WESTMINSTER SCHOOL DISTRICT

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

DSA Submittal

03/31/23



OWNER

WESTMINISTER SCHOOL DISTRICT

CONTACT: Brian Johnson
14121 Cedarwood Avenue
Westminster, CA 92683
714-894-7311 P Ext. 1121
Bkjohnson@wsdk8.us

ARCHITECT

PBK Architects

CONTACT: YONG YOO
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
949-548-5000
yong.yoo@pbk.com

STRUCTURAL

NIC STRUCTURAL ENGINEERING CONSULTANTS

CONTACT: Touraj Eimani
23 Corporate Plaza Dr. Suite 150
Newport Beach, CA 92660
t: 949-629-2529 P
Teimani@nic-eng.com

MEP ENGINEER

LEAF Engineers

CONTACT: Ronald De La Cruz
8163 Rochester Ave. #100
Rancho Cucamonga, CA 91730
909-390-3111 P
Ronald.delacruz@leafengineers.com

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA SUBMITTAL

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2023
STATE OF CALIFORNIA

COVER SHEET

G0.00

G0.01 - SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAP

0" 1"

DRAWING CONVENTIONS

PROPERTY LINE

AREA DRAIN

EXISTING ELEVATION — NO

FINISH GRADE ELEVATION — NO

NORTH SYMBOL — NORTH, TRUE NORTH

COLUMN LINE — O

FLOOR LINE — Name, Elevation

MATCH LINE

SECTION CALLOUT SYMBOL — 1 / A101

EXTERIOR ELEVATION SYMBOL — A1.01, 12

INTERIOR ELEVATION SYMBOL — 2, 3, A1.01, 1, 4

DOOR DESIGNATION — 101

WINDOW DESIGNATION — A, 5

PARTITION TYPE — 1

EXISTING PARTITION

NEW PARTITION

REVISION NUMBER — 1

DETAIL ENLARGED — 1 / A-100

PLAN OR DETAIL ENLARGED — 1 / A-100

DETAIL SECTIONS AND VERTICAL SECTIONS — 1 / A101

DIMENSIONS — 6'-0", 4'-0", 10'-0"

NOTE: all dimensions to face of wall unless otherwise noted

SPOT ELEVATION — 18'-6"

SPOT COORDINATE — N - 58' 2", E - 150' 11"

MATCH LINE — SEE XX/X-XXX

SHEET NUMBER ON WHICH CONTINUATION IS FOUND

FENCING (WITH POSTS)

BREAK LINE

KEY NOTE — 12.34

ROOM NAME AND NUMBER — Room name, 101, 150 SF

FIRE HOSE CABINET (RECESSED AND SURFACE MOUNTED) — FHC

FIRE EXTINGUISHER CABINET (RECESSED AND SURFACE MOUNTED) — FEC

EQUIPMENT DESIGNATION — 25C

TOILET ACCESSORY SYMBOL — TA1

SHOWER HEAD

FLOOR SINK — F.S.

FLOOR DRAIN — F.D.

OVERFLOW DRAIN AND ROOF DRAIN — OVERFLOW DRAIN, ROOF DRAIN

ROOF TOP UNIT REFER TO MECHANICAL FOR TYPE — RTU

GRAPHIC SCALE — 0, 2', 4', 8'; SCALE: 1" = 4'-0"

ABBREVIATIONS

A.D.	AREA DRAIN	EQUIP	EQUIPMENT	MEP	MECHANICAL, ELECTRICAL AND PLUMBING	S.D.	SOAP DISPENSER
A.D.A.	AMERICANS WITH DISABILITIES ACT	EXIST	EXISTING	MEZZ.	MEZZANINE	SCHED	SCHEDULE
A.F.F.	ABOVE FINISH FLOOR	EXP	EXPANSION	MFR.	MANUFACTURE (R)	SCPL	SOLID CORE PLASTIC LAMINATE
A.F.G.	ABOVE FINISH GRADE	EXT	EXTERIOR	MH.	MANHOLE	SECT	SECTION
A.H.J.	ATHORITY HAVING JURISDICTION	F.E.	FIRE EXTINGUISHER	MIN.	MINIMUM	SHT	SHEET
A/C	AIR CONDITIONING	F.E.C.	FIRE EXTINGUISHER CABINET	MISC.	MISCELLANEOUS	SIM	SIMILAR
ACP.	ACOUSTICAL PANEL	F.H.C.	FIRE HOSE CABINET	MOD	MODULAR	SPC	SPECIAL COATING SYSTEM
ACT.	ACOUSTICAL TILE	FB.	FACE BRICK	MTL	METAL	SPEC	SPECIFICATION (S)
ADJ.	ABADJUSTABLE	FD.	FLOOR DRAIN	MTP.	METAL TOILET PARTITION	SQ.	SQUARE
ALT.	ALTERNATE	FIN.	FINISH (ED)			SS.	SOUND STRIP
ALUM.	ALUMINUM	FIXT.	FIXTURE	N.D.	NAPKIN DISPOSAL	SS. STL.	STAINLESS STEEL
ASPH.	ASPHALT	FLR.	FLOOR (ING)	N.I.C.	NOT IN CONTRACT	STD	STANDARD
∠	ANGLE	FLSHG.	FLASHING	N.R.	NOT RATED	STL	STEEL
		FLUOR	FLUORESCENT	N.T.S.	NOT TO SCALE	STRUC	STRUCTURAL
B.U.R.	BUILT-UP ROOF			N.V.	NAPKIN VENDOR	SUSP	SUSPENDED
BD.	BOARD	G.B.	GRAB BAR	NO.	NUMBER	SVDF	SHEET VINYL DANCE FLOORING
BLDG.	BUILDING	G.I.	GALVANIZED IRON			SYS	SYSTEM
BLK.	BLOCK	GA.	GAUGE	O.C.	ON CENTER (S)		
BM.	BEAM	GALV.	GALVANIZED	O.C.E.W.	ON CENTER EACH WAY	T.B.	TACK BOARD
		GCMU	GLAZED CONCRETE MASONRY UNIT	O.D.	OUTSIDE DIAMETER	T.D.R.	TOWEL DISPENSER AND RECEPTACL
C	CHANNEL	GEN.	GENERAL	O.F.C.I.	OWNER FURNISHED, CONTRACTOR INSTALLED	T.O.	TOP OF
C.J.	CONTROL JOINT	GEN.	GENERAL	O.H.	OPPOSITE HAND	T.O.B.	TOP OF (WOOD) BLOCKING
C.M.U.	CONCRETE MASONRY UNIT	GL.	GLASS / GLAZING	OPNG.	OPENING	T.O.M.	TOP OF MASONRY
C.W.	COLD WATER	GL.	GLASS	OPP.	OPPOSITE	T.O.S.	TOP OF STEEL
CAB.	CABINET	GR.	GRADE	P. LAM.	PLASTIC LAMINATE	T.T.D.	TOILET TISSUE DISPENSER
CABT		GTP.	GLAZED TILE PAVER	P.C.	PRECAST	TCNA	TILE COUNCIL OF NORTH AMERICA
CFMF	COLD FORMED METAL FRAMING	GYP.	GYPSUM DRYWALL	P.H.	PAPER HOLDER		
CL	CENTERLINE			P.L.	PROPERTY LINE	TEL	TELEPHONE
CLG.	CEILING	H.W.	HOT WATER	P.P.	POWER POLE	TERR	TERRAZZO
CLR	CLEAR	HM	HOLLOW METAL FRAME	P.W.B.	PREFINISHED WALL BOARD	THK	THICK (NESS)
COL.	COLUMN	HORIZ.	HORIZONTAL	PL.	PLATE	TYP	TYPICAL
COMP.	COMPRESSIBLE	HT.	HEIGHT	PLUMB.	PLUMBING		
CONC.	CONCRETE			PLYWD.	PLYWOOD	U.N.O.	UNLESS NOTED OTHERWISE
COND.	CONDITION	I.D.	INSIDE DIAMETER	POL.	POLISHED	UR.	URINAL
CORR.	CORRIDOR	I.P.S.	IRON PIPE SIZE	PR.	PAIR		
CPT.	CARPET (ED)	INSUL	INSULATE (ED), (ION)	PREFIN.	PRE-FINISHED	V	VENT
CT.	CERAMIC TILE	INT.	INTERIOR	PT.	POINT	V.C.T.	VINYL COMPOSITION TILE
CTG.	CLEAR TEMPERED GLAZING	ISA	INTERNATIONL SYMBOL OF ACCESSIBILITY	PTD.	PAINTED	V.I.F.	VERIFY IN FIELD
CTSK.	COUNTER SINK					VENT.	VENTILATING, VENTILATED
		JT.	JOINT	Q.T.	QUARRY TILE	VER.	VERIFY
D	DRYER					VERT.	VERTICAL
D.F.	DRINKING FOUNTAIN			R / RAD	RAD/IUS	VGB	(PREFINISHED) VINYL CLAD GYPSUM BOARD
D.P.	DAMPPROOFING	L.P.	LIGHT POLE	RD	ROOF DRAIN		
D.S.	DOWN SPOUT	LAM.	LAMINATE (D)	RE. , REF.	REFER TO / REFERENCE / SEE	VWC	VINYL WALL COVERING
DIA.	DIAMETER	LAV.	LAVATORY				
DIM.	DIMENSION	LT.	LIGHT	RECP.	RECEPTACLE	W	WASHING MACHINE
DTL.	DETAIL	LT. WT.	LIGHTWEIGHT	REINF.	REINFORCE (D), (ING)	W.P.	WATER PROOFING
DWG.	DRAWING			REQD.	REQUIRED	W.S.	WEATHERSTRIP
		M.O.	MASONRY OPENING	RES.	RESILIENT	W.W.	WATER WELL
E.J.	EXPANSION JOINT	MAS.	MASONRY	REV.	REVISION (S), REVISED	W.W.F	WELDED WIRE FABRIC
E.Q.	EQUAL	MATL.	MATERIAL (S)	RF	RECREATIONAL RESILIENT FLOORING	W/	WITH
EA.	EACH	MAX.	MAXIMUM			WC	WATER CLOSET
EDF	ELECTRIC DRINKING FOUNTAIN	MB.	MARKER BOARD	RPG.	RELOCATABLE PAINTED GYPSUM BOARD	WD	WOOD
		MECH.	MECHANICAL			WDW	WINDOW
EL.	ELEVATION (HEIGHT)	MEM	MEMBRANE	RSS.	ROD STOCK AND SEALANT	WT	WEIGHT
ELECT.	ELECTRICAL	MEM. WP.	MEMBRANE WATERPROOFING	S.C.	SEALED CONCRETE		
ELEV	ELEVATION (DRAWING)						

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. 04-121953 File No. 30-43)

[X] The drawings or sheets listed on the cover or index sheet (see asterisk *)
[ ] 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))*

I certify that: [X] The drawings or sheets listed on the cover or index sheet
[X] This drawing or page

[X] is/are in general conformance and	[ ] is/are in general conformance and
[X] have been coordinated	[ ] have been coordinated
Signature / Date	Signature / Date
Architect or Engineer designated to be in general responsible charge	Architect or Engineer deligated responsibility for this portion of the work
YONG YOO	
Print Name	Print Name
C-31162 / 10-31-23	/
License Number / Expiration Date	License Number / Expiration Date

DSA NOTES

1. ALL WORK SHALL CONFORM TO 2022 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY A CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART I, TITLE 24, CCR
3. A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-32, PART 1, TITLE 24, CCR; CLASS 3
4. DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.

DEFERRED APPROVAL

SCOPE OF WORK

BUILDING IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO;

FIRE ALARM AND ROOFING UPGRADE ONLY
- EXISTING RELOCATABLE CLASSROOMS CR# R1, R2, R3, R4, R5, R6, R7, E1, E2, E3, E4, E5, & E6
- EXISTING MULTI PURPOSE

ADMIN BUILDING (EXISTING ADMINISTRATION BUILDING)
- (N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- FIRE ALARM UPGRADE

BUILDING K (EXISTING KINDERGRATEN CLASSROOM)
- (N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- FIRE ALARM UPGRADE

BUILDING "A-B" (EXISTING CLASSROOMS)
- (N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- TOILET MODERNIZATION
- FIRE ALARM UPGRADE

BUILDING "C-D" (EXISTING CLASSROOMS)
- (N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE
- FIRE ALARM UPGRADE

M/P BUILDING
- FIRE ALARM UPGRADE
- ALS SIGNAGE AT MULTIPURPOSE ROOM
- GUARDRAIL AT EXISTING INTERIOR DRINKING FOUNTAIN
- GRABS BARS AT EXISTING MENS AND WOMENS RESTROOMS.

EXISTING COVERED WALKWAYS
- (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTURE

NEW INTERIOR AND EXTERIOR PAINT IN ALL BUILDINGS AND STRUCTURES INCLUDING LUNCH SHELTER AND ALL RELOCATABLES.

SITE IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO; WALKWAYS, UTILITIES, LANDSCAPING AND DRIVEWAYS/FIRE LANES

CODES & STANDARDS

PARTIAL LIST OF APPLICABLE CODES

2022 California Administrative Code (CAC) ..... (Part 1, Title 24, CCR)
2022 California Building Code (CBC) ..... (Part 2, Title 24, CCR)
2022 California Electrical Code (CEC) ..... (Part 3, Title 24, CCR)
2022 California Mechanical Code (CMC) ..... (Part 4, Title 24, CCR)
2022 California Plumbing Code (CPC) ..... (Part 5, Title 24, CCR)
2022 California Energy Code (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 (CAL Green) ..... (Part 11, Title 24, CCR)
2022 California Referenced Standards Code ..... (Part 12, Title 24, CCR)
Title 19 CCR, Public Safety, State Fire Marshall Regulations
2019 ASME A17.1/CSA B44-13 Safety Code For Elevators and Escalators (per 2022 CBC Part 2, Ch 35)
Note: Cal/OSHA Elevator Unit enforces CCR Title 8 and uses the 2004 ASME A17.1 by adoption

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 13 Automatic Fire Sprinkler Systems ..... (2022 Edition)
NFPA 14 Standpipe and Hose Systems ..... (2019 Edition)
NFPA 17 Dry Chemical Extinguishing Systems ..... (2021 Edition)
NFPA 17a Wet Chemical Extinguishing Systems ..... (2021 Edition)
NFPA 20 Stationary Pumps for Fire Protection ..... (2019 Edition)
NFPA 24 Standard for the Installation of Private Fire Service Mains & their Appurtenances (CA amended) ..... (2019 Edition)
***NFPA 25** Standard for Inspection, Testing and Maintenance of Water-Based Fire Protection Systems (CA amended)* ..... *(2013 Edition)*
NFPA 72 National Fire Alarm & Signaling Code (CA amended) ..... (2022 Edition)
NFPA 80 Fire Doors and Other Opening Protectives ..... (2019 Edition)
NFPA 92 Standard for Smoke Control Systems ..... (2018 Edition)
NFPA 253 Critical Radiant Flux of Floor Covering Systems ..... (2019 Edition)
NFPA 2001 Clean Agent Fire Extinguishing Systems (CA amended) ..... (2018 Edition)
ICC 300 ICC Stds on Bleachers, Folding and Telescoping Seating and Grand stands ..... (2017 Edition)
UL 300 Fire Testing of Fire Extinguishing Sys for Protection of Restaurant Cooking Areas 2005 (R2010)
UL 464 Audible Signal Appliances ..... (2003 Edition)
UL 521 Heat Detectors for Fire Protective Signaling Systems ..... (1999 Edition)

For a complete list of applicable NFPA standards refer to 2022 CBC (SFM) Chapter 35 and California Fire Code Chapter 80

See California Building Code Chapter 35 for State of California amendments to the NFPA Standards.

CALIFORNIA ENERGY CODE NOTES

1. 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.
2. LIGHTING CONTROLS ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED LIGHTING CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT).
3. MECHANICAL SYSTEM ACCEPTANCE TEST MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.
4. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER / ARCHITECT OF RECORD OR THE OWNER'S AGENT.
5. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS://WWW.ENERGY.CA.GOV/PROGRAMS-AND-TOPICS/PROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER-PROGRAM/ACCEPTANCE.
6. 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.
7. PROJECT INSPECTORS WILL CORRECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

GENERAL NOTES

1. CONSTRUCTION DOCUMENTS DESCRIBE THE PRODUCTS, SYSTEMS, QUANTITIES, CONFIGURATION AND PERFORMANCE SPECIFICATIONS THAT DELIVER THE OVERALL DESIGN INTENT OF THE PROJECT.
2. THE CONSTRUCTION DOCUMENT DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY, AND WHAT IS REQUIRED BY ONE SHALL BE AS BINDING AS IF REQUIRED BY BOTH.
3. PERFORMANCE BY THE CONSTRUCTION TEAM SHALL BE CONSISTENT WITH THE CONSTRUCTION DRAWINGS AND SPECIFICATIONS AS NECESSARY TO DELIVER THE INDICATED RESULTS OF THE DESIGN INTENT.
4. ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.
5. THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY SUPPORTS AND SCAFFOLDING IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
6. WHERE ANY CONFLICT OCCURS BETWEEN THE REQUIREMENTS OF LAWS, CODES, ORDINANCES, RULES AND REGULATIONS, THE MOST STRINGENT SHALL GOVERN.
7. ENACT ALL MEASURES TO PROTECT AND SAFEGUARD ALL EXISTING ELEMENTS TO REMAIN FROM BEING DAMAGED. REPLACE OR REPAIR EXISTING ELEMENTS DAMAGED BY THE EXECUTION OF THIS CONTRACT TO EQUAL OR BETTER CONDITION.
8. CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW STRUCTURAL ELEMENTS SHALL NOT BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT, AND STRUCTURAL ENGINEER OF RECORD.
9. VERIFY DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH AFFECTED WORK.
10. REFLECTED CEILING PLAN DIMENSIONS ARE REFERENCED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE. CEILING HEIGHTS ARE DIMENSIONED FROM FLOOR TO FINISHED CEILING HEIGHT.
11. DIMENSIONS NOTED AS "FIELD VERIFY" SHALL BE CHECKED AT THE SITE BY THE CONTRACTOR AND REVIEWED WITH THE ARCHITECT BEFORE INCORPORATING INTO THE WORK.
12. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE. IF CLARIFICATION IS REQUIRED IN ORDER TO DETERMINE THE INTENT OF THE CONTRACT DOCUMENTS, CONTACT THE ARCHITECT.
13. NOTES OR DIMENSIONS LABELED "TYPICAL" SHALL APPLY TO SITUATIONS THAT ARE THE SAME OR SIMILAR.
14. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS NOTED OTHERWISE.
15. ALL SPACES WITH FLOOR DRAINS TO HAVE FINISHED FLOORS SLOPED TO DRAIN NOT TO EXCEED ONE IN FIFTY.
16. ALL FLOORS FINISH CHANGES SHALL OCCUR AT THE CENTERLINE OF DOORS UNLESS NOTED OTHERWISE. ALL FLOOR FINISH CHANGES SHALL HAVE THRESHOLDS OR REDUCER STRIPS.
17. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED.
18. ALL DOORS IN INTERIOR GYP. BD STUD WALLS SHALL BE SET 4" OFF THE PERP. ADJ. WALL ON THE HINGE SIDE OF THE DOOR UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL CONTACT THE ARCHITECT IF ANY CONFLICTS OCCUR.
19. ALUM. THRESHOLDS TO BE SET IN FULL BED OF SEALANT AT ALL EXT. DOORS.
20. COORDINATE ROOF DRAIN LEADER LOCATIONS WITH FLOOR PLAN PRIOR TO SLAB CONSTRUCTION.
21. PROVIDE VINYL REDUCER AT ALL DISSIMILAR FLOOR MATERIALS UNLESS OTHERWISE NOTED.
22. UNLESS OTHERWISE NOTED, ALL ELECTRICAL AND MECHANICAL OPERABLE DEVICES SHALL BE MOUNTED WITH THE HIGHEST OPERABLE CONTROL AT MAX. OF 42" AFF.
23. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APPROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT, OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK, PER CAC, 2013, 4-317(c)
24. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33.
25. MAINTAIN THE INTEGRITY OF ALL EXISTING RATED ASSEMBLIES U.O.N.

THIS PROJECT SHALL NOT BE CLOSED AND CERTIFIED PRIOR TO THE CERTIFICATION OF A#04 121968 (EASTWOOD ES INTERIM HOUSING) FOR:

1. D.F AT BLDG A-B
2. ONE PEDESTRIAN GATE BETWEEN BLDG K & ADMIN BLDG.
3. REVISION TO ACCESSIBLE PARKING LOT 1 & 2 & (N) TOW AWAY SIGN.
4. ACCESSIBLE UPGRADE TO BLDG A-B BOYS & GIRLS RR.
5. ACCESSIBLE UPGRADE TO BLDG E6 MENS & WOMENS STAFF RR.

VICINITY MAP



SHEET NUMBERING

SHEET NUMBER

A2.01

SEQUENCE (.01 - .99.....etc.)
SHEET DISCIPLINE TYPE

SHEET DISCIPLINE TYPE

DISCIPLINE			
G	GENERAL	0_____	GENERAL & LIFE SAFETY PLANS
C	CIVIL	1_____	SITE PLANS, FLOOR PLANS, & ENLARGED PLANS
L	LANDSCAPE	2_____	WINDOWS, DOORS, FRAME ELEVATIONS & SCHEDULE
A	ARCHITECTURAL	3_____	REFLECTED CEILING PLANS
AD	ARCHITECTURAL DEMOLITION	4_____	ROOF PLANS
AS	ARCHITECTURAL SITE	5_____	EXTERIOR ELEVATIONS
S	STRUCTURAL	6_____	BUILDING SECTION & WALL SECTIONS
M	MECHANICAL	7_____	INTERIOR ELEVATIONS
MD	MECHANICAL DEMOLITION	8_____	DETAILS
E	ELECTRICAL		
P	PLUMBING		
PD	PLUMBING DEMOLITION		

DRAWING INDEX

GENERAL

G0.00	COVER SHEET
G0.01	SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAP
G0.02	ACCESSIBILITY SITE PLAN
G0.03	FIRE ACCESS SITE PLAN
G0.04	SITE DETAILS

SHEET COUNT: 5

DEMOLITION

D1.1	DEMO FLOOR PLANS BLDG 'A-B', 'C-D','K' & 'ADMIN' FLOOR PLANS
D2.1	DEMO RCP BLDG 'A-B', 'C-D','K'& ADMIN

SHEET COUNT: 2

ARCHITECTURAL

A1.01	BLDG 'A-B', 'C-D', 'K' & 'ADMIN' FLOOR PLANS
A2.01	BLDG 'A-B', 'C-D', 'ADMIN' & 'K' REFLECTED CEILING PLANS
A3.01	OVERALL ROOF PLAN & GENERAL INFORMATION
A3.02	ENLARGED ROOF PLAN
A3.03	GENERAL ROOF DETAILS
A4.01	BUILDING SECTIONS
A5.01	ENLARGED RESTROOM PLANS & ELEVATIONS
A5.02	ENLARGED RESTROOM PLANS & ELEVATIONS
A6.01	EXTERIOR ELEVATIONS
A6.02	EXTERIOR ELEVATIONS
A7.01	INTERIOR ELEVATIONS
A8.01	DOORS, WINDOW FRAME DETAILS
A8.02	PARTITION TYPES AND MISC. DETAILS
A8.03	CEILING DETAILS
A9.01	DOOR SCHEDULE & WINDOW FRAMING ELEVATION
A10.01	FINISH PLANS & SCHEDULE

SHEET COUNT: 16

STRUCTURAL *

SN1	GENERAL NOTES
S1	FLOOR/ROOF PLANS - BLDG 'A-B', 'C-D', & 'K'
SD1	CONCRETE DETAILS
SD2	RTU DETAILS
SD3	HUNG UNITS DETAILS

SHEET COUNT: 5

MECHANICAL *

M0.00	MECHANICAL SHEET INDEX, LEGEND, AND NOTES
M0.01	MECHANICAL TITLE 24 FORMS
M0.02	MECHANICAL TITLE 24 FORMS
M0.03	MECHANICAL TITLE 24 FORMS
M0.04	MECHANICAL TITLE 24 FORMS
M1.01	MECHANICAL SITE PLAN
MD2.01	DEMO MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
M2.01	MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
M4.01	MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS
M5.01	MECHANICAL SCHEDULES
M5.02	MECHANICAL SCHEDULES
M6.01	MECHANICAL DETAILS
M6.02	MECHANICAL DETAILS

SHEET COUNT: 13

ELECTRICAL *

E0.00	ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS
E0.01	ELECTRICAL TITLE 24 FORMS
E0.02	ELECTRICAL TITLE 24 FORMS
E1.01	ELECTRICAL SITE PLAN
ED2.01	DEMO ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
ED3.01	DEMO LIGHTING PLAN BLDG 'A-B', 'C-D', 'ADMIN' & 'K'
E2.01	ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
E3.01	ELECTRICAL BLDG LIGHTING PLANS 'A-B', 'C-D', 'ADMIN' & 'K'
E4.01	ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS
E5.01	ELECTRICAL SCHEDULES & SINGLE LINE DIAGRAM
E5.02	ELECTRICAL SCHEDULES
E6.01	ELECTRICAL DETAILS

SHEET COUNT: 12

PLUMBING *

P0.00	PLUMBING SHEET INDEX, LEGEND, AND NOTES
P1.01	PLUMBING SITE PLAN
PD2.01	DEMO PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
P2.01	PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
P4.01	PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS
P5.01	PLUMBING SCHEDULES
P6.01	PLUMBING DETAILS

SHEET COUNT: 7

FIRE ALARM

FA0.00	FIRE ALARM SCHEDULE, NOTES, AND ABBREVIATIONS
FA1.01	FIRE ALARM SITE PLAN
FA2.01	FIRE ALARM BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
FA2.02	FIRE ALARM BLDG 'M/P', 'E1-E3', & 'E4-E6' FLOOR PLANS
FA2.03	FIRE ALARM PORTABLE BUILDINGS
FA5.01	FIRE ALARM RISER DIAGRAM
FA5.02	FIRE ALARM CALCULATIONS
FA6.01	FIRE ALARM DETAILS

SHEET COUNT: 8

TOTAL SHEETS: 68

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT — PBK Architects, Inc. — PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953

WESTMINSTER SCHOOL DISTRICT



Consultant

Architect



CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

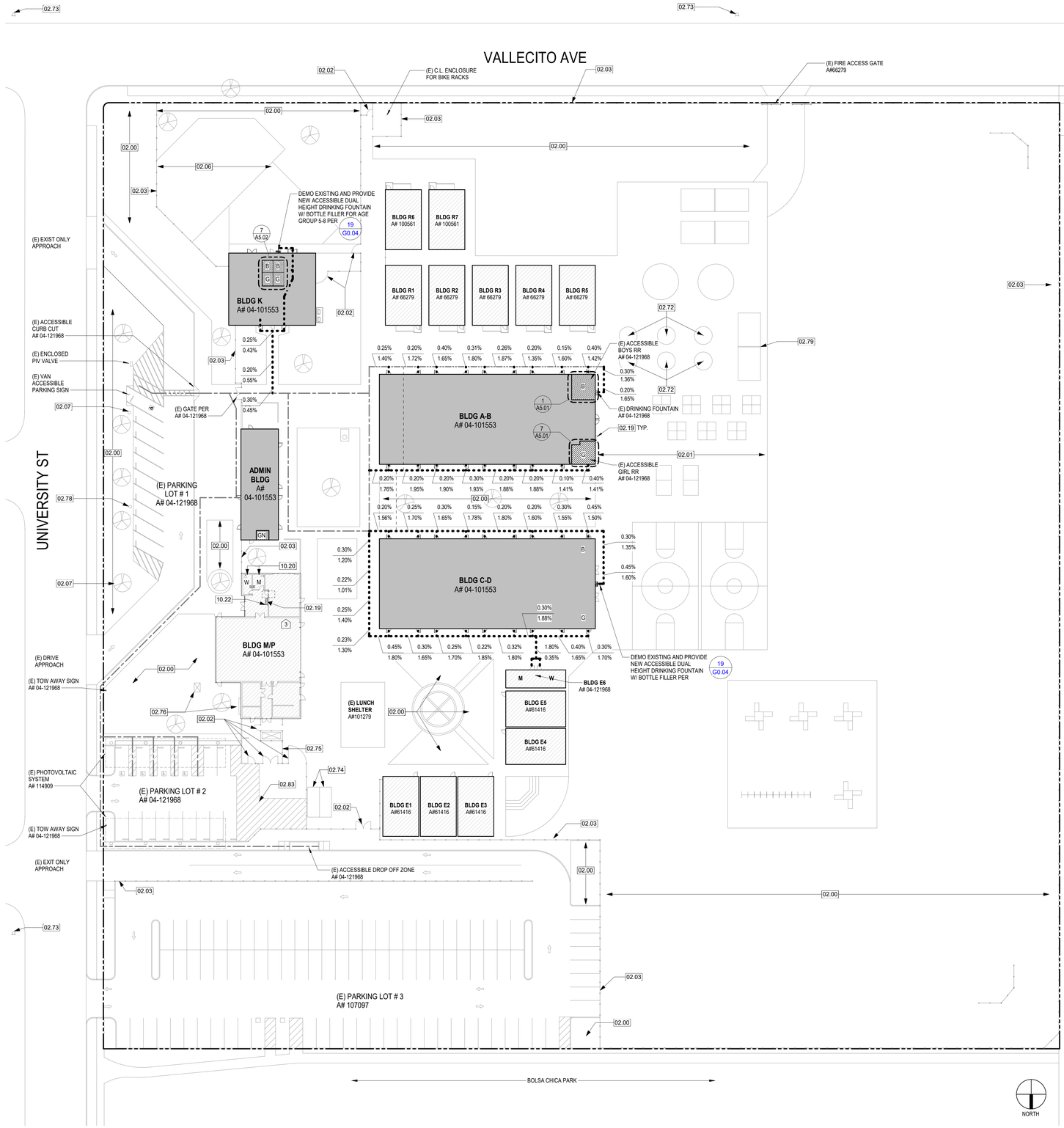
DSA Submittal

SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAP

G0.01

FILE PATH: Z:\Projects\...
9/15/2023 2:57:33 PM

0" 1"



PATH OF TRAVEL

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT:
THE POT INDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR **PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS**, AS PART OF THE DESIGN OF THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NONCOMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS. DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

ACCESSIBILITY LEGEND

- PROPOSED PATH OF TRAVEL
- (E) PATH OF TRAVEL PER A# 101553
- (E) PATH OF TRAVEL PER A# 121968
- (E) PATH OF TRAVEL PER A# 107097
- PROPERTY LINE
- (E) BUILDING FIRE ALARM SCOPE ONLY
- (E) BUILDING TO BE MODERNIZED
- SAFE DISPERSAL AREA
- ACCESSIBLE RESTROOM TO BE PROVIDED AS PART OF THE CONTRACT

B = BOYS
G = GIRLS
M = MEN
W = WOMEN
GN = GENDER NEUTRAL

0.0% SLOPE IN DIRECTION OF TRAVEL
0.0% (E) SLOPES PER SMART LEVEL, VERIFIED IN FIELD.
NOTE: SLOPE MEASUREMENTS SPACED 10'-0" O.C. MAX, TYP
CROSS SLOPE

3 ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 23 / A8.02.

ACCESSIBILITY KEYED NOTES

#	Description
02.00	(E) TURF TO REMAIN
02.01	(E) CONCRETE TO REMAIN
02.02	(E) SERVICE GATE TO REMAIN
02.03	(E) CHAIN LINK FENCE TO REMAIN
02.06	(E) ASPHALT TO REMAIN
02.07	(E) TREE TO REMAIN
02.19	(E) DRINKING FOUNTAIN TO REMAIN
02.72	(E) TETHERBALL POLE
02.73	(E) FIRE HYDRANT
02.74	(E) 8' X 20' STORAGE CONTAINER
02.75	(E) TRASH ENCLOSURE
02.76	(E) TRANSFORMERS/SWITCH BOARD
02.78	(E) LIGHT POLE
02.79	(E) HANDBALL WALL
02.83	(E) WHITE STRIPING
10.20	(E) MENS AND WOMENS RESTROOM FIXTURES, ACCESSORIES, AND FINISHES TO REMAIN. INSTALL NEW GRAB BARS AT ADULT HEIGHT PER DETAIL 3/A8.02.
10.22	(N) GUARDRAIL TO BE INSTALLED TO (E) DRINKING FOUNTAIN. SEE DETAIL 1/G0.04

DSA CERTIFICATION LIST

1. THE FOLLOWING PROJECT... **A# 61416** CLOSED WITH DSA CERTIFICATION ON 02/04/2009
2. THE FOLLOWING PROJECT... **A# 66279** CLOSED WITH DSA CERTIFICATION ON 05/13/2010
3. THE FOLLOWING PROJECT... **A# 100561** CLOSED WITH DSA CERTIFICATION ON 07/17/2013
4. THE FOLLOWING PROJECT... **A# 101553** "UNDER REVIEW FOR CERTIFICATION"
5. THE FOLLOWING PROJECT... **A# 107097** CLOSED WITH DSA CERTIFICATION ON 05/12/2009
6. THE FOLLOWING PROJECT... **A# 114909** CLOSED WITH DSA CERTIFICATION ON 01/26/2017

PARKING CALCULATION

(E) PARKING LOT 1: (STAFF/VISITOR USER GROUP)	
STANDARD STALLS	8
VAN ACCESSIBLE STALLS	1
TOTAL P-LOT 1 STALLS	**9**
(E) PARKING LOT 2: (STAFF/VISITOR USER GROUP)	
STANDARD STALLS	11
VAN ACCESSIBLE STALLS	1
STD ACCESSIBLE STALLS (FROM PARKING LOT #3)	3
TOTAL P-LOT 2 STALLS	**15**
(E) PARKING LOT 3: (STAFF/VISITOR/PARK USER GROUP)	
STANDARD STALLS	91
VAN ACCESSIBLE STALLS	1
STD ACCESSIBLE STALLS	1
TOTAL P-LOT 3 STALLS	**93**
TOTAL STALLS ON SITE	**117**

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

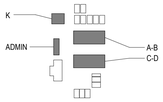
ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953



KEY PLAN N NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

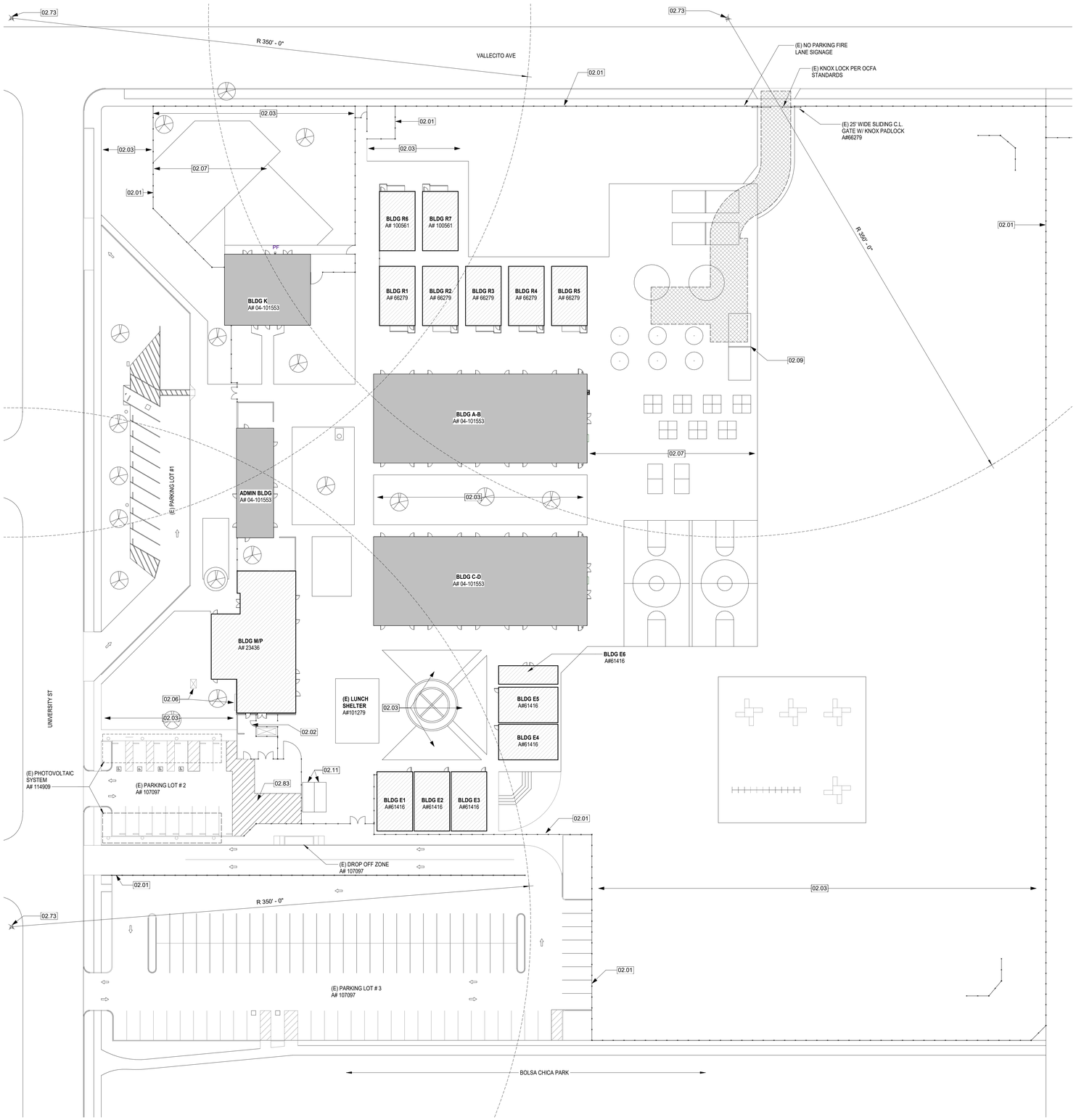
ACCESSIBILITY SITE PLAN

G0.02

FILE PATH: Z:\Projects\...
12/5/2023 1:53:54 PM

6 ACCESSIBILITY SITE PLAN
1" = 30'-0"

0" 1"



FIRE ACCESS LEGEND

- PROPERTY LINE
- (E) BUILDING NOT IN SCOPE
- BUILDING TO BE MODERNIZED
- (E) FIRE ACCESS LANE A# 04-121968
- SAFE DISPERSAL AREA

FIRE ACCESS KEYED NOTES

#	Description
02.01	(E) CONCRETE TO REMAIN
02.02	(E) SERVICE GATE TO REMAIN
02.03	(E) CHAIN LINK FENCE TO REMAIN
02.06	(E) ASPHALT TO REMAIN
02.07	(E) TREE TO REMAIN
02.09	(E) PARKWAY DRAIN
02.11	(E) DRAINAGE
02.73	(E) FIRE HYDRANT
02.83	(E) WHITE STRIPING

BLDG CONSTRUCTION TYPE/SPRINKLER INFO

1. ADMIN BLDG (EXISTING ADMINISTRATION BLDG) - TYPE V-N , NON SPRINKLERED
2. BLDG K (EXISTING KINDERGARTEN CLASSROOM) - TYPE V-N , NON SPRINKLERED
3. BLDG A-B, C-D (EXISTING CLASSROOMS) - TYPE V-N , NON SPRINKLERED
4. BLDG MP (EXISTING MULTI-PURPOSE BLDG) - TYPE V - 1 HOUR , NON-SPRINKLERED
5. EXISTING RELOCATABLE CLASSROOMS CR# R1, R2, R3, R4, R5, R6, R7, E1, E2, E3, E4, E5 & E6- TYPE V-N , NON SPRINKLERED

DSA

810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

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

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

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

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

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

PROJECT INFORMATION	
School District/Owner:	WESTMINSTER SCHOOL DISTRICT
Project Name/School:	EASTWOOD ELEMENTARY SCHOOL
Project Address:	13552 UNIVERSITY ST., WESTMINSTER, CA 92683

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN 10-31-2025 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

FIRE ACCESS SITE PLAN

G0.03

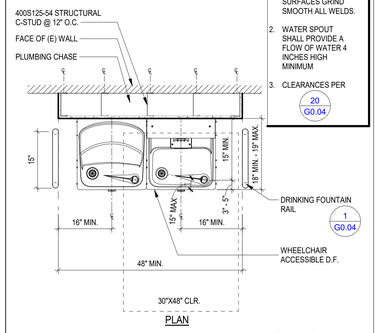
6 FIRE ACCESS PLAN
1" = 30'-0"

FILE PATH: Z:\Projects\...
9/14/2023 6:00:21 PM

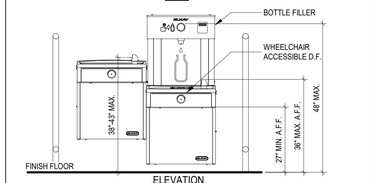
0" 1"

DRINKING FOUNTAIN
MFR: EKLAY
MODEL: EZH2O MODEL VRCTLR8WSK
DESCRIPTION: BOTTLE FILLER
SPOUT TO PROVIDE A FLOW OF WATER 4" HIGH MIN.

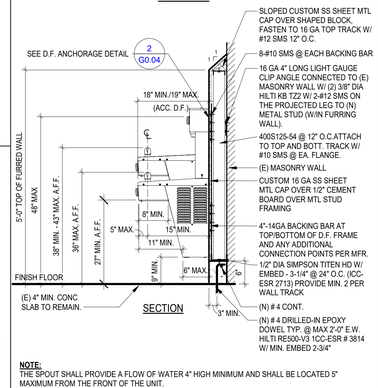
NOTES:
1. UNDERSIDE OF D.F. SHALL BE FREE OF SHARP OR ABRASIVE EDGES OR SURFACES GRIND SMOOTH ALL WELDS.
2. WATER SPOUT SHALL PROVIDE A FLOW OF WATER 4 INCHES HIGH MINIMUM
3. CLEARANCES PER 20 G0.04



PLAN



ELEVATION



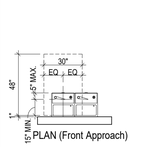
SECTION

NOTE:
THE SPOUT SHALL PROVIDE A FLOW OF WATER 4" HIGH MINIMUM AND SHALL BE LOCATED 5" MAXIMUM FROM THE FRONT OF THE UNIT.

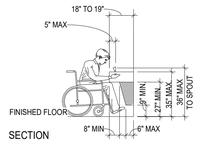
IF THE SPOUT IS LOCATED LESS THAN 3" FROM THE FRONT OF THE UNIT, THE ANGLE OF THE STREAM SHALL BE 30 DEGREES MAXIMUM.

WHERE LOCATED BETWEEN 3" AND 5" FROM THE FRONT OF THE UNIT, THE ANGLE OF THE STREAM SHALL BE 15 DEGREES MAXIMUM RELATIVE TO THE FRONT FACE (ORIENTATION OF WALL SURFACE.)

19 ACCESSIBLE DRINKING FOUNTAIN
3/4" = 1'-0"

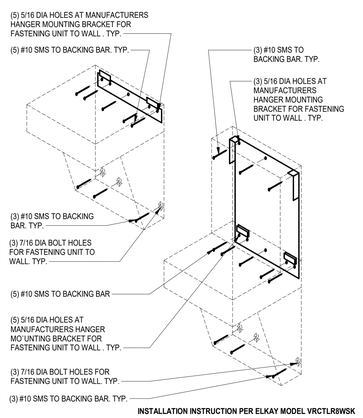


PLAN (Front Approach)



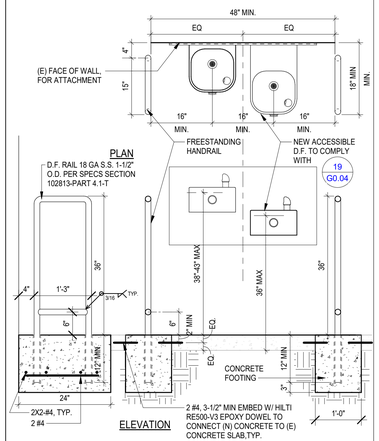
SECTION

20 DRINKING FOUNTAIN GUIDELINE
1/4" = 1'-0"



INSTALLATION INSTRUCTION PER ELKAY MODEL VRCTLR8WSK

2 DRINKING FOUNTAIN ANCHORAGE
1/4" = 1'-0"



ELEVATION

1 DRINKING FOUNTAIN RAILS
3/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

KEY PLAN
NORTH: PLAN

Consultant

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

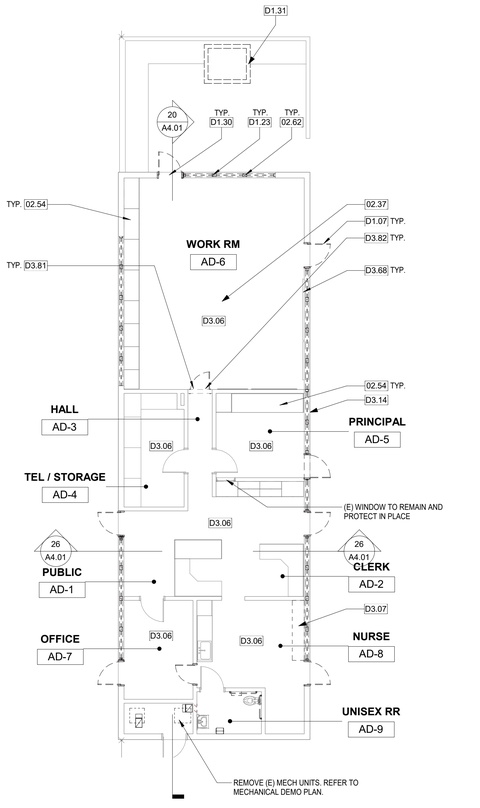
DSA Submittal

SITE DETAILS

G0.04

D1.1 - DEMO FLOOR PLANS BLDG 'A-B', 'C-D','K' & 'ADMIN' FLOOR PLANS

0" 1"

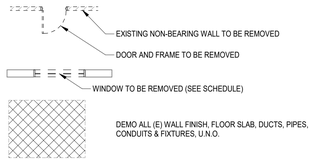


NORTH

18 BLDG 'ADMIN' - DEMOLITION FLOOR PLAN

1/8" = 1'-0"

DEMOLITION LEGEND

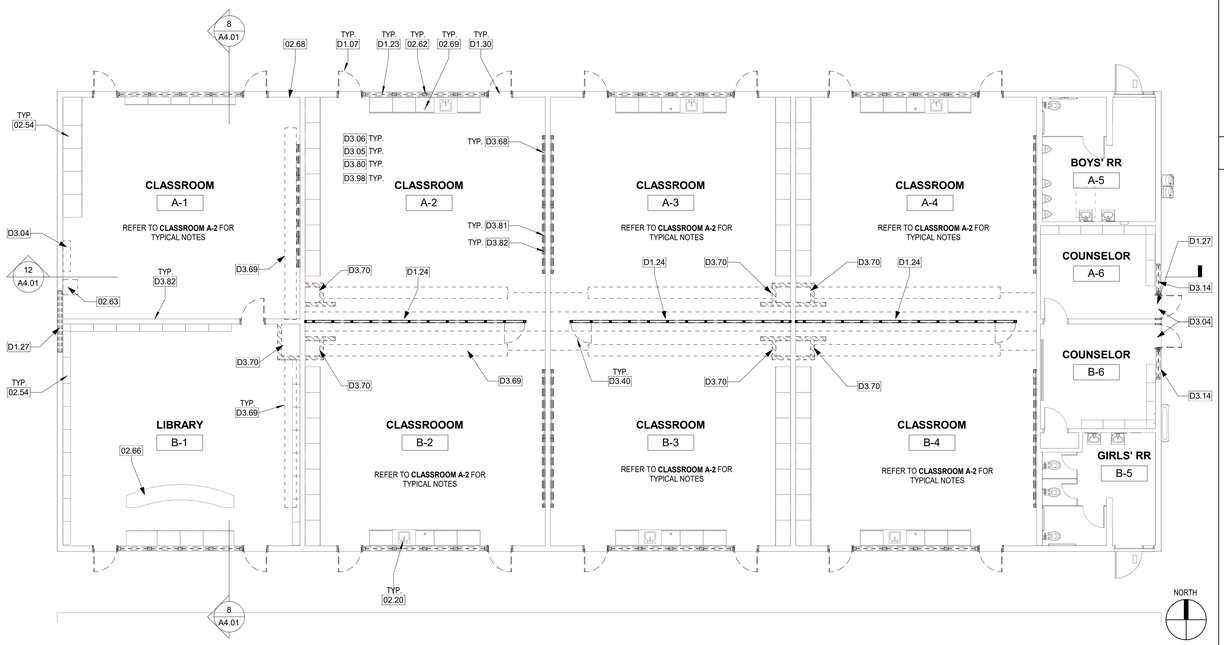


KEYNOTE LEGEND

#	DESCRIPTION
02.20	(E) LAVATORY TO REMAIN, PROTECT IN PLACE.
02.37	(E) FLOOR FINISH TO REMAIN, PROTECTED IN PLACE.
02.54	(E) CASEWORK TO REMAIN, RE-PAINT & PROTECT IN PLACE.
02.62	(E) WINDOW MULLION/COLUMN TUBE STEEL TO REMAIN, PROTECT IN PLACE, WHERE OCCURS
02.63	(E) MDF/IDF TO REMAIN & PROTECT IN PLACE.
02.66	(E) LIBRARY COUNTER DESK TO REMAIN, PROTECT IN PLACE AND REPAINT.
02.68	(E) ELECTRICAL PANEL TO REMAIN, PROTECT IN PLACE.
02.69	(E) VENT PIPE TO REMAIN AND PROTECT IN PLACE, WHERE OCCURS.

DEMOLITION KEYED NOTES

#	DESCRIPTION
D1.07	(E) DOOR AND FRAME TO BE REMOVED AND DISPOSED
D1.23	(E) ALUMINUM FRAME & GLAZING WINDOW SYSTEM TO BE REMOVED AND DISPOSED
D1.24	(E) INTERIOR PARTITION TO BE REMOVED AND DISPOSED. REFER TO ASBESTOS REPORT
D1.27	(E) LOUVERED VENT TO BE REMOVED AND DISPOSED, INFILL PER DETAIL 4/A8.01.
D1.30	(E) TRANSOM WINDOW TO BE REMOVED AND DISPOSED
D1.31	(E) PLANTER TO BE DEMO AND PREPARED FOR A NEW CONCRETE
D3.04	(E) WALL MOUNTED SPLIT UNIT TO BE REMOVED AND DISPOSED.
D3.05	(E) PROJECTOR & BRACKET TO BE REMOVED AND RETURNED TO DISTRICT. WHERE OCCURS.
D3.06	(E) FLOOR FINISH TO BE REMOVED, DISPOSED AND REPLACED. SEE FINISH SCHEDULE & SPECS TO PREPARE FOR (N).
D3.07	REMOVE AND DISPOSE (E) BENCH, PATCH AND REPLACE WALL FINISH MATERIALS TO MATCH EXISTING
D3.11	(E) LOW SOFFIT AND ASSOCIATED FRAMING TO BE DEMOLISHED AND DISPOSED. REFER TO ASBESTOS REPORT. PATCH ADJACENT WALLS AS NECESSARY.
D3.14	(E) STUD WALL FINISH AND STRUCTURE BELOW WINDOW ARE TO BE REPLACED. CONTRACTOR TO VERIFY THE EXTENT OF DETERIORATION PRIOR TO REMOVAL AND CONSULT ARCHITECT AND OWNER. REFER TO ASBESTOS REPORT
D3.39	(E) TOILET SINK LAVATORY TO BE REMOVED AND DISPOSED, PATCH AND REPLACE FLOOR AND WALL FINISH MATERIALS TO MATCH EXISTING
D3.40	(E) DOOR ATTACHED TO PARTION WALL TO BE REMOVED AND DISPOSED
D3.68	(E) MARKER/TACK BOARD TO BE REMOVED AND DISPOSED. PATCH & REPAIR AS REQ'D.
D3.69	(E) VENT TO BE REMOVED AND DISPOSED
D3.70	(E) HEATER TO BE REMOVED AND DISPOSED.
D3.79	REMOVE (E) DRINKING FOUNTAIN. PREPARE FOR NEW DRINKING FOUNTAIN
D3.80	(E) TELEVISION & BRACKET TO BE REMOVED AND DISPOSED. WHERE OCCURS. PATCH WALL AS NECESSARY.
D3.81	(E) ANALOG WALL CLOCK TO BE REMOVED AND DISPOSED. WHERE OCCURS.
D3.82	(E) AUDIO SPEAKER TO BE REMOVED WHERE OCCURS AND RELOCATED BELOW (N) CEILING PER PLAN.
D3.87	(E) CASEWORK TO BE REMOVED AND DISPOSE. PATCH AND PREPARED FOR A NEW SIDE PANEL AFTER DEMOLITION.
D3.98	REMOVE & DISPOSE OF (E) INSULATION BELOW ROOF, BETWEEN RAFTERS.



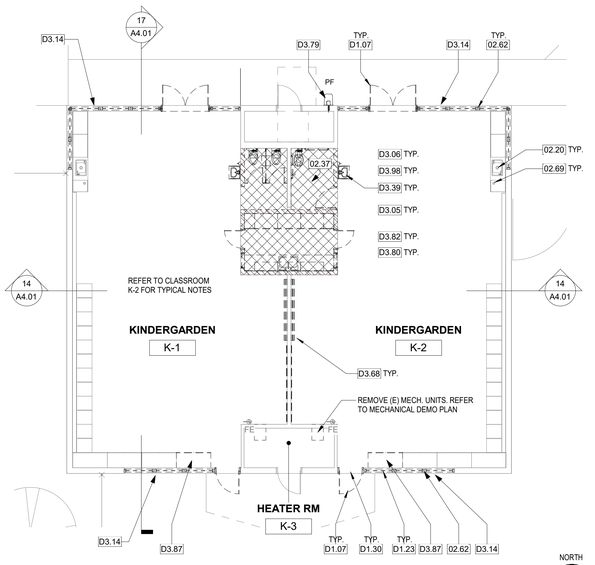
16 BLDG 'A-B' - DEMOLITION FLOOR PLAN

1/8" = 1'-0"

GENERAL DEMOLITION NOTES:

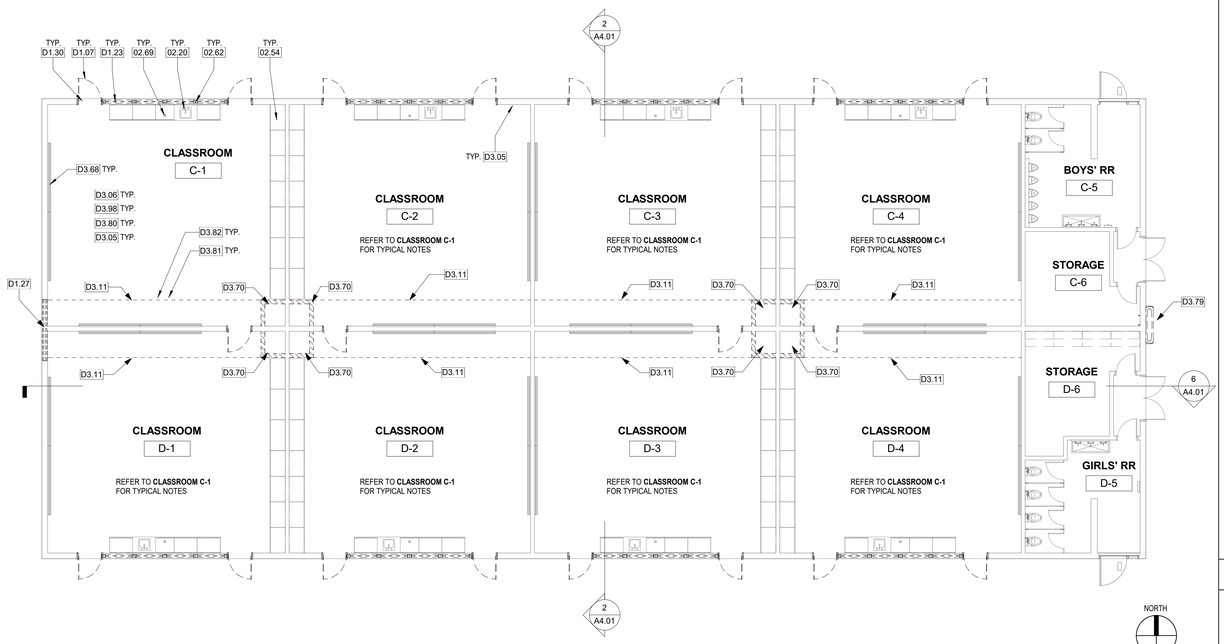
1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUESTS FOR ADDITIONAL MONEY WILL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR.
7. CONTRACTOR SHALL NOT SCALE DRAWINGS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND/OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.
11. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DUST AND OR SOUND PARTITION BETWEEN CONSTRUCTION AREA AND AREAS NOT IN SCOPE AS NECESSARY. DEMOLITION ACTIVITIES SHALL BE PERFORMED SO AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY AND OCCUPANTS (I.E. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST).
13. CONTRACTOR SHALL REPAIR, REPLACE, OR PATCH EXISTING BUILDINGS, DRIVEWAYS, SIDEWALKS, CANOPIES, AND OR PARKING AREAS DAMAGED, MODIFIED, AND OR DISTURBED BY DEMOLITION WORK AT NO COST TO THE OWNER.
14. ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCTION TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCTION SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
16. DO NOT INTERRUPT EXISTING UTILITES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES, AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
17. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.
18. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.
19. CONTRACTOR SHALL RELOCATE UTILITES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECHNOLOGY REQUIREMENTS FOR NEW WORK.
20. PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESSARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.
21. CONTRACTOR SHALL REGRADE AND HYDROMULCH AREAS AFFECTED BY DEMOLITION.
22. OWNER HAS RIGHT TO FIRST REFUSAL OF ALL ITEMS REMOVED AS PART OF THE SCOPE OF WORK, WHETHER IDENTIFIED AS SALVAGE OR NOT.
23. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.
24. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
25. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION AT NO COST TO THE OWNER.
26. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
27. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTEDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
28. REMOVE, PATCH, AND REPAIR ALL ABANDONED ROOF PENETRATIONS RESULTING FROM WORK.
29. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVISES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMBING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORNCING BARS DOWELLED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE, TO RECEIVE NEW FLOOR FINISHES. CORRDINATE WITH STRUCTURAL.
30. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
31. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT AT LOCATIONS INDICATED TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS. COORDINATE LOCATIONS OF ALL NEW OPENINGS IN EXISTING WALLS AND PARTITIONS WITH ARCHITECTURAL PLANS.
32. WHERE EXISTING WALL OPENINGS ARE TO BE NEWLY CLOSED-OFF, REMOVE ANY EXISTING OPENING FRAME AND PATCH AND REPAIR EXISTING WALL TO MATCH EXISTING ADJACENT MATERICALS AND FINISHES, UNLESS NOTED OTHERWISE.
33. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
34. REFER TO MEPT DRAWINGS FOR DEMOLITION OF MEPT SYSTEMS. IDENTIFY WORK REQUIRED BY THIS CONTRACTOR WHICH MAY AFFECT DEMOLITION AND OR REPARIS OF ARCHITECTURAL ELEMENTS. COORDINATE WITH RELATED SUBCONTRACTORS THE EXTENT OF ALL DEMOLITION WORK.
35. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
36. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
37. ALL DASHED LINES ARE DEMOLITION LINES. U.N.O.
38. REMOVE (E) ROOF INSULATION, AND PROVIDE (N) ROOF INSULATION BETWEEN RAFTERS.
39. REMOVE (E) TACKBOARDS AND DISPOSE, PATCH & REPAIR AS REQ'D, PREPARE SURFACE TO RECEIVE NEW TACKBOARD. TYP ON ALL WALLS.

NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.



6 BLDG 'K' - DEMOLITION FLOOR PLAN

1/8" = 1'-0"



4 BLDG 'C-D' - DEMOLITION FLOOR PLAN

1/8" = 1'-0"

BUILDING MPE NOTES

1. EXISTING GAS AND WATER PIPES: REMOVE AND REPLACE ANY RUSTED OR DETERIORATED PIPES, VALVES AND YARD BOXES TO REMAIN.
2. RELOCATE / RE-ROUTE ANY ELECTRICAL CONDUITS AND LOW VOLTAGE RACEWAYS AND WIRING ABOVE & BELOW CEILING TO ACCOMMODATE NEW WORK.
3. RELOCATE / RE-ROUTE ANY VENT PIPES INTERFERING WITH NEW WORK.
4. REMOVE AND DISPOSE OLD CLOCK AND SPEAKERS NO LONGER IN USE.
5. REMOVE AND DISPOSE ELECTRICAL CABLING AND DEVICES NOT IN USE.
6. REMOVE AND DISPOSE FAU HEATING UNITS IN EACH ROOM AND ALL ASSOCIATED DUCTWORK, REGISTERS, CONDUITS AND WIRING.
7. REMOVE PROJECTORS WHERE OCCURS AND RETURN TO DISTRICT.

FILE PATH: Z:\Projects\...
9/14/2023 6:00:02 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

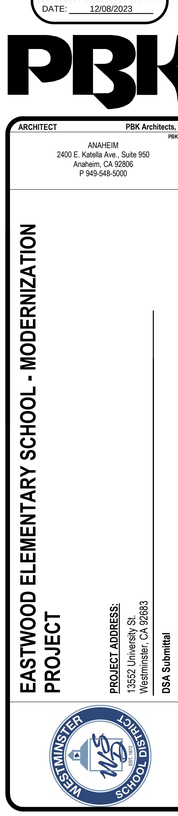
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN N NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT Yong Yoo No. C-31162 REN. 10-31-2025 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

DEMO FLOOR PLANS BLDG 'A-B', 'C-D','K' & 'ADMIN' FLOOR PLANS

D1.1

D2.1 - DEMO RCP BLDG 'A-B', 'C-D','K'& ADMIN

0" 1"

DEMOLITION KEYED NOTES

#	DESCRIPTION
D3.11	(E) LOW SOFFIT AND ASSOCIATED FRAMING TO BE DEMOLISHED AND DISPOSED. REFER TO ASBESTOS REPORT. PATCH ADJACENT WALLS AS NECESSARY.
D3.15	(E) CEILING EXHAUST FAN TO BE DEMOLISHED, REMOVE CIRCUIT BACK TO THE SOURCE. SEE ELECTRICAL ED2.01

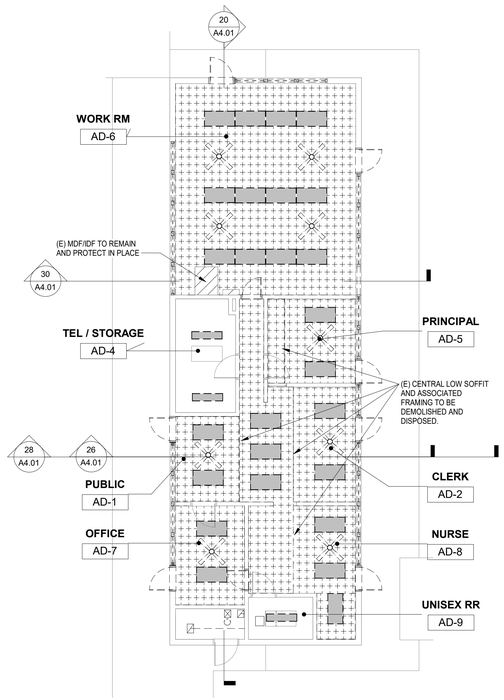
KEYNOTE LEGEND

#	DESCRIPTION
02.63	(E) MDF/IDF TO REMAIN & PROTECT IN PLACE.

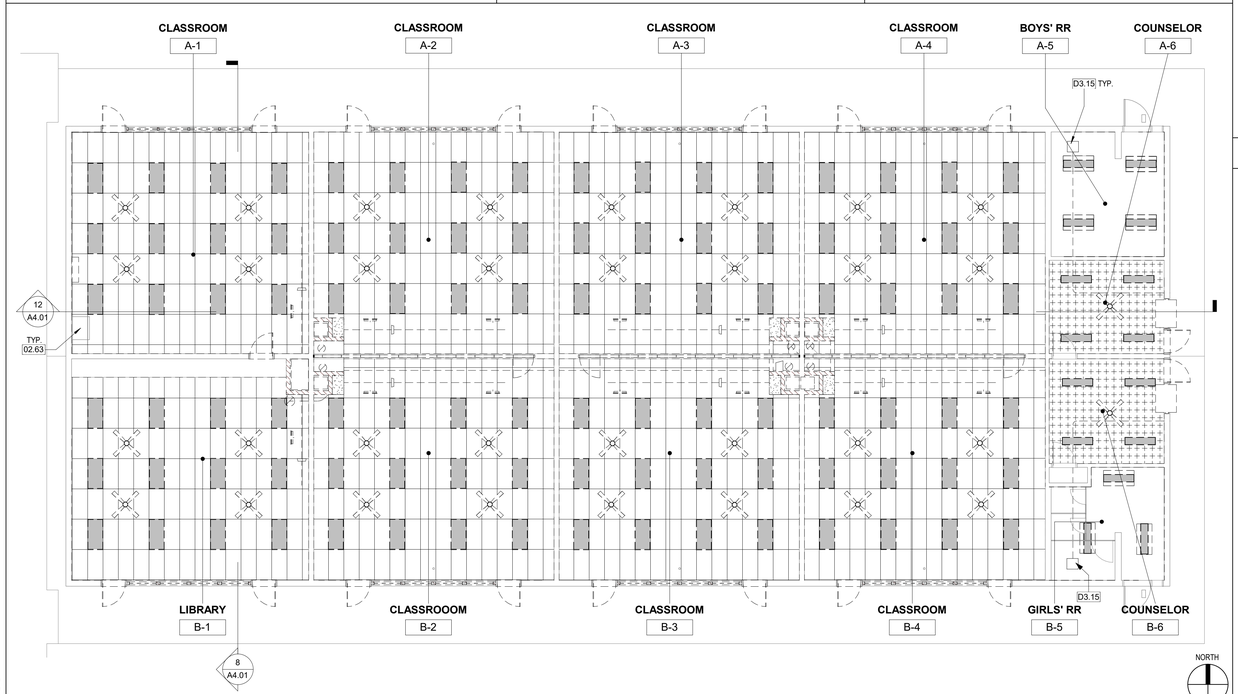
DEMOLITION RCP LEGEND

- EXISTING CEILING TO REMAIN
- EXISTING PLASTER CEILING TO BE REMOVED.
- EXISTING NON-BEARING WALL TO BE REMOVED
- EXISTING 12"x12" GLUE UP TILE AND (E) SUBSTRATES TO BE REMOVED AND DISPOSED.
- REMOVE AND DISPOSE (E) LIGHT FIXTURES AND WIRING
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS (REMOVE WHEN SHOWN DASHED)
- (E) CEILING FAN AND ACCESSORIES TO BE REMOVED AND DISPOSED.
- (E) ACCESS PANEL TO BE REMOVED & DISPOSED, WHERE OCCURS.

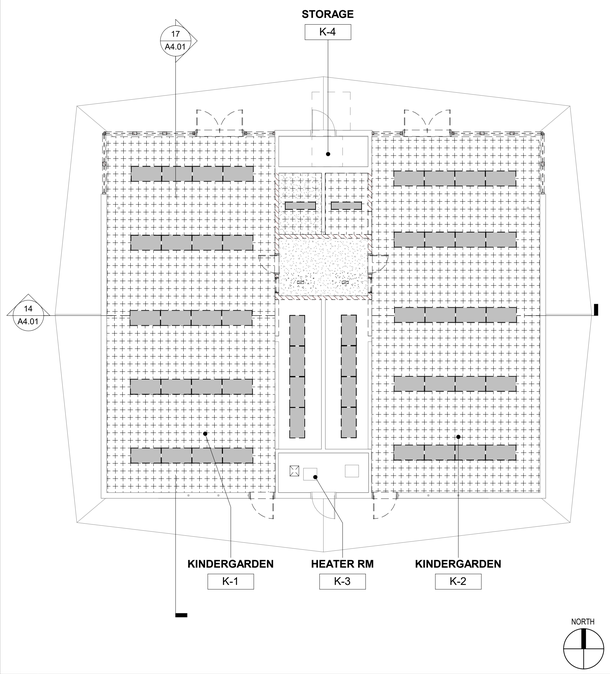
NOTE:
1. REMOVE & DISPOSE OF EXISTING ROOF INSULATION. WHERE OCCURS.



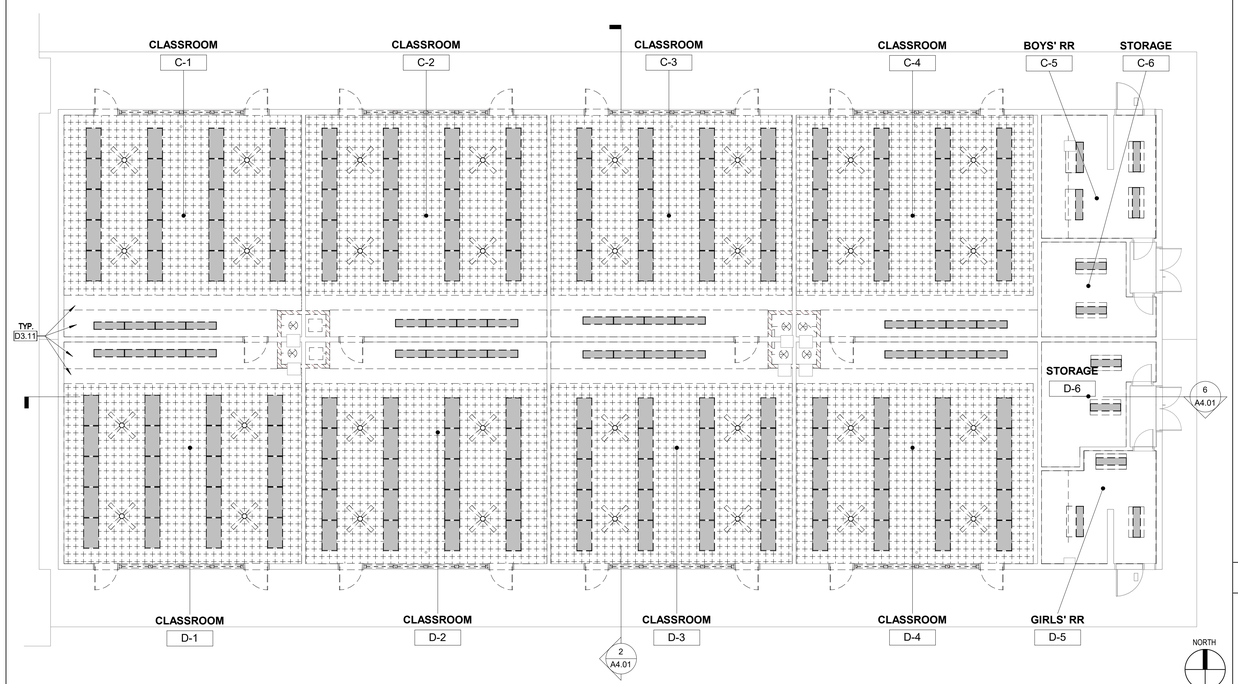
18 BLDG 'ADMIN' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"



16 BLDG 'A-B' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"



9 BLDG 'K' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"



12 BLDG 'C-D' - DEMO REFLECTED CEILING PLAN
1/8" = 1'-0"

GENERAL DEMOLITION NOTES:

1. DEMOLITION PLANS INDICATE SOME OF THE SCOPE-OF-WORK INVOLVED FOR THE DEMOLITION PHASE OF THIS PROJECT. CONTRACTOR SHALL REVIEW ALL SHEETS FOR ADDITIONAL DEMOLITION SCOPE.
2. CONTRACTOR SHALL VERIFY EXISTING SITE AND BUILDING CONDITIONS AND DIMENSIONS IN THE FIELD PRIOR TO DEMOLITION ACTIVITIES AND WORK.
3. CONTRACTOR SHALL NOTIFY ARCHITECT OF ANY DISCREPANCIES IN WRITING.
4. CONTRACTOR SHALL NOTIFY ARCHITECT AND OWNER OF ANY POSSIBLE ASBESTOS CONTAINING MATERIALS DISCOVERED BEFORE PROCEEDING WITH WORK, PROTECT INTERIOR CONSTRUCTION TO REMAIN DURING DEMOLITION AND CONSTRUCTION.
5. CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS BEFORE COMMENCING WORK.
6. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUESTS FOR ADDITIONAL MONEY WILL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING A SITE VISIT BY THE CONTRACTOR.
7. CONTRACTOR SHALL NOT SCALE DRAWINGS.
8. CONTRACTOR SHALL PROVIDE ALL NECESSARY TEMPORARY SHORING, TEMPORARY BRACING, AND/OR TEMPORARY SUPPORTS AS REQUIRED TO MAINTAIN STRUCTURAL INTEGRITY OF EXISTING STRUCTURE TO REMAIN AND OR EXISTING BUILDING ELEMENTS TO REMAIN.
9. CONTRACTOR IS TO VERIFY THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO DEMOLITION ACTIVITIES AND WORK.
10. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS REGULARLY AS NECESSARY TO ELIMINATED INTERFERENCE WITH ROADS, STREET, WALKS, AND ALL OTHER ADJACENT FACILITIES.
11. CONTRACTOR SHALL REMOVE TRASH AND DEBRIS FROM THE SITE ON A DAILY BASIS.
12. CONTRACTOR IS RESPONSIBLE FOR CONSTRUCTION OF TEMPORARY DUST AND OR SOUND PARTITION BETWEEN CONSTRUCTION AREA AND AREAS NOT IN SCOPE AS NECESSARY. DEMOLITION ACTIVITIES SHALL BE PERFORMED SO AS TO PRODUCE MINIMAL DISTURBANCE TO EXISTING FACILITY AND OCCUPANTS (I.E. MINIMIZE EXCESSIVE AND PROLONGED NOISE LEVELS AND DUST).
13. CONTRACTOR SHALL REPAIR, REPLACE, OR PATCH EXISTING BUILDINGS, DRIVEWAYS, SIDEWALKS, CANOPIES, AND OR PARKING AREAS DAMAGED, MODIFIED, AND OR DISTURBED BY DEMOLITION WORK AT NO COST TO THE OWNER.
14. ALL EXISTING EQUIPMENT THAT REMAINS SHALL BE PROTECTED DURING DEMOLITION AND OR CONSTRUCTION TO PREVENT DAMAGE. ANY DAMAGE TO REMAINING EXISTING EQUIPMENT SUSTAINED DURING DEMOLITION AND OR CONSTRUCTION SHALL BE EQUIVALENTLY REPLACED OR EQUIVALENTLY REPAIRED AT NO COST TO THE OWNER.
15. CONTRACTOR SHALL PROVIDE TRAFFIC HANDLING MEASURES TO PROTECT THE GENERAL PUBLIC AT ALL TIMES, AS NECESSARY AND AS REQUIRED BY AUTHORITIES HAVING JURISDICTION.
16. DO NOT INTERRUPT EXISTING UTILITES, EXCEPT WHEN AUTHORIZED IN WRITING BY AUTHORITIES HAVING JURISDICTION. PROVIDE TEMPORARY SERVICES DURING INTERRUPTIONS TO EXISTING UTILITIES. AS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
17. WHEN UTILITY SERVICES ARE REQUIRED TO BE REMOVED, RELOCATED, OR ABANDONED, PROVIDE BYPASS CONNECTIONS TO MAINTAIN CONTINUITY OF SERVICE BEFORE PROCEEDING WITH DEMOLITION.
18. CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES INCLUDING BUT NOT LIMITED TO THE FOLLOWING: ELECTIC, GAS, WATER, TELEPHONE, STORM SEWER, AND SANITARY SEWER FOR FIELD LOCATION OF ALL UNDERGROUND AND OVERHEAD UTILITY LINES. PRIOR TO COMMENCEMENT OF ANY DEMOLITION WORK, CONTRACTOR SHALL IDENTIFY ALL ELECTRICAL CIRCUITS SERVICING THE AREA INVOLVED WITH THIS DEMOLITION. THOSE CIRCUITS SHALL THEN BE LOCKED OUT AND TAGGED OUT IF THEY DO NOT SERVICE ANY OF THE REMAINING BUILDING. THOSE CIRCUITS WHICH ARE IDENTIFIED TO SERVICE BOTH THE AREA TO BE DEMOLISHED AND THE REMAINING BUILDING SHALL BE SPLIT SO AS TO KILL ALL ELECTRICAL POWER TO THE AREA TO BE DEMOLISHED WHILE MAINTAINING POWER TO THE REMAINDER OF THE BUILDING.
19. CONTRACTOR SHALL RELOCATE UTILITES AND EQUIPMENT AS REQUIRED TO ACCOMMODATE NEW HVAC, ELECTRICAL, PLUMBING, AND TECONLOGY REQUIREMENTS FOR NEW WORK.
20. PROTECT EXISTING SITE ELEMENTS AND EXISTING LANDSCAPING TO REMAIN. PROTECTION SHALL INCLUDE BUT NOT BE LIMITED TO EXISTING TREES AND OTHER EXISTING VEGETATION INDICATED TO REMAIN IN PLACE AGAINST UNNECESARY CUTTING, BREAKING, OR SKINNING OF ROOTS, SKINNING OR BRUISING OF BARK, SMOTHERING OF TREES BY STOCKPILING CONSTRUCTION MATERIAL OR EXCAVATED MATERIAL WITHIN DRIP LINES.
21. CONTRACTOR SHALL REGRADE AND HYDROMULCH AREAS AFFECTED BY DEMOLITION.
22. OWNER HAS RIGHT TO FIRST REFUSAL OF ALL ITEMS REMOVED AS PART OF THE SCOPE OF WORK, WHETHER IDENTIFIED AS SALVAGE OR NOT.
23. NOTIFY THE BUILDING OWNER OF ANY MATERIALS, FIXTURES, ETC. TO BE REMOVED THAT ARE DEEMED SALVAGEABLE. TURN OVER ANY REQUESTED ITEMS TO THE BUILDING OWNER IN GOOD AND CLEAN CONDITION.
24. ALL FURNITURE WILL BE REMOVED OR RELOCATED BY THE OWNER AS NECESSARY PRIOR TO THE DEMOLITION WORK OF THIS PROJECT. CONTRACTOR SHALL COORDINATE WITH OWNER AS REQUIRED.
25. REMOVE EXISTING CONSTRUCTION TO THE EXTENT INDICATED ON THE DRAWINGS. SHOULD ANY DAMAGE OCCUR TO ANY EXISTING CONSTRUCTION TO REMAIN, THE CONTRACTOR SHALL REPAIR THE DAMAGE TO MATCH EXISTING AND OR ADJACENT CONSTRUCTION AT NO COST TO THE OWNER.
26. MAINTAIN ANY AND ALL EXISTING FIRE-RATED ASSEMBLIES THAT ARE TO REMAIN, AND THEIR ASSOCIATED FIRE-RATINGS, INCLUDING BUT NOT LIMITED TO ALL ASSOCIATED EXISTING FIRE-RATED OPENINGS, ALL ASSOCIATED EXISTING FIRE-RATED PENETRATIONS, AND ALL ASSOCIATED EXISTING FIRE-RATED FIRESTOPPING CONDITIONS.
27. WHEN UNANTICIPATED MECHANICAL, ELECTRICAL, OR STRUCTURAL ELEMENTS THAT CONFLICT WITH THE INTEDED FUNCTION OR DESIGN ARE ENCOUNTERED, DETERMINE THE NATURE AND EXTENT OF THE CONFLICT AND NOTIFY THE ARCHITECT IMMEDIATELY FOR RESOLUTION.
28. REMOVE, PATCH, AND REPAIR ALL ABANDONED ROOF PENETRATIONS RESULTING FROM WORK.
29. SAW-CUT AND REMOVE EXISTING FLOOR FINISHES AND FLOOR SLAB AS REQUIRED TO INSTALL NEW FIXTURES, ITEMS, AND OR DEVISES FOR ALL SCOPE-OF-WORK PERTAINING TO NEW MECHANICAL WORK, NEW PLUMBING UTILITIES, NEW PLUMING WORK, NEW ELECTRICAL WORK, AND NEW TECHNOLOGY WORK. SPLICE NEW REINFORNCING BARS DOWELLED INTO EXISTING CONCRETE AND PROVIDE NEW VAPOR RETARDER AND NEW CONTINUOUS WATERSTOPS AT JOINT BETWEEN NEW CONCRETE FLOOR SLAB AND EXISTING CONCRETE FLOOR SLAB. PATCH WITH NEW 3,500 PSI MINIMUM CONCRETE AND PREPARE FLOOR, INCLUDING NEW CONCRETE, TO RECEIVE NEW FLOOR FINISHES. CORRDINATE WITH STRUCTURAL.
30. EXISTING WALLS (OR PORTIONS OF WALLS) TO BE REMOVED SHALL BE CUT FLUSH WHERE INTERSECTING WITH WALLS TO REMAIN. REMAINING WALLS TO BE PATCHED AND FINISHED SMOOTH.
31. NEW OPENING TO BE CUT IN EXISTING WALLS SHALL BE SAW-CUT AT LOCATIONS INDICATED TO THE HEIGHT AND WIDTH INDICATED. NEW LINTELS SHALL BE INSTALLED TO SUPPORT EXISTING WALL CONSTRUCTION ABOVE AS INDICATED ON THE DRAWINGS, OR IF NOT INDICATED, AS REQUIRED FOR NEW WALL CONSTRUCTION PER STRUCTURAL DRAWINGS. COORDINATE LOCATIONS OF ALL NEW OPENINGS IN EXISTING WALLS AND PARTITIONS WITH ARCHITECTURAL PLANS.
32. WHERE EXISTING WALL OPENINGS ARE TO BE NEWLY CLOSED-OFF, REMOVE ANY EXISTING OPENING FRAME AND PATCH AND REPAIR EXISTING WALL TO MATCH EXISTING ADJACENT MATERICALS AND FINISHES, UNLESS NOTED OTHERWISE.
33. WHERE EXISTING INTERIOR WALLS ARE REPLACED OR REMOVED, REMOVE MEPT SYSTEMS BACK TO PANEL, OR MECHANICAL ROOM, OR FARTHEST POSSIBLE POINT WITHOUT DISTURBING EXISTING CONSTRUCTION. REMOVE EXISTING MECHANICAL EQUIPMENT, RELOCATE POWER PER MEPT DRAWINGS.
34. REFER TO MEPT DRAWINGS FOR DEMOLITION OF MEPT SYSTEMS. IDENTIFY WORK REQUIRED BY THIS CONTRACTOR WHICH MAY AFFECT DEMOLITION AND OR REPARIS OF ARCHITECTURAL ELEMENTS. COORDINATE WITH RELATED SUBCONTRACTORS THE EXTENT OF ALL DEMOLITION WORK.
35. PATCH FLOORS, WALLS CEILINGS WHICH REMAIN AT LOCATIONS WHERE PIPES, CONDUITS, ETC. ARE REMOVED AS REQUIRED TO MATCH EXISTING CONDITIONS OR TO RECEIVE NEW FINISHES.
36. WHERE EXISTING FINISH FLOOR IS REMOVED, PREPARE FLOOR SURFACE TO RECEIVE NEW FLOORING.
37. ALL DASHED LINES ARE DEMOLITION LINES. U.N.O.
38. REMOVE (E) ROOF INSULATION, AND PROVIDE (N) ROOF INSULATION BETWEEN RAFTERS.
39. REMOVE (E) TACKBOARDS AND DISPOSE. PATCH & REPAIR AS REQ'D, PREPARE SURFACE TO RECEIVE NEW TACKBOARD. TYP ON ALL WALLS.

NOTE: CONTRACTOR SHALL PROTECT ALL EXISTING WALL MURALS AND SCHEDULE A MEETING WITH THE OWNER AND ARCHITECT TO REVIEW ALL PROTECTION IN PLACE PRIOR TO INITIATING DEMOLITION.

BUILDING MPE NOTES

1. EXISTING GAS AND WATER PIPES: REMOVE AND REPLACE ANY RUSTED OR DETERIORATED PIPES, VALVES AND YARD BOXES TO REMAIN.
2. RELOCATE / RE-ROUTE ANY ELECTRICAL CONDUITS AND LOW VOLTAGE RACEWAYS AND WIRING ABOVE & BELOW CEILING TO ACCOMMODATE NEW WORK.
3. RELOCATE / RE-ROUTE ANY VENT PIPES INTERFERING WITH NEW WORK.
4. REMOVE AND DISPOSE OLD CLOCK AND SPEAKERS NO LONGER IN USE.
5. REMOVE AND DISPOSE ELECTRICAL CABLING AND DEVICES NOT IN USE.
6. REMOVE AND DISPOSE FAU HEATING UNITS IN EACH ROOM AND ALL ASSOCIATED DUCTWORK, REGISTERS, CONDUITS AND WIRING.
7. REMOVE PROJECTORS WHERE OCCURS AND RETURN TO DISTRICT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN N
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

DEMO RCP BLDG 'A-B', 'C-D','K'& ADMIN

D2.1

FILE PATH: Z:\Projects\...
9/14/2023 6:00:08 PM

A1.01 - BLDG 'A-B', 'C-D', 'K' & 'ADMIN' FLOOR PLANS

ASSISTIVE LISTENING SYSTEMS AND SIGNAGE 11B-219

PROVIDE AN ASSISTIVE LISTENING SYSTEM, COMPLYING WITH CBC 11B-219 & 11B-706.PROVIDE EACH ASSEMBLY WITH A SIGN WHICH INCLUDES THE SYMBOL FOR HEARING LOSS IN COMPLIANCE WITH 11B-216.10 & 11B-703.7.2.4.

ALTERNATIVE ALS SYSTEM REQUIREMENTS

PROVIDE 2 PORTABLE ASSISTIVE LISTENING SYSTEMS, EACH WITH A TRANSMITTER AND A MINIMUM OF 2 RECEIVERS, FOR USE IN CLASSROOMS WITHOUT AUDIO AMPLIFICATION. THE ASSISTIVE LISTENING RECEIVERS AND TRANSMITTER SHALL BE STORED IN THE SCHOOL SITE ADMINISTRATION OFFICE UNTIL REQUESTED.

CONSTRUCTION KEYED NOTES

#	DESCRIPTION
02.54	(E) CASEWORK TO REMAIN, RE-PAINT & PROTECT IN PLACE.
02.55	(E) ACCESSIBLE SINK TO REMAIN. PROTECT IN PLACE
02.57	(E) DOOR FRAME & PANEL TO REMAIN. PROTECT IN PLACE.
08.01	(N) ALUMINUM FRAME & GLAZING WINDOW SYSTEM.SEE WINDOWS FRAMING ELEVATION A9.01, PER ALUMINUM-FRAMED STOREFRONT & ALUMINUM WINDOWS & GLAZING SPEC SECTION
08.02	(N) INTEGRAL ALUMINUM FRAME DOOR SYSTEM.SEE FRAMING ELEVATION A9.01 & DOOR SCHEDULE, PER ALUMINUM-FRAMED STOREFRONT & DOOR SPEC SECTION
09.01	(N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
09.02	(N) FLOOR FINISH AND BASEBOARD, SEE FINISH SCHEDULE
10.14	(N) FIRE EXTINGUISHER, SURFACE MOUNTED TO (E) WALL
10.17	(N) TACKABLE SURFACE ON (E) WALL, SEE DETAIL
10.18	(N) MARKER BOARD, SEE FINISH SCHEDULE
22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND GUARDS. SEE DETAIL 19/GD.04 AND 1/GD.04

EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES. MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.

GENERAL ARCH PLAN NOTES

1. COORDINATE ALL SPOT ELEVATIONS AND DIMENSIONS WITH CIVIL
2. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 1 % MINIMUM. 2 % MAXIMUM AT ALL EXTERIOR PAVED PEDESTRIAN AREAS, INCLUDING BUT NOT LIMITED TO: SIDEWALKS, PATIOS, STAIRS, PAVING, U.N.O.
3. PROVIDE AND INSTALL POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS OF 5 % FOR A HORIZ. DISTANCE OF 10 FEET AT ALL EXTERIOR NON-PAVED AREAS U.N.O
4. REFER TO CIVIL DOCUMENTS FOR CONCRETE SIDEWALK EXPANSION JOINTS AND CONCRETE SIDEWALK CONTROL JOINTS
5. PROVIDE AND INSTALL CONCRETE SIDEWALK CONTROL JOINTS AT DISTANCES EQUIVALENT TO SIDEWALK WIDTH, BUT NOT TO EXCEED 10 FEET ON-CENTER MAX.

NOTE:
1. ALL BUILDINGS ARE NON-SPRINKLERED
2. ALL EXTERIOR CLASSROOM, ADMIN WINDOW FRAMES AND GLAZING TO BE REPLACED. PATCH AND REPAIR WALLS, AS NEEDED, FOLLOWING WINDOW INSTALLATION. VERIFY IN FIELD ALL DIMENSIONS SHOWN.

REMODEL PLAN LEGEND

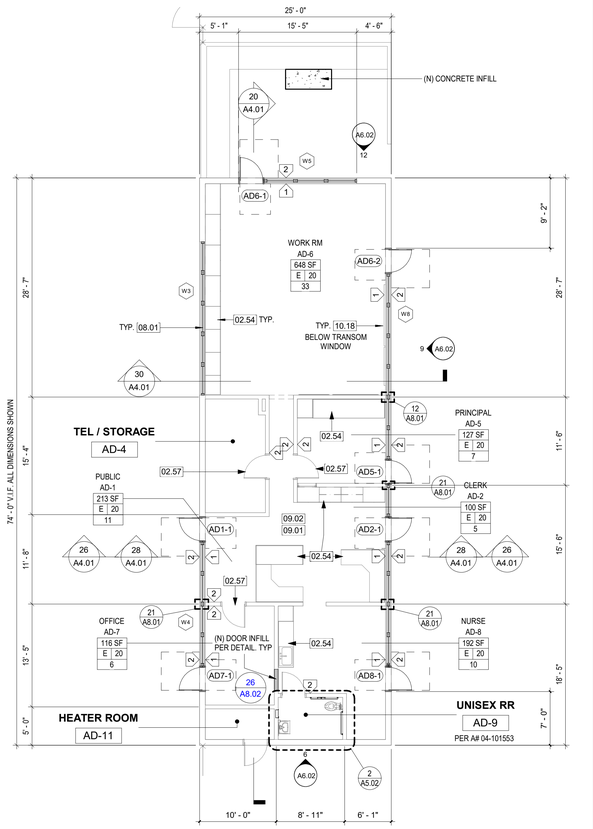
- EXISTING WALL TO REMAIN
- NEW WALL TO BE PROVIDED — 1 / A8.02 — 2 / A8.02
- NEW CONCRETE SIDEWALK TO BE PROVIDED, ALIGNED TO ADJACENT (E) CONCRETE, WITH LESS THAN 2% CROSS SLOPE — 2 / SD1
- WINDOW MARK, REFER TO WINDOW SCHEDULE A9.01 FOR WINDOW FRAMES AND GLAZING TYPES
- (N) WINDOW
- (N) DOOR TO BE PROVIDED. REFER TO A9.01 FOR DOOR SCHEDULE AND TYPES.
- NOTE: VERIFY IN FIELD 2% SLOPES AWAY FROM BUILDING AND 2% MAX CROSS SLOPE, PROVIDE NEW CONCRETE AS REQ.
- WALL PARTITIONS TAG
- LETTER INDICATES PARTITION TYPE, REF. DETAIL — 1 / A8.02
- # INDICATES CORE WIDTH IN INCHES — 2 / A8.02
- LETTER INDICATES CORE TYPE (S=STUD)
- CLASSROOM — ROOM NAME
- 400 — ROOM NUMBER
- 960 — ROOM AREA (SQ. FT.)
- E 20 — OCCUPANT LOAD FACTOR
- 48 — ROOM OCCUPANT
- OCCUPANCY TYPE
- 100 — COMBINED EXIT LOAD
- 32 | 20 — REQUIRED CLEAR EXIT WIDTH (IN INCHES)
- PROVIDED CLEAR EXIT WIDTH (IN INCHES)
- FE — WHERE EXISTING FIRE EXTINGUISHER IS MISPLACED IN CLASSROOM, MOVE (E) FIRE EXTINGUISHER WITH WALL BRACKET TO LOCATION SHOWN ON PLAN. IF FIRE EXTINGUISHER AND/OR MOUNTING BRACKET IS MISSING PROVIDE PER SPEC 10 44 00 AND REFER TO DETAIL — 29 / A8.02

SIGNAGE LEGEND

SIGNAGE TAG #

1. TACTILE EXIT SIGNAGE, SEE DETAIL 16 / A8.02 AND/OR SEE ELECTRICAL PLANS FOR ILLUMINATED EXIT REQUIREMENTS.
2. ROOM IDENTIFICATION SIGNAGE, SEE DETAIL 19 / A8.02 (VERIFY ROOM NAME & NUMBER W/ OWNER). WHERE TWO ROOMS ADJOIN ONE ANOTHER, PROVIDE SIGNAGE ON EACH SIDE OF THE WALL, TYP. ALL ROOMS.
3. ASSISTIVE LISTENING SIGNAGE, SEE DETAIL 23 / A8.02 .
4. ACCESSIBLE RESTROOM DOOR AND WALL SIGNAGE, SEE DETAIL 24 / A8.02 .
5. MAX. OCCUPANT SIGN , SEE DETAIL 17 / A8.02
6. NON ACCESSIBLE RESTROOM DOOR AND WALL SIGNAGE 9 / A8.02

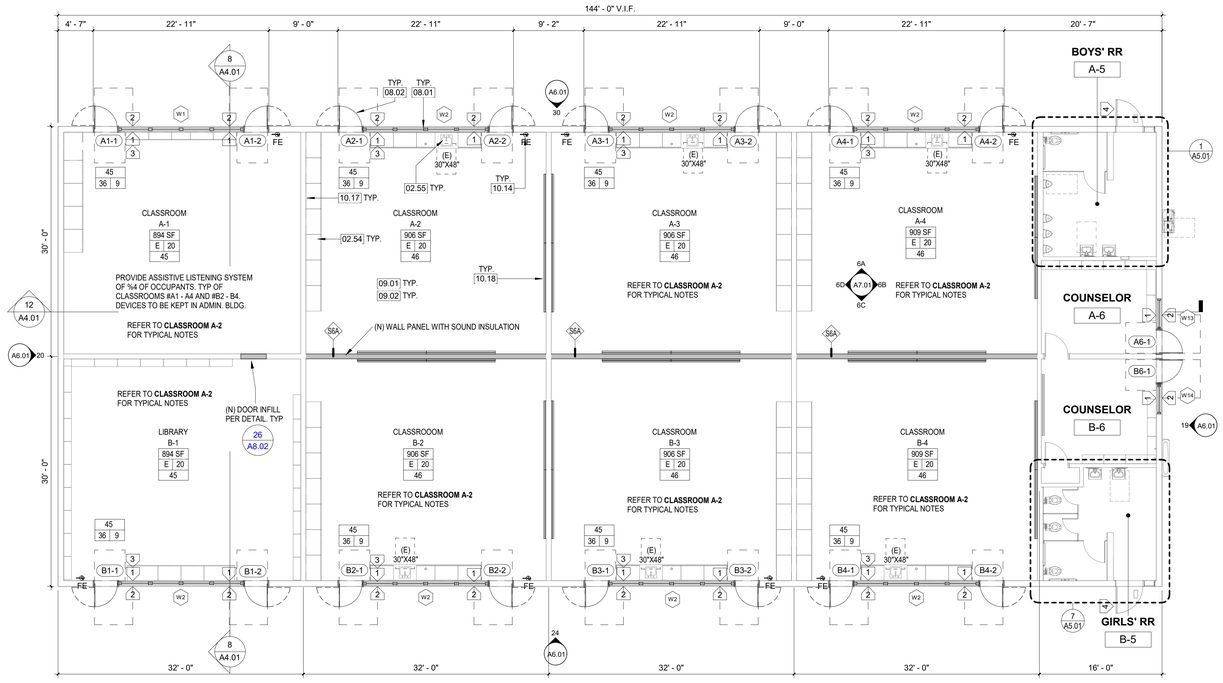
18 FLOOR PLAN - BLDG ADMIN
1/8" = 1'-0"



NOTE: ALL EXISTING INTERIOR WALL ARE NON FULL HEIGHT.

