Autodesk Docs://Small Admin Office Remodel/LIBERTY UNION SCHOOL DISTRICT _NEW OFFICE.rvt

GENERAL NOTES

1. DIMENSION LINES ARE PLACED FROM "FACE OF STUD" OR FROM "GRID LINE" UNLESS NOTED OTHERWISE.
2. EXISTING CONSTRUCTION DATA SHOWN ON THE DRAWINGS WAS OBTAINED FROM AVAILABLE OWNER PROVIDED DRAWINGS. INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS PROVIDED AS THE "BEST PRESENT KNOWLEDGE"; BUT WITHOUT GUARANTEE OF ACCURACY. DIMENSIONS, ELEVATIONS, AND EXISTING CONDITIONS SHALL BE FIELD VERIFIED ON THE JOB SITE, DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH WORK.
3. WRITTEN DIMENSIONS ON DRAWINGS TAKE PRECEDENCE OVER SCALED DIMENSIONS. D0 NOT SCALE DRAWINGS TO DETERMINE THE FINAL WORKING DIMENSIONS. DISCREPANCIES SHALL BE REPORTED TO THE ARCHITECT BEFORE PROCEEDING WITH WORK.
4. IN THE EVENT THAT CERTAIN FEATURES OF THE WORK ARE NOT FULLY SHOWN OR DETAILED ON THE DRAWINGS OR CALLED FOR IN THE GENERAL NOTES, THEIR CONSTRUCTION SHALL BE OF THE SAME CHARACTER AS. SIMILAR CONDITIONS THAT ARE SHOWN OR CALLED FOR.
5. THE PROJECT MANUAL IS AN INTEGRAL PART OF THE CONTRACT DOCUMENTS. FOR SPECIFIC REQUIREMENTS OF MATERIAL, WORKMANSHIP, AND PERFORMANCE, REFER TO SPECIFICATIONS AND GENERAL REQUIREMENTS.
6. CONSTRUCTION TECHNIQUES, MATERIALS AND FINISHES TO BE INSTALLED AS REQUIRED BY THE APPROPRIATE CODE AUTHORITIES. INSTALLATION SHALL FOLLOW THE STANDARDS OF THE INDUSTRY IN ADDITION TO MEETING OR EXCEEDING THE DESIGN STANDARDS.
7. ARCHITECTURAL DRAWINGS TAKE PRECEDENCE OVER OTHER DRAWINGS. THE STRUCTURAL, ELECTRICAL, MECHANICAL, AND OTHER DRAWINGS ARE SUPPLEMENTARY TO THE ARCHITECTURAL DRAWINGS. DRAWING DIVISIONS ARE NOT INTENDED TO DIVIDE THE CONSTRUCTION WORK BY TRADE OR CONTRACT. CONTRACTOR WILL COORDINATE ALL WORK WITH THE ARCHITECTURAL DRAWINGS BEFORE PROCEEDING WITH THE WORK. NOTIFY THE ARCHITECT FOR CLARIFICATION OF DISCOVERED DISCREPANCIES. WORK INSTALLED IN CONFLICT WITH THE ARCHITECTURAL DRAWINGS SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
8. ANCHORAGE OF FIXTURES OR EQUIPMENT, TO WALL OR CEILING ASSEMBLIES, WHICH WEIGH MORE THAN 20 LBS., SHALL BE ATTACHED TO BACKING PER THE DETAILS PROVIDED. CONTRACTOR SHALL COORDINATE THE RELATED TRADES FOR PLACEMENT OF THE BACKING MEMBERS FOR EACH ITEM. CONTRACTOR SHALL ENSURE BACKING HAS BEEN PROVIDED BEFORE THE WALL OR CEILING SHEATHING IS APPLIED, OR WORK IS COVERED.
9. CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE CONTRACT DOCUMENTS, FIELD CONDITIONS AND DIMENSIONS, FOR ACCURACY AND CONFIRMING THAT WORK IS CONSTRUCTIBLE AS SHOWN PRIOR TO PROCEEDING WITH THE WORK. FOR QUESTIONS REGARDING THE CONTRACT DOCUMENTS OR OTHER COORDINATION QUESTIONS, OBTAIN WRITTEN CLARIFICATION FROM THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
10. CONTRACTOR SHALL INFORM THE ARCHITECT OF CONFLICTS THAT EXIST IN LOCATIONS OF MECHANICAL, COMMUNICATION, ELECTRICAL, LIGHTING, PLUMBING, AND FIRE SPRINKLER EQUIPMENT. CONFIRM REQUIRED CLEARANCES FOR INSTALLATION AND MAINTENANCE OF ABOVE DESCRIBED EQUIPMENT IS PROVIDED.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING, FITTING, AND PATCHING THAT MAY BE REQUIRED TO COMPLETE THE WORK, OR TO MAKE ITS MANY PARTS FIT TOGETHER PROPERLY. PROTECT ADJACENT CONSTRUCTION FROM DAMAGE. CUTTING AND WEAKENING OF EXISTING STRUCTURAL COMPONENTS, WALLS, FLOORS, AND ROOF MEMBERS IS PROHIBITED UNLESS FULLY DETAILED ON THE PLANS.
12. CONTRACTOR IS RESPONSIBLE FOR PROVIDING WORK AND MATERIALS IN STRICT COMPLIANCE WITH LOCAL, COUNTY, STATE, AND FEDERAL REGULATORY AGENCIES AND APPLICABLE BUILDING CODES.
13. "TYPICAL" SHALL MEAN IDENTICAL FOR ALL SAME CONDITIONS. "SIMILAR" SHALL MEAN COMPARABLE CHARACTERISTICS FOR THE CONDITIONS NOTED.
14. HEIGHTS ARE DIMENSIONED FROM "ABOVE FINISH FLOOR", UNLESS NOTED OTHERWISE.
15. ITEMS IDENTIFIED TO BE DEMOLISHED, REMOVED, OR RELOCATED ARE TO BE COMPLETELY REMOVED. INCLUDING, BUT NOT LIMITED TO CONCEALED ITEMS (PIPES, CURBS, FRAMING, FASTENERS, ETC.). ITEMS WITHIN A DEMOLITION AREA THAT MUST BE REROUTED IN ORDER TO MAINTAIN CONTINUITY SHALL BE DONE SO IN ACCORDANCE WITH THE APPROPRIATE SPECIFICATION SECTIONS OF THE PROJECT MANUAL, AT NO ADDITIONAL COST TO THE OWNER. CONTINUITY SHALL BE MAINTAINED BY CURRENT STANDARD CONSTRUCTION METHODS, EQUAL TO OR GREATER THAN THE QUALITY OF THE EXISTING CONDITION. ANY AREA OF DEMOLITION SHALL BE LEFT IN A COMPLETE AND CLEAN CONDITION, READY FOR NEW WORK, AS OUTLINED IN THE DOCUMENTS AND DRAWINGS.
16. WORK INDICATED AS "OWNER FURNISHED/CONTRACTOR INSTALLED", AND "OWNER FURNISHED/OWNER INSTALLED" SHALL MEET ALL APPLICABLE CODES AND REGULATORY REQUIREMENTS INDICATED WITHIN THESE DOCUMENTS AND SHALL BE INSTALLED AND FULLY OPERATIONAL PRIOR TO FINAL APPROVAL OF THIS PROJECT.
17. CONSTRUCTION INDICATED AS "FUTURE" IS NOT PART OF THIS PROJECT APPROVAL. SEPARATE APPLICATION AND APPROVAL BY DSA WILL BE REQUIRED FOR THESE ITEMS.
18. ITEMS LISTED AS "NOT IN CONTRACT" ARE NOT PART OF THIS PROJECT APPROVAL. SEPARATE APPLICATION AND APPROVAL BY DSA MAY BE REQUIRED FOR THESE ITEMS.
19. ITEMS NOT IDENTIFIED AS "EXISTING" ARE INTENDED AS NEW AND TO BE PROVIDED AS PART OF THIS PROJECT.
20. FIRE SAFETY DURING CONSTRUCTION & DEMOLITION WILL BE ENFORCED IN ACCORDANCE WITH CBC & CFC CHAPTER 33.
21. ALL WORK SHALL CONFORM TO 2022 TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).
22. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY AN ADDENDUM OR A CONSTRUCTION CHANGED DOCUMENT (CCD).
23. THE ARCHITECT SHALL NOT BE OBSERVING THE CONSTRUCTION OF THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR SAFETY, SECURITY, QUALITY CONTROL AND CONSTRUCTION STANDARDS FOR THIS PROJECT.
24. ALL NEW CONSTRUCTION SHALL CONFORM TO THE LATEST EDITION OF CODES ADOPTED BY LOCAL GOVERNING AGENCIES. THESE SHALL INCLUDE (BUT NOT LIMITED TO) THE APPLICABLE CODES, LAWS, AND REGULATIONS LISTED UNDER "CODE INFORMATION" ON THIS SHEET, AS WELL AS ALL HEALTH AND SAFETY CODES AND ORDINANCES ADOPTED BY THE LOCAL GOVERNING AGENCIES.
25. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS. SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(C), PART 1, TITLE 24, CCR) .
26. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
27. THE CALIFORNIA ENERGY CODE SECTION 10-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.
28. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
29. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
30. ACCESSIBILTY - ALL NEW WORK IN THIS BUILDING SHALL CONFORM WITH APPLICABLE SECTION OF C.B.C. IIB CBC SECTION IIB-202.4 PATH OF TRAVEL REQUIREMENTS IN ALTERATIONS, ADDITIONS, AND STRUCTURAL REPAIRS. THE NEW WORK FOR THIS TENANT IMPROVEMENT PROJECT IS DESIGN TO MEET APPLICABLE ACCESSIBILITY CODES. ADDITIONAL WORK SHALL BE PERFORMED TO MEET THE INTENT OF THIS CODE SECTION SEE IIB-202.4 NOTES ON SHEET AS2 FOR LIST OF UPGRADES TO PATH OF TRAVEL TO BUILDING.
31. 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.
32. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.
33. FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION WILL BE ENFORCED IN ACCORDANCE WITH CBC AND CHAPTER 33

NEW ADMIN OFFICE REMODEL AT MAINTENANCE AND OPERATIONS
LIBERTY HIGH SCHOOL
ADDENDUM #1

LIBERTY UNION HIGH SCHOOL DISTRICT
ESTABLISHED 1902

850 2ND STREET BRENTWOOD, CA 94513

Statement of General Conformance

FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS, INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS

(Application No. 01- 122562 **File No.** 7-H4 **)**

☑ The drawings or sheets listed on the cover or index sheet
☑ This drawing, page of specifications/calculations

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

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

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Sections 4-336, 4-341 and 4-344" of Title 24, Part 1. (Title 24, Part 1, Section 4-317 [b])

APPENDIX B–Example of Signature Block

I find that: ☑ All drawings or sheets listed on the cover or index sheet ☑ This drawing or page	
☑ is/are in general conformance with the project design intent, and ☑ has/have been coordinated with the project plans and specifications.	☐ is/are in general conformance with the project design intent, and ☐ has/have been coordinated with the project plans and specifications.
Signature 9/12/2025 Date	Signature Date
Architect or Engineer designated to be in general responsible charge	**Architect or Engineer delegated responsibility for this portion of the work**
Print Name RODOLFO L. CHACON	Print Name
License Number C28654 Expiration Date 2/28/2027	License Number Expiration Date

ABBREVIATIONS

ABOVE	ABV	EACH	EA.	LAMINATE	LAM.	SANITARY NAPKIN DISPENSER	S.N.D.
ABOVE FINISHED FLOOR	A.F.F.	ELECTRIC	ELEC.	LAVATORY	LAV.	SANITARY NAPKIN RECEPTACLE	S.N.R.
ACCESSIBLE	A.C.C.	ELECTRIC DRINKING FOUNTAIN	E.D.F.	LEFT HAND	L.H.	SCHEDULE	SCH.
ACOUSTICAL	ACOUST.,ACT.	ELEVATION	ELEV.,EL.	LINOLEUM	LINO.	SEAT COVER DISPENSER	S.C.D.
ADJACENT	ADJ	EQUAL	EQ.	LONG	LG.	SECTION	SECT.
ADJUSTABLE	ADJUST.	EQUIPMENT	EQUIP.			SELF-TAPPING	S.T.
AIR CONDITIONING	A/C	ESTIMATE	EST.	MACHINE BOLT	M.B.	SHEATHING	SHTG.
ALUMINUM	ALUM.,AL.	EXHAUST	EXH.	MACHINE SCREW	M.S.	SHEET	SHT.
ANCHOR BOLT	AB.	EXHAUST FAN	E.F.	MANUFACTURER	MFGR.	SHEET METAL	S.M.
BENT ANCHOR BOLT	BAB.	EXISTING	(E)	MATERIAL	MAT.,MATL.	SHEET METAL & AIR CONDITIONING CONTRACTOR NATIONAL ASSOCIATION	SMACNA
ANODIZED	ANOD.	EXPANSION	EXP.	MAXIMUM	MAX.	SHEET METAL SCREWS	S.M.S.
ARCHITECTURAL	ARCH.	EXPANSION JOINT	E.J.	MECHANICAL	MECH.	SHELVES	SH.
ASPHALT CONCRETE	A.C.	EXTERIOR	EXT.	MEDIUM	MED.	SIMILAR	SML.,SIM
				MEMBRANE	MBNE.	SINK	S.
BACKBOARD	BACKBRD.	FABRIC WALL COVERING	F.W.C.	METAL	MTL.	SOAP DISPENSER	S.D.
BEAM	BM	FACE OF BLOCK	F.O.B.	METAL PLANAR CEILING	M.P.C.	SPECIFICATION	SPEC.
BENCH MARK	B.M.	FACE OF CONCRETE	F.O.C.	METAL TOILET PARTITION	M.T.P.	SPLASH	SPL.
BETWEEN	BTWN.	FACE OF STUD	F.O.S.	MILLIMETER	MILL.	SPLASH BLOCK	S.B.
BLOCK	BLK.	FACE OF WALL	F.O.W.	MINIMUM	MIN.	SQUARE	SQ.
BOTTOM	BTM.,BTTM.	FACTORY FINISH	F.F.	MISCELLANEOUS	MISC.	STAINLESS STEEL	S.S.
BOUNDARY NAILING	B.N.	FEET/FOOT	FT.	MULLION	MULL.	STANDARD	STD.
BUILDING	BLDG.	FEMININE NAPKIN DISPOSAL	F.N.D.			STEEL	STL.
		FIBER GLASS	F.G.,FIBERGL.	NOT IN CONTRACT	N.I.C.	STORAGE	STOR.
CABINET	CAB.	FINISH	FIN.	NOT TO SCALE	N.T.S.	STIFFENER	STIFF.
CADMIUM	CAD.	FIRE EXTINGUISHER CABINET	F.E.C.	NUMBER	NO.,#	STRUCTURAL	STRUCT.,ST.
CARPET	CPT.	FIRE RATED GYP. BD.	F.R.G.B.			SUSPENDED	SUSP.
CARRIAGE BOLT	C.B.	FIRE TREATED	F.T.	OPPOSITE HAND	O.H.	SWITCH	SW.
CAST IRON	C.I.	FIXED GLASS	F.G.	OPPOSITE	OPP.	SEE STRUCTURAL DRAWINGS	SSD.
CEILING	CLG.,CEL'G.	FLAT HEAD	F.H.	ON CENTER	O.C.		
CEILING DIFFUSER	C.D.	FLOOR	FLR.	OPENING	OPG.	TELEPHONE	TEL.,TELE.
CEILING GRILLE	C.G.	FLOOR DRAIN	F.D.	OUTSIDE DIAMETER/IDIMENSION	O.D.	THICK	THK.
CEILING REGISTER	C.R.	FLUORESCENT	FLUOR.	OVAL HEAD	O.H.	THRESHOLD	THR.
CEMENT	CEM.	FOOTING	FTG.	OVER (ON)	O/	TOILET PAPER	T.P.
CENTERLINE	C.L.	FOUNDATION	FDN.	OVERFLOW	OVFL.	TOILET PAPER HOLDER	T.P.H.
CERAMIC TILE	C.T.	FRAMING	FRM'G.	OVERHAND	OH.	TOLERANCE	TOL.
CIRCUIT	CRT.					TRANSFORMER	TRANS.
CLEANOUT	C.O.	GAGE/GAUGE	GA.	PAINT	PT.	TYPICAL	TYP.
CLEAR	CLR.	GALVANIZE	GALV.	PAIR	PR.		
COLD WATER	C.W.	GALVANIZED IRON	G.I.	PAPER TOWEL DISPENSER	P.T.D.	UNDERWRITERS LABORATORY	U.L.
COLUMN	COL.	GLASS	GL.	PLASTIC	PLAS.	UNLESS OTHERWISE NOTED	U.O.N.
COMBINATION/COMBUSTION	COMB	GRAB BAR	G.B	PLATE	PL.	URINAL	UR.
COMPOSITION, COMPOSITE	COMP.	GRADE	G.R	PLATED	PLTD.		
CONCRETE	CONC.	GROUND	GND.	PLBG.	PLBG.	VENTILATE/VENTILATION	VENT.
CONCRETE MASONRY UNIT	C.M.U.	GYPSUM	GYP.	PLYWOOD	PLYWD.	VENT THROUGH ROOF	V.T.R
CONDITION	COND.	GYPSUM BOARD	G.B.,GYP.BD.	POINT	PT.	VERTICAL	VERT.
CONNECTION	CONN.			POINT OF CONNECTION	P.O.C.	VINYL COMPOSITION TILE	V.C.T
CONSTRUCTION	CONST.			POUND	LB.,#	VINYL WALL COVERING	V.W.C.
CONSTRUCTION JOINT	C.J.	HARDWARE	HDW.HDWR.	POUND PER SQ. FOOT	P.S.F.	VOLUME	VOL.
CONTINUOUS	CONT.	HEAD	HD.	POUND PER SQ. INCH	P.S.I.		
CONTRACTOR	CONTR.	HEADER	HDR.			WATER CLOSET	W.C.
COORDINATE	COORD.	HEIGHT	HT.,H.	QUARTER	QTR.	WATER PROOF	W.P.
COUNTERSINK	CSK.	HOLLOW METAL	H.M.			WATER RESISTANT	W.R.
		HORIZONTAL	HORIZ.	RADIUS	R.,RAD.	WIDTH	W.
DEPARTMENT	DEPT.	HOT WATER	H.W.	RAINWATER LEADER	R.W.L.	WIRE GLASS	W.GL.
DEPTH, DEEP	D.	HOSE BIBB	H.B.	RECEPTACLE	RECEPT.	WITH	W/
DETAIL	DET.,DTL.			REFLECTED	REFL'D.	WITHOUT	W/O
DIAGONAL	DIAG.	INCH	IN.	REFRIGERATOR	REF.	WOOD	WD.
DIAMETER	DIA.	INSIDE DIAMETER/DIMENSION	I.D.	REINFORCING	REINF.	WOOD SCREWS	W.S.
DIMENSION	DIM.	INSULATION	INSUL.	REMOVABLE	REMOV.		
DISPENSER/DISPOSAL	DISP.	INTERIOR	INT.	REQUIRED	REQ'D.		
DIVISION	DIV.			RESILIENT	RES.		
DOOR	DR.	JAMB	JB.	REVISE, REVISION	REV.		
DOUBLE	DBL	JOINT	JT.	RIGHT HAND	R.H.		
DOWN	DN.			ROOF DRAIN	R.D.		
DOWNSPOUT	D.S.			RUBBER TOPSET BASE	R.T.B.		
DRAWING	DRWG.						
DRINKING FOUNTAIN	D.F.						

VICINITY MAP



SITE

DEFERRED SUBMITTAL

NONE

PROJECT DIRECTORY

Mr. Paul Meloni
Director of Facilities
Liberty Union High School District
20 Oak Street
Brentwood, CA

ARCHITECT:
CHACON Architecture
Rodolfo L. Chacon
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Bay Point, CA 94565
559-240-0288

STRUCTURAL
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BCA ENGINEERS
San Jose, CA
408-550-8586

MECH.& PLUMBING
Mr. Matt Simmons
COSTA ENGINEERS
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Suite D
Napa, CA 94558

ELECTRICAL ENGINEER:
BORRELLI & ASSOCIATES, INC.
John Borrelli
2032 N. Gateway blvd.
Fresno, CA 93727
559-233-4138

SYMBOLS

XX / XXXX — SECTION KEY
SECTION IDENTIFICATION
SHEET NUMBER

G / S-4 — DETAIL KEY
DETAIL NUMBER
SHEET NUMBER

A / D 3 A5.01 B / C — INTERIOR ELEVATION KEY
ELEVATION DIRECTION
ELEVATION IDENTIFICATION
SHEET NUMBER

ELEVATION DATUM
INDICATES HEIGHT IN RELATION TO 0'-0"

MENS
103 — ROOM NUMBER/ FINISH TAG
ROOM NAME
ROOM NUMBER

W06 — WINDOW SCHEDULE KEY

103 — KEYNOTE SCHEDULE KEY

101B — DOOR SCHEDULE KEY

BUILDING DATA

OCCUPANCY GROUP = B

CONSTRUCTION TYPE V-B

SCOPE OF WORK:

CONSTRUCTION OF A NEW ADMINISTRATIVE OFFICE AT AN EMPTY BAY WITHIN THE EXISTING MAINTENANCE AND OPERATIONS BUILDING

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2023:

2025	CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR*
2022	CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022	CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022	CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022	CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022	CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR
2022	CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR
2022	CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR
2022	CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11,TITLE 24 CCR
2022	CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR

SHEET INDEX

ARCHITECTURAL	
G0.00	COVER
G0.01	CODE ANALYSIS
A0.00	OVERALL SITE PLAN
A0.01	SITE PLAN
A1.00	OVERALL FLOOR PLAN
A1.01	FLOOR PLAN
A1.02	ROOF PLAN
A1.03	FINISH PLAN
A1.04	ENLARGED PLANS
A2.00	REFLECTED CEILING PLAN
A3.01	ELEVATIONS
A3.02	INTERIOR ELEVATIONS
A3.03	INTERIOR ELEVATIONS
A3.04	INTERIOR ELEVATIONS
A3.05	INTERIOR ELEVATIONS
A3.06	INTERIOR ELEVATIONS
A3.07	INTERIOR ELEVATIONS
A4.00	SECTIONS
A4.01	SECTIONS
A5.00	DETAILS
A5.01	SUSPENDED CEILING DETAILS
A5.02	DETAILS
A5.03	DETAILS
A5.04	DETAILS
STRUCUTURAL	
S0.1	GENERAL NOTES & BASIS OF DESIGN
S0.2	SPECIFICATIONS
S1.0	PARTIAL FOUNDATION AND ROOF FRAMING PLAN
S2.0	FOUNDATION DETAILS
S3.0	METAL STUD FRAMING DETAILS

MECHANICAL	
A5.03	DETAILS
A6.00	SCHEDULES
M0.1	MECHANICAL SPECIFICATIONS AND LEGENDS
M1.1	FIRST FLOOR MECHANICAL PLANS
M1.2	FIRST FLOOR REFRIGERANT PIPING PLANS
PLUMBING	
M4.1	MECHANICAL DETAILS
M5.1	MECHANICAL CONTROLS
P-0.1	PLUMBING SCHEDULES AND LEGENDS
P-1.0	FIRST FLOOR PLUMBING OVERALL PLAN
P-1.1	FIRST FLOOR PLUMBING WASTE + VENT PLANS
ELECTRICAL	
P-1.2	FIRST FLOOR PLUMBING DCW + DHW PLANS
P-4.1	PLUMBING DETAILS
E1.01.01	SYMBOLS LEGEND, ABBREVIATIONS, NOTES, & REQUIREMENTS
E1.01.02	ADDITIONAL NOTES
E1.02.01	FIXTURE SCHEDULE
E1.03.01	SINGLE LINE DIAGRAM & SCHEDULES
E2.01.01	ELECTRICAL AND FIRE ALARM SITE PLAN
E2.02.01	PARTIAL PHOTOMETRIC SITE PLAN
E3.01.01	PARTIAL POWER & SIGNAL FLOOR PLAN
E3.02.01	LIGHTING FLOOR PLAN
E4.01.01	FIRE ALARM NOTES AND RISER DIAGRAM
E4.02.01	FIRE ALARM CALCULATION
E4.03.01	FIRE ALARM FLOOR PLAN
E4.04.01	TYPICAL FIRE ALARM DETAILS
E5.01.01	TYPICAL ELECTRICAL DETAILS
E5.02.01	TYPICAL ELECTRICAL DETAILS
E6.01.01	POWER TITLE 24
T-24 SHEETS	
E6.02.01	INDOOR LIGHTING TITLE 24
E6.03.01	OUTDOOR LIGHTING TITLE 24
T24.1	ENERGY CODE COMPLIANCE
TOTAL	59

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C-28654
Renewal 2.28.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

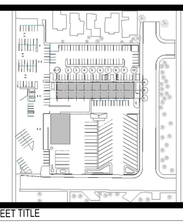
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
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ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565

WWW.CHACONARCHITECTURE.COM

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

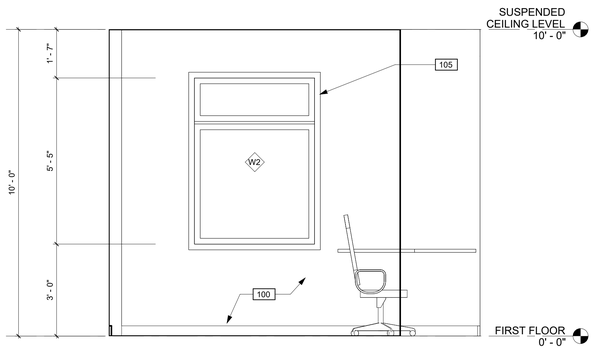
COVER

G0.00

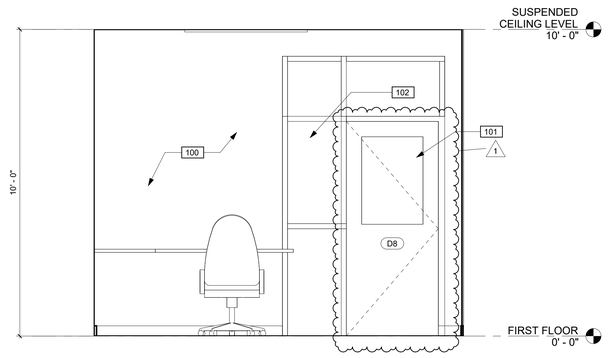
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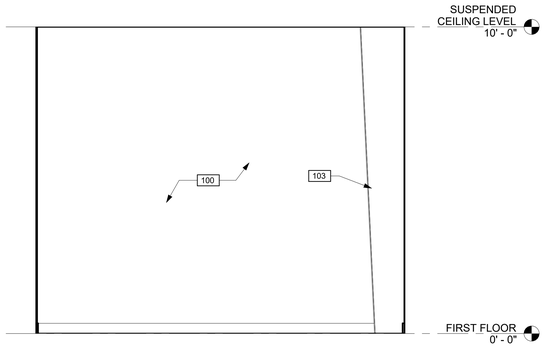
NINA'S OFFICE INTERIOR ELEVATIONS



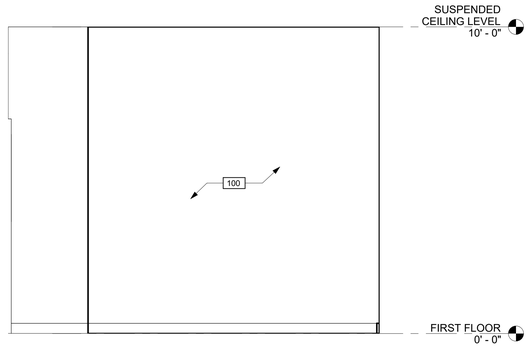
1 NINA'S OFFICE 1
1/2" = 1'-0"



2 NINA'S OFFICE 2
1/2" = 1'-0"

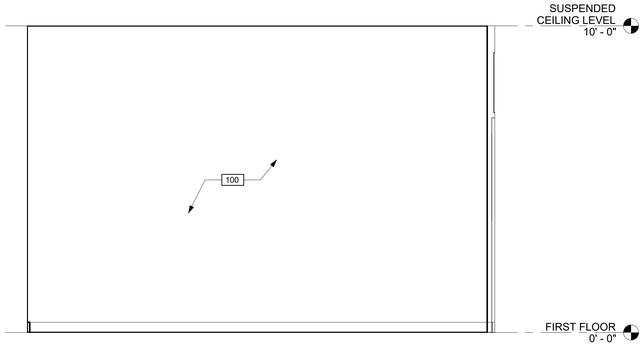


3 NINA'S OFFICE 3
1/2" = 1'-0"

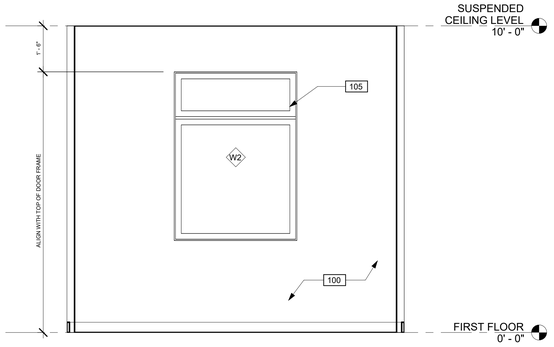


4 NINA'S OFFICE 4
1/2" = 1'-0"

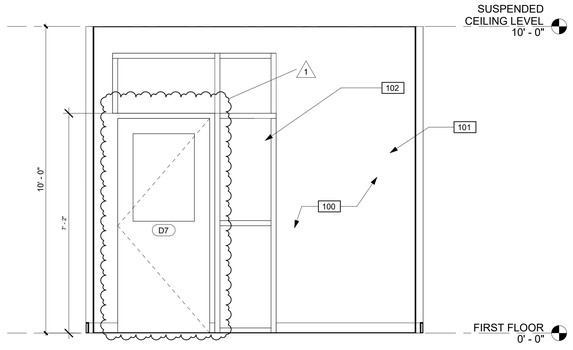
AL'S OFFICE INTERIOR ELEVATIONS



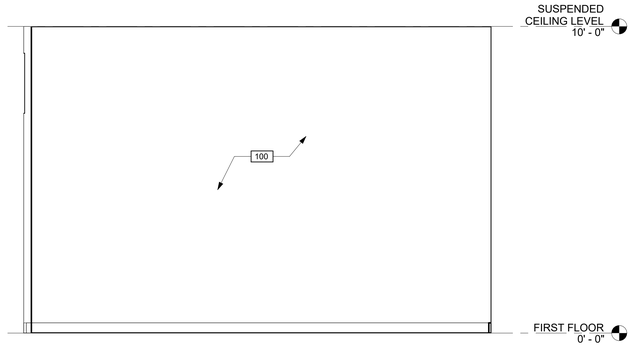
5 AL'S OFFICE 1
1/2" = 1'-0"



6 AL'S OFFICE 2
1/2" = 1'-0"



7 AL'S OFFICE 3
1/2" = 1'-0"



8 AL'S OFFICE 4
1/2" = 1'-0"

KEYNOTES

100	(N) FINISH SEE FINISH SCHEDULE SPECS
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT DOOR SCHEDULE AND SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	NOT USED
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS

INTERIOR ELEVATION GENERAL NOTES

1. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATION OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
2. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT OTHERWISE SHOWN.
3. REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN.
4. TYPICAL MOUNTING HEIGHTS OF ACCESSIBLE ELEMENTS AT ACCESSIBLE FIXTURES SEE
5. FLUSH VALVE HANDLES SHALL BE LOCATED AT THE WIDE SIDE OF ACCESSIBLE STALL.
6. FLOORING & BASE SHALL EXTEND UNDER ACCESSIBLE SINK/LAVATORY BASE CABINETS TO THE WALL. HOT WATER AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
7. PROVIDE SOLID BLOCKING FOR CABINET, ACCESSORY, OR EQUIPMENT MOUNTING

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Renl: 08.31.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

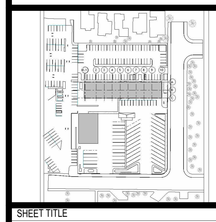
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



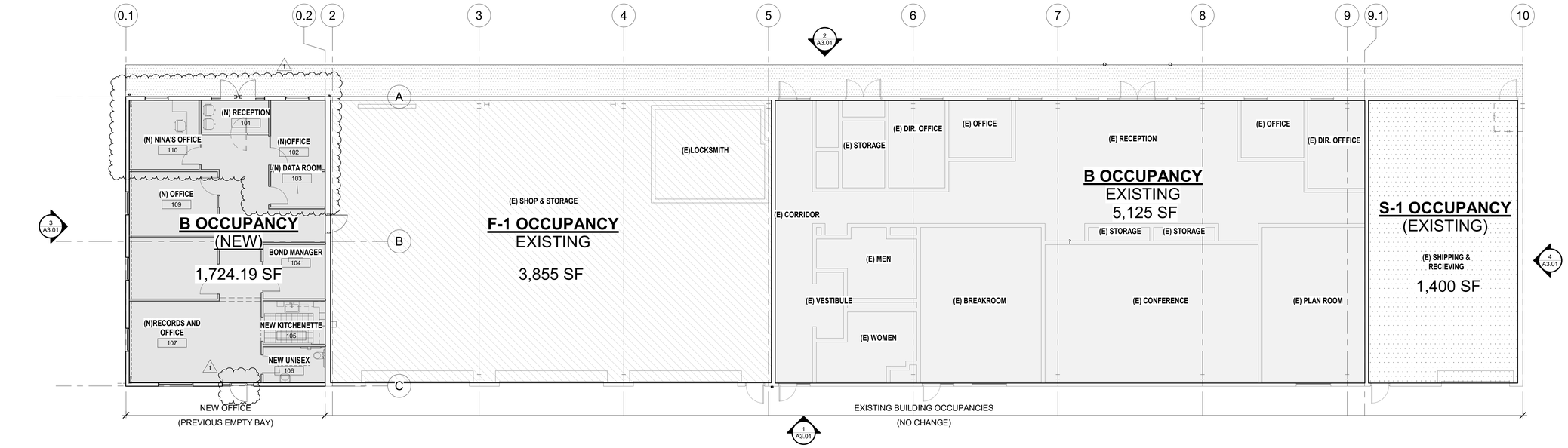
SHEET TITLE

INTERIOR ELEVATIONS

A3.02

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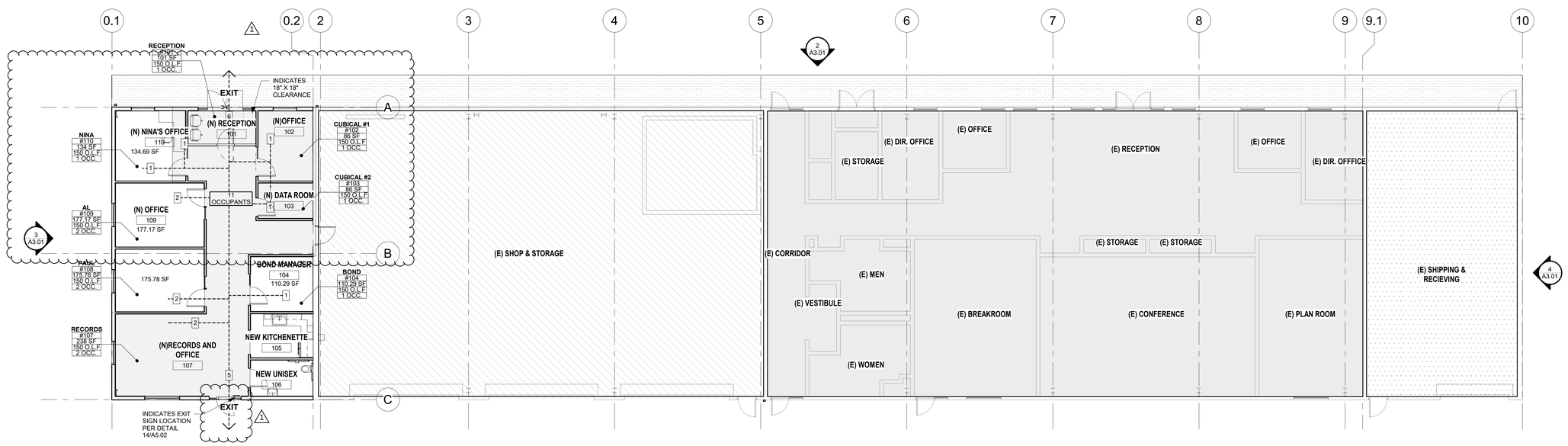
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1 OCCUPANCY REVIEW PLAN
1/8" = 1'-0"

BUILDING CODE ANALYSIS CBC 2022

BUILDING NAME	BLDG "A" TRANSPORTATION, MAINTENANCE & OPERATIONS		
OCCUPANCY	B (EXISTING + NEW)	F-1 (EXISTING)	S-1 (EXISTING)
USE	OFFICES, RECEPTIONS, CONFERENCE, PLAN RM.	M&O SHOP, LOCKSMITH RM, MEZZANINE, RIDING EQUIP	SHIPPING & RECEIVING
CONTRCTION TYPE	TYPE V-B	TYPE V-B	TYPE V-B
AUTOMATIC FIRE SPRINLERS	YES	YES	YES
ALLOWABLE AREA C.B.C. TABLE 506.2 AT	36,000 SF	34,000 SF	36,000 SF
ACTUAL TOTAL AREA	5,125 SF + 1,724.19 SF = 6,849.19 SF	3,855 SF	1,400 SF
BUILDING TOTAL AREA	15,075 SF		
SEPARATED OCCUPANCIES ALLOWABLE BUILDING AREA, SEC 508.4.2	6,850 SF/36,000 SF + 3,855 SF/34,000 SF + 1,400 SF/36,000 SF = 0.333 0.333 < ALLOWABLE OF 1		
ALLOWABLE BLDG. HEIGHT, TABLE 504.3	60'	60'	60'
ACTUAL BLDG. HEIGHT	17'	25'	17'
ALLOWABLE NUMBER OF STORIES, TABLE 504.4	3	2	2
ACTUAL STORIES	1	1	1



2 EGRESS REVIEW PLAN
1/8" = 1'-0"

PLOT DATE: 4/6/2026 7:34:18 PM

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Rev: 28,2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
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LIBERTY UNION HIGH SCHOOL DISTRICT

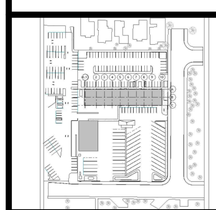
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850 2ND STREET BRENTWOOD, CA 94513

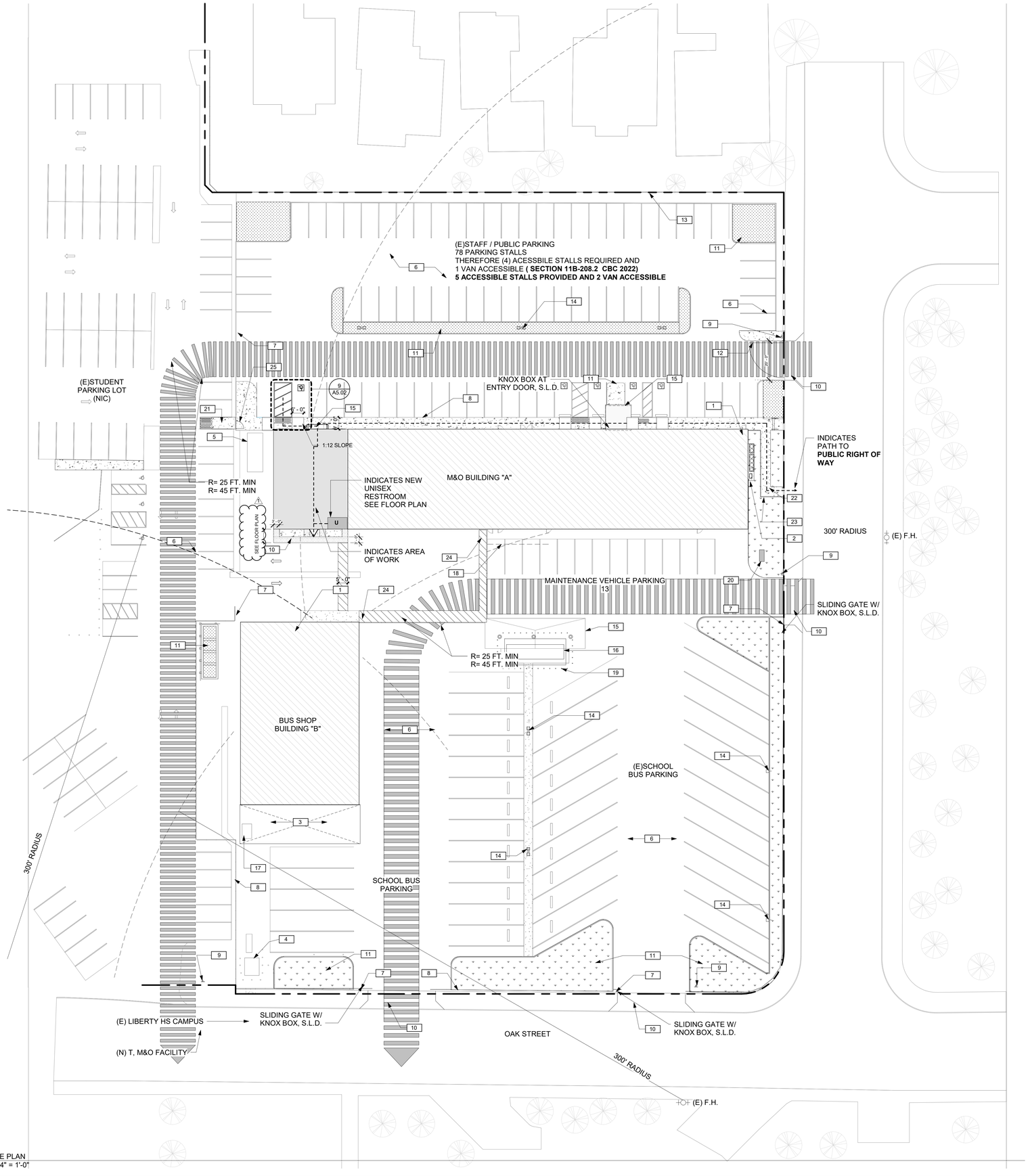


SHEET TITLE

CODE ANALYSIS

G0.01

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1 SITE PLAN
3/64" = 1'-0"

GENERAL NOTES

1. SITE IS FULLY ACCESSIBLE. NO WAYFINDING SIGNAGE NEEDED TO DIRECT USERS TO ACCESSIBLE PATH.
2. ACCESSIBLE PATH OF TRAVEL (P.O.T.) AS INDICATED ON PLAN IS A BARRIER-FREE ACCESS ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP-RESISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTIONS TO 80"MINIMUM AND PROTRUDING OBJECTS GREATER THAN 4" PROJECTION FROM WALL AND ABOVE 27" AND LESS THAN 80". ARCHITECT SHALL VERIFY THAT THERE ARE NO BARRIERS IN THE PATH OF TRAVEL.
3. COMPLY WITH CFC CH 33 - FIRE SAFETY DRAWINGS DURING CONSTRUCTION AND DEMOLITION.
4. NO PASSENGER DROP OFF FOR THIS FACILITY

ACCESSIBLE PATH OF TRAVEL

20' FIRE LANE

(E) FIRE HYDRANT

PROPERTY LINE

LEGEND

- (E) BUILDINGS
- CONC. PAVING
- (E) BIO SWALE
- (E) TREE
- (E) TOWAWAY SIGNAGE UPDATE PER DETAIL
- (E) FENCING TO REMAIN

SITE PLAN KEYNOTES

1	(E) FIRE SPRINKLER RISER.
2	(E) MECHANICAL YARD
3	(E) BUS WASH BAY.
4	(E) ELECTRICAL
5	(E) 20' X 8' WASTE BIN (N) LOCATION.
6	(E) AC PAVING & PARKING STRIPING TYP.
7	(E) SLIDING CHAIN-LINK GATE W/ KNOX BOX TYP.
8	(E) 6" CONCRETE CURB
9	(E) TOWAWAY SIGN UPDATE PER DETAIL 12/A5.02
10	(E) CONCRETE PAVING/ SIDEWALK.
11	(E) BIOSWALE.
12	(E)PIPE GATE.
13	(E) RESIDENTIAL FENCE, PRESERVE AND PROTECT.
14	(E) LIGHT POLE.
15	(E) ROOF CANOPY ABOVE.
16	(E) FUEL TANK.
17	(E) WASTE LIQUID STORAGE CONTAINER (500 GAL) NEW LOCATION.
18	(E) WHEEL STOP.
19	(E) BOLLARDS.
20	(E) FIRE PROTECTION ASSEMBLY.
21	(E) ACCESSIBLE CURB RAMP.
22	(E) SLOPED WALK, MAX. SLOPE DOES NOT EXCEED 5%.
23	(E) FENCING.
24	(E) CROSSWALK
25	(E) ACCESSIBLE GATE

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren 7.28.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
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LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1902

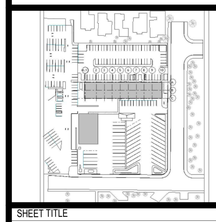
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



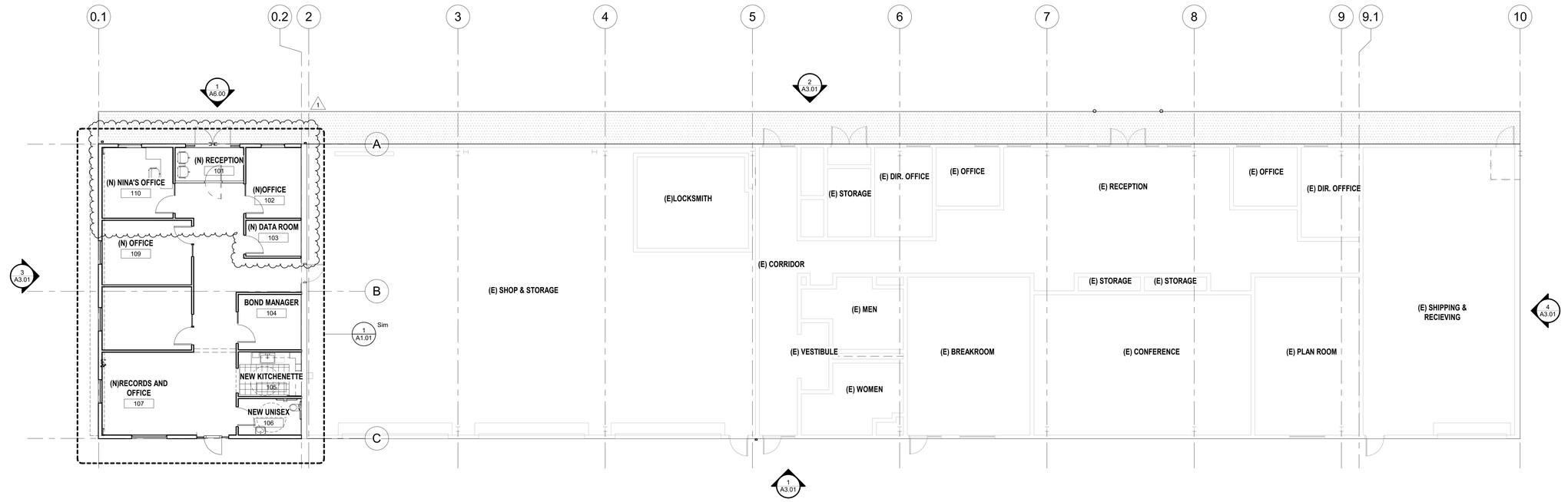
SHEET TITLE

SITE PLAN

A0.01

PLOT DATE: 4/6/2026 7:34:21 PM

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1 FIRST FLOOR OVERALL
1/8" = 1'-0"

KEYNOTES

PLOT DATE: 4/6/2026 7:34:21 PM

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Rard 28 2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
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LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT
ESTABLISHED 1902

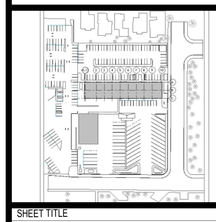
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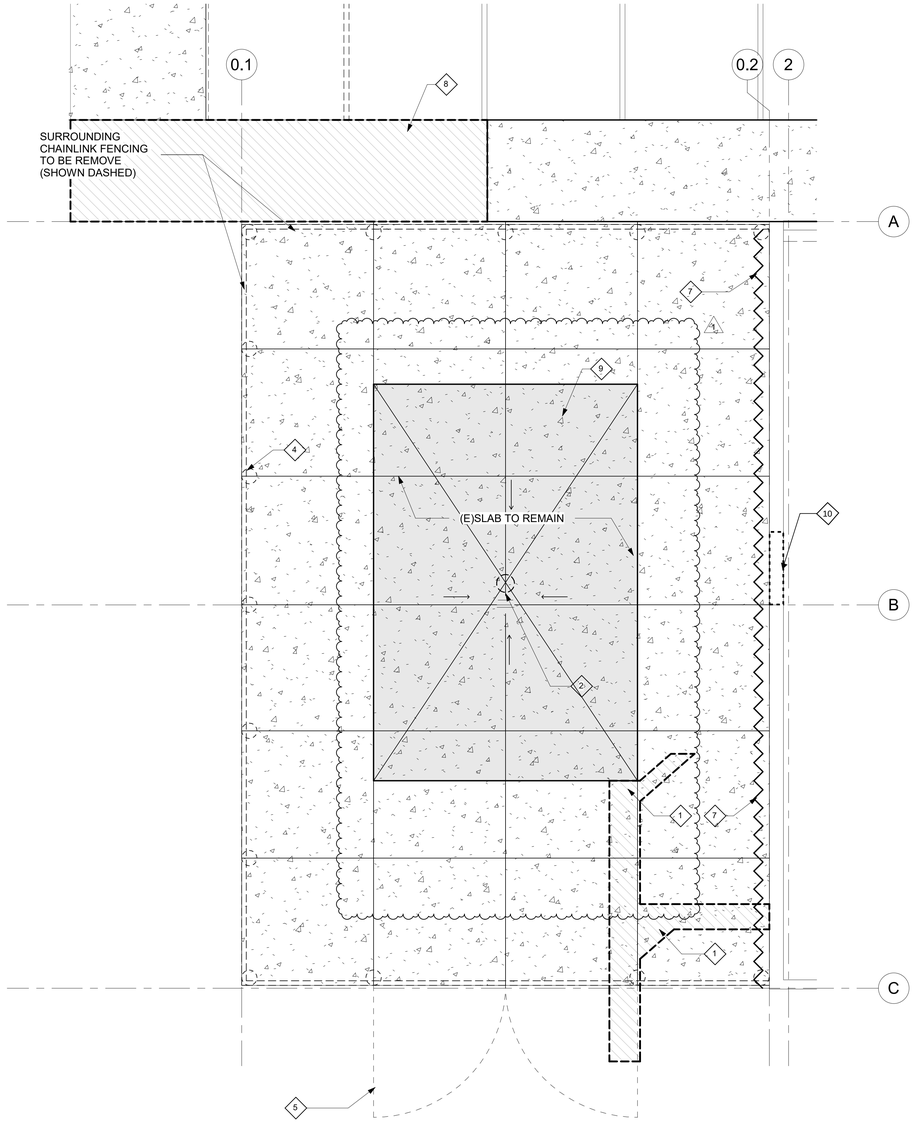


SHEET TITLE

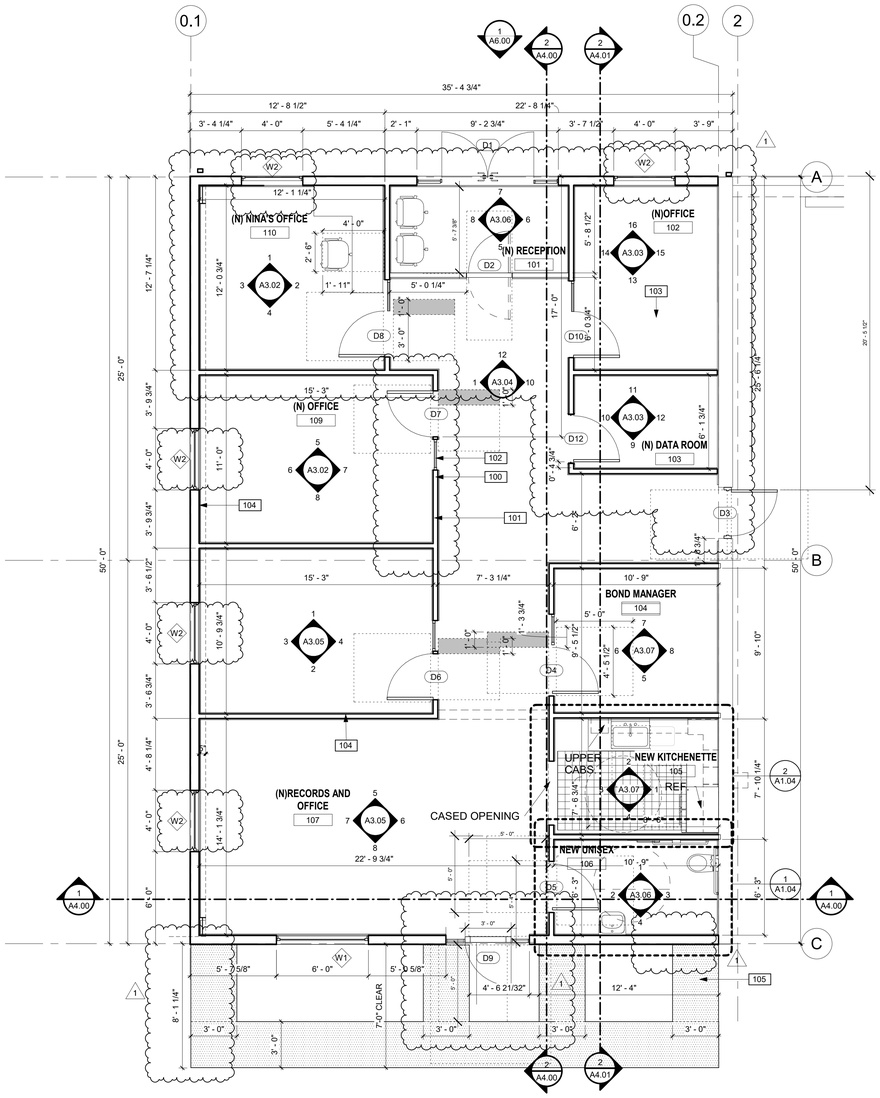
OVERALL FLOOR PLAN

A1.00

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2 FIRST FLOOR DEMO
1/4" = 1'-0"



1 FIRST FLOOR PROPOSED
1/4" = 1'-0"

DEMO KEYNOTES

1. INDICATES SAW CUTTING OF CONCRETE FOR FUTURE PLUMBING SSD FOR PATCH AND REPAIR DETAILS. GC TO FIELD VERIFY LOCATION
2. (E) DRAIN TO BE CAPPED AND ABONDONED IN PLACE
3. (E) SLAB TO REMAIN SSD
4. (E) GALVANIZED POSTS TO BE REMOVED AND SALVAGED TO DISTRICT
5. (E) GATES TO BE REMOVED AND SALVAGED TO DISTRICT
6. (E) FENCING TO BE REMOVED AND SALVAGED TO DISTRICT
7. (E)CORRUGATED METAL CLADDING TO REMAIN FINISHES TO BE INSTALLED OVER TO HEIGHT OF 10'-6" .
8. (E) CONCRETE SIDEWALK TO BE REMOVED
9. (E) APPROXIMATE SLOPED AREA OF EXISTING CONCRETE SLAB INTALL LEVEING TOPPING SSD FOR DETAILS
10. (N) DOOR LOCATION SEE DOOR SCHEDULE

LEGEND

(E) SLAB TO BE REMOVED

PROPOSED KEYNOTES

100 (N) METAL STUD WALL SEE WALL ASSEMBLY SHEET AND SSD

101 (N) DOOR AND SIDELIGHT SEE DOOR SCHEDULE SHEET A6.0 AND SPECIFICATIONS

102 (N) WINDOW AND SIDELIGHT SEE DOOR SCHEDULE SHEET A6.0

103 (N) CUBICLES TO BE PROVIDED BY DISTRICT

104 (N) WALL FINISH ON SEE FINSH SCHEDULE A6.00

105 (N) DETECTABLE WARNINGS SEE DETAIL 8/A5.02

GENERAL NOTES

1. ***11B-703.1.1.2 Inspection***. *Signs and identification devices shall be field inspected after installation and approved by the enforcing agency prior to the issuance of a final certificate of occupancy per Chapter 1, Division II, Section 111, or final approval where no certificate of occupancy is issued. The inspection shall include, but not be limited to, verification that Braille dots and cells are properly spaced and the size, proportion and type of raised characters are in compliance with these regulations.*

2. ANY WINDOW SHADE OPERABLE PARTS SHALL BE LOCATED WITHIN 15" TO 48" ABOVE FINISHED FLOOR WITH MAX. OPERATING FORCE OF 5 LBS

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren. 2.28.2026
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1902

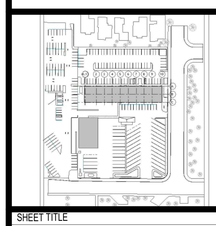
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



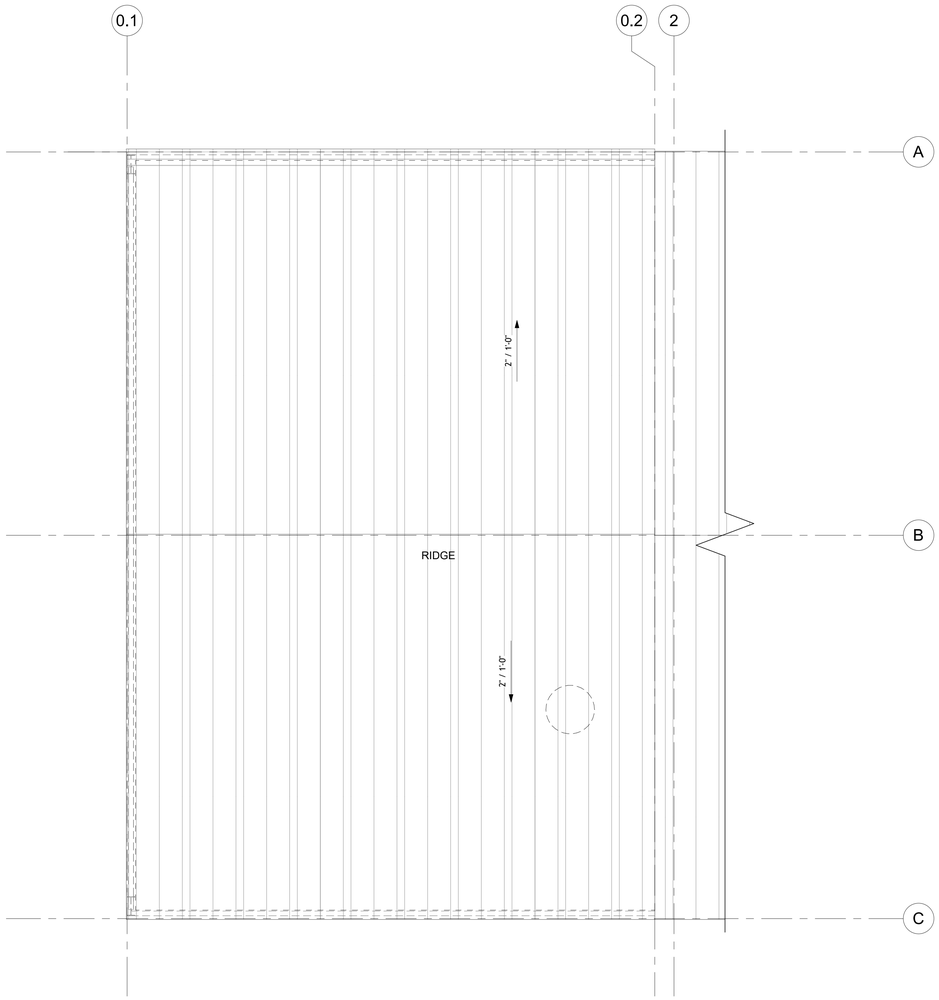
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FLOOR PLAN

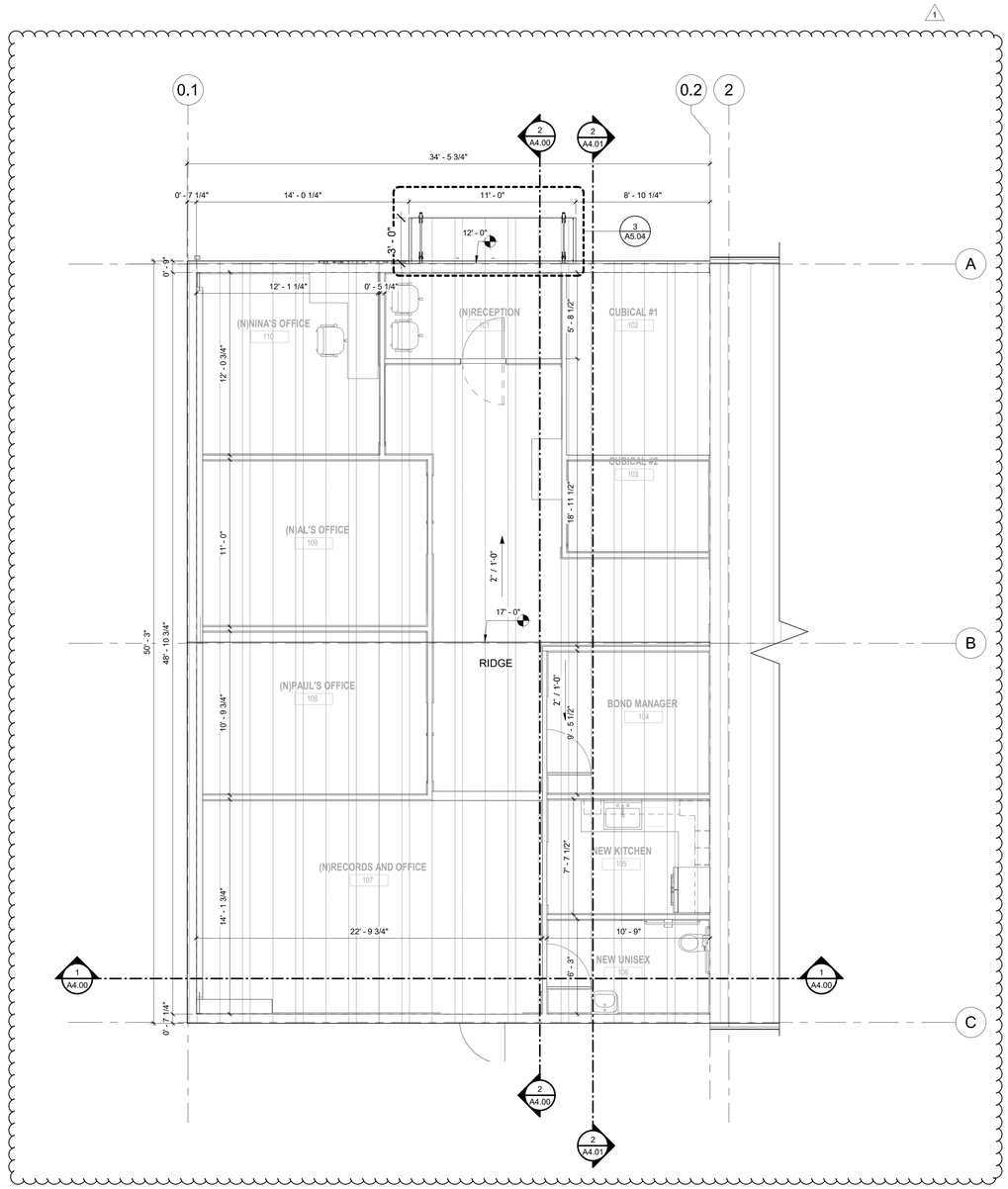
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PLOT DATE: 4/6/2026 7:34:22 PM

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1 DEMO ROOF PLAN
1/4" = 1'-0"



2 PROPOSED ROOF PLAN
1/4" = 1'-0"

ROOF PLAN GENERAL NOTES

1. LOCATE ALL METAL ROOF PENETRATIONS IN THE CENTER OF THE PAN. DO NOT INTERRUPT STANDING SEAMS.
2. ALL ROOFING TO BE CLASS A.
3. REFER TO MECHANICAL AND ELECTRICAL DRAWINGS FOR ROOF PENETRATION LOCATIONS NOT OTHERWISE INDICATED, TYPICAL.
4. MECHANICAL UNIT MOUNTING CURBS S.M.D.
5. MECHANICAL OR PLUMBING VENT FLASHING.

