

# WESTMINSTER SCHOOL DISTRICT FINLEY ES HVAC UPGRADE & MODERNIZATION



## <u>OWNER</u>

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## **DSA SUBMITTAL**

## 05-16-2023

## **ARCHITECT**

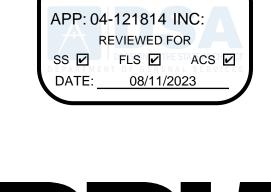
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## MEP ENGINEER

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## **STRUCTURAL**

NIC STRUCTURAL ENGINEERING CONSULTANTS CONTACT: Touraj Eimani 23 Corporate Plaza Dr., Suite 150 Newport Beach, CA 92660 949-629-2529 P teimani@nic-eng.com









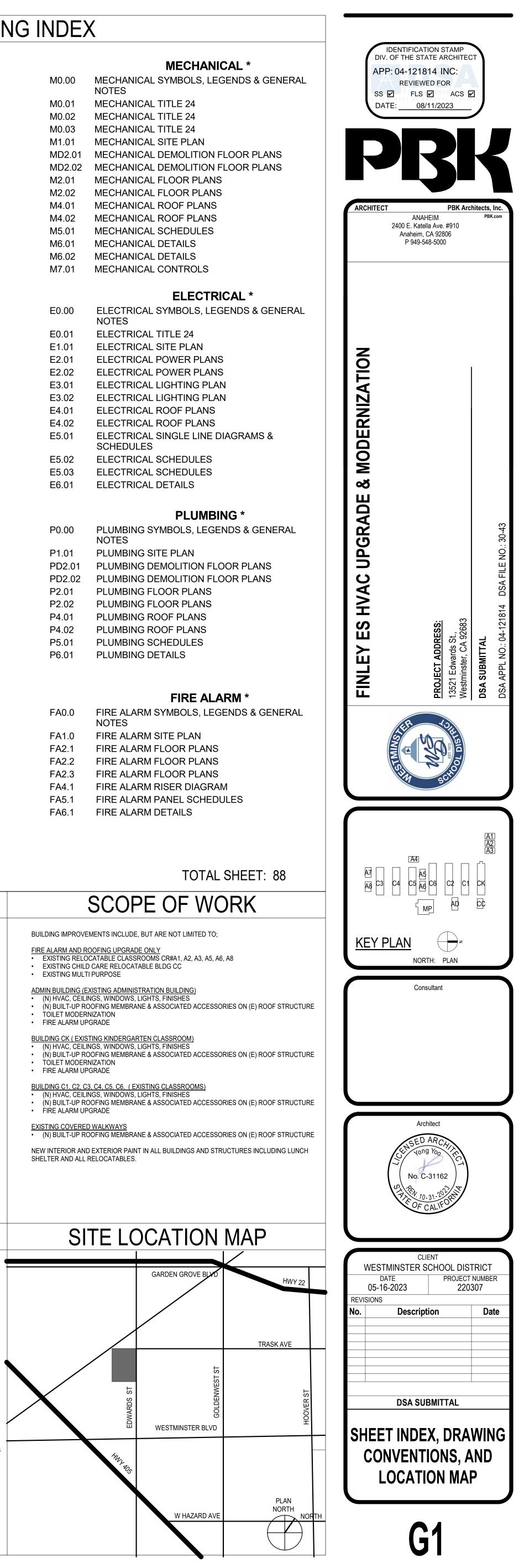


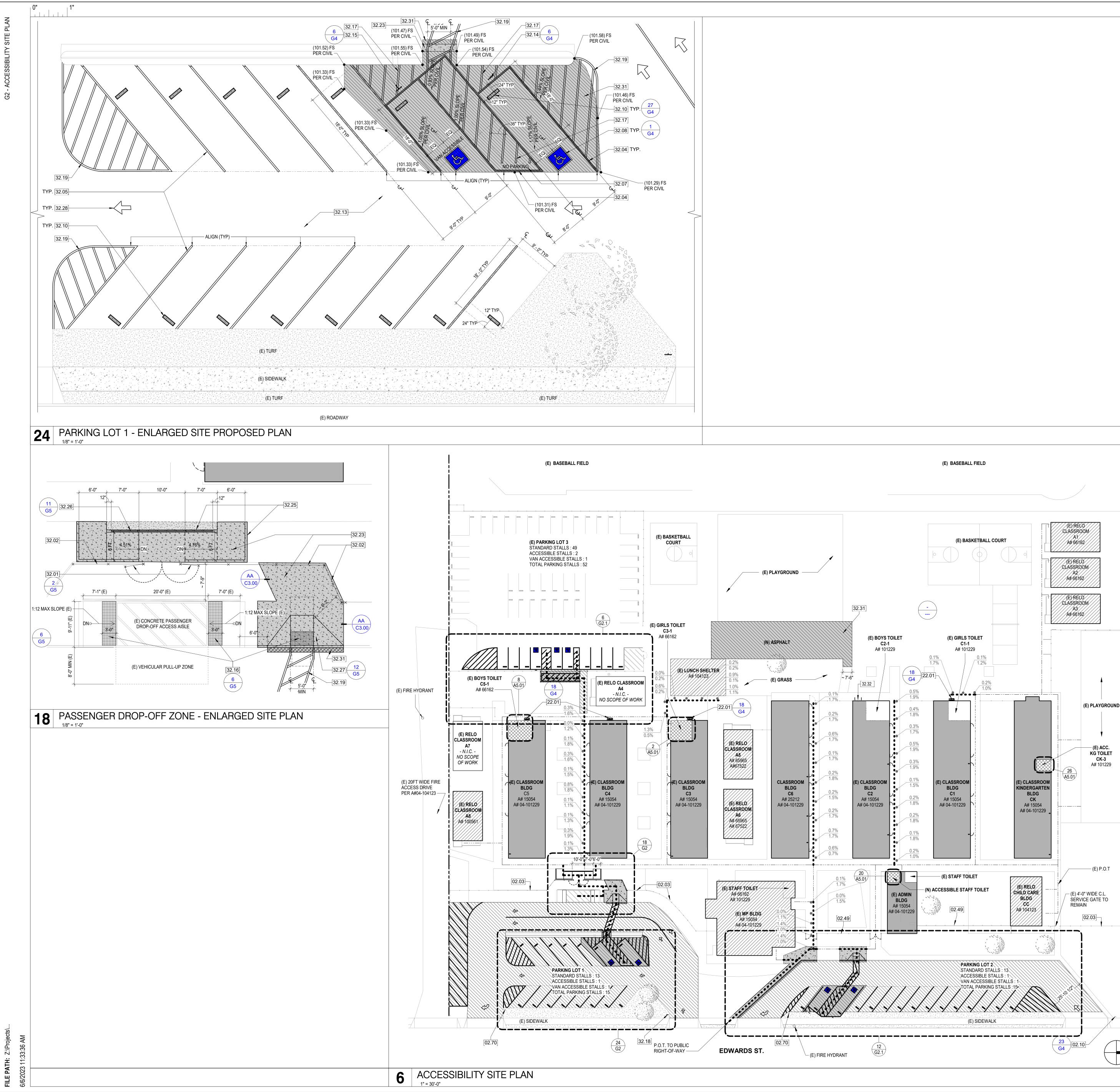
0"	<b>1"</b>					
A A.D.	ABBREVIA AREA DRAIN	ATIONS M MEM. WP. MEMBRANE WATERPROOFING	STATEMENT OF GENERAL CONFORMANCE	GENERAL NOTES	DRAWI	NG INDEX
A A.D.A. A A.D.A.	AREA DRAIN AMERICANS WITH DISABILITIES ACT 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN G. AMERICANS WITH DISABILITIES	M MEP MECHANICAL, ELECTRICAL, PLUMBING M MEPT MECHANICAL, ELECTRICAL, PLUMBING, TECHNOLOGY	Statement of General Conformance FOR ARCHITECTS/ENGINEERS WHO UTILIZE PLANS,	<ol> <li>CONSTRUCTION DOCUMENTS DESCRIBE THE PRODUCTS, SYSTEMS, QUANTITIES, CONFIGURATION AND PERFORMANCE SPECIFICATIONS THAT DELIVER THE OVERALL DESIGN INTENT OF THE PROJECT.</li> <li>THE CONSTRUCTION DOCUMENT DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY,</li> </ol>	GENERAL G0 COVER SHEET G1 SHEET INDEX DRAWING CONVENTIONS AND	MECHANICAL * M0.00 MECHANICAL SYMBOLS, LEGENDS & GENERAL NOTES
A A.D.A.A. A A.F.F.	ACT ACCESSIBILITY GUIDELINES ABOVE FINISH FLOOR	M MEZZ. MEZZANINE M MFR. / MANUFACTURE (R) MANUF. M MH. MANHOLE	INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS, PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS	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.	G1SHEET INDEX, DRAWING CONVENTIONS, AND LOCATION MAPG2ACCESSIBILITY SITE PLAN	M0.01 MECHANICAL TITLE 24 M0.02 MECHANICAL TITLE 24
A A.F.G. A A.H.J.	ABOVE FINISH GRADE ATHORITY HAVING JURISDICTION	M MIN. MINIMUM M MISC. MISCELLANEOUS M MOD MODULAR	(Application No. <u>04-121814</u> File No. <u>30-43</u> )	<ol> <li>ALL MATERIALS AND WORKMANSHIP SHALL COMPLY WITH ALL GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.</li> <li>THE DESIGN ADEQUACY AND SAFETY OF ERECTION BRACING, SHORING, TEMPORARY</li> </ol>	G2.1ENLARGED SITE PLANSG3FIRE ACCESS SITE PLAN	M0.03 MECHANICAL TITLE 24 M1.01 MECHANICAL SITE PLAN
A A/C A ACC. A ACP.	AIR CONDITIONING ACCESSIBLE, ACCESSIBILITY ACOUSTICAL PANEL	M MTL METAL M MTP. METAL TOILET PARTITION	<ul> <li>The drawings or sheets listed on the cover or index sheet (see asterisk *)</li> <li>This drawing, page of specifications/calculations</li> </ul>	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	G4SITE DETAILSG5SITE DETAILS	MD2.01 MECHANICAL DEMOLITION FLOOR PLANS MD2.02 MECHANICAL DEMOLITION FLOOR PLANS
A ACT. A ADJ. A ALT.	ACOUSTICAL TILE ABADJUSTABLE ALTERNATE	N N.D. NAPKIN DISPOSAL N N.I.C. NOT IN CONTRACT	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:	<ol> <li>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.</li> <li>CUTTING, BORING, SAWCUTTING OR DRILLING THROUGH THE EXISTING OR NEW</li> </ol>	CIVIL *	M2.01 MECHANICAL FLOOR PLANS M2.02 MECHANICAL FLOOR PLANS M4.01 MECHANICAL ROOF PLANS
A ALUM. A ASPH.	ALUMINUM ASPHALT ANGLE	N     N.T.S.     NOT TO SCALE       N     N.V.     NAPKIN VENDOR       N     NO.     NUMBER	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	<ul> <li>STRUCTURAL ELEMENTS SHALL NOT BE STARTED UNTIL THE DETAILS HAVE BEEN REVIEWED AND APPROVED BY THE ARCHITECT, AND STRUCTURAL ENGINEER OF RECORD.</li> <li>9. VERIFY DIMENSIONS AND EXISTING CONDITIONS BEFORE COMMENCING WORK. REPORT DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING WITH AFFECTED WORK.</li> </ul>	C1.00 DEMOLITION PLAN C2.00 GRADING PLAN	M4.01 MECHANICAL ROOF PLANS M4.02 MECHANICAL ROOF PLANS M5.01 MECHANICAL SCHEDULES
B B.O.D. B B.U.R.	BOTTOM OF DECK BUILT-UP ROOF	N NOM. NOMINAL O O.C. ON CENTER (S)	2) coordination with my plans and specifications and is acceptable for incorporation into	10. REFLECTED CEILING PLAN DIMENSIONS ARE REFERENCED FROM FINISHED SURFACES UNLESS NOTED OTHERWISE. CEILING HEIGHTS ARE DIMENSIONED FROM FLOOR TO FINISHED CEILING HEIGHT.	C3.00 DETAIL SHEET	M6.01 MECHANICAL DETAILS M6.02 MECHANICAL DETAILS
B BD. B BD. B BLDG. B BLK.	BOARD BUILDING BLOCK	O       O.C.E.W.       ON CENTER EACH WAY         O       O.D.       OUTSIDE DIAMETER         O       O.F.C.I.       OWNER FURNISHED,         CONTRACTOR INSTALLED	the construction of this project. The Statement of General Conformance "shall not be construed as relieving me of my rights,	<ul> <li>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.</li> <li>12. DO NOT SCALE DRAWING. WRITTEN DIMENSIONS TAKE PRECEDENCE. IF CLARIFICATION IS</li> </ul>	DEMOLITION D0.1 SITE DEMOLITION PLAN	M7.01 MECHANICAL CONTROLS
B BM.	BEAM	CONTRACTOR INSTALLED O O.H. OPPOSITE HAND O OPNG. OPENING	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. ( <i>Title 24, Part 1, Section 4-317 (b)</i> )	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	D0.2 SITE DEMOLITION PLAN D1.1 DEMO FLOOR PLAN BLDG CK, C1,C2,C6 & ADMIN	ELECTRICAL * E0.00 ELECTRICAL SYMBOLS, LEGENDS & GENERAL
C C.J. C C.M.U. C C.W.	CONTROL JOINT CONCRETE MASONRY UNIT COLD WATER	O OPP. OPPOSITE P P. LAM. / PLASTIC LAMINATE PLAM		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.	D1.2DEMO FLOOR PLAN BLDG C3, C4, & C5D2.1DEMO RCP BLDG CK,C1,C2,C6,C3 & ADMIN	NOTES E0.01 ELECTRICAL TITLE 24
	BT CABINET COLD-FORMED METAL FRAMING	P P.C. PRECAST P P.H. PAPER HOLDER P P.L. PROPERTY LINE	I find that: X The drawings or sheets listed on the cover or index sheet This drawing or page	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.	D2.2 DEMO RCP BLDG C4 & C5	E1.01 ELECTRICAL SITE PLAN E2.01 ELECTRICAL POWER PLANS E2.02 ELECTRICAL POWER PLANS
C CFSF C CL C CLG.	COLD-FORMED STEEL FRAMING CENTERLINE CEILING	PP.P.POWER POLEPP.W.B.PREFINISHED WALL BOARD	X is/are in general conformance with the project design	<ol> <li>17. COORDINATE HOUSEKEEPING PAD DIMENSIONS AND LOCATIONS WITH EQUIPMENT TO BE INSTALLED.</li> <li>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</li> </ol>	ARCHITECTURAL	E3.01 ELECTRICAL LIGHTING PLAN E3.02 ELECTRICAL LIGHTING PLAN
C CLR C COL. C COMP.	CLEAR COLUMN COMPRESSIBLE	P PL. PLATE P PLUMB. PLUMBING P PLYWD. PLYWOOD	intent, and intent, and X has/have been coordinated with the project plans and have been coordinated with the project plans and	CONTACT THE ARCHITECT IF ANY CONFLICTS OCCUR. 19. ALUM. THRESHOLDS TO BE SET IN FULL BED OF SEALANT AT ALL EXT. DOORS. 20. UNLESS OTHERWISE NOTED, ALL ELECTRICAL AND MECHANICAL OPERABLE DEVICES	A1.01 FLOOR PLANS BLDG CK, C1,C2,C6 & ADMIN A1.02 FLOOR PLANS BLDG C3,C4 & C5	E4.01ELECTRICAL ROOF PLANSE4.02ELECTRICAL ROOF PLANS
C CONC. C COND.	CONCRETE CONDITION CONTINUOUS	P POL. POLISHED P PR. PAIR P PREFIN. PRE-FINISHED	specifications. specifications.	SHALL BE MOUNTED WITH THE HIGHEST OPERABLE CONTROL AT MAX. OF 42" AFF. 21. 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	A2.01 REFLECTED CEILING PLANS BLDG CK, C1, C2, C6, C3 & ADMIN A2.02 REFLECTED CEILING PLANS BLDG C4 & C5	E5.01 ELECTRICAL SINGLE LINE DIAGRAMS & SCHEDULES E5.02 ELECTRICAL SCHEDULES
C CONT. C CORR. C CPT. C CT.	CORRIDOR CORRIDOR CARPET (ED) CERAMIC TILE	PPTPRESSURE-TREATEDPPT.POINTPPTD.PAINTED	Signature     Date     Signature     Date	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	A3.02 ENLARGED ROOF PLAN A3.02 ENLARGED ROOF PLAN	E5.02 ELECTRICAL SCHEDULES E5.03 ELECTRICAL SCHEDULES E6.01 ELECTRICAL DETAILS
C CTSK.	CERAMIC TILE COUNTER SINK DRYER	Q Q.T. QUARRY TILE	Architect or Engineer designated to be in general responsible charge Architect or Engineer deligated responsibility for this portion of the work	WORK, PER CAC, 2013, 4-317(c)	A3.03 ROOF DETAILS - MOD. BIT. A4.01 BUILDING SECTIONS	PLUMBING *
D D D D.F. D D.P. D D.S	DRYER DRINKING FOUNTAIN DAMPPROOFING DOWN SPOUT	R     R / RAD     RADIUS       R     RCP     REFLECTED CEILING PLAN       R     RD     ROOF DRAIN       R     DE     DEFED TO / DEFEDENCE / SEE	YONG YOO       Print Name       Print Name		A4.02 BUILDING SECTIONS A5.01 ENLARGED RESTROOM PLANS & INTERIOR ELEVATIONS	PLUWBING * P0.00 PLUMBING SYMBOLS, LEGENDS & GENERAL NOTES
D D.S. D DIA. D DIM.	DIAMETER DIMENSION	RREF.REFER TO / REFERENCE / SEERRECP.RECEPTACLERREINF.REINFORCE (D), (ING)DDECUDER	C-31162     10/31/2023       License Number     Expiration Date       License Number     Expiration Date		A6.01 EXTERIOR ELEVATIONS A6.02 EXTERIOR ELEVATIONS	P1.01 PLUMBING SITE PLAN PD2.01 PLUMBING DEMOLITION FLOOR PLANS
D DN D DTL. D DWG.	DOWN DETAIL DRAWING	RREQ'D.REQUIREDRRES.RESILIENTRREV.REVISION (S), REVISED			A6.03 EXTERIOR ELEVATIONS A7.01 INTERIOR ELEVATIONS	PD2.02 PLUMBING DEMOLITION FLOOR PLANS P2.01 PLUMBING FLOOR PLANS
E E.J. E E.Q.	EXPANSION JOINT EQUAL	R     RF     RECREATIONAL RESILIENT       FLOORING			A8.01 DOORS, WINDOW FRAME DETAILS A8.02 PARTITION TYPES AND MISC. DETAILS	P2.02 PLUMBING FLOOR PLANS P4.01 PLUMBING ROOF PLANS
E EA. E EDF E EL.	ELEVATION (HEIGHT)		CODES & STANDARDS		A8.03 CEILING & MISC DETAILS A9.01 DOORS SCHEDULE & WINDOWS FRAMING	<ul><li>P4.02 PLUMBING ROOF PLANS</li><li>P5.01 PLUMBING SCHEDULES</li><li>P6.01 PLUMBING DETAILS</li></ul>
E ELEC. E ELECT. E ELEV	ELECTRICAL ELECTRICAL ELEVATION (DRAWING)	SS.C.SEALED CONCRETESS.D.SOAP DISPENSERSS.N.D.SANITARY NAPKIN DISPOSAL	PARTIAL LIST OF APPLICABLE CODES         2022 Building Standards Administrative Code         2024 Online Standards Administrative Code	IFE SAFETY APPLICABLE STANDARDS	ELEVATION A10.01 FINISH PLANS & SCHEDULE	
E EQUIP E EXIST E EXP	EQUIPMENT EXISTING EXPANSION	S SCHED SCHEDULE S SCPL SOLID CORE PLASTIC LAMINATE	2019 California Building Code (CBC)       (Part 2, Title 24, CCR)         (2018 International Building Code with 2019 California Ammendments)       NFPA 13 Automatic Fire Sp         2019 California Electrical Code (CEC)       (Part 3, Title 24, CCR)       NFPA 14 Standpipe and Ho         (2017 National Electrical Code and 2019 California Amendments)       NFPA 17 Dry Chemical Ext	ose Systems	STRUCTURAL *	<b>FIRE ALARM *</b> FA0.0 FIRE ALARM SYMBOLS, LEGENDS & GENERAL
E EXT F F.E.	EXTERIOR FIRE EXTINGUISHER	S SECT SECTION S SHT SHEET S SIM SIMILAR	2019 California Mechanical Code (CMC)       (Part 4, Title 24, CCR)       NFPA 17A Wet Chemical E         (2018 IAMPO Uniform Mechanical Code and 2019 California Amendments)       NFPA 20 Stationary Pumps         2019 California Plumbing Code (CPC)       (Part 5, Title 24, CCR)       NFPA 22 Standard for the I	Extinguishing Systems(2017 Edition)s for Fire Protection(2016 Edition)Installation of Private Fire Service Mains and Their Appurtenances(2013 Edition)	SN1 GENERAL NOTES S1 ROOF PLANS - BLDG C1, C2 & CK	FAU.0 FIRE ALARM STMBOLS, LEGENDS & GENERAL NOTES FA1.0 FIRE ALARM SITE PLAN
F F.E.C. F F.H.C. F FB.	FIRE EXTINGUISHER CABINET FIRE HOSE CABINET FACE BRICK	SSPCSPECIAL COATING SYSTEMSSPECSPECIFICATION (S)SSQ.SQUARE	(2018 IAMPO Uniform Plumbing Code and 2019 California Amendments) NFPA 24 Private Fire Main 2019 California Energy Code (CEC)	rm & Signaling Code	S2 ROOF PLANS - BLDG C3, C4 & C5 S3 ROOF PLANS - BLDG C6, ADMIN	FA2.1 FIRE ALARM FLOOR PLANS FA2.2 FIRE ALARM FLOOR PLANS
F FD. F FIN. F FIXT.	FLOOR DRAIN FINISH (ED) FIXTURE	S SS / SS. STAINLESS STEEL STL. S STL STEEL S STRUC / STRUCTURAL	2019 California Existing Building Code (CEBC)       (Part 10, Title 24, CCR)       UL 300 Standard Fire Exting UL 464 Audible Signal App         2019 California Green Building Standards Code       (Part 11, Title 24, CCR)       UL 464 Audible Signal App	nguishing Systems For Protection of Commercial Cooking Equipment	SD1CONCRETE DETAILSSD2RTU DETAILS	FA2.3 FIRE ALARM FLOOR PLANS FA4.1 FIRE ALARM RISER DIAGRAM
F FLR. F FLSHG. F FLUOR	FLOOR (ING) FLASHING FLUORESCENT	S STRUCT STRUCTURAL STRUCT S SUSP SUSPENDED S SVDF SHEET VINYL DANCE FLOORING	2019 California Referenced Standards CodeUL 1971 Standard for SignalRegulations of the State Fire Marshall(Part 12, Title 24, CCR)UL 1971 Standard for Signal2016 ASME A17.1/CSA B44-16 Safety Code for Elevators and Escalators(per 2019 CBC Part 2 Ch 35)ICC 300 Standard for Blead	aling Devices for the Hearing Impared	SD3 HUNG UNITS DETAILS	FA5.1FIRE ALARM PANEL SCHEDULESFA6.1FIRE ALARM DETAILS
F FRP G G.B.	FIBER REINFORCED PLASTIC	S SVF SHEET VINTE DANCE FLOORING T T.A.S. TEXAS ACCESSIBLITY	For a complete list of all applicable NFPA standards refer to 2019 CBC (SFM) Chapter 35 and California Fire Code (CFC) Chapter 80. See California Building Code, Chapter 35, for State of California ammendments to the NFPA Standards			
G G.I. G GA. G GALV. G GCMU	GALVANIZED IRON GAUGE GALVANIZED GLAZED CONCRETE MASONRY	STANDARDS (2012)TT.B.TT.C.R.TTOWEL DISPENSER AND				TOTAL SHEET: 88
G GEN. G GEN.	GLAZED CONCRETE MASONRY UNIT GENERAL GENERAL	RECEPTACL         T       T.O.         T       T.O.B.         T       T.O.B.         T       T.O.M.         TOP OF MASONRY	DRAWING CONVENTIONS	CALIFORNIA ENERGY	DSA NOTES	SCOPE OF WORK
G GL. G GL. G GR.	GLASS / GLAZING GLASS GRADE	T T.O.P. TOP OF PARAPET T T.O.S. TOP OF STEEL T T.T.D. TOILET TISSUE DISPENSER	PROPERTY LINE PLAN OR DETAIL ENLARGED	CODE NOTES	1. 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	BUILDING IMPROVEMENTS INCLUDE, BUT ARE NOT LIMITED TO;
G GTP. G GYP.	GLAZED TILE PAVER GYPSUM DRYWALL	T TEL TELEPHONE T TERR TERRAZZO T THK THICK (NESS)		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	2. 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	<ul> <li>FIRE ALARM AND ROOFING UPGRADE ONLY</li> <li>EXISTING RELOCATABLE CLASSROOMS CR#A1, A2, A3, A5, A6, A8</li> <li>EXISTING CHILD CARE RELOCATABLE BLDG CC</li> <li>EXISTING MULTI PURPOSE</li> </ul>
H H.W. H HM H HORIZ.	HOT WATER HOLLOW METAL FRAME HORIZONTAL	T TYP TYPICAL U U.N.O. UNLESS NOTED OTHERWISE	NORTH DETAIL SECTIONS AND VERTICAL SECTIONS	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	<ul> <li>DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR; CLASS 3</li> <li>3. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.</li> </ul>	ADMIN BUILDING (EXISTING ADMINISTRATION BUILDING) • (N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES
H HT.	HEIGHT	U UR. URINAL V V VENT	TRUE NORTH       NORTH SYMBOL	CONTROLS ACCEPTANCE TEST TECHNICIAN (ATT). 3. MECHANICAL SYSTEM ACCEPTANCE TEST MUST BE PERFORMED BY A CERTIFIED MECHANICAL	4. ALL WORK SHALL CONFORM TO 2019 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).	<ul> <li>(N) BUILT-UP ROOFING MEMBRANE &amp; ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTUF</li> <li>TOILET MODERNIZATION</li> <li>FIRE ALARM UPGRADE</li> </ul>
I I.P.S. I I.P.S. I INSUL I INT.	IRON PIPE SIZE INSULATE (ED), (ION) INTERIOR	V V VENT V V.C.T. VINYL COMPOSITION TILE V V.I.F. VERIFY IN FIELD V VENT. VENTILATING, VENTILATED	6'-0" 4'-0" DIMENSIONS	<ul> <li>ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.</li> <li>4. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ENGINEER / ARCHITECT OF RECORD OR THE OWNER'S AGENT.</li> </ul>	5. THE SCOPE OF WORK - CLEARLY INDICATE THE SCOPE OF WORK ON THE COVER SHEET OR GENERAL NOTE SHEET OF THE DRAWINGS.	BUILDING CK (EXISTING KINDERGARTEN CLASSROOM)  • (N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES  • (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTUF
J JT.	JOINT	V VENT. VENTILATING, VENTILATED V VER. VERIFY V VERT. VERTICAL V VGB (PREFINISHED) VINYL CLAD	O COLUMN LINE NOTE: all dimensions to face of wall unless otherwise noted	<ol> <li>A LISTING OF CERTIFIED ATT CAN BE FOUND AT: HTTPS.//WWW.ENERGY.CA.GOV/PROGRAMS- AND-TOPICSPROGRAMS/ACCEPTANCE-TEST-TECHNICIAN-CERTIFICATION-PROVIDER- PROGRAM/ACCEPTANCE.</li> </ol>	6. FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS, AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY THE ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY DSA. LIST DEFERRED SUBMITTAL ITEMS FOR THIS	<ul> <li>TOILET MODERNIZATION</li> <li>FIRE ALARM UPGRADE</li> </ul> BUILDING C1, C2, C3, C4, C5, C6, (EXISTING CLASSROOMS)
L L.P. L LAM. L LAV.	LIGHT POLE LAMINATE (D) LAVATORY	V VGB (PREFINISHED) VINYL CLAD GYPSUM BOARD V VWC VINYL WALL COVERING	— — — — — — — — — — — — — — — — — — —	6. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE	PROJECT. 7. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE	<ul> <li>(N) HVAC, CEILINGS, WINDOWS, LIGHTS, FINISHES</li> <li>(N) BUILT-UP ROOFING MEMBRANE &amp; ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTUF</li> <li>FIRE ALARM UPGRADE</li> </ul>
L LT. L LT. WT.	LIGHT	WWASHING MACHINEWW.P.WATER PROOFINGWW.S.WEATHERSTRIP	SPOT ELEVATION	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	ALTERNATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR,. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION	EXISTING COVERED WALKWAYS     (N) BUILT-UP ROOFING MEMBRANE & ASSOCIATED ACCESSORIES ON (E) ROOF STRUCTUF
M M.O. M MAS. M MATL.	MASONRY OPENING MASONRY MATERIAL (S)	W W.W. WATER WELL W W.W.F. WELDED WIRE FABRIC W W.W.M. WOVEN WIRE MESH	1 SECTION CALLOUT SYMBOL MATCH LINE SEE XX/X-XXX	7. PROJECT INSPECTORS WILL CORRECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.	CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(c), PART 1, TITLE 24, CCR).	NEW INTERIOR AND EXTERIOR PAINT IN ALL BUILDINGS AND STRUCTURES INCLUDING LUNCH SHELTER AND ALL RELOCATABLES.
M MAIL. M MAX. M MB. M MECH.	MATERIAL (3) MAXIMUM MARKER BOARD MECHANICAL	W W/ WITH W WC WATER CLOSET W WD WOOD	SHEET NUMBER ON WHICH CONTINUATION IS FOUND		8. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.	
M MEM	MEMBRANE	W WD WOOD W WDW WINDOW W WT WEIGHT	A1.01 12 EXTERIOR ELEVATION SYMBOL			
			2 3 A1.01 1 INTERIOR ELEVATION SYMBOL		SHEET NUMBERING	SITE LOCATION MAP
			4 BREAK LINE			GARDEN GROVE BLVD HWY 22
			101     DOOR DESIGNATION       12.34     KEY NOTE		SHEET NUMBER	
			WINDOW DESIGNATION		A2.01A BUILDING AREA	TRASK AVE
			PARTITION TYPE 150 SF		SEQUENCE (.0199etc.)         SHEET DISCIPLINE TYPE         0 - GENERAL         0 - GENERAL	Б
					GGENERAL0 - SITE PLANS & DETAILSCCIVIL1 - FLOOR PLANSLLANDSCAPE2 - REFLECTED CEILING PLANS & DETAILSCASPORTS3 - ROOF PLANS & DETAILS	I S ST I
			EXISTING PARTITION (RECESSED AND SURFACE MOUNTED) FHC FHC		SSTRUCTURAL4 - BUILDING SECTIONSDDEMOLITION5 - ADA & ENLARGED PLANSAARCHITECTURAL6 - ENLARGED PLAN DETAILS	WESTMINSTER BLVD
			NEW PARTITION		MMECHANICAL7 - ENLARGED MILLWORK & DETAILSEELECTRICAL8 - PARTITION TYPES & WALL SECTIONSPPLUMBING9 - WINDOWS, DOORS, FRAME ELEVATIONS & DETAILSTTECHNOLOGY10 - FINISH SCHEDULES	
MA			REVISION NUMBER		FSFOOD SERVICE10 - FINISH SCHEDULESFSFOOD SERVICE11 - ELEVATIONS (EXTERIOR & INTERIOR)AVACOUSTICAL12 - CASEWORK ELEVATIONSTHTHEATRICAL12 - CASEWORK ELEVATIONS	Es Es
10:18:26 A			TATI TOILET ACCESSORY SYMBOL			W HAZARD AVE
0/2023 1			DETAIL ENLARGED F.D. FLOOR DRAIN			
5/3(						

**FILE PATH:** 75/30/2023 10:10









## 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 STRCUTURAL 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 RESONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANT WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

## PARKING CALCULATION

	07.4
PARKING L	STANDARD STALLS
	TOTAL P-LOT STALLS
PARKING L	OT 2 :
	STANDARD STALLS
	TOTAL P-LOT STALLS
(E) PARKIN	IG LOT 3 :
(_, , , , , , , , , , , , , , , , , , ,	STANDARD STALLS
	TOTAL P-LOT STALLS

### TOTAL NO. OF REQUIRED ACCESSIBLE PARKING SPACES. TOTAL NO. OF ACCESSIBLE PARKING SPACES PROVIDED. TOTAL NO. OF REQUIRED PARKING SPACES FOR THIS LOT ...

### ACCESSIBILITY KEYED NOTES

02.03	(E) 6'-0"H GALV STEEL CHAIN LINK FENCE TO REMAIN
02.10	(E) TOW AWAY SIGN, PER DETL 23/G4
02.19	(E) DRINKING FOUNTAIN TO REMAIN
02.49	(E) METAL FENCE AND POSTS TO REMAIN
02.70	(E) "DO NOT ENTER" SIGNAGE
 22.01	(N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND WING GUARDS. SEE DI 18/G4
32.01	(N) 6'-0" HIGH DBL LEAF GALV. STEEL CHAIN LINK GATE WITH PANIC HARDWARE PER DETAIL 2/G5
32.02	(N) 6'-0" HIGH GALV. STEEL CHAIN LINK FENCE, PER DETAIL 22/G4
32.04	(N) 4" WIDE PAINTED BLUE STRIPING
32.05	(N) 4" WIDE PAINTED WHITE STRIPING
32.07	(N) 12" HIGH MIN. LETTERS IN WHITE PAINT, READING 'NO PARKING'. NO DIAGONAL STRIPING THROUGH TEXT, TYP.
32.08	(N) INTERNATIONAL SYMBOL OF ACCESSIBILITY PER DETAIL 1/G4
32.10	(N) CONCRETE WHEELSTOP PER DETAIL 27/G4
32.13	(N) ASPHALT SLURRY COAT
32.14	(N) VAN ACCESSIBLE PARKING SIGN PER DETAIL 6/G4
32.15	(N) ACCESSIBLE PARKING SIGN PER DETAIL 6/G4
32.16	(N) TRUNCATED DOMES PER DETAIL 6/G5
32.17	(N) 4" WIDE PAINTED WHITE HATCH LINES AT 36" OC
32.18	(N) TOW AWAY SIGNAGE PER DETAIL 23/G4
32.19	(N) 4" WIDE PAINTED WHITE BORDER & HATCH LINES AT 36" OC
32.23	(N) CONCRETE PAVEMENT PER CIVIL
32.25	(N) CONC CURB PER CIVIL
32.26	(N) CURB MOUNTED HANDRAIL PER DETL 11/G5
32.27	(N) ACCESSIBLE CURB RAMP PER CIVIL DWGS & DETL 12/G5
32.28	(N) PAINTED WHITE DRIVE AISLE DIRECTIONAL SIGNAGE
~~ ~ /	

32.31 AREA OF (N) ASPHALT PAVEMENT PER CIVIL

### 32.32 PROVIDE BARRIER RAIL AT (E) DRINKING FOUNTAIN PER DETAIL 3/G4

### ACCESSIBILITY LEGEND

————— (E) PATH OF TRAVEL (PER A#66162)

—---- (E) PATH OF TRAVEL (PER A#04-100561)

●●●●●●● (N) PATH OF TRAVEL

----- PROPERTY LINE

(E) BUILDING N.I.C. - NO SCOPE OF WORK

(E) BUILDING - FIRE ALARM SCOPE ONLY (IN SCOPE OF WORK)

(E) BUILDING TO BE REMODELED (IN SCOPE OF WORK)

TOILET ROOMS RR = GENDER NEUTRAL RESTROOM B = BOYS G = GIRLS S = STAFF

-----AREAS OF MODIFICATION

AREA OF (N) CONCRETE PAVING

AREA OF (N) ASPHALT PAVING

AREA OF (N) ASPHALT SLURRY COAT AND (N) PARKING STRIPING

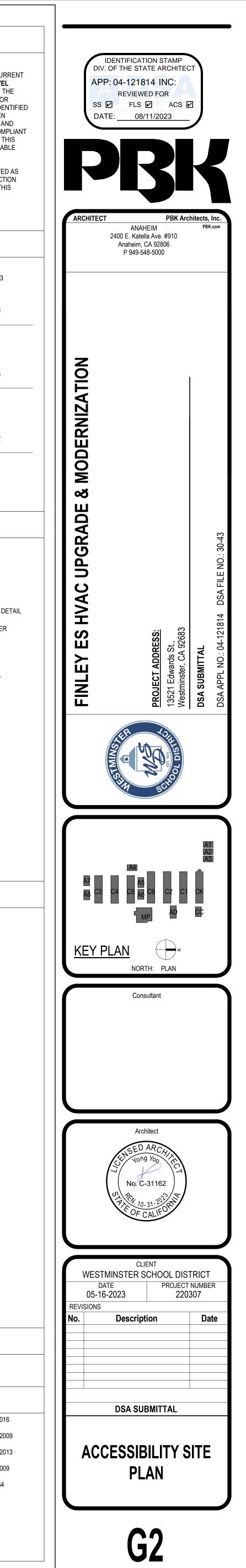
(E) SLOPES PER SMART LEVEL, VERIFIED IN FIELD. CROSS SLOPE

## **GENERAL NOTES**

1. REFER TO CIVIL DRAWINGS FOR NEW PAVING AREAS AND DETAILS.

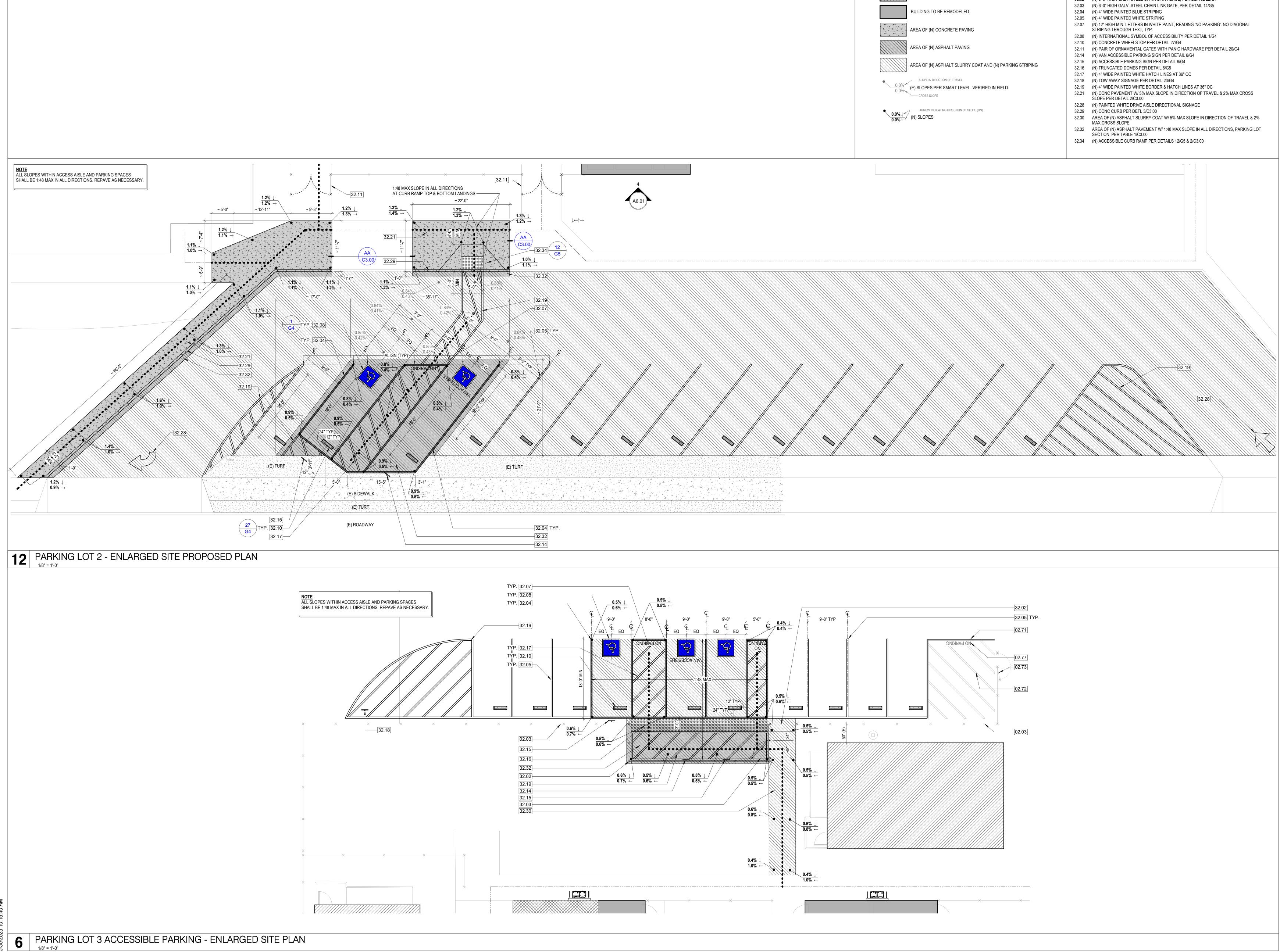
## DSA CERTIFICATION LIST

1. THE FOLLOWING PROJECT A# 04-101229 CLOSED WITH DSA CERTIFICATION ON 7/8/2016
2. THE FOLLOWING PROJECT A# 04-104123 CLOSED WITH DSA CERTIFICATION ON 7/31/2009
3. THE FOLLOWING PROJECT A# 04-100561 CLOSED WITH DSA CERTIFICATION ON 7/17/2013
4. THE FOLLOWING PROJECT A# 04-66162 CLOSED WITH DSA CERTIFICATION ON 6/16/2009
5. THE FOLLOWING PROJECT A# 25212 CLOSED WITH DSA CERTIFICATION ON 10/15/1964
6. THE FOLLOWING PROJECT A# 15054 CLOSED WITH DSA CERTIFICATION ON 1/3/1957
7. THE FOLLOWING PROJECT A# 04-118246 PROJECT CANCELLED

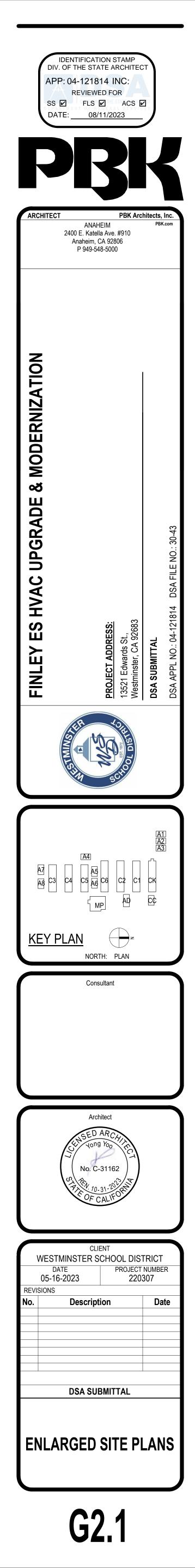




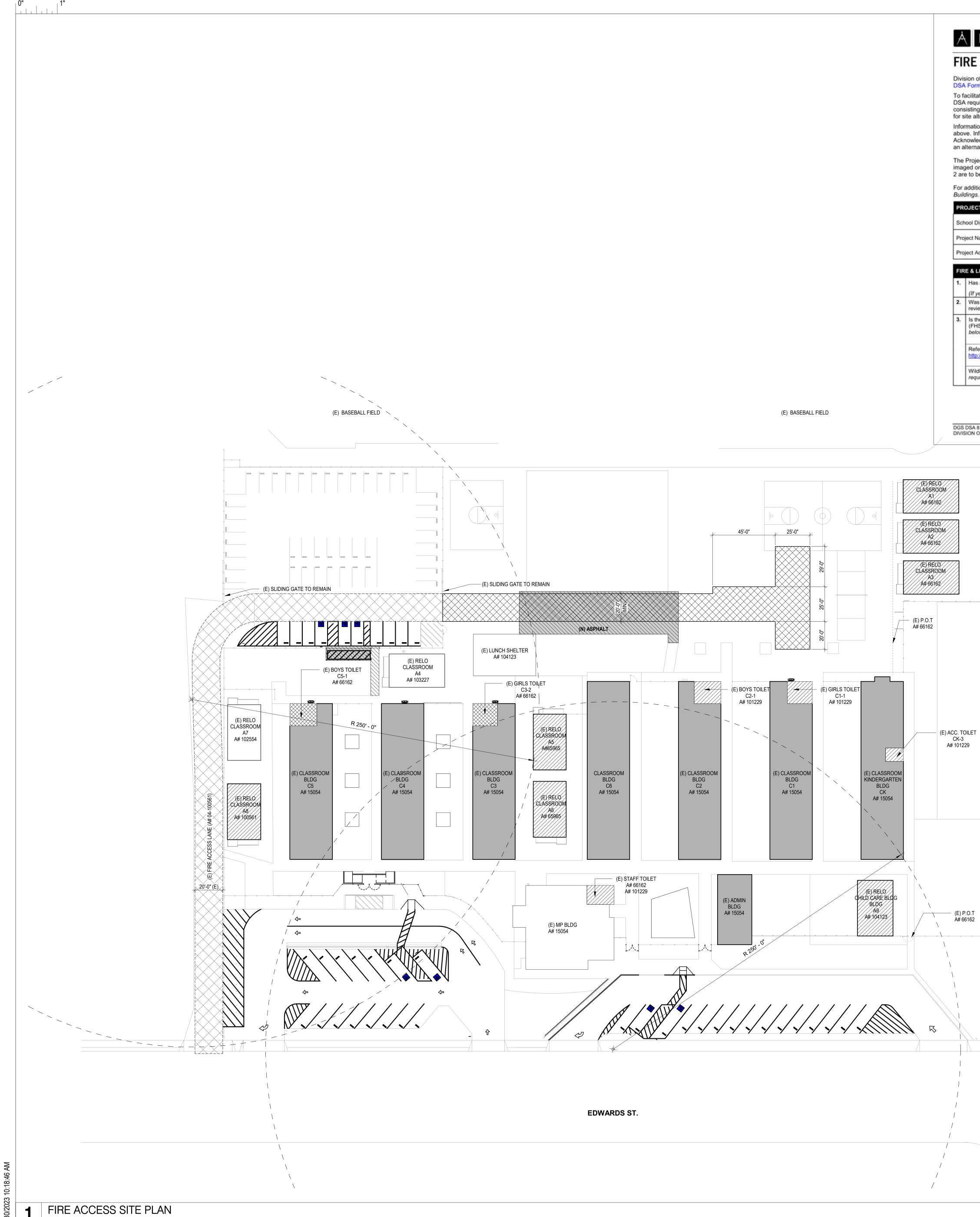
0" 1"



ACCESSIBILITY LEGEND	ACCESSIBILITY KEYED NOTES
ACCESSIBLITY LEGEND     (e) PATH OF TRAVEL (PER A#04-100561)   (f) PATH OF TRAVEL (PER A#04-104123)   (g) PATH OF TRAVEL   (h) PATH OF TRAVEL   (g) BULDING FIRE ALARM SCOPE ONLY   (g) BULDING FIRE ALARM SCOPE ONLY   (h) PATH OF DE REMODELED   (h) PATH OF (N) CONCRETE PAVING   (h) PATH OF (N) ASPHALT PAVING   (h) PATH OF (N) ASPHALT SLURRY COAT AND (N) PARKING STRIPING   (h) PATH OF (N) CONCRETE PAVING	02.03       (E) 6'-0"H GALV STEEL CHAIN LINK FENCE TO REMAIN         02.03       (E) 6'-0"H GALV STEEL CHAIN LINK FENCE TO REMAIN         02.71       (E) 4" WIDE PAINTED BLUE STRIPING @ 36" OC TO REMAIN         02.72       (E) 4" WIDE PAINTED WHITE STRIPING @ 36" OC TO REMAIN         02.73       (E) CHAINLINK GATE TO REMAIN         02.77       (E) 12" HIGH MIN. LETTERS IN WHITE PAINT, READING 'NO PARKING'. NO DIAGONAL STRIPING THROUGH TEXT         32.02       (N) 6'-0" HIGH GALV. STEEL CHAIN LINK FENCE, PER DETAIL 22/G4         32.03       (N) 6'-0" HIGH GALV. STEEL CHAIN LINK GATE, PER DETAIL 22/G4         32.04       (N) 4" WIDE PAINTED BLUE STRIPING         32.05       (N) 4" WIDE PAINTED BLUE STRIPING         32.06       (N) 12" HIGH MIN. LETTERS IN WHITE PAINT, READING 'NO PARKING'. NO DIAGONAL STRIPING THROUGH TEXT, TYP.         32.08       (N) INTERNATIONAL SYMBOL OF ACCESSIBILITY PER DETAIL 1/G4         32.10       (N) CONCRETE WHEELSTOP PER DETAIL 27/G4         32.11       (N) PAIR OF ORNAMENTAL GATES WITH PANIC HARDWARE PER DETAIL 20/G4         32.15       (N) ACCESSIBLE PARKING SIGN PER DETAIL 6/G4         32.16       (N) TRUNCATED DOMES PER DETAIL 6/G5         32.17       (N) 4" WIDE PAINTED WHITE HATCH LINES AT 36" OC         32.16       (N) OW AWAY SIGNAGE PER DETAIL 2/3/G4         32.17       (N) 4" WIDE PAINTED WHITE BORDER & HATCH LINES
ARROW INDICATING DIRECTION OF SLOPE (DN) 0.0% ← (N) SLOPES	<ul> <li>32.28 (N) PAINTED WHITE DRIVE AISLE DIRECTIONAL SIGNAGE</li> <li>32.29 (N) CONC CURB PER DETL 3/C3.00</li> <li>32.30 AREA OF (N) ASPHALT SLURRY COAT W/ 5% MAX SLOPE IN DIRECTION OF TRAVEL &amp; 2%</li> </ul>
0.0% ← (··) 2231 23	<ul> <li>32.30 AREA OF (N) ASPHALT PAVEMENT W/ 1:48 MAX SLOPE IN ALL DIRECTIONS, PARKING LO' SECTION, PER TABLE 1/C3.00</li> <li>32.34 (N) ACCESSIBLE CURB RAMP PER DETAILS 12/G5 &amp; 2/C3.00</li> </ul>







1" = 30'-0"

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

## ADSA 810 **FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL**

District/Owner: Westminster Unified School District			
t Name/School: Finley Elementary School HVAC Upgrade & Moderniza	tion		
t Address: 13521 Edwards Street, Westminster, CA 92683			
LIFE SAFETY INFORMATION			
as a fire hydrant flow test been performed within the past 12 months?	Yes 🗆		No 🗹
f yes, provide a copy of the test data.)			
Vas the fire hydrant water flow test performed as part of this LFA eview?	Yes 🗆		No 🗹
the project located within a designated fire hazard severity zone FHSZ) as established by Cal-Fire? (If yes, indicate FHSZ classification elow.)	Yes 🗆		No 🗹
efer to the following website for FHSZ locations: ttp://egis.fire.ca.gov/FHSZ/	Moderate 🗆	High 🗆	Very High 🗆
Addiand Interface Area (WIFA) (If any designations are checked, project equirements of CBC Chapter 7A.)	design must m	eet the	WIFA 🗆

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT

Page 1 of 4 STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES

## FIRE ACCESS LEGEND / CODE INFORMATION

----- PROPERTY LINE

(E) BUILDING NOT IN SCOPE

(E) FIRE ACCESS LANE (A# 04-100561)

(N) FIRE ACCESS LANE

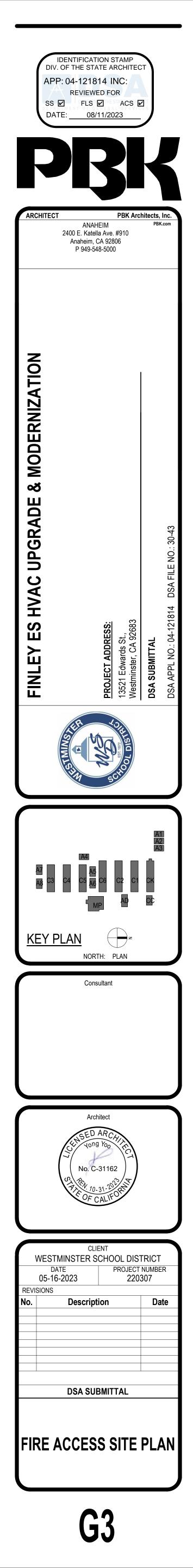
ACCESSIBLE RESTROOM TO BE PROVIDED AS PART OF THE CONTRACT RR = GENDER NEUTRAL RESTROOM B = BOYS G = GIRLS S = STAFF

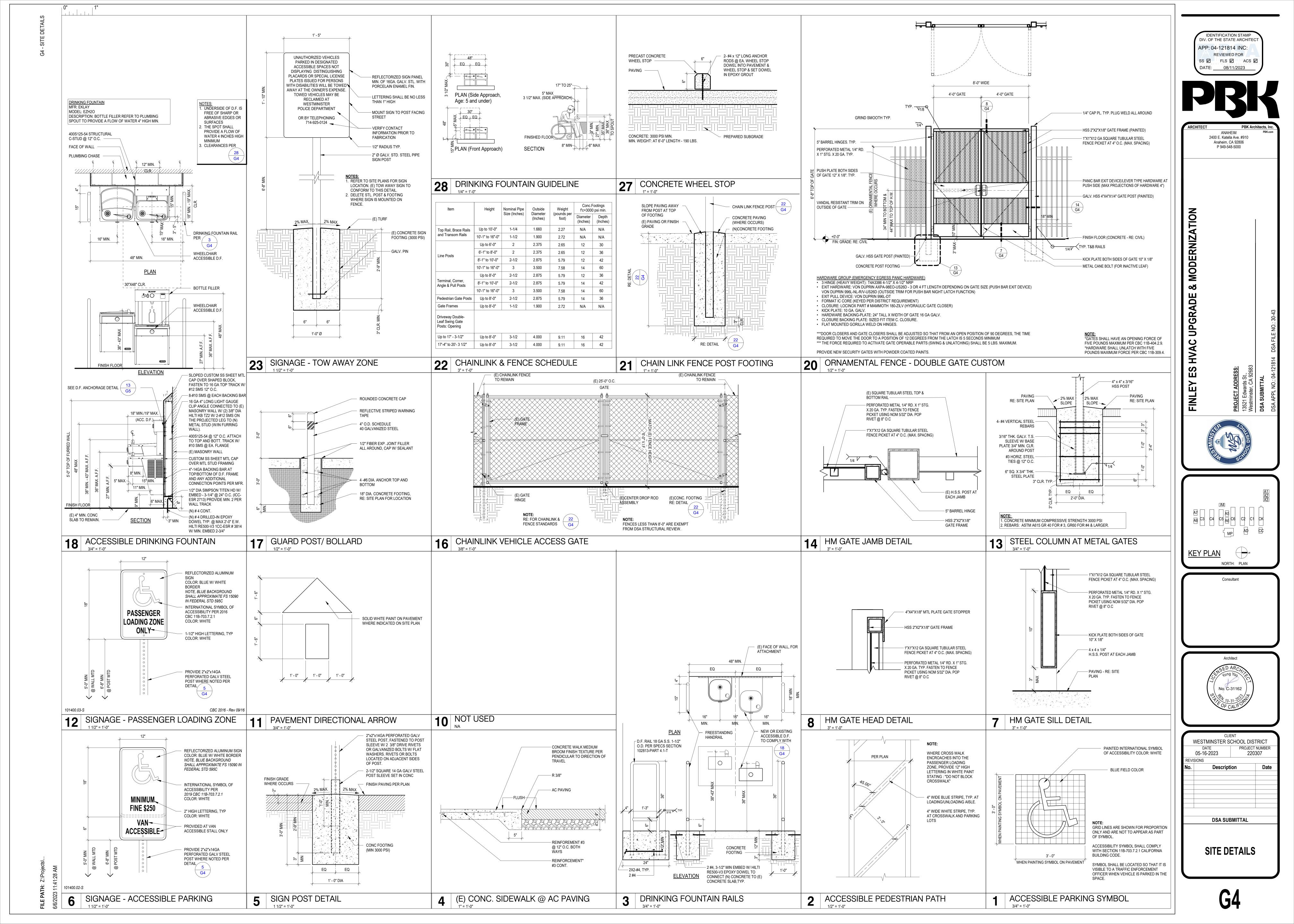
**— • — • —** 150' MAX. FIRE HOSE

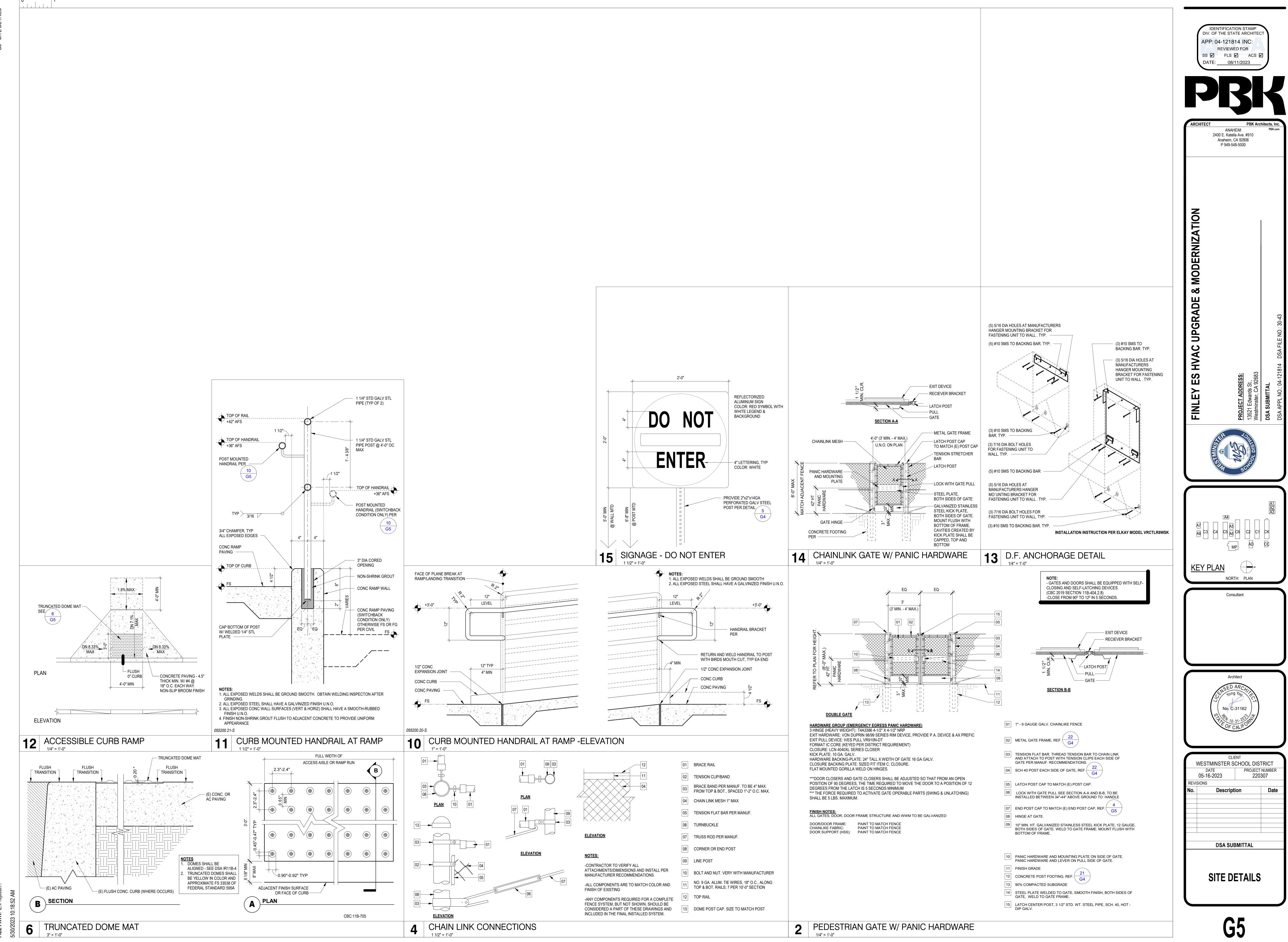
---- 250' MAX. DISTANCE TO FH

NOTE COMPLY WITH CFC CHAPTER 33 - FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION.

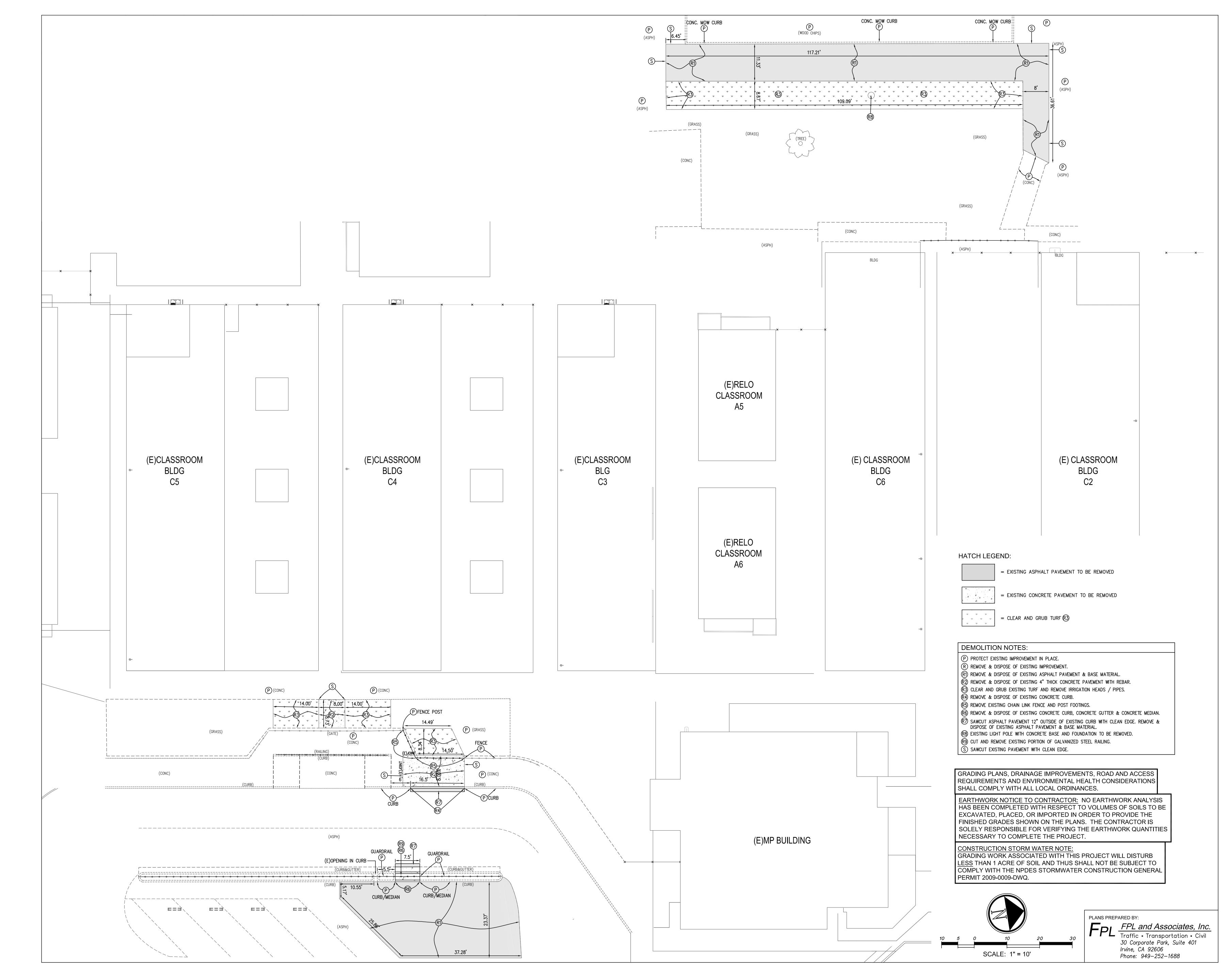
TOILET (-3 11229		
)1229		
E) P.O.T # 66162	ч * * *	
		NORTH

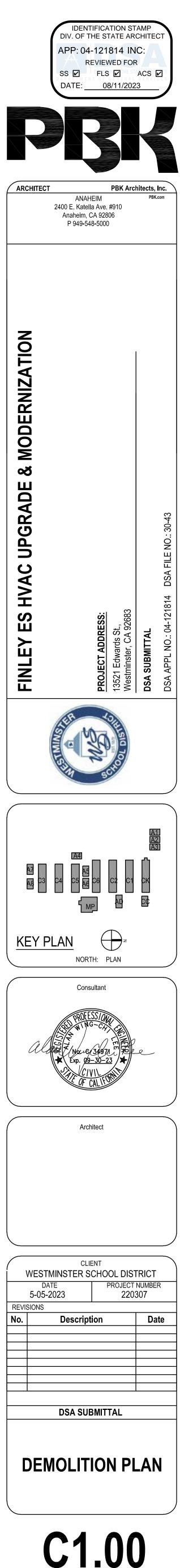


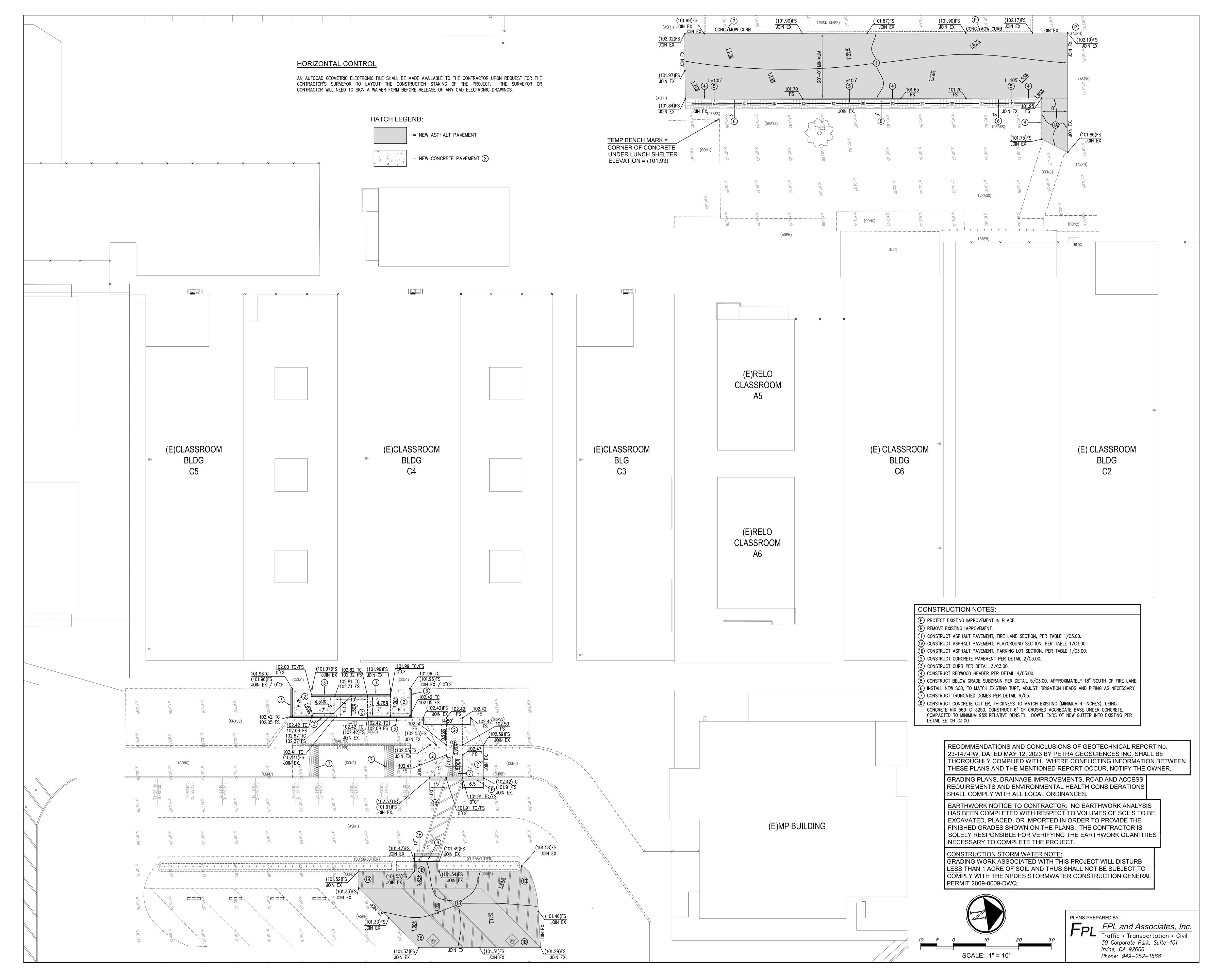


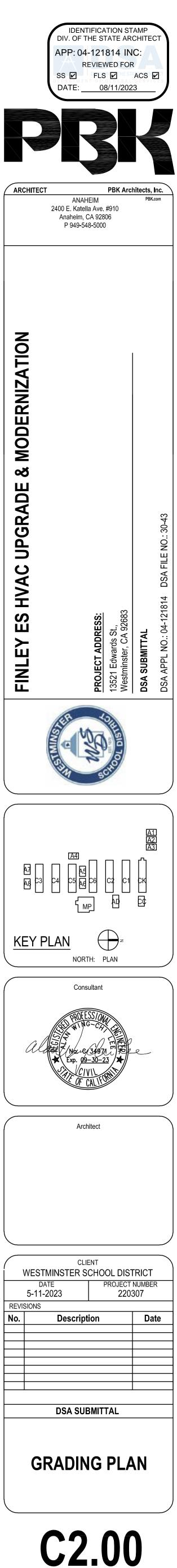


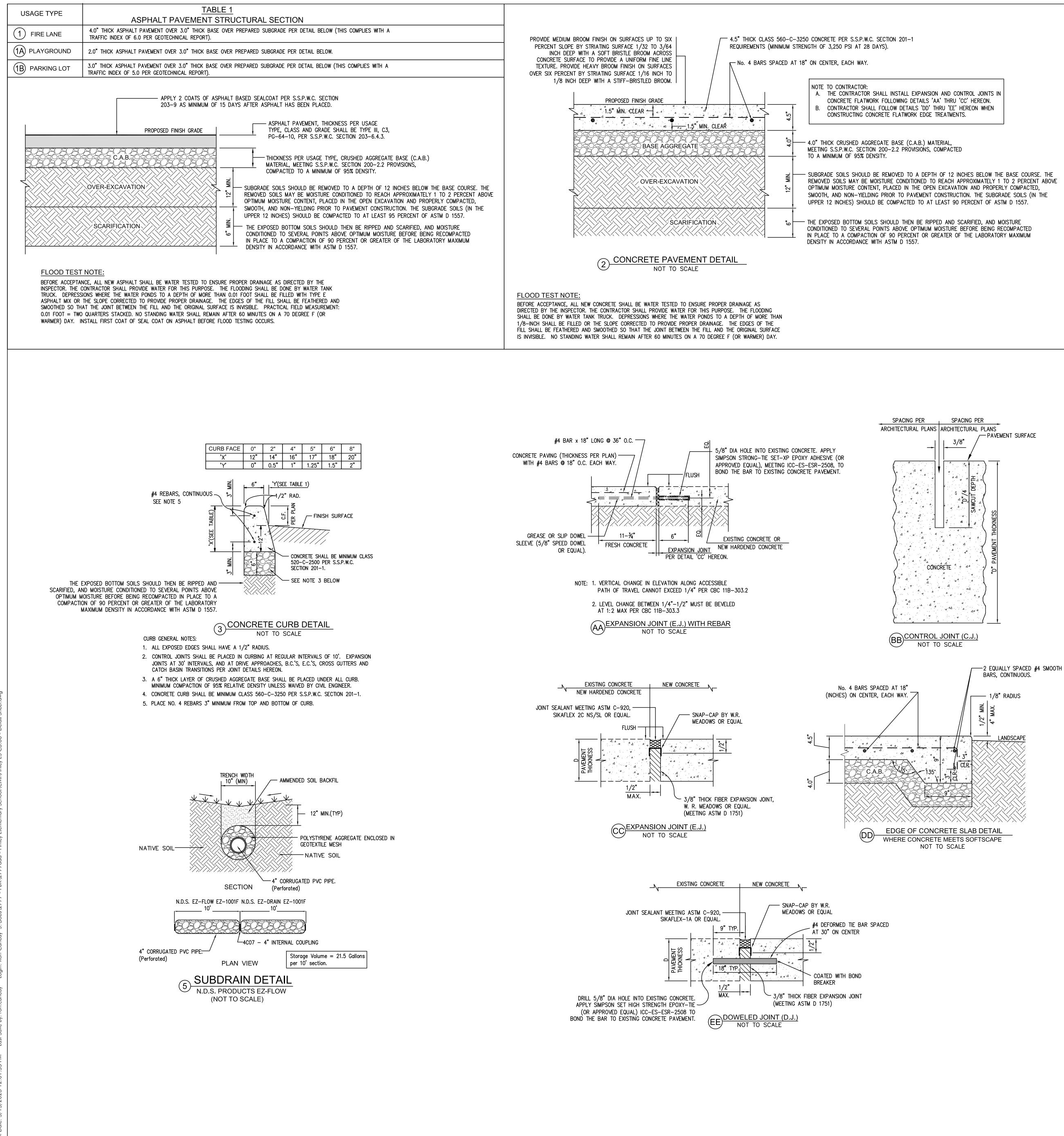
35 - SITE DETAILS



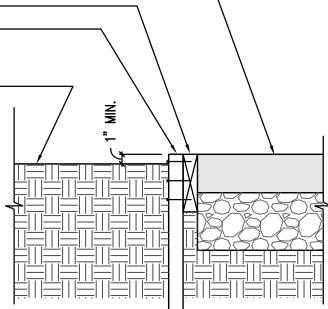








HOT-MIX ASPHALT PAVING OVER BASE MATERIAL ----2" X 8" REDWOOD HEADER -----2"x4"x18" STAKE WITH 3-12D HOT DIPPED -GALV. NAILS AT EACH STAKE - 4'-0" O.C. MAX AND AT ALL BOARD ENDS. LANDSCAPING FINISH GRADE -

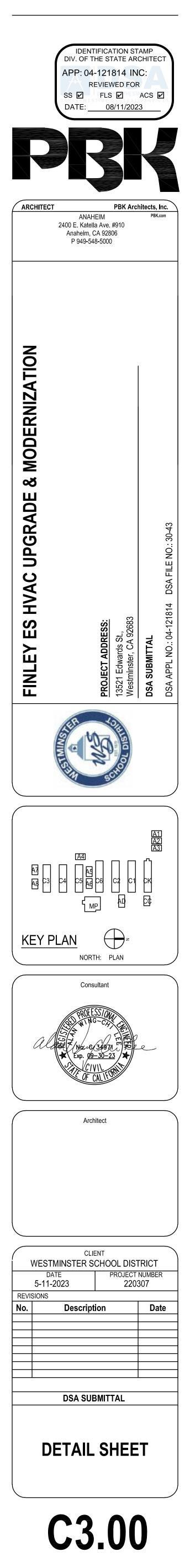


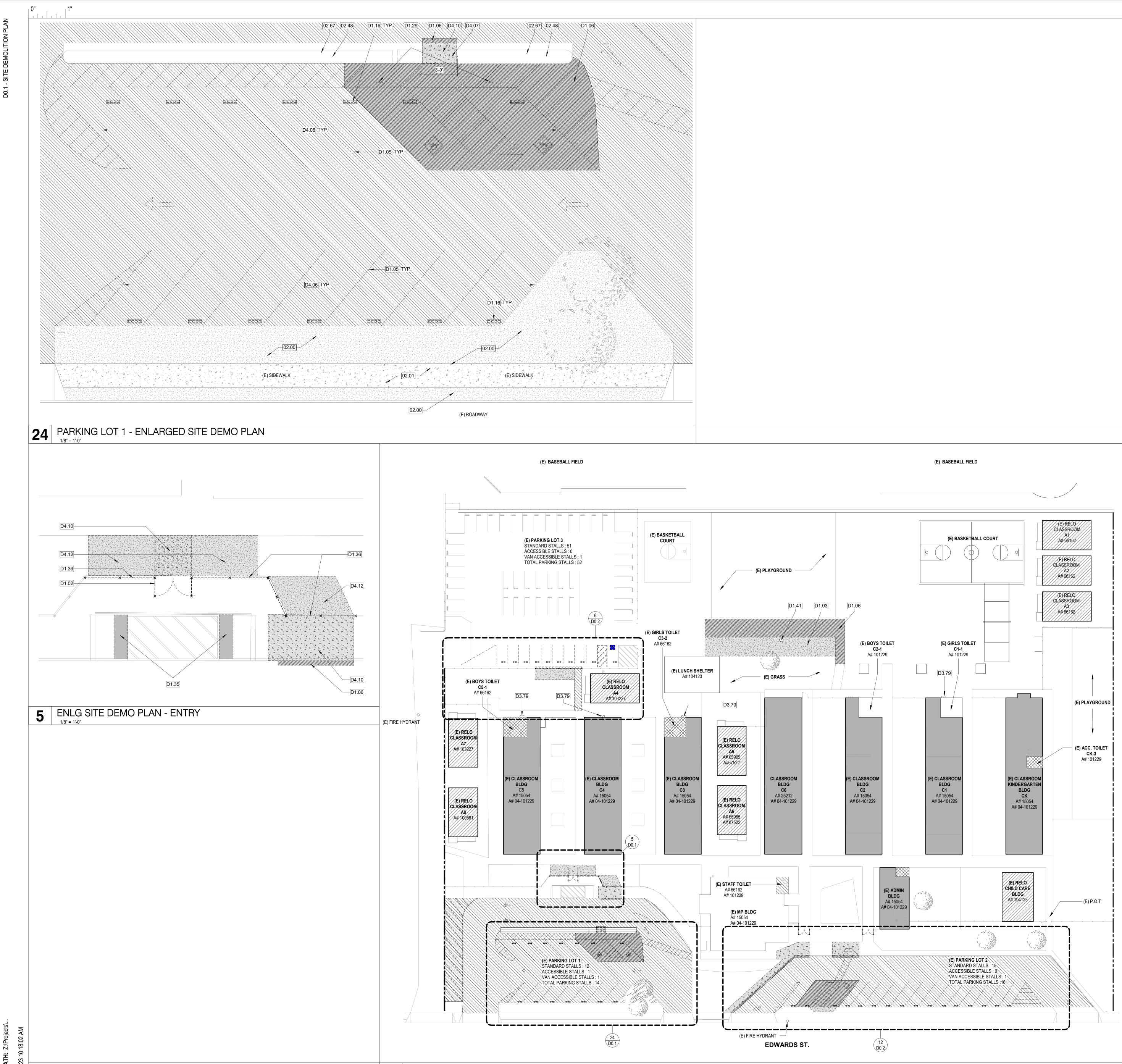
STAKE - 16" MINIMUM EMBEDMENT - CUT OFF TOP SECTION -FLUSH WITH HEADER AFTER DRIVING INTO GROUND.