NORTH

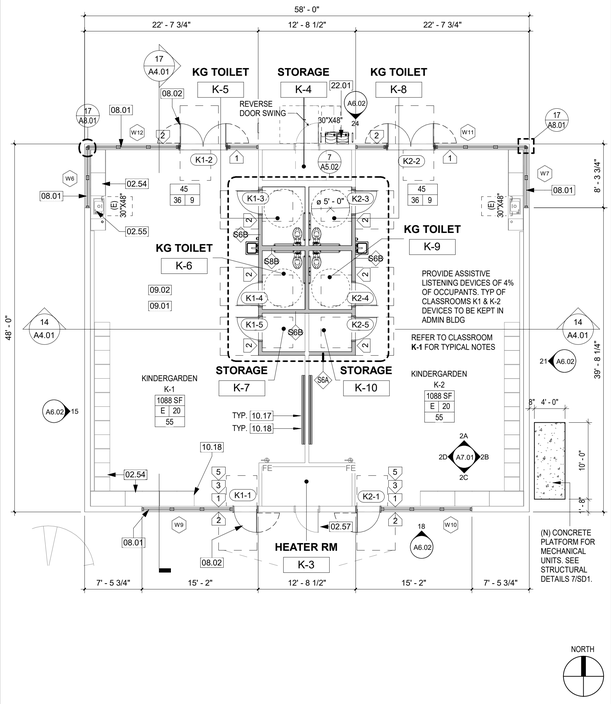
16 BLDG 'A-B' FLOOR PLAN
1/8" = 1'-0"



NOTE: FOR TYP CLASSROOM NOTES, SEE ROOM #A-2

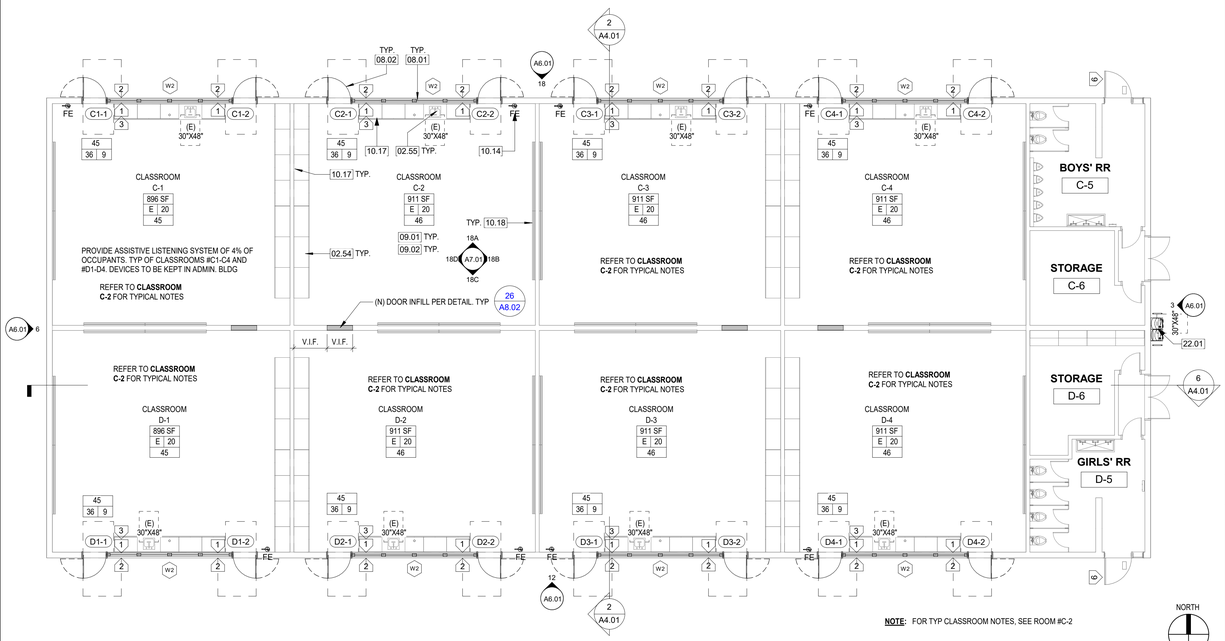
NORTH

6 BLDG 'K' FLOOR PLAN
1/8" = 1'-0"



NORTH

4 BLDG 'C-D' FLOOR PLAN
1/8" = 1'-0"



NOTE: FOR TYP CLASSROOM NOTES, SEE ROOM #C-2

NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Tong You
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

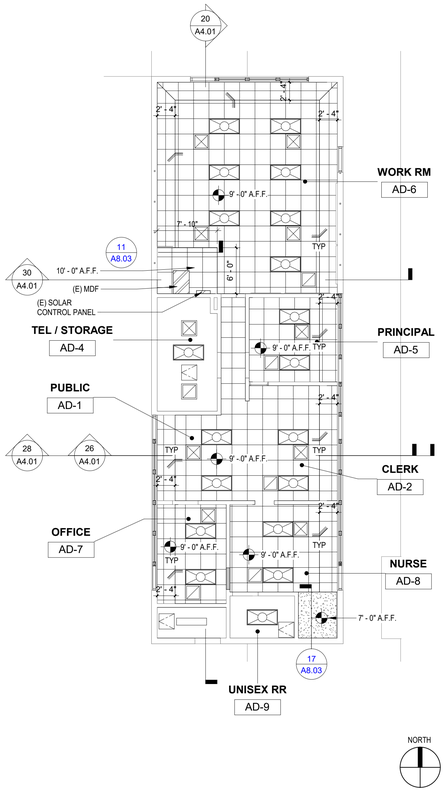
BLDG 'A-B', 'C-D', 'K' & 'ADMIN' FLOOR PLANS

A1.01

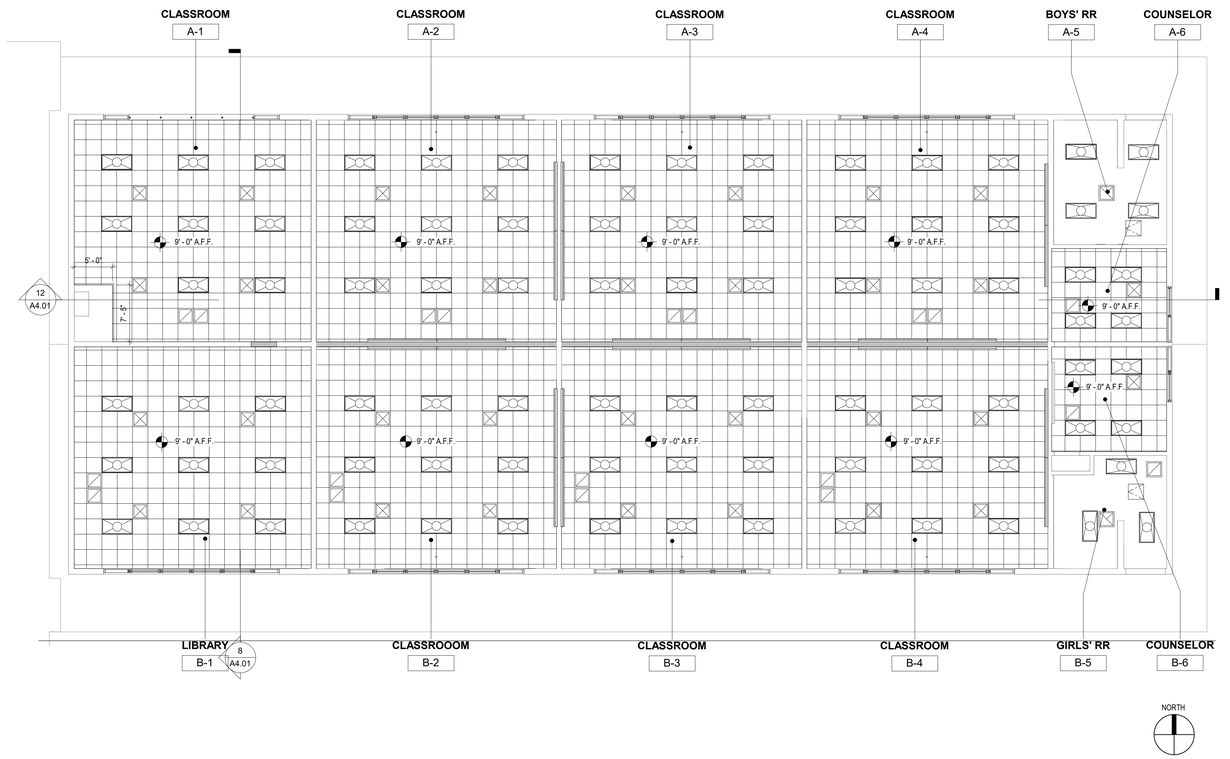
FILE PATH: Z:\Projects\...
9/14/2023 5:58:44 PM

A2.01 - BLDG 'A-B', 'C-D', 'ADMIN' & 'K' REFLECTED CEILING PLANS

0" 1"

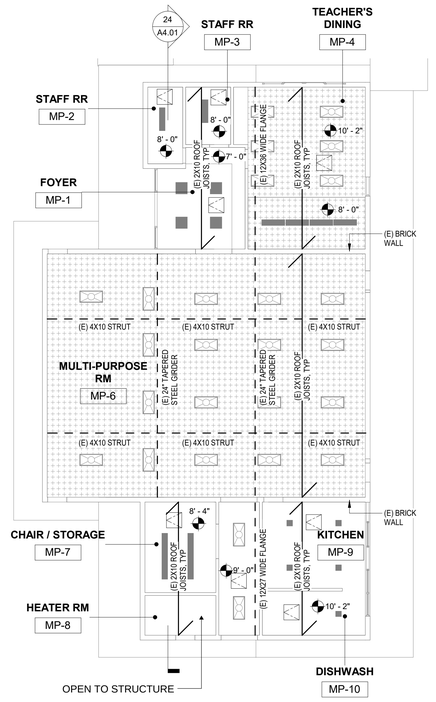


18 BLDG 'ADMIN' REFLECTED CEILING PLAN
1/8" = 1'-0"

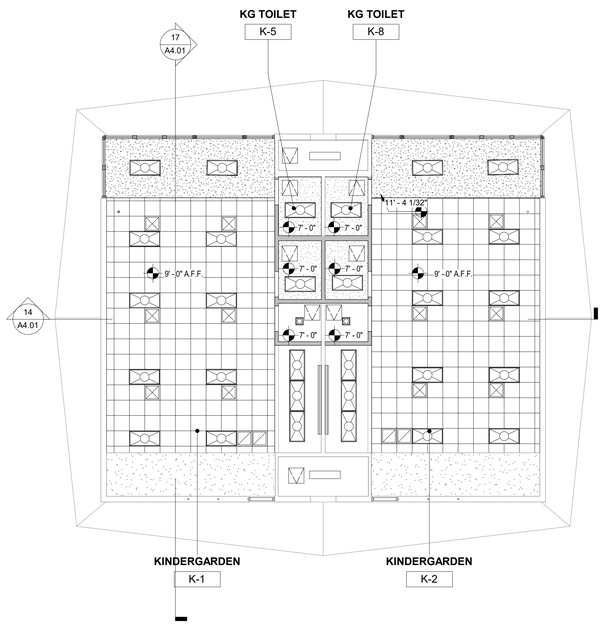


16 BLDG 'A-B' REFLECTED CEILING PLAN
1/8" = 1'-0"

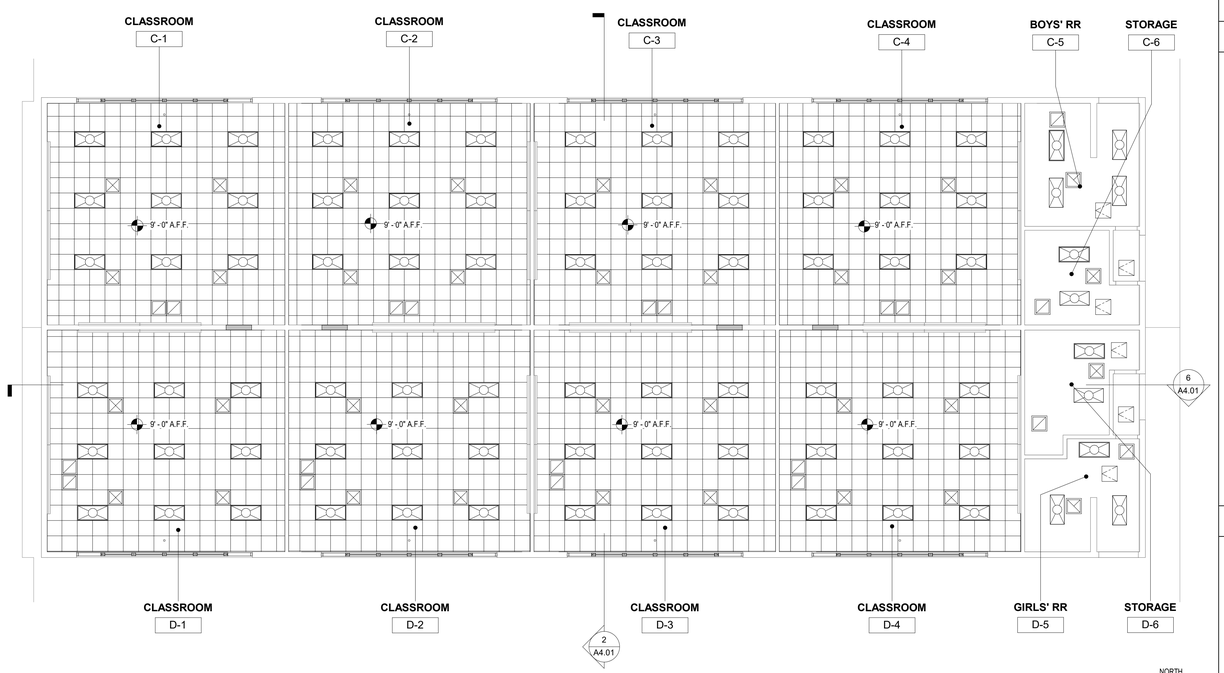
NOTE: SEE FIRE ALARM PLANS FOR FIRE ALARM SCOPE IN THIS BUILDING. PROVIDE CEILING ACCESS PANELS AT LOCATIONS SHOWN. SEE .DETAIL 4/A8.03. COORDINATE EXACT LOCATIONS IN FIELD.



13 BLDG 'M/P' - DEMO REFLECTED CEILING PLAN
3/32" = 1'-0"



6 BLDG 'K' REFLECTED CEILING PLAN
1/8" = 1'-0"



4 BLDG 'C-D' REFLECTED CEILING PLAN
1/8" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION

REFLECTED CEILING PLAN LEGEND

- EXISTING PLASTER /GYP. BD. CEILING TO REMAIN. RE-PAINT TO MATCH EXISTING.
- NEW GYPSUM BOARD CEILING ATTACHED TO (E) CEILING JOIST. SEE DETAIL 5/A8.03
- NEW 24" x 24" SUSPENDED ACOUSTIC CEILING TILE. SEE DETAIL 7/A8.03
- NEW LIGHT FIXTURE(S). SEE ELECTRICAL DRAWINGS.
- MECHANICAL GRILLES, REFER TO MECHANICAL DRAWINGS
- ACCESS PANEL. SEE DETAIL 4/A8.03
- CEILING SLOPE TRANSITION. 24/A8.03
- CEILING HEIGHT

NOTE:
ALL (E) BLDGS ARE NON-SPRINKLERED

GENERAL CEILING PLAN NOTES

1. REFER TO AND COORD. WITH ROOM FINISH SCHEDULES FOR SPECIFIC CEILING TYPES.
2. ALL SCHEDULED CEILING HEIGHTS ARE FROM THE MAIN FLOOR LEVEL WITHIN THE ROOM AND OR SPACE, AND ARE NOT FROM AN ELEVATED FLOOR LEVEL, AND ARE NOT FROM A RECESSED FLOOR LEVEL.
3. ONLY CEILING MOUNTED FIXTURES AND EQUIP. IS SHOWN ON ARCH. CEILING PLANS. REFER TO INTERIOR ELEVATIONS FOR WALL MOUNTED FIXTURES. REFER TO MEPT DOCUMENTS FOR ADDITIONAL INFORMATION CONCERNING CEILING MOUNTED FIXTURES AND OR WALL MOUNTED FIXTURES.
4. CEILING MOUNTED LIGHT FIXTURES ARE SHOWN FOR LOCATION PURPOSES ONLY. COORD. WITH ELEC. DOCUMENTS FOR LIGHT FIXTURE DESIGNATIONS.
5. CEILING MOUNTED LIGHT FIXTURES WITHIN FIRE RATED CEILING ASSEMBLIES SHALL HAVE LIGHT FIXTURE PROTECTION AND BE TENTED OR OTHERWISE FIRE RATED TO MATCH CEILING ASSEMBLY FIRE RATING.
6. VERIFY LOCATIONS OF ALL CEILING ACCESS PANELS WITH MEPT DOCUMENTS. COORD. LOCATIONS OF CEILING ACCESS PANELS WITH ARCH. PRIOR TO INSTALLATION. CEILING ACCESS PANEL FIRE RATINGS SHALL MATCH CEILING ASSEMBLY FIRE RATINGS.
7. REFER TO WALL SECTIONS FOR WALL-CEILING INTERFACE
8. EXISTING CEILING ACCESS PANEL TO REMAIN.
9. PROVIDE NEW CEILING ACCESS PANEL WHERE REQUIRED PER CODE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

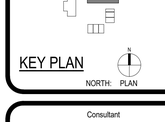
ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953



KEY PLAN NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2024
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

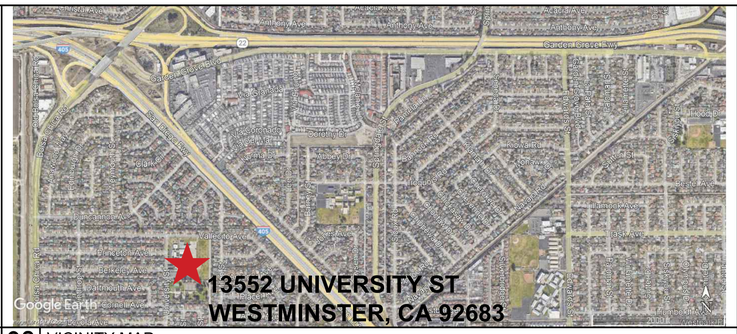
No.	Description	Date

DSA Submittal

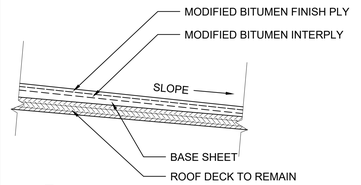
BLDG 'A-B', 'C-D', 'ADMIN' & 'K' REFLECTED CEILING PLANS

A2.01

FILE PATH: Z:\Projects\...
9/14/2023 5:58:48 PM

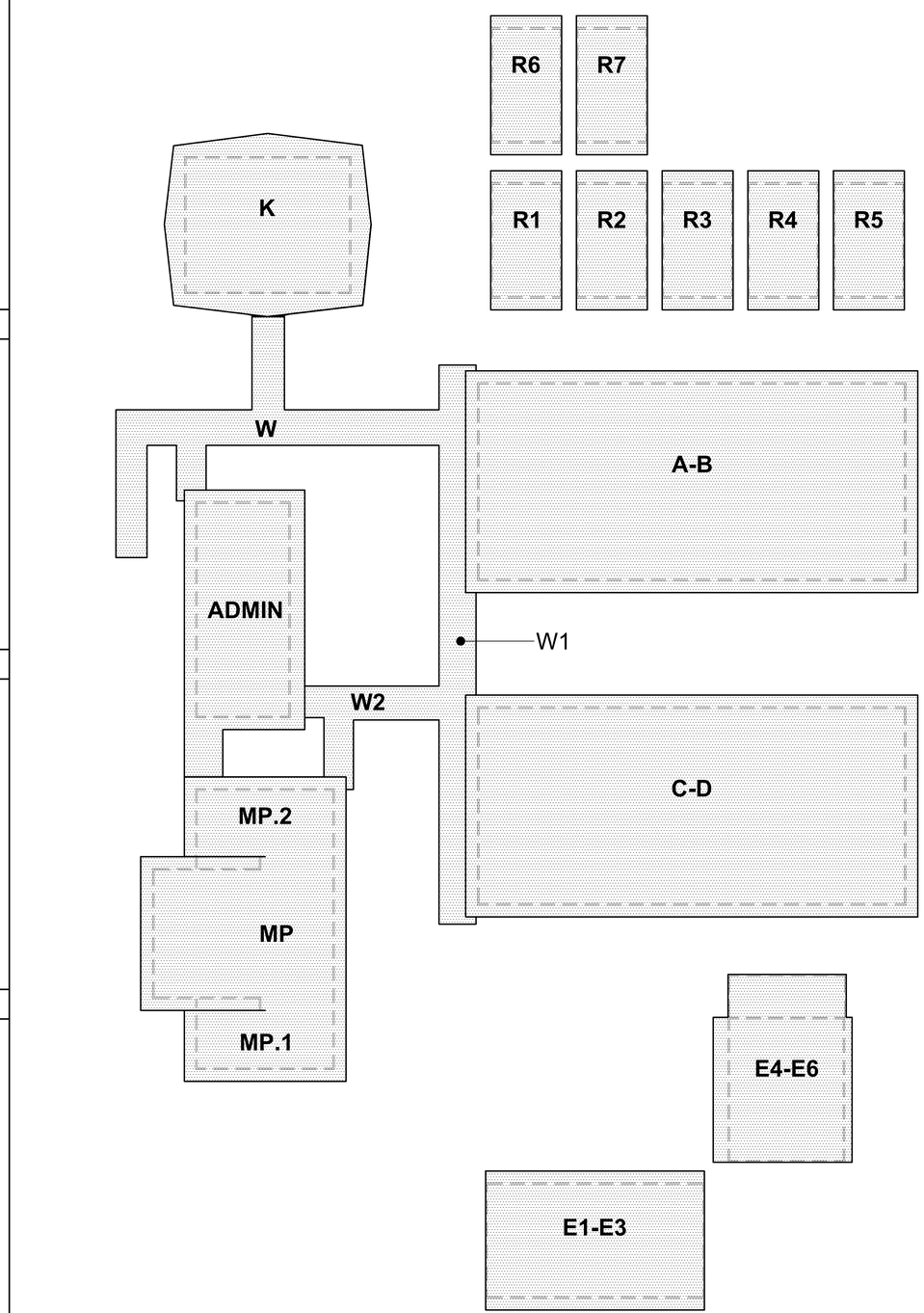


28 VICINITY MAP
NOT TO SCALE



A

1. REMOVE AND PROPERLY DISPOSE OF EXISTING ROOFING (WEIGHING APPROXIMATELY 8 LBS/SF) / INSULATION (RE: 3/A4.11) DOWN TO EXISTING ROOF DECK AT ROOF AREAS ADMIN, KINDERGARTEN, BLDG C1, C2, C3, C4, C5,C6, MPR & ALL RELOCATABLES. PREPARE / REPAIR EXISTING VERTICAL FASCIA NAILER (INCLUDE 100 IN FT OF REPLACEMENT) FOR INSTALLATION OF NEW CLASS "A" ROOF SYSTEM. PREPARE / REPAIR EXISTING ROOF DECK WITH LIKE KIND MATERIAL AND ATTACHMENT. MECHANICALLY ATTACH NEW BASE SHEET, HEAT WELD MODIFIED BITUMEN BASE PLY ROOF MEMBRANE, ENSURE IS WATER TIGHT PRIOR TO COVERING UP. HEAT WELD MODIFIED BITUMEN TITLE 24 FINISH PLY ROOF MEMBRANE WITH ASSOCIATED ROOF RELATED SHEET METAL, GUTTERS, DOWNSPOUTS, EDGE METALS AND TRIM. THE TOTAL WEIGHT OF THE NEW COMPLETED ROOF IS NOT TO EXCEED 5 LBS/SF.
2. PROVIDE R-30 BATT INSULATION UNDER ROOF DECK PER SPEC SECTION 07 21 00.
3. REPLACE OR REPAIR ALL EXISTING ROOF DAMAGE.
4. REPLACE EXISTING ROOF FASCIA WITH "TREX" COMPOSITE FASCIA, MATCH EXISTING FASCIA PROFILE.
5. EXISTING ROOF SLOPE TO REMAIN.
6. SEE DIVISION 7 FOR ROOFING SPECIFICATIONS FOR MORE INFORMATION.



5 COMPOSITE ROOF MAP
1"=20'-0"

26 NEW NOMENCLATURE
NOT TO SCALE

AREA	APROX. SQ. FT.	EXISTING NOMENCLATURE	NEW NOMENCLATURE	REMARKS
A-B	11,614	WD/SS/BUR-A	A	-
ADMIN	3,511	WD/SS/BUR-A	A	-
C-D	11,614	WD/SS/BUR-A	A	-
E1-E3	3,479	WD/SS/BUR-A	A	-
E4-E6	2,884	WD/SS/BUR-A	A	-
K	3,938	WD/SS/BUR-A	A	-
MP	3,614	WD/SS/BUR-A	A	-
MP.1	1,313	WD/SS/BUR-A	A	-
MP.2	1,477	WD/SS/BUR-A	A	-
R1	1,128	WD/SS/BUR-A	A	-
R2	1,128	WD/SS/BUR-A	A	-
R3	1,128	WD/SS/BUR-A	A	-
R4	1,128	WD/SS/BUR-A	A	-
R5	1,128	WD/SS/BUR-A	A	-
R6	1,128	WD/SS/BUR-A	A	-
R7	1,128	WD/SS/BUR-A	A	-
W	2,253	WD/SS/BUR-A	A	C.W.
W1	2,370	WD/SS/BUR-A	A	C.W.
W2	772	WD/SS/BUR-A	A	C.W.
TOTAL	56735			

NOTE: SQUARE FOOTAGES SHOWN ARE FOR REFERENCE ONLY -(FIELD VERIFY) CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND FOR ENSURING NEW CONDITIONS ADHERE TO ALL LOCAL AND FEDERAL CODES ALONG WITH INDUSTRY STANDARD GUIDELINES AND REMAIN IN A WATERTIGHT CONDITION.

SEE SPECIFICATION DIVISION 7 FOR OTHER ROOF RELATED COMPONENTS.

REMARKS:

C.W. = COVERED WALKWAY

14 EXISTING NOMENCLATURE
NOT TO SCALE

WD:	WOOD DECK
SS:	SLIP AHEET
BUR-A:	MULTI-PLY BUILT UP ROOF SYSTEM W/ ALUMINUM COATING
(E):	EXISTING
TYP:	TYPICAL
SIM:	SIMILAR
PLYWD:	PLYWOOD
SHTHG:	SHEATHING
COMPO:	COMPOSITION MODIFIED BITUMEN ROOFING
BLDG:	BUILDING
NIC:	NOT IN CONTRACT

8 ABREVIATIONS
NOT TO SCALE

19 SCOPE OF WORK
NOT TO SCALE

A. CONTRACTOR SHALL VISIT SITE TO ASCERTAIN EXACT EXISTING CONDITIONS AND COMPONENTS RELATED TO THE WORK DESCRIBED BY THESE DOCUMENTS. AFTER AWARD OF THE CONTRACT, CHANGE ORDER REQUEST FOR ADDITIONAL MONEY SHALL NOT BE APPROVED IF THE WORK COULD HAVE BEEN ANTICIPATED DURING THE SITE VISIT BY THE CONTRACTOR, ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH ACCEPTED MANUFACTURER'S PRINTED INSTRUCTIONS & WARRANTY REQUIREMENTS.

B. DIMENSIONS,DETAILS, EQUIPMENT SIZE AND LOCATION SHOWN IN THESE DOCUMENTS ARE FOR INFORMATION AND REFERENCE ONLY. EXACT SIZE, LOCATION, TYPE OF MATERIAL AND TYPE OF CONSTRUCTION OF EXISTING CONDITIONS ARE THE RESPONSIBILITY OF THE CONTRACTOR TO ASCERTAIN & CONFIRM.

C. ALL NEW CRICKETS AND TAPERED INSULATION SHALL BE INSTALLED WITH A FINISHED 1/4" PER FOOT MIN. SLOPE. CRICKET THE UP SLOPE SIDE OF ALL SQUARE CURBS AND PROJECTIONS.

D. REMOVE ALL ABANDONED EQUIP. IDENTIFIED ON ROOF TOP AND AS SHOWN ON DRAWINGS -(PATCH DECK) HOLES LESS THAN 10" WIDE- SCREW 22 GA. STAINLESS STEEL SHEET METAL TO EXISTING DECK HOLES GREATER THAN 10" WIDE- SCREW NEW METAL DECK (MATCH EXISTING) SPAN FROM JOIST TO JOIST.

E. ALL HVAC AND/OR DX UNITS, ELECTRICAL TRANSFORMERS, ROOF TOP EQUIPMENT, ETC. THAT ARE ON SLEEPERS SHALL BE DISCONNECTED/REMOVED, RAISED, & PLACED ON NEW CURBED PLATFORMS (RE: DETAIL), AND RECONNECTED/RE-INSTALLED. VERIFY ALL EXISTING CURB MOUNTED UNITS, EQUIPMENT, ETC. HAVE A MINIMUM 10" CURB HEIGHT (RAISED AS REQUIRED) - ALL DISCONNECTS AND RECONNECTS SHALL BE PERFORMED BY A LICENSED ELECTRICIAN.

F. IF EXISTING ELECTRICAL/GAS/WATER/ETC. LINES ARE MODIFIED- ONLY LICENSED SUBCONTRACTORS SPECIALIZING IN HVAC, PLUMBING AND ELECTRICAL SHALL PERFORM THAT TYPE OF WORK. PERMITS AND INSPECTIONS REQUIRED- PROVIDE "MERCURY" GAS LINE TEST (COORDINATE OWNER/ARCHITECT WITNESS OF TEST), REPAIR ALL LEAKS AND RE-TEST

G. REPLACE AND RAISE (AS REQUIRED) ALL EXISTING EXPANSION JOINTS/AREA DIVIDERS/ CURB MOUNTED EQUIPMENT/ SKYLIGHTS A MIN. 10" ABOVE ROOF DECK. (UNLESS INDICATED OTHER WISE ON DRAWING.)

H. ENSURE ALL SOIL STACK FLASHING IS MIN. 10" ABOVE ROOF. COUPLE PVC PIPE ABOVE DECK, COUPLE CAST IRON PIPE UNDER DECK.

I. PROVIDE SHEET METAL HOODED (w/METAL FACE CLOSURE), WOOD CURB, BOX COVER AT ALL GAS LINE AND WATER LINE ROOF PENETRATIONS (RE: DETAILS). ENSURE LINES SLOPE AWAY FROM FACE COVER.

J. PROVIDE WALKWAY PROTECTION PADS (AS ACCEPTABLE TO MANUFACTURER-RE: SPECS.) AROUND ALL ROOF HATCHES, A/C UNITS, DOORS THAT OPEN ONTO ROOF, AND AT ALL ROOF TOP ACCESS LADDERS (TOP & BOTTOM)

K. ISOLATE ALL HEAT PIPES/FLUES AS RECOMMENDED & OUTLINED IN THE NRCA MANUAL FOR ISOLATED STACK FLASHING- (RE:DETAILS)

L. ALL OUTSIDE AIR INTAKES SHALL BE COVERED TO ELIMINATE ODORS AND FUMES FROM ENTERING INTO THE BUILDING DURING WORK.

M. EXAMINE AND CLEAN EXISTING DRAIN LINES OF DEBRIS AND BLOCKAGE, FLUSH WITH WATER TO ENSURE THAT DRAINS FLOW FREELY.

N. OWNER WILL VERIFY CORRECT OPERATION OF ALL ROOF TOP EQUIPMENT BEFORE AND AFTER PROJECT. CONTRACTOR SHALL BE RESPONSIBLE FOR IDENTIFYING ALL INOPERABLE EQUIPMENT PRIOR TO RELEASE OF RETAINAGE.

O. REPLACE ALL RUSTED/DETERIORATED EXISTING METAL VENT FLASHING AND FLUES.

P. COORDINATE WALK OF ENTIRE ROOF (PRIOR TO STARTING) WITH ROOFING MANUFACTURER'S TECHNICAL REP. TO IDENTIFY AND LOCATE ALL AREAS OF HIGH SLOPE WHICH MIGHT REQUIRE SPECIAL PROCEDURES FOR SYSTEM ATTACHMENT.

Q. PROVIDE ONE-WAY MOISTURE VENTS 1 PER 900 SF AT ALL LT. WT. OVER POUR AREAS

7 GENERAL NOTES
NOT TO SCALE

GENERAL:

SHEET NUMBER	SHEET NAMES
A3.01	GENERAL INFORMATION

BUILDING ENVELOPE:

A3.02	ENLARGED ROOF PLAN
A3.03	GENERAL ROOF DETAILS

1 INDEX OF DRAWINGS
NOT TO SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

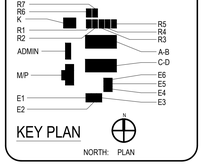
PBK

ARCHITECT PBK Architects, Inc.
8163 ROCHESTER AVE
RANCHO CUCAMONGA, CA 91730
909-987-0909 P
BEAMprof.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 UNIVERSITY ST
WESTMINSTER, CA 92683

DSA APPL NO.: ## ##### DSA FILE NO.: ###



KEY PLAN NORTH: PLAN

Consultant

BEAM PROFESSIONALS

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
8/25/2023	220528

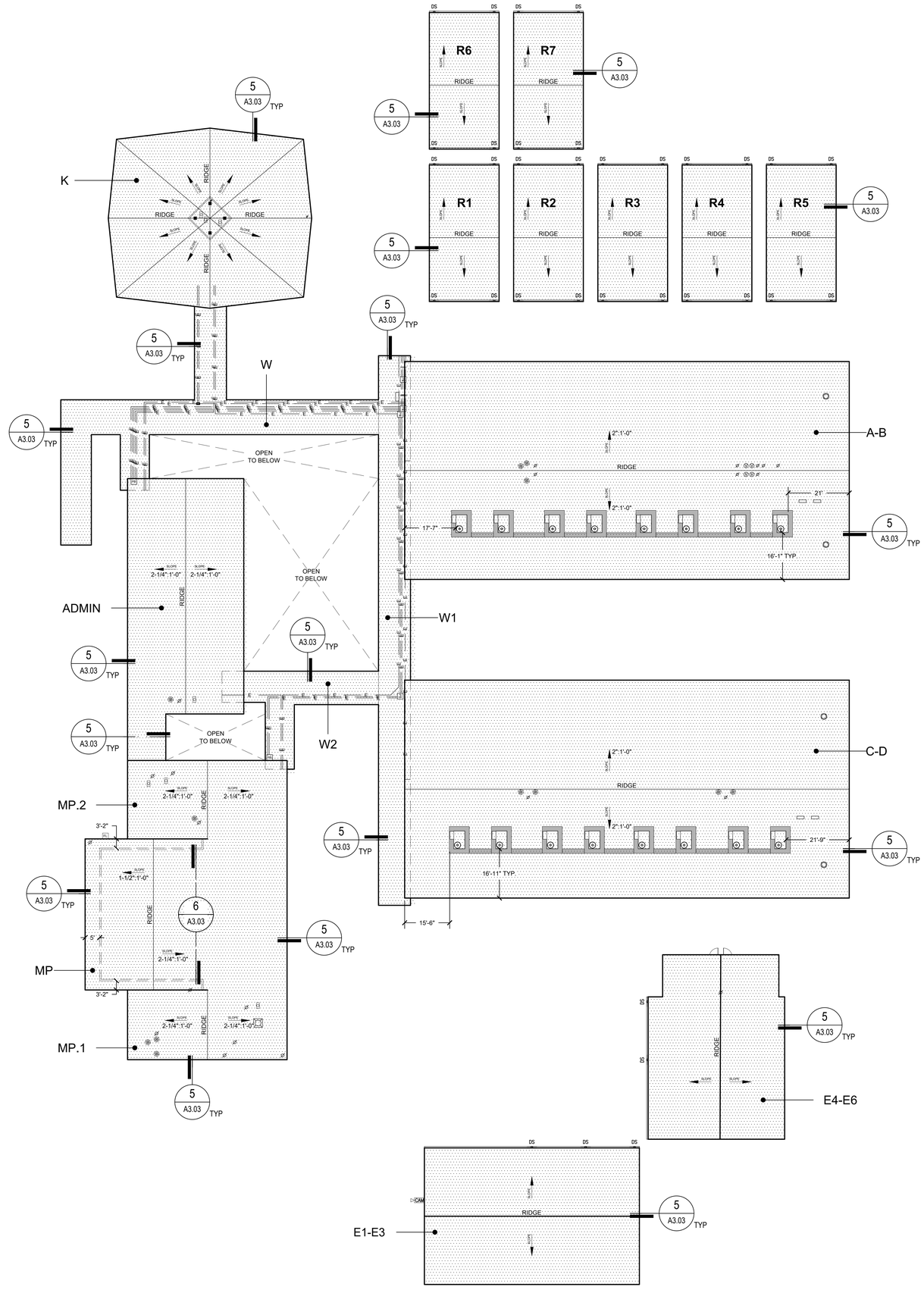
REVISIONS

No.	DESCRIPTION	DATE

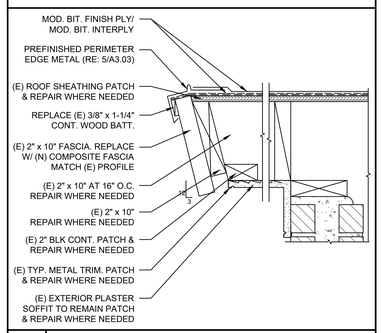
DSA 100% PROGRESS SET

GENERAL INFORMATION

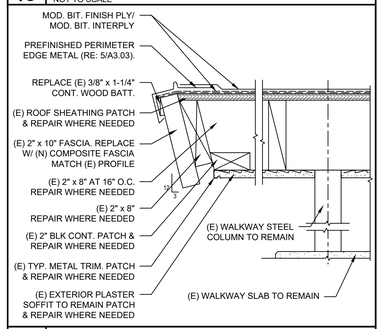
A3.01



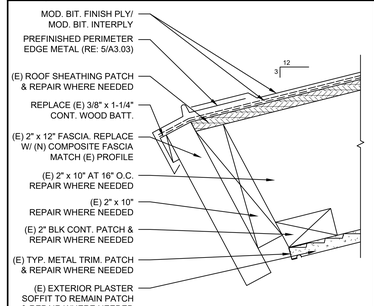
5 ROOF PLAN
1/16"=1'-0"



19 TYPICAL ROOF RAKE
NOT TO SCALE



13 TYPICAL COVERED WALKWAY
NOT TO SCALE



7 TYPICAL ROOF EAVE
1/16"=1'-0"

- PLUMBING VENT (RE: 9/A3.03)
- BOILER VENT (RE: 8/A3.03)
- CURB MOUNTED VENT (RE: 3/A3.03)
- FLANGE VENT (RE: 9/A3.03)
- FL — FLOOD LIGHT (RE: 5/A3.03)
- T-TOP VENT (RE: 9/A3.03)
- DS — DOWNSPOUT AND GUTTER (RE: 4/A3.03 & 11/A3.03)
- PITCH PAN (RE: 9/A3.03)
- CAM — CAMERA - COORDINATE WITH ELECTRICAL TO PROVIDE POWER.
- EXISTING AREAS TO REMIAN-NIC
- PB — PIPE BOX (RE: 7/A3.03)
- A1 — ROOF AREA DESIGNATION
- E — ELECTRICAL LINE (RE: 7/A3.03)
- WALKPAD (RE: 12/A3.03)
- NEW MULTI-PLY BUR SYSTEM (RE: 26/A3.01)

1 GENERAL LEGEND
NOT TO SCALE

TRUE NORTH

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
8163 ROCHESTER AVE
RANCHO CUCAMONGA, CA 91730
909-987-0909 P
BEAMprof.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 UNIVERSITY ST
WESTMINSTER, CA 92683

DSA APPL NO.: ## ##### DSA FILE NO.: ###

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant
BEAM PROFESSIONALS

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
8/25/2023	220528

REVISIONS

No.	DESCRIPTION	DATE

DSA 100% PROGRESS SET

ENLARGED ROOF PLAN

A3.02

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

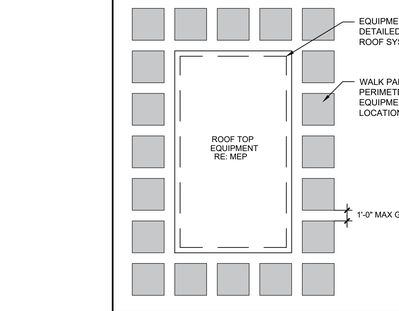
PBK

ARCHITECT PBK Architects, Inc.
8163 ROCHESTER AVE
RANCHO CUCAMONGA, CA 91730
909-987-0909 P
BEAMprof.com

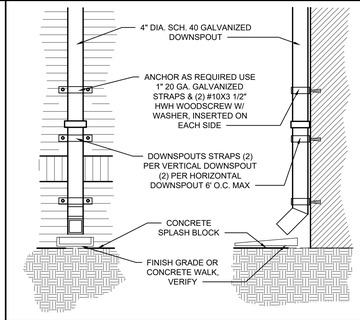
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 UNIVERSITY ST
WESTMINSTER, CA 92683

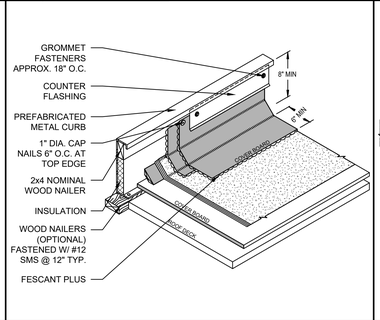
DSA APPL NO: ##-###### DSA FILE NO: ###



12 WALK PADS AT RTU
NOT TO SCALE



11 DOWNSPOUT TO GRADE
NOT TO SCALE

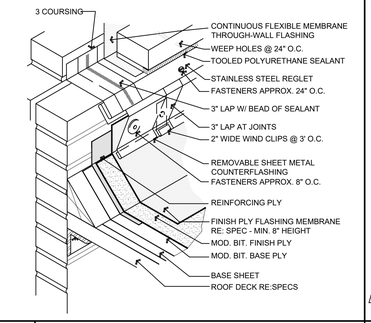


10 PREFABRICATED CURB
NOT TO SCALE

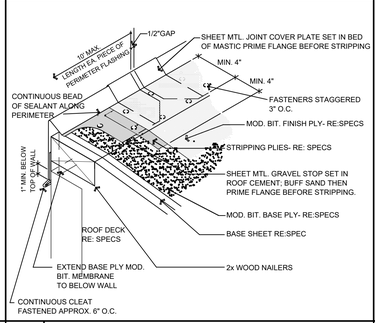
9 PLUMBING VENT THRU ROOF
NOT TO SCALE

8 HOT STACK
NOT TO SCALE

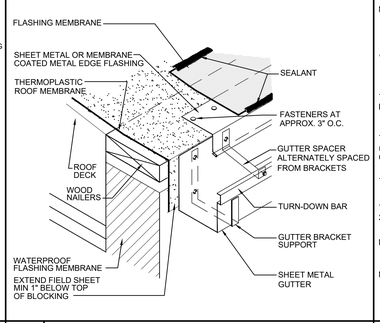
7 NON-PENETRATING PIPE SUPPORTS
NOT TO SCALE



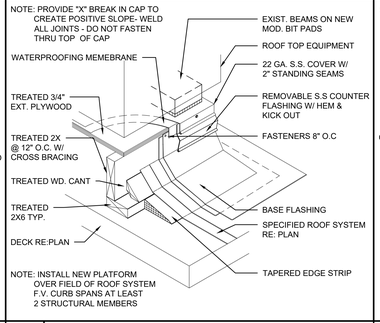
6 BASE FLASHING
NOT TO SCALE



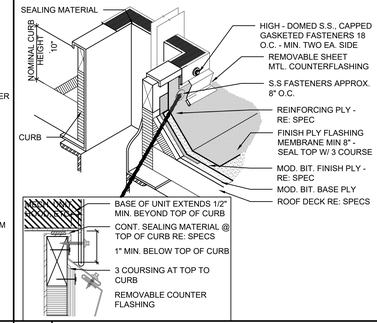
5 PERIMETER EDGE
NOT TO SCALE



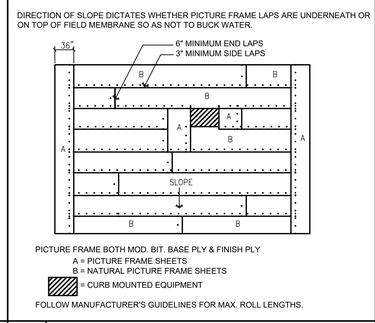
4 GUTTER EDGE
NOT TO SCALE



3 CURBED PLATFORM
NOT TO SCALE

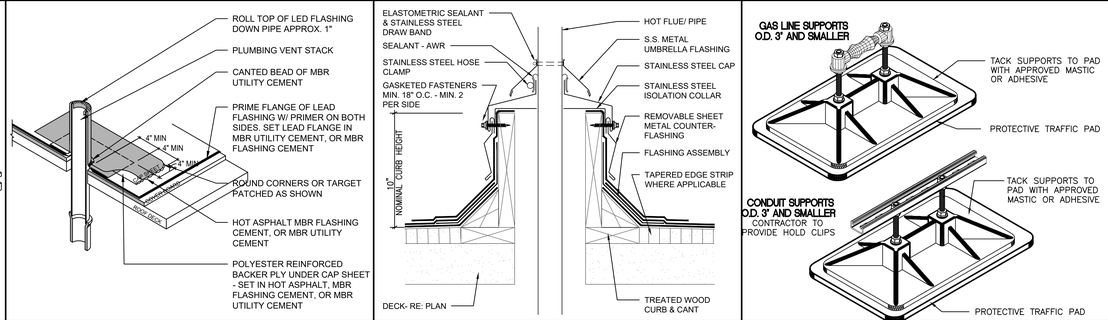


2 EQUPMENT CURB
NOT TO SCALE

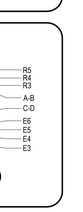


1 PICTURE FRAME
NOT TO SCALE

16 ROOF ZONE
NOT TO SCALE



15 FASTENERS PATTERN
NOT TO SCALE



Consultant

BEAM PROFESSIONALS

Architect

LICENSED ARCHITECT
Jong Yoo
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
8/25/2023	220528

REVISIONS

No.	DESCRIPTION	DATE

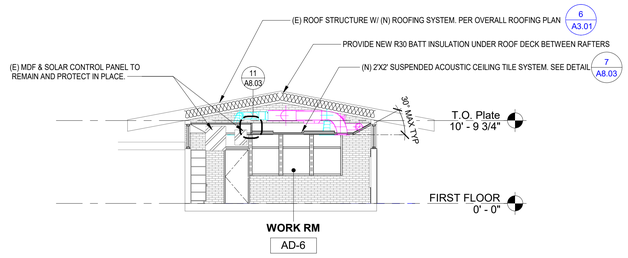
DSA 100% PROGRESS SET

GENERAL ROOF DETAILS

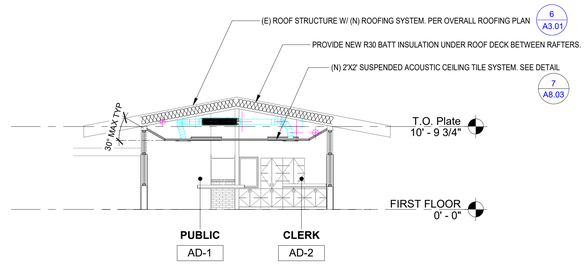
A3.03

A4.01 - BUILDING SECTIONS

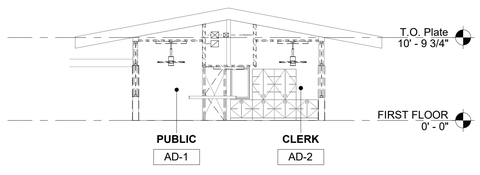
0" 1"



30 BLDG ADMIN SECTION - WORKROOM - NEW
1/8" = 1'-0"

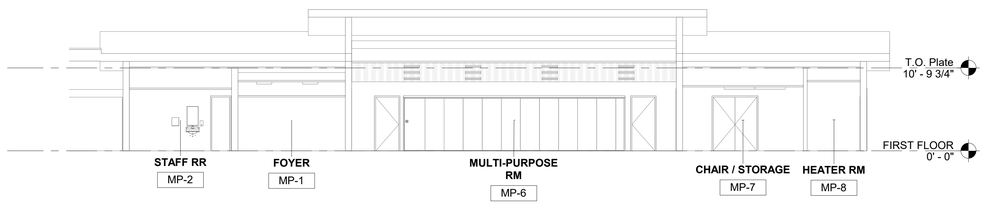


28 BLDG ADMIN SECTION TRANSVERSE - NEW
1/8" = 1'-0"

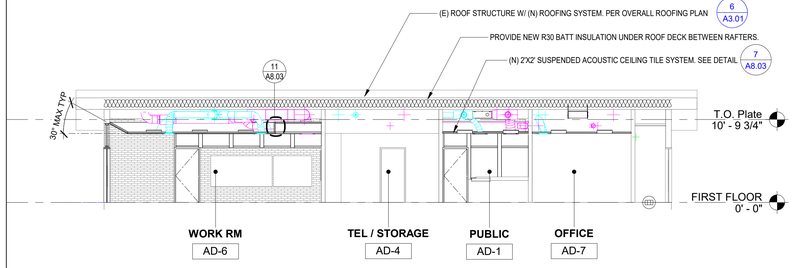


26 BLDG ADMIN SECTION TRANSVERSE - DEMO
1/8" = 1'-0"

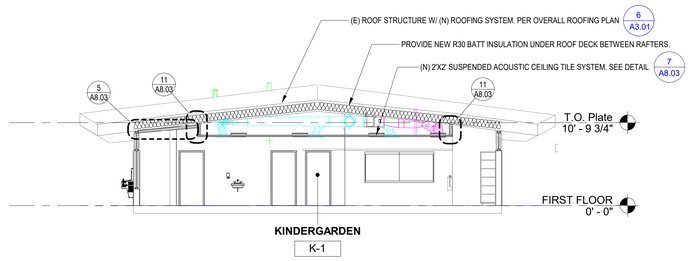
NOTE: SECTION SHOWN FOR REFERENCE ONLY. NO SCOPE IN THIS BUILDING OTHER THAN FIRE ALARM UPGRADES. SEE FIRE ALARM SHEETS.



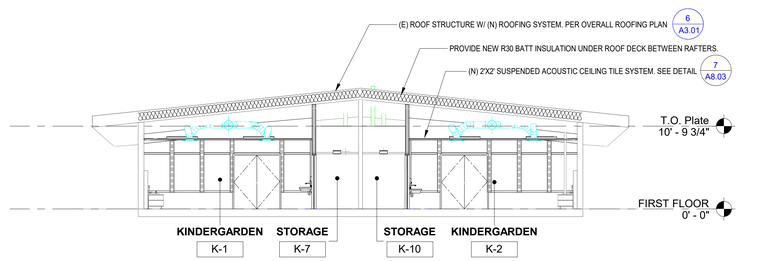
24 BLDG M/P LONGITUDINAL SECTION
1/8" = 1'-0"



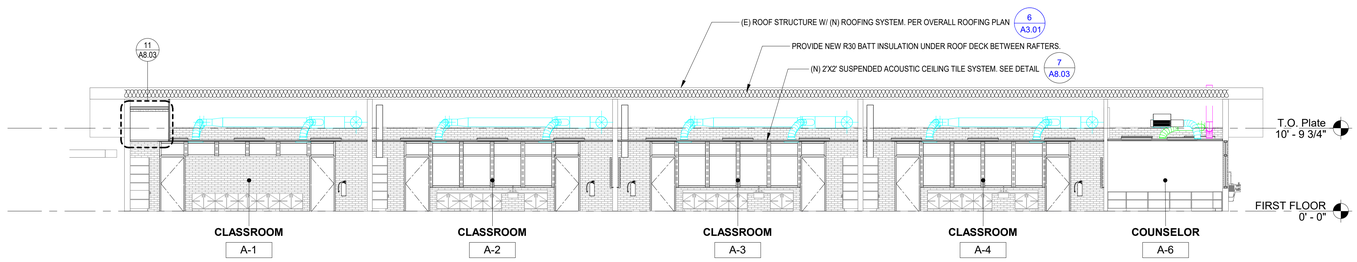
20 BLDG ADMIN LONGITUDINAL SECTION
1/8" = 1'-0"



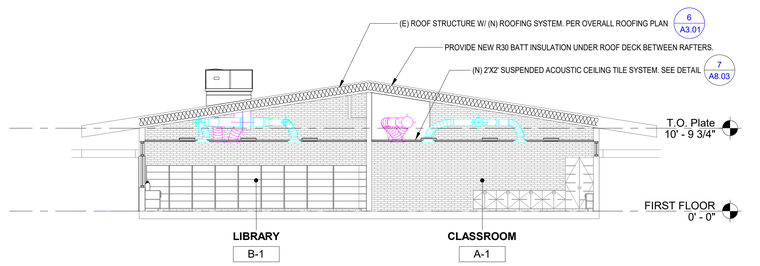
17 BLDG K TRANSVERSE SECTION
1/8" = 1'-0"



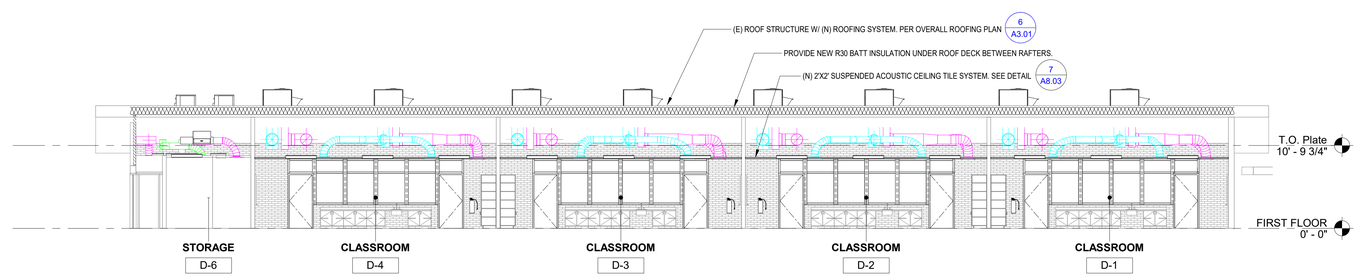
14 BLDG K LONGITUDINAL SECTION
1/8" = 1'-0"



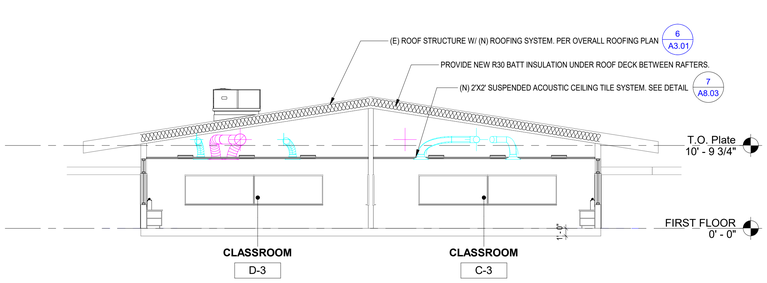
12 BLDG A-B LONGITUDINAL SECTION
1/8" = 1'-0"



8 BLDG A-B TRANSVERSE SECTION
1/8" = 1'-0"



6 BLDG C-D LONGITUDINAL SECTION
1/8" = 1'-0"



2 BLDG C-D TRANSVERSE SECTION
1/8" = 1'-0"

FILE PATH: Z:\Projects\...
9/14/2023 3:59:05 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong Yao
No. C-31162
REN 10-31-2015
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

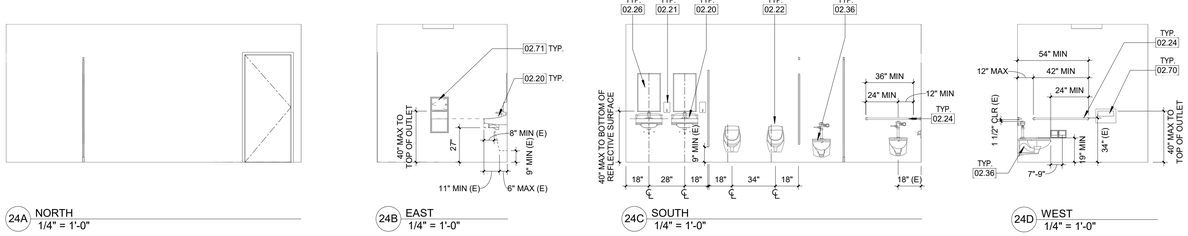
No.	Description	Date

DSA Submittal

BUILDING SECTIONS

A4.01

0" 1"



24A NORTH 1/4" = 1'-0"

24B EAST 1/4" = 1'-0"

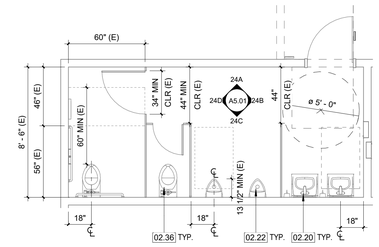
24C SOUTH 1/4" = 1'-0"

24D WEST 1/4" = 1'-0"

(FOR REFERENCE ONLY)

24 ELEVATIONS - E6 BLDG - MEN RR (ADULT) PER A#04-121968
1/4" = 1' - 0"

(FOR REFERENCE ONLY)



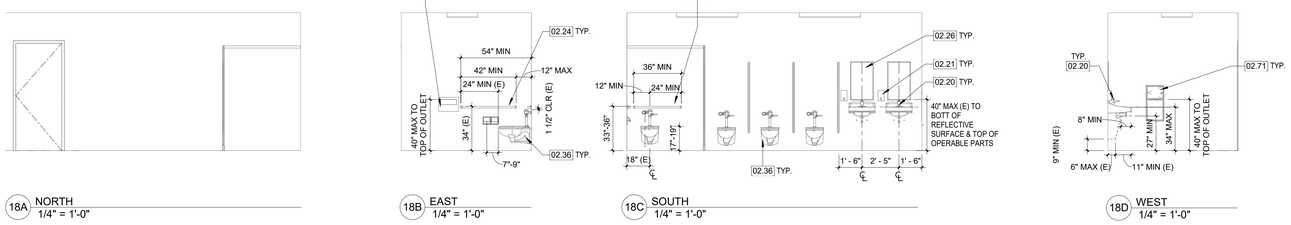
NOTE:

"(E)" TO ALL DIMENSIONS AS THERE IS NO SCOPE IN THESE RESTROOMS, EVERYTHING IS EXISTING TO REMAIN.

15 ENLARGED MENS STAFF RR - BLDG E6
1/4" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION
02.20	(E) LAVATORY TO REMAIN, PROTECT IN PLACE.
02.21	(E) SOAP DISPENSER TO REMAIN
02.22	(E) URINAL TO REMAIN
02.23	(E) TOILET FIXTURE TO REMAIN
02.24	(E) GRAB BAR TO REMAIN
02.25	(E) TOILET PAPER DISPENSER TO REMAIN
02.26	(E) MIRROR TO REMAIN
02.30	(E) ACCESSIBLE TOILET FIXTURE TO REMAIN
02.32	(E) FLOOR MOUNTED WATER CLOSET TO REMAIN
02.36	(E) WALL HUNG WATER CLOSET TO REMAIN
02.70	(E) TOILET SEAT COVER DISPENSER
02.71	(E) COMBO PAPER TOWEL DISPENSER & TASH RECEPTACLE
02.84	(E) STALL DOOR TO REMAIN. REMOVE (E) DOOR HARDWARE AND REPLACE WITH NEW. PROVIDE DOOR PULL ON BOTH SIDES, TO COMPLY WITH 11B-404.2.7. PROVIDE SELF-CLOSING MECHANISM AND DOOR LATCH AND HOUSING



18A NORTH 1/4" = 1'-0"

18B EAST 1/4" = 1'-0"

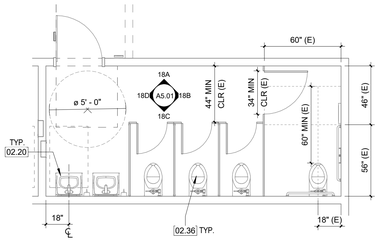
18C SOUTH 1/4" = 1'-0"

18D WEST 1/4" = 1'-0"

(FOR REFERENCE ONLY)

18 ELEVATIONS - E6 BLDG - WOMEN RR (ADULT) PER A#04-121968
1/4" = 1' - 0"

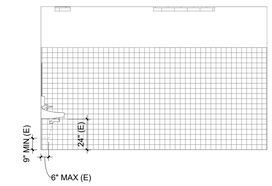
(FOR REFERENCE ONLY)

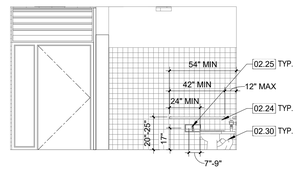


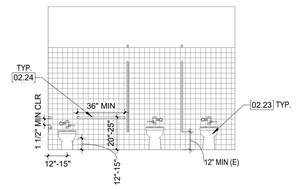
NOTE:

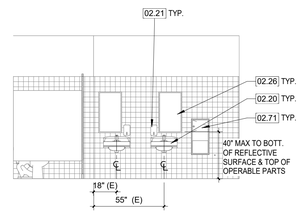
"(E)" TO ALL DIMENSIONS AS THERE IS NO SCOPE IN THESE RESTROOMS, EVERYTHING IS EXISTING TO REMAIN.

14 ENLARGED WOMEN STAFF RR - BLDG E6
1/4" = 1'-0"









12A A&B BLDG GIRL RR - EAST 1/4" = 1'-0"

12B A&B BLDG GIRL RR - SOUTH 1/4" = 1'-0"

12C A&B BLDG GIRL RR - WEST 1/4" = 1'-0"

12D A&B BLDG GIRL RR - NORTH 1/4" = 1'-0"

(FOR REFERENCE ONLY)

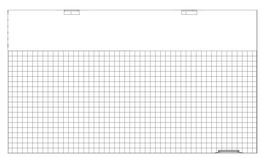
12 ELEVATIONS - A&B BLDG - GIRLS RR (AGES 5-8) PER A#04-121968
1/4" = 1' - 0"

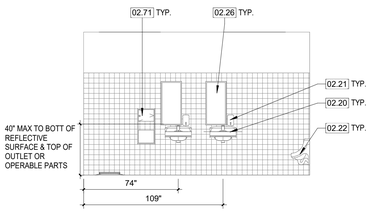
(FOR REFERENCE ONLY)

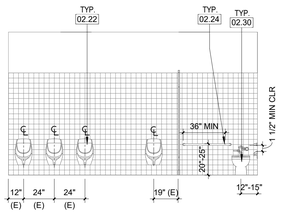
NOTE:

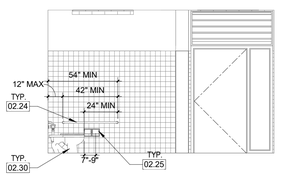
"(E)" TO ALL DIMENSIONS AS THERE IS NO SCOPE IN THESE RESTROOMS, EVERYTHING IS EXISTING TO REMAIN.

7 ENLARGED GIRL RR - BLDG A&B
1/4" = 1'-0"









6A EAST 1/4" = 1'-0"

6B A&B BLDG BOY RR - SOUTH 1/4" = 1'-0"

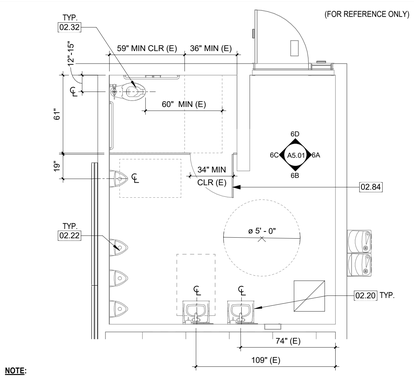
6C A&B BLDG BOY RR - WEST 1/4" = 1'-0"

6D A&B BLDG BOY RR - NORTH 1/4" = 1'-0"

(FOR REFERENCE ONLY)

6 ELEVATIONS - A&B BLDG - BOYS RR (AGES 5-8) PER A#04-121968
1/4" = 1' - 0"

(FOR REFERENCE ONLY)



NOTE:

"(E)" TO ALL DIMENSIONS AS THERE IS NO SCOPE IN THESE RESTROOMS, EVERYTHING IS EXISTING TO REMAIN.

1 ENLARGED BOY RR - BLDG A&B
1/4" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

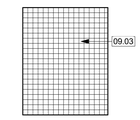
ENLARGED RESTROOM PLANS & ELEVATIONS

A5.01

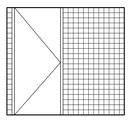
FILE PATH: Z:\Projects\...
9/14/2023 5:59:11 PM

A5.02 - ENLARGED RESTROOM PLANS & ELEVATIONS

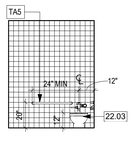
0" 1"



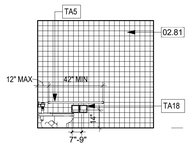
12A NORTH
1/4" = 1'-0"



12B EAST
1/4" = 1'-0"



12C SOUTH
1/4" = 1'-0"



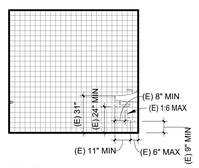
12D WEST
1/4" = 1'-0"

NOTE: FIXTURE MOUNTING PER AGE GROUP 5-8

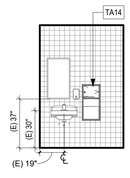
12 ELEVATIONS - K BLDG - BOYS RESTROOM (AGES 5-8)
1/4" = 1' - 0"



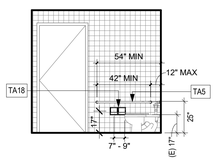
6B EAST
1/4" = 1'-0"



6C SOUTH
1/4" = 1'-0"



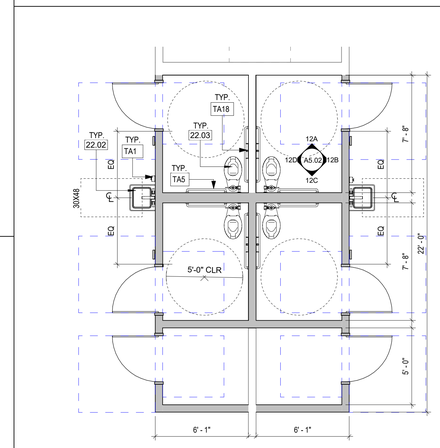
6D WEST
1/4" = 1'-0"



6A NORTH
1/4" = 1'-0"

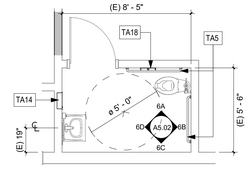
(FOR REFERENCE ONLY)

6 ELEVATIONS - ADMIN BLDG - NURSE UNISEX RESTROOM (AGES 5-12)
1/4" = 1' - 0"



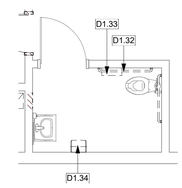
NOTE: LAVATORY MOUNT AT APPROPRIATE HEIGHT FOR KINDERGARTEN. REF. TO INTERIOR ELEVEATION 2/A7.01

7 ENLARGED BLDG K - RR
1/4" = 1'-0"



(FOR REFERENCE ONLY)

2 ENLARGED NURSE UNISEX RR (AGE 5-12)
1/4" = 1'-0"



1 DEMO PLAN - NURSE UNISEX RR (AGE 5-12)
1/4" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION
02.81	(E) CERAMIC TILE TO REMAIN, PROTECT IN PLACE.
09.03	(N) 4X4 CERAMIC TILE. PROVIDE GREENBOARD SUBSTRATE AT (E) BRICK SURFACES.
22.02	(N) WALL MOUNTED LAVATORY
22.03	(N) FLOOR MOUNTED ACCESSIBLE WATER CLOSET

DEMOLITION KEYED NOTES

#	DESCRIPTION
D1.32	REMOVE (E) GRAB BARS, PATCH AND REPAIR WALL FINISHES TO MATCH EXISTING
D1.33	REMOVE (E) TOILET PAPER DISPENSER, SALVAGE TO DISTRICT, PATCH AND REPAIR WALL FINISHES TO MATCH EXISTING.
D1.34	REMOVE (E) PAPER TOWEL DISPENSER, SALVAGE TO DISTRICT, PATCH AND REPLACE WALL FINISHES TO MATCH EXISTING.

LABEL	DESCRIPTION	REMARKS
TA1	SOAP DISPENSER	
TA2	MIRROR (1" MIN.) (T.N.O.)	
TA3	TOILET PAPER DISPENSER	
TA4	PAPER TOWEL DISPENSER	
TA5	GRAB BARS AT TYPICAL ACCESSIBLE TOILET STALLS	
TA6	SANITARY NAPKIN DISPENSER	
TA7	SANITARY NAPKIN DISPOSAL	
TA8	MOP & BROOM HOLDER	
TA9	GRAB BARS AT ACCESSIBLE SHOWER	
TA10	FOLDING SHOWER BENCH	
TA11	CLOTHES HOOK	
TA12	SHOWER CURTAIN, ROD AND HOOKS	
TA13	ELECTRIC HAND DRYER	
TA14	COMBO PAPER TOWEL DISPENSER/TRASH RECEPTACLE	
TA15	GRAB BAR AT AMBULATORY ACCESSIBLE TOILET STALL	
TA16	CHANGING STATION	
TA17	TRASH RECEPTACLE	
TA18	TOILET PAPER DISPENSER, SEMI-RECESSED	
TA19	TOILET SEAT COVER DISPENSER	
TA20	SANITARY NAPKIN DISPOSAL, SEMI-RECESSED	

NOTES:

1. ALL TOILET ACCESSORIES SHALL BE CONTRACTOR FURNISHED AND INSTALLED UNLESS NOTED OTHERWISE.
2. COORDINATE FINAL LOCATIONS WITH ARCHITECT PRIOR TO INSTALLATION.
3. CONTRACTOR IS TO VERIFY ALL HEIGHTS OF ACCESSORIES TO COMPLY WITH ADA.
4. REFER TO ALL FINISHES AND COLORS IN FINISH SCHEDULE.VERIFY ALL PATTERNS WITH ARCHITECT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Jong You
No. C-31162
REN 10-31-2024
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

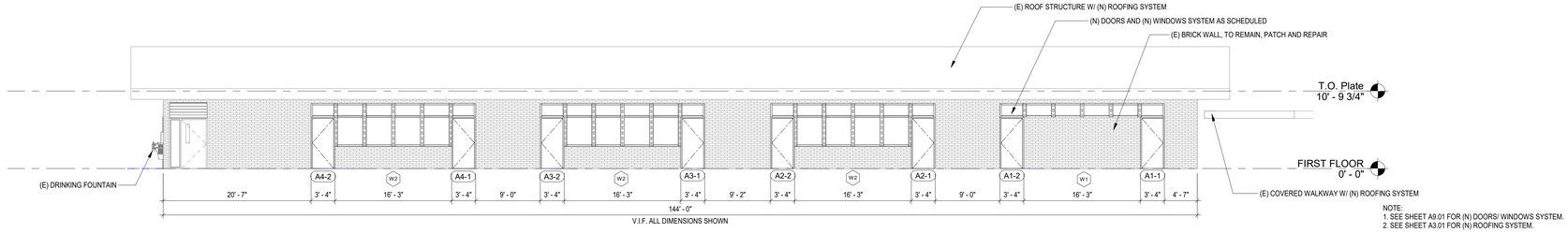
ENLARGED RESTROOM PLANS & ELEVATIONS

A5.02

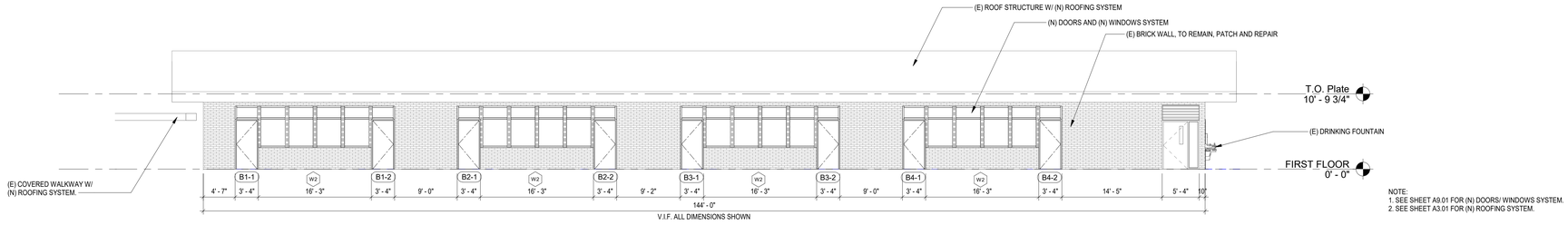
FILE PATH: Z:\Projects\...
9/14/2023 5:59:15 PM

A6.01 - EXTERIOR ELEVATIONS

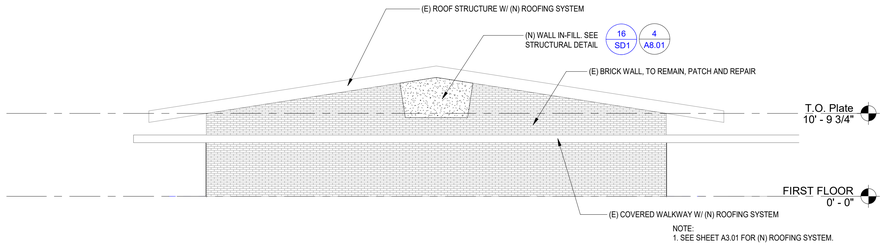
0" 1"



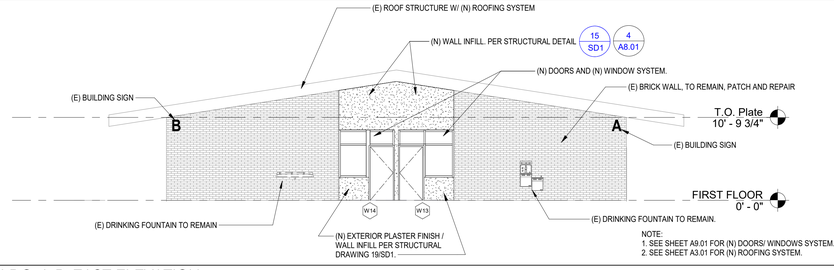
30 BLDG 'A-B' NORTH ELEVATION
1/8" = 1'-0"



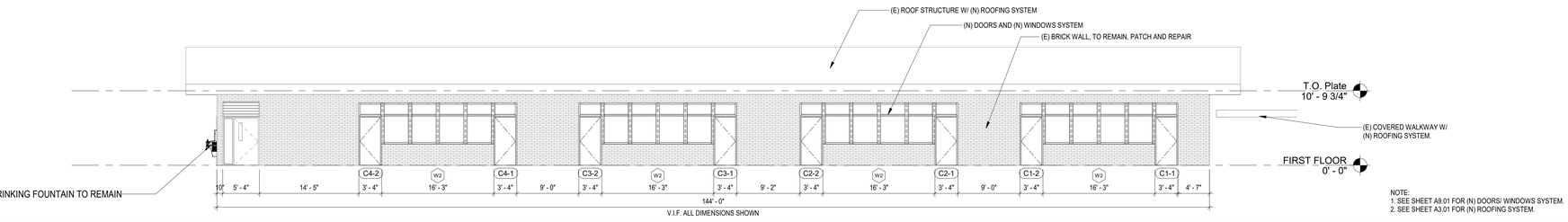
24 BLDG 'A-B' SOUTH ELEVATION
1/8" = 1'-0"



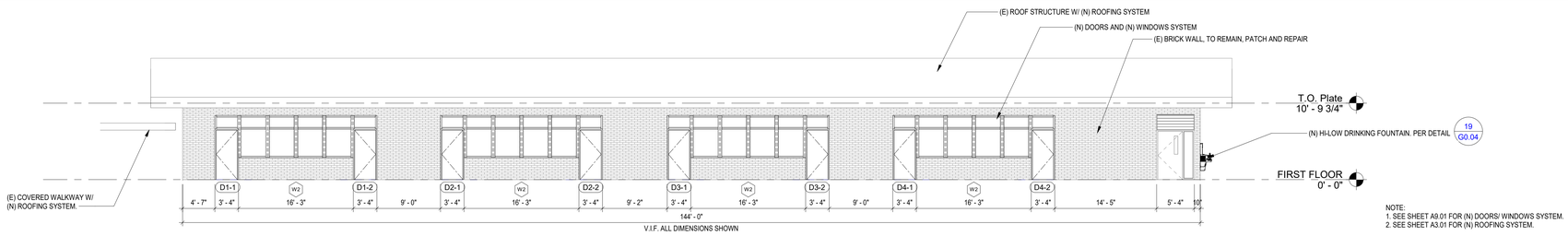
20 BLDG 'A-B' WEST ELEVATION
1/8" = 1'-0"



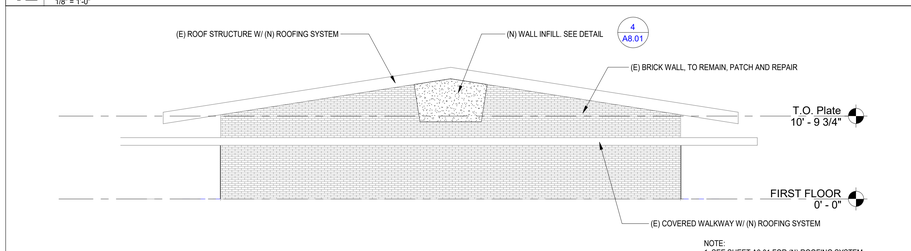
19 BLDG 'A-B' EAST ELEVATION
1/8" = 1'-0"



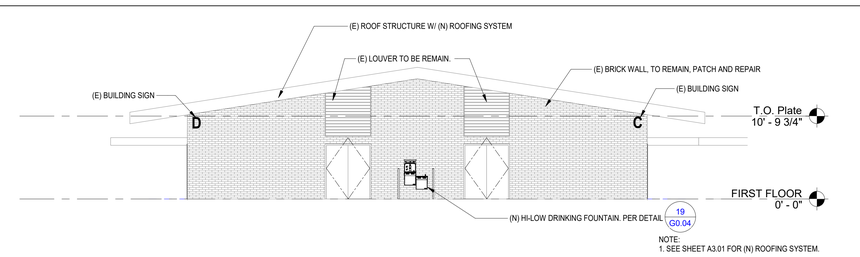
18 BLDG 'C-D' NORTH ELEVATION
1/8" = 1'-0"



12 BLDG 'C-D' SOUTH ELEVATION
1/8" = 1'-0"



6 BLDG 'C-D' WEST ELEVATION
1/8" = 1'-0"



3 BLDG 'C-D' EAST ELEVATION
1/8" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION

EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES, MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953

WESTMINSTER SCHOOL DISTRICT

A-B
C-D

KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

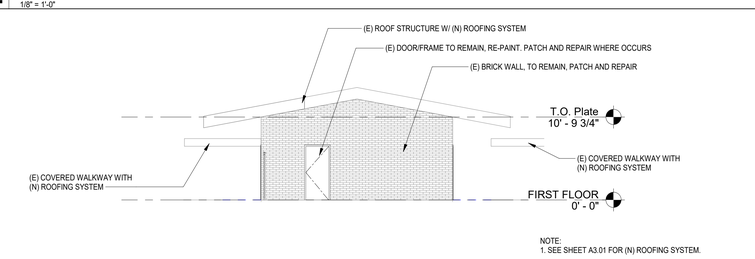
EXTERIOR ELEVATIONS

A6.01

FILE PATH: Z:\Projects\...
9/14/2023 5:59:20 PM

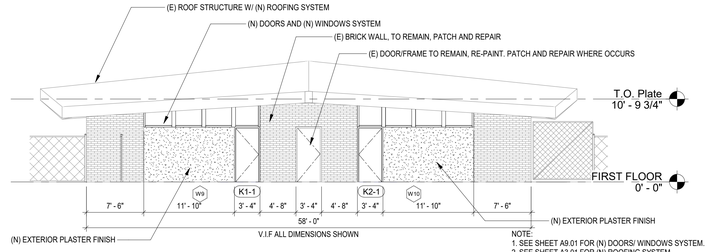
A6.02 - EXTERIOR ELEVATIONS

0" 1"



NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

24 BLDG 'K' NORTH ELEVATION
1/8" = 1'-0"



NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

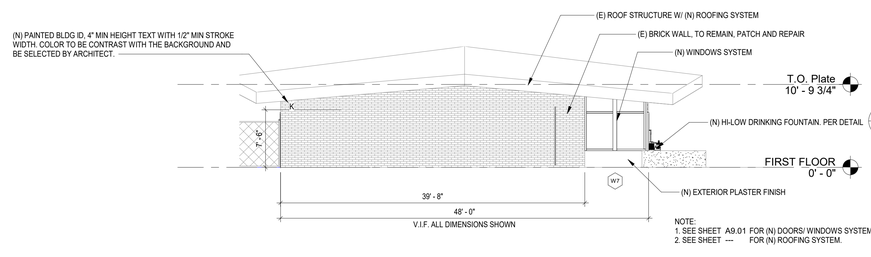
18 BLDG 'K' SOUTH ELEVATION
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

12 'ADMIN' BLDG EXTERIOR ELEVATION - NORTH
1/8" = 1'-0"

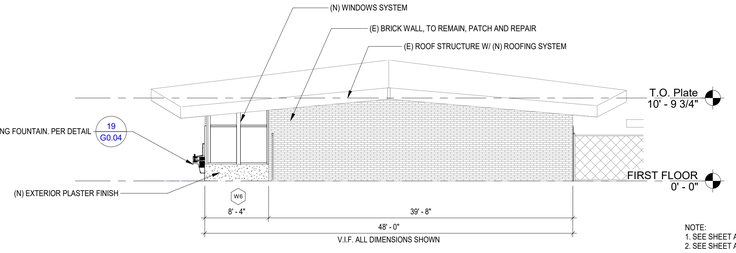
NOTE:
1. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

6 'ADMIN' BLDG EXTERIOR ELEVATION - SOUTH
1/8" = 1'-0"



NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET --- FOR (N) ROOFING SYSTEM.

21 BLDG 'K' EAST ELEVATION
1/8" = 1'-0"



NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

15 BLDG 'K' WEST ELEVATION
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

9 'ADMIN' BLDG EXTERIOR ELEVATION - EAST
1/8" = 1'-0"

NOTE:
1. SEE SHEET A9.01 FOR (N) DOORS/ WINDOWS SYSTEM.
2. SEE SHEET A3.01 FOR (N) ROOFING SYSTEM.

3 'ADMIN' BLDG EXTERIOR ELEVATION - WEST
1/8" = 1'-0"

CONSTRUCTION KEYED NOTES

#	DESCRIPTION

EXTERIOR PAINT SCOPE OF WORK

1. CONTRACTOR SHALL PAINT ALL EXTERIOR AND INTERIOR SURFACES OF ALL BUILDINGS INCLUDING PORTABLES PER SPECIFICATION, THIS WORK INCLUDES ALL FLASHING, FASCIA, PLASTER, LOUVER, DRYWALL, DOORS AND FRAMES WITH THE EXCEPTION OF BRICK SURFACES. MINIMUM OF 4 COLORS TO BE SELECTED BY THE ARCHITECTS.
2. CONTRACTOR SHALL PAINT ALL COLUMN AND BEAMS OF SOLAR SHADE STRUCTURE PER SPECIFICATION, EXCEPT GALVANIZED AND SOLAR PANEL SURFACES, MINIMUM OF 2 COLORS TO BE SELECTED BY ARCHITECT.
3. GENERAL CONTRACTOR TO NOTIFY AND DOCUMENT ANY AREAS WITH DRYROT AND / OR TERMITE DAMAGE IN WRITTEN FORMAT PRIOR TO BID.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

K
ADMIN
KEY PLAN
N
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Trang Tran
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

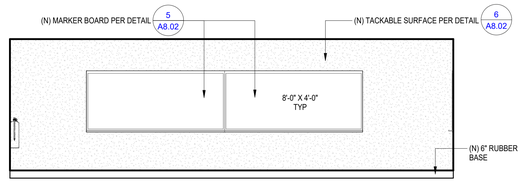
EXTERIOR ELEVATIONS

A6.02

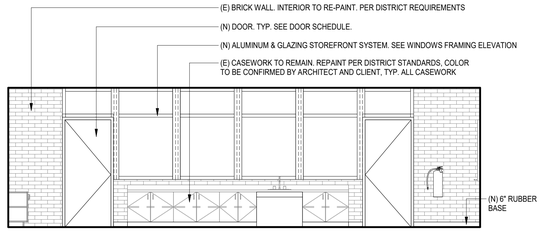
FILE PATH: Z:\Projects\...
9/14/2023 3:59:25 PM

A7.01 - INTERIOR ELEVATIONS

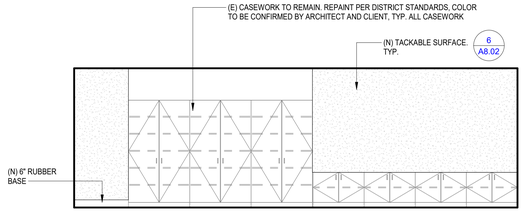
0" 1"



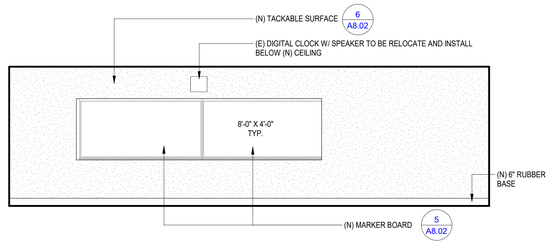
18B TYP CLASSROOM - C4 - EAST INTERIOR ELEVATION
1/4" = 1'-0"



18A TYP CLASSROOM - C4 - NORTH INTERIOR ELEVATION
1/4" = 1'-0"

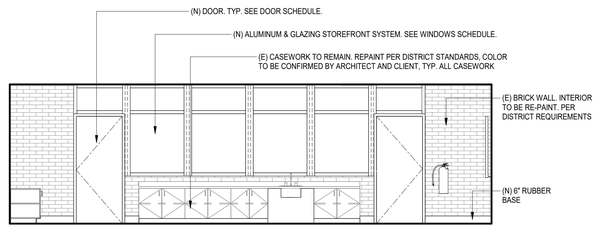


18D TYP CLASSROOM - C4 - WEST INTERIOR ELEVATION
1/4" = 1'-0"

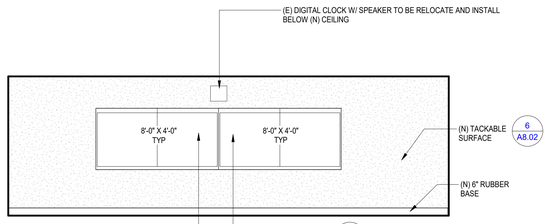


18C TYP CLASSROOM - C4 - SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

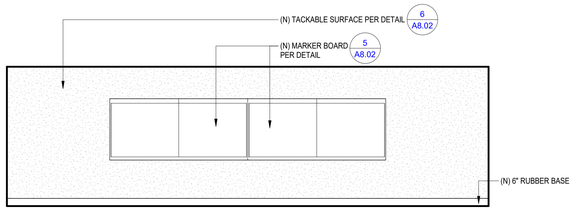
18 TYPICAL CLASSROOM AT BLDG C-D - INTERIOR ELEVATIONS
1/4" = 1' - 0"



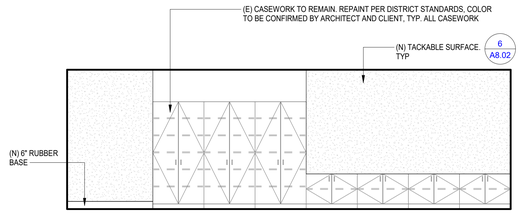
6A TYP CLASSROOM - A4 - NORTH INTERIOR ELEVATION
1/4" = 1'-0"



6B TYP CLASSROOM - A4 - EAST INTERIOR ELEVATION
1/4" = 1'-0"

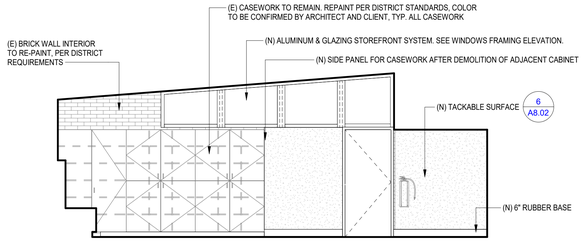


6C TYP CLASSROOM - A4 - SOUTH INTERIOR ELEVATION
1/4" = 1'-0"

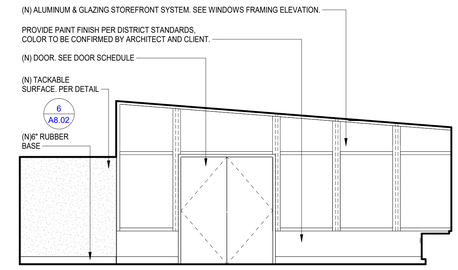


6D TYP CLASSROOM - A4 - WEST INTERIOR ELEVATION
1/4" = 1'-0"

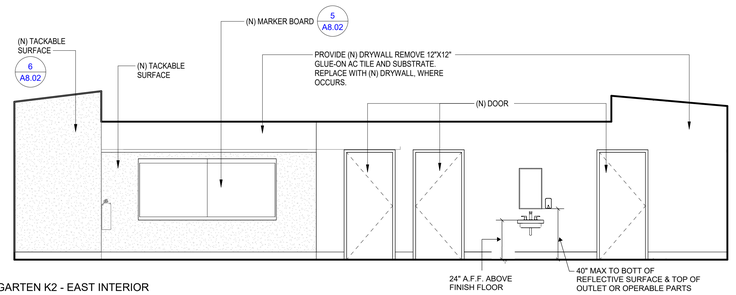
6 TYPICAL CLASSROOM AT BLDG A-B - INTERIOR ELEVATIONS
1/4" = 1' - 0"



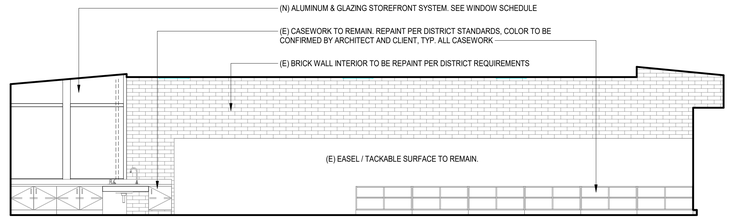
2C KINDERGARTEN K2 - SOUTH INTERIOR ELEVATION
1/4" = 1'-0"



2A KINDERGARTEN K2 - NORTH INTERIOR ELEVATION
1/4" = 1'-0"



2D KINDERGARTEN K2 - EAST INTERIOR ELEVATION
1/4" = 1'-0"



2B KINDERGARTEN K2 - WEST INTERIOR ELEVATION
1/4" = 1'-0"

2 KINDERGARTEN K1&K2 - TYP. INTERIOR ELEVATIONS
1/4" = 1' - 0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

K
A-B
C-D
KEY PLAN
N
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Yong Yoo
No. C-31162
REN 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

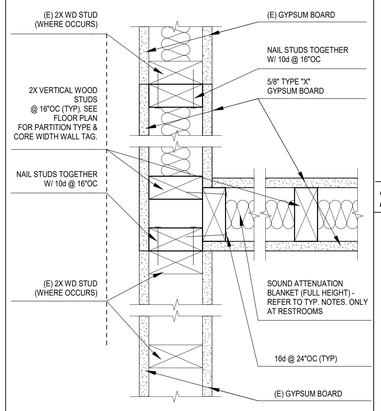
DSA Submittal

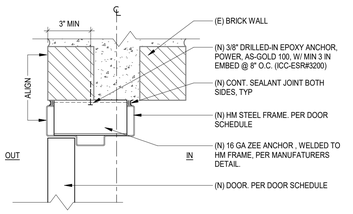
INTERIOR ELEVATIONS

A7.01

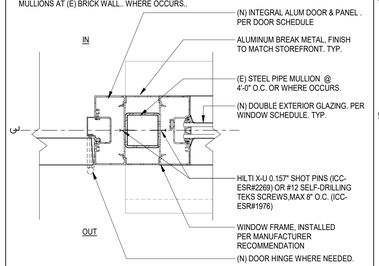
FILE PATH: Z:\Projects\...
9/14/2023 5:59:29 PM

0" 1"

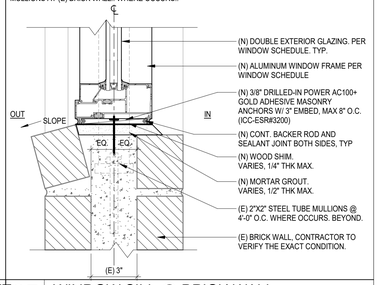




NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..