LICENSED ARCHITECT
RODOLFO L. CHACON
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Ren. 2.28.2026
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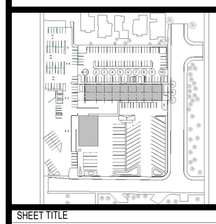
LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1902

NEW ADMIN OFFICE REMODEL

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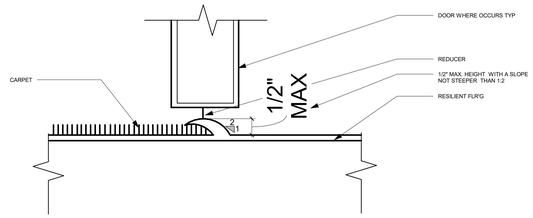


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ROOF PLAN

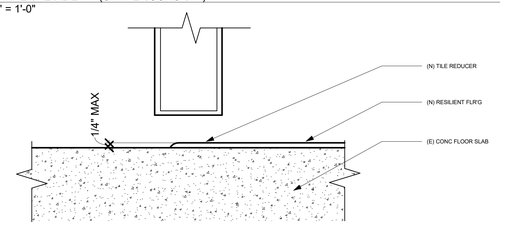
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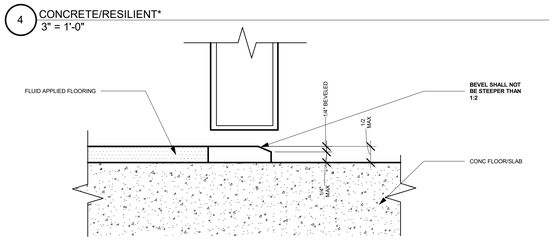
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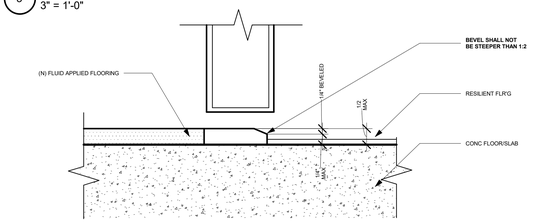
5 CARPET/RESILIENT* (CARPET/CONC SIM)
3" = 1'-0"



4 CONCRETE/RESILIENT*
3" = 1'-0"



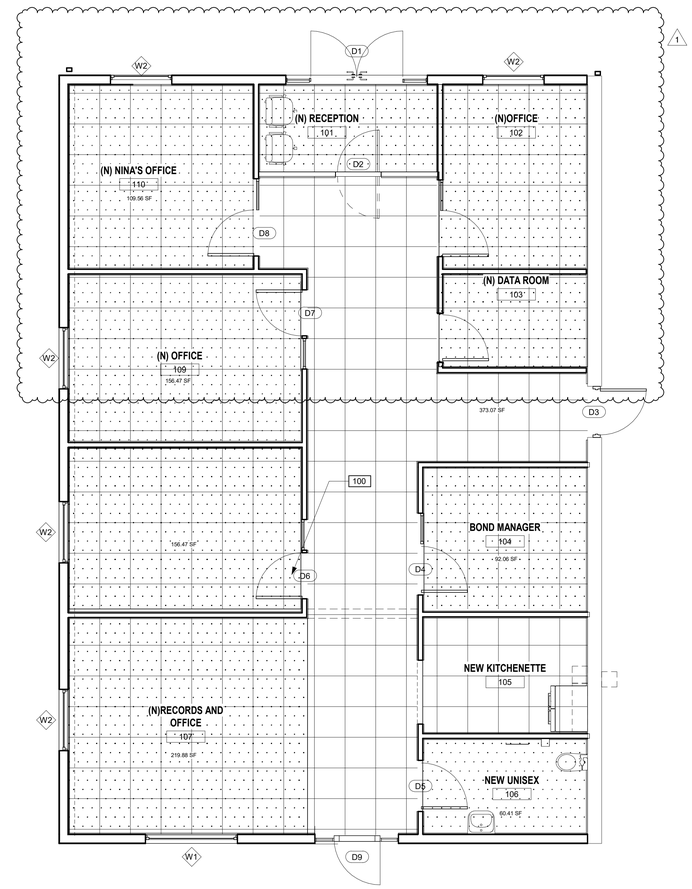
3 FLUID APPLIED FLOORING / CONCRETE
3" = 1'-0"



2 FLUID APPLIED FLOORING/RESILIENT*
3" = 1'-0"

NOTES:
1. RESILIENT FLOORING - TILE OR SHEET MATERIAL AS NOTED OR SPECIFIED ELSEWHERE.
2. WHERE TRANSITION STRIP > 1/4" HT SHALL BE BEVELED 1:2 MAX OR EQUIVALENT THERETO.
3. DOOR AS OCCURS, TYP.

FLOOR TRANSITION/SILLS



1 FINISH PLAN
1/4" = 1'-0"

LEGEND

37.05 SF

CARPET TILE BY "MOHAWK GROUP"
DENIM CULTURE
STYLE: Made to Last (gt350)
SUBMIT SAMPLES TO DISTRICT AND ARCHITECT PRIOR TO ORDER
"Grey Wash"

37.05 SF

RUBBER TILE BY "ROPPE"
24" X 24"
SUBMIT SAMPLES TO DISTRICT AND ARCHITECT PRIOR TO ORDER
"BLACK", SMOOTH

37.05 SF

EPOXY FLOORING "SHERWIN WILLIAMS"
SEE SPECIFICATION

PROPOSED KEYNOTES

100 PROVIDE TRANSITION STRIPS PER DETAIL 1

LICENSED ARCHITECT
RODOLFO CHACON
No. C 28654
Rad: 09.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

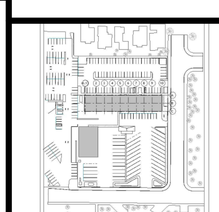
LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT
ESTABLISHED 1902

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number
Organization Description
NEW ADMIN OFFICE REMODEL
850 2ND STREET BRENTWOOD, CA 94513

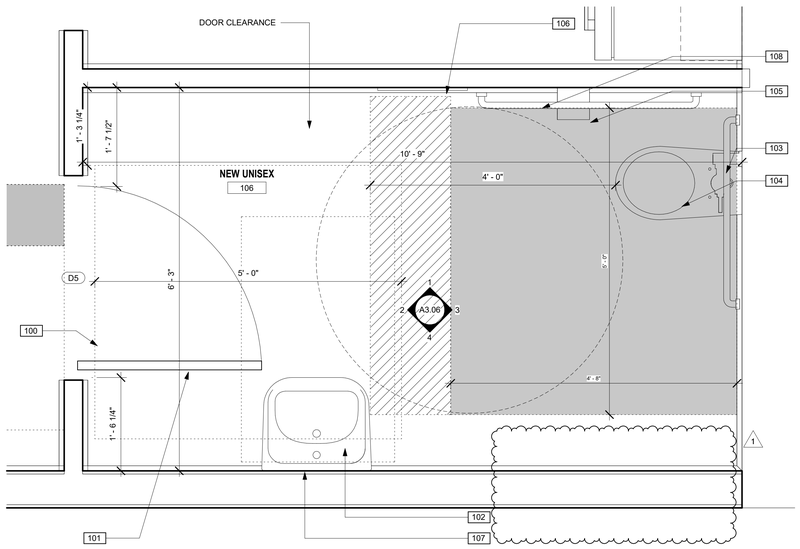


SHEET TITLE
FINISH PLAN

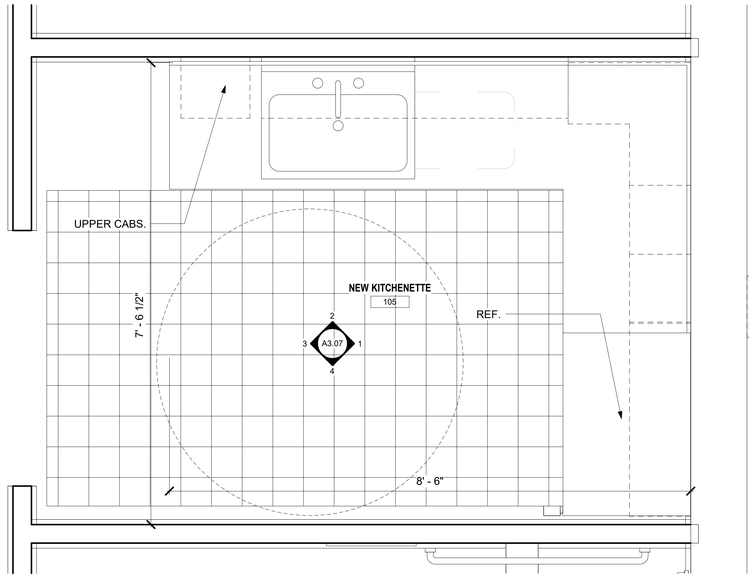
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PLOT DATE: 4/6/2026 7:34:24 PM

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1 ENLARGED BATHROOM PLAN
1" = 1'-0"



2 ENLARGED KITCHEN PLAN
1" = 1'-0"

LEGEND

37.05 SF

CARPET TILE BY "MOHAWK GROUP"
DENIM CULTURE
STYLE: Made to Last (gt350)
SUBMIT SAMPLES TO DISTRICT AND ARCHITECT PRIOR TO ORDER
"Grey Wash"

37.05 SF

RUBBER TILE BY "ROPPE"
24" X 24"
SUBMIT SAMPLES TO DISTRICT AND ARCHITECT PRIOR TO ORDER
"BLACK", SMOOTH

37.05 SF

EPOXY FLOORING "SHERWIN WILLIAMS"
SEE SPECIFICATION

PROPOSED KEYNOTES

100	PROVIDE TRANSITION STRIPS PER DETAIL 1
101	NEW UNISEX DOOR SIGNAGE. SEE DETAILS 2 AND 3/A5.02
102	NEW WALL MOUNTED ACCESSIBLE SINK. SEE PLUMBING DRAWNGS.
103	NEW 36" WALL MOUNTED GRAB BAR TA-GB1
104	NEW FLOOR MOUNTED ACCESSIBLE TOILET. SEE PLUMBING DRAWNGS.
105	NEW TOILET PAPER DISPENSER SEMI -RECESSED. TA -PT1(SEE SPECS)
106	NEW SEAT DISPENSER SURFACE MOUNTED. TA -SCI(SEE SPECS).
107	NEW 18" X 30" MIRROR BOBRICK TA-MR1 (SEE SPECS)
108	NEW 48" GRAB BAR TA-GB1 (SEE SPECS)

GENERAL NOTES

1.) TOILET ACCESSORIES TO BE PROVIDED BY DISTRICT

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren: 7.28.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

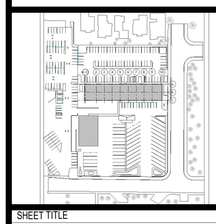
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



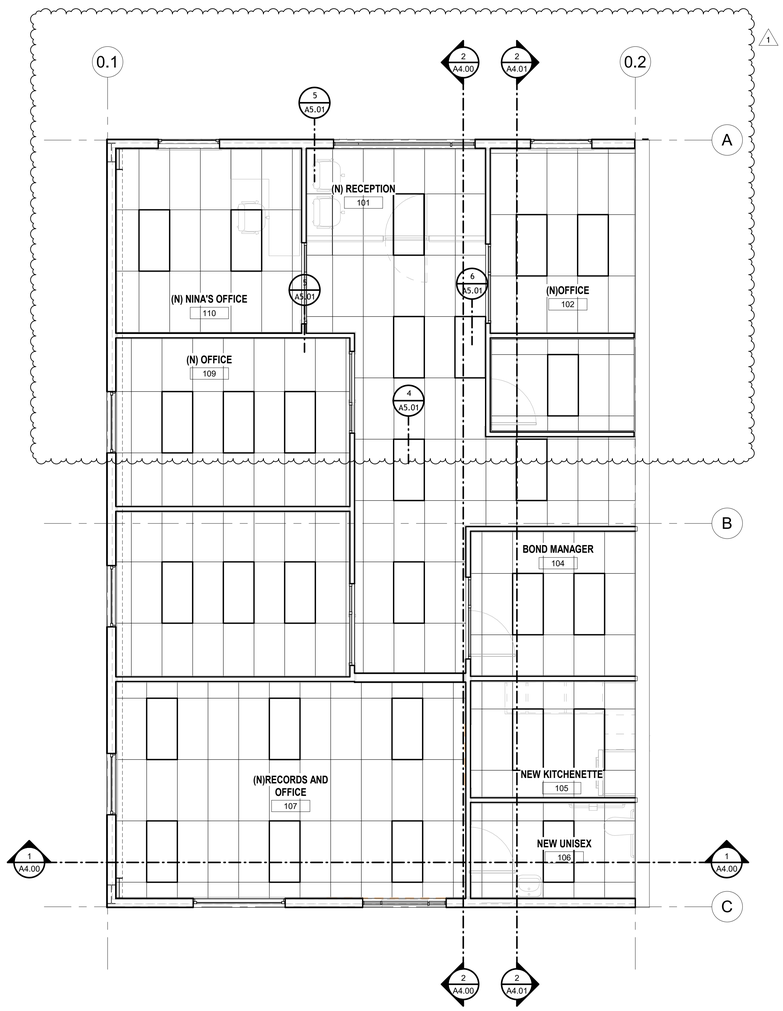
SHEET TITLE

ENLARGED PLANS

A1.04

PLOT DATE: 4/6/2026 7:34:24 PM

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1 FIRST FLOOR
1/4" = 1'-0"

LEGEND

- 2'X4' FLUORESCENT FIXTURE
- 2'X4' FLUORESCENT FIXTURE
- EXIT LIGHT FIXTURE
- 2'-0"X4'-0" SUSPENDED ACOUSTICAL LAY-IN CEILING SYSTEM
- GYP. BD. CEILING O/ 6" FRAMING @16" O.C.

GENERAL NOTES

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren: 08.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT
ESTABLISHED 1902

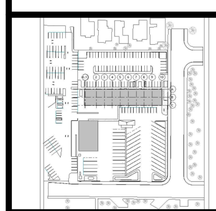
NEW ADMIN OFFICE REMODEL

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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



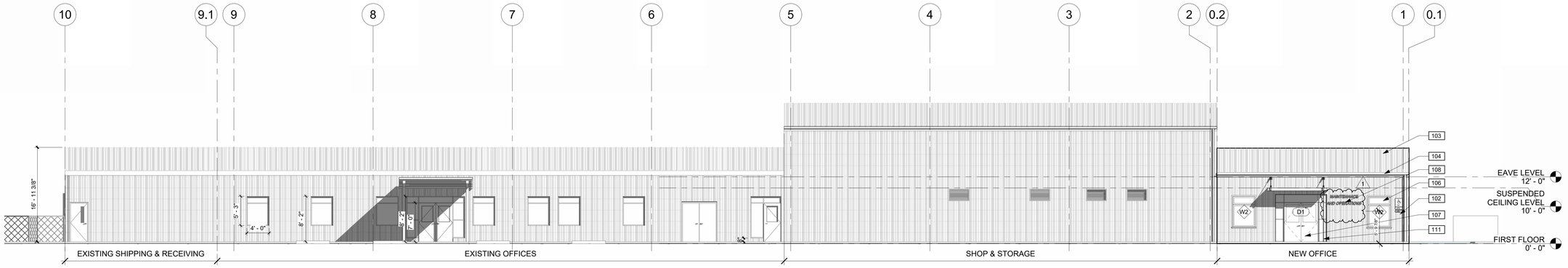
SHEET TITLE

REFLECTED CEILING PLAN

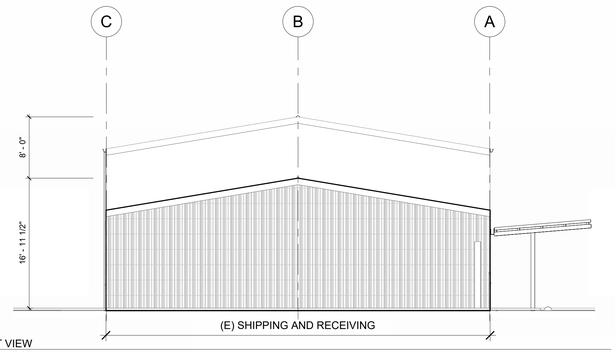
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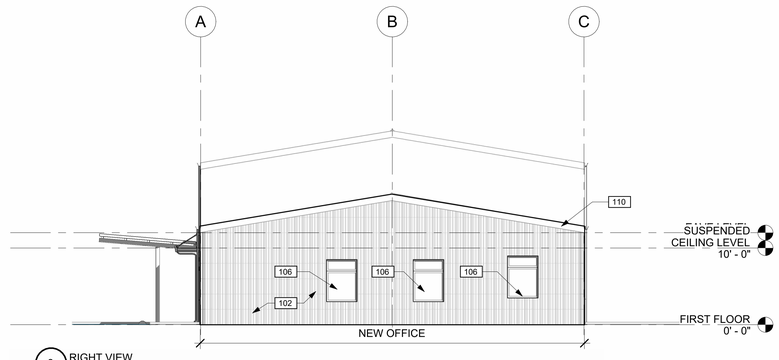
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2 FRONT VIEW
1/8" = 1'-0"



4 LEFT VIEW
1/8" = 1'-0"



3 RIGHT VIEW
1/8" = 1'-0"



1 REAR VIEW
1/8" = 1'-0"

KEYNOTES

100	INDICATES NEW CANOPY SEE DETAIL SHEET A5.04
101	(N)PARKING SIGNAGE SEE DETAIL 11/A5.02
102	(N) METAL CLADDING BY METAL BULDING MFR., SEE TYPICAL DETAILS SHEET A5.06
103	(E) METAL ROOFING TO REMAIN
104	(E) METAL GUTTERS TO REMAIN
105	(E) METAL DOWNSPOUTS TO REMAIN
106	(N) WINDOWS SEE WINDOW SCHEDULE SHEET A6.00
107	(N) DOORS SEE DOOR SCHEDULE A6.00
108	(N)SIGNAGE BY DISTRICT SEE DETAIL 5/A3.01
109	(N)WALL LOUVER SEE MECH. DRAWINGS SEE DETAILS 1 AND 2 SHEET A5.03
110	(E)FASCIA TO REMAIN
111	(N) DOWNSPOUT

GENERAL NOTES

1. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATION OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
2. ALL PENETRATIONS THROUGH EXTERIOR ROOF AND WALLS, AND FLOORS SHALL BE FLASHED AND SEALED WEATHER TIGHT. ALL PENETRATIONS THROUGH THE BUILDING INSULATION ENVELOPE SHALL BE PACKED WITH INSULATION.
3. PROVIDE OPENING FLASHINGS AT ALL LOUVERS AND SIMILAR WALL OPENINGS PER
4. PROVIDE EXTERIOR METAL TO MATCH EXISTING MAIN BUILDING.
5. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT OTHERWISE SHOWN.
6. REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN.
7. **SIGNAGE NOTES**

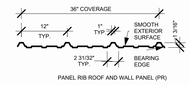
   A. CHARACTERS AND THEIR BACKGROUND SHALL HAVCE ANON-GLARE FINISH . CHARACTERS SHALL CONTRAST WITH THEIR BACKGROUND WITH EITHER LIGHT CHARACTERS ON A DARK BACKGROUND OR DARK CHARACTGERS ON A LIGHT BACKGROUND.
   B. STROKE THICKNESS OF THE UPPER CASE LETTER "I" SHALL BE 10 PERCENT MIN AND 20 PERCENT MAX. OF THE HEIGHT OF THE CHARACTER.
   C. CHARACTER SPACING SHALL BE MEASURED BETWEEN TWO CLOSEST POINTS OF ADJACENT CHARACTERS EXCLUDING WORD SPACES. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MIN. 35 PERCENT MAX. OF CHARACTER HEIGHT.
   D. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF CHARACTERS WITIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.
   E. TEXT SHALL BE A HORIZONTAL FORMAT
   F. VISUAL CHARACTERS SHALL BE 40" MIN. ABOVE FINISH FLOOR OR GROUND.

LEGEND

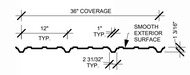
PERFORMED METAL ROOF BY MTL BLDG MFR

METAL PANEL, BY MTL BLDG MFR

PANEL AND WALL PROFILE PER MTL BULDING MFR



PANEL RIB ROOF AND WALL PANEL (PR)



RPR WALL PANEL

PR ROOF & PR/RPR WALL PANELS

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Renl: 08.2026
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1902

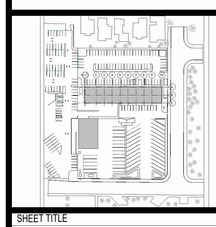
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

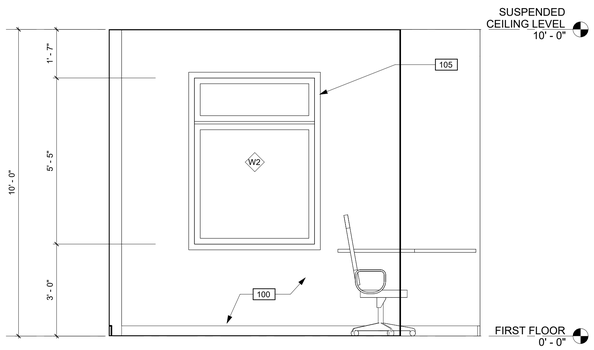
ELEVATIONS

A3.01

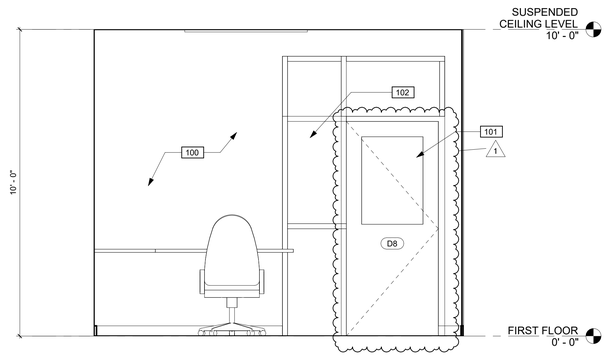
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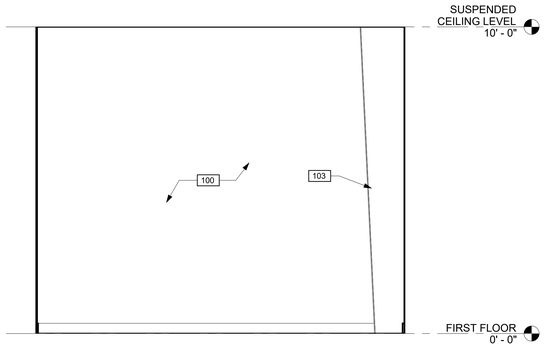
NINA'S OFFICE INTERIOR ELEVATIONS



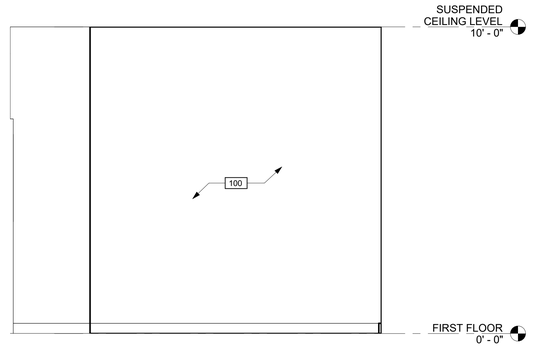
1 NINA'S OFFICE 1
1/2" = 1'-0"



2 NINA'S OFFICE 2
1/2" = 1'-0"

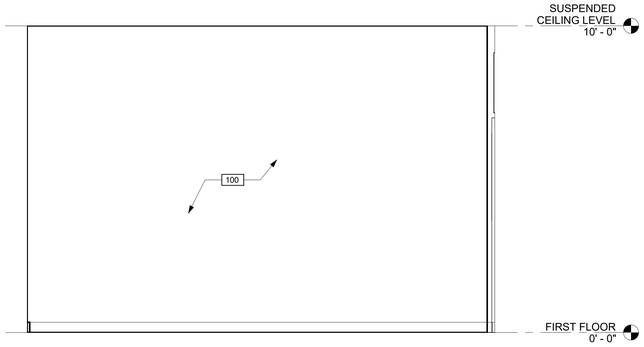


3 NINA'S OFFICE 3
1/2" = 1'-0"

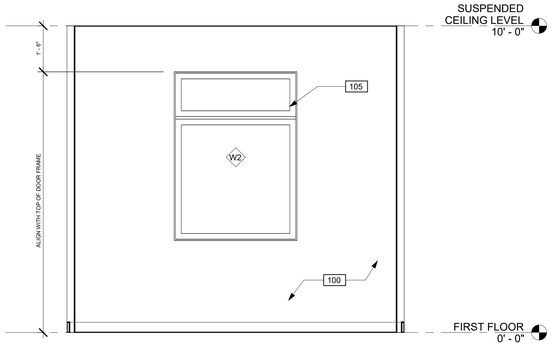


4 NINA'S OFFICE 4
1/2" = 1'-0"

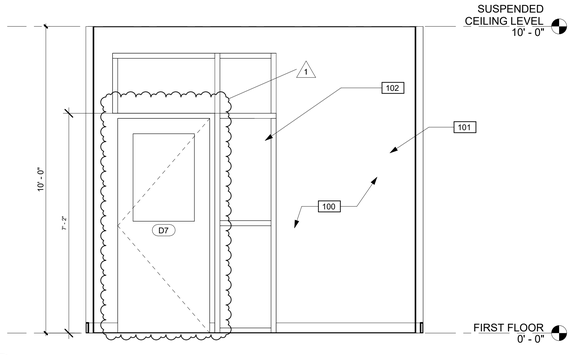
AL'S OFFICE INTERIOR ELEVATIONS



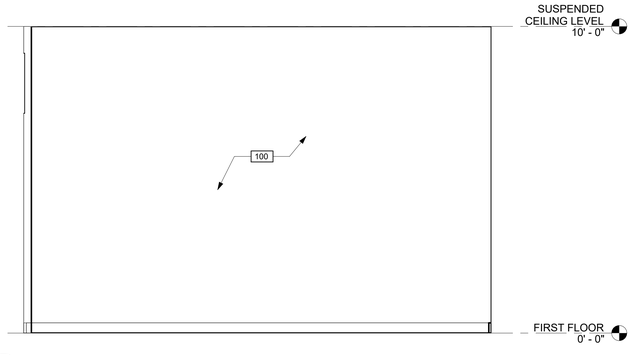
5 AL'S OFFICE 1
1/2" = 1'-0"



6 AL'S OFFICE 2
1/2" = 1'-0"



7 AL'S OFFICE 3
1/2" = 1'-0"



8 AL'S OFFICE 4
1/2" = 1'-0"

KEYNOTES

100	(N) FINISH SEE FINISH SCHEDULE SPECS
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT DOOR SCHEDULE AND SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	NOT USED
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS

INTERIOR ELEVATION GENERAL NOTES

1. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATION OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
2. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT OTHERWISE SHOWN.
3. REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN.
4. TYPICAL MOUNTING HEIGHTS OF ACCESSIBLE ELEMENTS AT ACCESSIBLE FIXTURES SEE
5. FLUSH VALVE HANDLES SHALL BE LOCATED AT THE WIDE SIDE OF ACCESSIBLE STALL.
6. FLOORING & BASE SHALL EXTEND UNDER ACCESSIBLE SINK/LAVATORY BASE CABINETS TO THE WALL. HOT WATER AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
7. PROVIDE SOLID BLOCKING FOR CABINET, ACCESSORY, OR EQUIPMENT MOUNTING

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28554
Rene 08.31.2026
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

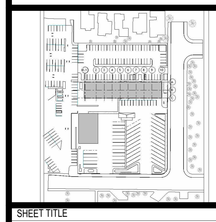
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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PHONE: 925-504-8098
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

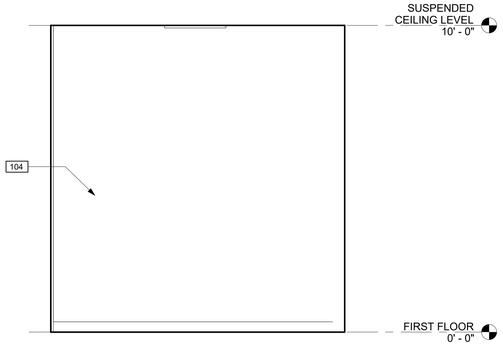
INTERIOR ELEVATIONS

A3.02

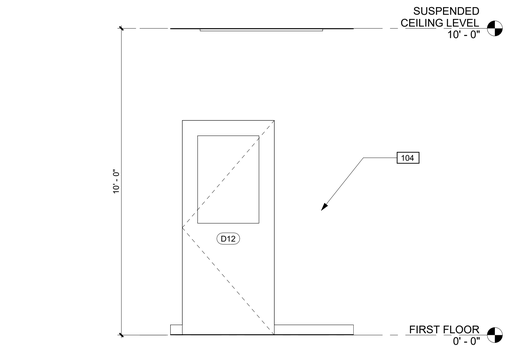
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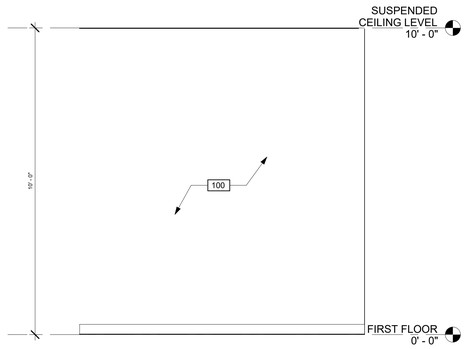
DATA ROOM- INTERIOR ELEVATIONS



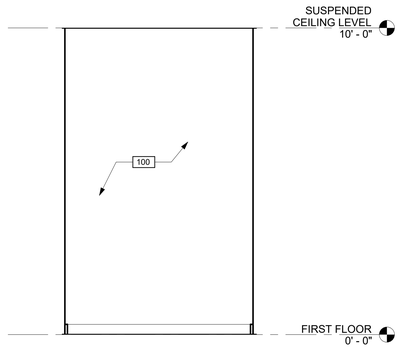
9 DATA ROOM SOUTH WALL
1/2" = 1'-0"



10 DATA ROOM VIEW TO DOOR
1/2" = 1'-0"

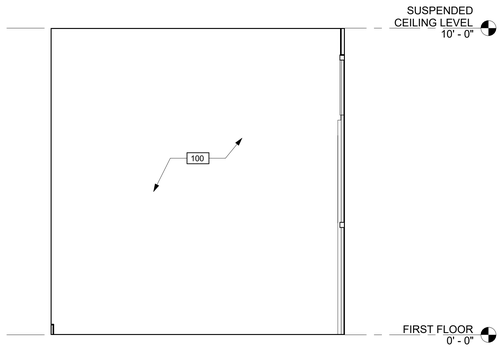


11 DATA WALL NORTH WALL
1/2" = 1'-0"

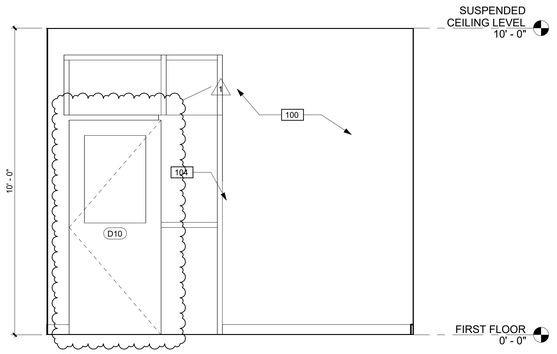


12 CUBICAL-2 4
1/2" = 1'-0"

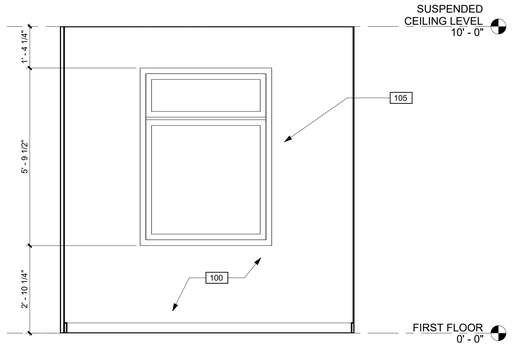
OFFICE #102 INTERIOR ELEVATIONS



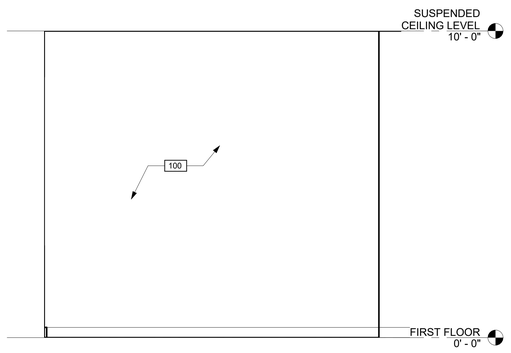
13 OFFICE #102 SOUTH WALL
1/2" = 1'-0"



14 OFFICE #102
1/2" = 1'-0"



16 OFFICE #102 NORTH WALL
1/2" = 1'-0"



15 OFFICE #102 EAST WALL
1/2" = 1'-0"

KEYNOTES

100	(N) FINISH SEE FINISH SCHEDULE
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) WALL SEE FINISH SCHEDULE
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS

GENERAL NOTES

1. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATION OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
2. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT OTHERWISE SHOWN.
3. REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN.
4. TYPICAL MOUNTING HEIGHTS OF ACCESSIBLE ELEMENTS AT ACCESSIBLE FIXTURES SEE
5. FLUSH VALVE HANDLES SHALL BE LOCATED AT THE WIDE SIDE OF ACCESSIBLE STALL.
6. FLOORING & BASE SHALL EXTEND UNDER ACCESSIBLE SINK/LAVATORY BASE CABINETS TO THE WALL. HOT WATER AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
7. PROVIDE SOLID BLOCKING FOR CABINET, ACCESSORY, OR EQUIPMENT MOUNTING

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren: 08.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

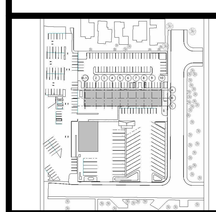
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

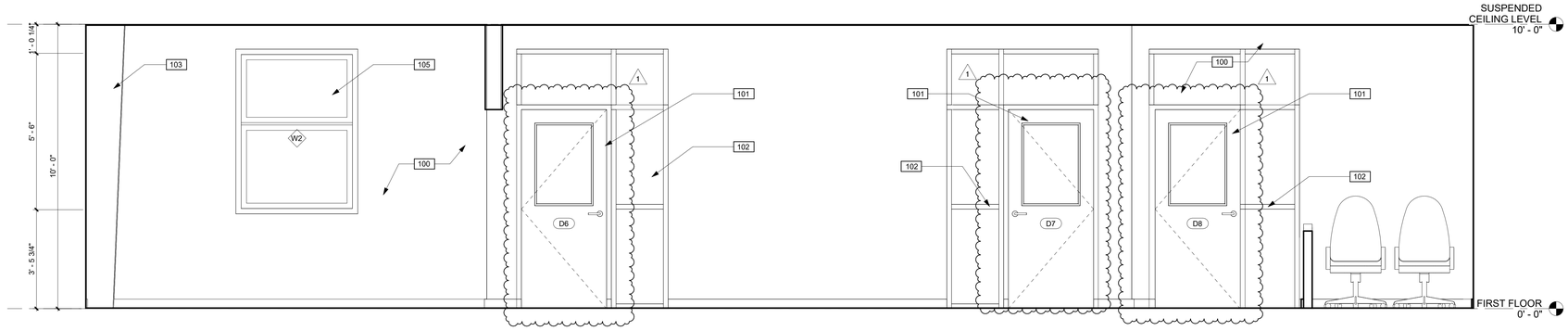
INTERIOR ELEVATIONS

A3.03

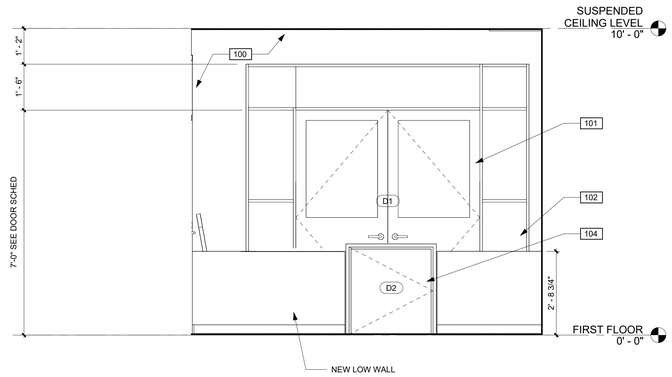
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Autodesk Docs://Small Admin Office Remodel/LIBERTY UNION SCHOOL DISTRICT _NEW OFFICE.rvt

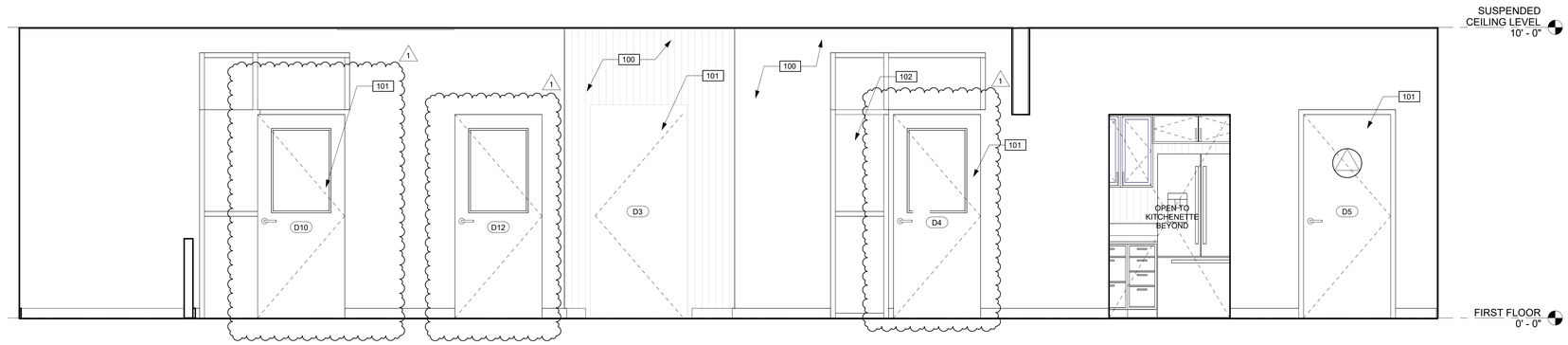
LOBBY INTERIOR ELEVATIONS



1 HALLWAY ELEVATION
1/2" = 1'-0"



2 VIEW TOWARDS RECEPTION
1/2" = 1'-0"



3 LOBBY 3
1/2" = 1'-0"

KEYNOTES

100	(N) WALL SEE FINISH SCHEDULE
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS SEE SHEET A6.00
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) DOOR SEE SCHEDULE AND SPECS
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS SEE SHEET A6.00
106	(N) CABINETS BY DISTRICT

GENERAL NOTES

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LICENSED ARCHITECT RODOLFO L. CHACON No. C 28654 Rev: 28.2026 STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

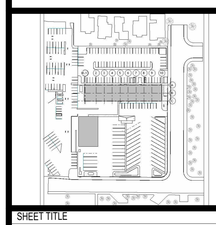
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

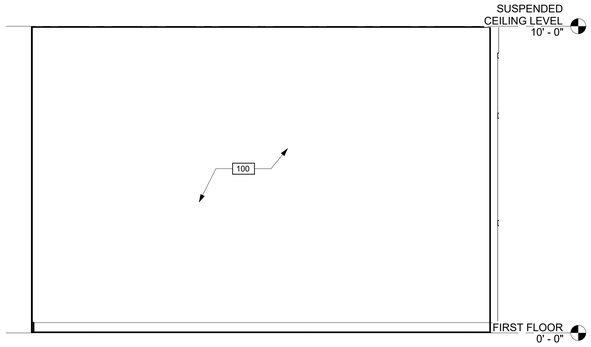
INTERIOR ELEVATIONS

A3.04

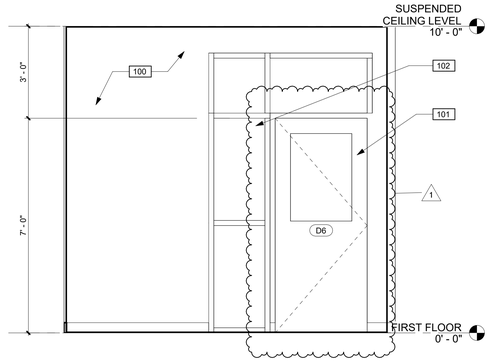
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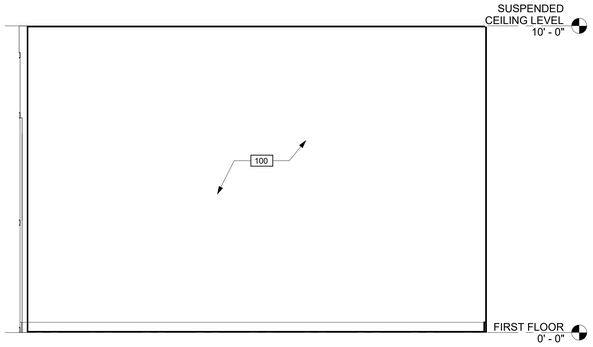
PAUL'S OFFICE INTERIOR ELEVATIONS



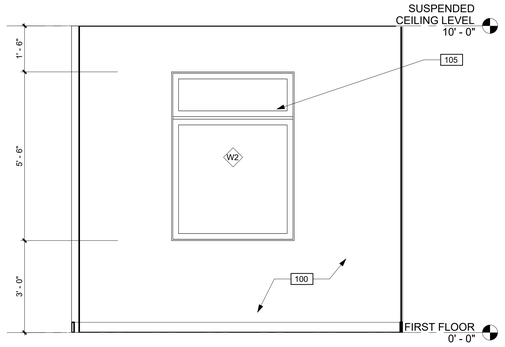
1 PAUL'S OFFICE 1
1/2" = 1'-0"



2 PAULS OFFICE 2
1/2" = 1'-0"

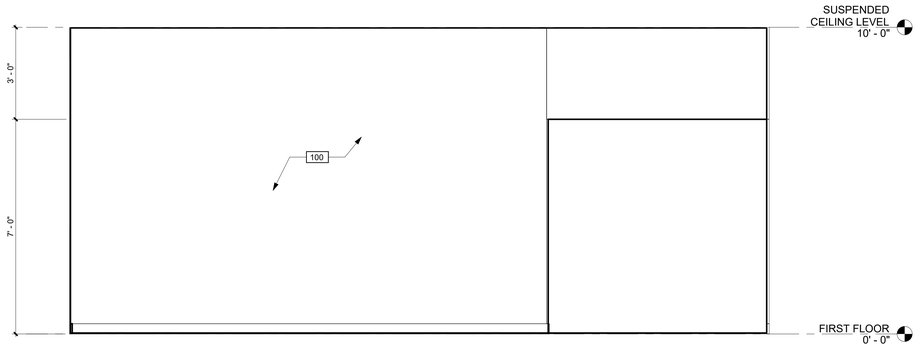


3 PAUL'S OFFICE 3
1/2" = 1'-0"

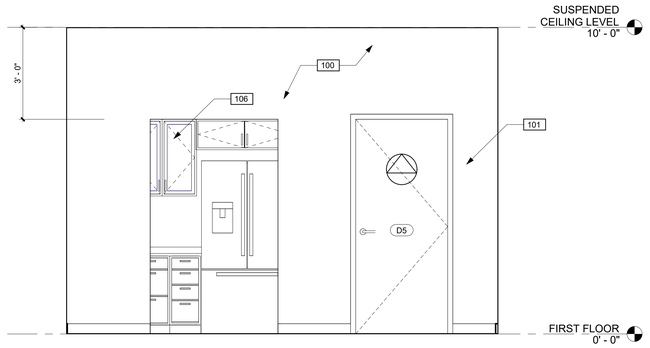


4 PAUL'S OFFICE 4
1/2" = 1'-0"

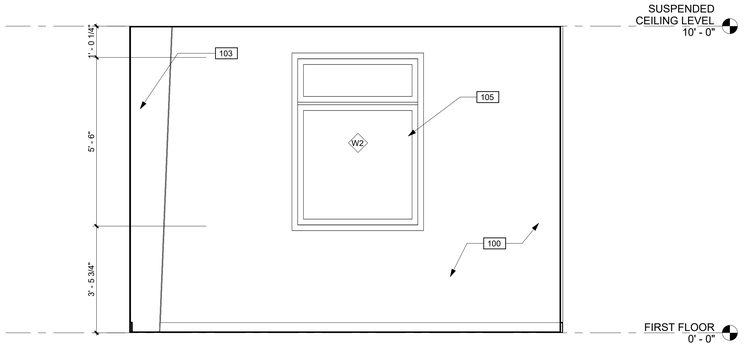
RECORDS AND OFFICE INTERIOR ELEVATIONS



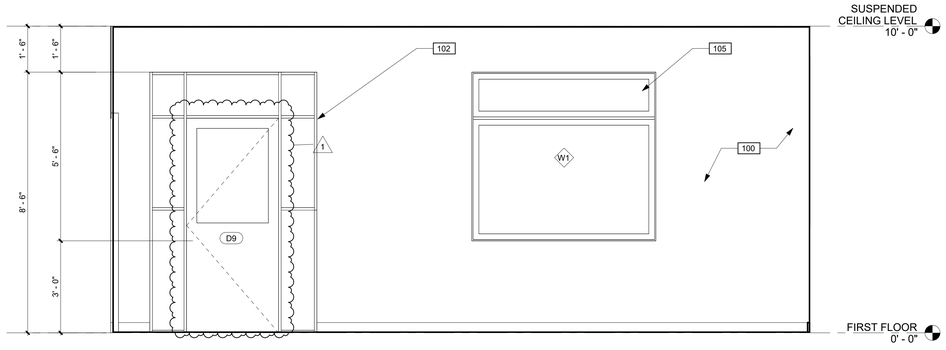
5 RECORDS AND OFFICE 1
1/2" = 1'-0"



6 RECORDS AND OFFICE 2
1/2" = 1'-0"



7 RECORDS AND OFFICE 3
1/2" = 1'-0"



8 RECORDS AND OFFICE 4
1/2" = 1'-0"

KEYNOTES

100	(N) PAINTED GYP BOARD SEE SPECS
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) CUBICLES
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS

GENERAL NOTES

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LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren: 08.31.27
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

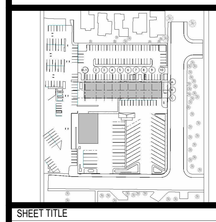
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



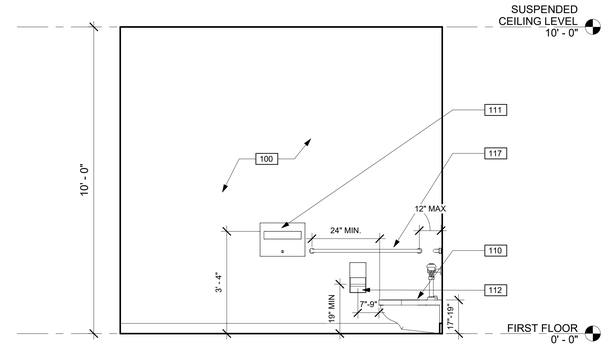
SHEET TITLE
INTERIOR ELEVATIONS

A3.05

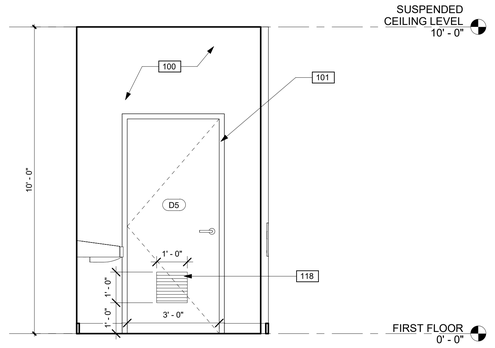
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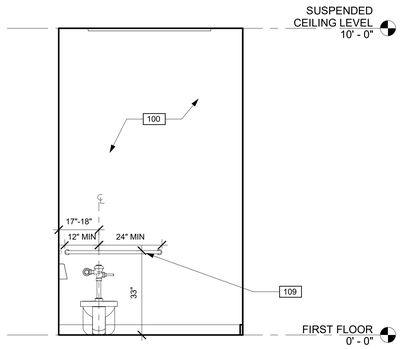
TOILET INTERIOR ELEVATIONS



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

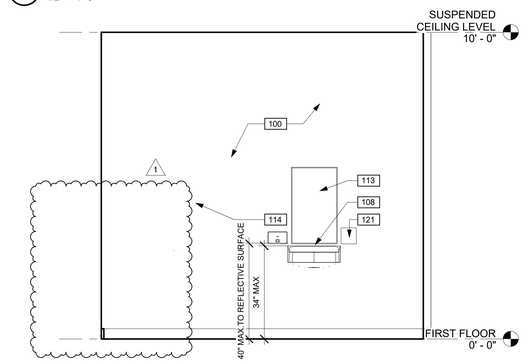


2 TOILET 2
1/2" = 1'-0"



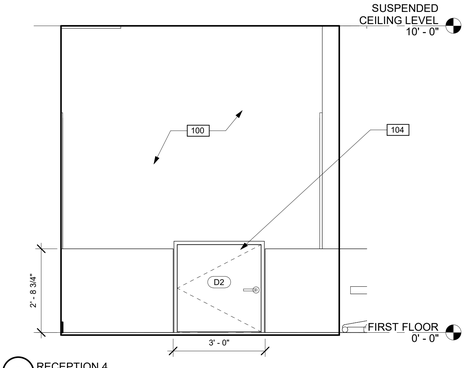
3 TOILET 3
1/2" = 1'-0"

1.) TOILET ACCESSORIES TO BE PROVIDED BY DISTRICT

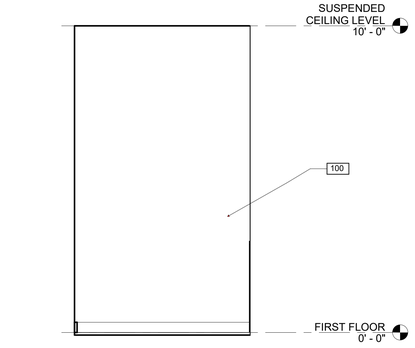


4 TOILET 4
1/2" = 1'-0"

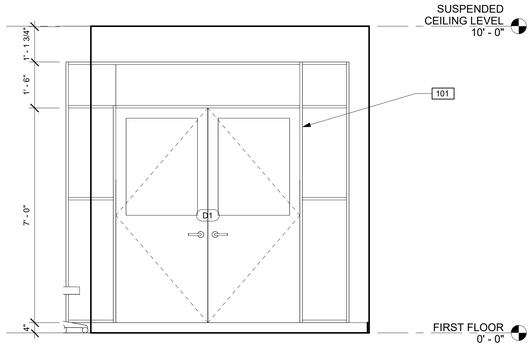
RECEPTION INTERIOR ELEVATIONS



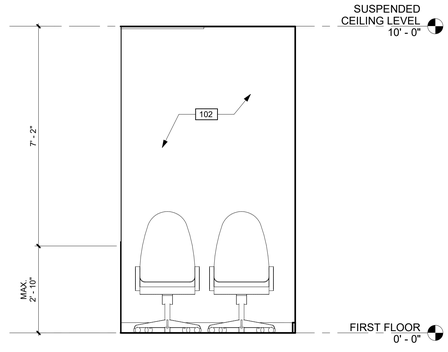
5 RECEPTION 4
1/2" = 1'-0"



6 RECEPTION 3
1/2" = 1'-0"



7 RECEPTION 2
1/2" = 1'-0"



8 RECEPTION 1
1/2" = 1'-0"

KEYNOTES

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101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) DOOR AND FRAME SEE DOOR SCHEDULE AND SPECS
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS
107	(N) UNISEX DOOR SIGNAGE SEE DETAIL 2 AND 3 , SHEET A5,02
108	(N)WALL MOUNTED ACCESSIBLE SINK SEE PLUMBING DRAWINGS
109	(N) 36" WALL MOUNTED GRAB BAR TA-GB1
110	(N) NEW ACCESSIBLE TOILET SEE PLUMBING DRAWINGS
111	(N) NEW TOILET SEAT DISPENSER SEE TA-SCI(SEE SPECS)
112	(N) TOILET PAPER DISPENSER TA-PT1 (SEE SPECS)
113	(N) 18" X 30" MIRROR TA-MR1 (SEE SPECS)
114	NOT USED
115	(N) SOAP DISPENSER
116	(N) INSULATED PIPES
117	(N) 42" GRAB BAR TA-GB1 (SEE SPECS)
118	(N) LOUVER SEE MECH. DRAWINGS PRIME AND PAINT TO MATCH DOOR COLOR
119	(N) SOAP DISPENSER
120	(N) REFRIGERATOR SEE SPECS
121	(N) PAPER TOWEL TA-PT 1 (SEE SPECS) DISPENSER

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LICENSED ARCHITECT RODOLFO L. CHACON No. C 28554 Rev 28.2026 STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

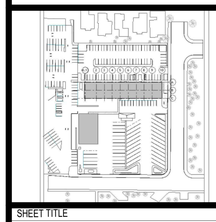
NEW ADMIN OFFICE REMODEL

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EMAIL: rodolfo@chaconarchitecture.com
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

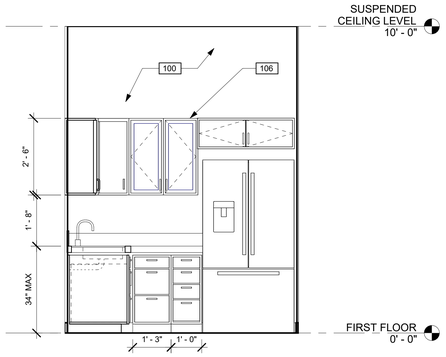
INTERIOR ELEVATIONS

A3.06

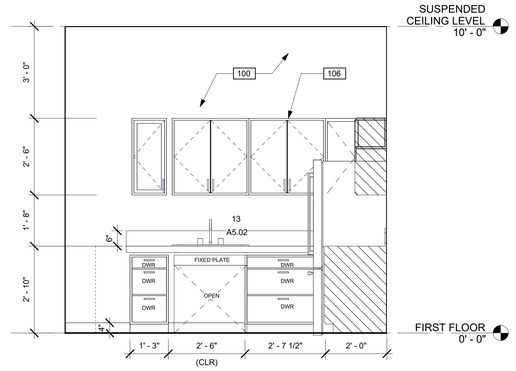
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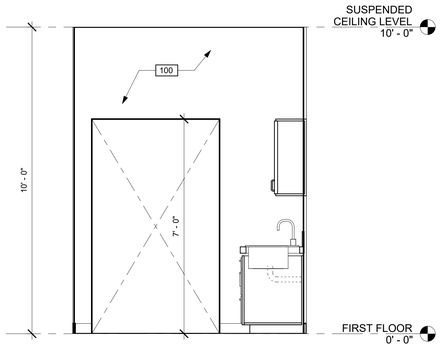
KITCHEN INTERIOR ELEVATIONS



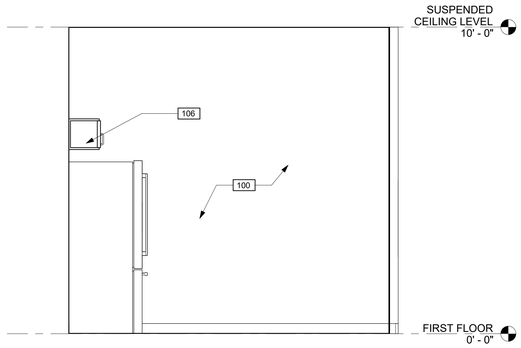
1 KITCHENETTE 4
1/2" = 1'-0"



