
CSP	CORRUGATED STEEL PIPE	RCP	REINFORCED CONCRETE PIPE
CMU	CONCRETE MASONRY UNIT	RDR	ROOF DRAIN
CO	CLEAN OUT	REF	REFERENCE
COL	COLUMN	REQD	REQUIRED
CONC	CONCRETE	RET	RETURN
CONST	CONSTRUCTION	RETG	RETAINING
CONT	CONTINUOUS	REV	REVISION
CONTR	CONTRACTOR	RP	RADIUS POINT
COR	CORNER	RR	RAILROAD
CR	CROWN	RT	RIGHT
CY	CUBIC YARD	R/W	RIGHT OF WAY
D	DRAIN	RWC	RAINWATER CONDUCTOR
DA	DRIVE APPROACH	RWL	RAINWATER LEADER
DEM	DEMOLISH, DEMOLITION	S	SOUTH
DET	DETAIL	SCHED	SCHEDULE
DI	DRAIN OR DROP INLET	SD	STORM DRAIN
DIA	DIAMETER	SDMH	STORM DRAIN MANHOLE
DIAG	DIAGONAL	SEC	SECTION
DIM	DIMENSION	SERV	SERVICE
DIP	DUCTILE IRON PIPE	SF	SQUARE FOOT
DN	DOWN	SG	FINISHED SUBGRADE
DWG	DRAWING	SHT	SHEET
E	EAST	SIM	SIMILAR
EA	EACH	SPEC	SPECIFICATION
EC	END OF CURVE	SPECS	SPECIFICATIONS
ECR	END OF CURB RETURN	SQ	SQUARE
EJ	EXPANSION JOINT	SS	SANITARY SEWER
ELEV	ELEVATION	SSMH	SANITARY SEWER MANHOLE
ENCL	ENCLOSURE	SSDMH	SANITARY SEWER DROP MANHOLE
EP	EDGE OF PAVEMENT	SSTL	STAINLESS STEEL
EQ	EQUAL	STA	STATION
EQUIP	EQUIPMENT	STD	STANDARD
EST	ESTIMATE	STL	STEEL
ETW	EDGE OF TRAVEL WAY	STRUCT	STRUCTURAL
EXCA	EXCAVATE	SW	SWALE
EXIST	EXISTING	SYM	SYMETRICAL
FD	FOUND	T&B	TOP AND BOTTOM
FES	FLARED END SECTION	TB	TOP OF BERM
FF	FINISHED FLOOR ELEVATION	TBM	TEMPORARY BENCH MARK
FG	FINISHED GRADE	TC	TOP OF CURB
FH	FIRE HYDRANT	TD	TOP OF DIKE
FL	FLOW LINE	TEL	TELEPHONE
FNC	FENCE	TEMP	TEMPORARY
FOC	FACE OF CONCRETE	TER	TOP OF EAST RAIL
FOF	FACE OF FINISH	TF	TOP OF FOOTING
FOM	FACE OF MASONRY	TH	TOP OF REDWOOD HEADER
FOS	FACE OF STUDS	THK	THICK(NESS)
FTG	FOOTING	TM	TOP OF MOW STRIP
GA	GAUGE	TOM	TOP OF MASONRY
GALV	GALVANIZED	TOS	TOP OF STEEL
GB	GRADE BREAK	TNR	TOP OF NORTH RAIL
GC	GRADE CHANGE	TR	TOP OF RAIL
GI	GALVANIZED IRON	TRK	TOP OF ROCK
GR	TOP OF GRATE	TSL	TOP OF SLAB
GRD	GRADE, GRADING	TSR	TOP OF SOUTH RAIL
GV	GATE VALVE	TW	TOP OF WALL
HORIZ	HORIZONTAL	TWR	TOP OF WEST RAIL
HP	HINGE POINT	TYP	TYPICAL
HPT	HIGH POINT	UGD	UNDERGROUND
HW	HEADWALL	UNO	UNLESS NOTED OTHERWISE
HWL	HIGH WATER LINE	VCP	VITRIFIED CLAY PIPE
ID	INSIDE DIAMETER	VERT	VERTICAL
INCL	INCLUDE(D), INCLUDING	VIF	VERIFY IN FIELD
INV	INVERT	W	WEST
JB	JUNCTION BOX	W/	WITH
JT	JOINT	W/O	WITHOUT
L	LEFT	WD	WOOD
LP	LOW POINT	WHB	WHEEL BUMPER
LT	LIGHT	WM	WATER METER
		WP	WORKING POINT
		WTR	WATER
		WV	WATER VALVE

ABBREVIATIONS: WHEN USED IN THESE CIVIL DRAWINGS SHALL CONFORM TO THE ABOVE LIST, UNLESS NOTED OTHERWISE. OTHER SECTIONS (SUCH AS ARCHITECTURAL, STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRICAL PLANS) MAY CONTAINSPECIFIC REFERENCES AND LEGENDS WITH INTERPRETATIONS INTENDED ONLY FOR THOSE SECTIONS.

REGISTERED PROFESSIONAL ENGINEER — HA VANG — R.C.E. 73146 — 01/08/2025 — CIVIL — STATE OF CALIFORNIA

CONSULTANT

LANE ENGINEERS INC.
CIVIL● STRUCTURAL● SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT JR. — No. C-34290 — RENEWAL 08-31-25 — STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210

REVISIONS

MANGINI | ARCHITECTURE ENGINEERING
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291

TITLE
CIVIL COVERSHEET

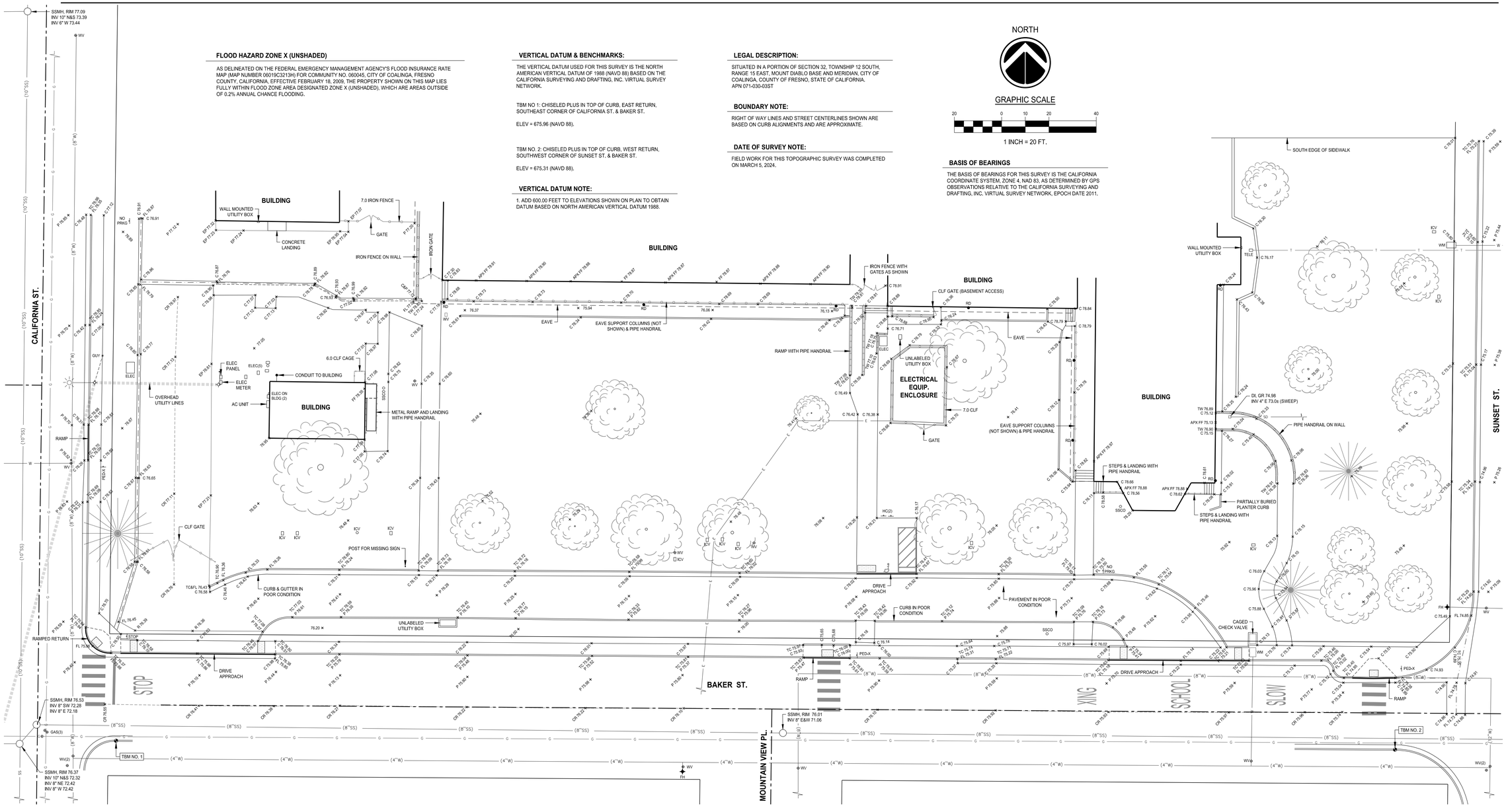
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PROJECT 24401

LANE PROJ. NO. 24040.1

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FLOOD HAZARD ZONE X (UNSHADED)

AS DELINEATED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP (MAP NUMBER 06019C3213H) FOR COMMUNITY NO. 060045, CITY OF COALINGA, FRESNO COUNTY, CALIFORNIA, EFFECTIVE FEBRUARY 18, 2009, THE PROPERTY SHOWN ON THIS MAP LIES FULLY WITHIN FLOOD ZONE AREA DESIGNATED ZONE X (UNSHADED), WHICH ARE AREAS OUTSIDE OF 0.2% ANNUAL CHANCE FLOODING.

VERTICAL DATUM & BENCHMARKS:

THE VERTICAL DATUM USED FOR THIS SURVEY IS THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) BASED ON THE CALIFORNIA SURVEYING AND DRAFTING, INC. VIRTUAL SURVEY NETWORK.

TBM NO 1: CHISELED PLUS IN TOP OF CURB, EAST RETURN, SOUTHEAST CORNER OF CALIFORNIA ST. & BAKER ST.

ELEV = 675.96 (NAVD 88).

TBM NO. 2: CHISELED PLUS IN TOP OF CURB, WEST RETURN, SOUTHWEST CORNER OF SUNSET ST. & BAKER ST.

ELEV = 675.31 (NAVD 88).

VERTICAL DATUM NOTE:

1. ADD 600.00 FEET TO ELEVATIONS SHOWN ON PLAN TO OBTAIN DATUM BASED ON NORTH AMERICAN VERTICAL DATUM 1988.

LEGAL DESCRIPTION:

SITUATED IN A PORTION OF SECTION 32, TOWNSHIP 12 SOUTH, RANGE 15 EAST, MOUNT DIABLO BASE AND MERIDIAN, CITY OF COALINGA, COUNTY OF FRESNO, STATE OF CALIFORNIA. APN 071-030-03ST

BOUNDARY NOTE:

RIGHT OF WAY LINES AND STREET CENTERLINES SHOWN ARE BASED ON CURB ALIGNMENTS AND ARE APPROXIMATE.

DATE OF SURVEY NOTE:

FIELD WORK FOR THIS TOPOGRAPHIC SURVEY WAS COMPLETED ON MARCH 5, 2024.

NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.

BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA COORDINATE SYSTEM, ZONE 4, NAD 83, AS DETERMINED BY GPS OBSERVATIONS RELATIVE TO THE CALIFORNIA SURVEYING AND DRAFTING, INC. VIRTUAL SURVEY NETWORK, EPOCH DATE 2011.

UNDERGROUND UTILITY NOTE:

THE EXISTING UNDERGROUND UTILITY LINES SHOWN ARE BASED ON THE LOCATION OF VISIBLE SURFACE IMPROVEMENTS, CITY OR COUNTY RECORD DRAWINGS, AND UTILITY COMPANY RECORD DRAWINGS. IN SOME CASES IT HAS NOT BEEN POSSIBLE TO OBTAIN PERTINENT INFORMATION FROM THESE COMPANIES. ALTHOUGH EVERY EFFORT HAS BEEN MADE TO ACCURATELY SHOW THE UNDERGROUND UTILITY LINES, IT WILL BE NECESSARY TO CONFIRM THE LOCATIONS BY NOTIFYING UNDERGROUND SERVICE ALERT.

TELEPHONE U.S.A. AT 811 PRIOR TO DIGGING, THE DEPTHS OF ALL LINES MUST BE DETERMINED BY CAREFULLY PROBING OR POTHOLING UNDER UTILITY COMPANY SUPERVISION.

DRY UTILITY INFORMATION WAS REQUESTED FROM AT&T AND PG&E ON FEBRUARY 15 2024.

AT&T RECORD DRAWINGS WERE RECEIVED ON MARCH 1, 2024.

PG&E RECORD DRAWINGS WERE RECEIVED ON FEBRUARY 28, 2024.

CITY UTILITY INFORMATION WAS TAKEN FROM THEIR GIS WEB-SITE.

LEGEND

75.99	ORIGINAL GROUND ELEVATION (UNLESS NOTED OTHERWISE)
APX FF	CONCRETE ELEVATION MEASURED ADJACENT TO LOCKED DOOR
C	TOP OF CONCRETE
CLF	CHAIN LINK FENCE
CR	CROWN
DI	DRAIN INLET
EP	EDGE OF PAVEMENT
FF	FINISH FLOOR ELEVATION
FL	FLOW LINE
GR	TOP OF GRATE
P	TOP OF PAVEMENT
R	RIDGE
TC	TOP OF CURB
TW	TOP OF WALL

SIGNS

HC — HANDICAP SIGN
NO PRKG — NO PARKING SIGN
PED-X — PEDESTRIAN SIGN
STOP — STOP SIGN

GENERAL SYMBOLS

MONUMENT FOUND AS DESCRIBED
TBM — TEMPORARY BENCH MARK
STREET LIGHT
DECIDUOUS TREE TRUNK AND CANOPY DRAWN TO SCALE
EVERGREEN TREE TRUNK AND CANOPY DRAWN TO SCALE
TRUNCATED DOMES

WET UTILITIES

DI — DRAIN INLET
FH — FIRE HYDRANT
ICV — IRRIGATION CONTROL VALVE
RD — ROOF DRAIN
SSCO — SANITARY SEWER CLEAN OUT
WM — WATER METER
WV — WATER VALVE
MH — MANHOLE

DRY UTILITIES

ELEC — ELECTRICAL BOX
GAS — GAS VALVE
GUY — GUY ANCHOR
TELE — TELEPHONE BOX
UTILITY POLE

UTILITY LINETYPES

E — ELECTRICAL
G — GAS
SD — STORM DRAIN
SS — SANITARY SEWER
T — TELEPHONE
W — WATER

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

Project
SUNSET ELEMENTARY SCHOOL

985 SUNSET AVE.
COALINGA, CA.

Prepared For
COALINGA-HURON UNIFIED SCHOOL DISTRICT

LANE ENGINEERS, INC.
CIVIL • STRUCTURAL • SURVEYING

979 North Blackstone Street
Tulare, California 93274
559.688.5263
www.laneengineers.com

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Professional Seal

LICENSED LAND SURVEYOR
Ronald D. Snow
No. 6859
STATE OF CALIFORNIA

Description	Release Date

No.	Revision	Date

Drawn by: BAS

Reviewed by: RDS

Sheet Title
PARTIAL TOPOGRAPHIC SURVEY

Original drawing is 24 x 36. Do not scale contents of this drawing.

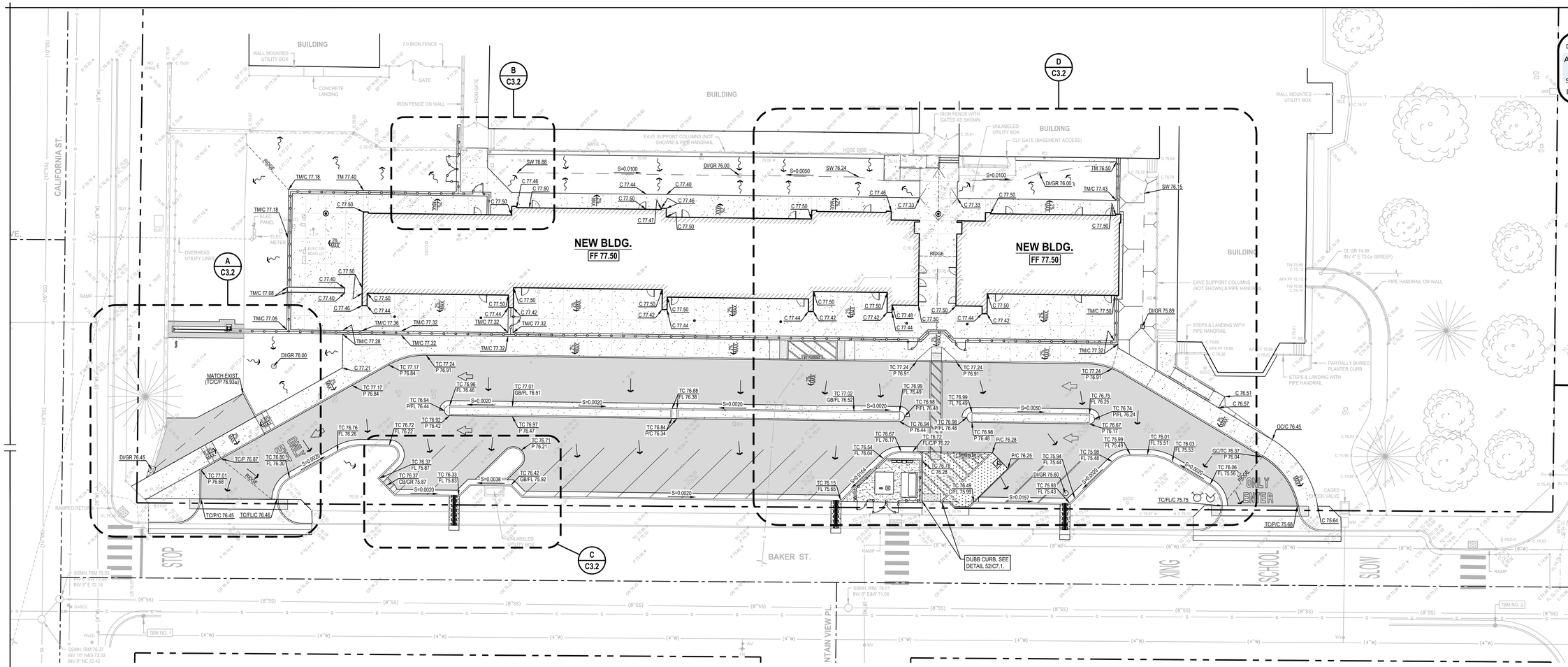
Sheet Number

C1.1

OF 1

Project No: 24040

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GRADING NOTES

1. REFER TO SHEETS C0.1 FOR BENCHMARKS, GENERAL NOTES & INFORMATION.
2. UNLESS SHOWN OR NOTED OTHERWISE, WHERE FINISH GRADE ABUTS CONCRETE PAVEMENTS/BACK OF CURBS, FINISH GRADE ELEVATION SHALL BE 1 INCH LOWER THAN ADJACENT CONCRETE ELEVATION IN SHRUB AREAS AND ½ INCH LOWER IN TURF AREAS.
3. CROSS SLOPE AT ALL PEDESTRIAN WALKS AND SIDEWALKS SHALL BE 1% MIN., BUT SHALL NOT EXCEED 2.0%.
4. FINISHED PAVEMENT SLOPES AT ALL ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2.0% IN ANY DIRECTION.
5. EXTERIOR CONCRETE SHALL BE FLUSH WITH FINISHED FLOOR AT ALL EXTERIOR DOORS.
6. FIELD VERIFY ALL ELEVATIONS SHOWN WHERE PROPOSED IMPROVEMENTS ABUT EXISTING IMPROVEMENTS. IMMEDIATELY NOTIFY PROJECT ARCHITECT OF ANY DISCREPANCIES.
7. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL SITE INFORMATION AND DETAILS.
8. ALL EXISTING VALVE BOXES AND MANHOLES TO REMAIN SHALL BE ADJUSTED AS REQUIRED SO THAT THE TOP OF COVERS ARE FLUSH WITH FINISH GRADES.
9. SEE PROJECT SPECIFICATIONS FOR SITE PREPARATION OVER-EXCAVATION REQUIREMENTS.
10. SEE SHEET C6.1 & C6.2 FOR OFFSITE DEMOLITION AND IMPROVEMENTS.

LEGEND

- NEW CONCRETE PAVEMENT
- NEW CONCRETE FLATWORK & OTHER CONCRETE SURFACE - SEE ARCH. "SD" DRAWINGS
- AC PAVING PATCH/REPAIR
- RIGHT OF WAY/PROPERTY LINE
- ROAD CENTERLINE

NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.

GRADING AND DRAINAGE PLAN

REGISTERED PROFESSIONAL ENGINEER
RA. VANG
CIVIL
STATE OF CALIFORNIA
01/08/2025

CONSULTANT

LANE ENGINEERS INC.
CIVIL• STRUCTURAL• SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

APPROVALS

FILE # 10-26
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT '98
No. C-34290
RENEW:08.31.25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210

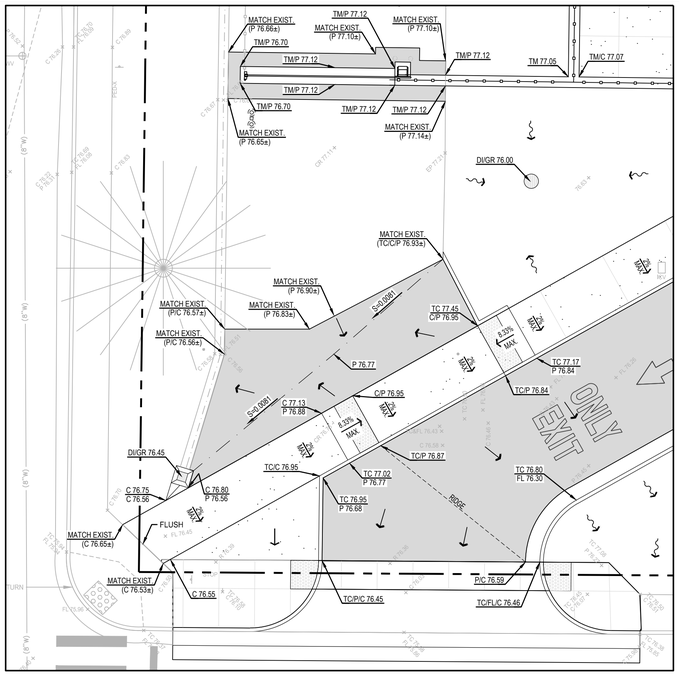
REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 fax

TITLE
GRADING AND DRAINAGE PLAN

C3.1

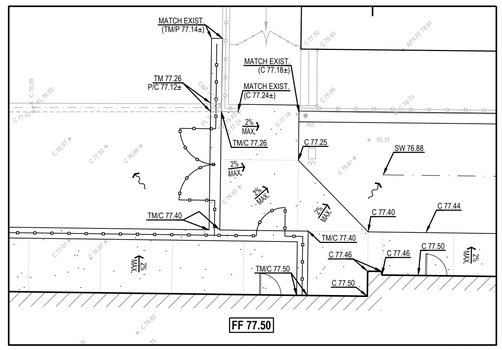
PROJECT 24401



A ENLARGED GRADING

SCALE: 1"=10'

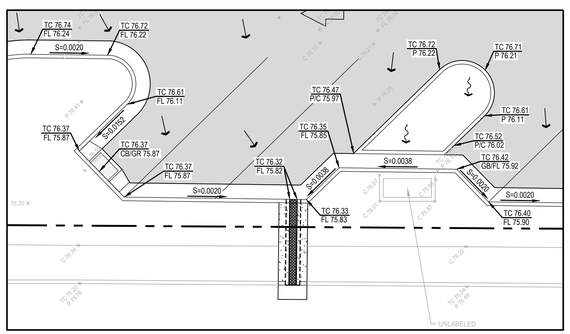
NORTH



B ENLARGED GRADING

SCALE: 1"=10'

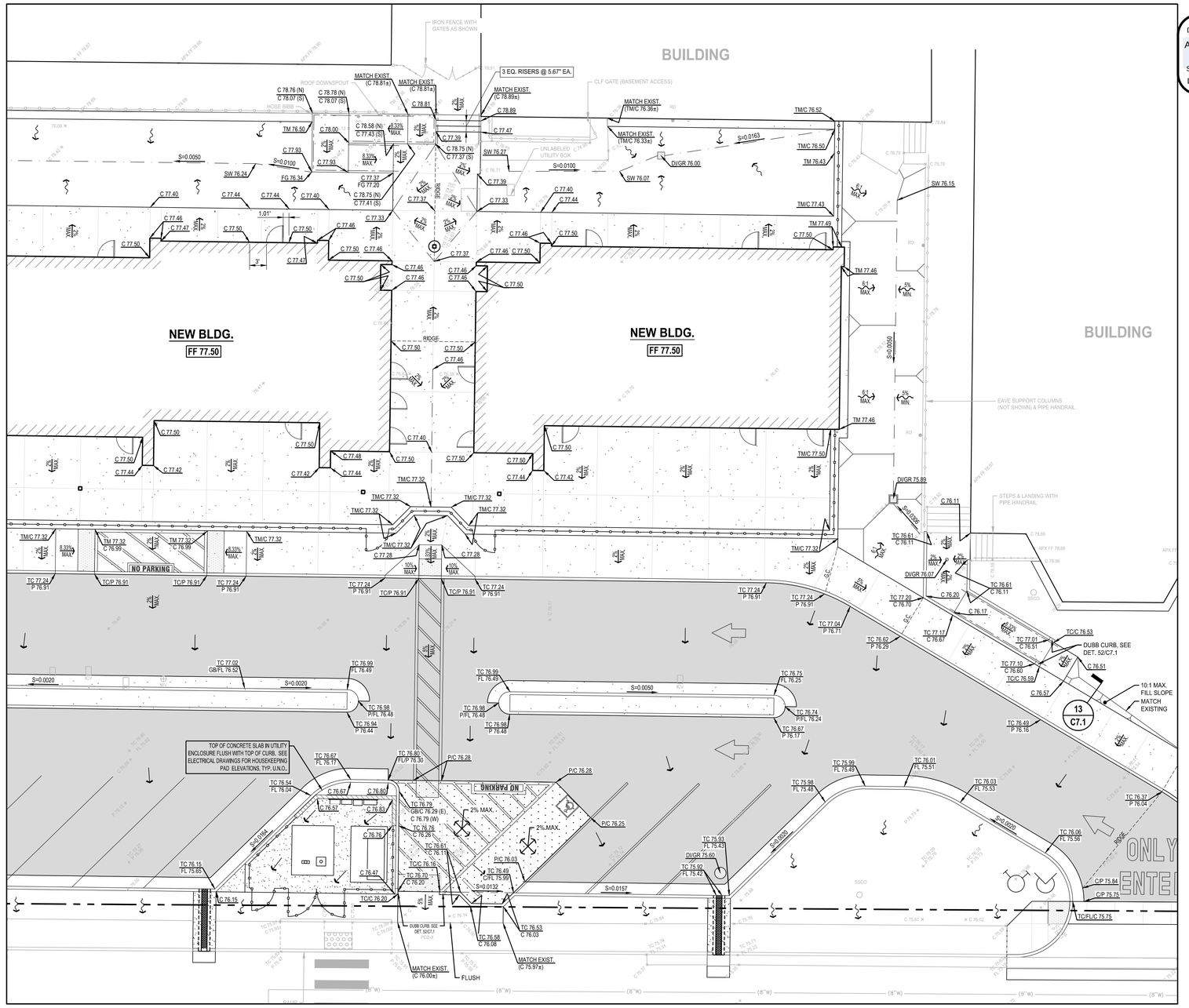
NORTH



C ENLARGED GRADING

SCALE: 1"=10'

NORTH



D ENLARGED GRADING

SCALE: 1"=10'

NORTH

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT '98
No. C-34290
RENEWAL 08.31.25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT

985 SUNSET AVENUE, COALINGA, CA 93210

REVISIONS

MANGINI | ARCHITECTURE ENGINEERING

MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE

ENLARGED GRADING DETAILS

REGISTERED PROFESSIONAL ENGINEER
HA VANG
No. C 73146
01/08/2025
CIVIL
STATE OF CALIFORNIA

CONSULTANT

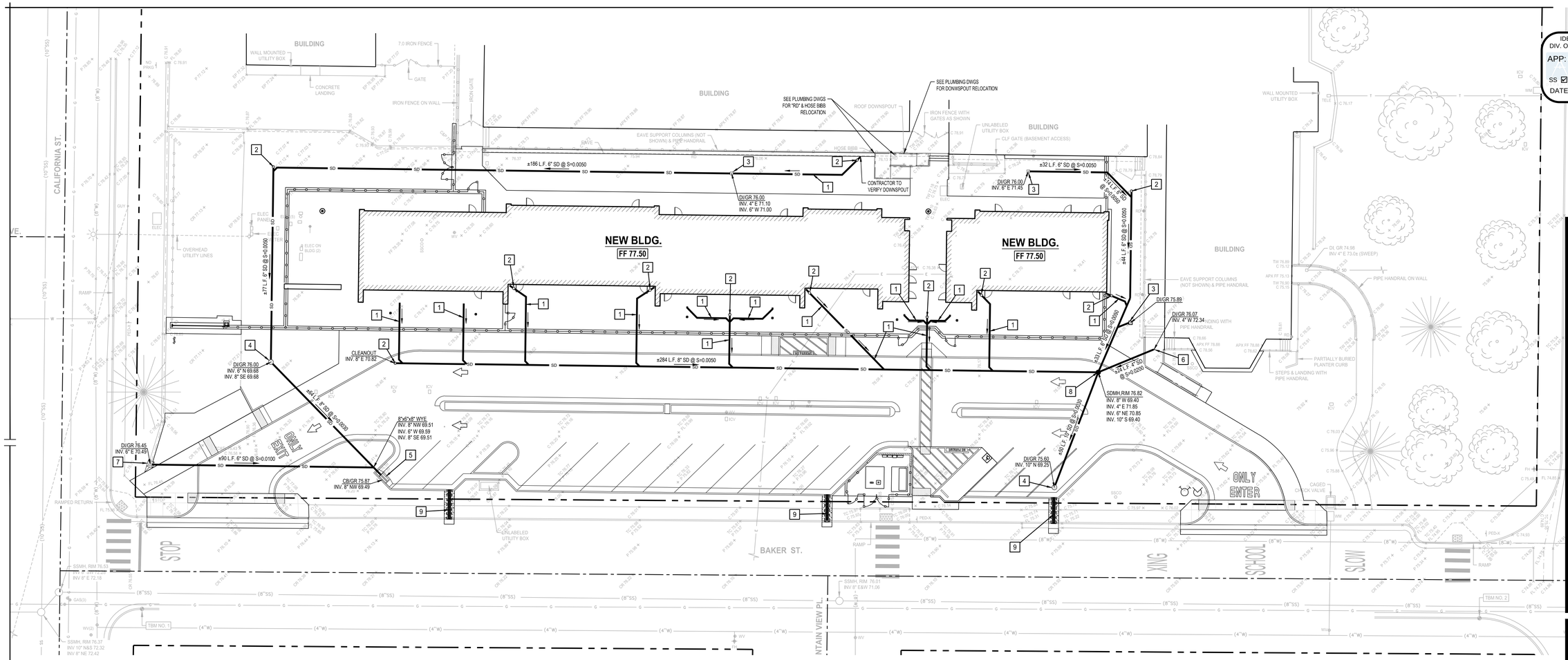
LANE ENGINEERS INC.
CIVIL • STRUCTURAL • SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

ENLARGED GRADING DETAILS

C3.2

PROJECT 24401

LANE PROJ. NO. 24040.1



NOTES

1. REFER TO SHEETS C0.1 FOR BENCHMARKS, GENERAL NOTES & INFORMATION.
2. SEE ARCHITECTURAL DWGS. FOR ADDITIONAL SITE INFORMATION AND DETAILS. SEE PLUMBING DRAWINGS FOR ADDITIONAL WET UTILITY PIPING.
3. ALL STORM DRAIN PIPING AND LATERALS SHALL HAVE A MINIMUM OF 3' OF COVER.
4. EXTEND STORM DRAIN LATERAL PIPING TO BUILDING DOWNSPOUTS, UNLESS NOTED OTHERWISE. CONTRACTOR SHALL VERIFY ALL ROOF DOWNSPOUT LOCATIONS WITH ARCHITECTURAL DRAWINGS.
5. ALL TRENCHES ON-SITE SHALL BE BACKFILLED IN ACCORDANCE WITH DETAIL 11/C7.1.
6. ANY EXISTING IRRIGATION SYSTEMS THAT ARE DAMAGED OR REMOVED DUE TO NEW STORM DRAIN PIPE INSTALLATION SHALL BE REPAIR/REPLACED AS REQUIRED.
7. CONTRACTOR SHALL VERIFY THAT NO CONFLICTS OCCUR BETWEEN STORM DRAIN PIPE ALIGNMENTS AND CANOPY FOOTINGS.
8. DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, PIPE SLOPES, FITTINGS, ETC., WHICH MAY BE REQUIRED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THESE DRAWINGS AND FURNISH ALL FITTINGS, ETC. NECESSARY TO COMPLETE A FULLY FUNCTIONAL PIPING SYSTEM AND AVOID ANY CONFLICTS WITH OTHER UTILITIES.

LEGEND

- RIGHT OF WAY/PROPERTY LINE
- ROAD CENTERLINE
- SD — NEW STORM DRAIN PIPING

CONSTRUCTION KEYNOTES

THIS SHEET ONLY

1. FURNISH & INSTALL 4"Ø STORM DRAIN LATERALS TO ROOF DRAINS AND DOWNSPOUTS. ALL LATERALS SLOPE TO DRAIN AWAY FROM STRUCTURES AND SHALL HAVE A MIN. SLOPE OF 2.0%. SEE ARCHITECTURAL AND PLUMBING DRAWINGS FOR STORM DRAIN TO ROOF DRAIN AND DOWNSPOUT CONNECTIONS.
2. FURNISH AND INSTALL CLEANOUT TO GRADE. SEE DETAIL 12/C7.1
3. FURNISH & INSTALL PLANTER DRAIN INLET WITH CAST IRON GRATE, SEE DETAIL 23/C7.1.
4. CONSTRUCT LARGE DRAIN INLET. SEE DETAIL 32/C7.1.
5. CONSTRUCT ON-SITE CATCH BASIN. SEE DETAIL 12/C7.2.
6. FURNISH & INSTALL SMALL DRAIN INLET. SEE DETAIL 13/C7.2.
7. CONSTRUCT VEE-GUTTER DRAIN INLET. SEE DETAIL 34/C7.1.
8. CONSTRUCT STORM DRAIN MANHOLE. SEE DETAILS 42/C7.1, 44/C7.1 & 51/C7.1.
9. CONSTRUCT CITY STANDARD SIDEWALK CHANNEL DRAIN. SEE OFFSITE SHEET C6.2 FOR MORE INFORMATION.

NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.

STORM DRAIN PLAN

REGISTERED PROFESSIONAL ENGINEER — RA. VANG — CIVIL — 01/08/2025 — STATE OF CALIFORNIA

CONSULTANT

LANE ENGINEERS INC.
CIVIL • STRUCTURAL • SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT '48 — No. C-34290 — RENEW 08.31.25 — STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT

985 SUNSET AVENUE, COALINGA, CA 93210

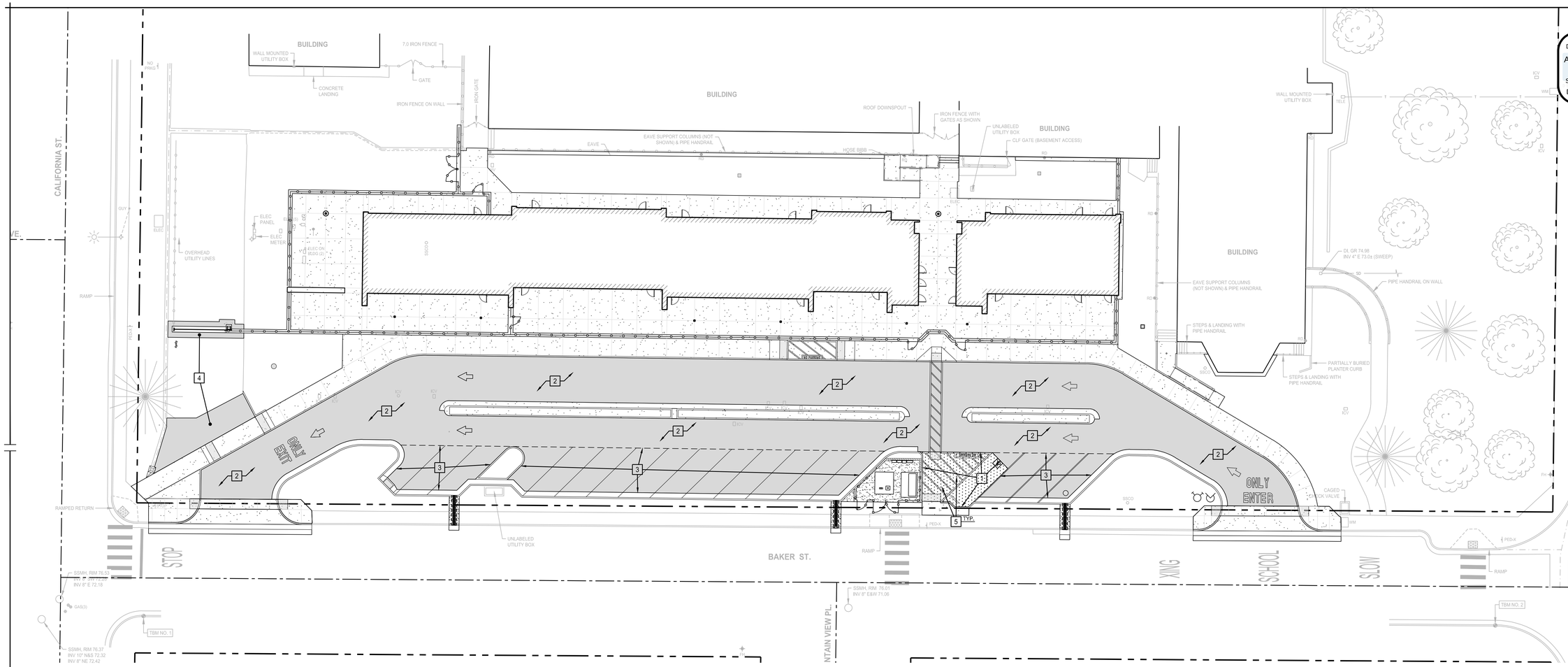
REVISIONS

MANGINI | ARCHITECTURE INGENUITY
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 fax
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291

TITLE
STORM DRAIN PLAN

C4.1

PROJECT 24401



NOTES

1. REFER TO SHEETS C0.1 FOR BENCHMARKS, GENERAL NOTES & INFORMATION.
2. REFER TO ARCHITECTURAL "SD" DRAWINGS. FOR ADDITIONAL SITE INFORMATION AND DETAILS.

LEGEND

- NEW CONCRETE PAVEMENT
- NEW CONCRETE FLATWORK & OTHER CONCRETE SURFACE - SEE ARCH. "SD" DRAWINGS
- AC PAVING PATCH/REPAIR
- RIGHT OF WAY/PROPERTY LINE
- ROAD CENTERLINE

CONSTRUCTION KEYNOTES THIS SHEET ONLY

1. PORTLAND CEMENT CONCRETE PAVING (AUTO PARKING SPACES): 5" CONCRETE OVER 4" CLASS 2 A.B. OVER 12" COMPACTED SUBGRADE. SEE DETAIL 21/C7.1.
2. ASPHALT CONCRETE PAVING (MAIN DRIVE AISLE & DROP-OFF ZONE): 3" A.C. OVER 9" CLASS 2 AGGREGATE BASE OVER 12" COMPACTED SUBGRADE. SEE DETAIL 22/C7.1.
3. ASPHALT CONCRETE PAVING (AUTO PARKING SPACES): 2.5" A.C. OVER 6" CLASS 2 AGGREGATE BASE OVER 12" COMPACTED SUBGRADE. SEE DETAIL 22/C7.1.
4. AC PAVEMENT REPAIR SECTION: 2.5" ASPHALT CONCRETE OVER 6" AGGREGATE BASE OVER 12" COMPACTED SUBGRADE. SEE DETAIL 22/C7.1.
5. CRACK CONTROL/CONSTRUCTION JOINT LINES. SEE ARCHITECTURAL "SD" DRAWINGS. SPACING OF CONSTRUCTION CONTROL JOINTS SHALL NOT EXCEED 10' SQUARE GRID.

NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.

PAVING PLAN

REGISTERED PROFESSIONAL ENGINEER
RA. VANG
CIVIL
01/08/2025
STATE OF CALIFORNIA

CONSULTANT

LANE ENGINEERS INC.
CIVIL • STRUCTURAL • SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 08.31.25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT

985 SUNSET AVENUE, COALINGA, CA 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY

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4320 West Mineral King Avenue
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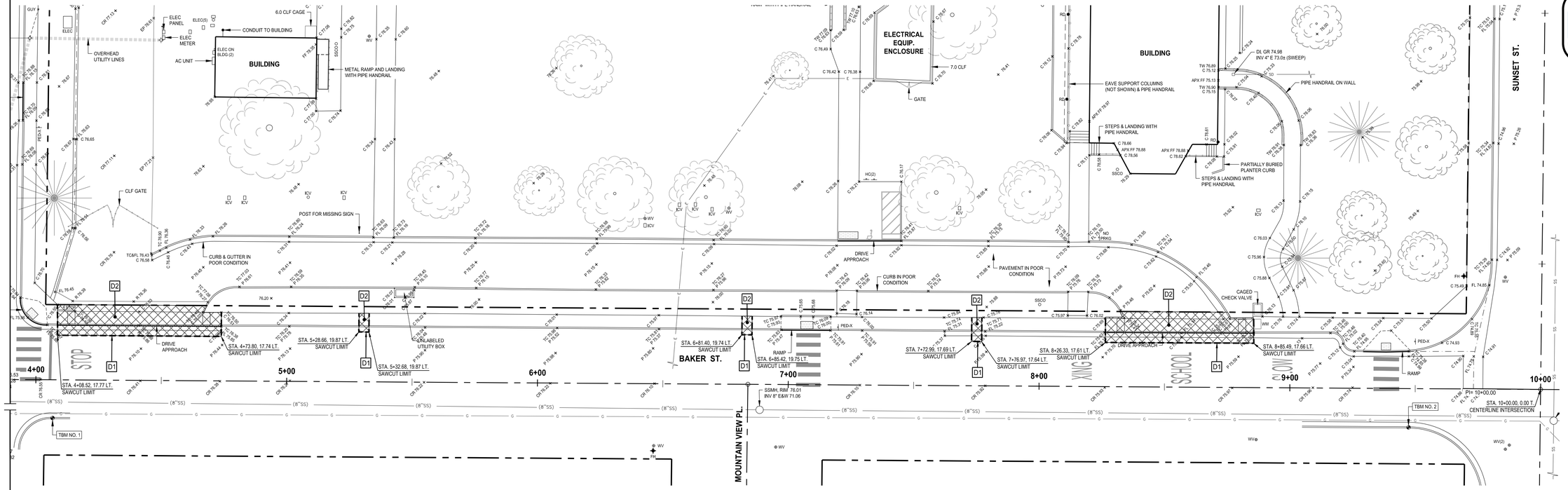
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 fax

TITLE
PAVING PLAN

C5.1

PROJECT 24401

LANE PROJ. NO. 24040.1



DEMOLITION NOTES

1. REFER TO SHEET C0.1 FOR BENCHMARKS, GENERAL NOTES, INFORMATION, AND SPECIFICATIONS.
2. ALL WORK AND MATERIALS WITHIN CITY RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE CITY OF COALINGA IMPROVEMENT STANDARDS. AN ENCROACHMENT PERMIT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO DOING ANY WORK WITHIN THE CITY RIGHT-OF-WAY. SIGNING AND FLAGGING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH IN THE CURRENT AMENDED VERSION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR USE IN CALIFORNIA.
3. TEXT FROM THE TOPOGRAPHIC SURVEY ARE SHOWN FADED ON THIS DRAWING.
4. ALL IMPROVEMENTS NOT NOTED FOR SALVAGE, REMOVAL, OR RELOCATION SHALL BE PROTECTED IN PLACE.
5. ALL ITEMS NOTED TO BE SALVAGED SHALL BE REMOVED WITHOUT DAMAGING AND STORED ON THE OWNER'S PROPERTY IN A LOCATION DESIGNATED BY THE OWNER UNTIL THEY ARE RE-INSTALLED AS SHOWN ON THE PLANS.
6. ALL HOLES AND TRENCHES CREATED FROM DEMOLITION AND REMOVAL SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH THE REQUIREMENTS NOTED ON THESE PLANS.
7. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL ITEMS NOTED FOR REMOVAL WITH THE OWNER. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL VERIFY DIMENSIONS FOR DEMOLITION.
8. ANY EXISTING SURFACE STRUCTURES OR IMPROVEMENTS (E.G. UTILITY BOXES, METER BOXES, WATER VALVES, TRASH BINS, BENCHES, SIGNS, PAVEMENT STRIPING, STREET LIGHTS, IRRIGATION SYSTEMS ETC.) THAT ARE DAMAGED OR TEMPORARILY REMOVED DURING DEMOLITION SHALL BE REPLACED IN KIND, U.N.O.
9. ANY UTILITY BOXES, VALVES AND MANHOLES NOT NOTED TO BE REMOVED SHALL BE ADJUSTED AS REQUIRED TO FINISHED GRADES, TYP.
10. ANY EXISTING REGULATORY OR WARNING SIGNS REMOVED FOR CONSTRUCTION SHALL BE REPLACED WITH TEMPORARY SIGNS AS NECESSARY TO SAFELY DIRECT TRAFFIC UNTIL THE NEW PERMANENT SIGNS ARE INSTALLED IN THEIR PERMANENT LOCATIONS PER THESE PLANS. TEMPORARY SIGNAGE MUST BE APPROVED BY THE PROJECT ARCHITECT.
11. CONTRACTOR SHALL VERIFY WITH OWNER PRIOR TO REMOVING OR RELOCATING ANY EXISTING STRUCTURES SHOWN ON THIS PLAN.
12. REMOVAL OF ANY IMPROVEMENTS FROM THE SITE SHALL BE DISPOSED OF IN A PROPER MANNER PER FEDERAL, STATE, AND OR LOCAL LAWS AND ORDINANCES.
13. ANY STRIPING BEING REMOVED SHALL BE COMPLETELY REMOVED BY WET SANDBLASTING. COATING PATCHES OVER EXISTING STRIPING IS NOT PERMITED.
14. REFER TO ARCHITECTURAL DRAWINGS FOR ON-SITE DEMOLITION REQUIREMENTS.

LEGEND

(THIS SHEET ONLY)

RIGHT OF WAY

ROAD CENTERLINE

DEMOLITION KEYNOTES

D1 SAWCUT EXISTING A.C. PAVEMENT TO A CLEAN VERTICAL EDGE.

SHOWN THUS: – – – – – –

D2 UNLESS NOTED OTHERWISE, DEMOLISH AND REMOVE ALL EXISTING SURFACE SITE IMPROVEMENTS (CONCRETE, ASPHALT PAVEMENT, CURBS, GUTTERS ETC..) WITHIN DEMOLITION LIMITS.

SHOWN THUS:

NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.

OFFSITE DEMOLITION PLAN

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT MANGINI
No. C-34290
HBN 06.01.25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210

REVISIONS

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(559) 627.1926 Fax

TITLE
OFFSITE DEMOLITION PLAN

C6.1

PROJECT 24401

REGISTERED PROFESSIONAL ENGINEER
RA VANG
C.E. 73146
01/08/2025
CIVIL
STATE OF CALIFORNIA

CONSULTANT
LANE ENGINEERS INC.
CIVIL• STRUCTURAL• SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

LANE PROJ. NO. 24040.1

F:\Jobs\2024\24040.1\Dwg\Production Drawings\Offsite Demo_24401.dwg Jan 08 2025 9:51am

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

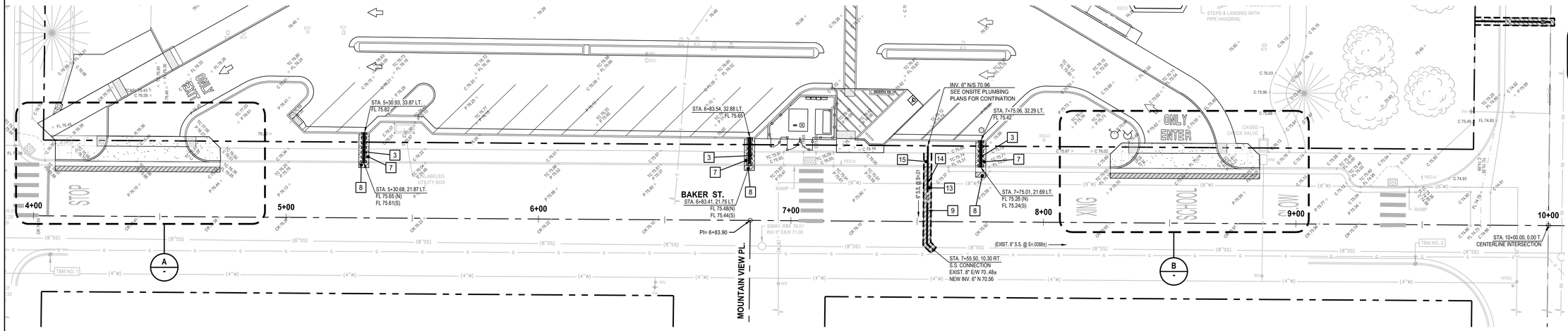
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT YEE
No. C-34290
REN: 06.30.25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210

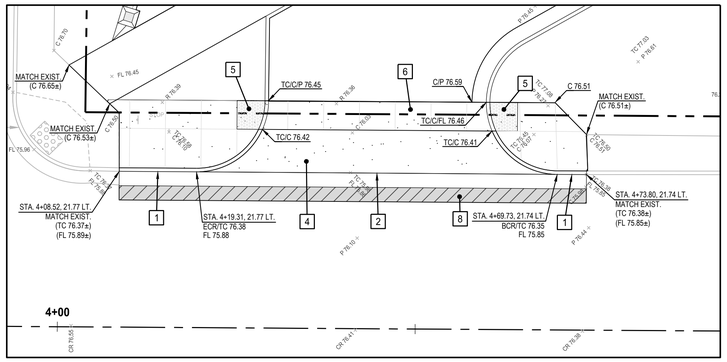


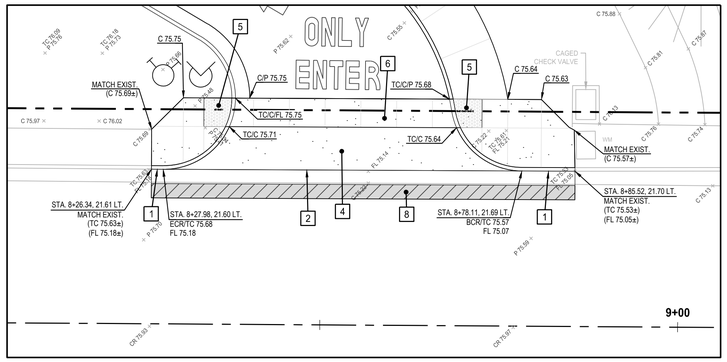
NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.





A ENLARGED GRADING

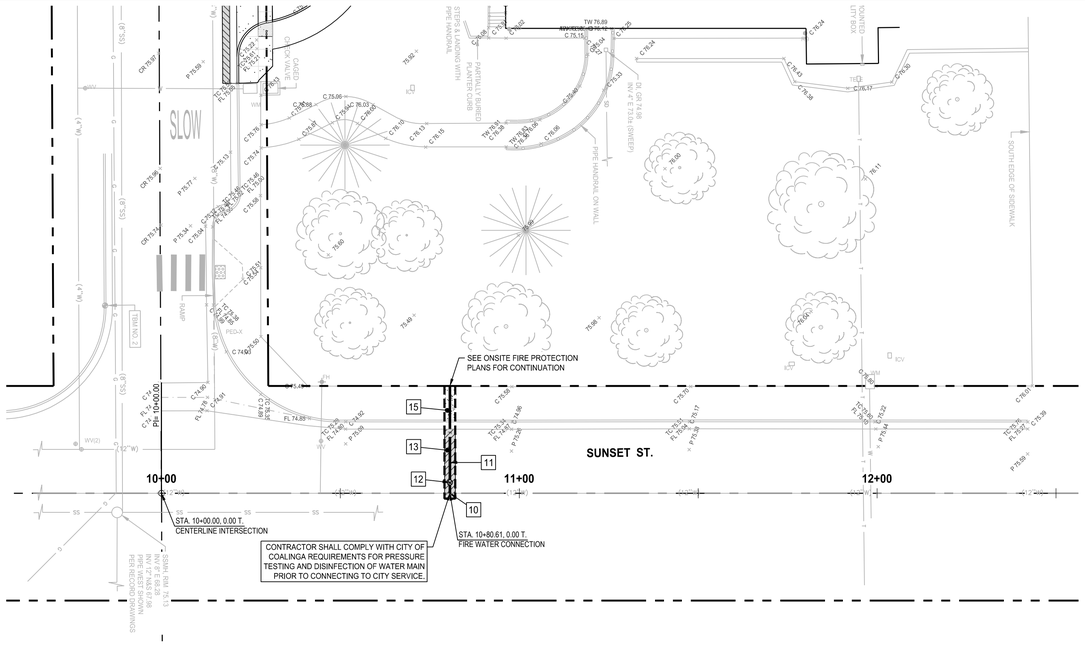
SCALE: 1"=10'

NORTH

B ENLARGED GRADING

SCALE: 1"=10'

NORTH



NORTH

GRAPHIC SCALE

20 0 10 20 40

1 INCH = 20 FT.

CONSTRUCTION KEYNOTES (THIS SHEET ONLY)

1. RECONSTRUCT CURB & GUTTER PER CITY STANDARD DETAILS P-1. SEE SHEET C7.3.
2. DEPRESSED CURB AT DRIVE APPROACH TO ¾" HIGH LIP AT FLOW LINE.
3. FURNISH MATERIAL REQUIRED AND CONSTRUCT SIDEWALK CHANNEL DRAIN PER CITY STANDARD DETAIL A-15. SEE SHEET C7.3. CONCRETE CHANNEL & STEEL PLATE SHALL EXTEND THRU PARKWAY FROM BACK OF STREET SIDEWALK TO ONSITE CURB AS SHOWN.
4. CONSTRUCT DRIVE APPROACH WITH 4'-0" MIN. WIDE SIDEWALK AND DETECTABLE WARNING SURFACE ON EACH SIDE OF DRIVE APPROACH AS SHOWN. SEE DETAIL 12/C7.3.
5. FURNISH & INSTALL 3' WIDE DETECTABLE WARNING SURFACE PER CITY STANDARDS SPECIFIED BELOW & DETAIL 13/C7.3:

   DETECTABLE WARNINGS SHALL COMPLY WITH ADA ACCESSIBILITY DESIGN SECTION 4.29.2. THE DETECTABLE WARNING SHALL BE SURFACE TACTILE TILE MODULES (SURFACE APPLIED AND CAST-IN-PLACE) CONSISTING OF RAISED TRUNCATED DOMES WITH A DIAMETER OF NOMINAL 0.9 IN (23MM), A HEIGHT OF NOMINAL 0.2IN (5MM) AND CENTER-TO-CENTER SPACING OF NOMINAL 2.35IN (60MM), COLOR: YELLOW CONFORMING TO FEDERAL COLOR NO. 33538. COLOR SHALL BE HOMOGENOUS THROUGHOUT THE TILE. THE VITRIFIED POLYMER COMPOSITE TACTILE TILE (SURFACE APPLIED AND CAST-IN-PLACE) SPECIFIED IS BASED ON ARMOR-TILE MANUFACTURED BY ENGINEERED PLASTICS INC. (800-682-2525) OR CITY ENGINEER APPROVED EQUAL.
6. CONCRETE SIDEWALK AT DRIVE APPROACH SHALL BE 6.5" THICK REINFORCED CONCRETE PAVEMENT OVER 4" THICK CLASS 2 AGGREGATE BASE OVER 12 " COMPACTED SUBGRADE. SEE DETAIL 12/C7.3.
7. RECONSTRUCT 4" THICK CONCRETE SIDEWALK TRANSITION SIMILAR TO CITY STANDARD P-4. SEE SHEET C7.3 FOR DETAILS
8. ASPHALT PAVING REPAIR: 7" THICK ASPHALT CONCRETE PAVEMENT (TYPE B) OVER 6" COMPACTED SUBGRADE. SUBGRADE SHALL BE COMPACTED TO 95% MIN. RELATIVE COMPACTION. SEE DETAIL 23/C7.3.
9. FURNISH AND INSTALL 6" PVC (SDR-35) SANITARY SEWER LATERAL SIMILAR TO CITY STANDARD S-1 ON SHEET C7.3. SEE THIS PLAN FOR SIZE AND SLOPE.
10. HOT-TAP CONNECTION TO WATER MAIN. SEE DETAIL 24/C7.3.
11. CONSTRUCT 8" FIRE WATER SERVICE LATERAL WITH GATE VALVE AND VALVE BOX FOR ON-SITE FIRE PROTECTION PER CITY OF COALINGA STANDARDS. SEE FIRE PROTECTION PLANS FOR ON-SITE CONTINUATION.
12. FURNISH AND INSTALL CITY STANDARD 8" GATE VALVE. SEE CITY STANDARD W-3 ON SHEET C7.4.
13. TRENCH BACKFILL AND PAVEMENT REPAIR PER CITY STANDARD DETAIL A-1 ON SHEET C7.4.
14. WHERE NEW SEWER AND EXISTING WATER MAIN CROSSING OCCURS, PROVIDE SPECIAL CONSTRUCTION SEPARATION REQUIREMENTS PER CITY STANDARD W-13 ON SHEET C7.4.
15. RECONSTRUCT 4" THICK CONCRETE SIDEWALK AT NEW PIPE TRENCH. SEE CITY STANDARD P-4 FOR DETAILS.

NOTES

1. CROSS SLOPE AT ALL SIDEWALKS SHALL NOT EXCEED 2.0%. ALL SCORING PATTERNS SHALL BE IN ACCORDANCE WITH CITY STANDARDS.
2. FIELD VERIFY ALL ELEVATIONS SHOWN WHERE PROPOSED IMPROVEMENTS ABUT EXISTING IMPROVEMENTS. IMMEDIATELY NOTIFY PROJECT ARCHITECT OF ANY DISCREPANCIES.
3. ADJUST ALL EXISTING GATE VALVES, UTILITY BOXES, AND WATER METERS TO BE FLUSH WITH FINISH GRADES.
4. ALL WORK AND MATERIALS WITHIN THE STREET RIGHTS OF WAY SHALL CONFORM TO CITY OF COALINGA STANDARDS AND SPECIFICATIONS. AN ENCROACHMENT PERMIT SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO DOING ANY WORK WITHIN THE CITY RIGHT-OF-WAY.
5. UNLESS NOTED OTHERWISE, CONCRETE PAVEMENT AND ASPHALT PAVEMENT SURFACE SHALL BE 0.5' LESS THAN TOP OF CURB ELEVATIONS, TYP.

LEGEND

- NEW CONCRETE WALKWAY & OTHER CONCRETE SURFACE IMPROVEMENTS
- AC PAVING REPAIR
- RIGHT OF WAY/PROPERTY LINE
- ROAD CENTERLINE

REVISIONS

MANGINI ARCHITECTURE INGENUITY
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax
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4320 West Mineral King Avenue
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OFFSITE IMPROVEMENTS

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C6.2

PROJECT 24401

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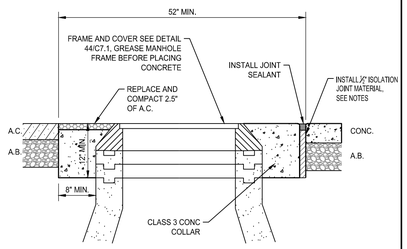
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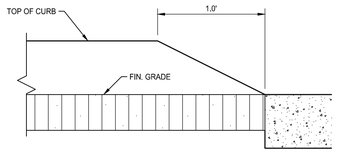


NOTES

1. FRAME AND COVER SHALL MATCH CROSS SLOPE OF FINISHED GRADE/FINISHED PAVEMENT SURFACE.
2. ISOLATION JOINT FILLER SHALL MEET THE REQUIREMENTS OF ASTM D 1751, ASPHALT-SATURATED CELLULOSIC FIBER IN PRE-FORMED STRIPS. EXTEND JOINT FILLERS FULL WIDTH AND DEPTH OF JOINT. TERMINATE JOINT FILLER NOT LESS THAN 1/2 INCH OR MORE THAN 1 INCH BELOW FINISHED SURFACE IF JOINT SEALANT IS INDICATED. PLACE TOP OF JOINT FILLER FLUSH WITH FINISHED CONCRETE SURFACE IF JOINT SEALANT IS NOT INDICATED.

NO SCALE

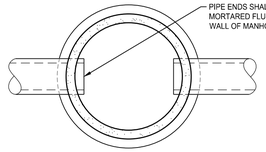
MANHOLE COVER INSTALLATION — 51



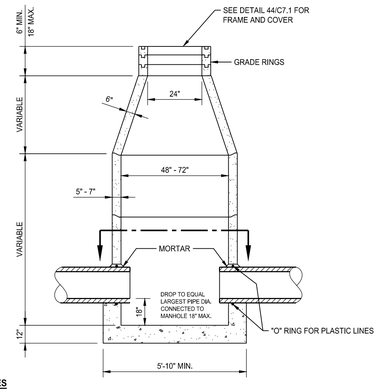
NOTES

1. ALL CONCRETE SHALL BE CLASS 3 2500 PSI MIN. AT 28 DAYS.
2. ALL VISIBLE EDGES SHALL BE ROUNDED WITH 1/2" RADII.

DUBB CURB — NO SCALE — 52



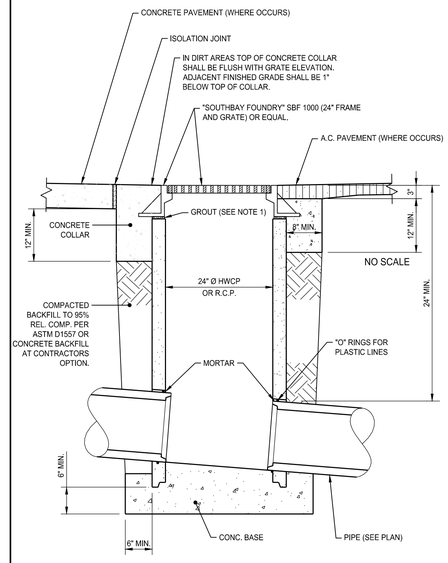
SECTION A-A



NOTES

1. ALL CONCRETE SHALL BE 2500 PSI MIN. AT 28 DAYS.
2. MANHOLE PIPE, CONE AND GRADE RINGS SHALL BE PRECAST REINFORCED CONCRETE AS PER ASTM C-478.
3. MORTAR AND BAND ALL PIPE JOINTS. MORTAR MIXTURE SHALL BE ONE PART CEMENT PER TWO PARTS SAND.
4. MASTIC (KENT SEAL NO. 2 OR EQUAL) MAY BE SUBSTITUTED AT JOINTS. MASTIC SHALL COVER A MIN. OF ONE-HALF THE COMPRESSED SURFACE. INSIDE OF MANHOLE JOINT SHALL BE MORTARTED TO A SMOOTH SURFACE.
5. MAXIMUM DISTANCE BETWEEN MANHOLES SHALL BE 500 FEET OR AS REQUIRED BY THE CITY ENGINEER.
6. SUMP BOTTOM MANHOLES ARE REQUIRED ON ALL STORM DRAIN SYSTEMS WITH PUMPS.
7. 48" MANHOLES ARE REQUIRED FOR STORM DRAIN PIPE SIZES FROM 12" TO 24". 60" MANHOLES ARE REQUIRED FOR STORM DRAIN PIPE SIZES FROM 27" TO 36", 72" MANHOLES ARE REQUIRED FOR STORM DRAIN PIPE SIZES 39" AND LARGER.

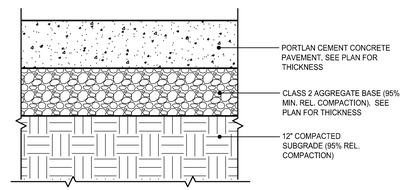
STORM DRAIN MANHOLE — NO SCALE — 42



NOTES

1. GROUT SHALL BE A HIGH STRENGTH, SHRINKAGE COMPENSATING NON-METALLIC GROUT, "MASTERFLOW" 713 OR EQUAL.
2. CONCRETE SHALL BE 2500 PSI MIN. AT 28 DAYS.

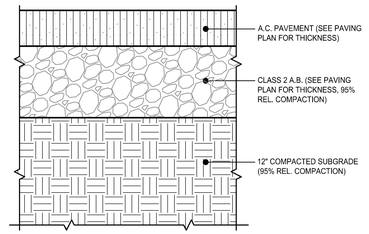
DRAIN INLET — NO SCALE — 32



NOTES:

1. CONCRETE PAVEMENT SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS, 4" MAX. SLUMP, SEE PROJECT SPECIFICATIONS.
2. MAXIMUM WATER/CEMENT RATIO SHALL BE 0.50 AND A SLUMP LIMIT OF 5 INCHES MAXIMUM.
3. JOINT SPACING AND CONSTRUCTION JOINT SHALL BE AS NOTED ON PAVING PLAN.

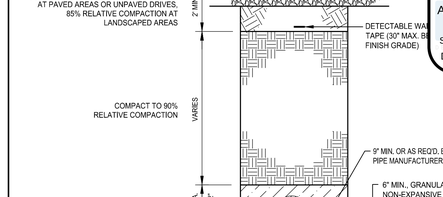
CONCRETE PAVEMENT SECTION — NO SCALE — 21



NOTES:

1.) ASPHALT CONCRETE SHALL BE COMPACTED TO 91%-97% IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

ON-SITE ASPHALT PAVEMENT SECTION — NO SCALE — 22

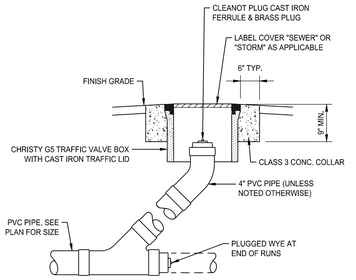


NOTES

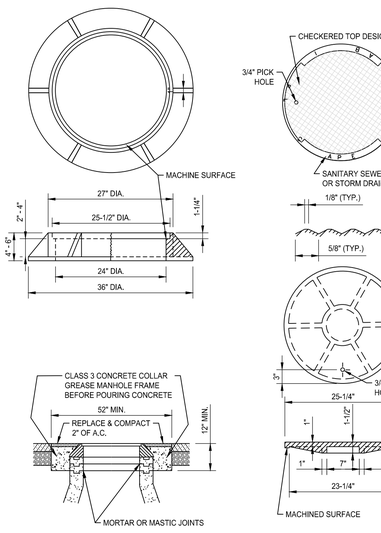
1. BACKFILL TO A DEPTH OF 12" OVER TOP OF PIPE, FILL SHALL BE PLACED BY HAND AND TAMPED OR AS PER PIPE MANUFACTURER'S SPECIFICATIONS. FOR PLASTIC PIPE INSTALLATIONS, BEDDING SHALL BE IN ACCORDANCE W/PIPE MANUFACTURER SPECIFICATIONS.
2. BACKFILL MATERIAL WITHIN THE HAUNCHING, INITIAL BACKFILL, AND OUTER BEDDING AREAS SHALL BE CATEGORY I, II, OR III MATERIAL (ASTM D2321) PLACED TO 90% REL. COMPACTION.

(ON SITE)

TRENCH BACKFILL AND PAVING — NO SCALE — 11



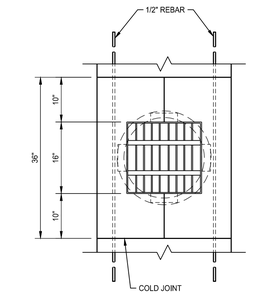
SURFACE CLEANOUT (COTG) — NO SCALE — 12



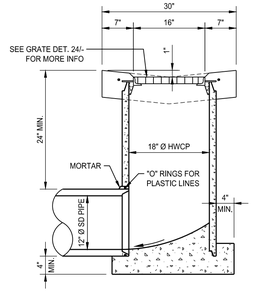
NOTES

1. MATERIAL SHALL BE CAST IRON. FRAME AND COVER TO BE CONSTRUCTED IN ACCORDANCE WITH ASTM DESIGNATION A48, CLASS 25.
2. FRAME AND COVER SHALL MATCH CROSS SLOPE OF FINISHED GRADE/FINISHED PAVEMENT SURFACE.

MANHOLE FRAME AND COVER — NO SCALE — 44



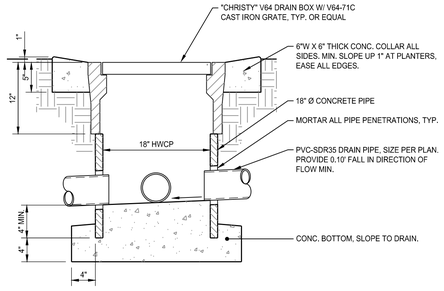
PLAN VIEW



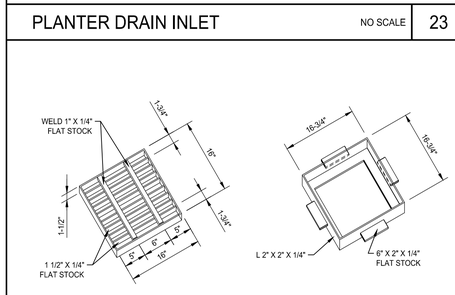
NOTES

CONCRETE SHALL BE CLASS 3 (MIN. 3000 PSI AT 28 DAYS).

VEE-GUTTER CATCH BASIN — NO SCALE — 34

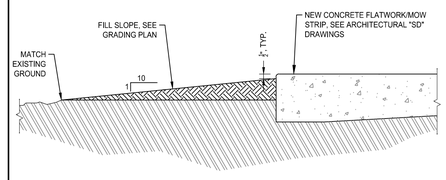


PLANTER DRAIN INLET — NO SCALE — 23



GRATE DETAIL — FRAME DETAIL

VEE-GUTTER GRATE DETAIL — NO SCALE — 24



NOTE:

1. ALL NEW CONCRETE SHALL BE 2500 PSI MIN. AT 28 DAYS.
2. SEE ARCHITECTURAL "SD" DRAWINGS FOR ADDITIONAL REQUIREMENTS.

TYPICAL FILL SLOPE — NO SCALE — 13

MANGINI | ARCHITECTURE INGENUITY
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TITLE
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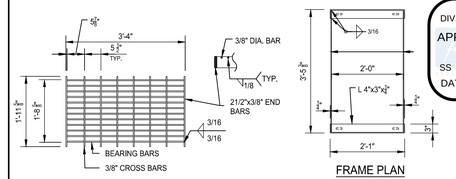
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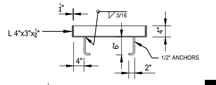
LANE PROJ. NO. 24040.1

NO SCALE	51	NO SCALE	41	NO SCALE	31	NO SCALE	21
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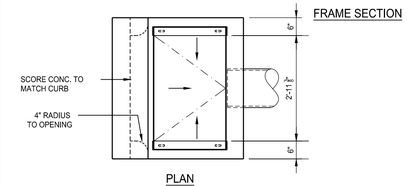


GRATE DETAIL

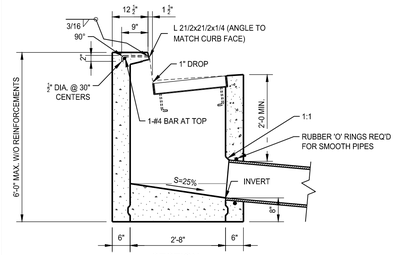
FRAME PLAN



FRAME SECTION



PLAN

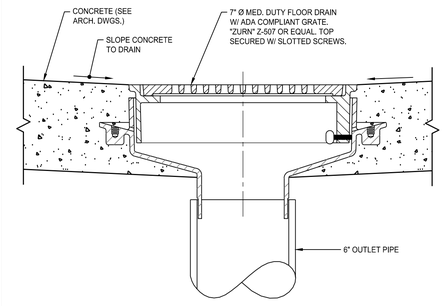


SECTION

NOTES

1. BEARING BARS SHALL BE 3-1/2" x 3/8" ON 1-7/8" CENTERS.
2. 3/8" DIA. CROSS BARS MAY BE FILLET WELDED, RESISTANCE WELDED, OR ELECTROFORGED TO BEARING BARS.
3. FRAME AND GRATE SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.
4. CONCRETE SHALL BE 2500 PSI MINIMUM AT 28 DAYS.

CURB INLET — NO SCALE — 12



SMALL DRAIN INLET — NO SCALE — 13

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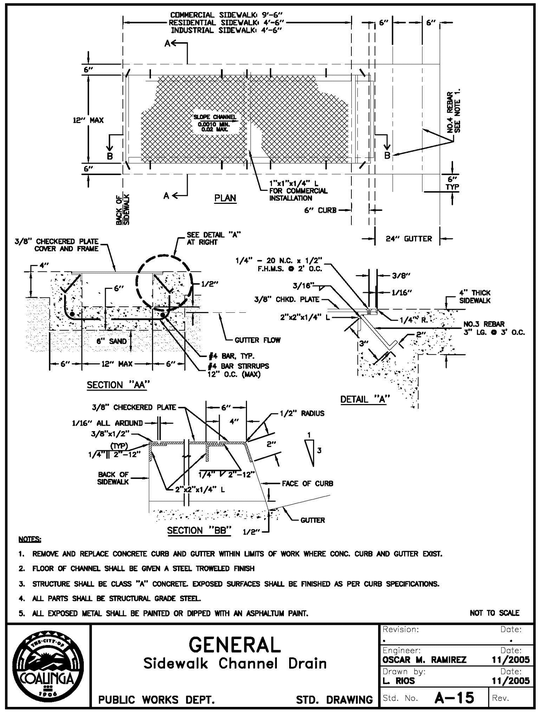
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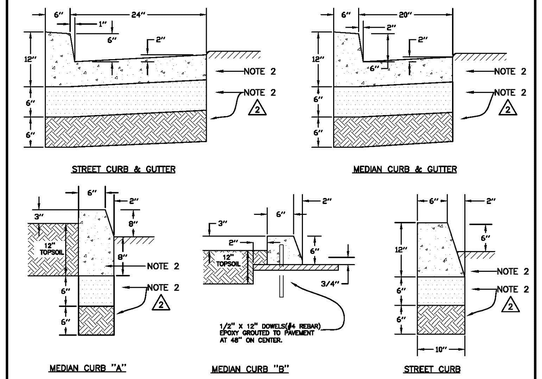
1. REMOVE AND REPLACE CONCRETE CURB AND GUTTER WITHIN LIMITS OF WORK WHERE CONC. CURB AND GUTTER EXIST.
2. FLOOR OF CHANNEL SHALL BE GIVEN A STEEL TROWELED FINISH
3. STRUCTURE SHALL BE CLASS "A" CONCRETE. EXPOSED SURFACES SHALL BE FINISHED AS PER CURB SPECIFICATIONS.
4. ALL PARTS SHALL BE STRUCTURAL GRADE STEEL.
5. ALL EXPOSED METAL SHALL BE PAINTED OR DIPPED WITH AN ASPHALTUM PAINT.

NOT TO SCALE

GENERAL
Sidewalk Channel Drain

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
.	.
Engineer: OSCAR M. RAMIREZ	Date: 11/2005
Drawn by: L. RIOS	Date: 11/2005
Std. No. A-15	Rev.



NOTES:

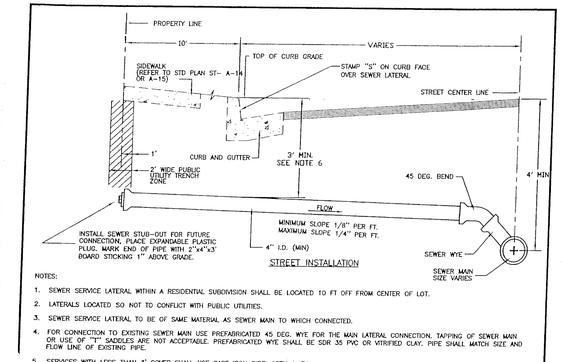
1. USE 3000 PSI CONCRETE, OR BETTER, FOR ALL CURB AND GUTTER CONSTRUCTION. PROVIDE CONTRACTION JOINTS EVERY 45' SEE STD. DWG. NO. P-4 FOR JOINT DETAILS
2. ALL CONCRETE CURB & GUTTER, WITH THE EXCEPTION OF MEDIAN CURB "B" SHALL BE POURED UPON A 6"LAYER OF CLASS II AGGREGATE BASE COMPACTED TO 95% R.C. . AGGREGATE BASE SHALL BE PLACED UPON A 6" LAYER OF NATIVE SOIL COMPACTED TO 90% R.C.
3. THE DRAINAGE ADEQUACY OF ALL NEW GUTTERS SHALL BE WATER TESTED. THE DIRECTION OF THE GUTTER SLOPE SHALL MATCH THE STREET PAVEMENT SLOPE.

NOT TO SCALE

PAVING
CURB AND GUTTER

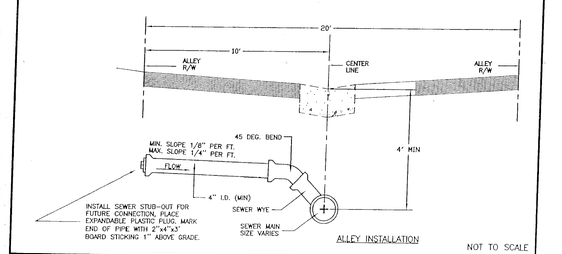
PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
.	.
Engineer: OSCAR M. RAMIREZ	Date: 11/2005
Drawn by: L. RIOS	Date: 11/2005
Std. No. P-1	Rev.



NOTES:

1. SEWER SERVICE LATERAL WITHIN A RESIDENTIAL SUBDIVISION SHALL BE LOCATED 10 FT OFF FROM CENTER OF LOT.
2. LATERALS LOCATED SO NOT TO CONFLICT WITH PUBLIC UTILITIES.
3. SEWER SERVICE LATERAL TO BE OF SAME MATERIAL AS SEWER MAIN TO WHICH CONNECTED.
4. FOR CONNECTION TO EXISTING SEWER MAIN USE PREFABRICATED 45 DEG. WYE FOR THE MAIN LATERAL CONNECTION. TAPPING OF SEWER MAIN OR USE OF "T" SADDLES ARE NOT ACCEPTABLE. PREFABRICATED WYE SHALL BE SDR 35 PVC OR VITRIFIED CLAY. PIPE SHALL MATCH SIZE AND FLOW LINE OF EXISTING PIPE.
5. SERVICES WITH LESS THAN 3' COVER SHALL USE CAST IRON PIPE, ASTM A-74.

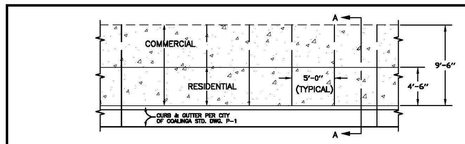


NOT TO SCALE

SEWER
Service Lateral
Street and Alley Installation

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
.	.
Engineer: OSCAR M. RAMIREZ	Date: 1/2006
Drawn by: L. RIOS	Date: 1/2006
Std. No. S-1	Rev.



NOTES

1. THE STANDARD SIDEWALK SHALL BE A 4'-6" WIDE FOR RESIDENTIAL AND 9'-6" WIDE FOR COMMERCIAL BY 4" THICK CONCRETE SLAB. INSTALL CONTRACTION JOINTS EVERY 5' AND EXPANSION JOINTS EVERY 45' USE 3000 PSI CONCRETE OR BETTER.
2. CONTRACTION JOINTS SHALL BE 1/4" WIDE AND EXTENDING TO 1/4 OF THE DEPTH OF THE SLAB.
4. EXPANSION JOINTS SHALL BE 3/4" WIDE, EXTENDING THE FULL WIDTH OF THE CONCRETE SLAB. THESE JOINTS SHALL BE FILLED WITH MOLDED JOINT FILLER CONFORMING TO ASTM D 1751.
5. ALL SIDEWALK CONSTRUCTION SHALL BE IN ACCORDANCE WITH CALTRANS STANDARD SPECIFICATIONS SECTION 73, DATED JULY 1992, EXCEPT WHERE OTHERWISE STATED HEREIN.

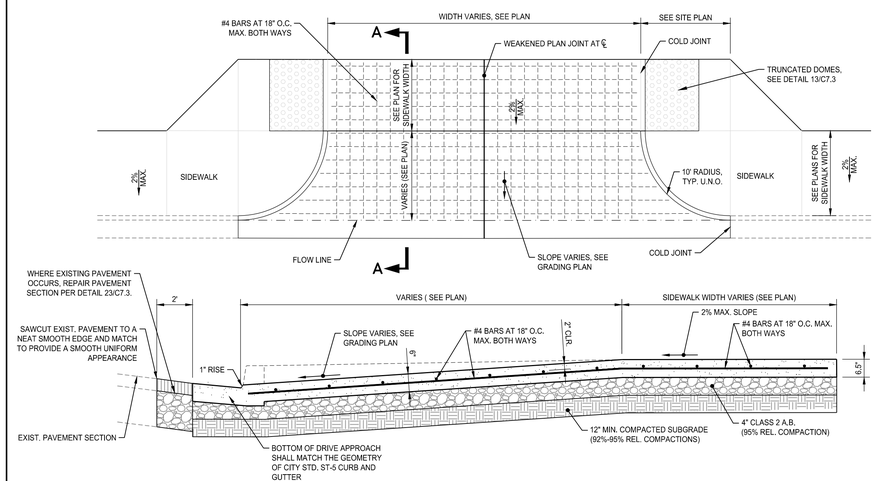
NOT TO SCALE

PAVING
Concrete Sidewalk
(Commercial & Residential)

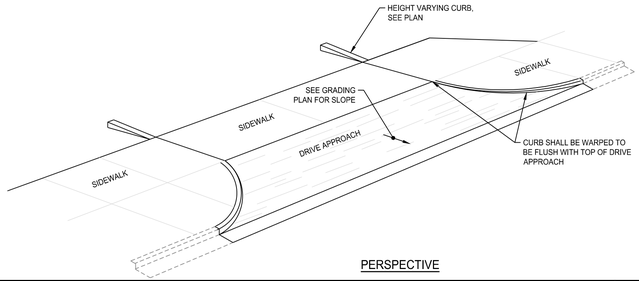
PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
.	.
Engineer: OSCAR M. RAMIREZ	Date: 11/2005
Drawn by: L. RIOS	Date: 11/2005
Std. No. P-4	Rev.

CITY STANDARD DETAILS



SECT. A-A

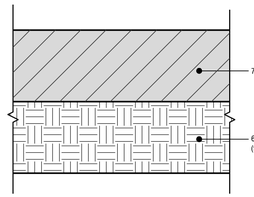


PERSPECTIVE

NOTES:

1. ALL CONCRETE SHALL BE 6-SACK MIX. SEE CITY OF COALINGA STANDARD SPECIFICATIONS.
2. ALL SIDEWALKS/WALKWAYS SHALL HAVE A CROSS SLOPE NOT EXCEEDING 2% MAX. AS SHOWN ON THE DETAILS ABOVE. SEE OFF-SITE IMPROVEMENT PLANS FOR ACTUAL GRADES.
3. REINFORCING BARS SHALL BE DEFORMED STEEL BARS AND SHALL BE GRADE 40 MINIMUM. REINFORCING BARS SHALL BE FREE OF RUST OR DIRT AND SHALL BE THOROUGHLY CLEANED BEFORE PLACEMENT.
4. REINFORCING BARS SHALL HAVE A MIN. 2" OF CLEAR COVERAGE.

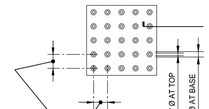
CONCRETE DRIVE APPROACH — NO SCALE — 12



NOTES:

1. PAVEMENT REPAIR WORK SHALL BE IN ACCORDANCE WITH CITY OF COALINGA STANDARD SPECIFICATIONS.

AC PAVING REPAIR — NO SCALE — 23



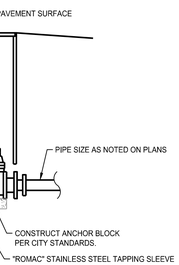
TRUNCATED DOME PANEL

RAISED TRUNCATED DOME

NOTES

1. DETECTABLE WARNING TACTILE PANELS SHALL BE ADA SOLUTIONS, INC., ARMOR-TILE, ARMORCAST, OR APPROVED EQUAL INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS IN THE LOCATIONS SHOWN ON THESE DRAWINGS. COLOR SHALL BE FEDERAL YELLOW SF 33538.
2. SEE PLAN FOR WIDTH OF DETECTABLE WARNING SURFACE. WARNING SURFACE SHALL BE 3 FEET DEEP IN THE DIRECTION OF TRAVEL.
3. WHERE NEW CONCRETE AND RAMPS ARE BEING INSTALLED, DETECTABLE WARNING PANELS SHALL BE SET IN WET CONCRETE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS SO THAT THE EDGES OF THE PANELS ARE FLUSH WITH THE ADJACENT CONCRETE SURFACE.
4. WHERE PANELS ARE BEING INSTALLED ON EXISTING SURFACES, THEY SHALL BE NAILED AND GLUED TO THE EXIST. CONCRETE SURFACE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

DETECTABLE WARNING SURFACE — NO SCALE — 13



NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF THE CITY OF COALINGA STANDARD SPECIFICATIONS AND IMPROVEMENT STANDARDS.

NO SCALE

HOT-TAP CONNECTION TO WATER MAIN — 24

APPROVALS

FILE #	APPLICATION #
10-26	02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT '98
No. C-34290
RENEWAL 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
OFFSITE DETAILS

C7.3

PROJECT 24401

REGISTERED PROFESSIONAL ENGINEER
HA VANG
C.E. 73146
01/08/2025
CIVIL
STATE OF CALIFORNIA

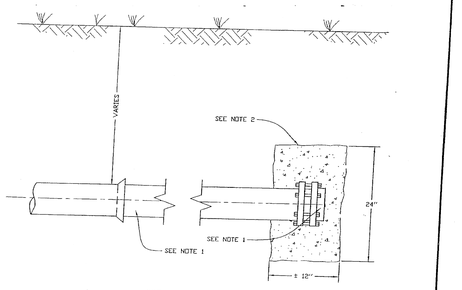
CONSULTANT
LANE ENGINEERS INC.
CIVIL • STRUCTURAL • SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

APPROVALS
FILE # 10-26
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT
No. C-34290
RENEW:08.31.25
STATE OF CALIFORNIA

DATE: JULY 31, 2024



WATER PLUG

NOTES:
1. USE 6' LONG PIECE OF PIPE OF THE SAME DIAMETER AND CHARACTERISTICS AS THE WATER MAIN. FOR WATER MAIN 6" DIA. AND LARGER USE D.I. PLUG OR CAP WITH A GASKET AND MECHANICAL JOINT GLAND.
2. FOR WATER MAINS UP TO 10" ø, INSTALL A THRUST BLOCK AS INDICATED. FOR WATER MAINS LARGER THAN 10" DIA. INSTALL A THRUST BLOCK AS DIRECTED BY THE CITY ENGINEER. USE 2,000 P.S.I. CONCRETE OR BETTER.

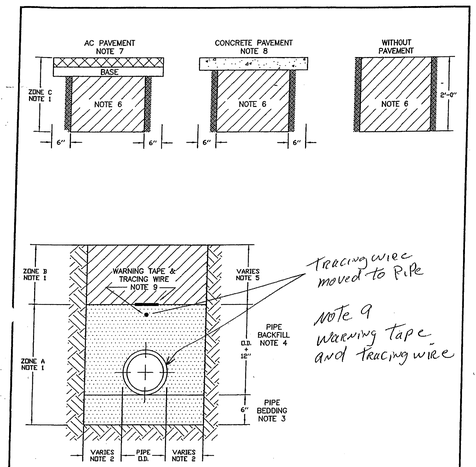
NOT TO SCALE

CITY OF COALINGA EST. 1906

WATER
PLUG

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
-	-
Engineer: OSCAR M. RAMIREZ	Date: 1/2006
Drawn by: L. Rios	Date: 1/2006
Std. No. W-7	Rev.



FOR NOTES SEE STD. NO. A-1A

CITY OF COALINGA EST. 1906

GENERAL
PIPE TRENCH BACKFILL

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
-	-
Engineer: OSCAR M. RAMIREZ	Date: 11/2005
Drawn by: L. RIOS	Date: 11/2005
Std. No. A-1	Rev.

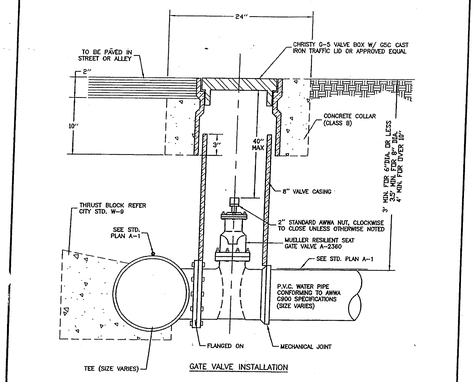
1. THE PIPE TRENCH DEPTH SHALL BE EQUAL TO THE SUM OF ZONES A, B AND C. FOR PIPE 2" IN DIA. AND SMALLER INSIDE PRIVATE PROPERTY, THE TRENCH DEPTH SHALL BE NOT LESS THAN THE PIPE O.D. PLUS 18" (ZONE A). FOR PIPE LARGER THAN 2" DIA., THE TRENCH DEPTH SHALL BE NOT LESS THAN THE PIPE O.D. PLUS 36" (ZONE A AND ZONE C).
2. THE PIPE TRENCH WIDTH, FOR PIPE 2" DIA. AND SMALLER INSIDE PRIVATE PROPERTY, SHALL BE NOT LESS THAN THE PIPE O.D. PLUS 6" (3 INCHES ON EACH SIDE). FOR PIPE 2" DIA. TO 6" DIA., THE TRENCH WIDTH SHALL BE NO LESS THAN THE PIPE O.D. PLUS 12". FOR PIPE LARGER THAN 6" DIA. THE TRENCH WIDTH SHALL BE NOT LESS THAN THE PIPE O.D. PLUS 18".
3. ALL PIPE SHALL HAVE NOT LESS THAN 6" OF SAND BEDDING. THE SAND SHALL BE CLEAN SAND, GRADED AND FREE OF CLAY PARTICLES (WASHED SAND), INSTALLED WITH AT LEAST 85% RELATIVE COMPACTION. SAND JETTING REQUIRES PRIOR CITY ENGINEER'S APPROVAL. FOR PIPE SMALLER THAN 2" DIA., INSIDE PRIVATE PROPERTY, A THINNER PIPE BEDDING MAY BE REQUESTED FROM THE CITY ENGINEER.
4. PIPE BACKFILL SHALL BE NOT LESS THAN 12" OVER TOP OF PIPE. THE BACKFILL SHALL BE CLEAN SAND, GRADED AND FREE OF CLAY PARTICLES (WASHED SAND), INSTALLED IN NOT LESS THAN 2 LIFTS AND WITH AT LEAST 85% RELATIVE COMPACTION. SAND JETTING REQUIRES PRIOR CITY ENGINEER'S APPROVAL.
5. THE DEPTH OF ZONE B WILL VARY WITH THE DESIGN DEPTH OF THE PIPE. WHEN ZONE B IS REQUIRED, IT SHALL BE IMPORT MATERIAL OR SELECT NON-PLASTIC NATIVE MATERIAL, FREE OF ROCK AND/OR LUMPS LARGER THAN 2" AND WITH AT LEAST 85% RELATIVE COMPACTION.
6. THE TOTAL DEPTH OF ZONE C SHALL BE 2'. THE MATERIAL UNDER THE PAVEMENT AND PAVEMENT BASE SHALL BE IMPORT OR SELECT NON-PLASTIC NATIVE MATERIAL, FREE OF ROCK AND/OR LUMPS LARGER THAN 2" AND WITH AT LEAST 90% RELATIVE COMPACTION.
7. THE A.C. PAVEMENT AND BASE RESTORATION WIDTH SHALL BE EQUAL TO THE TRENCH WIDTH PLUS 12". THE THICKNESS OF A.C. PAVEMENT AND BASE SHALL MATCH EXISTING PAVEMENT AND BASE THICKNESS, BUT IN NO CASE SHALL THEY BE LESS THAN 3" AND 6", RESPECTIVELY. A.C. PAVEMENT RESTORATIONS SHALL BE MADE AGAINST VERTICAL SAW CUT EDGES OF EXISTING PAVEMENT.
8. THE CONCRETE PAVEMENT RESTORATION WIDTH SHALL BE EQUAL TO THE TRENCH WIDTH PLUS 12". THE THICKNESS OF CONCRETE PAVEMENT SHALL MATCH EXISTING PAVEMENT THICKNESS. CONCRETE PAVEMENT RESTORATION SHALL BE MADE AGAINST VERTICAL SAW CUT EDGES OF EXISTING PAVEMENT.
9. TO PERMIT LOCATING BURIED PVC AND PE PIPE, A METALLIC-CORE PLASTIC IDENTIFYING TAPE SHALL BE INSTALLED IN THE PIPE TRENCH 12" ABOVE CENTERLINE OF THE PIPE WITH ITS PRINTED SIDE UP. THE IDENTIFYING TAPE SHALL BE AN INERT MATERIAL SUCH AS POLYETHYLENE PLASTIC WITH A METALLIC CORE, HIGHLY RESISTANT TO ALKALIS, ACIDS, OR OTHER CHEMICAL COMPONENTS LIKELY TO BE ENCOUNTERED IN SOILS. THE TAPE SHALL BE IN BRIGHT COLORS FOR CONTRAST WITH THE SOIL, WITH IDENTIFYING PRINTING IN BLACK LETTERS, ONE SIDE ONLY, ON A BLUE BACKGROUND (WATER MAINS), A GREEN BACKGROUND (SEWER MAINS) OR A YELLOW BACKGROUND (GAS MAINS). THE TAPE SHALL BE SUPPLIED IN CONTINUOUS ROLLS, WITH THE IDENTIFYING LETTERS REPEATED CONTINUOUSLY THE FULL LENGTH OF THE TAPE. THE TAPE SHALL NOT BE PULLED, DISTORTED, TWISTED, OR OTHERWISE MISPLACED IN COMPLETING THE TRENCH BACKFILL. THE TAPE SHALL BE EXTENDED INTO THE VALVE BOXES OR ATTACHED TO THE SEWER MANHOLE RINGS FOR CONNECTION TO PIPE LOCATOR. IN PLACE OF METALLIC-CORE IDENTIFYING TAPE, A COMBINATION OF NON-METALLIC WARNING TAPE LOCATED ABOVE A 10 GAUGE SOLID INSULATED COPPER WIRE MAY BE USED. WARNING TAPE SHALL BE OF THE SAME COLOR AND LETTERING AS THE METTALIC-CORE IDENTIFYING TAPE AND INSTALLED IN THE SAME MANNER. TAPE AND COPPER WIRE REQUIRED FOR ALL PIPE TRENCH BACKFILL INSTALLATIONS.

CITY OF COALINGA EST. 1906

GENERAL
PIPE TRENCH BACKFILL

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
-	-
Engineer: OSCAR M. RAMIREZ	Date: 11/2005
Drawn by: L. Rios	Date: 11/2005
Std. No. A-1A	Rev.



GATE VALVE INSTALLATION

NOTES:
1. USE A 6" THICK BY AT LEAST 3' O.D. CONCRETE COLLAR. THE COLLAR SHALL BE SET 2" BELOW GRADE TO ALLOW FOR 2" OF A.C. PAVEMENT COVER
2. USE "CHRISTY" G5 TRAFFIC VALVE BOX, OR APPROVED EQUAL, WITH CAST IRON LID STAMPED "WATER".
3. EXTENSION MUST BE CENTERED OVER THE VALVE STEM AND LEFT 6" AWAY FROM THE VALVE BODY. USE "CHRISTY" ADS, PLASTIC EXTENSIONS, OR APPROVED EQUAL
4. USE SAND OR SANDY MATERIAL(S.E. 50 OR BETTER) TO BACKFILL ABOUT 3" AROUND THE VALVE BOX EXTENSION.
5. INSTALL CONCRETE THRUST BLOCK AS INDICATED OR DIRECTED BY ENGINEER. USE 2000 PSI CONCRETE OR BETTER.

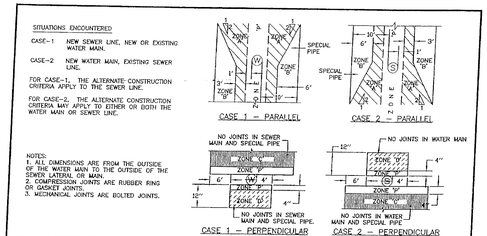
NOT TO SCALE

CITY OF COALINGA EST. 1906

WATER
Water Valve,
Valve Box Extension

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
-	-
Engineer: OSCAR M. RAMIREZ	Date: 1/2006
Drawn by: L. RIOS	Date: 1/2006
Std. No. W-3	Rev.



SPECIAL CONSTRUCTION REQUIREMENTS

CASE 1: NEW SEWER BEING INSTALLED – NEW OR EXISTING WATER MAIN

IF A NEW SEWER IS CONSTRUCTED WITHIN ZONE A, B, C, OR D OF A PROPOSED OR EXISTING WATER MAIN, THE FOLLOWING SPECIAL REQUIREMENTS WILL APPLY FOR THE SEWER.

ZONE	SPECIAL REQUIREMENTS
A	SEWER LINES WILL NOT BE PERMITTED IN THIS ZONE WITHOUT SPECIAL PERMISSION FROM THE DEPARTMENT OF HEALTH.
B	A SEWER LINE PLACED PARALLEL TO A WATER MAIN SHALL BE CONSTRUCTED OF EXTRA-STRENGTH VITRIFIED CLAY PIPE WITH COMPRESSION JOINTS; OR CLASS 4000, TYPE II ASBESTOS-CEMENT PIPE WITH RUBBER GASKET JOINTS; OR POLY(VINYL CHLORIDE) PIPE WITH RUBBER RING JOINTS; OR REINFORCED CONCRETE PRESSURE PIPE WITH REINFORCED CONCRETE COLLARS AROUND THE JOINTS WHICH COLLARS SHALL HAVE A MINIMUM THICKNESS OF 6" AND A MINIMUM LENGTH ALONG THE PIPE OF 6" ON EITHER SIDE OF THE JOINT; OR CAST IRON PIPE WITH COMPRESSION JOINTS.
C or D	A SEWER LINE CROSSING A WATER MAIN SHALL BE CONSTRUCTED OF CLASS 150 OR STRONGER CAST IRON PIPE WITH HOT DIP BITUMINOUS COATING AND APPROVED MECHANICAL JOINTS; OR A CONTINUOUS SECTION OF CLASS 200 POLY(VINYL CHLORIDE) PIPE; OR REINFORCED CONCRETE PRESSURE PIPE CENTERED OVER THE PIPE BEING CROSSED; OR ANY SEWER PIPE ENCASED WITHIN A CONTINUOUS STEEL CASING SHALL HAVE A THICKNESS OF NOT LESS THAN 1/2" AND ALL VOIDS BETWEEN THE SEWER LINE AND THE CASING PRESSURE GROUTED WITH SAND-CEMENT GROUT; OR (ZONE-D ONLY) ANY SEWER PIPE SEPARATED BY A REINFORCED CONCRETE BLANKET AS SHOWN IN STANDARD PLAN NO. W-7.
P	PROHIBITED ZONE

CASE 2: NEW WATER MAIN BEING INSTALLED – EXISTING SEWER

IF A PROPOSED WATER MAIN WILL BE LOCATED WITHIN ZONE A, B, C, OR D, THE FOLLOWING SPECIAL REQUIREMENTS WILL APPLY FOR THE PROPOSED WATER MAIN.

ZONE	SPECIAL REQUIREMENTS
A	NO WATER MAIN SHALL BE CONSTRUCTED WITHOUT PERMISSION FROM THE DEPARTMENT OF PUBLIC HEALTH.
B	IF THE SEWER PARALLELING THE WATER MAIN DOES NOT MEET THE CASE-1, ZONE-B REQUIREMENTS, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING; OR CLASS 200, TYPE II, ASBESTOS-CEMENT PRESSURE PIPE; OR CLASS 200 PRESSURE RATED POLY(VINYL CHLORIDE) PIPE OR EQUIVALENT.
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 DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING; OR CLASS 200 PRESSURE RATED POLY(VINYL CHLORIDE) PIPE OR EQUIVALENT AND THE SEWER SHALL BE ENCASED WITH REINFORCED CONCRETE AS SHOWN IN STANDARD PLAN W-7.
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 (4) FEET FROM EITHER SIDE OF THE SEWER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE WITH HOT DIP BITUMINOUS COATING; OR CLASS 200 PRESSURE RATED POLY(VINYL CHLORIDE) PIPE OR EQUIVALENT; OR DIPPED AND WRAPPED 1/2" THICK WELDED STEEL PIPE.
P	PROHIBITED ZONE

*WHERE REQUIRED SEPARATION CANNOT BE MAINTAINED

NOT TO SCALE

CITY OF COALINGA EST. 1906

WATER
Special Construction Requirements
For Sewer and Water Separation*

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
-	-
Engineer: OSCAR M. RAMIREZ	Date: 1/2006
Drawn by: L. RIOS	Date: 1/2006
Std. No. W-13	Rev.

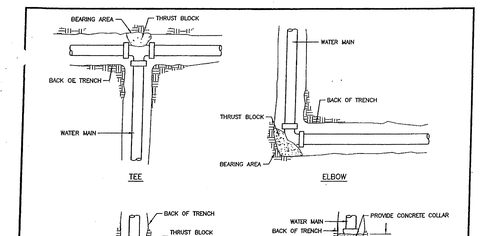


TABLE OF BEARING AREAS REQUIRED (IN SQUARE FEET)

PIPE DIAMETER	6"	8"	10"	12"
CROSS, TEE, 90° BEND PLUG& PIPE HYDRANT	3	5	8	11
45° BEND	2	3	5	6
22.5° BEND	1	2	3	3
VALVE	0	0	0	9

NOTES:
1. ENGINEER TO COMPUTE BEARING AREAS FOR CASES NOT COVERED HEREIN.
2. CONCRETE FOR THRUST BLOCKS SHALL BE CLASS "B" CONCRETE.

NOT TO SCALE

CITY OF COALINGA EST. 1906

WATER
Concrete Thrust Blocks

PUBLIC WORKS DEPT. STD. DRAWING

Revision:	Date:
-	-
Engineer: OSCAR M. RAMIREZ	Date: 1/2006
Drawn by: L. RIOS	Date: 1/2006
Std. No. W-9	Rev.

CITY STANDARD DETAILS

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
(559) 627-0530 Office
(559) 627-1926 fax
www.mangini.us

TITLE
OFFSITE DETAILS

C7.4

PROJECT 24401

REGISTERED PROFESSIONAL ENGINEER
RA. VANG
No. CIVIL 73148
01/08/2025
CIVIL
STATE OF CALIFORNIA

CONSULTANT
LANE ENGINEERS INC.
CIVIL • STRUCTURAL • SURVEYING
979 N. BLACKSTONE
TULARE, CALIFORNIA 93274
(559) 688-5263

LANE PROJ. NO. 24040.1

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

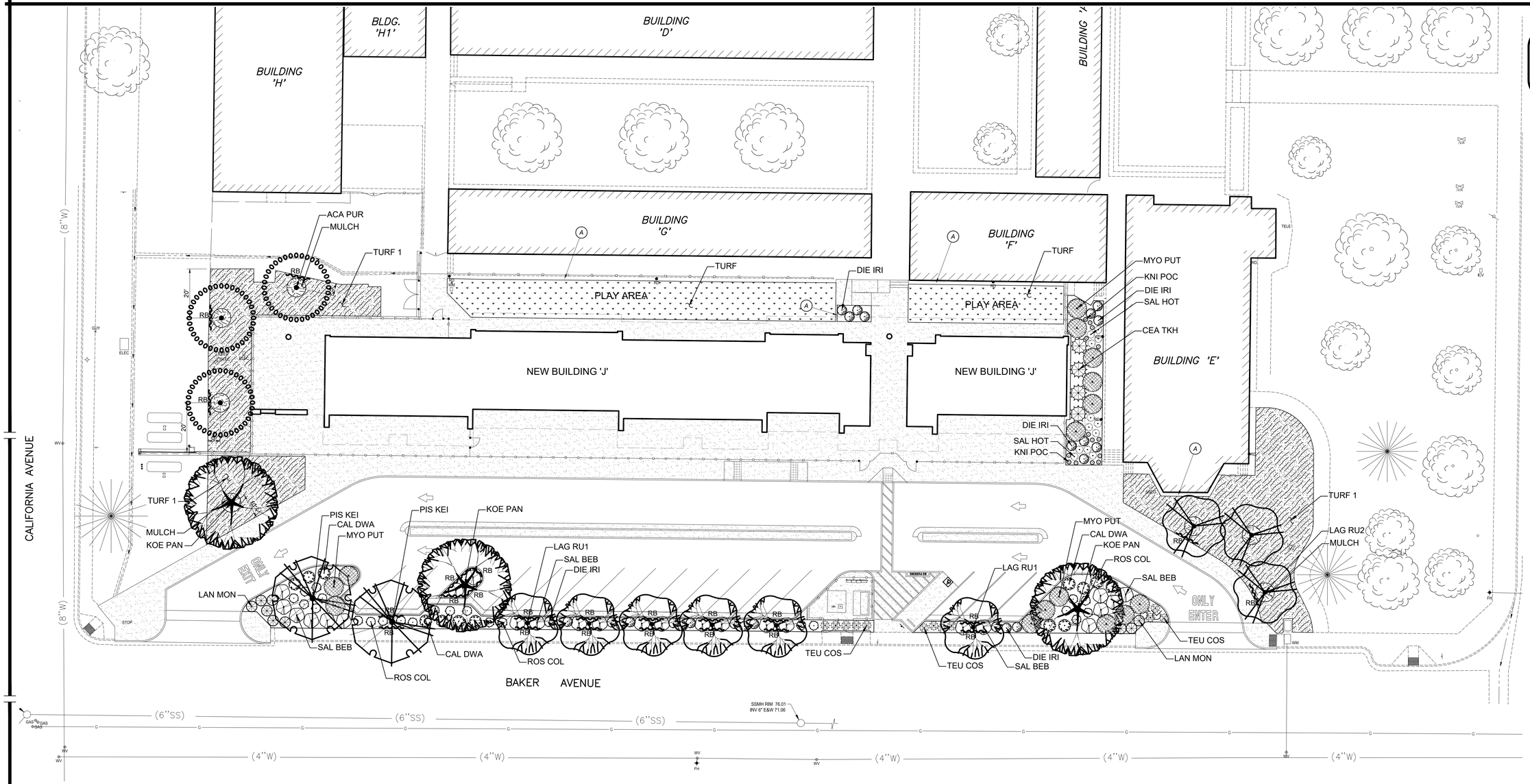
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT MA
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210



LANDSCAPE SHADE CALCULATIONS	SHADING PER CALGREEN 5.106.12		
SITE SHADING - LANDSCAPE & HARDSCAPE	**QUANTITY PROPOSED (SF)**	**PERCENT REQUIRED**	**SHADE AREA REQUIRED (SF)**
LANDSCAPED AREA (EXCLUDING SPECIAL USE & PARKING LANDSCAPE AREAS)	937	20	187
UNCOVERED HARDSCAPE AREA (EXCLUDING PARKING HARDSCAPE AREAS)	3,523	20	705
TOTAL SITE SHADE REQUIRED			892
PROVIDED SHADE TREES	**PROVIDED SHADE AREA**	**NO. TREES**	
VERY LARGE (40' dia.= 1256 SF)	0	0	
LARGE (35' dia.= 962 SF)	0	0	
MEDIUM (30' dia.= 707 SF)	0	0	
SMALL (20' dia.= 314 SF)	942	3	
TOTALS	942	3	
OVER (UNDER) LANDSCAPE & HARDSCAPE SHADE REQUIREMENT			**50**
PARKING LOT SHADING	**QUANTITY PROPOSED (SF)**	**PERCENT REQUIRED**	**SHADE AREA REQUIRED (SF)**
PARKING LOT STALLS & AISLES	11,433	50	5,717
PARKING LOT LANDSCAPE	3,223	20	645
PARKING LOT HARDSCAPE	6,018	20	1,204
TOTAL PARKING SHADE REQUIRED			7,565
PROVIDED SHADE TREES - PARKING LOT AREA	**PROVIDED SHADE AREA**	**NO. TREES**	
VERY LARGE (40' dia.= 1256 SF)	0	0	
LARGE (35' dia.= 962 SF)	4,810	5	
MEDIUM (30' dia.= 707 SF)	0	0	
SMALL (20' dia.= 314 SF)	2,826	9	
TOTALS	7,636	14	
OVER (UNDER) PARKING LOT SHADE REQUIREMENT			**71**

LANDSCAPE PLANTING AREA REQUIREMENT (DSA 1-L)

	AREA (SF)
NEW BUILDINGS FOOTPRINT:	9,311
REQUIRED MWELO COMPLIANT PLANTING:	6,983
EXISTING IRRIGATED AREA DESIGNATED FOR REMOVAL:	29,771
PROPOSED MWELO COMPLIANT PLANTING:	4,160
TOTAL CREDIT FOR MWELO COMPLIANT PLANTING:	33,931
EXCESS / (DEFICIT) OF PROPOSED COMPLIANT PLANTING:	26,948

WATER CONSERVATION COMPLIANCE STATEMENT:

I HAVE COMPLIED WITH THE CRITERIA OF THE LANDSCAPE WATER CONSERVATION ORDINANCE AND GUIDELINES, AND HAVE APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE PLANTING DESIGN PLAN.

DAVID W. BRILEY, PLA 2787

LANDSCAPE PLANTING OBSERVATION LOG

ITEM NO.	WORK ITEM DESCRIPTION	REVIEWED & ACCEPTED BY OWNER'S REP OR LAND ARCH: PRINT NAME	SIGNATURE	DATE
PL-1	REPORT & PROTECTION OF EXISTING TREES			
PL-2	RIPPING OF PLANTING AREAS			
PL-3	SOIL CONDITIONING & TILLAGE DEPTH			
PL-4	IRRIGATION COVERAGE PRIOR TO PLANTING			
PL-5	FINISH GRADING PRIOR TO PLANTING			
PL-6	TREES - INITIAL QUALITY & LAYOUT			
PL-7	PLANTS - INITIAL QUALITY & LAYOUT			
PL-8	GRANULAR PRE-EMERGENT HERBICIDE IN MULCHED AREAS			
PL-9	WOOD MULCH DEPTH			

NOTES: THE ORIGINAL VERSION OF THIS LOG SHALL BE MAINTAINED ON THE AS-BUILT RECORD DRAWING SET.
WORK ITEMS MAY NOT BE REVIEWED IF PRIOR WORK ITEMS HAVE NOT BEEN ACCEPTED.

SCALE: N 1"=20'
0 5 20 40
SCALE IN FEET

SEE SHEET LA2 FOR PLANTING LEGEND AND LA3 FOR DETAILS

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

LICENSED LANDSCAPE ARCHITECT
DAVID W. BRILEY NO. 2787
Signature
12/31/26
Renewal Date
Date
STATE OF CALIFORNIA

Blair, Church & Flynn
CONSULTING ENGINEERS
Blair, Church & Flynn Consulting Engineers
465 Clovis Avenue, Suite 200
Clovis, California 93612
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REVISIONS

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(559) 627-1926 Fax

TITLE
PLANTING PLAN

LA1

PROJECT 24001

PLANT LEGEND

TOTAL MIXED PLANTING AREA = 4,160 SF SUNSET ZONE# 7, 9

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	WATER USE	QTY	DETAIL	REMARKS
LARGE TREES							
	KOE PAN	KOELREUTERIA PANICULATA / GOLDEN RAIN TREE	24"BOX	M	3	A/LA3	DECIDUOUS. STANDARD FORM. PARTIAL SHADE TO FULL SUN. YELLOW FLOWERS IN SUMMER. MS: 35' H X 25'-40' W
	PIS KEI	PISTACIA CHINENSIS 'KEITH DAVEY' / KEITH DAVEY CHINESE PISTACHE	24"BOX	L	2	A/LA3	DECIDUOUS. STANDARD FORM. FULL SUN. ORANGE-CRIMSON FALL COLOR MS: 30-40' H X 25-35' W
SMALL TREES							
	ACA PUR	ACACIA BAILEYANA `PURPUREA` / PURPLE-LEAF BAILEY ACACIA	24"BOX	L	3	A/LA3	EVERGREEN. STANDARD FORM. YELLOW FLOWERS IN WINTER OR SPRING. MS: 30' H X 20'-30' W
	LAG RU1	LAGERSTROEMIA INDICA 'RUBRA' / RED CRAPE MYRTLE	15 GAL	L	6	A/LA3	DECIDUOUS. STANDARD FORM. FUN SUN. SUMMER FLOWERING. MS: 25' H X 25' W
	LAG RU2	LAGERSTROEMIA INDICA 'RUBRA' / RED CRAPE MYRTLE	24"BOX	L	3	A/LA3	DECIDUOUS. STANDARD FORM. FULL SUN. SUMMER FLOWERING. MS: 25' H X 25' W

SYMBOL	CODE	BOTANICAL / COMMON NAME	SIZE	WATER USE	QTY	DETAIL	REMARKS
SHRUBS							
	CAL DWA	CALLISTEMON VIMINALIS `LITTLE JOHN` / DWARF WEEPING BOTTLEBRUSH	1 GAL	L	13	B/LA3	FULL SUN. RED FLOWERS SPRING TO SUMMER MS: 3' H X 5' W
	CEA TKH	CEANOTHUS THYRSIFLORUS `SKYLARK` / SKYLARK BLUEBLOSSOM	5 GAL	L	4	B/LA3	FULL TO PARTIAL SUN, DARK BLUE FLOWERS WITH REDDISH BRACTS BLOOM IN SPRING. CA NATIVE MS: 4'-5' H X 6'-7' W
	LAN MON	LANTANA MONTEVIDENSIS / TRAILING LANTANA	1 GAL	L	10	B/LA3	FULL SUN TO PART SUN. LILAC FLOWES MS: 1'-2' H X 3'-5' W
	ROS COL	ROSMARINUS OFFICINALIS `COLLINGWOOD INGRAM` / COLLINGWOOD INGRAM ROSEMARY	5 GAL	L	23	B/LA3	EVERGREEN. FULL SUN. DARK BLUE FLOWERS. MS: 2-3' H X 4' W
	SAL HOT	SALVIA MICROPHYLLA 'HOT LIPS' / HOT LIPS GRAHAM SAGE	5 GAL	L	12	B/LA3	FULL SUN TO PARTIAL SHADE. RED FLOWERS MS: 2'-3' H X 2'-3' W
PERENNIALS							
	DIE IRI	DIETES IRIDIOIDES / FORTNIGHT LILY	1 GAL	L	26	B/LA3	FULL TO PARTIAL SUN, PERENNIAL, WHITE FLOWERS SPRING THROUGH LATE FALL MS: 2'-3' H X 3'-4' W
	KNI POC	KNIPHOFIA X 'POCO SUNSET' TM / POCO SUNSET HOT POKER	1 GAL	L	14	B/LA3	FULL SUN, HERBACEOUS PERENNIAL, RED AND ORANGE BLOOMS ALL SUMMER MS: 2' H X 2' W
	SAL BEB	SALVIA X `BEE`S BLISS` / BEE`S BLISS SAGE	3 GAL	L	25	B/LA3	FULL SUN. LAVENDER BLUE FLOWERS IN SPRING MS: 2' H X 6'-8' W
GROUND COVER							
	MYO PUT	MYOPORUM PARVIFOLIUM `PINK` / PINK MYOPORUM	1 GAL	L	15	B/LA3	FULL SUN. PINK FLOWERS. MS: 3"-6" H X 9' W
	TEU COS	TEUCRIUM COSSONII / CREEPING GERMANDER	5 GAL	L	12	B/LA3	FULL SUN.PINK OR PURPLE FLOWERS. MS: 4"-6" H X 2'-4' W

SYMBOL	CODE	BOTANICAL / COMMON NAME	CONT	WATER USE	QTY	DETAIL	REMARKS
GROUND COVERS							
	MULCH	WALK-ON WOOD MULCH	N/A	N/A	329 SF	E/LA3	MIN. 3 INCH COMPRESSED DEPTH. SEE PLANTING NOTE #18.
	TURF	`CELEBRATION` BERMUDAGRASS	SOD	M	3,420 SF	D/LA3	
	TURF 1	`CELEBRATION` BERMUDAGRASS	SOD	M	5,858 SF	D/LA3	EXISTING TURFGRASS REPAIR AND REPLACEMENT INSTALL FULL WIDTH SOD TO THE LIMITS OF DISTURBANCE. VERIFY QUANTITY. SEE DEMOLITION AND GRADING PLANS.
RB		ROOT BARRIER UB24-2				C/LA3	24 INCH DEEP ROOT BARRIER PANELS. INSTALL PER MANUFACTURE'S SPECIFICATIONS.
A		MOWSTRIP PER CIVIL PLANS					

WATER EFFICIENT LANDSCAPE WORKSHEET
Educational

Project: New Classroom Wing at Sunset ES
Location: Coalinga, CA
ETo Reference (MWELO-Apdx. A): Coalinga

MAWA = MAXIMUM APPLIED WATER ALLOWANCE (1,000 GALLONS)

TOTAL NEW BUILDING FOOTPRINT	9,311	SF	(1,600 sf is threshold for inclusion)
75% OF BLDG. SF REQ'D LANDSCAPE	6,983	SF	
EXIST. IRRIGATION REMOVED FROM SERVICE	29,771	SF	
REGULAR LANDSCAPE AREA	4,160	SF	(landscape area >500 sf)
SPECIAL LANDSCAPE AREA (SLA)	3,420	SF	
TOTAL PROPOSED LANDSCAPE AREA (LA)	7,580	SF	
TOTAL COMPLIANT LANDSCAPE AREA	37,351	SF	

NORMAL YEAR REFERENCE	ANNUAL
EVAPOTRANSPIRATION (ETo)	50.9
EFFECTIVE PRECIPITATION (25% OF ANNUAL)	0.0
ADJUSTED EVAPOTRANSPIRATION	50.9

MAWA=(ETo) x (0.62) [(0.65 x LA)+(0.35 x SLA)] ANNUAL 2015 DWR/DSA Update

MAX. APPLIED WATER ALLOWANCE	**193.3**	K Gallons
TOTAL IN ACRE/FT	0.6	
TOTAL IN CCF	258.4	

ETWU = ESTIMATED TOTAL WATER USE (1,000 GALLONS)

LANDSCAPE HYDROZONE TYPES	7,580	HA	PF	IE	ETAF
MIXED PLANTING (L)	4,160	SF	0.3	0.81	0.37
MIXED PLANTING (M)	0	SF	0.5	0.81	0.62
WARM-SEASON TURFGRASS (MH)	0	SF	0.6	0.75	0.80
SLA - RECREATIONAL/RECYCED WATER USE	3,420	SF	0.6	0.75	0.80
AVERAGE REGULAR ETAF:					0.11
MAXIMUM AVERAGE REGULAR ETAF:					**0.65**

ETWU=(ETo) x (0.62)x [(HA x PF/IE) + SLA]	ANNUAL	typical IE coeficients
MIXED PLANTING (L)	48.6	0.75 overhead sprinklers
MIXED PLANTING (M)	0.0	0.81 drip & bubblers
WARM-SEASON TURFGRASS (M)	0.0	
SLA - RECREATIONAL/RECYCED WATER USE	86.3	
ESTIMATED TOTAL WATER USE	**135.0**	K Gallons
TOTAL IN ACRE/FT	0.4	
TOTAL IN CCF	180.4	

ETWU AS A PERCENT OF MAWA: 70%

TREE SIZE AND QUALITY STANDARDS

AMERICAN STANDARDS FOR NURSERY STOCK (ANSI Z60.1) AND GUIDELINE SPECIFICATIONS FOR NURSERY TREE QUALITY (URBAN TREE FOUNDATION) SHALL APPLY

	TYPES 1 & 2 SHADE TREES			TYPE 3 SMALL UPRIGHT TREES**			TYPE 4 SMALL SPREADING TREES***		
CONTAINER SIZE	MIN. CALIPER	MAX. CALIPER	TYPE 1 MIN./MAX. HEIGHT*	MIN. CALIPER	MAX. CALIPER	MIN./MAX. HEIGHT	MIN. CALIPER	MAX. CALIPER	MIN./MAX. HEIGHT
15 GALLON	0.75	2.0	7-10 FT	0.75	2.0	6-8 FT	0.75	2.0	4-8 FT
24" BOX	1.25	3.0	8-12 FT	1.25	3.0	8-10 FT	1.25	3.0	6-10 FT
36" BOX	1.75	3.5	10-16 FT	1.75	3.5	10-14 FT	1.75	3.5	7-12 FT
42" BOX	2.0	4.0	12-20 FT	2.0	4.0	12-18 FT	2.0	4.0	8-14 FT
48" BOX	2.5	5.0	14-26 FT	2.5	5.0	14-22 FT	2.5	5.0	9-16 FT

** TYPE 2 TREE HEIGHTS SHALL NOT BE LESS THAN TWO-THIRDS THE LISTED HEIGHT RANGE.*

*** TYPE 3 TREES SHALL HAVE A MINIMUM OF SEVEN BRANCHES*

**** TYPE 4 TREES SHALL HAVE A MINIMUM OF EIGHT BRANCHES*

CALIPER MEASUREMENT FOR CLUMP OR MULTI-STEM TREES IS ONE-HALF THE SUM OF THE THREE LARGEST TRUNK CALIPERS

CALIPER MEASUREMENT FOR <4" TRUNK IS +6" ABOVE ROOTBALL (NOT INCLUDING ROOTSTOCK). >4" TRUNK IS +12"

TREES SHALL HAVE A CENTRAL LEADER. NEW LEADERS LESS THAN HALF THE DIAMETER OF A HEADED LEADER, BROKEN OR CO-DOMINATE LEADERS ARE NOT ACCEPTABLE

SCAFFOLD BRANCHES SHALL BE LESS THAN 2/3 THE DIAMETER OF THE TRUNK, WITHOUT INCLUDED BARK AT ATTACHMENT. SCAFFOLD BRANCHES SHALL BE BALANCED, WELL SPACED VERTICALLY, AND WITH A RADIALLY BLANK SECTOR NO GREATER THAN 1/3 OF THE CANOPY CIRCUMFERENCE.

TEMPORARY BRANCHES ON THE LOWER TRUNK SHALL BE LESS THAN 3/8 INCH DIAMETER; AND THE CLEAR TRUNK HEIGHT SHALL BE NO MORE THAN 40% OF THE TOTAL TREE HEIGHT.

THE ROOT COLLAR AND ROOTBALL SHALL BE FREE OF DEFECTS INCLUDING CIRCLING, KINKED AND GIRDLING ROOTS. ROOTS THE EDGE AND BOTTOM OF THE CONTAINER SHALL BE LESS THAN 1/4 INCH DIAMETER, AND UNIFORM THROUGHOUT THE CONTAINER.

TREE CANOPY WIDTH SHALL BE A MINIMUM OF 25% OF THE STANDARD FORM TREE HEIGHT.

DO NOT HEAD BACK OR PRUNE TREES UNLESS APPROVED AND/OR DIRECTED TO BY THE LANDSCAPE ARCHITECT

SEE SHEET LA1 FOR PLANTING PLAN AND CALCULATIONS AND LA3 FOR DETAILS

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

LICENSED LANDSCAPE ARCHITECT — JOHN A. BRILEY, No. 2587 — Signature — 12/31/26 Renewal Date — State of California

Blair, Church & Flynn CONSULTING ENGINEERS
Blair, Church & Flynn Consulting Engineers
453 Clovis Avenue, Suite 200
Clovis, California 93612
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APPROVALS
FILE # 10-28 APPLICATION # 02-122658

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LICENSED ARCHITECT — MICHAEL J. SCOTT JR. — No. C-34290 — REN: 05-31-25 — STATE OF CALIFORNIA

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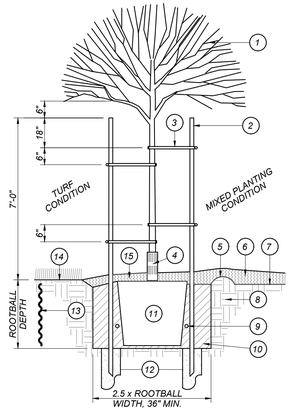
REVISIONS

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TITLE
PLANTING LEGEND

LA2

PROJECT 24001



LEGEND:

1. *TREE PER PLANTING PLAN.*
2. *2" X 10' LODGEPOLE PINE STAKE. DO NOT DRIVE STAKE THROUGH ROOTBALL. CUT OFF TOP SECTION DAMAGED BY HAMMERING. TOP OF STAKE IS 6" CLEAR OF LOWEST TREE BRANCHES.*
3. *FLEXIBLE VINYL TREE TIE, 4 / TREE (V.I.T. OR APPROVED EQUAL.)*
4. *TREE TRUNK PROTECTOR (GRAY) WHERE TREE IS IN TURF AREA.*
5. *4" HIGH WATERING BERM.*
6. *ADJACENT PLANTING AREA WITH MULCH WHERE OCCURS.*
7. *FINISH GRADE.*
8. *SITE SOIL.*
9. *PLANT FERTILIZER TABLET. SEE SPECIFICATIONS.*
10. *AMENDED BACKFILL. SEE SPECIFICATIONS.*
11. *ROOTBALL. SET TOP OF ROOTBALL 2" ABOVE FINISH GRADE.*
12. *DRAINAGE SUMP: 12" DIA. PER DRAINAGE SUMP NOTES. FILL WITH CONCRETE SAND PER SSPWC 200-1.5.5.*
13. *ROOT CONTROL BARRIER WHERE REQUIRED. SEE GENERAL PLANTING NOTES AND DETAIL [C/LA3].*
14. *ADJACENT TURFGRASS PLANTING WHERE OCCURS.*
15. *MULCH, MINIMUM 3" DEPTH. SEE GENERAL PLANTING NOTE 17.*

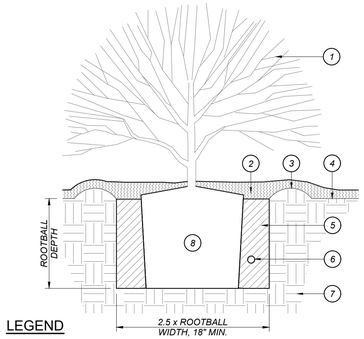
DRAINAGE SUMP NOTES:

A. DRAINAGE SUMPS SHALL PENETRATE THROUGH AND BEYOND ANY UNDERLYING PAVEMENT OR HARDPAN SOIL STRATUM, AND SUCH PAVEMENT OR HARDPAN MATERIAL SHALL BE REMOVED FROM THE SUMP HOLES.

B. THE SUMP HOLE SHALL BE DRILLED TO MINIMUM DEPTH OF TEN (10) FEET, UNLESS VISUAL EVIDENCE OF A SUBSURFACE SAND AND/OR GRAVEL DRAINAGE STRATUM IS APPARENT AT A LESSER DEPTH. THE SUMP HOLES SHALL EXTEND INTO THE DRAINAGE STRATUM A MINIMUM OF ONE (1) FOOT.

A / LA3 — DOUBLE STAKE TREE PLANTING

NOT TO SCALE

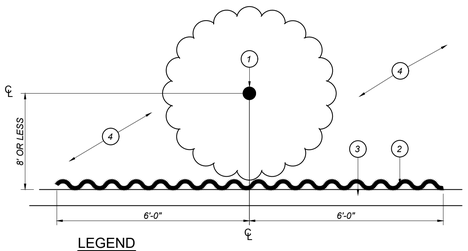


LEGEND

1. *SHRUB.*
2. *WOOD MULCH LAYER.*
3. *3" HIGH WATERING BASIN.*
4. *FINISH GRADE.*
5. *AMENDED BACKFILL. SEE SPECIFICATIONS.*
6. *FERTILIZER PACKET. SEE SPECIFICATIONS.*
7. *SITE SOIL.*
8. *ROOTBALL. SET TOP OF ROOTBALL 1" ABOVE FINISH GRADE.*

B / LA3 — SHRUB PLANTING

NOT TO SCALE

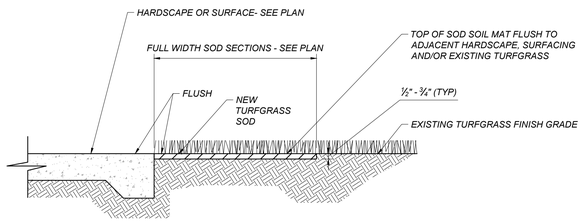


LEGEND

1. *TREE TRUNK.*
2. *12 LF OF 24"-DEEP ROOT CONTROL BARRIER: DEEP ROOT UB24-2 OR EQUIVALENT. CENTER BARRIER ON TRUNK OF TREE. INSTALL PER MANUFACTURER'S SPECIFICATIONS.*
3. *HARDSCAPE ELEMENT: CURB, SIDEWALK, WALL, ETC.*
4. *PLANTING AREA.*
5. *INSTALL ROOT CONTROL BARRIER ON ALL SIDES OF THE PLANTING AREA WHEN SURROUNDED BY HARDSCAPE WITHIN 8' OF THE TREE TRUNK.*

C / LA3 — ROOT CONTROL BARRIER

NOT TO SCALE

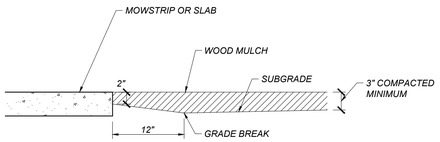


NOTE:

IF THE EXISTING TURFGRASS FINISH GRADE IS HIGHER OR LOWER THAN THE NEW FINISH SURFACE, TRANSITION GRADE THE NEW SOD AT A MAXIMUM 1V:12H SLOPE

D / LA3 — TURF SOD INSTALLATION

NOT TO SCALE



E / LA3 — MULCH DETAIL

NOT TO SCALE

PLANTING NOTES:

1. *IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE IF IT IS OBVIOUS THAT OBSTRUCTIONS OR STRUCTURES, IRRIGATION SYSTEM MALFUNCTION, EXISTING TREES OR PLANTS, GRADE DIFFERENCES OR CHANGES IN THE SITE PLAN ARE PRESENT THAT WILL IMPACT THE PLANTING DESIGN. FAILURE TO GIVE SUCH NOTIFICATION SHALL PLACE THE RESPONSIBILITY ON THE CONTRACTOR FOR ANY REVISIONS OR REPLACEMENTS NECESSARY FOR CORRECTION.*
2. *ANY EXISTING PLANTING SHOWN ON THE PLAN IS FOR REFERENCE ONLY. THE CONTRACTOR SHALL VERIFY THE EXISTING PLANTING AT THE SITE PRIOR TO STARTING WORK. UNLESS NOTED OTHERWISE, THE CONTRACTOR SHALL PROTECT THE EXISTING PLANTING ADJACENT TO THE WORK FROM DAMAGE OR DISTRESS.*
3. *ALL TREES AND SHRUBS SHALL BE OF CLASS A QUALITY WITHOUT PESTS, DISEASE OR DAMAGE, SHALL BE WELL ESTABLISHED IN THEIR CONTAINERS WITHOUT GIRDLING ROOTS OR EXCESSIVE TOP GROWTH, AND SHALL COMPLY WITH THE REQUIREMENTS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI Z60.1).*
4. *NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO THE INSTALLATION OF IRRIGATION COMPONENTS AND TREE AND/OR SHRUB PLANTING FOR APPROVAL OF THE PLANT LAYOUT AND PLANT QUALITY. PLANT LOCATIONS SHALL AVOID CONFLICTS WITH EXISTING IMPROVEMENTS, PLANTINGS OR UTILITIES, LIGHT POLES WHILE MEETING THE DESIGN INTENT. DO NOT PLANT TREES WITHIN 15 FEET OF LIGHT POLES UNLESS SPECIFICALLY AUTHORIZED. FAILURE TO OBTAIN SUCH APPROVAL SHALL PLACE THE RESPONSIBILITY ON THE CONTRACTOR FOR ANY RELOCATION OR REPLACEMENT OF IRRIGATION COMPONENTS, PLANTED TREES AND/OR SHRUBS.*
5. *PLANT QUANTITIES ARE PROVIDED FOR BIDDING CONVENIENCE ONLY. THE CONTRACTOR SHALL PROVIDE SUFFICIENT QUANTITIES OF PLANTS EQUAL TO THE SYMBOL COUNT OR TO FILL THE AREA SHOWN ON THE PLAN AT THE SPECIFIED TRIANGULAR SPACING.*
6. *WHERE GROUND COVER PLANTS ARE SHOWN AT A SPECIFIED SPACING, THE GROUND COVER PLANTING CONTINUES UNDERNEATH THE TALLER SHRUBS AND TREES AS SHOWN IN THE PLANTING DETAILS. DO NOT PLANT GROUND COVER IN SHRUB OR TREE WATERING BASINS.*
7. *ALL NEW TREES LOCATED WITHIN 8 FEET OF PAVEMENT OR STRUCTURES SHALL HAVE A ROOT CONTROL BARRIER INSTALLED WHEN PLANTED. UNLESS OTHERWISE SPECIFIED, INSTALL A 12 FOOT LONG X 24 INCH DEEP LINEAR POLYETHYLENE BARRIER VESPRO OR EQUAL AT THE EDGE OF PAVEMENT/STRUCTURE, CENTERED ON THE TREE TRUNK AS SHOWN IN THE PLANTING DETAILS.*
8. *REMOVE NURSERY STAKES FROM TREES AFTER TREE STAKING OR GUYING AS SHOWN IN THE DETAILS.*
9. *INSTALL PERFORATED POLYETHYLENE TREE TRUNK PROTECTORS FOR ALL NEW TREES PLANTED IN TURF. UNLESS NOTED OTHERWISE, MAINTAIN A MINIMUM 6 FOOT DIAMETER MULCHED AREA AT THE BASE OF THE TREE INSIDE THE WATERING BASIN.*
10. *THE CONTRACTOR SHALL PRUNE NEW TREES ONLY WHEN SPECIFICALLY DIRECTED BY THE LANDSCAPE ARCHITECT. TREES HEADED BACK WITHOUT INTACT SCAFFOLDING BRANCH STRUCTURE OR IN ROOT-BOUND CONTAINERS SHALL BE REJECTED.*
11. *SUBMIT REPRESENTATIVE SOIL SAMPLES OF NATIVE AND PROPOSED IMPORT, IF NEEDED, PLANTING TOPSOIL TO A SOIL LAB FOR HORTICULTURAL ANALYSES AND FERTILITY RECOMMENDATIONS. AMEND SOIL ACCORDING TO THE RECOMMENDATIONS OF THE SOILS REPORT AND LANDSCAPE ARCHITECT'S DIRECTION. SEE THE LANDSCAPE PLANTING SPECIFICATIONS FOR ADDITIONAL INSTRUCTIONS.*
12. *PROVIDE SANDY LOAM TOPSOIL PER SPECIFICATION IN ALL RAISED PLANTERS AND WHERE IMPORT TOPSOIL IS REQUIRED. NATIVE SITE SOIL MAY BE USED IN RAISED PLANTERS ONLY WHEN THE NATIVE SITE SOIL MEETS THE CRITERIA FOR SANDY LOAM TOPSOIL AS DETERMINED BY A SOIL ANALYSIS.*
13. *PRIOR TO SOIL CONDITIONING, RIP IN TWO DIFFERENT DIRECTIONS WITH TINES AT 12 INCH SPACING, ALL TURFGRASS AREAS TO A 12 INCH DEPTH, AND SHRUB/GROUND COVER AREAS TO A 18 INCH DEPTH. ROUGH GRADE AND TILL THE APPROVED SOIL CONDITIONERS AND FERTILIZERS INTO THE TOP 6 INCHES PER THE LANDSCAPE PLANTING SPECIFICATIONS. COMPOST RATE SHALL BE A MINIMUM OF FOUR (4) CUBIC YARDS PER 1,000 SQUARE FEET.*
14. *UPON THE COMPLETION OF THE SOIL CONDITIONING, REMOVE ROCKS AND CLODS 1 INCH DIAMETER AND GREATER FROM THE TOP TWO INCHES OF TOPSOIL, AND ALL DEBRIS. FINISH GRADE THE AREA TO +/- 0.04 FOOT TOLERANCE. FINISH GRADE IN MULCHED AREAS SHALL BE STRAIGHT GRADES WITHOUT HUMPS OR DEPRESSIONS AND SHALL BE 2 INCHES BELOW ADJACENT HARDSCAPE, INLETS OR UTILITY BOX COLLARS. RELATIVE DENSITY OF THE TOPSOIL SHALL NOT EXCEED 85% COMPACTION.*
15. *OBTAIN THE APPROVAL OF THE OWNER'S REPRESENTATIVE TO BEGIN PLANTING OPERATIONS ONCE THE IRRIGATION SYSTEM IS OPERATIONAL AND THE SOIL CONDITIONING AND FINISH GRADING IS COMPLETED.*
16. *AFTER PLANTING IS COMPLETED AND JUST PRIOR TO MULCH INSTALLATION, APPLY A BROAD SPECTRUM PRE-EMERGENT HERBICIDE TO ALL NON-TURFGRASS PLANTING AREAS PER THE MANUFACTURER'S SPECIFICATIONS.*
17. *WHERE MULCH IS TO BE INSTALLED IN AN EXISTING PLANTING AREA, BREAKUP/TILL THE EXISTING SOIL TO A MINIMUM 6 INCH DEPTH PER SPECS, AND ADJUST FINISH GRADE ADJACENT TO HARDSCAPE AND DRAINAGE ELEMENTS TO PROVIDE A 2 INCH DEPTH THAT TRANSITIONS TO THE EXISTING GRADE OVER 1 TO 2 FEET.*
18. *INSTALL A MINIMUM 3 INCH DEPTH OF CHIPPED WALK-ON WOOD MULCH IN ALL PLANTING AREAS AND TREE WATERING BASINS EXCEPT FOR TURFGRASS AREAS, SLOPES 3H:1V OR GREATER, AREAS TO RECEIVE SEED PLANTING, OR AS NOTED ON THE PLAN. AREAS PLANTED WITH FLATS SHALL HAVE A MINIMUM MULCH DEPTH OF 2 INCHES. INSTALL A MINIMUM 3 FOOT RADIUS OF 3 INCH DEEP WOOD MULCH AT THE BASE OF ALL TREES IN NEW TURFGRASS AREAS.*
19. *ALL EXISTING PLANTS AND/OR TURFGRASS SHOWN TO REMAIN AND DAMAGED OR REMOVED BY CONSTRUCTION OPERATIONS AND/OR UTILITY/IRRIGATION/DRAINAGE LINES SHALL BE REPLACED WITH PLANTS THAT MATCH AS CLOSELY AS POSSIBLE TO THE EXISTING PLANT SPECIES, VARIETY AND SIZE. THE REPLACEMENT TURFGRASS SOD VARIETY SHALL BE THE SAME AS SHOWN IN THE PLANTING LEGEND AS IF FOR NEW WORK, OR SHALL MATCH THE EXISTING TURFGRASS VARIETY WHERE EXISTING. TILL SOIL CONDITIONING MATERIALS INTO THE TOP 6 INCHES OF THE SOIL OVER THE AREA OF REPAIR/REPLACEMENT AS IF FOR NEW WORK. ADJUST FINISH GRADE SO NEW TURFGRASS SOD ABUTS FLUSH TO EXISTING SOD GRADE. THE REPLACEMENT PLANTS AND/OR TURFGRASS SOD SHALL BE MAINTAINED AS PART OF THE ORIGINAL SCOPE OF WORK. THE REPAIR OR REPLACEMENT WORK SHALL BE AT THE CONTRACTOR'S SOLE EXPENSE.*
20. *CONTRACTOR SHALL MAINTAIN THE NEW PLANTING FOR HEALTHY AND VIGOROUS GROWTH, WHICH INCLUDES BUT IS NOT LIMITED TO WATERING, WEEDING, FERTILIZING, MOWING AND EDGING (AT LEAST ONCE A WEEK), REMOVING TRASH AND DEBRIS, AND OTHER RELATED ACTIVITIES THROUGHOUT THE DURATION OF THE MAINTENANCE PERIOD UNTIL FINAL ACCEPTANCE.*

CONTRACTOR SPECIAL PLANTING NOTES:

1. *AN ASSESSMENT AND VALUATION OF ONSITE EXISTING TREES SCHEDULED TO REMAIN IN THE AREA OF WORK SHALL BE PERFORMED BY THE CONTRACTOR'S ARBORIST PRIOR TO THE START OF CONSTRUCTION OPERATIONS PER THE 'EXISTING LANDSCAPE PROTECTION' SPECIFICATION.*
2. *THE CONTRACTOR SHALL RIP, CONDITION AND TILL THE ENTIRE EXTENT OF ALL PLANTING AREAS RECEIVING NEW PLANTS PER THE PLANTING NOTES AND 'LANDSCAPE PLANTING' SPECIFICATIONS.*
3. *ALL EXISTING MIXED PLANTING AREAS RECEIVING NEW WOOD MULCH SHALL BE MANUALLY TILLED TO A MINIMUM DEPTH OF 4 INCHES, CLODS BROKEN UP TO A MAXIMUM 1 INCH DIAMETER, FINISH GRADED TO 2 INCHES BELOW ADJACENT SURFACES AND UTILITY/IRRIGATION BOXES WITHIN 12 INCHES OF THE HARDSCAPE EDGE, AND A PRE-EMERGENT HERBICIDE APPLIED PRIOR TO WOOD MULCH INSTALLATION. PROTECT EXISTING PLANTING DURING WOOD MULCH PREPARATION AND INSTALLATION.*
4. *THE ORIGINAL PLANTING OBSERVATION LOG SHALL BE MAINTAINED ON THE AS-BUILT RECORD DRAWING SET.*
5. *THE AS-BUILT RECORD DRAWING SET AND MAINTENANCE MANUAL SHALL BE SUBMITTED AND ACCEPTED PRIOR TO THE SCHEDULING OF A FINAL ACCEPTANCE REVIEW.*

SEE SHEET LA1 FOR PLANTING PLAN AND CALCULATIONS AND LA2 FOR PLANTING LEGEND

Know what's below. Call before you dig.

LICENSED LANDSCAPE ARCHITECT — BRILEY No. 2581 — 12/31/26 Renewal Date — STATE OF CALIFORNIA

Blair, Church & Flynn CONSULTING ENGINEERS
Blair, Church & Flynn Consulting Engineers
453 Clovis Avenue, Suite 200
Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

APPROVALS

FILE # 10-28 — APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT JR — No. C-34290 — REN: 08-31-25 — STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

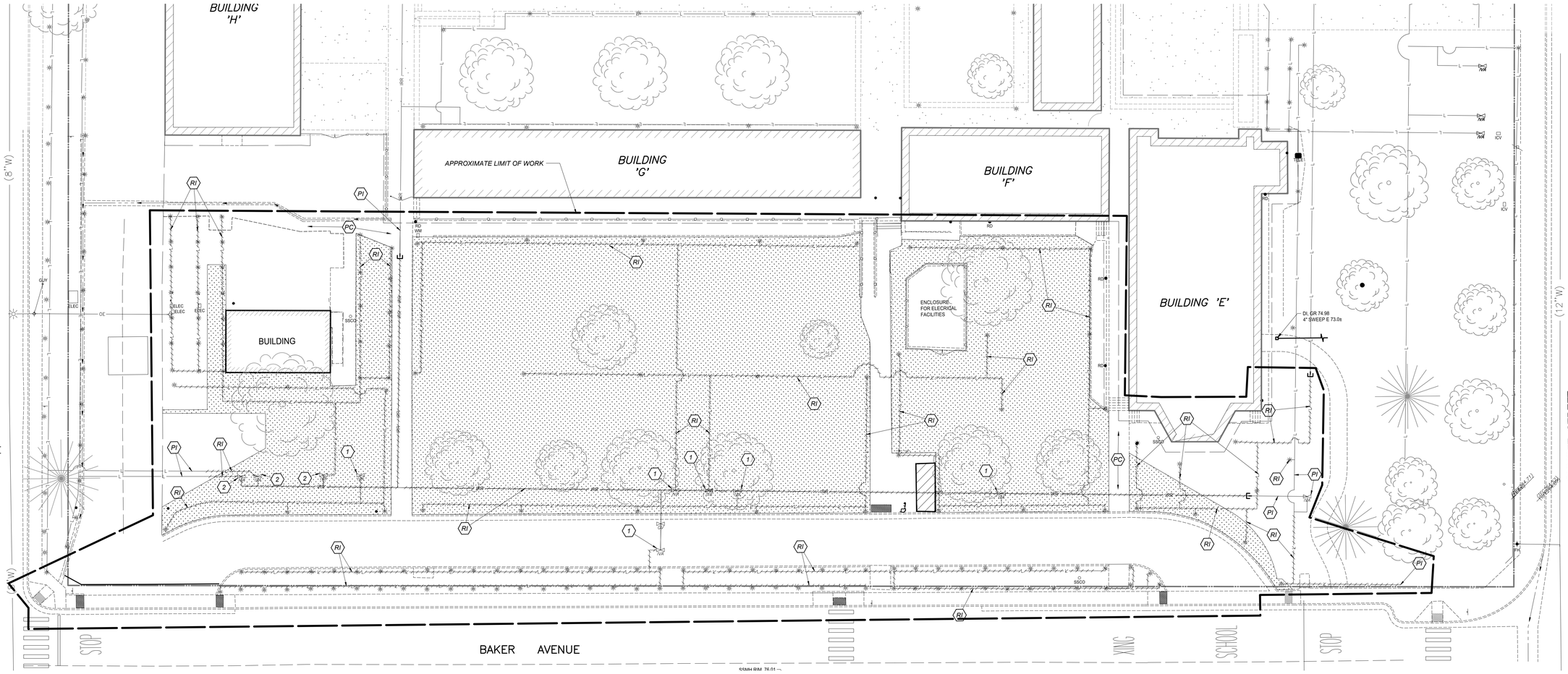
REVISIONS

MANGINI | ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
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(559) 627-2630 Office
(559) 627-1926 Fax

TITLE: *PLANTING DETAILS*

LA3

PROJECT 24001



IRRIGATION DEMOLITION LEGEND:

- REMOVE TURF
- LIMIT OF IRRIGATION LATERAL LINE REMOVAL/ABANDONMENT
- LIMIT OF IRRIGATION MAIN LINE REMOVAL/ABANDONMENT
- (PC) PROTECT CONCRETE IMPROVEMENTS TO REMAIN.SEE ARCHITECTURAL PLANS
- (RI) REMOVE EXISTING IRRIGATION
- (PI) PROTECT EXISTING IRRIGATION
- (1) REMOVE AND SALVAGE EXISTING 2" IRRIGATION VALVE. RETURN TO OWNER. USE EXISTING CONTROLLER STATION AND WIRE FOR NEW VALVE
- (2) REMOVE AND RELOCATE EXISTING 1-1/2" IRRIGATION VALVE (SEE IRRIGATION PLAN FOR NEW LOCATION). KEEP EXISTING CONTROLLER WIRE AND STATION

SCALE: 1"=20'

0 5 20 40
SCALE IN FEET

Know what's below. Call before you dig.