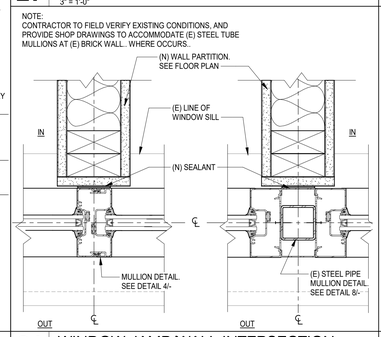


NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..

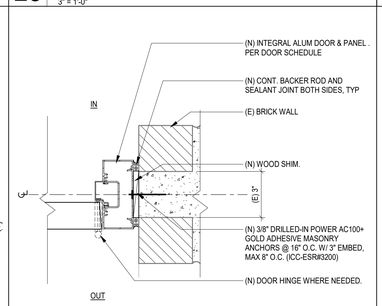


27 HM DOOR JAMB/HEAD @ BRICK
3" = 1'-0"

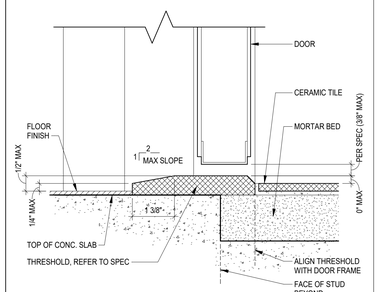
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..

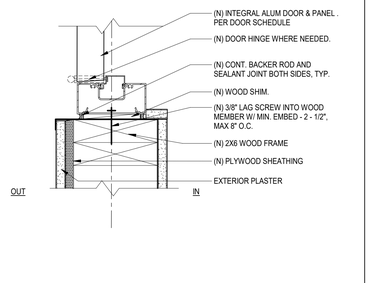


26 WINDOW/DOOR (E) MULLION ATTACHMENT
3" = 1'-0"



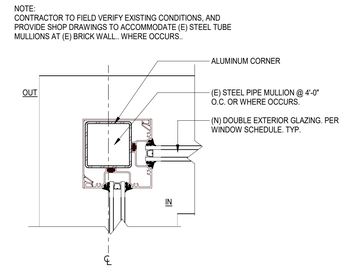
25 WINDOW SILL @ BRICK WALL
3" = 1'-0"





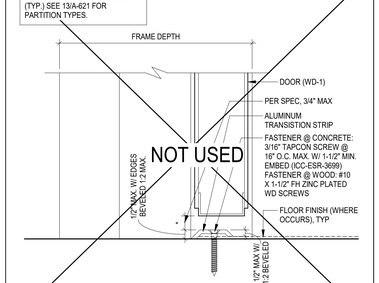
18 ALUM DOOR JAMP @ STUD WALL
3" = 1'-0"

NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..



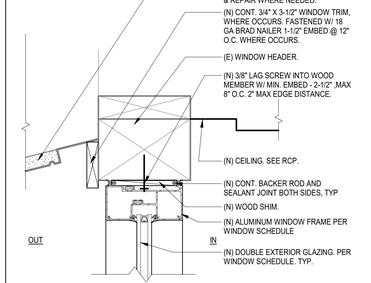
17 WINDOW CORNER MULLION ATTACHMENT
3" = 1'-0"

NOTE:
FRAME DEPTH TO BE DETERMINED BY OVERALL WALL THICKNESS (TYP.) SEE 13/A-621 FOR PARTITION TYPES.

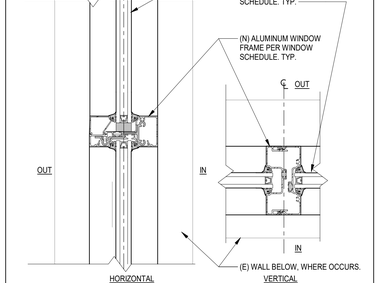


NOT USED

16 DOOR SILL
6" = 1'-0"

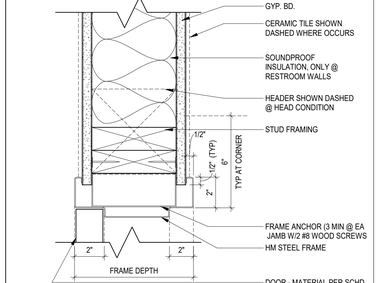


15 WINDOW HEADER
3" = 1'-0"

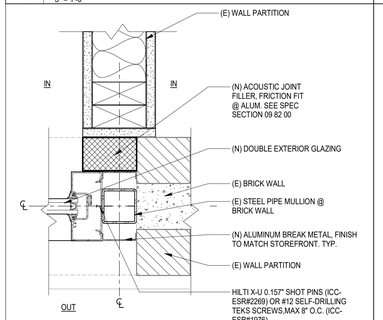


14 WINDOW MULLION VERT/HORIZ
3" = 1'-0"

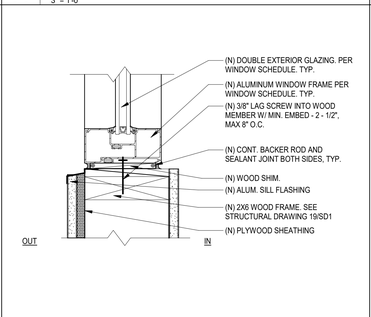
NOTES:
1. FRAME DEPTH TO BE DETERMINED BY OVERALL WALL THICKNESS (TYP.)



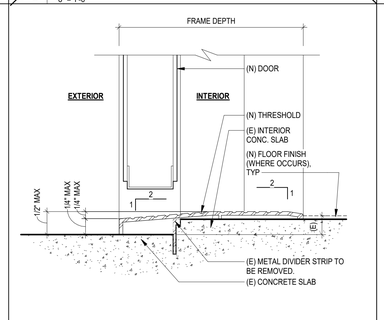
13 HM FRAME INT JAMB / HEAD @ (N) WALL
3" = 1'-0"



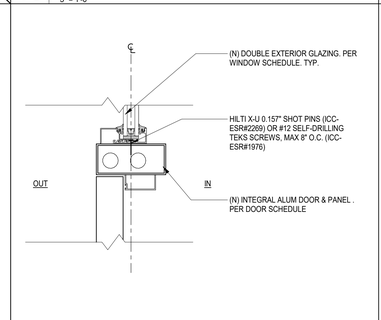
12 WINDOW JAMB/STUD/BRICK INTERSECT
3" = 1'-0"



11 WINDOW SILL @ STUD WALL
3" = 1'-0"

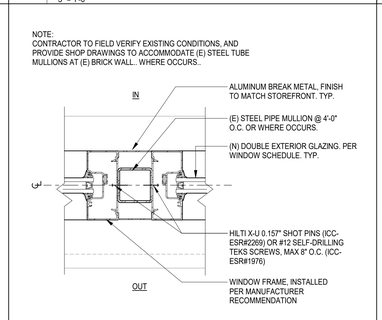


10 EXT SILL DOOR THRESHOLD RAMP
6" = 1'-0"

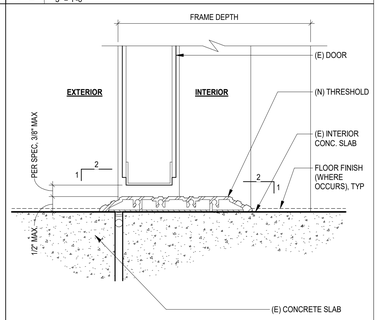


9 WINDOW/DOOR INTEGRAL ALUM HEADER
3" = 1'-0"

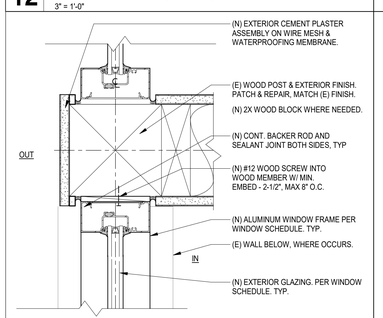
NOTE:
CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS, AND PROVIDE SHOP DRAWINGS TO ACCOMMODATE (E) STEEL TUBE MULLIONS AT (E) BRICK WALL.. WHERE OCCURS..



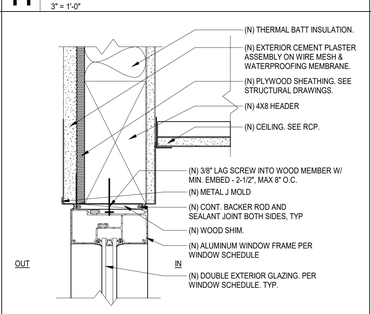
8 WINDOW MULLION ATTACHMENT
3" = 1'-0"



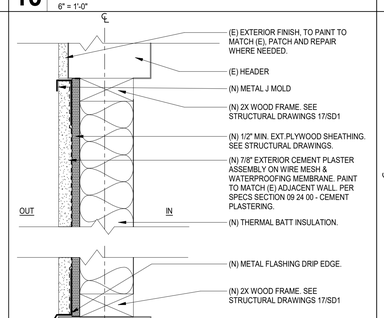
7 EXT SILL @ (E) DOOR
6" = 1'-0"



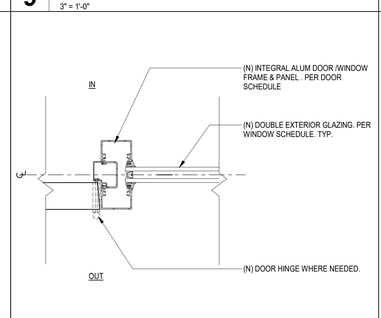
6 WINDOW JAMB @ STUD COLUMN
3" = 1'-0"



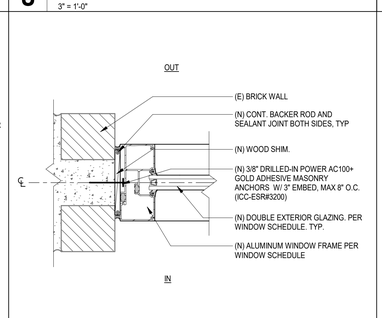
5 WINDOW HEAD @ (N) WALL IN-FILL
3" = 1'-0"



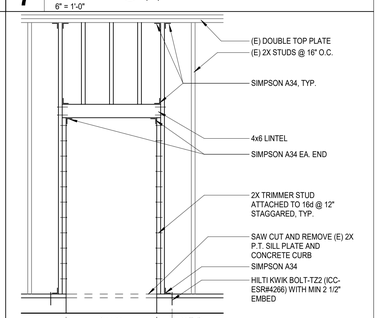
4 WINDOW / LOUVER INFILL
3" = 1'-0"



3 WINDOW/DOOR MULLION ATTACHMENT
3" = 1'-0"



2 WINDOW JAMB @ BRICK WALL
3" = 1'-0"



1 (N) DOOR OPENING
1/2" = 1'-0"

FILE PATH: Z:\Projects\...
9/14/2023 5:59:34 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

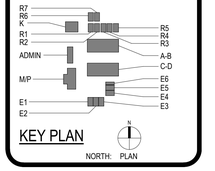
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Jing Ying Ng
No. C-31162
REN 10-31-2024
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

DOORS, WINDOW FRAME DETAILS

A8.01

0" 1"

BACKGROUND COLOR SHALL CONTRAST 70% MIN. WITH DOOR COLOR, TYP.
1/4" THICK CIRCLE
SUB-SURFACE IMAGE CENTERED ON SIGN, TYP.
CIRCLE COLOR TO CONTRAST DOOR AND TRIANGLE COLOR.
12" EQ.
6" TYP.
12"
12" DIAMETER
EQUAL SIDES, TYP
BOYS
GIRLS
GENDER NEUTRAL RESTROOM
1/4" THICK TRIANGLE
1/4" THICK TRIANGLE OVER 1/4" THICK CIRCLE
VERTICES SHALL BE RADIUSES 1/8" MIN. - 1/4" MAX., TYP
EDGE SHALL BE ROUNDED @ 1/16" MIN. OR CHAMFERED @ 1/8" MIN., TYP

(B) DOOR SIGNAGE

8" TYP
EQ. (1/2" MIN)
6" TYP.
10" TYP
+60" * MAX. AFF
+48" * MIN. AFF
3/8"
GIRLS
BOYS
CORNERS SHALL HAVE 3/8" RADIUS, TYP.
FONT = HELVETICA NARROW CHARACTER FONT HEIGHT = 1"

ACCESSIBLE RESTROOM SIGN

NON ACCESSIBLE RESTROOM SIGN

PROVIDE AT SINGLE OCCUPANT TOILET ROOMS
+60" * MAX. AFF
+48" * MIN. AFF
RESTROOM
0' - 4"
0' - 8"
0' - 2"
0' - 4"

GENDER NEUTRAL RESTROOM

(A) WALL SIGNAGE

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

NOTE:
FOR CHARACTER TYPE AND BRAILLE REQUIREMENTS SEE DETAILS 12 A8.02 11 A8.02

24 RESTROOM DOOR & WALL SIGNS
1 1/2" = 1'-0"

CHARACTER REQUIREMENTS:

A. CHARACTER REQUIREMENTS FOR ALL SIGNS PER 2022 CBC 11B-703:
1. CHARACTERS SHALL BE UPPERCASE.
2. CHARACTERS SHALL BE SANS SERIF. CHARTERS SHALL NOT BE ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR OF OTHER UNUSUAL FORMS.
3. CHARACTER SHALL BE SELECTED FROM FONTS WHERE THE WIDTH OF THE UPPERCASE LETTER 'O' IS 60 PERCENT MINIMUM AND 110 PERCENT MAXIMUM OF THE HEIGHT OF THE UPPERCASE LETTER 'I'.
4. SPACING BETWEEN THE BASELINES OF SEPARATE LINES OF RAISED CHARACTERS WITHIN A MESSAGE SHALL BE 135 PERCENT MINIMUM AND 170 PERCENT MAXIMUM OF THE CHARACTER HEIGHT.
5. TEXT SHALL BE IN HORIZONTAL FORMAT.
6. CHARACTERS AND THEIR BACKGROUND SHALL HAVE A NON-GLARE FINISH AND CONTRAST WITH ONE ANOTHER

B. RAISED CHARACTER REQUIREMENTS FOR SIGNS WITH BRAILLE PER 2022 CBC 11B-703.2:
1. RAISED CHARACTERS SHALL COMPLY WITH REQUIREMENTS NOTED IN PARAGRAPH 'A' ABOVE
2. RAISED CHARACTERS SHALL BE 1/32 INCH MIN ABOVE BACKGROUND.
3. RAISED CHARACTER HEIGHT MEASURED VERTICALLY FROM THE BASELINE OF THE CHARACTER SHALL BE 5/8 INCH MINIMUM AND 2 INCHES MAXIMUM BASED ON THE HEIGHT OF THE UPPERCASE LETTER 'I'.
4. STROKE THICKNESS OF THE UPPERCASE LETTER 'I' SHALL BE 10 PERCENT MINIMUM AND 15 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.
5. CHARACTER SPACING BETWEEN INDIVIDUAL RAISED LETTERS SHALL BE 1/8 INCH MINIMUM AND FOUR (4) TIMES THE RAISED CHARACTER STROKE WIDTH MAXIMUM.

C. VISUAL CHARACTER REQUIREMENTS FOR SIGNS WITHOUT BRAILLE PER 2022 CBC 11B-703.5:
1. VISUAL CHARACTERS SHALL COMPLY WITH REQUIREMENTS NOTED IN PARAGRAPH 'A' ABOVE
2. MINIMUM CHARACTER HEIGHT SHALL CONFORM TO 2022 CBC TABLE 11B-703.5.5 BUT IN NO CASE SHALL BE LESS THAN 5/8 INCH.
3. HEIGHT FROM FINISH FLOOR SHALL BE NO LESS THAN 40 INCHES.
4. STROKE THICKNESS OF THE UPPERCASE LETTER 'I' SHALL BE 10 PERCENT MINIMUM AND 20 PERCENT MAXIMUM OF THE HEIGHT OF THE CHARACTER.
5. SPACING BETWEEN INDIVIDUAL CHARACTERS SHALL BE 10 PERCENT MINIMUM AND 35 PERCENT MAXIMUM OF CHARACTER HEIGHT.

CHARACTER AND STROKE WIDTH TO HEIGHT PROPORTIONS.

1:1:1 MAX 110%	3:5 MIN 60%	3:20 MAX 15% (TACTILE)	1:5 MAX 20% (NON-TACTILE)	1:10 MIN 10%
CHARACTER WIDTH (UPPERCASE LETTER "O")		STROKE THICKNESS(UPPERCASE LETTER "I")		

12 CHARACTER REQ. FOR SIGNAGE
1" = 1'-0"

CEILING HEIGHT /TRANSOM WINDOW SILL
(N) / (E) WOOD STUD WALL
(N) / (E) 5/8" GYP BOARD
ADHESIVELY SECURED. PER MANUFACTURERS DETAIL
VINYL FABRIC COVER 1/4" CORK BOARD
FLOOR LEVEL

TACKBOARD ON GYP BD WOOD FRAMING WALL

CEILING HEIGHT /TRANSOM WINDOW SILL
(E) BRICK WALL
ADHESIVELY SECURED. PER MANUFACTURERS DETAIL
VINYL FABRIC COVER 1/4" CORK BOARD
FLOOR LEVEL

TACKBOARD ON (E) BRICK WALL

6 TACKBOARD DETAIL
3" = 1'-0"

MOUNTING BRACKET REFER TO SPECIFICATION & VERIFY WITH MANUFACTURER FOR SPECIFIC SIZES OF HOLES & TYPES OF SCREWS. PROVIDE BACKING AS REQUIRED.
+48" MAX TO FIRE EXT. HANDLE OR CABINET HANDLE
FIRE EXTINGUISHER PER PLAN
WALL PER PLAN
TYPE 'X' GYP BOARD, WO. FINISH FLOOR
4" MAX.

29 WALL MOUNT FIRE EXTINGUISHER
3" = 1'-0"

9"
EQ
6"
EQ
2"
10"
8"
EQ
EQ
CORNERS SHALL HAVE 3/8" RADIUS, TYP
INTERNATIONAL SYMBOL OF ACCESS FOR HEARING LOSS
+60" AFF
PICTOGRAM SHALL CONTRAST WITH BACKGROUND AND HAVE A NON-GLARE FINISH
ASSISTIVE LISTENING SYSTEM AVAILABLE
5/8" MIN CHARACTER HEIGHT. HELVETICA NARROW.

NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK PLASTIC W/ 1/32" RAISED LETTERS
2. MOUNT W/ VANDAL RESISTANT FASTENERS
3.COMPLY WITH VISUAL CHARACTERS PER CBC 1143A.5

101400.13-S CBC 2022 - Rev 3/17

23 ASSISTIVE LISTENING SIGNAGE
3" = 1'-0"

9"
EQ
EQ
6"
EQ
EQ
5/8" MIN CHARACTER HEIGHT. HELVETICA NARROW. SEE ALSO
+84" AFF
MAXIMUM OCCUPANCY 200
VERIFY # PER PLAN
CORNERS SHALL HAVE 3/8" RADIUS, TYP

NOTES:
1. SIGN MATERIAL SHALL BE 1/4" THICK PLASTIC
2. MOUNT W/ VANDAL RESISTANT FASTENERS
3.COMPLY WITH VISUAL CHARACTERS PER CBC 1143A.5

101400.14-S CBC 2022 - Rev 7/17

17 OCCUPANT LOAD SIGN
3" = 1'-0"

BRAILLE REQUIREMENTS PER 2019 CBC 11B-703.3:
1. CONTRACTED CALIFORNIA GRADE 2 BRAILLE SHALL COMPLY WITH SECTIONS 11B-703.3 AND 11B-703.4
2. BRAILLE DOTS SHALL HAVE A DOMED OR ROUNDED SHAPE AND COMPLY WITH TABLE 11B-703.3.1
3. DOT BASE DIAMETER = 0.059 TO 0.063 INCHES
4. DISTANCE BETWEEN TWO DOTS IN THE SAME CELL = 0.100 INCHES
5. DISTANCE BETWEEN CORRESPONDING DOTS IN ADJACENT CELLS = 0.300 INCHES
6. DOT HEIGHT = 0.025 TO 0.037 INCHES
7. DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW = 0.395 TO 0.400 INCHES
8. SPACING BETWEEN DOTS AND CELLS PER BELOW, MEASURED CENTER TO CENTER...

5. SPACING BETWEEN CELLS
SINGLE BRAILLE CELL
RAISED DOT
NO RAISED DOT
BLANK CELL SPACE BETWEEN WORDS
4. SPACING BETWEEN DOTS (VERTICAL OR HORIZONTAL)
7. DISTANCE BETWEEN CORRESPONDING DOTS FROM ONE CELL DIRECTLY BELOW

9. BRAILE SHALL BE POSITIONED BELOW THE CORRESPONDING TEXT IN A HORIZONTAL FORMAT, FLUSH LEFT OR CENTERED. IF TEXT IS MULTI-LINED, BRAILLE SHALL BE PLACED BELOW THE ENTIRE TEXT. BRAILLE SHALL BE SEPARATED 3/8" (9.5MM) MIN. AND 1/2 INCH (12.7MM) MAXIMUM FROM ANY OTHER TACTILE CHARACTERS AND 3/8" MIN. FROM RAISED BORDERS AND DECORATIVE ELEMENTS.

11 BRAILLE STANDARDS FOR SIGNAGE
6" = 1'-0"

5/8" GYP BOARD
#12 WOOD SCREW @ 16" O.C. @ 1-1/2" MIN. EMBED INTO BLOCKING
VARIES TO FIN. FLR.
CORK INSERT
MAP RAIL
MARKERBOARD TRIM AS SPECIFIED
SOLID BLOCKING W/ A34 TOP & BOTTOM AT EA. END
MARKER TRAY W/ END PLATES EACH END
4" MAX
WOOD STUDS BEHIND
MARKERBOARD ON GYP BD WOOD FRAMING WALL

CORK INSERT
MAP RAIL
MARKERBOARD TRIM AS SPECIFIED
1/2" SIMPSON TITEN HD @ 16" O.C. 2-1/2" MIN. EMBED . ICC ESR 1056
MARKER TRAY W/ END PLATES EACH END
(E) BRICK WALL BEHIND
MARKERBOARD ON (E) BRICK WALL

5 MARKERBOARD DETAIL
3" = 1'-0"

28 RESTROOM SIGNAGE
1/2" = 1'-0"

CORNERS SHALL HAVE 3/8" RADIUS, TYP
ATTACH WITH VANDALL RESISTANT SCREWS PER SPEC, TYP
FONT = HELVETICA NARROW CHARACTER HEIGHT = 1"
9"
CONFERENCE 100-A
4"
+60" MAX AFF
1 1/4"
3/8"
+48" MIN AFF
VERIFY ROOM NAME AND NUMBER WITH OWNER PRIOR TO FABRICATION

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

101400.11-S CBC 2022- Rev 09/19

22 TYP. ROOM ID SIGN
6" = 1'-0"

NOT USED
6"
CORNERS SHALL HAVE 3/8" RADIUS, TYP
FONT = HELVETICA NARROW CHARACTER HEIGHT = 1" SEE ALSO SPEC AND
12 A8.02 TYP
4"
EXIT ROUTE
EXIT
BRAILLE PER 11 A8.02 TYP
(A)
(B)
48" MIN AFF *
60" MAX AFF *
4"

* 60" MAX A.F.F. TO THE BASELINE OF THE HIGHEST LINE OF RAISED CHARACTERS & 48" MIN. A.F.F. TO THE BASELINE OF THE LOWEST BRAILLE CELLS

101400.12-S CBC 2022 - Rev 10/19

16 TACTILE EXIT SIGNS
3" = 1'-0"

NOTE:
PROVIDE SPACES AS NEEDED SO SIGNAGE IS WITHIN 3" OF WINDOW FRAME

MOUNTING AT DBL. GLAZING
WINDOW FRAME
SAME HEIGHT, WIDTH, CORNER RADIUSES- MIRROR BACK TO BACK
3" TYP.
GLAZING
BLANK PLATE/ SIGNAGE, AS OCCURS. PROVIDE BLANK IF NO SIGNAGE OCCURS. MOUNTED WITH CLEAR ADHESIVE SILICONE.
ALIGN EACH END, TYP.
SIGNAGE MOUNTED WITH CLEAR SILICONE ADHESIVE

MOUNTING AT SGL. GLAZING
WINDOW FRAME
SAME HEIGHT, WIDTH, CORNER RADIUSES- MIRROR BACK TO BACK
3" TYP.
BLANK PLATE/ SIGNAGE, AS OCCURS. PROVIDE BLANK IF NO SIGNAGE OCCURS. MOUNTED WITH CLEAR ADHESIVE SILICONE.
GLAZING
ALIGN EACH END, TYP.
SIGNAGE MOUNTED WITH CLEAR SILICONE ADHESIVE

MOUNTING AT C.M.U WALL
C.M.U WALL
AT SPLIT FACE WALL GRIND SMOOTH HIGH POINTS AS NEEDED TO ALLOW PLUMB INSTALLATION
SIGNAGE MOUNTED TO MATERIAL/SURFACE WITH MECHANICAL FASTENERS & CLEAR SILICONE ADHESIVE.

4 ROOM IDENTIFICATION SIGN MOUNTING
3" = 1'-0"

27 GRAB BAR MOUNT1
3" = 1'-0"

4x6 BLOCKING W/ (2) SIMP. A34 FRAMING CLIPS TOP & BOTTOM. EACH END OF BLOCKING
FILL ALL HOLES IN MANUFACTURER MOUNTING PLATE W/ 1/4" LAG SCREWS W/ 2" MIN. EMBED INTO BLOCKING. MIN (4) SCREWS
1 1/2" CLR
GRAB BAR 1-1/4" O.D. MIN. & 2" O.D. MAX. PER CBC 11B-609.2.1
FOR MOUNTING HEIGHT REFER TO TABLE ON 8 /
MIN. 1" EDGE DISTANCE
ESCUTCHEON PLATE O/ GRAB BAR BRACKET
CERAMIC TILE, U.N.O.
CEMENTITIOUS BACKER BOARD, U.N.O.

MORTAR BED TO BE USED IN MULTI - OCCUPANT RESTROOMS
THIN - SET TO BE USED IN SINGLE - OCCUPANT RESTROOMS
5/8" GYPSUM WATER RESISTANT BACKER
WALL TILE - REFER TO FINISH SCHEDULE
WATERPROOF MEMBRANE TO EXTEND 24" UP FACE OF WALL
COVE TILE BASE - REFER TO FINISH PLAN
FLOOR TILE. PER SPECS SECTION 093000
WATERPROOF FLOOR MEMBRANE
MORTAR BED OR THIN SET PER SPECS SECTION 093000- 2.5 - SETTING MATERIALS

NOTE:
PROVIDE HOT MOP AT RESTROOM WALLS WITH NO CURB OR SINGLE OCCUPANT RESTROOMS

21 TYPICAL TILE WALL BASE
6" = 1'-0"

7'-0" WHERE APPLIES
BULLNOSE COLOR: WHITE SIZE: 4-1/4" X 4-1/4"
ACCENT TILE A COLOR: SEE SPEC # 09 30 00 SIZE: 4-1/4" X 4-1/4"
WALL TILE - FIELD COLOR: WHITE SIZE: 4-1/4" X 4-1/4"
COVE BASE COLOR: WHITE SIZE4 4-1/4" X 4-1/4"
21 A8.02

9 Non-Accessible Restroom Sign
3" = 1'-0"

(E) MENS AND WOMENS RESTROOM FIXTURES, ACCESSORIES, AND FINISHES TO REMAIN. INSTALL NEW GRAB BARS AT ADULT HEIGHT PER DETAIL 27 / A8.02
36" MIN.
36" MAX.
42" MIN.
12" MAX.
36" MAX.

3 GRAB BAR MOUNTING @ STAFF R.R.
1/2" = 1'-0"

26 DOOR INFILL DETAIL
1/2" = 1'-0"

(E) HEADER TO REMAIN
REMOVE (E) WALL FINISH AS REQUIRED TO ALLOW INFILL FRAMING
2X STUD FRAMING INFILL TO MATCH (E) STUD. PER STRUCT DETL 10/SD1
(E) F.F./F.S.
INTERIOR DRYWALL TO MATCH EXISTING AND ALIGN WITH EXISTING ADJACENT DRYWALL SURFACES. PAINT TO MATCH EXISTING
TOP PLATE TO HEADER PER STRUCT DETL 10/SD1
2X STUD TO MATCH EXISTING PER STRUCT DETL 10/SD1
FOR VERTICAL STUD ATTACHMENT REFER TO STRUCT DETL 10/SD1
2X P.T. SILL PER STRUCT DETL 10/SD1

20 TOP CONNECTION - PERPENDICULAR
1 1/2" = 1'-0"

(E) GLB 5-1/4"X 20-1/2" V.O.S.
(E) 2X12 @24" O.C. ROOF JOIST V.O.S.
(N) 2x BLKG EVERY 4'-0"
1" GAP
1" GAP
(N) DOUBLE TOP PLATE
NON-BEARING PARTITION
CONT. 3x6 FLAT
10d NAIL @ 6" O.C. INTO VERT. BLKG
2-10d NAIL INTO ROOF JOISTS

19 ROOM IDENTIFICATION SIGNAGE
1 1/2" = 1'-0"

9" MIN.
ROOM SIGN PER 22 A8.02
9" MIN.
ROOM SIGN PER 22 A8.02
SCHED FRAME WIDTH
9" MIN.
ROOM SIGN PER 22 A8.02
DETL 9/G0.04
DETL 9/G0.04
EQ EQ
36" AFF TO CENTER OF DOOR SIGN

ELEVATION
9" MIN.
ROOM SIGN PER 22 A8.02
DETL 9/G0.04
DETL 9/G0.04
MOUNT DETAILS
ROOM EXIT SIDE
MOUNT DETAILS
ROOM ENTRY SIDE

ELEVATION
(B) ROOM SIGN C.B.C. FIGURE 11B-703.4.1
REFER TO MOUNTING DETAILS 4 A8.02
CLASSROOM
4"
4".
OPTION 2 SIGN PLACEMENT
OPTION 1 SIGN PLACEMENT
ROOM SIGNAGE PER 22 A8.02
(A) BUILDING ENTRY ROOM SIGN
COLOR TO BE SELECTED BY ARCHITECT (LIGHT TEXT / DARK BACKGROUND)

NOTES:
1. FOR CHARACTER TYPE & BRAILLE, SEE ALSO DETAIL 12 A8.02 11 A8.02
2. SIGN MATERIAL SHALL BE PAINTED, 1/8" THICK ES PLASTIC USING GRAPHIC PROCESS SAND-CARVED W/ 3/32" RAISED GRAPHIC AND LETTERS. PROVIDE MECHANICAL MOUNTING W/ COUNTERSUNK, VANDAL RESISTANT #8 FASTENERS. MOUNT ON GLAZING WITH CLEAR SILICONE ADHESIVE AND A SECOND SIGN OR BLANK ALIGNED ON THE OTHER SIDE OF GLAZING TO MASK THE ADHESIVE.
3. PROVIDE ONE SIGN WHERE INDICATED ON PLANS OR SCHEDULE.
4. SIGNS SHALL BE INSTALLED ON THE WALL ADJACENT TO THE LATCH SIDE OF THE DOOR, WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE, INCLUDING DOUBLE LEAF DOORS, SIGNS SHALL BE PLACED ON THE NEAREST ADJACENT WALL, PREFERABLY ON THE RIGHT. MOUNTING LOCATION SHALL BE DETERMINED SO THAT A PERSON MAY APPROACH WITHIN 3" OF SIGNAGE WITHOUT ENCOUNTERING PROTRUDING OBJECTS OR STANDING WITHIN THE SWING OF A DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING IS LIMITED TO 90 DEGREES, MOUNT SIGN 9" FROM EDGE OF DOOR. FOR PAIRS OF DOORS WHERE DOOR SWING ECCEEDS 90 DEGREES, MOUNT SIGN DOOR WIDTH PLUS 9" FROM EDGE OF DOOR.

14 TOP CONNECTION - PARALLEL
1 1/2" = 1'-0"

(E) ROOF FRAMING PER PLAN V.O.S.
(E) 2X12 @24" O.C. ROOF JOIST V.O.S.
(N) 3-10D NAIL
(N) 2x BLKG
(N) 2X4 BRACE @ 32" O.C. MAX. TYP. 6'-0" MAX LENGTH
(N) 2X BLKG W/ (2) SIMPSON A-35 FRAMING CLIPS EA END, EA SIDE OF BLKG W/ (3) 10d NAILS @ EA LEG OF EA CLIP
PERPENDICULAR FRAMING
PARALLEL FRAMING
CEILING LINE
(N) 3-10D NAIL
SEE STRUCTURAL DRAWING 9/SD1
(N) STUD WALL

7 (N) WALL TO (E) BRICK WALL
3" = 1'-0"

(E) BRICK WALL TO REMAIN
(N) 4x4 TILE FINISH
(N) WATERPROOFING MEMBRANE
(N) 5/8" GYPSUM BOARD
SEE STRUCTURAL POST-INSTALLED ANCHOR BOLTS STRUCTURAL SHEET SN1
1/2" DIA. SIMPSON HY270 EPOXY ANCHORS (ICC-ESR #4143)
(N) 2x6 STUD WALL

15 TILE FINISH ELEVATION
1/2" = 1'-0"

8"
CORNERS SHALL HAVE 3/8" RADIUS, TYP.
1/2"
10"
ACCESSIBLE RESTROOM AT BUILDING A&B
5/8" MIN. CHARACTER HEIGHT. HELVETICA NARROW
1/2"

2 B- PARTITION TYPE
3" = 1'-0"

TOP PLATE BRACING. REFER TO 14 A8.02 20 A8.02
(E) STRUCTURE
HEAD
SOUND ATTENUATION BLANKET (FULL HEIGHT) - REFER TO TYP. NOTES. ONLY AT RESTROOMS
2X BLOCKING @ 8'-0" O.C. SEE FLOOR PLAN FOR PARTITION TYPE & CORE WIDTH WALL TAG.
PLAN
2X VERTICAL WOOD STUDS @16" O.C. SEE FLOOR PLAN FOR PARTITION TYPE & CORE WIDTH WALL TAG.
5/8" TYPE "X" GYPSUM BOARD
SCHEDULED TILE W/ BACKER BOARD WHERE OCCURS - REFER TO FINISH SCHEDULE
BASE
5/8" DIA THREADED ROD @ 4'-0" O.C. INSTALL W/ HILTI HIT-HY 200 (ICC-ES ESR-3187) PULL TEST = 2,000)
2X PTDF SILL PLATE
7'-2" TILE FINISH WHERE OCCURS
REST ROOM SIDE
F.F.
2 #4 CONT REBAR
6" CONC BASE
CLEAN & ROUGHEN (E) SLAB, BY 1/4" MIN. CONCRETE DEPTH.
ACOUSTICAL SEALANT AT NON-RATED WALLS
3" MIN
FOR TOILET CONDITION

1 A- PARTITION TYPE
3" = 1'-0"

TOP PLATE BRACING. REFER TO 14 A8.02 20 A8.02
(E) STRUCTURE
HEAD
SOUND ATTENUATION BLANKET (FULL HEIGHT) - REFER TO TYP. NOTES. ONLY AT RESTROOMS
2X BLOCKING @ 8'-0" O.C. SEE FLOOR PLAN FOR PARTITION TYPE & CORE WIDTH WALL TAG.
PLAN
2X VERTICAL WOOD STUDS @16" O.C. SEE FLOOR PLAN FOR PARTITION TYPE & CORE WIDTH WALL TAG.
5/8" TYPE "X" GYPSUM BOARD
BASE
(N) SHOT PINS (HILTI X-U 0.157 WITH EMBED=1-1/2" INTO (E) SLAB-ON-GRADE AT 16-IN O.C. (ICC-ESR#2269), OR 3/8-IN HILTI EXPANSION BOLT KWIK BOLT-TZ2 (ICC-ESR#4266) AT 32-IN O.C.
SCHEDULED BASE WHERE OCCURS
2X PTDF SILL PLATE
F.F.

FILE PATH: Z:\Projects\...
9/14/2023 5:59:40 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M.P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3

KEY PLAN
NORTH: N PLAN

Consultant

Architect
LICENSED ARCHITECT Tong Yoo No. C-31162 REN. 10-31-2024 STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

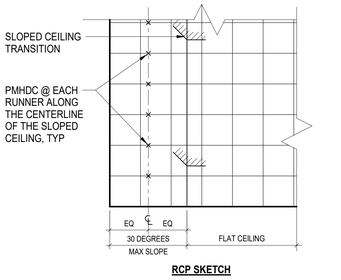
No.	Description	Date

DSA Submittal

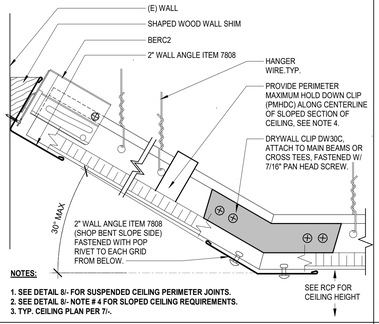
PARTITION TYPES AND MISC. DETAILS

A8.02

0" 1"



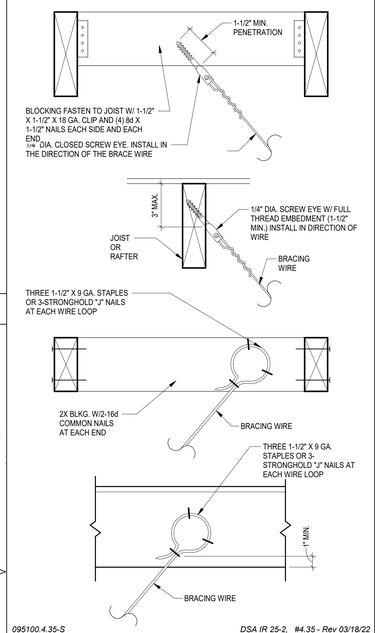
RCP SKETCH



NOTES:

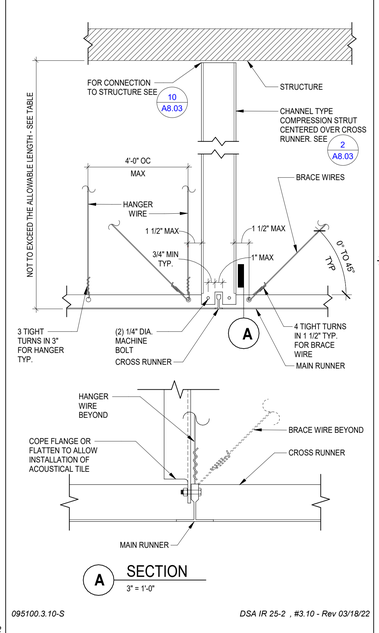
1. **SEE DETAIL 8/- FOR SUSPENDED CEILING PERIMETER JOINTS.**
2. **SEE DETAIL 8/- NOTE # 4 FOR SLOPED CEILING REQUIREMENTS.**
3. **TYP. CEILING PLAN PER ?/-.**

24 SLOPED CEILING
6" = 1'-0"



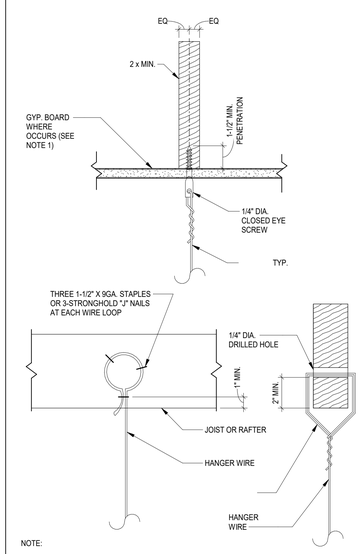
095100.4.35-S DSA IR 25-2, #4.35 - Rev 03/18/22

22 BRACING WIRE TO WOOD
3" = 1'-0"



095100.3.10-S DSA IR 25-2 , #3.10 - Rev 03/18/22

21 COMPRESSION STRUT - CHANNEL
1 1/2" = 1'-0"

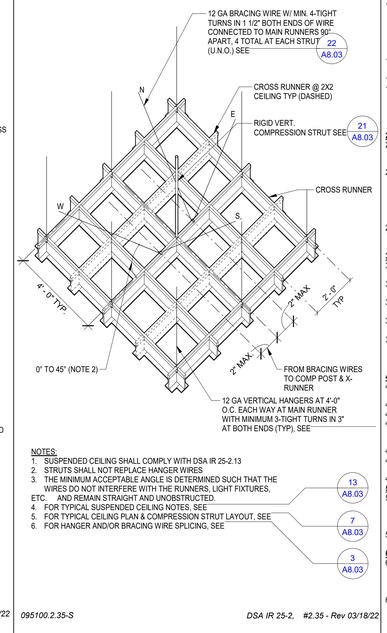


NOTE:

(1) WHEN FIRE RATED GYP. BOARD IS INSTALLED ON THE BOTTOM FLANGES, USE SCREW EYES W/ SUFFICIENT LENGTH TO AVOID DAMAGING THE FIRE RATED GYP. BOARD AND MEET MIN. PENETRATION.

095100.4.25-S DSA IR 25-2, #4.25 - Rev 03/18/22

20 SUSPENDED CEILING SYSTEM
3/8" = 1'-0"



NOTES:

1. SUSPENDED CEILING SHALL COMPLY WITH DSA IR 25-2.13
2. STRUTS SHALL NOT REPLACE HANGER WIRES
3. THE MINIMUM ACCEPTABLE ANGLE IS DETERMINED SUCH THAT THE WIRES DO NOT INTERFERE WITH THE RUNNERS, LIGHT FIXTURES, ETC. AND REMAIN STRAIGHT AND UNOBSTRUCTED. 13 A8.03
4. FOR TYPICAL SUSPENDED CEILING NOTES, SEE
5. FOR TYPICAL CEILING PLAN & COMPRESSION STRUT LAYOUT, SEE 7 A8.03
6. FOR HANGER AND/OR BRACING WIRE SPLICING, SEE 3 A8.03

095100.2.35-S DSA IR 25-2, #2.35 - Rev 03/18/22

1. CEILING SYSTEM GENERAL NOTES:

1.01 CEILING SYSTEM COMPONENTS SHALL COMPLY WITH ASTM C635-07 AND SECTION 5.1 OF ASTM E580-10a.
1.02 THE CEILING GRID SYSTEM MUST BE RATED HEAVY DUTY AS DEFINED BY ASTM C635-08.
1.03 CEILING SYSTEMS: THE FOLLOWING CEILING SYSTEM(S) IS/ARE PART OF THE SCOPE OF THIS PROJECT:
MANUFACTURER'S NAME ARMSTRONG WORLD INDUSTRIES, INC.
PRODUCT EVALUATION REPORT TYPE AND NUMBER ICC ESR-1308
MANUFACTURER'S MODEL NUMBER - MAIN RUNNER ARMSTRONG:HEAVY DUTY PRELUDE XL 7301
MANUFACTURER'S CATALOG NUMBER - CROSS RUNNER ARMSTRONG: XL7328
1.04 SEISMIC WALL CLIP:
MANUFACTURER'S MODEL BERC2
1.05 CEILING PANELS SHALL NOT SUPPORT ANY LIGHT FIXTURES, AIR TERMINALS OR DEVICES.
1.06 FOR CEILING INSTALLATIONS UTILIZING ACOUSTICAL TILE PANELS OF MINERAL OR GLASS FIBER, IT IS NOT MANDATORY TO PROVIDE 3/4" CLEARANCE BETWEEN THE ACOUSTICAL TILE PANELS AND THE WALL ON THE SIDES OF THE CEILING WHICH ARE FREE TO SLIP. FOR ALL OTHER CEILING PANEL TYPES, PROVIDE 3/4" CLEARANCE BETWEEN THE CEILING PANEL AND THE WALL ON THE SIDES OF THE CEILING FREE TO SLIP.

2. MATERIALS:

2.01 CEILING WIRE SHALL BE CLASS 1 ZINC COATED (GALVINIZED) CARBON STEEL CONFORMING TO ASTM A641-09a. WIRE SHALL BE #12 GAGE (0.106" DIAMETER) WITH SOFT TEMPER AND MINIMUM TENSILE STRENGTH = 70 KSI.
2.02 GALVANIZED SHEET STEEL (INCLUDING THAT USED FOR METAL STUD AND TRACK COMPRESSION STRUTS/POST) SHALL CONFORM TO ASTM A6453-11, OR OTHER EQUIVALENT SHEET STEEL LISTED IN SECTION A2.1 OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS 2007, INCLUDING SUPPLEMENT 2 DATED 2010 (AISI S100-07/S2-10). MATERIAL 43 MIL (18 GAGE) AND LIGHTER SHALL HAVE A MINIMUM YIELD STRENGTH OF 32 KSI. MATERIAL 54 MIL (16 GAGE) AND HEAVIER SHALL HAVE A MINIMUM YIELD STRENGTH OF 50 KSI.
2.03 ELECTRICAL METALLIC TUBE (EMT) SHALL BE ANSI C80.3/UL 797 CARBON STEEL WITH G90 GALVANIZING. EMT SHALL HAVE MINIMUM YIELD STRENGTH (Fy) OF 30 KSI AND MINIMUM ULTIMATE STRENGTH (Fu) OF 48 KSI.

3. ATTACHMENT OF HANGER AND BRACING WIRES:

3.01 SEPARATE ALL CEILING HANGER AND BRACING WIRES AT LEAST SIX (6) INCHES FROM ALL UNBRACED DUCTS, PIPES, CONDUIT, ETC.
3.02 HANGER AND BRACING WIRES SHALL NOT ATTACH TO OR BEND AROUND OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO: PIPING, DUCTWORK, CONDUIT AND EQUIPMENT.
3.03 HANGER WIRES THAT ARE MORE THAN ONE (HORIZONTAL) IN SIX (VERTICAL) OUT OF PLUMB SHALL HAVE COUNTER-SLOPING WIRES.
3.04 SLACK SAFETY WIRES SHALL BE CONSIDERED HANGER WIRES FOR INSTALLATION AND TESTING REQUIREMENTS.
3.05 HANGER AND BRACING WIRE ANCHORAGE TO THE STRUCTURE SHALL BE INSTALLED IN SUCH A MANNER THAT THE DIRECTION OF THE ANCHORAGE ALIGNS CLOSELY WITH THE DIRECTION OF THE WIRE. (E.G. BRACING WIRE CEILING CLIPS MUST BE BENT AS SHOWN IN THE DETAILS AND ROTATED AS REQUIRED TO ALIGN CLOSELY WITH THE DIRECTION OF THE WIRE, ETC.)

4. FASTENERS AND WELDING:

4.01 SHEET METAL SCREWS SHALL COMPLY WITH ASTM C1513-10, ASME B18.6.4-89 (R2005): PENETRATION OF SCREWS THROUGH JOINED MATERIAL SHALL NOT BE LESS THAN THREE EXPOSED THREADS.
4.02 EXPANSION ANCHORS SHALL BE: NA
4.03 POWER-ACTUATED FASTENERS SHALL BE: NA
4.04 IF NOT OTHERWISE SPECIFIED IN THE EVALUATION REPORT, POWER-ACTUATED FASTENERS INSTALLED IN STEEL SHALL BE INSTALLED SO THE ENTIRE POINTED END OF THE FASTENER IS DRIVEN THROUGH THE STEEL MEMBER.
4.05 POWER-ACTUATED FASTENERS IN CONCRETE ARE NOT PERMITTED FOR BRACING WIRES.
4.06 CONCRETE REINFORCEMENT AND PRESTRESSING TENDONS SHALL BE LOCATED BY NON DESTRUCTIVE MEANS PRIOR TO INSTALLING POST - INSTALLED ANCHOR.
4.07 WELDING SHALL BE IN ACCORDANCE WITH AWS D1.3 USING E60XX SERIES ELECTRODES.

5. TESTING: ALL FIELD TESTING MUST BE PERFORMED IN THE PRESENCE OF THE PROJECT INSPECTOR.

5.01 POST-INSTALLED ANCHORS IN CONCRETE USED TO SUPPORT HANGER WIRES SHALL BE TESTED AT A FREQUENCY OF 10 PERCENT. POWER ACTUATED FASTENERS IN CONCRETE SHALL BE FIELD TESTED FOR 200 LBS. IN TENSION. ALL OTHER POST-INSTALLED ANCHORS IN CONCRETE SHALL BE TESTED IN ACCORDANCE WITH CBC SECTION 1913A.7.
5.02 POST-INSTALLED ANCHORS IN CONCRETE USED TO ATTACH BRACING WIRES SHALL BE TESTED AT A FREQUENCY OF 50 PERCENT IN ACCORDANCE WITH CBC SECTION 1913A.7.

6. LIGHT FIXTURES:

6.01 ALL LIGHT FIXTURES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS TO RESIST A HORIZONTAL FORCE EQUAL TO THE WEIGHT OF THE FIXTURE. A MINIMUM OF TWO SCREWS OR APPROVED FASTENERS ARE REQUIRED AT EACH LIGHT FIXTURES, PER ASTM E580, SECTION 5.3.1.
6.02 SURFACE-MOUNTED LIGHT FIXTURES SHALL BE ATTACHED TO THE MAIN RUNNER WITH AT LEAST TWO POSITIVE CLAMPING DEVICES. THE CLAMPING DEVICE SHALL COMPLETELY SURROUND THE SUPPORTING CEILING RUNNER AND BE MADE OF STEEL WITH A MINIMUM THICKNESS OF #14 GAGE. ROTATIONAL SPRING CATCHES DO NOT COMPLY. A #12 GAGE SLACK SAFETY WIRE SHALL BE CONNECTED FROM EACH CLAMPING DEVICE TO THE STRUCTURE ABOVE. PROVIDE ADDITIONAL SUPPORTS WHEN LIGHT FIXTURES ARE EIGHT (8) FEET OR LONGER OR EXCEED 56 LB. MAXIMUM SPACING BETWEEN SUPPORTS SHALL NOT EXCEED EIGHT (8) FEET.
6.03 LIGHT FIXTURES WEIGHING LESS THAN OR EQUAL TO 10 LB. SHALL HAVE A MINIMUM OF ONE (1) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE.
6.04 LIGHT FIXTURES WEIGHING GREATER THAN 10 LB. BUT LESS THAN OR EQUAL TO 56 LBS. MAY BE SUPPORTED DIRECTLY ON THE CEILING RUNNERS, BUT THEY SHALL HAVE A MINIMUM OF TWO (2) #12 GAGE SLACK SAFETY WIRE CONNECTED FROM THE FIXTURE HOUSING AT DIAGONAL CORNERS TO THE STRUCTURE ABOVE.
EXCEPTION: ALL LIGHT FIXTURES GREATER THAN TWO BY FOUR FEET WEIGHING LESS THAN 56LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE AT EACH CORNER.
6.05 ALL LIGHT FIXTURES WEIGHING GREATER THAN 56 LB. SHALL BE INDEPENDENTLY SUPPORTED BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES (ONE AT EACH CORNER) ATTACHED FROM THE FIXTURE HOUSING TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS. THE FOUR (4) TAUT #12 GAGE WIRES OR OTHER APPROVED HANGERS, INCLUDING THEIR ATTACHMENT TO THE STRUCTURE ABOVE, SHALL BE CAPABLE OF SUPPORTING FOUR (4) TIMES THE WEIGHT OF THE FIXTURE.

7. SERVICES WITHIN THE CEILING:

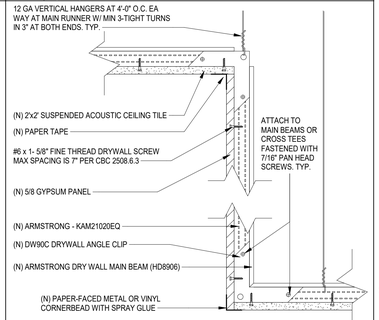
7.01 ALL FLEXIBLE SPRINKLER HOSE FIRRING MOUNTING BRACKETS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES SHALL BE POSITIVELY ATTACHED TO THE CEILING SUSPENSION SYSTEMS BY MECHANICAL MEANS. SCREWS OR APPROVED FASTENERS ARE REQUIRED. A MINIMUM OF TWO ATTACHMENTS ARE REQUIRED AT EACH COMPONENT.
7.02 CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING LESS THAN OR EQUAL TO 20 LB. SHALL HAVE ONE (1) #12 GAGE SLACK SAFETY WIRE ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
7.03 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 20 LB. BUT LESS THAN OR EQUAL TO 56 LB. SHALL HAVE TWO (2) #12 GAGE SLACK SAFETY WIRES (AT DIAGONAL CORNERS) CONNECTED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE.
7.04 FLEXIBLE SPRINKLER HOSE FITTINGS, CEILING-MOUNTED AIR TERMINALS OR OTHER SERVICES WEIGHING MORE THAN 56 LB. SHALL BE SUPPORTED DIRECTLY FROM THE STRUCTURE ABOVE BY NOT LESS THAN FOUR (4) TAUT #12 GAGE HANGER WIRES ATTACHED FROM THE TERMINAL OR SERVICE TO THE STRUCTURE ABOVE OR OTHER APPROVED HANGERS.

8. OTHER DEVICES WITHIN THE CEILING:

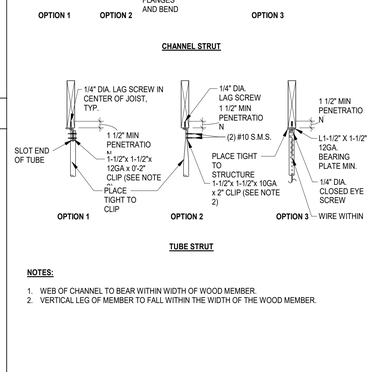
8.01 ALL LIGHTWEIGHT MISCELLANEOUS DEVICES, SUCH AS STROBE LIGHTS, OCCUPANCY SENSORS, SPEAKERS, EXIT SIGNS, ETC., SHALL BE ATTACHED TO THE CEILING GRID. IN ADDITION, DEVICES WEIGHING MORE THAN 10 LBS. SHALL HAVE A #12 GAGE SLACK SAFETY WIRE ANCHORED TO THE STRUCTURE ABOVE. DEVICES WEIGHING MORE THAN 20 LB. SHALL BE SUPPORTED INDEPENDENTLY FROM THE STRUCTURE ABOVE.

095100.1.00-S DSA IR 25-2 - Rev 03/18/22

17 SOFFIT ELEVATION TRANSITION
3" = 1'-0"



11 SOFFIT CEILING SYSTEM
3" = 1'-0"



NOTES:

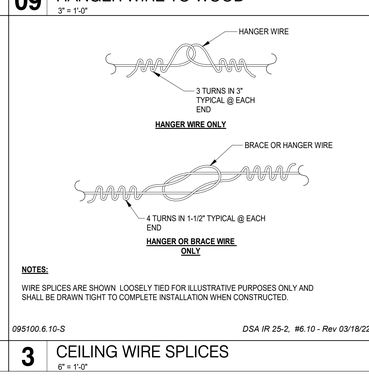
1. WEB OF CHANNEL TO BEAR WITHIN WIDTH OF WOOD MEMBER.
2. VERTICAL LEG OF MEMBER TO FALL WITHIN THE WIDTH OF THE WOOD MEMBER.

095100.5.60-S DSA IR 25-2, #5.60 - Rev 03/18/22

10 STRUT TO WOOD FRAMING
1" = 1'-0"

095000.12-S

4 ACCESS PANEL
3" = 1'-0"



NOTES:

WIRE SPLICES ARE SHOWN LOOSELY TIED FOR ILLUSTRATIVE PURPOSES ONLY AND SHALL BE DRAWN TIGHT TO COMPLETE INSTALLATION WHEN CONSTRUCTED.

095100.6.10-S DSA IR 25-2, #6.10 - Rev 03/18/22

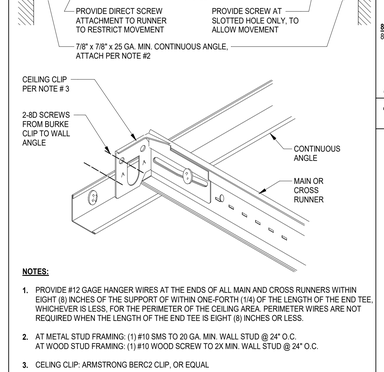
3 CEILING WIRE SPLICES
6" = 1'-0"

EMT COMPRESSION STRUT	MAXIMUM LENGTH
1/2" DIAMETER EMT (0.042" WALL THICKNESS)	3'-11"
3/4" DIAMETER EMT (0.049" WALL THICKNESS)	6'-4"
1" DIAMETER EMT (0.057" WALL THICKNESS)	9'-9"
1 1/4" DIAMETER EMT (0.065" WALL THICKNESS)	12'-9"
1 1/2" DIAMETER EMT (0.065" WALL THICKNESS)	14'-9"
2" DIAMETER EMT (0.065" WALL THICKNESS)	18'-10"

CHANNEL COMPRESSION STRUT	MAXIMUM LENGTH
250S125-33	5'-10"
250S137-33	6'-10"
362S137-33	8'-0"
250137-43	8'-10"
400S137-43	10'-10"

095100.3.21-S DSA IR 25-2, #3.21 - Rev 03/18/22

2 COMPRESSION STRUT TABLE
1/2" = 1'-0"

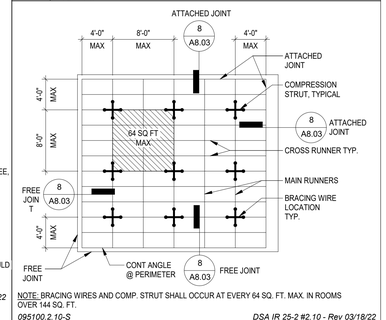


NOTES:

1. PROVIDE #12 GAGE HANGER WIRES AT THE ENDS OF ALL MAIN AND CROSS RUNNERS WITHIN EIGHT (8) INCHES OF THE SUPPORT OF WITHIN ONE-FORTH (1/4) OF THE LENGTH OF THE END TEE, WHICHEVER IS LESS. FOR THE PERIMETER OF THE CEILING AREA. PERIMETER WIRES ARE NOT REQUIRED WHEN THE LENGTH OF THE END TEE IS EIGHT (8) INCHES OR LESS.
2. AT METAL STUD FRAMING: (1) #10 SMS TO 20 GA. MIN. WALL STUD @ 24" O.C. AT WOOD STUD FRAMING: (1) #10 WOOD SCREW TO 2X MIN. WALL STUD @ 24" O.C.
3. CEILING CLIP: ARMSTRONG BERC2 CLIP, OR EQUAL
4. SLOPED CEILING: USE ACCEPTABLE SUSPENSION SYSTEM & ACCESSORIES. WALL ANGLE ARE PAINTED AND WALL SHIMMED TO ACHIEVE THE CORRECT ANGLE. 7/8" WALL ANGLE ITEM 7800 SHOULD BE USED.

095100.2.60-S DSA IR 25-2, #2.60 - Rev 03/18/22

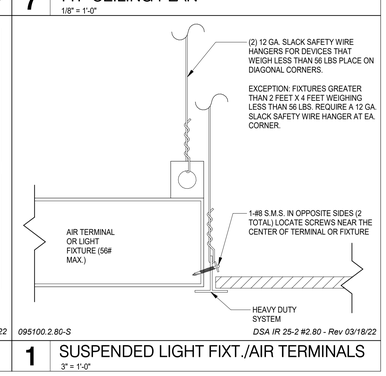
8 SUSPENDED CEILING PERIMETER JOINTS
6" = 1'-0"



NOTE: BRACING WIRES AND COMP. STRUT SHALL OCCUR AT EVERY 64 SQ. FT. MAX. IN ROOMS OVER 144 SQ. FT.

095100.2.10-S DSA IR 25-2 #2.10 - Rev 03/18/22

13 SUSPENDED CEILING NOTES
1/2" = 1'-0"



095100.2.80-S DSA IR 25-2 #2.80 - Rev 03/18/22

1 SUSPENDED LIGHT FIXT./AIR TERMINALS
3" = 1'-0"

FILE PATH: Z:\Projects\...
9/14/2023 5:59:45 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

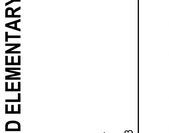
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Tong Yao
No. C-31162
REN. 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

CEILING DETAILS

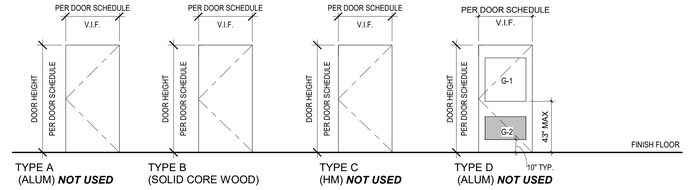
A8.03

A9.01 - DOOR SCHEDULE & WINDOW FRAMING ELEVATION

0" 1"

Door Schedule

DOOR #	ROOM NAME	BUILDING NAME	DOOR		DOOR SIZE WXH				FRAME			DETAILS			HARDWARE	FIRE RATING	PANIC HARDWARE	ACCESSIBLE SECURITY LOCKING HARDWARE
			DOOR TYPE	PAIR/SINGLE	WIDTH	HEIGHT	MATL	FINISH	FRAME TYPE	MATERIAL	FINISH	SILL	JAMB	HEAD				
A1-1	A-1	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A1-2	A-1	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A2-1	A-2	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A2-2	A-2	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A3-1	A-3	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A3-2	A-3	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A4-1	A-4	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
A4-2	A-4	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
A6-1	A-6	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
AD1-1	AD-1	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD2-1	AD-2	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD5-1	AD-5	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
AD6-2	AD-6	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD6-1	AD-6	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
AD7-1	AD-7	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
AD8-1	AD-8	BLDG ADMIN	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
B1-2	B-1	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B1-1	B-1	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B2-1	B-2	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B2-2	B-2	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B3-1	B-3	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B3-2	B-3	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B4-1	B-4	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
B4-2	B-4	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
B6-1	B-6	BLDG A-B	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	2		Yes	Yes
C1-1	C-1	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C1-2	C-1	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
C2-1	C-2	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C2-2	C-2	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
C3-1	C-3	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C3-2	C-3	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
C4-1	C-4	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
C4-2	C-4	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D1-1	D-1	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D1-2	D-1	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D2-1	D-2	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D2-2	D-2	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D3-1	D-3	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D3-2	D-3	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
D4-1	D-4	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	1		Yes	Yes
D4-2	D-4	BLDG C-D	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	6		No	Yes
K1-2	K-1	BLDG K	B	DOUBLE	6' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	3		Yes	Yes
K1-1	K-1	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&18/A8.01	9/A8.01	1		Yes	Yes
K2-2	K-2	BLDG K	B	DOUBLE	6' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&26/A8.01	9/A8.01	3		Yes	Yes
K2-1	K-2	BLDG K	B	SINGLE	3' - 0"	7' - 0"	SC/WD	PNT	1	ALUM	AC	7 OR 10| A8.01	20&18/A8.01	9/A8.01	1		Yes	Yes
K1-3	K-5	BLDG K	B	SINGLE	3' - 0"	7' - 0"	HM	PNT	2	ALUM	AC	7 OR 10| A8.01					No	
K1-4	K-6	BLDG K	B	SINGLE	3' - 0"	7' - 0"	HM	PNT	2	ALUM	AC	7 OR 10| A8.01					No	
K1-5	K-7	BLDG K	B	SINGLE	3' - 0"	7' - 0"	HM	PNT	2	ALUM	AC	7 OR 10| A8.01					No	
K2-3	K-8	BLDG K	B	SINGLE	3' - 0"	7' - 0"	HM	PNT	2	ALUM	AC	7 OR 10| A8.01					No	
K2-4	K-9	BLDG K	B	SINGLE	3' - 0"	7' - 0"	HM	PNT	2	ALUM	AC	7 OR 10| A8.01					No	
K2-5	K-10	BLDG K	B	SINGLE	3' - 0"	7' - 0"	HM	PNT	2	ALUM	AC	7 OR 10| A8.01					No	



TYPE A (ALUM) ***NOT USED*** | TYPE B (SOLID CORE WOOD) | TYPE C (HM) ***NOT USED*** | TYPE D (ALUM) ***NOT USED***

NOTE:

G-1 = TG (TEMPERED GLASS)
G-2 = TG/TINT (TEMPERED GLASS/TINTED GLASS)

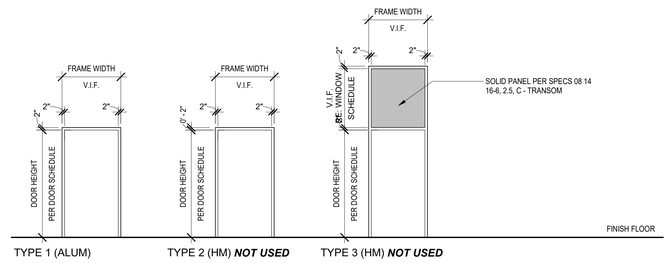
GLASS COLOR TO BE VERIFIED BY THE DISTRICT

DOOR & WINDOW SCHEDULE ABBREVIATIONS

ALUM	ALUMINUM
AC	ANODIZED CLEAR
FF	FACTORY FINISH
HM	HOLLOW METAL
N/A	NOT APPLICABLE
PT	PAINT
SC	SOLID CORE
ST	STAIN
WD	WOOD

DOOR TYPE LEGEND

1/4" = 1'-0"



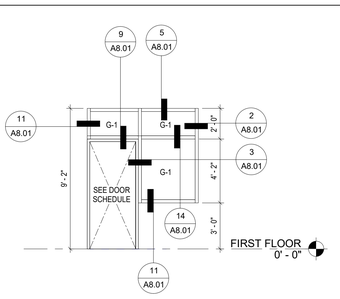
TYPE 1 (ALUM) | TYPE 2 (HM) ***NOT USED*** | TYPE 3 (HM) ***NOT USED***

GENERAL WINDOW FRAMING NOTES

1. (N) ALUMINUM FRAME . PER SPEC SEC. 08 41 13
2. G-1 : TEMPERED GLASS (N) 1" INSULATED GLASS. SEE GLAZING SPECS.
3. USE BRONZE GLAZING COLOR
4. G-2: TEMPERED GLASS (N) 1" INSULATED / TINTED GLASS
5. FIELD VERIFY ALL DIMENSIONS

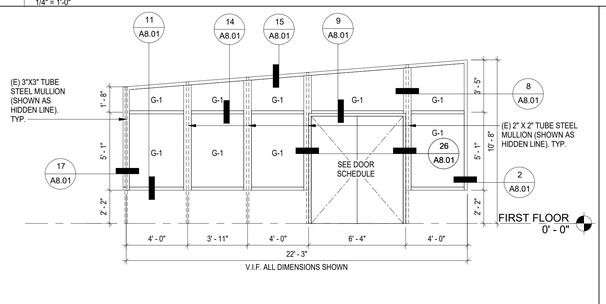
FRAME TYPE LEGEND

1/4" = 1'-0"



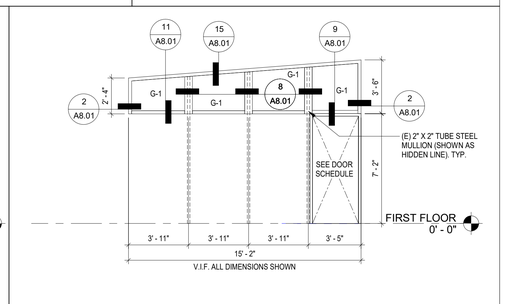
W13 & W14 ARE SIMILAR BUT WITH MIRROR LAYOUT.

19 WINDOW FRAME ELEVATION - W13 & W14
1/4" = 1'-0"



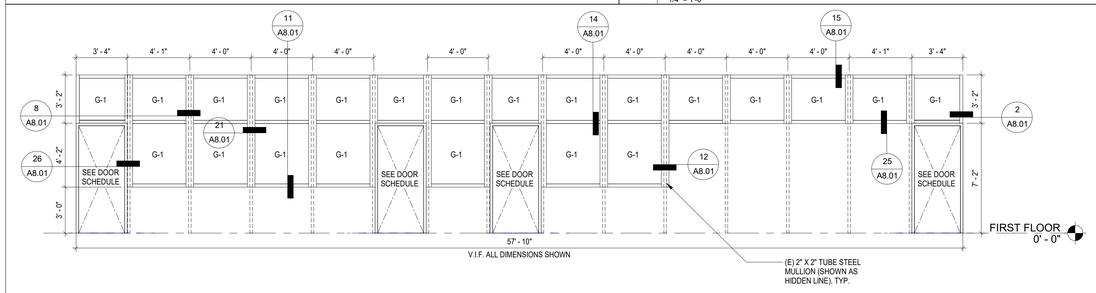
W11 & W12 ARE SIMILAR BUT WITH MIRROR LAYOUT.

15 WINDOW FRAME ELEVATION - W11 & W12
1/4" = 1'-0"

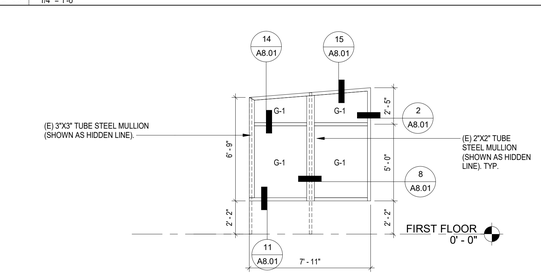


W9 & W10 ARE SIMILAR BUT WITH MIRROR LAYOUT.

13 WINDOW FRAME ELEVATION - W9 & W10
1/4" = 1'-0"

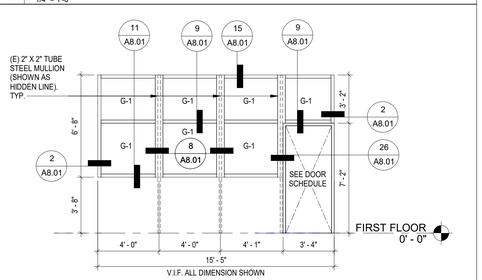


12 WINDOW FRAME ELEVATION - W8
1/4" = 1'-0"

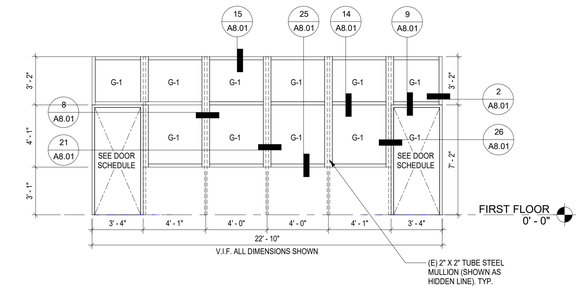


W6 & W7 ARE SIMILAR BUT WITH MIRROR LAYOUT.

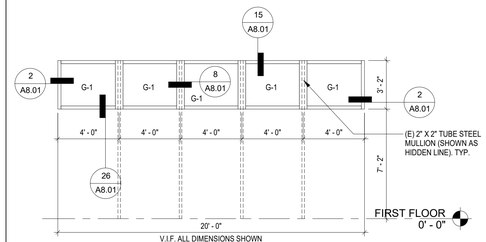
9 WINDOW FRAME ELEVATION - W6 & W7
1/4" = 1'-0"



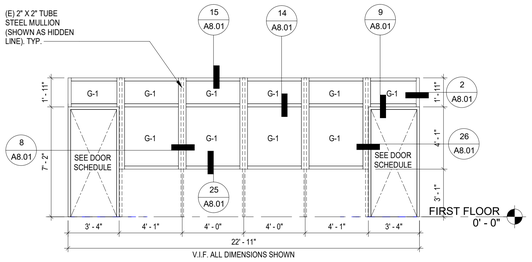
7 WINDOW FRAME ELEVATION - W5
1/4" = 1'-0"



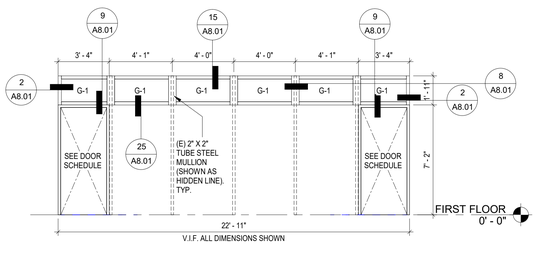
6 WINDOW FRAME ELEVATION - W4
1/4" = 1'-0"



4 WINDOW FRAME ELEVATION - W3
1/4" = 1'-0"



3 WINDOW FRAME ELEVATION - W2
1/4" = 1'-0"



1 WINDOW FRAME ELEVATION - W1
1/4" = 1'-0"

FILE PATH: Z:\Projects\...
9/14/2023 5:59:50 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

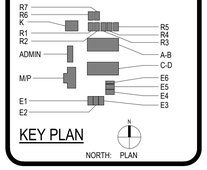
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

Architect

LICENSED ARCHITECT
Tong Yoo
No. C-31162
REN 10-31-2023
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date

DSA Submittal

DOOR SCHEDULE & WINDOW FRAMING ELEVATION

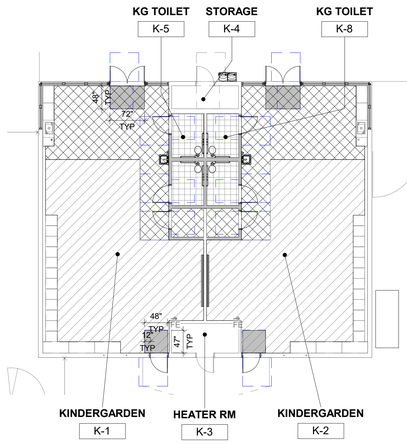
A9.01

A10.01 - FINISH PLANS & SCHEDULE

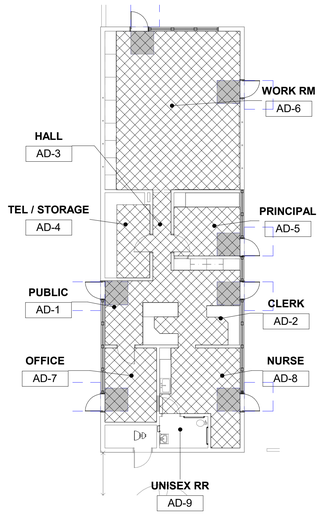
0" 1"

FINISH SCHEDULE

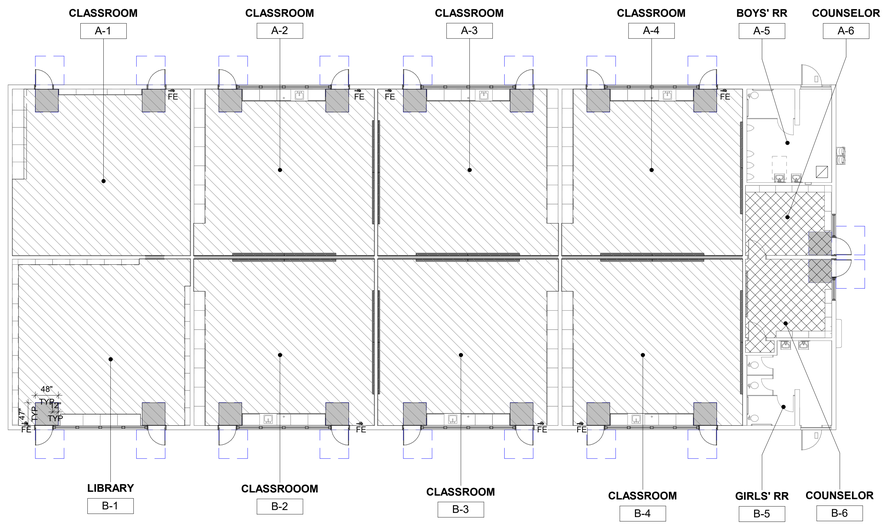
ROOM NUMBER	ROOM NAME	(E) FLOOR MATERIAL	FLOOR		BASE		NORTH WALL		EAST WALL		SOUTH WALL		WEST WALL		CEILING	
			MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH
A-1	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(N) GYP	TS1	(E) BRICK	P1 & TS1	ACP	ACP1
A-2	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(N) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
A-3	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	P1 & TS1	(N) GYP	TS1	(E) GYP	TS1	ACP	ACP1
A-4	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(N) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
A-6	COUNSELOR	CPT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) GYP	P1	(E) GYP	P1	ACP	ACP1
AD-1	PUBLIC	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	-	-	(E) GYP	P1	(E) BRICK	P1	ACP	ACP1
AD-2	CLERK	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	(E) GYP	P1	-	-	ACP	ACP1
AD-3	HALL	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	-	-	(E) GYP	P1	ACP	ACP1
AD-5	PRINCIPAL	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) BRICK	P1	(E) GYP	P1	(E) GYP	P1	ACP	ACP1
AD-6	WORK RM	VCT	(E)	(E)	(E)	(E)	(E) BRICK & (E) GYP	P1	(E) BRICK	P1	(E) GYP	P1	(E) BRICK	P1	ACP	ACP1
AD-7	OFFICE	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	(E) GYP	P1	(E) BRICK	P1	ACP	ACP1
AD-8	NURSE	VCT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) GYP	P1	ACP	ACP1
AD-9	UNISEX RR	CT	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	(E)	GYP	P1
AD-11	HEATER ROOM															
B-1	LIBRARY	CPT	CPT	CPT1	RB	RB1	(E) GYP	P1	(E) GYP	P1	(E) BRICK	P1	(E) BRICK	P1	ACP	ACP1
B-2	CLASSROOOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
B-3	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	P1 & TS1	(E) BRICK	P1	(E) GYP	TS1	ACP	ACP1
B-4	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
B-6	COUNSELOR	CPT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E) BRICK & (E) GYP	P1	(E) GYP	P1	(E) GYP	P1	ACP	ACP1
C-1	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	P1 & TS1	(E) GYP	TS1	(E) BRICK	TS1	ACP	ACP1
C-2	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(E) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
C-3	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	P1 & TS1	(E) GYP	TS1	(E) GYP	TS1	ACP	ACP1
C-4	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) BRICK	P1	(E) GYP	TS1	(E) GYP	TS1	(E) GYP	P1 & TS1	ACP	ACP1
D-1	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	P1 & TS1	(E) BRICK	P1	(E) BRICK	TS1	ACP	ACP1
D-2	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
D-3	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	P1 & TS1	(E) BRICK	P1	(E) GYP	TS1	ACP	ACP1
D-4	CLASSROOM	CPT	CPT	CPT1	RB	RB1	(E) GYP	TS1	(E) GYP	TS1	(E) BRICK	P1	(E) GYP	P1 & TS1	ACP	ACP1
K-1	KINDERGARDEN	CPT & VCT	CPT & VCT	CPT1 & VCT1	RB	RB1	(E) GYP	P1	(E) GYP	P1 & TS1	(E) BRICK & (E) GYP	P1	(E) BRICK	P1	ACP & GYP	ACP1 & P1
K-2	KINDERGARDEN	CPT & VCT	CPT & VCT	CPT1 & VCT1	RB	RB1	(E) GYP	P1	(E) BRICK	P1	(E) BRICK & (E) GYP	P1	(E) GYP/GUT/CT	P1 & TS1	ACP & GYP	ACP1 & P1
K-5	KG TOILET	CT	(E)	(E)	(E)	(E)	(E) GYP	P1	(E) GYP	P1	(E) GYP	P1	(E) GYP	P1	GYP	P1
K-6	KG TOILET															
K-7	STORAGE															
K-8	KG TOILET	CT	(E)	(E)	(E)	(E)	CT	(E)	CT	(E)	CT	(E)	CT	(E)	GYP	P1
K-9	KG TOILET															
K-10	STORAGE															
K-11	Room															
K-12	Room															
K-13	Room															
K-14	Room															
K-15	Room															
K-16	Room															
K-17	Room															
K-18	Room															
K-19	Room															
K-20	Room															
K-21	Room															



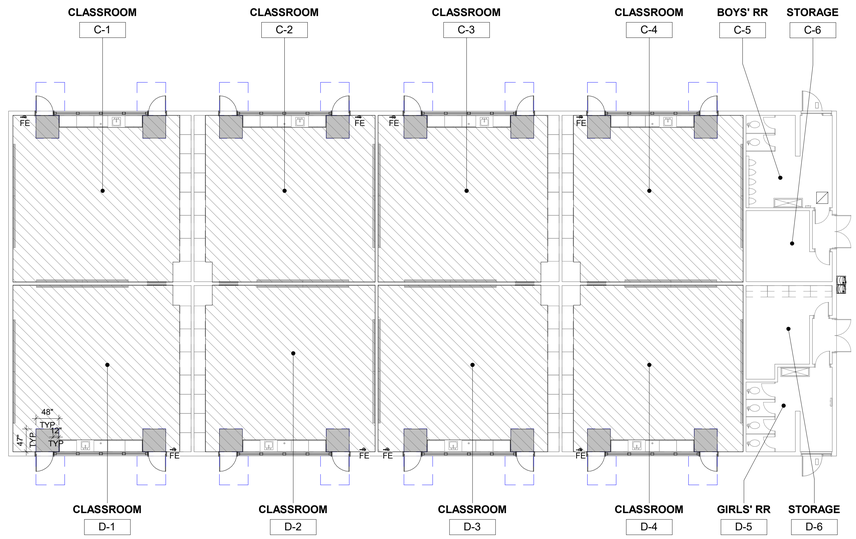
20 FINISH FLOOR PLAN - BLDG "K"
3/32" = 1'-0"



19 FINISH FLOOR PLAN - BLDG ADMIN
3/32" = 1'-0"



6 FINISH FLOOR PLAN - BLDG "A-B"
3/32" = 1'-0"



4 FINISH FLOOR PLAN - BLDG "C-D"
3/32" = 1'-0"

FINISH FLOOR MATERIALS LEGEND

- CPT-1, CARPET FLOORING TYPE 1 *RE: FINISH SCHEDULE*
- VCT-1, VINYL COMPOSITION TILE *RE: FINISH SCHEDULE*
- CT-1 CERAMIC TILE FLOORING *RE: FINISH SCHEDULE*
- WALK-OFF MAT, TRANSITION FLUSHED W/ ADJACENT CARPET. RE: FLOOR FINISH PLAN 48" DEPTH, 12" EXTEND ON PUSH SIDE, UNLESS SHOWN AS FLUSH TO DOOR WIDTH OR EDGE OF WALL

GENERAL FINISH LEGEND NOTES

1. ALL FINISH MATERIALS SHALL MEET THE FLAME SPREAD RATINGS PER THE BUILDING CODE. PROVIDE CLASS A MATERIALS.
2. REFER TO INTERIOR ELEVATIONS FOR SPECIFIC MATERIAL LOCATIONS.
3. PAINT ALL EXPOSED STRUCT. MEMBERS, STRUCT. DECK, DUCTWORK, DIFFUSERS, PIPING, CONDUIT, EQUIP. HOUSINGS, LIGHT FIXTURE HOUSINGS, CABLE SUPPORTS, CABLE TRAYS, EQUIP. SUPPORTS, HANGERS, ETC. TO MATCH ADJACENT SURFACES.
4. PAINT ALL NON-FACTORY FINISHED EXPOSED METAL.
5. REFER TO TYPICAL FLOORING TRANSITION DETAILS FOR FLOORING MATERIAL TRANSITIONS.
6. ALL FLOORING TRANSITIONS AT DOORS SHALL BE LOCATED UNDER THE DOOR IN THE CLOSED POSITION, U.N.O.
7. PROTECT ALL FINISHED FLOORING SURFACES FROM DAMAGE DURING ALL CONSTRUCTION PHASES.
8. PROVIDE AND INSTALL BULLNOSE TRIM AT ALL TRANSITIONS FROM CERAMIC WALL TILE TO OTHER MATERIAL U.N.O.
9. REFER TO REFLECTED CEILING PLANS FOR CEILING HEIGHTS.
10. ALL ELECTRICAL DEVICE COVERS ARE TO BE WHITE U.N.O.
11. ALL CARPET PATTERNS TO RUN PARALLEL TO CORRIDOR, U.N.O.
12. PAINT ALL HOLLOW METAL DOOR FRAMES TO MATCH ADJACENT WALL COLOR U.N.O.
13. REMOVE EXISTING PAINT AT EXISTING BRICK WALL. PREPARE BRICK WALL SMOOTH TO RECEIVE NEW PAINT FINISH. WHERE OCCURS.
14. RE-PAINT ALL EXISTING CASEWORK (EXCLUDE PLAMSTONE COUNTERTOPS).
15. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIAL TO EXISTING INTERIOR SURFACES TO RECEIVE NEW FINISHES PER FINISH SPECS.
16. PROVIDE APPROPRIATE PREPARATION, CLEANING AND BASE MATERIALTO EXISTING BRICK WALL BEFORE RECEIVING NEW FINISH MATERIAL. PER FINISH SPECIFICATION.
17. PROVIDE CONSISTENT FLAT SURFACE USING CEMENT FLOAT AND APPROPRIATE BASE MATERIAL AT EXISTING BRICK WALL TO RECEIVE NEW TILE FINISH, PER FINISH SPECIFICATIONS.

MATERIAL FINISH ABBREVIATIONS

ACP1	2'X2' ACOUSTICAL CEILING PANEL , SEE SPECIFICATIONS
CPT1	CARPET TYPE 1, SEE SPECIFICATIONS
CT1	CERAMIC TILE 1, SEE SPECIFICATIONS
CTB1	CERAMIC TILE BASE 1, SEE SPECIFICATIONS
VCT1	VINYL COMPOSITE TILE 1, SEE SPECIFICATIONS
P1	PAINT TO BE SELECTED BY OWNER, SEE SPECIFICATIONS
RB1	RUBBER BASE , SEE SPECIFICATIONS
(E)	(E) FINISH TO REMAIN
MF	MANUFACTURERS FINISH, SEE SPECIFICATIONS
TS1	TACKABLE SURFACE, SEE SPECIFICATIONS

MATERIAL ABBREVIATIONS

ACP	ACOUSTIC CEILING PANEL
CONC	CONCRETE
CPT	CARPET
CT	CERAMIC TILE
CTB	CERAMIC TILE BASE
GUT	GLUE UP TILE
GYP	GYPSUM BOARD
P	PAINT
RB	RUBBER BASE
VCT	VINYL COMPOSITE TILE
(E)	(E) FINISH TO REMAIN

FILE PATH: Z:\Projects\...
9/14/2023 5:59:55 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

Architect
LICENSED ARCHITECT
Tsong Yao
No. C-31162
RENEW: 10-31-2025
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/23	04-121953

REVISIONS

No.	Description	Date
	DSA Submittal	

FINISH PLANS & SCHEDULE

A10.01

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH TITLE 24 CALIFORNIA BUILDING CODE, 2022 EDITION.
2. ALL DRAWINGS AND SPECIFICATIONS ARE CONSIDERED TO BE A PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR SHALL BE BROUGHT TO THE ATTENTION OF THE EOR, THE ARCHITECT AND THE OWNER REPRESENTATIVE. PRIOR TO THE START OF CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT DOCUMENTS OR ANY CODE REQUIREMENTS SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER.
3. ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE EOR AND THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.
4. ALL DIMENSIONS AND THE SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE JOB SITE PRIOR TO BID SUBMITTAL, START OF SHOP DRAWINGS, START OF CONSTRUCTION, AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE ENCOUNTERED, OR CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, THE OWNER SHALL BE NOTIFIED FOR CLARIFICATION.
5. CONTRACTOR SHALL PROVIDE AND BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ADJACENT EXISTING SURFACES AND AREAS WHICH MAY BE DAMAGED AS A RESULT OF NEW WORK.
6. DO NOT SCALE DRAWINGS. PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS AND LARGE SCALE OVER SMALL.
7. TYPICAL DETAILS SHALL APPLY IN GENERAL CONSTRUCTION UNLESS SPECIFICALLY DETAILED. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMILAR WORK & PER TYP DETAILS.
8. THE CONTRACT DOCUMENTS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THESE DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE AND SAFETY OF WORKMEN DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO, BRACING, SHORING FOR LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE CITY OR STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS AND DOES NOT IN ANY WAY RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITIES FOR THE ABOVE.
9. FOR TRENCHES OR EXCAVATIONS (5) FIVE FEET OR MORE IN DEPTH INTO WHICH A PERSON IS REQUIRED TO DESCEND, THE CONTRACTOR IS TO OBTAIN THE NECESSARY PERMIT FROM THE STATE OF CALIFORNIA, DIVISION OF INDUSTRIAL SAFETY, PRIOR TO THE ISSUANCE OF A BUILDING PERMIT.
10. NO HOLES, NOTCHES, BLOCKOUTS, ETC. ARE ALLOWED IN STRUCTURAL ELEMENTS UNLESS DETAILED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER AND OWNER.
11. ALL INFORMATION SHOWN ON THE DRAWINGS RELATIVE TO EXISTING CONDITIONS IS GIVEN AS THE BEST PRESENT KNOWLEDGE FROM PLANS SUPPLIED BY THE OWNER, BUT WITHOUT GUARANTEE OF ACCURACY. WHERE ACTUAL CONDITIONS CONFLICT WITH THE DRAWINGS, THEY SHALL BE REPORTED TO THE UNIVERSITY REPRESENTATIVE OR ENGINEER SO THAT PROPER CLARIFICATION MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER AND OWNER.
12. IN CASE OF DISCREPANCIES BETWEEN NOTES ON THIS SHEET & PROJECT SPECIFICATIONS, THE PROVIDED NOTES SHALL TAKE PRECEDENCE OVER SPECS.
13. CUTTING, BORING, SAW CUTTING OR DRILLING INTO (E) OR (NEW) STRUCTURAL ELEMENTS SHALL BE SPECIFICALLY DETAILED OR OTHERWISE APPROVED BY EOR.

QUALITY ASSURANCE PROGRAM

A) STRUCTURAL TESTS AND SPECIAL INSPECTION PROGRAM.

PER SECTION 4-335 OF CALIFORNIA ADMINISTRATION CODE, THE ARCHITECT OR REGISTERED ENGINEER IN GENERAL RESPONSIBLE CHARGE OF THE PROJECT, OR WITHIN THEIR DELEGATED PORTION OF THE WORK, SHALL ESTABLISH THE EXTENT OF THE STRUCTURAL TESTS AND SPECIAL INSPECTION PROGRAM CONSISTENT WITH THE NEEDS OF THE PROJECT, AND A COMPLETED AND SIGNED DSA-103.

THE ARCHITECT OR REGISTERED ENGINEER SHALL RECEIVE VERIFIED REPORTS FROM THE PROJECT INSPECTOR, SPECIAL INSPECTORS, TESTING FACILITY, THE GEOTECHNICAL ENGINEER, CONTRACTORS AND THE OTHER ARCHITECTS AND ENGINEERS ARE SUBMITTED AS REQUIRED. THE RESPONSIBLE PARTY SHALL NOTIFY DSA AS TO THE DISPOSITION OF MATERIALS NOTED ON LABORATORY TESTING, AND/ OR SPECIAL INSPECTION, REPORTS AS NOT CONFORMING TO THE DSA APPROVED DOCUMENTS.