**REDWOOD HEADER DETAIL** 

NOT TO SCALE

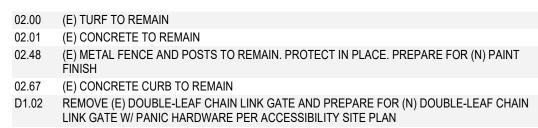


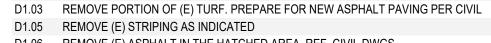






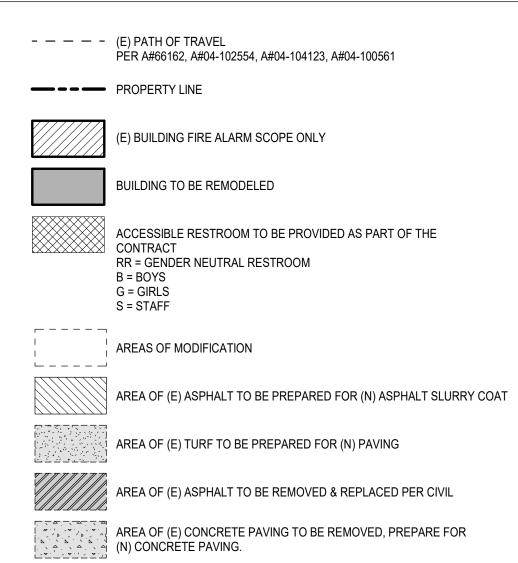


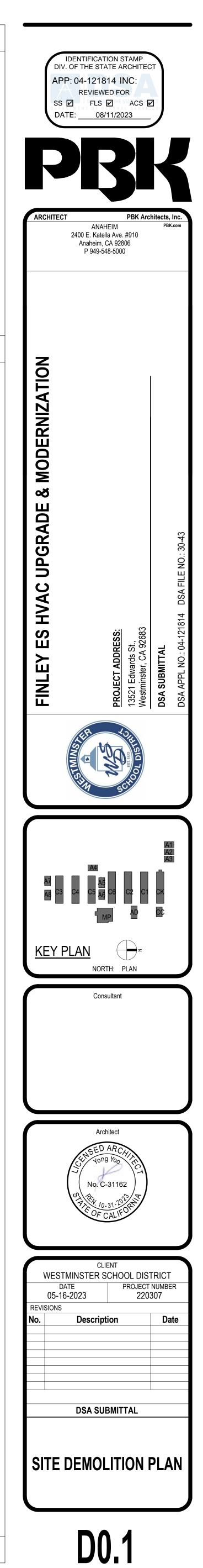




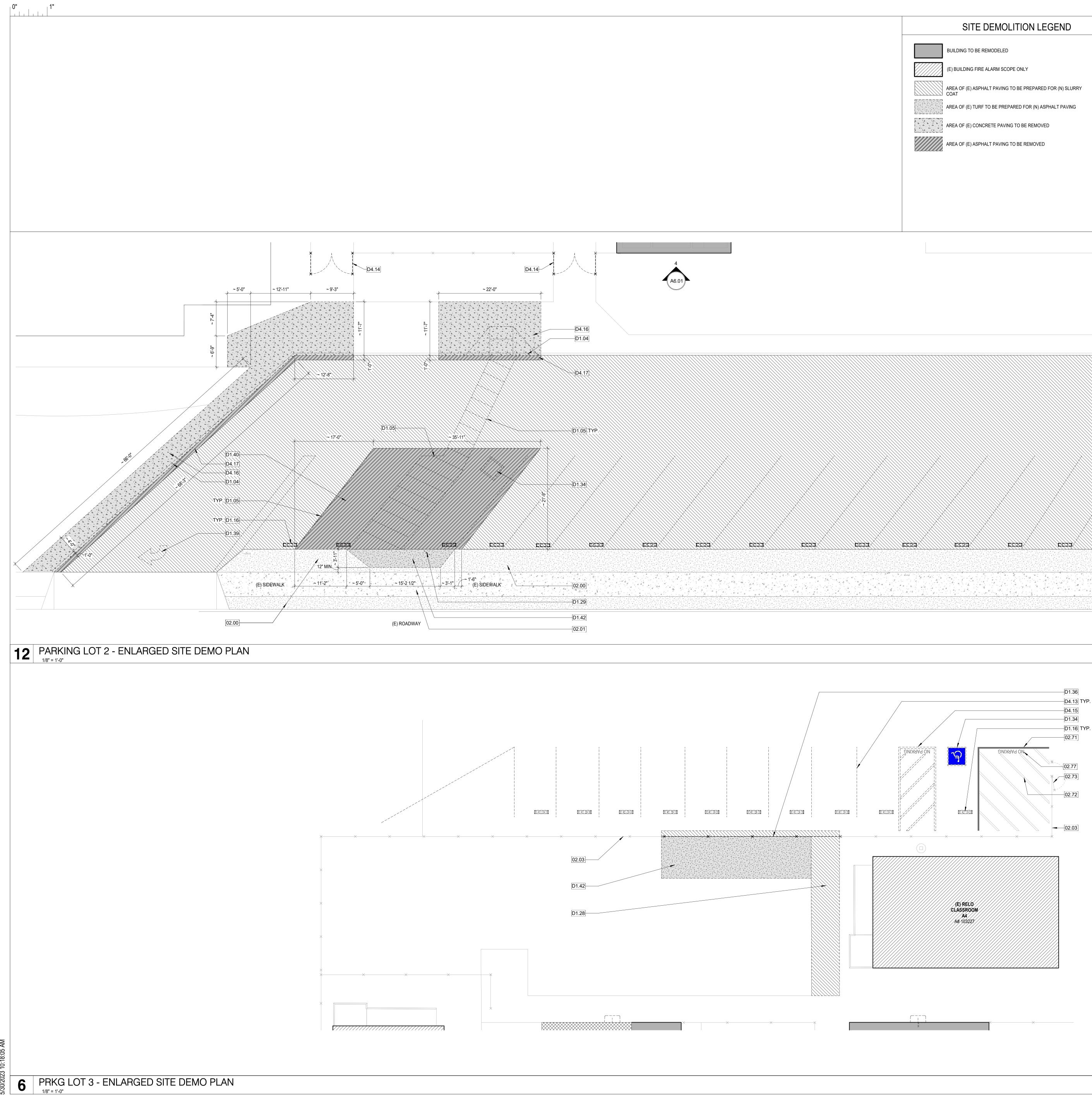
- D1.06 REMOVE (E) ASPHALT IN THE HATCHED AREA, REF. CIVIL DWGS. D1.16 REMOVE (E) CONCRETE WHEEL STOP
- D1.29 (E) ACCESSIBLE PARKING SIGN TO BE REMOVED D1.35 PREPARE (E) CONCRETE FOR (N) TRUNCATED DOME MAT
- D1.36 REMOVE PORTION OF (E) 6'-0"H GALV STEEL CHAIN LINK FENCE, DISPOSE D1.41 (E) LIGHT POLE W/ CONCRETE BASE TO BE REMOVED
- D3.79 REMOVE (E) DRINKING FOUNTAINS, PREPARE FOR NEW DRINKING FOUNTAIN
- D4.10 REMOVE AND DISPOSE OF (E) CONCRETE PAVEMENT AS INDICATED PER CIVIL D4.12 PREPARE (E) TURF FOR NEW CONC PAVEMENT PER CIVIL

## SITE DEMOLITION LEGEND

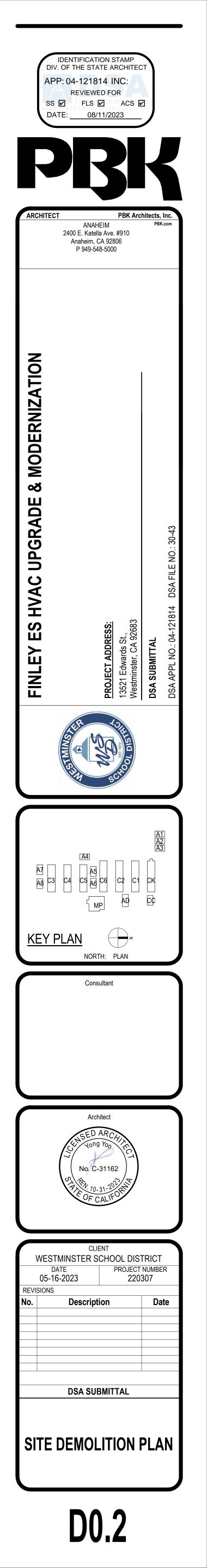




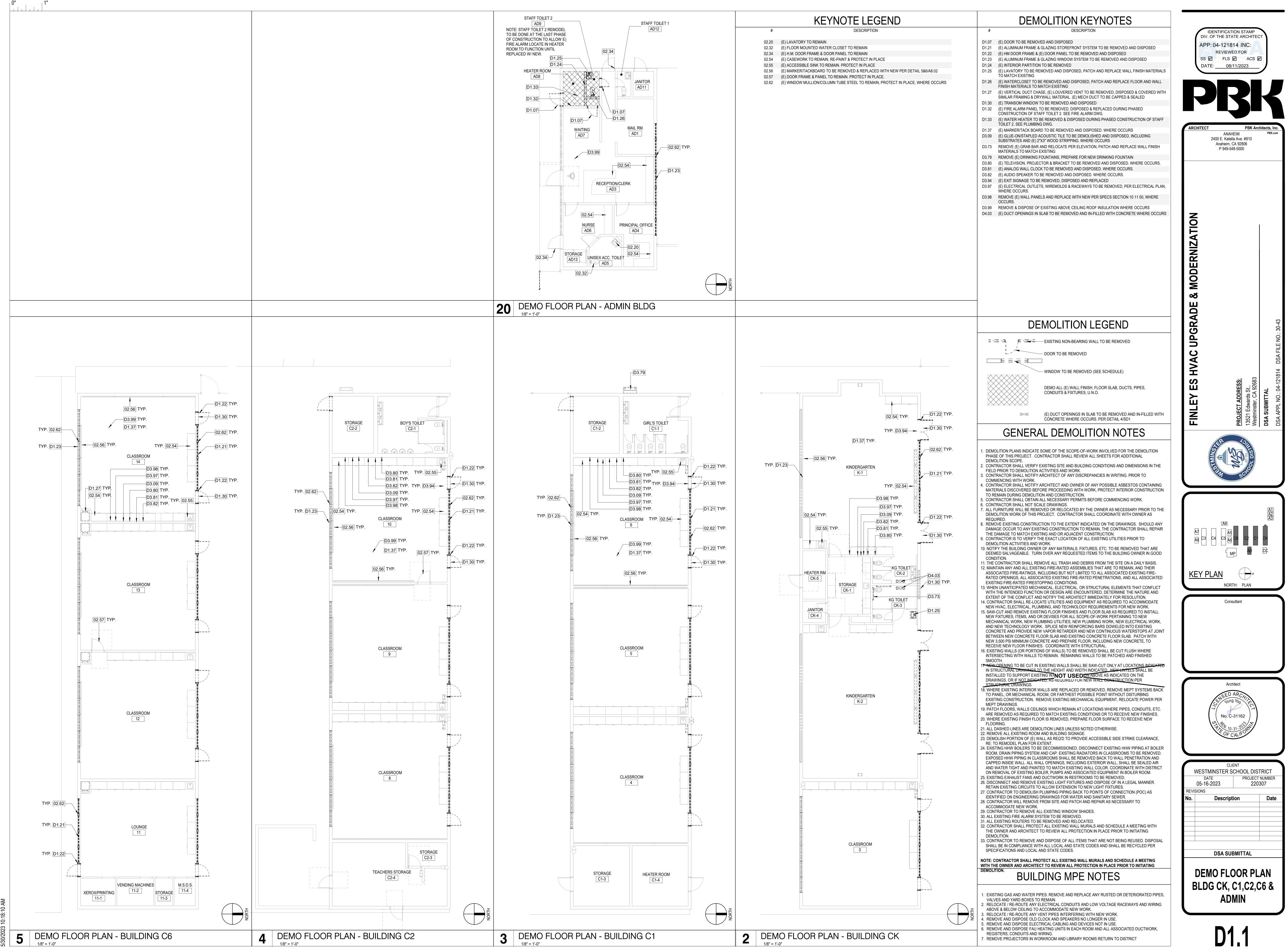




SITE DEMOLITION LEGEND	SITE DEMOLITION KEYED NOTES
BUILDING TO BE REMODELED	02.00 (E) TURF TO REMAIN
(E) BUILDING FIRE ALARM SCOPE ONLY	<ul> <li>02.01 (E) CONCRETE TO REMAIN</li> <li>02.03 (E) 6'-0"H GALV STEEL CHAIN LINK FENCE TO REMAIN</li> <li>02.71 (E) 4" WIDE PAINTED BLUE STRIPING TO REMAIN</li> </ul>
AREA OF (E) ASPHALT PAVING TO BE PREPARED FOR (N) SLURRY	<ul> <li>02.72 (E) 4" WIDE PAINTED WHITE STRIPING @ 36" OC TO REMAIN</li> <li>02.73 (E) CHAINLINK GATE TO REMAIN</li> <li>02.77 (E) 12" HIGH MIN. LETTERS IN WHITE PAINT, READING 'NO PARKING'. NO DIAGONAL</li> </ul>
AREA OF (E) TURF TO BE PREPARED FOR (N) ASPHALT PAVING	STRIPING THROUGH TEXT         D1.04       REMOVE AND DISPOSE OF (E) CONCRETE CURB AS INDICATED         D1.05       REMOVE (E) STRIPING AS INDICATED
AREA OF (E) CONCRETE PAVING TO BE REMOVED	D1.16REMOVE (E) CONCRETE WHEEL STOPD1.28(E) ASPHALT AND PARKING STRIPING TO BE PREPARED FOR (N) ASPHALT SLURRY COAT
AREA OF (E) ASPHALT PAVING TO BE REMOVED	D1.29       (E) ACCESSIBLE PARKING SIGN TO BE REMOVED         D1.34       REMOVE (E) PAINTED INTERNATIONAL SYMBOL OF ACCESSIBILITY         D1.36       REMOVE PORTION OF (E) 6'-0"H GALV STEEL CHAIN LINK FENCE, DISPOSE
	<ul> <li>D1.39 REMOVE (E) PAINTED WHITE DRIVE AISLE DIRECTIONAL SIGNAGE</li> <li>D1.40 REMOVE AND DISPOSE OF (E) ASPHALT PAVEMENT &amp; BASE MATERIAL AS INDICATED,</li> </ul>
	PREPARE FOR (N) ASPHALT PAVEMENT         D4.13       REMOVE (E) 4" WIDE PAINTED WHITE STRIPING         D4.14       REMOVE (E) DOUBLE LEAF METAL GATE AND DISPOSE, PREPARE FOR (N) DOUBLE LEAF
	METAL GATE D4.15 REMOVE (E) ACCESSIBLE AISLE STRIPING AND TEXT D4.16 REMOVE AND DISPOSE OF (E) CONCRETE PAVEMENT W/ REBAR
	D1.05\TYP.
	D1.39
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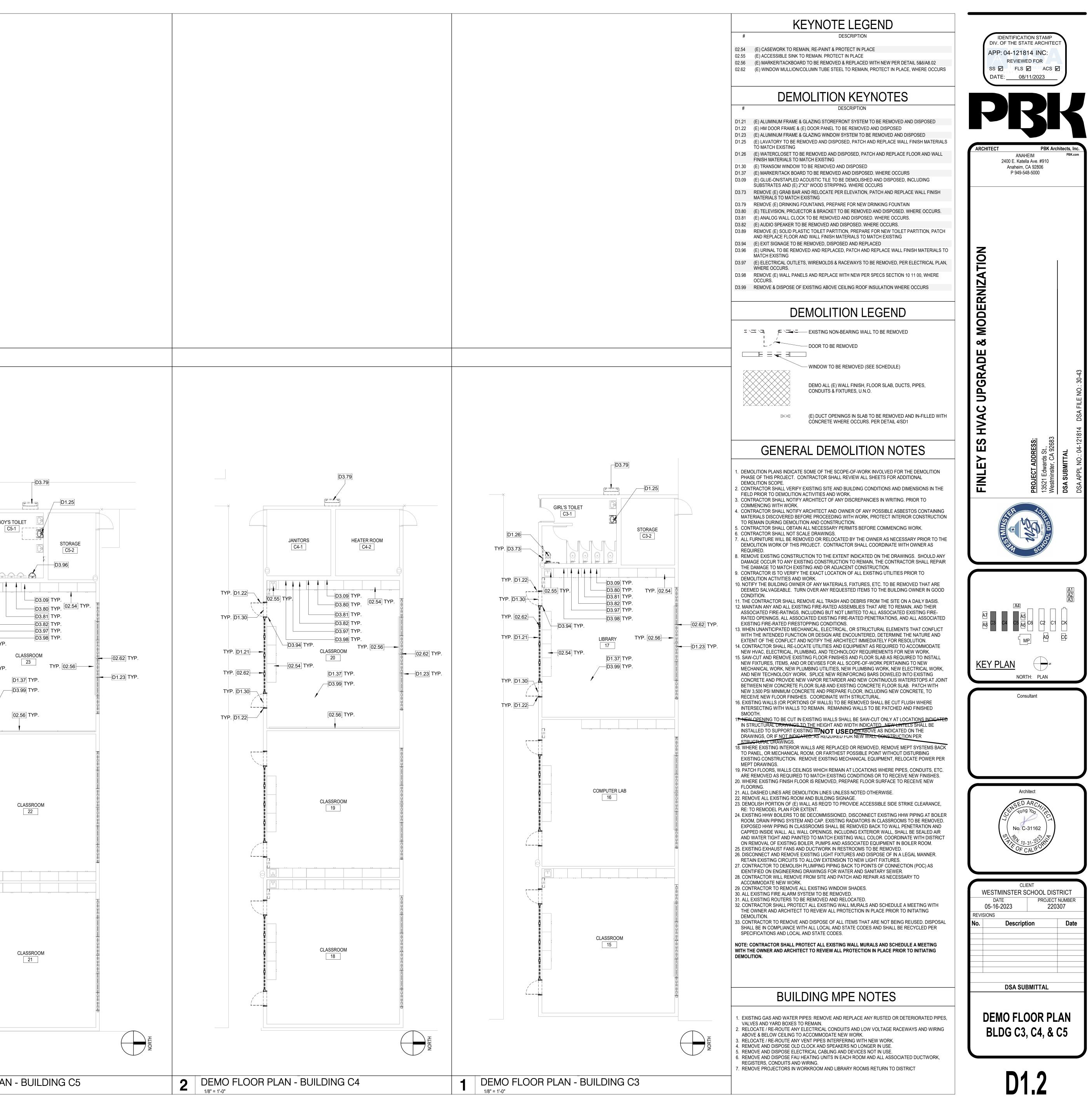




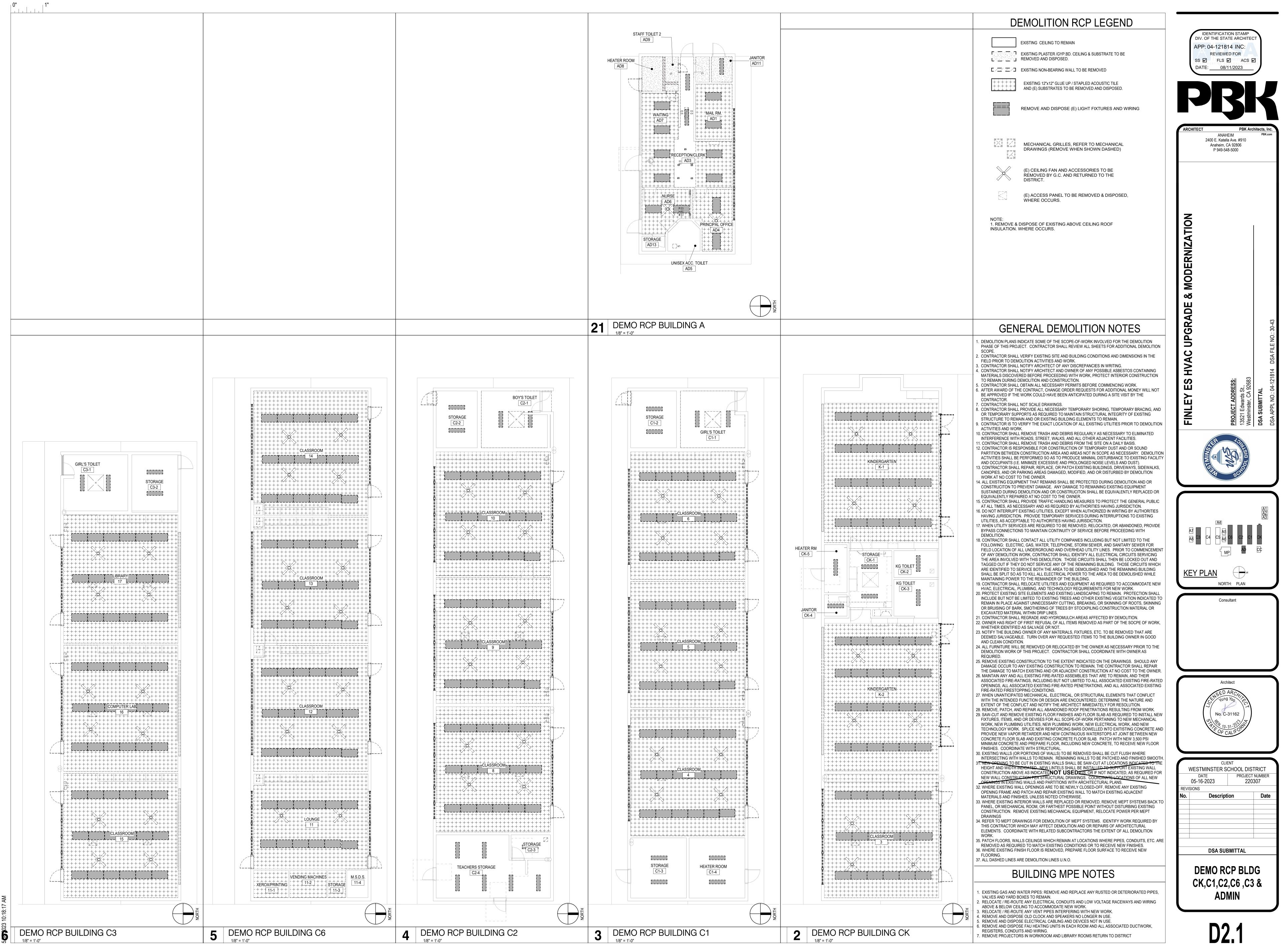


D1.2 - DEMO FLOOR PLAN BLDG C3, C4, & C5

	BC
TYP [0122 TYP [0123] TYP [0121 TYP [0121 TYP [0122] TYP [012] TYP	Ŀ/
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	] TYF
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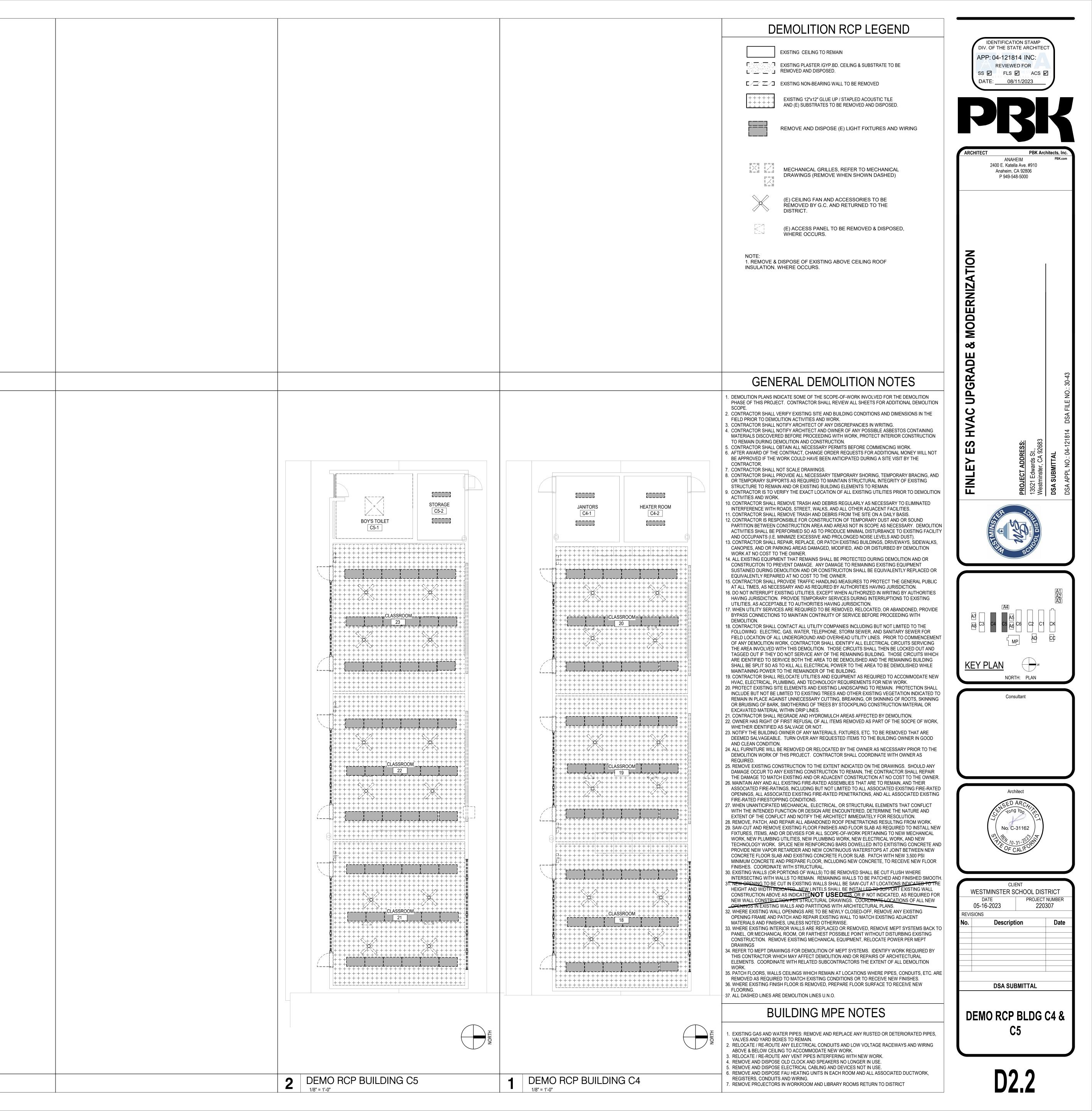




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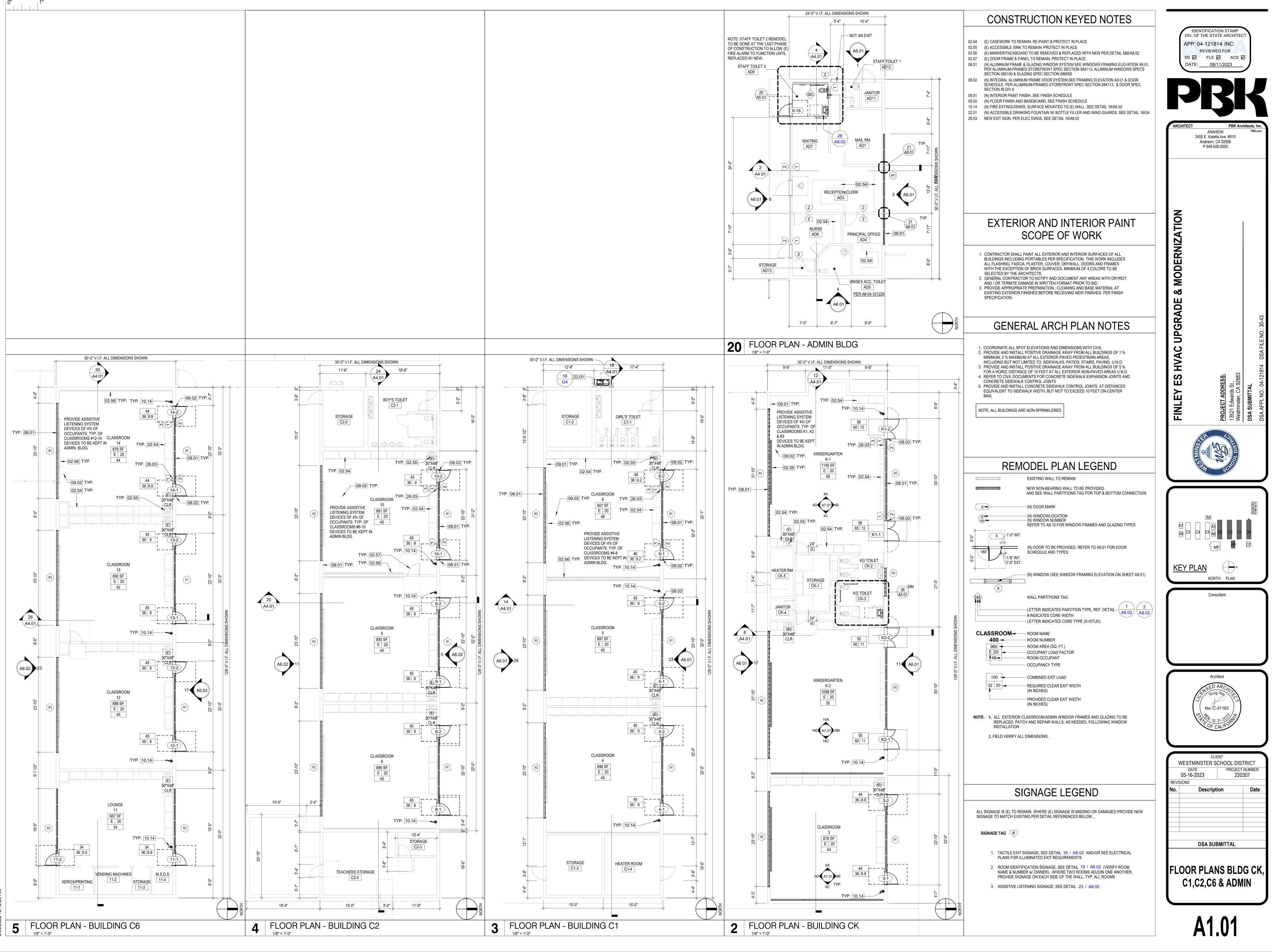
D2.2 - DEMO RCP BLDG C4 & C5

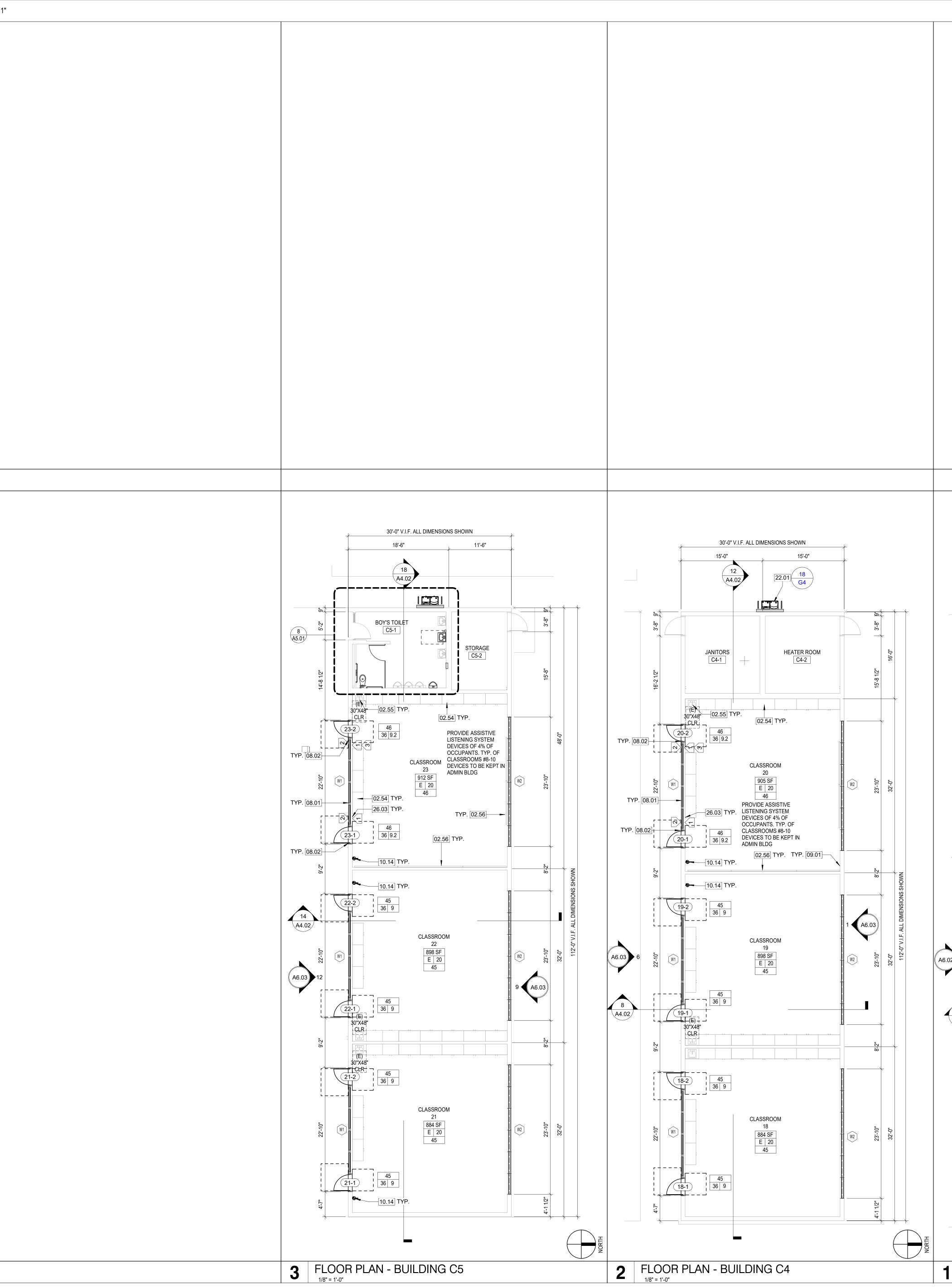
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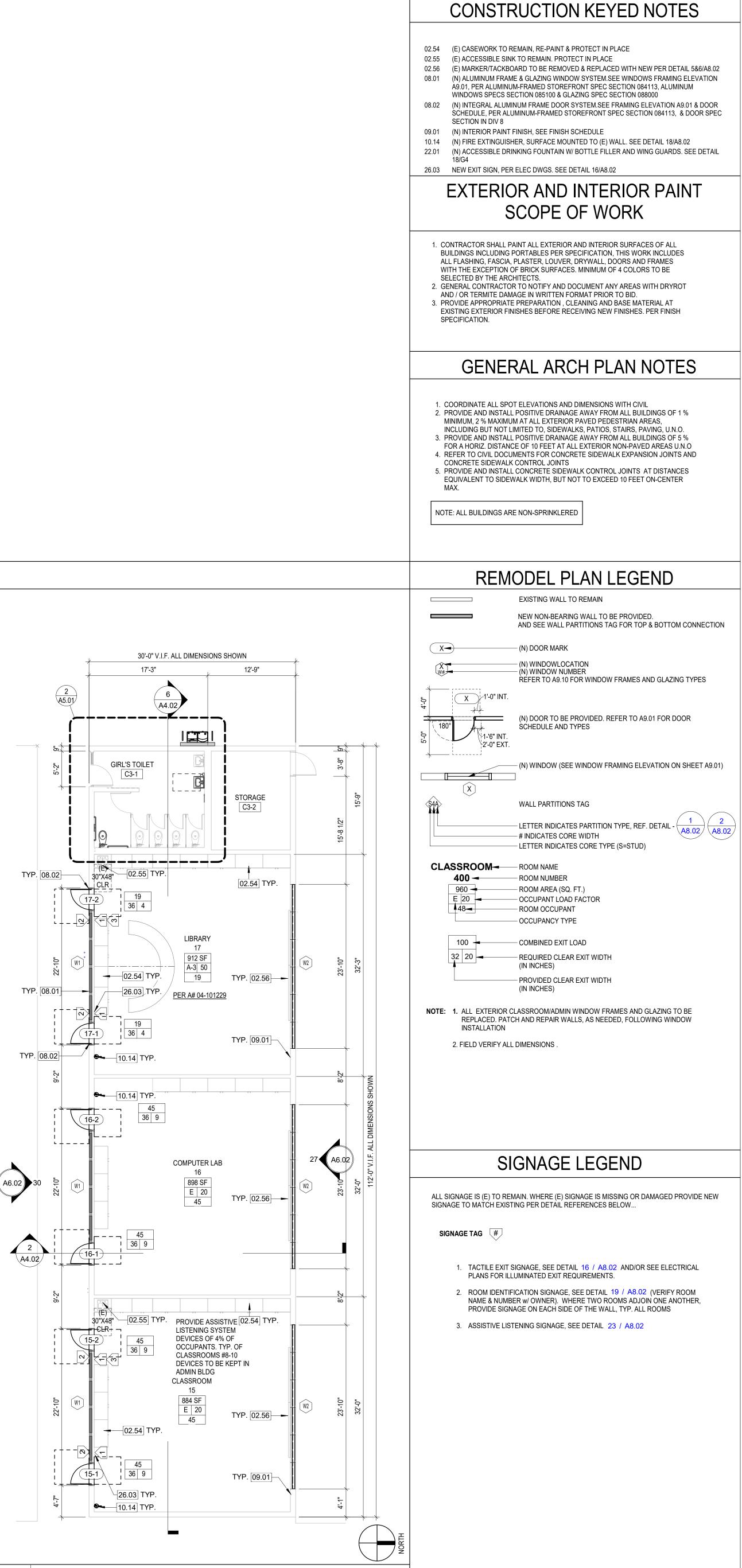


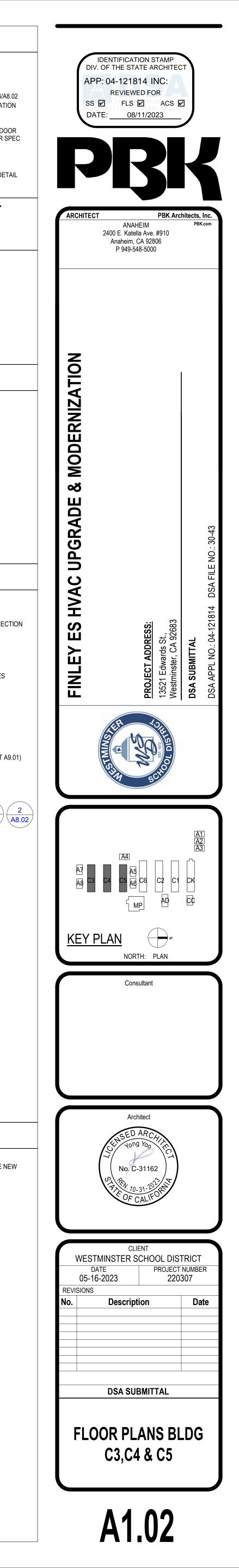


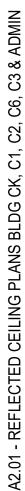


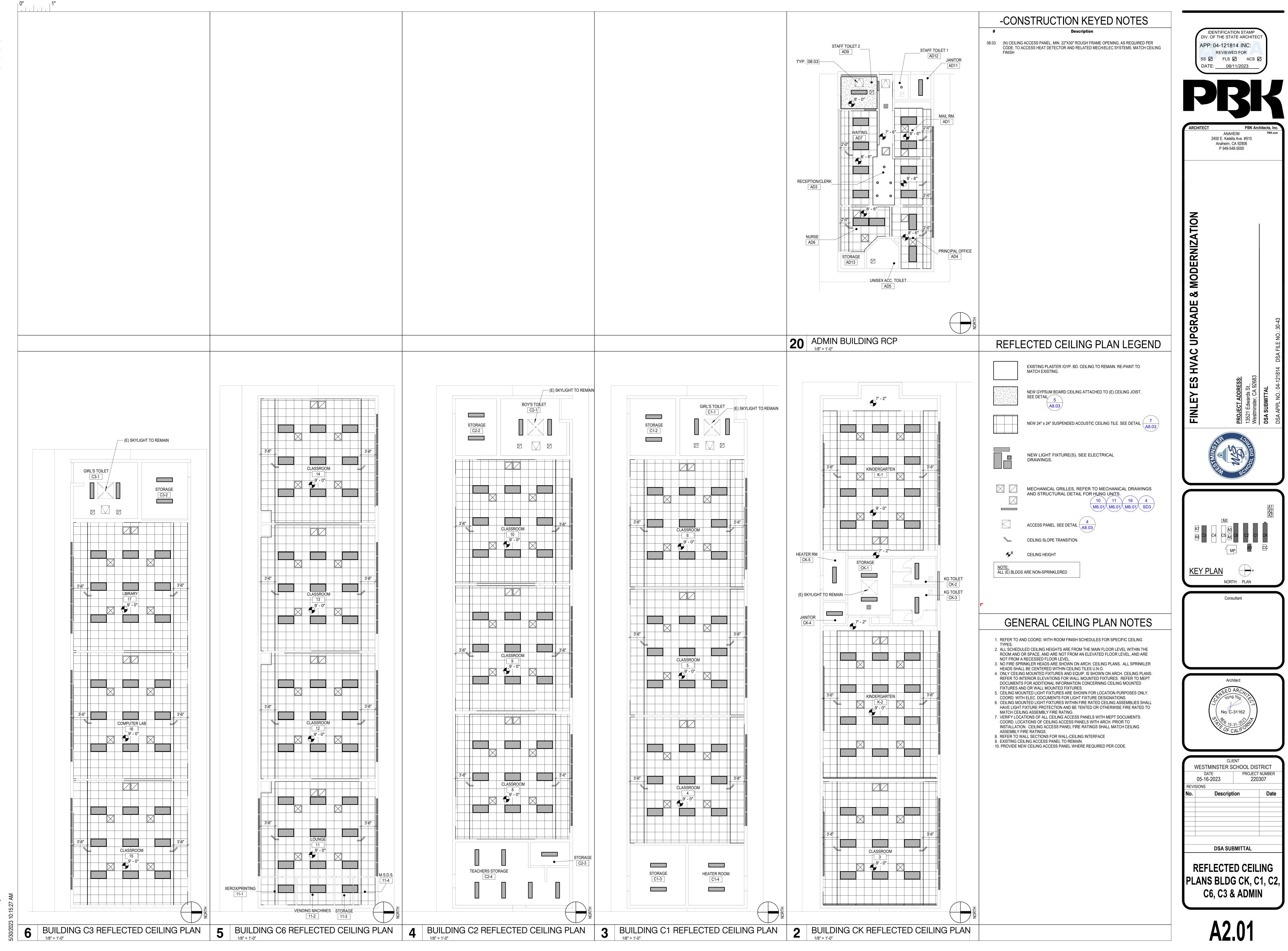
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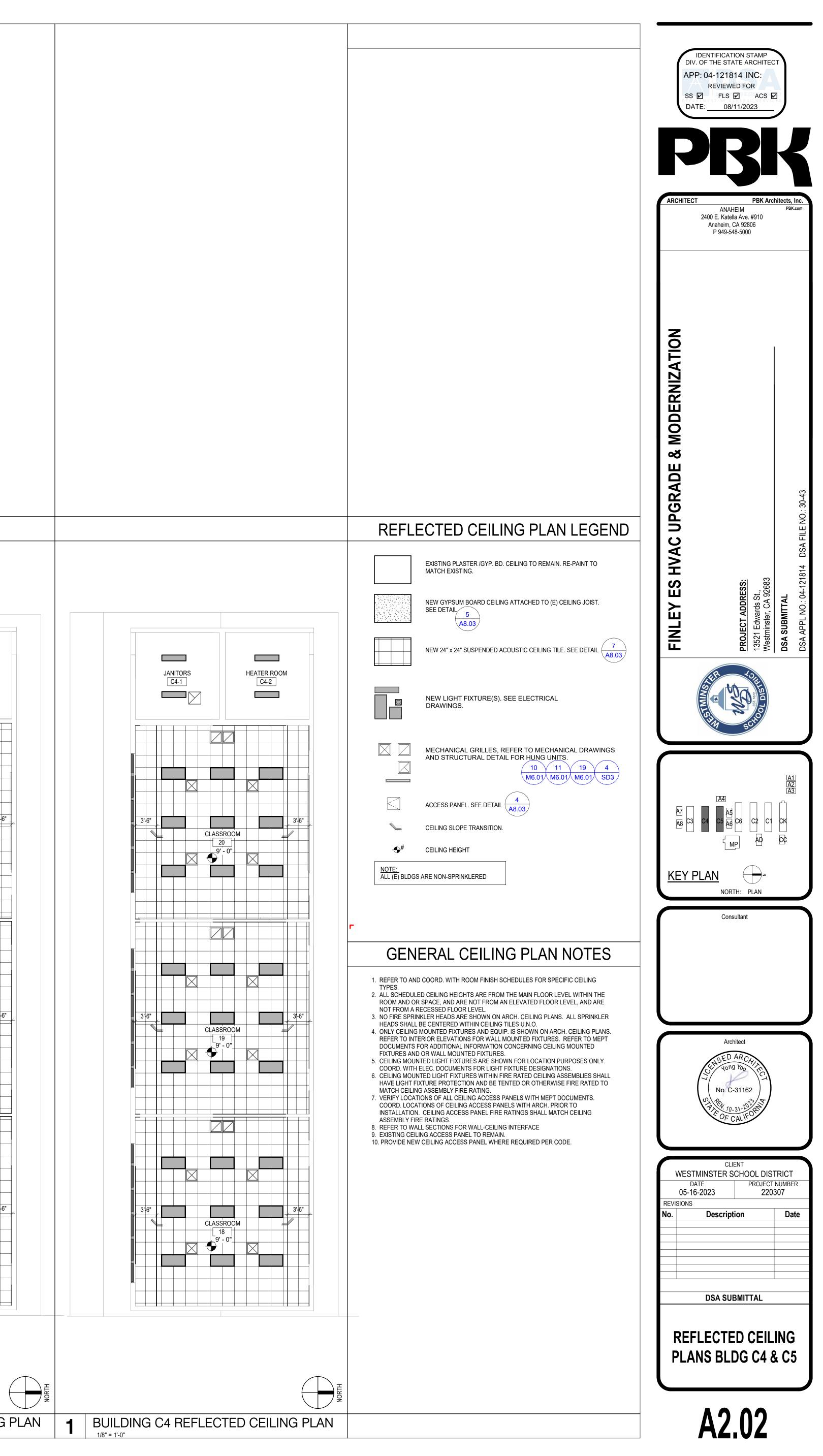




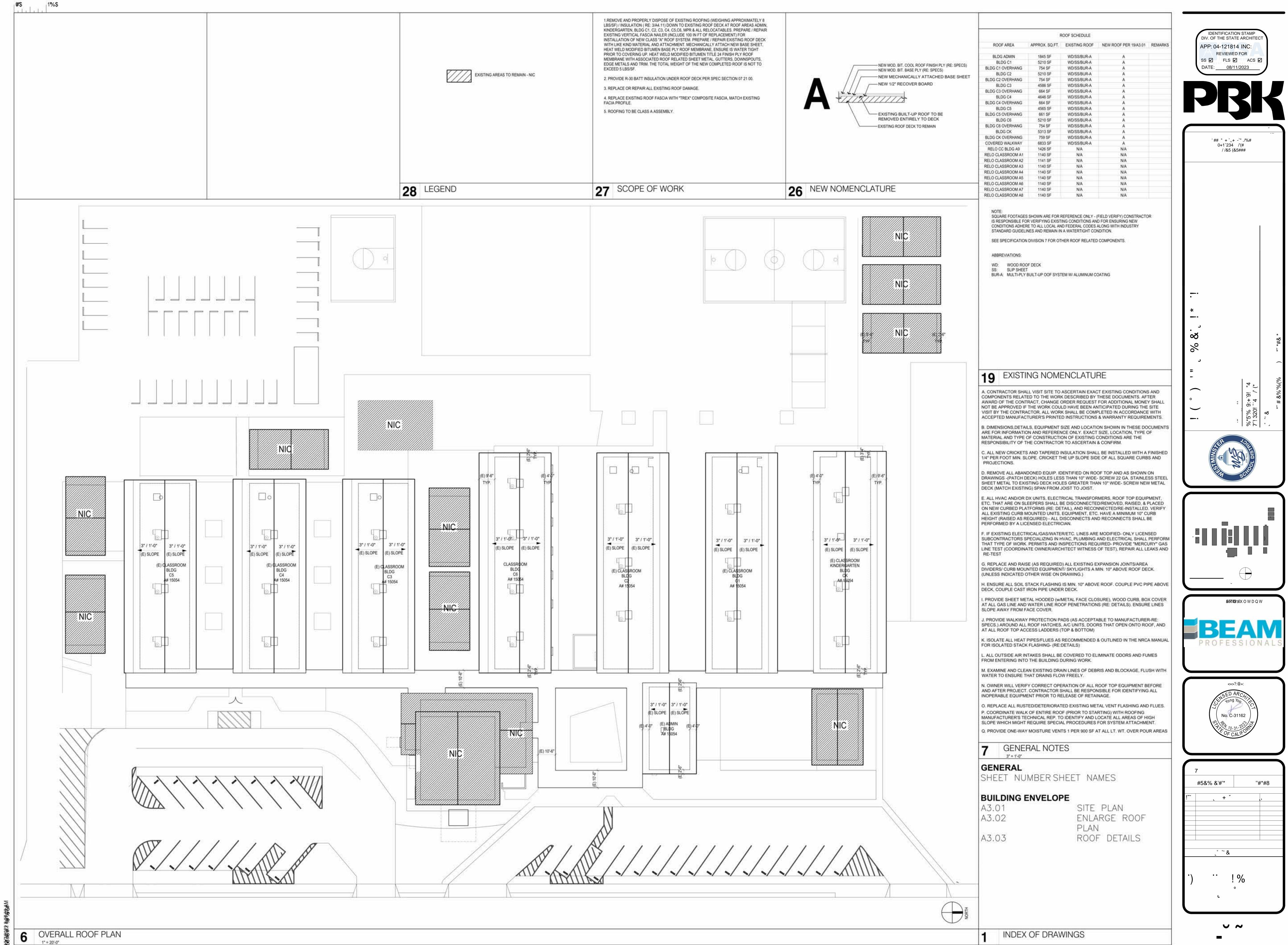
A2.02 - REFLECTED CEILING PLANS BLDG C4 & C5

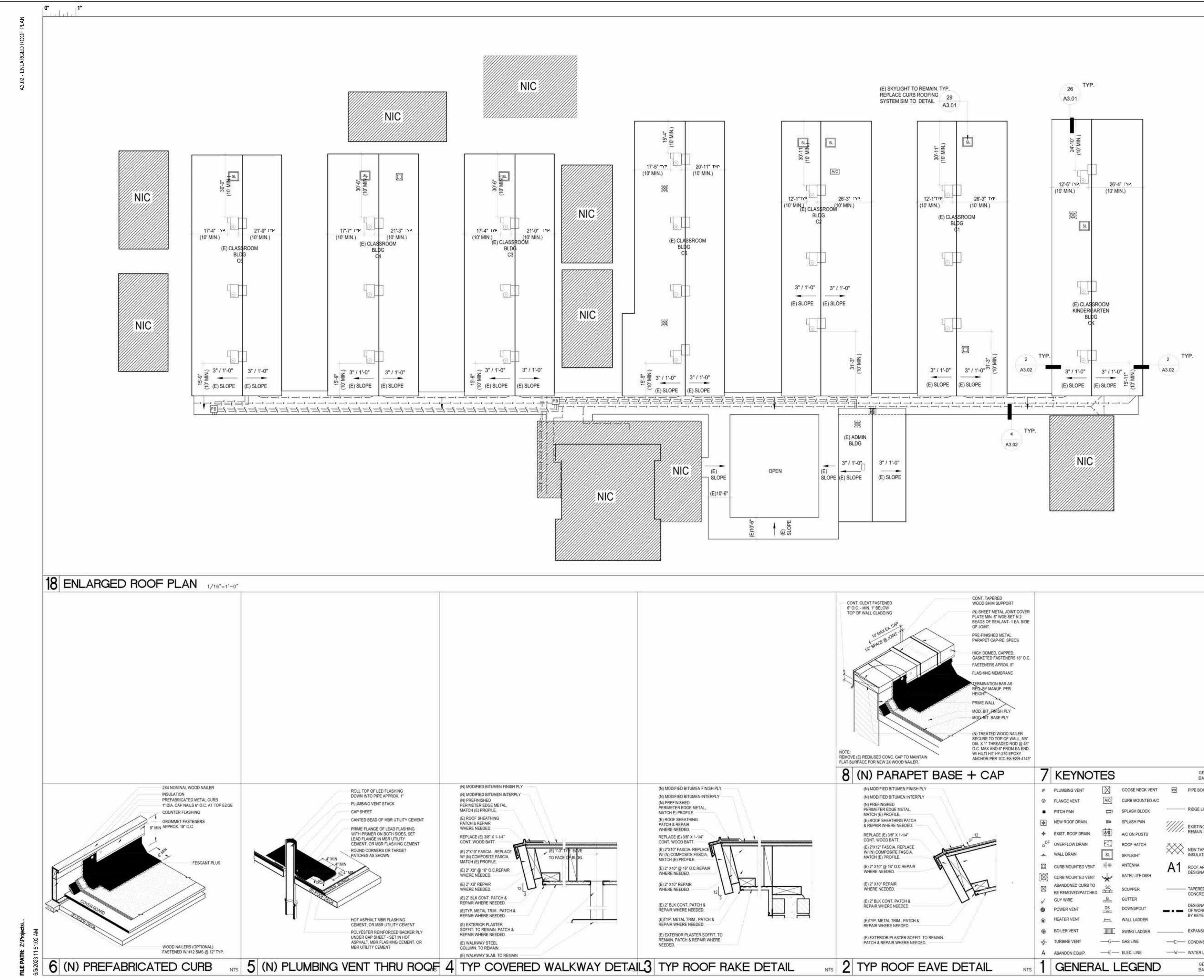
0" 1"	

	(E) SKYLIGHT TO REMAIN
	BOY'S TOILET C5-1 STORAGE C5-2 11' - 2 1/2"
	3'-6" 3'-6" CLASSROOM 23 9' - 0" 3'-6"
	3'-6" CLASSROOM 22 9' - 0"
	CLASSROOM     21       9' - 0"     21       9' - 0"     21
	2 BUILDING C5 REFLECTED CEILING

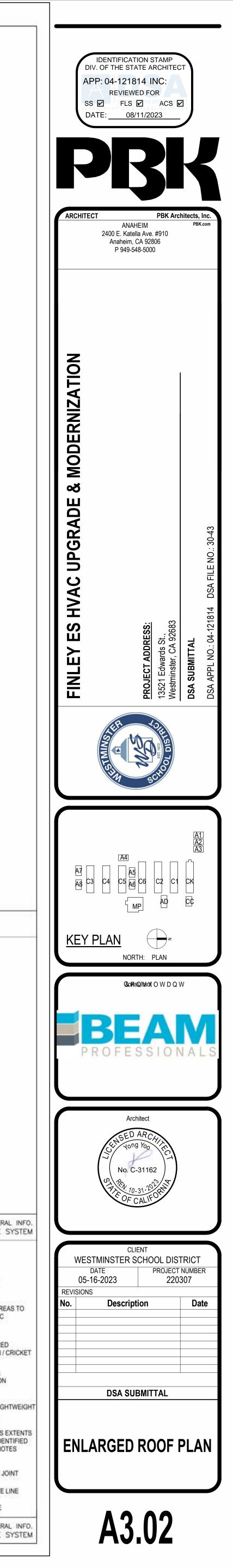


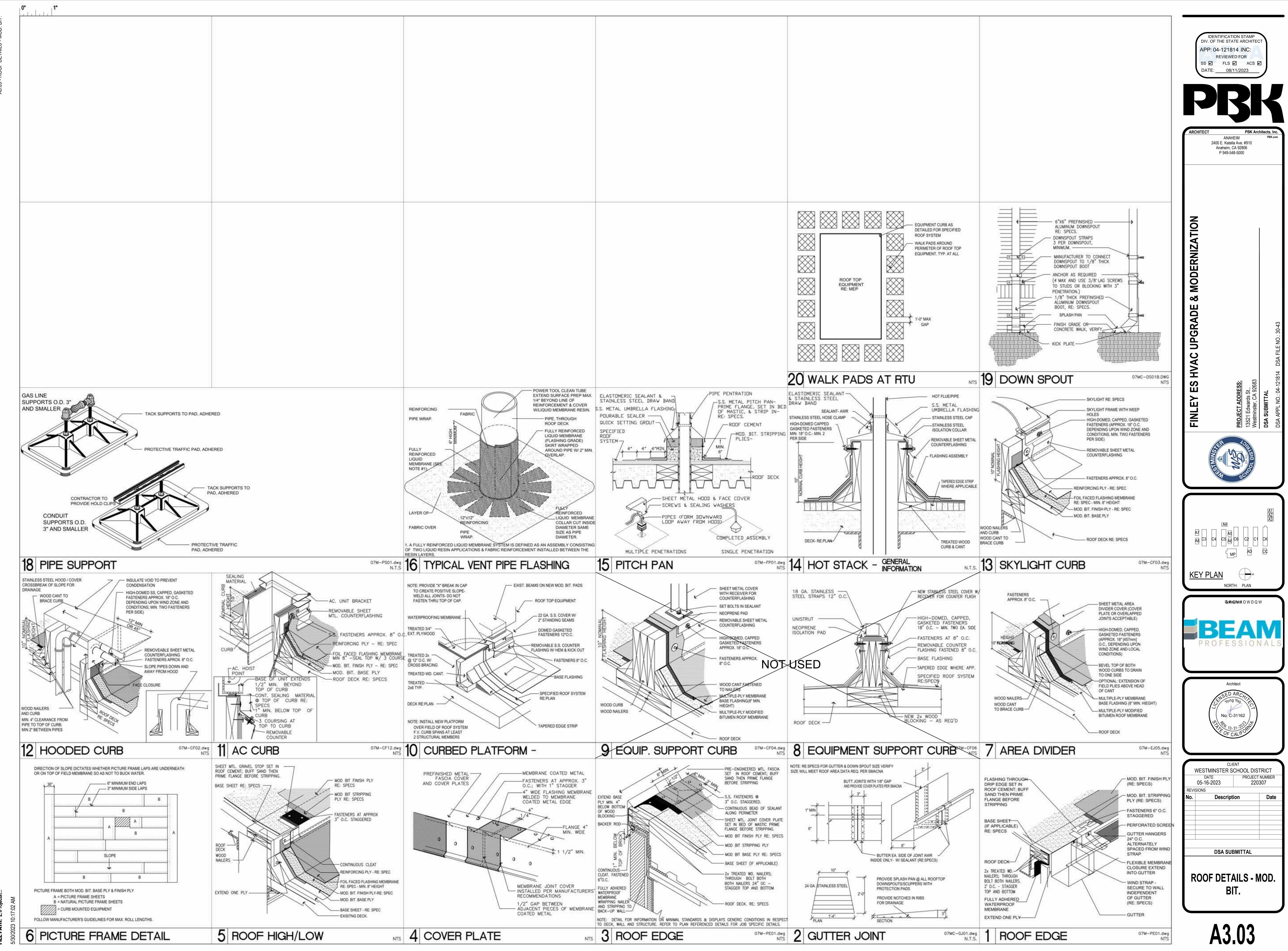




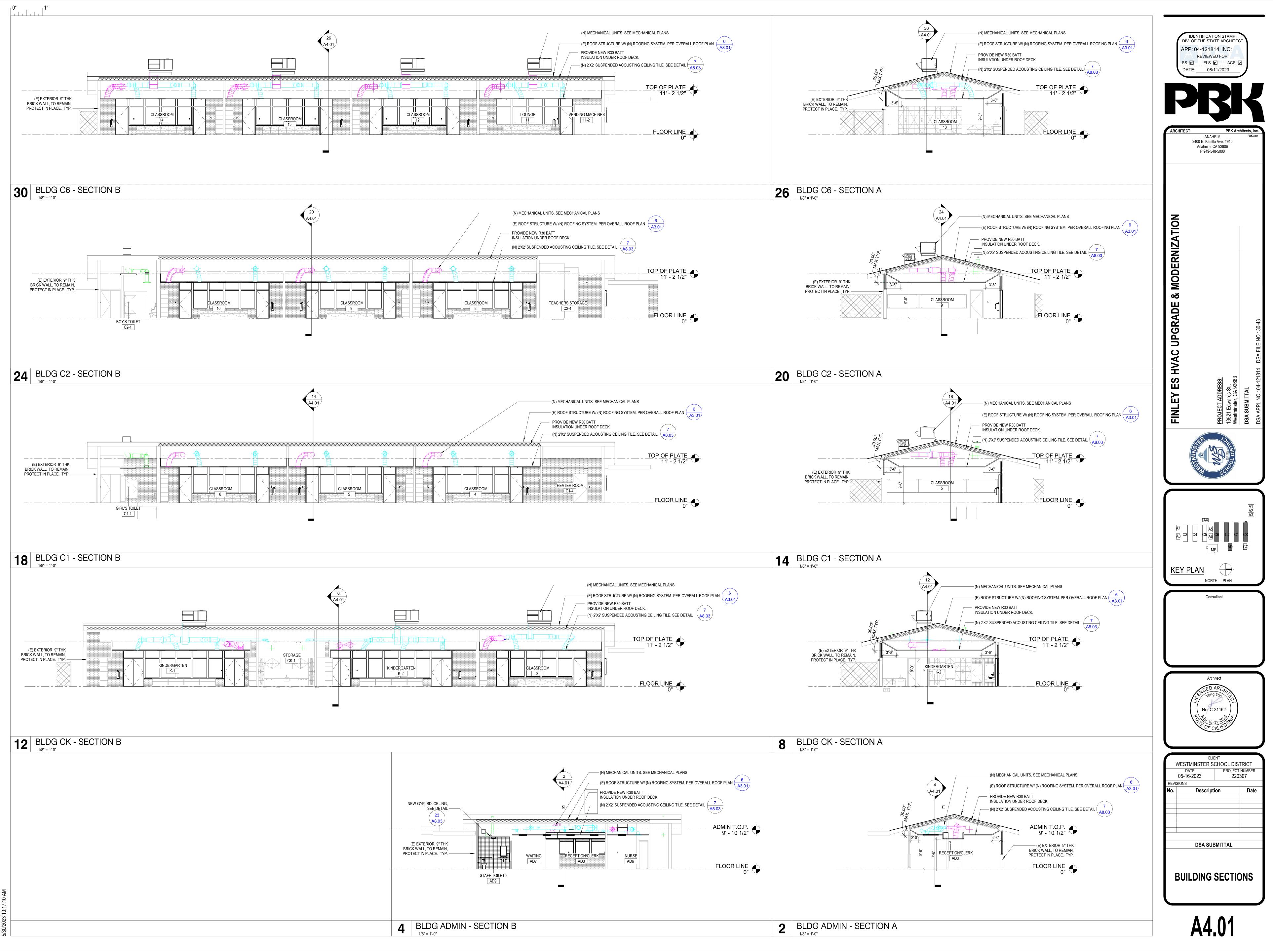


PATCH & REPAIR WHERE NEEDED.	ې A	TURBINE VENT ABANDON EQUIP.		- GAS LINE - ELEC. LINE	—c—	<ul> <li>CONDINSATE LIN</li> <li>WATER LINE</li> </ul>
(E) EXTERIOR PLASTER SOFFIT. TO REMAIN.	۲	BOILER VENT		SWING LADDER -		EXPANSION JOIN
(E)TYP. METAL TRIM . PATCH &		HEATER VENT	щ	WALL LADDER		OF WORK IDENTI BY KEYED NOTES
(E) 2" BLK CONT. PATCH & CONT.	√ ⊚	GUY WIRE POWER VENT	 DS	GUTTER DOWNSPOUT		DESIGNATES EXT
WHERE NEEDED.		BE REMOVED/PATCHED	⇒sc ⇒±≠	SCUPPER		<ul> <li>TAPERED LIGHTV CONCRETE</li> </ul>
(E) 2" X10" REPAIR		CURB MOUNTED VENT ABANDONED CURB TO	*	SATELLITE DISH		
(E) 2" X10" @ 16" O.C.REPAIR HT (		CURB MOUNTED VENT	<del>     </del>	ANTENNA	A1	ROOF AREA DESIGNATION
W/ (N) COMPOSITE FASCIA, MATCH (E) PROFILE.	-	WALL DRAIN	SL	SKYLIGHT	XXX	NEW TAPERED INSULATION / CRI
CONT. WOOD BATT. (E) 2"X12" FASCIA. REPLACE	oOF	OVERFLOW DRAIN	$\leq$	ROOF HATCH	888	NEW TADEDED
REPLACE (E) 3/8" X 1-1/4" 12	+	EXIST. ROOF DRAIN	[Å¢]	A/C ON POSTS	1////	EXISTING AREAS REMAIN - NIC
MATCH (E) PROFILE. (E) ROOF SHEATHING PATCH & REPAIR WHERE NEEDED.	•	NEW ROOF DRAIN	im .	SPLASH PAN	'////.	
(N) PREFINISHED PERIMETER EDGE METAL,		PITCH PAN		SPLASH BLOCK		- RIDGE LINE
(N) MODIFIED BITUMEN INTERPLY	ø	PLUMBING VENT		GOOSE NECK VENT	Re	PIPE BOX
 8 (N) PARAPET BASE + CAP	1	KEYNOT	100000	00005 10000	-	BASE SY
NOTE: REMOVE (E) REDIUSED CONC. CAP TO MAINTAIN FLAT SURFACE FOR NEW 2X WOOD NAILER.						
TERMINATION BAR AS RED.BY MANUF. PER HEIGHT						
FASTENERS APROX. 8* FLASHING MEMBRANE						
HIGH DOMED, CAPPED, GASKETED FASTENERS 18" O.C.						
10 MAX EA CAP 10 MAX						
6" O.C MIN. 1" BELOW TOP OF WALL CLADDING (N) SHEET METAL JOINT COVER PLATE MIN. 6" WDE SET N 2 BEADS OF SEALANT- 1 EA. SIDE OF JOINT.						
CONT. CLEAT FASTENED WOOD SHIM SUPPORT						

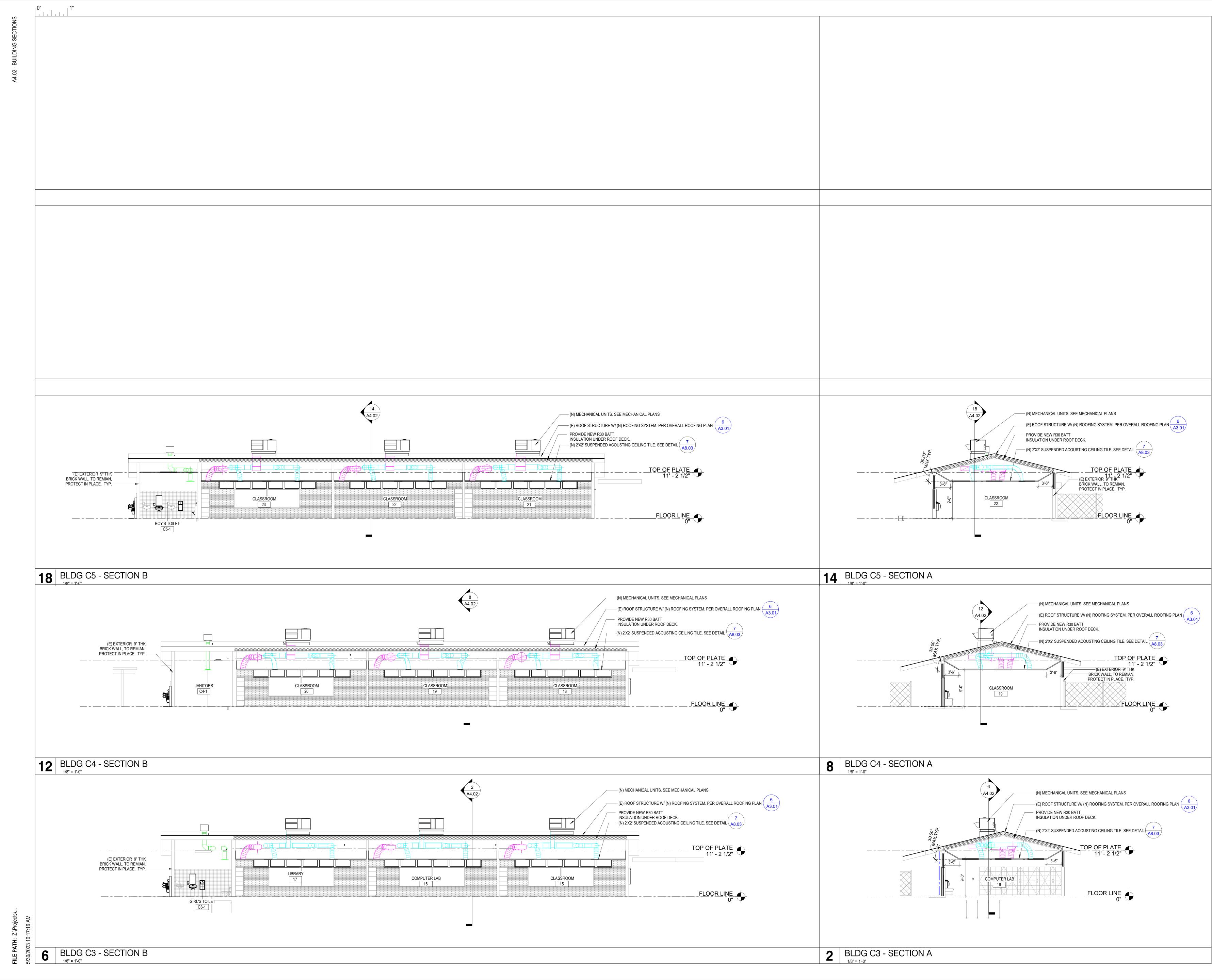


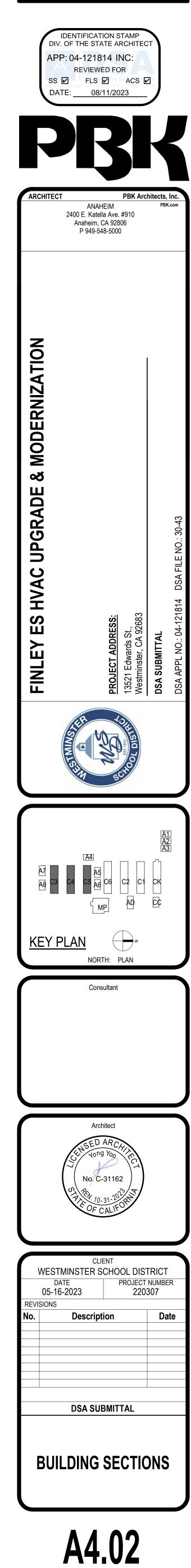


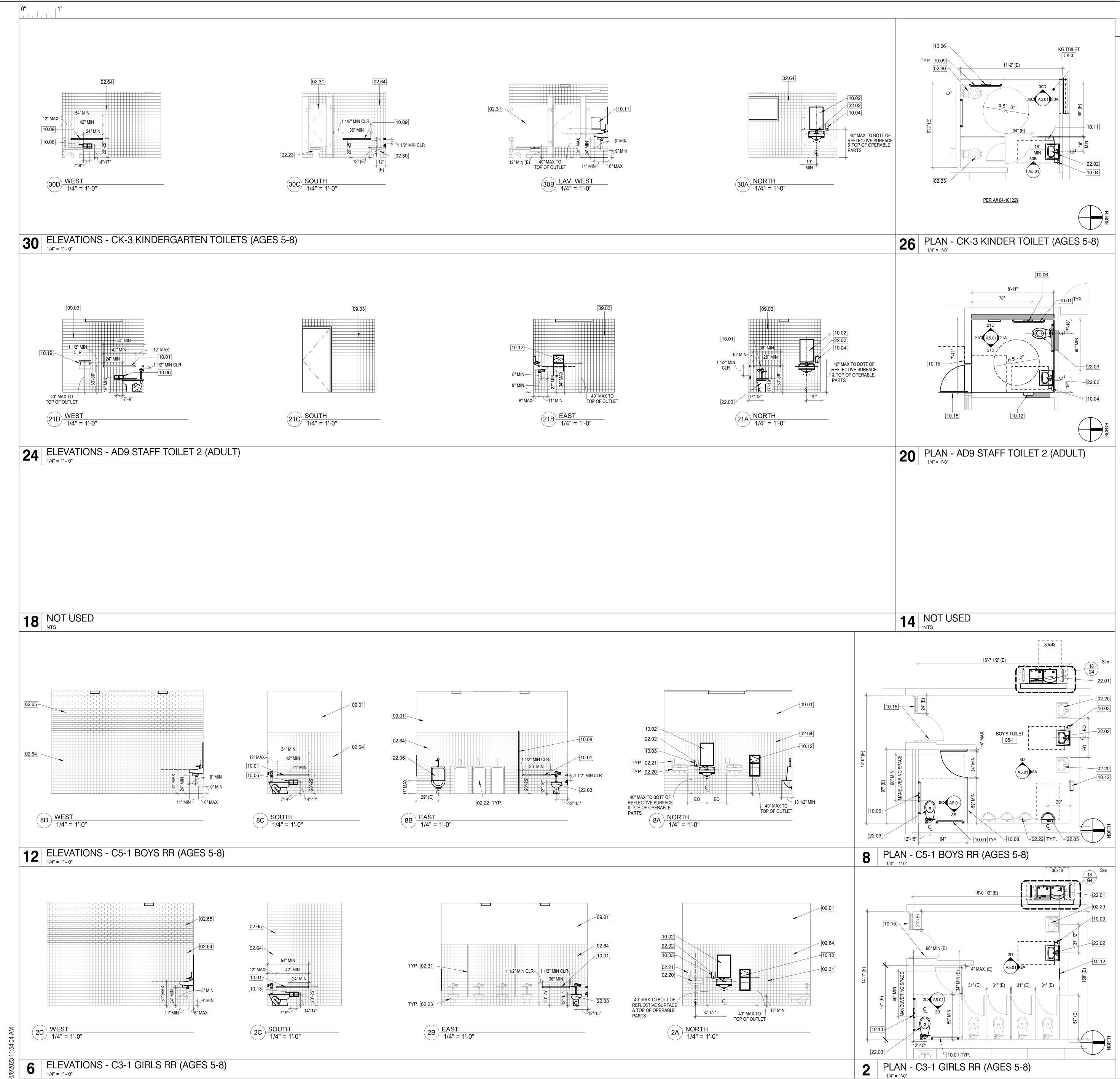




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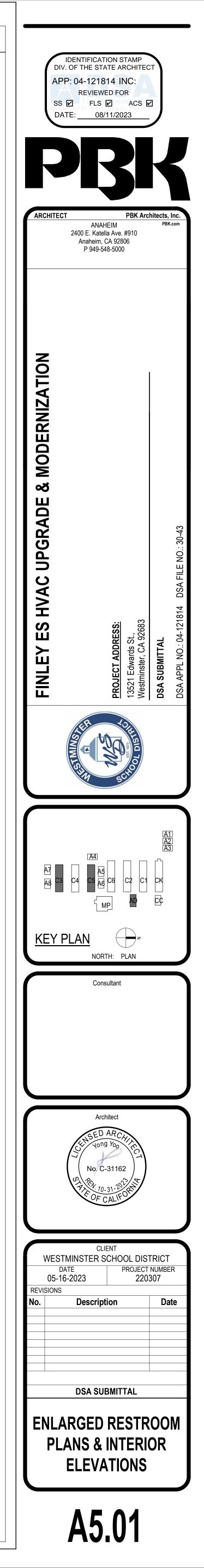




A5.01 - ENLARGED RESTROOM PLANS & INTERIOR ELEVATIONS

## CONSTRUCTION KEYED NOTES

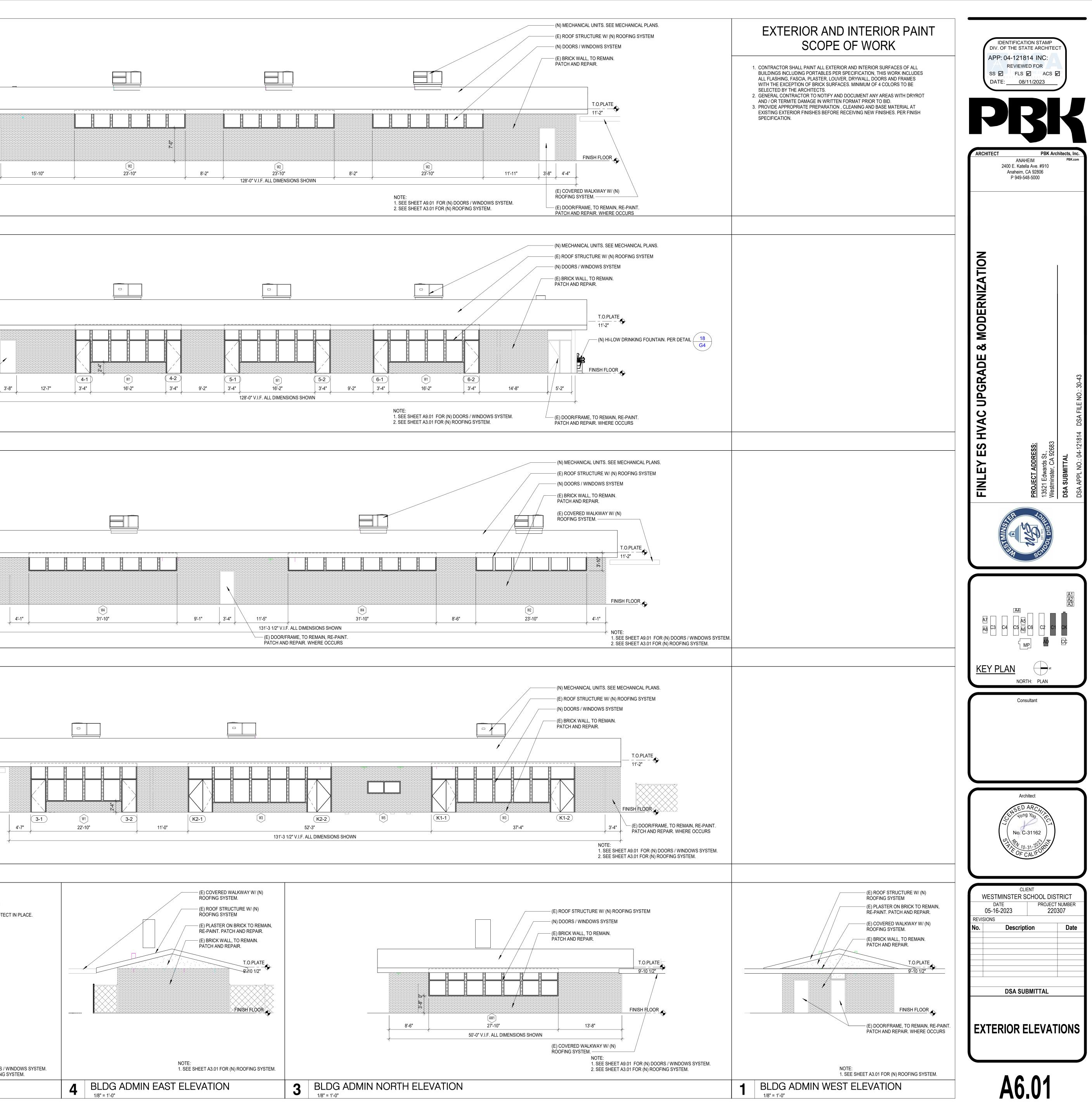
- 02.20 (E) LAVATORY TO REMAIN
- 02.21 (E) SOAP DISPENSER TO REMAIN02.22 (E) URINAL TO REMAIN
- 02.23 (E) TOILET FIXTURE TO REMAIN
- 02.30 (E) ACCESSIBLE TOILET FIXTURE TO REMAIN
  02.31 (E) FLOOR MOUNTED OVERHEAD BRACED SOLID PLASTIC TOILET PARTITION TO REMAIN
  02.64 (E) CERAMIC TILE TO REMAIN, PROTECT IN PLACE
- 02.64 (E) WALL FINISH TO REMAIN, PROTECT IN PLACE
- 09.01 (N) INTERIOR PAINT FINISH, SEE FINISH SCHEDULE
- 09.03 (N) 4X4 CERAMIC TILE. PROVIDE GREENBOARD SUBSTRATE AT (E) BRICK SURFACES.
  10.01 (N) WALL MOUNTED GRAB BAR, MOUNT PER DETAIL 27/A8.02
- 10.02 (N) WALL MOUNTED MIRROR
- 10.03 NEW LOCATION FOR (E) HAND SOAP DISPENSER10.04 (N) WALL MOUNTED HAND SOAP DISPENSER
- 10.04 (N) SEMI-RECESSED TOILET PAPER DISPENSER, 4" MAX PROTRUSION
- 10.08 (N) SOLID PLASTIC TOILET PARTITION, FOR MOUNTING SEE DETL 12/A8.03
- 10.09 NEW LOCATION FOR (E) GRAB BAR, FOR MOUNTING SEE DETL 27/A8.02
- 10.11 (N) PAPER TOWEL DISPENSER, 4" MAX PROTRUSION10.12 (N) COMBO PAPER TOWEL DISPENSER & WASTE RECEPTACLE, 4" MAX PROTRUSION
- 10.12 (N) SURFACE MOUNT TOILET PAPER DISPENSER, 4" MAX PROTRUSION
- 10.15 TACTILE RESTROOM DOOR & WALL SIGN, REF DETAIL 24/A8.02
- 10.19 (N) TOILET SEAT COVER DISPENSER, 4" MAX PROTRUSION
- 22.01 (N) ACCESSIBLE DRINKING FOUNTAIN W/ BOTTLE FILLER AND WING GUARDS. SEE DETAIL 18/G4
- 22.02 (N) WALL MOUNTED LAVATORY, BACKING SUPPORT PER DETL 6/A8.03
- 22.03 (N) FLOOR MOUNTED ACCESSIBLE WATER CLOSET
  22.05 (N) WALL MOUNTED URINAL, BACKING SUPPORT PER DETL 6/A8.03

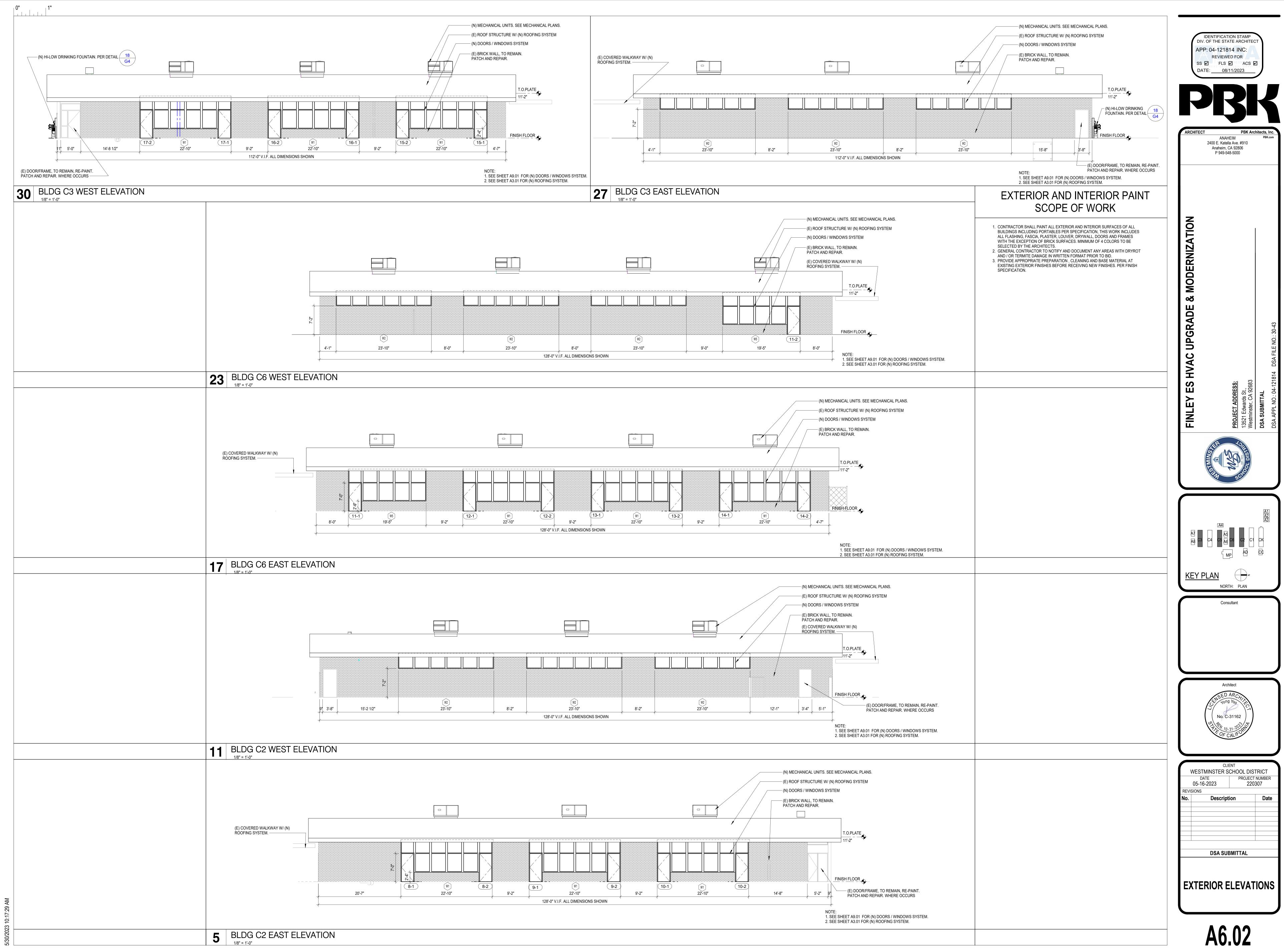


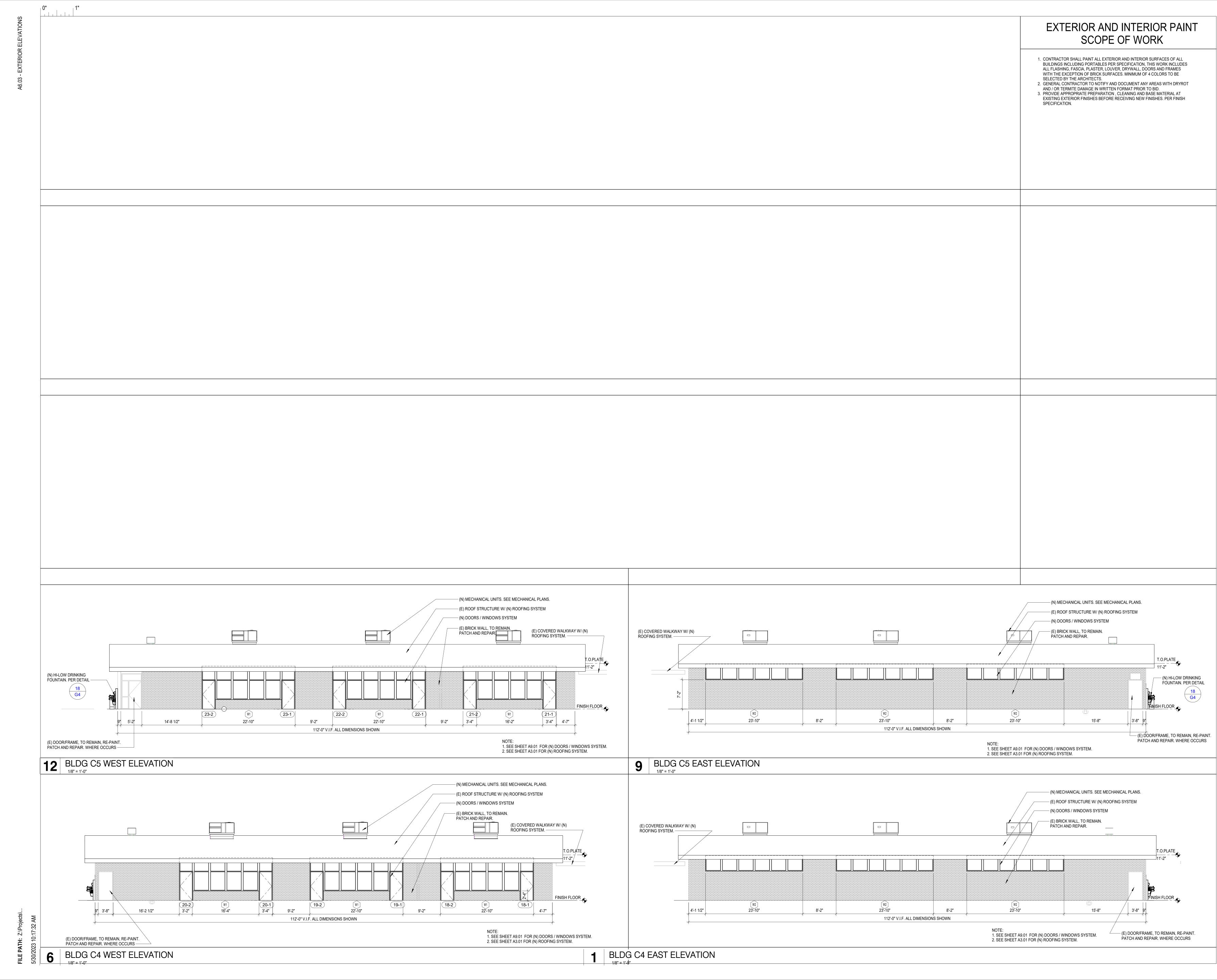
	0" 1"					
		(N) F	HI-LOW DRINKING	FOUNTAIN. PER DETA	L	
				(18) G4		3-8"
						1
		29	BLDG 1/8" = 1'-0"	C1 WEST E	ELEVATION	
				WALKWAY W/ (N)		
			ROOFING SYS	STEM.		
				_		
			(E) DOOR / FR PAINT. PATCH	AME. TO REMAIN. RE-	4-	4" 3'-8"
		23	BLDG	C1 EAST E	LEVATION	
			1/8" = 1'-0"			
						4'-1"
						+ +
		17	1/8" = 1'-0"	CK WEST I	ELEVATION	
			(E	) COVERED WALKWAY DOFING SYSTEM	′ W/ (N)	
						4'-7"
						1
		11	BLDG 1/8" = 1'-0"		LEVATION	
	(N) HM DOOR FRAME. SEE DETAIL 16 22 27 28 A8.01 A8.01 A8.01 A8.01 A8.01 A8.01 A8.01				RE W/ (N) ROOFING SYS W SYSTEM TO REMAIN.	
	(E) COVERED WALKWAY W/ (N) ROOFING SYSTEM.			— (E) BRICK WALL, TO PATCH AND REPAIR	REMAIN.	
					T.O.PLATE 9'-10 1/2"	]
	6-16 50'-0" V.I.F. ALL DIMENSIC	DNS SHOWN	/	3'-8" 5'-1"	FINISH FLOOR	_
3 10:17:26 AM				PATCH AND REPAIR		0000 //////
10				1. SEE \$ 2. SEE \$	SHEET A9.01 FOR (N) D SHEET A3.01 FOR (N) R	JOKS / WINDOWS