LICENSED LANDSCAPE ARCHITECT
BRILEY No. 2581
12/31/25
Renewal Date
Date
STATE OF CALIFORNIA
Date Signed:

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CONSULTING ENGINEERS
Blair, Church & Flynn Consulting Engineers
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Clovis, California 93612
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LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

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TITLE
IRRIGATION DEMOLITION PLAN

IR1

PROJECT 24001

\\bcf-engr.pri\shares\Project\224-0238\Site\productiondrawings\224238ir-demo01.dwg Jan 07 2025 3:39pm

POINT OF CONNECTION

WATER SERVICE SIZE/ MAX FLOW: 6" CL200 PVC/ 300 GPM

WATER METER SIZE/75% MAX FLOW: 4" / 350 GPM

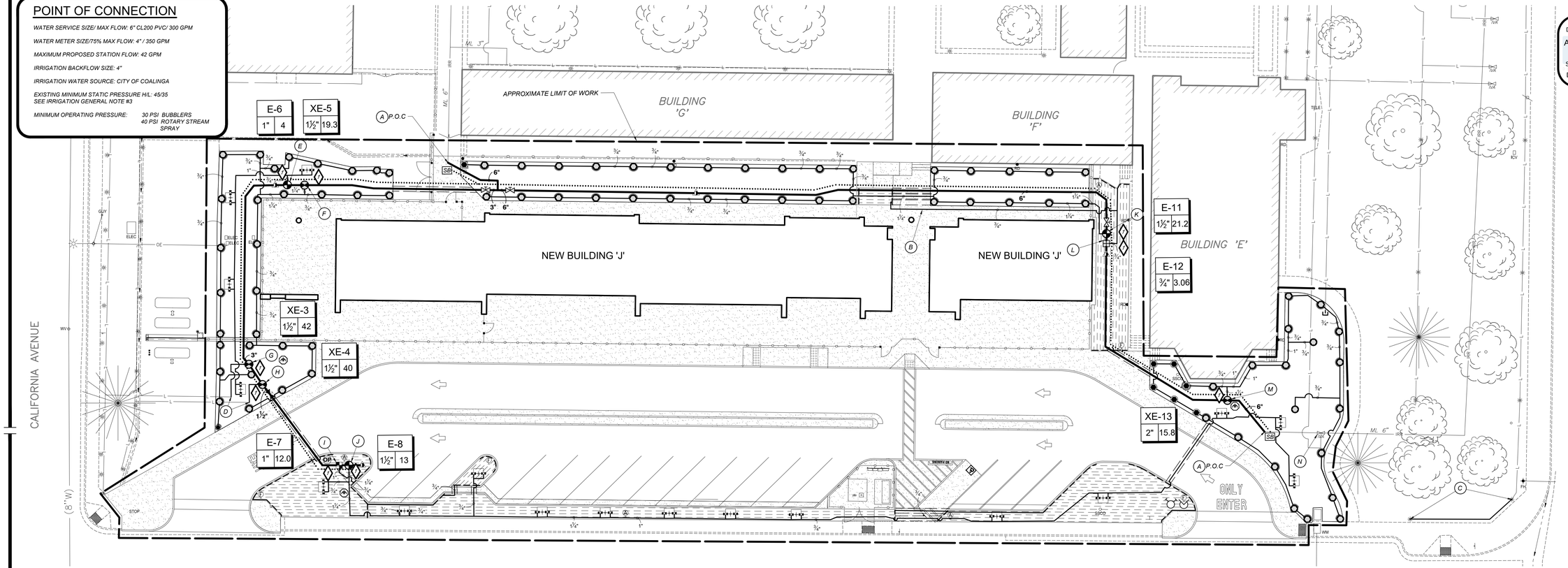
MAXIMUM PROPOSED STATION FLOW: 42 GPM

IRRIGATION BACKFLOW SIZE: 4"

IRRIGATION WATER SOURCE: CITY OF COALINGA

EXISTING MINIMUM STATIC PRESSURE HI/L: 45/35
SEE IRRIGATION GENERAL NOTE #3

MINIMUM OPERATING PRESSURE: *30 PSI BUBBLERS*
40 PSI ROTARY STREAM SPRAY



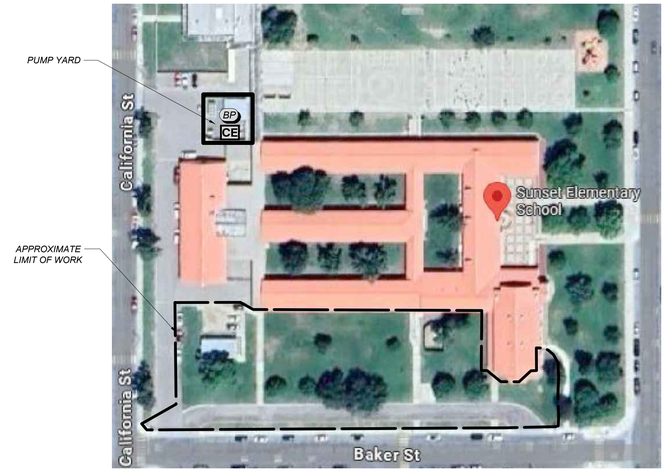
IRRIGATION LEGEND

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	ARC	PSI	GPM	RADIUS	DETAIL
	HUNTER MP CORNER PROS-04-PRS40-CV-F T	ADJ	40		14'	K/IR3
	HUNTER MP1000 PROS-04-PRS40-CV-F M	90-210	40	0.84	14'	K/IR3
	HUNTER MP2000 PROS-04-PRS40-CV-F K	90-210	40	1.48	19'	K/IR3
	HUNTER MP2000 PROS-04-PRS40-CV-F R	360	40	1.48	19'	K/IR3
	TREE BUBBLER 50 HUNTER PROS-PRS30-04-CV-PCN-50	360	30	0.5	3'	L/IR3

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	DRIP CONTROL KIT HUNTER ICZ-101-LF-25	A/IR4
	DRIP CONTROL KIT 3/4" HUNTER ACZ-075-25	A/IR4
F	FLUSH VALVE ASSEMBLY	D/IR4
A	AIR/ VACCUM RELIEF VALVE HUNTER AVR-075. INSTALL AT HIGHEST TUBING ELEVATION IN EACH DRIP SECTION. INSTALL IN A ROUND TAN VALVE BOX	F/IR4
OP	DRIP SYSTEM OPERATION INDICATOR HUNTER ECO-ID	E/IR4
	AREA TO RECEIVE DRIPLINE HUNTER HDL-06-18-COP PRESSURE COMPENSATING LANDSCAPE DRIPLINE WITH CHECK VALVE. 0.6 GPH EMITTERS AT 18" O.C. DRIPLINE LATERALS SPACED AT 18" APART, WITH EMITTERS OFFSET FOR TRIANGULAR PATTERN. MINIMUM 3" COVER	B/IR4

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	DETAIL
	EXISTING REMOTE CONTROL VALVE WITH REVISED FLOW	
	REMOTE CONTROL VALVE HUNTER ICZ-101G	F/IR3
	QUICK COUPLER VALVE HUNTER-44RC WITH HK44 KEY AND HS2 HOSE SWIVEL	J/IR3
	GATE VALVE LARGE LEEMCO LMV-BB WITH 2" NUT PUSH-ON BELL ENDS, OR EQUAL	G/IR3
	GATE VALVE SMALL NIBCO T-113-K, OR EQUAL(SMALL PIPE SIZE)	G/IR3
CE	EXISTING CONTROLLER 'E' (LOCATED AT PUMP YARD) RAIN BIRD ESP-SAT 32 (TWO-WIRE)	
	CAP FOR FUTURE USE	
	EARTH GROUND WITH RAIN BIRD LSP-1TURF SURGE PROTECTOR. PROVIDE AN EARTH GROUND AT THE CONTROLLER IF ONE DOES NOT EXIST, AND ALONG THE CABLE PATH AT A MAXIMUM 500' SPACING. SEE TWO-WIRE NOTES.	G/IR4
BP	EXISTING BOOSTER PUMP (SEE BOOSTER PUMP PARAMETERS)	
SB	SPLICE BOX	I/IR3
	IRRIGATION LATERAL LINE: PVC SCHEDULE 40	C/IR3

	IRRIGATION MAINLINE: PVC CLASS 200 SDR 21 RUBBER GASKETED, SIZE AS NOTED	A/IR3
	PIPE SLEEVE: PVC SCHEDULE 40 TWICE PIPE SIZE	E/IR3
#	VALVE NUMBER	
#" #	VALVE FLOW (GPM) VALVE SIZE	
*	EXISTING ROTORS - RAIN BIRD 6504-PC-06	
L	EXISTING LATERAL LINE	
IRR	EXISTING MAIN LINE	
	DRIPLINE MANIFOLD: PVC SCHEDULE 40	C/IR4
	CONTROL WIRE (TWO-WIRE)	D/IR3
	ESP-LXD MODULE - QUANTITY/TYPE CHART: 1 = FD-101TURF	
+	PROPOSED TREE, SEE PLANTING PLAN ON SHEET LA1 FOR VARIETY AND SIZE	
A	CONNECT NEW MAIN LINE TO EXISTING MAIN LINE	
B	PIPE SHOWN OUTSIDE OF PLANTER FOR CLARITY. INSTALL PIPE WITHIN PLANTER AND PIPE SLEEVE UNDER CONCRETE. SEE GENERAL IRRIGATION NOTE #8	
C	CONNECT NEW LATERAL LINE TO EXISTING SPRINKLER HEAD	
D	CONNECT NEW LATERAL LINE TO EXISTING LATERAL LINE	
E	NEW 1" IRRIGATION VALVE 'E-1'. USE EXISTING CONTROLLER STATION '20-E'	
F	EXISTING RELOCATED 1-1/2" IRRIGATION VALVE 'XE-5' (SEE IRRIGATION DEMOLITION PLAN). USE EXISTING CONTROLLER STATION '28-E'	
G	EXISTING RELOCATED 1-1/2" IRRIGATION VALVE 'XE-3' (SEE IRRIGATION DEMOLITION PLAN). USE EXISTING CONTROLLER STATION '30E'	
H	EXISTING RELOCATED EXISTING 1-1/2" IRRIGATION VALVE 'XE-4'. USE EXISTING CONTROLLER STATION '29E'	
I	REMOVE AND SALVAGE EXISTING 2" IRRIGATION VALVE 'XE-7' (SEE DEMOLITION PLAN). RETURN TO OWNER. USE EXISTING CONTROLLER STATION '27E' FOR NEW 1" DRIP CONTROL KIT 'E-2'	
J	REMOVE AND SALVAGE EXISTING 2" IRRIGATION VALVE 'XE-8' (SEE DEMOLITION PLAN). RETURN TO OWNER. USE EXISTING CONTROLLER STATION '19E' FOR NEW 1-1/2" VALVE 'E-3'	
K	REMOVE AND SALVAGE EXISTING 2" IRRIGATION VALVE 'XE-11' (SEE DEMOLITION PLAN). RETURN TO OWNER. USE EXISTING CONTROLLER STATION '5E' FOR NEW 1-1/2" VALVE 'E-4'	
L	REMOVE AND SALVAGE EXISTING 2" IRRIGATION VALVE 'XE-12' (SEE DEMOLITION PLAN). RETURN TO OWNER. USE EXISTING CONTROLLER STATION '8E' FOR NEW 3/4" DRIP CONTROL KIT 'E-5'	
M	EXISTING RELOCATED 2" IRRIGATION VALVE 'XE-13'. KEEP EXISTING CONTROLLER STATION '17E'	
N	EXISTING 2" IRRIGATION VALVE WITH REVISED FLOW.	



BOOSTER PUMP LOCATION (EXISTING)

NOT TO SCALE

BOOSTER PUMP PARAMETERS (EXISTING)

LOCATED AT PUMP YARD AT NW OF THE SITE

OPERATIONAL DISCHARGE PRESSURE: 60 PSI
MAXIMUM OUTPUT FLOW: 300 GPM (CL200 - 6" MAIN LINE)
ACTIVATION MODE: PRESSURE/ FLOW SENSOR
PUMP SIZE: 15 HORSEPOWER
PUMP TYPE: VARIABLE FREQUENCY DRIVE

WATER CONSERVATION COMPLIANCE STATEMENT:

I HAVE COMPLIED WITH THE CRITERIA OF THE LANDSCAPE WATER CONSERVATION ORDINANCE AND GUIDELINES, AND HAVE APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.

DAVID W. BRILEY, RLA 2787

SCALE: N 1"=20'

0 5 20 40
SCALE IN FEET

SEE SHEET IR2 AND IR3 FOR DETAILS AND NOTES

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

LICENSED LANDSCAPE ARCHITECT DAVID W. BRILEY NO. 2787 12/31/26 Renewal Date Date STATE OF CALIFORNIA

Blair, Church & Flynn CONSULTING ENGINEERS
Blair, Church & Flynn Consulting Engineers
453 Clovis Avenue, Suite 200
Clovis, California 93612
Tel (559) 326-1400
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APPROVALS

FILE # 10-28 APPLICATION # 02-122658

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APP: 02-122658 INC:
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LICENSED ARCHITECT MICHAEL J. SCOTT JR No. C-34290 REN: 05-31-25 STATE OF CALIFORNIA

DATE: JULY 31, 2024

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REVISIONS

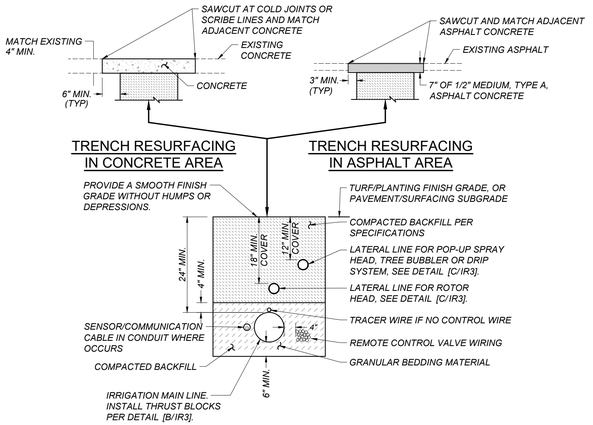
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TITLE
IRRIGATION PLAN

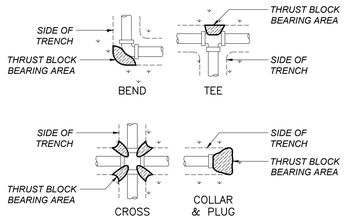
IR2

PROJECT 24001



TYPICAL TRENCH SHOWN IN PLANTING AREA

A / IR3 IRRIGATION TRENCH BACKFILL
NOT TO SCALE

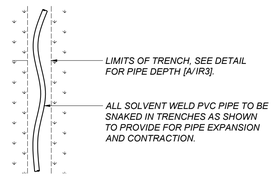


NOTE: CONCRETE PER SPECIFICATIONS. THRUST BLOCKS NOT REQUIRED WITH LESS THAN 2" MAIN LINE

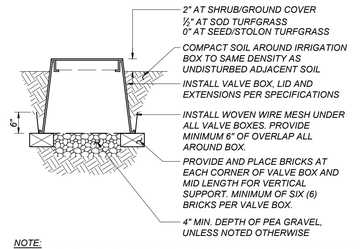
TABLE OF BEARING AREAS REQUIRED (IN SQUARE FEET)

PIPE DIAMETER	≦4"	6"	8"	10"	12"
CROSS, TEE, 90° BEND, PLUG, FIRE HYDRANT	1	3	5	8	11
45° BEND	1	2	3	4	6
22-1/2" BEND	0.5	1	2	2	3
11-1/4" BEND	0	0	1	1	2
GATE VALVE (IN-LINE)	0	1	2.5	4	9

B / IR3 CONCRETE THRUST BLOCKS
NOT TO SCALE



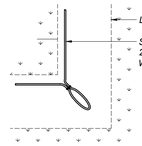
C / IR3 SOLVENT WELD PIPE
NOT TO SCALE



NOTE:
PROVIDE A TRAFFIC RATED CONCRETE BOX AND LID FOR ANY BOX LOCATED IN HARDSCAPE PAVEMENT AND SET FLUSH TO FINISHED SURFACE. PROVIDE A 6"X6" CONCRETE COLLAR AROUND THE BOX IF LOCATED IN ASPHALTIC CONCRETE.

H / IR3 IRRIGATION VALVE BOX
NOT TO SCALE

NOTE:
ALL CONTROL WIRE AND TWO-WIRE CONTROL CABLE SHALL BE INSTALLED IN CONDUIT



NOTES:
1. TWO-WIRE UNDER PAVEMENT OR WALKS SHALL BE INSTALLED WITHIN A CONDUIT PVC SCH. 40 TYPE II PIPE CONDUIT.
2. SPLICES ARE ALLOWED ONLY WITH DBRY-6 CONNECTORS.
3. A VALVE BOX MUST BE PROVIDED AT ALL UNDERGROUND SPLICE CONNECTIONS.
4. SEE TWO-WIRE DECIDER SYSTEM NOTES.

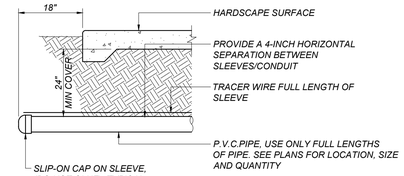
TWO-WIRE CONTROL CABLE

D / IR3 CONTROL WIRE
NOT TO SCALE

CONDUIT/SLEEVE FOR CONTROL WIRE

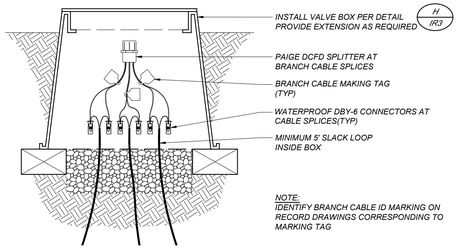
CONDUIT/SLEEVE SIZE	QTY. 14 GA. WIRE
1"	8 OR LESS
1-1/4"	15
1-1/2"	20
2"	32
2-1/2"	45
3"	70
4"	120

NOTE: SLEEVE FOR PIPE IS 2X THE PIPE DIAMETER



NOTE:
IF CONTROL WIRES ARE ROUTED IN CONDUIT, SLEEVE FOR WIRES IS NOT REQUIRED

E / IR3 IRRIGATION SLEEVE/CONDUIT
NOT TO SCALE



NOTE:
IDENTIFY BRANCH CABLE ID MARKING ON RECORD DRAWINGS CORRESPONDING TO MARKING TAG

I / IR3 2-WIRE SPLICEBOX
NOT TO SCALE

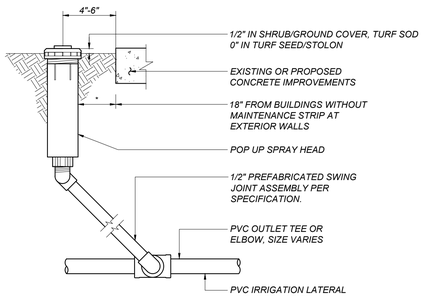
NOTE:
RISER PIPE SIZE AT MINIMUM SHALL MATCH THE LARGEST LATERAL PIPE SIZE

F / IR3 REMOTE CONTROL VALVE WITH BALL VALVE - GLOBE
NOT TO SCALE

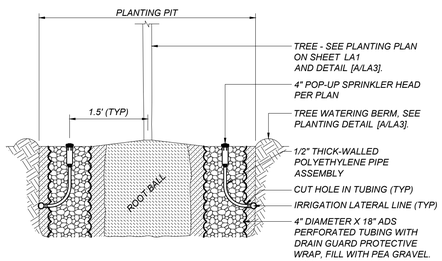
1-1/2" AND SMALLER GATE VALVE

2" AND LARGER GATE VALVE

G / IR3 GATE VALVE
NOT TO SCALE

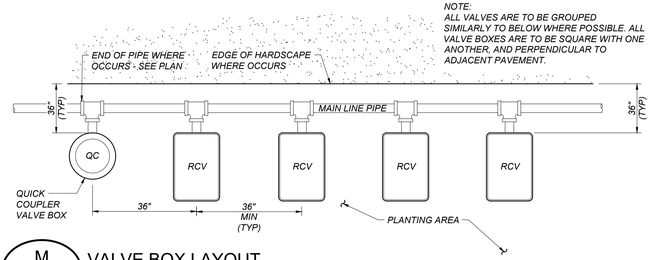


K / IR3 POP-UP SPRAY
NOT TO SCALE



L / IR3 TREE BUBBLERS
NOT TO SCALE

NOTE:
ALL VALVES ARE TO BE GROUPED SIMILARLY TO BELOW WHERE POSSIBLE. ALL VALVE BOXES ARE TO BE SQUARE WITH ONE ANOTHER, AND PERPENDICULAR TO ADJACENT PAVEMENT.



M / IR3 VALVE BOX LAYOUT
NOT TO SCALE

IRRIGATION SYSTEM OBSERVATION LOG

ITEM NO.	WORK ITEM DESCRIPTION	REVIEWED & ACCEPTED BY OWNER'S REP OR LAND ARCH		
		PRINT NAME	SIGNATURE	DATE
IR-1	EXISTING SYSTEM OPERATION & PRESSURE CHECK			
IR-2	PIPING/WIRE SLEEVES UNDER PAVEMENT			
IR-3	MAIN LINE INSTALLATION & PRESSURE TEST			
IR-4	VALVE INSTALLATIONS			
IR-5	IRRIGATION COVERAGE PRIOR TO PLANTING			
IR-6	CONTROL EQUIPMENT INSTALLATION	N/A	N/A	
IR-7	BOOSTER PUMP INSTALLATION & START-UP (MANUF.)	N/A	N/A	
IR-8	FINAL SYSTEM OPERATION REVIEW			

NOTE: THE ORIGINAL VERSION OF THIS LOG SHALL BE MAINTAINED ON THE AS-BUILT RECORD DRAWING SET.
WORK ITEMS MAY NOT BE REVIEWED IF PRIOR WORK ITEMS HAVE NOT BEEN ACCEPTED.



J / IR3 QUICK COUPLER VALVE
NOT TO SCALE

SEE SHEET IR1 FOR IRRIGATION PLAN

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

LICENSED LANDSCAPE ARCHITECT — MICHAEL J. BRILEY — No. 2574 — Exp. 12/31/25 — Renewal Date — Date — STATE OF CALIFORNIA

Blair, Church & Flynn CONSULTING ENGINEERS
Blair, Church & Flynn Consulting Engineers
4521 Clovis Avenue, Suite 200
Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

APPROVALS
FILE # 10-28
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT — No. C-34290 — REN. 05-31-25 — STATE OF CALIFORNIA
DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

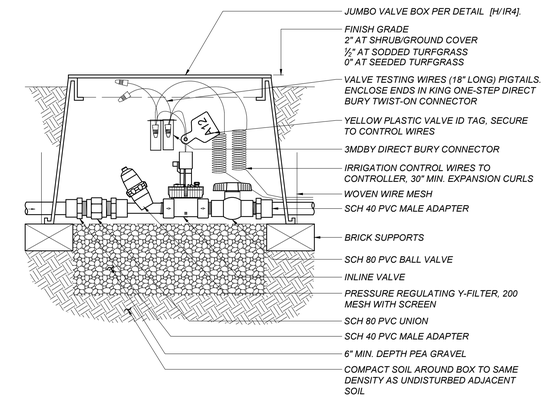
REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 Fax

TITLE
IRRIGATION DETAILS

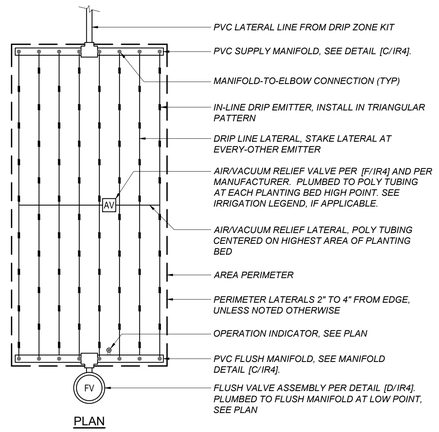
IR3

PROJECT 24001



A IR4 DRIP ZONE ASSEMBLY

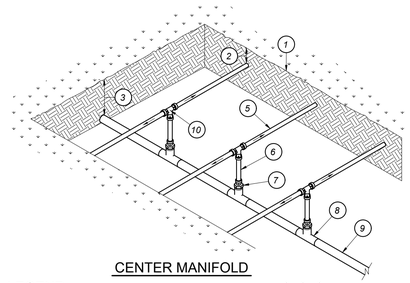
NOT TO SCALE



PLAN

B IR4 DRIPLINE LAYOUT SCHEMATIC

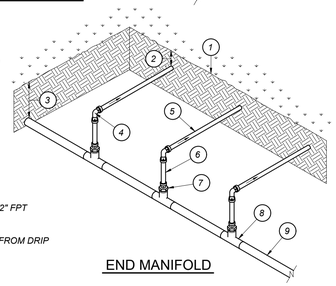
NOT TO SCALE



CENTER MANIFOLD

LEGEND:

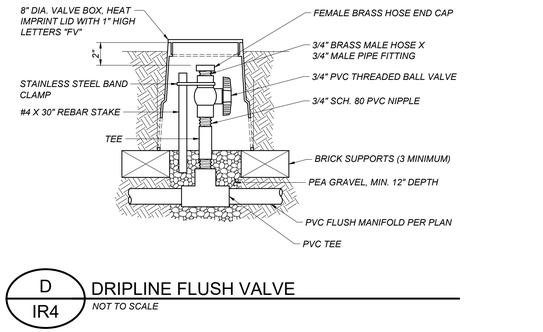
1. *FINISH GRADE*
2. *DEPTH OF TUBING BELOW FINISHED GRADE - SEE LEGEND*
3. *MIN. 12" DEPTH OF PVC SUPPLY / FLUSH MANIFOLD BELOW FINISHED GRADE*
4. *ELBOW*
5. *DRIPLINE LATERAL, SEE PLAN*
6. *POLY TUBING, LENGTH AS NECESSARY*
7. *MALE ADAPTER*
8. *SCH 40 PVC TEE (SxSxT) WITH 1/2" FPT OUTLET*
9. *SCH 40 PVC SUPPLY MANIFOLD FROM DRIP ZONE KIT*
10. *TEE*



END MANIFOLD

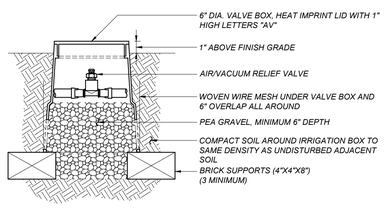
C IR4 DRIPLINE MANIFOLD

NOT TO SCALE



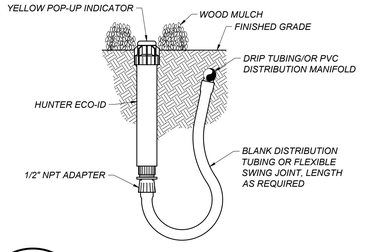
D IR4 DRIPLINE FLUSH VALVE

NOT TO SCALE



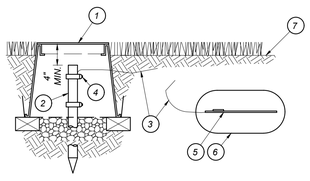
F IR4 DRIPLINE AIR/VACUUM RELIEF VALVE

NOT TO SCALE



E IR4 HUNTER ECO-INDICATOR

NOT TO SCALE



LEGEND:

1. *COVER GROUNDING ROD WITH 10-INCH ROUND VALVE BOX AS SHOWN*
2. *5/8-INCH X 10 FT COPPER CLAD GROUNDING ROD OR GROUNDING PLATE. INSTALL RODS IN SOIL IN A TRIAGULAR PATTERN SPACED A MINIMUM OF 16FT APART FROM EACH OTHER. GROUNDING GRID TO HAVE A RESISTANCE OF TEN (10) OHMS OR LESS*
3. *BARE COPPER WIRE (#6 AWG MIN.) BETWEEN GROUNDING ROD OR GROUND PLATE*
4. *GROUND ROD CLAMP OR WELDS*
5. *COPPER GROUNDING PLATE*
6. *GROUND ENHANCEMENT MATERIAL (IF REQUIRED)*
7. *FINISH GRADE*

G IR4 GROUNDING ROD OR GROUDING PLATE

NOT TO SCALE

GENERAL IRRIGATION NOTES:

1. *ALL ITEMS IN THE LEGEND ARE TO BE FURNISHED AND INSTALLED, UNLESS NOTED OTHERWISE. THE CONTRACTOR SHALL FURNISH THE ARTICLES, EQUIPMENT, MATERIALS OR PROCESSES SPECIFIED BY NAME. NO SUBSTITUTION WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF THE DESIGN ENGINEER. (ALL MATERIAL REQUIRED SHALL BE NEW AND OF THE BEST QUALITY AVAILABLE)*
2. *THE DESIGN ENGINEER RESERVES THE RIGHT TO REJECT ANY MATERIAL OR WORK WHICH DOES NOT CONFORM TO THE CONTRACT PLANS AND SPECIFICATIONS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DESIGN ENGINEER.*
3. *PRIOR TO STARTING WORK, THE CONTRACTOR SHALL VERIFY THE EXISTING SYSTEM COMPONENTS' LOCATION, SIZES AND ROUTING FOR BACKFLOW PREVENTERS, CONTROLLERS, MAIN AND LATERAL PIPING, VALVES, SPRINKLER HEADS AND CONTROL WIRE; AND SHALL CONFIRM THEIR OPERATIONAL STATUS IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL ALSO VERIFY THE AVAILABLE STATIC PRESSURE AT THE POINT-OF-CONNECTION. FAILURE TO NOTIFY THE OWNER'S REPRESENTATIVE BEFORE STARTING WORK OF ANY DEVIATION FROM THE INFORMATION SHOWN ON THE CONTRACT DOCUMENTS, OR NECESSARY REPAIRS TO THE EXISTING SYSTEM, SHALL MAKE THE CONTRACTOR RESPONSIBLE TO PROVIDE, AT HIS OWN EXPENSE, ANY CORRECTIVE WORK OR COMPONENTS NECESSARY FOR A FULLY FUNCTIONAL SYSTEM WITH FULL COVERAGE.*
4. *THE CONTRACTOR IS RESPONSIBLE TO PROTECT AND KEEP ANY EXISTING IRRIGATION SYSTEM SCHEDULED TO REMAIN OPERATIONAL AT ALL TIMES DURING THE COURSE OF THIS WORK. THE CONTRACTOR SHALL REPLACE ANY PLANTS DEAD OR DISTRESSED DUE TO THE INTERRUPTION OF EXISTING IRRIGATION SCHEDULES AND SHALL PERFORM ALL WORK NECESSARY TO MAINTAIN THE EXISTING SYSTEM'S OPERATIONAL.*
5. *THE CONTRACTOR IS RESPONSIBLE TO LOCATE AND PROTECT ALL EXISTING UTILITIES. UTILITIES SHOWN ARE FOR THE CONTRACTOR'S AWARENESS AND NO SURVEY HAS BEEN COMPLETE TO VERIFY THE ACCURACY OF THE UTILITIES SHOWN. IT IS THE CONTRACTORS RESPONSIBILITY TO REPAIR ANY DAMAGED UTILITIES CAUSED BY CONSTRUCTION ACTIVITIES.*
6. *THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ALL DIMENSIONS SHOWN AND TO ADJUST SAID DIMENSIONS TO FIT SITE CONDITIONS AND ACTUAL EQUIPMENT INSTALLED.*
7. *THE CONTRACTOR SHALL NOT WILLFULLY INSTALL THE IRRIGATION FACILITIES AS INDICATED ON THE DRAWINGS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN OBSTRUCTIONS MIGHT NOT HAVE BEEN CONSIDERED IN THE DESIGN. SUCH OBSTRUCTIONS OR DIFFERENCES SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.*
8. *THE IRRIGATION PLAN IS DIAGRAMMATIC. ALL PIPING, VALVES, AND HEADS SHALL BE LOCATED IN PLANTING AREAS WHENEVER POSSIBLE.*
9. *THE CONTRACTOR SHALL PROVIDE ADEQUATE SAFETY MEASURES TO WARN AND PROTECT THE PUBLIC, OTHER SITE CONTRACTORS AND HIS WORKERS FROM POSSIBLE INJURY DUE TO HIS CONSTRUCTION EQUIPMENT AND OPERATIONS.*
10. *DUE TO THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE ALL OFFSETS, FITTINGS, ETC. WHICH MAY BE REQUIRED. THE CONTRACTOR SHALL CAREFULLY INVESTIGATE THE STRUCTURAL AND FINISHED CONDITIONS AFFECTING ALL HIS WORK, AND PLAN HIS WORK ACCORDINGLY, FURNISHING SUCH FITTINGS, ETC., AS MAY BE REQUIRED TO INSTALL THE PROPOSED FACILITIES AND ACCOMMODATE THE SITE CONDITIONS. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND INDICATIVE OF THE WORK TO BE DONE TO PROVIDE A COMPLETE AND OPERATIONAL IRRIGATION SYSTEM. ALL WORK TO BE DONE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, LOCAL CODES AND ORDINANCES.*
11. *VALVES SHALL BE LOCATED IN SHRUB/GROUND COVER AREAS INSTEAD OF IN TURFGRASS AREAS WHENEVER POSSIBLE. VALVES IN ATHLETIC SPORTS FIELDS SHALL BE LOCATED OUTSIDE OF THE FIELD-OF-PLAY TO THE GREATEST EXTENT POSSIBLE.*
12. *THE CONTRACTOR SHALL REPLACE ANY EXISTING PLANTS SCHEDULED TO REMAIN (SEE LANDSCAPE PLANS) THAT ARE DAMAGED BY THIS WORK WITH NEW PLANTS OF THE SAME SPECIES/VARIETY AND SIZE AS THE ORIGINAL.*
13. *ANY EXISTING TURFGRASS REMOVED FOR THIS WORK SHALL BE REPLANTED IF VIABLE, OR NEW SOD OF THE SAME SPECIES/VARIETY INSTALLED. THE UPPER 6 INCHES OF THE COMPACTED TRENCH BACKFILL SHALL BE CONDITIONED PER LANDSCAPE SPECIFICATIONS PRIOR TO SOD INSTALLATION. THE NEW SOD SURFACE SHALL BE FLUSH TO THE ADJACENT TURFGRASS WITHOUT HUMPS OR DEPRESSIONS.*
14. *INSTALL SLEEVES UNDER ALL ASPHALT/CONCRETE IMPROVEMENTS. SLEEVES SHALL BE PVC SCH. 40 PVC OR SDR 35 AND TWICE THE DIAMETER OF THE PIPE UNLESS OTHERWISE NOTED. CONTROL WIRING SHALL BE SLEEVED IN 2" SCH 40 PVC UNLESS OTHERWISE NOTED. MINIMUM DEPTH OF SLEEVES UNDER ALL ASPHALT/CONCRETE IMPROVEMENTS IS 18" BELOW SUBGRADE OR 24" BELOW FINISHED GRADE, WHICHEVER IS GREATER.*
15. *CONTRACTOR SHALL SAWCUT TO EXISTING JOINTS. REMOVE AND REPLACE SURFACING (CONCRETE, ASPHALT) AS NECESSARY TO INSTALL THE IRRIGATION SYSTEM.*
16. *THE CONTRACTOR SHALL PROVIDE AND KEEP AN UP-TO-DATE "RECORD DRAWING" SHOWING ALL CHANGES TO THE ORIGINAL DRAWINGS AND EXACT LOCATIONS OF THE FACILITIES INSTALLED. BEFORE FINAL INSPECTION, THE CONTRACTOR SHALL FURNISH MARKED "RECORD DRAWINGS" TO THE INSPECTOR.*
17. *THE CONTRACTOR SHALL PROVIDE ADJUSTMENT OF NOZZLE ARC AND RADIUS, INCLUDING ANY ALTERNATE NOZZLE TYPES, NECESSARY TO PROVIDE COMPLETE COVERAGE, TO SUIT ACTUAL SITE CONDITIONS, AND TO MINIMIZE OVERSPRAY ONTO HARDSCAPE, PAVEMENT AND/OR STRUCTURES.*
18. *CONCRETE ANCHORS OR THRUST BLOCKS SHALL BE PROVIDED ON ALL MAIN LINE PIPING. THEY ARE TO BE LOCATED AT ALL ABRUPT CHANGES IN PIPELINE GRADE, CHANGES IN HORIZONTAL ALIGNMENT, REDUCTION IN PIPE SIZES, END OF LINE AND IN-LINE VALVES TO ABSORB ANY AXIAL THRUST OF THE PIPE. THE PIPE MANUFACTURER'S RECOMMENDATIONS FOR THRUST CONTROL SHALL BE FOLLOWED. THRUST BLOCKS MUST BE FORMED AGAINST UNDISTURBED EARTH.*
19. *ALL MAIN LINE AND LATERAL LINE PIPES UNDER PAVEMENT SHALL BE PRESSURE TESTED WITH THE VALVES INSTALLED. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT NEEDED. IF ANY LEAKS DEVELOP, THE REPAIRS ARE TO BE MADE AND THE TEST REPEATED UNTIL THE SYSTEM IS PROVEN WATERTIGHT. THE CONTRACTOR IS TO CENTER LOAD THE PIPE AND LEAVE ALL JOINTS EXPOSED FOR INSPECTION. THE PRESSURE TEST SHALL BE OBSERVED AND APPROVED BY THE OWNER'S REPRESENTATIVE. WHEN THE PIPE IS PROVEN WATERTIGHT AND ONLY THEN MAY THE LINE BE BACKFILLED.*
20. *WIRED CONNECTIONS BETWEEN THE CONTROLLER AND REMOTE CONTROL VALVES SHALL BE MADE WITH ONE CONTINUOUS DIRECT BURIAL WIRE RUN. A VALVE BOX MUST BE PROVIDED AT THE CONTRACTOR'S EXPENSE AT ALL UNDERGROUND SPLICES.*
21. *ONLY TEFLON TAPE OR AN APPROVED TEFLON PASTE MAY BE USED AS THE SEALING MATERIAL TO MAKE ALL THREADED CONNECTIONS. A MINIMUM OF TWO (2) WRAPS IN THE DIRECTION OF THE THREADS TO BE USED FOR TAPE. NO OTHER PIPE JOINT MATERIAL WILL BE ALLOWED WITHOUT THE WRITTEN AUTHORIZATION FROM THE DESIGN ENGINEER.*
22. *THE CONTRACTOR SHALL PROVIDE TWO (2) INDIVIDUALLY BOUND SETS OF OPERATION AND MAINTENANCE MANUALS. THE MANUAL SHALL CONTAIN THE FOLLOWING INFORMATION:*
    - *A. CONTRACTOR'S ADDRESS AND PHONE NUMBER.*
    - *B. DURATION OF GUARANTEE PERIOD (ONE YEAR AFTER FINAL ACCEPTANCE).*
    - *C. NAMES, ADDRESSES AND PHONE NUMBERS OF LOCAL MANUFACTURER REPRESENTATIVES.*
    - *D. COMPLETE SET OF MANUFACTURER'S LITERATURE AND SPECIFICATIONS.*
    - *E. COMPLETE OPERATING AND MAINTENANCE INSTRUCTIONS ON ALL MAJOR EQUIPMENT.*
    - *F. ISSUE A "CERTIFICATE OF CONSTRUCTION COMPLIANCE" WHICH STATES THAT ALL WORK DONE AND MATERIALS AND EQUIPMENT USED ARE IN CONFORMANCE WITH THE APPROVED PLANS, SPECIFICATIONS AND ALL AUTHORIZED REVISIONS.*
    - *G. INITIAL ELECTRICAL DATA ON EACH VALVE:*
      - *(1) OHMMS READING FOR EACH VALVE TAKEN AT THE CONTROLLER.*
      - *(2) VOLTAGE READING FOR EACH VALVE TAKEN BOTH AT THE CONTROLLER AND AT THE VALVE.*
23. *THE CONTRACTOR SHALL PROVIDE TWO SETS OF CONTROLLER CHARTS. THE CHARTS TO BE A REDUCED DRAWING OF THE ACTUAL PLANS. THE CHARTS SHALL BE COLORED WITH A DIFFERENT COLOR FOR EACH IRRIGATION CIRCUIT. THE CHARTS SHALL BE COVERED IN A WATERTIGHT ENVELOPE.*
24. *IRRIGATION LINE TRENCHING AND PIPE INSTALLATION LOCATED WITHIN THE CANOPY DRIP LINE OF EXISTING TREES SHALL BE PERFORMED BY HAND OR BY AIR SPADE WITHOUT CUTTING OR DAMAGING EXISTING ROOTS GREATER THAN ONE INCH IN DIAMETER. SEE EXISTING LANDSCAPE PROTECTION SECTION FOR ADDITIONAL REQUIREMENTS.*
25. *REPLACE ALL DAMAGED EXISTING VALVE BOXES AND/OR LIDS WITHIN THE AREA OF WORK. ADJUST THE ELEVATION OF ALL EXISTING VALVE BOXES WITHIN THE AREA OF WORK TO FINISH GRADE AS NECESSARY TO COMPLY WITH THE VALVE BOX DETAIL.*

DRIP SYSTEM IRRIGATION NOTES:

1. *ALL ITEMS, ACCESSORIES, FITTINGS, ETC. NECESSARY FOR A COMPLETE AND PROPERLY FUNCTIONING SUB-SURFACE DRIP SYSTEM ARE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR, UNLESS NOTED OTHERWISE.*
2. *THE EQUIPMENT AND COMPONENTS CALLED OUT ON THE DRAWING LEGEND ARE THE PREFERENCE OF THE OWNER AND ARE SELECTED TO MATCH EQUIPMENT AND COMPONENTS IN USE IN OTHER SIMILAR IRRIGATION SYSTEMS OF THE OWNER.*
3. *PRIOR TO STARTING WORK, THE CONTRACTOR SHALL VERIFY ANY EXISTING SYSTEM COMPONENTS' LOCATION, SIZES AND ROUTING FOR BACKFLOW PREVENTERS, CONTROLLERS, MAIN AND LATERAL PIPING, VALVES, SPRINKLER HEADS AND CONTROL WIRE; AND SHALL CONFIRM THEIR OPERATIONAL STATUS IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. THE CONTRACTOR SHALL ALSO VERIFY THE AVAILABLE STATIC PRESSURE AND AVAILABLE SAFE FLOW AT THE POINT-OF-CONNECTION. FAILURE TO NOTIFY THE OWNER'S REPRESENTATIVE AND THE ENGINEER BEFORE STARTING WORK, OF ANY DEVIATION FROM THE INFORMATION SHOWN ON THE CONTRACT DOCUMENTS OR NECESSARY REPAIRS TO THE EXISTING SYSTEM, SHALL MAKE THE CONTRACTOR RESPONSIBLE TO PROVIDE, AT HIS OWN EXPENSE, ANY CORRECTIVE WORK OR COMPONENTS NECESSARY FOR A FULLY FUNCTIONAL SYSTEM WITH FULL COVERAGE.*
4. *THE IRRIGATION PLAN IS DIAGRAMMATIC. ALL PIPING, VALVES, AND COMPONENTS SHALL BE LOCATED IN PLANTING AREAS, UNLESS NOTED OTHERWISE. VALVES SHALL BE LOCATED IN SHRUB/GROUND COVER AREAS INSTEAD OF IN TURFGRASS AREAS WHENEVER POSSIBLE.*
5. *INSTALL DRIP EMITTERS IN A TRIANGULAR OR STAGGERED PATTERN AND AT A CONSISTENT DEPTH BELOW GRADE AS SHOWN OR INDICATED IN THE DRAWINGS.*
6. *STAKE THE EMITTER TUBING USING THE MANUFACTURER'S RECOMMENDED STAKES DIRECTLY OVER EVERY OTHER EMITTER. FOR EXAMPLE, IF THE EMITTERS ARE SPACED AT 18 INCHES O.C., THEN STAKE AT 36 INCHES O.C.*
7. *PRIOR TO BACKFILLING THE DRIP TUBING AND THE START OF PLANTING OPERATIONS, THE SYSTEM SHALL BE REVIEWED FOR PROPER OPERATION BY THE OWNER'S REPRESENTATIVE.*
8. *PROGRAM THE CONTROLLER TO OPERATE THE CONTROL VALVE(S) FOR THE DRIP SYSTEM USING THE CONTROLLER'S "CYCLE AND SOAK" FEATURE IN ORDER TO APPLY THE REQUIRED WATER AMOUNT IN THREE EQUAL CYCLES.*
9. *PRIOR TO THE START OF PLANTING OPERATIONS, THE DRIP SYSTEM SHALL BE OPERATED FOR A FREQUENCY AND DURATION TO ADEQUATELY MOISTEN THE TOPSOIL TO A MINIMIM DEPTH OF 12 INCHES AT ANY LOCATION WITHIN THE PLANTING AREA .*
10. *THE CONTRACTOR SHALL PROVIDE ONE HUNDRED (100) FEET OF IN-LINE EMITTER TUBING OF THE SAME MODEL AS SPECIFIED, ENOUGH STAKES FOR THE 100 FEET, AND TEN (10) OF EACH TYPE OF FITTINGS USED ON THE PROJECT FOR THE OWNER'S USE AS SPARE PARTS.*
11. *IT IS THE CONTRACTOR'S RESPONSIBILITY TO KEEP ANY EXISTING IRRIGATION SYSTEM SCHEDULED TO REMAIN OPERATIONAL AT ALL TIMES DURING THE COURSE OF THIS WORK. THE CONTRACTOR SHALL REPLACE ANY PLANTS DEAD OR DISTRESSED DUE TO THE INTERRUPTION OF EXISTING IRRIGATION SCHEDULES, AND SHALL PERFORM ALL WORK NECESSARY TO MAINTAIN THE EXISTING SYSTEM'S OPERATION.*
12. *THE CONTRACTOR SHALL REPLACE ANY EXISTING PLANTS SCHEDULED TO REMAIN THAT ARE DAMAGED BY THIS WORK WITH NEW PLANTS OF THE SAME SPECIES/VARIETY AND SIZE AS THE ORIGINAL PRIOR TO THE START OF WORK. ANY EXISTING TURFGRASS REMOVED FOR THIS WORK SHALL BE REPLANTED IF VIABLE, OR NEW SOD OF THE SAME SPECIES/VARIETY INSTALLED. THE UPPER 6 INCHES OF THE COMPACTED TRENCH BACKFILL SHALL BE CONDITIONED PER THE PLANTING SPECIFICATIONS PRIOR TO SOD INSTALLATION. THE NEW SOD SURFACE SHALL BE FLUSH TO THE ADJACENT TURFGRASS WITHOUT HUMPS OR DEPRESSIONS.*

CONTRACTOR SPECIAL IRRIGATION NOTES:

1. *THE CONTRACTOR SHALL PERFORM AN OPERATIONAL ASSESSMENT OF THE EXISTING IRRIGATION SYSTEM WITHIN THE AREA OF WORK WITH THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION OPERATIONS.*
2. *THE CONTRACTOR SHALL ENSURE THAT ALL EXISTING PLANTING SCHEDULED TO REMAIN SHALL CONTINUE TO BE IRRIGATED THROUGHOUT THE COURSE OF CONSTRUCTION OPERATIONS. ANY DAMAGE TO THE EXISTING IRRIGATION SYSTEM THAT IMPACTS EXISTING PLANTING TO REMAIN SHALL BE IMMEDIATELY REPAIRED TO THE OWNER'S SATISFACTION.*
3. *PRIOR TO THE START OF ANY SHRUB, GROUND COVER, AND/OR TURFGRASS PLANTING, AN OPERATIONAL REVIEW OF THE IRRIGATION SYSTEM SHALL BE PERFORMED FOR PROPER COVERAGE AND SOIL MOISTURE DEPTH BY THE OWNER'S REPRESENTATIVE. ALL CORRECTIONS AND/OR ADJUSTMENTS SHALL BE COMPLETED AND VERIFIED BY THE OWNER'S REPRESENTATIVE BEFORE GROUND LEVEL PLANTING MAY COMMENCE.*
4. *THE ORIGINAL IRRIGATION SYSTEM OBSERVATION LOG SHALL BE MAINTAINED ON THE AS-BUILT RECORD DRAWING SET.*
5. *THE AS-BUILT RECORD DRAWING SET AND OTHER CLOSE-OUT ITEMS SHALL BE SUBMITTED AND ACCEPTED PRIOR TO THE SCHEDULING OF A FINAL ACCEPTANCE REVIEW.*
6. *UNLESS NOTED OTHERWISE, SALVAGE AND RETURN TO THE OWNER ALL IRRIGATION VALVES, HEADS AND OTHER EQUIPMENT COMPONENTS REMOVED AS PART OF THE WORK. SALVAGED COMPONENTS SHALL BE CLEAN AND IN WORKING CONDITION UNLESS NOTED AS NON-OPERATIONAL DURING THE OPERATIONAL ASSESSMENT.*

TWO-WIRE DECODER SYSTEM NOTES:

1. *ALL DECODERS, CONTROL WIRE, ACCESSORIES, CONNECTORS, GROUNDING AND INSTALLATION SHALL COMPLY WITH THE CONTROLLER/DECODER MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS.*
2. *THE IRRIGATION CONTROLLER SHALL HAVE A DEDICATED EARTH GROUND, BY MEANS OF EITHER AN EIGHT FOOT LONG STEEL COPPER CLAD GROUND ROD, OR BY A PAIGE #1821991C GROUNDING PLATE (4" X 96" X 0.06").*
3. *THE GROUND ROD OR PLATE SHALL BE LOCATED AT LEAST 10 FEET AWAY FROM THE CONTROLLER OR DECODER, AND THE PLATE SHALL BE ORIENTED PERPENDICULAR FROM THE CABLE RUN AND SHALL BE AT LEAST 36 INCHES BELOW GRADE. GROUNDING CIRCUIT RESISTANCE SHALL BE LESS THAN 10 OHMS.*
4. *EARTH GROUNDING SHALL BE INSTALLED ALONG THE WIRE PATH CABLE PER MANUFACTURER'S RECOMMENDED SPACING. THE LAST DECODER ON A CABLE RUN SHALL BE EARTH GROUNDED WITH A ROD OR PLATE. THE GROUNDING PLATE SHALL BE ORIENTED PERPENDICULAR FROM THE CABLE RUN AND SHALL BE AT LEAST 36 INCHES BELOW GRADE.*
5. *TWO-WIRE CABLE SHALL BE A JACKETED, TWISTED PAIR OF 14 AWG SOLID-CORE WIRE FOR UP TO 10,000 FEET OF RUN. WIRE CONNECTORS SHALL BE DBRY-6, OR EQUAL. EACH SEPARATE WIRE PATH FROM THE CONTROLLER SHALL HAVE A DIFFERENT COLOR CABLE MARKING.*
6. *CABLE PATH BRANCHES SHALL BE MADE WITH A PAIGE DCFC SPLITTER. INSTALL THE SPITTER WITH DBRY-6 CONNECTORS. PROVIDE A MINIMUM OF 5 FEET OF SLACK CABLE ON EACH SIDE OF THE CONNECTION, AND INSTALL IN A RECTANGULAR VALVE BOX PER THE SPECIFICATIONS.*
7. *USE ONE DECODER STATION TO OPERATE ONE CONTROL VALVE. GROUPED VALVES MAY USE MULTIPLE STATION DECODERS (2, 4, OR 6 OUTPUTS IN ONE DECODER). FLOW AND/OR CLICK TYPE SENSORS SHALL USE AN APPROPRIATE SENSOR DECODER. USE A SINGLE STATION DECODER FOR ANY PUMP START OR MASTER VALVE PURPOSE.*
8. *INSTALL THE DECODER INSIDE THE CONTROL VALVE BOX. PROVIDE ADEQUATE SLACK WIRE FOR ABOVE-GROUND INSPECTION AND MAINTENANCE. USE TWISTED WIRE CABLE FOR DECODER TO SOLENOID RUNS GREATER THAN 20 FEET UP TO 150 FEET, OTHERWISE USE 14 AWG IRRIGATION CONTROL WIRE. DECODER TO SOLENOID CONNECTIONS SHALL BE MADE WITH DBY-6 CONNECTORS OR EQUAL.*

SEE SHEET IR1 FOR IRRIGATION PLAN

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

LICENSED LANDSCAPE ARCHITECT — BRILEY NO. 2579 — 12/31/26 Renewal Date — STATE OF CALIFORNIA

Blair, Church & Flynn CONSULTING ENGINEERS

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Clovis, California 93612
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APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT — No. C-34290 — REN: 05-31-25 — STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

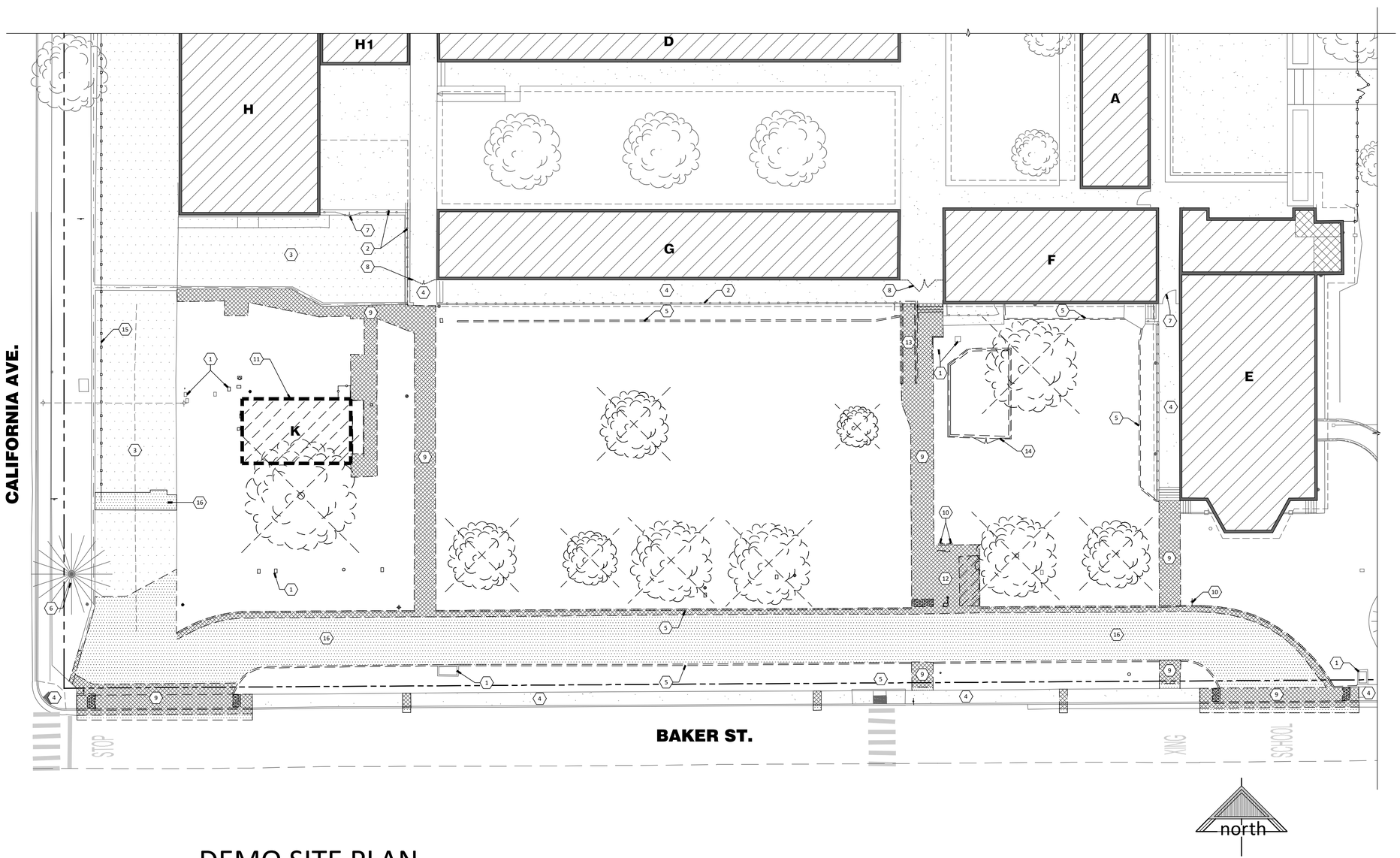
MANGINI ARCHITECTURE | INGENUITY

MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.2630 Office
(559) 627.1926 Fax

TITLE
IRRIGATION DETAILS

IR4

PROJECT 24001



DEMO SITE PLAN

SCALE 1" = 30'

DEMOLITION NOTES :

THE INTENT OF THIS DEMOLITION PLAN IS TO LEAVE THE SITE OF NEW CONSTRUCTION OPEN, CLEAN, AND FREE OF DEBRIS AND READY FOR NEW CONSTRUCTION.

REMOVE THE FOLLOWING :

1) EXISTING TREES, ROOTS LARGER THAN 3/4" DIA., AND SHRUBS.

2) SAWCUT & REMOVE PAVING AS INDICATED ON CIVIL DRAWINGS

PROTECT THE FOLLOWING:

1) ALL UTILITY LINES, BOXES AND ANCILLARY EQUIPMENT DESIGNATED FOR NEW CONSTRUCTION.

EXISTING A/C PAVING, CONCRETE SLABS, WALKS, CURBS, GUTTERS AND SUBGRADE, INDICATED TO REMAIN ON CIVIL DRAWINGS

LEGEND:

- EXISTING BUILDING TO REMAIN, PROTECT
- EXISTING CONCRETE TO REMAIN, PROTECT
- EXISTING AC PAVING TO REMAIN, PROTECT
- EXISTING RELOCATABLE BUILDING TO BE REMOVED, SALVAGE RAMP TO OWNER
- EXISTING CONC. TO BE REMOVED
- EXISTING AC PAVING TO BE REMOVED
- EXISTING TREE TO BE REMOVED
- PROPERTY LINE
- EXISTING BUILDING OVERHANG
- EXISTING METAL FENCE / RAILING TO REMAIN, PROTECT

DEMO SITE PLAN KEYNOTES:

1. (E) SITE UTILITIES TO REMAIN, PROTECT & RAISE TO FLUSH, AS REQ'D
2. (E) FENCING / RAILING TO REMAIN, PROTECT.
3. (E) AC PAVING TO REMAIN, PROTECT.
4. (E) CONCRETE TO REMAIN, PROTECT.
5. (E) PLANTER & CONC. CURB TO BE REMOVED
6. (E) TREE TO REMAIN, PROTECT.
7. (E) GATE TO REMAIN, PROTECT.
8. **(E) GATE TO BE REMOVED.**
9. (E) CONC. TO BE REMOVED, TYP.
10. (E) SIGNAGE TO BE REMOVED.
11. (E) RELOCATABLE BUILDING 'K' TO BE REMOVED
12. (E) ACCESS. PARKING STALL TO BE REMOVED
13. (E) RAMP & RAILING TO BE REMOVED AS REQ.
14. (E) ELEC. ENCLOSURE TO BE REMOVED, SEE ELEC. DWGS.
15. (E) METAL FENCING
16. (E) AC PAVING TO BE REMOVED

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
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TITLE
DEMO SITE PLAN

SD1

PROJECT 24001

F:\01 Projects\24001\Drawings\01 Architectural\03 Sheets\24001_SD1 – Demo Site Plan.dwg Feb 13 2025 1:36pm

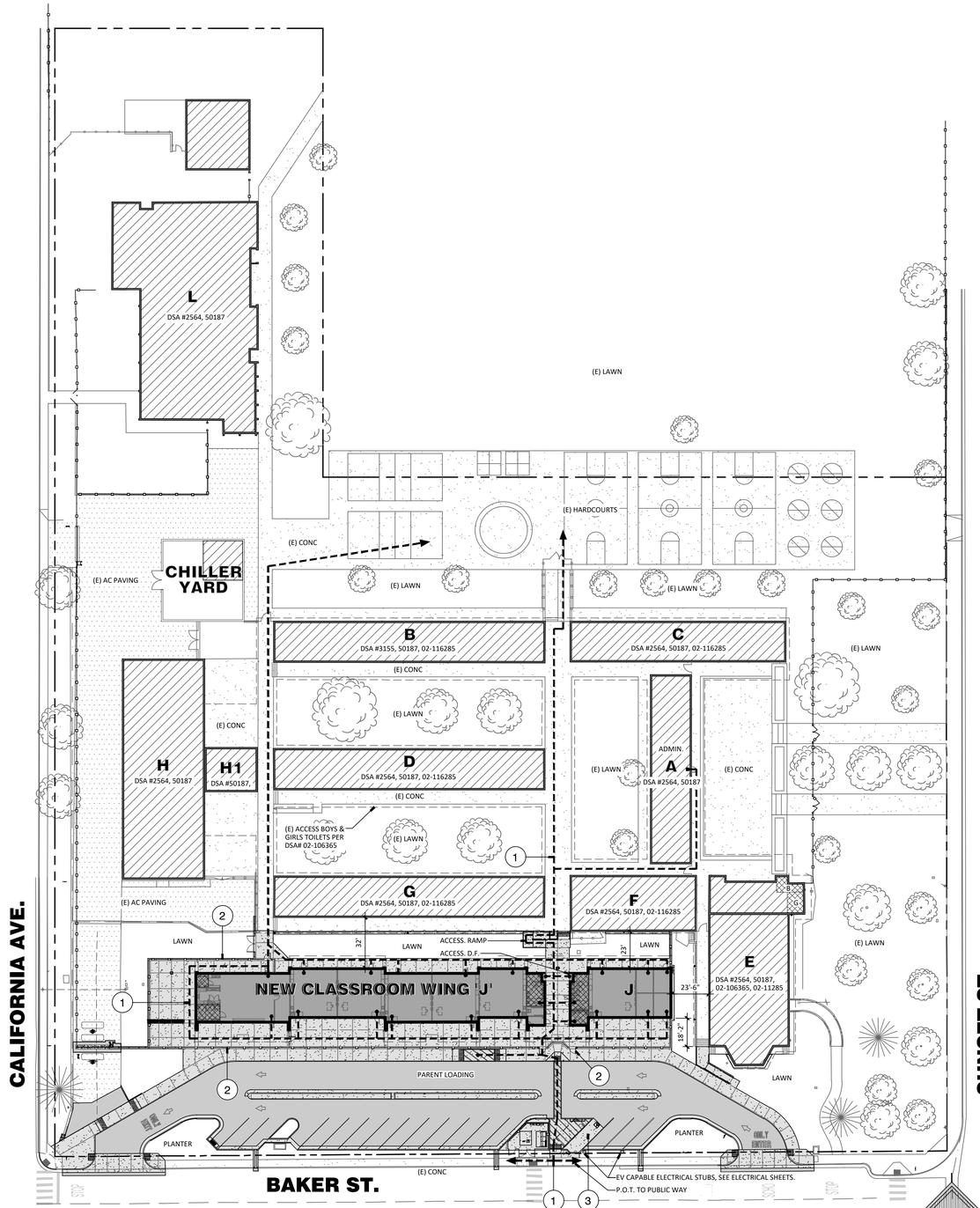
APPROVALS

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LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34280
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024



OVERALL SITE PLAN

SCALE: 1" = 40'-0"

DSA PR-1501

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTION OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND
2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTION OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT" (FORM DSA 140).

LEGEND:

- NEW PROPOSED BUILDING
- EXISTING BUILDING
- ACCESSIBLE TOILETS
- NEW CONCRETE
- NEW AC PAVING
- EXISTING CONCRETE TO REMAIN, PROTECT
- PROPERTY LINE
- ACCESSIBLE PATH OF TRAVEL
- EXISTING IRON FENCE
- NEW IRON FENCE

1 ACCESSIBLE PATH OF TRAVEL :

PATH OF TRAVEL (P.O.T.) AS VERIFIED BY THE ARCHITECT IS:
- AT LEAST ONE ACCESSIBLE ROUTE WITHIN THE BOUNDARY OF THE SITE SHALL BE PROVIDED FROM PUBLIC WAY, ACCESSIBLE STUDENT RESTROOMS TO ALL AREA OF WORK UNDER THIS PROJECT.
- A COMMON BARRIER FREE ACCESSIBLE ROUTE AT LEAST 48" WIDE WITHOUT ANY ABRUPT VERTICAL CHANGES EXCEEDING 1/2" BEVELED AT 1:2 MAXIMUM SLOPE, EXCEPT THAT LEVEL CHANGES DO NOT EXCEED 1/4" VERTICAL.
- THE PATH SURFACE IS SLIP RESISTANT, STABLE, FIRM, AND SMOOTH.
- PASSING SPACES AT LEAST 60" x 60" ARE LOCATED NOT MORE THAN 200' APART (11B-403.5.3).
- WALKS WITH CONTINUOUS GRADIENTS HAVE 60" IN LENGTH OF LEVEL AREAS NOT MORE THAN 400' APART (11B-403.7).
- CROSS-SLOPE DOES NOT EXCEED 2%.
- SLOPE IN THE DIRECTION OF TRAVEL IS 5% OR LESS UNLESS OTHERWISE INDICATED AS A RAMP.
- P.O.T. SHALL MAINTAIN FREE OF OVERHANGING OBSTRUCTIONS TO 80" MINIMUM (11B-307.4), PROTRUDING OBJECTS (11B-307) GREATER THAN 4" PROJECTION FROM WALL OR EDGE ABOVE 27" AND LESS THAN 80" FINISH GRADE.
- THERE IS NO DROP OFF OVER 4" AT THE EDGE OF WALK OR LANDING UNLESS IDENTIFIED BY A GUARD, A HANDRAIL, OR A WARNING CURB AT LEAST 6" IN HEIGHT ABOVE THE WALK (11B-303.5)

2 ORNAMENTAL IRON FENCING AND GATES :

ALL 4'-0" WIDE MAN GATES IN THE PATH OF TRAVEL SHALL HAVE LEVER-TYPE LATCH AND 10" HIGH KICKPLATES SECURE TO FENCE PANEL BOTH SIDES, 5LBS MAX PRESSURE TO OPERATE AND STRIKE SIDE CLEARANCE PER. CBC 11B-404.2. PROVIDE PANIC HARDWARE WHERE NOTED SEE ENLARGED SITE PLANS & SHEETS SDS FOR GATE LOCATIONS.

3 ACCESSIBLE PARKING :

AT SOUTHERN PARKING LOT:
18 PUBLIC PARKING STALLS,
1 ACCESSIBLE STALL REQUIRED PER C.B.C. 11B-208.2.
1 ACCESSIBLE STALL PROVIDED.
1 = 1, THEREFORE OK
4 EV CAPABLE STALLS REQUIRED FOR FUTURE PER TABLE 5.106.5.3.1
OF THE 4 EV CAPABLE 1 WILL BE FUTURE VAN ACCESSIBLE PER TABLE 11B-228.3.2.1

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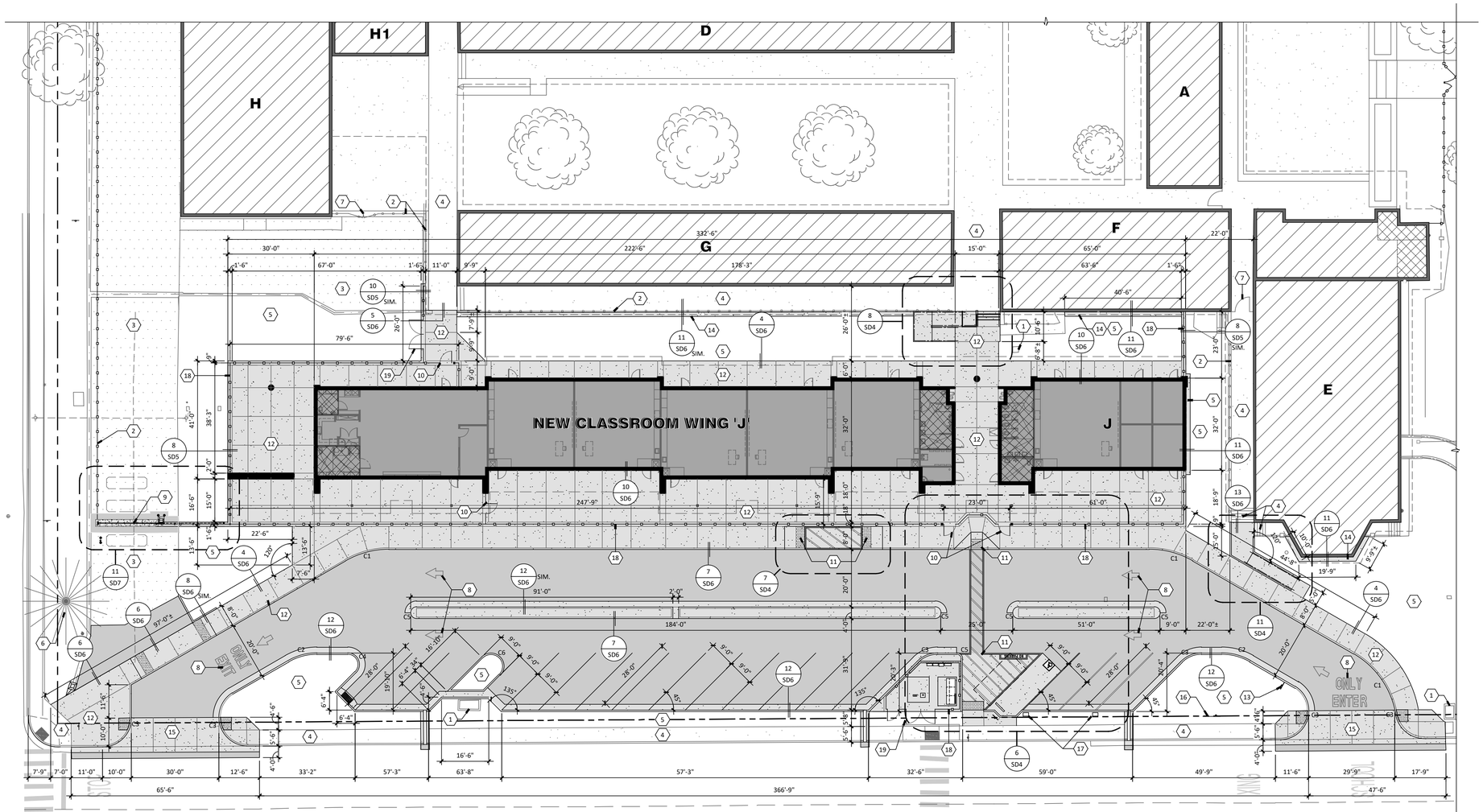
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TITLE
OVERALL SITE PLAN

SD2

PROJECT 24001



SITE PLAN

SCALE 1" = 20'

LEGEND

- EXISTING BUILDING TO REMAIN, PROTECT
- EXISTING CONCRETE TO REMAIN, PROTECT
- EXISTING AC PAVING TO REMAIN, PROTECT
- NEW CLASSROOM WING 'J'
- ACCESSIBLE TOILETS
- NEW CONCRETE PAVING
- NEW AC PAVING
- PROPERTY LINE
- EXISTING BUILDING OVERHANG
- EXISTING METAL FENCE / RAILING TO REMAIN, PROTECT
- NEW BUILDING OVERHANG
- NEW 7'-0" HIGH METAL FENCING

SITE PLAN KEY NOTES

1. (E) SITE UTILITIES TO REMAIN, PROTECT & RAISE TO FLUSH AS REQ'D.
2. (E) FENCING / RAILING TO REMAIN, PROTECT.
3. (E) AC PAVING TO REMAIN, PROTECT.
4. (E) CONCRETE TO REMAIN, PROTECT.
5. LANDSCAPING, SEE LANDSCAPE DRAWINGS
6. (E) TREE TO REMAIN, PROTECT.
7. (E) GATE TO REMAIN, PROTECT.
8. PAVEMENT MARKINGS, SEE 19 / SD4
9. 20' WIDE METAL ROLLING GATE, SEE 11 / SD7 and 4 / SD7
10. ACC. MAN GATE, SEE DETAIL 5 / SD5
11. TACTILE WARNING MAT, SEE DETAIL 13 / SD4 and 14 / SD4
12. CONCRETE PAVING, SEE DETAIL 1 / SD6
13. ENTRANCE SIGN, SEE DETAIL 16B / SD4
14. CONCRETE MOWSTRIP
15. DRIVE APPROACH & OFF-SITE PAVING, SEE CIVIL DRAWINGS
16. TEMP. PROJECT SIGN, SEE DETAIL 21 / SD5
17. EV CAPABLE ELECTRICAL STUB FOR FUTURE CHARGING STATION. SEE ELECTRICAL SHEET ES1.3
18. METAL FENCING, SEE 4 / SD5
19. 10' WIDE DOUBLE LEAF METAL GATE, SEE 3 / SD5

CURVE TABLE

CURVE	RADIUS
C1	30'-0"
C2	20'-0"
C3	10'-0"
C4	4'-0"
C5	2'-0"
C6	4'-6"

NOTE

RADII ARE TO FACE OF CURB, FACE OF MOWSTRIP OR EDGE OF AC, UNLESS OTHERWISE INDICATED.

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34299
REN. 05-31-25
STATE OF CALIFORNIA

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TITLE: SITE PLAN

SD3

PROJECT 24001

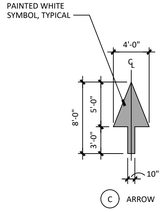
APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

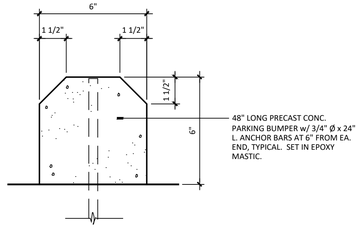
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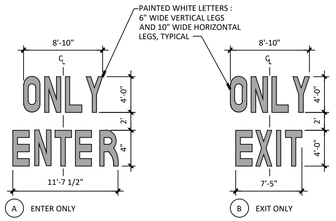


C ARROW



15 CONC. WHEELSTOP

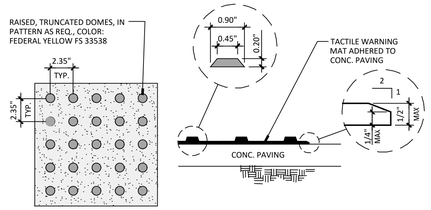
3" = 1'-0"



A ENTER ONLY B EXIT ONLY

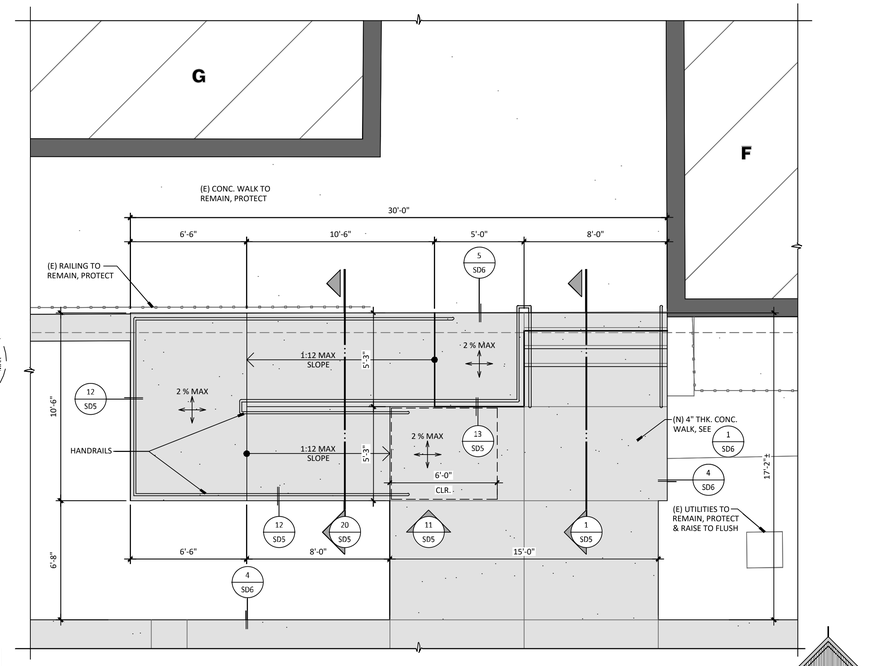
19 ON-SITE PAVEMENT MARKINGS

N.T.S.



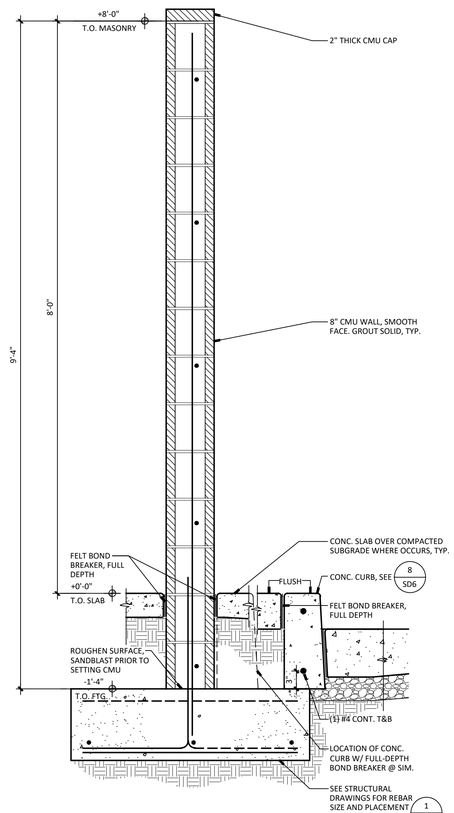
14 TACTILE WARNING MAT

1" = 1'-0"



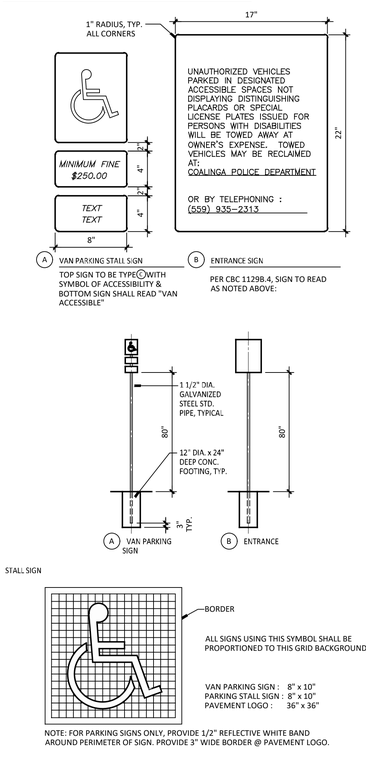
8 ENL. ACCESS. RAMP & STAIRS

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



21 CMU WALL

SCALE: 1" = 1'-0"



A VAN PARKING STALL SIGN B ENTRANCE SIGN

TOP SIGN TO BE TYPE C WITH SYMBOL OF ACCESSIBILITY & BOTTOM SIGN SHALL READ "VAN ACCESSIBLE"

PER CBC 1129B.4, SIGN TO READ AS NOTED ABOVE:

A VAN PARKING SIGN B ENTRANCE

STALL SIGN

ALL SIGNS USING THIS SYMBOL SHALL BE PROPORTIONED TO THIS GRID BACKGROUND.

VAN PARKING SIGN : 8" x 10"
PARKING STALL SIGN : 8" x 10"
PAVEMENT LOGO : 36" x 36"

NOTE: FOR PARKING SIGNS ONLY, PROVIDE 1/2" REFLECTIVE WHITE BAND AROUND PERIMETER OF SIGN. PROVIDE 3" WIDE BORDER @ PAVEMENT LOGO.

16 SITE SIGNAGE

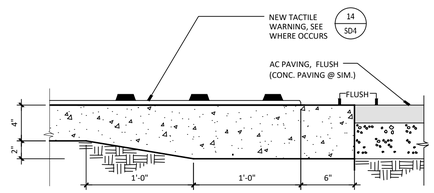
1/4" = 1'-0"

NOTE:
WHERE SIGNAGE IS HUNG ON FENCE OR BLDG. USE SAME MOUNTING HEIGHTS, TYP.

GENERAL NOTES :

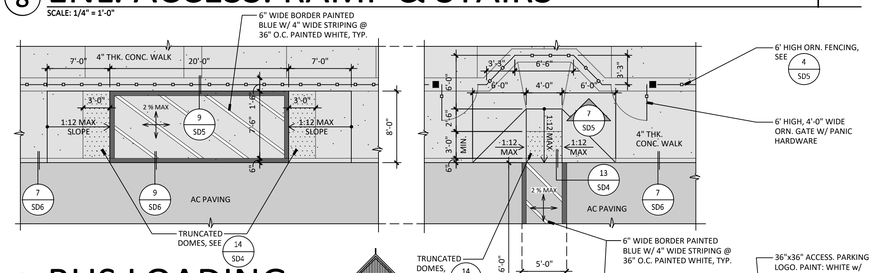
1) SIGNS TO BE REFLECTORIZED AND EQUAL TO PORCELAIN ON STEEL WITH BEADED TEXT.
2) TEXT SHALL BE PROPORTIONED TO GIVEN OVERALL SIGN DIMENSIONS. SEE SIGN DESCRIPTIONS BELOW FOR SYMBOL OR TEXT.

SIGN DESCRIPTIONS :



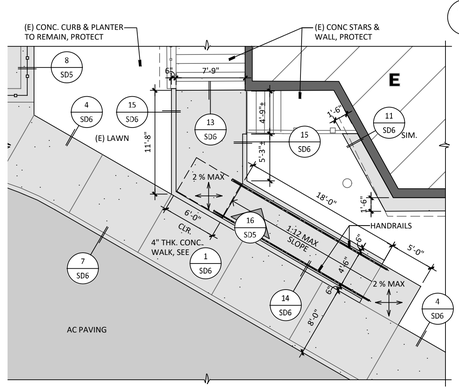
13 TACTILE WARNING MAT

1 1/2" = 1'-0"



7 BUS LOADING

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



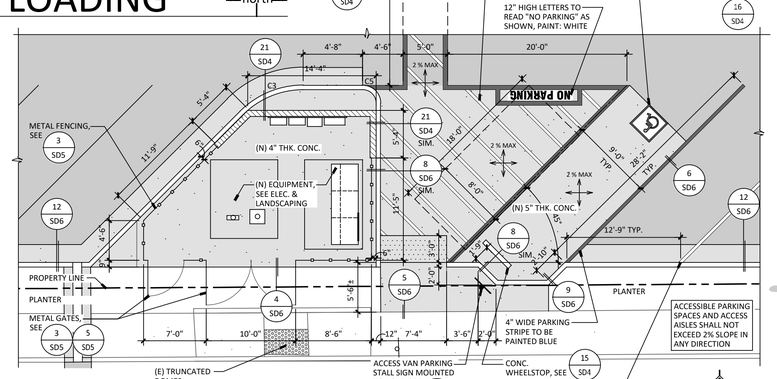
CURVE TABLE	
CURVE	RADIUS
C1	30'-0"
C2	20'-0"
C3	10'-0"
C4	4'-0"
C5	2'-0"
C6	4'-6"

NOTE

RADII ARE TO FACE OF CURB, FACE OF MONSTRIP OR EDGE OF AC, UNLESS OTHERWISE INDICATED.

11 ENL. ACCESS. RAMP

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



6 ENL. ACCESS. PARKING

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

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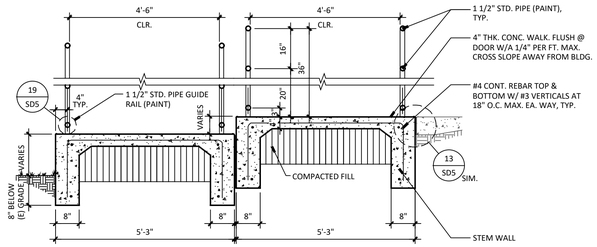
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TITLE
ENLARGED SITE PLANS & SITE DETAILS

SD4

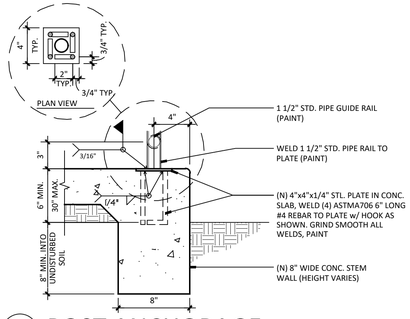
PROJECT 24001

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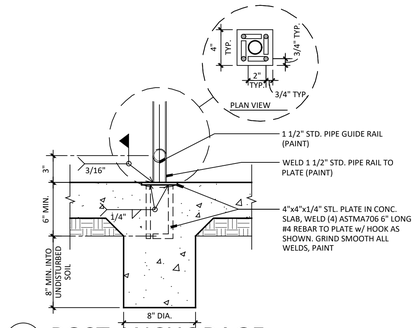
20 SECTION AT RAMP

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



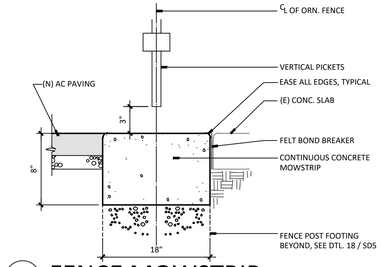
19 POST ANCHORAGE

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



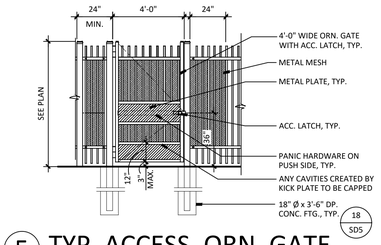
14 POST ANCHORAGE

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



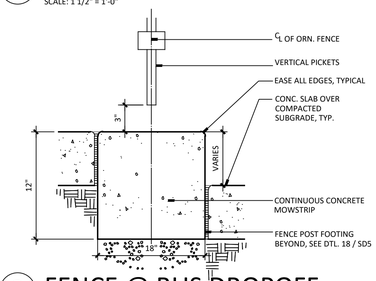
10 FENCE MOWSTRIP

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



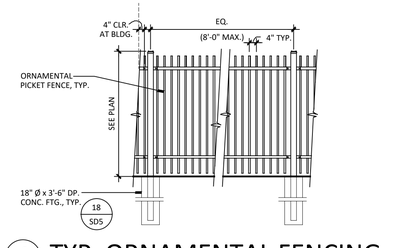
5 TYP. ACCESS. ORN. GATE

1/4" = 1'-0"



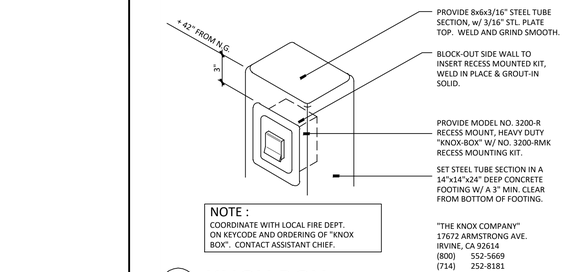
9 FENCE @ BUS DROPOFF

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



4 TYP. ORNAMENTAL FENCING

1/4" = 1'-0"

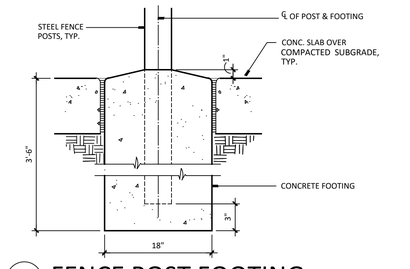


NOTE :
COORDINATE WITH LOCAL FIRE DEPT. ON KEYCODE AND ORDERING OF "KNOX BOX". CONTACT ASSISTANT CHIEF.

"THE KNOX COMPANY"
17672 ARMSTRONG AVE.
IRVINE, CA 92614
(800) 552-5669
(714) 252-8181

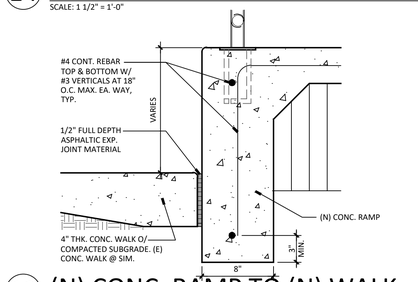
23 KNOX BOX

SCALE: N.T.S.



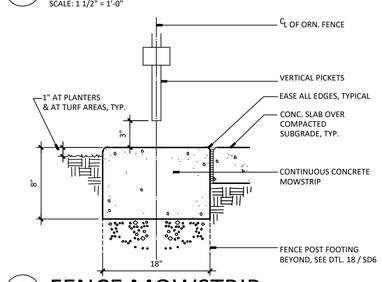
18 FENCE POST FOOTING

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



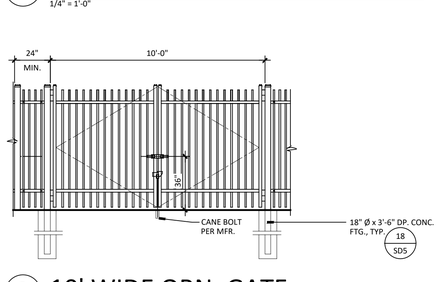
13 (N) CONC. RAMP TO (N) WALK

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



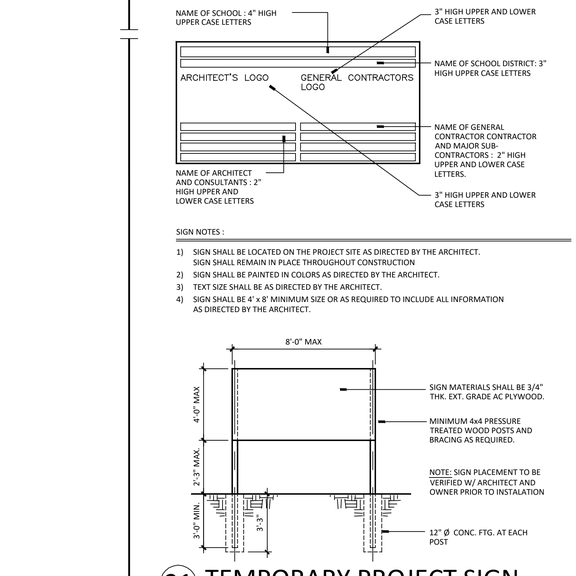
8 FENCE MOWSTRIP

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



3 10' WIDE ORN. GATE

1/4" = 1'-0"

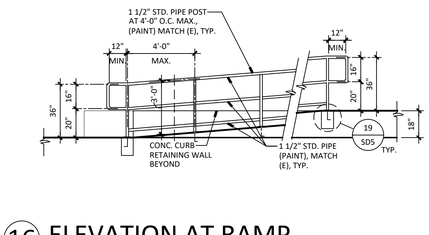


SIGN NOTES :

1) SIGN SHALL BE LOCATED ON THE PROJECT SITE AS DIRECTED BY THE ARCHITECT. SIGN SHALL REMAIN IN PLACE THROUGHOUT CONSTRUCTION
2) SIGN SHALL BE PAINTED IN COLORS AS DIRECTED BY THE ARCHITECT.
3) TEXT SIZE SHALL BE AS DIRECTED BY THE ARCHITECT.
4) SIGN SHALL BE 4' x 8' MINIMUM SIZE OR AS REQUIRED TO INCLUDE ALL INFORMATION AS DIRECTED BY THE ARCHITECT.

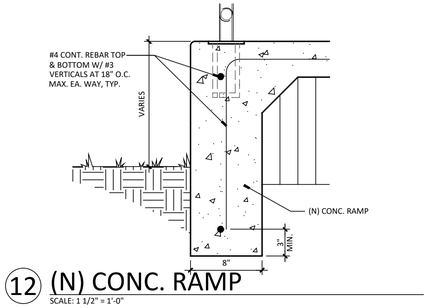
21 TEMPORARY PROJECT SIGN

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



16 ELEVATION AT RAMP

1/4" = 1'-0"

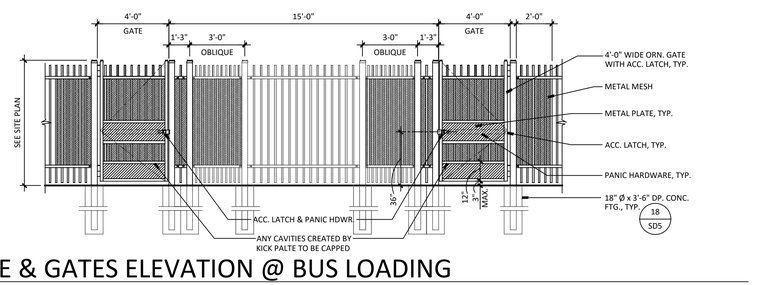


17 STAIR NOSING

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

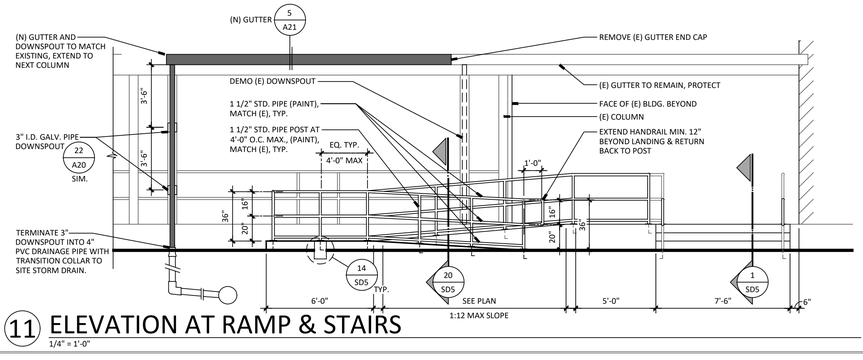
12 (N) CONC. RAMP

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



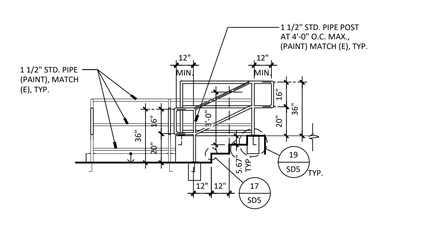
7 FENCE & GATES ELEVATION @ BUS LOADING

1/4" = 1'-0"



11 ELEVATION AT RAMP & STAIRS

1/4" = 1'-0"



1 SECTION AT STAIRS

1/4" = 1'-0"

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

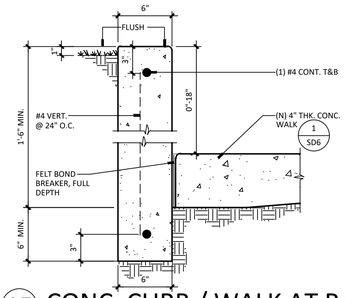
REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4230 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
SITE DETAILS

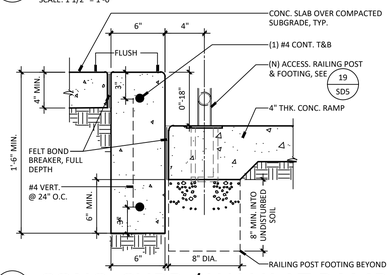
SD5

PROJECT 24001



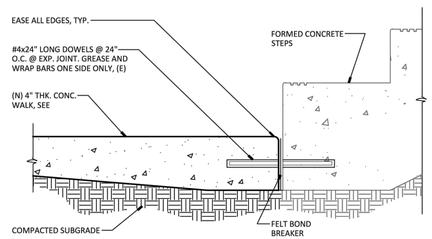
15 CONC. CURB / WALK AT RAMP

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



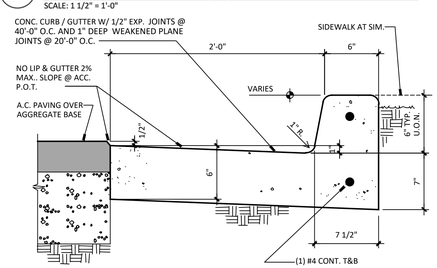
14 CONC. CURB / WALK AT RAMP

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



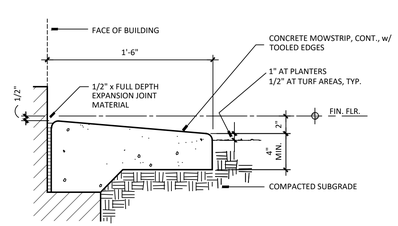
13 (N) CONC. AT (E) STAIRS

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



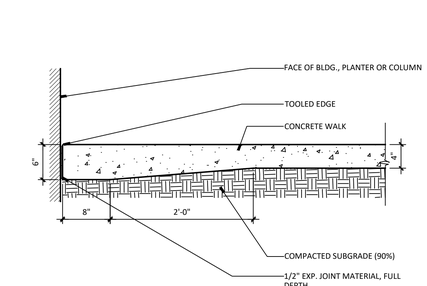
12 CONC. CURB / GUTTER

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



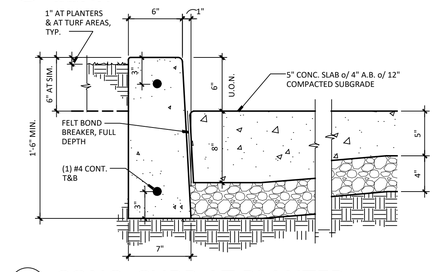
11 CONCRETE MOWSTRIP

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



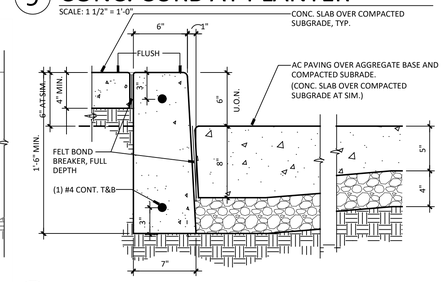
10 CONC. WALK AT BLDG.

SCALE: 1" = 1'-0"



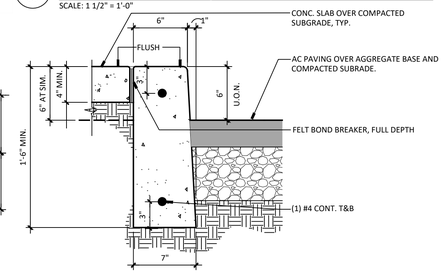
9 CONC. CURB AT PLANTER

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



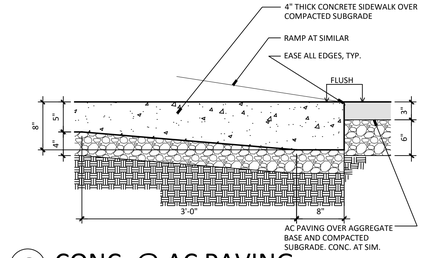
8 CONC. CURB / WALK AT PAVING

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



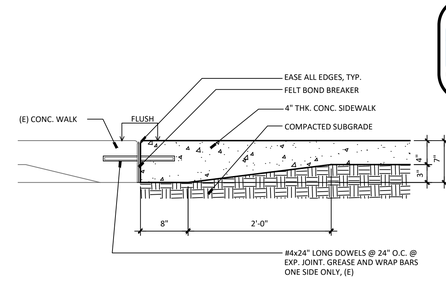
7 CONC. CURB / WALK AT PAVING

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



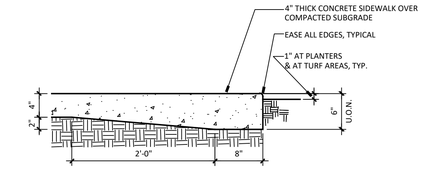
6 CONC. @ AC PAVING

SCALE: 1" = 1'-0"



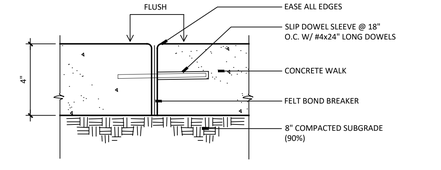
5 (N) CONC. WALK @ (E) CONC.

SCALE: 1" = 1'-0"

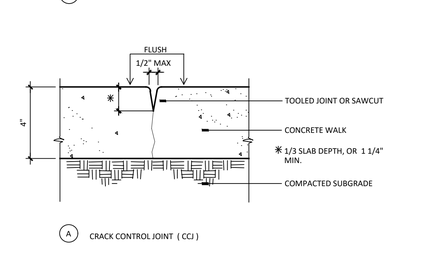


4 CONCRETE SIDEWALK

SCALE: 1" = 1'-0"



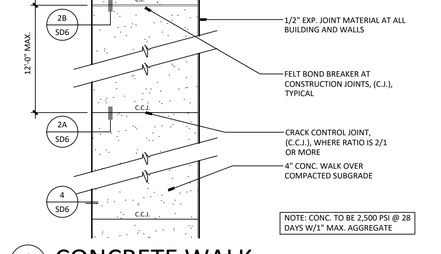
B CONSTRUCTION JOINT



A CRACK CONTROL JOINT (CCJ)

2 CONCRETE JONITS

SCALE: 3" = 1'-0"



1 CONCRETE WALK

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

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
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SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY.
MANGINI ASSOCIATES INC.
4220 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 fax

TITLE
SITE DETAILS

SD6

PROJECT 24001

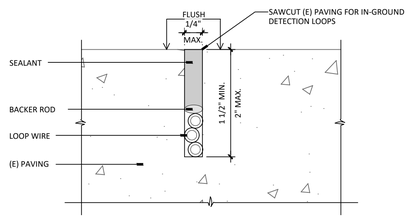
APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

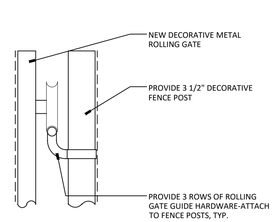
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DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
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DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34299
REN. 05-31-25
STATE OF CALIFORNIA

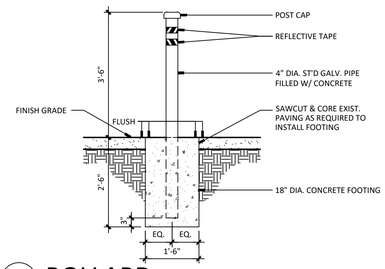
DATE: JULY 31, 2024



15 DETECTION LOOP AT PAVING
SCALE: 3" = 1'-0"

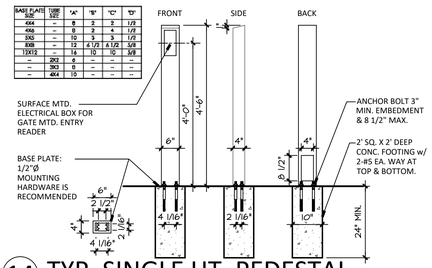


10 GATE HARDWARE
N.T.S.

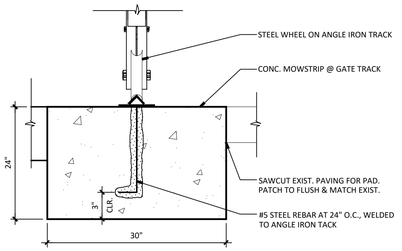


5 BOLLARD
1/2" = 1'-0"

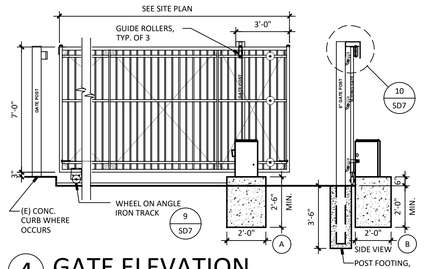
BASE PLATE SIZE	TUBE SIZE	"A"	"B"	"C"	"D"
4X4	–	8	2	2	1/2
4X6	–	8	2	4	1/2
5X5	–	10	3	5	1/2
6X8	–	12	4 1/2	6 1/2	5/8
12X12	–	16	10	10	5/8
–	2X2	6	–	–	–
–	3X3	8	–	–	–
–	4X4	10	–	–	–



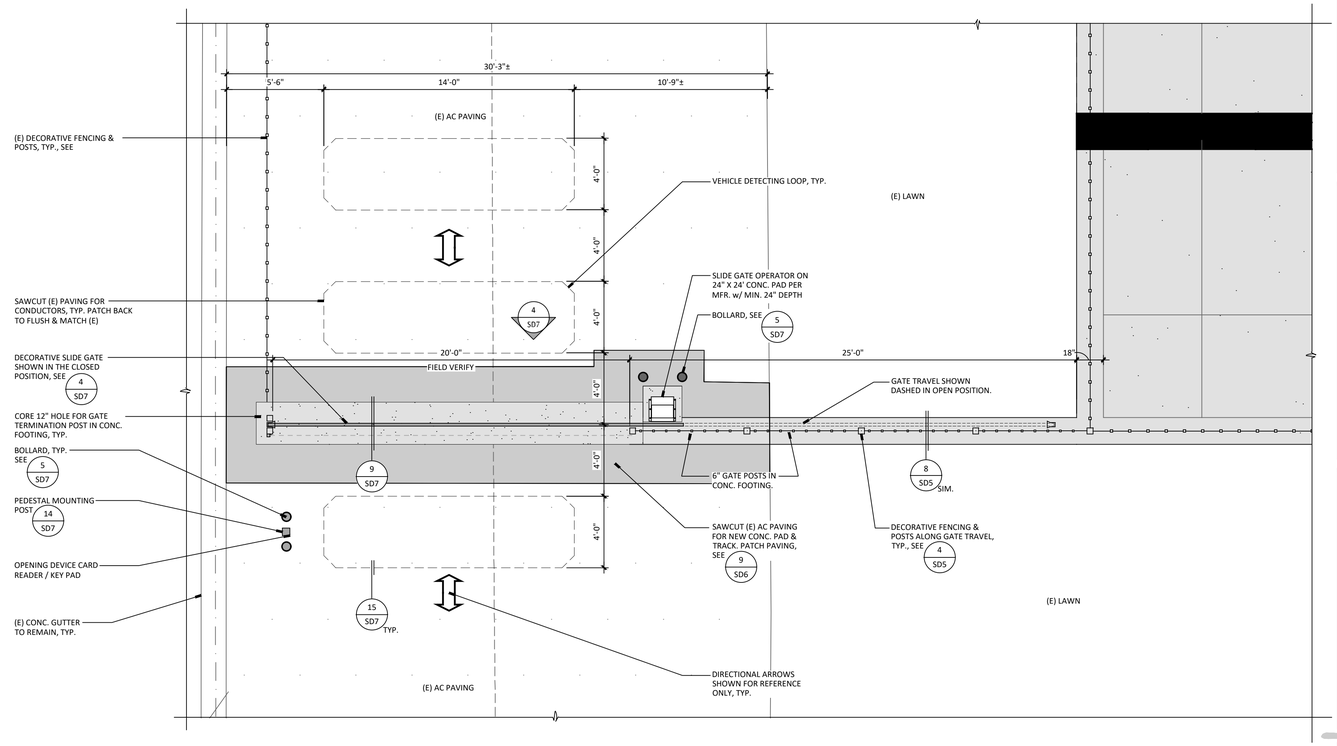
14 TYP. SINGLE HT. PEDESTAL
1/2" = 1'-0"



9 GATE TRACK
N.T.S.



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



11 ENLARGED GATE PLAN
SCALE: 1/4" = 1'-0"

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

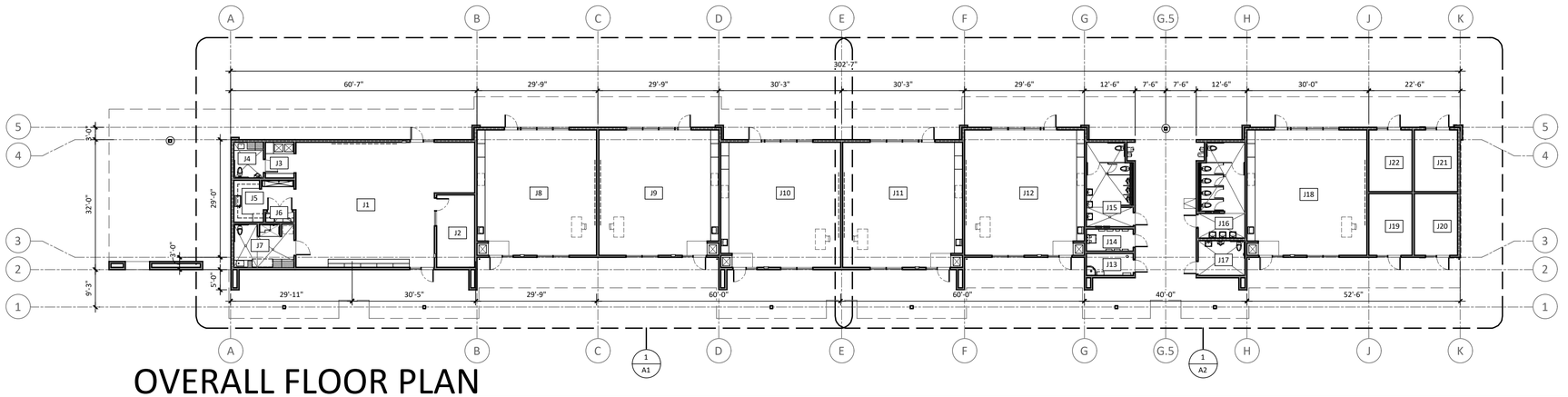
REVISIONS

MANGINI
ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
ENLARGED GATE PLAN & DETAILS

SD7

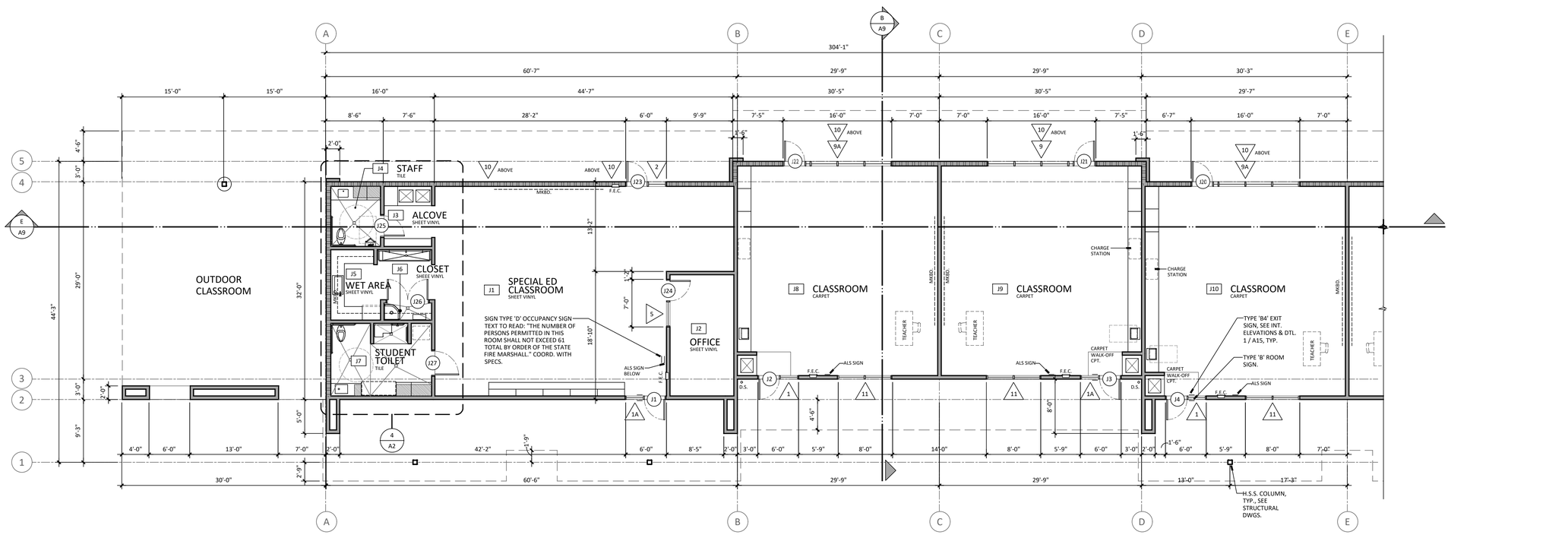
PROJECT 24001



OVERALL FLOOR PLAN

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

north



FLOOR LEGEND:

- 2x8 D.F. WOOD STUDS @ 16" O.C.
- 2x6 WOOD STUDS @ 16" O.C.
- 2x4 WOOD STUDS @ 16" O.C.

FLOOR NOTES:

1. FINISH ALL GYPSUM BOARD EDGES PER DET. 14/A19
2. CONSTRUCT RATED AND NON-RATED WALLS PER ASSEMBLY DETAILS ON SHEET A14
4. REFER TO INTERIOR ELEV. & DETAIL FOR TYP. ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS. 16/A19
5. REFER TO ELEVATIONS AND DOOR SCHEDULE FOR ALL ROOM AND BUILDING SIGNAGE
6. SEE SHEETS A10 - A12 FOR INTERIOR ELEVATIONS
7. PROVIDE SOUND ATTENUATION BATT INSULATION (FULL HGT.) AT ALL INTERIOR WALLS IN WALLS, TYP. U.O.N.

north

1 FLOOR PLAN

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

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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TITLE
OVERALL FLOOR PLAN, FLOOR PLAN

A1

PROJECT 24001

F:\01 Projects\24001\Drawings\01 Architectural\03 Sheets\24001_A1-A2 Floor Plan.dwg Feb 13 2025 1:46pm

APPROVALS

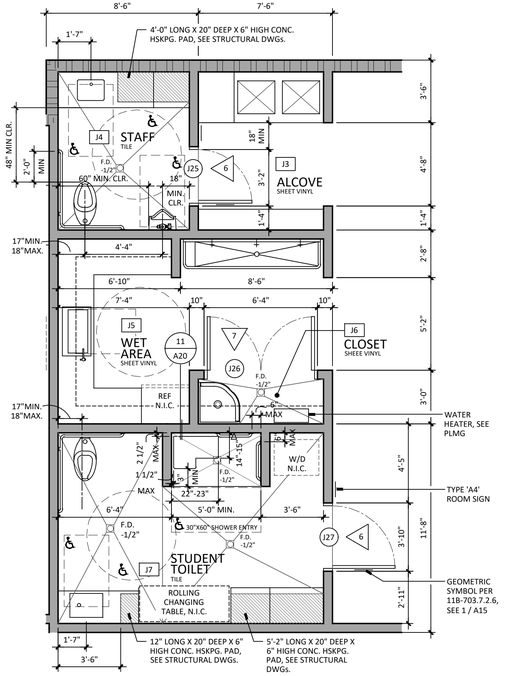
FILE # 10-28 | APPLICATION # 02-122658

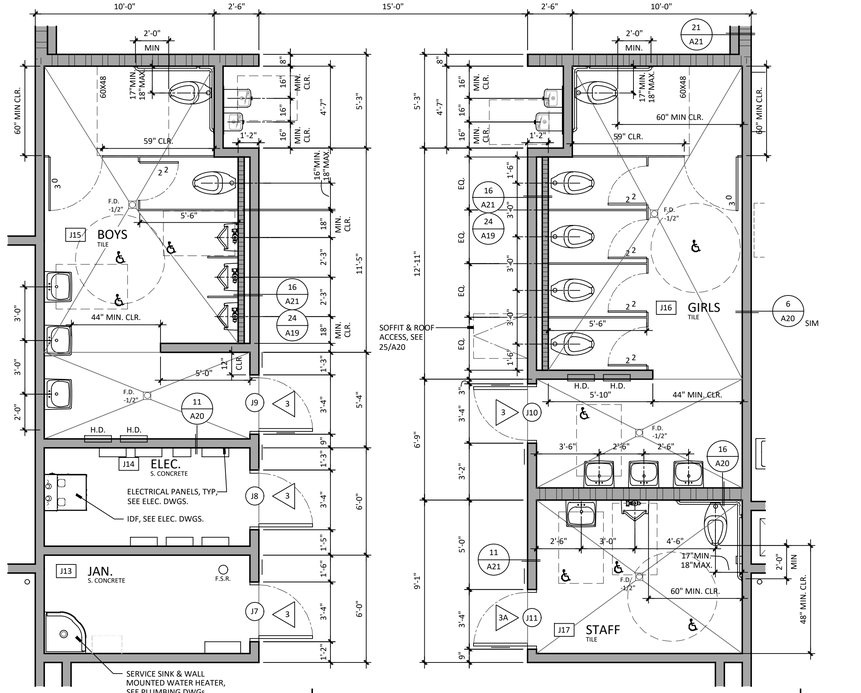
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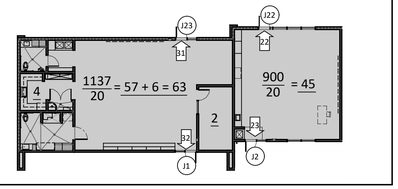
ENLARGED

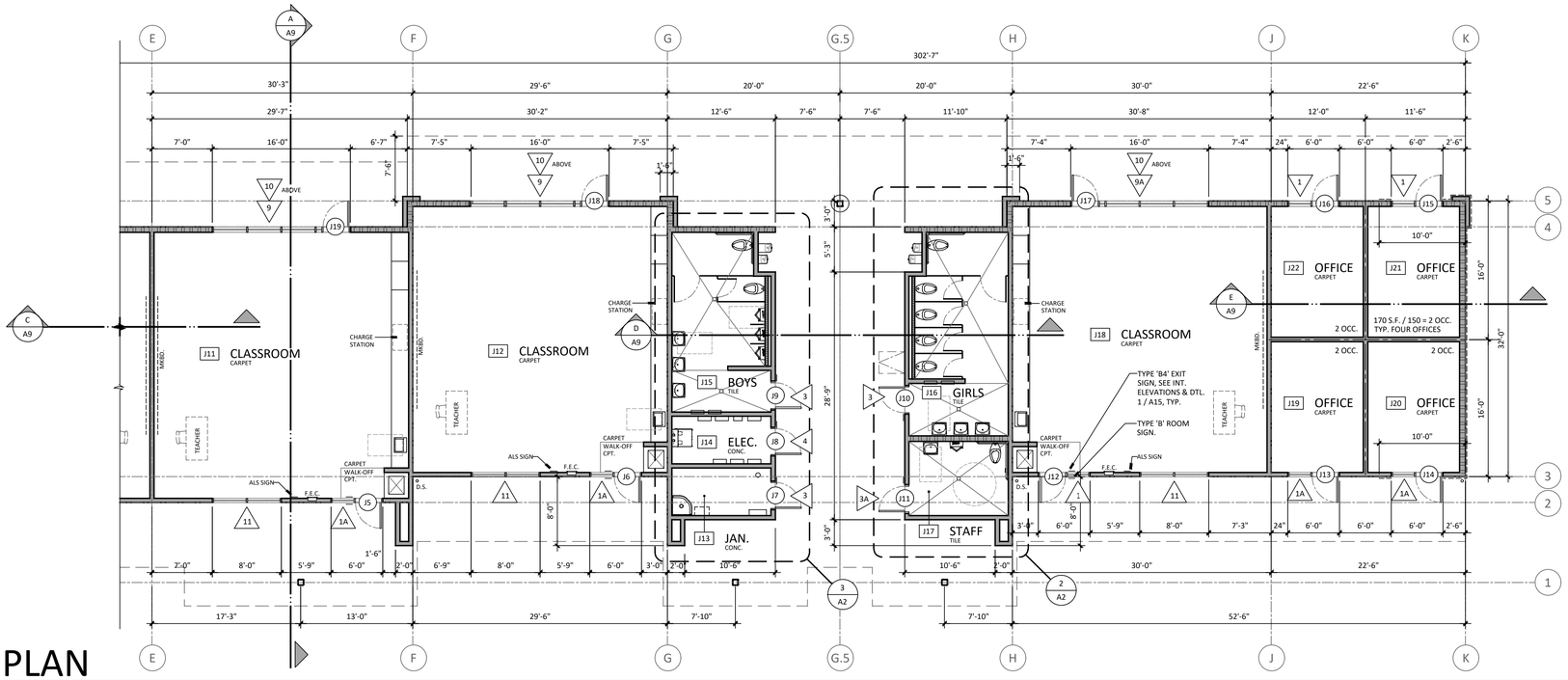




EXIT ANALYSIS

CALCULATED OCCUPANTS OF PRIMARY SPACES WITH ACCESSORY OCCUPANTS EXITING THROUGH CBC 1004.1		NUMBER OF REQUIRED EXITS CBC 1015.1	NUMBER OF PROVIDED EXITS	EGRESS WIDTH PER OCCUPANT SERVED CBC 1005.1	EGRESS WIDTH				
						OCC. # THROUGH EXIT	REQ. EXIT WIDTH	EXIT WIDTH PROVIDED	DOOR #
CLASSROOM (TYP.)	45	45 < 50 =1 EXIT REQ.	2 EXITS PROVIDED	WITH SPRINKLER SYSTEM .15" PER OCC. CBC 1025.2	EXIT 1	23	45 x 0.2" = 9"	36"	J2
					EXIT 1	22	45 x 0.2" = 9"	36"	J22
SPECIAL ED CLASSROOM	57	63 > 50 =2 EXIT REQ.	2 EXITS PROVIDED	WITH SPRINKLER SYSTEM .15" PER OCC. CBC 1025.2	EXIT 1	32	32 x 0.2" = 6.4"	36"	J1
OFFICE & WET AREA	6				EXIT 2	31	31 x 0.2" = 6.2"	36"	J23
TOTAL = 63									





FLOOR LEGEND:

- 2x8 D.F. WOOD STUDS @ 16" O.C.
- 2x6 WOOD STUDS @ 16" O.C.
- 2x4 WOOD STUDS @ 16" O.C.
- 1-HR RATED EXTERIOR WALL, CONTINUOUS FROM FLOOR TO ROOF DECK, SEE 21 / A14
- INDICATES 30"x48" CLEAR SPACE
- INDICATES 5' DIAMETER W.C. ROTATION SPACE

FLOOR NOTES:

1. FINISH ALL GYPSUM BOARD EDGES PER DET. 14 / A19
2. CONSTRUCT RATED AND NON-RATED WALLS PER ASSEMBLY DETAILS ON SHEET A14
4. REFER TO INTERIOR ELEV. & DETAIL FOR TYP. ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS. 16 / A19
5. REFER TO ELEVATIONS AND DOOR SCHEDULE FOR ALL ROOM AND BUILDING SIGNAGE
6. SEE SHEETS A10 - A12 FOR INTERIOR ELEVATIONS
7. PROVIDE SOUND ATTENUATION BATT INSULATION (FULL HGT.) AT ALL INTERIOR WALLS IN WALLS, TYP.
8. FLOOR SLOPE TO DRAIN SHALL NOT EXCEED 2% ALL DIRECTIONS

1 FLOOR PLAN

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

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

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TITLE
FLOOR PLAN, ENLARGED FLOOR PLANS

A2

PROJECT 24001

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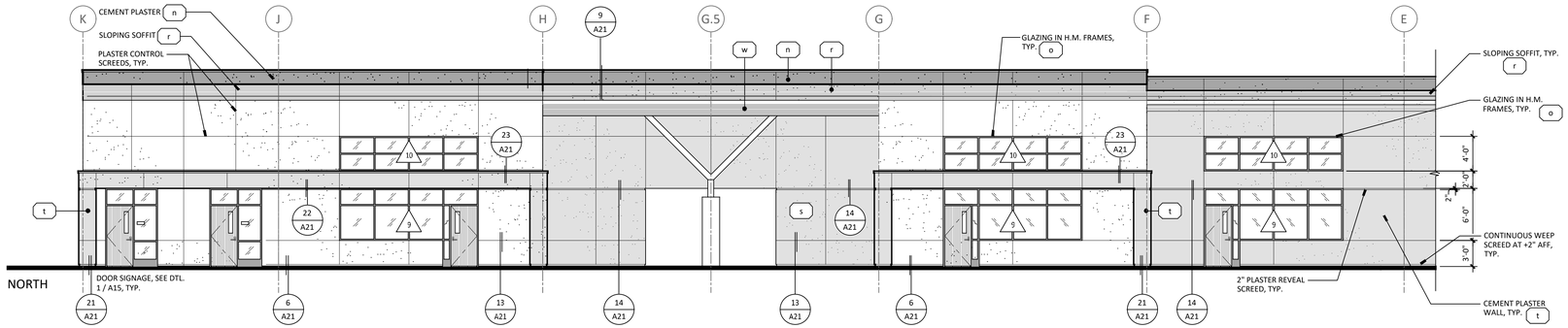
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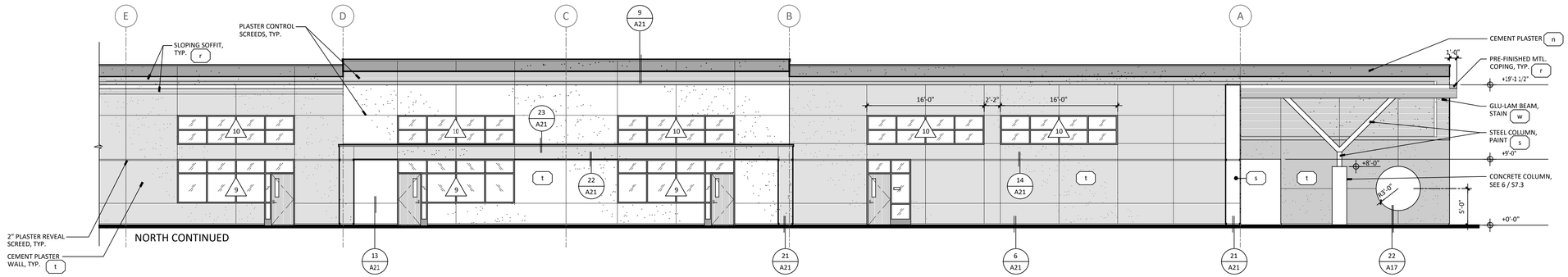
FILE # 10-28 | APPLICATION # 02-122658

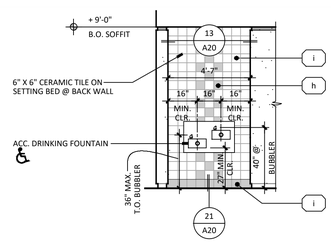
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DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34280
REN. 05-31-25
STATE OF CALIFORNIA

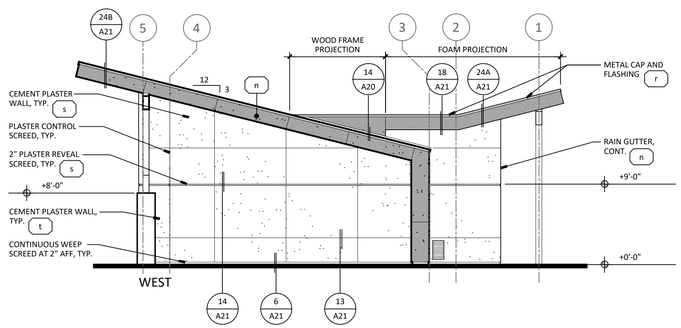
DATE: JULY 31, 2024

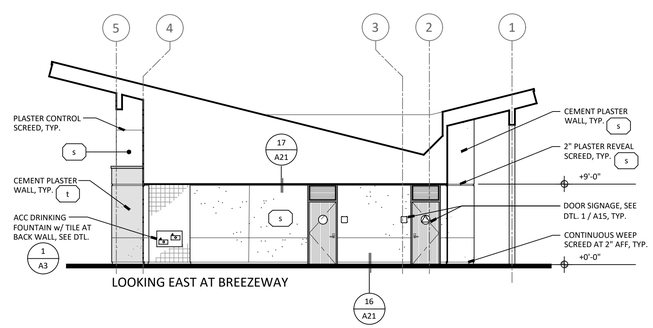






1 ACC DRINKING FOUNTAIN
SCALE: 1/4" = 1'-0"





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

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
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TITLE
EXTERIOR ELEVATIONS

A3

PROJECT 24001

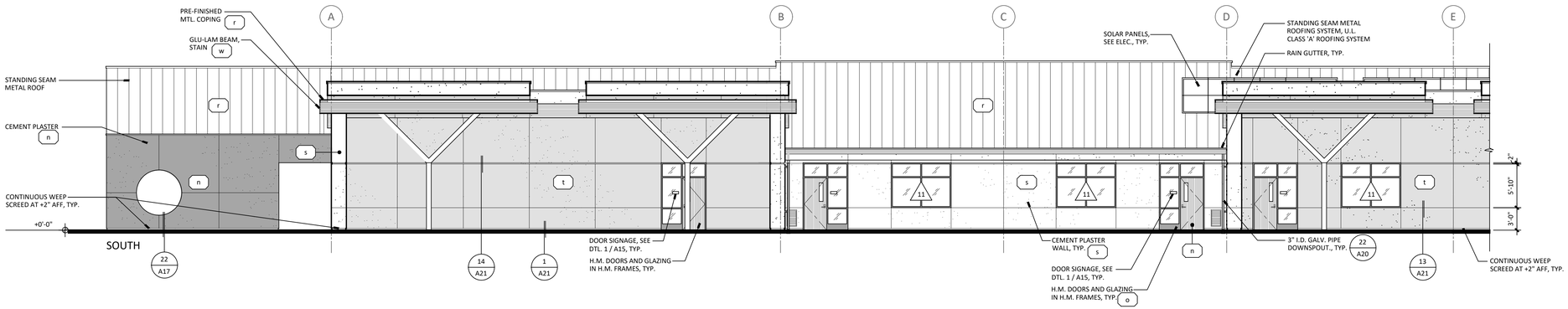
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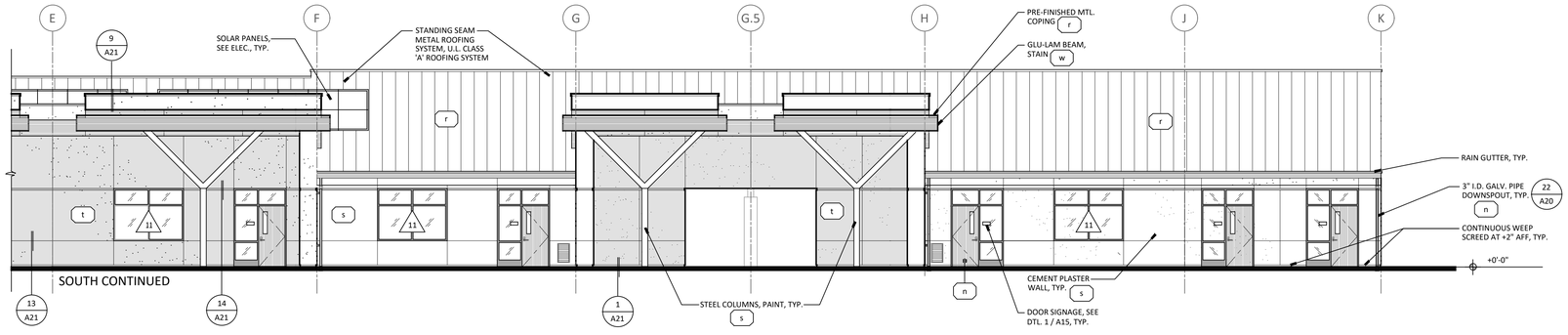
FILE # 10-28 | APPLICATION # 02-122658

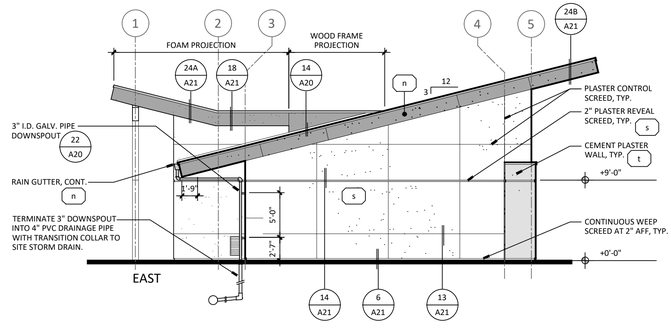
IDENTIFICATION STAMP
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DATE: 03/03/2025

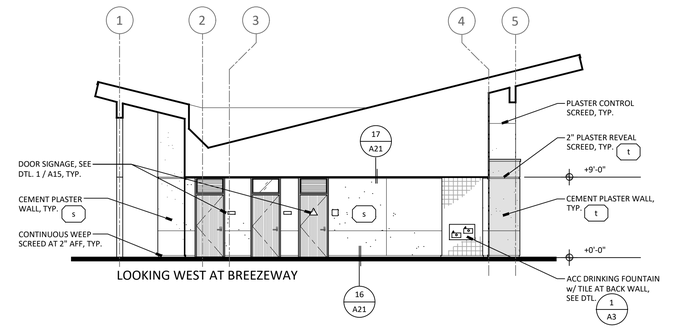
LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34280
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024









EXTERIOR ELEVATIONS

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

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

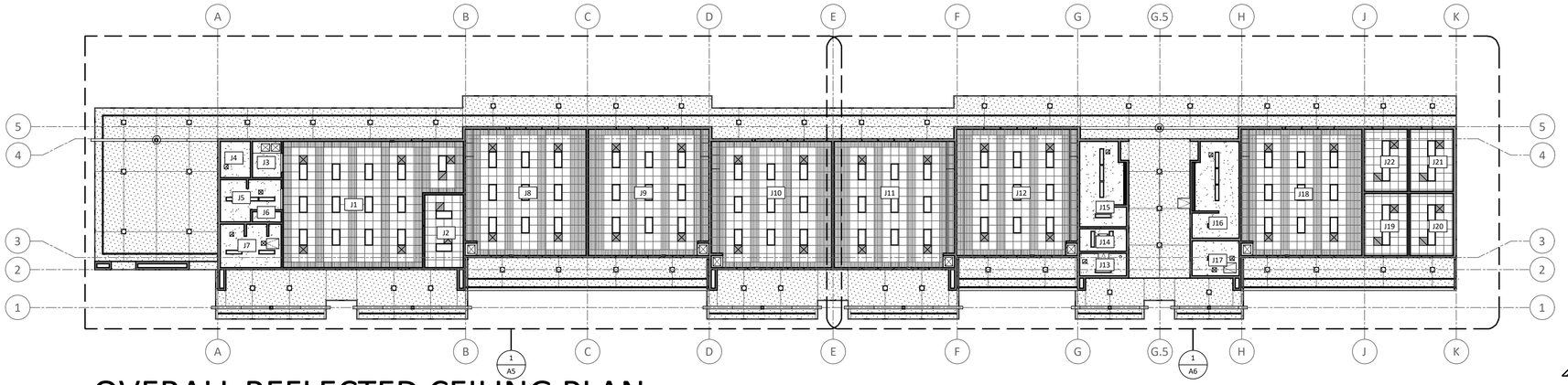
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TITLE
EXTERIOR ELEVATIONS

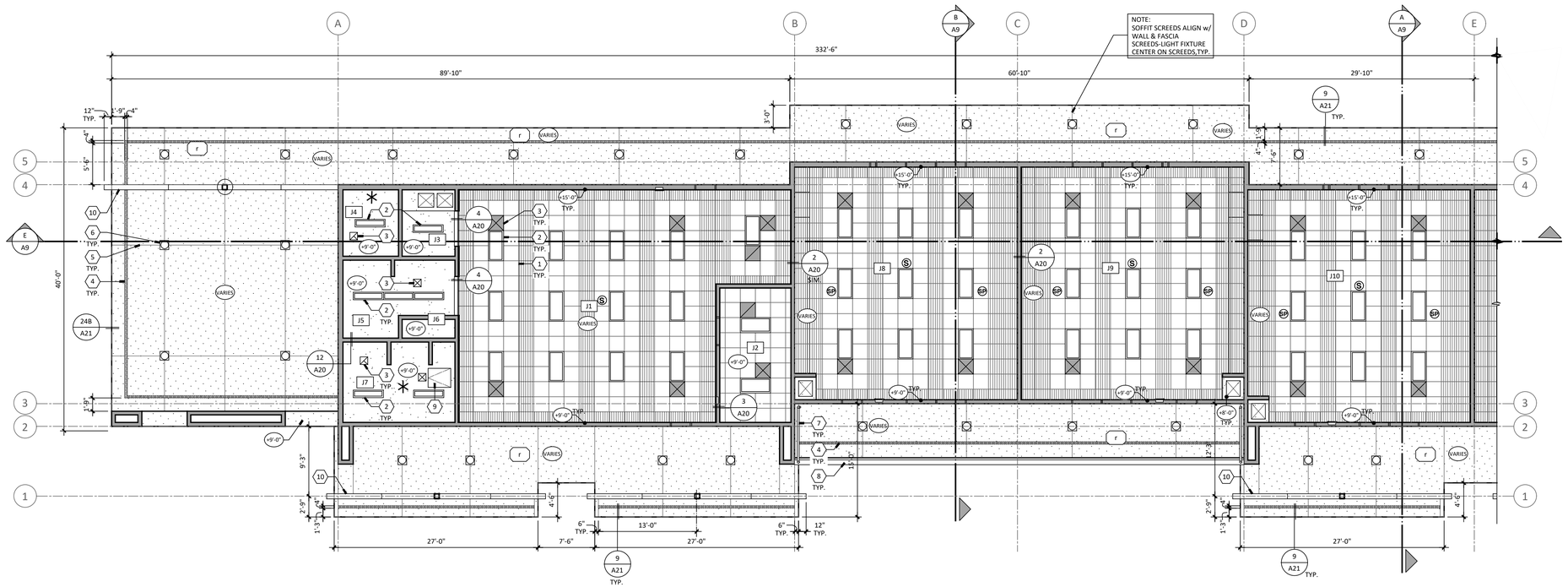
A4

PROJECT 24001



OVERALL REFLECTED CEILING PLAN

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



REFLECTED CEILING PLAN KEYNOTES

1. SUSPENDED ACOUSTICAL CEILING SYSTEM GRID AND PANELS, SEE DETAIL 6 / A19 AND SECTIONS FOR CEILING HEIGHTS
2. LIGHT FIXTURES AS SHOWN, SEE ELECTRICAL DWGS
3. MECH. REGISTER AS SHOWN, SEE MECHANICAL DWGS, TYP.
4. CONTINUOUS 4" SOFFIT VENT, SEE DETAIL 9 / A21
5. CEMENT PLASTER CRACK CONTROL JOINT (13 / A21) SIM.
6. RECESSED SOFFIT LIGHT FIXTURE, SEE ELEC. DWGS.
7. 3"Ø GALV. PIPE D.S. ANCHOR TO SOFFIT & WALL
8. PRE-FINISHED 6" METAL GUTTER SYSTEM, SEE DTL. (4 / A21)
9. 2'-6" x 3'-0" ATTIC ACCESS, SEE (19 / A20)
10. GLU-LAM BEAM, SEE STRUCTURAL

REFLECTED CEILING PLAN LEGEND

- CEMENT PLASTER SOFFIT SYSTEM, SEE (13 / A19)
- TAPED, TEXTURED AND PAINTED 5/8" THICK GYP. BD. CEILING
- 24" x 24" SUSP. LAY-IN CEILING SYSTEM (6 / A19)
- 24" x 24" SUSP. LAY-IN CEILING SYSTEM, SCORED ACOUSTICAL TILES (6 / A19)
- "X'-X" — ELEVATION ABOVE FINISH FLOOR LEVEL
- # — FINISH TAG, SEE FINISH SCHEDULE A13
- (S) — INDICATES SPEAKER, COORDINATE LOCATIONS w/ ELECTRICAL DRAWINGS
- (SP) — INDICATES FIRE ALARM SPEAKER, COORDINATE LOCATIONS w/ ELECTRICAL DRAWINGS.
- * — ASTERISK INDICATES 3 ½" TYPE 'C' SOUND INSULATION BATTS ABOVE CEILING, TYPICAL

north

1 REFLECTED CEILING PLAN

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

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APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

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TITLE
OVERALL REFLECTED CEILING PLAN
REFLECTED CEILING PLAN

A5

PROJECT 24001

APPROVALS
FILE # 10-28
APPLICATION # 02-122658

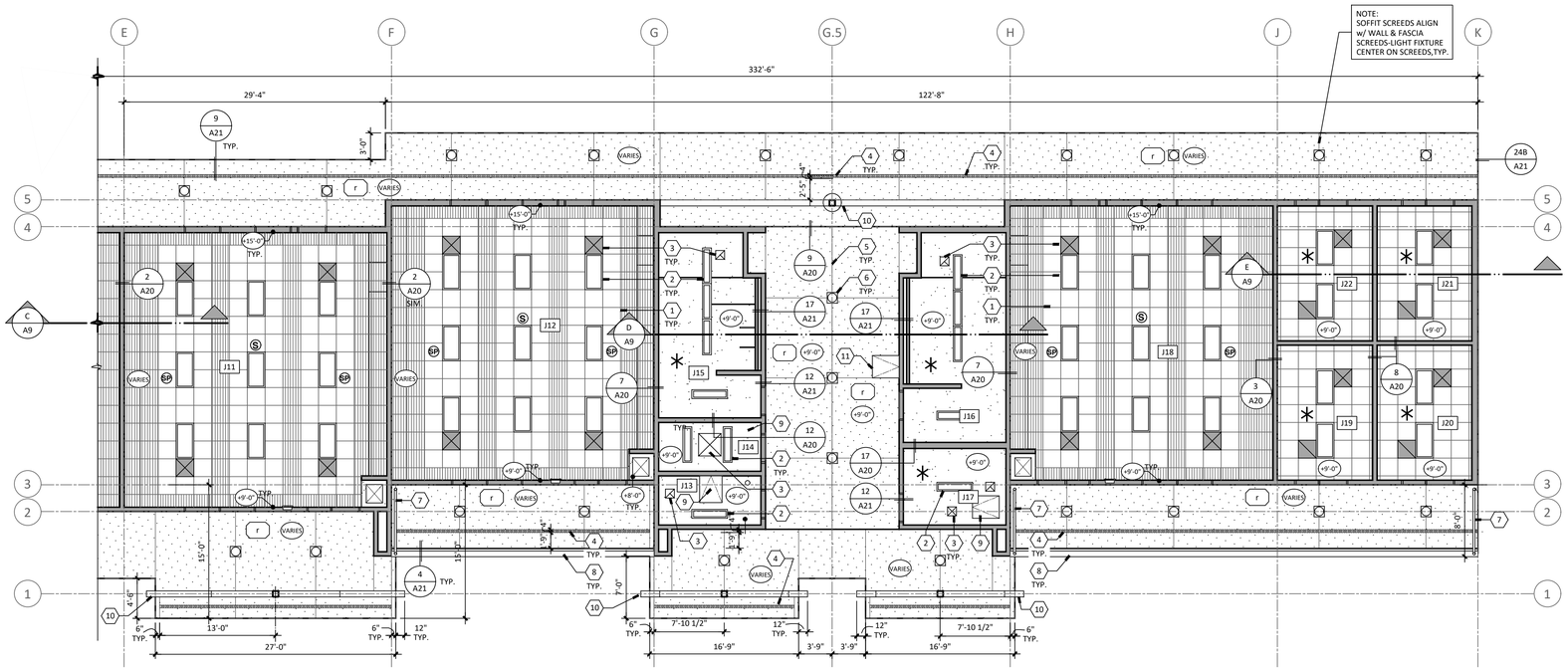
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985 SUNSET AVENUE, COALINGA, CA, 93210



REFLECTED CEILING PLAN KEYNOTES

1. SUSPENDED ACOUSTICAL CEILING SYSTEM GRID AND PANELS, SEE DETAIL 6 / A19 AND SECTIONS FOR CEILING HEIGHTS
2. LIGHT FIXTURES AS SHOWN, SEE ELECTRICAL DWGs
3. MECH. REGISTER AS SHOWN, SEE MECHANICAL DWGs, TYP.
4. CONTINUOUS 4" SOFFIT VENT, SEE DETAIL 9 / A21
5. CEMENT PLASTER CRACK CONTROL JOINT (13 / A21) SIM.
6. RECESSED SOFFIT LIGHT FIXTURE, SEE ELEC. DWGS.
7. 3"Ø GALV. PIPE D.S. ANCHOR TO SOFFIT & WALL
8. PRE-FINISHED 6" METAL GUTTER SYSTEM, SEE DTL. (4 / A21)
9. 2'-6" x 3'-0" ATTIC ACCESS, SEE (19 / A20)
10. GLU-LAM BEAM, SEE STRUCTURAL
11. 2'-6" x 3'-0" SOFFIT & ROOF ACCESS, SEE (25 / A20)

REFLECTED CEILING PLAN LEGEND

- CEMENT PLASTER SOFFIT SYSTEM, SEE (13 / A19)
- TAPED, TEXTURED AND PAINTED 5/8" THICK GYP. BD. CEILING
- 24" x 24" SUSP. LAY-IN CEILING SYSTEM (6 / A19)
- 24" x 24" SUSP. LAY-IN CEILING SYSTEM, SCORED ACOUSTICAL TILES (6 / A19)
- (+X'-X") ELEVATION ABOVE FINISH FLOOR LEVEL
- (#) FINISH TAG, SEE FINISH SCHEDULE A13
- (S) INDICATES SPEAKER, COORDINATE LOCATIONS w/ ELECTRICAL DRAWINGS
- (SP) INDICATES FIRE ALARM SPEAKER, COORDINATE LOCATIONS w/ ELECTRICAL DRAWINGS.
- ASTERISK INDICATES 3 ½" TYPE 'C' SOUND INSULATION BATTS ABOVE CEILING, TYPICAL

north

1 REFLECTED CEILING PLAN

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

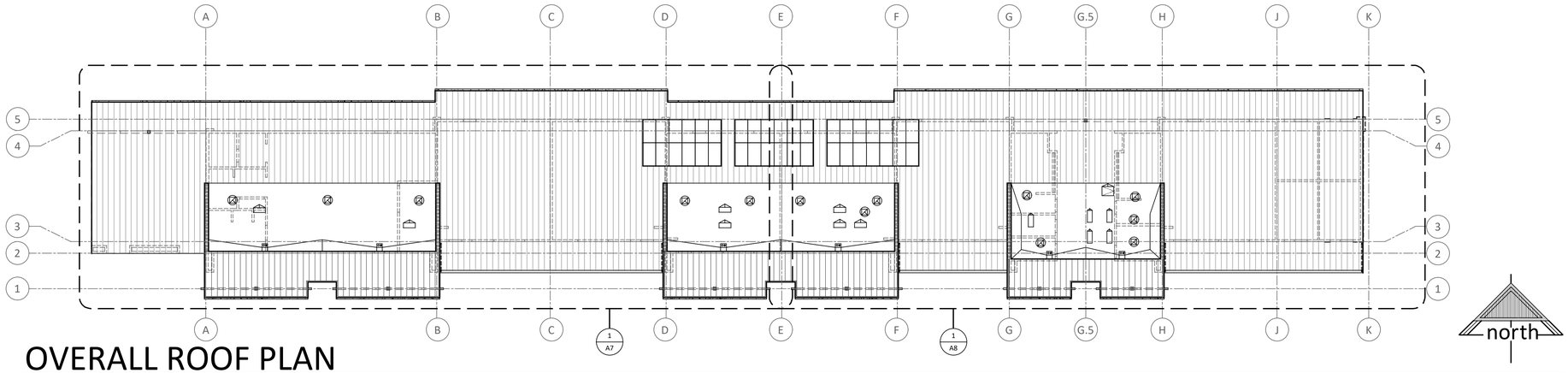
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TITLE
REFLECTED CEILING PLAN

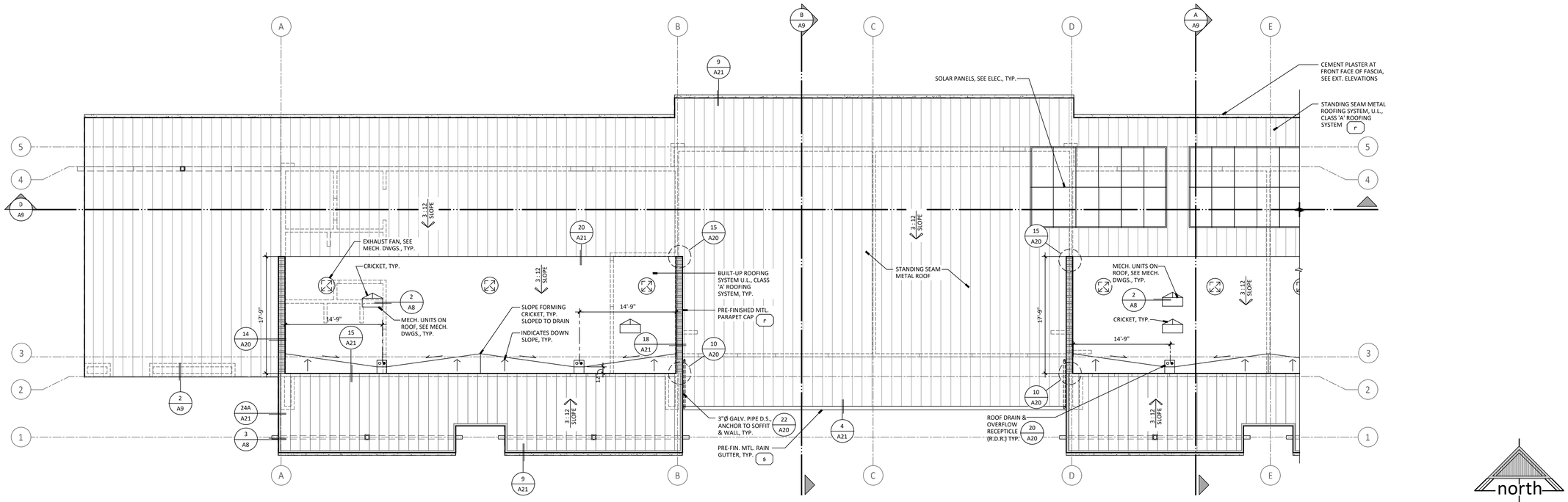
A6

PROJECT 24001



OVERALL ROOF PLAN

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



1 ROOF PLAN

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

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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DATE: JULY 31, 2024

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TITLE
OVERALL ROOF PLAN, ROOF PLAN

A7

PROJECT 24001

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APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34299
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

PROFILE DRAWINGS

DETAIL A

32", 36", or 18"

R-MER SPAN ROOF PANELS

STANDING SEAM MTL. PANEL: 18" WIDE, 22 GA. STEEL.