B) STRUCTURAL OBSERVATION

PERIODIC STRUCTURAL OBSERVATION SHALL BE CONDUCTED, PER SECTION 1710A OF THE CALIFORNIA BUILDING CODE AND SECTION 4-341(F) OF THE CALIFORNIA ADMINISTRATION CODE, TO ASSURE CONFORMANCE WITH THE DESIGN INTENT AND THE APPROVED PLANS AND SPECIFICATIONS. STRUCTURAL OBSERVATION DOES NOT WAIVE THE REQUIREMENT ANS/OR RESPONSIBILITY FOR THE INSPECTION BY IOR.

A REGISTERED PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OF THE PROJECT, INCLUDING LICENSED ARCHITECT OR STRUCTURAL ENGINEER, SHALL OBSERVE HIS/HER PORTION OF WORK DURING THE CONSTRUCTION OF THE PROJECT.

OBSERVATION SHOULD INCLUDE VISITS TO THE PROJECT SITE BY THE ARCHITECT AND/OR ENGINEER OR THEIR QUALIFIED REPRESENTATIVES IN COORDINATION WITH THE DISTRICT AND DSA. PRIOR NOTIFICATION SHALL BE MADE TO REQUEST THE REQUIRED OBSERVATIONS. DEMOLITION OF COVERING MATERIAL MAY BE REQUIRE TO FACILITATE OBSERVATION.

STRUCTURAL OBSERVATIONS MAY CONSIST OF VISUAL OBSERVATION OF MAJOR STRUCTURAL MEMBERS, AND THEIR IMMEDIATE CONNECTIONS, AT SIGNIFICANT CONSTRUCTION STAGES. THE FREQUENCY OF SUCH OBSERVATION SHALL BE COORDINATED WITH THE DISTRICT ENGINEER OR ASSIGNED IOR PER SECTION 4-336.

AT THE COMPLETION OF THE PROJECT, A FINAL OBSERVATION REPORT (DSA-6) MUST BE SUBMITTED WHICH SHOWS THAT THE STRUCTURAL SYSTEM IS COMPLETE AND GENERALLY CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.

DEMOLITION

1. REFER TO MECH. SHEETS FOR DEMOLITION NOTES. SEE DEMOLITION PLANS ON SHEET MD2 SERIES
2. ALL (E) UTILITIES, DUCTS, CONDUITS, PIPES, SIGNS, JOINTS, ELEC PANELS & BOXES, DOOR, WINDOW, CHAIN FRAME CEILINGS & OTHER ARCH'L TREATMENTS SHALL BE REMOVED TEMPORARILY AS NEEDED & REINSTALLED TO IT'S ORIGINAL CONDITION & IN AGREEMENT WITH CODE STANDARDS. SUPPORTS & BRACES FOR DUCT WORK SHALL BE IN ACCORDANCE WITH SMACNA GUIDELINES.
3. DEMOLITION WORK SHALL BE FULLY COORDINATED WITH THE DISTRICT & DSA 'S REPRESENTATIVES FOR SEQUENCE AND TIME FRAME.
4. CONTRACTOR TO PROVIDE TEMP. SHORING, AS REQUIRED.
5. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

CONCRETE AND REINFORCEMENT

1. ALL CEMENT SHALL CONFORM AT ASTM C-150, TYPE II OR V
2. FINE AND COARSE AGGREGATE SHALL CONFORM TO ASTM C-33.
3. AGGREGATE GRADATION FOR CONCRETE SHALL CONFORM TO ASTM C-33 AND CBC 2022. AGGREGATE FOR ELEMENT WITH 4 HOURS RATING SHALL BE SILICEOUS.
4. CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY STRENGTH:
   - ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI, UNLESS NOTED OTHERWISE.
   - CAST IN DRILLED-HOLE PILES - 4000 PSI.
   - CONCRETE SLAB ON GRADE/HOUSEKEEPING PAD - 3000 PSI.
   - EXTERIOR CONCRETE WALKS, CURBS, ETC. AND MISC. CONCRETE - 2500 PSI STONE.
5. LIGHTWEIGHT CONCRETE . (NOT APPLICABLE)
6. CONCRETE DESIGN MIXES SHALL CONFORM TO THE STANDARD SPECIFICATIONS. MIX DESIGNS SHALL BE SIGNED BY A CALIFORNIA LICENSED ENGINEER & SUBMITTED FOR REVIEW & APPROVAL. SUPPORTING DATA SHALL BE PROVIDED PER CBC 1903A. THE TEST DATA SHALL BE REPORTED BY AN INDEPENDENT TESTING AGENCY.
7. PLACING OF ALL CONCRETE SHALL BE INSPECTED BY THE JOB INSPECTOR TO VERIFY THAT REINFORCING STEEL IS SECURELY SUPPORTED IN PLACE DURING THE POUR. CONTRACTOR TO PROVIDE NECESSARY MEASURE TO PROTECT REINFORCING AND TENDONS DURING PLACEMENT USING TIES AND SUPPORTS. USE TREMY FOR PLACEMENT OF CONCRETE FOR POURS DEEPER THAN 6'-0". USE OF BUCKET OR DROPPING IS NOT ALLOWED TO AVOID SEGREGATION.
8. LOCATION OF CONSTRUCTION JOINTS OR POUR JOINTS SHALL BE AS SHOWN ON PLANS OR AS APPROVED BY THE ENGINEER OR THE ARCHITECT PRIOR TO POURING CONCRETE. SEE NOTE 19 BELOW.
9. ANCHOR BOLTS, DOWELS, REINFORCING STEEL, INSERTS, ETC., SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING CONCRETE. CONCRETE BLOCKS ONLY SHALL BE USED TO SUPPORT REINFORCING OFF GRADE.
10. CONCRETE SLABS SHALL BE CURED BY KEEPING CONTINUOUSLY WET FOR 7 DAYS. FORMS FOR CONCRETE WALLS SHALL BE LEFT IN PLACE FOR 7 DAYS OR THEY MAY BE STRIPPED AFTER 3 DAYS AND THEN COVERED WITH BURLAP WHICH SHALL BE KEPT WET FOR AN ADDITIONAL 7 DAYS. IN LIEU OF BURLAP, CURING COMPOUNDS MAY BE USED IF APPROVED BY THE STRUCTURAL ENGINEER. FORMS FOR CONCRETE COLUMNS SHALL BE LEFT IN PLACE FOR 3 DAYS. IF STRIPPED EARLY, THEN SHALL BE COVERED FOR ANOTHER 3 DAYS. OR BE PROTECTED BY CURRING COMPONDS CONTRACTOR SELECTS TO DEVIATE FROM THESE INSTRUCTIONS, ALL CRACKS AND OTHER DEFECTS SHALL BE PER EOR RECOMMENDATIONS IN CONTRACTORS EXPENSE.
11. NOTIFY THE STRUCTURAL ENGINEER 48 HOURS MINIMUM PRIOR TO ALL POURS.
12. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE CORNERS.
13. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL COMPLY WITH CBC SECTION TABLE 1808A.8.2
14. ALL CONCRETE SHALL BE VIBRATED IN PLACE BY MECHANICAL MEANS DURING PLACING OF CONCRETE.
15. THE STRUCTURAL STEEL AND STEEL FORM WILL DEFLECT WHILE CONCRETE IS BEING PLACED ON IT. THIS WILL RESULT IN THE NEED TO ADJUST THE SCREEDS AFTER THE CONCRETE HAS BEEN PLACED TO PRODUCE A LEVEL CONCRETE SURFACE. ALSO, THERE WILL BE ADDITIONAL CONCRETE REQUIRED, WHICH IS TO BE ANTICIPATED, AND NO REQUEST FOR EXTRA COST WILL BE CONSIDERED.
16. NO STAKES, STEEL OR WOOD, SHALL BE PERMITTED IN ANY CONCRETE POUR. SUSPEND FORMS FROM ABOVE GRADE.
17. DRYPACK SHALL BE 1:3-1/2 PORTLAND CEMENT TO SAND WITH A MINIMUM 28 DAY STRENGTH OF 4500 PSI. OR SET GROUT BY AN APPROVED EOR.
18. NON-SHRINK GROUT SHALL HAVE A MINIMUM 28 DAY STRENGTH OF 7000 PSI.
19. CONSTRUCTION JOINTS: CONSTRUCTION JOINTS SHALL HAVE ENTIRE SURFACE REMOVED TO MIN 1/4" TO EXPOSE CLEAN, SOLIDLY EMBEDDED AGGREGATE. PER TYP. DETAILS PROVIDED IN THIS SET, CONSTRUCTION JOINTS SHALL BE PROVIDED TO LIMIT SHRINKAGE CRACKS. A MAX DISTANCE OF 30 x SLAB THICKNESS (IN) SHALL BE CONSIDERED IF NO CONSTRUCTION JOINTS IS CALLED ON PLANS. THE CONTRACTOR SHALL OBTAIN THE ENGINEER'S APPROVAL OF CONSTRUCTION & CONTROL JOINT LOCATION IN SLABS, WALLS AND BEAMS.
20. TEMPERATURE AND SHRINKAGE REINFORCEMENT: SHALL HAVE A LAP OF THIRTY (30) BAR DIAMETERS, BUT NOT LESS THAN 18 IN. AND THE SPLICES IN ADJACENT BARS SHALL BE NOT LESS THAN FIVE (5) FEET APART.
21. REBAR GRADES: **ALL REINFORCING STEEL SHALL BE NEW STOCK DEFORMED BARS CONFORMING TO ASTM A615 AS FOLLOWS:**
   - ALL SIZES NOT SUBJECT TO WELDING......................................GRADE 60.

   ALL REINFORCING BARS TO BE WELDED SHOULD CONFORM TO ASTM A706.
22. TYP. REBAR COVER: MINIMUM REBAR COVER FOR PRESTRESSED CONCRETE SHALL BE AS SHOWN IN THIS TABLE:
23. MAX W/C RATIO = 0.45

EXPOSURE CONDITION	COVER	TOLERANCE (-)
CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH:	3"	3/8 INCH
EXPOSED TO EARTH OR WEATHER:		
NO. 5 AND SMALLER BARS	1-1/2"	1/4 INCH
NO. 6 AND LARGER BARS	2"	1/4 INCH
NOT EXPOSED TO WEATHER OR IN CONTACT WITH THE GROUND:		
ROOF SLAB	1"	1/8 INCH
STRUCTURAL SLABS & WALLS	1"	1/8 INCH
BEAMS AND COLUMNS (PRIMARY REINFORCEMENT, TIES, STIRRUPS & SPIRALS)	1-1/2"	1/4 INCH
SLABS ON GRADE	1-1/2"	1/4 INCH

NON-SHRINK GROUT

"NON-SHRINK GROUT" SHALL BE DEFINED AS A HIGH-STRENGTH MORTAR OR GROUT WHICH DOES NOT SHRINK IN THE PLASTIC STATE, IS DIMENSIONALLY STABLE IN THE HARDENED STATE, AND BONDS PERMANENTLY TO CLEAN METAL SURFACES AND CONCRETE SUBSTRATE.

DRY PACK OR NON-SHRINK GROUT SHALL CONFORM TO THE ASTM C1107, SPECIFICATION FOR PACKAGED DRY, HYDRAULIC-CEMENT GROUT (NON-SHRINKABLE). NO SHRINKAGE BEFORE HARDENING (0.00 SHRINKAGE WHEN TESTED IN ACCORDANCE WITH ASTM C827), IS ALLOWED

COMPRESSIVE STRENGTH, SHALL REACH THE FOLLOWING COMPRESSIVE STRENGTH

a. AT ONE DAY: 1000 PSI
b. AT THREE DAYS: 2500 PSI
c. AT SEVEN DAYS: 4000 PSI
d. AT 28 DAYS: 7000 PSI

A MANUFACTURER'S PRODUCT DATA SHALL BE SUBMITTED PRIOR TO THE INSTALLATION, SHOWING THE MATERIAL MEET SPECIFIED SHRINKAGE AND COMPRESSIVE STRENGTH REQUIREMENTS, ABOVE.

SHOP DRAWINGS:

1. SHOP DRAWINGS ARE AN AID FOR FIELD PLACEMENT, AND ARE SUPERSEDED BY THE STRUCTURAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO MAKE CERTAIN THAT ALL CONSTRUCTION IS IN FULL AGREEMENT WITH THE LATEST STRUCTURAL DRAWINGS.
2. SHOP DRAWINGS SHALL BE SUBMITTED BY CONTRACTOR TO ENGINEER OF RECORD (EOR) FOR REVIEW AND APPROVAL, AND IF REUIRED TO THE BUILDING OFFICIALS FOR THEIR REVIEW AND APPROVAL, ALSO SEE SUBMITTALS AND DEFERRED APPROVAL.
3. A SET OF APPROVED SHOP DRAWINGS SHALL BE MAINTAINED @ THE JOB SITE & PRESENTED TO THE INSPECTOR PRIOR TO PLACEMENT OF THE REINFORCEMENT.

STRUCTURAL STEEL AND MISC. IRON

1. WELDING SHALL BE DONE IN CONFORMANCE WITH AWS-D1.1 & OTHER APPLICABLE CODES & STANDARDS USE ELECTRIC SHIELDED ARC PROCESS USING E-70XX ELECTRODES. ALL WELDS SHALL BE UNIFORM IN SIZE AND APPEARANCE, AND FREE OF PINHOLES, POROSITY, UNDERCUTTING, OR OTHER DEFECTS. ALL BUTT WELDS SHALL BE FULL PENETRATION.
2. WELDS SHALL BE DONE IN THE SHOP OF AN ICC OR AISC APPROVED FABRICATOR UNLESS OTHERWISE NOTED ON PLANS. ALL FIELD WELDING SHALL BE PERFORMED BY QUALIFIED WELDERS APPROVED BY THE BUILDING OFFICIAL.
3. CONTINUOUS INSPECTION BY AN APPROVED DEPUTY INSPECTOR IS REQUIRED FOR ALL ON SITE WELDING, U.N.O.
4. STRUCTURAL STEEL NOT ENCASED IN CONCRETE OR MASONRY SHALL BE SHOP PAINTED AS SPECIFIED. ANY ABRASIONS SHALL BE TOUCHED UP AFTER ERECTION.
5. FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER FOR REVIEW PRIOR TO START OF FABRICATION. FABRICATION SHALL CONFORM TO A.I.S.C. SPECIFICATION.
6. ALL FULL PENETRATION WELDS IN FIELD AND SHOP SHALL BE ULTRASONICALLY TESTED AND APPROVED.
7. CONTINUOUS INSPECTION IS REQUIRED FOR ALL HIGH STRENGTH BOLTING CONNECTIONS.
8. SPLICE MEMBERS ONLY WHERE INDICATED.
9. BOLT HOLES IN STEEL SHALL BE STANDARD HOLES, 1/16 INCH LARGER IN DIAMETER THAN NORMAL SIZE OF BOLT USED, UNLESS NOTED OTHERWISE. BOLT HOLES IN BASE PLATES MAY BE OVERSIZED PER AISC TABLE 14-2 IF WASHERS ARE PROVIDED IN ACCORDANCE WITH THIS TABLE.
10. STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW UNLESS NOTED OTHERWISE:
   - ALL WIDE FLANGE AND WT SHAPES — A992, GRADE 50
   - STEEL ANGLES AND CHANNELS — A36 U.N.O.
   - BEAM SHEAR PLATES, STIFFENER PLATES, ALL OTHER PLATES — A572, GRADE 50 U.N.O.
   - MACHINE BOLTS USE ONLY WHERE INDICATED) — A307
   - THREADED AND SMOOTH ROD — F1554, GR50
   - NUTS FOR BOLTS AND MACHINE BOLTS — A563
   - HARDENED WASHERS — F436
   - UNHARDENED WASHERS — F844
   - PLAIN WASHERS — ANSI B18.22.1
   - STRUCTURAL TUBES — A-500, GRADE C
   - STRUCTURAL PIPES — A-53, TYPE E OR S, GRADE B
12. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIP ZINC GALVANIZED

WOOD FRAMING

1. ALL SAWN LUMBER SHALL BE DOUGLAS FIR OR WESTERN LARCH, U.N.O.
2. GRADE MARKED BY A RECOGNIZED GRADING AGENCY (WWPA OR WCLIB). WOOD GRADES ARE TO BE AS FOLLOWS U.N.O.:
   - BEAMS________LSL OR PRL OR GLB UNO
   - HEADERS________NO.1
   - POSTS AND TIMBERS________NO.1
   - PLATES________NO.2
   - STUDS @ NON-BEARING WALLS________NO.2
   - STUDS @ BEARING/SHEAR WALLS NO.2 U.N.O.___NO.2
   - RAFTERS AND ROOF JOISTS________NO.2
   - FLOOR JOIST________NO.1
   - SILL PLATES PRESSURE TREATED FOR MOISTURE RESISTANCE (SEE NOTE #23.)____NO.1
   - TJI________PER PLAN OR EQ.
   - OPEN WEB TRUSSES________PER PLAN & APPROVED MANUF.
   - ROOF TRUSSES________PER PLAN & APPROVED MANUF.
3. WHERE WOOD IS IN CONTACT WITH CONCRETE OR MASONRY USE FOUNDATION REDWOOD OR DOUGLAS FIR PRESSURE TREATED FOR MOISTURE RESISTANCE. CORROSION RESISTANCE BOLTS ARE REQUIRED FOR "CHEMICALLY THREATED SILLS".
4. PLYWOOD SHALL BE DOUGLAS FIR CONFORMING TO U.S. PRODUCT STANDARDS PS 1-83, WITH EXTERIOR GLUE AND SHALL BE GRADE MARKED BY APA. PLYWOOD AT EXPOSED EAVES SHALL BE EXPOSURE I GRADE PLYWOOD. PLYWOOD SHALL BE STRUCTURAL- I FOR FLOOR DIAPHRAGMS & SHEAR WALLS. OSB PANELS MAY BE USED IF HAVE EQUIVALENT PROPERTIES.
5. U.N.O. ALL DAMAGED OR DETERIORATED LUMBER SHALL BE REPLACED WITH EQUAL SECTION AND EQUAL OR BETTER GRADE AS SPECIFIED ON THESE DRAWINGS.
6. ALL BOLTS FOR WOOD CONNECTIONS SHALL BE A307, GRADE A. WHERE WOOD IS BOLTED TO STEEL, USE A LOCK WASHER UNDER THE NUT ON THE STEEL SIDE.
7. ALL BOLT HEADS AND NUTS THAT BEAR AGAINST THE FACE OF WOOD MEMBERS SHALL BE PROVIDED WITH METAL SQUARE WASHERS AS INDICATED ON PLANS.
8. ALL STUD WALLS SHALL HAVE FIRE BLOCKING AT 5'-0" O.C. MAXIMUM, VERTICAL UNLESS ALLOWED BY CODE.
9. BLOCKING SHALL BE INSTALLED AT THE TOP OF ALL BEARING AND SHEAR WALLS.
10. PROVIDE DOUBLE FLOOR JOISTS UNDER PARALLEL PARTITIONS.
11. PROVIDE 2X3 CROSS-BRIDGING OR 2X SOLID BLOCKING AT A MINIMUM OF 8'-0" O.C. FOR FLOOR JOISTS (CONTACT METAL BRIDGING OR EQUAL MAY BE USED).
12. HOLES AND NOTCHES IN STRUCTURAL MEMBERS FOR PIPES AND CONDUIT SHALL COMPLY WITH THE BUILDING CODE & PROVIDED TYP. DETAILS.
13. ALL BOLT HOLES SHALL BE DRILLED A MIN. OF 1/32" TO A MAX. OF 1/16" LARGER IN DIAMETER THAN THE NOMINAL SIZE OF BOLT USED.
14. EACH SHEET OF PLYWOOD SHALL HAVE 2' MIN. SHEET DIMENSION UNLESS ALL EDGES OF THE UNDERSIZED SHEETS ARE SUPPORTED BY FRAMING MEMBERS OR BLOCKING.
15. THREADED PORTION OF LAG SCREWS SHALL BE TURNED NOT DRIVEN INTO THE PRE-DRILLED HOLE.
16. ALL NAILS SHALL BE COMMON WIRE NAILS U.N.O.
17. IF GUN NAILING IS USED, REDUCE THE SPECIFIED NAIL SPACING BY 20% UNLESS THE HEADS DO NOT PENETRATE INTO THE SHT'G..
18. ALL NAILS SHALL BE GALVANIZED WHERE EXPOSED TO WEATHER.
19. EXCEPT WHERE TOE NAIL IS REQUIRED, NAILS SHALL BE DRIVEN PERPENDICULAR. PRE-DRILL FOR ALL NAILS 20d OR LARGER.
20. TJI, PARALLAM, AND TIMBER STRANDS SHALL BE ICC APPROVED PER SPECIFICATIONS. ALSO SEE SPECIAL INSPECTION & SHOP DRAWING NOTES ON THIS SHEET.
21. USE SIMPSON OR OTHER EQUIVALENT ICC APPROVED HARDWARE FOR ALL CONNECTION PER PLAN NOTES AND SPECIFICATIONS.
22. ROOF TRUSSES SHALL BE DESIGNED & STAMPED BY MANUFACTURE'S ENGINEER. SHOP DRAWING SHALL BE PREPARED PER NOTES ON THIS SHEET.
23. FASTENERS AND ANCHOR BOLTS INSTALLED IN CHEMICALLY OR PRESSURE TREATED LUMBERS SHALL BE CORROSION RESISTANT USING HOT-DIPPED ZINC COATED GALVANIZED OR STAINLESS STEEL PER CBC SECTION 2304A.3
24. EDGE OF SHEATHING PLYWOOD PANELS SHALL BE BLOCKED OR T&G AS SPECIFIED ON PLANS.
25. PARTICLE PANELS (OSB) MAY BE USED IN LIEU OF PLYWOOD, IF IT IS PROVED TO BE EQUIVALENT TO CDX-STRUCT-I, AND MEETS UL-FIRE-RATED ASSEMBLY FOR THE FLOOR SYSTEM, AS SPECIFIED ON THE PROJECT REQUIREMENTS. PLYWOOD SHEATHING PANELS SHALL HAVE TONGUE & GROOVE EDGES FOR INTERLOCKING OR BE SUPPORTED BY 3X BLOCKING ALONG THE PANEL WITH SQUARE EDGES. PLACING DECK CLIPS FOR SUPPORT OF PANELS IS NOT ACCEPTABLE AS ALTERNATIVE SUPPORT METHODS ALONG FREE EDGES.

POST-INSTALLED ANCHOR BOLTS

ANCHOR BOLTS SHALL BE ONE OF THE FOLLOWING ACCEPTABLE PRODUCTS, OR AN EQUIVALENT. NO DRILLED-IN ANCHOR IS ALLOWED IN POST TENSIONED SLABS TO AVOID DAMAGING/CUTTING TENDONS & REINFORCEMENT, UNLESS THE LOCATION IS CLEARED BY NONDESTRUCTIVE TESTING OF UNDERGROUND PENETRATING RADAROR X-RAY. (PACHOMETER READING IS NOT ACCEPTABLE)

- EXPANSION-TYPE ANCHORS
  HILTI -TZ2 (ESR#4266) (FOR CONCRETE)
  HILTI -TZ2 (ESR#4561) (FOR MASONRY)
  (FOR INSTALLATION SEE TABLE A)
- EPOXY/ADHESIVE ANCHORS
  HILTI RESD500-V3 ADHESIVE SYSTEM, ESR#3814
  (FOR TEST FREQUENCY SEE NOTES BELOW AND FOR TESTING LOADS SEE TABLE B)
- SCREW TYPE ANCHORS
  SIMPSON TITEN HD (ESR#1056) (FOR MASONRY)

1. EQUIVALENT PRODUCTS, WITH VALID & CURRENT ICC REPORTS WHICH ALLOW APPLICATION FOR SEISMIC LOADING, ARE ACCEPTABLE.
2. FOR MIN. EMBEDMENT AND OTHER INFO., REFER TO DETAILS.
3. FOR REPRESSION AND INSTALLATION, REFER TO MANUFACTURES' RECOMMENDATIONS & NOTE/TABLES BELOW

POST-INSTALLED EXPANSIVE ANCHOR BOLTS

TABLE A

SETTING INFORMATION	SYM.	UNITS	NOMINAL ANCHOR DIAMETER (IN.)													
			1/4	3/8			1/2				5/8			3/4		
NOMINAL BIT DIAMETER	d_0	IN	1/4	3/8			1/2				5/8			3/4		
EFFECTIVE MIN. EMBEDMENT	h_{ef}	IN	1½	1½	2	2½	1½	2	2½	3¼	2¾	3¼	4	3¼	3¾	4¾
NOMINAL EMBEDMENT	h_{nom}	IN	1¾	1⅞	2½	3	2	2½	3	3¾	3¼	3¾	4½	4	4½	5½
MIN. HOLE DEPTH	h_o	IN	2	2	2¾	3¼	2¼	2¾	3¼	4¼	3¾	4¼	4¾	4¼	4¾	5¾
INSTALLATION TORQUE C.S.	T_{inst}	FT-LB	4	30			50				40			110		
INSTALLATION TORQUE S.S.	T_{inst}	FT-LB	6	30			40				60			125		
FIXTURE HOLE DIAMTER	d_h	IN	5/16	7/16			9/16				11/16			13/16		

ADHESIVE ANCHOR BOLTS AND DOWELS:

1. MANUFACTURER'S FIELD REPRESENTATIVE SHALL PROVIDE INSTALLATION TRAINING FOR ALL PRODUCTS TO BE USED PRIOR TO COMMENCEMENT OF WORK; INSTALLATION.
2. INSTALLATION OF ADHESIVE ANCHORS IN HORIZONTAL TO VERTICAL ORIENTATION SHALL BE DONE BY A CERTIFIED ADHESIVE INSTALLER (AAI) AS CERTIFIED THROUGH ACI AND IN ACCORDANCE WITH THE CURRENT EDITION OF ACI 318.
3. EMBEDMENT DEPTH FOR ANCHORS AND DOWELS IS AS FOLLOWS, UNLESS OTHERWISE NOTED THE TESTING LABORATORY WILL PERFORM TENSION TESTS ON 25% OF ANCHORS AND DOWELS TO THE SPECIFIED TEST LOADS:

TABLE B

ROD DIA. OR BAR SIZE	EMBEDMENT	TEST LOAD	BASE MATERIAL
3/8"	4"	3,000#	CONCRETE
1/2"	5"	4,500#	CONCRETE
5/8"	6"	6,500#	CONCRETE
3/4"	7"	9,000#	CONCRETE
7/8"	9"	11,000#	CONCRETE
1"	11"	15,000#	CONCRETE
1-1/4"	14"	20,000#	CONCRETE
#3	5"	3,500#	CONCRETE
#4	6-1/2"	5,500#	CONCRETE
#5	8"	8,500#	CONCRETE
#6	10"	12,000#	CONCRETE
#7	12"	16,500#	CONCRETE
#8	14"	12,500#	CONCRETE
#9	16"	23,000#	CONCRETE
#10	19"	26,000#	CONCRETE

4. ANCHORS SHALL CONFORM WITH ASTM A193 GRADE B7 THREADED RODS USING ASTM A 563 GRADE DH HEAVY HEX NUTS AND ASTM F436 WASHERS U.N.O..
5. REPLACE ANCHORS AND DOWELS THAT FAIL DURING TESTING AND RETEST. IF MORE THAN 10% OF THE TESTED DOWELS AND ANCHORS FAIL TO ACHIEVE THE SPECIFIED TEST LOAD, TEST 100% OF THE DOWELS AND ANCHORS INSTALLED IN THE LAST 2 DAYS OF ANCHOR INSTALLATION.
6. CENTER BAR IN THE HOLE AND WEDGE TIGHT WITH WOODEN WEDGES TO HOLD IT IN PLACE UNTIL THE ADHESIVE SETS.
7. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT THE HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF 2 ANCHOR DIAMETERS OR 1 INCH, WHICHEVER IS LARGER, OF SOUND CONCRETE BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED AS NOTED ABOVE. THE ENGINEER WILL DETERMINE A NEW LOCATION.
8. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLES ATTACHED WITH ADHESIVE ANCHORS.
9. BOLTS SET IN EXPOSED SURFACE SHALL BE STAINLESS STEEL OR CORROSION RESISTANT
10. **TEST REQUIRMENT:**
    - **A. FREQUENCY** 50% OR ALTERNATE BOLTS IN A GROUP, INCLUDING AT LEAST ONE-HALF THE ANCHORS IN EACH GROUP, SHALL BE TESTED.
    - **B. TEST LOADS:** TEST LOADS SHALL BE TWICE THE MAXIMUM ALLOWABLE TENSION LOAD OR ONE AND A QUARTER (1¼) TIMES THE MAXIMUM DESIGN STRENGTH OF ANCHORS AS PROVIDED IN THE APPROVED ICC REPORT TENSION TEST LOAD NEED NOT EXCEED 80% OF THE NOMINAL YIELD STRENGTH OF THE ANCHOR ELEMENT.

STRUCTURAL INDEX OF DRAWINGS

SN1........GENERAL NOTES
S1......... FLOOR/ROOF PLANS - BLDG 'A-B', 'C-D', & 'K'
SD1........CONCRETE DETAILS
SD2........RTU DETAILS
SD3........HUNG UNITS DETAILS

DESIGN LOADS:

THE SEISMIC DESIGN CRITERIA:
LATITUDE: 33.765469° N
LONGITUDE: -118.035399° W

S_S = 1.453 S_{DS}= 1.162
S_1=0.520 S_{D1} = N/A

SITE CLASS "DEFAULT"
SEISMIC DESIGN CATEGORY "D"
I_e =1.25 RISK CATEGORY: III

COMPONENTS:

a_p= 1
R_p= 2.5
Ω_o= 2.0
I_p = 1.0

WIND CRITERIA:
BASIC WIND SPEED 101 MPH
EXPOSURE "C"
I_W = 1.00

STRUCTURAL ABBREVIATIONS

#	NUMBER OR POUNDS
CL	CENTER LINE
BM.	BEAM
BEAM	BEAM
DET.	DETAIL
CLR.	CLEAR
CONT.	CONTINUOUS
CONC.	CONCRETE
COL.	COLUMN
BTWN.	BETWEEN
BOTT.	BOTTOM
B.O.F.	BOTTOM OF FOOTING
ANCH.	ANCHOR
A.B.	ANCHOR BOLT
DWG.	DRAWING
DIM.	DIMENSION
-3"	SLAB DEPRESSION
EA.	EACH
FIN.	FINISH
EXP.	EXPANSION
EXIST.	EXISTING
ELECTL.	ELECTRICAL
EL	ELEVATION
E.W.	EACH WAY
E.F.	EACH FACE
EXTR.	EXTERIOR
F.O.W.	FACE OF WALL
F.O.S.	FACE OF STUD
F.O.C.	FACE OF CONCRETE
FDN.	FOUNDATION
ELEV.	ELEVATOR OR ELEVATION
GA.	GAUGE
JT.	JOINT
INTR.	INTERIOR
MFR.	MANUFACTURER
MECHL.	MECHANICAL
MAX.	MAXIMUM
M.B.	MACHINE BOLT
LT.	WT. LIGHTWEIGHT
HORIZ.	HORIZONTAL
H.S.B.	HIGH STRENGTH BOLT
GR. BM.	GRADE BEAM
FRT.	FIRE RETARDANT
FRMG.	FRAMING
FLR.	FLOOR
MTL.	METAL
PL.	PLATE
REINF.	REINFORCING
PLCS.	PLACES
P.H.	PENTHOUSE
O.C.	ON CENTER
NO.	NUMBER
PSF	POUNDS PGR SQ.FT.
N.T.S.	NOT TO SCALE
N.I.C.	NOT IN CONTRACT
SIM.	SIMILAR
SIMP.	SIMPSON
SEPN.	SEPARATION
SECT.	SECTION
S.W.S.	SHEAR WALL
SCHL.	SCHEDULE
S.	FOOTING STEP
MIN.	MINIMUM
STL.	STEEL
THK.	THICK
STIFF.	STIFFENER
T.O.W.	TOP OF WALL
T.O.S.	TOP OF STEEL
T.O.	TOP OF DRAWINGS
S.O.G.	SLAB ON GRADE
S.A.D.	SEE ARCHITECTURAL
SYM.	SYMMETRICAL
SUPPT.	SUPPORT
STD.	STANDARD
SQ.	SQUARE
V.O.S.	VERIFY ON SITE
V.O.J.	VERIFY ON JOB
TYP.	TYPICAL
SPEC.	SPECIFICATION
U.N.O.	UNLESS NOTED OTHERWISE
DWL.	DOWEL
W/	WITH
WT.	WEIGHT
WJ.	WALL JOINT
VERT.	VERTICAL

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

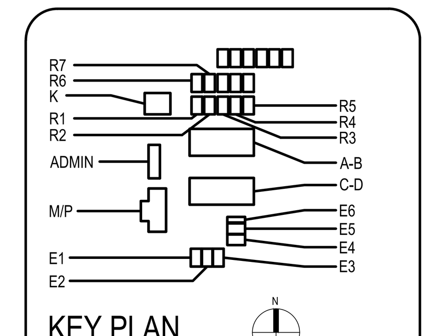
PBK

ARCHITECT PBK Architects, Inc.
RANCHO CUCAMONGA PBK.com
8163 Rochestser Avenue, Suite 100
Rancho Cucamonga
California 91730
P 909-987-0909

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal
DSA APPL NO.: 04-121953



KEY PLAN
NORTH: PLAN

Consultant

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR. SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.2224.07

REGISTERED PROFESSIONAL ENGINEER TOURAJ EIMANI No. S4302 Exp.09/30/25 STRUCTURAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
Issue Date	Project Number

REVISIONS

No.	Description	Date

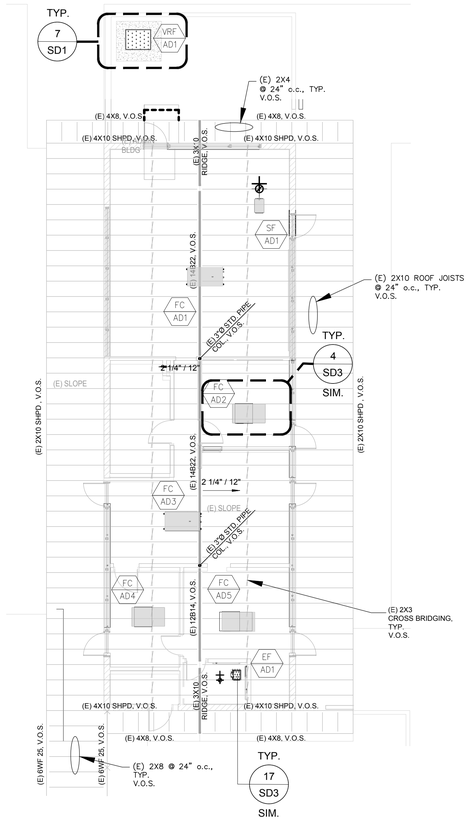
DSA Submittal

This document is for plan review only

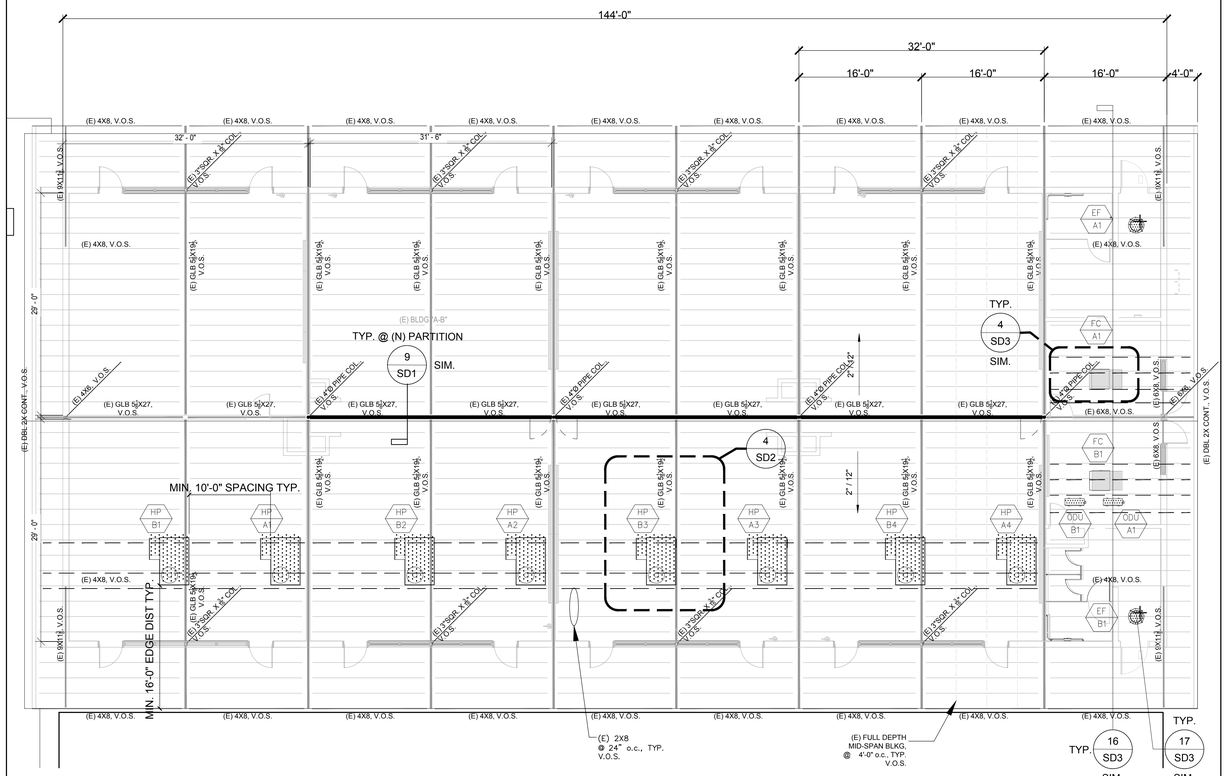
GENERAL NOTES

SN1

FILE PATH: Z:\Projects\...
1/6/2023 1:25:00 PM



4 BLDG 'ADMIN' ROOF PLAN
1/8" = 1'-0"



2 BLDG 'A–B' ROOF PLAN
1/8" = 1'-0"

1. THE MAXIMUM OPERATIONAL WEIGHTS OF NEW UNITS ARE LISTED IN THE ANCHORAGE SCHEDULE IN DETAIL 18/SD2. EXACT SIZE AND WEIGHT OF UNITS MAY SLIGHTLY DIFFER FROM THE ONES SPECIFIED ON THESE DRAWINGS/SCHEDULE. SHOULD THE ACTUAL WEIGHT OF ANY UNITS EXCEED MORE THAN 10% OF THE LISTED WEIGHTS, IMMEDIATELY NOTIFY SE OR AND DSA DISTRICT ENGINEER FOR FURTHER INSTRUCTION.
2. THE OPERATABLE WEIGHT OF UNITS SHALL BE LESS OR EQUAL TO THE VALUES SHOWN, CONTRACTOR SHALL NOTIFY SEoR ABOUT HEAVIER UNITS. (MORE THAN 5% OF LISTED VALUES)
3. UNIT DIMENSION SHOWN HERE REPRESENT THE BEST ESTIMATE BASED ON THE AVAILABLE DATA.
4. MINOR ADJUSTMENTS IN UNIT POSITION WITH RESPECT TO EXISTING ROOF FRAMING MAY BE NECESSARY TO MISS CONFLICT, ALIGN NEW BLOCKINGS TO MATCH THE EXACT UNIT LOCATION/DIMENSIONS.
5. FINAL CONFIGURATION OF EACH UNIT, WITH RESPECT TO THE EXISTING ROOF FRAMING, SHALL BE FIELD VERIFY TO AVOID CONFLICT. SEE ALTERNATIVE CONFIGURATIONS SHOWN ON TYPICAL DETAIL 4/SD2
6. THE EXACT LOCATION AND SIZE OF MECH UNIT SHALL BE VERIFIED BY VENDOR/INSTALLER IN COORDINATION WITH THE LATEST MECH DRAWING/ CUT SHEETS.

A. PRIOR TO DEMOLITION WORK, SEE GENERAL NOTES ON SN1. FOR EXACT EXTENT OF DEMOLITION WORK REFER TO THE ARCH. DWG'S.

B. ALL EXISTING FRAMING MEMBERS THAT ARE BEING CUT/NOTCHED/TRIMMED SHALL BE PROPERLY SECURED BY SHORING.

C. SIZES SPACING LOCATIONS OF ALL EXISTING STRUCTURAL ELEMENTS SHALL BE FIELD VERIFIED & ANY DISCREPANCIES BE REPORTED TO SEoR.

D. IF EXISTING MEMBERS ARE SMALLER THAN WHAT IS SHOWN IN DRAWINGS AND CONSIDERED IN CALCULATIONS, PLEASE NOTICE SEOR FOR DETAIL OR FURTHER INFO

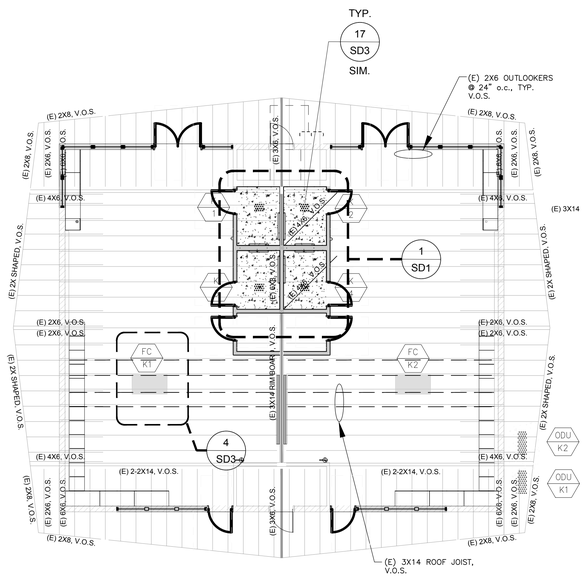
LEGEND

	(E) BEAM, V.O.S., PER PLAN SEE NOTE A-D
	(E) HEADER, V.O.S., PER PLAN, SEE NOTES A-D
	(E) ROOF FRAMING, PER PLAN, SEE NOTES A-D
	(E) STL POST, V.O.S.
	(N) MATCHING SISTER JOIST, PER PLAN FOR EXACT LOCATION, SEE DETAIL 4/SD2
	(N) CONC. S.O.G., SEE 1/SD1
EF A1 HP B1	(N) ROOFTOP UNIT, PER PLAN, SEE 4/SD2 SEE NOTE 1-6
FC A1	(N) SUSPENDED UNIT, PER PLAN, SEE 4/SD3 SEE NOTE 1-6
	(N) HVAC UNIT, PER MECH. PLANS SEE NOTE 1-6

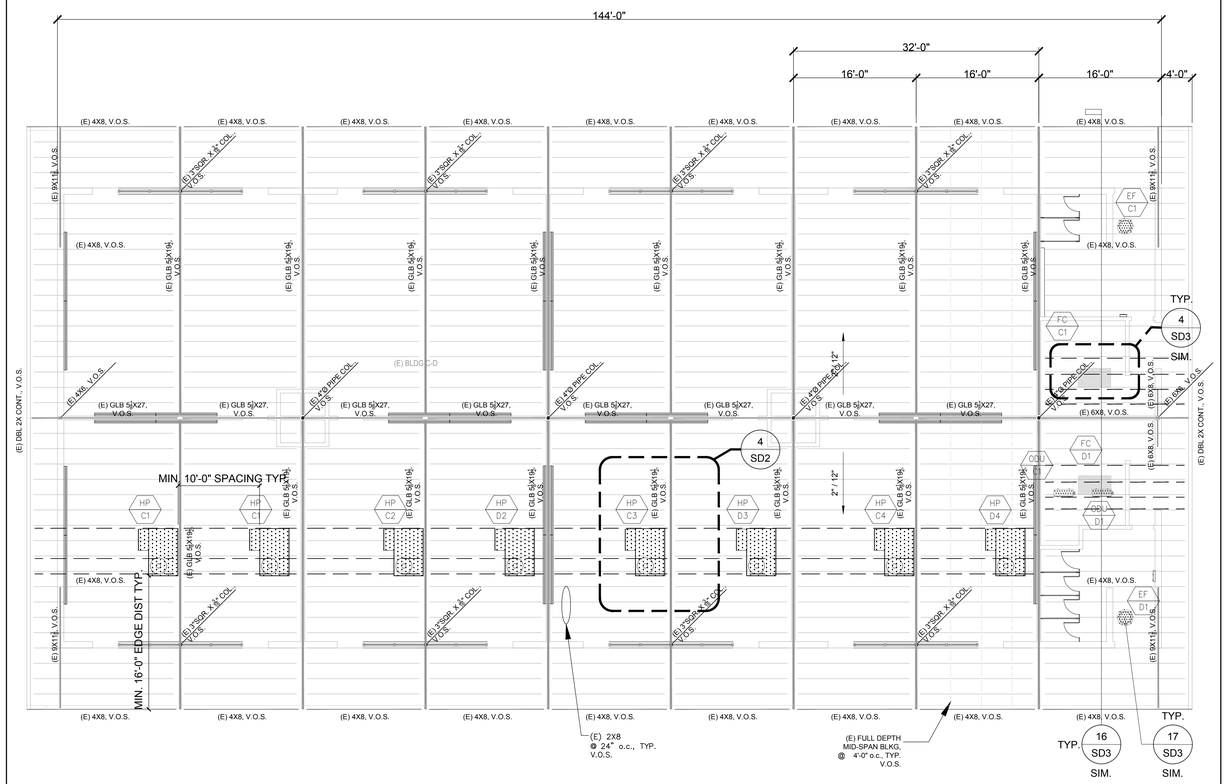
EQUIPMENT SCHEDULE (*)

UNIT DESCRIPTION	OVERALL WEIGHT(LBS)	DIMENSIONS	DETAIL REF.
		HP A1 HP B1 HP A2 HP B2 HP A3 HP B3 HP A4 HP B4	
HEAT PUMP (ON ROOF)	737	74"L x 44"W x 41"H	4/SD2
		HP C1 HP D1 HP C2 HP D2 HP C3 HP D3 HP C4 HP D4	
HEAT PUMP (ON ROOF)	737		4/SD2
		FC A1 FC B1 FC C1 FC D1 FC K1 FC K2 FC E1 FC E2	
FAN COIL	40...163		4/SD3
		SF A1	
SUPPLY FAN	58		4/SD3
		EF A1 EF B1 EF C1 EF D1 EF E1 EF E2	
EXHAUST FAN	15...72		17/SD3
		ODU A1 ODU B1 ODU C1 ODU D1 ODU K1 ODU K2	
OUTDOOR UNIT	75...225		SEE MECH.
		MP A1	
OUTDOOR HEAT	600		SEE MECH.

(*) SUBJECT TO CHANGE REFER TO LATEST MECHANICAL PACKAGE. SEE NOTES 1-7



3 BLDG 'K' ROOF PLAN
1/8" = 1'-0"



1 BLDG 'C–D' ROOF PLAN
1/8" = 1'-0"

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

Not for permitting or construction

PBK

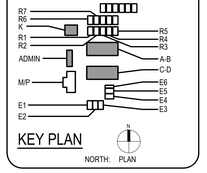
ARCHITECT
PBK Architects, Inc.
PBK.com
RANCHO CUCAMONGA
8163 Rochestser Avenue, Suite 100
Rancho Cucamonga
California 91730
P 909-987-0909

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953



KEY PLAN
NORTH: PLAN

Consultant

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR.
SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.2224.07

REGISTERED PROFESSIONAL ENGINEER TOMAJ EMINI No. S4302 Exp.09/30/25 STRUCTURAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
Issue Date	Project Number

REVISIONS

No.	Description	Date

DSA Submittal

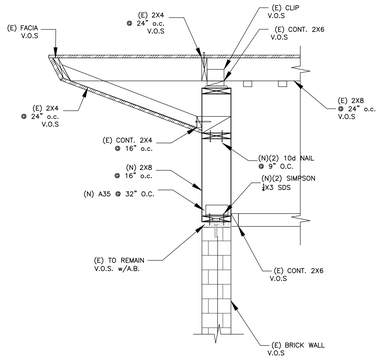
FLOOR PLANS - BLDG 'A-B', 'C-D', & 'K'

This document is for plan review only

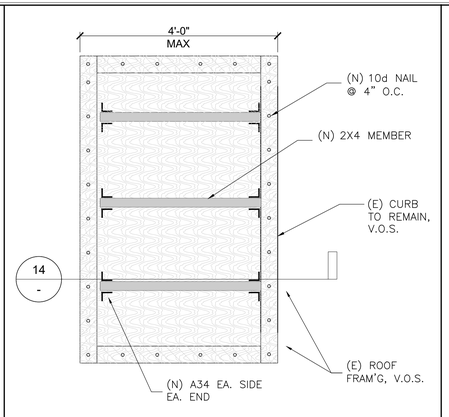
S1

FILE PATH: Z:\Projects\...
1/6/2023 1:25:00 PM

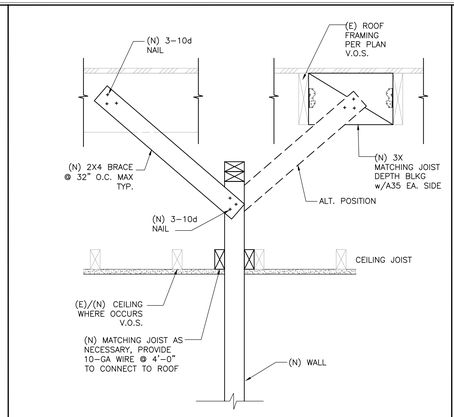
0" 1"



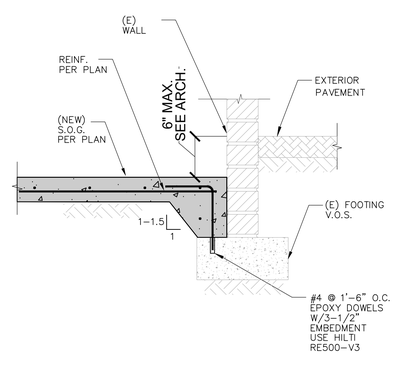
TYP. DETAIL | 17



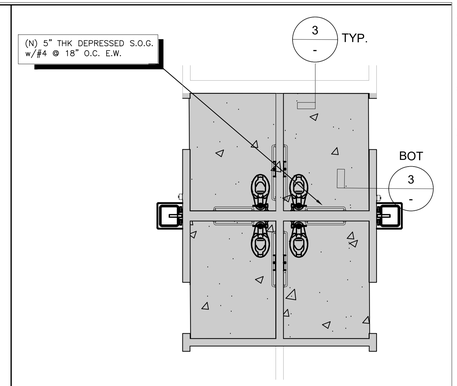
NEW INFILL | 13



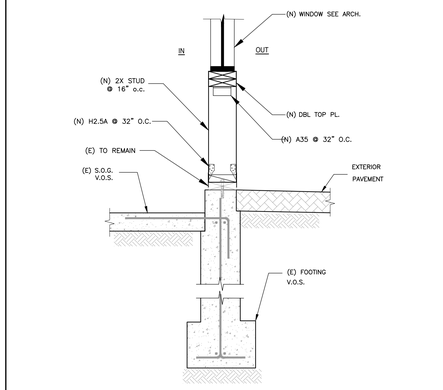
TYP. TOP CONN. @ (N) PARTN. | 9



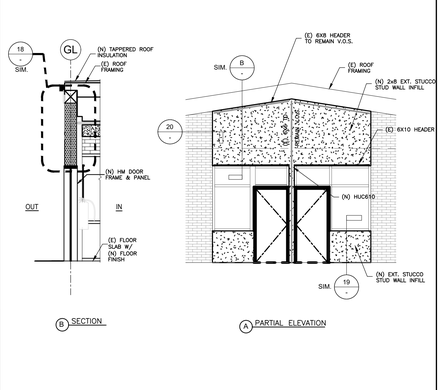
NEW DEPRESSED SLAB @ EXT. WALL | 5



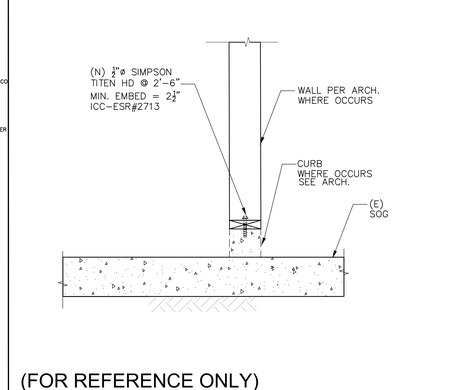
STUDENTS RR @ BLDG. "K" | 1



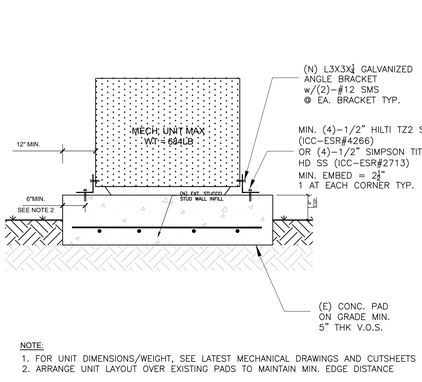
TYP. DETAIL | 18



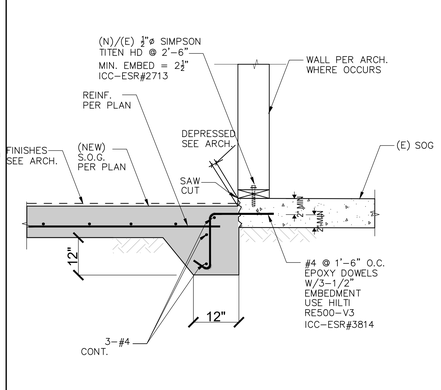
SECTION | 14



TYP. INFILL @ DOOR OPNG. | 10



NEW DEPRESSED SLAB @ INT. WALL | 6



TYPICAL REPAIR AT SLAB ON GRADE | 2

TYP. PONY WALL DETAIL | 19

TYP. TRANSOM INFILL | 15

TYP. BOT. CONN. @ PARTN. WALL | 11

ON GROUND UNIT ANCHORAGE | 7

NEW DEPRESSED SLAB @ INT. WALL | 3

TYP. DETAIL | 20

TYP. TRANSOM INFILL | 16

EQUIP. PADS FOR UNITS W<500 LB. | 12

EQUIP. PAD AND ANCHORAGE, W>500 LB. | 8

	TYPE OF HOOK	BAR SIZE	MIN D (IN)	L_{EXT} (IN)
STIRRUP	90-DEGREE HOOK	#3-5	$4d_b$	GREATER OF $6d_b$ AND 3"
		#6-8	$6d_b$	$12d_b$
	135-DEGREE HOOK	#3-5	$4d_b$	GREATER OF $6d_b$ AND 3"
		#6-8	$6d_b$	
	180-DEGREE HOOK	#3-5	$4d_b$	GREATER OF $4d_b$ AND 2.5"
		#6-8	$6d_b$	
BENT BAR	90-DEGREE HOOK	#3-8	$6d_b$	$12d_b$
		#9-11	$8d_b$	
	180-DEGREE HOOK	#3-8	$6d_b$	GREATER OF $4d_b$ AND 2.5"
		#9-11	$8d_b$	

D = INSIDE BENT DIAMTER

BAR BENDING & STIRRUPS | 4

FILE PATH: Z:\Projects\...
1/6/2023 1:25:00 PM

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT
PBK Architects, Inc.
PBK.com
RANCHO CUCAMONGA
8163 Rochestser Avenue, Suite 100
Rancho Cucamonga
California 91730
P 909-987-0909

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953

R7 R6 R5 R4 R1 R2 R3
ADMIN A-B C-D
M/P E6 E5 E4
E1 E3
E2
KEY PLAN
NORTH: PLAN

Consultant
STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR. SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.2224.07
REGISTERED PROFESSIONAL ENGINEER JEFFREY J. EBNER No. S4302 Exp.09/30/25 STRUCTURAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT
DATE: Issue Date
PROJECT NUMBER: Project Number
REVISIONS

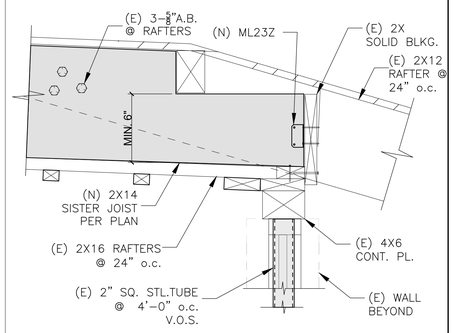
No.	Description	Date

DSA Submittal

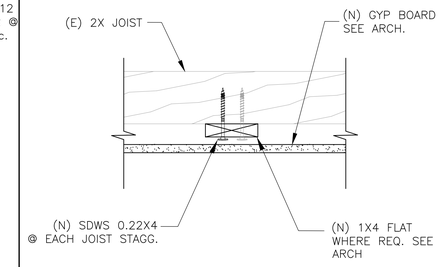
CONCRETE DETAILS

This document is for plan review only

SD1



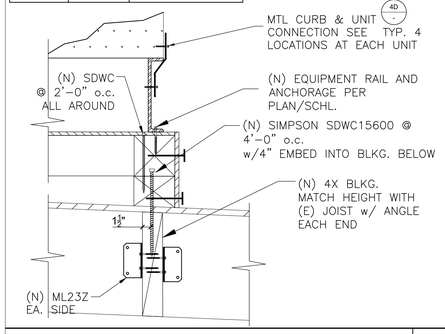
DETAIL 17



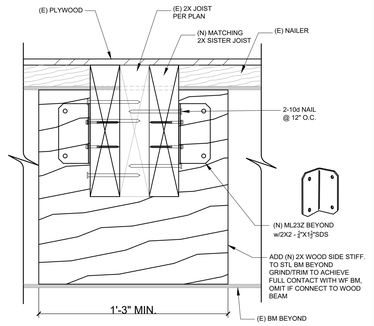
CEILING JOIST DETAIL 13

RTU ANCHORAGE SCHEDULE

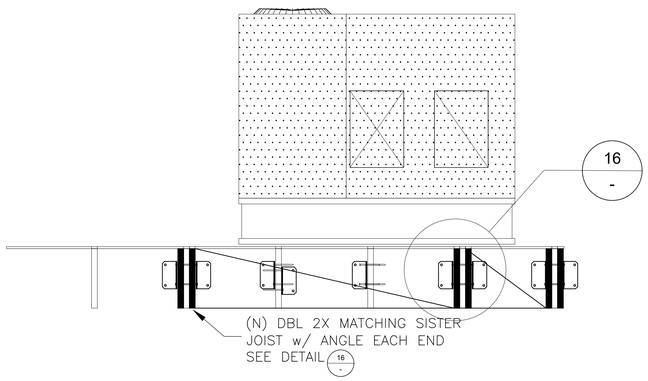
UNIT SYMBOL	MAX. WEIGHT	FASTENER
A, B, C, D	737 LB	(3)-3/8ø LAG SCREW LONG SIDE (2)-3/8ø LAG SCREW SHORT SIDE MIN PENETRATION = 3½"



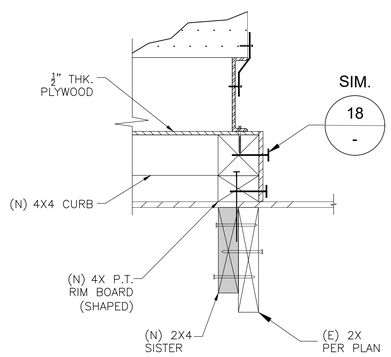
DETAIL 18



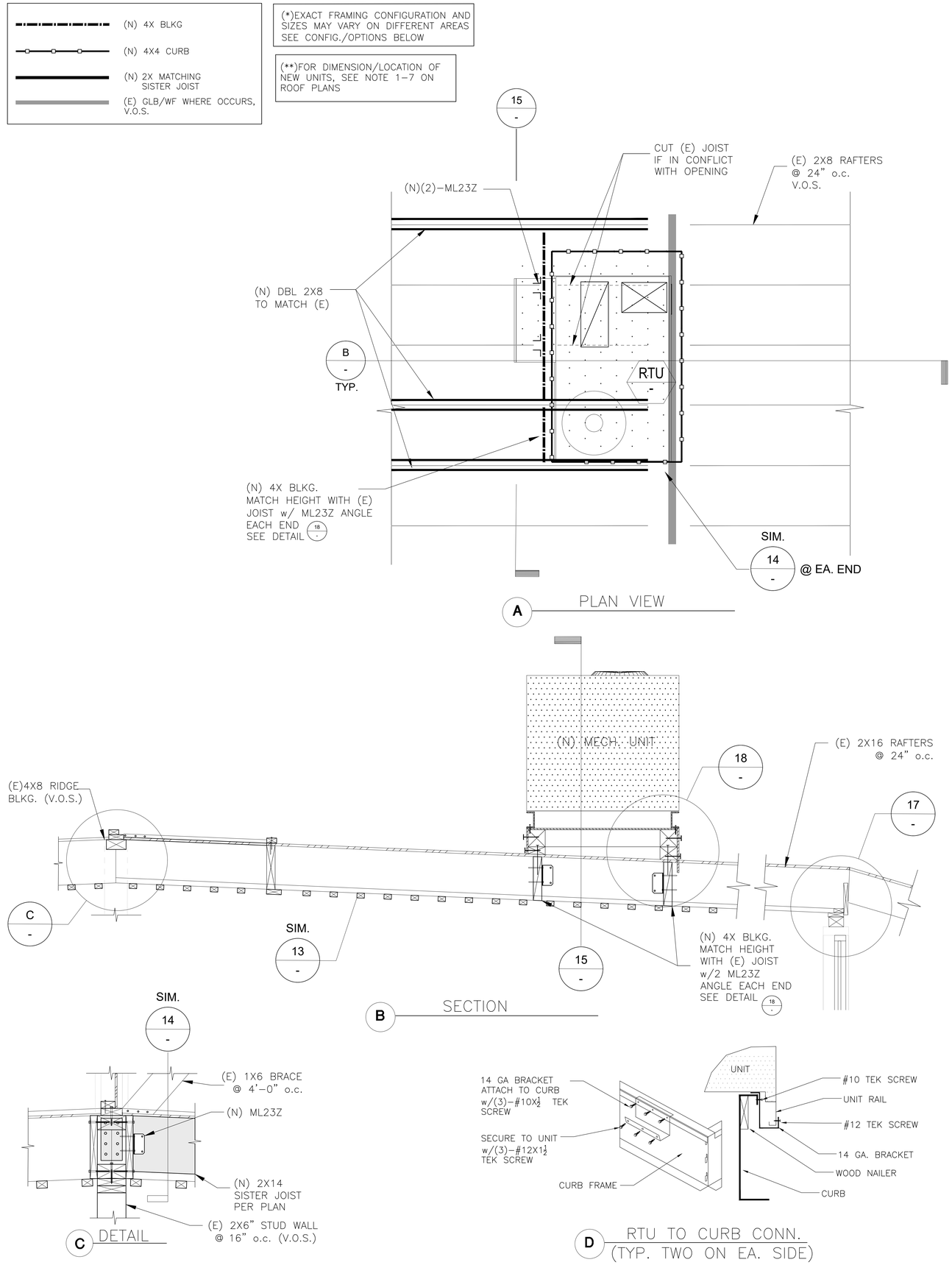
REINFORCED SUBPURLINE @ ROOF 14



SECTION 15



DETAIL 16



NEW MECH. UNIT @ CLASSROOM 4

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

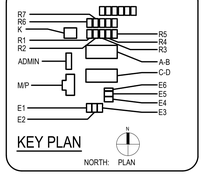
ARCHITECT PBK Architects, Inc.
RANCHO CUCAMONGA PBK.com
8163 Rochester Avenue, Suite 100
Rancho Cucamonga
California 91730
P 909-987-0909

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953



Consultant
STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR.
SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.2224.07

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
Issue Date	Project Number

REVISIONS

No.	Description	Date

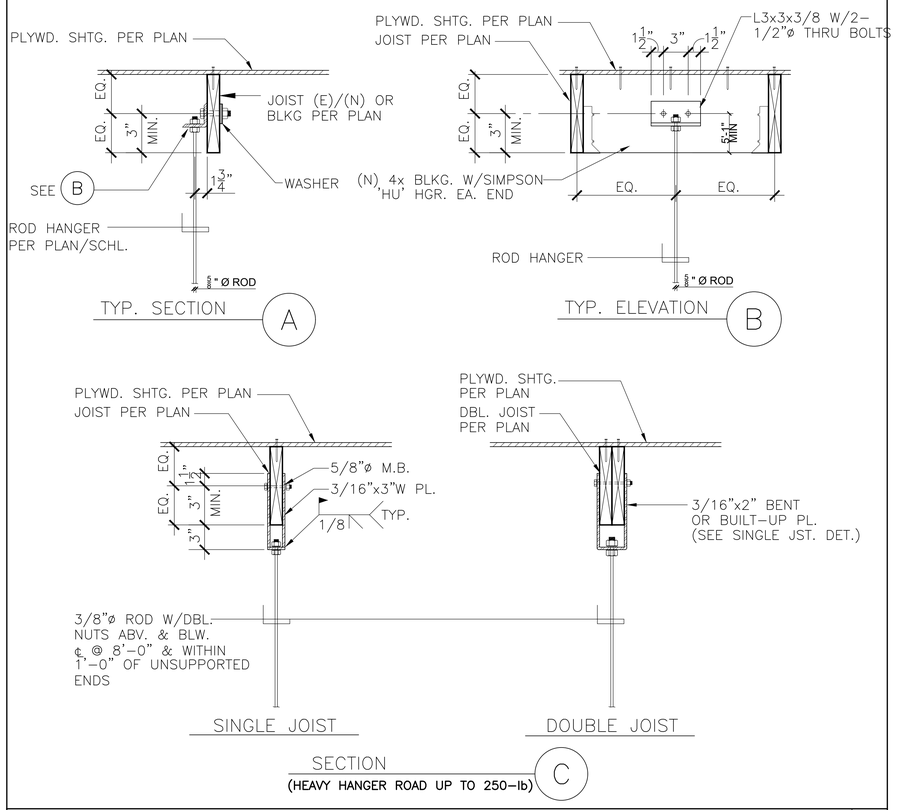
DSA Submittal

RTU DETAILS

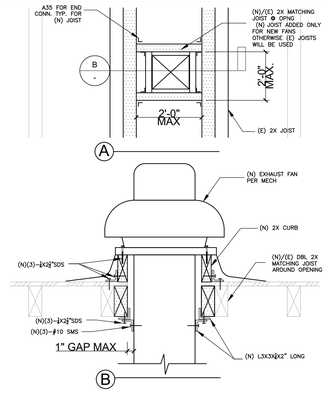
This document is for plan review only

SD2

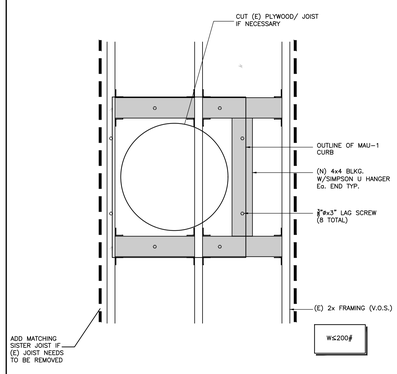
FILE PATH: Z:\Projects\...
1/6/2023 1:25:00 PM



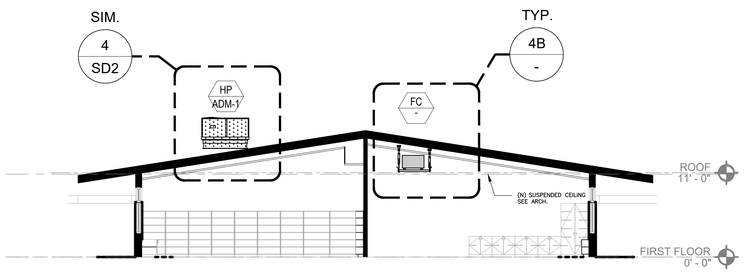
HANGER FOR SAWN LUMBER (UP TO 250 LB) | 14



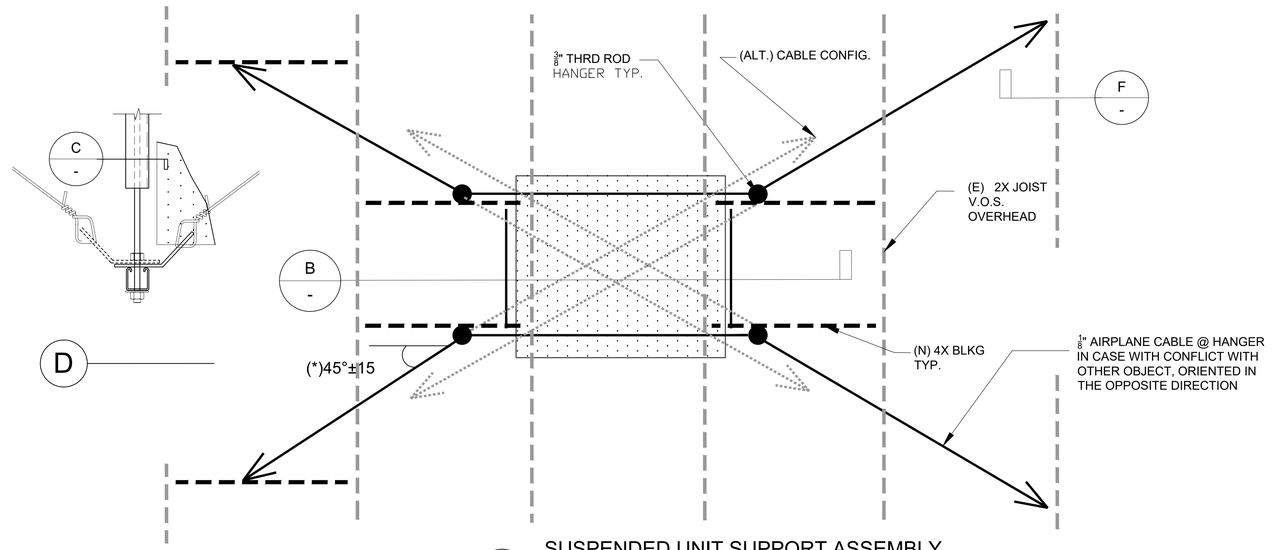
DETAIL | 17



LIGHT WT EQUIP. SUPPORT FRAMING | 15

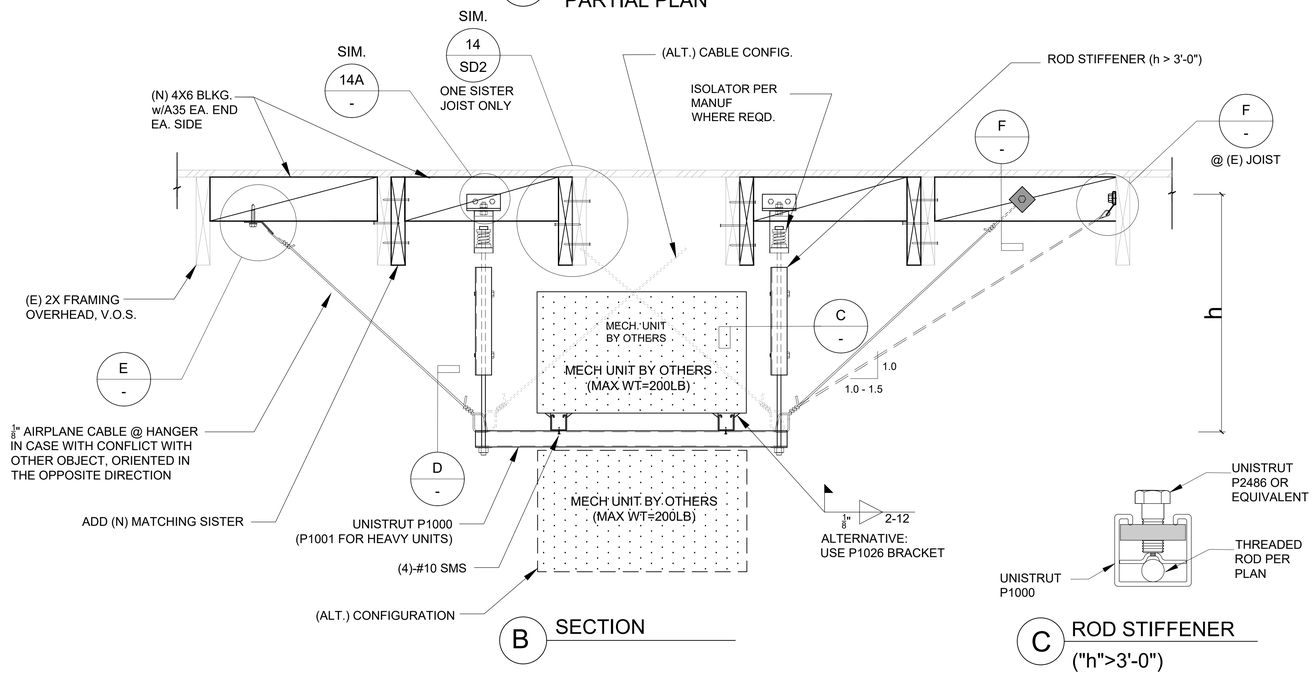


BLDG. SECTION @ CLASSROOMS | 16



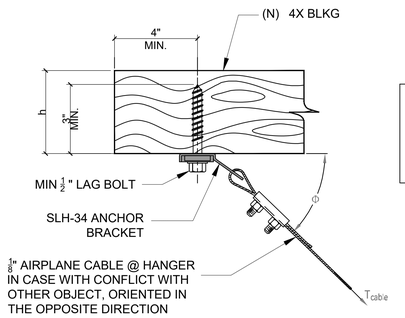
A SUSPENDED UNIT SUPPORT ASSEMBLY

PARTIAL PLAN



B SECTION

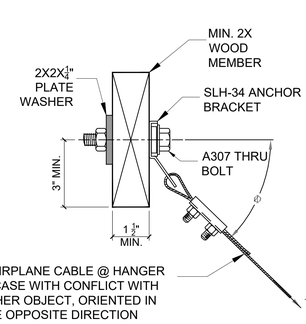
C ROD STIFFENER ("h">3'-0")



MAX SERVICE LOAD: 100 lbs

E LAG BOLT TO WOOD MEMBER

PROVIDE ADDITIONAL SUPPORT POINT & LATERAL BRACES FOR HEAVY UNITS (>500-LB) COORDINATE WITH MEP



MAX SERVICE LOAD: 100 lbs

F THRU BOLT PERPENDICULAR TO WOOD MEMBER

HANGER SUPPORT/ SEISMIC BRACING @ HUNG UNITS (MAX 200-lbs) | 4

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

Not for permitting or construction

PBK

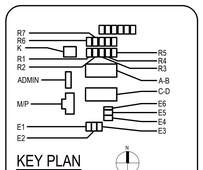
ARCHITECT
PBK Architects, Inc.
RANCHO CUCAMONGA
8163 Rochestser Avenue, Suite 100
Rancho Cucamonga
California 91730
P 909-987-0909
PBK.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953



Consultant

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR.
SUITE 150
NEWPORT BEACH, CA 92660
NIC PROJECT NO.2224.07

REGISTERED PROFESSIONAL ENGINEER
No. S4302
Exp.09/30/25
STRUCTURAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
Issue Date	Project Number

REVISIONS

No.	Description	Date

DSA Submittal

HUNG UNITS DETAILS

This document is for plan review only

SD3

FILE PATH: Z:\Projects\...
1/6/2023 1:25:00 PM

0" 1"

TITLE 24 NOTES

THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:

1. EQUIPMENT SHALL MEET EFFICIENTY REQUIREMENTS OF TABLES 110.2-A THROUGH 110.2-K.
2. ALL AIR-COOLED, UNITARY, DX UNITS (PACKAGED, SPLIT-SYSTEM, HEAT PUMPS AND VRF) WITH ECONOMIZERS SHALL BE EQUIPPED WITH FAULT DETECTION AND DIAGNOSTICS SYSTEMS.
3. PIPE INSULATION FOR SPACE CONDITIONING AND SERVICE WATER-HEATING WITH FLUID TEMPERATURES LISTED IN TABLE 120.3-A SHALL HAVE INSULATION LEVELS AS SPECIFIED IN SUBSECTION (A) AND (B).
4. MECHANICAL HEATING AND COOLING EQUIPMENT SHALL BE THE SMALLEST SIZE, WITHIN THE AVAILABLE OPTIONS OF THE DESIRED EQUIPMENT LINE, NECESSARY TO MEET THE DESIGN HEATING AND COOLING LOADS OF THE BUILDING, AS CALCULATED ACCORDING TO THE REQUIREMENTS OF SECTION 140.4(B).
5. HVAC MOTORS FOR FANS THAT ARE LESS THAN 1 HP AND 1/12 HP OR GREATER SHALL BE ECM OR HAVE A MINIMUM MOTOR EFFICIENCY OF 70%. MOTORS SHALL ALSO HAVE MEANS TO ADJUST MOTOR SPEED FOR BALANCING OR REMOTE CONTROL.
6. ELECTRIC RESISTANCE HEATING SYSTEMS ARE NOT PROVIDED FOR SPACE HEATING.
7. IN DRIER CLIMATES AND WHEN LARGE OUTDOOR AIR FRACTIONS ARE REQUIRED, EVAPORATIVE PRE-COOLING PACKAGES WERE EVALUATED TO PRE-COOL OUTSIDE AIR AND COOL THE AIR FLOWING OVER THE DX CONDENSING UNIT.
8. ZONE EACH AIR HANDLER TO SERVE ONLY AREAS WITH COMMON LOADS TO ALLOW MORE AGGRESSIVE CONTROL STRATEGIES AND IMPROVE COMFORT. HAVE DIFFERENT AHU'S SERVING CORE VS. PERIMETER AREAS.
9. THE DESIGN ACCOMMODATES PARTIAL OCCUPANCY ENERGY SAVINGS WHEN THE OWNER'S REQUIREMENTS OR NARRATIVE DESCRIBE ANY POSSIBLITY OF PARTIAL OCCUPANCY, BY ZONING AIR HANDLERS BY FLOOR OR BY PART OF A FLOOR, OR BY INCORPORATING CONTROLLED FLOOR DAMPERS, OR VAV AIR TERMINALS GOING TOTALLY SHUT WHEN NOT OCCUPIED, ETC.
10. EACH ZONE IS CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL. CONTROLS SHALL BE CAPABLE OF SETTING TEMPERATURES TO 55 DEG F FOR HEATING AND 85 DEG F FOR COOLING AND PROVIDE A TEMPERATURE DEADBAND OF AT LEAST 5 DEG F IF CONTROLLING BOTH HEATING AND COOLING.
11. EACH SPACE CONDITIONING SYSTEM SHALL BE EQUIPPED WITH CONTROLS TO SHUT THE SYSTEM OFF DURING PERIODS OF NONUSE AND WILL TEMPORARILY OPERATE THE SYSTEM TO MAINTAIN SETBACK AND SETUP TEMPERATURES WHILE KEEPING VENTILATION DAMPERS CLOSED.
12. SYSTEMS SERVING MULTIPURPOSE ROOMS LESS THAN 100 SF AND CLASSROOMS, CONFERENCE, AUDITORIUM OR MEETING CENTER ROOMS GREATER THAN 750 SF SHALL HAVE OCCUPANCY SENSORS THAT INTERFACE WITH HVAC CONTROLS TO AUTOMATICALLY SETUP THE COOLING SETPOINT BY 2F OR MORE AND AUTOMATICALLY RESET THE MINIMUM REQUIRED VENTILATION RATE. THESE OCCUPANT SENSOR VENTILATION CONTROL DEVICES MUST MEET THE REQUIREMENTS OF SECTION 120.1(C)5.
13. OUTDOOR AIR SUPPLY AND EXHAUST EQUIPMENT SHALL BE INSTALLED WITH DAMPERS THAT AUTOMATICALLY CLOSE UPON EF FAN SHUTDOWN.
14. HVAC SYSTEMS WITH DDC TO THE ZONE LEVEL SHALL BE PROGRAMMED TO ALLOW CENTRALIZED DEMAND SHED FOR NON-CRITICAL ZONES.
15. ZONE CONTROLS PREVENT REHEATING, RECOOLING AND SIMULTANEOUS PROVISIONS OF HEATING AND COOLING TO THE SAME ZONE.
16. EACH WALL MOUNTED THRMOSTAT SHALL BE LOCATED AWAY FROM POTENTIAL SOURCES THAT WOULD ADVERSELY AFFECT THE READING (CLOSE TO COPIERS, DIRECT SUNLIGHT, BELOW OR ABOVE A SUPPLY AIR DIFFUSER OR CONVECTOR, ETC.). ANY THERMOSTATS MOUNTED ON EXTERIOR WALLS SHALL BE INSTALLED IN SEALED AND INSULATED JUNCTION BOXES.
17. CORNER OFFICE SHALL ALWAYS HAVE THEIR OWN THERMOSTATS, AIR TERMINAL BOXES OR FIN-TUBE RADIATORS.
18. CONTROL SEQUENCES SHALL BE LISTED FOR EQUIPMENT OPERATED BY STAND-ALONE PACKAGED CONTROLS. UNOCCUPIED SEQUENCES SHALL BE INCLUDED.
19. CONTROL SEQUENCES SHALL BE PROVIDED FOR EACH PIECE OF EQUIPMENT LISTED IN THE EQUIPMENT SCHEDULE THAT IS MONITORED OR CONTROLLED BY THE BUILDING AUTOMATION SYSTEM (BAS). UNOCCUPIED SEQUENCES SHALL BE INCLUDED.
20. OUTSIDE AIR TEMPERATURE SENSORS SHALL BE IN A COMMERCIALLY DESIGNED SOLAR SHIELD LOCATED ON A NORTH WALL OR SOME OTHER LOCATION OUT OF DIRECT SUNLIGHT AND AWAY FROM BUILDING EXHAUST OR HEAT REJECTION EQUIPMENT.
21. THE OUTDOOR AIR-VENTILATION RATE AND AIR-DISTRIBUTION ASSUMPTIONS MADE IN THE DESIGN OF THE VENTILATING SYSTEM ARE CLEARLY IDENTIFIED ON THE PLANS.
22. EACH SPACE IS DESIGNED TO HAVE NATURAL VENTILATION OR MECHANICAL VENTILATION THAT IS NO LESS THAN THE LARGER OF CONDITIONED FLOOR AREA TIMES THE REQUIREMENTS IN TABLE 120.1-A OR 15 CFM TIMES THE EXPECTED NUMBER OF OCCUPANTS.
23. THE MINIMUM AND MAXIMUM OUTDOOR AIR RATES FOR EACH AIR HANDLER ARE LISTED ON THE EQUIPMENT SCHEDULES.
24. THE OUTDOOR AIR-VENTILATION RATES ARE BASED ON PLANNED OWNER OCCUPANCY AS DEFINED IN OWNER'S DESIGN INTENT AND ARE NOT BASED ON MAXIMUM EGRESS OCCUPANCY RATES.
25. HVAC SYSTEMS THAT HAVE AN ECONOMIZER, SERVE A SPACE WITH A DESIGN OCCUPANT DENSITY GREATER THAN OR EQUAL TO 25 PEOPLE PER 1000 SF, AND ARE EITHER A SINGLE ZONE SYSTEM WITH ANY CONTROLS OR MULTIPLE ZONE SYSTEM WITH DDC CONTROLS TO THE ZONE LEVEL MUST HAVE DEMAND CONTROL VENTILATION CONTROLS. THE FOLLOWING MUST BE MET:

    A. CO2 SENSORS INSTALLED IN EACH ROOM SERVED BY SYSTEMS WITH DCV CONTROLS.
    B. CO2 SENSORS ARE LOCATED BETWEEN 3 FT AND 6 FT ABOVE THE FLOOR.
    C. CO2 CONCENTRATIONS MAINTAINED AT LESS THAN OR EQUAL TO 600 PPM PLUS OUTDOOR PPM.
    D. DURING HOURS OF EXPECTED OCCUPANCY, CONTROLS MAINTAIN THE SYSTEM VENTILATION RATE.