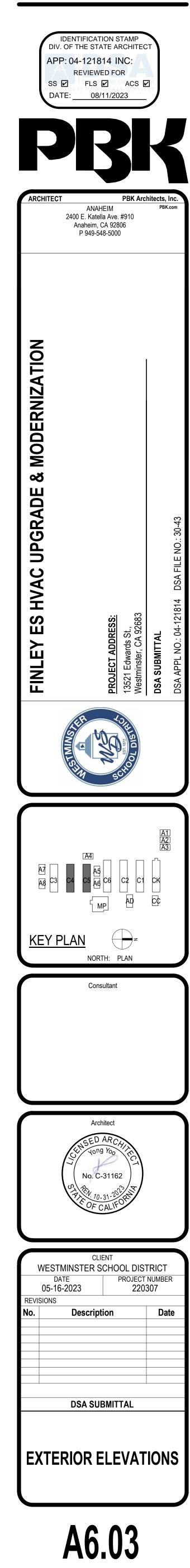
A6.01 - EXTERIOR ELEVATIONS

6 BLDG ADMIN SOUTH ELEV

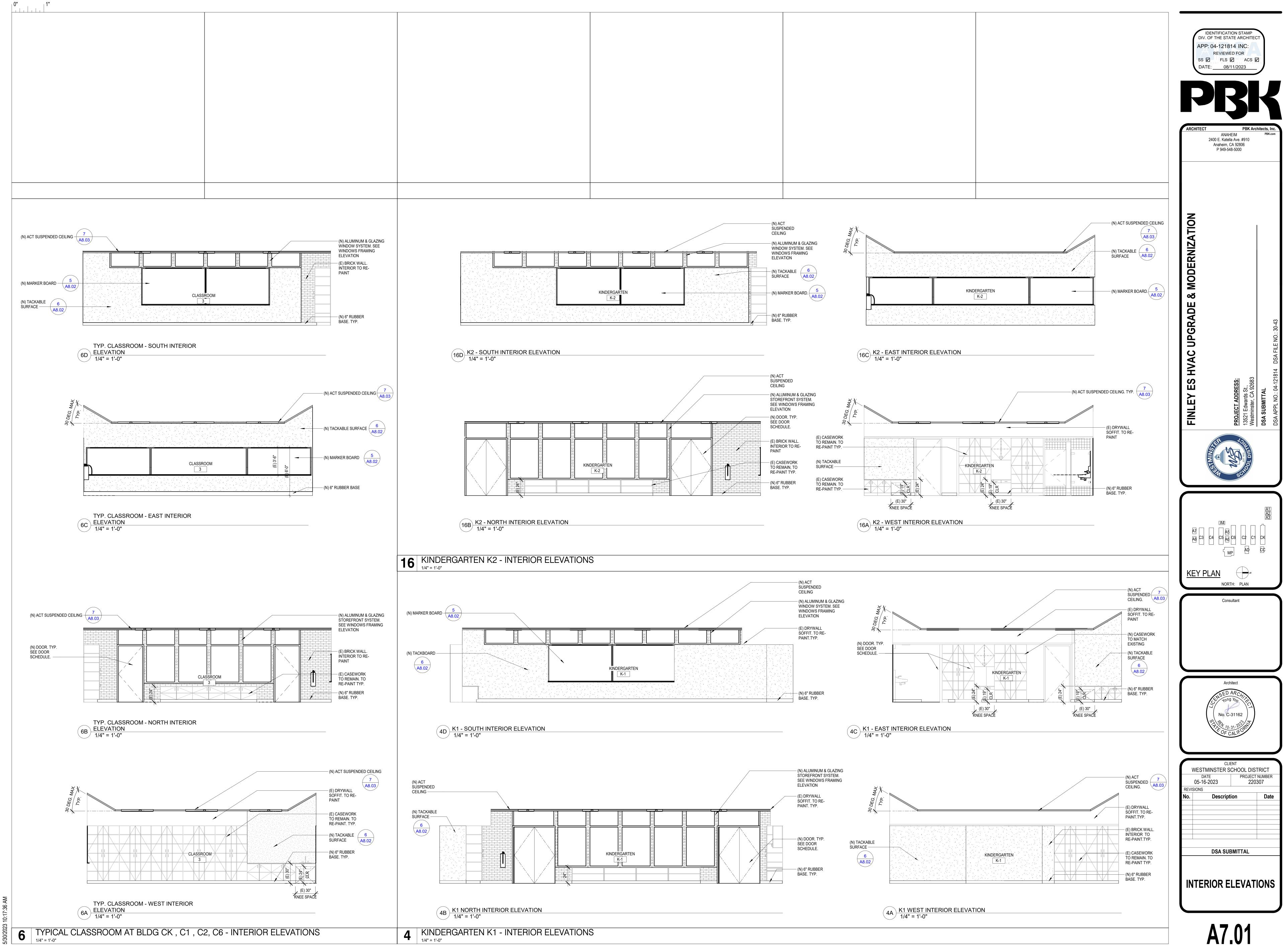




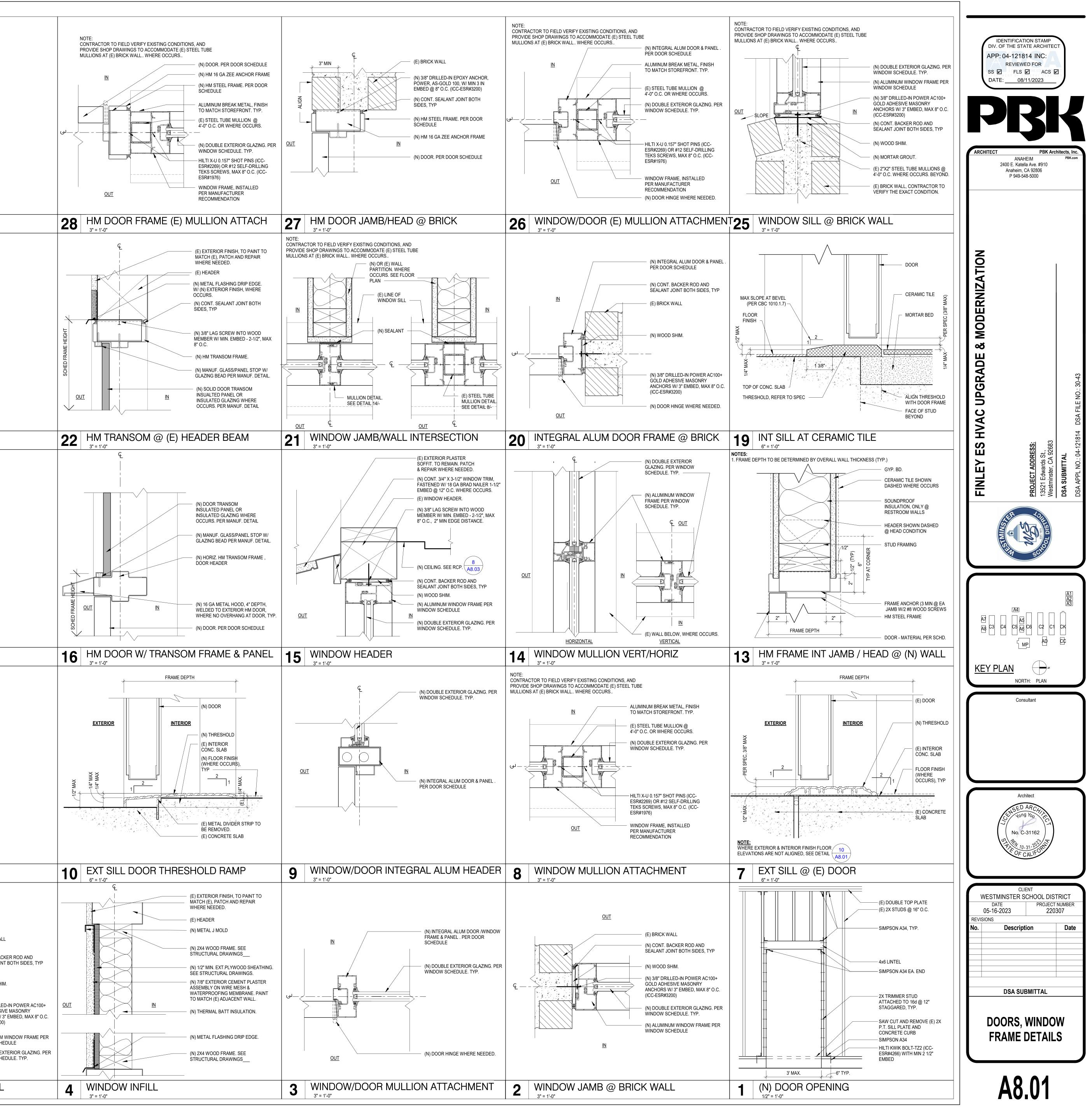


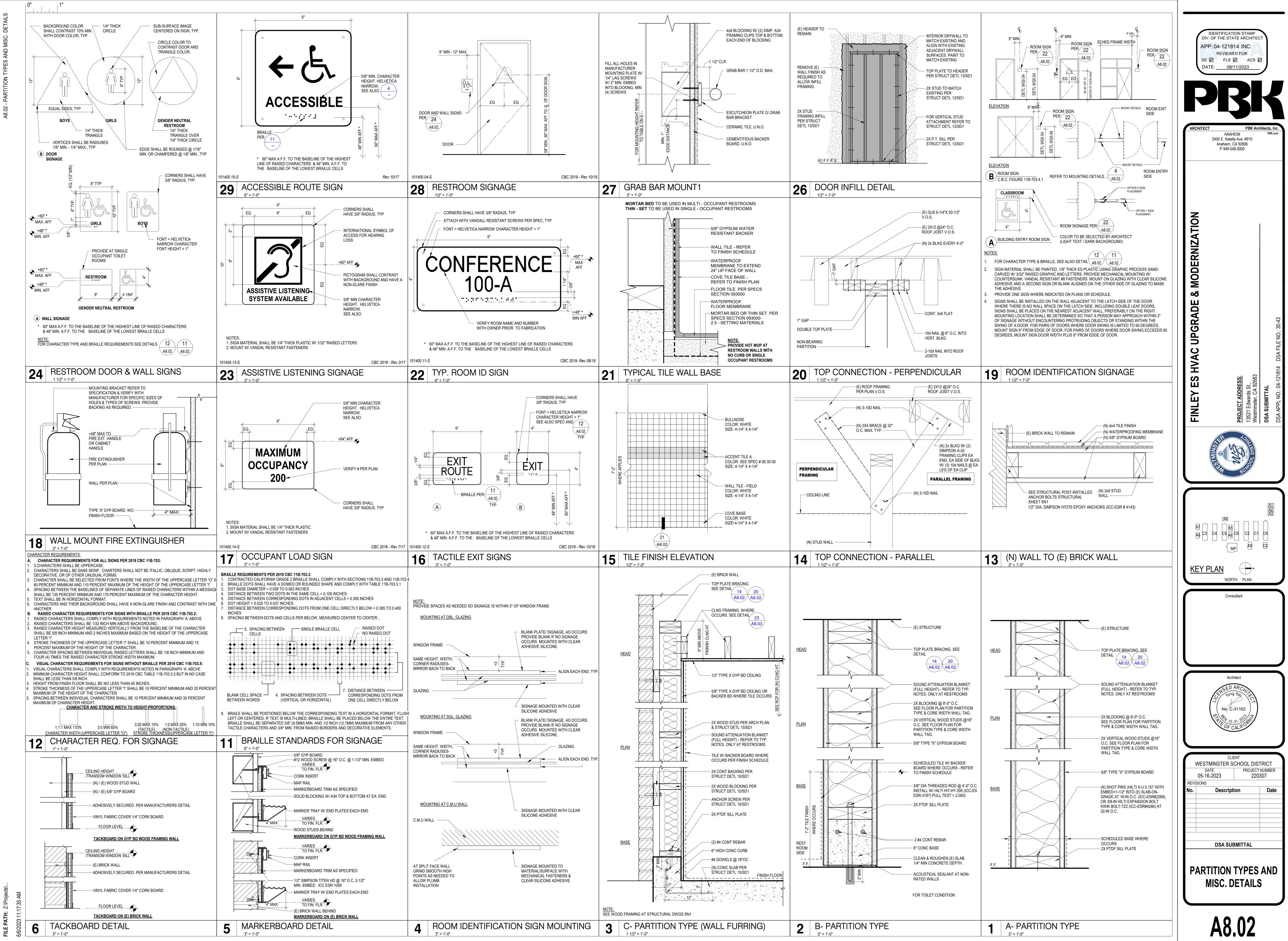


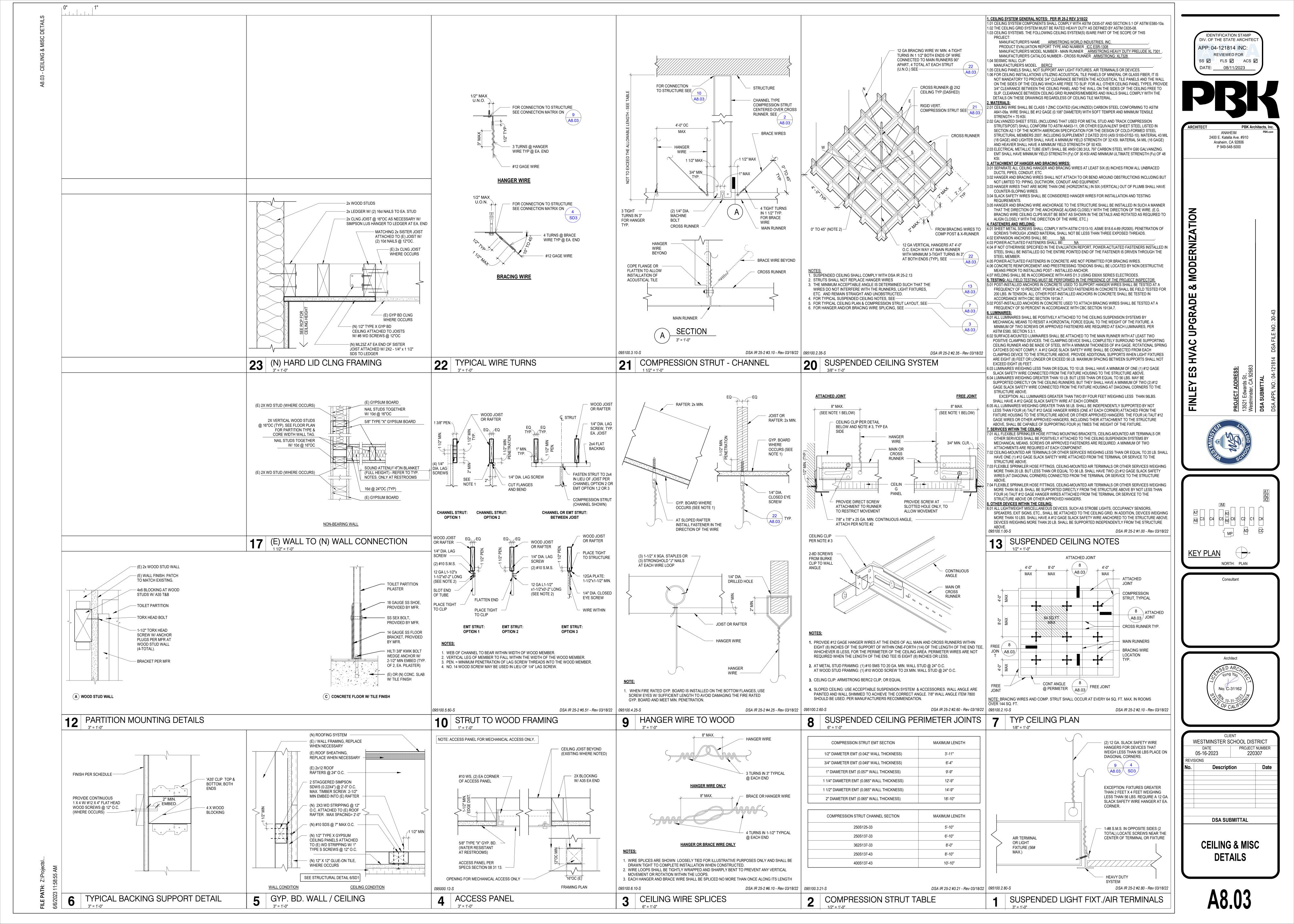


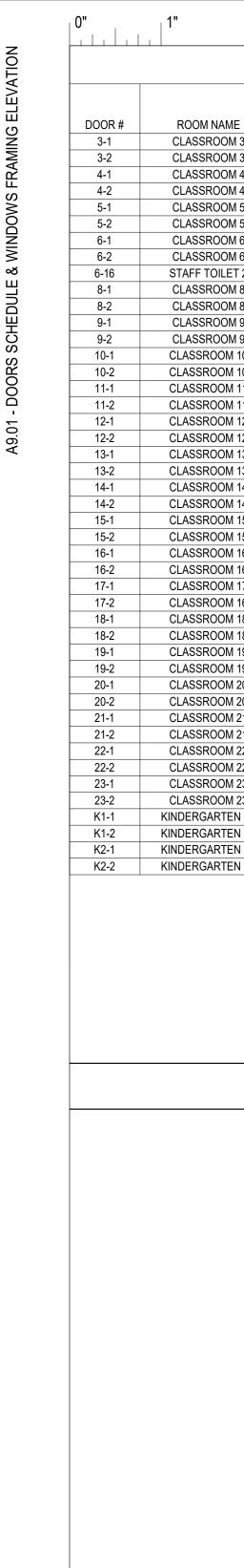


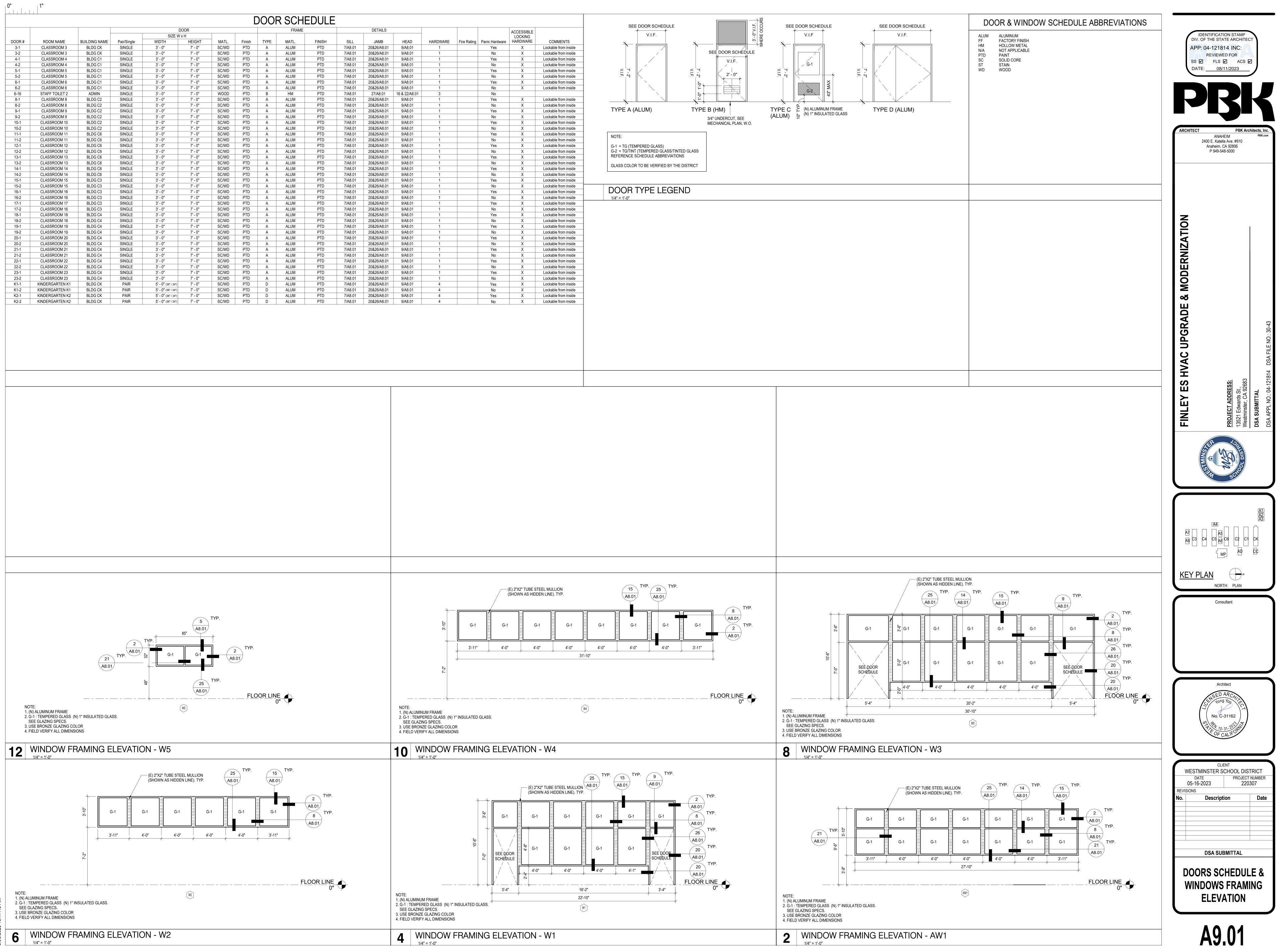
AILS	0" 1"	
A8.01 - DOORS, WINDOW FRAME DETAILS		
, WINDOW F		
01 - DOORS		
A8.		
		Ę
		(E) BRICK WAL
		(N) CONT. BAC SEALANT JOIN
		(N) WOOD SHI
	<u>1</u>	ANCHORS W/3 (ICC-ESR#3200
FILE PATH: Z:\Projects\		(N) ALUMINUM WINDOW SCH (N) DOUBLE EX WINDOW SCH
FILE PATH:		5 WINDOW HEAD @ BRICK WALL





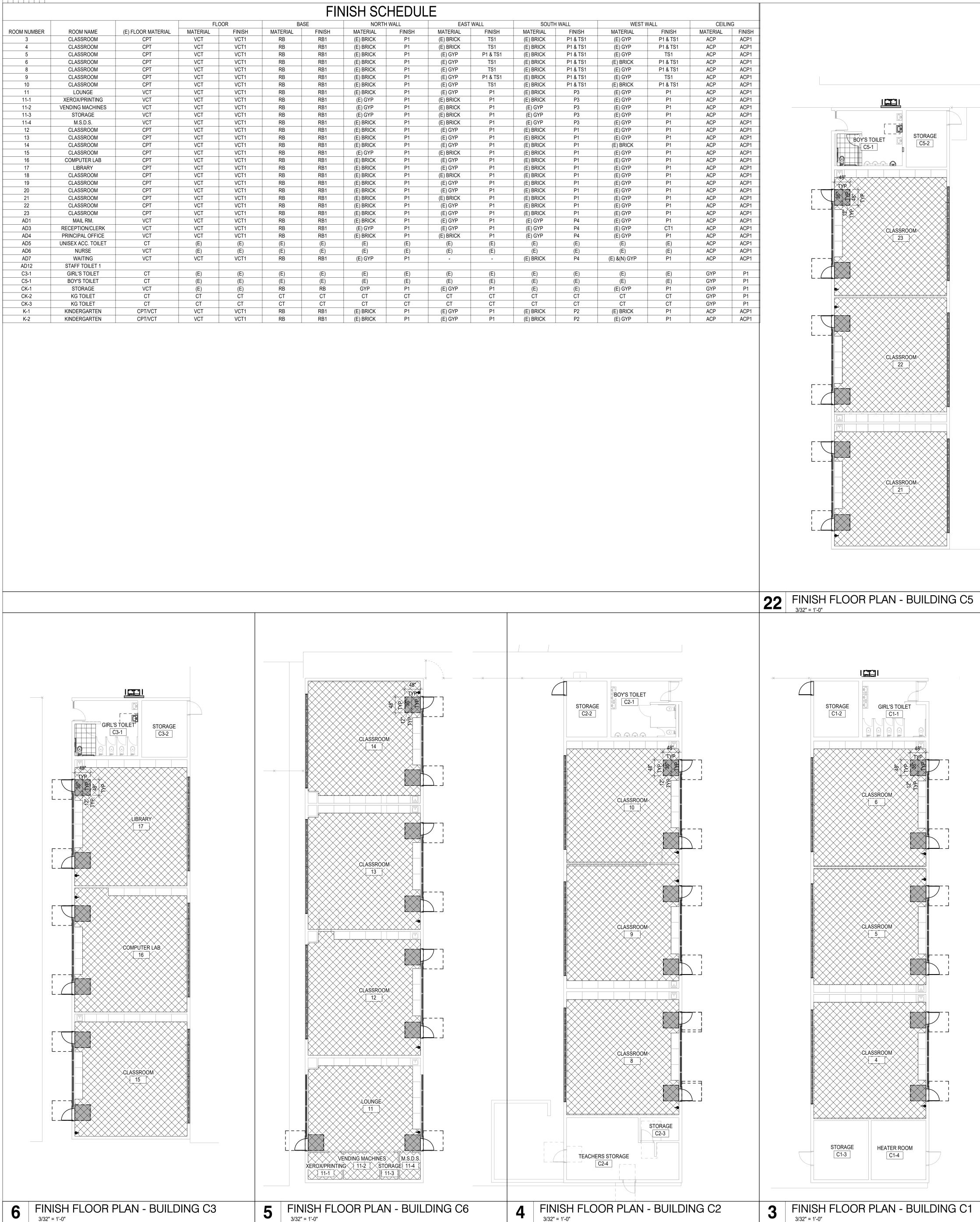


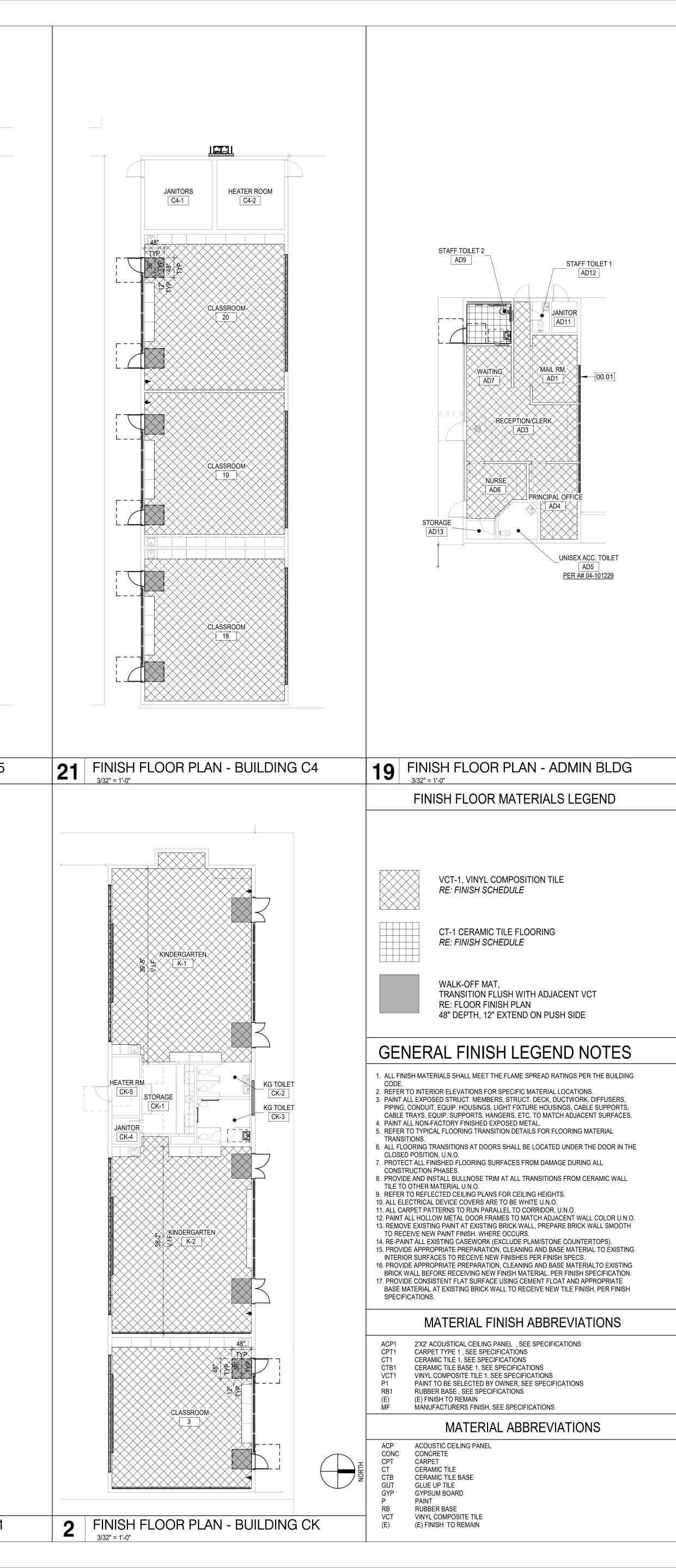


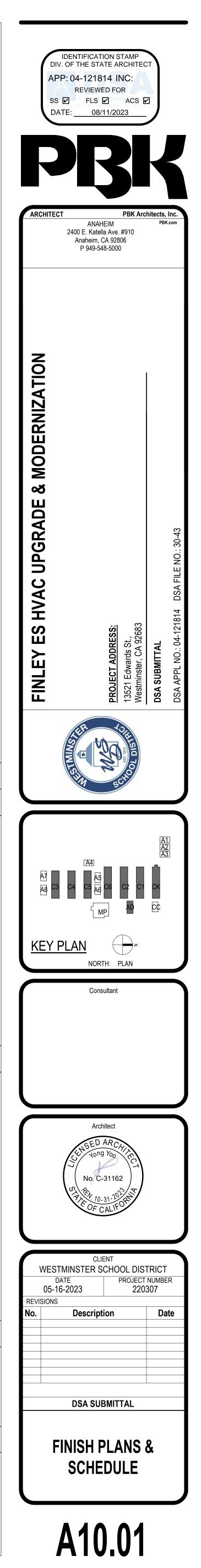


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							FINISH SCHEDULE			
			FLOOR		BASE		NORTH WALL			
ROOM NUMBER	ROOM NAME	(E) FLOOR MATERIAL	MATERIAL	FINISH	MATERIAL	FINISH	MATERIAL	FINISH	MAT	
3	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E) E	
4	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E) E	
5	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
6	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
8	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
9	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
10	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
11	LOUNGE	VCT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
11-1	XEROX/PRINTING	VCT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E) E	
11-2	VENDING MACHINES	VCT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E) E	
11-3	STORAGE	VCT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E) E	
11-4	M.S.D.S.	VCT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E) E	
12	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
13	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
14	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
15	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E) E	
16	COMPUTER LAB	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
17	LIBRARY	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
18	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E) E	
19	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
20	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
21	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E) E	
22	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
23	CLASSROOM	CPT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
AD1	MAIL RM.	VCT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
AD3	RECEPTION/CLERK	VCT	VCT	VCT1	RB	RB1	(E) GYP	P1	(E)	
AD4	PRINCIPAL OFFICE	VCT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E) E	
AD5	UNISEX ACC. TOILET	СТ	(E)	(E)	(E)	(E)	(E)	(E)		
AD6	NURSE	VCT	(E)	(E)	(E)	(E)	(E)	(E)		
AD7	WAITING	VCT	VCT	VCT1	RB	RB1	(E) GYP	P1		
AD12	STAFF TOILET 1									
C3-1	GIRL'S TOILET	СТ	(E)	(E)	(E)	(E)	(E)	(E)	(	
C5-1	BOY'S TOILET	СТ	(E)	(E)	(E)	(E)	(E)	(E)		
CK-1	STORAGE	VCT	(E)	(E)	RB	RB	GYP	P1	(E)	
CK-2	KG TOILET	СТ	CT	CT	CT	CT	CT	СТ	(	
CK-3	KG TOILET	CT	СТ	СТ	СТ	СТ	CT	СТ	(	
K-1	KINDERGARTEN	CPT/VCT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	
K-2	KINDERGARTEN	CPT/VCT	VCT	VCT1	RB	RB1	(E) BRICK	P1	(E)	







<u>GENERAL NOTES</u>	CONCRETE AND REINFORCEMENT	STRUCTURAL STEEL AND MISC. IRON	POST-INSTALLED ANCHOR BOLTS
<ol> <li>ALL DIMENSIONS 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 RESPONSIBLE FOR THE REVIEW AND COORDINATION OF ALL DRAWINGS AND SPECIFICATIONS PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES THAT OCCUR 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 RESOLUTION CODE REQUIREMENTS SHALL BE CONSTRUCTION SO THAT A CLARIFICATION CAN BE ISSUED. ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT OR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER.</li> <li>ALL SYMBOLS AND ABBREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED TO BE CONSTRUCTION STANDARDS. IF CLARIFICATION IS REQUIRED, THE CONTRACTOR SHALL DREVENSE ON THE CONTRACTOR AT HIS OWN EXPENSE AND AT NO EXPENSE TO THE OWNER.</li> <li>ALL DIMENSIONS AND THE SITE CONDITIONS SHALL BE VERIFIED BY THE CONTRACTOR AT THE UDGS STE PRIOR TO BID SUBMITTAL, START OF SHOP DRAWINGS, START OF CONSTRUCTION, AND/OR FABRICATION OF MATERIALS. IF DISCREPANCIES ARE RECOUNTERED, OR CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DO SHALL PROVIDE AND BE RESPONSIBLE FOR THE PROTECTION AND REPARE OF ADJACENT EXISTING SUBFACES AND AREAS WHICH MAY BE DAMAGED AS A RESULT OF NEW WORK.</li> <li>DO NOT SCALE DRAWINGS, PRINTED DIMENSIONS HAVE PRECEDENCE OVER SCALED DRAWINGS SAND LARGE SCALE OVER SMALL.</li> <li>TYPICAL DETAILS SHALL APPLY IN GENERAL CONSTRUCTION UNLESS SPECIFICALLY DETAILED. WHERE NO DETAILS ARE GIVEN, CONSTRUCTION SHALL BE AS SHOWN FOR SIMULAR WORK &amp; PERTY DETAILS.</li> <li>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 HE STRUCTURE. THESE TO ON THIS DIMENSIONS HAVE PRECEDENCE OVER STAND DOCS N</li></ol>	<ol> <li>ALL CEMENT SHALL CONFORM AT ASTM C-150, TYPE II OR V</li> <li>FINE AND COARSE AGGREGATE SHALL CONFORM TO ASTM C-33.</li> <li>AGGREGATE GRADATION FOR CONCRETE SHALL CONFORM TO ASTM C-33.</li> <li>AGGREGATE GRADATION FOR CONCRETE SHALL CONFORM TO ASTM C-33 AND CBC 2019. AGGREGATE FOR LEBEMENT WITH 4 HOURS RATING SHALL BE SULCEOUS.</li> <li>CONCRETE SHALL HAVE THE FOLLOWING MINIMUM 28 DAY STRENGTH:         <ul> <li>ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI, UNLESS NOTED OTHERWISE.</li> <li>CAST IN DRILLED-HOLE PILES - 4000 PSI.</li> <li>CONCRETE SHAO ON GRADE/HOUSEKEEPING PAD - 3000 PSI.</li> <li>EXTENIOR CONCRETE WALKS, CURBS, ETC. AND MISC. CONCRETE - 2500 PSI STONE.</li> </ul> </li> <li>IGHTWEIGHT CONCRETE . (NOT APPLICABLE)</li> <li>CONCRETE DESIGN MIXES SHALL CONFORM TO THE STANDARD SPECIFICATIONS. MIX DESIGNS SHALL BE SIGNED BY A CALIPORINA TO THE STANDARD SPECIFICATIONS. MIX DESIGNS SHALL BE SIGNED BY A CALIPORINA DA NI INDEPENDENT TESTING AGENCY.</li> <li>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 NORENT CET NOR AGENCY.</li> <li>PLACING OF ALL CONCRETE STALL BE INSPECTED BY THE JOB INSPECTOR TO VERIFY THAT REINFORCING STEEL IS SECURELY SUPPORTED IN PLACE DURING THE POUR. CONTRACTOR TO PROVIDE NORES DEPRE THAN 6'-0''. USE OF BUCKET OR DRACTOR TO POURING CONTRACTOR TO POURS DEPRE THAN 6'-0''. USE OF BUCKET OR DRACTOR TO POURING CONCRETE CONCRETE FENDING PLACE MORY FOR ALLOWED TO AVOID SEGREGATION.</li> <li>LOCATION OF CONSTRUCTION JOINTS OR POUR JOINTS SHALL BE AS SHOWN ON PLACE PRIOR TO POURING CONCRETE. CONCRETE BLOCKS ONLY SHALL BE EXCURELY TIED IN PLACE PRIOR TO POURING CONCRETE. SEE NOTE 19 BELOW.</li> <li>ANCHOR BOLTS, DOWELS, REINFORCING STEEL, INSERTS, ETC, SHALL BE SECURELY TIED IN PLACE PRIOR TO POURING OF GRADE.</li> <li>CONCRETE SHALL B</li></ol>	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 APPRANCE, AND FREE     OF PINHOLES, POROSITY, UNDERCUTTING, OR OTHER DEFECTS. ALL BUTT WELDS     SHALL BE FOUL PENETRATION.     WELDS SHALL BE DONE IN THE SHOP OF AN ICC OR ASCE APPROVED FABRICATOR     UNLESS OTHERWISE NOTED ON PLANS, ALL FIELD WELDING SHALL BE PERFORMED     BY QUALIFIED WELDERS APPROVED BY THE BUILDING OFFICIAL.     CONTINUOUS INSPECTION BY AN APPROVED DEPUTY INSPECTOR IS REQUIRED FOR     ALL ON SITE WELDING, U.N.O.     STRUCTURAL STEEL NOT ENCASED IN CONCRETE OR MASONRY SHALL BE SHOP     PAINTED AS SPECIFIED. ANY ABRASIONS SHALL BE TOLCHED UP AFTER ERECTION.     FABRICATOR SHALL SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER FOR     REVIEW PRIOR TO START OF FABRICATION. FABRICATION SHALL CONFORM TO     ALS.C. SPECIFICATION.     ALL SUBMIT SHOP DRAWINGS TO STRUCTURAL ENGINEER FOR     REVIEW PRIOR TO START OF FABRICATION. FABRICATION SHALL CONFORM TO     ALS.C. SPECIFICATION.     CONTINUOUS INSPECTION IS REQUIRED FOR ALL HIGH STRENGTH BOLTING     CONNECTIONS.     SPLICE MEMBERS ONLY WHERE INDICATED.     BOLT HOLES IN STEEL SHALL BE STANDARD HOLES, 1/16 INCH LARGER IN DIAMFTER     THAN NORMAL SEO OF BOLT USED. UNLESS NOTED OTHERWISE. BOLT HOLES IN BASE     PLATES MAY BE OVERSIZED PER AISC TABLE 14-2 IF WASHERS ARE PROVIDED IN     ACCORDACE WITH THIS TABLE.     STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW     UNLESS NOTED OTHERWISE.          ALL WIDE FLANGER AND WT SHAPES AP92, GRADE 50          STEEL ANDLES AND CANNELS AP92, GRADE 50          STEEL ANDLES AND CANNELS          ASTU, GRADE SO UN.O.     MACHINE BOLTS ASTES          ASTU, GRADE SO UN ASTROPES          ASTU, GRADE SO UN ASTROPES          ASTURCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW     UNACHINE BOLTS          ASTURCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION AS INDICATED BELOW     UNACH	ANCHOR BOLTS SHALL BE ONE OF THE FOLLOWING ACCEPTABLE PRODUCTS, OR AN EQUIVALENT: NO DRILLED-IN ANCHOR IS ALLOWED IN POST TENSIONED SLABS TO A DAMAGING/CUTTING TENDONS & REINFORCEMENT, UNLESS THE LOCATION IS CLEA BY NONDESTRUCTIVE TESTING OF UNDERGROUND PENETRATING RADAROR X-RAY. (PACHOMETER READING IS NOT ACCEPTABLE) • EXPANSION-TYPE ANCHORS HILTI -TZ2 (ESRH4266) (FOR CONCRETE) HILTI -TZ2 (ESRH4266) (FOR CONCRETE) HILTI -TZ2 (ESRH4266) (FOR CONCRETE) HILTI -TZ2 (ESRH4266) (FOR MASONRY) (FOR INSTALLATION SEE TABLE A) • FORWYADHESIVE ANCHORS HILTI RESDSOU-Y3 ADHESIVE SYSTEM, ESRH3814 (FOR TEST FREQUENCY SEE NOTES BELOW AND FOR TESTING LOAD TABLE B) • SUMPSON HY270 EPOXY ANCHORS (ICC-ESR # 4143) FOR USE IN • SCREW TYPE ANCHORS SIMPSON TITEN HO (ESRH1056) (FOR MASONRY) • EQUIVALENT PRODUCTS, WITH VALLD & CURRENT ICC REPORTS WHICH ALLOW APPLICATION FOR SEISMIC LOADING, ARE ACCEPTABLE. • FOR MIN. EMBEDMENT AND OTHER INFO., REFER TO DATAILS. • FOR RIN. EMBEDMENT AND OTHER INFO., REFER TO DATAILS. • FOR RINN. EMBEDMENT AND OTHER INFO., REFER TO DATAILS. • FOR REPRESSION AND INSTALLATION, REFER TO MANUFACTURES' RECOMMENDATIONS & NOTE/TABLES BELOW <b>POST-ENSTALLED EXPANSIVE ANCHOR BOLTS.</b> <b>TABLE 4</b> • • • • • • • • • • • • • • • • • • •
UNLESS DÉTAILED ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE STRUCTURAL ENGINEER AND OWNER. 1. 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 I KNINEER SO THAT PROPER CLARIFICATION MAY BE MADE. MODIFICATION OF DETAILS OF CONSTRUCTION SHALL NOT BE MADE WITHOUT WRITTEN APPROVAL OF STRUCTURAL ENGINEER AND OWNER. 1. IN CASE OF DISCREPANCIES BETWEEN NOTES ON THIS SHEET & PROJECT SPECIFICATIONS, THE PROVIDED NOTES SHALL TAKE PRECEDENCE OVER SPECS. 1. CUTTING, BORING, SAW CUTTING OR DRILLING INTO (E) OR (NEW) STRUCTURAL ELEMENTS SHALL BE SPECIFICALLY DETAILED OR OTHERWISE APPROVED BY STRUCTURAL ENGINEER OF RECORD. <b>DUALTY ASSUMPACE PROGRAMS</b> A STRUCTURAL TESTS AND SPECIAL INSPECTION PROGRAM. PRE 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 ESTABLIST HE EXTENT OF THE STRUCTURAL TESTS AND SPECIAL INSPECTION PROGRAM CONSISTENT WITH THE NEEDS OF THE PROJECT, AND SIGN DSA-103. THE ARCHITECT OR REGISTERED ENGINEER SHALL RECEIVE VERIFIED REPORTS FROM THE PROJECT INSPECTOR, SPECIAL INSPECTION PROGRAM CONSISTENT WITH THE NEEDS OF THE PROJECT, AND SIGN DSA-103. THE ARCHITECT OR REGISTERED ENGINEER SHALL RECEIVE VERIFIED REPORTS FROM THE PROJECT INSPECTOR, SPECIAL INSPECTORY FISTING FACILITY, THE GEOTECHNICAL ENGINEER, CONTRACTORS AND THE OTHER ARCHITECTS AND ENGINEERS ARE SUBMITTED AS REQUIRED. THE RESPONSIBLE PARTY SHALL NOTIFY DSA AS TO THE DUSDECT INSPECTOR, SPECIAL INSPECTORY SHALL NOTIFY DSA AS TO THE PROJECT INSPECTOR, SPECIAL INSPECTORY SHALL NOTIFY DSA AS TO THE DUSDECT INSPECTOR, SPECIAL INSPECTORY SHALL NOTIFY DSA AS TO THE PRODUCCT TRUCTURAL OBSERVATION SHALL BE CONDUCTED, PER SECTION 1710 OF THE CALIFORNIA BUILDING CODE AND SECTION	<ol> <li>MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL COMPLY WITH CBC SECTION TABLE 1808A.8.2</li> <li>ALL CONCRETE SHALL BE VIBRATED IN PLACE DURING PLACING OF CONCRETE.</li> <li>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.</li> </ol>	<ol> <li>ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIP ZINC GALVANIZED</li> <li>ALL SAWN LUMBER SHALL BE DOUGLAS FIR OR WESTERN LARCH, U.N.O.</li> <li>GRADE MARKED BY A RECOGNIZED GRADING AGENCY (WWPA OR WCLIB). WOOD GRADES ARE TO BE AS FOLLOWS U.N.O.:         <ul> <li>BEAMS</li> <li>ISL OR PRL OR GLB UNO</li> <li>HEADERS</li> <li>SEE SCHEDULE (4/SD5.2)</li> <li>POSTS AND TIMBERS</li> <li>NO.1</li> <li>PLATES</li> <li>NO.2</li> <li>STUDS @ NON-BEARING WALLS</li> <li>NO.2</li> <li>STUDS @ NON-BEARING WALLS</li> <li>NO.2</li> <li>STUDS @ BEARING/SHEAR WALLS NO.2 U.N.O.</li> <li>SEE SCHEDULE (8/SD5.2)</li> <li>PLATES</li> <li>NO.2</li> <li>STUDS @ BEARING SHEAR WALLS NO.2 U.N.O.</li> <li>SULD FLATES PRESSURE TREATED</li> <li>FOR MOISTURE RESISTANCE (SEE NOTE #23.)NO.1</li> <li>SILL PLATES PRESSURE TREATED</li> <li>FOR MOISTURE RESISTANCE (SEE NOTE #23.)NO.1</li> <li>TILPER PLAN &amp; APPROVED</li> <li>MANUF.</li> <li>ROOF TRUSSESPER PLAN &amp; APPROVED</li> <li>MANUF.</li> <li>MHERE 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".</li> </ul> </li> <li>WHERE WOOD IS IN CONTACT WITH CONCRETE OR MASONRY USE FOUNDATION REDWOOD OT DOUGLAS FIR PRESSURE TREATED FOR MOISTURE RESISTANCE. CORROSION RESISTANCE BOLTS ARE REQUIRED FOR "CHEMICALLY THREATED SILLS".</li> <li>UN.O. ALL DAMAGED OR DETERIORATED LUMBER SHALL BE REPLACED WITH EQUAL SECTION AND EQUAL OR BETTER GRADE PLYOOD. PLYWOOD SHALL BE STRUCTURAL I FOR FLOOR DIAPHRAGMS &amp; SHEAR WALLS. OSB PANELS MAY BE USED IF HAVE EQUIVALENT PROPERTIES.</li> <li>UN.</li></ol>	INSTALLATION.         2. INSTALLATION.       2. INSTALLATION OF ADHESIVE ANCHORS IN HORIZONTAL TO VERTICAL ORIENTATS SHALL BE DONE BY A CERTIFIED ADHESIVE INSTALLER (AAI) AS CERTIFIED THRO 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 25% OF ANCHORS AND DOWELS TO THE SPECIFIED TEST LOADS:         TABLE B         ROD DIA: OR AND DOWELS TO THE SPECIFIED TEST LOADS:         TABLE B         ROD DIA: OR AND DOWELS TO THE SPECIFIED TEST LOADS:         TABLE B         ROD DIA: OR AND DOWELS TO THE SPECIFIED TEST LOADS:         TABLE B         ROD DIA: OR AND DOWELS TO THE SPECIFIED TEST LOADS:         TABLE B         ROD DIA: OR AND CONCRETE         1/2" 5"         5/8" 6"         G,500# CONCRETE         1/4" 7"         9"         11,000# CONCRETE         1/4" 11"         15,000# CONCRETE         #4         6,1/2"         1,0/2         1,0/2         1,0/2         1,0/2
<ul> <li>A REGISTERED PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OF THE PROJECT, INCLUDING LICENSED ARCHITECT ON STRUCTION OF THE PROJECT.</li> <li>OBSERVATION SHOULD INCLUDE VISITS TO THE PROJECT SITE BY THE ARCHITECT AND/OR ENGINEER OR THEIR QUALIFED REPRESENTATIVES IN COORDINATION WITH THE DISTRICT AND DSA. PRIOR NOTIFICATION SHALL BE MADE TO REQUEST THE REQUIRED DBSERVATIONS. ELINQUENT NOTIFICATION MAY REQUIRE DEMOLITION OF COVERING MATERIAL TO FACILITATE OBSERVATION.</li> <li>STRUCTURAL OBSERVATIONS, BALD QUENT NOTIFICATION MAY REQUIRE DEMOLITION OF COVERING MATERIAL TO FACILITATE OBSERVATION.</li> <li>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.</li> <li>THE COMPLETION OF THE PROJECT, A FINAL VERIFIED REPORT (DSA-6) MUST BE SUBJITTED WHICH SHOWS THAT THE STRUCTURAL SYSTEM IS COMPLETE AND GENERALLY CONFORMS TO THE APPROVED PLANS AND SPECIFICATIONS.</li> <li><b>DEMOLITION</b> OF THE PROJECT, CONDUITS, PIPES, SIGNS, JOINTS, ELEC PANELS &amp; BOXES, DORNO, WINDOW, CHAIN FRAME CELLINGS &amp; OTHER ARCH'I TREATMENTS SHALL BE REMOVED TEMPORARILY AS NEEDED &amp; REINSTALLED TO IT'S ORIGINAL CONDITION &amp; IN AGREEMENT WITH CODE STANDARDS. SUPPORTS &amp; BRACES FOR DUCT WORK SHALL BE IN ACCORDANCE WITH SMACNA GUIDELINES.</li> <li>DEMOLITION WORK SHALL BE FULLY COORDINATED WITH THE DISTRICT &amp; DSA 'S REPRESENTATIVES FOR SEQUENCE AND TIME FRAME.</li> <li>CONTRACTOR TO PROVIDE TEMP. SHORING, AS REQUIRED.</li> <li>UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTORIZATION FROM THE STRUCTURAL REGINEER AND THE DISTRICT ENGINEER SHALL BE CUT, DRILLED NOR NOTCHED WITHOUT PRIOR WRITTEN AUTORIZATION FROM THE STRUCTURAL REGINEER AND THE DISTRICT ENGINEER FROM THE DIVISION OF THE STATE ARCHITECT.</li> </ul>	<text><text><text><text><text></text></text></text></text></text>	<ol> <li>BUCKNIG SHALL BE INSTALLED AT ITLOFOF A ALLE DARTITIONS.</li> <li>PROVIDE DOUBLE FLOOR JOISTS UNDER PARALEL PARTITIONS.</li> <li>PROVIDE ZAS 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).</li> <li>HOLES AND NOTCHES IN STRUCTURAL MEMBERS FOR PIPES AND CONDUIT SHALL COMPLY WITH THE BUILDING CODE &amp; PROVIDED TYP. DETAILS.</li> <li>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.</li> <li>FARCH SHEET OF NUMBER STRUCTURED BY FRAMING MEMBERS OR BLOCKING.</li> <li>THREADED PORTION OF LAG SCREWS SHALL BE TURNED NOT DRIVEN INTO THE PRE-DRILLED HOLE.</li> <li>ALL NAILS SHALL BE COMMON WIRE NAILS U.N.O.</li> <li>FIGUN ANILING IS USED, REDUCE THE SPECIFIED MAIL SPACING BY 20% UNLESS THE HEADS DO NOT PENETARTE INTO THE SHTCG.</li> <li>ALL NAILS SHALL BE COMMON WIRE NAILS UN.O.</li> <li>HE GUN NAILING IS USED, REDUCE THE SPECIFIED NAIL SPACING BY 20% UNLESS THE HEADS DO NOT PENETARTE INTO THE SHTCG.</li> <li>ALL NAILS SHALL BE COMMON WIRE NAILS UN.O.</li> <li>HE KEEPT WHERE TOE NAIL IS REQUIRED, NAILS SHALL BE DRIVEN PERPENDICULAR. PRE-DRILLED HOLE.</li> <li>EXCEPT WHERE TOE NAIL IS REQUIRED, NAILS SHALL BE DRIVEN PERPENDICULAR. PRE-DRILLED ALL IS REQUIRED, NAILS SHALL BE DRIVEN PERPENDICULAR. PRE-DRILL FOR ALL NAILS 200 CI LARGER.</li> <li>TI, PARALLAM, AND TIMBER STRANDS SHALL BE ICC APPROVED PER SPECIFICATIONS. ALSO SEE SPECIAL INSPECTION SHALLS AND SPECIFICATIONS.</li> <li>SE SIMPSON OR OTHER EQUIVALENT ICC APPROVED HARDWARE FOR ALL CONNECTION PER HAN NOTES AND SPECIFICATIONS.</li> <li>ROOF TRUSSES SHALL BE REPARAED SPEN OTES DOT THIS SHEET.</li> <li>USS SIMPSON OR OTHER EQUIVALENT ICC APPROVED HARDWARE FOR ALL CONNECTION PER LAN ONCES AND SPECIFICATIONS.</li> <li>ROOF TRUSSES SHALL BE CORROSION RESISTANT USING HOT-DIPPED ZINC COATED GALVANIZED OR STAILEDS STALELE DI N THE UPARCH WAR SO</li></ol>	<ul> <li>DAYS OF ANCHOR INSTALLATION.</li> <li>CENTER BAR IN THE HOLE AND WEDGE TIGHT WITH WOODEN WEDGES TO HOL PLACE UNTIL THE ADHESIVE SETS.</li> <li>IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON AND SHIFT HOLE LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM OF ANCHOR DIAMETERS OR I INCH, WHICHEVER IS LARGER, OF SOUND CONCER BETWEEN THE DOWEL AND THE ABANDONED HOLE. FILL THE ABANDONED H WITH NON-SHIRK GROUT. IF THE ANCHOR OR DOWEL MAY NOT BE SHIFTED. NOTED ABOVE. THE ENGINEER WILL DETERMINE A NEW LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLES ATTACHED WIT ADHESIVE ANCHORS.</li> <li>BOLTS SET IN EXPOSED SURFACE SHALL BE STAINLESS STEEL OR CORROSION RE</li> <li><b>10.</b> <u>TEST REQUIRMENT:</u></li> <li><b>A.</b> <u>FREQUERCY</u> 50% OR ALTERNATE BOLTS IN A GROUP, INCLUDING AT ONE-HALF THE ANCHORS IN EACH GROUP, SHALL BE TESTED.</li> <li><b>B.</b> <u>TEST LOADS</u>: TEST LOADS: TEST LOADS SHALL BE TWICE THE MAXIMUM ALLOWABLE TENSION OR ONE AND A QUARTER (1<sup>1</sup>/<sub>2</sub>) TIMES THE MAXIMUM DESIGN STRENK ANCHORS AS PROVIDED IN THE APPROVED ICC REPORT TENSION TEST LOAD NEED NOT EXCEED 80% OF THE NOMINAL VIELI STRENGTH OF THE ANCHOR IN BRICK USE SIMPSON HY 270 UF 1/2" DIA. USE 450 LBS. FOR TESTING LOAD. TEST 1 OUT OF 5. IN CASE OF FAILURE TEST ANOTHER 20%, 2 OUT OF 5.</li> </ul>

AN TO AVOID **CLEARED** RAY.

- LOADS SEE
- JSE IN BRICK
- LOW

## TS

TRAINING

ENTATION THROUGH

TESTS ON

. IF MORE SPECIFIED LAST 2

O HOLD IT IN

SHIFT THE VI OF 2 NCRETE NED HOLE TED AS

ON RESISTANT

NG AT LEAST

ISION LOAD TRENGTH OF YIELD

70 UP TO E OF

## STRUCTURAL INDEX OF DRAWINGS

SN1......GENERAL NOTES S1..... ROOF PLANS - BLDGC1, C2 & CK S2..... ROOF PLANS - BLDG C3, C4 & C5 S3...... ROOF PLANS - BLDG C6 & ADMIN SD1......CONCRETE DETAILS SD2......RTU DETAILS SD3...... HUNG UNITS DETAILS

## DESIGN LOADS:

LATITUDE: 33.764562°N LONGITUDE: -118.017431° W

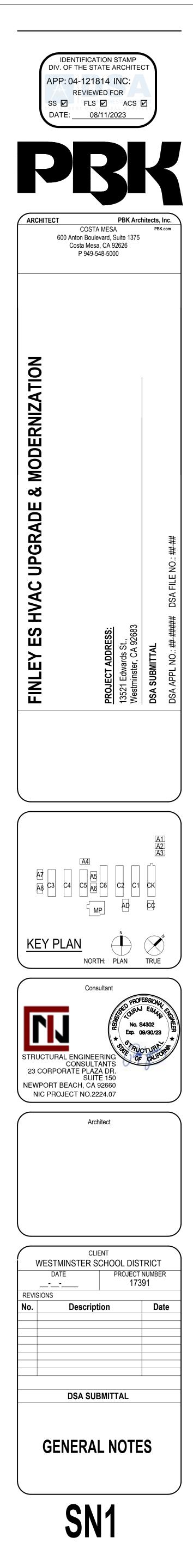
Ss = 1.429 SDS= 1.144 S1= 0.51 SD1 = N/A SITE CLASS "DEFAULT" SEISMIC DESIGN CATEGORY "D" I =1.25 RISK CATEGORY: III

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

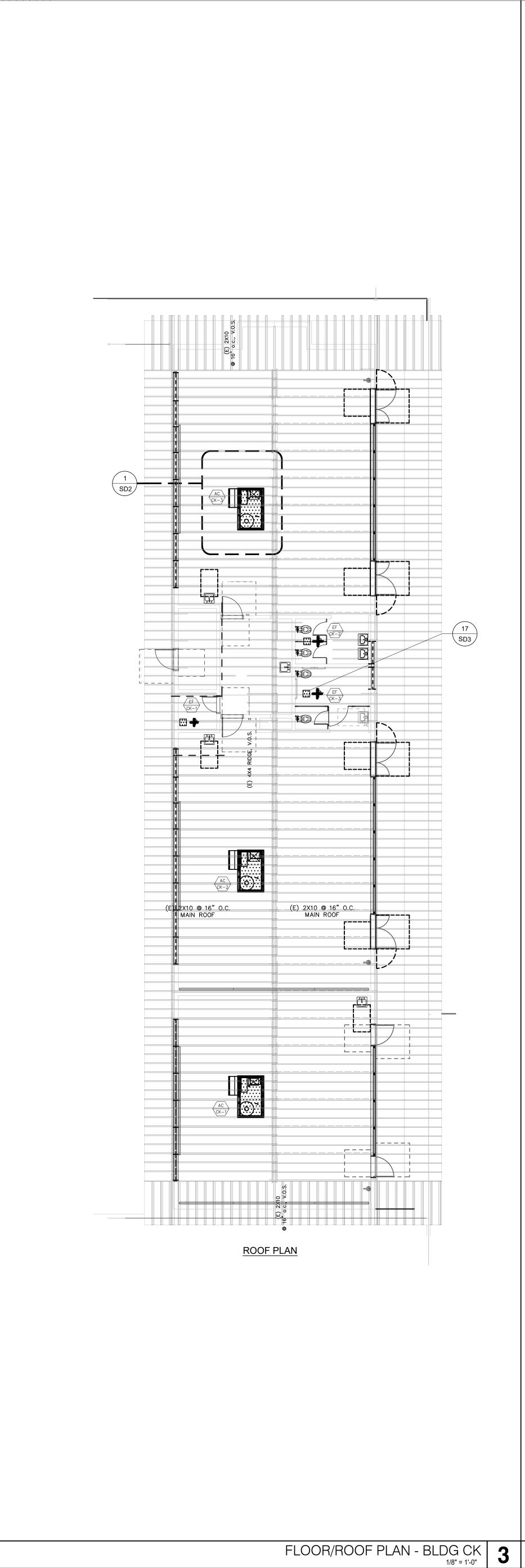
## STRUCTURAL ABBREVIATIONS

NUMBER OR POUNDS # CL CENTER LINE BEAM BM. 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 JOINT JT. 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

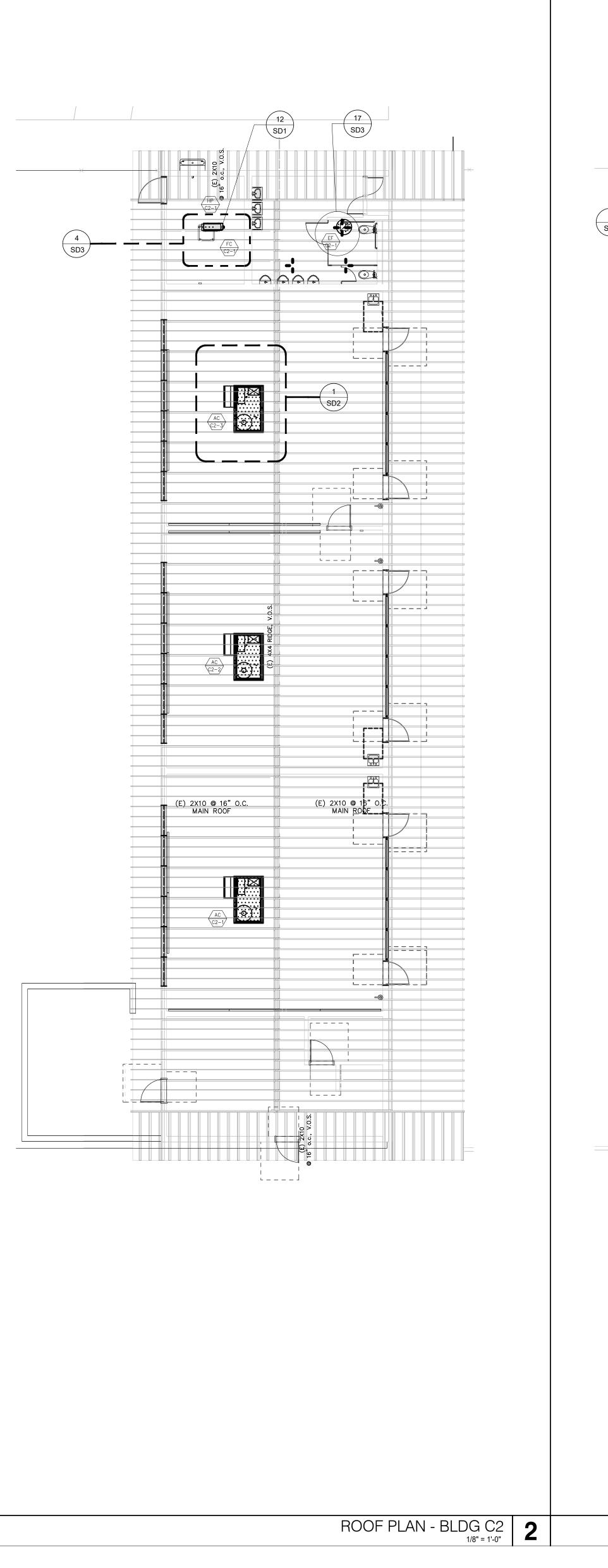
FRMG. FRAMING FLR. FLOOR MTL. METAL PL. PLATE REINF. REINFORCING PLCS. PLACES P.H. PENTHOUSE O.C. ON CENTER NUMBER NO. PSF POUNDS PGR SQ.FT. N.T.S. NOT TO SCALE N.I.C. NOT IN CONTRACT SIM. SIMILAR SIMP. SIMPSON SEPN. SEPARATION SECT. SECTION S.W.S. SHEAR WALL SCHL. SCHEDULE FOOTING STEP S. MIN. MINIMUM 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

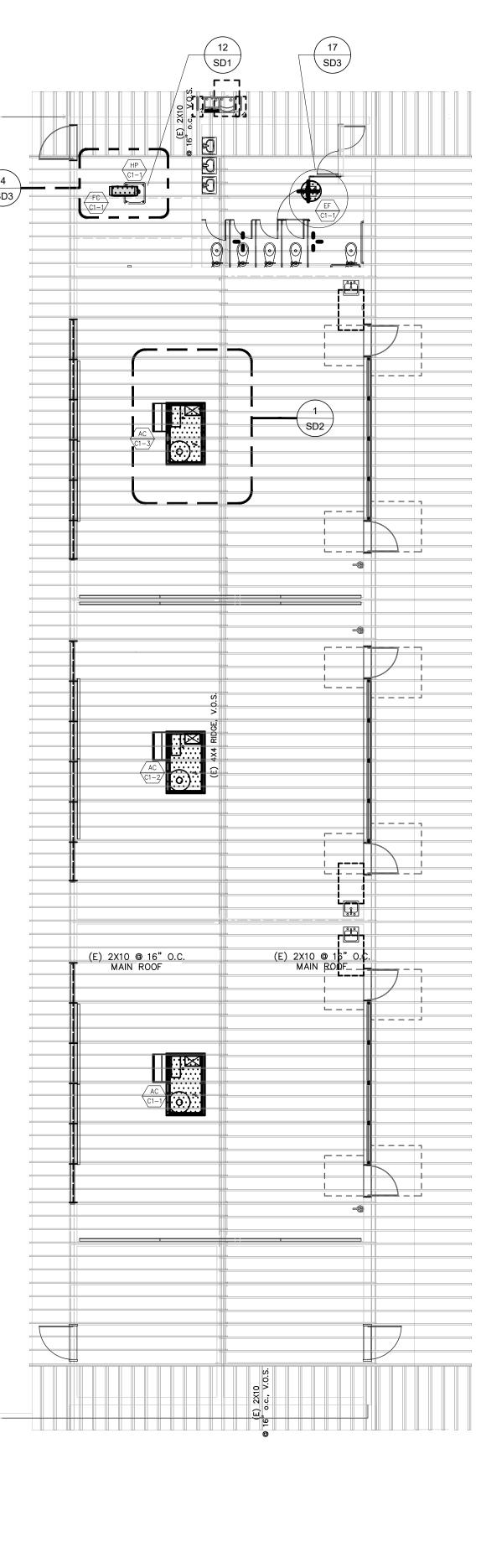


0" | 1"



ILE PATH: Z:\Projects\..





1.	THE MAXIMUM OPERATIONAL WEIGHTS OF NEW UNITS ARE LISTED IN THE ANCHORAGE SCHEDULE IN DETAIL 4/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.
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.
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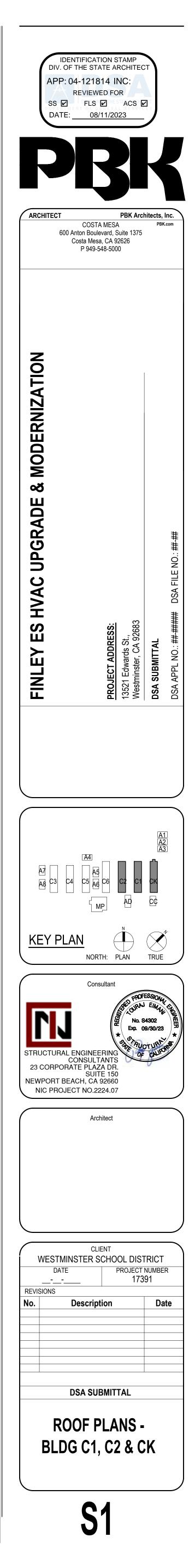
- B. ALL EXISTING FRAMING MEMBERS THAT ARE BEING CUT/NOTCHED/TRIMMED SHALL BE PROPERLY SECURED BY SHORING.
- C. SIZES SPACING LOCATIONS OF ALL EXISTING STRUCTURAL ELEMENTS SHALL BE FIELD VERIFIED & ANY DISCREPANCIES BE REPORTED TO SEOR.
- D. IF EXISTING MEMBERS ARE SMALLER THAN WHAT IS SHOWN IN DRAWINGS 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, WHERE OCCURS, SEE NOTES A-D
	(E) STL POST, V.O.S.
	(N) MATCHING SISTER JOIST, PER PLAN FOR EXACT LOCATION, SEE DETAIL 1/SD2
	(N) CONC. SLAB-ON-GRADE
EF HP	(N) ROOFTOP UNIT, PER PLAN, SEE 1/SD2 SEE NOTE 1-7
FC -	(N) SUSPENDED UNIT, PER PLAN, SEE 4/SD3 SEE NOTE 1-7
	(N) HVAC UNIT, PER MECH. PLANS SEE NOTE 1-7
	DUCT THROUGH ROOF PENETRATION PER MECH.

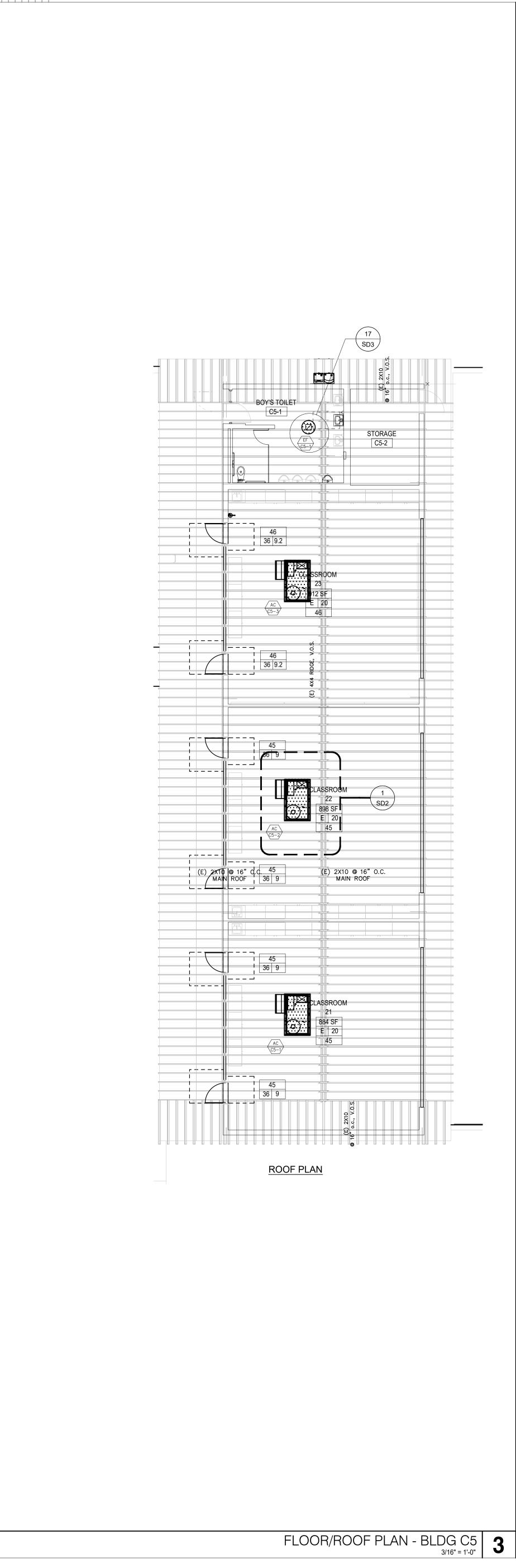
EQUIPMENT SCHEDULE (*)								
UNIT DESCRIPTION	OVERALL WEIGHT(LBS)	DIMENSIONS	DETAIL REF.					
	$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
HEAT PUMP (CURB)	595640 347	74"L x 44"W x 41"H	For detail see sheet SD2					
FC FC CI-1								
FAN COIL	40		For detail see sheet 4/SD3					
EF         EF         EF         EF           (1-1)         (2-1)         (X-2)         (X-3)								
EXHAUST FAN	1575		For detail see sheet 17/SD3					
		HP CI-1 C2-1						
HEAT PUMP	75		For detail see sheet 12/SD1					

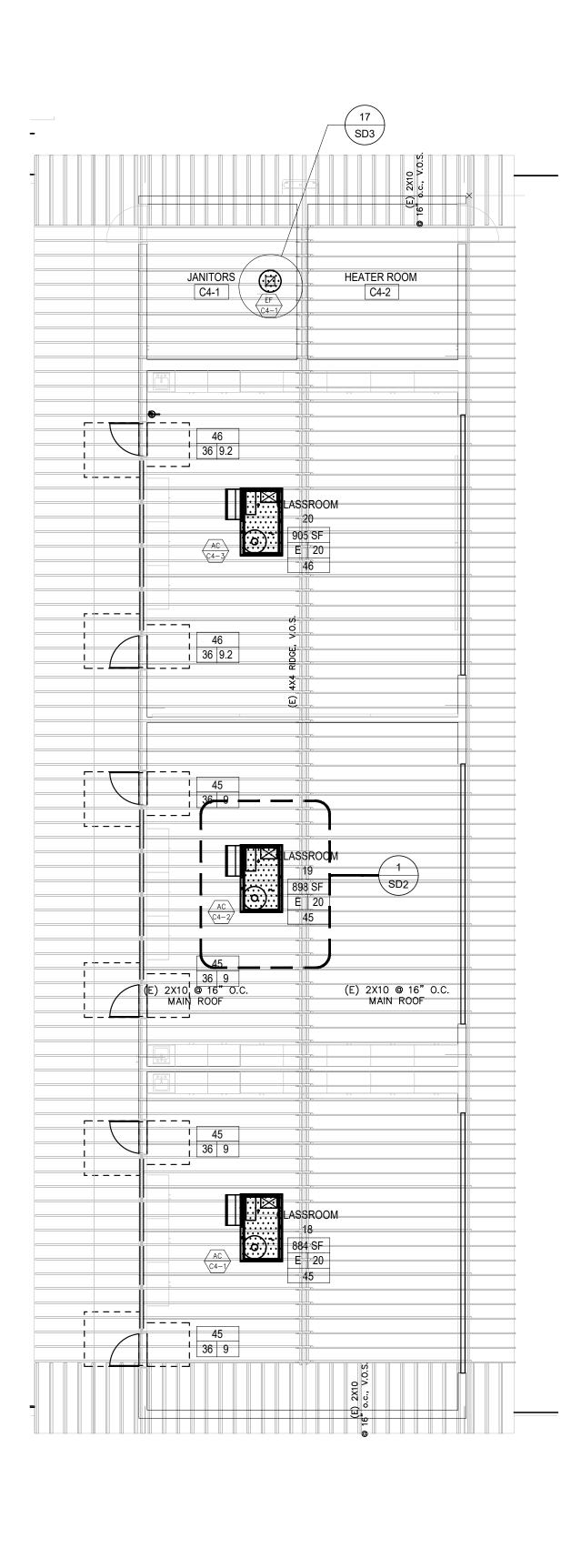
(\*) SUBJECT TO CHANGE REFER TO LATEST MECHANICAL PACKAGE. SEE NOTES 1-7

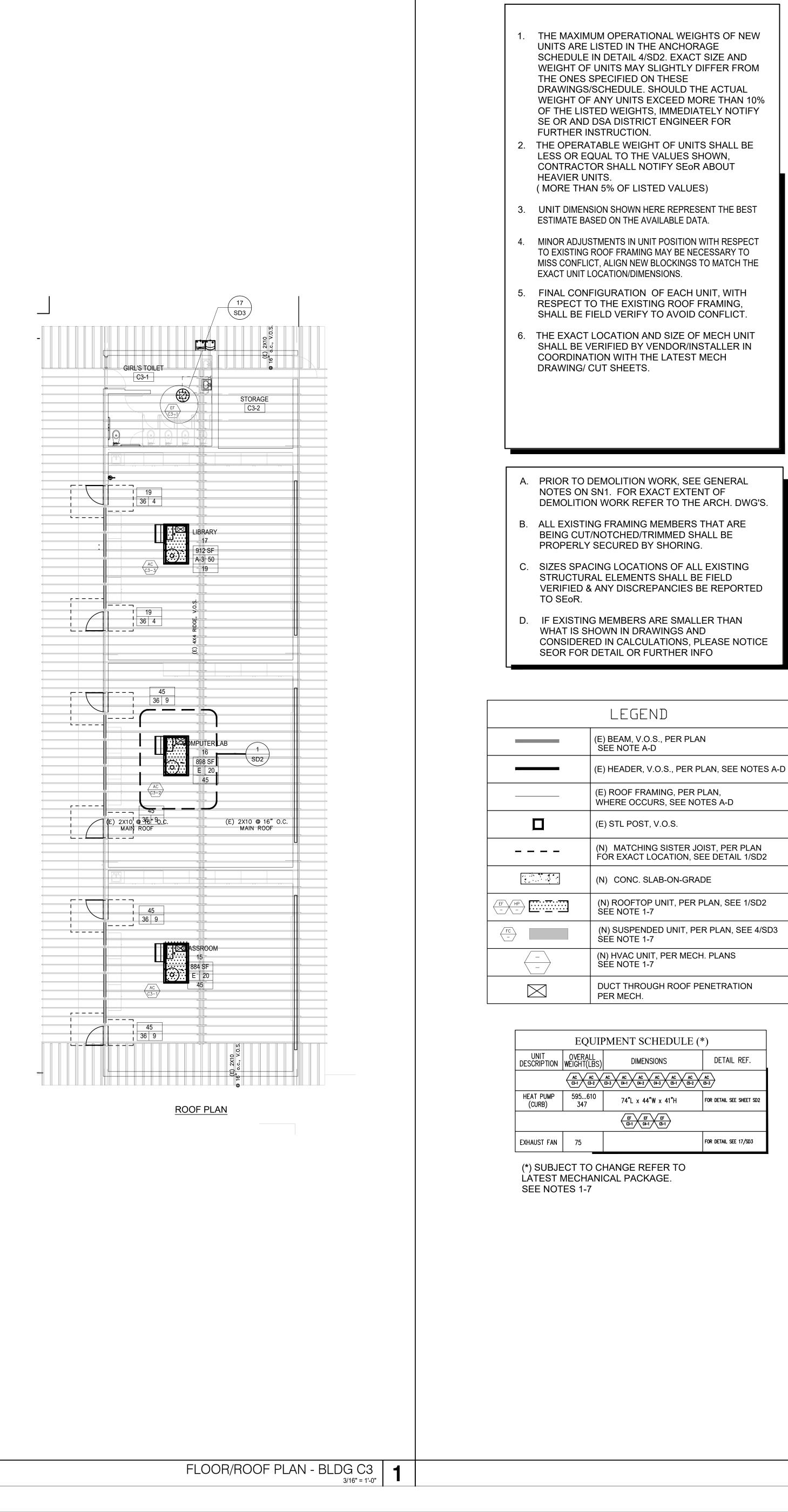
(+) AC UNIT WEIGHT INCLUDES RTU SELF WEIGHT AND WEIGHT OF MECH. CURB

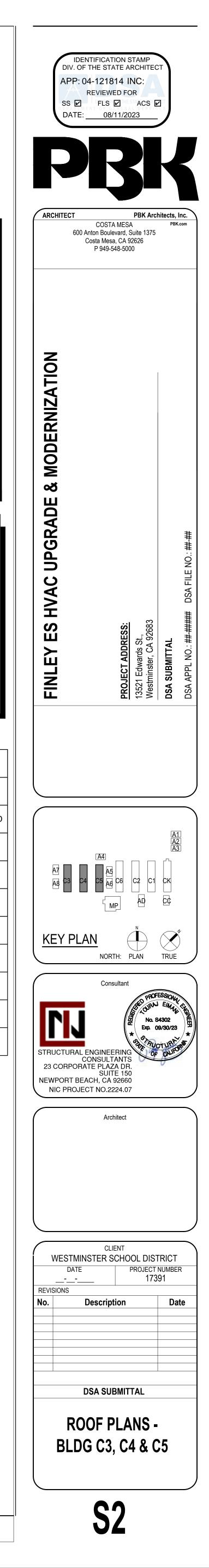






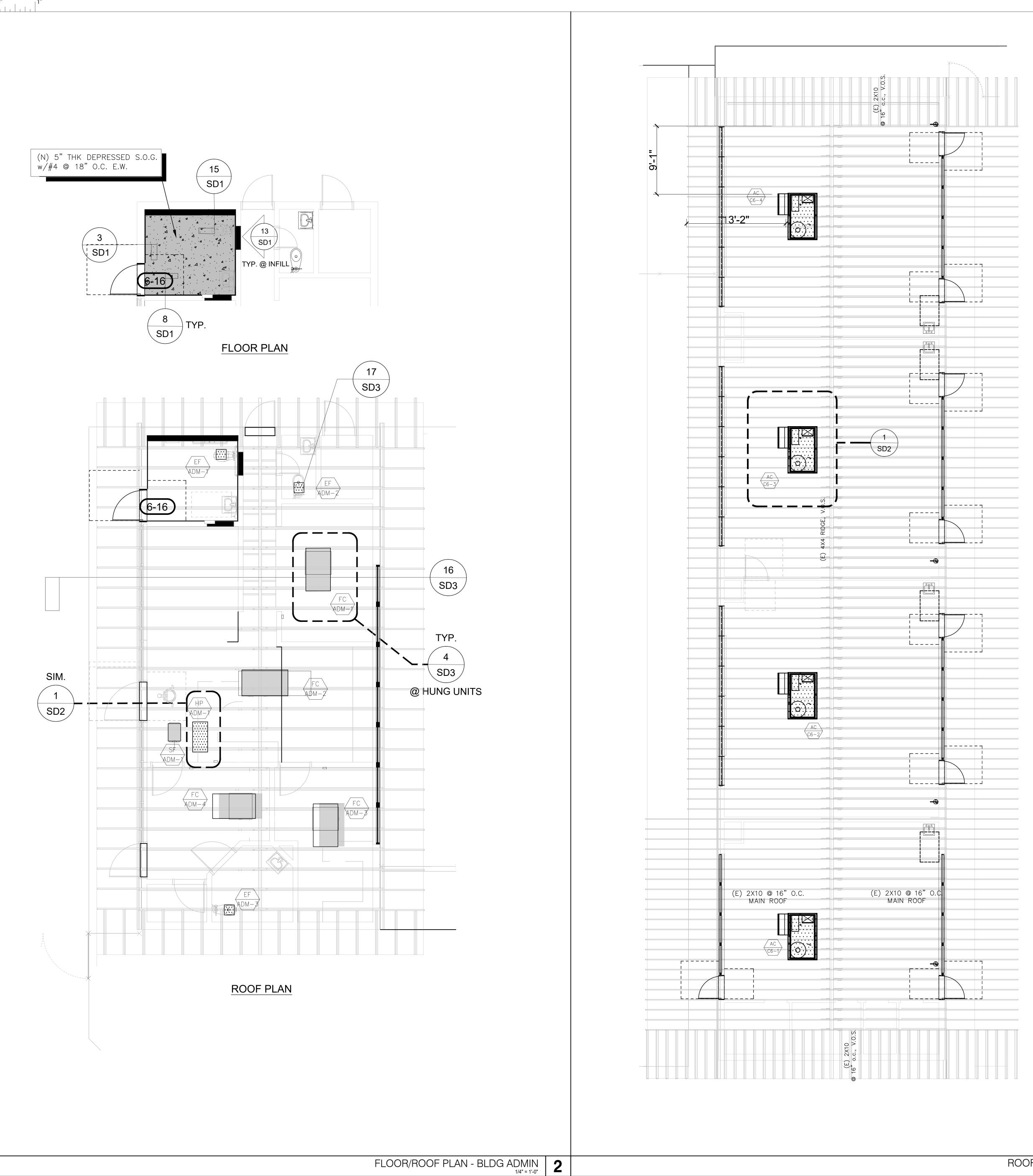






DETAIL REF.





1.	THE MAXIMUM OPERATIONAL WEIGHTS OF NEW UNITS ARE LISTED IN THE ANCHORAGE SCHEDULE IN DETAIL 4/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.
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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.
В.	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, WHERE OCCURS, SEE NOTES A-D
	(E) STL POST, V.O.S.
	(N) MATCHING SISTER JOIST, PER PLAN FOR EXACT LOCATION, SEE DETAIL 1/SD2
$\begin{bmatrix} x_{1} & x_{2} & y_{1} & y_{2} \\ x_{2} & x_{2} & y_{3} & y_{4} \\ y_{1} & y_{2} & y_{3} & y_{4} \\ y_{1} & y_{2} & y_{3} & y_{4} \end{bmatrix} = \begin{bmatrix} x_{1} & y_{2} \\ y_{1} & y_{2} \\ y_{3} \end{bmatrix}$	(N) CONC. SLAB-ON-GRADE
EF HP	(N) ROOFTOP UNIT, PER PLAN, SEE 1/SD2 SEE NOTE 1-7
FC -	(N) SUSPENDED UNIT, PER PLAN, SEE 4/SD3 SEE NOTE 1-7
	(N) HVAC UNIT, PER MECH. PLANS SEE NOTE 1-7
	DUCT THROUGH ROOF PENETRATION PER MECH.