2 KITCHENETTE 3
1/2" = 1'-0"

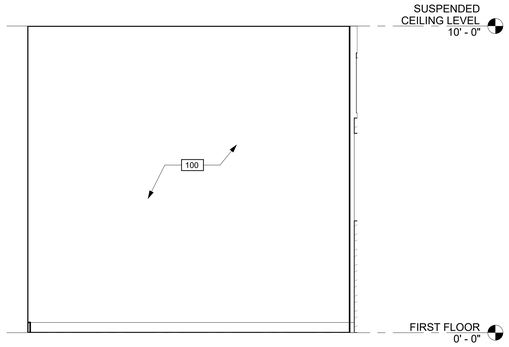


3 KITCHENETTE 2
1/2" = 1'-0"

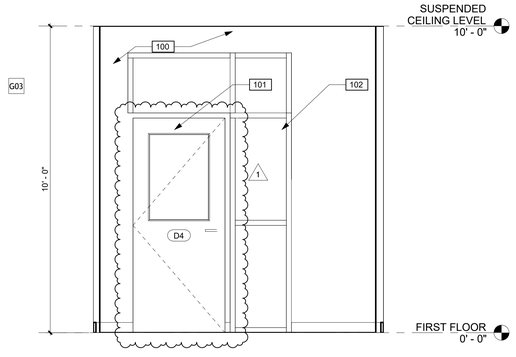


4 KITCHENETTE 1
1/2" = 1'-0"

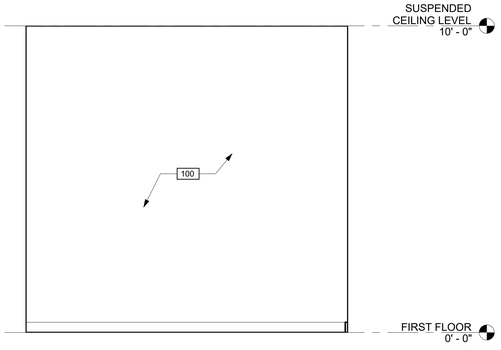
BOND MANAGER'S INTERIOR ELEVATIONS



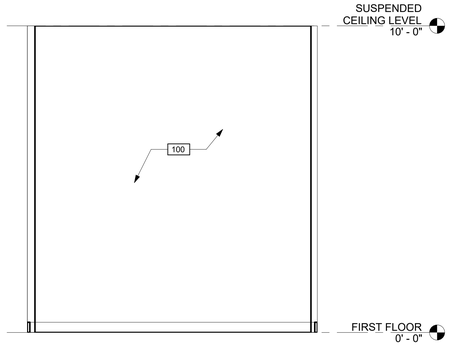
5 BOND MANAGER 1
1/2" = 1'-0"



6 BOND MANAGER 2
1/2" = 1'-0"



7 BOND MANAGER 3
1/2" = 1'-0"



8 BOND MANAGER 4
1/2" = 1'-0"

KEYNOTES

100	(N) PAINTED GYP BOARD SEE SPECS
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) CUBICLES
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS

GENERAL NOTES

1. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATION OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
2. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT OTHERWISE SHOWN.
3. REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN.
4. TYPICAL MOUNTING HEIGHTS OF ACCESSIBLE ELEMENTS AT ACCESSIBLE FIXTURES SEE
5. FLUSH VALVE HANDLES SHALL BE LOCATED AT THE WIDE SIDE OF ACCESSIBLE STALL.
6. FLOORING & BASE SHALL EXTEND UNDER ACCESSIBLE SINK/LAVATORY BASE CABINETS TO THE WALL. HOT WATER AND DRAINPIPES ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR OTHERWISE COVERED. THERE SHALL BE NO SHARP OR ABRASIVE SURFACES UNDER LAVATORIES.
7. PROVIDE SOLID BLOCKING FOR CABINET, ACCESSORY, OR EQUIPMENT MOUNTING

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Rev: 28.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

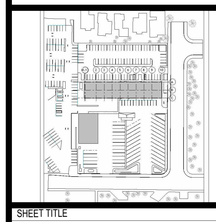
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



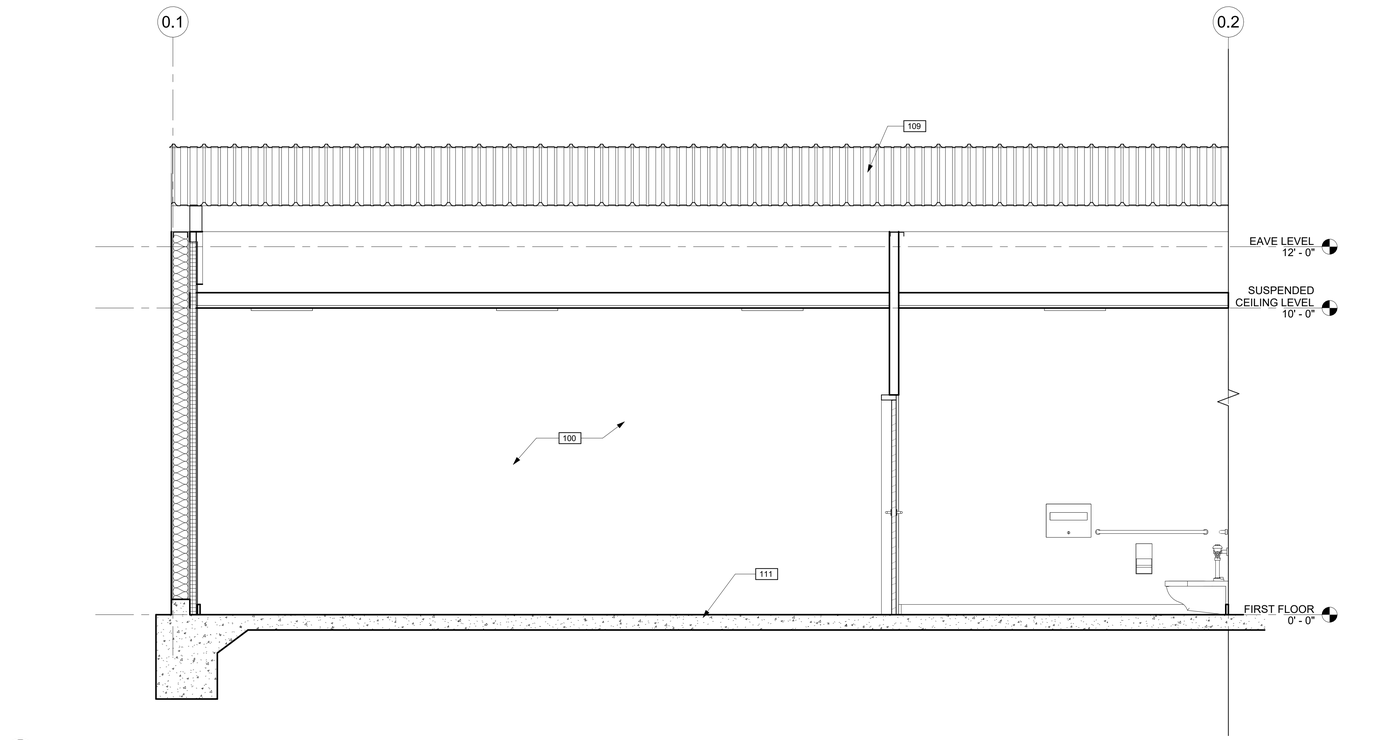
SHEET TITLE

INTERIOR ELEVATIONS

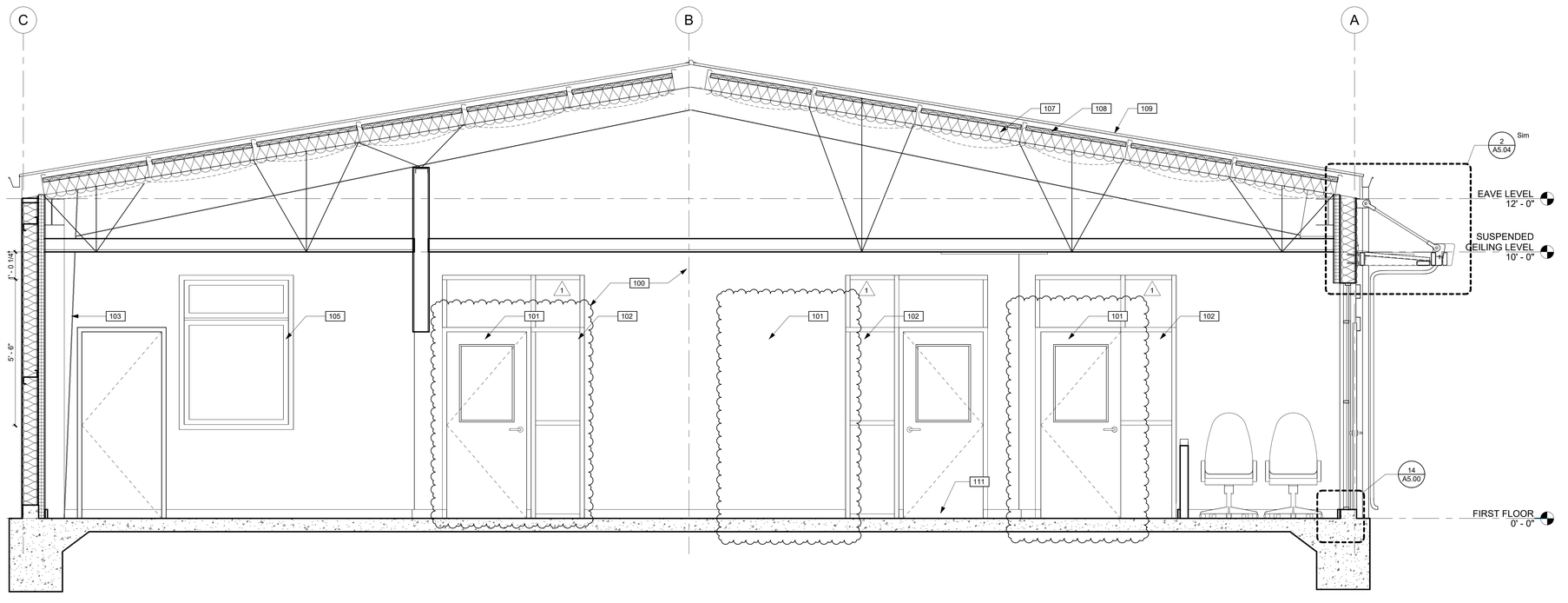
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Autodesk Docs://Small Admin Office Remodel/LIBERTY UNION SCHOOL DISTRICT _NEW OFFICE.rvt



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



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

KEYNOTES

100	(N) PAINTED GYP BOARD SEE SPECS
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) CUBICLES
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS
107	(N) R-38 BATT INSULATION
108	(N) R-12 RIGID INSULATION ATTACH TO (E) PURLINS WITH INSULATION BRACKETS AND TEK SCREWS @ 12" O.C.
109	(N) R-19 BATT INSULATION ATTACH TO PURLINS WITH METAL BANDING OR WIRE BY MFR.
110	(E) METAL ROOFING TO REMAIN
111	(E) SLAB SEAL WITH RED GUARD OR EQUAL

SECTION GENERAL NOTES

1. NOTES AND SYMBOLS ARE TO APPLY AT ALL AREAS OF SIMILAR GRAPHIC REPRESENTATION. SUCH INDICATIONS MAY BE LIMITED TO PROMOTE CLARITY OR AVOID REDUNDANCY. NO LIMITATION OF APPLICATION SHALL BE CONSTRUED WITHOUT SPECIFIC NOTATION.
2. ALL PENETRATIONS THROUGH EXTERIOR ROOF AND WALLS, AND FLOORS SHALL BE FLASHED AND SEALED WEATHER TIGHT. ALL PENETRATIONS THROUGH THE BUILDING INSULATION ENVELOPE SHALL BE PACKED WITH INSULATION.
3. PROVIDE OPENING FLASHINGS AT ALL WINDOWS, DOORS, LOUVERS AND SIMILAR WALL OPENINGS PER DETAIL
4. PROVIDE FIRESTOPPING AT CONCEALED SPACES, INCLUDING BETWEEN STAIR STRINGERS & BETWEEN STUDS WITH STAIR RUN, FURRED SPACES, CEILING/FLOOR LEVELS AND 10'-0" INTERVALS ALONG LENGTHS OF WALL, SOFFITS, DROP CEILINGS, AND COVE CEILINGS PER CBC 718.
5. REFER TO INTERIOR ELEVATIONS FOR WALL FINISHES AND INFORMATION NOT SHOWN, TYPICAL.
6. REFER TO FLOOR PLAN FOR FLOOR FINISHES, TYPICAL.
7. REFER TO REFLECTED CEILING PLAN FOR CEILING FINISHES, TYPICAL. 8. REFER TO MECHANICAL DRAWINGS FOR REGISTERS AND VENTS NOT OTHERWISE SHOWN.
8. REFER TO ELECTRICAL DRAWINGS FOR HORNS, SPEAKERS, PULL STATIONS AND OTHER FEATURES NOT OTHERWISE SHOWN.

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Ren: 08.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT
ESTABLISHED 1902

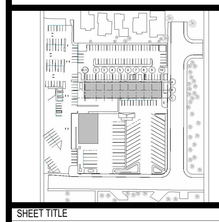
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



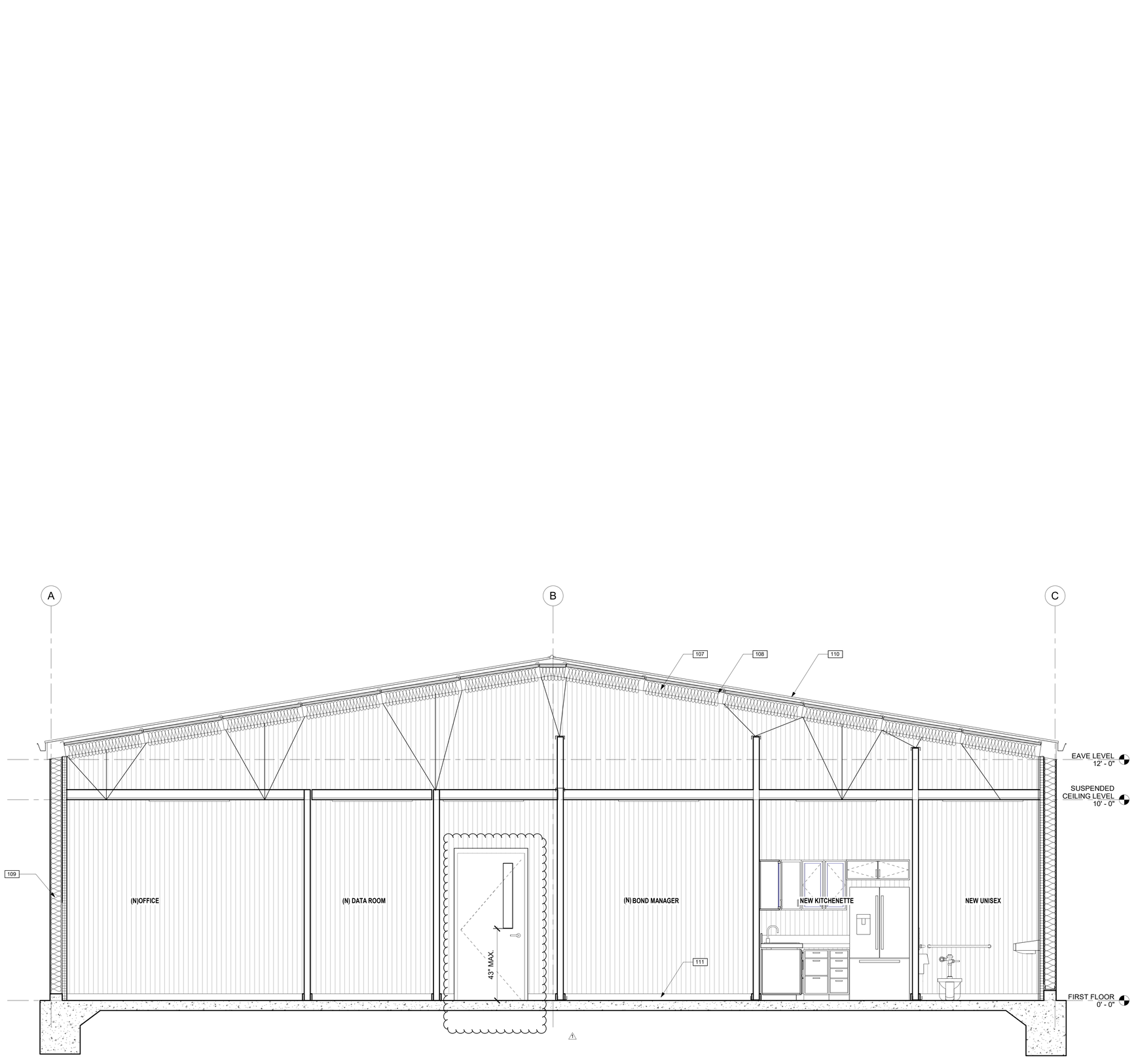
SHEET TITLE

SECTIONS

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

KEYNOTES

100	(N) PAINTED GYP BOARD SEE SPECS
101	(N) DOOR SEE DOOR SCHEDULE AND SPECIFICATIONS
102	(N) SIDELIGHT SEE SPECIFICATIONS
103	(E) MOMENT FRAME PRIME AND PAINT
104	(N) NOT USED
105	(N) WINDOW SEE WINDOW SCHEDULE AND SPECIFICATIONS
106	(N) CABINETS
107	(N) R-38 BATT INSULATION ATTACH TO (E) PURLINS WITH METAL INSULATION BANDS
108	(N) R-12 RIGID INSULATION WITH INSULATION BRACKETS AND TEK SCREWS
109	(N) R-19 BATT INSULATION
110	(E) METAL ROOFING TO REMAIN

SECTION GENERAL NOTES

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3. PROVIDE OPENING FLASHINGS AT ALL WINDOWS, DOORS, LOUVERS AND SIMILAR WALL OPENINGS PER DETAIL
4. PROVIDE FIRESTOPPING AT CONCEALED SPACES, INCLUDING BETWEEN STAIR STRINGERS & BETWEEN STUDS WITH STAIR RUN, FURRED SPACES, CEILING/FLOOR LEVELS AND 10'-0" INTERVALS ALONG LENGTHS OF WALL, SOFFITS, DROP CEILINGS, AND COVE CEILINGS PER CBC 718.
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LICENSED ARCHITECT
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STATE OF CALIFORNIA

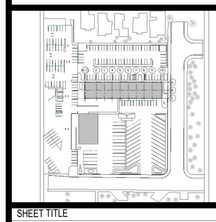
REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number
Organization Description
NEW ADMIN OFFICE REMODEL
850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE
SECTIONS

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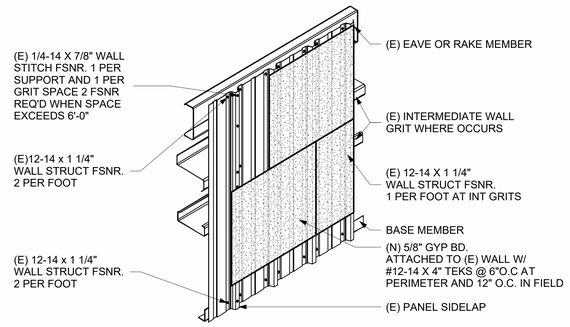
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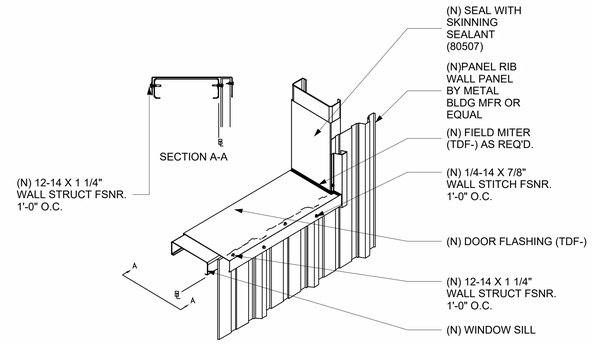


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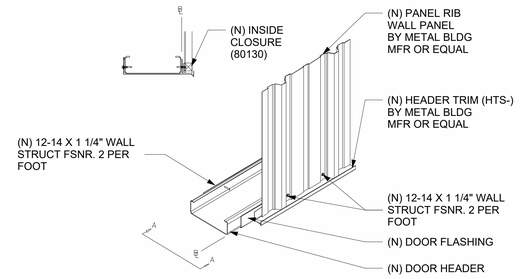
5 MAINTENANCE AND OPERATIONS ADMINISTRATION DEPARTMENT SIGNAGE
1" = 1'-0"



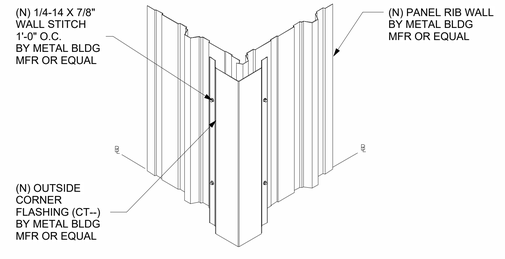
4 NEW INTERIOR WALL RE FINISH ATTACHMENTS GRID LINE 0.2
12" = 1'-0"



3 SILL TRIM
12" = 1'-0"



2 WALL TRIM AT DOOR HEAD
12" = 1'-0"



1 OUTSIDE CORNER TRIM
12" = 1'-0"

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Renew 08.2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
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LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

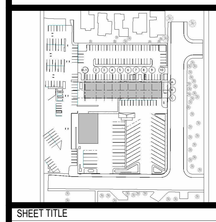
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

DETAILS

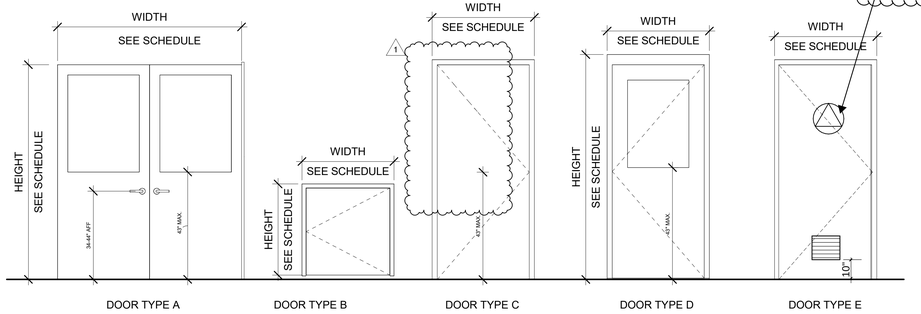
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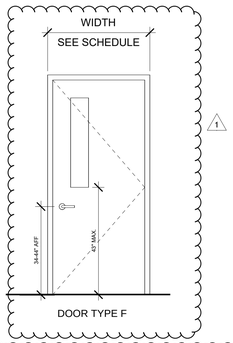
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DOOR SCHEDULE

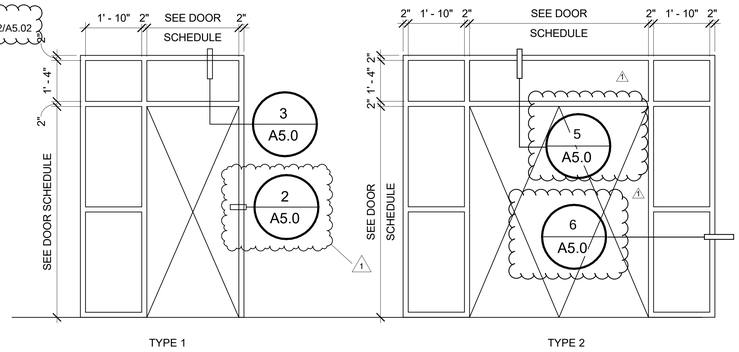
MARK	DOOR FUNCTION	TYPE MARK	DOOR SIZE HEIGHT	Width	DOOR SIZE THICKNESS	DOOR MATERIAL	DOOR FINISH	FRAME FRAME MATERIAL	FRAME TYPE	FRAME FINISH	DETAILS HEAD	DETAILS JAMB	DETAILS SILL	HARDWARE SET (SEE SPECS)	FIRE RATING	DOOR PANEL HEIGHT
D1	ENTRY DOOR	A	7' - 0"	6' - 0"	0' - 1 1/2"	ALUMINUM/GLASS			2	PAINT	5/A5.00	6/A5.00		01	NR	SEE DR. TYPES
D2	INTERIOR DOOR	B	3' - 0"	3' - 0"	0' - 1 1/2"	HOLLOW METAL	PAINT	HOLLOW METAL	—	PAINT	—	—		05		
D3	INTERIOR DOOR	F	7' - 0"	3' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		02		
D4	INTERIOR DOOR	C	7' - 0"	3' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		03		
D5	BATHROOM DOOR	E	7' - 0"	3' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		04		
D6	INTERIOR DOOR	D	7' - 0"	3' - 0"	0' - 2"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		03		
D7	INTERIOR DOOR	D	7' - 0"	3' - 0"	0' - 2"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		03		
D8	INTERIOR DOOR	D	7' - 0"	3' - 0"	0' - 2"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		03		
D9	ENTRY DOOR	D	7' - 0"	3' - 0"	0' - 1 1/2"	HOLLOW METAL	PAINT	HOLLOW METAL	1	PAINT	5/A5.00	6/A5.00		01		
D10	INTERIOR DOOR	D	7' - 0"	3' - 0"	0' - 2"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		03		
D12	INTERIOR DOOR	C	7' - 0"	3' - 0"	0' - 1 3/4"	HOLLOW METAL	PAINT	HOLLOW METAL	3	PAINT	3/A5.00	2/A5.00		03		

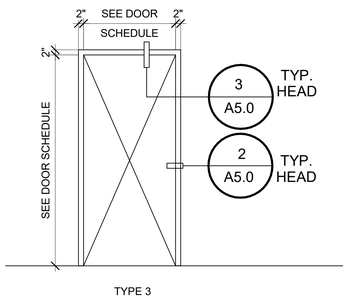


DOOR PANEL TYPES



DOOR FRAME TYPES

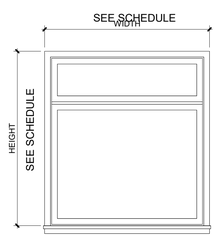




TYPE 3

WINDOW SCHEDULE

WINDOW NUMBER	WINDOW TYPE	WINDOW SIZE WIDTH	WINDOW SIZE HEIGHT	WINDOW MATERIAL	WINDOW FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	DETAIL HEAD	DETAIL JAMB	DETAIL SILL	COUNT	HARDWARE GROUP
W1	A	6' - 0"	5' - 6"	ALUMINUM	F.F		ALUMINUM	F.F	1/A5.00	1/A5.00 SIM	1/A5.00	1	NEW
W2	A	4' - 0"	5' - 6"	ALUMINUM	F.F		ALUMINUM	F.F	1/A5.00	1/A5.00 SIM	1/A5.00	5	NEW



WINDOW TYPE A

FINISH SCHEDULE

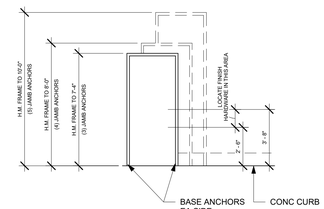
ROOM NUMBER	ROOM NAME	FLOOR MATERIAL	FLOOR BASE	FLOOR COLOR	WALL MATERIAL	WALL FINISH	CEILING COLOR	CEILING MATERIAL	CEILING FINISH	COMMENTS
101	RECEPTION	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	
102	OFFICE	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	
103	DATA ROOM	CPT. TILE	TOPSET RUBBER		GWB	SMOOTH	WHITE	ACT	FF	
104	BOND MANAGER	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	
105	NEW KITCHENETTE	RUBBER	TOPSET RUBBER		GWB	SMOOTH	WHITE	ACT	FF	
106	NEW UNISEX	EPOXY	TOPSET RUBBER		GWB	SMOOTH	WHITE	ACT	FF	
107	RECORDS AND OFFICE	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	
108	PAUL'S OFFICE	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	
109	OFFICE	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	
110	NINA'S OFFICE	CPT. TILE	TOPSET RUBBER		TACKBOARD	SMOOTH	WHITE	ACT	FF	

1. ALL EXIT DOORS IN SCHOOL BUILDINGS, INCLUDING BUT NOT LIMITED TO DOORS OF TOILET ROOMS AND STORAGE ROOMS SHALL CONFORM TO CBC 1010. EXIT DOORS SHALL BE OPERABLE FROM THE INSIDE WITHOUT THE USE OF A KEY, OR SPECIAL KNOWLEDGE OR EFFORT.
2. EXIT DEVICES (PANIC HARDWARE) SHALL BE INSTALLED IN CONFORMANCE WITH CBC 1010.1.10. THE ACTIVATING MEMBER SHALL BE CENTERED AT A HEIGHT OF NOT LESS THAN 34 INCHES OR MORE THAN 44 INCHES ABOVE THE FLOOR.
3. PANIC HARDWARE IS REQUIRED FROM ROOMS AND CORRIDORS OF E OCCUPANCY WHERE OCCUPANT LOAD EXCEEDS, 50 PER CBC 1010.1.10
4. DOORS WITH CLOSERS SHALL BE ADJUSTED TO PROVIDE MINIMUM DOOR CLOSER PERIOD OF FIVE SECONDS FROM A POSITION OF 90 DEGREES TO WITHIN 12 DEGREES OF THE DOOR LATCH, MEASURED FROM THE LEADING EDGE OF THE DOOR.
5. MAXIMUM EFFORT TO OPERATE DOORS SHALL NOT EXCEED 5 POUNDS APPLIED IN THE DIRECTION OF TRAVEL. REQUIRED FIRE DOORS SHALL HAVE A MAXIMUM OPERATING EFFORT NOT TO EXCEED 15 POUNDS. IF APPROVED BY AUTHORITY HAVING JURISDICTION

DOOR GENERAL NOTES

1. ALL SIGNAGE AT MAIN ENTRANCES, TOILETS, PERMANENT ROOMS, ASSISTIVE LISTENING SYSTEMS SHALL COMPLY WITH TITLE 24 CBC AND CBC 11B-703
2. RAISED CHARACTERS SHALL CONFORM TO CBC 11B-703.2 BRAILLE SHALL CONFORM TO 11B-703.3 PICTORIAL SIGNAGE SHALL CONFORM TO 11B-703.6
3. MOUNTING LOCATION AND HEIGHT: (WHERE PERMANENT INDENTIFICATION IS PROVIDED OR WHERE SIGNAGE IS REQUIRED FOR ROOMS AND SPACES): CBC 11B-703.4
4. INTERNATIONAL SYMBOL OF ACCESSIBILITY DESIGN AND COLOR SHALL CONFORM TO CBC 11B-703.7.1 & 11B-703.7.2.1.
5. DOORS TO TOILET ROOMS: PROVIDE SIGNAGE CONFORMING TO CBC 11B-703.7.2.6
6. CONTRAST AND FINISH OF SYMBOLS SHALL CONFORM TO CBC 11B-703.7.1.

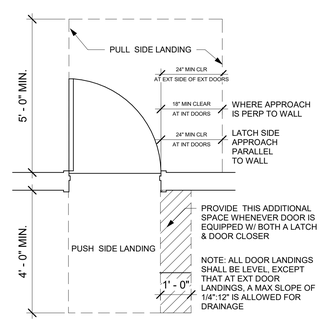
SIGNAGE GENERAL NOTES



NOTES:

1. PROVIDE DOOR FRAME ANCHORAGE AS FOLLOWS:
   PROVIDE A MINIMUM OF 3-FRAME ANCHORS AT EA JAMB OF DOOR FRAMES. AT WALLS PROVIDE SNAP-IN FRAME ANCHORS AT 24" O.C. (2 MIN) WITH 3/8" DIA I.C.C. APPROVED EXPANSION BOLTS FROM ANCHOR TO CONCRETE (TYP.)AMB ANCHORS TO BE SPACED EQUALLY.
2. ATTACH ANCHORS TO WOOD FRAMING WITH #8 F.H.W.S., 1 1/2" MINIMUM PENETRATION.
3. BASE ANCHORS ARE ADDITIONAL TO THE NUMBER OF JAMB ANCHORS INDICATED ON THIS DIAGRAM.

6 HM FRAME ANCHORAGE
1/4" = 1'-0"



5 ACCESSIBLE DOOR LANDINGS
1/2" = 1'-0"

LICENSED ARCHITECT
RODOLFO L. CHACON
No. C 28654
Rev. 28 2027
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REV.4.1.2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT
ESTABLISHED 1902

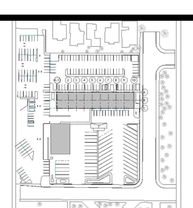
NEW ADMIN OFFICE REMODEL

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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

SCHEDULES

A6.00

PLOT DATE: 4/6/2026 7:34:39 PM

GENERAL NOTES & BASIS OF DESIGN

PROJECT DESCRIPTION

THIS PROJECT CONSISTS OF A CONVERSION OF THE EXISTING RIDING EQUIPMENT STORAGE AREA TO ENCLOSED OFFICE SPACE. NEW EXTERIOR WALLS ARE ADDED TO ENCLOSE THE SPACE. NO UPGRADES TO THE EXISTING LATERAL FORCE RESISTING SYSTEM ARE REQUIRED TO ACCOMMODATE THE BUILDING MODIFICATIONS.

BUILDING DESCRIPTION

LIBERTY HIGH SCHOOL MAINTENANCE AND OPERATIONS BUILDING A

BUILDING CONSISTS OF:

LEVELS:	1 STORY PRE-FABRICATED METAL BUILDING WITH INTERIOR MEZZANINE.
FOUNDATION:	SPREAD FOOTINGS WITH CONTINUOUS GRADE BEAMS & CONCRETE SLAB ON GRADE
ROOF SYSTEM:	METAL DECK AND STEEL BEAMS
LATERAL FORCE RESISTING SYSTEM:	ORDINARY STEEL MOMENT RESISTING FRAMES
DIAPHRAGMS:	ROD BRACING

PROJECT DATA

1. PLANS AND CALCULATIONS FOR THE STRUCTURAL DESIGN WERE BASED UPON:
   - 2022 CALIFORNIA BUILDING CODE.
   - 2022 CALIFORNIA EXISTING BULDING CODE.
   - ORIGINAL BUILDING ARCHITECTURAL DRAWINGS BY QUATTROCCHI KWOK ARCHITECTS, DATED OCTOBER 23, 2018
   - ORIGINAL BUILDING STRUCTURAL DRAWINGS BY ZFA STRUCTURAL ENGINEERS, DATED OCTOBER 23, 2018
   - METAL BUILDING DRAWINGS BY VP BUILDINGS, DATE AUGUST 28, 2018.

2. DESIGN LOADS ARE AS FOLLOWS:

VERTICAL

ROOF DEAD LOAD	13.5	PSF	PER ORIG DRAWINGS
ROOF LIVE LOAD	20	PSF	AND REDUCED PER CODE
CANOPY DEAD LOAD	15	PSF	

LATERAL

WIND PER ASCE 7-16
V=95 MPH BASIC WIND SPEED (3 SECOND GUST)
WIND IMPORTANCE FACTOR, I = 1.0
RISK CATEGORY II
EXPOSURE CATEGORY B
INTERNAL PRESSURE COEFFICIENT, GC_{pi} = ±0.18

SEISMIC PER ASCE 7-16
RISK CATEGORY II
SEISMIC IMPORTANCE FACTOR, I = 1.0
SITE CLASS D (DEFAULT)
S_S = 1.364 S_1 = 0.48
S_{DS} = 1.092 S_{D1} = NULL
SEISMIC DESIGN CATEGORY D

FOUNDATION (PER ORIG STRUCTURAL DRAWINGS)

BEARING PRESSURES	3000	PSF	DEAD + LIVE LOAD
	4000	PSF	TOTAL LOADS

TESTING AND SPECIAL INSPECTION

1. SEE FORM DSA-103 FOR ALL REQUIREMENTS

GENERAL NOTES

1. REFER TO THE SPECIFICATIONS FOR COMPLETE REQUIREMENTS. MORE STRINGENT REQUIREMENTS CONTROL WHERE INFORMATION SHOWN ON DRAWING AND IN SPECIFICATIONS ARE IN CONFLICT.
2. CONSTRUCTION MUST BE IN ACCORDANCE WITH CALIFORNIA BUILDING CODE, CURRENT EDITION
3. DETAILS OF THE CONSTRUCTION NOT FULLY SHOWN OR NOTED ON THE DRAWINGS NOR CALLED FOR IN THE SPECIFICATIONS MUST BE OF THE SAME SIZE AND CHARACTER AS FOR SIMILAR CONDITIONS WHICH ARE SHOWN AS NOTED
4. "TYPICAL" SHALL MEAN THAT THE INDICATED INFORMATION SHALL BE APPLIED TO ALL SIMILAR CONDITIONS WHETHER OR NOT THE INFORMATION IS SPECIFICALLY REFERENCED, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
5. DO NOT SCALE DRAWINGS. SCALE FOR REFERENCE ONLY.
6. THE CONTRACTOR MUST VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS AT JOB SITE. THE CONTRACTOR MUST COMPARE STRUCTURAL DRAWINGS WITH ARCHITECTURAL, CIVIL, LANDSCAPE, MECHANICAL, PLUMBING, ELECTRICAL, AND ANY OTHER APPLICABLE TRADE DRAWINGS BEFORE COMMENCING WITH THE WORK AND MUST NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES REQUIRING CLARIFICATION OR REVISION.
7. THE CONSTRUCTION CONTRACTOR AND SUBCONTRACTORS AGREE THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONSTRUCTION CONTRACTOR AND SUBCONTRACTORS 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 LIMITED TO NORMAL WORKING HOURS, AND THE CONSTRUCTION CONTRACTOR AND SUBCONTRACTORS FURTHER AGREE TO DEFEND, INDEMNIFY AND HOLD THE DESIGN PROFESSIONAL HARMLESS FROM ANY LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPT LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE DESIGN PROFESSIONAL.

TYPICAL PLAN NOTES

1. REFER TO NOTES TITLED "DOCUMENT COORDINATION" FOR REFERENCE TO INFORMATION FOUND ON OTHER DRAWINGS.
2. ALL CLADDING SYSTEMS AND INTERIOR PARTITIONS SHALL HAVE THE ABILITY TO COMPENSATE FOR 3/4" MIN VERTICAL DEFLECTION OF THE FRAMING ABOVE, UON.
3. BEAM PENETRATIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS ARE NOT PERMITTED WITHOUT APPROVAL OF THE ENGINEER.

DOCUMENT COORDINATION

1. REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS NOT SHOWN AND LOCATION AND SIZE OF SLOPES, STEPS, DEPRESSIONS, BLOCKOUTS, RECESSES, CURBS, PADS, ETC.
2. REFER TO ARCHITECTURAL AND OTHER DRAWINGS FOR SIZES AND LOCATIONS OF EQUIPMENT SUPPORT PADS AND CURBS AND FOR EQUIPMENT ANCHORAGE/BRACING.
3. REFER TO ARCHITECTURAL AND OTHER DRAWINGS FOR SIZES, LOCATIONS, AND ELEVATIONS OF ITEMS CAST-IN-PLACE OR EMBEDDED IN CONCRETE AND COORDINATE WITH STRUCTURAL ELEMENTS. THESE ITEMS INCLUDE BUT ARE NOT LIMITED TO:
   - ANCHOR BOLTS, INSERTS, HANDRAIL BASES, AND HANGERS FOR ATTACHMENT OF NON-STRUCTURAL BUILDING COMPONENTS.
   - SLEEVES, DRAINS, BOXES AND CONDUITS.
5. REFER TO ARCHITECTURAL AND OTHER DRAWINGS FOR SUPPLEMENTARY STRUCTURAL SUPPORTS AND EMBEDDED ATTACHMENTS FOR NON-STRUCTURAL SYSTEMS AND COMPONENTS NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS, INCLUDING:
   - RAILINGS
   - MISCELLANEOUS ARCHITECTURAL APPENDAGES
   - SIGNS, FLAG POLES, AND BANNERS.
6. REFER TO ARCHITECTURAL AND CIVIL DRAWINGS FOR:
   - REQUIRED WATERPROOFING, DRAINAGE SLOPE AND DETAILS. REFERENCE TO WATERPROOFING AND DRAINAGE IN THE STRUCTURAL DRAWINGS IS ONLY FOR THE CONVENIENCE OF THE CONTRACTOR.
   - REQUIRED EXTENT OF FIREPROOFING AND FIREPROOFING DETAILS FOR STRUCTURAL ELEMENTS.
   - CONCRETE SURFACES TO BE TREATED AS "ARCHITECTURAL CONCRETE".
   - FINISHES FOR STRUCTURAL STEEL INCLUDING GALVANIZING, PAINTING, ARCHITECTURALLY EXPOSED STRUCTURAL STEEL (AESS) AND OTHER COATINGS.

GEOTECHNICAL REQUIREMENTS

1. THE CONTRACTOR MUST BE FAMILIAR WITH GEOTECHNICAL CONDITIONS AT THE PROJECT SITE.
2. BOTTOM OF FOOTINGS MAY BE REVISED BY THE PROJECT INSPECTOR TO ENSURE MINIMUM FOOTING EMBEDMENTS INTO COMPETENT SOIL MATERIAL. DO NOT DISTURB SOIL EXCEPT FOR THE MINIMUM REQUIRED FOR THE FOUNDATIONS AS SHOWN.

TEMPORARY BRACING AND SHORING

1. THE STABILITY AND INTEGRITY OF THE STRUCTURE DURING CONSTRUCTION MUST BE MAINTAINED AT LEVELS GENERALLY ACCEPTABLE WITHIN THE CONSTRUCTION INDUSTRY BY THE USE OF BRACING AND SHORING UNTIL THE PROPOSED STRUCTURE WORK IS COMPLETED. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND REMOVAL OF TEMPORARY BRACING AND CONSTRUCTION SUPPORTS REQUIRED TO COMPLETE THE PROJECT. NO PORTION OF THE STRUCTURE SHOULD BE CONSIDERED TO BE SELF SUPPORTING UNTIL THE ENTIRE VERTICAL AND LATERAL LOAD RESISTING SYSTEM IS COMPLETE. THE CONTRACTOR MUST PROTECT AND SHORE ALL EXCAVATIONS WITH BRACING AND SHORING AS REQUIRED TO MAINTAIN SOIL STABILITY.
2. THE BRACING AND SHORING SYSTEMS REQUIRED TO PROVIDE TEMPORARY SUPPORT OF THE STRUCTURE DURING CONSTRUCTION MUST BE DESIGNED TO SUPPORT THE DEAD, LIVE, SOIL, EARTHQUAKE AND WIND LOADS THAT MAY BE IMPOSED ON THE STRUCTURE DURING CONSTRUCTION IN ACCORDANCE WITH INDUSTRY STANDARDS AND GENERALLY ACCEPTED ENGINEERING PRINCIPLES.

SUBMITTALS

1. REFER TO THE SPECIFICATIONS FOR COMPLETE LIST OF SUBMITTALS AND REQUIREMENTS.
2. SUBMITTALS FOR THE ENGINEER'S REVIEW ARE REQUIRED INCLUDING:
   - REINFORCING SHOP DRAWINGS, PRODUCT DATA, MILL CERTIFICATES.
   - CONCRETE PRODUCT DATA, MIX DESIGNS, CERTIFICATES OF COMPLIANCE FOR AGGREGATE, CEMENTITIOUS MATERIAL, ADMIXTURE, VAPOR RETARDER/BARRIER, GROUT, CURING, COMPOUND, FOAM BLOCK.
   - ADHESIVE ANCHORING SYSTEM AND EXPANSION ANCHORS
   - STRUCTURAL STEEL FRAMING AND MISCELLANEOUS METALS SHOP DRAWINGS, MILL CERTIFICATES.
   - WPS AND PQR FOR NON-PREQUALIFIED JOINTS, CERTIFICATES OF COMPLIANCE FOR METALS, WELDING MATERIAL, BOLTS
   - COLD FORMED STEEL PRODUCT DATA
   - OTHER SUBMITTALS LISTED IN THE SPECIFICATIONS.
3. CONTRACTOR MUST ELECTRONICALLY SUBMIT ALL SUBMITTALS , USE OF CONTRACT DOCUMENTS AS SHOP DRAWINGS WILL NOT BE ACCEPTED. THE CONTRACTOR MUST SUBMIT A SUBMITTAL SCHEDULE FOR REVIEW FOUR WEEKS BEFORE THE FIRST SUBMITTAL IS ISSUED.
4. THE CONTRACTOR MUST REVIEW EACH SUBMITTAL PRIOR TO FORWARDING TO THE ARCHITECT AND STRUCTURAL ENGINEER. THE CONTRACTOR IS TO STAMP EACH SUBMITTAL VERIFYING THAT THE FOLLOWING IS ADDRESSED:
   - THE SUBMITTAL IS REQUESTED BY THE CONTRACT DOCUMENTS
   - THE SUBMITTAL IS BASED ON THE MOST CURRENT EDITION OF THE CONTRACT DOCUMENTS INCLUDING ALL ADDENDA, SUPPLEMENTS, BULLETINS, RFI'S, ETC.
   - THE ARCHITECT'S AND STRUCTURAL ENGINEER'S COMMENTS FROM ANY PREVIOUS SUBMITTALS ARE ADDRESSED.
   - THE WORK IS COORDINATED AMONG ALL CONSTRUCTION TRADES.
   - REVISIONS FROM PREVIOUS SUBMITTALS ARE CLEARLY MARKED BY CIRCLING OR CLOUDS
   - SUBMITTAL IS COMPLETE
   - SUBMITTAL DOES NOT INCLUDE A SUBSTITUTION REQUEST
   - SUBMITTAL INCLUDES A STAMP INDICATING PROJECT NAME AND LOCATION, SUBMITTAL NUMBER, SPECIFICATION SECTION NUMBER.
5. THE STRUCTURAL ENGINEER WILL RETURN WITHOUT COMMENT, SUBMITTALS WHICH THE CONTRACTOR HAS NOT STAMPED OR WHICH DO NOT MEET THE ABOVE REQUIREMENTS. THE STRUCTURAL ENGINEER'S REVIEW OF SUBMITTALS WILL BE FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT. NO WORK MAY BE STARTED WITHOUT SUCH REVIEW. THE STRUCTURAL ENGINEER WILL ONLY REVIEW SUBMITTALS FOR ITEMS WITHIN THE SCOPE OF WORK THAT APPEAR IN THE STRUCTURAL DRAWINGS AND SPECIFICATIONS.
6. CONTRACTOR'S STATEMENT OF RESPONSIBILITY: EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC OR WIND-FORCE RESISTING SYSTEM OR COMPONENT MUST ISSUE A WRITTEN STATEMENT OF RESPONSIBILITY IN COMPLIANCE WITH SECTION 1704.4 OF THE CURRENT EDITION OF THE CALIFORNIA BUILDING CODE. THE CONTRACTOR'S STATEMENT OF RESPONSIBILITY SHALL CONTAIN ACKNOWLEDGEMENT OF THE SPECIAL INSPECTION AND TESTING REQUIREMENTS.

DELEGATED DESIGN ELEMENTS

1. DELEGATED DESIGN ELEMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR. DELEGATED DESIGN ELEMENTS ASSUMED TO BE DESIGNED BY THE CONTRACTOR INCLUDE:
   - TEMPORARY SHORING AND BRACING
   - RAILINGS
   - ANCHORAGE AND BRACING OF ALL MEP EQUIPMENT AND DISTRIBUTION LINES (EXCEPT FOR ITEMS SPECIFICALLY DETAILED ON THE CONTRACT DOCUMENTS)
   - OTHER DESIGN REQUIRED FOR TEMPORARY MEANS AND METHODS BY THE CONTRACTOR
2. ALL DELEGATED DESIGN ELEMENTS MUST BE SUBMITTED TO ENGINEER OF RECORD AND ARCHITECT FOR REVIEW. DESIGN OF ALL DELEGATED DESIGN ELEMENTS MUST BE BY A REGISTERED CALIFORNIA PROFESSIONAL ENGINEER. SHOP DRAWINGS AND CALCULATION SUBMITTALS MUST BE STAMPED AND SIGNED BY THE CONTRACTOR'S DESIGN ENGINEER.
3. DELEGATED DESIGN ELEMENT CALCULATIONS MUST HAVE A SUMMARY PAGE STATING THE DESIGN ASSUMPTIONS INCLUDING CODES AND DESIGN LOADS.

ABBREVIATIONS

@	AT	LB(S)	POUND(S)
Ø	DIAMETER	LL	LIVE LOAD
#	NUMBER	LLBB	LONG LEGS BACK TO BACK
		LLH	LONG LEG HORIZONTAL
AB	ANCHOR BOLT	LLV	LONG LEG VERTICAL
ADDL	ADDITIONAL	LOC	LOCATION
ALT	ALTERNATE	LOL	LAYOUT LINE
APPROX	APPROXIMATE(LY)	LONGIT	LONGITUDINAL
ARCH.	ARCHITECT(URAL)	LS	LAG SCREW(S)
ATS	ANCHOR TIE SYSTEM	LW	LIGHT WEIGHT
BF	BOUNDARY FASTENING OR BRACED FRAME	MAX	MAXIMUM
		MB	MACHINE BOLT(S)
BLK	BLOCK	MECH	MECHANICAL
BLKG	BLOCKING	MFR	MANUFACTURER
BLDG	BUILDING	MIN	MINIMUM
BM	BEAM	MISC	MISCELLANEOUS
BN	BOUNDARY NAILING		
BOF	BOTTOM OF FOOTING	(N)	NEW
BOT	BOTTOM	NIC	NOT IN CONTRACT
		No	NUMBER
CL	CENTER LINE	NOM	NOMINAL
CBC	CALIFORNIA BLDG CODE	NS	NEAR SIDE
CFS	COLD FORMED STEEL	NTS	NOT TO SCALE
CIDH	CAST-IN-DRILLED-HOLE		
CIP	CAST-IN-PLACE	OC	ON CENTER
CJ	CONSTRUCTION JOINT	OD	OUTSIDE DIAMETER
CJP	COMPLETE JT PENETRATION	OG	ORIGINAL GROUND
CLR	CLEAR	OH	OPPOSITE HAND
CLG	CEILING	OWSJ	OPEN WEB STEEL JOIST
CMP	CORRUGATED METAL PIPE		
CMU	CONCRETE MASONRY UNIT	℄ or PL	METAL PLATE
COL	COLUMN	PDF	POWDER DRIVEN FASTENER
CONC	CONCRETE	PLY	PLYWOOD
CONN	CONNECTION	PJP	PARTIAL JOINT PENETRATION
CONST	CONSTRUCTION	PQR	PROCEDURE QUALIFICATION REPORT
CONT	CONTINUOUS	PSF	POUNDS PER SQUARE FOOT
COORD	COORDINATE	PSI	POUNDS PER SQUARE INCH
CSK	COUNTERSINK	PT	POINT OR POST TENSION
		PTDF	PRESERVATIVE TREATED DOUGLAS FIR
DBL	DOUBLE	PV	PHOTO VOLTAIC
DCW	DEMAND CRITICAL WELD	PVC	POLYVINYL CHLORIDE
DET	DETAIL		
DF	DOUGLAS FIR	RAD or R	RADIUS
DIAG	DIAGONAL	RCP	REINF CONC PIPE
DN	DOWN	REINF	REINFORCED, REINFORCING
DO	DITTO	REQ'D	REQUIRED
DWG	DRAWING	REV	REVISION
		RS	ROUGH SAWN
(E)	EXISTING	RWD	REDWOOD
EA	EACH		
EF	EDGE FASTENING	S.A.D.	SEE ARCH. DRAWINGS
EL	ELEVATION	SCHED	SCHEDULE
ELECT	ELECTRICAL	SEC	SECTION
ELEV	ELEVATOR	SFRS	SEISMIC FORCE RESISTING SYSTEM
EN	EDGE NAILING	SHT	SHEET
EQ	EQUAL	SHTG	SHEATHING
EW	EACH WAY	SIM	SIMILAR
		SM	SHEETMETAL
FBC	FRAMED BEAM CONN	SMS	SHEET METAL SCREW
FIN	FINISH(ED)	SPEC(S)	SPECIFICATION(S)
FG	FINISHED GRADE	SQ	SQUARE
FDN	FOUNDATION	STAG	STAGGERED
FOC	FACE OF CONCRETE	STD	STANDARD
FOHC	FREE OF HEART CENTER	STL	STEEL
FOM	FACE OF MASONRY	STRUCT	STRUCTURAL
FOS	FACE OF STUD(S)	STS	SELF TAPPING SCREW
FS	FAR SIDE	SYM	SYMMETRICAL
FTG	FOOTING		
		T&B	TOP & BOTTOM
Ga	GAUGE	T&G	TONGUE AND GROOVE
GALV	GALVANIZED	TBR	TO BE REMOVED
GL	GLUED LAMINATED BEAM	TEMP	TEMPORARY
		TN	TOE NAIL
HD	HOLDOWN	T.O.	TOP OF
HDPE	HIGH DENSITY POLYETHYLENE	TOF	TOP OF FOOTING
HDR	HEADER	T.O.P.	TOP OF PLATE
HEX	HEXAGONAL	TOS	TOP OF SLAB OR STEEL
HGR	HANGER	T.O.W.	TOP OF WALL
HORIZ	HORIZONTAL	TRANS	TRANSVERSE
HS	HIGH STRENGTH	TYP	TYPICAL
HSB	HIGH STRENGTH BOLT		
HSS	HOLLOW STRUCT SECTION	UON	UNLESS OTHERWISE NOTED
H or HT	HEIGHT		
		VERT	VERTICAL
ID	INSIDE DIAMETER	VIF	VERIFY IN FIELD
INSP	INSPECTION/INSPECTOR		
INSUL	INSULATION	W/	WITH
		WF	WIDE FLANGE
JT	JOINT	WFRS	WIND FORCE RESISTING SYSTEM
		WP	WATERPROOF OR WORK POINT
		WPS	WELDING PROCEDURE SPECIFICATIONS
		WT	WEIGHT
		WWR	WELDED WIRE REINFORCEMENT

STRUCTURAL DRAWING INDEX

S0.1	GENERAL NOTES & BASIS OF DESIGN
S0.2	SPECIFICATIONS
S1.0	PARTIAL FOUNDATION AND ROOF FRAMING PLAN
S2.0	FOUNDATION DETAILS
S3.0	METAL STUD FRAMING DETAILS

REGISTERED PROFESSIONAL ENGINEER — DANIEL L. LAZARIN — No. S6835 — Exp. 9/30/27 — STRUCTURAL — STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REVISIONS 3/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT — ESTABLISHED 1902

NEW ADMIN OFFICE REMODEL

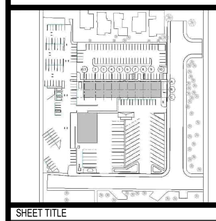
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
865 The Alameda
San Jose, California 95126
408-296-5515

IF THERE ARE ANY DIFFERENCES BETWEEN THE MOST CURRENT SIGNED DOCUMENTS AND EARLIER OR UNSIGNED VERSIONS OF THE DOCUMENTS, THE MOST CURRENT SIGNED DOCUMENTS SHALL GOVERN. BIGGS CARDOSA ASSOCIATES, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN THE ENGINEER OF RECORD FOR BIGGS CARDOSA ASSOCIATES, INC.

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

GENERAL NOTES & BASIS OF DESIGN

S0.1

CHECKED BY: MJL

SPECIFICATIONS

SECTION 03 10 00
CONCRETE FORMING AND ACCESSORIES

PART 2 - PRODUCTS

2.01 FORMWORK - GENERAL

A. Maximum deflection of facing materials reflected on concrete surfaces exposed to public view must be 1/240 of the span between structural members of the formwork.

B. Formed Construction and Contraction Joints

1. Locate and form construction joints that least impair strength of the structure and meet the requirements of "Construction Joints" Section 03 30 00 - Cast-in-Place Concrete.
2. Unless otherwise specified or permitted, locate and detail formed construction joints to the following requirements:
   a. Locate joints foundations and grade beams within the middle third of the distance between column and in walls and columns at the underside of slabs, beams, or girders and at the tops of footings or slabs; and
   b. Make joints perpendicular to the main reinforcement.
3. Provide keyways at all construction joints unless shown otherwise in the Contract Documents. Unless otherwise specified, longitudinal keyways indicated on the Contract Documents, must be a minimum of 1-1/2 in. deep in joints in walls and between walls and slabs or footings.
4. Provide construction and contraction joints where indicated on the Contract Documents. Submit for acceptance the location of construction and contraction joints differing from those indicated on the Contract Documents.

2.02 FORM MATERIALS

A. Form-facing materials: Materials for form faces in contact with concrete must meet the requirements of "Concrete Finishing" Section 03 30 00 - Cast-in-Place Concrete and the following requirements unless otherwise specified in Contract Documents.

1. For smooth-form finish, use plywood, tempered concrete-form-grade hardboard, metal, plastic, paper, or other acceptable materials capable of producing the desired finish for form-facing materials. Form-facing materials must produce a smooth, uniform texture on the concrete. Do not use form-facing materials with raised grain, torn surfaces, worn edges, dents, or other defects that will impair the texture of concrete surfaces. Facing materials must be supported with studs or other backing capable of maintaining deflections within the tolerances specified in Part 2.01.

2.03 FORMWORK ACCESSORIES

A. Use commercially manufactured accessories for formwork accessories that are partially or wholly embedded in concrete, including ties and hangers. Do not use nonfabricated wire form ties. Where indicated in the Contract Documents, use form ties with integral water barrier plates in walls or other acceptable positive water barriers.

2.04 FORMWORK RELEASE AGENT

A. Use commercially manufactured formwork release agents that prevent formwork absorption of moisture, prevent bond with concrete, and do not stain the concrete surfaces.

2.05 EXPANSION JOINT FILLER

A. Premolded expansion joint filler must conform to ASTM D994 or ASTM D1751.

2.06 FABRICATION AND MANUFACTURE

A. Formwork must be tight to prevent loss of mortar from concrete.

B. Place 3/4 inch chamfer strips in the corners of formwork to produce beveled edges on permanently exposed surfaces unless otherwise specified. Do not bevel reentrant corners or edges of formed joints of concrete unless specified in the Contract Documents.

C. Inspect formwork and remove deleterious material immediately before concrete is placed. Provide temporary openings where needed at the base of column and wall formwork to facilitate cleaning and inspection.

D. Fabricate form ties so ends or end fasteners can be removed with minimum spalling at the faces of concrete.

E. Locate waterstops in joints where indicated on Contract Documents. Use pieces of premolded waterstop with a maximum practicable length to create the minimum number of end joints. Make joints in waterstops in accordance with the manufacturer's recommendations. Ensure that joints develop effective watertightness equal to the continuous waterstop material, permanently develop not less than 50% of the strength of the parent section and permanently retain flexibility.

END OF SECTION 03 10 00
SECTION 03 20 00
CONCRETE REINFORCING

PART 2 - PRODUCTS

2.01 REINFORCING BARS

A. Reinforcing Steel:

1. Bars for reinforcement must conform to the requirements of ASTM A706-22a with Supplementary Requirement S1, Grade 60 deformed low-alloy steel bars.
2. Uncoated steel unless otherwise noted.

2.02 WIRE

A. All wire for concrete reinforcement must conform to ASTM A1064.

2.03 REINFORCEMENT ACCESSORIES

A. Chairs, Bolsters, Bar Supports, Spacers: Sized and shaped for adequate support of reinforcement during concrete placement. Reinforcement supports must conform to the requirements of ACI 301.

2.04 OTHER MATERIALS

A. All other materials, not specifically described by these specifications but required for complete and proper placement of reinforcement must be new, first quality of their respective kinds, and subject to the approval of the Architect/Engineer.

2.05 FABRICATION

A. Welding of reinforcement is permitted only with the approval of Engineer. Perform welding in accordance with AWS D1.4. Do not weld crossing bars (tack welds) for assembly of reinforcement, supports, or embedded items. After completing welds on galvanized or epoxy-coated reinforcement, repair coating damage with patching material conforming to ASTM A775.

END OF SECTION 03 20 00
SECTION 03 30 00
CAST-IN-PLACE CONCRETE

PART 2 - PRODUCTS

2.01 FORMWORK

A. Comply with requirements of Section 03 10 00.

2.02 REINFORCEMENT

A. Comply with requirements of Section 03 20 00.

2.03 CEMENTITIOUS MATERIALS

A. Portland Cement: ASTM C150, Type II or ASTM C595 Type IL with moderate (MS) or high (HS) sulfate resistance.

B. Fly Ash: ASTM C618, Class F.

1. Fly ash may substitute for portland cement up to a maximum of 25% of total cementitious materials by weight.
   a. Substitutions that combine fly ash and ground granulated blast-furnace slag are limited to a combined total of 50% of the total cementitious material by weight with fly ash no more than 25% of the total cementitious materials by weight.
   b. Reduce slag and fly ash substitution rates by at least 50% for cold weather concreting as defined in ACI 306.1.