ANCHOR CLIP: ONE-PIECE, STANDARD PANEL CLIP w/ (2) #12 x 1" LONG PANCAKE HEAD SCREWS. SPACE CLIP AT 24" O.C. ALONG EA. PANEL SEAM, TYP.

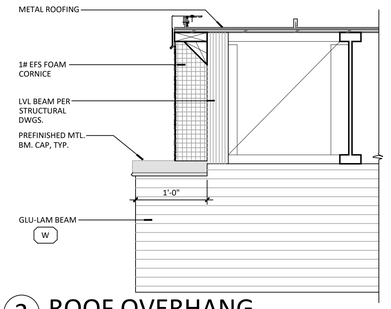
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Expiration Date: 09/13/27
Approval Date: 09/01/22
Page 4 of 5

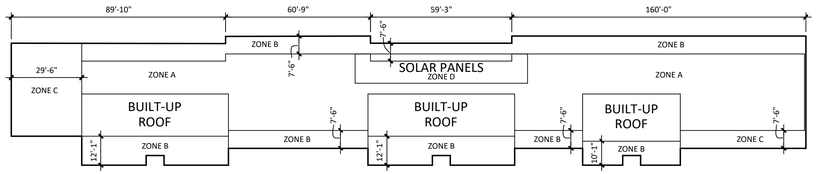
ZONE	STRENGTH LEVEL	CLIP SPACING
A	28.0 PSF	24" O.C.
B	33.7 PSF	24" O.C.
C	58.3 PSF	24" O.C.
D	SOLAR	12" O.C.

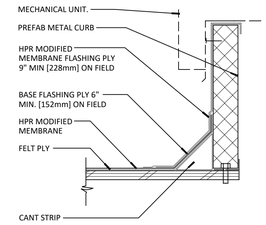
EACH CLIP IS TO BE FASTENED TO ROOF SHEATHING w/ (2) #12 x 1" LONG PANCAKE HEAD SCREWS. ALL CLIPS ARE 16 GA. STD. CLIPS.

4 METAL ROOF PANEL
SCALE: N.T.S.

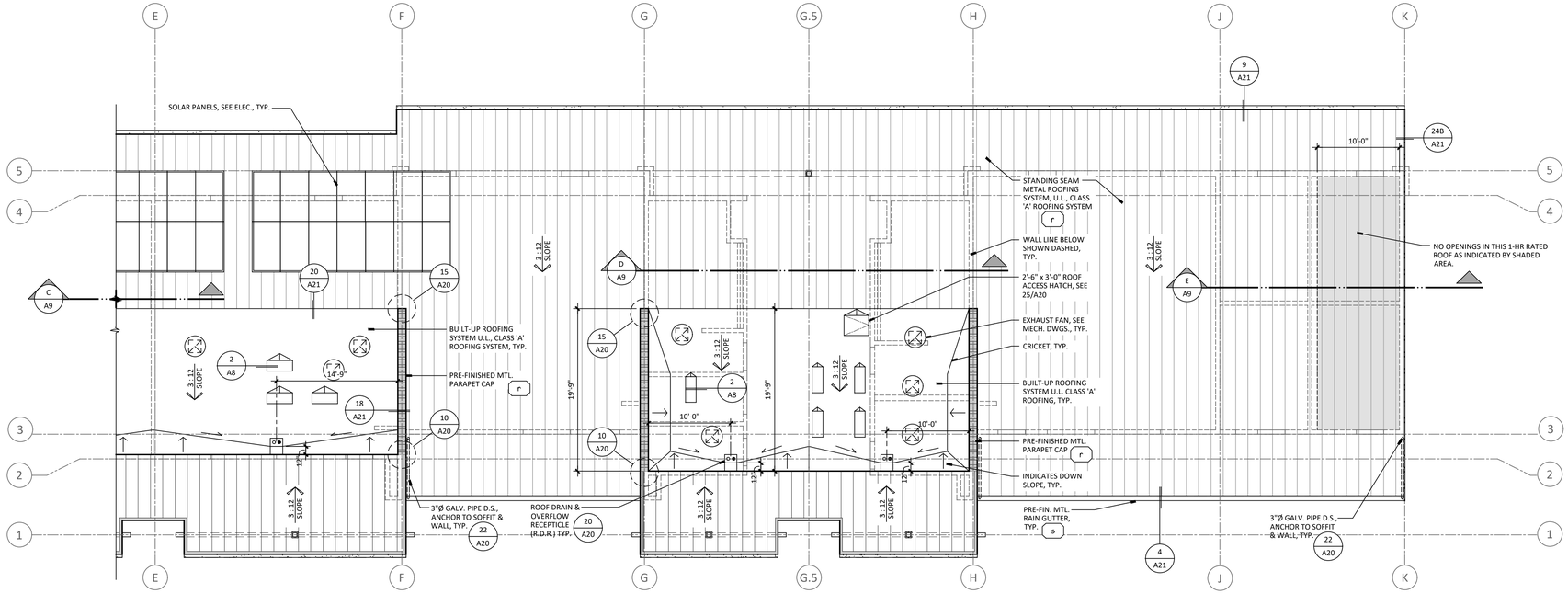


3 ROOF OVERHANG
SCALE: 1" = 1'-0"





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



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

north

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
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985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

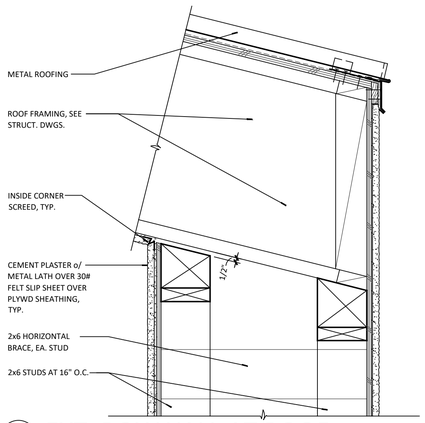
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TITLE
ROOF PLAN

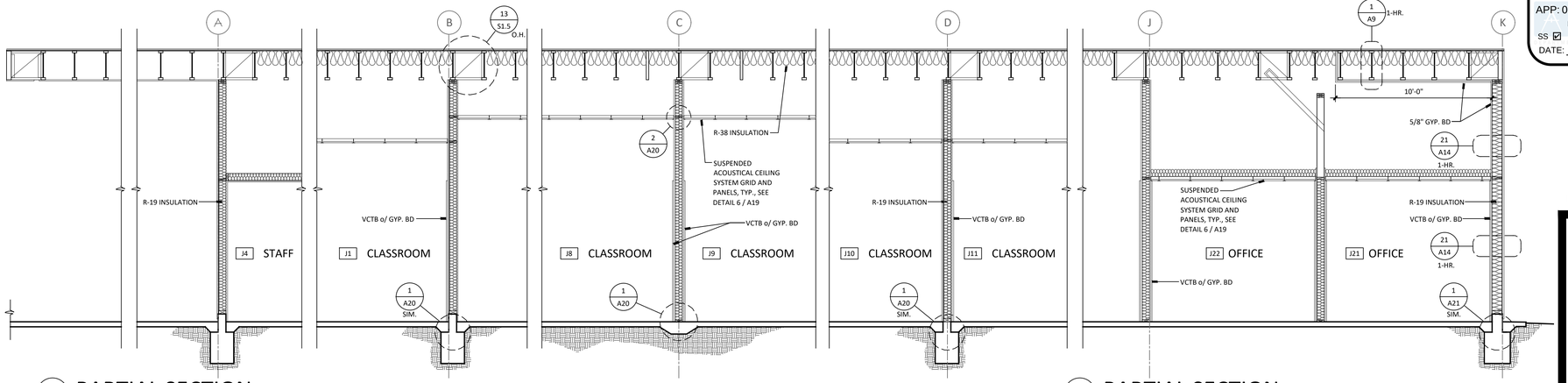
A8

PROJECT 24001

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2 EXT. BOX WALL AT ROOF
SCALE: 1 1/2" = 1'-0"



D PARTIAL SECTION
SCALE: 1/4" = 1'-0"

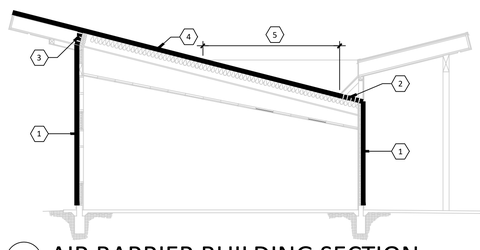
E PARTIAL SECTION
SCALE: 1/4" = 1'-0"

AIR BARRIER KEYNOTES:

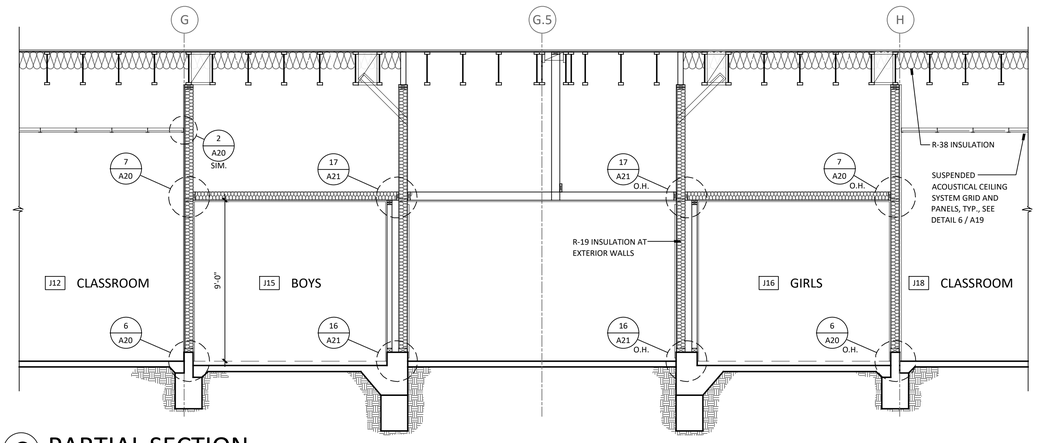
1. PLASTER & PLYWOOD AS AIR BARRIER WHERE SHOWN
2. PLYWOOD AS AIR BARRIER WHERE SHOWN
3. SOLID WOOD FRAMING / BLOCKING, SEALED TO COMPLETE AIR BARRIER
4. STANDING SEAM METAL ROOFING UNDERLAYMENT
5. BUILT-UP ROOFING AS AIR BARRIER WHERE SHOWN

AIR BARRIER NOTES:

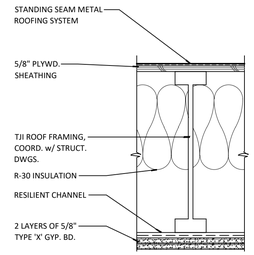
1. BRIDGE AND SEAL AIR LEAKAGE PATHWAYS AND GAPS, INCLUDING, BUT NOT LIMITED TO:
   -CONNECTIONS OF THE WALLS TO THE ROOF AIR BARRIER
   -CONNECTIONS OF THE WALLS TO THE FOUNDATIONS
   -SEISMIC AND EXPANSION JOINTS
   -OPENINGS AND PENETRATIONS OF WINDOW AND DOOR FRAMES, STORE FRONT, CURTAIN WALL
   -PIPING, CONDUIT, DUCT, AND SIMILAR PENETRATIONS
   -MASONRY TIES, SCREWS, BOLTS, AND SIMILAR PENETRATIONS
   -FLASHING AND SHEET METAL ASSEMBLIES
   -ALL OTHER AIR LEAKAGE PATHWAYS IN THE BUILDING ENVELOPE
2. REFER TO 07 2700 AIR BARRIER SYSTEM FOR ADDITIONAL REQUIREMENTS



F AIR BARRIER BUILDING SECTION
SCALE: 1/8" = 1'-0"



C PARTIAL SECTION
SCALE: 1/4" = 1'-0"



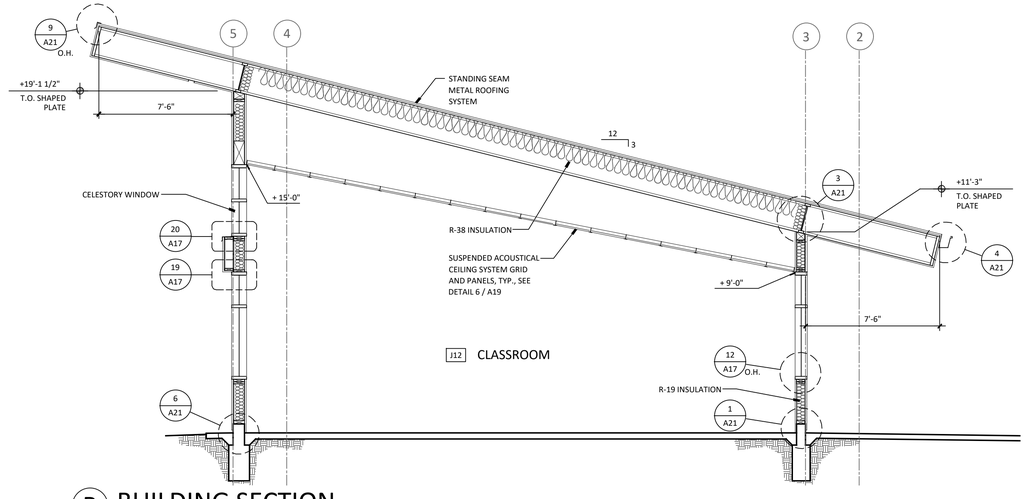
1 1-HR. RATED ROOF ASSEMBLY
SCALE: 1 1/2" = 1'-0"

1-HOUR FIRE RATED
GYPSUM ASSOCIATION
FIRE RESISTANCE DESIGN MANUAL
GA FILE NO. FC 5503.3
"WOOD I-JOISTS, GYPSUM WALLBOARD, RESILIENT CHANNELS"

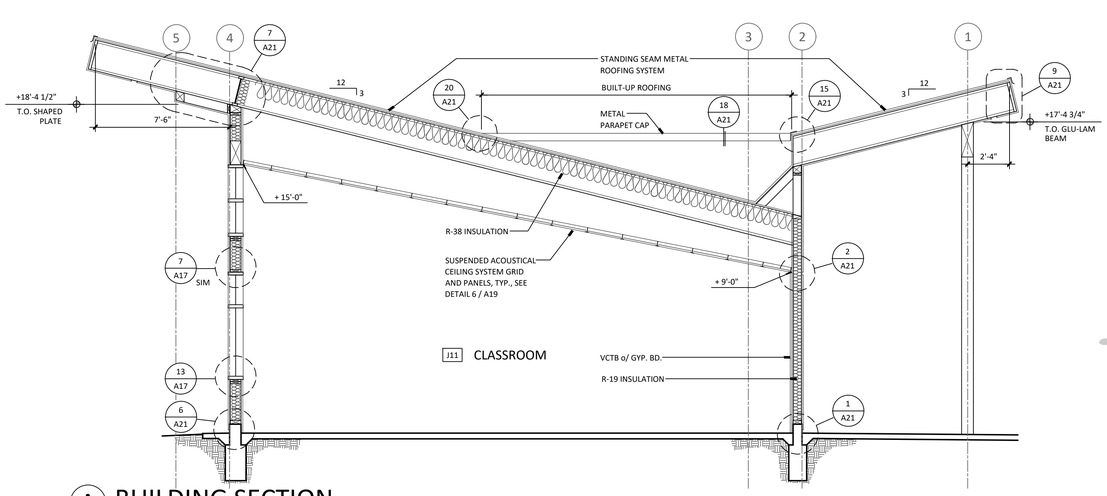
FIRE DESIGN:
BASE LAYER 5/8" TYPE X GYPSUM WALLBOARD OR GYPSUM VENEER BASE APPLIED AT RIGHT ANGLES TO RESILIENT CHANNELS SPACED 12" O.C. WITH 1" TYPE S SCREWS SPACED 8" O.C. AT END JOINTS AND 16" O.C. IN THE FIELD OF THE PANEL. RESILIENT CHANNELS APPLIED AT RIGHT ANGLES TO A MINIMUM 9 1/2" DEEP PROPRIETARY WOOD I-JOISTS SPACED 24" O.C. WITH 1-3/4" TYPE W SCREWS. 3-1/2" GLASS FIBER INSULATION SECURED TO SUBFLOORING WITH STAPLES OR WOOD JOISTS WITH STEEL WIRES. FACE LAYER 5/8" TYPE X GYPSUM VENEER BASE APPLIED AT RIGHT ANGLES TO RESILIENT CHANNELS WITH 1-5/8" TYPE S SCREW 8" O.C. AND 1-1/2" TYPE G SCREWS 8" O.C. AT BUTT JOINTS LOCATE MIDSPAN BETWEEN RESILIENT CHANNELS

PROPRIETARY GYPSUM BOARD:
GEORGIA-PACIFIC GYPSUM LLC
5/8" TOUGHROCK® FIREGUARD C® GYPSUM BOARD

CEILING PROVIDES ONE HOUR FIRE RESISTANCE PROTECTION FOR I-JOISTS



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



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

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34200
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

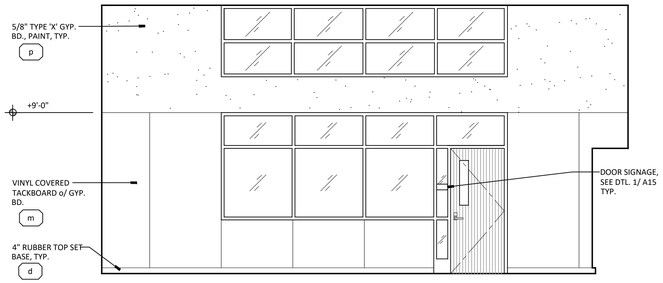
REVISIONS

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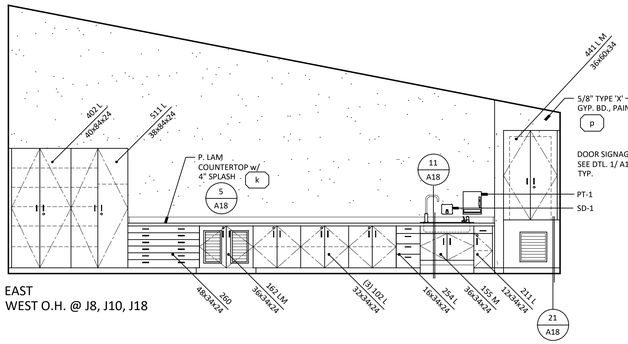
TITLE
SECTIONS

A9

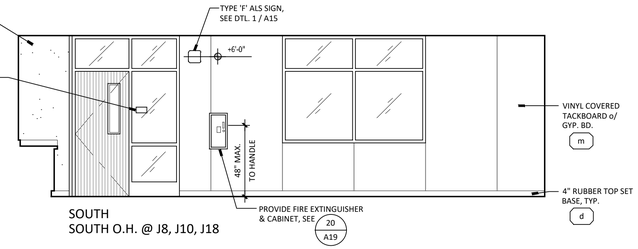
PROJECT 24001



NORTH
NORTH O.H. @ J8, J10, J18

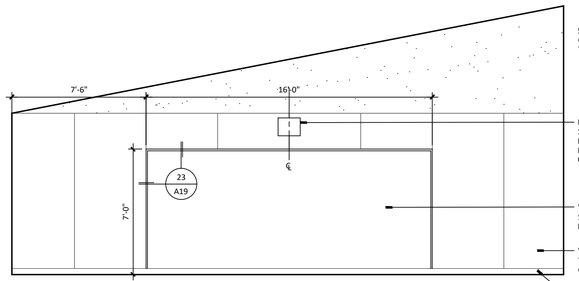


EAST
WEST O.H. @ J8, J10, J18

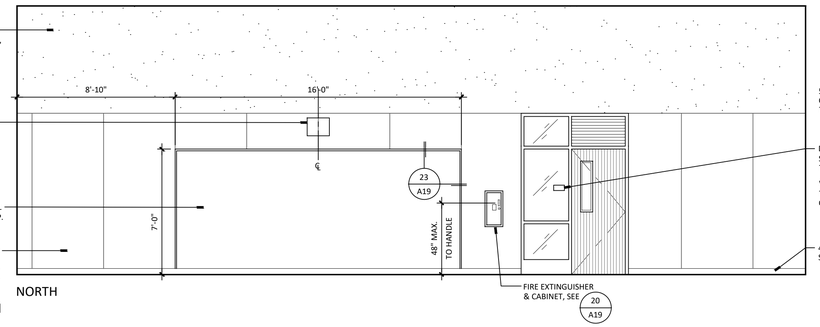


SOUTH
SOUTH O.H. @ J8, J10, J18

J9 TYP. CLASSROOM J11, 12

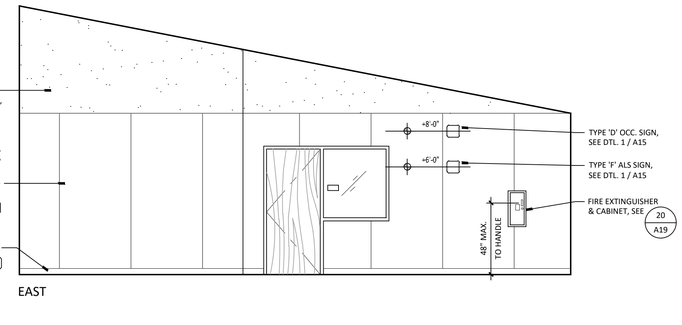


WEST
EAST O.H. J8, J10, J18



NORTH

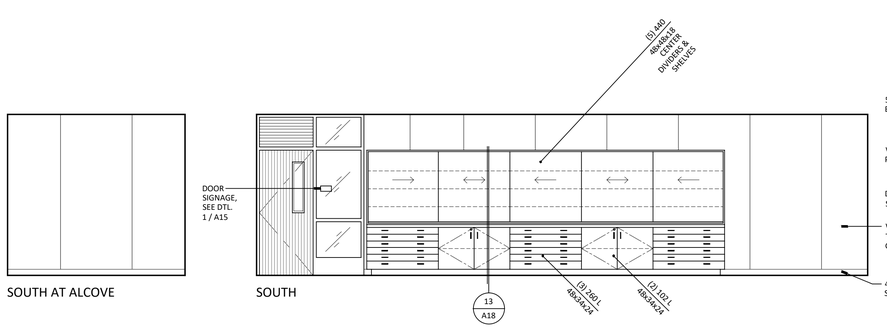
J1 SPECIAL ED CLASSROOM



EAST

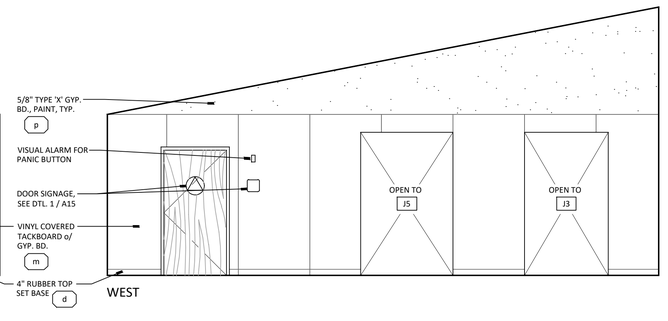
INTERIOR ELEVATION NOTES

1. (x) MATERIAL DEFINITION. REFER TO SHEET A13
2. REFER TO FINISH SCHEDULE SHEET A13 FOR DESIGNATION OF FINISHES.
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7. FOR ACCESSIBLE LAV., SEE DETAIL 19 / A19
8. SEE 1 / A15 AND DOOR SCHEDULE FOR TYPICAL DOOR SIGNAGE.
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11. SEE 18 / A17 FOR VCTB EDGE TRIM AT RUBBER BASE
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14. ANY ACCESSORIES SHOWN N.I.C. SHALL BE PROVIDED BY THE OWNER. CONTRACTOR TO PROVIDE BLOCKING PER 6 / A18, AT LOCATION SHOWN AND INSTALLATION OF ACCESSORIES.



SOUTH AT ALCOVE

SOUTH



WEST

J1 SPECIAL ED CLASSROOM

INTERIOR ELEVATIONS

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

F:\01 Projects\24001\Drawings\01 Architectural\03 Sheets\24001_A10-A12 Interior Elevations.dwg Jan 08 2025 3:24pm

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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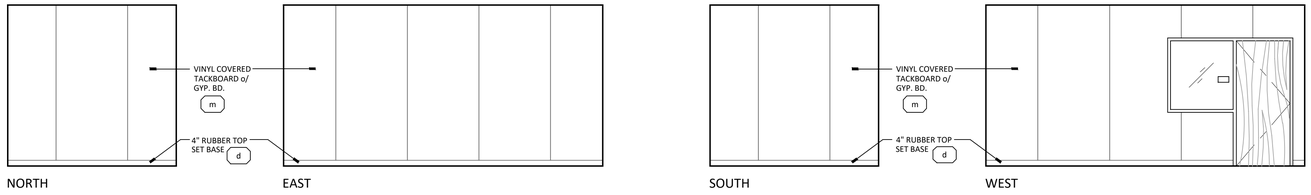
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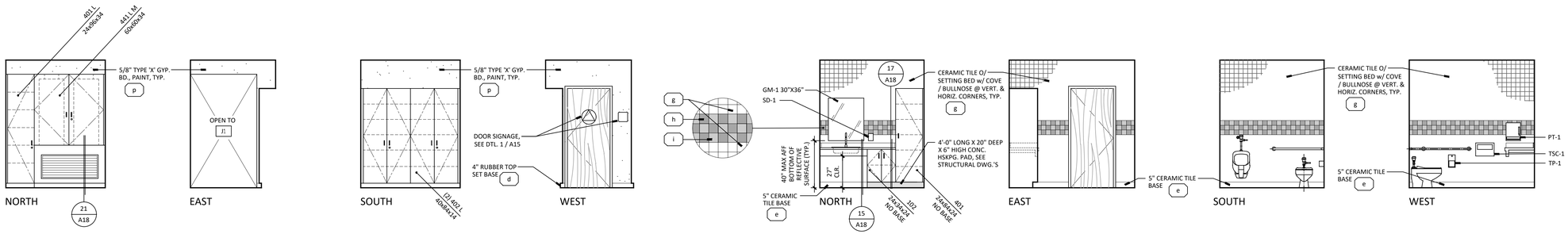
TITLE
INTERIOR ELEVATIONS

A10

PROJECT 24001



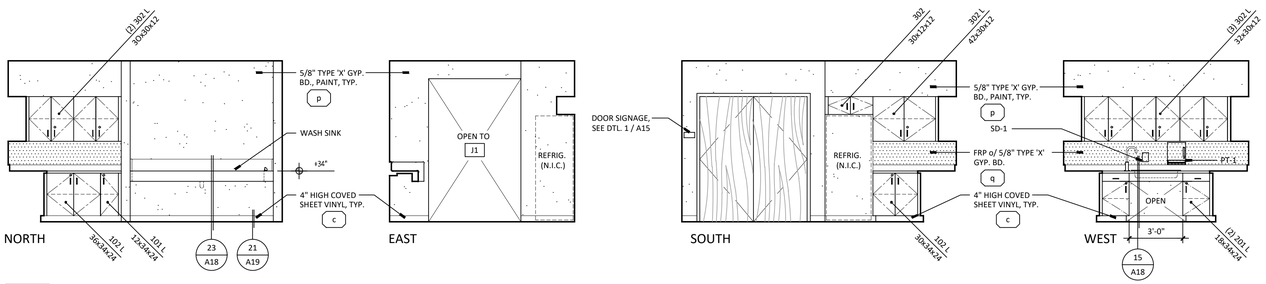
J2 OFFICE



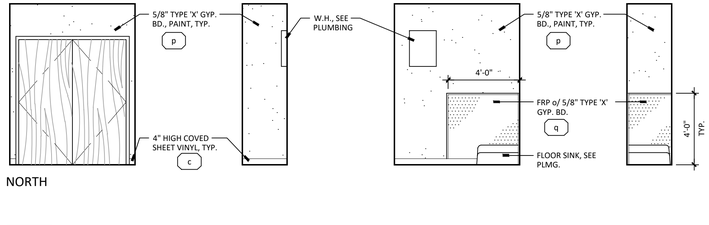
J3 ALCOVE

J4 STAFF

REFER TO 16/A19 FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.



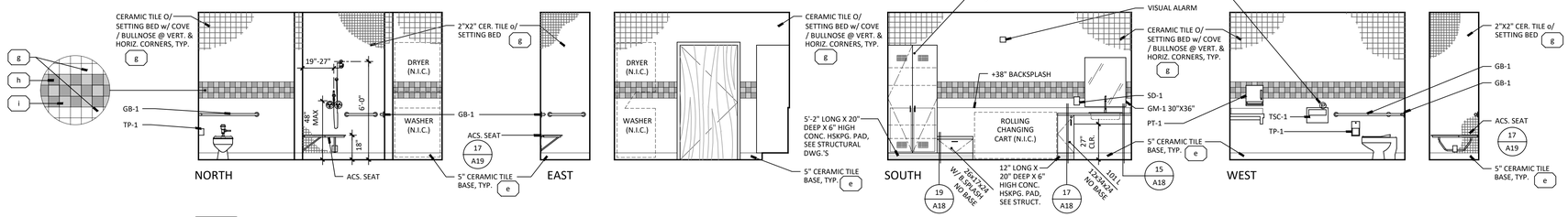
J5 WET AREA



J6 CLOSET

INTERIOR ELEVATION NOTES

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J7 STUDENT TOILET

REFER TO 16/A19 FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.

INTERIOR ELEVATIONS

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

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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LICENSED ARCHITECT
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No. C-34299
REN. 05-31-25
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DATE: JULY 31, 2024

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REVISIONS

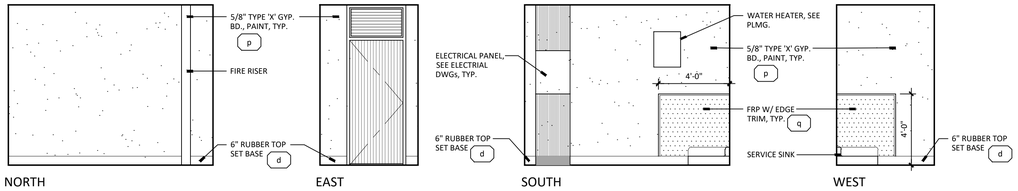
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TITLE
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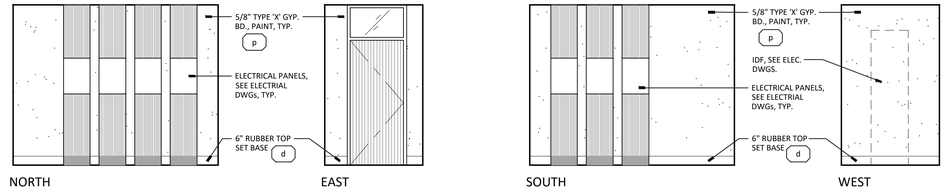
A11

PROJECT 24001

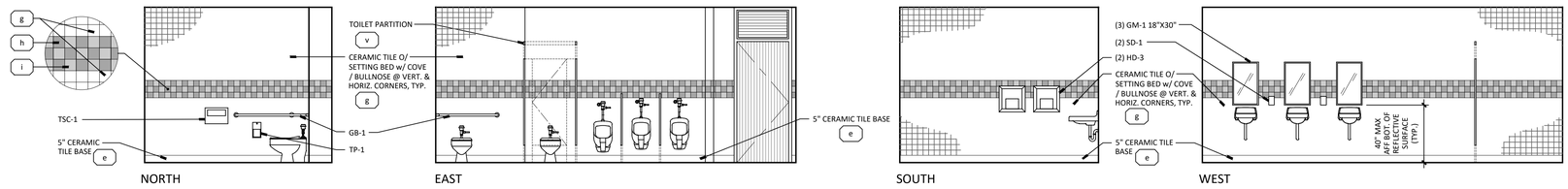
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J13 JANITOR

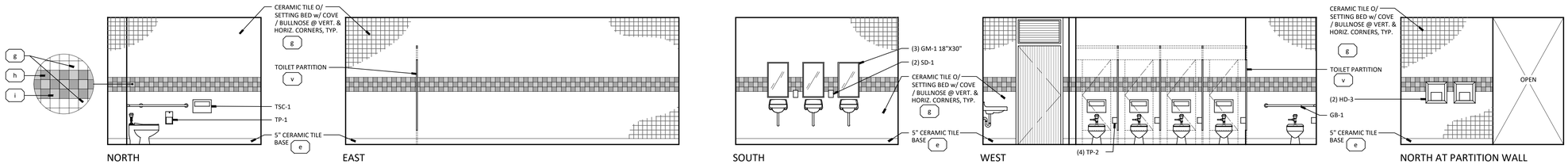


J14 ELECTRICAL ROOM



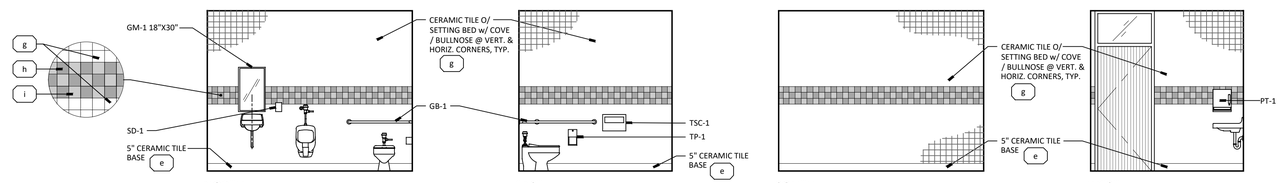
J15 BOYS

REFER TO 16/A19 FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.



J16 GIRLS

REFER TO 16/A19 FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.

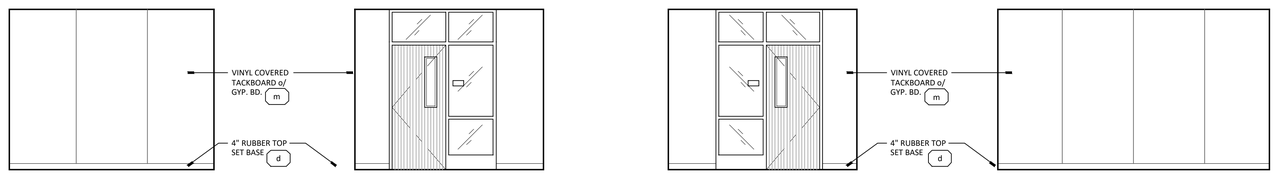


J17 STAFF

REFER TO 16/A19 FOR TYPICAL ACCESSIBLE MOUNTING HEIGHTS AND REQUIREMENTS U.O.N.

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J19 TYP. OFFICE

INTERIOR ELEVATIONS

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

F:\01 Projects\24001\Drawings\01 Architectural\03 Sheets\24001_A10-A12 Interior Elevations.dwg Jan 08 2025 3:25pm

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

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TITLE
INTERIOR ELEVATIONS

A12

PROJECT 24001

INTERIOR ROOM FINISH SCHEDULE

BLDG.		ROOM NUMBER & NAME	FLOOR		BASE		WAINSCOT		WALLS NORTH	WALLS EAST	WALLS SOUTH	WALLS WEST	CEILING MAT'L.	CEILING HEIGHT	SOFFIT MAT'L.	SOFFIT HEIGHT	REMARKS:	COUNTER TOPS		MILLWORK LOWER		MILLWORK UPPER		ALTERNATES
NEW BUILDING WING 'J'	J1	SP. ED. CLASSROOM	12	c	20	d			41/42 p/m	41/42 p/m	41/42 p/m	41/42 p/m	50	VARIES				60	k	70	j			
	J2	OFFICE	12	c	20	d			42 m	42 m	42 m	42 m	50	9'-0"										
	J3	ALCOVE	12	c	20	d			41 p	41 p	41 p	41 p	52	9'-0"						70	j			
	J4	STAFF	13	f	23	e			43 g h i	43 g h i	43 g h i	43 g h i	52	9'-0"			* SEE TILE PATTERN ON INTERIOR ELEVATION	60	k	70	j			
	J5	WET AREA	12	c	22	c			41/45 p/q	41 p	41/45 p/q	41/45 p/q	52	9'-0"				60	k	70	j	70	j	
	J6	CLOSET	12	-	22	c	30	q	41 p	41 p	41 p	41 p	52	9'-0"										
	J7	STUDENT TOILET	13	f	23	e			43/44 g h i	43/44 g h i	43/44 g h i	43/44 g h i	52	9'-0"			* SEE TILE PATTERN ON INTERIOR ELEVATION	60	k	70	j			
	J8	CLASSROOM	11	b	20	d			41/42 p/m	41/42 p/m	41/42 p/m	41 p	50	VARIES				60	k	70	j			
	J9	CLASSROOM	11	b	20	d			41/42 p/m	41 p	41/42 p/m	41/42 p/m	50	VARIES				60	k	70	j			
	J10	CLASSROOM	11	b	20	d			41/42 p/m	41/42 p/m	41/42 p/m	41 p	50	VARIES				60	k	70	j			
	J11	CLASSROOM	11	b	20	d			41/42 p/m	41 p	41/42 p/m	41/42 p/m	50	VARIES				60	k	70	j			
	J12	CLASSROOM	11	b	20	d			41/42 p/m	41 p	41/42 p/m	41/42 p/m	50	VARIES				60	k	70	j			
	J13	JANITOR	10	-	21	d	30	q	41 p	41 p	41 p	41 p	52	9'-0"										
	J14	ELECTRICAL	10	-	21	d			41 p	41 p	41 p	41 p	52	9'-0"										
	J15	BOYS	13	f	23	e			43 g h i	43 g h i	43 g h i	43 g h i	52	9'-0"			* SEE TILE PATTERN ON INTERIOR ELEVATION							
	J16	GIRLS	13	f	23	e			43 g h i	43 g h i	43 g h i	43 g h i	52	9'-0"			* SEE TILE PATTERN ON INTERIOR ELEVATION							
	J17	STAFF	13	f	23	e			43 g h i	43 g h i	43 g h i	43 g h i	52	9'-0"			* SEE TILE PATTERN ON INTERIOR ELEVATION							
	J18	CLASSROOM	11	b	20	d			41/42 p/m	41/42 p/m	41/42 p/m	41 p	50	VARIES				60	k	70	j			
	J19	OFFICE	11	b	20	d			42 m	42 m	42 m	42 m	50	9'-0"										
	J20	OFFICE	11	b	20	d			42 m	42 m	42 m	42 m	50	9'-0"										
	J21	OFFICE	11	b	20	d			42 m	42 m	42 m	42 m	50	9'-0"										
	J22	OFFICE	11	b	20	d			42 m	42 m	42 m	42 m	50	9'-0"										

MATERIALS

FLOOR

10 CONCRETE, SEALED
11 CARPET
12 SHEET VINYL
13 2" SQ. CERAMIC MOSAIC TILE

BASE

20 4" RUBBER TOPSET
21 6" RUBBER TOPSET
22 4" COVED SHEET VINYL
23 5" H. 2"x2" CERAMIC MOSAIC TILE

WAINSCOT

30 FIBERGLASS REINFORCED PANELING OVER GYPSUM BOARD

WALLS

41 SEMI-GLOSS ENAMEL OVER GYPSUM BOARD
42 VINYL COVERED TACKBOARD PANELS o/ GYP. BOARD
43 4 1/4" x 4 1/4" GLAZED CERAMIC TILE
44 2"x2" GLAZED CERAMIC TILE
45 FIBERGLASS REINFORCED PANELING (FRP) o/ GYP. BOARD (WATER RESIST. WHERE OCCURS)

CEILINGS

50 2'x4' LAY-IN ACOUSTICAL TILE
52 SEMI-GLOSS ENAMEL OVER GYP. BOARD

COUNTER TOPS

60 PLASTIC LAMINATE

MILLWORK

70 PLASTIC LAMINATE

GENERAL NOTES

1) REFER TO FLOOR PLANS, INTERIOR ELEVATIONS AND REFLECTED CEILING PLANS FOR EXTENT OF FINISHES AND FOR CLARIFICATION OF MORE THAN ONE FINISH DESIGNATED IN A BOX. INDICATED ELSEWHERE IN DRAWINGS THUS : (#)
2) FOR TYPICAL GYP. BOARD EDGE AND CORNER DETAILS, SEE (14/A19)
3) FOR TYPICAL SUSPENDED CEILING DETAILS, SEE (6/A19)
4) FOR TYPICAL HANDICAP MOUNTING HEIGHTS, SEE PROVIDED DTL. (16/A19)
5) FOR TYPICAL CABINET ANCHORAGE, SEE (1/A18) (3/A18)
6) FOR TYPICAL COUNTERTOP, SEE (5/A18)
7) FOR CABINET LAYOUT, VERIFY DIMENSIONS IN FIELD. DIMENSIONS NOTED ON DRAWINGS ARE NORMAL - PROVIDE FILLERS @ END UNITS INCLUDING TOP OF CABINET AS REQUIRED FOR PROPER OPERATION AND CLOSING OF VOID SPACES.
8) CEILING HEIGHTS NOTED, ON THIS SCHEDULE, ARE FROM THE FLOOR BELOW IN THAT ROOM. THIS IS FOR THE PURPOSE OF ESTIMATING & DETERMINING INSTALLATION REQUIREMENTS.

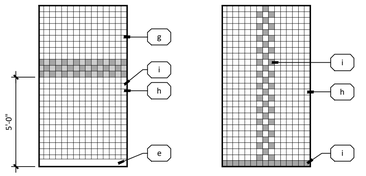
ALT. BID KEY NOTES

EXT. FINISH SCHEDULE

WINDOW & DOOR FRAME (o)
HOLLOW METAL DOOR (n)
METAL ROOFING (r)
METAL ROOFING TRIM (r)
DOWNSPOUTS (s)
METAL GUTTER (s)

FINISHES/ COLORS

a REFER TO SPECIFICATIONS FOR MATERIAL / COLOR DESIGNATION
b 'SHAW CONTRACT' CONSTELLATION TILE #59326-26610 LYRA, 24X24 TILE
c 'SHAW CONTRACT' VITALITY ONES #4375V-00240 METTLE - 6.5FT GOODS - WELDING ROD #184CA
d 'ROPPE' PINNACLE - TYPE TS #110 BROWN
e 'DAL TILE' KEYSTONE 2 x 2 BUILT UP BASE #MB5B - #D037 PEPPER WHITE w/ CUSTOM BUILD PRISM GROUT #10 ANTIQUE WHITE
f NOT USED
g 'DALE TILE' CLASSIC 4 X 4 #0147 PEPPER WHITE WITH CUSTOM BUILD. PRISM GROUT #381 BRIGHT WHITE
h 'DALE TILE' CLASSIC 4 X 4 #1097 ORANGE BURST WITH CUSTOM BUILD. PRISM GROUT #381 BRIGHT WHITE
i 'DALE TILE' 4 X 4 #K111 BLACK DT WITH CUSTOM BUILD. PRISM GROUT #381 BRIGHT WHITE
j 'WILSONART' # 10734-60 LIMBER MAPLE
k 'WILSONART' #4674-60 EVENING TIGRIS
m 'KOROSEAL' CHATFILD CLARKE - SPELLBOUND - KASPER
n 'GLIDDEN' #4216-0400L HUSKY BRONZE
o 'GLIDDEN' #4216-0500L IRON GATE
p 'GLIDDEN' TO MATCH DUNN EDWARDS COLOR #DE6148 ANTIQUE LINEN
q 'GLASSBOARD' FRP #84 IBORY, CLASS C FIRE-RATED
r 'METAL SALES' KYNAR #W72 TERRA COTTA
s 'GLIDDEN' #2250-0110 ORIENTAL IVORY
t 'GLIDDEN' #2240-0300 HUSH PUPPY
u 'KOROSEAL' - WALLTALKERS #JR60-JUST-RITE 59"/60" WIDTH, 21 OZ. - *REQUIRES HIGH LEVEL FINISH 5 FOR INTSALL
v 'BOBRICK' SIERRA SERIES SCRC-SC02 DESERT BEIGE
w SHERWIN WILLIAMS EXTERIOR WOOD STAIN - #SW 3524 CHESTNUT OR EQUAL



TYPICAL TILE PATTERN

TYPICAL DRINKING FOUNTAIN PATTERN

APPROVALS
FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34280
REN: 05-31-25
STATE OF CALIFORNIA
DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
FINISH SCHEDULE

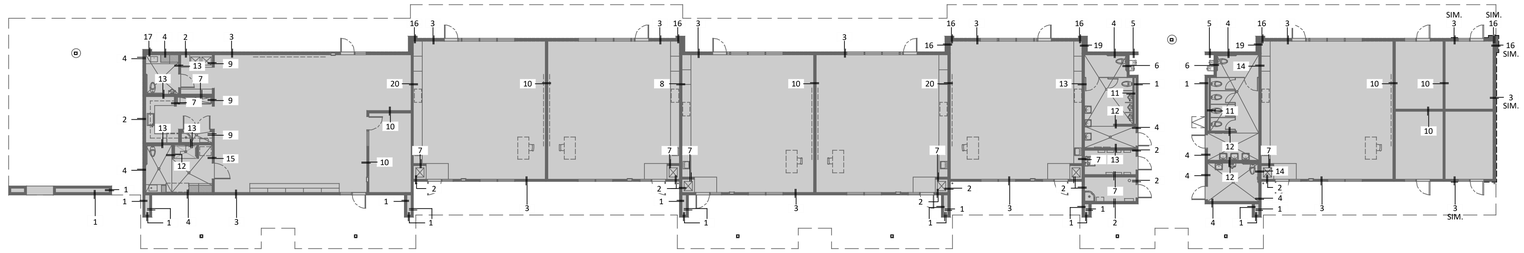
A13

PROJECT 24001

APPROVALS
FILE # 10-28
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA
DATE: JULY 31, 2024

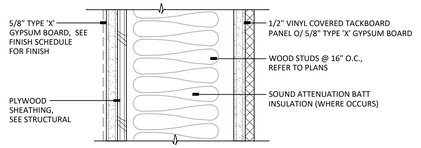


LEGEND

##—— WALL ASSEMBLY DETAIL ON THIS PAGE

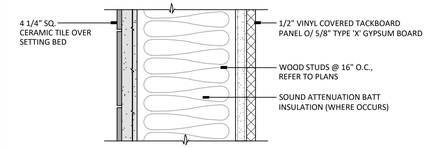
WALL ASSEMBLY KEY PLAN

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



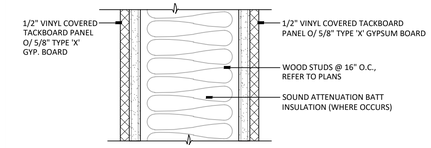
20 WALL ASSEMBLY

SCALE: 3" = 1'-0"



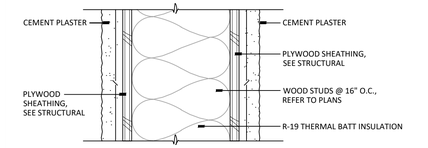
15 WALL ASSEMBLY

SCALE: 3" = 1'-0"



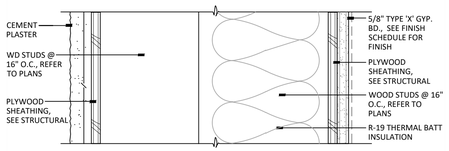
10 WALL ASSEMBLY

SCALE: 3" = 1'-0"



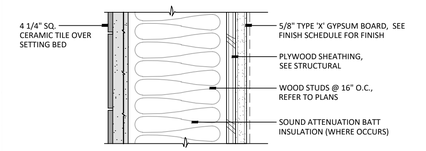
5 WALL ASSEMBLY

SCALE: 3" = 1'-0"



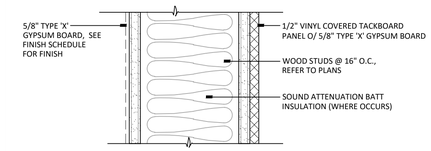
19 WALL ASSEMBLY

SCALE: 3" = 1'-0"



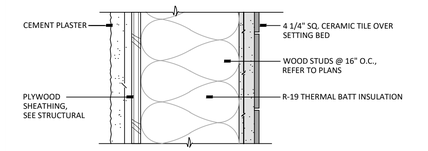
14 WALL ASSEMBLY

SCALE: 3" = 1'-0"



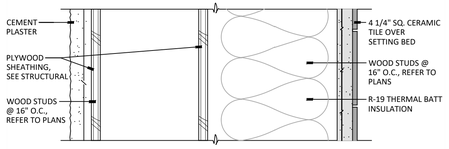
9 WALL ASSEMBLY

SCALE: 3" = 1'-0"



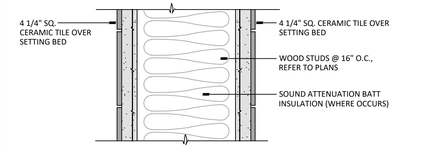
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SCALE: 3" = 1'-0"



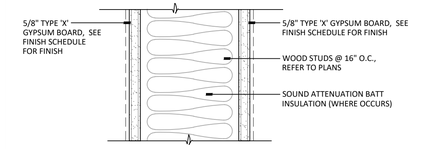
18 NOT USED

SCALE: NO SCALE



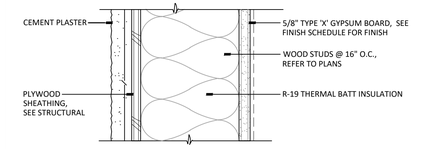
13 WALL ASSEMBLY

SCALE: 3" = 1'-0"



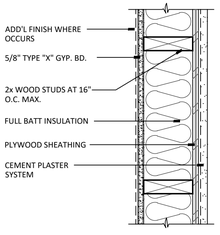
8 WALL ASSEMBLY

SCALE: 3" = 1'-0"



3 WALL ASSEMBLY

SCALE: 3" = 1'-0"



1 - HOUR RATED WALL

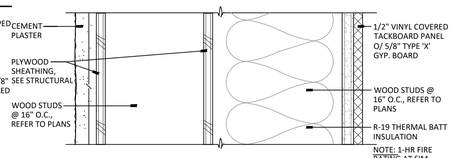
CBC TBLE 721.1(2): 15-1.3

WOOD STUDS : 2x AT 16" O.C. CROSS BRACED AT MID-HEIGHT AND FIRE- STOPPED AT TOP AND BOTTOM OF WALL.

7/8" CEMENT PLASTER ON THE EXTERIOR SURFACE WITH INTERIOR SURFACE TREATMENT AS GYPSUM WALLBOARD: 5/8" THICK, 4' WIDE, TYPE 'X' GYP. BD. INSTALLED VERTICALLY AND ATTACHED TO WOOD STUDS w/ 16d COOLER NAILS AT 7" O.C. MAX. PLACE END JOINTS ON NAILING MEMBERS.

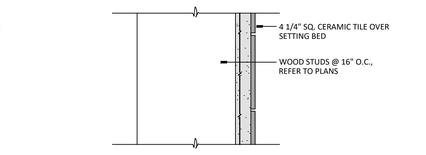
21 1-HR. RATED EXTERIOR WALL

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



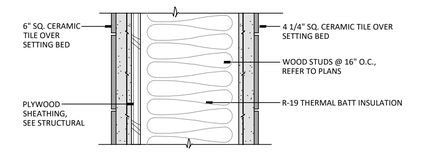
16 WALL ASSEMBLY

SCALE: 3" = 1'-0"



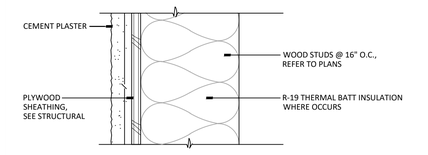
11 WALL ASSEMBLY

SCALE: 3" = 1'-0"



6 WALL ASSEMBLY

SCALE: 3" = 1'-0"



1 WALL ASSEMBLY

SCALE: 3" = 1'-0"

NEW CLASSROOM WING AT
SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI
ARCHITECTURE
INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
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TITLE
WALL ASSEMBLIES

A14

PROJECT 24001

APPROVALS
FILE # 10-28
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
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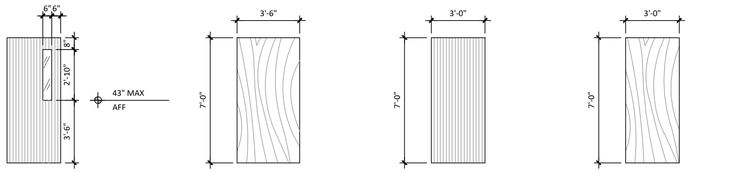
NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

DOOR SCHEDULE

BLDG. J	DOOR NO.	TYPE	DIMENSIONS WIDTH	HGT.	THK.	HDWR GROUP	FINISH	FIRE RATING	FRAME TYPE	DEPTH	FINISH	DETAILS HEAD	JAMB	JAMB	SILL	SIGNAGE TYPE	TEXT	REMARKS:
NEW CLASSROOM WING 'J'	J1	A	3'-0"	7'-0"	1 3/4"	001	n		1A	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J2	A	3'-0"	7'-0"	1 3/4"	007	n		1	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. LEFT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. RIGHT OF INT. SIDE OF DOOR
	J3	A	3'-0"	7'-0"	1 3/4"	007	n		1A	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J4	A	3'-0"	7'-0"	1 3/4"	007	n		1	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. LEFT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. RIGHT OF INT. SIDE OF DOOR
	J5	A	3'-0"	7'-0"	1 3/4"	007	n		1A	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J6	A	3'-0"	7'-0"	1 3/4"	007	n		1A	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J7	C	3'-0"	7'-0"	1 3/4"	003	n		3	8 3/8"	o	3 SIM.	8	8	16	B2	"JANITOR"	"B2" MTD. ON PULL SIDE OF DOOR
												A17	A17	A17	A17	SEE B/F3.0	FIRE SPRINKLER RISER ROOM	MTD. ON EXT. PANEL OF DOOR. SEE B/F3.0 FOR SIGN
	J8	C	3'-0"	7'-0"	1 3/4"	002	n		4	8 3/8"	o	3 SIM.	8	8	16	B2	"ELECTRICAL ROOM"	"B2" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	-		
	J9	C	3'-0"	7'-0"	1 3/4"	004	n		3	8 3/8"	o	3 SIM.	9	9	16	A1 / A4	"BOYS"	"A1" MTD. ON EXT. PANEL OF DOOR
												A17	A17	A17	A17	-		"A4" MTD. RIGHT OF EXT. SIDE OF DOOR
	J10	C	3'-0"	7'-0"	1 3/4"	005	n		3	8 3/8"	o	3 SIM.	9	9	16	A2 / A4	"GIRLS"	"A2" MTD. ON EXT. PANEL OF DOOR
												A17	A17	A17	A17	-		"A4" MTD. RIGHT OF EXT. SIDE OF DOOR
	J11	C	3'-0"	7'-0"	1 3/4"	007	n		5A	8 3/8"	o	3 SIM.	9	9	16	A3 / A4	"RESTROOM"	"A3" MTD. ON EXT. PANEL OF DOOR
												A17	A17	A17	A17	-		"A4" MTD. LEFT OF EXT. SIDE OF DOOR
	J12	A	3'-0"	7'-0"	1 3/4"	006	n		1	8 3/8"	o	3 SIM.	4	3	21	B1	##	"B1" MTD. LEFT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. RIGHT OF INT. SIDE OF DOOR
	J13	A	3'-0"	7'-0"	1 3/4"	006	n		1A	8 3/8"	o	3 SIM.	4	3	21	B2	OFFICE	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17			
	J14	A	3'-0"	7'-0"	1 3/4"	006	n		1A	8 3/8"	o	3 SIM.	4	3	21	B2	OFFICE	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17			
	J15	A	3'-0"	7'-0"	1 3/4"	006	n		1	8 3/8"	o	3 SIM.	4	3	21	B2	OFFICE	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17			
	J16	A	3'-0"	7'-0"	1 3/4"	007	n		1	8 3/8"	o	3 SIM.	4	3	21	B2	OFFICE	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17			
	J17	A	3'-0"	7'-0"	1 3/4"	007	n		9A	10 1/8"	o	3 SIM.	7	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J18	A	3'-0"	7'-0"	1 3/4"	007	n		9	10 1/8"	o	3 SIM.	7	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J19	A	3'-0"	7'-0"	1 3/4"	007	n		9	10 1/8"	o	3 SIM.	7	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J20	A	3'-0"	7'-0"	1 3/4"	007	n		9A	10 1/8"	o	3 SIM.	7	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J21	A	3'-0"	7'-0"	1 3/4"	007	n		9	10 1/8"	o	3 SIM.	7	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J22	A	3'-0"	7'-0"	1 3/4"	007	n		9A	10 1/8"	o	3 SIM.	7	3	21	B1	##	"B1" MTD. RIGHT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. LEFT OF INT. SIDE OF DOOR
	J23	A	3'-0"	7'-0"	1 3/4"	001	n		2	10 1/8"	o	3 SIM.	7	3	16	B1	##	"B1" MTD. LEFT OF EXT. SIDE OF DOOR
												A17	A17	A17	A17	B4	"EXIT"	"B4" MTD. RIGHT OF INT. SIDE OF DOOR
	J24	D	3'-0"	7'-0"	1 3/4"	010	n		5	8	o	14 SIM.	14	14		B2	"OFFICE"	"B2" MTD. ON GLASS PUSH SIDE OF DOOR
												A17	A17	A17				
	J25	D	3'-0"	7'-0"	1 3/4"	011	n		6	8	o	10 SIM.	10	10	11	A3 / A4	"RESTROOM"	UNDERCUT DOOR 1" PER MECH. DRAWINGS "A3" MTD. RIGHT ON PULL SIDE OF DOOR
												A17	A17	A17	A17	-		"A4" MTD. LEFT ON PUSH SIDE OF DOOR
	J26	E	3'-0" PAIR	7'-0"	1 3/4"	009	n		7	8	o	15 SIM.	15	15	11	B2	"CLOSET"	"B2" MTD. LEFT ON PULL SIDE OF DOOR
												A17	A17	A17	A17	-		
	J27	B	3'-6"	7'-0"	1 3/4"	008	n		8	8	o	10 SIM.	10	10	11	A3 / A4	"RESTROOM"	UNDERCUT DOOR 1" PER MECH. DRAWINGS "A3" MTD. RIGHT ON PULL SIDE OF DOOR
												A17	A17	A17	A17	-		"A4" MTD. LEFT ON PUSH SIDE OF DOOR

DOOR TYPES



TYPE "A"
1 3/4" THK. H.M. DOOR w/ 6"x34" TYPE 'A' GLAZING

TYPE "B"
1 3/4" THK. SOLID CORE WOOD DOOR

TYPE "C"
1 3/4" THK. HOLLOW METAL DOOR.

TYPE "D"
1 3/4" THK. SOLID CORE WOOD DOOR

TYPE "E"
1 3/4" THK. SOLID CORE WOOD DOUBLE DOOR

DOOR SCHEDULE NOTES:

1) PAINT DOORS AND FRAMES SEMI- GLOSS IN ACCORDANCE WITH SPECIFICATION SECTION 09 9100.
ALL FRAMES TO BE PAINTED (-) DO NOT PAINT OR ALTER FIRE RESITANCE RATING LABELS.

2) PAINT DOORS THE SAME COLOR ON BOTH SIDES UNLESS OTHERWISE NOTED. WHEN INTERIOR AND EXTERIOR COLORS ARE DIFFERENT, THEY SHALL BE NOTED THUS :
EXTERIOR / INTERIOR
LATCH EDGE SHALL MATCH EXTERIOR COLOR AND HINGE EDGE SHALL MATCH INTERIOR COLOR. FINISH ALL EDGES.

3) PAINT REMOVABLE MULLIONS TO MATCH DOOR.

4) REFER TO SPECIFICATION SECTION 10 1400 FOR DOOR SIGNAGE TYPES. ALL SIGNS SHALL INCLUDE GRADE 2 BRAILLE IDENTIFICATION IN ACCORDANCE WITH CBC 11B-703.3 SEE DETAIL 1 / A15.

5) OPERABLE PARTITIONS TO BE PROVIDED & INSTALLED BY MANUFACTURER / SUPPLIER.

6) REFER TO GLAZING SCHEDULE SHEET A16 AND THE SPECIFICATIONS FOR TYPES OF GLAZING NOTED.

7) SEE SHEET SD5 FOR GATE TYPES - SEE SPEC. HARDWARE SCHEDULE FOR HARDWARE

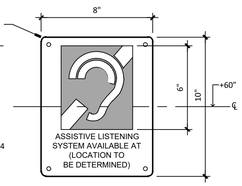
8) VERIFY ALL ROOM SIGNAGE TEXT WITH OWNER PRIOR TO LAYOUT

9) ### = TEXT TO BE DETERMINED BY OWNER

10) (#) SEE SHEET A16 FOR FRAME TYPES

11) ALL DOORS TO ROOMS OR SPACES THAT HAVE AN OCCUPANT LOAD OF 5 OR MORE SHALL BE EQUIPPED WITH HARDWARE THAT IS LOCKABLE FROM THE INSIDE PER CBC 1010.2.8.2

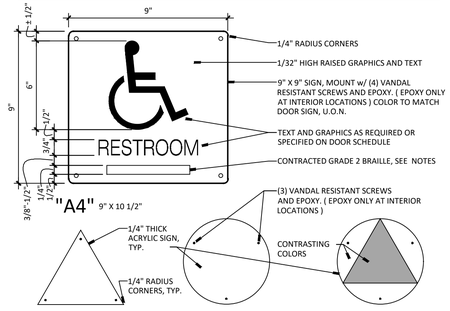
NOTES:
1. REFER TO FLOOR PLANS & ELEVATIONS FOR LOCATIONS
2. LETTERS AND NUMBERS 5/8" HIGH.
3. EXTERIOR ATTACHMENT: EPOXY AND 4 VANDAL RESISTANT SCREWS. INTERIOR ATTACHMENT: EPOXY.
4. INTERNATIONAL SYMBOL OF ACCESS FOR HEARING IMPAIRED, FIGURE CBC 11B-703.7.2.4
5. COORDINATE EQUIPMENT LOCATION DESCRIPTION WITH ARCHITECT



TYPE "F" ASSISTIVE LISTENING SIGN



"A4" GRAPHICS OPTIONS

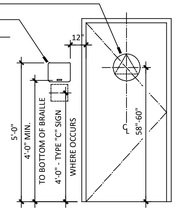


TYPE "A" SIGNS

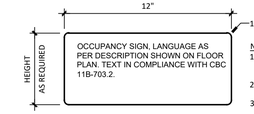
SIGN TYPES "A1, A2, OR A3"

SIGN TYPE "A4" OR "B" ROOM I.D.

NOTES:
1. IN ADDITION TO SIGN TYPES "A1, A2, AND A3" MOUNTED ON RESTROOM DOORS, PROVIDE SIGN TYPE "A4", LOCATED AS SHOWN.
2. TYPE "B" SIGNS TO BE MOUNTED ON LATCH SIDE OF SINGLE DOOR. AT DOUBLE DOORS, MOUNT SIGN ON INACTIVE LEAF. IF BOTH LEAVES ARE ACTIVE MOUNT SIGN ON RIGHT SIDE OF DOUBLE 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.
3. REFER TO DOOR SCHED. & ELEVATIONS FOR LOCATIONS.
4. USE 60" TO TOP OF THE UPPER SIGN TO SET SIGNS. CBC ALLOWS 60" MAX. TO BASELINE OF RAISED CHARACTERS & 48" MIN. TO BASELINE OF LOWEST LINE OF BRAILLE.

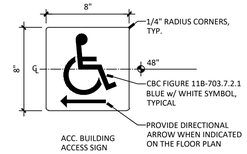


SIGN LOCATIONS



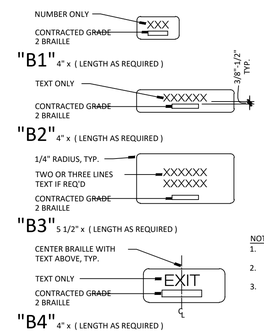
NOTES:
1. REFER TO FLOOR PLANS & ELEVATIONS FOR LOCATIONS
2. LETTERS AND NUMBERS 5/8" HIGH.
3. EXTERIOR ATTACHMENT: EPOXY AND 4 VANDAL RESISTANT SCREWS. INTERIOR ATTACHMENT: EPOXY.

SIGN TYPE "D" OCCUPANCY SIGNS



NOTES:
1. REFER TO FLOOR PLANS & ELEVATIONS FOR LOCATIONS
2. EXTERIOR ATTACHMENT: EPOXY AND 4 VANDAL RESISTANT SCREWS. INTERIOR ATTACHMENT: EPOXY.

TYPE "C" SIGNS



NOTES:
1. NUMBERS 2" HIGH.
2. LETTERS 1" HIGH.
3. EXTERIOR ATTACHMENT: EPOXY AND A MINIMUM OF 2 VANDAL RESISTANT SCREWS. INTERIOR ATTACHMENT: EPOXY.

TYPE "B" SIGNS

NOTES:

1. CONSTRUCT SIGNS OF 1/8" THK. PLASTIC UNLESS OTHERWISE NOTED. ALL CHARACTERS AND PICTOGRAMS SHALL BE RAISED 1/32".
2. COLOR TO BE SELECTED BY ARCHITECT. (SIGN BACKGROUND COLORS TO CONTRAST WITH DOOR COLOR) 70% CONTRAST BETWEEN CHARACTERS AND BACKGROUND. CIRCLE COLOR TO CONTRAST WITH TRIANGLE.
3. ALL EDGES SHALL BE EASED OR ROUNDED AT 1/16".
4. AT LOCATIONS WHERE AN EXIT SIGN AND A ROOM I.D. SIGN ARE BACK TO BACK ON GLASS, ALIGN & MAKE SIGNS THE SAME SIZE. WHEN SIGN IS MOUNTED ON GLASS WITH NO SIGN ON BACK SIDE, PROVIDE BLANK SIGN THE SAME SIZE ON THE BACK SIDE.
5. ROOM. I.D. SIGNAGE : RAISED CHARACTERS (LETTERS) (RAISED 1/32", ALL UPPER CASE CALIBRI) SHALL BE PROVIDED & SHALL BE ACCOMPANIED BY CONTRACTED (GRADE 2) BRAILLE.
   RAISED CHARACTERS (LETTERS) SHALL COMPLY WITH CBC 11B-703.2.
6. CONTRACTED (GRADE 2) BRAILLE SHALL COMPLY WITH CBC 11B-703.3.
7.

1 SIGN TYPES
N.T.S.

REVISIONS

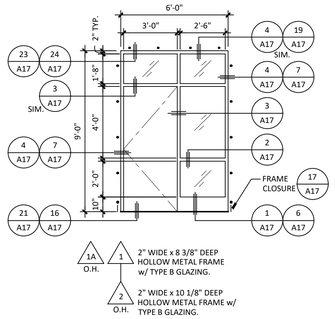
MANGINI ARCHITECTURE INGENUITY.
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

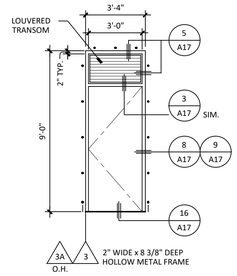
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DOOR SCHEDULE

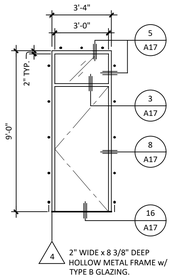
A15

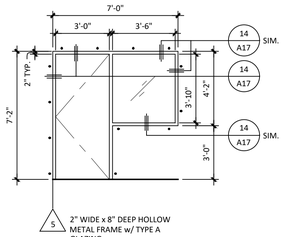
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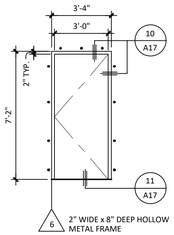
FRAME TYPES

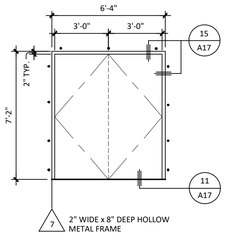


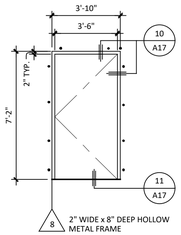


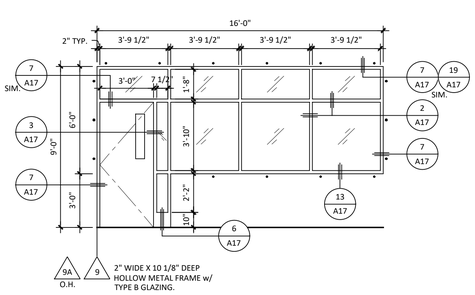


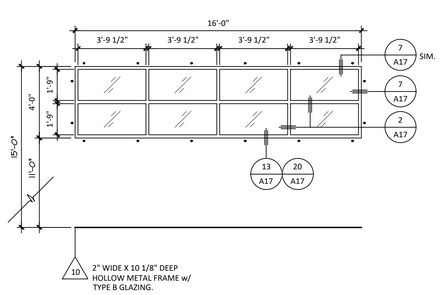


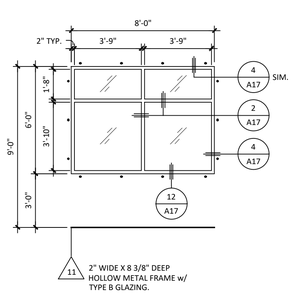












DOOR AND WINDOW FRAME TYPE NOTES

1. ALL GLASS SHALL BE TYPE AS NOTED.
2. GLAZING SCHEDULE : SEE SPECIFICATIONS
   TYPE "A" : 1/4" THICK, CLEAR, FULLY TEMPERED GLASS
   TYPE "B" : 1" TEMPERED, CLEAR, INSULATING GLASS UNIT, 1/4" CLEAR LOW-E, 1/2" ARGON FILLED SPACE, 1/4" CLEAR, LOW-E
   NOTE: ALL TEMPERED GLASS IS TO BE SAFETY GLASS & MEET HUMAN IMPACT LOADS LISTED IN SPECIFICATIONS.
3. METAL FRAMES SHALL FIT TIGHT TO WALL. CENTER FRAME THROAT OPENING BETWEEN OUTSIDE FACE OF MATERIALS BEING WARPED BY FRAME. SHIM GYPSUM BOARD AS REQUIRED FOR PLUMB TOLERANCE AT FRAME / GYPSUM BOARD.
4. "LABEL" SHALL MEAN "ASSEMBLY" AS DEFINED IN CBC SECTION 4306(b).
5. PAINT WINDOW FRAMES (x) BOTH SIDES, UNLESS OTHERWISE NOTED ON THE INTERIOR ELEVATIONS
6. PAINT FRAMES AND DOORS SEMI-GLOSS ENAMEL IN ACCORDANCE WITH SPECIFICATION SECTION 09900, AS NOTED ON THE DOOR SCHEDULE. REFER TO FINISH COLORS FOR DESIGNATION. PAINT BOTH SIDES THE SAME COLOR U.O.N. DO NOT PAINT FRAME LABELS
7. FIRE-RATED FRAMES SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS AND NFPA 80. THE MANUFACTURER'S WRITTEN INSTRUCTIONS SHALL BE MADE AVAILABLE TO THE INSPECTING AUTHORITY. LABELS SHALL NOT BE ALTERED IN ANY WAY.
8. ALL DIMENSIONS ARE +/- . VERIFY IN THE FIELD (OR WITH FLOOR PLAN FOR APPROXIMATE AS INDICATED).
9. VERIFY DOOR SWINGS WITH FLOOR PLAN.
10. MINIMUM ANCHOR REQUIREMENTS, (U.O.N.) :
    FRAME HEIGHTS UP TO 4'-0" : 2 JAMB ANCHORS
    FRAME HEIGHTS UP TO 7'-4" : 3 JAMB ANCHORS
    FRAME HEIGHTS UP TO 10'-0" : 4 JAMB ANCHORS
    FRAME HEIGHTS OVER 10'-0" : 1 ADDITIONAL ANCHOR PER 3'-0" OR PORTION THEREOF
    FRAME WIDTHS UP TO 7'-4" : 4 HEAD ANCHORS
    FRAME WIDTHS UP TO 10'-0" : 4 HEAD ANCHORS
    FRAME WIDTHS OVER 10'-0" : 1 ADDITIONAL ANCHOR PER 3'-0" OR PORTION THEREOF
    PROVIDE 6" EDGE DISTANCE AT FIRST HEAD ANCHOR.
11. FRAMES SHALL BE ANCHORED AT THE FLOOR WITH MANUFACTURER'S STANDARD FLOOR ANCHORS AS REQ'D.
12. ALL FRAME ANCHORS SHALL BE MANUFACTURER'S STANDARD CONCEALED ANCHORS, UL LISTED WHERE REQUIRED BY THE DOOR SCHEDULE.
13. EXPOSED DIMPLE FASTENERS WILL ONLY BE ALLOWED UPON PRIOR WRITTEN ACCEPTANCE BY THE ARCHITECT.
14. WHERE FRAMES ARE ALLOWED TO BE DIMPLED FOR ANCHORAGE, COUNTERSINK SCREW HEADS.
15. TYPICAL FRAME ANCHOR FASTENERS :
    a. WOOD STUDS : 2-8d EACH SIDE.
    b. CONC. SLAB : (2) 1/4" Ø x 2 1/2" EXP. ANCHOR AT 24" O.C. MIN. PROVIDE MIN. 2 SETS
16. VERTICAL AND HORIZONTAL FRAMING MEMBERS ARE 2" THICK UNLESS OTHERWISE NOTED.
17. FOR TYP. SIGNAGE / MOUNTING SEE DTLS. 1/ A5

LEGEND

DOT INDICATES ANCHOR LOCATION, TYPICAL

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

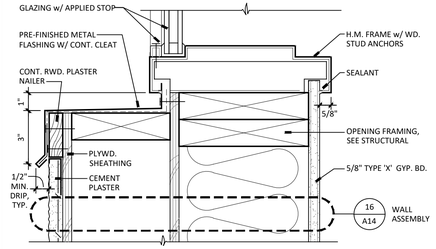
MANGINI
ARCHITECTURE
INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
FRAME TYPES

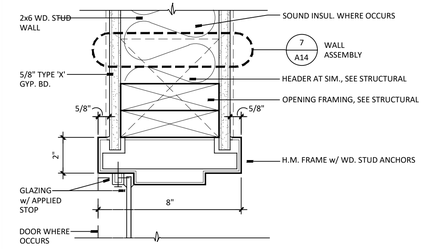
A16

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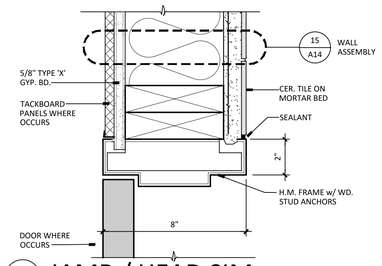
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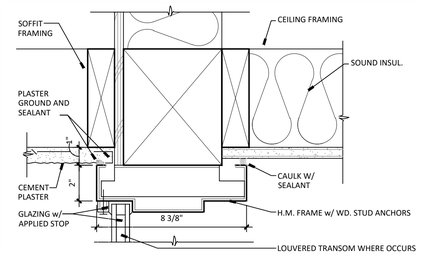
20 SILL @ ACCENT SOFFIT
3" = 1'-0"



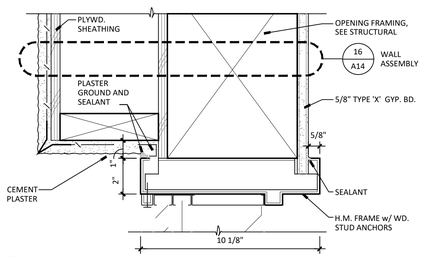
15 JAMB / HEAD & SIM.
3" = 1'-0"



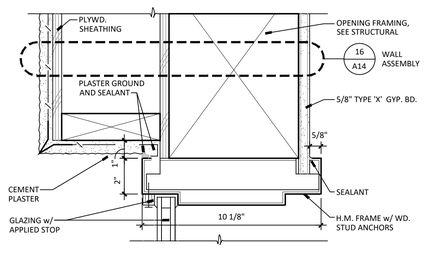
10 JAMB / HEAD SIM.
3" = 1'-0"



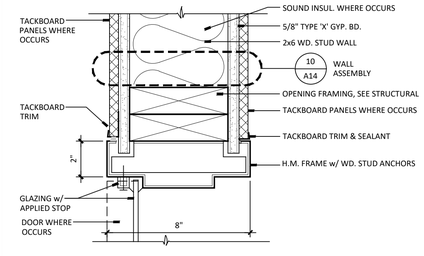
5 HEAD @ HARD CEILING
3" = 1'-0"



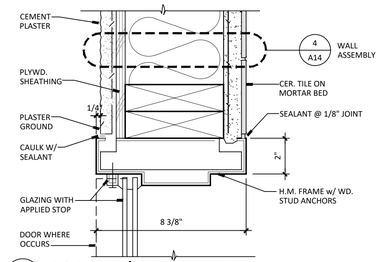
24 HEAD @ ACCENT SOFFIT
3" = 1'-0"



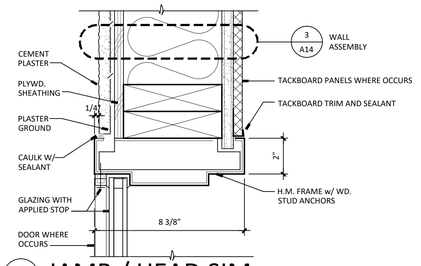
19 HEAD @ ACCENT SOFFIT
3" = 1'-0"



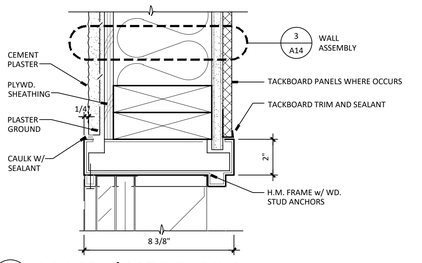
14 JAMB, HEAD / SILL SIM.
3" = 1'-0"



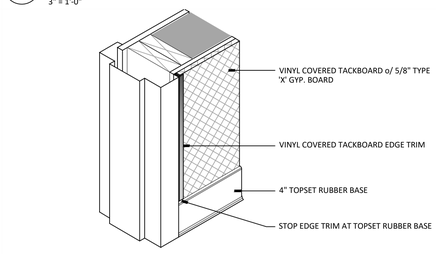
9 JAMB / HEAD SIM.
3" = 1'-0"



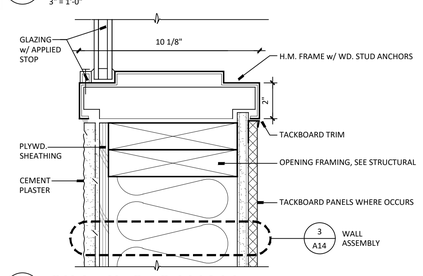
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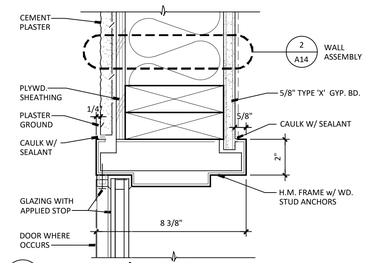
23 JAMB / HEAD SIM.
3" = 1'-0"



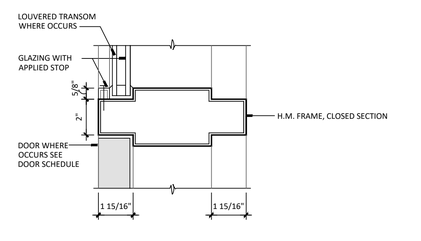
18 VCTB EDGE TRIM
SCALE: 1 1/2" = 1'-0"



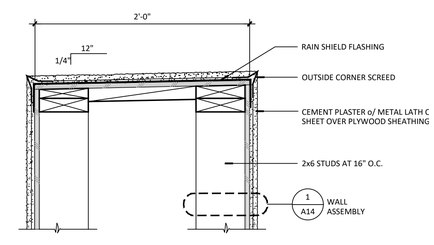
13 SILL @ 2x8 WALL
3" = 1'-0"



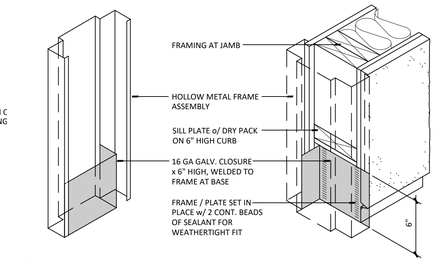
8 JAMB / HEAD SIM.
3" = 1'-0"



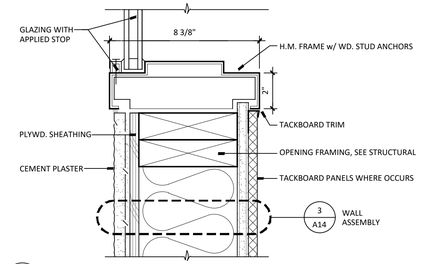
3 JAMB, (MULLION, TRANSOM)
3" = 1'-0"



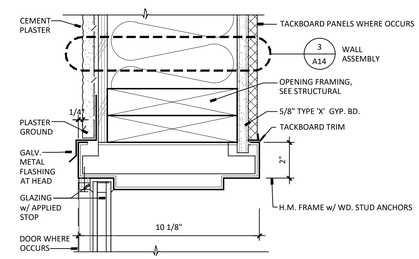
22 PENETRATION AT EXT. WALL
1 1/2" = 1'-0"



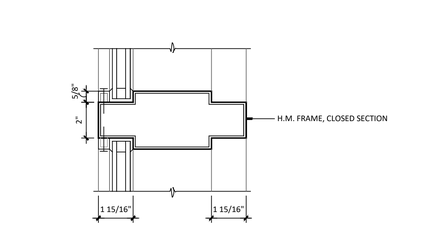
17 H.M. FRAME @ 6" CURB, TYP.
1 1/2" = 1'-0"



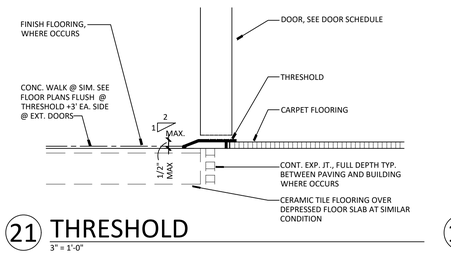
12 SILL
3" = 1'-0"



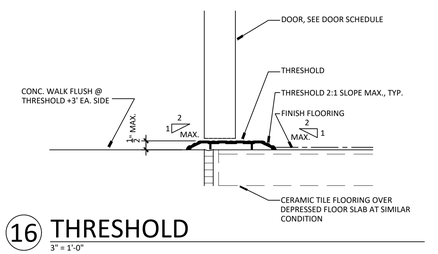
7 JAMB @ 2X8 WALL
3" = 1'-0"



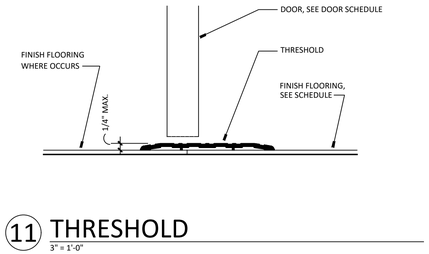
2 JAMB, (MULLION, TRANSOM)
3" = 1'-0"



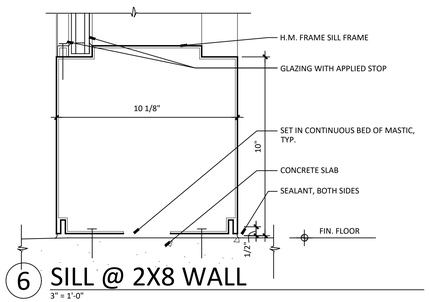
21 THRESHOLD
3" = 1'-0"



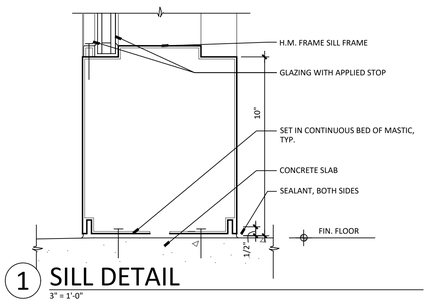
16 THRESHOLD
3" = 1'-0"



11 THRESHOLD
3" = 1'-0"



6 SILL @ 2X8 WALL
3" = 1'-0"



1 SILL DETAIL
3" = 1'-0"

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
FRAME DETAILS

A17

PROJECT 24001

F:\01 Projects\24001\Drawings\01 Architectural\03 Sheets\24001_A17 Frame Details.dwg Feb 13 2025 2:10pm

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34299
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

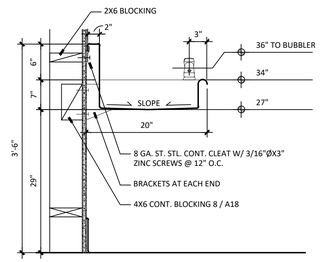
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TITLE
MILLWORK DETAILS

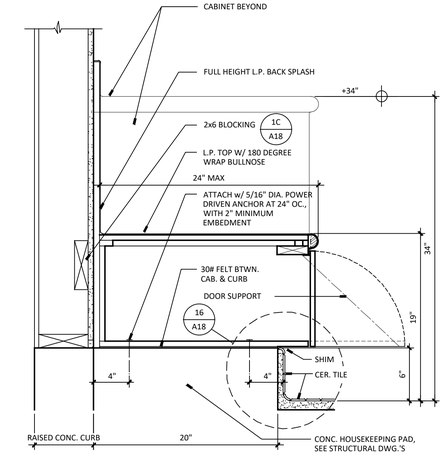
A18

PROJECT 24001

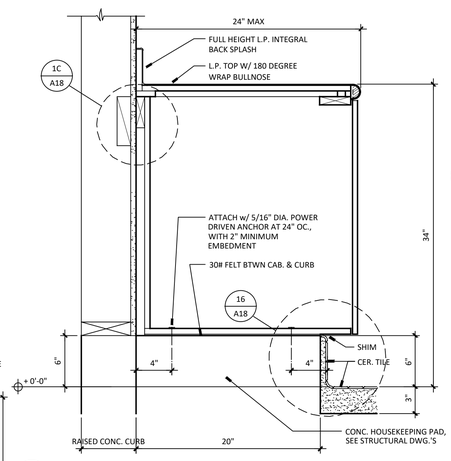


23 STAINLESS STEEL LAV
1" = 1'-0"

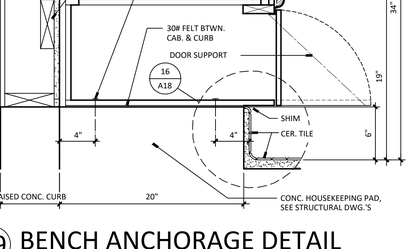
21 FURNACE PLATFORM
1 1/2" = 1'-0"



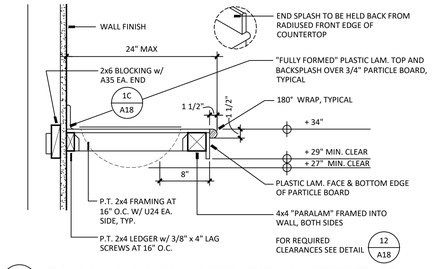
19 BENCH ANCHORAGE DETAIL
1 1/2" = 1'-0"



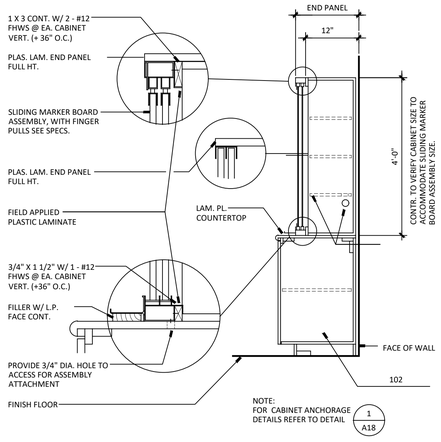
17 CAB. AT TOILET ANCHORAGE
1 1/2" = 1'-0"



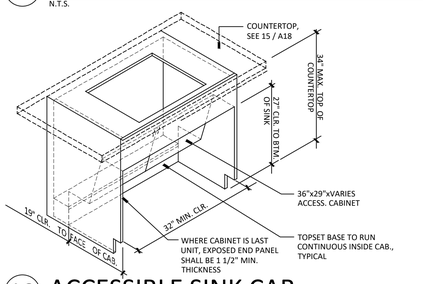
16 COVED TILE BASE @ CABINET
3" = 1'-0"



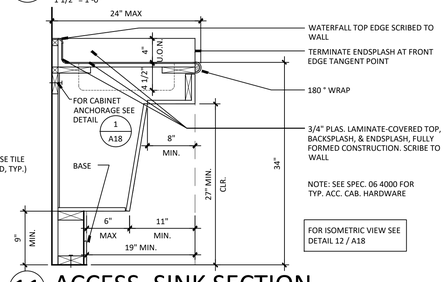
15 PLAS. LAMINATE COUNTERTOP
1" = 1'-0"



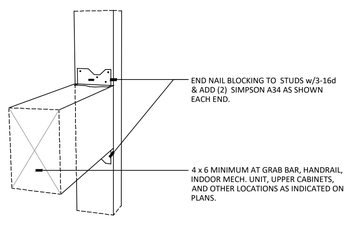
13 MARKERBOARD CABINET
N.T.S.



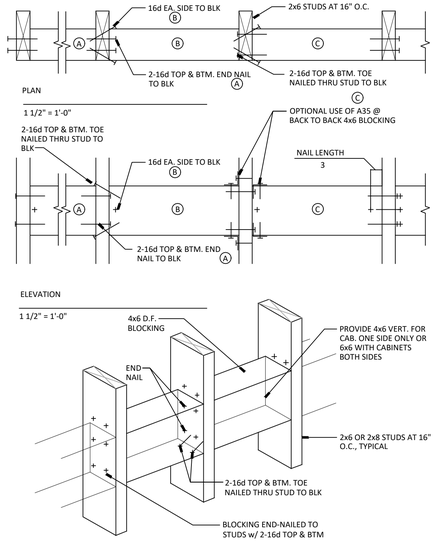
12 ACCESSIBLE SINK CAB.
1 1/2" = 1'-0"



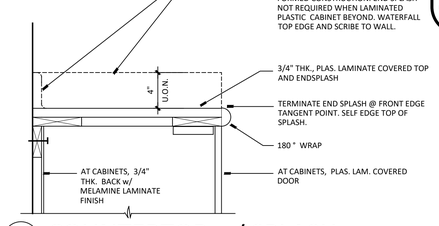
11 ACCESS. SINK SECTION
1" = 1'-0"



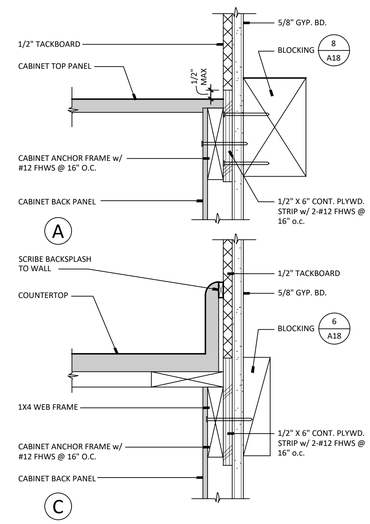
10 BLOCKING ATTACHMENT
1 1/2" = 1'-0"



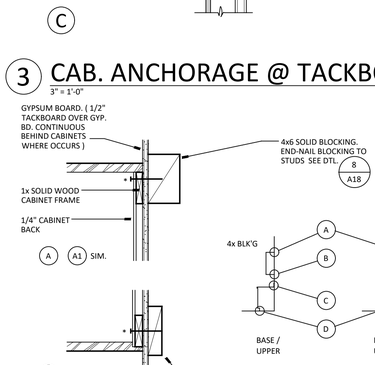
8 4X6 BLOCKING AT WALL
N.T.S.



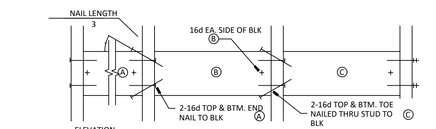
5 COUNTERTOP w/ SPLASH
1 1/2" = 1'-0"



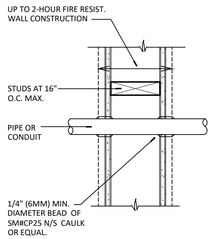
6 2X6 BLOCKING AT WALL
N.T.S.



3 CAB. ANCHORAGE @ TACKBOARD
3" = 1'-0"



1 CABINET ANCHORAGE
1 1/2" = 1'-0"

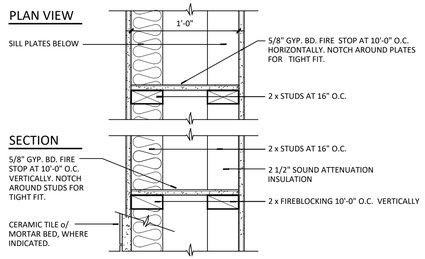


WALL PENETRATION NOTES :

1. CAULK IS TO BE FORCED INTO THE ANNULAR SPACE TO THE MAX. EXTENT POSSIBLE FLUSH W/ EXTERIOR OF THE PENETRATION SURFACE.
2. FINISH CAULKING W/ A 1/4" (6MM) MIN. BEAD OF 3M #CP25 N/S CAULK APPLIED TO PERIMETER OF CONDUIT PIPE AT ITS EGRESS FROM THE WALL.
3. THE MAX. ANNULAR SPACE IS NOT TO EXCEED 3/16" (5MM).
4. INSTALL FIRESTOP ON BOTH SIDES OF THE WALL.
5. THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTM E-814 (UL WL1001) FIRE TEST AND UL THROUGH PENETR. FIRESTOP SYSTEM #147.

25 PENETRATION THRU WALL

1 1/2" = 1'-0"

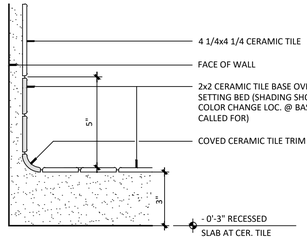


24 FIRE STOP AT INT. CHASE

1 1/2" = 1'-0"

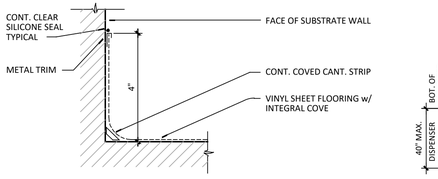
23 WRITABLE WALL SURFACE

SCALE: 3" = 1'-0"



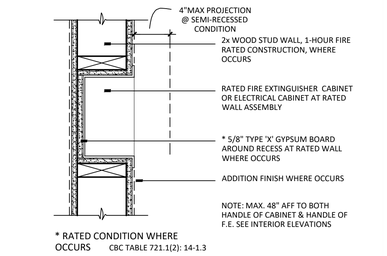
22 CERAMIC TILE BASE

3" = 1'-0"



21 COVED SHEET VINYL BASE

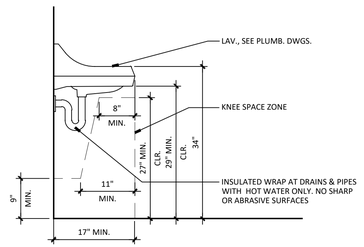
3" = 1'-0"



* RATED CONDITION WHERE OCCURS CBC TABLE 721.1(2): 14-1.3

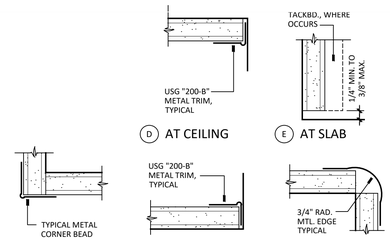
20 RECESSED FIRE EXTING. CAB.

1 1/2" = 1'-0"



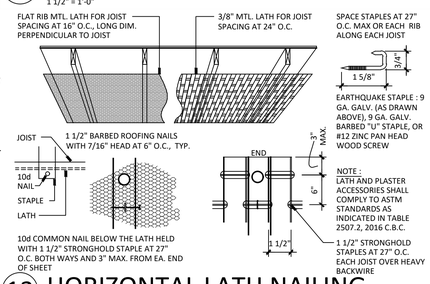
19 ACCESS LAV.

SCALE: 3/4" = 1'-0"



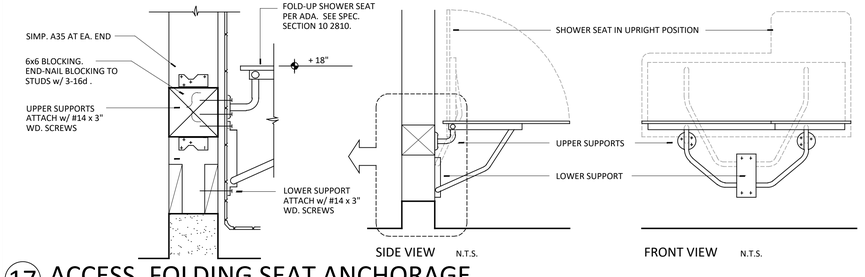
14 TYP. GYP. METAL EDGES

1 1/2" = 1'-0"



13 HORIZONTAL LATH NAILING

1 1/2" = 1'-0"

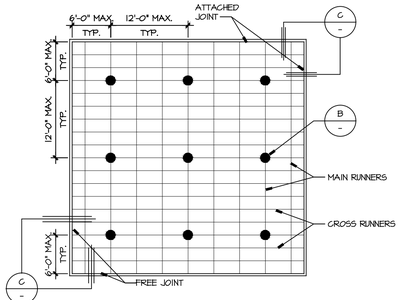


18 GRAB BAR ANCHORAGE

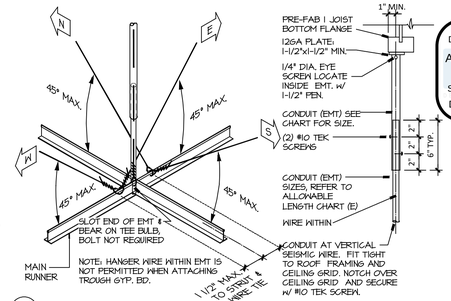
3" = 1'-0"

16 TYPICAL ACCESSIBLE MOUNTING HEIGHTS - ADULT

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



TYPICAL SUSPENDED LAY-IN CEILING FRAMING

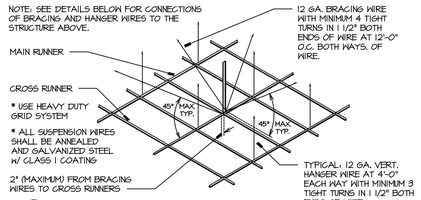


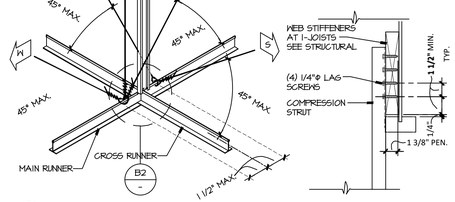
A ACOUSTICAL CEILING GRID ATTACHMENT

BI ALTERNATE COMPRESSION STRUT

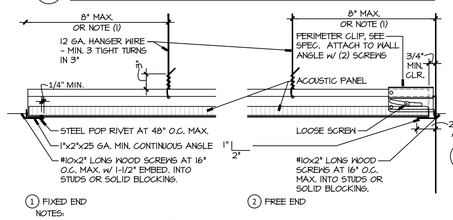
COMPRESSION STRUT: STRUT CHANNEL PER CHART 'E' BELLOW, STARTING NOT MORE THAN 48" FROM TWO ADJACENT WALLS AND 72" FROM TWO OTHER ADJACENT WALLS TO SUPPORT A TRIBUTARY AREA OF 144 SQUARE FEET MAXIMUM. STRUT TO HAVE L / r RATIO EQUAL TO OR LESS THAN 200. ATTACH TO MAIN RUNNERS WITH 1/4" M.B. AND TO TRUSS JOIST BLOCKING WITH 2 - #12 WOOD SCREWS, SEE DETAIL B. COMPRESSION STRUT SHALL NOT REPLACE HANGER WIRE.

NOTE: SEE DETAILS BELOW FOR CONNECTIONS OF BRACING AND HANGER WIRES TO THE STRUCTURE ABOVE.

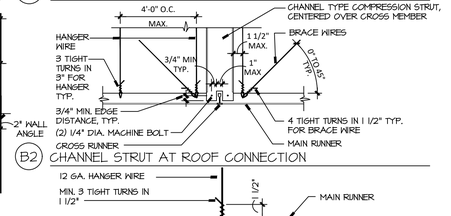




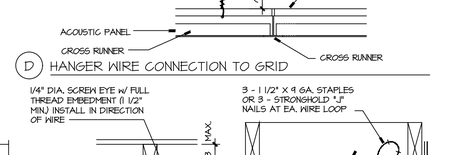
B COMPRESSION STRUT



C CEILING PERIMETER



B2 CHANNEL STRUT AT ROOF CONNECTION

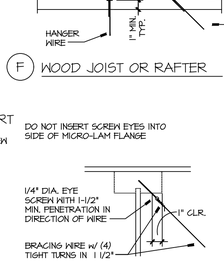


D HANGER WIRE CONNECTION TO GRID

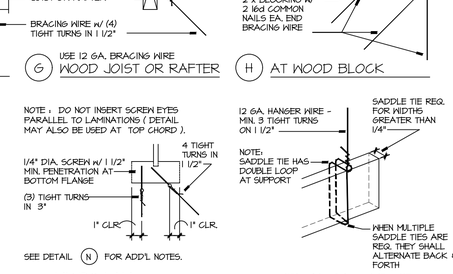
COMPRESSION STRUT EMT SECTION IN DIAMETER	MAXIMUM HEIGHT Ft. - In.
1/2"	3'-11"
3/4"	6'-4"
1"	9'-4"
1 1/4"	12'-4"
1 1/2"	14'-4"
2"	18'-10"

COMPRESSION STRUT CHANNEL SECTION	MAXIMUM HEIGHT
250S125-33	5'-10"
250S137-33	6'-10"
362S137-33	8'-0"
250S137-43	8'-10"
400S137-43	10'-10"

E ALLOWABLE LENGTH CHART



F WOOD JOIST OR RAFTER



G USE 12 GA. BRACING WIRE WOOD JOIST OR RAFTER

H AT WOOD BLOCK

K MICRO-LAM UPPER FLANGE

USE 12 GA. BRACING WIRE

L MICRO-LAM LOWER FLANGE

USE 12 GA. BRACING WIRE

M TYPICAL SADDLE TIE AT JOIST OR BLOCK

J TO BOTTOM OF BLOCK

N WOOD I-JOIST

O AT STEEL BEAMS

6 SUSPENDED CEILING DETAILS

N.T.S.

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34280 REN. 05-31-25 STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

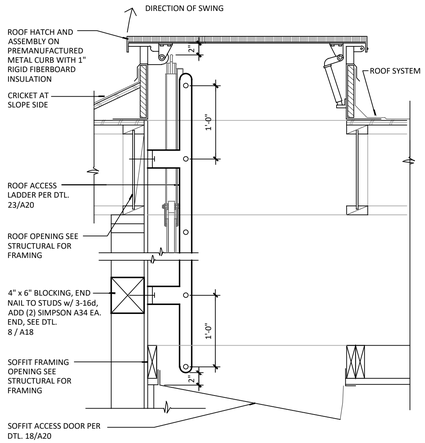
REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4230 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-1926 Office
(559) 627-1926 Fax

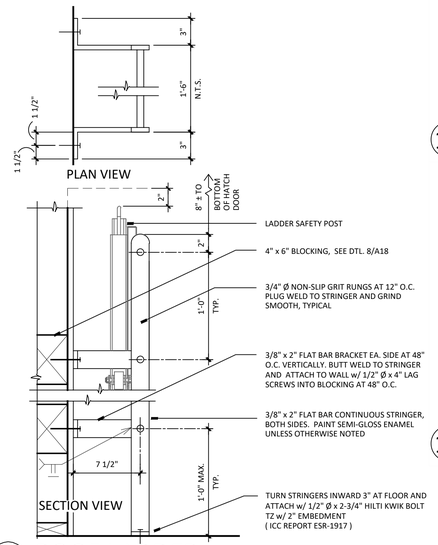
TITLE
TYPICAL DETAILS

A19

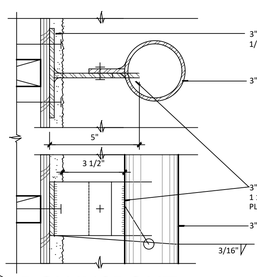
PROJECT 24001



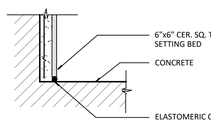
25 ROOF & SOFFIT ACCESS HATCH
1" = 1'-0"



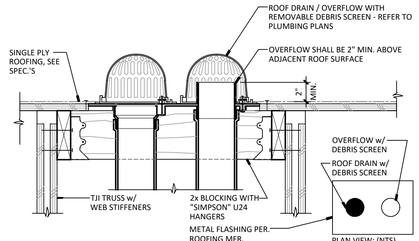
23 ROOF LADDER
1 1/2" = 1'-0"



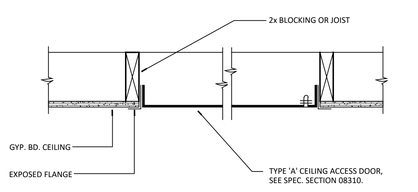
22 DOWNSPOUT
3" = 1'-0"



21 CERAMIC TILE AT SIDEWALK
1/4" = 1'-0"

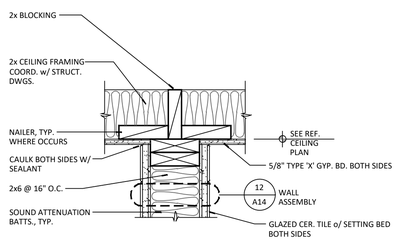


20 ROOF DRAIN/OVERFLOW
SCALE: 1 1/2" = 1'-0"

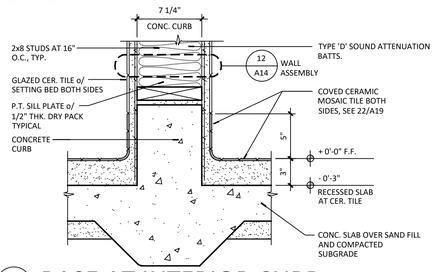


19 ATTIC ACCESS DOOR
1 1/2" = 1'-0"

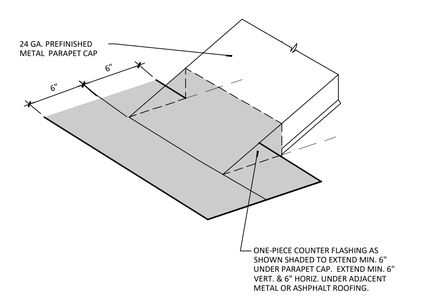
18 SOFFIT ACCESS DOOR
1 1/2" = 1'-0"



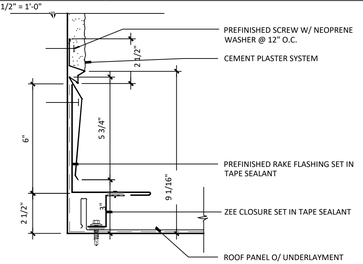
17 HARD CEILING AT TILE WALL
1 1/2" = 1'-0"



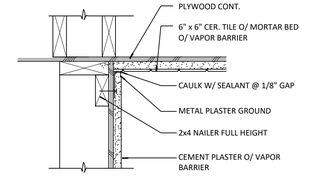
16 BASE AT INTERIOR CURB
1 1/2" = 1'-0"



15 PARAPET / ROOF FLASHING
1 1/2" = 1'-0"

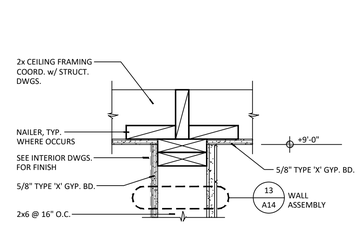


14 METAL ROOF @ SIDEWALL
3" = 1'-0"

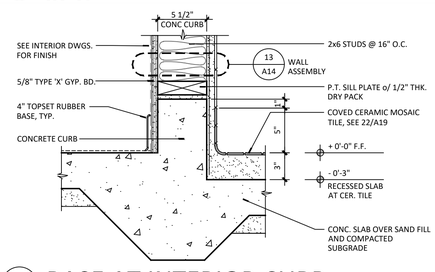


PLAN VIEW

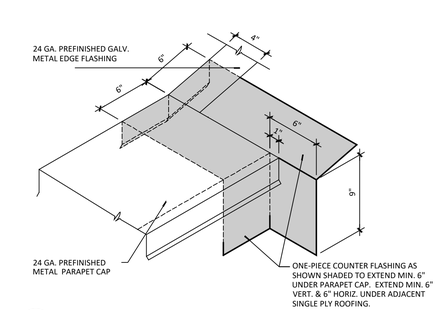
13 TILE/PLASTER JOINT @ EXT. DF.
1 1/2" = 1'-0"



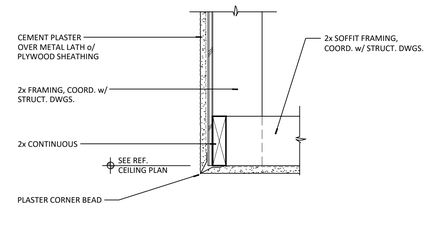
12 HARD CEILING AT TILE WALL
1 1/2" = 1'-0"



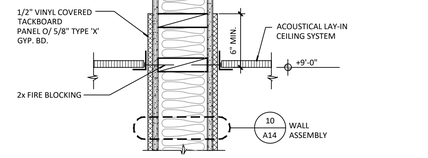
11 BASE AT INTERIOR CURB
1 1/2" = 1'-0"



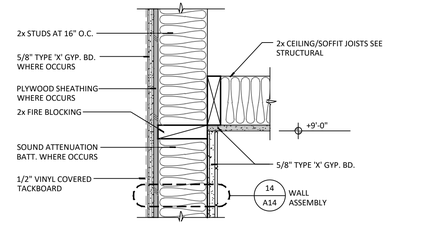
10 PARAPET / ROOF FLASHING
1 1/2" = 1'-0"



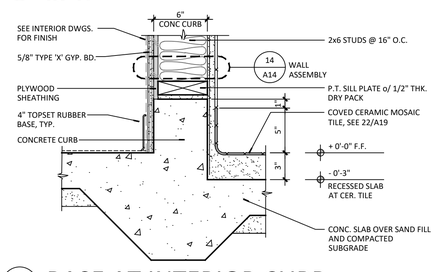
9 EXT. SOFFIT FRAMING
1 1/2" = 1'-0"



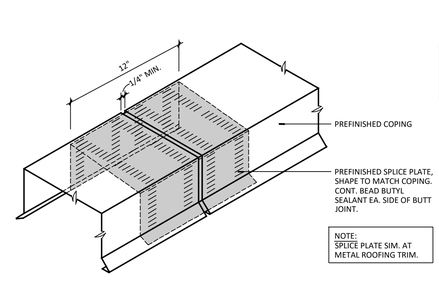
8 WALL AT CEILING
SCALE: 1 1/2" = 1'-0"



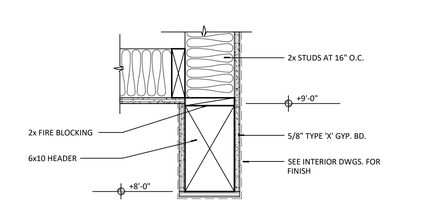
7 HARD CEILING AT INT. WALL
1 1/2" = 1'-0"



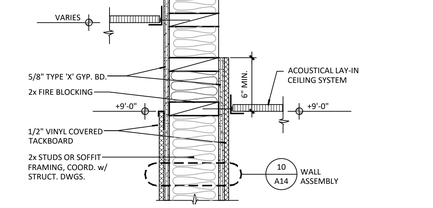
6 BASE AT INTERIOR CURB
1 1/2" = 1'-0"



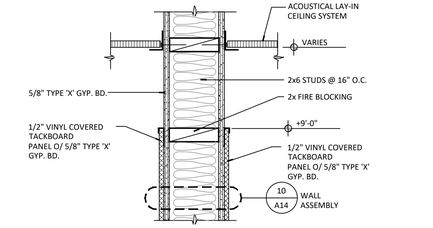
5 TYP. FLASHING SPLICE P
1 1/2" = 1'-0"



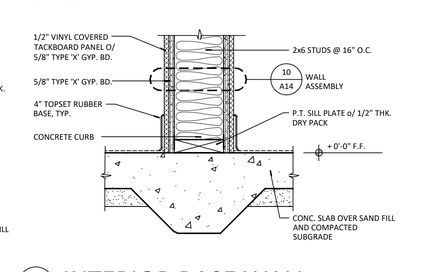
4 HEADER
1 1/2" = 1'-0"



3 LAY-IN CEILING AT INT. WALL
1 1/2" = 1'-0"



2 INTERIOR WALL
1 1/2" = 1'-0"



1 INTERIOR BASE WALL
1 1/2" = 1'-0"

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 office
(559) 627.1926 fax

TITLE DETAILS

A20

PROJECT 24001

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34280
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

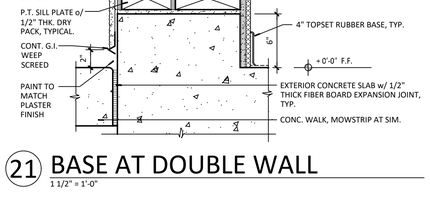
MANGINI ARCHITECTURE INGENUITY
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4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE DETAILS

A21

PROJECT 24001

25 FOAM AT METAL ROOF
3" = 1'-0"

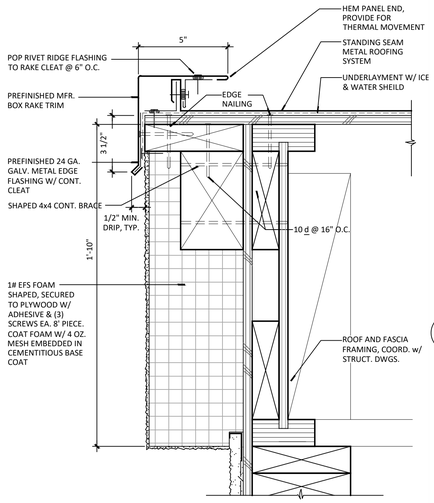


24 FASCIA
1" = 1'-0"

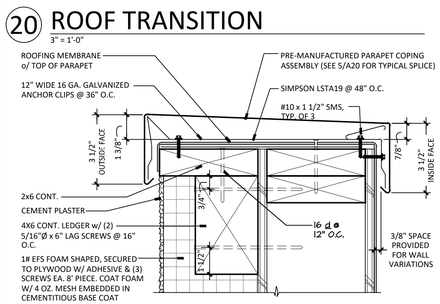
23 ACCENT SOFFIT
1 1/2" = 1'-0"

22 ACCENT SOFFIT
1 1/2" = 1'-0"

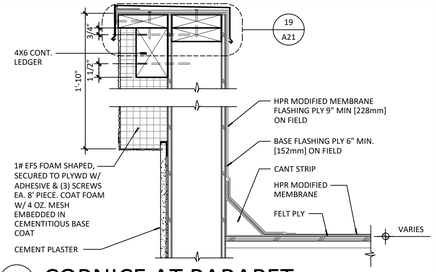
21 BASE AT DOUBLE WALL
1 1/2" = 1'-0"



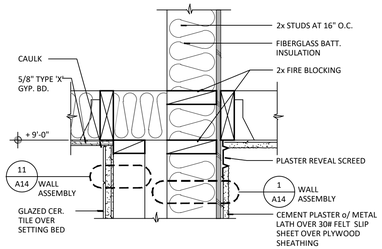
20 ROOF TRANSITION
3" = 1'-0"



19 COPING
3" = 1'-0"

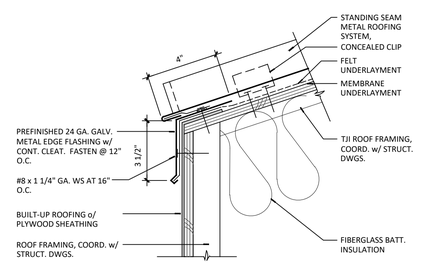


18 CORNICE AT PARAPET
1 1/2" = 1'-0"

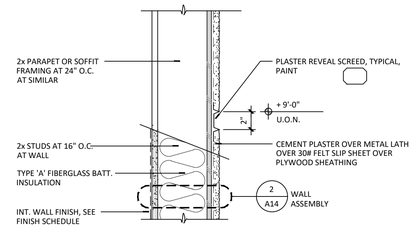


17 SOFFIT AT EXT. CHASE WALL
1 1/2" = 1'-0"

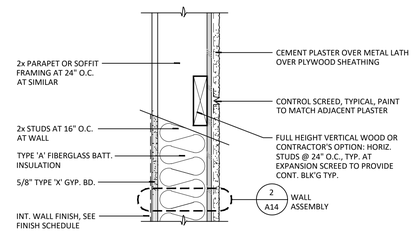
16 BASE AT EXT. CHASE WALL
1 1/2" = 1'-0"



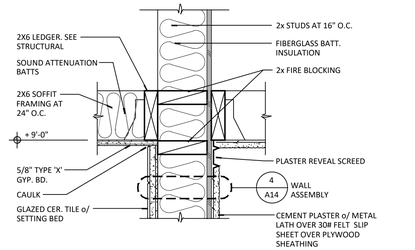
15 ROOF EDGE
3" = 1'-0"



14 REVEAL SCREED
1 1/2" = 1'-0"

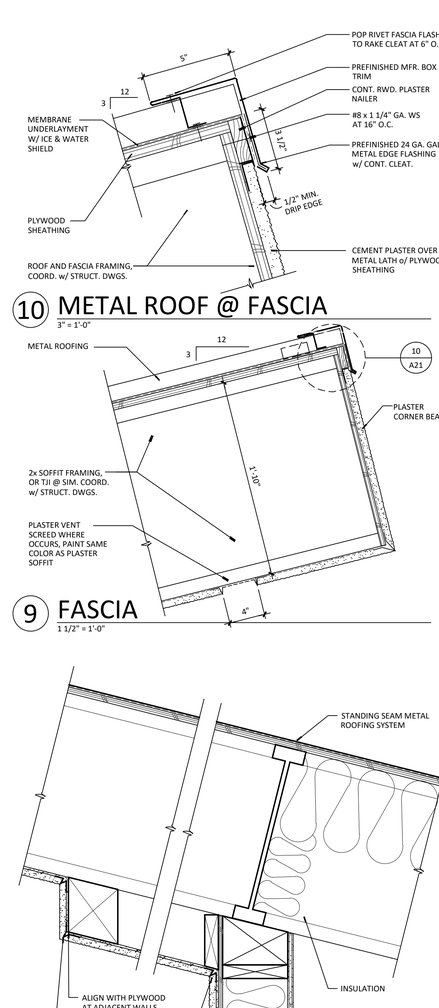


13 CONTROL SCREED
1 1/2" = 1'-0"



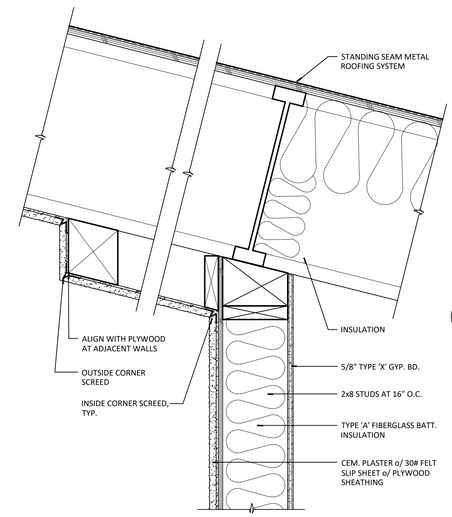
12 EXT. SOFFIT AT HARD CEIL.
1 1/2" = 1'-0"

11 EXTERIOR BASE AT TILE
1 1/2" = 1'-0"

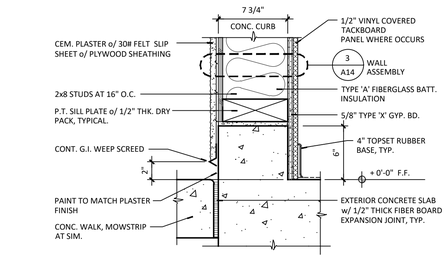


10 METAL ROOF @ FASCIA
3" = 1'-0"

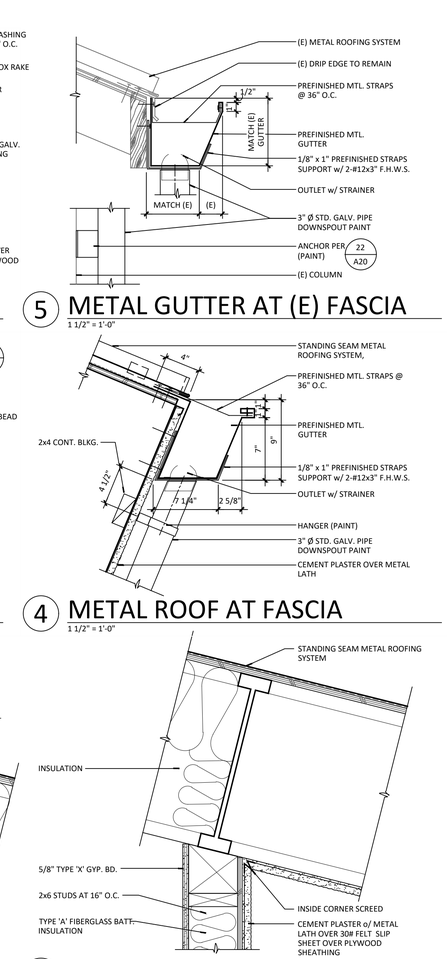
9 FASCIA
1 1/2" = 1'-0"



7 EXTERIOR WALL AT ROOF
1 1/2" = 1'-0"



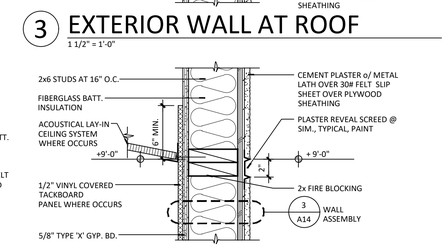
6 EXTERIOR BASE WALL
1 1/2" = 1'-0"



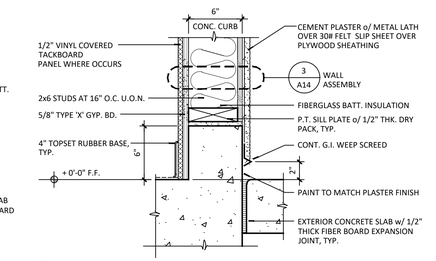
5 METAL GUTTER AT (E) FASCIA
1 1/2" = 1'-0"

4 METAL ROOF AT FASCIA
1 1/2" = 1'-0"

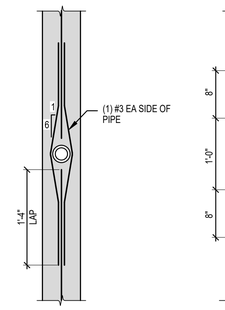
3 EXTERIOR WALL AT ROOF
1 1/2" = 1'-0"



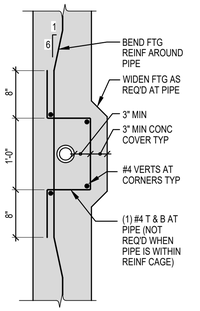
2 EXTERIOR WALL
1 1/2" = 1'-0"



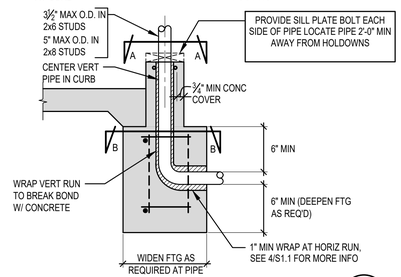
1 EXTERIOR BASE WALL
1 1/2" = 1'-0"



SECTION A
AT CURB



SECTION B AT
FOOTING



DRAIN PIPE AT FOOTING

NTS 3008-04 — 11 / S1.1

BAR SIZE	CONCRETE f'c = 3000 psi TENSION LAP SPLICE LENGTH (INCHES)					
	CONC COVER = 0.75"		CONC COVER = 1.5"		CONC COVER = 2"	
	TOP	OTHER	TOP	OTHER	TOP	OTHER
#3	17	13	17	13	17	13
#4	28	22	23	17	23	17
#5	41	32	28	22	28	22
#6	56	43	34	26	34	26
#7	90	69	55	43	49	38
#8	111	86	70	54	56	43
#9	135	104	86	66	69	53
#10	162	125	105	81	85	66
#11	190	146	125	97	102	79

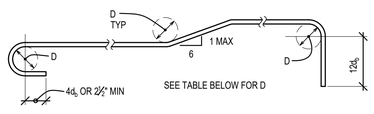


NOTES:

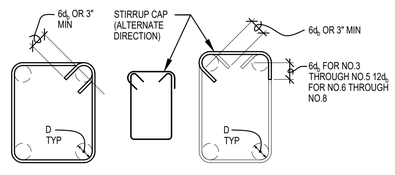
1. LAP SPLICES SHOWN CONFORM TO CLASS "B" SPLICES PER ACI 318-14.
2. USE THE SPLICE LENGTH GIVEN FOR TOP BARS WHEN MORE THAN 12" OF CONCRETE IS CAST BELOW HORIZONTAL BARS IN THE MEMBER. USE THE SPLICE LENGTH FOR BOTTOM BARS FOR ALL OTHER CONDITIONS.
3. SPLICES IN FOOTINGS, WALLS, AND SLABS ON GRADE SHALL BE STAGGERED AT LEAST 24". SPLICE IN BEAMS, COLUMNS, AND ELEVATED SLABS SHALL BE AS SHOWN ON DRAWINGS.

REBAR SPLICE LENGTH

=3000 psi 3301-30 — 12 / S1.1



180 DEGREE HOOK | BEND | 90 DEGREE HOOK



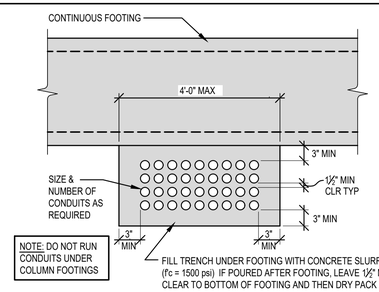
COLUMN TIE | BEAM STIRRUP

SIZE	MINIMUM DIAMETERS OF BEND	
	TIES & STIRRUPS	BARS OTHER THAN TIES & STIRRUPS
	D	D
NO. 3 THROUGH NO. 5	4 d_b	6 d_b
NO. 6 THROUGH NO. 8	6 d_b	6 d_b
NO. 9 THROUGH NO. 11	8 d_b	8 d_b
NO. 14 THROUGH NO. 18	10 d_b	10 d_b

d_b = BAR DIAMETER
D = MINIMUM INSIDE BEND DIAMETER

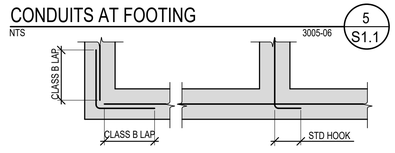
TYP REINFORCING BENDS

NTS 3303-03 — 13 / S1.1

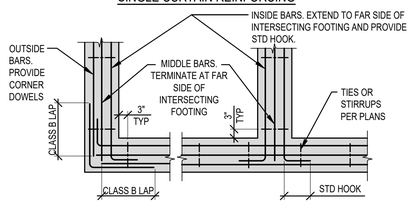


CONDUITS AT FOOTING

NTS 3005-06 — 5 / S1.1



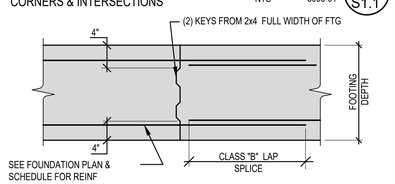
SINGLE CURTAIN REINFORCING



MULTIPLE CURTAIN REINFORCING

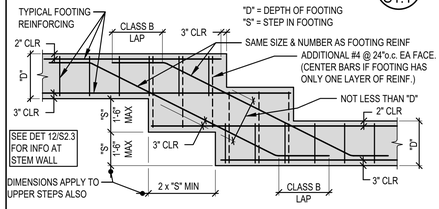
TYPICAL REINF AT FTG

CORNERS & INTERSECTIONS NTS 3006-01 — 6 / S1.1



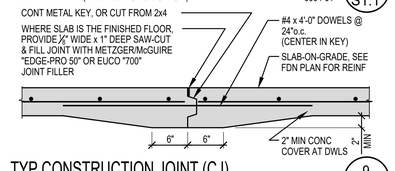
COLD JOINT AT CONT FTG

NTS 3007-01 — 7 / S1.1



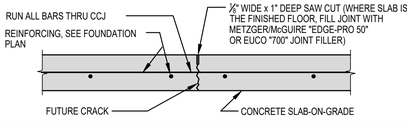
TYPICAL STEPPED FOOTING

NTS (STEPPED TOP & BOTTOM) 3004-01 — 8 / S1.1



TYP CONSTRUCTION JOINT (CJ)

(AT SLAB WITH REBAR) NTS 3102-01 — 9 / S1.1



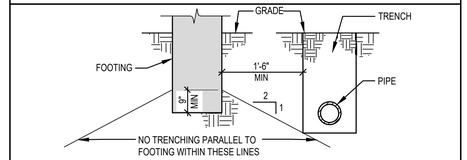
SAW CUTS MUST BE MADE AT EACH LOCATION AS SOON AS THE SLAB WILL SUPPORT THE WEIGHT OF THE SAW AND THE OPERATOR, NORMALLY WITHIN 2 HOURS AFTER FINISHING. USE A SAW WHICH IS SPECIALLY DESIGNED FOR CUTTING FRESH CONCRETE, SUCH AS "SOFF-CUT" OR EQUAL.

CRACK CONTROL JOINT (CCJ)

(AT SLAB WITH REBAR) NTS 3102-02 — 10 / S1.1

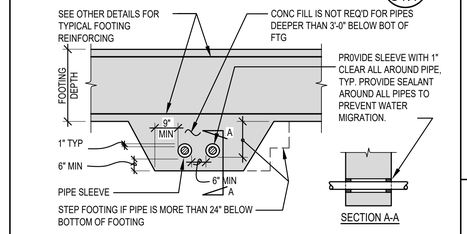
ABBREVIATIONS

AB	ANCHOR BOLT	(E)	EXISTING	O.C.	ON CENTER
ACI	AMERICAN CONCRETE INSTITUTE	EA	EACH	O.D.	OUTSIDE DIAMETER
		EJ	EXPANSION JOINT	O.H.	OPPOSITE HAND
ADD'L	ADDITIONAL	ELEV	ELEVATION	OPNG	OPENING
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	EN	EDGE NAILING	OPP	OPPOSITE
		ENGR	ENGINEER	PC	PRE-CAST
		EQ	EQUAL	PERP	PERPENDICULAR
ALT	ALTERNATE	EQUIP	EQUIPMENT	PJP	PARTIAL JOINT PENETRATION
ARCH	ARCHITECTURAL	EXIST	EXISTING		
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EXP	EXPOSED		PLATE
		EXT	EXTERIOR	PLYWD	PLYWOOD
		FDN	FOUNDATION	PSF	POUNDS PER SQUARE FOOT
BEV	BEVELED	FHWS	FLAT HEAD WOOD SCREW	PSI	POUNDS PER SQUARE INCH
BLDG	BUILDING	FIN	FINISH, FINISHED		
BLK	BLOCK	FLG	FLANGE	PT	PRESSURE TREATED
BLKG	BLOCKING	FLR	FLOOR	R	RADIUS
BLT	BOLT	F.O.	FACE OF	REF	REFERENCE
BM	BEAM	FOB	FACE OF BLOCK	REINF	REINFORCING
BN	BOUNDARY NAILING	FOC	FACE OF CONCRETE	REQD	REQUIRED
B.O.	BOTTOM OF, BY OTHERS	FOS	FACE OF STUDS,	RND	ROUND
BOT	BOTTOM		FACE OF STEEL	RHWS	ROUND HEAD WOOD SCREW
BP	BASE PLATE	FRMG	FRAMING		
BRG	BEARING	FS	FAR SIDE	SCHED	SCHEDULE
BTWN	BETWEEN	FT (')	FEET, FOOT	SDS	SELF-DRILLING SCREW
CBC	CALIFORNIA BUILDING CODE	FTG	FOOTING		
		GA	GAGE, GAUGE	SECT	SECTION
C.C.	CENTER TO CENTER	GALV	GALVANIZED	SHT	SHEET
CCJ	CRACK CONTROL JOINT	GC	GENERAL CONTRACTOR	SHTG	SHEATHING
		GL	GLU-LAM	SIM	SIMILAR
CIP	CAST IN PLACE	GLB	GLU-LAM BEAM	SIMP	SIMPSON (BRAND NAME)
CJ	CONSTRUCTION JOINT	GR	GRADE		
CJP	COMPLETE JOINT PENETRATION	GSM	GAUGE SHEET METAL	SLRS	SEISMIC LOAD RESISTING
		GYP BD	GYPSUM BOARD	SMS	SHEET METAL SCREW
	CENTER LINE	HD	HOLDOWN	SPEC	SPECIFICATION
CLG	CEILING	HDR	HEADER	SPECS	SPECIFICATIONS
CLR	CLEAR	HORIZ	HORIZONTAL	SQ	SQUARE
CMU	CONCRETE MASONRY UNIT	HSS	HOLLOW STEEL SECTIONS	STAGG	STAGGER
				STAGG'D	STAGGERED
COL	COLUMN	HT	HEIGHT	STD	STANDARD
CONC	CONCRETE	I.D.	INSIDE DIAMETER	STL	STEEL
COND	CONDITION	IN. (")	INCH	STIFF	STIFFENER
CONN	CONNECTION	INFO	INFORMATION	STRUCT	STRUCTURAL
COORD	COORDINATE	INT	INTERIOR	SUSP	SUSPENDED
CONSTR	CONSTRUCTION	LAM	LAMINATED	SYMM	SYMMETRICAL
CONT	CONTINUOUS	LBS (#)	POUNDS	T & B	TOP AND BOTTOM
CONT'D	CONTINUED	LLH	LONG LEG HORIZONTAL	TEMP	TEMPORARY
CONTR	CONTRACTOR	LLV	LONG LEG VERTICAL	THK	THICK
CSK	COUNTER SINK	LOC	LOCATION	T.O.	TOP OF
DBL	DOUBLE	LONGIT	LONGITUDINAL	TOS	TOP OF STEEL
DEMO	DEMOLITION	LT	LIGHT	TRANS	TRANSVERSE
DET	DETAIL	LT WT	LIGHT WEIGHT	TYP	TYPICAL
DETS	DETAILS	MAS	MASONRY	UBC	UNIFORM BUILDING CODE
DF	DOUGLAS FIR	MAX	MAXIMUM		
DIA (Ø)	DIAMETER	MB	MACHINE BOLT	UON	UNLESS OTHERWISE NOTED
DIAG	DIAGONAL	MCJ	MASONRY CONTROL JOINT		
DIM	DIMENSION	MECH	MECHANICAL		
DIST	DISTANCE	MFR	MANUFACTURER	VERT	VERTICAL
DO	DITTO	MIN	MINIMUM	W/	WITH
DP	DEEP	MTL	METAL	WD	WOOD
DWG	DRAWING	(N)	NEW	WF	WIDE FLANGE
DWGS	DRAWINGS	NS	NEAR SIDE	WP	WORK POINT
DWL	DOWEL	NSA	NELSON STUD ANCHOR	WT	WEIGHT
		NTS	NOT TO SCALE	WWF	WELDED WIRE FABRIC



TRENCHING NEAR FOOTINGS

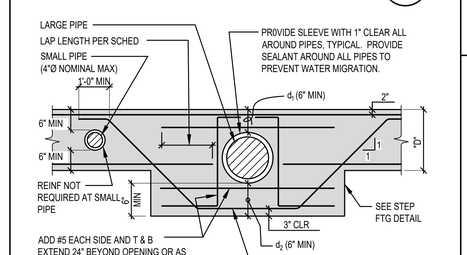
NTS 3005-03 — 2 / S1.1



NOTE: ALL PENETRATIONS SHALL BE PERPENDICULAR TO THE LINE OF THE FOOTING, TYPICAL. NO PIPES ALLOWED AT COLUMN FOOTINGS.

PIPES BELOW FOOTING

NTS 3005-02 — 3 / S1.1



NOTES:

1. ALL PENETRATIONS SHALL BE PERPENDICULAR TO THE LINE OF THE FOOTING, TYPICAL.
2. NO PIPES ALLOWED THRU COLUMN PADS.
3. NO PIPES ALLOWED WITHIN 24" OF HOLDOWN BOLTS
4. SLEEVES FOR ADJACENT PIPES SHALL BE SPACED NO CLOSER THAN THREE DIAMETERS, CENTER LINE TO CENTER LINE, BASED ON DIAMETER OF LARGER SLEEVE.
5. ADDITIONAL REINFORCING SHOWN AROUND LARGE PIPE IS REQ'D FOR ALL PIPES LARGER THAN 4"Ø EVEN IF PIPE DOES NOT INTERRUPT REINFORCING.

PIPES THRU FOOTINGS

NTS 3005-04 — 4 / S1.1

CONCRETE NOTES

1. FORMWORK: ALL MOLDS, ORNAMENTS, GROOVES ETC. SHOWN ON THE ARCHITECTURAL DRAWINGS SHALL BE PROVIDED FOR IN THE FORMWORK BEFORE THE CONCRETE IS POURED.
2. EMBEDDED ITEMS: ALL REINFORCING STEEL, ANCHOR BOLTS, DOWELS AND OTHER EMBEDS SHALL BE IN PLACE AND SECURED TO FORMWORK PRIOR TO POURING OF CONCRETE.
3. PLUMBING: REFER TO BOTH ARCHITECTURAL AND MECHANICAL DRAWINGS FOR LOCATION OF PLUMBING FIXTURES.
4. PIPES: NO PIPES OR DUCTS SHALL BE PLACED IN CONCRETE WALLS OR STRUCTURAL SLABS UNLESS SPECIFICALLY DETAILED.
5. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS NOT INDICATED ON THE DRAWINGS SHALL BE SO MADE AND LOCATED AS NOT TO IMPAIR THE STRENGTH OF THE STRUCTURE. PROVISION SHALL BE MADE FOR THE TRANSFER OF SHEAR AND OTHER FORCES THROUGH THE JOINTS. THE CONTRACTOR SHALL OBTAIN THE ARCHITECT'S APPROVAL OF CONSTRUCTION JOINT LOCATION IN ALL STRUCTURAL SLABS, BEAMS, AND SHEAR WALLS.
6. HORIZONTAL JOINTS: THE SURFACE OF ALL HORIZONTAL CONSTRUCTION JOINTS, INCLUDING JOINTS BETWEEN FOOTINGS AND SLABS ON GRADE, SHALL BE CLEANED AND ROUGHENED BY SANDBLASTING OR OTHER PRE-APPROVED MEANS. IN ORDER TO REMOVE THE ENTIRE SURFACE AND EXPOSE CLEAN AGGREGATE SOLIDLY EMBEDDED IN MORTAR MATRIX. IN THE EVENT THAT THE CONTACT SURFACE BECOMES COATED WITH EARTH, SAWDUST, ETC, AFTER BEING CLEANED, THE ENTIRE SURFACE SO COATED SHALL BE RECLEANED.
7. QUALITY: THE QUALITY AND DESIGN OF CONCRETE SHALL BE IN ACCORDANCE WITH THE CALIFORNIA BUILDING CODE EXCEPT ITEMS NOT SPECIFICALLY COVERED THEREIN SHALL ALSO CONFORM WITH ACI 318.
8. REINFORCING: ALL REINFORCING SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A615, EXCEPT STEEL TO BE WELDED SHALL BE ASTM A706.
   a.) #3 BARS AND SMALLER.....GRADE 40 b.) #4 BARS AND LARGER.....GRADE 60
   (EXCEPT THAT TIES & STIRRUPS MAY BE GRADE 40)
   c.) COLUMN SPIRALS, IF USED, SHALL CONFORM TO "STANDARD SPECIFICATION FOR CARBON-STEEL WIRE AND WELDED WIRE REINFORCEMENT, PLAIN AND DEFORMED, FOR CONCRETE" ASTM A1064 WITH A MINIMUM YIELD STRENGTH OF 70,000 psi. FABRICATION SHALL CONFORM TO ACI MANUAL OF STANDARD PRACTICE.
   d.) SEPARATE BARS ½ DIAMETERS CLEAR OR ½" CLEAR WHICHEVER IS LARGER.
9. SPLICES: SPLICES FOR REINFORCING STEEL SHALL BE "CLASS B" AS DEFINED BY THE CBC AND ACI CODES UNLESS SPECIFICALLY SHOWN OTHERWISE. THE LENGTH OF LAP SHALL BE BASED ON GRADE 60 STEEL AND THE CONCRETE STRENGTH SHOWN BELOW. SEE REBAR SPLICE DETAIL.
10. FIELD SPLICES: FIELD SPLICES NOT ORIGINALLY SHOWN ON SHOP DRAWINGS WILL BE PERMITTED ONLY WITH APPROVAL FROM THE ARCHITECT. SUCH SPLICES SHALL BE MADE WITH FULL PENETRATION BUTT WELDING UNLESS OTHERWISE NOTED OR DETAILED.
11. WELDING OF REINFORCING: ALL WELDING OF REINFORCING STEEL SHALL BE WITH LOW HYDROGEN ELECTRODES AND SHALL COMPLY WITH ANSI/AWS D1.4. WELDING IS ALLOWED ONLY WHERE INDICATED ON DRAWINGS. REINFORCING SHALL COMPLY WITH ASTM A706. SHOP FUSION WELDED STIRRUP/TIE CAGES (OR SPIRAL ASSEMBLIES) CONSISTING OF ASTM A706 REINFORCING STIRRUPS/TIES AND LONGITUDINAL HOLDING WIRES OF MAXIMUM SIZE W5 AND CONFORMING TO ASTM A1064 SHALL BE PERMITTED.
12. CONCRETE COVER: MINIMUM CONCRETE COVER FOR REINFORCING SHALL BE AS FOLLOWS:
    CAST AGAINST EARTH (EXCEPT SLABS ON GRADE).....3"
    SLABS ON GRADE (TO BOTTOM).....2"
    EXPOSED TO EARTH OR WEATHER:
    #5 BARS AND SMALLER.....1½"
    #6 BARS AND LARGER.....2"
    NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:
    SLABS, WALLS, JOISTS:
    #11 BARS AND SMALLER.....¾"
    #14 AND #18 BARS.....1½"
    BEAMS, GIRDERS, AND COLUMNS: PRINCIPLE REINFORCING, TIES, STIRRUPS, OR SPIRALS.....1½"
    SHELLS AND FOLDED PLATE MEMBERS:
    #5 BARS AND SMALLER.....¾"
    #6 BARS AND LARGER.....¾"
13. WIRE MESH: WELDED WIRE FABRIC SHALL COMPLY WITH ASTM A1064.
14. ANCHOR BOLTS: ALL ANCHOR BOLTS SHALL BE HEADED BOLTS AND SHALL COMPLY WITH ASTM A307 OR ASTM F1554 Gr. 36, UON. NO UPSET THREADS ALLOWED.
15. AGGREGATE SIZE: MAXIMUM AGGREGATE SIZE SHALL BE:
    1½" AT INTERIOR SLABS ON GRADE
    1" AT ALL OTHER CONCRETE
    SEE PROJECT SPECIFICATIONS FOR COMBINED GRADATION LIMITS.
16. MIX DESIGN: CONCRETE SHALL HAVE 5½ SACKS MINIMUM (6 SACKS MIN AT LIGHTWEIGHT CONC) TYPE-I/II PORTLAND CEMENT PER CUBIC YARD AND SHALL CONTAIN 15% FLY ASH PER ASTM C-618 CLASS F. EXCEPTION: FLY ASH IS NOT PERMITTED IN CONCRETE TO BE POLISHED.
17. CONCRETE STRENGTH: CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS:
    f'_c = 3,000 psi AT INTERIOR SLABS ON GRADE
    f'_c = 3,500 psi AT POLISHED CONCRETE
    f'_c = 3,000 psi AT ALL OTHER CONCRETE
18. WATER/CEMENT RATIO: MAXIMUM WATER/CEMENT RATIO SHALL BE:
    0.50 AT INTERIOR SLABS ON GRADE
    0.56 AT ALL OTHER CONCRETE

LEGEND

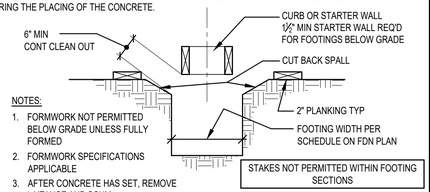
CONCRETE
MASONRY
STEEL
CURB
CONTINUOUS WOOD MEMBER
DISCONTINUOUS WOOD MEMBER (BLOCKING)

1 / S1.1 — DETAIL NO. / SHEET DRAWN ON
FOOTING STEP
ELEVATION BOTTOM OF FOOTING
ELEVATION
ELEVATION TOP OF STEEL

FOUNDATIONS: MANDATORY MINIMUM FORMWORK

(UNLESS FULLY FORMED)

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 THE CONCRETE.