26. EACH COOLING FAN SYSTEM THAT HAS A DESIGN MECHANICAL COOLING CAPACITY OVER 54,000 BTU/H SHALL HAVE AN AIR ECONOMIZER OR A WATER ECONOMIZER. AIR ECONOMIZERS MUST COMPLY WITH THE HIGH LIMIT SHUTOFF CONTROLS SHOWN IN TABLE 140.4-B.
27. INTEGRATED ECONOMIZER CONTROLS SHALL BE SET UP SUCH THAT PARTIAL COOLING IS PROVIDED BY THE ECONOMIZER EVEN WHEN ADDITIONAL MECHANICAL COOLING ID REQUIRED.
28. ECONOMIZER DAMPERS SHALL BE DRIVEN BY DIRECT DRIVE ACTUATORS RATHER THAN ROD LINKAGES, WHICH CAN BE A MAJOR CAUSE OF ECONOMIZER MALFUNCTION.
29. BAROMETRIC RELIEF IS USED, IF POSSIBLE. IF NOT, RELIEF FANS (RATHER THAN RETURN FANS) SHALL BE USED IN MOST CASES.
30. OUTDOOR AND RETURN AIR SENSORS SHALL BE PROPERLY SELECTED, PROPERLY LOCATED TO PROVIDE ACCURATE AND REPEATABLE MEASUREMENTS FOR CONTROLLING ECONOMIZER OPERATION. AVERAGING SENSORS COVER THE ENTIRE DUCT OR COIL FACE AREAS.
31. ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS MUST BE INSTALLED, SEALED AND INSULATED AS REQUIRED BY 120.4(A).
32. DUCT SEALING LEAKAGE RATES SHALL BE NO MORE THAN 6% OF AIR FLOW FOR NEW DUCT SYSTEMS AND NO MORE THAN 15% OF AIR FLOW FOR ALTERED EXISTING DUCT SYSTEMS.
33. DUCT SHALL UTILIZE LOW STATIC PRESSURE DESIGN. IDENTIFY THE MOST RESTRICTIVE BRANCH FROM THE FAN TO THE LAST AIR TERMINAL UNIT. IDENTIFY POSSIBLE MEANS OF SIGNIFICANTLY REDUCING THE PRESSURE DROP. BRANCH DUCT SYSTEMS SHALL DESIGNED FOR EQUAL PRESSURE DROP, WHEN POSSIBLE.
34. DUCT BRANCHES WITH SIGNIFICANTLY DIFFERING STATIC PRESSURE REQUIREMENTS SHALL HAVE VOLUME CONTROL STRATEGICALLY PLACED TO AID IN TAB WORK.
35. FAN SHALL DISCHARGE INTO DUCT SECTIONS THAT REMAIN STRAIGHT FOR AS LONG AS POSSIBLE (IDEALLY 10 DUCT DIAMETERS) TO REDUCE FAN INEFFICIENCIES FROM SYSTEM EFFECTS.
36. DUCT VELOCITIES SHALL GENERALLY BE BELOW 2,000 FPM FOR DUCTS IN CEILING PLENUMS, 1500 FPM FOR EXPOSED DUCTS AND 3500 FPM IN MECHANICAL ROOMS AND NON-NOISE SENSITIVE SHAFTS AND DO NOT REDUCE ANY DUCT SIZES LISTED ON PLANS.
37. DUCT FRICTION RATES SHALL GENERALLY BE LESS THAN O.25" WC PER 100 LINEAL FEET NEARER THE FAN, 0.15 TO 0.20" IN THE MAIN DUCTS AND 0.08 TO 0.12" WC/100' NEARER THE END OF THE SYSTEM. DESIGNS OVER THESE RATES SHALL BE QUESTIONED. VERY ENERGY EFFICIENT DESIGN CAN LOWER THESE VALUES BY UP TO 40%.
38. CONTRACTOR SHOP DRAWINGS SHALL BE SUFFICIENTLY DETAILED TO ENSURE THAT DISTRIBUTION SYSTEM DESIGN INTENT IS ADEQUATELY CONVEYED TO MATCH PLANS. IF SUFFICIENT DETAIL IS NOT INCLUDED IN DRAWINGS, INSTALLATIONS MAY RESULT IN SIGNIFICANTLY HIGHER PRESSURE DROPS AND HENCE HIGHER ENERGY CONSUMPTION AND OTHER OPERATING ISSUES.
39. ACCEPTANCE REQUIREMENTS ARE CLEARLY IDENTIFIED IN CONSTRUCTION DOCUMENTS.
40. COMMISSIONING MEASURES OR REQUIREMENTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.
41. REQUIREMENTS FOR FUNCTIONAL PERFORMANCE TESTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.
42. COOLING SYSTEMS IDENTIFIED IN TABLE 140.4-D SHALL HAVE FAN CONTROLS TO VARY THE INDOOR FAN AIRFLOW AS A FUNCTION OF LOAD:
    A. DX AND CHILLED WATER COOLING SYSTEMS THAT CONTROL CAPACITY BASED ON OCCUPIED SPACE TEMPERATURE SHALL HAVE A MINIMUM OF 2 STAGES OF CONTROL.
    B. SYSTEMS THAT CONTROL SPACE TEMPERATURE BY MODULATING AIRFLOW TO THE SPACE SHALL HAVE PROPORTIONAL FAN CONTROL.
    C. SYSTEMS WITH AIR SIDE ECONOMIZER SHALL HAVE A MINIMUM OF 2 SPEEDS OF FAN CONTROL DURING ECONOMIZER OPERATION.
43. FAN CABINET ENCLOSURE AND INTERNAL COMPONENTS SHALL BE ELECTED TO MINIMIZE PRESSURE DROP, E.G. FACE VELOCITY IS LESS THAN 500 FPM, LOW PRESSURE DROP COILS, FILTERS, ETC.
44. FAN WHEEL SHALL BE SELECTED FOR EFFICIENT OPERATION, E.G. LARGER DIAMETER ROTATING AT LOWER SPEED.
45. SYSTEMS THAT SERVE MULTIPLE ZONES SHALL HAVE CONTROLS THAT AUTOMATICALLY RESET SUPPLY AIR TEMPERATURE. ZONES WITH HIGH INTERNAL LOADS WITH NEAR CONSTANT AIRFLOW SHALL BE DESIGNED FOR THE ELEVATED RESET SUPPLY AIR TEMPERATURE. RESET CONTROLS SHALL BE IN RESPONSE TO BUILDING LOADS OR TO OUTDOOR AIT TEMPERATURE AND SHALL BE AT LEAST 25% OF THE DIFFERENCE BETWEEN SUPPLY AIR AND DESIGN ROOM AIR TEMPERATURE. CONTROL SEQUENCES ARE IDENTIFIED IN CONSTRUCTION DOCUMENTS.
46. SAT RESET SHALL BE ESTABLISHED WITH AN AGGRESSIVE RESET SCHEDULE OF 10F, E.G. 55F DURING WARM WEATHER AND 65F DURING COOL WEATHER.
47. UNLESS SPECIFICALLY SHOWN ON THESE PLANS, NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT

GENERAL NOTES

1. ALL WORK SHALL COMPLY WITH CURRENT CALIFORNIA CODE OF REGULATIONS TITLE 24, ALL OTHER APPLICABLE CODES AND REGULATIONS, SMACNA AND ASHRAE GUIDELINES, AND LOCAL CODES.
2. ALL HVAC EQUIPMENT SHALL BE COMPLIANT WITH EFFICIENCY STANDARDS PER TITLE-24, PART 6.
3. ALL FRESH AIR INTAKES SHALL BE AT LEAST 10 FEET IN A HORIZONTAL DIRECTION FROM ALL EXHAUST, FLUE, FUEL BURNING APPLIANCE AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONING UNITS WHERE THE CODE REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION SHALL BE USED TO MINIMIZE THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRIOR TO BID. THIS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
4. AIR FILTERS SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS IN ALL OCCUPANCIES SHALL BE PER TITLE-24 PART 6 AND APPLICABLE ASHRAE REQUIREMENTS. FILTERS SHALL BE ACCESSIBLE
5. REVIEW THESE PLANS AND SPECIFICATIONS PRIOR TO BID. REVIEW PLANS AND SPECIFICATIONS OF OTHER RELATED TRADES INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND FIRE PROTECTION.
6. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AS THESE ARE PART OF THE CONTRACT DOCUMENTS. WHERE A CONFLICT OCCURS BETWEEN THIS SPECIFICATION AND OTHER SPECIFICATIONS ISSUED AS A PART OF THE CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SUPERCEDES.
7. THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND NOT INTENDED TO INDICATE ALL REQUIRED OFFSETS, BENDS, ELBOWS, TRANSITIONS, FITTINGS AS REQUIRED TO CONFORM TO THE BUILDING STRUCTURE, CLEARANCE INSIDE CEILINGS, AVOIDANCE OF OBSTRUCTIONS, AND MAINTAINING HEAD CLEARANCE.
8. COORDINATE INSTALLATION WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF EQUIPMENT OR MATERIALS, INCLUDING BUT NOT LIMITED TO, STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND PLUMBING.
9. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH THE ARCHITECTURAL REFLECTIVE CEILING PLANS, ELECTRICAL LIGHTING LAYOUT, AND ARCHITECTURAL ROOM ELEVATIONS. THE ARCHITECT AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION AND INSTALLATION.
10. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATIONS OF ALL ROOF MOUNTED EQUIPMENT WITH THE STRUCTURAL AND ARCHITECTURAL WEIGHTS FOR PLATFORM AND CURB SIZES, FOR ROOF AND WALL PENETRATION DETAILS AND REQUIREMENTS, SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS. REQUIRED PLATFORMS AND FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL AND ARCHITECTURAL PLANS, UNLESS NOTED OTHERWISE.
11. HIRE A TEST AND BALANCE AGENCY TO PERFORM THE TESTING PROCEDURES, REQUIRED BY THE MECH-2A THROUGH MECH-11A CERTIFICATE OF ACCEPTANCE FORMS, AS APPLICABLE FOR ALL NEWLY INSTALLED HEATING AND COOLING SYSTEMS. THE CONTRACTOR AND TEST AND BALANCE AGENCY ARE RESPONSIBLE FOR OBTAINING THE CERTIFICATE OF ACCEPTANCE FORMS REQUIRED BY THE IOR. THE TEST AND BALANCE AGENCY SHALL BE WELL VERSED WITH ALL THE REQUIREMENTS OF THESE CERTIFICATE OF ACCEPTANCE FORMS, AND SHALL COORDINATE AND WORK WITH THE EQUIPMENT AND CONTROLS INSTALLERS TO COMPLY WITH THESE REQUIREMENTS IN A TIMELY MANNER WITHIN THE PROJECT SCHEDULE. THE AIR BALANCE CONTRACTOR SHALL BE A MEMBER OF AABC (ASSOCIATED AIR BALANCE COUNCIL).
12. PAINT ALL EXPOSED DUCTWORK, DUCT SUPPORTS, ACCESSORIES, REGISTERS, GRILLES, DIFFUSERS, AND APPURTENANCES, WHETHER OR NOT COLORS ARE DESIGNATED IN SCHEDULES, EXCEPT WHERE A SURFACE OR MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED OR IS TO REMAIN NATURAL. WHERE AN ITEM OR SURFACE IS NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SURFACES. IF COLOR OR FINISH IS NOT DESIGNATED, THE ARCHITECT WILL SELECT FROM STANDARD COLORS OR FINISHES AVAILABLE. PAINTING INCLUDES FIELD PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS (INCLUDING COLOR CODING), HANGERS, EXPOSED STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL EQUIPMENT.
13. PROVIDE ALL LABOR, MATERIAL, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, AND OTHER WORK AS REQUIRED. FOR A COMPLETE AND PROPERLY OPERATING MECHANICAL SYSTEM.
14. ALL MATERIALS SHALL BE NEW AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GROUP OF EQUIPMENT. EQUIPMENT SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES, AND SHALL BEAR THE INSPECTION LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVAL OF THE GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY THE LATEST EDITION OF CMC, CBC U.L., SMACNA AND ASHRAE GUIDELINES. INSTALL PER MANUFACTURERS' RECOMMENDATIONS, AND INSTALLATION INSTRUCTIONS.
15. OBTAIN AND PAY FOR ALL NECESSARY BUILDING PERMITS AND VARIANCES. COORDINATE TEMPORARY CONSTRUCTION REQUIREMENTS WITH ALL TRADES PRIOR TO CONSTRUCTION. INCLUDE ALL COSTS IN THE BID.
16. IF THE CONTRACTOR PROPOSES ALTERNATE EQUIPMENT OR MATERIAL, THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL DSA APPROVALS, PAY ALL RELATED FEES AND OBTAIN APPROVAL FROM OWNER & ENGINEER OF RECORD. PROVIDE TITLE-24 COMPLIANCE CERTIFICATION AND ALL ASSOCIATED FEES REQUIRED. COORDINATE SUBMITTED EQUIPMENT WITH OTHER TRADES. INCLUDE IN THE SHOP DRAWINGS THE EQUIPMENT SUBMITTED FOR APPROVAL WITH A DIFFERENT PHYSICAL SIZE OR ARRANGEMENT FROM THAT SHOWN.
17. PROVIDE SHOP DRAWINGS PER PROJECT SCHEDULE, SEE 23 00 00 SPECIFICATIONS FOR REQUIREMENTS. IF SHOP DRAWINGS ARE NOT PROVIDED TO THE ENGINEER FOR REVIEW, AND ANY CONFLICTS OCCUR BETWEEN TRADES, DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY TO RESOLVE THE CONFLICT AND BEAR ALL COSTS INCURRED FOR ALL REVISIONS, AT NO ADDITIONAL COST TO THE DISTRICT. THE DISTRICT AND ENGINEER SHALL BE NOTIFIED IMMEDIATELY PRIOR TO FABRICATION AND INSTALLATION OF ALL WORK THAT CAUSES CONFLICTS BETWEEN TRADES.
18. PROVIDE ALL MANUFACTURER'S PRODUCT DATA CLEARLY INDICATING MODEL NUMBERS, CAPACITIES, CONSTRUCTION, ELECTRICAL INFORMATION, AND OPTIONAL ACCESSORIES, PER PROJECT SCHEDULE AND PRIOR TO THE START OF WORK. THESE SHALL BE REVIEWED BY THE MECHANICAL ENGINEER PRIOR TO PURCHASING.
19. SUBMIT TO THE OWNER ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, "AS-BUILTS", ETC. AT THE COMPLETION OF THE JOB. PROVIDE THE OWNER WITH COMPLETE MECHANICAL "AS-BUILTS" INDICATING FINAL EQUIPMENT LOCATIONS, DUCTWORK AND PIPE ROUTING, ETC.
20. OBTAIN APPROVAL FROM THE OWNER ON ALL ADDENDA AND CONSTRUCTION CHANGE DOCUMENT (CCD) PRIOR TO DOING THE WORK.
21. INSTALL ALL EQUIPMENT, ACCESSORIES, AND MATERIAL IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
22. PROVIDE FIRESTOPPING FOR PIPE AND DUCT PENETRATIONS THROUGH RATED WALLS. CONTRACTOR SHALL COORDINATE WITH OTHER TRADES AS NECESSARY PRIOR TO INSTALLATION.
23. ANY MATERIAL EXPOSED WITHIN A PLENUM OR DUCT MUST HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25, AND A SMOKE DEVELOPED RATING OF NOT MORE THAN 50, AND A MOLD/HUMIDITY RESISTANCE PER U.L. 181.
24. ALL EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS OUTSIDE OF THE BUILDING OR OTHERWISE EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHERPROOFED.
25. LOCATE ALL EQUIPMENT SUCH THAT CODE REQUIRED ACCESS IS MAINTAINED, INCLUDING N.E.C. REQUIREMENTS. ACCESS PANELS WHERE REQUIRED, SHALL BE COORDINATED WITH ARCHITECT, AND PROVIDED BY FACTORY OR BE FIELD-PROVIDED. FOR ATTIC EQUIPMENT, G.C. TO PROVIDE A CATWALK & LIGHT PER CMC FOR ATTIC EQUIPMENT.
26. FOR INACCESSIBLE AREAS THE CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING WHERE THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:
    1) HAND ACCESS: 12"x12" MIN.
    2) BODY ACCESS: 30"x30" MIN.
27. ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTIONS.
28. LABEL ALL EQUIPMENT AS TO THE SPACE IT SERVES. SEE SPECIFICATIONS FOR IDENTIFICATION STANDARDS. LABEL DUCT SMOKE DETECTOR LOCATIONS (AT CEILING) AS TO THE EQUIPMENT IT SERVES.
29. A/C UNITS PROVIDED WITH ECONOMIZER CYCLE DAMPERS SHALL HAVE OSA DAMPERS SET UP TO CLOSE AUTOMATICALLY ON FAN SHUT DOWN.
30. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR FRESH AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY-ECONOMIZERS.
31. DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY EXISTING CONDITION PRIOR TO BID DATE.
32. OWNER RETAINS SALVAGE RIGHTS, PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO REMOVAL OF ROOF TOP UNITS AND EXHAUST FANS.
33. PATCH AND SEAL ALL SLAB, ROOF AND WALL OPENINGS WITH LIKE MATERIAL WHERE MECHANICAL EQUIPMENT ONCE PENETRATED.
34. REMOVE EXISTING AND PROVIDE ALL NEW DUCT AND PIPE HANGER SUPPORTS WHERE DUCT AND PIPE IS BEING REPLACED.
35. PROVIDE ALL NEW PIPE SUPPORTS WHERE PIPING IS SCHEDULED TO BE REPLACED.
36. OUTDOOR REFRIGERANT PIPING TO BE INSULATED AND ALUMINUM WRAPPED.
37. CONTRACTOR IS RESPONSIBLE FOR COMPLETE AND OPERABLE SYSTEM.
38. ALL MECHANICAL EQUIPMENTS, PIPES AND DUCTS SHALL BE SUPPORTED AND BRACED PER THE CURRENT CALIFORNIA BUILDING CODE. ALL MECHANICAL COMPONENTS SHALL BE ABLE TO RESIST THE EFFECTS OF SEISMIC FORCES.
39. MECHANICAL WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATIONS.
40. CONTRACTOR SHALL PROTECT EXISTING BUILDING INFRASTRUCTURE DURING CONSTRUCTION FROM OUTDOOR ELEMENT. IF DAMAGED, CONTRACTOR SHALL REPLACE DAMAGED BUILDING COMPONENTS WITH NEW AT NO ADDITIONAL COST TO THE OWNER.
41. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE SMACNA LOW PRESSURE DUCT CONSTRUCTION STANDARDS.
42. ALL DUCT JOINTS SHALL BE MADE WITH MASTIC SEALANT, SHEET METAL SCREWS AND TAPED AIR TIGHT WITH HARDCAST OR EQUIV., MINIMUM 2-1/2" WIDTH.
43. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND DSA FIELD ENGINEER.
44. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PROVIDED BY THE CONTRACTOR AND KEPT ON THE JOB AT ALL TIMES.
45. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSET AS REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, TRUSSES, ETC.
46. COORDINATE ALL EQUIPMENT VOLTAGES WITH ELECTRICAL PRIOR TO ORDERING ANY EQUIPMENT.
47. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRULLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT

ANCHORAGE AND BRACING NOTES

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

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

MEP COMPONENT ANCHORAGE NOTE

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.5, 13.6.6, 13.6.7, 13.6.8; AND 2019 CBC, SECTION 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

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

MP ☒ MD ☒ PP ☐ E ☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) # 0203-13.

CAL GREEN NOTES

1. TESTING AND ADJUSTING. TESTING AND ADJUSTING OF SYSTEMS SHALL BE REQUIRED FOR NEW BUILDING LESS THAN 10,000 SQUARE FEET OR NEW SYSTEMS TO SERVE AN ADDITION OR ALTERATION SUBJECT TO SECTION 303.1

2. SYSTEMS. DEVELOP A WRITTEN PLAN OF PROCEDURES FOR TESTING AND ADJUSTING SYSTEMS. SYSTEMS TO BE INCLUDED FOR TESTING AND ADJUSTING SHALL INCLUDE, AS APPLICABLE TO THE PROJECT:

    A. HVAC SYSTEMS AND CONTROLS.
    B. INDOOR AND OUTDOOR LIGHTING AND CONTROLS.
    C. WATER HEATING SYSTEMS.
    D. RENEWABLE ENERGY SYSTEMS.
    E. LANDSCAPE IRRIGATION SYSTEMS.
    F. WATER REUSE SYSTEMS.

3. PROCEDURES. PERFORM TESTING AND ADJUSTING PROCEDURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND APPLICABLE STANDARDS ON EACH SYSTEM.

    A. HVAC BALANCING. IN ADDITION TO TESTING AND ADJUSTING, BEFORE A NEW SPACE-CONDITIONING SYSTEM SERVING A BUILDING OR SPACE IS OPERATED FOR NORMAL USE, BALANCE THE SYSTEM IN ACCORDANCE WITH THE PROCEDURES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS; THE NATIONAL ENVIRONMENTAL BALANCING BUREAU PROCEDURAL STANDARDS; ASSOCIATED AIR BALANCE COUNCIL NATIONAL STANDARDS OR AS APPROVED BY THE ENFORCING AGENCY.

4. REPORTING. AFTER COMPLETION OF TESTING, ADJUSTING AND BALANCING, PROVIDE A FINAL REPORT OF TESTING SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.

5. OPERATION AND MAINTENANCE (O & M) MANUAL. PROVIDE THE BUILDING OWNER OR REPRESENTATIVE WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS AND COPIES OF GUARANTIES/WARRANTIES FOR EACH SYSTEM. O & M INSTRUCTIONS SHALL BE CONSISTENT WITH OSHA REQUREMENTS IN CCR, TITLE 8, SECTION 5142, AND OTHER RELATED REGULATIONS.

    A. INSPECTIONS AND REPORTS. INCLUDE A COPY OF ALL INSPECTION VERIFICATIONS AND REPORTS REQUIRED BY THE ENFORCING AGENCY.

6. TEMPORARY VENTILATION. THE PERMANENT HVAC SYSTEM SHALL ONLY BE USED DURING CONSTRUCTION IF NECESSARY TO CONDITION THE BUILDING WITHIN THE REQUIRED TEMPERATURE RANGE FOR MATERIAL AND EQUIPMENT INSTALLATION. IF THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A MINIMUM REPORTING VALUE (MERV 13) OF 13, BASED ON ASHRAE 52.2-1999 OR AN AVERAGE EFFICIENCY OF 30 PERCENT BASED ON ASHRAE 52.1-1992. REPLACE ALL FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR, IF THE BUILDING IS OCCUPIED DURING ALTERATIONS, AT THE CONCLUSION OF CONSTRUCTION.

7. COVERING OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION. AT THE TIME OF ROUGH INSTALLATION AND DURING STORAGE ON THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF THE HEATING, COOLING AND VENTILATION EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT OPENINGS SHALL BE COVERED WITH WRAP, PLASTIC, SHEET METAL OR OTHER METHODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM.

8. FILTERS. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDE AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV 13) OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.

    EXCEPTIONS:
    A. AN ASHRAE 10-PERCENT TO 15-PERCENT EFFICIENCY FILTER SHALL BE PERMITTED FOR AN HVAC UNIT MEETING THE 2019 CALIFORNIA ENERGY CODE HAVING 60,000 BTU/H OR LESS CAPACITY PER FAN COIL, IF THE ENERGY USE OF THE AIR DELIVERY SYSTEM IS 0.4 W/CFM OR LESS AT DESIGN AIR FLOW.
    B. EXISTING MECHANICAL EQUIPMENT.

9. OZONE DEPLETION AND GREENHOUSE GAS REDUCTIONS. INSTALLATIONS OF HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS 5.508.1.1 AND 5.508.1.2.

    A. CHLOROFLOUROCARBONS (CFCS). INSTALL HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN CFCS.
    B. HALONS. INSTALL HVAC REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN HALONS.

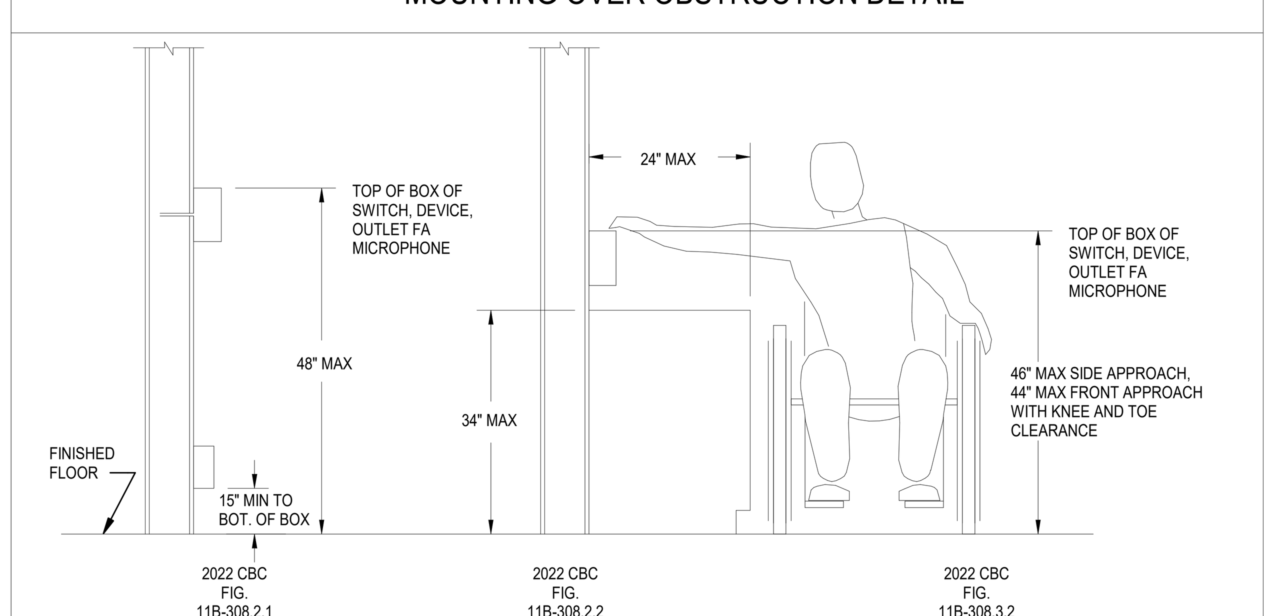
10. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIVE PRIMERS, SEALANTS, SEALANT PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION CONTROL OR AIR QUALITY MANAGEMENT DISTRICT RULES WHERE APPLICABLE, OR SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN TABLES 5.504.4.1.

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
1	KEY NOTES
1	DEMOLITION KEY NOTES
01 / M-2	DETAIL DESIGNATION DETAIL NUMBER SHEET NO. WHERE SHOWN
AC / 1	EQUIPMENT DESIGNATION UNIT ABBREVIATION NUMBER
10X10-3 / 120 F/S	GRILLE DESIGNATION NECK SIZE & BLOW FIRE/SMOKE DAMPER WHERE REQ'D CFM
- / -	SECTION CALLOUT
	POINT OF CONNECTION
	POINT OF DISCONNECTION
	NEW LINEWORK
	EXISTING LINEWORK
	DEMOLITION LINEWORK
16"x12"	SHEET METAL DUCT
16"x12"	HIDDEN SHEET METAL DUCT
16"x12"	INTERNALLY INSULATED SHEET METAL DUCT
	DIRECTION OF FLOW
	STANDARD BRANCH FOR SUPPLY AND RETURN
	ROUND ELBOW DOWN
	ROUND ELBOW UP
	RECTANGULAR TO ROUND TRANSITION
8"	FLEXIBLE DUCT
FC	FLEX CONNECTION
BDD	BACK DRAFT DAMPER
FD	FIRE DAMPER
F/S	COMBINATION FIRE AND SMOKE DAMPER
M	MOTORIZED DAMPER
	SUPPLY DIFFUSER: 2-WAY/3-WAY/4-WAY
	GRILLE: RETURN/EXHAUST
	1'x2' RETURN AIR GRILLE
	2'x2' RETURN AIR GRILLE
UP DN	SUPPLY AIR DUCT SECTION
UP DN	RETURN AIR DUCT SECTION
UP DN	EXHAUST AIR DUCT SECTION
	POWER OR GRAVITY ROOF VENTILATOR - EXHAUST
	POWER OR GRAVITY ROOF VENTILATOR - SUPPLY
UC	UNDERCUT DOOR
TG	TRANSFER GRILLE OR LOUVER
DG	DOOR GRILLE OR LOUVER

SYMBOL	DESCRIPTION
D X	DX COOLING COIL
H C	HEATING COIL
	DAMPER, OPPOSED BLADE
	DAMPER, PARALLEL BLADE
	FILTER
	HUMIDIFIER
	LOUVER
AD	ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK
1" 2"	STATIC PRESSURE CHANGE TAG
2"	STATIC PRESSURE TAG
	TURNING VANES (RECTANGULAR)
	DRAIN, FUNNEL
	CENTRIFUGAL FAN
	ANALOG SIGNAL
	DIGITAL SIGNAL
	ELECTRIC LEAD
	INSTRUMENT CAPILLARY TUBING
	ELECTRONIC 3-WAY VALVE
	ELECTRONIC 2-WAY VALVE
	DDC INPUT
	DDC OUTPUT
	LOCALLY MOUNTED INSTRUMENT
C02	CARBON DIOXIDE SENSOR
DPS	DIFFERENTIAL PRESSURE SENSOR
FM	FLOW METER
FS	AIRFLOW SENSOR
HS	RELATIVE HUMIDITY SENSOR
TS	TEMPERATURE SENSOR
TS	AVERAGING TEMPERATURE SENSOR
	METAL DUCT
R	EMS CO2 SENSOR
T	THERMOSTAT
PS	PRESSURE SWITCH
SD	SMOKE DETECTOR
SP	STATIC PRESSURE SENSOR
RS	REFRIGERANT SENSOR
D	DEW POINT SENSOR
H	SPACE HUMIDITY SENSOR
S	SWITCH
▲	FIRE WALL PENETRATION
(E)	EXISTING
(N)	NEW

MOUNTING OVER OBSTRUCTION DETAIL



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

DRAWING INDEX

SHEET	DESCRIPTION
M0.00	MECHANICAL SHEET INDEX, LEGEND, AND NOTES
M0.01	MECHANICAL TITLE 24 FORMS
M0.02	MECHANICAL TITLE 24 FORMS
M0.03	MECHANICAL TITLE 24 FORMS
M0.04	MECHANICAL TITLE 24 FORMS
M1.01	MECHANICAL SITE PLAN
MD2.01	DEMO MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
M2.01	MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
M4.01	MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS
M5.01	MECHANICAL SCHEDULES
M5.02	MECHANICAL SCHEDULES
M6.01	MECHANICAL DETAILS
M6.02	MECHANICAL DETAILS

ABBREVIATIONS

ABBREVIATION	DESCRIPTION
AAV	AUTOMATIC AIR VENT
ABV	ABOVE
AC	AIR CONDITIONING UNIT
AD	ACCESS DOOR
AFF	ABOVE FINISHED FLOOR
AHU	AIR HANDLING UNIT
AI	ANALOG INPUT
ALUM	ALUMINUM
AO	ANALOG OUTPUT
AP	ACCESS PANEL
B	BOILER
BDD	BACK DRAFT DAMPER
BEL	BELOW
BFC	BELOW FINISHED CEILING
BFP	BACK FLOW PREVENTER
BG	BLAST GATE
BHP	BREAK HORSEPOWER
BLDG	BUILDING
BOB	BOTTOM OF BEAM
BOP	BOTTOM OF PIPE
BSMT	BASEMENT
BTU	BRITISH THERMAL UNIT
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CI	CAST IRON
CL	CENTER LINE
CLG	CEILING
CO	CLEANOUT
COL	COLUMN
CP	CONDENSATE PUMP
CT	COOLING TOWER
CU	CONDENSING UNIT
CV	CONSTANT VOLUME BOX
D	DRAIN
DB	DRY BULB
DEG	DEGREES
DI	DIGITAL INPUT
DIA	DIAMETER
DL	DOOR LOUVER
DN	DOWN
DO	DIGITAL OUTPUT
DP	DIFFERENATIAL PRESSURE
DS	DUCT SILENCER
DX	DIRECT EXPANSION
EA	EACH
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EF	EXHAUST FAN
EFF	EFFICIENCY
EGC	EGGCRATE GRILLE
EJ	EXPANSION JOINT
EL	ELEVATION
EQ	EQUAL
ER	EXHAUST REGISTER
ESP	EXTERNAL STATIC PRESSURE
ET	EXPANSION TANK
EWC	ELECTRIC WATER COOLER
EXIST / (E)	EXISTING
°F	DEGREES FAHRENHEIT
FA	FREE AREA
FC	FAN COIL UNIT
FD	FIRE DAMPER
FG	FILTER GRILLE
FLA	FULL LOAD AMPS
FLR	FLOOR
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FP	FIRE PUMP
FPI	FINS PER INCH
FPM	FEET PER MINUTE
FS	FLOW SWITCH
FT	FEET / FOOT
FX	FLEXIBLE CONNECTION
GA	GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
HB	HOSE BIBB
HD	HEAD
HOA	HANDS OFF AUTO
HP	HEAT PUMP
HP	HORSEPOWER
HT	HEIGHT
HV	HEATING AND VENTILATING UNIT
HWC	HOT WATER CONVERTER
HWP	HEATING HOT WATER RETURN
HWR	HOT WATER PUMP
HWS	HEATING HOT WATER SUPPLY
HZ	HERTZ
IC	MOTOR STATUS
ICW	INDUSTRIAL COLD WATER
ID	INSIDE DIAMETER
IN	INCHES
IW	INDIRECT WASTE

ABBREVIATION	DESCRIPTION
KW	KILOWATTS
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LD	LINEAR DIFFUSER
LF	LINEAR FEET
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	THOUSAND BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPS
MH	MANHOLE
MIN	MINIMUM
MOCP	MAXIMUM OVERLOAD CIRCUIT PROTECTION
MOD	MOTOR OPERATED DAMPER
MTD	MOUNTED
MUA	MAKE-UP AIR UNIT
(N)	NEW
NC	NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
OAT	OUTSIDE AIR TEMPERATURE
OBD	OPPOSED BLADE DAMPER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OSA	OUTSIDE AIR
PBD	PARALLEL BLADE DAMPER
PD	PRESSURE DROP
PERF	PERFORATED
PH	PHASE
PR	PRESSURE RELIEF
PS	PRESSURE SWITCH
PSID	POUNDS PER SQUARE INCH DIFFERENTIAL
PSIG	POUNDS PER SQUARE INCH GAUGE
PT	PRESSURE TRANSMITTER
PTAC	PACKAGED TERMINAL AIR CONDITIONER
PVC	POLYVINYL CHLORIDE
RA	RETURN AIR
RAR	RETURN AIR REGISTER
RD	ROOF DRAIN
RF	RETURN FAN
RG	RETURN AIR GRILLE
RH	RELATIVE HUMIDITY
RHC	REHEAT COIL
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAR	SUPPLY AIR REGISTER
SAV	STAGED AIR VOLUME
SD	SMOKE DAMPER
SF	SUPPLY FAN
SI	SPEED INDICATOR
SK	SPEED CONTROL
SMBH	SENSIBLE MBH
SP	STATIC PRESSURE
SPEC	SPECIFICATION
SS	STAINLESS STEEL
STD	STANDARD
TAD	TRANSFER AIR DUCT
TEFC	TOTALLY ENCLOSED FAN COOLED
TEMP	TEMPERATURE
TG	TRANSFER GRILLE
TI	TEMPERATURE INDICATOR
TMBH	TOTAL MBH
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UC	UNDERCUT
UH	UNIT HEATER
UON	UNLESS OTHERWISE NOTED
UTR	UP THROUGH ROOF
V	VOLTS
VA	DAMPER/VALVE ACTUATOR
VAV	VARIABLE AIR VOLUME UNIT
VD	VOLUME DAMPER
VFD	VARIABLE FREQUENCY DRIVE
VP	VELOCITY PRESSURE
VTR	VENT THROUGH ROOF
W/	WITH
W/O	WITHOUT
WB	WET BULB
WC	WATER COLUMN
WG	WATER GAUGE
WT	WEIGHT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000
PBK.com

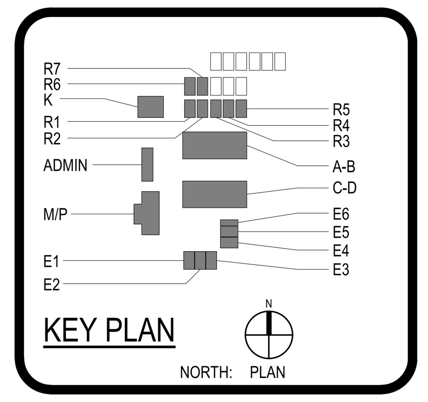
CONSULTANT LEAF Engineers
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 Univeristy St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL SHEET INDEX, LEGEND, AND NOTES

M0.00

FILE PATH: Z:\Projects\...
9/14/2023 10:34:40 AM

M0.01 - MECHANICAL TITLE 24 FORMS

0" 1"

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 1 of 17)
Project Name: Eastwood ES Bldg A — **Date Prepared:** 2023-03-27

A. General Information

1	Project Name	Eastwood ES Bldg A			
2	Run Title	Title 24 Analysis			
3	Project Location	13552 University St			
4	City	Westminster	5	Standards Version	Compliance 2022
6	Zip code	92683	7	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	6	9	Building Orientation (deg)	0
10	Building Type(s)	• Nonresidential	11	Weather File	TORRANCE-MUNI-AP_STYP20.epw
12	Project Scope	• Existing alteration	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	7659	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	7659	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 2 of 17)

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance					Building Components Complying Prescriptively		
Envelope (See Table G)	Nonres	Not Included	Solar Thermal Water Heating (See Table I3)	☐ Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).		
	MultiFam	Not Included		☒ Not Included			
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐ Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required	
	MultiFam	Not Included		☒ Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required	
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐ Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required	
	MultiFam	Not Included		☒ Not Included	**Building Components Complying with Mandatory Measures**		
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☒ Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)		
	MultiFam	Not Included		☐ Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required	
			Battery (see Table F)	☐ Performance	Commissioning 120.8	NRCC-CXR-E is required	
				☒ Not Included	Solar and Battery 110.10	NRCC-SAB-E is required	

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 3 of 17)

C1. COMPLIANCE SUMMARY

	COMPLIES[3]		
	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	375.18	375.18	29.64
Proposed Design	210.16	210.16	15.9
Compliance Margins	**165.02**	**165.02**	**13.74**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 4 of 17)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

	COMPLIES[2]		
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	4.06	2.62	1.44
Space Cooling	91.32	82.61	8.71
Indoor Fans	225.47	70.6	154.87
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	21.23	21.23	0
Indoor Lighting	33.1	33.1	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**375.18**	**210.16**	**165.02 (44%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**375.18**	**210.16**	**165.02 (44%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 5 of 17)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[2]
Receptacle	414.79	414.79	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**789.97**	**624.95**	**165.02 (20.9%)**

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 6 of 17)

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

	COMPLIES[2]		
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	0.56	0.35	0.21
Space Cooling	3.56	4.9	-1.34
Indoor Fans	21.13	6.26	14.87
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	1.77	1.77	0
Indoor Lighting	2.62	2.62	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**29.64**	**15.9**	**13.74 (46.4%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**29.64**	**15.9**	**13.74 (46.4%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 7 of 17)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[2]
Receptacle	44.35	44.35	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**73.99**	**60.25**	**13.74 (18.6%)**

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

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 8 of 17)

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.9	0.6	0.3	---	---	---
Space Cooling	21.5	20.3	1.2	---	---	---
Indoor Fans	61.2	19.1	42.1	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	6.6	6.6	0	---	---	---
Indoor Lighting	9.7	9.7	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**99.9**	**56.3**	**43.6**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**99.9**	**56.3**	**43.6**	**0**	**0**	**0**
Receptacle	116.5	116.5	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**216.4**	**172.8**	**43.6**	**0**	**0**	**0**

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 9 of 17)

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	96.4	76.98	19.42	20.15
NET EUI[1]	96.4	76.98	19.42	20.15

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
• The user model includes space(s) that are designed to be served by mechanical cooling systems, but the cooling systems were not included in the simulation model. A cooling system has been modeled for both the proposed and standard cases.
• The user model includes space(s) without sufficient cooling equipment. Cooling equipment has been added to the model to meet cooling loads.

F1. REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception[1]	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)

[1] *See Table D1 for any PV exceptions used.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 10 of 17)

F1B. PV BATTERY BUILDING TYPE(S)

01 Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)	02 Conditioned Floor Area (ft²)	03 Unconditioned Floor Area (ft²)
Grocery	0	0
High-Rise Multifamily	0	0
Office, Financial Institutions, Unleased Tenant Space	7659	0
Retail	0	0
School	0	0
Warehouse	0	0
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0	0
None	0	0

**Building Occupancy Types are defined in Section 100.1 of the Energy Code*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
Computer Lab A-1	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom A-2	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 11 of 17)

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
Classroom A-3	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom A-4	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom B-4	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom B-3	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom B-2	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom B-1	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Counselor A6	Single Zone Heat Pump (SZHP) Air System	1	12	0	N/A	NA	12	EER SEER	13 21.5	No Economizer	N
Office	Single Zone Heat Pump (SZHP) Air System	1	12	0	N/A	NA	12	EER SEER	13 21.5	No Economizer	N

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 12 of 17)

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
			Supply Fan				Return / Relief Fan					
Name or Item Tag	Qty	Design OA CFM	CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	Status[1]
Computer Lab A-1	1	134.1	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom A-2	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom A-3	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom A-4	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom B-4	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom B-3	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom B-2	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom B-1	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Counselor A6	1	27.45	350	0.15	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Office	1	30.75	350	0.15	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H8. SYSTEM SPECIAL FEATURES

01 System Name	02 Equipment Type	03 Interlocks per 140.4(n)[1]	04 Other Special Features and Controls
Computer Lab A-1	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom A-2	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom A-3	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 13 of 17)

H8. SYSTEM SPECIAL FEATURES

01 System Name	02 Equipment Type	03 Interlocks per 140.4(n)[1]	04 Other Special Features and Controls
Classroom A-4	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom B-4	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom B-3	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom B-2	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom B-1	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 14 of 17)

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01 Zone Name	02	03	04	05	06	07
	Mechanical Ventilation					
	Ventilation Function	# of Peoplef of People	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
1-Computer Lab A-1	Education - Computer lab	1.34	134.1	0	894	DCV
2-Classroom A-2	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
3-Classroom A-3	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
4-Classroom A-4	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
5-Classroom B-4	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 15 of 17)

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01 Zone Name	02	03	04	05	06	07
	Mechanical Ventilation					
	Ventilation Function	# of Peoplef of People	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
6-Classroom B-3	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
7-Classroom B-2	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
8-Classroom B-1	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
9-Counselor A6	Office - Office space	0.92	27.45	0	183	N/A
10-Office	Office - Office space	1.02	30.75	0	205	N/A

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
			Rated Capacity (kBtuh)		Airflow (cfm)			Fan			
System ID	System Type	Qty	Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	VSD
1-Computer Lab A-1-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
2-Classroom A-2-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
3-Classroom A-3-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
4-Classroom A-4-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
5-Classroom B-4-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
6-Classroom B-3-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
7-Classroom B-2-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
8-Classroom B-1-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
9-Counselor A6-Trm	Uncontrolled	1	N/A	N/A	350	N/A	0	N/A	N/A	N/A	☐
10-Office-Trm	Uncontrolled	1	N/A	N/A	350	N/A	0	N/A	N/A	N/A	☐

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 16 of 17)

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01 Occupancy Type[1]	02 Conditioned Floor Area[2] (ft²)	03 Installed Lighting Power (Watts)	04 Lighting Control Credits (Watts)	05 Additional (Custom) Allowance: Area Category Footnotes (Watts)	06 Additional (Custom) Allowance: Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	6377	3826.2	0	0	0
Computer Room	894	447	0	0	0
Office (250 square feet)	388	232.8	0	0	0
Building Totals:	**7659**	**4506**	**0**	**0**	**0**

[1] *See Table 140.6-C*
[2] *See NRCC-LTI-E for unconditioned spaces*
[3] *Lighting information for existing spaces modeled is not included in this table*

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E
Nonresidential Performance Compliance Method — (Page 17 of 17)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

FILE PATH: Z:\Projects\...
9/14/2023 10:34:40 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3
KEY PLAN
N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WADE No.M38155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL TITLE 24 FORMS

M0.01

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 17 of 17)**

Documentation Author's Declaration Statement

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

Documentation Author Name: Keith Bacosa	Documentation Author Signature:
Company: Leaf Engineers	Signature Date:
Address: 8163 Rochester Ave.	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909-987-0909

Responsible Person's Declaration statement

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

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

Responsible Designer Name: Rex Wang	Responsible Designer Signature:
Company: Leaf Engineers	
Address: 8163 Rochester Ave	Date Signed: 3/28/23
City/State/Zip: Rancho Cucamonga, CA 91730	License #: M36155
Phone: 909-987-0909	Title: Director of Engineering — Scope:

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 1 of 19)**

Project Name: Eastwood ES Bldg CD | **Date Prepared:** 2023-03-27

A. General Information

1	Project Name	Eastwood ES Bldg CD		
2	Run Title	Title 24 Analysis		
3	Project Location	13552 University St		
4	City	Westminster	5	Standards Version — Compliance 2022
6	Zip code	92683	7	Compliance Software (version) — EnergyPro 9.1
8	Climate Zone	6	9	Building Orientation (deg) — 0
10	Building Type(s)	• Nonresidential	11	Weather File — TORRANCE-MUNI-AP_5TYP20.epw
12	Project Scope	• Existing addition and alteration	13	Number of Dwelling Units — 0
14	Total Conditioned Floor Area in Scope (ft²)	7616	15	Total # of hotel/motel rooms — 0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type — Natural gas
18	Nonresidential Conditioned Floor Area	7616	19	Total # of Stories (Habitable Above Grade) — 1
20	Residential Conditioned Floor Area	0		

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 2 of 19)**

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance					Building Components Complying Prescriptively		
Envelope (See Table G)	Nonres	Performance	☐	Solar Thermal Water Heating (See Table I3)	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).		
	MultiFam	Not Included	☒	Not Included			
Mechanical (See Table H)	Nonres	Performance	☐	Covered Process: Commercial Kitchens (see Table J)	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included	☒	Not Included	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	☐	Covered Process: Laboratory Exhaust (see Table J)	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included	☒	Not Included	**Building Components Complying with Mandatory Measures**		
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	☒	Photovoltaics (see Table F)	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included	☐		Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			☐	Battery (see Table F)	Performance	Commissioning 120.8	NRCC-CXR-E is required
			☒		Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 3 of 19)**

C1. COMPLIANCE SUMMARY

COMPLIES[2]

	Time Dependent Valuation (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	270.74	270.74	19.32
Proposed Design	171.25	171.25	11.83
Compliance Margins	**99.49**	**99.49**	**7.49**
	Pass	**Pass**	**Pass**

[1] *Efficiency measures include improvements like a better building envelope and more efficient equipment*
[2] *Compliance Totals include efficiency, photovoltaics and batteries*
[3] *Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 4 of 19)**

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

COMPLIES[2]

Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	4.74	3.81	0.93
Space Cooling	65.6	44.84	20.76
Indoor Fans	144.42	66.61	77.81
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	23.57	23.58	-0.01
Indoor Lighting	32.41	32.41	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**270.74**	**171.25**	**99.49 (36.7%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**270.74**	**171.25**	**99.49 (36.7%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 5 of 19)**

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[2]
Receptacle	68.44	68.44	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**339.18**	**239.69**	**99.49 (29.3%)**

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 6 of 19)**

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

COMPLIES[2]

Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	0.65	0.51	0.14
Space Cooling	2.28	1.26	1.02
Indoor Fans	11.87	5.54	6.33
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	1.95	1.95	0
Indoor Lighting	2.57	2.57	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**19.32**	**11.83**	**7.49 (38.8%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**19.32**	**11.83**	**7.49 (38.8%)**

[1] *Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 7 of 19)**

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	5.03	5.03	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**24.35**	**16.86**	**7.49 (30.8%)**

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

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 8 of 19)**

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	1	0.8	0.2	---	---	---
Space Cooling	15.3	9.7	5.6	---	---	---
Indoor Fans	38.8	17.9	20.9	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	7.4	7.4	0	---	---	---
Indoor Lighting	9.3	9.3	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**71.8**	**45.1**	**26.7**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**71.8**	**45.1**	**26.7**	**0**	**0**	**0**
Receptacle	20.6	20.6	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**92.4**	**65.7**	**26.7**	**0**	**0**	**0**

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 9 of 19)**

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROS EUI[1]	41.4	29.43	11.97	28.91
NET EUI[1]	41.4	29.43	11.97	28.91

[1] *Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.*

D1. EXCEPTIONAL CONDITIONS

• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.

F1. REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception[1]	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)

[1] *See Table D1 for any PV exceptions used.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 10 of 19)**

F1B. PV BATTERY BUILDING TYPE[5]

01	02	03
Building Occupancy Type[5] (From Table 140.10-A/B and 170.2-U/V)	**Conditioned Floor Area (ft²)**	**Unconditioned Floor Area (ft²)**
Grocery	0	0
High-Rise Multifamily	0	0
Office, Financial Institutions, Unleased Tenant Space	7616	0
Retail	0	0
School	0	0
Warehouse	0	0
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0	0
None	0	0

[5] *Building Occupancy Types are defined in Section 100.1 of the Energy Code*

G1. ENVELOPE GENERAL INFORMATION (conditioned spaces only)

01	02	03	04
Opaque Surfaces & Orientation	**Total Gross Surface Area (ft²)**	**Total Fenestration Area (ft²)**	**Window to Wall Ratio (%)**
North-Facing[1]	1408	440	31.25
East-Facing[2]	132	0	0
South-Facing[3]	1408	440	31.25
West-Facing[4]	640	0	0
Total	**3588**	**880**	**24.53**
Roof	7616	0	0

Notes
[1] *North-Facing is oriented to within 45 degrees of true north, including 45 00'00" east of north (NE), but excluding 45 00'00" west of north (NW),*
[2] *East-Facing is oriented to within 45 degrees of true east, including 45 00'00" south of east (SE), but excluding 45 00'00" north of east (NE),*
[3] *South-Facing is oriented to within 45 degrees of true south, including 45 00'00" west of south (SW), but excluding 45 00'00" east of south (SE),*
[4] *West-Facing is oriented to within 45 degrees of true west, including 45 00'00" north of west (NW), but excluding 45 00'00" south of west (SW),*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 11 of 19)**

G4. NONRESIDENTIAL AIR BARRIER

01	02
Building Story Name	**Air Barrier**
Com-Floor 1	No air barrier

G5. OPAQUE SURFACE ASSEMBLY SUMMARY

01	02	03	04	05	06		07	08	09	10
Surface Name	Construction Type	Area (ft²)	Framing Type	Cavity R-Value	Continuous R-Value		Units	Value	Description of Assembly Layers	Status[1]
					Interior	Exterior				
Default Wall Prior to 1976	Exterior Wall	3,588	Wood	0	N/A	N/A	U-factor	0.537	Stucco - 7/8 in. Vapor permeable felt - 1/8 in. Composite-1 Gypsum Board - 1/2 in.	E
Slab On Grade10	Underground Floor	7,616	N/A	0	N/A	N/A	F-factor	0.73	Slab Type =Unheated slab on grade Insulation Orientation =None Insulation R-Value =none	E
Default Roof Prior to 19712	Roof	7,616	Wood	11	N/A	N/A	U-factor	0.0778	AsphaltShingleJD_25in Vapor permeable felt - 1/8 in. Plywood - 1/2 in. Air - Cavity - Wall Roof Ceiling - 4 in. or more Composite-2 Gypsum Board - 1/2 in.	E

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 12 of 19)**

G7A. FENESTRATION ASSEMBLY SUMMARY (NONRESIDENTIAL)

01	02	03	04	05	06	07	08	09
Fenestration Assembly Name	Fenestration Type/ Product Type / Frame Type	Certification Method[1]	Assembly Method	Area (ft²)	Overall U-factor	Overall SHGC	Overall VT	Status[2]
Single Metal Tinted	Vertical fenestration Fixed window Metal	Default 110.6	Site built	880	1.19	0.68	0.77	E

[1] *Notes: Newly installed fenestration shall have a certified NFRC Label Certificate or use the CEC default tables found in Table 110.6-A and Table 110.6-B. Center of Glass (COG) values are for the glass-only, determined by the manufacturer, and are shown for ease of verification. Site-built fenestration values are calculated per Nonresidential Appendix NA6 and are used in the analysis.*
[2] *Status: N - New, A - Altered, E - Existing*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
Classroom C-1	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom C-2	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom C-3	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 13 of 19)**

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating				Cooling				
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
Classroom C-4	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom D-4	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom D-3	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom D-2	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Classroom D-1	Single Zone Heat Pump (SZHP) Air System	1	41.91	0	N/A	NA	49.4	EER SEER	12 14.3	Fixed DB	N
Office C6	Single Zone Heat Pump (SZHP) Air System	1	12	0	N/A	NA	12	EER SEER	13 21.5	No Economizer	N
Storage D6	Single Zone Heat Pump (SZHP) Air System	1	12	0	N/A	NA	12	EER SEER	13 21.5	No Economizer	N

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 14 of 19)**

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
Classroom C-1	1	339.72	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom C-2	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom C-3	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom C-4	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom D-4	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom D-3	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom D-2	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Classroom D-1	1	346.18	1,600	0.51	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Office C6	1	23.85	350	0.15	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
Storage D6	1	27.9	350	0.15	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(a)[1]**	**Other Special Features and Controls**
Classroom C-1	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom C-2	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom C-3	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — **NRCC-PRF-E**

Nonresidential Performance Compliance Method — **(Page 15 of 19)**

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	**Equipment Type**	**Interlocks per 140.4(a)[1]**	**Other Special Features and Controls**
Classroom C-4	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom D-4	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom D-3	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom D-2	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB
Classroom D-1	Single Zone Heat Pump (SZHP) Air System	N/A	Zone(s) With CO2 Sensor Vent. Control Fixed DB

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.
[1] *Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.*

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04		05	06	07
Zone Name	Mechanical Ventilation					Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of People# of People	Supply OA CFM	Exhaust CFM			
1-Classroom C-1	Education - Classrooms (ages 9-18)	22.35	339.72	0		894	DCV
2-Classroom C-2	Education - Classrooms (ages 9-18)	22.77	346.18	0		911	DCV
3-Classroom C-3	Education - Classrooms (ages 9-18)	22.77	346.18	0		911	DCV
4-Classroom C-4	Education - Classrooms (ages 9-18)	22.77	346.18	0		911	DCV
5-Classroom B-4	Education - Classrooms (ages 9-18)	22.77	346.18	0		911	DCV

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS: 13552 University St, Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3 R1 R2

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 CIVIL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL TITLE 24 FORMS

M0.02

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 16 of 19)

H8. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of Peopleit of People	Supply OA CFM	Exhaust CFM		
6-Classroom B-3	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
7-Classroom B-2	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
8-Classroom B-1	Education - Classrooms (ages 9-18)	22.77	346.18	0	911	DCV
9-Office C6	Office - Office space	0.8	23.85	0	159	N/A
10-Storage D6	Office - Office space	0.93	27.9	0	186	N/A

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
1-Classroom C-1-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
2-Classroom C-2-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
3-Classroom C-3-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
4-Classroom C-4-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
5-Classroom B-4-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
6-Classroom B-3-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
7-Classroom B-2-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
8-Classroom B-1-Trm	Uncontrolled	1	N/A	N/A	1,600	N/A	0	N/A	N/A	N/A	☐
9-Office C6-Trm	Uncontrolled	1	N/A	N/A	350	N/A	0	N/A	N/A	N/A	☐
10-Storage D6-Trm	Uncontrolled	1	N/A	N/A	350	N/A	0	N/A	N/A	N/A	☐

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-27 17:19:43 Compliance ID: EnergyPro-42024-0323-0034

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 17 of 19)

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	7271	4362.6	0	0	0
Office (250 square feet)	345	207	0	0	0
Building Totals:	**7616**	**4569.6**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI- E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Envelope	NRCI-ENV-E - Envelope (for all buildings)
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-27 17:19:43 Compliance ID: EnergyPro-42024-0323-0034

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 18 of 19)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC
Mechanical	NRCA-MCH-05-A - Air Economizer Controls
Mechanical	NRCA-MCH-06-A Demand Control Ventilation Systems must be submitted for all systems required to employ demand controlled ventilation (refer to) can vary outside ventilation flow rates based on maintaining interior carbon dioxide (CO2) concentration setpoints.

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-27 17:19:43 Compliance ID: EnergyPro-42024-0323-0034

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 19 of 19)

Documentation Author's Declaration Statement

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

Documentation Author Name: Keith Bacosa	Documentation Author Signature:
Company: Leaf Engineers	Signature Date: 3/28/23
Address: 8163 Rochester Ave.	CEA/HERS Certification Identification (if applicable):
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909-987-0909

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 the building design or system design identified on this Certificate of Compliance.
5. I understand that a registered copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections, and I will take the necessary steps to accomplish this requirement.
6. I understand that a registered copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy, and I will take the necessary steps to accomplish these requirements.

Responsible Designer Name: Rex Wang	Responsible Designer Signature:
Company: Leaf Engineers	
Address: 8163 Rochester Ave	Date Signed: 3/28/23
City/State/Zip: Rancho Cucamonga, CA 91730	License #: M36155
Phone: 909-987-0909	Title: Director of Engineering Scope:

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-27 17:19:43 Compliance ID: EnergyPro-42024-0323-0034

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 1 of 14)

Project Name: Eastwood ES Bldg K — **Date Prepared:** 2023-03-28

A. General Information

1	Project Name	Eastwood ES Bldg K			
2	Run Title	Title 24 Analysis			
3	Project Location	13552 University St			
4	City	Westminster	5	Standards Version	Compliance 2022
6	Zip code	92683	7	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	6	9	Building Orientation (deg)	0
10	Building Type(s)	• Nonresidential	11	Weather File	TORRANCE-MUNI-AP_STYP20.epw
12	Project Scope	• Existing alteration	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft²)	2176	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft²)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	2176	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 2 of 14)

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance					Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Not Included	Solar Thermal Water Heating (See Table I3)	☐ Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E):	
	MultiFam	Not Included		☒ Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐ Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒ Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐ Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒ Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☒ Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e., compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☐ Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐ Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒ Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 3 of 14)

C1. COMPLIANCE SUMMARY

	COMPLIES[1]		
	Time Dependent Valuation (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	265.69	265.69	19.17
Proposed Design	198.73	198.73	14.78
Compliance Margins	**66.96**	**66.96**	**4.39**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 4 of 14)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

	COMPLIES[2]		
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	2.12	8.16	-6.04
Space Cooling	62.22	52.98	9.24
Indoor Fans	135.15	71.49	63.66
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	33.79	33.69	0.1
Indoor Lighting	32.41	32.41	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**265.69**	**198.73**	**66.96 (25.2%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**265.69**	**198.73**	**66.96 (25.2%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 5 of 14)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	66.92	66.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**332.61**	**265.65**	**66.96 (20.1%)**

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

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 6 of 14)

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

	COMPLIES[2]		
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	0.27	1.13	-0.86
Space Cooling	2.03	1.97	0.06
Indoor Fans	11.14	5.95	5.19
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	3.16	3.16	0
Indoor Lighting	2.57	2.57	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**19.17**	**14.78**	**4.39 (22.9%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**19.17**	**14.78**	**4.39 (22.9%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 7 of 14)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	4.92	4.92	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**24.09**	**19.7**	**4.39 (18.2%)**

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

C6. 'ABOVE CODE' QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 8 of 14)

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.1	0.5	-0.4	---	---	---
Space Cooling	4.1	3.6	0.5	---	---	---
Indoor Fans	10.3	5.5	4.8	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	2.9	2.9	0	---	---	---
Indoor Lighting	2.7	2.7	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**20.1**	**15.2**	**4.9**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**20.1**	**15.2**	**4.9**	**0**	**0**	**0**
Receptacle	5.8	5.8	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**25.9**	**21**	**4.9**	**0**	**0**	**0**

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 9 of 14)

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	40.61	32.93	7.68	18.91
NET EUI[1]	40.61	32.93	7.68	18.91

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
• The user model includes space(s) that are designed to be served by mechanical cooling systems, but the cooling systems were not included in the simulation model. A cooling system has been modeled for both the proposed and standard cases.
• The user model includes space(s) without sufficient cooling equipment. Cooling equipment has been added to the model to meet cooling loads.

F1. REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception[1]	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (a in 12)	Inverter Eff. (%)	Annual Solar Access (%)

[1]See Table D1 for any PV exceptions used.

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 10 of 14)

F1B. PV BATTERY BUILDING TYPE(S)

01	02	03
Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)	Conditioned Floor Area (ft²)	Unconditioned Floor Area (ft²)
Grocery	0	0
High-Rise Multifamily	0	0
Office, Financial Institutions, Unleased Tenant Space	2176	0
Retail	0	0
School	0	0
Warehouse	0	0
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0	0
None	0	0

[1]Building Occupancy Types are defined in Section 100.1 of the Energy Code

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
Equipment Name	Equipment Type	Qty	Heating				Cooling			Economizer Type (if present)	Status[1]
			Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency		
ODU/FC-K1	Single Zone Heat Pump (SZHP) Air System	1	62	0	N/A	NA	58	EER SEER	10 18	No Economizer	N
ODU/FC-K2	Single Zone Heat Pump (SZHP) Air System	1	62	0	N/A	NA	58	EER SEER	10 18	No Economizer	N

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

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 11 of 14)

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
Name or Item Tag	Qty	Design OA CFM	Supply Fan				Return / Relief Fan					Status[1]
			CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	
ODU/FC-K1	1	413.44	2,150	0.7	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
ODU/FC-K2	1	413.44	2,150	0.7	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
Zone Name	Mechanical Ventilation				Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
	Ventilation Function	# of Peopleit of People	Supply OA CFM	Exhaust CFM		
1-Kindergarten K-1	Education - Classrooms (ages 5-8)	27.2	413.44	0	1088	N/A
2-Kindergarten K-2	Education - Classrooms (ages 5-8)	27.2	413.44	0	1088	N/A

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
System ID	System Type	Qty	Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
			Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
1-Kindergarten K-1-Trm	Uncontrolled	1	N/A	N/A	2,150	N/A	0	N/A	N/A	N/A	☐
2-Kindergarten K-2-Trm	Uncontrolled	1	N/A	N/A	2,150	N/A	0	N/A	N/A	N/A	☐

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD — NRCC-PRF-E

Nonresidential Performance Compliance Method — (Page 12 of 14)

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
Occupancy Type[1]	Conditioned Floor Area[2] (ft²)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Additional (Custom) Allowance	
				Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Classroom, Lecture, or Training Vocational	2176	1305.6	0	0	0
Building Totals:	**2176**	**1305.6**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI-E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration

CA Building Energy Efficiency Standards - 2022 Nonresidential Compliance — Report Version: 2022.0.000 Schema Version: rev 20220601 — Report Generated: 2023-03-28 12:52:02 Compliance ID: EnergyPro-42024-0323-0039

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953

WESTMINSTER SCHOOL DISTRICT



Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL TITLE 24 FORMS

M0.03

FILE PATH: Z:\Projects\...
9/14/2023 10:34:40 AM

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 13 of 14)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Mechanical	NRCA-MCH-02-A - Outdoor Air must be submitted for all newly installed HVAC units. Note: MCH-02-A can be performed in conjunction with MCH-07-A Supply Fan VFD Acceptance (if applicable) since testing activities overlap
Mechanical	NRCA-MCH-03-A - Constant Volume Single Zone HVAC

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 14 of 14)

Documentation Author's Declaration Statement

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

Documentation Author Name: Keith Bacosa	Documentation Author Signature:
Company: Leaf Engineers	Signature Date: 3/28/23
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone:

Responsible Person's Declaration statement

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

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

Responsible Designer Name: Rex Wang	Responsible Designer Signature:
Company: Leaf Engineers	
Address: 8163 Rochester Ave	Date Signed: 3/28/23
City/State/Zip: Rancho Cucamonga, CA 91730	License #: M36155
Phone: 909-987-0909	Title: Director of Engineering Scope:

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 1 of 14)

Project Name: Eastwood ES Bldg ADM **Date Prepared:** 2023-03-28

A. General Information

1	Project Name	Eastwood ES Bldg ADM			
2	Run Title	Title 24 Analysis			
3	Project Location	13552 University St			
4	City	Westminster	5	Standards Version	Compliance 2022
6	Zip code	92683	7	Compliance Software (version)	EnergyPro 9.1
8	Climate Zone	6	9	Building Orientation (deg)	0
10	Building Type(s)	• Nonresidential	11	Weather File	TORRANCE-MUNI-AP_STYP20.epw
12	Project Scope	• Existing alteration	13	Number of Dwelling Units	0
14	Total Conditioned Floor Area in Scope (ft^2)	1620	15	Total # of hotel/motel rooms	0
16	Total Unconditioned Floor Area (ft^2)	0	17	Fuel Type	Natural gas
18	Nonresidential Conditioned Floor Area	1620	19	Total # of Stories (Habitable Above Grade)	1
20	Residential Conditioned Floor Area	0			

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 2 of 14)

B. PROJECT SUMMARY

Table B shows which building components are included in the performance calculation. If indicated as not included, the project must show compliance prescriptively if within the permit application.

Building Components Complying via Performance						Building Components Complying Prescriptively	
Envelope (See Table G)	Nonres	Not Included	Solar Thermal Water Heating (See Table I3)	☐	Performance	The following building components are ONLY eligible for prescriptive compliance and should be documented on the NRCC form listed if within the scope of the permit application (i.e. compliance will not be shown on the NRCC-PRF-E).	
	MultiFam	Not Included		☒	Not Included		
Mechanical (See Table H)	Nonres	Performance	Covered Process: Commercial Kitchens (see Table J)	☐	Performance	Indoor Lighting (Unconditioned) 140.6 & 170.2(e)	NRCC-LTI-E is required
	MultiFam	Not Included		☒	Not Included	Outdoor Lighting 140.7 & 170.2(e)	NRCC-LTO-E is required
Domestic Hot Water (See Table I)	Nonres	Not Included	Covered Process: Laboratory Exhaust (see Table J)	☐	Performance	Sign Lighting 140.8 & 170.2(e)	NRCC-LTS-E is required
	MultiFam	Not Included		☒	Not Included	**Building Components Complying with Mandatory Measures**	
Lighting (Indoor Conditioned, see Table K)	Nonres	Performance	Photovoltaics (see Table F)	☒	Performance	Electrical power systems, commissioning, solar ready, elevator and escalator requirements are mandatory and should be documented on the NRCC form listed if applicable (i.e. compliance will not be shown on the NRCC-PRF-E.)	
	MultiFam	Not Included		☐	Not Included	Electrical Power Distribution 110.11	NRCC-ELC-E is required
			Battery (see Table F)	☐	Performance	Commissioning 120.8	NRCC-CXR-E is required
				☒	Not Included	Solar and Battery 110.10	NRCC-SAB-E is required

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 3 of 14)

C1. COMPLIANCE SUMMARY

	COMPLIES[1]		
	Time Dependent Valuaton (TDV)		Source Energy Use
	Efficiency[1] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)	Total[2] (kBtu/ft² - yr)
Standard Design	478.11	478.11	39.14
Proposed Design	258.54	258.54	20.31
Compliance Margins	**219.57**	**219.57**	**18.83**
	Pass	**Pass**	**Pass**

[1] Efficiency measures include improvements like a better building envelope and more efficient equipment
[2] Compliance Totals include efficiency, photovoltaics and batteries
[3] Building complies when efficiency and total compliance margins are greater than or equal to zero and unmet load hour limits are not exceeded

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 4 of 14)

C2. TDV ENERGY COMPLIANCE RESULTS FOR PERFORMANCE COMPONENTS (Annual TDV Energy Use, kBtu/ft² - yr)

	COMPLIES[2]		
Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Space Heating	10.02	17.33	-7.31
Space Cooling	130.67	91.72	38.95
Indoor Fans	290.23	102.3	187.93
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	10.68	10.68	0
Indoor Lighting	36.51	36.51	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**478.11**	**258.54**	**219.57 (45.9%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**478.11**	**258.54**	**219.57 (45.9%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 5 of 14)

C3. TDV ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (TDV)	Proposed Design (TDV)	Compliance Margin (TDV)[1]
Receptacle	106.22	106.22	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**584.33**	**364.76**	**219.57 (37.6%)**

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 6 of 14)

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

	COMPLIES[2]		
Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Space Heating	1.45	2.56	-1.11
Space Cooling	6.55	4.49	2.06
Indoor Fans	27.42	9.54	17.88
Heat Rejection	0	0	0
Pumps & Misc.	0	0	0
Domestic Hot Water	0.95	0.95	0
Indoor Lighting	2.77	2.77	0
Flexibility	---	---	---
EFFICIENCY COMPLIANCE TOTAL	**39.14**	**20.31**	**18.83 (48.1%)**
Photovoltaics	---	---	---
Batteries	---	---	---
TOTAL COMPLIANCE	**39.14**	**20.31**	**18.83 (48.1%)**

[1] Notes: This number in parenthesis following the Compliance Margin in column 4, represents the Percent Better than Standard.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 7 of 14)

C5. SOURCE ENERGY RESULTS FOR NON-REGULATED COMPONENTS[1]

Non-Regulated Energy Component	Standard Design (SOURCE)	Proposed Design (SOURCE)	Compliance Margin (SOURCE)[1]
Receptacle	7.54	7.54	---
Process	---	---	---
Other Ltg	---	---	---
Process Motors	---	---	---
TOTAL (TOTAL COMPLIANCE + NON-REGULATED COMPONENTS)	**46.68**	**27.85**	**18.83 (40.3%)**

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

C6. "ABOVE CODE" QUALIFICATIONS

☐ This project is pursuing CalGreen Tier 1 ☐ This project is pursuing CalGreen Tier 2

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 8 of 14)

C7. ENERGY USE SUMMARY

Energy Component	Standard Design Site (MWh)	Proposed Design Site (MWh)	Margin (MWh)	Standard Design Site (MBtu)	Proposed Design Site (MBtu)	Margin (MBtu)
Space Heating	0.5	0.8	-0.3	---	---	---
Space Cooling	7	4.9	2.1	---	---	---
Indoor Fans	16.6	5.8	10.8	---	---	---
Heat Rejection	---	---	---	---	---	---
Pumps & Misc.	---	---	---	---	---	---
Domestic Hot Water	0.6	0.6	0	---	---	---
Indoor Lighting	2.3	2.3	0	---	---	---
Flexibility	---	---	---	---	---	---
EFFICIENCY TOTAL	**27**	**14.4**	**12.6**	**0**	**0**	**0**
Photovoltaics	---	---	---	---	---	---
Batteries	---	---	---	---	---	---
ENERGY USE SUBTOTAL	**27**	**14.4**	**12.6**	**0**	**0**	**0**
Receptacle	6.9	6.9	0	---	---	---
Process	---	---	---	---	---	---
Other Ltg	---	---	---	---	---	---
Process Motors	---	---	---	---	---	---
ENERGY USE TOTAL	**33.9**	**21.3**	**12.6**	**0**	**0**	**0**

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 9 of 14)

C8. ENERGY USE INTENSITY (EUI)

	Standard Design (kBtu/ft² / yr)	Proposed Design (kBtu/ft² / yr)	Margin (kBtu/ft² / yr)	Margin Percentage
GROSS EUI[1]	71.4	44.86	26.54	37.17
NET EUI[1]	71.4	44.86	26.54	37.17

[1] Notes: Gross EUI is Energy Use Total (not including PV)/Total Building Area. Net EUI is Energy Use Total (including PV)/Total Building Area.

D1. EXCEPTIONAL CONDITIONS

• The building does not include service water heating. Verify that service water heating is not required and is not included in the design.
• The user model includes space(s) that are designed to be served by mechanical cooling systems, but the cooling systems were not included in the simulation model. A cooling system has been modeled for both the proposed and standard cases.
• The user model includes space(s) without sufficient cooling equipment. Cooling equipment has been added to the model to meet cooling loads.

F1. REQUIRED PV SYSTEMS

01	02	03	04	05	06	07	08	09	10	11	12
DC System Size (kWdc)	Exception[1]	Module Type	Array Type	Power Electronics	CFI	Azimuth (deg)	Tilt Input	Array Angle (deg)	Tilt: (x in 12)	Inverter Eff. (%)	Annual Solar Access (%)

[1]See Table D1 for any PV exceptions used.

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 10 of 14)

F1B. PV BATTERY BUILDING TYPE(S)

01	02	03
Building Occupancy Type* (From Table 140.10-A/B and 170.2-U/V)	Conditioned Floor Area (ft^2)	Unconditioned Floor Area (ft^2)
Grocery	0	0
High-Rise Multifamily	0	0
Office, Financial Institutions, Unleased Tenant Space	1620	0
Retail	0	0
School	0	0
Warehouse	0	0
Auditorium, Convention Center, Hotel/Motel, Library, Medical Office Building/Clinic, Restaurant, Theater	0	0
None	0	0

**Building Occupancy Types are defined in Section 100.1 of the Energy Code*

H1. DRY SYSTEM EQUIPMENT (FURNACES, AIR HANDLING UNITS, HEAT PUMPS, VRF, ECONOMIZERS ETC.)

01	02	03	04	05	06	07	08	09	10	11	12
			Heating			Cooling					
Equipment Name	Equipment Type	Qty	Total Heating Output (kBtu/h)	Supp Heat Output (kBtu/h)	Efficiency Unit	Efficiency	Total Cooling Output (kBtu/h)	Efficiency Unit	Efficiency	Economizer Type (if present)	Status[1]
VRF-1	Variable Refrigerant Flow	1	108	N/A	COP	3.8	96	EER	12.2	N/A	N

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

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 11 of 14)

H3. NONRESIDENTIAL / COMMON USE AREA FAN SYSTEMS SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12	13
			Supply Fan				Return / Relief Fan					
Name or Item Tag	Qty	Design OA CFM	CFM	Power	Power Units	Control	Fan Type	CFM	Power	Power Units	Control	Status[1]
2-FC-AD1-VRF	1	97.35	1,130	0.38	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
3-FC-AD2-VRF	1	19.05	395	0.21	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
4-FC-AD3-VRF	1	72.6	705	0.24	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
5-FC-AD4-VRF	1	17.4	395	0.21	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N
6-FC-AD5-VRF	1	36.6	620	0.16	BHP	Constant Vol	N/A	N/A	N/A	N/A	N/A	N

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

H8. SYSTEM SPECIAL FEATURES

01	02	03	04
System Name	Equipment Type	Interlocks per 140.4(n)[1]	Other Special Features and Controls
VRF-1	Variable Refrigerant Flow	N/A	Heat Recovery

Notes: This table includes controls related to the performance path only. For projects using the prescriptive path, mandatory and prescriptive controls requirements are documented on the NRCC-MCH-E.

[1] Yes = interlocks are provided, No = interlocks are not provided, NA means no operable openings.

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
		Mechanical Ventilation				
Zone Name	Ventilation Function	# of Peoplefl of People	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
1-FC-AD1	Office - Office space	3.25	97.35	0	649	N/A
2-FC-AD2	Office - Office space	0.64	19.05	0	127	N/A
3-FC-AD3	Office - Office space	2.42	72.6	0	484	N/A
4-FC-AD4	Office - Office space	0.58	17.4	0	116	N/A

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 12 of 14)

H9. NONRESIDENTIAL / COMMON USE AREA & HOTEL/MOTEL VENTILATION

01	02	03	04	05	06	07
		Mechanical Ventilation				
Zone Name	Ventilation Function	# of Peoplefl of People	Supply OA CFM	Exhaust CFM	Conditioned Area (sf)	DCV or Occupant Sensor Controls, or Both
5-FC-AD5	Office - Office space	1.22	36.6	0	244	N/A

H11. ZONAL SYSTEM AND TERMINAL UNIT SUMMARY

01	02	03	04	05	06	07	08	09	10	11	12
			Rated Capacity (kBtuh)		Airflow (cfm)			Fan			VSD
System ID	System Type	Qty	Heating	Cooling	Design	Min.	Min. Ratio	Power	Power Units	Cycles	
2-FC-AD1-VRF	Variable Refrigerant Flow	1	40	36	1,130	N/A	N/A	0.38	BHP	Continuous	☐
3-FC-AD2-VRF	Variable Refrigerant Flow	1	12	12	395	N/A	N/A	0.21	BHP	Continuous	☐
4-FC-AD3-VRF	Variable Refrigerant Flow	1	27	24	705	N/A	N/A	0.24	BHP	Continuous	☐
5-FC-AD4-VRF	Variable Refrigerant Flow	1	12	12	395	N/A	N/A	0.21	BHP	Continuous	☐
6-FC-AD5-VRF	Variable Refrigerant Flow	1	20	18	620	N/A	N/A	0.16	BHP	Continuous	☐

K1. INDOOR CONDITIONED LIGHTING GENERAL INFO

01	02	03	04	05	06
				Additional (Custom) Allowance	
Occupancy Type[1]	Conditioned Floor Area[2] (ft^2)	Installed Lighting Power (Watts)	Lighting Control Credits (Watts)	Area Category Footnotes (Watts)	Area Category Footnotes (Watts)
Office (250 square feet)	484	290.4	0	0	0
Office (250 square feet)	1136	738.4	0	0	0
Building Totals:	**1620**	**1028.8**	**0**	**0**	**0**

[1]See Table 140.6-C
[2]See NRCC-LTI- E for unconditioned spaces
[3]Lighting information for existing spaces modeled is not included in this table

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 13 of 14)

K4. INDOOR CONDITIONED LIGHTING MANDATORY LIGHTING CONTROL

See NRCC-LTI-E for mandatory controls

L. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

Selections made by Documentation Author indicate which Certificates of Installation must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

Building Component	Form/Title
Envelope	NRCI-ENV-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-01-E - Must be submitted for all buildings
Mechanical	NRCI-MCH-E - For all buildings with Mechanical Systems
Indoor Lighting	NRCI-LTI-E - Indoor Lighting (for all buildings)

M. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Selections made by Documentation Author indicate which Certificates of Acceptance must be submitted for the features to be recognized for compliance. These documents must be provided to the building inspector during construction and must be completed through an Acceptance Test Technician Certification Provider (ATTCP).

Building Component	Form/Title
Envelope	NRCA-ENV-02-F - NRFC label verification for fenestration

N. DECLARATION OF REQUIRED CERTIFICATES OF VERIFICATION

Selections made by Documentation Author indicate which Certificates of Verification must be submitted for the features to be recognized for compliance. These documents must be retained and provided to the building inspector during construction and can be found online

There are no Certificates of Verification applicable to this project

CERTIFICATE OF COMPLIANCE - NONRESIDENTIAL PERFORMANCE COMPLIANCE METHOD NRCC-PRF-E

Nonresidential Performance Compliance Method (Page 14 of 14)

Documentation Author's Declaration Statement

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

Documentation Author Name:	Documentation Author Signature:
Company: Leaf Engineers	Signature Date: 3/28/23
Address:	CEA/HERS Certification Identification (if applicable):
City/State/Zip: ,	Phone:

Responsible Person's Declaration statement

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

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

Responsible Designer Name: Rex Wang	Responsible Designer Signature:
Company: Leaf Engineers	
Address: 8163 Rochester Ave	Date Signed: 3/28/23
City/State/Zip: Rancho Cucamonga, CA 91730	License #: M36155
Phone: 909-987-0909	Title: Director of Engineering Scope:

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers

LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909-987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 CIVIL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

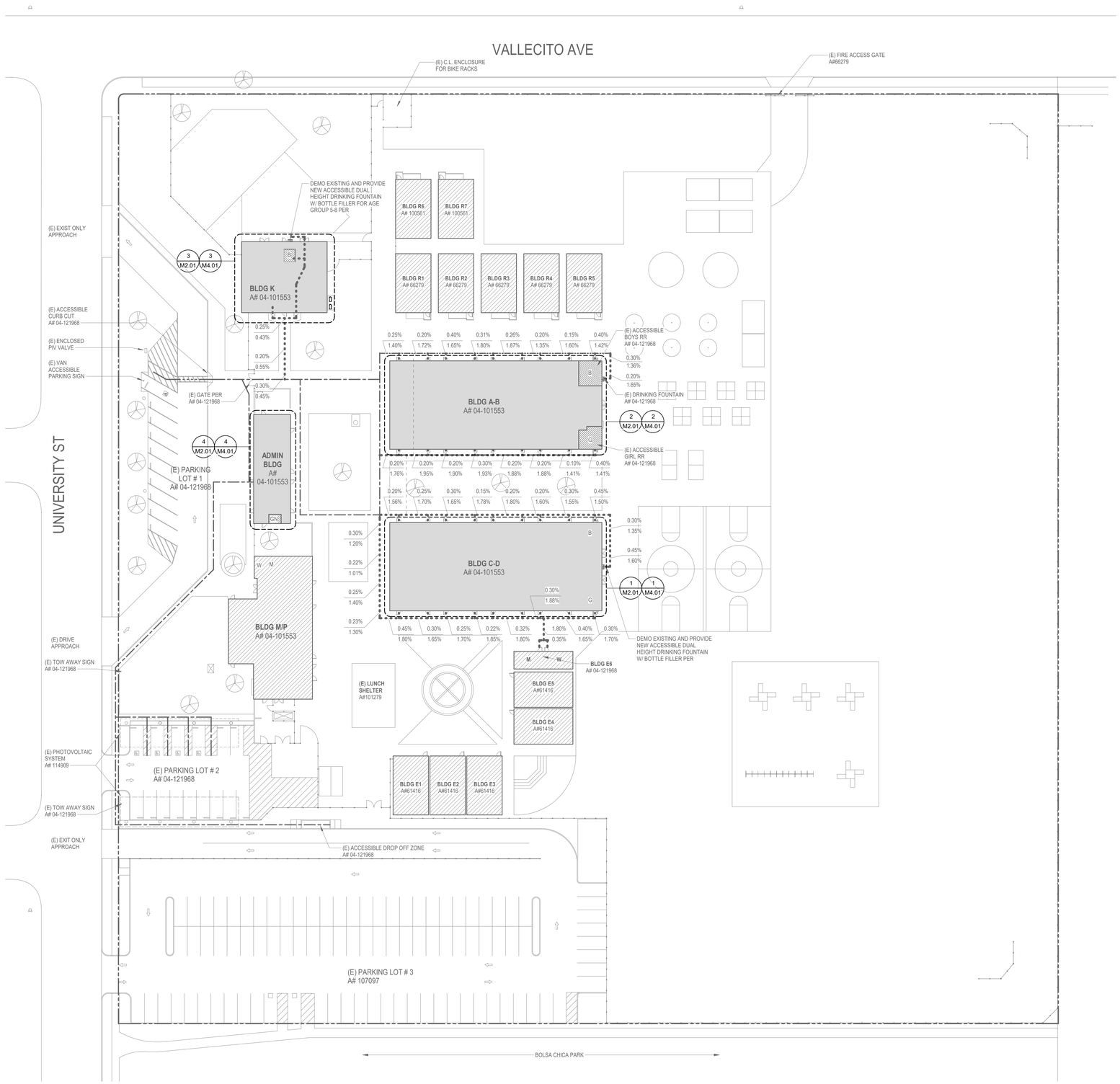
DSA Submittal

MECHANICAL TITLE 24 FORMS

M0.04

M1.01 - MECHANICAL SITE PLAN

0" 1"



ACCESSIBILITY LEGEND

- PROPOSED PATH OF TRAVEL
- (E) PATH OF TRAVEL PER A# 101553
- (E) PATH OF TRAVEL PER A# 107097
- PROPERTY LINE
- (E) BUILDING FIRE ALARM SCOPE ONLY
- BUILDING TO BE REMODELED
- SAFE DISPERSAL AREA
- ACCESSIBLE RESTROOM TO BE PROVIDED AS PART OF THE CONTRACT

B = BOYS
G = GIRLS
S = STAFF

1 SITE PLAN
1" = 30'-0"

FILE PATH: Z:\Projects\...
9/14/2023 10:34:42 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

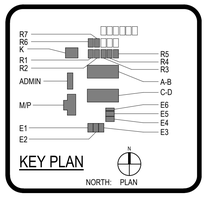
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WARD No.M36165 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

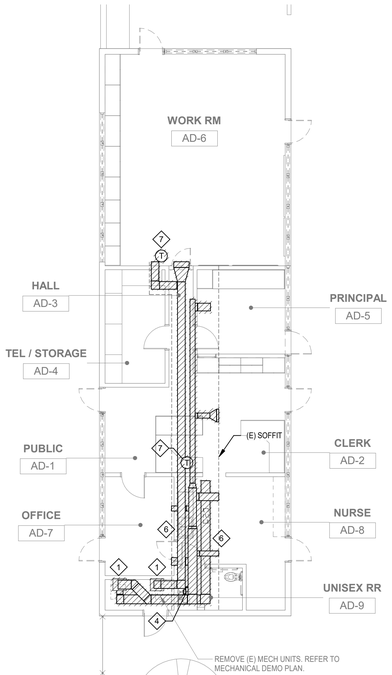
No.	Description	Date

DSA Submittal

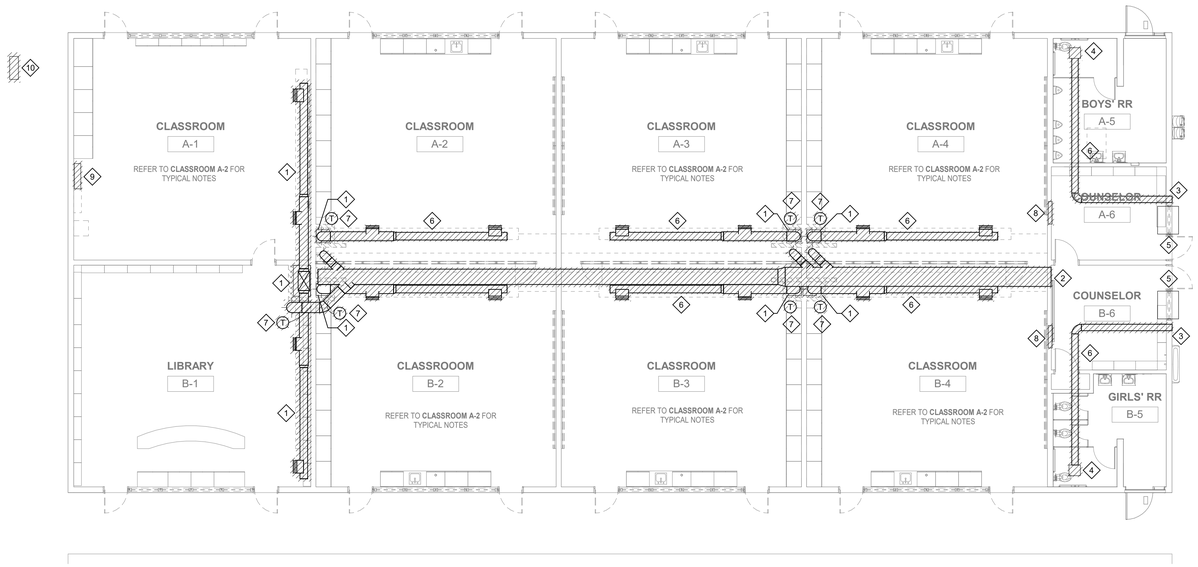
MECHANICAL SITE PLAN

M1.01

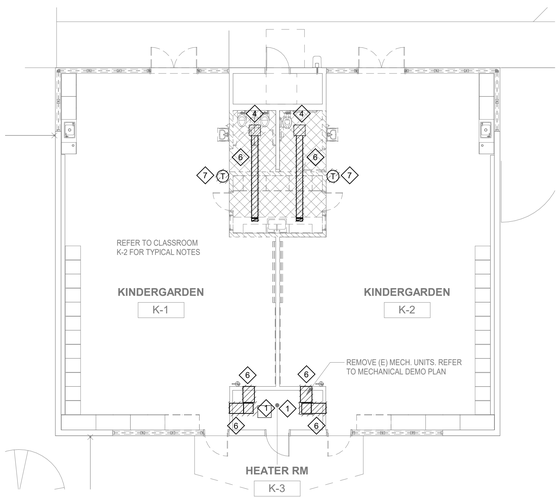
0" 1"



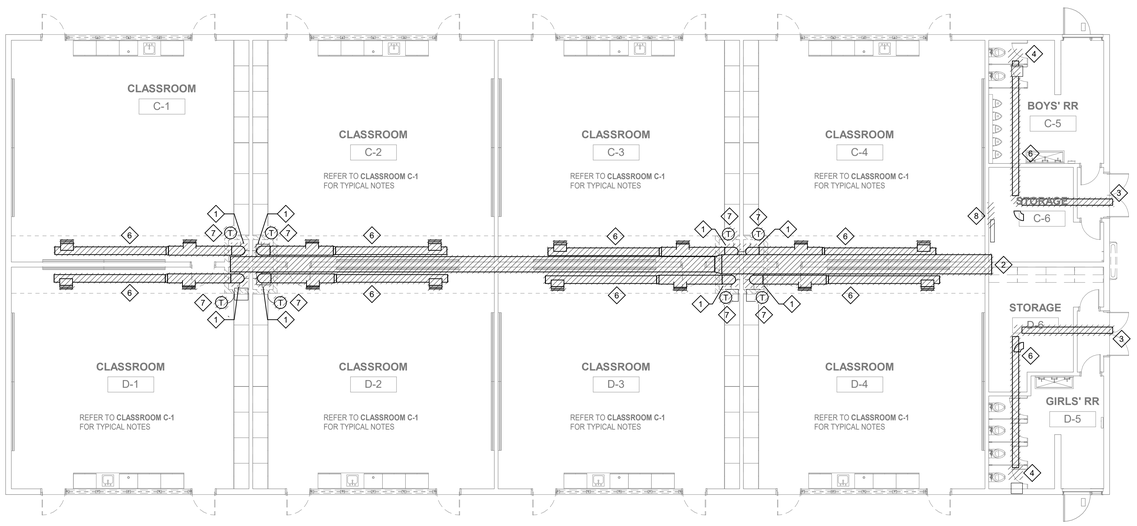
4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

DEMOLITION KEY NOTES

1. (E) GAS FURNACE TO BE DEMOLISHED WITH ALL ASSOCIATED DUCTWORK, FLUE PIPE, WIRING, ACCESSORIES, ETC. PATCH AND REPAIR REMAINING ROOF AND WALL OPENINGS AND PAINT SURFACES TO MATCH EXISTING
2. (E) OSA GRILLE/LOUVER TO BE DEMOLISHED WITH ALL ASSOCIATED DUCTWORK, ETC.. PATCH, REPAIR AND PAINT SURFACE TO MATCH EXISTING.
3. (E) LOUVER TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC. PATCH, REPAIR AND PAINT SURFACES TO MATCH EXISTING.
4. (E) CEILING EXHAUST FAN TO BE DEMOLISHED WITH ALL ASSOCIATED DUCTWORK, WIRING, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT SURFACE TO MATCH EXISTING.
5. (E) WINDOW TYPE A/C UNIT (ABOVE DOOR) TO BE DEMOLSHED WITH ALL ASSOCIATED WIRING, SUPPORT, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT SURFACES TO MATCH EXISTING.
6. (E) DUCTWORK AND ALL ASSOCIATED ACCESSORIES, HANGARS, DIFFUSER AND GRILLES TO BE DEMOLISHED. PATCH, REPAIR AND PAINT SURFACE TO MATCH EXISTING
7. (E) THERMOSTAT TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT SURFACE TO MATCH EXISTING.
8. (E) WALL HEATER TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING & ACCESSORIES. PATCH, REPAIR AND PAINT SURFACE TO MATCH EXISTING.
9. (E) WALL MOUNTED MINI SPLIT UNIT AND ALL ASSOCIATED ACCESSORIES, HANGARS, REFRIGERANT PIPE & WIRING TO BE DEMOLISHED. PATCH REPAIR AND PAINT SURFACE TO MATCH EXISTING.
10. (E) CONDENSING UNIT LOCATED ABOVE COVERED WALKWAY AND ALL ASSOCIATED EQUIPMENT, REFRIGERANT PIPING, WIRING AND MOUNTING PAD TO BE DEMOLISHED. PATCH, REPAIR AND PAINT ROOF SURFACE TO MATCH EXISTING.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

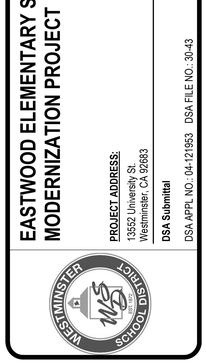
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

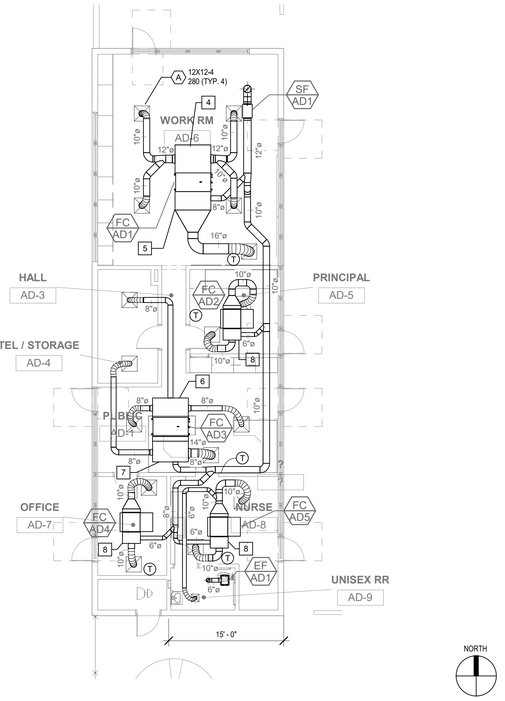
DEMO MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

MD2.01

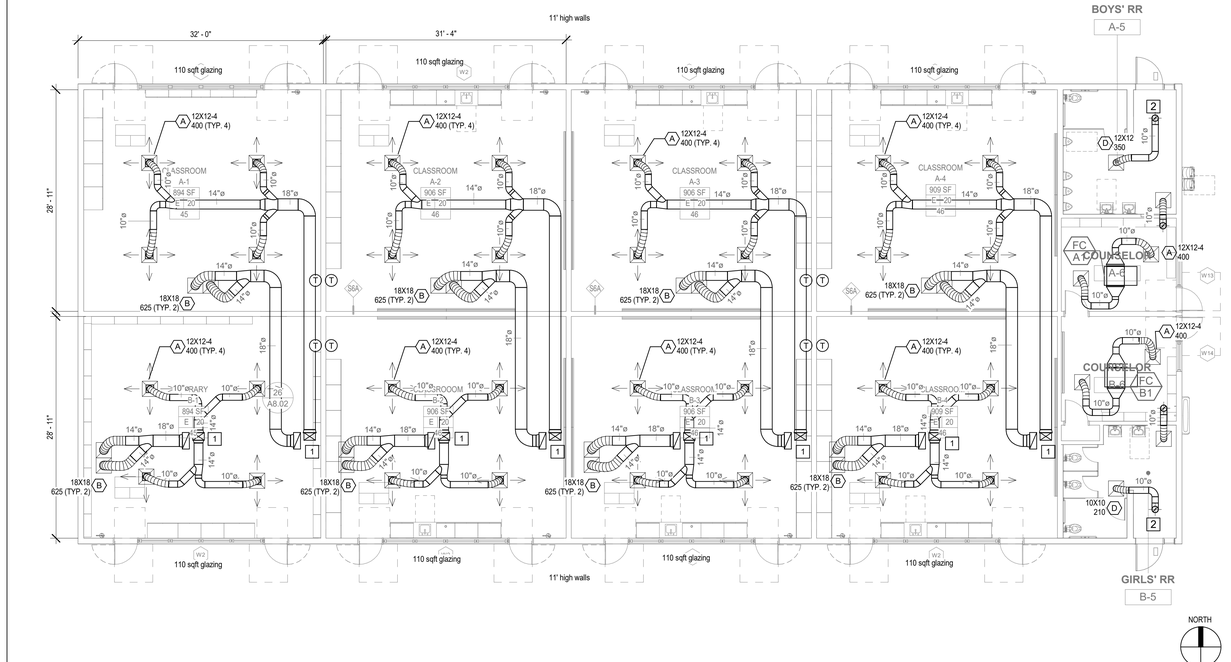
FILE PATH: Z:\Projects\...
9/14/2023 10:34:47 AM

M2.01 - MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

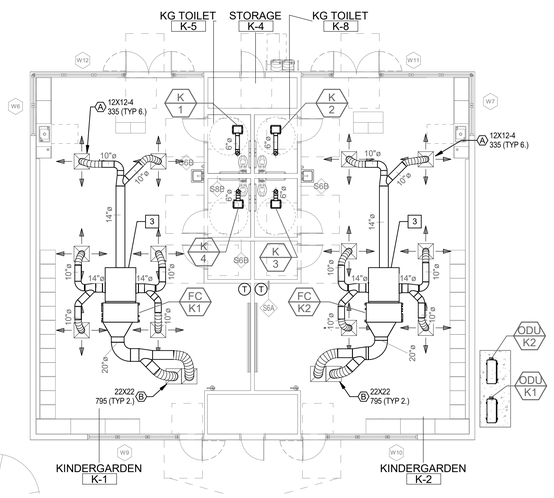
0" 1"



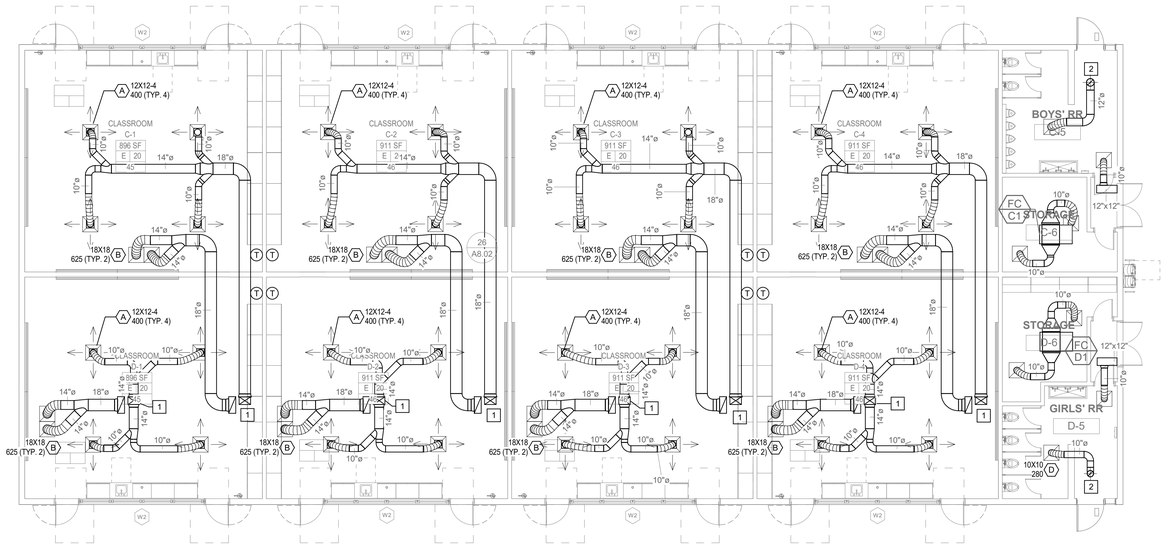
4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

KEY NOTES

1. 12X18 SA & 26X11 RA DUCTS UP THRU ROOF. SEE DETAIL 4/SD2 FOR OPENING
2. 10" EA DUCT UP THRU ROOF. PROVIDE WEATHER COVER AND 1/4" MESH SCREEN AT ROOF TERMINATION
3. 48X16 SA PLENUM
4. 56X14 SA PLENUM
5. 56X16 RA PLENUM
6. 56X12 SA PLENUM
7. 56X16 RA PLENUM
8. 28X12 RA PLENUM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

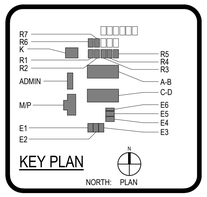
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WARD
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

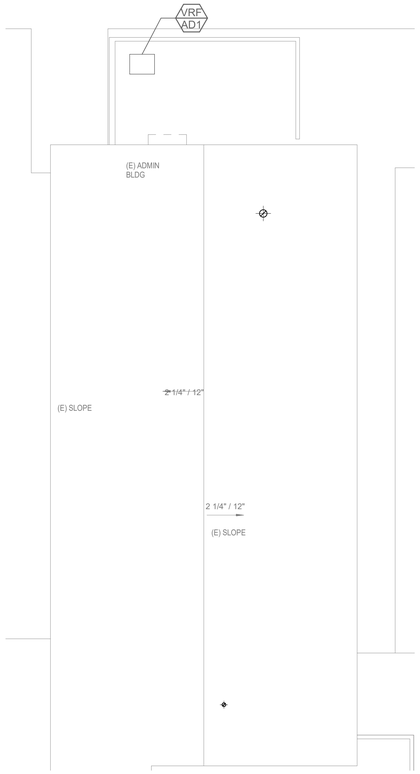
MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

M2.01

FILE PATH: Z:\Projects\...
9/15/2023 1:20:42 PM

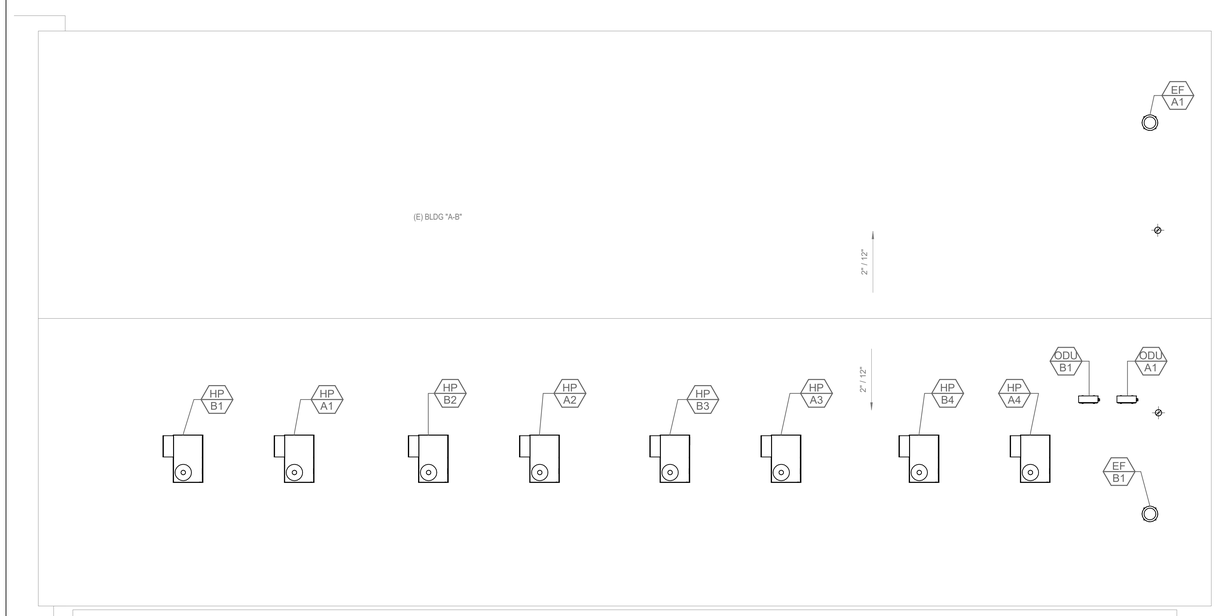
M4.01 - MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS

0" 1"



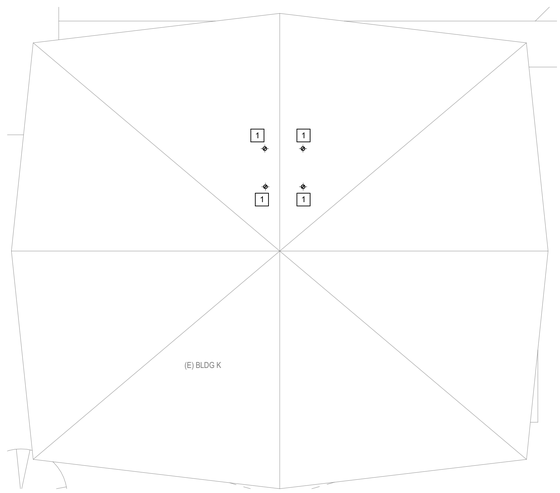
NORTH

4 ROOF PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



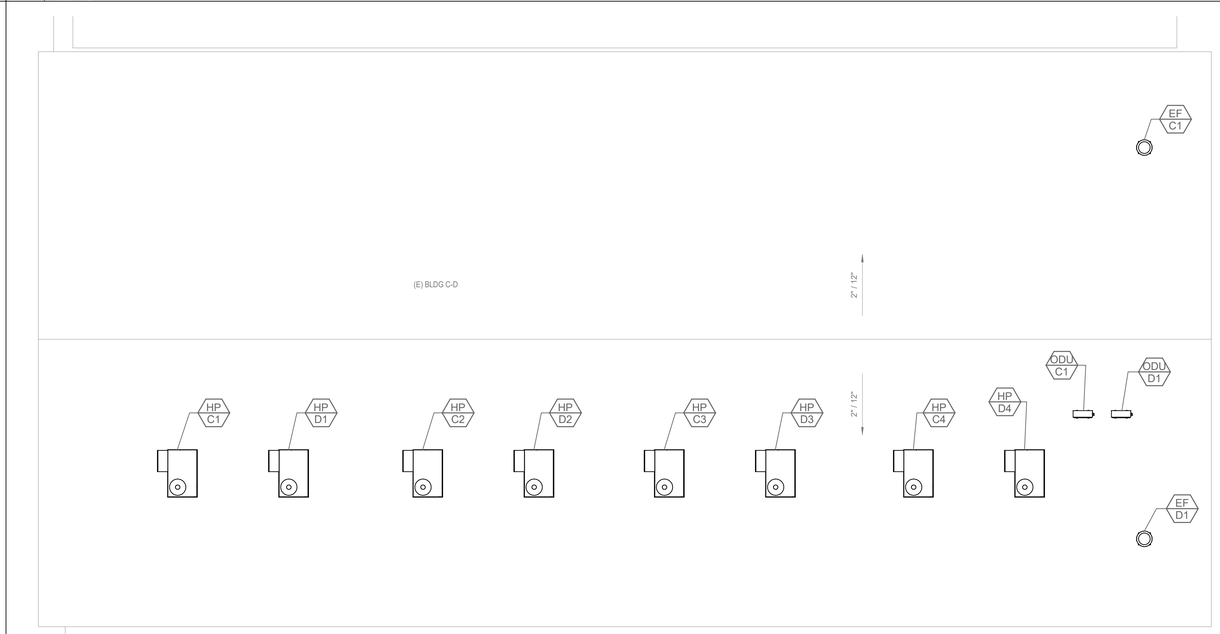
NORTH

2 ROOF PLAN - BLDG 'A-B'
1/8" = 1'-0"



NORTH

3 ROOF PLAN - BLDG 'K'
1/8" = 1'-0"



NORTH

1 ROOF PLAN - BLDG 'C-D'
1/8" = 1'-0"

KEY NOTES

1 10" EXHAUST DUCT TERMINATION. PROVIDE 1/4" MESH SCREEN AND WEATHER CAP

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

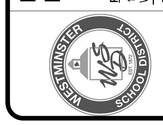
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS

M4.01

FILE PATH: Z:\Projects\...
9/15/2023 1:20:43 PM

ROOFTOP PACKAGED AIR CONDITIONING (HEAT PUMP) UNIT SCHEDULE

UNIT	MANUFACTURER & MODEL NO.	CFM	TONNAGE	TYPE	ESP (IN. WG)	COOLING CAP (MBH)		EVAP. ENT. AIR TEMP. (°F)		EVAP. LEAV. AIR TEMP. (°F)		ENT. COND. TEMP. (°F)			EER SEER	HEATING CAPACITIES (MBH)		COP		HSPF	INDOOR FAN				COMPRESSOR			ECONOMIZER WITH POWER EXHAUST										ELECTRICAL								FILTERS (IN.) MERV 13	OPER. WT. (UNIT + CURB + ECONOMIZER) (LBS)	OSA CFM	ANCHORAGE DETAIL	REMARKS
						TOTAL	SENS.	DB	WB	DB	WB	SUMMER DB	SUMMER WB	WINTER DB		TOTAL	INTEGRATED	HIGH TEMP.	LOW TEMP.		NO.	RPM	HP/ BHP	DRIVE	NO.	RLA	LRA	PART #	CFM	HP	FLA	MCA	MOCP	V	PHASE	HZ	OPER. WT. (LBS)	OFM NO.	OFM (FLA)	IFM (FLA)	ELECTRIC HEATER (FLA)	V	PHASE	HZ	UNIT MCA	UNIT MCOP				
HP A1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP A2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP A3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP A4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP B1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP B2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP B3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP B4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP C1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	170	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP C2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP C3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP C4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	220	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP D1	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	220	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP D2	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	360	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP D3	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	220	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬
HP D4	CARRIER 50GCGM05	1,600	4	VERTICAL	1.0	48.15	40.42	80.4	65.2	56.9	55.3	91.0	68.0	36.0	16.20	38.97	37.24	3.7	-	8.7	1	1878	0.71	DIRECT	1	14.0	83.0	MICROMETL PECD-SRT12CA-D2DH-2LH	1,600	0.5	3.9	4.9	8.8	208	3	60	191	1	1.5	7.1	-	230	3	60	27	30	(4) 16"x16"x2"	590 + 98 + 49 = 737	130	1 M6.01	②③⑤⑦⑧⑨⑩⑪⑫⑬

NOTES:

1. SCHEDULED LOADS INCLUDE FAN AND MOTOR HEAT.
2. PROVIDE ANTI-RECYCLE TIMER, CRANKCASE HEATER, LOW AMBIENT KIT AND HIGH CAPACITY FILTER RACK.
3. PROVIDE FACTORY "MICROMETL" MODULATING ECONOMIZER WITH POWER EXHAUST. AC UNIT SHALL HAVE C02 CONTROL. PROVIDE WITH LOCKING MESH COVER. POWER EXHAUST SHALL BE PROVIDED WITH A SEAPARTE DISCONNECT SWITCH, FIELD WIRED BY ELECTRICAL.
4. NOT USED.
5. BYPASS UNIT ANTI-RECYCLE TIMER WHEN ANTI-RECYCLE FUNCTION IS INCLUDED IN THE THERMOSTAT.
6. NOT USED.
7. PROVIDE WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
8. PROVIDE FACTORY CONDENSER COIL GUARDS.
9. PROVIDE T-24 COMPLAINT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL X7C WITH DEMAND CONTROL VENTILATION (DCV) W/CO2 SENSORS AND CONNECT TO EXISTING EMS.
10. UNITS SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED WITHIN ROOF CURB.
11. ALL AC UNITS SHALL HAVE R-410A REFRIGERANT.
12. PROVIDE WITH FACTORY MOUNTED NON-POWERED CONVENIENT OUTLET.
13. PROVIDE A FACTORY "MICROMETL" MODEL CRBK-SRT12GA-14 PITCHED ROOF CURB, 98 LBS.