C. Ground-granulated Blast-furnace Slag: ASTM C989 grades 100 or 120

1. Ground-granulated Blast-furnace Slag may substitute for portland cement up to a maximum of 50% of the total cementitious material by weight.

D. Use cementitious materials that are of the same brand and type and from the same plant of manufacture as the cementitious materials used in the concrete represented by the submitted field test records or used in the trial mixtures.

E. Color Additives: ASTM C979, synthetic or natural mineral-oxide pigments or liquid coloring admixtures, temperature stable and nonfading.

F. Fiber Reinforcement: Synthetic Fiber; fibrillated polypropylene fibers designed for use in concrete, complying with ASTM C1116, Type III, 1/2 inch to 1-1/2 inch in length.

2.04 AGGREGATES

A. Aggregates for hardrock concrete must conform to ASTM C33.

B. Lightweight Aggregate: ASTM C330.

C. Aggregates used for entire project must be obtained from the same sources and have the same size ranges as the aggregates used in the concrete represented by submitted historical data or used in trial mixtures.

2.05 WATER

A. Mixing Water for concrete must be clean and free from deleterious amounts of chlorides, acids, alkalis or organic materials.

2.06 CHEMICAL ADMIXTURES

A. Do not use chemicals that contain calcium chloride or will result in total soluble chloride ions in hardened concrete at ages from 28 to 42 days contributed from water, aggregates, cementitious materials, and admixtures in excess of 0.30 percent by weight of cement for reinforced concrete and 0.06 percent by weight of cement for prestressed concrete. Measure water-soluble chloride-ion content in accordance with ASTM C1218. Admixtures containing chloride salts must not be used where concrete is placed on metal deck. Calcium chloride or any admixture containing chloride ions must not be used in drilled piers.

B. Air Entrainment Admixture: ASTM C260.

1. Acceptable Products subject to compliance with requirements:
   a. Sika Aer; Sika Corporation.
   b. MB-VR or MB-AE; Master Builders.
   c. Darex AEA; W.R. Grace.

C. High Range Water Reducing and Retarding Admixture: ASTM C 494 Type G.

D. High Range Water Reducing Admixture (Super Plasticizer): ASTM C494 Type F.

1. Acceptable Products subjected to compliance with requirements:
   a. WRDA19; W.R. Grace..
   b. Sikament; Sika Chemical Corporation..
   c. Pozzolith 400; Master Builders..

E. Water Reducing and Retarding Admixture: ASTM C494 Type D.

1. Acceptable Products subjected to compliance with requirements:
   a. Pozzolith 300-R; Master Builders.
   b. Daratard; W.R. Grace.
   c. Plastiment; Sika Chemical Corporation.

F. Water Reducing Admixture: ASTM C494 Type A.

1. Acceptable Products subjected to compliance with requirements:
   a. Eucon WR-75; Euclid Chemical Company.

G. Admixtures used in concrete must be the same as those used in the concrete represented by the submitted field test records or used in the trial mixtures.

2.07 ACCESSORY MATERIALS

Underslab Vapor Retarder Sheeting: Thickness must be no less than 10 mil and comply with ASTM E1745, Class A stated by manufacturer as suitable for installation in contact with soil or granular fill under concrete slabs. Seal edges with vapor retarder manufacturer's recommended tape and adhesive. Install vapor retarder/barrier in accordance with manufacturer's instructions and ASTM E1643 including repair of all penetrations and punctures.

Accessory Products: Mastic adhesive or pressure-sensitive adhesive tape or vapor retarder manufacturer's recommended tape and adhesive.

1. Acceptable Products:
   a. Vapor Retarder
      1) 10 mil Stego Wrap; STEGO Industries.
      2) Moistop Ultra 10; Fortifiber Corp.
      3) Griffolyn 10 Mil Green; Griffolyn Co.
      4) Vapor Block 10; Raven Industries or approved equal.

B. Non-Shrink Grout:

1. ASTM C1107 Grade B or C, pre-mixed, high strength, Metallic or non-metallic flowable grout, which does not shrink as it cures. Water-soluble chloride ion content of grout must have less than 0.06 percent chloride ion by weight of cement when tested in accordance with ATM C1218.
   a. Minimum Compressive Strength at 7 Days: 5000 psi.
   b. Subject to compliance with requirements provide one of the following:
      1) Metallic:
      2) Non-metallic

C. Cast-In-Place Anchors:

1. Anchor Rods and Nuts: ASTM F1554 Grade 36 Class 2A (Grade 105 Class 2A where High Strength is noted) with matching finish ASTM A563 nuts. Rods embedded in concrete, grout or adhesive must be galvanized or non-lubricated unless noted otherwise. Embedded rods must be threaded full length unless noted otherwise. Rods, nuts and washers in contact with preservative-treated wood must be hot-dipped galvanized.

D. Waterproofing Paper: ASTM C171.

E. Liquid Membrane Curing Compound: ASTM C309 or ASTM C1315.

2.08 BONDING AND JOINTING PRODUCTS

A. Joint Filler: 1/2 inch thick unless noted on the drawings, with removable top section that will form 1/2 inch deep sealant pocket after removal.

2.09 CURING MATERIALS

A. Curing Compound, Naturally Dissipating: Clear, water-based, liquid membrane-forming compound, that dissipates within 3 to 5 weeks, complying with ASTM C309.

B. Curing and Sealing Compound, Low Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.

C. Curing and Sealing Compound, High Gloss: Liquid, membrane-forming, clear, non-yellowing acrylic; complying with ASTM C1315 Type 1 Class A.

D. Moisture-Retaining Sheet: ASTM C171.

2.10 CONCRETE MIX DESIGN

A. Admixtures: Where admixtures are used they must be added as recommended in ACI 211.1 for normal weight concrete and at rates recommended by manufacturer. Admixtures are subject to the Engineer's review.

B. Fiber Reinforcement: Add to mix at rate of 1.5 pounds per cubic yard, or as recommended by manufacturer for specific project conditions.

C. Normal Weight Concrete Mix Requirements:

1. Must be made with aggregates for hardrock concrete.
2. Minimum Compressive Strength, f'c, when tested in accordance with ASTM C39 at 28 days: As scheduled below.
3. Minimum Cementitious Material Content:
   a. For concrete (f'c = 3000 psi and greater) used in floors and slab-on-grades, cementitious material content must not be less than indicated in the following table:

Nominal maximum size of aggregate	Minimum cementitious material content, sacks

4. Maximum Water-Cement Ratio: As scheduled below. Significant volume of liquid admixtures should be considered as part of the mixing water.
5. Maximum Aggregate Size: Nominal maximum size of coarse aggregate must not exceed three-fourths of the minimum clear spacing between reinforcing bars, one-fifth of the narrowest dimension between sides of forms, or one-third of the thickness of slabs or toppings.

Concrete Class	Min. 28 day Compressive Strength, f'c	Maximum Water/Cementitious Material Ratio by Weight
Class A	3000 psi	0.55
Class B	2500 psi	0.60
Lean Concrete	300 psi	

D. Controlled Low Strength Material (CLSM) Mix Requirements:

1. Must be made with aggregates conforming to ASTM C33.
2. Compressive Strength tested in accordance with ASTM D4832: As scheduled above.
3. Maximum Water-Cement Ratio: Sufficient to produce a fluid workable mixture without segregation of the aggregate when placed.

E. Concrete Mix Designs: The aggregate and slump for each type of concrete, must be as follows:

oncrete Element	Class of Concrete	Max. Size Aggregate	Slump (inch) at point of discharge
Curbs and Slabs on Grade	A	1	**
Structural Backfill	Lean	1.5	6 min
Yard Concrete Walks & Curbs	B	3/4	**

** Determine the slump by ASTM C143 at the point of truck discharge. Slump must not exceed 3" for any concrete placement where top of surface slopes more than 2%. When an ASTM C1017 Type I or II plasticizing admixture or an ASTM C494 Type F or G high-range water-reducing admixture is used, concrete must have a slump of 2 to 4 in. before the admixture is added and a maximum slump of 8 in. at the point of truck discharge after the admixture is added unless otherwise specified.

F. Returned Plastic Concrete (RPC) may not be used for structural concrete.

2.11 MIXING

A. Use ready-mixed concrete complying with ASTM C94 and with the requirements of Contract Documents. Mix for a period of not less than ten (10) minutes; at least three (3) minutes of the mixing period must be immediately prior to discharging at the job.

B. CLSM must be placed in the work within 3 hours after introduction of the cement to the aggregates.

END OF SECTION 03 30 00
SECTION 03 90 00
POST-INSTALLED ANCHORING SYSTEMS

PART 2 - PRODUCTS

2.01 MATERIALS

A. Adhesive anchoring system

1. Adhesive anchoring system in concrete must be HILTI-HY 200 V3 (ESR-4878) or Simpson SET-3G (ESR-4057) or approved equal with a current ICC/IAPMO evaluation report.

B. Expansion anchors and screw anchors

1. Expansion anchors must be HILTI KWIK BOLT-TZ2 (ESR-4266), or approved equal with a current ICC/IAPMO evaluation report.
2. Screw anchors must be Simpson Titen HD (ESR-2713) or approved equal with a current ICC/IAPMO evaluation report.

END OF SECTION 03 90 00
SECTION 05 40 00
COLD FORMED METAL FRAMING

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Metal Framing, Connectors, and Accessories:

1. American Studco, Inc., Angeles Metal Systems, California Metal Systems, Inc., Consolidated Fabricators Corp., Design Shapes in Steel, Dietrich Industries, Inc., Knorr Steel Framing Systems, The Steel Network, Inc., Unimast, Inc., United Construction Supply, Western Metal Lath Co. or approved equal.

2.02 FRAMING MATERIALS

A. Base metal for all members and accessories: Unless otherwise noted, ASTM A1003 steel sheet, galvanized in accordance with ASTM A653 G60 coating.

1. Structural Grade 33 type H for 33 mil and 43 mil members.
2. Structural Grade 50 type H for 54 mil and thicker members.

B. Tracks: Unless otherwise noted, ASTM C955; Manufacturer's standard U-shaped (T type) steel track, unpunched, with straight flanges (unstiffened flanges).

1. Size: Match steel studs.
2. Gage: Match steel studs (54 mil minimum thickness).

C. Studs: Unless otherwise noted, ASTM C955; Manufacturer's standard C-shaped (S type) steel studs, punched with minimum 1-5/8 inch lipped flanges (stiffened flanges) unless noted otherwise on plans.

1. Gage and size: As indicated on the drawings.

D. Headers: Manufacturer's standard C-shapes (S type) used to from header beams, punched, with minimum 1-5/8 inch lipped flanges (stiffened flanges) unless noted otherwise on plans.

1. Gage and size: As indicated on the drawings.

E. Joists and Purlins: ASTM C955; Manufacturer's standard C-shaped (S type) steel studs, with minimum 1-5/8 inch lipped flanges (stiffened flanges) unless noted otherwise on plans.

1. Gage and size: As indicated on the drawings.

2.03 ACCESSORIES

A. Framing Connectors: Factory-made formed steel sheet, thickness determined for conditions encountered, finish to match framing components and factory punched holes.

B. Structural Steel Shapes and Clips: ASTM A36, zinc coated by the hot-dip process according to ASTM A123.

C. Bracing, Furring, Bridging: Formed steel sheet, thickness determined for conditions encountered; finish to match framing components.

D. Touch-Up Primer for Galvanized Surfaces: SSPC-Paint 20, with dry film containing a minimum of 94% zinc dust by content, complying with VOC limitations of authorities having jurisdiction.

2.04 FASTENERS

A. Self-Drilling, Self-Tapping Screws: ASTM C1513, Screws may be Grabber, Hilti, Simpson Strong-Tie, or approved equal with application and installation in accordance with the manufacturer's recommendations. For exterior use in a low-corrosivity environment, only Hilti S-MD KF, Simpson XE self-drilling screws or approved equal may be used. For more severe exposure, only Simpson XE self-drilling screws or approved equal may be used.

B. Bolts, Nuts and Washers: Hot dip galvanized per ASTM A153.

C. Power-Actuated Fastener (PAF): Hilti X-U fastener (ESR-2269) or approved equal for dry-interior use and Hilti X-CR (ESR-1663) or approved equal for exterior use. Install per current ICC/IAPMO report and Manufacturer's recommendations.

D. Welding and Electrodes: In conformance with AISI Manual, AWS D1.1 and AWS D1.3.

E. Slide Clips: Unless otherwise noted, Simpson Strong-Tie bypass or head clips, or approved eaqual, capable of accommodating 1/2 inch (upward and downward) vertical displacement and/or 1/2 inch lateral drift of structural roof or floor using slotted holes, screws and anti-friction bushings, while maintaining structural performance of framing. Products must have a valid ICC/ IAPMO evaluation report.

2.05 GROUT

A. As specified in Section 03 30 00.

2.06 FABRICATION

A. Fabricate cold-formed metal framing and accessories plumb, square, true to line, and with connections securely fastened, according to manufacturer's recommendations and ASTM C1007 requirements except where more stringent requirements are shown or specified.

1. Fabricate framing assemblies in jig templates.

B. Reinforce, stiffen, and brace framing assemblies to withstand handling, delivery, and erection stresses. Lift fabricated assemblies to prevent damage or distortion.

C. Fabrication Tolerances: Fabricate assemblies to a maximum allowable tolerance variation per ASTM C1007.

END OF SECTION 05 40 00
SECTION 31 40 00
BRACING, SHORING, AND UNDERPINNING

PART 2 - PRODUCTS

2.01 MATERIALS FOR SHORING AND BRACING

A. Materials for shoring and bracing must be undamaged, high quality materials.

2.02 CONCRETE FOR UNDERPINNING

A. Concrete for underpinning must meet the requirements of Section 03 30 00, "Cast-in-Place Concrete," of these specifications.

SEE PROJECT SPECIFICATIONS BINDER FOR COMPLETE STRUCTURAL SPECIFICATIONS. ONLY PART 2 PRODUCTS IS INCLUDED ON THIS SHEET FOR REFERENCE.

REGISTERED PROFESSIONAL ENGINEER
DANIEL L. LAZARIN
No. S-6435
Exp. 9/30/27
STRUCTURAL
STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REVISIONS 3/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

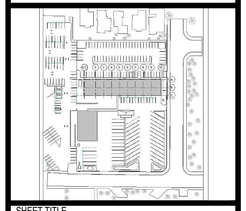
BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
865 The Alameda
San Jose, California 95126
408-295-5515

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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513

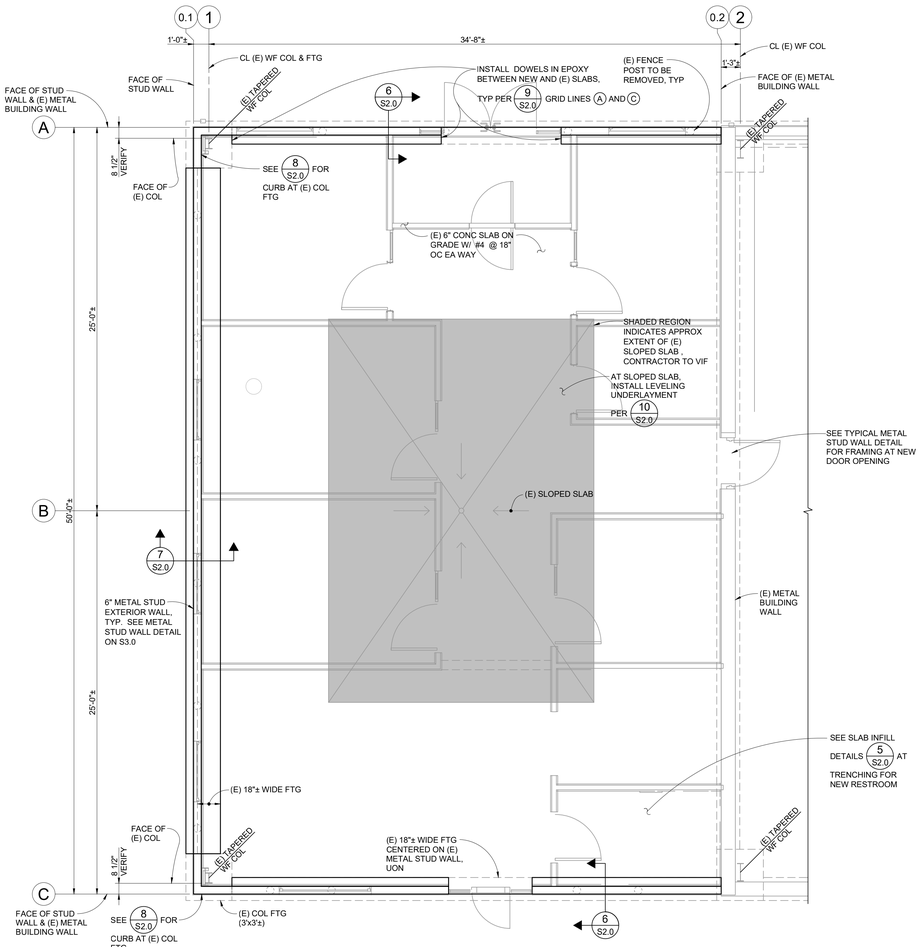


SHEET TITLE

SPECIFICATIONS

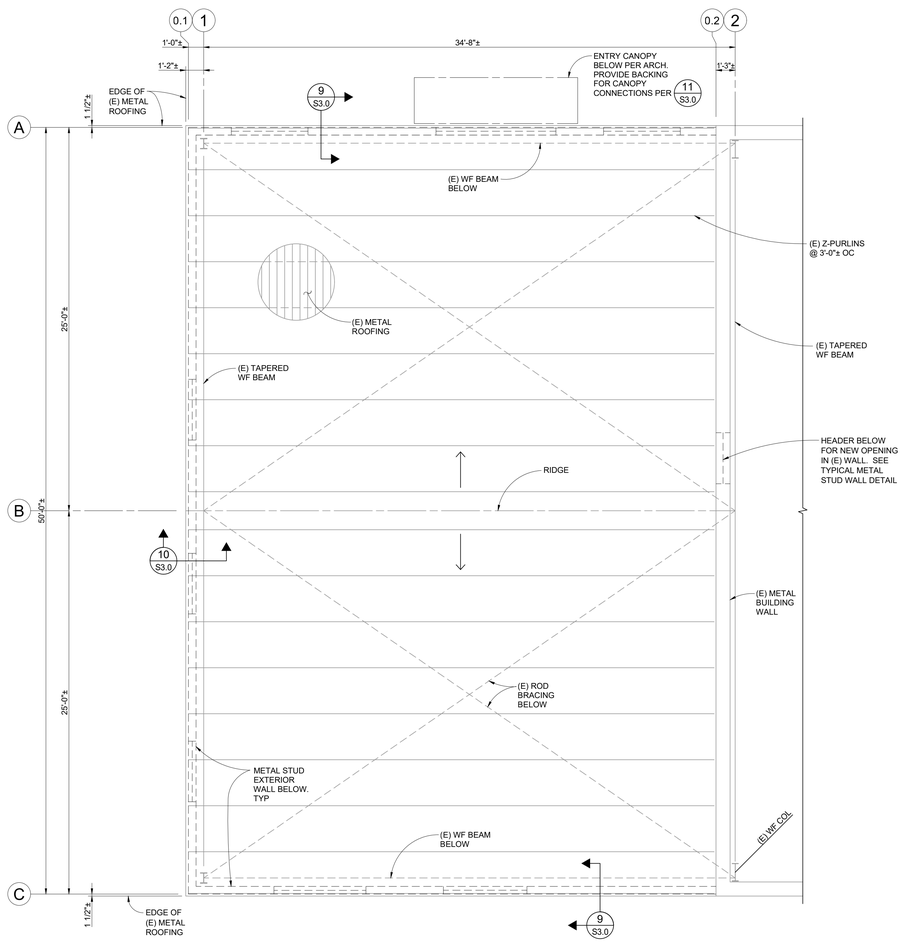
S0.2

CHECKED BY: MJL



PARTIAL FOUNDATION PLAN

1/4" = 1'-0"



LOW ROOF FRAMING PLAN

1/4" = 1'-0"

FOUNDATION NOTES:

1. TOP OF SLAB & GROUND FLOOR ELEVATION = 0'-0" TYP, UON.
2. ALL CONTRACTORS WILL BE RESPONSIBLE FOR THE VERIFICATION OF LOCATIONS OF ALL EXISTING UTILITIES IN THE FIELD. ALL CONTRACTOR'S SHALL CALL U.S.A., (CA. 1-800-227-2600) 48 HOURS BEFORE DIGGING. EXCAVATION FOR UNDER-GROUND FACILITIES SHALL NOT BE PERMITTED PRIOR TO UNDERGROUND SERVICE ALERT'S IDENTIFICATION OF EXISTING UTILITIES.
3. THE SIZE & LOCATION OF ALL FOOTING AND SLAB PENETRATIONS MUST BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO INSTALLATION
4. SEE "FOOTING AND CURB INTERSECTION" DETAIL FOR TYPICAL WALL & CURB INTERSECTION.
5. FOR TYPICAL HOOKS, BENDS & LAP OF REINFORCING, SEE "BAR HOOKS & BEND" DETAIL.
6. CONCRETE CONTRACTOR IS RESPONSIBLE FOR THE PLACEMENT OF ALL EMBEDDED ITEMS.
7. ANCHOR BOLTS AND BASEPLATES SHALL NOT BE WET SET.

1 S2.0 — SECTION OR DETAIL NUMBER. SHEET NUMBER WHERE SECTION OR DETAIL IS SHOWN.

INDICATES LIGHT GAGE METAL BEARING WALL ABOVE.

INDICATES ITEM TO BE REMOVED.

INDICATES DIRECTION OF SLOPE.

± — INDICATES AN APPROXIMATE DIMENSION OR ELEVATION. THE CONTRACTOR IS TO VERIFY INFORMATION AS REQUIRED TO COMPLETE CONSTRUCTION.

INDICATES CHANGE IN SLAB ELEVATION.

ROOF FRAMING NOTES:

1. CONTRACTOR TO VERIFY ALL DIMENSIONS & ELEVATIONS SHOWN WITH ARCH. DWGS AND INFORM ARCHITECT & STRUCTURAL ENGINEER OF ANY DISCREPANCY.
2. SEE ARCH. DWGS FOR SIZE & LOCATION OF ROOF PENETRATIONS.
3. NO MECH EQUIP, DUCTWORK, PIPING, ETC MUST BE HUNG FROM METAL ROOFING.

REGISTERED PROFESSIONAL ENGINEER
DANIEL L. LAZARIN
No. S6435
Exp. 9/30/27
STRUCTURAL
STATE OF CALIFORNIA

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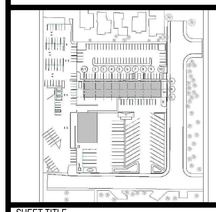
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NEW ADMIN OFFICE REMODEL

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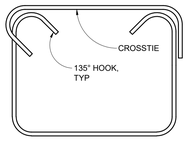
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PARTIAL FOUNDATION AND ROOF FRAMING PLAN

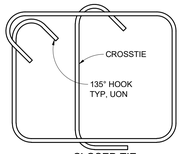
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(2025172S10) 2025037



STIRRUP



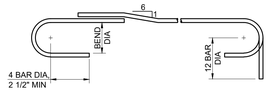
CLOSED TIE

CROSSTIE NOTES:

A. SIZE AND SPACING TO MATCH STIRRUPS OR TIES UON.

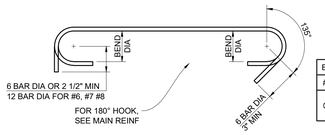
B. FOR JOISTS AND BEAMS: WHERE SLAB OCCURS ON BOTH SIDES OF MEMBER, ALTERNATE PLACEMENT OF 135° HOOK AT EACH CONSECUTIVE CROSSTIE. WHERE SLAB OCCURS ON ONE SIDE ONLY, PLACE THE 135° HOOK ON THE SIDE WITHOUT SLAB.

C. FOR COLUMNS: PLACE CROSSTIE AS SHOWN ON COLUMN SCHEDULE. ALTERNATE PLACEMENT OF HOOK FOR EACH CONSECUTIVE CROSSTIE.



MAIN REINFORCEMENT

BAR SIZE	BEND DIA
#3 TO #8	6 BAR DIA
#9 TO #11	8 BAR DIA
#14 TO #18	10 BAR DIA

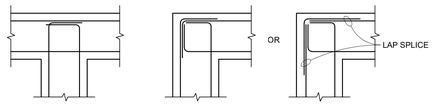


STIRRUPS AND TIES

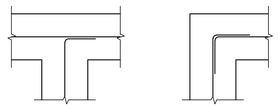
BAR SIZE	BEND DIA
#3 TO #5	4 BAR DIA
OTHERS	SAME AS FOR MAIN REINF

BAR HOOKS, BENDS, OFFSETS, STIRRUPS, AND TIES 1 S2.0

NO SCALE



REINFORCING EACH FACE ✳



REINFORCING IN CENTER ✳

✳ VERTICAL REINFORCING NOT SHOWN

NOTES:
1. d = BAR DIAMETER.
2. SEE BAR HOOKS & BENDS DETAIL FOR HOOK DIMENSIONS.

FOOTING AND CURB INTERSECTIONS 2 S2.0

NO SCALE

GRADE 60 LAP SPLICE SCHEDULE

BAR SIZE	f'c=3000 PSI		f'c=4000 PSI		f'c=5000 PSI	
	BOT BARS	OTHER BARS	BOT BARS	OTHER BARS	BOT BARS	OTHER BARS
#3	16"	18"	16"	16"	16"	16"
#4	18"	24"	16"	24"	16"	18"
#5	24"	30"	24"	30"	18"	24"
#6	36"	42"	30"	36"	27"	36"
#7	42"	54"	36"	48"	36"	42"
#8	54"	72"	48"	60"	42"	54"

NOTES:
1. LAP SPLICE LOCATIONS MUST BE APPROVED BY THE ENGINEER.
2. THE 'OTHER BARS' LAP SPLICE MUST BE USED FOR HORIZONTAL BARS WHERE THERE IS 12" OR MORE OF FRESH CONCRETE BELOW THE BAR. WALL HORIZONTAL BARS ARE 'OTHER BARS'. VERTICAL BARS ARE 'BOT BARS'.
3. WHEN TWO BARS OF DIFFERENT SIZES ARE SPLICED, USE THE SHORTER LAP LENGTH.
4. STAGGER LAP SPLICES OF ADJACENT BARS BY 24".
5. INCREASE LAP SPLICE LENGTH BY A FACTOR OF 1.3 FOR EPOXY COATED OTHER BARS, 1.5 FOR EPOXY COATED BOTTOM BARS, 1.33 FOR GRADE 80 BARS AND 1.33 FOR LIGHTWEIGHT CONCRETE.
6. MINIMUM CENTER-TO-CENTER OR 60 BAR SPACING: 3" FOR #6 AND SMALLER, 5" FOR #7 AND LARGER. INCREASE LAP LENGTH BY A FACTOR OF 1.7 FOR SMALLER SPACING, BUT NO LESS THAN 1 1/2" CLEAR DISTANCE FOR #8 AND SMALLER; AND 2 1/2" CLEAR DISTANCE FOR #9 AND LARGER. GR 80 MIN SPACING: 6".

LAP SPLICE SCHEDULE 3 S2.0

NO SCALE

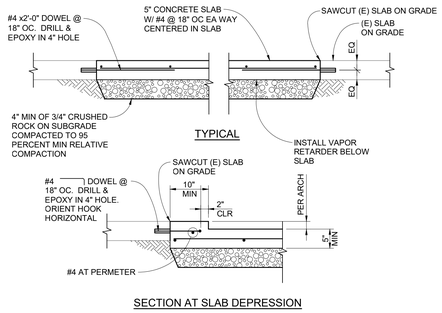
CONCRETE COVER SCHEDULE

ELEMENT	CLEAR COVER (INCHES)
CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#5 AND SMALLER	1½
#6 AND LARGER	2
CONCRETE NOT EXPOSED TO WEATHER OR IN CONTACT WITH GROUND:	
SLABS, WALLS & JOISTS:	
#11 AND SMALLER	¾
#14 AND #18	1½
BEAMS & COLUMNS	
PRIMARY REINFORCEMENT, TIES, STIRRUPS, & SPIRALS	1½
SHELLS & FOLDED PLATE MEMBERS	
#5 AND SMALLER	½
#6 AND LARGER	¾

NOTE:
1. COVERS NOTED SHALL BE USED UNLESS NOTED OTHERWISE ON THE CONTRACT DOCUMENTS.

CONCRETE COVER SCHEDULE 4 S2.0

NO SCALE

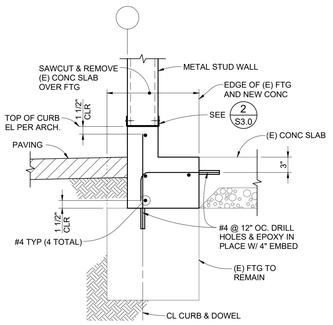


TYPICAL

SECTION AT SLAB DEPRESSION

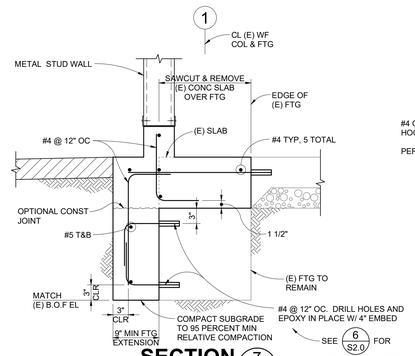
SLAB OR TRENCH INFILL 5 S2.0

NO SCALE



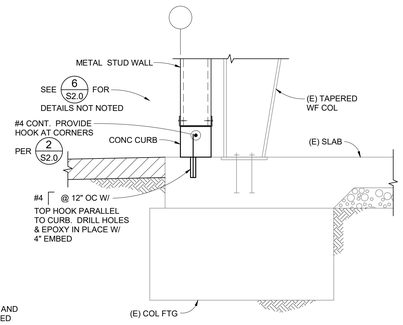
SECTION 6 S2.0

1" = 1'-0"



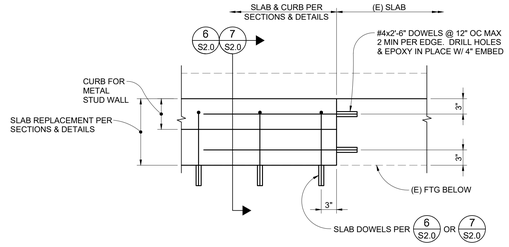
SECTION 7 S2.0

1" = 1'-0"



DETAIL 8 S2.0

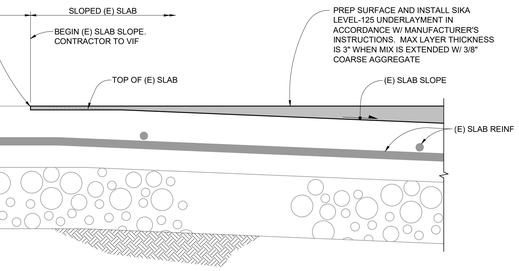
1" = 1'-0"



PLAN VIEW

DETAIL 9 S2.0

1" = 1'-0"



DETAIL 10 S2.0

3" = 1'-0"

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REVISIONS 3/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

BIGGS CARDOSA ASSOCIATES INC
STRUCTURAL ENGINEERS
865 The Alameda
San Jose, California 95126
408-296-5515

IF THERE ARE ANY DIFFERENCES BETWEEN THE MOST CURRENT SIGNED DOCUMENTS AND EARLIER OR UNSIGNED VERSIONS OF THE DOCUMENTS, THE MOST CURRENT SIGNED DOCUMENTS SHALL GOVERN. BIGGS CARDOSA ASSOCIATES, INC. IS NOT RESPONSIBLE FOR ANY MODIFICATIONS MADE TO OUR DOCUMENTS BY ANYONE OTHER THAN THE ENGINEER OF RECORD FOR BIGGS CARDOSA ASSOCIATES, INC.

Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513

SHEET TITLE

FOUNDATION DETAILS

S2.0

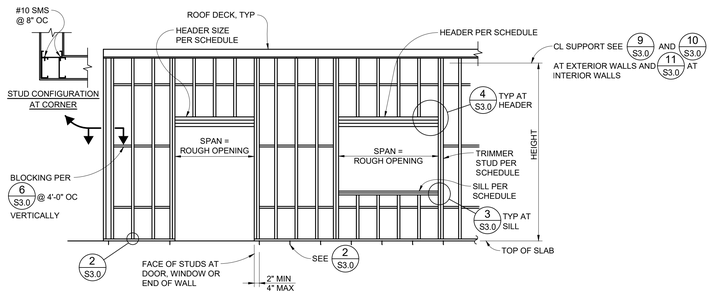
CHECKED BY: MJL

1. ALL SECTIONS SHALL BE GALVANIZED, MANUFACTURED IN ACCORDANCE WITH THE LATEST AISI SPECIFICATION.
2. BENT, KINKED, DISTORTED, OR DAMAGED SECTIONS MUST NOT BE USED.
3. STUDS MAY HAVE 1 1/2"x4" WEB CUT OUTS AT 24" OC, CUT OUTS MUST NOT BE CLOSER THAN 10" CLEAR FROM CLOSER THAN 10" CLEAR FROM SECTION ENDS. JOISTS OR TRACK USED FOR BEAMS, GIRDERS OR HEADERS MUST BE UN-PUNCHED WEBS, UNLESS NOTED OTHERWISE.
4. SECTION PROPERTIES ARE BASED UPON THE "STEEL STUD MANUFACTURER'S ASSOCIATION" (SSMA) CATALOG OF PARTICIPATING PRODUCERS, ICBO ER-4943-P SECTION SIZES ARE DENOTED THUS:

600 S 162 - 54
- MATERIAL THICKNESS IN 1/1000 INCH (33 = 20Ga, 43 = 18Ga, 54 = 16Ga, 68 = 14Ga, 97 = 12Ga)
- FLANGE WIDTH IN 1/100 INCH (162 = 1.625")
- SECTION TYPE (S = C-STUD/JOIST, T=TRACK, U = U-CHANNEL, F = FURRING CHANNEL)
- MEMBER DEPTH IN 1/100 INCH (600 = 6") ALL MEMBERS 16 Ga OR HEAVIER MUST BE 50 ksi.

ALL MEMBERS 18 Ga OR LIGHTER MUST BE 33 ksi. ALL OTHER MEMBERS, CLIPS, AND CONNECTORS MUST BE 50 ksi.

5. FABRICATE & INSTALL COLD-FORMED METAL FRAMING AND ACCESSORIES PLUMB, SQUARE, TRUE TO LINE, AND WITH CONNECTIONS SECURELY FASTENED.
   - A. CUT FRAMING MEMBERS BY SAWING OR SHEARING; DO NOT TORCH CUT.
   - B. FASTEN COLD-FORMED METAL FRAMING MEMBERS BY SCREW FASTENING OR WELDING. WIRE TYING OF FRAMING MEMBERS IS NOT PERMITTED.
     1. COMPLY WITH AWS REQUIREMENTS AND PROCEDURES FOR WELDING APPEARANCE AND QUALITY OF WELDS, AND METHODS USED IN CORRECTING WELDING WORK. ALL WELDING MUST CONFORM TO THE LATEST AISI AND AWS SPECIFICATIONS. USE E60XX ELECTRODE.
     2. SCREWS JOINING MEMBERS MUST HAVE AT LEAST 3 EXPOSED SCREW THREADS. FASTENERS MUST BE SELF-DRILLING SCREWS, TYPICAL, UNLESS NOTED OTHERWISE. MINIMUM SCREW EDGE DISTANCE MUST BE 1/2" AND MINIMUM CENTER TO CENTER SPACING MUST BE 3/4".
6. REINFORCE, STIFFEN, AND BRACE FRAMING ASSEMBLIES TO WITHSTAND HANDLING, DELIVERY, AND ERECTION \STRESSES. LIFT FABRICATED ASSEMBLIES TO PREVENT DAMAGE OR DISTORTION.
7. USE HILTI X-U PAF AT LIGHT GAGE TO STEEL ATTACHMENT WHERE POWDER DRIVEN FASTENERS ARE SPECIFIED ON PLANS, DETAILS & NOTES.
8. INSTALL FRAMING MEMBERS IN ONE-PIECE LENGTHS, UNLESS SPLICE CONNECTIONS ARE INDICATED FOR TRACK OR TENSION MEMBERS.
9. INSTALL COLD-FORMED METAL FRAMING TO A MAXIMUM ALLOWABLE TOLERANCE VARIATION FROM PLUMB, LEVEL, AND TRUE TO LINE OF 1/8" IN 10'-0".
   - A. SPACE INDIVIDUAL FRAMING MEMBERS NO MORE THAN 1/8"± FROM PLAN LOCATION. CUMULATIVE ERROR MUST NOT EXCEED MIN FASTENING REQUIREMENTS OF SHEATHING OR OTHER FINISHING MATERIAL.
10. SET STUDS PLUMB, EXCEPT AS REQUIRED FOR DIAGONAL BRACING FOR NONPLUMB WALLS OR WARPED SURFACES.
11. LOCATE ALL STUD WALLS & SOFFITS PER ARCHITECTURAL DRAWINGS.
12. SEE ARCHITECTURAL DRAWINGS FOR SOFFIT SIZES AND LOCATIONS.



STUD WALL SCHEDULE							
WALL	STUD SIZE AND SPACING	TOP AND BOTTOM TRACKS	SPAN	MAX HEIGHT	JAMB/TRIMMER	HEADER	SILL
6" WALL	600S162-54 @ 16" OC	54 MIL W/ 1 1/2" FLANGE WIDTH	≤ 4'-0"	17'-0"	2-600S162-54	2-600S162-54 W/ 2-600T150-54	2-600S162-54
6" WALL	600S162-54 @ 16" OC	54 MIL W/ 1 1/2" FLANGE WIDTH	≤ 8'-0"	17'-0"	2-600S162-54	2-800S162-68 W/ 2-600T150-68	2-600S162-54
3 5/8" WALL	362S162-54 @ 16" OC	54 MIL W/ 1 1/2" FLANGE WIDTH	≤ 6'-0"	17'-0"	2-362S162-54	2-600S162-54 W/ 2-362T150-54	2-362S162-54

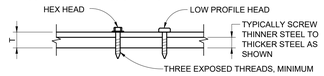
NOTES:
1. SEE 4 S3.0 AND 5 S3.0 FOR HEADER DETAILS.
2. STUDS IN BOX SECTIONS ORIENTED FLAT.
3. PROVIDE HEADERS, TRIMMERS AND SILLS PER SCHEDULE AT ALL INTERIOR STUD WALLS. SEE ARCHITECTURAL DRAWINGS FOR TYPICAL INTERIOR STUD SIZES.

TYPICAL METAL STUD WALL
1/4" = 1'-0"

GAUGE METAL THICKNESS		
MATERIAL THICKNESS (MILS)	GAUGE	DESIGN THICKNESS (INCH)
18	25	0.0188
27	22	0.0283
33	20	0.0346
43	18	0.0451
54	16	0.0566
68	14	0.0713
97	12	0.1017

METAL TO METAL FASTENER SIZE	
COMBINED METAL THICKNESS 'T'	SCREW TYPE
T < 12 Ga	#8 W/ #2 POINT
12 Ga < T < 0.175"	#10 W/ #3 POINT
0.175" < T < 1/4"	#12 W/ #4 POINT
1/4" ≤ T < 1/2"	#12 W/ #5 POINT

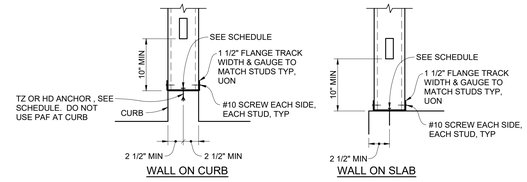
NOTE:
1. FASTENERS: GRABBER, HILTI OR SIMPSON STRONG-TIE BRAND
2. SCREWS EXPOSED TO MOISTURE MUST BE RATED FOR SUCH CONDITION PER AN ICC OR IAPMO EVALUATION REPORT



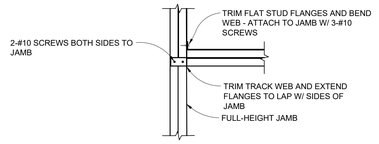
FASTENER SCHEDULE 1 S3.0
1" = 1'-0"

TRACK ANCHOR SCHEDULE	
INTERIOR PARTITION WALL	EXTERIOR WALLS
0.145" DIA x 1 1/4" EMBED PAF @ 16" OC	3/8" DIA x 2" EMBED HILTI KWIK BOLT TZ OR 3/8" DIA x 2-1/2" SIMPSON TITEN HD @ 16" OC

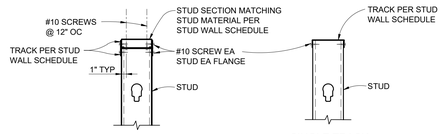
NOTES:
1. LOCATE 2" MIN - 4" MAX FROM EACH END OF TRACK.
2. WHERE CURB WIDTH IS LESS THAN 5", USE 3/8" DIA x 8" EMBED CAST-IN-PLACE HEADED ANCHOR BOLTS @ 32" OC. LOCATE BOLTS AT CENTER OF CURB. CURB WIDTH SHALL BE 4" MINIMUM. STUDS LESS THAN 4" WIDE MUST NOT BE SUPPORTED ON CURB UNLESS CURB IS 4" WIDE (MIN) AND BOLTS ARE CENTERED ON CURB.



BOTTOM TRACK CONNECTION 2 S3.0
NO SCALE



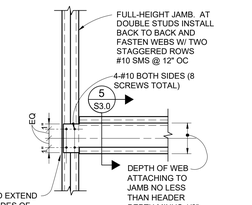
SILL TO JAMB



TWO TRACK SILL SECTION

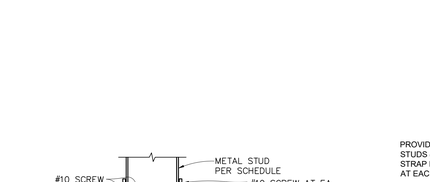
SINGLE TRACK SILL SECTION

STUD WALL SILL DETAIL 3 S3.0
1" = 1'-0"



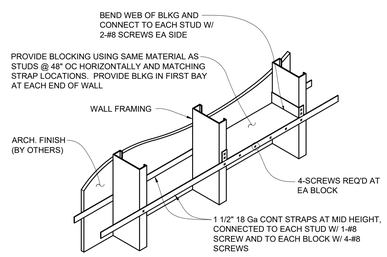
DOUBLE HEADER

STUD WALL HEADER DETAIL 4 S3.0
1" = 1'-0"

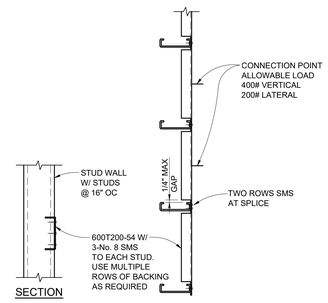


TYPICAL HEADER SECTION

BOX HEADER SECTION 5 S3.0
1" = 1'-0"

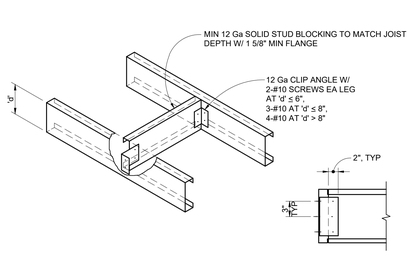


STRAP AND BLOCKING DETAILS 6 S3.0
1" = 1'-0"

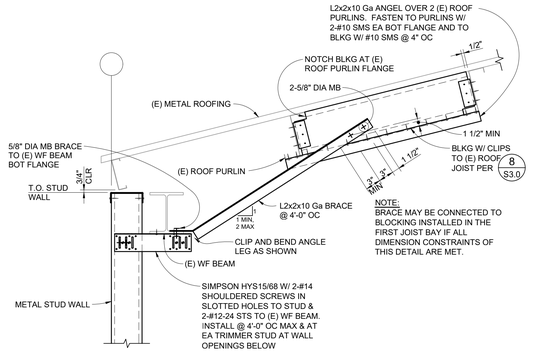


SECTION

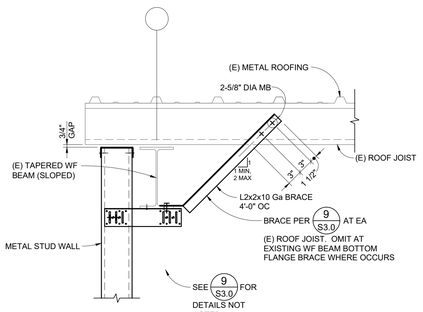
TYPICAL BACKING DETAIL 7 S3.0
1" = 1'-0"



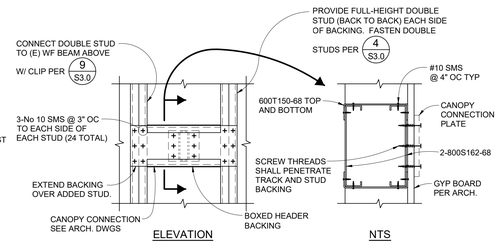
JOIST/RAFTER SOLID BLOCKING 8 S3.0
NO SCALE



DETAIL 9 S3.0
1" = 1'-0"



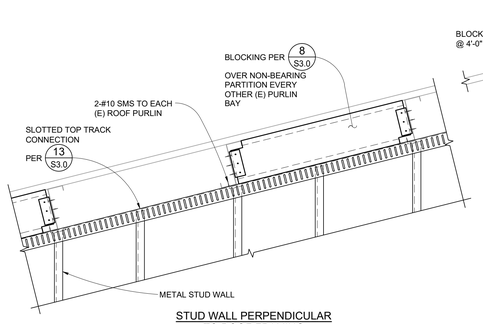
SECTION 10 S3.0
1" = 1'-0"



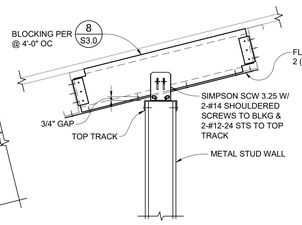
ELEVATION NTS

NOTE:
WHERE CANOPY CONNECTION ATTACHES TO HEADER, OMIT BACKING AND FASTEN DIRECTLY TO HEADER.

CANOPY BACKING DETAIL 11 S3.0
1" = 1'-0"

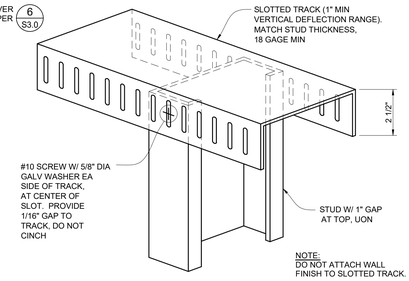


STUD WALL PERPENDICULAR TO ROOF FRAMING



STUD WALL PARALLEL TO ROOF FRAMING

INTERIOR NON-BEARING PARTITION TOP CONNECTION 12 S3.0
1" = 1'-0"



SLOTTED TOP TRACK CONNECTION FOR NON-BEARING WALLS 13 S3.0
3" = 1'-0"

REGISTERED PROFESSIONAL ENGINEER DANIEL L. LAZAMAN No. S6635 Exp. 9/30/27 STRUCTURAL STATE OF CALIFORNIA

REVISION	DESCRIPTION
1	ADDENDUM #1 DISTRICT REVISIONS 3/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

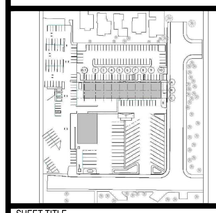
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Project Number

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

METAL STUD FRAMING DETAILS

S3.0

CHECKED BY: MJL

(2025172S30) 2025172

Autodesk Docs://Small Admin Office Remodel/LIBERTY UNION SCHOOL DISTRICT _NEW OFFICE.rvt

MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC CHAPTER 16 AND ASCE 7-22 CHAPTER 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. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND THE DSA DISTRICT STRUCTURAL ENGINEER. 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 7-22 SECTION 13.3 AS DEFINED IN ASCE 7-22 SECTION 13.6.5.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1616A.1.24, 1616A.1.25, AND 1616A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEMS ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON PRE APPROVED INSTALLATION GUIDE (e.g. SMACNA OR OSHPD OPM), 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 SYSTEM. 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	
X	X	☐	☐	OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
MP	MD	PP	E	
X	X	☐	☐	OPTION 2: SHALL COMPLY WITH THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT APPLICABLE SEISMIC HAZARD LEVEL AND CONNECTIONS FOR THE PROJECT CONDITIONS

LIST OF APPLICABLE CODES

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

APPLICABLE STANDARDS

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

MECHANICAL SHEET LIST

M0.1	MECHANICAL SCHEDULES AND LEGENDS
M1.1	FIRST FLOOR MECHANICAL PLANS
M1.2	FIRST FLOOR REFRIGERANT PIPING PLANS
M4.1	MECHANICAL DETAILS
M5.1	MECHANICAL CONTROLS
T24.1	ENERGY CODE COMPLIANCE
T24.2	ENERGY CODE COMPLIANCE
T24.3	ENERGY CODE COMPLIANCE

SPLIT SYSTEM VRV AIR CONDITIONING UNIT SCHEDULE

LOCATION	FAN COIL MARK	VRV MARK	MANUF. MODEL	AIR FLOW (SPEED)	VENT. OSA (REQ.)	COOLING (BTUH) SENS.	COOLING (BTUH) TOTAL	ESP "W.C.	HEAT BTUH	IEER SEER	COP	ELECTRICAL (FAN COIL) Volts	Ø	MCA	MOCP	ELECTRICAL (VRF CONDENSER) Volts	Ø	MCA	MOCP	RFS	FILTER	FC WT (LBS)	VRV WT (LBS)	DX PIPING SIZES	FAN COIL DETAIL	VRV DETAIL
(N) NINA'S OFFICE #110	FC 1	HP 1	MITSUBISHI PLFY-P08NFMU-ER1 PURY-EP72TNU-A1	280 CFM (MED)	40 CFM	6,224 FAN COIL	8,016 FAN COIL	N/A	8,995 FAN COIL 79,954 VRF HP	22.85 12	4.090	208v/ 230v	1	0.28	15	208v/ 230v	1	33 30	50 50	35 30	INTEGRAL PP HC FABRIC	28.9	519	1/4" LIQ. 1/2" GAS	A M4.1	C M4.1
(N) OFFICE #109	FC 2		MITSUBISHI PLFY-P08NFMU-ER1 (PURY-EP72TNU-A1)	280 CFM (MED)	40 CFM	6,224 FAN COIL	8,016 FAN COIL	N/A	8,995 FAN COIL	22.85 12	4.090	208v/ 230v	1	0.28	15	208v/ 230v	1	33 30	50 50	35 30	INTEGRAL PP HC FABRIC	28.9		1/4" LIQ. 1/2" GAS	A M4.1	C M4.1
(N) PAUL'S OFFICE #108	FC 3		MITSUBISHI PLFY-P08NFMU-ER1 (PURY-EP72TNU-A1)	280 CFM (MED)	40 CFM	6,224 FAN COIL	8,016 FAN COIL	N/A	8,995 FAN COIL	22.85 12	4.090	208v/ 230v	1	0.28	15	208v/ 230v	1	33 30	50 50	35 30	INTEGRAL PP HC FABRIC	28.9		1/4" LIQ. 1/2" GAS	A M4.1	C M4.1
(N) RECORDS BOND MNGR. #104 - #107	FC 4		MITSUBISHI PEFY-P18NMAU-E5 (PURY-EP72TNU-A1)	740 CFM (MED)	125 CFM	16,970 FAN COIL	18,038 FAN COIL	0.60"	19,988 FAN COIL	22.85 12	4.090	208v/ 230v	1	2.88	15	208v/ 230v	1	33 30	50 50	35 30	MERV 13 14x20x2 14x14x2	91 W/MIX BOX		1/4" LIQ. 1/2" GAS	B M4.1	C M4.1
(N)RECEPTION (N) OFFICE #101 - #102	FC 5		MITSUBISHI PEFY-P24NMAU-E4 (PURY-EP72TNU-A1)	740 CFM (MED)	75 CFM (320 CFM TOTAL)	19,233 FAN COIL	24,050 FAN COIL	0.60"	26,984 FAN COIL	22.85 12	4.090	208v/ 230v	1	2.88	15	208v/ 230v	1	33 30	50 50	35 30	MERV 13 14x20x2 14x20x2	96 W/MIX BOX		3/8" LIQ. 5/8" GAS	B M4.1	C M4.1
(N) DATA ROOM #103	FC 5	⚠1	MITSUBISHI PKFY-P08NLMU-ER1 (PURY-EP72TNU-A1)	191 CFM (MED)	N/A	5,502 FAN COIL	7,847 FAN COIL	0.60"	8,683 FAN COIL	22.85 12	4.090	208v/ 230v	1	0.24	15	208v/ 230v	1	33 30	50 50	35 30	INTEGRAL CARBON FILTER	25 LBS.		1/4" LIQ. 1/2" GAS	2 M1.2	C M4.1

REMARKS:
1. PROVIDE WITH ALL NECESSARY REFRIGERATION PIPING & APPURTENANCES; R410A REFRIGERANT
2. PROVIDE WITH AUXILIARY CONDENSATE PUMPS FOR FAN COILS AS REQUIRED.
3. PROVIDE WITH UNIVERSAL THERMOSTAT INTERFACE MDL. PAC-US445CN-1 WITH BACNET INTERFACE AND CENTRALIZED CONTROLLER MDL. AE-200A.
4. PROVIDE WITH MERV 13 FILTERS IN FILTER RACK FOR FAN COILS FC-4 (FBM2-2-A) AND FC-5 (FBM2-3-A). PROVIDE FILTER SERVICE ACCESS AS PER MANUF. REQUIREMENTS.
5. SINCLE BC BRANCH CONTROLLER BC-1 MDL. CMB-P106NU-J2 FOR FC-1 THRU FC-5 PIPING REQUIRED FOR HP-1. 208v/230v-1Ø POWER REQUIRED AT 0.55A/0.65A MCA, 20 MOCP. 64 LBS. NET WEIGHT. PROVIDE 3/4" FIELD DRAIN PIPING.
6. PROVIDE 5/8" LIQUID AND 3/4" GAS REFRIGERANT LINE SETS FROM HP-1 TO BC-1, WITH BALL VALVES (#BV38BBSI AND #BV58BBSI).
7. PROVIDE ALL FAN COILS WITH BUILT-IN CONDENSATE LIFT PUMPS PER MANUFACTURER (FAN COIL FC-6 WITH GOBI II) , WITH 2.0 - 2.5 FT. LIFT.

CERTIFICATE OF ACCEPTANCE

Certificate of Acceptance. For all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person in charge of the acceptance testing, who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the applicable scope of system design, or construction, or installation of features, materials, components, or manufactured devices regulated by Part 6 or the Appliance Efficiency Regulations (*responsible person*), shall sign and submit all applicable Certificate of Acceptance documentation in accordance with Section 10-103(a)4 and Reference Nonresidential Appendix NA7 to certify conformance with Part 6. If more than one person has responsibility for the acceptance testing, each person shall sign and submit the Certificate of Acceptance documentation applicable to the portion of the construction or installation, for which they are responsible; alternatively, the person with chief responsibility for the system design, construction or installation, shall sign and submit the Certificate of Acceptance documentation for the entire construction or installation scope of work for the project. Subject to the requirements of Section 10-103(a)4, persons who prepare Certificate of Acceptance documentation (*documentation authors*) shall sign a declaration statement on the documents they prepare to certify the information provided on the documentation is accurate and complete. Persons who perform acceptance test procedures in accordance with the specifications in Reference Nonresidential Appendix NA7, and report the results of the acceptance tests on the Certificate of Acceptance (*field technicians*) shall sign a declaration statement on the documents they submit to certify the information provided on the documentation is true and correct. In accordance with applicable requirements of Section 10-103(a)4, the signatures provided by *responsible persons*, *field technicians*, and *documentation authors* shall be original signatures on paper documents or electronic signatures on electronic documents conforming to the electronic signature specifications in Reference Joint Appendix JA7.

A. All Certificate of Acceptance documentation shall conform to a format and informational order and content approved by the Energy Commission.

These documents shall:

i. Identify the features, materials, components, manufactured devices, and system performance diagnostic results required to demonstrate compliance with the acceptance requirements to which the applicant must conform as indicated in the plans and specifications submitted under Section 10-103(a)2, and as specified in Reference Nonresidential Appendix NA7.

ii. State the number of the building permit under which the construction or installation was performed.

iii. Display the unique registration number assigned by the data registry if Section 10-103(a)4 requires the document to be registered.

iv. Include a declaration statement indicating that the features, materials, components or manufactured devices identified on the Certificate of Acceptance conform to the applicable acceptance requirements as indicated in the plans and specifications submitted under Section 10-103(a), and with applicable acceptance requirements and procedures specified in the Reference Nonresidential Appendix NA7, and confirms that Certificate(s) of Installation described in Section 10-103(a)3 has been completed and is posted or made available with the building permit(s) issued for the building, or made available for viewing on an approved data registry.

v. Be signed by the *documentation author* to certify the documentation is accurate and complete. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

vi. Be signed by the *field technician* who performed the acceptance test procedures and reported the results on the Certificate of Acceptance. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

vii. Be signed by the *responsible person* in charge of the acceptance testing who is eligible under Division 3 of the Business and Professions Code to accept responsibility for the system design, construction or installation in the applicable classification for the scope of work identified on the Certificate of Acceptance, or shall be signed by their authorized representative. When document registration is required by Section 10-103(a)4, the signature shall be an electronic signature on an electronic document in accordance with the electronic signature specifications in Reference Joint Appendix JA7.

Contingent upon approval of data registry(s) by the Commission, for all nonresidential buildings, high-rise residential buildings, and hotels and motels, when designated to allow use of an occupancy group or type regulated by Part 6 the person(s) responsible for the Certificate(s) of Acceptance shall submit the Certificate(s) and their associated Compliance Registration Packages for registration and retention to a data registry approved by the Commission, excluding all Certificates of Acceptance recorded by an acceptance test technician certification provider (10-103.1 and 10-103.2). The submittals to the approved data registry shall be made electronically in accordance with the specifications in Reference Joint Appendix JA7.

Contingent upon availability and approval of an electronic document repository by the Executive Director, Certificate of Acceptance documents and their associated Compliance Registration Packages that are registered and retained by an approved data registry shall also be automatically transmitted by the data registry, to an electronic document repository for retention in accordance with the specifications in Reference Joint Appendix JA7.

A copy of the Certificate(s) of Acceptance shall be posted, or made available with the building permit(s) issued for the building, and shall be made available to the enforcement agency for all applicable inspections. If construction on any portion of the building subject to Part 6 will be impossible to inspect because of subsequent construction, the enforcement agency may require the Certificate(s) of Acceptance to be posted upon completion of that portion. A copy of the Certificate(s) of Acceptance shall be included with the documentation the builder provides to the building owner at occupancy as specified in Section 10-103(b).

EXHAUST FAN SCHEDULE

MARK	MANUF. MODEL	AIRFLOW (CFM)	ESP (" WC)	HP (WATTS)	RPM	Volts	Ø	FLA	WATTS	MOCP	LOCATION SERVICE TYPE	SONES (NC)	WT (LBS)	DETAIL
EF 1	GREENHECK CSP-A125 (CABINET)	120	0.125	(22.4)	980	120	1	0.19	22.1	15	NEW UNISEX #103	1.1	16	D M-4.1

REMARKS:
1. PROVIDE CONTROL INTERLOCK WITH LIGHTING/OCCUPANCY SENSOR.
2. PROVIDE WITH VARI-GREEN MOTORS ON ALL APPLICABLE MODELS.
3. PROVIDE WITH MDL. WC-8x8 RECTANGULAR HOODED WALL CAP. COORDINATE WITH ARCHITECTURAL DRAWINGS.

AIR TERMINAL SCHEDULE

MANUFACTURER: TITUS

CD		CEILING SUPPLY DIFFUSER	MODEL MCD-AA. COMPLETE WITH LAY-IN TILE BORDER TYPE 3, OPPOSED BLADE DAMPER AND REMOVABLE MODULAR CORES
CR		CEILING RETURN GRILLE	MODEL 50F. 1/2" x 1/2" x 1/2" ALUMINUM CORE WITH COMPLETE ALUMINUM LAY-IN TILE BORDER TYPE 3.
CE		CEILING EXHAUST GRILLE	MODEL 50F. 1/2" x 1/2" x 1/2" ALUMINUM CORE WITH COMPLETE ALUMINUM LAY-IN TILE BORDER TYPE 3.