NOTES:

1. FORMWORK NOT PERMITTED BELOW GRADE UNLESS FULLY FORMED
2. FORMWORK SPECIFICATIONS APPLICABLE
3. AFTER CONCRETE HAS SET, REMOVE LAITANCE AND SCUM

STAKES NOT PERMITTED WITHIN FOOTING SECTIONS

STARTER WALL REQUIRED FOR ALL MASONRY OR CONCRETE WALLS WHEN BELOW GRADE

FOUNDATION TRENCHING AND FORMING DETAIL

NTS (CCR TITLE 24) 3001-02 — 1 / S1.1

GENERAL NOTES

1. DISCREPANCIES: THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND CONDITIONS BEFORE STARTING WORK; AND SHALL NOTIFY THE ARCHITECT IMMEDIATELY IF ANY DISCREPANCIES ARE FOUND. TYPICAL DETAILS: THE TYPICAL DETAILS AND NOTES SHOWN ON THESE SHEETS SHALL APPLY
2. IN ALL CASES UNLESS SHOWN OTHERWISE. WHERE NO DETAILS ARE SHOWN, CONSTRUCTION SHALL BE AS SHOWN FOR OTHER SIMILAR WORK. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL NOTES AND TYPICAL DETAILS. ALL WORK AND CONSTRUCTION SHALL COMPLY WITH APPLICABLE BUILDING CODES, REGULATIONS, AND SAFETY REQUIREMENTS.
3. OTHER TRADES: SEE ARCHITECTURAL, ELECTRICAL, AND MECHANICAL DRAWINGS FOR SIZE AND LOCATION OF PIPE, VENT, DUCT, AND OTHER OPENINGS AND DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. VERIFY ALL DIMENSIONS WITH THE ARCHITECTURAL DRAWINGS.
4. SHORING AND BRACING: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DESIGN AND PROVIDE ADEQUATE SHORING, BRACING, AND FORMWORK AS REQUIRED FOR THE CONSTRUCTION OF THIS BUILDING. PROVIDE TEMPORARY BRACING AS REQUIRED TO HOLD THE VARIOUS ELEMENTS IN PLACE UNTIL FINAL SUPPORT IS SECURELY ANCHORED.
5. EXCAVATION: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EXCAVATION PROCEDURES AND FOR PROTECTION OF ADJACENT PROPERTY, STRUCTURES, STREETS, AND UTILITIES IN ACCORDANCE WITH THE LOCAL BUILDING DEPARTMENT.
6. BACKFILL: DO NOT BACKFILL AROUND THE EXTERIOR PERIMETER WALLS UNTIL AFTER THE WALLS ARE SUPPORTED BY THE COMPLETION OF INTERIOR FLOOR SYSTEMS. IF THE FLOOR SLABS ARE CONCRETE, DO NOT BACKFILL UNTIL 7 DAYS MINIMUM AFTER COMPLETION OF THE FLOOR SLABS. DO NOT BACKFILL UNTIL AFTER COMPLETION AND INSPECTION OF DAMP-PROOFING.
7. DESIGN INTENT: IT IS THE INTENTION OF THESE DRAWINGS TO PROVIDE THE FOLLOWING CONTINUITIES IN THE STRUCTURE: ALL ROOF AND FLOOR MEMBERS LABELED AS STRUTS SHALL BE CONTINUOUSLY
   a.) CONNECTED FOR THE FULL LENGTH OF THE ROOF OR FLOOR SYSTEM UNLESS OTHERWISE NOTED. ALL WALL BRACING AND/OR SHEAR PANELS SHALL BE CONNECTED TO THE ROOF
   b.) AND/OR FLOOR STRUTS. ALL MASONRY AND CONCRETE WALLS SHALL BE POSITIVELY ANCHORED TO THE c.) ROOF AND FLOOR SYSTEMS AT MAXIMUM INTERVALS OF 4'-0"o.c. UON.
   IF DETAILS REQUIRED TO PROVIDE THE ABOVE CONTINUITIES ARE NOT EVIDENT ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CLARIFICATION.
8. REGARDING SCHEDULES: NOT ALL ITEMS SHOWN ON SCHEDULES ARE NECESSARILY USED ON EACH SHEET WHERE SCHEDULE APPEARS.

DESIGN DATA

GOVERNING CODE: ..... 2022 CALIFORNIA BUILDING CODE (CBC) (PART TITLE 24 CCR)

DESIGN LOADS:	UNIFORM:	CONCENTRATED:
ROOF LIVE LOAD:	20 psf *	300 lbs.
FLOOR LIVE LOAD:	N/A psf **	N/A lbs.
ROOF SNOW LOAD:	N/A psf	

* LIVE LOAD REDUCTION PER CBC 1607A.14.2.1
** LIVE LOAD REDUCTION PER CBC 1607A.12.1 FOR LOADS LESS THAN 100 psf.

FLOOD DESIGN DATA:
THIS PROJECT DOES NOT FALL WITHIN A FLOOD HAZARD ZONE.

WIND DESIGN:
METHOD: ..... DIRECTIONAL PROCEDURE (ASCE 7-16, CH27)
BASIC WIND SPEED: ..... 100 MPH
EXPOSURE CATEGORY: C

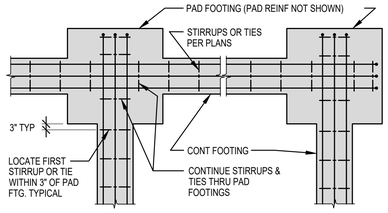
SEISMIC DESIGN:
RISK CATEGORY III
IMPORTANCE FACTOR, I_e 1.25
SEISMIC DESIGN CATEGORY: ..... D
S_S ... 1.777 S_1 ... 0.590
S_{DS} ... 1.186 S_{D1} ... 0.673
SYSTEM: ..... PLYWOOD SHEAR WALLS: R = 6.5
SEISMIC RESPONSE COEFFICIENT: .... C_s = 0.228
ANALYSIS PROCEDURE: ..... EQUIVALENT LATERAL FORCE
IRREGULARITIES:
HORIZONTAL: ..... N/A
VERTICAL: ..... N/A
BASE LEVEL: ..... +0'-0"

SOIL DATA:
CHARACTER OF SOIL: ..... SANDY SILT
SITE CLASS: ..... D
DESIGN SOIL PRESSURE: ..... 3000 psf
GEOTECHNICAL REPORT No. 052-24041
PREPARED BY KRAZAN & ASSOCIATES INC
AND DATED JUNE 14, 2024

FOUNDATION NOTES

1. REFERENCE ELEVATION: REFERENCE ELEVATION (0'-0") IS TOP OF FINISHED FLOOR UNLESS OTHERWISE NOTED (UON).
2. EARTHWORK: PREPARE BUILDING PAD AS SHOWN ON DETAIL 1/S1.2 AND IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE SOILS REPORT LISTED UNDER "DESIGN DATA".
3. FOOTINGS: ALL FOOTINGS SHALL EXTEND TO FIRM BEARING IN UNDISTURBED SOIL OR ENGINEERED FILL. IN THE EVENT THAT FOOTINGS ARE OVER-EXCAVATED, THEY SHALL BE FILLED WITH CONCRETE OR PROPERLY COMPACTED AND TESTED ENGINEERED FILL. ALL LOOSE SOIL AND DEBRIS MUST BE REMOVED PRIOR TO PLACING CONCRETE.
4. FOOTING TRENCHES: SEE FOUNDATION FORMING AND TRENCHING DETAIL FOR TRENCHING OF FOOTINGS.
5. STEPPED FOOTINGS: FOUNDATIONS FOR ALL BUILDINGS WHERE THE SURFACE OF THE GROUND SLOPES MORE THAN 1 FOOT IN 10 SHALL BE LEVEL OR SHALL BE STEPPED SO THAT BOTH TOP AND BOTTOM OF SUCH FOUNDATIONS ARE LEVEL.
6. EXTERIOR SLABS AND WALKWAYS: REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION AND EXTENT OF EXTERIOR SLABS AND WALKWAYS.
7. NON-BEARING WALLS: REFER TO ARCHITECTURAL DRAWINGS FOR NON-BEARING WALLS NOT SHOWN ON STRUCTURAL DRAWINGS.
8. SLABS ON GRADE: ALL SLABS ON GRADE SHALL HAVE THICKNESS AND REINFORCING SHOWN ON 2/S2.2
9. EMBEDDED ITEMS: ALL REINFORCING STEEL, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED AND ANCHORED TO THE FORMS PRIOR TO POURING OF CONCRETE.
10. CRACK CONTROL JOINTS: REFER TO FOUNDATION PLAN FOR LOCATION OF CRACK CONTROL JOINTS IN FLOOR SLABS. IF NOT SHOWN, JOINT SPACING SHALL NOT EXCEED 12 FEET IN EACH DIRECTION.
11. CONSTRUCTION JOINTS: PROVIDE CONSTRUCTION JOINTS WHERE CONCRETE POURS ARE STOPPED AND WHERE SHOWN ON FOUNDATION PLAN.
12. WALL DOWELS: ALL CONCRETE AND MASONRY WALLS SHALL BE DOWELED INTO FOOTINGS WITH BARS OF THE SAME SIZE AND SPACING AS THE WALL BARS UNLESS OTHERWISE NOTED. SEE CONCRETE NOTES FOR LAP REQUIREMENTS.
13. CONTINUOUS FOOTING REINFORCEMENT: ALL CONTINUOUS FOOTING REINFORCEMENT SHALL CONTINUE THROUGH PAD FOOTINGS. (SEE DETAIL 9/S1.2)

REGISTERED PROFESSIONAL ENGINEER JACK D. BREWER No. S5782 Exp. 6-30-25 STRUCTURAL STATE OF CALIFORNIA



INTERSECTION CORNER

NOTES:

1. EXTEND GRADE BEAM BARS TO FAR SIDE OF PAD FOOTING AND PROVIDE STD HOOK. (TURN UP/DOWN)
2. PROVIDE SLAB DOWELS AND WALL DOWELS SHOWN ON CONT FOOTING DETAILS IN PAD FOOTING REGION ALSO.

CONT FTG REINF AT PAD FTGS

NTS 3006-03 — 12 / S1.2

UNLESS LARGER SIZES ARE SHOWN, THE MINIMUM SIZE OF FILLET WELDS SHALL BE AS SHOWN IN TABLE J2.4. THESE PROVISIONS DO NOT APPLY TO FILLET WELD REINFORCEMENTS OF PARTIAL-OR COMPLETE-JOINT-PENETRATION GROOVE WELDS.

TABLE J2.4 AISC MINIMUM SIZE OF FILLET WELDS

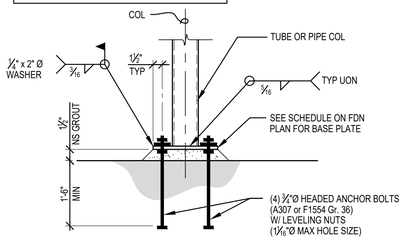
MATERIAL THICKNESS OF THINNER PART JOINED (IN)	MINIMUM SIZE OF FILLET WELD (IN) *
TO ¼ INCLUSIVE	ⓧ USE 3/16 MIN
OVER ¼ TO ½	3/16
OVER ½ TO ¾	¼
OVER ¾ TO 1½"	5/16

* LEG DIMENSION OF FILLET WELDS. SINGLE-PASS WELDS MUST BE USED.

FILLET WELDS

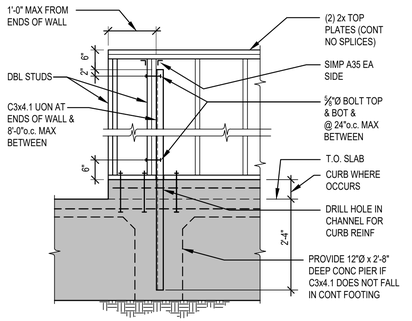
NTS 5001-02 — 13 / S1.2

NOTE: ASTM F844 (USS STANDARD) WASHERS MAY BE USED IN LIEU OF WELDED WASHER IF BASE PLATE HOLES DO NOT EXCEED 1 3/16"Ø



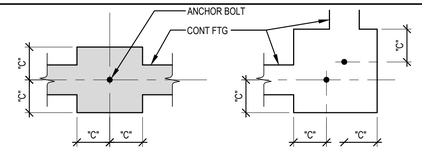
BASE PLATE DETAIL

TUBE OR PIPE COLUMN NTS 5101-01 — 14 / S1.2



WING WALL DETAIL

NTS 6311-02 — 15 / S1.2



TYPICAL CORNER

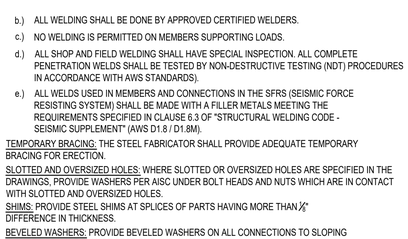
HOLDOWN	"C"
HDU2	9"
HDU4	9"
HDU5	9"
HDU8	15"
HDU11	17"
HDU14	17"

NOTES:

1. WIDEN FOOTINGS AS REQUIRED TO PROVIDE MINIMUM CONCRETE COVER "C" AT EACH ANCHOR BOLT.
2. WIDENED FOOTINGS ARE NOT SHOWN ON FOUNDATION PLANS.
3. NO ADDITIONAL REINF IS REQUIRED UON.

CONC COVER AT HD ANCHORS

NTS 3206-01 — 10 / S1.2



PLAN VIEW OF CONT FOOTING

BUMP-OUTS AT FOOTINGS

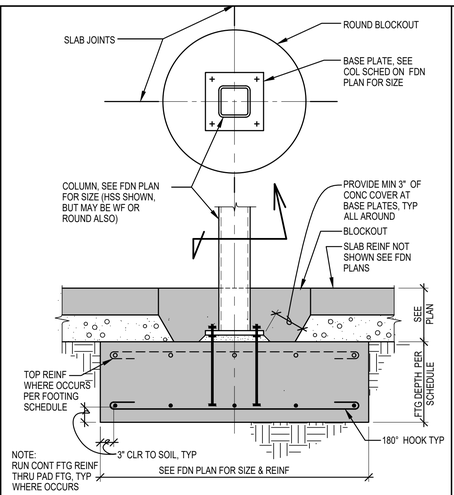
NTS 3006-02 — 11 / S1.2

STRUCTURAL STEEL NOTES

1. GRADES: STRUCTURAL STEEL SHALL CONFORM TO THE FOLLOWING (UNLESS OTHERWISE NOTED):

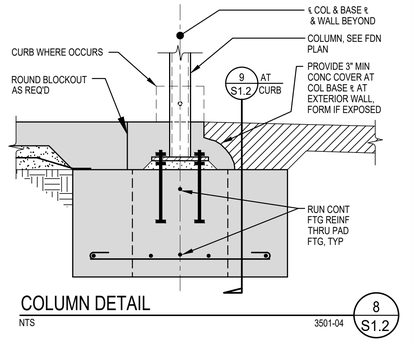
STRUCTURAL SHAPE	ASTM SPECIFICATION	Fy (MIN)
W-SHAPES, WT-SHAPES	ASTM A992	50 ksi
CHANNELS, PLATES, AND ANGLES	ASTM A36	36 ksi
STEEL PIPE	ASTM A53 GRADE B	35 ksi
ROUND HSS	ASTM A500 GRADE C	46 ksi
SQUARE AND RECTANGULAR HSS	ASTM A500 GRADE C	50 ksi

2. NATURAL CAMBER: WHEN FABRICATING BEAMS, PLACE NATURAL CAMBER UP.
3. FABRICATION AND ERECTION: FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION. SHOP DRAWINGS SHALL BE SUBMITTED BEFORE FABRICATION.
4. BOLTS: ALL UNFINISHED BOLTS FOR WOOD TO STEEL SHALL BE ASTM A307 UNLESS OTHERWISE NOTED. BOLTS FOR STEEL TO STEEL CONNECTIONS SHALL BE A307 UON, EXCEPT THAT BOLTS FOR BEAM CONNECTIONS SHALL BE PER BEAM CONNECTION SCHEDULE. BOLT HOLES SHALL BE STANDARD SIZE UON.
5. HIGH STRENGTH BOLTS: HIGH STRENGTH (HS) BOLTS, IN SLIP CRITICAL CONNECTIONS (SC), SHALL BE ASTM A325. ASSEMBLY SHALL COMPLY WITH AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325 BOLTS AND SHALL COMPLY WITH THE REQUIREMENTS FOR SLIP CRITICAL TYPE CONNECTION, CLASS A SURFACE. INSTALLATION SHALL BE BY EITHER "CALIBRATED WRENCH TIGHTENING", "TURN OF THE NUT TIGHTENING METHOD", OR "TIGHTENING BY USE OF A DIRECT TENSION INDICATOR". HIGH STRENGTH BOLTS IN NON-SLIP CRITICAL CONNECTIONS (A325N) REQUIRE TIGHTENING TO THE SNUG TIGHT CONDITION ONLY.
6. MINIMUM CONNECTION: IF DETAILS ARE NOT SHOWN, BEAMS SHALL BE CONNECTED USING ¾"Ø A325N BOLTS PER PART 7, TABLE 7-1 OF AISC MANUAL OF STEEL CONSTRUCTION 15th EDITION. THE NUMBER OF BOLTS SHALL BE THE MAXIMUM POSSIBLE FOR THE PARTICULAR BEAM DEPTH. NO CONNECTION SHALL HAVE FEWER THAN 2 BOLTS.
7. WELDING:
   a.) ALL WELDS SHALL BE MADE WITH PREQUALIFIED JOINTS PER AISC, USING THE ELECTRIC ARC PROCESS AND E-70XX ELECTRODES IN ACCORDANCE WITH AWS STANDARDS.
   b.) ALL WELDING SHALL BE DONE BY APPROVED CERTIFIED WELDERS.
   c.) NO WELDING IS PERMITTED ON MEMBERS SUPPORTING LOADS.
   d.) ALL SHOP AND FIELD WELDING SHALL HAVE SPECIAL INSPECTION. ALL COMPLETE PENETRATION WELDS SHALL BE TESTED BY NON-DESTRUCTIVE TESTING (NDT) PROCEDURES IN ACCORDANCE WITH AWS STANDARDS).
   e.) ALL WELDS USED IN MEMBERS AND CONNECTIONS IN THE SFRS (SEISMIC FORCE RESISTING SYSTEM) SHALL BE MADE WITH A FILLER METALS MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.3 OF "STRUCTURAL WELDING CODE - SEISMIC SUPPLEMENT" (AWS D1.8 / D1.8M).
8. TEMPORARY BRACING: THE STEEL FABRICATOR SHALL PROVIDE ADEQUATE TEMPORARY BRACING FOR ERECTION.
9. SLOTTED AND OVERSIZED HOLES: WHERE SLOTTED OR OVERSIZED HOLES ARE SPECIFIED IN THE DRAWINGS, PROVIDE WASHERS PER AISC UNDER BOLT HEADS AND NUTS WHICH ARE IN CONTACT WITH SLOTTED AND OVERSIZED HOLES.
10. SHIMS: PROVIDE STEEL SHIMS AT SPLICES OF PARTS HAVING MORE THAN ¼" DIFFERENCE IN THICKNESS.
11. BEVELED WASHERS: PROVIDE BEVELED WASHERS ON ALL CONNECTIONS TO SLOPING FLANGES OF WIDE FLANGE SECTIONS AND CHANNELS.
12. STITCH BOLTS: PROVIDE ½"Ø STITCH BOLTS AND FILL PLATE (OR EQUIVALENT WELDED FILL PLATES) CONNECTING ALL DOUBLE ANGLE MEMBERS AT 2'-0"o.c. MAX.
13. MINIMUM WELDS: WHERE MINIMUM AISC FILLET WELD THICKNESS REQUIREMENT EXCEEDS WELDS SHOWN ON DETAILS, PROVIDE MINIMUM AISC WELD.
14. OPENINGS IN STEEL MEMBERS: OPENINGS SHALL NOT BE PLACED IN STEEL MEMBERS UNLESS SPECIFICALLY DETAILED. STEEL MEMBERS SHALL BE SHORED WHEN PERMISSIBLE HOLES ARE CUT WITH TORCH AFTER STEEL IS ERECTED. THE SHORES SHALL REMAIN IN PLACE UNTIL STEEL TEMPERATURE HAS RETURNED TO AIR TEMPERATURE.
15. STUD BOLTS: ALL STUD BOLTS SHALL BE NELSON STUDS OR EQUIV PER ESR 2856 AND SHALL BE INSTALLED BY A LICENSED FABRICATOR.
16. STEEL EXPOSED TO EARTH: ALL STEEL EXPOSED TO EARTH SHALL HAVE A MINIMUM CONCRETE COVER OF 3" UON.
17. LIGHT GAGE STEEL: LIGHT GAGE COLD-FORMED STRUCTURAL STEEL SHALL CONFORM TO THE SPECIFICATIONS OF THE AISI MANUAL UNLESS OTHERWISE NOTED.
18. SHEAR CONNECTORS: SHEAR CONNECTORS SHALL BE ASTM A108 WITH Fu = 65 KSI.



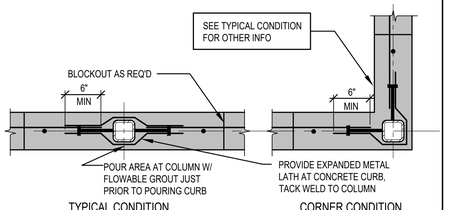
COLUMN FOOTING

NTS 3501-02 — 7 / S1.2

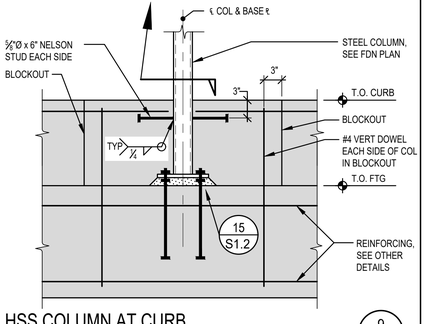


COLUMN DETAIL

NTS 3501-04 — 8 / S1.2

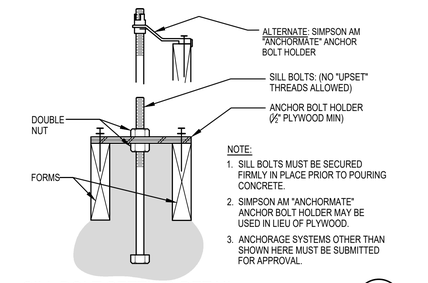


TYPICAL CONDITION CORNER CONDITION



HSS COLUMN AT CURB

NTS 3501-03 — 9 / S1.2

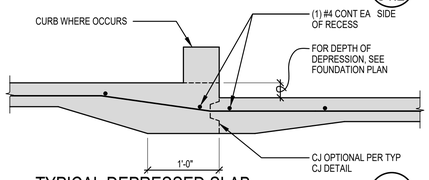


NOTE:

1. SILL BOLTS MUST BE SECURED FIRMLY IN PLACE PRIOR TO POURING CONCRETE.
2. SIMPSON AM "ANCHORMATE" ANCHOR BOLT HOLDER MAY BE USED IN LIEU OF PLYWOOD.
3. ANCHORAGE SYSTEMS OTHER THAN SHOWN HERE MUST BE SUBMITTED FOR APPROVAL.

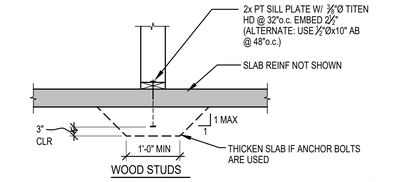
SILL BOLT SETTING DETAIL

NTS 3205-02 — 3 / S1.2



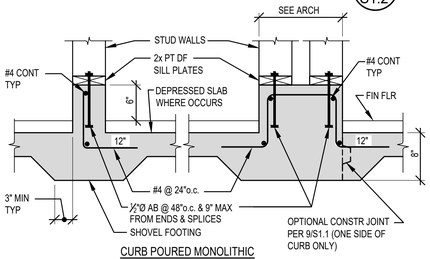
TYPICAL DEPRESSED SLAB

NTS 3104-01 — 4 / S1.2

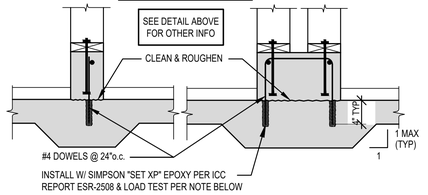


TYPICAL INTERIOR NON-BEARING WALL

NTS 3101-03C-MOD — 5 / S1.2



CURB POURED MONOLITHIC



CURB POURED AFTER SLAB (OPTIONAL)

TESTING: TENSION TEST 25% OF ANCHORS TO 2400 LBS. IF ANY ANCHOR FAILS TEST ALL ANCHORS NOT PREVIOUSLY TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS, THEN RESUME THE 25% TEST FREQUENCY.

CURBS AT INTERIOR WALLS

(NON-BEARING & NON-SHEAR) 3101-00 — 6 / S1.2

ANCHOR DIAMETER	INSTALLATION REQUIREMENTS								
	HILTI KB-TZ2		SIMPSON STRONG-BOLT 2		DEWALT POWER-STUD+ SD2		SIMPSON TITEN HD	HILTI KH-EZ	DEWALT SCREW-BOLT+
	MINIMUM NOMINAL EMBED	INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	INSTALL TORQUE (FT-LBS)	MINIMUM NOMINAL EMBED	MINIMUM NOMINAL EMBED	MINIMUM NOMINAL EMBED
⅜"	1⅜"	4	1⅜"	4	-	-	1⅝"	1⅜"	1⅜"
½"	3"	30	2⅜"	30	2⅜"	20	2⅝"	2⅜"	2⅜"
⅝"	3⅜"	50	3⅜"	60	3⅜"	40	3⅝"	3"	3⅝"
¾"	4½"	40	5⅝"	90	4½"	60	4"	3⅝"	3⅝"
⅞"	5⅝"	110	5⅞"	150	5⅜"	110	5⅝"	4"	4½"
1"	6½"	185	7⅝"	230	-	-	-	-	-

GENERAL NOTES:

1. THE TESTING OF POST-INSTALLED ANCHORS SHALL BE DONE IN THE PRESENCE OF THE SPECIAL INSPECTOR AND A REPORT OF THE TEST RESULTS SHALL BE SUBMITTED TO THE ENFORCEMENT AGENCY. TEST ANCHORS, AS FOLLOWS:
   10% OF SILL PLATE BOLTS
   50% OF EQUIPMENT ANCHORAGE BOLTS
   100% OF ALL OTHER STRUCTURAL ANCHORS
   IF ANY ANCHOR FAILS, TEST ALL ANCHORS OF THE SAME CATEGORY NOT PREVIOUSLY TESTED UNTIL 20 CONSECUTIVE ANCHORS PASS THE TEST REQUIREMENTS. THE INITIAL TESTING FREQUENCY SHALL THEN BE RESUMED.
2. TEST PROCEDURE SHALL BE AS PERMITTED BY AN APPROVED TEST REPORT USING CRITERIA ADOPTED IN THE CALIFORNIA BUILDING CODE (CBC). TORQUE CONTROLLED POST-INSTALLED ANCHORS SHALL BE PERMITTED TO BE TESTED USING TORQUE BASED ON APPROVED TEST REPORT AS SHOWN IN TABLE ABOVE.
3. HOLES FOR ANCHORS SHALL BE DRILLED USING A CARBIDE-TIPPED DRILL BIT CONFORMING TO ANSI B212.15 W/ THE SAME NOMINAL DIAMETER AS THE ANCHOR.
4. TESTING IS NOT REQUIRED FOR POWER ACTUATED FASTENERS USED TO ATTACH TRACKS OF INTERIOR NON-SHEAR WALL PARTITIONS FOR SHEAR ONLY, WHERE THERE ARE AT LEAST THREE FASTENERS PER SEGMENT OF TRACK.
5. USE POST-INSTALLED ANCHORS ONLY WHERE SHOWN ON DRAWINGS.

REQUIREMENTS FOR TORQUE CONTROLLED ANCHORS:

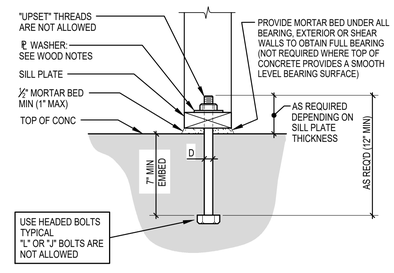
1. ACCEPTANCE CRITERIA FOR POST-INSTALLED ANCHORS SHALL BE BASED ON APPROVED TEST REPORT USING CRITERIA ADOPTED IN THE CBC. FIELD TORQUE TESTS SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:
   TORQUE WRENCH METHOD: ANCHORS TESTED WITH A CALIBRATED TORQUE WRENCH MUST ATTAIN THE SPECIFIED TORQUE WITHIN ½ TURN OF THE NUT.
   EXCEPTIONS:
   a. WEDGE OR SLEEVE TYPE: ONE-QUARTER (¼) TURN OF THE NUT FOR A ⅜" DIAMETER SLEEVE ANCHOR ONLY.
   b. THREADED (SCREW) TYPE: ONE-QUARTER (¼) TURN OF THE SCREW AFTER INITIAL SEATING OF THE SCREW HEAD.
2. TORQUE CONTROLLED ANCHORS MUST BE LISTED IN A CURRENT APPROVED TEST REPORT INCLUDING, BUT NOT LIMITED TO THE FOLLOWING:
   a. HILTI KB-TZ2 (ESR-4266)
   b. SIMPSON STRONG BOLT 2 (ESR-3037)
   c. DEWALT\POWERS POWER-STUD+ SD2 (ESR-2502)
   d. HILTI KH-EZ SCREW ANCHOR (ESR-3027)
   e. SIMPSON TITEN HD SCREW ANCHOR (ESR-2713)
   f. DEWALT\POWERS SCREWBOLT+ SCREW ANCHOR (ESR-3889)
3. INSTALL SCREW ANCHORS PER MANUFACTURER'S APPROVED TEST REPORT. DO NOT EXCEED MAXIMUM INSTALLATION TORQUE VALUES LISTED IN REPORT.

REQUIREMENTS FOR ADHESIVE ANCHORS:

1. FIELD TENSION TESTS SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENTS:
   HYDRAULIC RAM METHOD:
   ANCHORS TESTED WITH A HYDRAULIC JACK OR SPRING LOADED DEVICES SHALL MAINTAIN THE TEST LOAD FOR A MINIMUM OF 15 SECONDS AND SHALL EXHIBIT NO DISCERNIBLE MOVEMENT DURING THE TENSION TEST, E.G., AS EVIDENCED BY LOOSENING OF THE WASHER UNDER THE NUT.
2. TESTING OF SHEAR DOWELS ACROSS COLD JOINTS IN SLABS ON GRADE, WHERE THE SLAB IS NOT PART OF THE LATERAL FORCE-RESISTING SYSTEM SHALL NOT BE REQUIRED.
3. TENSION TEST LOAD SHALL BE AS INDICATED ON DETAILS.
4. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER (AAI) AS CERTIFIED THROUGH ACI AND IN ACCORDANCE WITH ACI 318-14 (SECTION 17.8.2.2). PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ARCHITECT & SEOR PRIOR TO INSTALLATION.
5. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT THE TIME OF ANCHOR INSTALLATION PER ACI 318-19 (SECTION 26.7.2(f)).

POST-INSTALLED ANCHORS IN CONCRETE

NTS 3305-01(14) — 1 / S1.2



SILL BOLT DETAIL

NTS 3205-01 — 2 / S1.2

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT JAMES R. MORRELL No. C-33128 REN. 05-31-25 STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0630 Office
(559) 627-1926 Fax

TITLE
TYPICAL NOTES AND DETAILS

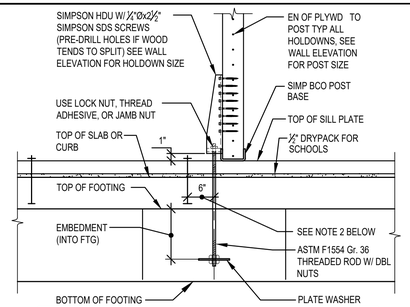
S1.2

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER JACK D. BROWER No. S5792 Exp. 6-30-25 STRUCTURAL STATE OF CALIFORNIA

ASD advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com

P:\M62404 Sunset Classroom Wing\Struct\S1.2_Typ.dwg Feb 12 2025 9:02am

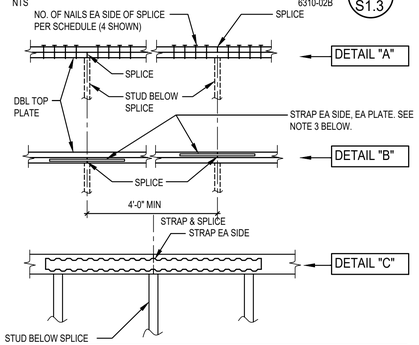


HOLDOWN SIZE	NO. OF SCREWS TO POST	ANCHOR DIA	MIN EMBED DEPTH	WASHER SIZE
HDU2	(6)	⅝"	20"	3"x3" SQ
HDU4	(10)			
HDU5	(14)			
HDU8	(20)	¾"	20"	3"x3"x¼" SQ
HDU11	(30)	1"	20"	3"x3"x⅜" SQ
HDU14	(36)	1"	20"	3"x3"x⅜" SQ

NOTES:
1. DEEPEN FTG AS REQUIRED TO PROVIDE 3" MIN CONCRETE COVER AT ANCHOR BOLT & PLATE WASHER, AND WIDEN FTG AS REQ'D AT ANCHORS PER 8/S1.2.
2. WHEN HOLDOWN (HD) OCCURS NEAR END OF SILL PLATE, LOCATE A SILL BOLT 6" MAX FROM HD BOLT.
3. PIPES OR CONDUITS IN FOOTINGS SHALL NOT BE LOCATED WITHIN "C" DISTANCE OF HOLDOWN ANCHORS AS SHOWN ON 8/S1.2.

HOLDOWN DETAIL

NTS 6310-02B — 8 / S1.3

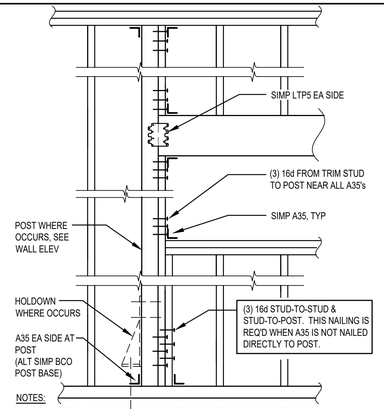


DETAIL "A" (NAILS)		DETAIL "B" (STRAPS)		DETAIL "C" (STRAPS AT 4x OR 6x)	
TYPE	NAIL SIZE	TYPE	SIMP STRAP	TYPE	SIMP STRAP
1	(4) - 16d	4	MSTA18	7	ST6236
2	(6) - 16d	5	MSTA24	8	MSTC66
3	(8) - 16d	6	MSTA30	9	-

NOTES:
1. BOTH TOP AND BOTTOM PLATES MUST BE SPLICED.
2. ALL SPLICES ARE TO OCCUR OVER A STUD.
3. USE 10d x 1½" NAILS WHEN STRAPS ARE APPLIED DIRECTLY TO TOP PLATES. USE 10d x 2½" MIN NAILS WHEN STRAPS ARE APPLIED OVER PLYWOOD.

TOP PLATE SPLICE DETAIL

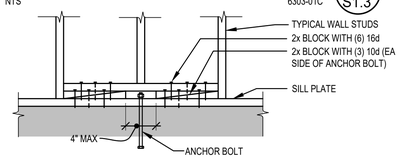
NTS 6301-05 — 9 / S1.3



NOTES:
1. THIS DETAIL APPLIES AT ALL CONDITIONS WHERE A 3x STUD/POST (OR LARGER) REPLACES THE 2x FULL HEIGHT KING STUDS SHOWN ON DETAIL 2/S1.3, TYP UON.
2. SEE DETAIL 2/S1.3 FOR OTHER INFO.

TYP POST AT OPNG

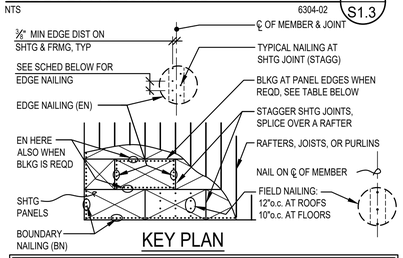
NTS 6303-01C — 4 / S1.3



NOTE:
THIS DETAIL APPLIES WHERE ANCHOR BOLTS INTERFERE WITH STUDS. (NOT ALLOWED UNDER KING STUDS OR JAMB STUDS)

SILL BOLT FALLS AT STUD

NTS 6304-02 — 5 / S1.3



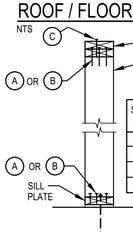
KEY PLAN

SHEATHING PANEL SCHEDULE						
TYPE	THICK	INDEX	BN	EN	EDGE BLOCKING	USE
A	⅞"	40/20	10d @ 4"o.c.	10d @ 6"o.c.	3x4 FLAT	ROOF

NOTES:
1. ALL NAILS SHALL BE COMMON WIRE NAILS. NAILS DRIVEN INTO PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED PER ASTM A153 CLASS D.
2. ALL SHEATHING SHALL BE MARKED "APA RATED GROUP 1 DF, C-D, EXPOSURE 1".
3. INDIVIDUAL PIECES OF SHEATHING SHALL NOT BE LESS THAN 24" IN THE LEAST DIMENSION NOR LESS THAN 8 SQ-FT IN AREA.
4. EDGE BLOCKING, IF CALLED FOR ABOVE, IS FOR DIAPHRAGM SHEAR REQUIREMENTS ONLY. IF BLOCKING IS NOT REQUIRED FOR SHEAR, VERIFY ADEQUACY OF UNBLOCKED EDGES WITH ROOF INSTALLER BEFORE APPLYING SHEATHING. USE T & G SHTG ON ALL FLOORS.
5. PROVIDE BOUNDARY NAILING ALONG ALL SHEAR WALL LINES AND MEMBERS LABELED AS STRUTS. USE TWO ROWS OF BOUNDARY NAILING AT ALL INTERIOR SHEAR WALL LINES AND STRUTS.
6. PREDRILL HOLES WHERE WOOD TENDS TO SPLIT.
7. USE DEFORMED SHANK NAILS FOR ALL FLOOR SHEATHING USED AS COMBINATION SUBFLOOR-UNDERLAYMENT.
8. FLOOR SHEATHING SHALL BE GLUED TO ALL FRAMING MEMBERS.

ROOF / FLOOR SHEATHING

NTS 6002-01 — 6 / S1.3

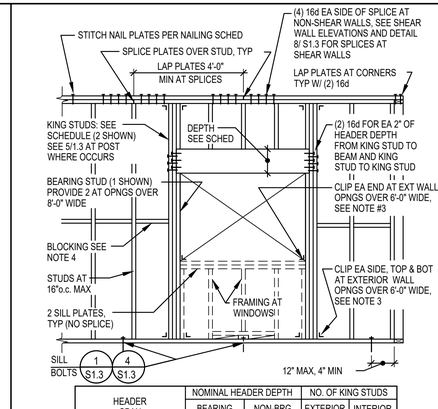


STUD SIZE	A END NAILS * (16d)	B TOE NAILS (8d)	C STITCH NAILS
2x4	2	4	(1) 16d @ 16"o.c.
2x6	3	5	(2) 16d @ 16"o.c.
2x8	4	6	(2) 16d @ 16"o.c.
2x10	5	7	(3) 16d @ 16"o.c.

* USE 16d END NAILS AT 2x PLATES. USE 30d END NAILS AT 3x PLATES (PRE-DRILL) (END NAILS NOT ALLOWED AT 4x PLATES)

STUD NAILING

NTS 6403-01A — 7 / S1.3

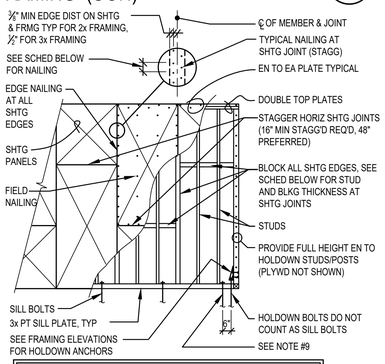


HEADER SPAN	NOMINAL HEADER DEPTH		NO. OF KING STUDS	
	BEARING WALL	NON-BRG WALL	EXTERIOR WALL	INTERIOR WALL
UP TO 4'-0"	8"	4"	1	1
OVER 4' TO 8'-0"	10"	6"	2	1
OVER 8' TO 10'-0"	12"	8"	3	2
OVER 10' TO 12'-0"	14"	10"	3	2

NOTES:
1. UNLESS OTHERWISE NOTED, HEADERS SHALL BE THE SAME WIDTH AS STUDS. FUR GLU-LAM HEADERS WITH PLYWOOD TO FLUSH WITH WALL STUDS.
2. SEE NAILING SCHEDULE FOR TYPICAL NAILING. STITCH NAIL ALL MULTIPLE STUDS PER SCHEDULE.
3. UNLESS OTHERWISE NOTED: USE SIMPSON LS30 OR A34 @ 2x4 STUDS, LS50 OR A35 @ 2x6 STUDS, LS70 @ 2x8 STUDS AND LS90 @ 2x10 STUDS.
4. BLOCKING REQUIRED AT ALL PLYWOOD SPLICES. (10'-0"o.c. MAX FOR FIRE BLOCKING.)
5. SEE DET 5/ S1.3 WHERE POST OCCURS AT OPNG.

TYP WALL AND OPENING FRAMING (UON)

NTS 6303-01 — 2 / S1.3



SHEATHING PANEL SCHEDULE			
TYPE	EDGE NAILING (EN)	NOMINAL THICKNESS STUDS & BLKG AT PLYWD JOINTS	SILL BOLTS *
1	10d @ 6" o.c.	2x	⅝" Ø x 12" @ 48"o.c.
2	10d @ 4" o.c.	3x	⅝" Ø x 12" @ 32"o.c.

NOTE: * ANCHOR BOLTS WITH UPSET THREADS ARE NOT ALLOWED & SHALL HAVE 7" MIN EMBEDMENT
1. ALL NAILS SHALL BE COMMON WIRE NAILS. NAILS DRIVEN INTO PRESSURE TREATED LUMBER SHALL BE HOT DIPPED GALVANIZED PER ASTM A153 CLASS D.
2. ALL SHEATHING SHALL BE MARKED "A.P.A. RATED SHEATHING, STRUCT I, EXPOSURE 1".
3. INDIVIDUAL PIECES OF SHEATHING SHALL NOT BE LESS THAN 16" IN THE LEAST DIMENSION NOR LESS THAN 8 SQ-FT IN AREA.
4. ALL SHEATHING SHALL BE ½" OR ⁹⁄₁₆" THICK UNLESS OTHERWISE NOTED.
5. SPACE NAILS AT 12"o.c. ALONG INTERMEDIATE FRAMING MEMBERS (FIELD NAILING).
6. PROVIDE EDGE NAILS FULL HEIGHT OF JAMB STUDS, TYPICAL AT WALL OPENINGS AND ALL STUDS WITH HOLDOWNS.
7. PREDRILL HOLES WHERE WOOD TENDS TO SPLIT.
8. STAGGER NAILS WHERE SPACED @ 3"o.c. OR LESS.
9. WHEN HOLDOWN (HD) BOLT OCCURS NEAR END OF SILL PLATE, LOCATE SILL BOLT 6" FROM HD BOLT.

SHEAR WALL DETAIL

NTS 6309-01 — 3 / S1.3

NAILING SCHEDULE

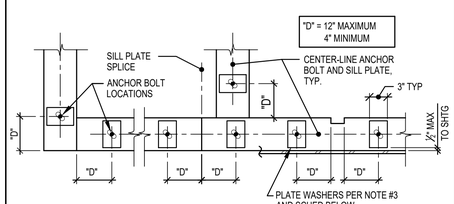
2022 CBC

NOTE: NAILING SHOWN BELOW IS MINIMUM PERMISSIBLE. DETAILS SHALL GOVERN WHEN THEIR NAILING IS MORE STRINGENT. ALL NAILS SHALL BE COMMON WIRE NAILS AND THEY SHALL BE DRIVEN PERPENDICULAR TO THE GRAIN INSTEAD OF TOENAILED IF POSSIBLE.

CONNECTION	NAILING	LOCATION
1. JOISTS TO SILL OR GIRDER:	(3) 8d	TOENAIL
2. BRIDGING TO JOIST	(2) 8d	TOENAIL EACH END
3. 1"x6" SUBFLOOR OR LESS TO EACH JOIST	(2) 8d	FACE NAIL
4. WIDER THAN 1"x6" SUBFLOOR TO EACH JOIST	(3) 8d	FACE NAIL
5. 2" SUBFLOOR TO JOIST OR GIRDER	(2) 16d	BLIND AND FACE NAIL
6. SOLE PLATE TO JOIST OR BLOCKING	16d @ 16"o.c.	TYPICAL FACE NAIL
SOLE PLATE TO JOIST OR BLOCKING AT BRACED WALL PANEL	(2) 16d @ 16"o.c.	BRACED WALL PANELS
7. TOP PLATE TO STUD	SEE STUD NAILING DETAIL 7/S1.3	
8. STUD TO SILL (SOLE PLATE)		
9. DOUBLE STUDS	16d @ 24"o.c.	FACE NAIL
10. DOUBLE TOP PLATES DOUBLE TOP PLATES	16d @ 16"o.c. (6) 16d	TYPICAL FACE NAIL LAP SPLICE, UON
11. BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE	(3) 8d	TOENAIL
12. RIM JOIST TO TOP PLATE	8d @ 6"o.c.	TOENAIL
13. TOP PLATE, LAPS AND INTERSECTIONS	(2) 16d	FACE NAIL
14. CONTINUOUS HEADER, TWO PIECES	16d @ 16"o.c.	ALONG EACH EDGE
15. CEILING JOISTS TO PLATE	(3) 8d	TOENAIL
16. CONTINUOUS HEADER TO STUD	(4) 8d	TOENAIL
17. CEILING JOISTS, LAPS OVER PARTITIONS	(3) 16d	FACE NAIL
18. CEILING JOISTS TO PARALLEL RAFTERS	(3) 16d	FACE NAIL
19. RAFTERS TO PLATE	(3) 8d	TOENAIL
20. 1" DIAGONAL BRACE TO EACH STUD AND PLATE	(2) 8d	FACE NAIL
21. 1"x8" SHEATHING, OR LESS TO EA BEARING	(3) 8d	FACE NAIL
22. WIDER THAN 1"x8" SHTG TO EA BEARING	(3) 8d	FACE NAIL
23. BUILT-UP CORNER STUDS	16d @ 24"o.c.	FACE NAIL
24. BUILT-UP GIRDER AND BEAMS	20d @ 32"o.c. 10d @ 24"o.c. (2) 20d (3) 10d	FACE NAIL AT TOP AND BOTTOM, STAGG'D ON OPPOSITE SIDES FACE NAIL AT ENDS AND AT EACH SPLICE
25. 2" PLANKS	(2) 16d	EACH BEARING
26. COLLAR TIE TO RAFTER	(3) 10d	FACE NAIL
27. JACK RAFTER TO HIP	(3) 10d (2) 16d	TOENAIL FACE NAIL
28. ROOF RAFTER TO 2x RIDGE BEAM	(2) 16d (2) 16d	TOENAIL FACE NAIL
29. JOIST TO BAND JOIST	(3) 16d	FACE NAIL
30. LEDGER STRIP	(3) 16d	FACE NAIL AT EA JOIST

MACHINE NAILING OF PLYWOOD

USE OF MACHINE NAILING IS SUBJECT TO A SATISFACTORY JOB SITE DEMONSTRATION FOR EACH PROJECT AND THE APPROVAL BY THE PROJECT ARCHITECT OR STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT. THE APPROVAL IS SUBJECT TO CONTINUED SATISFACTORY PERFORMANCE. MACHINE NAILING WILL NOT BE ACCEPTED IN ⅝" PLYWOOD. IF NAIL HEADS PENETRATE THE OUTER PLY MORE THAN WOULD BE NORMAL FOR A HAND HAMMER OR IF MINIMUM ALLOWABLE EDGE DISTANCES ARE NOT MAINTAINED THE PERFORMANCE WILL BE DEEMED UNSATISFACTORY, AND MACHINE NAILING SHALL BE DISCONTINUED.



ANCHOR BOLT WASHER SCHEDULE		
WALL SIZE	MINIMUM WASHER SIZE	
2x4	PLATE 0.229" x 3" x 3"	(ALT SIMP BPS5/8-3)
2x6	PLATE 0.229" x 3" x 4½"	(ALT SIMP BPS5/8-6)
2x8	PLATE ¼" x 3" x 6¼"	
2x10	PLATE ⅜" x 3" x 8¼"	

NOTES:
1. WHERE SILL PLATE IS NOTCHED OR DRILLED MORE THAN ⅛ OF ITS WIDTH, A BOLT SHALL BE PLACED ON EACH SIDE OF THE NOTCH.
2. PROVIDE 2 BOLTS MINIMUM EACH PIECE OF SILL PLATE. FOR WALL LESS THAN 2'-0" LONG, THE MINIMUM END DISTANCE MAY BE REDUCED TO 4x BOLT DIAMETER.
3. PROVIDE PLATE WASHERS PER SCHEDULE AT ALL SILL BOLTS. THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO ⅜" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1¾", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. THE WASHER PLATE SHALL EXTEND TO WITHIN ½" OF THE EDGE OF THE SILL PLATE ON THE SIDES WITH SHEATHING. ANCHOR BOLTS SHALL BE CENTERED ON THE SILL PLATE, TYP UON.
4. STANDARD CUT WASHERS MAY BE USED AT INTERIOR NON-BRG, NON-SHEAR WALLS.

TYPICAL SILL FRAMING

NTS 6304-01 — 1 / S1.3

WOOD NOTES

1. LUMBER GRADES: ALL FRAMING LUMBER INCLUDING JOISTS, RAFTERS, BEAMS, STUDS, POSTS, PLATES AND BLOCKING SHALL BE GRADE MARKED DOUGLAS FIR NO. 1, UNLESS OTHERWISE NOTED. ALL FRAMING LUMBER 3x AND LARGER SHALL BE FREE OF HEART CENTER.
2. GRADE MARKS: ALL GRADE MARKS ON FRAMING LUMBER AND PLYWOOD SHEATHING SHALL BE LEGIBLE.
3. SILL PLATES: SILL PLATES SHALL BE PRESSURE TREATED DOUGLAS FIR NO. 1 UNLESS OTHERWISE NOTED. EACH PIECE SHALL BEAR THE STAMP OF AN APPROVED INDEPENDENT AGENCY OPERATING UNDER ALSC OVERVIEW. TREATED WOOD, WHERE CUT, DRILLED OR NOTCHED, SHALL BE FIELD TREATED WITH PRESERVATIVE.
4. FASTENERS AND CONNECTORS FOR PRESERVATIVE-TREATED AND FIRE-RETARDANT-TREATED WOOD: FASTENERS, INCLUDING NUTS AND WASHERS, SHALL BE OF HOT-DIPPED ZINC-COATED GALVANIZED STEEL COMPLYING WITH ASTM A153. FASTENERS OTHER THAN NAILS, WOOD SCREWS, AND LAG SCREWS SHALL BE PERMITTED TO BE OF MECHANICALLY DEPOSITED ZINC-COATED STEEL WITH COATING WEIGHTS IN ACCORDANCE WITH ASTM B 695, CLASS 55 MINIMUM. CONNECTORS USED IN EXTERIOR APPLICATIONS AND IN CONTACT WITH PRESERVATIVE-TREATED WOOD SHALL HAVE COATING TYPES AND WEIGHTS IN ACCORDANCE WITH THE TREATED WOOD OR CONNECTOR MANUFACTURERS RECOMMENDATIONS. IN THE ABSENCE OF MANUFACTURES RECOMMENDATIONS, A MIN OF ASTM A653, TYPE G185 ZINC-COATED GALVANIZED STEEL, OR EQUIVALENT, SHALL BE USED.
5. SILL BOLTS/PLATE WASHERS: PROVIDE PLATE WASHERS NOT LESS THAN 0.229"x3"x3" AT ALL SILL BOLTS - USE A LARGER PLATE AS REQ'D BY STUD SIZE (SEE DETAIL 1/ S1.3). THE HOLE IN THE PLATE WASHER IS PERMITTED TO BE DIAGONALLY SLOTTED WITH A WIDTH OF UP TO ⅜" LARGER THAN THE BOLT DIAMETER AND A SLOT LENGTH NOT TO EXCEED 1¾", PROVIDED A STANDARD CUT WASHER IS PLACED BETWEEN THE PLATE WASHER AND THE NUT. THE PLATE WASHER SHALL EXTEND TO WITHIN ½" OF THE EDGE OF THE SILL ON THE SIDE(S) WITH SHEATHING. STANDARD WASHERS MAY BE USED AT INTERIOR NON-BEARING, NON-SHEAR WALLS. SEE TYPICAL SILL FRAMING DETAIL. BOLTS AND PLATE WASHERS SHALL BE GALVANIZED AS REQUIRED BY NOTE #4 ABOVE.
6. HANGERS: ALL JOISTS AND BEAMS WHICH DO NOT BEAR DIRECTLY ON A SUPPORT SHALL BE PROVIDED WITH SIMPSON 'LU' AND 'HU' TYPE HANGERS, RESPECTIVELY, OF MATCHING SIZE OR EQUIVALENT, UNLESS HEAVIER CONNECTIONS ARE SHOWN. USE MAXIMUM NAILS POSSIBLE UON. PROVIDE SLOPED AND/OR SKEWED HANGERS AT SLOPED AND/OR SKEWED MEMBERS. JOISTS SHALL BEAR COMPLETELY ON THE CONNECTOR SEATS, AND THE GAP BETWEEN THE JOIST END AND THE HEADER SHALL NOT EXCEED ½".
7. POST CAPS/BASES: ALL POSTS SHALL HAVE SIMPSON 'PCZ' POST CAPS AND 'BC' POST BASES AS APPLICABLE, OR EQUIVALENT, UNLESS HEAVIER CONNECTIONS ARE SHOWN.
8. NAILS: ALL NAILS, INCLUDING MACHINE NAILS, SHALL BE COMMON NAILS WITH FULL SIZE HEAD PER ASTM F1667. ALL NAILS FOR PRESSURE TREATED OR FIRE-RETARDANT LUMBER SHALL BE HOT-DIP GALVANIZED PER ASTM A153, CLASS D. NAILS WITH OTHER TYPES OF GALVANIZING MAY BE USED IF PRE-APPROVED BY THE ENFORCEMENT AGENCY. PROVIDE SUFFICIENT EDGE DISTANCE, END DISTANCE, AND SPACING TO PREVENT SPLITTING. REPLACE MEMBER IF SPLITTING OCCURS.
9. PREDRILLING: PREDRILL NAIL HOLES WHERE WOOD TENDS TO SPLIT. PREDRILL HOLES FOR ALL SCREWS AND LAG BOLTS.
10. BOLTS: ALL BOLTS, INCLUDING SILL ANCHOR BOLTS, SHALL BE FULL-DIAMETER CUT-THREAD BOLTS PRODUCED BY AN AMERICAN MANUFACTURER. NO "UPSET" THREADS ARE ALLOWED.
11. BOLT HOLES: ALL BOLT HOLES IN WOOD, INCLUDING SILL PLATES, SHALL BE ⅛" MAX OVERSIZE.
12. BOLT SPACING: SPACE ALL BOLTS IN WOOD 4 DIAMETERS MINIMUM WITH 7 DIAMETERS MINIMUM END DISTANCE UNLESS OTHERWISE NOTED.
13. STANDARD WASHERS: PROVIDE STANDARD CUT WASHERS UNDER ALL BOLT HEADS AND NUTS BEARING ON WOOD UNLESS OTHERWISE NOTED. PROVIDE WASHERS UNDER ALL LAG SCREW HEADS.
14. BOLT RETIGHTENING: RETIGHTEN ALL BOLTS PRIOR TO APPLICATION OF SHEATHING, PLASTER, ETC.
15. LAG SCREWS: ALL LAG SCREWS SHALL BE FULL BODY DIAMETER CUT THREAD LAG SCREWS WITH STANDARD HEX HEAD. "REDUCED BODY DIAMETER" SCREWS ARE NOT ALLOWED.
16. WOOD SCREWS: ALL WOOD SCREWS SHALL BE CUT THREAD WOOD SCREWS WITH FULL BODY DIAMETER.
17. BLOCKING AT BEARINGS: PLACE 2x SOLID BLOCKING BETWEEN JOISTS OR RAFTERS OVER ALL SUPPORTS. BLOCKING SHALL BE FULL DEPTH OF JOISTS.
18. BLOCKING/BRIDGING AT JOISTS AND RAFTERS: PROVIDE 2x FULL DEPTH SOLID BLOCKING FOR ROOF RAFTERS OVER 8" DEEP AND FLOOR JOISTS OVER 4" DEEP AT 6'-0"o.c. MAXIMUM. APPROVED METAL BRIDGING OR 2x3 CROSS BRIDGING MAY BE USED AT SAME SPACING. WHERE CROSS BRIDGING IS USED, THE LOWER ENDS SHALL BE DRIVEN UP AND NAILED AFTER THE FLOOR, SUBFLOOR, OR ROOF HAS BEEN NAILED.
19. BLOCKING IN WALLS: PROVIDE 2x BLOCKING SAME WIDTH AS WALL STUDS AT 10'-0"o.c. MAXIMUM IN STUD WALLS. PROVIDE 2x MINIMUM BLOCKING AT ALL EDGES OF PLYWOOD APPLIED TO STUD WALLS, UON. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SOLID BLOCKING AT 48"o.c. MAX, OR OTHER MEANS OF LATERAL SUPPORT FOR STUDS IN BEARING WALLS WHICH ARE LOADED PRIOR TO RECEIVING SHEATHING OR GYP BOARD.
20. BLOCKING AT UNSHEATHED REGIONS OF WALLS: ALL BEARING WALLS REQUIRE SHEATHING OR GYP BOARD FULL HEIGHT TO PREVENT BUCKLING OF STUDS. REGIONS OF WALLS WHICH DO NOT RECEIVE PERMANENT SHEATHING OR GYP BOARD ON AT LEAST ONE FACE SHALL BE PROVIDED WITH ROWS OF SOLID BLOCKING SPACED AT 48"o.c. MAX.
21. MISC. BLOCKING: IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW BLOCKING REQUIRED FOR FINISHES, FIRE BLOCKING, OR BLOCKING FOR THE ATTACHMENT OF NON-STRUCTURAL ITEMS. CONTRACTOR SHALL PROVIDE ALL REQUIRED BLOCKING. SEE ARCHITECTURAL DWGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.
22. HOLES IN JOISTS AND BEAMS: HOLES OR NOTCHES ARE NOT ALLOWED IN JOISTS OR BEAMS UNLESS SPECIFICALLY SHOWN AND DETAILED ON DRAWINGS.
23. HOLES IN STUDS: HOLES IN STUDS SHALL COMPLY WITH DETAIL 3/S1.4. HOLES IN POSTS ARE NOT ALLOWED UNLESS SHOWN ON STRUCTURAL DRAWINGS. NOTCHES ARE NOT ALLOWED.
24. HOLES IN TOP PLATES: HOLES ARE NOT ALLOWED IN TOP PLATES OF BEARING WALLS OR SHEAR WALLS. HOLES IN TOP PLATES OF NON-BEARING NON-SHEAR WALLS SHALL COMPLY WITH DETAIL 1/S1.4.
25. STRAPS THROUGH SHEATHING: STRAPS PASSING THROUGH PLYWOOD SHEATHING SHALL PASS THROUGH NEATLY DRILLED ROUND HOLES, OR NEATLY SLOTTED HOLES. THE DIAMETER OF HOLES OR THE LENGTH OF SLOTS SHALL NOT EXCEED THE STRAP WIDTH PLUS ⅛". WIDTH OF SLOTS SHALL NOT EXCEED ⅛".
26. TIMBER CONNECTORS: ALL TIMBER CONNECTORS SPECIFIED ON THESE DRAWINGS REFERS TO SIMPSON STRONG TIE CATALOG NO. C-C 2021. ALL CONNECTORS SHALL BE STAMPED AT THE FACTORY WITH AN IDENTIFYING MARK. ALL CONNECTORS IN CONTACT WITH PRESSURE TREATED LUMBER SHALL BE COATED WITH ZMAX (G-180) OR HOT DIPPED GALVANIZED.
27. MOISTURE CONTENT: THE MAXIMUM MOISTURE CONTENT OF ALL FRAMING LUMBER SHALL NOT EXCEED 19% AT THE TIME OF INSTALLATION.
28. HARD CEILINGS: IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW FRAMING PLANS OR SECTION CUTS AT ALL HARD CEILINGS AND SUSPENDED SOFFITS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF HARD (GYP) CEILINGS AND SOFFITS. FRAME CEILINGS PER TYPICAL CEILING FRAMING DETAILS UON FRAME SOFFITS PER TYPICAL SOFFIT FRAMING DETAILS OR OTHER SIMILAR SOFFIT DETAILS SHOWN ON DRAWINGS.

APPROVALS

FILE # 10-28 — APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-33128 — REN: 08-31-25 — STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
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(559) 627-7630 Office
(559) 627-1926 Fax

TITLE: TYPICAL NOTES AND DETAILS

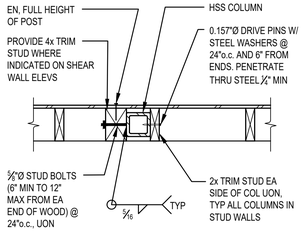
S1.3

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER — JACK D. BRENEMAN — No. S5792 — Exp. 6-30-25 — STRUCTURAL — STATE OF CALIFORNIA

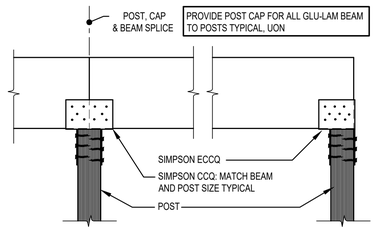
ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com

P:\M62404 Sunset Classroom Wing\Struct\S1.3_Typ.dwg Feb 12 2025 9:02am



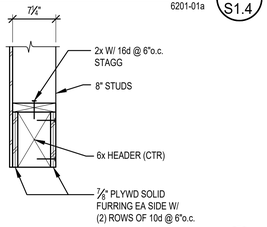
TYP COL IN STUD WALL

NTS 6309-02 — 17 / S1.4



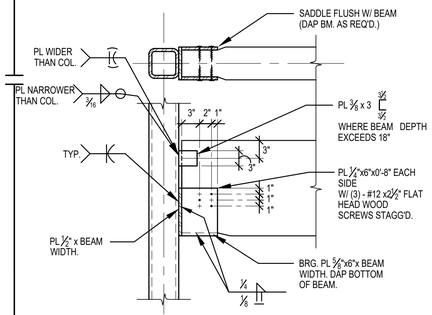
GLU-LAM TO POST CONN

NTS 6201-01a — 18 / S1.4



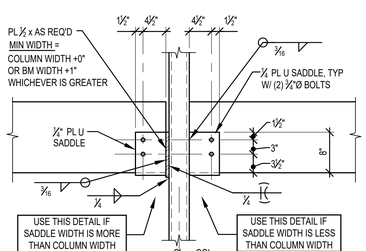
HEADERS AT 8" WALLS

1" ~ 1'-0" 6303-02 — 19 / S1.4



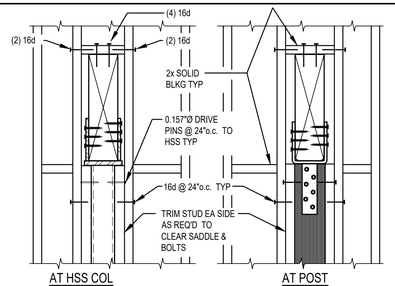
FLUSH BEAM SADDLE

NTS 5204-05 — 20 / S1.4



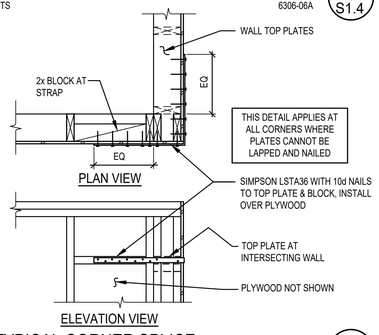
BEAM SADDLE TO COLUMN

BEAMS 18" DEEP OR LESS NTS 5204-01 — 21 / S1.4



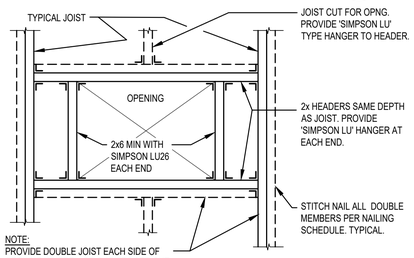
TYP GL INTO STUD WALL

NTS 6306-06A — 13 / S1.4



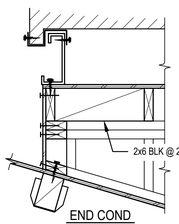
TYPICAL CORNER SPLICE

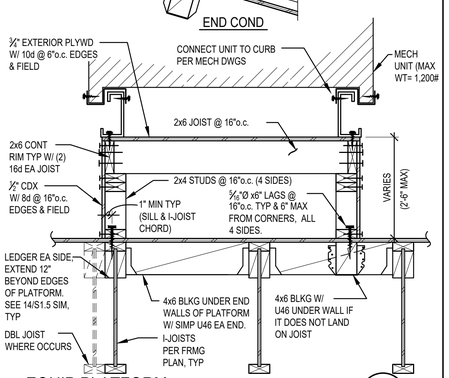
(WALL PLATES AT DIFFERENT HT) NTS 6401-01 — 14 / S1.4



TYP FRMG AT CLG OPENINGS

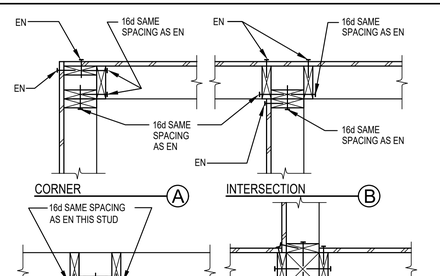
N.T.S. 6011-02 — 15 / S1.4





EQUIP PLATFORM

(AT SLOPING ROOF) NTS — 16 / S1.4

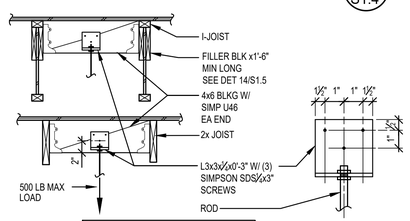


PLAN VIEW OF SHEAR WALL DETAILS

NTS 6306-00 — 9 / S1.4

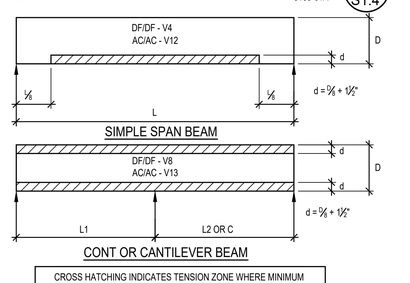
NOT USED

10 / S1.4



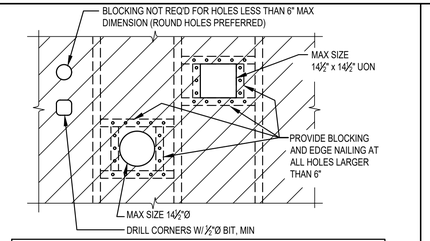
DETAIL AT ROD HANGER

NTS 6105-01A — 11 / S1.4



GLU-LAM BEAM DETAIL

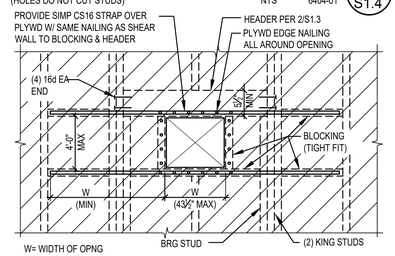
NTS 6205-01 — 12 / S1.4



NOTE: THIS DETAIL APPLIES TO ALL HOLES THRU SHEAR WALLS UON. SEE DETAIL 6/S1.4 FOR HOLES WHICH CUT THRU STUDS OR EXCEED THESE DIMENSIONS. HOLES THAT DO NOT CUT STUDS OR EXCEED THESE DIMENSIONS ARE NOT SHOWN ON SHEAR WALL ELEVATIONS. MAXIMUM OF 1 HOLE ALLOWED FOR EVERY 8'-0" OF SHEAR WALL PIER (SHADED ON SHEAR WALL ELEVATIONS).

HOLES AT SHEAR WALLS

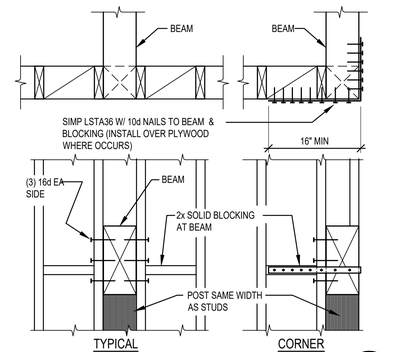
(HOLES DO NOT CUT STUDS) NTS 6404-01 — 5 / S1.4



NOTE: THIS DETAIL APPLIES TO ALL HOLES THRU SHEAR WALLS UON. SEE DETAIL 5/S1.4 FOR HOLES WHICH DO NOT CUT THRU STUDS. OPENINGS NOT SHOWN ON SHEAR WALL ELEVATIONS SHALL BE APPROVED BY THE SEOR AND DSA BEFORE CONSTRUCTION.

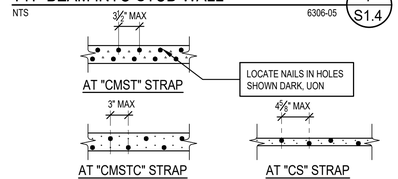
HOLES AT SHEAR WALLS

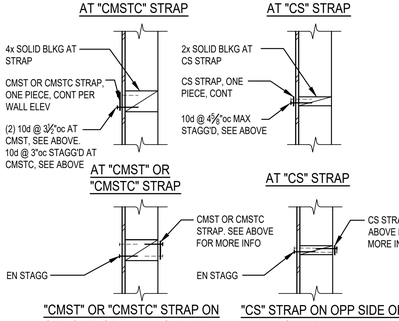
(HOLES CUT 1 OR 2 STUDS) N.T.S. 6404-02 — 6 / S1.4



TYP BEAM INTO STUD WALL

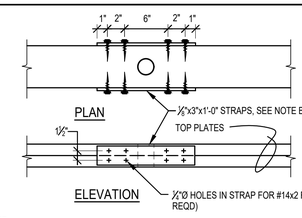
NTS 6306-05 — 7 / S1.4





STRAP DETAIL

NTS 6302-01 — 8 / S1.4

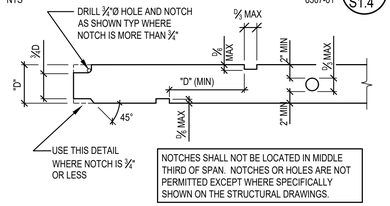


NOTE:
½"x3"x1'-0" STRAPS REQUIRED FOR HOLE DIAMETERS OF ½" TO ⅝" THE WIDTH OF WOOD PLATES. HOLES HAVING DIAMETERS GREATER THAN ⅝" OF THE PLATE WIDTH ARE NOT PERMITTED. NO HOLES PERMITTED IN TOP PLATES LESS THAN 5½" WIDE.

THIS DETAIL APPLIES AT NON-BEARING, NON-SHEAR WALLS ONLY. NO HOLES PERMITTED IN BEARING WALLS OR SHEAR WALLS.

HOLES IN TOP PLATES

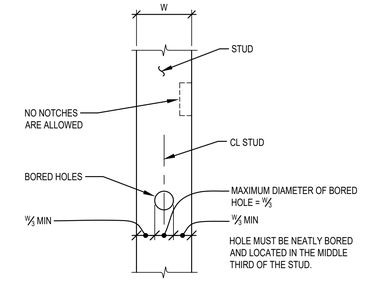
NTS 6307-01 — 1 / S1.4



NOTCHES SHALL NOT BE LOCATED IN MIDDLE THIRD OF SPAN. NOTCHES OR HOLES ARE NOT PERMITTED EXCEPT WHERE SPECIFICALLY SHOWN ON THE STRUCTURAL DRAWINGS.

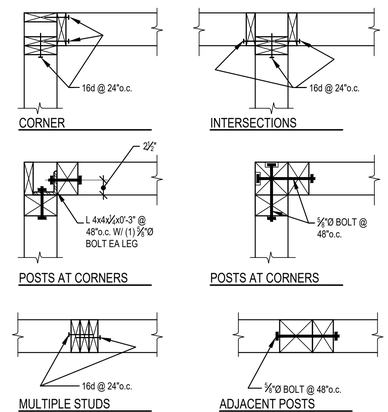
NOTCHES & HOLES AT

JOISTS OR RAFTERS NTS 6010-01 (TITLE 24) — 2 / S1.4



NOTCHES AND HOLES

IN STUDS (CBC) NTS 6010-03 — 3 / S1.4



NOTE: USE THESE DETAILS AS A MINIMUM UNLESS MORE STRINGENT CONDITIONS ARE SHOWN ELSEWHERE ON THESE DRAWINGS.

TYPICAL FRAMING DETAILS

NTS 6306-04 — 4 / S1.4

REGISTERED PROFESSIONAL ENGINEER JACK D. BREWER No. S5792 Exp. 6-30-25 STRUCTURAL STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT JAMES R. MORRELL No. C-33128 REN: 05-31-25 STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

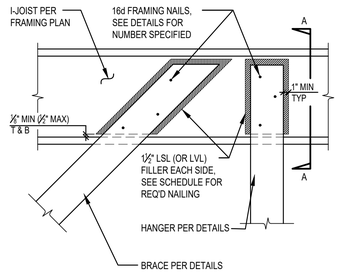
REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

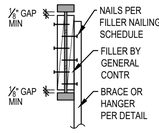
TITLE
TYPICAL NOTES AND DETAILS

S1.4

PROJECT 24001



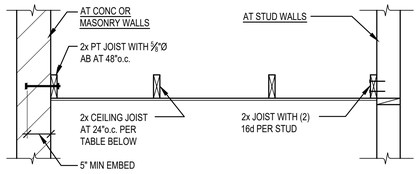
FILLER NAILING SCHEDULE	
FRAMING NAILS PER DETAILS	REQ'D FILLER NAILS (EACH SIDE)
(2) 16d	(2) 16d
(3) 16d	(2) 16d
(4) 16d	(3) 16d
(5) 16d	(4) 16d
(6) 16d	(5) 16d



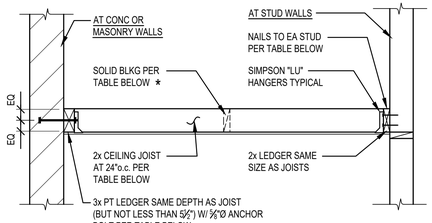
SECTION A-A

FILLER BLOCK DETAIL

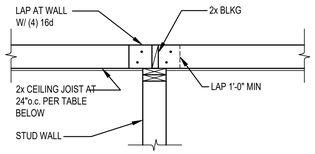
NTS 6110-04 — 15 / S1.5



AT JOISTS PARALLEL TO WALL



AT LEDGERS



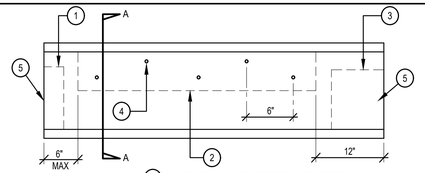
AT INTERIOR WALL

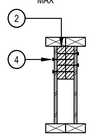
JOIST SIZE	MAX SPAN		LEDGER NAILS	BOLT SPACING	BLOCKING (NOTE #5)
	GYP BD	PLASTER			
2x4	6'-0"	4'-0"	(2) 16d	48"o.c.	NOT REQ'D
2x6	12'-0"	8'-0"	(2) 16d	48"o.c.	MID-SPAN
2x8	16'-0"	12'-0"	(3) 16d	32"o.c.	MID-SPAN
2x10	20'-0"	16'-0"	(3) 16d	32"o.c.	TWO ROWS
2x12	24'-0"	20'-0"	(4) 16d	24"o.c.	TWO ROWS

NOTES:
1. DESIGN LOADS: DL=6psf AT GYP BD; 10psf AT PLASTER LL=10psf
2. AT CONTRACTOR'S OPTION, 10d x 1½" NAILS MAY BE USED FOR ATTACHMENT OF JOIST HANGERS TO LEDGERS.
3. SPACE CEILING JOISTS @ 16"o.c. AT FIRE RATED CONSTRUCTION, WHERE REQ'D PER ARCH DWGS.
4. SEE "TYPICAL FRAMING AT OPENINGS" FOR FRAMING AT OPENINGS OR RECESSED FIXTURES
5. ROWS OF BLOCKING TO BE EQUALLY SPACED BETWEEN SUPPORTS.

TYPICAL CEILING FRAMING

NTS 6009-03 — 16 / S1.5





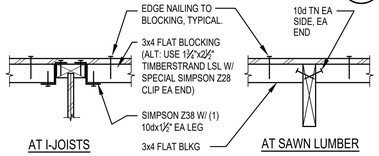
SECTION A-A

1. PLANT ATTACH WEB STIFFENERS AT LEFT END BTWN JOISTS PER STANDARD TYPICAL WEB STIFF DETAIL 2/S1.5.
2. FULL LENGTH FILLER BETWEEN JOISTS. SEE SCHEDULE BELOW.
3. LARGE STIFFENER BETWEEN JOISTS AT RIGHT END TO ALLOW FOR FIELD TRIMMING.
4. ATTACH FILLER WITH NAILS PER SCHEDULE @ 6"o.c. STAGG'D FROM EACH SIDE, SEE TABLE BELOW.
5. WEB STIFFENERS FOR EACH END (NOT SHOWN) ARE SHIPPED LOOSE.

I-JOIST FLANGE WIDTH (IN)	FILLER			FASTENER
	DEPTH	THICKNESS	MATERIAL	
3½"	5½"	2-1½"	LSL OR LVL	16d
2½"	5½"	2-1"	LSL OR LVL	8d

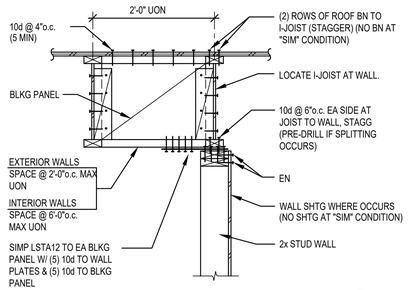
DOUBLE I-JOIST DETAIL

NTS 6014-03 — 11 / S1.5



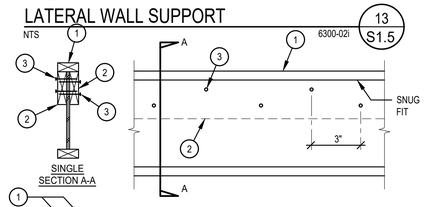
PLYWOOD EDGE BLOCKING

NTS 6006-01 — 12 / S1.5



LATERAL WALL SUPPORT

NTS 6300-02i — 13 / S1.5



1. I-JOIST
2. CONTINUOUS LEDGER, SEE SCHEDULE BELOW
3. ATTACH LEDGER WITH NAILS PER SCHEDULE @ 3"o.c. STAGG'D
4. CONT FILLER PER DBL I-JOIST DETAIL

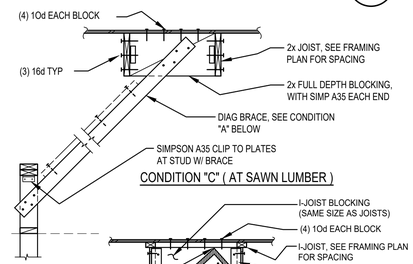
I-JOIST FLANGE WIDTH (IN)	LEDGER			FASTENER
	DEPTH	THICKNESS	MATERIAL	
3½"	5½"	1½"	LSL OR LVL	16d
2½"	5½"	1"	LSL OR LVL	8d

CONTINUOUS LEDGER AT I-JOIST

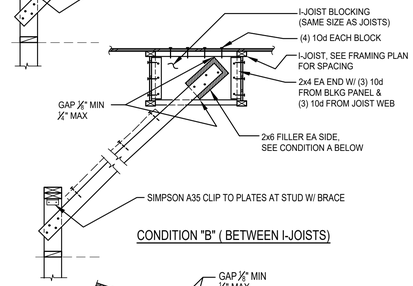
NTS 6110-05 — 14 / S1.5

NOT USED

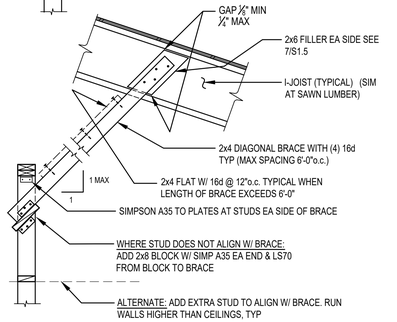
8 / S1.5



CONDITION "C" (AT SAWN LUMBER)



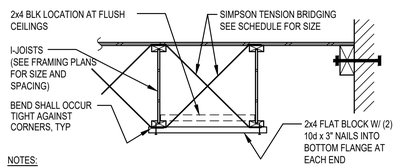
CONDITION "B" (BETWEEN I-JOISTS)



CONDITION "A" (TO SIDE OF I-JOIST)

WALL BRACE DETAIL

NTS (INTERIOR WALLS) 6110-03A — 9 / S1.5

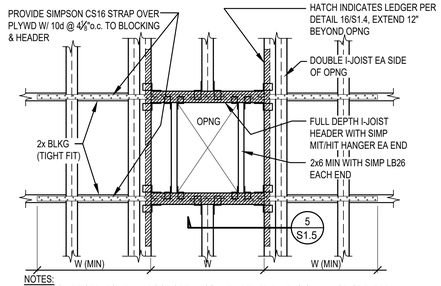


NOTES:
1. PROVIDE CONTINUOUS ROWS OF BRIDGING @ 12'-0"o.c. MAX FOR I -90 AND 10'-0"o.c. MAX FOR I-65. PROVIDE ONE ROW WITHIN 1'-0" OF ENDS OF JOISTS SUPPORTED BY TOP FLANGE HANGERS.
2. APPLY BRIDGING BETWEEN JOISTS W/ (2) 10d x 1½" NAILS EA END.
3. LOWER ENDS OF CROSS BRIDGING SHALL BE DRIVEN UP AND NAILED AFTER THE ROOF SHEATHING HAS BEEN NAILED, TYPICAL.
4. BRIDGING SHALL BE STRAIGHT. NO BOWING OR KINKS ALLOWED, TYPICAL.

JOIST HEIGHT	JOIST SPACING (INCHES)								
	12	16	19.2	24	30	32	36	42	48
9½	TB20	TB27	TB27	TB30	TB36	TB36	TB42	TB48	TB54
10	TB20	TB27	TB27	TB30	TB36	TB36	TB42	TB48	TB54
11⅞	TB20	TB27	TB27	TB30	TB36	TB36	TB42	TB48	TB54
12	TB20	TB27	TB27	TB30	TB36	TB36	TB42	TB48	TB54
14	TB27	TB27	TB27	TB36	TB36	TB42	TB42	TB48	TB54
16	TB27	TB27	TB30	TB36	TB42	TB42	TB42	TB48	TB54
18	TB27	TB30	TB30	TB36	TB42	TB42	TB48	TB54	TB56
20	TB30	TB30	TB36	TB36	TB42	TB42	TB48	TB54	TB56
22	TB30	TB36	TB36	TB36	TB42	TB42	TB48	TB54	TB56
24	TB36	TB36	TB36	TB42	TB42	TB48	TB48	TB54	TB56

I-JOIST BRIDGING DETAIL

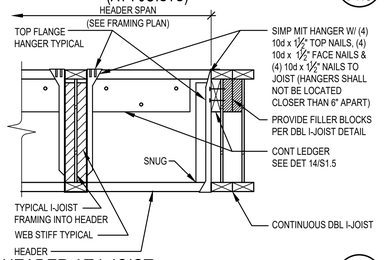
NTS 6111-01i — 10 / S1.5



NOTES:
1. PROVIDE STRAPS AT ALL ROOF OPENINGS WITH EITHER DIMENSION 2'-0" OR GREATER.
2. MAXIMUM SIZE OF OPENING = 4'-0" SQUARE UNLESS DETAILED ON PLANS.
3. PROVIDE DOUBLE JOIST EACH SIDE OF OPENING WHERE JOISTS ARE CUT.
4. PROVIDE PLYWOOD EDGE NAILING ALL AROUND OPENING.

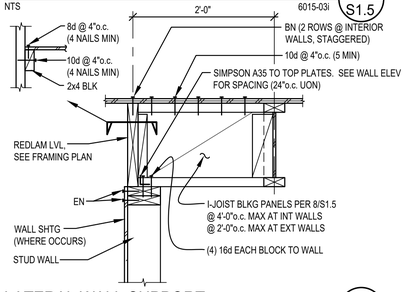
TYPICAL FRAMING AT OPENINGS (AT I-JOISTS)

NTS 6103-02Ai — 4 / S1.5



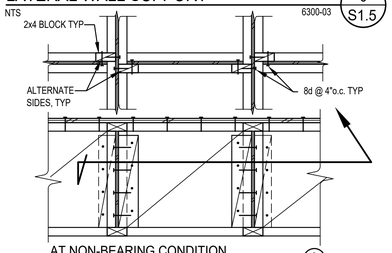
HEADER AT I-JOIST

NTS 6015-03i — 5 / S1.5

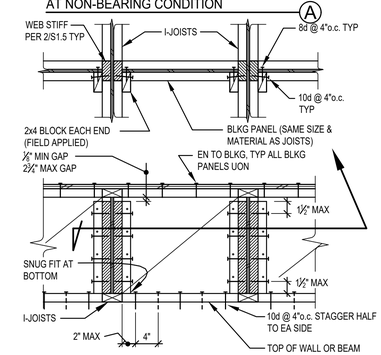


LATERAL WALL SUPPORT

NTS 6300-03 — 6 / S1.5



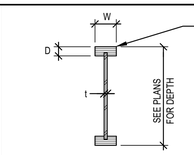
AT NON-BEARING CONDITION (A)



AT BEARING CONDITION (B)

I-JOIST BLOCKING DETAIL

NTS 6013-01Ai — 7 / S1.5



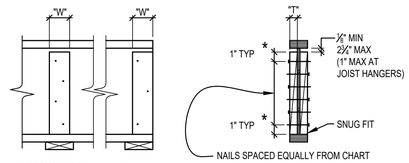
I-JOIST	FLANGE		WEB	
	W	D	THICK "t"	MATERIAL
22" RED-I90	3½"	1½"	7/16"	OSB

MINIMUM SECTION PROPERTIES			
I-JOIST	M allow (#-ft) AT 100%	V allow (#) AT 100%	E(10⁶#-in²)
22" RED-I90	18,075	3,615	2,597

NOTES:
1. RED I-JOISTS ARE MANUFACTURED BY RED BUILT, LLC. THE RED I-SECTION PROPERTIES ARE BASED ON ICC ESR-2994.

I-JOIST PROPERTIES

NTS 6016-01A — 1 / S1.5



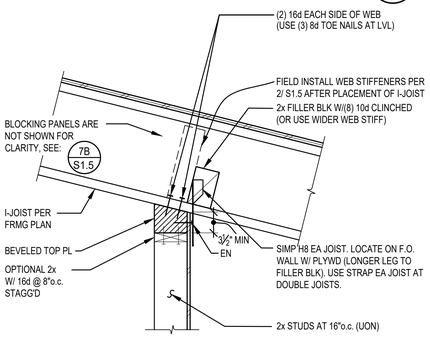
* ½" TYP AT 2x4 WEB STIFFENERS

I-JOIST DEPTH/SERIES	NO. OF NAILS REQUIRED		MIN WEB STIFFENER WIDTH "W"	MIN WEB STIFFENER THICK "T"
	END OR HANGER	INTERMEDIATE		
22" RED I-90	(11) 16d	(11) 16d	3½"	1½"

NOTES:
1. ALL STIFFENERS ARE TO BE SUPPLIED BY MFR.
2. WEB STIFFENERS ARE REQUIRED AT ALL BEARINGS AND AT HANGERS.
3. GAP MUST BE AT THE TOP FOR ALL BEARING CONDITIONS. STIFFENER MUST BE SNUG TO BOTTOM CHORD.
4. WEB STIFFENER MATERIAL FOR RED I-90 SHALL BE 2x4 CONSTR GRADE OR LVL

I-JOIST WEB STIFFENERS

NTS 6013-02i — 2 / S1.5



I-JOIST CONNECTION

NTS 6017-01i — 3 / S1.5

APPROVALS

FILE # 10-28 — APPLICATION # 02-122658

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DATE: 03/03/2025

LICENSED ARCHITECT — JAMES R. MORRELL — No. C-33128 — REN: 05-31-25 — STATE OF CALIFORNIA

DATE: JUNE 26, 2024

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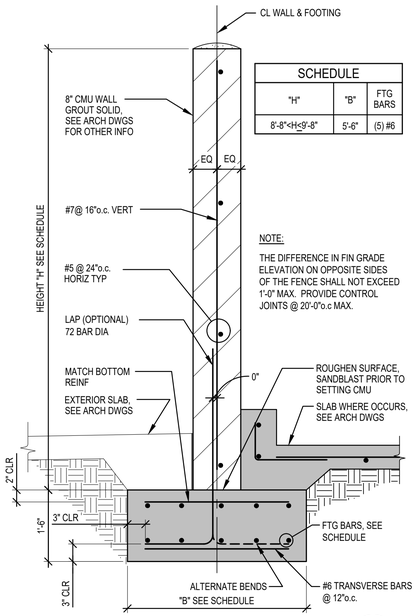
TITLE: TYPICAL NOTES AND DETAILS

S1.5

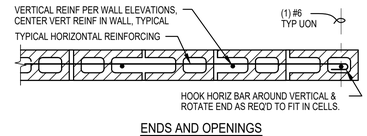
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER — JACK D. BREWER — No. S5702 — Exp. 6-30-25 — STRUCTURAL — STATE OF CALIFORNIA

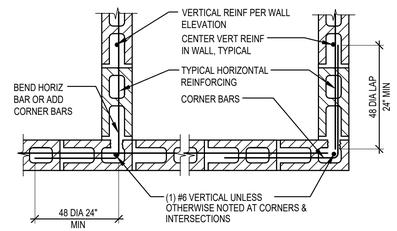
ASD
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STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
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CMU FENCE DETAIL — NTS — 4500-00a — 1 S1.6

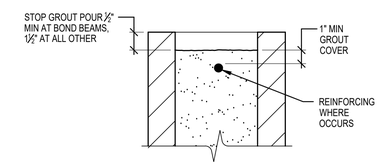


ENDS AND OPENINGS



INTERSECTION CORNER

CMU WALL REINFORCING (SINGLE CURTAIN) — NTS — 4001-01 — 2 S1.6



CMU HORIZONTAL CONSTRUCTION JOINT — NTS — 4005-05 — 3 S1.6

CONCRETE BLOCK NOTES

(TITLE 24)

1. BLOCK UNITS: ALL CONCRETE BLOCK UNITS SHALL BE LIGHT WEIGHT OR MEDIUM WEIGHT AND SHALL BE MANUFACTURED IN COMPLIANCE WITH ASTM C-90, GRADE N, AND UNITS SHALL BE PLACED IN A RUNNING BOND PATTERN. TYPICAL UNLESS NOTED OTHERWISE. VERTICAL BARS SHALL BE SPACED @ 16"o.c. MAX FOR STACKED BOND.
2. GROUTING: ALL CELLS SHALL BE SOLIDLY FILLED WITH GROUT. GROUT SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION DURING PLACING & RECONSOLIDATED AFTER EXCESS MOISTURE HAS BEEN ABSORBED, BUT BEFORE WORKABILITY IS LOST. THE GROUTING OF ANY SECTION OF A WALL SHALL BE COMPLETED IN ONE DAY, WITH NO INTERRUPTIONS GREATER THAN ONE HOUR.
3. WEBS & CELLS: WEBS OF EACH COURSE SHALL BE CENTERED ON WEBS BELOW. VERTICAL CELLS SHALL HAVE VERTICAL ALIGNMENT TO MAINTAIN A CLEAN UNOBSTRUCTED VERTICAL FLUE MEASURING NOT LESS THAN 3" x 3".
4. OPEN END UNITS: OPEN END UNITS SHALL BE USED WITH ALL REINFORCED CELLS EXCEPT AT JAMBS. ALL CELLS, REINFORCED OR NOT, SHALL BE FILLED WITH GROUT. HORIZONTAL REINFORCEMENT SHALL BE PLACED IN BOND BEAM UNITS WITH A MINIMUM GROUT COVER OF 1" ABOVE THE STEEL FOR EACH GROUT POUR.
5. FOOTING DOWELS: FOOTING DOWELS TO MATCH VERTICAL WALL REINFORCING SHALL BE PROVIDED AT ALL POINTS WHERE CELLS ARE TO BE REINFORCED.
6. REINFORCING: SEE CONCRETE NOTES FOR REINFORCING STEEL GRADES. MAXIMUM SIZE OF REINFORCING IN 8" WALLS IS #6. MAX SIZE IN 12" CMU IS #8.
7. REINFORCING POSITIONERS: REINFORCING SHALL BE STRAIGHT AND PLACED ACCURATELY IN POSITION. VERTICAL BARS IN CELLS SHALL BE HELD IN PLACE BY AN APPROVED MECHANICAL DEVICE AT TOP AND BOTTOM AND AT INTERVALS NOT TO EXCEED 192 BAR DIAMETERS NOR 10 FEET.
8. SPLICES: SPLICES IN REINFORCING STEEL SHALL BE 48 BAR DIAMETERS FOR #5 AND SMALLER BARS AND 62 BAR DIAMETERS FOR #6 AND LARGER BARS UNLESS NOTED OTHERWISE. WHEN ADJACENT SPLICES ARE SEPARATED BY 3" OR LESS, INCREASE THE LAP LENGTH TO 72 DIAMETERS. IF SPLICES ARE STAGGERED AT LEAST 24 BAR DIAMETERS, NO INCREASE IS REQUIRED. PILASTER BARS SHALL BE ONE PIECE FULL HEIGHT UNLESS DETAILED OTHERWISE.
9. CHORD BARS: PROVIDE (2) #5 HORIZONTAL BARS MINIMUM IN WALLS AT ALL ROOFS AND FLOORS IN ADDITION TO TYPICAL HORIZONTAL REINFORCING. LAP BARS 72 BAR DIAMETERS AT SPLICES. RUN BARS CONTINUOUS THROUGH MCJ's.
10. CLEANOUTS: WHERE BLOCK IS LAID TO A MAXIMUM OF FOUR FEET BEFORE GROUTING, NO CLEANOUTS SHALL BE REQUIRED. WHERE THE BLOCK IS LAID TO HEIGHTS GREATER THAN FOUR FEET BEFORE GROUTING, CLEANOUTS SHALL BE PROVIDED AT THE BOTTOM OF ALL CELLS. CLEANOUTS SHALL BE OF SUFFICIENT SIZE AND LOCATION TO ALLOW THOROUGH FLUSHING AWAY OF ALL MORTAR DROPPINGS AND DEBRIS.
11. HIGH LIFT: THE MAXIMUM HEIGHT OF POURS FOR HIGH LIFT SHALL BE LIMITED TO 12 FEET FOR 8" CMU AND 16 FEET FOR 12" CMU. BETWEEN GROUT POURS, HORIZONTAL CONSTRUCTION JOINTS SHALL BE FORMED BY STOPPING ALL MASONRY UNITS AT THE SAME ELEVATION AND WITH THE GROUT STOPPING A MINIMUM OF 1½" BELOW THE MORTAR JOINT, EXCEPT AT THE TOP OF THE WALL. WHERE BOND BEAMS OCCUR, THE GROUT SHALL BE STOPPED A MINIMUM OF ½" BELOW THE TOP OF THE MASONRY.
12. REINFORCING IN WALLS: SEE TYPICAL DETAILS FOR MIN REINFORCING AT ENDS, CORNERS, INTERSECTIONS AND OPENINGS IN WALLS, UNLESS OTHERWISE NOTED.
13. EMBEDDED ITEMS: ALL REINFORCING AND EMBEDDED ITEMS SHALL BE PLACED AND SECURELY ANCHORED AGAINST MOVING PRIOR TO GROUTING. BOLTS SHALL BE ACCURATELY SET WITH TEMPLATES OR APPROVED EQUIVALENT MEANS AND HELD IN PLACE TO PREVENT DISLOCATION DURING GROUTING. ALL BOLTS AND ANCHORS SHALL BE GROUTED IN PLACE WITH AT LEAST 1 INCH OF GROUT ALL AROUND BETWEEN THE BOLT AND THE MASONRY.
14. GROUT: CEMENT GROUT SHALL CONSIST OF ONE PART PORTLAND CEMENT, 2¼ TO 3 PARTS SAND, AND 1 TO 2 PARTS OF ⅜" PEA GRAVEL. CEMENT CONTENT SHALL CONTAIN 15% TO 20% FLY ASH PER ASTM C-618 CLASS F. ALL GROUT SHALL CONTAIN "SIKA GROUT AID" TO COUNTERACT GROUT SHRINKAGE.
15. GROUT STRENGTH: GROUT SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 2000 psi AT 28 DAYS AND TEST SPECIMENS SHALL BE PREPARED PER ASTM C-1019.
16. MORTAR (TYPE S): CEMENT MORTAR SHALL CONSIST OF ONE PART PORTLAND CEMENT, OVER ¼ TO ½ PARTS LIME PUTTY, AND 2¼ TO 3 TIMES THE SUM OF THE SEPARATE VOLUMES OF CEMENTITIOUS MATERIALS OF SAND. LIME SHALL BE THE LAST MATERIAL ADDED TO THE MIXER.
17. MORTAR STRENGTH: MORTAR SHALL ATTAIN A MINIMUM COMPRESSIVE STRENGTH OF 1800 psi AT 28 DAYS AND TEST SPECIMENS SHALL BE PREPARED PER ASTM C 1586 AND ASTM C-270.
18. PIPES/CONDUITS: PIPE OR CONDUIT SHALL NOT BE EMBEDDED IN ANY MASONRY UNLESS SPECIFICALLY DETAILED. ANY PIPE OR CONDUIT MAY PASS PERPENDICULAR THROUGH ANY MASONRY BY MEANS OF A SLEEVE AT LEAST LARGE ENOUGH TO PASS ANY HUB OR COUPLING ON THE PIPE LINE. SUCH SLEEVES SHALL BE PLACED NOT CLOSER THAN THREE DIAMETERS, CENTER TO CENTER.
19. CODES: ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE CBC, TITLE 24 AND IR 21-2.13.
20. MASONRY STRENGTH: MINIMUM ULTIMATE COMPRESSIVE STRENGTH IN 28 DAYS: f'm = 2000 psi

APPROVALS

FILE # 10-28 — APPLICATION # 02-122658

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4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 Fax

TITLE: TYPICAL NOTES AND DETAILS

S1.6

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER — JACK D. BRENEMAN — No. S5792 — Exp. 6-30-25 — STRUCTURAL — STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com

KEY NOTES

1. CIRCULAR OPNG ABOVE IN DBL WALL PER DETAIL 7/S7.2

FOUNDATION NOTES

1. SEE SHEET S1.1 FOR GENERAL NOTES AND FOUNDATION NOTES.
2. REVIEW ALL DETAILS RELATED TO FOUNDATIONS ON THE TYPICAL DETAIL SHEETS PRIOR TO STARTING ANY WORK. TYPICAL DETAILS APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE.
3. ALL REINFORCING AT CONTINUOUS FOOTINGS, INCLUDING TIES OR STIRRUPS, SHALL CONTINUE THRU PAD FOOTINGS.
4. SEE ARCHITECTURAL DRAWINGS AND/OR CIVIL DRAWINGS FOR LOCATIONS OF SIDEWALKS, PLANTERS, AND MOW STRIPS AROUND THE BUILDING PERIMETER.
5. PROVIDE SLIP DOWELS AT BUILDING SLAB TO EXTERIOR SLABS AND SIDEWALKS AT ALL DOOR OPENINGS.
6. SEE ARCHITECTURAL AND PLUMBING DRAWINGS FOR FLOOR DRAIN LOCATIONS WHICH MAY NOT NECESSARILY BE SHOWN ON FOUNDATION PLANS. SLOPE SLABS TO DRAINS.
7. COORDINATE LOCATION AND DEPTH OF ALL DEPRESSED SLABS WITH ARCHITECTURAL DRAWINGS.
8. DIMENSIONS AND GRID LINES ARE FROM F.O. PLYWOOD OR ℄ OF COLUMNS, TYP UON.
9. SEE DETAILS 11/S1.2 & 1/S2.4 FOR BUMP-OUTS AT FOOTINGS. COORDINATE LOCATIONS & DIMENSIONS W/ ARCH DWG'S.
10. SEE SHEETS S6.1 THRU S6.3 FOR SHEAR WALL ELEVATIONS

LEGEND

CCJ = CRACK CONTROL JOINT PER DET 10/S1.1

CJ = CONSTRUCTION JOINT PER DET 9/S1.1

= COLUMN / FOOTING TYPE

= BOTTOM OF FOOTING ELEVATION

= SIMPSON HOLDOWN PER DET 8/S1.3

= 6" HIGH CONC CURB

= DEPRESSED SLAB AREA (-3" UON), SEE DET 4/S1.2

XXX = NOMINAL SIZE OF STUDS WHEN OTHER THAN 2x6. SEE ALSO SHEAR WALL ELEVATIONS.

= WOOD POST CARRYING BEAM ABOVE, SEE FRMG PLAN FOR SIZE

S- - -S = STEPPED FOOTING PER DETAIL

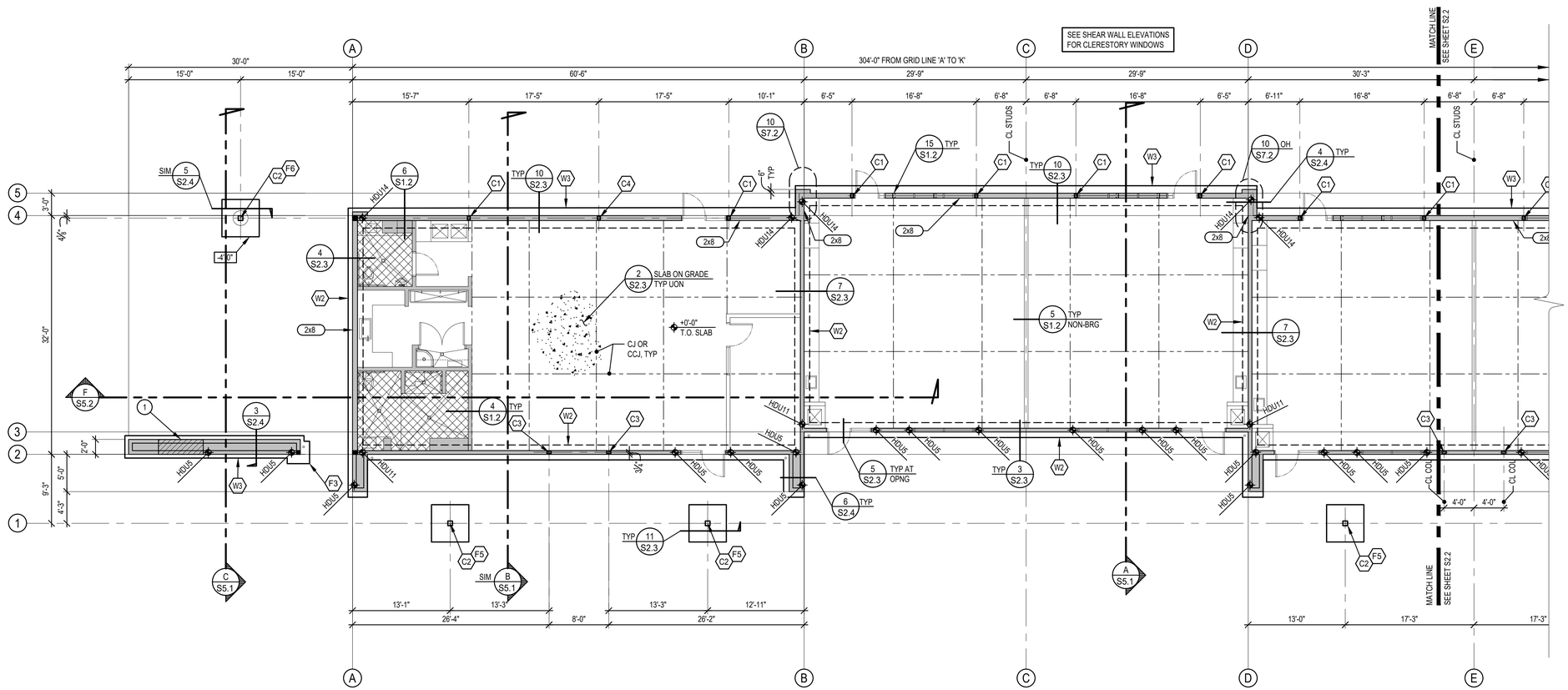
FOOTING SCHEDULE

MARK	PLAN DIMENSION	DEPTH	REINFORCEMENT
W1	1'-6" WIDE	2'-0"	(2) #5 CONT T&B #3 STIRRUPS @ 10"o.c.
W2	2'-0" WIDE	2'-0"	(2) #6 CONT T&B #3 STIRRUPS @ 10"o.c.
W3	2'-8" WIDE	2'-0"	(3) #6 CONT T&B #3 STIRRUPS @ 10"o.c.
F3	3'-0" SQ	2'-0"	(4) #6 EACH WAY T&B
F5	5'-0" SQ	2'-0"	(6) #6 EACH WAY T&B
F6	6'-0" SQ	3'-0"	(8) #6 EACH WAY T&B

COLUMN SCHEDULE

MARK	SIZE	BASE PLATE (14/S1.2)
C1	HSS7x5x¼	⅝"x11"x1'-1"
C2	HSS8x8x5/16	⅞"x14"x1'-2"
C3	HSS9x5x⅜	¾"x11"x1'-3"
C4	HSS7x7x5/16	⅞"x13"x1'-1"

* ALL EXTERIOR COLUMNS SHALL MEET REQUIREMENTS FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SEE SPECIFICATIONS FOR MORE INFO.



PARTIAL FOUNDATION PLAN

1/4" ~ 1'-0"

B.O. FOOTING ELEV = -3'-0" UON

north



KEY PLAN

NTS

north

APPROVALS

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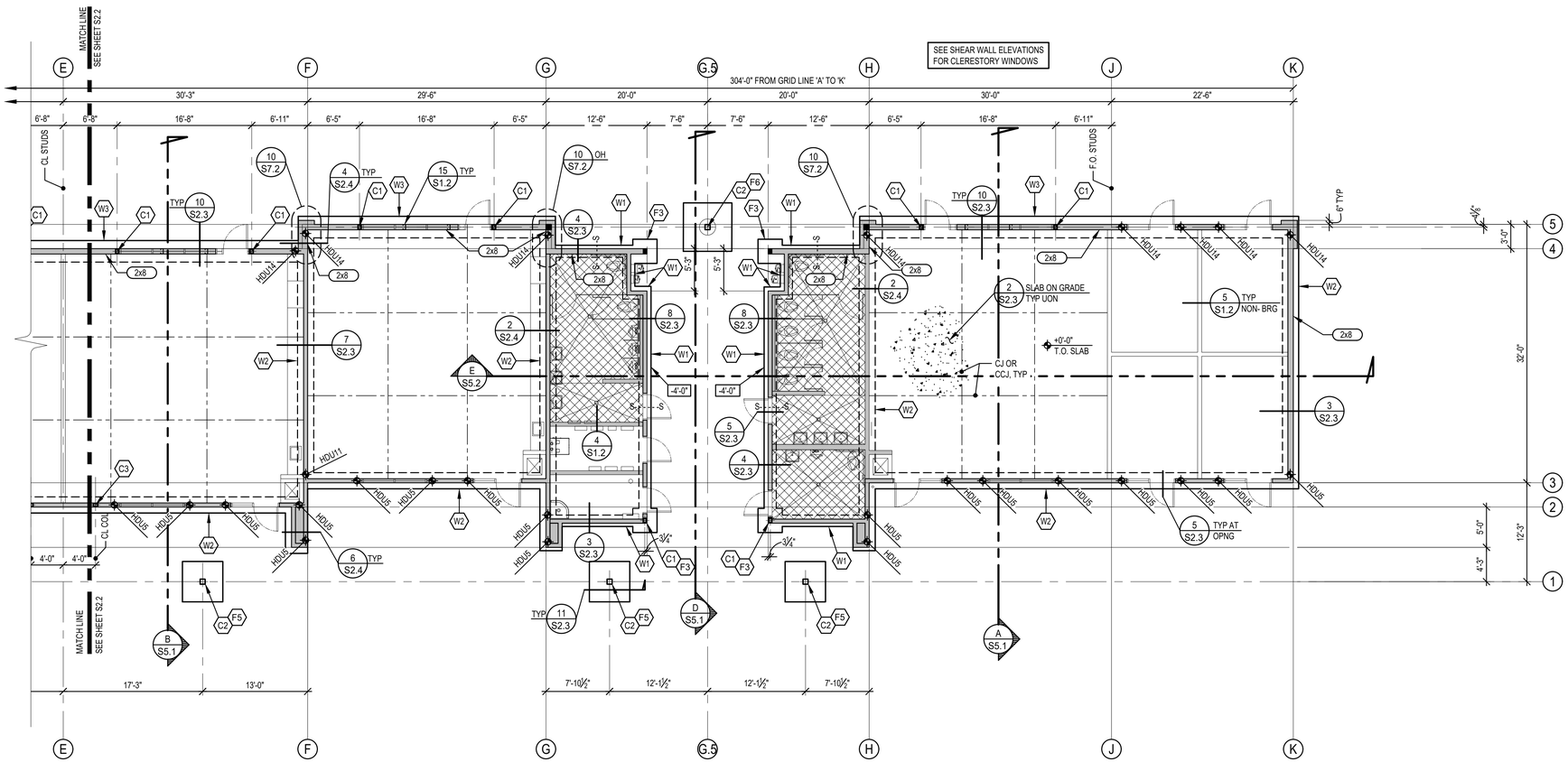
TITLE
PARTIAL FOUNDATION PLAN

S2.1

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5792
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com



PARTIAL FOUNDATION PLAN

⅛" ~ 1'-0"
B.O. FOOTING ELEV = [3'-0"] UON

north

FOUNDATION NOTES

1. SEE SHEET S2.1 FOR FOUNDATION NOTES

LEGEND

CCJ = CRACK CONTROL JOINT PER DET 10/S1.1

CJ = CONSTRUCTION JOINT PER DET 9/S1.1

= COLUMN / FOOTING TYPE

= BOTTOM OF FOOTING ELEVATION

HDU = SIMPSON HOLDOWN PER DET 8/S1.3

= 6" HIGH CONC CURB

= DEPRESSED SLAB AREA (-3" UON), SEE DET 4/S1.2

XXX = NOMINAL SIZE OF STUDS WHEN OTHER THAN 2x6. SEE ALSO SHEAR WALL ELEVATIONS.

■ = WOOD POST CARRYING BEAM ABOVE, SEE FRMG PLAN FOR SIZE

S- - -S = STEPPED FOOTING PER DETAIL

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MARK	PLAN DIMENSION	DEPTH	REINFORCEMENT
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* ALL EXTERIOR COLUMNS SHALL MEET REQUIREMENTS FOR ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) SEE SPECIFICATIONS FOR MORE INFO.



KEY PLAN
NTS

north

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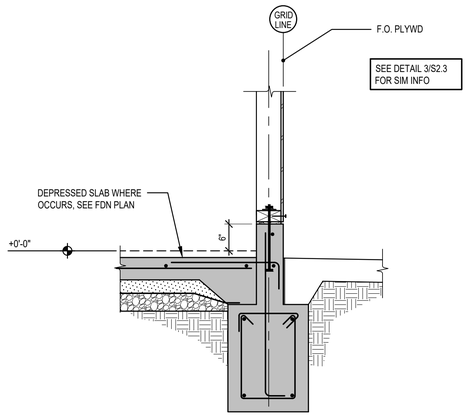
TITLE
PARTIAL FOUNDATION PLAN

S2.2

PROJECT 24001

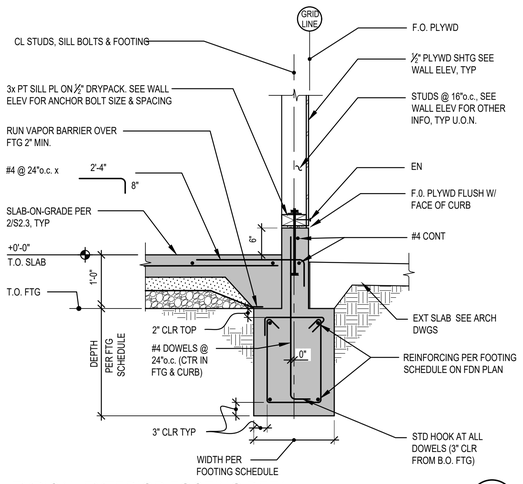
REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5782
Exp. 6-30-25
STRUCTURAL
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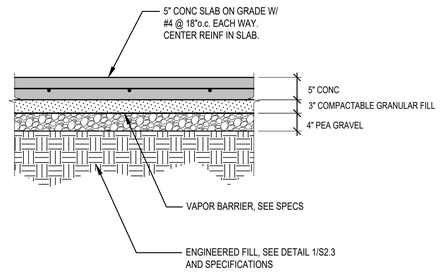
DETAIL
3/4" ~ 1'-0"

4 S2.3



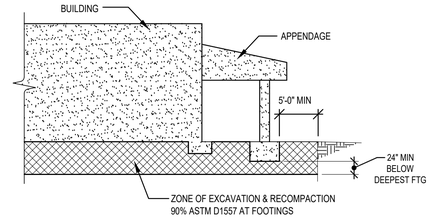
TYPICAL EXTERIOR FOOTING DETAIL
3/4" ~ 1'-0"

3 S2.3



SLAB ON GRADE DETAIL
NTS

2 S2.3

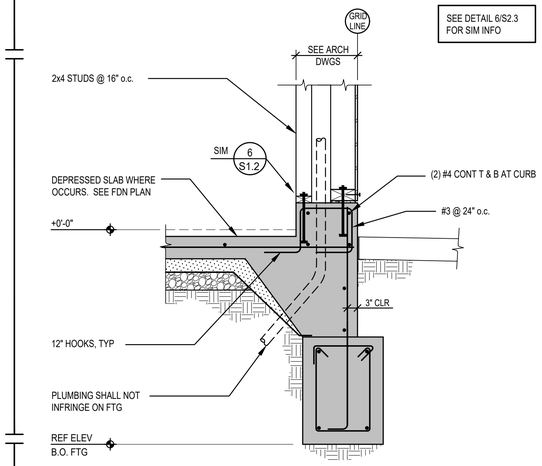


NOTES:

1. PRIOR TO EARTHWORK OPERATIONS, THE AREA TO BE DEVELOPED SHALL BE STRIPPED AND CLEARED ACCORDING TO THE REQUIREMENTS OF THE SOILS REPORT.
2. AFTER THE STRIPPING AND CLEARING OPERATIONS, THE PROPOSED BUILDING AREAS SHALL BE OVER-EXCAVATED AN ADDITIONAL 3 FEET MIN. THE EXCAVATION SHALL BE BACKFILLED WITH ENGINEERED FILL, PLACED IN LEVEL LIFTS APPROXIMATELY 6 INCHES THICK, MOISTURE CONDITIONED AS NECESSARY, AND COMPACTED TO AT LEAST 90% OF THE MAXIMUM DRY DENSITY BASED ON ASTM TEST METHOD D1557. PRIOR TO FILL PLACEMENT, THE BOTTOM OF THE EXCAVATION SHALL BE PROOF ROLLED AND OBSERVED BY THE GEOTECHNICAL ENGINEER.
3. EXTEND THE ZONE OF OVER-EXCAVATION AND COMPACTION A MIN OF 5 FEET BEYOND THE PERIMETER OF BUILDINGS.
4. SEE SOILS REPORT AND SPECIFICATIONS FOR OTHER INFO.

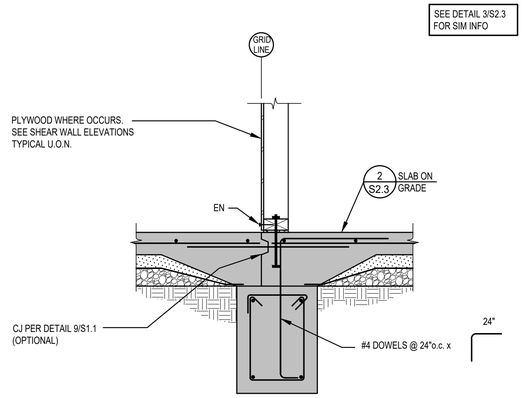
EXCAVATION AND COMPACTION
NTS 3000-00

1 S2.3



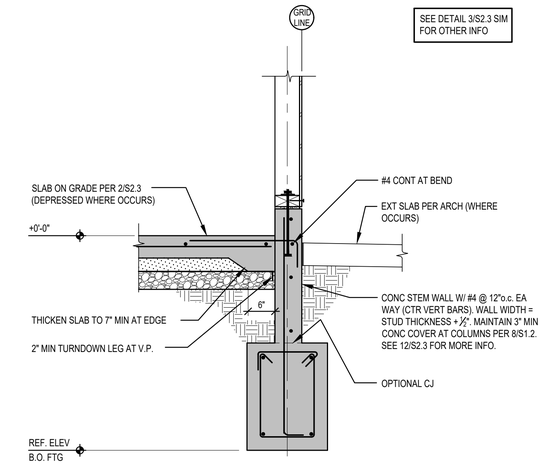
PLUMBING WALL AT STEPPED FOOTING
3/4" ~ 1'-0"

8 S2.3



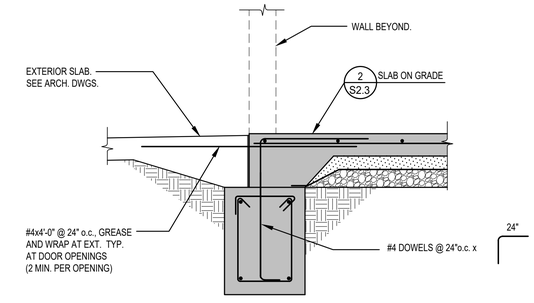
INTERIOR WALL FOOTING
3/4" ~ 1'-0"

7 S2.3



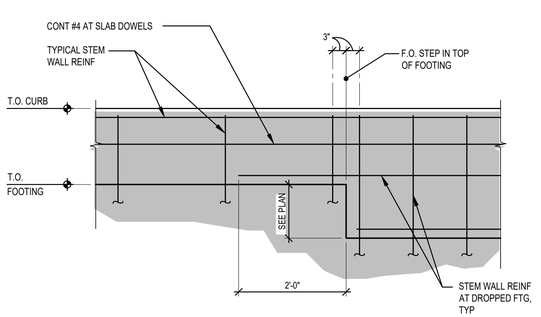
DETAIL AT STEPPED (LOWERED) FOOTING
3/4" ~ 1'-0"

6 S2.3



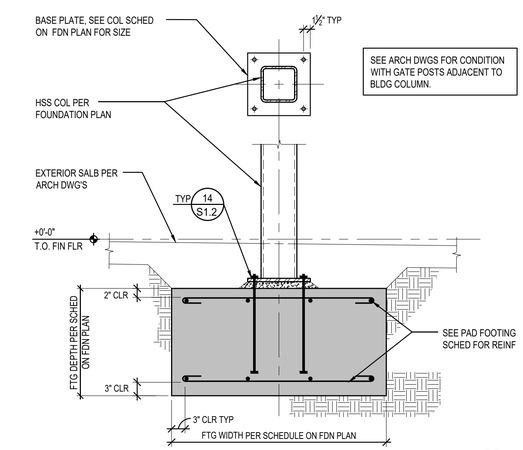
FOOTING AT OPENING DETAIL
3/4" ~ 1'-0"

5 S2.3



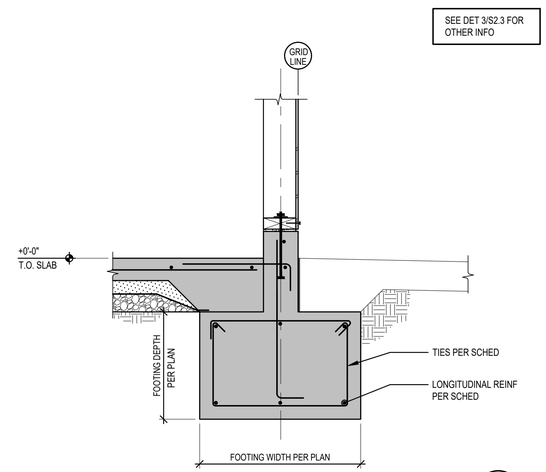
STEM WALL AT STEPPED FOOTING
3/4" ~ 1'-0"

12 S2.3



DETAIL
3/4" ~ 1'-0"

11 S2.3



DETAIL
3/4" ~ 1'-0"

10 S2.3

NOT USED
3/4" ~ 1'-0"

9 S2.3

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-33128
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4330 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
FOOTING DETAILS

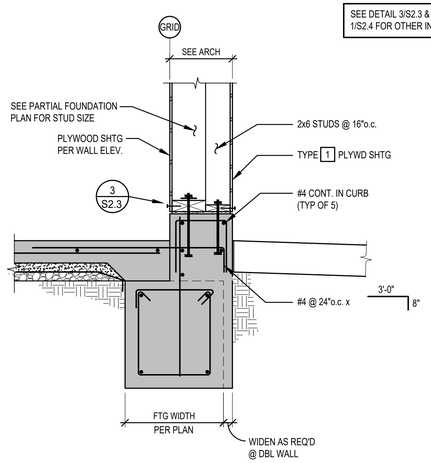
S2.3

PROJECT 24001

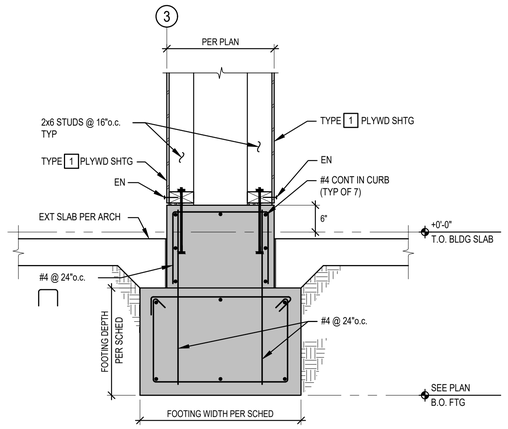
REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5792
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
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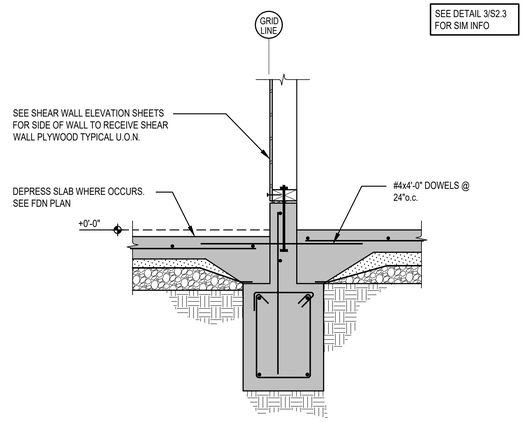
P:\M62404 Sunset Classroom Wing\Struct\S2.3_FTG DET.DWG Feb 12 2025 9:03am



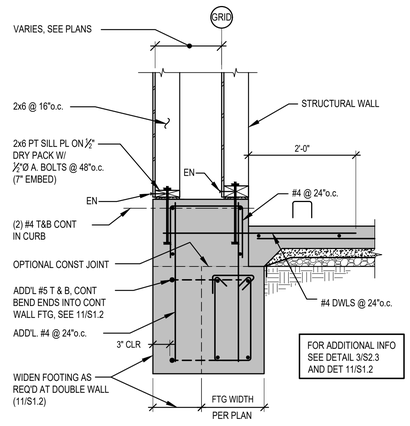
DETAIL
3/4" ~ 1'-0"
4 S2.4



DETAIL
3/4" ~ 1'-0"
3 S2.4



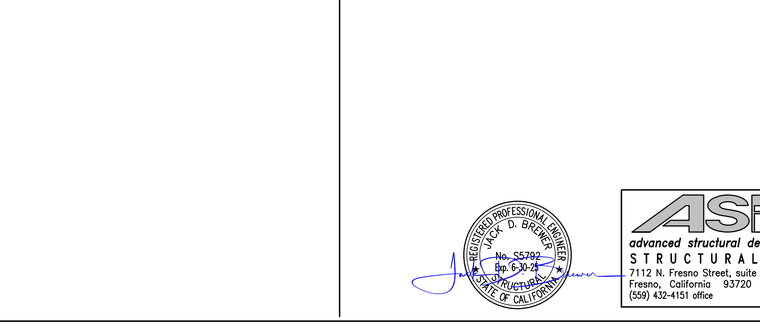
INTERIOR WALL FOOTING
3/4" ~ 1'-0" (WITH CURB)
2 S2.4



DETAIL AT DOUBLE WALL
3/4" ~ 1'-0"
1 S2.4



DETAIL
3/4" ~ 1'-0"
6 S2.4



DETAIL AT EXTERIOR COLUMN
3/4" ~ 1'-0"
5 S2.4

APPROVALS

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No. C-33128
REN: 05-31-25
STATE OF CALIFORNIA

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(559) 627-1926 Fax

TITLE
FOOTING DETAILS

S2.4

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5702
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com

I-JOIST SCHEDULE

MARK	SIZE	SPACING
J1	22" RED I-90	24"o.c.

BEAM SCHEDULE

MARK	SIZE	MARK	SIZE
B1	4x6	B6	6x6
B2	4x8	B7	6x8
B3	4x10	B8	6x10
B4	4x12	B9	6x12
B5	4x14	B10	6x14

GLU-LAM BEAM SCHEDULE

MARK	SIZE	CAMBER
G1	6¾" x 24" ALASKAN YELLOW CEDAR	NO CAMBER
G2	6¾" x 16½" DF/DF	R = 2000'
G3	5⅛"x16½" DF/DF	NO CAMBER
G4	6¾"x24" DF/DF	NO CAMBER
G5	5⅛"x15" ALASKAN YELLOW CEDAR	NO CAMBER

GLU-LAM BEAM NOTES

1. ALL GLU-LAM BEAMS SHALL MEET THE FOLLOWING REQUIREMENTS AND COMBINATION SHALL BE AS NOTED ON DRAWINGS. SEE DETAIL 12/S1.4 AND GLU-LAM SCHEDULE FOR OTHER INFORMATION.

   FOR BEAMS NOT EXPOSED TO WEATHER:

   CONDITION OF USE- DRY
   SPECIES- DOUGLAS FIR
   STANDARDS- ANSI/AITC A190.1, ASTM D3737, AITC 200, ASTM D905, AND TITLE 24.
   COMBINATION- 24F-V4, 24F-V8 (12/S1.4)

   Fb=2,400psi Fv=265 psi Fcp=650 psi
   E=1,800,000 psi

   FOR BEAMS EXPOSED TO WEATHER (EXTERIOR):

   CONDITION OF USE- WET
   SPECIES- ALASKA YELLOW CEDAR
   STANDARDS- ANSI/AITC A190.1, ASTM D3737, AITC 200, ASTM D905, AND TITLE 24.
   COMBINATION- 20F-V12, 20F-V13 (12/S1.4)

   Fb=2,000psi Fv=265 psi Fcp=560 psi
   E=1,500,000 psi
2. PROVIDE POSITIVE CAMBER AT MID-SPAN AS INDICATED ON THE GLU-LAM SCHEDULE.
3. ADHESIVES MUST BE "WET-USE" ADHESIVES. "DRY-USE" ADHESIVES SHALL NOT BE USED.
4. MOISTURE CONTENT AT TIME OF GLUING SHALL NOT EXCEED 12%. THE MINIMUM MOISTURE CONTENT SHALL NOT BE LESS THAN 7%.
5. SERVICE TEMPERATURE--LESS THAN 150° F.
6. MEMBERS SHALL BE DELIVERED AND STORED WITH CARE TO AVOID DAMAGE. PROVIDE ADEQUATE WATER-RESISTANT WRAPPING. SEE SPECIFICATIONS AND AITC 111 FOR MORE INFO.

I-JOIST NOTES

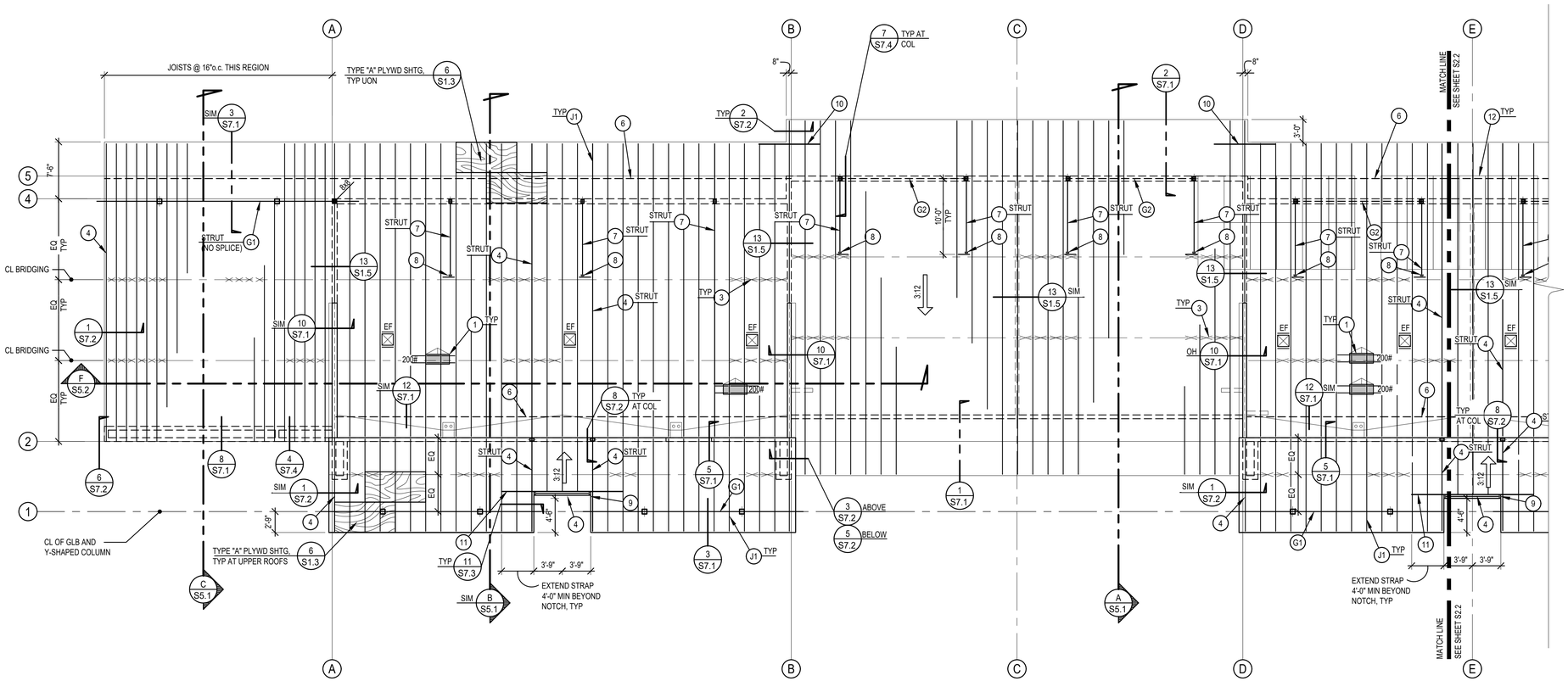
1. SEE DETAIL 1/S1.5 FOR I-JOIST PROPERTIES.
2. SEE DETAIL 7/S1.5 FOR I-JOIST BLOCKING.
3. SEE DETAIL 3/S1.5 FOR ATTACHMENT OF I-JOIST TO BEARINGS.
4. PROVIDE ONE ROW MINIMUM OF X-BRIDGING AT MIDSPAN OF ALL I-JOISTS. JOIST SPANNING GREATER THAN 12'-0" SHALL RECEIVE MULTIPLE ROWS OF X-BRIDGING SPACED EQUALLY (12'-0"o.c. MAX). SEE DETAIL 10/S1.5.
5. SEE DETAIL 11/S1.5 FOR DBL I-JOISTS. PROVIDE SPECIAL HANGER MADE FOR DBL JOISTS.
6. EACH I-JOIST SHALL BE IDENTIFIED BY A STAMP INDICATING THE JOIST TYPE, ESR REPORT NUMBER, MANUFACTURER'S NAME, PLANT NUMBER, AND PFS CORPORATION LOGO.

WOOD FRAMING NOTES

1. ELEVATIONS ARE GIVEN TO TOP OF FRAMING (BOTTOM OF SHEATHING) UON.
2. SEE TYPICAL DETAIL SHEETS FOR GENERAL NOTES, SCHEDULES, AND TYPICAL DETAILS. WHERE SPECIFIC DETAILS ARE NOT SHOWN, THE TYPICAL DETAILS SHALL APPLY.
3. VERIFY SIZE AND LOCATION OF OPENINGS FOR EQUIPMENT WITH MECHANICAL AND ELECTRICAL DRAWINGS. LOCATE UNITS SO DUCT DROPS FALL BETWEEN JOISTS AS SHOWN. DO NOT CUT JOISTS EXCEPT WHERE SHOWN ON DRAWINGS. UNIT WEIGHTS SHOWN ARE THE WEIGHTS USED FOR DESIGN OF THE FRAMING. WEIGHTS OF UNITS SHALL NOT EXCEED THESE WEIGHTS WITHOUT THE ADVANCE APPROVAL OF THE STRUCTURAL ENGINEER.
4. SEE TYPICAL DETAILS FOR FRAMING AT ROOF OPENINGS, UON.
5. SEE TYPICAL DETAILS FOR FRAMING OF EQUIPMENT PLATFORMS.
6. PROVIDE POSTS UNDER ALL BEAMS UNLESS DETAILS SHOW OTHERWISE. POSTS SHALL BE AT LEAST AS WIDE AS THE BEAMS AND AS DEEP AS THE WALL STUDS.
7. PROVIDE PLYWOOD EDGE NAILING (EN) ALONG ALL RAFTERS, BLOCKING, AND STRUTS ALONG SHEAR WALL LINES, UON.
8. ALL SIMPSON CONNECTORS ARE TAKEN FROM CATALOG C-C 2021 BY SIMPSON STRONGTIE INC.
9. IT IS NOT THE INTENT OF THESE DRAWINGS TO SHOW FIRE BLOCKING OR BLOCKING REQUIRED FOR FINISHES OR OTHER NON-STRUCTURAL ELEMENTS. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
10. SEE ARCHITECTURAL DRAWINGS FOR SIZE AND LOCATIONS OF ROOF ACCESSES. PROVIDE FRAMING AND BLOCKING AROUND OPENINGS PER TYPICAL DETAILS UON WHERE APPLICABLE, FRAME OPENING IN CEILING FRAMING ALSO.
11. PROVIDE FRAMING AT ALL HARD CEILINGS PER DET 16/S1.5 UON. REFER TO THE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF HARD CEILINGS.

KEY NOTES

1. MECHANICAL UNIT ON WOOD PLATFORM, SEE MECH DWGS & DET 16/S1.4
2. NOT USED
3. I-JOIST X-BRIDGING PER DET 10/S1.5
4. 3½"x22" REDLAM LVL (2.0E)
5. BEAM BELOW. SEE CEILING FRMG PLAN FOR SIZE
6. SHP'D STRUT BELOW I-JOISTS, SEE WALL ELEVATIONS & DET 12/S7.1
7. LOCATE 3½"x22" REDLAM LVL STRUT AT CL HSS COL, REPLACE I-JOIST W/ FULL LENGTH LVL IF I-JOIST OCCURS AT COLUMN
8. HU416 HANGER TO FULL DEPTH 3½" LVL BLK PER 7/S7.4, SIM
9. HU416 EA END
10. SIMP CS16 x 8'-0" STRAP OVER ROOF PLYWD W/ 10d @ 4⅝"o.c. TO 2x FLAT FASCIA BLKG & TO 3x4 FLAT BLKG BTWN I-JOISTS (CTR ON ROOF PLAN NOTCH)
11. SIMP CS16 STRAP OVER ROOF PLYWD W/ 10d @ 4⅝"o.c. TO LVL FASCIA & TO 3x4 FLAT BLKG BTWN I-JOISTS
12. SOLAR PANEL ARRAY, SEE ELECT DWGS



PARTIAL ROOF FRAMING PLAN

1/4" = 1'-0"



KEY PLAN
NTS

north

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
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APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-33128
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

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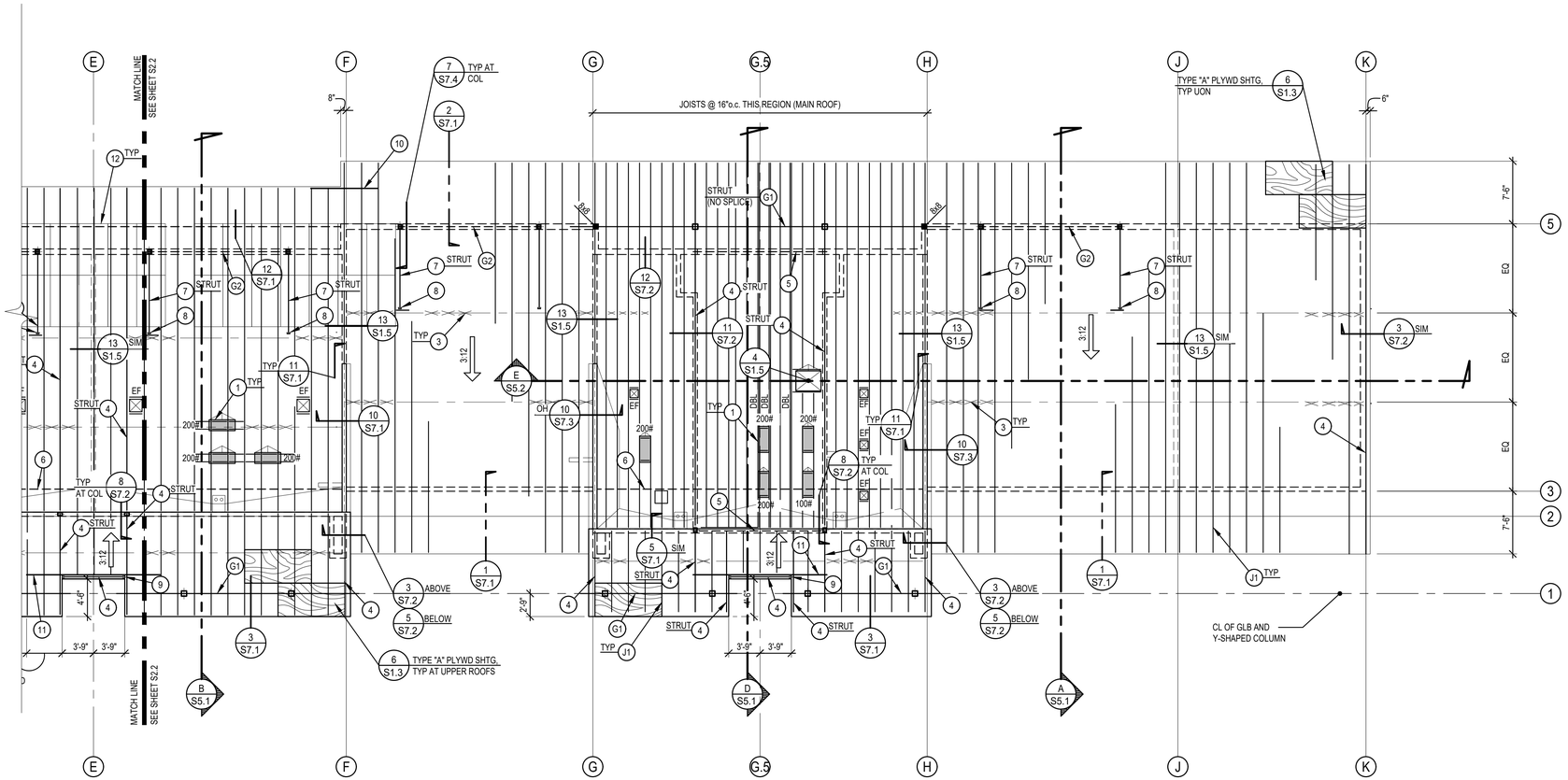
TITLE
PARTIAL ROOF PLAN

S3.1

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5792
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com



PARTIAL ROOF FRAMING PLAN

1/8" = 1'-0"

north

I-JOIST SCHEDULE

MARK	SIZE	SPACING
J1	22" RED I-90	24"o.c.

BEAM SCHEDULE

MARK	SIZE	MARK	SIZE
B1	4x6	B6	6x6
B2	4x8	B7	6x8
B3	4x10	B8	6x10
B4	4x12	B9	6x12
B5	4x14	B10	6x14

GLU-LAM BEAM SCHEDULE

MARK	SIZE	CAMBER
G1	6½" x 24" ALASKAN YELLOW CEDAR	NO CAMBER
G2	6½" x 16½" DF/DF	R = 2000'
G3	5⅛"x16½" DF/DF	NO CAMBER
G4	6½"x24" DF/DF	NO CAMBER
G5	5½"x15" ALASKAN YELLOW CEDAR	NO CAMBER

WOOD FRAMING NOTES

1. SEE SHEET S3.1 FOR WOOD FRAMING NOTES

I-JOIST NOTES

1. SEE SHEET S3.1 FOR I-JOIST NOTES

GLU-LAM BEAM NOTES

1. SEE SHEET S3.1 FOR GLU-LAM BEAM NOTES

KEY NOTES

1. MECHANICAL UNIT ON WOOD PLATFORM, SEE MECH DWGS & DET 16/S1.4
2. NOT USED
3. I-JOIST X-BRIDGING PER DET 10/S1.5
4. 3½"x22" REDLAM LVL (2.0E)
5. BEAM BELOW. SEE CEILING FRMG PLAN FOR SIZE
6. SHP'D STRUT BELOW I-JOISTS, SEE WALL ELEVATIONS & DET 12/S7.1
7. LOCATE 3½"x22" REDLAM LVL STRUT AT HSS COL, REPLACE I-JOIST W/ FULL LENGTH LVL IF I-JOIST OCCURS AT COLUMN
8. HU416 HANGER TO FULL DEPTH 3½" LVL BLK PER 7/S7.4, SIM
9. HU416 EA END
10. SIMP CS16 x 8'-0" STRAP OVER ROOF PLYWD W/ 10d @ 4½"o.c. TO 2x FLAT FASCIA BLKG & TO 3x4 FLAT BLKG BTWN I-JOISTS (CTR ON ROOF PLAN NOTCH)
11. SIMP CS16 STRAP OVER ROOF PLYWD W/ 10d @ 4½"o.c. TO LVL FASCIA & TO 3x4 FLAT BLKG BTWN I-JOISTS
12. SOLAR PANEL ARRAY, SEE ELECT DWGS



KEY PLAN
NTS

north

APPROVALS

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TITLE
PARTIAL ROOF PLAN

S3.2

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5792
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

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BEAM SCHEDULE

MARK	SIZE	MARK	SIZE
B1	4x6	B6	6x6
B2	4x8	B7	6x8
B3	4x10	B8	6x10
B4	4x12	B9	6x12
B5	4x14	B10	6x14

GLU-LAM BEAM SCHEDULE

MARK	SIZE	CAMBER
G1	6½" x 24" ALASKAN YELLOW CEDAR	NO CAMBER
G2	6½" x 16½" DF/DF	R = 2000'
G3	5⅛"x16½"	NO CAMBER
G4	6½"x24"	NO CAMBER
G5	5½"x15" ALASKAN YELLOW CEDAR	NO CAMBER

CEILING FRAMING NOTES

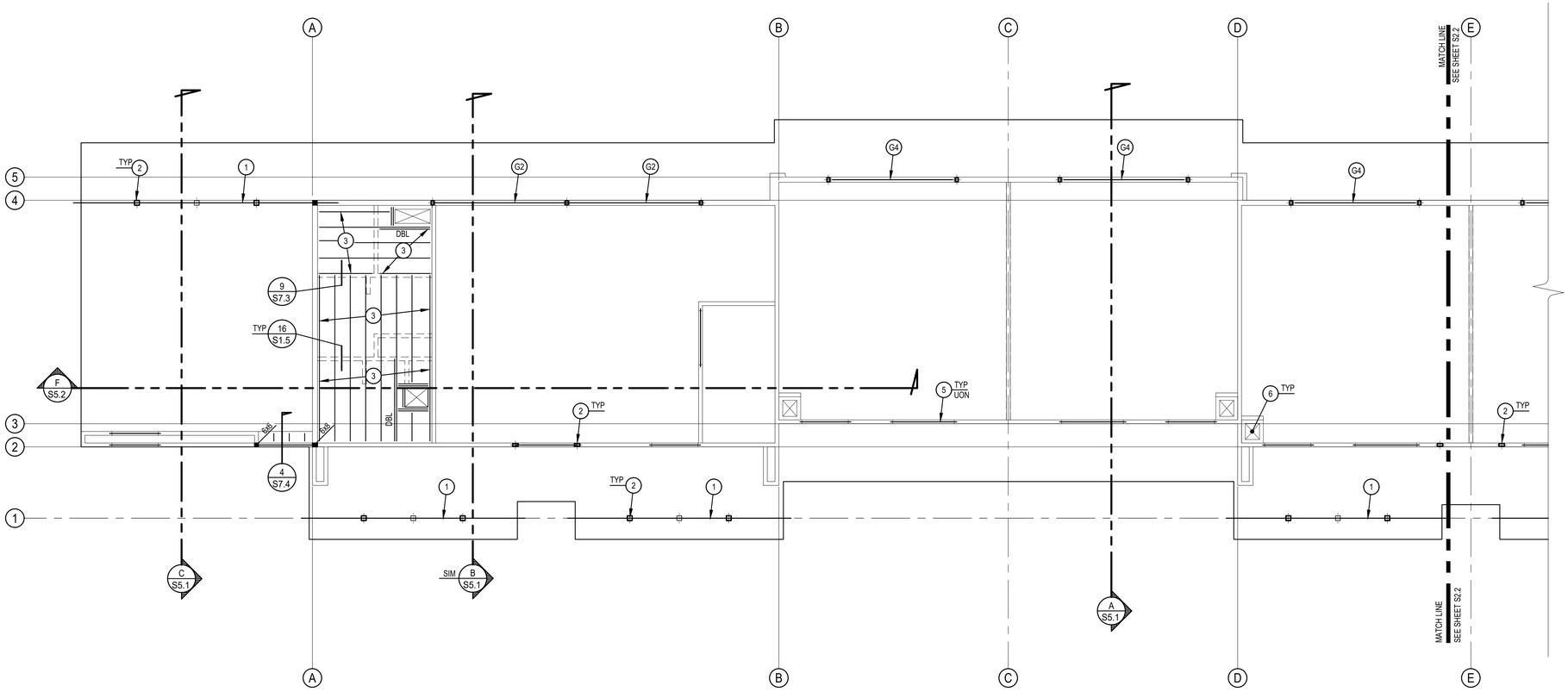
1. SEE WOOD FRAMING NOTES ON SHEET S3.1
2. SEE GLU-LAM BEAM NOTES ON SHEET S3.1
3. COORDINATE FIXTURE LOCATIONS WITH ARCH. AND ELECT. DRAWINGS.
4. SEE DETAIL 16/S1.5 FOR TYPICAL CEILING FRAMING DETAIL.
5. PROVIDE 2x SOLID BLKG AT CEILINGS PER DETAIL 16/S1.5
6. SEE ROOF FRAMING PLANS FOR BEAM SIZES TYPICAL U.O.N.
7. REFER TO DETAIL 2/S1.3 FOR TYPICAL HEADER SIZES NOT SPECIFICALLY CALLED OUT ON PLANS.