VRF SYSTEM OUTDOOR HEAT RECOVERY UNIT SCHEDULE

UNIT	MANUFACTURER AND MODEL NO.	TYPE	COOLING CAP. (MBH)		COP	AMB. TEMP.(°F)		SCHE	E.E.R. I.E.E.R.	ELECTRICAL						OPER WT. (LBS)	ANCHORAGE DETAIL	REMARKS
			COOLING (TOTAL/SENSIBLE)	HEATING		SUMMER (DB/WB)	WINTER (DB)			COMPRESSOR QTY.	COMPRESSOR RLA	OUTDOOR FAN QTY.	MCA	MOCP	VOLTAGE			
VRF AD1	TOSHIBA/CARRIER MMY-MAP0966FT9P-UL	HEAT RECOVERY VRF	96.0	108.0	3.80	88.0/68.0	41.0	27.6	12.2 22.8	2	-	2	34.2	40	230V / 3Ø / 60HZ	684	7 SD1	①②③④⑤⑥⑦⑨

NOTES:

1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES.
2. PROVIDE LOW AMBIENT KIT.
3. PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD.
4. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
5. SIZE REFRIGERANT (R410A) LINES PER MANUFACTURERS RECOMMENDATIONS. PROVIDE LONG LINE KIT IF REQUIRED.
6. PROVIDE HAIL-GUARD.
7. PROVIDE WITH HOUSEKEEPING PAD.
8. NOT USED
9. PROVIDE UNIT WITH HEAT RECOVERY.

VRF SYSTEM INDOOR FAN COIL UNIT SCHEDULE

UNIT	MANUFACTURER AND MODEL NO.	SERVICE/ LOCATION	TYPE	CAPACITY (MBH)			OSA TEMP. (°F)		EAT. (°F) (DB/WB)	SUPPLY FAN		FLOW SELECTOR BOX					ELECTRICAL				OPER. WT. (LBS.)	ANCHORAGE DETAIL	REMARKS
				COOLING		HEATING	SUMMER (DB/WB)	WINTER (DB)		CFM (H/M/L)	E.S.P. (IN.)	MANUFACTURER & MODEL NO.	VOLTAGE	CURRENT DRAW (AMP)	MOCP	TOTAL WT. (LBS.)	VOLTAGE	UNIT FLA	UNIT MCA	MOCP			
				TOTAL	SENSIBLE																		
FC AD1	TOSHIBA/CARRIER MMD-AP0366BHPUL	WORK ROOM AD-6	CONCEALED DUCTED	36.0	-	40.0	88.0/68.0	41.0	80.0/67.0	1,130/ 954/ 812	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1ø/60HZ	-	-	13	230V/1ø/60HZ	-	2.3	15	119	4 SD3	①②③④⑤⑥⑦
FC AD2	TOSHIBA/CARRIER MMD-AP0126BHPUL	PRINCIPAL AD-5	CONCEALED DUCTED	12.0	-	13.5	88.0/68.0	41.0	80.0/67.0	589/ 489/ 394	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1ø/60HZ	-	-	11	230V/1ø/60HZ	-	<1	15	70	4 SD3	①②③④⑤⑥⑦
FC AD3	TOSHIBA/CARRIER MMD-AP0246BHPUL	PUBLIC AD-1	CONCEALED DUCTED	24.0	-	27.0	88.0/68.0	41.0	80.0/67.0	706/ 583/ 512	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1ø/60HZ	-	-	11	230V/1ø/60HZ	-	1.8	15	119	4 SD3	①②③④⑤⑥⑦
FC AD4	TOSHIBA/CARRIER MMD-AP0126BHPUL	OFFICE AD-7	CONCEALED DUCTED	12.0	-	13.5	88.0/68.0	41.0	80.0/67.0	589/ 489/ 394	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1ø/60HZ	-	-	11	230V/1ø/60HZ	-	<1	15	70	4 SD3	①②③④⑤⑥⑦
FC AD5	TOSHIBA/CARRIER MMD-AP0186BHPUL	NURSE AD-8	CONCEALED DUCTED	18.0	-	20.0	88.0/68.0	41.0	80.0/67.0	624/ 489/ 394	0.6	TOSHIBA/CARRIER RBM-Y0383FUL	230V/1ø/60HZ	-	-	11	230V/1ø/60HZ	-	1.2	15	93	4 SD3	①②③④⑤⑥⑦

NOTES:

1. PROVIDE WITH CONDENSATE DRAIN PAN (PRIMARY AND SECONDARY) FOR FAN COIL UNIT AND ASSOCIATED PIPING.
2. PROVIDE WITH FACTORY FURNISHED & INSTALLED CONDENSATE DRAIN LIFT PUMP (CONDENSATE PUMP SHALL BE POWERED THRU INDOOR FAN COIL UNIT).
3. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.
4. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL 241003-001 AND CONNECT TO EXISTING EMS.
5. CONCEALED/DUCTED FAN COIL UNIT.
6. PROVIDE DISCONNECT SWITCH.
7. PROVIDE WITH MEDIUM STATIC MOTOR.

AIR DISTRIBUTION SCHEDULE

SYMBOL	TYPE	MAKE & MODEL	DESCRIPTION
Ⓐ	CEILING SUPPLY	TITUS MODEL MCD-3	MODULAR CORE DIFFUSER WITH FRAME FOR LAY-IN T-BAR CEILING, FLUSH FACE MOUNTING.
Ⓑ	CEILING RETURN	TITUS MODEL PAR-3	PERFORATED FACE DIFFUSER WITH FRAME FOR LAY-IN T-BAR CEILING, FLUSH FACE MOUNTING.
Ⓒ	CEILING SUPPLY	TITUS MODEL MCD-1	MODULAR CORE DIFFUSER WITH RAPID MOUNT FRAME MODEL TRM FOR SURFACE MOUNTING.
Ⓓ	CEILING RETURN/EXHAUST	TITUS MODEL 50F	EGG CRATE GRILLE REGISTER WITH RAPID MOUNT FRAME TRM FOR SURFACE MOUNTING.
Ⓔ	SIDEWALL SUPPLY	TITUS MODEL 1700	DOUBLE DEFLECTION HORIZONTAL 5° DOWN FRONT GRILLE WITH 1/2" BLADE SPACING, FRAME FOR WALL MOUNTING.
Ⓕ	LINEAR CEILING SUPPLY	TITUS MODEL ML-38-2B	ALUMINUM LINEAR SLOT DIFFUSER, 3/4" SLOT,4-SLOT, PATTERN CONTROLLER, FLANGED BORDER FOR SURFACE MOUNTING, OPTIONAL PLENUM IN 2,3,4 OR 5 FOOT SECTIONS PER PLANS, COLOR PER ARCHITECT.
Ⓖ	SIDEWALL RETURN	TITUS MODEL 355FL	ALUMINUM LOUVERED RETURN GRILLE, 1/2" BLADE SPACING, 35° DEFLECTION, LONG BLADES, FRAME FOR WALL MOUNTING.

NOTES:

1. EQUIVALENT MODELS OF KRUEGER, ANEMOSTAT, PRICE OR J&J ARE ACCEPTABLE.
2. REFER TO THE FLOOR PLANS FOR NECK SIZE, CFM, AIR DIFFUSION PATTERN AND FIRE/DAMPER, IF REQUIRED.
3. PROVIDE AIR CONTROL GRID FOR ALL CEILING SUPPLY DIFFUSERS SET AT 90°.
4. INTERIOR OF ALL GRILLES SHALL BE PAINTED FLAT BLACK.
5. DIFFUSERS, REGISTERS AND GRILLES SHALL HAVE A MAX OPERATING WEIGHT OF 10 LBS. SEE DETAIL 10/M6.01 FOR SUPPORT CONNECTION

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

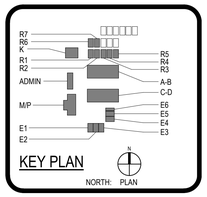
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WARDNER
No.M38155
Exp.09-30-2024
SIGNATURE
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL SCHEDULES

M5.01

FILE PATH: Z:\Projects\...
9/14/2023 10:34:46 AM

FANS SCHEDULE

UNIT	MANUFACTURER & MODEL NO.	SERVICE	TYPE	CFM	SP IN W.G.	FAN RPM	MOTOR					SONES	OPER WT. (LBS)	ANCHORAGE DETAIL	REMARKS
							HP/ BHP	FLA	VOLT	PH	HZ				
EF AD1	GREENHECK SP-110-VG	BUILDING "ADMIN" UNISEX RR AD9	CEILING/SUSPENDED	70	0.25	-	_	0.29	115	1	60	-	15	9 / M6.01	2 3
EF K1	GREENHECK SP-110-VG	BUILDING "K" BOYS RR C7	CEILING/SUSPENDED	70	0.25	-	_	0.29	115	1	60	-	15	9 / M6.01	2 3
EF K2	GREENHECK SP-110-VG	BUILDING "K" BOYS RR C8	CEILING/SUSPENDED	70	0.25	-	_	0.29	115	1	60	-	15	9 / M6.01	2 3
EF K3	GREENHECK SP-110-VG	BUILDING "K" GIRLS RR C9	CEILING/SUSPENDED	70	0.25	-	_	0.29	115	1	60	-	15	9 / M6.01	2 3
EF K4	GREENHECK SP-110-VG	BUILDING "K" GIRLS RR C10	CEILING/SUSPENDED	70	0.25	-	_	0.29	115	1	60	-	15	9 / M6.01	2 3
EF A1	GREENHECK GB100HP-4	BUILDING "AB" BOYS RR A5	ROOF MOUNTED	350	0.5	-	1/4	5.8	115	1	60	-	72	18 / M6.01	1 3
EF B1	GREENHECK GB100HP-4	BUILDING "AB" GIRLS RR B5	ROOF MOUNTED	280	0.5	-	1/4	5.8	115	1	60	-	72	18 / M6.01	1 3
EF C1	GREENHECK GB100HP-4	BUILDING "CD" BOYS RR C5	ROOF MOUNTED	490	0.5	-	1/4	5.8	115	1	60	-	72	18 / M6.01	1 3
EF D1	GREENHECK GB100HP-4	BUILDING "CD" GIRLS RR D5	ROOF MOUNTED	280	0.5	-	1/4	5.8	115	1	60	-	72	18 / M6.01	1 3
SF AD1	GREENHECK SQ98	BUILDING "ADMIN" ADMIN. AREA	CEILING MOUNTED INLINE	240	0.75	-	1/4	-	115	1	60	-	58	4 / SD3	3

NOTES:
1. PROVIDE FACTORY ROOF CURB. SLOPE TO MATCH EXISTING ROOF SLOPE, AS REQUIRED.
2. FAN SHALL OPERATE ON A TIME CLOCK SCHEDULE PROVIDED BY THE SCHOOL DISTRICT.
3. PROVIDE BACKDRAFT DAMPER FOR ALL FANS.
4. INTERLOCK FAN WITH A/C UNIT SERVING ADJACENT CLASSROOM.
5. INTERLOCK SUPPLY FAN WITH ALL FAN COIL UNITS SERVING ADMIN. AREA.
6. PROVIDED FACTORY SOLID STATE CONTROLLER MOUNTED WITHIN THE FAN'S CASING.
7. PROVIDE CONTROL TRANSFORMER AND PRESSURE TRANSDUCER.
8. PROVIDE WITH MERV 13 FILTERS.
9. CONNECT TO EXISTING EMS.

INDOOR FAN COIL UNIT SCHEDULE

UNIT	MANUFACTURER AND MODEL NO.	CAPACITY (MBH)		OSA TEMP. (°F)		EAT. (°F) (DB/WB)	LAT. (°F) (DB/WB)	SUPPLY FAN		ELECTRICAL			OPER. WT. (LBS.)	ANCHORAGE DETAIL	REMARKS
		COOLING (TOTAL/SENSIBLE)	HEATING	SUMMER (DB/WB)	WINTER (DB)			CFM	E.S.P. (IN.)	VOLTAGE	UNIT MCA	MOCP			
FC A1	CARRIER 40MBCQ12	12.0	12.0	91.0/68.0	36.0	57.6	95	400 H 340 M 280 L	0.6	208V/ 1Ø / 60HZ	1.11	7	40	4 / SD3	1 2 3 4 5 7
FC B1	CARRIER 40MBCQ12	12.0	12.0	91.0/68.0	36.0	57.6	95	400 H 340 M 280 L	0.6	208V/ 1Ø / 60HZ	1.11	7	40	4 / SD3	1 2 3 4 5 7
FC C1	CARRIER 40MBCQ12	12.0	12.0	91.0/68.0	36.0	57.6	109.7	400 H 340 M 280 L	0.6	208V/ 1Ø / 60HZ	1.11	7	40	4 / SD3	1 2 3 4 5 7
FC D1	CARRIER 40MBCQ12	12.0	12.0	91.0/68.0	36.0	57.6	109.7	400 H 340 M 280 L	0.6	208V/ 1Ø / 60HZ	1.11	7	40	4 / SD3	1 2 3 4 5 7
FC K1	CARRIER 40MBDQ58	57.0	62.0	91.0/68.0	36.0	57.6	109.7	2150 H 1710 M 1260 L	0.8	208V/ 1Ø / 60HZ	3.65	7	163	4 / SD3	1 2 3 4 5 7
FC K2	CARRIER 40MBDQ58	57.0	62.0	91.0/68.0	36.0	57.6	109.7	2150 H 1710 M 1260 L	0.8	208V/ 1Ø / 60HZ	3.65	7	163	4 / SD3	1 2 3 4 5 7

NOTES:
1. PROVIDE WITH CONDENSATE DRAIN PAN (PRIMARY AND SECONDARY) FOR FAN COIL UNIT AND ASSOCIATED PIPING.
2. PROVIDE WITH FACTORY FURNISHED & INSTALLED CONDENSATE DRAIN LIFT PUMP (CONDENSATE PUMP SHALL BE POWERED THRU INDOOR FAN COIL UNIT).
3. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.
4. CONNECT TO EMS FOR CONTROLS.
5. CEILING MOUNTED FAN COIL UNIT.
6. CASSETTE TYPE DUCTLESS FAN COIL UNIT, POWERED BY OUTDOOR HEAT PUMP.
7. PROVIDE WITH MEDIUM STATIC MOTOR.

OUTDOOR HEAT PUMP UNIT SCHEDULE

UNIT	MANUFACTURER AND MODEL NO.	COOLING CAP. (MBH)		COP/ HSPF	AMB. TEMP.(°F)		E.E.R. I.E.E.R.	ELECTRICAL						OPER WT. (LBS)		REMARKS
		COOLING (TOTAL/SENSIBLE)	HEATING		SUMMER (DB/WB)	WINTER (DB)		COMPRESSOR QTY.	COMPRESSOR RLA	OUTDOOR FAN QTY.	MCA	MOCP	VOLTAGE			
ODU A1	CARRIER 38MARBQ12AA3	12.0	12.0	3.22/ 10.6	91.0/68.0	36.0	12.7 EER 21.5 SEER	1	8.5	1	15	15	208V / 1Ø / 60HZ	75	5 / M6.01	
ODU B1	CARRIER 38MARBQ12AA3	12.0	12.0	3.22/ 10.6	91.0/68.0	36.0	12.7 EER 21.5 SEER	1	8.5	1	15	15	208V / 1Ø / 60HZ	75	5 / M6.01	
ODU C1	CARRIER 38MARBQ12AA3	12.0	12.0	3.22/ 10.6	91.0/68.0	36.0	12.7 EER 21.5 SEER	1	8.5	1	15	15	208V / 1Ø / 60HZ	75	5 / M6.01	
ODU D1	CARRIER 38MARBQ12AA3	12.0	12.0	3.22/ 10.6	91.0/68.0	36.0	12.7 EER 21.5 SEER	1	8.5	1	15	15	208V / 1Ø / 60HZ	75	5 / M6.01	
ODU K1	CARRIER 38MBRQS58A--3	58.0	62.0	3.6/ 9.0	91.0/68.0	36.0	10.0 EER 18.0 SEER	1	8.5	1	35	50	208V / 1Ø / 60HZ	225	7 / SD1	
ODU K2	CARRIER 38MBRQS58A--3	58.0	62.0	3.6/ 9.0	91.0/68.0	36.0	10.0 EER 18.0 SEER	1	8.5	1	35	50	208V / 1Ø / 60HZ	225	7 / SD1	

NOTES:
1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES.
2. PROVIDE LOW AMBIENT KIT.
3. PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD.
4. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
5. SIZE REFRIGERANT (R410A) LINES PER MANUFACTURERS RECOMMENDATIONS. PROVIDE LONG LINE KIT IF REQUIRED.
6. PROVIDE HAIL-GUARD.
7. PROVIDE WITH HOUSEKEEPING PAD.
8. ALL HEAT PUMP UNITS ARE ROOF MOUNTED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M38155 Exp.09-30-2024 MECHANICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

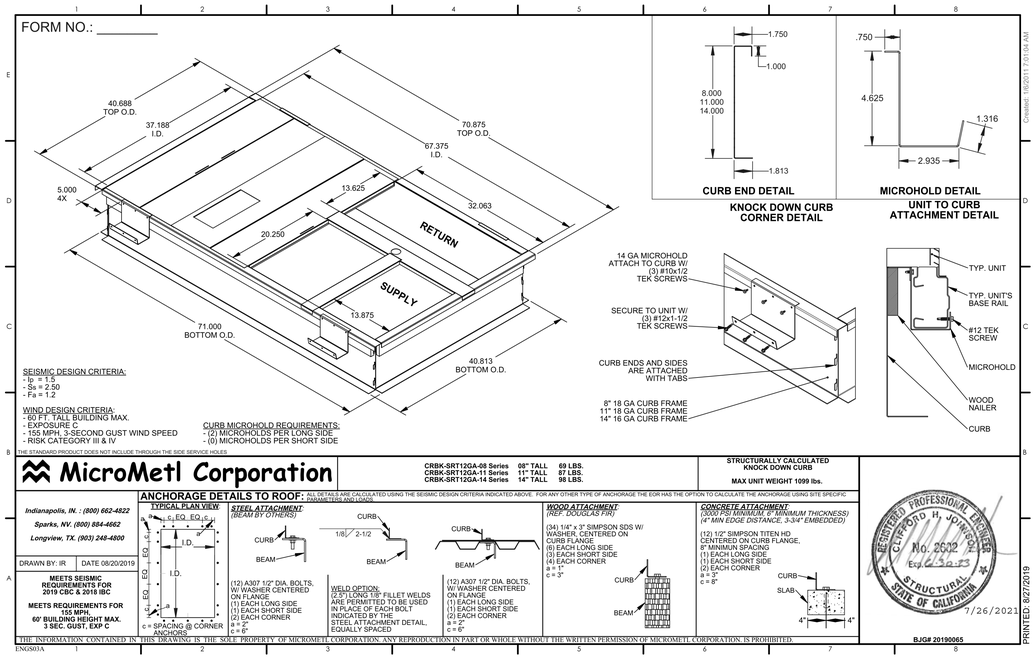
REVISIONS

No.	Description	Date

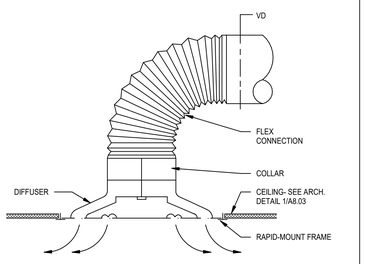
DSA Submittal

MECHANICAL SCHEDULES

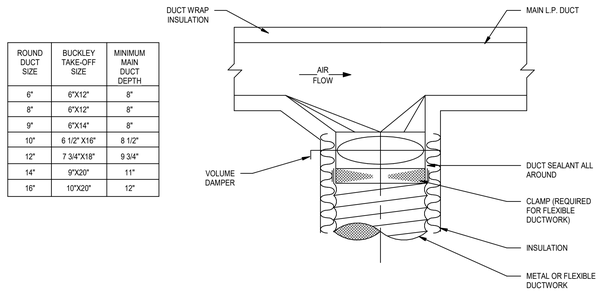
M5.02



17 ROOF CURB DETAIL FOR A/C UNITS
NOT TO SCALE

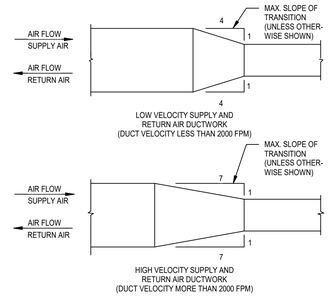


NOTE: MAX OPERATING WEIGHT IS 10 LBS

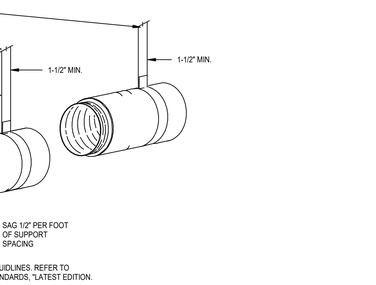


ROUND DUCT SIZE	BUCKLEY TAKE-OFF SIZE	MINIMUM MAIN DUCT DEPTH
6"	6"X12"	8"
8"	6"X12"	8"
9"	6"X14"	8"
10"	6 1/2" X16"	8 1/2"
12"	7 3/4"X18"	9 3/4"
14"	9"X20"	11"
16"	10"X20"	12"

16 AIR DISTRIBUTION SCHEDULE
NOT TO SCALE

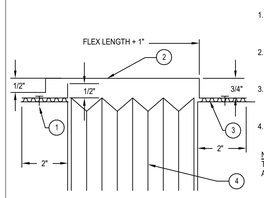


15 DUCTED FAN COIL UNIT DETAIL
NOT TO SCALE



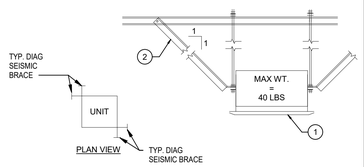
NOTES:
1. INSTALL DUCTWORK PER SMACNA GUIDLINES. REFER TO "SMACNA DUCT CONSTRUCTION STANDARDS, "LATEST EDITION.

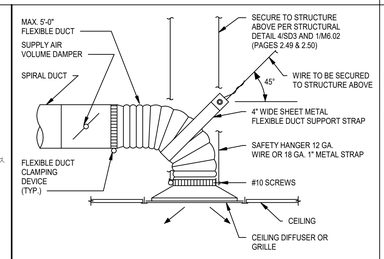
14 HARD LID DIFFUSER CONNECTION DETAIL
NOT TO SCALE



13 RECTANGULAR TO ROUND TRANSITION TAKE-OFF DETAIL
NOT TO SCALE

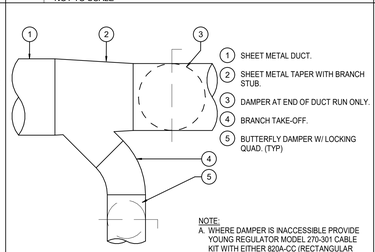
1. CEILING SUSPENDED FAN WITH FACTORY PROVIDED HANGING KIT. SEE MECH. SCHEDULE FOR MAKE & MODEL.
2. REFER TO STRUCTURAL DETAIL 4/SD3 FOR ATTACHMENT TO STRUCTURE AND FOR ADDITIONAL INFORMATION.





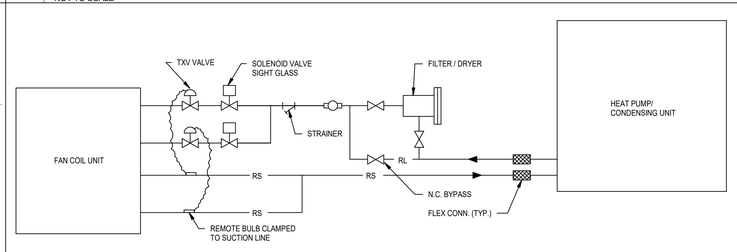
NOTES:
1. REFER TO DETAIL #14/M6.01 FOR FLEXIBLE DUCTWORK DETAIL.
2. LOCATE VOLUME DAMPER AS FAR AWAY FROM DIFFUSER OR GRILLE AS POSSIBLE.

12 RECTANGULAR DUCT TRANSITION DETAIL
NOT TO SCALE



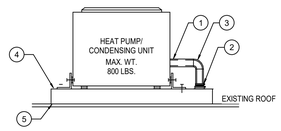
NOTE:
A. WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 820A-CC (RECTANGULAR OR 5020-CC (ROUND) DAMPER.
B. PROVIDE DAMPER WITH LOCKING QUADRANT AT ALL SINGLE RUNOUTS.

11 FLEXIBLE DUCTWORK HANGER DETAIL
NOT TO SCALE



NOTE:
1. TYPICAL OF 2 INDEPENDENT CIRCUITS.
2. ALL REFRIGERANT PIPING TO BE SIZED PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

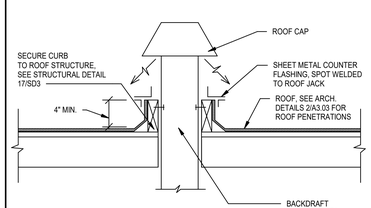
10 FLEX CONNECTOR DETAIL
NOT TO SCALE



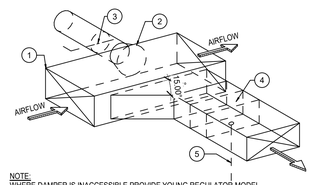
NOTES:
1. INSULATED REFRIGERANT PIPES THRU CURB. PIPES, THRU CURB.
2. PROVIDE GRADULATED STEP BOOT WITH STSAINLESS STEEL CLAMPS BY THE PATE COMPANY. BOOT JOINT AT CURB, SHALL BE MADE WATER TIGHT.
3. INSULATED, ALUMINUM WRAP REFRIGERANT PIPES, THRU CURB.
4. HEAT PUMP/CONDENSING UNIT'S PLATFORM WITH NEOPRENE PAD.
5. SEE STRUCTURAL DETAIL 16/SD1 FOR ATTACHEMENT TO STRUCTURE.

9 SUSPENDED EXHAUST FAN DETAIL
NOT TO SCALE

8 LAY IN DIFFUSER CONNECTION DETAIL
NOT TO SCALE



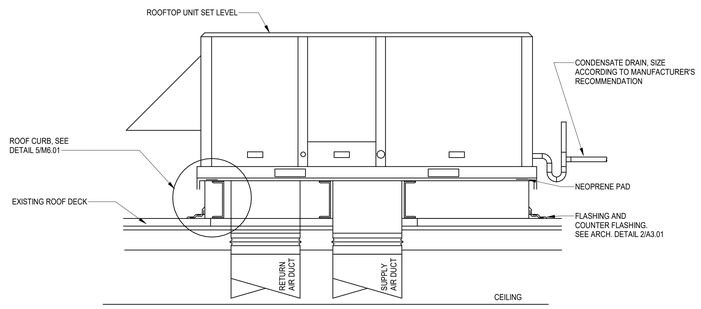
7 BRANCH DUCT DAMPER DETAIL
NOT TO SCALE



NOTE:
WHERE DAMPER IS INACCESSIBLE PROVIDE YOUNG REGULATOR MODEL 270-301 CABLE KIT WITH EITHER 830A-CC (RECTANGULAR) OR 5020-CC (ROUND) DAMPER.

1. RECTANGULAR GALVANIZED SHEET METAL SUPPLY AIR DUCT - SEE MECHANICAL PLAN FOR SIZE.
2. CUT OPENING ACCURATELY FOR SPIN IN (FLARED) FITTING - WHERE POSSIBLE.
3. BUTTERFLY DAMPER W/ LOCKING QUAD. (TYP)
4. VOLUME CONTROL DAMPER WITH LOCKING QUADRANT.
5. DAMPER REGULATOR

6 REFRIGERANT PIPING SCHEMATIC DETAIL
NOT TO SCALE



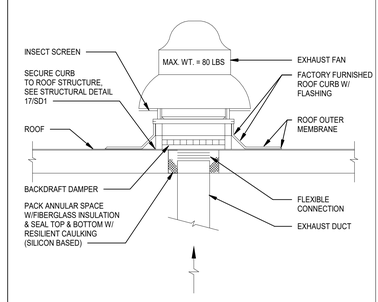
5 HP/CU ROOF MOUNTING DETAIL
NOT TO SCALE

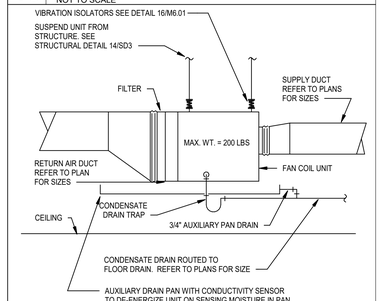
3 ROOF JACK DETAIL
NOT TO SCALE

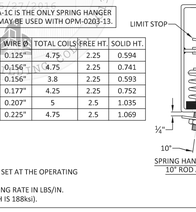
2 BRANCH DUCT TAKE-OFF & DMP. DETAIL
NOT TO SCALE

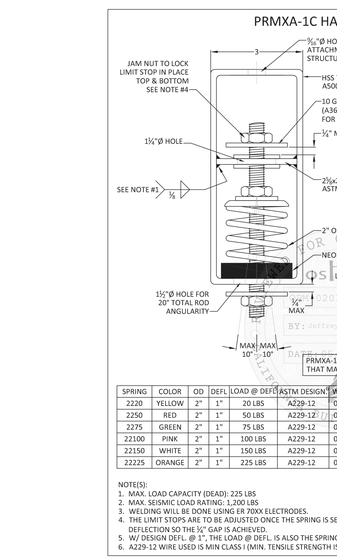
1 ROOF TOP UNIT DETAIL
NOT TO SCALE

18 ROOF MOUNTED EXHAUST FAN DETAIL
NOT TO SCALE









SPRING	COLOR	OD	DEFL	LOAD @ DEFL	ASTM DESIGN	WIRE Ø	TOTAL COILS	FREE HT.	SOLID HT.
2220	YELLOW	2"	1"	20 LBS	A229-12	0.125"	4.75	2.25	0.594
2250	RED	2"	1"	50 LBS	A229-12	0.156"	4.75	2.25	0.741
2275	GREEN	2"	1"	75 LBS	A229-12	0.156"	3.8	2.25	0.593
22100	PINK	2"	1"	100 LBS	A229-12	0.177"	4.25	2.25	0.752
22150	WHITE	2"	1"	150 LBS	A229-12	0.207"	5	2.5	1.035
22225	ORANGE	2"	1"	225 LBS	A229-12	0.225"	4.75	2.5	1.069

NOTE(S):
1. MAX. LOAD CAPACITY (DEAD): 225 LBS
2. MAX. SEISMIC LOAD RATING: 1,200 LBS
3. WELDING WILL BE DONE USING ER 70XX ELECTRODES.
4. THE LIMIT STOPS ARE TO BE ADJUSTED ONCE THE SPRING IS SET AT THE OPERATING DEFLECTION SO THE 3/4" GAP IS ACHIEVED.
5. W/ DESIGN DEFL. @ 1", THE LOAD @ DEFL. IS ALSO THE SPRING RATE IN LBS/IN.
6. A229-12 WIRE USED IS MIN CLASS I (MIN. TENSILE STRENGTH IS 188ksi).

Vibrex vibration & seismic control systems
M.W. Sausse & Co., Inc.
28744 Witherspoon Parkway | Valencia, CA 91355
Ph: (661) 257-3311 | Fax: (661) 257-6050
Civil Engineer: P.K. Sachdeva
California PE No. C59644
Page No.: 4.1
Date: May 9, 2016

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

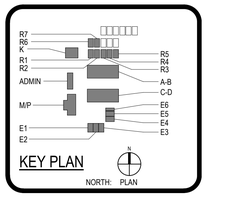
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



Consultant
REGISTERED PROFESSIONAL ENGINEER REX DAVID WARD No.M38155 Exp.09-30-2024 SIGNATURE STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220528

REVISIONS

No.	Description	Date

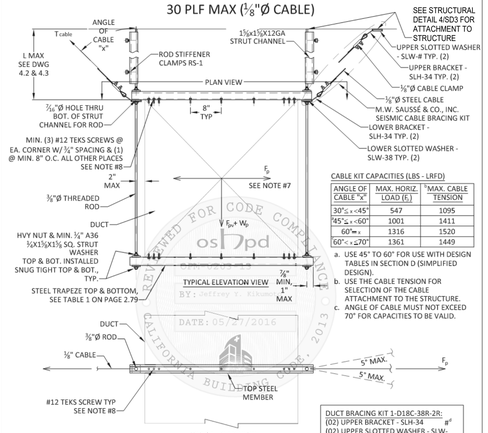
DSA Submittal

MECHANICAL DETAILS

M6.01

FILE PATH: Z:\Projects\...
9/14/2023 10:34:46 AM

CABLE BRACING SYSTEM - TRAPEZE HUNG DUCT - TRANSVERSE 30 PLF MAX (⅛"Ø CABLE)



CABLE KIT CAPACITIES (LBS - LRFD)

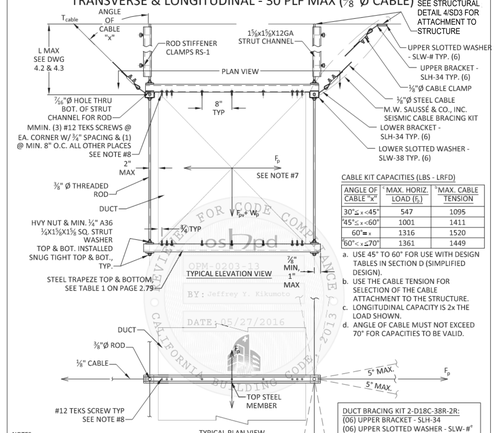
ANGLE OF CABLE "x"	MAX. HORIZ. LOAD (F_h)	MAX. CABLE TENSION
30°≤ x <45°	547	1095
45°≤ x <60°	1001	1411
60°= x	1316	1520
60° < x ≤70°	1361	1449

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.
d. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

DUCT BRACING KIT 1-D18C-38R-2R:
(02) UPPER BRACKET - SLH-34
(02) UPPER SLOTTED WASHER - SLW-#"
(02) LOWER BRACKET - SLH-34
(02) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(02) ⅛" CABLE - 10 FT.
(04) ⅛" CABLE CLAMPS

NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PG 4.5
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. RDP SHALL CONSIDER THE ECCENTRIC LOAD DISTRIBUTION WHEN DETERMINING THE F_h VALUE USED IN THE DESIGN.
8. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

CABLE BRACING SYSTEM - TRAPEZE HUNG DUCT TRANSVERSE & LONGITUDINAL - 30 PLF MAX (⅛"Ø CABLE)



CABLE KIT CAPACITIES (LBS - LRFD)

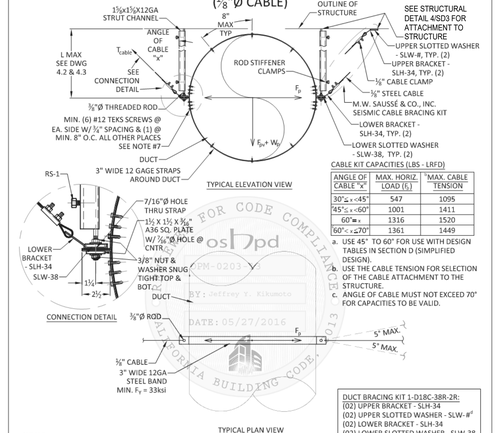
ANGLE OF CABLE "x"	MAX. HORIZ. LOAD (F_h)	MAX. CABLE TENSION
30°≤ x <45°	547	1095
45°≤ x <60°	1001	1411
60°= x	1316	1520
60° < x ≤70°	1361	1449

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. LONGITUDINAL CAPACITY IS 2x THE LOAD SHOWN.
d. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.
e. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

DUCT BRACING KIT 2-D18C-38R-2R:
(06) UPPER BRACKET - SLH-34
(06) UPPER SLOTTED WASHER - SLW-#"
(06) LOWER BRACKET - SLH-34
(06) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(06) ⅛" CABLE - 10 FT.
(12) ⅛" CABLE CLAMPS

NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PG 4.5
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. RDP SHALL CONSIDER THE ECCENTRIC LOAD DISTRIBUTION WHEN DETERMINING THE F_h VALUE USED IN THE DESIGN.
8. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

CABLE BRACING SYSTEM - HUNG ROUND DUCT - TRANSVERSE - 30 PLF MAX (⅛"Ø CABLE)



CABLE KIT CAPACITIES (LBS - LRFD)

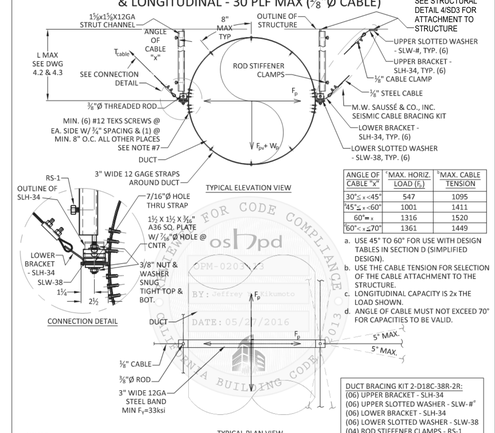
ANGLE OF CABLE "x"	MAX. HORIZ. LOAD (F_h)	MAX. CABLE TENSION
30°≤ x <45°	547	1095
45°≤ x <60°	1001	1411
60°= x	1316	1520
60° < x ≤70°	1361	1449

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.
d. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

DUCT BRACING KIT 1-D18C-38R-2R:
(02) UPPER BRACKET - SLH-34
(02) UPPER SLOTTED WASHER - SLW-#"
(02) LOWER BRACKET - SLH-34
(02) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(02) ⅜" CABLE - 10 FT.
(04) ⅛" CABLE CLAMPS

NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PAGE 4.5.
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

CABLE BRACING SYSTEM - HUNG ROUND DUCT - TRANSVERSE & LONGITUDINAL - 30 PLF MAX (⅛"Ø CABLE)



CABLE KIT CAPACITIES (LBS - LRFD)

ANGLE OF CABLE "x"	MAX. HORIZ. LOAD (F_h)	MAX. CABLE TENSION
30°≤ x <45°	547	1095
45°≤ x <60°	1001	1411
60°= x	1316	1520
60° < x ≤70°	1361	1449

a. USE 45° TO 60° FOR USE WITH DESIGN TABLES IN SECTION D (SIMPLIFIED DESIGN).
b. USE THE CABLE TENSION FOR SELECTION OF THE CABLE ATTACHMENT TO THE STRUCTURE.
c. LONGITUDINAL CAPACITY IS 2x THE LOAD SHOWN.
d. ANGLE OF CABLE MUST NOT EXCEED 70° FOR CAPACITIES TO BE VALID.
e. UPPER SLOTTED WASHER TO MATCH SELECTED ATTACHMENT.

DUCT BRACING KIT 2-D18C-38R-2R:
(06) UPPER BRACKET - SLH-34
(06) UPPER SLOTTED WASHER - SLW-#"
(06) LOWER BRACKET - SLH-34
(06) LOWER SLOTTED WASHER - SLW-38
(04) ROD STIFFENER CLAMPS - RS-1
(06) ⅛" CABLE - 10 FT.
(12) ⅛" CABLE CLAMPS

NOTES:
1. CABLE IS 7 X 19 GALVANIZED STEEL CABLE. SEE PAGE 4.5.
2. CABLES TO BE INSTALLED TAUT W/O SLACK. CAUTION - CABLE MUST NOT SUSTAIN ANY DEAD LOAD.
3. SEE PAGE 4.2 & 3 FOR ROD STIFFENER DETAIL & REQUIREMENTS.
4. SEE PAGE 4.4 FOR BRACKET - SLH-34 AND SLOTTED WASHER - SLW-XX DETAIL.
5. SEE PAGE 4.5 FOR CABLE CLAMP DETAIL.
6. TEKS SCREWS MUST BE PER ICC ESR-1976.
7. USE SHORTEST SMS POSSIBLE WHEN PENETRATING DUCTWORK TO MINIMIZE AIRFLOW NOISE INSIDE THE DUCT (FEMA 414).

RS-1 - ROD STIFFENER DETAILS & REQUIREMENTS

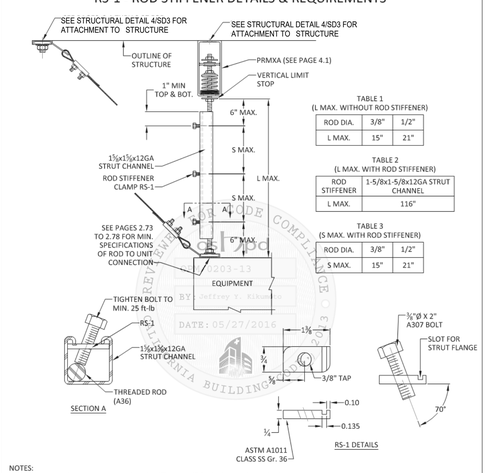


TABLE 1 (L MAX. WITHOUT ROD STIFFENER)

ROD DIA.	3/8"	1/2"
L MAX.	15"	21"

TABLE 2 (L MAX. WITH ROD STIFFENER)

ROD STIFFENER	1-5/8x1-5/8x12GA STRUT CHANNEL
L MAX.	116"

TABLE 3 (S MAX. WITH ROD STIFFENER)

ROD DIA.	3/8"	1/2"
S MAX.	15"	21"

NOTES:
1. SEE TABLE 1 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITHOUT ROD STIFFENER.
2. SEE TABLE 2 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITH ROD STIFFENER.
3. SEE TABLE 3 TO DETERMINE NUMBER OF ROD STIFFENER CLIPS REQUIRED.
4. PROVIDE ROD STIFFENING ONLY WHERE SEISMIC BRACKETS ARE ATTACHED TO THE ROD.
5. SEE SECTION 3 FOR STRUCTURAL ATTACHMENTS FOR HANGER BOX AND CABLE BRACING

RS-1 - ROD STIFFENER DETAILS & REQUIREMENTS

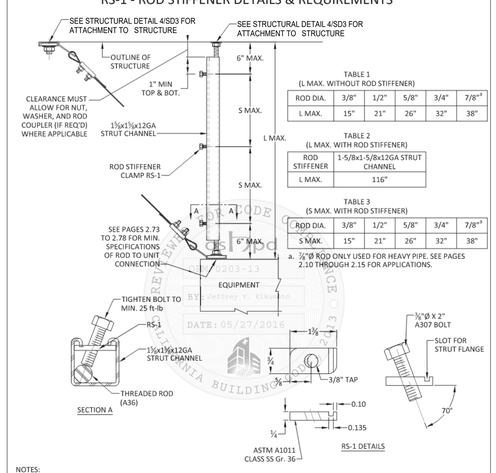


TABLE 1 (L MAX. WITHOUT ROD STIFFENER)

ROD DIA.	3/8"	1/2"	5/8"	3/4"	7/8"[a]
L MAX.	15"	21"	26"	32"	38"

TABLE 2 (L MAX. WITH ROD STIFFENER)

ROD STIFFENER	1-5/8x1-5/8x12GA STRUT CHANNEL
L MAX.	116"

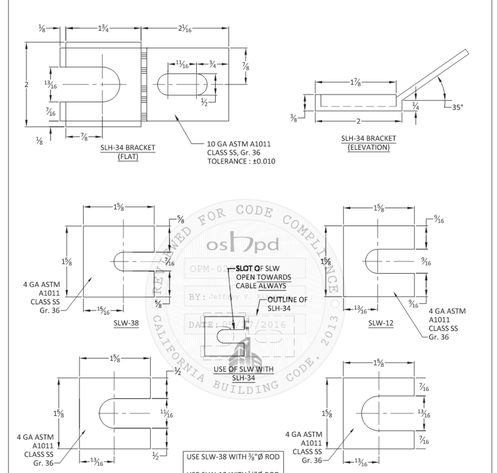
TABLE 3 (S MAX. WITH ROD STIFFENER)

ROD DIA.	3/8"	1/2"	5/8"	3/4"	7/8"[a]
S MAX.	15"	21"	26"	32"	38"

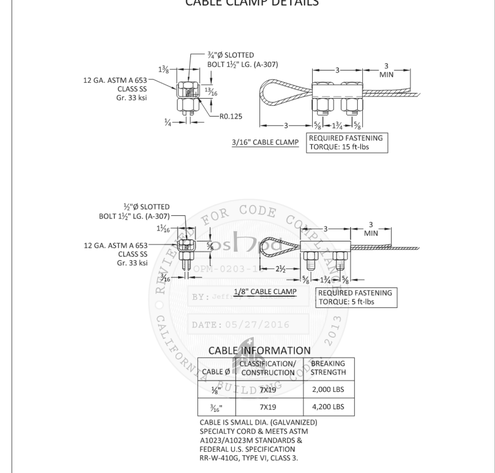
a. ⅞"Ø ROD ONLY USED FOR HEAVY PIPE. SEE PAGES 2.10 THROUGH 2.15 FOR APPLICATIONS.

NOTES:
1. SEE TABLE 1 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITHOUT ROD STIFFENER.
2. SEE TABLE 2 FOR MAXIMUM LENGTH OF ⅜" THRU ⅞"Ø RODS WITH ROD STIFFENER.
3. SEE TABLE 3 TO DETERMINE NUMBER OF ROD STIFFENER CLIPS REQUIRED.
4. PROVIDE ROD STIFFENING ONLY WHERE SEISMIC BRACKETS ARE ATTACHED TO THE ROD.
5. SEE SECTION 3 FOR STRUCTURAL ATTACHMENTS FOR HANGER BOX AND CABLE BRACING

SLH-34 & SLW-38, 12, 58, & 34 DETAILS



CABLE CLAMP DETAILS



CABLE INFORMATION

CABLE Ø	CLASS/DESCRIPTION/ CONSTRUCTION	BREAKING STRENGTH
⅛"	7X19	2,000 LBS
3/16"	7X19	4,200 LBS

CABLE IS SMALL DIA. (GALVANIZED) SPECIALTY CORD & MEETS ASTM A1023/A1023M STANDARDS & FEDERAL U.S. SPECIFICATION RR-W-410G, TYPE VI, CLASS 3.

1 PRE-APPROVED OPM HANGER DETAILS
NOT TO SCALE

FILE PATH: Z:\Projects\...
9/14/2023 10:34:46 AM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS: 13562 University St. Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43

DSA APPL NO.: 04-121953

WESTMINSTER SCHOOL DISTRICT

R7 R6 K ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3 R1 R2

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M38155 Exp.09-30-2024 CHANTICO STATE OF CALIFORNIA

Architect

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 03/31/2023
PROJECT NUMBER 220528

REVISIONS

No.	Description	Date

DSA Submittal

MECHANICAL DETAILS

M6.02

E0.00 - ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS

0" 1"

ELECTRICAL SYMBOL LEGEND

1. EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.
2. DASHED ELECTRICAL EQUIPMENT GENERALLY INDICATES EXISTING EQUIPMENT.
3. LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCH LINE OR DEFINES AREA FOR SPECIAL NOTE.

CIRCUIT RELATED:

LIGHTING OR POWER CIRCUIT(S). ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT, "D" ON HOMERUN ARROW INDICATES DEDICATED CIRCUIT. PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET; COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THHN/THWN CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.
NOTE: HOMERUN INDICATES INSTALLATION OF NEW WIRE AND CONDUIT (#12 WIRE, 3/4"C, UNLESS OTHERWISE NOTED) FROM SOURCE PANELBOARD TO LOAD. HOMERUN INDICATES CONNECTION OF NEW LOADS TO EXISTING CIRCUITS IN LIEU OF PANELBOARD WHERE NOTED ON PLANS.

JUNCTION BOX

GROUNDING FIXTURE

LIGHTING:

LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT. CROSS HATCHING INDICATES FIXTURE ON EMERGENCY SYSTEM. FOR SOLID CIRCLE WITHIN FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL

STRIP TYPE LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE ATTACHED TO FIXTURE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL

LED LIGHTING FIXTURE. LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY "A" CIRCUIT RELATED SYMBOL

DESIGNATES FIXTURE ON EMERGENCY POWER. RE: LIGHTING PLAN NOTES AND FIXTURE SCHEDULE NOTES FOR ADDITIONAL INFORMATION

WALL OR BRACKET MOUNTED FIXTURE OR DEVICE

EXIT LIGHT FIXTURE. LETTER INDICATES TYPE, NUMBER INDICATES CIRCUIT, NUMBER AND LOCATION OF SHADED TRIANGLE SECTIONS INDICATE NUMBER OF EXIT SIGN FACES AND DIRECTION OF EACH FACE. PROVIDE CHEVRON DIRECTIONAL INDICATORS AS SHOWN ON DRAWINGS

CONTROL:

SWITCH. SMALL LETTER INDICATES FIXTURES CONTROLLED, "P" INDICATES PILOT LIGHT, "WP" INDICATES WEATHERPROOF, "K" INDICATES KEY POERATED, "MO" INDICATES SPDT MOMENTARY CONTACT, "2" INDICATES DPDT, "3" INDICATES 3-WAY, "4" INDICATES 4-WAY, "M" INDICATES MANUAL MOTOR STARTER, CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER

WALL BOX DIMMER SWITCH. "MARK" INDICATES WATTAGE IF OTHER THAN 600, "3D" INDICATES 3-WAY DIMMER

MULTI-LEVEL SWITCH. CIRCUIT DESIGNATION NEXT TO SWITCH INDICATES BRANCH CIRCUIT NUMBER

DIGITAL TIME SWITCH

PHOTOELECTRIC CONTROL

EMERGENCY POWER OFF (EPO) PUSHBUTTON

PUSH BUTTON

WALL MOUNT OCCUPANCY SENSOR

WALL MOUNT OCCUPANCY SENSOR WITH DIMMING CONTROLS

DUAL TECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR

CEILING MOUNTED RESTROOM OCCUPANCY SENSOR

CEILING MOUNTED CORRIDOR OCCUPANCY SENSOR

CEILING MOUNTED HIGH CEILING OCCUPANCY SENSOR

POWER OUTLETS:

20A-125V DUPLEX RECEPTACLE

20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE. "WP" INDICATES WEATHER PROOF DEVICE

20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP. REFER TO ARCHITECT FOR EXACT HEIGHT ABOVE COUNTER

20A-125V CONTROLLED DUPLEX RECEPTACLE

20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE

20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS

20A-125V FOURPLEX RECEPTACLE. SAME SYMBOLOGY AS DUPLEX RECEPTACLE

SPECIAL PURPOSE SINGLE POWER RECEPTACLE. RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED), "C" INDICATES CLOCK OUTLET

20A-125V FLUSH FLOOR DUPLEX RECEPTACLE. 20A WHEN INDICATED OR IF BRANCH CIRCUIT SERVES ONLY SINGLE DUPLEX. PROVIDE CARPED FLANGE WHERE APPLICABLE

LC1-X CIRCUIT DESIGNATION NEXT TO RECEPTACLE DEVICES INDICATES BRANCH CIRCUIT NUMBER. SEE PANEL SCHEDULES FOR INFORMATION.

TELEPHONE/DATA:

FLUSH FLOOR TELEPHONE OUTLET WITH CARPET FLANGE WHERE APPLICABLE

WALL COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS

FLUSH FLOOR COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS. PROVIDE CARPET FLANGE WHERE APPLICABLE

SURFACE FLOOR COMMUNICATIONS OR DATA OUTLET. REFER TO 'TS' SERIES SHEETS FOR EXACT BOX / CONDUIT REQUIREMENTS. PROVIDE CARPET FLANGE WHERE APPLICABLE

EQUIPMENT:

+42" A NOTATION INDICATING THE MOUNTING HEIGHT OF A DEVICE AS MEASURED FROM FINISHED FLOOR OR GRADE TO CENTER LINE OF DEVICE

MOTOR

DISCONNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED, "NF" INDICATES NON-FUSIBLE. NEMA 1 ENCLOSURE UNLESS OTHERWISE NOTED. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY. ALL DISCONNECT SWITCHES SHALL BE 30/NF/3 UNLESS OTHERWISE NOTED

SINGLE CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE

MAGNETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE. STARTER NEMA SIZE SHALL BE "NEMA 1" UNLESS OTHERWISE NOTED

COMBINATION DISCONNECT SWITCH / MOTOR CONTROLLER

CONTACTOR

PANELBOARD

SWITCHBOARD / DP

TRANSFORMER

GROUNDING CONNECTION TO GROUNDING ELECTRODE AS DEFINED IN CEC ARTICLE 250

BELL. "WP" INDICATED OUTDOOR RATED

REMODEL:

(E) EQUIPMENT WITH "E" ADJACENT IS EXISTING TO REMAIN.

(R) EXISTING EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY DISCONNECTED AND REMOVED.

(RR) EXISTING EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW LOCATION AND RECONNECTED AS REQUIRED.

(ER) EQUIPMENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.

NO TAG INDICATES NEW EQUIPMENT.

(E) PNL-CKT CIRCUIT DESIGNATION WITH PREFIX "(E)" DENOTES EXISTING CIRCUIT AND EQUIPMENT IS TO REMAIN.

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS AND BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK.
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA (DRAWINGS AND SPECIFICATIONS.) HE SHALL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
3. THE CONTRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.
4. ALL ELECTRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
5. PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING DISCONNECTED IN ORDER TO MAINTAIN SYSTEMS IN OPERATION.
6. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED WITH THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE AND OVERTIME PAY SHALL BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANEL BOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.
7. AFTER ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED. REPRESENTATIVES OF THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCETANCE FROM EACH REPRESENTATIVE.
8. FURNISH A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLETION.
9. ALL FINAL CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR.
10. EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONARY WALLS, GRADEBEAMS, FLOORS OR STRUCTURAL STEEL MEMBER SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAWCUTTING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL. FLOOR OR CEILING EXACT METHOD AND LOCATION OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED.
11. FINAL CONNECTIONS TO VIBRATING EQUIPMENT AND AT SEISMIC SEPARATIONS SHALL BE FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS, AND LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS.
12. EQUIPMENT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE AND CONNECTION METHODS IN HVAC AIR-PLENUMS SHALL BE APPROVED FOR USE IN PLENUMS AND SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE.
13. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING, ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.
14. CONDUIT SHALL NOT BE INSTALLED IN ANY FLOOR SLAB. CONDUIT SHALL BE INSTALLED CONCEALED IN THE CEILING SPACE, CONCEALED WALLS, OR 24" MINIMUM BELOW SLAB ON GRADE UNLESS NOTED OTHERWISE.
15. LOCATE ELECTRICAL EQUIPMENT AND BOXES IN ACCESSIBLE CEILING SPACE OR PROVIDE AN ACCESS PANEL FOR INACCESSIBLE CEILING SYSTEMS. ACCESS DOORS SHALL BE A MINIMUM DIMENSION OF 24" x 24" ACCESS DOOR LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
16. COORDINATE REQUIRED ACCESS DOORS IN NON-ACCESSIBLE CEILING TO SUIT FIELD CONDITIONS. THE EXACT SIZES AND PHYSICAL LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL BE PROVIDED IN OTHER SECTIONS OF THE SPECIFICATIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.
17. WHENEVER A DISCREPANCY OF ANY SYSTEM AND/OR EQUIPMENT ARISES ON THE CONTRACT DOCUMENTS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECT/ENGINEER.
18. STRAIGHT FEEDER BRANCH CIRCUIT AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS.
19. PANEL SCHEDULES SHALL BE REVISED TO REFLECT FINAL ROOM NAMES AND NUMBERS USING OWNER'S ROOM NAMES AND NUMBERS DESIGNATIONS. CONTRACTOR TO PROVIDE FINAL PANEL SCHEDULE TO EEOR AT COMPLETION OF PROJECT.
20. WHERE OUTLETS OCCUR AT TACKABLE WALL PANELS OR OTHER WALL FINISHES. PROVIDE EXTENSION RINGS AS REQUIRED SO THAT NO SPACE WILL EXIST BETWEEN DEVICE PLATE AND BACKBOX PER CALIFORNIA ELECTRICAL CODE 314.20 SEE ARCHITECTURAL ELEVATIONS FOR WALL FINISHES AND LOCATIONS.
21. COORDINATE LOCATIONS OF ALL SEISMIC SEPARATIONS.
22. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF ALL LOW VOLTAGE / TECHNOLOGY SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. CABLING CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT.
23. SYSTEM WIRING AND EQUIPMENT INSTALLATION SHALL BE IN ACCORDANCE WITH GOOD ENGINEERING PRACTICES AS ESTABLISHED BY THE EIA AND THE CEC.
24. ALL AC POWER CABLES ARE TO BE INSTALLED WITH A MINIMUM OF 12 INCHES OF SEPARATION FROM TECHNOLOGY LOW VOLTAGE CABLES, INTERCOM, FIRE ALARM, SECURITY CABLES IN ANY PARALLEL OPEN WIRE RUN.
25. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHING ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH OTHER BUILDING TRADES.
26. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.
27. ALL CONDUCTORS SHALL BE UL LISTED, COPPER #12 MINIMUM SIZE, TYPE THHN/THWN THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY, UNLESS NOTED OTHERWISE.
28. ALL CABLING SHALL BE ROUTED IN CONDUIT. SIZE CONDUIT AS REQUIRED TO ROUTE SYSTEMS WITH MAXIMUM 40% CABLE FILL. MINIMUM CONDUIT SIZE SHALL BE 3/4" INTERIOR & 1" EXTERIOR.
29. ALL CONDUIT STUB OUTS AND SLEEVES SHALL HAVE PROTECTIVE BUSHINGS TO PREVENT CABLE DAMAGE. BUSHING TO BE INSTALLED PRIOR TO CABLE INSTALLATION. CUTTING BUSHING AND INSTALLING AFTER CABLE IS INSTALLED WILL NOT BE ACCEPTED.

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020 *
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR *
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5 TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE (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
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

EQUIPMENT ANCHORAGE NOTES

MEP COMPONENT ANCHORAGE NOTES:

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

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO START OF AND DURING THE HANGING AND BRACING OF DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY 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 & DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #_____.

DRAWING INDEX

SHEET	DESCRIPTION
E0.00	ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS
E0.01	ELECTRICAL TITLE 24 FORMS
E0.02	ELECTRICAL TITLE 24 FORMS
E1.01	ELECTRICAL SITE PLAN
ED2.01	DEMO ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
ED3.01	DEMO LIGHTING PLAN BLDG 'A-B', 'C-D', 'ADMIN' & 'K'
E2.01	ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
E3.01	ELECTRICAL BLDG LIGHTING PLANS 'A-B', 'C-D', 'ADMIN' & 'K'
E4.01	ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS
E5.01	ELECTRICAL SCHEDULES & SINGLE LINE DIAGRAM
E5.02	ELECTRICAL SCHEDULES
E6.01	ELECTRICAL DETAILS

DIAGRAMMATIC NOTE

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

DEVICE LOCATIONS NOTE

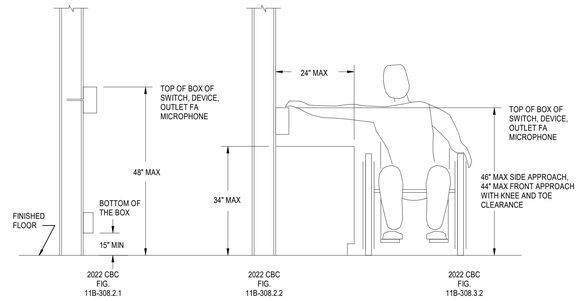
THE LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TO INSTALLATION. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED IN WALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED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

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

STRUCTURAL NOTE

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

MOUNTING OVER OBSTRUCTION DETAIL



NOTE:

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

UL LISTINGS NOTE

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

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

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

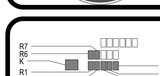
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23676
Exp. 09-30-2026
STATE OF CALIFORNIA
ELECTRICAL

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

ELECTRICAL SYMBOLS, NOTES, AND ABBREVIATIONS

E0.00

FILE PATH: Z:\Projects\...
9/15/2023 1:43:04 PM

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name:	EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT	**Report Page:** (Page 4 of 4)
Project Address:		**Date Prepared:** 2023-03-27T21:27:49-04:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Carlos Gonzalez	Documentation Author Signature: Carlos Gonzalez
Company: Leaf Engineers	Signature Date: 3-27-23
Address: 8163 Rochester AVE.	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909-987-0909

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:	Responsible Designer Signature:
Company: Leaf Engineers	Date Signed: 3-27-23
Address: 8163 Rochester AVE.	License: E23576
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909-987-0909

STATE OF CALIFORNIA
Electrical Power Distribution
CALIFORNIA ENERGY COMMISSION

CERTIFICATE OF COMPLIANCE		NRCC-ELC-E
Project Name:	EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT	**Report Page:** (Page 1 of 4)
Project Address:		**Date Prepared:** 2023-03-27T21:27:49-04:00

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)	Westminster	02	Climate Zone	6
			03	Occupancy Types Within Project:	ClassroomSchool or Classroom

B. PROJECT SCOPE

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

01	02	03	04	05	06	07
Electrical Service Designation/ Description	Scope of Work[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
E5.01	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:	EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT	**Report Page:** (Page 2 of 4)
		Date Prepared: 2023-03-27T21:27:49-04:00

C. COMPLIANCE RESULTS

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

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

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

H. VOLTAGE DROP

This table includes entirely new or complete replacement electrical power distribution systems, or alterations that add, modify or replace both feeders and branch circuits to demonstrate compliance with 130.5(c)/ 160.6(c). For alterations, only the altered circuits must demonstrate compliance per 141.0(b)2Pii// 180.2(b)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
E5.01	☒ 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:	EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT	**Report Page:** (Page 3 of 4)
		Date Prepared: 2023-03-27T21:27:49-04:00

K. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION

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

L. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

There are no forms required for this project.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3

KEY PLAN

N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

ELECTRICAL TITLE 24 FORMS

E0.01

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT

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

Documentation Author Name: Carlos Gonzalez	Documentation Author Signature: Carlos Gonzalez
Company: Leaf Engineers	Signature Date: 3-27-23
Address: 8163 Rochester AVE.	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909-987-0909

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: Leaf Engineers	Responsible Designer Signature:
Company: Leaf Engineers	Date Signed: 3-27-23
Address: 8163 Rochester AVE.	License: E23576
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909-987-0909

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

Area Level Controls

04	05	06	07	08	09	10	11	12	
Area Description	Complete Building or Area Category Primary Function Area	Manual Area Controls 130.1(a) / 160.5(b)4A	Multi-Level Controls 130.1(b) / 160.5(b)4B	Shut-Off Controls 130.1(c) // 160.5(b)4C	Primary/Skylit Daylighting 130.1(d) / 160.5(b)4D	Secondary Daylighting 130.1(d) / 160.5(b)4D	Interlocked Systems 140.6(a)1/ 170.2(e)2A	Field Inspector	
								Pass	Fail
Classroom Bldg. A/B	School or Classroom	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Classroom Bldg. C/D	School or Classroom	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Admin Bldg.	School or Classroom	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
Bldg. K	School or Classroom	Readily Accessible	Dimmer	Occupancy Sensor	NA: General Ltg < 120W	NA: General Ltg < 120W	No	☐	☐
							13		
							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
Classroom Bldg. A/B	School or Classroom	0.6	8,629	5,177.39	No	No
Classroom Bldg. C/D	School or Classroom	0.6	8,639	5,183.39	No	No
Admin Bldg.	School or Classroom	0.6	1,850	1,110	No	No

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

Bldg. K	School or Classroom	0.6	2,789	1,673.4	No	No
			TOTALS:	21,907	13,144.2	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.

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

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

V. DECLARATION OF REQUIRED CERTIFICATES OF ACCEPTANCE

Form/Title	Systems/Spaces To Be Field Verified
NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.	Classroom Bldg. A/B; Classroom Bldg. C/D; Admin Bldg.; Bldg. K

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)	Westminster	04 Total Conditioned Floor Area (ft²)	21,908
02 Climate Zone	6	05 Total Unconditioned Floor Area (ft²)	0
03 Occupancy Types Within Project (select all that apply):		06 # of Stories (Habitable Above Grade)	1

● Classroom ● School or Classroom

B. PROJECT SCOPE

This table includes any lighting systems that are within the scope of the permit application and are demonstrating compliance using the prescriptive path outlined in 140.6 / 170.2(e) or 141.0(b)2 / 180.2(b)4 for alterations.

Scope of Work	Conditioned Spaces		Unconditioned Spaces	
01	02	03	04	05
My Project Consists of (check all that apply):	Calculation Method	Area (ft²)	Calculation Method	Area (ft²)
☒ New Lighting System	Complete Building Method	21908	N/A	0
☐ New Lighting System - Parking Garage	N/A	0	N/A	0
Total Area of Work (ft²)	21908			

C. COMPLIANCE RESULTS

If any cell on this table says "DOES NOT COMPLY" or "COMPLIES with Exceptional Conditions" refer to Table D. for guidance.

Lighting in conditioned and unconditioned spaces must not be combined for compliance per 140.6(b)1 / 170.2(e)	Allowed Lighting Power per 140.6(b) / 170.2(e) (Watts)						Adjusted Lighting Power per 140.6(a) / 170.2(e) (Watts)				Compliance Results
	01	02	03	04		05		06	07	08	09
	Complete Building 140.6(c)1	Area Category 140.6(c)2 / 170.2(e)4	Area Category Additional 140.6(c)2G / 170.2(e)4Av (+)	Tailored 140.6(c)3 / 170.2(e)4B (+)		**Total Allowed** (Watts)		Total Designed (Watts)	Adjustments PAF Lighting Control Credits 140.6(a)2 / 170.2(e)1B (-)	**Total Adjusted** (Watts) *Includes Adjustments	**05 must be >= 08 140.6 / 170.2(e)**
	(See Table I)	(See Table I)	(See Table J)	(See Table K)				(See Table F)	(See Table P)		
Conditioned	13,144.2				=	13,144.2	≥	8,916		= 8916	COMPLIES
Unconditioned					=		≥			=	
Controls Compliance (See Table H for Details)											COMPLIES
Rated Power Reduction Compliance (See Table Q for Details)											

D. EXCEPTIONAL CONDITIONS

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

E. ADDITIONAL REMARKS

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

F. INDOOR LIGHTING FIXTURE SCHEDULE

This table includes all planned permanent and portable lighting other than dwelling unit/ hotel/ motel room lighting. Multifamily dwelling unit and hotel/motel room lighting is documented in Table T. If using Table T to document lighting in multifamily common use areas providing shared provisions for living, eating, cooking or sanitation, those luminaires are not included here.

Designed Wattage: Conditioned Spaces

01	02	03	04	05	06	07	08	09	10	
Name or Item Tag	Complete Luminaire Description	Modular (Track) Fixture	Small Aperture & Color Change[1]	Watts per luminaire[2]	How is Wattage determined	Total Number of Luminaires	Excluded per 140.6(a)3 / 170.2(e)2C	Design Watts	Field Inspector	
									Pass	Fail
FX-A & C	2X4 Troffer	No	NA	38	Mfr. Spec	208	No	7,904	☐	☐
FX-B & E	1x4 Troffer	No	NA	37	Mfr. Spec	27	No	999	☐	☐
FX-D	6" Downlight	No	NA	13	Mfr. Spec	1	No	13	☐	☐
							Total Designed Watts: CONDITIONED SPACES	8,916		

[1]FOOTNOTE: Design Watts for small aperture and color changing luminaires which qualify per 140.6(a)4B / 170.2(e)2D is adjusted to be 75% /80% of their rated wattage. Table F automatically makes this adjustment, the permit applicant should enter full rated wattage in column 05.

[2]Authority Having Jurisdiction may ask for Luminaire cut sheets to confirm wattage used for compliance per 130.0(c) / 160.5(b). Wattage used must be the maximum rated for the luminaire, not the lamp.

G. MODULAR LIGHTING SYSTEMS

This section does not apply to this project.

H. INDOOR LIGHTING CONTROLS (Not including PAFs)

This table includes lighting controls for conditioned and unconditioned spaces.

Building Level Controls

01	02	03	
Mandatory Demand Response 110.12(c)	Shut-off controls 130.1(c) / 160.5(b)4C	Field Inspector	
		Pass	Fail
NA: <= 80 % LP (alt only)	See Area/Space Level Controls	☐	☐

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc. PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C. DELA CRUZ No. E 23576 Exp. 09-30-2025 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

ELECTRICAL TITLE 24 FORMS

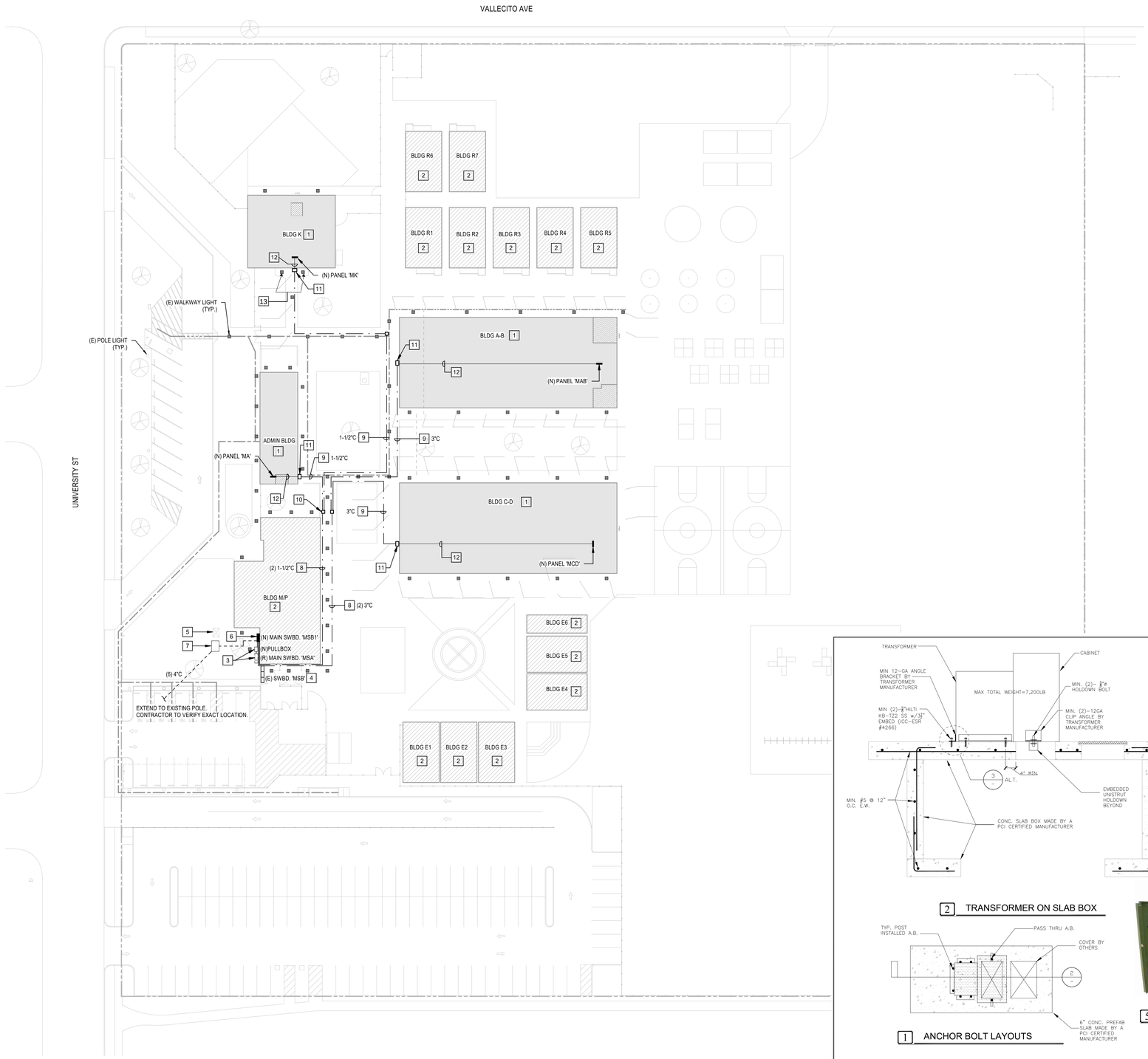
E0.02

E0.02 - ELECTRICAL TITLE 24 FORMS

FILE PATH: Z:\Projects\...
9/15/2023 1:43:12 PM

E1.01 - ELECTRICAL SITE PLAN

0" 1"



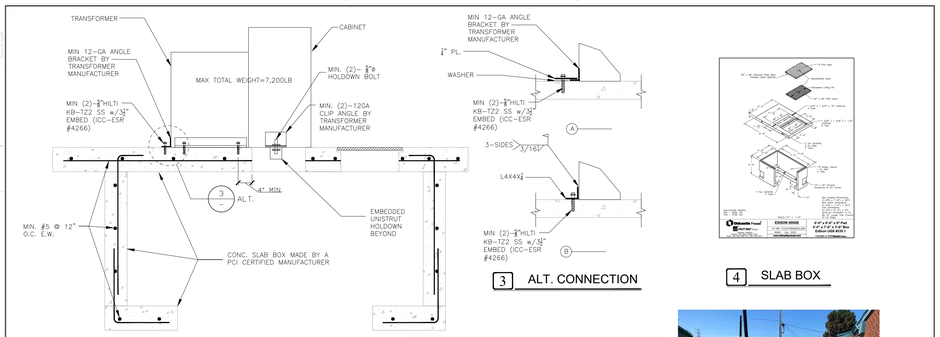
1 SITE PLAN
1" = 30'-0"

GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON EXISTING DRAWINGS, AND A FIELD VISIT OF THE ELECTRICAL SYSTEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.
3. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.
5. UPON COMPLETION OF THIS PROJECT CONTRACTOR TO DEMOLISH ALL TEMPORARY INFRASTRUCTURE SERVING THE INTERIM BUILDINGS.
6. PAINT CONDUITS SEMI-GLOSS TO MATCH ADJACENT EXTERIOR PAINT, PER DISTRICT STANDARD.
7. EXISTING SWITCHBOARD 'MSA' SHALL REMAIN OPERATIONAL UNTIL NEW SWITCHBOARD 'MSB1' IS FULLY OPERATIONAL. ONCE 'MSB1' IS OPERATIONAL, CONTRACTOR SHALL DEMOLISH EXISTING SWITCHBOARD 'MSA' AND ALL ASSOCIATED ABANDONED CONDUIT AND WIRING.
8. PULLBOX AND JUNCTION BOX SHALL BE SIZED PER DRAWINGS OR AS PER NEC/CEC 314.28 WHICHEVER IS LARGER.

KEY NOTES

1. BUILDING WITHIN SCOPE OF WORK.
2. BUILDING NOT WITHIN SCOPE OF WORK.
3. EXISTING MAIN SWITCH BOARD 'MSA' TO BE DEMOLISHED. PROVIDE IN-GROUND HEAVY DUTY TRAFFIC RATED PULL BOX SIZED PER NEC REQUIREMENT AT EXISTING SWITCHBOARD LOCATION AND EXTEND EXISTING FEEDERS TO NEW SWITCHBOARD. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDUIT/FEEDERS AND MATCH SIZE TO EXISTING CONDITIONS.
4. EXISTING SWITCHBOARDS '1', '2', & '3' LOCATED IN YARD TO REMAIN AND BE PROTECTED IN PLACE. INTERCEPT AND EXTEND ANY CONDUIT AND WIRING FED FROM EXISTING SWITCHBOARD 'MSA'. CONTRACTOR TO FIELD VERIFY ALL EXISTING CONDUIT/FEEDERS AND MATCH SIZE TO EXISTING CONDITIONS.
5. EXISTING UTILITY TRANSFORMER TO BE REMOVED. EXISTING TRANSFORMER SHALL REMAIN OPERATIONAL UNTIL NEW TRANSFORMER IS INSTALLED WITH NEW MAIN SWITCHBOARD 'MSB1'.
6. NEW 1600AMP, 120/208V, 3PH, 4W MAIN SWITCHBOARD 'MSB1'. SEE DETAILS 7&8/E6.01 FOR ADDITIONAL INFORMATION.
7. NEW UTILITY TRANSFORMER SHALL BE PROVIDED AND INSTALLED BY SCE. CONTRACTOR SHALL BE RESPONSIBLE FOR UNDERGROUND CONDUIT AND ROUTING FROM NEW TRANSFORMER TO NEW SWITCHBOARD 'MSB1'. CONTRACTOR SHALL COORDINATE WITH SCE REPRESENTATIVE FOR SIZING AND ROUTING.
8. ROUTE NEW SURFACE MOUNTED CONDUIT UNDER ROOF OVERHANG. SEE SINGLE LINE DIAGRAM ON SHEET E5.01 FOR WIRE SIZING AND QUANTITY ON SHEET E5.01.
9. ROUTE CONDUIT ABOVE COVERED WALKWAY. SEE SINGLE LINE DIAGRAM FOR WIRE SIZING AND QUANTITY ON SHEET E5.01.
10. PROVIDE NEW 24"x24"xDEPTH REQ'D NEMA 3R WALL MOUNTED PULLBOX ABOVE COVERED WALKWAY. CONTRACTOR SHALL VERIFY PULLBOX SIZE PRIOR TO ROUGH-IN.
11. PROVIDE NEW 12"x12"xDEPTH REQ'D NEMA 3R WALL MOUNTED PULLBOX TO BUILDING. CONTRACTOR SHALL VERIFY PULLBOX SIZE PRIOR TO ROUGH-IN.
12. ROUTE CONDUIT TO NEW 120/208V, 3P PANEL INSIDE OF THE BUILDING ABOVE THE CEILING. SEE SINGLE LINE DIAGRAM ON SHEET E5.01 FOR WIRE SIZING AND QUANTITY.
13. REPLACE EXISTING FIXTURE WITH NEW SURFACE MOUNTED FIXTURE AT EXISTING LOCATIONS. RE-CONNECT TO EXISTING CIRCUITS AND PROVIDE UNSWITCHED HOT TO THE BATTERY SO THE FIXTURES CAN BE SWITCHED ON/OFF WITHOUT DRAINING BATTERY. PROVIDE FIXTURE WITH 90-MINUTE EMERGENCY BATTERY, LIGHTWAY #CHSC-LED-02A-3000K-W1-CPP-DIM-BB10.



3 ALT. CONNECTION

4 SLAB BOX

2 TRANSFORMER ON SLAB BOX

1 ANCHOR BOLT LAYOUTS



5 TRANSFORMER FRONT BOX



6 SIMILAR PROJECT

STRUCTURAL ENGINEERING CONSULTANTS
23 CORPORATE PLAZA DR. SUITE 150
NEWPORT BEACH, CA 92660

REGISTERED PROFESSIONAL ENGINEER — No. S4302 Exp.09/30/25 — STRUCTURAL — STATE OF CALIFORNIA

EASTWOOD ES
TRANSFORMER ANCHOR
CCD

CCD_S1

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
PBK.com
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

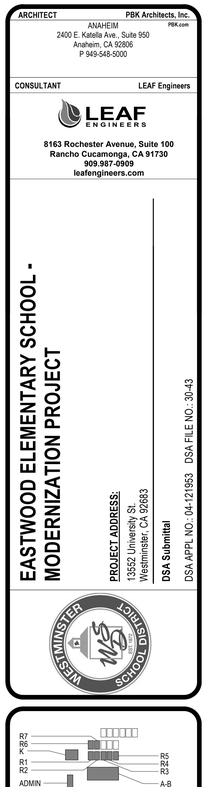
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant
REGISTERED PROFESSIONAL ENGINEER — ROMMO C DE LA CRUZ III — No. E 23576 Exp. 09-30-2025 — ELECTRICAL — STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

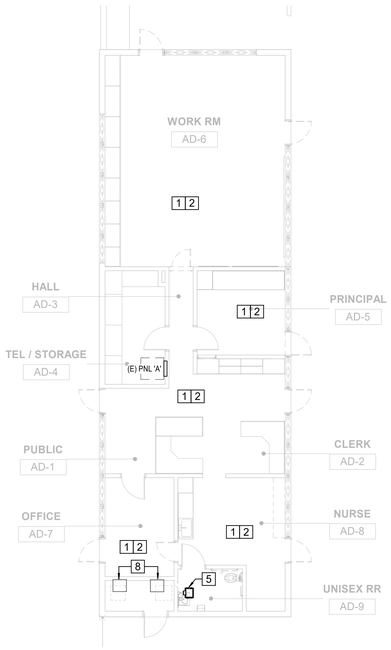
DSA Submittal

ELECTRICAL SITE PLAN

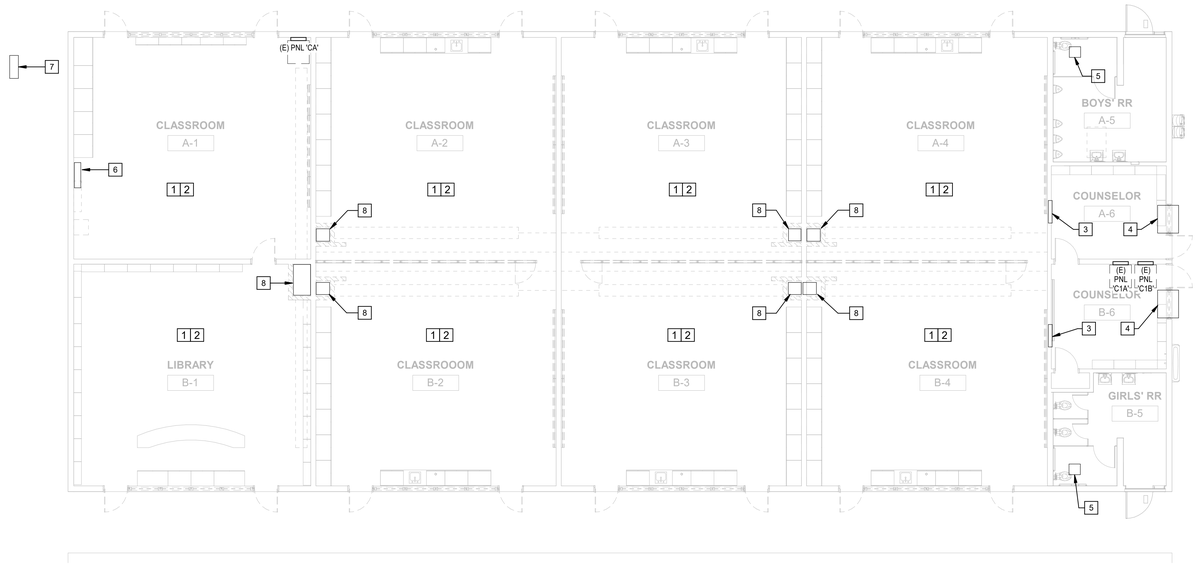
E1.01

FILE PATH: Z:\Projects\...
9/15/2023 1:43:13 PM

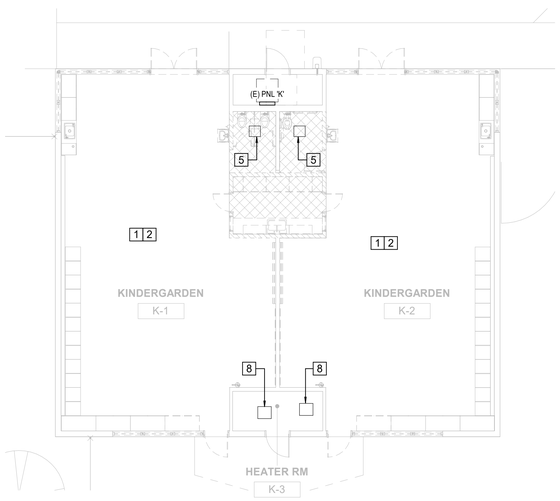
0" 1"



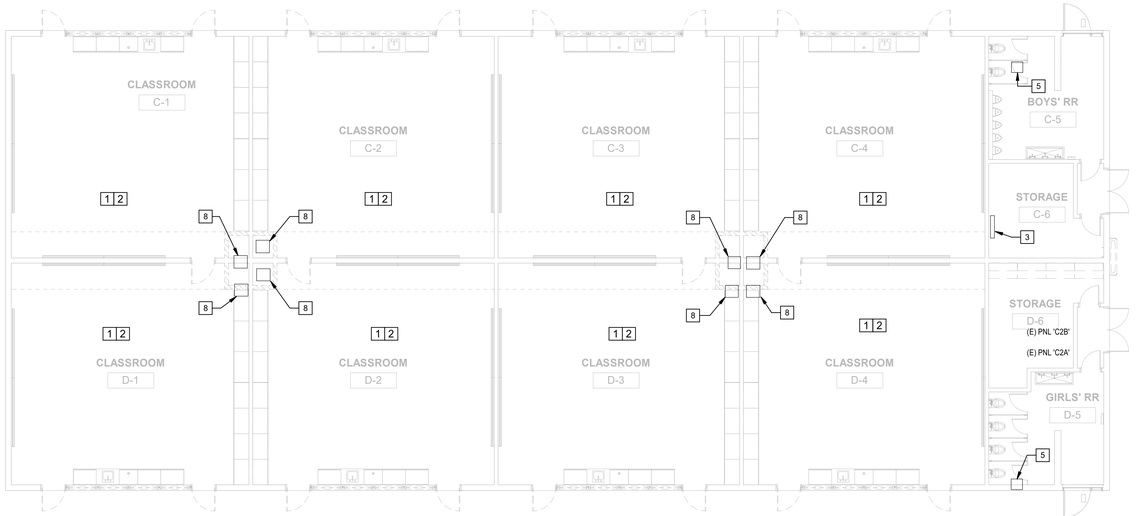
4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON EXISTING DRAWINGS, AND A FIELD VISIT OF THE ELECTRICAL SYSEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.
3. FOR ALL EXISTING CIRCUITS AND DEVICES THAT ARE TO REMAIN, CONTRACTOR TO INCLUDE IN THEIR BID TO REMOVE AND REPLACE ALL MC CABLES ABOVE CEILING SPACES. INTERCEPT ALL CONDUITS ABOVE THE CEILINGS, PROVIDE NEW HOMERUNS WITH MINIMUM 3/4" EMT AND NEW WIRING THAT MATCHES THE EXISTING, BACK TO THE PANEL SOURCE.