NOTES:
1. PROVIDE BACK BOX FULL SIZE OF LISTED DIFFUSER/REGISTER NECK, INTERIOR BLACK.
2. SIZE (NECK) TYPE
CFM (THROW-SEE PLANS)

MECHANICAL LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
1 / P-1		DRAWING NUMBER
A / P-1		DETAIL NUMBER / DRAWING NUMBER
WH / 1		EQUIPMENT IDENTIFICATION
	SA OR OA	SECTION THRU SUPPLY AIR OR OUTSIDE AIR DUCT
	RA OR EA	SECTION THRU RETURN AIR OR EXHAUST AIR DUCT
		ROUND DUCT DOWN
DN	DN OR UP	SLOPE DUCT DOWN OR UP IN DIRECTION OF FLOW
	L	ACOUSTICAL LINING
	FC	FLEXIBLE DUCT CONNECTION
	VD	VOLUME DAMPER
	TV	TURNING VANES
		FLEXIBLE DUCT
		45° ROUND DUCT TAKE-OFF
		45° RECTANGULAR DUCT TAKE-OFF
		90° RADIUS TURN - ROUND OR RECTANGULAR DUCT
		SQUARE TO ROUND DUCT TRANSITION
		DUCT TRANSITION
		RECTANGULAR DUCT 90° SPLIT
T		THERMOSTAT (48" A.F.F. FROM TOP OF UNIT)
CO2		CARBON DIOXIDE SENSOR (48" A.F.F.)
M		MOTORIZED DAMPER + ACTUATOR
(E) FD		FIRE DAMPER - 1-1/2 HR. RATED, CURTAIN (EXISTING TO REMAIN)
	AP	ACCESS PANEL
	POC, POD	POINT OF CONNECTION, DISCONNECT

REGISTERED PROFESSIONAL ENGINEER — BRYAN W. BIRKEMEIER — No. 35927 — EXP. 12-31-26 — STATE OF CALIFORNIA — MECHANICAL

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REVISION	DESCRIPTION
⚠1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

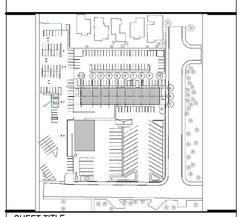
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



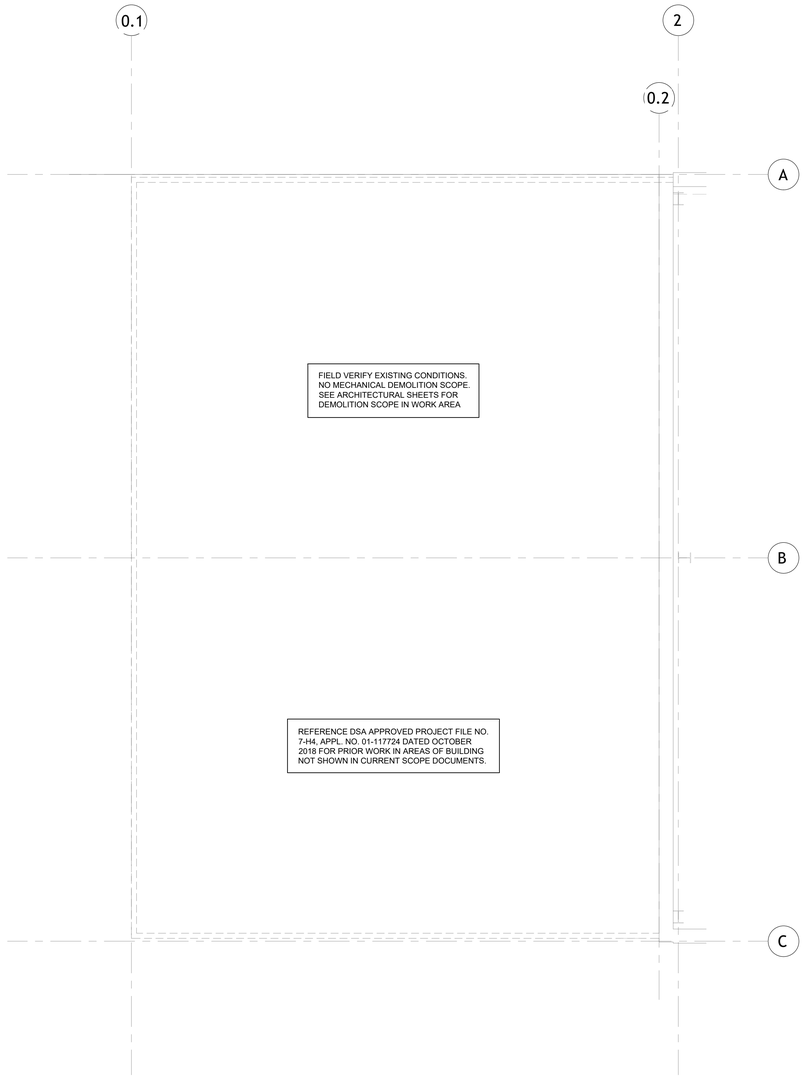
SHEET TITLE

MECHANICAL SCHEDULES & LEGENDS

M-0.1

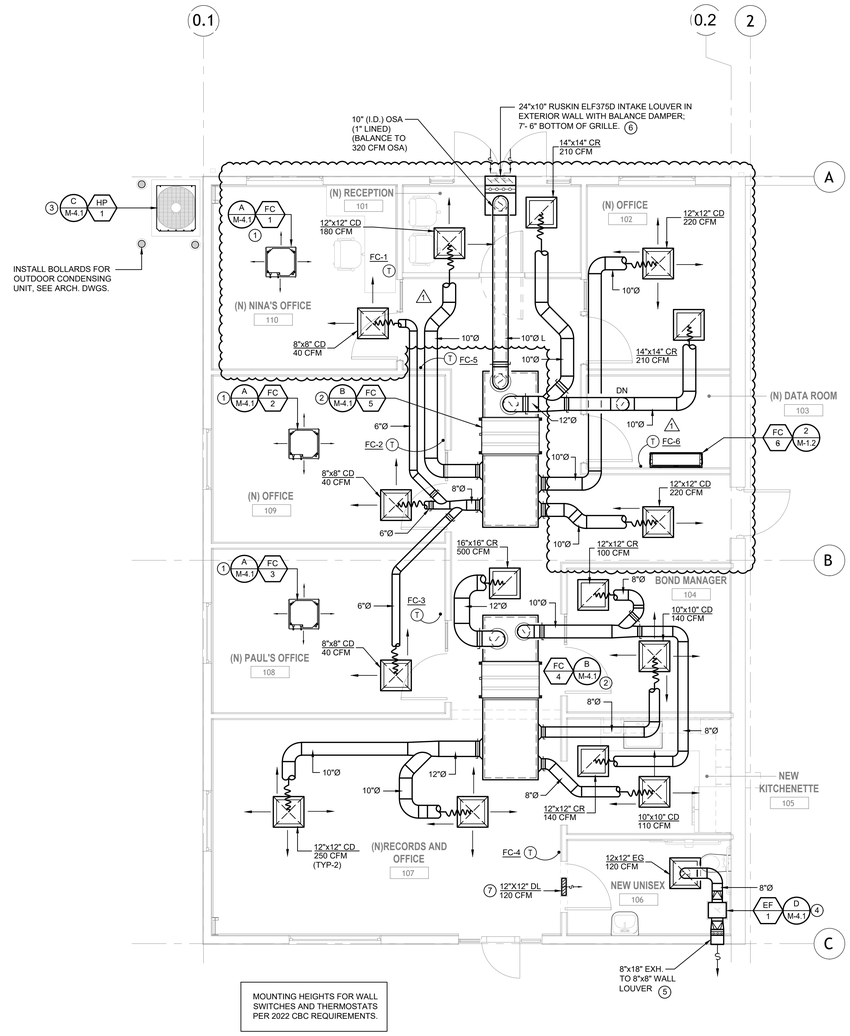
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1 FIRST FLOOR MECHANICAL DEMO PLAN

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



2 FIRST FLOOR MECHANICAL PROPOSED PLAN

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

MECHANICAL SHEET NOTES

1. FIELD VERIFY EXISTING ROOF FRAMING, OBSTRUCTIONS AND CLEARANCE ABOVE NEW ACOUSTIC CEILING FOR INSTALLATION OF CEILING CASSETTE FAN COIL. COORDINATE FINAL LOCATION IN TBAR GRID WITH ARCHITECTURAL REFLECTED CEILING PLAN AND OCCUPANCY SENSORS, LIGHTING AND PENDANTS. COORDINATE STRUCTURAL SUPPORT AND BRACING WITH FRAMING AS INDICATED IN DETAIL A/M-4.1. ALLOW ACCESS SPACE FOR REFRIGERANT AND CONDENSATE PIPING CONNECTIONS. VERIFY OPERATION AND AIRFLOW RATE/SPEED AND SUBMIT TABULATED REPORT TO E.O.R. INTEGRATE NEW REMOTE THERMOSTAT WITH EXISTING BUILDING EMS CONTROLS AND ETHERNET AS SHOWN ON B/M-5.1.
2. FIELD VERIFY EXISTING ROOF FRAMING, OBSTRUCTIONS AND CLEARANCE ABOVE NEW ACOUSTIC CEILING FOR INSTALLATION OF DUCTED FAN COIL, SUPPLY PLENUM, AND RETURN MIXING PLENUM WITH FILTER RACK. COORDINATE FINAL LOCATION WITH OCCUPANCY SENSORS, LIGHTING AND PENDANTS. COORDINATE STRUCTURAL SUPPORT AND BRACING WITH FRAMING AS INDICATED IN DETAIL B/M-4.1. ALLOW ACCESS SPACE FOR REFRIGERANT AND CONDENSATE PIPING CONNECTIONS. INSTALL NEW MERV-13 FINAL FILTERS. VERIFY OPERATION AND AIRFLOW RATE/SPEED AND SUBMIT TABULATED REPORT TO E.O.R. INTEGRATE NEW REMOTE THERMOSTAT WITH EXISTING BUILDING EMS CONTROLS AND ETHERNET AS SHOWN ON B/M-5.1.
3. INSTALL NEW OUTDOOR VRF HEAT PUMP CONDENSER ON CONCRETE EQUIPMENT PAD AS INDICATED ON DETAIL C/M-4.1. ALERT ARCHITECT TO ANY OBSTRUCTIONS WITH INSTALLING CONDENSER, REFRIGERANT PIPING AND SUPPORTS, AND SAFETY BOLLARDS PRIOR TO COMMENCING WORK. VERIFY COMPLIANCE WITH MANUFACTURER'S REQUIRED CLEARANCE LISTINGS. CHARGE/TEST FINAL SYSTEM PERFORMANCE AND REPORT SUCTION/LIQUID PRESSURES, TEMPERATURES, FAN SPEED AND AIR PURGE TO E.O.R. AT PROJECT COMPLETION.
4. FIELD VERIFY AVAILABLE CLEARANCE ABOVE NEW CEILING HEIGHT FOR INSTALLATION OF NEW TOILET ROOM EXHAUST FAN BETWEEN FRAMING AND ATTACHMENT TO STRUCTURE. VERIFY HEIGHT AND PENETRATION FRAMING FOR WALL OUTLET LOUVER AS SHOWN. REPORT TO E.O.R. REQUIRED MODIFICATIONS DUE TO EXISTING OBSTRUCTIONS PRIOR TO COMMENCING WORK. PROVIDE ACCESS IN CEILING TO SERVICE FAN AND DOCUMENT AIRFLOW/WATTS IN FINAL AIR BALANCE REPORT.
5. COORDINATE EXHAUST FAN DISCHARGE LOUVER EXTERIOR WALL FRAME, BLADE TYPE AND LOCATION/HEIGHT WITH ARCHITECTURAL ELEVATIONS AND FRAMING PRIOR TO COMMENCING WORK. INSTALL COUNTER BALANCED BACKDRAFT DAMPER AT WALL PENETRATION.
6. COORDINATE OUTSIDE AIR INTAKE LOUVER AND BACK BOX EXTERIOR WALL FRAME, BLADE TYPE AND LOCATION/HEIGHT WITH ARCHITECTURAL ELEVATIONS AND FRAMING PRIOR TO COMMENCING WORK. VERIFY ADEQUATE CLEARANCE AND REPORT ANY OBSTRUCTIONS TO OUTSIDE AIR DUCT ROUTED FROM FAN COIL TO FINAL CONNECTION AT BACK BOX. INSTALL COUNTER BALANCED BACKDRAFT DAMPER AT WALL PENETRATION.
7. INSTALL VISION PROOF DOOR TRANSFER GRILLE AT NEW UNISEX TOILET ROOM AS SHOWN. VERIFY FRAME TYPE AND MOUNTING HEIGHT WITH ARCHITECTURAL INTERIOR SECTIONS AND DOOR SCHEDULE. VERIFY PRESSURE DIFFERENTIAL AT DOOR DOES NOT EXCEED 2022 CBC REQUIREMENTS.

REGISTERED PROFESSIONAL ENGINEER
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No. 39020
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MECHANICAL

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REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

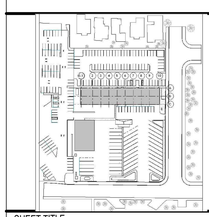
RODOLFO L.CHACON
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Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

FIRST FLOOR MECHANICAL PLANS

M-1.1

PLOT DATE: 29-07-2025 19:04:13

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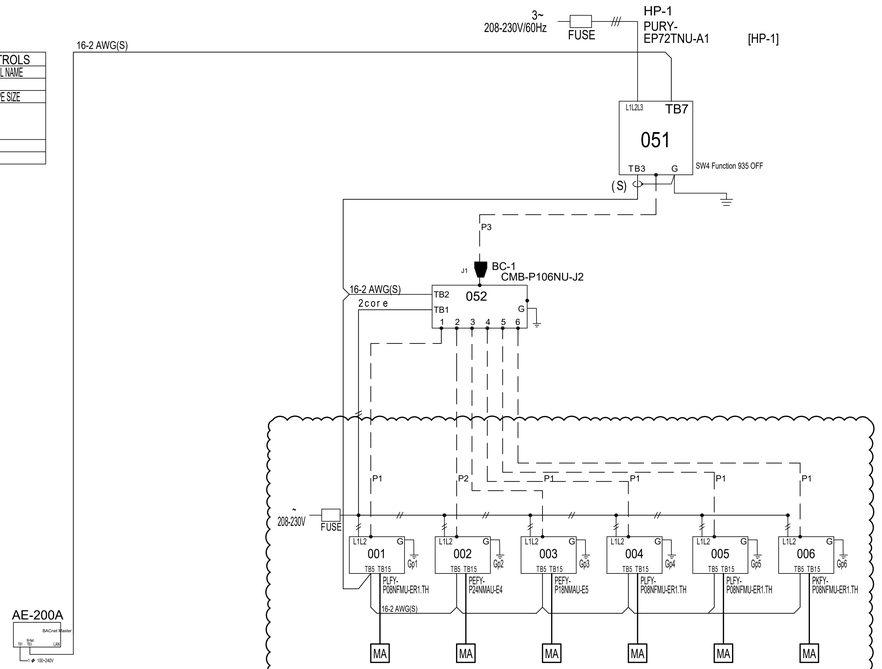
SYSTEM SCHEMATIC DWG.

LUHSD - New AdminOffice

DIAGRAM SYMBOL LEGEND	
DISPLAY	DESCRIPTION
///	POWER WIRE
———	CONTROL WIRE
———	REF. PIPE

CONT.No		PAGE	

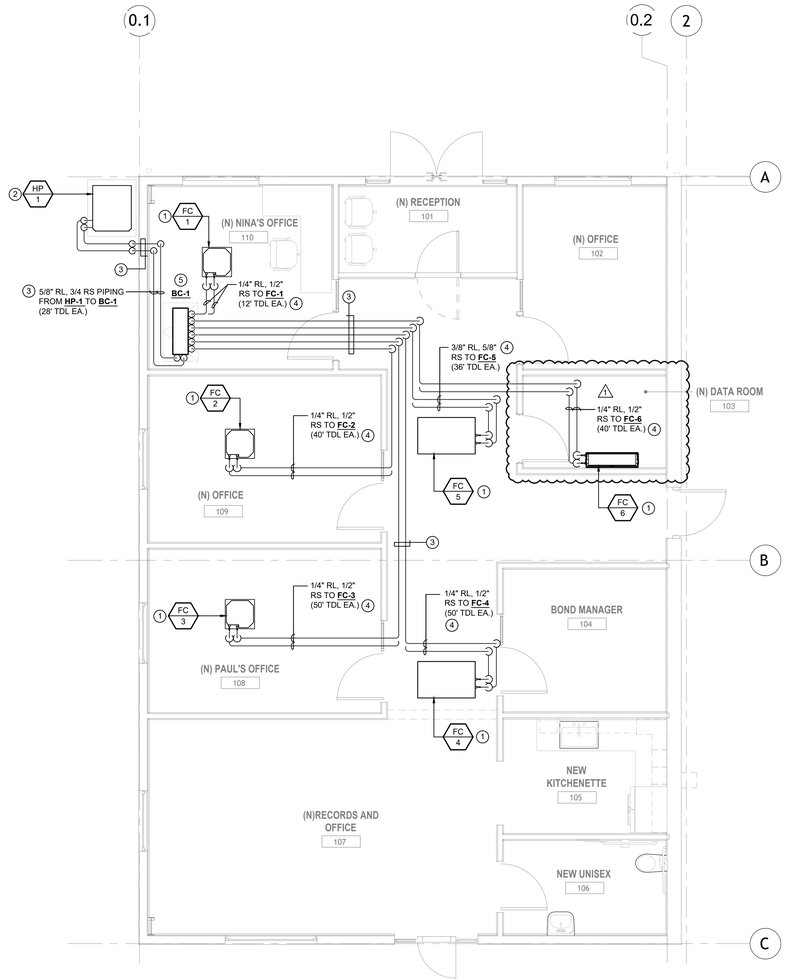
PIPING AND CONTROLS	
SYMBOL	BRANCH PIPE MODEL NAME
J1	CMY-R301S-G
SYMBOL	LIQUID PIPE/GAS PIPE SIZE
P1	1/4 " / 1/2
P2	3/8 " / 5/8
P3	5/8 " / 3/4
SYMBOL	MODEL NUMBER
MA	PAR-40MAAUB



This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record

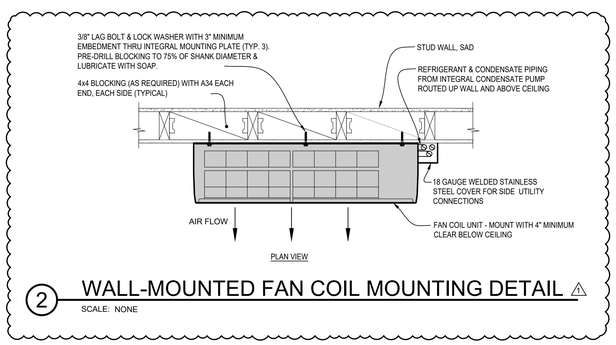
Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.

1.25mm(16 AWG) : 1.25mm(16 AWG) or more. 0.75mm(20 AWG) : between 0.5mm(24 AWG) and 0.75mm(20 AWG).



1 FIRST FLOOR REFRIGERANT PIPING PROPOSED PLAN

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



2 WALL-MOUNTED FAN COIL MOUNTING DETAIL

SCALE: NONE

REFRIGERANT PIPING SHEET NOTES

1. FIELD VERIFY EXISTING ROOF FRAMING, OBSTRUCTIONS AND CLEARANCE ABOVE NEW ACOUSTIC CEILING FOR INSTALLATION OF REFRIGERANT PIPING AND SUPPORTS TO CEILING CASSETTE, WALL AND DUCTED FAN COILS. INSTALL STRUCTURAL SUPPORTS AND BRACING TO EXISTING FRAMING AS INDICATED IN DETAIL F/P-4.1. ALLOW ACCESS SPACE FOR REFRIGERANT PIPING CONNECTIONS, TEST PORTS AND ISOLATION VALVES. CHARGE/TEST FINAL SYSTEM PERFORMANCE AND REPORT SUCTION/LIQUID PRESSURES, TEMPERATURES, FAN SPEED AND AIR PURGE TO E.O.R. AT PROJECT COMPLETION.
2. INSTALL NEW OUTDOOR VRF HEAT PUMP CONDENSER REFRIGERANT PIPING AND SUPPORTS AS INDICATED ON DETAIL H/P-4.1. VERIFY SIZING AND TRAPPING AS REQUIRED AND SUBMIT A FINAL DIAMOND BUILDER OR EQUIVALENT SIZING DIAGRAM WITH PIPE SIZES, CONNECTIONS AND VALVES FOR APPROVAL PRIOR TO COMMENCING WORK.
3. FIELD VERIFY AVAILABLE CLEARANCE ABOVE NEW CEILING HEIGHT FOR INSTALLATION OF NEW REFRIGERANT AND CONDENSATE DRAIN PIPING SUPPORTS AND BRACING BETWEEN AND BELOW EXISTING FRAMING AND OTHER UTILITIES. REPORT TO E.O.R. REQUIRED MODIFICATIONS DUE TO EXISTING OBSTRUCTIONS PRIOR TO COMMENCING WORK. REFER TO REFRIGERANT PIPING SYSTEM DIAGRAM SHEET M-1.2, SPECIFICATIONS AND MANUFACTURER FOR REQUIRED COMPONENTS, VALVES, SEPARATORS, STRAINERS ETC. FOR COMPLETE DX SYSTEM FUNCTIONALITY.
4. INSTALL REFRIGERANT PIPING CONNECTIONS TO FAN COILS AS INDICATED ON DETAIL I/M-4.1. PROVIDE ADEQUATE SPACE AND CLEARANCE ABOVE CEILING FOR CONTINUED MAINTENANCE WITH MINIMUM 22"x22" ACCESS AT CEILING FOR ALL FAN COIL LOCATIONS. COORDINATE ACCESS WITH NEW AND EXISTING UTILITIES, FRAMING AND SUPPORTS.
5. FIELD VERIFY EXISTING ROOF FRAMING, OBSTRUCTIONS AND CLEARANCE ABOVE NEW ACOUSTIC CEILING FOR INSTALLATION OF REFRIGERANT PIPING AND SUPPORTS TO BRANCH CIRCUIT CONTROLLER. INSTALL STRUCTURAL SUPPORTS AND BRACING TO EXISTING FRAMING AS INDICATED IN DETAIL A/M-4.1. ALLOW ACCESS SPACE FOR REFRIGERANT PIPING CONNECTIONS AND VALVES. CHARGE/TEST FINAL SYSTEM PERFORMANCE AND REPORT SUCTION/LIQUID PRESSURES TO E.O.R. AT PROJECT COMPLETION.

REGISTERED PROFESSIONAL ENGINEER — ANTHONY W. SIMONETTI — No. 39629 — EXP. 12-31-26 — MECHANICAL — STATE OF CALIFORNIA

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REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

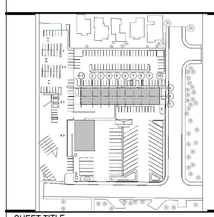
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



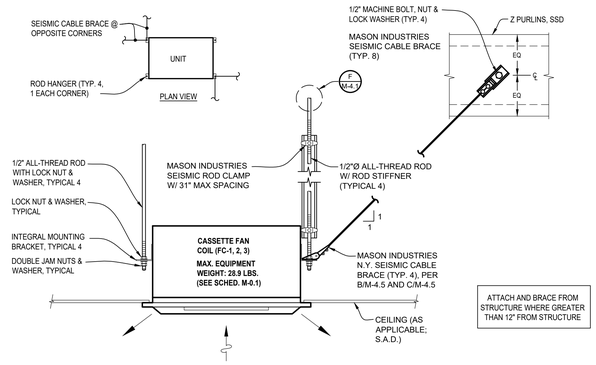
SHEET TITLE

FIRST FLOOR REFRIGERANT PIPING PLANS

M-1.2

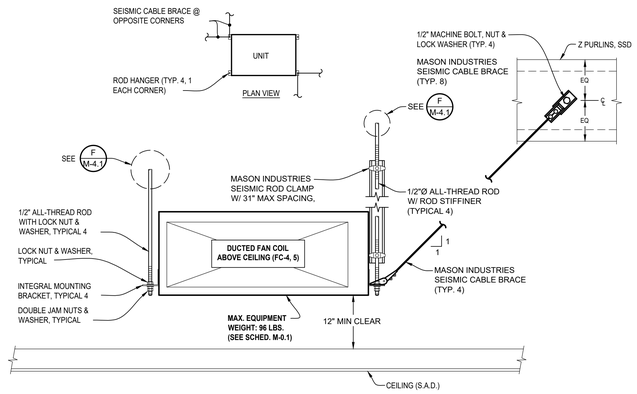
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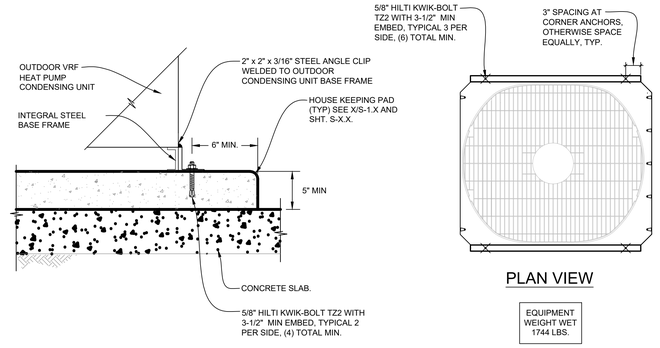
A CEILING DUCTLESS CASSETTE FAN COIL MOUNTING

SCALE: NONE



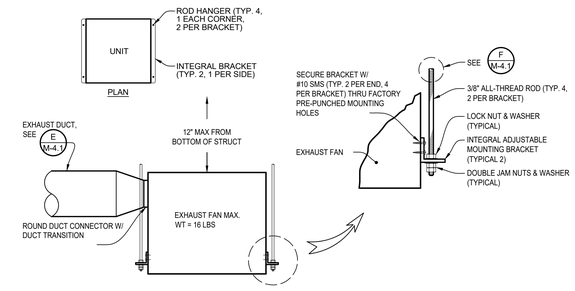
B DUCTED SPLIT SYSTEM VRF FAN COIL SUPPORT DETAIL

SCALE: NONE



C OUTDOOR VRF HEAT PUMP CONDENSER MOUNTING DETAIL

SCALE: NONE

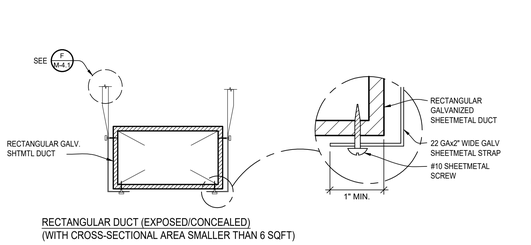


D INLINE EXHAUST FAN MOUNTING DETAIL

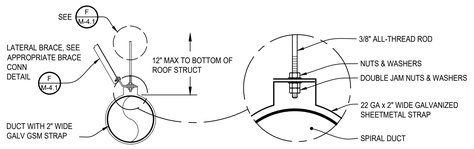
SCALE: NONE

TABLE-1	
ANGLE (INCHES)	MAX LENGTH (INCHES)
1-1/2 x 1-1/2 x 1/8	3'-0"
2 x 2 x 3/16	6'-0"
3 x 3 x 1/4	8'-0"

MINIMUM ROD SIZES (INCHES)	PIPE DIAMETER (INCHES)
3/8"	2" & SMALLER PIPE
1/2"	2-1/2" & 3" PIPE
5/8"	4" PIPE



RECTANGULAR DUCT (EXPOSED/CONCEALED)
(WITH CROSS-SECTIONAL AREA SMALLER THAN 6 SQFT)



ROUND DUCT (EXPOSED/CONCEALED)
(WITH CROSS-SECTIONAL AREA LARGER THAN 6 SQFT)

DUCT SUPPORT NOTES:

A. ALL STRAPS, RODS, TRAPEZE ANGLES AND TRAPEZE CHANNELS SHALL BE SIZED AND INSTALLED IN ACCORDANCE WITH THE LATEST SMACNA REQUIREMENTS.

B. ALL BOLTS, NUTS, SCREWS AND OTHER FASTENING DEVICES SHALL BE LOAD-RATED AND SHALL MEET ALL CODE REQUIREMENTS AND SAFETY FACTORS WHICH APPLY.

C. WIRE, USED IN LIEU OF STRAPS AND RODS, IS NOT ALLOWED.

D. WHERE APPLICABLE, INSTALL INSULATION AFTER INSTALLING DUCT HANGERS.

E. SUPPORTS SHALL BE PLACED AT 8'-0" ON CENTER (MAX) AND AT ALL CHANGES IN DIRECTION.

F. LATERAL BRACING REQUIRED ON DUCTS WITH CROSS-SECTIONAL AREA LARGER THAN 6 SQ FT.

G. SEISMIC BRACING IS NOT REQUIRED AT HVAC DUCTS THAT ARE 6 FT SQ OR LESS IN CROSS-SECTIONAL AREA, OR WEIGH 10 LB/FT OR LESS.

H. SUPPORTS SHALL BE PLACED AT 8'-0" ON CENTER (MAX) AND AT ALL CHANGES IN DIRECTION.

I. SEISMIC BRACING IS NOT REQUIRED AT HVAC DUCTS SUPPORTED BY HANGERS THAT ARE 12" OR LESS IN LENGTH FROM THE DUCT SUPPORT POINT TO THE SUPPORTING STRUCTURE. HVAC DUCTS SUPPORTED WITH ROD HANGERS WITH DIAMETER GREATER THAN 3/8 INCH SHALL BE EQUIPPED WITH SWIVELS TO PREVENT INELASTIC BENDING IN THE ROD.

J. HVAC DUCTS ARE FREE TO SWING AT 45° IN ANY HORIZONTAL DIRECTION WITHOUT COLLIDING WITH THE STRUCTURE, ARCHITECTURAL ITEMS OR OTHER MECHANICAL, PLUMBING OR ELECTRICAL ITEMS.

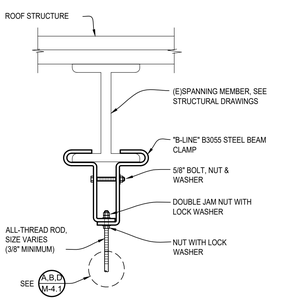
TRAPEZE LOAD & SUPPORT CONDITIONS:

HEAVY: 645 LBS PER TRAPEZE, OR MORE: 1/2"Ø ALL-THREAD TO ROOF STRUCTURE

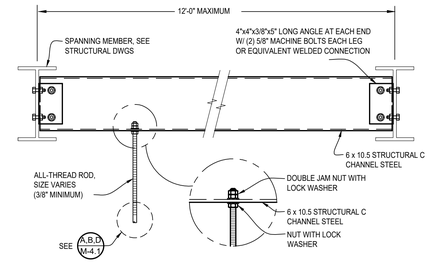
NOT HEAVY: LESS THAN 645 LBS PER TRAPEZE: 3/8"Ø ALL-THREAD TO ROOF STRUCTURE

E TYPICAL DUCT HANGER DETAILS

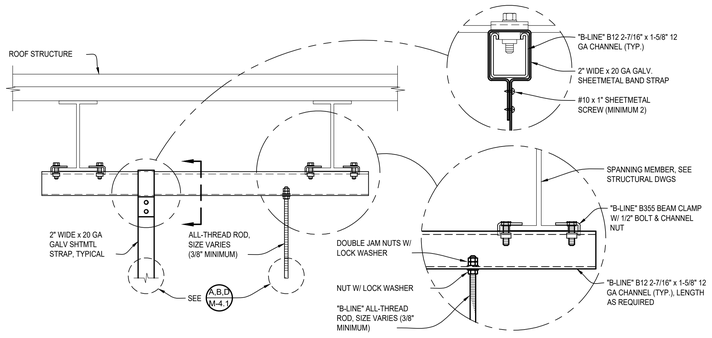
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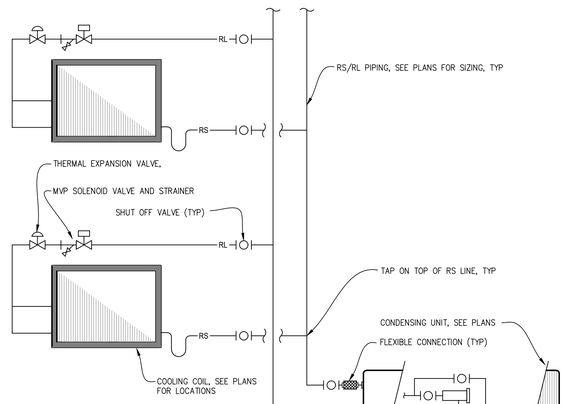
HANGER PARALLEL TO BEAMS



HANGER PERPENDICULAR TO BEAMS



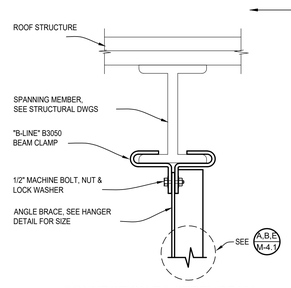
HANGER PERPENDICULAR TO BEAMS



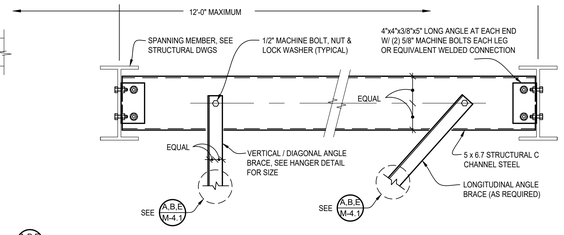
NOTE: FILTER DRYERS AND SIGHT GLASS INCLUDED WITH CONDENSING UNIT

F TYPICAL HANGER CONNECTIONS @ BEAMS

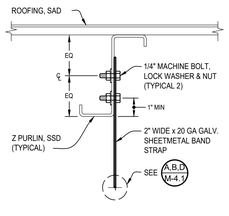
SCALE: NONE

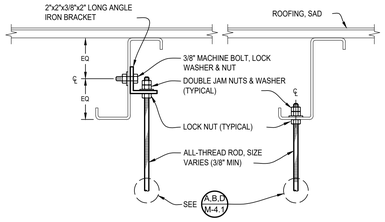


CONNECTION TO STEEL BEAM
(VERTICAL ANGLE ONLY)



CONNECTION TO SPREADER
(VERTICAL, DIAGONAL AND LONGITUDINAL L'S)





NOTES:

1. MECHANICAL JOINT REFRIGERANT CONNECTIONS ARE PROHIBITED. ALL JOINTS SHALL BE BRAZED.
2. TRIPLE EVACUATE AND WEIGH IN REFRIGERANT CHARGE.
3. USE ONLY RIGID ACR COPPER PIPING. DO NOT USE PRE-CHARGED TUBING KITS.
4. INSULATE SUCTION LINE WITH ½" THICK "ARMAFLEX" UNICELLULAR PIPE INSULATION WITH ULTRA VIOLET PROTECTION.
5. ALL VALVES SHALL BE FIELD PROVIDED AND INSTALLED AS REQUIRED

G TYPICAL SEISMIC BRACE CONNECTION DETAILS @ BEAMS

SCALE: NONE

H TYPICAL HANGER CONNECTIONS @ Z PURLIN

SCALE: NONE

I FAN COIL REFRIGERANT PIPING & VALVING

SCALE: NONE

REGISTERED PROFESSIONAL ENGINEER — MARVIN W. SIMONSEN — No. 39621 — EXP. 12-31-26 — MECHANICAL — STATE OF CALIFORNIA

COSTA ENGINEERS INC.
674 Trilly Lane, Clyde, CA 94520
ph: 707-252-9177
fax: 707-252-6473

REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

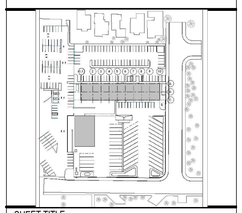
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



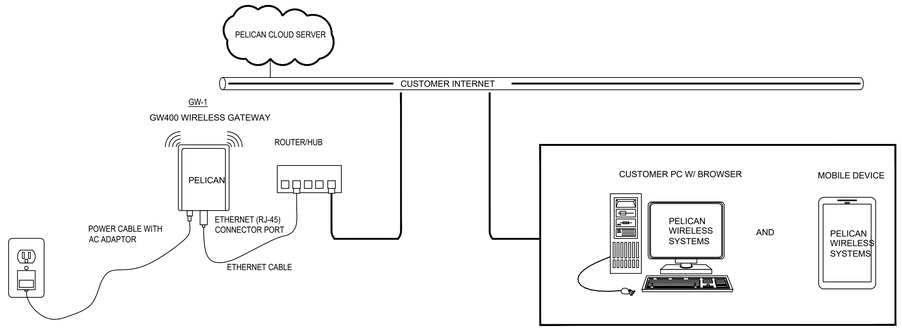
SHEET TITLE

MECHANICAL DETAILS

M-4.1

PLOT DATE: 28-07-2025 19:04:13

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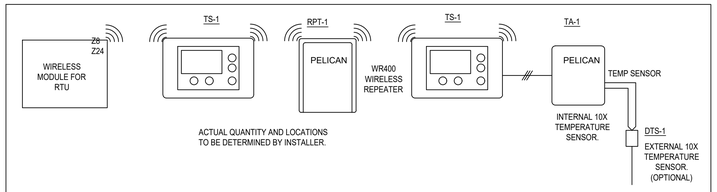


THE WIRELESS GATEWAY IS DESIGNATED TO BE WALL MOUNTED USING THE INCLUDED 3M COMMAND REMOVABLE STRIPS.

FIND A SUITABLE LOCATION WHICH IS:

-WITHIN 10 FEET OF YOUR INTERNET ROUTER
-WITHIN 4 FEET OF AN ELECTRICAL OUTLET
-AT LEAST 4 FEET AWAY FROM OTHER WIRELESS DEVICES
-AWAY FROM LARGE METAL OBJECTS WHICH MAY INTERFERE WITH THE WIRELESS SIGNAL.
-ABOVE OFFICE EQUIPMENT WHICH MAY INTERFERE WITH THE WIRELESS SIGNAL
-ACTUAL QUANTITY AND LOCATIONS TO BE DETERMINED BY INSTALLER.
NO PRACTICAL LIMITS TO NUMBER OF THERMOSTATS SUPPORTED BY A SINGLE GATEWAY
FACTORY IP ADDRESS GATE WAY WILL CONNECT AUTOMATICALLY TO PELICAN SERVER AFTER SERIAL NO. OF GATEWAY IS REGISTERED ON PELICAN SITE.

GO TO:http//www.pelicanwireless.com/new-site-subscription/



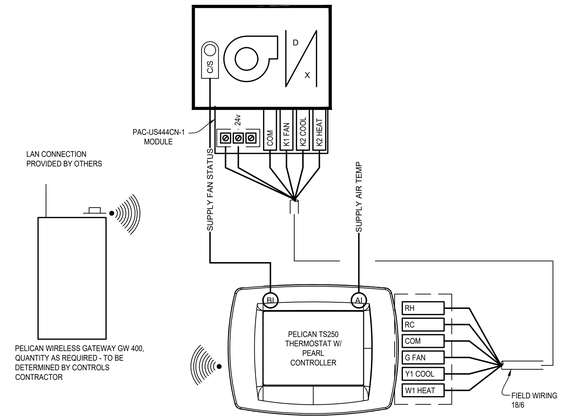
WIRELESS COMPONENTS		
TAG	PART NUMBER	DESCRIPTION
RPT-1	PEL WR400	WIRELESS REPEATER, WITH POWER ADAPTOR
GW-1	PEL GW400	WIRELESS GATEWAY, WITH POWER ADAPTOR
TS-1	TS250	TEMPERATURE AND CO2 SENSOR WITH PEAL ECONOMIZER CONTROLLER

A TYPICAL PELICAN WIRELESS LAN LAYOUT

SCALE: NONE

Fan Coil Unit Control Sequence of Operation

1. System Overview
   a. Each FC unit will be directly controlled by its own dedicated EMS (Energy Management System) unitary controller.
   b. EMS unitary controller will be connected to a wall mounted electronic zone temperature sensor with integral relative humidity sensor and CO2 sensor.
   c. Electronic zone temperature sensor shall have a touch screen LCD interface which includes: 1) digital pushbuttons for warmer/cooler setpoint control; 2) visual display of room temperature, room humidity, room CO2 and ambient OSA temperature; and 3) digital pushbutton after-hours override timer control, with user adjustable duration. The after-hours override duration shall have the ability to be limited from the front-end.
2. Unit Fan Operation
   a. When the zone is in Occupied Mode or in Afterhours Mode, the fan shall run continuously.
   b. During the Unoccupied Mode as determined by EMS time schedule, the unit fan cycles with demand and the temperature is controlled by the unoccupied space temperature heating and cooling setpoints.
3. Minimum Outdoor Air Ventilation
   a. During Occupied Mode or Afterhours Mode, the DOAS unit will be commanded to the on position and shall run continuously while enabled in this mode. Each space is balanced for a fixed amount of OSA.
4. Automatic Demand Reduction Controls
   a. EMS shall be programmed with capability to implement centralized demand shed for all non-critical zones upon call for Automatic Demand Reduction. Critical zones shall not be impacted by demand shed conservation measures.
5. Zone Pre-Occupancy Purge
   a. The EMS shall schedule the zone to be in Occupied Mode one hour prior to the actual time of anticipated occupancy.
6. Heating operation
   a. The controller compares the heating setpoint with the space temperature and determines a need-heating control signal to modulate the HW heating coil control valve to maintain room setpoint.
   b. Economizer to be commanded to Min CFM setting and CHW cooling coil control valve to be commanded closed during heating mode.
7. Cooling operation
   a. The controller compares the cooling setpoint with the space temperature and determines a need-cooling signal.
   b. The first stage of cooling will enable the economizer to provide free cooling for as long as possible.
8. Monitoring - The following conditions shall be monitored and displayed at EMS Operator Workstation/Graphical User Interface:
   a. Supply air temperature.
   b. Room temperature.
   c. Room Co2 level
   d. Current mode (heating/cooling/fan).
   e. Supply air temperature attained last time unit was in heating.
   f. Current command status of fan, economizer.



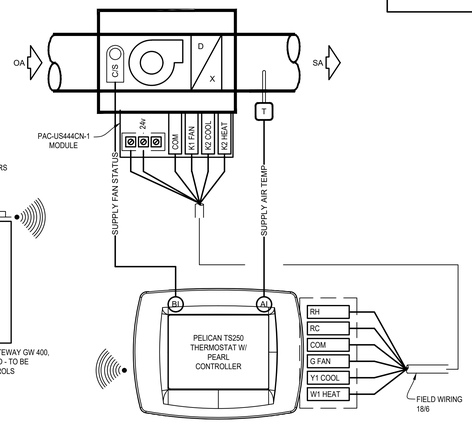
B FAN COIL UNIT CONTROL DIAGRAM

SCALE: NONE

DOAS with EF interlock Sequence of Operations

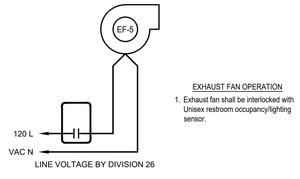
1. System Overview
   a. The DOAS unit will be directly controlled by its own dedicated EMS (Energy Management System) unitary controller.
   b. EMS unitary controller will be connected to a wall mounted electronic zone temperature sensor with integral relative humidity sensor and CO2 sensor.
   c. Electronic zone temperature sensor shall have a touch screen LCD interface which includes: 1) digital pushbuttons for warmer/cooler setpoint control; 2) visual display of room temperature, room humidity, room CO2 and ambient OSA temperature; and 3) digital pushbutton after-hours override timer control, with user adjustable duration. The after-hours override duration shall have the ability to be limited from the front-end.
2. Unit Fan Operation
   a. When the zone is in Occupied Mode or in Afterhours Mode, the fan shall run continuously.
   b. During the Unoccupied Mode as determined by EMS time schedule, the unit fan cycles with demand and the temperature is controlled by the unoccupied space temperature heating and cooling setpoints.
3. Minimum Outdoor Air Ventilation
   a. During Occupied Mode or Afterhours Mode, the DOAS unit will be commanded to the on position and shall run continuously while enabled in this mode. Each space is balanced for a fixed amount of OSA.
   b. A dry contact shall interlock with building exhaust fans. EF shall enable when the DOAS is enabled.
4. Automatic Demand Reduction Controls
   a. EMS shall be programmed with capability to implement centralized demand shed for all non-critical zones upon call for Automatic Demand Reduction. Critical zones shall not be impacted by demand shed conservation measures.
5. Zone Pre-Occupancy Purge
   a. The EMS shall schedule the zone to be in Occupied Mode one hour prior to the actual time of anticipated occupancy.
6. Heating operation
   a. The controller compares the heating setpoint with the space temperature and determines a need-heating control signal to modulate the HW heating coil control valve to maintain room setpoint.
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   a. The controller compares the cooling setpoint with the space temperature and determines a need-cooling signal.
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   a. Supply air temperature.
   b. Room temperature.
   c. Room Co2 level
   d. Current mode (heating/cooling/fan).
   e. Supply air temperature attained last time unit was in heating.
   f. Current command status of fan, economizer.

CONTROL SYMBOL LEGEND
DO DIGITAL OUTPUT, EMS
DI DIGITAL INPUT, EMS
AO ANALOG OUTPUT, EMS
AI ANALOG INPUT, EMS
INDICATES WIRING BY ELECTRICAL CONTRACTOR
INDICATES WIRING BY CONTROL / EMS CONTRACTOR



C DUCTED FAN COIL UNIT CONTROL DIAGRAM

SCALE: NONE



EXHAUST FAN OPERATION

1. Exhaust fan shall be interlocked with Unisex restroom occupancy/lighting sensor.

D EXHAUST FAN CONTROL DIAGRAM

SCALE: NONE

REGISTERED PROFESSIONAL ENGINEER
ANTHON W. EIKENBERRY
No. 35924
EXP. 12-31-26
MECHANICAL
STATE OF CALIFORNIA

COSTA ENGINEERS INC.
1214 Tiffin Lane, Napa, CA 94558
ph: 707-252-9177
fax: 707-252-6473

REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

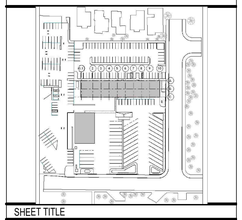
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
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BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

MECHANICAL CONTROLS

M-5.1

PLOT DATE: 28-07-2025 19:04:13

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MEP COMPONENT ANCHORAGE NOTE

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC CHAPTER 16 AND ASCE 7-22 CHAPTER 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. MOVABLE EQUIPMENT WHICH IS STATIONED IN ONE PLACE FOR MORE THAN 8 HOURS AND HEAVIER THAN 400 POUNDS ARE REQUIRED TO BE ANCHORED WITH TEMPORARY ATTACHMENTS.

THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE, BUT THE ATTACHMENT NEED NOT BE DETAILED ON THE PLANS. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.

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

FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND THE DSA DISTRICT STRUCTURAL ENGINEER. 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 7-22 SECTION 13.3 AS DEFINED IN ASCE 7-22 SECTION 13.6.5.6, 13.6.7, 13.6.8, AND 2022 CBC, SECTIONS 1616A.1.24, 1616A.1.25, AND 1616A.1.26.

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEMS ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON PRE APPROVED INSTALLATION GUIDE (e.g. SMACNA OR OSHPD OPM), 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 SYSTEM. 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 SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION (2009), INCLUDING ANY ADDENDA. FASTENERS AND OTHER ATTACHMENTS NOT SPECIFICALLY IN THE SMACNA SEISMIC RESTRAINT MANUAL, OSHPD EDITION, ARE DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS. THE DETAILS SHALL ACCOUNT APPLICABLE SEISMIC HAZARD LEVEL AND CONNECTIONS FOR THE PROJECT CONDITIONS

WATER HEATER CALCS: EWH-1

EQUIPMENT	GPH	QTY.	TOTAL GPH	CALCULATIONS
STAFF SINK [P-5A]	20	1	20	1. 20 x .30 (ASHRAE APPLICATIONS TABLE 6-1: **OFFICE** DEMAND FACTOR) = 6.0 GPH REQUIRED 2. 6.0 GPH x 80° TEMP. RISE x 8.33 LB PER GAL / 98% THERMAL EFFIC. / 3412 BTU PER KW = 1.2 KW REQUIRED 3. 2 KW INPUT x 98% = 1.96 KW OUTPUT > 1.2 KW REQUIRED
TOTAL GPH			20	

WATER HEATER CALCS: EWH-2

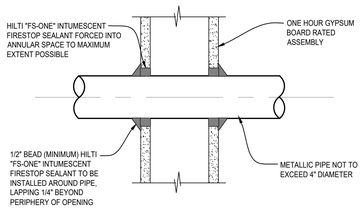
EQUIPMENT	GPH	QTY.	TOTAL GPH	CALCULATIONS
LAVATORY [P-2A]	6	1	12	1. 12 x .30 (ASHRAE APPLICATIONS TABLE 6-1: **OFFICE** DEMAND FACTOR) = 3.6 GPH REQUIRED 2. 3.6 GPH x 80° TEMP. RISE x 8.33 LB PER GAL / 98% THERMAL EFFIC. / 3412 BTU PER KW = 0.71 KW REQUIRED 3. 6.24 KW INPUT x 98% = 6.1 KW OUTPUT > 0.71 KW REQUIRED
TOTAL GPH			12	

LIST OF APPLICABLE CODES

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

APPLICABLE STANDARDS

FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS, REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.



HOUR PARTITION (UL SYSTEM #WL-1085)

THROUGH PENETRATIONS AND MEMBRANE PENETRATIONS SHALL BE PROTECTED BY AN APPROVED PENETRATION FIRESTOP SYSTEM OR MEMBRANE PENETRATION SYSTEM INSTALLED AS TESTED IN ACCORDANCE WITH ASTM E 814 OR UL 1479, WITH A MIN. POSITIVE PRESSURE DIFFERENTIAL OF 0.01 INCH (2.49 PA) OF WATER OR AS OTHERWISE PERMITTED BY CBC SECTION 714. LISTED THROUGH PENETRATION FIRESTOP SYSTEMS AND MEMBRANE PENETRATIONS SHALL BE INSTALLED IN ACCORDANCE WITH THE INSTALLATION DETAILS FOR LISTED SYSTEMS.

NOTES:

1. AT NON-RATED WALLS THE PIPE SHALL BE FULLY SEALED AT PENETRATION WITH NON-HARDENING MASTIC. ESCUTCHEON PLATES SHALL BE INSTALLED ON EACH SIDE, BUT NOT AT SIDES FACING ATTICS, CEILING SPACES, ETC. INSTALLATIONS EXPOSED TO WEATHER SHALL BE APPROPRIATELY WEATHERPROOFED.
2. SYSTEM DESIGN EVALUATED TO THE TIME TEMPERATURE REQUIREMENTS OF ASTM E119.
3. DESIGN BASED UPON UL CLASSIFIED SYSTEM NO. WL-1085 EVALUATED TO UL STANDARD 1479 (ASTM E814).
4. INSTALL FIRESTOP COMPOUND TO A WET DEPTH THICKNESS OF 1.75" BOTH SIDES.
5. MINIMUM ANNULAR SPACE (BETWEEN PIPE AND SIDE OPENING) 3/8".

LOCAL CONNECTION SCHEDULE

MARK	FIXTURE	S	V	CW	HW	MAX.WT. LBS.	REMARKS
P-1A	WATER CLOSET (ACCESSIBLE)	4"	2"	3/4"	-	78 LBS.	WALL MOUNTED FLUSH VALVE; VITREOUS CHINA; MANUAL LEVER HANDLE, ADA, 17" - 19" MAX. MTD. HT.
P-2A	LAVATORY, WALL (ACCESSIBLE)	2"	1-1/2"	3/4"	3/4"	45 LBS.	WALL MOUNTED; VITREOUS CHINA; METER PUSH CW/HW BUTTONS, 105°F MAX. TEMP., ADA COMPLIANT
P-5A	SINK, COUNTER, BASIN BREAKROOM (ACCESSIBLE)	2"	1-1/2"	3/4"	3/4"	11 LBS.	25"x22" COUNTER MTD. SELF RIMMING; 316 STAINLESS; GOOSENECK FAUCET, WRIST BLADE HANDLES, ADA
HB-1	HOSE BIBB (INTERIOR)	-	-	3/4"	-	"	CHROME, LOOSE KEY WITH VACUUM BREAKER
HD-1	HOPPER DRAIN (INDIRECT)	2"	1-1/2"	3/4"	-	"	PROVIDE WITH TRAP PRIMER & ACCESS PANEL

FIXTURE NOTES:

1. ALL FIXTURES NOTED AS ADA COMPLIANT SHALL BE MOUNTED AT ACCESSIBLE HEIGHT. REFER TO ARCHITECTURAL DETAILS.
2. ALL WALL MOUNTED FIXTURES SHALL BE PROVIDED WITH CARRIER SYSTEMS PER SPECIFICATIONS 22 0000. ATTACH AS DIRECTED BY CARRIER MANUFACTURER INSTALLATION GUIDELINES IN ACCORDANCE WITH ASME A112..6.1 STANDARDS.
3. PROVIDE MIXING VALVES PER SPECIFICATIONS AT SINKS AND LAVATORIES; SET AT 105°F MAX. FOR LAVATORIES, 120°F MAX. FOR SINKS.

ELECTRIC WATER HEATER SCHEDULE

MARK	MODEL #	STORAGE CAPACITY	VOLT/Ø	ELEMENTS	WATTS	GAL./HR. @ 60°F RISE	WEIGHT	REMARKS
EWH 1	A.O.SMITH DEL-6	6 GAL.	208-1	1	2000 W	14	85 LBS.	MOUNT AS PER DETAIL A/P-4.1.
EWH 2	CHRONOMITE CMI-30L/208	0.50 GPM @70° RISE	208-1	1	6240 W	0.20 GPM ACTIVATION	5 LBS.	MOUNT AS PER DETAIL X/P-4.1.

REMARKS: 1. FOR STAFF BREAKROOM SINK, MIX SET POINT AT 105°F. MAX. TEMPERATURE
2. PROVIDE EWH-1 WITH AMTROL "THERM-X-TROL" ST-5C-DD EXPANSION TANK, 10 LBS. OPER WT., AND VACUUM RELIEF.
3. PROVIDE DRAIN PAN AND SEISMIC STRAPPING AT EWH-1 BELOW COUNTER PER DETAIL C/P-4.1.
4. PROVIDE EWH-2 Z-C1616D CONCEALING WALL SLEEVE WITH DOOR AND LATCH, 16 GAGE 16"x16" FRAME FOR CONCEALED WALL MOUNTING. PROVIDE WITH MDL. 2095-1 DISCONNECT SWITCH MOUNTED WITHIN CABINET.