KEY NOTES

1. BEAM PER ROOF FRMG PLAN
2. HSS COL PER PLAN OR WALL ELEV
3. CLG JOIST PER DET 16/S1.5
4. HANGER PER DET 4/S7.1
5. HEADER PER DET 2/S1.3
6. MECHANICAL UNIT, SEE MECH DWGS

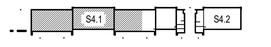
NOTE: NOT ALL MEMBERS SHOWN ON SCHEDULES ARE USED ON EVERY SHEET.

NOTE: GRID LINES ARE LOCATED AT OUTSIDE FACE OF PLYWOOD, TYP UON.



PARTIAL CEILING FRAMING PLAN

1/4" = 1'-0"



KEY PLAN

NTS

north

north

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-33128
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI | ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
PARTIAL CEILING FRAMING PLAN

S4.1

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BRENNEMAN
No. S5792
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
(559) 432-4151 office
asdi@asdiengr.com

P:\M62404 Sunset Classroom Wing\Struct\S4.1 – S4.2 – Ceilings.DWG Feb 12 2025 9:03am

BEAM SCHEDULE

MARK	SIZE	MARK	SIZE
B1	4x6	B6	6x6
B2	4x8	B7	6x8
B3	4x10	B8	6x10
B4	4x12	B9	6x12
B5	4x14	B10	6x14

GLU-LAM BEAM SCHEDULE

MARK	SIZE	CAMBER
G1	6¾"x24" ALASKAN YELLOW CEDAR	NO CAMBER
G2	6¾"x16½" DF/DF	R = 2000'
G3	5⅛"x16½"	NO CAMBER
G4	6¾"x24"	NO CAMBER
G5	5⅛"x15" ALASKAN YELLOW CEDAR	NO CAMBER

CEILING FRAMING NOTES

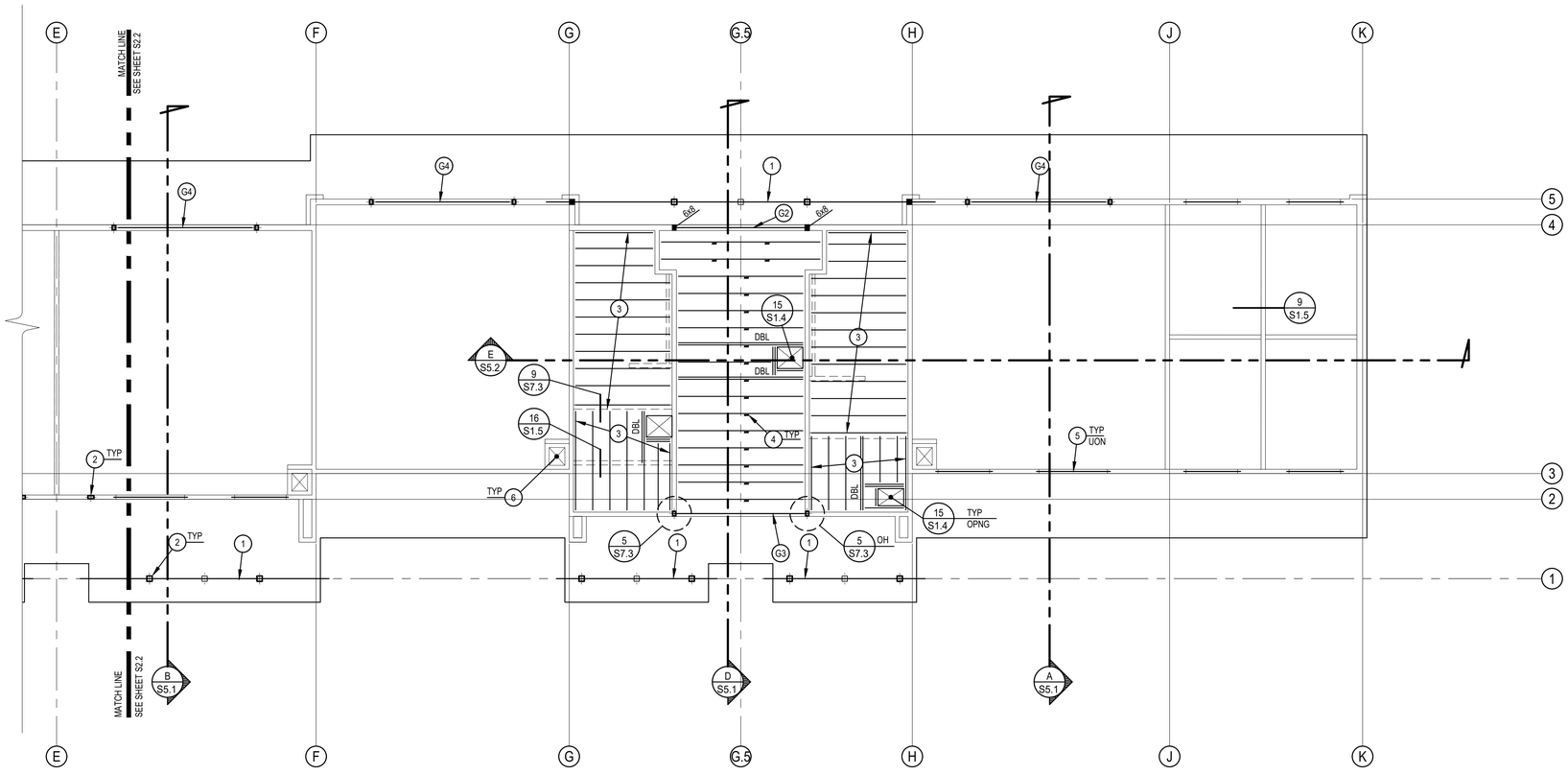
1. SEE SHEET S4.1 FOR CEILING FRMG NOTES

KEY NOTES

1. BEAM PER ROOF FRMG PLAN
2. HSS COL PER PLAN OR WALL ELEV
3. CLG JOIST PER DET 16/S1.5
4. NOT USED
5. HEADER PER DET 2/S1.3
6. MECHANICAL UNIT, SEE MECH DWGS

NOTE: NOT ALL MEMBERS SHOWN ON SCHEDULES ARE USED ON EVERY SHEET.

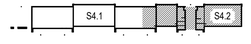
NOTE: GRID LINES ARE LOCATED AT OUTSIDE FACE OF PLYWOOD, TYP UON.



PARTIAL CEILING FRAMING PLAN

⅛" = 1'-0"

north



KEY PLAN

NTS

north

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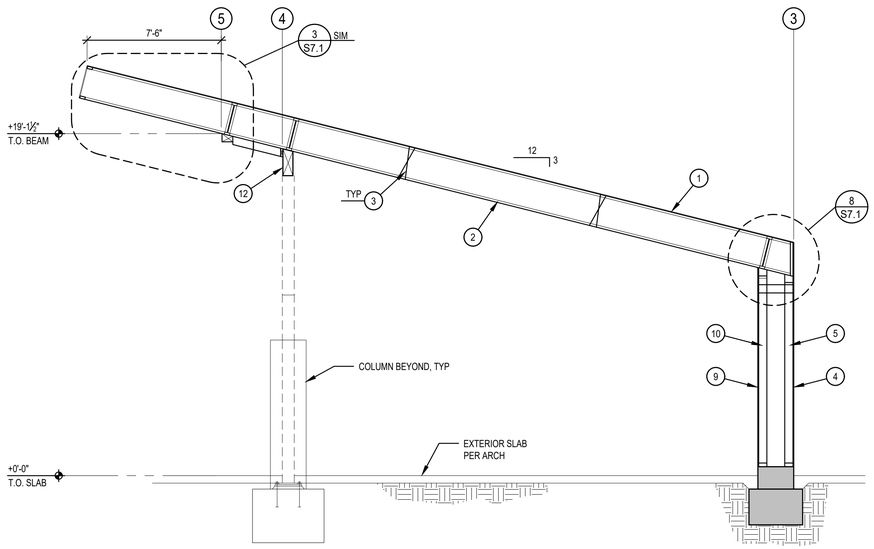
TITLE
PARTIAL CEILING FRAMING PLAN

S4.2

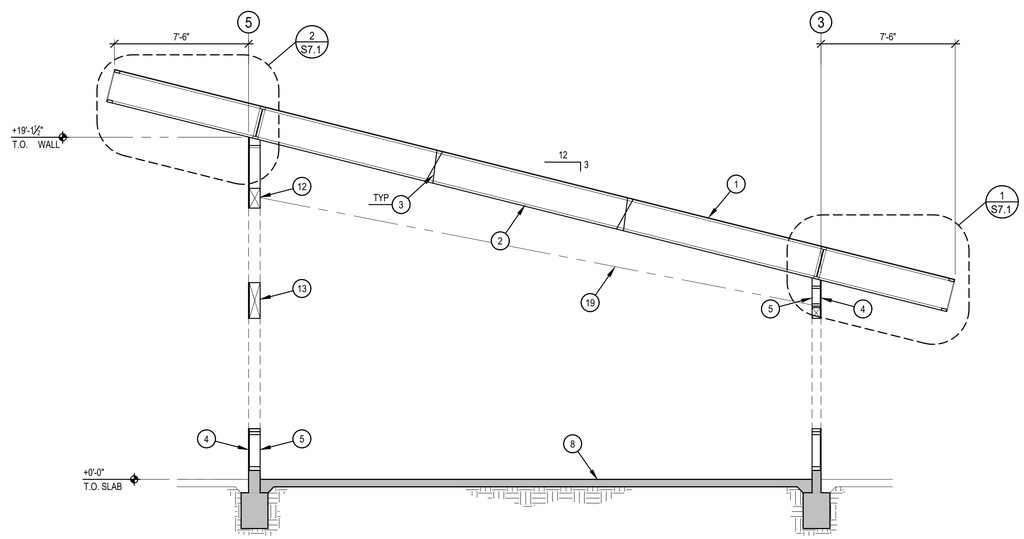
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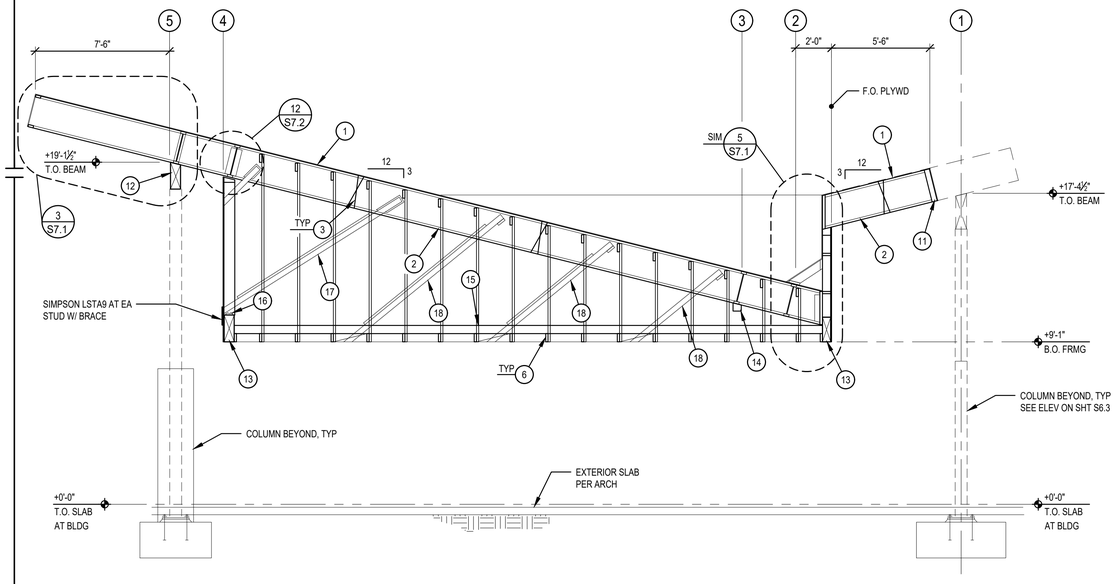
SECTION C S5.1
¼" ~ 1'-0"



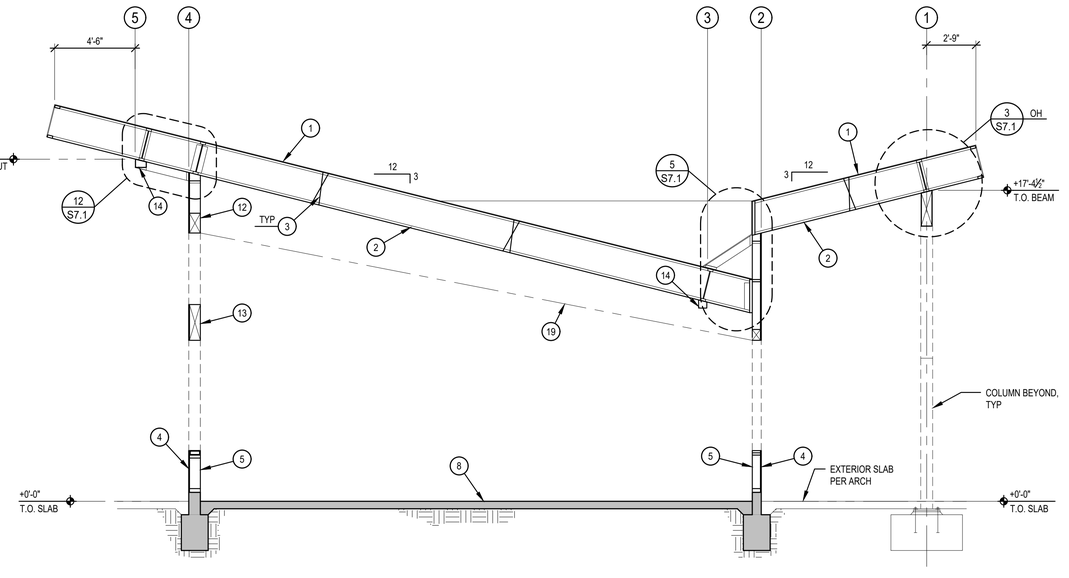
SECTION A S5.1
¼" ~ 1'-0"

KEY NOTES

1. PLYWOOD ROOF SHEATHING PER FRAMING PLAN
2. JOISTS PER ROOF FRAMING PLAN
3. X-BRIDGING PER FRAMING PLAN & DET 10/S1.5
4. PLYWOOD WALL SHEATHING PER WALL ELEVATIONS
5. STUDS @ 16"o.c. PER WALL ELEVATIONS
6. SOFFIT OR CEILING JOISTS PER CEILING FRAMING PLAN & DETAIL 16/S1.5
7. NOT USED
8. CONCRETE SLAB ON GRADE PER FOUNDATION PLAN
9. TYPE 1 PLYWD SHTG
10. 2x6 STUDS @ 16"o.c.
11. LVL PER PLAN
12. BEAM PER ROOF FRMG PLAN
13. BEAM PER CLG FRMG PLAN
14. STRUT PER PLAN
15. CONT 2x6 STRONGBACK PER 4/S7.1
16. SIMP A35 AT EA STUD W/ BRACE
17. 2x4 BRACE PER 9/S1.5 SIM, LOCATE AT BEAM ¼ POINTS
18. 2x4 SOFFIT BRACE PER 4/S7.3
19. SUSPENDED CLG PER ARCH DWGS



SECTION D S5.1
¼" ~ 1'-0"



SECTION B S5.1
¼" ~ 1'-0"

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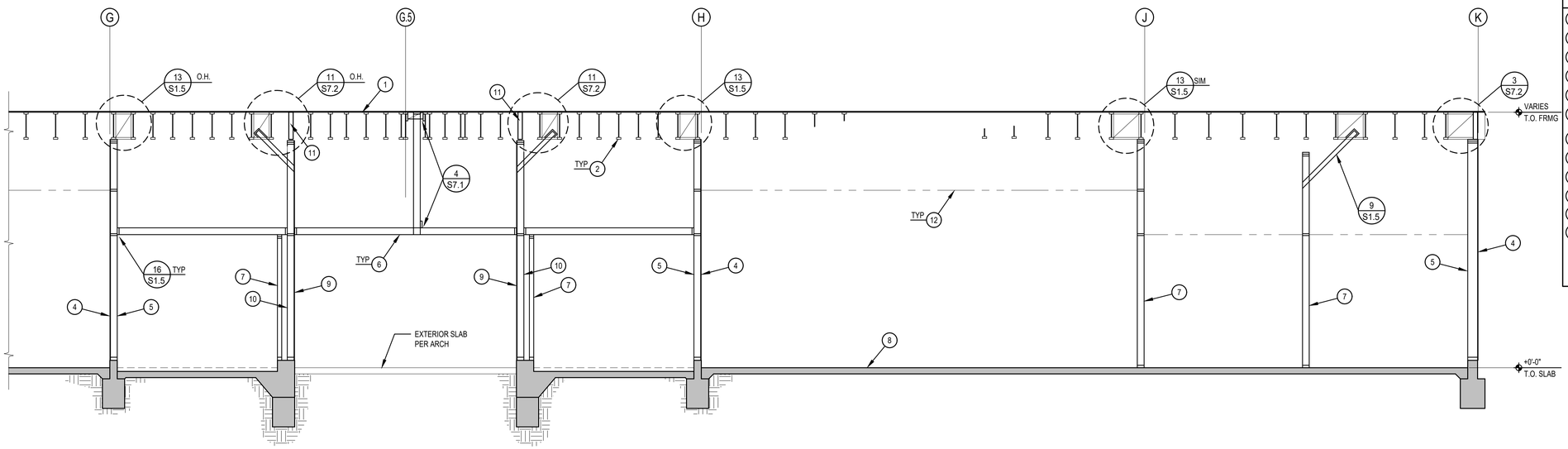
TITLE
BUILDING SECTIONS

S5.1

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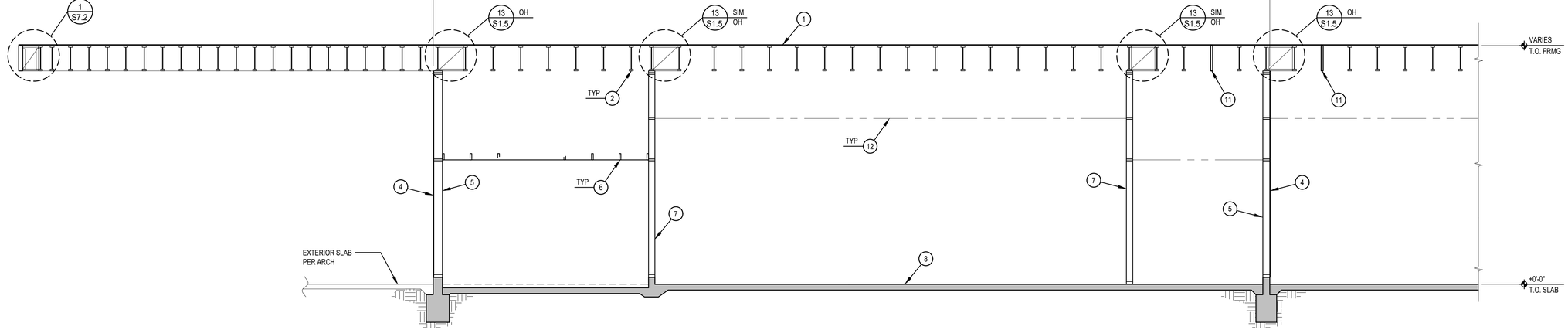
PARTIAL SECTION

1/4" ~ 1'-0"

E S5.2

KEY NOTES

1. PLYWOOD ROOF SHEATHING PER FRAMING PLAN
2. JOISTS PER ROOF FRAMING PLAN
3. X-BRIDGING PER FRAMING PLAN & DET 10/S1.5
4. PLYWOOD WALL SHEATHING PER WALL ELEVATIONS
5. STUDS @ 16"o.c. PER WALL ELEVATIONS
6. SOFFIT OR CEILING JOISTS PER CEILING FRAMING PLAN & DETAIL 16/S1.5
7. 2x STUDS @ 16"o.c. PER ARCH DWGS
8. CONCRETE SLAB ON GRADE PER FOUNDATION PLAN
9. TYPE [1] PLYWD WALL SHEATHING
10. 2x6 STUDS @ 16"o.c.
11. LVL STRUT PER FRMG PLAN
12. SUSPENDED CLG PER ARCH DWGS



PARTIAL SECTION

1/4" ~ 1'-0"

F S5.2

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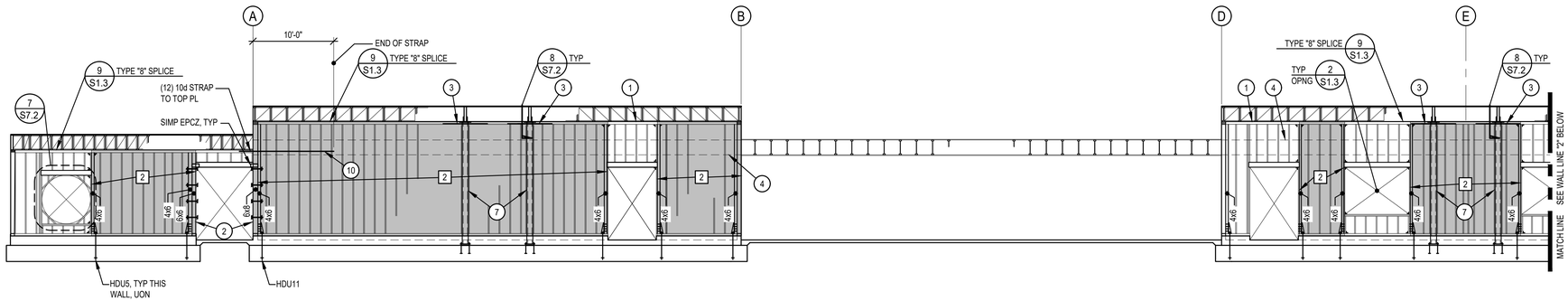
TITLE
BUILDING SECTIONS

S5.2

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5782
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

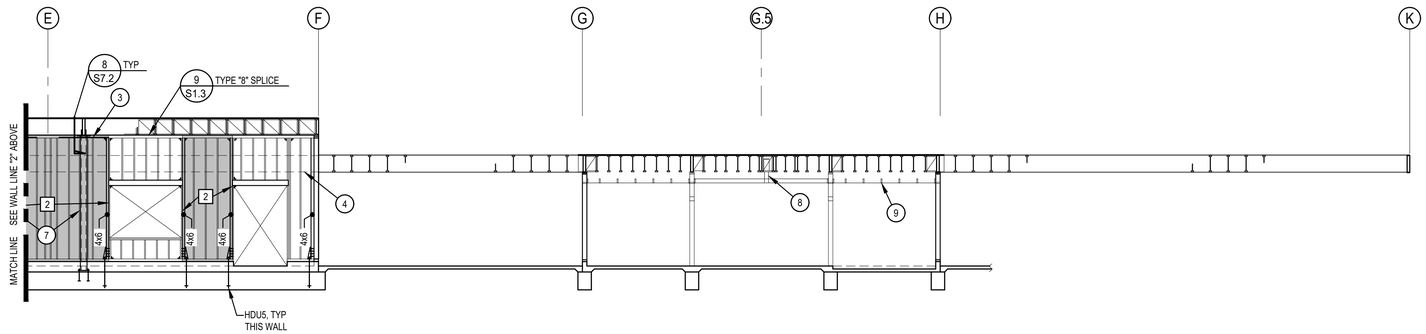
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Fresno, California 93720
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asdi@asdiengr.com



PARTIAL WALL LINE "2"

1/8" ~ 1'-0"

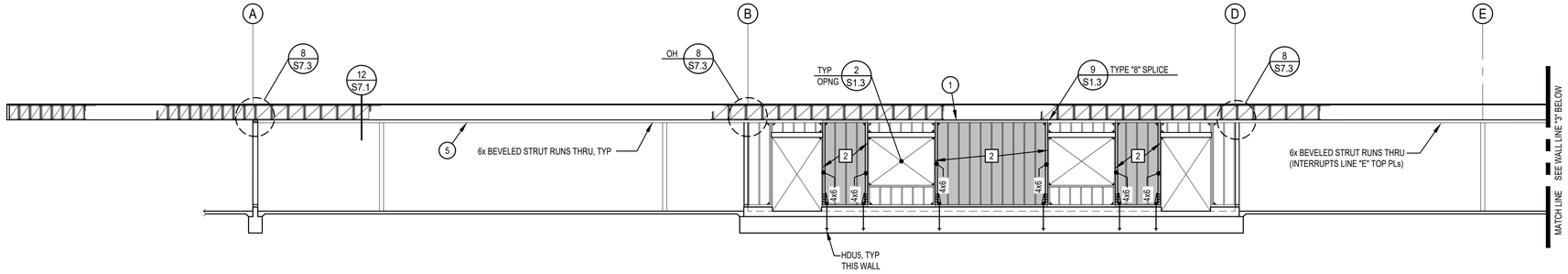
2x6 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE [2] PLYWD JOINTS)



PARTIAL WALL LINE "2"

1/8" ~ 1'-0"

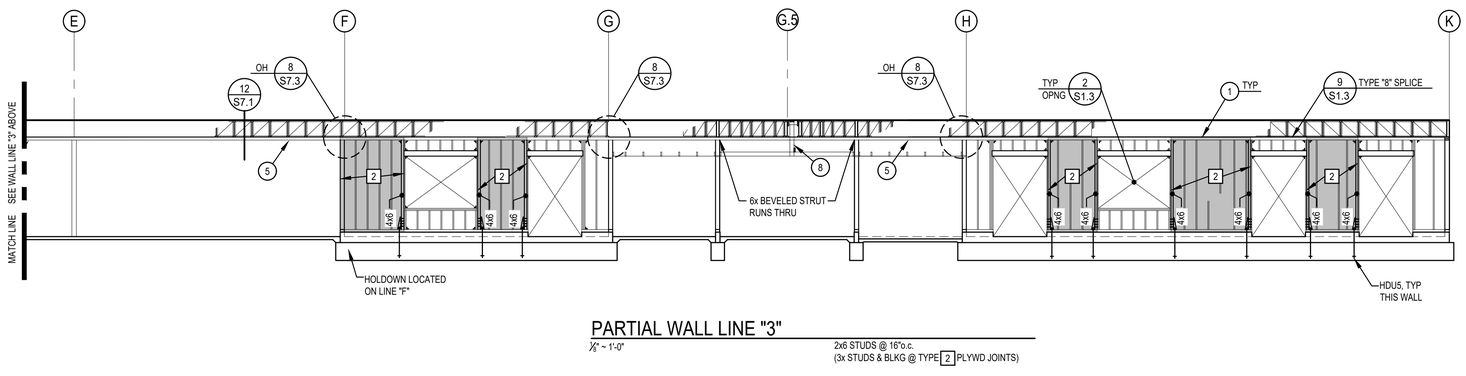
2x6 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE [2] PLYWD JOINTS)



PARTIAL WALL LINE "3"

1/8" ~ 1'-0"

2x6 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE [2] PLYWD JOINTS)



PARTIAL WALL LINE "3"

1/8" ~ 1'-0"

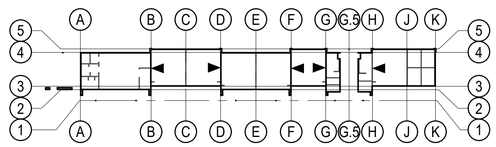
2x6 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE [2] PLYWD JOINTS)

SHEAR WALL NOTES

1. SHADED AREAS ON WALLS INDICATE REGIONS OF STRUCTURAL SHEAR PANELS. OTHER REGIONS ON WALL SHALL HAVE THE SAME SHEATHING WITH NAILS AT 6"o.c AT EDGES AND 12"o.c. FIELD.
2. PROVIDE PLYWOOD ON ALL EXTERIOR SURFACES OF FASCIAS AND EXTERIOR WALLS PER NOTE #1 "OTHER REGIONS", EVEN IF WALL ELEVATIONS ARE NOT DRAWN.
3. (EN) "EDGE NAILING" SPACE NAILS AS REQUIRED FOR SHEAR PANEL EDGES EVEN IF NOT AT AN EDGE.
4. [#] - INDICATES SHEATHING TYPE AND ANCHOR BOLT SPACING PER SCHEDULE ON DETAIL 3/S1.3.
5. SILL BOLTS AT NON-SHEAR REGIONS OF WALLS SHALL BE ⅝"Ø x 12" SPACED AT 48"o.c. MAXIMUM.
6. STUDS OR POSTS AT EDGES OF SHEAR PANELS AND AT HOLD DOWNS SHALL BE ONE PIECE FULL HEIGHT OF WALL AND SHALL RECEIVE EDGE NAILING FULL HEIGHT.
7. PROVIDE EDGE NAILING TO EACH TOP PLATE OF WALL. SEE DETAIL 9/S1.3 FOR SCHEDULE OF PLATE SPLICES.
8. ALL MEMBERS DESIGNATED AS "STRUTS" SHALL RECEIVE EN FOR THEIR ENTIRE LENGTH.
9. SEE DETAIL 8/S1.3 FOR HOLD DOWNS, UNLESS OTHERWISE NOTED.
10. FRAME WALLS AND OPENINGS PER 2/S1.3 UNLESS OTHERWISE NOTED.
11. FRAME ALL HOLES THRU SHEAR WALLS PER DETAILS 5/S1.4 & 6/S1.4 UON.
12. PROVIDE SOLID CONTINUOUS BLOCKING AT 48"o.c. AT ALL WALL REGIONS WHICH DO NOT HAVE PLYWOOD OR GYP BOARD ON AT LEAST ONE SIDE.
13. STUD SIZES INDICATED ON THE WALL ELEVATIONS ARE FOR THE TYPICAL STUDS. REFER TO THE SHEATHING PANEL SCHEDULE ON THE TYPICAL SHEAR WALL DETAIL FOR REGIONS REQUIRING 3x STUDS AND BLOCKING AT PANEL JOINTS.

KEY NOTES

1. CONT SHAPED 6x TOP PL. SEE WALL ELEV FOR SPLICE TYPE.
2. ⅝" Ø STITCH BOLTS PER 4/S1.4 POST-TO-POST
3. STRAP AT TOP PL, SEE DET 8/S7.2
4. 1¾" STACKED LVL LEDGER PER 7/S7.1
5. CONT 6x STRUT, SEE DET 12/S7.1, SPLICE UNDER I-JOIST PER 9/S1.3, TYPE "8" UON
6. BEAM PER CLG FRMG PLAN
7. HSS COL PER PLAN
8. HANGER PER 4/S7.1
9. CLG JOIST PER CLG FRMG PLAN
10. SIMPSON CS16 STRAP OVER WALL PLYWD PER 8/S1.4



KEY PLAN

NO SCALE

◄ - INDICATES FACE TO RECEIVE SHEAR WALL PLYWOOD AT INTERIOR WALLS. ALL EXTERIOR WALLS HAVE PLYWOOD ON THE OUTSIDE FACE U.O.N.

REGISTERED PROFESSIONAL ENGINEER JACK D. BROWNFIELD No. S5782 Exp. 6-30-25 STRUCTURAL STATE OF CALIFORNIA

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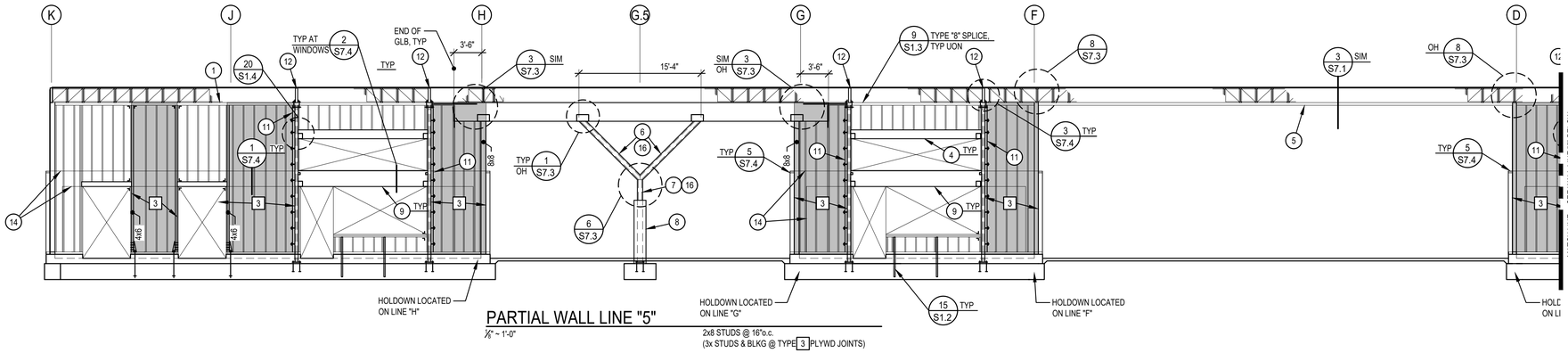
MANGINI ARCHITECTURE | INGENUITY
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TITLE
SHEAR WALL ELEVATIONS

S6.1

PROJECT 24001

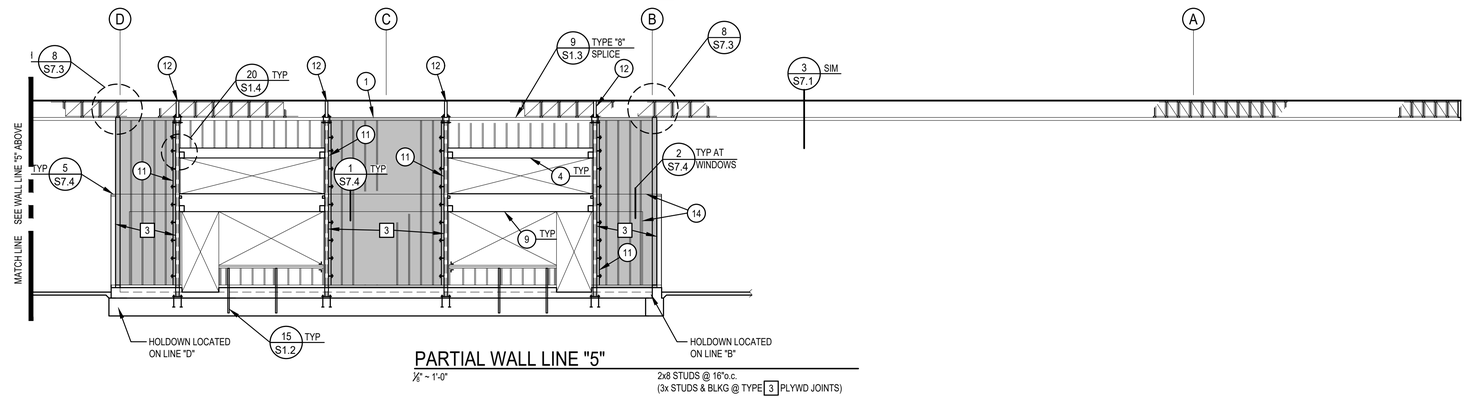
P:\M62404 Sunset Classroom Wing\Struct\S6.1 – Elevations.DWG Feb 12 2025 9:03am



PARTIAL WALL LINE "5"

1/8" ~ 1'-0"

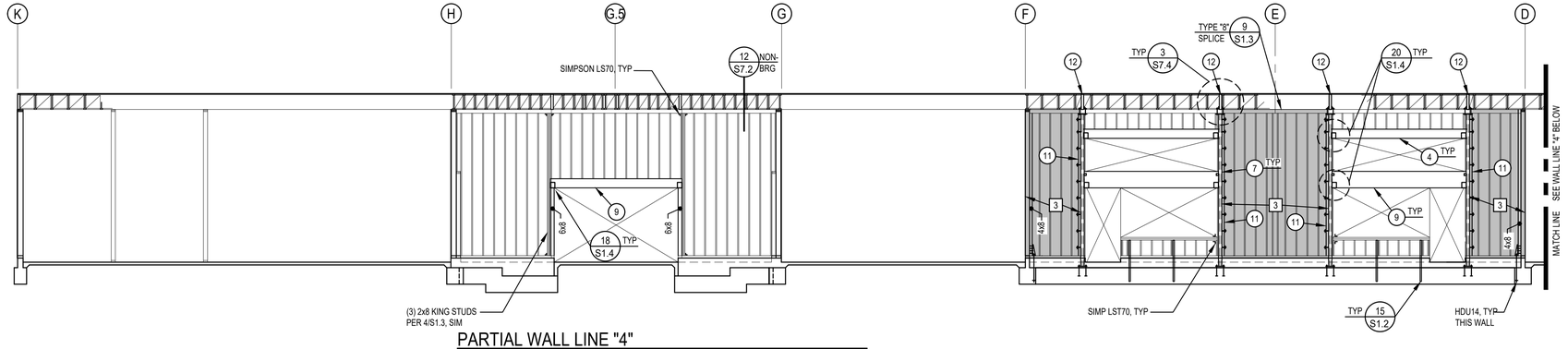
2x8 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE 3 PLYWD JOINTS)



PARTIAL WALL LINE "5"

1/8" ~ 1'-0"

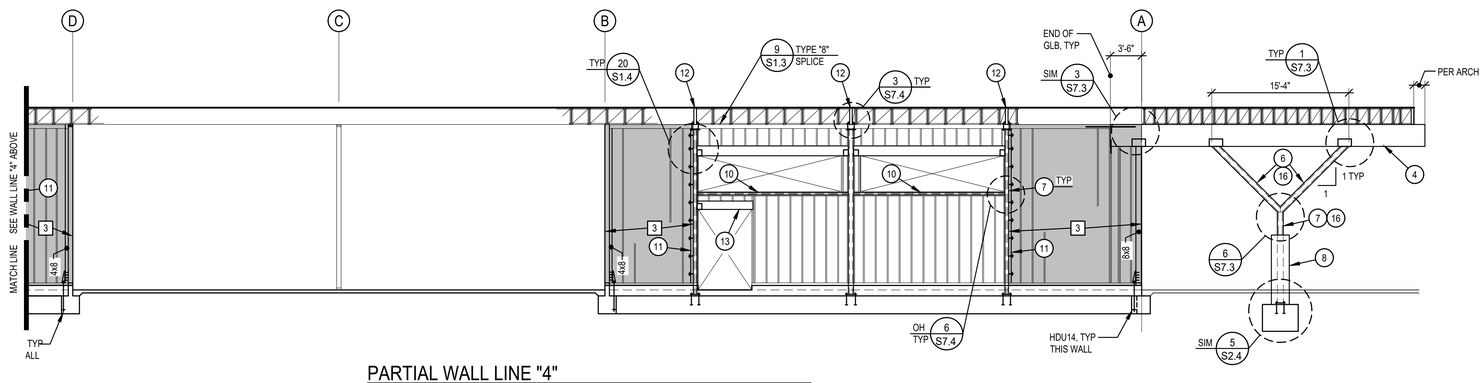
2x8 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE 3 PLYWD JOINTS)



PARTIAL WALL LINE "4"

1/8" ~ 1'-0"

2x8 STUDS @ 16"o.c.
(3x STUDS & BLKG @ TYPE 3 PLYWD JOINTS)

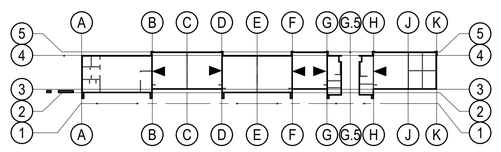


SHEAR WALL NOTES

1. SEE SHEET S6.1 FOR SHEAR WALL NOTES

KEY NOTES

1. CONT SHAPED 6x TOP PL. SEE WALL ELEV FOR SPLICE TYPE.
2. NOT USED
3. NOT USED
4. GLB PER ROOF FRMG PLAN
5. CONT 6x BEV STRUT, SEE DET 12/S7.1. SPLICE PER DET 9/S1.3 TYPE "7" U.O.N.
6. HSS 8x8x5/16
7. HSS COL PER PLAN
8. 24"Ø CONC ENCASEMENT PER DET 5/S2.4
9. GLB PER CEILING FRAMING PLAN
10. HSS 7x3x1/4 (FLAT) SILL W/ 2x TRIM T&B PER 10/S1.3, SIM
11. 4x NAILER W/ 5/8"Ø STUD BOLTS @ 24"o.c. PER DET 10/S1.3
12. LVL STRUT @ COL PER PLAN
13. 6x12 HDR W/ FURRING PER DET 19/S1.4
14. ACCENT WALL PER ARCH (OUTLINE SHOWN)
15. NOT USED
16. AESS MEMBER (ARCHITECTURALY EXPOSED STRUCTURAL STEEL). SEE SPECIFICATIONS FOR MORE INFO.



KEY PLAN

NO SCALE

◄ - INDICATES FACE TO RECEIVE SHEAR WALL PLYWOOD AT INTERIOR WALLS. ALL EXTERIOR WALLS HAVE PLYWOOD ON THE OUTSIDE FACE U.O.N.

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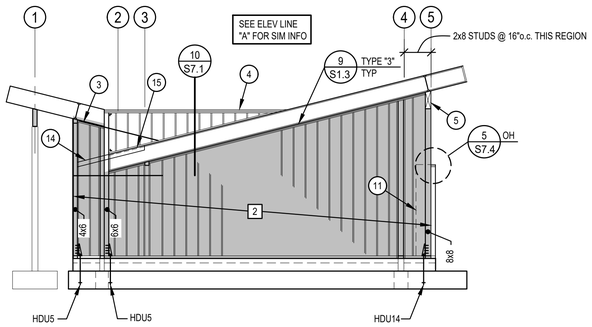
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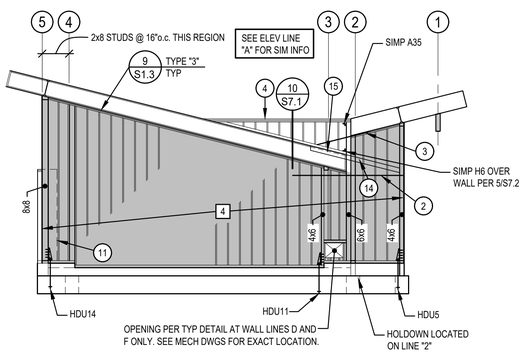
PROJECT 24001



WALL LINE "H" ("G" SIM)

1/8" ~ 1'-0"

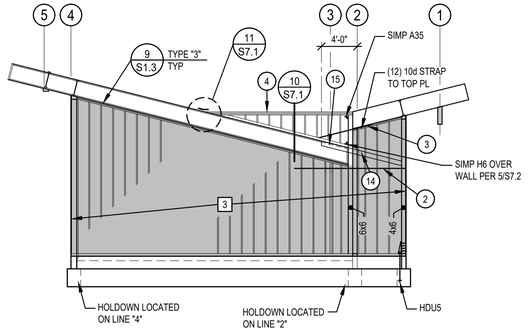
2x6 STUDS @ 16"o.c., U.O.N.



WALL LINE "D" ("B" & "F" SIM)

1/8" ~ 1'-0"

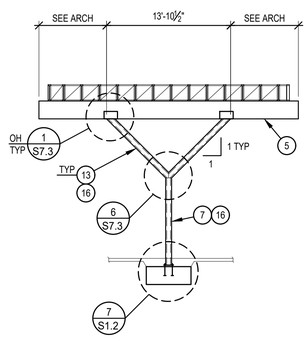
2x6 STUDS @ 16"o.c., U.O.N.
(3x STUDS & BLKG AT TYPE 4 PLYWD JOINTS)



WALL LINE "A"

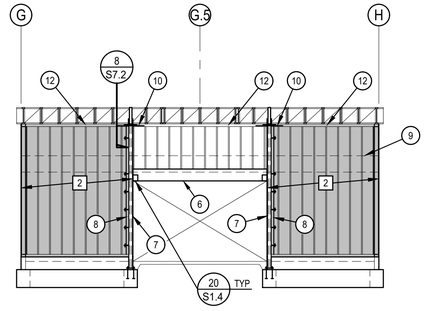
1/8" ~ 1'-0"

2x8 STUDS @ 16"o.c., U.O.N.
(3x STUDS & BLKG AT TYPE 3 PLYWD JOINTS)



Y-SHAPED COLUMNS @ LINE "1"

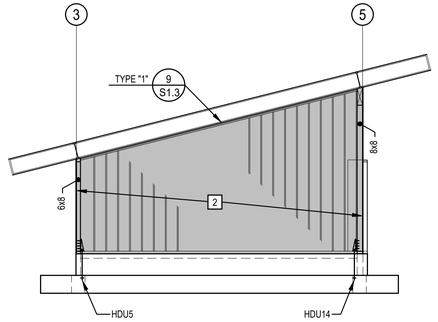
1/8" ~ 1'-0"



WALL LINE "1.7"

1/8" ~ 1'-0"

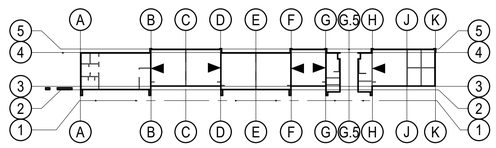
2x6 STUDS @ 16"o.c.



WALL LINE "K"

1/8" ~ 1'-0"

2x8 STUDS @ 16"o.c.



KEY PLAN

NO SCALE

◀ - INDICATES FACE TO RECEIVE SHEAR WALL PLYWOOD AT INTERIOR WALLS. ALL EXTERIOR WALLS HAVE PLYWOOD ON THE OUTSIDE FACE U.O.N.

SHEAR WALL NOTES

1. SEE SHEET S6.1 FOR SHEAR WALL NOTES

KEY NOTES

1. NOT USED
2. CONT 10'-0" CS14 STRAP OVER WALL PLYWD PER 8/S1.4
3. CONT CS16 STRAP OVER WALL PLYWD PER 8/S1.4
4. (3) 2x6 CONTINUOUS TOP 's (NO SPLICE)
5. GLB PER ROOF FRMG PLAN
6. HEADER PER CLG FRMG PLAN
7. HSS COL PER PLAN
8. 4x NAILER W/ 5/8"Ø STUD BOLTS @ 24"o.c. PER DET 10/S1.3
9. 1¾" STACKED LVL LEDGER PER 7/S7.1. SPLICE PER 9/S7.1.
10. STRAP AT TOP PL SEE DET 8/S7.2
11. ACCENT WALL PER ARCH (FAR SIDE WHERE SHOWN DASHED)
12. CONT BEV 6x TOP PLATE BETWEEN COLUMNS (NO-SPLICE)
13. HSS 8x8x5/16
14. 2x6 CONT LEDGER, NO SPLICE
15. EXTEND CONT 2x6 LEDGER TO LAP W/ I-JOIST PER DET 7/S7.3 . EN FULL LENGTH
16. AESS MEMBER (ARCHITECTURALY EXPOSED STRUCTURAL STEEL). SEE SPECIFICATIONS FOR MORE INFO.

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-33128
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI | ARCHITECTURE INGENUITY
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4320 West Mineral King Avenue
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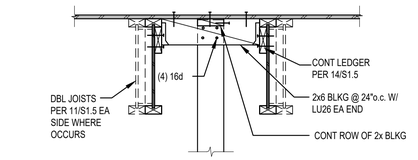
TITLE
SHEAR WALL ELEVATIONS

S6.3

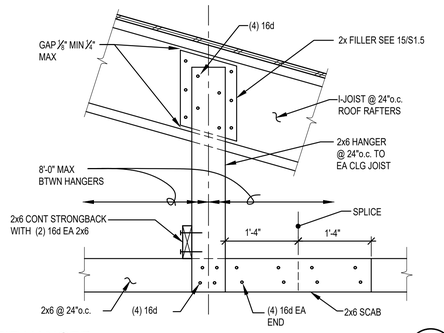
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BRENNER
No. S5792
Exp. 6-30-25
STRUCTURAL
STATE OF CALIFORNIA

ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
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asdi@asdiengr.com



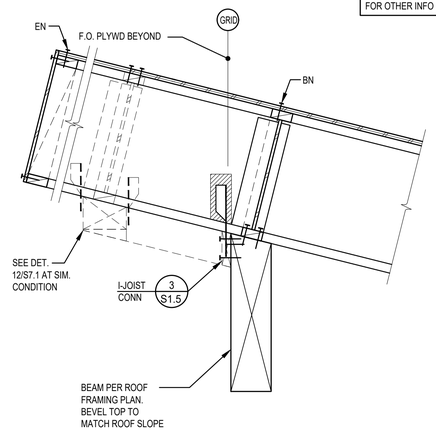
HANGER BETWEEN I-JOISTS



SOFFIT HANGER

NTS 6021-01i

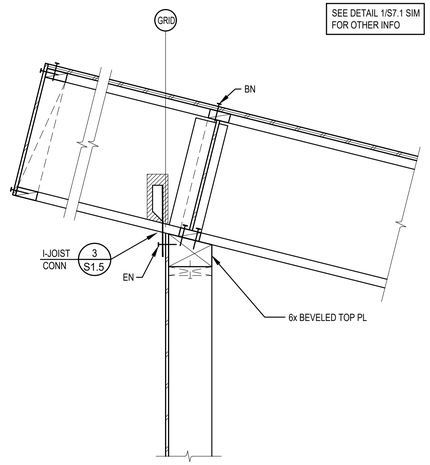
4 S7.1



DETAIL

1" ~ 1'-0"

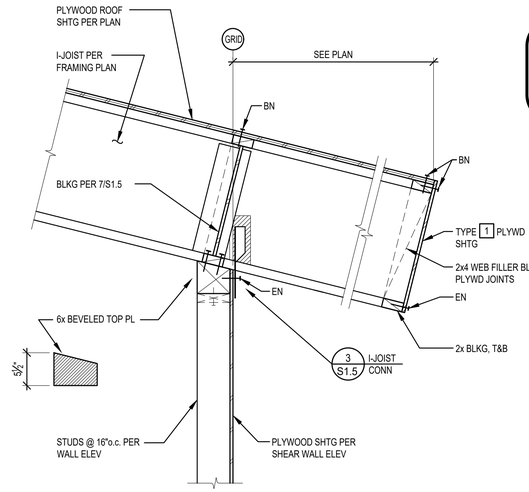
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DETAIL

1" ~ 1'-0"

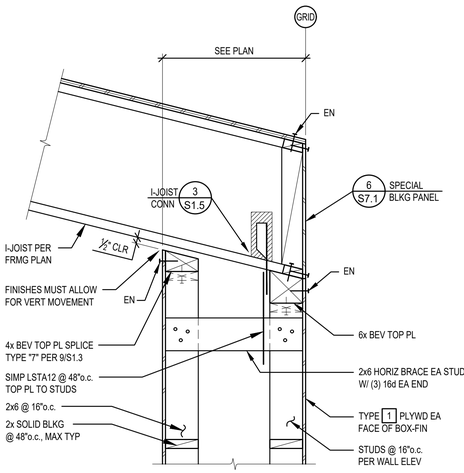
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DETAIL

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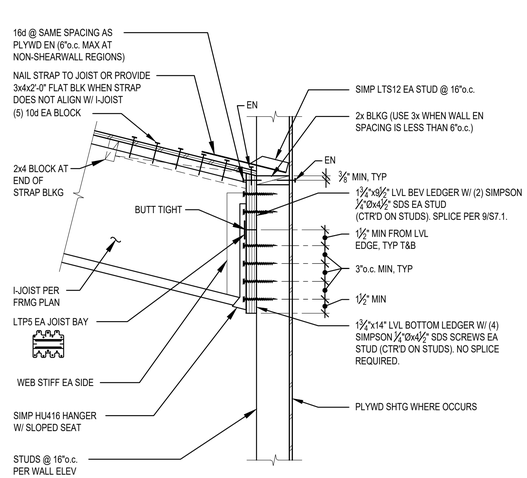
1 S7.1



DETAIL

1" ~ 1'-0"

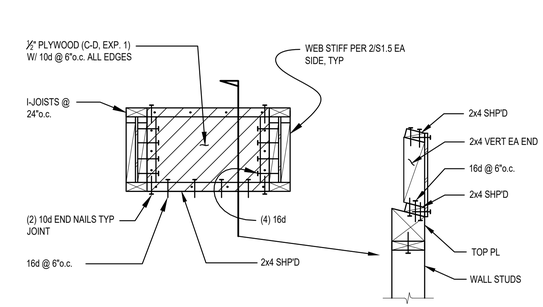
8 S7.1



DOUBLE LEDGER DETAIL

NTS (AT 22" I-JOISTS)

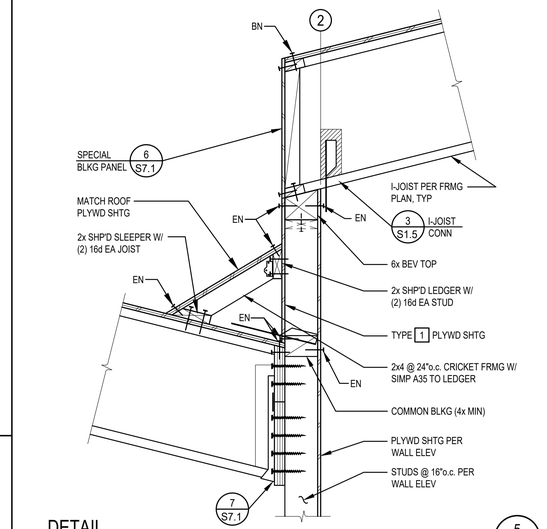
7 S7.1



SPECIAL I-JOIST BLKG PANELS

NTS (BY GENERAL CONTRACTOR)

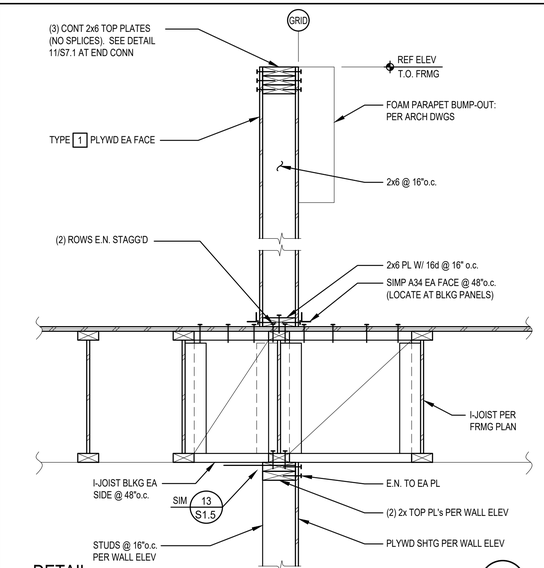
6 S7.1



DETAIL

NTS

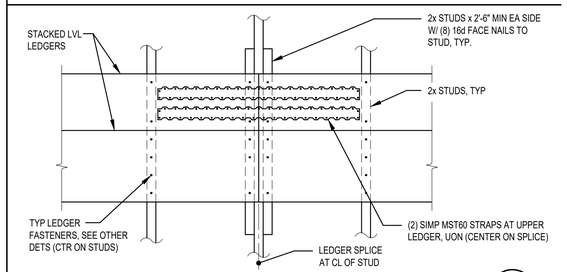
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DETAIL

1" ~ 1'-0"

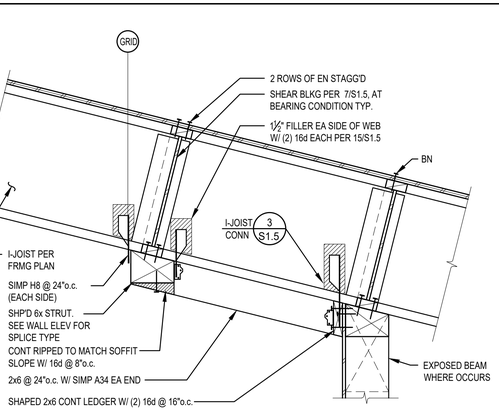
10 S7.1



TYPICAL LEDGER SPLICE DETAIL

1" ~ 1'-0"

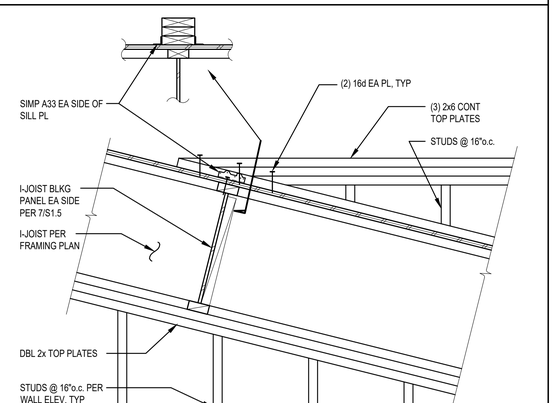
9 S7.1



DETAIL

1" ~ 1'-0"

12 S7.1



DETAIL

1" ~ 1'-0"

11 S7.1

REGISTERED PROFESSIONAL ENGINEER
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No. S5782
Exp. 6-30-25
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STATE OF CALIFORNIA

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Fresno, California 93720
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APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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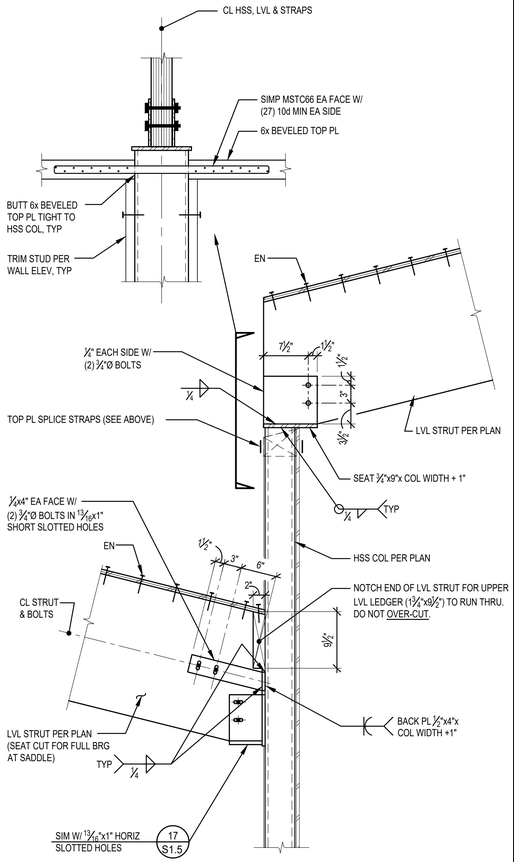
MANGINI ARCHITECTURE INGENUITY
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4320 West Mineral King Avenue
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www.mangini.us
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TITLE
FRAMING DETAILS

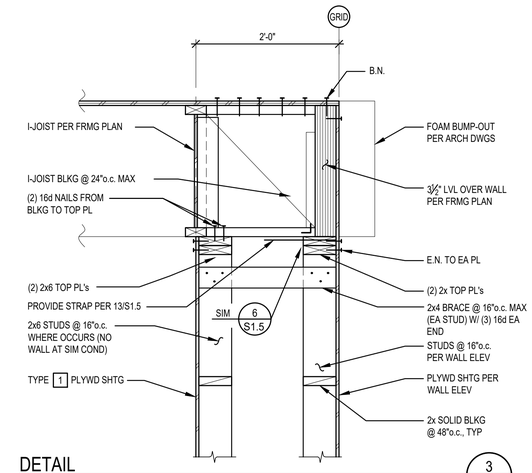
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PROJECT 24001

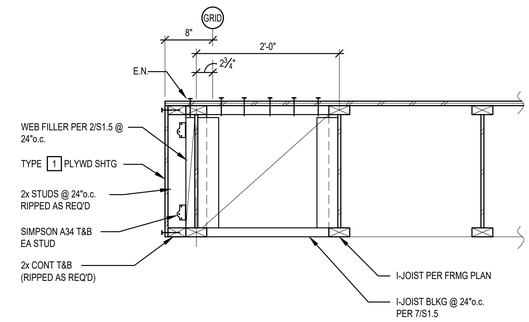
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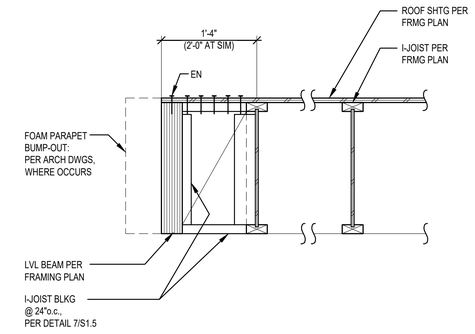
DETAIL
NTS
8
S7.2



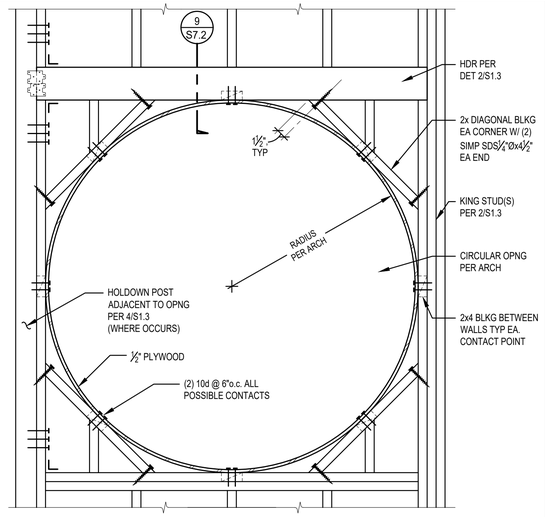
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S7.2



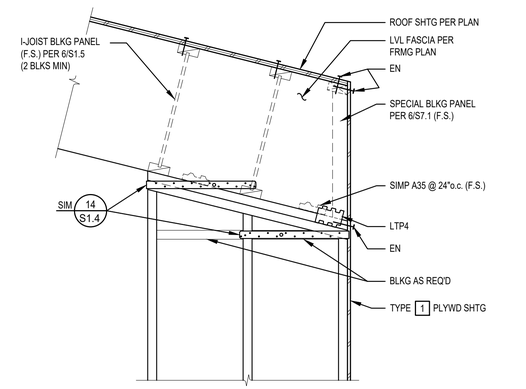
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S7.2



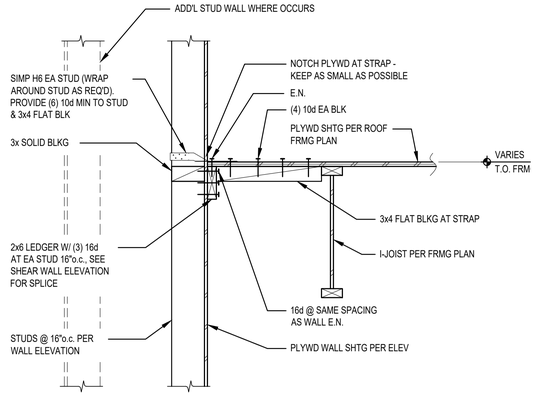
DETAIL
1" ~ 1'-0"
1
S7.2



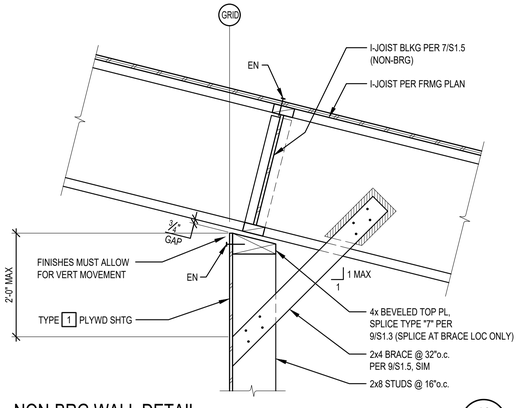
DETAIL
NTS
7
S7.2



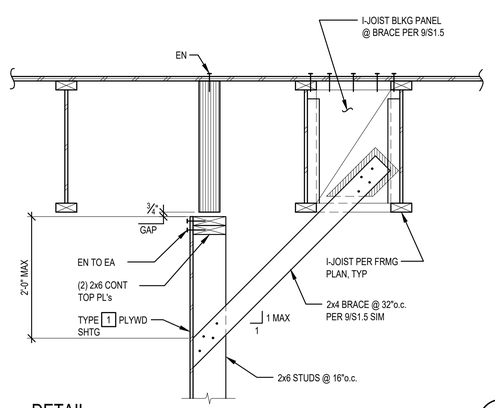
DETAIL
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6
S7.2



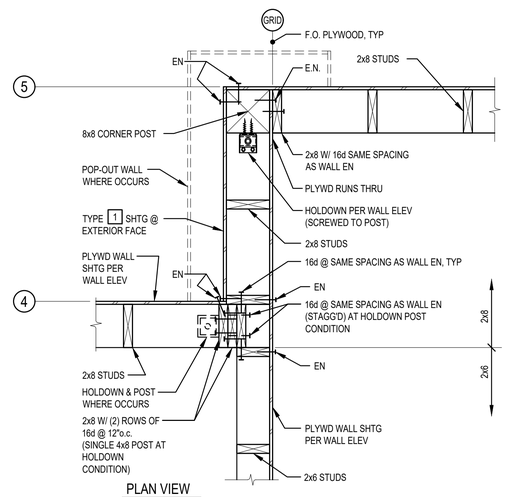
DETAIL
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5
S7.2



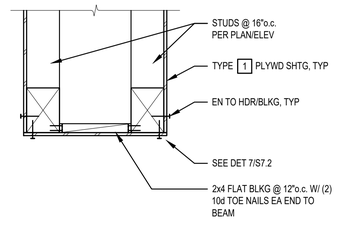
NON-BRG WALL DETAIL
1" ~ 1'-0"
12
S7.2



DETAIL
1" ~ 1'-0"
11
S7.2



DETAIL
1" ~ 1'-0"
10
S7.2



DETAIL
1" ~ 1'-0"
9
S7.2

APPROVALS

FILE # 10-26 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
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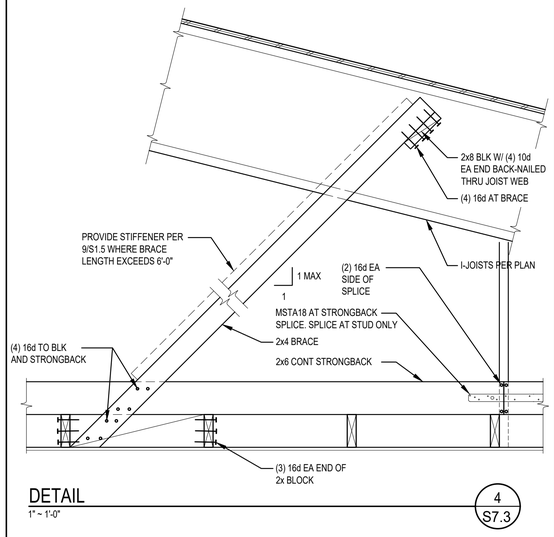
TITLE
FRAMING DETAILS

S7.2

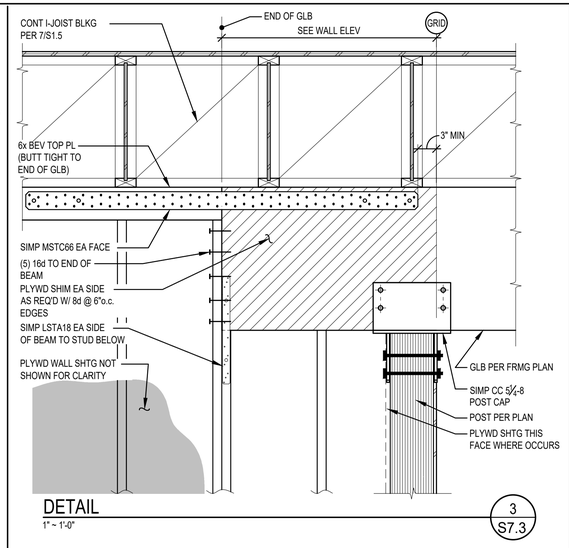
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5782
Exp. 6-30-26
STRUCTURAL
STATE OF CALIFORNIA

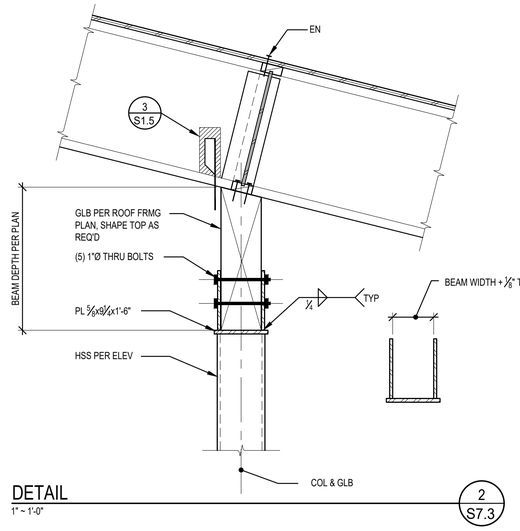
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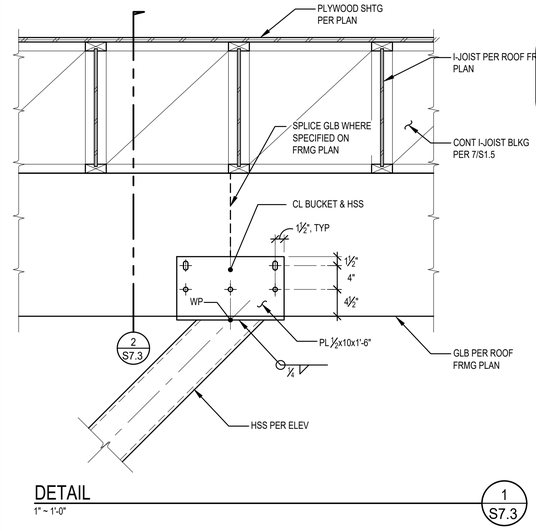
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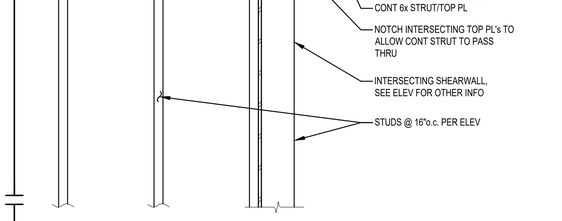
DETAIL 3 / S7.3
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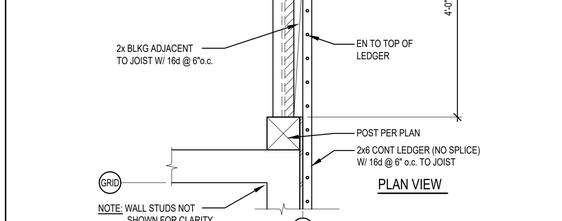
DETAIL 2 / S7.3
1" ~ 1'-0"



DETAIL 1 / S7.3
1" ~ 1'-0"

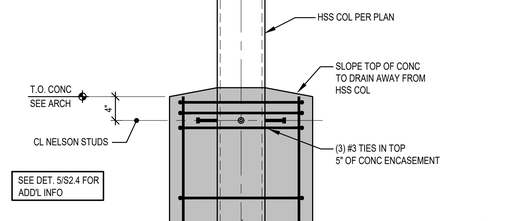


DETAIL 8 / S7.3
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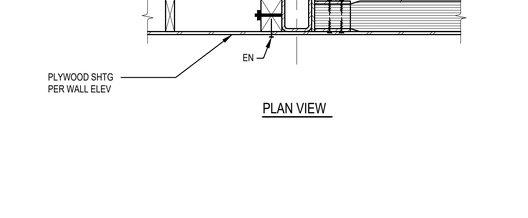


PLAN VIEW

DETAIL 7 / S7.3
1" ~ 1'-0"

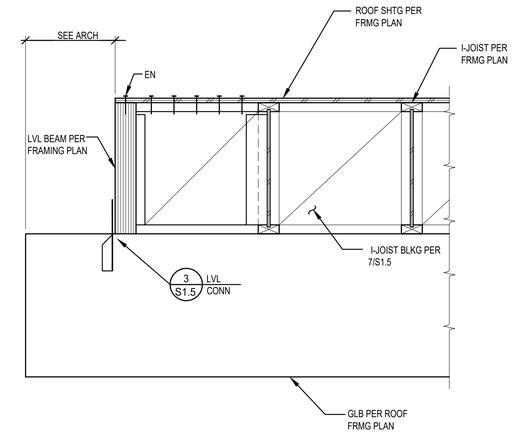


DETAIL 6 / S7.3
1" ~ 1'-0"

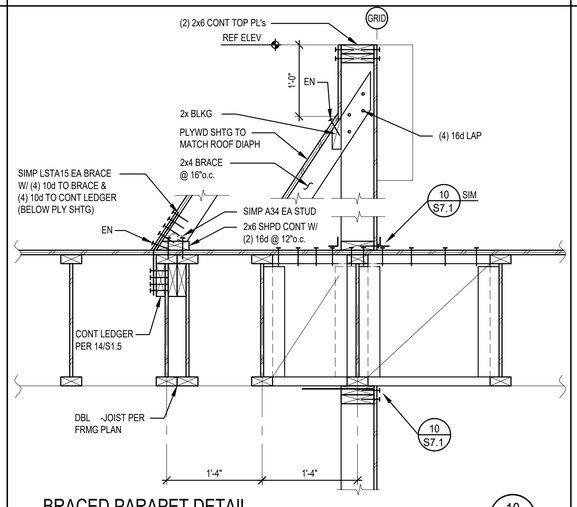


PLAN VIEW

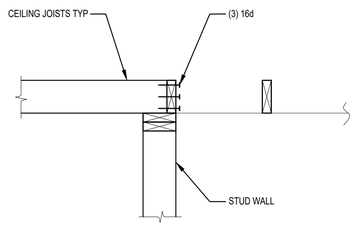
DETAIL 5 / S7.3
1" ~ 1'-0"



DETAIL 11 / S7.3
1" ~ 1'-0"



BRACED PARAPET DETAIL 10 / S7.3
1" ~ 1'-0"



DETAIL 9 / S7.3
N.T.S

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
JAMES R. MORRELL
No. C-33128
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
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(559) 627-1926 Fax

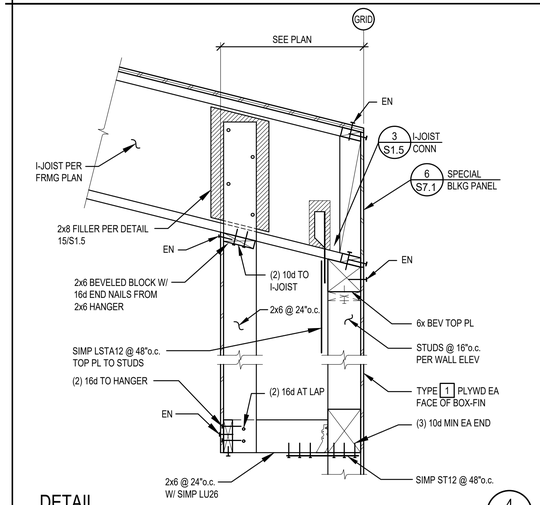
TITLE
FRAMING DETAILS

S7.3

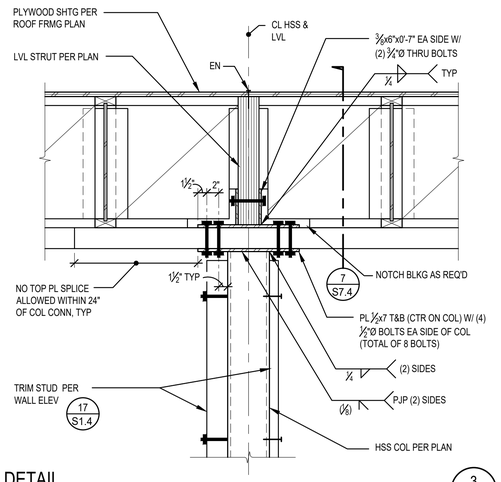
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
JACK D. BREWER
No. S5792
Exp. 6-30-26
STRUCTURAL
STATE OF CALIFORNIA

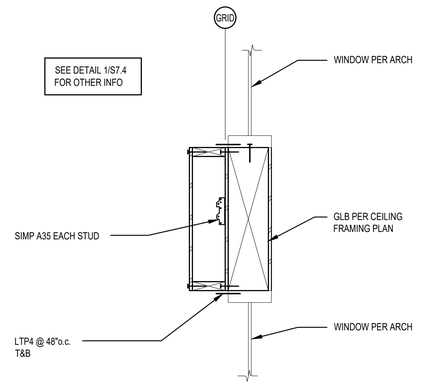
ASD
advanced structural design, inc.
STRUCTURAL ENGINEERS
7112 N. Fresno Street, suite 311
Fresno, California 93720
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asdi@asdiengr.com



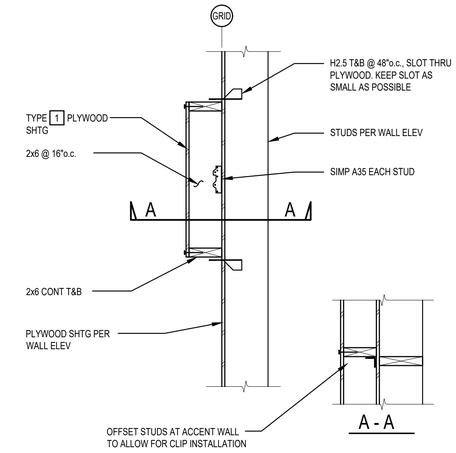
DETAIL
NTS
4 S7.4



DETAIL
1" ~ 1'-0"
3 S7.4



ACCENT WALL AT WINDOW
1" ~ 1'-0"
2 S7.4



DETAIL AT ACCENT WALL
1" ~ 1'-0"
1 S7.4

DETAIL
1" ~ 1'-0"
7 S7.4

DETAIL
1" ~ 1'-0"
6 S7.4

DETAIL
1" ~ 1'-0"
5 S7.4

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TITLE
FRAMING DETAILS

S7.4

PROJECT 24001

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APPROVALS

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MICHAEL J. SCOTT JR.
No. C-34290
REN: 05-31-25
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TITLE
PLUMBING
SITE PLAN

PS.1

PROJECT 24001

GENERAL PLUMBING NOTES:

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE 2022 EDITION OF TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WOULD NOT COMPLY WITH SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CHANGE ORDER DETAILING AND SPECIFYING THE REQUESTED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.

2. THE APPLICABLE CODES AND REGULATIONS FOR THIS PROJECT INCLUDE, BUT ARE NOT LIMITED TO, THE FOLLOWING:

   CALIFORNIA CODE OF REGULATIONS
   TITLE 8, INDUSTRIAL RELATIONS
   TITLE 19, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
   TITLE 24, PART 1, ADMINISTRATIVE REGULATIONS
   2022 CALIFORNIA BUILDING CODE, PART 2, TITLE 24 CCR
   2022 CALIFORNIA ELECTRICAL CODE, PART 3, TITLE 24 CCR
   2022 CALIFORNIA MECHANICAL CODE, PART 4, TITLE 24 CCR
   2022 CALIFORNIA PLUMBING CODE, PART 5, TITLE 24 CCR
   2022 CALIFORNIA FIRE CODE, PART 9, TITLE 24 CCR

   NFPA 101 2021 EDITION
   OSHA - OCCUPATIONAL SAFETY AND HEALTH ACT

3. LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY. THE PLUMBING BUILDING PLANS HAVE BEEN PREPARED TO MATCH THE ARCHITECTURAL PLANS. IF DIFFERENCES OCCUR, THE ARCHITECTURAL PLANS ARE TO TAKE PRECEDENCE. THE ACTUAL LOCATIONS OF ALL MATERIALS, PIPING, DUCTWORK, FIXTURES, EQUIPMENT, SUPPORTS, ETC. SHALL BE CAREFULLY PLANNED, PRIOR TO INSTALLATION OF ANY WORK, TO AVOID ALL INTERFERENCE WITH EACH OTHER, OR WITH STRUCTURAL, ELECTRICAL, ARCHITECTURAL, OR OTHER ELEMENTS. ALL PIPE OFFSET ELBOWS FOR COORDINATION BETWEEN TRADES ARE NOT SHOWN. CONTRACTOR SHALL INCLUDE SUFFICIENT FUNDS FOR THE COORDINATION OFFSETS IN THE BID. VERIFY THE PROPER VOLTAGE AND PHASE OF ALL EQUIPMENT WITH THE ELECTRICAL PLANS. ALL CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER PRIOR TO INSTALLATION OF ANY WORK OR THE ORDERING OF ANY EQUIPMENT.

4. WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER-DRIVEN PINS IN EXISTING NON-PRESTRESSED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRE-STRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.

5. **MEP COMPONENT ANCHORAGE NOTE:**

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

   1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
   2. TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER.
   3. TEMPORARY, MOVABLE, OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:

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

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., 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.

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

MP ☐ MD ☐ PP ☐ B. OPTION 2: PLUMBING PIPING (PP) - SHALL COMPLY WITH OPM-0043-13 HCAI PRE-APPROVAL AS INCLUDED IN THESE DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS (MASON WEST, SEISMIC RESTRAINT GUIDELINES FOR SUSPENDED DISTRIBUTION SYSTEMS).

6. BRACE ALL PIPING 4" DIAMETER AND GREATER; USE Ip=1.0 FOR SEISMIC DESIGN CALCULATIONS. EXCEPTION: NATURAL GAS PIPING 1"DIAMETER AND GREATER, USE Ip=1.5 FOR SEISMIC DESIGN CALCULATIONS.

7. PENETRATIONS THROUGH FIRE RATED WALLS, FLOOR/CEILING, AND ROOF/CEILING ASSEMBLIES SHALL BE SEALED USING AN APPROVED SYSTEM CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARD SPECIFIC TO FIRE STOPS PER 2022 CBC SECTION 714. THIS INCLUDES EXISTING PIPE AND CONDUIT THROUGH NEW ASSEMBLIES. CUSTOM DESIGNED SYSTEMS WHICH COMBINE COMPONENTS FROM DIFFERENT APPROVED SYSTEMS BUT HAVE NOT BEEN TESTED AS A COMPLETE ASSEMBLY WILL NOT BE ACCEPTABLE. FOR FIRE STOPS FOR PIPE PENETRATIONS SEE SPECIFICATIONS.

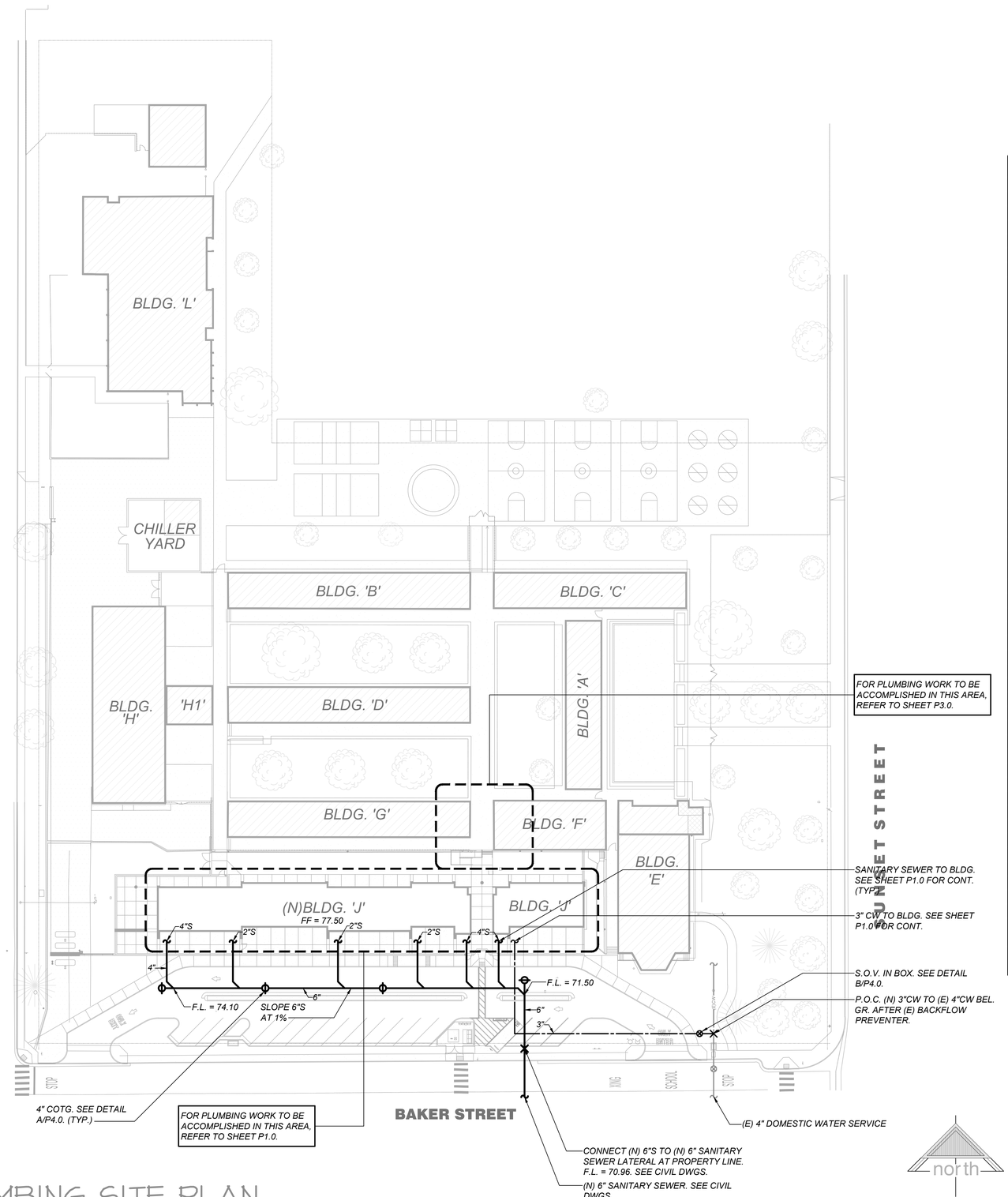
8. FIELD VERIFY THE EXACT LOCATION, DEPTH AND SIZE OF ALL NEW POINTS OF CONNECTION TO EXISTING UTILITIES PRIOR TO COMMENCING NEW UTILITY WORK.

9. INSTALLATION OF NEW UTILITIES FROM EXISTING MAINS IN THE STREET SHALL BE DONE IN STRICT ACCORDANCE WITH GOVERNING AUTHORITY REQUIREMENTS.

10. INSTALLATION, TYPE AND MANUFACTURERS MODELS OF DOMESTIC WATER METERS, BACKFLOW PREVENTERS, FIRE HYDRANTS, DETECTOR CHECK VALVES, MANHOLES, DRAIN INLETS/OUTLETS AND OTHER APPURTENANCE OF SITE UTILITY SYSTEMS SHALL BE DONE IN STRICT ACCORDANCE WITH GOVERNING AUTHORITY REQUIREMENTS.

11. CONTRACTOR SHALL EXCAVATE AND BACKFILL THE GAS SERVICE TRENCH FOR THE LOCAL GAS UTILITY. THE LOCAL GAS UTILITY SHALL INSTALL THEIR GAS SERVICE LINE TO THE GAS METER. TRENCHING SHALL BE IN ACCORDANCE WITH UTILITY STANDARDS. ALL CHARGES AND FEES INCURRED BY THE UTILITY FOR NEW GAS SERVICE SHALL BE PAID BY THE CONTRACTOR.

12. ALL DOMESTIC WATER PIPING SHALL BE A MINIMUM OF 1/2" SIZE UNLESS NOTED OTHERWISE. USE A REDUCING DROP ELL AT FIXTURE CONNECTION WHEN APPLICABLE.



1 PLUMBING SITE PLAN
SCALE: 1" = 40'-0"

SYMBOL	PLUMBING LEGEND ITEM	ABBR
———	SOIL or WASTE	S or W
- - - -	VENT	V
	VENT RISER	VR
	VENT THRU ROOF	VTR
——-——	DOMESTIC COLD WATER	CW
——--——	DOMESTIC HOT WATER	HW
——---——	DOMESTIC HOT WATER RETURN	HWR
—G—	LOW PRESSURE NATURAL GAS	G
—2#G—	2 PSI GAS	2#G
—5#G—	5 PSI GAS	5#G
—GSM—	GAS SERVICE MAIN BY THE LOCAL GAS UTILITY	GSM
—C—	CONDENSATE DRAIN	CD
—RWL—	RAIN WATER LEADER	RWL
—OD—	OVERFLOW DRAIN	OD
—SD—	STORM DRAIN	SD
—IW—	INDIRECT WASTE	IW
—F—	FIRE PROTECTION LINE	F
———	EXISTING PIPING	(E)
(E)	EXISTING	
(N)	NEW	
	ABOVE CEILING	ABV CLG
	BELOW FLOOR	BEL FLR
	BELOW GRADE	BEL GR
	TYPICAL	TYP
	CONTINUATION	CONT
	DOWN	DN
	FLOOR CLEANOUT	FCO
	CLEANOUT TO GRADE	COTG
	WALL CLEANOUT	WCO
	PIPING TURN UP	
	PIPING TURN DOWN	
	POINT OF CONNECTION	POC
	SHUT-OFF VALVE IN BOX	SOV
	SHUT-OFF VALVE	SOV
	SHUT-OFF VALVE IN RISER	-
	SHUT-OFF VALVE IN DROP	-
	GATE VALVE	-
	BUTTERFLY VALVE	-
	GLOBE VALVE	-
	CHECK VALVE	-
	PLUG VALVE	-
	BALL VALVE	-
	BALANCE COCK	-
	REDUCER	-
	MANHOLE	MH
	FLOW LINE	FL
	UNION	-
	RELIEF VALVE	-
	BALANCING VALVE	-
	PRESSURE GAUGE	-
	THERMOMETER	-

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CALVERT
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

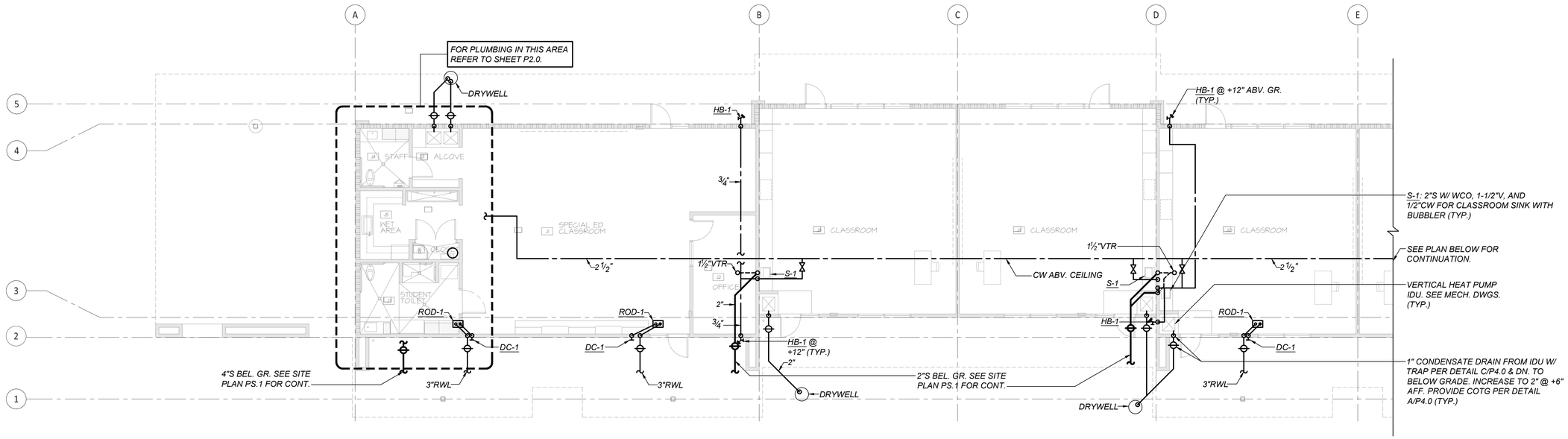
LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
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FAX (559) 431-1342

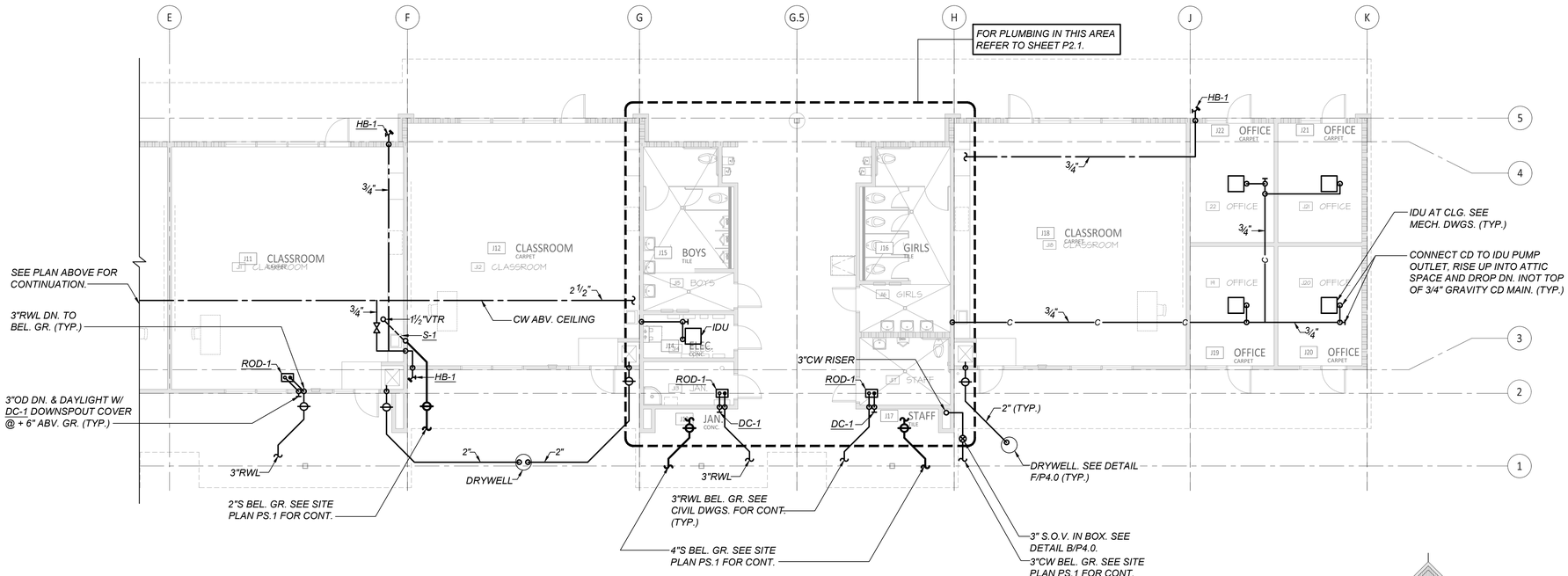
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LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024





north

1 OVERALL PLUMBING PLAN
SCALE: 1/8" = 1'-0"

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
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REVISIONS

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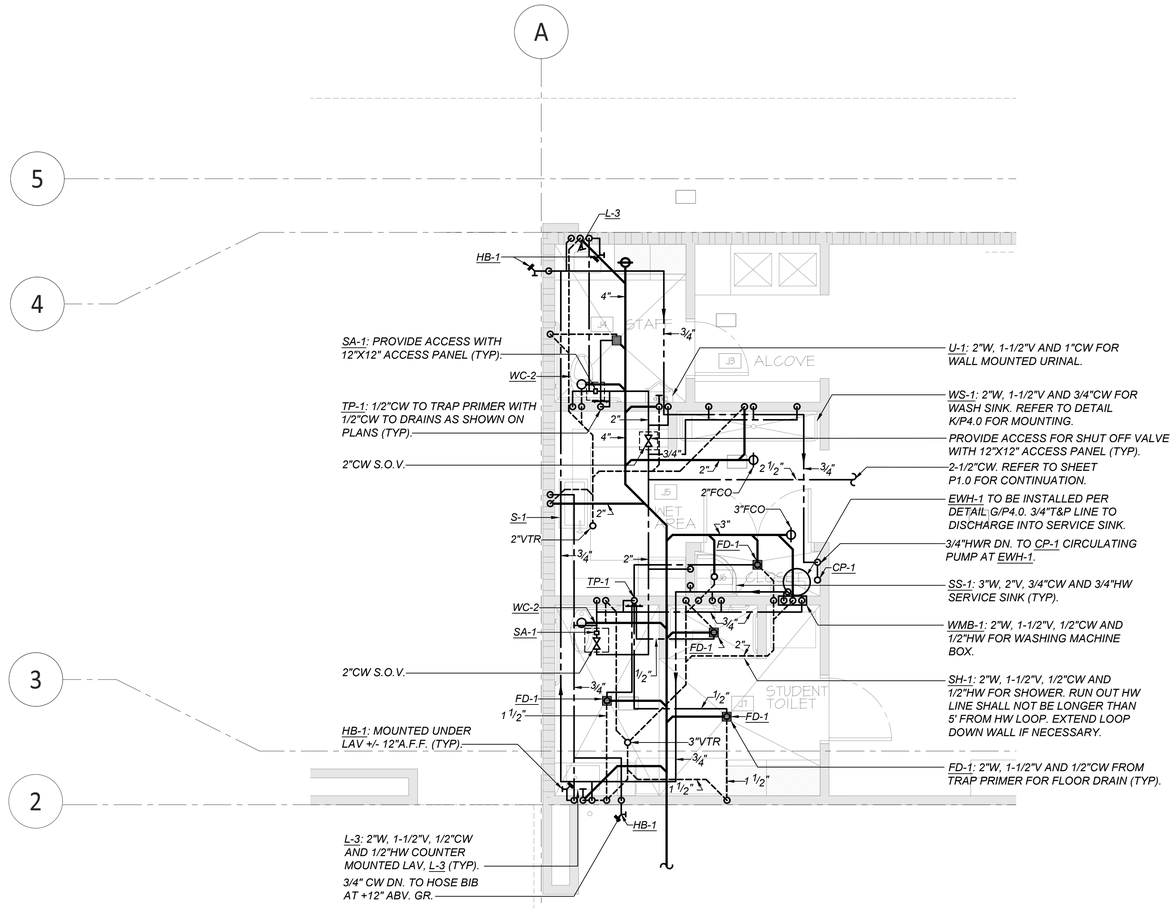
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TITLE
OVERALL PLUMBING PLAN

P1.0

PROJECT 24001



1 ENLARGED PLUMBING PLAN

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

north

APPROVALS

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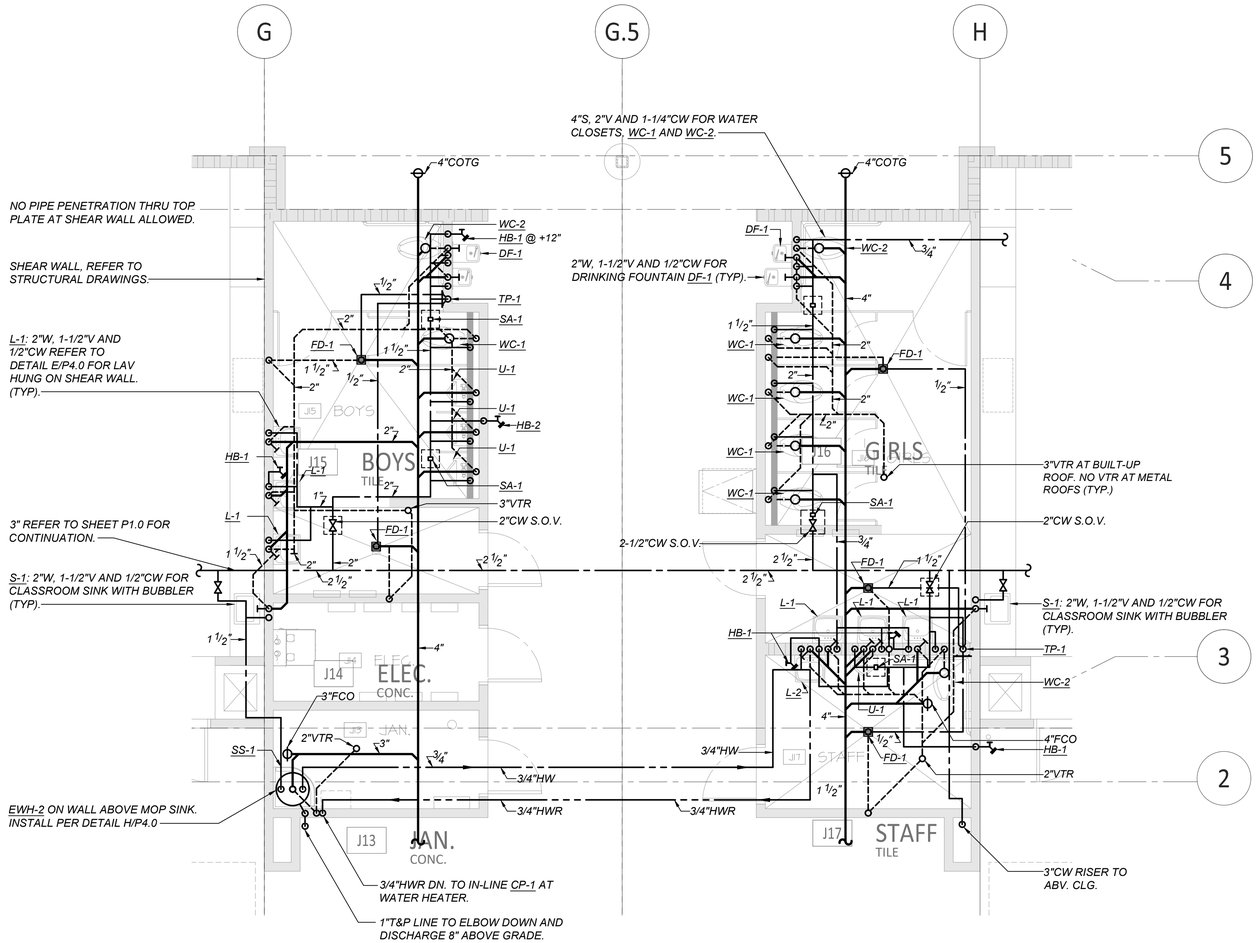
REGISTERED PROFESSIONAL ENGINEER
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TITLE
ENLARGED PLUMBING PLAN

P2.0

PROJECT 24001



1 ENLARGED PLUMBING PLAN

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

north

APPROVALS

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No. C-34200
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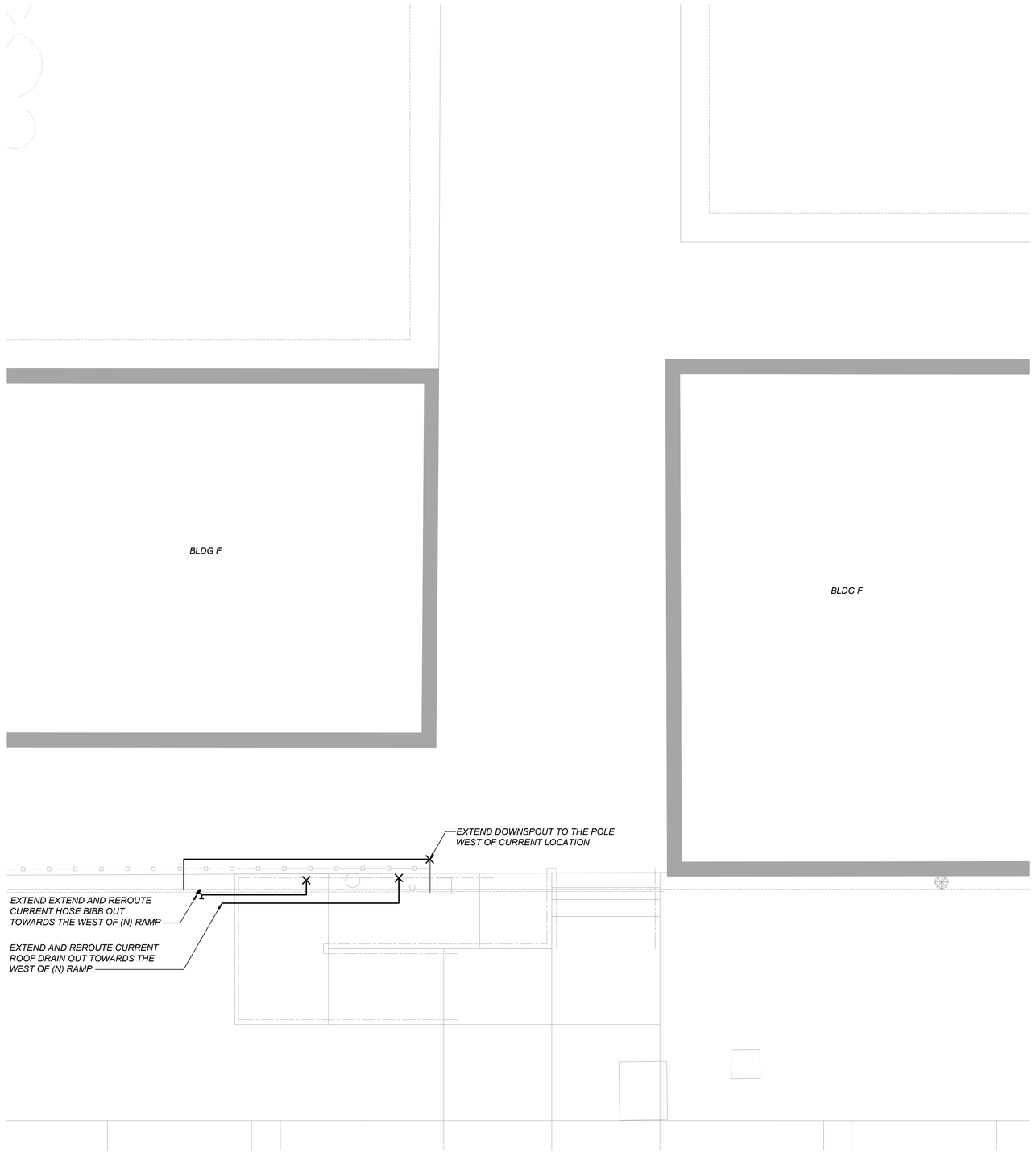
REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLYLE
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

TITLE
ENLARGED PLUMBING PLAN

P2.1

PROJECT 24001

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(559) 431-0101
24012
Fresno, CA 93727
FAX (559) 431-1342



north

1 BLDG F ENLARGED PLUMBING PLAN

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

GENERAL NOTES (THIS SHEET ONLY):

ALL PIPE TO MATCH (E) PIPING WHEN RE ROUTING. VERIFY WITH DESIGNER.

APPROVALS

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MECHANICAL
STATE OF CALIFORNIA

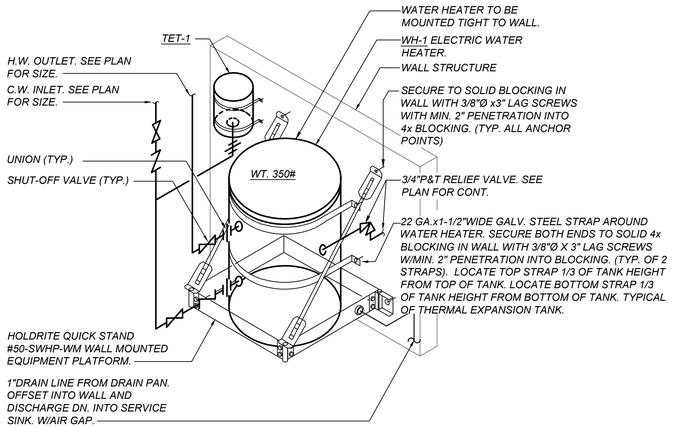
LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
Fresno, CA 93727
FAX (559) 431-1362

TITLE
BLDG F ENLARGED PLUMBING PLAN

P3.0

PROJECT 24001

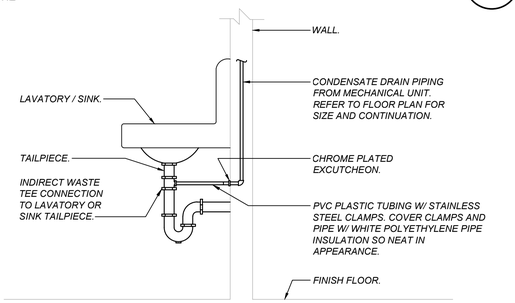
20 January 2025 8:54 AM p:\2024\24012 coalinga huron sunset cr wing\4-drawings\5 P\P3.0 - Enlarged Plumbing Plan.dwg alex



FOR BLOCKING DETAIL REFER TO ARCHITECTURAL DETAIL 8/A18.

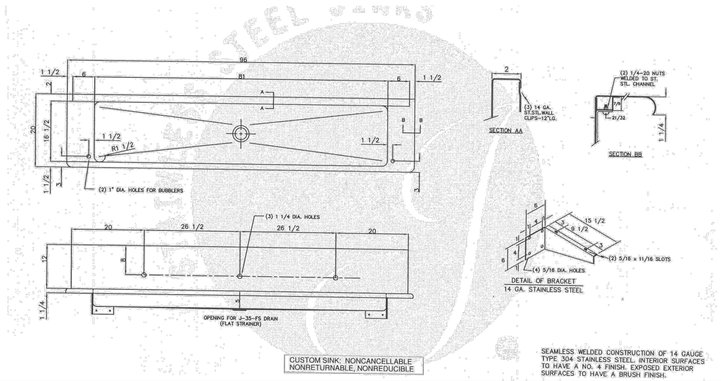
WATER HEATER DETAIL — H / P4.0

SCALE: NONE



CONDENSATE TERMINATION TO TAILPIECE — J / P4.0

SCALE: NONE

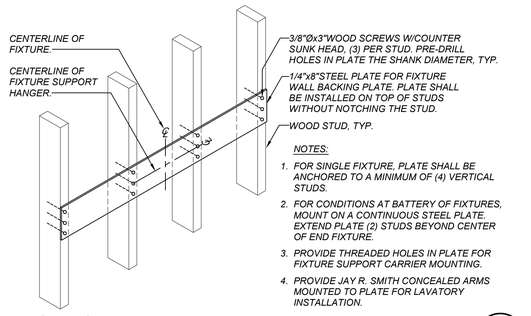


1) ANCHOR SINK BRACKETS AND WALL CLIPS WITH #12 WOOD SCREWS w/ 2 1/2" EMBEDMENT INTO 4x6 BLOCKING IN WALL. REFER TO ARCH. DETAIL 10/A18 FOR BLOCKING. SINK WEIGHT=145 LBS.

2) LEGS HAVE BEEN ADDED FOR VERTICAL SUPPORT. REFER TO ARCH PLANS FOR ADJUSTED HEIGHT.

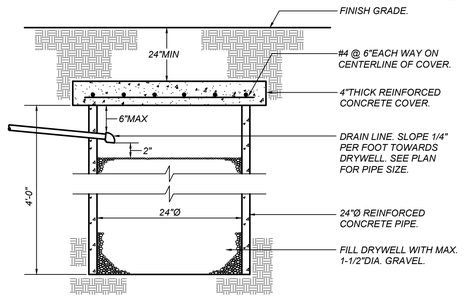
CUSTOM SINK WS-1 SHOP DRAWING — K / P4.0

SCALE: NONE



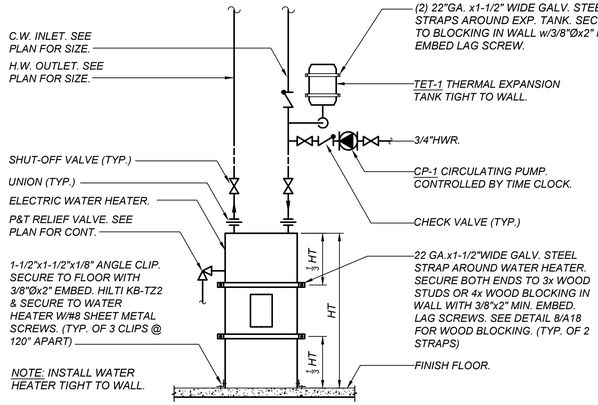
BACKING PLATE DETAIL — E / P4.0

SCALE: NONE — WOOD WALL — P134



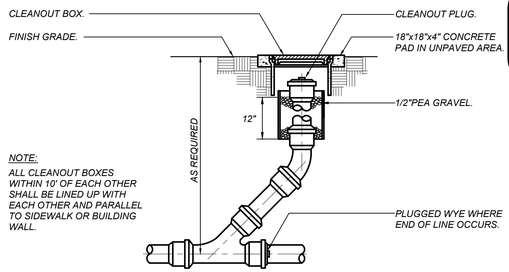
DRYWELL DETAIL — F / P4.0

SCALE: NONE — P040



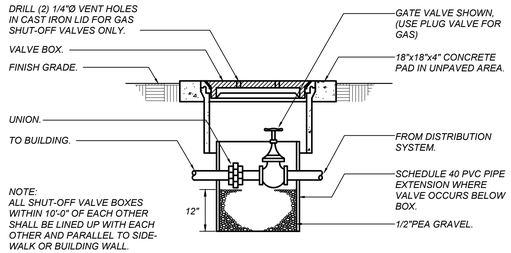
WATER HEATER DETAIL — G / P4.0

SCALE: NONE — P072



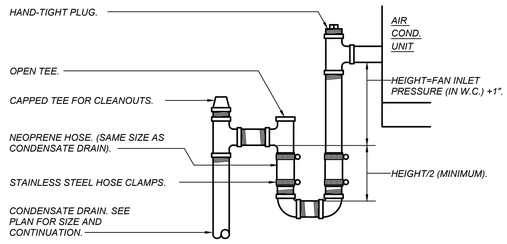
CLEANOUT TO GRADE DETAIL — A / P4.0

SCALE: NONE — P114



SHUT-OFF VALVE IN BOX DETAIL — B / P4.0

SCALE: NONE — P022



CONDENSATE DRAIN CONNECTION DETAIL — C / P4.0

P010

OMITTED DETAIL

D / P4.0

SCALE: NONE — P134

APPROVALS

FILE # 10-25 — APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT JR — No. C-34290 — REN: 05-31-25 — STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

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4320 West Mineral King Avenue
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(559) 627.1926 Fax

TITLE: PLUMBING DETAILS

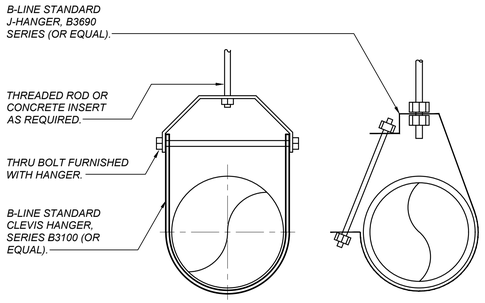
P4.0

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER — IVAN W. CARLSON — No. M34846 Exp. 6-30-26 — MECHANICAL — STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
Fresno, CA 93727
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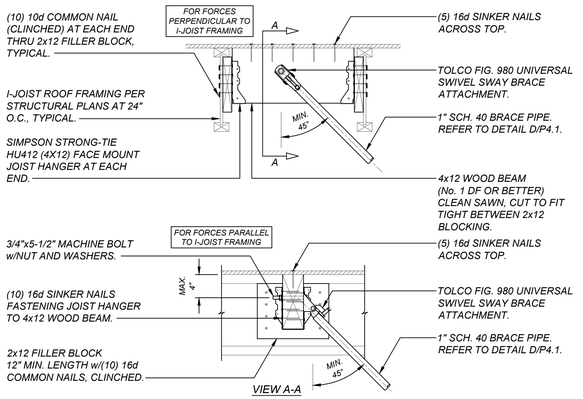
20 January 2025 8:54 AM p:\2024\24012 coalinga huron sunset cr wing\4-drawings\5 P\P4.0 - Plumbing Details.dwg olex



PIPE HANGER DETAIL

SCALE: NONE

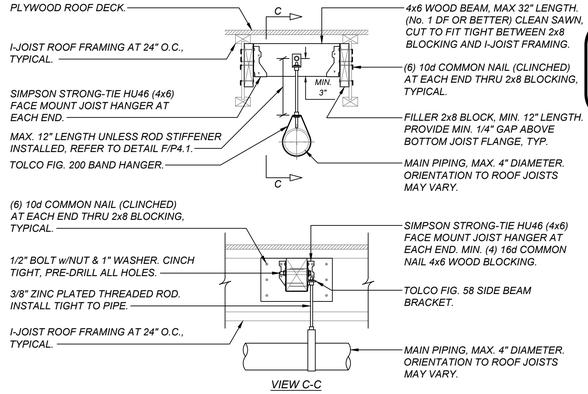
E / P4.1



SEISMIC BRACING ATTACHMENT AT I-JOIST

SCALE: NONE

C / P4.1



10-FEET MAXIMUM HANGER SPACING

NOTE:
ALL HAZARDOUS SYSTEMS GREATER THAN 1" DIAMETER PIPE SIZE SHALL BE BRACED PER CBC 1617A.1.26

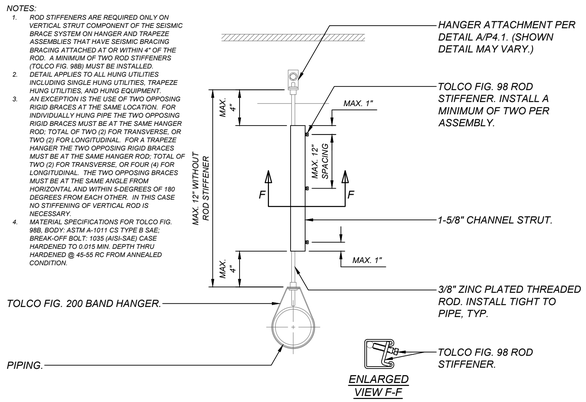
4x6 WOOD BLOCKING SPANNING I-JOIST FRAMING - 4" MAX. PIPE DIAMETER

SCALE: NONE

FSS105-11.19

A / P4.1

NOTES:
1. ROD STIFFENERS ARE REQUIRED ONLY ON VERTICAL STRUT COMPONENT OF THE SEISMIC BRACE SYSTEM ON HANGER AND TRAPEZE ASSEMBLIES THAT HAVE SEISMIC BRACING BRACING ATTACHED AT OR WITHIN 4" OF THE ROD. A MINIMUM OF TWO ROD STIFFENERS (TOLCO FIG. 98B) MUST BE INSTALLED.
2. DETAIL APPLIES TO ALL HUNG UTILITIES INCLUDING SINGLE HUNG UTILITIES, TRAPEZE HUNG UTILITIES, AND HUNG EQUIPMENT.
3. AN EXCEPTION IS THE USE OF TWO OPPOSING RIGID BRACES AT THE SAME LOCATION. FOR INDIVIDUALLY HUNG PIPE THE TWO OPPOSING RIGID BRACES MUST BE AT THE SAME HANGER ROD. TOTAL OF TWO (2) FOR TRANSVERSE, OR TWO (2) FOR LONGITUDINAL. FOR A TRAPEZE HANGER THE TWO OPPOSING RIGID BRACES MUST BE AT THE SAME HANGER ROD. TOTAL OF TWO (2) FOR TRANSVERSE, OR FOUR (4) FOR LONGITUDINAL. THE TWO OPPOSING BRACES MUST BE AT THE SAME ANGLE FROM HORIZONTAL AND WITHIN 5-DEGREES OF 180 DEGREES FROM EACH OTHER. IN THIS CASE NO STIFFENING OF VERTICAL ROD IS NECESSARY.
4. MATERIAL SPECIFICATIONS FOR TOLCO FIG. 98B, BODY: ASTM A-1011 CS TYPE B SAE: BREAK-OFF BOLT: 1035 (AISI-SAE) CASE HARDENED TO 0.015 MIN. DEPTH THRU HARDENED @ 43-55 RC FROM ANNEALED CONDITION.

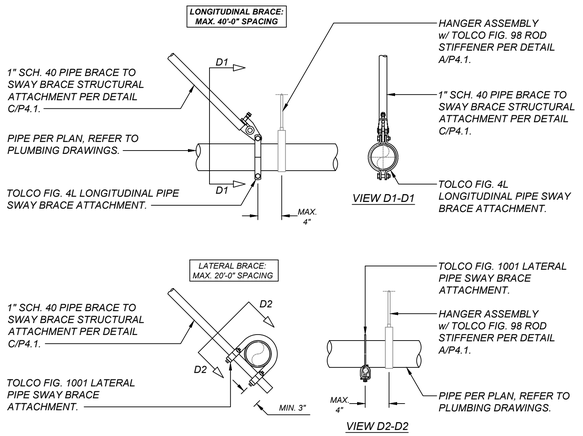


TOLCO FIG. 98 ROD STIFFENER ASSEMBLY

SCALE: NONE

FSS305-03.20

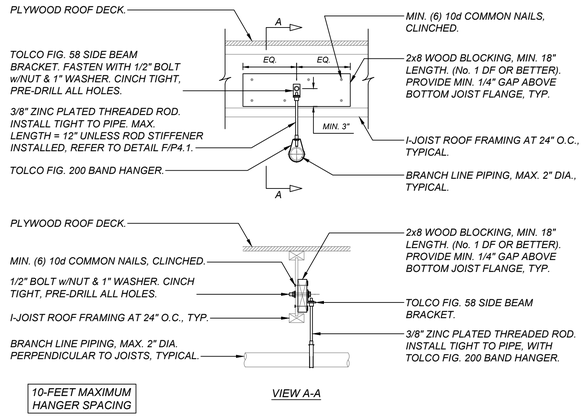
F / P4.1



LOWER SEISMIC BRACING ATTACHMENT AT PIPE

SCALE: NONE

D / P4.1



10-FEET MAXIMUM HANGER SPACING

BRANCH LINE HANGER SUPPORT AT I-JOIST FRAMING (2" MAX. PIPE DIAMETER)

SCALE: NONE

FSS101-11.19

B / P4.1

APPROVALS

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COALINGA-HURON UNIFIED SCHOOL DISTRICT
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REVISIONS

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Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
PLUMBING DETAILS

P4.1

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
BRIAN W. CARLSON
No. M34846
Exp. 6-30-26
STATE MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
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Fresno, CA 93727
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20 January 2025 8:54 AM p:\2024\24012 coalinga huron sunset cr wing\4-drawings\5 P\P4.1 PLUMBING DETAILS.dwg olex

P:\2024\24012 coalinga huron sunset cr wing\4-drawings\5 P\P4.1 PLUMBING DETAILS.dwg Jan 20 2025 8:54am

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	V	CW	HW	
TP-1	TRAP PRIMER	-	-	1/2"	-	**PRECISION PLUMBING PRODUCTS MODEL #P-1** (OR MIFAB EQUAL) VALVE W/ DISTRIBUTION UNITS AS REQUIRED FOR UP TO 4 DRAINS PER DISTRIBUTION UNIT.
FD-1	FLOOR DRAIN	2"	1-1/2"	1/2"	-	**JAY R. SMITH #2005-P050** (OR MIFAB OR ZURN EQUAL) DUCO CAST IRON BODY WITH 5"SQUARE NICKEL BRONZE STRAINER AND TRAP PRIMER CONNECTION.
SA-1	SHOCK ABSORBER	-	-	3/4"	-	**JAY R. SMITH #5005**, (OR ZURN EQUAL) STAINLESS STEEL CONSTRUCTION, P.D.I. SYMBOL "A" FOR UP TO 11 FIXTURE UNITS. INSTALL IN UPWARD POSITION.
ROD-1	COMBO ROOF OVERFLOW DRAIN	3"	-	-	-	**JAY R. SMITH #SERIES 148** (OR MIFAB OR ZURN EQUAL), GALVANIZED CAST IRON COMBINATION OF DRAIN AND OVERFLOW DRAIN WITH DOME GRATES. INSTALL PER MANUFACTURERS RECOMMENDATIONS. 3" OUTLET SIZE.
DC-1	DOWN-SPOUT COVER	3"	-	-	-	**JAY R. SMITH # 1775-U** DOWNSPOUT COVER FOR OVERFLOW DRAIN PIPE DAYLIGHT, WITH VANDAL PROOF SCREWS.

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	V	CW	HW	
SS-1	SERVICE SINK	3"	2"	3/4"	3/4"	KOHLER "WHITBY" #K-6710, 28"x 28" CORNER STYLE ENAMELED CAST IRON MOP SINK WITH #K-8940 RIM GUARD, #K-9146 DRAIN, CHICAGO #897-CP (OR T&S BRASS OR ZURN EQUAL) WALL MOUNT POLISHED CHROME FAUCET WITH VACUUM BREAKER, STOPS, & WALL BRACE, FLORESTONE #MR-370 60" HOSE WITH WALL BRACKET AND #MR-372 MOP HANGER.
DF-1 ♿	DRINKING FOUNTAIN	2"	1-1/2"	1/2"	-	**HAWS "HI-LO" #1119.14-1920** CBC ACCESS COMPLIANT, WALL-MOUNT DUAL HEIGHT 14 GAUGE STAINLESS STEEL FOUNTAINS AND BOTTLE FILLER WITH PUSH-BUTTON OPERATION, VANDAL RESISTANT BOTTOM PLATES, AND **#6700.4** MOUNTING PLATE. PROVIDE OPTIONAL **#6469** DRIP TRAY, **#BP32** BACK PANEL, AND **#6700R** MOUNTING PLATE.
WS-1	WASH SINK	2"	1-1/2"	1/2"	-	JUST CUSTOM FABRICATED SIMILAR TO THE MULTI-STATION SURGEON'S WASH-UP SINK, 14 GAUGE TYPE 304 WALL MOUNTED STAINLESS STEEL 98"X20"X5" DEEP OVERALL SIZE, WITH AN 8" STAINLESS STEEL BACKSPLASH, JUST J-ADA-35 OFFSET GRID STRAINER & (3) CHICAGO "HYTRONIC" "ECAST" #116.204.AB.1-GN2A (OR T&S BRASS OR ZURN EQUAL) GN2A WALL MOUNTED FAUCET & GOOSNECK SPOUT MODIFIED WITH #E35VPJKABCP AERATOR FAUCET. FOR MOUNTING FIXTURE PER DETAIL D/P5. USE E/P5 WHEN INSTALLING ON A SHEAR WALL. REFER TO THE ARCHITECTURAL DRAWINGS FOR THE MOUNTING ELEVATIONS.
EWH-1	WATER HEATER (ELECT. REQ)	-	-	3/4"	3/4"	**A.O. SMITH MODEL DEN-40**, COMMERCIAL ELECTRIC WATER HEATER, 40 GALLON STORAGE CAPACITY, GLASS LINED TANK, 4.5 KW, 208V/1Ø. OPERATING WT. = 450LBS
EWH-2	WATER HEATER (ELECT. REQ)	-	2"	3/4"	3/4"	**A.O. SMITH DEL-30**, COMMERCIAL ELECTRIC WATER HEATER, 30 GALLON STORAGE CAPACITY, GLASS LINED TANK. 4.5KW, 208V/1Ø. OPERATING WEIGHT = 350LBS
CP-1	CIRCULATING PUMP (ELECT. REQ)	-	-	-	3/4"	**BELL & GOSSETT #NBF-25** (OR GRUNDFOS OR TACO EQUAL) NSF LEAD-FREE BRONZE (OR STAINLESS) WET ROTOR CIRCULATOR FOR POTABLE WATER. 115V/1Ø.
TET-1	THERMAL EXPANSION TANK	-	-	3/4"	-	**AMTROL "THERM-X-TROL" #ST-5-C**, TWO GALLON ASME RATED WITH INLINE CONNECTIONS AND WITH FDA APPROVED BLADDER FOR POTABLE WATER USE. WT.-22 LBS.
WMB-1	WASHING MACHINE BOX	2"	1-1/2"	3/4"	3/4"	**GUY GRAY #T200**, 20 GAUGE STEEL RECESSED SUPPLY AND DRAIN BOX WITH WHITE POWDER COAT FINISH. INSTALL VALVES FOR BOTTOM SUPPLY.
SH-1 ♿	SHOWER FITTINGS	-	-	1/2"	1/2"	**MOEN #8342** (OR POWERS EQUAL) CBC ACCESS COMPLIANT PRESSURE BALANCED SHOWER VALVE WITH LEVER HANDLE, CHECKSTOPS, DETACHABLE HAND- HELD SHOWERHEAD ASSEMBLY WITH HOSE & WALL BAR, IN-LINE VACUUM BREAKER, QUICK-DISCONNECT, AND W/FIXED SHOWERHEAD W/DIVERTER VALVE WITH #116712 1.75 GPM FLOW RESTRICTOR.
HB-1	HOSE BIBB	-	-	3/4"	-	**WOODFORD #24P** ROUGH BRONZE WALL HOSE VALVE WITH LOCKSHIELD, NON-REMOVABLE VACUUM BREAKER, & OPTIONAL LOOSE TEE KEY HANDLE.
HB-2	HOSE BIBB	-	-	3/4"	-	**WOODFORD #24P** (OR MIFAB EQUAL) OPTIONAL POLISHED CHROME WALL HOSE VALVE WITH LOCKSHIELD, NON-REMOVABLE VACUUM BREAKER, AND OPTIONAL LOOSE TEE KEY HANDLE WITH MODEL 34HD.

PLUMBING FIXTURE AND EQUIPMENT SCHEDULE

MARK	FIXTURE	CONNECTION SIZES				DESCRIPTION
		S or W	V	CW	HW	
WC-1	WATER CLOSET	4"	2"	1"	-	KOHLER ELONGATED FLOOR MOUNT "WELLWORTH" #K-4406, (OR AMERICAN STANDARD OR ZURN EQUAL) 1.28 GPF, SLOAN "ROYAL" #111-1.28 (OR ZURN EQUAL) FLUSH VALVE AND OLSONITE #95SS/CT EXTRA HEAVY DUTY OPEN-FRONT SEAT.
WC-2 ♿	WATER CLOSET	4"	2"	1"	-	KOHLER ELONGATED FLOOR MOUNT "HIGHLINE" #K-4405, (OR AMERICAN STANDARD OR ZURN EQUAL) CBC ACCESS COMPLIANT, 1.28 GPF, SLOAN "ROYAL" #111-1.28 (OR ZURN EQUAL) FLUSH VALVE WITH HANDLE POINTED TOWARDS WIDE SIDE OF STALL, AND OLSONITE #95SS/CT EXTRA HEAVY DUTY OPEN FRONT SEAT.
U-1 ♿	URINAL	2"	1-1/2"	3/4"	-	**KOHLER "BARDON" #K-4991-ET** (OR AMERICAN STANDARD OR ZURN EQUAL) CBC ACCESS COMPLIANT, 0.125 GPF, WASHOUT STYLE WITH #K-GP1211759 STRAINER & **SLOAN "ROYAL" #186-0.13** (OR ZURN EQUAL) FLUSH VALVE. PROVIDE STEEL SUPPORT PLATE FOR MOUNTING FIXTURE PER DETAIL E/P4.0. SEE ARCH. DWGS. FOR MOUNTING HEIGHT.
L-1 ♿	LAVATORY	2"	1-1/2"	1/2"	-	**KOHLER WALL-HUNG "KINGSTON" #K-2007**, (OR AMERICAN STANDARD OR ZURN EQUAL) CBC ACCESS COMPLIANT, 21-1/4"x18", VIT. CHINA WITH ONE FAUCET HOLE AT CENTER, **MCGUIRE #155A GRID DRAIN**, **CHICAGO "ECAST" #333-665PSHVPAABCP** WITH NEOPERL 1 GPM INSERT (OR T&S BRASS OR ZURN EQUAL) METERING FAUCET ADJUSTED TO STAY OPEN FOR 10 SECONDS, JAY R. SMITH #723 CONCEALED ARMS, AND A STEEL SUPPORT PLATE FOR MOUNTING FIXTURE PER DETAIL E/P4.0. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
L-2	LAVATORY	2"	1-1/2"	1/2"	1/2"	KOHLER WALL-HUNG "KINGSTON" #K-2005, (OR AMERICAN STANDARD OR ZURN EQUAL) CBC ACCESS COMPLIANT, 21-1/4"x18", VIT. CHINA WITH 4" CENTERS, McGUIRE #155A GRID DRAIN, CHICAGO #420-T45E39VPABCP, ASSE 1070 COMPLIANT WITH NEOPERL 0.35 GPM INSERT (OR T&S BRASS OR ZURN EQUAL) SINGLE LEVER FAUCET, JAY R. SMITH #723 CONCEALED ARMS, AND A STEEL SUPPORT PLATE FOR MOUNTING FIXTURE PER DETAIL E/P4.0. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
L-3 ♿	LAVATORY	2"	1-1/2"	1/2"	1/2"	JUST #SLF-ADA-1815-A-GR (OR ELKAY EQUAL), CBC ACCESS COMPLAINT, SINGLE COMPARTMENT 18 GAUGE STAINLESS STEEL, 12"X12"X6-1/2" DEEP BOWL SIZE WITH SINGLE FAUCET HOLE AT CENTER, #J-35GS BASKET STRAINER, AND CHICAGO "ECAST" #50-E35ABCP (OR T&S BRASS OR ZURN EQUAL) RIGID GOOSENECK FAUCET WITH AERATOR WITH MIXING VALVE, MV-1 MOUNTED BELOW FIXTURE.
MV-1	MIXING VALVE	-	-	1/2"	1/2"	POWERS #LFe480-01 (OR BRADLEY EQUAL) "UNDERCOUNTER" CHROME LEAD FREE THERMOSTATIC MIXING VALVE SET AT 110°F. OUTLET TEMPERATURE.
S-1 ♿	CLASSROOM SINK	2"	1-1/2"	1/2"	-	JUST #CRA-ADA-1931-A-GR, (OR ELKAY EQUAL) CBC ACCESS COMPLIANT, 19"x31"x6-1/2"DEEP STAINLESS STEEL W/CHICAGO #350-E35-317XKABCP WITH LOW FLOW AERATOR, 1.5 GPM (OR T&S BRASS OR ZURN EQUAL) GOOSENECK FAUCET INDEXED "C" AT CENTER OF LEFT LEDGE, CHICAGO "ECAST" #748-665ABCP DRINKING BUBBLER AT RIGHT FRONT, AND JUST #J-35-SSF SINK STRAINER.

APPROVALS

FILE # 10-26 APPLICATION # 02-122658

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(559) 627.0530 Office
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TITLE
PLUMBING SCHEDULES

P5.0

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
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APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
FIRE PROTECTION SITE PLAN

FS.1

PROJECT 24001

HYDRANT FLOW REQUEST FORM

COALINGA FIRE

Coalinga Fire Department
Fire Prevention Division
300 W. Elm Ave, Coalinga, CA 93210
Office # (559) 935-1652 FAX # (559) 935-1638

Please complete the below information in blue or black ink. Submit form and fee ($119). Please make check or money order payable to City of Coalinga Fire Department. Our mailing address is listed above.

Date Requested: 4-3-24 Date Required: 4-10-22

Name of Company Requesting Hydrant Flow: CHUSD

Contact Name: Rod Bradley

Contact Mailing Address: rbradley@CHUSD.org

Phone Number: 659-903-8813

Reason for Requesting Hydrant Flow: ☑ New Construction ☐ Tenant Improvement
☐ Insurance ☐ Other – Please State: _____

Address and Location of Hydrant: _____
(For example: 314 W. Cook Street, hydrant located at north east corner of property)

Send Hydrant Flow Information: ☑ By Mail ☐ By Fax: _____ (Fax Number)

☐ By E-mail: rbradley@chusd.org (E-mail Address)

Requestor's Signature: Rod Bradley Date: 4-3-24

HYDRANT FLOW INFORMATION

TO BE COMPLETED BY FIRE DEPARTMENT

Date: 4-10-24 Completed By: James Ramsay

Location: Sunset & Baker

Static: 86 Residual: 74 Pitot: ~~1687~~ 20 PSI Gauge

Gallons Per Minute: 4224 Outlet Diameter: 4½

TO BE COMPLETED BY FIRE DEPARTMENT

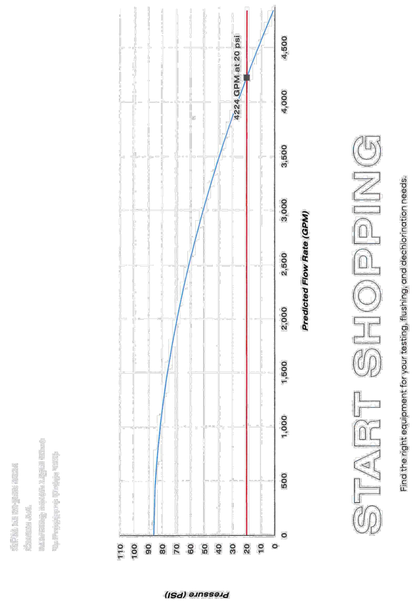
Date Hydrant Flow Fee Paid: _____ Accepted By: _____

Date Hydrant Flow Information Sent: _____

☐ By Fax ☐ By Mail ☐ By E-mail ☐ Other: _____

Sent By: _____

Rev. 10/23/19



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SITE PIPING SPECIFICATIONS

PIPING TO BE AS FOLLOWS:

1. *UNDERGROUND SITE PIPING SHALL BE DR14 PVC UPSTREAM OF THE FIRE DEPARTMENT CONNECTION PER LOCAL AUTHORITY HAVING JURISDICTION REQUIREMENTS, AND SHALL BE DR14 PVC DOWNSTREAM OF THE FIRE DEPARTMENT CONNECTION.*
2. *UNDERGROUND PIPING INSTALLATION TO MEET REQUIREMENTS OF NFPA 13 (2022), NFPA 24 (2022), CBC/CFC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND COALINGA REQUIREMENTS.*
3. *ALL PIPE TO BE INSTALLED WITH A 36" MIN. BURY, FROM TOP OF PIPE, OR AS APPLICABLE TO LOCATION, AS PER NFPA 13 (2022), NFPA 24 (2022), CBC/CFC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND COALINGA REQUIREMENTS.*
4. *ALL THRUST BLOCKS & RESTRAINING GLANDS TO BE POURED IN PLACE AND SIZED IN ACCORDANCE TO NFPA 13 (2022), NFPA 24 (2022), CBC/CFC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND COALINGA REQUIREMENTS.*
5. *UNDERGROUND PIPING RISING UP AT BASE OF RISER SHALL BE A STAINLESS STEEL, SINGLE PIECE IN-BUILDING RISER, LISTED FOR FIRE PROTECTION USE.*
6. *ALL MECHANICAL JOINT FITTINGS SHALL BE COATED WITH A NON-OXIDIZING, CORROSIVE PROHIBITING COATING, AND WRAPPED WITH 2 MIL POLY WRAP.*
7. *ALL UNDERGROUND PIPING, COATED / WRAPPED FITTINGS, VALVES, DETECTION WIRE LOCATION AND TYPE, ETC TO BE INSPECTED BY ONSITE IOR BEFORE BACKFILL.*
8. *PER NFPA 24 §6.2.9(1)(a), THE POST INDICATOR VALVE MINIMUM DISTANCE TO BUILDING SHALL NOT BE LESS THAN THE HEIGHT OF THE EXTERIOR WALL FACING THE POST INDICATOR VALVE OR AS ALLOWED BY THE LOCAL FIRE MARSHAL.*

SITE UNDERGROUND PLAN NOTES

1. *THE UNDERGROUND PIPING NOTED AS EXISTING OR BY OTHERS, IS INTENDED FOR HYDRAULIC CALCULATION OF SPRINKLER SYSTEM REFERENCE ONLY.*
2. *UNDERGROUND FIRE PIPING INSTALLATION CONTRACTOR SHALL COORDINATE WITH PLUMBING, CIVIL, LANDSCAPE, AND MECHANICAL PIPING PLANS PRIOR TO INSTALLATION.*
3. *ALL UNDERGROUND PIPE LENGTHS INDICATED ON PLANS REFLECT TOTAL PIPE LENGTH (CENTER TO CENTER) WITH NO TAKEOUT FOR FITTINGS.*
4. *ALL UNDERGROUND PVC, C-900, OR OTHER PLASTIC PIPING UTILIZED SHALL BE EQUIPPED WITH A SUITABLE MAGNETIC LOCATION TAPE INSTALLED APPROPRIATELY TO THE TOP OF THE PIPING.*
5. *EXISTING UNDERGROUND UTILITIES AND IMPROVEMENTS ARE SHOWN IN THEIR APPROXIMATE LOCATIONS BASED UPON RECORD INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF PREPARATION OF THESE PLANS. LOCATIONS MAY NOT HAVE BEEN VERIFIED IN THE FIELD AND NO GUARANTEE IS MADE AS TO THE ACCURACY OR COMPLETENESS OF THE INFORMATION SHOWN.*
6. *THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 2 WORKING DAYS IN ADVANCE OF CONSTRUCTION TO FIELD LOCATE UTILITIES. CALL UNDERGROUND SERVICE ALERT (U.S.A.); AT 8-1-1.*
7. *IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE EXISTENCE AND LOCATION OF THOSE UTILITIES SHOWN ON THESE PLANS OR INDICATED IN THE FIELD BY LOCATING SERVICES. ANY ADDITIONAL COSTS INCURRED AS A RESULT OF CONTRACTOR'S FAILURE TO VERIFY LOCATIONS OF EXISTING UTILITIES PRIOR TO BEGINNING OF CONSTRUCTION IN THEIR VICINITY SHALL BE BORNE BY THE CONTRACTOR AND ASSUMED INCLUDED AND MERGED IN THE CONTRACT UNIT.*

GENERAL NOTES

SPRINKLER SYSTEM DESIGNED IN ACCORDANCE WITH NFPA 13 (2022), CFC/CBC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF COALINGA STANDARDS. ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS AND ALL NATIONAL, STATE, AND LOCAL CODES.

THESE DRAWINGS ARE NOT COORDINATED PLANS (AMONGST THE TRADES). IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FURNISH AND INSTALL ALL ITEMS REQUIRED FOR A COMPLETE ACCEPTABLE WORKING INSTALLATION, WHETHER SHOWN OR NOT SHOWN, APPLICABLE TO ALL CITED CODES AND STANDARDS. IT SHALL BE THE RESPONSIBILITY OF THE SPRINKLER INSTALLATION CONTRACTOR TO COORDINATE WITH ALL TRADES.

CONTRACTOR TO REVIEW FOR BID, THE PLANS AS DESIGNED BY ENGINEER. ANY ALTERNATE PROPOSED DESIGN CHANGES OR REVISIONS BY CONTRACTOR, ARE TO BE SUBMITTED IN WRITTEN FORMAT, REVIEWED AND RESPONDED TO, BY ENGINEER PRIOR TO BIDDING. AFTER AWARD OF BID, ALL DEVIATIONS FROM THE ORIGINAL DESIGN INTENTION SHALL BE CLOUDED AND NOTED ON CONTRACTOR ISSUED SHOP DRAWINGS TO ENGINEER, WHICH HAVE BEEN COORDINATED AMONGST THE TRADES, FOR REVIEW AND APPROVAL BY ENGINEER. ALL CHANGES TO THE PLAN SHALL BE SUBMITTED TO DSA FOR REVIEW AND APPROVAL PRIOR TO FABRICATION AND INSTALLATION.

GENERAL CONTRACTOR IS SOLELY RESPONSIBLE FOR INSURING ALL SUB-CONTRACTOR'S COORDINATE SHOP DRAWINGS PRIOR TO ORDERING OR INSTALLATION OF ANY EQUIPMENT, DEVICE, MATERIAL, ETC. SUBMISSION OF SHOP DRAWINGS TO THE ENGINEER CONSTITUTES THAT THE DRAWINGS SUBMITTED HAVE BEEN COORDINATED AMONGST THE TRADES. FAILURE TO COORDINATE ALL SHOP DRAWINGS AMONGST THE TRADES, FOR REVIEW AND APPROVAL BY ENGINEER, WILL NOT CONSTITUTE A CHANGE ORDER TO THE OWNER, FOR UNIDENTIFIED FIELD COORDINATION ISSUES.

ANY REVISIONS OR DEVIATIONS THAT ARISE FROM COORDINATION AND CONSTRUCTION OF INSTALLATION METHODS AND MEANS AMONGST THE TRADES DURING CONSTRUCTION, SHALL BE PROVIDED TO THE ARCHITECT BY RFI, DETAILING COORDINATION ISSUE AND PROPOSED SOLUTION. ONCE REVIEWED AND APPROVED BY ENGINEER, THE DESIGN REVISIONS OR DEVIATIONS SHALL BE APPROVED BY THE DSA, THEN COORDINATED IN THE FIELD AMONGST THE IMPACTED TRADES, AND SHOWN ON THE AS-BUILT DRAWINGS. A COMPLETE, ACCURATE SET OF AS-BUILT DRAWINGS SHALL BE MAINTAINED ONSITE DURING CONSTRUCTION, AND ARE TO BE ISSUED TO ARCHITECT AND ENGINEER UPON COMPLETION, INSPECTION, AND TESTING OF INSTALLATION.

CONTRACTOR TO PROVIDE SIX (6) SETS OF THE FOLLOWING:

A. FULLY COORDINATED AMONGST THE TRADES INSTALLATION SHOP DRAWINGS, INCLUDING ALL PIPE CUT LENGTHS, FITTINGS, HANGERS, BRACES, SPRINKLERS WITH LEGEND, HYDRAULIC AND SEISMIC CALCULATIONS, AND PRODUCT SUBMITTAL.
B. BOUND SUBMITTAL TO INCLUDE COVER PAGE, PIPING, HARDWARE, AND MATERIALS (INCLUDING FIRE STOPPING). COVER PAGE TO INCLUDE PROJECT NAME, SPRINKLER CONTRACTOR, GENERAL CONTRACTOR, ARCHITECT, AND DATE SUBMITTED FOR REVIEW.