EQUIPMENT SCHEDULE (*)					
UNIT OVERALL DESCRIPTION WEIGHT(LBS)		DIMENSIONS	DETAIL REF.		
AC AC AC AC AC HP 06-1 06-2 06-3 06-4 A0M-1					
HEAT PUMP 595 (CURB) 347 74"L x 44"W x 41"H FOR DETAIL SEE SHEET					
		FC FC FC FC FC ADM-4			
FAN COIL (SUSPENDED)	60100		For detail see 4/SD3		
EF EF EF SF ADM-1 ADM-2 ADM-3 ADM-1					
FAN	1550				

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

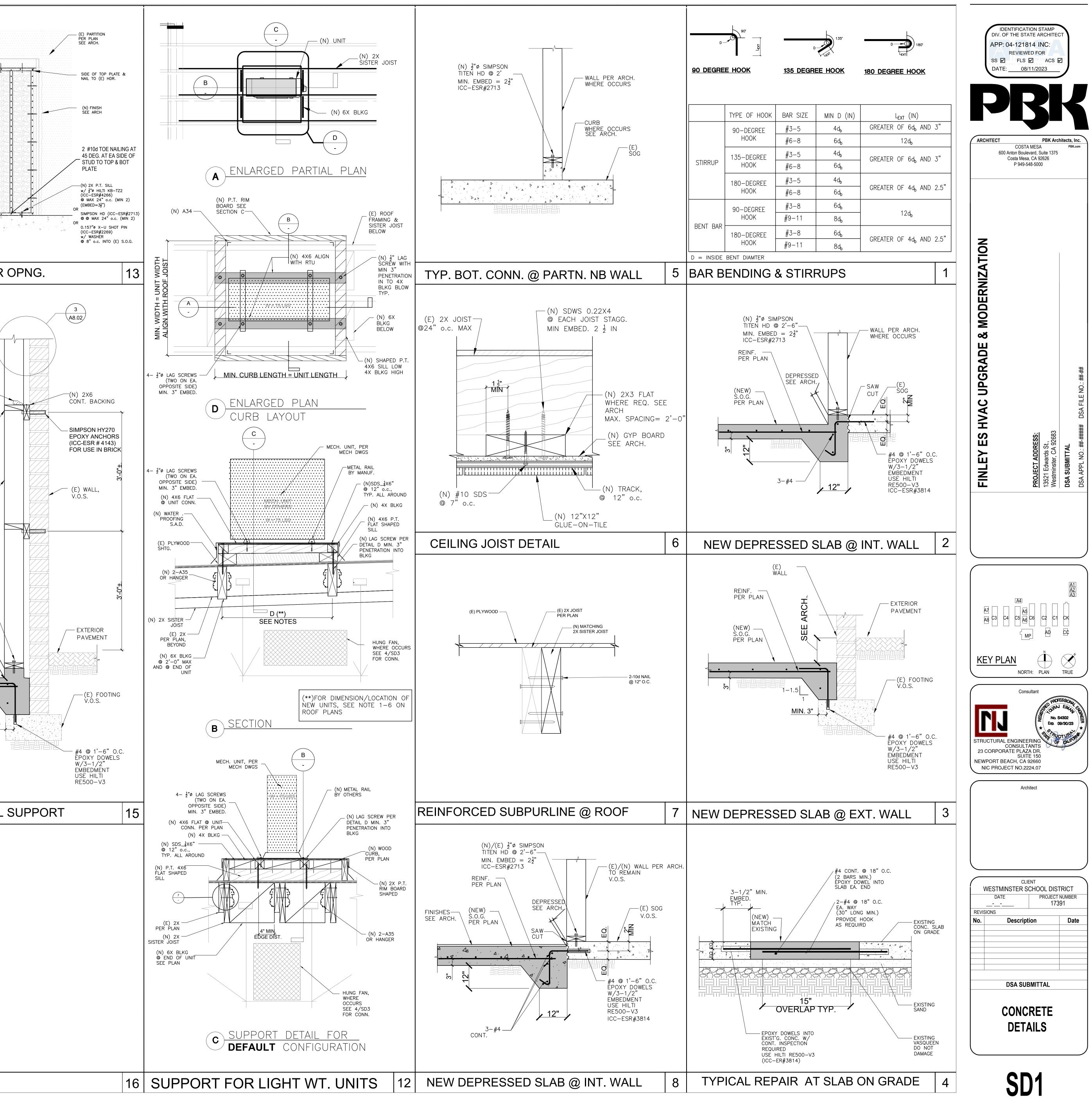
(+) AC UNIT WEIGHT INCLUDES RTU SELF WEIGHT AND WEIGHT OF MECH. CURB

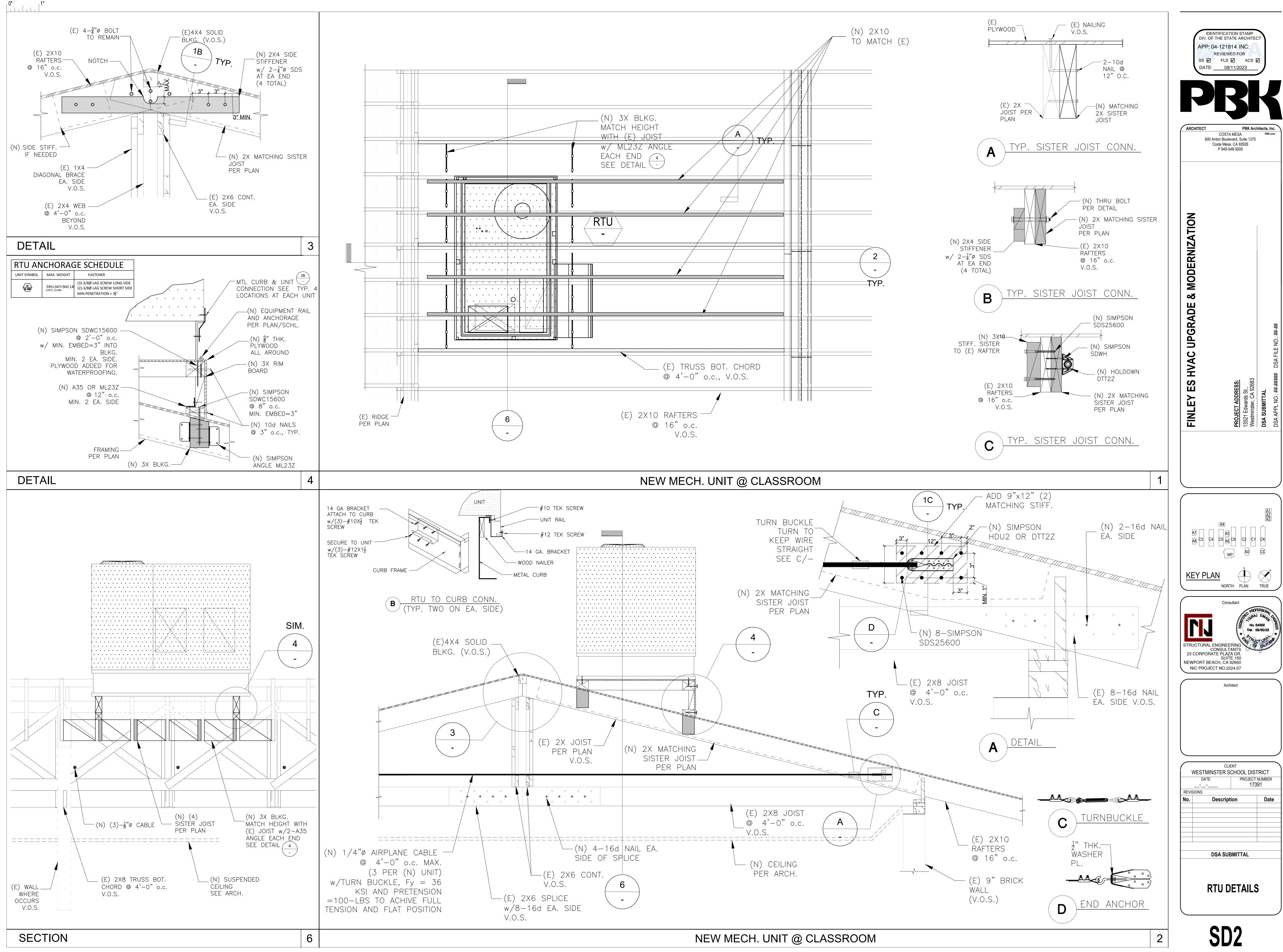


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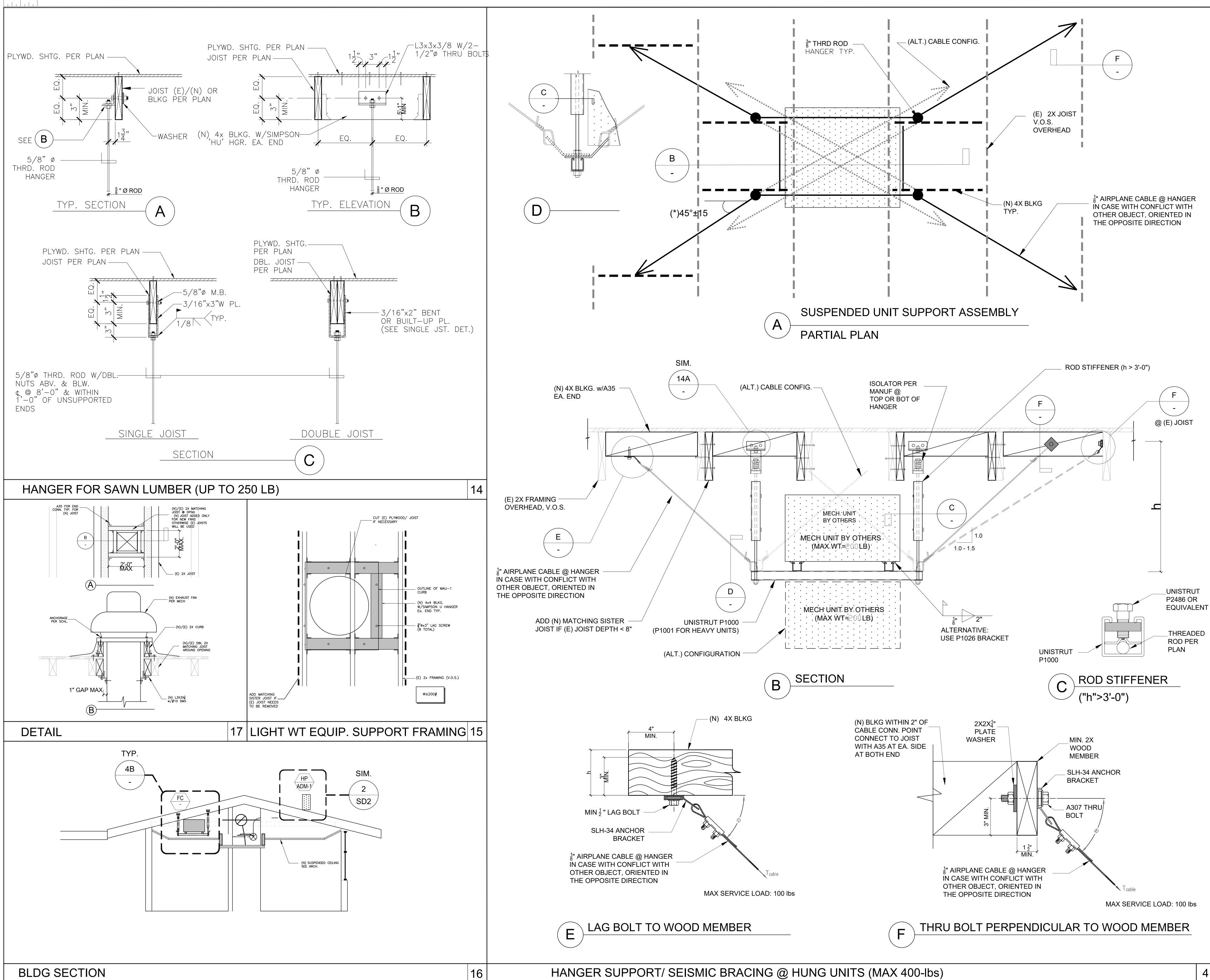
18         18           18         18           18         18           18         18           19 27 years of the second seco		(E) CONC. SLAB
18 19 27 MATCHAR 18 18 18 18 18 19 27 MATCHAR 19 TYP. FURRING WALL	17	TYP. INFILL @ DOOR
19 TYP. FURRING WALL	18	HURRICANE TIE (N) 2X MATCHING BLKG. EVERY OTHER BAY (N) 2X WOOD STUD (N) 2X WOOD STUD (N) 2X WOOD STUD (N) 2X WOOD STUD (N) 2'' Ø SIMPSON TITEN HD (0) 2'-6'' MIN. EMBED = $2^{1''}_{2''}$ ICC-ESR#2713 REINF. PER PLAN DEPRESSED
		(NEW) S.O.G. PER PLAN 1-1.5 1 MIN. 3"
	19	TYP. FURRING WALL
	20	

-E PATH: Z:\Project

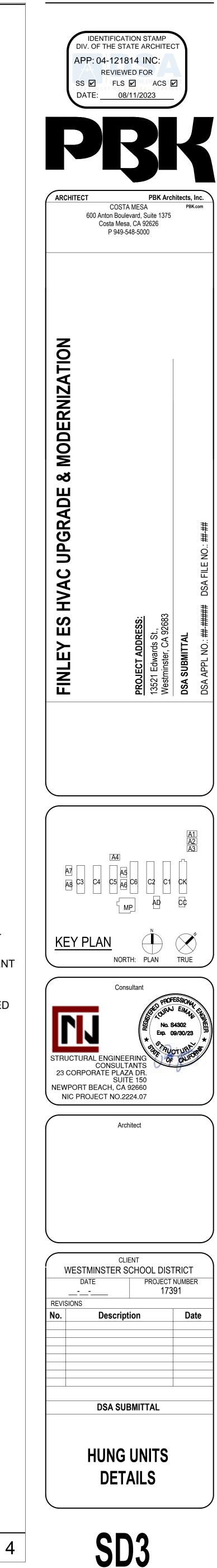




0" | 1"



**BLDG SECTION** 



: **РАТН:** '2023 8:4

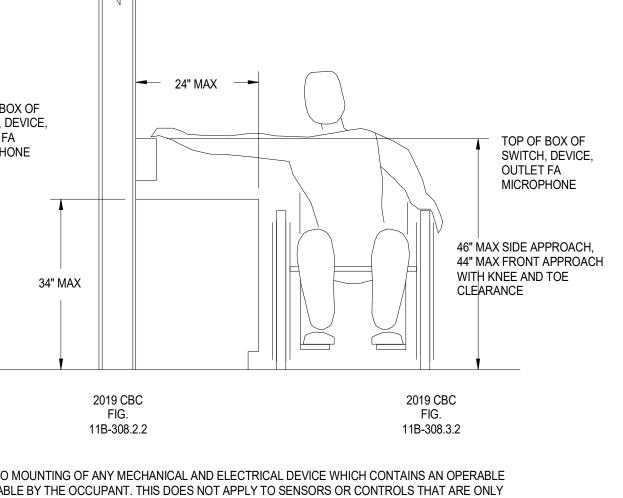
0'	' <b>1"</b>	
	TITLE 24 NOTES	GENERAL NOTES
	THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED IN DRAWINGS AND/OR SPECIFICATIONS:	<ol> <li>ALL WORK SHALL COMPLY WITH CURRENT CALIFORNIA CODE OF REGULATIONS TITLE 24, A CODES AND REGULATIONS, SMACNA AND ASHRAE GUIDELINES, AND LOCAL CODES.</li> <li>ALL HVAC EQUIPMENT SHALL BE COMPLIANT WITH EFFICIENCY STANDARDS PER TITLE-24, F</li> </ol>
1. 2.	THROUGH 110.2-K.	3. ALL FRESH AIR INTAKES SHALL BE AT LEAST 10 FEET IN A HORIZONTAL DIRECTION FROM AL BURNING APPLIANCE AND PLUMBING VENT OUTLETS. FOR GAS/ELECTRIC AIR CONDITIONIN REQUIRED CLEARANCES ARE NOT MET, A FACTORY FLUE GAS DEFLECTOR AND EXTENSION THESE CLEARANCES. CONTRACTOR SHALL DETERMINE LOCATIONS WHERE REQUIRED PRI
3.	AND DIAGNOSTICS SYSTEMS.	<ul> <li>PROVIDED AT NO ADDITIONAL COST TO THE OWNER.</li> <li>4. AIR FILTERS SHALL BE STATE FIRE MARSHAL APPROVED AND LISTED. PREFORMED FILTERS FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS IN ALL OCCUPANCIES AND APPLICABLE ASHRAE REQUIREMENTS. FILTERS SHALL BE ACCESSIBLE</li> </ul>
4.		<ol> <li>REVIEW THESE PLANS AND SPECIFICATIONS PRIOR TO BID. REVIEW PLANS AND SPECIFICAT TRADES INCLUDING ARCHITECTURAL, STRUCTURAL, ELECTRICAL, AND FIRE PROTECTION.</li> <li>REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AS THESE ARE PART OF THE O WHERE A CONFLICT OCCURS BETWEEN THIS SPECIFICATION AND OTHER SPECIFICATIONS I CONTRACT DOCUMENTS, THE MORE STRINGENT REQUIREMENT SUPERCEDES.</li> </ol>
5.	140.4(B). 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.	<ol> <li>THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND NOT INTENDED TO INDICATE ALL REQUIR TRANSITIONS, FITTINGS AS REQUIRED TO CONFORM TO THE BUILDING STRUCTURE, CLEAR AVOIDANCE OF OBSTRUCTIONS, AND MAINTAINING HEAD CLEARANCE.</li> <li>COORDINATE INSTALLATION WITH ALL OTHER TRADES PRIOR TO INSTALLATION OF EQUIPMINE</li> </ol>
6. 7.	ELECTRIC RESISTANCE HEATING SYSTEMS ARE NOT PROVIDED FOR SPACE HEATING. IN DRIER CLIMATES AND WHEN LARGE OUTDOOR AIR FRACTIONS ARE	<ul> <li>BUT NOT LIMITED TO, STRUCTURAL, ARCHITECTURAL, ELECTRICAL, AND PLUMBING.</li> <li>9. COORDINATE THE LOCATIONS OF ALL CEILING DIFFUSERS, REGISTERS, AND GRILLES WITH REFLECTIVE CEILING PLANS, ELECTRICAL LIGHTING LAYOUT, AND ARCHITECTURAL ROOM E AND ENGINEER SHALL BE IMMEDIATELY NOTIFIED OF ANY CONFLICTS PRIOR TO FABRICATION</li> </ul>
8.		10. COORDINATE THE LOCATION OF ALL ROOF OPENINGS AND THE LOCATIONS OF ALL ROOF M STRUCTURAL AND ARCHITECTURAL WEIGHTS FOR PLATFORM AND CURB SIZES, FOR ROOF DETAILS AND REQUIREMENTS, SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS. REQUI FLASHINGS FOR MECHANICAL EQUIPMENT SHALL BE AS INDICATED ON THE STRUCTURAL A
9.	ALLOW MORE AGGRESSIVE CONTROL STRATEGIES AND IMPROVE COMFORT. HAVE DIFFERENT AHU'S SERVING CORE VS. PERIMETER AREAS. THE DESIGN ACCOMMODATES PARTIAL OCCUPANCY ENERGY SAVINGS WHEN THE OWNER'S REQUIREMENTS OR NARRATIVE DESCRIBE ANY POSSIBLITY OF	UNLESS NOTED OTHERWISE. 11. HIRE A TEST AND BALANCE AGENCY TO PERFORM THE TESTING PROCEDURES, REQUIRED I MECH-11A CERTIFICATE OF ACCEPTANCE FORMS, AS APPLICABLE FOR ALL NEWLY INSTALL SYSTEMS. THE CONTRACTOR AND TEST AND BALANCE AGENCY ARE RESPONSIBLE FOR OF
10	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. EACH ZONE IS CONTROLLED BY AN INDIVIDUAL THERMOSTATIC CONTROL.	ACCEPTANCE FORMS REQUIRED BY THE IOR. THE TEST AND BALANCE AGENCY SHALL BE V REQUIREMENTS OF THESE CERTIFICATE OF ACCEPTANCE FORMS, AND SHALL COORDINATE EQUIPMENT AND CONTROLS INSTALLERS TO COMPLY WITH THESE REQUIREMENTS IN A TIM
11		<ul> <li>PROJECT SCHEDULE. THE AIR BALANCE CONTRACTOR SHALL BE A MEMBER OF AABC (ASS COUNCIL).</li> <li>12. PAINT ALL EXPOSED DUCTWORK, DUCT SUPPORTS, ACCESSORIES, REGISTERS, GRILLES, D APPURTENANCES, WHETHER OR NOT COLORS ARE DESIGNATED IN SCHEDULES, EXCEPT W MATERIAL IS SPECIFICALLY INDICATED NOT TO BE PAINTED OR IS TO REMAIN NATURAL. WH</li> </ul>
12		NOT SPECIFICALLY MENTIONED, PAINT THE SAME AS SIMILAR ADJACENT MATERIALS OR SU NOT DESIGNATED, THE ARCHITECT WILL SELECT FROM STANDARD COLORS OR FINISHES A FIELD PAINTING EXPOSED BARE AND COVERED PIPES AND DUCTS (INCLUDING COLOR CODI STEEL AND IRON WORK, AND PRIMED METAL SURFACES OF MECHANICAL EQUIPMENT.
	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	<ol> <li>PROVIDE ALL LABOR, MATERIAL, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TO OTHER WORK AS REQUIRED. FOR A COMPLETE AND PROPERLY OPERATING MECHANICAL S</li> <li>ALL MATERIALS SHALL BE NEW AND OF THE SAME MANUFACTURER FOR EACH CLASS OR GEO EQUIPMENT SHALL BE LISTED AND APPROVED BY UNDERWRITER'S LABORATORIES, AND SH</li> </ol>
13	DAMPERS THAT AUTOMATICALLY CLOSE UPON EF FAN SHUTDOWN.	LABEL WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH THE APPROVA HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED AND INSTALLED IN ACCORD/ STANDARDS ESTABLISHED BY THE LATEST EDITION OF CMC, CBC U.L., SMACNA AND ASHRA MANUFACTURERS' RECOMMENDATIONS, AND INSTALLATION INSTRUCTIONS.
14	ALLOW CENTRALIZED DEMAND SHED FOR NON-CRITICAL ZONES.	<ol> <li>OBTAIN AND PAY FOR ALL NECESSARY BUILDING PERMITS AND VARIANCES. COORDINATE 1 REQUIREMENTS WITH ALL TRADES PRIOR TO CONSTRUCTION. INCLUDE ALL COSTS IN THE</li> <li>IF THE CONTRACTOR PROPOSES ALTERNATE EQUIPMENT OR MATERIAL, THE CONTRACTOR</li> </ol>
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	OBTAIN ALL DSA APPROVALS, PAY ALL RELATED FEES AND OBTAIN APPROVAL FROM OWNE PROVIDE TITLE-24 COMPLIANCE CERTIFICATION AND ALL ASSOCIATED FEES REQUIRED. CO EQUIPMENT WITH OTHER TRADES. INCLUDE IN THE SHOP DRAWINGS THE EQUIPMENT SUB DIFFERENT PHYSICAL SIZE OR ARRANGEMENT FROM THAT SHOWN.
17	IN SÉALED AND INSULATED JUNCTION BOXES. CORNER OFFICE SHALL ALWAYS HAVE THEIR OWN THERMOSTATS, AIR TERMINAL BOXES OR FIN-TUBE RADIATORS.	17. PROVIDE SHOP DRAWINGS PER PROJECT SCHEDULE, SEE 23 00 00 SPECIFICATIONS FOR RI DRAWINGS ARE NOT PROVIDED TO THE ENGINEER FOR REVIEW, AND ANY CONFLICTS OCCI CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK NECESSARY T BEAR ALL COSTS INCURRED FOR ALL REVISIONS, AT NO ADDITIONAL COST TO THE DISTRICT
19	ALONE PACKAGED CONTROLS. UNOCCUPIED SEQUENCES SHALL BE INCLUDED. CONTROL SEQUENCES SHALL BE PROVIDED FOR EACH PIECE OF EQUIPMENT LISTED IN THE EQUIPMENT SCHEDULE THAT IS MONITORED OR CONTROLLED BY	<ul> <li>SHALL BE NOTIFIED IMMEDIATELY PRIOR TO FABRICATION AND INSTALLATION OF ALL WORK BETWEEN TRADES.</li> <li>18. PROVIDE ALL MANUFACTURER'S PRODUCT DATA CLEARLY INDICATING MODEL NUMBERS, O ELECTRICAL INFORMATION, AND OPTIONAL ACCESSORIES, PER PROJECT SCHEDULE AND P</li> </ul>
20	<ul> <li>THE BUILDING AUTOMATION SYSTEM (BAS). UNOCCUPIED SEQUENCES SHALL BE INCLUDED.</li> <li>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</li> </ul>	<ul> <li>THESE SHALL BE REVIEWED BY THE MECHANICAL ENGINEER PRIOR TO PURCHASING.</li> <li>19. SUBMIT TO THE OWNER ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWIN COMPLETION OF THE JOB. PROVIDE THE OWNER WITH COMPLETE MECHANICAL "AS-BUILTS LOCATIONS, DUCTWORK AND PIPE ROUTING, ETC.</li> </ul>
21	EQUIPMENT. . THE OUTDOOR AIR-VENTILATION RATE AND AIR-DISTRIBUTION ASSUMPTIONS MADE IN THE DESIGN OF THE VENTILATING SYSTEM ARE CLEARLY IDENTIFIED ON	<ol> <li>20. OBTAIN APPROVAL FROM THE OWNER ON ALL ADDENDA AND CONSTRUCTION CHANGE DOO THE WORK.</li> <li>21. INSTALL ALL EQUIPMENT, ACCESSORIES, AND MATERIAL IN STRICT ACCORDANCE WITH THE INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.</li> </ol>
22	THE PLANS. 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.	<ol> <li>PROVIDE FIRESTOPPING FOR PIPE AND DUCT PENETRATIONS THROUGH RATED WALLS. CC WITH OTHER TRADES AS NECESSARY PRIOR TO INSTALLATION.</li> <li>ANY MATERIAL EXPOSED WITHIN A PLENUM OR DUCT MUST HAVE A FLAME SPREAD INDEX C SMOKE DEVELOPED RATING OF NOT MORE THAN 50, AND A MOLD/HUMIDITY RESISTANCE PI</li> </ol>
23 24	<ul> <li>THE MINIMUM AND MAXIMUM OUTDOOR AIR RATES FOR EACH AIR HANDLER ARE LISTED ON THE EQUIPMENT SCHEDULES.</li> <li>THE OUTDOOR AIR-VENTILATION RATES ARE BASED ON PLANNED OWNER</li> </ul>	<ol> <li>ALL EQUIPMENT, DUCTS, PIPING, AND OTHER DEVICES AND MATERIALS OUTSIDE OF THE BU EXPOSED TO THE WEATHER SHALL BE COMPLETELY WEATHERPROOFED.</li> <li>LOCATE ALL EQUIPMENT SUCH THAT CODE REQUIRED ACCESS IS MAINTAINED, INCLUDING I PANELS WHERE REQUIRED, SHALL BE COORDINATED WITH ARCHITECT, AND PROVIDED BY</li> </ol>
25	OCCUPANT DENSITY GREATER THAN OR EQUAL TO 25 PEOPLE PER 1000 SF, AND	PROVIDED. FOR ATTIC EQUIPMENT, G.C. TO PROVIDE A CATWALK & LIGHT PER CMC FOR AT 26. FOR INACCESSIBLE AREAS THE CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL DA DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE W THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:
	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:	<ol> <li>HAND ACCESS: 12"x12" MIN.</li> <li>BODY ACCESS: 30"x30" MIN.</li> <li>ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE 0</li> <li>LABEL ALL EQUIPMENT AS TO THE SPACE IT SERVES. SEE SPECIFICATIONS FOR IDENTIFICA</li> </ol>
	<ul> <li>A. CO2 SENSORS INSTALLED IN EACH ROOM SERVED BY SYSTEMS WITH DCV CONTROLS.</li> <li>B. CO2 SENSORS ARE LOCATED BETWEEN 3 FT AND 6 FT ABOVE THE FLOOR.</li> <li>C. CO2 CONCENTRATIONS MAINTAINED AT LESS THAN OR EQUAL TO 600 PPM PLUS OUTDOOR PPM.</li> </ul>	<ul> <li>SMOKE DETECTOR LOCATIONS (AT CEILING) AS TO THE EQUIPMENT IT SERVES.</li> <li>29. A/C UNITS PROVIDED WITH ECONOMIZER CYCLE DAMPERS SHALL HAVE OSA DAMPERS SET ON FAN SHUT DOWN.</li> <li>30. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR FRESH AIR INTAKES</li> </ul>
26	D. DURING HOURS OF EXPECTED OCCUPANCY, CONTROLS MAINTAIN THE SYSTEM VENTILATION RATE.	<ul> <li>EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT ECONOMIZERS.</li> <li>31. DRAWINGS ARE FOR REFERENCE ONLY. CONTRACTOR TO FIELD VERIFY EXISTING CONDITI 32. OWNER RETAINS SALVAGE RIGHTS, PROVIDE A MINIMUM OF 72 HOURS NOTICE PRIOR TO RI</li> </ul>
27	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.	<ul> <li>AND EXHAUST FANS.</li> <li>33. PATCH AND SEAL ALL SLAB, ROOF AND WALL OPENINGS WITH LIKE MATERIAL WHERE MECH PENETRATED.</li> <li>34. REMOVE EXISTING AND PROVIDE ALL NEW DUCT AND PIPE HANGER SUPPORTS WHERE DUC REPLACED.</li> </ul>
28	COOLING IS PROVIDED BY THE ECONOMIZER EVEN WHEN ADDITIONAL MECHANICAL COOLING ID REQUIRED. ECONOMIZER DAMPERS SHALL BE DRIVEN BY DIRECT DRIVE ACTUATORS RATHER THAN ROD LINKAGES, WHICH CAN BE A MAJOR CAUSE OF ECONOMIZER	<ul> <li>35. PROVIDE ALL NEW PIPE SUPPORTS WHERE PIPING IS SCHEDULED TO BE REPLACED.</li> <li>36. OUTDOOR REFRIGERANT PIPING TO BE INSULATED AND ALUMINUM WRAPPED.</li> <li>37. CONTRACTOR IS RESPONSIBLE FOR COMPLETE AND OPERABLE SYSTEM.</li> <li>38. ALL MECHANICAL EQUIPMENTS, PIPES AND DUCTS SHALL BE SUPPORTED AND BRACED PEF</li> </ul>
29	RETURN FANS) SHALL BE USED IN MOST CASES.	BUILDING CODE. ALL MECHANICAL COMPONENTS SHALL BE ABLE TO RESIST THE EFFECTS 39. MECHANICAL WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES AND RE 40. CONTRACTOR SHALL PROTECT EXISTING BUILDING INFRASTRUCTURE DURING CONSTRUCT
	PROPERLY LOCATED TO PROVIDE ACCURATE AND REPEATABLE MEASUREMENTS FOR CONTROLLING ECONOMIZER OPERATION. AVERAGING SENSORS COVER THE ENTIRE DUCT OR COIL FACE AREAS. ALL AIR DISTRIBUTION SYSTEM DUCTS AND PLENUMS MUST BE INSTALLED,	<ul> <li>ELEMENT. IF DAMAGED, CONTRACTOR SHALL REPLACE DAMAGED BUILDING COMPONENTS COST TO THE OWNER.</li> <li>41. ALL DUCTWORK SHALL BE FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST PRESSURE DUCT CONSTRUCTION STANDARDS.</li> </ul>
32	SEALED AND INSULATED AS REQUIRED BY 120.4(A).	<ol> <li>42. ALL DUCT JOINTS SHALL BE MADE WITH MASTIC SEALANT, SHEET METAL SCREWS AND TAP OR EQUIV., MINIMUM 2-1/2" WIDTH.</li> <li>43. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE GUIDELINES, TH BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, MECHANICAL ENGINEER AND DSA FIEL</li> </ol>
33		<ol> <li>44. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PRO AND KEPT ON THE JOB AT ALL TIMES.</li> <li>45. CONTRACTOR SHALL COORDINATE ALL DUCTWORK ROUTING WITH WORK OF OTHER TRADI REQUIRED TO AVOID CONFLICT WITH PIPING, LIGHT FIXTURES, TRUSSES, ETC.</li> </ol>
34	DUCT BRANCHES WITH SIGNIFICANTLY DIFFERING STATIC PRESSURE REQUIREMENTS SHALL HAVE VOLUME CONTROL STRATEGICALLY PLACED TO AID IN TAB WORK.	46. COORDINATE ALL EQUIPMENT VOLTAGES WITH ELECTRICAL PRIOR TO ORDERING ANY EQU 47. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBERS SHALL BE CU WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIS FROM THE DIVISION OF THE STATE ARCHITECT.
36	LONG AS POSSIBLE (IDEALLY 10 DUCT DIAMETERS) TO REDUCE FAN INEFFICIENCIES FROM SYSTEM EFFECTS.	
37	ROOMS AND NON-NOISE SENSITIVE SHAFTS AND DO NOT REDUCE ANY DUCT SIZES LISTED ON PLANS.	1.       TESTING AND ADJUSTING.       TESTING AND ADJUSTIN         AN ADDITION OR ALTERATION SUBJECT TO SECTION         2.       SYSTEMS DEVELOP A WRITTEN READ OF DROCED
38	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%. CONTRACTOR SHOP DRAWINGS SHALL BE SUFFICIENTLY DETAILED TO ENSURE	2. <u>SYSTEMS.</u> DEVELOP A WRITTEN PLAN OF PROCEDU INCLUDE, AS APPLICABLE TO THE PROJECT: A. HVAC SYSTEMS AND CONTROLS. B. INDOOR AND OUTDOOR LIGHTING AND CONTRO
	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.	C. WATER HEATING SYSTEMS. <u>PROCEDURES.</u> PERFORM TESTING AND ADJUSTING SYSTEM.
39 40	DOCUMENTS.	A. <u>HVAC BALANCING.</u> IN ADDITION TO TESTING AND FOR NORMAL USE, BALANCE THE SYSTEM IN ACC STANDARDS; THE NATIONAL ENVIRONMENTAL BA
41	<ul> <li>REQUIREMENTS FOR FUNCTIONAL PERFORMANCE TESTS ARE REFLECTED IN THE CONSTRUCTION DOCUMENTS.</li> <li>COOLING SYSTEMS IDENTIFIED IN TABLE 140.4-D SHALL HAVE FAN CONTROLS TO VARY THE INDOOR FAN AIRFLOW AS A FUNCTION OF LOAD:</li> </ul>	4. <u>REPORTING.</u> AFTER COMPLETION OF TESTING, ADJ PERFORMING THESE SERVICES.
	<ul> <li>A. DX AND CHILLED WATER COOLING SYSTEMS THAT CONTROL CAPACITY BASED ON OCCUPIED SPACE TEMPERATURE SHALL HAVE A MINIMUM OF 2 STAGES OF CONTROL.</li> <li>B. SYSTEMS THAT CONTROL SPACE TEMPERATURE BY MODULATING AIRFLOW</li> </ul>	5. <u>OPERATION AND MAINTENANCE (O &amp; M) MANUAL.</u> P AND COPIES OF GUARANTIES/WARRANTIES FOR EA AND OTHER RELATED REGULATIONS.
43	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. FAN CABINET ENCLOSURE AND INTERNAL COMPONENTS SHALL BE ELECTED TO	A. <u>INSPECTIONS AND REPORTS.</u> INCLUDE A COPY O 6. <u>TEMPORARY VENTILATION.</u> THE PERMANENT HVAC
	MINIMIZE PRESSURE DROP, E.G. FACE VELOCITY IS LESS THAN 500 FPM, LOW PRESSURE DROP COILS, FILTERS, ETC. . FAN WHEEL SHALL BE SELECTED FOR EFFICIENT OPERATION, E.G. LARGER DIAMETER ROTATING AT LOWER SPEED.	6. <u>TEMPORARY VENTILATION.</u> THE PERMANENT HVAC REQUIRED TEMPERATURE RANGE FOR MATERIAL A MINIMUM REPORTING VALUE (MERV 13) OF 13, BASE FILTERS IMMEDIATELY PRIOR TO OCCUPANCY, OR, I
45	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	7. <u>COVERING OF DUCT OPENINGS AND PROTECTION C</u> THE CONSTRUCTION SITE UNTIL FINAL STARTUP OF OPENINGS SHALL BE COVERED WITH WRAP, PLASTI WATER AND DEBRIS WHICH MAY ENTER THE SYSTE
	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.	8. <u>FILTERS.</u> IN MECHANICALLY VENTILATED BUILDINGS PRIOR TO OCCUPANCY THAT PROVIDE AT LEAST A MAND RECOMMENDATIONS FOR MAINTENANCE WITH
46	5. SAT RESET SHALL BE ESTABLISHED WITH AN AGGRESSIVE RESET SCHEDULE OF 10F, E.G. 55F DURING WARM WEATHER AND 65F DURING COOL WEATHER.	<u>EXCEPTIONS:</u> A. AN ASHRAE 10-PERCENT TO 15-PERCENT EFFICIE BTU/H OR LESS CAPACITY PER FAN COIL, IF THE F
AIVI		B. EXISTING MECHANICAL EQUIPMENT.  9. OZONE DEPLETION AND GREENHOUSE GAS REDUCT 5.508.1.1 AND 5.508.1.2.
0.40.UZ		A. <u>CHLOROFLOUROCARBONS (CFCS).</u> INSTALL HVA B. <u>HALONS.</u> INSTALL HVAC REFRIGERATION AND FI
		10. ADHESIVES, ADHESIVE BONDING PRIMERS, ADHESIV CONTROL OR AIR QUALITY MANAGEMENT DISTRICT
., 🗀		

	MEP COMPONENT ANCHORAGE NOTE		MECHANICAL LEG	GEND	
4, ALL OTHER APPLICABLE 24, PART 6. // ALL EXHAUST, FLUE, FUEL DNING UNITS WHERE THE CODE SION SHALL BE USED TO MINIMIZE	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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:	SYMBOL 1 (1)	DESCRIPTION KEY NOTES DEMOLITION KEY NOTES		DESCRIP DX COOL
PRIOR TO BID. THIS SHALL BE ERS HAVING COMBUSTIBLE CIES SHALL BE PER TITLE-24 PART 6	<ol> <li>ALL PERMANENT EQUIPMENT AND COMPONENTS.</li> <li>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.</li> </ol>	01 M-2	DETAIL DESIGNATION DETAIL NUMBER SHEET NO. WHERE SHOWN	H	HEATING
ICATIONS OF OTHER RELATED N. HE CONTRACT DOCUMENTS.	<ol> <li>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</li> </ol>			<u>/ C \</u>	
NS ISSUED AS A PART OF THE QUIRED OFFSETS, BENDS, ELBOWS, EARANCE INSIDE CEILINGS,	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	AC 1	UNIT ABBREVIATION NUMBER		DAMPER,
IPMENT OR MATERIALS, INCLUDING	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 10X10-3 120 F/S	GRILLE DESIGNATION NECK SIZE & BLOW		DAMPER,
M ELEVATIONS. THE ARCHITECT ATION AND INSTALLATION. OF MOUNTED EQUIPMENT WITH THE DOF AND WALL PENETRATION	<ol> <li>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.</li> <li>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.</li> </ol>		FIRE/SMOKE DAMPER WHERE REQ'D     CFM	$\sim$	
QUIRED PLATFORMS AND AL AND ARCHITECTURAL PLANS, ED BY THE MECH-2A THROUGH FALLED HEATING AND COOLING	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.		SECTION CALLOUT POINT OF CONNECTION		FILTER
R OBTAINING THE CERTIFICATE OF BE WELL VERSED WITH ALL THE NATE AND WORK WITH THE TIMELY MANNER WITHIN THE	EQUIPMENT HAVE DEEN ANCHORED IN ACCORDANCE WITH ADOVE REQUIREMENTS.		POINT OF DISCONNECTION		HUMIDIFIE
ASSOCIATED AIR BALANCE S, DIFFUSERS, AND			EXISTING LINEWORK	//////	LOUVER
PT WHERE A SURFACE OR WHERE AN ITEM OR SURFACE IS SURFACES. IF COLOR OR FINISH IS S AVAILABLE. PAINTING INCLUDES CODING), HANGERS, EXPOSED		<i>₹<i>→</i>/<i>→</i>/<i>→</i>/<i>→</i>/<i>→</i>/<i>→</i>?</i>	DEMOLITION LINEWORK		ACCESS [ (AP) IN DU
ON TOOLS, TRANSPORTATION, AND AL SYSTEM. R GROUP OF EQUIPMENT.	PIPING, DUCTWORK, AND ELECTRICAL		SHEET METAL DUCT HIDDEN SHEET METAL DUCT	1" 2" 2"	STATIC PI
D SHALL BEAR THE INSPECTION OVAL OF THE GOVERNING BODIES ORDANCE WITH APPLICABLE HRAE GUIDELINES. INSTALL PER	DISTRIBUTION SYSTEM BRACING NOTE	  	INTERNALLY INSULATED SHEET METAL DUCT		TURNING
TE TEMPORARY CONSTRUCTION THE BID. TOR SHALL BE RESPONSIBLE TO VNER & ENGINEER OF RECORD.	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.		DIRECTION OF FLOW		DRAIN, FL
COORDINATE SUBMITTED SUBMITTED FOR APPROVAL WITH A	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		STANDARD BRANCH FOR SUPPLY AND RETURN		·
R REQUIREMENTS. IF SHOP DCCUR BETWEEN TRADES, DURING RY TO RESOLVE THE CONFLICT AND RICT. THE DISTRICT AND ENGINEER ORK THAT CAUSES CONFLICTS	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.		ROUND ELBOW DOWN	₹	CENTRIFU
RS, CAPACITIES, CONSTRUCTION, ND PRIOR TO THE START OF WORK.	MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):		ROUND ELBOW UP	} <u>}</u> }	DIGITAL S
AWINGS, "AS-BUILTS", ETC. AT THE JILTS" INDICATING FINAL EQUIPMENT DOCUMENT (CCD) PRIOR TO DOING	MP 🔀 MD MP PP E OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) <u># 0203-13</u> .		RECTANGULAR TO ROUND TRANSITION	}}	INSTRUM
THE MANUFACTURER'S CONTRACTOR SHALL COORDINATE		8" \\\\\\\  //////	FLEXIBLE DUCT	}} ■	ELECTRO
EX OF NOT MORE THAN 25, AND A E PER U.L. 181. E BUILDING OR OTHERWISE		FC	FLEX CONNECTION		DDC INPU
NG N.E.C. REQUIREMENTS. ACCESS BY FACTORY OR BE FIELD- R ATTIC EQUIPMENT. L DAMPERS, EQUIPMENT, SMOKE HE WALL AND/OR CEILING WHERE			BACK DRAFT DAMPER		DDC OUT
IPE CONNECTIONS.			FIRE DAMPER		LOCALLY
FICATION STANDARDS. LABEL DUCT SET UP TO CLOSE AUTOMATICALLY KES ON ALL AIR HANDLING		↓ F/S	COMBINATION FIRE AND SMOKE DAMPER	(CO2) (DPS)	
IENT WITH FACTORY- DITION PRIOR TO BID DATE. O REMOVAL OF ROOF TOP UNITS			MOTORIZED DAMPER	FM	FLOW ME
ECHANICAL EQUIPMENT ONCE			SUPPLY DIFFUSER: 2-WAY/3-WAY/4-WAY	FS	AIRFLOW
			GRILLE: RETURN/EXHAUST	(HS) (TS)	RELATIVE TEMPERA
PER THE CURRENT CALIFORNIA		Ø	1'x2' RETURN AIR GRILLE	(TS)-MM	AVERAGI
D REGULATIONS. UCTION FROM OUTDOOR INTS WITH NEW AT NO ADDITIONAL IEST EDITION OF THE SMACNA LOW		<u>s</u>	2'x2' RETURN AIR GRILLE		METAL DI
			SUPPLY AIR DUCT SECTION	(R) (T)	EMS CO2
5, THE FIELD INSTALLATION SHALL FIELD ENGINEER. PROVIDED BY THE CONTRACTOR RADES AND MAKE ANY OFFSET AS			RETURN AIR DUCT SECTION	PS	PRESSUF
EQUIPMENT CUT, DRILLED NOR NOTCHED E DISTRICT STRUCTURAL ENGINEER			EXHAUST AIR DUCT SECTION	SD	SMOKE D
CAL GREEN NC	)TFS		POWER OR GRAVITY ROOF VENTILATOR - EXHAUST	(RS)	STATIC PI
	RED FOR NEW BUILDING LESS THAN 10,000 SQUARE FEET OR NEW SYSTEMS TO SERVE		POWER OR GRAVITY ROOF VENTILATOR - SUPPLY	D	
	ING SYSTEMS. SYSTEMS TO BE INCLUDED FOR TESTING AND ADJUSTING SHALL		UNDERCUT DOOR	(H)	SPACE HI
D. RENEWABLE ENER IROLS. E. LANDSCAPE IRRIGA F. WATER REUSE SYS	ATION SYSTEMS.	TG	TRANSFER GRILLE OR LOUVER	(S) ▲	SWITCH FIRE WAL
AND ADJUSTING, BEFORE A NEW SPA	WITH MANUFACTURER'S SPECIFICATIONS AND APPLICABLE STANDARDS ON EACH	DG	DOOR GRILLE OR LOUVER	(E) (N)	EXISTING NEW
L BALANCING BUREAU PROCEDURAL	ES DEFINED BY THE TESTING ADJUSTING AND BALANCING BUREAU NATIONAL STANDARDS; ASSOCIATED AIR BALANCE COUNCIL NATIONAL STANDARDS OR AS		MOUNTING OVER O	BSTRUCTION DET	ΓAIL
L. PROVIDE THE BUILDING OWNER OF	R REPRESENTATIVE WITH DETAILED OPERATING AND MAINTENANCE INSTRUCTIONS				
	IS SHALL BE CONSISTENT WITH OSHA REQUREMENTS IN CCR, TITLE 8, SECTION 5142,		<u>→</u> 24" M		
VAC SYSTEM SHALL ONLY BE USED DI AL AND EQUIPMENT INSTALLATION. IF	URING CONSTRUCTION IF NECESSARY TO CONDITION THE BUILDING WITHIN THE THE HVAC SYSTEM IS USED DURING CONSTRUCTION, USE RETURN AIR FILTERS WITH A /ERAGE EFFICIENCY OF 30 PERCENT BASED ON ASHRAE 52.1-1992. REPLACE ALL		TOP OF BOX OF SWITCH, DEVICE, OUTLET FA		<u> </u>
DR, IF THE BUILDING IS OCCUPIED DUI	RING ALTERATIONS, AT THE CONCLUSION OF CONSTRUCTION. ING CONSTRUCTION. NTILATION EQUIPMENT, ALL DUCT AND OTHER RELATED AIR DISTRIBUTION COMPONENT				
ASTIC, SHEET METAL OR OTHER METH STEM. INGS, PROVIDE REGULARLY OCCUPIE	HODS ACCEPTABLE TO THE ENFORCING AGENCY TO REDUCE THE AMOUNT OF DUST, ED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR & VALUE (MERV 13) OF 13. MERV 13 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY		48" MAX		
VITH FILTERS OF THE SAME VALUE SH	IALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.		34" MAX		
	RY SYSTEM IS 0.4 W/CFM OR LESS AT DESIGN AIR FLOW. , REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH SECTIONS	BOT. 2019 CE			2019 CBC
HVAC, REFRIGERATION AND FIRE SUF D FIRE SUPPRESSION EQUIPMENT TH	PPRESSION EQUIPMENT THAT DO NOT CONTAIN CFCS. IAT DO NOT CONTAIN HALONS.	FIG. 11B-308	.2.1 FIG. 11B-308.2.2		FIG. 11B-308.3.2
	T PRIMERS AND CAULKS SHALL COMPLY WITH LOCAL OR REGIONAL AIR POLLUTION SCAQMD RULE 1168 VOC LIMITS, AS SHOWN IN TABLES 5.504.4.1.		TE: THIS DETAIL APPLIES TO MOUNTING OF ANY MECHANICAL AN PART THAT IS ADJUSTABLE BY THE OCCUPANT. THIS DOES N ADJUSTABLE THROUGH THE BUILDING AUTOMATION SYSTEM	OT APPLY TO SENSORS OR CONT	FROLS THAT ARE

MECHANICAL LEG	
NOTES	×
	H
E SHOWN	c
NATION N	$\leq$
ON / / DEP W/HERE REC'D	
PER WHERE REQ'D	
TION	
NECTION	
RK	AD
VORK	$\square$
CT	1" 2"
TAL DUCT	2"
ATED SHEET METAL DUCT	
9W	
	$\bigvee$
CH FOR SUPPLY AND RETURN	
DWN	₹///
,	<b>≀</b> ₩
	<u>}</u>
ROUND TRANSITION	<u>}</u>
	<u>}</u>
١	
PER	
	$\bigcirc$
E AND SMOKE DAMPER	(C02)
- AND SINORE DAIVIPER	DPS
ER	FM
: <b>2-WAY/3-WAY/4-WAY</b>	FS
XHAUST	HS
GRILLE	(TS) (TS)-vvvv
GRILLE	( <u>TS</u> )
SECTION	(R) (T)
SECTION	PS
	42
T SECTION	
	SD
T SECTION TY ROOF VENTILATOR - EXHAUST	(SP)
	(SP) (RS)
TY ROOF VENTILATOR - EXHAUST	(SP) (RS) (D)
TY ROOF VENTILATOR - EXHAUST	(SP) (RS) (D) (H)
TY ROOF VENTILATOR - EXHAUST	(SP) (RS) (D)

DESCRIPTION
DX COOLING COIL
HEATING COIL
DAMPER, OPPOSED BLADE
DAMPER, PARALLEL BLADE
FILTER
HUMIDIFIER
LOUVER
ACCESS DOOR OR ACCESS PANEL (AP) IN DUCTWORK
STATIC PRESSURE CHANGE TAG
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
CARBON DIOXIDE SENSOR
DIFFERENTIAL PRESSURE SENSOR
FLOW METER
AIRFLOW SENSOR
RELATIVE HUMIDITY SENSOR
TEMPERATURE SENSOR
AVERAGING TEMPERATURE SENSOR
METAL DUCT
EMS CO2 SENSOR
THERMOSTAT
PRESSURE SWITCH
SMOKE DETECTOR
STATIC PRESSURE SENSOR
REFRIGERANT SENSOR
DEW POINT SENSOR
SPACE HUMIDITY SENSOR
SWITCH
FIRE WALL PENETRATION EXISTING NEW

# MOUNTING OVER OBSTRUCTION DETAIL



DIL SED BLADE	SHEET M0.00 M0.01 M0.02 M0.03 M1.01 MD2.01 MD2.02 M2.01 M2.02 M4.01 M4.02
	M5.01 M6.01 M6.02
LLEL BLADE	M7.01
OR ACCESS PANEL	
OR ACCESS PANEL DRK	
IRE CHANGE TAG	
IRE TAG	
S (RECTANGULAR)	ABBREVIATION AAV
	ABV AC AD
	AFF AHU
AN	AI ALUM AO
L	AP B
)	BDD BEL
APILLARY TUBING	BFC BFP BG
WAY VALVE	BHP BLDG BOB
WAY VALVE	BOP BSMT
	BTU CD
	CFM CI CL
	CLG CO
ITED INSTRUMENT	COL CP CT
DE SENSOR	CU CV
PRESSURE SENSOR	D DB
OR	DEG DI DIA
DITY SENSOR	DL DN
SENSOR	DO DP DS
MPERATURE SENSOR	DX
	EA EAT EC
SOR	EF EFF
	EGC EJ EL
TCH	EQ ER ESP
JRE SENSOR	ET EWC
SENSOR	EXIST / (E) °F
ISOR	FA FC FD
Y SENSOR	FG FLA FLR
ETRATION	FOB FOT
	FP FPI FPM
	FS FT FX
	GA
	GALV GC GPH
	GPM HB
	HD HOA
TOP OF BOX OF SWITCH, DEVICE,	HP HP HT
	1

# DRAWING INDEX

<u>SHEET</u>	DESCRIPTION
M0.00	MECHANICAL SYMBOLS, LEGENDS & GENERAL NOTES
M0.01	MECHANICAL TITLE 24
M0.02	MECHANICAL TITLE 24
M0.03	MECHANICAL TITLE 24
M1.01	MECHANICAL SITE PLAN
MD2.01	MECHANICAL DEMOLITION FLOOR PLANS
MD2.02	MECHANICAL DEMOLITION FLOOR PLANS
M2.01	MECHANICAL FLOOR PLANS
M2.02	MECHANICAL FLOOR PLANS
M4.01	MECHANICAL ROOF PLANS
M4.02	MECHANICAL ROOF PLANS
M5.01	MECHANICAL SCHEDULES
M6.01	MECHANICAL DETAILS
M6.02	MECHANICAL DETAILS
M7.01	MECHANICAL CONTROLS

# ABBREVIATIONS

INCHES

INSIDE DIAMETER

INDIRECT WASTE

ΗV

HWC HWP HWR

HWS HZ

IC

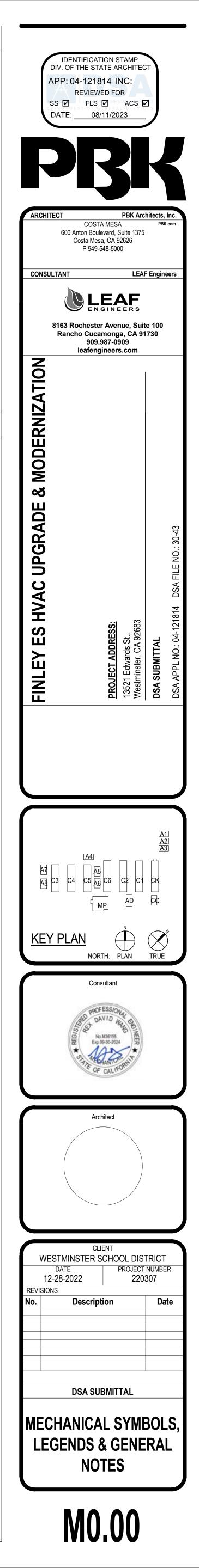
ICW

ID

IN

IW

DESCRIPTION AUTOMATIC AIR VENT	<u>ABBREVIATION</u> KW	DESCRIPTION KILOWATTS
ABOVE AIR CONDITIONING UNIT	LAT	LEAVING AIR TEMPERATURE
ACCESS DOOR	LBS	POUNDS
ABOVE FINISHED FLOOR	LD	LINEAR DIFFUSER
AIR HANDLING UNIT	LF	LINEAR FEET LEAVING WATER
	LWT	TEMPERATURE
ALUMINUM ANALOG OUTPUT		
ACCESS PANEL	MAX MBH	MAXIMUM THOUSAND BTU PER HOUR
	MC	MECHANICAL CONTRACTOR
	MCA	MINIMUM CIRCUIT AMPS
BACK DRAFT DAMPER BELOW	MH	MANHOLE
BELOW FINISHED CEILING	MIN	MINIMUM
BACK FLOW PREVENTER	MOCP	MAXIMUM OVERLOAD CIRCU PROTECTION
BLAST GATE	MOD	MOTOR OPERATED DAMPER
	MTD	MOUNTED
BUILDING BOTTOM OF BEAM	MUA	MAKE-UP AIR UNIT
BOTTOM OF PIPE		
BASEMENT	(N) NC	NEW NORMALLY CLOSED
BRITISH THERMAL UNIT	NIC	NOT IN CONTRACT
CEILING DIFFUSER	NO	NORMALLY OPEN
	047	
CAST IRON	OAT OBD	OUTSIDE AIR TEMPERATURE OPPOSED BLADE DAMPER
CENTER LINE	OC	OPPOSED BLADE DAMPER
CEILING	OD	OUTSIDE DIAMETER
	OSA	OUTSIDE AIR
COLUMN CONDENSATE PUMP	PBD	PARALLEL BLADE DAMPER
COOLING TOWER	PD	PARALLEL BLADE DAMPER PRESSURE DROP
CONDENSING UNIT	PERF	PERFORATED
CONSTANT VOLUME BOX	PH	PHASE
	PR	PRESSURE RELIEF
DRAIN	PS PSID	PRESSURE SWITCH
DRY BULB	PSID	POUNDS PER SQUARE INCH DIFFERENTIAL
DEGREES DIGITAL INPUT	PSIG	POUNDS PER SQUARE INCH
DIAMETER		GAUGE
DOOR LOUVER	PT	PRESSURE TRANSMITTER
DOWN	PTAC	PACKAGED TERMINAL AIR CONDITIONER
DIGITAL OUTPUT	PVC	POLYVINYL CHLORIDE
DIFFERENATIAL PRESSURE DUCT SILENCER		
DIRECT EXPANSION	RA	RETURN AIR
	RAR	RETURN AIR REGISTER
EACH	RD	
ENTERING AIR TEMPERATURE	RF RG	RETURN FAN RETURN AIR GRILLE
ELECTRICAL CONTRACTOR	RH	RELATIVE HUMIDITY
EXHAUST FAN	RHC	REHEAT COIL
	RLA	RATED LOAD AMPS
EGGCRATE GRILLE EXPANSION JOINT	RPM	REVOLUTIONS PER MINUTE
ELEVATION	~ .	
EQUAL	SA SAR	SUPPLY AIR SUPPLY AIR REGISTER
EXHAUST REGISTER	SAR SAV	SUPPLY AIR REGISTER
EXTERNAL STATIC PRESSURE EXPANSION TANK	SD	SMOKE DAMPER
ELECTRIC WATER COOLER	SF	SUPPLY FAN
EXISTING	SI	SPEED INDICATOR
	SK	SPEED CONTROL
DEGREES FAHRENHEIT	SMBH SP	SENSIBLE MBH STATIC PRESSURE
FREE AREA FAN COIL UNIT	SPEC	SPECIFICATION
FIRE DAMPER	SS	STAINLESS STEEL
FILTER GRILLE	STD	STANDARD
FULL LOAD AMPS		
FLOOR	TAD	TRANSFER AIR DUCT
FLAT ON BOTTOM FLAT ON TOP	TEFC	TOTALLY ENCLOSED FAN
FIRE PUMP	TEMP	COOLED TEMPERATURE
FINS PER INCH	TG	TRANSFER GRILLE
FEET PER MINUTE	TI	TEMPERATURE INDICATOR
FLOW SWITCH	TMBH	TOTAL MBH
FEET / FOOT FLEXIBLE CONNECTION	TSP	TOTAL STATIC PRESSURE
	TYP	TYPICAL
GAUGE		
GAUGE GALVANIZED	UC UH	UNDERCUT UNIT HEATER
GENERAL CONTRACTOR	UON	UNLESS OTHERWISE NOTED
GALLONS PER HOUR	UTR	UP THROUGH ROOF
GALLONS PER MINUTE		
HOSE BIBB	V	VOLTS
HEAD	VA	DAMPER/VALVE ACTUATOR
HANDS OFF AUTO	VAV VD	VARIABLE AIR VOLUME UNIT VOLUME DAMPER
HEAT PUMP	VD VFD	VOLUME DAMPER
HORSEPOWER	VP	VARIABLE FREQUENCY DRIV
HEIGHT HEATING AND VENTILATING	VTR	VENT THROUGH ROOF
HEATING AND VENTILATING UNIT		
HOT WATER CONVERTER	W/	WITH
HEATING HOT WATER RETURN	W/O	WITHOUT
HOT WATER PUMP	WB	WET BULB
		WATER COLUMN
HEATING HOT WATER SUPPLY	WC WC	
	WC WG WT	WATER GAUGE WEIGHT



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#### STATE OF CALIFORNIA Mechanical Systems

NRCC-MCH-E	E OF COMPLIANCE					-				CALIFO
This docur	ment is used to demonstrat ned in <u>5140.4</u> , or <u>5141.0(b)</u>	신 옷 옷 집에 가지 않는 것 같아. 집에 집에 들어야 하는 것이 같아.	cal syste	ms that are within	the scope	e	of the permit application	n and are	demonstrati	ng complia
Project Nar	me:	Finley Elementary School	HVAC Up	grade & Modernizat	ion Report	t	Page:			
Project Add	dress:	13521 Edwards St, Westn	ninster, CA	92683	Date P	Pr	epared:			
A. GENER	RAL INFORMATION									
01 Projec	ct Location (city)	1	Westr	ninster	04	T	Total Conditioned Floor	Area		
02 Clima	te Zone	8		6	05	t	Total Unconditioned Floo	or Area	2	
03 Occup	pancy Types Within Project				06	I	# of Stories (Habitable Al	bove Gra	de)	
Office	e (B)	🗆 Retail (N	1)			1	Non-refrigerated Wareho	ouse (S)		
Hotel	/ Motel Guest Rooms (R-1)	School (i	E)				Healthcare Facility (I)			
High-	Rise Residential (R-2/R-3)	Relocata	ble Class	Bldg (E)	⊠	1	Other (Write In)			
	CT SCOPE Includes mechanical system	ns or components that are	within t	he scone of the ne	ermit anni	lie	cation and are demonstri	atina con	noliance usin	a the nresi
	5141.0(b)2 for alterations			ine scope of the pe					designed associa	, ,
	01				02					03
	Air System(s)	)		Wet Syste	em Compo	0	nents		Dry	System Co
	Heating Air System			Water Economi	izer				Air Econor	nizer
	Cooling Air System			Pumps					Electric Re	sistance H
	Mechanical Cont	trols		System Piping	-				Fan Syster	ns
	Mechanical Controls (exi or new)	sting to remain, altered		Cooling Towers					Ductwork	(existing to
		7		Chillers					Ventilation	n
				Boilers					Zonal Syst	ems/ Term
						_			and the second se	and the second se

Registration Number:

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

### Generated Date/Time: Report Version: 2019.1.003

Schema Version: rev 20200601

Zonal Systems/ Terminal Boxes

#### STATE OF CALIFORNIA Mechanical Systems

NRCC-MCH-E CERTIFICATE OF COMPLIANCE Finley Elementary School HVAC Upgrade & Modernization Report Page: Project Name: Date Prepared: Project Address: 13521 Edwards St, Westminster, CA 92683

## F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

01 AC/C3-3 AC/C4-1 AC/C4-2 Unitary ele Unitary ele	02 tary Heat Pumps (no elec. resistance) tary Heat Pumps (no elec. resistance)	tioners, condensers, heat pumps, VF 03 Air-cooled, pkg (3 phase)	RF, furnaces and 04 Yes	05	06	07	1	á – 2	8		Dry System Equipme	nt Sizing (includes air conditioners, o	condensers, heat	numos, VRF, furna	ces and unit heat	ters)		104	
AC/C3-3 AC/C4-1 AC/C4-2 Unitary ele Unitary ele Unitary ele Unitary ele	tary Heat Pumps (no elec. resistance) tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)		05	06	07	1 100				and address edubute	in sing (mendes an conditioners)	condensers, mear	pumps, mar, runna	ees and anne meat				
AC/C3-3 ele AC/C4-1 Unitary ele AC/C4-2 Unitary	elec. resistance) tary Heat Pumps (no elec. resistance)		Yes			07	08	09	10	11	01	02	03		04 05	06	07 08	09	10 11
AC/C4-1 ele AC/C4-2 Unitary	elec. resistance)			41900	48000	0	42680	49400	30300	42000		nent shall be the smallest size, within e facilities are excepted.	the available opti	ons of the desired	equipment line, ne	ecessary to meet th	e design heating a	and cooling loads	of the building pe
AC/C4-7	to a March Durana Inc.	Air-cooled, pkg (3 phase)	Yes	51690	60000	0	55910	61620	34300	47500	지 않아 안 한 것 같아. 것 같아. 것 같아. 것 같아. 것 같아.	e to show rated output capacity on th ting only, leave cooling output and loc	아님이야 같은 것이야 한다.						
	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	<sup>4</sup> Authority Having Ju	risdiction may ask for load calculation	ns used for compl	ance per <u>§140,4(b</u> ,	ŀ.				
AC/C4+3	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	01	nt Efficiency (other than Package Te 02	03	04	05	06	07	08	09
AC/C5-1	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	51690	60000	0	55910	61620	34300	47500				Heati	ng Mode Minimum	1		Cooling Mode Minimum	Т
AC/C5-2 Unitary	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	Name or Item Tag	Size Category (Btu/h)	Rating Condition	Efficiency Unit	Efficiency Required per Tables 110.2 /	Design Efficiency	Efficiency Unit	Efficiency Required per Tables 110.2 /	Design Efficienc
AC/C5-3	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000			(*F)		Title 20			Title 20	
AL/LB-1	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	HP/ADM-1	>=65,000 and <135,000	47 *Fdb/ 43 *Fwb OSA	HSPF	3.3	26.9	EER IEER	11 14.6	12.6 19.5
Unitan	tary Heat Pumps (no	5 . S . S									AC/C1-1	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/Cb+/	elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	AC/C1-2	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C6-3 Unitary	tary Heat Pumps (no	Air sealed also (2 alsos)	Nee	41900	48000	0	42680	49400	30300	42000	AC/C1-3	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C6-3 ele	elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	U	42080	49400	30300	42000	AC/C2-1	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/Cb-4	tary Heat Pumps (no	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	AC/C2-2	<65,000		HSPF	8	8.1	SEER	14	14.3
ele	elec. resistance)					3					AC/C2-3	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/CK+1	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000	AC/C3-1	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/CK-2 Unitary	tary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	58890	72000	0	65590	74960	34700	49500	AC/C3-2 AC/C3-3	<65,000 <65,000		HSPF HSPF	8	8.1 8.1	SEER SEER	14 14	14.3 14.3
AC/CK=5	tary Heat Pumps (no	Air-cooled, pkg (3 phase)	Yes	58890	72000	0	65590	74960	34700	49500	AC/C4-1 AC/C4-2	<65,000		HSPF	8	8.1	SEER	14	14.3
ele	elec. resistance)										AC/C4-3	<65,000		HSPF	8	8.1	SEER	14	14.3

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STATE OF CALIFORNIA Mechanical Systems NRCC-MCH-E

CERTIFICATE OF COMPLIANCE		
Project Name:	Finley Elementary School HVAC Upgrade & Modernization	Report Page:
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:

				escriptive requirements four be included in Table H.	nd in <u>§14(</u>	<u>),4(c), §</u>	<u>140.4(e)</u> an	d <u>§140.4(m)</u> for fan	systems. Fan systems servir
System Name:	HP/ADM-1	Econor	mizer:1	NA: Efficiency per Table 140.4-D	Econor	0000000	1		System Fan Type:
01	02		03	04			05	06	07
Fan Name or	Face French			Maximum Design Supply	mum Design Supply Airflow (CFM)			Design HD	Fan Power Pressure Drop
Item Tag	Fan Functi	ion	Qty	(CFM)			Unit	Design HP	Device
FC/ADM-1	Supply	8	1	395		Name	plate HP	0.75	NA
FC/ADM-2	Supply	2	1	1130		Name	plate HP	0.75	NA
FC/ADM-3	Supply		1	395		Name	plate HP	0.75	NA
FC/ADM-4	Supply	5	1	395		Name	plate HP	0.75	NA
Total Syste	m Design Supply	Airflow (Cf	• •M):	2315	Total S	System (B)HP:	Design	3	Maximum System Fan Power (B)HP:
System Name:	AC/C1-1	Econor	mizer:1	Differential Enthalpy	Econor	0000000	Designed	per <u>§140.4(e)</u> and (m)	System Fan Type:
01	02		03	04			05	06	07
Fan Name or				Maximum Design Supply	Airflow				Fan Power Pressure Drop
Item Tag	Fan Functi	ion	Qty	(CFM)	AITIOW	HP	Unit <sup>2</sup>	Design HP	Device
AC/C1-1	Supply		1	1600		Name	plate HP	0.75	NA.
Total Syste	m Design Supply	Airflow (CF	-M):	1600	Total S	System (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:

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Report Version: 2019.1.003

Schema Version: rev 20200601

Documentation Software: Energy Code Ace **Registration Number:** Compliance ID: 80030 CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance Report Generated: 2022-12-19 18:05:18

# FORNIA ENERGY COMMISSION NRCC-MCH-E liance using the prescriptive (Page 1 of 21) 2022-12-19T21:05:17-05:00 21950 0 1 \_\_\_\_\_ scriptive path outlined in ----omponents Heat g to remain, altered or new)

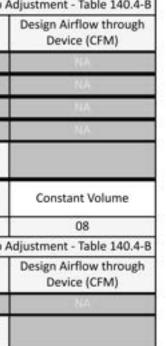
CERTIFICATE O	FCOMP	LIANCE														NRCC-MCH
Project Name:	è.		F	inley Elementar	y Schoo	I HVAC Upgrade	& Mod	ernization	Report P	age:						(Page 2 of 2
Project Addres	is:		1	3521 Edwards S	t, Westr	minster, CA 926	83	l	Date Pre	parec	d:				2022	-12-19T21:05:17-05:
C. COMPLIA	NCE R	ESULTS														
				out into the co ional Conditio										itable b	y the user. If this t	able says "DOES
01		02		03		04		05		Т	06	1	07		08	09
System Summary <u>§110.1</u> , <u>§110.2</u> , <u>§140.4</u>	AND	Pumps <u>§140.4(k)</u>	AND	Fans/ Economizers <u>§140.4(c)</u> , <u>§140.4(e)</u>	AND	System Controls <u>§110.2,</u> <u>§120.2,</u> <u>§140.4(f)</u>	AND	Ventilation		"	ferminal Box Controls §140.4(d)	AND	Distribution <u>§120.3</u> , <u>§140.4(l)</u>	AND	Cooling Towers §110.2(e)2	Compliance Resul
(See Table F)		(See Table G)	2	(See Table H)		(See Table I)	$\left\{ \cdot \right\}$	(See Table	e J)	(	See Table K)	1 1	(See Table L)		(See Table M)	1
Yes	AND		AND	Yes	AND	Yes	AND	Yes	A	D		AND	Yes	AND		COMPLIES with Exceptional Conditions
				Mandatory	Measu	ures Complian	ce (See	Table Q fo	or Deta	ils)				COMP	LIES	
		ONDITIONS														
makes and an other states of the state of the states of th		and the second sec		omments beca		and the second s		and thread the family designed		-		-				
The permit ap	pplican	t has indicated	on Tal	ble J that venti	lation	calculations ha	ave bee	en attached	d or incl	uded	d elsewhere o	on the	plans.			

Documentation Software: Energy Code Ace Compliance ID: 80030 Report Generated: 2022-12-19 18:05:18

CALIFORNIA ENERGY COMMISSION NRCC-MCH-E (Page 4 of 21) 2022-12-19T21:05:17-05:00

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> CALIFORNIA ENERGY COMMISSION NRCC-MCH-E (Page 7 of 21) 2022-12-19T21:05:17-05:00 rving only process loads are Variable Air Volume 08 Adjustment - Table 140.4-B Design Airflow through



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CALIFORNIA ENERGY COMMISSION

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#### NRCC-MCH-E CERTIFICATE OF COMPLIANCE

**Registration Number:** 

NRCC-MCH-E Finley Elementary School HVAC Upgrade & Modernization Report Page: (Page 5 of 21) Project Name: 2022-12-19T21:05:17-05:00 Project Address: Date Prepared: 13521 Edwards St, Westminster, CA 92683

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## F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

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STATE OF CALIFORNIA
Mechanical Systems

**Registration Number:** 

NRCC-MCH-E			CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name:	Finley Elementary School HVAC Upgrade & Moderniza	tion Report Page:	(Page 8 of 21)
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19T21:05:17-05:00

System Name:	AC/C1-2	Econor	mizer:1	Differential Enthalpy	Econor	1.07.01	Designed	i per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume
01	02	-941	03	04			05	06	07	08
Fan Name or				Maximum Design Supply	Airflow				Fan Power Pressure Drop	Adjustment - Table 140.4-8
Item Tag	Fan Functi	on	Qty	(CFM)	AITIOW	HP	Unit <sup>2</sup>	Design HP	Device	Design Airflow through Device (CFM)
AC/C1-2	Supply	(	1	1600		Name	plate HP	0.75	NA.	NA
Total Syster	n Design Supply	Airflow (Cf	M):	1600	Total S	System ( (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:	
System Name:	AC/C1-3	Econor	mizer:1	Differential Enthalpy	Econor		Designed	l per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume
01	02		03	04			05	06	07	08
Fan Name or			·	Maximum Design Supply Airflow		irflow			Fan Power Pressure Drop	Adjustment - Table 140.4-8
Item Tag	Fan Functi	on	Qty	(CFM)	Airnow	HP	Unit <sup>2</sup>	Design HP	Device	Design Airflow through Device (CFM)
AC/C1-3	Supply	Ś	1	1600		Name	plate HP	0.75	N/A	-NA
Total System	n Design Supply	Airflow (CF	:M):	1600	Total S	System (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:	
System Name:	AC/C2-1	Econor	mizer:1	Differential Enthalpy	Econor	6 B. L C C	Designed	f per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume
01	02		03	04			05	06	07	08
Fan Name or	141 141 141			Maximum Design Supply	Airflow			VALUE (1997)	Fan Power Pressure Drop	Adjustment - Table 140.4-
Item Tag	Fan Functi	on	Qty	(CFM)	Amow	HP	Unit <sup>2</sup>	Design HP	Device	Design Airflow through Device (CFM)
AC/C2-1	Supply	2	1	1600		Name	plate HP	0.75	NA .	NA
Total Syster	n Design Supply	Airflow (CF	: M):	1600	Total S	System (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:	

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Documentation Software: Energy Code Ace Compliance ID: 80030 Report Generated: 2022-12-19 18:05:18

Report Version: 2019.1.003 Schema Version: rev 20200601

#### STATE OF CALIFORNIA Mechanical Systems NRCC-MCH-E

CALIFORNIA ENERGY COMMISSION CERTIFICATE OF COMPLIANCE NRCC-MCH-E (Page 3 of 21) Project Name: Finley Elementary School HVAC Upgrade & Modernization Report Page: 2022-12-19721:05:17-05:00 Project Address: Date Prepared: 13521 Edwards St, Westminster, CA 92683

F. HVAC SYSTEM SUMMARY (DRY & WET SYSTEMS)

ory System Equi	pment Sizing (includes air co	onditioners, condensers, heat pumps, VRI	, furnaces and u	unit heaters)						
01	02	03	04	05	06	07	08	09	10	11
					Equipme			r Mechanical Schedule (kBtu/h) 140.4 (a&b)		
			Smallest Size	Hea	ting Outpu	t <sup>2,3</sup>	Cooling C	Dutput <sup>2,3</sup>	Load Calc	ulations <sup>3,4</sup>
Name or Item Tag	Equipment Category per Tables 110.2	Equipment Type per Tables 110.2 / Title 20	Available <sup>1</sup> §140.4(a)	Per Design (k8tu/h)	Rated (kBtu/h)	Supp. Heating Output (kBtu/h)	Sensible Per Design (kBtu/h)	Rated (kBtu/h)	Total Heating Load (kBtu/h)	Total Sensible Cooling Load (kBtu/h)
HP/ADM-1	Variable Refrigerant Flow	VRF heat pump, air cooled	Yes	77000	72000	0	69000	72000	30800	47800
AC/C1-1	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41910	48000	0	42680	49400	30300	42000
AC/C1-2	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41910	48000	0	42680	49400	30300	42000
AC/C1-3	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000
AC/C2-1	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000
AC/C2-2	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000
AC/C2-3	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	41900	48000	0	42680	49400	30300	42000
AC/C3-1	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	51690	60000	0	55910	61620	34300	47500
AC/C3-2	Unitary Heat Pumps (no elec. resistance)	Air-cooled, pkg (3 phase)	Yes	51690	60000	0	55910	61620	34300	47500

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#### STATE OF CALIFORNIA Mechanical Systems

NRCC-MCH-E
CERTIFICATE OF COMPLIANCE

CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name:	Finley Elementary School HVAC Upgrade & Modern	ization Report Page:	(Page 6 of 21)
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19721:05:17-05:00

01	02	03	04	05	06	07	08	09
	0.000		Heati	ng Mode			Cooling Mode	
Name or Item Tag	Size Category (Btu/h)	Rating Condition ( *F)	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficiency	Efficiency Unit	Minimum Efficiency Required per Tables 110.2 / Title 20	Design Efficienc
AC/C5-1	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C5-2	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C5-3	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C6-1	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C6-2	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C6-3	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/C6-4	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/CK-1	<65,000		HSPF	8	8.1	SEER	14	14.3
AC/CK-2	>=65,000 and <135,000	47 "Fdb/ 43 "Fwb OSA	COP	3.3	3.6	EER IEER	10.8 12	11.2 15
AC/CK-3	>=65,000 and <135,000	47 "Fdb/ 43 "Fwb OSA	COP	3.3	3.6	EER IEER	10.8 12	11.2 15

This section does not apply to this project.

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Mechanical System NRCC-MCH-E	s		CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name:	Finley Elementary School HVAC Upgrade & Modernization	Report Page:	(Page 9 of 21)
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19721:05:17-05:00

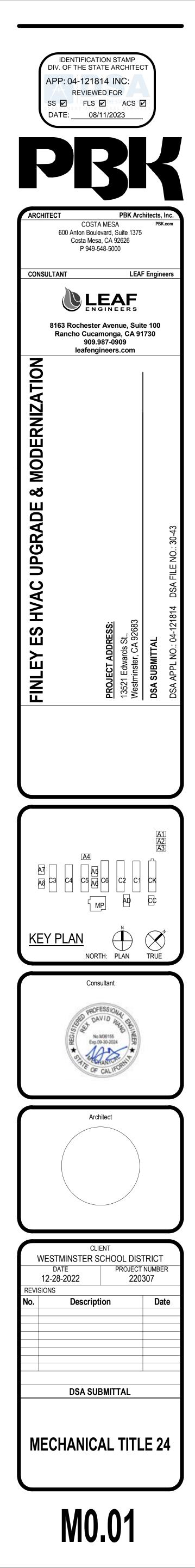
H. FAN SYSTEM	IS & AIR ECON	OMIZERS								
System Name:	AC/C2-2	Econom	nizer:1	Differential Enthalpy	Econor		Designed	l per <u>6140.4(e)</u> and (m)	System Fan Type:	Constant Volume
01	02		03	04			05	06	07	08
Fan Name or				Maximum Design Supply	Airflow	Airflow HP Unit <sup>2</sup>			Fan Power Pressure Drop	Adjustment - Table 140.4-
Item Tag	Fan Functi	ion	Qty	(CFM)	Airnow			HP Unit <sup>2</sup>		Design HP
AC/C2-2	Supply	3	1	1600 N		Name	eplate HP	0.75	NA.	NA
Total Syste	m Design Supply	Airflow (CFN	vi):	1600	1600 Total S		Total System Design (B)HP:		Maximum System Fan Power (B)HP:	
System Name:	AC/C2-3	Econom	nizer:1	Differential Enthalpy	Econor		Designed	l per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume
01	02		03	04			05	06	07	08
Fan Name or				Maulaura Dacian Sunah	pply Airflow HI				Fan Power Pressure Drop	Adjustment - Table 140.4
Item Tag	Fan Functi	ion	Qty	Maximum Design Supply (CFM)			V Unit <sup>2</sup>		Device	Design Airflow through Device (CFM)
AC/C2-3	Supply	(	1	1600		Nameplate HP		0.75	N/K:	NA_
Total Syste	m Design Supply	Airflow (CFN	vI):	1600	Total Syste (B)		and the second	0.75	Maximum System Fan Power (B)HP:	
System Name:	AC/C3-1	Econom	izer:1	Differential Enthalpy	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Economizer Controls:		l per <u>6140.4(e)</u> and (m)	System Fan Type:	Constant Volume
01	02		03	04			05	06	07	08
Fan Name or	140 Mill 140		ana	Maximum Design Supply	Airflour			1949 A.M. 1999 A.M. 19	Fan Power Pressure Drop	Adjustment - Table 140.4
Item Tag	Fan Functi	on	Qty	(CFM)	AITIOW	HP	Vunit <sup>2</sup>	Design HP	Device	Design Airflow through Device (CFM)
AC/C3-1	Supply	8	1	2000		Name	eplate HP	0.75	NA .	NA
Total Syste	m Design Supply	Airflow (CFN	vi):	2000	2000 Total S		Design	0.75	Maximum System Fan Power (B)HP:	

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#### STATE OF CALIFORNIA Mechanical Systems

CERTIFICATE OF COMPLIANCE

NRCC-MCH-E

Project Name:		Finle	y Element	tary School HVAC Upgrade & N	fodernizatio	n Repo	rt Page:		
Project Address:		1352	1 Edward	s St, Westminster, CA 92683		Date	Prepared:		
H. FAN SYSTEN	15 & AIR ECON	OMIZERS							
System Name:	AC/C3-2	Econor	nizer:1	Differential Enthalpy	Econor		Designed	per <u>§140.4(e}</u> and (m)	System Fan Type:
01	02		03	04			05	06	07
Fan Name or				Maximum Design Supply	Airflow				Fan Power Pressure Drop
Item Tag	Fan Funct	ion	Qty	(CFM)		HP Unit <sup>2</sup>		Design HP	Device
AC/C3-2	Supply	6	1	2000	Total System Decign		0.75	NA	
Total System	m Design Supply	Airflow (CF	M):	2000			0.75	Maximum System Fan Power (B)HP:	
System Name:	AC/C3-3	Econor	nizer:1	Differential Enthalpy	Economizer Designed Controls:		Designed	per <u>§140.4(e)</u> and (m)	System Fan Type:
01	02		03	04	05		05	06	07
Fan Name or				Maximum Design Supply	Airflow	rflow		Fan Power Pressure Drop	
Item Tag	Fan Funct	ion	Qty	(CFM)	Airiow	HP	P Unit <sup>2</sup> Design HP		Device
AC/C3-3	Supply	6	1	1600		Name	plate HP	0.75	N/A:
Total System	m Design Supply	Airflow (CF	M):	1600	Total System Design (B)HP:		- 175		Maximum System Fan Power (B)HP:
System Name:	AC/C4-1	Econor	nizer:1	Differential Enthalpy	Econor		Designed	per <u>6140.4(e)</u> and (m)	System Fan Type:
01	02		03	04			05	06	07
Fan Name or		6 B.	1948	Maximum Design Supply	pply Airflow HP Unit <sup>2</sup> Design		10.510 0327 0	Fan Power Pressure Drop	
Item Tag	Fan Funct	ion	Qty	(CFM)			HP Unit <sup>2</sup> Design HP		Device
AC/C4-1	Supply	8	1	2000		Name	plate HP	0.75	NA.
Total System	m Design Supply	Airflow (CF	M):	2000	Total S	ystem (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:

Registration Number:

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STATE OF CALIFORNIA

Mechanical Systems NRCC-MCH-E CERTIFICATE OF COMPLIANCE

Finley Elementary School HVAC Upgrade & Modernization Report Page: Project Name: Project Address: Date Prepared: 13521 Edwards St, Westminster, CA 92683

System Name:	AC/C6-3	Econor	mizer:1	Differential Enthalpy		Controls: Designed		per <u>§140.4(e)</u> and (m)	System Fan Type:	
01	02	-	03	04		05		06	07	ĺ
Fan Name or				Maximum Design Supply	Airflow				Fan Power Pressure Drop A	ļ
Item Tag	Fan Funct	ion	Qty	(CFM)	HP Unit <sup>2</sup>		Unit <sup>2</sup>	Design HP	Device	
AC/C6-3	Supply	6	1	1600 Nameplate HP 1600 Total System Design (B)HP:		Name	plate HP	0.75	NA.	
Total System	m Design Supply	Airflow (CF	M):			Design	0.75	Maximum System Fan Power (B)HP:		
System Name:	AC/C6-4	Econor	mizer:1	Differential Enthalpy	Econor			per <u>§140.4(e)</u> and (m)	System Fan Type:	
01	02		03	04			05	06	07	ľ
Fan Name or				Maximum Design Supply	Airflow				Fan Power Pressure Drop A	1
Item Tag	Fan Funct	ion	Qty	(CFM)	HP Unit <sup>2</sup>		Unit <sup>2</sup>	Design HP	Device	
AC/C6-4	Supply	6	1	1600		Name	plate HP	0.75	N/4	l
Total System	m Design Supply	Airflow (CF	:M):	1600	Total S	ystem (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:	
System Name:	AC/CK-1	Econor	mizer:1	Differential Enthalpy	Economize Controls:		Designed	per <u>§140.4(e)</u> and (m)	System Fan Type:	
01	02		03	04			05	06	07	ĺ
Fan Name or		6	1015	Maximum Design Supply	Airflow		1000	141510 1527 B	Fan Power Pressure Drop A	1
Item Tag	Fan Funct	ion	Qty	(CFM)		HP	Unit <sup>2</sup>	Design HP	Device	
AC/CK-1	Supply	2	1	1600		Name	plate HP	0.75	NA	ĺ
Total System	m Design Supply	Airflow (CF	: M):	1600	Total S	System Design (B)HP:		0.75	Maximum System Fan Power (B)HP:	

Registration Number:

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

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Generated Date/Time:

STATE OF CALIFORNIA Mechanical Systems

CERTIFICATE OF COMPLIA	NCE							_
Project Name:	Fir	nley Elementary Schoo	I HVAC Upgrade & Mode	ernization Report	Page:			_
Project Address:	13	521 Edwards St, West	minster, CA 92683	Date Pr	repared:			_
I. SYSTEM CONTROLS	j							
AC/C4-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	1
AC/C4-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	•
AC/C5-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/C5-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/C5-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/C6-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	
AC/C6-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/C6-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/C6-4	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/CK-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/CK-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N
AC/CK-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	N

have setback thermostats. \*Notes: Controls with a \* require a note in the space below explaining how compliance is achieved. EX: system 1: SA Temp Reset: Exempt because zones compliant with §140.4(d); EXCEPTION 1 to §140.4(f)

Registration Number:

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Generated Date/Time: Report Version: 2019.1.003 Schema Version: rev 20200601

#### STATE OF CALIFORNIA Mechanical Systems

NRCC-MCH-E

CERTIFICATE OF COMPLIANCE Project Name: Finley Elementary School HVAC Upgrade & Modernization Report Page: Project Address: Date Prepared: 13521 Edwards St, Westminster, CA 92683

H. FAN SYSTEN	IS & AIR ECON	OMIZERS									
System Name:	AC/C4-2	Economizer:1	Differential Enthalpy	Econor		Designed	i per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume		
01	02	03	04	04		05	06	07	08		
Fan Name or			Maximum Design Suppl	. Airflow				Fan Power Pressure Drop	Adjustment - Table 140.4-B		
Item Tag	Fan Functi	on Qty	(CFM)			P Unit <sup>2</sup> Design HP		Device	Design Airflow through Device (CFM)		
AC/C4-2	Supply	1	1600		Nam	eplate HP	0.75	NA.	NA		
Total System	m Design Supply	Airflow (CFM):	1600	Total S	ystem (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:			
System Name:	AC/C4-3	Economizer:1	Differential Enthalpy	Econor	1000 C		l per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume		
01	02	03	04		05		06	07	08		
Fan Name or			Maulaura Desiga Suppl	Maximum Design Supply Airflow				Fan Power Pressure Drop	Adjustment - Table 140.4-B		
Item Tag	Fan Functi	on Qty	(CFM)	y Airnow	HP Unit <sup>2</sup> Nameplate HP Total System Design (B)HP:		Jnit <sup>2</sup> Design HP	Device	Design Airflow through Device (CFM)		
AC/C4-3	Supply	1	1600				Nameplate HP		0.75	N/K	N/A
Total System	m Design Supply	Airflow (CFM):	1600	Total S			0.75	Maximum System Fan Power (B)HP:			
System Name:	AC/C5-1	Economizer:1	Differential Enthalpy		Economizer Controls:		i per <u>§140.4(e)</u> and (m)	System Fan Type:	Constant Volume		
01	02	03	04			05	06	07	08		
Fan Name or	10. A		Maximum Design Suppl	Airflow	Airflow HP U			Fan Power Pressure Drop	Adjustment - Table 140.4-B		
Item Tag	Fan Functi	on Qty	(CFM)	y Airnow			Design HP	Device	Design Airflow through Device (CFM)		
AC/C5-1	Supply	1	2000		Name	eplate HP	0.75	NA .	NA		
Total System	m Design Supply	Airflow (CFM):	2000	Total S	System (B)HP:	Design	0.75	Maximum System Fan Power (B)HP:			

Documentation Software: Energy Code Ace

CALIFORNIA ENERGY COMMISSION

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Constant Volume

08

djustment - Table 140.4-B

Design Airflow through

Device (CFM)

Constant Volume

08

Adjustment - Table 140.4-B

Design Airflow through

Device (CFM)

Constant Volume

08

Adjustment - Table 140.4-B

Design Airflow through

Device (CFM)

NRCC-MCH-E

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CERTIFICATE OF COMPLIANCE

NRCC-MCH-E

**Registration Number:** 

Finley Elementary School HVAC Upgrade & Modernization Report Page: Project Name: Project Address: Date Prepared: 13521 Edwards St, Westminster, CA 92683

System Name:	AC/CK-2	Econo	mizer:1	Differential Enthalpy	ntial Enthaloy		Controls:		System Fan Type:	Constant Volume						
01	02	- <b>1</b>	03	04			05	06	07	08						
For Norma an				Maximum Desire Curah	Aidlaus				Fan Power Pressure Drop	Adjustment - Table 140.4-B						
Fan Name or Item Tag	Fan Functi	on	Qty	Maximum Design Supply (CFM)			Unit <sup>2</sup>	Design HP	Device	Design Airflow through Device (CFM)						
AC/CK-2	Supply	3	1	2400		Name	plate HP	1	NA NA	NA						
Total System	m Design Supply	Airflow (C	FM):	2400	Econom			1	Maximum System Fan Power (B)HP: System Fan Type:							
System Name:	AC/CK-3	Econo	mizer:1	Differential Enthalpy			Designed	l per <u>§140.4(e)</u> and (m)		Constant Volume						
01	02		03	04			05	06	07	08						
Free Manual and									Fan Power Pressure Drop	Adjustment - Table 140.4-B						
Fan Name or Item Tag	Fan Functi	on	Qty	Maximum Design Supply (CFM)	Airtiow	Airflow HP Unit		Airflow HP		HP U		HP Unit <sup>2</sup>		Design HP	Device	Design Airflow through Device (CFM)
AC/CK-3	Supply	š	1 2400			Nameplate HP		1	N/A	NA						
Total System	em Design Supply Airflow (CFM): 2400		Total System Design (B)HP:			1	Maximum System Fan Power (B)HP:									

<sup>1</sup> FOOTNOTES: Computer room economizers must meet requirements of §140.9(a) and will be documented on the NRCC-PRC-E document. <sup>2</sup> The unit used for HP must be consistent for all fans within a system.