GREEN STANDARDS FIXTURE SCHEDULE

FIXTURE (TAG)	MAX. FLOW TBL. 5.303.2	SPECIFIED FLOW RATE	REMARKS
WATER CLOSET (P-1A)	1.28 GPF	1.28 GPF	REFER TO SPECIFICATION SECTION 22 0000 FOR FIXTURE BOWL AND FLUSH TANK MODELS
LAVATORY (P-2A)	0.5 GPM	0.5 GPM	REFER TO SPECIFICATION SECTION 22 0000 FOR FIXTURE BOWL AND FAUCET MODELS
STAFF SINK (P-5A)	1.8 GPM	1.5 GPM	REFER TO SPECIFICATION SECTION 22 0000 FOR FIXTURE BOWL AND FAUCET MODELS

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
1 / P-1		DRAWING NUMBER
A / P-1		DETAIL NUMBER / DRAWING NUMBER
WH 1		EQUIPMENT IDENTIFICATION
		PIPE UP
		PIPE DOWN
	CW	COLD WATER LINE
	HW	HOT WATER LINE
	HWR	HOT WATER RETURN LINE
TW	TW	TEMPERED WARM WATER LINE
G	G	GAS LINE
	S OR W	SANITARY SEWER OR WASTE LINE
AW	AW	SANITARY ACID WASTE LINE (PVC-DWV)
	V	VENT LINE
	BG	PIPE BELOW GRADE
		DIRECTION OF FLOW
F	F	FIRE PROTECTION WATER SUPPLY
CD	CD	CONDENSATE DRAIN
FCO	FCO	FLOOR CLEANOUT
WCO	WCO	WALL CLEANOUT
GCO	GCO	GRADE CLEANOUT
GM	GM	GAS METER
	SA	SHOCK ABSORBER
	CV	CHECK VALVE
	GC	GAS COCK
	STR	STRAINER
		UNION
	POC	POINT OF CONNECTION
	AP	ACCESS PANEL
	BF	BELOW FLOOR
	CFH	CUBIC FEET PER HOUR
	CR	CONDENSATE RECEIVER
	DIW	DOWN IN WALL
	DN	DOWN
	DTBG	DOWN TO BELOW GRADE
	DTR	DOWN THROUGH ROOF
	GA	GAUGE
	HB	HOSE BIBB
	IFC	IN FURRED CEILING
	ITS	IN TRUSS SPACE
	IW	IN WALL
	NIPS	NOT IN PLUMBING SECTION
	SHTMTL	SHEET METAL
	SMD	SEE MECHANICAL DRAWINGS
	TP	TRAP PRIMER
	UIW	UP IN WALL
	UTR	UP THROUGH ROOF
	VTR	VENT THROUGH ROOF

PLUMBING SHEET LIST

P0.1	PLUMBING SCHEDULES AND LEGENDS
P1.0	FIRST FLOOR PLUMBING OVERALL PLAN
P1.1	FIRST FLOOR PLUMBING WASTE + VENT PLANS
P1.2	FIRST FLOOR PLUMBING DCW + DHW PLANS
P4.1	PLUMBING DETAILS

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REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

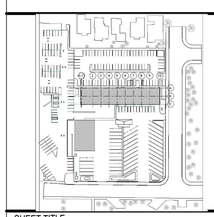
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Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



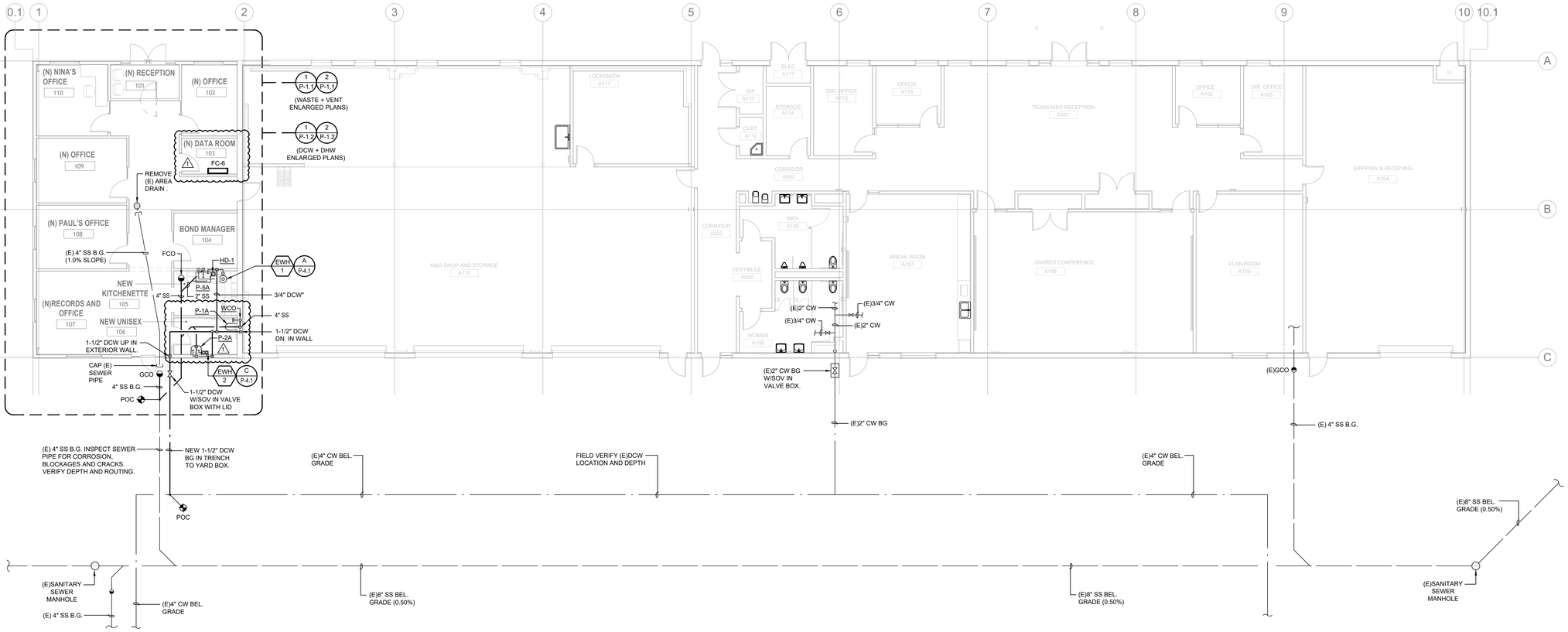
SHEET TITLE

PLUMBING SCHEDULES & LEGENDS

P-0.1

PLOT DATE: 28-07-2025 19:04:13

Autodesk Docs://Small Admin Office Remodel/LIBERTY UNION SCHOOL DISTRICT _NEW OFFICE.rvt



1 FIRST FLOOR PLUMBING OVERALL FLOOR PLAN

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

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REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1902

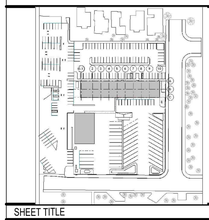
NEW ADMIN OFFICE REMODEL

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Project Number: 61721-97

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NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



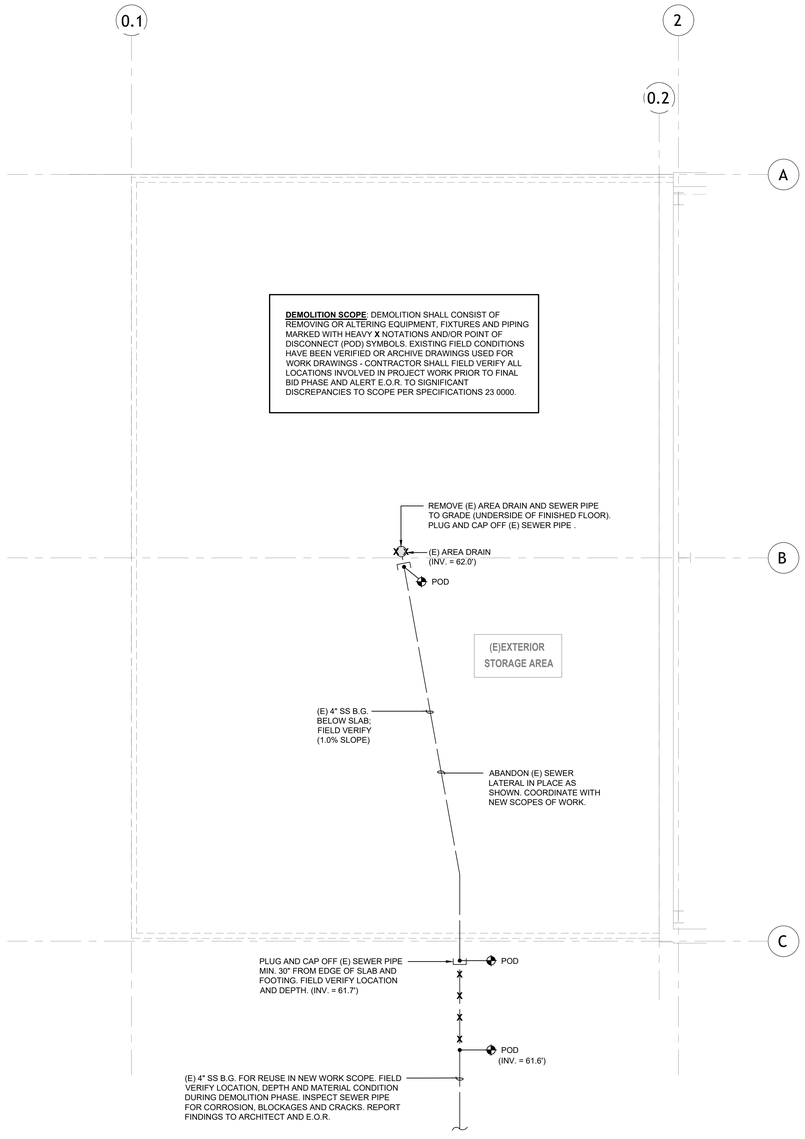
SHEET TITLE

FIRST FLOOR PLUMBING OVERALL PLAN

P-1.0

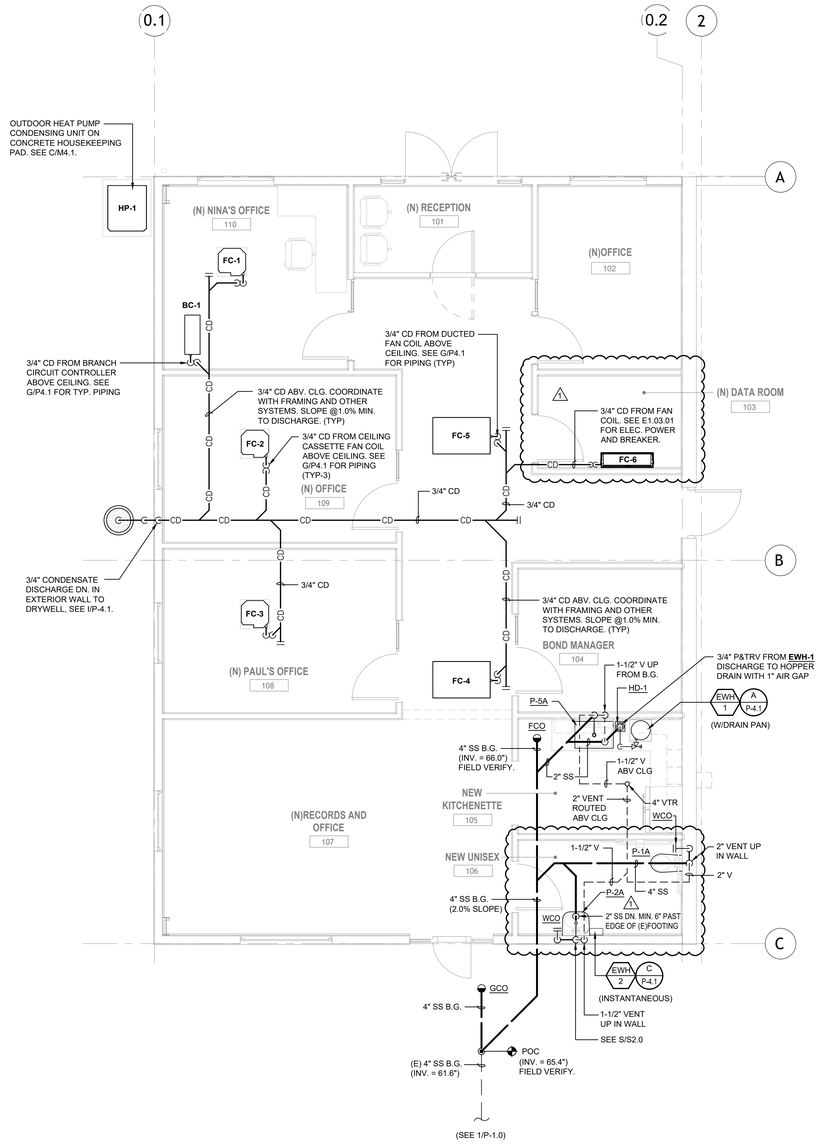
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Autodesk Docs://Small Admin Office Remodel/LIBERTY UNION SCHOOL DISTRICT _NEW OFFICE.rvt



1 FIRST FLOOR PLUMBING WASTE + VENT DEMO PLAN

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



2 FIRST FLOOR PLUMBING WASTE + VENT PROPOSED PLAN

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

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REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT — ESTABLISHED 1902

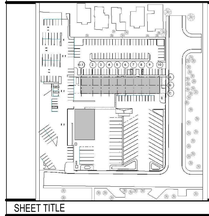
NEW ADMIN OFFICE REMODEL

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Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



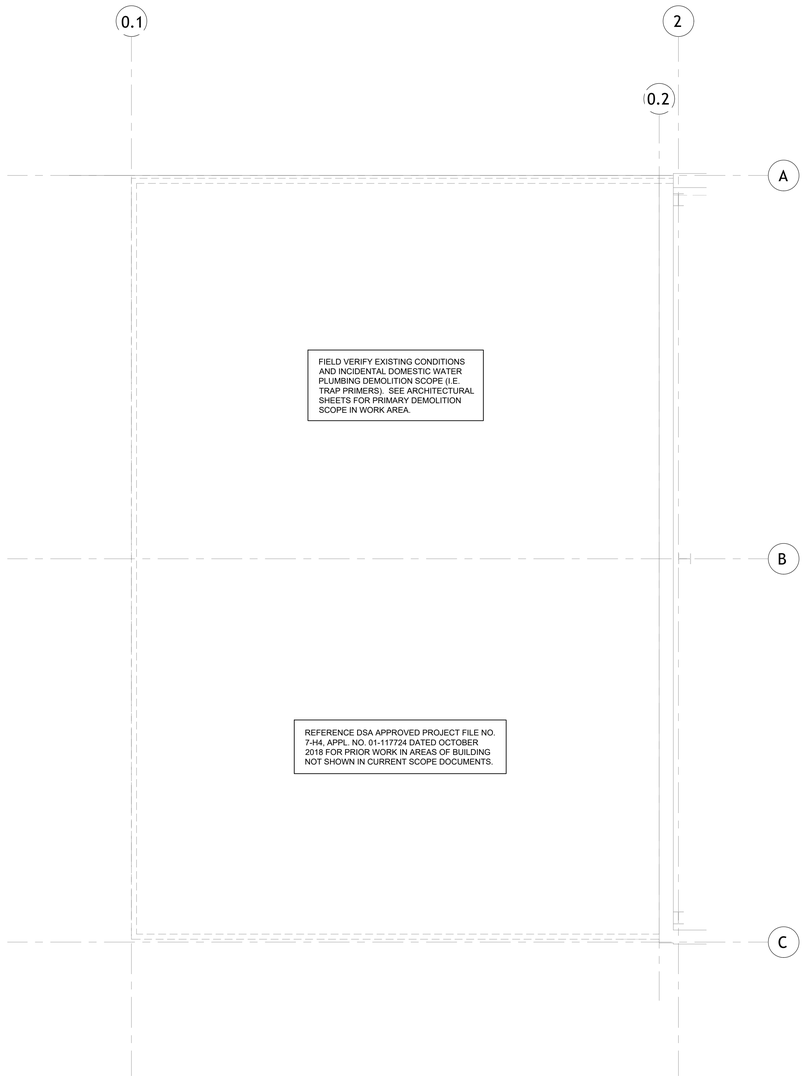
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FIRST FLOOR PLUMB WASTE + VENT PLANS

P-1.1

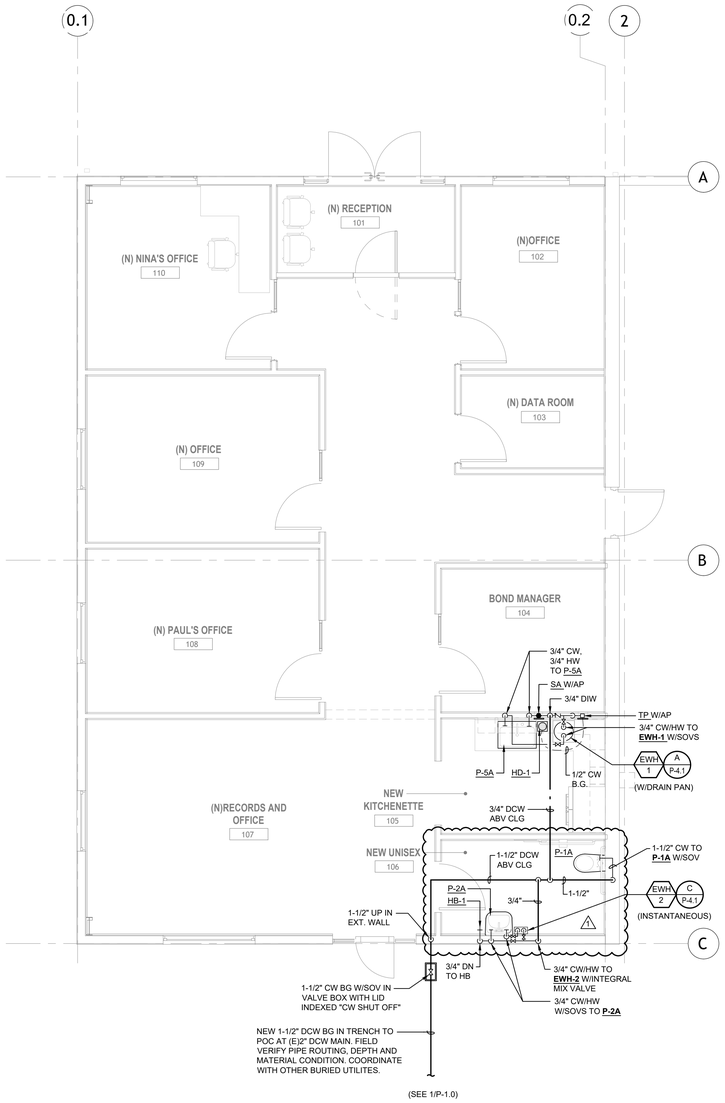
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1 FIRST FLOOR PLUMBING DCW + DHW DEMO PLAN

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



2 FIRST FLOOR PLUMBING DCW + DHW PROPOSED PLAN

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

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LIBERTY UNION HIGH SCHOOL DISTRICT

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1902

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

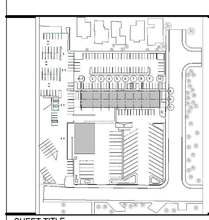
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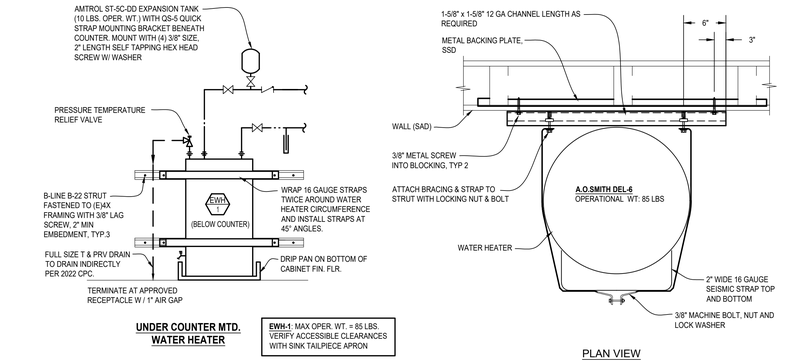
SHEET TITLE

FIRST FLOOR PLUMB DCW + DHW PLANS

P-1.2

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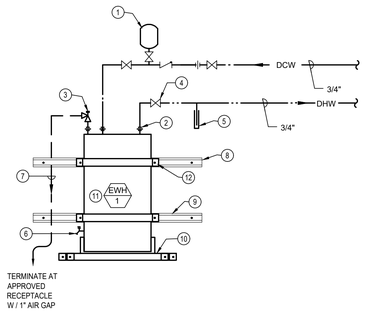
UNDER COUNTER MTD. WATER HEATER

EWH-1: MAX OPER. WT. = 85 LBS. VERIFY ACCESSIBLE CLEARANCES WITH SINK TAILPIECE APRON

PLAN VIEW

A WATER HEATER MOUNTING (BELOW CABINET COUNTER)

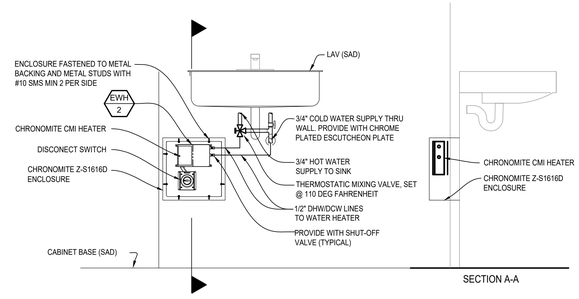
SCALE: NONE



1. AMTROL ST-5C-DD EXPANSION TANK WITH **QUICK-STRAP MDL. QS-120 MOUNTING BRACKET (LOAD RATING 70 LBS.),** MOUNT WITH (4) 3/8" SIZE, 2" LENGTH SELF TAPPING HEX HEAD SCREW W/ WASHER
2. DIELECTRIC UNION (TYPICAL)
3. PRESSURE TEMPERATURE RELIEF VALVE, CONNECT TO WATER HEATER P&TRV DRAIN OUTLET
4. GATE VALVE (TYPICAL)
5. THERMOMETER (TYP)
6. DRAIN VALVE WITH HOSE BIBB CONNECTION
7. FULL SIZE T & PRV DRAIN CONT. DN TO DRAIN INDIRECTLY TO UNDER COUNTER HOPPER DRAIN
8. SEE A/P-4.1 NOTATIONS FOR BRACING DETAILS.
9. METAL CHANNEL STUD BEHIND GYP-BD WALL @ 16" O.C (TYP)
10. DRIP PAN MOUNTED ON CABINET BASE
11. STORAGE-TYPE, ELECTRIC WATER HEATER. 9" MIN CLEARANCE TO CABINET FRAMING.
12. B-LINE B-22 STRUT FASTENED TO EA. SIDE OF CHANNEL METAL FRAMING WITH 3/8" LAG SCREW, 2" MIN EMBEDMENT TYP. 3, SEE A/P-4.1.

B ELEC. WATER HEATER (EWH) PIPING DIAGRAM

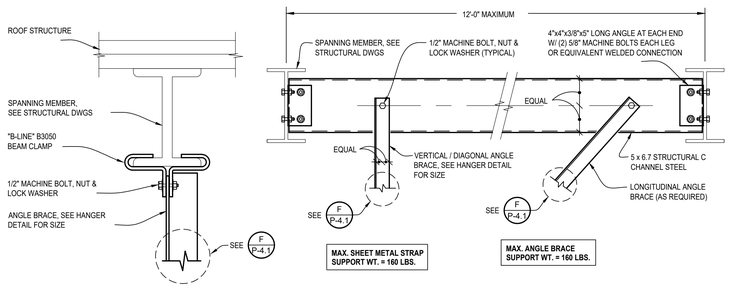
SCALE: NONE



SECTION A-A

C EWH ENCLOSURE MOUNTING & PIPING DETAIL

SCALE: NONE



MAX. SHEET METAL STRAP SUPPORT WT. = 160 LBS.

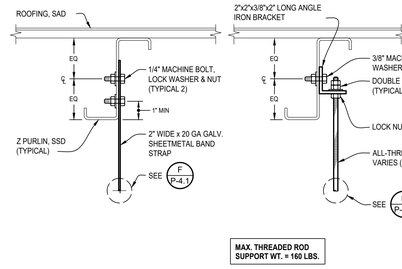
MAX. ANGLE BRACE SUPPORT WT. = 160 LBS.

CONNECTION TO STEEL BEAM
(VERTICAL ANGLE ONLY)

CONNECTION TO SPREADER
(VERTICAL, DIAGONAL AND LONGITUDINAL L'S)

D TYPICAL SEISMIC BRACE CONNECTION DETAILS @ BEAMS

SCALE: NONE



MAX. THREADED ROD SUPPORT WT. = 160 LBS.

E TYPICAL HANGER CONNECTIONS @ Z PURLIN

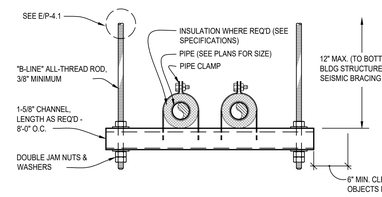
SCALE: NONE

NOTES:
1. RUN PIPING TRAPEZE AS CLOSE AS POSSIBLE TO STRUCTURE.
2. SUPPORT PIPING AT A MAXIMUM OF 8'-0" INTERVALS.
3. SEE PLANS FOR PIPE SIZES.
4. CHANNEL DEFLECTION SHALL NOT EXCEED 1/360 OF THE SPAN BETWEEN RODS. DOUBLE-UP CHANNELS AS REQUIRED.
5. NO BRACING IS REQUIRED ON PIPES LESS THAN 2-1/2" IN DIAMETER, AND WHEN SUPPORTED LESS THAN 12" FROM BOTTOM OF BLDG STRUCTURE.

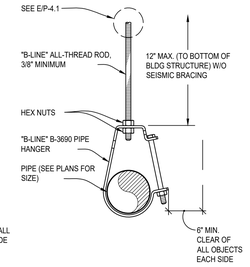
TRAPEZE LOAD & SUPPORT CONDITIONS:

HEAVY: 645 LBS PER TRAPEZE, OR MORE: 1/2"Ø ALL-THREAD TO WOOD BLOCKING.

NOT HEAVY: LESS THAN 645 LBS PER TRAPEZE: 3/8"Ø ALL-THREAD TO WOOD BLOCKING.

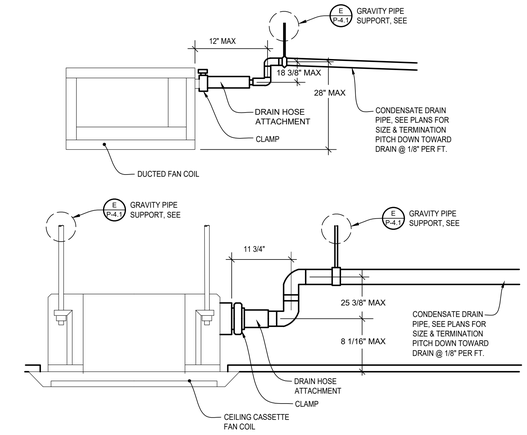


MINIMUM ROD SIZES (INCHES)	PIPE DIAMETER (INCHES)
3/8"	2" & SMALLER PIPE
1/2"	2-1/2" & LARGER PIPE



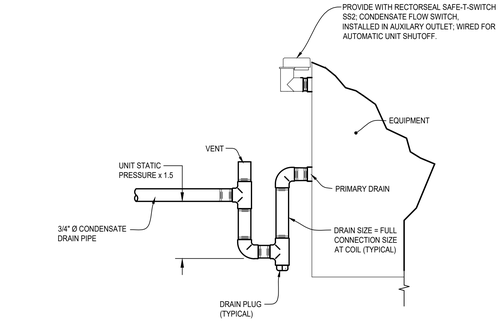
F TYPICAL PIPE HANGER DETAILS

SCALE: NONE



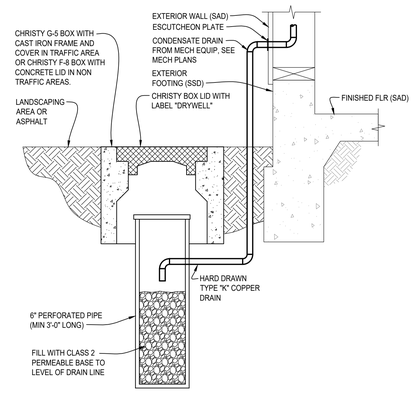
G TYPICAL INDOOR VRV CONDENSATE DETAIL

SCALE: NONE



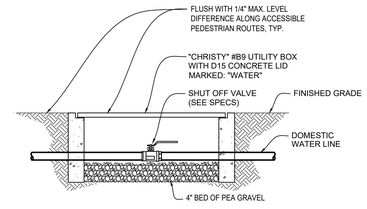
H PRIMARY / SECONDARY DRAIN DETAIL

SCALE: NONE



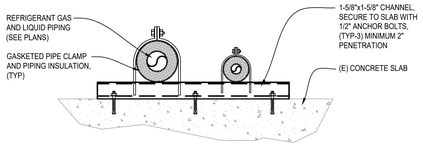
I CONDENSATE TO DRYWELL DETAIL

SCALE: NTS



J DCW SHUT-OFF VALVE IN YARD BOX

SCALE: NONE



SIDE VIEW

NOTE:
1. ALL CHANNEL SHALL BE B-LINE GREENKOTE. ALL FASTENERS SHALL BE STAINLESS STEEL.
2. PIPE SUPPORT SPACING SHALL BE AT MAX. 8'-0" BETWEEN CHANNELS.

K PIPE SUPPORT DETAIL ON CONC SLAB

SCALE: NONE

PLOT DATE: 28-07-2025 19:04:13

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REVISION	DESCRIPTION
1	ADDENDUM #1_DISTRICT REVISIONS 03/27/2026

LIBERTY UNION HIGH SCHOOL DISTRICT

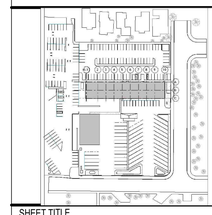
NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
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Project Number: 61721-97

Organization Description
NEW ADMIN OFFICE REMODEL

850 2ND STREET BRENTWOOD, CA 94513



SHEET TITLE

PLUMBING DETAILS

P-4.1

ARC FLASH WARNING LABEL REQUIREMENTS

CONDITION 1:
EXISTING EQUIPMENT WITHIN SCOPE OF THE PROJECT AND ALL NEW EQUIPMENT



1. ARC FLASH HAZARD HAZARD WARNING LABELS SHALL BE FIELD MARKED/PLACED ON ALL NEW AND EXISTING ELECTRICAL DISTRIBUTION BOARDS, SWITCHBOARDS, TRANSFORMERS, PANELS, PANELBOARDS, DISCONNECTS, & MOTOR CONTROL CENTERS THAT ARE WITHIN THE SCOPE OF THIS PROJECT PER CEC 110.16. LABELS SHALL BE APPLIED TO EXISTING EQUIPMENT WHERE NEW CONNECTIONS ARE MADE. THE LABELS SHALL MEET THE REQUIREMENTS OF 110.21(B) AND ANSI Z535.4-2011 GUIDELINES BY USING EFFECTIVE COLORS, SYMBOLS OR ANY COMBINATION THEREOF.

CONDITION 2:
COMPLETELY NEW DISTRIBUTION SYSTEMS ONLY



1. ARC FLASH HAZARD WARNING LABELS FOR AN ENTIRELY NEW ELECTRICAL SERVICE AND DISTRIBUTION SYSTEMS SHALL BE UTILIZED AND ALL ELECTRICAL COMPONENTS OF THE DISTRIBUTION EQUIPMENT SHALL HAVE AN ARC FLASH WARNING LABEL WITH THE FOLLOWING INFORMATION:
   1.1. NOMINAL SYSTEM VOLTAGE
   1.2. ARC FLASH BOUNDARY
   1.3. MINIMAL ARC RATING OF CLOTHING
   1.4. EXACTLY ONE OF THE FOLLOWING:
      1.4.1. INCIDENT ENERGY & CORRESPONDING WORKING DISTANCE
      1.4.2. THE ARC FLASH PPE CATEGORY
2. THE LABELS SHALL MEET THE REQUIREMENTS OF CEC 110.21(B) AND ANSI Z535.4-2011 GUIDELINES BY USING EFFECTIVE COLORS, SYMBOLS OR ANY COMBINATION THEREOF.
3. THE CONTRACTOR SHALL HAVE THE EQUIPMENT MANUFACTURER PROVIDE THE REQUIRED LABELING OR OBTAIN THE SERVICES OF A THIRD PARTY OR THE ELECTRICAL ENGINEER OF RECORD.

CONDITION 3:
NEW SERVICES

1. ARC FLASH HAZARD WARNING LABELS SHALL BE FIELD MARKED/PLACED ON ALL NEW SERVICE EQUIPMENT WITH THE FOLLOWING INFORMATION.
   1.1. NOMINAL SYSTEM VOLTAGE
   1.2. AVAILABLE FAULT CURRENT AT THE SERVICE OVERCURRENT PROTECTIVE DEVICES
   1.3. CLEARING TIME OF THE SERVICE OVERCURRENT PROTECTIVE DEVICES BASED ON THE AVAILABLE FAULT CURRENT AT THE SERVICE EQUIPMENT
   1.4. THE DATE THE LABEL WAS APPLIED
2. THE LABELS SHALL MEET THE REQUIREMENTS OF CEC 110.21(B) AND ANSI Z535.4-2011 GUIDELINES BY USING EFFECTIVE COLORS, SYMBOLS OR ANY COMBINATION THEREOF.

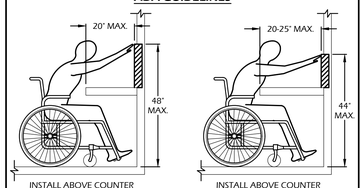
120V BRANCH CIRCUIT VOLT DROP CONDUCTOR LENGTH CHART

LOAD IN VOLT AMPERES	LENGTH OF CONDUCTOR WIRE SIZE IN (GAUGE)				
	#12	#10	#8	#6	#4
1200VA	74	121	183	284	434
1560VA	57	93	141	218	334
1800VA	49	81	122	189	289
1920VA	46	76	115	178	271
2340VA	X	62	94	146	223
2880VA	X	51	76	118	181
3000VA	X	48	73	114	174
3900VA	X	X	56	87	134
4800VA	X	X	46	71	108

NOTES:
1. THIS CHART IS FOR COPPER CONDUCTORS ONLY.
2. THIS CHART ASSUME AN 80% POWER FACTOR AND STEEL RACEWAYS.
3. 2022 CALIFORNIA ENERGY CODE, 130.5(c) ALLOWS A MAXIMUM COMBINED VOLTAGE DROP OF 5%. THIS CHART ASSUMES A MAXIMUM LENGTH OF CONDUCTORS FOR LESS THAN 2% VOLTAGE DROP ON A BRANCH CIRCUIT AT GIVEN VA LOAD.
4. USE WIRE SIZE FROM THIS CHART UNLESS LARGER CONDUCTOR SIZES ARE NOTED ON THE DRAWINGS.
5. FOR VA VALUES NOT SHOWN USE NEXT HIGHEST VALUE FROM VALUE FROM THE CHART.

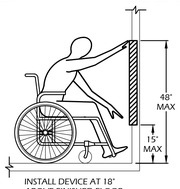
TYPICAL WALL DEVICE MOUNTING HEIGHTS

ADA GUIDELINES



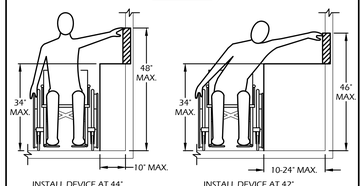
INSTALL ABOVE COUNTER DEVICE AT 44" ABOVE FINISHED FLOOR.

INSTALL ABOVE COUNTER DEVICE AT 40" ABOVE FINISHED FLOOR.



INSTALL DEVICE AT 18" ABOVE FINISHED FLOOR

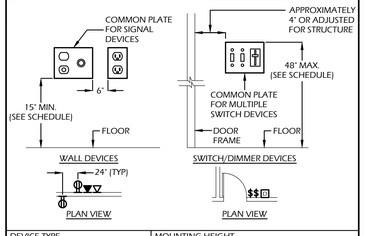
FRONT ACCESS



INSTALL DEVICE AT 44" ABOVE FINISHED FLOOR.

INSTALL DEVICE AT 42" ABOVE FINISHED FLOOR.

SIDE ACCESS



DEVICE TYPE	MOUNTING HEIGHT
SWITCHES	NO MORE THAN 48" A.F.F. TO TOP OF DEVICE
DIMMERS	NO MORE THAN 48" A.F.F. TO TOP OF DEVICE
RECEPTACLES	NO LESS THAN 15" A.F.F. TO BOTTOM OF DEVICE
TEL. OUTLETS (OFFICE)	NO LESS THAN 15" A.F.F. TO BOTTOM OF DEVICE
TEL. OUTLETS (CLASSROOMS)	NO MORE THAN 48" A.F.F. TO TOP OF DEVICE
DATA OUTLETS	NO LESS THAN 15" A.F.F. TO BOTTOM OF DEVICE
INTERCOM OUTLETS	NO LESS THAN 15" A.F.F. TO BOTTOM OF DEVICE
TELEVISION OUTLETS	NO LESS THAN 15" A.F.F. TO BOTTOM OF DEVICE
MICROPHONE OUTLETS	NO LESS THAN 15" A.F.F. TO BOTTOM OF DEVICE
RECEPTACLES, OUTLETS, SWITCHES, ETC. MOUNTED ABOVE COUNTERS	WITHIN THE REACH RANGE SPECIFIED IN SECTION 11B-308 OF THE CALIFORNIA BUILDING CODE.
CLOCKS	AS SHOWN ON DRAWINGS
SPEAKERS	AS SHOWN ON DRAWINGS
HAND DRYERS	REFER TO ARCHITECTURAL PLANS
HAIR DRYERS	REFER TO ARCHITECTURAL PLANS
WALL SCONCES	ABOVE 80" FOR PROJECTIONS INTO CORRIDORS OF MORE THAN 4" OR AS SHOWN ON DRAWING
EXIT LIGHTS	SEE DETAILS
EXIT MARKERS	SEE DETAILS
EMERGENCY LIGHTING WALL PACK	AS SHOWN ON DRAWINGS
KEYPADS	NO MORE THAN 48" A.F.F. TO TOP OF DEVICE
WIREMOLD	MOUNTING HEIGHT SHALL BE SUCH THAT THE LOWEST DEVICE MOUNTED ON WIREMOLD IS AT 15" A.F.F. TO BOTTOM OF DEVICE, U.O.N.

NOTES:
1. ALL VERTICAL MEASUREMENTS ARE 'ABOVE FINISHED FLOOR' - (A.F.F.).
2. SEE DRAWINGS FOR NON-TYPICAL MOUNTING HEIGHTS.
3. WHERE MOUNTING HEIGHTS ARE NOT SHOWN, REFER TO ARCHITECTURAL PLANS.
4. RECEPTACLES, LIGHT SWITCHES, TELEPHONE-DATA OUTLETS AND OTHER RECESSED ELECTRICAL DEVICES THAT ARE SHOWN BACK-TO-BACK ON WALLS SEPARATING CORRIDORS, ROOMS AND OPEN AREAS SHALL BE SEPARATED HORIZONTALLY BY AT LEAST 24 INCHES. THIS REQUIREMENT IS TO SATISFY BOTH THE CONDITIONS AT FIRE RATED CORRIDORS AND SOUND TRANSMISSION FACTOR BETWEEN ALL CORRIDORS, ROOMS AND OPEN AREAS INCLUDING EXTERIOR WALLS.

STANDARD SYMBOL LEGEND

- FIXTURE DESIGNATOR - '#' INDICATES FIXTURE TYPE.
- LIGHT FIXTURE - APPROXIMATELY TO SCALE
- FIXTURE WITH 90 MINUTE EMERGENCY BATTERY BACK-UP UNIT - SEE TYPICAL WIRING DETAIL
- LIGHT FIXTURE - WALL OR CEILING MOUNTED. '3' INDICATES CIRCUIT, 'a' INDICATES SWITCH CONTROL.
- EXIT LIGHTS- CEILING OR WALL MOUNTED, ARROW(S) INDICATES DIRECTION.
- EXISTING POLE LIGHTING
- WATTSTOPPER LMRC-101 ON/OFF, 1 SWITCH LEG LIGHTING CONTROLLER
- WATTSTOPPER LMRC-102 ON/OFF, 2 SWITCH LEG LIGHTING CONTROLLER
- WATTSTOPPER LMRC-212 DIMMING, 2 SWITCH LEG LIGHTING CONTROLLER
- WATTSTOPPER LMRC-213 DIMMING, 3 SWITCH LEG LIGHTING CONTROLLER
- WATTSTOPPER LMDC-100 DUAL TECHNOLOGY MOTION SENSOR
- WATTSTOPPER LMDX-100 DUAL TECHNOLOGY OCCUPANCY SENSOR
- WATTSTOPPER LMSW-101 SWITCH, 'a' INDICATES SWITCH LEG CONTROL. 2 LETTERS NEXT TO EACHOTHER WITHOUT A COMMA INDICATES 1 SWITCH LEG
- WATTSTOPPER LMDM-101 DIMMER, 'a' INDICATES SWITCH LEG CONTROL. 2 LETTERS NEXT TO EACHOTHER WITHOUT A COMMA INDICATES 1 SWITCH LEG
- WATTSTOPPER LMLS-400 PHOTOSENSOR
- WATTSTOPPER LMPL-201 RECEPTACLE CONTROLLER
- PANEL IDENTIFICATION
- CIRCUIT IDENTIFICATION
- SWITCH-LEG IDENTIFICATION

PNL-#a

LIGHTING AND RECEPTACLE ROOM CONTROLLERS SHALL BE LOCATED ABOVE THE T-BAR CEILING FOR THE ROOMS THEY ARE CONTROLLING. IF THE ROOM WITH THE CONTROLLED DEVICES HAS A HARD CEILING THEN LOCATE THE ROOM CONTROLLERS AT THE NEAREST ADJACENT ROOM WITH A T-BAR CEILING. IF NO T-BAR CEILINGS EXISTS LOCATE THE ROOM CONTROLLERS IN THE ELECTRICAL ROOM. LABEL ALL ROOM LIGHTING AND RECEPTACLE CONTROLLERS WITH THE ROOM NAME, ROOM NUMBER, AND CIRCUIT(S) THEY CONTROL.

- SKYLIT OR PRIMARY SIDE DAYLIT ZONE
- SECONDARY SIDE DAYLIT ZONE
- SPST TOGGLE WALL SWITCH - 20A, 120/277V, 'a' INDICATES CONTROL
- OCCUPANCY SENSOR COMBO WALL SWITCH - 20A, 120/277V RATED
- CEILING OR WALL MOUNTED JUNCTION BOX
- PULLBOX(S) - SIZE AND NUMBER AS INDICATED
- RECEPTACLE, DUPLEX - 20A, 120V & GROUND
- RECEPTACLE, DUPLEX CEILING MOUNTED
- RECEPTACLE, DUPLEX - WITH ONE-HALF SWITCHED/CONTROLLED
- RECEPTACLE, DUPLEX- WITH GFCI PROTECTION
- WP RECEPTACLE, DUPLEX - WITH GFCI PROTECTION IN WEATHERPROOF HOUSING
- 20A, 120V RECEPTACLE, DUPLEX- WITH TWO USB PORTS
- RECEPTACLE, DOUBLE DUPLEX - (2) 20A, 120V & GROUND
- RECEPTACLE, DOUBLE DUPLEX CEILING MOUNTED
- RECEPTACLE, DOUBLE DUPLEX WITH GFCI PROTECTION
- RECEPTACLE, DOUBLE DUPLEX - WITH ONE-HALF SWITCHED/CONTROLLED
- RECEPTACLE, DOUBLE DUPLEX - WITH ONE-HALF SWITCHED/CONTROLLED, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.
- RECEPTACLE, SPECIAL - REFER TO FLOOR PLAN FOR RECEPTACLE SIZE.
- TELEPHONE OUTLET: PROVIDE & INSTALL 2-GANG BOX WITH 1" CONDUIT. STUB-UP INTO T-BAR CEILING. FOR HARD CEILINGS, RUN THE CONDUIT TO THE CABLE TERMINATION LOCATION INDICATED PER THE RISER DIAGRAM. PROVIDE A SINGLE 1" CONDUIT FOR UP TO 4 CABLES.
- (#) DATA OUTLETS: PROVIDE & INSTALL 2-GANG BOX, FACEPLATE, AND QUANTITY OF CAT-6A DATA PORTS INDICATED WITH 1" CONDUIT STUB-UP INTO T-BAR CEILING. FOR HARD CEILINGS, RUN THE CONDUIT TO THE CABLE TERMINATION LOCATION INDICATED PER THE RISER DIAGRAM OR IDF LOCATION INDICATED. PROVIDE A SINGLE 1" CONDUIT FOR UP TO 4 CABLES. LABEL ALL DATA PORTS PER THE OWNER'S REQUIREMENTS.
- RECEPTACLE, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.
- RECEPTACLE WITH ONE-HALF SWITCHED/CONTROLLED, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.
- TELEPHONE OUTLET, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.
- DATA OUTLET, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.
- INTERCOM OUTLET, FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED.
- FLUSH, FLOOR MOUNTED DUPLEX RECEPTACLE, DATA JACK, AND TELEPHONE JACK.
- DATA OUTLET, CEILING MOUNTED
- CEILING OR WALL MOUNTED WIRELESS ACCESS POINT PROVISIONS. PROVIDE AND INSTALL TWO DATA CABLES FROM EACH ACCESS POINT TO IDF. FOR HARD CEILINGS TERMINATE THE CABLES INTO A BOX WITH COVER PLATE. FOR T-BAR CEILINGS TERMINATE THE CABLES INTO A CUBE CAT-6 PORT AND CURL UP THE CABLE WITH 10-FEET OF SLACK. LEAVE ABOVE THE T-BAR CEILING. PROVIDE A LABEL BENEATH THE T-BAR CEILING TO INDICATE DATA PORTS ABOVE.
- (#) SHEET NOTE NUMBER - #, SEE NOTE DESCRIPTION ON SAME SHEET.
- (#) GENERAL NOTE NUMBER - #, SEE NOTE DESCRIPTION ON SAME SHEET.
- (#/#) REFERENCE TO PLAN/DETAIL/DIAGRAM

- 3/4" THICK x 96" TALL FIRE RETARDANT PLYWOOD BACKBOARD. PROVIDE QUANTITY OF PLYWOOD SHEETS TO ENCOMPASS ENTIRE LENGTH INDICATED ON PLANS.
- TERMINAL CABINET - SURFACE OR FLUSH MOUNTED WITH FLAME RETARDANT PLYWOOD BACKBOARD
- PANELBOARD - SURFACE OR FLUSH MOUNTED
- DISTRIBUTION OR SWITCHBOARD
- NEUTRAL LINK
- TRANSFORMER
- T TRANSFORMER
- #A/#B/#C FUSED DISCONNECT - MOTOR RATED. FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR. DISCONNECTS TO BE FURNISHED WITH DUAL ELEMENT FUSES SIZED ACCORDING TO NAME PLATE DATA ON EQUIPMENT INSTALLED. SIZE AS : #A = AMPERE RATING OF DISCONNECT, #B = POLES, #C = FUSE SIZE REQUIRED. ALSO REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR DISCONNECT REQUIREMENTS. IF NO AMPERE RATING IS INDICATED ON PLAN SIZE DISCONNECT PER NAMEPLATE RATING AND CEC.
- #A/#B UNFUSED DISCONNECT - MOTOR RATED, FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR: #1 = AMPERE RATING OF DISCONNECT, #2 = POLES REQUIRED. ALSO REFER TO MECHANICAL EQUIPMENT SCHEDULE FOR DISCONNECT REQUIREMENTS. IF NO AMPERE RATING IS INDICATED ON PLAN SIZE DISCONNECT PER NAMEPLATE RATING AND CEC.
- MAGNETIC MOTOR STARTER FURNISHED, INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
- MOTOR - FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AND CONNECTED BY ELECTRICAL CONTRACTOR.
- M METER
- INSTALL OWNER FURNISHED SURVEILLANCE CAMERA. PROVIDE AND INSTALL CAT-6a DATA PORT IN ATTIC AT CAMERA LOCATION AND CAT-6a CABLE FROM THE CAMERA TO NEAREST IDF. MAKE ALL CONNECTIONS FOR A FULLY FUNCTIONAL SYSTEM.
- INTRUSION ALARM DOOR CONTACT CONDUIT PROVISION, SEE TYPICAL DETAILS. PROVIDE AND INSTALL CONDUIT PROVISIONS BACK TO THE INTRUSION ALARM TERMINAL CABINET.
- INTRUSION ALARM KEYPAD
- WALL OR CEILING MOUNTED INTRUSION ALARM MOTION SENSOR. PROVIDE AND INSTALL CONDUIT PROVISIONS BACK TO THE INTRUSION ALARM TERMINAL CABINET.
- WALL OR CEILING MOUNTED GLASS BREAK DETECTOR. PROVIDE AND INSTALL CONDUIT PROVISIONS BACK TO THE INTRUSION ALARM TERMINAL CABINET.
- GROUND
- CIRCUIT BREAKER
- EXISTING ABOVE GROUND CONDUIT
- EXISTING UNDERGROUND CONDUIT
- SURFACE MOUNTED WIREMOLD RACEWAY. SEE PLANS FOR TYPE.
- SURFACE MOUNTED VERTICAL WIREMOLD RACEWAY RISER. SEE PLANS FOR TYPE.
- NEW ELECTRICAL EQUIPMENT
- EXISTING ELECTRICAL EQUIPMENT TO REMAIN
- EXISTING ELECTRICAL EQUIPMENT TO BE DEMOLISHED
- GROUND WIRE WITH GREEN INSULATION SIZE PER N.E.C., U.O.N.
- CONDUIT CONCEALED IN WALL OR CEILINGS. PROVIDE NUMBER OF WIRES NECESSARY FOR BRANCH CIRCUIT, SWITCH LEGS, ETC. PROVIDE SEPARATE NEUTRALS FOR EACH PHASE WIRE. SIZE SHALL BE DETERMINED BY OCPD CONNECTED TO THE PHASE CONDUCTORS AND VOLTAGE DROP CONSIDERATIONS. ALL CONDUITS SHALL HAVE GROUND CONDUCTOR(S). SIZE CONDUIT PER NEC.
- CONDUIT CONCEALED UNDERGROUND OR BELOW FLOOR, MINIMUM SIZE IS 3/4". PROVIDE NUMBER OF WIRES NECESSARY FOR BRANCH CIRCUIT, SWITCH LEGS, ETC. PROVIDE SEPARATE NEUTRALS FOR EACH PHASE WIRE. SIZE SHALL BE DETERMINED BY OCPD CONNECTED TO THE PHASE CONDUCTORS AND VOLTAGE DROP CONSIDERATIONS. ALL CONDUITS SHALL HAVE GROUND CONDUCTOR(S). SIZE CONDUIT PER NEC.
- CONDUIT- UP
- CONDUIT-DOWN
- PROVIDE AND INSTALL TWO MALE F-TYPE CONNECTORS AND TV FACEPLATE. PROVIDE AND INSTALL RG-6 COAXIAL CABLE FROM EACH CONNECTOR TO THE CABLE TV HEADEND & TERMINATE WITH A MALE F-TYPE CONNECTOR.
- TELEVISION OUTLET IN FLUSH FLOOR BOX - CARPET PLATE WHERE REQUIRED, SEE TELEVISION SYMBOL.
- (5)(4)(2) NUMBER IN PARENTHESIS INDICATES QUANTITY OF DEVICES. TYPICAL FOR ALL TYPES OF DEVICES.
- SPEAKER - WALL OR CEILING MOUNTED, REFER TO RISER DIAGRAM AND/OR SPECIFICATIONS.
- CLOCK, REFER TO RISER DIAGRAM AND/OR NOTES ON PLANS.
- COMBINATION CLOCK & SPEAKER, SEE CLOCK & SPEAKER SYMBOLS.
- WALL MOUNTED TV OUTLET WITH F-TYPE TV JACK. PROVIDE SURFACE MOUNTED WIREMOLD BOX TO ACCOMMODATE
- XX X DESIGNATES SIZE AND QUANTITY OF FEEDERS SEE FEEDER SCHEDULE

ELECTRICAL SHEET INDEX

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THESE PLANS ARE ACCOMPANIED WITH BOOK SPECIFICATIONS THAT FORM PART OF THE CONTRACT DOCUMENTS.

ABBREVIATIONS

A, AMP	AMPERES
A.C.	ABOVE COUNTER
A.F.F.	ABOVE FINISHED FLOOR
AL	ALUMINUM CONDUCTOR OR BUS
BD	BOARD
C	CONDUIT
CAB	CABINET
CATV	CABLE TELEVISION
CB	CIRCUIT BREAKER
CC	CENTER TO CENTER
CKT	CIRCUIT
CO	CONDUIT ONLY (EMPTY CONDUIT) WITH PULL WIRE
COPS	CRITICAL OPERATIONS POWER SYSTEM (CEC 708)
CPB	COMMUNICATIONS PULL BOX
CU	COPPER CONDUCTOR OR BUS
DB	DISTRIBUTION PANEL
DCOA	DESIGNATED CRITICAL OPERATIONS AREA
(E)	EXISTING
EM	EMERGENCY
EMT	ELECTRIC METALLIC TUBING
E.O.L.	END-OF-LINE
EPO	EMERGENCY POWER-OFF
EWC	ELECTRIC WATER COOLER
F	FUSE
F.A./F.A	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
F.B.O.	FURNISHED BY OTHER/FURNISHED BY OWNER
FLA	FULL LOAD AMPS
FMC	FLEXIBLE METALLIC CONDUIT
FS	FLOW SWITCH
G	GREEN GROUND WIRE
GFCI	GROUND FAULT CIRCUIT INTERRUPT
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HC	HORIZONTAL CROSSCONNECT
HID	HIGH INTENSITY DISCHARGE
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
I.B.O.	INSTALLED BY OTHER
I.B.E.	INSTALLED AND CONNECTED BY ELECTRICAL CONTRACTOR
IDF	INTERMEDIATE DISTRIBUTION FRAME (DATA)
IG	ISOLATED GROUND
INT	INTRUSION ALARM
J/JB	JUNCTION BOX
KNAN	FR3 FILLED, NATURAL CONVECTION TRANSFORMER
KV	KILOVOLTS
KVA	KILOVOLTS-AMPERES
KW	KILOWATT
LFMC	LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT
LCP	LIGHTING CONTROL PANEL
LMNC	DLM NETWORK COMPONENT ENCLOSURE
LTG	LIGHTING
LV	LOW VOLTAGE
MCC	MOTOR CONTROL CENTER
MTD	MOUNTED
MTG	MOUNTING
MLO	MAIN LUG ONLY
N	NEUTRAL
(N)	NEW
NL	NIGHT LIGHT
N.I.C.	NOT IN CONTRACT
N.T.S.	NOT TO SCALE
O.C./OC	ON CENTER
OFOI	OWNER FURNISHED OWNER INSTALLED
Ø	PHASE
P	POLE
P.A./PA	PUBLIC ADDRESS SYSTEM
PB	PULL BOX
PIV	POST INDICATOR VALVE
PNL	PANEL
PPB	POWER PULL BOX
REC/RECEPT.	RECEPTACLE
REF.	REFRIGERATOR
RELO	RELOCATABLE BUILDING/ PORTABLE BUILDING
RM	ROOM
RS	RAPID START
RU	RACK UNIT
SCE	SIGNAL CURRENT EXPANDER PANEL
S.L.	SECURITY LIGHT
SCTB	SIGNAL AND COMMUNICATION TERMINAL BACKBOARD
SPB	SIGNAL PULL BOX
SPD	SURGE SUPPRESSION DEVICE
STB	SIGNAL TERMINAL BOARD
STC	SIGNAL TERMINAL CABINET
SW	SWITCH
TPB	TELEPHONE PULL BOX
TS	TAMPER SWITCH
TEL	TELEPHONE
TERM	TERMINAL
TYP	TYPICAL
TTB	TELEPHONE TERMINAL BOARD
TTC	TELEPHONE TERMINAL CABINET
U.C.	UNDER COUNTER
UG	UNDERGROUND
U.O.N.	UNLESS OTHERWISE NOTED
V	VOLTS/VOLTAGE
V.P.	VANDAL PROOF
W	WATTS
WP	WEATHERPROOF
WM	WIREMOLD

ELECTRICAL EQUIPMENT NOTES

1. THE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF ELECTRICAL EQUIPMENT, DEVICES AND WIRING. SEE SECTION 260000 OF THE SPECIFICATIONS.
2. FOR THE EXACT LOCATION OF ELECTRICAL EQUIPMENT AND DEVICES SEE THE ARCHITECTURAL ELEVATIONS, DETAILS AND DIMENSIONS SHOWN ON THE DRAWINGS.

DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

NEW ADMIN OFFICE REMODEL

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PROJECT NO:
MODEL FILE:

DRAWN BY: JB
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SHEET TITLE

SYMBOLS LEGEND, ABBREVIATIONS, NOTES, & REQUIREMENTS

E1.01.01

REGISTERED PROFESSIONAL ENGINEER — BRENT A. BORRELLI — No. E16360 — Exp. 6/30/27 — ELECTRICAL — CALIFORNIA

DATE OF SIGN AND SEAL

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BAI Project #25126

SCAN ME

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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

1" = 40'-0" 120 80 40 0
1" = 30'-0" 90 60 30 0
1" = 20'-0" 60 40 20 0
1/8" = 1'-0" 16 8 0
1/4" = 1'-0" 8 4 0

TRENCHING AND EXCAVATION NOTES

1. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CALL UNDERGROUND SERVICE ALERT "USA" BEFORE THE COMMENCEMENT OF ANY EXCAVATION. EACH CONTRACTOR SHALL HAVE THEIR OWN USA TICKET NUMBER FOR EACH PROJECT LOCATION AND SHALL NOT RIDE ON ANY OTHER CONTRACTORS TICKET. CONTRACTOR SHALL NOTIFY THE OWNER 72 HOURS PRIOR TO EXCAVATION.
2. THIS CONTRACTOR SHALL PERFORM ALL CUTTING AND PATCHING NECESSARY FOR THE INSTALLATION OF EQUIPMENT AND MATERIALS. ALL PATCHING SHALL ACCURATELY MATCH THE ADJOINING WORK.
3. THIS CONTRACTOR SHALL DO EXCAVATING REQUIRED FOR THE INSTALLATION OF THE WORK. UNDERGROUND LINES OUTSIDE THE BUILDINGS SHALL BE INSTALLED WITH A MINIMUM OF 24" OF COVER, EXCEPT DEPTH OF UTILITY SERVICES SHALL COMPLY WITH RESPECTIVE UTILITY COMPANY REQUIREMENTS.
4. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE OPTIMUM MOISTURE CONTENT. COMPACT EACH LAYER TO REQUIRED PERCENTAGE OF MAXIMUM DRY DENSITY OR RELATIVE DRY DENSITY FOR EACH AREA CLASSIFICATION. DO NOT PLACE BACKFILL OR FILL MATERIAL ON SURFACES THAT ARE MUDDY, FROZEN, OR CONTAIN FROST OR ICE.
5. STRUCTURES, BUILDING SLABS, WALKWAYS, AND STEPS; COMPACT TOP 6" OF SUBGRADE AND EACH LAYER OF BACKFILL OR FILL MATERIAL AT 95% MAXIMUM RELATIVE COMPACTION.
6. COMPACT TOP 6" OF SUBGRADE MATERIAL AT 85% RELATIVE COMPACTION.
7. COMPACT TOP 6" OF SUBGRADE IMMEDIATELY BENEATH THE BASE COURSE AT 95% MINIMUM RELATIVE COMPACTION.
8. ANY SURPLUS EXCAVATION RESULTING FROM THESE EXCAVATIONS SHALL BE HAULED OFF.
9. AFTER ALL TRENCHES HAVE BEEN TAMPED IN, RAKE OUT ALL HIGH AND LOW AREAS ALONG THE TRENCH LINE. ALL CLODS AND SOLID ROCKS EXPOSED ON THE SURFACE AS A RESULT OF THE EXCAVATION SHALL BE BROKEN DOWN AND OR CLEANED UP. ALL TRENCH LINES SHALL BE RAKED LEVEL WITH EXISTING GRADE.
10. ELECTRICAL, NETWORK, OR DATA CONDUIT SHALL NOT BE RUN IN EXCAVATIONS PROVIDED FOR PLUMBING OR HEATING PIPES, UNLESS SEPARATED BY A MINIMUM OF 12 INCHES.
11. PATCH ALL TRENCHED AREAS TO MATCH EXISTING.
12. HAND EXCAVATE IN AREAS WHERE TRENCHING IS DIFFICULT DUE TO STRUCTURAL OBSTRUCTIONS OR EXISTING UNDERGROUND CONDUIT.
13. THE CONTRACTOR SHALL WALK THE SITE WITH THE DISTRICT TO IDENTIFY ALL EXISTING CONDUITS AND PIPES.
14. CONTRACTOR SHALL RETAIN AND PAY FOR THE SERVICES OF A SOILS LAB TO TEST FOR THE COMPACTION OF THE BACKFILL. A SOILS PROFILE SHALL BE DONE OF THE EXCAVATED NATIVE TRENCHED DIRT SO THE COMPACTION TEST CAN BE COMPARED WITH THE NATIVE DIRT PROFILE. THE CONTRACTOR SHALL PROVIDE ALL COMPACTION OF THE TRENCH REQUIRED TO MEET A 95% COMPACTION REQUIREMENT. AN INSPECTED AND SIGNED OFF COMPACTION TESTING REPORT SHALL BE PROVIDED BY THE SOILS TESTING LAB AND COPY OF THE COMPACTION TEST SHALL BE PROVIDED TO THE ENGINEER OF RECORD/PROJECT COORDINATOR PRIOR INSTALLING THE HARDSCAPE. THE CONTRACTOR SHALL WILL BE REQUIRED TO PAY FOR ALL TESTS UNTIL THE COMPACTION RESULTS MEET OR EXCEED THE COMPACTION TEST.
15. CONTRACTOR TO CONDUCT GROUND PENETRATING RADAR STUDY AND IT SHALL BE PERFORMED ALONG THE ENTIRE TRENCHING PRIOR TO ANY TRENCHING WORK.

CONDUIT SUPPORT NOTE

ALL ABOVE CEILING SPACE CONDUITS USED ON THIS PROJECT ARE LESS THAN 2-1/2" IN DIAMETER AND ARE TO BE INDIVIDUALLY SUPPORTED TO THE UNDERSIDE OF THE ROOF JOIST WITH HANGER ROD 10 INCHES OR LESS FROM THE TOP OF THE CONDUIT TO THE BOTTOM OF THE SUPPORT STRUCTURE. ANY CONDUIT GREATER THAN 2-1/2" IN SIZE SHALL BE SUPPORTED AND BRACED PER OSHPD PRE-APPROVALS OPM-0043, OPM-0052-13, OR OPM-0542.

CALIFORNIA CODE OF REGULATIONS

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2023

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

2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR (2021 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR (2020 NATIONAL ELECTRICAL CODE AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR (2021 IAPMO UNIFORM MECHANICAL CODE AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR(2021 IAPMO UNIFORM PLUMBING CODE AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR

2022 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR(2021 INTERNATIONAL FIRE CODE AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR (2021 INTERNATIONAL EXISTING BUILDING CODE AND 2022 CALIFORNIA AMENDMENTS)

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR

2022 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2019 ASME A17.1/CSA B44-2019 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2022 CEC PART 35)NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION.