ALL ITEMS REQUIRED BY NFPA 13 (2022) CHAPTER 28 (FOR WORKING DRAWINGS) SHALL BE PROVIDED ON THE SHOP DRAWINGS. SUBMITTALS ARE IN ADDITION TO, AND NOT IN LIEU OF, THIS REQUIREMENT.

FINAL INSTALLATION SPACING FOR SPRINKLER SYSTEM PIPING AND SPRINKLERS, MAY VARY WITH FIELD COORDINATION ISSUES. ALL VARIANCES TO COMPLY WITH LISTING OF SPRINKLERS, NFPA 13 (2022), CFC/CBC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF COALINGA REQUIREMENTS.

ALL HANGERS, THREADED ROD, BRACING COMPONENTS AND HARDWARE, SHALL BE HOT DIPPED GALVANIZED - OR FACTORY COATED GALVANIZED - FOR ALL EQUIPMENT AND COMPONENTS IN EXTERIOR APPLICATIONS. ALL FASTENERS USED (IE BOLTS - NUTS / WASHERS) TO BE STAINLESS STEEL.

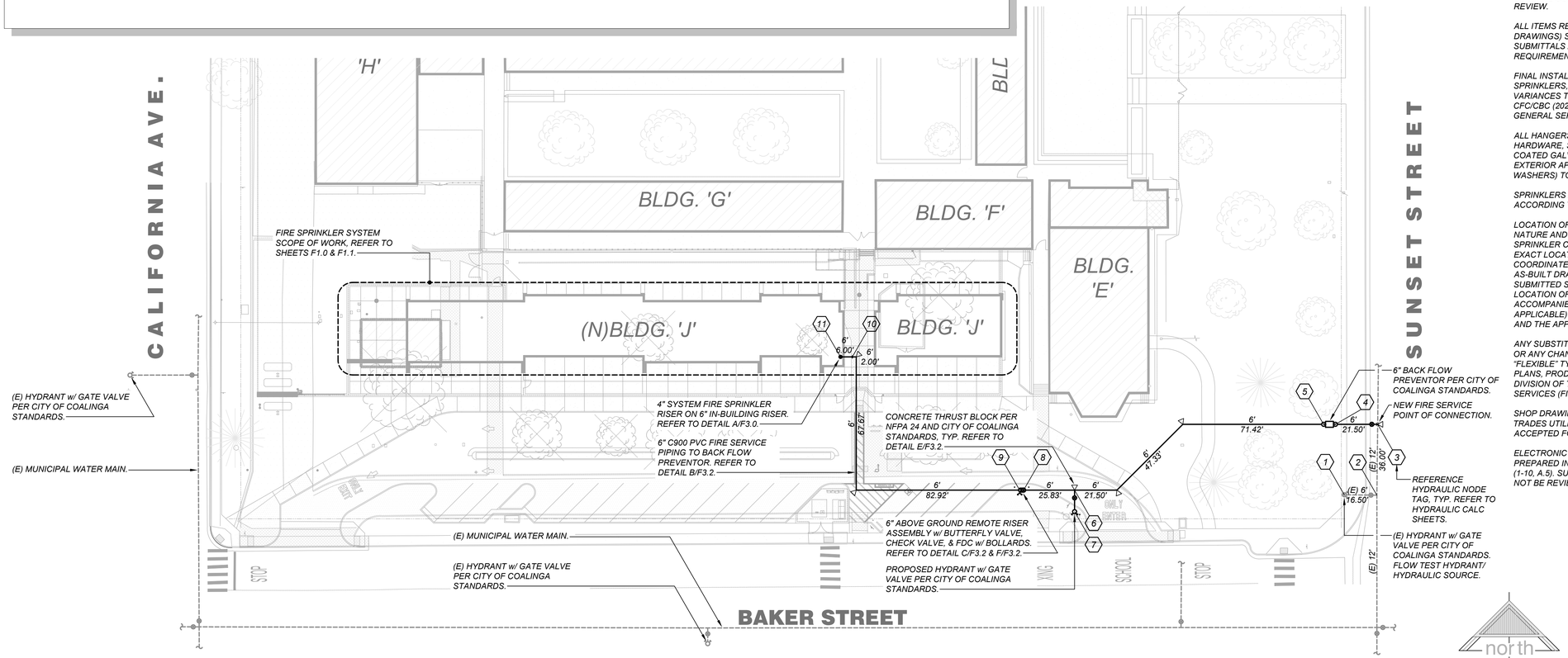
SPRINKLERS ARE TO BE LOCATED CENTER TILE (OR AS SHOWN) ACCORDING TO INDUSTRY STANDARDS AND PRACTICES.

LOCATION OF SEISMIC BRACING AND HANGERS ARE SCHEMATIC IN NATURE AND INTENDED TO SHOW APPROXIMATE LOCATIONS. SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR SHOWING THE EXACT LOCATION OF SEISMIC RESTRAINTS ON SUBMITTED COORDINATED AMONGST THE TRADES SHOP DRAWINGS, AND FINAL AS-BUILT DRAWINGS.
SUBMITTED SHOP DRAWINGS SHALL DESIGNATE THE TYPE AND LOCATION OF EACH BRACE, HANGER OR RESTRAINT, AND SHALL BE ACCOMPANIED BY A DETAIL WITH LEGEND, AND CALCULATIONS (IF APPLICABLE) IN ACCORDANCE WITH NFPA 13 (2022), CFC/CBC (2022), AND THE APPROPRIATE SEISMIC DESIGN CRITERIA FOR THE PROJECT.

ANY SUBSTITUTION OF "FLEXIBLE" TYPE PIPING IN LIEU OF "RIGID" PIPE, OR ANY CHANGES TO SIZE, MANUFACTURER, OR LENGTHS OF "FLEXIBLE" TYPE PIPING WILL REQUIRED RE-SUBMITTAL OF PIPING PLANS, PRODUCT DATA SHEETS, AND HYDRAULIC CALCULATIONS TO DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES (FIRE LIFE SAFETY) FOR REVIEW AND APPROVAL.

SHOP DRAWINGS THAT HAVE NOT BEEN COORDINATED AMONGST THE TRADES UTILIZING THE MOST CURRENT 2D/3D FILES, WILL NOT BE ACCEPTED FOR REVIEW.

ELECTRONIC (DIGITAL) SUBMITTAL IN PDF FORMAT IS ACCEPTABLE, IF PREPARED IN ACCORDANCE WITH SPECIFICATION 2105 00, SECTION (1-10, A.5). SUBMITTALS NOT CONFORMING TO THE SPECIFICATION WILL NOT BE REVIEWED.



north

1 FIRE PROTECTION SITE PLAN

SCALE: 1" = 30'-0"

0 30'
SCALE: 1" = 30'

CERTIFIED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
Fresno, CA 93727
FAX (559) 431-1362

12 February 2025 3:21 PM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\FS.1 FIRE PROTECTION SITE PLAN.dwg bolt

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APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

Sprinkler Legend

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Victaulic	V3802	FL-QR/C	8	5.6	Concealed Pendent	½	Quick	Brass	175°F	
	Victaulic	V2708	FL-QR	16	5.6	Pendent	½	Quick	Chrome	155°F	
	Victaulic	V5606	FL-QR/C	9	5.6	Concealed Pendent	½	Quick	Brass	175°F	
	Victaulic	V2704	FL-QR	99	5.6	Upright	½	Quick	Brass	200°F	
FLEX	Victaulic	V3204	VS2	78	5.6	Concealed Pendent	1	Quick	Brass	155°F	VS2 FLEX ASSEMBLY
				Total = 210							

SPRINKLER LEGEND DATA IS FOR DSA REVIEW ONLY. THE INSTALLING CONTRACTOR SHALL VERIFY THE ACCURACY OF THE SPRINKLER LAYOUT AND SPRINKLER HEAD QUANTITIES TO MEET NFPA 13 STANDARDS. NO PRICING ADJUSTMENTS WILL BE PERMITTED FOR SPRINKLER HEADS ADDED BY THE CONTRACTOR.

Hydraulic Information — Remote Area 1

OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.100 for 1950.00ft² (Actual 1371.92ft²)
QUICK RESPONSE REDUCTION	16'-6 Ceiling (30.3%) 1360.13ft²
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	16
K-FACTOR	5.6
TOTAL WATER REQUIRED	461.58
TOTAL PRESSURE REQUIRED	64.938
BASE of RISER (gpm)	361.58
BASE of RISER (psi)	56.995
SAFETY MARGIN (psi)	+19.964 (23.5%)

THIS REMOTE AREA IS SUBJECT TO MULTIPLE ADJUSTMENTS PER NFPA 13 (2022) §19.2.3.2.8.1 WHERE THE REMOTE AREA HAS BEEN INCREASED BY 30% PER NFPA 13 (2022) §19.2.3.2.4 (SLOPED CLG.) w/ QUICK RESPONSE REDUCTION PER NFPA 13 (2022) §19.2.3.2.3.1.

Hydraulic Information — Remote Area 2

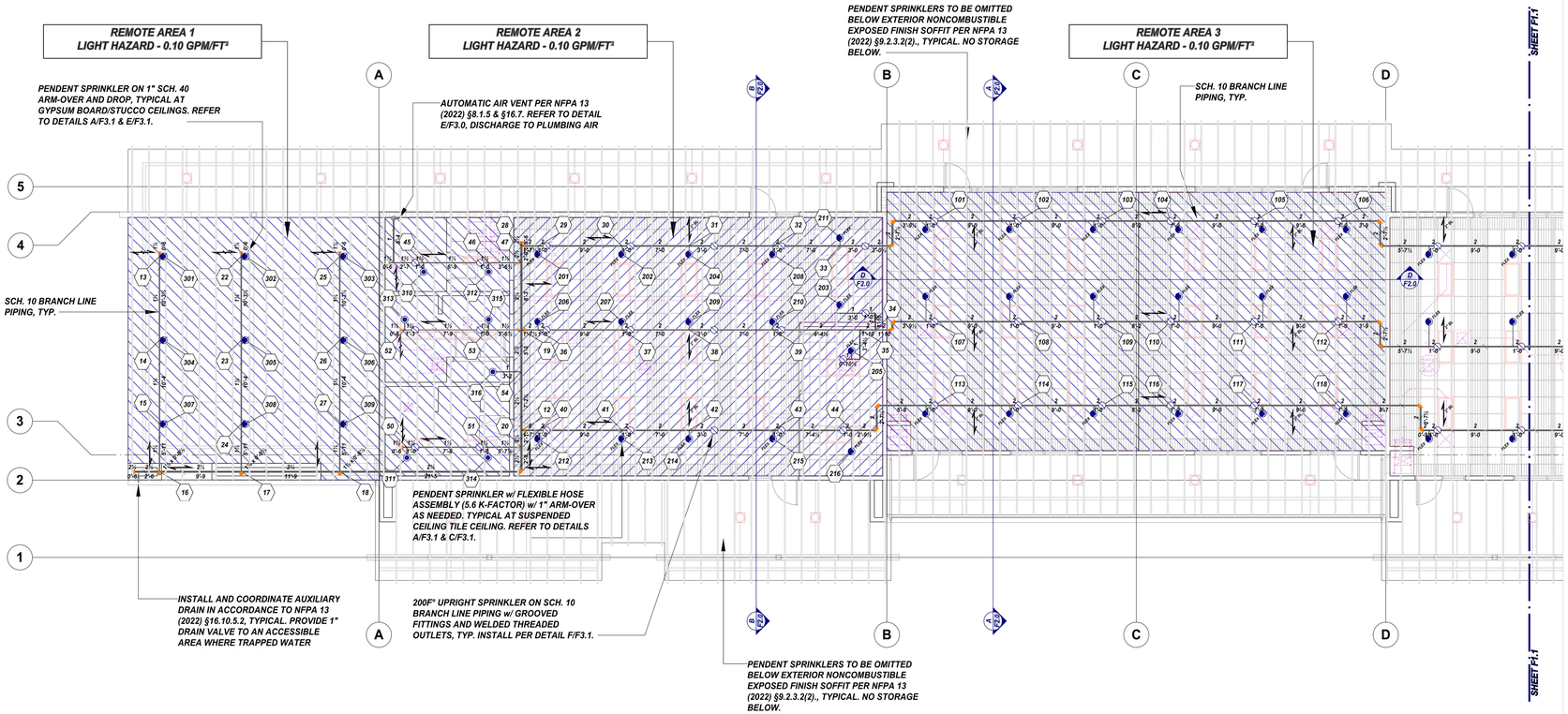
OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.100 for 1950.00ft² (Actual 1356.67ft²)
QUICK RESPONSE REDUCTION	15'-0 Ceiling (32.5%) 1316.25ft²
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	16
K-FACTOR	5.6
TOTAL WATER REQUIRED	471.58
TOTAL PRESSURE REQUIRED	57.378
BASE of RISER (gpm)	371.58
BASE of RISER (psi)	49.359
SAFETY MARGIN (psi)	+27.480 (32.4%)

THIS REMOTE AREA IS SUBJECT TO MULTIPLE ADJUSTMENTS PER NFPA 13 (2022) §19.2.3.2.8.1 WHERE THE REMOTE AREA HAS BEEN INCREASED BY 30% PER NFPA 13 (2022) §19.2.3.2.4 (SLOPED CLG.) w/ QUICK RESPONSE REDUCTION PER NFPA 13 (2022) §19.2.3.2.3.1.

Hydraulic Information — Remote Area 3

OCCUPANCY CLASSIFICATION	Light Hazard
DENSITY (gpm/ft²)	0.100 for 1950.00ft² (Actual 1834.58ft²)
QUICK RESPONSE REDUCTION	18'-3 Ceiling (27.6%) 1411.31ft²
TOTAL HOSE STREAMS	100.00
TOTAL HEADS FLOWING	18
K-FACTOR	5.6
TOTAL WATER REQUIRED	394.68
TOTAL PRESSURE REQUIRED	34.468
BASE of RISER (gpm)	294.68
BASE of RISER (psi)	26.864
SAFETY MARGIN (psi)	+50.711 (59.5%)

THIS REMOTE AREA IS SUBJECT TO MULTIPLE ADJUSTMENTS PER NFPA 13 (2022) §19.2.3.2.8.1 WHERE THE REMOTE AREA HAS BEEN INCREASED BY 30% PER NFPA 13 (2022) §19.2.3.2.4 (SLOPED CLG.) w/ QUICK RESPONSE REDUCTION PER NFPA 13 (2022) §19.2.3.2.3.1.



SPRINKLER SYSTEM NOTES

SPRINKLER SYSTEM DESIGN CRITERIA:

1. SYSTEM SHALL BE DESIGNED TO CONFORM WITH NFPA 13 (2022 CALIFORNIA EDITION), CFC/CBC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF COALINGA STANDARDS.
2. FIRE SPRINKLER SYSTEM POINT OF CONNECTION SHALL BE AT THE 6" IN-BUILDING RISER, REFER TO RISER DETAIL A/F3.0.
3. SPRINKLER DISCHARGE DENSITY FOR THIS PROJECT SHALL BE IN ACCORDANCE WITH NFPA 13 (2022) §19.2.3.1 WITH DESIGN DENSITY IN ACCORDANCE WITH TABLE §19.2.3.1.1.
   - 3.1. LIGHT HAZARD OCCUPANCY SHALL INCLUDE ALL OFFICE, CORRIDOR, DINING, CONCEALED ATTIC SPACES, RESTROOMS, AND SIMILAR AREAS. LIGHT HAZARD OCCUPANCY SHALL HAVE A DESIGN DENSITY OF 0.10 GPM/FT² OVER A MINIMUM REMOTE AREA OF 1500 FT². THE MAXIMUM ALLOWABLE PROTECTION AREA OF COVERAGE FOR A SPRINKLER SHALL BE IN ACCORDANCE WITH THE VALUE INDICATED IN TABLE 10.2.4.2.1(a) AND SHALL NOT EXCEED 225FT².
   - 3.2. ORDINARY HAZARD GROUP I (OH1) SHALL FOOD SERVICE AREAS, ELECTRICAL AND MECHANICAL EQUIPMENT ROOMS, PORTE COCHERES, AND SIMILAR AREAS INDICATED IN NFPA 13 (2022) §A.4.3.3.1 OH1 OCCUPANCY SHALL HAVE A DENSITY OF 0.15GPM/FT² OVER A MINIMUM REMOTE AREA 0F 1500FT². THE MAXIMUM ALLOWABLE PROTECTION AREA OF COVERAGE FOR A SPRINKLER SHALL BE IN ACCORDANCE WITH THE VALUE INDICATED IN TABLE 10.2.4.2.1(b) – 130FT².
   - 3.3. ORDINARY HAZARD GROUP II (OH2) SHALL INCLUDE AUTOMOTIVE WORKSHOP AREAS, SCIENCE LABRATORIES, STAGES, STORAGE ROOMS, SIMILAR AREAS INDICATED IN NFPA 13 (2022) §A.4.3.3.2 OH2 OCCUPANCY SHALL HAVE A DESIGN DENSITY OF 0.20GPM/FT² OVER A MINIMUM REMOTE AREA OF 1500FT². THE MAXIMUM ALLOWABLE PROTECTION AREA OF COVERAGE FOR A SPRINKLER SHALL BE IN ACCORDANCE WITH THE VALUE INDICATED IN TABLE 10.2.4.2.1(b) - 130FT².
4. MAXIMUM SPRINKLER SPACING SHALL NOT EXCEED 15'-0" ON CENTER, UNLESS SPECIFICALLY LISTED BY THE SPRINKLER MANUFACTURER.
5. HOSE STREAM ALLOWANCE GPM FLOW SHALL BE IN ACCORDANCE WITH THE VALUES INDICATED IN TABLE 19.2.3.1.2: LIGHT HAZARD - 100 GPM; ORD HAZARD - 250 GPM.
6. PER NFPA 13 (2022) §19.2.3.2.3.1, WHERE LISTED QUICK-RESPONSE SPRINKLERS ARE USED THROUGHOUT A SYSTEM OR PORTION OF A SYSTEM HAVING THE SAME HYDRAULIC DESIGN BASIS, THE SYSTEM AREA OF OPERATION SHALL BE PERMITTED TO BE REDUCED WITHOUT REVISING THE DENSITY AS INDICATED IN FIG. 19.2.3.2.3.1. NOTE: REMOTE AREA REDUCTION EXCLUDES EXTENDED COVERAGE SPRINKLER HEADS AND ONLY APPLICABLE TO LIGHT HAZARD OCCUPANCY ONLY.
7. PER NFPA 13 (2022) §19.2.3.2.4, THE SYSTEM REMOTE AREA SHALL BE INCREASED BY 30% WITHOUT REVISING THE DENSITY WHEN SPRAY SPRINKLERS AND CMSA SPRINKLERS ARE USED ON SLOPED CEILINGS WITH A PITCH EXCEEDING 1 IN 6 (A RISE OF 2 UNITS IN A RUN OF 12 UNITS) IN NON-STORAGE APPLICATIONS.
8. PER NFPA 13 (2022) §19.2.3.2.8.1, MULTIPLE ADJUSTMENTS CAN BE MADE TO THE REMOTE AREA WHEN BOTH QUICK RESPONSE SPRINKLER AREA REDUCTIONS AND SLOPED CEILING AREA INCREASE ARE APPLICABLE.
9. THE HYDRAULIC CALCULATION SOURCE SHALL BE TO THE FLOW TEST HYDRANT OR APPLICABLE STREET CONNECTION, ACCORDING TO LOCAL FIRE PREVENTION DISTRICT WATER CURVE DETERMINATIONS AND OR TESTING PROCEDURES. REFER TO SITE PLAN AND HYDRAULIC CALCULATIONS.
10. STORAGE HEIGHT SHALL NOT EXCEED 8-FEET.
11. MICROBIAL INDUCED CORROSION WILL NOT BE A FACTOR FOR THIS SYSTEM.
12. THE FIRE SPRINKLER ALARM SYSTEM SHALL BE DESIGNED, INSTALLED AND PERMITTED BY OTHERS, AND IS NOT IN THE SCOPE OF WORK. SUPERVISORY FLOW DETECTORS AND TAMPER RESISTANT VALVES INSTALLED ON THE OVERHEAD SPRINKLER SYSTEM PIPING WILL BE SUPPLIED AND INSTALLED BY FIRE SPRINKLER CONTRACTOR AND WIRED BY ALARM CONTRACTOR.
13. PER PROJECT SPECIFICATIONS, IF DESIGN OR MATERIALS DIFFER FROM THAT SPECIFIED HEREIN, SUPPLEMENTAL ENGINEERING DESIGN, SUBMITTAL, AND REVIEW SHALL BE REQUIRED.

SPRINKLER SYSTEM LEGEND

SYMBOL	DESCRIPTION
	LATERAL SEISMIC BRACE (PERPENDICULAR)
	LONGITUDINAL SEISMIC BRACE (PARALLEL)
	4-WAY SEISMIC BRACE (PARALLEL/PERPENDICULAR)
	LINE RESTRAINT
	PIPE HANGERS
	PENDENT SPRINKLER ON 1" DROP
	UPRIGHT SPRINKLER ON BRANCH LINE
	SEISMIC SEPARATION ASSEMBLY
	HYDRAULIC NODE
	FIRE PIPING
	EXISTING FIRE PIPING

north

REGISTERED PROFESSIONAL ENGINEER
BRYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
(559) 431-0101 | 24012 | Fresno, CA 93727 FAX (559) 431-1362

1 FIRE SPRINKLER PLAN

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

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

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
FIRE SPRINKLER PLAN

F1.0

PROJECT 24001

12 February 2025 3:21 PM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\F1.0 FIRE SPRINKLER PLAN.dwg bolt

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APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

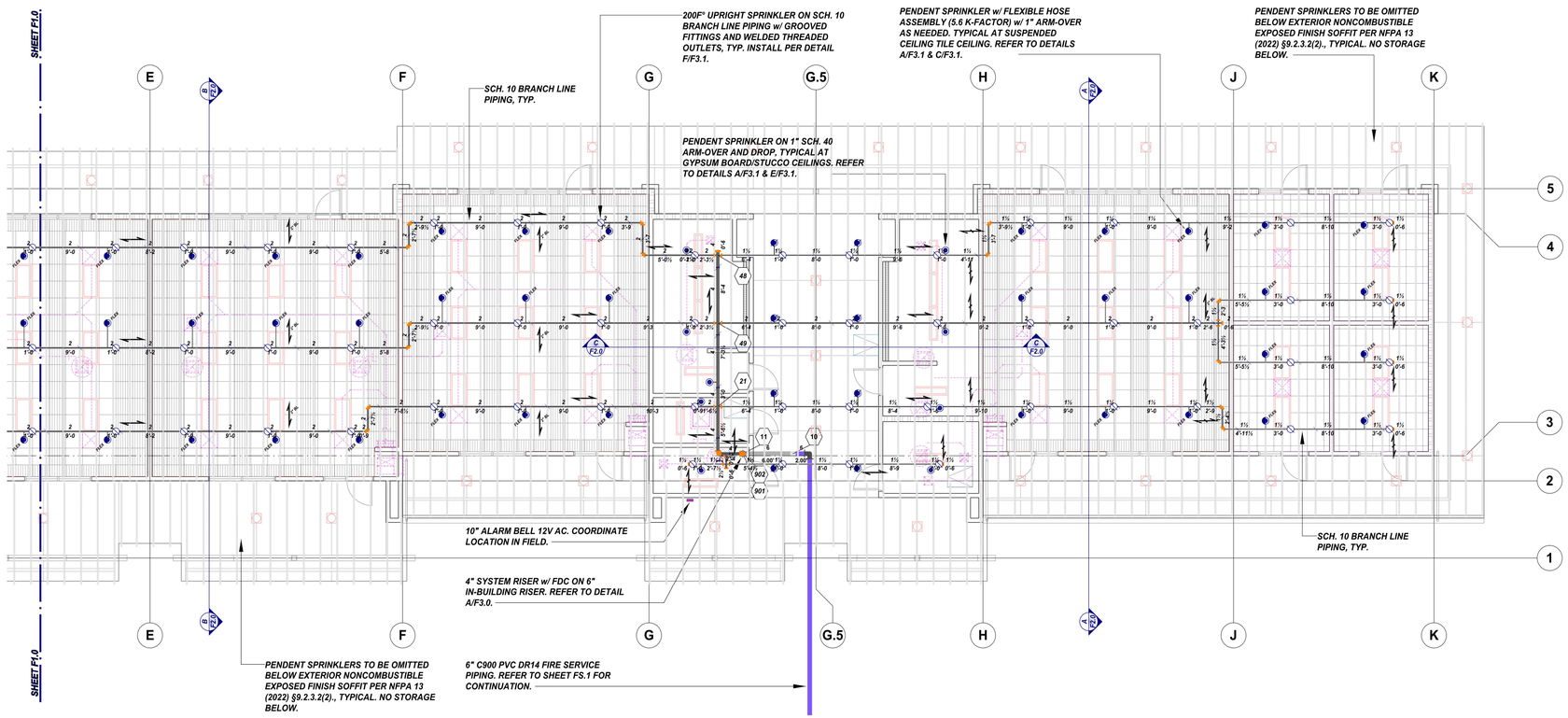
LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

SPRINKLER LEGEND DATA IS FOR DSA REVIEW ONLY. THE INSTALLING CONTRACTOR SHALL VERIFY THE ACCURACY OF THE SPRINKLER LAYOUT AND SPRINKLER HEAD QUANTITIES TO MEET NFPA 13 STANDARDS. NO PRICING ADJUSTMENTS WILL BE PERMITTED FOR SPRINKLER HEADS ADDED BY THE CONTRACTOR.

Sprinkler Legend

Symbol	Manufacturer	SIN	Model	Quantity	K-Factor	Type	Size	Response	Finish	Temperature	Note
	Victaulic	V3802	FL-QR/C	8	5.6	Concealed Pendent	½	Quick	Brass	175°F	
	Victaulic	V2708	FL-QR	16	5.6	Pendent	½	Quick	Chrome	155°F	
	Victaulic	V5606	FL-QR/C	9	5.6	Concealed Pendent	½	Quick	Brass	175°F	
	Victaulic	V2704	FL-QR	99	5.6	Upright	½	Quick	Brass	200°F	
FLEX	Victaulic	V3204	VS2	78	5.6	Concealed Pendent	1	Quick	Brass	155°F	VS2 FLEX ASSEMBLY
				Total = 210							



2 FIRE SPRINKLER PLAN

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

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

GENERAL INSTALLATION REQUIREMENTS:

1. OVERHEAD FIRE SPRINKLER PIPING SHALL BE AS FOLLOWS (UNLESS NOTED OTHERWISE ON PLANS):
   - 1.1. PIPING 1-1/2" AND LARGER SHALL BE SCH. 10 BLACK STEEL WITH ROLLED GROOVED FITTINGS, RISER TO BE SCH.10 GALVANIZED STEEL PIPE.
   - 1.2. PIPING 1-1/4" AND LESS SHALL BE SCH. 40 BLACK STEEL. 2" RISER DRAIN PIPING SHALL BE THREADED GALVANIZE WITH GALVANIZED THREADED FITTINGS.
   - 1.3. DRAINAGE PIPING 2" OR SMALLER, DOWNSTREAM OF THE DRAIN VALVE SHALL BE SCH. 40 GALVANIZED PIPE WITH GALVANIZED FITTINGS.
2. WHERE APPLICABLE IN UNOBSTRUCTION CONSTRUCTION CONDITIONS (AS DEFINED PER NFPA 13 §3.3.43.2); PER NFPA 13 (2022) §10.2.6.1.1.1, THE DISTANCE BETWEEN THE SPRINKLER DEFLECTOR AND THE CEILING SHALL BE A MINIMUM OF 1-INCH AND A MAXIMUM OF 12-INCHES THROUGHOUT THE AREA OF COVERAGE OF THE SPRINKLER.
3. WHERE APPLICABLE IN OBSTRUCTION CONSTRUCTION CONDITIONS (AS DEFINED PER NFPA 13 §3.3.43.1); PER NFPA 13 (2022) §10.2.6.1.2, SPRINKLER DEFLECTORS SHALL BE INSTALLED WITH THE DEFLECTORS WITHIN THE HORIZONTAL PLANES OF 1-INCH TO 6-INCHES BELOW THE STRUCTURAL MEMBERS AND A MAXIMUM DISTANCE OF 22-INCHES FROM THE CEILING/ROOF DECK.
4. PER NFPA 13 (2022) §9.4.1.3 UPRIGHT SPRINKLERS SHALL BE INSTALLED WITH THE FRAME ARMS PARALLEL TO THE BRANCH LINE, UNLESS SPECIFICALLY LISTED FOR OTHER ORIENTATION.
5. PER NFPA 13 (2022) §9.5.4.2 DEFLECTORS OF SPRINKLERS SHALL BE ALIGNED PARALLEL TO CEILINGS, ROOFS, OR THE INCLINE OF STAIRS.
6. PER NFPA 13 (2022) §9.3.17.1 CONCEALED SPACES OF EXPOSED COMBUSTIBLE CONSTRUCTION SHALL BE PROTECTED BY SPRINKLERS EXCEPT IN CONCEALED SPACES WHERE SPRINKLERS ARE NOT REQUIRED TO BE INSTALLED BY §9.2.1.1 THROUGH §9.2.1.20 AND §9.2.2.
7. PER NFPA 13 (2022) §9.2.1.1 CONCEALED SPACES OF NONCOMBUSTIBLE WITH MINIMAL COMBUSTIBLE LOADING HAVING NO ACCESS SHALL NOT REQUIRE SPRINKLER PROTECTION.
8. PER NFPA 13 (2022) §9.2.1.3 CONCEALED SPACES FORMED BY STUDS OR JOISTS WITH LESS THAN 6-INCHES BETWEEN THE INSIDE OR NEAR EDGES OF THE STUDS OR JOISTS SHALL NOT REQUIRE SPRINKLER PROTECTION.
9. PER NFPA 13 (2022) §9.2.1.7 CONCEALED SPACES FILLED WITH NONCOMBUSTIBLE INSULATION SHALL NOT REQUIRE SPRINKLER PROTECTION; MAXIMUM 2-INCH AIR GAP AT THE TOP OFTHE SPACE SHALL BE PERMITTED.
10. PER NFPA 13 (2022) §9.2.1.20.2 COMBUSTIBLE SOFFITS, EAVES, OVERHANGS, AND DECORATIVE FRAME ELEMENTS SHALL NOT EXCEED 4-FEET IN WIDTH SHALL NOT REQUIRED SPRINKLER PROTECTION.
11. PER NFPA 13 (2022) §9.2.1.20.4 SPRINKLERS SHALL BE PERMITTED TO BE OMITTED WHERE THE EXTERIOR CANOPIES, ROOFS, PORTE-COCHERES, BALCONIES, DECKS, AND SIMILAR PROJECTIONS ARE CONSTRUCTED WITH MATERIALS THAT ARE NONCOMBUSTIBLE.
12. PER NFPA 13 (2022) §9.2.3.2 SPRINKLERS SHALL BE PERMITTED TO BE OMITTED FROM BELOW THE EXTERIOR PROJECTIONS OF COMBUSTIBLE CONSTRUCTION, PROVIDED THE EXPOSED FINISH MATERIAL ON THE EXTERIOR PROJECTIONS ARE NON-COMBUSTIBLE AND THE EXTERIOR PROJECTIONS CONTAIN ONLY SPRINKLERED CONCEALED SPACES OR ANY OF THE FOLLOWING UNSPRINKLERED COMBUSTIBLE CONCEALED SPACES: (1) COMBUSTIBLE CONCEALED SPACES FILLED ENTIRELY WITH NON-COMBUSTIBLE INSULATION, (2) LIGHT OR ORDINARY HAZARD OCCUPANCIES WHERE NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE CEILINGS ARE DIRECTLY ATTACHED TO THE BOTTOM OF SOLID WOOD JOISTS SO AS TO CREATE ENCLOSED JOIST SPACES 220-FT³ OR LESS IN VOLUME, INCLUDING SPACE BELOW INSULATION THAT IS LAID DIRECTLY ON TOP OR WITHIN THE CEILING JOISTS IN AN OTHERWISE SPRINKLERED ATTIC, OR (3) CONCEALED SPACES OVER ISOLATED SMALL EXTERIOR PROJECTIONS NOT EXCEEDING 55FT² IN AREA
13. CAGE-TYPE SPRINKLER HEAD GUARDS SHALL BE INSTALLED TO PROTECT ALL SPRINKLERS SUBJECT TO MECHANICAL DAMAGE, INCLUDING ALL NON-CONCEALED PENDENT SPRINKLER BELOW 8-FEET ABOVE FINISH FLOOR OR EXPOSED UPRIGHTS AND PENDENT SPRINKLER INSTALLED DIRECTLY ON PIPING WITHIN A GYMNASIUM AREA.
14. ALL HANGERS, BRACES, AND RESTRAINTS SHALL BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2022 CALIFORNIA EDITION), CBC/CFC (2022), DIVISION OF THE STATE ARCHITECT - DEPARTMENT OF GENERAL SERVICES, AND CITY OF COALINGA STANDARDS.
15. PER NFPA 13 (2022) §18.6.5 BRANCH LINE RESTRAINT SHALL NOT BE REQUIRED WHERE BRANCH LINES ARE SUPPORTED BY RODS LESS THAN 6" IN LENGTH WHEN MEASURED BETWEEN THE TOP OF THE PIPE TO THE POINT OF ATTACHMENT TO THE BUILDING STRUCTURE.

SPRINKLER SYSTEM LEGEND

SYMBOL	DESCRIPTION
	LATERAL SEISMIC BRACE (PERPENDICULAR)
	LONGITUDINAL SEISMIC BRACE (PARALLEL)
	4-WAY SEISMIC BRACE (PARALLEL/PERPENDICULAR)
	LINE RESTRAINT
	PIPE HANGERS
	PENDENT SPRINKLER ON 1" DROP
	UPRIGHT SPRINKLER ON BRANCH LINE
	SEISMIC SEPARATION ASSEMBLY
	HYDRAULIC NODE
	FIRE PIPING
	EXISTING FIRE PIPING

north

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLILE
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
(559) 431-0101 | 24012 | Fresno, CA 93727 FAX (559) 431-1362

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

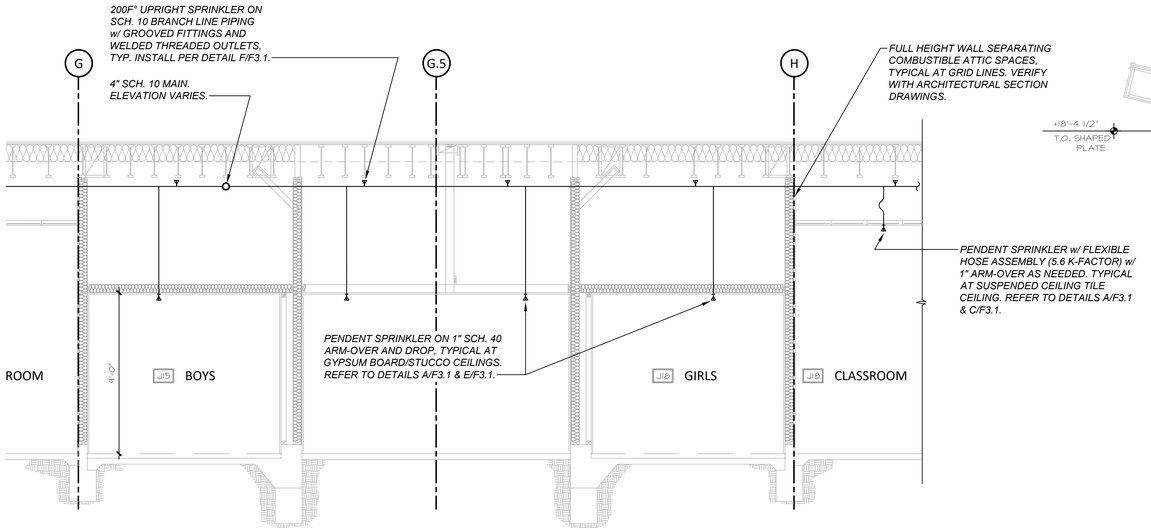
REVISIONS

MANGINI | ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
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(559) 627.0530 Office
(559) 627.1926 Fax

TITLE: FIRE SPRINKLER PLAN

F1.1

PROJECT 24001

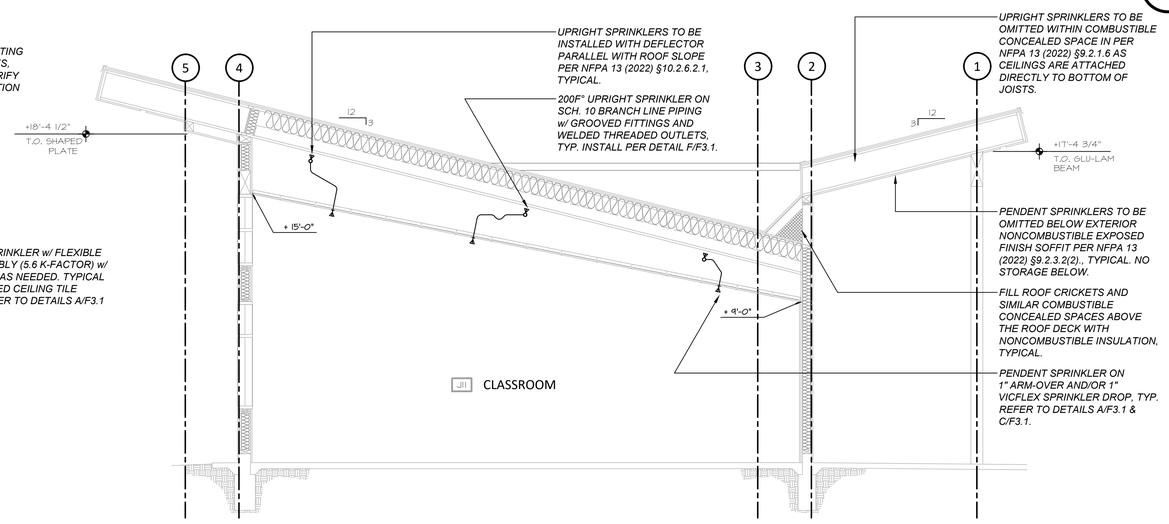


BUILDING SECTION

SCALE: NONE

FSS101

C / F2.0

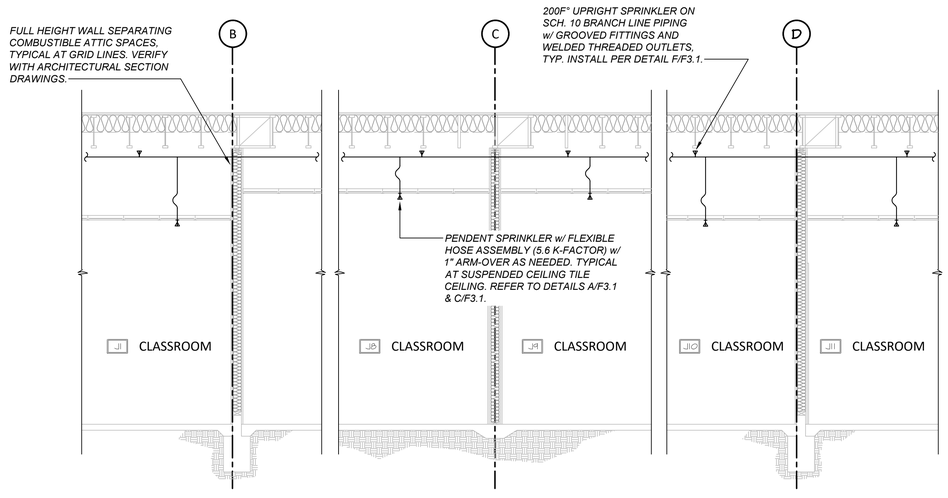


BUILDING SECTION

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FSS101

A / F2.0

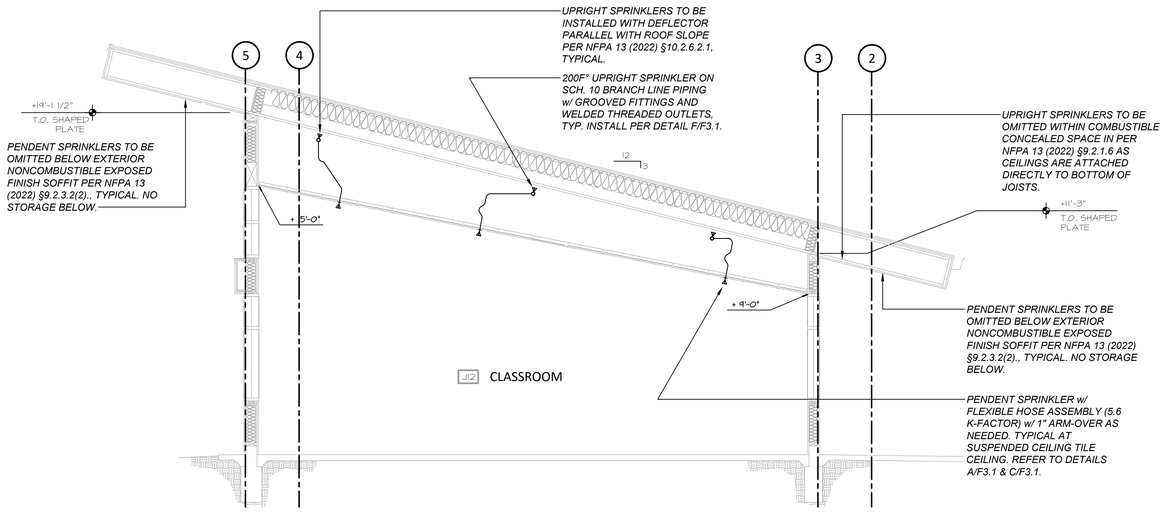


BUILDING SECTION

SCALE: NONE

FSS101

D / F2.0



BUILDING SECTION

SCALE: NONE

FSS101

B / F2.0

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

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TITLE
FIRE SPRINKLER SECTION DRAWINGS

F2.0

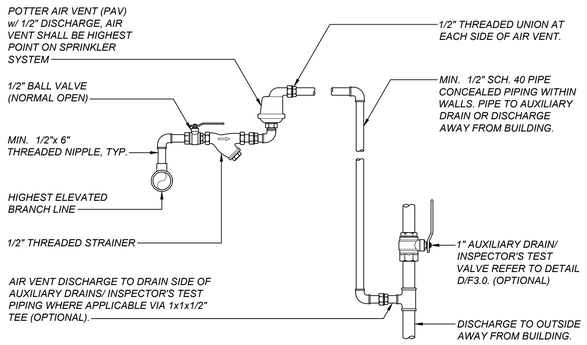
PROJECT 24001

LICENSED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
Fresno, CA 93727
FAX (559) 431-1362

12 February 2025 3:21 PM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\F2.0 FIRE SPRINKLER SECTION DRAWINGS.dwg bolt

P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\F2.0 FIRE SPRINKLER SECTION DRAWINGS.dwg Feb 12 2025 3:21pm



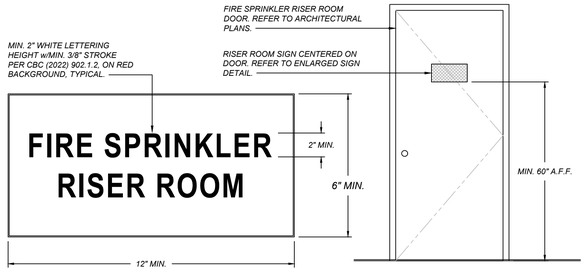
INSTALLATION NOTES:

A. WHERE APPLICABLE, AIR VENT DISCHARGE PIPING (MIN. 1/2" DIA. PIPING/TUBING) MAY DRAIN INTO THE NEAREST PLUMBING AIR VENT.
B. WHERE IT IS NOT PRACTICAL TO PROVIDE A DRAIN, POTTER AUTOMATIC AIR RELEASE w/ DRIP PAN (PAAR-B) MAY BE USED IN LIEU OF POTTER MODEL (PAV).

POTTER AIR VENT

SCALE: NONE FSSXXX

E / F3.0



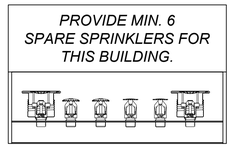
INSTALLATION NOTES:

A. PER CFC §509.1, ROOMS CONTAINING CONTROLS FOR SPRINKLER RISERS AND VALVES OR OTHER FIRE DETECTION, SUPPRESSION OR CONTROL ELEMENTS SHALL BE IDENTIFIED FOR USE OF THE FIRE DEPARTMENT. SUCH SIGNS SHALL BE CONSTRUCTED OF DURABLE MATERIALS, PERMANENTLY INSTALLED, AND READILY VISIBLE.
B. IF THE FIRE SPRINKLER RISER ROOM IS ONLY ACCESSIBLE VIA AN INTERIOR DOOR, ADDITIONAL SIGNS SHALL BE INSTALLED ON APPLICABLE DOORS INDICATING THE DIRECT ROUTE TO THE FIRE SPRINKLER RISER ROOM.
C. THE SIGN INSTALLER SHALL COORDINATE, VERIFY, AND CONFORM WITH THE LOCAL FIRE MARSHAL FOR SPECIFIC FIRE SPRINKLER RISER ROOM SIGN IDENTIFICATION REQUIREMENTS WHICH MAY HAVE ADDITIONAL CRITERIA NOT LISTED ON THIS DETAIL.

FIRE SPRINKLER RISER ROOM SIGNAGE

SCALE: NONE FSS101

B / F3.0



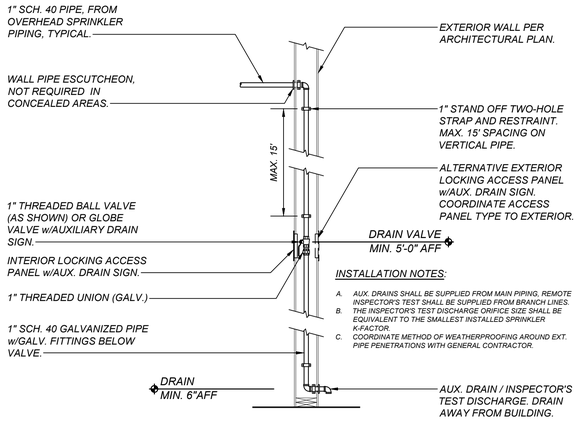
SPARE HEAD BOX NOTES:

1. PER NFPA 13 (2022) §16.2.7.3 THE SPRINKLERS SHALL BE KEPT IN A CABINET LOCATED WHERE THE TEMPERATURE TO WHICH THEY ARE SUBJECTED WILL AT NO TIME EXCEED THE MAXIMUM CEILING TEMPERATURES SPECIFIED IN TABLE 6.2.5.1 FOR EACH OF THE SPRINKLERS WITHIN THE CABINET.
2. THE SPARE HEAD CABINET SHALL BE PLACED IN A SECURE LOCATION, PREFERABLY FASTENED TO A WALL ABOVE 6'-0" A.F.F. LOCATION SHALL BE COORDINATED BY THE OWNER.
3. PER NFPA 13 (2022) §16.2.7.5 THE STOCK OF SPARE SPRINKLERS SHALL INCLUDE ALL TYPES AND RATINGS INSTALLED AND SHALL BE AS FOLLOWS:
   3.1. FOR PROTECTED FACILITIES HAVING UNDER 300 SPRINKLERS — NO FEWER THAN SIX SPRINKLERS.
   3.2. FOR PROTECTED FACILITIES HAVING 300 TO 1000 SPRINKLERS — NO FEWER THAN 12 SPRINKLERS.
   3.3. FOR PROTECTED FACILITIES HAVING OVER 1000 SPRINKLERS — NO FEWER THAN 24 SPRINKLERS.
   3.4. A MINIMUM OF TWO SPRINKLERS OF EACH TYPE AND TEMPERATURE RATING SHOULD BE PROVIDED.
4. PER NFPA 13 (2022) §16.2.7.6 ONE SPRINKLER WRENCH AS SPECIFIED BY THE SPRINKLER MANUFACTURER SHALL BE PROVIDED IN THE CABINET FOR EACH TYPE OF SPRINKLER INSTALLED TO BE USED FOR THE REMOVAL AND INSTALLATION OF SPRINKLERS IN THE SYSTEM. ONE SPRINKLER WRENCH DESIGN CAN BE APPROPRIATE FOR MANY TYPES OF SPRINKLERS AND SHOULD NOT REQUIRE MULTIPLE WRENCHES OF THE SAME DESIGN.
5. PER NFPA 13 (2022) §16.2.7.7 A LIST OF THE SPRINKLERS INSTALLED IN THE PROPERTY SHALL BE POSTED IN THE SPRINKLER CABINET. THE LIST SHALL INCLUDE THE FOLLOWING:
   5.1. SPRINKLER IDENTIFICATION NUMBER (SIN) IF EQUIPPED; OR THE MANUFACTURER, MODEL, ORIFICE, DEFLECTOR TYPE, THERMAL SENSITIVITY, AND PRESSURE RATING.
   5.2. GENERAL DESCRIPTION.
   5.3. QUANTITY OF EACH TYPE TO BE CONTAINED IN THE CABINET.
   5.4. ISSUE OR REVISION DATE OF THE LIST.

SPARE HEAD BOX DETAIL

SCALE: NONE FRM010

C / F3.0



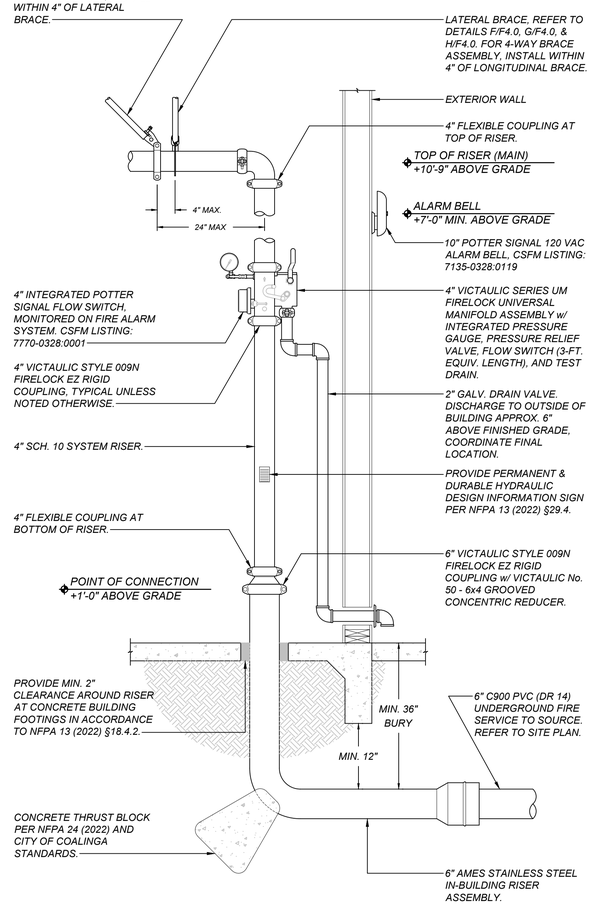
INSTALLATION NOTES:

A. AUX. DRAINS SHALL BE SUPPLIED FROM MAIN PIPING, REMOTE INSPECTOR'S TEST SHALL BE SUPPLIED FROM BRANCH LINES.
B. THE INSPECTOR'S TEST DISCHARGE ORIFICE SIZE SHALL BE EQUIVALENT TO THE SMALLEST INSTALLED SPRINKLER K-FACTOR.
C. COORDINATE METHOD OF WEATHERPROOFING AROUND EXT. PIPE PENETRATIONS WITH GENERAL CONTRACTOR.

CONCEALED AUXILIARY DRAIN DETAIL/ REMOTE INSPECTOR'S TEST

SCALE: NONE FRM010

D / F3.0





TITLE 19 ARTICLE 906 (A): A LABEL OF THE SELF-ADHESIVE TYPE SHALL BE PLACED ON THE FIRE DEPARTMENT CONNECTION OR ON THE RISER FOR FIRE SPRINKLER SYSTEM WITH THE DATE OF SERVICE AND/OR DATE INSTALLATION WAS PERFORMED AND LICENSE NUMBER OF PERSON PERFORMING SERVICE WORK.

RISER NOTES:

1. EACH RISER DETAIL IS A SCHEMATIC REPRESENTATION OF THE RISER(S). ORIENTATION OF FITTINGS, VALVES, GAUGES, AND OTHER DEVICES HAVE BEEN MODIFIED FOR ILLUSTRATION PURPOSES AND MAY VARY IN ACTUAL INSTALLATION.
2. PER NFPA 13 (2022) §18.2.3.1 - A FLEXIBLE COUPLING SHALL BE INSTALLED WITHIN 24" OF THE TOP AND BOTTOM OF ALL RISERS. RISERS LESS THAN 3 FT IN LENGTH MAY OMIT FLEX COUPLINGS. ONE FLEX COUPLING IS ADEQUATE FOR RISERS 3' TO 7' IN LENGTH.
3. PER NFPA 13 (2022) §18.5.8.3 - WHEN A FOUR-WAY BRACE AT THE TOP OF A RISER IS ATTACHED ON THE HORIZONTAL PIPING, IT SHALL BE WITHIN 24" OF THE CENTERLINE OF THE RISER AND THE LOADS FOR THAT BRACE SHALL INCLUDE BOTH THE VERTICAL AND HORIZONTAL PIPE.
4. PER NFPA 13 (2022) §29.4. - THE INSTALLING CONTRACTOR SHALL IDENTIFY A HYDRAULICALLY DESIGNED SPRINKLER SYSTEM WITH A PERMANENTLY MARKED WEATHERPROOF METAL OR RIGID PLASTIC SIGN SECURED WITH CORROSION RESISTANT WIRE, CHAIN, OR OTHER APPROVED MEANS.
5. PER NFPA 13 (2022) §29.6.1 - THE INSTALLING CONTRACTOR SHALL PROVIDE A GENERAL INFORMATION SIGN USED TO DETERMINE SYSTEM DESIGN BASIS AND INFORMATION RELEVANT TO THE INSPECTION, TESTING, AND MAINTENANCE REQUIREMENTS REQUIRED BY NFPA 25.
6. LOCATION OF 2" SYSTEM DRAIN TO BE COORDINATED WITH GENERAL CONTRACTOR. DRAIN PIPE AND FITTINGS SHALL BE GALV.
7. FIRE RISER ROOM SHALL COMPLY WITH CBC (2022) 901.3 PER CFC (2022) SECTION 509.1 FIRE EQUIPMENT ROOMS SHALL BE IDENTIFIED IN AN APPROVED MANNER. APPROVED SIGNS SHALL BE DURABLE, PERMANENT, AND VISIBLE.

RISER DETAIL: 4" SYSTEM RISER ON 6" IN-BUILDING RISER (INT)

SCALE: NONE FSSXXX

A / F3.0

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

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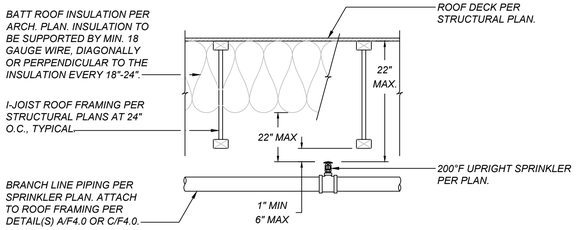
TITLE: RISER AND PIPING DETAILS

F3.0

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
BRYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
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Fresno, CA 93727
FAX (559) 431-1362



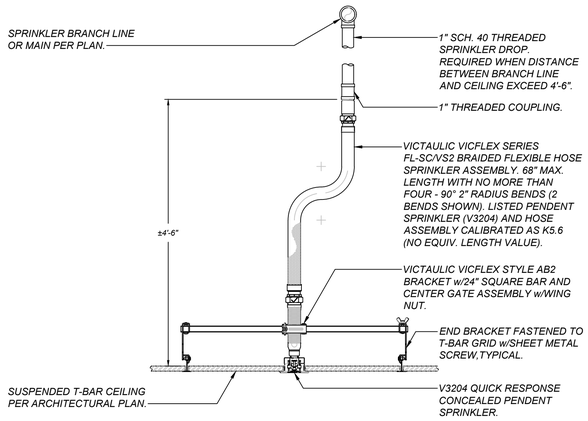
INSTALLATION NOTES:

A. INSTALLATION OF SPRINKLER HEAD SHALL BE IN ACCORDANCE TO NFPA 13 (2022) §10.2.6.1.2(1): OBSTRUCTED CONSTRUCTION, IN WHICH SPRINKLER DEFLECTORS SHALL BE A MINIMUM 1" TO A MAXIMUM 6" FROM THE HORIZONTAL PLANE BELOW STRUCTURAL MEMBERS AND A MAXIMUM 22" BELOW THE CEILING/ROOF DECK.
B. PER NFPA 13 (2022) §9.5.4.1.3, WHEN INSULATION IS INSTALLED DIRECTLY AGAINST UNDERSIDE OF THE CEILING OR ROOF STRUCTURE, THE DEFLECTOR DISTANCE SHALL BE MEASURED FROM THE BOTTOM OF THE INSULATION. INSTALLATION OF THE INSULATION SHALL COMPLY WITH NFPA 13 §9.5.4.1.3.2 & §9.5.4.1.3.3.
C. PER NFPA 13 (2022) §9.4.1.3 UPRIGHT SPRINKLERS FRAME ARMS SHALL BE INSTALLED PARALLEL TO THE BRANCH LINE AND §9.5.4.2, SPRINKLER DEFLECTORS SHALL BE ALIGNED PARALLEL TO CEILINGS AND ROOFS.

UPRIGHT SPRINKLER & BRANCH LINE INSTALLATION AT I-JOIST ROOF FRAMING

F3.1

SCALE: NONE FSSXXX



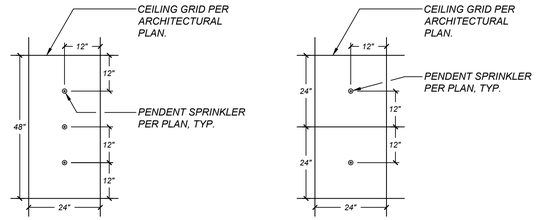
VICFLEX SERIES FL-SC/VS2 FLEXIBLE SPRINKLER DROP w/CONCEALED PENDENT SPRINKLER (V3204)

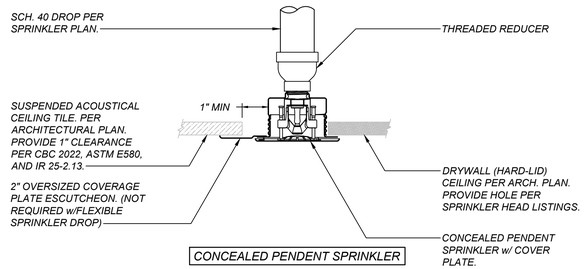
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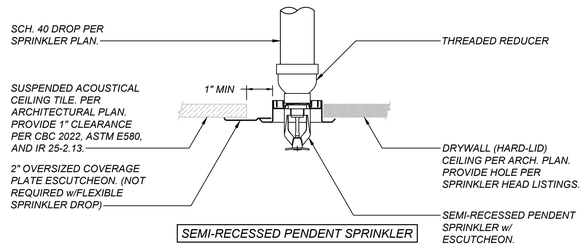
SCALE: NONE FSSXXX

INSTALLATION NOTES:

A. PENDENT SPRINKLER HEADS INSTALLED WITHIN SUSPENDED CEILING TILES SHALL BE POSITIONED "CENTER OF TILE" AS INDICATED PER PROJECT SPECIFICATIONS. HOWEVER, SPRINKLER SPACING SHALL NOT EXCEED THE MAXIMUM SPRINKLER SPACING PER NFPA 13 (2022) §10.2.5.1, §10.2.5.2, §10.2.5.2.3.1, §11.2.3.1, §11.2.3.2 AND FIRE SPRINKLER MANUFACTURER LISTINGS.
B. PENDENT SPRINKLER HEADS INSTALLED IN DRY-WALL CEILINGS SHALL BE POSITIONED PER PLAN, ALIGNED WITH LIGHTING, AUDIO, AND OTHER CEILING FEATURES. HOWEVER, SPRINKLER SPACING SHALL NOT EXCEED MAXIMUM NFPA 13 REQUIREMENTS AND FIRE SPRINKLER MANUFACTURER LISTINGS.







SPRINKLER HEAD INSTALLATION DETAIL

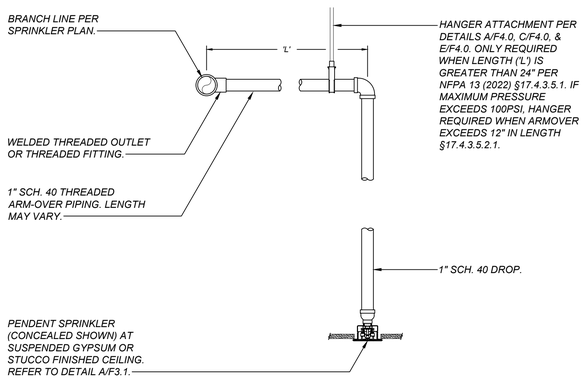
F3.1

SCALE: NONE FSSXXX

NOT USED

F3.1

SCALE: NONE FSSXXX

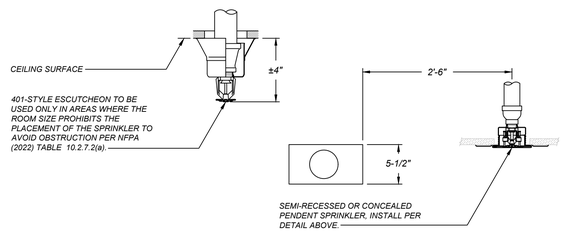


ARM-OVER PIPING w/ 1" DROP DETAIL

F3.1

SCALE: NONE FSSXXX

THIS DETAIL IS TO BE USED FOR AVOIDING OBSTRUCTIONS PRESENTED BY SURFACE MOUNTED LIGHTING IN GYPBOARD CEILINGS. SPRINKLER SPACING TO BE IN ACCORDANCE WITH NFPA 13 (2022) FOR PARTICULAR HAZARD, AND TYPE OF SPRINKLER WHERE OBSTRUCTION OCCURS. DETAIL AS SHOWN IS FOR STANDARD SPRAY PENDENT SPRINKLER, WITH PRESSURES FROM 15 PSI TO 100 PSI ONLY. IF EXTENDED COVERAGE OR SPECIAL LISTED SPRINKLERS ARE USED, REFER TO APPROPRIATE NFPA 13 (2022) TABLE FOR THE SPECIFIC REQUIREMENTS FOR EACH SPECIFIC TYPE OF SPRINKLER.



NFPA 13 (2022) TABLE 10.2.7.2(a) POSITIONING OF SPRINKLERS TO AVOID OBSTRUCTIONS TO DISCHARGE	
DISTANCE FROM SPRINKLERS TO SIDE OF OBSTRUCTION	MAX. ALLOWABLE DISTANCE OF DEFLECTOR ABOVE BOTTOM OF OBSTRUCTION
2" TO LESS THAN 2'-6"	5-1/2"
COORDINATE ALL CONCEALED PENDENT SPRINKLERS W/ CURRENT LIGHT LAYOUT AND TYPES. AN AREAS W/ SURFACE MOUNTED LIGHT FIXTURES, UTILIZE OBSTRUCTION SPACING PER NFPA 13 (2022). IF SIZE OF ROOM PROHIBITS SPACING REQUIREMENTS TO BE MET, UTILIZE ST-1E 401 ESCUTCHEON W/ PENDENT SPRINKLER OF SAME TEMPERATURE, K-FACTOR, AND DESIGN CRITERIA.	

SPRINKLER HEAD OBSTRUCTION DETAIL

F3.1

SCALE: NONE FSSXXX

NOT USED

F3.1

SCALE: NONE FSSXXX

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34290 REN: 05-31-25 STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

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REVISIONS

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MANGINI ASSOCIATES INC.
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(559) 627.1926 Fax

TITLE
INSTALLATION DETAILS

F3.1

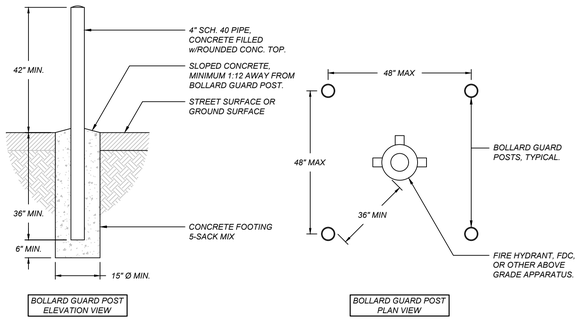
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER BRIAN W. CARLSON No. M34846 Exp. 6-30-26 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
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12 February 2025 3:21 PM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\F3.0 F3.1 F3.2 DETAILS.dwg bolt

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BOLLARD GUARD POST ELEVATION VIEW

BOLLARD GUARD POST PLAN VIEW

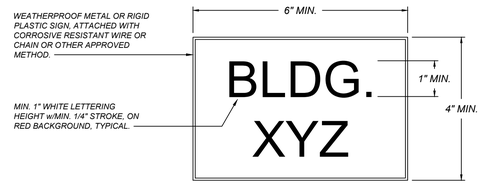
INSTALLATION NOTES:

A. BOLLARD GUARD POSTS SHALL BE INSTALLED IN ACCORDANCE TO CFC 2022 §312.2. GUARD POSTS SHALL BE CONSTRUCTED OF STEEL NOT LESS THAN 4-INCHES IN DIAMETER AND CONCRETE FILLED.
B. STEEL POSTS SHALL BE PAINTED WITH A CORROSIVE PROTECTIVE ENAMEL PAINT FINISH. COLOR SHALL BE SPECIFIED BY THE ARCHITECT.

PROTECTIVE BOLLARD DETAIL

SCALE: NONE FSS101

F / F3.2



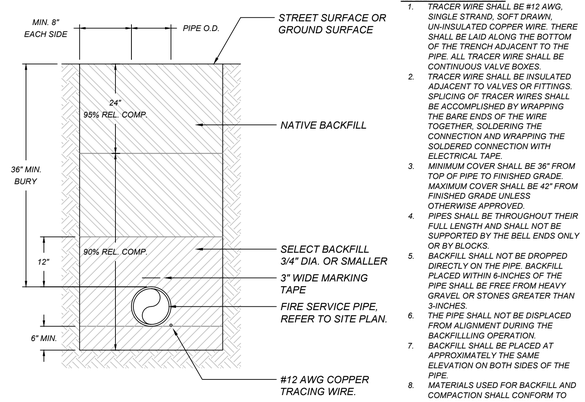
INSTALLATION NOTES:

A. PER NFPA 13 (2022) TABLE A.16.17 SPRINKLER SYSTEM SIGNAGE SUMMARY, SYSTEM CONTROL VALVES AND FIRE DEPARTMENT CONNECTIONS SHALL HAVE IDENTIFICATION SIGNAGE. IDENTIFICATION SIGNS SHALL BE INSTALLED AT A MINIMUM 18" ABOVE FINISH GRADE MEASURED FROM THE BOTTOM EDGE OF THE SIGN.
B. PER NFPA 13 (2022) §16.9.3.5 IDENTIFICATION SIGNS ON CONTROL VALVES SHALL BE PROVIDED AT EACH VALVE TO INDICATE ITS FUNCTION AND WHAT IT CONTROLS.
C. PER NFPA 13 (2022) §16.12.5.8 (CFC 2022 §912.5) EACH FIRE DEPARTMENT CONNECTION TO SPRINKLER SYSTEMS SHALL BE DESIGNATED BY A SIGN HAVING RAISED OR ENGRAVED LETTERS AT LEAST 1-INCH IN HEIGHT ON PLATE OR FITTING READING SERVICE DESIGN.
D. WHEN SYSTEM DEMANDS ARE GREATER THAN 150PSI, THE SIGN SHALL INDICATE THE PRESSURE REQUIRED AT THE INLETS TO DELIVER THE GREATEST SYSTEM DEMAND.
E. WHERE LOCAL JURISDICTION REQUIRES ADDRESS OR BUILDING IDENTIFICATION ON POST INDICATOR VALVES INDICATE FIRE DEPARTMENT CONNECTIONS. IDENTIFICATION MARKING CAN BE PAINTED DIRECTLY ON THE APPARATUS IN LIEU OF SIGNAGE. VERIFY REQUIREMENT WITH LOCAL JURISDICTION REGARDING MINIMUM LETTERING HEIGHT AND PAINT COLOR REQUIREMENTS.

SITE APPARATUS SIGNAGE

SCALE: NONE FSS101

D / F3.2



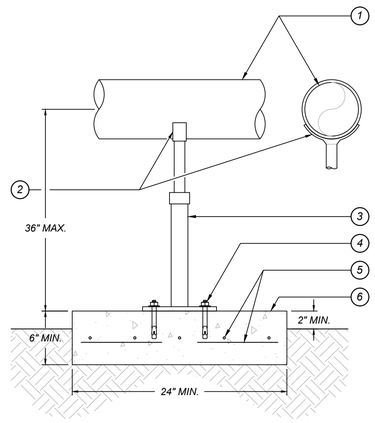
INSTALLATION NOTES:

1. TRACER WIRE SHALL BE #12 AWG, SINGLE STRAND, SOFT DRAWN, UN-INSULATED COPPER WIRE. THERE SHALL BE LAID ALONG THE BOTTOM OF THE TRENCH ADJACENT TO THE PIPE. ALL TRACER WIRE SHALL BE CONTINUOUS VALVE BOXES.
2. TRACER WIRE SHALL BE INSULATED ADJACENT TO VALVES OR FITTINGS. SPLICING OF TRACER WIRES SHALL BE ACCOMPLISHED BY WRAPPING THE BARE ENDS OF THE WIRE TOGETHER, SOLDERING THE CONNECTION AND WRAPPING THE SOLDERED CONNECTION WITH ELECTRICAL TAPE.
3. MINIMUM COVER SHALL BE 36" FROM TOP OF PIPE TO FINISHED GRADE. MAXIMUM COVER SHALL BE 42" FROM FINISHED GRADE UNLESS OTHERWISE APPROVED.
4. PIPES SHALL BE THROUGHOUT THEIR FULL LENGTH AND SHALL NOT BE SUPPORTED BY THE BELL ENDS ONLY OR BY BLOCKS.
5. BACKFILL SHALL NOT BE DROPPED DIRECTLY ON THE PIPE. BACKFILL PLACED WITHIN 6-INCHES OF THE PIPE SHALL BE FREE FROM HEAVY GRAVEL OR STONES GREATER THAN 3-INCHES.
6. THE PIPE SHALL NOT BE DISPLACED FROM ALIGNMENT DURING THE BACKFILLLING OPERATION.
7. BACKFILL SHALL BE PLACED AT APPROXIMATELY THE SAME ELEVATION ON BOTH SIDES OF THE PIPE.
8. MATERIALS USED FOR BACKFILL AND COMPACTION SHALL CONFORM TO SOILS REPORT REQUIREMENTS.

PIPE TRENCH DETAIL

SCALE: NONE FSS101

A / F3.2



DETAIL KEYNOTES:

1. PIPE OR DOUBLE CHECK DETECTOR ASSEMBLY VALVE.
2. B3093-10 ADJUSTABLE PIPE SADDLE SUPPORT.
3. TOLCO B30887-3 THREADED BASE STAND. MINIMUM DIAMETER 3".
4. (4) HILTI KWIK-BOLT TZ SS 304,1/2"x 4-1/2". MIN. 3-1/4" EMBEDMENT, ICC ESR-1917.
5. #4 REBAR @ 6" O.C. EACH WAY.
6. CONCRETE PAD, MIN. THICKNESS 6".

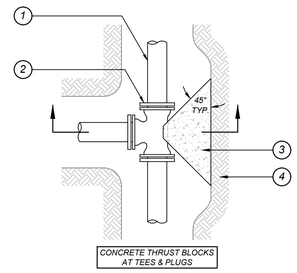
INSTALLATION NOTES:

A. ALL ANCHORS AND HARDWARE SHALL BE STAINLESS STEEL.
B. MAXIMUM SIZE OF SUPPORTED PIPE/BACKFLOW DEVICE, 10" DIA.
C. MAXIMUM SPACING BETWEEN PIPE STANDS, 6-FEET.

PIPE SUPPORT ON GRADE

SCALE: NONE FSS101

G / F3.2



KEYNOTES:

1. UNDERGROUND FIRE SERVICE PIPING, REFER TO FIRE PROTECTION SITE PLAN.
2. UNDERGROUND FIRE SERVICE PIPE FITTING (TEE, BEND, OR PLUG).
3. CONCRETE THRUST BLOCK. PROVIDE MINIMUM BEARING SURFACE PER TABLE BELOW. NON-REINFORCED, 5-SACK MIX - MIN. 2500 PSI IN 28-DAYS.
4. UNDISTURBED EARTH. MINIMUM HORIZONTAL BEARING STRENGTH OF 1500 lb/ft².
5. CONCRETE ANCHOR THRUST BLOCK (FOR VERTICAL BEND). 5-SACK MIX - MIN. 2500 PSI IN 28-DAYS. CONCRETE ANCHOR BLOCK BASE WIDTH SHALL BE MIN. 2x NOMINAL DIAMETER OF PIPE, WITH A MIN. BLOCK HEIGHT OF 12", MEASURED FROM THE THE UNDISTURBED EARTH TO THE BOTTOM OF THE HORIZONTAL FIRE SERVICE PIPING.
6. NO. 5 REBAR ANCHORS (MIN. TWO). REBAR SHALL HAVE CORROSIVE RESISTANT FINISH.

INSTALLATION NOTES:

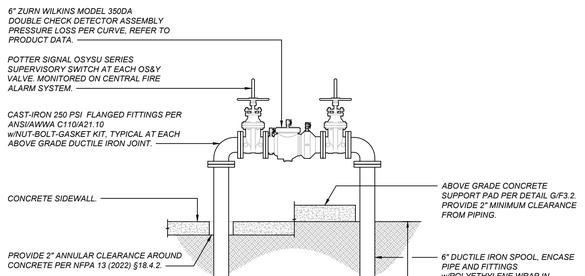
A. INSTALLATION OF UNDERGROUND FIRE SERVICE PIPING SHALL BE DONE IN ACCORDANCE TO NFPA 24 AND LOCAL STANDARD REQUIREMENTS.
B. CONCRETE THRUST BLOCKS SHALL BE INSTALLED AT ALL ELBOWS, TEES, CROSSES, AND PLUGS.
C. CONCRETE THRUST BLOCKS SHALL BE POURED AGAINST UNDISTURBED EARTH. CONTACT WITH FITTINGS SHALL BE MADE ON THE BODY OF THE FITTING ONLY AND NOT ON THE BELL OR FLANGE ENDS.
D. WHERE THRUST BLOCKING MAY BE IMPRACTICAL DUE TO SITE CONDITIONS, IMPLEMENTATION OF A RESTRAINED JOINT SYSTEM AS LISTED IN NFPA 24 §10.6.2 MAY BE USED IN LIEU OF CONCRETE THRUST BLOCKS.
E. BACKFILL TRENCH PER DETAIL A/F3.2.

REQUIRED HORIZONTAL BEARING BLOCK AREA					
PIPE DIA.	TEE/PLUGS	90°-BEND	45°-BEND	22½°-BEND	11¼°-BEND
3-INCH	2.6 ft²	2.6 ft²	1.4 ft²	0.7 ft²	0.4 ft²
4-INCH	3.8 ft²	3.8 ft²	2.1 ft²	1.0 ft²	0.5 ft²
6-INCH	7.9 ft²	7.9 ft²	4.3 ft²	2.2 ft²	1.1 ft²
8-INCH	13.6 ft²	13.6 ft²	7.4 ft²	3.8 ft²	1.9 ft²
10-INCH	20.5 ft²	20.5 ft²	11.1 ft²	5.7 ft²	2.8 ft²
12-INCH	29.0 ft²	29 ft²	15.7 ft²	8.0 ft²	4.0 ft²
14-INCH	39.0 ft²	39 ft²	21.1 ft²	10.8 ft²	5.4 ft²
INFORMATION ABOVE BASED ON NFPA 24 TABLE A.10.6.1(b) - MIN. HORIZONTAL BEARING LOAD: 1500lb/ft²					

CONCRETE THRUST BLOCK DETAILS AND TABLE

SCALE: NONE FSS101

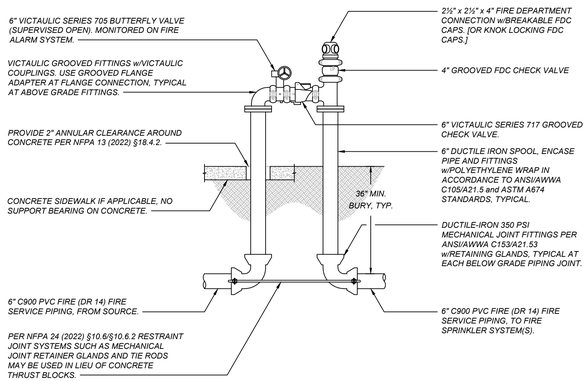
E / F3.2



6" BACKFLOW PREVENTOR DETAIL

SCALE: NONE FSS101

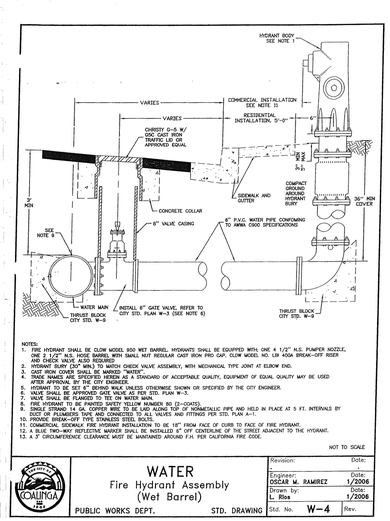
B / F3.2



ABOVE GRADE REMOTE RISER ASSEMBLY BUTTERFLY VALVE - CHECK VALVE - FDC

SCALE: NONE FSS101

C / F3.2



APPROVALS

FILE # 10-28 APPLICATION # 02-122658

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SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI | ARCHITECTURE | INGENUITY

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4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-7636 Office
(559) 627-1926 Fax

TITLE
SITE FIRE DETAILS

F3.2

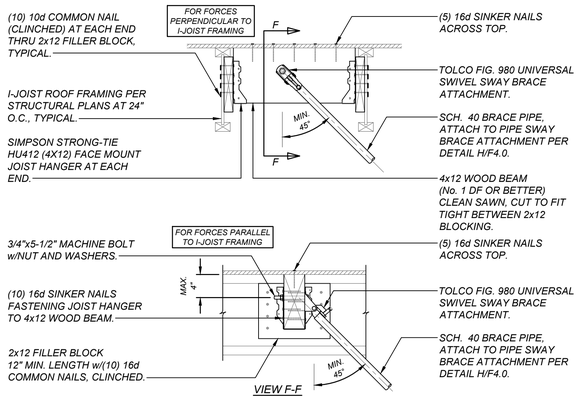
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
BRYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
Fresno, CA 93727
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24012

12 February 2025 3:21 PM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\F3.0 F3.1 F3.2 DETAILS.dwg bolt

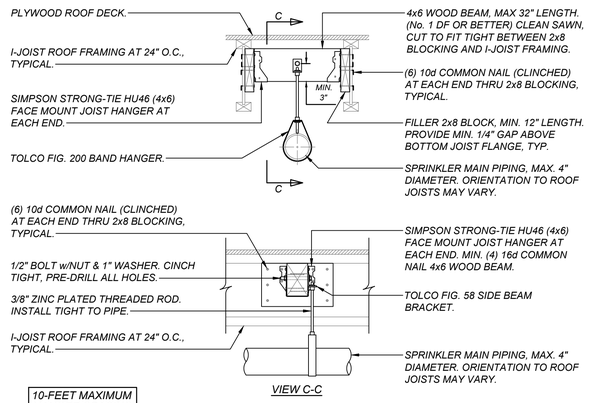
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4x12 WOOD BEAM ASSEMBLY FOR SEISMIC BRACING ATTACHMENT AT I-JOIST (PERPENDICULAR AND PARALLEL FORCES)

F / F4.0

SCALE: NONE FSS006



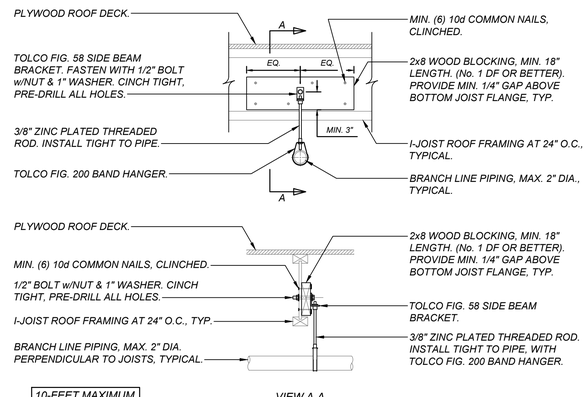
10-FEET MAXIMUM HANGER SPACING

SYMBOL

4x6 WOOD BLOCKING SPANNING I-JOIST FRAMING - 4" MAX. PIPE DIAMETER

C / F4.0

SCALE: NONE FSS105-11.19



10-FEET MAXIMUM HANGER SPACING

SYMBOL

BRANCH LINE HANGER SUPPORT AT I-JOIST FRAMING (2" MAX. PIPE DIAMETER)

A / F4.0

SCALE: NONE FSS101-11.19

2x8 BLOCKING ASSEMBLY FOR SEISMIC BRACING ATTACHMENT AT I-JOIST (PARALLEL FORCES ONLY)

G / F4.0

SCALE: NONE FSS007

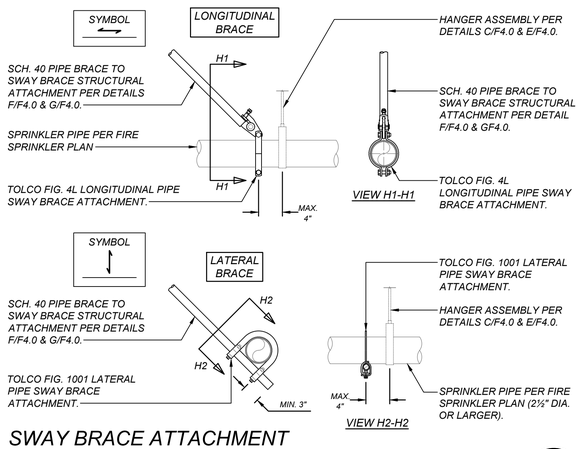
40-ft. MAX. SPACING PER NFPA 13 (2022) §18.5.5.2.2.

SYMBOL ± BL

LATERAL BRACE ATTACHMENT AT 2" BRANCH LINE PIPING

D / F4.0

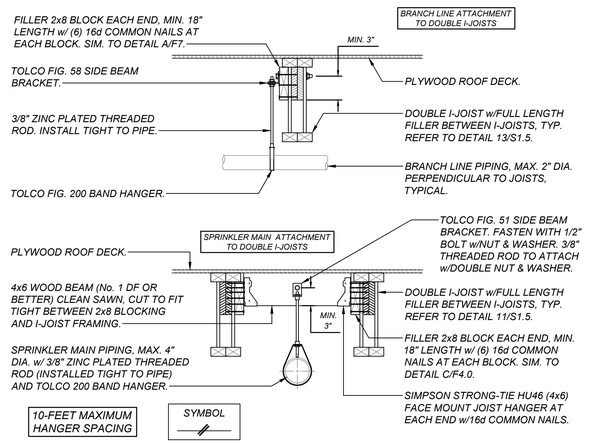
SCALE: 2"= 1'-0" FSS007



SWAY BRACE ATTACHMENT AT SPRINKLER MAIN PIPING

H / F4.0

SCALE: NONE FSS008



10-FEET MAXIMUM HANGER SPACING

SYMBOL

HANGER ATTACHMENTS TO DOUBLE I-JOIST

E / F4.0

SCALE: NONE FSS005

MAX. SPACING PER NFPA 13 (2022) TABLE 18.6.4(a)

SYMBOL

BRANCH LINE RESTRAINT AT I-JOIST FRAMING

B / F4.0

SCALE: NONE FSS102-11.19

MAX. SPACING OF BRANCH LINE RESTRAINTS

PIPE DIA. (INCHES)	SEISMIC COEFFICIENT - C_p			
	$C_p \leq 0.50$	$0.50 < C_p \leq 0.71$	$0.71 < C_p \leq 1.40$	$C_p \geq 1.40$
1	43-FT	36-FT	26-FT	22-FT
1¼	46-FT	39-FT	27-FT	24-FT
1½	49-FT	41-FT	29-FT	25-FT
2	53-FT	45-FT	31-FT	27-FT

NFPA 13 (2022) TABLE 18.6.4(a)

MAXIMUM SWAY BRACE SPACING

BASED ON DETAILS ON THIS SHEET ONLY

PIPE DIA.	ORIENTATION OF BRACE	MAX. SPACING
4"	LATERAL	24'-0"
4"	LONGITUDINAL	24'-0"
2"	LONGITUDINAL	60'-0"

MAXIMUM PIPE BRACE LENGTH

NFPA 13, TABLE 18.5.11.8(b) WITH I/r=200

BRACE PIPE DIA. (INCHES)	BRACE LENGTH
1	7'-0"
1¼	9'-0"
1½	10'-4"
2	13'-1"

APPROVALS

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REGISTERED PROFESSIONAL ENGINEER BRIAN W. CARLSON No. M34846 Exp. 6-30-26 MECHANICAL STATE OF CALIFORNIA

TITLE
STRUCTURAL DETAILS

F4.0

PROJECT 24001

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101 Fresno, CA 93727
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12 February 2025 3:21 PM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\6 F\F4.0 F4.1 STRUCTURAL DETAILS.dwg bolt

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

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No. C-34280
REN: 05-31-25
STATE OF CALIFORNIA

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TITLE
HVAC PLAN

M1.0

PROJECT 24001

GENERAL NOTES:

1. *THE INTENT OF THE DRAWING AND SPECIFICATIONS IS TO CONSTRUCT THE BUILDING IN ACCORDANCE WITH THE 2022 EDITION OF TITLE 24, CALIFORNIA CODE OF REGULATIONS. CHANGES TO THE STRUCTURAL, ACCESSIBILITY OR FIRE AND LIFE-SAFETY PORTIONS OF THE APPROVED PLANS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR CONSTRUCTION CHANGE DOCUMENT AS REQUIRED IN SECTION 4-338, PART 1, TITLE 24, CCR, AND SHALL BE SUBMITTED TO AND APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK. DOCUMENTS SHALL BE PREPARED AND SUBMITTED TO DSA IN COMPLIANCE WITH DSA INTERPRETATION OF REGULATION IR A-6.*
2. *LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY. THE HVAC BUILDING PLANS HAVE BEEN PREPARED TO MATCH THE ARCHITECTURAL PLANS. IF DIFFERENCES OCCUR, THE ARCHITECTURAL PLANS ARE TO TAKE PRECEDENCE. THE ACTUAL LOCATIONS OF ALL MATERIALS, PIPING, DUCTWORK, FIXTURES, EQUIPMENT, SUPPORTS, ETC. SHALL BE CAREFULLY PLANNED, PRIOR TO INSTALLATION OF ANY WORK, TO AVOID ALL INTERFERENCE WITH EACH OTHER, OR WITH STRUCTURAL, ELECTRICAL, ARCHITECTURAL, OR OTHER ELEMENTS. ALL DUCT AND PIPE OFFSET ELBOWS FOR COORDINATION BETWEEN TRADES ARE NOT SHOWN. CONTRACTOR SHALL INCLUDE SUFFICIENT FUNDS FOR THE COORDINATION OFFSETS IN THE BID. VERIFY THE PROPER VOLTAGE AND PHASE OF ALL EQUIPMENT WITH THE ELECTRICAL PLANS. ALL CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER PRIOR TO THE INSTALLATION OF ANY WORK OR THE ORDERING OF ANY EQUIPMENT.*
3. *WHEN INSTALLING DRILLED-IN ANCHORS AND/OR POWDER-DRIVEN PINS IN EXISTING NON-PRESTRESSED CONCRETE, USE CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE EXISTING REINFORCING BARS. WHEN INSTALLING THEM INTO EXISTING PRESTRESSED CONCRETE (PRE- OR POST-TENSIONED), LOCATE THE PRESTRESSED TENDONS BY USING A NON-DESTRUCTIVE METHOD PRIOR TO INSTALLATION. EXERCISE EXTREME CARE AND CAUTION TO AVOID CUTTING OR DAMAGING THE TENDONS DURING INSTALLATION. MAINTAIN A MINIMUM CLEARANCE OF ONE INCH BETWEEN THE REINFORCEMENT AND THE DRILLED-IN ANCHOR AND/OR PIN.*

KEYNOTES: (THIS SHEET ONLY)

1. *SEE DETAIL A/M5.1. FOR EQUIPMENT CLOSET.*
2. *UNDERCUT DOOR 1" SEE ARCH.*
3. *12"x12" E.A. DUCT FROM EXHAUST FAN ON ROOF. SEE SHEET M3.0 FOR CONTINUATION.*
4. *REFRIGERANT PIPING FROM ODU OR CU ON ROOF. SEE SHEET M3.0 FOR CONTINUATION, REFER TO SCHEDULE FOR SIZE.*
5. *RETURN AIR GRILLE IN WALL. SEE DETAIL A/M5.1 FOR MORE INFORMATION.*
6. *OUTSIDE INTAKE LOUVER IN WALL. SEE DETAIL A/M5.1 FOR MORE INFORMATION.*
7. *14"x14" E.A. DUCT FROM EXHAUST FAN ON ROOF. SEE SHEET M3.0 FOR CONTINUATION.*
8. *C 22"x22" 450 CFM*
9. *THERMOSTAT & CO2 SENSOR MOUNTED ON WALL, 48" TO TOP OF BOX, FOR CONTROL OF HVAC UNIT(S) SERVING SAME SPACE. COORDINATE WITH ARCH AND CONTROLS CONTRACTOR FOR PLACEMENT.*

4. *MEP COMPONENT ANCHORAGE NOTE:*

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

1. *ALL PERMANENT EQUIPMENT AND COMPONENTS.*
2. *TEMPORARY OR MOVABLE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.*
3. *TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVER 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 THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

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

5. *PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE:*

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

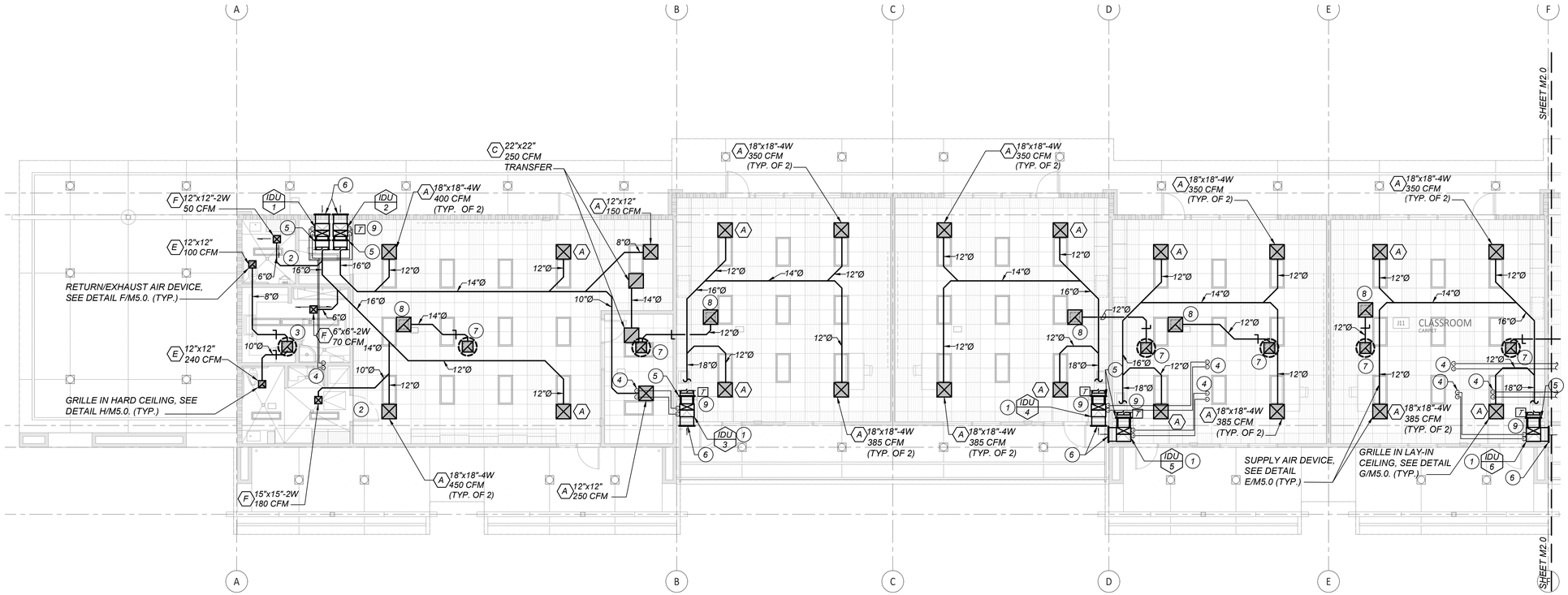
THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI (OSHPD) OPM FOR 2022 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL 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 THE APPLICABLE HCAI (OSHPD) PRE-APPROVAL (OPM#) # _____ .

6. *PENETRATIONS THROUGH FIRE RATED WALLS, FLOOR/CEILING, AND ROOF/CEILING ASSEMBLIES SHALL BE SEALED USING AN APPROVED SYSTEM CAPABLE OF PREVENTING THE PASSAGE OF FLAMES AND HOT GASES WHEN SUBJECTED TO THE REQUIREMENTS OF THE TEST STANDARD SPECIFIC TO FIRE STOPS PER 2022 CBC SECTION 714. THIS INCLUDES EXISTING PIPE AND CONDUIT THROUGH NEW ASSEMBLIES. CUSTOM DESIGNED SYSTEMS WHICH COMBINE COMPONENTS FROM DIFFERENT APPROVED SYSTEMS BUT HAVE NOT BEEN TESTED AS A COMPLETE ASSEMBLY WILL NOT BE ACCEPTABLE. FOR FIRE STOPS FOR PIPE PENETRATIONS SEE SPECIFICATIONS.*
7. *DUCTWORK SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. WHERE ACOUSTIC LINING IS SHOWN, INCREASE EACH SHEET METAL DIMENSION TO ACCOMMODATE LINING & MAINTAIN CLEAR INSIDE DUCT DIMENSIONS SHOWN.*
8. *SA DUCTWORK SHALL BE 1" PRESSURE CLASS, AND RA & EA DUCTWORK SHALL 1" PRESSURE CLASS UNLESS OTHERWISE NOTED.*
9. *A DSA CERTIFIED PROJECT INSPECTOR (CLASS 2) EMPLOYED BY THE DISTRICT & APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-338, PART 1, TITLE 24, CCR.*
10. *A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.*



1 HVAC PLAN

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

north

AIR CONDITIONING LEGEND		
SYMBOL	ITEM	ABBR
	ROUND DUCT	Ø
	FLAT OVAL DUCT	⬭
	SHEET METAL DUCT	—
	ACOUSTIC LINING FOR DUCT OR GRILLES	(L)
	DUCT W/EXT INSULATION & GALV. SM SUNSHIELD	—
	SUPPLY AIR DUCT DROP	—
	RETURN AIR DUCT DROP	—
	EXHAUST DUCT AIR DROP	—
	SUPPLY AIR DUCT RISE	—
	RETURN AIR DUCT RISE	—
	EXHAUST AIR DUCT RISE	—
	TURNING VANES	TV
	EXTRACTOR	—
	VOLUME CONTROL DAMPER W/LOCKING QUADRANT	VCD
	OPPOSED BLADE DAMPER	OBD
	BACKDRAFT DAMPER	BDD
	VOLUME CONTROL DAMPER W/ REMOTE REGULATOR	VCR
& ■	FIRE/SMOKE DAMPER WITH ACCESS PANEL	F/SD
& ▲	FIRE DAMPER WITH ACCESS PANEL	FD
& ◆	SMOKE DAMPER WITH ACCESS PANEL	SD
CFM	CUBIC FEET OF AIR PER MINUTE	CFM
M	EMS MOTORIZED DUCT DAMPER/ PIPE VALVE ACTUATOR	—
T	THERMOSTAT @ +4'-0" TOP OF BOX	T'STAT
H	HUMIDISTAT @ +4'-0" TOP OF BOX	H'STAT
C	CO_2 SENSOR @ +4'-0" TOP OF BOX	CO_2
T	EMS TEMPERATURE SENSOR @ +4'-0" TOP OF BOX	—
H	EMS HUMIDITY SENSOR @ +4'-0" TOP OF BOX	—
C	EMS CO_2 SENSOR @ +4'-0" TOP OF BOX	CO_2
SP	EMS STATIC PRESSURE SENSOR	SP
DP	EMS DIFFERENTIAL PRESSURE SENSOR	DP
CS	EMS CURRENT SENSOR	CS
	DIRECTION OF FLOW	—
	SUPPLY AIR	SA
	RETURN AIR	RA
	EXHAUST AIR	EA
	OUTSIDE AIR	OSA
	PIPE/DUCT TURN DOWN	—
	PIPE/DUCT TURN UP	—
	POINT OF CONNECTION	POC
	EXISTING (DESIGNATED)	(E)
	NEW (DESIGNATED)	(N)
SD	DUCT SMOKE DETECTOR	SD
A/V	AUDIBLE/VISUAL ALARM	A/VA
	BYPASS TIMER	BPT
EMS	ENERGY MANAGEMENT SYSTEM CABLE IN CONDUIT	EMS

REGISTERED PROFESSIONAL ENGINEER
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APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

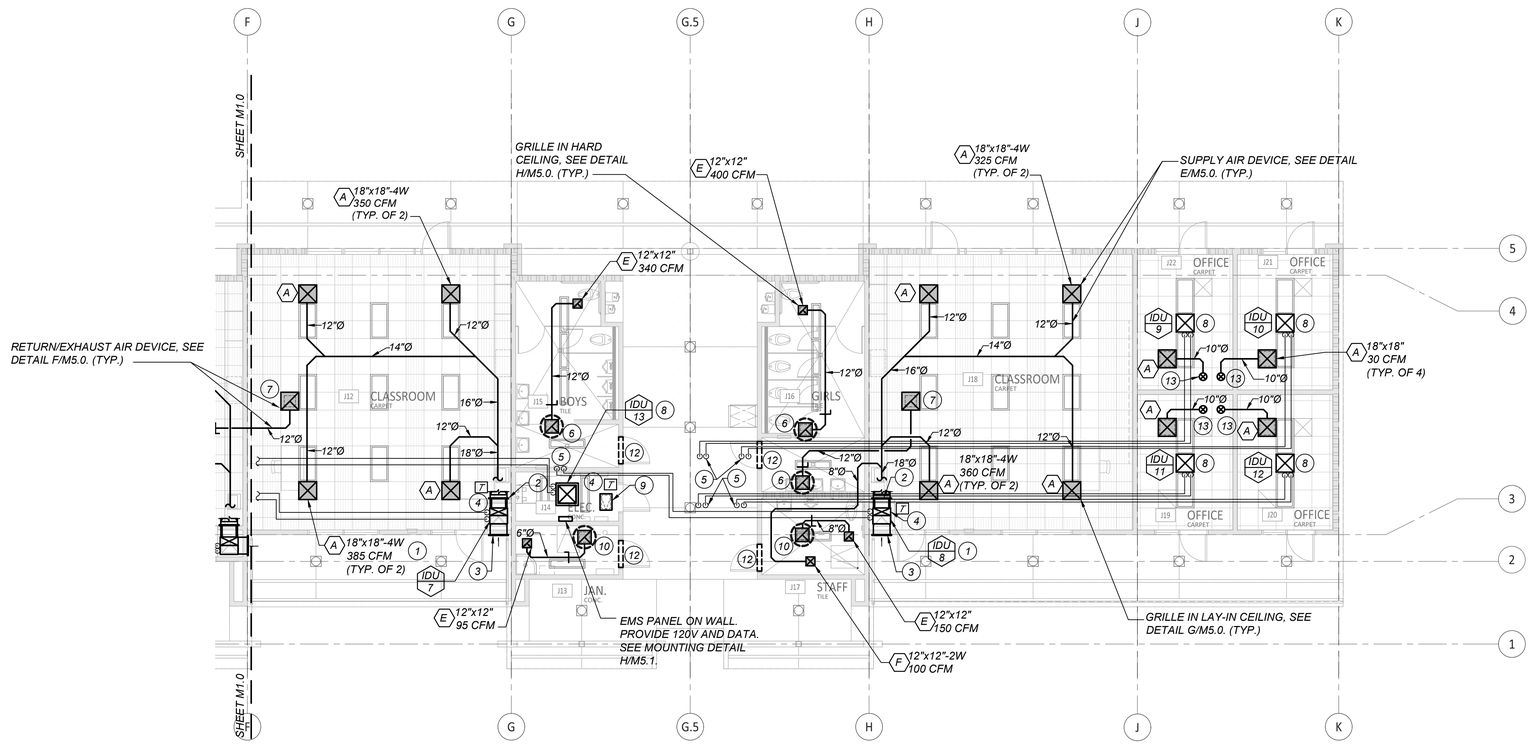
DATE: JUNE 26, 2024

GENERAL NOTES:

REFER TO DETAIL D/M5.3 AND E/M5.3 FOR DUCT HANGER DETAIL.(TYP)

KEYNOTES: *(THIS SHEET ONLY)*

1. *SEE DETAIL A/M5.1 FOR EQUIPMENT CLOSET.*
2. *RETURN AIR GRILLE IN WALL. SEE DETAIL A/M5.1 FOR MORE INFORMATION.*
3. *OUTSIDE INTAKE LOUVER IN WALL. SEE DETAIL A/M5.1 FOR MORE INFORMATION.*
4. *THERMOSTAT & CO2 SENSOR MOUNTED ON WALL, 48" TO TOP OF BOX, FOR CONTROL OF HVAC UNIT(S) SERVING SAME SPACE. COORDINATE WITH ARCH AND CONTROLS CONTRACTOR FOR PLACEMENT.*
5. *REFRIGERANT PIPING FROM ODU OR CU ON ROOF. SEE SHEET M4.0 FOR CONTINUATION, REFER TO SCHEDULE FOR SIZE.*
6. *14"x14" E.A. DUCT FROM EXHAUST FAN ON ROOF. SEE SHEET M4.0 FOR CONTINUATION.*
7. *C 22x22" 450 CFM*
8. *INDOOR UNIT AT CEILING. SEE DETAIL C/M5.1.*
9. *CEILING ACCESS PANEL. SEE ARCH.*
10. *8"x8" E.A. DUCT FROM EXHAUST FAN ON ROOF. SEE SHEET M4.0 FOR CONTINUATION.*
11. *UNDERCUT DOOR 1", SEE ARCH.*
12. *FULL LOUVERED TRANSOM ABOVE DOOR. SEE ARCHITECTURAL.*
13. *10"Ø DUCT ABOVE CEILING OVER, UP THRU ROOF. SEE M4.0 FOR CONTINUATION.*



1 HVAC PLAN

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

north

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

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TITLE: HVAC PLAN

M2.0

PROJECT 24001

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

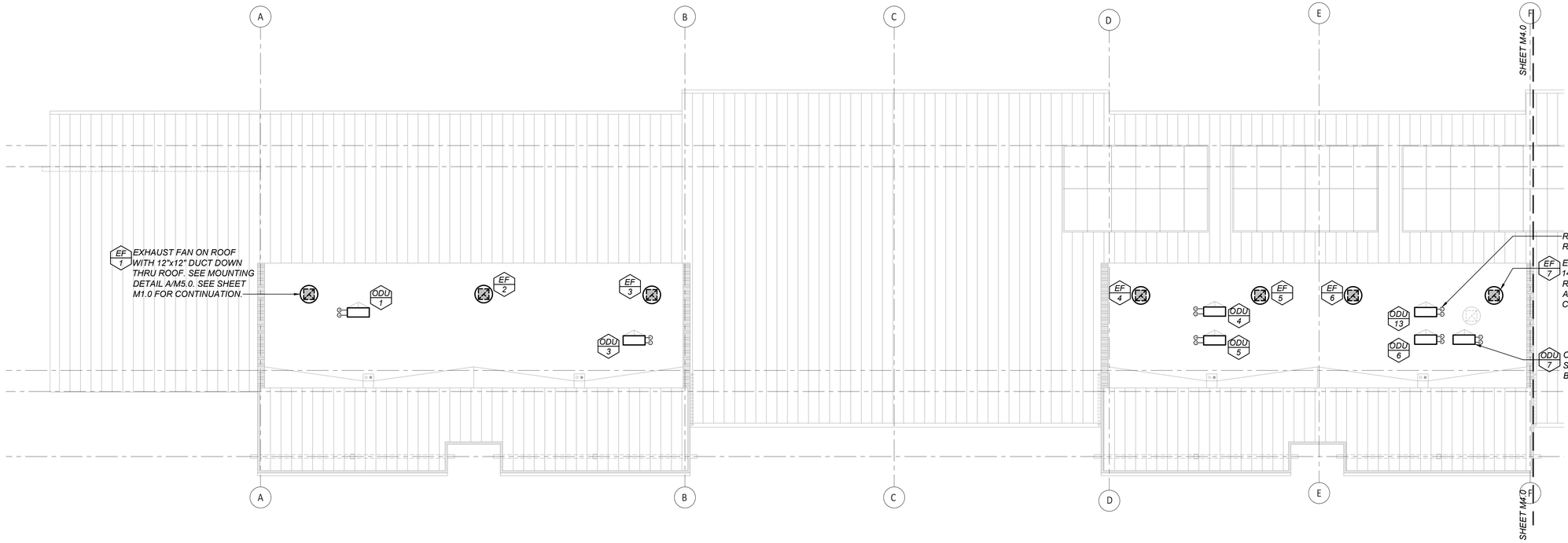
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DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34200
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210



1 HVAC ROOF PLAN

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

REVISIONS

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TITLE
HVAC ROOF PLAN

M3.0

PROJECT 24001

11 February 2025 8:12 AM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M3.0 - M4.0 - HVAC Roof Plans.dwg kyle yang

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

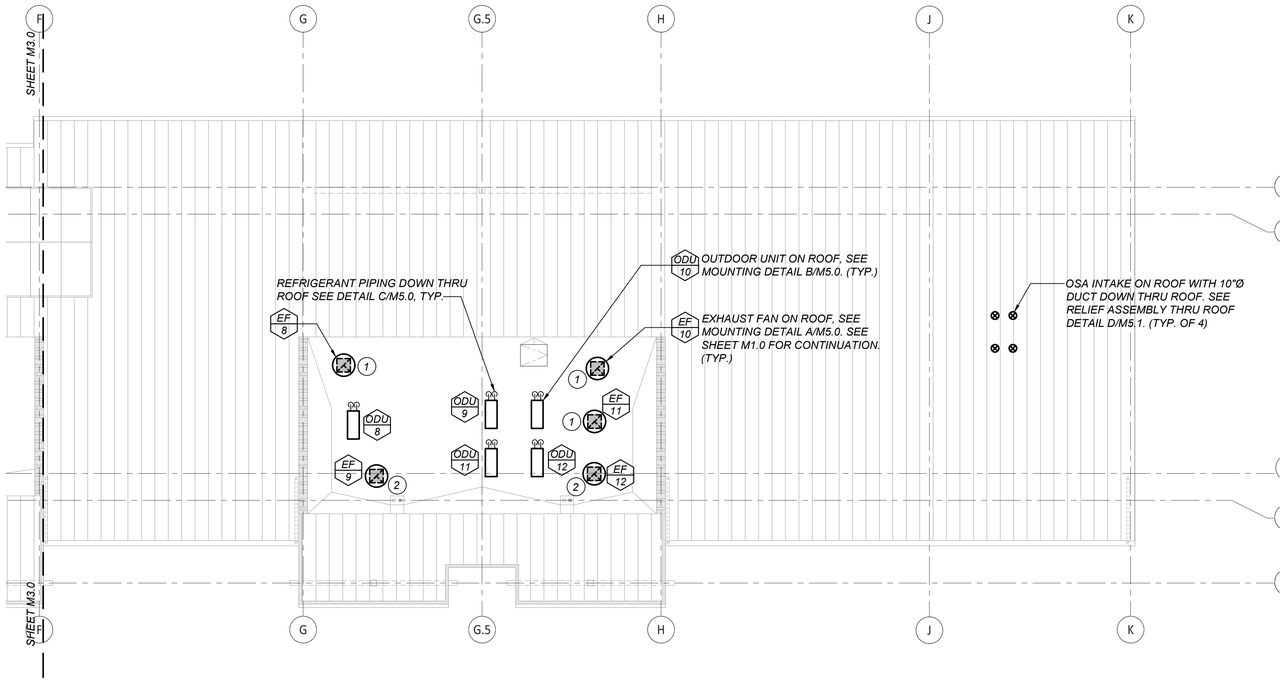
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DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

KEYNOTES: *(THIS SHEET ONLY)*

1. *14"x14" E.A. DUCT DOWN THRU ROOF.*
2. *8"x8" E.A. DUCT DOWN THRU ROOF.*



north

1 HVAC ROOF PLAN

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

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
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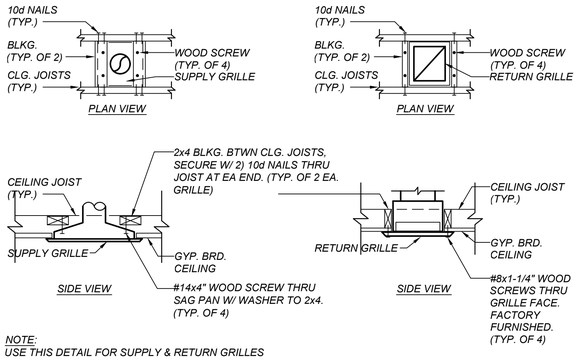
REGISTERED PROFESSIONAL ENGINEER
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No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
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Fresno, CA 93727
FAX (559) 431-1362

TITLE
HVAC ROOF PLAN

M4.0

PROJECT 24001



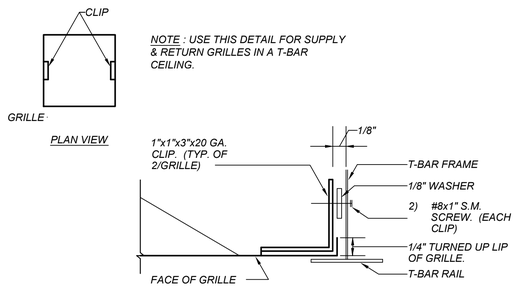
NOTE:
USE THIS DETAIL FOR SUPPLY & RETURN GRILLES IN A GYP. BOARD CEILING.

GRILLE RESTRAINT DETAIL

SCALE: NONE

MD107

G / M5.0

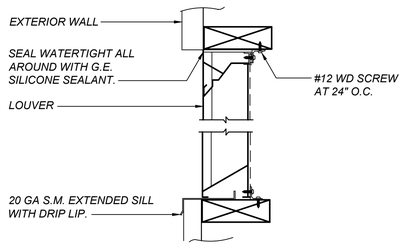


GRILLE RESTRAINT DETAIL

SCALE: NONE

MD090

H / M5.0

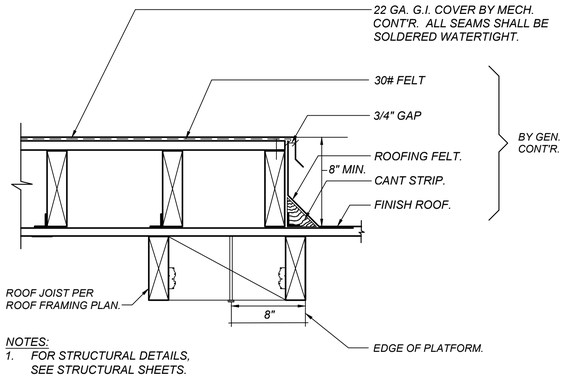


LOUVER MOUNTING DETAIL

SCALE: NONE

MM183

J / M5.0



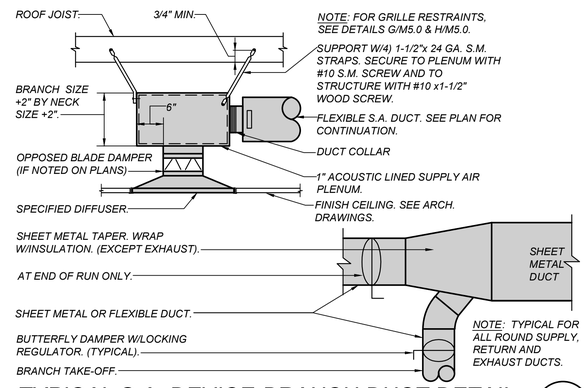
NOTES:
1. FOR STRUCTURAL DETAILS, SEE STRUCTURAL SHEETS.

ROOF PLATFORM DETAIL

SCALE: NONE

MM073

D / M5.0

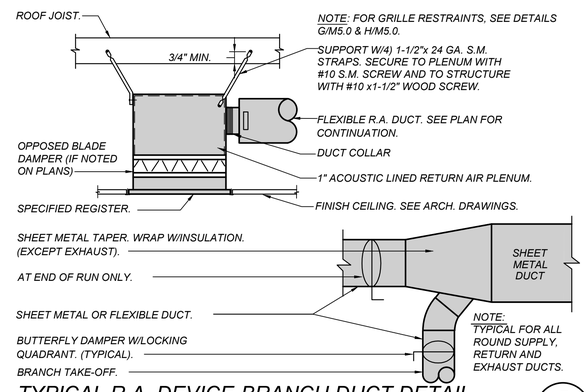


TYPICAL S.A. DEVICE-BRANCH DUCT DETAIL

SCALE: NONE

MD002

E / M5.0

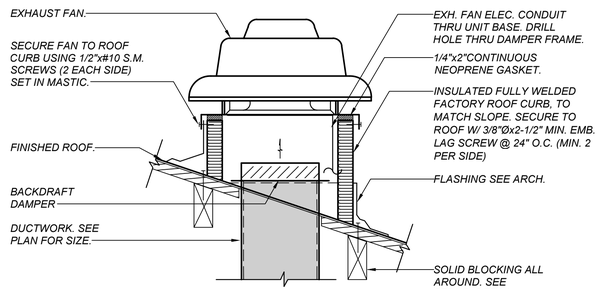


TYPICAL R.A. DEVICE-BRANCH DUCT DETAIL

SCALE: NONE

MD102

F / M5.0

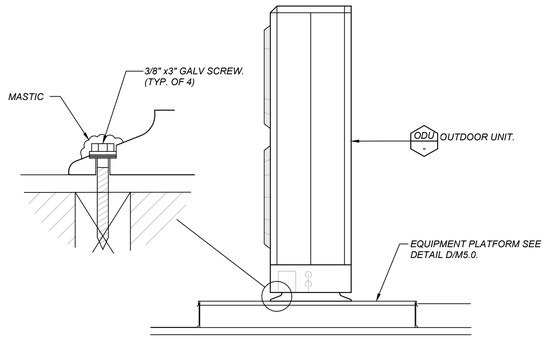


ROOF EXHAUST FAN MOUNTING DETAIL

SCALE: NONE

MM148

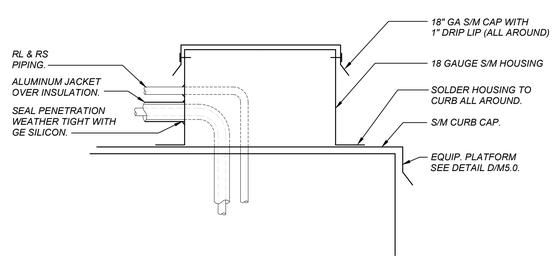
A / M5.0



OUTDOOR UNIT ON EQUIPMENT PLATFORM

SCALE: NONE

B / M5.0



INSULATED PIPE ROOF PENETRATION

SCALE: NONE

C / M5.0

APPROVALS

FILE # 10-26 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34290 REN: 05-31-25 STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-26 MECHANICAL STATE OF CALIFORNIA

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MANGINI ARCHITECTURE INGENUITY.
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4320 West Mineral King Avenue Visalia, California 93291
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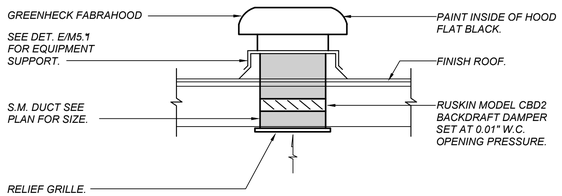
TITLE
HVAC DETAILS

M5.0

PROJECT 24001

11 February 2025 8:12 AM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M5.0-5.3 - HVAC Details.dwg kyle yong

APPROVALS
FILE # 10-26 APPLICATION # 02-122658
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025
LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34290 REN: 05-31-25 STATE OF CALIFORNIA
DATE: JUNE 26, 2024



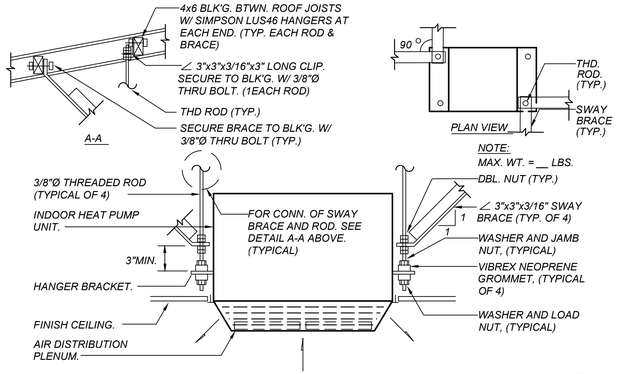
RELIEF ASSEMBLY THRU ROOF DETAIL

SCALE: NONE

* MM027,MM028,MM029,MM110,MM114.

MD068

D / M5.1

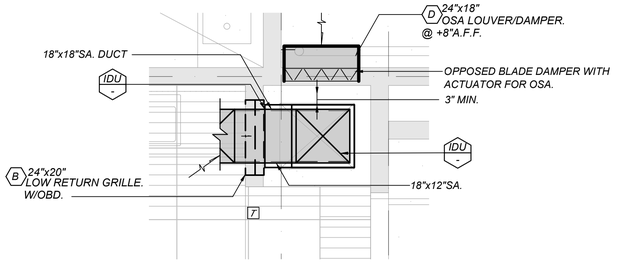


INDOOR UNIT MOUNTING DETAIL

SCALE: NONE

MM057

C / M5.1

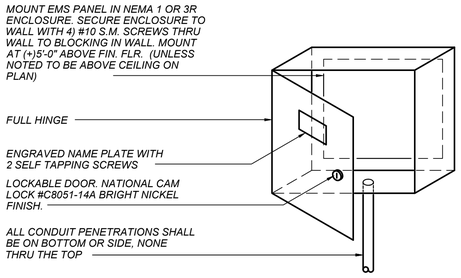


NOTE: SEE SECTION B/M5.1 FOR ADDITIONAL INFORMATION.

TYPICAL EQUIPMENT CLOSET PLAN VIEW

SCALE: 1/2"=1'-0

A / M5.1

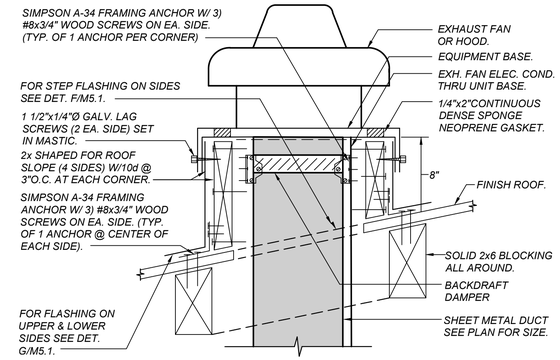


EMS PANEL ENCLOSURE DETAIL

SCALE: NONE

MC014

H / M5.1

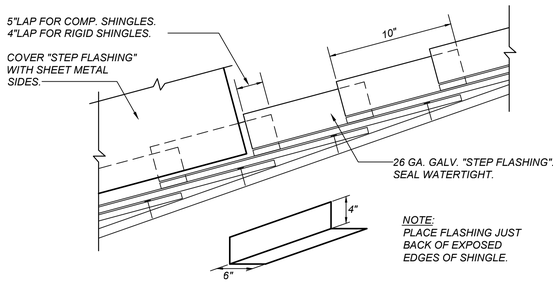


EQUIPMENT SUPPORT DETAIL

SCALE: NONE

MM027

E / M5.1

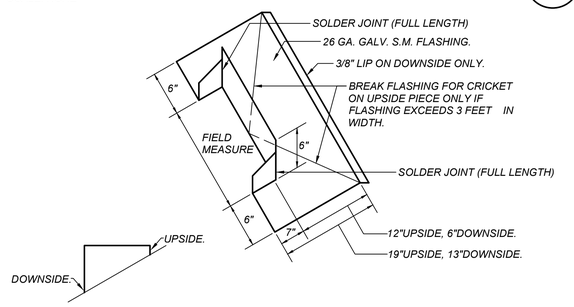


SIDE FLASHING DETAIL

SCALE: NONE

MM075

F / M5.1

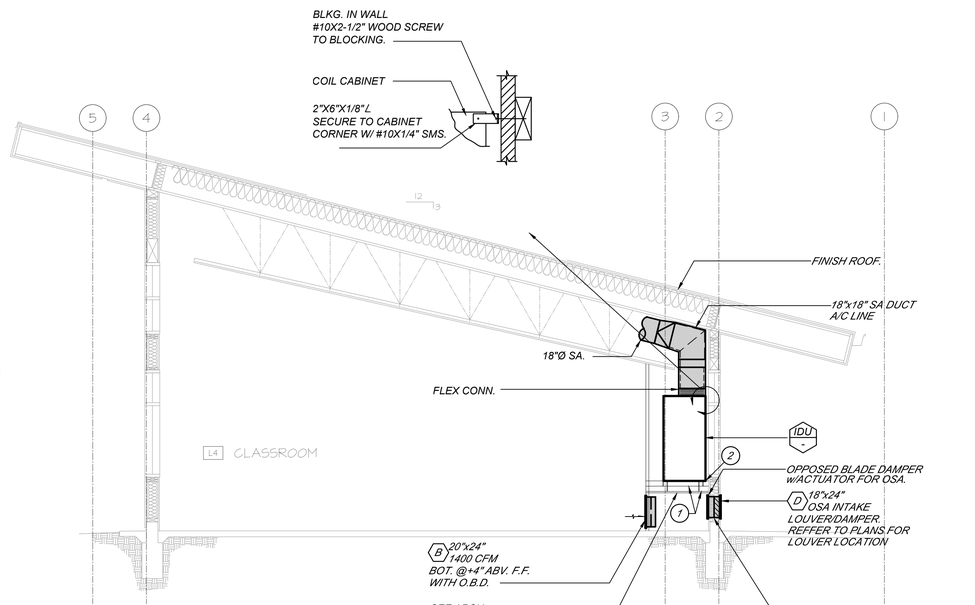


CURB/PLATFORM FLASHING DETAIL

SCALE: NONE

MM074

G / M5.1



1. PROVIDE AIR TIGHT SEAL & AT DUCT SLEEVE PENETRATION w/SILICONE SEALANT.
2. ANCHOR INSIDE BASE FRAME OF FURNACE FRAME BELOW FILTER SLIDE RAIL TO PLYWOOD SUPPORT w 1½"x1 ½"MIN. EMBDMENT LAG BOLT 1/CORNER MAKE SURE FILTER IS FREE TO REMOVE.

SECTION AT FURNACE/COOLING COIL

SCALE: 1/4"=1'-0

B / M5.1

REGISTERED PROFESSIONAL ENGINEER BRIAN W. CARLSON No. M34846 Exp. 6-30-26 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101 Fresno, CA 93727
(559) 431-0101 24012 FAX (559) 431-1362

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY

MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291

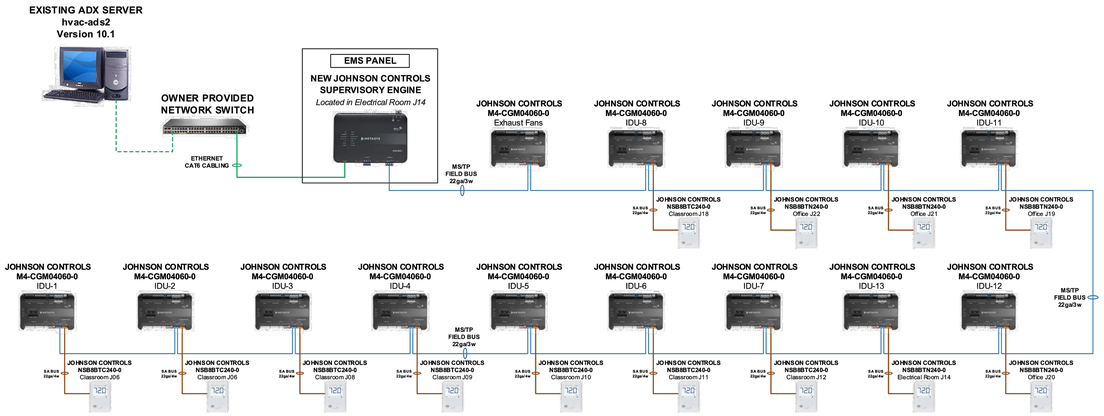
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
HVAC DETAILS

M5.1

PROJECT 24001

11 February 2025 8:12 AM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M5.0-5.3 - HVAC Details.dwg kyle yong



CONTROLS DIAGRAM

SCALE: NONE

A
M5.2

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34200
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

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TITLE
HVAC DETAILS

M5.2

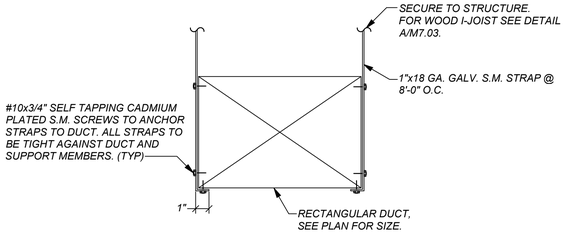
PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE
ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
Fresno, CA 93727
FAX (559) 431-1362

11 February 2025 8:12 AM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M5.0-5.3 - HVAC Details.dwg kyle yong

P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M5.0-5.3 - HVAC Details.dwg Feb 11 2025 8:12am

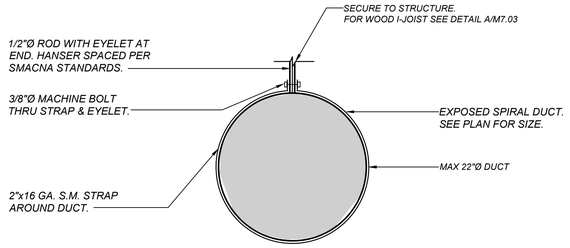


NOTE: THIS DETAIL IS FOR DUCTS SMALLER THAN 6 SQ. FT. CROSS AREA AND DO NOT REQUIRE LATERAL BRACING PER OPM-0052-13, SECTION 5.0.

RECTANGULAR DUCT HANGING DETAIL

D / M5.3

SCALE: NONE

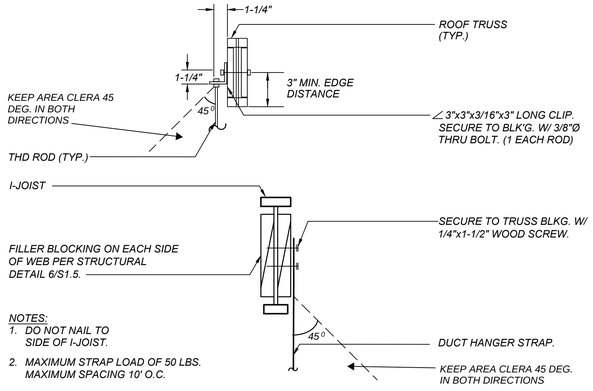


ROUND DUCT HANGING DETAIL

E / M5.3

SCALE: NONE

45°



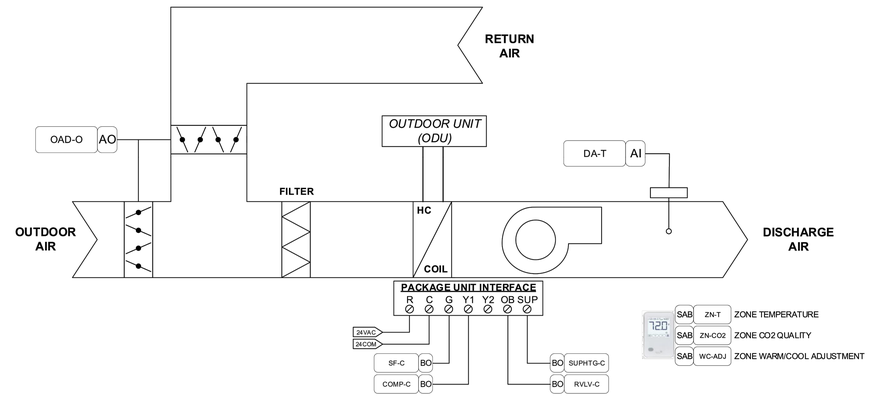
UPPER ATTACHMENT DETAIL(S)

F / M5.3

SCALE: NONE

MD066

VRF VERTICAL HEAT PUMP SPLIT SYSTEM

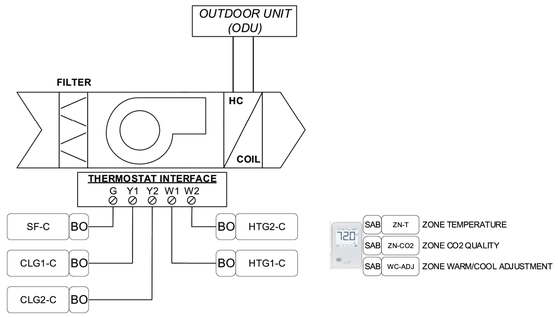


VRF HEAT PUMP CONTROLS DIAGRAM

A / M5.3

SCALE: NONE

VRF CASSETTE HEAT PUMP SPLIT SYSTEM

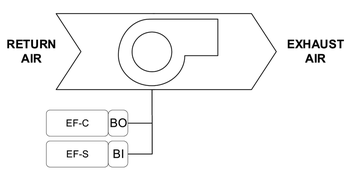


VRF CASSETTE HEAT PUMP CONTROLS DIAGRAM

B / M5.3

SCALE: NONE

EXHAUST FAN



EXHAUST FAN CONTROLS DIAGRAM

C / M5.3

SCALE: NONE

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

IDENTIFICATION STAMP
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APP: 02-122658 INC:
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LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

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TITLE: HVAC DETAILS

M5.3

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
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11 February 2025 8:12 AM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M5.0-5.3 - HVAC Details.dwg kyle yong

INDOOR UNIT SCHEDULE

DESIGNATION		IDU 1	IDU 2	IDU 3	IDU 4	IDU 5	IDU 6	IDU 7	IDU 8	IDU 9	IDU 10	IDU 11	IDU 12	IDU 13
BLOWER	SUPPLY AIR (CFM)	1,200	1,200	1,470	1,470	1,470	1,470	1,470	1,470	380	380	380	380	1,250
	EXT. S P (IN. WC)	-	-	-	-	-	-	-	-	-	-	-	-	-
	MIN. O.S.A. (CFM)	-	-	-	-	-	-	-	-	-	-	-	-	-
	MOCP	SEE ODU-1	SEE ODU-2	SEE ODU-3	SEE ODU-4	SEE ODU-5	SEE ODU-6	SEE ODU-7	SEE ODU-8	SEE ODU-9	SEE ODU-10	SEE ODU-11	SEE ODU-12	SEE ODU-13
	MCA / FLA (AMPS)	SEE ODU-1	SEE ODU-2	SEE ODU-3	SEE ODU-4	SEE ODU-5	SEE ODU-6	SEE ODU-7	SEE ODU-8	SEE ODU-9	SEE ODU-10	SEE ODU-11	SEE ODU-12	SEE ODU-13
	VOLTS/PHASE	SEE ODU-1	SEE ODU-2	SEE ODU-3	SEE ODU-4	SEE ODU-5	SEE ODU-6	SEE ODU-7	SEE ODU-8	SEE ODU-9	SEE ODU-10	SEE ODU-11	SEE ODU-12	SEE ODU-13
	SEER / EER	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-	-/-
COOLING	SENSIBLE (MBH)	24.64	24.64	39.50	39.50	39.50	39.50	39.50	39.50	7.70	7.70	7.70	7.70	7.70
	TOTAL (MBH)	33.30	33.30	44.64	44.64	44.64	44.64	44.64	44.64	10.36	10.36	10.36	10.36	10.36
	EADB/EAWB (°F)	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67	80 / 67
	REFRIGERANT	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
HEATING	CAPACITY (MBH) @47°F	29.50	29.50	44.25	44.25	44.25	44.25	44.25	44.25	14.38	14.38	14.38	14.38	14.38
	KW	-	-	-	-	-	-	-	-	-	-	-	-	-
	STAGES	-	-	-	-	-	-	-	-	-	-	-	-	-
FILTER	QUANTITY/SIZE	-	-	-	-	-	-	-	-	-	-	-	-	-
	TYPE	-	-	-	-	-	-	-	-	-	-	-	-	-
	P D (IN. WC)	-	-	-	-	-	-	-	-	-	-	-	-	-
MANUFACTURER		TOSHIBA	TOSHIBA	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	TOSHIBA
TYPE		VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	VERTICAL HEAT PUMP	CASSETTE HEAT PUMP	CASSETTE HEAT PUMP	CASSETTE HEAT PUMP	CASSETTE HEAT PUMP	CASSETTE HEAT PUMP
MODEL NUMBER		MMD-AP0360VHG2UL	MMD-AP0360VHG2UL	40MBRCQ48AA3	40MBRCQ48AA3	40MBRCQ48AA3	40MBRCQ48AA3	40MBRCQ48AA3	40MBRCQ48AA3	40MBCQ09---3	40MBCQ09---3	40MBCQ09---3	40MBCQ09---3	MMU-UP0481HP-UL
CONDENSING UNIT		ODU-1	ODU-2	ODU-3	ODU-4	ODU-5	ODU-6	ODU-7	ODU-8	ODU-9	ODU-10	ODU-11	ODU-12	ODU-13
SERVICE		CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	OFFICE	OFFICE	OFFICE	OFFICE	ELECTRICAL
LOCATION		MECHANICAL CLOSET	MECHANICAL CLOSET	MECHANICAL CLOSET	MECHANICAL CLOSET	MECHANICAL CLOSET	MECHANICAL CLOSET	MECHANICAL CLOSET	MECHANICAL CLOSET	IN CEILING	IN CEILING	IN CEILING	IN CEILING	IN CEILING
OPER. WT (LBS)		100	100	100	100	100	100	100	100	100	100	100	100	100
ACCESSORIES		1, 2, 3, 4	1, 2, 3, 4	1, 2, 4	1, 2, 4	1, 2, 4	1, 2, 4	1, 2, 4	1, 2, 4	1, 4	1, 4	1, 4	1, 4	1, 4

1 . FACTORY 24V INTERFACE KIT
2 . INTERLOCK OPERATION WITH EXHAUST FAN SERVING SAME SPACE.
3 . INTERLOCK SUPPLY FAN WITH TOTAL AREA DETECTION SYSTEM AND WIRED FOR AUTOMATIC SHUTDOWN OF UNIT UPON ALARM.
4 . INTEGRATE WITH EMS.

OUTDOOR UNIT SCHEDULE

DESIGNATION	ODU 1	ODU 2	ODU 3	ODU 4	ODU 5	ODU 6	ODU 7	ODU 8	ODU 9	ODU 10	ODU 11	ODU 12	ODU 13
COOLING CAPACITY (MBH)	66.6	66.6	44.6	44.6	44.6	44.6	44.6	44.6	10.4	10.4	10.4	10.4	48.0
HEATING CAPACITY (MBH)	59.0	59.0	44.3	44.3	44.3	44.3	44.3	44.3	14.4	14.4	14.4	14.4	54.0
NOMINAL TONS	6.0	6.0	4.0	4.0	4.0	4.0	4.0	4.0	0.8	0.8	0.8	0.8	4.0
VOLTS/PHASE	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3	208-230 / 3
FLA	-	-	-	-	-	-	-	-	-	-	-	-	-
MCA / MOCP	27.0 / 30.0	27.0 / 30.0	35.0 / 50.0	35.0 / 50.0	35.0 / 50.0	35.0 / 50.0	35.0 / 50.0	35.0 / 50.0	15.0 / 15.0	15.0 / 15.0	15.0 / 15.0	15.0 / 15.0	36.3 / 60.0
SEER / EER (AT ARI)	23.4 / 13.7	23.4 / 13.7	16.2 / 8.6	16.2 / 8.6	16.2 / 8.6	16.2 / 8.6	16.2 / 8.6	16.2 / 8.6	20.5 / 13.0	20.5 / 13.0	20.5 / 13.0	20.5 / 13.0	19.10 / 9.85
HSPF/COP (AT 47°F)	4.01 / -	4.01 / -	3.03 / -	3.03 / -	3.03 / -	3.03 / -	3.03 / -	3.03 / -	10.8 / -	10.8 / -	10.8 / -	10.8 / -	- / -
AMBIENT (°F)	104	104	104	104	104	104	104	104	104	104	104	104	104
REFRIG. LINE SIZE		NOT USED											
LIQUID (IN.OD)	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
SUCTION (IN. OD)	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
REFRIG. TYPE	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
MANUFACTURER	TOSHIBA	TOSHIBA	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	CARRIER	TOSHIBA
TYPE	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP	SPLIT HEAT PUMP
MODEL NUMBER	MMY-MAP0726HT6P-UL	MMY-MAP0726HT6P-UL	38MBRCQ48AA3	38MBRCQ48AA3	38MBRCQ48AA3	38MBRCQ48AA3	38MBRCQ48AA3	38MBRCQ48AA3	38MARBQ09AA3	38MARBQ09AA3	38MARBQ09AA3	38MARBQ09AA3	MCY-MAP0487HS-UL
SERVICE	IDU-1	IDU-2	IDU-3	IDU-4	IDU-5	IDU-6	IDU-7	IDU-8	IDU-9	IDU-10	IDU-11	IDU-12	IDU-13
LOCATION	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF
OPER. WT (LBS)	200	200	200	200	200	200	200	200	200	200	200	200	200
ACCESSORIES	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 3, 4	1, 2, 4	1, 2, 4	1, 2, 4	1, 2, 4	1, 2, 4

1 . PROVIDE WITH LIQUID LINE FILTER, SUCTION LINE FILTER AND SITE GLASS.
2 . FACTORY DRAIN SOCKET.
3 . INTERLOCK OPERATION WITH EXHAUST FAN SERVING SAME SPACE.
4 . INTEGRATE WITH EMS.

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

IDENTIFICATION STAMP
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TITLE
HVAC SCHEDULES

M6.0

PROJECT 24001

EXHAUST FAN SCHEDULE

DESIGNATION	EF 1	EF 2	EF 3	EF 4	EF 5	EF 6	EF 7	EF 8	EF 9	EF 10	EF 11	EF 12
CFM	340	735	450	450	450	450	450	340	95	400	450	150
EXT. S.P. (IN. WC)	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
HP / BHP	0.06 / 0.25	0.11 / 0.25	0.08 / 0.25	0.08 / 0.25	0.08 / 0.25	0.08 / 0.25	0.08 / 0.25	0.06 / 0.25	0.03 / 0.25	0.07 / 0.25	0.08 / 0.25	0.05 / 0.25
VOLTS / PHASE	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1	115 /1
MCA / MOP (AMPS)	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15	4 / 15
FLA (AMPS)	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9
RPM	1196	1725	1311	1311	1311	1311	1311	1196	1115	1250	1311	1240
TIP SPEED/ SONES	3502 / 6.0	3682 / 6.1	3840 / 7.0	3840 / 7.0	3840 / 7.0	3840 / 7.0	3840 / 7.0	3502 / 6.0	3265 / 4.5	3661 / 6.4	3840 / 7.0	3633 / 5.7
DRIVE	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT	DIRECT
MOUNTING	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF	ROOF
MANUFACTURER	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK	GREENHECK
TYPE	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL	CENTRIFUGAL
MODEL NUMBER	G-098-VG	G-100-VG	G-098-VG	G-098-VG	G-098-VG	G-098-VG	G-098-VG	G-098-VG	G-097-VG	G-098-VG	G-098-VG	G-097-VG
CONTROL												
SERVICE	STAFF/STUDENT RR	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	CLASSROOM	BOYS RR	JANITOR	GIRLS RR	CLASSROOM	STAFF TOILET
OPER. WT. (LBS)	120	120	120	120	120	120	120	120	120	120	120	120
ACCESSORIES	1, 2, 3, 4, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 6	1, 2, 3, 4, 6	1, 2, 3, 4, 6	1, 2, 3, 4, 5, 6	1, 2, 3, 4, 6

1 . VARI-GREEN EC MOTOR w/ REMOTE MTD. SPEED CONTROL
2 . SEISMIC SLOPED CURB. HEIGHT AND SLOPE OF CURB TO BE DETERMINED BY THE MECHANICAL CONTRACTOR.
3 . BDD
4 . S/S BIRDSCREEN
5 . INTERLOCK OPERATION WITH INDOOR UNIT AND OUTDOOR UNIT SERVING SAME SPACE.
6. INTEGRATE INTO EXISTING EMS.

GRILLE SCHEDULE

MARK	DUTY	DESCRIPTION
A	CEILING SUPPLY	TITUS TDC (TYPE 3) LOUVER FACE SQUARE OR RECTANGULAR NECK DIFFUSER FOR STD. LAY-IN CEILING, AND NO. 26 OFF-WHITE FINISH. (18"X18" NECK ADAPTER SIZE SHOWN).
B	WALL RETURN	TITUS 33R HEAVY DUTY GRILLE WITH OBD., BLADES PARALLEL TO FLOOR, AND NO. 26 WHITE FINISH.
C	CEILING RETURN OR EXHAUST	TITUS 50F (TYPE 3) ALUMINUM EGG CRATE REGISTER WITH 1/2" x 1/2" GRID FOR STD. LAY-IN CEILING WITH NO. 26 WHITE FINISH.
D	WALL RELIEF OR INTAKE LOUVER	RUSKIN ELF 375 STATIONARY EXTRUDED ALUMINUM LOUVER. REMOVABLE 1/2" MESH SCREEN ON INSIDE FACE. MILL FINISH FOR PAINTING. COORDINATE WITH ARCH. FOR FINISH.
E	CEILING RETURN OR EXHAUST	TITUS 50F (TYPE 1) ALUMINUM EGG CRATE REGISTER WITH 1/2" x 1/2" GRID FOR STD. SURFACE MOUNTING WITH NO. 26 WHITE FINISH.
F	CEILING SUPPLY	TITUS TDC (TYPE 3) LOUVER FACE SQUARE OR RECTANGULAR NECK DIFFUSER FOR STD. SURFACE MOUNTING CEILING, AND NO. 26 OFF-WHITE FINISH. (18"X18" NECK ADAPTER SIZE SHOWN).

TITLE 24 ACCEPTANCE TESTING TABLE

DESIGNATION		IDU 1	IDU 2	IDU 3	IDU 4	IDU 5	IDU 6	IDU 7	IDU 8	IDU 9	IDU 10	IDU 11	IDU 12	IDU 13
FORM / TITLE	NRCA-MCH-02-A OUTDOOR AIR.	X	X	X	X	X	X	X	X					
	NRCA-MCH-03-A CONSTANT VOLUME SINGLE ZONE HVAC.	X	X	X	X	X	X	X	X	X	X	X	X	X
	NRCA-MCH-04-A AIR DISTRIBUTION DUCT LEAKAGE.													
	NRCA-MCH-05-A AIR ECONOMIZER CONTROLS.													
	NRCA-MCH-06-A DEMAND CONTROL VENTILATION SYSTEMS.													
	NRCA-MCH-07-A SUPPLY FAN VARIABLE FLOW CONTROLS.													
	NRCA-MCH-08-A VALVE LEAKAGE TEST.													
	NRCA-MCH-09-A SUPPLY WATER TEMPERATURE RESET CONTROLS.													
	NRCA-MCH-10-A HYDRONIC SYSTEM VARIABLE FLOW CONTROLS.													
	NRCA-MCH-11-A AUTOMATIC DEMAND SHED CONTROLS.													
	NRCA-MCH-12-A FDD FOR PACKAGED DIRECT EXPANSION UNITS.													
	NRCA-MCH-13-A AUTOMATIC FDD FOR AIR HANDLING UNITS AND ZONE TERMINAL UNITS.													
	NRCA-MCH-14-A DISTRIBUTED ENERGY STORAGE DX AC SYSTEMS.													
	NRCA-MCH-15-A THERMAL ENERGY STORAGE (TES) SYSTEM.													
	NRCA-MCH-16-A SUPPLY AIR TEMPERATURE RESET CONTROLS.													
	NRCA-MCH-17-A CONDENSER WATER TEMPERATURE RESET CONTROLS.													
	NRCA-MCH-18-A ENERGY MANAGEMENT CONTROL SYSTEMS.													
	NRCA-MCH-19-A OCCUPANCY SENSOR CONTROLS.													
	NRCA-MCH-20 MULTI-FAMILY VENTILATION.													
	NRCA-MCH-21 MULTI-FAMILY ENVENLOPE LEAKAGE.													
	NRCA-MCH-22-A MF DUCT LEAKAGE.													
	NRCA-MCH-23-A MF HRV/ERV VERIFICATION.													

1. REFER TO TITLE-24 DOCUMENTS FOR ADDITIONAL INFORMATION.
2. NRCA MUST BE SUMBITTED AND COMPLETED BY A CERTIFED ACCEPTANCE TEST TECHNICIAN TO COMPLY WITH CALIFORNIA ENERGY CODE.
3. SUBMIT ACCEPTANCE FORMS TO PROJECT INSPECTOR & MEOR FOR REVIEW.