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

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> CALIFORNIA ENERGY COMMISSION NRCC-MCH-E (Page 16 of 21 2022-12-19T21:05:17-05:00

NA: No operable windows
NA: No operable windows

Documentation Software: Energy Code Ace Compliance ID: 80030

STATE OF CALIFORNIA Mechanical Systems CALIFORNIA ENERGY COMMISSION NRCC-MCH-I NRCC-MCH-E CERTIFICATE OF COMPLIANCE Project Name: Finley Elementary School HVAC Upgrade & Modernization Report Page: (Page 17 of 21 2022-12-19T21:05:17-05:00 Project Address: 13521 Edwards St, Westminster, CA 92683 Date Prepared: J. VENTILATION AND INDOOR AIR QUALITY This table is used to demonstrate compliance with mandatory ventilation requirements in 6120.1 and 6120.2(e)3B for all nonresidential, high-rise residential and hotel/motel occupancies. For alterations, only ventialtion systems being altered within the scope of the permit application need to be documented in this table. In lieu of this table, the required outdoor ventilation rates and airflows may be shown on the plans or the calculations can be presented in a spreadsheet. Check the box if the project is showing ventilation calculations on the plans, or attaching the calculations instead of completing this table. 01 Check this box if the project included Nonresidential or Hotel/Motel spaces 02 Check this box if the project included new or altered high-rise residential dwelling units. 03 Check the box if the project is using natural ventilation in any nonresidential or hotel/motel spaces to meet required ventilation rates per <u>§120.1(c)2</u>. K. TERMINAL BOX CONTROLS This section does not apply to this project. L. DISTRIBUTION (DUCTWORK and PIPING) This table is used to show compliance with mandatory pipe insulation requirements found in <u>§120.3</u> and prescriptive requirements found in <u>§140.4(I)</u> for duct leakage testing. Duct Leakage Sealing

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The answers to the questions below apply to the following duct systems: Duct leakage testing triggered for these systems? Supply No No The scope of the project includes only duct systems serving healthcare facilities 11 Yes Duct system provides conditioned air to an occupiable space for a constant volume, single zone, space-conditioning system. 12 13 Yes The space conditioning system serves less than 5,000 ft<sup>2</sup> of conditioned floor area. No The combined surface area of the ducts in the following locations is more than 25% of the total surface area of the entire duct system: 14 Outdoors In a space directly under a roof that has a U-factor greater than the u-factor of the ceiling, or if the roof does not meet the requirements of <u>5140.3(a)1B</u> or if the roof has fixed vents or openings to the outside/ unconditioned spaces In an unconditioned crawl space In other unconditioned spaces No The scope of the project includes extending an existing duct system, which is constructed, insulated or sealed with asbestos. 15 The scope of the project includes an existing duct system that is documented to have been previously sealed as confirmed through field verification 16 No and diagnostic testing in accordance with procedures in the Reference Nonresidential Appendix NA2. 17 Duct system shall be sealed in acordance with the California Mechanical Code

**Registration Number:** 

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Constant Volume
08
justment - Table 140.4-B
Design Airflow through Device (CFM)
NA
Constant Volume
08
justment - Table 140.4-B
Design Airflow through Device (CFM)
NA

tem Fan HP:	
	210
	Design Airflow through Device (CFM)
sure Drop	Adjustment - Table 140.4-B
	08
Type:	Constant Volume
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	Compliance ID: 80030

Device (CFM)
NA
Constant Volume
08
ljustment - Table 140.4-B
Design Airflow through Device (CFM)
NA
Constant Volume
09

Registration Number:

#### STATE OF CALIFORNIA Mechanical Systems

#### (Page 12 of 21) Finley Elementary School HVAC Upgrade & Modernization Report Page: Project Address: 2022-12-19T21:05:17-05:0 13521 Edwards St, Westminster, CA 92683 Date Prepared: I. FAN SYSTEMS & AIR ECONOMIZERS System Economizer Designed per <u>§140.4(e)</u> and System Fan Type: AC/C5-2 Differential Enthalpy Constant Volume Economizer: Name: Controls: (m) 01 08 03 06 02 05 04 Fan Power Pressure Drop Adjustment - Table 140.4-B Maximum Design Supply Airflow Fan Name or Fan Function HP Unit<sup>2</sup> Design HP Design Airflow through Qtv Item Tag (CFM) Device Device (CFM) AC/C5-2 1600 0.75 Supply Nameplate HP Maximum System Fan Total System Design 1600 0.75 Total System Design Supply Airflow (CFM): (B)HP: Power (B)HP: System Economizer Designed per <u>§140.4(e)</u> and AC/C5-3 Differential Enthalpy System Fan Type: Constant Volume Economizer:1 Name: Controls: (m) 01 06 08 02 03 04 05 07 Fan Power Pressure Drop Adjustment - Table 140.4-B Fan Name o Maximum Design Supply Airflow Fan Function HP Unit<sup>2</sup> Design HP Design Airflow through Item Tag (CFM) Device

Nameplate HP

05

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Date Prepared:

Total System Design

(B)HP:

conomizer

Controls:

0.75

0.75

06

0.75

0.75

Designed per <u>§140.4(e)</u> an

(m)

Maximum Design Supply Airflow Fan Function HP Unit<sup>2</sup> Design HP (CFM) Supply 1600 Nameplate HP Total System Design Total System Design Supply Airflow (CFM): 1600 (B)HP: Registration Number: Generated Date/Time:

1600

04

Finley Elementary School HVAC Upgrade & Modernization Report Page:

13521 Edwards St, Westminster, CA 92683

1600

**Differential Enthalpy** 

Documentation Software: Energy Code Ace

Fan Power Pressure Drop Adjustment - Table 140.4-B

Maximum System Fan

Power (B)HP:

System Fan Type:

07

Device

Maximum System Fan

Power (B)HP:

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Device (CFM)

Constant Volume

08

Design Airflow through

Device (CFM)

CALIFORNIA ENERGY COMMISSION

NRCC-MCH-E

## STATE OF CALIFORNIA

### Mechanical Systems

NRCC-MCH-E CERTIFICATE OF COMPLIANCE

Project Name: Project Address:

able is used to demo conditioning system		nce with mand	atory controls in <u>§110.2</u> and	<u>§120.2</u> and p	vrescriptive con	ntrols in <u>§140.4(f)</u> and (n) or	requirements i	in <u>§141.0(b)2E</u> for altered
01	02	03	04	05	06	07	08	09
System Name	System Zoning	Conditioned Floor Area Being Served (ft <sup>2</sup> )	Thermostats <u>§110.2(b)</u> & (c) <sup>1</sup> , <u>§120.2(a)or</u> <u>§141.0(b)2E</u>	Shut-Off Controls <u>§120.2(e)</u>	Isolation Zone Controls §120.2(g)	Demand Response 6110.12 and 6120.2(b)	Supply Air Temp. Reset 5140.4(f)	Window Interlocks per <u>§140.4(n)</u>
HP/ADM-1	Multi-zone w/ DDC to zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C1-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C1-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C1-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C2-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C2-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C2-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C3-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C3-2	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C3-3	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window
AC/C4-1	Single zone	<= 25,000 ft <sup>2</sup>	EMCS	EMCS	EMCS	EMCS	NA: Alteration	NA: No operable window

Registration Number:

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NRCI-MCH-01-E - Must be submitted for all buildings

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STATE OF CALIFORNIA Mechanical Systems

NRCC-MCH-E CALIFORNIA ENE			
CERTIFICATE OF COMPLIANCE	E		NRCC-MCH-E
Project Name:	Finley Elementary School HVAC Upgrade & Modern	ization Report Page:	(Page 18 of 21)
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19721:05:17-05:00
M. COOLING TOWERS			
This section does not apply	to this project.		
N. DECLARATION OF RE	QUIRED CERTIFICATES OF INSTALLATION		
These documents must be	e based on information provided in previous tables of this d provided to the building inspector during construction and v/title24/2019standards/2019_compliance_documents/No	can be found online at	ed, please explain why in Table E Additional Remarks.
	•	Form/Title	

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AC/CS-3

System

Name:

01

Fan Name or

Item Tag

AC/C6-2

Supply

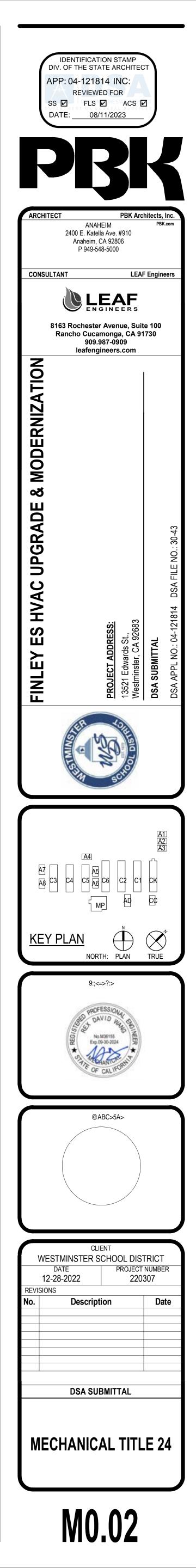
02

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Economizer:1

Total System Design Supply Airflow (CFM):

AC/C6-1



`\$,\$& <sup>°</sup>`

CERTIFICATE OF COMPLIANCE			LIFORNIA ENERGY COMMISSIO NRCC-MCH-
Project Name:	Finley Elementary School HVAC Upgrade & Modern	sization Report Page:	(Page 19 of 21
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19721:05:17-05:0
O. DECLARATION OF REC	UIRED CERTIFICATES OF ACCEPTANCE		
These documents must be p	based on information provided in previous tables of this de rovided to the building inspector during construction and /title24/2019standards/2019_compliance_documents/No		in Table E Additional Remarks.
	Form/Title		Systems/Spaces To Be Field Verified
	Air must be submitted for all newly installed HVAC units. I (if applicable) since testing activities overlap.	Note: MCH-02-A can be performed in conjunction with MCH-07-A	AC/C1-1; AC/C1-2; AC/C1-3; AC/C2-1; AC/C2-2; AC/C2-3; AC/C3-1; AC/C3-2; AC/C3-3; AC/C4-1; AC/C4-2; AC/C4-3; AC/C5-1; AC/C5-2; AC/C5-3; AC/C6-1; AC/C6-3; AC/C6-4; AC/CK-1; AC/CK-2; AC/CK-3
NRCA-MCH-05-A - Air Econo	omizer Controls		AC/C1-1; AC/C1-2; AC/C1-3; AC/C2-1; AC/C2-2; AC/C2-3; AC/C3-1; AC/C3-2; AC/C3-3; AC/C4-1; AC/C4-2; AC/C4-3; AC/C5-1; AC/C5-2; AC/C5-3; AC/C6-1; AC/C6-3; AC/C6-4; AC/CK-1; AC/CK-2; AC/CK-3
NRCA-MCH-07-A Supply Far	n Variable Flow Controls		FC/ADM-1; FC/ADM-2; FC/ADM-3; FC/ADM-4
NRCA-MCH-11-A Automatic	Demand Shed Controls		HP/ADM-1
NRCA-MCH-18-A Energy Ma	anagement Control Systems		HP/ADM-1; AC/C1-1; AC/C1-2; AC/C1-3; AC/C2-1; AC/C2-2; AC/C2-3; AC/C3-1; AC/C3-2; AC/C3-3; AC/C3-1; AC/C3-2; AC/C3-3; AC/C4-1; AC/C4-2; AC/C4-3; AC/C5-1; AC/C5-2; AC/C5-3; AC/C6-1; AC/C6-2; AC/C6-3; AC/C6-4; AC/CK-1; AC/CK-2; AC/CK-3

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#### STATE OF CALIFORNIA Mechanical Systems

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ł	able E Additional Remarks.
ļ	Systems/Spaces To Be Field
	Verified
4	C/C1-1; AC/C1-2; AC/C1-3;
Ą	C/C2-1; AC/C2-2; AC/C2-3;
١	C/C3-1; AC/C3-2; AC/C3-3;
ļ	C/C4-1; AC/C4-2; AC/C4-3;
	C/C5-1; AC/C5-2; AC/C5-3;
١	C/C6-1; AC/C6-3; AC/C6-4;
4	C/CK-1; AC/CK-2; AC/CK-3
٩	C/C1-1; AC/C1-2; AC/C1-3;
٩	C/C2-1; AC/C2-2; AC/C2-3;
١	C/C3-1; AC/C3-2; AC/C3-3;
Ą	C/C4-1; AC/C4-2; AC/C4-3;
	C/C5-1; AC/C5-2; AC/C5-3;
	C/C6-1; AC/C6-3; AC/C6-4;
1	C/CK-1; AC/CK-2; AC/CK-3
	C/ADM-1; FC/ADM-2;
	C/ADM-3; FC/ADM-4
	P/ADM-1
	P/ADM-1; AC/C1-1;
	C/C1-2; AC/C1-3; AC/C2-1;
	C/C2-2; AC/C2-3; AC/C3-1;
	C/C3-2; AC/C3-3; AC/C4-1;
	C/C4-2; AC/C4-3; AC/C5-1;
i	C/C5-2; AC/C5-3; AC/C6-1;
	C/C6-2; AC/C6-3; AC/C6-4;

Compliance ID: 80030

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CERTIFICATE OF COMPLIANCE			NRCC-MCH-
Project Name:	Finley Elementary School HVAC Upgrade & Moder	nization Report Page:	(Page 20 of 2)
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19721:05:17-05:0
P. DECLARATION OF REQ	UIRED CERTIFICATES OF VERIFICATION		
There are no NRCV forms re	equired for this project.		
Q. MANDATORY MEASU	RES DOCUMENTATION LOCATION		
This table is used to indicate	e where mandatory measures are documented in the plan	set or construction documentation	n.
	01		02
Compliance with Mandator Mandatory Measures Note	y Measures documented through MCH Block	No	
	03		04
	Mandatory Measure		Plan sheet or construction document location
Heating Equipment Efficiency per 5110.1			M5.01
Cooling Equipment Efficient	cy per <u>§110.1</u>		M5.01
Furnace Standby Loss Control per §110.2(d)			N/A
Duct Insulation per §120.4			M0.00
Heat Pump with Supplemental electric Resistance Heater Controls per §110.2(b)			M0.00
The air duct and plenum system is designed per §120.4(a) -(f)			Yes
Kitchen range hoods shall be rated for sound in accordance with Section 7.2 of ASHRAE 62.2			N/A

Registration Number:

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CALIFORNIA ENERGY COMMISSION

#### STATE OF CALIFORNIA Mechanical Systems

NRCC-MCH-E			CALIFORNIA ENERGY COMMISSION
CERTIFICATE OF COMPLIANCE			NRCC-MCH-E
Project Name:	Finley Elementary School HVAC Upgrade & Modernization	n Report Page:	(Page 21 of 21)
Project Address:	13521 Edwards St, Westminster, CA 92683	Date Prepared:	2022-12-19721:05:17-05:00

DOCUMENTATION AUTHOR'S DECLARATION STATEMENT	
I certify that this Certificate of Compliance documentation is acc	urate and complete.
Documentation Author Name: Maher Dandachi	Documentation Author Signature:
Company: LEAF Engineers	Signature Date: 12/19/2022
Address: 8163 Rochester Avenue	CEA/ HERS Certification Identification (if applicable):
City/State/Zip: Rancho Cucamonga, CA 91730	Phone: 909.987.0909
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 Certif plans and specifications submitted to the enforcement agency for approval wi 5. I will ensure that a completed signed copy of this Certificate of Compliance shi	and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirement icate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, th this building permit application. all be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable ompliance is required to be included with the documentation the builder provides to the building owner at occupancy.
Responsible Designer Name: rex wang	Responsible Designer Signature:
F	Date Signed:
Company: LEAF Engineers	12/19/2022
	12/19/2022 License: M36155

**Registration Number:** 

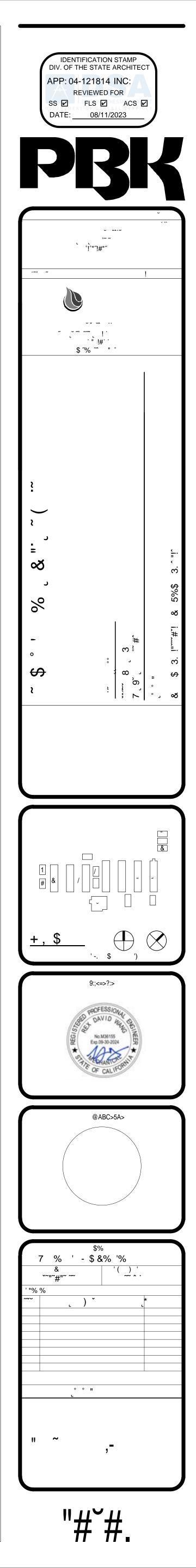
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance

Report Version: 2019.1.003

Generated Date/Time:

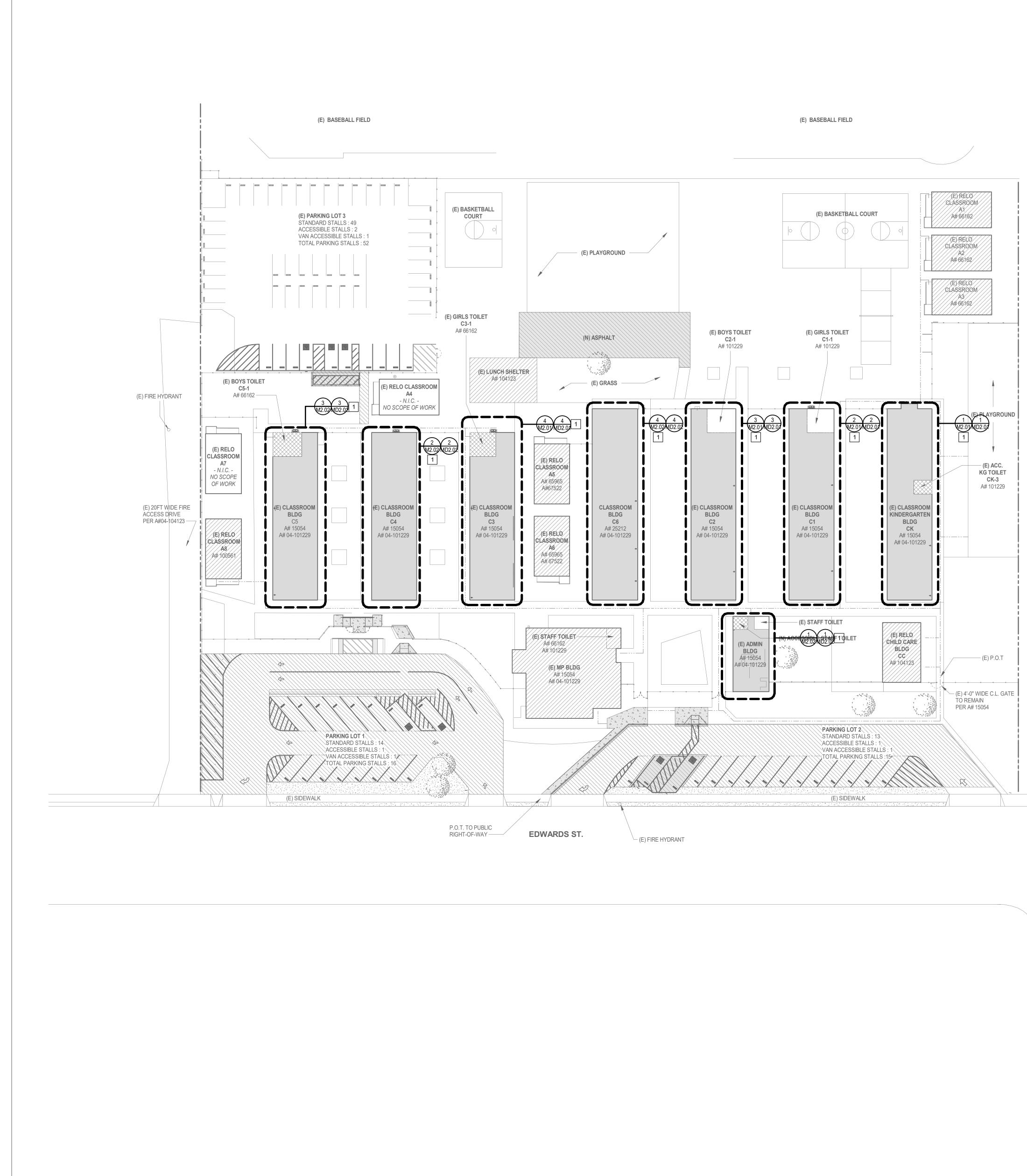
Schema Version: rev 20200601

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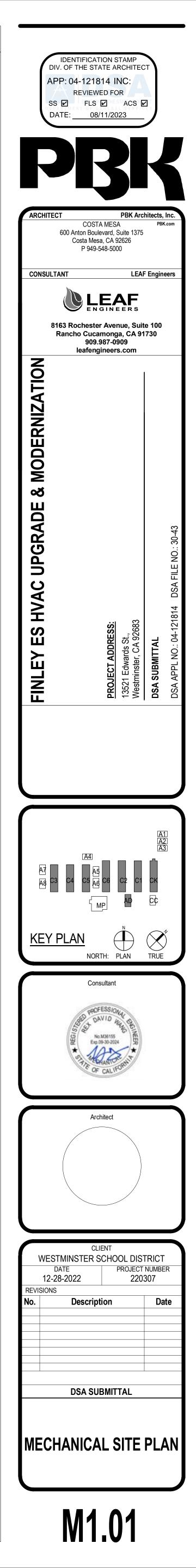
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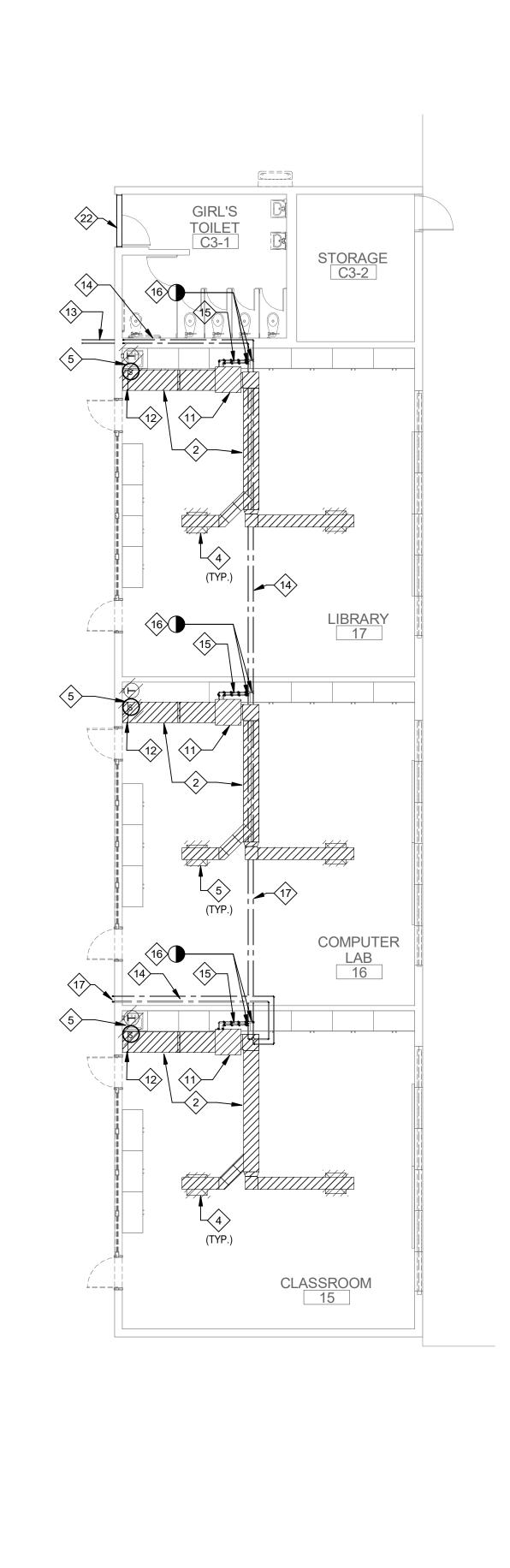


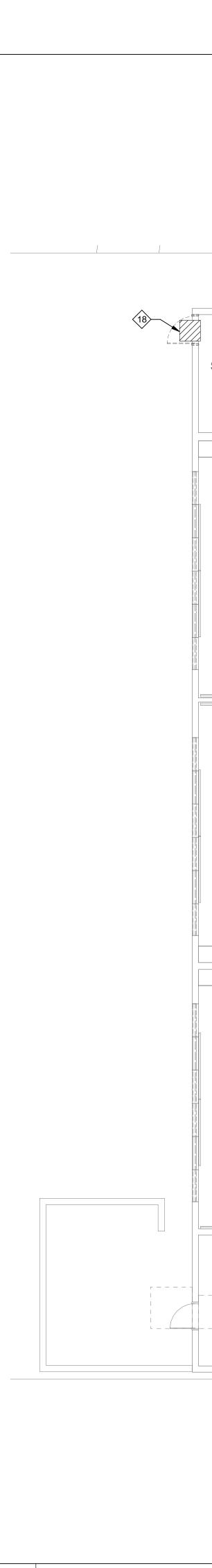
# **KEY NOTES**

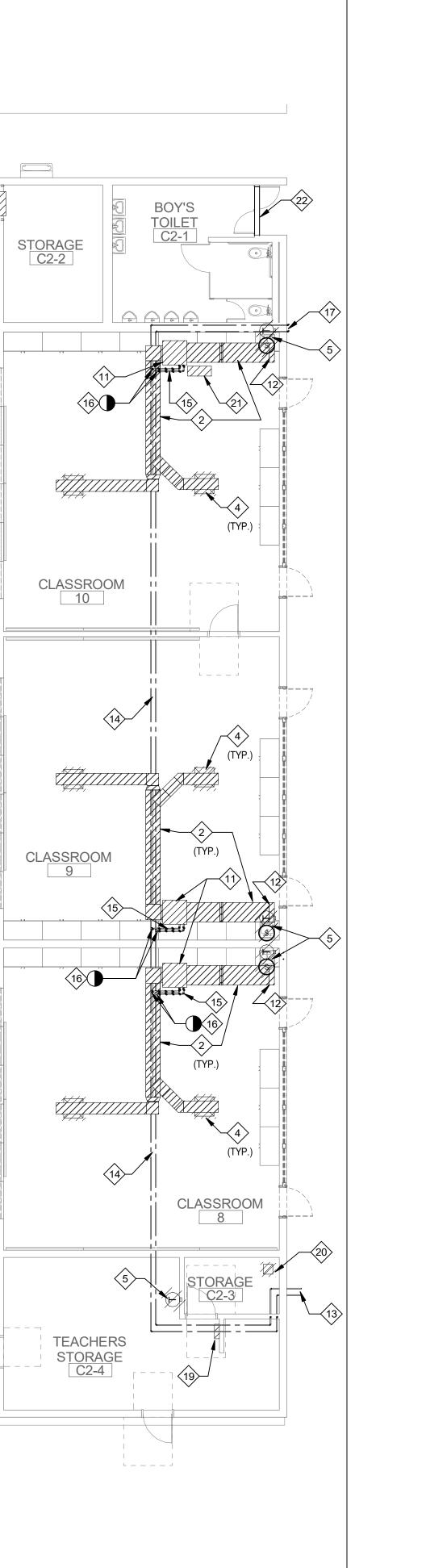
1 SCOPE OF WORK.

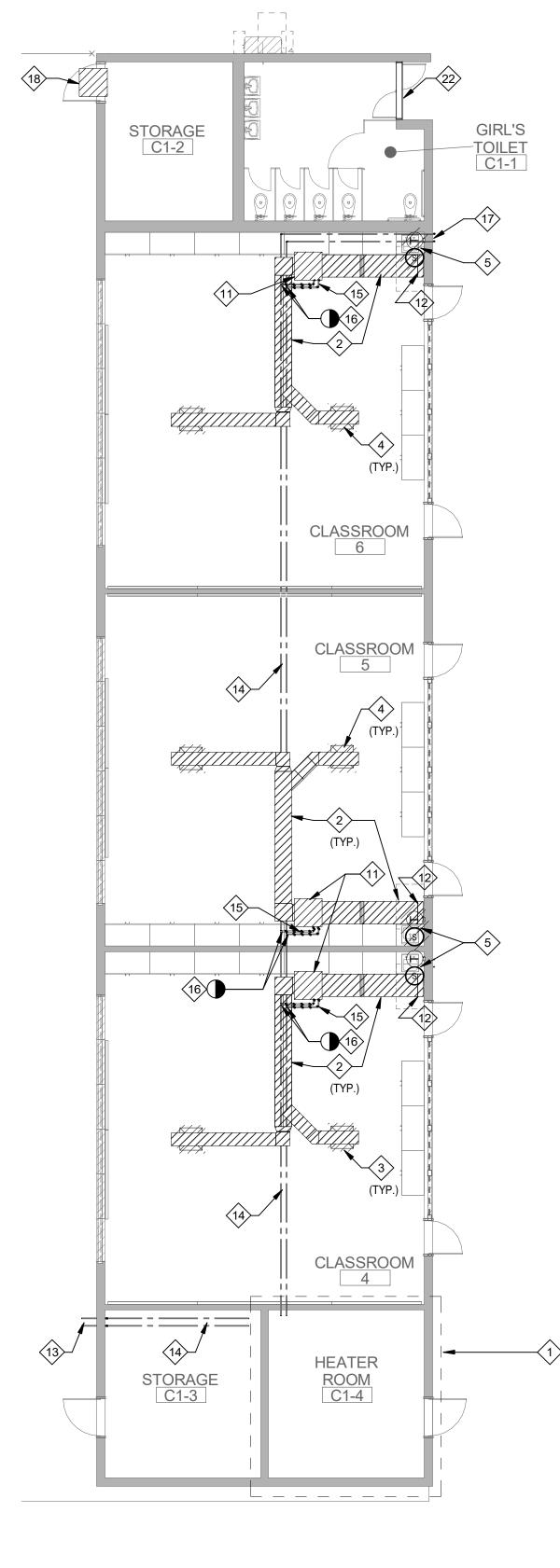


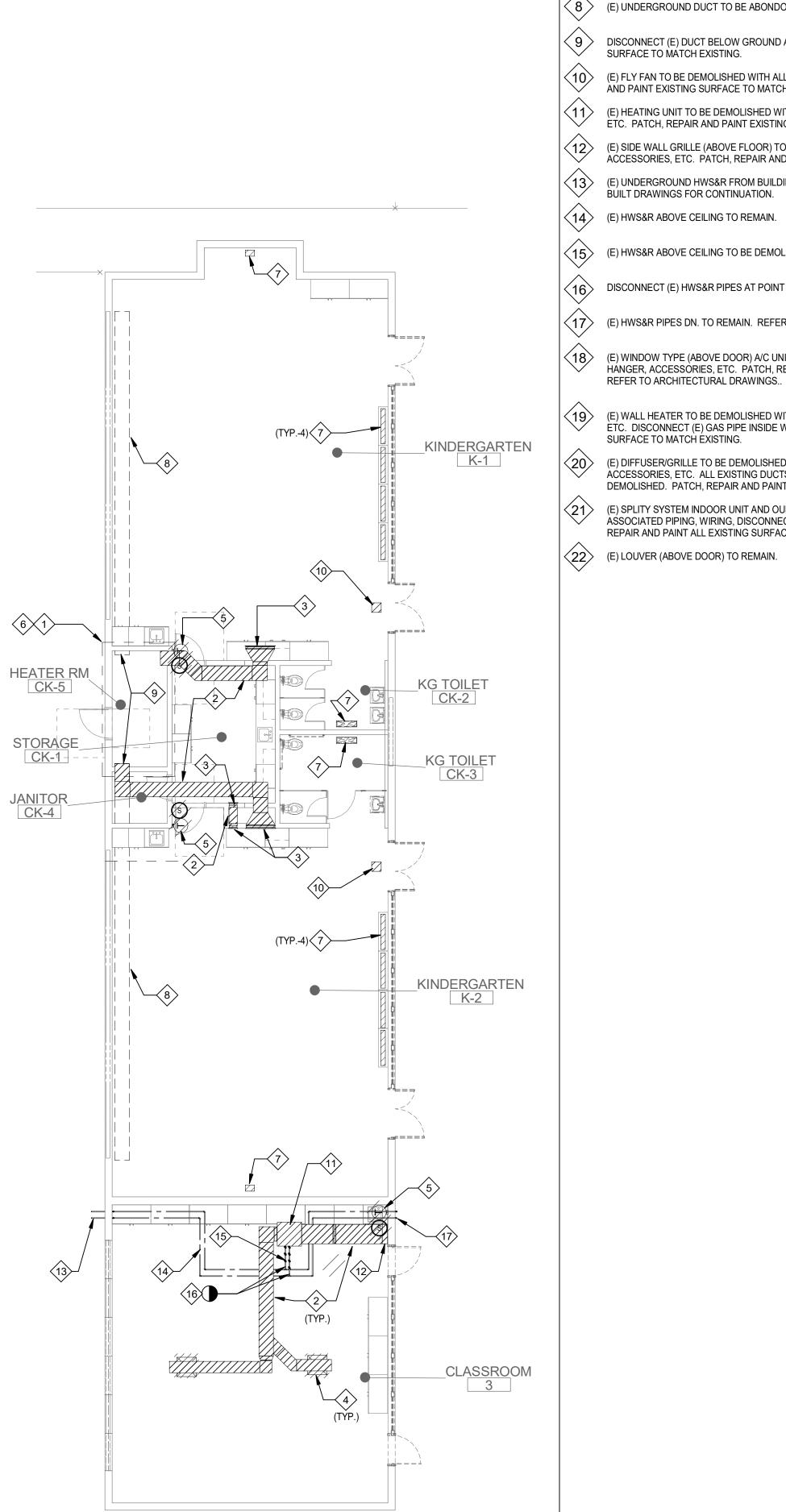
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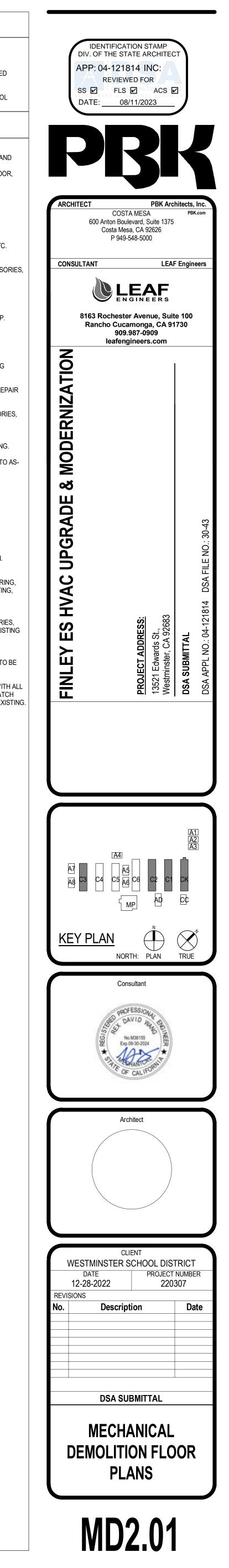




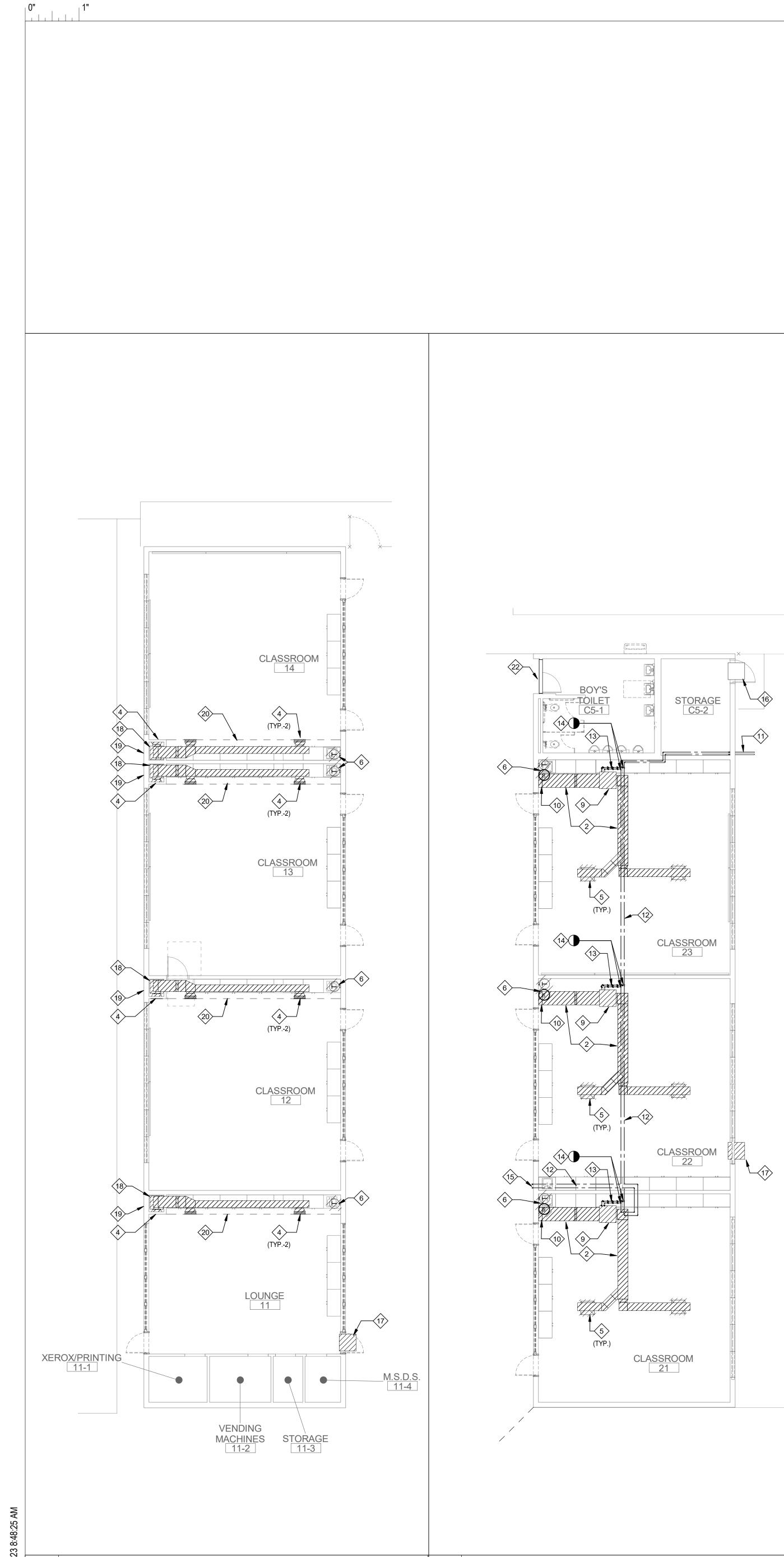


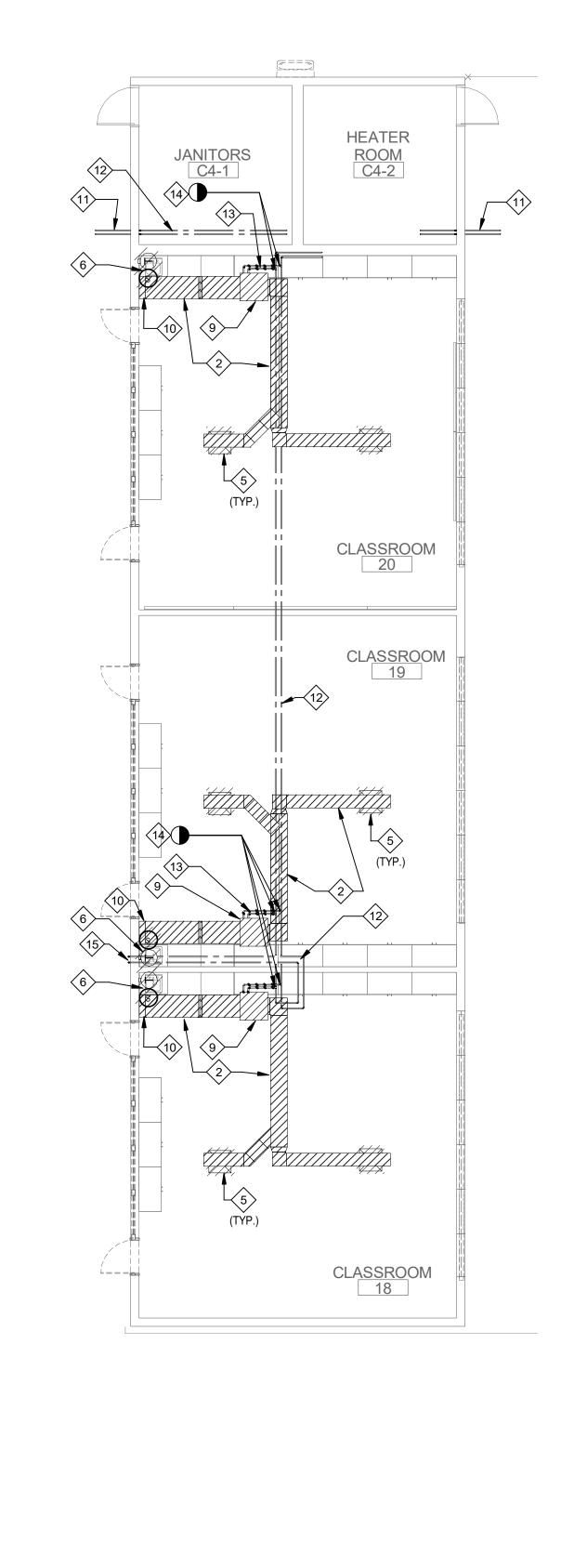
	DEMOLITION GENERAL NOTES
	NTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT, CTWORK, LOUVERS, ACCESSORIES, ETC. BEFORE COMMENCING WORK.
	L EXISTING DUCT, DIFFUSER, REGISTER, THERMOSTAT, DAMPER, ETC. TO BE DEMOLISHED TH ALL ASSOCIATED ACCESSORIES.
	NTRACTOR SHALL REMOVE ALL EXISTING CEILING FANS AND TURN THEM TO THE SCHOOL STRICT.
	DEMOLITION KEY NOTES
	ALL EXISITNG MECHANICAL EQUIPMENT, HOUSEKEEPING PAD, DUCT, GAS FLUE DUCT AND UTR, DAMPERS, LOUVERS, PIPE, ETC. TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC. PATCH, REPAIR, AND PAINT ALL EXISTING SURFACES (WALLS, FLOOR, ROOF, ETC.) TO MATCH EXISTING.
2	(E) DUCT TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, ACCESSORIES, ETC.
3	(E) SIDE WALL GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC.
4	(E) DIFFUSER/REGISTER TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC.
5	(E) THERMOSTAT/SENSOR TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, ACCESSORIES, ETC. PATCH, REPAIR, AND PAINT EXISTING SURFACES TO MATCH EXISTING.
6	REFER TO PLUMBING DRAIWNGS FOR EXISTING WATER HEATER AND PIPING.
	(E) FLOOR GRILLE TO BE DEMOLISHED. DISCONNECT (E) DUCT BELOW FLOOR AND CAP. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
8	(E) UNDERGROUND DUCT TO BE ABONDONED.
9	DISCONNECT (E) DUCT BELOW GROUND AND CAP. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
	(E) FLY FAN TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
	(E) HEATING UNIT TO BE DEMOLISHED WITH ALL ASSOCIATED CUCT, WIRING, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
	(E) SIDE WALL GRILLE (ABOVE FLOOR) TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
13	(E) UNDERGROUND HWS&R FROM BUILDING ADJACENT BUILDING TO REMAIN. REFER TO AS- BUILT DRAWINGS FOR CONTINUATION.
	(E) HWS&R ABOVE CEILING TO REMAIN.
15	(E) HWS&R ABOVE CEILING TO BE DEMOLISHED.
	DISCONNECT (E) HWS&R PIPES AT POINT OF DISCONNECT, AS SHOWN, AND CAP.
	(E) HWS&R PIPES DN. TO REMAIN. REFER TO AS-BUILT DRAWINGS FOR CONTINUATION.
18	(E) WINDOW TYPE (ABOVE DOOR) A/C UNIT TO DEMOLISHED WITH ALL ASSOCIATED WIRING, HANGER, ACCESSORIES, ETC. PATCH, REPAIR AND PAINT SURFACES TO MATCH EXISTING, REFER TO ARCHITECTURAL DRAWINGS
 (19) 	(E) WALL HEATER TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, PIPE, ACCESSORIES, ETC. DISCONNECT (E) GAS PIPE INSIDE WALL AND CAP. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
20	(E) DIFFUSER/GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED DUCT, DAMPER, ACCESSORIES, ETC. ALL EXISTING DUCTS CONNECTED TO THIS DIFFUSER/REGISTER TO BE DEMOLISHED. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
21	(E) SPLITY SYSTEM INDOOR UNIT AND OUDOOR UNIT (ON ROOF) TO BE DEMOLISHED WITH ALL ASSOCIATED PIPING, WIRING, DISCONNECT, CONDUIT, CURB, ASCCESSORIES, ETC. PATCH REPAIR AND PAINT ALL EXISTING SURFACES (WALLS, FLOOR, ROOF, ETC.) TO MATCH EXISTING.

**1** FLOOR PLAN - BUILDING CK - DEMO

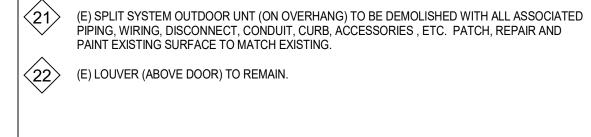


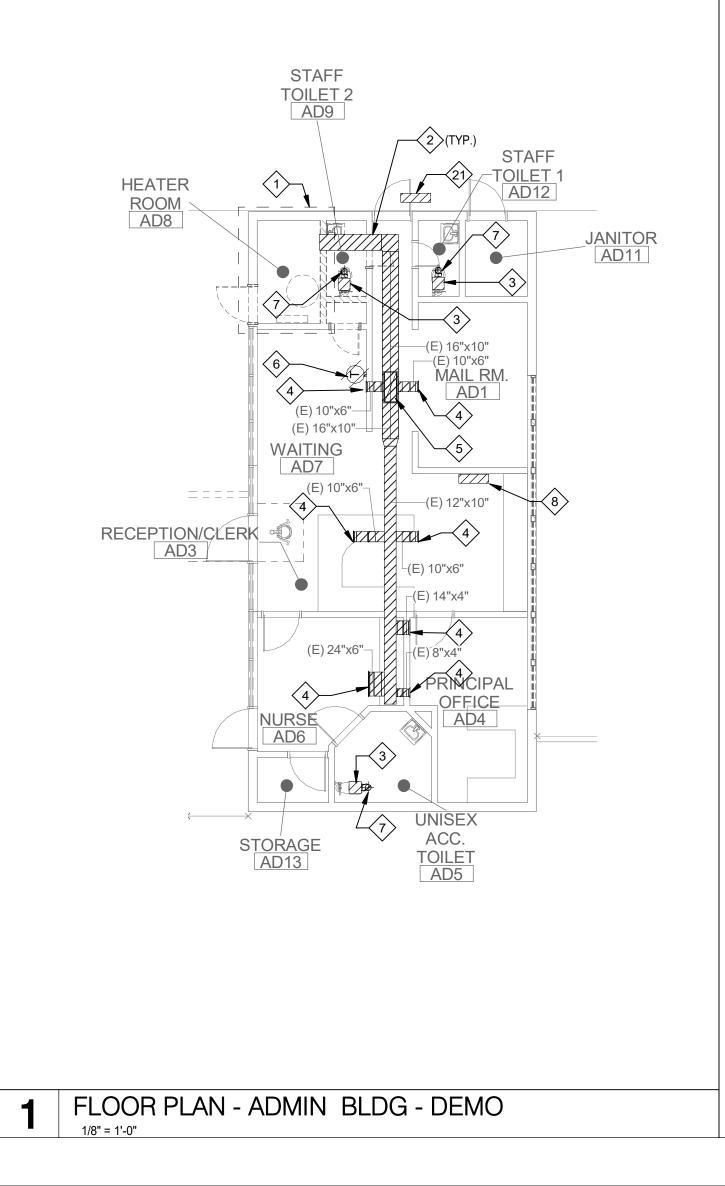


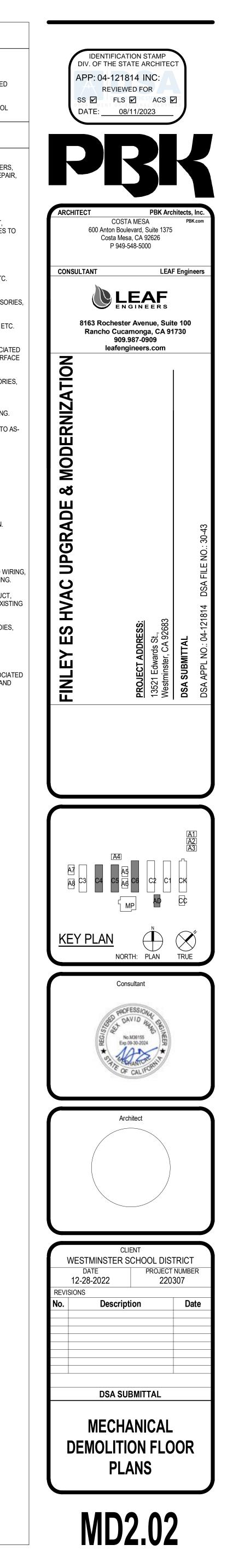


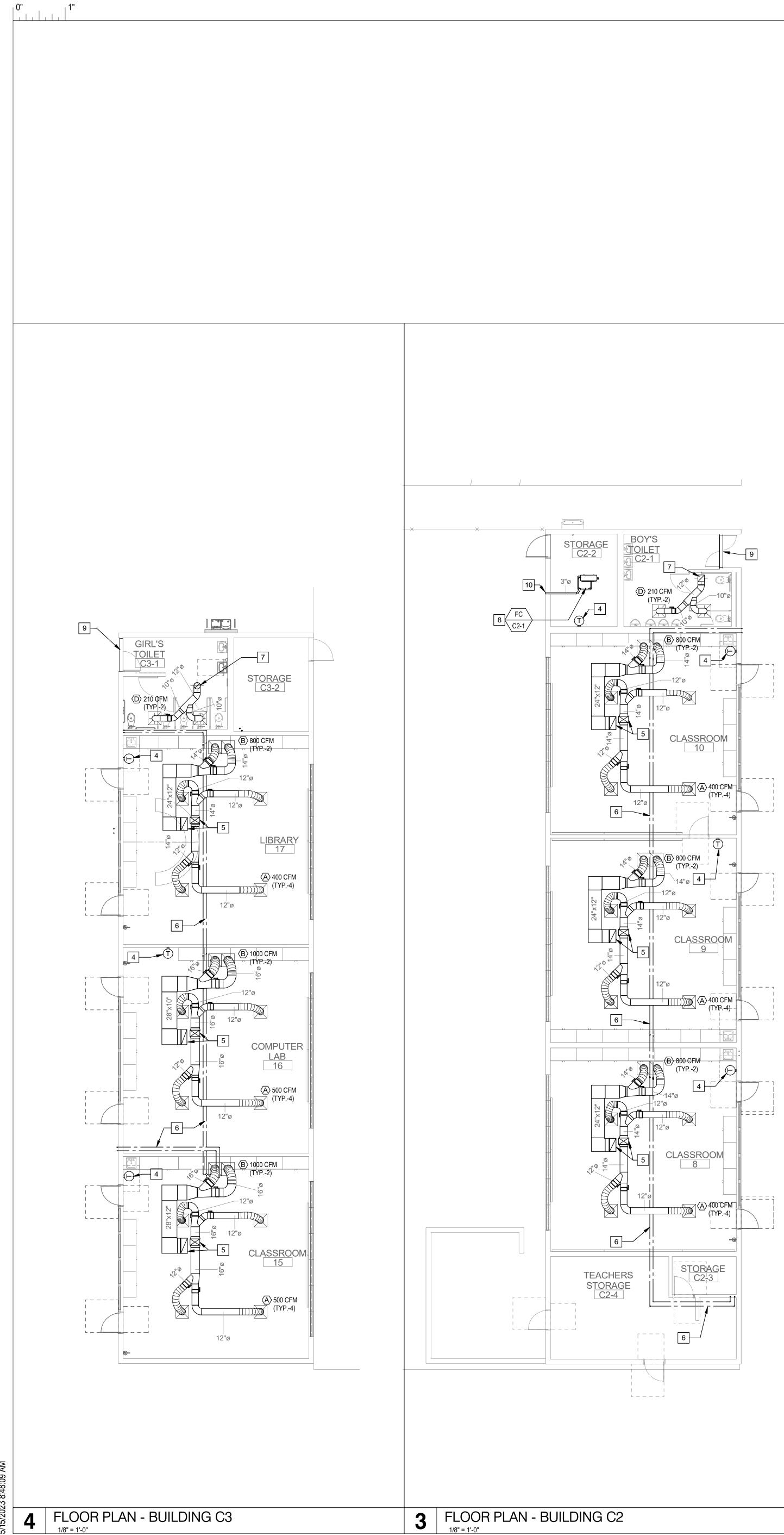


	DEMOLITION GENERAL NOTES
	NTRACTOR SHALL FIELD VERIFY LOCATIONS AND SIZES OF ALL EXISTING EQUIPMENT, CTWORK, LOUVERS, ACCESSORIES, ETC. BEFORE COMMENCING WORK.
	. EXISTING DUCT, DIFFUSER, REGISTER, THERMOSTAT, DAMPER, ETC. TO BE DEMOLISHED I'H ALL ASSOCIATED ACCESSORIES.
	NTRACTOR SHALL REMOVE ALL EXISTING CEILING FANS AND TURN THEM TO THE SCHOOL TRICT.
	DEMOLITION KEY NOTES
•	
	ALL EXISITNG MECHANICAL EQUIPMENT, HOUSEKEEPING PAD, DUCT, DAMPERS, LOUVERS, PIPE, ETC. TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC. PATCH, REPAIR AND PAINT EXISTING SURFACES TO MATCH EXISTING.
2>	(E) DUCT TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, ACCESSORIES, ETC.
3	(E) CEILING MOUNTED EXHAUST FAN TO BE DEMOLISHED WITH ALL ASSOCIATED DUCT, WIRING, DAMPER, ACCESSORIES, ETC. PATCH, REPAIR, AND PAINT EXISTING SURFACES TO MATCH EXISTING.
4	(E) SIDE WALL GRILLE TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC.
5	(E) DIFFUSER/REGISTER TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC.
6	(E) THERMOSTAT/SENSOR TO BE DEMOLISHED WITH ALL ASSOCIATED WIRING, ACCESSORI ETC. PATCH, REPAIR, AND PAINT EXISTING SURFACES TO MATCH EXISTING.
7	(E) EA DUCT UTR TO BE DEMOLISHED WITH ALL ASSOCIATED DAMPER, ACCESSOIRES, ETC.
8	E) SPLIT SYSTEM WALL MOUNTED FAN COIL UNIT TO BE DEMOLISHIED WITH ALL ASSOCIATE WIRING, PIPING, T'STAT, ACCESSORIES, ETC. PATCH, REPAIR, AND PAINT EXISTING SURFAC TO MATCH EXISTING.
9	(E) HEATING UNIT TO BE DEMOLISHED WITH ALL ASSOCIATED CUCT, WIRING, ACCESSORIES ETC. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
10	(E) SIDE WALL GRILLE (ABOVE FLOOR) TO BE DEMOLISHED WITH ALL ASSOCIATED ACCESSORIES, ETC. PATCH, REPAIR AND PAINT EXISTING SURFACE TO MATCH EXISTING.
11	(E) UNDERGROUND HWS&R FROM BUILDING ADJACENT BUILDING TO REMAIN. REFER TO AS BUILT DRAWINGS FOR CONTINUATION.
12	(E) HWS&R ABOVE CEILING TO REMAIN.
13	(E) HWS&R ABOVE CEILING TO BE DEMOLISHED.
14	DISCONNECT (E) HWS&R PIPES AT POINT OF DISCONNECT, AS SHOWN, AND CAP.
15	(E) HWS&R PIPES DN. TO REMAIN. REFER TO AS-BUILT DRAWINGS FOR CONTINUATION.
16	(E) WINDOW TYPE (ABOVE DOOR) A/C UNIT TO REMAIN.
17	(E) WINDOW TYPE (ABOVE DOOR) A/C UNIT TO BE DEMOLISHED WITH ALL ASSOCIATED WIRL ACCESSORIES, ETC. PATCH, REPAIR, AND PAINT EXISTING SURFACE TO MATCH EXISTING.
18	(E) FURNACE (INSIDE CLOSET) TO BE DEMOLISHED WITH ALL ASSOCIATED PLENUM, DUCT, WIRING, DAMPER, GAS FLUE DUCT, ACCESSORIES, ETC. PATCH, REPAIR, AND PAINT EXISTIL SURFACE TO MATCH EXISTING.
19	(E) OSA LOUVER TO BE DEMOLISHED WITH ALL ASSOCIATED DUCT, DAMPER, ACCESSOIES, ETC. PATCH, REPAIR, AND PAINT EXISTING SURFACE TO MATCH EXISTING.
20>	(E) SOFFIT, SEE ARCHITECTURAL DRAWING.
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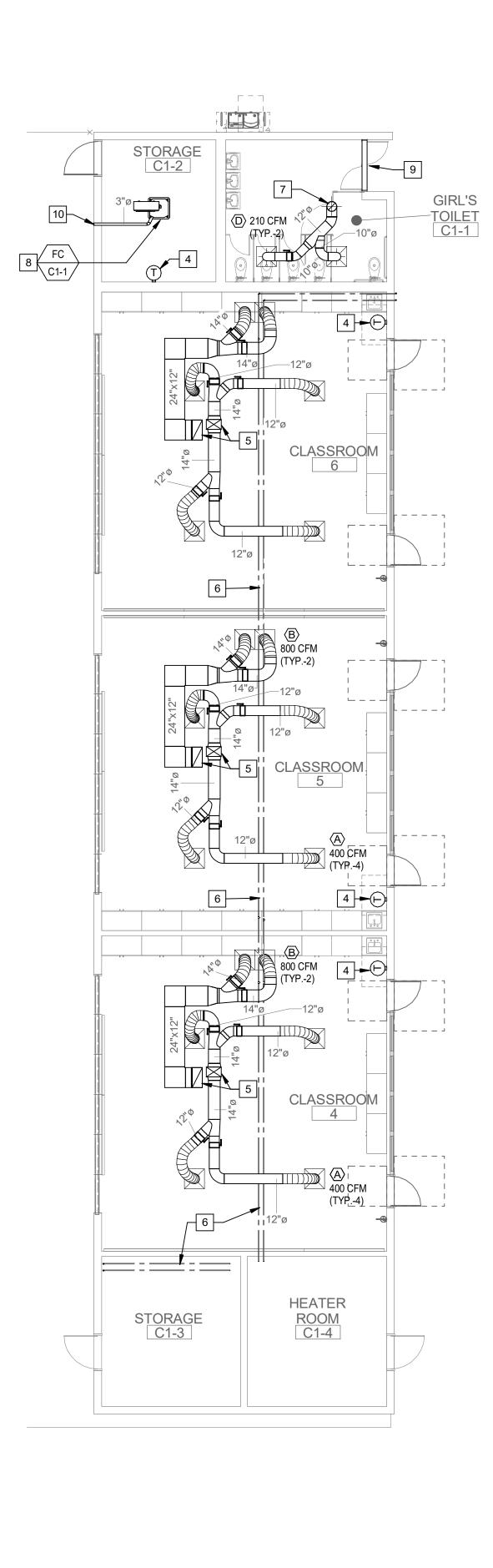








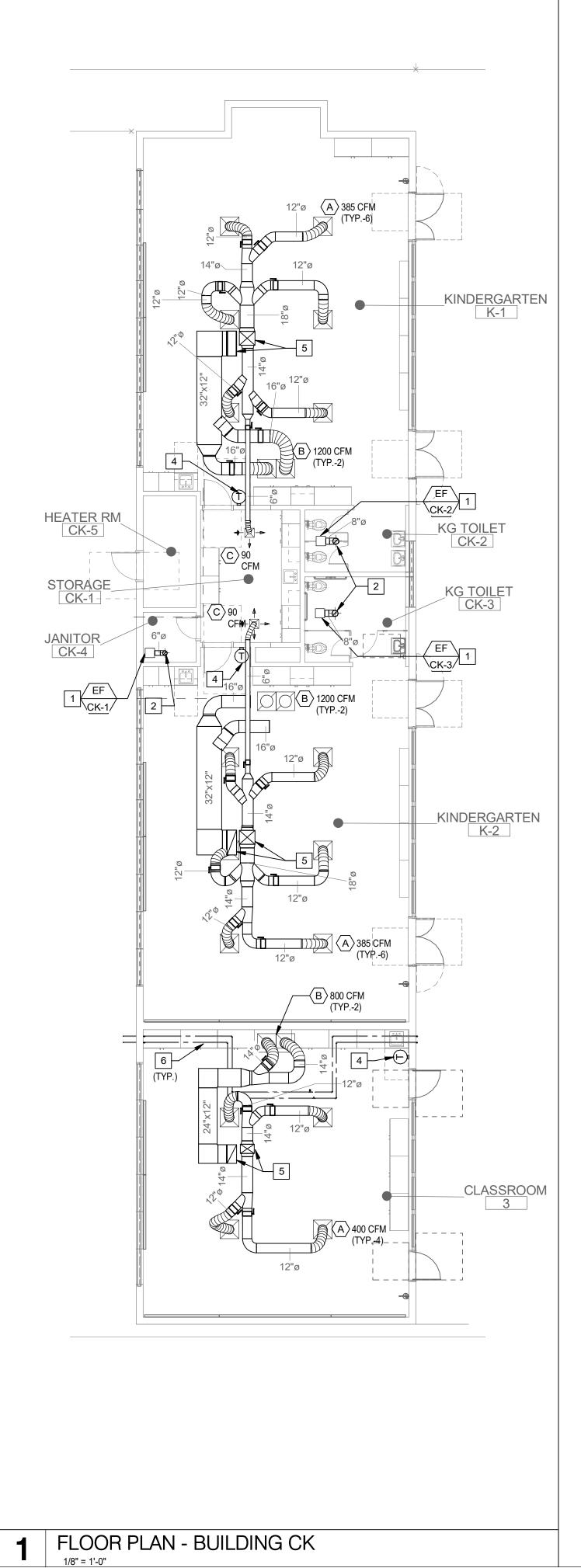
4 FLOOR PLAN - BUILDING C3

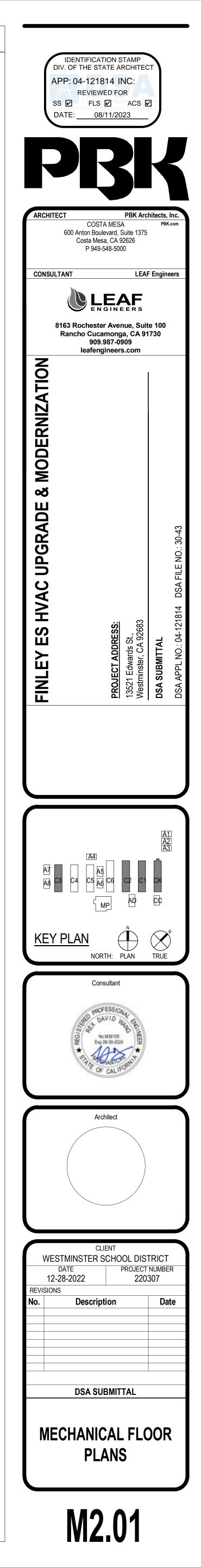


## **KEY NOTES**

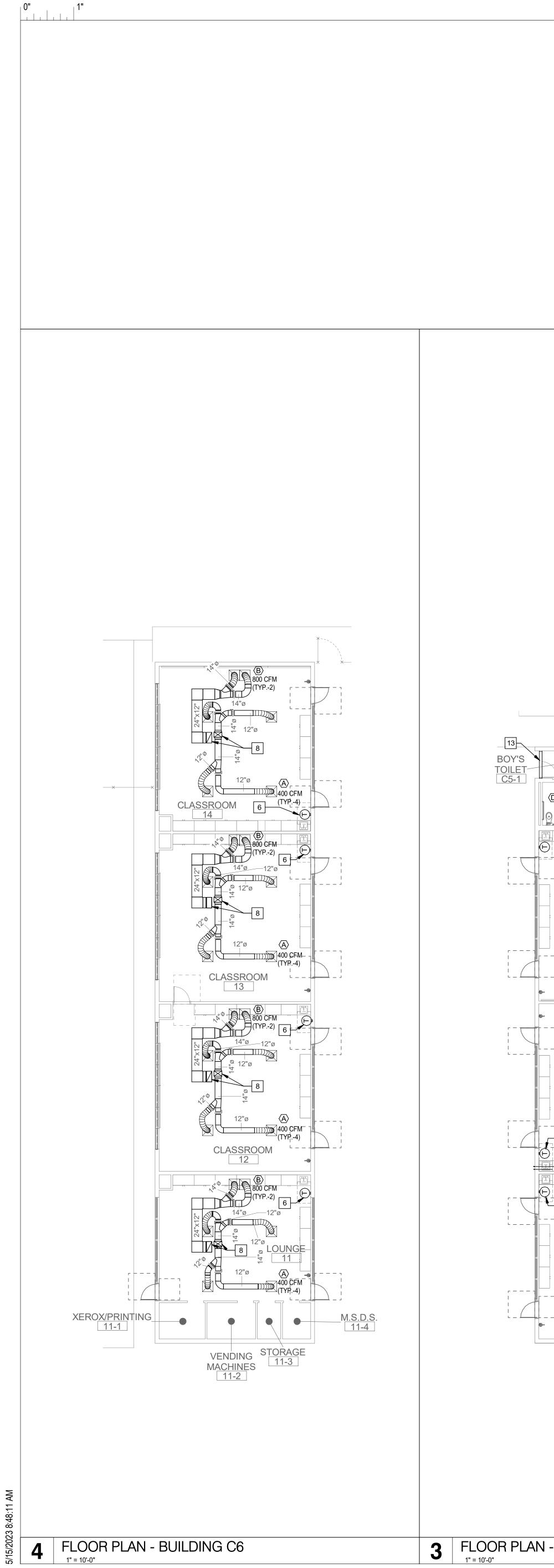
- CEILING MOUTNED EXHAUST FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE DETAIL #11/M6.01.
- 2 6"Ø EA DUCT UTR, SEE DETAIL #21/M6.01.
- 3 8"Ø EA DUCT UTR, SEE DETAIL #21/M6.01.
- 4 THERMOSTAT, SEE MOUNTING OVER OBSTRUTION DETAIL ON SHEET M0.00.
- 5 SA & RA DUCT UTR TO A/C UNIT ON ROOF, SEE DETAIL #2/M6.01.
- 6 (E) HWS&R PIPES.
- 7 12"Ø EA DUCT UTR, SEE DETAIL #21/M6.01.
- 8 SPLITY SYSTEM DUCTLESS (CASSETTE TYPE) FAN COIL UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE DETAIL #19/M6.01
- 9 (E) MAKE-UP AIR LOUVER (ABOVE DOOR).

10 8"x4" OSA LOUVER (0.2 SQUARE FEET, 50% FREE AREA), REFER TO ARCHITECTURAL DRAWINGS.

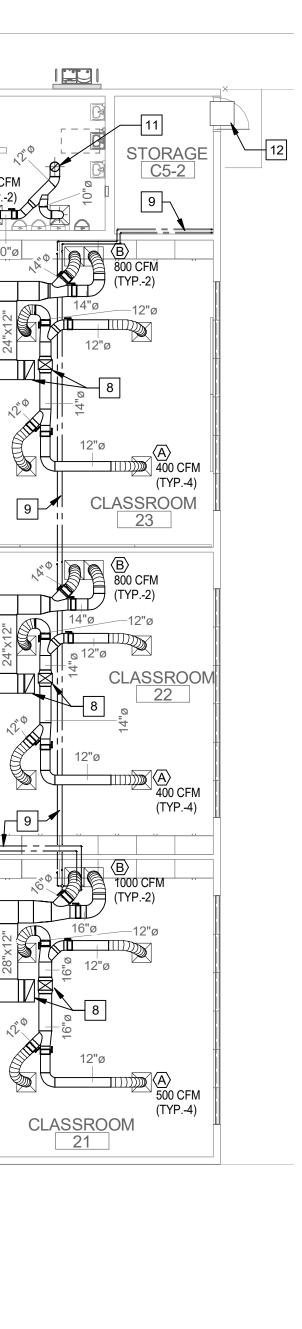


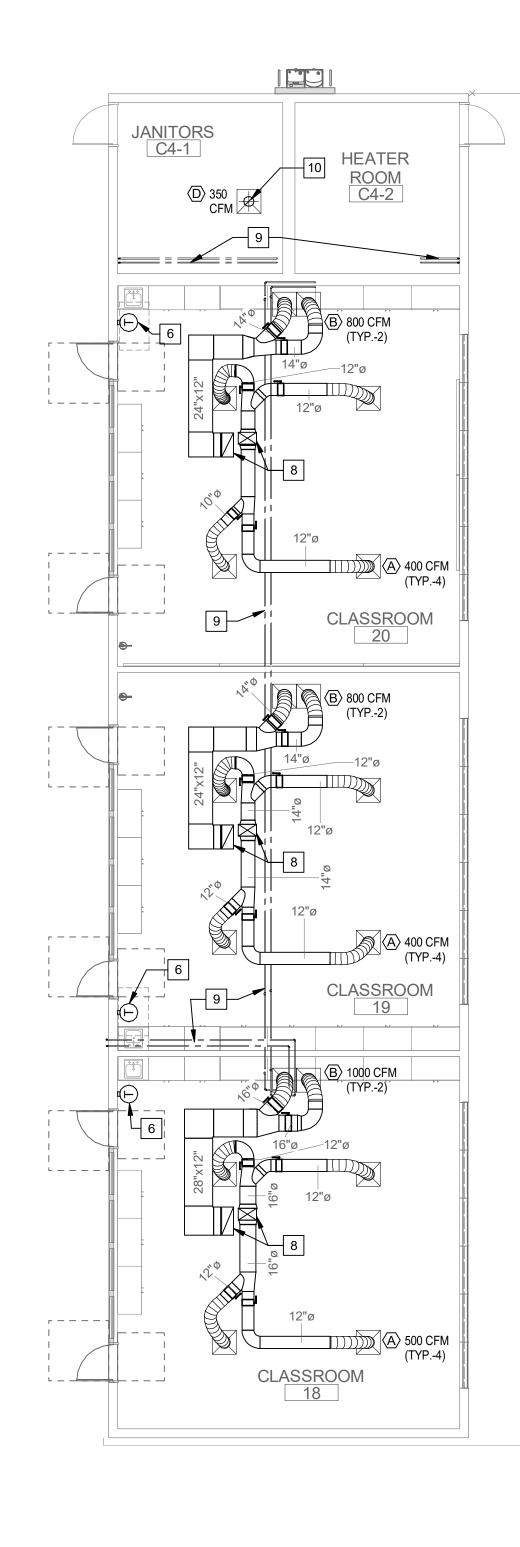




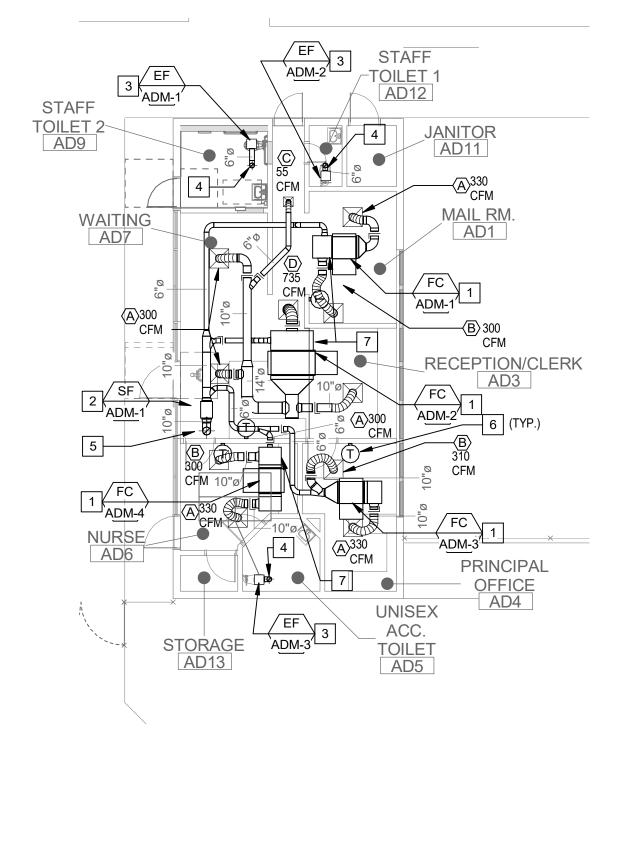


**3** FLOOR PLAN - BUILDING C5





**1** FLOOR PLAN - ADMIN BLDG



DETAIL #20/M6.01 2 SUSPENDED SUPPLY FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION.

1 DUCTED VRF SYSTEM FAN COIL UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE

3 CEILING MOUTNED EXHAUST FAN, SEE SCHEDULE SHEET M5.01 FOR INFORMATION, SEE DETAIL # 11/M6.01.

4 6"Ø EA DUCT UTR, SEE DETAIL #21/M6.01.

5 10"Ø OSA DUCT UTR, SEE DETAIL #21/M6.01.

6 THERMOSTAT, SEE MOUNTING OVER OBSTRUTION DETAIL ON SHEET M0.00..

7 MIXING BOX, SEE DETAIL #20/M6.01.

8 SA & RA DUCT UTR TO A/C UNIT ON ROOF, SEE DETAIL #2/M6.01.

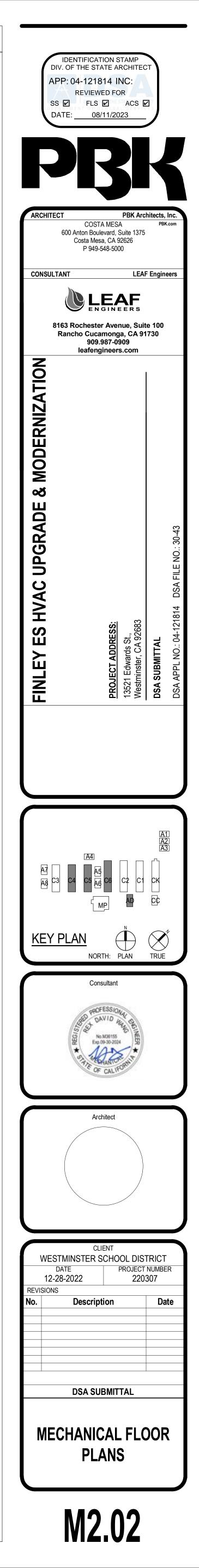
9 (E) HWS&R PIPES.

10 10"Ø EA DUCT UTR, SEE DETAIL #21/M6.01.

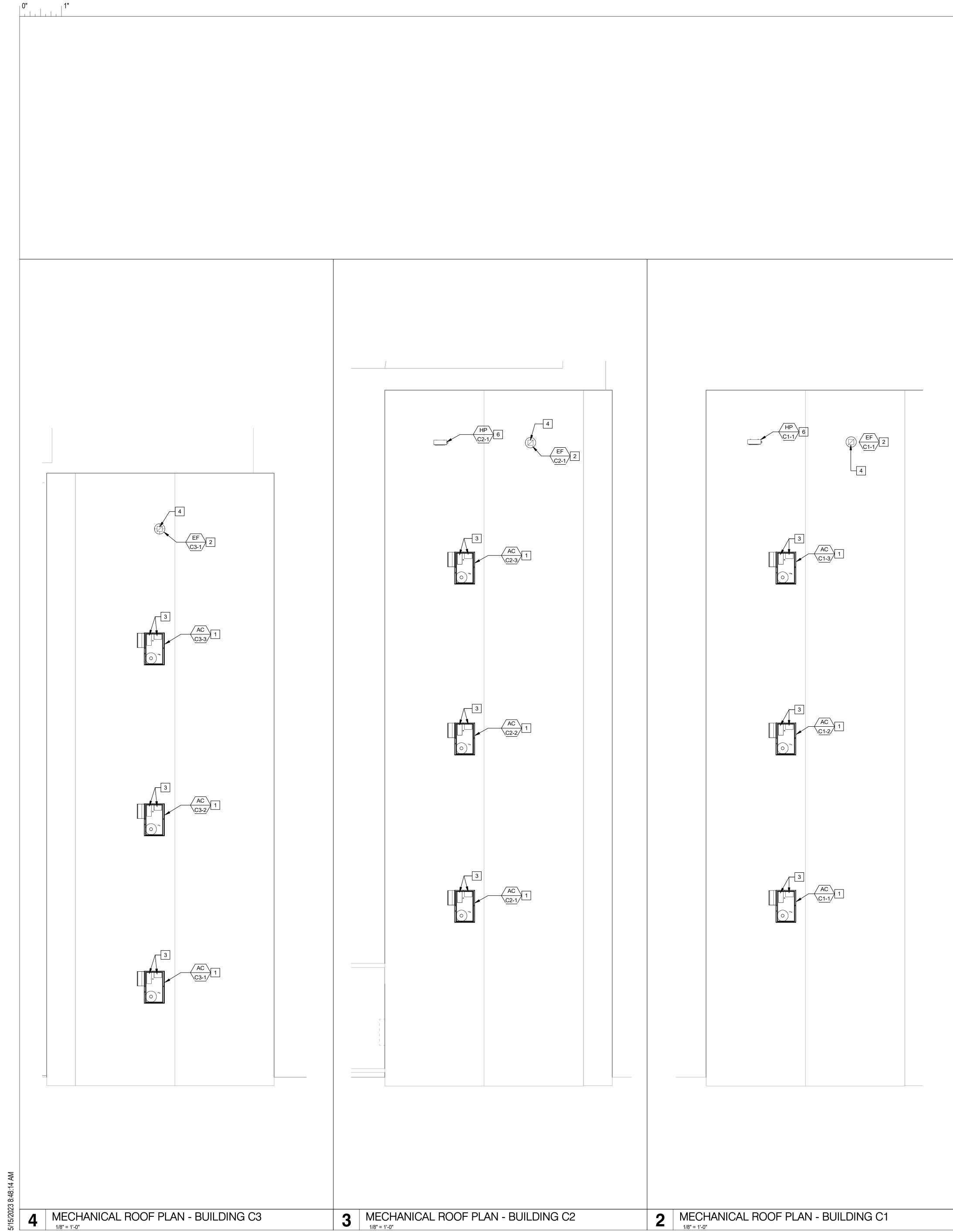
11 12"Ø EA DUCT UTR, SEE DETAIL #21/M6.01.

(E) WINDOW TYPE A/C UNIT (ABOVE DOOR).

13 (E) MAKE-UP AIR LOUVER (ABOVE DOOR).

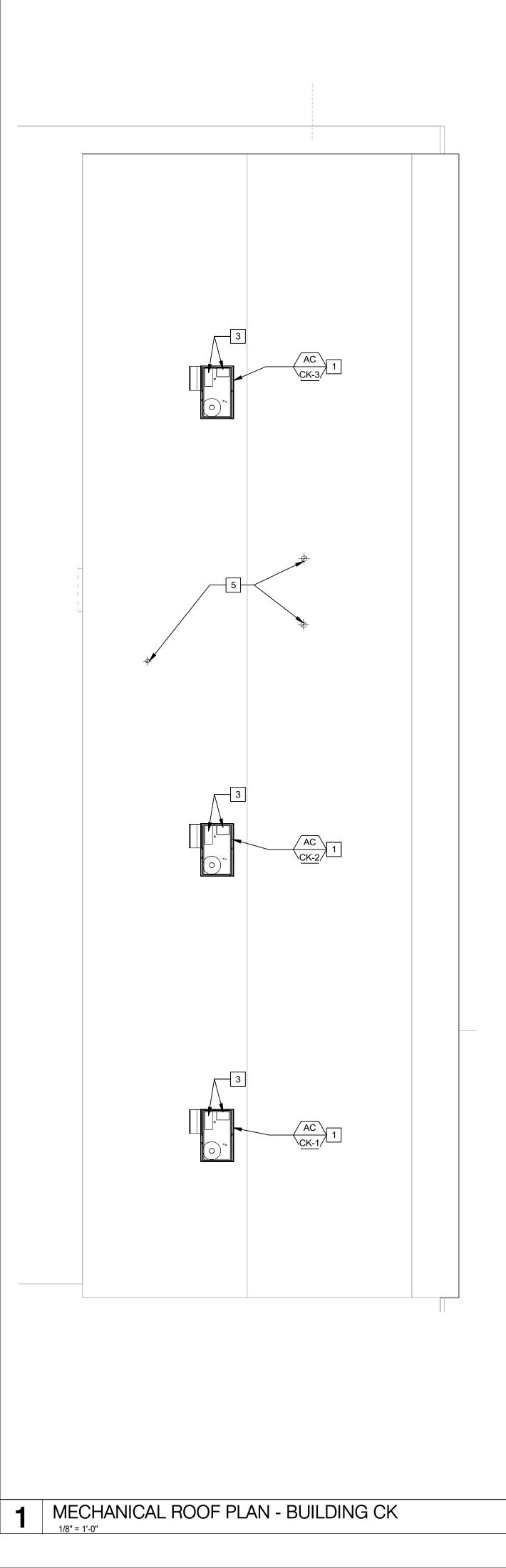


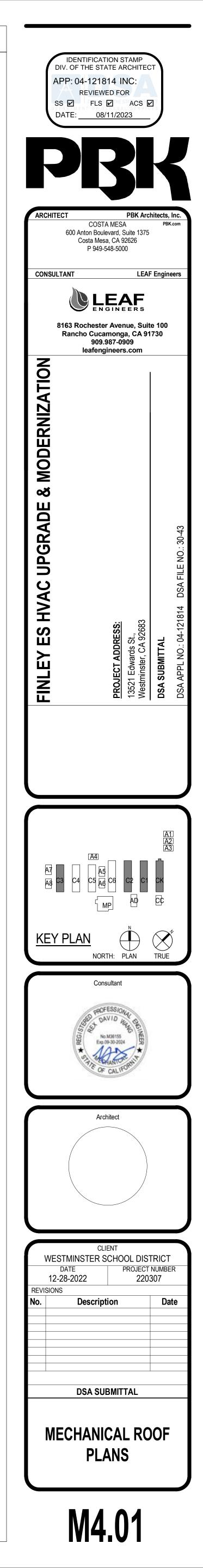




## **KEY NOTES**

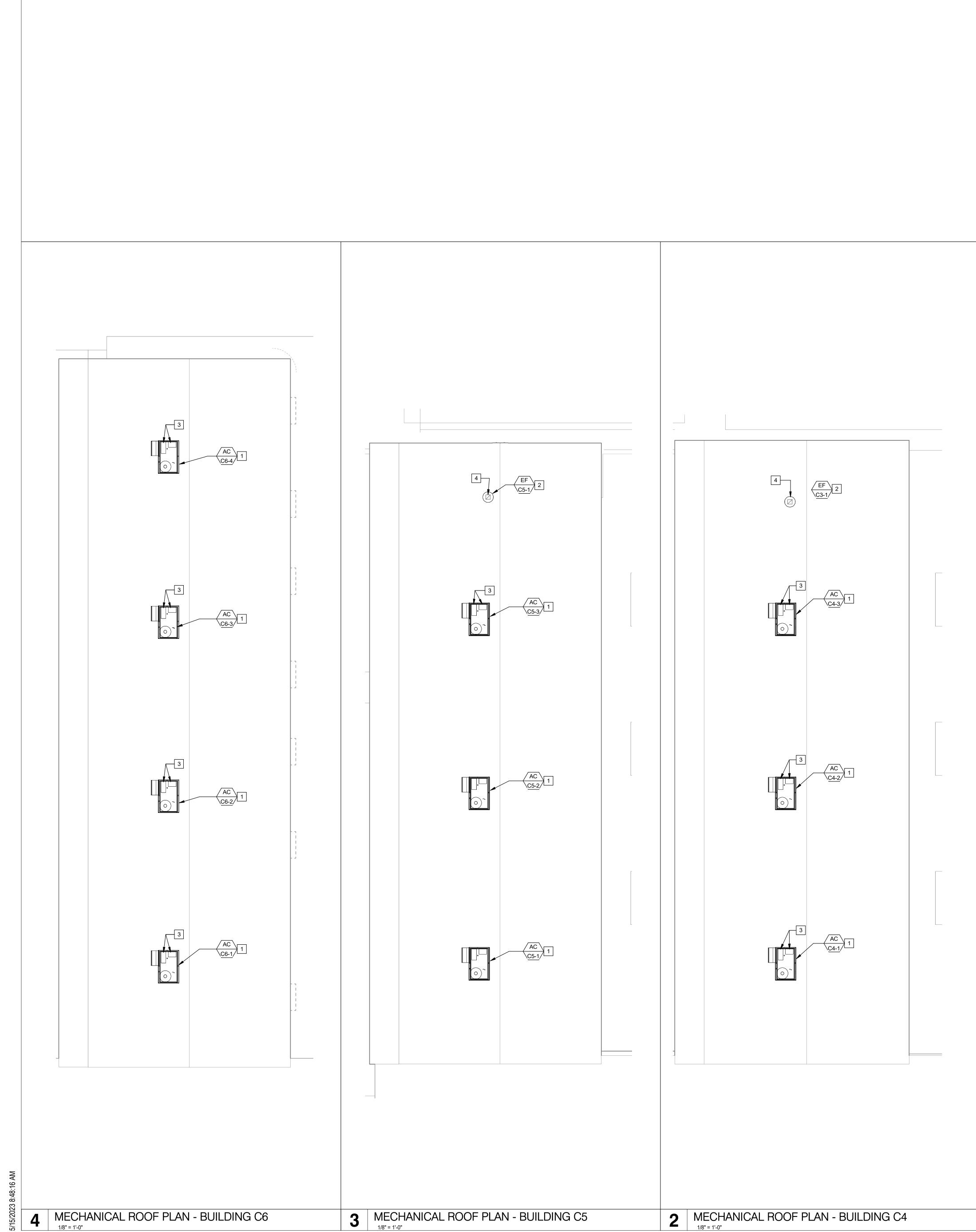
- 1 ROOFTOP PACKAGE HEAT PUMP UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE DETAIL #2/M6.01.
- 2 ROOF MOUNTED EXHAUST FAN, SEE SCHEDULE SHEET M5.01 DOR INFORMAITON. SEE DETAIL
- #25/M6.01
- 3 SA & RA DUCT DN. THROUGH ROOF, SEE DETAIL #2/M6.01.
- 4 EA DUCT DN. THROUGH ROOF, SEE DETAIL #25/M6.01.
- 5 EA DUCT DN. THROUGH ROOF, TERMINATE ON ROOF WITH ROOF JACK. SEE DETAIL #21/M6.01. 6 ROOF MOUTNED SPLIT SYSTEM (OUTDOOR) HEAT PUMP UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE DETAIL #6/M6.01.







0" | 1"



## **KEY NOTES**

1 ROOFTOP PACKAGE HEAT PUMP UNIT, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE DETAIL #2/M6.01.

2 ROOF MOUNTED EXHAUST FAN, SEE SCHEDULE SHEET M5.01 DOR INFORMAITON. SEE DETAIL #25/M6.01

	#25/M0.01.
]	SA & RA DUCT DN. THROUGH ROOF, SEE DETAIL #2/M6.01

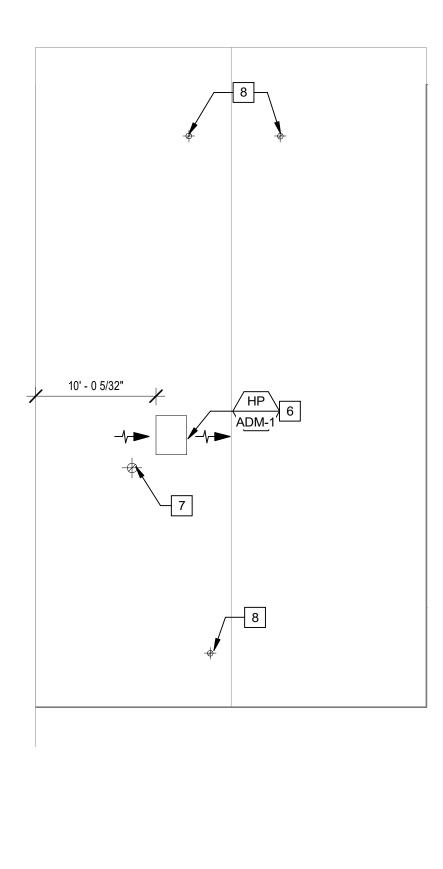
4 EA DUCT DN. THROUGH ROOF, SEE DETAIL #25/M6.01..

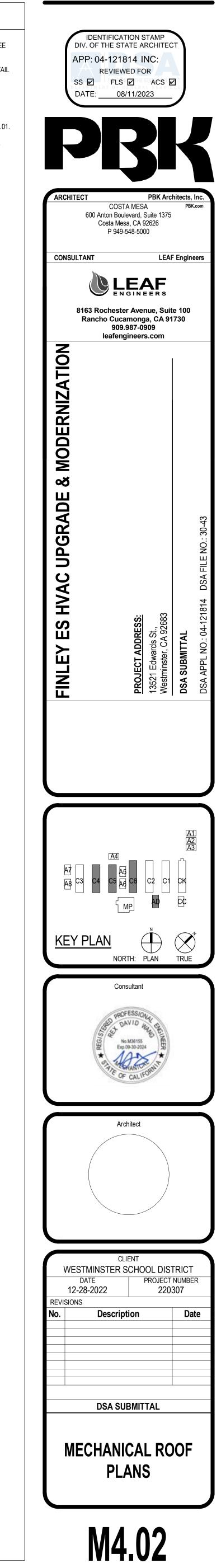
5 EA DUCT DN. THROUGH ROOF, TERMINATE ON ROOF WITH ROOF JACK. SEE DETAIL #21/M6.01.

6 VRF SYSTEM OUTDOOR HEAT PUMP, SEE SCHEDULE SHEET M5.01 FOR INFORMATION. SEE DETAIL #6/M6.01.

7 10"Ø OSA DUCT DN. TERMINATE ON ROOF WITH ROOF JACK. SEE DETAIL #21/M6.01.

8 6"Ø EA DUCT DN. TERMINATE ON ROOF WITH ROOF JACK. SEE DETAIL #21/M6.01.