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13 -	STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS (CA AMENDED)-2022 EDITION
NFPA 14 -	STANDARD FOR THE INSTALLATION OF STANDPIPE AND HOSE SYSTEMS (CA AMENDED)-2019 EDITION
NFPA 17 -	STANDARD FOR DRY CHEMICAL EXTINGUISHING SYSTEMS-2021 EDITION
NFPA 17A -	STANDARD FOR WET CHEMICAL EXTINGUISHING SYSTEMS-2021 EDITION
NFPA 20 -	STANDARD FOR THE INSTALLATION OF STATIONARY PUMPS FOR FIRE PROTECTION- 2019 EDITION
NFPA 24 -	STANDARD FOR THE INSTALLATION OF PRIVATE FIRE SERVICE MAINS AND THEIR APPURTENANCES (CA AMENDED)-2022 EDITION
NFPA 72 -	NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED)-2022 EDITION
NFPA 80 -	STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES-2019 EDITION
NFPA 2001 -	STANDARD ON CLEAN AGENT FIRE EXTINGUISHING SYSTEMS (CA AMENDED)-2018 EDITION
UL 300 -	STANDARD FOR FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF COMMERCIAL COOKING EQUIPMENT-2005 (R2010)
UL 464 -	AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES-2003 EDITION
UL 521 -	STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS-1999 EDITION
ICC 300 -	STANDARD FOR BLEACHERS, FOLDING AND TELESCOPIC SEATING, AND GRANDSTANDS-2017 EDITION

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

GENERAL NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM TO LATEST CODES AND ORDINANCES. IT IS THE INTENTION OF THESE PLANS AND SPECIFICATIONS TO COVER ALL THINGS REQUIRED TO PROVIDE COMPLETE AND OPERATIVE SYSTEMS. THE CONTRACTOR SHALL FURNISH LABOR, MATERIAL, TRANSPORTATION, EQUIPMENT, MISCELLANEOUS SERVICES, ETC. REQUIRED TO ACCOMPLISH THIS RESULT. ANYTHING WHICH MAY BE REASONABLY CONSTRUED AS A NECESSARY PART OF THE INSTALLATION SHALL BE INCLUDED. NOTHING IN THESE PLANS OR SPECIFICATIONS MAY BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO ANY CONSTRUCTION CODES.
2. ALL EQUIPMENT SHALL HAVE TESTING LABORATORY LABEL ATTACHED (U.L. C.S.A. ETC.) AS PER C.E.C. 110. PROOF OF TESTING LABELS REQUIRED WITH ALL SUBMITTALS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL THESE REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER PRIOR TO PURCHASING, IF ANY OF THE SPECIFIED MATERIAL FAILED THESE REQUIREMENTS. WHERE A FIELD CERTIFIED PRODUCT MAY BE REQUIRED FOR FIELD ASSEMBLED COMPONENT, PROVIDE CERTIFIED REPORT BY AN APPROVED TESTING AGENCY ACCEPTABLE TO THE AUTHORITIES HAVING JURISDICTION. INCLUDE ALL TESTING FEES IN BID.
3. THE ENGINEERING SERVICE ARE LIMITED TO PREPARATION OF PLANS AND SPECIFICATIONS. THE PLANS AND SPECIFICATIONS ARE INTENDED TO BE USED AS CONSTRUCTION GUIDELINES ONLY AND NOT THE TOTAL INSTRUMENT OF CONTRACT DOCUMENTS. IT IS NOT THE INTENTION OF ANY CONSTRUCTION PLANS TO DIVIDE WORK AMONG DIFFERENT TRADES. VERIFY SCOPE OF WORK WITH GENERAL CONTRACTOR/OWNER SINCE THE ENGINEER IS NOT SUPERVISING THE JOB. THE ENGINEER WILL PROVIDE INTERPRETATION OF THE CONSTRUCTION DOCUMENTS, BUT SUPERVISION IS UNDER THE RESPONSIBILITY OF THE OWNER OR HIS APPOINTEE.
4. WORKING CLEARANCE SHALL BE MAINTAINED AS PER C.E.C FOR ALL PANEL(S), SERVICE EQUIPMENT, DISCONNECT SWITCH, ETC. LOCAL UTILITY COMPANY WORKING CLEARANCE REQUIREMENT SHALL ALSO BE OBSERVED. POWER EQUIPMENT MANUFACTURER'S PRODUCT MAY VARY IN DIMENSION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF WORKING CLEARANCE REQUIREMENT WHEN LAYING OUT THE ELECTRICAL EQUIPMENT.
5. ARC FLASH WARNING LABELS SHALL BE PLACED ON ALL ELECTRICAL DISTRIBUTION BOARDS, MAIN SWITCHBOARDS, TRANSFORMERS, PANELS, PANELBOARDS, DISCONNECTS ETC. PER CEC 110.16. LABELS SHALL BE PER ANSI Z535.4 GUIDELINES. REFER TO THE ARC FLASH REQUIREMENTS PER THE TYPICAL DETAILS.
6. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF TERMINAL BOXES AND CONDUIT ENTRANCES OF ALL EQUIPMENT AGAINST SHOP DRAWINGS BEFORE STUBBING UP CONDUITS OR PENETRATING EXTERIOR WALL(S) OF BUILDING(S).
7. IN CASE OF INTERFERENCE BETWEEN ELECTRICAL EQUIPMENT SHOWN ON THE DRAWINGS AND OTHER EQUIPMENT, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING BEFORE PROCEEDING.
8. ALL OUTDOOR DEVICES SHALL BE WEATHERPROOF.
9. ONLY MAJOR PULL BOXES ARE SHOWN. CONTRACTOR SHALL PROVIDE ADDITIONAL PULL BOXES WHERE THEY ARE REQUIRED TO MAKE A WORKABLE INSTALLATION. ALL PULL BOXES ABOVE GROUND SHALL BE PAD LOCKABLE. ALL PULL BOXES UNDERGROUND SHALL HAVE HOLD DOWN BOLTS AND BE TRAFFIC RATED.
10. MARK ALL PANELS WITH LAMANOID TAGS RIVETED TO THE EQUIPMENT. PROVIDE TYPE WRITTEN PANEL SCHEDULE AT ALL PANELS.
11. ALL FLOOR/GROUND MOUNTED EQUIPMENT SHALL SIT ON A CONCRETE PAD 3" HIGHER THAN SURROUNDING SURFACE FOR INTERIOR EQUIPMENT AND 6" FOR EXTERIOR EQUIPMENT.
12. CONTRACTOR SHALL FURNISH ALL MATERIALS, TOOLS, LABOR, EQUIPMENT AND SUPERVISION NECESSARY TO COMPLETE INSTALLATION, CHECKOUT AND INITIAL OPERATION.
13. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GENERAL ARRANGEMENT OF EQUIPMENT SHOWN AND SHALL SUBMIT SHOP DRAWINGS FOR ALL EQUIPMENT PRIOR TO PURCHASE.
14. CAUTION SHOULD BE USED WHEN EXCAVATING OR TRENCHING TO LOCATE EXISTING UNDERGROUND CONDUITS. COORDINATE WITH AGENCIES SUCH AS UNDERGROUND SERVICE ALERT PRIOR TO EXCAVATION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HAVING VISITED THE SITE AND SATISFIED HIMSELF AS TO THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED. THE CONTRACTOR SHALL CHECK ALL OF THE CONDITIONS WHICH MAY AFFECT HIS WORK. THE SITE VISIT SHALL BE MADE PRIOR TO SUBMITTING THE BID. BIDDERS SHALL PREARRANGE A SITE VISIT WITH THE OWNER/PROJECT ENGINEER.
16. THE CONTRACTOR SHALL OBTAIN A FULL SET OF PLANS WHEN BIDDING THE JOB.
17. ALL PHASE CONDUCTORS SHALL HAVE THEIR OWN NEUTRALS. NO SHARING OF NEUTRALS ALLOWED.
18. ISOLATED GROUNDING CONDUCTORS SHALL BE SIZED TO MATCH THE EQUIPMENT GROUNDING CONDUCTOR SIZE AND INSTALLED AND CONNECTED ONLY TO THE RECEPTACLES REQUIRED TO BE CONNECTED TO THE ISOLATED GROUNDING SYSTEM AND GROUNDED AT THE MAIN GROUNDING BUS WITHIN THE THE PANEL OF CIRCUIT ORIGIN. THE ISOLATED GROUNDING CONDUCTOR SHALL NOT BE CONNECTED TO ANY OTHER GROUNDING SYSTEM ALONG IT'S PATH.
19. PATCH AND REPAIR ALL REMOVED CONCRETE TO MATCH ADJACENT SURFACES.
20. A CERTIFIED ELECTRICAL SHALL BE PRESENT ON THE PROJECT WHENEVER ELECTRICAL WORK IS IN PROGRESS. AN ELECTRICAL CONTRACTOR IS NOT EXEMPT FROM THIS REQUIREMENT AND SHALL ALSO BE CERTIFIED IF HE IS WORKING AS THE RESPONSIBLE PROJECT ELECTRICIAN. VIOLATION OF THIS REQUIREMENT BY EITHER ELECTRICIANS OR WORKING CONTRACTORS SHALL BE REPORTED TO THE STATE LICENSE CONTRACTOR BOARD AS REQUIRED UNDER THE EXISTING LABOR CODE SECTION 108.02. NO VOLUNTEERS ARE ALLOWED TO PERFORM WORK ON THIS PROJECT AND ALL CITY INSURANCE REQUIREMENTS MUST BE MET PRIOR TO PERFORMING ANY WORK.
21. ALL CONDUIT SHALL BE CONCEALED WITHIN ATTIC SPACE AND WALLS.
22. ALL EXTERIOR RECEPTACLES SHALL BE GFCI TYPE WITH A LOCKING, WEATHERPROOF IN-USE COVER.
23. ALL FASTENERS USED SHALL BE STAINLESS STEEL GRADE 316.
24. ALL CONDUIT AND CONDUCTORS INSTALLED IN UNDERGROUND OR WET LOCATIONS SHALL BE LISTED FOR WET LOCATIONS AND MARKED WITH 'W' PER CEC.
25. SPLICES AND TERMINALS SHALL BE COMPRESSION TYPE OF SEAMLESS PURE COPPER, TIN PLATED, LONG BARREL (TERMINALS WITH TWO-HOLE PAD AND INSPECTION WINDOW WITH NEMA DRILLING), AS MANUFACTURED BY BURNDY TYPE YS, YA2-2N OR EQUAL. CLEAN ALL SURFACES AND INSTALL WITH OXIDE INHIBITING COMPOUND, BURNDY PENETROX-E OR EQUAL. INSTALL COMPRESSION CONNECTORS WITH 360° CIRCUMFERENTIAL COMPRESSION DYE, BURNDY HYPRESS OR EQUAL. THE INDENTER OR OTHER TYPE TOOLS WILL NOT BE ACCEPTABLE.
26. INSTALL MECHANICALLY FASTENED PHENOLIC NAMEPLATE WITH WHITE LETTING ON BLACK BACKGROUND ON ALL EQUIPMENT, INCLUDING PULL BOXES, WITH DESCRIPTION INDICATED ON DRAWINGS. NAMEPLATE LETTERING SIZE SHALL BE 3/16-INCH HIGH FOR ALL NAMEPLATES SERVING FEEDER AND BRANCH CIRCUIT BREAKERS, ON MAIN SERVICE PANELS AND ALL OTHER NAMEPLATES LETTERING SHALL BE 1/4-INCH HIGH.
    26.1. ALL SWITCHBOARDS, SWITCHGEAR, PANEL BOARDS, VFD'S, MOTORS, JUNCTION BOXES, PULL BOXES, DISCONNECT SWITCHES, ETC. SHALL BE MARKED TO INDICATE EACH DEVICE OR EQUIPMENT WHERE THE POWER ORIGINATES PER CEC 408.4, FIELD IDENTIFICATION REQUIRED, (B) SOURCE OF SUPPLY.
27. COORDINATE EQUIPMENT LOCATIONS, CONTROL AND POWER WIRING REQUIREMENTS AND CONNECTION POINTS WITH ALL APPLICABLE DISCIPLINES.
28. UTILIZE WIREMOLD 5400 AND 2300 SERIES SURFACE RACEWAYS OR EQUAL FOR SURFACE RACEWAY VERTICAL RUNS WHERE CABLING CANNOT BE CONCEALED WITHIN WALLS.
29. ONLY RIGID OR IMC CONDUIT SHALL BE USED WHEN TRANSITIONING FROM UNDERGROUND PVC CONDUIT TO ABOVE GROUND, PVC NOT ALLOWED.
30. ALL DISCONNECTS SHALL BE READILY ACCESSIBLE AND IN SIGHT OF THE EQUIPMENT, PER THE CALIFORNIA ELECTRICAL CODE. IF THE DISCONNECTING MEANS CANNOT BE LOCATED WITHIN SIGHT OF THE EQUIPMENT SERVED, IT SHALL HAVE THE CAPABILITY OF BEING LOCKED IN THE OPEN POSITION.
31. PROVIDE AND INSTALL FUSES PER UNIT NAMEPLATE DATA ON THE EQUIPMENT PROVIDED.
32. ALL NEW METAL STRUCTURES AND THE ELECTRICAL SYSTEMS SHALL BE GROUNDED AND BONDED. REFER TO ELECTRICAL SPECIFICATIONS AND TYPICAL DETAILS.
33. ALL TRANSFORMER DISCONNECTS SHALL HAVE LOCKOUT CAPABILITY TO LOCK THE DISCONNECT IN THE OPEN AS WELL AS IN THE CLOSED POSITION.
34. ALL BUSES, CONDUCTORS, AND WINDINGS SHALL BE COPPER.
35. ALL INTERRUPT AND SHORT CIRCUIT RATINGS SHALL BE FULLY RATED.
36. ALL TRANSFORMER WINDING SHALL BE COPPER AND THEY SHALL BE K-13 RATED.
37. ALL OUTDOOR ENCLOSURES SHALL BE WEATHERPROOF RATED AND HAVE LOCKING HASP. INCLUDING, BUT NOT LIMITED TO SWITCHBOARDS, DISCONNECTS, ENCLOSURES, ETC. THE DISTRICT WILL PROVIDE THEIR OWN KEYED LOCKS. OUTDOOR PANELS SHALL HAVE KEYED LOCKING MECHANISM, KEYED PER DISTRICT'S STANDARD.
38. AVAILABLE FAULT CURRENT SHALL BE INDICATED ON ALL NEWLY INSTALLED SERVICE EQUIPMENT PER ECE 110.24. THE FIELD MARKING SHALL INCLUDE THE DATE OF THE FAULT CURRENT CALCULATION WAS PERFORMED. FOR MODIFICATION TO THE ELECTRICAL INSTALLATION, THE AVAILABLE FAULT CURRENT SHALL BE RECALCULATED INCLUDING NEW LOADS AND POSTED ON SITE PRIOR TO FINAL INSPECTION PER CEC ARTICLE 110.24.
39. ACCEPTANCE TESTING FOR LIGHTING CONTROLS AND PROCESS EQUIPMENT TO BE PROVIDED BY CERTIFIED TECHNICIANS.
40. ALL NEW PANELS SHALL HAVE INTEGRAL SURGE PROTECTION DEVICE WITH ALL MODES OF PROTECTIONS. UTILIZE 120KA PER PHASE FOR PANELBOARDS, 200KA PER PHASE FOR DISTRIBUTION PANELS, AND 300KA PER PHASE FOR SWITCHBOARD.

MEP COMPONENT ANCHORAGE NOTE

MEP COMPONENT ANCHORAGE NOTE:

ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. WHERE NO DETAIL IS INDICATED, THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 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 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 SECTION13.6.5, 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. WHAT BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR 2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOB SITE PRIOR TO THE START OF AND DURING THE HANGING AND BRACING OF THE DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

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

MP [ ] MD [ ] PP [ ] E [x] OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS

MP [ ] MD [ ] PP [ ] E [ ] OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM#) # OPM-0052-13

DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

NEW ADMIN OFFICE REMODEL

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PROJECT NO:
MODEL FILE:

DRAWN BY: JB
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SHEET TITLE

ADDITIONAL NOTES

E1.01.02

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BAI Project #25126

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DATE OF SIGN AND SEAL

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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

1" = 40'-0" 120 80 40 0
1" = 30'-0" 90 60 30 0
1" = 20'-0" 60 40 20 0
1/8" = 1'-0" 24 16 8 0
1/4" = 1'-0" 12 8 4 0

MECHANICAL EQUIPMENT SCHEDULE

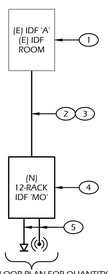
DESIG.	DESCRIPTION	MCA/HP/W/FLA	STARTER/FUSES	VOLT (V)	PHASE	MAX. OCPD SIZE	CONDUIT SIZE	CONDUCTOR #	CONDUCTOR SIZE	GND.
EF-1	EXHAUST FAN 1	22.4 W	FUSE/DISC.	120V	1	NOTE 2	3/4"	2	#10	NOTE 3
EWH-1	ELECTRIC WATER HEATER 1	2000 W	DISC.	208V	1	NOTE 2	3/4"	2	#10	NOTE 3
EWH-2	ELECTRIC WATER HEATER 2	6,240 W	DISC.	208V	1	NOTE 2	1"	2	# 8	NOTE 3
FC-1	FAN COIL 1	0.28 MCA	FUSE/DISC.	208V	1	NOTE 2	3/4"	2	#10	NOTE 3
FC-2	FAN COIL 2	0.28 MCA	FUSE/DISC.	208V	1	NOTE 2	3/4"	2	#10	NOTE 3
FC-3	FAN COIL 3	0.28 MCA	FUSE/DISC.	208V	1	NOTE 2	3/4"	2	#10	NOTE 3
FC-4	FAN COIL 4	2.88 MCA	FUSE/DISC.	208V	1	NOTE 2	3/4"	2	#10	NOTE 3
FC-5	FAN COIL 5	2.88 MCA	FUSE/DISC.	208V	1	NOTE 2	3/4"	2	#10	NOTE 3
FC-6	FAN COIL 6	.24 MCA	FUSE/DISC.	208V	1	NOTE 3	3/4"	3	#10	NOTE 4
HP-1	HEAT PUMP 1	33 MCA	FUSE/DISC.	208V	3	NOTE 2	1"	4	#8	NOTE 3

NOTES:
1. *=THERMAL RATED SWITCH FOR FRACTIONAL HORSEPOWER MOTORS.
2. REFER TO THE PANEL SCHEDULE AND SINGLE LINE DIAGRAM FOR THE CIRCUIT BREAKER
3. GROUNDING CONDUCTOR SIZE TO MATCH CONDUCTOR SIZE.

GENERAL NOTES:
1. COORDINATE LOCATIONS AND POWER REQUIREMENT FOR MECHANICAL AND PLUMBING EQUIPMENT WITH MECHANICAL AND PLUMBING CONTRACTOR.
2. PROVIDE DISCONNECT PER NAME PLATE RATING OF MECHANICAL UNITS.

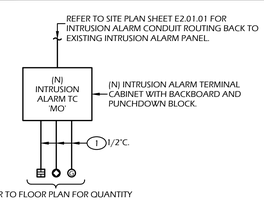
SHEET NOTES (#)

1. LAND FIBER OPTIC CABLE TO THE EXISTING FIBER OPTIC PATCH PANEL.
2. ROUTE NEW FIBER OPTIC CABLE WITHIN NEW 1-1/2 INCH CONDUIT, SEE E2.01.01 FOR CONCUIT ROUTING.
3. PROVIDE AND INSTALL 12-STRAND SINGLE MODE FIBER OPTIC CABLE. CURL 20FT OF CABLE AT EACH END.
4. TERMINATE CABLES WITH RJ45 JACKS AND INSTALL WITHIN NEW PATCH PANEL, TYPICAL.
5. CAT-6A DATA CABLE. REFER TO SYMBOLS LEGEND AND FLOOR PLANS FOR QUANTITY, TYPICAL.



1 - DATA RISER DIAGRAM

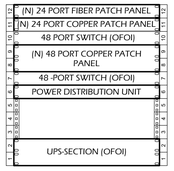
NOT TO SCALE



GENERAL NOTES:
1. PROVIDE AND INSTALL CONDUIT PROVISIONS AND INTRUSION ALARM TERMINAL CABINET WITH BACKBOARD AND PUNCHDOWN BLOCK.
2. ALL WIRING, INTRUSION ALARM DEVICES AND SENSORS, POWER SUPPLY, INTRUSION ALARM SYSTEM CONNECTIONS, AND PROGRAMMING TO BE DONE BY SCHOOL DISTRICT'S INTRUSION ALARM CONTRACTOR, SONITROL.

2 - SECURITY RISER DIAGRAM

NOT TO SCALE



3 - NEW IDF 'MO' ELEVATION

NOT TO SCALE

LIGHTING FIXTURE SCHEDULE (E)

TYPE	LIGHTS	MANUFACTURER AND MODEL	LAMPS	REMARKS	WATTS	LBS
A1		COOPER LIGHTING #24FP3135C-FPEQ	LED	2-FT. x 4-FT., 3,553 LUMENS (NOMINAL) LED FIXTURE RECESS MOUNTED IN A T-BAR CEILING. FIXTURE SHALL HAVE CONTINOUS 0-10V DIMMING DRIVER AND EMERGENCY DRIVER ELI 4W AT EMERGENCY FIXTURE LOCATIONS INDICATED ON LIGHTING PLAN.	29.3	18.5
A2		COOPER LIGHTING #24FP3835HE-FPEQ	LED	2-FT. x 4-FT., 3,849 LUMENS (NOMINAL) LED FIXTURE RECESS MOUNTED IN A T-BAR CEILING. FIXTURE SHALL HAVE CONTINOUS 0-10V DIMMING DRIVER AND EMERGENCY DRIVER ELI 4W AT EMERGENCY FIXTURE LOCATIONS INDICATED ON LIGHTING PLAN.	28.5	18.5
A3		COOPER LIGHTING #24FP4735C-FPEQ	LED	2-FT. x 4-FT., 4,556 LUMENS (NOMINAL). LED FIXTURE RECESS MOUNTED IN A T-BAR CEILING. FIXTURE SHALL HAVE CONTINUOUS 0-10V DIMMING DRIVER AND EMERGENCY DRIVER ELI 4W AT EMERGENCY FIXTURE LOCATIONS INDICATED ON LIGHTING PLAN.	41.4	18.5
A4		COOPER LIGHTING #24FP6435C-FPEQ	LED	2-FT. x 4-FT., 6,506 LUMENS (NOMINAL). LED FIXTURE RECESS MOUNTED IN A T-BAR CEILING. FIXTURE SHALL CONTINUOUS 0-10V DIMMING DRIVER AND EMERGENCY DRIVER ELI 4W AT EMERGENCY FIXTURE LOCATIONS INDICATED ON LIGHTING PLAN.	62.2	18.5
E1		GARDCO #PWS-C-A01-840-3-UNV-010V-DLEA-PCB-(COLOR TO MATCH SITE)	LED	WALL SCONCE, 2,373 LUMENS (NOMINAL), LED, FIXTURE SHALL HAVE CONTINUOUS 0-10V DIMMING DRIVER. FIXTURE SHALL HAVE EMERGENCY DRIVER AT EMERGENCY FIXTURE LOCATIONS INDICATED ON LIGHTING PLAN.	21	27
X1	EXIT	ISOLITE LIGHTING #DCL-G-U-BA-BA-MTEBP	LED	UNIVERSAL MOUNTED, EXIT SIGN WITH CLEAR AND GREEN LETTERS. PROVIDE INDICATING ECHELON ARROWS REQUIRED PER DIRECTION INDICATED ON PLANS. PROVIDE TEST SWITCH, INDICATING LEDS, AND BATTERY PACK WITH INTEGRAL CHARGER. REFER TO FLOOR PLANS FOR WALL OR CEILING MOUNTING LOCATIONS.	6	7

SCHEDULES NOTES

1. COORDINATE ALL COLORS WITH OWNER/ARCHITECT PRIOR TO ORDERING. CONTRACTOR SHALL PROVIDE COLOR SAMPLES DURING SUBMITTAL STAGE
2. ALL CLEAR, ACRYLIC, PRISMATIC LENSES ARE TO BE MINIMUM 0.125" PATTERN K12, U.O.N
3. ALL LEDS SHALL HAVE A CRI OF 0.8 AND COLOR TEMPERATURE OF 4000K.
4. ALL HALF SHADED FIXTURES SHALL HAVE AN EMERGENCY DRIVER WITH BATTERY BACKUP IN ORDER TO PROVIDE A MINIMUM OF 90 MINUTES OF BACKUP IN THE EVENT OF POWER OUTAGE WITH MINIMUM 1100 LUMEN OUTPUT. THE BATTERY CHARGER SHALL BE CONNECTED TO THE UNSWITCHED SOURCE.
5. ALL EXIT LIGHT FIXTURES SHALL BE CONNECTED TO AN UNSWITCHED SOURCE.
6. ALL RECESS MOUNTED FIXTURES SHALL COME WITH BAR HANGERS. THE CONTRACTOR SHALL VERIFY CEILING TYPE PRIOR TO ORDERING.
7. ALL DRIVERS SHALL HAVE LESS THAN 10% THD.
8. FIXTURE TYPE IS SHOWN WITHIN MOST FIXTURES.
9. PRIOR TO ORDERING FIXTURES REFER TO THE LIGHTING PLAN FOR THE CORRECT VOLTAGES TO BE UTILIZED FOR THE FIXTURES.
10. THE SYSTEM DESIGNED HERE IN IS A WATTSTOPPER LIGHTING SYSTEM. ALL ROOM CONTROLLERS, NETWORK BRIDGES, OCCUPANCY SENSORS, PHOTO SENSORS, ETC. SHALL BE NETWORKED TOGETHER WITH THE SEGMENT MANAGER. REFER TO TYPICAL DETAILS.

(N) PANEL 'MOR'

VOLTAGE: 208/120V, 3Ø, 4W | BUS: 150A | MAIN BREAKER: 150A/3P | BREAKER AIC: 35,000 | MOUNTING: SURFACE | NEMA 3R ENCLOSURE

CIR #	BKR	LOAD (VA) PHASE A	PHASE B	PHASE C	DESCRIPTION	DESCRIPTION	LOAD (VA) PHASE C	PHASE B	PHASE A	BKR	CIR #
1	20A/1P	900			NINA'S OFFICE RECS	SPARE			0	20A/1P	2
3	↓		900		ALS OFFICE RECS	BOND MANAGER RECS.		360		↓	4
5	↓			900	PAUL'S OFFICE RECS	RECEPTION RECS	360			↓	6
7	↓	540			OFFICE RECS	MICROWAVE REC			1500	↓	8
9	↓		0		SPARE	REFRIGERATOR REC.	1200			↓	10
11	↓			720	RECORDS/OFFICE RECS	SPARE				↓	12
13	↓	180			RESTROOM REC.	KITCHEN REC		540		↓	14
15	↓		0		SPARE	SPARE	0			↓	16
17	↓			900	HALLWAY	IDF REC.	360			↓	18
19		0			SPACE	EXTERIOR REC.		180		↓	20
21	↓		0		↓	SPACE		0		↓	22
23	↓			0	↓	↓	0			↓	24
25	↓	0			↓	↓			0	↓	26
27	↓		0		↓	↓		0		↓	28
29	↓			0	↓	↓	0			↓	30
31	↓	0			↓	↓			0	↓	32
33	↓		0		↓	↓		0		↓	34
35	↓			0	↓	↓	0			↓	36
37	↓	0			↓	↓			0	↓	38
39	↓		0		↓	↓		0		↓	40
41	↓			0	↓	↓	0			↓	42
TOTAL Ø LOADS (VA):			PHASE A = 3840			PHASE B = 2400			PHASE C = 2240		
TOTAL Ø LOADS (A):			PHASE A = 37			PHASE B = 20.71			PHASE C = 21.54		
TOTAL LOAD:			8480 VA			60 A					

NOTE:
1. PANEL TO BE LOCKABLE

(N) PANEL 'MOM'

VOLTAGE: 208/120V, 3Ø, 4W | BUS: 150A | MAIN BREAKER: 150A/3P | BREAKER AIC: 35,000 | MOUNTING: SURFACE | NEMA 3R ENCLOSURE

CIR #	BKR	LOAD (VA) PHASE A	PHASE B	PHASE C	DESCRIPTION	DESCRIPTION	LOAD (VA) PHASE C	PHASE B	PHASE A	BKR	CIR #
1	15A/2P	29.12			FC-1	HP-1			3963		2
3			29.12					3963		50A/3P	4
5	15A/2P			29.12	FC-2		3963				6
7		29.12				EWH-2			3120	40A/2P	8
9	15A/2P		29.12		FC-3			3120			10
11				29.12		EWH-1	1000				12
13	15A/2P	299.5			FC-4				1000	20A/2P	14
15			299.5			SPARE		0		20A/1P	16
17	15A/2P			299.5	FC-5	BC-1 CONTROLLER	124.8			↓	18
19		299.5				SPARE			0	↓	20
21	15A/2P		24.96		FC-6	↓		0		↓	22
23				24.96		EF-1	22.4			15A/1P	24
25		0			SPACE	SPACE			0		26
27	↓		0		↓	↓		0		↓	28
29	↓			0	↓	↓	0			↓	30
31	↓	0			↓	↓			0	↓	32
33	↓		0		↓	↓		0		↓	34
35	↓			0	↓	↓	0			↓	36
37	↓	0			↓	↓			0	↓	38
39	↓		0		↓	↓		0		↓	40
41	↓			0	↓	↓	0			↓	42
TOTAL Ø LOADS (VA):			PHASE A = 8740			PHASE B = 7466			PHASE C = 5493		
TOTAL Ø LOADS (A):			PHASE A = 73			PHASE B = 62			PHASE C = 46		
TOTAL LOAD:			21699 VA			60 A					

NOTE:
1. PANEL TO BE LOCKABLE

(N) PANEL 'MOL'

VOLTAGE: 208/120V, 3Ø, 4W | BUS: 100A | MAIN BREAKER: 100A/3P | BREAKER AIC: 35,000 | MOUNTING: SURFACE | NEMA 3R ENCLOSURE

CIR #	BKR	LOAD (VA) PHASE A	PHASE B	PHASE C	DESCRIPTION	DESCRIPTION	LOAD (VA) PHASE C	PHASE B	PHASE A	BKR	CIR #
1	20A/1P	319.1			RECORDS, RR, KIT, BOND	SPARE			0	20A/1P	2
3	↓		248.8		REC, OFFICE, DATA, HALL	↓		0		↓	4
5	↓			289.6	OFFICES LTG	↓	0			↓	6
7	↓	18			EXIT LIGHT	↓			0	↓	8
9	↓		84		EXTERIOR LTG	↓		0		↓	10
11	↓			0	SPARE	↓	0			↓	12
13		0			SPACE	SPACE			0		14
15	↓		0		↓	↓		0		↓	16
17	↓			0	↓	↓	0			↓	18
19	↓	0			↓	↓			0	↓	20
21	↓		0		↓	↓		0		↓	22
23	↓			0	↓	↓	0			↓	24
25	↓	0			↓	↓			0	↓	26
27	↓		0		↓	↓		0		↓	28
29	↓			0	↓	↓	0			↓	30
TOTAL Ø LOADS (VA):			PHASE A = 337			PHASE B = 337			PHASE C = 290		
TOTAL Ø LOADS (A):			PHASE A = 3			PHASE B = 3			PHASE C = 3		
TOTAL LOAD:			960 VA			3 A					

NOTE:
1. PANEL TO BE LOCKABLE

ELECTRICAL DISTRIBUTION WEIGHT & DIMENSIONS SCHEDULE

NAME	CB	WEIGHT(Lb)	W	D	H	MOUNTING	MANUFACTURER
DB 'MDP2'	300	658	42"	12.95"	59"	SURFACE MOUNTED	SQUARE D OR EQUAL
PANEL 'MOL'	150	158	20"	6.5"	50"	SURFACE MOUNTED	SQUARE D OR EQUAL
PANEL 'MOM'	225	271	20"	6.5"	86"	SURFACE MOUNTED	SQUARE D OR EQUAL
PANEL 'MOR'	225	158	20"	6.5"	50"	SURFACE MOUNTED	SQUARE D OR EQUAL

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LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
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FIXTURE SCHEDULE & SCHEDULES

E1.02.01

REGISTERED PROFESSIONAL ENGINEER JEREMY BORRELLI No. E19390 ELECTRICAL CALIFORNIA

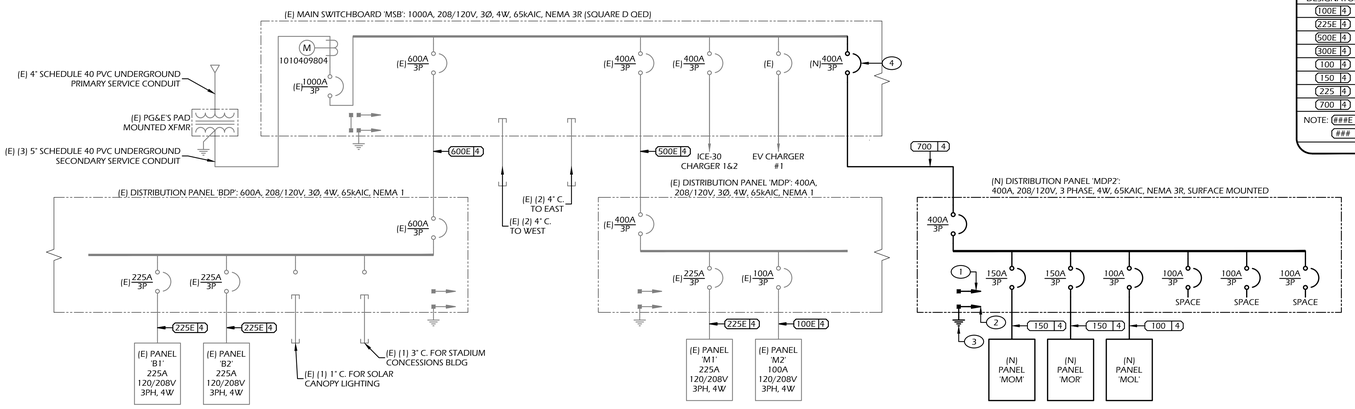
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BAI Project #25126

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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
1" = 40'-0" 1" = 30'-0" 1" = 20'-0" 1/8" = 1'-0" 1/4" = 1'-0"



FEEDER SCHEDULE

FEEDER DESIGNATOR	CONDUITS & CONDUCTORS (QUANTITY & SIZES)
100E 4	2" C. - (4) #2 & (1) #6 GND.
225E 4	3" C. - (4) #4/0 & (1) #4 GND.
500E 4	2(4" C. - (4) #300 MCM & (1) #2 GND.)
600E 4	2(4" C. - (4) #350 MCM & (1) #1/0 GND.)
100 4	1-1/4"C. - (4) #2 & (1) #8 GND.
150 4	2"C. - (4) #1/0 & (1) #6 GND.
225 4	2-1/2"C. - (4) #4/0 & (1) #2 GND.
700 4	2 (4" C. - (4) #500 KCMIL & (1) #2/0 GND.)

NOTE: ###E # = EXISTING FEEDER
= NEW FEEDER

1 — SINGLE LINE DIAGRAM

NOT TO SCALE

SHEET NOTES

1. BOARD SHALL HAVE FULL NEUTRAL BUS.
2. BOARD SHALL HAVE LENGTH GROUND BUS.
3. PROVIDE GROUNDING ELECTRODE PER SPECIFICATION. PROVIDE SIZE #2/0 COPPER CONDUCTOR FOR THE GROUND CONNECTION FROM THE SERVICE MAIN GROUND BUS TO THE GROUND ROD. GROUND BOND TO COLD WATER PIPE GROUND CONDUCTOR.
4. PROVIDE AND INSTALL NEW INDICATED CIRCUIT BREAKER AND ALL MOUNTING HARDWARE

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SINGLE LINE DIAGRAM

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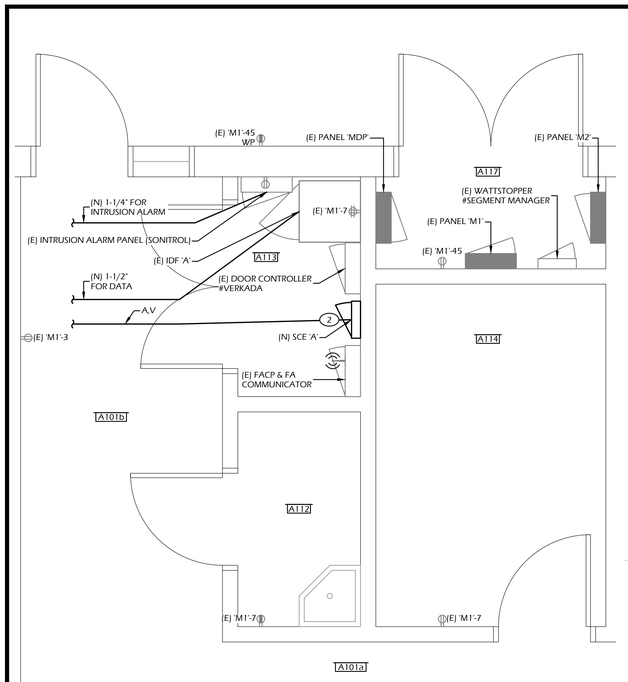
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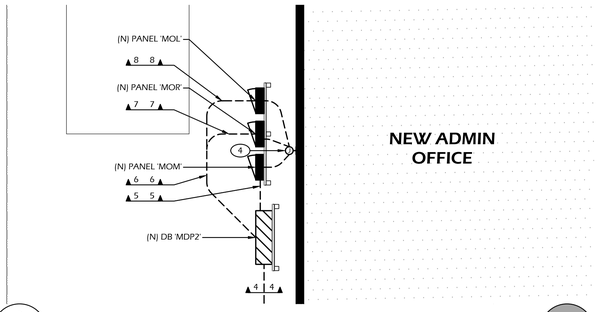
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1" = 40'-0" (120 80 40 0 40)
1" = 30'-0" (90 60 30 0 30)
1" = 20'-0" (60 40 20 0 20)
1/8" = 1'-0" (24 16 8 0 8)
1/4" = 1'-0" (12 8 4 0 4)

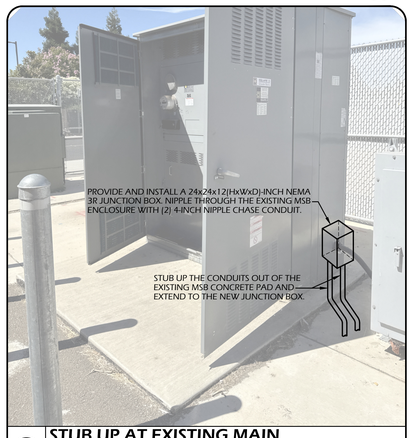
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING



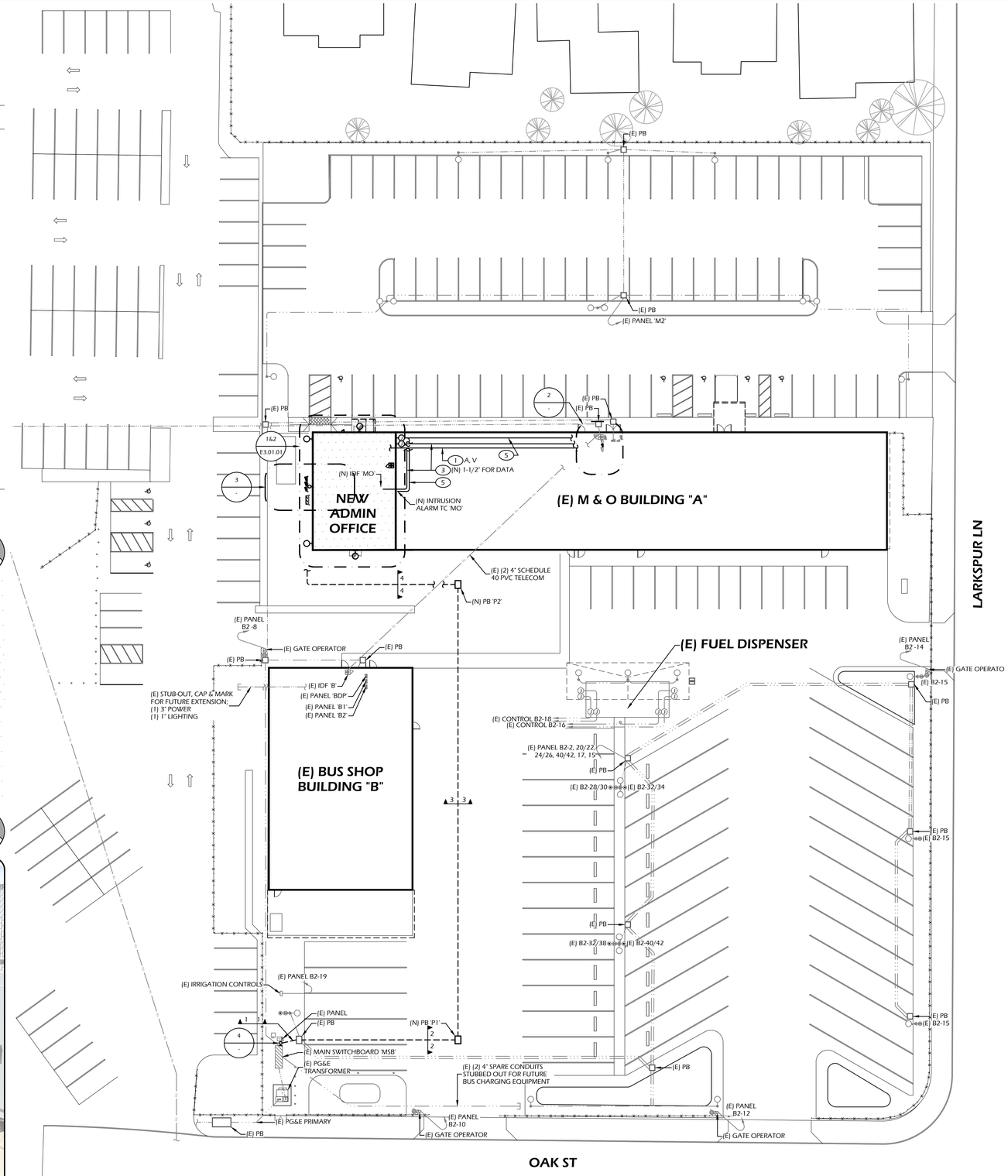
2 PARTIAL EXISTING POWER & SIGNAL FLOOR PLAN
SCALE: 1/2" = 1'-0"



3 PARTIAL EXISTING POWER & SIGNAL FLOOR PLAN
SCALE: 1/4" = 1'-0"



4 STUB UP AT EXISTING MAIN SWITCHBOARD 'MSB'
NOT TO SCALE



1 ELECTRICAL AND FIRE ALARM SITE PLAN
SCALE: 1" = 20'-0"

ROOM SCHEDULE

###	EXISTING ROOM NAME
A101a	CORRIDOR
A101b	CORRIDOR
A112	CUST.
A113	IDF
A117	ELECTRICAL ROOM

SHEET NOTES (#)

1. ROUTE THE NEW 1-1/4" CONDUIT UNDER THE CEILING AND WITHIN THE ATTIC SPACE BACK TO THE FIRE ALARM PANEL.
2. INSTALL THE NEW SIGNAL CIRCUIT EXPANDER ADJACENT TO THE EXISTING FIRE ALARM CONTROL PANEL.
3. ROUTE THE NEW DATA CONDUIT UNDER THE CEILING AND WITHIN THE ATTIC SPACE BACK TO THE NEW IDF.
4. PROVIDE AND INSTALL A 36x36x12[HxWxD]-INCH NEMA 3R JUNCTION BOX HIGH UP ON THE WALL AND NIPPLE THROUGH THE ATTIC SPACE.
5. ROUTE THE NEW 1-1/4-INCH INTRUSION ALARM CONDUIT UNDER THE CEILING AND WITHIN THE ATTIC SPACE

PULL BOX SCHEDULE

	DESIGNATOR	MINIMUM SIZE	LxW [IN]	LID TYPE	SYSTEMS
POWER	PB 'P1'	B3048	36.125 x 54.375	H/20	POWER
	PB 'P2'	B3048	36.125 x 54.375	H/20	POWER

NOTES:
1. ALL PULL BOXES SHALL BE EITHER BROOKS, CHRISTY, OR EQUIVALENT.
2. ALL PULL BOXES SHALL BE PROVIDED WITH EXTENSION RINGS AND BOLT DOWN COVERS AS REQUIRED TO SUIT THE APPLICATION.
3. LABEL PULL BOXES `ELECTRICAL' OR `COMMUNICATIONS' AS REQUIRED.
4. PULL BOX COVERS SHALL BE FULL TRAFFIC H20 RATED.

DUCT BANK SCHEDULE

▲# #▲	POWER		COMMUNICATION	
	POWER		DATA	
1	(2) 4"	–	–	–
2	(2) 4"	–	–	–
3	(2) 4"	–	–	–
4	(2) 4"	–	–	–
5	2"	–	–	–
6	1-1/4", 2"	–	–	–
7	2"	–	–	–
8	1-1/4"	–	–	–
NOTES:				

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ELECTRICAL AND FIRE ALARM SITE PLAN

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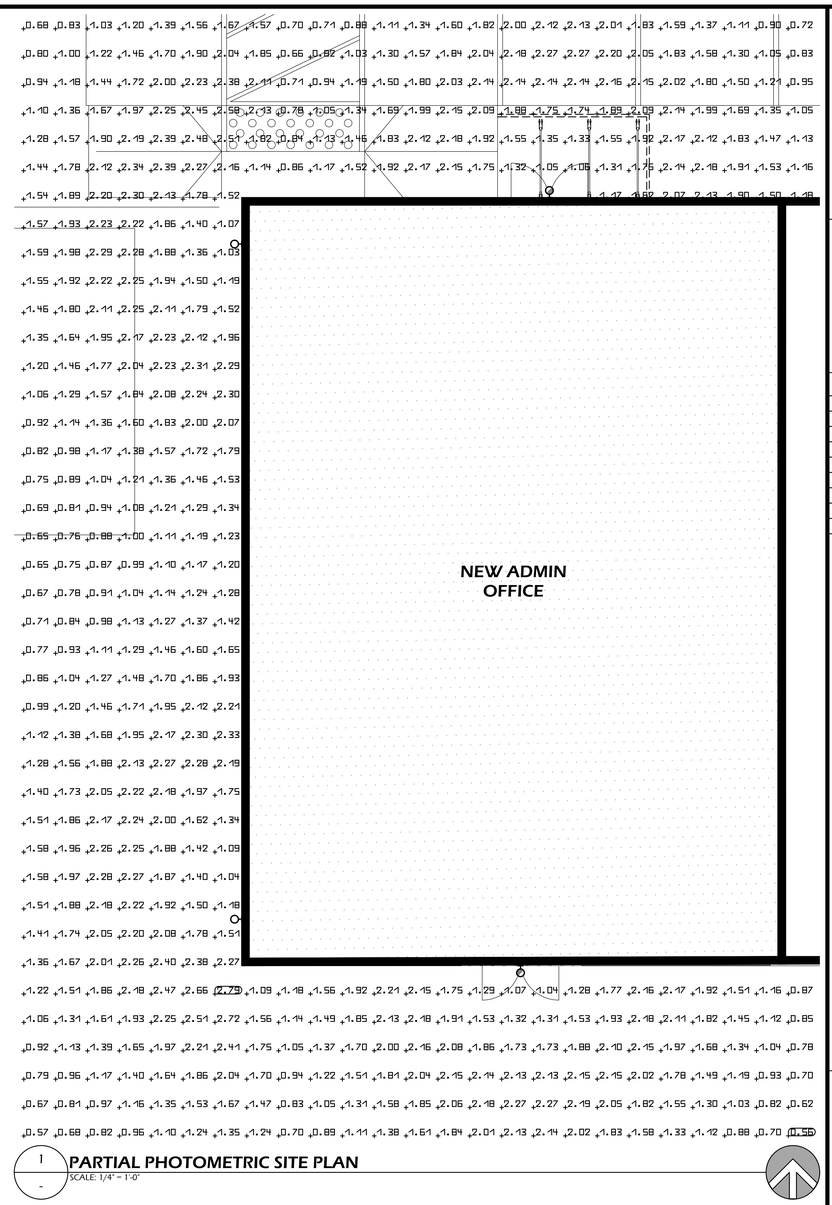
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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
1" = 40'-0" 120 80 40 0
1" = 30'-0" 90 60 30 0
1" = 20'-0" 60 40 20 0
1/8" = 1'-0" 24 16 8 0
1/4" = 1'-0" 12 8 4 0



1 PARTIAL PHOTOMETRIC SITE PLAN
SCALE: 1/4" = 1'-0"

1" = 40'-0"
1" = 30'-0"
1" = 20'-0"
1/8" = 1'-0"
1/4" = 1'-0"

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

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LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

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SHEET TITLE

PARTIAL PHOTOMETRIC SITE PLAN

E2.02.01

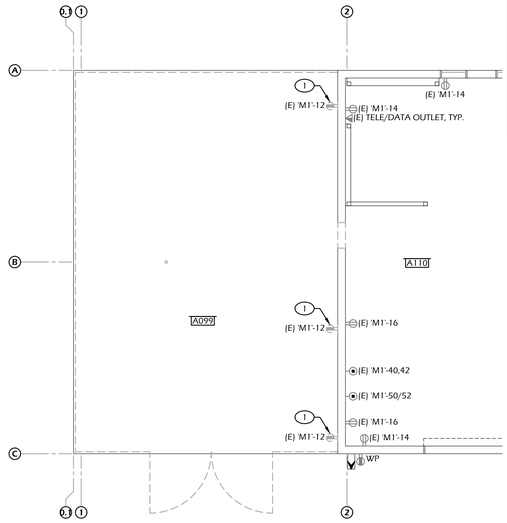
REGISTERED PROFESSIONAL ENGINEER — KEVIN BORRELLI — No. E13360 — Exp. 6/30/27 — ELECTRICAL — CALIFORNIA

DATE OF SIGN AND SEAL

Borrelli & Associates, Inc.
Consulting Electrical Engineers
2032 N. Gateway Boulevard Fresno, CA. 93727
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BAI Project #25126

SCAN ME

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1 - PARTIAL DEMOLITION POWER & SIGNAL FLOOR PLAN

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

ROOM SCHEDULE

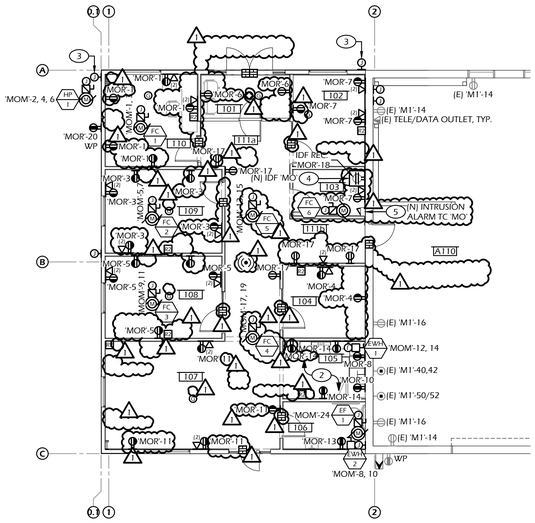
###	EXISTING ROOM NAME	###	NEW ROOM NAME
A099	EQUIPMENT STORAGE	101	RECEPTION
A110	SHOP & STORAGE	102	OFFICE
		103	DATA ROOM
		104	BOND MANAGER
		105	KITCHEN
		106	UNISEX
		107	RECORDS AND OFFICE
		108	PAUL'S OFFICE
		109	OFFICE
		110	NINA'S OFFICE
		111a	HALL
		111b	HALL

SHEET NOTES (#)

1. DISCONNECT AND REMOVE THE EXISTING RECEPTACLE PULL THE EXISTING CONDUIT AND WIRING DOWNSTREAM AND UPSTREAM OF THE RECEPTACLE THAT IS TO REMAIN FUNCTIONAL. PROVIDE A NEW EXTENSION OF ORIGINAL CIRCUIT AND CONDUIT AND MAKE ALL CONNECTIONS FOR SERVICE CONTINUITY.
2. ALL RECEPTACLES WITHIN KITCHEN AREA OTHER THAN THE REFRIGERATOR RECEPTACLE SHALL BE HALF SWITCHED/CONTROLLED.
3. PROVIDE AND INSTALL 4x4x2-1/8-INCH DEEP WEATHERPROOF JUNCTION BOX UP HIGH FOR FUTURE CAMERA. PROVIDE AND INSTALL A 3/4-INCH CONDUIT AND A CAT6A DATA CABLE WITHIN TO THE NEW IDF. TERMINATE WITH RJ45 CONNECTORS AND TEST ALL DATA CABLES.
4. PROVIDE AND INSTALL WALL MOUNT MOUNT 12-UNIT RACK CPI #11900-724 24x24x24-INCH (HxWxD), 101 LBS. PROVIDE LOW-DECIBEL DUAL-FAN AND FILTER KIT #40975-001, 4LBS. MOUNT THE RACK 80-INCHES ABOVE FINISHED FLOOR. REFER TO FLOOR PLAN FOR DOOR SWING ORIENTATION.
5. PROVIDE AND INSTALL 12x12x6(HxWxD)-INCH NEMA 1 JUNCTION BOX WITH FIRE RETARDANT PLYWOOD BACKBOARD

GENERAL NOTES (#)

1. COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION OF MECHANICAL UNITS.
2. PROVIDE AND INSTALL (3)#12 AWG CONDUCTORS WITHIN A 3/4-INCH CONDUIT BACK TO THE BC-1 CONTROLLER. COORDINATE WITH MECHANICAL DRAWINGS FOR EXACT LOCATION. UTILIZE 1-INCH CONDUIT MINIMUM FOR EXTERIOR INSTALLATION.



2 - PARTIAL POWER & SIGNAL FLOOR PLAN

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

DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

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PARTIAL POWER & SIGNAL FLOOR PLAN

E3.01.01

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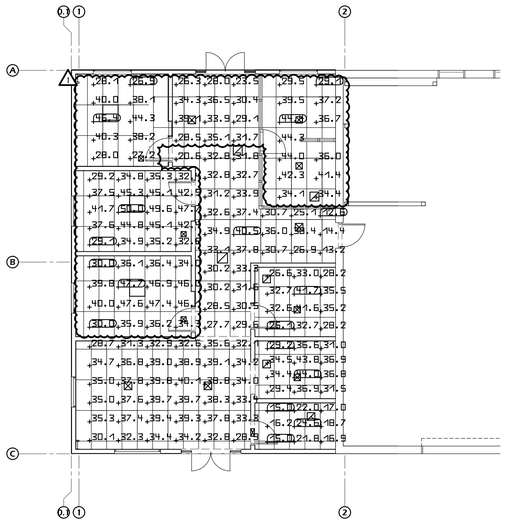
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DATE OF SIGN AND SEAL

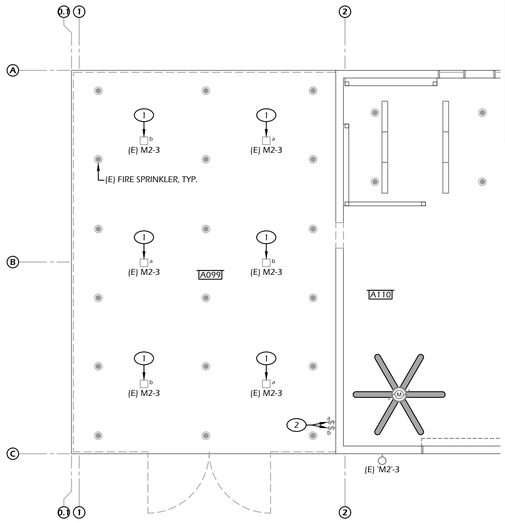
SCAN ME

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

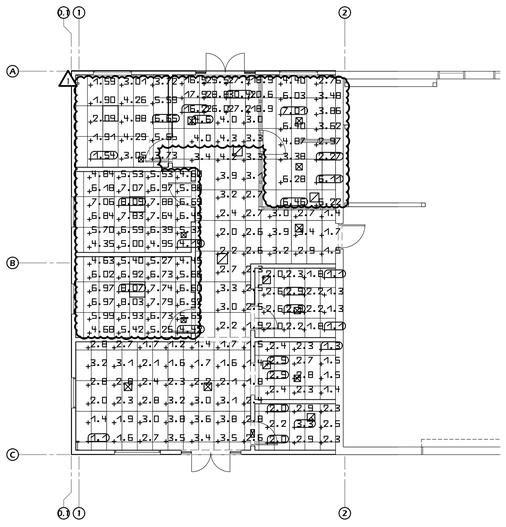
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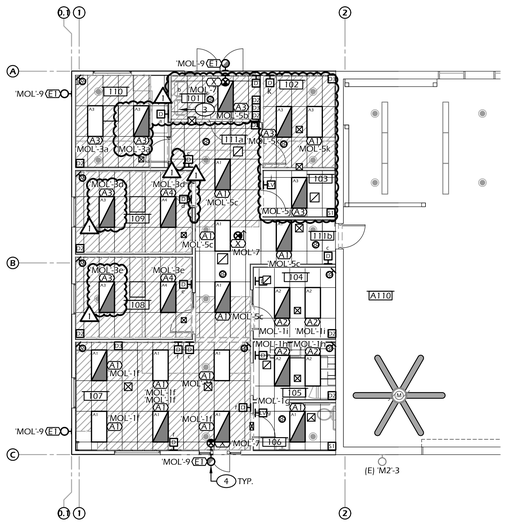
3 - PHOTOMETRIC FLOOR PLAN
SCALE: 1/8" = 1'-0"



1 - PARTIAL DEMOLITION LIGHTING FLOOR PLAN
SCALE: 1/8" = 1'-0"



4 - EMERGENCY PHOTOMETRIC FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 - PARTIAL LIGHTING FLOOR PLAN
SCALE: 1/8" = 1'-0"

ROOM SCHEDULE

###	EXISTING ROOM NAME	###	NEW ROOM NAME
A099	EQUIPMENT STORAGE	101	RECEPTION
A110	SHOP & STORAGE	102	OFFICE
		103	DATA ROOM
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		106	UNISEX
		107	RECORDS AND OFFICE
		108	PAUL'S OFFICE
		109	OFFICE
		110	NINA'S OFFICE
		111a	HALL
		111b	HALL

SHEET NOTES

1. DISCONNECT AND REMOVE THE EXISTING LIGHTING FIXTURE. PULL THE EXISTING CONDUIT AND WIRING BACK TO THE ITS LIGHTING SWITCH.
2. DISCONNECT AND REMOVE THE EXISTING LIGHT SWITCH. PULL THE EXISTING CONDUIT AND WIRING DOWNSTREAM AND UPSTREAM OF THE LIGHTING THAT IS TO REMAIN FUNCTIONAL. PROVIDE A NEW EXTENSION OF ORIGINAL CIRCUITS AND CONDUITS FOR THE OPERATION OF THE REMAINING LIGHTING FOR SERVICE CONTINUITY.
3. ROUTE ALL NEW E1 TYPE EXTERIOR LIGHTING THROUGH THIS D2 CONTROLLER. PROGRAM THE EXISTING SEGMENT MANAGER SO THESE LIGHTS HAVE TWO NIGHTTIME MODES SCHEDULING (OCCUPIED AND UNOCCUPIED). COORDINATE WITH OWNER FOR THE TIME PERIODS. DIM THE LIGHTS TO 50% DURING THE UNOCCUPIED PERIOD.
4. ROUTE ALL TYPE E1 EXTERIOR FIXTURES THROUGH NEW D2 CONTROLLER IN RECEPTION PER SHEET NOTE 3.

NETWORK LIGHTING SYSTEM NOTES

1. THE SYSTEM DESIGNED HERE IS A WATTSTOPPER NETWORKED LIGHTING SYSTEM. ALL ROOM CONTROLLERS, NETWORKED BRIDGES, OCCUPANCY SENSOR, PHOTO SENSORS, ETC. SHALL BE NETWORKED TOGETHER WITH THE EXISTING LIGHTING SEGMENT MANAGER.
2. OCCUPANCY SENSING CONTROLS INSTALLED IN CORRIDORS AND STAIRWELLS SHALL SEPARATELY REDUCE THE LIGHTING POWER IN EACH SPACE BY AT LEAST 50 PERCENT WHEN THE SPACE IS UNOCCUPIED. WHEN THE SPACE IS OCCUPIED, THE SENSING CONTROLS SHALL BE CAPABLE OF AUTOMATICALLY TURNING THE LIGHTING FULLY ON ONLY IN THE SEPARATELY CONTROLLED SPACE REGARDLESS OF ANY OTHER CONTROL.
3. ALL ROOM CONTROLLERS TO BE NETWORKED TO THE EXISTING SEGMENT MANAGER (WITH ASTRONOMICAL TIME SWITCH). PROGRAM ALL ROOM CONTROLLERS AND SEGMENT MANAGER TO TURN ON / OFF THE LIGHTS AFTER CERTAIN HOURS. COORDINATE THE LIGHTING ON (TYPICALLY OCCUPIED HOURS) AND LIGHTING OFF (TYPICALLY UNOCCUPIED HOURS) TIME SCHEDULE WITH THE OWNER. PROGRAM ALL DIMMERS / SWITCHES TO INITIATE A 2-HOUR OVERRIDE ON THEIR RESPECTIVE LOAD LIGHTING CONTROL INDICATED PER THE SWITCH LEGS ON THE LIGHTING FLOOR PLAN. PROGRAM THE ROOM CONTROLLERS AND LIGHTING RELAY CONTROL PANEL TO INDICATE THE USER WITH A WARNING (BY MEANS OF BLINKING LIGHTING) 5 MINUTES PRIOR TO THE END OF THE 2-HOUR OVERRIDE COUNT DOWN. THE SWITCH / DIMMER OVERRIDE CONTROL CANNOT EXCEED 5000 SQUARE FEET. PROGRAM THE ROOM CONTROLLERS AND SEGMENT MANAGER (WITH ASTRONOMICAL TIME SWITCH) TO INCLUDE THE HOLIDAY "SHUT-OFF" FEATURE. AN AUTOMATIC HOLIDAY SHUT-OFF FEATURE WILL TURN OFF ALL LOADS FOR AT LEAST 24 HOURS BEFORE RESUMING THE NORMALLY SCHEDULED OPERATION.
4. PROVIDE AND INSTALL WATTSTOPPER #LM-MSTP CABLE WITHIN 1-1/4-INCH CONDUIT BACK TO THE EXISTING SEGMENT MANAGER IN EXISTING IDF ROOM, SEE 2/E2.01.01 FOR LOCATION. CONNECT TO THE AVAILABLE SPARE SEGMENT NETWORK CONNECTION.