KEY NOTES

1. RECEPTACLES, DEVICES/ EQUIPMENT AND EXISTING ASSOCIATED CONDUITS IN THE WALL SHALL REMAIN. INTERCEPT CONDUITS ABOVE CEILING, AND PROVIDE NEW CONDUIT HOMRUN TO THE EXISTING PANEL.
2. DICONNECT ALL EXISTING DIGITAL CLOCKS AND RE-INSTALL ON WALL BELOW THE CEILING. EXTEND EXISTING WIRING AS REQUIRED.
3. (E) WALL HEATER TO BE DEMOLISHED . REMOVE CIRCUIT BACK TO THE SOURCE. MARK BREAKER AS SPARE.
4. (E) WINDOW TYPE A/C UNIT (ABOVE DOOR) TO BE DEMOLISHED. REMOVE SURFACE RACEWAY AND CIRCUIT SERVING THE UNIT BACK TO THE SOURCE. MARK BREAKER AS SPARE.
5. (E) CEILING EXHAUST FAN TO BE DEMOLISHED. REMOVE CIRCUIT BACK TO THE SOURCE.
6. (E) WALL MOUNTED MINI SPLIT TO BE DEMOLISHED. REMOVE CIRCUIT SERVING THE UNIT BACK TO SOURCE.
7. (E) CONDENSING UNIT LOCATED ABOVE COVERED WALKWAY TO BE DEMOLISHED. REMOVE RACE WAY AND WIRING BACK TO THE SOURCE. MARK BREAKER AS SPEARE.
8. (E) FURNACE TO BE DEMOLISHED. REMOVE CIRCUIT BACK TO TO THE SOURCE. MARK BREAKER AS SPARE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

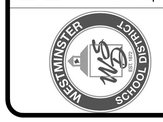
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

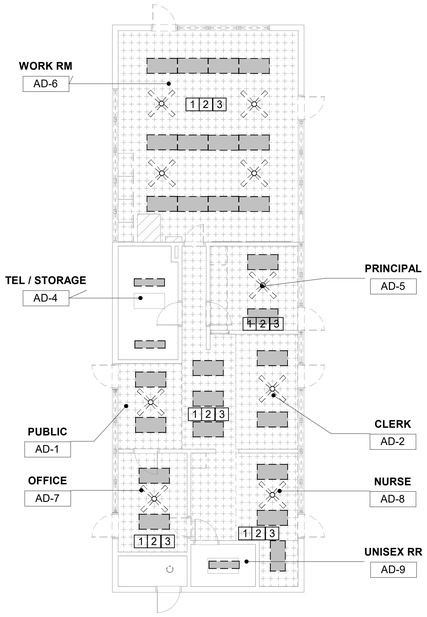
DSA Submittal

DEMO ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

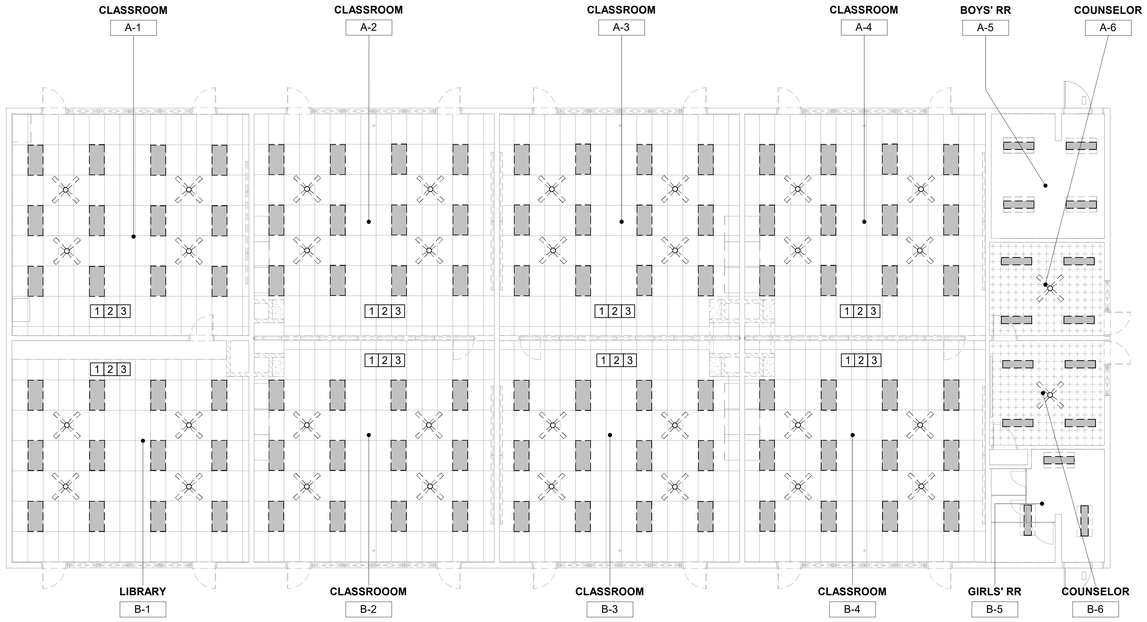
ED2.01

FILE PATH: Z:\Projects\...
9/15/2023 1:43:26 PM

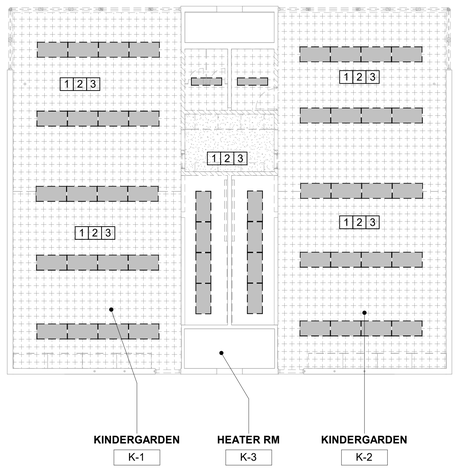
0" 1"



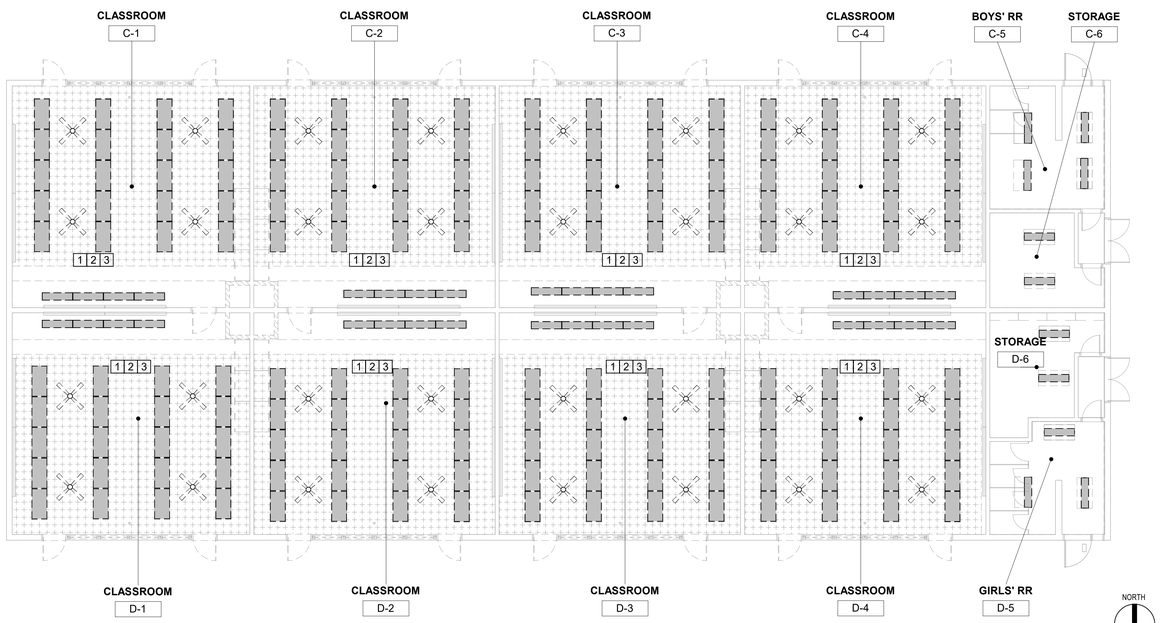
4 RCP - BLDG 'ADMIN' DEMO
1/8" = 1'-0"



2 RCP - BLDG 'A-B' DEMO
1/8" = 1'-0"



3 RCP - BLDG 'K' DEMO
1/8" = 1'-0"



1 RCP - BLDG 'C-D' DEMO
1/8" = 1'-0"

GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON EXISTING DRAWINGS, AND A FIELD VISIT OF THE ELECTRICAL SYSEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.

KEY NOTES

1. EXISTING LIGHT FIXTURES AND ALL OTHER ELECTRICAL/DEVICES EQUIPMENT IN THE SCOPE OF WORK AREA SHALL BE REMOVED. ALL CONDUITS AND WIRES SHALL BE DEMOLISHED BACK TO PANEL BOARD SOURCE. CONTRACTOR TO DEMOLISH AND PROVIDE CIRCUIT CONTUNUITY TO DOWNSTREAM DEVICES/EQUIPMENT WHICH REMAIN. VERIFY EXACT SCOPE OF DEMOLITION WITH ARCHITECTURAL PLANS.
2. REMOVE ANY UNUSED CONDUITS AND RELOCATE EXISTING TO ALLOW SPACE FOR NEW DUCTS AND CONDUITS.
3. ALL CELING MOUNTED DEVICES INCLUDING BUT NOT LIMITED TO SECURITY MOTION DETECTOR, WIFI ACCESS POINT, PA SPEAKERS, SHALL BE DISCONNECTED AND RE-INSTALLED ON THE NEW CEILINGS. EXTEND EXISTING WIRING AS REQUIRED.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

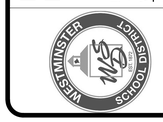
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

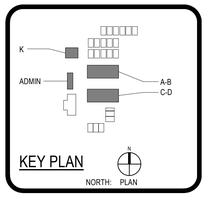
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

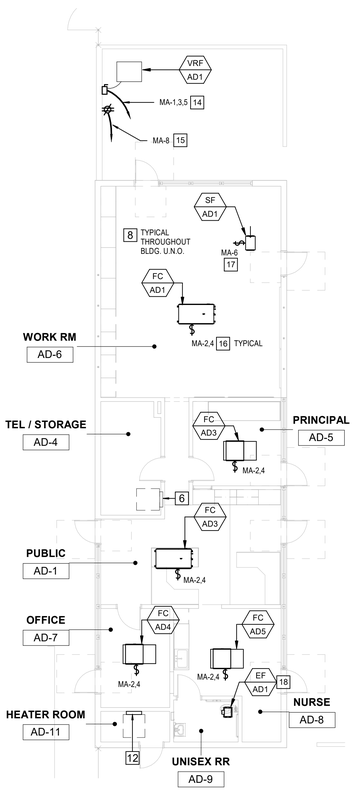
DEMO LIGHTING PLAN BLDG 'A-B', 'C-D', 'ADMIN' & 'K'

ED3.01

FILE PATH: Z:\Projects\...
9/15/2023 1:43:29 PM

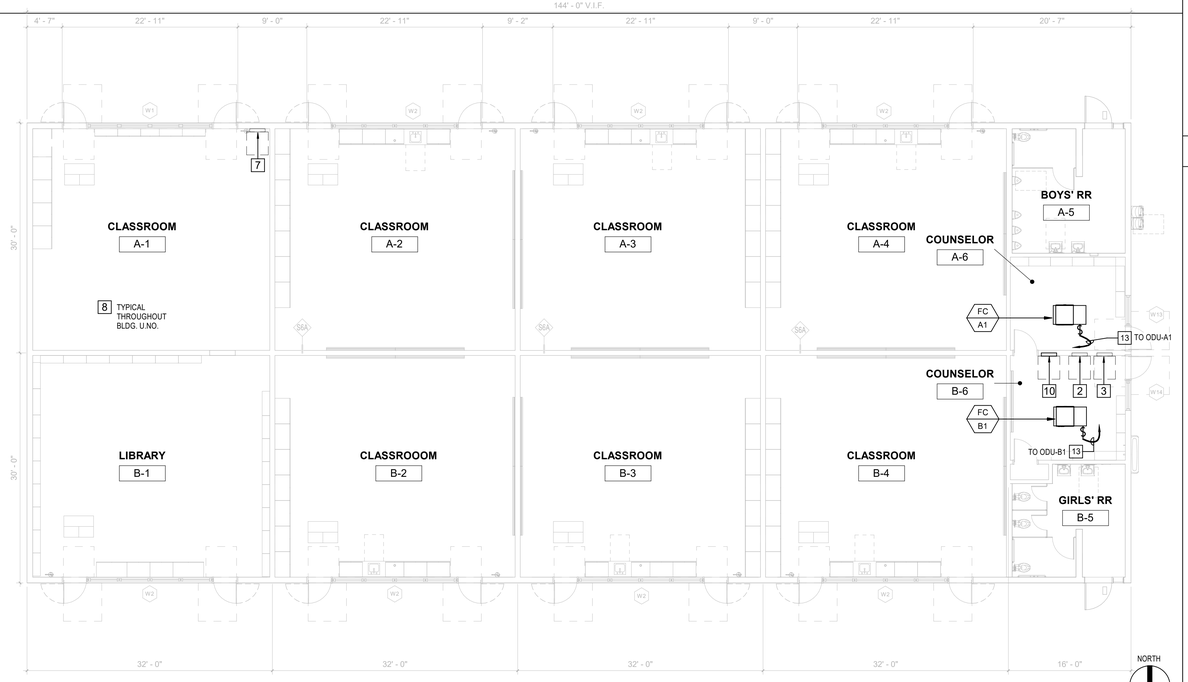
E2.01 - ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

0" 1"



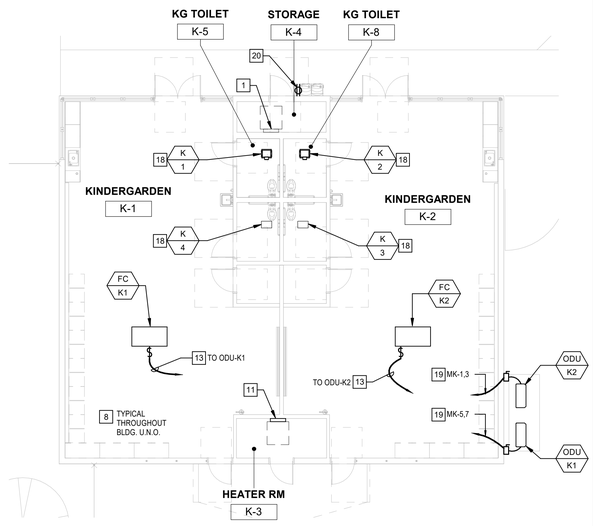
NORTH

4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



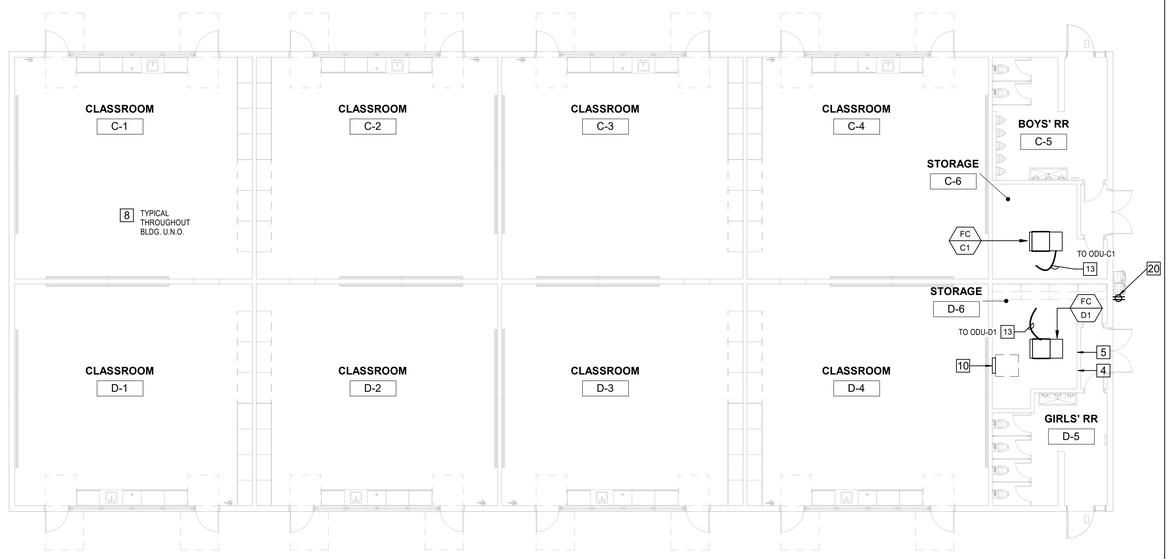
NORTH

2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



NORTH

3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



NORTH

1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON EXISTING DRAWINGS, AND A FIELD VISIT OF THE ELECTRICAL SYSEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.

KEY NOTES

1	EXISTING TO REMAIN PANEL 'K' 120/240, 1PH - 225AMP.
2	EXISTING TO REMAIN PANEL 'C1A' 120/240, 1PH - 225AMP.
3	EXISTING TO REMAIN PANEL 'C1B' 120/240, 1PH - 100AMP.
4	EXISTING TO REMAIN PANEL 'C2A' 120/240, 1PH - 225AMP.
5	EXISTING TO REMAIN PANEL 'C2B' 120/240, 1PH - 100AMP.
6	EXISTING TO REMAIN PANEL 'A' 120/240, 1PH - 100AMP.
7	EXISTING TO REMAIN PANEL 'CA' 120/240, 1PH - 70AMP.
8	ALL EXISTING RECEPTACLE DEVICES TO REMAIN IN PLACE .
9	PROVIDE NEW PANEL 'MAB' 120/208V, 3PH. SEE SINGLE LINE DIAGRAM FOR MORE INFORMATION. REFER TO SHEET 4/E6.01 FOR PANEL MOUNTING DETAIL.
10	PROVIDE NEW PANEL 'MCD' 120/208V, 3PH. SEE SINGLE LINE DIAGRAM FOR MORE INFORMATION.REFER TO SHEET 4/E6.01 FOR PANEL MOUNTING DETAIL.
11	PROVIDE NEW PANEL 'MK' 120/208V, 3PH. SEE SINGLE LINE DIAGRAM FOR MORE INFORMATION. REFER TO SHEET 4/E6.01 FOR PANEL MOUNTING DETAIL.
12	PROVIDE NEW PANEL 'MA' 120/208V, 3PH. SEE SINGLE LINE DIAGRAM FOR MORE INFORMATION. REFER TO SHEET 4/E6.01 FOR PANEL MOUNTING DETAIL.
13	FAN COIL UNIT POWERED BY OUTDOOR HEAT PUMP. PROVIDE LOCAL 208V/1PH DISCONNECT SWITCH AND 3/4"C - (2) #12 + (1) #12 GND TO ODU.
14	PROVIDE NON-FUSED NEMA-3R/60A/3PH DISCONNECT SWITCH AND POWER CONNECTION TO OUTDOOR HEAT RECOVERY UNIT 'VRF-AD1'. 3/4"C - 3 #8 + 1 #10 GRD. RUN CONDUIT ALONG THE EXISTING CMU WALL TO ADMIN BUILDING.
15	PROVIDE 120V WP/GFCI SERVICE OUTLET. 3/4"C -2 #12 +1 #12 GRD.
16	PROVIDE LOCAL 208V/1PH DISCONNECT SWITCH AND POWER CONNECTION FOR FAN COIL UNIT. 3/4"C - 2 #12 + 1 #12 GRD.
17	PROVIDE LOCAL 120V/1PH DISCONNECT SWITCH AND POWER CONNECTION TO MECHANICAL UNIT. 3/4"C - 2 #12 + 1 #12 GRD.
18	ROUTE EXHAUST FAN THROUGH LIGHTING CIRCUIT AND LIGHTING CONTROLS. SEE MECHANICAL SCHEDULE FOR ADDITIONAL INFORMATION.
19	PROVIDE 208V/1PH, 60A DISCONNECT SWITCH AND POWER CONNECTION TO OUTDOOR HEATPUMP UNIT, 3/4"C -2 #8, 1 #10 GRD.
20	PROVIDE NEW DUPLEX RECEP. 120V/20AMP GCI BREAKER AND 2#12, #12G, 3/4"C FOR POWER TO NEW DRINKING FOUNTAIN.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

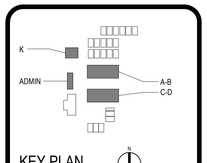
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN N
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
LEONARD C. DEL CASTILLO
No. E 22674
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

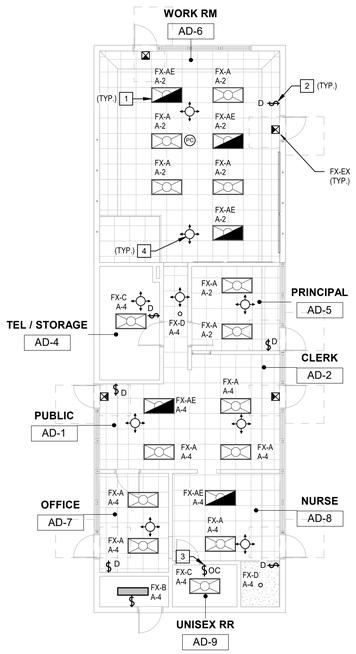
No.	Description	Date

DSA Submittal

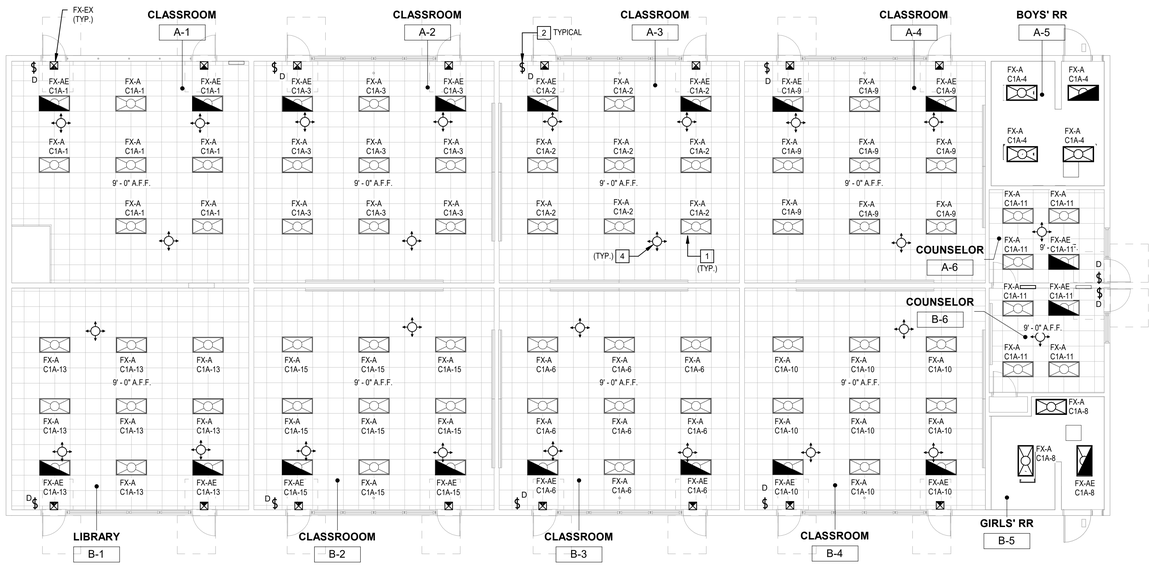
ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

E2.01

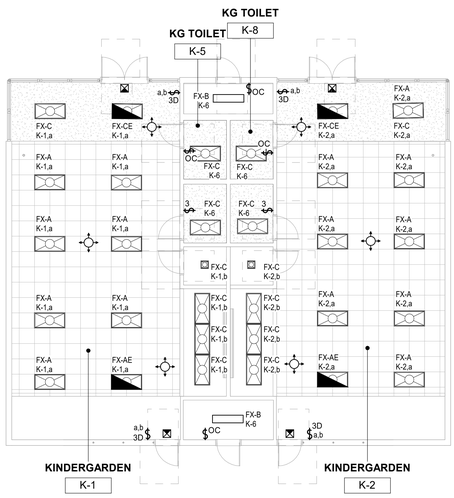
FILE PATH: Z:\Projects\...
9/15/2023 1:43:15 PM



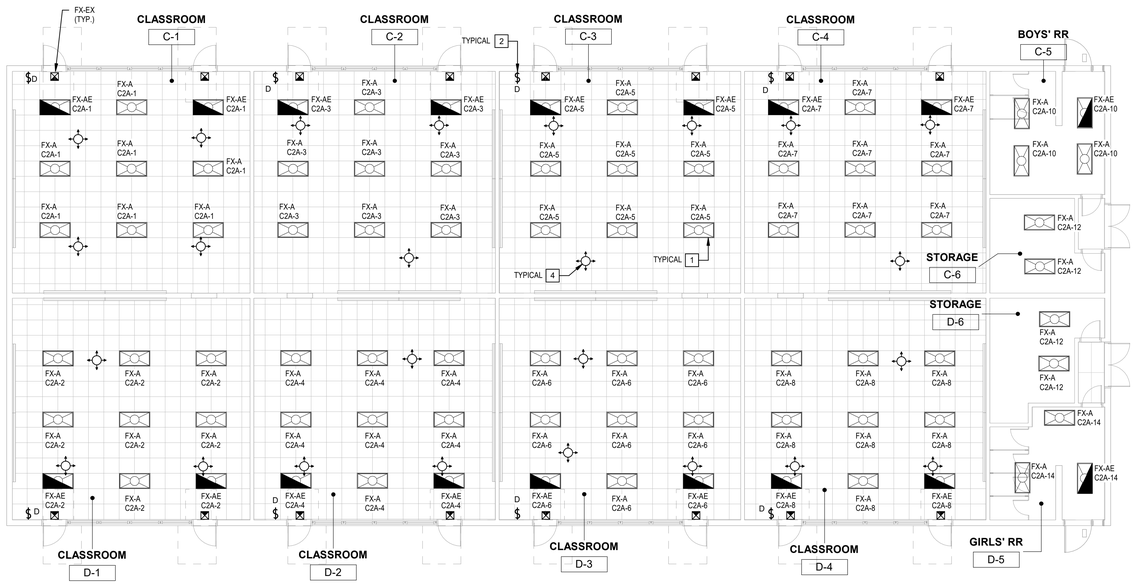
4 RCP - BLDG 'ADMIN'
1/8" = 1'-0"



2 RCP - BLDG 'A-B'
1/8" = 1'-0"



3 RCP - BLDG 'K'
1/8" = 1'-0"



1 RCP - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON EXISTING DRAWINGS, AND A FIELD VISIT OF THE ELECTRICAL SYSEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.
3. REFER TO ARCHITECT'S REFLECTED CEILING PLAN FOR EXACT LOCATIONS OF ALL LIGHTING FIXTURES.
4. UNLESS OTHERWISE NOTED, ALL EXIT SIGNS ARE TYPE "X".
5. PROVIDE EMERGENCY BATTERY PACKS FOR ALL LIGHTING FIXTURES DESIGNATED TO BE ON EMERGENCY POWER "EM". PROVIDE UNSWITCHED HOT BATTERY SO THAT LAMPS CAN BE SWITCHED OFF AND ON WITHOUT DRAINING BATTERY. RE: DIVISION 26 SPECIFICATIONS FOR ADDITIONAL INFORMATION.
6. PROVIDE A COMPLETE AND OPERATIONAL TITLE 24 COMPLIANT LIGHTING CONTROL SYSTEM . INCLUDING BUT NOT LIMITED TO POWER PACKS, SENSORS, DIMMERS, WIRING, ETC. REFER TO SPECIFICATION SECTION 260943 FOR ADDITIONAL INFORMATION.
7. NEW LIGHT FIXTURES SHALL BE PROVIDED NEW FIXTURE WHIPS WITH 2#12, #12G WIRING AND ADDITIONAL LOW VOLTAGE WIRING FOR DIMMING AS REQUIRED.

KEY NOTES

1. REMOVE AND REPLACE EXSTING LIGHT FIXTURE WITH NEW LED LIGHT FIXTURE. . PROVIDE NEW FIXTURE WHIPS AS REQUIRED WITH 2#12, #12GRD FOR LINE VOLTAGE, PLUS DIMMING WIRES AS REQUIRED. SEE LIGHT FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL RE-USE EXISTING CIRCUITS IF POSSIBLE.
2. LOW VOLTAGE WALL ON/OFF SWITCH WITH DIMMING, LUTRON MAESTRO SERIES. "D" INDICATES 3-BUTTON ON/OFF/DIM. NO SYMBOL INDICATES 2-BUTTON ON/OFF NON-DIMMED.
3. LUTRON LOW VOLTAGE WALL MOUNT VACANCY/SWITCH - NON-DIMMED, LUTRON MAESTRO SERIES.
4. LUTRON WIRELESS CEILING MOUNTED OCCUPANCY SENSOR, LUTRON MAESTRO SERIES.
5. RE-USE EXISTING LIGHTING CIRCUIT FOR NEW LIGHT FIXTURE. PROVIDE ADDITIONAL DEVICES AND WIRING FOR T-24 COMPLIANT LIGHTING CONTROLS.
6. RECONNECT EXISTING LIGHTING AND ALL ASSOCIATED WIRING AND CONTROLS FOR A COMPLETE AND OPERABLE SYSTEM.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

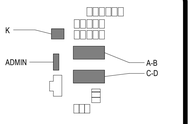
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 09/30/2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

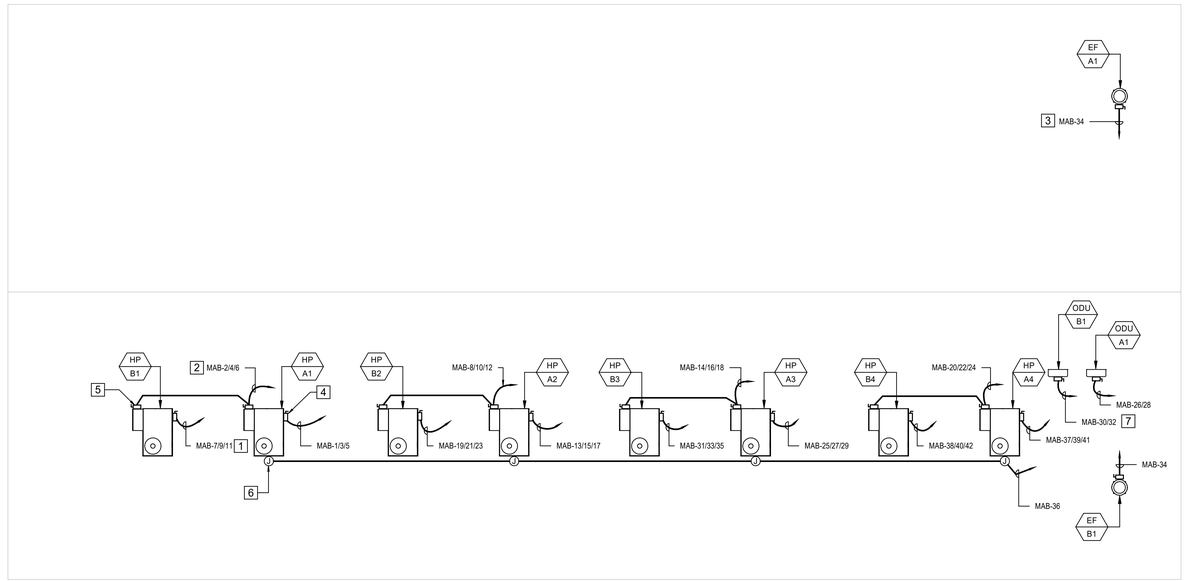
No.	Description	Date

DSA Submittal

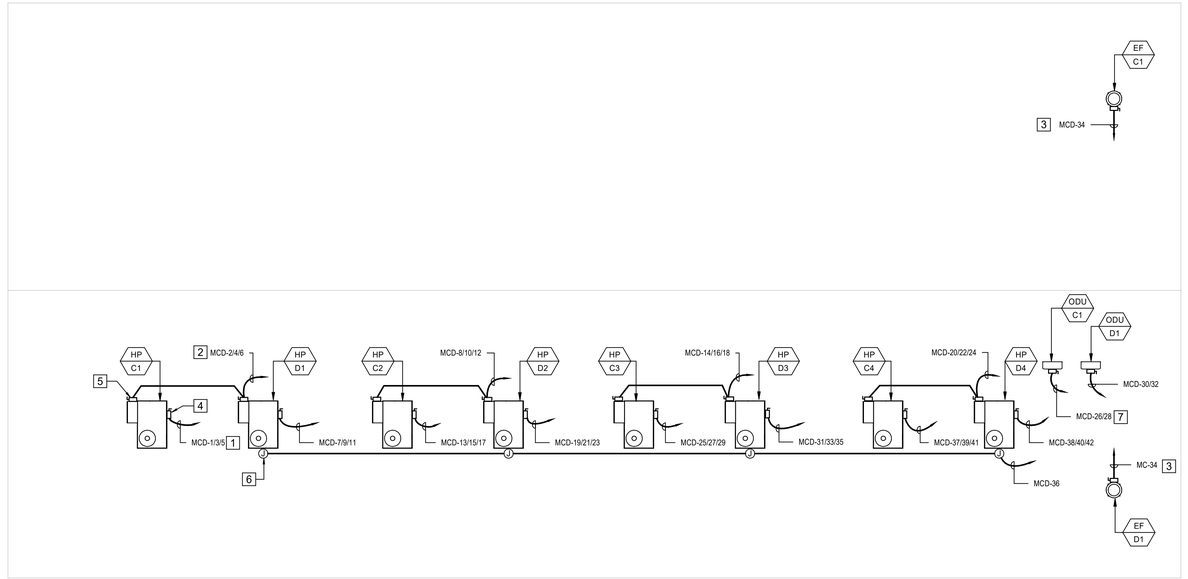
ELECTRICAL BLDG LIGHTING PLANS 'A-B', 'C-D', 'ADMIN' & 'K'

E3.01

FILE PATH: Z:\Projects\...
9/15/2023 1:43:17 PM



2 ROOF PLAN - BLDG 'A-B'
1/8" = 1'-0"



1 ROOF PLAN - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
2. ELECTRICAL ENGINEERING FOR THIS PROJECT IS BASED ON EXISTING DRAWINGS, AND A FIELD VISIT OF THE ELECTRICAL SYSEM. IN CASE OF ANY DISCREPANCIES WITH EXISTING FIELD CONDITIONS, ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT DIFFERENCES AND NOTIFY THE ELECTRICAL ENGINEER FOR POSSIBLE REVISION TO THESE DOCUMENTS.

KEY NOTES

1	PROVIDE 208V/3PH POWER CONNECTION TO HEAT PUMP, 3/4"C - 3 #10 + 1 #10 GRD. TYPICAL.
2	PROVIDE 208V/3PH POWER CONNECTION TO POWER EXHAUST, 3/4"C - 3 #12 + 1 #12 GRD. TYPICAL.
3	PROVIDE DISCONNECT SWITCH AND 120V POWER TO EXAUST FAN, 3/4"C - 2 #12 + 1 #12 GRD. TYPICAL.
4	NON-FUSED DISCONNECT SWITCH, NEMA 3R FACTORY MOUNTED BY MECHANICAL. SEE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION. TYPICAL.
5	PROVIDE NON-FUSED NEMA-3R/30A/3PH DISCONNECT FOR POWER EXHAUST. TYPICAL.
6	PROVIDE 120V POWER CONNECTION TO FACTORY MOUNTED WP/GFCI CONVENIENCE OUTLET. TYPICAL.
7	PROVIDE DISCONNECT SWITCH AND 208V/1PH POWER CONNECTION TO OUTDOOR HEATPUMP UNIT, 3/4"C - 2 #12, 1 #12 GRD. TYPICAL.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

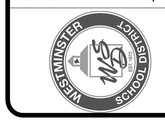
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

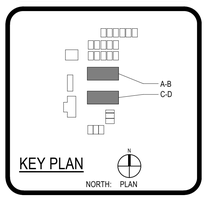
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

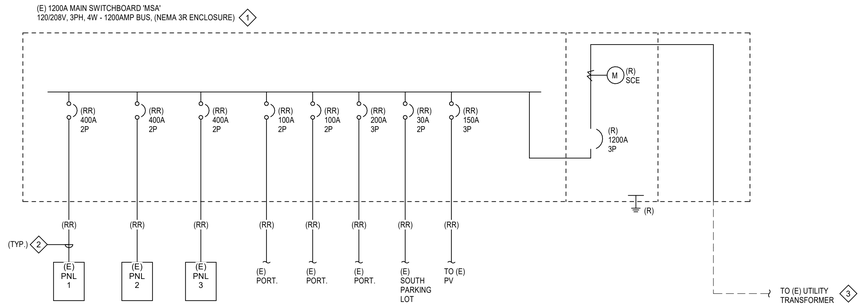
REVISIONS

No.	Description	Date

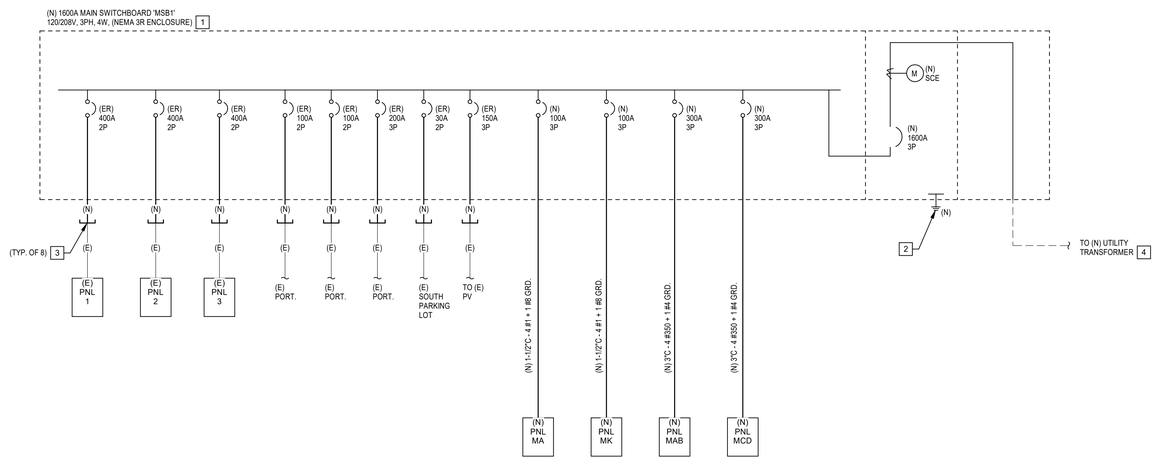
DSA Submittal

ELECTRICAL BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS

E4.01



1 DEMO SINGLE LINE DIAGRAM
NOT TO SCALE



2 NEW SINGLE LINE DIAGRAM
NOT TO SCALE

GENERAL NOTES

1. ALL WORK SHALL BE PERFORMED IN A WORKMANLIKE MANNER.
2. THE CONTRACTOR SHALL PROVIDE UPDATED PANEL SCHEDULES IN ALL AFFECTED ELECTRICAL PANELS INDICATING THE NEW CIRCUIT CONFIGURATION.

KEY NOTES - DEMOLITION

1. DEMOLISH EXISTING MAIN SWITCHBOARD. EXISTING LOADS SHALL BE RELOCATED TO NEW MAIN SWITCHBOARD. SEE NEW SINGLE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
2. EXISTING CONDUIT AND WIRING SHALL REMAIN AND BE PROTECTED AND CAPPED FOR REINSTALLATION.
3. EXISTING UTILITY TRANSFORMER SHALL BE DEMOLISHED AFTER NEW SWITCHBOARD IS INSTALLED AND ALL EXISTING LOADS HAVE BEEN RELOCATED AND OPERATIONAL.

KEY NOTES - NEW

1. NEW 1600A SWITCHBOARD - CONTRACTOR SHALL COORDINATE WITH SCE FOR NEW METER INSTALLATION AND ALL ASSOCIATED REQUIREMENTS FOR A COMPLETE INSTALL. REFER TO DETAIL 2/E6.01 FOR SWITCHBOARD MOUNTING DETAIL.
2. 1 #3/0 COPPER GROUND CONDUCTOR IN 1" CONDUIT TO MAIN INCOMING METAL WATER PIPE, TO MADE GROUNDING ELECTRODE AND TO BUILDING GROUND. SEE 11/E6.01 FOR GROUNDING SYSTEM CONNECTION DETAIL.
3. INTERCEPT AND EXTEND EXISTING FEEDERS TO NEW SWITCHBOARD, MATCH EXISTING SIZING. CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING BRANCH FEEDERS ARE IN GOOD WORKING CONDITIONS AND REPLACE FEEDERS AS REQUIRED.
4. NEW UTILITY TRANSFORMER, CONTRACTOR SHALL COORDINATE WITH SCE REP FOR REQUIRED CONDUIT SIZING, TRENCH, AND REQUIRED PAD SIZE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

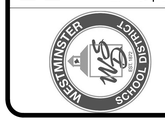
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

ELECTRICAL SCHEDULES & SINGLE LINE DIAGRAM

E5.01

Job:EASTWOOD ES MOD — Job No.220528

Mounting:**SURFACE** — Main Type:**MCB (100A)** — Neutral:**100%** — Voltage:**208Y/120V-3PH 4W** — Main Size:**100 AMPS** — AIC Rating:**22000** — Ground:**Equipment Ground** — Lugs:**SINGLE**

PANEL: **MA** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
		4107						VRF	40/3	#8	1	A	2	#12	15/2	FC-AD1,AD2,AD3,...			760					
		4107						-	-	-	3	B	4	-	-	AD4,AD5			760					
		4107						-	-	-	5	C	6	#12	15/1	SF-AD1			700					
								SPACE ONLY			7	A	8	#12	20/1	SERVICE RECPT.		180						
								SPACE ONLY			9	B	10			SPACE ONLY								
								SPACE ONLY			11	C	12			SPACE ONLY								
								SPACE ONLY			13	A	14			SPACE ONLY								
								SPACE ONLY			15	B	16			SPACE ONLY								
								SPACE ONLY			17	C	18			SPACE ONLY								
								SPACE ONLY			19	A	20			SPACE ONLY								
								SPACE ONLY			21	B	22			SPACE ONLY								
								SPACE ONLY			23	C	24			SPACE ONLY								
								SPACE ONLY			25	A	26			SPACE ONLY								
								SPACE ONLY			27	B	28			SPACE ONLY								
								SPACE ONLY			29	C	30			SPACE ONLY								
0	0	12321	0	0	0	0	0	**TOTALS**								**TOTALS**	0	180	2220	0	0	0	0	0

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
0.0	0.2	14.5	0.0	0.0	0.0	0.0	0.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
0.0	0.2	14.5	0.0	0.0	0.0	0.0	0.0	Design KVA

Phase Load

Ph	KVA
A	5.0
B	4.9
C	4.8

Panel Remarks:

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	14.7	40.9		14.7	40.9

PANEL **MA**

Date: 8/11/2023 — By: Designer

Job:EASTWOOD ES MOD — Job No.220528

Mounting:**SURFACE** — Main Type:**MCB (100A)** — Neutral:**100%** — Voltage:**208Y/120V-3PH 4W** — Main Size:**100 AMPS** — AIC Rating:**22000** — Ground:**Equipment Ground** — Lugs:**SINGLE**

PANEL: **MK** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
		3640						ODU/FC-K1	50/2	#6	1	A	2	#12	20/1	SERVICE RECPT.		180						
		3640						-	-	-	3	B	4	#12	20/1	DRINKING FOUNT.		200						
		3640						ODU/FC-K2	50/2	#6	5	C	6			SPACE ONLY								
		3640						-	-	-	7	A	8			SPACE ONLY								
								SPACE ONLY			9	B	10			SPACE ONLY								
								SPACE ONLY			11	C	12			SPACE ONLY								
								SPACE ONLY			13	A	14			SPACE ONLY								
								SPACE ONLY			15	B	16			SPACE ONLY								
								SPACE ONLY			17	C	18			SPACE ONLY								
								SPACE ONLY			19	A	20			SPACE ONLY								
								SPACE ONLY			21	B	22			SPACE ONLY								
								SPACE ONLY			23	C	24			SPACE ONLY								
								SPACE ONLY			25	A	26			SPACE ONLY								
								SPACE ONLY			27	B	28			SPACE ONLY								
								SPACE ONLY			29	C	30			SPACE ONLY								
0	0	14560	0	0	0	0	0.00	**TOTALS**								**TOTALS**	0	380	0	0	0	0	0	0.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
0.0	0.4	14.6	0.0	0.0	0.0	0.0	0.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
0.0	0.4	14.6	0.0	0.0	0.0	0.0	0.0	Design KVA

Phase Load

Ph	KVA
A	7.5
B	3.8
C	3.6

Panel Remarks:

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	14.9	41.5		14.9	41.5

PANEL **MK**

Date: 8/11/2023 — By: Designer

Job:EASTWOOD ES MOD — Job No.220528

Mounting:**SURFACE** — Main Type:**MCB (300A)** — Neutral:**100%** — Voltage:**208Y/120V-3PH 4W** — Main Size:**400 AMPS** — AIC Rating:**22000** — Ground:**Equipment Ground** — Lugs:**SINGLE**

PANEL: **MAB** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
		2882						HP-A1	30/3	#10	1	A	2	#12	15/3	PE-A1,B1			1177					
		2882						-	-	-	3	B	4	-	-	-			1177					
		2882						-	-	-	5	C	6	-	-	-			1177					
		2882						HP-B1	30/3	#10	7	A	8	#12	15/3	PE-A2,B2			1177					
		2882						-	-	-	9	B	10	-	-	-			1177					
		2882						-	-	-	11	C	12	-	-	-			1177					
		2882						HP-A2	30/3	#10	13	A	14	#12	15/3	PE-A3,B3			1177					
		2882						-	-	-	15	B	16	-	-	-			1177					
		2882						-	-	-	17	C	18	-	-	-			1177					
		2882						HP-B2	30/3	#10	19	A	20	#12	15/3	PE-A4,B4			1177					
		2882						-	-	-	21	B	22	-	-	-			1177					
		2882						-	-	-	23	C	24	-	-	-			1177					
		2882						HP-A3	30/3	#10	25	A	26	#12	15/2	ODU/FC-A1			1000					
		2882						-	-	-	27	B	28	-	-	-			1000					
		2882						-	-	-	29	C	30	#12	15/2	ODU/FC-B1			1000					
		2882						HP-B3	30/3	#10	31	A	32	-	-	-			1000					
		2882						-	-	-	33	B	34	#12	15/1	EF-A1,B1			1392					
		2882						-	-	-	35	C	36	#12	20/1	ROOF RECPT.		720						
		2882						HP-A4	30/3	#10	37	A	38	#10	30/3	HP-B4			2882					
		2882						-	-	-	39	B	40	-	-	-			2882					
		2882						-	-	-	41	C	42	-	-	-			2882					
0	0	60522	0	0	0	0	0.00	**TOTALS**								**TOTALS**	0	720	28162	0	0	0	0	0.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
0.0	0.7	88.7	0.0	0.0	0.0	0.0	0.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
0.0	0.7	88.7	0.0	0.0	0.0	0.0	0.0	Design KVA

Phase Load

Ph	KVA
A	29.8
B	30.2
C	29.5

Panel Remarks:

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	89.4	248.2		89.4	248.2

PANEL **MAB**

Date: 8/11/2023 — By: Designer

Job:EASTWOOD ES MOD — Job No.220528

Mounting:**SURFACE** — Main Type:**MCB (300A)** — Neutral:**100%** — Voltage:**208Y/120V-3PH 4W** — Main Size:**400 AMPS** — AIC Rating:**22000** — Ground:**Equipment Ground** — Lugs:**SINGLE**

PANEL: **MCD** — ALL LOADS IN VA

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph	Cir. No.	Wire	Amp/P	Description	Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S
		2882						HP-C1	30/3	#10	1	A	2	#12	15/3	PE-C1,D1			1177					
		2882						-	-	-	3	B	4	-	-	-			1177					
		2882						-	-	-	5	C	6	-	-	-			1177					
		2882						HP-D1	30/3	#10	7	A	8	#12	15/3	PE-C2,D2			1177					
		2882						-	-	-	9	B	10	-	-	-			1177					
		2882						-	-	-	11	C	12	-	-	-			1177					
		2882						HP-C2	30/3	#10	13	A	14	#12	15/3	PE-C3,D3			1177					
		2882						-	-	-	15	B	16	-	-	-			1177					
		2882						-	-	-	17	C	18	-	-	-			1177					
		2882						HP-D2	30/3	#10	19	A	20	#12	15/3	PE-C4,D4			1177					
		2882						-	-	-	21	B	22	-	-	-			1177					
		2882						-	-	-	23	C	24	-	-	-			1177					
		2882						HP-C3	30/3	#10	25	A	26	#12	15/2	ODU/FC-C1			1000					
		2882						-	-	-	27	B	28	-	-	-			1000					
		2882						-	-	-	29	C	30	#12	15/2	ODU/FC-D1			1000					
		2882						HP-D3	30/3	#10	31	A	32	-	-	-			1000					
		2882						-	-	-	33	B	34	#12	15/1	EF-C1,D1			1392					
		2882						-	-	-	35	C	36	#12	20/1	ROOF RECPT.		720						
		2882						HP-C4	30/3	#10	37	A	38	#10	30/3	HP-D4			2882					
		2882						-	-	-	39	B	40	-	-	-			2882					
		2882						-	-	-	41	C	42	-	-	-			2882					
0	0	60522	0	0	0	0	0.00	**TOTALS**								**TOTALS**	0	720	28162	0	0	0	0	0.00

LOAD SUMMARY

Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description
0.0	0.7	88.7	0.0	0.0	0.0	0.0	0.0	Connected KVA
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors
0.0	0.7	88.7	0.0	0.0	0.0	0.0	0.0	Design KVA

Phase Load

Ph	KVA
A	29.8
B	30.2
C	29.5

Panel Remarks:

*Input div. factor per descriptions as required for calculations.
**100% of 1st 10 KVA, 50% of remaining.

	Con. KVA	Con. Amps		Des. KVA	Des. Amps
TOTAL	89.4	248.2		89.4	248.2

PANEL **MCD**

Date: 8/11/2023 — By: Designer

TYPE	DESCRIPTION	VOLTAGE	MOUNTING	MANUFACTURER & NO.	WEIGHT (LBS)	REMARKS
FX-A	2X4 TROFFER	MVOLT	RECESSED	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT	15.1	
FX-AE	2X4 TROFFER - EMERG.	MVOLT	RECESSED	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP	15.1	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP'
FX-B	1X4 TROFFER	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT	13.9	'PROVIDE SURFACE MOUNT KIT 'SMKSH'.
FX-BE	1X4 TROFFER - EMERG.	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP	13.9	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP'
FX-C	2X4 TROFFER	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT	15.1	PROVIDE SURFACE MOUNT KIT 'SMKSH'.
FX-CE	2X4 TROFFER	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT	15.1	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP'
FX-D	5" DOWNLIGHT	MVOLT	SURFACE	JUNO LIGHTING JSF 5IN 07LM 35K 90CRI 120 FRPC WH E10WLCP	1.15	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WLCP'
FX-EX	EMERGENCY EXIT	MVOLT	SURFACE	LITHONIA LIGHTING LE S 1 R EL N SD - WITH MOUNTING KIT 'ELA WG1'	4.46	COORDINATE WITH MANUFACTURER AND ARCHITECT PRIOR TO PROCUREMENT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

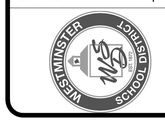
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

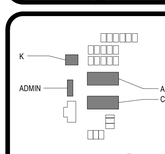
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





KEY PLAN — NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
Exp. 09-30-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

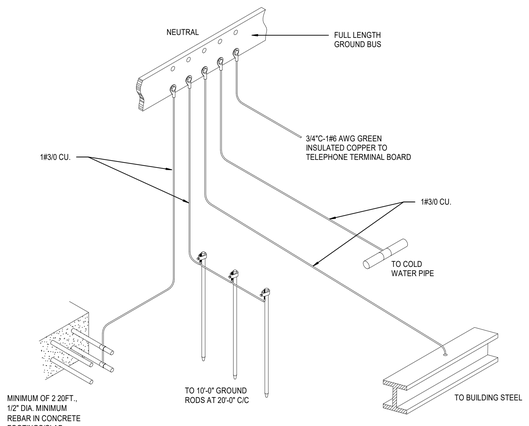
No.	Description	Date

DSA Submittal

ELECTRICAL SCHEDULES

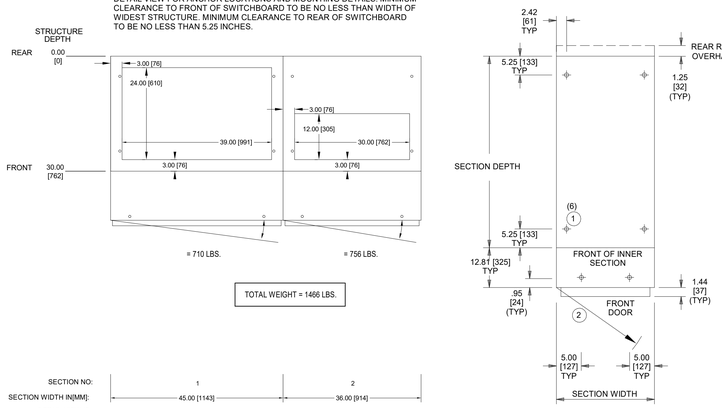
E5.02

FILE PATH: Z:\Projects\...
9/15/2023 1:43:22 PM



11 GROUNDING SYSTEM CONNECTION
NOT TO SCALE

DOOR SWING IS EQUAL TO STRUCTURE WIDTH. DOORS OPEN TO 90 DEGREES. CONDUIT ENTERING BOTTOM OF SWITCHBOARD SHALL NOT EXTEND MORE THAN 3 INCHES INTO STRUCTURE. REFER TO FLOOR PLAN DETAIL VIEW FOR ANCHOR LOCATIONS AND MOUNTIING DETAILS. MINIMUM CLEARANCE TO FRONT OF SWITCHBOARD TO BE NO LESS THAN WIDTH OF WIDEST STRUCTURE. MINIMUM CLEARANCE TO REAR OF SWITCHBOARD TO BE NO LESS THAN 5.25 INCHES.



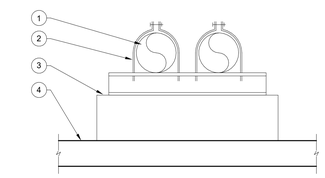
KEYNOTES:

1. LOCATIONS FOR TIE-DOWN BOLTS. PROVISIONS FOR 1/2 INCH DIA. ANCHOR BOLTS, GRADE 5 TORQUED AT 60 FT-LBS. REFER TO DETAIL 2/E6.01 FOR ADDITIONAL ANCHOR INFORMATION.
2. DOOR SWING EQUALS SECTION WIDTH AT 90 DEGREES.

NOTES:

1. FINISHED FOUNDATION'S SURFACE SHALL BE LEVEL WITHIN 0.125 INCH IN 36 INCHES LEFT-TO-RIGHT, FRONT-TO-BACK, AND DIAGONALLY, AS MEASURED BY A LASER LEVEL.
2. CLEARANCE FROM WALLS (NOT REAR ACCESSIBLE) -MINIMUM OF 6 INCHES FOR OUTDOOR OR WET LOCATIONS.

7 SWITCHBOARD DETAIL
NOT TO SCALE

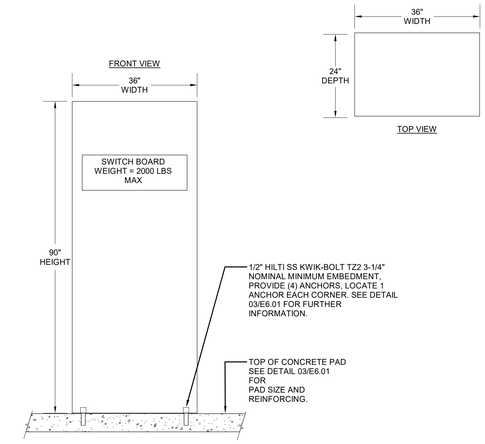


KEYNOTES:

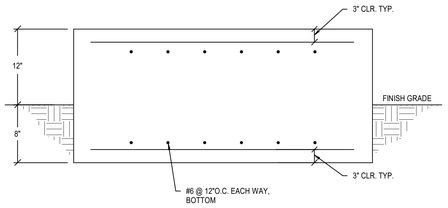
1. PIPE (MAX. OF 3).
2. PIPE CLAMP, TYP.
3. MIFAB C10 RUBBER SUPPORT WITH CHANNEL AND PIPE CLAMP.
4. EXISTING FINISHED ROOF.

NOTE:
SPACE PIPE SUPPORTS AT MAXIMUM INTERVALS OF 8'-0" ON CENTER FOR PIPES ¾" AND 1". FOR PIPES 1 INCH AND LARGER, MAXIMUM SPAN SHALL BE 10'.

1 ROOF MOUNTED CONDUIT SUPPORT
NOT TO SCALE



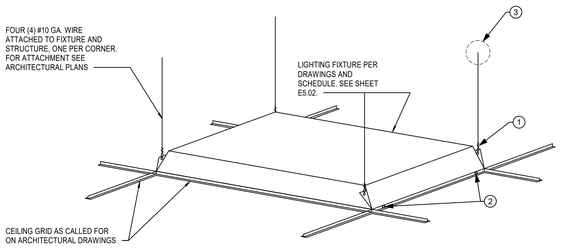
2 BUILDING SWITCHBOARD ANCHORAGE
NOT TO SCALE



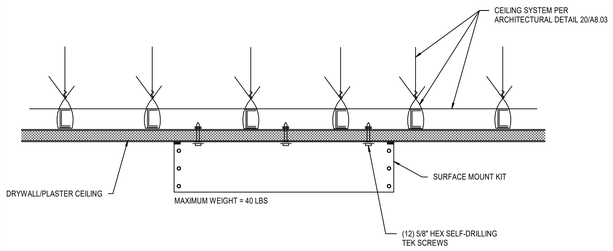
8 CONCRETE HOUSE KEEPING PAD DETAIL
NOT TO SCALE

KEY NOTES:

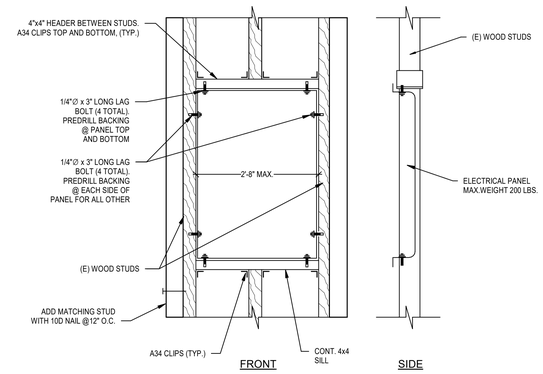
1. ATTACH WIRE TO FIXTURE (3 TIGHT TURNS MIN. IN 1½" MAX.)
2. MIN #8 "TEK" SCREW GRID TO FIXTURE @ EACH CORNER.
3. ATTACH HANGER WIRES TO STRUCTURE AS PER ARCHITECTURAL 09/A8.03.



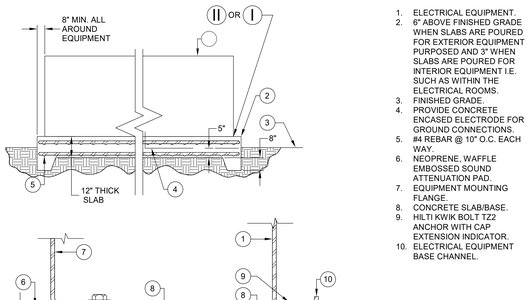
6 RECESSED FIXTURE IN LAY-IN GRID DETAIL
NOT TO SCALE



5 SURFACE MOUNTED FIXTURE DETAIL
NOT TO SCALE

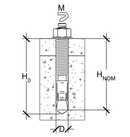


4 RECESSED MOUNTED PANEL AT WOOD FRAMING DETAIL
NOT TO SCALE



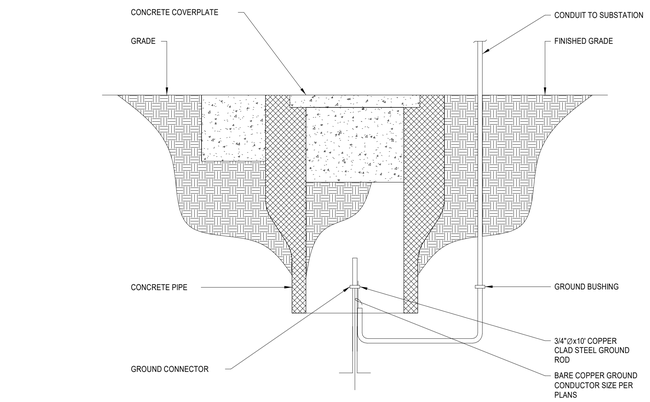
1. ELECTRICAL EQUIPMENT.
2. 6" ABOVE FINISHED GRADE WHEN SLABS ARE POURED FOR EXTERIOR EQUIPMENT PURPOSED AND 3" WHEN SLABS ARE POURED FOR INTERIOR EQUIPMENT I.E. SUCH AS WITHIN THE ELECTRICAL ROOMS.
3. FINISHED GRADE.
4. PROVIDE CONCRETE ENCASED ELECTRODE FOR GROUND CONNECTIONS.
5. #4 REBAR @ 10" O.C. EACH WAY.
6. NEOPRENE, WAFFLE EMBOSSED SOUND ATTENUATION PAD.
7. EQUIPMENT MOUNTING FLANGE.
8. CONCRETE SLAB/BASE.
9. HILTI KWIK BOLT TZ2 ANCHOR WITH CAP EXTENSION INDICATOR.
10. ELECTRICAL EQUIPMENT BASE CHANNEL.

ANCHOR DIAMETER - D	TORQUE (FT-LB) - M	MIN. EMBEDMENT DEPTH (IN.) - H_{NOM}	MIN. HOLE DEPTH (IN.) - H_0
3/8"	30	2-1/2	2-3/4
1/2"	50	3	3-1/4
5/8"	40	3-3/4	4-1/4
3/4"	110	4-1/2	4-3/4

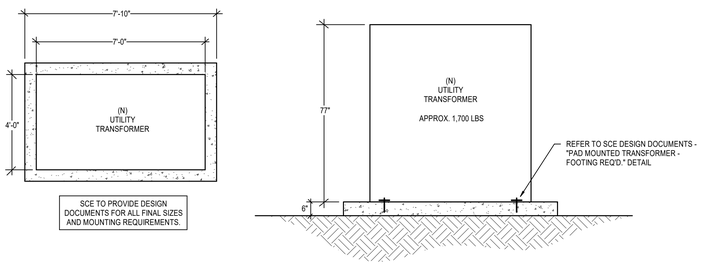


NOTES:
A. EXPANSION ANCHORS SHALL BE ZINC PLATED CARBON STEEL HILTI KWIK-BOLT TZ2.
B. KWIK BOLT TZ2 EXPANSION ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH HILTI CARBIDE TIPPED DRILL BITS. ANCHORS SHALL BE INSTALLED AND TORQUED PER MANUFACTURERS RECOMMENDATIONS.
C. ANCHOR SIZES, QUANTITIES AND TORQUES SHALL BE PER TABLES.
D. REFER TO ESR-4266 REPORT FOR FURTHER REQUIREMENTS.
E. ALL CONCRETE SHALL HAVE 3000 PSI STRENGTH AT 28 DAYS.
F. POST-INSTALLED ANCHORS SHALL BE TESTED IN ACCORDANCE WITH 2019 CBC SECTION 1910A.5.
G. IF ANY ANCHOR FAILS TESTING, TEST ALL ANCHORS OF THE SAME TYPE, NOT PREVIOUSLY TESTED UNTIL TWENTY (20) CONSECUTIVE ANCHORS PASS. THEN RESUME THE INITIAL TEST FREQUENCY. IF THE ANCHORS ARE USED FOR SUPPORT AND BRACING OF NON-STRUCTURAL COMPONENTS (PIPE, DUCT OR CONDUIT), THE TWENTY (20) SHALL BE ONLY THOSE ANCHORS INSTALLED BY THE SAME TRADE. REFER TO ESR-4266 TABLE 1 AND 2019 CBC 1910A.5.4-1910A.5.5 FOR ACCEPTANCE/FAILURE CRITERIA.
H. REGARDLESS OF WHICH TEST METHOD IS CHOSEN BY THE CONSULTANT, TEST VALUES AND ALL APPROPRIATE CRITERIA SHALL BE SHOWN ON THE CONTRACT DOCUMENTS.
I. REFER TO CIVIL AND STRUCTURAL PLANS AND SPECIFICATIONS FOR FURTHER REQUIREMENTS.

3 FREESTANDING ELECTRICAL EQUIPMENT (TYP.) FOR ALL GROUND MOUNTED EQUIPMENT
NOT TO SCALE



9 GROUND ROD DETAIL
NOT TO SCALE



10 UTILITY TRANSFORMER/PAD DETAIL
NOT TO SCALE

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C DELA CRUZ No. E 23576 Exp. 09-30-2025 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

ELECTRICAL DETAILS

E6.01

0" 1"

PLUMBING LEGEND

NOTE: NOT ALL SYMBOLS TABULATED BELOW ARE NECESSARILY USED ON THE DRAWINGS.

SYMBOL	ITEM	ABBR.
S / 1	FIXTURE DESIGNATION UNIT ABBREVIATION NUMBER	
01 / P-1	DETAIL DESIGNATION DETAIL NUMBER SHEET NO. WHERE SHOWN	
	DOMESTIC COLD WATER	CW
	DOMESTIC HOT WATER	HW
	DOMESTIC HW RETURN	HWR
	EXISTING PIPING	
X	POINT OF CONNECTION	POC
C	CONDENSATE DRAIN	
	SHUT-OFF VALVE IN BOX	SOV
	PIPING RISE	
	PIPING DROP	
S / W	SOIL OR WASTE	S OR W
V	VENT	V
	VENT THRU ROOF	VTR
FCO	FLOOR CLEANOUT	FCO
COTG	CLEANOUT TO GRADE	COTG
	WALL CLEANOUT	WCO
	HOSE BIBB	HB
RD	ROOF DRAIN	RD
OD	OVERFLOW DRAIN	OD
	DOWN SPOUT	DS
	UNDERGROUND	UG
TP	TRAP PRIMER	TP
SD	STORM DRAIN	SD
(E)	EXISTING	EXIST.
(N)	NEW	NEW
	UNDERFLOOR	UF
	OVERHEAD	OH
R	RELIEF	
D	DRAIN	
	CONDENSATE DRAIN CLEAN OUT	CO
SC	SECONDARY CONDENSATE DRAIN	
FC	FURNACE CONDENSATE	
	GAS SHUT OFF VALVE	GSOV
	CONDENSATE DRAIN TRAP	CDT
LPG	LIQUIFIED PETROLEUM GAS	LPG
G	NATURAL GAS	G
	FIRE SPRINKLER RISER	FSR
FSL	FIRE SPRINKLER LINE	FSL
	FIRE DEPARTMENT CONNECTION	FDC
	FINISHED FLOOR	FF
	FLOW LINE	FL
▲	FIRE RATED PENETRATION	
	POINT OF DISCONNECTION	POD
	POINT OF CONNECTION	POC

CALIFORNIA GREEN BUILDING STANDARDS

THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:

5.303.1 METERS: SEPARATE SUBMETERS OR METERING DEVICES SHALL BE INSTALLED FOR USES DESCRIBED IN SECTIONS
5.303.1.1 AND 5.303.1.2.

5.303.1.1 NEW BUILDINGS OR ADDITIONS IN EXCESS OF 50,000 SQUARE FEET:

1. FOR EACH INDIVIDUAL LEASED, RENTED, OR OTHER TENANT SPACE WITHIN THE BUILDING PROJECTEED TO CONSUME MORE THAN 100 GAL/DAY, INCLUDING, BUT NOT LIMITED TO, SPACES USED FOR LAUNDRY OR CLEANERS, RESTAURANT OR FOOD SERVICE, MEDICAL OR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP.
2. WHERE SEPARATE SUBMETERS FOR INDIVIDUAL BUILDING TENANTS ARE UNFEASIBLE, FOR WATER SUPPLIED TO THE FOLLOWING SUBSYSTEMS:
   a. MAKE-UP WATER FOR COOLING TOWERS WHERE FLOW THROUGH IS GREATER THAN 500 GPM.
   b. MAKE-UP WATER FOR EVAPORATIVE COOLERS GREATER THAN 6 GPM.
   c. STEAM AND HOT-WATER BOILERS WITH ENERGY INPUT MORE THAN 500,000 BTUH/H.

5.303.1.2 EXCESS CONSUMPTION: A SEPARATE SUBMETER OR BE PROVIDED FOR ANY TENANT WITHIN A NEW BUILDING OR WITHIN AN ADDITION THAT IS PROJECTED TO CONSUME MORE THAN 1,000 GAL/DAY.

5.303.2 RESERVED

5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS: PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE FOLLOWING:

5.303.3.1 WATER CLOSETS: THE EFFECTIVE FLUSH VOLUME OF ALL WATER CLOSETS SHALL NOT EXCEED 1.28 GALLONS PER FLUSH. TANK-TYPE WATER CLOSETS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR TANK-TYPE TOILETS. NOTE: THE EFFECTIVE FLUSH VOLUME OF DUAL FLUSH TOILETS IS DEFINED AS THE COMPOSITE, AVERAGE FLUSH VOLUME OF TWO REDUCED FLUSHES AND ONE FULL FLUSH.

5.303.3.2 URINALS:

5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH.

5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS SHALL NOT EXCEED 0.125 GALLONS PER FLUSH.

5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH.

5.303.3.3 SHOWERHEADS:

5.303.3.3.1 SINGLE SHOWERHEAD: SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 2.0 GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO THE PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS.

5.303.3.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER: WHEN A SHOWER IS SERVED BY MORE THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS AND/OR SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 2.0 GALLONS PER MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY ONE SHOWER OUTLET TO BE IN OPERATION AT A TIME. NOTE: A HAND-HELD SHOWER SHALL BE CONSIDERED A SHOWERHEAD.

5.303.3.4 FAUCETS AND FOUNTAINS:

5.303.3.4.1 NONRESIDENTIAL LAVATORY FAUCETS: LAVATORY FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.5 GALLONS PER MINUTE AT 60 PSI.

5.303.3.4.2 KITCHEN FAUCETS: KITCHEN FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE AT 60 PSI. KITCHEN FAUCETS MAY TEMPORARILY INCREASE FLOW ABOVE THE MAXIMUM RATE, BUT NOT TO EXCEED 2.2 GALLONS PER MINUTE AT 60 PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI.

5.303.3.4.3 WASH FOUNTAINS: WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 1.8 GALLONS PER MINUTE/20 [RIM SPACE (INCHES) AT 60 PSI].

5.303.3.4.4 METERING FAUCETS: METERING FAUCETS SHALL NOT DELIVER MORE THAN 0.20 GALLONS PER CYCLE.

5.303.3.4.5 METERING FAUCETS FOR WASH FOUNTAINS: METERING FAUCETS FOR WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.20 GALLONS PER CYCLE/20 [RIM SPACE (INCHES) AT 60 PSI]. NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION.

PLUMBING TESTING

1. ALL EQUIPMENT AND/OR SYSTEMS NOTED ON THE DRAWINGS "TO REMAIN" SHALL BE INSPECTED AND TESTED ON SITE TO CERTIFY WORKING CONDITION. A WRITTEN REPORT ON THE CONDITION OF ALL EQUIPMENT TO REMAIN, INCLUDING A COPY OF THE TEST RESULTS AND RECOMMENDED REMEDIAL ACTIONS AND COSTS SHALL BE MADE BY THIS CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW.

2. PIPE COVER AND BACKFILLING:
   A. AFTER HYDROSTATIC TEST, EVENLY BACKFILL ENTIRE TRENCH WIDTH BY HAND PLACING BACKFILL MATERIAL AND HAND TAMPING IN FOUR (4) ICHES COMPACTED LAYERS TO 12 INCHES MINIMUM COVER OVER TOP OF JACKET. COMPACT TO 95 PERCENT MAXIMUM DENSITY.
   B. EVENLY AND CONTINUOUSLY BACKFILL REMAINING TRENCH DEPTH IN
   C. UNIFORM LAYERS WITH BACKFILL MATERIAL.
   D. DO NOT USE WHEELED OR TRACKED VEHICLES FOR TAMPING.

3. PRESSURE TEST ALL DOMESTIC WATER PIPING, AFTER INSTALLATION AND PRIOR TO BACKFILL OR COVER-UP. RINSE PIPING SYSTEM OF PARTICULATE CONTAMINANTS, CAP AND SUBJECT TO STATIC WATER PRESSURE OF 125 PSIG FOR FOUR (4) HOURS. REPAIR LEAKS AND DEFECTS AND RE-TEST ANY PORTION OF PIPING SYSTEM THAT FAILS. PROVIDE WRITTEN TEST REPORT INCLUDING DATE AND TIME OF TEST, PASS OR FAIL INDICATION, SUMMARY OF REMEDIAL WORK REQUIRED AND DATE AND TIME OF EACH RE-TEST.

4. PRIOR TO COVER UP, WATER PIPE, SANITARY PIPE, AND GAS PIPING SHALL BE PRESSURE TESTED. TESTS SHALL BE WITNESSED BY CONSULTANT AND OWNER. NOTIFY OWNER 48 HOURS PRIOR TO TEST. TEST SHALL BEWITNESSED BY CLIENT PLUMBING TECHNICIAN.

5. UPON COMPLETION OF THE SANITARY PIPING SYSTEM, THE CONTRACTOR SHALL NOTIFY ENGINEER AND OWNER TO OBSERVE A SMOKE TEST OF THE SYSTEM. SMOKE TESTING SHALL BE PERFORMED ON SANITARY PIPING SYSTEM TWICE DURING CONSTRUCTION.

6. PRESSURE TEST NATURAL GAS PIPING IN ACCORDANCE WITH NFPA 54. CA PLUMBING CODE SECTION 1213

GENERAL PLUMBING NOTES

1. ALL BRACING OF PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, HAZARD LEVEL 'A'.

2. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND FIELD INSPECTOR.

3. SUPPORT AND BRACING OF ALL PIPING SHALL BE IN ACCORDANCE WITH THE SMACNA "GUIDELINES FOR SEISMIC RESTRAINTS OF PLUMBING PIPING SYSTEMS", OR THE "SUPERSTRUT SEISMIC RESTRAINT SYSTEM" FOR PIPING ONLY.

4. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL PIPE ROUTING WITH WORK OF OTHER TRADES AND MAKE ANY OFFSETS AS REQUIRED TO AVOID CONFLICT WITH DUCTWORK, LIGHT FIXTURES, SKYLIGHTS, ETC.

6. PLUMBING CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL CONDENSATE DRAIN CONNECTIONS TO MECHANICAL EQUIPMENT.

7. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLUMBING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ ENGINEER OF ANY EXISTING CONDITIONS WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS.

8. FOR PLUMBING FIXTURE MOUNTING HEIGHTS AND LOCATIONS, REFER TO THE ARCHITECTURAL DRAWINGS.

9. ALL PLUMBING CONVEYING OR DISPENSING WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953 FOR LEAD CONTENT.

10. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS.

11. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL.

12. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING.

13. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER.

14. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE HEIGHT PER ARCHITECTURAL DETAILS.

15. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE.

16. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT.

17. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED TO PREVENT FREEZING.

18. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING CODES AS ADOPTED BY THE INSPECTION AUTHORITY. NOTHING IN THESE PLANS IS TO BE CONSTUED TO PERMIT WORK NOT CONFORMING TO THESE CODES OR OTHER APPLICABLE PROJECT SPECIFICATIONS:

    A. CALIFORNIA BUILDING CODE - 2022
    B. CALIFORNIA PLUMBING CODE - 2022
    C. CALIFORNIA MECHANICAL CODE - 2022
    D. CALIFORNIA ELECTRICAL CODE - 2022
    E. CALIFORNIA GREEN CODE - 2022
    F. NATIONAL FIRE PROTECTION ASSOCIATION
    G. OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA)

19. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE FACILITY, UTILITIES AND APPURTENANCE CAUSED BY THE WORK IN THEIR SCOPE. CONTRACTOR SHALL RESTORE AND REPAIR ANY DAMAGE AT NO ADDITIONAL COST TO THE OWNERS BY INSTALLATION THE FACILITY OF NEW WORK.

MEP COMPONENT ANCHORAGE NOTES:

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

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (e.g. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRIC, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.

3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

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

1. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

2. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., OSHPD OPM FOR2013 CBC OR LATER), COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO START OF AND DURING THE HANGING AND BRACING OF DISTRIBUTION SYSTEMS. THE STRUCTURAL ENGINEER OF RECORD SHALL VERIFY 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 & DETAILS.

MP☐ MD☐ PP☐ E☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #_____.

DRAWING INDEX

SHEET	DESCRIPTION
P0.00	PLUMBING SHEET INDEX, LEGEND, AND NOTES
P1.01	PLUMBING SITE PLAN
PD2.01	DEMO PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
P2.01	PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
P4.01	PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS
P5.01	PLUMBING SCHEDULES
P6.01	PLUMBING DETAILS

ABBREVIATIONS

NOTE: 1. ALL ABBREVIATIONS MAY NOT BE USED ON THESE DRAWINGS.

AAP	AREA ALARM PANEL	MH	MANHOLE
AAV	AUTOMATIC AIR VENT	MS	MOP SINK
A.F.F.	ABOVE FINISHED FLOOR	N.C.	NORMALLY CLOSED
AP	ACCESS PANEL	NIC	NOT IN CONTRACT
B.F.F.	BELOW FINISHED FLOOR	N.O.	NORMALLY OPEN
BFP	BACKFLOW PREVENTER	O.F./C.I.	OWNER FURNISHED/CONTRACTOR INSTALLED
BOB	BOTTOM OF BEAM	O.F./O.I.	OWNER FURNISHED/OWNER INSTALLED
BOP	BOTTOM OF PIPE	OFD	OVERFLOW DRAIN
BTUH	BRITISH THERMAL UNITS PER HOUR	PH	PHASE
CA	COMPRESSED AIR	PIV	POST INDICATOR VALVE
C/C	CUT AND CAP	PRV	PRESSURE REDUCING VALVE
CFH	CUBIC FEET PER HOUR	RD	ROOF DRAIN
CFS	CUBIC FEET PER SECOND	RE:	REFER TO
CI	CAST IRON	R.I.C.	ROUGH-IN AND CONNECT
CLG	CEILING	RO	REVERSE OSMOSIS
CO	CLEANOUT	RPBFP	REDUCED PRESSURE BACKFLOW PREVENTER
CONN	CONNECTION	RPM	REVOLUTIONS PER MINUTE
CONT.	CONTINUATION	RVB	REFRIGERATOR VALVE BOX
DF	DRINKING FOUNTAIN	SD	STORM DRAIN
DPV	DRY PIPE VALVE	S.F.	SQUARE FEET
DWG.	DRAWING	SIA.	SIAMESE
EA	EACH	SK	SINK
EL.	ELEVATION	T.O.P.	TOP OF PIPE
EDF	ELECTRIC DRINKING FOUNTAIN	TP	TRAP PRIMER
FCO	FLOOR CLEANOUT	TYP	TYPICAL
FD	FLOOR DRAIN	U	URINAL
FDV	FIRE DEPARTMENT VALVE	U/F	UNDERFLOOR
F.F.	FINISHED FLOOR	U/S	UNDERSLAB
FHC	FIRE HOSE CABINET	VAC. BRKR.	VACUUM BREAKER
F.L.	FLOW LINE	VIF	VERIFY IN FIELD
FS	FLOOR SINK	VTR	VENT THRU ROOF
FT	FEET	WC	WATER CLOSET
FU	FIXTURE UNITS	WCO	WALL CLEANOUT
GC	GENERAL CONTRACTOR	WH	WALL HYDRANT
GPH	GALLONS PER HOUR	WMB	WASHING MACHINE BOX
GPM	GALLONS PER MINUTE	YH	YARD HYDRANT
HB	HOSE BIBB	ZV	ZONE VALVE
HP	HORSEPOWER	(A)	ITEM NOTED TO BE ABANDONED
I.E.	INVERT ELEVATION	(D)	ITEM NOTED TO BE DEMOLISHED
KW	KILOWATTS	(E)	EXISTING ITEM
LAV	LAVATORY	(N)	NEW ITEM
MAP	MASTER ALARM PANEL	(R)	ZFITEM NOTED TO RELOCATED
MECH	MECHANICAL		

UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

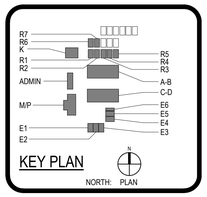
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
CIVIL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

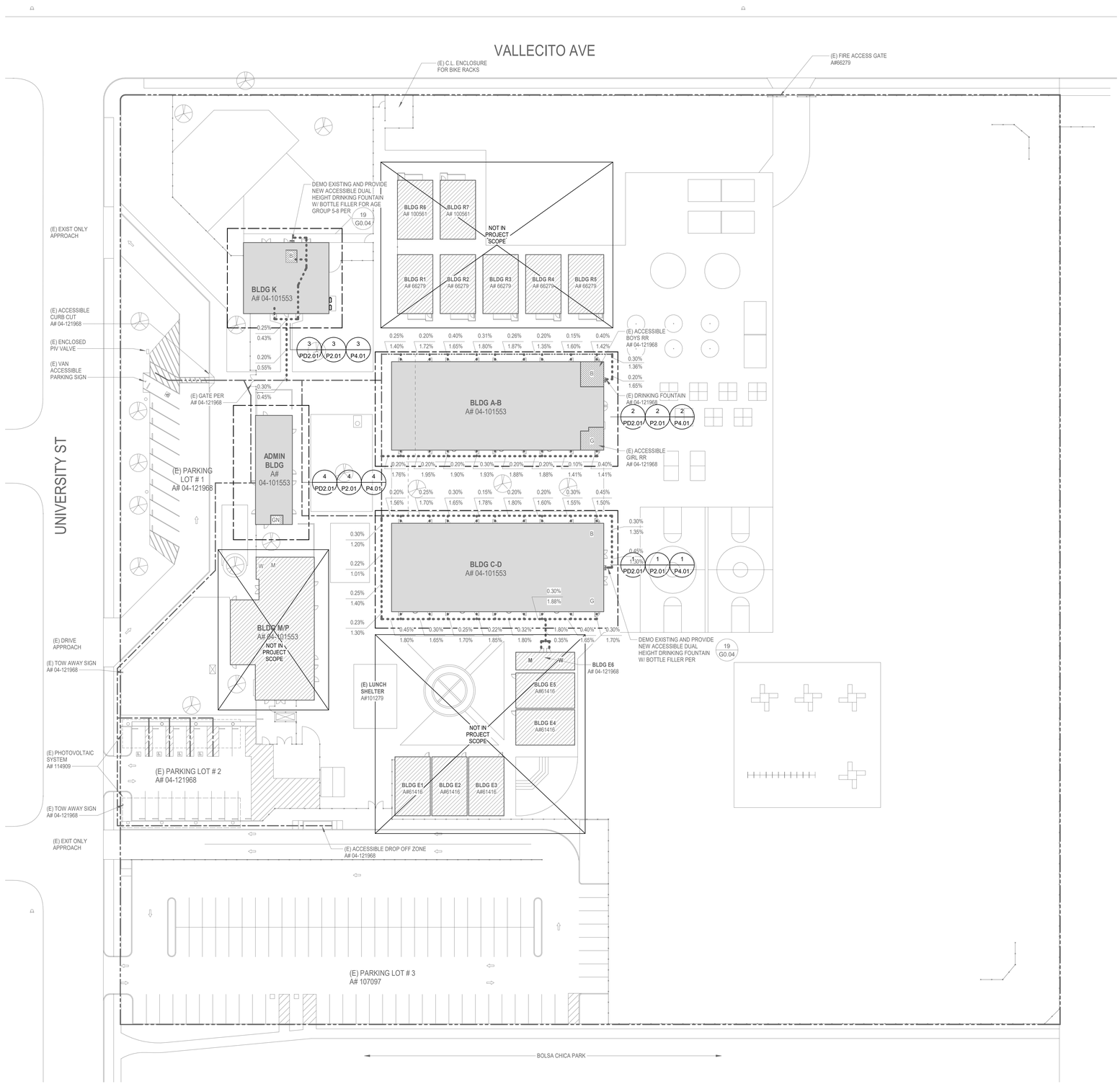
PLUMBING SHEET INDEX, LEGEND, AND NOTES

P0.00

FILE PATH: Z:\Projects\...
9/13/2023 10:56:39 PM

P1.01 - PLUMBING SITE PLAN

0" 1"



1 SITE PLAN
1" = 30'-0"

KEY NOTES

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT

R7 R6 K R1 R2 ADMIN M/P E1 E2 R5 R4 R3 A-B C-D E6 E5 E4 E3

KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER REX DAVID WANG No.M36155 Exp.09-30-2024 STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

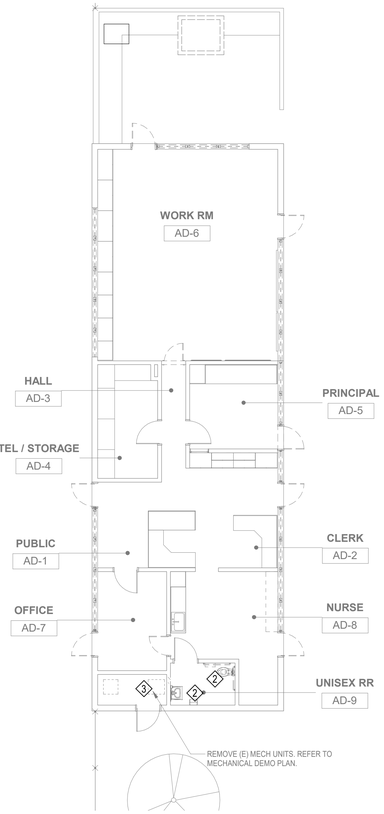
PLUMBING SITE PLAN

P1.01

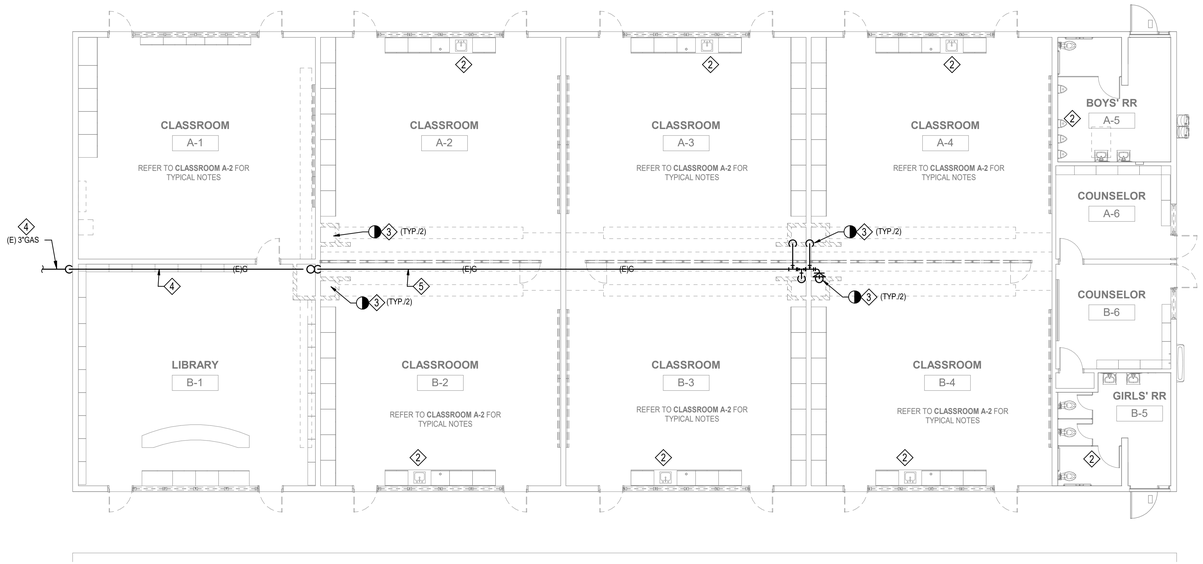
FILE PATH: Z:\Projects\...
9/13/2023 10:56:40 PM

PD2.01 - DEMO PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

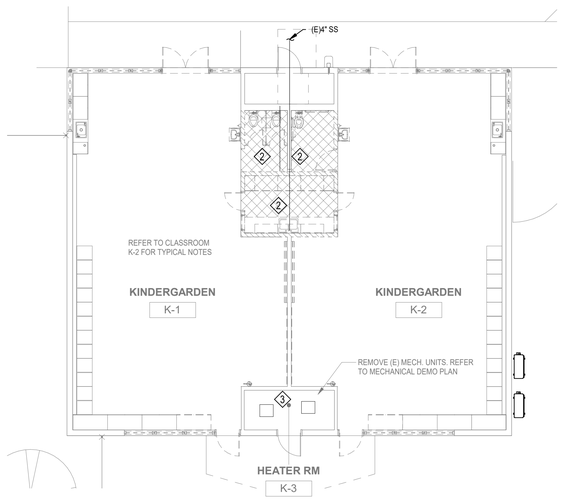
0" 1"



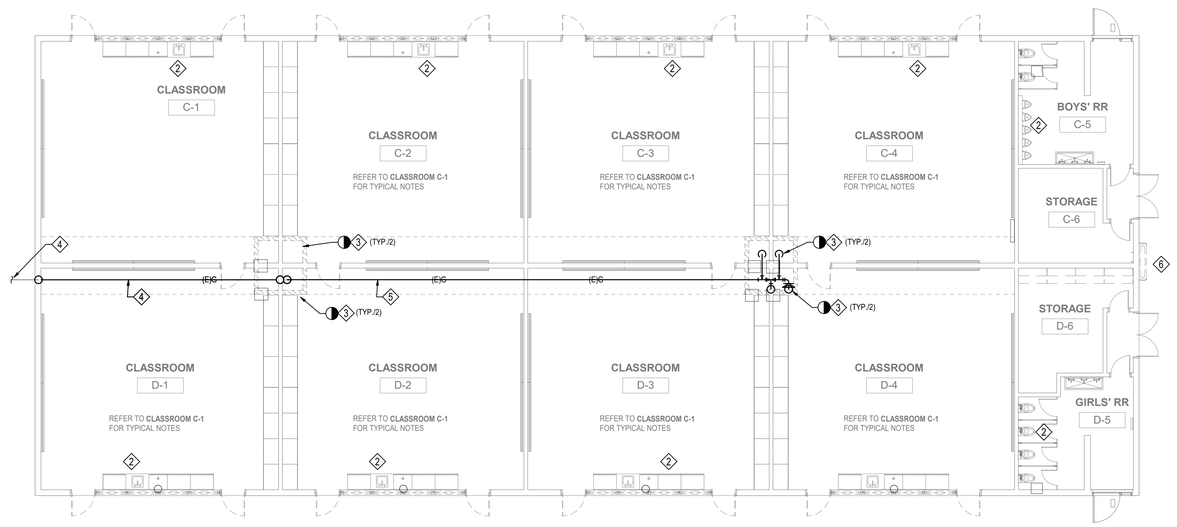
4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.