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ROOFTOP PACKAGED AIR CONDITIONING (HEAT PUMP) UNIT SCHEDULE																																				
UNIT MANUF & MO	FACTURER DDEL NO.	CFM	TONNAGE	TYPE	ESP	COOLING C	CAP (MBH) SENS.	EVAP. ENT. AIR TEMP. (°F) DB WB	AIR TEMP (°F)		COND. TE (°F) MER WIN WB [	EMP. EER HEA	ATING CAPACI (MBH) TAL INTEGR/		COP I LOW P. TEMP.	INDOOR NO. RPM			COMPRESS		PART #	С		R EXHAUST		ASE HZ	DPER. C WT. (LBS) NO.	DFM   (FLA) (F		PHASE HZ UNIT MCA	FILTERS	S (IN.) O V 13 (UNIT	PER. C(LBS) OSA CFM CFM	ANCHOR/ DETAI	RAGE	REMARKS
AC C, C1-1 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,0</sup>	600 1/2 3.	9 4.9					5.0 230		30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		12345789(10(11)(12)(13)
AC C1-2 C1-2 C1-2	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,0</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1)2345789(10)(11)(12)(13)
AC C1-3 C1-3 C1-3	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,1</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1234578910(11)(12)(13)
AC C, C2-1 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,1</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1234578910111213
AC C, C2-2 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,1</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1234578910111213
AC C	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1234578910111213
AC C, C3-1 50	ARRIER DFCQM06	2,000	5.0	VERTICAL	1.0	61.62	55.91	80.8 64.4	4 54.8 5	54.0 88.0	68.0 4	11.0 <u>-</u> 51.	.69 50.50	6 3.8	2.3 8.2	1 1790	3.0/ 0.6	Direct 1	16.0	110	MICROMETL PECD-SRT12CB-D2DH	-2L1 2,0	000 1 6.	4 8.0	14.4 230	3 60	191 1	1.5	7.2 230	3 60 29	40 (4) 16"x1	16"x2" 610 +	347 = 957 360	2 M6.01		1)23456789(10(11)(12)(13)
AC C, C3-2 50	ARRIER DFCQM06	2,000	5.0	VERTICAL	1.0	61.62	55.91	80.8 64.4	4 54.8 5	54.0 88.0	68.0 4	41.0 <u>-</u> 51.	.69 50.50	6 3.8	2.3 8.2	1 1790	3.0/ 0.6	Direct 1	16.0	110	MICROMETL PECD-SRT12CB-D2DH	-2L1 2,0	000 1 6.	4 8.0	14.4 230	3 60	191 1	1.5	7.2 230	3 60 29	40 (4) 16"x1	16"x2" 610 +	347 = 957 360	2 M6.01		123456789(10)(11)(12)(13)
AC C, C3-3 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	11.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,1</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 170	2 M6.01		1)2345789(10(11)(12)(13)
AC C, C4-1 50	ARRIER DFCQM06	2,000	5.0	VERTICAL	1.0	61.62	55.91	80.8 64.4	4 54.8 5	54.0 88.0	68.0 4	11.0 <u>-</u> 51.	.69 50.50	6 3.8	2.3 8.2	1 1790	3.0/ 0.6	Direct 1	16.0	110	MICROMETL PECD-SRT12CB-D2DH	-2L1 2,0	000 1 6.	4 8.0	14.4 230	3 60	191 1	1.5	7.2 230	3 60 29	40 (4) 16"x1	16"x2" 610 +	347 = 957 360		$\mathbf{i}$	12345678910(11)(12)(13)
AC C/ C4-2 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	11.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,0</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1)2345789(10)(11)(12)(13)
AC C, C4-3 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	4 55.5 5	54.0 88.0	68.0 4	11.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH <sup>1,0</sup>	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 220	2 M6.01		1)2345789(10)(11)(12)(13)
AC C/ C5-1 50	ARRIER DFCQM06	2,000	5.0	VERTICAL	1.0	61.62	55.91	80.8 64.4	54.8 5	54.0 88.0	68.0 4	11.0 <u>-</u> 51.	.69 50.50	6 3.8	2.3 8.2	1 1790	3.0/ 0.6	Direct 1	16.0	110	MICROMETL PECD-SRT12CB-D2DH	-2L1 2,0	000 1 6.	4 8.0	14.4 230	3 60	191 1	1.5	7.2 230	3 60 29	40 (4) 16"x1	16"x2" 610 +	347 = 957 360	2 M6.01		123456789(10(11)(12)(13)
AC C.	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,0	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1) 2 3 4 5 7 8 9 10 (11) (12) (13)
AC C, 25-3 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 - 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,0	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 220	2 M6.01		1) 2 3 4 5 7 8 9 (10) (11) (12) (13)
AC C, C6-1 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,0	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 130	2 M6.01		12345789(10(11)(12)(13)
AC C. C6-2 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,0	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1) 2 3 4 5 7 8 9 10 11 12 13
AC C. C6-3 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,0	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1) 2 3 4 5 7 8 9 (10) (11) (12) (13)
AC C6-4 C, 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		12345789(10(11)(12)(13)
AC CK-1 C, 50	ARRIER DFCQM05	1,600	4.0	VERTICAL	1.0	49.40	42.68	80.3 64.4	55.5 5	54.0 88.0	68.0 4	41.0 <u>-</u> 41.	.91 41.0	0 3.7	2.3 8.2	1 1680	3.0/ 0.51	Direct 1	13.7	83	MICROMETL PECD-SRT12CB-D2DH	-2LH 1,	600 1/2 3.	9 4.9	8.8 230	3 60	191 1	1.5	5.0 230	3 60 24	30 (4) 16"x1	16"x2" 595 +	347 = 942 360	2 M6.01		1) 2 3 4 5 7 9 10 11 12 13
AC         C,           CK-2         50	ARRIER DFCQM07	2,400	6.0	VERTICAL	1.0	74.96	65.59	80.0 64.3	3 54.6 5	53.8 88.0	68.0 4	11.0 11.2 15.0 58.	.89 57.63	3 3.6	2.4 -	1 2008	3.0/ 0.84	Direct 1	18	136	MICROMETL PECD-SRT12CB-D2DH	-2L1 2,4	400 1.0 6.	4 8.0	14.4 230	3 60	191 1	1.5	7.8 230	3 60 32	45 (4) 16"x1	16"x2"	640 415	2 M6.01		12345678910(11)(12)(13)
AC CK-3 CK-3	ARRIER DFCQM07	2,400	6.0	VERTICAL	1.0	74.96	65.59	80.0 64.3	3 54.6 5	53.8 88.0	68.0 4	11.0 11.2 58. 15.0 58.	.89 57.63	3 3.6	2.4 -	1 2008	3.0/ 0.84	Direct 1	18	136	MICROMETL PECD-SRT12CB-D2DH	-2L1 2,4	400 1.0 6.	4 8.0	14.4 230	3 60	191 1	1.5	7.8 230	3 60 32	45 (4) 16"x1	16"x2"	640 440	2 M6.01		123456789(10)(11)(12)(13)

. PROVIDE ANTI-RECYCLE TIMER, CRANKCASE HEATER, LOW AMBIENT KIT AND HIGH CAPACITY FILTER RACK.

PROVIDE FACTORY "MICROMETL" MODULATING ECONOMIZER WITH POWER EXHAUST. AC UNIT SHALL HAVE C02 CONTROL. PROVIDE WITH LOCKING MESH COVER. 9. PROVIDE T-24 COMPLIANT INTERNET PROGRAMMABLE THERMOSTAT "NT" MODEL X7C WITH POWER EXHAUST SHALL BE PROVIDED WITH A SEAPARTE DISCONNECT SWITCH, FIELD WIRED BY ELECTRICAL. PROVIDE VIBRATION ISOLATORS.

PROVIDE VIBRATION ISOLATORS.
 BYPASS UNIT ANTI-RECYCLE TIMER WHEN ANTI-RECYCLE FUNCTION IS INCLUDED IN THE THERMOSTAT.
 OVERALL SMOKE DETECTION SYSTEM PROVIDED BY ELECTRICAL FOR ALL UNITS TO SHUT-OFF UPON DETECTION OF SMOKE AND SIGNAL THE FIRE ALARM SYSTEM, NOVICE WITH FACTORY MOUNTED NON-POWERED CONVENIENT OUTLET.
 INSTALL IN STRICT ACCORDANCE WITH THE 2019 CALIFORNIA MECHANICAL CODE, SECTION 608. REFER TO ELECTRICAL PLANS AND MECHANICAL TO CONNECT TO
 UNIT STALL BE INSTALLED ON A LEVELED BUILT-UP CURB (PROVIDED BY OTHERS).

ELECTRICAL RELAY. PRIOR TO MECHANICAL PERMIT FINAL, A SMOKE DETECTOR SYSTEM SHUT-OFF TEST WILL BE REQUIRED.

	VRF SYSTEM INDOOR FAN COIL UNIT SCHEDULE																						
				С	APACITY (N	IBH)	OSA TE	MP. (°F)		SUPPL	Y FAN		FLOW SELECTOR	BOX			ELI	ECTRICA	AL.				
UNIT	MANUFACTURER AND MODEL NO.	SERVICE/ LOCATION	TYPE	CO( TOTAL	OLING SENSIBLE		SUMMER (DB/WB)		EAT. (°F) (DB/WB)	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	OPER. WT. (LBS.)	ANCHORAGE DETAIL	REMARKS
FC ADM-1	TOSHIBA/CARRIER MMD-AP0126BHPUL	ADMIN. 'ADM' WORKROOM AD1	CONSEALED DUCT	12.0	9.0	13.5	88.0/68.0	41.0	80.0/67.0	395/ 329/ 263	0.4	230V/1Ø/60HZ	TOSHIBA/CARRIER RBM-Y0383FUL	<1	15	11	230V/1Ø/60HZ	0.88	1.1	15	60	20 M6.01	
FC ADM-2	TOSHIBA/CARRIER MMD-AP0366BHPUL	ADMIN. 'ADM' RECEPTION/CLERK AD3	CONSEALED DUCT	36.0	28.44	40.0	88.0/68.0	41.0	80.0/67.0	1,130/ 954/ 812	0.6	230V/1Ø/60HZ	TOSHIBA/CARRIER RBM-Y0613FUL	<1	15	13	230V/1Ø/60HZ	2.71	3.39	15	100	20 M6.01	
FC ADM-3	TOSHIBA/CARRIER MMD-AP0126BHPUL	ADMIN. 'ADM' OFFICE AD4	CONSEALED DUCT	12.0	28.44	40.0	88.0/68.0	41.0	80.0/67.0	-/ -/ -	0.4	230V/1Ø/60HZ	TOSHIBA/CARRIER RBM-Y0383FUL	<1	15	11	230V/1Ø/60HZ	0.88	1.1	15	60	20 M6.01	
FC ADM-4	TOSHIBA/CARRIER MMD-AP0126BHPUL	ADMIN. 'ADM' NURSE AD6	CONSEALED DUCT	12.0	28.44	40.0	88.0/68.0	41.0	80.0/67.0	-/ -/ -	0.4	230V/1Ø/60HZ	TOSHIBA/CARRIER RBM-Y0383FUL	<1	15	11	230V/1Ø/60HZ	1.85	2.31	15	100	20 M6.01	

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 5. CONCEALED/DUCTGED FAN COIL UNIT. 6. DROVIDE DISCONNECT SWITCH POWERED THRU INDOOR FAN COIL UNIT). 3. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.

6. PROVIDE DISCONNECT SWITCH. 7. PROVIDE WITH MDEDIUM STATIC MOTOR.

	SPLIT SYSTEM (INDOOR) FAN COIL UNIT SCHEDULE														
		CAPACITY (N	/IBH)	OSA TEI	MP. (°F)			SUPPL	YFAN	ELECTF	RICAL				
UNIT	MANUFACTURER AND MODEL NO.	COOLING (TOTAL/SENSIBLE)	HEATING	SUMMER (DB/WB)	WINTER (DB)	– EAT. (°F) (DB/WB)	(DB/WB)	CFM	E.S.P. (IN.)	VOLTAGE	UNIT MCA	MOCP	OPER. WT. (LBS.)	ANCHORAGE DETAIL	REMARKS
FC C1-1	CARRIER 40MBCQ12	12.0	12.0	91.0/68.0	36.0	57.6	109.7	400 H 340 M 280 L	-	208V/ 1Ø / 60HZ	0.2	6	40	19 M6.01	123456
FC C2-1	CARRIER 40MBCQ12	12.0	12.0	91.0/68.0	36.0	57.6	109.7	400 H 340 M 280 L	-	208V/ 1Ø / 60HZ	0.2	6	40	19 M6.01	123456

1. PROVIDE WITH CONDENSATE DRAIN PAN (PRIMARY AND SECONDARY) FOR FAN COIL UNIT AND ASSOCIATED PIPING. PROVIDE WITH FACTORY FURNISHED & INSTALLED CONDENSATE DRAIN LIFT PUMP (CONDENSATE PUMP SHALL BE POWERED THRU INDOOR FAN COIL UNIT).

# 6. PROVIDE WITH MDEDIUM STATIC MOTOR.

3. SIZE REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS.

	SPLIT SYSTEM (OUTDOOR) HEAT PUMP UNIT SCHEDULE															
		COOLING CAF	P. (MBH)		AMB. TE	MP.(°F)					ELECTR	ICAL				
UNIT	- MANUFACTURER AND MODEL NO.	COOLING	HEATING	COP/ HSPF	SUMMER	WINTER	E.E.R. I.E.E.R.	СОМР	RESSOR	OUTDOOF FAN	MCA	MOCP	VOLTAGE	OPER WT. (LBS)	ANCHORAGE DETAIL	REMARKS
		(TOTAL/SENSIBLE)			(DB/WB)	(DB)		QTY.	RLA	QTY.			VOLINOL			
HP C1-1	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	6 M6.01	
HP C2-1	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	6 M6.01	

<u>NOTES:</u> 1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES. 2. PROVIDE LOW AMBIENT KIT.

3. PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD. PROVIDE MINIMUM CLEARANCE AROUND EACH UNIT PER THE MANUFACTURER'S RECOMMENDATIONS.
 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.

ROOFTOP PACKAGED AIR CONDITIONING (HEAT PUMP) UNIT SCHEDULE
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PROVIDE WITH FACTORY MOUNTED NON-FUSED DISCONNECT SWITCH.
 PROVIDE FACTORY CONDENSER COIL GUARDS.

DEMAND CONTROL VENTILATION (DCV), C02 SENSORS. 10. UNITS SHALL HAVE DUCT FLEX CONNECTIONS INSTALLED WITHIN ROOF CURB.

4. PROVIDE T-24 COMPLAINT INTERNET PROGRAMMABLE THERMOSTAT. 5. CASSETTE TYPE DUCTLESS FAN COIL UNIT, POWERED BY OUTDOOR HEAT PUMP.

			COOLING CA	AP. (MBH)		AMB. TE	MP.(°F)						ELECTR	ICAL				
UNIT	MANUFACTURER AND MODEL NO.	TYPE	COOLING	HEATING			WINTER	SCHE	E.E.R. I.E.E.R.	COMPI	RESSOR	OUTDOOR FAN	MCA	МОСР	VOLTAGE	OPER WT. (LBS)	ANCHORAGE DETAIL	REMARKS
			(TOTAL/SENSIBLE)			(DB/WB)	(DB)			QTY.	RLA	QTY.						
HP ADM-1	TOSHIBA/CARRIER MMY- MAP0726FT2P-UL	ROOF MOUNTED	69.0	77.0	3.42	88.0/68.0	41.0	26.9	12.6 19.5	2	-	2	47	50	230V / 3Ø / 60HZ	600	6 M6.01	

6. PROVIDE HAIL-GUARD. 7. PROVIDE WITH HOUSEKEEPING PAD.

1. PROVIDE CRANKCASE HEATER, HIGH & LOW PRESSURE SWITCHES. 2. PROVIDE LOW AMBIENT KIT.

 PROVIDE 3/4" EXPAND METAL CONDENSING COIL GUARD.
 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.

					FANS	s sci	HEDUL	E							
	MANUFACTURER		ТҮРЕ	CFM	SP IN	FAN			МС	DTOR		SONES	OPER WT.	ANCHORAG	DEMARKO
UNIT	& MODEL NO.	SERVICE	IYPE	CFM	W.G.	RPM	HP/ BHP	FLA	VOLT	РН	HZ	SONES	(LBS)	E DETAIL	REMARKS
EF ADM-1	GREENHECK SP-A50-90-VG	BUILDING "ADM" MEN'S TOILET AD9	CEILING/SUSPENDED	70	0.25	838	6 WATTS	0.29	115	1	60	2.0	15	11 M6.01	2568910
EF ADM-2	GREENHECK SP-A50-90-VG	BUILDING "ADM" WOMEN'S TOILET AD12	CEILING/SUSPENDED	70	0.25	838	6 WATTS	0.29	115	1	60	2.0	15	11 M6.01	25689(10)
EF ADM-3	GREENHECK SP-A50-90-VG	BUILDING "ADM" UNISEX ACC. TOILET AD5	CEILING/SUSPENDED	70	0.25	838	6 WATTS	0.29	115	1	60	2.0	15	11 M6.01	25689(10)
EF C1-1	GREENHECK GB100HP-4	BUILDING "C1" GIRL'S TOILET C1-1	ROOF MOUNTED	350	0.5	1326	1/4 0.09	5.8	115	1	60	5.5	75	25 M6.01	123468
EF C2-1	GREENHECK GB100-4	BUILDING "C2" BOY'S TOILET C2-1	ROOF MOUNTED	420	0.5	1151	1/4 0.09	5.8	115	1	60	3.9	75	25 M6.01	123468
EF C3-1	GREENHECK GB100HP-4	BUILDING "C3" GIRL'S TOILET C3-1	ROOF MOUNTED	350	0.5	1326	1/4 0.09	5.8	115	1	60	5.5	75	25 M6.01	123468
EF C4-1	GREENHECK GB100HP-4	BUILDING "C4" JANITORS C4-1	ROOF MOUNTED	350	0.5	1326	1/4 0.09	5.8	115	1	60	5.5	75	25 M6.01	123468
EF C5-1	GREENHECK GB100-4	BUILDING "C5" BOY'S TOILET C5-1	ROOF MOUNTED	420	0.5	1151	1/4 0.09	5.8	115	1	60	3.9	75	25 M6.01	123468
EF CK-1	GREENHECK SP-A50-90-VG	BUILDING "CK" JANITOR CK-4	CEILING/SUSPENDED	70	0.25	838	6 WATTS	0.29	115	1	60	2.0	15	(11 (M6.01)	2468
EF CK-2	GREENHECK SP-A200	BUILDING "CK" KG TOILET CK-2	CEILING/SUSPENDED	140	0.25	695	23 WATTS	0.46	115	1	60	1.2	30	11 M6.01	2468
EF CK-3	GREENHECK SP-A200	BUILDING "CK" KG TOILET CK-3	CEILING/SUSPENDED	140	0.25	695	23 WATTS	0.46	115	1	60	1.2	30	11 M6.01	2468
EF CK-4					DE		TED								
EF CK-5					DE		TED								
SF ADM-1	GREENHECK SQ-90	BUILDING "ADM" ADMIN. AREA	CEILING MOUNTED INLINE	300	0.507	1550	1/10 0.06	-	115	1	60	7.4	50	(11 (M6.01)	3567

NOTES: 1. PROVIDE FACTORY ROOF CURB. SLOPE TO MATCH EXISTING ROOF SLOPE, AS REQUIRED. FAN SHALL OPERATE ON A TIME CLOCK SCHEDULE PROVIDED BY THE SCHOOL DISTRICT.

PROVIDE BACKDRAFT DAMPER FOR ALL FANS. INTERLOCK FAN WITH A/C UNIT SERVING ADJAMENT CLASSROOM. INTERLOCK SUPPLY FAN WITH ALL FAN COIL UNITS SERVING ADMIN. AREA.

PROVIDED FACTORY SOLID STATE CONTROLLER MOUNTED WITHIN THE FAN'S CASING. PROVIDE WITH MERV 13 FILTERS.

8. PROVIDE WITH FACTORY SEISMIC HANKING KIT. PROVIDE WITH FACTORY WHITE GRILLE. 10. PROVIDE WITH FACTORY BACKDRAFT DAMPER.

# VRF SYSTEM OUTDOOR HEAT RECOVERY UNIT SCHEDULE

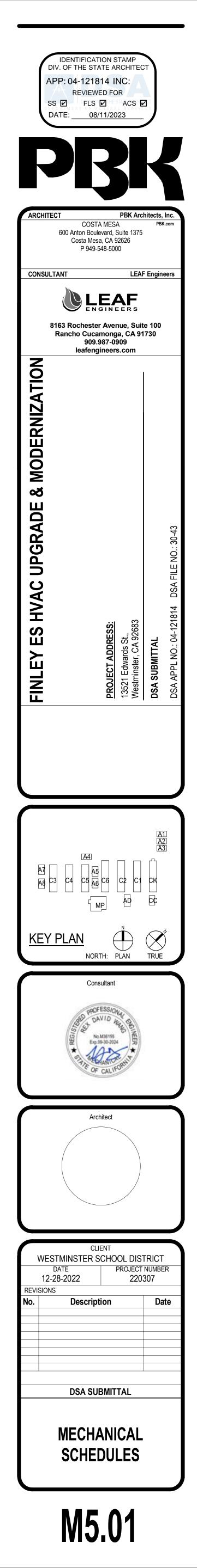
# 9. PROVIDE UNIT WITH HEAT RECOVERY.

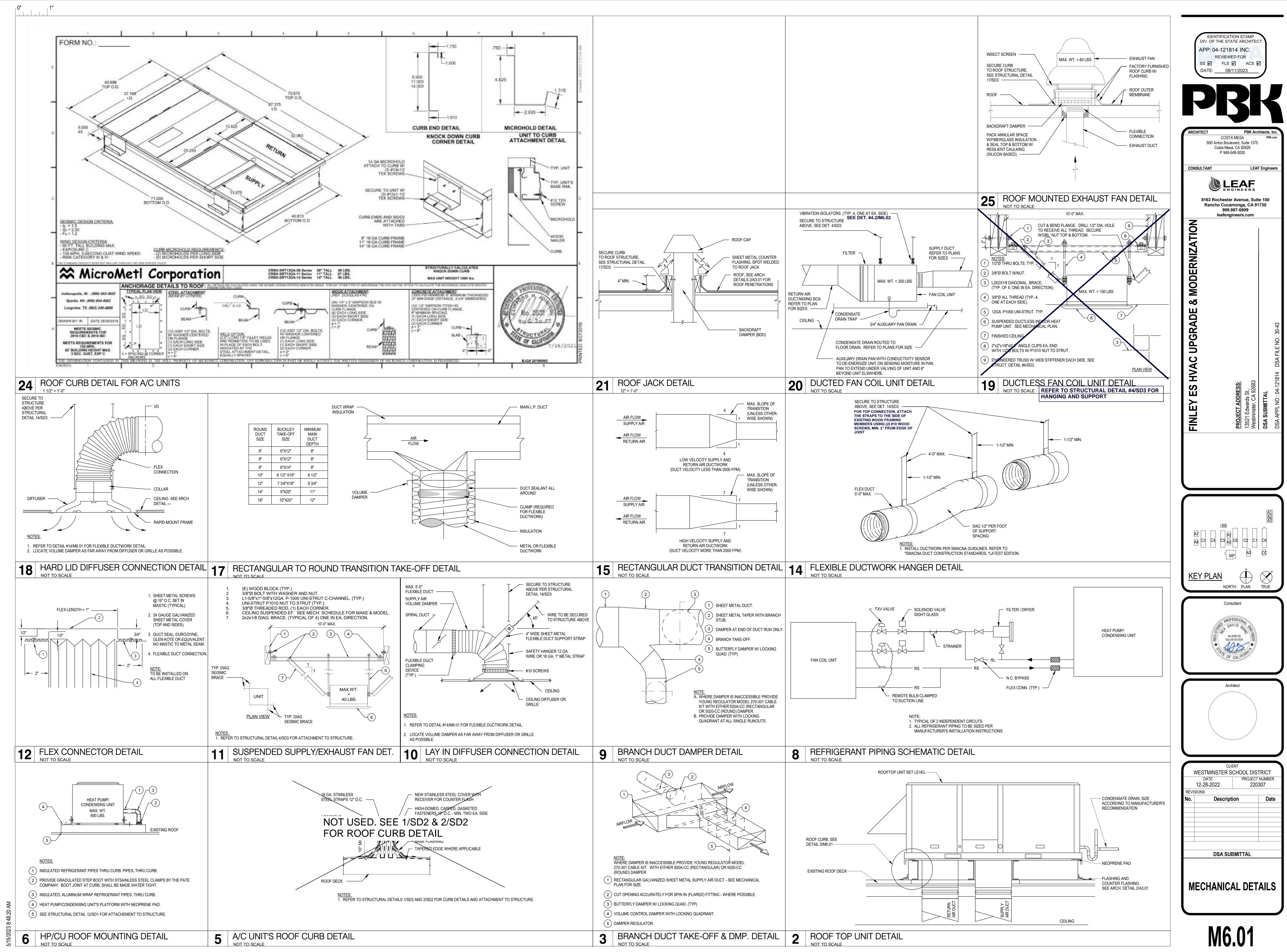
8. ALL HEAT PUMP UNITS ARE ROOF MOUNTED.

# AIR DISTRIBUTION SCHEDULE

SYMBOL	TYPE	MAKE & MODEL	DESCRIPTION
A	CEILING SUPPLY	TITUS MODEL MCD	MODULAR CORE DIFFUSER WITH FRAME FOR LAY-IN T-BAR CEILING, FLUSH FACE MOUNTING.
B	CEILING RETURN	TITUS MODEL PAR	PERFORATED FACE DIFFUSER WITH FRAME FOR LAY-IN T-BAR CEILING, FLUSH FACE MOUNTING.
Ċ	CEILING SUPPLY	TITUS MODEL MCD	MODULAR CORE DIFFUSER WITH RAPID MOUNT FRAME MODEL TRM FOR SURFACE MOUNTING.
	CEILING RETURN/EXHASUT	TITUS MODEL 50F	EGG CRATE GRILLE REGISTER WITH RAPID MOUNT FRAME TRM FOR SURFACE MOUNTING.
Æ	SIDEWALL SUPPLY	TITUS MODEL 1700	DOUBLE DEFLECTION HORIZONTAL 5° DOWN FRONT GRILLE WITH 1/2" BLADE SPACING, FRAME FOR WALL MOUNTING.
F	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.

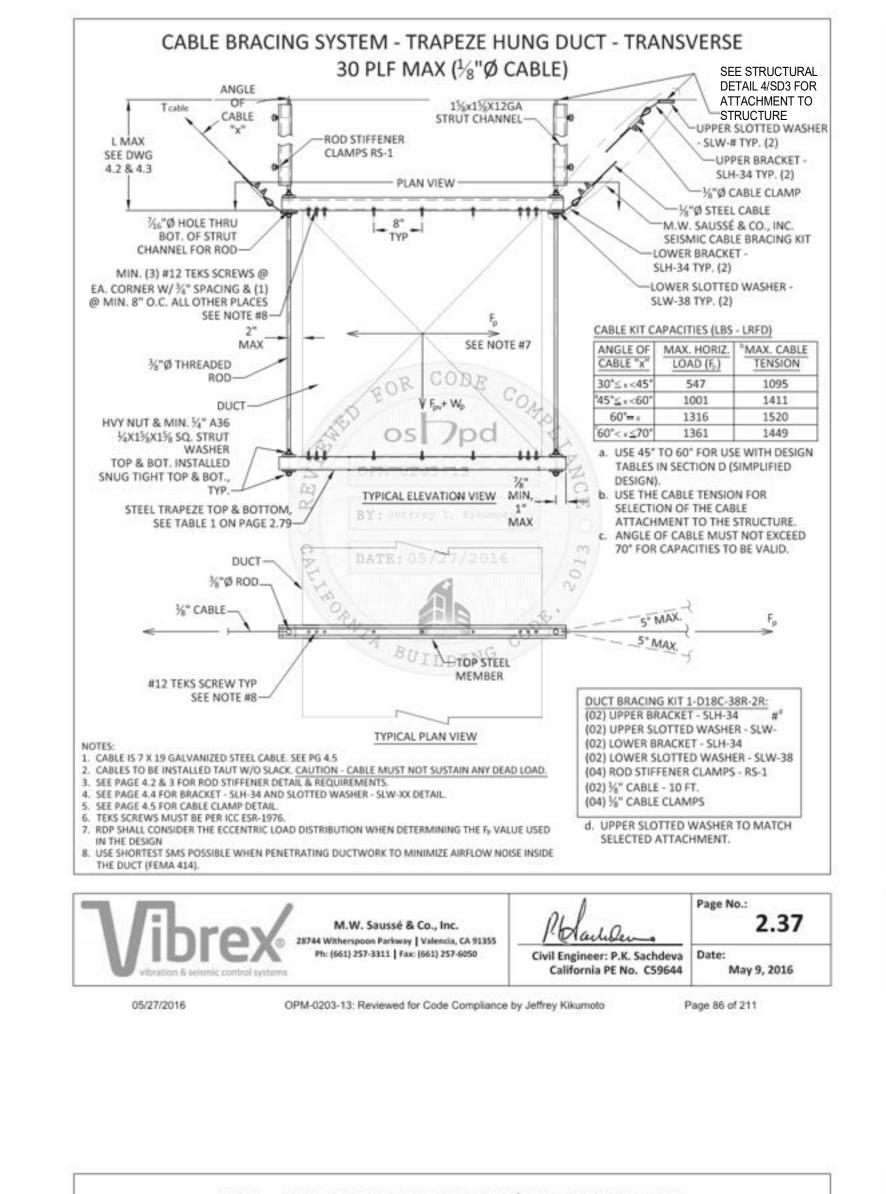
NOTES: 1. REFER TO THE FLOOR PLANS FOR NECK SIZE, CFM, AIR DIFFUSION PATTERN AND FIRE/DAMPER, IF REQUIRED. 2. PROVIDE AIR CONTROL GRID FOR ALL CEILING SUPPLY DIFFUSERS SET AT 90°.

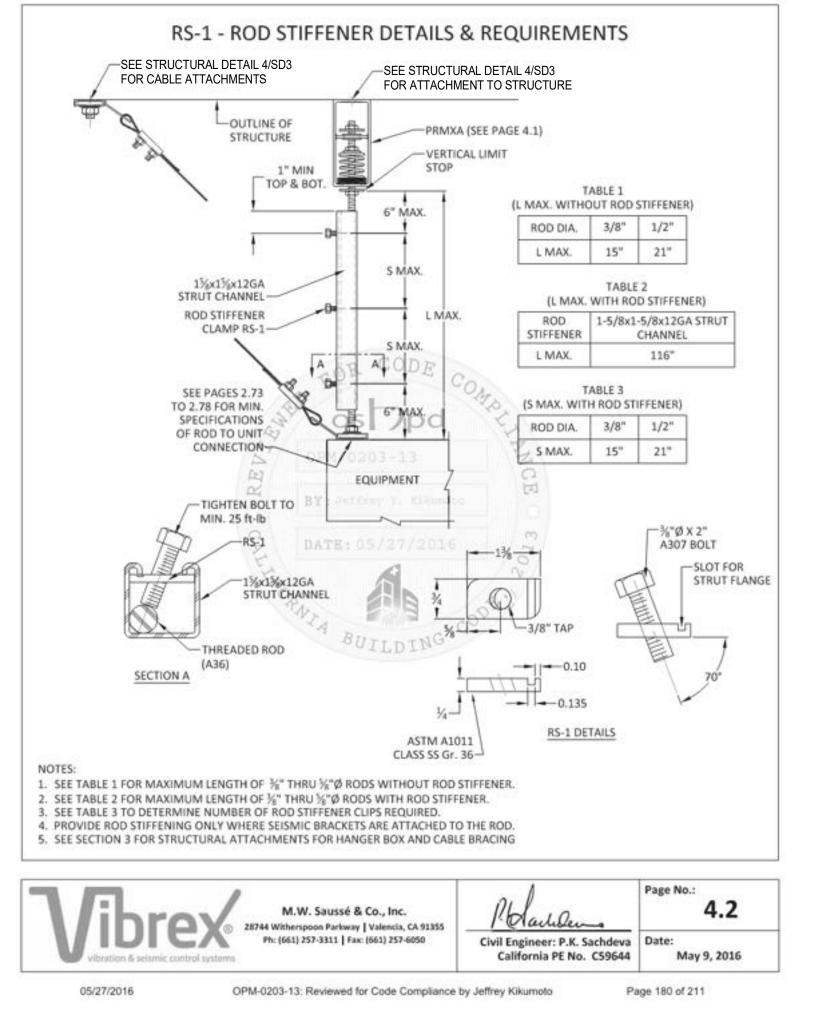




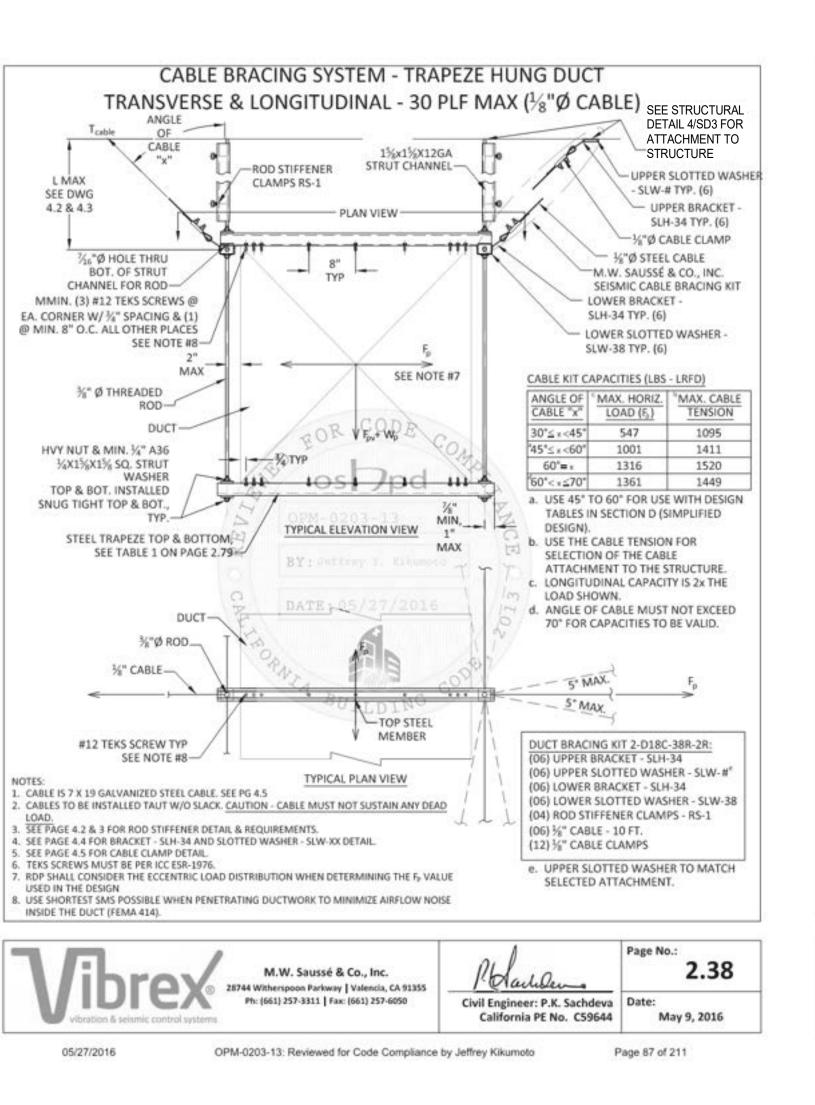
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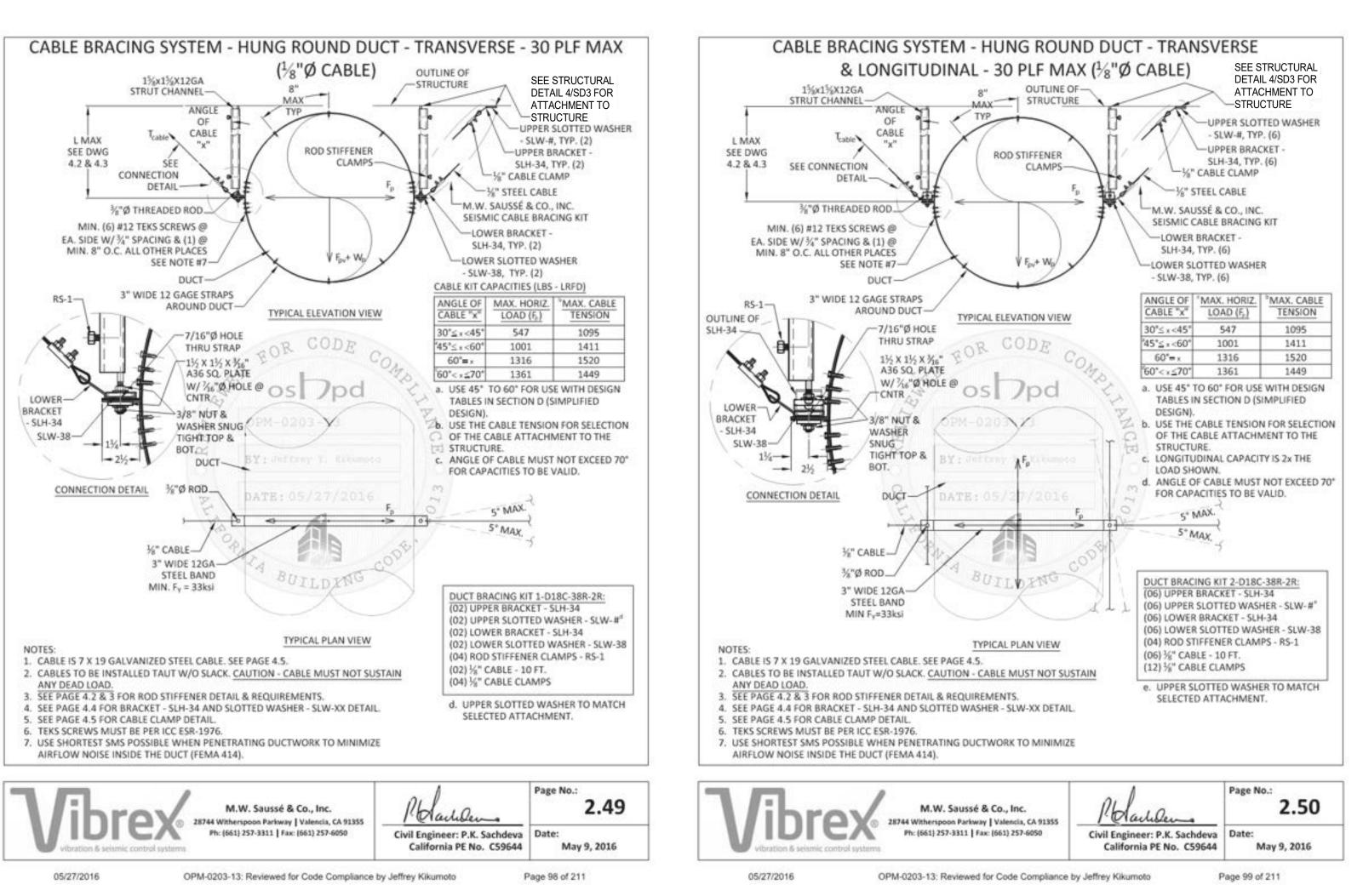
M6.02 - MECHANICAL DETAILS

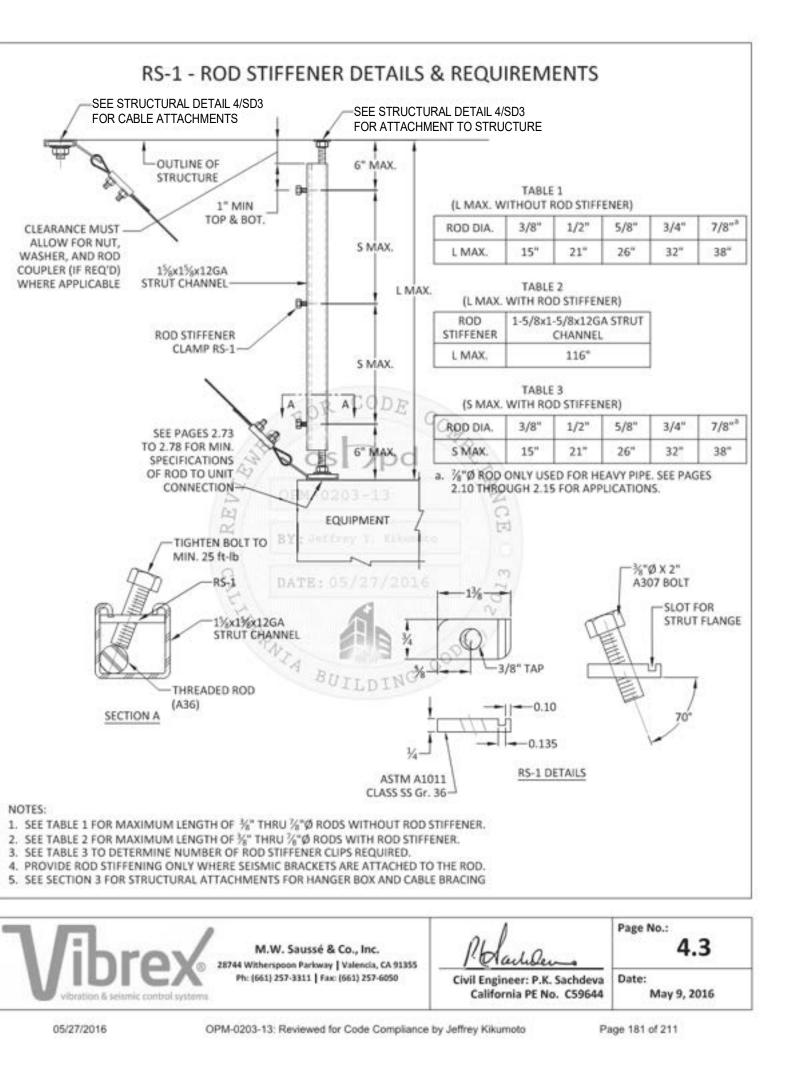


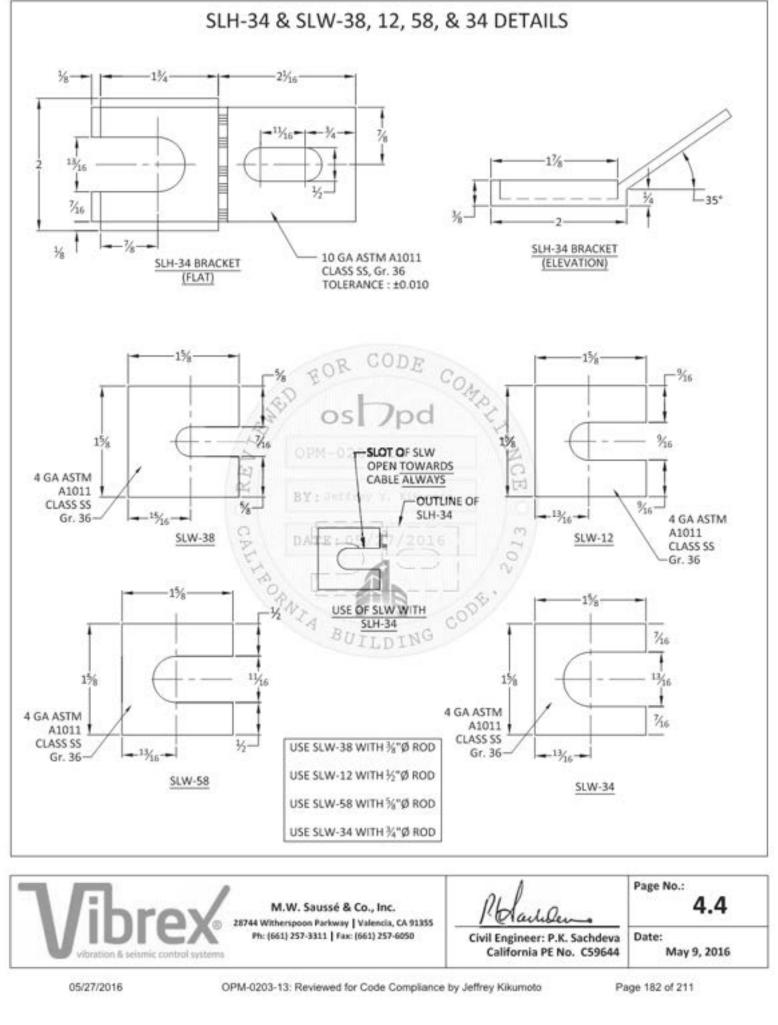


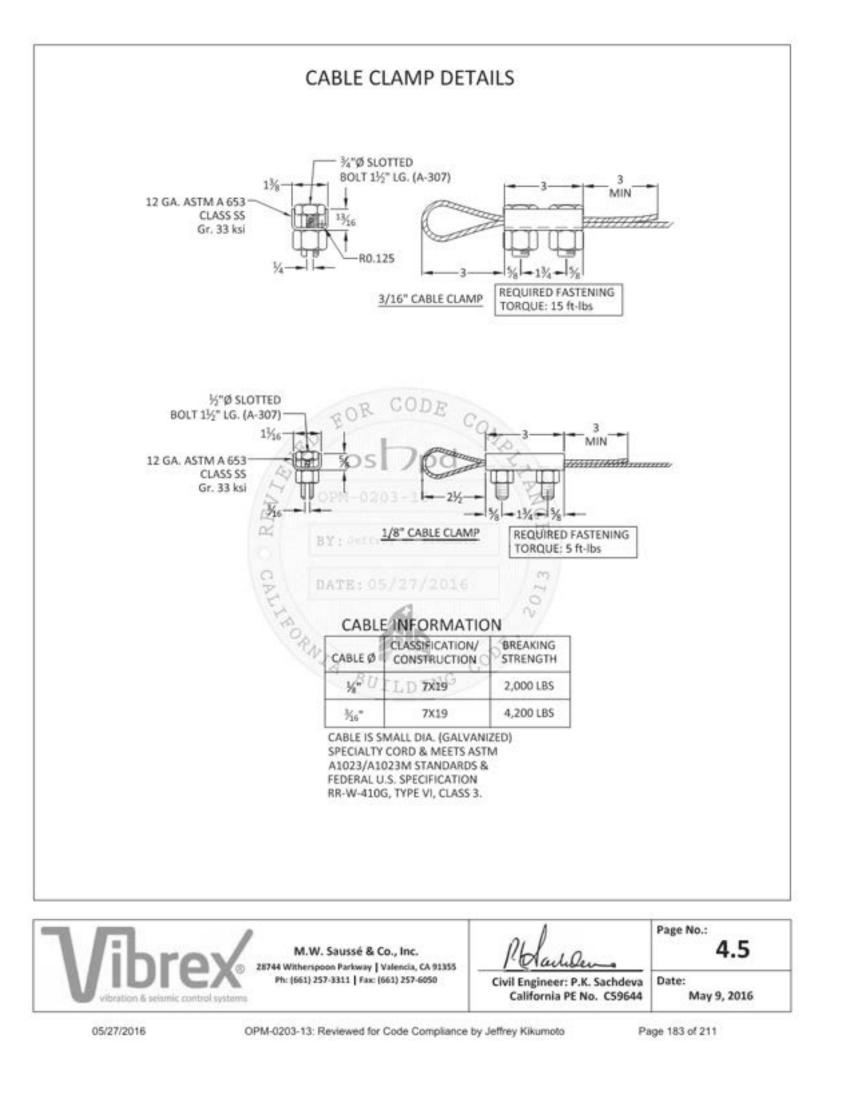
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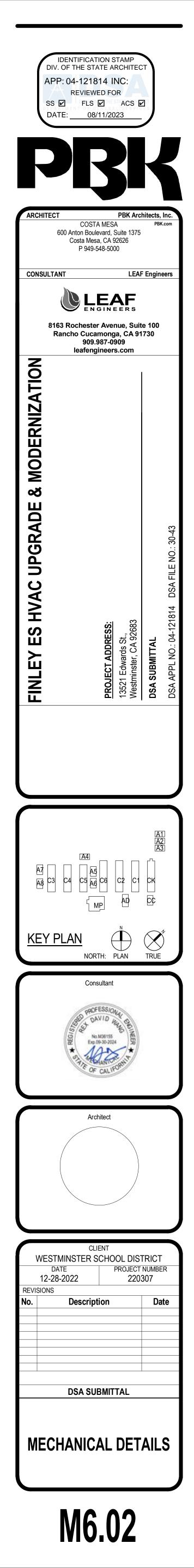


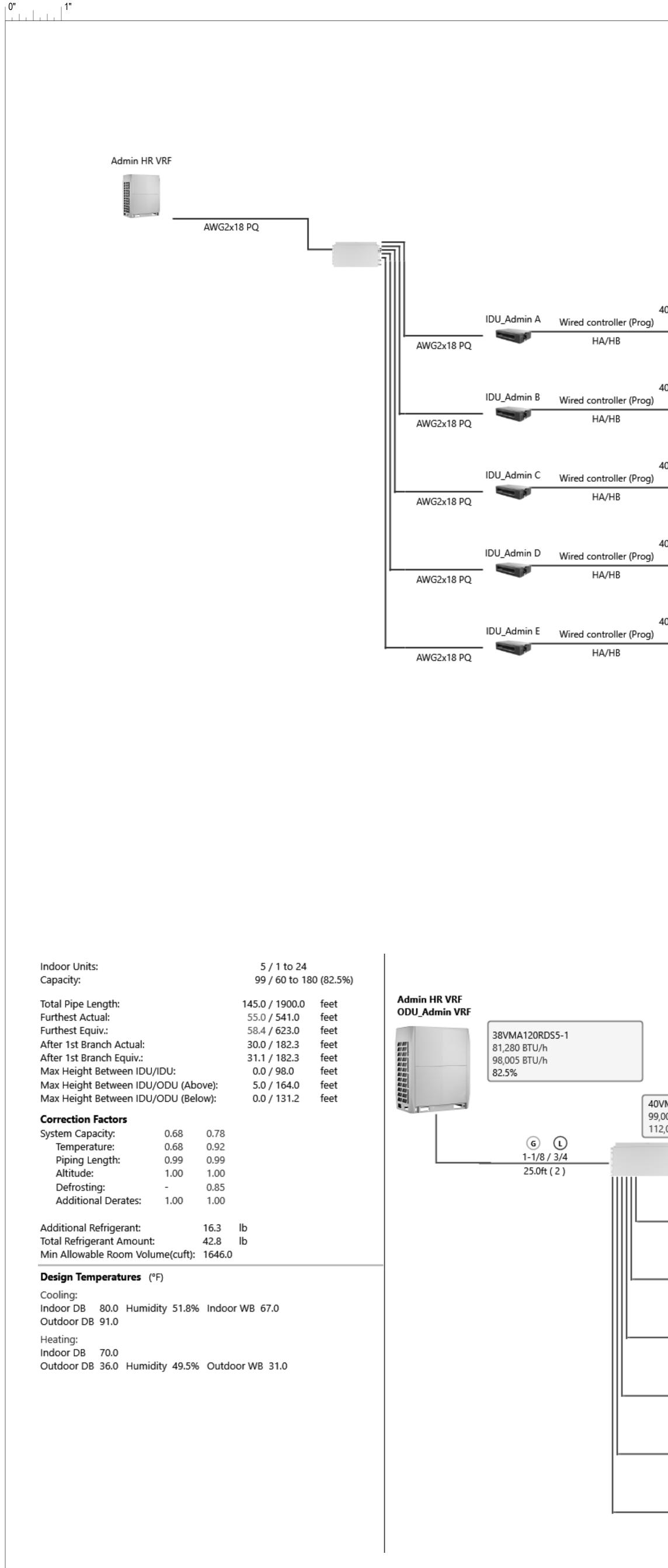












# 40VM900003 Group 1 HA/HB

40VM900003 Group 2 HA/HB

40VM900003 Group 3 4 1 1 HA/HB

40VM900003 Wired controller (Prog) Group 4 · · · · HA/HB

> 40VM900003 Group 5 HA/HB

# 40VMD006M--3 99,000 BTU/h 112,000 BTU/h 6 L 5/8 / 3/8 30.0ft (1) 6 L 1/2 / 1/4 20.0ft (1) G L 5/8 / 3/8 20.0ft (1) G ↓ 1/2 / 1/4 25.0ft (1) G L 1/2 / 1/4 25.0ft (1)

0.0ft ( 0 )

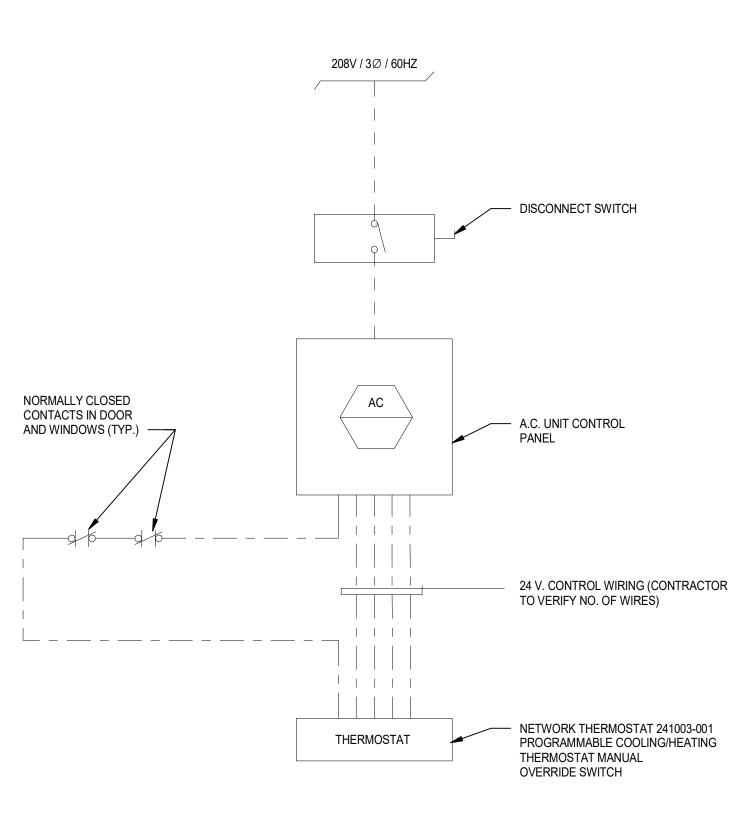
40VMM030A3
24,759 BTU/h (18,175 BTU/h)
29,670 BTU/h
1 / IDU_Admin A / RC
40VMM015A3
12,399 BTU/h (9,205 BTU/h)
14,772 BTU/h
2 / IDU_Admin B / RC
40VMM024A3
19,554 BTU/h (14,463 BTU/h)
23,663 BTU/h
3 / IDU_Admin C / RC
40VMM015A3
12,368 BTU/h (9,213 BTU/h)
14,960 BTU/h
4 / IDU_Admin D / RC
40VMM015A3
12,200 BTU/h (9,109 BTU/h)
14,941 BTU/h
5 / IDU_Admin E / RC

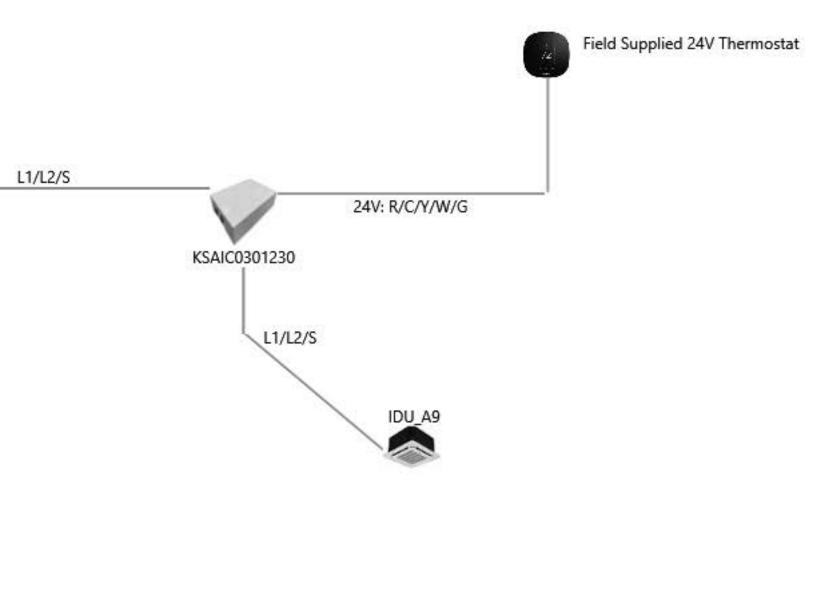
21	AC UNIT WIRING DIAGRAM	

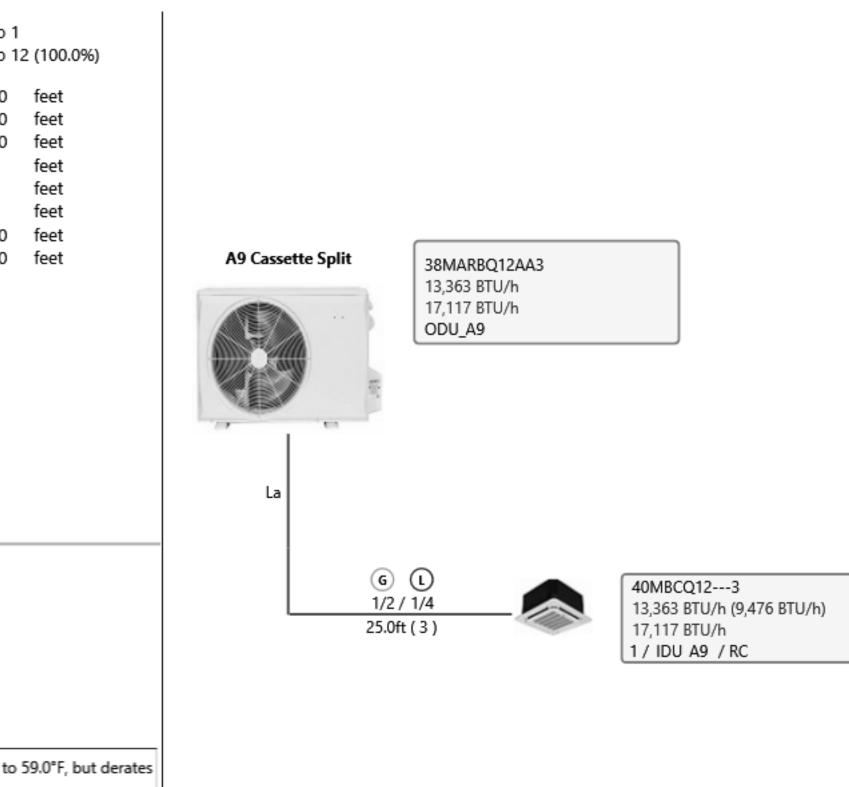
A9 Cassette Split

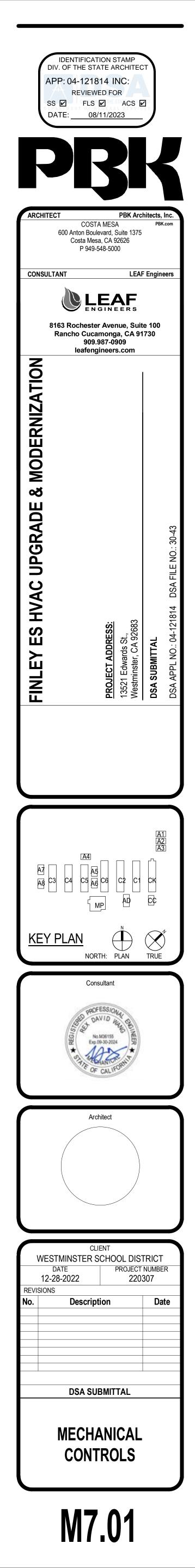
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Indoor Units:				l / 1 to 1
Capacity:			12	2 / 6 to 1
Total Pipe Length:			25.0	) / 82.0
Furthest Actual:			25.0	) / 82.0
Furthest Equiv.:			25.0	) / 82.0
After 1st Branch Actual:				0 / 0.0
After 1st Branch Equiv.:				0 / 0.0
Max Height Between IDU/				0 / 0.0
Max Height Between IDU/				) / 32.0
Max Height Between IDU/	ODU (Bel	low):	10.0	) / 32.0
Correction Factors				
System Capacity:	1.00	1.00		
Temperature:	0.00	0.00		
Piping Length:	0.99	0.99		
Altitude:	1.00	1.00		
Defrosting:	-	1.00		
Additional Derates:	1.00	1.00		
Additional Refrigerant:		0.0	lb	
Total Refrigerant Amount:		2.6	lb	
Min Allowable Room Volu			10	
Design Temperatures (°	F)			
Cooling:	-			
Indoor DB 80.0 Humid	ity 51.8%	6 Indo	or WB 6	57.0
Outdoor DB 91.0				
Heating:				
Indoor DB 70.0				
Outdoor DB 36.0 Humid	ity 49.5%	6 Outd	oor WB	31.0
Indoor Unit Cooling Ra	-		-	rated to
are based upon minim	um and m	aximum	values.	
	RAM			
12" = 1'-0"				









0" 1"	ELECTRICAL SYMBOL LEGEND	GENE
23	<ol> <li>EVERY SYMBOL SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS.</li> <li>DASHED ELEECTRICAL EQUIPMENT GENERALLY INDICATES EXISTING EQUIPMENT.</li> <li>LONG-SHORT-SHORT-LONG DASHING GENERALLY INDICATES MATCH LINE OR DEFINES AREA FOR SPECIAL NOTE.</li> </ol>	<ol> <li>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 SHALL BE REQUIRED TO PERFORM HIS WORK.</li> <li>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 F RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK</li> </ol>
LIGHTIN WIRE(S SWITCH DASHES INDICA ARROW FOR EN AND GF CONDU UIG UIG UIG UIG UIG UIG UIG UIG UIG UI	RCUIT RELATED: GO R POWER CIRCUIT(S) ARROW INDICATES HOME RUN, LONGER TICK(S) INDICATE NEUTRAL (), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE H LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (SERIES OF SHORT DASHES) TES EXISTING WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) TES EXISTING WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) TES EXISTING WIRING BELOW THROUGH ARROW INDICATES PARTIAL CIRCUIT, 'D' ON HOMERUN WIRING TES DEDICATED CIRCUIT: PROVIDE A SEPARATE NEUTRAL CIRCUIT, 'D' ON HOMERUN WIRING PLANTHYNN CONDUCTORS IN A SINGLE RACEWAY, GROWNING COMPENSION OF SX THINNTHWN CONDUCTORS IN A SINGLE RACEWAY, GROWNING OTHERWISE NOTED (FROM SOURCE PROVIDE) COLAD, HOMERUN INDICATES CONNECTION OF NEW LOADS TO EXISTING CIRCUITS IN LIEU OF PANELBOARD UHERE NOTED ON PLANS. ON BOX BIDING FIXTURE. HITING FIXTURE, LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH CONTROL. IR INDICATES CIRCUIT, CROSS HATCHING INDICATES FIXTURE ON EMERGENCY SYSTEM, FOR SOLID WITHIN FIXTURE REFERENCE APPROPRIATE CATEGORY 'N' CIRCUIT RELATED SYMBOL HITING FIXTURE, LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH OL, NUMBER INDICATES ORCUIT, FOR SOLID CIRCLE ATTACHED TO FIXTURE REFERENCE APPROPRIATE ORY 'A' CIRCUIT, REATED SOLID CIRCLE ATTACHED TO FIXTURE REFERENCE APPROPRIATE ORY 'A' CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY 'A' TRELATED SYMBOL HITING FIXTURE, LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH OL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY 'A' TRELATED SYMBOL HITING FIXTURE, LETTER INDICATES TYPE, SMALL LETTER INDICATES SWITCH OL, NUMBER INDICATES CIRCUIT, FOR SOLID CIRCLE REFERENCE APPROPRIATE CATEGORY 'A' TRELATED SYMBOL HITING FIXTURE ON ERRORMONY ON DRAWINGS BY ACKET MOUNTED FIXTURE OR DEVICE SHIT FIXTURE ON ERRORMONY ON DRAWINGS HITING LETTER INDICATES TYPE, NUMBER INDICATES SPID TI MOMENTARY 'MINDICATES SPOTON INFORCTION NEXT TO SWITCH INDIC	<ul> <li>RESPONSIBILITES, FALURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK ACCORRACE WITH THE CONTRACT DOCUMENTS.</li> <li>THE CONTRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS INCECESSARY FOR EXECUTI- AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE. COUNTY AND LOCAL GOVERNIFTAL AGENO TO INSTALL WORK TO ACCOMPLIES SAD COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCES, AMBIGUTES ON COMPLETS INFOLLABLE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TME FOR CLARRICATION. ANY SUCH CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TME FOR CLARRICATION. ANY SUCH CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TME FOR CLARRICATION. ANY SUCH CONFLICTS INTO CLARRIE PRION TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.</li> <li>PROVDE TEMPORARY POWER RACLITIES AND CONNECTIONS FOR ALL FEEDERS. BRANCH CIRCUTS OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING BIS CONNECTIONS FOR ALL FEEDERS. BRANCH CIRCUTS ON SIGNAL AND COMMUNICATIONS SYSTEMS BEINGED SID. WORK IN EXISTING SWYICHADRICS OR PAREL BARLE ENCLUEDE IN THE CONTRACTOR SID. WORK IN EXISTING SWYICHADRIS OR PAREL DATES AND OVER THE CONTRACTORS BID. WORK IN EXISTING SWYICHADRIS OR PAREL COORDINATED WITH THE CONTRACTOR SID. WORK IN EXISTING SWYICHADRIS OR THE DATE DATES SHALL BE COORDINATED WITH THE CONTRACTOR SID. WORK IN EXISTING SWYICHADRIS OR FORMEL TO DEMONSTRATE THE UPPER THE ALL REQUIREMENTS OF THE CONTRACTOR SHALL PROVIDE COMPETENT FRESONEL TO DEMONSTRATE THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL BE MADE BY THE CONTRACTOR.</li> <li>ATTER ALL REQUIREMENTS OF THE CONTRACTOR SHALL BE MADE BY THE CONTRACTOR.</li> <li>FURNISH A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLET OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL BE MADE BY THE CONTRACTOR.</li></ul>
+ ↓     DUAL T       + ℝ     CEILING       + ೕ      CEILING       + ೕ      CEILING       (HB)     CEILING	AOUNT OCCUPANCY SENSOR WITH DIMMING CONTROLS ECHNOLOGY CEILING MOUNTED OCCUPANCY SENSOR G MOUNTED RESTROOM OCCUPANCY SENSOR G MOUNTED CORRIDOR OCCUPANCY SENSOR G MOUNTED HIGH CEILING OCCUPANCY SENSOR	<ol> <li>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.</li> <li>WHERE OUTLETS OCCUR AT TACKABLE WALL PANELS OR OTHER WALL FINISHES. PROVIDE EXTENSION RINGS AS REQUIRED THAT NO SPACE WILL EXIST BETWEEN DEVICE PLATE AND BACKBOX PER CALIFORNIA ELECTRICAL CODE 314.20 SEE ARCHITECTURAL ELEVATIONS FOR WALL FINISHES AND LOCATIONS.</li> <li>COORDINATE LOCATIONS OF ALL SEISMIC SEPARATIONS.</li> </ol>
Image: Construct on the second of the se	NNECT SWITCH. FRAME SIZE/FUSE SIZE/POLES AS INDICATED, "NF" INDICATES NON-FUSIBLE. NEMA OSURE UNLESS OTHERWISE NOTED. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED SWAY. ALL DISCONNECT SWITCHES SHALL BE 30/NF/3 UNLESS OTHERWISE NOTED E CIRCUIT BREAKER IN INDIVIDUAL ENCLOSURE ETIC MOTOR CONTROLLER. NUMBER INDICATES NEMA SIZE. STARTER NEMA SIZE SHALL BE "NEMA 1" S OTHERWISE NOTED NATION DISCONNECT SWITCH / MOTOR CONTROLLER CTOR	<section-header><section-header><section-header><text><text><list-item><list-item><text><text><text><text><text><text><text></text></text></text></text></text></text></text></list-item></list-item></text></text></section-header></section-header></section-header>
_	NDING CONNECTION TO GROUNDING ELECTRODE AS DEFINED IN CEC ARTICLE 250	APPLICABLE CODES
(E) (R) ⊕ EQUIPM (RR) ⊕ EXISTIN LOCATI (ER) ⊕ EQUIPM ⊕ NO TAG	MODEL: MENT WITH "E" ADJACENT IS EXISTING TO REMAIN. NG EQUIPMENT WITH "R" ADJACENT IS TO BE COMPLETELY DISCONNECTED AND REMOVED. NG EQUIPMENT WITH "RR" ADJACENT IS TO BE DISCONNECTED, REMOVED AND RELOCATED TO NEW ION AND RECONNECTED AS REQUIRED. MENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION. INDICATES NEW EQUIPMENT. T DESIGNATION WITH PREFIX "(E)" DENOTES EXISTING CIRCUIT AND EQUIPMENT IS TO REMAIN.	PARTIAL LIST OF APPLICABLE CODES AS OF JANUARY 1, 2020 * 2022 CALIFORNIA ADMINISTRATIVE CODE (CAC), PART 1, TITLE 24 CCR * 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR (2018 INTERNATIONAL BUILDING CODE, VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR (2017 NATIONAL ELECTRICAL CODE (CEC), PART 6, TITLE 24 CCR 2019 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 CCR (2018 INTERNATIONAL FIRE CODE (CFC), PART 6, TITLE 24 CCR (2018 INTERNATIONAL FIRE CODE (CFC), PART 9, TITLE 24 CCR (2018 INTERNATIONAL FIRE CODE (CFC), PART 9, TITLE 24 CCR (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR (2018 INTERNATIONAL EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR (2018 INTERNATIONAL EXISTING BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR 2019 CALIFORNIA REFERENCED STANDARDS CODE, PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS 2016 ASME A17.1(CSA B44-13 SAFETY CODE FOR ELEVATORS AND ESCALATORS (PER 2019 CBC PART 2 CH 35) NOTE: CAL/OSHA ELEVATOR UNIT ENFORCES CCR TITLE 8 AND USES THE 2004 ASME A17.1 BY ADOPTION

# **GENERAL NOTES**

TRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY ZE HIMSELF WITH THE EXISTING CONDITIONS AND BY SUBMITTING A BID, ACCEPTS THE CONDITIONS UNDER WHICH HE REQUIRED TO PERFORM HIS WORK.
BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA GS AND SPECIFICATIONS.) HE SHALL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS SIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK IN ANCE WITH THE CONTRACT DOCUMENTS.
TRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION PLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.
TRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS LL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT VTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS OR SIGNAL AND ICATIONS SYSTEMS BEING DISCONNECTED IN ORDER TO MAINTAIN SYSTEMS IN OPERATION.
RRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER WHEN AN INTERRUPTION IS NECESSARY, DOWN MUST BE COORDINATED WITH THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE AND OVERTIME PAY INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANEL BOARDS SHALL BE ATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.
L REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED. REPRESENTATIVES OF THE WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE DN OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE LL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCETANCE FROM EACH NTATIVE.
A ONE YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLETION.
CONNECTIONS TO OWNER FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR.
ETHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONARY WALLS, GRADEBEAMS, DR STRUCTURAL STEEL MEMBER SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, "ING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SEALED IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL. FLOOR OR CEILING EXACT AND LOCATION OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL D.
NNECTIONS TO VIBRATING EQUIPMENT AND AT SEISMIC SEPARATIONS SHALL BE FLEXIBLE STEEL CONDUIT IN DRY LOCATIONS, AND LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, TONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS.
NT OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE AND CONNECTION METHODS IN HVAC AIR-PLENUMS SHALL BE D FOR USE IN PLENUMS AND SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE.
XPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND

## UTILITY PENETRATIONS NOTE

# APPLICABLE CODES

- 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.

# 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 2019 CBC, SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:

- 1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
- 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.
- 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: 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. 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 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 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 EX 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 #) #\_\_\_\_\_



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

ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S

**UL LISTINGS NOTE** 

11B-308.2.2

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

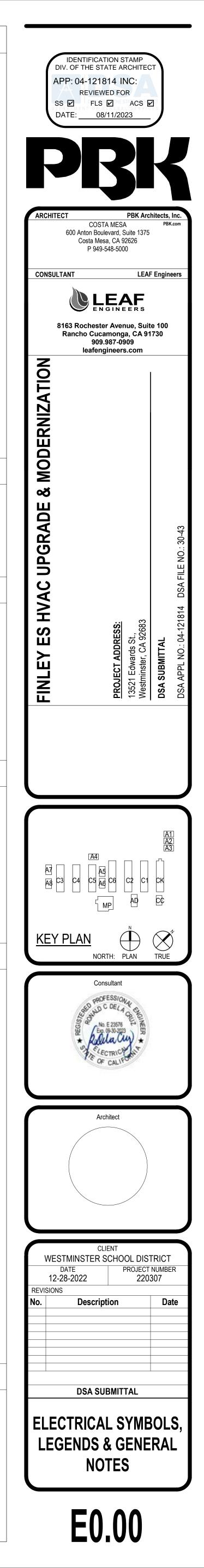
11B-308.3.2

ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE CEILING OR WALL.

11B-308.2.1

NOTE:

HUMIDITY SENSORS).



	used to demons	cruce compliance	e with requireme	ents in <u>9110.9</u> , §	911	<u>0.12(c), §130.0, §</u>	9130	v.1, 9140.6, an	a <u>9141.0(b)2</u> )	orii	naoor lig	nting scop	es using the
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New Lighting		or (check all that	сарріуј.		aicu	nation Method		Area (n	.~)	can	ulation	wiethod	Area
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Altered Light	ting system				.011	ibiete polioing		22,50	<u>,                                     </u>				
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spaces must not be combined for	Building	Area Category §140.6(c)2	Additional §140.6(c)2G	§140.6(c)3	=	Total Allowed	2	Designed	Credits		= (W	Adjusted /atts)	05 Must be
compliance per §140.6(b)1.	<u>§140.6(c)1</u>		(+)	(+)		(Watts)		(Watts)	<u>§140.6(a)2</u> (-)		0.0000	cludes stments	<u>§140.</u>
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CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

Project Nan	E OF COMPLIANCE									
Project Name: Finley Elementary - HVAC Upgrade & Modernization						Report Page:				
Project Add	ress: 13521 Edwards St. Westmins	ter CA. 92683			Date Prepared	i:				
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F. ADDITIC	NAL REMARKS									
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H. INDOOR LIGHTING CONTROLS (Not Including PAFs)

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

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STATE OF CALIFORNIA
Indoor Lighting

NRCC-LTI-E (Created 04/21)		CALIFORNIA ENERGY COMMISSIO
CERTIFICATE OF COMPLIANCE		NR
Project Name: Finley Elementary - HVAC Upgrade & Modernization	Report Page:	Pa
Project Address: 13521 Edwards St. Westminster CA. 92683	Date Prepared:	12
S. DAYLIGHT DESIGN POWER ADJUSTMENT FACTOR (PAF)	23	
This Section Does Not Apply		,

T. DECLARATION OF REQUIRED CERTIFICATES OF INSTALLATION
Table Instructions: Selections have been made based on information provided in previous tables of this document. If any selection needs to be changed, please explain with
Table E. Additional Remarks. These documents must be provided to the building inspector during construction and can be found online at https://ww2.energy.ca.gov/

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v	ES	NO	Form/Title	Field In	ispect
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6	•	0	NRCI-LTI-01-E - Must be submitted for all buildings		
0	0	۲	NRCI-LTI-02-E - Must be submitted for a lighting control system, or for an Energy Management Control System (EMCS), to be recognized for compliance.		
(	0	۲	NRCI-LTI-04-E - Must be submitted for two interlocked systems serving an auditorium, a convention center, a conference room, a multipurpose room, or a theater to be recognized for compliance.		
(	0	۲	NRCI-LTI-05-E - Must be submitted for a Power Adjustment Factor (PAF) to be recognized for compliance.		
	_	-	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for		- 8

0	۲	NRCI-LTI-06-E - Must be submitted for additional wattage installed in a video conferencing studio to be recognized for compliance.		
U. DECLAR	RATION OF	REQUIRED CERTIFICATES OF ACCEPTANCE		2
Table E. Add	ditional Rei	ections have been made based on information provided in previous tables of this document. If any selection needs to be changed, narks. These documents must be provided to the building inspector during construction and any with "-A" in the form name mus ician Certification Provider (ATTCP). For more information visit: <u>http://www.energy.ca.gov/title24/attcp/providers.html</u>		Contraction of the second s
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۲	0	NRCA-LTI-02-A - Must be submitted for occupancy sensors and automatic time switch controls.		
C	۲	NRCA-LTI-03-A - Must be submitted for automatic daylight controls.		
۲	0	NRCA-LTI-04-A - Must be submitted for demand responsive lighting controls.		
C	۲	NRCA-LTI-05-A - Must be submitted for institutional tuning power adjustment factor (PAF).		
0		NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).		
0	6	NRCA-ENV-03-F - Must be submitted for daylighting design power adjustment factors (PAF).		