GENERAL NOTES

1. OCCUPANCY SENSOR TO BE INSTALLED 4 TO 6 FEET AWAY FROM AIR SUPPLY DUCTS. THE OCCUPANCY SENSOR SHALL BE INSTALLED BETWEEN 8 TO 10 FEET ABOVE FINISHED FLOOR.

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LIGHTING FLOOR PLAN

E3.02.01

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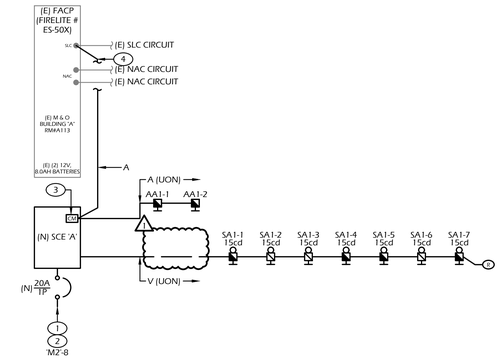
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FIRE RISER DIAGRAM

1

NOT TO SCALE

FIRE ALARM OPERATION MATRIX

INPUT	OUTPUT				
	ACTIVATE VISUAL NOTIFICATION DEVICES	ANNUNCIATE ALARM AT FACP	ANNUNCIATE SUPERVISORY AT FACP	ANNUNCIATE TROUBLE AT FACP	TRANSMIT SIGNAL TO CENTRAL STATION
MANUAL PULL STATION	●	●			●
ANNUNCIATOR TROUBLE				●	●
POWER FAILURE			●	●	●
GENERAL SYSTEM TROUBLE				●	●

FIRE ALARM RECORD DOCUMENTS CABINET

1. THE FIRE ALARM SYSTEM WORK SHALL INCLUDE A DOCUMENTATION CABINET, INSTALLED AT THE SYSTEM CONTROL PANEL OR OTHER APPROVED LOCATION PER NFPA 72, 7.7.2.
2. THE DOCUMENTATION CABINET SHALL BE RED WITH A HINGED, LOCKING DOOR AND SHALL BE PROMINENTLY LABELED 'SYSTEM RECORD DOCUMENTS'.
3. ALL RECORD AND TESTING DOCUMENTATION SHALL BE STORED INSIDE THE CABINET.
4. CONTENTS SHALL BE ACCESSIBLE BY AUTHORIZED PERSONNEL ONLY.
5. WHERE CABINET IS INSTALLED IN A LOCATION OTHER THAN THE SYSTEM CONTROL UNIT, ITS LOCATION SHALL BE IDENTIFIED AT THE SYSTEM CONTROL UNIT.
6. PROVIDE SYSTEM DOCUMENTS AS APPLICABLE:
   a. RECORD DRAWINGS/ AS-BUILTS
   b. EQUIPMENT CUT SHEETS AND CA SFM LISTINGS
   c. ALTERNATIVE MEANS AND METHODS
   d. PERFORMANCE BASED DESIGN DOCUMENTATION (NFPA 72. 7.3.7)
   e. SYSTEM RECORD OF COMPLETION AND ANY SUPPLEMENTAL INSPECTION AND TESTING DOCUMENTATION (NFPA 72, 7.8.2)
   f. EMERGENCY RESPONSE PLAN (NFPA 72, 7.3.8)
   g. EVALUATION DOCUMENTATION (NFPA 72, 7.3.9)
   h. RISK ANALYSIS DOCUMENTATION (NFPA 72, 7.3.6)
   i. SOFTWARE AND FIRMWARE CONTROL DOCUMENTATION (NFPA 72, 23.2.2)

FIRE ALARM SYMBOL LEGEND

SYMBOL	DEVICE TYPE	MANUFACTURER AND MODEL NUMBER	CSFM LISTING NUMBER
	SIGNAL CIRCUIT EXPANDER: SCE 'A' POWER SUPPLY NAC CONTROLLER	FIRE LITE #HPF-PS-6 REMOTE POWER	7315-1637:0505
	MANUAL PULL STATION	FIRE LITE #BG-12LX	7150-0075:0184
CM	CONTROL MODULE	FIRE LITE #CMF-300	7300-0075:0185
	MULTI-CANDELA STROBE - WALL MOUNTED	SYSTEM SENSOR #SRLED	7300-1653:0525
	MULTI-CANDELA HORN / STROBE - WALL MOUNTED	SYSTEM SENSOR #P2RLED	7135-1653:0526
E	END OF LINE RESISTOR 3.9KΩ	VARIOUS	N/A
	CABLE LEGEND		
A	INITIATION CABLE ABOVE GROUND INITIATION CABLE UNDERGROUND	WEST-PENN #D990 WEST-PENN #AQ225	7161-0859:101 7161-0859:101
P	POWER CABLE ABOVE GROUND POWER CABLE UNDERGROUND	WEST-PENN #998 WEST-PENN #AQ227	7161-0859:101 7161-0859:101
V	VISUAL CABLE ABOVE GROUND VISUAL CABLE UNDERGROUND	WEST-PENN #998 WEST-PENN #AQ227	7161-0859:101 7161-0859:101

NOTES:
1. PROVIDE 24"X24" ACCESS PANEL(S) BENEATH ALL FIRE ALARM DEVICES IN ATTICS ABOVE HARD CEILING. REFER TO FIRE ALARM FLOOR PLANS.
2. PROVIDE ALL ACCESSORIES FOR FULLY FUNCTIONAL SYSTEM.

SYSTEM DESCRIPTION

1. THE SYSTEM SHOWN IS A MODIFICATION TO AN EXISTING MANUAL SYSTEM.
2. CLASS B WIRING METHOD IS UTILIZED FOR ALL SIGNALING CIRCUITS.

SCOPE OF FIRE ALARM WORK

1. THE FIRE ALARM SYSTEM SCOPE CONSISTS OF ADDITION OF ADDRESSABLE INITIATION DEVICES AND AUDIBLE/VISUAL DEVICES FOR NOTIFICATION.

SHEET NOTES (#)

1. PROVIDE AND INSTALL A CIRCUIT BREAKER COMPLYING WITH NFPA 72 (RED AND WITH AN APPROVED BREAKER LOCKING DEVICE) FOR EACH DEDICATED CIRCUIT SUPPLYING POWER TO FIRE ALARM DEVICE. THIS CIRCUIT SHALL BE PERMANENTLY IDENTIFIED AS 'FIRE ALARM CIRCUIT.' THE CIRCUIT DISCONNECTING MEANS SHALL BE ACCESSIBLE ONLY TO AUTHORIZED PERSONNEL. THE LOCATION OF THE BRANCH CIRCUIT DISCONNECTING MEANS SHALL BE PERMANENTLY IDENTIFIED AT THE CONTROL UNIT. THE CIRCUIT DISCONNECTING MEANS SHALL HAVE A RED MARKING.
2. PROVIDE AND INSTALL A 120V 20A/1P CIRCUIT BREAKER IN THE PANEL CIRCUIT INDICATED. PROVIDE AND INSTALL (3) #12AWG CONDUCTORS WITHIN A 3/4-INCH CONDUIT AND MAKE ALL CONNECTIONS.
3. PROVIDE AND INSTALL ADDRESSABLE CONTROL MODULE INSIDE OF SIGNAL CIRCUIT EXPANDER TO ACTIVATE IT.
4. T-TAP CONNECT TO THE EXISTING SLC ADDRESSABLE LOOP AT THE EXISTING PANEL.

GENERAL NOTES (◊)

1. PROVIDE AND INSTALL 1-1/4-INCH CONDUIT MINIMUM SIZE CONDUIT FOR FIRE ALARM CABLE. CONTRACTOR TO INCREASE CONDUIT SIZE AS REQUIRED.

FIRE ALARM SYSTEM NOTES

1. APPLICABLE STANDARD NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35.
2. 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.
3. THE FIRE ALARM SYSTEM DESIGN IS A 'COMPLETE PLAN SUBMITTAL'. THE CONTRACTOR SHALL INSTALL THE SYSTEM AS SHOWN AND AS HEREIN SPECIFIED.
4. 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 15 DB 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.
5. 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 PER CHAPTER 14, NFPA 72, AND A CERTIFICATE OF COMPLETION SHALL BE PROVIDED TO THE OWNER PER CHAPTER 7, NFPA 72 AND THE CALIFORNIA FIRE CODE, SECTION 907.7.
6. 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.
7. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN EXCEPT WHERE INDICATED ELSEWHERE.
8. ALARM SIGNALS DO TO CARBON MONOXIDE(C/O) DETECTORS SHALL BE DISTINCT AND "DESCRIPTIVELY ANNUNCIATED" FROM FIRE ALARM, CO SUPERVISORY, AND CO TROUBLE SIGNALS. FURTHERMORE, THE CO ALARM SIGNAL SHOULD TAKE PRECEDENCE OVER SUPERVISORY OR TROUBLE SIGNALS. CO DETECTOR TROUBLE SIGNALS MUST BE INDICATED VISUALLY AND AUDIBLY AT THE CONTROL PANEL AND SUPERVISING STATION. AUDIBLE DO TO A CO ALARM NOTIFICATION SHALL BE PROVIDED AS A TEMPORAL 4 OR VIA A CODED VOICE MESSAGE OVER THE VOICE EVACUATION SYSTEM.
9. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
10. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" FROM FINISHED FLOOR AND NO CLOSER THE 6" TO A HORIZONTAL STRUCTURE.
11. ALL FIRE PROTECTION SIGNALING COMPONENTS SHALL BE ONLY THOSE APPROVED AND LISTED IN THE STATE FIRE MARSHAL'S LISTING SERVICE. AN ITEMIZED MATERIALS LIST SHOWING MAKE, MODEL NUMBER AND ITS CORRESPONDING STATE FIRE MARSHAL'S LISTING NUMBER SHALL BE FURNISHED TO THE PROJECT INSPECTOR. 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 LOCAL FIRE AUTHORITY WITH I.O.R. INSTALLATION REQUIREMENTS SHALL BE PER NFPA 72, CALIFORNIA BUILDING CODE, AND CALIFORNIA FIRE CODE.
12. THE FIRE ALARM SYSTEM 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 ULIFX (CENTRAL STATION) OR UUJS (REMOTE AND PROPRIETARY) BY UNDERWRITERS LABORATORY (UL) OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD FM 3011.
13. 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.
14. POWER SUPPLIES WITHIN THE FACP AND SCE ARE TO ACCOMMODATE THE CONNECTED FIRE ALARM LOADS.
15. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
16. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
17. AFTER SUCCESSFUL TESTING OF THE FIRE ALARM SYSTEM, COMPLETE THE NFPA 72 RECORD OF COMPLETION AND PROVIDE COPIES TO THE ARCHITECT, OWNER, LOCAL FIRE AUTHORITY, AND DSA (VIA THE PROJECT INSPECTOR).
18. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
19. 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.
20. DIVISION 26/28 SHALL PROVIDE FIRE ALARM WIRING AND CONTROL WITH A FIRE ALARM RELAY MODULE AT EACH HVAC UNIT. DIVISION 23 HVAC/CONTROL CONTRACTOR SHALL PROVIDE CONTROL WIRING FROM THE FIRE ALARM RELAY MODULE TO THE HVAC UNIT SHUTOFF RELAY. MAKE ALL CONNECTIONS.
21. PROVIDE ALL REQUIRED FIRE ALARM PANEL SYSTEM CARDS, HARDWARE, ETC. FOR A FULLY FUNCTIONAL SYSTEM. PROVIDE ALL FIRE ALARM ZONE INDICATORS AND SCHEDULES AT THE THE FIRE ALARM CONTROL PANEL AND REMOTE ANNUNCIATORS (WHEN REMOTE ANNUNCIATORS ARE USED).
22. 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.
23. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN SAME ROOM SHALL BE SYNCHRONIZED.
24. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
25. ALL FIRE ALARM WIRING SHALL BE FPLOR FPLP (FIRE POWER LIMITED OR FIRE POWER LIMITED PLENUM) AS REQUIRED FOR APPLICATION. WIRING IN CONDUIT ABOVE GROUND MAY BE TYPE THHN OR THWN.
26. 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.
27. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 3' 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.
28. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
29. 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.
30. A DEDICATED BRANCH CIRCUIT SHALL BE PROVIDED FOR FIRE ALARM EQUIPMENT. THIS CIRCUIT SHALL BE ENERGIZED FROM THE COMMON USE AREA PANEL AND SHALL HAVE NO OTHER OUTLETS. THE BREAKER SHALL HAVE A RED LOCKING DEVICE TO BLOCK THE HANDLE IN THE "ON" POSITION. THE CIRCUIT BREAKER SHALL BE LABELED "FIRE ALARM CIRCUIT CONTROL." CIRCUIT ID TO BE LABELED AT FIRE PANEL/EXTENDERS.
31. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 17.8.2.
32. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
33. 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.
34. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
35. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
36. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
37. PROVIDE A FIRE WATCH IF CLASSES ARE IN SESSION AND ALTERATION OF LIFE SAFETY SYSTEM IS HAPPENING.
38. FIRE ALARM ADDRESSING ARE PLACE HOLDER. CONTRACTOR SHALL SUBMIT SHOP DRAWING WITH ADDRESSING PER MANUFACTURING REQUIREMENTS. CONTRACTOR TO COORDINATE ADDRESSING PER MANUFACTURER REQUIREMENTS PRIOR TO ANY FIELD LABELING.

REGISTERED PROFESSIONAL ENGINEER — JOHN BORRELLI — No. E16390 — Exp. 6/30/27 — ELECTRICAL — CALIFORNIA

DATE OF SIGN AND SEAL

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BRENTWOOD, CA 94513

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SHEET TITLE

FIRE ALARM NOTES AND RISER DIAGRAM

E4.01.01

1" = 40'-0" 1" = 30'-0" 1" = 20'-0" 1/8" = 1'-0" 1/4" = 1'-0"

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

(E) FIRE ALARM CONTROL PANEL BATTERY CALCULATIONS

Device Type: FACP 'A'	Amount	Supv. I	Supv. I_T	Alarm I	Alarm I_T
Existing Load	1	0.2927	0.2927	3.5235	3.5235
Manual Pull Station	2	0.0004	0.0008	0.0050	0.0100
New Duct Smoke Detector	0	0.0002	0.0000	0.0045	0.0000
New Relay Module	0	0.0002	0.0000	0.0065	0.0000
New Control Module	1	0.0004	0.0004	0.0065	0.0065
Totals			0.2938		3.5400
Minimum runtime on batteries		24	HRS.	15.0000	MIN.
Subtotal battery standby (Amp-Hours)			7.0523		0.8850
Total battery standby (Amp-Hours)					7.9373
125% Safety Factor					125.00%
Minimum Capacity (Amp-Hours)					9.9216
Calculated Battery Size (Amp-Hours)					12
Existing Battery Size (Amp-Hours)					8

(N) SIGNAL CIRCUIT EXPANDER 'A' BATTERY CALCULATIONS

Device Type: SCE 'A'		Amount		Supv. I	Supv. I_T	Alarm I	Alarm I_T
(N) Circuit Signal Expander			1	0.1540	0.1540	0.1920	0.1920
15cd Wall Strobe	V15	3	3	0.0000	0.0000	0.0180	0.0540
30cd Wall Strobe	V30	0	0	0.0000	0.0000	0.0220	0.0000
75cd Wall Strobe	V75	0	0	0.0000	0.0000	0.0700	0.0000
110cd Wall Strobe	V110	0	0	0.0000	0.0000	0.0850	0.0000
15cd Wall Horn/Strobe	AV15	4	4	0.0000	0.0000	0.0350	0.1400
30cd Wall Horn/Strobe	AV30	1	1	0.0000	0.0000	0.0380	0.0380
75cd Wall Horn/Strobe	AV75	0	0	0.0000	0.0000	0.0870	0.0000
110cd Wall Horn/Strobe	AV110	0	0	0.0000	0.0000	0.0940	0.0000
Totals					0.1540		0.4240
Minimun runtime on batteries				24	HRS	15.0000	MIN.
Subtotal battery standby (Amp-Hours)					3.6960		0.1060
Total battery standby (Amp-Hours)							3.8020
125% Safety Factor							125.00%
Minimum Capacity (Amp-Hours)							4.7525
Battery Size (Amp-Hours)							7

Project: LIBERTY H.S. DISTRICT **Circuit :** SA1 VISUAL

Device Label	AV15	V15	V15	AV15	AV15	V15	AV30			
Device Number	1	2	3	4	5	6	7	8	9	10
Wire Gauge	12	12	12	12	12	12	12	12	12	12
Distance in Feet	0.000	15.000	22.000	10.000	20.000	10.000	23.000	0.000	0.000	0.000
Amps @ Device	0.043	0.043	0.043	0.043	0.043	0.043	0.063	0.000	0.000	0.000
Running Amps	0.321	0.278	0.235	0.192	0.149	0.106	0.063	0.000	0.000	0.000
Voltage Drop	0.000	0.016	0.020	0.008	0.012	0.004	0.006	0.000	0.000	0.000
Volts at Device	20.400	20.384	20.363	20.356	20.344	20.340	20.334	20.334	20.334	20.334

Total Current	=	0.321	Amps
Total Distance	=	100.00	ft
Total Voltage Drop	=	0.07	Volts
85% of Nominal Voltage	=	20.4	Volts
% Voltage Drop	=	0.32	%
% Spare Voltage Drop	=	21.24	%

Legend			
Symbol	Model	Description	
V15C	SCRL	Strobe	
AV15C	SPSCRL	Speaker/Strobe	
AV75C	SPSCRL	Speaker/Strobe	
WP	SPRK-R	Weatherproof Speaker	

Formula: V =(2K X L X I)/CMIL
K=12.9, L=Dist. in ft., I=Current

Wire Size	/M FT.	Circ. Mils
10	1.018	10380
12	1.59	6530
14	2.52	4110
16	4.02	2580
18	6.39	1620
20	10.1	1020
24	25.7	404

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FIRE ALARM CALCULATION

E4.02.01

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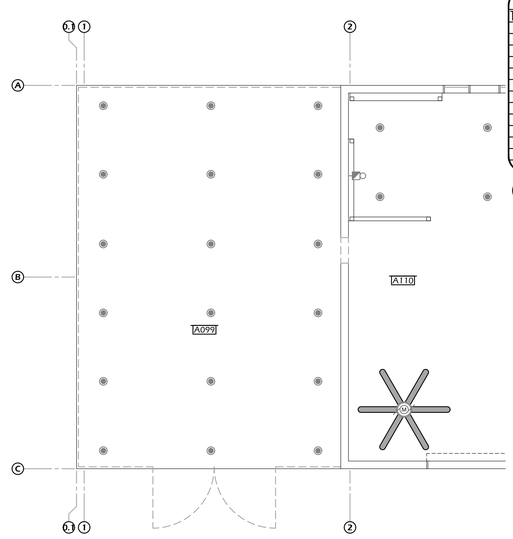
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1" = 40'-0" (1:480) | 1" = 30'-0" (1:360) | 1" = 20'-0" (1:240) | 1/8" = 1'-0" (1:96) | 1/4" = 1'-0" (1:48)

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

1" = 40'-0" 120 80 40 0 40
1" = 30'-0" 90 60 30 0 30
1" = 20'-0" 60 40 20 0 20
1/8" = 1'-0" 24 16 8 0 8
1/4" = 1'-0" 12 8 4 0 4

VERIFY SCALE
BAR IS ONE INCH ON
ORIGINAL DRAWING



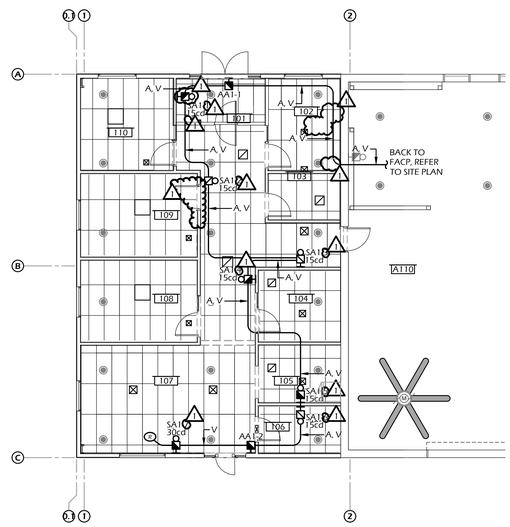
1 - PARTIAL DEMOLITION FIRE ALARM FLOOR PLAN
SCALE: 1/8" = 1'-0"

ROOM SCHEDULE

###	EXISTING ROOM NAME	###	NEW ROOM NAME
A099	EQUIPMENT STORAGE	101	RECEPTION
A110	SHOP & STORAGE	102	OFFICE 1
		103	DATA ROOM
		104	BOND MANAGER
		105	KITCHEN
		106	UNISEX
		107	RECORDS AND OFFICE
		108	PAUL'S OFFICE
		109	OFFICE 2
		110	NINA'S OFFICE
		111a	HALL
		111b	HALL

GENERAL NOTES

1. NOT USED
2. MINIMUM CONDUIT SIZE SHALL BE 1-1/4-INCH CONDUIT.
3. PROVIDE A FIRE WATCH IF CLASSES ARE IN SESSION AND ALTERATION OF SAFETY SYSTEM IS HAPPENING.



2 - PARTIAL FIRE ALARM FLOOR PLAN
SCALE: 1/8" = 1'-0"

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FIRE ALARM FLOOR PLAN

E4.03.01

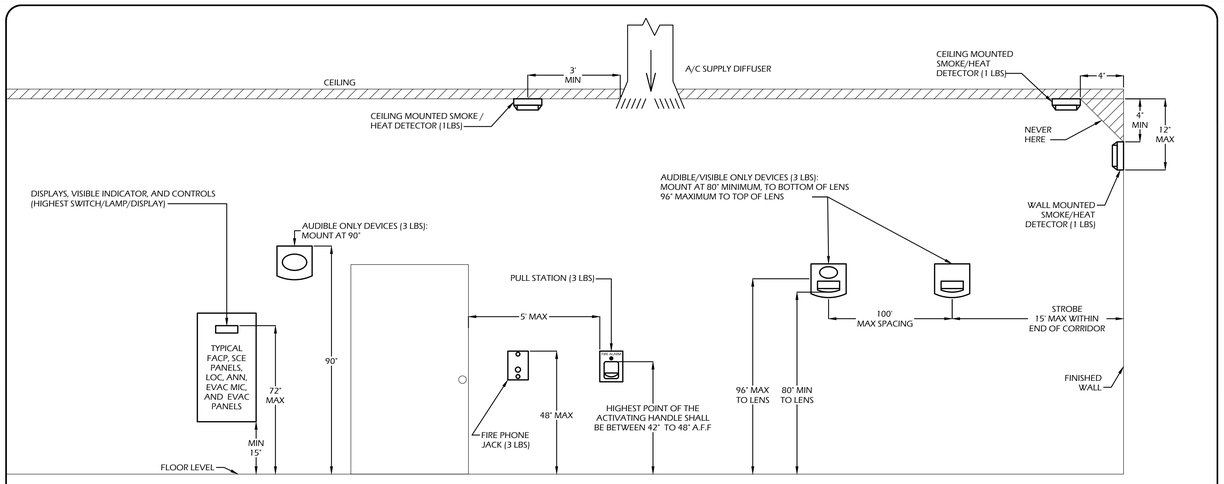
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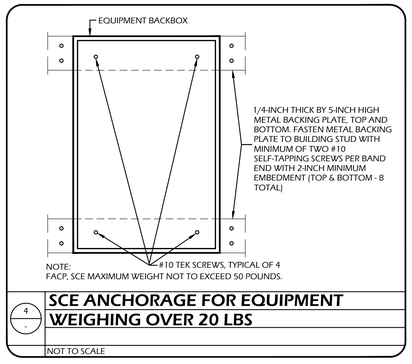
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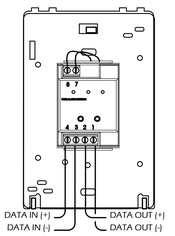
3 — **FIRE ALARM DEVICE MOUNTING HEIGHTS DETAIL**

NOT TO SCALE



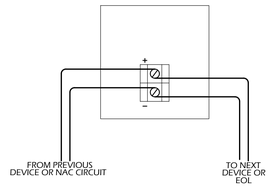
4 — **SCE ANCHORAGE FOR EQUIPMENT WEIGHING OVER 20 LBS**

NOT TO SCALE



A — MANUAL PULL STATION

SCALE: NONE

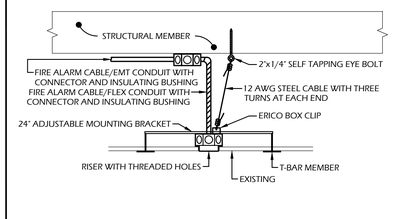


B — WIRING: STROBE & HORN/STROBE

SCALE: NONE

1 — **FIRE ALARM DEVICE WIRING TYPICAL CONNECTION DETAILS**

NOT TO SCALE



2 — **TYPICAL FIRE ALARM DETECTOR MOUNTING AT T-BAR CEILING**

NOT TO SCALE

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TYPICAL FIRE ALARM DETAILS

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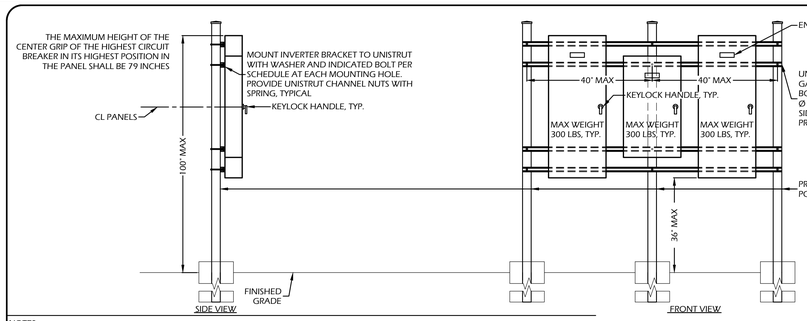
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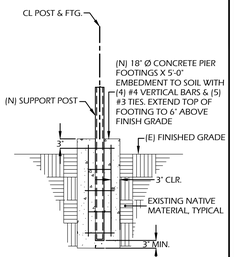
1" = 40'-0" 120 80 40 0 40
1" = 30'-0" 90 60 30 0 30
1" = 20'-0" 60 40 20 0 20
1/8" = 1'-0" 24 16 8 0 8
1/4" = 1'-0" 12 8 4 0 4

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

g:\educational\libertyunionhighschooldistrict\libertyhighschool\2025-libertyunionhighschool-mnobldgofficeaddition\25126E4-04-01.dwg, E4.04.01 TYPICAL FIRE ALARM DETAILS, 3/27/2026 4:02:45 PM, LEON2032



EQUIPMENT	ANCHORING	
	QTY.	DIA.
PANEL 'MOR'	5	3/8"
PANEL 'MOM'	5	3/8"
PANEL 'MOL'	5	3/8"



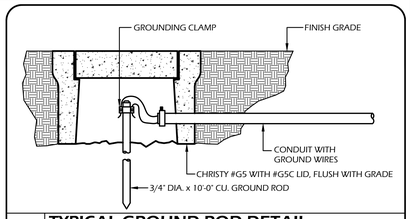
A SECTION VIEW
NO SCALE

NOTES:
1. THE CONTRACTOR SHALL LAY OUT THE ELECTRICAL EQUIPMENT PRIOR TO THE CONCRETE POUR IN ORDER TO PROVIDE EQUIPMENT SPACING AS INDICATED.
2. REFER TO SHEET E1.02.01 WEIGHT AND DIMENSIONS SCHEDULE FOR THE WEIGHTS AND DIMENSIONS OF THE EQUIPMENT
3. TYPEWRITTEN CIRCUIT DIRECTORY INSIDE PANEL DOOR

7 — TYPICAL POST MOUNTED PANELS MOUNTING DETAIL

NOT TO SCALE

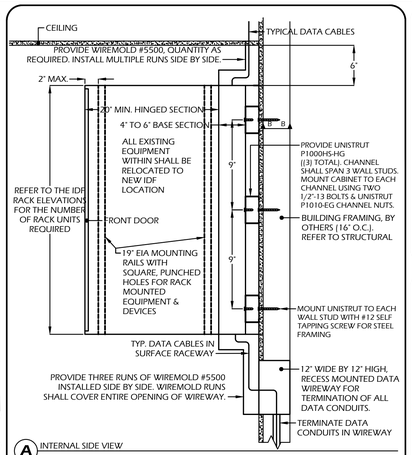
GB-0043-07-02-02



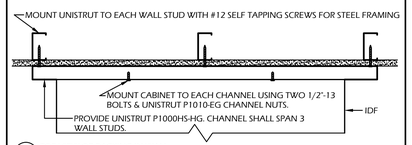
8 — TYPICAL GROUND ROD DETAIL

NOT TO SCALE

GB130-01-06



A INTERNAL SIDE VIEW



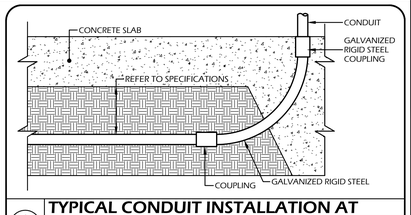
B TOP VIEW OF BACKING IN WALL

IDF NOTES:
1. PROVIDE END CAPS FOR THE EXPOSED UNISTRUT.
2. PAINT UNISTRUT BLACK TO MATCH IDF CABINET.
3. REFER TO SPECIFICATIONS FOR ADDITIONAL EQUIPMENT TO BE INSTALLED IN IDF CABINET.
4. MAX LOAD 300 POUNDS.

5 — EXISTING IDF RELOCATION MOUNTING DETAIL

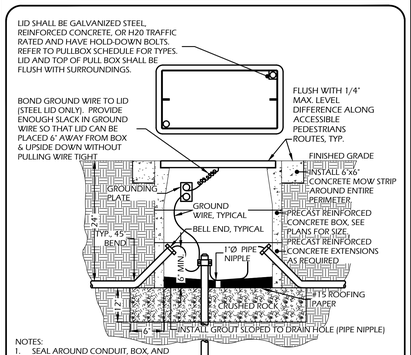
NOT TO SCALE

0000-00-00



1 — TYPICAL CONDUIT INSTALLATION AT CONCRETE SLAB ON GRADE

NOT TO SCALE

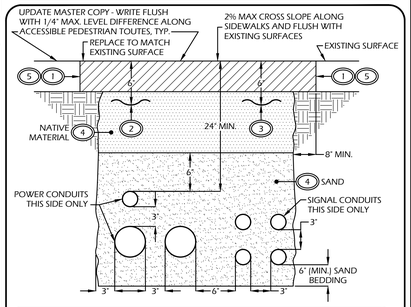


NOTES:
1. SEAL AROUND CONDUIT, BOX, AND JUNCTION OF EXTENSION(S) WITH GROUT.
2. ALL GROUT SHALL BE PORTLAND CEMENT WITH MAXIMUM OF 4 GALLONS OF WATER PER 94 POUNDS OF CEMENT.

2 — PULL BOX DETAIL

NOT TO SCALE

GB130-01-01

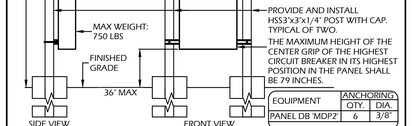


DETAIL NOTES (2)

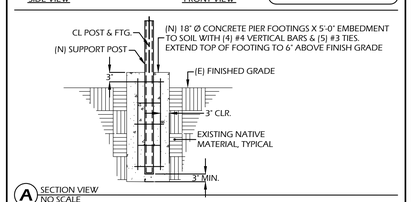
1. SAW-CUT ALL EDGES NEATLY.
2. PROVIDE AND INSTALL DETECTABLE WARNING TAPE MARKED "POWER" ABOVE POWER CONDUITS.
3. PROVIDE AND INSTALL DETECTABLE WARNING TYPE MARKED "COMMUNICATIONS" ABOVE COMMUNICATIONS CONDUIT.
4. THE CONTRACTOR SHALL RETAIN AND PAY FOR THE SERVICES OF A SOILS LAB TO TEST FOR THE COMPACTION OF THE BACKFILL. A SOILS PROFILE SHALL BE DONE OF THE EXCAVATED NATIVE TRENCHED DIRT SO THE COMPACTION TEST CAN BE COMPARED WITH THE NATIVE DIRT PROFILE. THE CONTRACTOR SHALL PROVIDE ALL COMPACTION OF THE TRENCH REQUIRED TO MEET A 95% COMPACTION REQUIREMENT. AN INSPECTED AND SIGNED COMPACTION TESTING REPORT SHALL BE PROVIDED BY THE SOILS TESTING LAB AND COPY OF THE COMPACTION TEST SHALL BE PROVIDED TO THE ENGINEER OF RECORD/PROJECT COORDINATOR PRIOR INSTALLING THE HARDSCAPE. THE CONTRACTOR SHALL BE REQUIRED TO PAY FOR ALL TESTS UNTIL THE COMPACTION RESULTS MEET OR EXCEED THE COMPACTION REQUIREMENTS.
5. PROVIDE 12"x1/2", STEEL REBAR DOWELS AT 12" CENTER TO CENTER ALONG ENTIRE PATH OF TRENCH BENEATH CONCRETE. DOWELS SHALL BE INSERTED 6" INTO EXISTING CONCRETE. PREPARE THE EXISTING CONCRETE BY DRILLING HOLES WITHIN IT AND PROVIDING EPOXY TO HOLD THE DOWEL IN PLACE.

3 — TRENCH DETAIL WITHOUT SPACERS AND UNDER EXISTING SURFACE

NOT TO SCALE



EQUIPMENT	ANCHORING	
	QTY.	DIA.
PANEL DB 'MDP2'	6	3/8"



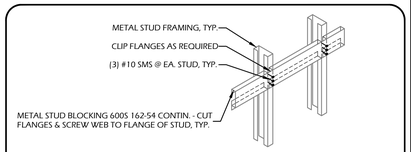
A SECTION VIEW
NO SCALE

NOTES:
1. THE CONTRACTOR SHALL LAY OUT THE ELECTRICAL EQUIPMENT PRIOR TO THE CONCRETE POUR IN ORDER TO PROVIDE EQUIPMENT SPACING AS INDICATED.
2. REFER TO SHEET E1.02.01 WEIGHT AND DIMENSIONS SCHEDULE FOR THE WEIGHTS AND DIMENSIONS OF THE EQUIPMENT

6 — TYPICAL POST MOUNTED SINGLE PANEL MOUNTING DETAIL

NOT TO SCALE

GB0239-02-02-02



4 — TYPICAL METAL BACKING

NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER — BRIAN A. BORRELLI — No. E16390 — Exp. 6/30/25 — ELECTRICAL — STATE OF CALIFORNIA

DATE OF SIGN AND SEAL

SCAN ME

Borrelli & Associates, Inc.
Consulting Electrical Engineers
2032 N. Gateway Boulevard Fresno, CA. 93727
Phone: 559-233-4138
http://www.borrelliengineering.com/ ca-bai@borrelliengineering.com
BAI Project #25126

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DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

LIBERTY UNION HIGH SCHOOL DISTRICT — ESTABLISHED 1902

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

PROJECT NO:
MODEL FILE:

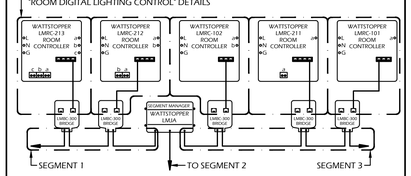
DRAWN BY: JB
COPYRIGHT: BAI

SHEET TITLE

TYPICAL ELECTRICAL DETAILS

E5.01.01

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
1" = 40'-0" 120 80 40 0
1" = 30'-0" 90 60 30 0
1" = 20'-0" 60 40 20 0
1/8" = 1'-0" 24 16 8 0
1/4" = 1'-0" 12 8 4 0

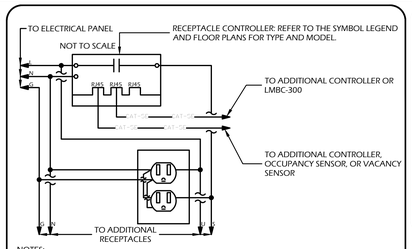


A CONDITION 'A' - SEGMENT MANAGER AND DLM LOCAL NETWORK (TYP.)

NOTES:
1. SEGMENT WIRING IS 4 WIRE RS-485 CABLES, WATTSTOPPER #LM-MSTP OR EQUAL. MAXIMUM LENGTH IS 4000 FEET.
2. ROOM NETWORK WIRING IS CAT-5E CABLES WITH RJ-45 CONNECTORS.
3. PROGRAM SEGMENT MANAGER(S) AND CONTROLLERS PER TITLE 24 REQUIREMENTS.
4. ALL CATALOG NUMBERS ARE FOR WATTSTOPPER PRODUCTS, U.O.N.
5. PROVIDE ALL PROGRAMMING FOR A COMPLETE AND FUNCTIONAL SYSTEM.
6. COORDINATE WITH THE EMS CONTRACTOR FOR REQUIRED INTERFACE TO EMS SYSTEM.
7. PROVIDE INTERNET PROTOCOL CONNECTION FROM SEGMENT MANAGER TO THE LOCAL AREA NETWORK.

6 **TYPICAL BUILDING DIGITAL LIGHTING CONTROL RISER DIAGRAM NON-RESIDENTIAL APPLICATIONS**

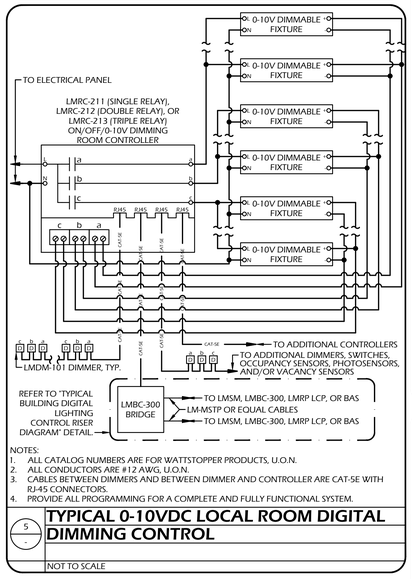
NOT TO SCALE



NOTES:
1. ALL CATALOG NUMBERS ARE FOR WATTSTOPPER PRODUCTS, U.O.N.
2. ALL CONDUCTORS ARE #12 AWG, U.O.N.
3. CABLES BETWEEN CONTROLLERS, BRIDGE, OCCUPANCY SENSORS, AND VACANCY SENSORS ARE CAT-5E WITH RJ-45 CONNECTORS.
4. PROGRAM RECEPTACLE CONTROLLER TO TURN OFF SWITCHED RECEPTACLES ONLY WHEN SENSORS DEDECT THE ROOM IS EMPTY. RECEPTACLES SHALL NOT BE SWITCHED BY LIGHT SWITCHES OR DIMMERS. RECEPTACLES SHALL BE SWITCHED OFF 1 MINUTE AFTER LIGHTS.
5. ROOMS REQUIRING SWITCH RECEPTACLES ARE OFFICES, LOBBIES, CONFERENCE ROOMS, KITCHENS, AND COPY ROOMS. RECEPTACLES SUPPLYING EQUIPMENT TO REMAIN ON WHEN ROOM IS VACANT, SUCH AS REFRIGERATORS, NETWORK PRINTERS, NETWORK EQUIPMENT, ETC., ARE EXEMPT.

4 **TYPICAL SWITCHED RECEPTACLE CONTROL**

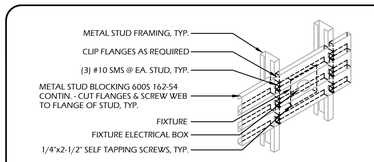
NOT TO SCALE



NOTES:
1. ALL CATALOG NUMBERS ARE FOR WATTSTOPPER PRODUCTS, U.O.N.
2. ALL CONDUCTORS ARE #12 AWG, U.O.N.
3. CABLES BETWEEN DIMMERS AND BETWEEN DIMMER AND CONTROLLER ARE CAT-5E WITH RJ-45 CONNECTORS.
4. PROVIDE ALL PROGRAMMING FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

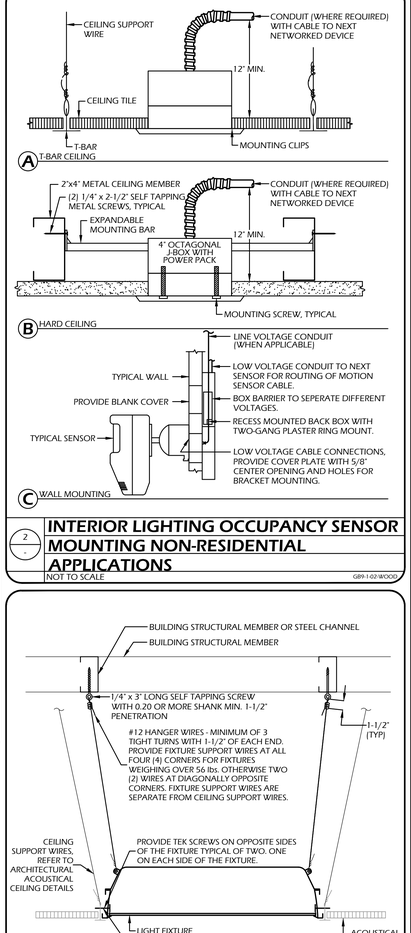
5 **TYPICAL 0-10VDC LOCAL ROOM DIGITAL DIMMING CONTROL**

NOT TO SCALE



1 **METAL STUD WALL MOUNTED LIGHT FIXTURE**

NOT TO SCALE GB4-1.02



2 **INTERIOR LIGHTING OCCUPANCY SENSOR MOUNTING NON-RESIDENTIAL APPLICATIONS**

NOT TO SCALE GB9-1.02-WOOD

3 **LIGHT FIXTURE IN T-BAR CEILING - ROOF METAL JOIST**

NOT TO SCALE

DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565

WWW.CHACONARCHITECTURE.COM

PROJECT NO:
MODEL FILE:

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SHEET TITLE

TYPICAL ELETRICAL DETAILS

E5.02.01

DATE OF SIGN AND SEAL

Borrelli & Associates, Inc.
Consulting Electrical Engineers
2032 N. Gateway Boulevard Fresno, CA. 93727
Phone: 559-233-4138
http://www.borrelliengineering.com/ ca-bai@borrelliengineering.com
BAI Project #25126

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VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

1" = 40'-0" 1" = 30'-0" 1" = 20'-0" 1/8" = 1'-0" 1/4" = 1'-0"

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name:	Brentwood - New Admin Office Remodel	**Report Page:** (Page 4 of 4)
Project Address:	850 2ND STREET BRENTWOOD, CA 94513	**Date Prepared:** 2025-08-29T13:22:47-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: John Borrelli, PE	Documentation Author Signature:
Company: Borrelli and Associates, Inc.	Signature Date: 08-29-25
Address: 2032 NORTH GATEWAY BOULEVARD	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: FRESNO, CA 93727	Phone: (559) 233-4138

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 that the builder provides to the building owner at occupancy.

Responsible Designer Name: JOHN BORRELLI, P.E.	Responsible Designer Signature:
Company: BORRELLI AND ASSOCIATES, INC.	Date Signed: 08-29-25
Address: 2032 NORTH GATEWAY BOULEVARD	License: E16390
City/State/Zip: FRESNO, CA 93727	Phone: (559) 233-4138

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name:	Brentwood - New Admin Office Remodel	**Report Page:** (Page 1 of 4)
Project Address:	850 2ND STREET BRENTWOOD, CA 94513	**Date Prepared:** 2025-08-29T13:22:47-04:00

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

A. GENERAL INFORMATION

01	Project Location (city)	Brentwood	02	Climate Zone	12
			03	Occupancy Types Within Project:	Office

B. PROJECT SCOPE

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

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work [1]	Rating[2] (kVA)	Utility Provided Metering System Exception to 130.5(a)/160.6(a)[3]	System subject to CA Elec Code Article 517 Exception to 130.5(a)and (b)	Demand Response Controls	Provides power to dwelling units/common living areas only in multifamily occupancy
Addition of new distribution board and panels for office additions	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:	Brentwood - New Admin Office Remodel	**Report Page:** (Page 2 of 4)
		Date Prepared: 2025-08-29T13:22:47-04:00

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
Addition of new distribution board and panels for office additions	☒ Voltage drop less than 5%	☐	Permitted by CA Elec Code (Exception to 130.5(c))*	Contractor Responsible		☐	☐

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

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

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name:	Brentwood - New Admin Office Remodel	**Report Page:** (Page 3 of 4)
		Date Prepared: 2025-08-29T13:22:47-04:00

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 NRCA forms required for this project.

REGISTERED PROFESSIONAL ENGINEER — JOHN E. BORRELLI — No. E16390 — Exp. 6/30/27 — ELECTRICAL — CALIFORNIA
DATE OF SIGN AND SEAL

Borrelli & Associates, Inc.
Consulting Electrical Engineers
2032 N. Gateway Boulevard Fresno, CA. 93727
Phone: 559-233-4138
http://www.borrellengineering.com/ ca-bai@borrellengineering.com
BAI Project #25126

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DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

LIBERTY UNION HIGH SCHOOL DISTRICT — ESTABLISHED 1902

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE

RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565

WWW.CHACONARCHITECTURE.COM

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MODEL FILE:

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SHEET TITLE

POWER TITLE 24

E6.01.01

1" = 40'–0" 120 80 40 0 40
1" = 30'–0" 90 60 30 0 30
1" = 20'–0" 60 40 20 0 20
1/8" = 1'–0" 24 16 8 0 8
1/4" = 1'–0" 12 8 4 0 4
VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING

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.

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

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	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Field Inspector Pass	Fail
NA < 4,000W subject to multilevel	See Area/Space Level Controls	☐	☐

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/Sky lit 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
Reception	Main Entry Lobby	Auth. Personnel	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Office #1	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Hallway	Corridor	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
Bond Manager	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
Kitchen	Kitchen/ Food Preparation	Readily Accessible	Dimmer	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐
Unisex	Restroom	Readily Accessible	NA: Restrooms	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐

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.

A. GENERAL INFORMATION

01	Project Location (city)	Brentwood	04 Total Conditioned Floor Area (ft²)	1,483.62
02	Climate Zone	12	05 Total Unconditioned Floor Area (ft²)	65.3
03	Occupancy Types Within Project (select all that apply):		06 # of Stories (Habitable Above Grade)	

● Office

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	N/A	0	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
☒ Altered Lighting System	Area Category Method	1483.62	Area Category Method	65.3
Total Area of Work (ft²)	1483.62		65.3	

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.	Reception; Office #1; Hallway; Bond Manager; Kitchen; Unisex; Records and Office; Office #2; Office #3; Nina's Office; Data Room

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Records and Office	Office (>250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Office #2	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Office #3	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Nina's Office	Office (<=250 square feet)	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Data Room	Electrical, Mechanical, or Telephone Room	Readily Accessible	NA: Enclosed area <100SF	Occupancy Sensor	NA: Not daylit zone	NA: Not daylit zone	No	☐	☐

Plan Sheet Showing Daylit Zones:

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
Reception	Main Entry Lobby	0.7	64.47	45.13	No	No
Office #1	Office (<=250 square feet)	0.65	110.45	71.79	No	No
Hallway	Corridor	0.4	302.02	120.81	No	No
Bond Manager	Office (<=250 square feet)	0.65	94.5	61.43	No	No
Kitchen	Kitchen/ Food Preparation	0.95	79.08	75.13	No	No
Records and Office	Office (>250 square feet)	0.6	320.25	192.15	No	No
Office #2	Office (<=250 square feet)	0.65	157.5	102.38	No	No

I. LIGHTING POWER ALLOWANCE: COMPLETE BUILDING OR AREA CATEGORY METHODS

Office #3	Office (<=250 square feet)	0.65	157.5	102.38	No	No
Nina's Office	Office (<=250 square feet)	0.65	144.62	94	No	No
Data Room	Electrical, Mechanical, or Telephone Room	0.4	53.23	21.29	No	No
			TOTALS:	1,483.62	886.49	See Tables J, or P for detail

Unconditioned 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
Unisex	Restroom	0.65	65.3	42.45	No	No
			TOTALS	65.3	42.45	See Tables J, or P for detail

J. ADDITIONAL ALLOWANCE: AREA CATEGORY METHOD QUALIFYING LIGHTING SYSTEM

This section does not apply to this project.

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.

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) 01 Complete Building 140.6(c)1	02 Area Category 140.6(c)2 /170.2(e)4	03 Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	04 Tailored 140.6(c)3 /170.2(e)4B (+)		05 Total Allowed (Watts)		Adjusted Lighting Power per 140.6(a) /170.2(e) (Watts) 06 Total Designed (Watts)	07 Adjustments PAF Lighting Control Credits 140.6(a)2 /170.2(e)1B (-)		08 Total Adjusted (Watts) *Includes Adjustments	Compliance Results 09 05 must be >= 08 140.6 /170.2(e)
	(See Table I)	Sec. Table K	(See Table J)	(See Table K)				(See Table E)	(See Table P)			
Conditioned		886.49			=	886.49	≥	862.6		=	862.6	COMPLIES
Unconditioned		42.45			=	42.45	≥	29.3		=	29.3	COMPLIES
											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.

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: John Borrelli, PE	Documentation Author Signature:
Company: Borrelli and Associates, Inc.	Signature Date: 3/26/2026
Address: 2032 NORTH GATEWAY BOULEVARD	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: FRESNO, CA 93727	Phone: (559) 233-4138

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: JOHN BORRELLI, P.E.	Responsible Designer Signature:
Company: BORRELLI AND ASSOCIATES, INC.	Date Signed: 3/26/2026
Address: 2032 NORTH GATEWAY BOULEVARD	License: E16390
City/State/Zip: FRESNO, CA 93727	Phone: (559) 233-4138

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 hatel/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 Name or Item Tag	02 Complete Luminaire Description	03 Modular (Track) Fixture	04 Small Aperture & Color Change [1]	05 Watts per luminaire[2]	06 How is Wattage determined	07 Total Number of Luminaires	08 Excluded per 140.6(a)3 / 170.2(e)2C	09 Design Watts	10 Field Inspector Pass	Fail
A1	2x4-FT, 3,553 lumens (nominal)	No	NA	29.3	Mfr. Spec	10	No	293	☐	☐
A2	2x4-FT, 3,849 lumens (nominal)	No	NA	28.5	Mfr. Spec	4	No	114	☐	☐
A3	2X4-FT, 4,556 lumens (nominal)	No	NA	41.4	Mfr. Spec	8	No	331.2	☐	☐
A4	2X4-FT, 6,506 lumens (nominal)	No	NA	62.2	Mfr. Spec	2	No	124.4	☐	☐
							Total Designed Watts: CONDITIONED SPACES	862.6		

Designed Wattage: Unconditioned Spaces

01 Name or Item Tag	02 Complete Luminaire Description	03 Modular (Track) Fixture	04 Small Aperture & Color Change [1]	05 Watts per luminaire[2]	06 How is Wattage determined	07 Total Number of Luminaires	08 Excluded per 140.6(a)3 / 170.2(e)2C	09 Design Watts	10 Field Inspector Pass	Fail
A1	2x4-FT, 3,553 lumens (nominal)	No	NA	29.3	Mfr. Spec	1	No	29.3	☐	☐
							Total Designed Watts: UNCONDITIONED SPACES	29.3		

[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.*

DATE OF SIGN AND SEAL

Borrelli & Associates, Inc.
Consulting Electrical Engineers
2032 N. Gateway Boulevard Fresno, CA. 93727
Phone: 559-233-4138
http://www.borrelliengineering.com/ ca-bai@borrelliengineering.com
BAI Project #25126

SCAN ME

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DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

PROJECT NO:
MODEL FILE:

DRAWN BY: JB
COPYRIGHT: BAI

SHEET TITLE

INDOOR LIGHTING TITLE 24

E6.02.01

VERIFY SCALE
BAR IS ONE INCH ON ORIGINAL DRAWING
1" = 40'–0" 1" = 30'–0" 1" = 20'–0" 1/8" = 1'–0" 1/4" = 1'–0"

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 7 of 8)**
	Date Prepared:	2025-09-11T12:34:10-04:00

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

There are no NRCA forms required for this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 4 of 8)**
	Date Prepared:	2025-09-11T12:34:10-04:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

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

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
WB2E	Existing to remain	☐ Linear	28	Mfr. Spec	3	Existing Unchanged	☐	84	---	☐	☐
							Total Design Watts:	2219			

* 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 section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 1 of 8)**
Project Address: 850 2ND STREET BRENTWOOD, CA 94513	**Date Prepared:**	2025-09-11T12:34:10-04:00

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)	Brentwood	04 Total Illuminated Hardscape Area (ft²)	82977
02	Climate Zone	12		
03	Outdoor Lighting Zone per Title 24 Part 1 10.114 or as designated by Authority Having Jurisdiction (AHJ):			
☐	LZ-0: Very Low - Undeveloped Parkland	☐ LZ-2: Moderate - Urban Clusters	☐ LZ-4: High - Must be reviewed by CA Energy Commission for Approval	
☐	LZ-1: Low - Rural Areas	☒ LZ-3: Moderately High - Urban Areas		
05	Occupancy Types within Project			
● Office				

B. PROJECT SCOPE

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

My Project Consists of:

01	02		
☐ New Lighting System	Must Comply with Allowances from 140.7 / 170.2(e)6		
☒ Altered Lighting System	Is your alteration increasing the connected lighting load (Watts)?	● Yes	○ No
03	04	05	
% of Existing Luminaires Being Altered[1]	Sum Total of Luminaires Being Added or Altered	Calculation Method	
☐ < 10% ☐ >= 10% and < 50% ☐ >= 50%			

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

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

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 8 of 8)**
Project Address: 850 2ND STREET BRENTWOOD, CA 94513	**Date Prepared:**	2025-09-11T12:34:10-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: John Borrelli, PE	Documentation Author Signature:
Company: Borrelli and Associates, Inc.	Signature Date: 08-29-25
Address: 2032 NORTH GATEWAY BOULEVARD	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: FRESNO, CA 93727	Phone: (559) 233-4138

RESPONSIBLE PERSON'S DECLARATION STATEMENT

I certify the following under penalty of perjury, under the laws of the State of California:

1. The information provided on this Certificate of Compliance is true and correct.
2. I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer)
3. The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
4. The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
5. I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name: JOHN BORRELLI, P.E.	Responsible Designer Signature:
Company: BORRELLI AND ASSOCIATES, INC	Date Signed: 08-29-25
Address: 2032 NORTH GATEWAY BOULEVARD	License: E16390
City/State/Zip: FRESNO, CA 93727	Phone: (559) 233-4138

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 5 of 8)**
	Date Prepared:	2025-09-11T12:34:10-04:00

H. OUTDOOR LIGHTING CONTROLS

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

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

01	02	03	04	05	
Area Description	Shut-Off 130.2(c)1 / 160.5(c)	Auto-Schedule 130.2(c)2 / 160.5(c)	Motion Sensor 130.2(c)3 / 160.5(c)	Field Inspector	
				Pass	Fail
General Hardscape (Automotive): "E1"	Astronomical Timer	Provided	NA: Each Luminaire <= 40 Watts	☐	☐

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

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 2 of 8)**
	Date Prepared:	2025-09-11T12:34:10-04:00

C. COMPLIANCE RESULTS

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

Calculations of Total Allowed Lighting Power (Watts) 140.7 / 170.2(e)6 or 141.0(b)2L / 180.2(b)4Bv												Compliance Results		
01		02		03		04		05	OR	06	=	07	≥	08	09
General Hardscape Allowance 140.7(d)1 / 170.2(e)6 (See Table I)	+	Per Application 140.7(d)2 / 170.2(e)6 (See Table J)	+	Sales Frontage 140.7(d)2 (See Table K)	+	Ornamental 140.7(d)2 / 170.2(e)6 (See Table L)	+	Per Specific Area 140.7(d)2 / 170.2(e)6 (See Table M)		Existing Power Allowance 141.0(b)2L / 180.2(b)4Bv (See Table N)		**Total Allowed** (Watts)		**Total Actual** (Watts)	**07 must be >= 08**
2,450.92	+	---	+	---	+	---	+	---	OR	---	=	2,450.92	≥	2,219	COMPLIES
										Shielding Compliance (See Table G for Details)					N/A
										Controls Compliance (See Table H for Details)					COMPLIES

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 6 of 8)**
	Date Prepared:	2025-09-11T12:34:10-04:00

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

This table includes areas using allowance calculations per 140.7 /170.2(e). General Hardscape Allowance is per Table 140.7-A/Table 170.2-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

O2	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)	
General Hardscape (Automotive)	72798	0.021	1528.76	2062	0.2	412.4	1941.16
General hardscape (Pedestrian)	10179	0.021	213.76	1480	0.2	296	509.76
					Initial Wattage Allowance for Entire Site (Watts):		
					Instances of Initial Wattage Allowance (LZ 0 only)[1]:		
					Total General Hardscape Allowance (Watts):		2450.92

J. LIGHTING ALLOWANCE: PER APPLICATION

This section does not apply to this project.

K. LIGHTING ALLOWANCE: SALES FRONTAGE

This section does not apply to this project.

L. LIGHTING ALLOWANCE: ORNAMENTAL

This section does not apply to this project.

STATE OF CALIFORNIA
Outdoor Lighting
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-LTO-E
Project Name: Brentwood - New Admin Office Remodel	**Report Page:**	**(Page 3 of 8)**
	Date Prepared:	2025-09-11T12:34:10-04:00

F. OUTDOOR LIGHTING FIXTURE SCHEDULE

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

Designed Wattage:

01	02		03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description		Watts per luminaire[1, 2]	How is Wattage determined	Total Number Luminaires [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
E1	Wall sconce, 2,373 lumens (nominal)	☐ Linear	20	Mfr. Spec	4	New	☐	80	NA: < 6200 lumens	☐	☐
SA1	Existing to remain	☐ Linear	73	Mfr. Spec	6	Existing Unchanged	☐	438	---	☐	☐
SA2	Existing to remain	☐ Linear	146	Mfr. Spec	2	Existing Unchanged	☐	292	---	☐	☐
SA3	Existing to remain	☐ Linear	73	Mfr. Spec	1	Existing Unchanged	☐	73	---	☐	☐
SB1	Existing to remain	☐ Linear	56	Mfr. Spec	5	Existing Unchanged	☐	280	---	☐	☐
SB2	Existing to remain	☐ Linear	112	Mfr. Spec	3	Existing Unchanged	☐	336	---	☐	☐
WB1	Existing to remain	☐ Linear	29	Mfr. Spec	13	Existing Unchanged	☐	377	---	☐	☐
WB1E	Existing to remain	☐ Linear	28	Mfr. Spec	2	Existing Unchanged	☐	56	---	☐	☐
WB2	Existing to remain	☐ Linear	29	Mfr. Spec	7	Existing Unchanged	☐	203	---	☐	☐

REGISTERED PROFESSIONAL ENGINEER JOHN E. BORRELLI No. E16390 Exp. 6/30/27 ELECTRICAL CALIFORNIA

DATE OF SIGN AND SEAL

Borrelli & Associates, Inc.
Consulting Electrical Engineers
2032 N. Gateway Boulevard Fresno, CA. 93727
Phone: 559-233-4138
http://www.borrelliengineering.com/ ca-bai@borrelliengineering.com
BAI Project #25126

SCAN ME

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DSA STAMP:

REVISION	DESCRIPTION
1	DISTRICT REVISIONS 03/27/26

LIBERTY UNION HIGH SCHOOL DISTRICT

850 2ND STREET
BRENTWOOD, CA 94513

LIBERTY UNION HIGH SCHOOL DISTRICT ESTABLISHED 1920

NEW ADMIN OFFICE REMODEL

CHACON ARCHITECTURE
RODOLFO L.CHACON
EMAIL: rodolfo@chaconarchitecture.com
PHONE: 925-504-8098
ADDRESS : 2106 BOLERO,
BAY POINT, CA. 94565
WWW.CHACONARCHITECTURE.COM

PROJECT NO:
MODEL FILE:

DRAWN BY: JB
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SHEET TITLE

OUTDOOR LIGHTING TITLE 24

E6.03.01

1" = 40'–0" 120 80 40 0
1" = 30'–0" 90 60 30 0
1" = 20'–0" 60 40 20 0
1/8" = 1'–0" 16 8 0
1/4" = 1'–0" 8 4 0
VERIFY SCALE BAR IS ONE INCH ON ORIGINAL DRAWING

g:\educational\libertyunionhighschooldistrict\libertyhighschool\2025-libertyunionhighschool-mnobldgofficeaddition\25126E6.03.01.dwg, E6.03.01 OUTDOOR LIGHTING TITLE 24, 3/27/2026 4:03:54 PM, LEON2032