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
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APPROVALS
FILE # 10-26
APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34299
REN: 05-31-25
STATE OF CALIFORNIA
DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
HVAC SCHEDULES

M6.1

PROJECT 24001

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Project Name: New Classroom Wing at Sunset ES | **Date Prepared:** 2024-06-26

A. General Information

1	Project Name	New Classroom Wing at Sunset ES			
2	Run Title	Title 24 Analysis			
3	Project Location	985 Sunset Ave			
4	City	Coalinga	5	Standards Version	Compliance 2022
6	Zip code	93210	7	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	13	9	Building Orientation (deg)	180
10	Building Type(s)	• Nonresidential	11	Weather File	LEMORE-NAS_STYP20.epw
12	Project Scope	• New envelope and mechanical	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	8082	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	547	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	8082	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	Not Included	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	321.79	267.89	21.46
Proposed Design	318.47	251.43	20.31
Compliance Margins	**3.32**	**16.46**	**1.15**
	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	16.38	27.39	-11.01
Space Cooling	103.66	123.48	-19.82
Indoor Fans	140.98	106.15	34.83
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	28.62	29.3	-0.68
Indoor Lighting	32.15	32.15	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**321.79**	**318.47**	**3.32 (1%)**
Photovoltaics	-51.79	-65.55	13.76
Batteries	-2.11	-1.49	-0.62
TOTAL COMPLIANCE	**267.89**	**251.43**	**16.46 (6.1%)**

[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	74.23	74.23	---
Process	85.06	85.06	---
Other Ltg	1.45	1.45	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**428.63**	**412.17**	**16.46 (3.8%)**

[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	2.24	3.94	-1.7
Space Cooling	4.17	4.69	-0.52
Indoor Fans	12.49	9.54	2.95
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	2.48	2.51	-0.03
Indoor Lighting	2.58	2.58	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**23.96**	**23.26**	**0.7 (2.9%)**
Photovoltaics	-1.83	-2.29	0.46
Batteries	-0.67	-0.66	-0.01
TOTAL COMPLIANCE	**21.46**	**20.31**	**1.15 (5.4%)**

[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	5.55	5.55	---
Process	6.25	6.25	---
Other Ltg	0.12	0.12	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**33.38**	**32.23**	**1.15 (3.4%)**

[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	3.9	7	-3.1	---	---	---
Space Cooling	22.9	24.4	-1.5	---	---	---
Indoor Fans	40	30.2	9.8	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	9.6	9.9	-0.3	---	---	---
Indoor Lighting	9.9	9.9	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**86.3**	**81.4**	**4.9**	**0**	**0**	**0**
Photovoltaics	-21.2	-26.5	5.3	---	---	---
Batteries	0.2	0.2	0	---	---	---
ENERGY USE SUBTOTAL	**65.3**	**55.1**	**10.2**	**0**	**0**	**0**
Receptacle	24.1	24.1	0	---	---	---
Process	28.3	28.3	0	---	---	---
Other Ltg	0.4	0.4	0	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**118.1**	**107.9**	**10.2**	**0**	**0**	**0**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	55.08	53.14	1.94	3.52
NET EUI[1]	46.7	42.66	4.04	8.65

[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.
• PV/Battery Building Type has been modified from software defaults for one or more spaces. Review project's PV/Battery Building Type(s) with documentation author. Refer to Energy Code section 140.10 for Nonresidential or 170.2(g) for more information.

F1. REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception[1]	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)
15.8	n/a	Standard (14-17%)	Fixed	none	false	180	Degrees	22	4.85	96	100

[1] *See Table D1 for any PV exceptions used.*

APPROVALS

FILE # 10-25 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34290 REN. 05-31-25 STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0630 Office
(559) 627.1926 Fax

TITLE
TITLE 24

M7.0

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-26 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101 Fresno, CA 93727
(559) 431-0101 24012 FAX (559) 431-1362

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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				
24012 Exterior Wall 2x87	Exterior Wall	5,712	Wood	19	N/A	N/A	U-factor	0.0619	Stucco - 7/8 in. Plywood - 1/2 in. Composite-1 Gypsum Board - 5/8 in.	N
24012 Exterior Wall 2x616	Exterior Wall	4,221	Wood	19	N/A	N/A	U-factor	0.068	Stucco - 7/8 in. Plywood - 1/2 in. Composite-2 Gypsum Board - 5/8 in.	N
Slab On Grade21	Underground Floor	8,629	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	N
24012 Roof-Wood frame23	Roof	7,489	Wood	38	N/A	N/A	U-factor	0.0322	Metal Standing Seam - 1/16 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Composite-3 Air - Cavity - Wall Roof Ceiling - 4 in. or more Acoustic Tile - 1/2 in.	N
24012 Restroom Roof - Woo30	Roof	1,140	Wood	38	N/A	N/A	U-factor	0.0277	Metal Standing Seam - 1/16 in. Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Composite-4 Air - Cavity - Wall Roof Ceiling - 4 in. or more Gypsum Board - 5/8 in.	N

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

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]	4981	1112	22.32
East-Facing[2]	701	0	0
South-Facing[3]	3303	552	16.71
West-Facing[4]	431	0	0
Total	**9416**	**1664**	**17.67**
Roof	8082	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	Air Barrier
Com-Floor 1	No air barrier

F1B. PV BATTERY BUILDING TYPE(S)

01	02	03
Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)	Conditioned Floor Area (ft²)	Unconditioned Floor Area (ft²)
Grocery	0	0
High-Rise Multifamily	0	0
Office, Financial Institutions, Unleased Tenant Space	0	0
Retail	0	0
School	8082	547
Warehouse	0	0
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0	0
None	0	0

* *Building Occupancy Types are defined in Section 100.1 of the Energy Code*

F2. BATTERY SYSTEMS[1]

01	02	03	04	05	06	07
Control	Capacity (kWh)	Charging Efficiency	Charging Rate (kW)	Discharging Efficiency	Discharging Rate (kW)	Round Trip Efficiency
Basic	30	N/A	5	N/A	5	0.9

[1] *See Table D1 for any Battery exceptions used.*

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		
IDU 6 / ODU 6	Single Zone Heat Pump (SZHP) Air System	1	44.25	0	N/A	NA	44.64	EER2 SEER2	8.6 16.2	No Economizer	N
IDU 7 / ODU 7	Single Zone Heat Pump (SZHP) Air System	1	44.25	0	N/A	NA	44.64	EER2 SEER2	8.6 16.2	No Economizer	N
IDU 8 / ODU 8	Single Zone Heat Pump (SZHP) Air System	1	44.25	0	N/A	NA	44.64	EER2 SEER2	8.6 16.2	No Economizer	N
IDU 9 / ODU 9	Single Zone Heat Pump (SZHP) Air System	1	14.38	0	N/A	NA	10.36	EER SEER	13 20.5	No Economizer	N
IDU 10 / ODU 10	Single Zone Heat Pump (SZHP) Air System	1	14.38	0	N/A	NA	10.36	EER SEER	13 20.5	No Economizer	N
IDU 11 / ODU 11	Single Zone Heat Pump (SZHP) Air System	1	14.38	0	N/A	NA	10.36	EER SEER	13 20.5	No Economizer	N
IDU 12 / ODU 12	Single Zone Heat Pump (SZHP) Air System	1	14.38	0	N/A	NA	10.36	EER SEER	12.2 20.5	No Economizer	N
IDU 13 / ODU 13	Single Zone Heat Pump (SZHP) Air System	1	51.38	0	N/A	NA	42.91	EER2 SEER2	11.1 19.1	No Economizer	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]
24012 Glass	Vertical fenestration Fixed window N/A	NFRC	Manufactured	1,664	0.34	0.22	0.42	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		
IDU 3 / ODU 3	Single Zone Heat Pump (SZHP) Air System	1	44.25	0	N/A	NA	44.64	EER2 SEER2	8.6 16.2	No Economizer	N
IDU 4 / ODU 4	Single Zone Heat Pump (SZHP) Air System	1	44.25	0	N/A	NA	44.64	EER2 SEER2	8.6 16.2	No Economizer	N
IDU 5 / ODU 5	Single Zone Heat Pump (SZHP) Air System	1	44.25	0	N/A	NA	44.64	EER2 SEER2	8.6 16.2	No Economizer	N

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

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-21 Wall38	Exterior Wall	202	Wood	21	N/A	N/A	U-factor	0.0691	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Composite-5 Gypsum Board - 1/2 in.	N
24012 Interior Wall42	Interior Wall	10	N/A	0	N/A	N/A	U-factor	0.2941	Gypsum Board - 5/8 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Gypsum Board - 5/8 in.	N

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

G6A. OPAQUE DOOR SUMMARY (NONRESIDENTIAL)

01	02	03	04
Assembly Name	Area (ft²)	Overall U-factor	Status[1]
Metal Door12	483	0.7	N

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

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		
7-Zone 8	Education - Classrooms (ages 5-8)	36	383.04	600	1008	N/A
8-Zone 9	Office - Office space	0.88	26.25	0	175	N/A
9-Zone 10	Office - Office space	0.86	25.8	0	172	N/A
10-Zone 11	Office - Office space	0.88	26.25	0	175	N/A
11-Zone 12	Office - Office space	0.86	25.8	0	172	N/A
12-Zone 7	General - Unoccupied	0.1	0	3940	64	N/A

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	
2-Zone 2-Trm	Uncontrolled	1	N/A	N/A	1,470	N/A	0	N/A	N/A	N/A	☐
3-Zone 3-Trm	Uncontrolled	1	N/A	N/A	1,470	N/A	0	N/A	N/A	N/A	☐
4-Zone 4-Trm	Uncontrolled	1	N/A	N/A	1,470	N/A	0	N/A	N/A	N/A	☐
5-Zone 5-Trm	Uncontrolled	1	N/A	N/A	1,470	N/A	0	N/A	N/A	N/A	☐
6-Zone 6-Trm	Uncontrolled	1	N/A	N/A	1,470	N/A	0	N/A	N/A	N/A	☐
7-Zone 8-Trm	Uncontrolled	1	N/A	N/A	1,470	N/A	0	N/A	N/A	N/A	☐
8-Zone 9-Trm	Uncontrolled	1	N/A	N/A	380	N/A	0	N/A	N/A	N/A	☐
9-Zone 10-Trm	Uncontrolled	1	N/A	N/A	380	N/A	0	N/A	N/A	N/A	☐
10-Zone 11-Trm	Uncontrolled	1	N/A	N/A	380	N/A	0	N/A	N/A	N/A	☐
11-Zone 12-Trm	Uncontrolled	1	N/A	N/A	380	N/A	0	N/A	N/A	N/A	☐
12-Zone 7-Trm	Uncontrolled	1	N/A	N/A	1,250	N/A	0	N/A	N/A	N/A	☐
2-Zone 1-VRF	Variable Refrigerant Flow	2	29.5	33.3	1,200	N/A	N/A	0.5	BHP	Continuous	☐

H5. GENERAL EXHAUST FAN SUMMARY

01	02	03	04	05	06	07	08
System ID	Zone Name	Qty	CFM	Power	Power Units	Continuous Operation?	Status[1]
Zone 11	1-Zone 1	1	740	0.1	BHP	No	N
Zone 247	2-Zone 2	1	450	0.08	BHP	No	N
Zone 360	3-Zone 3	1	450	0.08	BHP	No	N
Zone 473	4-Zone 4	1	450	0.08	BHP	No	N
Zone 586	5-Zone 5	1	450	0.08	BHP	No	N
Zone 699	6-Zone 6	1	450	0.08	BHP	No	N
Zone 8112	7-Zone 8	1	600	0.06	BHP	No	N
Zone 7161	12-Zone 7	4	985	0.1	BHP	No	N

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

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-Zone 1	Education - Classrooms (ages 5-8)	30.64	673.36	740	1772	N/A
2-Zone 2	Education - Classrooms (ages 5-8)	35	345.8	450	910	N/A
3-Zone 3	Education - Classrooms (ages 5-8)	35	345.42	450	909	N/A
4-Zone 4	Education - Classrooms (ages 5-8)	35	345.04	450	908	N/A
5-Zone 5	Education - Classrooms (ages 5-8)	35	345.04	450	908	N/A
6-Zone 6	Education - Classrooms (ages 5-8)	35	345.42	450	909	N/A

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		
ODU 1	Variable Refrigerant Flow	1	59	N/A	COP	3.3	66.6	EER	13.7	N/A	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	
IDU 3 / ODU 3	1	345.8	1,470	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 4 / ODU 4	1	345.42	1,470	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 5 / ODU 5	1	345.04	1,470	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 6 / ODU 6	1	345.04	1,470	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 7 / ODU 7	1	345.42	1,470	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 8 / ODU 8	1	383.04	1,470	0.75	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 9 / ODU 9	1	26.25	380	0.06	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 10 / ODU 10	1	25.8	380	0.06	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 11 / ODU 11	1	26.25	380	0.06	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 12 / ODU 12	1	25.8	380	0.06	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
IDU 13 / ODU 13	1	0	1,250	0.06	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
2-Zone 1-VRF	2	336.68	1,200	0.5	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

APPROVALS
FILE # 10-25 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA
DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
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TITLE
TITLE 24

M7.1

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
Fresno, CA 93727
FAX (559) 431-1362
24012

11 February 2025 8:12 AM P:\2024\24012 Coalinga Huron Sunset CR Wing\4-Drawings\4 M\M7.0 – M7.3 – Title 24.dwg kyle yong

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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: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 1 of 8)
Project Address: 985 Sunset Ave	**Date Prepared:** 6/26/2024

A. GENERAL INFORMATION

01	Project Location (city)	Coalinga	02	Climate Zone	13
03	Occupancy Types Within Project (select all that apply):				

● Classroom ● Office ● All Other Occupancies

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
☒ 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.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	**(Page 20 of 20)**

Documentation Author's Declaration Statement

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

Documentation Author Name: Brent Yang	Documentation Author Signature: *Brent Yang*
Company: Lawrence Engineering Group	Signature Date: 2024-06-26
Address: 4910 E Clinton Way	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Fresno, CA 93727	Phone: 5594310101

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: Michael Scott	Responsible Designer Signature:	
Company: Mangini Associates Inc		
Address: 4320 W Mineral King Ave	Date Signed: 2.18.2025	
City/State/Zip: Visalia, CA 93291	License #: C-33128	
Phone: 559-627-0530	Title:	Scope:
Responsible Designer Name: Ryan W. Carlson	Responsible Designer Signature:	
Company: Lawrence Engineering Group		
Address: 4910 E Clinton Way	Date Signed: 2024-06-26	
City/State/Zip: Fresno, CA 93727	License #: M34846	
Phone: 559-431-0101	Title:	Scope:

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD	NRCC-PRF-E
Nonresidential Performance Compliance Method	**(Page 19 of 20)**

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

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
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC

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 provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-E
Project Name: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 4 of 8)
	Date Prepared: 6/26/2024

F. DOMESTIC HOT WATER EQUIPMENT

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.

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-E
Project Name: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 3 of 8)
	Date Prepared: 6/26/2024

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 DEN-40	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 DEN-40	Consumer Rated Electric Storage	40	15,356	18 <= FHR <51	0.93	0.93	UEF		

03	04			05		06	
System Name	A.O. Smith DEL-30	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-30	Consumer Rated Electric Storage	30	15,356	18 <= FHR <51	0.92	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.*

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-E
Project Name: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 2 of 8)
	Date Prepared: 6/26/2024

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-E
Project Name: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 7 of 8)
	Date Prepared: 6/26/2024

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.

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-E
Project Name: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 6 of 8)
	Date Prepared: 6/26/2024

H. DOMESTIC HOT WATER CONTROLS

This table is used to demonstrate compliance with control requirements in 110.3 for all occupancies. For multifamily residential and hotel/motel occupancies, compliance is also demonstrated with requirements in 160.4(e) / 170.2(d).

	Yes	No	Not Applicable	Requirement
01	☒	☐	☐	Construction documents require manufacturer certification that service water-heating systems are equipped with automatic temperature controls capable of adjusting temperature settings per 110.3(a).
02	☐	☐	☒	Systems with capacity > 167,000 BTUH equipped with outlet temperature controls per 110.3(c)1 unless covered by California Plumbing Code 613.0.
03	☐	☐	☒	Controls for circulating pumps or electrical heat trace systems are capable of automatically turning off the system per §110.3(c)2 unless systems serves healthcare facility.
04	☐	☐	☒	For recirculation systems serving multiple dwelling units, design includes automatic pump controls per 170.2(d) or 180.1(b)3 for additions.
05	☐	☐	☒	For recirculation systems serving individual dwelling units, design includes manual on/off controls as specified in Reference Appendix RA4.4.9 per 170.2(d).
06	☐	☐	☒	Combustion air positive shut-off shall be provided per 160.4(3).on all newly installed commercial boilers as follows: • Boilers with input capacity >= 2.5 MMBtu/h, in which the boiler is designed to operate with a nonpositive vent static pressure • Boilers where one stack serves two or more boilers with a total combined input capacity per stack of 2.5 MMBtu/h.
07	☐	☐	☒	Boiler combustion air fans with motor >= 10 hp shall meet one of the following • The fan motor shall be driven by a variable speed drive OR • The fan motor shall include controls that limit the fan motor demand to <=30% of the total design wattage at 50% of the design air volume.
08	☐	☐	☒	Newly installed boilers with an input capacity (d:gte/) 5MMBtu/h and a steady state full-load combustion efficiency < 90% shall maintain excess (stack-gas) oxygen concentrations <= 5% by volume on a dry basis over firing rates of 20-100%. Combustion air volume shall be controlled with respect to firing rate or flue gas oxygen concentration. Use of a common gas and combustion air control linkage or jack shaft is prohibited.

STATE OF CALIFORNIA
Domestic Water Heating System
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-PLB-E
Project Name: Coalinga Huron Sunset CR Wing	**Report Page:** (Page 5 of 8)
	Date Prepared: 6/26/2024

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

APPROVALS
FILE # 10-25 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34290 REN. 05-31-25 STATE OF CALIFORNIA
DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
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REVISIONS

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TITLE
TITLE 24

M7.2

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER RYAN W. CARLSON No. M34846 Exp. 6-30-26 MECHANICAL STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101 Fresno, CA 93727
(559) 431-0101 24012 FAX (559) 431-1362

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STATE OF CALIFORNIA

Domestic Water Heating System

CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE			NRCC-PLB-E
Project Name:	Coalinga Huron Sunset CR Wing	**Report Page:**	(Page 8 of 8)
Project Address:	985 Sunset Ave	**Date Prepared:**	6/26/2024

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Brent Yang	Documentation Author Signature: Brent Yang
Company: Lawrence Engineering Group	Signature Date: 2024-06-26
Address: 4910 E Clinton Way	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Fresno CA 93727	Phone: 5594310101

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: Ryan W. Carlson	Responsible Designer Signature:
Company: Lawrence Engineering Group	Date Signed: 2024-06-26
Address: 4910 E Clinton Way	License: M34846
City/State/Zip: Fresno CA 93727	Phone: 559-431-0101

APPROVALS

FILE # 10-25 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR.
No. C-34290
REN. 05-31-25
STATE OF CALIFORNIA

DATE: JUNE 26, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE: TITLE 24

M7.3

PROJECT: 24001

REGISTERED PROFESSIONAL ENGINEER
RYAN W. CARLSON
No. M34846
Exp. 6-30-26
MECHANICAL
STATE OF CALIFORNIA

LAWRENCE ENGINEERING GROUP
4910 E. Clinton Way, Suite 101
(559) 431-0101
24012
Fresno, CA 93727
FAX (559) 431-1362

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FIXTURE SCHEDULE

FIXTURE SYMBOL (3-A-60): 3 = CIRCUIT NUMBER, A = FIXTURE TYPE, 60 = FIXTURE WATTAGE

TYPE	WATTS	LAMPS	VOLT	MANUFACTURER	CATALOG NO.	MOUNT	NOTES
A	60	L.E.D.	120-277V	LITHONIA	2BLT4-72L-ADP-MVOLT-WZI-LP840-N100	FLUSH T-BAR	PER #1/E5.2
AE	60	L.E.D.		LITHONIA	2BLT4-72L-ADP-MVOLT-WZI-LP840-N100-E10WLP	FLUSH T-BAR	PER #1/E5.2 (1)
B	35	L.E.D.		LITHONIA	STL4-40L-EZB-LP840-N100	SURFACE	PER #2/E5.2
BE	35	L.E.D.		LITHONIA	STL4-40L-EZB-LP840-N100-E10WLCP	SURFACE	PER #2/E5.2 (1)
C	39	L.E.D.		LUMINAIRE	VPF8-4-MIN10-40W-40K-MVOLT-CLP-WHT	SURFACE	PER #2/E5.2
CE	39	L.E.D.		LUMINAIRE	VPF8-4-MIN10-40W-40K-MVOLT-CLP-WHT-EMB310T20	SURFACE	PER #2/E5.2 (1)
D	15	L.E.D.		GOTHAM	EVOVR-4O-15-6AR-WD-LSS-MVOLT	RECESS	PER #6/E5.2 EXTERIOR (3)
DE	15	L.E.D.		GOTHAM	EVOVR-4O-15-6AR-WD-LSS-MVOLT-E10WCP	RECESS	PER #6/E5.2 EXTERIOR (2), (3)
EE	25	L.E.D.		LITHONIA	WST-LED-P2-40K-VF-MVOLT-PIR-DDBXD-E20WH	WALL	(2)
P1	138	L.E.D.		LITHONIA	DSX1-LED-P5-40K-T4LG RPA-MVOLT-PIR-DDBXD	POLE	PER #7/E5.2 (5)
P2	276	L.E.D.		LITHONIA	(2) DSX1-LED-P5-40K-T4LG RPA-MVOLT-PIR-DDBXD	POLE	PER #10/E5.2 (5)
X	2	L.E.D.	120-277V	LITHONIA	LE-S-W-1-R-120/277-ELNSD	SURFACE	SINGLE FACE EXIT SIGN WITH EMERGENCY BATTERY PACK

FIXTURE SCHEDULE NOTES:

(1) LIGHT FIXTURE SHALL BE EQUIPPED WITH AN EMERGENCY BATTERY PACK TO OPERATE THE L.E.D. DRIVER IN THE EMERGENCY MODE FOR A MINIMUM OF 90 MINUTES. PULL UNSWITCHED CIRCUIT TO EMERGENCY BATTERY PACK. REFER TO LIGHTING PLANS FOR EXACT LOCATIONS AND DETAIL PER #4/E5.2 FOR WIRING REQUIREMENTS.

(2) LIGHT FIXTURE SHALL BE EQUIPPED WITH AN EMERGENCY BATTERY PACK TO OPERATE THE L.E.D. DRIVER IN THE EMERGENCY MODE FOR A MINIMUM OF 90 MINUTES. PULL UNSWITCHED CIRCUIT TO EMERGENCY BATTERY PACK. REFER TO LIGHTING PLANS FOR EXACT LOCATIONS AND DETAIL PER #4/E5.2 FOR WIRING REQUIREMENTS.

(3) PROVIDE BAR HANGERS AS REQUIRED.

(4) SEE LIGHTING PLANS FOR MOUNTING HEIGHTS.

(5) SET FIXTURE TO DIM TO 50% AFTER FIRST 15 MINUTES, THEN TO OFF AT 30 MINUTES.

ELECTRICAL SYMBOLS NOTES:

(A) REFER TO FIRE ALARM DEVICES ELEVATION, DETAIL #1/E4.3 FOR RESPECTIVE MOUNTING HEIGHTS.

(B) AT EXTERIOR LOCATIONS, PROVIDE WEATHER-RESISTANT TYPE G.F.C.I. DUPLEX RECEPTACLES, LEVITON #SFWT2-W OR EQUAL. AT DAMP LOCATIONS, PROVIDE A DIECAST WEATHERPROOF LOCKABLE COVER, RACO #5028-0 OR EQUAL. AT WET LOCATIONS, PROVIDE A DIECAST WEATHERPROOF 'WHILE-IN-USE' LOCKABLE COVER, RED DOT #CKSUV OR EQUAL.

(C) 'nLIGHT' ENABLED LIGHT FIXTURE PER FIXTURE SCHEDULE ON SHEET #EG1.1.

(D) LIBERTY WIRE CABLE, INC #18-2C-LVB OR EQUAL.

(E) ACUITY CONTROLS #CAT 5e * _J1 OR EQUAL. * ASTERISK INDICATES LENGTH OF CABLE. CABLES ARE AVAILABLE IN 6', 1, 2, 5, 10', 15', 30', AND 50' LENGTHS.

(F) ACUITY CONTROLS #nCM-PDT-10-ADCX-RJB OR EQUAL.

(G) ACUITY CONTROLS #nPODMA-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(H) ACUITY CONTROLS #nCM-PDT-10-RJB OR EQUAL.

(J) ACUITY CONTROLS #nPOD-A-KEY-WH. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(K) ACUITY CONTROLS #nWSD-PDT-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(L) ACUITY CONTROLS #nPP16-D-EPP OR EQUAL.

(M) ACUITY CONTROLS #nPODMA-4P-DX-WH OR EQUAL. PROVIDE A DECORATOR STYLE STAINLESS STEEL WALLPLATE.

(N) ACUITY CONTROLS #nECY-MVOLT-BAC-ADR-ENC-GFNK OR EQUAL. REFER TO DETAIL #8/E5.2 FOR ADDITIONAL INFORMATION.

(P) ACUITY CONTROLS #nBRG-8-KIT OR EQUAL. REFER TO DETAIL #9/E5.2 FOR ADDITIONAL INFORMATION. PROVIDE A 4' SQ. x 2 1/8" DEEP OUTLET BOX FOR MOUNTING OF NETWORK INTERFACE BRIDGE AND POWER SUPPLY.

(Q) ACUITY CONTROLS #nGWY2-GFX AND 150ma POWER SUPPLY #PS150 OR EQUAL.

(R) ACUITY CONTROLS #nPP20-PL OR EQUAL. CONNECT TO THE SAME 120V 'UNSWITCHED' RECEPTACLE CIRCUIT, AS THE POWER/RELAY PACK CONTROLS.

ELECTRICAL SYMBOLS
ALL DIMENSIONS TO CENTER OF BOX, U.O.N.

3-	CIRCUIT NUMBER (3-A-60)
-A-	FIXTURE TYPE (3-A-60)
-60	FIXTURE WATTAGE (3-A-60)
	HOME RUN 3/4"C - MIN. (PANEL A, CIRCUIT #3)
	CONDUIT RUN IN WALL OR ATTIC (1/2"C - 2 #12 AWG THWN + 1 #12 GND)
	CONDUIT RUN IN FLOOR OR UG (1/2"C - 2 #12 AWG THWN + 1 #12 GND)
	ANY CONDUIT RUN - 1/2"C - 3 #12 AWG THWN + 1 #12 GND
	" " - 3/4"C - 4 #12 AWG THWN + 1 #12 GND
	" " - 3/4"C - 5 #12 AWG THWN + 1 #12 GND
	" " - 1"C - 6 #12 AWG THWN + 1 #12 GND
	CONDUIT STUB - CAPPED AND LABELED.
1	ELECTRICAL KEYNOTE #1, REFER TO NOTES ON SAME SHEET.
U.O.N.	UNLESS OTHERWISE NOTED
W.P.	WEATHERPROOF
PDZ	DENOTES BOUNDARY OF PRIMARY DAYLIT ZONE.
SDZ	DENOTES BOUNDARY OF SECONDARY DAYLIT ZONE.
	TERMINAL CABINET (SIZE AS SHOWN)
	ELECTRICAL PANELBOARD
	TAMPER-RESISTANT SINGLE 20A RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
	TAMPER-RESISTANT DUPLEX RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
	TAMPER-RESISTANT DUPLEX RECEPTACLE IN FLUSH FLOOR BOX
(B)	TAMPER-RESISTANT G.F.C.I. DUPLEX RECEPTACLE IN WALL (+15" MIN. TO BOTTOM OF BOX)
	EXIT LIGHT, CEILING MOUNTED
	RECESSED MOUNTED LIGHT FIXTURE IN CEILING
	LIGHT FIXTURE
(E)	NETWORK CABLE - CATEGORY 5e CABLE, LENGTH AS REQUIRED
(D)	0-10V DIMMING CONTROL CABLE, LENGTH AS REQUIRED
(C)	LIGHT FIXTURE WITH 'nLIGHT' EMBEDDED CONTROLS
EM	RECESSED MOUNTED LIGHT FIXTURE EQUIPPED WITH EMERGENCY BATTERY PACK.
EM	LIGHT FIXTURE EQUIPPED WITH EMERGENCY BATTERY PACK.
EL EL	LIGHT FIXTURE CONNECTED ONTO THE EMERGENCY LIGHTING INVERTER 'ELU'
	SINGLE HEAD AREA LIGHT
	TWIN HEAD AREA LIGHT
$	LIGHT SWITCH (44"-0" MAX. TO TOP OF BOX, U.O.N.)
(F)	360° OCCUPANCY SENSOR (DUAL TECHNOLOGY) WITH AUTOMATIC DIMMING CONTROL PHOTOCELL, CEILING MOUNTED
(G)	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (44"-0" MAX. TO TOP OF BOX, U.O.N.)
(H)	360° OCCUPANCY SENSOR (DUAL TECHNOLOGY), CEILING MOUNTED
(K)	OCCUPANCY SENSOR WALL SWITCH, LINE VOLTAGE (44"-0" MAX. TO TOP OF BOX, U.O.N.)
(M)	ON/OFF SWITCH WITH RAISE/LOWER DIMMING CONTROL (FOUR CHANNELS) (44"-0" MAX. TO TOP OF BOX, U.O.N.)
(J)	ON/OFF DIGITAL KEYSWITCH WITH RAISE/LOWER DIMMING CONTROL (44"-0" MAX. TO TOP OF BOX, U.O.N.)
(R)	LOW VOLTAGE POWER/RELAY PACK FOR RECEPTACLE CONTROLS MOUNTED IN ACCESSIBLE ATTIC SPACE, U.O.N.
(L)	LOW VOLTAGE POWER/RELAY PACK WITH 0-10VDC DIMMING OUTPUT FOR LIGHTING CONTROLS MOUNTED IN ACCESSIBLE ATTIC SPACE, U.O.N.
(N)	NETWORK LIGHTING CONTROLLER
(P)	NETWORK INTERFACE BRIDGE WITH POWER SUPPLY
(Q)	GRAPHIC WALLPOD WITH POWER SUPPLY
	JUNCTION BOX EQUIPPED WITH BLANK COVER
	JUNCTION BOX EQUIPPED WITH BLANK COVER AND FLEX CONNECTION
	COMBINATION HEAVY-DUTY FUSED SAFETY SWITCH/MAGNETIC STARTER
	MOTOR
	HEAVY-DUTY FUSED SAFETY SWITCH
SD	ADDRESSABLE SMOKE DETECTOR MOUNTED ON CEILING
HD	ADDRESSABLE HEAT DETECTOR MOUNTED ON CEILING
RM	ADDRESSABLE RELAY MODULE
DMM	ADDRESSABLE DUAL MONITOR MODULE
V 15	FIRE ALARM VISUAL STROBE, 15 CANDELA, CEILING MOUNTED
(A) SV 15	FIRE ALARM SPEAKER/15 CANDELA VISUAL STROBE (CEILING MOUNTED)
(A) SV 75	FIRE ALARM SPEAKER/75 CANDELA VISUAL STROBE (CEILING MOUNTED)
V 15	FIRE ALARM VISUAL STROBE, 15 CANDELA, WALL MOUNTED
SP W.P.	FIRE ALARM EXTERIOR SPEAKER IN WALL. SEE FIRE ALARM PLANS FOR MOUNTING HEIGHT(S).
B	FIRE RISER BELL
WF	WATER FLOW
TS	TAMPER SWITCH

DIVISION OF THE STATE ARCHITECT
APPLICABLE CODES AND STANDARDS

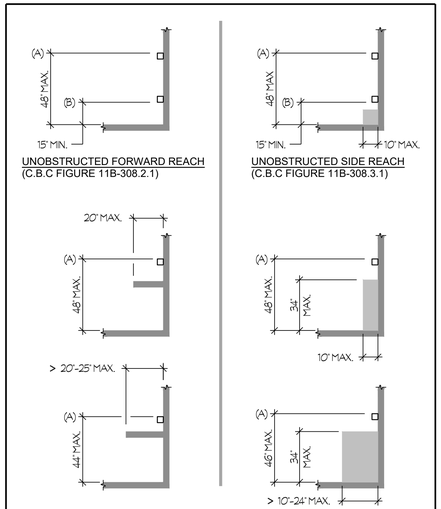
CODES:

2022	CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2022	CALIFORNIA BUILDING CODE (C.B.C.), PART 2, TITLE 24 C.C.R. (2021 INTERNATIONAL BUILDING CODE, VOLUMES 1 AND 2 WITH 2022 CALIFORNIA AMENDMENTS)
2022	CALIFORNIA ELECTRICAL CODE (C.E.C.), PART 3, TITLE 24 C.C.R. (2020 NFPA 70 NATIONAL ELECTRICAL CODE WITH 2022 CALIFORNIA AMENDMENTS)
2022	CALIFORNIA MECHANICAL CODE (C.M.C.), PART 4, TITLE 24 C.C.R. (2021 UNIFORM MECHANICAL CODE WITH 2022 CALIFORNIA AMENDMENTS)
2022	CALIFORNIA PLUMBING CODE (C.P.C.), PART 5, TITLE 24 C.C.R. (2021 UNIFORM PLUMBING CODE WITH 2022 CALIFORNIA AMENDMENTS)
2022	CALIFORNIA ENERGY CODE (CEnC), PART 6, TITLE 24 C.C.R.
2022	CALIFORNIA FIRE CODE (C.F.C.), PART 9, TITLE 24 C.C.R. (2021 INTERNATIONAL FIRE CODE WITH 2022 CALIFORNIA AMENDMENTS)
2022	CALIFORNIA REFERENCED STANDARDS CODE (C.R.S.C.), PART 12, TITLE 24 C.C.R.

TITLE 19, C.C.R. PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.

STANDARDS AND GUIDES:

NFPA 72	NATIONAL FIRE ALARM CODE, 2022 EDITION (CALIFORNIA AMENDED)
ADAAG	AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES
UL 38	MANUAL ACTUATED SIGNALING BOXES, 2005 EDITION
UL 268	SMOKE DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 2016 EDITION
UL 268A	SMOKE DETECTORS FOR DUCT APPLICATIONS, 2016 EDITION
UL 464	AUDIBLE SIGNAL APPLIANCES, 2003 EDITION
UL 521	HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION (WITH REVISIONS THROUGH JULY 2005)
UL 864	CONTROL UNITS FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 2014 EDITION



(A) TOP OF OUTLET BOX FOR RECEPTACLES, SWITCHES AND CONTROLS.

(B) BOTTOM OF OUTLET BOX FOR RECEPTACLES, SWITCHES AND CONTROLS.

1 ELECTRICAL RECEPTACLE, SWITCH AND CONTROL HEIGHTS

NTS

MINIMUM BATTERY STORAGE RATED ENERGY CAPACITY

PER BUILDING ENERGY EFFICIENCY STANDARDS
EQUATION 140.10-B
kWh(batt) = kW (PVdc) x B / (D ^ 0.5)

kW (PVdc) = 15.16 kW
B = 1.87 (PER TABLE 140.10-B)
D = 0.965 (PER EG4 ELECTRONICS 15kWh BATTERY)

kWh (batt) = 28.86
MORE THAN 10 kWh

TITLE 24, PART 6

THE CALIFORNIA ENERGY EFFICIENCY STANDARDS FOR NONRESIDENTIAL BUILDINGS HAS BEEN REVIEWED AND THE BUILDING DESIGN DESCRIBED ON THESE PAGES IS IN SUBSTANTIAL CONFORMANCE.

CODE, RULES AND REGULATIONS

ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST REGULATIONS OF THE STATE FIRE MARSHAL, CALIFORNIA CODE OF REGULATIONS, SERVING UTILITY COMPANIES AND OTHER APPLICABLE STATE ORDINANCES. NOTHING IN THESE PLANS OR SPECIFICATIONS IS TO BE CONSTRUED AS TO PERMIT WORK NOT CONFORMING TO THESE CODES. WHERE WORK OF A HIGHER DEGREE IS INDICATED IN THE PLANS OR SPECIFICATIONS THIS REQUIREMENT SHALL GOVERN.

SEISMIC ANCHORAGE REQUIREMENTS

MECHANICAL, ELECTRICAL AND PLUMBING ANCHORAGE NOTE

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

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

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

A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH 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 THE APPLICABLE OSHPD PRE-APPROVAL (OPA#) #OA043 AS INCLUDED IN THESE DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.

COMPLETE AUTOMATIC FIRE ALARM SYSTEM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER - BENJAMIN KIRK EASTHAM - No. E-19766 - Exp. 6/30/25 - ELECTRICAL - STATE OF CALIFORNIA

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT - MICHAEL J. SCOTT JR - No. C-34287 - REN: 08-31-25 - STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0630 Office
(559) 627-1926 Fax

TITLE
ELECTRICAL CODES, NOTES, SYMBOLS AND FIXTURE SCHEDULE

EG1.1

PROJECT 24001

Z:\Drafting\Jobs\RSES\24001\Coalinga-Huron USD\Sunset ES - New Classroom Wing\EG1.1.dwg DATE SAVED: 12/12/24 BY: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-JJ

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

This document is used to demonstrate compliance with requirements in 110.9, 110.12(c), 130.0, 130.1, 140.6 and 141.0(b)2 for indoor 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) and 180.2(b)4 for indoor lighting scopes using the prescriptive path for multifamily occupancies. Multifamily includes dormitory and senior living facilities.

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 1 of 7)**
Project Address: 985 SUNSET AVE	**Date Prepared:** 2024-06-18T10:49:18-04:00

A. GENERAL INFORMATION

01	Project Location (city)	Coalinga	04	Total Conditioned Floor Area (ft²)	9,284
02	Climate Zone	13	05	Total Unconditioned Floor Area (ft²)	0
03	Occupancy Types Within Project (select all that apply):		06	# of Stories (Habitable Above Grade)	1

● Classroom ● School or Classroom

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	Complete Building Method	9284	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)	9284			

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 2 of 7)**
	Date Prepared: 2024-06-18T10:49:18-04:00

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)					Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04	05	06	07		08	09
							Adjustments			
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)	**Total Allowed** (Watts)	Total Designed (Watts)	PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)		**Total Adjusted** (Watts) *Includes Adjustments	**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)		(See Table F)	(See Table P)			
Conditioned	5,570.4				= 5,570.4	≥ 5,317		=	5317	COMPLIES
Unconditioned					=	≥		=		
									Controls Compliance (See Table H for Details)	COMPLIES
									Rated Power Reduction Compliance (See Table Q for Details)	

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.

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 3 of 7)**
	Date Prepared: 2024-06-18T10:49:18-04:00

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
A, AE	2' x 4' L.E.D. GRID TROFFER	No	NA	60	Mfr. Spec	77	No	4,620	☐	☐
B, BE	1' x 4' SURFACE L.E.D.	No	NA	35	Mfr. Spec	11	No	385	☐	☐
C, CE	1' x 4' SURFACE L.E.D. - VANDAL RESISTANT	No	NA	39	Mfr. Spec	8	No	312	☐	☐
							Total Designed Watts: CONDITIONED SPACES	5,317		

[1]*FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.*

[2]*Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.*

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
		Field Inspector	
		Pass	Fail
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	☐	☐
Required >= 4,000W subject to multilevel	See Area/Space Level Controls		

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 4 of 7)**
	Date Prepared: 2024-06-18T10:49:18-04:00

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Skylit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
CLASSROOM BUILDING	School or Classroom	Readily Accessible	Dimmer	Occupancy Sensor	Included	Included	No	☐	☐
							13		
							Plan Sheet Showing Daylit Zones:		
							E1.3		

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Each area complying using the Complete Building or Area Category Methods per 140.6(b) are included in this table. Column 06 indicates if additional lighting power allowances per 140.6(c) or adjustments per 140.6(a) are being used .

Conditioned Spaces

01	02	03	04	05	06	
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density (W/ft²)	Area (ft²)	Allowed Wattage (Watts)	Additional Allowance / Adjustment	
					Area Category	PAF
CLASSROOM BUILDING	School or Classroom	0.6	9,284	5,570.4	No	No
		TOTALS:	9,284	5,570.4	See Tables J, or P for detail	

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 5 of 7)**
	Date Prepared: 2024-06-18T10:49:18-04:00

K. TAILORED METHOD GENERAL LIGHTING POWER ALLOWANCE

This section does not apply to this project.

L. ADDITIONAL LIGHTING ALLOWANCE: TAILORED WALL DISPLAY

This section does not apply to this project.

M. ADDITIONAL LIGHTING ALLOWANCE: TAILORED FLOOR AND TASK LIGHTING

This section does not apply to this project.

N. ADDITIONAL LIGHTING ALLOWANCE: TAILORED DECORATIVE /SPECIAL EFFECTS

This section does not apply to this project.

O. ADDITIONAL LIGHTING ALLOWANCE: TAILORED VERY VALUABLE MERCHANDISE

This section does not apply to this project.

P. POWER ADJUSTMENT: LIGHTING CONTROL CREDIT (POWER ADJUSTMENT FACTOR (PAF))

This section does not apply to this project.

Q. RATED POWER REDUCTION COMPLIANCE FOR ONE-FOR-ONE ALTERATIONS

This section does not apply to this project.

R. 80% LIGHTING POWER FOR ALL ALTERATIONS - CONTROLS EXCEPTIONS

This section does not apply to this project.

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 6 of 7)**
	Date Prepared: 2024-06-18T10:49:18-04:00

S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)

This section does not apply to this project.

T. DWELLING UNIT LIGHTING

This section does not apply to this project.

U. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections have been made based on information provided in this document. If any selections 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-LTI-E - Must be submitted for all buildings

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections have been made based on information provided in this document. If any selections have been changed by the permit applicant, an explanation should be included in Table E. Additional Remarks. These documents must be provided to the building inspector during construction and any with "-A" in the form name 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-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	CLASSROOM BUILDING
NRCA-LTI-03-A - Must be submitted for automatic daylight controls.	CLASSROOM BUILDING
NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.	CLASSROOM BUILDING

CERTIFICATE OF COMPLIANCE **NRCC-LTI-E**

Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** **(Page 7 of 7)**
Project Address: 985 SUNSET AVE	**Date Prepared:** 2024-06-18T10:49:18-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jeff Jackson	Documentation Author Signature:
Company: Rose Sing Eastham & Associates	Signature Date: 24-06-18
Address: 131 S DUNWORTH	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 104

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: Steven Eastham	Responsible Designer Signature:
Company: Rose Sing Eastham	Date Signed: 24-06-18
Address: 131 S DUNWORTH	License: E-18786
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 101

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN. 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
INDOOR LIGHTING COMPLIANCE

EG1.2

PROJECT **24001**

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733–2671
Visalia, California 93292–6705

REGISTERED PROFESSIONAL ENGINEER
STEVEN KIRK EASTHAM
No. E-18786
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\G1-2.dwg DATE: 8/4/24 BY: Casey PLOTTED: 02/13/25 JOB #: 24-034-U

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-LTO-E
Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	Report Page: (Page 1 of 8)
Project Address: 985 SUNSET AVE	Date Prepared: 2025-01-16T12:30:16-05:00

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

A. GENERAL INFORMATION

01	Project Location (city)	Coalinga	04	Total Illuminated Hardscape Area (ft²)	70795
02	Climate Zone	13			

03 Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):

☐ LZ-0: Very Low - Undeveloped Parkland ☐ LZ-2: Moderate - Urban Clusters ☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval
☐ LZ-1: Low - Rural Areas ☒ LZ-3: Moderately High - Urban Areas

05 Occupancy Types within Project

● Classroom ● School or Classroom

B. PROJECT SCOPE

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

My Project Consists of:

01	02		
☒ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6		
☐ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)?	○ Yes	○ No
03	04	05	
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method	
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%			

Please proceed to Table 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.*

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)	OR	Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)	=	**Total Allowed** (Watts)	≥	**Total Actual** (Watts)	**07 must be >= 08**
2,274.7	+	---	+	---	+	---	+	---	OR	---	=	2,274.7	≥	2,160	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.

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

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

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires [2]	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
D, DE	RECESSED L.E.D. DOWNLIGHT	☐ Linear	15	Mfr. Spec	52	New	☐	780	NA: < 6200 lumens	☐	☐
P1	25' L.E.D. POLE LIGHT	☐ Linear	138	Mfr. Spec	6	New	☐	828	Provided	☐	☐
P2	25' L.E.D. TWIN HEAD POLE LIGHT	☐ Linear	276	Mfr. Spec	2	New	☐	552	Provided	☐	☐
							Total Design Watts:	2160			

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

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

G. SHIELDING REQUIREMENTS (BUG)

This 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	
Name or Item Tag	Complete Luminaire Description	Backlight Rating[1]			Uplight Rating[2]			Glare Rating (Lumens)[2]			Field Inspector	
		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
P1	25' L.E.D. POLE LIGHT	2 MH from property line	No Limit	B2	Area Lighting	U0	U0	> 2 MH from property line	G3	G2	☐	☐
P2	25' L.E.D. TWIN HEAD POLE LIGHT	2 MH from property line	No Limit	B2	Area Lighting	U0	U0	> 2 MH from property line	G3	G2	☐	☐

[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.*

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
WALKWAY: "D, DE"	Astronomical Timer	Provided	NA: Each Luminaire <= 40 Watts	☐	☐
WALKWAY: "P1"	Astronomical Timer	Provided	Provided	☐	☐
WALKWAY: "P2"	Astronomical Timer	Provided	Provided	☐	☐

[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.*

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

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

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

02	03	04	05	06	07	08	09
Area Description	Area Wattage Allowance (AWA)			Linear Wattage Allowance (LWA)			Total General AWA + LWA (Watts)
	Illuminated Area (ft²)	Allowed Density (W/ft²)	Area Allowance (Watts)	Perimeter Length (lf)	Allowed Density (W/lf)	Linear Allowance (Watts)	
WALKWAY	19176	0.021	402.7	869	0.2	173.8	576.5
PARKING LOT	38502	0.021	808.54	1079	0.2	215.8	1024.34
SAFE DISPERSAL AREA	13117	0.021	275.46	742	0.2	148.4	423.86
					Initial Wattage Allowance for Entire Site (Watts):		250
					Instances of Initial Wattage Allowance (LZ 0 only)[1]		
					Total General Hardscape Allowance (Watts):		2274.7

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.

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.	WALKWAY: "D, DE"; WALKWAY: "P1"; WALKWAY: "P2"

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jeff Jackson	Documentation Author Signature:
Company: Rose Sing Eastham & Associates	Signature Date: 24-06-18
Address: 131 S DUNWORTH	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 104

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: Steven Eastham	Responsible Designer Signature:
Company: Rose Sing Eastham	Date Signed: 24-06-18
Address: 131 S DUNWORTH	License: E-18786
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 101

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI | ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627 1650 Office
(559) 627 1926 Fax

TITLE
OUTDOOR LIGHTING COMPLIANCE

EG1.3

PROJECT 24001

REGISTERED PROFESSIONAL ENGINEER
BRIAN KIRK EASTHAM
No. E-18786
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

Z:\Drafting\Jobs\RSE\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\EG1.3.dwg DATE SAVED: 01/16/25 BY: Casey DATE PLOTTED: 02/13/25 JOB #: 24-034-uJ

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

This document is used to demonstrate compliance with mandatory requirements in 130.5, for electrical systems in newly constructed nonresidential and hotel/motel occupancies and 160.6 and 160.9 for electrical systems in newly constructed multifamily occupancies. Additions and alterations to electrical service systems in nonresidential and hotel/motel occupancies will also use this document to demonstrate compliance per 141.0(a) or 141.0(b)2P for alterations. For multifamily addition or alterations compliance will be documented per 180.1(a) or 180.2 (b)4Bvii

Project Name:	SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:**	**(Page 1 of 4)**
Project Address: 985 SUNSET AVE		**Date Prepared:**	2024-06-18T10:47:22-04:00

A. GENERAL INFORMATION

01	Project Location (city)	Coalinga	02	Climate Zone	13
			03	Occupancy Types Within Project:	ClassroomSchool or Classroom

B. PROJECT SCOPE

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

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[3]	Rating[2] (kVA)	Utility Provided Metering System Exception to 130.5(a)/ 160.6(a)[3]	System subject to CA Elec Code Artcle 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
EXISTING MAIN SWITCHBOARD "MSB"	Add/Alt to feeders and branch circuits only	---	☐	☐	Where required, demand response controls must be specified which are capable of receiving and automatically responding to at least one standards based messaging protocol which enables demand response after receiving a demand response signal. Sections 120.2/ 160.3, 130.1/ 160.5, and 130.3/ 160.5, and mechanical, indoor lighting, and sign lighting Certificate of Compliance documents will indicate when demand response controls are required.	☐

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

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:**	**(Page 2 of 4)**
		Date Prepared:	2024-06-18T10:47:22-04:00

C. COMPLIANCE RESULTS

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

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

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

H. VOLTAGE DROP

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

01	02		03	04	05	
Electrical Service Designation/Description	Combined Voltage Drop on Installed Feeder/Branch Circuit Conductors Compliance Method		Location of Voltage Drop Calculations[1]	Sheet Number for Voltage Drop Calculations in Construction Documents	Field Inspector	
					Pass	Fail
EXISTING MAIN SWITCHBOARD "MSB"	☒ Voltage drop less than 5%	☐ Permitted by CA Elec Code (Exception to 130.5(c))*	In construction documents	E5.1	☐	☐

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

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

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:**	**(Page 3 of 4)**
		Date Prepared:	2024-06-18T10:47:22-04:00

K. 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-ELC-E - Must be submitted for all buildings

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE — **NRCC-ELC-E**

Project Name:	SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:**	**(Page 4 of 4)**
Project Address: 985 SUNSET AVE		**Date Prepared:**	2024-06-18T10:47:22-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jeff Jackson	Documentation Author Signature:
Company: Rose Sing Eastham & Associates	Signature Date: 24-06-18
Address: 131 S DUNWORTH	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 104

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: Steven Eastham	Responsible Designer Signature:
Company: Rose Sing Eastham	Date Signed: 24-06-18
Address: 131 S DUNWORTH	License: E-18786
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 101

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
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REVISIONS

MANGINI ARCHITECTURE | INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627 1926 Office
(559) 627 1926 Fax

TITLE
POWER COMPLIANCE

EG1.4

PROJECT 24001

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
JEFFREY KIRK EASTHAM
No. E-18786
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\ES1.4.dwg DATE SAVED: 06/18/24 BY: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-JJ

STATE OF CALIFORNIA
Solar And Battery
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE	NRCC-SAB-E
This document is used to demonstrate compliance with prescriptive PV and battery requirements in 140.10/ 170.2 for nonresidential, multifamily and mixed-use buildings and prescriptive solar thermal requirements in 170.2(d)3C for multifamily and hotel/ motel occupancies. When PV/battery/solar thermal requirements don't apply or are traded using the performance approach, this document demonstrates compliance with mandatory solar readiness requirements in 110.10/ 160.8 for newly constructed buildings which are either multifamily ten stories or fewer, hotel/motel ten stories or fewer or all other nonresidential buildings three stories or fewer. It is also used to demonstrate compliance with solar readiness in 110.10/ 160.8 for additions to nonresidential, multifamily or hotel/motel building types which add more than 2,000 ft² of roof area. Alterations, or additions of less than 2,000 ft² of roof area, are not required to comply with solar readiness, solar PV and battery requirements and do not need to complete this document.	
Project Name: SUNSET ELEMENTARY SCHOOL NEW CLASSROOM BUILDING	**Report Page:** (Page 1 of 6)
Project Address: 985 SUNSET AVE	**Date Prepared:** 2024-06-18T10:53:34-04:00

A. GENERAL INFORMATION

01	Project Location (city)	Coalinga	04	Building Occupancies	School or Classroom
02	Climate Zone	13	05	Construction Type	New construction
03	Conditioned Floor Area (ft²)	9284	06	Number of Stories	Bldg <= 3 stories

B. PROJECT SCOPE

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

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

	01	
☒	Provided PV system and battery storage sized per 140.10/ 170.2 (g and h)	The project has included an installed PV system and battery storage system per requirements in 140.10/ 170.2(g and h) as documented in Table J.
☐	Exception to PV and Battery: Not enough Solar Access Roof Area	The total of all available Solar Access Roof Area(s) of the project site is less than three percent of the conditioned floor area as documented in Table J.
☐	Exception to PV and Battery: Required PV < 4kW	The required PV system size is less than 4 kW dc as documented in Table J..
☐	Exception to PV and Battery: No contiguous Solar Access Roof Area	The Solar Access Roof Area(s) of the project site contains less than 80 contiguous square feet as documented in Table J.
☐	Exception to PV and Battery: Can't meet snow load	The project has a roof design where the enforcement authority has verified it is not possible for the PV system, including panels, modules, components, supports, and attachments to the roof structure, to meet ASCE 7-16 Chapter 7, Snow Loads.
☐	Exception to PV and Battery: Multi-tenant without VNEM or Community Solar	The project is a multi-tenant building in an area where a load serving entity does not provide either a Virtual Net Metering (VNEM) or community solar program.
☐	The prescriptive PV/battery requirement has been traded off using the performance compliance approach as documented on the PRF Certificate of Compliance form.	

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

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

C. COMPLIANCE RESULTS

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

Allocated Solar Zone				Installed PV System				Installed SWH System				Smart Tstat and Alternative EE Measure		Compliance Results
01		02	OR	03	04		OR	05		06	OR	07	08	
Required Minimum Area (ft²)	<=	Designated Area (ft²)		Required Minimum DC Power Rating (Watts)	Designed DC Power Rating (Watts)	<=		Required Minimum Solar Savings Fraction	<=	Designed/Rated Solar Savings Fraction		JA5 Compliant Thermostat Specified?	Alternative Energy Efficiency Measure	COMPLIES
(See Table F)				(See Tables G or J)				(See Table H)				(See Table I)		
	<=		OR	15,130	<= 15,770		OR		<=					
Location in construction documents showing the location for inverters and metering equipment and a pathway for the routing of conduit/ plumbing to the electrical service/ water heating system per §110.10[c].														
Battery storage system design meets the minimum requirements in Joint Appendix JA12 and the minimum energy (kWh)/ power (kW) capacity per Table J.														COMPLIES

D. EXCEPTIONAL CONDITIONS

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

Table F indicates a subarea that is not in compliance with the requirements. Please revisit Table F

E. ADDITIONAL REMARKS

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

F. ALLOCATED SOLAR ZONE

This section does not apply to this project.

G. PERMANENTLY INSTALLED SOLAR PV FOR SOLAR READY EXCEPTION

This section does not apply to this project.

H. PERMANENTLY INSTALLED SOLAR HOT WATER SYSTEMS

This section does not apply to this project.

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

This section does not apply to this project.

J. PHOTOVOLTAIC (PV) AND BATTERY SYSTEMS

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

Photovoltaic (PV) System

01	02	03	04	05	06	07	08
Occupancy	Conditioned Floor Area (ft²)	Area of New Roof[1] (ft²)	Roof Area < 70% Solar Access[2] (ft²)	Plansheet or Document showing Solar Access Calculations	Occupied Roof Area[3] (ft²)	Solar Access Roof Area (SARA) (ft²)	Min Size of PV System Required (kWdc)
School or Classroom	9,284	16,700	0	EG1.1	100	16,600	15.13
						Total Min Size PV System Required for all Spaces (kWdc):	15.13
						Total Size PV System in Design (kWdc):	15.77

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

Battery Storage System

01	02	03	04	05
Space Type	Min Size of PV Applicable To Battery Sizing (kWdc)	Rated Single Charge-Discharge AC Efficiency of Battery System[1]	Min Battery Rated Energy Capacity Required (kWh)	Min Power Capacity of Battery Required (kWdc)
School or Classroom	15.13	0.97	28.72	6.95
	Total Min Energy (kWh) and Power (kW) Capacity Required		28.73	6.96
	Total Energy (kWh) and Power (kW) Capacity in Design		30	7.5

[1]FOOTNOTE: Rated single charge-discharge cycle AC to AC (round trip) efficiency of the battery storage system

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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

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

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Jeff Jackson	Documentation Author Signature:
Company: Rose Sing Eastham & Associates	Signature Date: 24-06-18
Address: 131 S DUNWORTH	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 104

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: Steven Eastham	Responsible Designer Signature:
Company: Rose Sing Eastham	Date Signed: 24-06-18
Address: 131 S DUNWORTH	License: E-18786
City/State/Zip: VISALIA, CA 93292	Phone: 559-733-2671 EXT. 101

TABLE 1—ALLOWABLE CONNECTION CAPACITY OF THE S-5! CLAMPS TO STANDING SEAM METAL ROOF[1] (Continued)

S-5! Clamps	Standing Seam Metal Roof			Installed Torque (in-lb)	Allowable Connection Capacity (lbf)		
					Uplift	Lateral	
	Manufacturer	Product Designation	Yield Strength (ksi)		Normal to Seam	Parallel to Seam	Normal to Seam
S-5-V mini	MBCI	Ultra-Dek® (22 ga. steel w/ AZ55 & Galvalume Plus)	54.0	160-180	811	131	N/A
		Ultra-Dek® (24 ga. steel w/ AZ55 & Galvalume Plus)	54.8	130-150	384	292	N/A
		SuperLok® (22 ga. steel w/ AZ55 & Galvalume Plus)	54.0	160-180	1008	568	N/A
		SuperLok® (24 ga. steel w/ AZ55 & Galvalume Plus)	63.2	130-150	838	460	N/A
		Double-Lok® (22 ga. steel w/ AZ55 & Galvalume Plus)	55.2	160-180	1032	644	N/A
		Double-Lok® (24 ga. steel w/ AZ55 & Galvalume Plus)	60.1	130-150	619	550	N/A
S-5-S		LokSeam® (22 ga. steel w/ AZ55 & Galvalume Plus)	53.1	160-180	779	838	N/A
		LokSeam® (24 ga. steel w/ AZ55 & Galvalume Plus)	54.5	130-150	644	634	N/A
S-5-S mini		LokSeam® (22 ga. steel w/ AZ55 & Galvalume Plus)	53.1	160-180	376	581	N/A
		LokSeam® (24 ga. steel w/ AZ55 & Galvalume Plus)	54.5	130-150	235	476	N/A
S-5-N	McElroy Metals	Meridian (24 ga. steel w/ PVDF and Galvalume AZ50)	58.0	130-150	511	416	N/A
		Meridian (26 ga. steel w/ PVDF and Galvalume AZ50)	50.2	130-150	352	357	N/A
S-5-N mini		Meridian (24 ga. steel w/ PVDF and Galvalume AZ50)	58.0	130-150	384	335	N/A
		Meridian (26 ga. steel w/ PVDF and Galvalume AZ50)	50.2	130-150	188	247	N/A
S-5-V	Merchant & Evans	ZipLock 2" (22 ga. steel w/ PVDF and AZ55)	52.9	160-180	1218	635	N/A
		ZipLock 2" (24 ga. steel w/ PVDF and AZ55)	53.6	130-150	904	718	N/A
		Ziplock 2" (0.040 inch Aluminum w/ PVDF)	20.4	130-150	N/A	458	N/A
		Ziplock 2" (0.032 inch Aluminum w/ PVDF)	25.0	130-150	N/A	501	N/A
S-5-V mini		ZipLock 2" (22 ga. steel w/ PVDF and AZ55)	52.9	160-180	951	522	N/A
		ZipLock 2" (24 ga. steel w/ PVDF and AZ55)	53.6	130-150	505	390	N/A
		ZipLock 2" (0.040 inch Aluminum w/ PVDF)	20.4	130-150	390	514	N/A
		ZipLock 2" (0.032 inch Aluminum w/ PVDF)	25.0	130-150	349	380	N/A
S-5-E		ZipLock 1.5" (0.040 inch Aluminum w/ PVDF)	20.0	130-150	358	519	N/A
		ZipLock 1.5" (0.032 inch Aluminum w/ PVDF)	25.0	130-150	N/A	466	N/A

For **SI**: 1 ksi= 6.89 MPa; 1 lbf= 4.45 N.

APPROVALS
FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
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APP: 02-122658 INC: A
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SS ☑ FLS ☑ ACS ☑
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LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN: 08-31-25
STATE OF CALIFORNIA
DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI | ARCHITECTURE INGENUITY
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4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-2650 Office
(559) 627-1926 Fax

TITLE
SOLAR AND BATTERY STORAGE COMPLIANCE

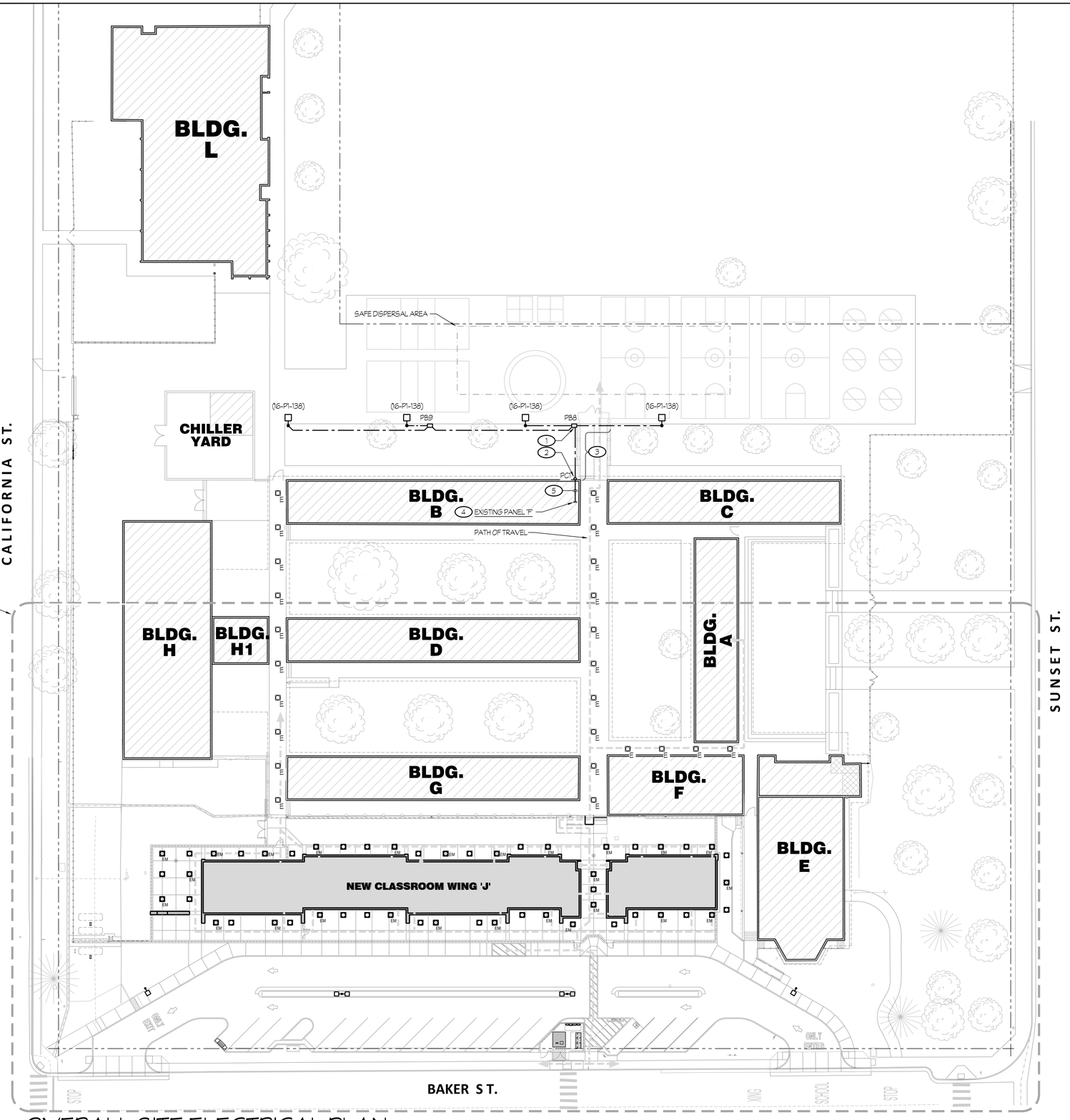
EG1.5

PROJECT 24001

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
STEVEN KIRK EASTHAM
No. E-18786
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

J:\Drafting\Jobs\RSES\24\01\3\Coalinga-Huron USD\Sunset ES - New Classroom Wing\Sht\1.dwg DATE SAVED: 12/09/24 BY: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-LU



OVERALL SITE ELECTRICAL PLAN

1" = 30'-0"

north

NOTES (THIS SHEET ONLY):

1. NEW POWER PULL BOX PER DETAILS #2/E5.3 AND #5/E5.3. TYPICAL, U.O.N..
2. PROVIDE A 18" H x 12" W x 6" DP, NEMA 3R SCREW COVER ENCLOSURE. SEAL AROUND TO PREVENT LEAKS.
3. SAWCUT AND PATCH EXISTING CONCRETE TO UNDERGROUND NEW CONDUITS AS SHOWN. PER DETAIL #9/E5.3.
4. PROVIDE NEW 20 AMP, 1-POLE CIRCUIT BREAKER AT CIRCUIT #16 FOR CONNECTION OF SAFE DISPERSAL AREA LIGHTS.
5. RUN CONDUIT OVERHEAD IN ACCESSIBLE ATTIC SPACE.

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34288
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
OVERALL SITE ELECTRICAL PLAN

ES1.1

PROJECT 24001

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
KIRK S. EASTHAM
No. E-19760
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Z:\Drafting\Jobs\RSES\24003\S\Coalinga-Huron USD\Sunset ES - New Classroom Wing\ES1.1.dwg DATE SAVED: 01/16/25 BY: Casey DATE PLOTTED: 02/11/25 JOB #: 24-03A-JJ

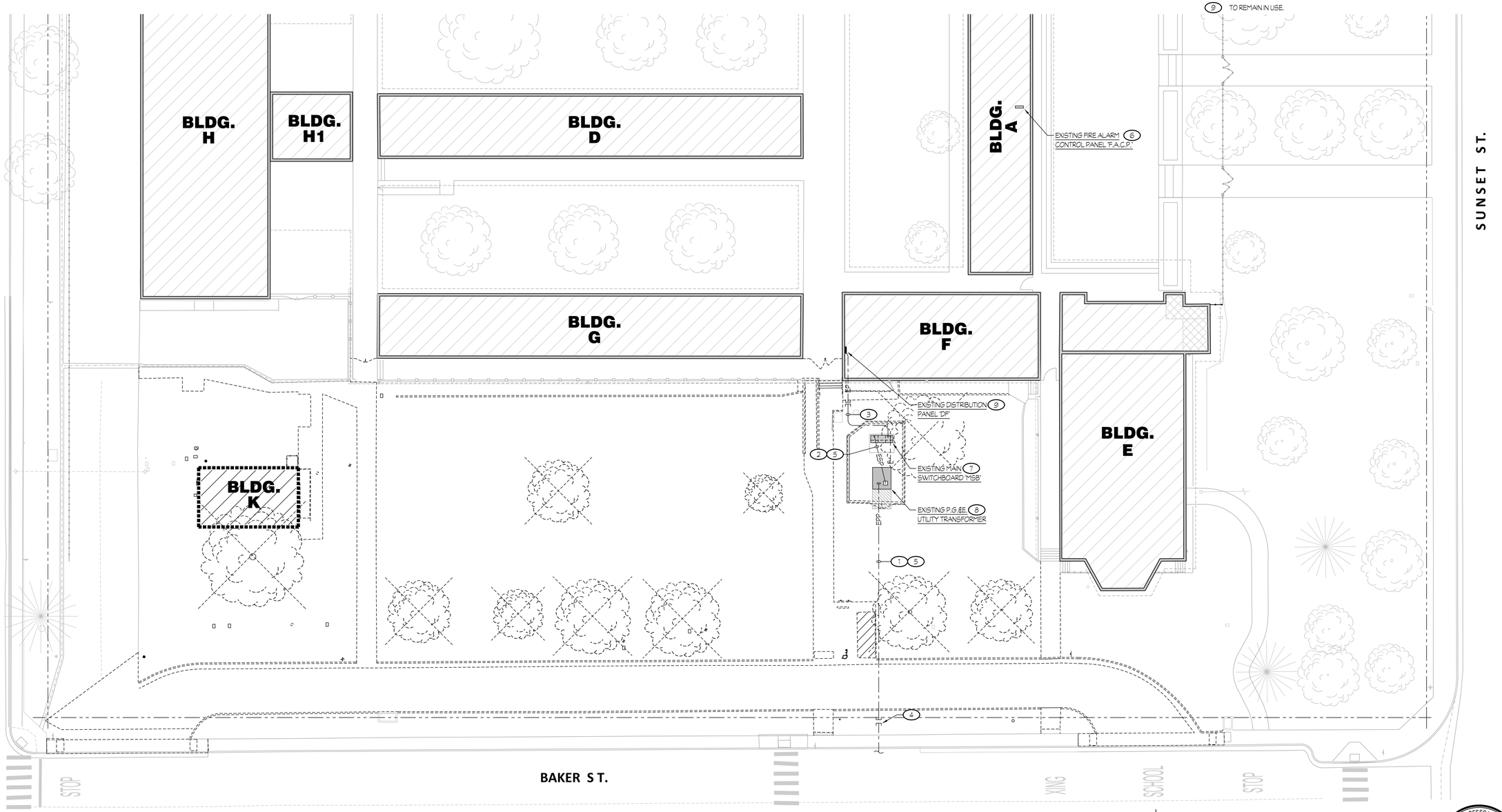
COMPLETE AUTOMATIC FIRE ALARM SYSTEM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

NOTES (THIS SHEET ONLY):

1. ——— EPP ——— DENOTES EXISTING S.C.E. 'PRIMARY' CONDUIT AND CONDUCTORS.
2. ——— ESP ——— DENOTES EXISTING S.C.E. 'SECONDARY' CONDUIT AND CONDUCTORS.
3. ——— EP ——— DENOTES EXISTING FEEDER TO REMAIN.
4. COORDINATE WITH UTILITY FOR EXACT INTERCEPTION POINT. INTERCEPT EXISTING UTILITY CONDUIT AND EXTEND TO NEW LOCATION OF PAD MOUNTED TRANSFORMER.
5. UTILITY CONDUCTORS SHALL BE DISCONNECTED AND REMOVED BY UTILITY. CONDUITS ALLOWED TO BE ABANDONED, BUT SHALL BE DEMOLISHED TO MAKE WAY FOR NEW CONSTRUCTION AS REQUIRED.
6. SEE FIRE ALARM RISER DIAGRAM, #1/E4.2 FOR ADDITIONAL INFORMATION.
7. DISCONNECT, REMOVE AND SALVAGE FOR REUSE. SEE ENLARGED SITE ELECTRICAL PLAN - NEW, SHEET #ES1.3, FOR NEW LOCATION.
8. CONTRACTOR TO COORDINATE WITH P.G.&E. TO DISCONNECT TRANSFORMER AND RELOCATE OR REPLACE. SEE SHEET #ES1.3 FOR ADDITIONAL INFORMATION.
9. TO REMAIN IN USE.



ENLARGED SITE ELECTRICAL PLAN - DEMOLITION

1" = 20'-0"

north

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
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SS ☑ FLS ☑ ACS ☑
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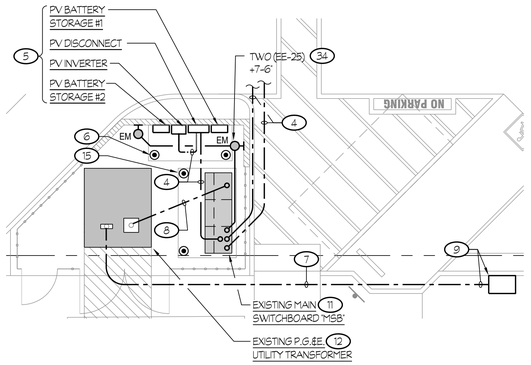
ES1.2

PROJECT 24001

Rose Sing Eastham & Associates
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131 S. Dunworth – (559)733-2671
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REGISTERED PROFESSIONAL ENGINEER
JASON KIRK EASTHAM
No. E-19766
Exp. 6/30/25
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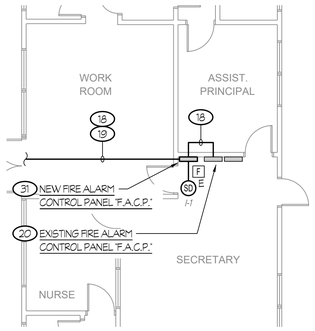
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PARTIAL ENLARGED SITE ELEC. PLAN - NEW

1/8" = 1'-0"

north



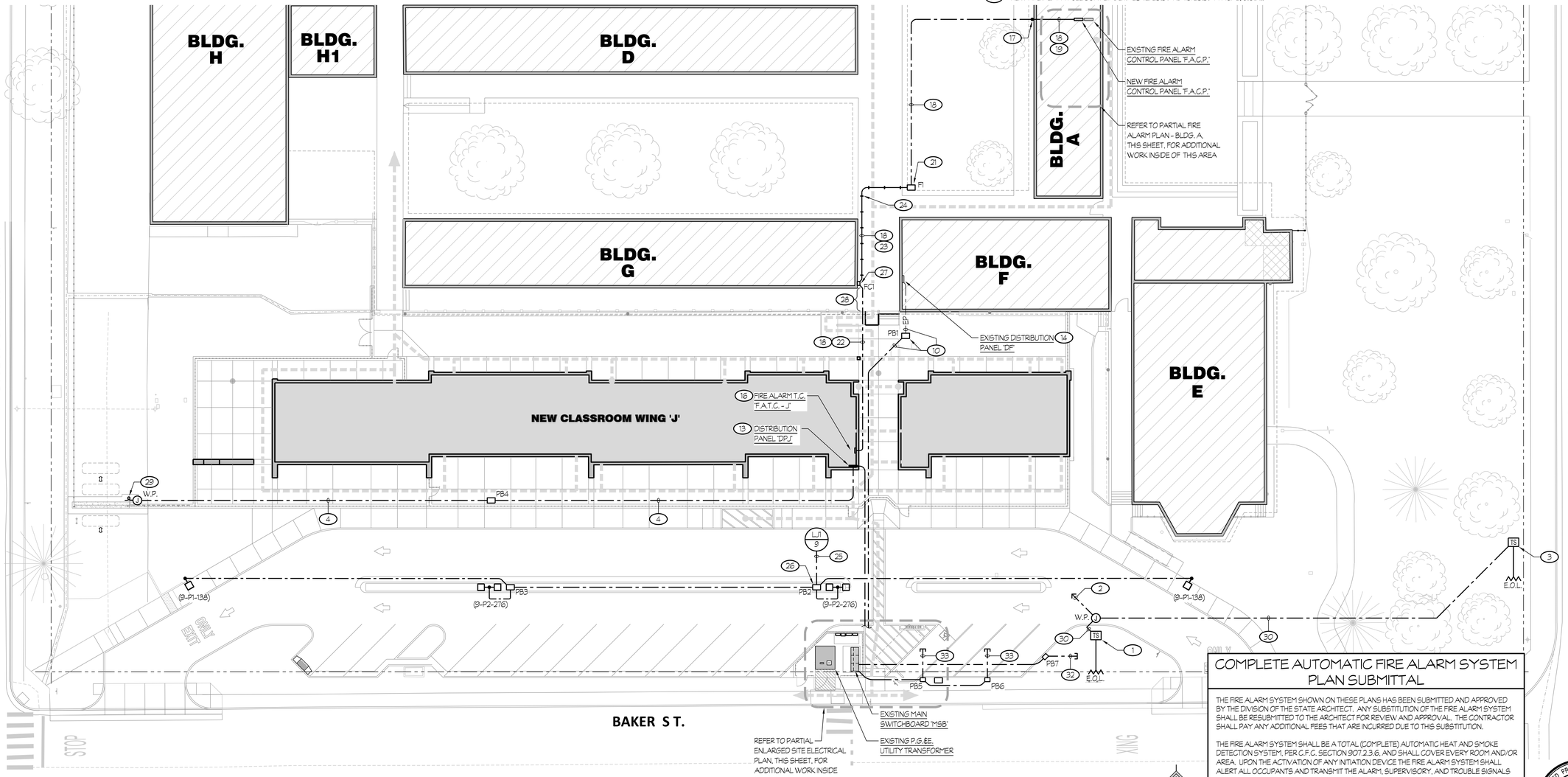
PARTIAL FIRE ALARM PLAN - BLDG. A

1/8" = 1'-0"

north

NOTES (THIS SHEET ONLY):

1. CONNECT TAMPER SWITCH AT THE POST INDICATOR VALVE 'P.I.V.'. RUN 1/2" LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT WITH 2 #14 INSIDE TO TAMPER SWITCH AND PROVIDE AN END-OF-LINE RESISTOR 'E.O.L.'. SECURE CONDUIT TO PIPING WITH 1/2" WIDE STAINLESS STEEL STRAPPING. PROVIDE A TWO-DEVICE DIECAST WEATHERPROOF JUNCTION BOX WITH A BLANK GASKETED COVER AND MOUNT AT +6' A.F.G.. PROVIDE AN ADDITIONAL GALVANIZED RIGID STEEL CONDUIT, MINIMUM OF 24" LONG, WRAPPED WITH PVC TAPE TO SUPPORT WEATHERPROOF JUNCTION BOX. COORDINATE EXACT LOCATION WITH FIRE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
2. RUN 3/4"C - 6 #14 TO DUAL MONITOR MODULES ' I/-1' AND ' I/-2' ROOM #J3.
3. CONNECT TAMPER SWITCHES AT THE O.S.&Y. VALVES LOCATED ON THE DOUBLE CHECK DETECTOR/BACKFLOW PREVENTER ASSEMBLY. RUN 1/2" LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT WITH 2 #14 INSIDE TO EACH TAMPER SWITCH AND PROVIDE AN END-OF-LINE RESISTOR 'E.O.L.' AT EACH TAMPER SWITCH. SECURE CONDUIT TO PIPING WITH 1/2" WIDE STAINLESS STEEL STRAPPING. PROVIDE A TWO-DEVICE DIECAST WEATHERPROOF JUNCTION BOX WITH A BLANK GASKETED COVER AND MOUNT AT +6' A.F.G.. PROVIDE AN ADDITIONAL GALVANIZED RIGID STEEL CONDUIT, MINIMUM OF 24" LONG, WRAPPED WITH PVC TAPE TO SUPPORT WEATHERPROOF JUNCTION BOX. COORDINATE EXACT LOCATION WITH FIRE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
4. FEEDER PER ONE LINE DIAGRAM #1/E5.1.
5. MOUNT PER DETAIL #1/E5.4.
6. GROUNDING AND BONDING PER DETAIL #2/E5.4.
7. PRIMARY FEEDER PER ONE LINE DIAGRAM #1/E5.1.
8. SECONDARY FEEDER PER ONE LINE DIAGRAM #1/E5.1.
9. PROVIDE P.G.&E. VAULT PER P.G.&E. SPECIFICATIONS TO CAPTURE EXISTING PRIMARY FEEDER AND EXTEND TO NEW LOCATION AS SHOWN.
10. PROVIDE NEW PULL BOX PER DETAILS #2/E5.3 AND #5/E5.3 TO CAPTURE EXISTING FEEDER. EXTEND FEEDER AS SHOWN TO RECONNECT EXISTING DISTRIBUTION PANEL.
11. RELOCATE EXISTING MAIN SWITCHBOARD TO NEW LOCATION AND RECONNECT AS SHOWN. MOUNT PER DETAIL #5/E5.4.
12. CONTRACTOR TO COORDINATE WITH P.G.&E. TO RELOCATE EXISTING P.G.&E. UTILITY TRANSFORMER TO NEW LOCATION AS SHOWN. COORDINATE WITH P.G.&E. TO PROVIDE NEW PRIMARY AND SECONDARY FEEDERS.
13. SEE POWER PLAN ON SHEET #E2.1 FOR EXACT LOCATION AND REQUIREMENTS.
14. TO REMAIN IN USE.
15. GROUNDING AND BONDING PER DETAIL #6/E5.4.
16. SEE FIRE ALARM PLAN ON SHEET #E3.1 FOR EXACT LOCATION AND REQUIREMENTS.
17. PROVIDE AN L.B. CONDUIT BODY ON EXTERIOR WALL. SEAL ALL PENETRATIONS TO PREVENT LEAKS.
18. FIRE ALARM CONDUIT AND WIRING PER FIRE ALARM SYSTEM RISER DIAGRAM, #1/E4.2.
19. ROUTE CONDUIT OVERHEAD IN CONCEALED ATTIC SPACE.
20. USE EXISTING FIRE ALARM CONTROL PANEL CABINET TO MOUNT NEW COMPONENTS PER FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS ON SHEET #E4.1 FOR RECONNECTION OF EXISTING SIGNALING AND INITIATION ZONES.
21. NEW FIRE ALARM PULL BOX PER DETAILS #2/E5.3 AND #5/E5.3. TYPICAL, U.O.N..
22. RUN NEW FIRE ALARM CONDUIT AND WIRING UNDERGROUND AND THEN RUN SURFACE MOUNTED UP WALL TO NEW PULL ENCLOSURE MOUNTED ON UNDERSIDE OF EXISTING WALK COVER.
23. RUN NEW FIRE ALARM CONDUIT AND WIRING EXPOSED ON UNDERSIDE OF EXISTING WALK COVER AND THEN DOWN COLUMN AND UNDERGROUND INTO NEW PULL BOX 'F1'.
24. PROVIDE CONDUIT STRAPS ON UNDERSIDE OF WALK COVER PER DETAIL #8/E4.3 AT A MINIMUM OF 6' O.C. AND WITHIN 18" OF ALL COUPLINGS. TYPICAL, U.O.N..
25. ROUTE CIRCUIT THROUGH LIGHTING CONTROL PANEL 'LCP-J'.
26. NEW POWER PULL BOX PER DETAILS #2/E5.3 AND #5/E5.3. TYPICAL, U.O.N..
27. PROVIDE A 18" H x 12" W x 6" DP. NEMA 3R SCREW COVER ENCLOSURE. SEAL AROUND TO PREVENT LEAKS.
28. SAWCUT AND PATCH EXISTING CONCRETE TO UNDERGROUND NEW CONDUITS AS SHOWN. PER DETAIL #9/E5.3.
29. CONNECT MOTORIZED GATE.
30. 3/4"C - 2 #14.
31. MOUNT NEW FIRE ALARM CONTROL PER DETAIL #6/E4.3.
32. SPARE CONDUITS PER ONE LINE DIAGRAM #1/E5.1.
33. STUBS PER ONE LINE DIAGRAM, #1/E5.1 FOR FUTURE E.V. STATIONS.
34. CONNECT TO EXISTING MAIN SWITCHBOARD 'MSB'. SEE ONE LINE DIAGRAM #1/E5.1 FOR ADDITIONAL INFORMATION.



ENLARGED SITE ELECTRICAL PLAN - NEW

1" = 20'-0"

north

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Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
SUSAN KIRK EASTHAM
No. E-17966
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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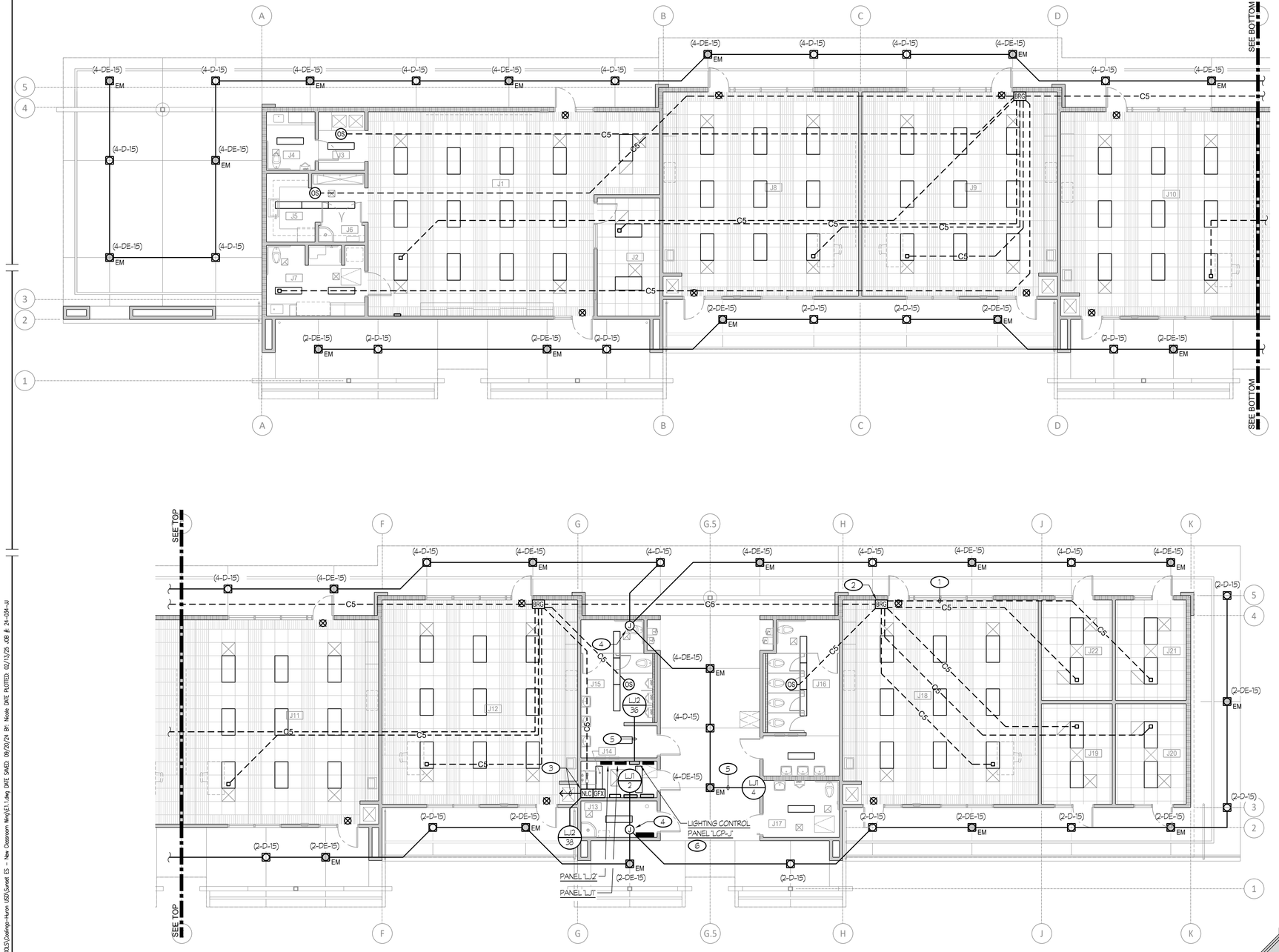
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TITLE
ENLARGED SITE ELECTRICAL PLAN - NEW

ES1.3

PROJECT 24001

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OVERALL LIGHTING PLAN

1/8" = 1'-0"

north

NOTES (THIS SHEET ONLY):

1. — — C5 — — DENOTES CAT. 5e CABLE. ELECTRICAL CONTRACTOR MAY USE PRETERMINATED CAT. 5e CABLING OR PROVIDE CAT. 5e CABLING, MODULAR JACKS ON EACH END AND TERMINATE THE MODULAR JACKS USING THE TIA/EIA-568-B.2 PIN-PAIR SPECIFICATION. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND OUTLET BOXES IN WALLS FOR ROUTING OF CABLING. CABLE MAY BE ROUTED IN FREE-AIR, WHEN LOCATED IN ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILINGS. AT GYPBOARD CEILINGS, PROVIDE A DOUBLE-GANG LOW VOLTAGE MOUNTING PLATE BRACKET, CADDY #MPLS2 OR EQUAL, AT THE RJ-45 JACKS (EMBEDDED CONTROLS) OF THE SURFACE MOUNTED LIGHT FIXTURES FOR PASSAGE OF CAT. 5e CABLING.
2. TYPICAL OF NETWORK INTERFACE BRIDGE (SYMBOL BRG): LOCATE THE NETWORK INTERFACE BRIDGE IN THE ACCESSIBLE ATTIC SPACE ABOVE THE T-BAR CEILING. SURFACE MOUNT ON THE WALL AT A MINIMUM OF 12" ABOVE THE T-BAR CEILING. RUN 1/2"C - 2 #12 TO NEAREST 'UNSWITCHED' LIGHTING CIRCUIT. RUN CAT. 5e CABLE BETWEEN ADJACENT NETWORK INTERFACE BRIDGES, WHERE APPLICABLE. REFER TO DETAIL #9/E5.2 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
3. SURFACE MOUNT THE NETWORK LIGHTING CONTROLLER 'NLC' AT +42" A.F.F.. LOCATE THE GRAPHIC WALLPOD ADJACENT TO THE NETWORK CONTROLLER. RUN 1'C - ONE CAT. 5e PATCH CABLE, LENGTH AS REQUIRED, FROM THE 'NLC' TO THE EXISTING PATCH PANEL IN THE MAIN CROSS-CONNECT LOCATED IN THE ELECTRICAL ROOM. REFER TO DETAIL #8/E5.2 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
4. JUNCTION BOX TO BE LOCATED IN ACCESSIBLE ATTIC SPACE.
5. ROUTE CIRCUIT(S) THROUGH LIGHTING CONTROL PANEL.
6. PROVIDE AN nLIGHT LIGHTING RELAY PANEL nLIGHT #ARPINTENC08-SM ENCLOSURE WITH #8FCR-MVOLT-HLK-DTC INTERIORS.

GENERAL NOTE:

1. REFER TO DETAIL #4/E5.4 FOR CONDUIT SUPPORT DETAILS.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
J2	OFFICE	+9'-0"	J13	JANITOR	+10'-0"
J3	ALCOVE	+9'-0"	J14	ELECTRICAL	+9'-0"
J4	STAFF	+9'-0"	J15	BOYS	+9'-0"
J5	WET AREA	+9'-0"	J16	GIRLS	+9'-0"
J6	CLOSET	+9'-0"	J17	STAFF	+9'-0"
J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
J11	CLASSROOM	VARIES	J22	OFFICE	+9'-0"

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REGISTERED PROFESSIONAL ENGINEER — JEREMY KIRK EASTHAM — No. E-19766 — Exp. 6/30/25 — ELECTRICAL — STATE OF CALIFORNIA

APPROVALS

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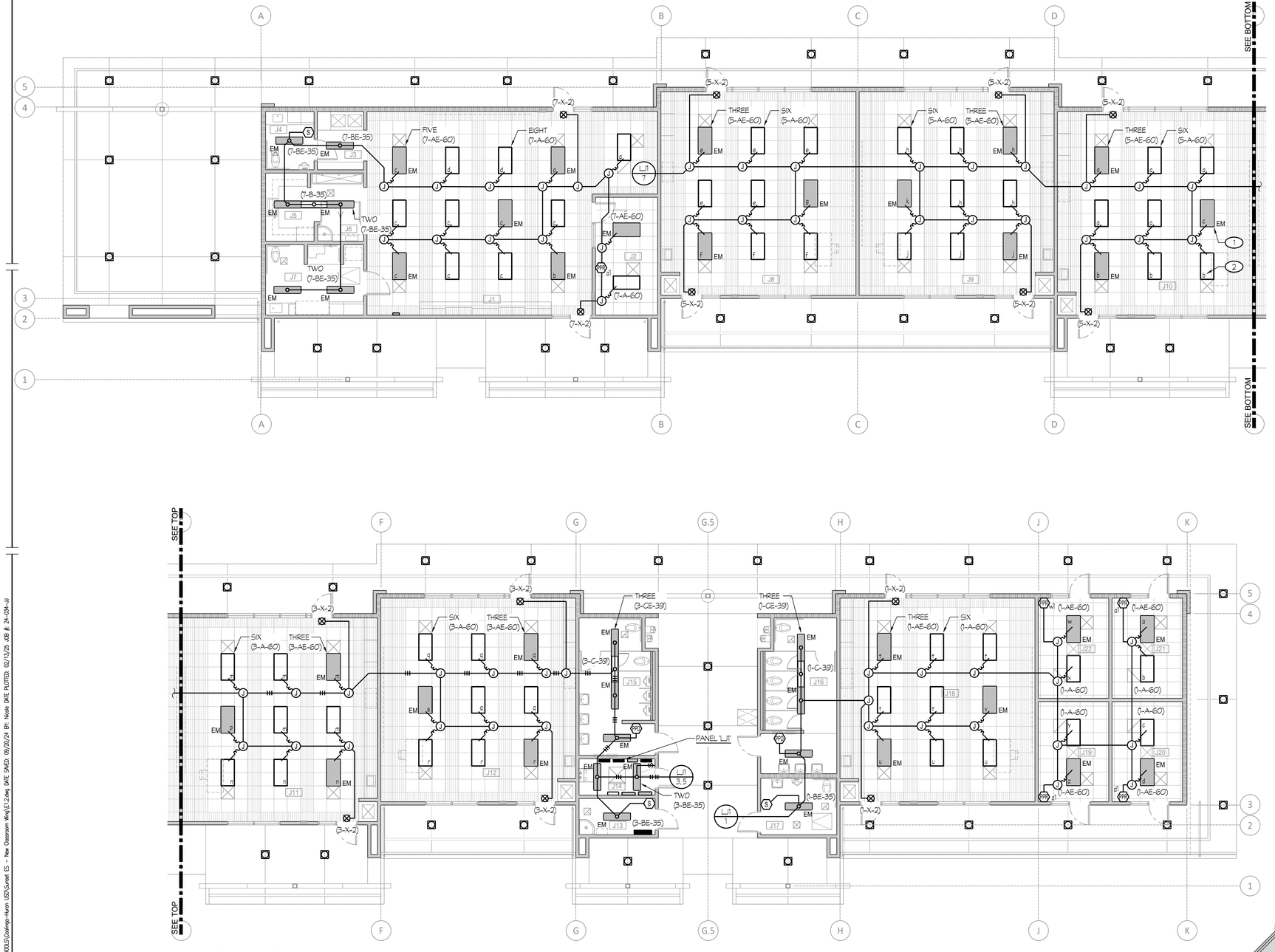
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TITLE
OVERALL LIGHTING PLAN

E1.1

PROJECT 24001

Z:\Drafting\Jobs\RSES\24003\S\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E1.1.dwg DATE SAVED: 09/20/24 By: Nicole DATE PLOTTED: 02/13/25 JOB # 24-034-JJ



LIGHTING PLAN

1/8" = 1'-0"

north

NOTES (THIS SHEET ONLY):

1. SYMBOLS EM DENOTES LIGHT FIXTURE EQUIPPED WITH AN EMERGENCY BATTERY PACK. CONNECT PER DETAIL #4/E5.2.
2. LOWER CASE LETTER DENOTES RESPECTIVE CONTROL ZONE, TYPICAL.

GENERAL NOTE:

1. REFER TO DETAIL #4/E5.4 FOR CONDUIT SUPPORT DETAILS.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
J2	OFFICE	+9'-0"	J13	JANITOR	+10'-0"
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J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
J11	CLASSROOM	VARIES	J22	OFFICE	+9'-0"

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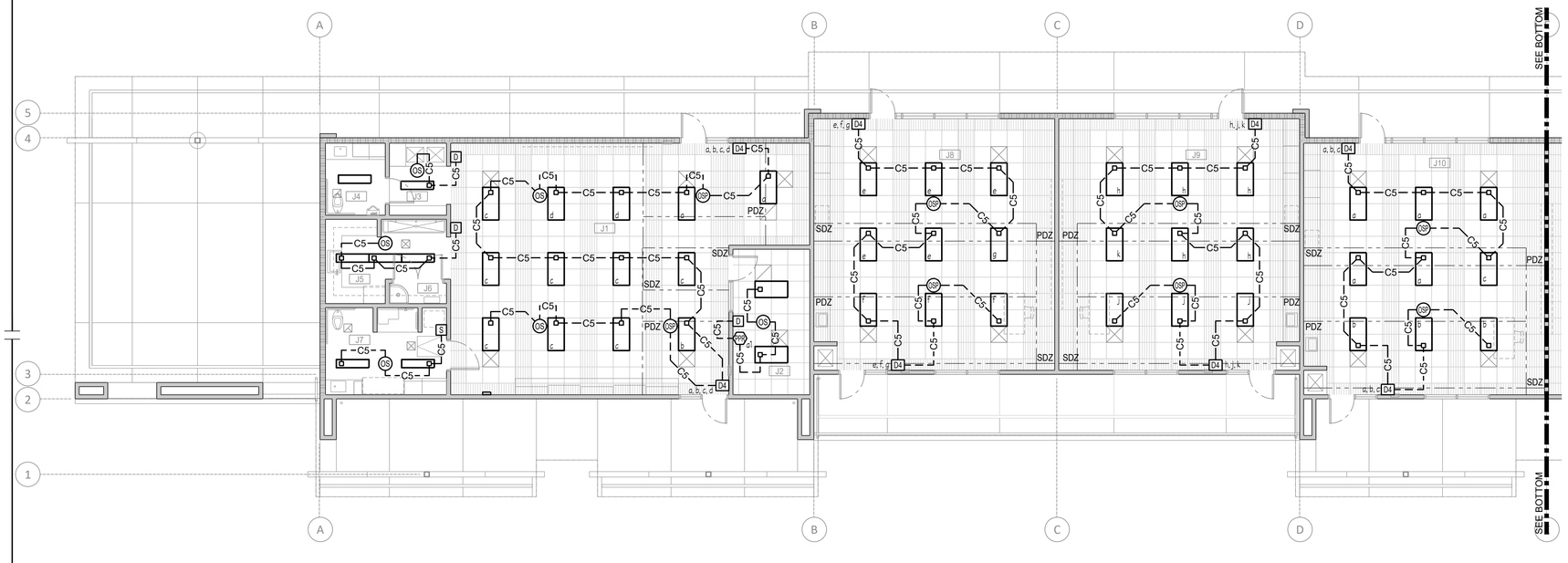
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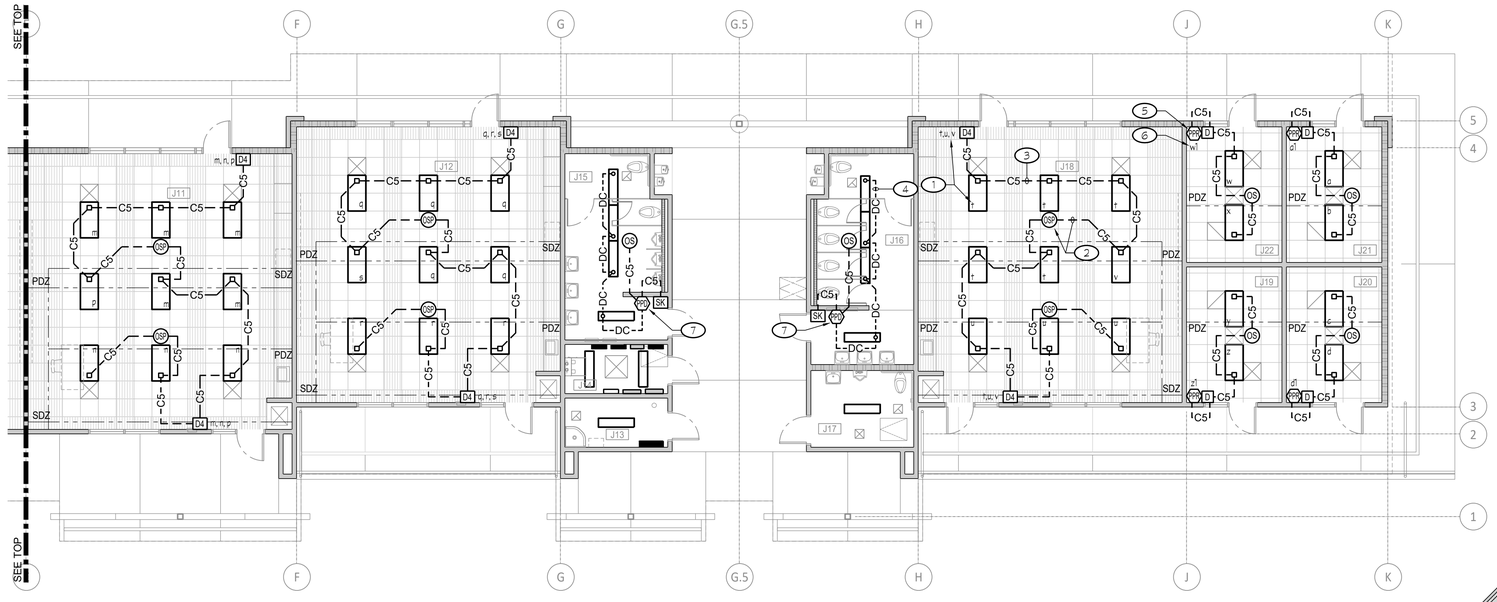
TITLE
LIGHTING PLAN

E1.2

PROJECT 24001

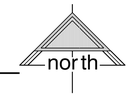
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LIGHTING CONTROLS PLAN

1/8" = 1'-0"



NOTES (THIS SHEET ONLY):

1. LOWER CASE LETTER DENOTES CONTROLLING SWITCH, TYPICAL.
2. REFER TO DETAIL #3/E5.2 FOR LOW VOLTAGE DEVICES AND LIGHTING CONTROL WIRING REQUIREMENTS, TYPICAL.
3. — —C5— — DENOTES CAT. 5e CABLE. ELECTRICAL CONTRACTOR MAY USE PRETERMINATED CAT. 5e CABLING OR PROVIDE CAT. 5e CABLING, MODULAR JACKS ON EACH END AND TERMINATE THE MODULAR JACKS USING THE TIA/E1A-568-B.2 PIN-PAIR SPECIFICATION. ELECTRICAL CONTRACTOR SHALL PROVIDE CONDUIT AND OUTLET BOXES IN WALLS FOR ROUTING OF CABLING. CABLE MAY BE ROUTED IN FREE-AIR, WHEN LOCATED IN ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILINGS. AT GYPBOARD CEILINGS, PROVIDE A DOUBLE-GANG LOW VOLTAGE MOUNTING PLATE BRACKET, CADDY #MPLS2 OR EQUAL, AT THE RJ-45 JACKS (EMBEDDED CONTROLS) OF THE SURFACE MOUNTED LIGHT FIXTURES FOR PASSAGE OF CAT. 5e CABLING.
4. ------DC------ DENOTES 0-10VDC CONTROL. PROVIDE 1/2"C - 2 #18 (GREY AND VIOLET). CONTRACTOR MAY PROVIDE A CABLE AND USE COLORED TAPE AT HIS OPTION.
5. PROVIDE POWER RELAY PACK PER DETAIL #13/E5.2 MOUNT ABOVE T-BAR CEILING IN ACCESSIBLE ATTIC SPACE OR HIGH ON WALL ABOVE LIGHT SWITCH. ROUTE 120V RECEPTACLE POWER THROUGH CONTACTS. SEE KEYNOTE #1 ON SHEET #E2.1 FOR ADDITIONAL INFORMATION. TYPICAL, U.O.N..
6. DENOTES POWER RELAY PACK THAT CONTROL ROOM DEVICES. SEE CORRESPONDING NOMENCLATURE FOR ROOM POWER CIRCUIT ON POWER PLAN. TYPICAL, U.O.N..
7. PROVIDE DIMMING/RELAY PACK IN A 3-GANG OUTLET BOX PER DETAIL #13/E5.2. MOUNT HIGH ON WALL 12" DOWN FROM CEILING. CUT AND PATCH WALL AS REQUIRED TO INSTALL ADJACENT TO SWITCH AND CONCEAL CONDUIT.

GENERAL NOTE:

1. REFER TO DETAIL #4/E5.4 FOR CONDUIT SUPPORT DETAILS.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
J2	OFFICE	+9'-0"	J13	JANITOR	+10'-0"
J3	ALCOVE	+9'-0"	J14	ELECTRICAL	+9'-0"
J4	STAFF	+9'-0"	J15	BOYS	+9'-0"
J5	WET AREA	+9'-0"	J16	GIRLS	+9'-0"
J6	CLOSET	+9'-0"	J17	STAFF	+9'-0"
J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
J11	CLASSROOM	VARIES	J22	OFFICE	+9'-0"

Rose Sing Eastham & Associates
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131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER — RICHARD KIRK EASTHAM — No. E-19780 — Exp. 6/30/25 — ELECTRICAL — STATE OF CALIFORNIA

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT JR — No. C-34289 — REN. 08-31-25 — STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

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TITLE
LIGHTING CONTROLS PLAN

E1.3

PROJECT 24001

Z:\Drafting\Jobs\RSES\SY\003\S\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E1.1.dwg DATE SAVED: 07/23/24 BY: Casey DATE PLOTTED: 02/13/25 JOB #: 24-034-JJ

GENERAL NOTE:

1. REFER TO DETAIL #4/E5.4 FOR CONDUIT SUPPORT DETAILS.

NOTES (THIS SHEET ONLY):

(1) ROUTE CIRCUIT THROUGH RECEPTACLE RELAY PACK. SEE SHEET #E1.3 FOR POWER RELAY PACK LOCATION.

(2) MOUNT PANEL PER DETAIL #1/E5.3.

(3) WEATHER-RESISTANT G.F.C.I. DUPLEX RECEPTACLE AT +18" A.F.F., PROVIDE A DIE-CAST WEATHERPROOF "WHILE-IN-USE" LOCKABLE COVER, RED-DOT #CKSUV OR EQUAL. TYPICAL OF 6.

(4) STUB TWO 1"C AND TWO 3/4"C INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING IN ROOM #J12.

(5) NUMBER BY DEVICE DENOTES CIRCUIT DEVICE IS TO BE CONNECTED ON, TYPICAL.

(6) DENOTES CONDUIT BEING RUN DOWN WALL. TYPICAL, U.O.N..

(7) FOR CONNECTION OF TV/PROJECTOR, TYPICAL OF 7.

(8) MOUNT DISTRIBUTION PER DETAIL #4/E5.3.

(9) CONNECT EMS PANEL (PROVIDED BY MECHANICAL).

(10) CONNECT INTERMITTENT IGNITIONS AND CIRCULATING PUMPS AT WATER HEATERS, WH-1 AND WH-2. PROVIDE H.P. RATED TOGGLE SWITCH AS DISCONNECTING MEANS FOR CIRCULATING PUMPS.

(11) RUN A 1"C TO RESPECTIVE ODU FOR CONTROLS. COORDINATE EXACT REQUIREMENTS WITH MECHANICAL.

(12) FLUSH FLOOR OUTLET BOX WITH DEVICE(S) SHOWN PER SPECIFICATIONS. TYPICAL, U.O.N.

(13) 3/4"C - 2 #10 + 1 #10 GND.

(14) CONNECT HAND DRYER, 120V.

(15) PROVIDE DEDICATED DOUBLE DUPLEX RECEPTACLE FOR HORIZONTAL CROSS-CONNECT. COORDINATE AND VERIFY EXACT LOCATION WITH DATA SYSTEMS CONTRACTOR PRIOR TO ROUGH-IN.

(16) PROVIDE A 30A, 1-POLE RECEPTACLE (NEMA 5-30R) FOR I.D.F. CONNECTIONS.

(17) FOR CONNECTION OF SMART BOARD, TYPICAL OF 7.

(18) DENOTES JUNCTION BOX IN ACCESSIBLE ATTIC SPACE. TYPICAL, U.O.N..

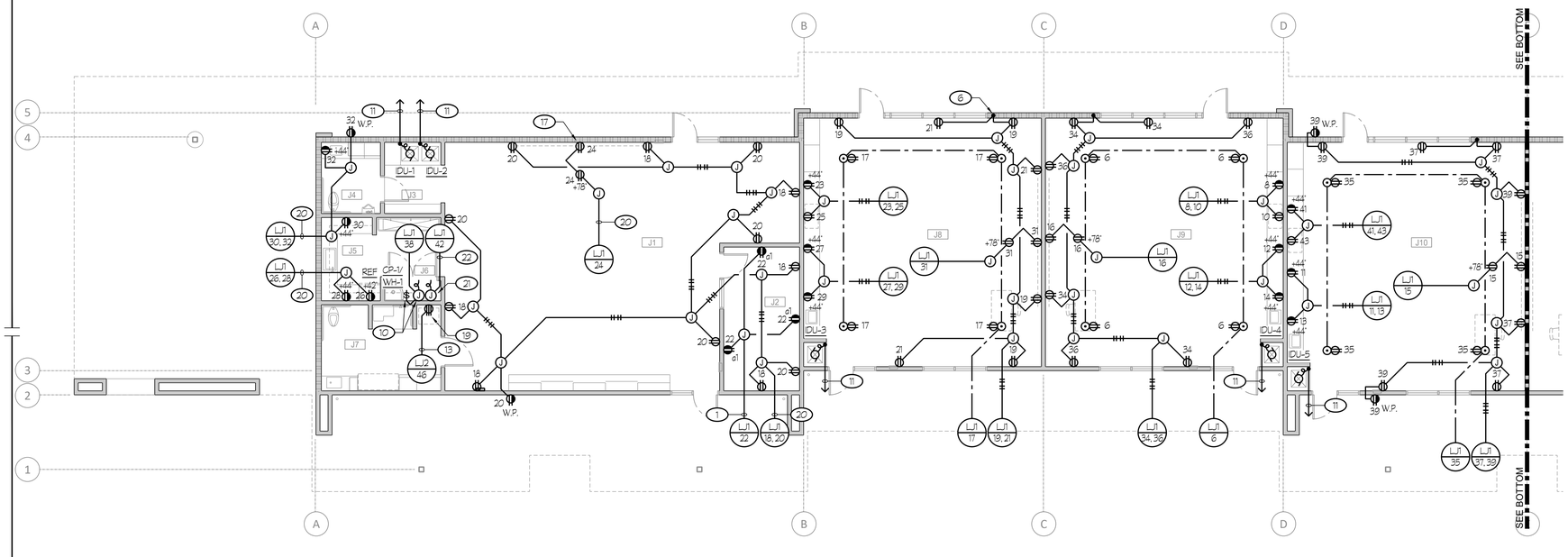
(19) CONNECT ELECTRIC DRYER, 208V, 30 AMPS.

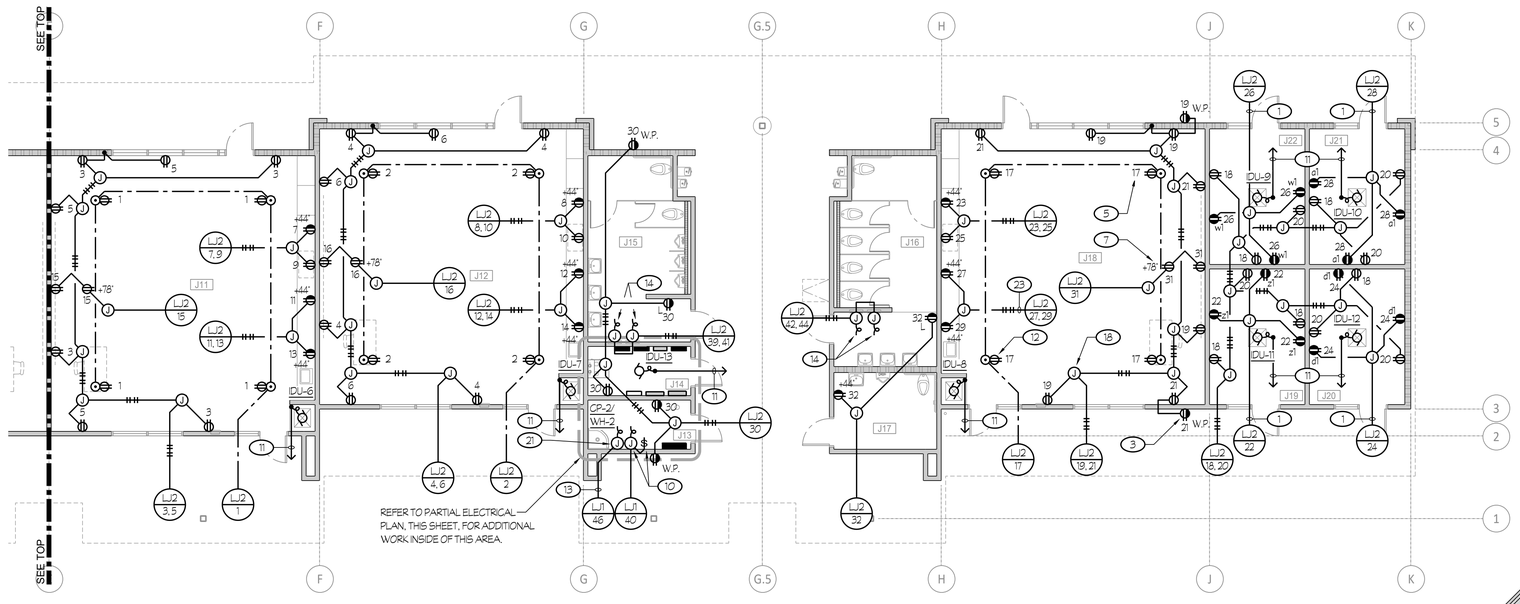
(20) 3/4"C - 4 #10 + 1 #10 GND.

(21) CONNECT WATER HEATER. 208V, 1ph, 4.5kW.

(22) 3/4"C - 2 #8 + 1 #8 GND.

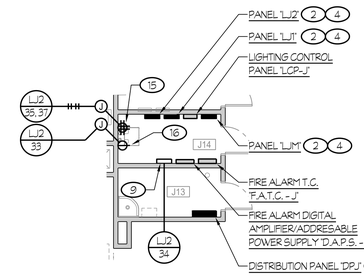
(23) PROVIDE SEPARATE PHASE AND NEUTRAL CONDUCTORS FOR EACH LISTED CIRCUIT IN HOMERUN. TYPICAL, U.O.N..





POWER PLAN

1/8" = 1'-0"



PARTIAL POWER PLAN

1/8" = 1'-0"

north

ROOM LEGEND

#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
J2	OFFICE	+9'-0"	J13	JANITOR	+10'-0"
J3	ALCOVE	+9'-0"	J14	ELECTRICAL	+9'-0"
J4	STAFF	+9'-0"	J15	BOYS	+9'-0"
J5	WET AREA	+9'-0"	J16	GIRLS	+9'-0"
J6	CLOSET	+9'-0"	J17	STAFF	+9'-0"
J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
J11	CLASSROOM	VARIES	J22	OFFICE	+9'-0"

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Exp. 6/30/25
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APPROVALS

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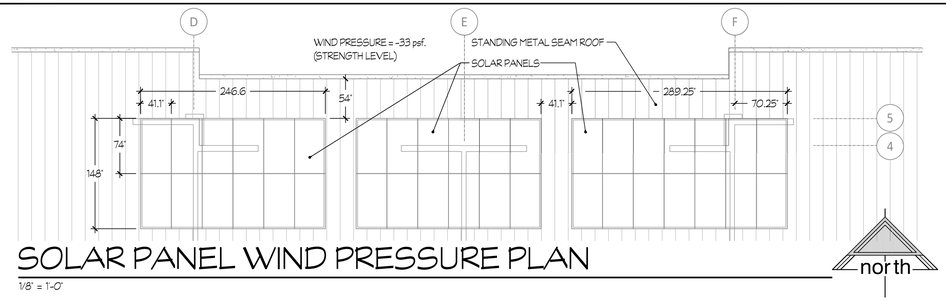
MANGINI ARCHITECTURE INGENUITY
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TITLE
POWER PLAN

E2.1

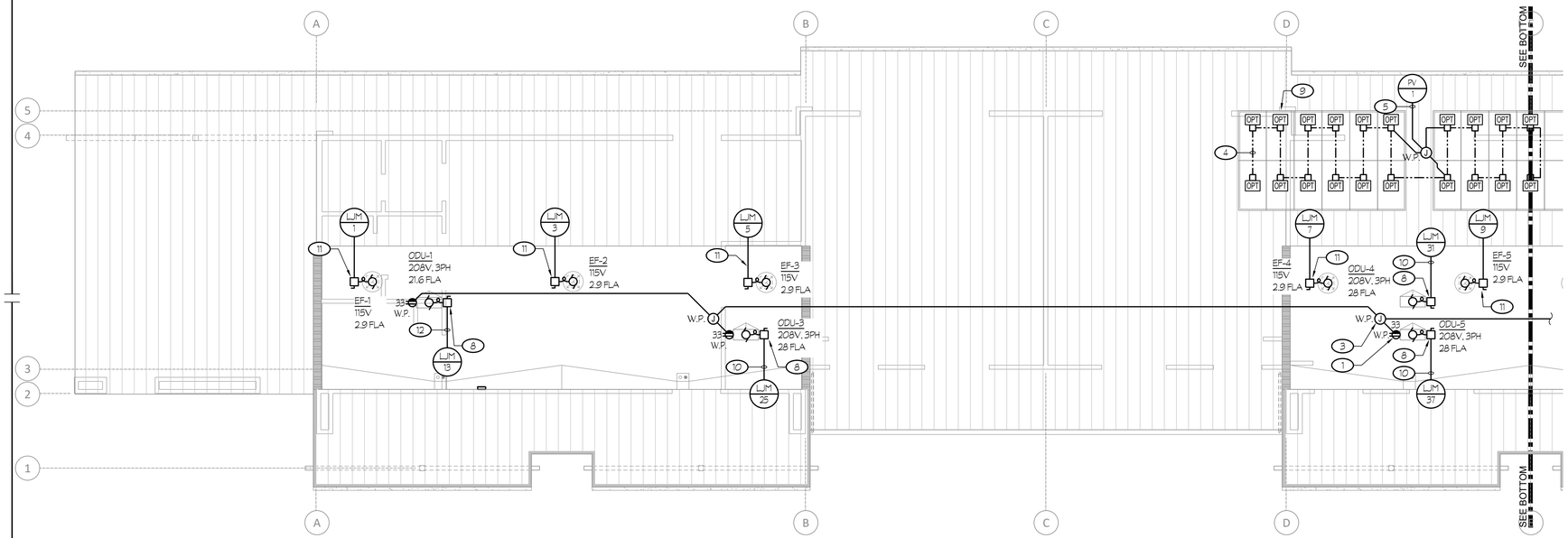
PROJECT 24001

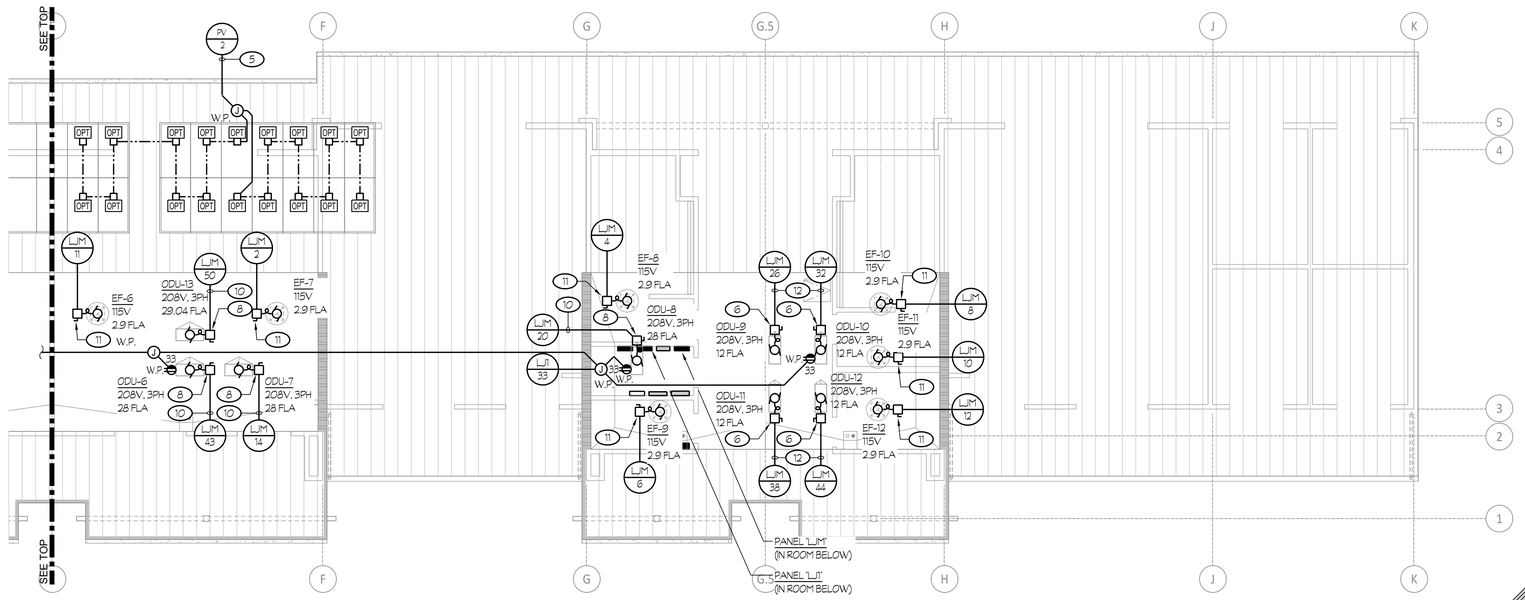
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SOLAR PANEL WIND PRESSURE PLAN

1/8" = 1'-0"





ROOF ELECTRICAL PLAN

1/8" = 1'-0"

NOTES (THIS SHEET ONLY):

1. WEATHER-RESISTANT G.F.C.I. DUPLEX RECEPTACLE AT ROOF CURB PLATFORM. MOUNT INSIDE A WEATHERPROOF OUTLET BOX EQUIPPED WITH WEATHERPROOF 'WHILE-IN-USE' LOCKABLE COVER. ROUTE BRANCH CIRCUITING UP OPENING OF ROOF CURB AND THEN THRU SIDEWALL. COVER SHALL BE A RED-DOT #CKSUV OR EQUAL. TYPICAL OF 6.
2. TYPICAL AT ALL H.V.A.C. EQUIPMENT: ROUTE BRANCH CIRCUITING UP THRU OPENING OF ROOF CURB & THEN THRU UNIT TO DISCONNECT SWITCH. PROVIDE LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT INSIDE UNIT FOR ROUTING OF CONDUCTORS.
3. MOUNT JUNCTION BOX IN ACCESSIBLE ATTIC SPACE BELOW. TYPICAL, U.O.N..
4. PV CABLE WITH MC4 CONNECTOR MOUNTED TO UNDERSIDE OF PV MODULE. TYPICAL FOR PV MODULE INTERCONNECTIONS.
5. 3/4"C - 2 #10 + 1 #10 EG + 1 #8 CU BARE. ROUTED IN CEILING SPACE BELOW ROOF.
6. PROVIDE 30A, 3-POLE HEAVY-DUTY FUSED SAFETY SWITCH IN A NEMA 3R ENCLOSURE AND MOUNT ONTO H.V.A.C. UNIT. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
7. PROVIDE 6"x 6" WEATHERPROOF ENCLOSURE FOR COMBINING OF PV STRINGS AS REQUIRED.
8. PROVIDE 60A, 3-POLE HEAVY-DUTY FUSED SAFETY SWITCH IN A NEMA 3R ENCLOSURE AND MOUNT ONTO H.V.A.C. UNIT. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
9. 415W SOLAR PV MODULE. REFER TO ONE-LINE DIAGRAM ON SHEET #E5.5 AND DETAIL #3/E5.5, FOR ADDITIONAL REQUIREMENTS.
10. 3/4"C - 3 #8 + 1 #10 GND.
11. PROVIDE 30A, 1-POLE HEAVY-DUTY FUSED SAFETY SWITCH IN A NEMA 3R ENCLOSURE AND MOUNT ONTO H.V.A.C. UNIT. PROVIDE FUSES PER MANUFACTURER RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
12. 3/4"C - 3 #10 + 1 #10 GND.

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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REN: 08-31-25
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TITLE
ROOF
ELECTRICAL PLAN

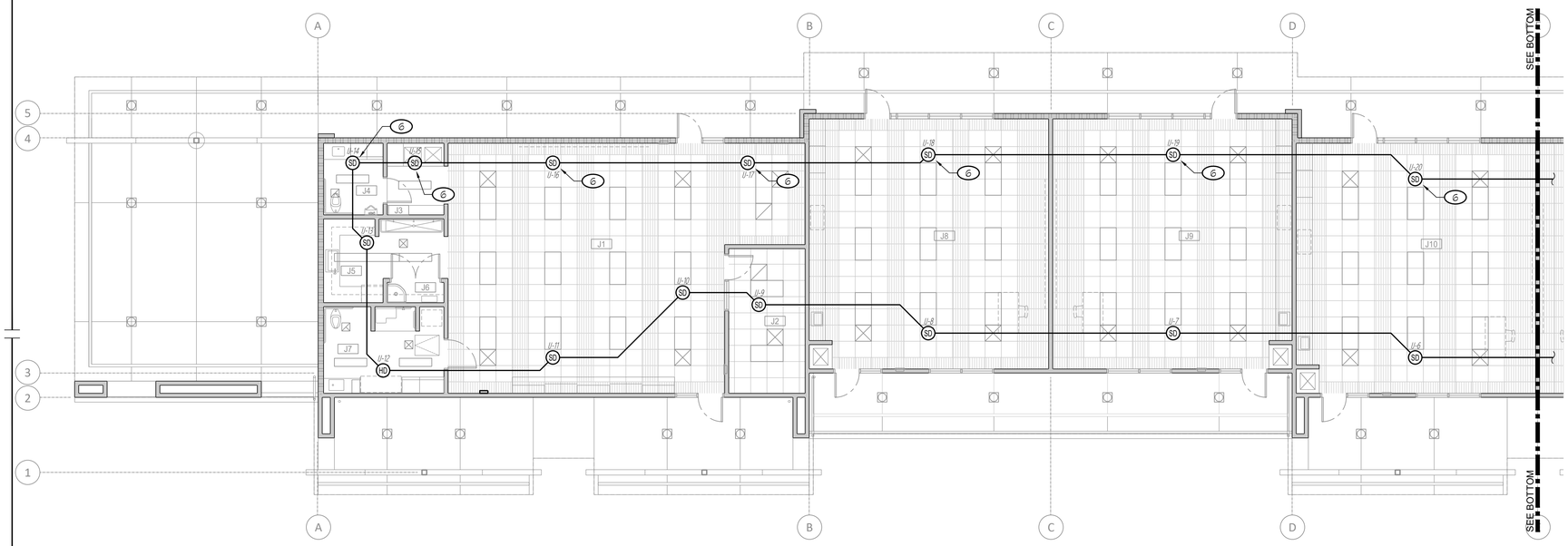
E2.2

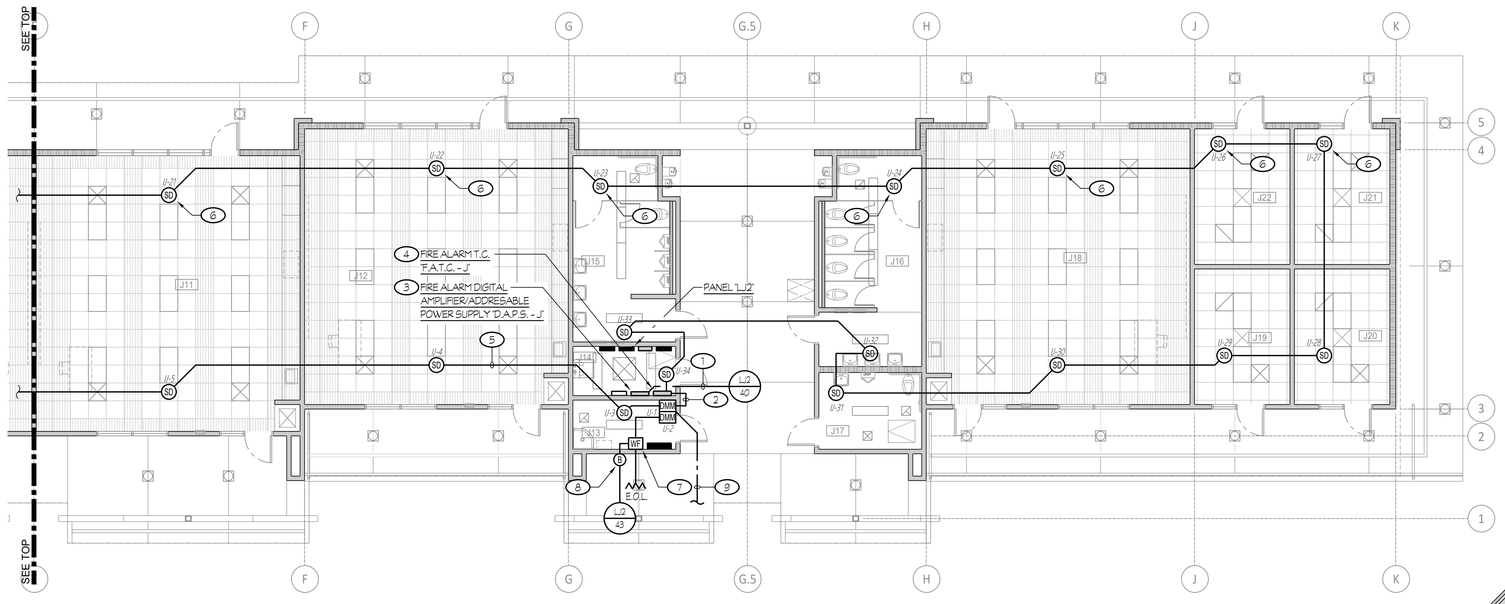
PROJECT 24001

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
BRIAN KIRK EASTHAM
No. E-19766
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

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FIRE ALARM INITIATION PLAN

1/8" = 1'-0"



NOTES (THIS SHEET ONLY):

1. RUN 1/2"C - 2 #12 + 1 #12 GND TO PANEL AND CONNECT TO DEDICATED 120V, 20 AMP, 1-POLE CIRCUIT BREAKER. CIRCUIT BREAKER SHALL BE EQUIPPED WITH A LOCK-ON ACCESSORY. PROVIDE AN ENGRAVED NAMEPLATE: 'FIRE ALARM - LEAVE ON'. NAMEPLATE SHALL HAVE WHITE LETTERS ON A RED BACKGROUND. PAINT CIRCUIT BREAKER HANDLE OR LOCK-ON ACCESSORY 'RED' IN COLOR.
2. REFER TO FIRE ALARM SYSTEM RISER DIAGRAM, DETAIL #1/E4.2 FOR CONDUIT AND CABLING REQUIREMENTS BETWEEN FIRE ALARM TERMINAL CABINET AND FIRE ALARM DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY 'D.A.P.S. - J'
3. MOUNT FIRE ALARM DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY 'D.A.P.S - J' PER DETAIL #3/E4.3.
4. MOUNT FIRE ALARM T.C. 'F.A.T.C. - J' PER DETAIL #6/E4.3.
5. 3/4"C - ONE 'FA' CABLE, ONE 'FAP' CABLE (24VDC AUXILIARY POWER FOR SOUNDER BASE AT CO DETECTOR). TYPICAL, U.O.N..
6. MOUNT SMOKE DETECTOR WITHIN THREE FEET OF HIGHEST POINT OF THE CEILING.
7. CONNECT THE WATERFLOW SWITCH AT FIRE SPRINKLER RISER. COORDINATE EXACT LOCATION WITH FIRE SPRINKLER CONTRACTOR. RUN 1/2"C - 2 #14 FROM DUAL MONITOR MODULE TO THE WATERFLOW SWITCH. PROVIDE JUNCTION BOX AND LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT AS REQUIRED.
8. CONNECT ELECTRIC BELL. ROUTE BRANCH CIRCUITING THRU THE WATERFLOW SWITCH. COORDINATE EXACT LOCATION WITH THE FIRE SPRINKLER CONTRACTOR PRIOR TO ROUGH-IN.
9. RUN 1/2"C - 2 #14 TO THE SUPERVISORY SWITCH AT THE POST INDICATOR VALVE 'P.I.V.'. REFER TO PARTIAL SITE ELECTRICAL PLAN, SHEET #ES1.2, FOR CONTINUATION.

GENERAL NOTE:

1. REFER TO DETAIL #4/E5.4 FOR CONDUIT SUPPORT DETAILS.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
J2	OFFICE	+9'-0"	J13	JANITOR	+10'-0"
J3	ALCOVE	+9'-0"	J14	ELECTRICAL	+9'-0"
J4	STAFF	+9'-0"	J15	BOYS	+9'-0"
J5	WET AREA	+9'-0"	J16	GIRLS	+9'-0"
J6	CLOSET	+9'-0"	J17	STAFF	+9'-0"
J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
J11	CLASSROOM	VARIES	J22	OFFICE	+9'-0"

COMPLETE AUTOMATIC FIRE ALARM SYSTEM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

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Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
WILLIAM KIRK EASTHAM
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Exp. 6/30/25
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APPROVALS

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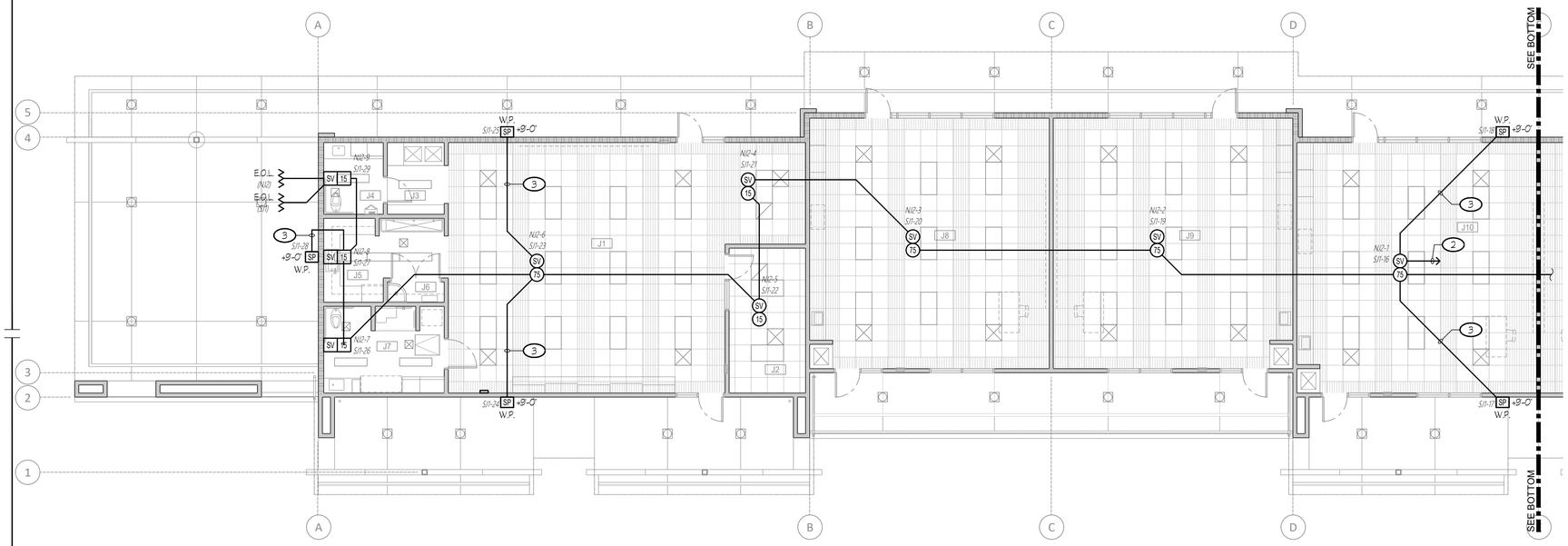
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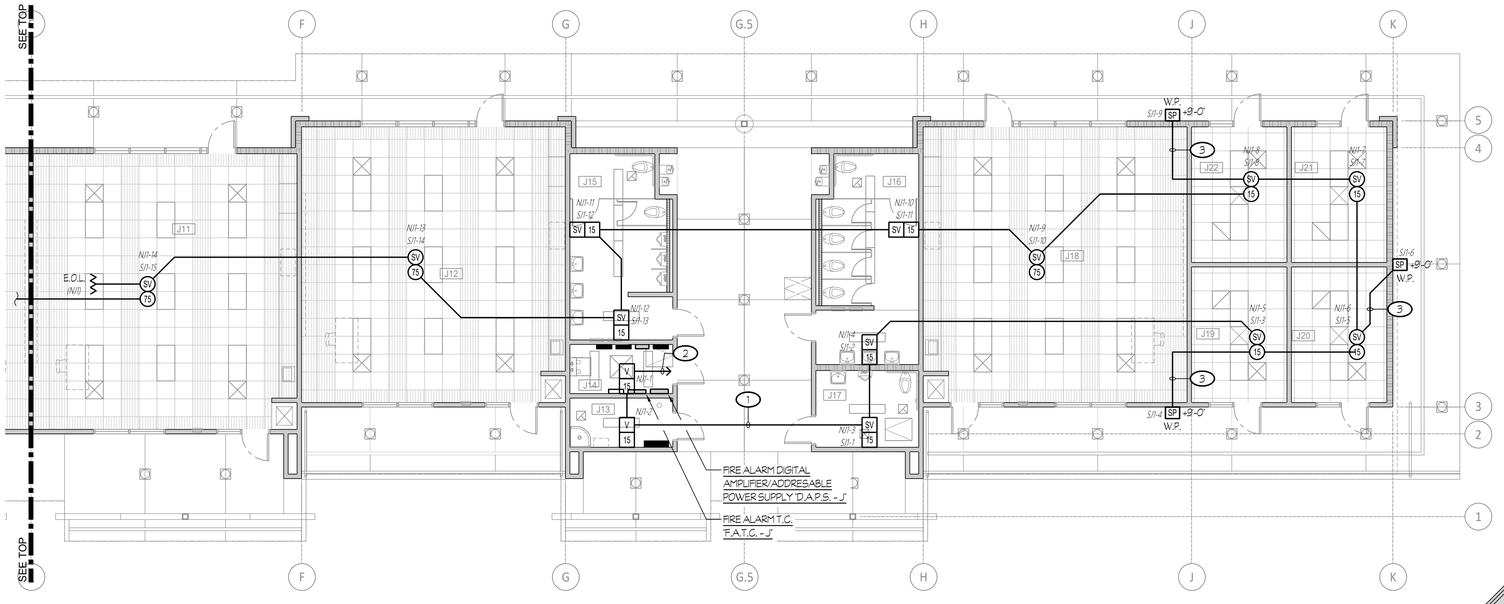
TITLE
FIRE ALARM INITIATION PLAN

E3.1

PROJECT 24001

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FIRE ALARM NOTIFICATION PLAN

1/8" = 1'-0"

north

NOTES (THIS SHEET ONLY):

1. TYPICAL OF FIRE ALARM CIRCUITING BETWEEN NOTIFICATION APPLIANCES, U.O.N.: RUN 3/4"C - ONE 'FSP' CABLE, 2 #12 BETWEEN NOTIFICATION APPLIANCES.
2. TO FIRE ALARM T.C. 'F.A.T.C. - J'.
3. 3/4"C - TWO 'FSP' CABLE.

GENERAL NOTE:

1. REFER TO DETAIL #4/E5.4 FOR CONDUIT SUPPORT DETAILS.

ROOM LEGEND					
#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
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J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
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TITLE
FIRE ALARM NOTIFICATION PLAN

E3.2

PROJECT 24001

Z:\Drafting\Jobs\RSES\SY4003\S\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E3.2.dwg DATE SAVED: 09/20/24 By: Nicole DATE PLOTTED: 02/13/25 JOB #: 24-034-JJ

FIRE ALARM SYSTEM SEQUENCE OF OPERATIONS

	RESULT OF OPERATION ⇩	TYPE OF INITIATION: MANUAL PULL STATION	AREA SMOKE/ HEAT DETECTOR (1)	CARBON MONOXIDE DETECTOR (2)	LOSS OF POWER	SHORT CIRCUIT/ GROUND FAULT	FIRE SPRINKLER RISER WATER FLOW SWITCH	FIRE SPRINKLER RISER TAMPER SWITCH	SMOKE DETECTOR FOR DOOR RELEASING	KITCHEN HOOD FIRE SUPPRESSION SYSTEM
	ANNUNCIATE ALARM AT FIRE ALARM CONTROL PANEL	YES	YES	———	———	———	YES	———	YES	YES
	ANNUNCIATE TROUBLE AT FIRE ALARM CONTROL PANEL	———	———	———	YES	YES	———	YES	———	———
	ANNUNCIATE SUPERVISORY AT FIRE ALARM CONTROL PANEL	———	———	YES	———	———	———	———	———	———
	ACTIVATE ALL AUDIBLE AND VISUAL ALARM SIGNALS	YES	YES	———	———	———	YES	———	YES	YES
	TRANSFER TO BATTERY BACK-UP	———	———	———	YES	———	———	———	———	———
(1)	RELEASE ELECTROMAGNETIC DOOR HOLDERS	———	YES	———	———	———	———	———	YES	———
(2)	SHUTDOWN RESPECTIVE A/C UNIT	———	YES	———	———	———	———	———	———	———
(2)	CLOSE SMOKE/FIRE DAMPER	———	YES	———	YES	———	———	———	———	———
(3)	ANNUNCIATE SUPERVISORY AT THE FIRE ALARM CONTROL PANEL	———	———	YES	———	———	———	———	———	———
	ANNUNCIATE AT 24 HR. ATTENDED LOCATION	YES	YES	YES	YES	———	YES	YES	———	YES
	CENTRAL STATION FOR MONITORING (ALARM)	YES	YES	———	———	———	YES	———	———	YES
	CENTRAL STATION FOR MONITORING (TROUBLE)	———	———	———	YES	———	———	YES	———	———
	CENTRAL STATION FOR MONITORING (SUPERVISORY)	———	———	———	———	———	———	———	———	———

(1) OR ACTIVATE THE TIME-DELAY RELEASING DEVICE AT OVERHEAD COILING DOOR.

(2) THIS OPERATION SHALL BE ACCOMPLISHED BY UTILIZING THE TOTAL SMOKE COVERAGE SYSTEM TO ACTIVATE THE RESPECTIVE RELAY MODULE. THE CONTACTS SHALL BE PROGRAMMED TO 'OPEN', THUS DE-ENERGIZING THE 120V POWER TO THE ACTUATOR OF THE SMOKE/FIRE DAMPER OR 'OPENING' THE H.V.A.C. CONTROL CIRCUIT.

(3) UPON DETECTION OF CARBON MONOXIDE, A SUPERVISORY SIGNAL SHALL ANNUNCIATE A BOTH THE FIRE ALARM CONTROL PANEL 'F.A.C.P.'.

FIRE ALARM SYSTEM GENERAL NOTES

1. APPLICABLE STANDARD NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35.
2. INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPROVED BY DSA.
3. UPON COMPLETION OF SYSTEM INSTALLATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR TEST SHALL INCLUDE ALL INFORMATION PER NFPA 72 14.6.2.4 AND FIGURE 7.8.2(g) AND READ OUT VERIFICATION FORM FROM CENTER STATION.
4. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
5. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ ENGINEER OF THE PROJECT.
6. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
7. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
9. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR AND NO CLOSER THAN 6" TO A HORIZONTAL STRUCTURE.
10. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (dBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR FIVE dBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
11. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN FOR A FIRE ALARM SIGNAL. AUDIBLE DEVICES SHALL ALSO SOUND A TEMPORAL CODE 4 PATTERN FOR A CARBON MONOXIDE SIGNAL. THE EXISTING FIRE ALARM CONTROL PANEL WILL PRODUCE/GENERATE BOTH SIGNALS.
12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
13. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELA. VISIBLE DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
15. ALL FIRE ALARM WIRING SHALL BE FPL OR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
16. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
17. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/ CONTAMINATION ON NEWLY INSTALLED FIRE ALARM, DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
18. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILING, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANNER AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
19. FIRE ALARM PANEL, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DETAILS.
20. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE 'ON' POSITION. THE CIRCUIT BREAKER SHALL BE LABELED 'FIRE ALARM CIRCUIT CONTROL'. CIRCUIT ID TO BE LABELED AT FIRE PANELS/EXTENDERS.
21. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED 'SYSTEM RECORD OF COMPLETION' PER NFPA 72, FIGURE 17.8.2.
22. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
23. MICROPHONES ASSOCIATED WITH EMERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSIBLE FOR USE, INSTALLED IN COMPLIANCE WITH CBC SECTIONS 11B-305 AND 11B-308.
24. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
25. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
26. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
27. PROVIDE AN ENGRAVED NAMEPLATE INDICATING THE D.S.A. APPLICATION NUMBER, FILE NUMBER AND DATE OF INSTALLATION AT EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', AT EACH DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY 'D.A.P.S.' AND AT EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.':
    A. THE PRIMARY POWER SUPPLY TO EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', TO EACH DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY 'D.A.P.S.' AND TO EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.' SHALL BE IN ACCORDANCE WITH NFPA 72 10.6.5 AND AS FOLLOWS:
        a) THE CIRCUIT BREAKER FEEDING THE RESPECTIVE PANEL SHALL BE LOCATED IN A LOCKED ROOM OR BEHIND A LOCKABLE DOOR AND BE READILY ACCESSIBLE TO AUTHORIZED PERSONNEL ONLY.
        b) THE CIRCUIT BREAKER SHALL BE EQUIPPED WITH A LOCK-ON ACCESSORY. PAINT LOCK-ON ACCESSORY 'RED' IN COLOR.
        c) THE CIRCUIT BREAKER SHALL HAVE AN ENGRAVED NAMEPLATE THAT IDENTIFIES IT AS A 'FIRE ALARM CIRCUIT'. THIS ENGRAVED NAMEPLATE SHALL HAVE WHITE LETTERS ON A RED BACKGROUND. MOUNT ONTO THE INTERIOR TRIM AND LOCATE ADJACENT TO CIRCUIT BREAKER WHERE POSSIBLE.
        d) THE LOCATION OF THE CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', AT EACH DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY 'D.A.P.S.' AND AT EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.'. PROVIDE AN ENGRAVED NAMEPLATE (WHITE LETTERS ON A RED BACKGROUND) WHICH INDICATES THIS.
    B. ALL ENGRAVED NAMEPLATES SHALL BE ATTACHED TO THE FRONT OF THE RESPECTIVE ENCLOSURE WITH SCREWS OR RIVETS.
28. PROVIDE A COPY OF THE BATTERY CALCULATION AT EACH FIRE ALARM CONTROL PANEL 'F.A.C.P.', AT EACH DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY 'D.A.P.S.' AND AT EACH FIRE ALARM POWER EXPANDER PANEL 'P.E.P.'. BATTERY CALCULATION SHALL CONTAIN INFORMATION AS NOTED ON SCHEDULES AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF DOOR.