April 2021

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

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April 2021



April 2021

STATE OF CALIFORNIA
Indoor Lighting

CERTIFICATE OF COM	PLIANCE							N	RCC-LTI	
the second s	ey Elementary - HVAC Upgrade & Moder	mization		Report Page:	Page 3 of					
Project Address: 135	21 Edwards St. Westminster CA. 92683			Date Prepared:				1	2-15-202	
	ase include lighting controls for condition he lighting controls section of the Compl							on of thi	s table	
Building Level Contro	ls									
	01	1			02			03	3	
	Mandatory Demand Response			Shut-	Off Controls			Field Inspector		
	<u>§110.12(c)</u>		<u>5130.1(c)</u>					Pass	Fail	
	Required > 10,000 SF			See Area/Sp	oace Level Control	S				
Area Level Controls								er - 20116	0.000	
04	05	06	07	08	09	10	11		12	
Area Description	Complete Building or Area Category Primary Function Area	Area Controls §130.1(a)	Multi-Level Controls	Shut-Off Controls	Primary/Skylit Daylighting	Secondary Daylighting	Interlocked Systems	Field I	nspecto	
			§130.1(b)	§130.1(c)	§130.1(d)	§140.6(d)	§140.6(a)1	Pass	Fail	
CLASSROOM	School Building	Manual ON/ OFF	Dimmer	Occ. Sensor	NA	NA				
ADMIN	Office Building	Manual ON/ OFF	Dimmer	Occ. Sensor	NA	NA				
RESTROOM	School Building	Manual ON/ OFF	Dimmer	Occ. Sensor	NA	NA				
*NOTES: Controls with	a * require a note in the space below of	xplaining how con	npliance is achie	ved.	1	1	3			
	nary/Skylight Daylighting: Exempt becau	850 B B B W 7 C B B B B B B B B B B B B B B B B B B			P	an Sheet Show	ing Davlit Zo	nee		

I. LIGHTING POWER ALLOWANCE	COMPLETE BUILDING OR AREA CATEGORY METHO	DS				2	
Table Instructions: Complete the table allowances per <u>§140.6(c)</u> or adjustme	e for each area complying using the Complete Building or A nts per <u>§140.6(a)</u> are being used.	Area Category Methods	per <u>§140.6(</u>	<u>b)</u> . Indicate if	additional lighting (	power	
Conditioned Spaces							
01	02	03	04	05	06 Additional Allowances / Adjustment		
Area Description	Complete Building or Area Category Primary Function Area	Allowed Density	Area	Allowed Wattage (Watts)			
	Primary Punction Area	(W/ft <sup>2</sup> )	(ft <sup>2</sup> )		Area Category	PAF	
CLASSROOM	School Building	0.65	21,563	14,015.95			
		TOTAL:	21,563	14,015.95	See Tables J or	P for detail	

CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

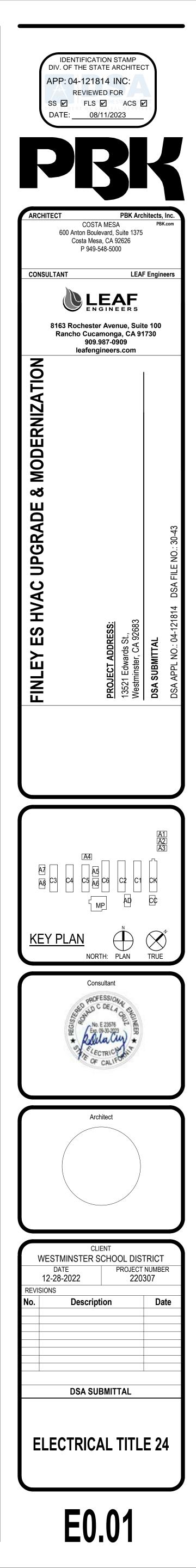
April 2021

STATE OF CALIFORNIA			
Indoor Lighting			6
NRCC-LTI-E (Created 04/21) CERTIFICATE OF COMPLIANCE			CALIFORNIA ENERGY COMMISSION
	ton, W/AC Unarada & Madamization	Report Dags	
and the second	tary - HVAC Upgrade & Modernization	Report Page:	Page 6 o
Project Address: 13521 Edward	Is St. Westminster CA. 92683	Date Prepared:	12-15-20
DOCUMENTATION AUTHOR	'S DECLARATION STATEMENT		1
I certify that this Certificate of C	Compliance documentation is accurate and com	plete	
Documentation Author Name:	NICOLE OROPEZA	Documentation Author Sign	ature: Nicole Oropeza
Company:	LEAF ENGINEERS	Signature Date:	12-15-2022
Address:	8163 ROCHESTER AVE.	CEA/ HERS Certification Ide	ntification (if applicable):
City/State/Zip:	RANCHO CUCAMONGA, CA. 91730	Phone:	909-987-0909
RESPONSIBLE PERSON'S DECLA	RATION STATEMENT		
I certify the following under pe	nalty of perjury, under the laws of the State o	f California:	
1. The information provided or	n this Certificate of Compliance is true and con	rect.	
		pt responsibility for the building designed	gn or system design identified on this Certificate of
Compliance (responsible des	signer)		
	formance specifications, materials, componen nform to the requirements of Title 24, Part 1 a		building design or system design identified on this
	영국 전쟁을 통해 이 집에 있는 것은 것은 것은 동안을 했다. 이 것은 것은 것은 것은 것은 것은 것은 것은 것을 것을 수 있는 것은 것을 하는 것을 수 있다. 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 수 있다. 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 하는 것을 수 있다. 것을 수 있는 것을 수 있는 것을 하는 것을 수 있다. 것을 수 있는 것을 수 있는 것을 수 있는 것을 수 있는 것을 수 있다. 것을 수 있는 것을 수 있다. 것을 수 있는 것을 수 있는 것을 수 있는 것을 수 있는 것을 수 있다. 것을 수 있는 것을 수 있다. 것을 것을 수 있는 것을 수 있다. 것을 수 있는 것을 수 있다. 것을 수 있는 것을 수 있다. 것을 수 있는 것을 것을 수 있는 것을 것을 수 있는 것을 수 있는 것을 것을 수 있는 것을 것을 것을 것을 것을 것을 것을 수 있는 것을 것을 것 같이 않는 것을 것을 것 같이 않는 것을 것 같이 않는 것이 않는 것을 것 같이 않는 것이 않는 것이 없다. 것을 것 같이 않는 것 같이 않는 것 않는 것 같이 않는 것 않는 것 같이 않는 것 않는 것 같이 않는 것 않는 것 않는 것 같이 않는 것 같이 않는 것 않는 것 않는 것 않는 것 같이 않는 것 않는 것 않는 것 같이 않는 것 않는 것 않는 것 같이 않는 것 않는 것 않는 것 않는 것 같이 않는 것 같이 않는 것 않는 것 않는 것 않는 것 않는 것 같이 않는 것 않는 것 않는 것 같이 않는 것 같이 않는 것 같이 않는 것 같이 않는 것 않는 것 같이 않는 것 않는		it with the information provided on other applicable y for approval with this building permit application.
to the enforcement agency f			ilding permit(s) issued for the building, and made availab tificate of Compliance is required to be included with the
Responsible Designer Name:	RONALD DELA CRUZ	Responsible Designer Signal	h marcing

Responsible Designer Name:	RONALD DELA CRUZ	Responsible Designer Sig	nature: DolaCury	
Company :	LEAF ENGINEERS	Date Signed:	G15-2022	
Address:	8163 ROCHESTER AVE.	License:	E23576	
City/State/Zip:	RANCHO CUCAMONGA, CA. 91730	Phone:	909-987-0909	

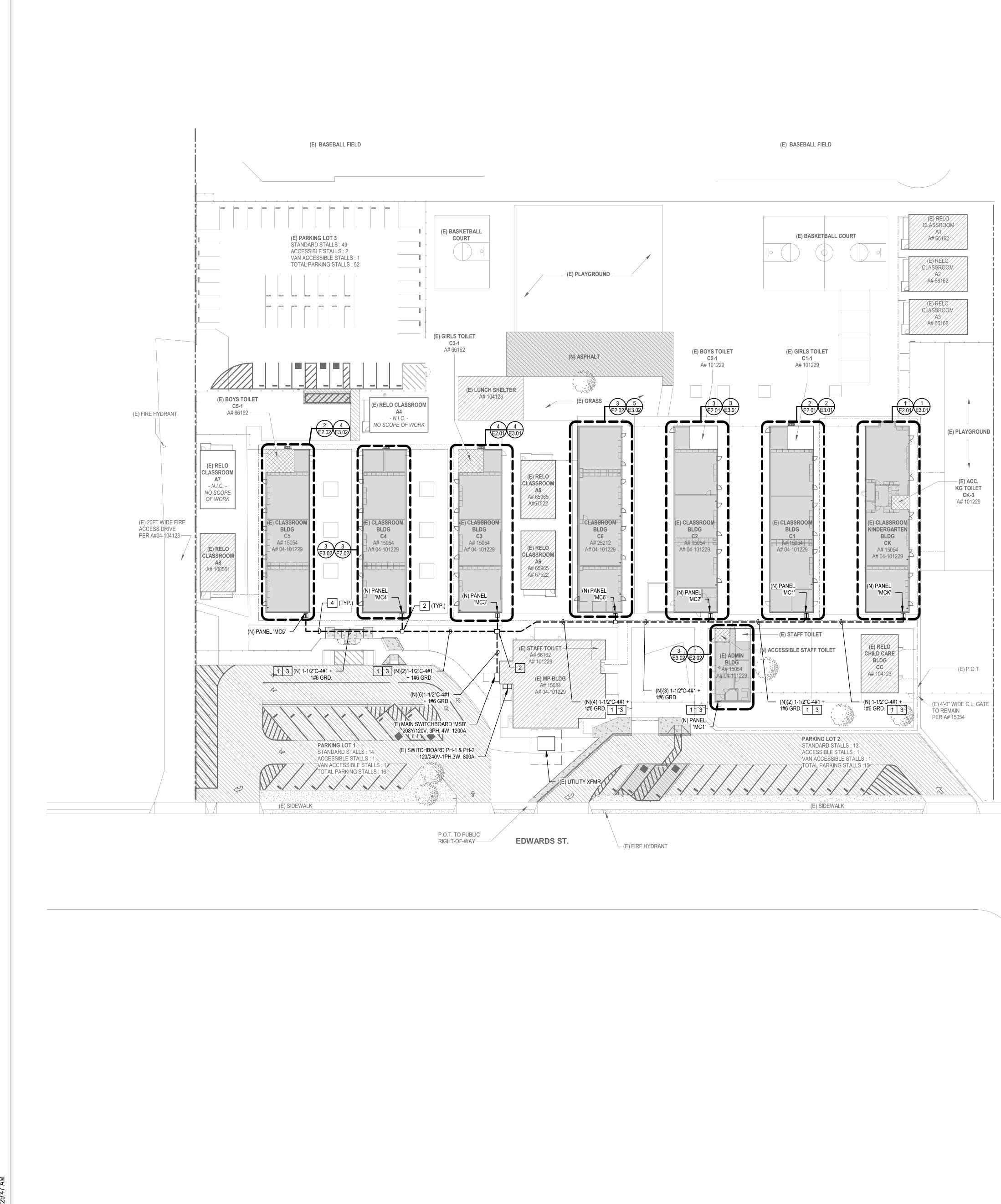
CA Building Energy Efficiency Standards - 2019 Nonresidential Compliance: http://www.energy.ca.gov/title24/2019standards

April 2021



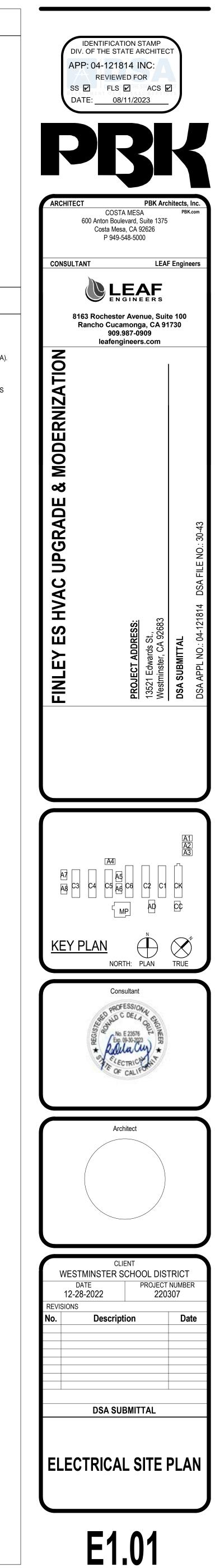
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L 0"

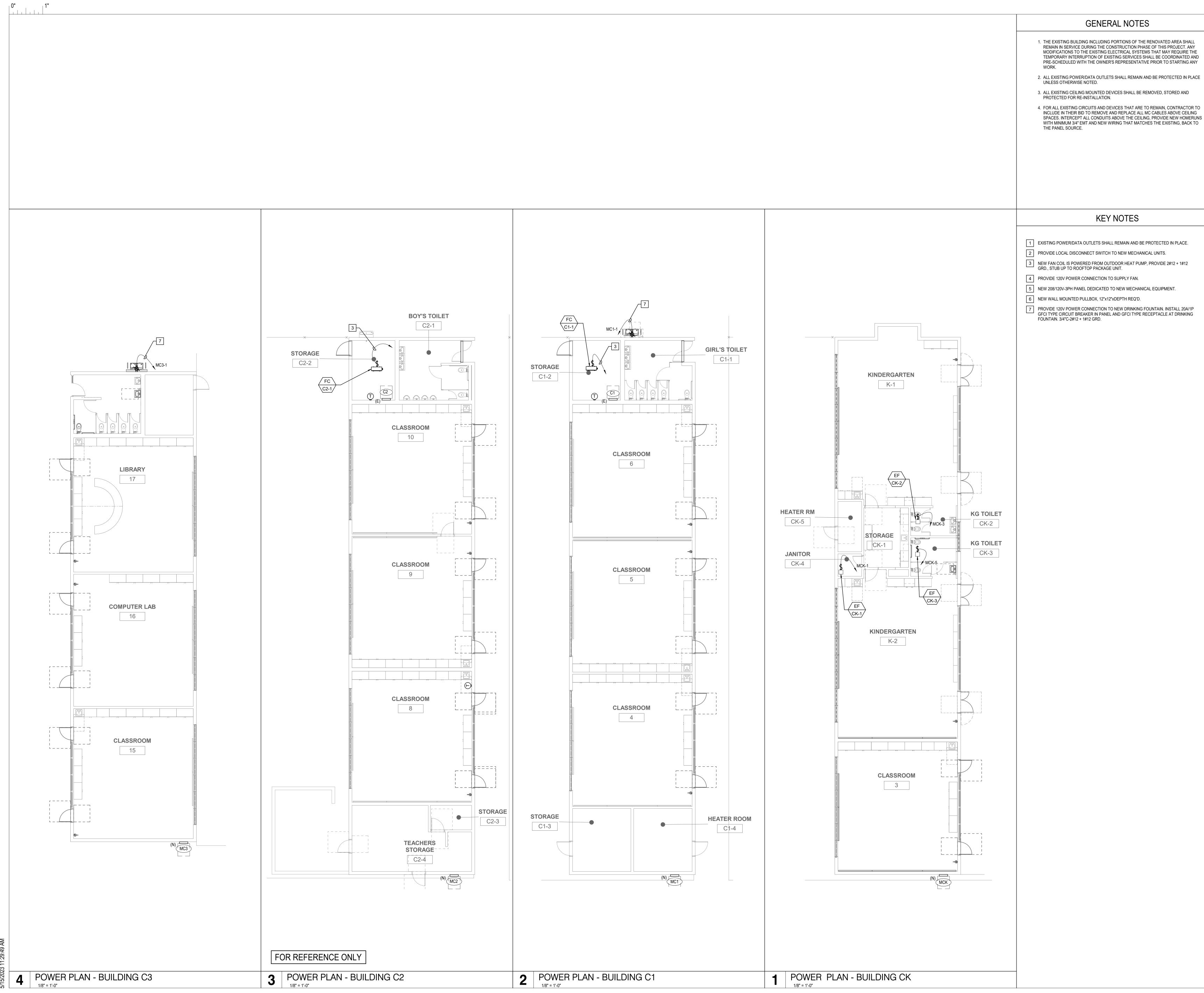


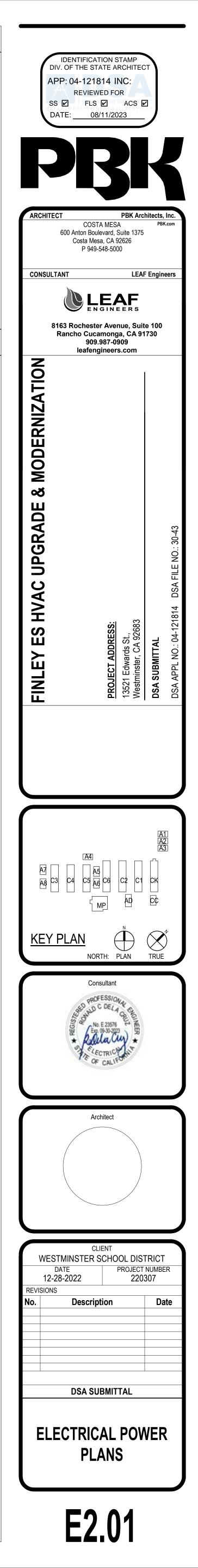
1 ELECTRICAL SITE PLAN 1" = 30'-0"

GENERAL NOTES
<ol> <li>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.</li> <li>COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.</li> <li>CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.</li> <li>CONTRACTOR SHALL BE RESPONSIBLE TO DEMOLISH TEMPORARY INFRASTRUCTURE</li> </ol>
SERVING THE INTERIM HOUSING AND BRING IT BACK TO ORIGINAL CONDITION, UPON COMPLETION OF THE MODERNIZATION PROJECT.
KEY NOTES
<ol> <li>PROVIDE UNDERGROUND CONDUIT AND WIRING.</li> <li>PROVIDE AND INSTALL IN-GROUND H-20 TRAFFIC RATED PULLBOX . SIZE PER NEC 314.28(// 3 SEE SINGLE LINE DIAGRAM FOR WIRE SIZING AND QUANTITY ON SHEET E5.01.</li> <li>SAWCUT, TRENCH AND EXCAVATE AS REQUIRED TO INSTALL CONDUITS AND FEEDERS AS INDICATED. BACKFILL, TAMP AND RESURFACE TO ORIGINAL CONDITION. STUB UP INTO EXTERIOR ABOVE GROUND JUNCTION BOX AND CONNECT LOAD SIDE TO NEW PANELBOARD. REFER TO DETAIL 6/E6.01 FOR FURTHER CONDUIT TRENCHING REQUIREMENTS.</li> </ol>

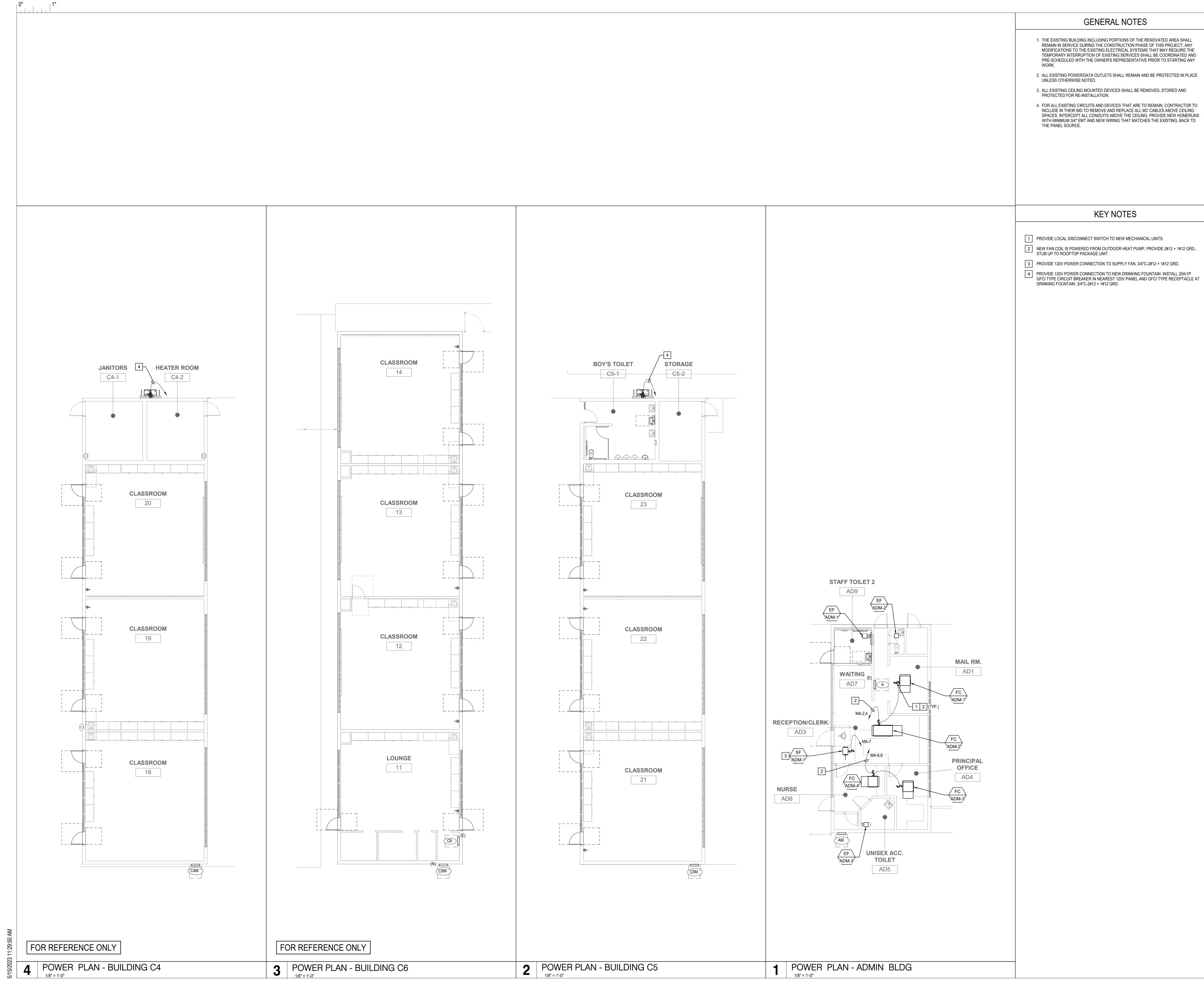


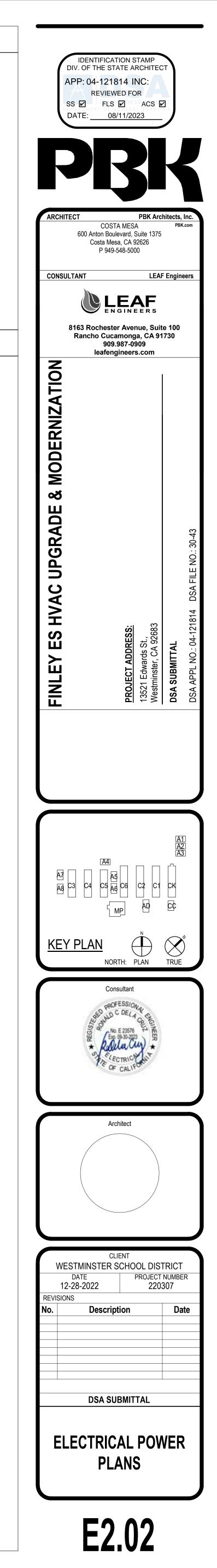


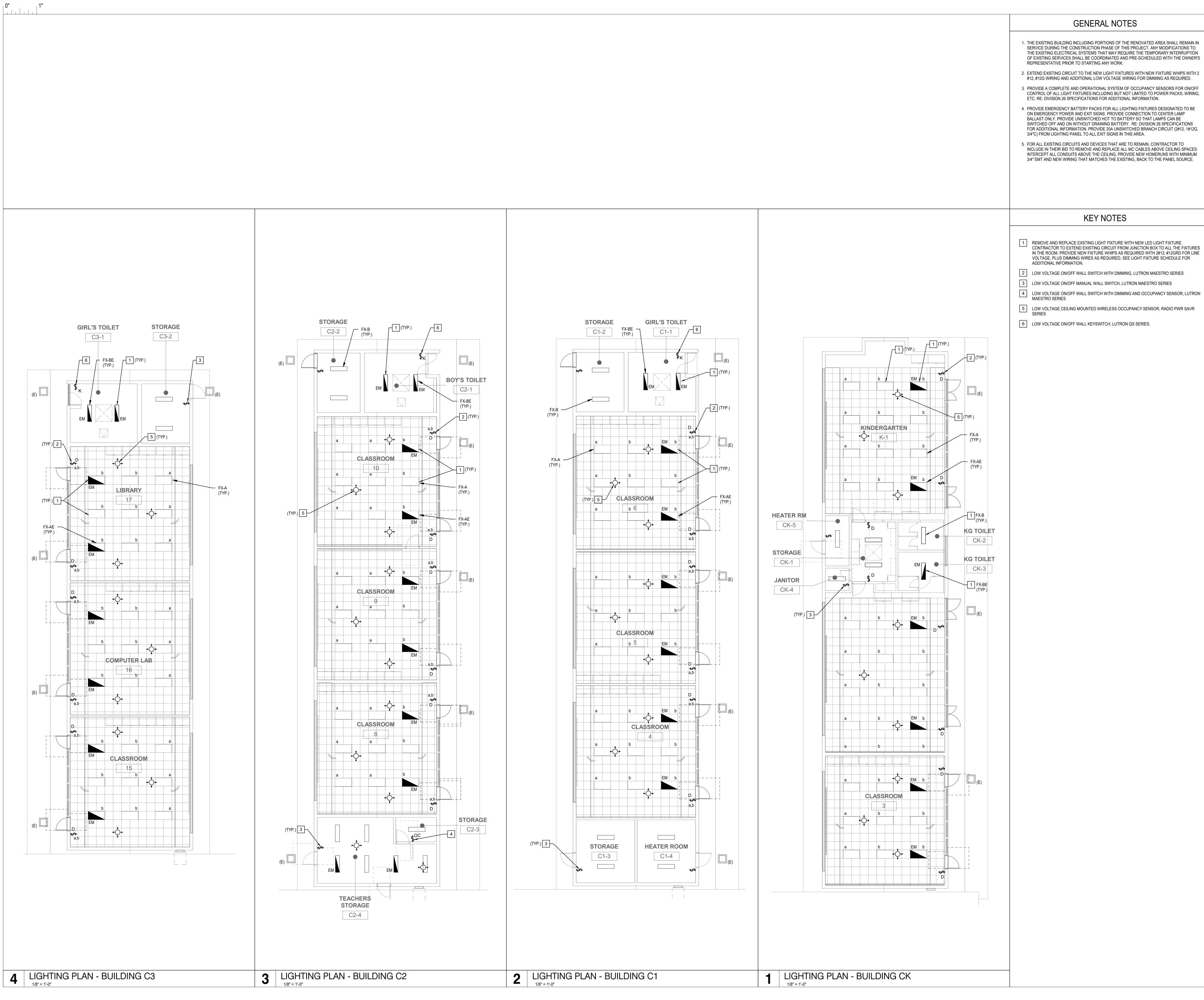


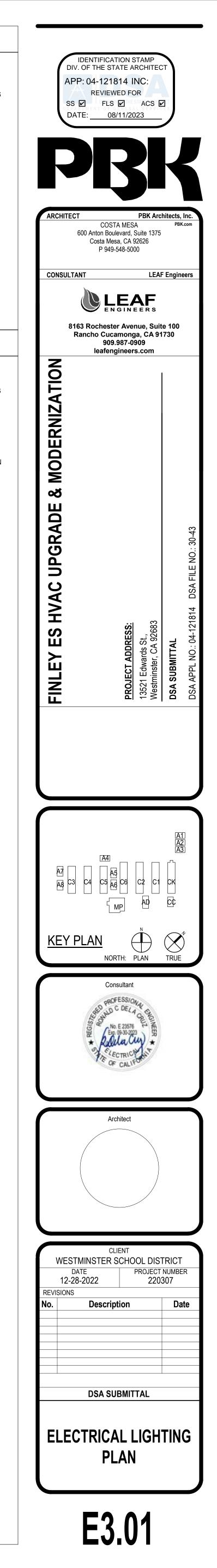


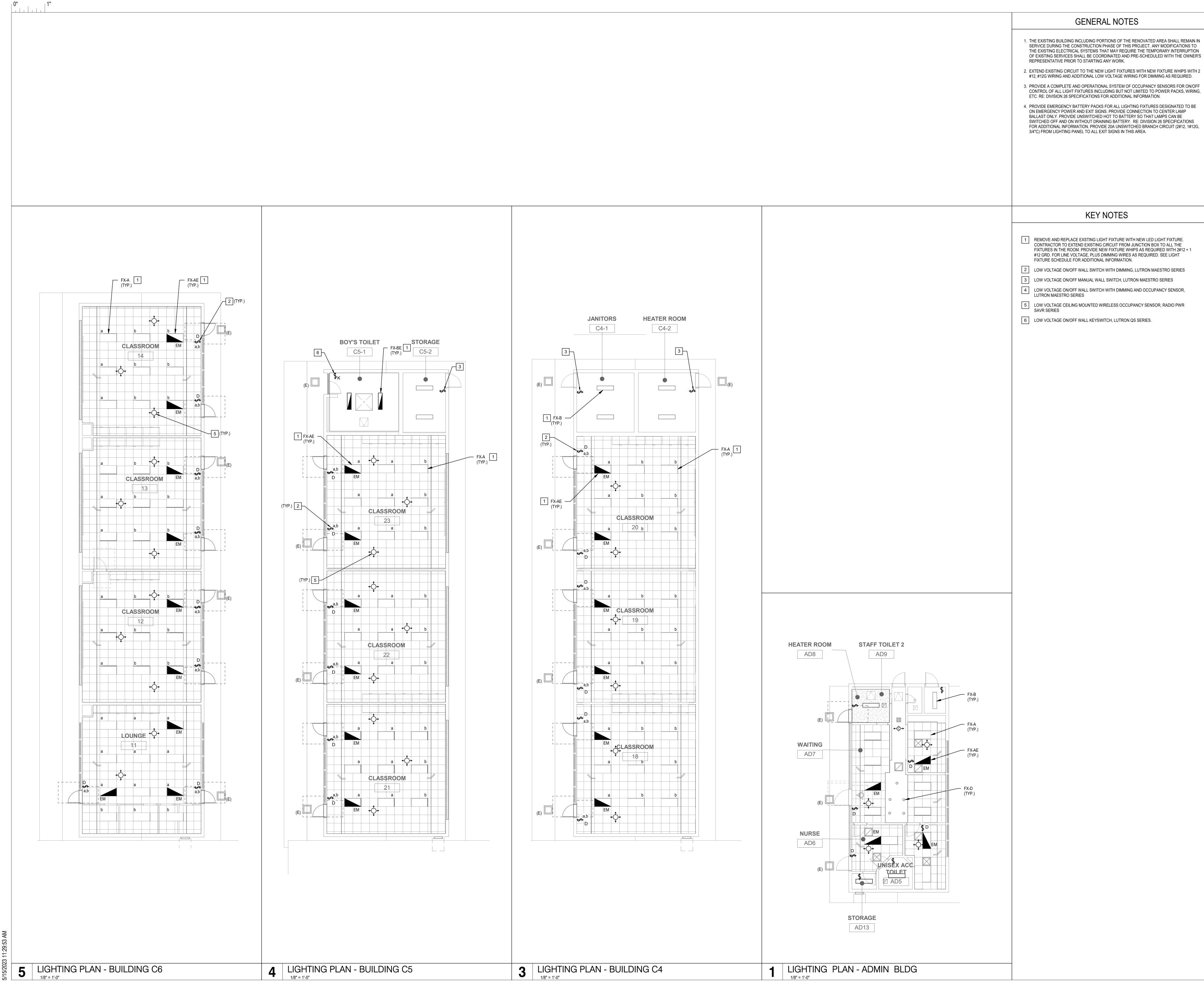




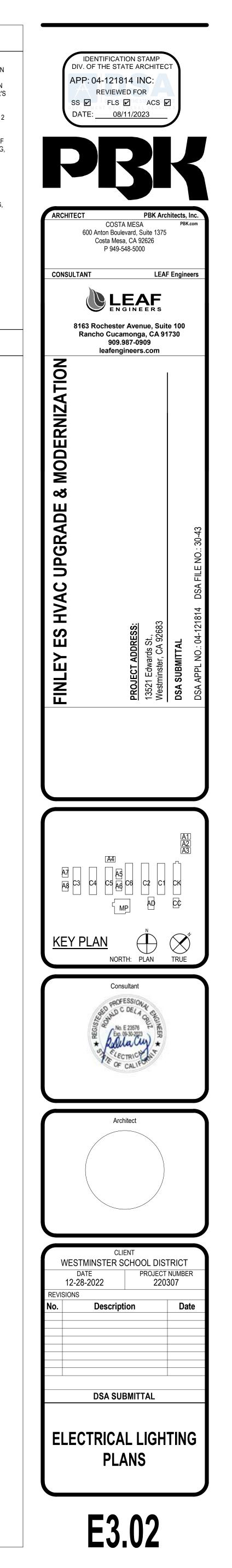






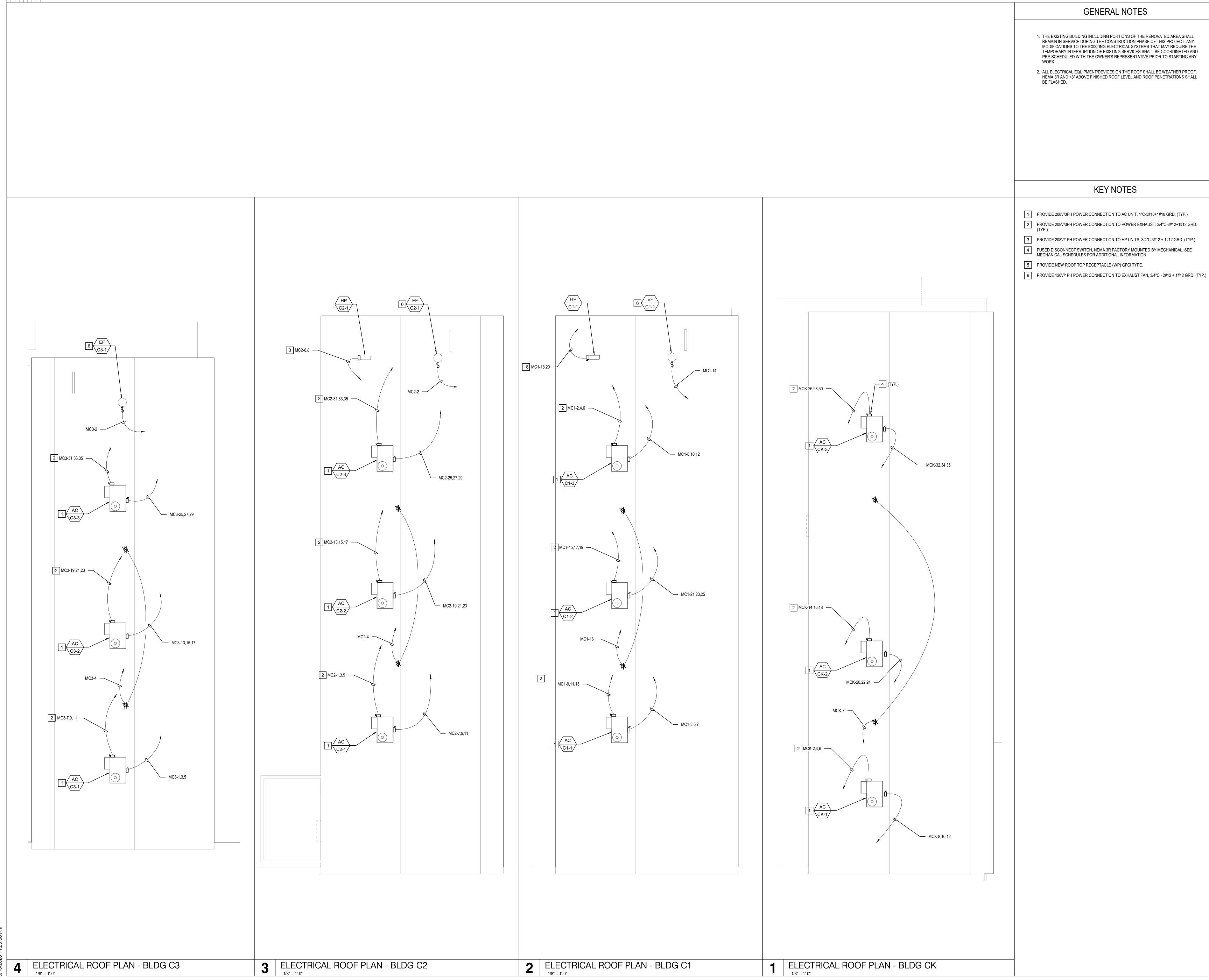


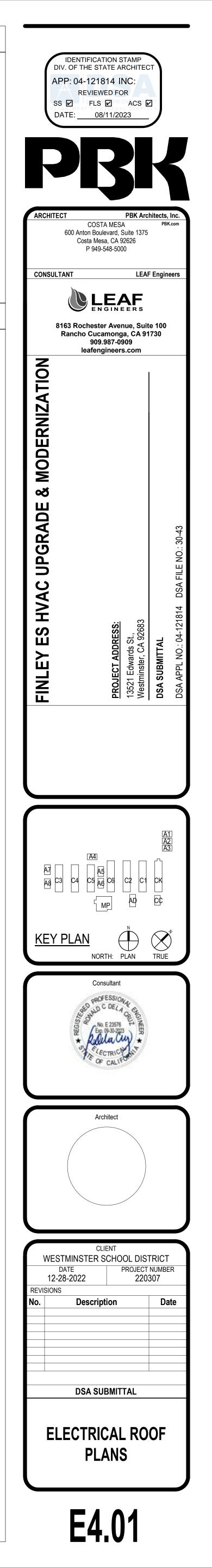
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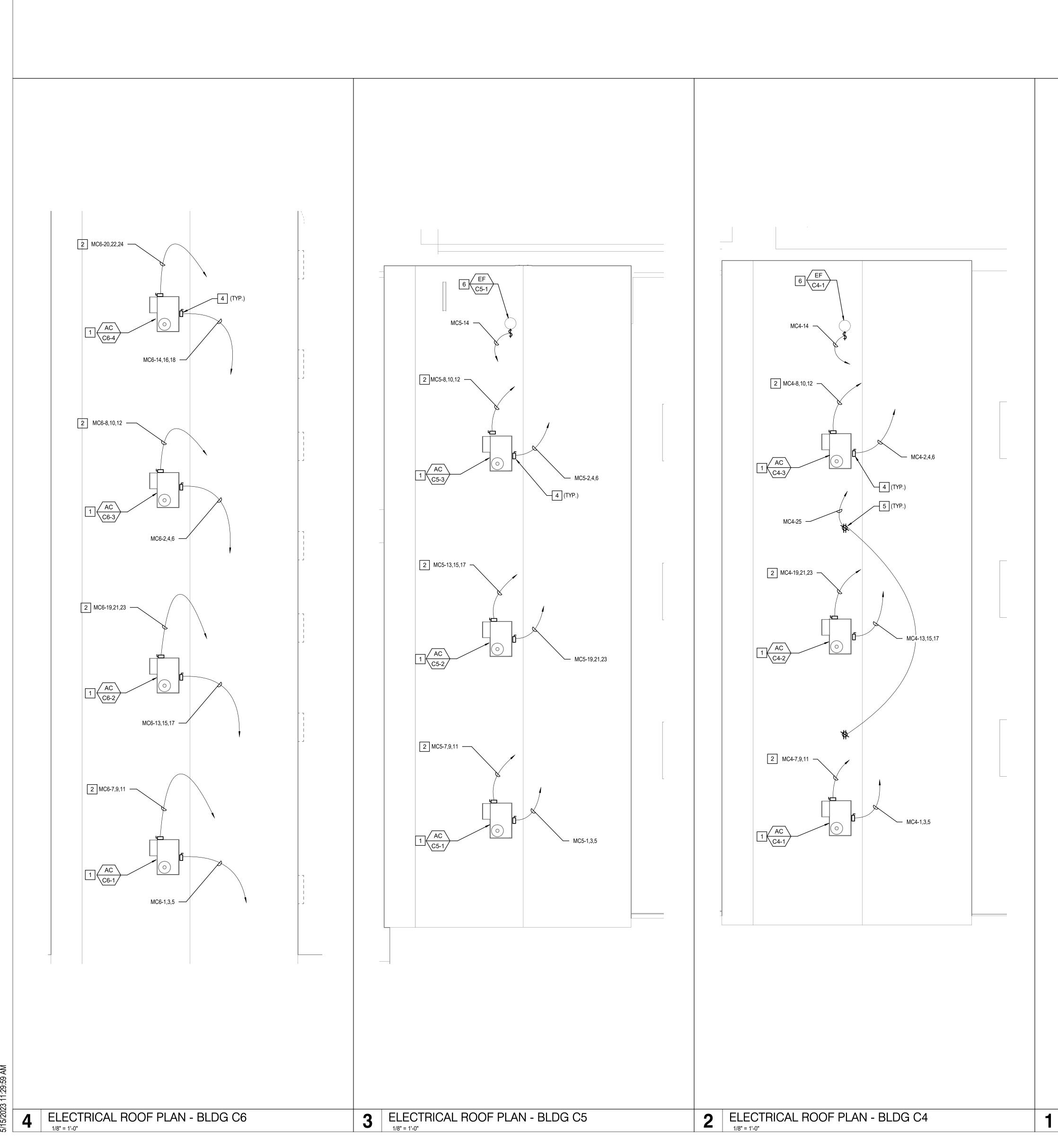




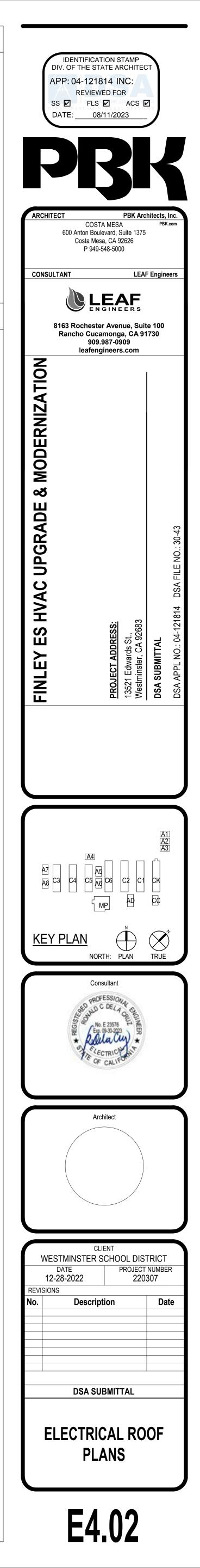


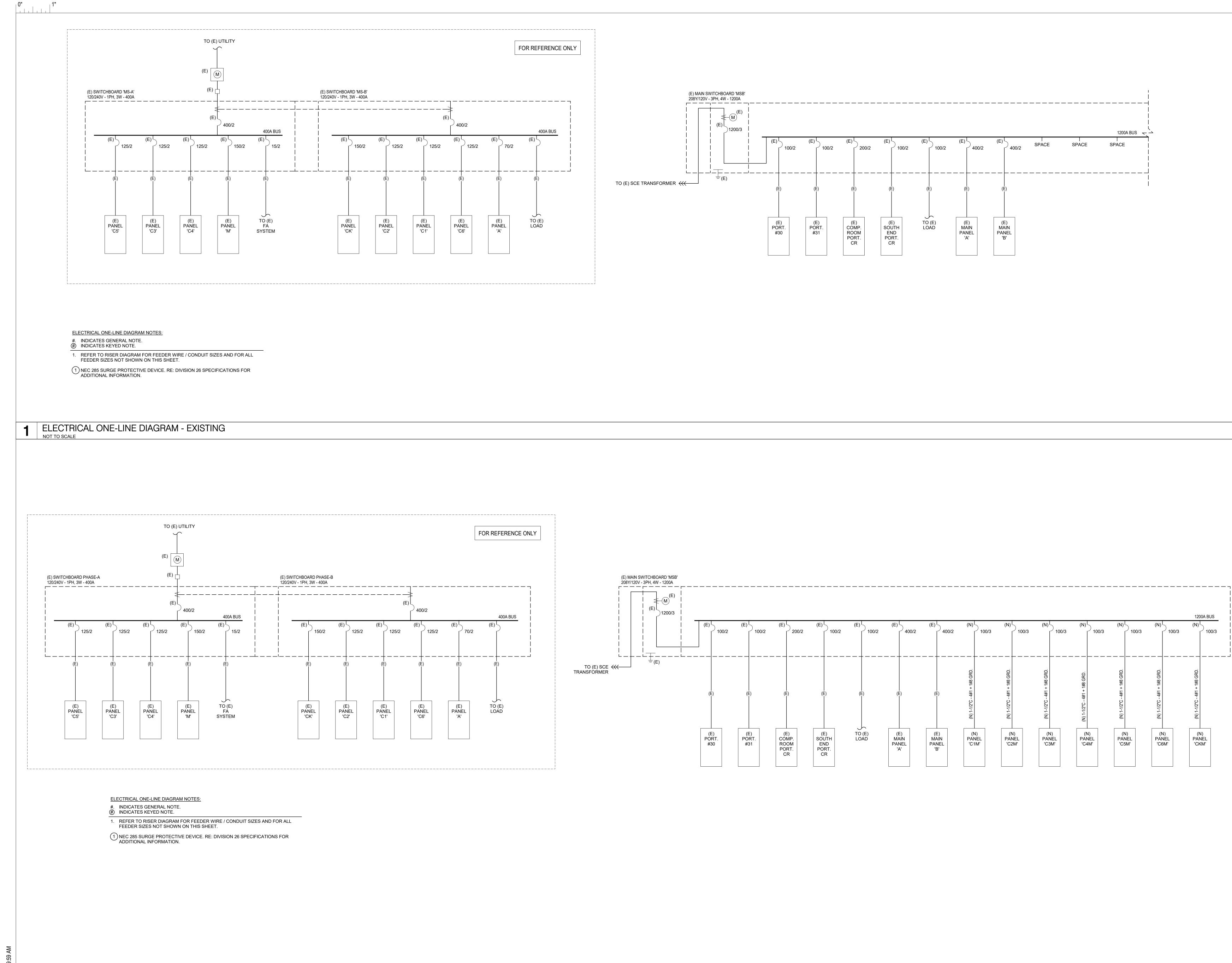


0" | 1"

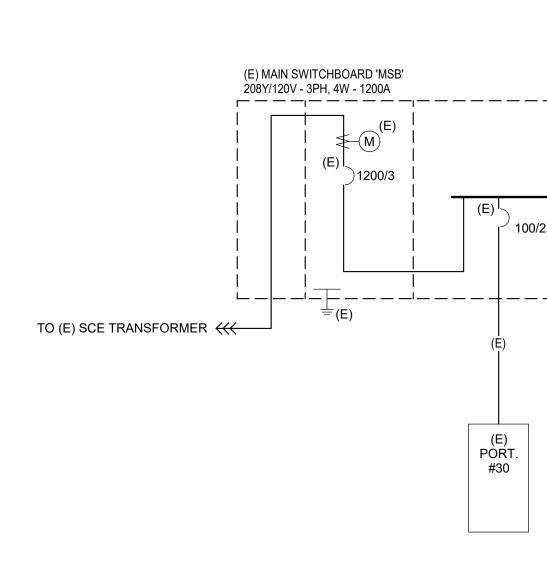


	GENERAL NOTES
	1. THE EXISTING BUILDING INCLUDING PORTIONS OF THE RENOVATED AREA SHALL REMAIN IN SERVICE DURING THE CONSTRUCTION PHASE OF THIS PROJECT. ANY MODIFICATIONS TO THE EXISTING ELECTRICAL SYSTEMS THAT MAY REQUIRE THE TEMPORARY INTERRUPTION OF EXISTING SERVICES SHALL BE COORDINATED AND PRE-SCHEDULED WITH THE OWNER'S REPRESENTATIVE PRIOR TO STARTING ANY WORK.
	<ol> <li>ALL ELECTRICAL EQUIPMENT/DEVICES ON THE ROOF SHALL BE WEATHER PROOF, NEMA 3R AND +8" ABOVE FINISHED ROOF LEVEL AND ROOF PENETRATIONS SHALL BE FLASHED.</li> </ol>
	1 PROVIDE 208V/3PH POWER CONNECTION TO AC UNIT, 1"C-3#10+1#10 GRD. (TYP.)
	<ul> <li>PROVIDE 208V/3PH POWER CONNECTION TO POWER EXHAUST. 3/4"C-3#12+1#12 GRD. (TYP.)</li> <li>PROVIDE 208V/1PH POWER CONNECTION TO HP UNITS, 3/4"C 3#12 + 1#12 GRD. (TYP.)</li> <li>FUSED DISCONNECT SWITCH, NEMA 3R FACTORY MOUNTED BY MECHANICAL. SEE MECHANICAL SCHEDULES FOR ADDITIONAL INFORMATION.</li> <li>PROVIDE NEW ROOF TOP RECEPTACLE (WP) GFCI TYPE.</li> <li>PROVIDE 120V/1PH POWER CONNECTION TO EXHAUST FAN, 3/4"C - 2#12 + 1#12 GRD. (TYP.)</li> </ul>
MA-1,3,5 ADM-1 MA-1,3,5	
ELECTRICAL ROOF PLAN - ADMIN BLDG	





2 ELECTRICAL ONE-LINE DIAGRAM - NEW

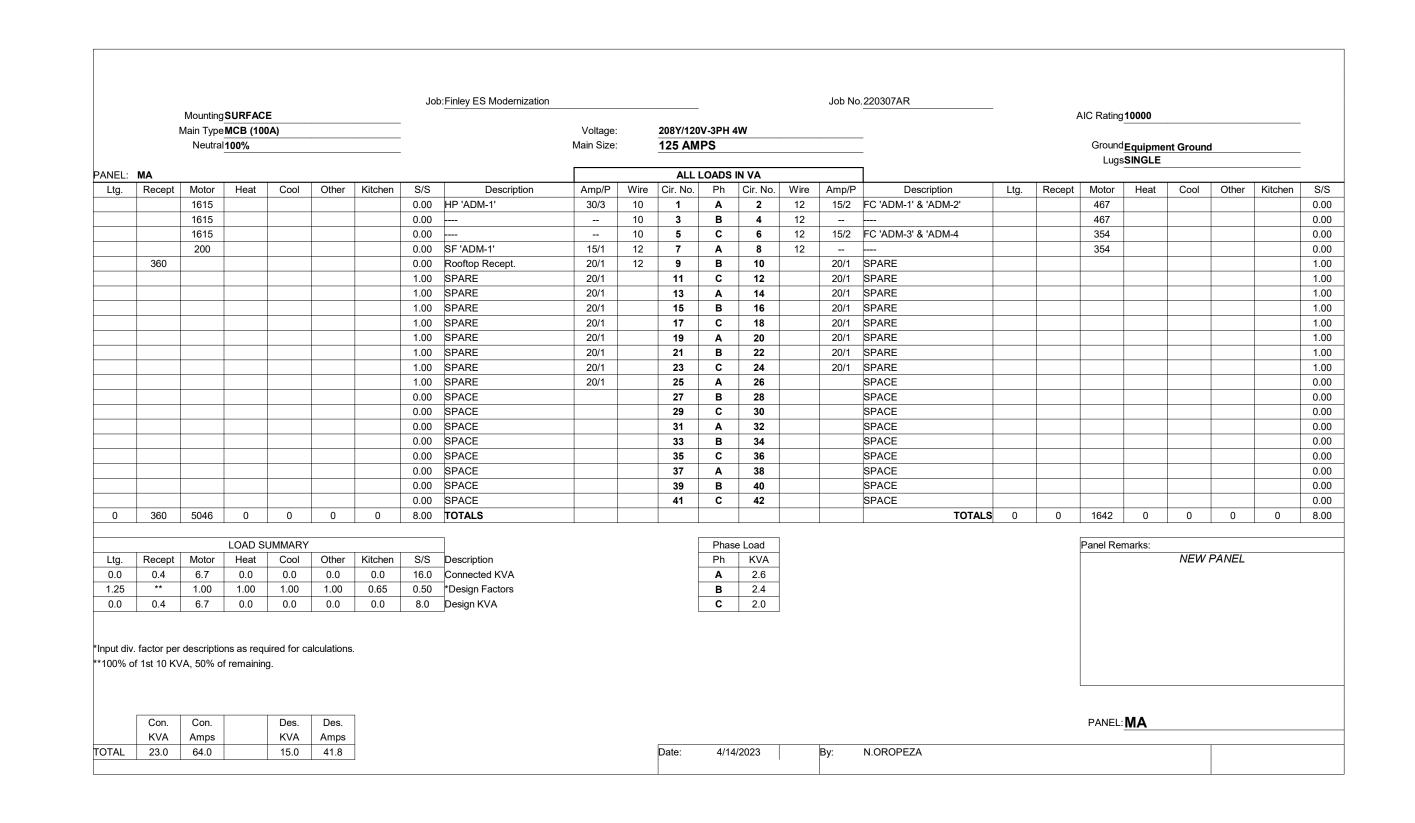


					·			
								1200A BUS
(E) 100/2	(E) 200/2	(E) 100/2	(E) 100/2	(E) 400/2	(E) 400/2	SPACE	 SPACE	SPACE
	+				·			
(E)	(E)	(E)	(E)	(E)	(E)			I
(E) PORT.	(E) COMP.	(E) SOUTH	TO (E) LOAD	(E) MAIN	(E) MAIN			
#31	ROOM PORT. CR	END PORT. CR		PANEL 'A'	PANEL 'B'			

											1200A BUS
00/2	(E) 100/2	(E) 100/2	(E) 400/2	(E) 400/2	(N) 100/3	(N) 100/3	(N) 100/3	(N) 100/3	(N)   100/3	(N) 100/3	(N) 100/3
		(E)	(E)	(E)	(N) 1-1/2"C - 4#1 + 1#8 GRD.						
	(E) SOUTH END PORT. CR	TO (E) LOAD	(E) MAIN PANEL 'A'	(E) MAIN PANEL 'B'	(N) PANEL 'C1M'	(N) PANEL 'C2M'	(N) PANEL 'C3M'	(N) PANEL 'C4M'	(N) PANEL 'C5M'	(N) PANEL 'C6M'	(N) PANEL 'CKM'

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITEC APP: 04-121814 INC: REVIEWED FOR SS 🗹 FLS 🗹 ACS 🗹 DATE: 08/11/2023 ARCHITECT PBK Architects, In COSTA MESA PBK.co 600 Anton Boulevard, Suite 1375 Costa Mesa, CA 92626 P 949-548-5000 CONSULTANT LEAF Engineers 8163 Rochester Avenue, Suite 100 Rancho Cucamonga, ĆA 91730 909.987-0909 leafengineers.com MODERNIZATION Š ш UPGRADE ES HVAC FINLE PROJ 13521 Westr A8 C3 MP ΑD <u>KEY PLAN</u>  $\bigcirc$ NORTH: PLAN TRUE Consultant Architect CLIENT WESTMINSTER SCHOOL DISTRICT PROJECT NUMBER DATE 12-28-2022 220307 REVISIONS No. Description Date DSA SUBMITTAL ELECTRICAL SINGLE LINE DIAGRAM & SCHEDULES E5.01

0" | 1"

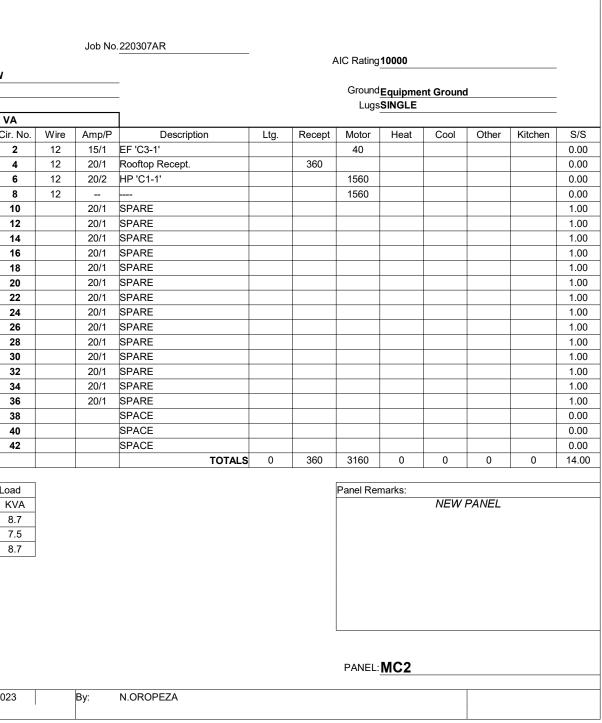


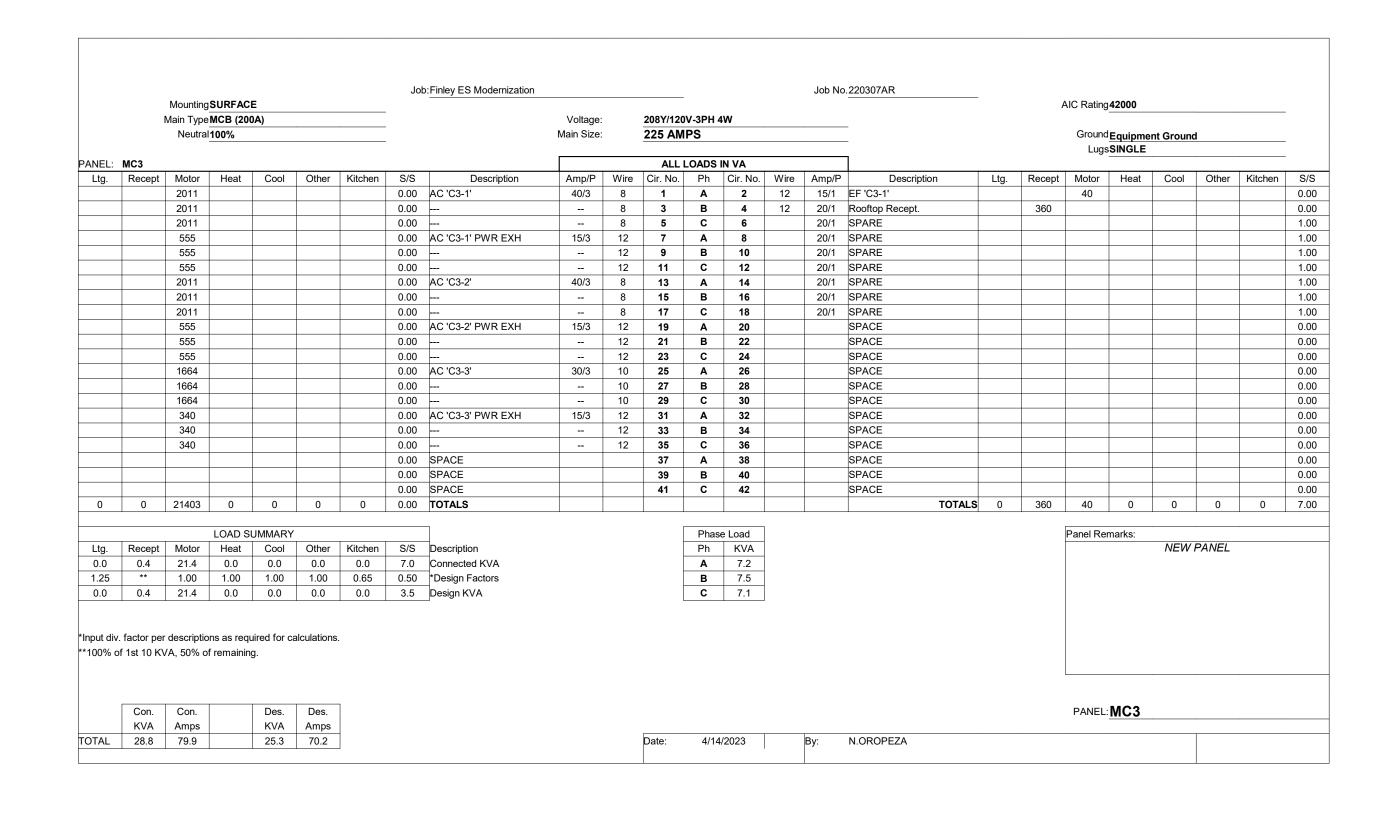
							Job	:Finley ES Modernization					
			SURFAC						Velterer		2002/420		A\A/
	I	Main Type Neutral	-	JA)				Voltage: Main Size:			208Y/120V-3PH 4W 125 AMPS		
		Neuliai	100 %						Wall 1 Size.		125 AWP5		
PANEL:	MC1										ALL	LOADS	IN VA
Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description	Amp/P	Wire	Cir. No.	Ph	Cir.
	200						0.00	DRINKING FOUNTAIN	20/1	12	1	Α	2
							0.00	AC 'C1-1'	40/3	8	3	В	4
							0.00			8	5	С	6
							0.00			8	7	Α	8
							0.00	AC 'C1-1' PWR EXH	15/3	12	9	В	1
							0.00			12	11	С	1
							0.00			12	13	Α	1
							0.00	AC 'C1-2'	40/3	8	15	В	1
							0.00			8	17	С	1
							0.00			8	19	Α	2
							0.00	AC 'C1-2' PWR EXH	15/3	12	21	В	2
							0.00			12	23	С	2
							0.00			12	25	Α	2
							1.00	SPARE	20/1		27	В	2
							1.00	SPARE	20/1		29	С	3
							1.00	SPARE	20/1		31	Α	3
							1.00	SPARE	20/1		33	В	3
							0.00	SPACE			35	С	3
							0.00	SPACE			37	Α	3
							0.00	SPACE			39	в	4
							0.00	SPACE			41	С	4
0	200	0	0	0	0	0	4.00	TOTALS					
								7			ſ		
	-			UMMARY									e Loa
Ltg.	Recept	Motor	Heat	Cool	Other	Kitchen	S/S	Description				Ph	K\
0.0	0.6	3.2	0.0	0.0	0.0	0.0	7.0	Connected KVA				Α	1.
1.25	**	1.00	1.00	1.00	1.00	0.65	0.50	*Design Factors				В	0.
0.0	0.6	3.2	0.0	0.0	0.0	0.0	3.5	Design KVA			l	С	1.

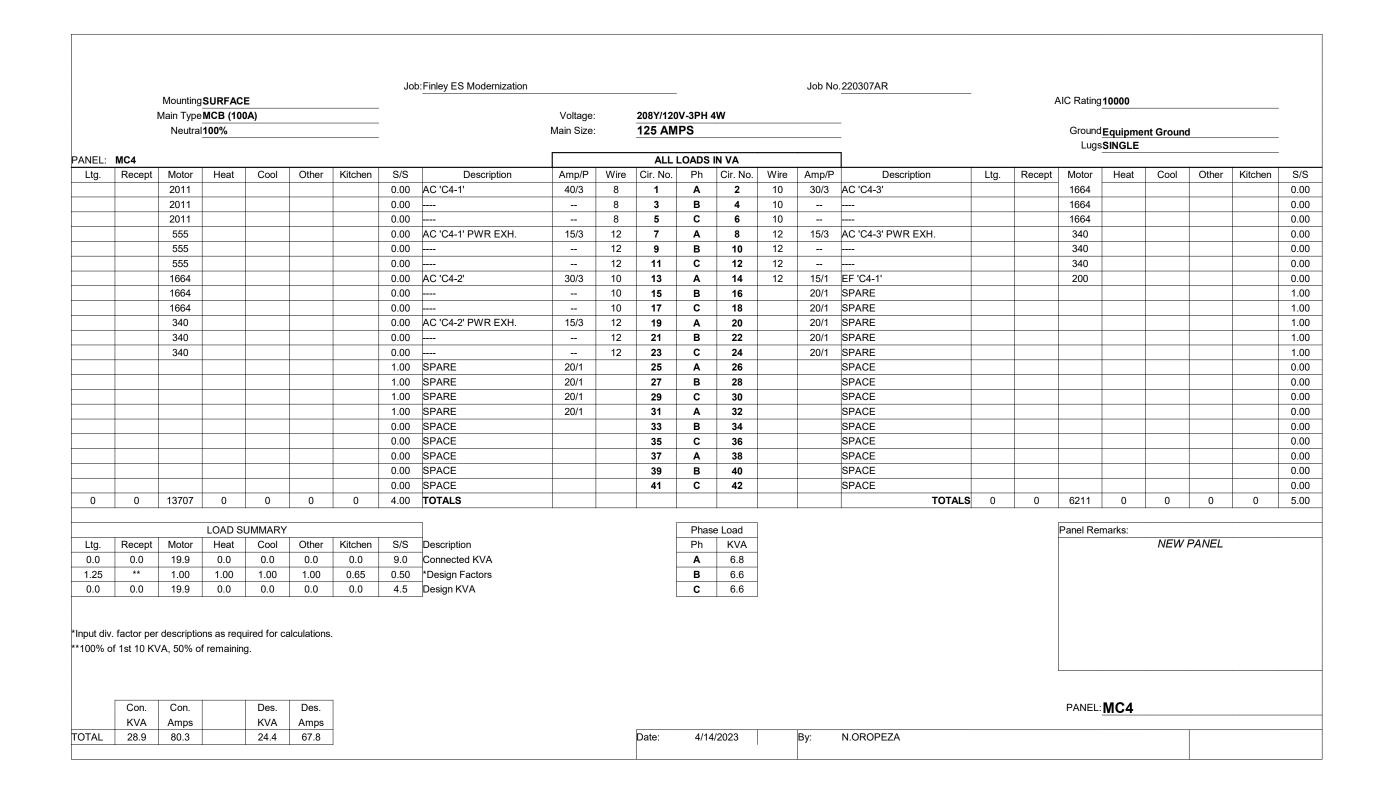
Mounting Main Type           Main Type           Neutra           2011           2011           2011           555           555           2011           2011			Other	Kitchen	S/S 0.00 0.00	Description AC 'C2-1'	Voltage: Main Size: Amp/P 40/3		208Y/120 125 AM ALL Cir. No.		IN VA Cir.
Meutra           pt         Motor           2011         2011           2011         555           555         555           255         2011	100%		Other	Kitchen	0.00		Main Size:	Wire	125 AM ALL Cir. No.	IPS LOADS Ph	IN VA Cir.
pt Motor 2011 2011 2011 555 555 555 2011		Cool	Other	Kitchen	0.00				ALL Cir. No.	LOADS Ph	Cir.
2011 2011 2011 555 555 555 2011	Heat	Cool	Other	Kitchen	0.00				Cir. No.	Ph	Cir.
2011 2011 2011 555 555 555 2011	Heat	Cool	Other	Kitchen	0.00						-
2011 2011 555 555 555 2011						AC 'C2-1'	40/3	8	1	Δ 1	
2011 555 555 555 2011				1 1				0	-		2
555 555 555 2011					0.00			8	3 5	B	
555 555 2011					0.00	AC 'C2-1' PWR EXH	15/3	12	7	A	6
555 2011					0.00	AC C2-1 PWR EAR		12	9	B	1
2011					0.00			12	11	C	1
					0.00	AC 'C2-2'	40/3	8	13	A	1
					0.00			8	15	B	1
2011				+	0.00			8	17	C	1
555					0.00	AC 'C2-2' PWR EXH	15/3	12	19	A	2
					0.00			12	21	в	2
555					0.00			12	23	С	2
1664					0.00	AC 'C2-3'	30/3	10	25	Α	2
1664					0.00			10	27	В	2
1664					0.00			10	29	С	3
340					0.00	AC 'C2-3' PWR EXH	15/3	12	31	Α	3
340					0.00			12	33	В	3
340					0.00			12	35	С	3
					0.00	SPACE			37	Α	3
					0.00				39	В	4
					0.00				41	С	4
21403	0	0	0	0	0.00	TOTALS					
						7				Dhaa	
nt Motor			Othor	Kitobon	6/6	Description					K\
•											8.
						-					7
						_					8
	1664         1664         340         340         340         21403	555           1664           1664           340           340           340           21403           0           LOAD Si           pt           Motor           24.6           0.0           1.00	555         1664           1664         1664           340         340           340         100           21403         0           0         0           Example         100           100         1.00	555           1664           1664           340           340           340           340           340           340           24403       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         0       0       0         100       1.00       1.00	555	555         0.00           1664         0.00           1664         0.00           1664         0.00           1664         0.00           1664         0.00           340         0.00           340         0.00           340         0.00           340         0.00           340         0.00           340         0.00           2403         0           0.00         0.00           0.00         0.00           0.00         0.00           0.00         0.00           1.00         1.00           1.00         1.00	555       0.00          1664       0.00       AC 'C2-3'         1664       0.00          1664       0.00          1664       0.00          340       0.00          340       0.00          340       0.00          340       0.00          340       0.00          340       0.00          340       0.00          340       0.00          340       0.00          240       0       0       0.00       1.00         24.6       0.0       0.00       1.00       1.00       1.00	555             1664        0.00       AC 'C2-3'       30/3         1664        0.00           1664        0.00           1664        0.00           340        0.00           340        0.00           340        0.00           340        0.00           340        0.00           340        0.00       SPACE          340        0.00       SPACE          340         0.00       SPACE          21403       0       0       0       0.00       TOTALS          .pt       Motor       Heat       Cool       Other       Kitchen       S/S       Description         24.6       0.0       0.0       0.00       1.00       1.00       Notos       *Desi	555        12         1664        0.00       AC 'C2-3'       30/3       10         1664        0.00       AC 'C2-3'       30/3       10         1664        0.00         10         1664        0.00        10         1664        0.00        10         340        0.00       AC 'C2-3' PWR EXH       15/3       12         340        0.00         12         340        0.00         12         340        0.00         12         340        0.00         12         340        0.00       SPACE        12         340         0.00       SPACE        12         21403       0       0       0       0.00       TOTALS           pt       Motor       Heat       Cool       Other       Kitchen       S/S       Description<	555        12       23         1664        10       25         1664         10       27         1664         10       27         1664         10       27         1664         10       29         340         10       29         340         10       23         340         10       29         340         12       33         340         12       33         340         12       33         340         12       33         340         12       33         12         12       35         14        0.00       SPACE       39         12       10       0       0       0       0.00       TOTALS         pt       Motor       Heat       Cool       Other       Kitchen	555        12       23       C         1664        0.00       AC 'C2-3'       30/3       10       25       A         1664        0.00       AC 'C2-3'       30/3       10       27       B         1664        0.00         10       27       B         1664        0.00         10       29       C         340        0.00       AC 'C2-3' PWR EXH       15/3       12       31       A         340        0.00         12       33       B         340        0.00         12       33       B         340        0.00         12       35       C         340         0.00       SPACE        12       35       C         340        -       0.00       SPACE       -       39       B         21403       0       0       0       0.00       TOTALS       -       -         pt       Motor

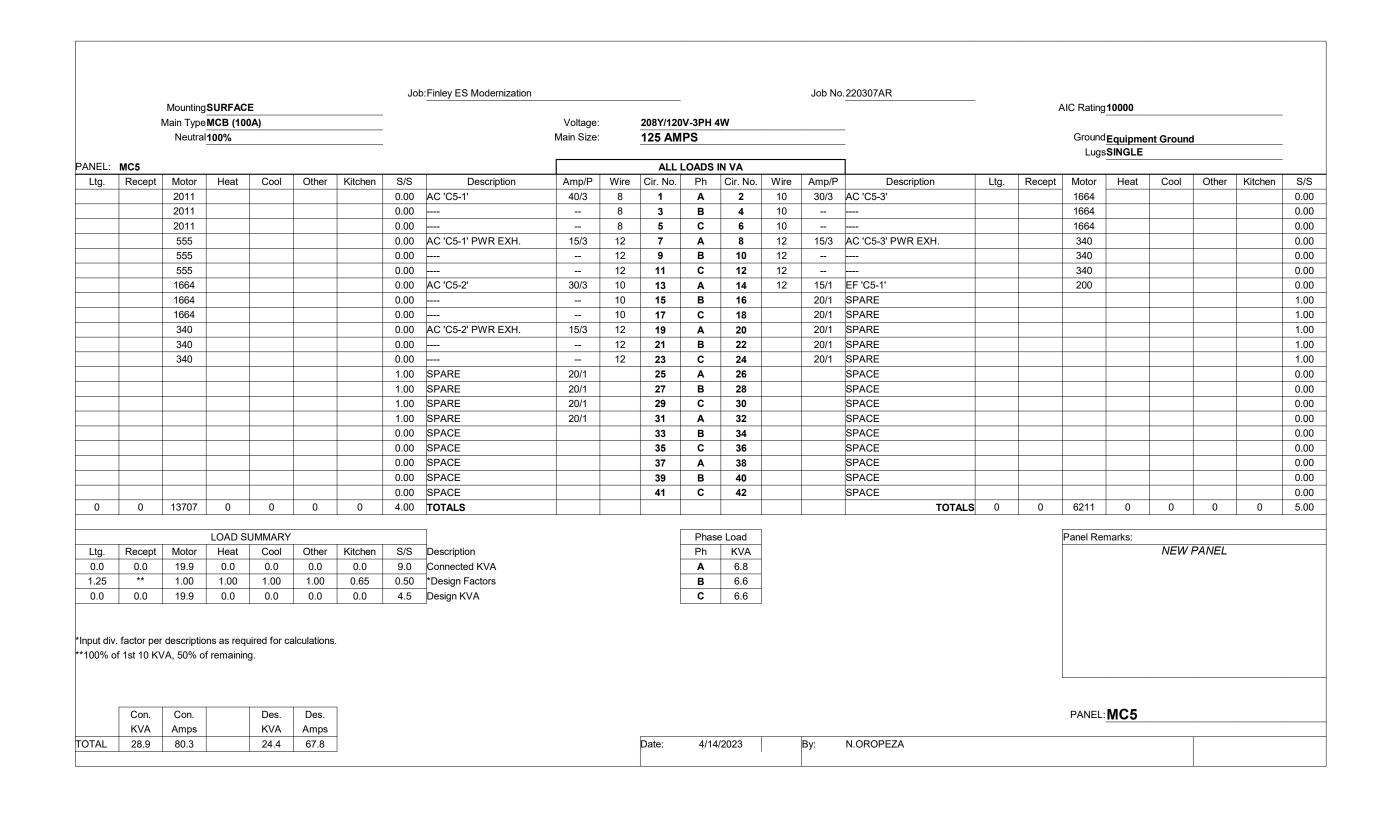
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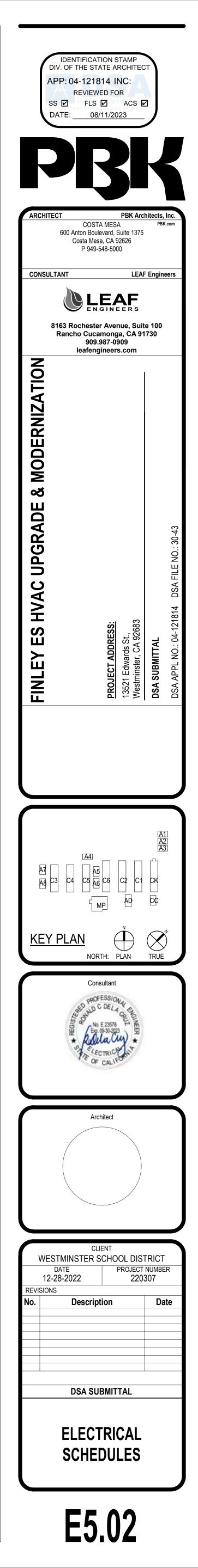




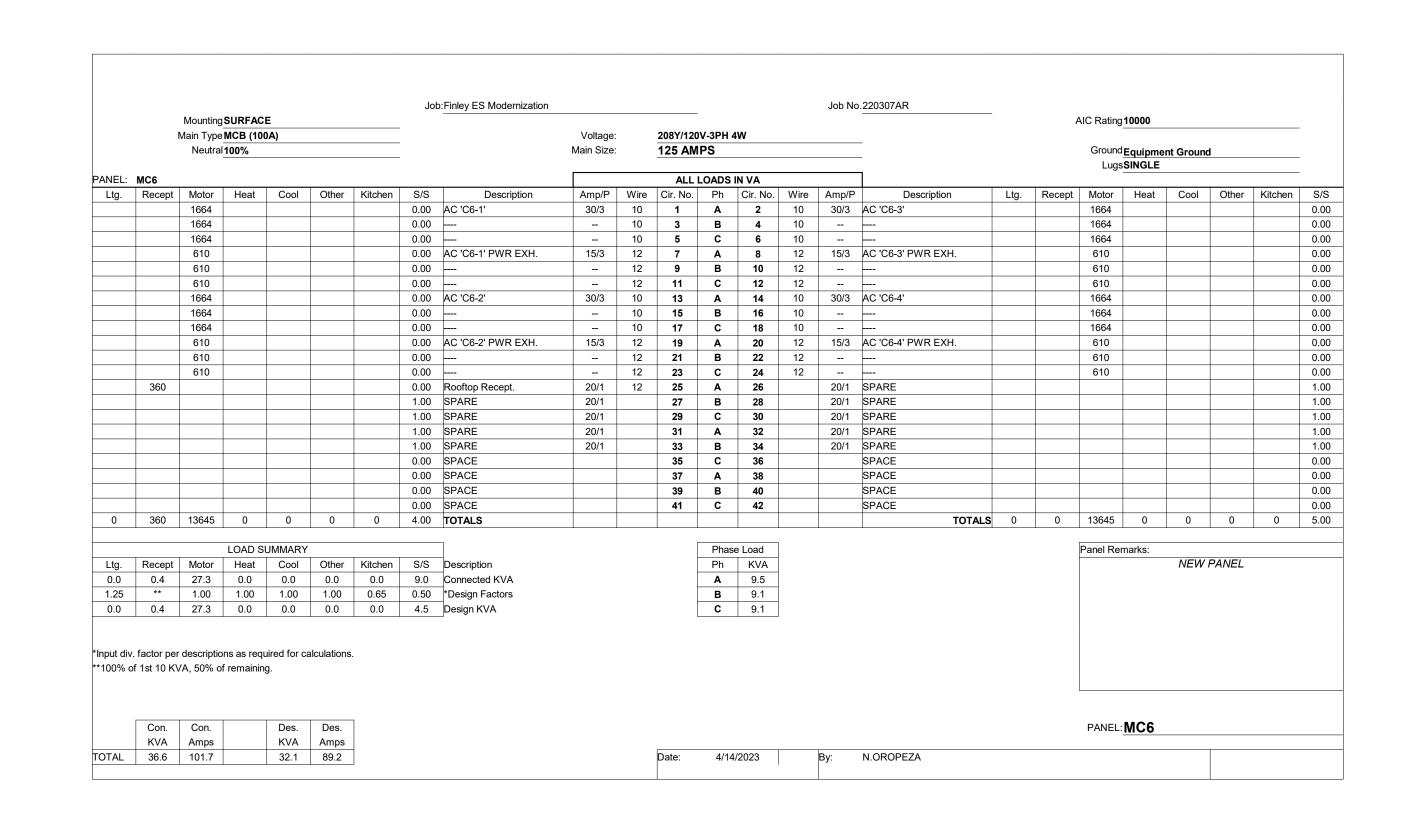


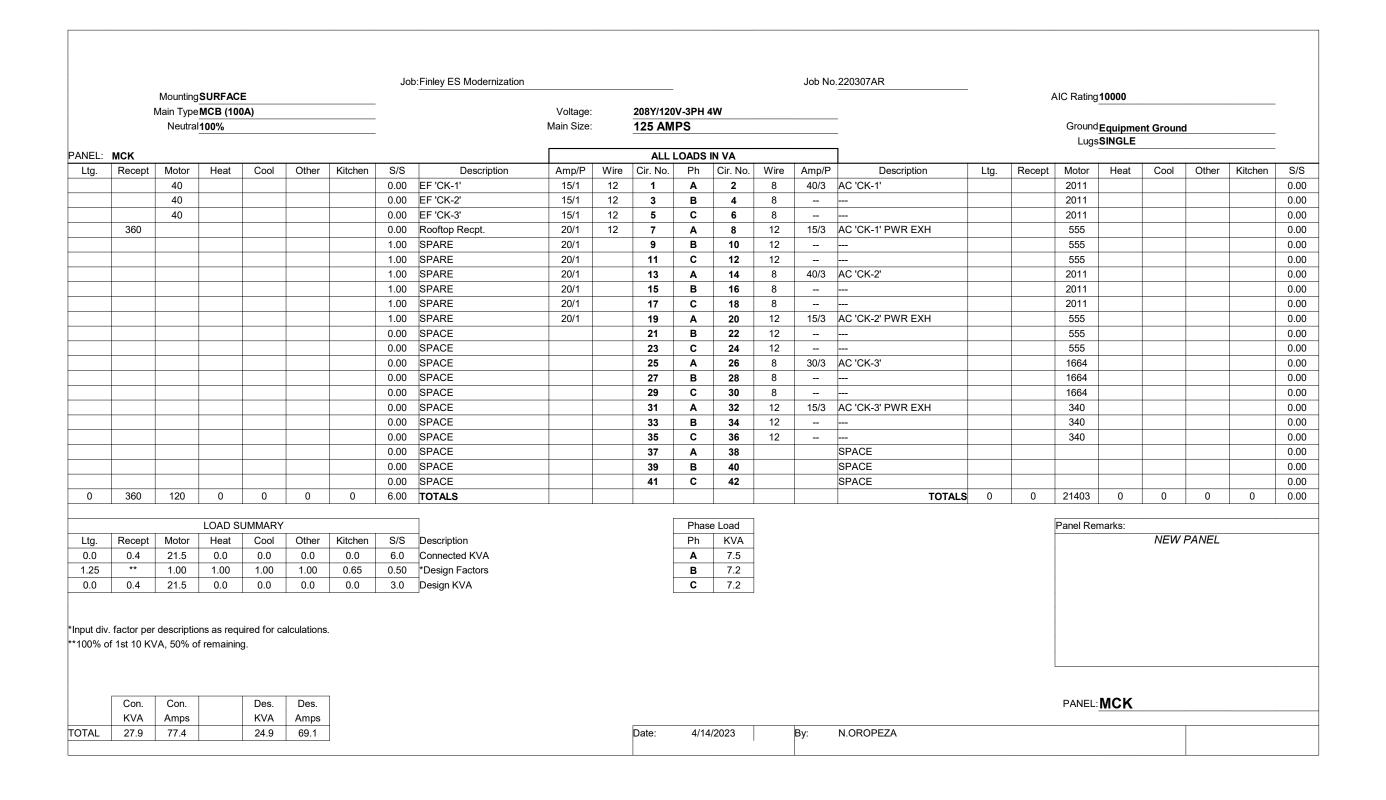






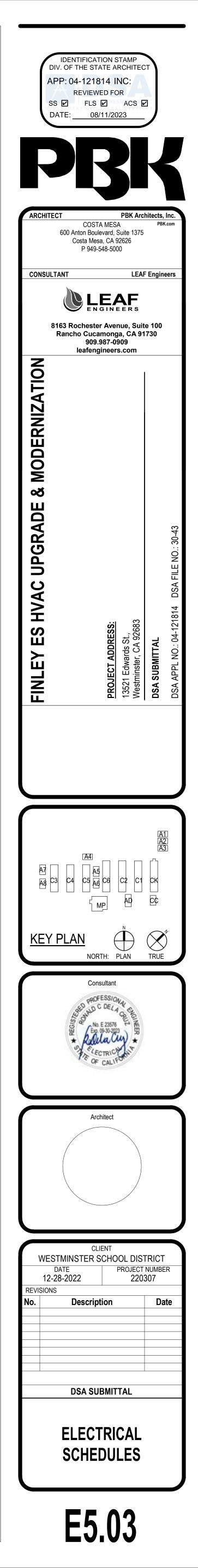
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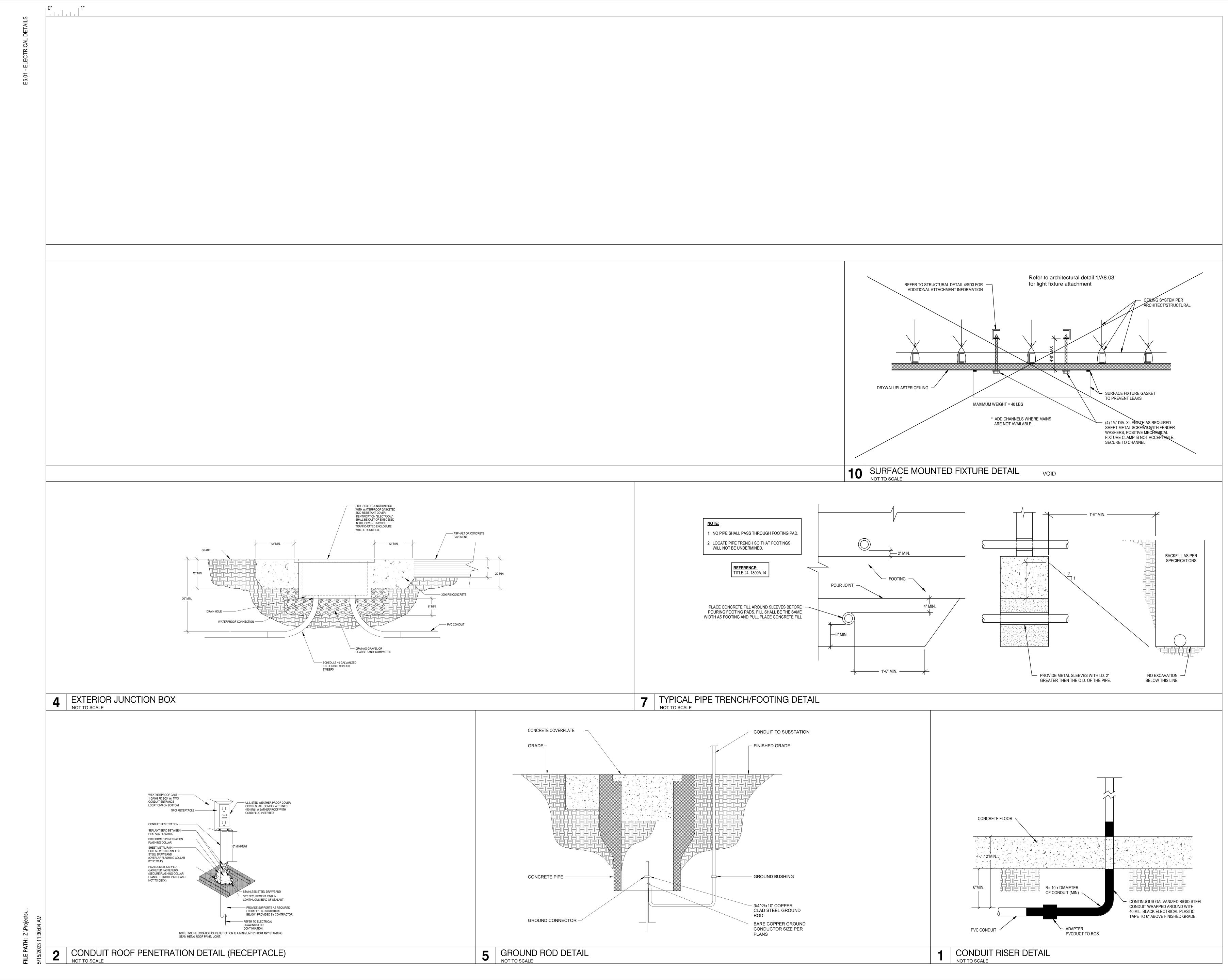


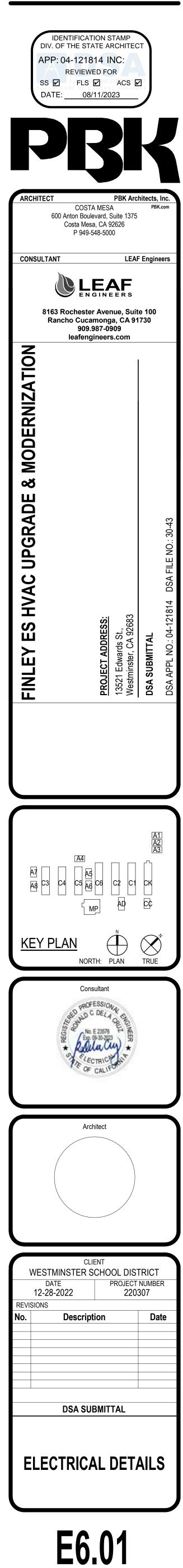


TYPE	DESCRIPTION	VOLTAGE	MOUNTING	MANUFACTURER & NO.	REMARKS
FX-A	2X4 TROFFER	MVOLT	RECESSED	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT	
FX-AE	2X4 TROFFER - EMERG.	MVOLT	RECESSED	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP'
FX-B	1X4 TROFFER	MVOLT	RECESSED	LITHONIA LIGHTING EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT	
FX-BE	1X4 TROFFER - EMERG.	MVOLT	RECESSED	LITHONIA LIGHTING EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP'
FX-C	2X4 TROFFER	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 2X4 4000LM 80CRI 35K MIN1 MVOLT	PROVIDE SURFACE MOUNT KIT 'SMKSH'.
FX-D	5" DOWNLIGHT	MVOLT	JUNFALE	JUNO LIGHTING JSF 5IN 07LM 35K 90CRI 120 FRPC WH E10WLCP	PROVIDE EMERGENCY BATTERY BACKUP 'E10WLCP'
FX-E	1X4 TROFFER	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT	PROVIDE SURFACE MOUNT KIT 'SMKSH'.
FX-EE	1X4 TROFFER	MVOLT	SURFACE	LITHONIA LIGHTING EPANL 1X4 4000LM 80CRI 35K MIN1 MVOLT E10WCP	PROVIDE 90 MIN. EMERGENCY BATTERY BACKUP 'E10WCP'
FX-EX	EMERGENCY EXIT	MVOLT	SURFACE	LITHONIA LIGHTING LE S 1 R EL N SD - WITH MOUNTING KIT 'ELA WG1'	COORDINATE WITH MANUFACTURER AND ARCHITECT PRIOR TO PROCUREMENT.

3 LIGHT FIXTURE SCHEDULE







## PLUMBING LEGEND

DESCRIBED IN SECTIONS 5.303.1.1 AND 5.303.1.2.

500 GPM.

1,000 GAL/DAY. 5.303.2 RESERVED

FOLLOWING:

5.303.3.2 URINALS:

SHALL URINALS

5.303.3.3 SHOWERHEADS: MORE THE

MORE AND/OR GALLONS PER ONE SHOWER SHALL BE

MORE

GALLONS PER CYCLE.

[RIM

NOTE: N	IOT ALL SYMBOLS TABULATED BELOW ARE NECESSARILY USED ON THE DRAWINGS	
SYMBOL	ITEM	ABBR.
S	FIXTURE DESIGNATION	
	UNIT ABBREVIATION	
01-	DETAIL DESIGNATION	
P-1 -	SHEET NO. WHERE SHOWN	
	DOMESTIC COLD WATER	CW
	DOMESTIC HOT WATER	HW
	DOMESTIC HW RETURN	HWR
	EXISTING PIPING	
—	POINT OF CONNECTION	POC
C	CONDENSATE DRAIN	
	SHUT-OFF VALVE IN BOX	SOV
	PIPING RISE	
0	PIPING DROP	
	SOIL OR WASTE	S OR W
VV	VENT	V
v	VENT THRU ROOF	VTR
FC0 0	FLOOR CLEANOUT	FCO
сот <u>б</u> ф	CLEANOUT TO GRADE	COTG
<u> </u>	WALL CLEANOUT	wco
X	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	СО
—SC	SECONDARY CONDENSATE DRAIN	
——FC ——	FURNACE CONDENSATE	
	GAS SHUT OFF VALVE	GSOV
0	CONDENSATE DRAIN TRAP	CDT
—LPG —	LIQUIFIED PETROLEUM GAS	LPG
——G——	NATURAL GAS	G
O	FIRE SPRINKLER RISER	FSR
FSL	FIRE SPRINKLER LINE	FSL
$\langle -$	FIRE DEPARTMENT CONNECTION	FDC
	FINISHED FLOOR	FF
		FL
	FIRE RATED PENETRATION	
	POINT OF DISCONNECTION	POD
	POINT OF CONNECTION	POC
	I	1

#### CALIFORNIA GREEN BUILDING STANDARDS PLUMBING TESTING 1. ALL EQUIPMENT AND/OR SYSTEMS NOTED ON THE DRAWINGS "TO REMAIN" THE FOLLOWING SHALL BE REQUIRED WHETHER OR NOT SPECIFICALLY SHOWN OR MENTIONED SITE TO CERTIFY WORKING CONDITION. A WRITTEN REPORT ON THE CONDIT IN DRAWINGS AND/OR SPECIFICATIONS: INCLUDING A COPY OF THE TEST RESULTS AND RECOMMENDED REMEDIAL BY THIS CONTRACTOR TO THE ARCHITECT/ENGINEER FOR REVIEW. 2. PIPE COVER AND BACKFILLING: 5.303.1 METERS: SEPARATE SUBMETERS OR METERING DEVICES SHALL BE INSTALLED FOR USES A. AFTER HYDROSTATIC TEST, EVENLY BACKFILL ENTIRE TRENCH WIDTH BY H AND HAND TAMPING IN FOUR (4) ICHES COMPACTED LAYERS TO 12 INCHES JACKET. COMPACT TO 95 PERCENT MAXIMUM DENSITY. B. EVENLY AND CONTINUOUSLY BACKFILL REMAINING TRENCH DEPTH IN 5.303.1.1 NEW BUILDINGS OR ADDITIONS IN EXCESS OF 50,000 SQUARE FEET: C. UNIFORM LAYERS WITH BACKFILL MATERIAL. 1. FOR EACH INDIVIDUAL LEASED, RENTED, OR OTHER TENANT SPACE WITHIN THE BUILDING D. DO NOT USE WHEELED OR TRACKED VEHICLES FOR TAMPING. 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 3. PRESSURE TEST ALL DOMESTIC WATER PIPING. AFTER INSTALLATION AND PR DENTAL OFFICE, LABORATORY, OR BEAUTY SALON OR BARBER SHOP. RINSE PIPING SYSTEM OF PARTICULATE CONTAMINANTS, CAP AND SUBJECT 2. WHERE SEPARATE SUBMETERS FOR INDIVIDUAL BUILDING TENANTS ARE UNFEASIBLE. FOR PSIG FOR FOUR (4) HOURS, REPAIR LEAKS AND DEFECTS AND RE-TEST ANY P WATER SUPPLIED TO THE FOLLOWING SUBSYSTEMS: FAILS. PROVIDE WRITTEN TEST REPORT INCLUDING DATE AND TIME OF TEST, a. MAKE-UP WATER FOR COOLING TOWERS WHERE FLOW THROUGH IS GREATER THAN OF REMEDIAL WORK REQUIRED AND DATE AND TIME OF EACH RE-TEST. b. MAKE-UP WATER FOR EVAPORATIVE COOLERS GREATER THAN 6 GPM. 4. PRIOR TO COVER UP, WATER PIPE, SANITARY PIPE, AND GAS PIPING SHALL B c. STEAM AND HOT-WATER BOILERS WITH ENERGY INPUT MORE THAN 500,000 BTUH/H. BE WITNESSED BY CONSULTANT AND OWNER. NOTIFY OWNER 48 HOURS PRIC BEWITNESSED BY CLIENT PLUMBING TECHNICIAN. 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 5. UPON COMPLETION OF THE SANITARY PIPING SYSTEM, THE CONTRACTOR SH TO OBSERVE A SMOKE TEST OF THE SYSTEM. SMOKE TESTING SHALL BE PER SYSTEM TWICE DURING CONSTRUCTION. 6. PRESSURE TEST NATURAL GAS PIPING IN ACCORDANCE WITH NFPA 54. CA PLI 5.303.3 WATER CONSERVING PLUMBING FIXTURES AND FITTINGS: PLUMBING FIXTURES (WATER CLOSETS AND URINALS) AND FITTINGS (FAUCETS AND SHOWERHEADS) SHALL COMPLY WITH THE GENERAL PLUMBING NO 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. 1. ALL BRACING OF PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMA 2. WHERE BRACING DETAILS ARE NOT SHOWN ON THE DRAWINGS OR IN THE 5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE ARCHITECT, SHALL NOT EXCEED 0.125 GALLONS PER FLUSH. FIELD INSPECTOR. 5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED 3. SUPPORT AND BRACING OF ALL PIPING SHALL BE IN ACCORDANCE WITH URINALS SHALL NOT EXCEED 0.5 GALLONS PER FLUSH. SEISMIC RESTRAINTS OF PLUMBING PIPING SYSTEMS", OR THE "SUPERST RESTRAINT SYSTEM" FOR PIPING ONLY. 5.303.3.2.1 WALL-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF WALL-MOUNTED URINALS 4. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO F NOT EXCEED 0.125 GALLONS PER FLUSH. CONTRACTOR SHALL NOTIFY ARCHITECT/ENGINEER OF ANY EXISTING CON WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCU 5.303.3.2.2 FLOOR-MOUNTED URINALS: THE EFFECTIVE FLUSH VOLUME OF FLOOR-MOUNTED SHALL NOT EXCEED 0.5 GALLONS PER FLUSH. 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. 5.303.3.3.1 SINGLE SHOWERHEAD: SHOWERHEADS SHALL HAVE A MAXIMUM FLOW RATE OF NOT 6. PLUMBING CONTRACTOR TO COORDINATE WITH MECHANICAL CONTRACTOR FOR ALL CONDENSATE DRAIN THAN 2.0 GALLONS PER MINUTE AT 80 PSI. SHOWERHEADS SHALL BE CERTIFIED TO CONNECTIONS TO MECHANICAL EQUIPMENT. PERFORMANCE CRITERIA OF THE U.S. EPA WATERSENSE SPECIFICATION FOR SHOWERHEADS. 7. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING PLUMBING CONDITIONS PRIOR TO PROCEEDING WITH INSTALLATION. CONTRACTOR SHALL NOTIFY ARCHITECT/ ENGINEER OF ANY EXISTING CONDITIONS 5.303.3.3.2 MULTIPLE SHOWERHEADS SERVING ONE SHOWER: WHEN A SHOWER IS SERVED BY WHICH CONFLICT WITH INFORMATION PROVIDED IN CONSTRUCTION DOCUMENTS. THAN ONE SHOWERHEAD, THE COMBINED FLOW RATE OF ALL SHOWERHEADS SHOWER OUTLETS CONTROLLED BY A SINGLE VALVE SHALL NOT EXCEED 2.0 8. FOR PLUMBING FIXTURE MOUNTING HEIGHTS AND LOCATIONS, REFER TO THE ARCHITECTURAL DRAWINGS. MINUTE AT 80 PSI, OR THE SHOWER SHALL BE DESIGNED TO ALLOW ONLY OUTLET TO BE IN OPERATION AT A TIME. NOTE: A HAND-HELD SHOWER 9. ALL PLUMBING CONVEYING OR DISPENSING WATER FOR HUMAN CONSUMPTION SHALL COMPLY WITH AB 1953 CONSIDERED A SHOWERHEAD. FOR LEAD CONTENT. 5.303.3.4 FAUCETS AND FOUNTAINS: 10. REFER TO ARCHITECTURAL DRAWING FOR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. DO NOT SCALE FROM PLUMBING DRAWINGS. 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. 11. ALL WALL CLEAN-OUTS SHALL BE ACCESSIBLE BY AN ACCESS PANEL. 5.303.3.4.2 KITCHEN FAUCETS: KITCHEN FAUCETS SHALL HAVE A MAXIMUM FLOW RATE OF NOT 12. PROVIDE A DOUBLE EXTERIOR CLEAN-OUT (DFCO) ON ALL SANITARY LINES EXITING THE BUILDING. 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 13. ALL FLOOR DRAINS AND FLOOR SINKS SHALL BE PROVIDED WITH A TRAP PRIMER. PSI, AND MUST DEFAULT TO A MAXIMUM FLOW RATE OF 1.8 GALLONS PER MINUTE AT 60 PSI. 14. FIXTURES DESIGNATED AS ADA ACCESSIBLE BY ARCHITECT SHALL BE INSTALLED AT ADA ACCESSIBLE 5.303.3.4.3 WASH FOUNTAINS: WASH FOUNTAINS SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE HEIGHT PER ARCHITECTURAL DETAILS. THAN 1.8 GALLONS PER MINUTE/20 [RIM SPACE (INCHES) AT 60 PSI]. 15. ALL DOMESTIC COLD AND HOT WATER TAKE-OFFS SHALL HAVE AN ISOLATION SHUT-OFF VALVE. 5.303.3.4.4 METERING FAUCETS: METERING FAUCETS SHALL NOT DELIVER MORE THAN 0.20 16. CONTRACTOR SHALL DEWATER ANY AREA AT OR BELOW GRADE PRIOR TO SETTING EQUIPMENT. 5.303.3.4.5 METERING FAUCETS FOR WASH FOUNTAINS: METERING FAUCETS FOR WASH FOUNTAINS 17. ANY AND ALL WATER PIPING EXPOSED TO OUTSIDE ELEMENTS SHALL BE INSULATED TO PREVENT FREEZING. SHALL HAVE A MAXIMUM FLOW RATE OF NOT MORE THAN 0.20 GALLONS PER CYCLE/20 SPACE (INCHES) AT 60 PSIJ. NOTE: WHERE COMPLYING FAUCETS ARE UNAVAILABLE, 18. ALL WORK AND MATERIAL SHALL BE PERFORMED AND INSTALLED IN COMPLIANCE WITH THE FOLLOWING AERATORS OR OTHER MEANS MAY BE USED TO ACHIEVE REDUCTION. 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: 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, 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 STANDARD CODE (CALGREEN), PART 11, TITLE 24 CCR 2022 CALIFORNIA REFERENCE STANDARDS CODE (CBC), PART 12, TITLE 24 CCR TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

			DRAWIN	G INDEX	
<ul> <li>"SHALL BE INSPECTED AND TESTED ON</li> <li>DITION OF ALL EQUIPMENT TO REMAIN,</li> <li>L ACTIONS AND COSTS SHALL BE MADE</li> <li>BY HAND PLACING BACKFILL MATERIAL</li> <li>HES MINIMUM COVER OVER TOP OF</li> </ul>		SHEETP0.00P1.01PD2.01PD2.02P2.01P2.02P4.01P4.02P5.01P6.01	PLUMBING SITE PL PLUMBING DEMOLI	ITION FLOOR PLANS ITION FLOOR PLANS PLANS PLANS ILANS JLANS JLES	
PRIOR TO BACKFILL OR COVER-UP, CT TO STATIC WATER PRESSURE OF 125 Y PORTION OF PIPING SYSTEM THAT ST, PASS OR FAIL INDICATION, SUMMARY					
L BE PRESSURE TESTED. TESTS SHALL PRIOR TO TEST. TEST SHALL					
SHALL NOTIFY ENGINEER AND OWNER PERFORMED ON SANITARY PIPING					
PLUMBING CODE SECTION 1213					
DTES			ABBREVIA	TIONS	
SMACNA GUIDELINES, HAZARD LEVEL 'A'. THE GUIDELINES, THE FIELD	NOTE:	1. ALL ABBREVIATIONS MAY NOT ON THESE DRAWINGS.	BE USED		
CT, MECHANICAL ENGINEER AND	AAP	AREA ALARM PANEL	МН	MANHOLE	
TH THE SMACNA "GUIDELINES FOR RSTRUT SEISMIC	AAV	AUTOMATIC AIR VENT	MS	MOP SINK	
	A.F.F.	ABOVE FINISHED FLOOR	N.C.	NORMALLY CLOSED	
O PROCEEDING WITH INSTALLATION. CONDITIONS DCUMENTS.	AP		NIC	NOT IN CONTRACT	
ROUTING WITH WORK OF OTHER	B.F.F.	BELOW FINISHED FLOOR	N.O.	NORMALLY OPEN	

REFER TO CBC CHAPTER 35 AND CFC CHAPTER 80.