KEY NOTES

1. NOT USED
2. EXISTING PLUMBING FIXTURE TO REMAIN
3. MECHANICAL FURNACE TO BE DEMOLISHED AND AND ALL APPURTENENACES.. REFER TO HVAC PLANS . CAP EXISTING 1 1/4" GAS ABOVE IN SOFFIT AND AND ALL APPURTENENACES.
4. EXISTING PIPING BELOW FLOOR TO REMAIN.
5. EXISTING GAS PIPING ABOVE IN SOFFIT TO REMAIN.
6. EXISTING PLUMBING FIXTURE TO BE REMOVED AND REPLACED. CAP SEWER, WATER AND VENT TEMPORARILY FOR NEW REPLACEMENT.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

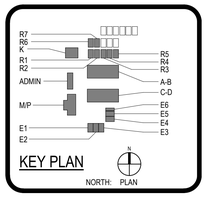
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953

WESTMINSTER SCHOOL DISTRICT



Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

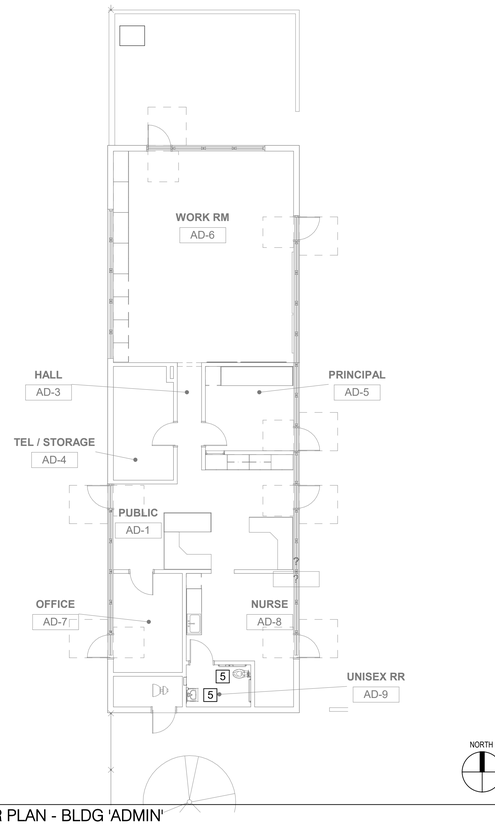
DSA Submittal

DEMO PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

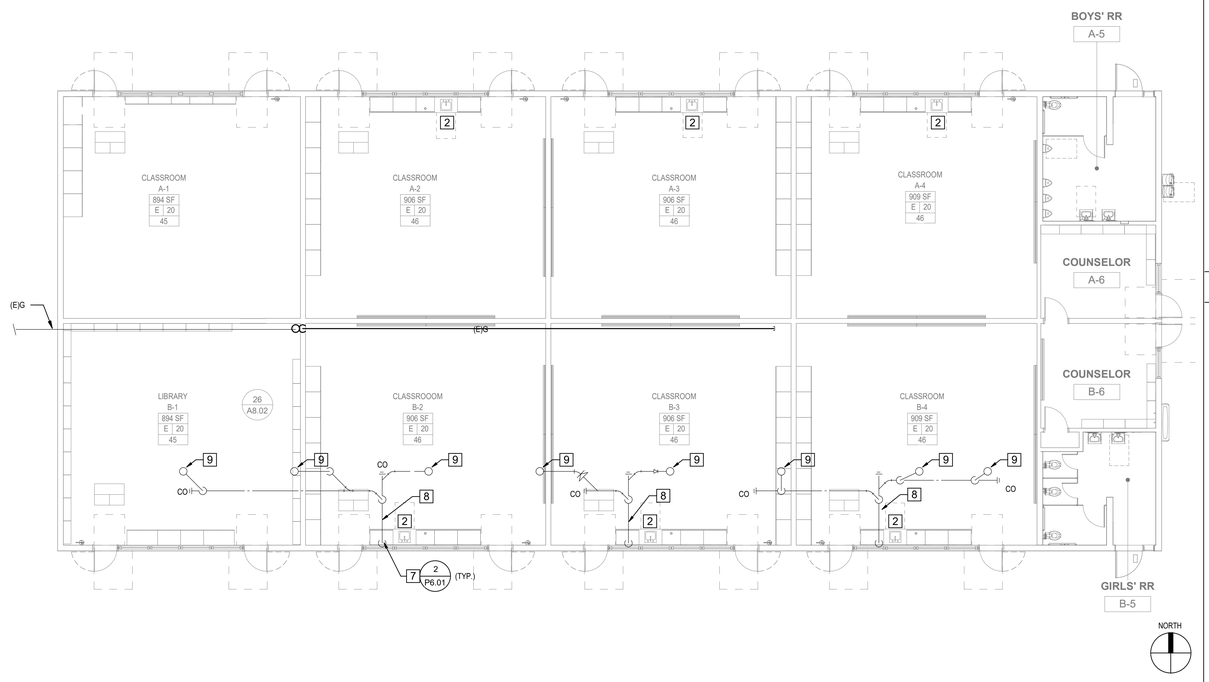
PD2.01

FILE PATH: Z:\Projects\...
9/13/2023 10:56:44 PM

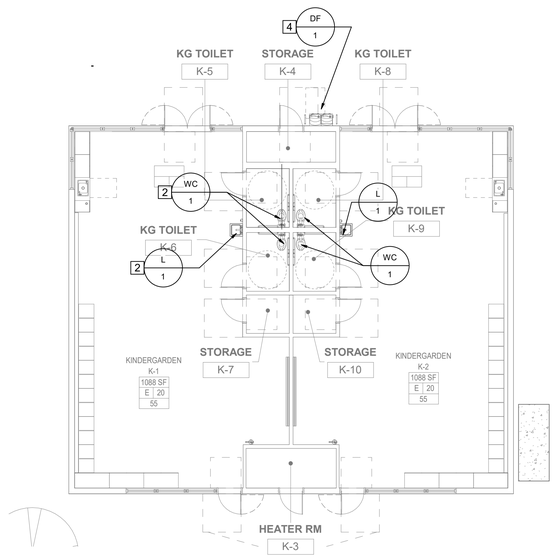
0" 1"



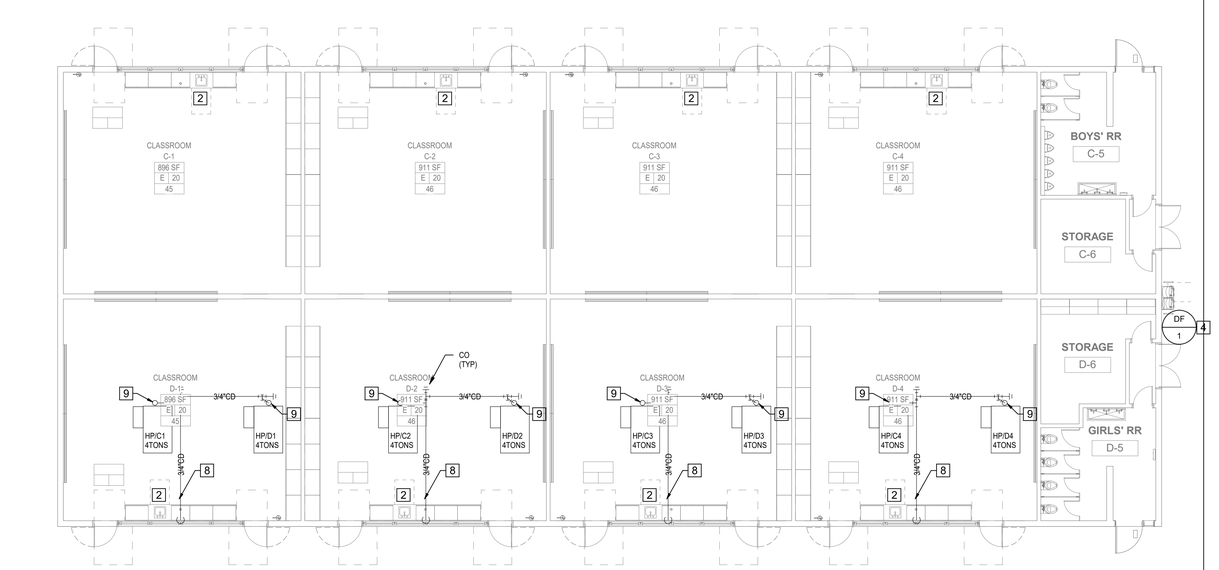
4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

KEY NOTES

1. PIPING ABOVE IN ATTIC SPACE
2. MODIFY, ROUGH-IN AND EXTEND UTILITIES IN WALL TO MAKE CONNECTIONS WITH FIXTURE ACCESSIBILITY RENOVATION; SEE ARCHITECTURAL PLANS. PATCH TO MATCH FINISH.
3. NOT USED
4. DRINKING FOUNTAIN POC TO (E) 2" SS AND 2" VENT AND (E) 3/4" CW .WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
5. EXISTING PLUMBING FIXTURE
6. EXISTING WATER HEATER
7. 3/4" CONDENSATE FROM ABOVE. DROP DN. IN WALL TO LAV TAIL PIECE
8. 3/4" CONDENSATE IN ATTIC SPACE SLOPE @ 1%
9. 3/4" CONDENSATE UP TO A/C UNIT ON ROOF.

CONSTRUCTION NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

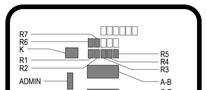
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
MECHANICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

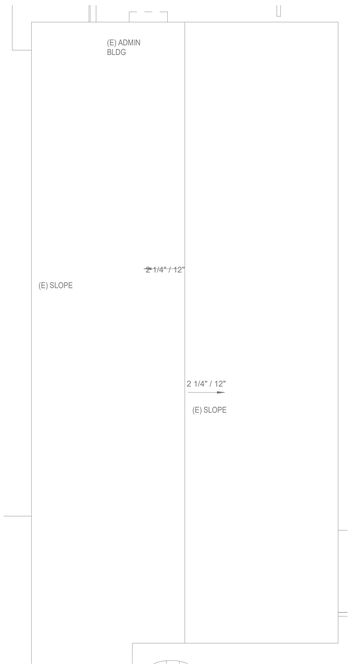
PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

P2.01

FILE PATH: Z:\Projects\...
9/13/2023 10:56:41 PM

P4.01 - PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS

0" 1"



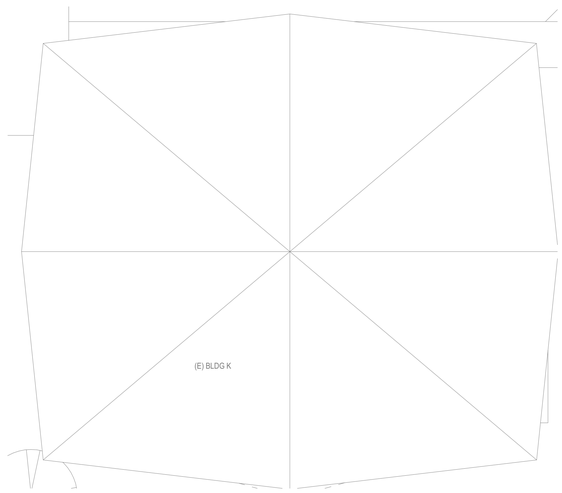
NORTH

4 ROOF PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



NORTH

2 ROOF PLAN - BLDG 'A-B'
1/8" = 1'-0"



NORTH

3 ROOF PLAN - BLDG 'K'
1/8" = 1'-0"



NORTH

1 ROOF PLAN - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
2. BEFORE COMMENCEMENT OF WORK , THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
3. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.
4. WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.

KEY NOTES

1 NEW A/C UNITS (BY MECHANICAL) PROVIDE 3/4" CONDENSATE LINE, TRAP AND VENT AS REQUIRED. SEE DETAIL.
ROUTE 3/4" CONDENSATE DOWN THROUGH ROOF (1 / P6.01) (2 / P6.01)

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

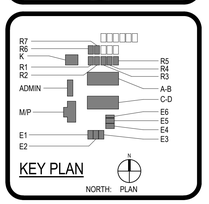
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13562 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN N NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

PLUMBING BLDG 'A-B', 'C-D', 'ADMIN' & 'K' ROOF PLANS

P4.01

FILE PATH: Z:\Projects\...
9/13/2023 10:56:42 PM

0" 1"

PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	S or W	V	CW	HW	DESCRIPTION
WC 1	WATER CLOSET (KINDERGARTEN/ ACCESSIBLE)	4"	2"	1-1/2"	---	AMERICAN STANDARD #2282.001 "BABY DEVORO" FLOWISE FLUSHOMETER VITREOUS CHINA TOILET, HIGH EFFICIENCY/LOW CONSUMPTION, ELONGATED BOWL 10-1/4" HEIGHT COMPLETE WITH CHURCH TOILET SEAT #1580C OPEN FRONT SEAT LESS COVER WITH AMERICAN STANDARD #6047.121.002 MANUAL FLUSH VALVE AT 1.28 GPF.
L 1	LAVATORY (KINDERGARTEN/ ACCESSIBLE)	2"	2"	1/2"	---	AMERICAN STANDARD #0356.0141 "LUCERNE" WALL-HUNG LAVATORY 20"X18", COMPLETE WITH CHICAGO FAUCET #333-E260S-336CAB METERING 0.5 GPM AERATOR AND VANDAL RESISTANT COVER PLATER, MCGUIRE NO 155A, 1-1/4" "OPEN GRID" P.O. PLUG" MCGUIRE NO. PW8090NCO 1-1/4" L.A. PATTERN P-TRAP WITH TRAP AND SUPPLY COVERS, GALVANIZED NIPPLE AND CHROMIUM PLATED BRASS CASING, CHICAGO #1017-ABCP LOOSE KEY STOPS AND RIGID SUPPLIES AND ZURN #Z-1231 CARRIER WITH STEEL PLATE, MOUNT AT ACCESSIBLE HEIGHT (REFER TO ARCHITECTURAL PLANS FOR MOUNTING HEIGHT).
DF 1	DRINKING FOUNTAIN	2"	2"	1/2"	---	ELKAY NO. VRCTLR8WSK / FILTERED S. WALL MOUNTED. W TOUCHLESS BOTTLE FILLER EZH2O, W/ SOLENOID VALVE, CONTROLLED BY TRANSFORMER 115 / 60HZ / 4.2 FLA 14 GAUGE STAINLESS STEEL W/ INTEGRAL 1/4" STAINLESS STEEL MOUNTING PLATE, ADA APPROVED, COMPLETE WITH VANDAL PROOF BOTTOM CHICAGO NO. 45LKABCP ANGLE STOP W/ 1/2" FEMALE INLET & OUTLET. MOUNT AT ADA ACCESSIBLE HEIGHT.

NOTES:

1. ALL PLUMBING FIXTURES, FLUSH VALVES, FAUCETS, FLOOR DRAINS, FLOOR SINKS, DRINKING FOUNTAINS, ETC. SHALL BE VANDAL RESISTANT.
2. ALL PLUMBING FIXTURES SHALL COMPLY WITH CAL GREEN FLOW RATES FOR 20 PERCENT FLOW RATE REDUCTION PER TABLE 5.303.2.3.
3. COORDINATE ALL FIXTURES WITH ARCHITECT
4. FOR PLUMBING FIXTURE HEIGHTS REFER TO ARCHITECT PLAN G0.04

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

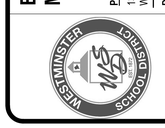
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

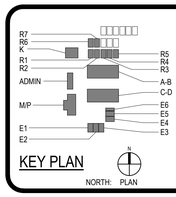
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43





KEY PLAN

Consultant



Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

PLUMBING SCHEDULES

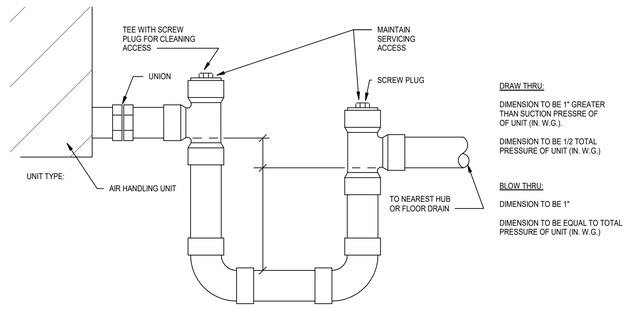
P5.01

DETAIL NOTES:

1. SINK IN CABINET.
2. SLIP-JOINT FITTING.
3. TRAP.
4. FINISHED FLOOR.
5. WALL.
6. INSULATE SUPPLY AND DRAIN PER SPECIFICATIONS.
7. ESCUTCHEON PLATE.
8. NEOPRENE HOSE & CLAMPS.
9. 3/4" CONDENSATE DRAIN IN WALL.

NOTE:
SEE ARCHITECT'S DRAWINGS FOR ACCESSIBLE REQUIREMENTS.

2 CONDENSATE TO TAILPIECE DETAIL
12" = 1'-0"



DRAW THRU:

DIMENSION TO BE 1" GREATER THAN SUCTION PRESSRE OF OF UNIT (IN. W.G.).

DIMENSION TO BE 1/2 TOTAL PRESSURE OF UNIT (IN. W.G.)

BLOW THRU:

DIMENSION TO BE 1"

DIMENSION TO BE EQUAL TO TOTAL PRESSURE OF UNIT (IN. W.G.)

1 CONDENSATE TRAP PIPING DETAIL
12" = 1'-0"

FILE PATH: Z:\Projects\...
9/13/2023 10:56:42 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

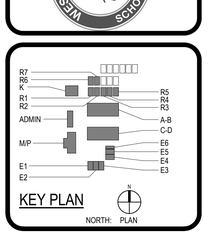
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
REX DAVID WANG
No.M36155
Exp.09-30-2024
CIVIL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

PLUMBING DETAILS

P6.01

0" 1"

DEVICE SCHEDULE

SYMBOL	DESCRIPTION	MODEL	MANUFACTURER	BACKBOX	MOUNTING HEIGHT	C.S.F.M. NUMBER
FACP	NEW FIRE ALARM CONTROL PANEL AND VOICE EVAC MICROPHONE	IFP-2100ECS ECS-RPU	FARENHYT BY SILENT KNIGHT	PROVIDED		7165-0559:0505 7300-0559:0175
ANN	FIRE ALARM ANUNCIATOR	RA-2000	FARENHYT BY SILENT KNIGHT	N/A		7165-0559:0135
FATC	FIRE ALARM TERMINAL CABINET	N/A	BY ELECTRICAL CONTRACTOR	N/A		N/A
FAPS	FIRE ALARM POWER SUPPLY	RPS-1000	FARENHYT BY SILENT KNIGHT	N/A		7165-0559:0135
AMP	FIRE ALARM AMPLIFIER	ECS-DUAL50W	FARENHYT BY SILENT KNIGHT	N/A		7300-0559:0173
SM	AUDIBLE/VISUAL SYNC MODULE	MDL3	SILENT KNIGHT	5S DEEP BOX W/ 5S EXTENSION		7300-1653:0202
S P	ADDRESSABLE AREA SMOKE DETECTOR (PHOTOELECTRIC)	IDP-PHOTO B300-6	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING	CEILING	7272-0559:0149 7300-1653:0109
! A / !	ADDRESSABLE AREA HEAT DETECTOR	IDP-HEAT-HT-W B300-6	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING	ATTIC/ CEILING	7270-0559:0147 7300-1653:0109
F	FIRE ALARM ADDRESSABLE MANUAL PULL STATION	IDP-PULL-DA	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING		7150-0559:0140
CR	FIRE ALARM ADDRESSABLE CONTROL RELAY MODULE	IDP-RELAY	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING		7300-0559:0155
WP	FIRE ALARM EXTERIOR WEATHERPROOF SPEAKER	SPRK	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION		7320-1653:0201
	FIRE ALARM CEILING MOUNTED SPEAKER/STROBE	SPSCRL	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION		7320-1653:0505
	FIRE ALARM CEILING MOUNTED STROBE	SCW	SYSTEM SENSOR	4S DEEP BOX W/ 4S EXTENSION		7125-1653:0186
JB	FIRE ALARM JUNCTION BOX	N/A	BY ELECTRICAL CONTRACTOR	N/A		N/A
EOL	END OF LINE RESISTOR	N/A	N/A	N/A		N/A
M	FIRE ALARM ADDRESSABLE MONITOR MODULE	IDP-MONITOR	FARENHYT BY SILENT KNIGHT	4S DEEP BOX W/ 3-0 RING		7300-0559:0155

* ALL FA DEVICES AND EQUIPMENTS ARE NEW UNLESS OTHERWISE NOTED AS EXISTING.

LEGENDS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
A OR AMP	AMPERES	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	NO.	NUMBER
AIC	AMPERES INTERRUPTING CAPACITY	PH. OR Ø	PHASE
ARCH.	ARCHITECT; ARCHITECTURAL	PNL	PANEL
AWG	AMERICAN WIRE GAUGE	PWR	POWER
C	CONDUIT	REC/RECEPT	RECEPTACLE
CKT	CIRCUIT	REQ'D	REQUIRED
CL.	CEILING MOUNTED DEVICE	RM	ROOM
C.O.	CONDUIT ONLY WITH PULL WIRE	SF	SQUARE FEET
CU	COPPER	SHT	SHEET
DWG	DRAWING	SP	SINGLE POLE
ER	EXISTING DEVICE TO BE REMOVED	SPECS	SPECIFICATIONS
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EQUIP	EQUIPMENT	TYP	TYPICAL
EXIST / (E)	EXISTING	UG	UNDERGROUND
FIN.	FINISH	U.O.N.	UNLESS OTHERWISE NOTED
FLR	FLOOR	V	VOLTS
FT	FEET	V-A	VOLT-AMPERES
GFI	GROUND FAULT INTERRUPTER	W	WATTS
GND	GROUND	W/	WITH
LTG.	LIGHTING	W/O	WITHOUT
MTG	MOUNTING	WP	WEATHERPROOF
N	NEW	CEC	CALIFORNIA ELECTRICAL CODE
FS	FLOW SWITCH		
JB	JUNCTION BOX		
PIV	POST INDICATOR VALVE		
TS	TAMPER SWITCH		
(rectangle)	PULL BOX (WEATHERPROOF)		
##	RISER UP AND DOWN		

APPLICABLE CODES

PARTIAL LIST OF APPLICABLE CODES:
2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR
2022 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR
2022 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR
2022 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR
2022 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR
2022 CALIFORNIA ENERGY CODE (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
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

PARTIAL LIST OF APPLICABLE STANDARDS
NFPA 72 NATIONAL FIRE ALARM AND SIGNALING CODE (CA AMENDED): 2022 EDITION
NFPA 80 STANDARD FOR FIRE DOORS AND OTHER OPENING PROTECTIVES; 2019 EDITION
UL 464 AUDIBLE SIGNALING DEVICES FOR FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING ACCESSORIES; 2003 EDITION
UL 521 STANDARD FOR HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS; 1999 EDITION WITH REVISIONS THROUGH 07/20/2005.
UL 1971 STANDARD FOR SIGNALING DEVICES FOR THE HEARING IMPAIRED; 2018 EDITION (R2010)

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

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

DRAWING INDEX

SHEET	DESCRIPTION
FA0.00	FIRE ALARM SCHEDULE, NOTES, AND ABBREVIATIONS
FA1.01	FIRE ALARM SITE PLAN
FA2.01	FIRE ALARM BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS
FA2.02	FIRE ALARM BLDG 'M/P', 'E1-E3', & 'E4-E6' FLOOR PLANS
FA2.03	FIRE ALARM PORTABLE BUILDINGS
FA5.01	FIRE ALARM RISER DIAGRAM
FA5.02	FIRE ALARM CALCULATIONS
FA6.01	FIRE ALARM DETAILS

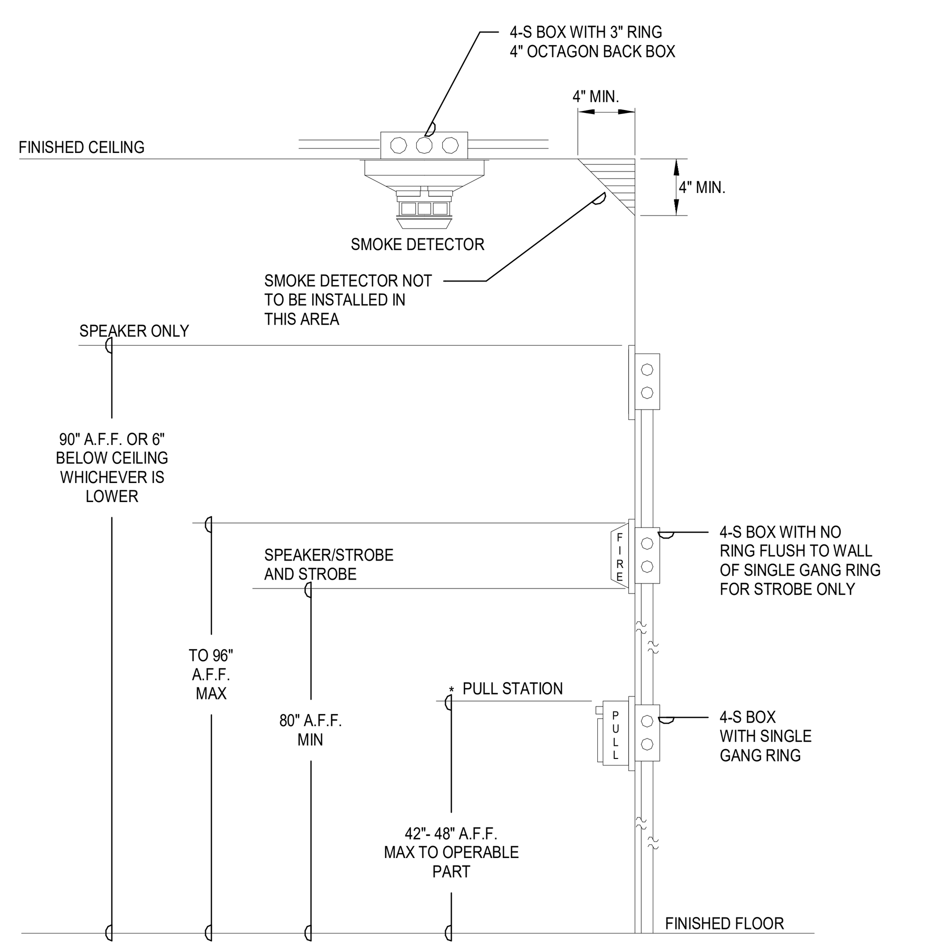
FIRE WATCH NOTE

A FIRE WATCH SHALL BE ESTABLISHED AND THE FIRE DEPARTMENT & FIRE CODE OFFICIAL SHALL BE NOTIFIED IMMEDIATELY WHENEVER THE FIRE PROTECTION / ALARM SYSTEM IS RENDERED OUT OF SERVICE. A FIRE WATCH SHALL BE STAGED WHENEVER THE BUILDING IS OCCUPIED (PARTIAL OR WHOLE) PER DSA IR F-2 AND CFC 901.7.

SCOPE OF WORK

PROVIDE COMPLETE FULL CAMPUS AUTOMATIC ADDRESSABLE FIRE ALARM SYSTEM WITHIN THE AREA OF WORK. PROVIDE FIRE ALARM SYSTEM DEVICES AS SHOWN IN EQUIPMENT LEGEND, FLOOR PLANS, AND SPECIFICATIONS IN THIS CONSTRUCTION DOCUMENT SET. USE NEW FIRE ALARM CONTROL PANEL TO CONNECT NEW FIRE ALARM SYSTEM DEVICES SHOWN PER DRAWING AND SPECIFICATION DOCUMENT. UPON COMPLETION, A COMPLETE PRE TEST SHALL BE PERFORMED TO VERIFY FUNCTIONALITY, IF FUNCTIONALITY IS COMPLETE THEN THE PROPER DOCUMENTATION SHALL BE SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PRIOR TO SCHEDULING A FINAL INSPECTION.

ELEVATION MOUNTING DETAIL



NOTES:

THE ENTIRE LENS OF STROBE LIGHTS MUST BE BETWEEN 80" AND 96" ABOVE FLOOR FINISH (AFF)

IF CEILING HEIGHTS EXCEED 30 FEET, STROBE LIGHTS MUST BE SUSPENDED AT OR BELOW 30 FEET

MANUAL FIRE ALARM BOXES SHALL BE INSTALLED IN ACCORDANCE WITH 2022 CBC SECTIONS 907.4.2

MANUAL FIRE ALARM BOXES SHALL BE LOCATED NOT MORE THAN 5 FEET FROM THE ENTRANCE TO EACH EXIT. ADDITIONAL MANUAL FIRE ALARM BOXES SHALL BE LOCATED SO THAT THE TRAVEL DISTANCE TO THE NEAREST BOX DOES NOT EXCEED 200 FEET.

THE HEIGHT OF THE MANUAL FIRE ALARM BOXES SHALL BE A MINIMUM OF 42 INCHES AND A MAXIMUM OF 48 INCHES, MEASURED VERTICALLY, FROM THE FLOOR LEVEL TO THE HIGHEST POINT OF THE ACTIVATING HANDLE OR LEVER OF THE BOX. MANUAL FIRE ALARM BOXES SHALL ALSO COMPLY WITH 2022 CBC SECTION 11B-309.4.

PER NFPA 72 CHAPTER A.17.7.4.1 DETECTORS SHOULD NOT BE LOCATED IN ADIRECT AIRFLOW OR CLOSER THAN 36 IN. (910 MM) FROM AN AIR SUPPLY DIFFUSER OR RETURN AIR OPENING. SUPPLY OR RETURN SOURCES LARGER THAN THOSE COMMONLY FOUND IN RESIDENTIAL AND SMALL COMMERCIAL ESTABLISHMENT CAN REQUIRE GREATER CLEARANCE TO SMOKE DETECTORS. SIMILARLY, SMOKE DETECTORS SHOULD BE LOCATED FARTHER AWAY FROM HIGH VELOCITY AIR SUPPLIES.

SEQUENCE OF OPERATIONS

ACTION \ DEVICE	MANUAL PULL STATION	AREA SMOKE DETECTOR	HEAT DETECTOR	120VAC POWER FAILURE	SHORT CIRCUIT	GROUND FAULT	BATTERY FAILURE	POST INDICATOR VALVE TAMPER SWITCH	SPRINKLER VALVE TAMPER SWITCH	SPRINKLER WATER FLOW SWITCH	KITCHEN FIRE SUPPRES-SION
SOUND ALARM AT "FACP"	**YES**	**YES**	**YES**	NO	NO	NO	NO	NO	NO	**YES**	NO
SOUND TROUBLE BUZZER AT "FACP"	NO	NO	NO	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	NO	**YES**
ANNUNCIATE AT "FACP" AND THE REMOTE ANNUNCIATOR (ALARM OR TROUBLE)	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
ACTIVATE AUDIBLE / VISUAL ALARM SIGNAL THROUGHOUT BUILDING	**YES**	**YES**	**YES**	NO	NO	NO	NO	NO	NO	**YES**	**YES**
ACTIVATE HVAC UNIT SHUTDOWN AND/ OR CLOSE COMBINATION FIRE/SMOKE DAMPERS	NO	**YES**	**YES**	NO	NO	NO	NO	NO	NO	**YES**	NO
ACTIVATE SIGNAL FOR OFF-SITE MONITORING	**YES**	**YES**	**YES**	**YES**	NO	NO	NO	NO	NO	**YES**	**YES**
MUTE AUTONOMOUS LOCAL SOUND SYSTEM	**YES**	**YES**	**YES**	**YES**	NO	NO	NO	NO	NO	**YES**	**YES**

ANCHORAGE AND BRACING NOTES

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

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

MEP COMPONENT ANCHORAGE NOTE

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

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

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

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

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

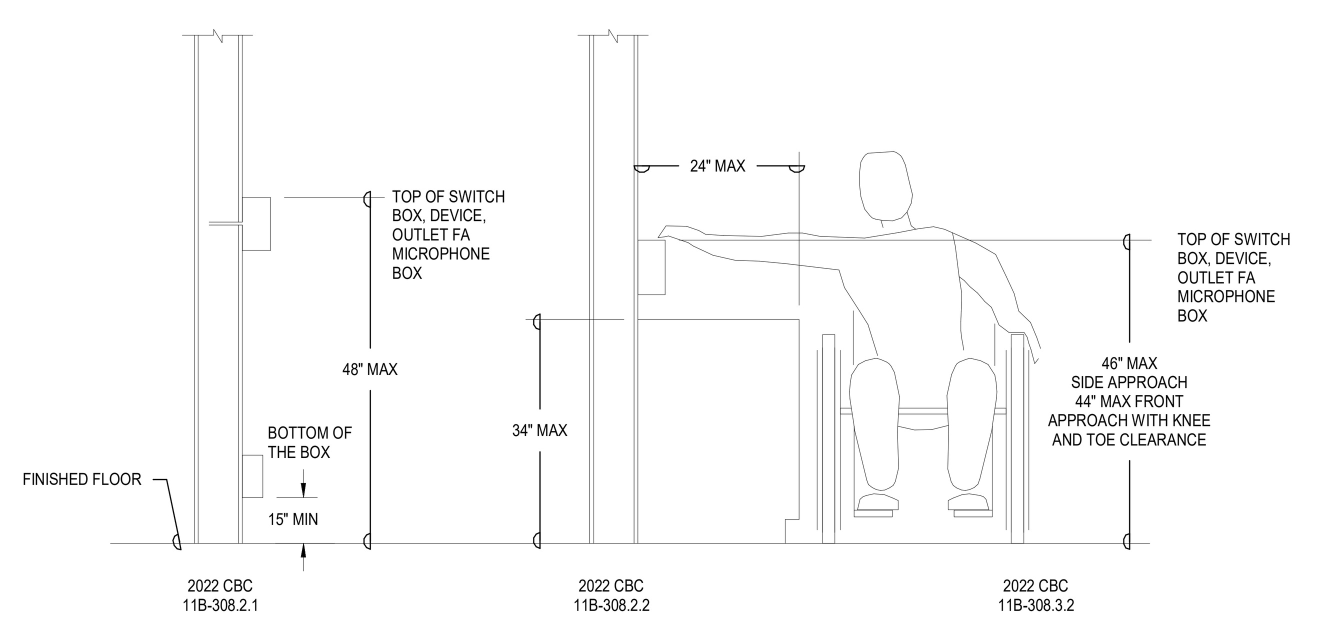
MECHANICALPIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

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

GENERAL NOTES

1. APPLICABLE STANDARD 2022, NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35
2. INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING STATE FIRE MARSHALL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPROVED BY DSA.
3. UPON COMPLETION OF SYSTEM INSTALLATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
4. A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
5. ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.
6. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.
7. ALL PENETRATIONS THROUGH RATED ASSEMBLIES REQUIRING OPENING PROTECTION SHALL BE PROVIDED WITH A PENETRATION FIRE STOP SYSTEM AS IDENTIFIED IN CBC CHAPTER 7, UL OR OTHER APPROVED LAB TESTING CRITERIA. APPROVED TYPES OF MATERIALS SHALL BE IDENTIFIED WITHIN THE PROJECT SPECIFICATIONS WITHIN THE FIRE ALARM SECTION.
8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.
9. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM FROM FINISHED FLOOR AND NO CLOSER THEN 6" TO A HORIZONTAL STRUCTURE.
10. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (DBA) ABOVE THE AVERAGE AMBIENT SOUND LEVEL OR FIVE DBA ABOVE THE MAXIMUM SOUND LEVEL HAVING A DURATION OF AT LEAST 60 SECONDS, WHICHEVER IS GREATER, IN EVERY OCCUPIABLE SPACE WITHIN THE BUILDING.
11. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.
12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.
13. VISIBLE DEVICES SHOULD NOT EXCEED TWO FLASHES PER SECOND AND SHOULD NOT BE SLOWER THAN ONE FLASH EVERY SECOND. THE DEVICE SHALL HAVE A PULSING LIGHT SOURCE NOT LESS THAN 15 CANDELLA. VISIBLE DEVICES WITHIN 55' FROM EACH OTHER SHALL BE SYNCHRONIZED.
14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.
15. ALL FIRE ALARM WIRING SHALL BE 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.
16. PER CEC STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY TO EACH FIRE DEVICE. DO NOT SPLICE THE WIRE. ALL BOXES TO BE SIZED PER CEC.
17. SMOKE DETECTORS SHALL NOT BE ANY CLOSER THAN 1' FROM FIRE SPRINKLERS OR 3' FROM ANY SUPPLY DIFFUSER. IN AREA OF CONSTRUCTION OR POSSIBLE DAMAGE/CONTAMINATION ON NEWLY INSTALLED FIRE ALARM, DEVICES SHALL BE COVERED UNTIL THAT AREA IS READY TO BE TURNED OVER TO THE OWNER.
18. ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT, SURFACE RACEWAY OR OPEN RUN ABOVE CEILINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS.
19. EXPOSED CIRCUITS ARE ONLY PERMITTED WHEN NOTED AS EXPOSED ON DESIGN DOCUMENTS.
20. 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.
21. 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.
22. THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED "SYSTEM RECORD OF COMPLETION" PER NFPA 72, FIGURE 7.8.2.
23. FIRE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTED AT 48" ABOVE THE FINISHED FLOOR.
24. 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. MICROPHONE USE INSTRUCTION SHALL BE PLACED NEXT TO MICROPHONE.
25. THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISORY MONITORING PER CBC SECTION 901.6.2.
26. SUPERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CORRECT SIGNALS IN CONJUNCTION WITH FINAL ACCEPTANCE TEST.
27. OWNER SHALL BE RESPONSIBLE FOR ESTABLISHING A FIRE SYSTEM MONITORING CONTRACT OR PROVISIONS.
28. ALL CARBON MONOXIDE SIGNALS SHALL SOUND A FOUR-PULSE TEMPORAL PATTERN PER NFPA 720, 5.8.6.5.1.
29. ALL EQUIPMENT SHALL BE U.L. AND C.S.F.M. LISTED.
30. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.
31. DO NOT DEVIATE FROM CONDUIT RUNS AS SHOWN ON FLOOR PLANS WITHOUT PRIOR APPROVAL FROM SYSTEM SUPPLIER. FACTORS SUCH AS EXCESSIVE VOLTAGE DROP, ADDITIONAL PARTS, ENGINEERING, ETC., THAT ARE A RESULT OF CONDUIT RUN DEVIATIONS SHALL BE THE SOLE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
32. ALL FAN SHUTDOWN FUNCTIONS, DAMPER CLOSURES, AND ASSOCIATED MECHANICAL SYSTEM FIRE ALARM I NTERFACE SHALL BE BY MECHANICAL CONTRACTOR.
34. ALL 120VAC POWER REQUIREMENTS FOR THE FIRE ALARM SYSTEM SHALL BE FURNISHED BY THE ELECTRICAL CONTRACTOR AND SHALL MEET ALL REQUIREMENTS OF THE AUTHORITIES HAVING JURISDICTION.
35. ALL FIRE ALARM DEVICE BACKBOXES, FIRE ALARM TERMINAL CABINETS, GUTTERS, JUNCTION BOXES, AND ASSOCIATED CONDUITS SHALL BE FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED. REFER TO FIRE ALARM SYMBOL LIST AND/OR MOUNTING DETAILS FOR ADDITIONAL INFORMATION. SYSTEM SUPPLIER PROVIDED BACKBOXES SHALL BE INSTALLED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE NOTED.
36. SMOKE DETECTOR TESTING SHALL BE ACCOMPLISHED PER THE MANUFACTURER'S INSTRUCTIONS.
37. ALL WIRING, INITIATING DEVICES AND ANNUNCIATOR PANEL SHALL BE SUPERVISED TO THE PRINCIPAL POINT OF ANNUNCIATION. THE FIRE ALARM CONTROL PANEL TO SUPERVISE THE ANNUNCIATOR PANEL, ALL INITIATING AND INDICATING DEVICE CIRCUITS.
38. ALL WIRING SHALL BE CUT FOR IN AND OUT. WIRING SHALL NOT BE LOOPED THROUGH DEVICES.
39. POINT, COMMON ANNUNCIATION, AND T-TAPPING ARE PROHIBITED.
40. PROVIDE 3/4" CONDUIT FROM FIRE ALARM CONTROL PANEL TO TELEPHONE BACKBOARD FOR OWNER PROVIDED CENTRAL STATION MONITORING.
41. ALL CONDUIT SHALL BE 3/4" UNLESS OTHERWISE NOTED.
42. ALL FLOW SWITCHES SHALL BE 2 WIRE WITH NON-ELECTRONIC RETARD TYPE SIMILAR TO THE SYSTEM SENSOR MODEL "WFD SERIES" ONLY.
43. ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
44. FIRE ALARM SYSTEM SHALL BE UL LISTED (UUJS).
45. CBC 907.6.6.3 (SFM AMENDMENT) REQUIRES FIRE ALARM TO... "TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISORY STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISORY STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE AND PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF STANDARD, FM 3011)."
46. SUBSTITUTION OF SYSTEM COMPONENTS OR MANUFACTURER WILL REQUIRE THE CONTRACTOR TO SEPARATELY OBTAIN APPROVAL WITH THE DSA AT CONTRACTOR'S EXPENSE AND SHALL MEET ALL REQUIREMENTS OF THE SYSTEM AS DESIGNED AND PRE-APPROVED. ALL PROPOSED SUBSTITUTIONS SHALL BE LISTED WITH THE CALIFORNIA STATE FIRE MARSHAL.
47. FINAL ACCEPTANCE TEST TO INCLUDE TESTING THE CONNECTION BETWEEN THE FIRE ALARM PANEL AND THE SUPERVISING STATION.
48. COORDINATE WITH THE ENGINEER FOR USE OF EXISTING CONDUIT ON A CASE BY CASE BASIS.
49. PRIOR TO DEMOLITION, CONTRACTOR SHALL TEST THE INTERCOM SYSTEM TO ENSURE FULL FUNCTIONALITY. GENERATE A LIST OF FAULTY EQUIPMENT AND PROVIDE TO THE OWNER AND THE ARCHITECT. PROVIDE PRICING FOR ANY REQUIRED EQUIPMENT REPAIRS OR REPLACEMENT.
50. CONTRACTOR SHALL DISCONNECT EXISTING FIRE ALARM SYSTEM FROM THE EXISTING INTERCOM SYSTEM. ENSURE THE INTERCOM SYSTEM IS COMPLETELY FUNCTIONAL AFTER DISCONNECTION.
51. CONTRACTOR SHALL CLEARLY MARK THE ABANDON SECTION OF PUBLIC ADDRESS SYSTEM.
52. PROVIDE A FIRE ALARM DOCUMENTATION CABINET PER NFPA72,7.7.
53. FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CBC CHAPTER 33 AND CFC CHAPTER 33.
54. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE DSA APRROVED DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATION CHANGE DOCUMENT, OR A SEPERATE SET OF PLANS AND SPECIFICATIONS,DETAILING AND SPECIFYING THE REQUIRED REPAIR WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE REPAIR WORK (CAC 4-317(C)).
55. CHANGES TO THE DIVISION OF THE STATE ARCHITECT APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS FOR CHANGES TO THE STRUCTURAL, ACCESSIBILITY OR FIRE -SAFETY PORTIONS OF THE PROJECT. CHANGES SHALL BE SUBMITTED TO AND APPROVED BY DSA PRIOR TO COMMENCEMENT OF THE WORK SHOWN THEREON CAC 4-338(C)).
56. PROJECT INSPECTOR TO APPROVE SYSTEM VOICE-EVACUATION INTELLIGIBILITY DURING TESTING PHASE.
57. CONTRACTOR SHALL PROVIDE ALL CABLING, RELAYS, MOUNTING HARDWARE AND ANY OTHER DEVICES (FIRE ALARM SYSTEM DEVICES) TO PROVIDE A FULLY FUNCTIONING FIRE ALARM OVERRIDE SYSTEM. WHEN FIRE ALARM CEASES, EACH LOCAL SOUND SYSTEM SHALL AUTOMATICALLY REVERT TO NORMAL OPERATION. FIRE ALARM MODULES AND CABLING BY FIRE ALARM CONTRACTOR.
58. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
59. NOTIFICATION APPLIANCES USED FOR SIGNALING OTHER THAN FIRE SHALL NOT HAVE THE WORD "FIRE" OR ANY FIRE SYMBOL, IN ANY FORM (I.E., STAMPED, IMPRINTED, ETC.) ON THE APPLIANCE VISIBLE TO THE PUBLIC. NOTIFICATION APPLIANCES WITH MULTIPLE VISIBLE ELEMENTS SHALL BE PERMITTED TO HAVE FIRE MARKING ONLY ON THOSE VISIBLE ELEMENTS USED FOR FIRE SIGNALING. PER NFPA 72, 18.3.3.2/ NFPA 720, 6.3.3.2/ IR 9-2, 5.4.4 & 5.4.5.
60. AUTOMATIC FIRE ALARM SYSTEMS SHALL BE MONITORED AND SHALL TRANSMIT THE ALARM, SUPERVISORY AND TROUBLE SIGNALS TO AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. THE SUPERVISING STATION SHALL BE LISTED AS EITHER UUFX (CENTRAL STATION) OR UUJS (REMOTE & PROPRIETARY) BY THE UNDERWRITERS LABORATORY INC. (UL) OR OTHER APPROVED LISTING AND TESTING LABORATORY OR SHALL COMPLY WITH THE REQUIREMENTS OF FM 3011. TERMINATION OF MONITORING SERVICES SHALL BE IN ACCORDANCE WITH SECTION 907.6.6.2.
61. THE NEW PROJECT SUBMITTAL TO INCLUDE DIRECTION THAT FIRE ALARM SYSTEM RECORD OF COMPLETION AND FIRE ALARM SYSTEM RECORD OF INSPECTION AND TESTING FORM THESE TWO DOCUMENTS FROM NFPA 72 ARE TO BE COMPLETED AND SUBMITTED PRIOR TO CLOSE OUT OF THE PROJECT. A COPY OF COMPLETED AND SIGNED FORM SHALL BE GIVEN TO THE ARCHITECT OR ENGINEER OF RECORD, THE PROJECT INSPECTOR, THE OWNER (SCHOOL DISTRICT) AND LOCAL FIRE AUTHORITY.
62. INTELLIGIBILITY SHALL BE TESTED ACCORDING TO NFPA 72 ANNEX D.2 (SPEECH INTELLIGIBILITY).
63. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DISTRICT STRUCTURAL ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.

MOUNTING OVER OBSTRUCTION DETAIL



NOTES:

1. THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AND ELECTRICAL DEVICE WHICH CONTAINS AN OPERABLE PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES NOT APPLY TO SENSORS OR CONTROLS THAT ARE ONLY ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM (IE: TEMPERATURE AND HUMIDITY SENSORS).
2. FORWARD OR FRONT APPROACH FOR DEVICES MOUNTED ABOVE COUNTERS ASSUMES THAT DIRECTLY BELOW THE DEVICE, THE COUNTER HAS A 30"MIN. WIDTH x27" HIGH x19" MIN. DEEP CLEAR OPENING. CBC SECTIONS 11B-306 & 11B-308.

FIRE ALARM REQUIREMENTS

THE CONTRACTOR SHALL PROVIDE AND SUBMIT THE FIRE ALARM SHOP DRAWINGS TO THE ARCHITECT FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION OF THE FIRE ALARM SYSTEM. THE SUBMITTAL SHALL CONTAIN THE FOLLOWING:

A. SHOP DRAWINGS: COMPLETE 1/8" SCALE FLOOR PLANS SHOWING ALL DEVICES, COMPONENTS, CONDUIT AND WIRING INDICATING A COMPLETE AND OPERABLE SYSTEM AS DESIGNED AND SPECIFIED. REPRODUCED COPIES OF BID SET FIRE ALARM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST ALSO INDICATE DEVICE MOUNTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.
B. ELECTRICAL CONTRACTOR'S AND FIRE ALARM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.
C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS.
D. ORIGINAL COPIERS OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.
E. VOLTAGE DROP CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE:
   1. POINT-TO-POINT OR OHMS LAW CALCULATIONS.
   2. IDENTIFICATION OF ZONE USED IN CALCULATIONS.
   3. VOLTAGE DROP PERCENT (NOT TO EXCEED MANUFACTURERS' REQUIREMENTS).
      a. NOTE: IF VOLTAGE DROP EXCEEDS 10%, INDICATE MANUFACTURERS' LISTED OPERATING RANGE(S) OR EQUIPMENT AND DEVICES.
   4. NOTE CIRCUIT NUMBER FOR WORST CASE CALCULATION.
F. BATTERY TYPE(S), AMPS HOURS AND LOAD CALCULATIONS -- INCLUDE THE FOLLOWING INFORMATION:
   1. NORMAL OPERATION: 100% OF APPLICABLE DEVICES FOR 24 HOURS = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER -- I.E.:
      a. ZONE MODULES
      b. DETECTORS
      c. OTHER DEVICES (IDENTIFY)
   2. ALARM CONDITION: 100% OF APPLICABLE DEVICES FOR 15 MINUTES = CONTROL PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER -- I.E.:
      a. ZONE MODULES
      b. SIGNAL MODULES
      c. DETECTORS
      d. SIGNAL DEVICES
      e. ANNUNCIATOR
      f. OTHER DEVICES (IDENTIFY)
   3. NORMAL OPERATION + ALARM OPERATION
      a. TOTAL AMP HOURS REQUIRED.
      b. TOTAL AMP HOURS PROVIDED.

10% OF EXISTING FIRE ALARM DEVICES AND APPLIANCES SHALL BE ADDED TO THE NEW FIRE ALARM DEVICES AND APPLIANCES FOR TESTING.

WIRE SCHEDULE

WIRE DESIGNATION	WIRE IN CONDUIT	WIRE IN CONDUIT UNDERGROUND/WET LOC.	UNDERGROUND/WET WIRE DESIGNATION
INIT. LOOP Z	2 CONDUCTOR #16 FPL TWISTED/ SHIELDED WEST PENN #D991	2 CONDUCTOR #16 FPLP SHIELDED WEST PENN #AQ-294	INIT. LOOP Z
SBUS B	4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	SBUS B
VBUS C	2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	VBUS C
SPEAKER CKT. S	2 CONDUCTOR #14 THHN/THWN STRANDED	2 CONDUCTOR #14 THHN/THWN STRANDED	SPEAKER CKT. S
VISUAL CKT. V	2 CONDUCTOR #12 THHN/THWN STRANDED	2 CONDUCTOR #12 THHN/THWN STRANDED	VISUAL CKT. V
POWER CKT. P	2 CONDUCTOR #12 THHN/THWN STRANDED	2 CONDUCTOR #12 THHN/THWN STRANDED	POWER CKT. P

NOTE:
ALL WIRE MODEL NUMBERS ARE WEST PENN.
EQUIVALENT BY OTHER MANUFACTURER IS ACCEPTABLE.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

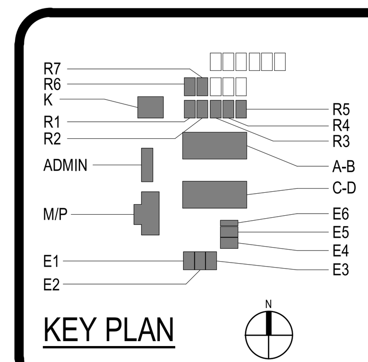
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT EST. 1872



KEY PLAN NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER RONALD C DELA CRUZ No. E 23576 Exp. 09-30-2025 ELECTRICAL STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

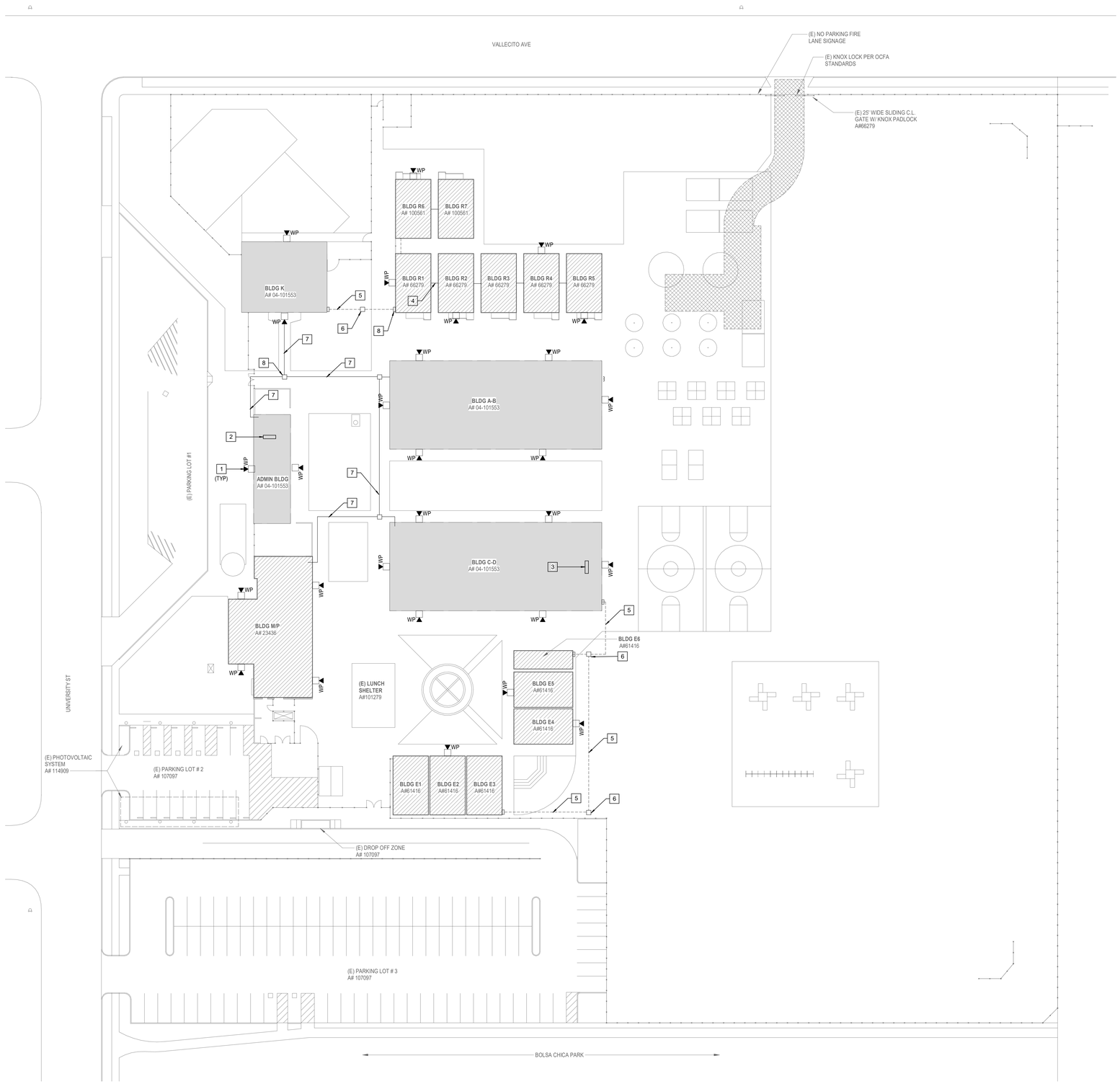
DSA Submittal

FIRE ALARM SCHEDULE, NOTES, AND ABBREVIATIONS

FA0.00

FA1.01 - FIRE ALARM SITE PLAN

0" 1"



NORTH

1 SITE PLAN
1" = 30'-0"

KEY NOTES

1. PROVIDE NEW FIRE ALARM WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP).
2. PROVIDE NEW FIRE ALARM CONTROL PANEL, FIRE ALARM POWER SUPPLY AND TERMINAL CABINEL AS SHOWN. FIELD VERIFY THE EXACT LOCATION.
3. PROVIDE FIRE ALARM POWER SUPPLY AND TERMINAL CABINET AS SHOWN.
4. PROVIDE 2" CONDUIT FLEXIBLE LIQUID TIGHT SLEEVE AT ATTIC SPACE HEIGHT.
5. SAWCUT AND TRENCH EXISTING ASPHALT. PROVIDE (2) 2" UNDERGROUND CONDUIT (PVC, SCHEDULE 40, 24" BELOW GRADE).ONE CONDUIT IS FOR SPARE AND FIRE ALARM CABLE AS INDICATED. BACK FILL TO MATCH EXISTING SURFACES. RUN CONDUIT IN DIRT/PLANNER AREA AS MUCH AS POSSIBLE.
6. PROVIDE CONCRETE UNDERGROUND PULL BOXES AS 11" X 17" X 18" DEEP ON A 6" DEEP GRAVEL BASE.
7. PROVIDE OVERHEAD CONDUIT ABOVE CEILINGS SPACES AND/OR ABOVE COVERED WALKWAY.
8. PROVIDE NEMA 3R WEATHERPROOF PULLBOX 18"x18"X6" FOR FIRE-ALARM.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

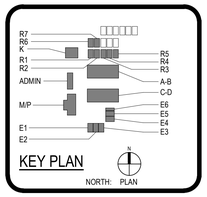
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 23576
12-31-24
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

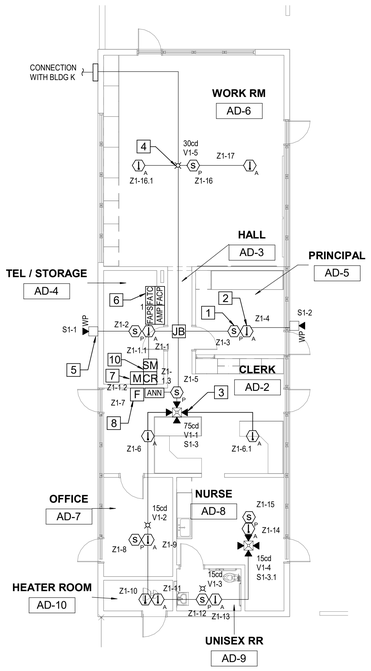
No.	Description	Date
	DSA Submittal	

FIRE ALARM SITE PLAN

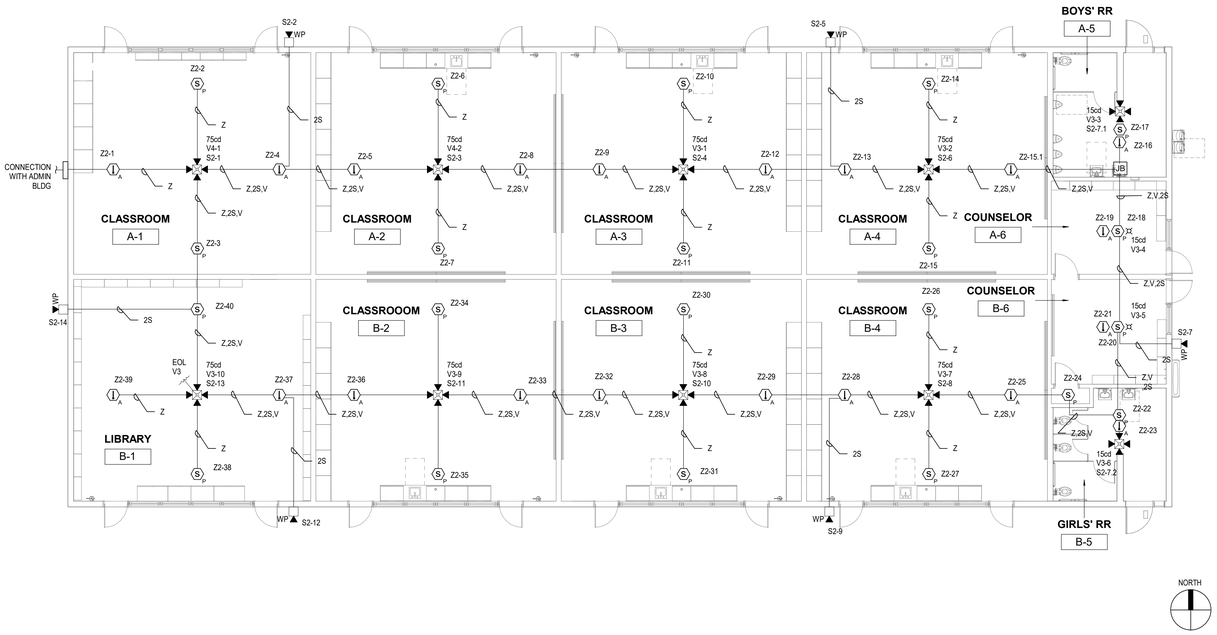
FA1.01

FILE PATH: Z:\Projects\...
9/13/2023 5:26:01 PM

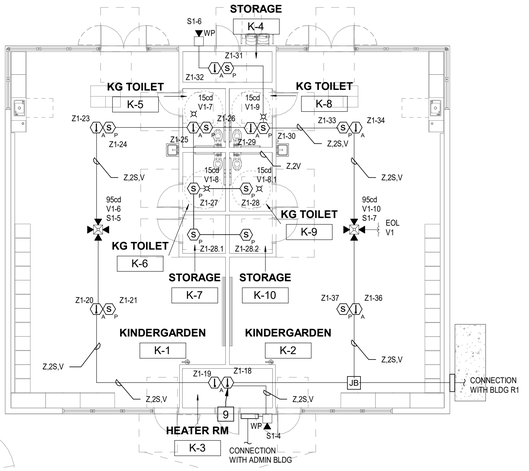
0" 1"



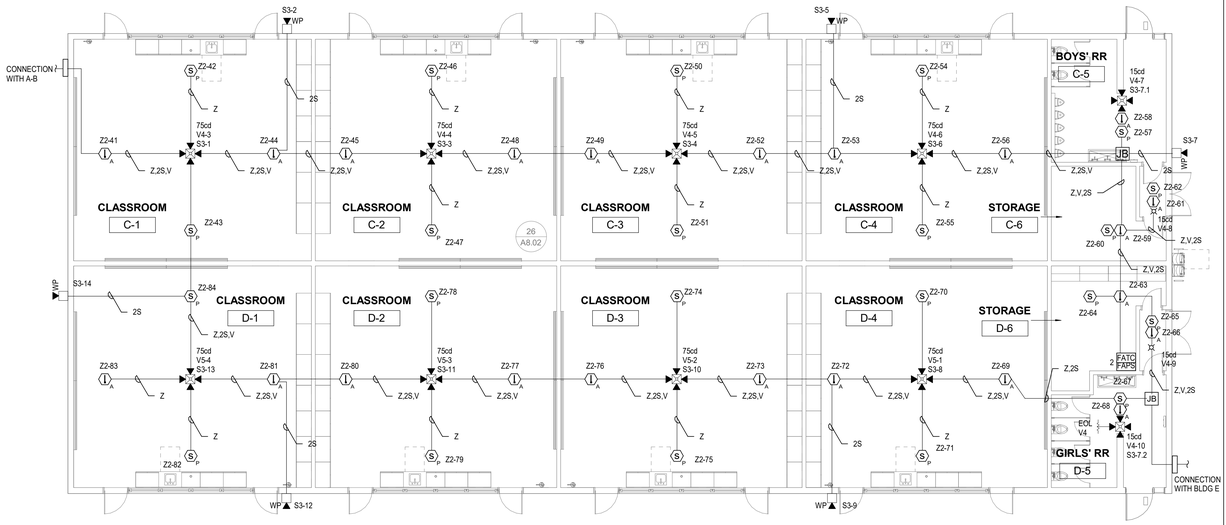
4 FLOOR PLAN - BLDG 'ADMIN'
1/8" = 1'-0"



2 FLOOR PLAN - BLDG 'A-B'
1/8" = 1'-0"



3 FLOOR PLAN - BLDG 'K'
1/8" = 1'-0"



1 FLOOR PLAN - BLDG 'C-D'
1/8" = 1'-0"

GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
3. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS PER CBC 907.2.11.8.
4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
5. EXISTING FIRE ALARM SYSTEM SHALL BE OPERATIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
6. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC. COORDINATE LOCATIONS IN FIELD. SEE DETAIL 4/A8.03 FOR CEILING PANEL

KEY NOTES

1	PROVIDE FIRE ALARM ADDRESSABLE SMOKE DETECTOR AS SHOWN (TYP).
2	PROVIDE FIRE ALARM ADDRESSABLE ATTIC HEAT DETECTOR AS SHOWN (TYP).
3	PROVIDE FIRE ALARM CEILING MOUNTED SPEAKER STROBE AS SHOWN (TYP).
4	PROVIDE FIRE ALARM CEILING MOUNTED STROBE DEVICE AS SHOWN (TYP).
5	PROVIDE FIRE ALARM WALL MOUNTED WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP).
6	PROVIDE NEW FIRE ALARM CONTROL PANEL, NEW POWER SUPPLY PANEL, NEW TERMINAL CABINET, NEW AMPLIFIER AND NEW FIRE ALARM TERMINAL CABINET AS SHOWN.
7	PROVIDE CONTROL RELAY AND MONITOR MODULE FOR FIRE ALARM OVERRIDE OF LOCAL SOUND SYSTEMS.
8	PROVIDE FIRE ALARM ANNUNCIATOR AS SHOWN. PROVIDE FIRE ALARM ADDESSABLE PULL STATION AS SHOWN NEXT TO THE NEW ANNUNCIATOR PANEL AS SHOWN.
9	PROVIDE CEILING MOUNTED HEAT DETECTOR AS SHOWN (TYP).
10	PROVIDE SUPERVISORY MONITOR MODULE TO MONITOR THE CONNECTION BETWEEN POWER SUPPLY AND FIRE ALARM CONTROL PANEL AS SHOWN.

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

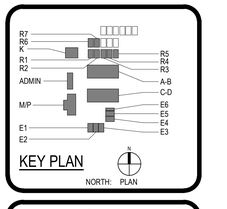
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 25578
Exp. 09-30-2025
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

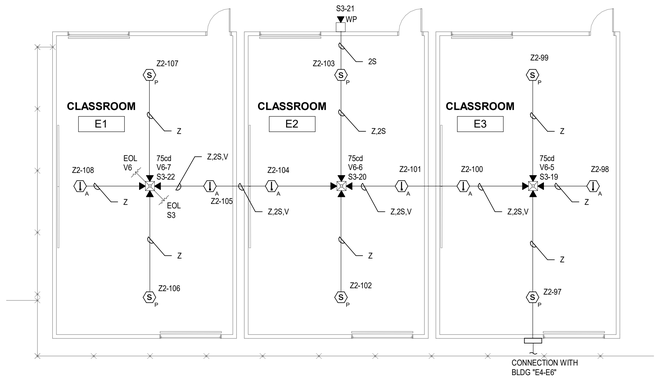
DSA Submittal

FIRE ALARM BLDG 'A-B', 'C-D', 'ADMIN' & 'K' FLOOR PLANS

FA2.01

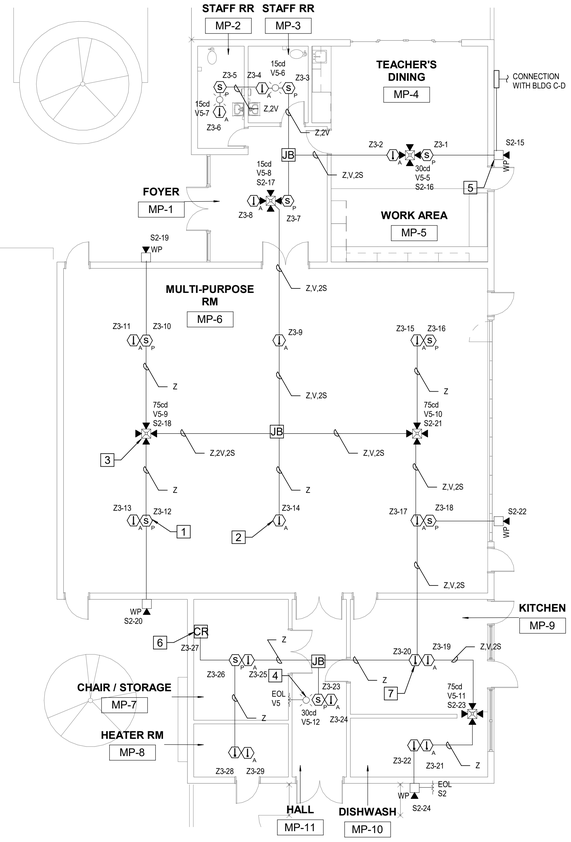
FILE PATH: Z:\Projects\...
9/13/2023 5:26:05 PM

0" 1"

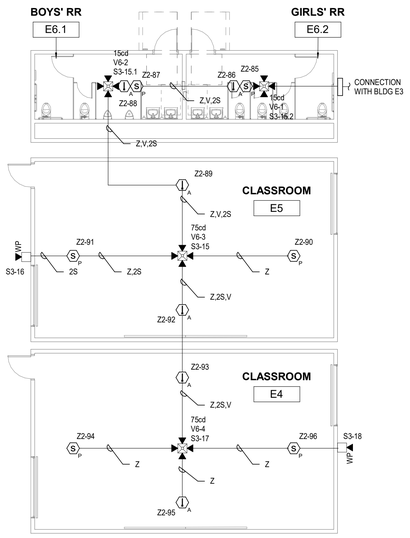


NORTH

2 FLOOR PLAN - BLDG 'E1-E3'
1/8" = 1'-0"



NORTH



NORTH

3 FLOOR PLAN - BLDG 'E4-E6'
1/8" = 1'-0"

1 FLOOR PLAN - BLDG 'M/P'
1/8" = 1'-0"

GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
3. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS PER CBC 907.2.11.8.
4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
5. EXISTING FIRE ALARM SYSTEM SHALL BE OPERATIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
6. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR. SERVICING, TROUBLESHOOTING, ETC. COORDINATE LOCATIONS IN FIELD. SEE DETAIL 4/A8.03 FOR CEILING PANEL

KEY NOTES

1. PROVIDE FIRE ALARM ADDRESSABLE SMOKE DETECTOR AS SHOWN (TYP).
2. PROVIDE FIRE ALARM ADDRESSABLE ATTIC HEAT DETECTOR AS SHOWN (TYP).
3. PROVIDE FIRE ALARM CEILING MOUNTED SPEAKER STROBE AS SHOWN (TYP).
4. PROVIDE FIRE ALARM CEILING MOUNTED STROBE DEVICE AS SHOWN (TYP).
5. PROVIDE FIRE ALARM WALL MOUNTED WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP).
6. PROVIDE FIRE ALARM CONTROL RELAYS TO SHUT DOWN THE MECHANICAL UNITS AS SHOWN (TYP). CONTRACTOR TO FIELD VERIFY THE EXACT LOCATION.
7. PROVIDE CEILING MOUNTED HEAT DETECTOR AS SHOWN (TYP).

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

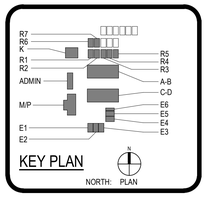
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELA CRUZ
No. E 25578
Exp. 09-30-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

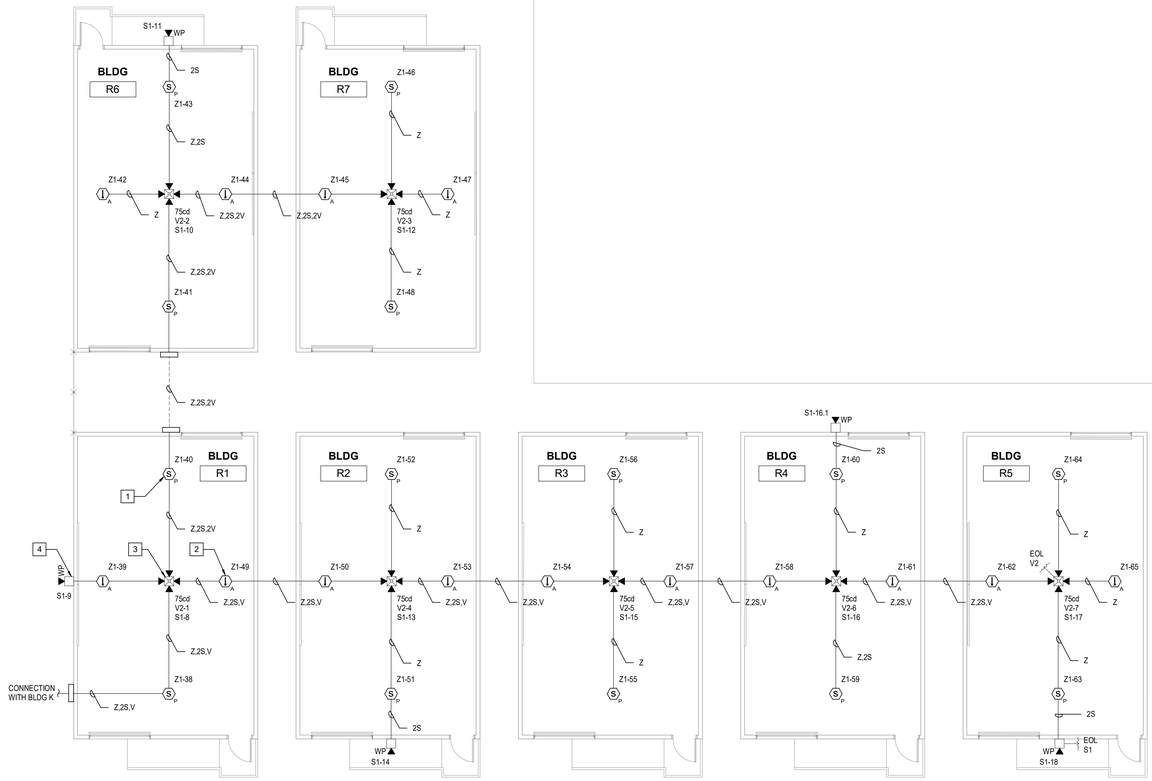
DSA Submittal

FIRE ALARM BLDG 'M/P', 'E1-E3', & 'E4-E6' FLOOR PLANS

FA2.02

FILE PATH: Z:\Projects\...
9/13/2023 5:26:07 PM

0" 1"



GENERAL NOTES

1. ALL SPEAKER TAP SETTING SHALL BE SET AT 1/2 WATT FOR INTERIOR SPEAKER AND 2 WATT FOR EXTERIOR SPEAKERS UNLESS NOTED OTHERWISE (U.N.O.)
2. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
3. SMOKE ALARMS AND SMOKE DETECTORS SHALL NOT BE INSTALLED WITHIN 36 IN. (910 MM) HORIZONTAL PATH FROM THE SUPPLY REGISTERS OF A FORCED AIR HEATING OR COOLING SYSTEM AND SHALL BE INSTALLED OUTSIDE OF THE DIRECT AIRFLOW FROM THOSE REGISTERS PER CBC 907.2.11.8.
4. DEMOLISH AND REMOVE ALL THE EXISTING FIRE ALARM DEVICES WHETHER SHOWN ON THE PLAN OR NOT AND REPLACE WITH BLANK COVER PLATES IF NECESSARY. DISCONNECT AND REMOVE ALL THE EXISTING CABLES BACK TO CONTROL PANEL.
5. EXISTING FIRE ALARM SYSTEM SHALL BE OPERATIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
6. FOR ALL HEAT DETECTORS THAT ARE LOCATED ABOVE CEILING/ATTIC SPACES, CONTRACTOR SHALL PROVIDE STICKER AND LABEL "HD" AT THE REFLECTED CEILING DIRECTLY BELOW THE DEVICE TO INDICATE LOCATION.
7. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.

KEY NOTES

1. PROVIDE FIRE ALARM ADDRESSABLE SMOKE DETECTOR AS SHOWN (TYP).
2. PROVIDE FIRE ALARM ADDRESSABLE ATTIC HEAT DETECTOR AS SHOWN (TYP).
3. PROVIDE FIRE ALARM CEILING MOUNTED SPEAKER STROBE AS SHOWN (TYP).
4. PROVIDE FIRE ALARM WALL MOUNTED WEATHERPROOF SPEAKER DEVICE AS SHOWN (TYP).

NORTH

1 FLOOR PLAN - PORTABLE BUILDINGS
1/8" = 1'-0"

FILE PATH: Z:\Projects\...
9/13/2023 5:26:08 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

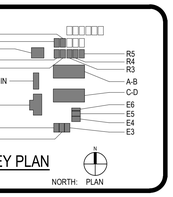
CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
No. E 25578
Exp. 09-30-2024
RONALD C DELA CRUZ
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

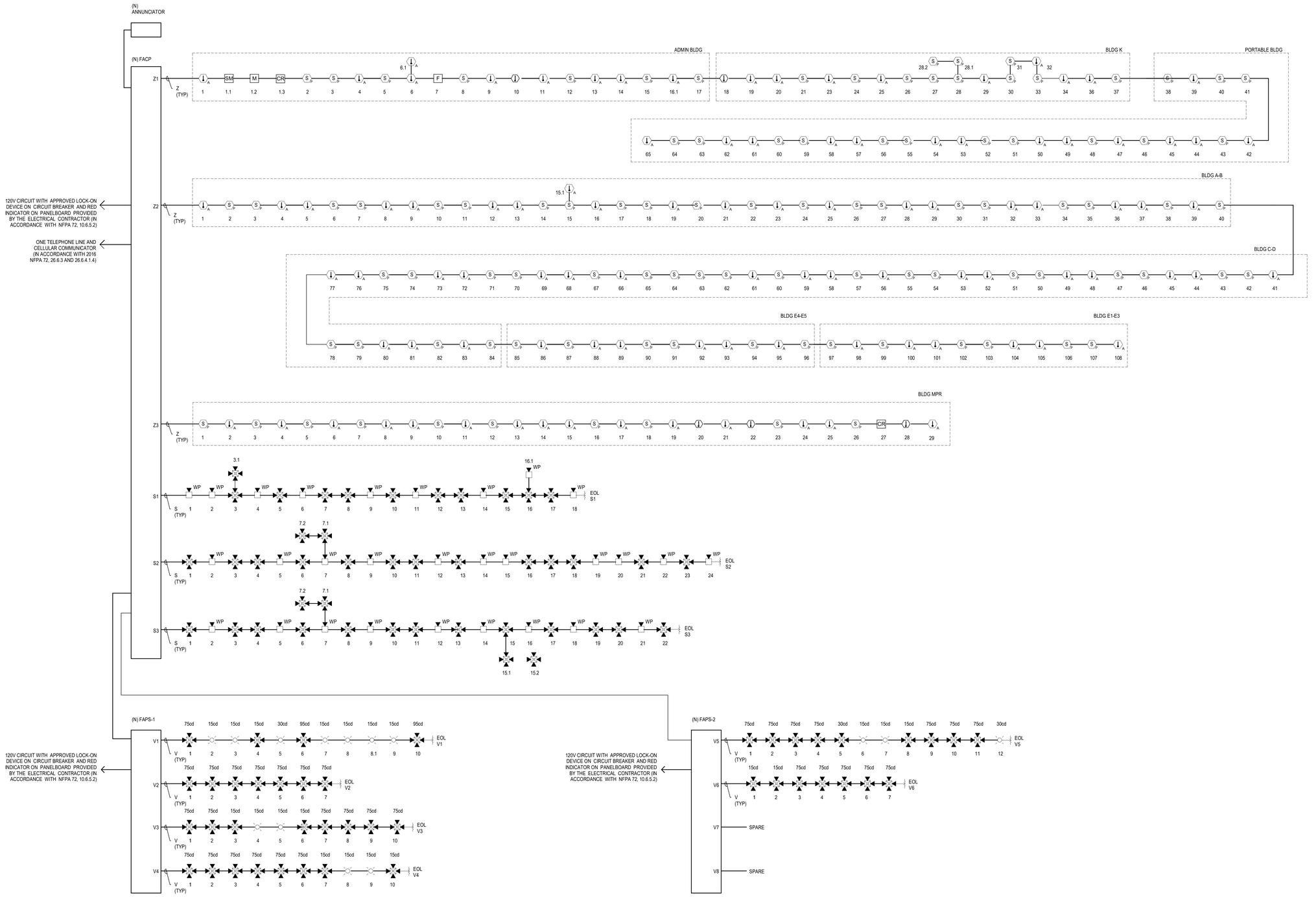
DSA Submittal

FIRE ALARM PORTABLE BUILDINGS

FA2.03

FA5.01 - FIRE ALARM RISER DIAGRAM

0" 1"



1 FIRE ALARM RISER DIAGRAM
NOT TO SCALE

FILE PATH: Z:\Projects\...
9/13/2023 5:26:09 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
BLDG
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

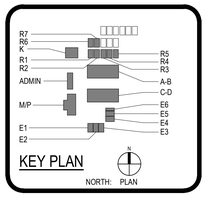
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA FILE NO.: 30-43
DSA APPL NO.: 04-121953

WESTMINSTER SCHOOL DISTRICT



Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DE LA CRUZ
No. E 23076
Exp. 6-30-24
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

FIRE ALARM RISER DIAGRAM

FA5.01

0" 1"

FACP BATTERY CALCULATION SHEET

FACP
LOCATION: ADMIN

QUANTITY		UNIT STANDBY CURRENT(A)	TOTAL STANDBY CURRENT(A)	UNIT ALARM CURRENT(A)	TOTAL ALARM CURRENT(A)
1	MAIN BOARD	0.23000	0.23000	0.45000	0.45000
1	SUPPLEMENT BOARD	0.08100	0.08100	0.15000	0.15000
1	INTERFACE MAIN BOARD	0.05000	0.05000	0.09100	0.09100
1	INTERFACE SUPPLEMENT BOARD	0.05000	0.05000	0.09100	0.09100
1	120V POWER SUPPLY SUB-ASSEMPLY	0.04000	0.04000	0.16000	0.16000
1	DIGITAL COMMUNICATOR (DACT-E3)	0.01800	0.01800	0.01800	0.01800
1	ANNUNCIATOR	0.02500	0.02500	0.05000	0.05000
1	REMOTE PAGING UNIT	0.00700	0.00700	0.00100	0.00100
1	FIRE PHONE CARD	0.05300	0.05300	0.07500	0.07500
1	AMPLIFIER	0.11000	0.11000	1.20000	1.20000
98	SMOKE DETECTOR	0.00019	0.01862	0.00019	0.01862
109	HEAT DETECTOR	0.00020	0.02169	0.00200	0.21800
1	PULL STATION	0.00035	0.00035	0.00035	0.00035
1	SYNC MODULE	0.00400	0.00400	0.00400	0.00400
0	CO DETECTOR SOUNDER BASE	0.05000	0.00000	0.03500	0.00000
1	MONITOR MODULE	0.00039	0.00039	0.00038	0.00038
2	RELAY MODULE	0.00030	0.00060	0.00550	0.01100
	SUB TOTAL		0.710		2.538
	STANDBY CURRENT x 24 Hrs. (AH)		17.032	AH	
	ALARM CURRENT x 15 MINUTES (AH)		0.635	AH	
	TOTAL (AH)		17.666	AH	
	25% DERATING		4.417	AH	
	TOTAL DEMAND (AH)		22.083	AH	
	BATTERY REQUIRED		55	AH	

BATTERY CAPACITY CALCULATION SHEET

FAPS-1

QUANTITY	Description	Unit Standby Current(A)	Total Standby Current(A)	Unit Alarm Current(A)	Total Alarm Current(A)
1	NAC TRIP	0.040	0.040	0.160	0.160
10	15cd ceiling strobes	0.000	0.000	0.071	0.710
1	30cd ceiling strobes	0.000	0.000	0.096	0.096
5	15cd ceiling speaker/strobe	0.000	0.000	0.060	0.300
20	75cd ceiling speaker/strobe	0.000	0.000	0.142	2.840
2	95cd ceiling speaker/strobe	0.000	0.000	0.164	0.328
	Sub Total		0.040		4.434
	A - Battery Backup - Standby (Hour)	24			
	B - Battery Backup (minutes)	15			
	C - Allowable Error (%)	25			
	D - Total Standby Backup (Amp-Hour)	0.960			
	E - Total Alarm Backup (Amp-Hour)	1.109			
	F - Allowable Error (C x (D + E))	0.517			
	Total Amp-Hour Required (D + E + F)	2.586			
	Battery Submitted	7 Amp-Hour			

BATTERY CAPACITY CALCULATION SHEET

FAPS-2

QUANTITY	Description	Unit Standby Current(A)	Total Standby Current(A)	Unit Alarm Current(A)	Total Alarm Current(A)
1	NAC TRIP	0.040	0.040	0.160	0.160
2	15cd ceiling strobes	0.000	0.000	0.071	0.142
1	30cd ceiling strobes	0.000	0.000	0.096	0.096
3	15cd ceiling speaker/strobe	0.000	0.000	0.060	0.180
1	30cd ceiling speaker/strobe	0.000	0.000	0.086	0.086
12	75cd ceiling speaker/strobe	0.000	0.000	0.142	1.704
	Sub Total		0.040		2.368
	A - Battery Backup - Standby (Hour)	24			
	B - Battery Backup (minutes)	15			
	C - Allowable Error (%)	25			
	D - Total Standby Backup (Amp-Hour)	0.960			
	E - Total Alarm Backup (Amp-Hour)	0.592			
	F - Allowable Error (C x (D + E))	0.388			
	Total Amp-Hour Required (D + E + F)	1.940			
	Battery Submitted	7 Amp-Hour			

SPEAKER CIRCUIT LOAD CALCULATION

MFG. REC. MAXIMUM LOSS IS: -0.5dB

SPEAKER CIRCUIT DESCRIPTION		PANEL CIRCUIT NUMBER	WIRE GAUGE (18, 16,14 12)	CIRCUIT VOLTAGE (25 OR 70 VRMS)	APPLIANCES QUANTITIES / TAP VALUES				TOTAL CIRCUIT LOAD (WATT)	ESTIMATED CIRCUIT LENGTH (FEET)	ACTUAL WIRE/LOSS (dB)	MAXIMUM ALLOWABLE CKT, LENGTH (FEET)	TOTAL CIRCUIT RESISTANCE (OHMS)
AMPLIFIER#	CIRCUIT LOCATION				SPEAKER TAPPED AT 0.25 WATTS	SPEAKER TAPPED AT 0.5 WATTS	SPEAKER TAPPED AT 1 WATTS	SPEAKER TAPPED AT 2 WATTS					
AMP 1	ADMIM, BLDG K, BLDG R	S1	14 AWG	70		11		9	23.50	810	-0.18	1,950	4.17
	BLDG A-B, MPR	S2	14 AWG	70		15		11	29.50	950	-0.27	2,415	4.89
	BLDG C-D, BLDG E	S3	14 AWG	70		17		9	26.50	800	-0.20	2,200	4.12
	(SPARE)	S4	14 AWG	70					0.00				0.00
								TOTAL	79.50				

STROBES WORST CASE VOLTAGE DROP

PANEL NAME	CIRCUIT NUMBER	CEILING STROBE 15cd 0.071	30cd 0.096	75cd 0.153	95cd 0.176	CEILING SPEAKER/STROBE 15cd 0.060	30cd 0.086	75cd 0.142	95cd 0.164	TOTAL CURRENT (AMPS)	TOTAL DISTANCE (FEET)	TOTAL VOLTAGE DROP (%)	TOTAL DEVICES
FAPS-1	V1	6	1			1		1	2	1.052	420	6.09%	11
	V2							7		0.994	600	8.22%	7
	V3	2				2		6		1.114	500	7.68%	10
	V4	2				2		6		1.114	510	7.83%	10
TOTAL		10	1	0	0	5	0	20	2				
FAPS-2	V5	2	1			1	1	7		1.378	442	8.39%	12
	V6					2		5		0.830	430	4.92%	7
	V7									0.000		0.00%	0
	V8									0.000		0.00%	0
TOTAL		2	1	0	0	3	1	12	0				

BATTERY CALCULATION SHEET

AMP-1
LOCATION: ADMIN. BUILDING

QUANTITY		UNIT STANDBY CURRENT(A)	TOTAL STANDBY CURRENT(A)	UNIT ALARM CURRENT(A)	TOTAL ALARM CURRENT(A)
1	50 WATT AMPLIFIER	0.110	0.110	1.2000	1.2000
43	SPEAKER (1/2 W)	0.000	0.000	0.0071	0.3053
29	WP SPEAKER (2W)	0.000	0.000	0.1790	5.1910
	SUB TOTAL		0.110		6.696
	STANDBY CURRENT x 24 Hrs. (AH)		2.640	AH	
	ALARM CURRENT x 15 MINUTES (AH)		1.674	AH	
	TOTAL (AH)		4.314	AH	
	25% DERATING		1.079	AH	
	TOTAL DEMAND (AH)		5.393	AH	
	BATTERY REQUIRED		7	AH	

1 FIRE ALARM VOLTAGE DROP AND BATTERY CALCULATIONS
NOT TO SCALE

FILE PATH: Z:\Projects\...
9/13/2023 5:26:12 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



KEY PLAN
NORTH: PLAN

Consultant

REGISTERED PROFESSIONAL ENGINEER
RONALD C DELORIER
No. E 23576
Exp. 06-30-2024
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

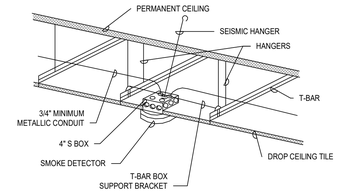
REVISIONS

No.	Description	Date

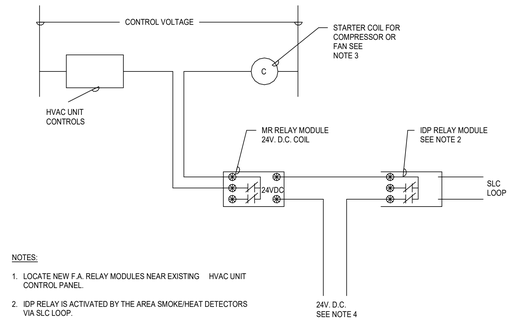
DSA Submittal

FIRE ALARM CALCULATIONS

FA5.02



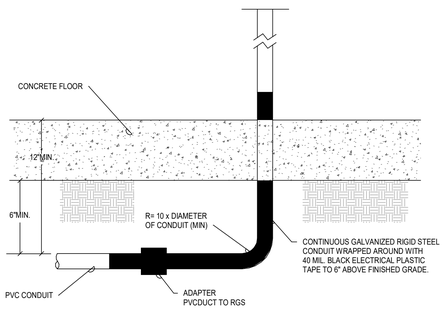
7 DROP CEILING DEVICE INSTALLATION DETAIL
NOT TO SCALE



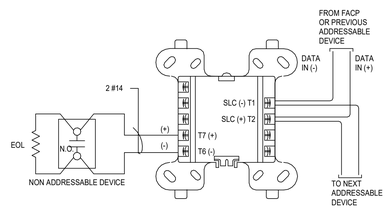
NOTES:

1. LOCATE NEW F.A. RELAY MODULES NEAR EXISTING HVAC UNIT CONTROL PANEL.
2. IDP RELAY IS ACTIVATED BY THE AREA SMOKE/HEAT DETECTORS VIA SLC LOOP.
3. VERIFY NUMBER OF STARTER COILS AT EACH HVAC UNIT. SOME UNITS REQUIRE 2 OR MORE RELAYS FOR SHUTDOWN OF COMPRESSORS AND FANS.
4. PROVIDE 24V. D.C. SOURCE (LOW VOLTAGE TRANSFORMER) FROM POWER SUPPLY UNIT.
5. A LISTED RELAY TO THE FIRE ALARM SYSTEM SHALL BE LOCATED WITHIN 3 FEET OF THE CONTROLLED CIRCUIT PER 2022 NFPA 6.16.2.2.

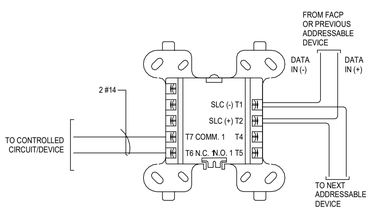
6 HVAC UNIT SHUT-DOWN DETAIL
NOT TO SCALE



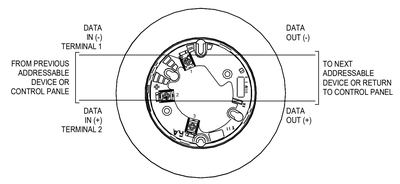
5 CONDUIT RISER DETAIL
NOT TO SCALE



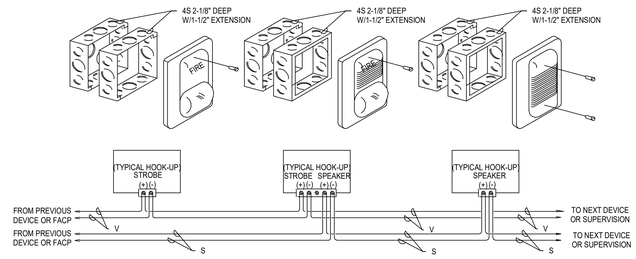
4 MONITOR MODULE DETAIL
NOT TO SCALE



3 RELAY MODULE DETAIL
NOT TO SCALE



2 SMOKE/HEAT DETECTOR DETAIL
NOT TO SCALE



1 SPEAKER/STROBE DETAIL
NOT TO SCALE

FILE PATH: Z:\Projects\...
9/13/2023 5:26:13 PM

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-121953 INC:
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑
DATE: 12/08/2023

PBK

ARCHITECT PBK Architects, Inc.
ANAHEIM PBK.com
2400 E. Katella Ave., Suite 950
Anaheim, CA 92806
P 949-548-5000

CONSULTANT LEAF Engineers
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.987-0909
leafengineers.com

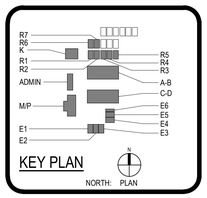
EASTWOOD ELEMENTARY SCHOOL - MODERNIZATION PROJECT

PROJECT ADDRESS:
13552 University St.
Westminster, CA 92683

DSA Submittal

DSA APPL NO.: 04-121953 DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT



Consultant

REGISTERED PROFESSIONAL ENGINEER
EDWARD C DE LA GARZA
No. E 23578
ELECTRICAL
STATE OF CALIFORNIA

Architect

CLIENT
WESTMINISTER SCHOOL DISTRICT

DATE	PROJECT NUMBER
03/31/2023	220528

REVISIONS

No.	Description	Date

DSA Submittal

FIRE ALARM DETAILS

FA6.01