FIRE ALARM SYSTEM EQUIPMENT LEGEND

	SYMBOL	DESCRIPTION	MODEL #	CSFM LISTING #	BACKBOX REQUIREMENTS (1)	MOUNTING HEIGHT (TO CENTER, U.O.N.)
(5)	FACP	EXISTING FIRE ALARM CONTROL PANEL CABINET	NOTIFIER #NFS-MA #PMB-AUX	7165-0028:0243 7165-0028:0516	EXISTING	EXISTING
(4)	FACP	FIRE ALARM CONTROL PANEL 'F.A.C.P.' #WH	NOTIFIER #CPS-N16LD #CAB-5 #DVC-EM #DVC-KD #DAA2-5070 #CMC-1	7165-0028:0516	INCLUDED	+60" A.F.F., U.O.N. PER DETAIL#8/E4.3
	DACT	FIRE ALARM DACT	#CGW-MBB	7300-1637:0504	INCLUDED	———
(3)	DAPS	FIRE ALARM DIGITAL AMPLIFIER/ ADDRESSABLE POWER SUPPLY 'D.A.P.S.'	NOTIFIER #DAA2-5070 NOTIFIER #ACPS-610	7165-0028:0243 7315-0028:0248	NOTIFIER #EQDR-C4/EQBB-C4 AND #NFS-LBB BATTERY BOX	+60" A.F.F., U.O.N. PER DETAIL#3/E4.3
	SD	ADDRESSABLE SMOKE DETECTOR	NOTIFIER #FSP-951/B210LP	7272-0028:0503 7300-1653:0109	4" SQ. x 2 1/8" DP. OUTLET BOX WITH S.G. RAISED RING	PER DETAIL #1/E4.3
	HD	ADDRESSABLE HEAT DETECTOR, MOUNTED ON CEILING	NOTIFIER #FST-951/B210LP	7270-0028:0502 7300-1653:0109	4" SQ. x 2 1/8" DP. OUTLET BOX WITH S.G. RAISED RING	PER DETAIL #1/E4.3
	DMM	ADDRESSABLE DUAL MONITOR MODULE	NOTIFIER #FDM-1	7300-0028:0219	4" SQ. x 2 1/8" DP. OUTLET BOX	
	V 15	VISUAL STROBE, 15 CANDELA WALL MOUNTED	SYSTEM SENSOR #SWL	7125-1653:0504	4" SQ. x 2 1/8" DP. OUTLET BOX	PER DETAIL #1/E4.3
	SV 15	SPEAKER/STROBE, WALL MOUNTED (CANDELA RATING AS NOTED)	SYSTEM SENSOR #SPSWL	7320-1653:0505	4" SQ. x 2 1/8" DP. OUTLET BOX WITH 1 1/2" DP. BOX EXTENSION	PER DETAIL #1/E4.3
	SV 15 75	SPEAKER/STROBE, CEILING MOUNTED (CANDELA RATING AS NOTED)	SYSTEM SENSOR #SPSCWL-P	7320-1653:0505	4" SQ. x 2 1/8" DP. OUTLET BOX WITH 1 1/2" DP. BOX EXTENSION	PER DETAIL #1/E4.3
	SP W.P.	EXTERIOR SPEAKER, WALL MOUNTED	SYSTEM SENSOR #SPRK-R/WTP-SPW	7320-1653:0201	4" SQ. x 2 1/8" DP. OUTLET BOX WITH 1 1/2" DP. BOX EXTENSION, PROVIDE WEATHERPROOF PLATE FOR SEMI-FLUSH MOUNTING	
(2)	E.O.L.	END OF LINE RESISTOR	NOTIFIER	———	———	———
	'FA' CABLE	ADDRESSABLE FIRE ALARM CABLE	WEST PENN #D990	7161-0859:0101	———	———
	'FSP' CABLE	FIRE ALARM SPEAKER CABLE	WEST PENN #975-BL	7161-0859:0101	———	———
	'FNT' CABLE	FIBER OPTIC NETWORK CABLE (INDOORS)	SUPERIOR ESSEX #4300666BB	7161-0859:0101	———	———
	'SFA' CABLE	ADDRESSABLE FIRE ALARM CABLE (OUTDOORS)	WEST PENN #AQ225	7161-0859:0101	———	———
	'SFSP' CABLE	FIRE ALARM SPEAKER CABLE (OUTDOORS)	WEST PENN #AQ293	7161-0859:0101	———	———

NOTES (FIRE ALARM SYSTEM EQUIPMENT SPECIFICATIONS):

(1) VERIFY BACKBOX REQUIREMENTS WITH THE FIRE ALARM SYSTEM EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.

(2) PROVIDE 2.2k ohm, 1/2W FOR NOTIFICATION APPLIANCE CIRCUITS FEEDING FROM THE FIRE ALARM CONTROL PANEL AND 4.7k ohm, 1/2W FOR NOTIFICATION APPLIANCE CIRCUITS FEEDING FROM THE ADDRESSABLE POWER SUPPLIES.

(3) PROVIDE TWO (2) DIGITAL AMPLIFIERS AND TWO (2) ADDRESSABLE POWER SUPPLIES FOR DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLIES 'D.A.P.S.'.

(4) PROVIDE AN EXTERNAL BATTERY BACKBOX, NOTIFIER #NFS-LBB, AND MOUNT BELOW THE EQUIPMENT ENCLOSURE. RUN 1/2"C - 2 #12 BETWEEN ADJACENT ENCLOSURES.

(5) USE EXISTING FIRE ALARM CONTROL PANEL CABINET TO MOUNT NEW COMPONENTS.

FIRE ALARM LEVEL OF AUDIBILITY

ALARM INDICATING 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 NOT LESS THAN 15db ABOVE AMBIENT NOISE LEVELS MEASURED FOUR FEET ABOVE THE FLOOR INSIDE BUILDING.

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.

THE FIRE ALARM SIGNAL SHALL COMPLY WITH THE CALIFORNIA EDUCATION CODE, SECTIONS 32000 AND 32004, AND BE A TEMPORAL PATTERN, CODE 3 AND THEN FOLLOWED BY ANY VOICE MESSAGES.

SCHOOLS FIRE ALARM REQUIREMENTS

THE FIRE ALARM SYSTEM SHALL CONFORM TO CALIFORNIA BUILDING CODE, SECTION 907.2.3; CALIFORNIA ELECTRICAL CODE, ARTICLE 760 AND CALIFORNIA FIRE CODE, CHAPTER 9, SECTION 907.

UPON COMPLETION OF THE INSTALLATION OF THE FIRE PROTECTIVE SIGNALING EQUIPMENT, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF THE ENFORCING FIRE AGENCY, NFPA 72. IF TESTING RESULTS DETERMINE FIRE ALARM AUDIBILITY DOES NOT MEET 15db OVER AMBIENT NOISE LEVELS, ADDITIONAL FIRE ALARM SIGNALING DEVICES MAY BE REQUIRED BY THE ENFORCING FIRE AGENCY.

FIRE ALARM SYSTEM CERTIFICATION AND DESCRIPTION SHALL BE PROVIDED FOR TESTING AND A PLASTIC LAMINATED COPY SHALL REMAIN (WITH INSTRUCTIONS) AT THE FIRE ALARM CONTROL PANEL PER NFPA 72.

THE FIRE ALARM 'CERTIFICATE OF COMPLETION' FORM IN NFPA 72 SHALL BE COMPLETED, SIGNED AND SUBMITTED.

SCOPE OF WORK

1. PROVIDE A NEW AUTOMATIC FIRE ALARM SYSTEM WITH SUPPLEMENTAL MANUAL FIRE DETECTION.
2. PROVIDE A FIRE ALARM CONTROL PANEL, FIRE ALARM POWER EXPANDER PANEL, ADDRESSABLE INITIATION DEVICES, NOTIFICATION APPLIANCES, CONDUIT, CABLING AND CONDUCTORS AS SHOWN ON THE DRAWINGS.

FIRE ALARM MONITORING NOTE

AUTOMATIC FIRE ALARM SYSTEMS SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UL(FX (CENTRAL STATION) OR UUJS (REMOTE AND PROPRIETARY) BY UNDERWRITERS LABORATORY (UL) OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD FM 3011. SUPERVISION OF SYSTEM AND LEASED TELEPHONE LINES SHALL BE ARRANGED BY OWNER.

FIRE ALARM RECORD DOCUMENTS CABINET NFPA 72, 7.7.2

- EVERY NEW FIRE ALARM SYSTEM SHALL PROVIDE A DOCUMENTATION CABINET, INSTALLED AT THE SYSTEM CONTROL PANEL OR OTHER APPROVED LOCATION.
- THE DOCUMENTATION CABINET SHALL BE PROMINENTLY LABELED, 'SYSTEM RECORD DOCUMENTS'.
- ALL RECORD AND TESTING DOCUMENTATION SHALL BE STORED IN THE CABINET.
- CONTENTS SHALL BE ACCESSIBLE BY AUTHORIZED PERSONNEL ONLY.
- WHERE CABINET IS INSTALLED IN A LOCATION OTHER THAN THE SYSTEM CONTROL UNIT, ITS LOCATION SHALL BE IDENTIFIED AT THE SYSTEM CONTROL UNIT.

SYSTEM DOCUMENTS AS APPLICABLE:

- RECORD DRAWINGS/AS-BUILTS.
- EQUIPMENT CUT SHEETS AND CA SFM LISTINGS.
- ALTERNATIVE MEANS AND METHODS.
- PERFORMANCE BASED DESIGN DOCUMENTATION (NFPA 72, 7.3.7).
- SYSTEM RECORD OF COMPLETION AND ANY SUPPLEMENTAL INSPECTION AND TESTING DOCUMENTATION (NFPA 72, 7.8.2).
- EMERGENCY RESPONSE PLAN (NFPA 72, 7.3.8.).
- EVALUATION DOCUMENTATION (NFPA 72, 7.3.9.).
- RISK ANALYSIS DOCUMENTATION (NFPA 72, 7.3.6).
- SOFTWARE AND FIRMWARE CONTROL DOCUMENTATION (NFPA 72, 23.2.2).

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN: 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
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TITLE
FIRE ALARM
CODES, NOTES AND SPECIFICATIONS

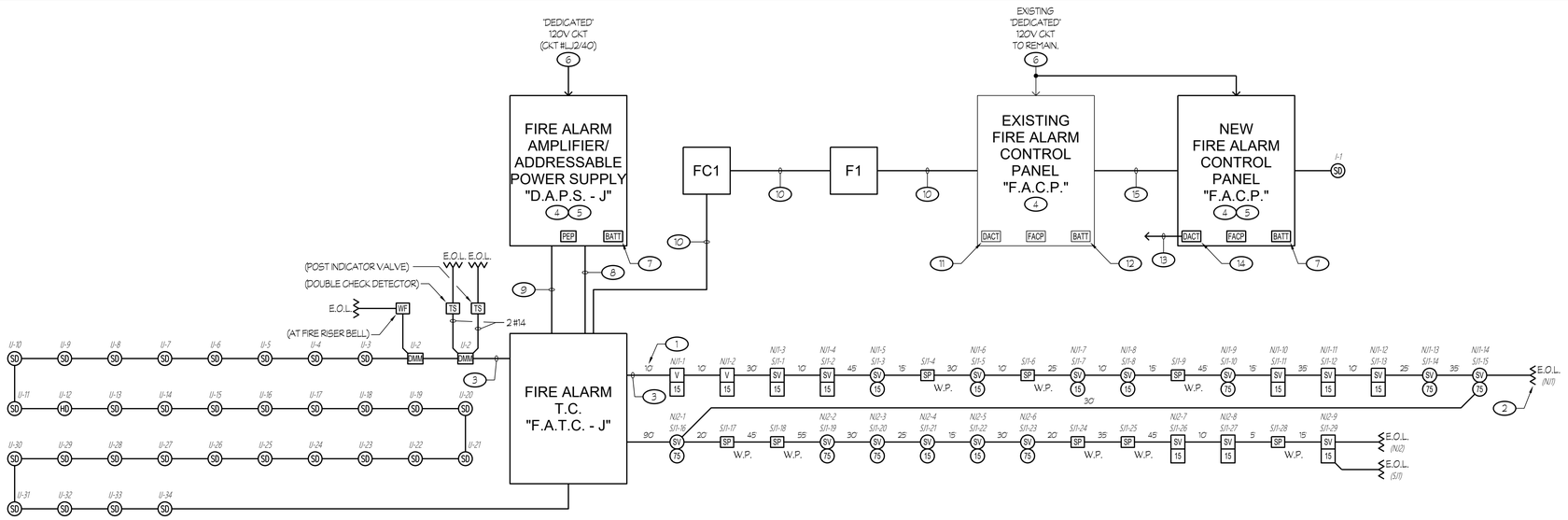
E4.1

PROJECT 24001

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Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E4.1.dwg DATE SAVED: 12/09/24 By: Casey DATE PLOTTED: 02/13/25 JOB #: 24-034-JJ



NOTES (THIS SHEET ONLY):

1. LENGTHS INDICATED WERE USED FOR CALCULATIONS/DESIGN PURPOSES ONLY AND BASED UPON THE 'DIAGRAMMATIC' LAYOUT SHOWN ON THE DRAWINGS. LENGTHS SHALL NOT BE USED FOR BIDDING.
2. DENOTES END OF LINE RESISTOR ON NOTIFICATION APPLIANCE CIRCUIT. RESISTORS SUPPLIED WITH FIRE ALARM POWER EXPANDER PANEL 'P.E.P. - K' AS REQUIRED. LOCATE RESISTORS AT END OF LINE APPLIANCES (CLASS 'B' WIRING). TYPICAL.
3. REFER TO RESPECTIVE FIRE ALARM PLANS, ON SHEETS #E1.5 AND #E1.6, FOR CONDUIT AND CABLING/CONDUCTOR REQUIREMENTS, TYPICAL.
4. PROVIDE A COPY OF THE BATTERY CALCULATION FOR THE 'RESPECTIVE' FIRE ALARM CONTROL PANEL 'F.A.C.P.' AND FIRE ALARM POWER EXPANDER PANEL 'P.E.P. - K'. THE BATTERY CALCULATION SHALL CONTAIN INFORMATION (AS NOTED ON THESE PLANS) AND BE PLASTIC LAMINATED. MOUNT ONTO INSIDE FACE OF PANEL DOOR.
5. PROVIDE 'END-OF-LINE' RESISTORS AT ANY UNUSED OUTPUTS.
6. CIRCUIT BREAKER SHALL BE EQUIPPED WITH A LOCK-ON DEVICE, 'RED IN COLOR', SPACEAGE #ELOCK-FA OR EQUAL. PROVIDE AN ENGRAVED NAMEPLATE: 'FIRE ALARM - LEAVE ON', WHITE LETTERS ON A RED BACKGROUND.
7. PROVIDE NEW BATTERIES PER RESPECTIVE BATTERY CALCULATION.
8. ONE SPARE 1 1/2"C.
9. 1 1/2"C - 4 #12, TWO 'SFA' CABLES, ONE 'FA' CABLE, ONE 'FS' CABLES.
10. 1 1/2"C - THREE 'SFA' CABLES.
11. EXISTING DACT TO REMAIN.
12. EXISTING BATTERIES TO REMAIN.
13. RUN A 3/4"C - TWO DEDICATED PHONE LINES TO CONNECT TO OFF SITE MONITORING.
14. MOUNT DACT ABOVE NEW FIRE ALARM CONTROL PANEL 'F.A.C.P.'.
15. 1"C - ONE 'FA' CABLE.

1 FIRE ALARM SYSTEM RISER DIAGRAM

NTS

VOLTAGE DROP CALCULATIONS (OHM'S LAW)

VOLTAGE DROP = 2 (DC RESISTANCE AT 75°C FROM TABLE 8, C.E.C.) (LENGTH OF CIRCUIT / 1000) (CURRENT I)

PERCENT VOLTAGE DROP = VOLTAGE DROP / NOMINAL VOLTAGE x 100

1. NOTIFICATION APPLIANCE CIRCUIT "N1":

- V 15 : 2 x 0.043 A = 0.086 A
- SV 15 : 5 x 0.043 A = 0.215 A
- SV 15 : 4 x 0.041 A = 0.164 A
- SV 75 : 3 x 0.111 A = 0.333 A / 0.798 A

VOLTAGE DROP = 2 (1.98) (375 / 1000) (0.798) = 1.185 V.D.

PERCENT VOLTAGE DROP = 1.185 / 24 x 100 = 4.938 %

VOLTAGE DROP CALCULATIONS (OHM'S LAW)

VOLTAGE DROP = 2 (DC RESISTANCE AT 75°C FROM TABLE 8, C.E.C.) (LENGTH OF CIRCUIT / 1000) (CURRENT I)

PERCENT VOLTAGE DROP = VOLTAGE DROP / NOMINAL VOLTAGE x 100

1. NOTIFICATION APPLIANCE CIRCUIT "N2":

- SV 15 : 3 x 0.043 A = 0.129 A
- SV 15 : 2 x 0.041 A = 0.082 A
- SV 75 : 4 x 0.111 A = 0.444 A / 0.655 A

VOLTAGE DROP = 2 (1.98) (440 / 1000) (0.655) = 1.141 V.D.

PERCENT VOLTAGE DROP = 1.141 / 24 x 100 = 4.75 %

NEW FIRE ALARM DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY "D.A.P.S. - J" BATTERY CALCULATION

	DESCRIPTION	QUANTITY	SUPV. CURRENT EACH	SUPV. CURRENT SUB-TOTAL	ALARM CURRENT EACH	ALARM CURRENT SUB-TOTAL
	DIGITAL AMPLIFIER	1	0.400	0.400	0.550	0.550
	POWER SUPPLY	1	0.130	0.130	0.130	0.130
(A)	SPEAKER/15cd STROBE (CEILING)	6	—	—	0.041	0.246
(A)	SPEAKER/75cd STROBE (CEILING)	7	—	—	0.111	0.777
	15cd STROBE (WALL)	2	—	—	0.043	0.086
(A)	SPEAKER/15cd STROBE (WALL)	8	—	—	0.043	0.344
		TOTALS		0.53		2.133

TOTAL ALARM CURRENT OF 2.133 x 0.250 (15 MINUTES) = 0.5333 A.H.
TOTAL SUPERVISORY CURRENT OF 0.53 x 24 HOURS = 12.72 A.H.
TOTAL AMP HOURS REQUIRED 13.2533 A.H.
x 1.25 SAFETY FACTOR
16.567 A.H.

PROVIDE 18.0 AMP HOUR BATTERIES.

(A) THE CURRENT VALUES LISTED ARE FOR THE STROBES ONLY. THE SPEAKER CURRENT IS INCLUDED IN THE VALUES LISTED UNDER THE DIGITAL AUDIO AMPLIFIER.

NEW FIRE ALARM CONTROL PANEL "F.A.C.P." BATTERY CALCULATION

DESCRIPTION	QUANTITY	SUPV. CURRENT EACH	SUPV. CURRENT SUB-TOTAL	ALARM CURRENT EACH	ALARM CURRENT SUB-TOTAL
FIRE ALARM CONTROL PANEL	1	0.116	0.116	0.116	0.116
SIX ZONE INTERFACE MODULE	1	0.002	0.002	0.040	0.040
SMOKE DETECTOR	32	0.0003	0.0096	0.0065	0.208
HEAT DETECTOR	1	0.0003	0.0003	0.0065	0.0065
DUAL MONITOR MODULE	2	0.000375	0.00075	0.000375	0.00075
	TOTALS		0.12865		0.37125

TOTAL ALARM CURRENT OF 0.37125 x 0.250 (15 MINUTES) = 0.0928 A.H.
TOTAL SUPERVISORY CURRENT OF 0.12865 x 24 HOURS = 3.0876 A.H.
TOTAL AMP HOURS REQUIRED 3.1804 A.H.
x 1.25 SAFETY FACTOR
3.9755 A.H.

PROVIDE 7.0 AMP HOUR BATTERIES.

SPEAKER dB LOSS CALCULATION

SPEAKER CIRCUIT	SPEAKER VOLTAGE	WIRE SIZE	RESISTANCE PER FOOT	FEET REQUIRED ON CIRCUIT	WIRE RESISTANCE	TOTAL WATTAGE OF SPEAKERS ON CIRCUIT	SPEAKER CURRENT (AMPS)	RESISTANCE OF SPEAKER LOAD	WIRE SIZE	ACTUAL VOLTAGE AT SPEAKER LOAD	ACTUAL WATTS AT SPEAKER LOAD	dB LOSS
SJ1	70	18	0.01278	725'	9.27	37	0.53	132.43	18	65.42276	32.3194089	-0.59

NOTE:
CALCULATION IS BASED ON EACH OF THE 'INTERIOR' SPEAKERS TAPPED AT 1 WATT AND EACH OF THE 'EXTERIOR' SPEAKERS TAPPED AT 2 WATTS.

COMPLETE AUTOMATIC FIRE ALARM SYSTEM PLAN SUBMITTAL

THE FIRE ALARM SYSTEM SHOWN ON THESE PLANS HAS BEEN SUBMITTED AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT. ANY SUBSTITUTION OF THE FIRE ALARM SYSTEM SHALL BE RESUBMITTED TO THE ARCHITECT FOR REVIEW AND APPROVAL. THE CONTRACTOR SHALL PAY ANY ADDITIONAL FEES THAT ARE INCURRED DUE TO THIS SUBSTITUTION.

THE FIRE ALARM SYSTEM SHALL BE A TOTAL (COMPLETE) AUTOMATIC HEAT AND SMOKE DETECTION SYSTEM, PER C.F.C. SECTION 907.2.3.6, AND SHALL COVER EVERY ROOM AND/OR AREA. UPON THE ACTIVATION OF ANY INITIATION DEVICE THE FIRE ALARM SYSTEM SHALL ALERT ALL OCCUPANTS AND TRANSMIT THE ALARM, SUPERVISORY, AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION (C.F.C. SECTION 907.2.3.5).

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER — BRIAN KIRK EASTHAM — No. E-19966 — Exp. 6/30/25 — ELECTRICAL — STATE OF CALIFORNIA

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT — MICHAEL J. SCOTT JR — No. C-34284 — REN: 08-31-25 — STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

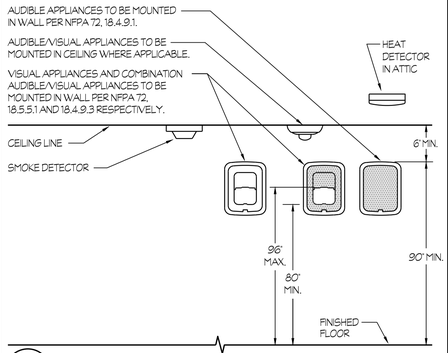
MANGINI ARCHITECTURE INGENUITY
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Visalia, California 93291
www.mangini.us
(559) 627-1030 Office
(559) 627-1926 fax

TITLE
FIRE ALARM SYSTEM RISER DIAGRAM AND CALCULATIONS

E4.2

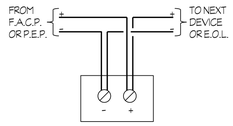
PROJECT 24001

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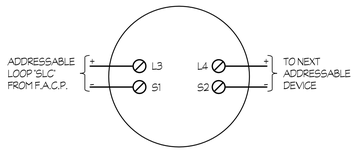


1 FIRE ALARM DEVICES ELEVATION

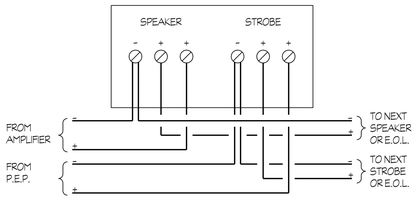
NTS



STROBE OR SPEAKER



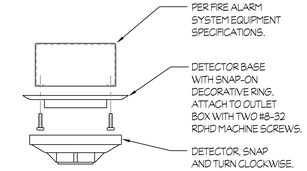
SMOKE OR HEAT DETECTOR



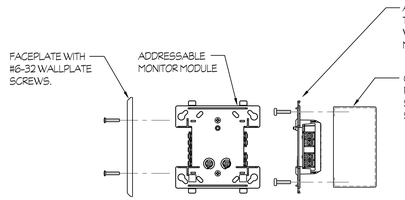
SPEAKER/STROBE

2 FIRE ALARM SYSTEM WIRING DIAGRAMS

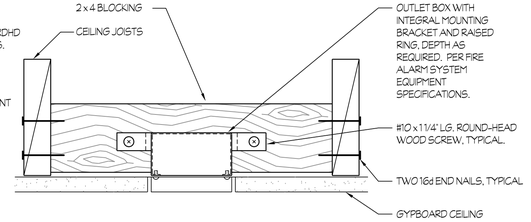
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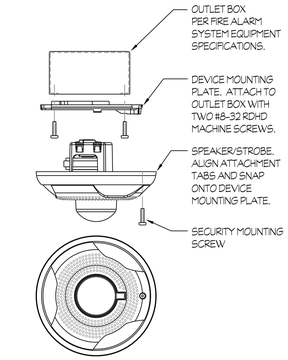
ADDRESSABLE SMOKE OR HEAT DETECTOR



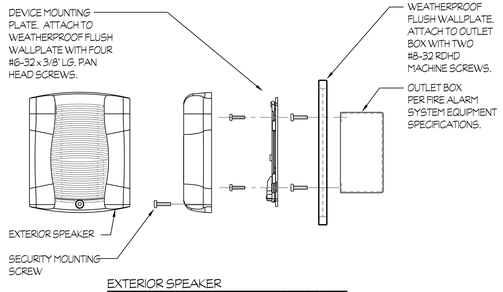
ADDRESSABLE MONITOR MODULE
(SIMILAR MOUNTING FOR ADDRESSABLE DUAL MONITOR, SUPERVISED OUTPUT, AND RELAY CONTROL MODULES)



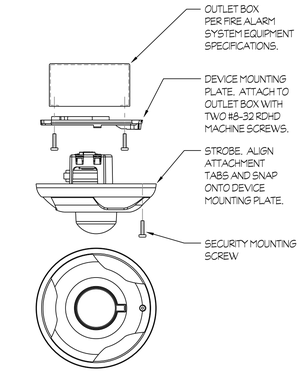
OUTLET BOX MOUNTING AT CEILING JOIST
(SIMILAR MOUNTING FOR OUTLET BOX BETWEEN WOOD STUDS)



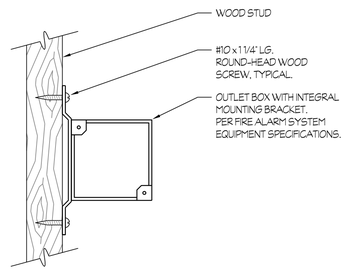
CEILING SPEAKER/STROBE



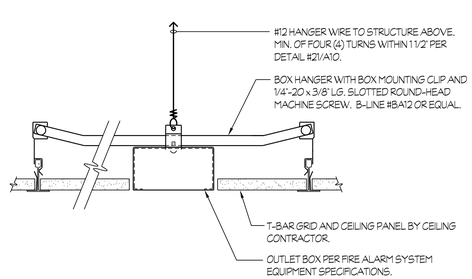
EXTERIOR SPEAKER
(WITH WEATHERPROOF FLUSH WALLPLATE 'WTP')



CEILING STROBE



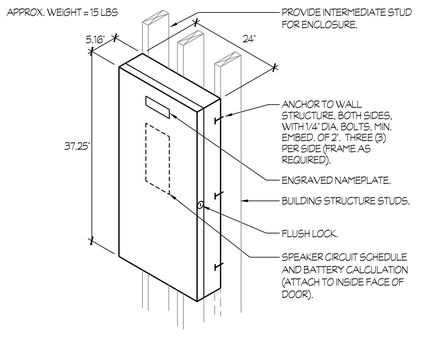
OUTLET BOX MOUNTING ONTO WOOD STUD
(SIMILAR MOUNTING FOR OUTLET BOX AT CEILING JOISTS)



OUTLET BOX MOUNTING AT SUSPENDED T-BAR CEILING

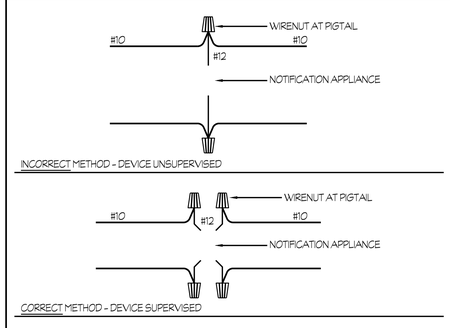
4 FIRE ALARM DEVICES MOUNTING

NTS



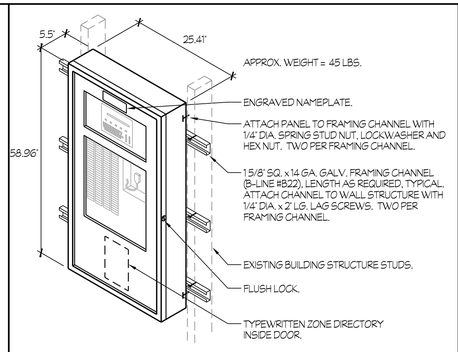
3 FIRE ALARM DIGITAL AMPLIFIER/ADDRESSABLE POWER SUPPLY "D.A.P.S. - J" MOUNTING

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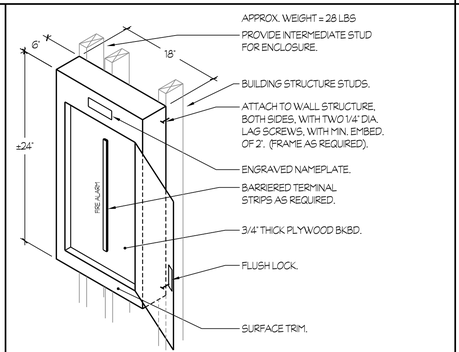
5 PIGTAIL WIRING DETAIL

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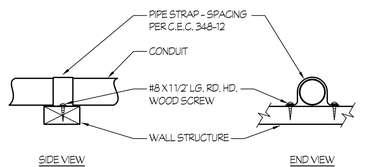
6 FIRE ALARM CONTROL PANEL "F.A.C.P." MOUNTING

NTS



7 FIRE ALARM T.C. "F.A.T.C. - J" MOUNTING

NTS



8 CONDUIT SUPPORT

NTS

APPROVALS

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No. C-34288
REN: 08-31-25
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FIRE ALARM DETAILS

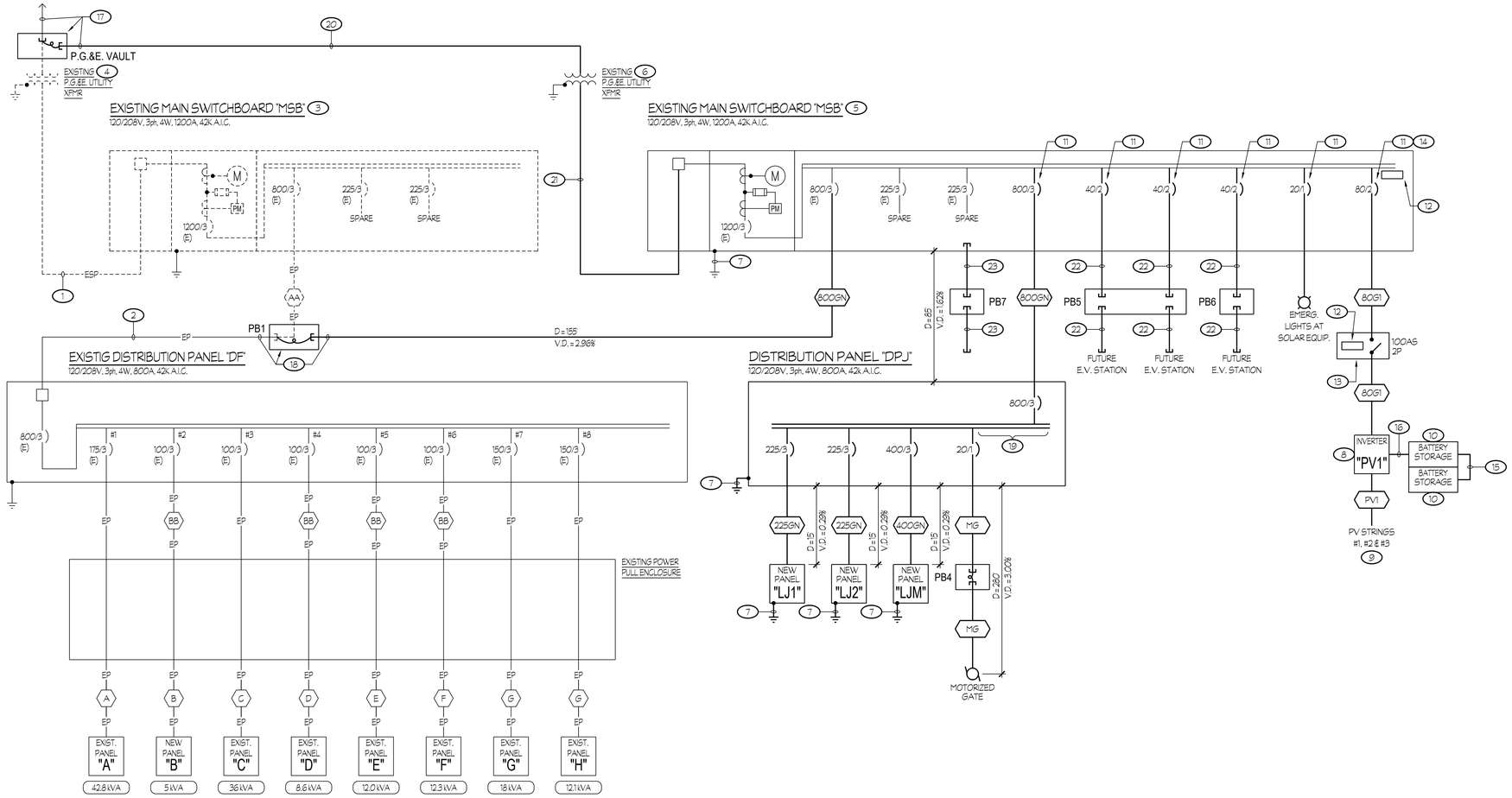
E4.3

PROJECT 24001

Rose Sing Eastham & Associates
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131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
ROSEMARY K. TRK SING EASTHAM
No. E-14786
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

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LOAD CALCULATION (MAIN SWBD "MSB"):

MAX DEMAND PER UTILITY COMP. RECORDS	129	kVA
ADJUSTMENT PER C.E.C. SECTION 220.87	161.25	kVA
TOTAL ADJUSTED LOAD	189.67	kVA
AMPS AT 120/208V, 3ph, 4W	526.86	AMPS
EQUIPMENT CAPACITY	1200	AMPS

LOAD CALCULATION (DIST. PANEL "DPJ"):

LIGHTS x 125%	9.34	kVA
RECEPTACLES (FIRST 10 kVA @ 100%, REMAINDER @ 50%)	36.7	kVA
H.V.A.C. x 100%	100.2	kVA
MISCELLANEOUS x 100%	26.9	kVA
(3) FUTURE E.V. STATIONS	14.4	kVA
TOTAL	187.54	kVA
AT 120/208V 3ph 4W	520.6	AMPS
TOTAL (EXISTING + NEW)	1,047.5	AMPS

THEREFORE THE EXISTING 1200 AMP SERVICE IS ADEQUATE.

1 ONE LINE DIAGRAM

NTS

ONE LINE DIAGRAM NOTES:

1. ——— ESP ——— DENOTES EXISTING S.C.E. 'SECONDARY' CONDUIT AND CONDUCTORS.
2. ——— EP ——— DENOTES EXISTING FEEDER TO REMAIN.
3. DISCONNECT, REMOVE AND SALVAGE EXISTING MAIN SWITCHBOARD 'MSB' FOR RELOCATION.
4. DISCONNECT, REMOVE AND SALVAGE EXISTING P.G.&E. UTILITY TRANSFORMER FOR RELOCATION.
5. RELOCATE EXISTING MAIN SWITCHBOARD 'MSB' TO NEW LOCATION SHOWN ON SHEET #ES1.3 AND RECONNECT.
6. RELOCATE EXISTING P.G.&E. UTILITY TRANSFORMER TO NEW LOCATION SHOWN ON SHEET #ES1.3 AND RECONNECT.
7. BOND AND GROUND PER DETAIL #6/E5.3.
8. PROVIDE SOL-ARC HYBRID INVERTER #15K-2P-N. CONNECT PV STRING CIRCUITS PER MANUFACTURER REQUIREMENTS.
9. PROVIDE 415W PV MODULES AS MANUFACTUERED BY Q CELLS, MODEL Q.PEAK DUO ML-G10+ AND SOL-ARK OPTIMIZER #0900-80V AT EACH UNIT. REFER TO PLANS FOR QUANTITY AND LOCATION OF MODULES.
10. PROVIDE EG4 ELECTRONICS 15 kWh LITHIUM IRON PHOSPHATE BATTERY STORAGE SYSTEM. CONNECT TO SYSTEM PER MANUFACTURER REQUIREMENTS.
11. PROVIDE NEW CIRCUIT BREAKER AS SHOWN. A.I.C. RATING TO MATCH EXISTING.
12. PROVIDE SOLAR NAME PLATE AS REQUIRED BY C.E.C.. SEE SHEET #E5.6. FOR ADDITIONAL INFORMATION.
13. PROVIDE WEATHERPROOF VISIBLE STYLE DISCONNECT SWITCH PER UTILITY REQUIREMENTS.
14. PV BREAKER PLACED IN LAST POSITION, FARTHEST FROM MAIN BREAKER.
15. 1 1/2"C - 2 #3/0 + 1 ONE CAT. '5e' CABLE.
16. 1 1/2"C - 4 #3/0 + 1 CAT. '5e' CABLE.
17. INTERCEPT EXISTING PRIMARY FEEDER WITH NEW P.G.&E. VAULT PER P.G.&E. REQUIREMENTS. EXTEND PRIMARY FEEDER TO NEW LOCATION OF RELOCATED EXISTING P.G.&E. UTILITY TRANSFORMER.
18. INTERCEPT EXISTING FEEDER WITH NEW PULL BOX AND EXTEND WITH NEW FEEDER TO NEW LOCATION OF RELOCATED EXISTING MAIN SWITCHBOARD 'MSB'.
19. PROVIDE SQUARE 'D', HCJ, I-LINE WITH 63 INCHES OF CIRCUIT BREAKER MOUNTING SPACE AND MAIN CIRCUIT BREAKER AS NOTED IN NEMA 1 ENCLOSURE.
20. ONE 4"C (PRIMARY). COORDINATE WITH P.G.&E. TO PULL IN AND CONNECT NEW PRIMARY CONDUCTORS.
21. FOUR 5"C (SECONDARY). COORDINATE WITH P.G.&E. TO PULL IN AND CONNECT NEW NEW SECONDARY CONDUCTORS.
22. 1 1/2"C SPARE FOR FUTURE E.V. STATION.
23. THREE 3"C STUB OUTS FOR FUTURE USE.

EXISTING FEEDER SCHEDULE:

- A — EXISTING 2"C - 4 #3/0-CU.
- B — EXISTING 1 1/4"C - 4 #2 + 1 #8 GND.
- C — EXISTING 1 1/4"C - 4 #1/0-CU.
- D — EXISTING 1 1/4"C - 4 #12 + 1 #8 GND.
- E — EXISTING 1 1/4"C - 4 #12 + 1 #8 GND.
- F — EXISTING 1 1/4"C - 4 #12 + 1 #8 GND.
- G — EXISTING 2"C - 4 #2/0 CU.
- A1 — EXISTING 4 #3/0 CU.
- B1 — EXISTING 4 #4.
- C1 — EXISTING 4 #1/0 CU.
- D1 — EXISTING 4 #1 CU.
- E1 — EXISTING 4 #4 CU.
- F1 — EXISTING 4 #2 CU.
- G1 — EXISTING 4 #2/0 CU.
- AA — EXISTING TWO 4"C - 4 #500 kcmil + 1 #1/0 GND IN EACH.
- BB — EXISTING 4"C - 4 #2 + 1 #8. ONE SPARE 4"C.

NEW FEEDER SCHEDULE:

(ALL UNDERGROUND CONDUCTORS, OF A 480/277V POWER SYSTEM, SHALL BE TYPE CU-XHHW-2. ALL OTHER CONDUCTORS, INCLUDING THE EQUIPMENT GROUNDING CONDUCTOR, SHALL BE CU-THWN-2 FOR #3 AWG OR LARGER AND CU-THWN FOR #10 AWG OR SMALLER).

- PV1 — 3/4"C - 2 #10 + 1 #10 GND + 1 #8 CU BARE PER STRING.
- MG — TC - 2 #6 + 1 #8 GND.
- 80G1 — 1 1/4"C - 2 #4 + 1 #8 GND.
- 225GN — 2 1/2"C - 4 #4/0 + 1 #4 GND.
- 400GN — 3 1/2"C - 4 #500 kcmil + 1 #2 GND.
- 800GN — TWO 3 1/2"C - 4 #500 kcmil + 1 #1/0 GND EACH.

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REGISTERED PROFESSIONAL ENGINEER — KIRK EASTHAM — Exp. 6/30/25 — ELECTRICAL — STATE OF CALIFORNIA

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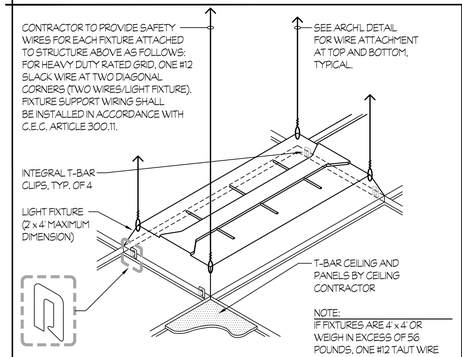
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TITLE
ONE LINE DIAGRAM
DIAGRAM

E5.1

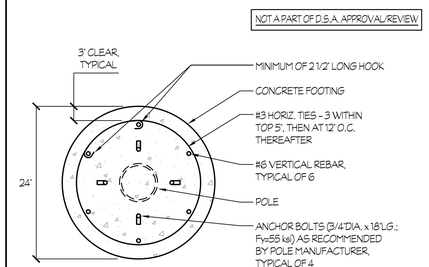
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Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\ES1.1.dwg DATE SAVED: 02/13/25 By: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-JJ



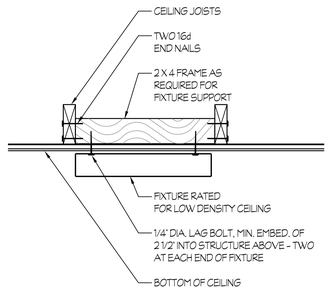
1 RECESSED FIXTURE MOUNTING

NTS



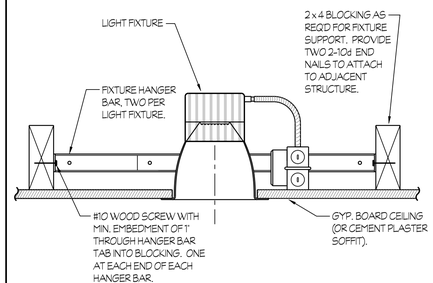
5 CROSS SECTION OF CONCRETE FOOTING

NTS



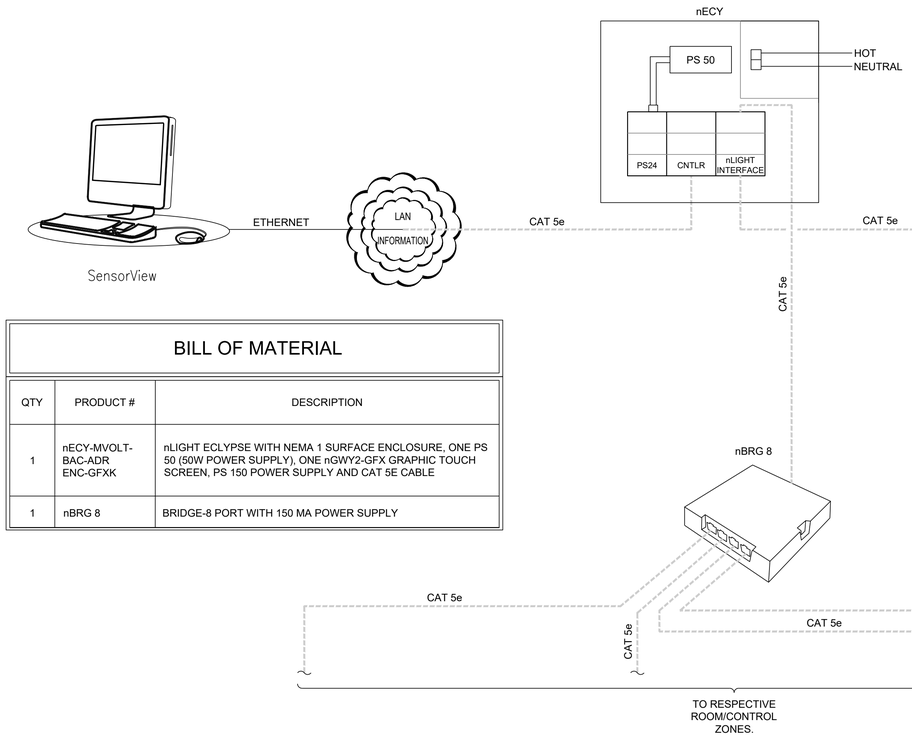
2 SURFACE FIXTURE MOUNTING

NTS



6 RECESSED DOWNLIGHT MOUNTING

NTS



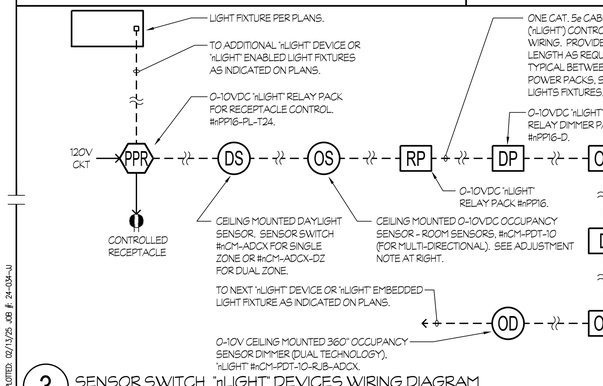
BILL OF MATERIAL

QTY	PRODUCT #	DESCRIPTION
1	nECY-MVOLT-BAC-ADR ENC-GFXK	nLIGHT ECLYPSE WITH NEMA 1 SURFACE ENCLOSURE, ONE PS 50 (50W POWER SUPPLY), ONE nGWY2-GFX GRAPHIC TOUCH SCREEN, PS 150 POWER SUPPLY AND CAT 5E CABLE
1	nBRG 8	BRIDGE-8 PORT WITH 150 MA POWER SUPPLY

8 AUTOMATED DEMAND RESPONSE CLIENT INTERFACE AND NETWORK INTERFACE CONTROLLER

(WIRING DIAGRAM)

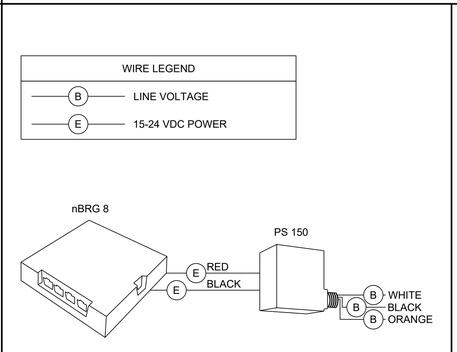
NTS



3 SENSOR SWITCH, "nLIGHT" DEVICES WIRING DIAGRAM

(NOTE: ACTUAL SEQUENCE OF DEVICES IS TO BE PER PLANS)

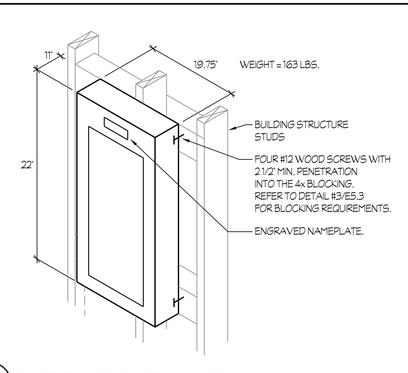
NTS



9 NETWORK INTERFACE BRIDGE KIT

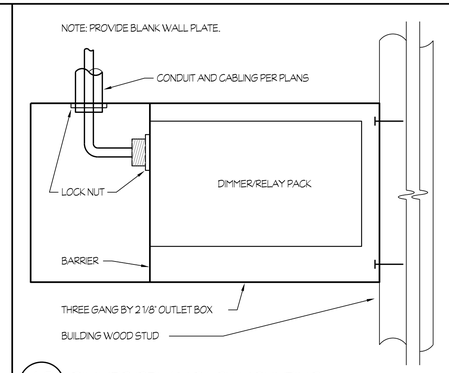
(WIRING DIAGRAM)

NTS



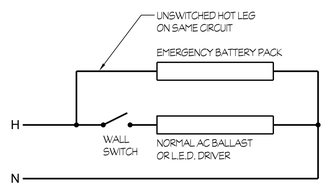
11 TYPE "ELU" FIXTURE MOUNTING

NTS



13 DIMMER/RELAY PACK MOUNTING

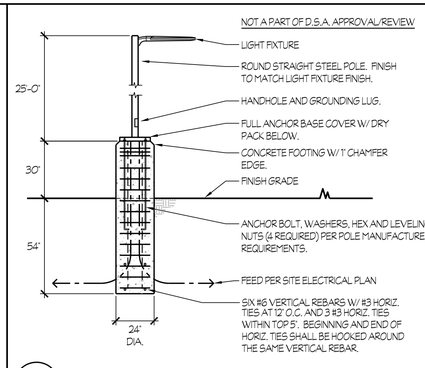
NTS



CONNECT LIGHT FIXTURE SO THAT THE L.E.D. DRIVER (OR ALL OF THE LAMPS) ARE CONTROLLED BY THE WALL SWITCH AND THE L.E.D. DRIVER (OR LAMPS) CONNECTED TO THE EMERGENCY BATTERY PACK WILL OPERATE DURING NORMAL POWER OUTAGE REGARDLESS OF THE POSITION OF THE WALL SWITCH.

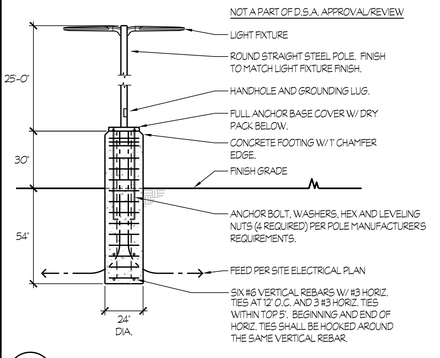
4 EMERGENCY BATTERY PACK WIRING DIAGRAM

NTS



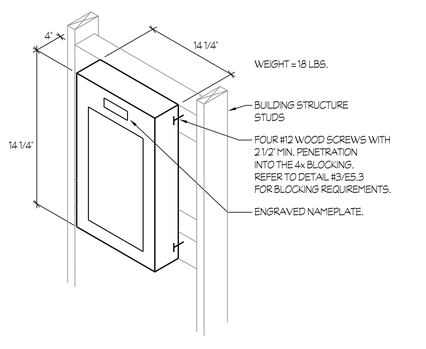
7 POLE LIGHT MOUNTING

NTS



10 POLE LIGHT MOUNTING

NTS



12 LIGHTING CONTROL PANEL "L.C.P. - J" MOUNTING

NTS

APPROVALS

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LICENSED ARCHITECT MICHAEL J. SCOTT JR. No. C-34289 REN. 08-31-25 STATE OF CALIFORNIA

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(559) 627-1926 Fax

TITLE

DETAILS

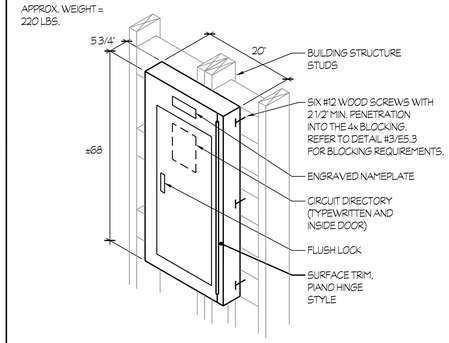
E5.2

PROJECT 24001

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER ROSEMARY KIRK SING EASTHAM No. E-14766 Exp. 6/30/25 ELECTRICAL STATE OF CALIFORNIA

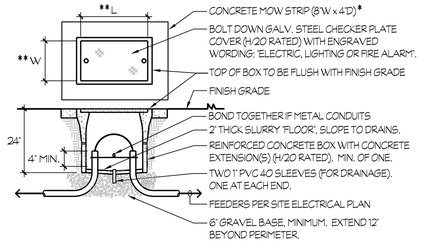
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1 SURFACE MOUNTED PANEL

NTS

PULL BOX	PB1, PB7	PB2-PB4, PB8, PB9	PB5, PB6	F1
W	24"	11 3/4"	17 1/8"	11 3/4"
L	36"	22 1/4"	30 1/4"	22 1/4"

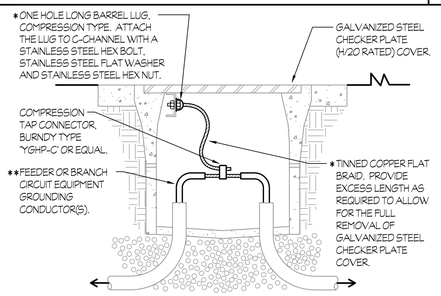


*NOTE: WHERE PULL BOX IS ADJACENT TO CONCRETE WALK, EXTEND MOW STRIP TO CONNECT WITH WALK. 'FOAM SEAL' ALL CONDUITS IN YARD BOXES.

**NOTE: INTERIOR DIMENSIONS MEASURED AT 'OPENING' OF PULL BOX.

5 PULL BOX MOUNTING

NTS



*THIS TYPICAL WORK SHALL BE PROVIDED FOR EACH SECTION OF A MULTIPLE SECTION COVER.

**THIS TYPICAL WORK SHALL BE DONE FOR EACH OF THE LARGEST FEEDER (OR BRANCH CIRCUIT) EQUIPMENT GROUNDING CONDUCTOR, PASSING THRU THE RESPECTIVE PULL BOX, WHICH ORIGINATE FROM SEPARATE SOURCES/VOLTAGES.

MATRIX FOR TINNED COPPER FLAT BRAID		
SIZE OF EQUIPMENT GROUNDING CONDUCTOR (g)	ALPHA WIRE PART #	OLYMPIC WIRE AND CABLE PART #
#8	1233	708
#6	1235	710
#4	1239	710
#2 THRU #1/0	1240	713
#2/0 THRU #4/0	1241	714

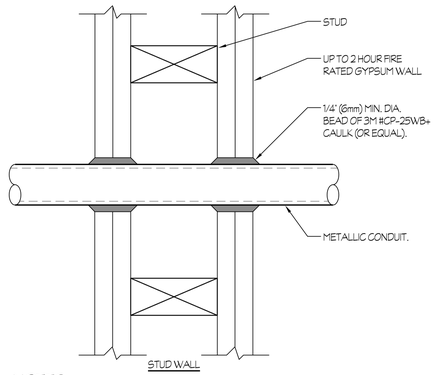
(g) CONTAINED IN THE LARGEST FEEDER (OR BRANCH CIRCUIT) PASSING THRU THE RESPECTIVE PULL BOX.

2 BONDING OF STEEL CHECKER PLATE COVERS

(AT ALL 'POWER' PULL BOXES)

NTS

THE FOLLOWING INFORMATION IS FOR REFERENCE ONLY. ALL PENETRATIONS IN FIRE-RATED ASSEMBLIES SHALL BE PROTECTED AS REQUIRED BY C.B.C., CHAPTER 7. THE U.L. FIRESTOP SYSTEM SHALL BE INSTALLED AND USED EXACTLY AS STATED IN THE U.L. FIRE RESISTANCE DIRECTORY.



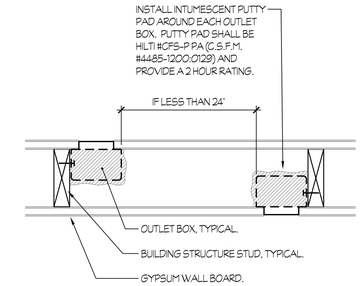
NOTES:

1. THE CAULK IS TO BE FORCED INTO THE ANNULAR SPACE TO THE MAXIMUM EXTENT POSSIBLE FLUSH WITH THE EXTERIOR OF THE PENETRATION SURFACE.
2. FINISH CAULKING WITH A 1/4" (6mm) MINIMUM BEAD OF CP-25WB+ CAULK APPLIED TO THE PERIMETER OF THE CONDUIT/PIPE AT ITS EGRESS FROM THE WALL.
3. THE MAXIMUM ANNULAR SPACE IS NOT TO EXCEED 3/16" (5mm).
4. INSTALL 3M FIRESTOP ON BOTH SIDES OF THE WALL.
5. THESE RECOMMENDATIONS ARE BASED ON PRODUCT PERFORMANCE PER ASTM E814 (ANSI/UL 1479) FIRE TEST AND UL THROUGH-PENETRATION FIRESTOP SYSTEM #WL1001.
6. 3M MODEL #CP-25WB+ CAULK.
7. C.S.F.M. #4485-0941:0116.

7 CONDUIT PENETRATION FIRESTOP DETAIL

(FOR METALLIC CONDUITS THROUGH FIRE RATED WALLS)

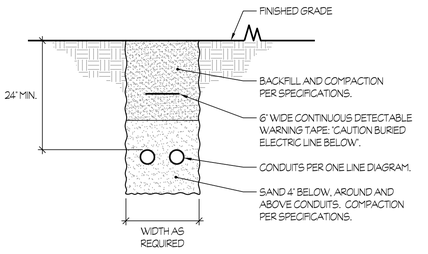
NTS



8 FIRE RATED OUTLET BOX ENCLOSURE

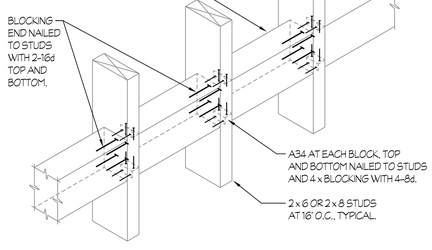
(REQUIRED IF OUTLET BOXES ARE INSTALLED WITHIN 24" OF EACH OTHER IN A FIRE RATED WALL)

NTS



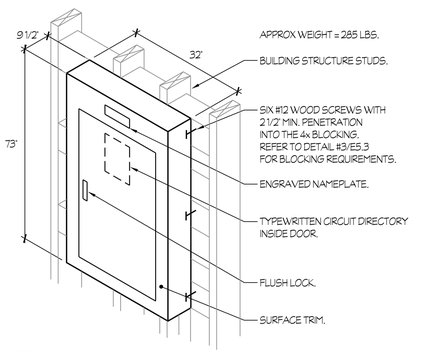
9 TRENCH DETAIL

NTS



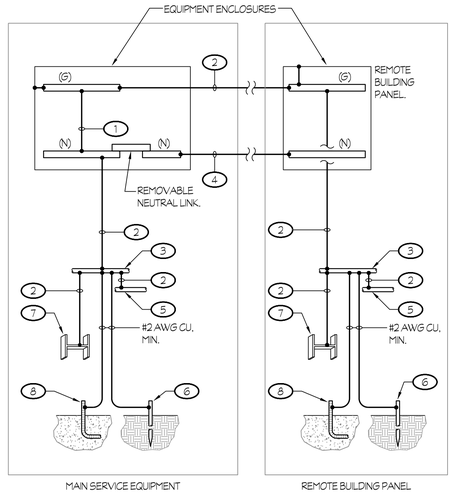
3 BLOCKING AT WOOD STUDS

NTS



4 DISTRIBUTION PANEL "DPJ" MOUNTING

NTS



NOTES (THIS DETAIL ONLY):

1. MAIN BONDING JUMPER PER C.E.C. 250.28.
2. FULL SIZE GROUNDING ELECTRODE CONDUCTOR PER C.E.C., TABLE 250.66.
3. METAL WATER PIPING PER C.E.C. 250.104.
4. NEUTRAL CONDUCTOR PER FEEDER SCHEDULE.
5. OTHER ABOVEGROUND METALLIC PIPING SYSTEMS PER C.E.C. 250.104.
6. 5/8" DIA. ROD ELECTRODE PER C.E.C. 250.52 (A), (5).
7. BUILDING STRUCTURAL STEEL PER C.E.C. 250.104.
8. CONCRETE ENCASED ELECTRODE PER C.E.C. 250.52 (A), (3).

LEGEND:

(G) DENOTES THE GROUND BUS OR BAR.

(N) DENOTES THE NEUTRAL BUS OR BAR.

GENERAL NOTE:

ALL MATERIALS AND METHODS USED IN GROUNDING AND BONDING SHALL COMPLY WITH C.E.C. ARTICLE 250.

6 MAIN SERVICE EQUIPMENT AND REMOTE BUILDING PANEL - GROUNDING AND BONDING

NTS

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STATE OF CALIFORNIA

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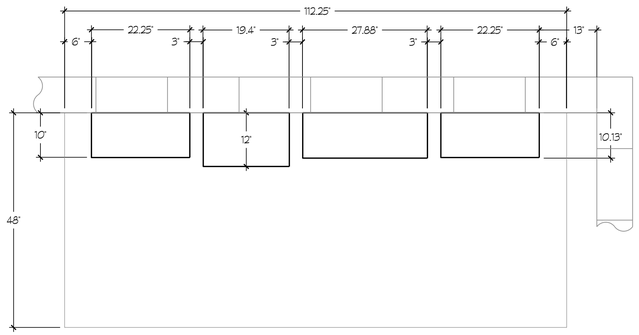
E5.3

PROJECT 24001

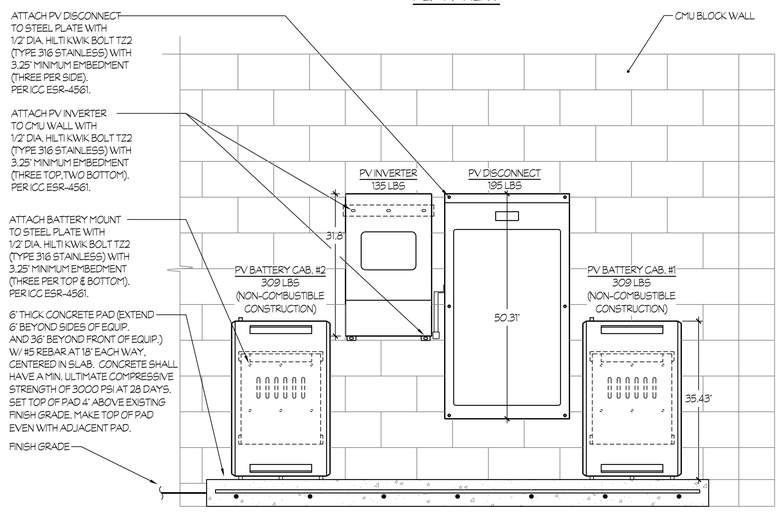
Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
JEREMY KIRK EASTHAM
No. 19766
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Z:\Drafting\Jobs\RSES\24003\S\Coalinga-Huron USD\Sunset ES - New Classroom Wing\DS_1.dwg DATE SAVED: 01/16/25 Br. Casey DATE PLOTTED: 02/13/25 JOB #: 24-034-JJ



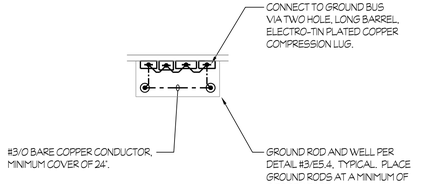
PLAN VIEW



FRONT VIEW

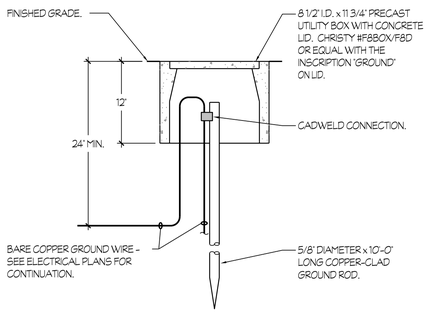
1 PV INVERTER AND BATTERY MOUNTING

NTS



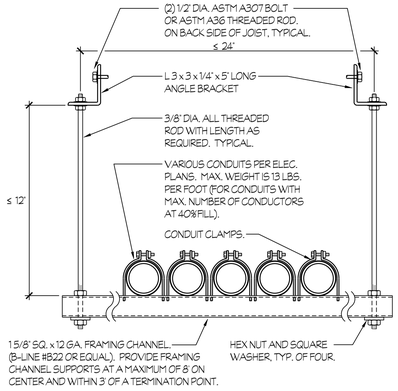
2 PV INVERTER BATTERY STORAGE AND PV DISCONNECT - GROUNDING & BONDING

NTS

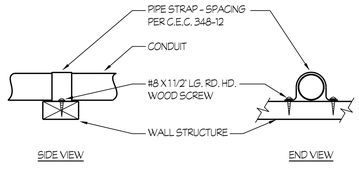


3 GROUND WELL DETAIL

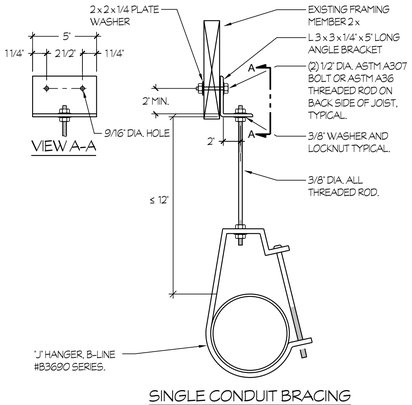
NTS



CONDUIT SUPPORT RACK



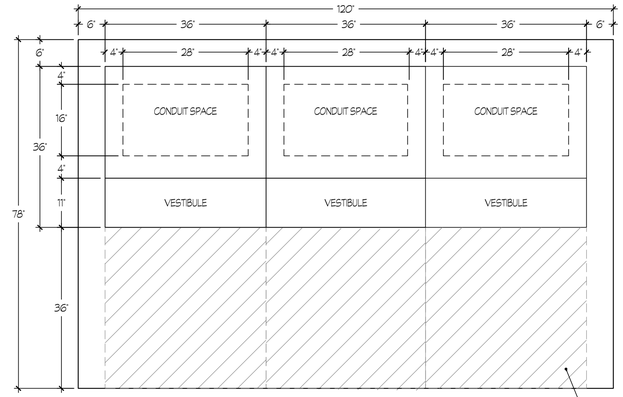
CONDUIT BRACING AT WALL STRUCTURE



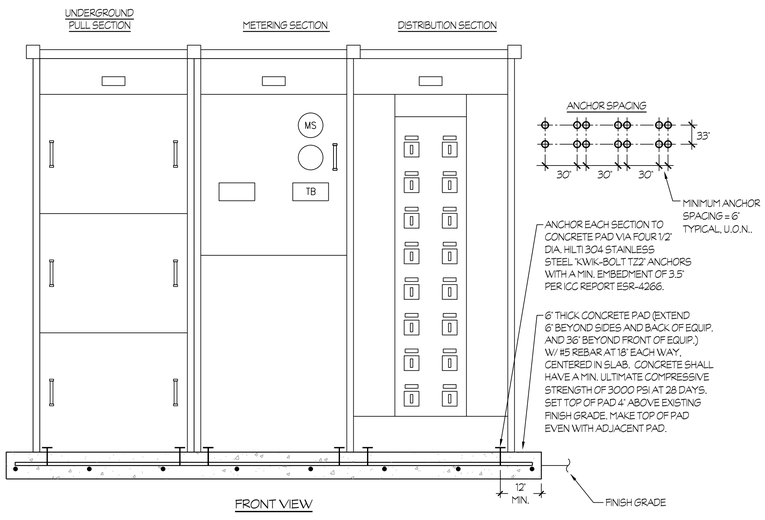
SINGLE CONDUIT BRACING

4 CONDUIT SUPPORT DETAILS

NTS



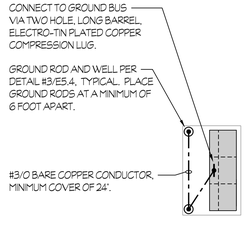
PLAN VIEW



FRONT VIEW

5 EXISTING RELOCATED MAIN SWITCHBOARD "MSB" MOUNTING

NTS



6 EXISTING RELOCATED MAIN SWITCHBOARD "MSB" - GROUNDING & BONDING

NTS

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TITLE
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E5.4

PROJECT 24001

Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E5.4.dwg DATE SAVED: 01/08/25 BY: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-JJ

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No. C-34284
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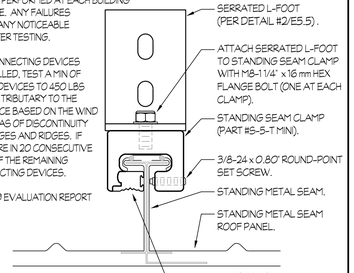
NOTES:

(1) CLAMPS SHALL BE LOCATED AND SPACED AT EVERY OTHER SEAM (36" O.C.).

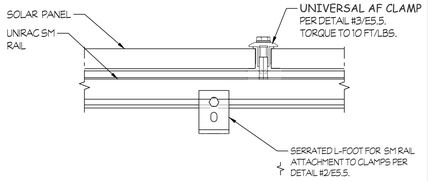
(2) PROVIDE FIELD TESTING OF SOLAR PANEL SYSTEM CONNECTING DEVICE(S) TO STANDING SEAM METAL ROOF PER DSA IR 16-8, 5.1.3.1 SOLAR PANEL PULL TEST REPORT SHALL INCLUDE: NUMBER OF TESTS PERFORMED AT EACH BULDING IN EACH WIND ZONE. ANY FAILURES DURING TESTING. ANY NOTICEABLE DEFORMATION AFTER TESTING.

(3) AFTER ALL THE CONNECTING DEVICES HAVE BEEN INSTALLED, TEST A MIN OF 20 CONSECUTIVE DEVICES TO 450 LBS WIND UPLIFT LOAD TRIBUTARY TO THE CONNECTING DEVICE BASED ON THE WIND PRESSURE AT AREAS OF DISCONTINUITY SUCH AS ROOF EDGES AND RIDGES. IF THERE IS NO FAILURE IN 20 CONSECUTIVE TESTS, TEST 10%OF THE REMAINING INSTALLED CONNECTING DEVICES.

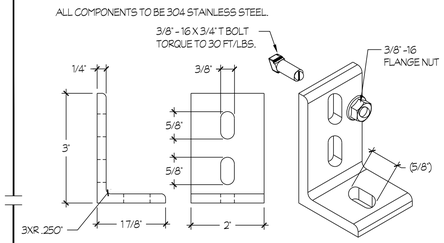
(4) SEE ICC-ESR-3869 EVALUATION REPORT ON SHEET #EG1.5.



1 SOLAR ATTACHMENT - L FOOT
(FOR STANDING METAL SEAM ROOF) NTS



4 SOLAR PANEL MOUNT - SIDE
(FOR WOOD FRAME ROOF) NTS



PART # TABLE	
P/N	DESCRIPTION
304001C	L-FOOT SERR W/ T-BOLT CLR

2 SERRATED L-FOOT DETAIL
NTS

SYMBOL LIST

	1-LINE SYMBOL- SOLAR ARRAY WITH AC SOLAR PANELS AS MANUFACTURED BY QCELLS MODEL Q.PEAK DUO ML-G10+, 415W STC
	ONE LINE SYMBOL - DC-AC INVERTER AS MANUFACTURED BY SOL-ARC HYBRID INVERTER #15K-2P-N (INCLUDES CTS), APPROVED GRID-TIED SYSTEM, 99% CEC EFFICIENCY.
J	TRANSITION BOX, NEMA 3R WHERE EXPOSED.
OPT	OPTIMIZER

SOLAR CABLE SCHEDULE

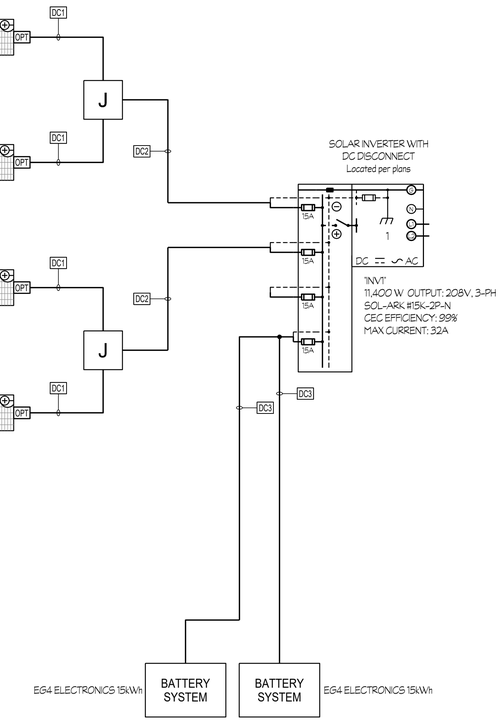
DC1	INPUT: (1) STRING OF 10 PANELS, MAXIMUM CIRCUIT VOLTAGE = 415 VDC, MAXIMUM CURRENT = 10.8A; #10 AWG PV CABLE.
DC2	INPUT: (2) STRING OF 9 OR 10 PANELS, MAXIMUM CIRCUIT VOLTAGE = 415 VDC, MAXIMUM CURRENT = 21.6A; #10 AWG PV CABLE.
DC3	BATTERY CONNECTION - 2 #3/0 AWG + COMM CABLE (CAT 5e)
GND	1#6 AWG MIN (EXPOSED) OR 1#8 AWG MIN (PROTECTED) TO GROUNDING SYSTEM PER NEC 250 AND 690

CALCULATIONS

PANEL
ISC = 11.26A PER PANEL
VOC = 45.16V PER PANEL

LOWEST AMBIENT TEMP = -2 C
CORRECTED VOLTAGE @ -2 C = 48.45
MAX VOC W/ 10 PER STRING @ -2C = 485 VDC
CORRECTED ISC @ 65C = 11.44 A (PER STRING)
MAX ISC = 1.25 * 1.25 * ISC * #STRINGS = 89.4A (@DC VOLTAGE)
MAX ISC = 1.25 * ISC(INV.) * #INV = 78A @208V AC

AC SOLAR ARRAY
TOTALS
15,770 W TOTAL
38 MODULES
415W PER PANEL



6 SOLAR ONE LINE DIAGRAM
NTS

UNIRAC RACKING COMPONENTS				
1	RAIL	320168M	SM RAIL 168" MILL	DETAILS #3/E5.5
1	RAIL	320246M	SM RAIL 246" MILL	DETAILS #3/E5.5
2	UNIVERSAL AF END CLAMP	302050M	UNIVERSAL AF END CLAMP-MIL	DETAILS #3/E5.5
3	UNIVERSAL AF MID CLAMP	302045M	UNIVERSAL AF MID CLAMP-M	DETAILS #3/E5.5
4	STANDOFF	304001C	L-FOOT SERRATED W/T-BOLT, CLR	DETAILS #1/E5.5

LOADS USED FOR DESIGN	
BUILDING CODE	ASCE 7-16
BASIC WIND SPEED	100.00 mph
GROUND SNOW LOAD	0.00 psf
SEISMIC SS	1.777
ELEVATION	287.00 ft
RISK CATEGORY	III
WIND EXPOSURE	C
TOPOGRAPHICAL FACTOR	1.00
VELOCITY PRESSURE	18.9 psf

SOLAR PANEL DIMENSIONS	
WIDTH	41.1"
LENGTH	74.0"
THICKNESS	1.26"
WEIGHT	48.5 LBS.

PANEL LOAD RATING (psf) (1)		
	PUSH	PULL
ALLOWABLE	75	55
STRENGTH LEVEL	113	84

(1) BASED ON ONE PANEL AS THE EFFECTIVE AREA.
(2) DESIGN LOADS ARE LRFD.

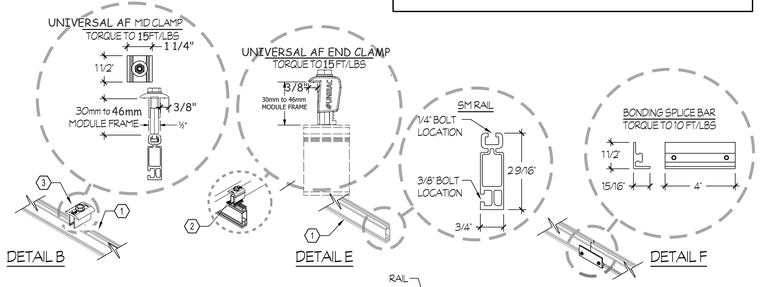
LEGEND	
	SOLAR PANELS
o	ATTACHMENT POINT
▪	SPLICE
—	RAIL LINES
-----	ROOF STRUCTRE
DISTRIBUTED DEAD LOAD	2.66 psf
AVERAGE ROOF POINT DEAD LOAD	22.22 lbs

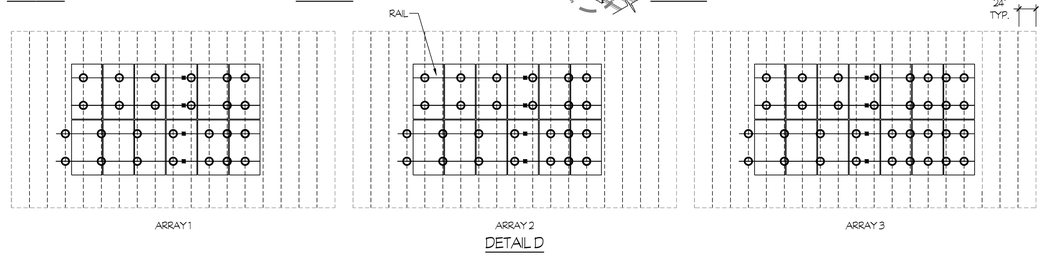
FIELD TESTING ON NEW OR SUPPLEMENTAL CONSTRUCTION

FIELD TESTS DESCRIBED BELOW ARE REQUIRED TO VERIFY PROPER INSTALLATION OF THE SOLAR SYSTEM CONNECTING DEVICE TO THE METAL ROOFING DURING THE CONSTRUCTION PHASE OF THE PROJECT.

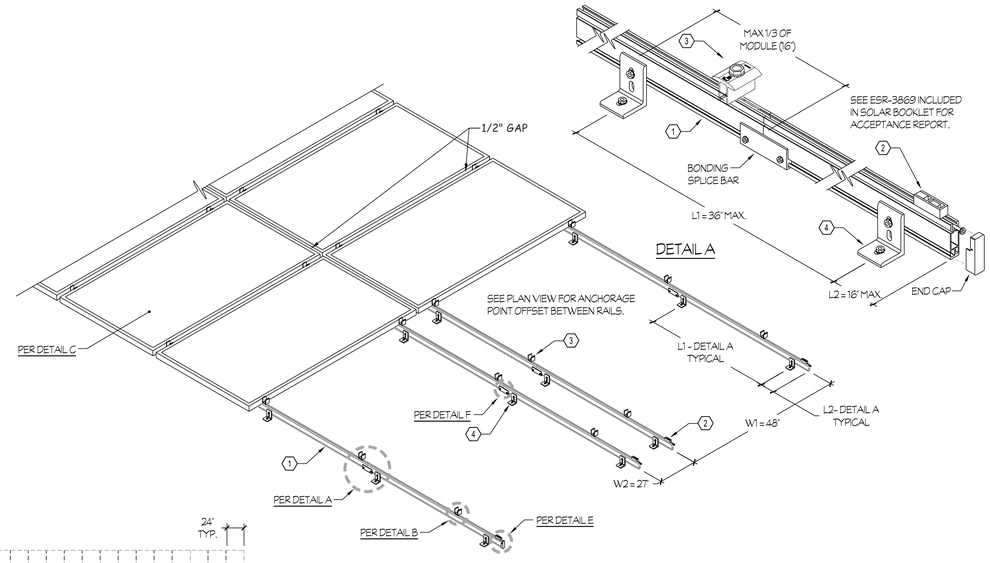
AFTER ALL THE CONNECTING DEVICES HAVE BEEN INSTALLED, TEST A MINIMUM OF 20 CONSECUTIVE DEVICES TO TWICE THE MAXIMUM ALLOWABLE STRESS DESIGN (ASD) WIND UPLOAD TRIBUTARY TO THE CONNECTING DEVICE BASED ON THE WIND PRESSURE AT AREAS OF DISCONTINUITY SUCH AS ROOF EDGES AND RIDGES. IF THERE IS NO FAILURE IN 20 CONSECUTIVE TESTS, TEST 10 PERCENT OF THE REMAINING INSTALLED CONNECTING DEVICES.

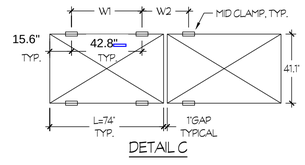
IF FAILURE OCCURS BEFORE 20 CONSECUTIVE SUCCESSFUL TESTS ARE COMPLETED, THEN ADDITIONAL TESTS SHALL BE PERFORMED UNTIL 20 CONSECUTIVE SUCCESSFUL TESTS ARE COMPLETED, THEN CONTINUE AT A RATE OF 10 PERCENT ON THE REMAINING INSTALLED DEVICES.





DETAIL D





DETAIL C

GENERAL NOTES:
1. CANTILEVER LENGTH L2 SHALL NOT BE LONGER THAN L1/3.
2. SOLAR PANEL ATTACHMENT PER DETAIL #4/E5.5.
3. ALL COMPONANT BOLTS SHALL HAVE A TORQUE VALUE PER THE MANUFACTURER'S SPECIFICATIONS.
4. ALL CLAMPS AND RAILS SHALL BE BARE ALUMINUM.
5. SEE SOLAR PANEL CUT SHEETS ON SHEET E5.6 FOR SOLAR PANEL DIMENSIONS.
6. ALL CLAMP BOLTS/NUTS SHALL BE 304 SS.

3 ASSEMBLY ISOMETRIC VIEW
NTS

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
BENJAMIN KIRK EASTHAM
No. E-19705
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
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(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
SOLAR DETAILS AND NOTES

E5.5

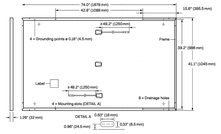
PROJECT 24001

Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E5.5.dwg DATE SAVED: 02/13/25 BY: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-JJ



MECHANICAL SPECIFICATION

Format	74.0 in × 41.1 in × 1.26 in (including frame) (1879 mm × 1045 mm × 32 mm)
Weight	48.5 lbs (22.0 kg)
Front Cover	0.13 in (3.2 mm) thermally pre-stressed glass with anti-reflection technology
Back Cover	Composite film
Frame	Black anodized aluminum
Cell	6 × 22 monocrystalline Q.ANTUM solar half cells
Junction Box	2.09–3.98 in × 1.26–2.36 in × 0.59–0.71 in (53–101 mm × 32–60 mm × 15–18 mm), IP67, with bypass diodes
Cable	4 mm² Solar cable; (+) ≥49.2 in (1250 mm), (−) ≥49.2 in (1250 mm)
Connector	Stäubli MC4; IP68

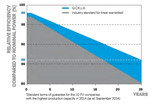


ELECTRICAL CHARACTERISTICS

POWER CLASS				395	400	405	410	415
MINIMUM PERFORMANCE AT STANDARD TEST CONDITIONS, STC¹ (POWER TOLERANCE +5 W / −0 W)								
Minimum	Power at MPP³	P_{MPP}	[W]	395	400	405	410	415
	Short Circuit Current³	I_{SC}	[A]	11.13	11.16	11.19	11.22	11.26
	Open Circuit Voltage³	V_{OC}	[V]	45.03	45.06	45.09	45.13	45.16
	Current at MPP	I_{MPP}	[A]	10.58	10.64	10.70	10.76	10.82
	Voltage at MPP	V_{MPP}	[V]	37.32	37.59	37.85	38.11	38.37
	Efficiency³	η	[%]	≥20.1	≥20.4	≥20.6	≥20.9	≥21.1
MINIMUM PERFORMANCE AT NORMAL OPERATING CONDITIONS, NMOT²								
Minimum	Power at MPP	P_{MPP}	[W]	296.4	300.1	303.9	307.6	311.4
	Short Circuit Current	I_{SC}	[A]	8.97	8.99	9.02	9.04	9.07
	Open Circuit Voltage	V_{OC}	[V]	42.46	42.49	42.52	42.56	42.59
	Current at MPP	I_{MPP}	[A]	8.33	8.38	8.43	8.48	8.53
	Voltage at MPP	V_{MPP}	[V]	35.59	35.82	36.04	36.27	36.49

¹Measurement tolerances P_{MPP} ±3%; I_{SC}; V_{OC} ±5% at STC: 1000 W/m², 25 ± 2 °C, AM 1.5 according to IEC 60904-3 • ²800 W/m², NMOT, spectrum AM 1.5

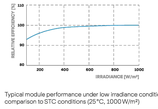
Q CELLS PERFORMANCE WARRANTY



At least 98 % of nominal power during first year. Thereafter max. 0.5 % degradation per year. At least 93.5 % of nominal power up to 10 years. At least 86 % of nominal power up to 25 years.

All data within measurement tolerances. Full warranties in accordance with the warranty terms of the Q CELLS sales organisation of your respective country.

PERFORMANCE AT LOW IRRADIANCE



Typical module performance under low irradiance conditions in comparison to STC conditions (25 °C, 1000 W/m²)

TEMPERATURE COEFFICIENTS

Temperature Coefficient of I_{SC}	α	[%/K]	+0.04	Temperature Coefficient of V_{OC}	β	[%/K]	−0.27
Temperature Coefficient of P_{MPP}	γ	[%/K]	−0.34	Nominal Module Operating Temperature	NMOT	[°F]	109 ± 5.4 (43 ± 3 °C)

PROPERTIES FOR SYSTEM DESIGN

Maximum System Voltage V_{SYS}	[V]	1000 (IEC)/1000 (UL)	PV module classification		Class II
Maximum Series Fuse Rating	[A DC]	20	Fire Rating based on ANSI / UL 61730		TYPE 2
Max. Design Load, Push / Pull³	[lbs/ft²]	75 (3600 Pa)/55 (2660 Pa)	Permitted Module Temperature on Continuous Duty		−40 °F up to +185 °F (−40 °C up to +85 °C)
Max. Test Load, Push / Pull³	[lbs/ft²]	113 (5400 Pa)/84 (4000 Pa)			

³See Installation Manual

QUALIFICATIONS AND CERTIFICATES

UL 61730, CE-compliant, Quality Controlled PV - TÜV Rheinland, IEC 61215:2016, IEC 61730:2016, U.S. Patent No. 9,893,215 (solar cells), QCPV Certification ongoing.

PACKAGING INFORMATION

Horizontal packaging	76.4 in 1940 mm	43.3 in 1100 mm	48.0 in 1220 mm	1656 lbs 751 kg	24 pallets	24 pallets	32 modules

Specifications subject to technical changes © Q CELLS 2019 | 01_2019-04-15_DUO_ML-G10+_395-415_2020-05_Sheet2_NA

Note: Installation instructions must be followed. See the installation and operating manual or contact our technical service department for further information on approved installation and use of this product.

Hanwha Q CELLS America Inc.
400 Spectrum Center Drive, Suite 1400, Irvine, CA 92618, USA | **TEL** +1 949 748 59 96 | **EMAIL** inquiry@us.q-cells.com | **WEB** www.q-cells.us

PHOTOVOLTAIC SOLAR SYSTEMS - GENERAL NOTES

1. THESE DRAWINGS HAVE BEEN PREPARED WITH INFORMATION PROVIDED IN ORIGINAL DESIGN DOCUMENTS AND HAVE NOT BEEN VERIFIED FOR ACCURACY. NEW DESIGN AND REQUIREMENTS WERE BASED ON THE ASSUMPTION OF EXISTING INFORMATION BEING ACCURATE. ANY DISCREPANCIES OR QUESTIONABLE POINTS SHALL BE IMMEDIATELY REPORTED TO THE ENGINEER.
2. ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL) AND BEAR THEIR LABEL, OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY. ALL LIKE EQUIPMENT, MATERIAL, FIXTURES, ETC. SHALL BE OF SAME MANUFACTURER AT ALL TIMES - NO EXCEPTIONS. CUSTOM MADE EQUIPMENT SHALL HAVE COMPLETE TEST DATA SUBMITTED BY THE MANUFACTURER ATTESTING TO ITS SAFETY. IN ADDITION, THE MATERIALS, EQUIPMENT AND INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS, STANDARDS, RULES, AND REGULATIONS OF THE FOLLOWING AND BE MOST SUITABLE TO THE PURPOSE INTENDED:

   AMERICAN SOCIETY OF TESTING MATERIALS (ASTM)
   INSULATED POWER CABLE MANUFACTURERS ASSOCIATION (IPCMA)
   NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION (NEMA)
   AMERICAN STANDARD ASSOCIATION (ASA)
   NATIONAL FIRE PROTECTION AGENCY (NFPA)
   AMERICAN NATIONAL STANDARD INSTITUTE (ANSI)
   CALIFORNIA ELECTRICAL CODE (CEC), 2022 EDITION
   CALIFORNIA CODE OF REGULATIONS TITLE 24 (CCR)
   INSTITUTE OF ELECTRICAL AND ELECTRONIC ENGINEERS (IEEE)
   NATIONAL ELECTRICAL CODE (NEC), 2020 EDITION
   ELECTRONIC INDUSTRY ASSOCIATION (EIA)
   TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA)
3. ELECTRICAL DOCUMENTS ARE DIAGRAMMATIC AND INDICATE THE GENERAL LAYOUT OF THE COMPLETE CONSTRUCTION WORK. DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS OF ANY ELECTRICAL, ARCHITECTURAL, STRUCTURAL, CIVIL, OR MECHANICAL ITEMS OR FEATURES. DUE TO STRUCTURAL CONDITIONS, MECHANICAL DUCTING, OR PIPING REASONS, ELECTRICAL CONTRACTOR MAY DESIRE TO INSTALL THE WORK IN A MANNER DIFFERENT FROM THAT SHOWN. ROUTING OF RACEWAYS SHALL BE AT THE OPTION OF THE CONTRACTOR UNLESS OTHERWISE NOTED AND SHALL BE COORDINATED WITH OTHER SECTIONS.
4. ALL WIRING AND CABLING SHALL BE IN CONDUIT. ALL EXPOSED CONDUITS SHALL BE RIGID, GALVANIZED STEEL OR INTERMEDIATE METAL CONDUITS (IMC) OR ELECTRICAL METALLIC TUBING (EMT). ALL CONDUITS SHALL BE INSTALLED PARALLEL WITH, OR AT RIGHT ANGLES TO THE BUILDING LINES, BEAMS, OR CEILING. ALL LONG CONDUIT RUNS SHALL INCLUDE PULL BOXES AT 100-FOOT INCREMENTS AND SIZED AS REQUIRED OR NOTED. IN ADDITION, ALL CONDUITS CROSSING CEILING STRUCTURE EXPANSIONS SHALL HAVE APPROVED EXPANSION FITTINGS ACCORDINGLY. FLEXIBLE CONDUIT IS PERMITTED ONLY FOR SHORT LENGTHS TO EQUIPMENT TERMINATION AS REQUIRED (NOT TO EXCEED 5' IN LENGTH).
5. ALL CONDUCTORS SHALL BE COPPER. CONDUCTORS #10-AWG AND LARGER SHALL BE STRANDED TYPE WITH "THWN/THHN" INSULATION (75 DEGREES CELSIUS, WET OR DRY). ALUMINUM CONDUCTORS ARE NOT PERMITTED.
6. ALL FINAL CONNECTIONS TO AND INSTALLATION OF FURNISHED BY OTHERS EQUIPMENT SHALL BE MADE BY THE ELECTRICAL CONTRACTOR.
7. UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIES SHALL BE FIRE STOPPED AND SEALED WITH AN APPROVED MATERIAL SECURELY INSTALLED.
8. REFER TO SHEET #EG1.1, "SEISMIC ANCHORAGE REQUIREMENTS", FOR THE SEISMIC BRACING AND ANCHORAGE OF ELECTRICAL CONDUITS.
9. SOLAR PANELS AND SUPPORT SYSTEM TO BE GROUNDED PER CEC 250 AND 690.
10. INVERTER INCLUDES INTEGRAL DC DISCONNECT UNLESS OTHERWISE NOTED.
11. SECURELY FASTEN ALL ELECTRICAL EQUIPMENT BY MEANS OF RODS, HANGERS, SUPPORTS, GUIDES, ANCHORS AND SWAY BRACES TO MAINTAIN ALIGNMENT, TO PREVENT EQUIPMENT MOVEMENT, AND TO RESIST SEISMIC FORCES. DO NOT SECURE ANY ELECTRICAL EQUIPMENT TO ACOUSTICAL CEILING SUPPORT WIRES OR NON STRUCTURAL ELEMENTS.
12. STRAIGHT FEEDER, BRANCH CIRCUIT AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS. LOCATIONS SHALL BE DETERMINED IN THE FIELD OR AS INDICATED ON THE DRAWINGS.
13. FEEDERS:

13.A. CONDUITS FOR SOLAR SYSTEMS SHALL BE IDENTIFIED WITH STENCIL MARKINGS AT 100 FOOT INCREMENTS, AT EACH INTERSECTION, AND AT EACH CROSSOVER FROM ONE AREA TO ANOTHER, PENETRATION OF WALLS, AND FLOORS WITH LETTERING 3/4" MINIMUM FOR 1" CONDUIT OR LESS, 1" MINIMUM FOR 2" CONDUIT OR LESS, AND 1-1/2" MINIMUM FOR 4" OR LESS IN THE COLORS AS FOLLOWS:

208/240 VOLTS: BLACK
1000 VOLTS: RED

14. ALL CONDUCTORS AND CABLES SHALL BE IDENTIFIED AT EACH JUNCTION BOX, OUTLET BOX, CABINET, PULL BOX, ETC., WITH VINYL SELF-ADHESIVE TAPE SHOWING PANEL AND CIRCUIT NUMBERS, CONTROL WIRE NUMBER OR OTHER APPROPRIATE INFORMATION REGARDING THE SYSTEM IT REPRESENTS.
15. DRAWINGS DO NOT SHOW ALL OFFSETS, BENDS, SPECIFIC FITTINGS, JUNCTION BOXES NOR PULL BOXES NECESSARY TO MEET JOB CONDITIONS. THESE ITEMS SHALL BE PROVIDED WHERE NECESSARY.
16. ALL EXISTING EQUIPMENT, MATERIAL, CONDUCTORS AND CABLES THAT ARE NOT TO BE REUSED IN THEIR PRESENT LOCATIONS SHALL BE CAREFULLY DISCONNECTED (CONDUCTORS AND CABLES REMOVED TO SOURCE OF SUPPLY) AND STORED IN A SAFE PLACE. IT SHALL BE MADE AVAILABLE FOR INSPECTION BY THE OWNER WHO WILL DESIGNATE WHAT IS TO BE STORED BY THE OWNER AND WHAT IS TO BE REMOVED FROM THE PREMISES BY THE ELECTRICAL CONTRACTOR.
17. THE ALTERATION OF THE EXISTING BUILDING IS WORK OF A COMPLEX NATURE WHICH WILL REQUIRE PLANNING, CAREFUL PREPARATION AND EXECUTION, ATTENTION TO DETAIL AND CLOSE SUPERVISION BY THE ELECTRICAL CONTRACTOR. ELECTRICAL CONTRACTOR WILL BE REQUIRED TO DO THIS WORK IN FULL COOPERATION WITH THE OTHER CONSTRUCTION TRADES AND, SUBJECT TO SCHEDULING, ARRANGE TO MINIMIZE DISRUPTION OF THE NORMAL ACTIVITIES OF THE FACILITY. ELECTRICAL CONTRACTOR TO COORDINATE ALL ACTIVITIES WITH OWNER.
18. IN AREAS WHERE THERE ARE NO ALTERATIONS INDICATED, THE EXISTING FACILITIES SHALL REMAIN IN SERVICE. IN CASE OF DOUBT, ASSUME THAT THE EXISTING ELECTRICAL SERVICE IS TO REMAIN IN OPERATION THROUGHOUT THE CONSTRUCTION PERIOD.
19. INSTALLATION OF ALL ELECTRICAL EQUIPMENT SHALL BE CAREFULLY COORDINATED WITH EXISTING CONDITIONS TO AVOID POSSIBLE INTERFERENCE PROBLEMS.
20. OUTDOOR ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN SUITABLE ENCLOSURES AND SHALL BE PROTECTED FROM ACCIDENTAL CONTACT BY UNAUTHORIZED PERSONNEL, OR BY VEHICULAR TRAFFIC, OR BY ACCIDENTAL SPILLAGE OR LEAKAGE FROM PIPING SYSTEMS.
21. REFER TO MANUFACTURERS MOUNTING INSTALLATION REQUIREMENTS FOR PROPER SUPPORT SPACING AND ATTACHMENTS PER CALIFORNIA BUILDING CODE. INSTALL AS REQUIRED.
22. EXACT LOCATION OF SOLAR SYSTEM TO BE FIELD VERIFIED AND INSTALLED AS REQUIRED BY MANUFACTURER AND APPLICABLE CALIFORNIA BUILDING CODE.
23. SOLAR CIRCUIT BREAKERS SHALL BE INSTALLED ON OPPOSITE ENDS OF THE BUS BAR FROM OTHER SOURCE FEEDS (i.e. MAIN CIRCUIT BREAKER).
24. ACCESS AND WORKING SPACE SHALL BE PROVIDED AND MAINTAINED ABOUT ALL ELECTRICAL EQUIPMENT TO PERMIT READY AND SAFE OPERATION AND MAINTENANCE OF SUCH EQUIPMENT. THERE SHALL BE A MINIMUM CLEAR SPACE OF 36" IN FRONT OF EQUIPMENT; THE WIDTH OF CLEAR SPACE SHALL BE 32" AND A HEIGHT OF 6-1/2 FEET FROM GRADE.
25. THE DESIGN OF SUPPORT FRAME SYSTEM SHALL BE BASED ON CALCULATIONS OR ON TESTING IN COMPLIANCE WITH ICC-ES AC428 "ACCEPTANCE CRITERIA FOR MODULAR FRAMING SYSTEM USED TO SUPPORT PHOTOVOLTAIC (PV) MODULES," OR EQUAL, PER IR A-5.
26. SOLAR PANEL SYSTEM REQUIREMENTS
    a. SOLAR PANELS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 1703 OR BOTH UL 61730-1 AND UL 61730-2 (CBC 3111.3.1) FOR THE PANEL ORIENTATIONS SHOWN ON PLANS, AND THIS SHALL BE INDICATED ON THE DRAWINGS.
    b. SOLAR PANEL ORIENTATION (PORTRAIT AND/OR LANDSCAPE LAYOUTS), ANCHORAGE POINT LOCATION, AND INSTALLATION TOLERANCE RANGE SHALL BE SPECIFIED ON THE DRAWINGS. PANEL CONNECTION GEOMETRY SHALL BE CONSISTENT WITH UL 1703 TESTS (AND UL 2703 TEST IF UTILIZED). IF HORIZONTAL SLIP JOINTS (e.g., THERMAL EXPANSION JOINTS) IN FRAMING MEMBERS ARE PRESENT, PANELS MUST NOT SPAN ACROSS NOR BE CONNECTED ON OPPOSING SIDES OF THE SLIP JOINTS.
    c. DRAWINGS MUST SPECIFY OVERALL SOLAR PANEL DIMENSIONS AND FULLY-DIMENSIONED FRAME CONFIGURATION OF THE SPECIFIED PANEL INCLUDING HEIGHT, LENGTH, WIDTH, THICKNESS OF EACH WEB/FLANGE, AND MATERIAL GRADE.
    d. DRAWINGS MUST SPECIFY THE SOLAR PANEL LOAD RATING IN POUNDS PER SQUARE FOOT (psf) BASED ON AN EFFECTIVE AREA EQUAL TO THE AREA OF ONE PV PANEL. THE LOAD RATING SHALL BE PROVIDED AS BOTH ALLOWABLE AND STRENGTH LEVEL CAPACITIES, FOR CLARITY.

CALIFORNIA STATE FIRE MARSHAL PHOTOVOLTAIC INSTALLATION GUIDELINES LABELS

PLACE ON ALL CONDUIT, LOCATED ON ROOF, INTERIOR AND EXTERIOR, EVERY 5 FEET, AT TURNS AND ABOVE AND/OR BELOW PENETRATIONS AND ALL DC COMBINER AND JUNCTION BOXES. IN ⅜" WHITE LETTERING ON RED BACKGROUND, ON FADE-RESISTANT MATERIAL:

WARNING: PHOTOVOLTAIC POWER SOURCE

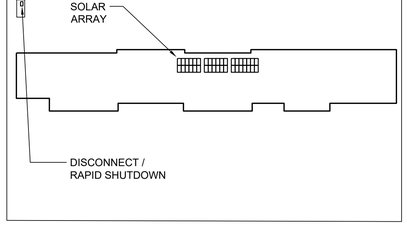
PLACE THIS LABEL WITHIN MAIN SERVICE DISCONNECT (OR ON OUTSIDE IF DISCONNECT IS OPERABLE WITH COVER CLOSED)

CAUTION: SOLAR ELECTRIC SYSTEM

REFLECTIVE, WHITE LETTERING ON RED BACKGROUND, TYPICAL UNLESS OTHERWISE NOTED

CEC 705.10
PLACE A PERMANENT PLAQUE DENOTING ALL ELECTRIC POWER SOURCES ON OR IN THE PREMISES AT THE SERVICE EQUIPMENT LOCATION AND AT ALL ELECTRIC POWER PRODUCTION SOURCES CAPABLE OF INTERCONNECTION

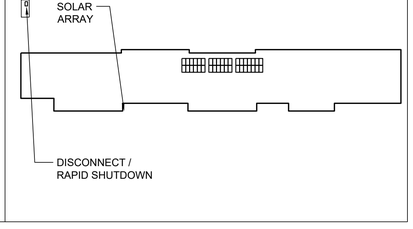
CAUTION MULTIPLE SOURCES OF POWER



CEC 690.56(C)
PLACE THIS LABEL AT SERVICE EQUIPMENT LOCATION.

SOLAR PV SYSTEM IS EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUTDOWN PV SYSTEM AND REDUCE SHOCK HAZARD IN ARRAY



BLACK LETTERING ON YELLOW BACKGROUND

CEC 690.13 (B) & 706.15 (C)
PLACE THIS LABEL ON ALL DISCONNECTING MEANS WHERE ENERGIZED IN AN OPEN POSITION

WARNING
ELECTRIC SHOCK HAZARD
DO NOT TOUCH TERMINALS
TERMINALS ON BOTH THE LINE AND LOAD SIDE MAY BE ENERGIZED IN THE OPEN POSITION

CEC 690.53
PLACE THIS LABEL ON ALL PHOTOVOLTAIC DC DISCONNECTING MEANS (ON INVERTER IF INTEGRATED DC DISCONNECTS AND AT SEPARATE DC DISCONNECT IF APPLICABLE)

PHOTOVOLTAIC SYSTEM DISCONNECT

RATED MAX POWER POINT CURRENT (IMP):	10.6A
RATED MAX POWER POINT VOLTAGE (VMP):	560V
MAX SYSTEM VOLTAGE (VOC):	600V
SHORT CIRCUIT CURRENT (ISC):	11.1A

CEC 690.54
PLACE THIS LABEL AT "INTERACTIVE POINT OF INTERCONNECTION" (AT MAIN SERVICE PANEL AND SUBPANEL IF APPLICABLE)

INVERTER "INV-1"
INTERACTIVE PHOTOVOLTAIC POWER SOURCE

RATED AC OUTPUT CURRENT (A):	27.8A
NOMINAL OPERATING AC VOLTAGE (V):	208V, 3-PH

CEC 1207.4.8)
PLACE THIS LABEL AT BATTERY STORAGE SYSTEM.

BATTERY STORAGE SYSTEM

CEC 705.10(D)(4)
PLACE THIS LABEL AT UTILITY METER.

WARNING
DUAL POWER SOURCES SECOND SOURCE IS PHOTOVOLTAIC SYSTEM

CEC 690.13(B)
PLACE THIS LABEL AT ALL PV DISCONNECTION POINTS.

PV SYSTEM DISCONNECT

CEC 690.56(C)(2)
PLACE THIS LABEL AT PV RAPID SHUTDOWN SWITCH.

RAPID SHUTDOWN SWITCH FOR SOLAR PV SYSTEM

CEC 705.12(B)(3)
PLACE THIS LABEL AT P.O.C. TO SERVICE DISTRIBUTION EQUIPMENT (I.E. MAIN PANEL (AND SUBPANEL IF APPLICABLE))

WARNING
POWER SOURCE OUTPUT CONNECTION
DO NOT RELOCATE THIS OVERCURRENT DEVICE

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34287
REN: 05-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL
COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627.0530 Office
(559) 627.1926 Fax

TITLE
SOLAR NOTES

E5.6

PROJECT 24001

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
BENJAMIN KIRK EASTHAM
No. E-19766
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Z:\Drafting\Jobs\RSES\SHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E5.6.dwg DATE SAVED: 12/09/24 BY: Casey DATE PLOTTED: 02/13/25 JOB # 24-034-JJ

APPROVALS

FILE # 10-28 | APPLICATION # 02-122658

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LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN. 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

PANEL "LJM"

120/208V, 3 PH, 4 W — 400 A. BUSSING — 400 A. MAIN BKR. — 54 CIRCUIT
22K BREAKER A.I.C. — 5 3/4" MAX. ENCL. DEPTH — SURF MOUNTING

CKT	BKR	LOAD: V.A. A	B	C	DESCRIPTION	DESCRIPTION	LOAD: V.A. C	B	A	BKR	CKT
1	20/1	348			EF-1, 2.9 FLA	EF-7, 2.9 FLA			348	20/1	2
3	20/1		348		EF-2, 2.9 FLA	EF-8, 2.9 FLA		348		20/1	4
5	20/1			348	EF-3, 2.9 FLA	EF-9, 2.9 FLA	348			20/1	6
7	20/1	348			EF-4, 2.9 FLA	EF-10, 2.9 FLA			348	20/1	8
9	20/1		348		EF-5, 2.9 FLA	EF-11, 2.9 FLA		348		20/1	10
11	20/1			348	EF-6, 2.9 FLA	EF-12, 2.9 FLA	348			20/1	12
13	45/3	2592							3360	60/3	14
15			2592		IDU-1/ODU-1, 21.6 FLA	IDU-7/ODU-7, 28 FLA		3360			16
17				2592			3360				18
19					SPACE				3360	60/3	20
21					SPACE	IDU-8/ODU-8, 28 FLA		3360			22
23					SPACE		3360				24
25	60/3	3360							1440	25/3	26
27			3360		IDU-3/ODU-3, 28 FLA	IDU-9/ODU-9, 12 FLA		1440			28
29				3360			1440				30
31	60/3	3360							1440	25/3	32
33			3360		IDU-4/ODU-4, 28 FLA	IDU-10/ODU-10, 12 FLA		1440			34
35				3360			1440				36
37	60/3	3360							1440	25/3	38
39			3360		IDU-5/ODU-5, 28 FLA	IDU-11/ODU-11, 12 FLA		1440			40
41				3360			1440				42
43	60/3	3360							1440	25/3	44
45			3360		IDU-6/ODU-6, 28 FLA	IDU-12/ODU-12, 12 FLA		1440			46
47				3360			1440				48
49					SPACE				3485	60/3	50
51					SPACE	IDU-13/ODU-13, 29.04 FLA		3485			52
53					SPACE		3485				54

LOAD SUMMARY	A	B	C	
CONNECTED LOAD (VA) :	33389	33389	33389	TOTAL CALCULATED LOAD FOR PANEL: 100167 VA
25% LCL/LML (VA) :	0	0	0	
TOTAL LOAD (VA) :	33389	33389	33389	
TOTAL LOAD (AMPS) :	278.2	278.2	278.2	

PANEL "LJ1"

120/208V, 3 PH, 4 W — 225 A. BUSSING — 225 A. MAIN BKR. — 54 CIRCUIT
22K BREAKER A.I.C. — 5 3/4" MAX. ENCL. DEPTH — SURF MOUNTING

CKT	BKR	LOAD: V.A. A	B	C	DESCRIPTION	DESCRIPTION	LOAD: V.A. C	B	A	BKR	CKT
1	20/1	1215			LIGHTS - J16-J22	LIGHTS - EXTERIOR			575	20/1	2
3	20/1		1349		LIGHTS - J11-J15	LIGHTS - EXTERIOR		725		20/1	4
5	20/1			1632	LIGHTS - J8-J10	RECEPT - FLOOR BOXES	720			20/1	6
7	20/1	1149			LIGHTS - J1-J7	RECEPT- COUNTER			1000	20/1	8
9	20/1		828		LIGHTS - PARKING LOT	RECEPT- CHARGING CART		1000		20/1	10
11	20/1			1000	RECEPT- COUNTER	RECEPT- COUNTER	1000			20/1	12
13	20/1	1000			RECEPT- COUNTER	RECEPT- COUNTER			1000	20/1	14
15	20/1		1000		RECEPT- T.V., SMART BRD	RECEPT- T.V., SMART BRD		1000		20/1	16
17	20/1			720	RECEPT - FLOOR BOXES	RECEPT - OFFICE, CLSSRM	1080			20/1	18
19	20/1	720			RECEPT- CLASSROOM	RECEPT - OFFICE, CLSSRM			1260	20/1	20
21	20/1		900		RECEPT- CLASSROOM	RECEPT- CONTROLLED		540		20/1	22
23	20/1			1000	RECEPT- COUNTER	RECEPT- T.V., SMART BRD	1000			20/1	24
25	20/1	1000			RECEPT- CHARGING CART	RECEPT- REFRIGERATOR			800	20/1	26
27	20/1		1000		RECEPT- COUNTER	RECEPT - COUNTER		1000		20/1	28
29	20/1			1000	RECEPT- COUNTER	RECEPT- COUNTER	1000			20/1	30
31	20/1	1000			RECEPT- T.V., SMART BRD	RECEPT- TOILET, EXTER.			360	20/1	32
33	20/1		1080		RECEPT - W.P. ON ROOF	RECEPT- CLASSROOM		720		20/1	34
35	20/1			720	RECEPT - FLOOR BOXES	RECEPT- CLASSROOM	540			20/1	36
37	20/1	720			RECEPT- CLASSROOM	CP-1			500	20/1	38
39	20/1		900		RECEPT- CLASSROOM	CP-2		500		20/1	40
41	20/1			1000	RECEPT- COUNTER	WH-1	2250			40/2	42
43	20/1	1000			RECEPT- CHARGING CART				2250		44
45	20/1				SPARE	WH-2		2250		40/2	46
47	20/1				SPARE		2250				48
49					SPACE	SPACE					50
51					SPACE	SPACE					52
53					SPACE	SPACE					54

LOAD SUMMARY	A	B	C	
CONNECTED LOAD (VA) :	15549	14792	16912	TOTAL CALCULATED LOAD FOR PANEL: 49121 VA
25% LCL/LML (VA) :	735	726	408	
TOTAL LOAD (VA) :	16284	15518	17320	
TOTAL LOAD (AMPS) :	135.7	129.3	144.3	

PANEL "LJ2"

120/208V, 3 PH, 4 W — 225 A. BUSSING — 225 A. MAIN BKR. — 54 CIRCUIT
22K BREAKER A.I.C. — 5 3/4" MAX. ENCL. DEPTH — SURF MOUNTING

CKT	BKR	LOAD: V.A. A	B	C	DESCRIPTION	DESCRIPTION	LOAD: V.A. C	B	A	BKR	CKT	
1	20/1	720			RECEPT - FLOOR BOXES	RECEPT - FLOOR BOXES			720	20/1	2	
3	20/1		720		RECEPT- CLASSROOM	RECEPT- CLASSROOM		720		20/1	4	
5	20/1			540	RECEPT- CLASSROOM	RECEPT- CLASSROOM	540			20/1	6	
7	20/1	1000			RECEPT- COUNTER	RECEPT- COUNTER			1000	20/1	8	
9	20/1		1000		RECEPT- CHARGING CART	RECEPT- CHARGING CART		1000		20/1	10	
11	20/1			1000	RECEPT- COUNTER	RECEPT- COUNTER	1000			20/1	12	
13	20/1	1000			RECEPT- COUNTER	RECEPT- COUNTER			1000	20/1	14	
15	20/1		1000		RECEPT- T.V., SMART BRD	RECEPT- T.V., SMART BRD		1000		20/1	16	
17	20/1			720	RECEPT - FLOOR BOXES	RECEPT - OFFICES	1080			20/1	18	
19	20/1	900			RECEPT- CLASSROOM	RECEPT - OFFICES			1080	20/1	20	
21	20/1		720		RECEPT- CLASSROOM	RECEPT - CONTROLLED		540		20/1	22	
23	20/1			1000	RECEPT- COUNTER	RECEPT - CONTROLLED	540			20/1	24	
25	20/1	1000			RECEPT- CHARGING CART	RECEPT - CONTROLLED			540	20/1	26	
27	20/1		1000		RECEPT- COUNTER	RECEPT - CONTROLLED		540		20/1	28	
29	20/1			1000	RECEPT- COUNTER	RECEPT- RESTROOM	720			20/1	30	
31	20/1	1000			RECEPT- T.V., SMART BRD	RECEPT- RESTROOM			360	20/1	32	
33	30/1		2500		RECEPT- DATA RACK	EMS PANEL		500		20/1	34	
35	20/1			1250	RECEPT- DATA RACK	LIGHTING CNTRL PANEL	500			20/1	36	
37	20/1	1250			RECEPT- DATA RACK	DEMAND RESPONSE			500	20/1	38	
39	20/1		1920		HAND DRYER	AMPLIFIER/POWER SUPPLY		500		20/1	40	(1)
41	20/1			1920	HAND DRYER	HAND DRYER	1920			20/1	42	
(1) 43	20/1	500			FIRE RISER BELL	HAND DRYER			1920	20/1	44	
45	20/1				SPARE	DRYER		3600		40/2	46	
47	20/1				SPARE		3600				48	
49					SPACE	SPACE					50	
51					SPACE	SPACE					52	
53					SPACE	SPACE					54	

LOAD SUMMARY	A	B	C	
CONNECTED LOAD (VA) :	14490	17260	17330	TOTAL CALCULATED LOAD FOR PANEL: 49080 VA
25% LCL/LML (VA) :	0	0	0	
TOTAL LOAD (VA) :	14490	17260	17330	
TOTAL LOAD (AMPS) :	120.8	143.8	144.4	

TYPICAL PANEL SCHEDULE NOTES:

(1) PROVIDE A LOCK-ON DEVICE AT THIS CIRCUIT BREAKER, 'RED IN COLOR', SPACEAGE #ELOCK-FA OR EQUAL. PROVIDE AN ENGRAVED NAMEPLATE: 'FIRE ALARM CIRCUIT', WHITE LETTERS ON A RED BACKGROUND. MOUNT NAMEPLATE ONTO INTERIOR TRIM AND ADJACENT TO CIRCUIT BREAKER.

REGISTERED PROFESSIONAL ENGINEER
BRIAN KIRK EASTHAM
No. E 19766
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth – (559)733-2671
Visalia, California 93292-6705

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

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REVISIONS

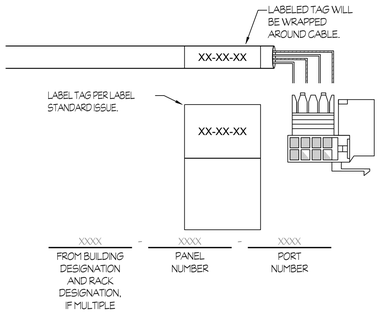
MANGINI | ARCHITECTURE INGENUITY
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(559) 627 2630 Office
(559) 627 1926 Fax

TITLE
PANEL SCHEDULES

E6.1

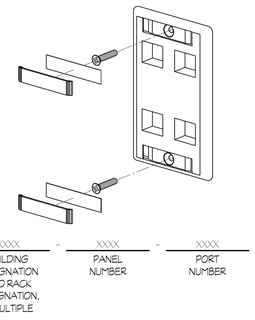
PROJECT 24001

Z:\Drafting\Jobs\RSES\SCHOOLS\Coalinga-Huron USD\Sunset ES - New Classroom Wing\E6.1.dwg DATE PLOTTED: 07/24/24 BY: Casey DATE SAVED: 07/24/24 BY: Casey JOB #: 24-034-U



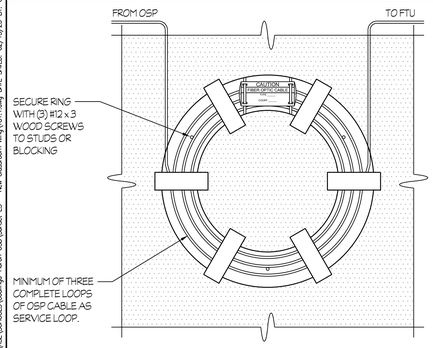
1 CABLE LINK IDENTIFIER LABELING FORMAT

NTS



2 DATA OUTLET IDENTIFICATION MATRIX

NTS

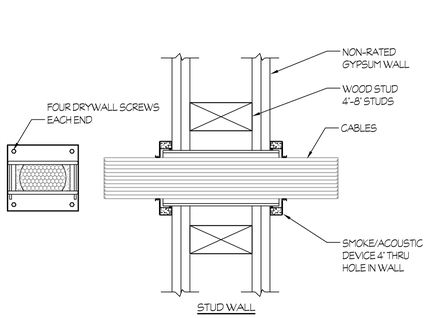


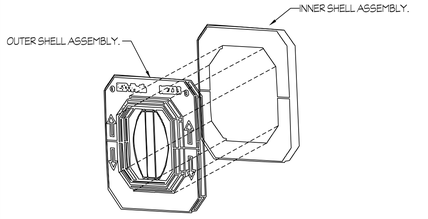
3 OSP CABLE MARKER TAG

NTS

4 STORAGE RING FOR OPTIC FIBER

NTS



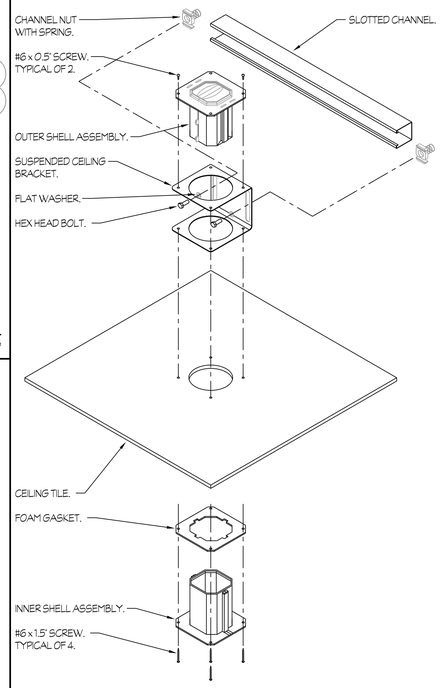


NOTES:

1. Cables – Aggregate cross-sectional area of cables in the sleeve to be 0% to max. 60% of the aggregate cross-sectional area of the sleeve. When there is no cable fill, device cover is to be tightly closed. Cables to be rigidly supported on both sides of the wall assembly.
2. Smoke/Acoustic Device – Device to be installed in accordance with the accompanying installation instructions.
3. STI FIRE STOP DEVICE # NEZDP233

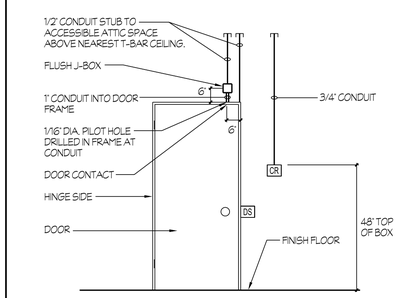
5 SMOKE – ACOUSTICAL PATHWAY THRU NON-RATED WALL

NTS



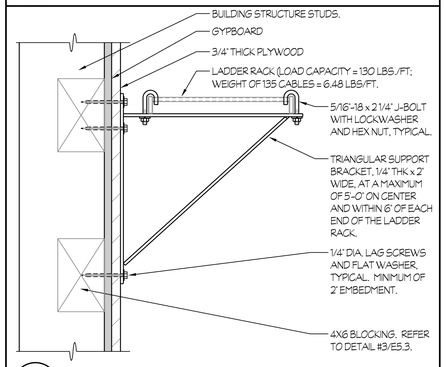
6 SMOKE – ACOUSTICAL PATHWAY WITH CEILING KIT THRU NON-RATED CEILING

NTS



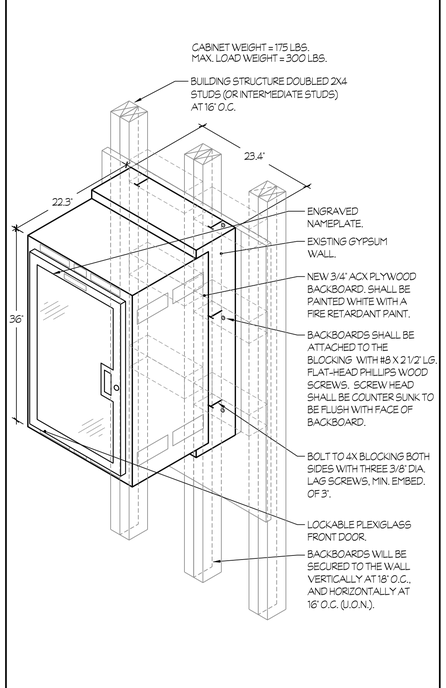
7 INTRUSION ALARM / ACCESS CONTROL DOOR ROUGH-IN

NTS



8 TELECO CABLE TRAY SUPPORT

NTS

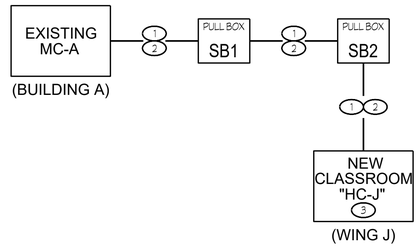


9 INTERMEDIATE DISTR. FRAME "I.D.F. #1" MOUNTING

NTS

NOTES (THIS SHEET ONLY):

1. NEW SIGNALS CONDUIT TWO 2"G., TWO 1"G.
2. NEW SIGNALS OSP ONE 12-STRAND SM FIBER, ONE 25PR CAT3.
3. NEW HC-J PER FLOOR PLAN. TERMINATE CABLING ON TELECO BACKBOARD AND DATA RACK FTU.



10 SIGNALS RISER DIAGRAM

NTS

ELECTRICAL CODES AND ANCHORAGE

REFER TO ELECTRICAL TITLE SHEET EG1.1 FOR STANDARD CODE INFORMATION DETAIL.
REFER TO ELECTRICAL TITLE SHEET EG1.1 FOR STANDARD ANCHORAGE DETAILS.

SIGNALS / TELECOMMUNICATIONS APPLICABLE CODES AND STANDARDS

CODES:

2022 CALIFORNIA BUILDING CODE (C.B.C.)

2022 CALIFORNIA ELECTRICAL CODE (C.E.C.)

STANDARDS AND GUIDES:

NFPA 72 -	NATIONAL FIRE ALARM CODE, 2016 EDITION (CALIFORNIA AMENDED)
ADAAG -	AMERICANS WITH DISABILITIES ACT, ACCESSIBILITY GUIDELINES ASSISTIVE LISTENING SYSTEMS SECTION 706
ANSI/BICSI -	TELECOMMUNICATIONS DISTRIBUTION METHODS MANUAL (TDMM), 13TH EDITION OR NEWER.
ANSI/BICSI 001-2017	- INFORMATION AND COMMUNICATION TECHNOLOGY SYSTEMS DESIGN AND IMPLEMENTATIONS BEST PRACTICES FOR EDUCATIONAL INSTITUTIONS AND FACILITIES.
ANSI/BICSI 005-2016	- ELECTRONIC SAFETY AND SECURITY (ESS) SYSTEM DESIGN AND IMPLEMENTATIONS BEST PRACTICES.

SIGNALS SYMBOLS

ALL DIMENSIONS TO CENTER OF BOX, U.O.N.

	(1)	ELECTRICAL KEYNOTE #1, REFER TO NOTES ON SAME SHEET.
	U.O.N.	UNLESS OTHERWISE NOTED
	———	CONDUIT RUN IN WALL OR ATTIC
	– · –	CONDUIT RUN IN FLOOR OR UG
	SFSB	SMOKE/FIRE CABLE SLEEVE THRU WALL.
		CONDUIT STUB - CAPPED AND LABELED.
		CONDUIT SLEEVE
(A)		DATA OUTLETS IN WALL (+18" U.O.N.) (2 "CAT6" CABLES)
	WA	DATA OUTLET IN CEILING WIRELESS ACCESS POINT (2 "CAT6" CABLES)
(C)		INTERCOM CLOCK, ON WALL (+96" U.O.N.) (ONE "CAT6" CABLE)
(B)	S	INTERCOM SPEAKER, FLUSH MOUNTED IN WALL (+96" U.O.N.) OR HARD CEILING
	H	INTERCOM HORN, FLUSH MOUNTED IN WALL (+96" U.O.N.) (WEATHERPROOF)
	SP	CLASSROOM SPEAKER, LOCAL AUDIO. FLUSH MOUNT IN T-BAR CEILING
(E)	CAM	CAMERA OUTLET IN ACCESSIBLE ATTIC SPACE
(C)	K	"FUTURE" INTRUSION ALARM KEY PAD (+48" U.O.N.)
	X	"FUTURE" INTRUSION ALARM DOOR CONTACT IN DOOR FRAMING
(C)	M	INTRUSION ALARM PASSIVE INFRARED DETECTOR ON CEILING
(C)	IS	INTRUSION ALARM SIREN, ON WALL (+9'-0 U.O.N.)
	HC	HC LOCATION

SIGNALS SYMBOLS NOTES:

(A) ELECTRICAL CONTRACTOR SHALL PROVIDE A 5" SQUARE x 2 7/8" DEEP OUTLET BOX WITH SINGLE GANG RAISED RING, DEPTH AS REQUIRED. UNLESS OTHERWISE NOTED, RUN 1 1/4"C FROM OUTLET BOX AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT #1WB-54 OR EQUAL, AT STUB.

(B) ELECTRICAL CONTRACTOR SHALL PROVIDE SPECIAL BACK BOX PER MFG.

(C) ELECTRICAL CONTRACTOR SHALL PROVIDE A 4-11/16" SQUARE x 2 1/8" DEEP OUTLET BOX WITH SINGLE GANG RAISED RING, DEPTH AS REQUIRED. UNLESS OTHERWISE NOTED, RUN 3/4"C FROM OUTLET BOX AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT #1WB-52 OR EQUAL, AT STUB.

(D) ELECTRICAL CONTRACTOR SHALL PROVIDE A 5" SQUARE x 2 7/8" DEEP OUTLET BOX WITH TWO-GANG RAISED RING, DEPTH AS REQUIRED. UNLESS OTHERWISE NOTED, RUN RUN 1 1/4"C FROM OUTLET BOX AND STUB INTO ACCESSIBLE ATTIC SPACE ABOVE T-BAR CEILING. PROVIDE AN INSULATING BUSHING, BRIDGEPORT #1WB-54 OR EQUAL, AT STUB.

(E) ELECTRICAL CONTRACTOR SHALL PROVIDE A 5" SQUARE x 2 7/8" DEEP OUTLET BOX WITH SINGLE GANG RAISED RING, DEPTH AS REQUIRED.

APPROVALS

FILE # 10-28 APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC: A
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34289
REN: 08-31-25
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DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

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985 SUNSET AVENUE, COALINGA, CA, 93210

REVISIONS

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TITLE
SIGNALS CODES, NOTES, SYMBOLS AND DETAILS

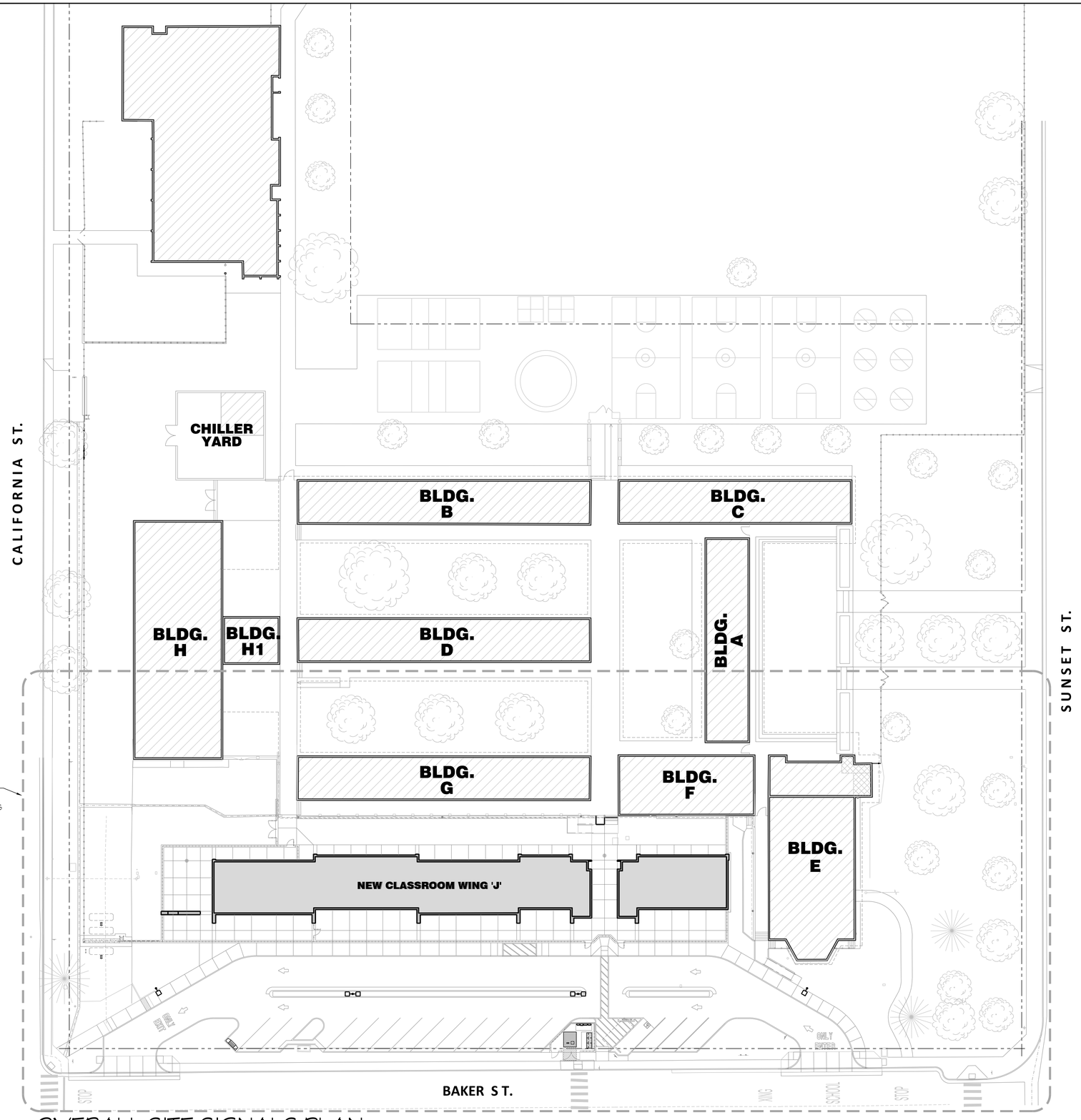
TG1.1

PROJECT 24001

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REFER TO PARTIAL ENLARGED SITE SIGNALS PLANS, SHEET #TS1.2 FOR WORK INSIDE OF THIS AREA.

OVERALL SITE SIGNALS PLAN

1" = 30'-0"

north

APPROVALS

FILE # 10-26 | APPLICATION # 02-122658

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-122658 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 03/03/2025

LICENSED ARCHITECT
MICHAEL J. SCOTT JR
No. C-34288
REN. 08-31-25
STATE OF CALIFORNIA

DATE: JULY 31, 2024

NEW CLASSROOM WING AT SUNSET ELEMENTARY SCHOOL

COALINGA-HURON UNIFIED SCHOOL DISTRICT
985 SUNSET AVENUE, COALINGA, CA. 93210

REVISIONS

MANGINI ARCHITECTURE INGENUITY
MANGINI ASSOCIATES INC.
4320 West Mineral King Avenue
Visalia, California 93291
www.mangini.us
(559) 627-0530 Office
(559) 627-1926 Fax

TITLE
OVERALL SITE SIGNALS PLAN

TS1.1

PROJECT 24001

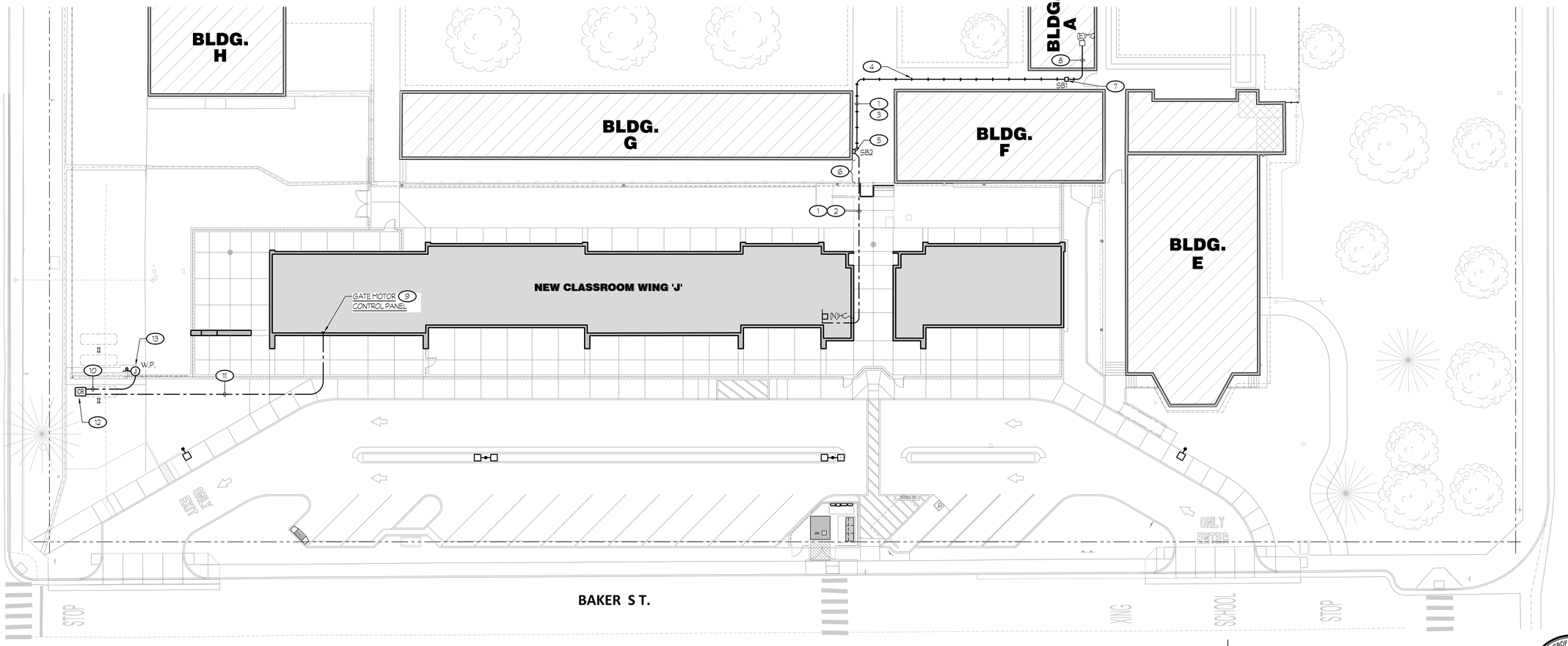
Rose Sing Eastham & Associates
Electrical Consultants
131 S. Dunworth - (559)733-2671
Visalia, California 93292-6705

REGISTERED PROFESSIONAL ENGINEER
WILLIAM KIRK EASTHAM
No. E-19766
Exp. 6/30/25
ELECTRICAL
STATE OF CALIFORNIA

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NOTES (THIS SHEET ONLY):

1. SIGNALS CONDUIT AND WIRING PER SIGNALS SYSTEM RISER DIAGRAM, #1/SG1.1.
2. RUN NEW SIGNALS CONDUIT AND WIRING UNDERGROUND AND THEN RUN SURFACE MOUNTED UP WALL TO NEW PULL ENCLOSURE MOUNTED ON UNDERSIDE OF EXISTING WALK COVER.
3. RUN NEW SIGNALS CONDUIT AND WIRING EXPOSED ON UNDERSIDE OF EXISTING WALK COVER AND THEN DOWN COLUMN AND UNDERGROUND INTO NEW PULL BOX "S1".
4. PROVIDE CONDUIT STRAPS ON UNDERSIDE OF WALK COVER PER DETAIL #8/E4.3 AT A MINIMUM OF 6' O.C. AND WITHIN 18" OF ALL COUPLINGS. TYPICAL, U.O.N..
5. PROVIDE A 18" H X 12" W X 6" DP, NEMA 3R SCREW COVER ENCLOSURE. SEAL AROUND TO PREVENT LEAKS.
6. SAWCUT AND PATCH EXISTING CONCRETE TO UNDERGROUND NEW CONDUITS AS SHOWN. PER DETAIL #9/E5.3.
7. PROVIDE NEW PULL BOX PER DETAILS #2/E5.3 AND #5/E5.3
8. ROUTE CONDUIT OVERHEAD IN CONCEALED ATTIC SPACE.
9. SEE SHEET #T1.1 FOR EXACT LOCATION AND REQUIREMENTS.
10. 3/4"C - 2 #14.
11. 1"C -TWO CAT. 6 CABLES AND ONE 18/2.
12. COORDINATE WITH OWNER AND PROVIDE VERKADA CARD READER PER THEIR DIRECTION.
13. CONNECT GATE MOTOR CONTROLS.



PARTIAL ENLARGED SITE SIGNALS PLAN - NEW

1" = 20'-0"

north

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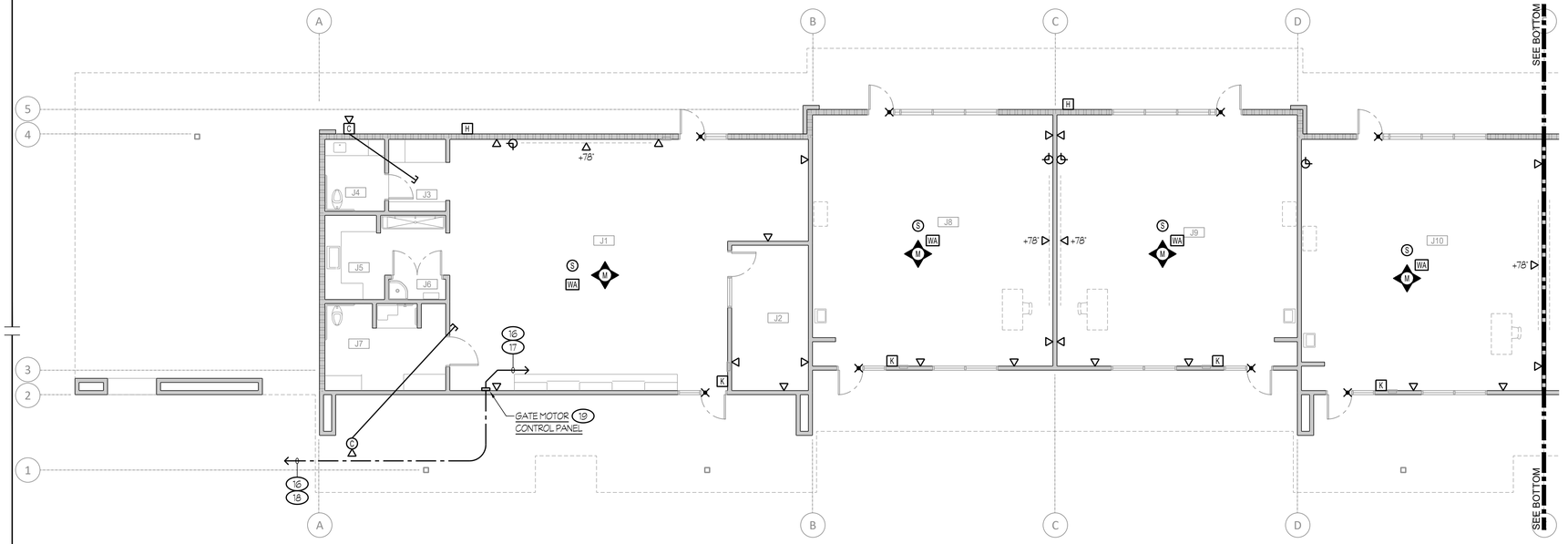
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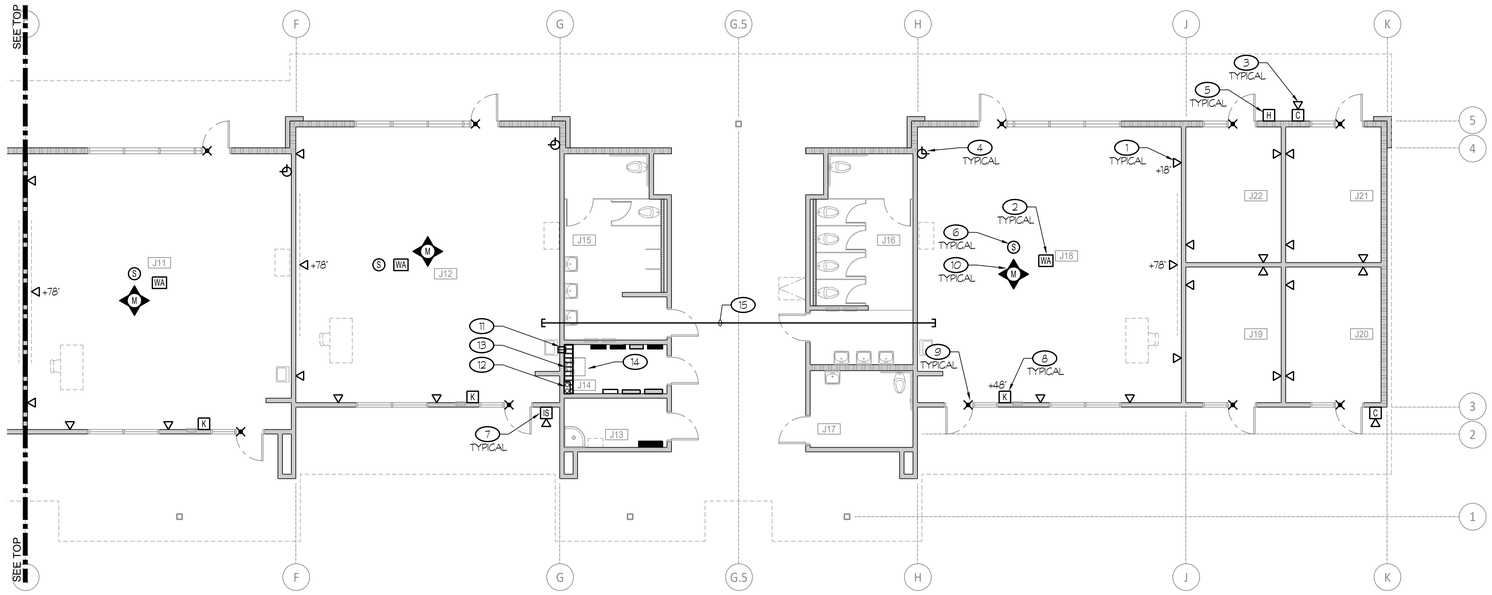
PROJECT 24001

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SIGNALS PLAN

1/8" = 1'-0"

north

NOTES (THIS SHEET ONLY):

1. DATA OUTLET. PROVIDE THREE 'CAT.6' CABLES AND JACKS, IN FOUR PORT SINGLE GANG PLATE. OUTLET BOX SHALL BE 5S TYPE 2 7/8' DEEP, 1G TRIM RING, ONE 1 1/4'C TO ACCESSIBLE SPACE. PER DETAIL #1/TG1.1, #2/TG1.1
2. CEILING GRID MOUNTED WIRELESS AP. PROVIDE TWO 'CAT.6' CABLES AND JACKS IN SURFACE BOX ABOVE GRID. LABEL GRID LOCATION AND OUTLET NUMBER ON GRID TEE.
3. CAMERA OUTLET. PROVIDE TWO 'CAT.6' CABLES AND JACKS IN TWO PORT SURFACE BOX. OUTLET BOX SHALL BE 4 11/16 SQR TYPE 2 1/8' DEEP, 3/O FIXTURE TRIM RING, ONE 1'C TO ACCESSIBLE SPACE. PROVIDE BLANK COVER.
4. INTERCOM CLOCK. BATTERY OPERATED, WIRELESS, SYNCHRONOUS PROVIDE 4S OUTLET BOX ONE 3/4'C TO ACCESSIBLE SPACE.
5. INTERCOM HORN +108' A.F.F., U.O.N.. PROVIDE ONE 'IC' CABLE (WHITE INTERCOM' CAT. 6, 4 PAIR, 24 AWG COPPER) IN SPECIAL BACK BOX, ONE 3/4'C TO ACCESSIBLE SPACE.
6. INTERCOM CEILING SPEAKER. PROVIDE ONE 'IC' CABLE TO SPECIAL CEILING BOX AND HANGER AS REQUIRED BY AHJ, ONE 3/4'C TO ACCESSIBLE SPACE.
7. INTRUSION SIREN +108' A.F.F., U.O.N.. PROVIDE ONE 'N' CABLE (WEST PENN #224, 2 COND., 18 AWG) SINGLE GANG BOX AND RING, ONE 3/4'C TO ACCESSIBLE SPACE.
8. INTRUSION KEYPAD. PROVIDE ONE 'N' CABLE SINGLE GANG BOX AND RING, ONE 3/4'C TO ACCESSIBLE SPACE. PER DETAIL #7/TG1.1
9. INTRUSION DOOR CONTACT. PROVIDE ONE 'N' CABLE, ONE 3/4'C TO ACCESSIBLE SPACE. COORDINATE ROUGH-IN WITH ALL TRADES. PER DETAIL #7/TG1.1
10. INTRUSION MOTION DETECTOR. PROVIDE ONE 'N' CABLE IN LOW VOLTAGE RING ON GRID. COORDINATE OUTLET WITH MILLWORK, ARCH. AND ELECT. PRIOR TO ROUGH-IN.
11. SMOKE - ACOUSTICAL PATHWAY THRU NON-RATED WALL PER DETAIL #5/TG1.1.
12. SMOKE - ACOUSTICAL PATHWAY WITH CEILING KIT THRU NON-RATED CEILING PER DETAIL #6/TG1.1.
13. TELECO CABLE TRAY SUPPORT PER DETAIL #8/TG1.1
14. NEW 'HC-J' MOUNTED ON 3/4' PLYWOOD, PAINTED WHITE WITH FIRE STAMP VISIBLE. MOUNT FIBER STORAGE RING INSIDE ON THE BACK. PER DETAIL #3/TG1.1, #4/TG1.1, #X/TG1.2.
15. NEW TWO 2'C, ROUTE CONDUIT OVERHEAD IN CONCEALED ATTIC SPACE.
16. 1'C -TWO CAT. 6 CABLES AND ONE 18/2.
17. TO 'HC-J' IN ROOM #J14.
18. TO GATE CARD READER. SEE SHEET #T51.2 FOR EXACT LOCATION.
19. CONTRACTOR TO COORDINATE VERKADA GATE CONTROLLER WITH OWNER.

ROOM LEGEND

#	ROOM NAME	CEILING HEIGHT	#	ROOM NAME	CEILING HEIGHT
J1	SPECIAL ED CLASSRM	VARIES	J12	CLASSROOM	VARIES
J2	OFFICE	+9'-0"	J13	JANITOR	+10'-0"
J3	ALCOVE	+9'-0"	J14	ELECTRICAL	+9'-0"
J4	STAFF	+9'-0"	J15	BOYS	+9'-0"
J5	WET AREA	+9'-0"	J16	GIRLS	+9'-0"
J6	CLOSET	+9'-0"	J17	STAFF	+9'-0"
J7	STUDENT TOILET	+9'-0"	J18	CLASSROOM	VARIES
J8	CLASSROOM	VARIES	J19	OFFICE	+9'-0"
J9	CLASSROOM	VARIES	J20	OFFICE	+9'-0"
J10	CLASSROOM	VARIES	J21	OFFICE	+9'-0"
J11	CLASSROOM	VARIES	J22	OFFICE	+9'-0"

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