1617A.1.26 AND ASCE 7-16 CHAPTER 13, 26 AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

2019 CBC, SECTION 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

APPLICABLE STANDARDS FOR A LIST OF APPLICABLE STANDARDS, INCLUDING CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS,

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.

20. 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.

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 2019 CBC, SECTIONS 1617A.1.18 THROUGH

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.

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

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

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

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.

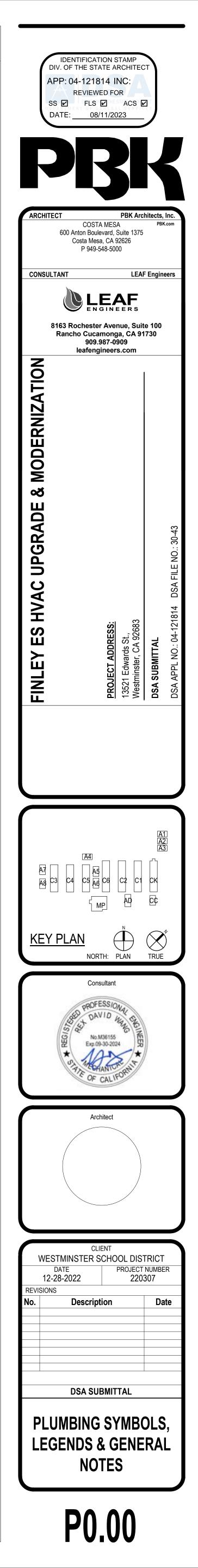
MECHANICAL PIPING (MP), MECHANICAL DUCTS (MD), PLUMBING PIPING (PP), ELECTRICAL DISTRIBUTION SYSTEMS (E):

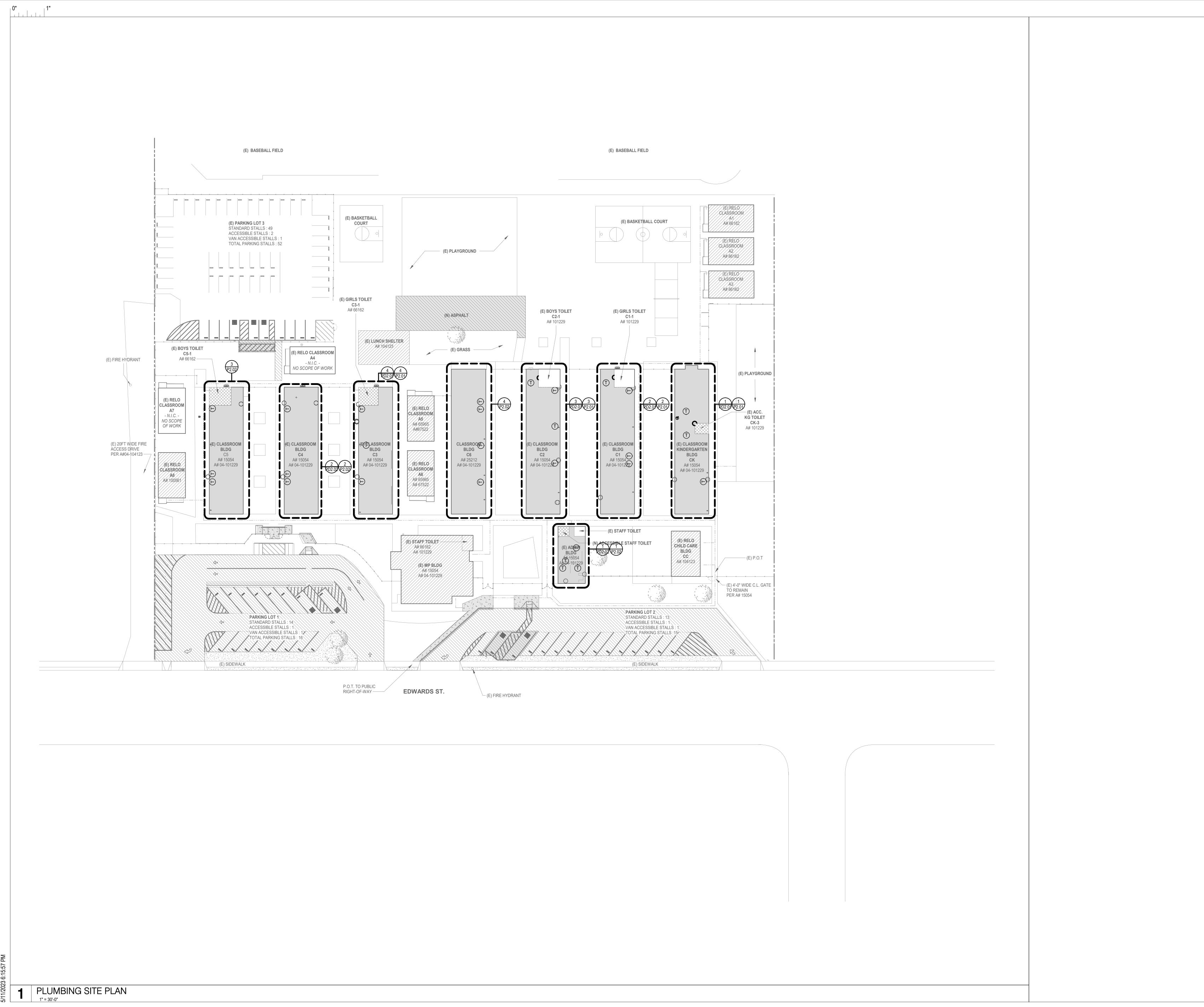
MP MD PPX E OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES & DETAILS.

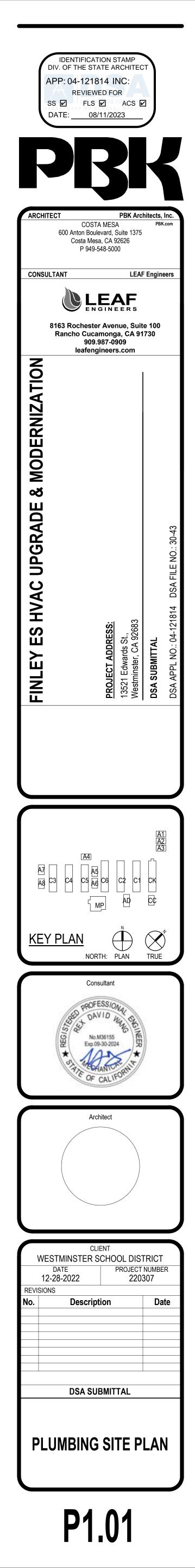
MP 🗍 MD 河 PP 🦳 E 🦳 OPTION 2: SHALL COMPLY WITH THE APPLICABLE OSHPD PRE-APPROVAL (OPM #) #\_\_\_\_\_\_.

NOTE:	1. ALL ABBREVIATIONS MAY NOT BE USED ON THESE DRAWINGS.	
AAP	AREA ALARM PANEL	МН
AAV	AUTOMATIC AIR VENT	MS
A.F.F.	ABOVE FINISHED FLOOR	N.C.
AP	ACCESS PANEL	NIC
B.F.F.	BELOW FINISHED FLOOR	N.O.
BFP	BACKFLOW PREVENTER	0.F./
BOB	BOTTOM OF BEAM	0.F./
BOP	BOTTOM OF PIPE	OFD
BTUH	BRITISH THERMAL UNITS PER HOUR	PH
CA	COMPRESSED AIR	PIV
C/C	CUT AND CAP	PRV
CFH	CUBIC FEET PER HOUR	RD
CFS	CUBIC FEET PER SECOND	RE:
CI	CAST IRON	R.I.C
CLG	CEILING	RO
CO	CLEANOUT	RPB
CONN	CONNECTION	RPM
CONT.	CONTINUATION	RVB
DF	DRINKING FOUNTAIN	SD
DPV	DRY PIPE VALVE	S.F.
DWG.	DRAWING	SIA.
EA	EACH	SK
EL.	ELEVATION	T.O.I
EDF	ELECTRIC DRINKING FOUNTAIN	TP
FCO	FLOOR CLEANOUT	TYP
FD	FLOOR DRAIN	U
FDV	FIRE DEPARTMENT VALVE	U/F
F.F.	FINISHED FLOOR	U/S
FHC	FIRE HOSE CABINET	VAC
F.L.	FLOW LINE	VIF
FS	FLOOR SINK	VTR
FT	FEET	WC
FU	FIXTURE UNITS	WCC
GC	GENERAL CONTRACTOR	WH
GPH	GALLONS PER HOUR	WME
GPM	GALLONS PER MINUTE	ΥH
HB	HOSE BIBB	ZV
HP	HORSEPOWER	(A)
I.E.	INVERT ELEVATION	(D)
KW	KILOWATTS	(E)
LAV	LAVATORY	(N)
MAP	MASTER ALARM PANEL	(R)
MECH	MECHANICAL	

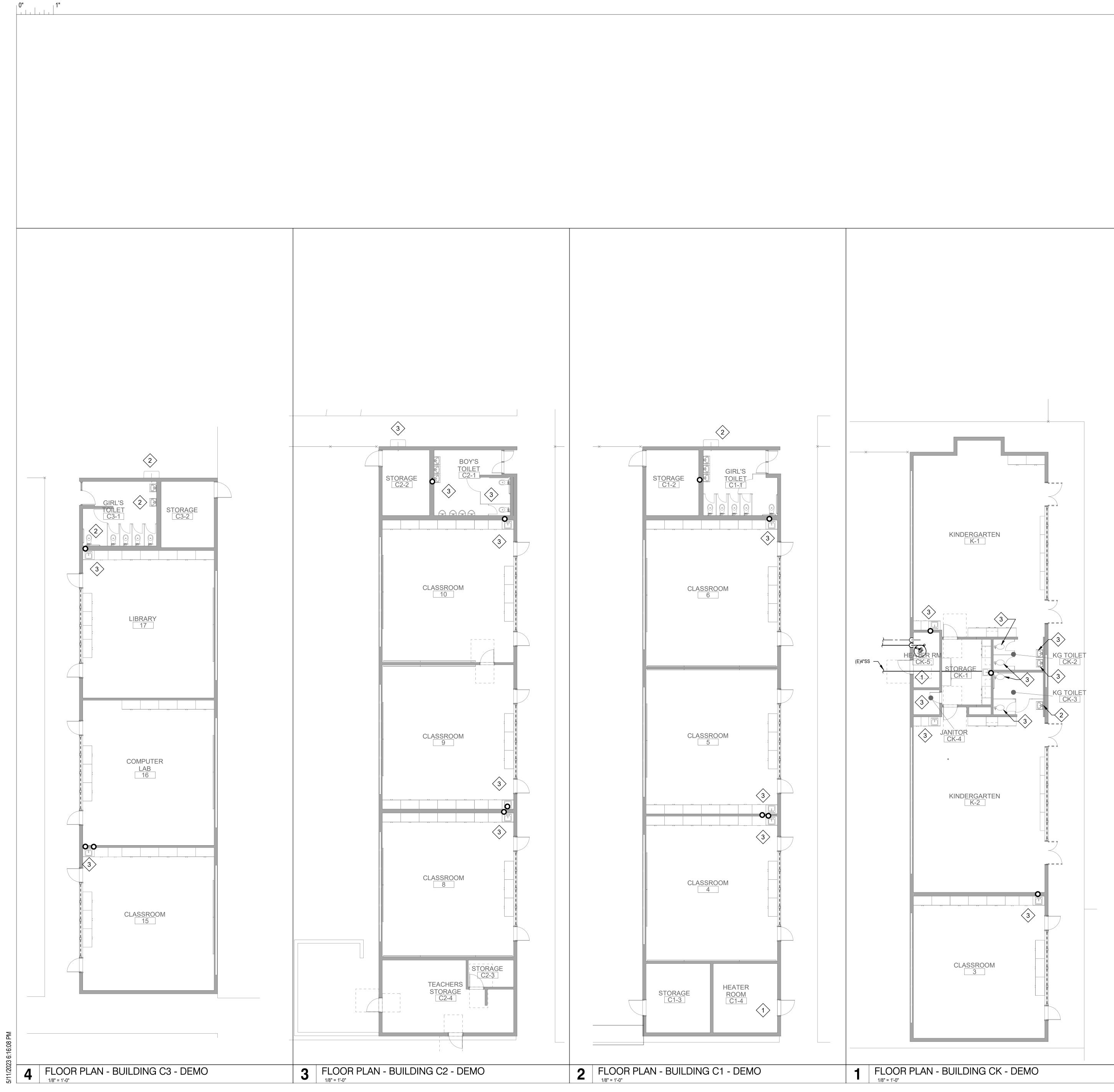
## F./C.I. OWNER FURNISHED/CONTRACTOR INSTALLED OWNER FURNISHED/OWNER INSTALLED ./O.I. OVERFLOW DRAIN PHASE POST INDICATOR VALVE PRESSURE REDUCING VALVE ROOF DRAIN REFER TO ROUGH-IN AND CONNECT REVERSE OSMOSIS REDUCED PRESSURE BACKFLOW PREVENTER BFP **REVOLUTIONS PER MINUTE REFRIGERATOR VALVE BOX** STORM DRAIN SQUARE FEET SIAMESE SINK TOP OF PIPE TRAP PRIMER TYPICAL URINAL UNDERFLOOR UNDERSLAB C. BRKR. VACUUM BREAKER VERIFY IN FIELD VENT THRU ROOF WATER CLOSET WALL CLEANOUT WALL HYDRANT WASHING MACHINE BOX YARD HYDRANT ZONE VALVE ITEM NOTED TO BE ABANDONED ITEM NOTED TO BE DEMOLISHED EXISTING ITEM NEW ITEM ZFITEM NOTED TO RELOCATED









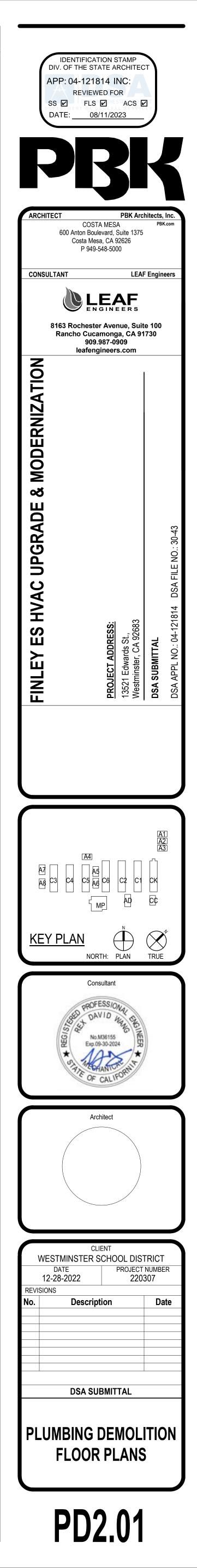


# DEMO KEY NOTES

(1) MECHANICAL EQUIPMENT TO BE DEMOLISHED. REFER TO HVAC PLANS. CAP EXISTING 1 1/2" GAS AND 2" MAKE UP WATER TO MECHANICAL BOILER  $\langle 2 \rangle$  EXISTING PLUMBING FIXTURE TO BE REMOVED AND REPLACED. CAP SEWER, VENT AND WATER LINE TEMPORARILY FOR NEW REPLACEMENT. MODIFY AND EXTEND PIPING AS REQUIRED.  $\langle 3 \rangle$  EXISTING PLUMBING FIXTURE TO REMAIN

## 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.
- WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING 4. TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.







0" | 1"

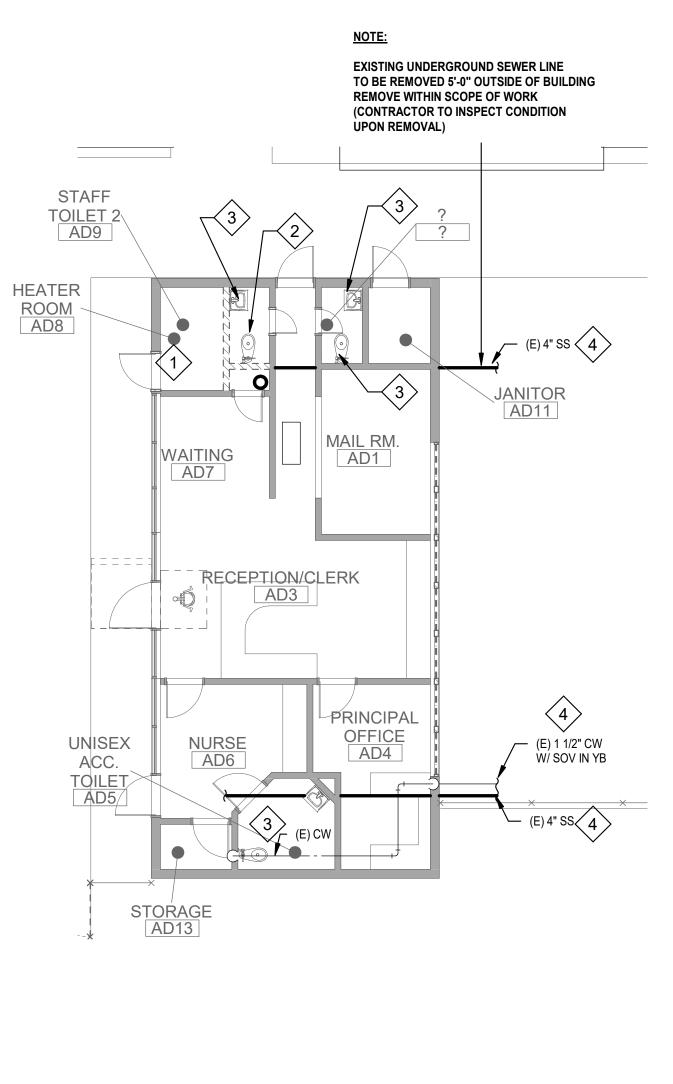
## DEMO KEY NOTES

 MECHANICAL EQUIPMENT TO BE DEMOLISHED. REFER TO HVAC PLANS. CAP EXISTING 1 1/2" GAS AND 2" MAKE UP WATER TO MECHANICAL BOILER
 EXISTING TOILET ROOM WALLS TO BE DEMOLISHED AND RECONFIGURED (PER ARCHITECTURAL DRAWINGS.) REMOVE PLUMBING FIXTURES. REMOVE AND REPLACE EXISTING SEWER BELOW FLOOR (WITHIN SCOPE), CAP VENT AND WATER LINE ABOVE CEILING.

3 EXISTING PLUMBING FIXTURE TO REMAIN

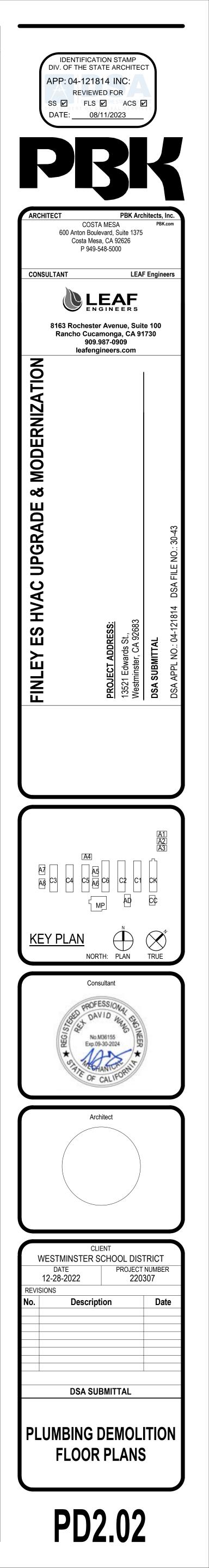
4 EXISTING PIPING BELOW FLOOR / GRADE

5 EXISTING PLUMBING FIXTURE TO BE REMOVED AND REPLACED. CAP SEWER, VENT AND WATER LINE TEMPORARILY FOR NEW REPLACEMENT. MODIFY AND EXTEND PIPING AS REQUIRED.



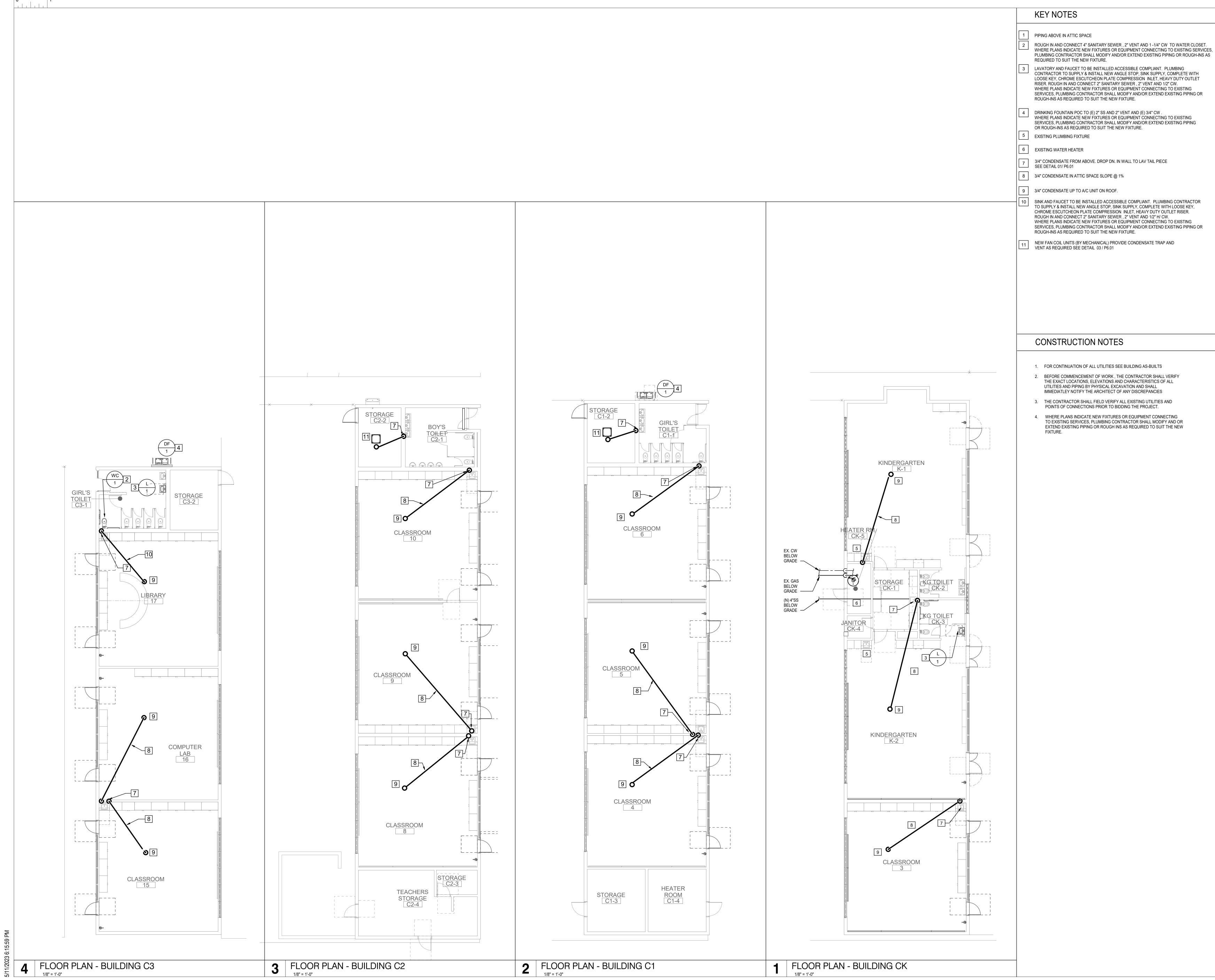
# CONSTRUCTION NOTES

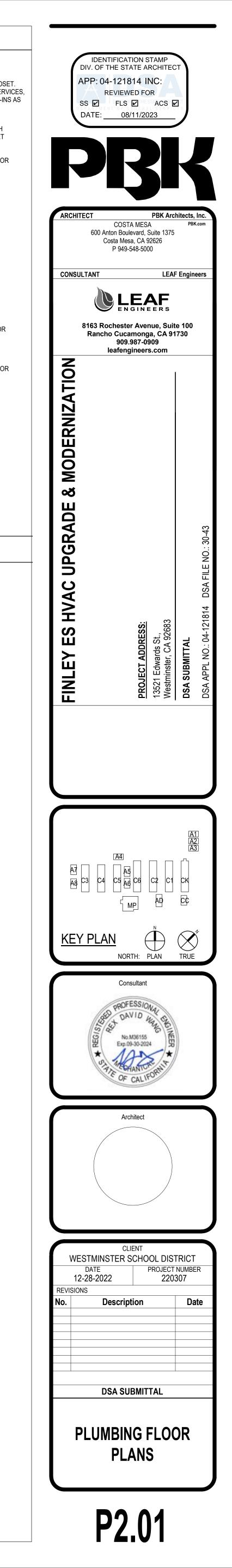
- FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS
   BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS, ELEVATIONS AND CHARACTERISTICS OF ALL UTILITIES AND PIPING BY PHYSICAL EXCAVATION AND SHALL IMMEDIATLEY NOTIFY THE ARCHITECT OF ANY DISCREPANCIES
- 3. THE CONTRACTOR 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.





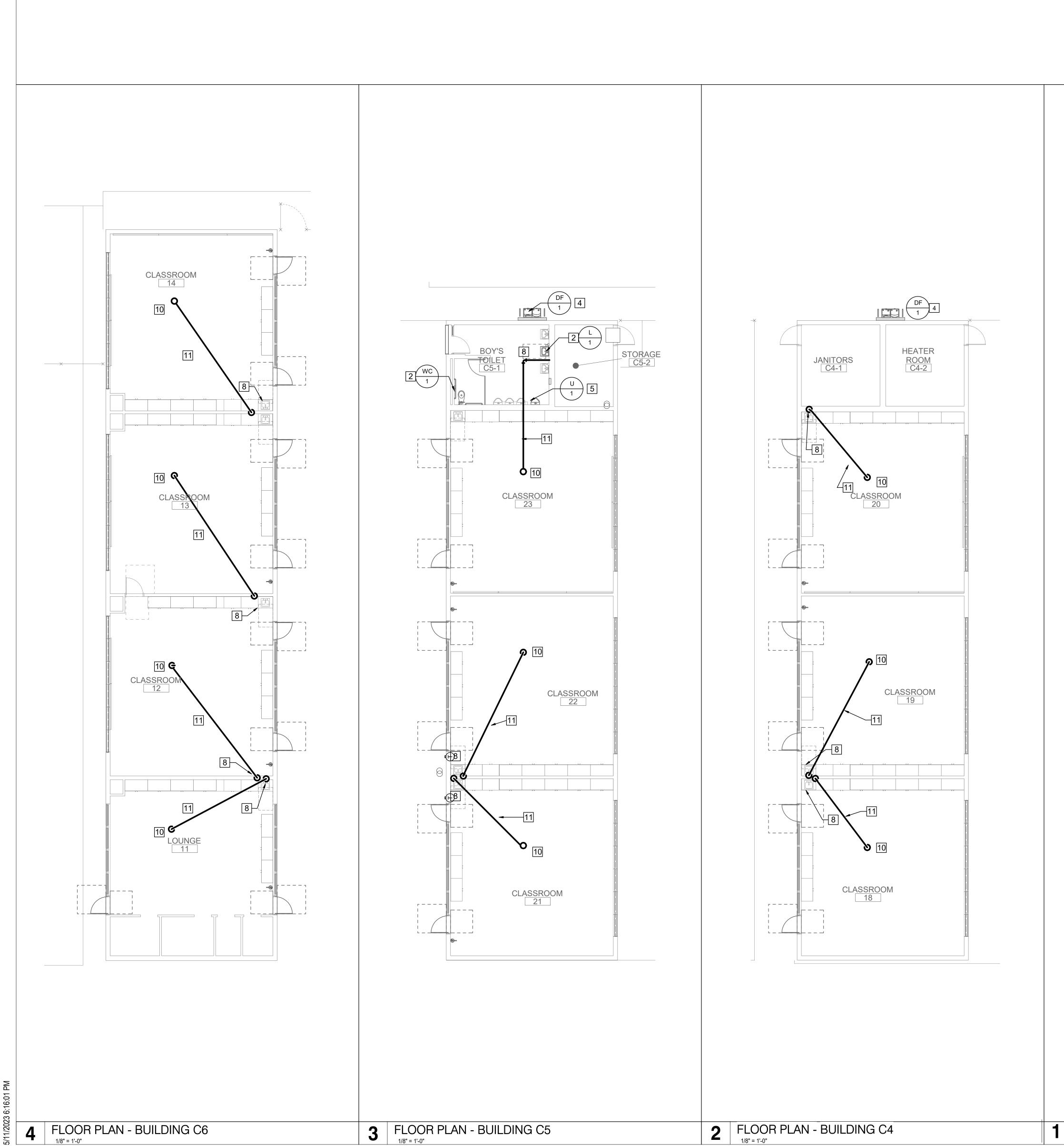
<sub>|</sub> 1"





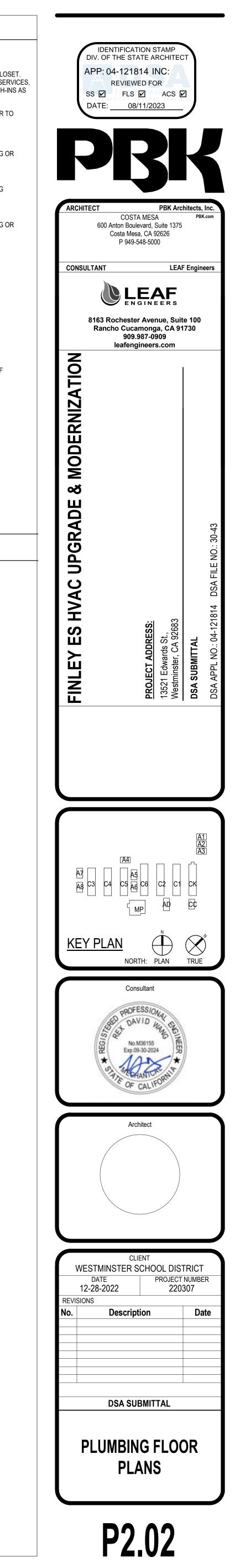


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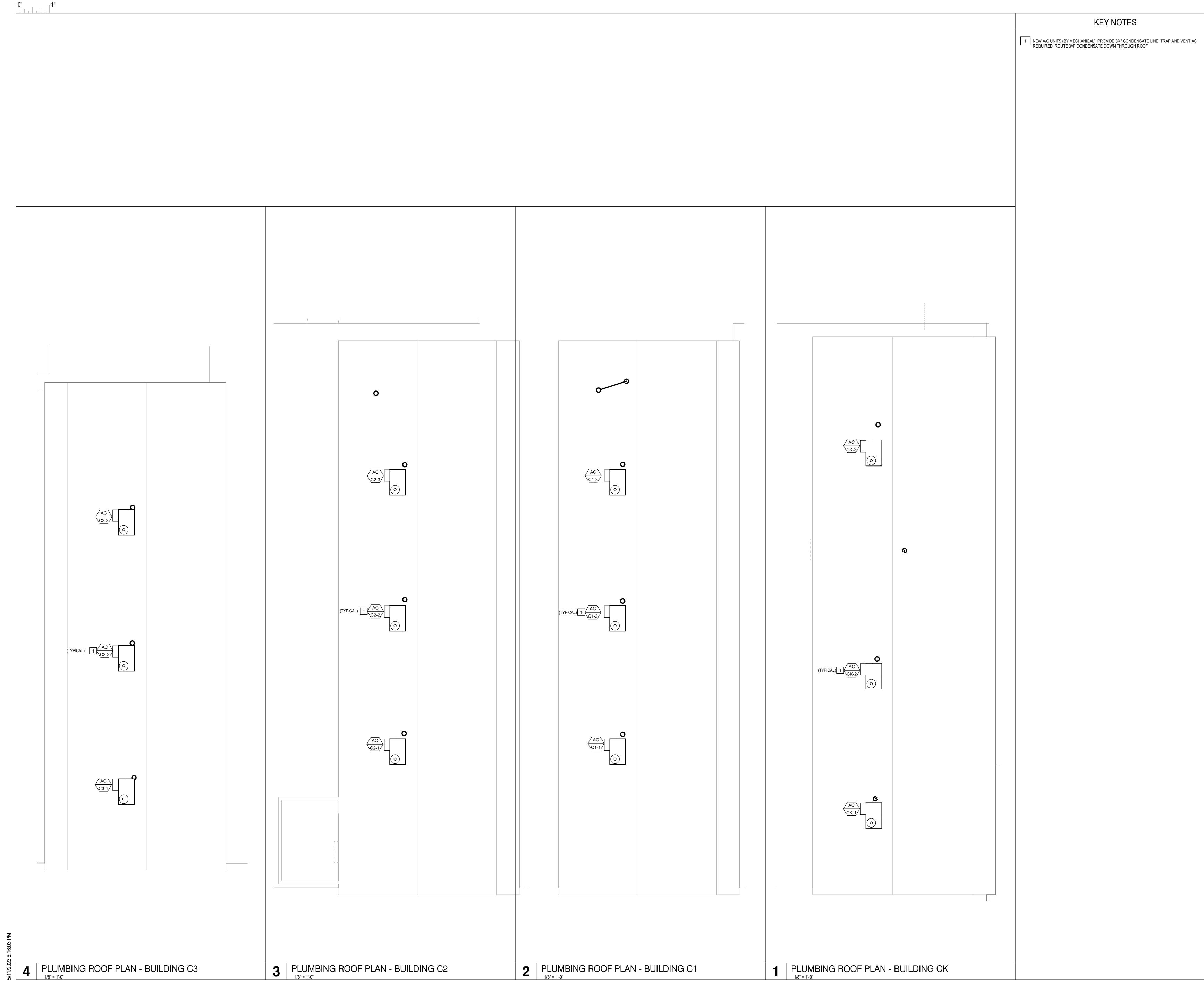


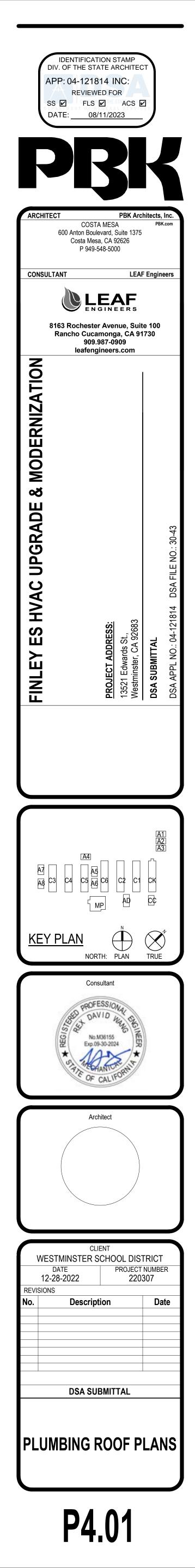
.E PATH: Z:\Pro

		KEY NOTES
	1	PIPING ABOVE IN ATTIC SPACE ROUGH IN AND CONNECT 4" SANITARY SEWER , 2" VENT AND 1 -1/4" CW TO WATER CLC WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SE PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING OR ROUGH-
	3	REQUIRED TO SUIT THE NEW FIXTURE. LAVATORY AND FAUCET TO BE INSTALLED ADA COMPLIANT. PLUMBING CONTRACTOR ' SUPPLY & INSTALL NEW ANGLE STOP, SINK SUPPLY, COMPLETE WITH LOOSE KEY, CHROME ESCUTCHEON PLATE COMPRESSION INLET, HEAVY DUTY OUTLET RISER. ROUGH IN AND CONNECT 2" SANITARY SEWER, 2" VENT AND 1/2" H/ CW WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING
	4	SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING ( ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE. 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	ROUGH IN AND CONNECT 2" SANITARY SEWER , 2" VENT AND 1 1/4" CW TO URINAL WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND/OR EXTEND EXISTING PIPING ROUGH-INS AS REQUIRED TO SUIT THE NEW FIXTURE.
	6 7 8	EXISTING PLUMBING FIXTURE EXISTING WATER HEATER 3/4" CONDENSATE FROM ABOVE. DROP DN. IN WALL TO LAV TAIL PIECE
	9	SEE DETAIL 01/ P6.01 NEW FAN COIL UNITS (BY MECHANICAL) PROVIDE CONDENSATE TRAP AND VENT AS REQUIRED SEE DETAIL 03 / P6.01 3/4" CONDENSATE UP TO A/C UNIT ON ROOF.
	11 12	3/4" CONDENSATE IN ATTIC SPACE SLOPE @ 1% NEW 4" SEWER LINE BELOW GRADE PROVIDE NEW CLEANOUT 5'-0" OUTSIDE FACE OF BUILDING. RE-CONNECT TO EXISITNG.
		CONSTRUCTION NOTES
		<ol> <li>FOR CONTINUATION OF ALL UTILITIES SEE BUILDING AS-BUILTS</li> <li>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</li> <li>THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND POINTS OF CONNECTIONS PRIOR TO BIDDING THE PROJECT.</li> <li>WHERE PLANS INDICATE NEW FIXTURES OR EQUIPMENT CONNECTING TO EXISTING SERVICES, PLUMBING CONTRACTOR SHALL MODIFY AND OR</li> </ol>
		EXTEND EXISTING PIPING OR ROUGH INS AS REQUIRED TO SUIT THE NEW FIXTURE.
STAFF ? TOILET 2 ?		
AD9 2 2 2 C		
WAITING AD7 9		
FC ADM-1 ADM-1 AD1 AD1		
RECEPTION/CLERK AD3 9 FC ADM-2		
NURSE AD6 FC ADM-3 PRINCIPAL CW (E)1 1/2" CW		
UNISEX STORAGE ACC.		
AD13 TOILET AD5		
<b>1</b> FLOOR PLAN - ADMIN BLDG	-	

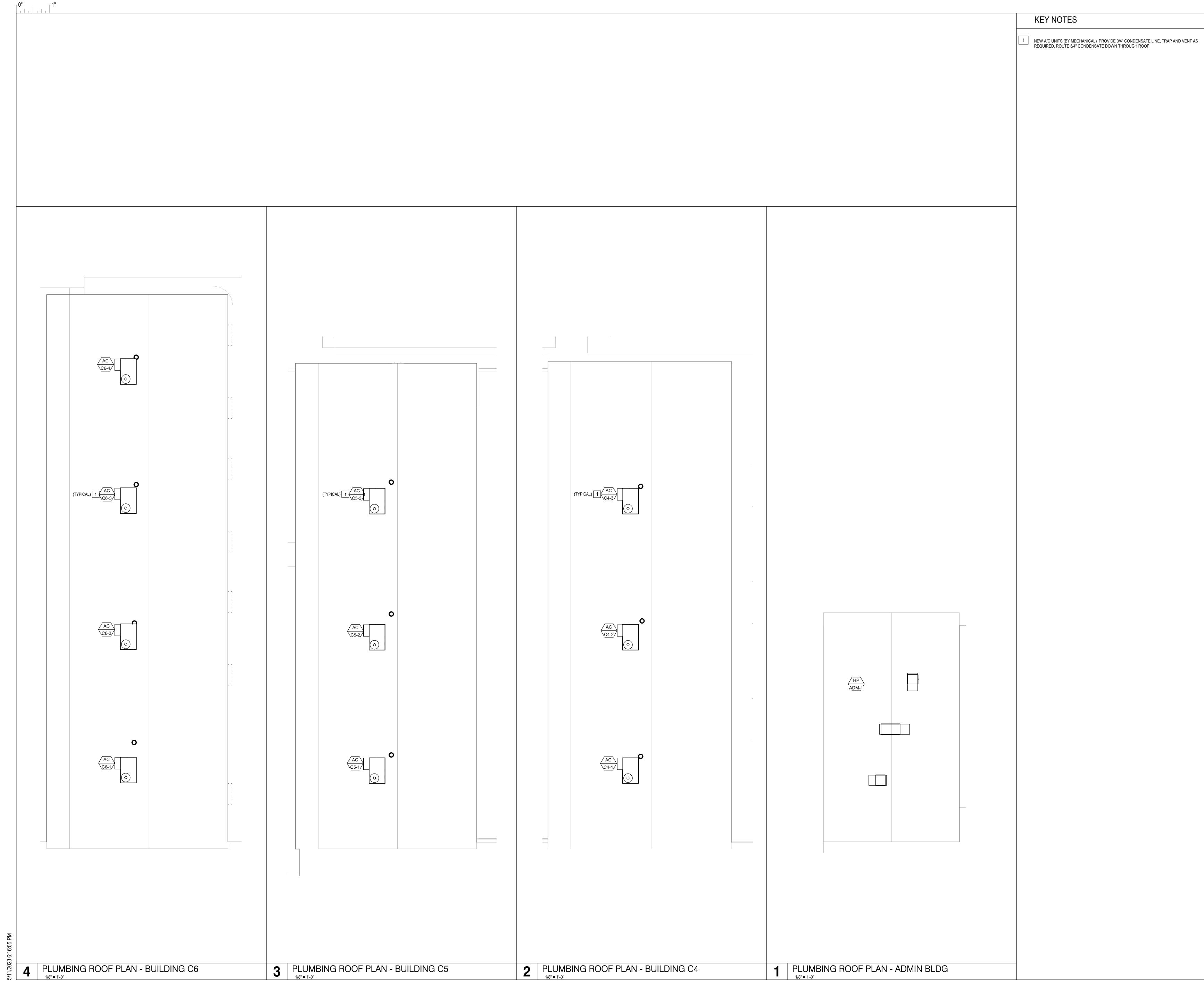


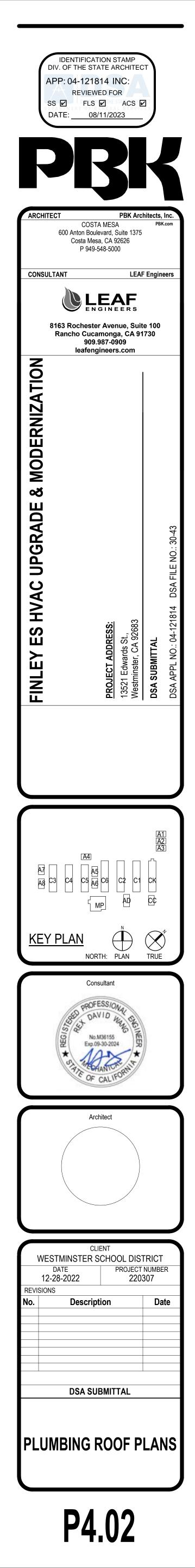












P5.01 - PLUMBING SCHEDULES

0" | 1"

PLUMBING FIXTURE SCHEDULE								
MARK	FIXTURE	S or W	V	CW	HW	DESCRIPTION		
WC 1	WATER CLOSET (KINDER)	4"	2"	1-1/2"		AMERICAN STANDARD MADERA YOUTHWISE # 2599.001.128 FLOOR MOUNTED TOILET SYSTEM WITH 6047.161.002 MANUAL FLUSH VALVE WITH METAL COVER AND 5901.100 HEAVY DUTY OPEN FRONT SEAT. FLUSH VALVE HANDLE TO BE MOUNTED ON WIDE SIDE OF STALL, CBC COMPLIANT		
WC 2	WATER CLOSET (ADA)	4"	2"	1-1/2"		AMERICAN STANDARD MADERA FLOWISE # 2854.128 FLOOR MOUNTED TOILET SYSTEM WITH SLOAN ROYAL 111-1.28 MANUAL FLUSH VALVE WITH METAL COVER AND 5901.100 HEAVY DUTY OPEN FRONT SEAT. FLUSH VALVE HANDLE TO BE MOUNTED ON WIDE SIDE OF STALL . (ACCESSIBLE) CBC COMPLIANT		
	URINAL	2"	1-1/2"	1"		AMERICAN STANDARD # 6590.001 WASHBROOK FLOWISE WALL HUNG URINAL "VITREOUS CHINA" 0.125 GPF, SLOAN ROYAL 186.125 EXPOSED MANUAL FLUSH VALVE J.R. SMITH # 0600 SERIES URINAL SUPPORTS. INSTALL IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. FOR MOUNTING HEIGHT REFER TO ARCH PLANS. CBC COMPLIANT		
	LAVATORY	2"	1-1/2"	1/2"	-	AMERICAN STANDARD NO. 0356.041"LUCERNE WALL HUNG LAVATORY" 20"X18" WALL HUNG, COMPLETE WITH FAUCET WITH 0.5 GPM AERATOR AND VANDAL RESISTANT COVER PLATE, MCGUIRE NO. 155A 1-1/4" OUTLET "OPEN GRID P.O. PLUG" MCGUIRE NO. PW8090NC0 1-1/4" L.A. PATTERN P-TRAP WITH TRAP AND SUPPLYCOVERS, GALVANIZED NIPPLE AND CHROMIUM PLATED BRASS CASING, CHICAGO NO. 1017 -ABCP LOOSE KEY STOPSWITH RIGID SUPPLIES, AND ZURN NO. Z-1231CARRIER WITH STEEL PLATE, MOUNT PER ARCHITECTURAL DWGS.		
L 2	LAVATORY (STAFF)	2"	1-1/2"	1/2"	1/2"	SAME AS L-1 MOUNT AT ADULT ACCESIBLE HEIGHT		
S 1	SINK (STAFF)	2"	2"	1/2"	1/2"	JUST SL -ADA ,2225 - B - GR 18 GA STAINLESS STEEL , SINGLE COMPARTMENT , 25" X 22" X 0-1/2, 3-HOLE PUNCH WITH CHICAGO 1100-GN8AE35-369AB WRISTBLADE LEVER, FAUCET WITH 1.5 GPM FLOW RETRICTOR, J-35-FS PERFORATED GRID DRAIN , SPEEDWAY COMPRESSION WALL STOPS & SUPPLY, P-TRAP . SYMMONS "MAXLINE" NO. 7-225-CK-MS-BT-X THERMOSTATIC MIXING VALVE WITH STAINLES STEEL CABINET,CBC COMPLIANT FOR ACCESS.		
DF 1	DRINKING FOUNTAIN	2"	2"	1/2"		ELKAY NO. VRC8TLWS / FILTERED DUAL LZ COOLER, 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.		
WHA 1	WATER HAMMER ARRESTER			VARIES	VARIES	PPP SC SERIES HYDRA-RESTER, SEAMLESS COPPER CHAMBER SUITABLE FOR CONCEALED INSTALLATION, SIZE INDICATED ON PLANS. INSTALL PER MANUFACTURER RECOMMENDATION.		
	TRAP PRIMER			1/2"		PRECISION PLUMBING PRODUCTS INC. BRASS DIAPHRAM TYPE TRAP PRIMER W/INTEG. VAC. BREAKER & GRAVITY OUTLET, PROVIDE INLET BALL VALVE & ACCESS PANEL. SEE PLANS FOR NUMBER OF TRAPS SERVED.		

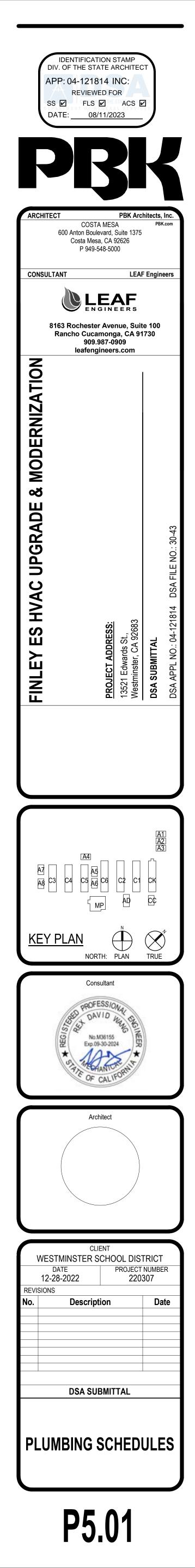
NOTES:

 REFER TO ARCHITECHTURAL DRAWINGS FOR EXACT SPECIFICATIONS AND LOCATIONS OF ALL APPLIANCES, PLUMBING FIXTURES AND FAUCETS. WHERE THERE IS A DISCREPANCY BETWEEN THE ENGINEERING AND ARCHITECTURAL DRAWINGS OF APPLIANCES AND FIXTURE SPECIFICATIONS, NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH THE WORK.

2. ALL FIXTURES AND APPLIANCES SHALL BE APPROVED BY THE LOCAL AUTHORITIES HAVING JURISDICTION.

3. PLUMBING CONTRACTOR TO COORDINATE NUMBER OF REQUIRED HOLES FOR ALL SINKS BASED ON EQUIPMENT / ACCESSORIES SPECIFIED. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.

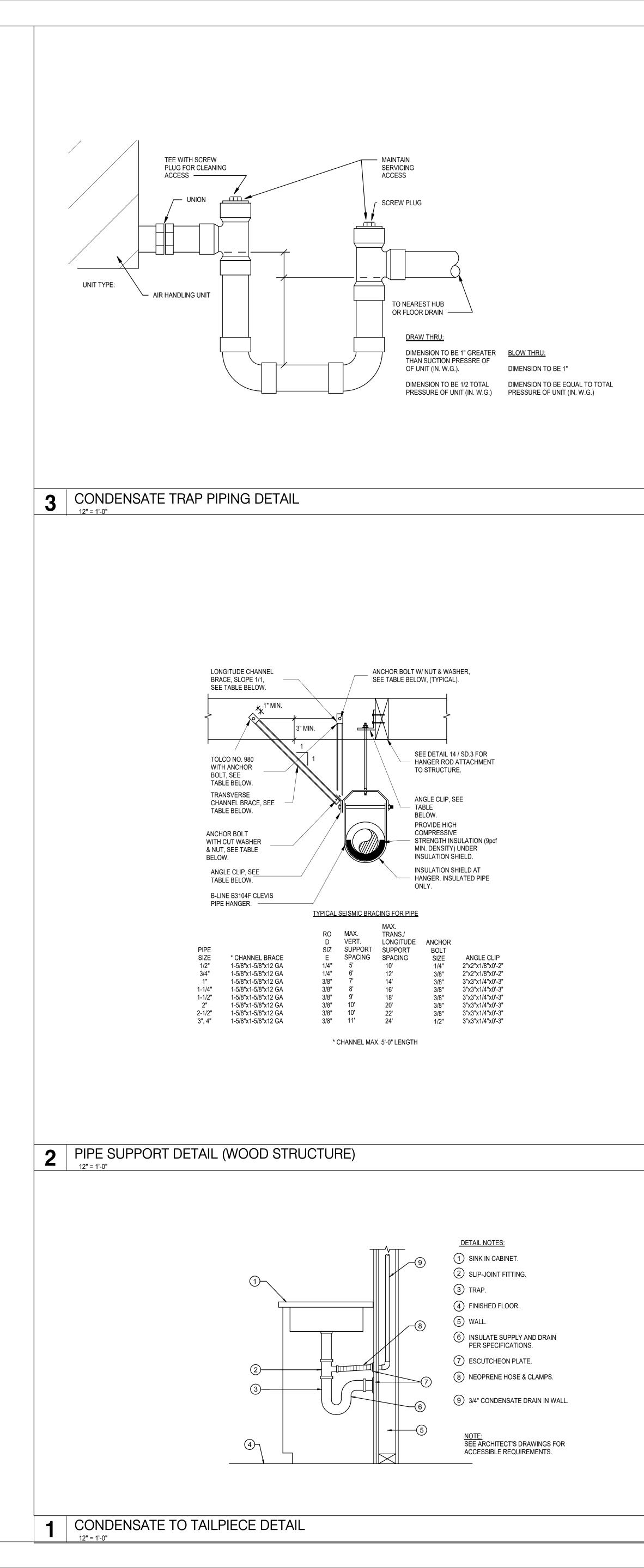
4. ALL FITTINGS AND FAUCETS TO BE USED SHALL BE IN COMLIANCE WITH STATE ASSEMBLY BILL AB1953 (LEAD FREE)

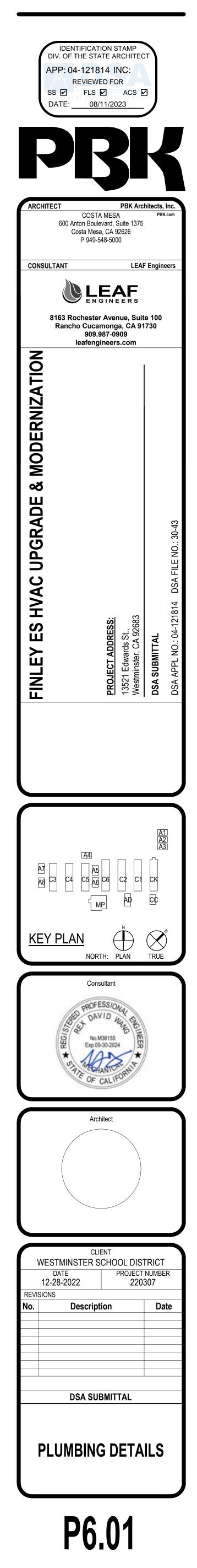


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(7)

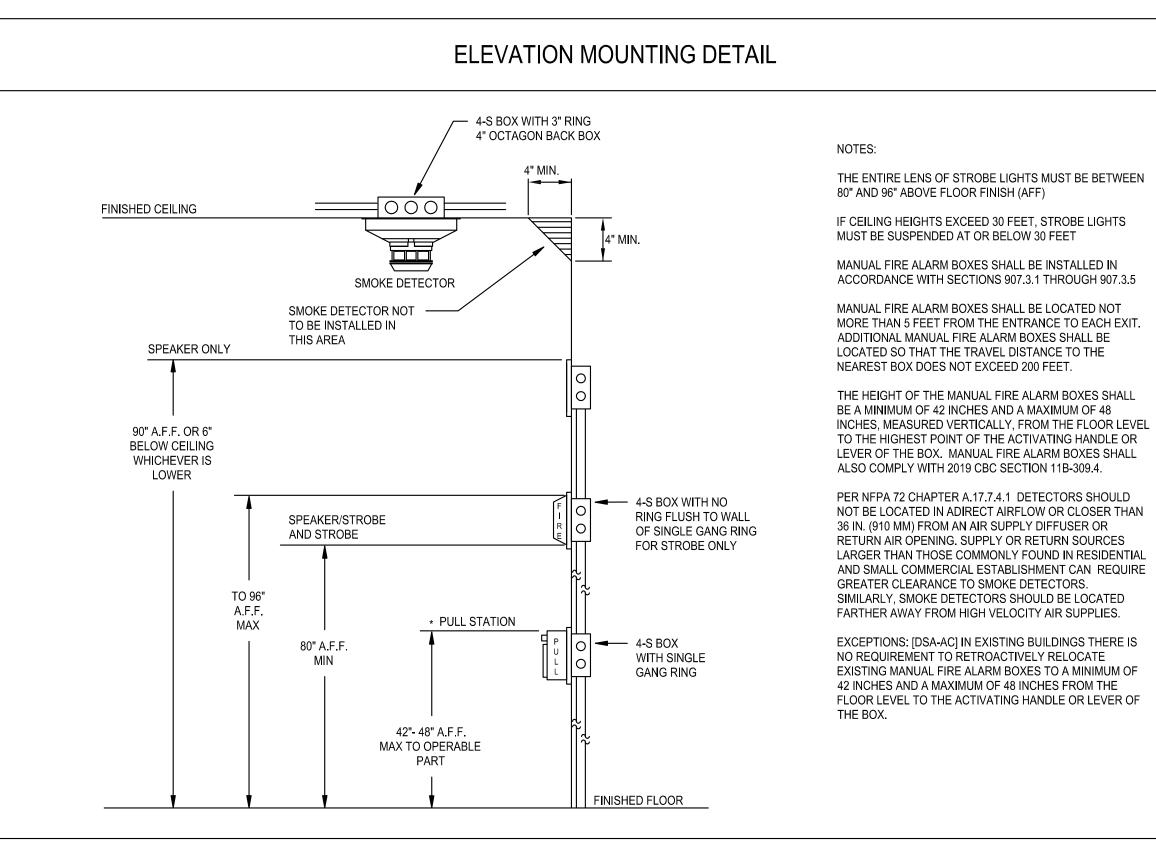




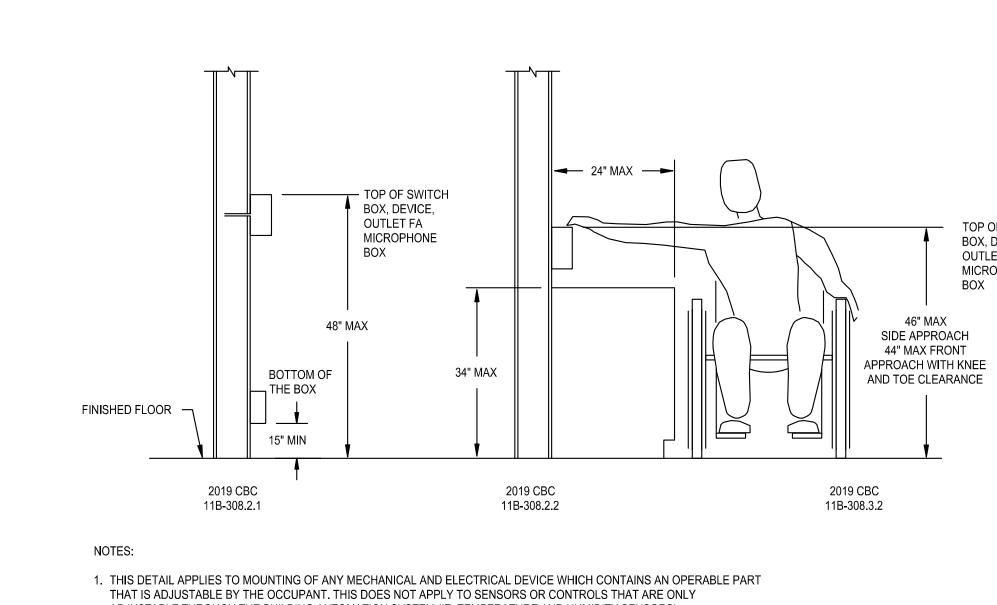
			DEVICE SCHEDULE		
SYM.	MODEL	MANUFACTURER	DESCRIPTION	MOUNTING	CSFM #
	IFP-2100ECS	FARENHYT	EMERGENCY VOICE/ALARM COMMUNICATION PANEL ECS-INT50W, INTERNAL 50 WATT AMPLIFIER 6815, SLC EXPANDER	WALL MOUNTED	7165-0559:05 7300-0559:01
FACP	HWF2V-COM	HONEYWELL/ADEMCO	CELLULAR FIRE ALARM COMMUNICATOR	WALL MOUNTED	7300-1645:05
	SSU00672	SAE	FIRE DOCUMENT BOX-RED	WALL MOUNT @ FACP	UL LISTED
AMP	ECS-50W	FARENHYT	SINGLE CHANNEL 50W, 25/70V AMPLIFIER	WALL MOUNTED	7165-0559:05
FAPS	RPS-1000	FARENHYT	INTELLIGENT 6 AMP NAC POWER SUPPLY	WALL MOUNTED	7165-0559:05
FATC	SSU00636	SAE	FIRE ALARM TERMINAL CABINET	WALL MOUNTED	UL & NEMA LIS
CR	IDP-RELAY	FARENHYT	ADDRESSABLE RELAY MODULE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7300-0559:01
(S)p	IDP-PHOTO-W B210LP	FARENHYT	ADDRESSABLE PHOTOELECTRIC SMOKE DETECTOR HEAD 6" DETECTOR BASE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7272-0559:014 7300-1653:010
$\langle \underline{I}_{A} / \langle \underline{I}_{C} \rangle$	IDP-HEAT-W B210LP	FARENHYT	ADDRESSABLE FIXED (135°F) HEAT SENSOR HEAD (F = FIXED, A = ATTIC) 6" DETECTOR BASE	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7270-0559:014 7300-1653:010
F	IDP-PULL-DA	FARENHYT	ADDRESSABLE DOUBLE ACTION MANUAL PULL STATION	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7150-0559:01
X	SRL	SYSTEM SENSOR	MULTI CANDELA STROBE, CEILING MOUNT-RED	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7125-1653:050
	SPSRL	SYSTEM SENSOR	MULTI CANDELA TEMPORAL SPEAKER STROBE, CEILING MOUNT-RED	4-11/16" SQUARE BOX 2-1/8" MIN. DEPTH	7320-1653:050
WP	SPRK	SYSTEM SENSOR	WEATHER PROOF SPEAKER, WALL MOUNT-RED	WBB BACK BOX IS INCLUDED	7320-1653:020
JB	TBD	TBD	ELECTRICAL JUNCTION BOX (SIZES WILL VARY)	TBD	UL LISTED
ANN	RA-2000	FARENHYT	FIRE ALARM REMOTE ANNUNCIATOR	4-11/16" SQUARE BOX	7165-0559:05
****	PS-12260VdS	POWER SONIC	12VDC, 26AH RECHARGEABLE SEALED LEAD ACID BATTERY	INSTALL IN EVAC ENCLOSURE	UL LISTED
****	PS-1270	POWER SONIC	12VDC, 7AH RECHARGEABLE SEALED LEAD ACID BATTERY	INSTALL IN POWER SUPPLY, AMPLIFIER & FAC ENCLOSURES	UL LISTED

NOTES:

1. INSTALL TWO 12VDC, 26Ah BATTERIES IN EVAC ENCLOSURE. 2. INSTALL TWO 12VDC, 7AH BATTERIES IN EACH NAC POWER SUPPLY & AMPLIFIER ENCLOSURES. 3. INSTALL ONE 12VDC, 7AH BATTERY IN COMMUNICATOR ENCLOSURE.







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.

	LEGEND	S
ABBREVIATION	DESCRIPTION	AB
A OR AMP	AMPERES	NIC
AFF	ABOVE FINISHED FLOOR	NC
AIC	AMPERES INTERRUPTING CAPACITY	PH
ARCH.	ARCHITECT; ARCHITECTURAL	PN
AWG	AMERICAN WIRE GAUGE	P۷
С	CONDUIT	RE
СКТ	CIRCUIT	RE
CL.	CEILING MOUNTED DEVICE	RM
C.O.	CONDUIT ONLY WITH PULL WIRE	SF
CU	COPPER	SH
DWG	DRAWING	SP
ER	EXISTING DEVICE TO BE REMOVED	SP
EMT	ELECTRICAL METALLIC TUBING	SV
EQUIP	EQUIPMENT	ΤY
EXIST / (E)	EXISTING	UG
FIN.	FINISH	U.(
FLR	FLOOR	V
FT	FEET	V-/
GFI	GROUND FAULT INTERRUPTER	W
GND	GROUND	W/
LTG.	LIGHTING	W/
MTG	MOUNTING	W
Ν	NEW	CE
FS	FLOW SWITCH	
JB	JUNCTION BOX	
PIV	POST INDICATOR VALVE	
ТЅ	TEMPER SWITCH	
	PULL BOX (WEATHERPROOF)	
	RISER UP AND DOWN	

JB

PIV

TS

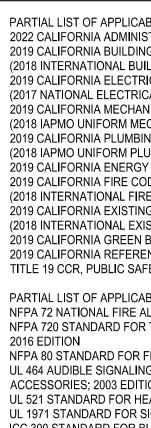
TOP OF SWITCH BOX, DEVICE,

OUTLET FA

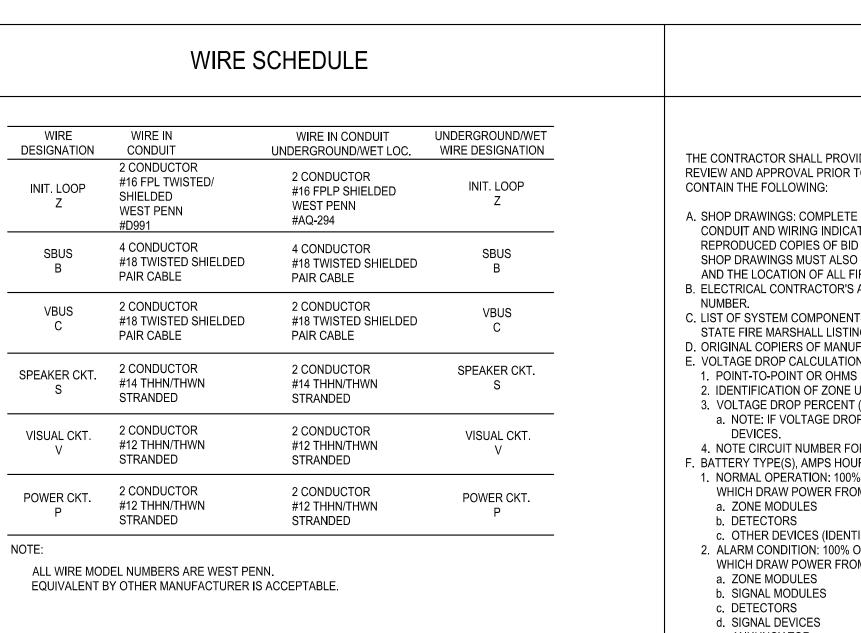
MICROPHONE

BOX

ABBREVIATIO
NIC
NO.
PH. OR Ø
PNL
PWR
REC/RECEPT
REQ'D
RM
SF
SHT
SP
SPECS
SW
TYP
UG
U.O.N.
V
V-A
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W/O
WP
CEC



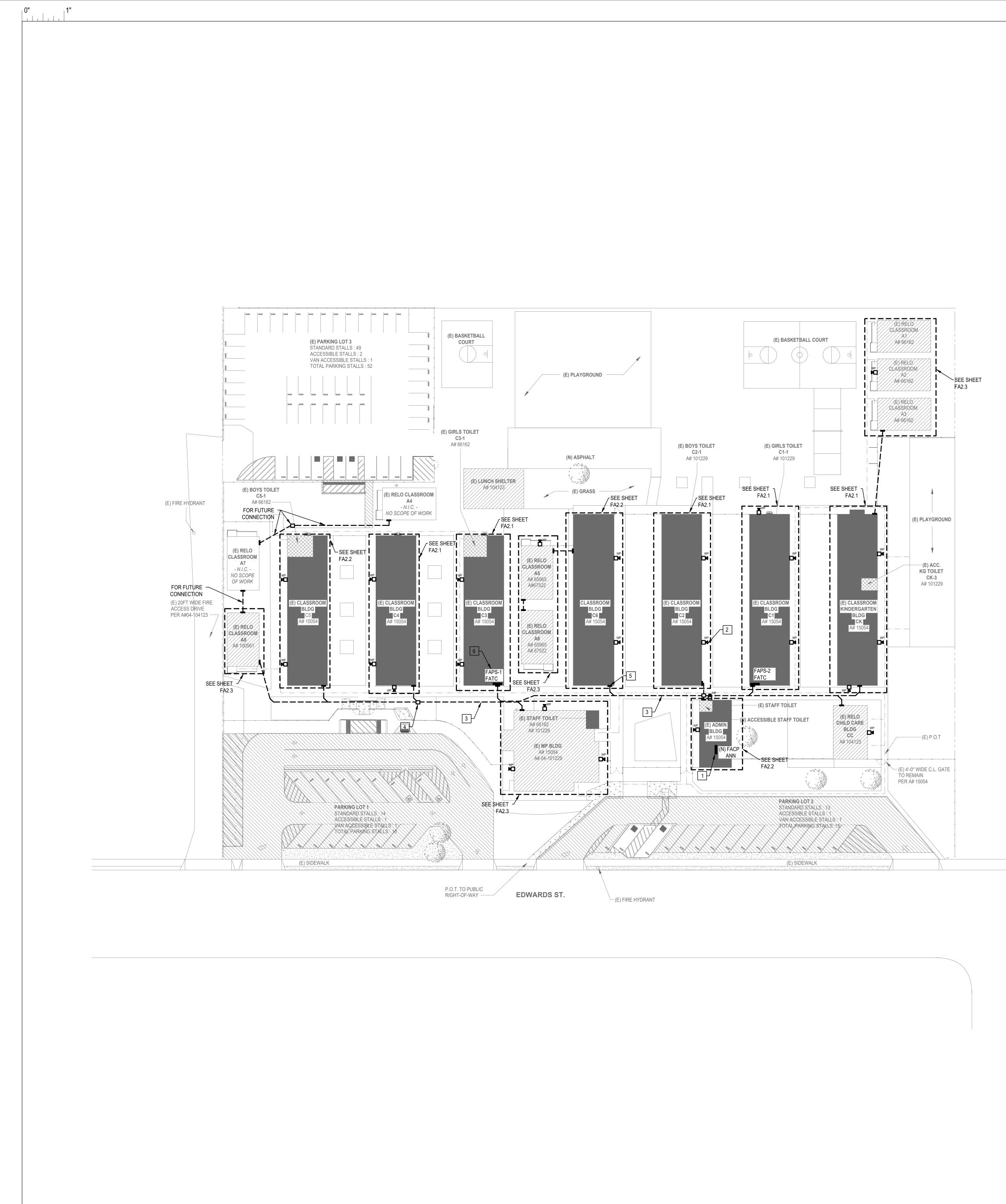
							APPLICABLE CODES	DRAWING INDEX				
ABBREVIATIONDESCRIPTIONNICNOT IN CONTRACTNO.NUMBERPO.PHASEPNLPANELPWRPOWERREC/RECEPTRECEPTACLEREQDREQUIREDRMROOMSFSQUARE FEETSHTSHEETSPCSSPECIFICATIONSSWSWITCHTYPTYPICALUGUNDERGROUNDU.O.N.UNLESS OTHERWISE NOTEDVVOLTSVAAVOLT-AMPERESW/WITHW/OWITHOUTWPWEATHERPROOFCECCALIFORNIA ELECTRICAL CODE				2022 CALIFC 2019 CALIFC (2018 INTER 2019 CALIFC (2017 NATIC 2019 CALIFC (2018 IAPMC 2019 CALIFC (2018 IAPMC 2019 CALIFC (2018 INTER 2019 CALIFC (2018	DRNIA ADMINI DRNIA BUILDIN DRNIA BUILDIN DRNIA ELECTRI DRNIA ELECTRI DRNIA MECHA DUNIFORM ME DRNIA PLUMBI DUNIFORM PL DRNIA ENERG DRNIA FIRE CO DRNIA FIRE CO DRNIA FIRE CO DRNIA FIRE CO DRNIA GREEN DRNIA FIRE A TANDARD FOR IBLE SIGNALIN IES; 2003 EDIT DARD FOR H ANDARD FOR S NDARD FOR S NDARD FOR S	STRATIVE COE NG CODE (CBC ILDING CODE, RICAL CODE (C CAL CODE ANI NICAL CODE (C ECHANICAL COD NG CODE (CP UMBING CODE Y CODE (CEC) DDE (CFC), PAI RE CODE AND CODE (CFC), PAI RE CODE AND SIG BUILDING CO ISTING BUILDING CO ISTING BUILDING STA ENCED STANDAF ALARM AND SIA SIGLE STANDAF ALARM AND SIA THE INSTALL FIRE DOORS A IG DEVICES FO TON EAT DETECTO SIGNALING DE BLEACHERS, F APPLICABLE CHAPTER 80.	S OF JANUARY 1, 2020 * OE (CAC), PART 1, TITLE 24 CCR * )), PART 2, TITLE 24 CCR VOL. 1 & 2, AND 2019 CALIFORNIA AMENDMENTS) EC), PART 3, TITLE 24 CCR D 2019 CALIFORNIA AMENDMENTS) CMC), PART 4, TITLE 24 CCR DDE AND 2019 CALIFORNIA AMENDMENTS) C), PART 5, TITLE 24 CCR E AND 2019 CALIFORNIA AMENDMENTS) , PART 6, TITLE 24 CCR 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA AMENDMENTS) 2010 COEE (AND 2019 CALIFORNIA AMENDMENTS) NUDARDS CODE (CALGREEN), PART 11, TITLE 24 CCR 2119 CALIFORNIA AMENDMENTS) 2015 COEE (CALGREEN), PART 11, TITLE 24 CCR 2120 CALIFORNIA AMENDMENTS) 2016 COE (CALGREEN), PART 11, TITLE 24 CCR 2130 COEE (CALGREEN), PART 11, TITLE 24 CCR 214 CCR 215 COEE (CALGREEN), PART 11, TITLE 24 CCR 216 COEE (CALGREEN), PART 11, TITLE 24 CCR 217 CMARSHAL REGULATIONS 205 GNALING CODE (CA AMENDED): 2016 EDITION ATION OF CARBON MONOXIDE DETECTION AND WARNING EQUIPMENT; AND OTHER OPENING PROTECTIVES; 2016 EDITION 216 COEE (CA AMENDED): 2016 EDITION 217 FIRE ALARM AND SIGNALING SYSTEMS, INCLUDING 218 FOR FIRE PROTECTIVE SIGNALING SYSTEMS, 1999 EDITION 210 VICES FOR THE HEARING IMPAIRED; 2002 EDITION (R2010) 210 DING AND TELESCOPING SEATING AND GRANDSTANDS; 2017 EDITION 210 NFPA STANDARDS REFER TO 2019 CBC (SFM) CHAPTER 35 AND 217 FIRE 35, FOR STATE OF CALIFORNIA AMENDMENTS TO THE	SHEETDESCRIPTIONFA0.0FIRE ALARM SYMBOLS, LEGENDS & GENERAL NOTESFA1.0FIRE ALARM SITE PLANFA2.1FIRE ALARM FLOOR PLANSFA2.2FIRE ALARM FLOOR PLANSFA2.3FIRE ALARM FLOOR PLANSFA4.1FIRE ALARM NISER DIAGRAMFA5.1FIRE ALARM PANEL SCHEDULESFA6.1FIRE ALARM DETAILS				
			DE	IMMEDIA	VATCH SHALL	VER THE FIRE	FIRE WATCH NOTE HED AND THE FIRE DEPARTMENT & FIRE CODE OFFICIAL SHALL BE NOTIFIED PROTECTION / ALARM SYSTEM IS RENDERED OUT OF SERVICE. A FIRE WATCH BUILDING IS OCCUPIED (PARTIAL OR WHOLE) PER DSA IR F-2 AND CFC 901.7.	<ol> <li>APPLICABLE STANDARD 2016, NFPA 72, AS ADOPTED AND AMENDED IN CBC CHAPTER 35</li> <li>INSTALLATION OF THE SYSTEMS SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICA INCLUDING STATE FIRE MARSHAL LISTING NUMBERS FOR EACH COMPONENT OF THE SYSTEM, HAS BEEN APPRO BY DSA.</li> <li>UPON COMPLETION OF SYSTEM INSTALLATION, A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE THE PRESENCE OF A DSA PROJECT INSPECTOR.</li> <li>A STAMPED SET OF APPROVED FIRE ALARM DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.</li> <li>ANY DISCREPANCIES BETWEEN THE DRAWINGS AND THE CODE OR RECOGNIZED STANDARDS SHALL BE BROUGHT.</li> </ol>				
				PROVIDI IN THIS ( ALARM S COMPLE	E FIRE ALARM CONSTRUCTIO SYSTEM DEVIO ETE PRE TEST	SYSTEM DEV ON DOCUMENT CES SHOWN P SHALL BE PER	SCOPE OF WORK TIC ADDRESSABLE FIRE ALARM SYSTEM WITHIN THE AREA OF WORK. ICES AS SHOWN IN EQUIPMENT LEGEND, FLOOR PLANS, AND SPECIFICATIONS T SET. USE NEW FIRE ALARM CONTROL PANEL TO CONNECT NEW FIRE FER DRAWING AND SPECIFICATION DOCUMENT. UPON COMPLETION, A REFORMED TO VERIFY FUNCTIONALITY, IF FUNCTIONALITY IS COMPLETE THEN	<ul> <li>TO THE ATTENTION OF DSA AND THE ARCHITECT/ENGINEER OF THE PROJECT.</li> <li>6. DSA, ARCHITECT/ENGINEER AND OWNER SHALL BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO THE FINAL INSPECTION AND /OR TESTING.</li> <li>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.</li> <li>8. WALL MOUNTED VISIBLE NOTIFICATION DEVICES SHALL HAVE THEIR BOTTOMS MOUNTED AT 80" MINIMUM AND 96" MAXIMUM FROM FINISHED FLOOR.</li> <li>9. WALL MOUNTED AUDIBLE NOTIFICATION DEVICES SHALL HAVE THEIR TOPS MOUNTED AT 90" MINIMUM AND 100" MAXIMUM FROM FINISHED FLOOR.</li> <li>10. AUDIBLE DEVICES SHALL PROVIDE A SOUND PRESSURE LEVEL OF 15 DECIBELS (DBA) ABOVE THE AVERAGE AMBIE 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.</li> </ul>				
	SEQU	JENCE	OF OPE	THE PRO SCHEDU	DPER DOCUM JLING A FINAL	ENTATION SH	ALL BE SUBMITTED TO THE AUTHORITY HAVING JURISDICTION PRIOR TO	<ul> <li>11. AUDIBLE DEVICES SHALL BE SYNCHRONIZED TEMPORAL CODE 3 PATTERN.</li> <li>12. THE CONTRACTOR SHALL ADJUST/INSTALL ALL DEVICES TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FALSE ALARMS.</li> <li>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.</li> <li>14. UNDERGROUND AND EXTERIOR CONDUITS TO HAVE WATER TIGHT FITTINGS AND WIRE TO BE APPROVED FOR WET LOCATIONS.</li> <li>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.</li> </ul>				
DEVIC ACTION SOUND ALARM AT "FACP" SOUND TROUBLE BUZZER AT "FACP" ANNUNCIATE AT "FAC AND THE REMOTE ANNUNCIATOR (ALARM OR TROUBLE) ACTIVATE AUDIBLE / VISUAL ALARM SIGNAL THROUGHOUT BUILDI ACTIVATE SIGNAL FOR OFF-SITE MONITORING MUTE AUTONOMOUS LOCAL SOUND SYSTE	YES NO YES NO YES	AREA SMOKE DETECTOR YES YES YES YES	HEAT DETECTOR YES YES YES	120VAC POWER FAILURENOYESNOYESNO	YES NO		BATTERY   NO   YES   NO   YES   NO	<ol> <li>B. PER CEO STANDARDS, ALL WIRING IS TO BE PULLED THROUGH EACH JUNCTION BOX AND CONNECTED DIRECTLY T EACH FIRE DEVICE. Do NOT SPILLED THE WIRE ALL BOXES TO BE SIZED PER CEC.</li> <li>S. MOKE DETECTORS SHALL NOT BE ANY CLOSER THAN I' FROM FIRE SPIRIKLERS 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.</li> <li>ALL FIRE ALARM CIRCUITS SHALL BE IN CONDUIT. SURFACE RACEWAY OR OPEN RUN ABOVE CELLINGS, UNDER FLOORS AND IN WALLS IN A NEAT AND PROTECTED MANOR AS INDICATED ON DESIGN DOCUMENTS.</li> <li>REXPOSED CIRCUITS ARE ONLY PERMITTED WHEIN NOTED AS EXPOSED ON DESIGN DOCUMENTS.</li> <li>REALARM PARE, REMOTES, AND COMPONENTS SHALL BE SECURED TO MOUNTING SURFACES PER MANUFACTURERS SPECIFICATIONS. NO SINGLE DEVICE SHALL EXCEED 20 LBS. WITHOUT SPECIAL MOUNTING DETALS.</li> <li>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 BE LABELED THRE ALARM CIRCUIT CONTROL." CIRCUIT ID TO BE LABELED AT FIRE PANELEXTENDERS.</li> <li>THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED 'SYSTEM RECORD O'F COMPLETION'PER NFPA 72, FIGURE 7.8.2.</li> <li>THE INSTALLING CONTRACTOR SHALL PROVIDE A COMPLETED 'SYSTEM RECORD O'C COMPLETION'PER NFPA 72, FIGURE 7.8.2.</li> <li>SHERE ALARM CONTROL PANELS AND REMOTE ANNUNCIATORS SHALL BE INSTALLED WITH THEIR BOTTOMS MOUNTE AT 48' ABOVE THE FINISHED FLOOR.</li> <li>MICHOPHONES ASSOCIATED WITH HERGENCY VOICE ALARM COMMUNICATION SYSTEMS (EVAC) SHALL BE ACCESSBULE FOR USE, INSTALLED IN COMPLIANCE WITH CEG SECTIONS 11B-303 AND 11B-308.</li> <li>THE INSTALLING CONTRACTOR SHALL PROVIDE SYSTEM PROGRAMMING FOR SUPERVISIORY MONITORING PER CEG SECTION 9016.2.</li> <li>SUPTERVISORY MONITORING SHALL BE TESTED AND VERIFIED AS SENDING CONTRACT OR PROVISIONS.</li> <li>A</li></ol>				
GROUND/WET LOC. WIRE I ONDUCTOR FPLP SHIELDED <sup>IN</sup> ST PENN	GROUND/WET DESIGNATION		REVI CON	EW AND APPF FAIN THE FOL	ROVAL PRIOR LOWING:	/IDE AND SUBI TO INSTALLAT	E ALARM REQUIREMENTS	<ul> <li>MODEL "WFD SERIES" ONLY.</li> <li>43.ALL DEVICES IN THE ALARM SYSTEM SHALL BE COMPATIBLE AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS.</li> <li>44.FIRE ALARM SYSTEM SHALL BE UL LISTED (UUJS).</li> <li>45.CBC 907.6.5.3 (SFM AMENDMENT) REQUIRES FIRE ALARM TO "TRANSMIT THE ALARM, SUPERVISORY AND TROUBLI 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)."</li> <li>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.</li> <li>47.FINAL ACCEPTANCE TEST TO INCLUDE TESTING THE CONNECTION BETWEEN THE FIRE ALARM PANEL AND THE</li> </ul>				
A-294 ONDUCTOR SBUS R CABLE BHIELDED BHIELDED C ONDUCTOR SPEAKER CKT. THHN/THWN S RANDED ONDUCTOR VISUAL CKT. THHN/THWN V RANDED ONDUCTOR POWER CKT. P ANDED ABLE.			C C RE SH AN B. EL NU C. LIS ST D. OF E. V( 1. 2. 3. 4. F. B/ 1. 2. 3. 3.	<ul> <li>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 ALRAM PLANS ARE NOT ACCEPTABLE AS SHOP DRAWINGS. SHOP DRAWINGS MUST LSO INDICATE DEVICE MOUTING HEIGHTS, ROOM NAMES AND NUMBERS AND THE LOCATION OF ALL FIRE RATED WALLS.</li> <li>B. ELECTRICAL CONTRACTORS AND FIRE ALRAM SYSTEM INSTALLER'S NAME, ADDRESS, PHONE NUMBER AND C-10 LICENSE NUMBER.</li> <li>C. LIST OF SYSTEM COMPONENTS, EQUIPMENT AND DEVICES, INCLUDING MANUFACTURERS' MODEL NUMBER(S) AND CALIFORNIA STATE FIRE MARSHALL LISTING NUMBERS.</li> <li>D. ORIGINAL COPIERS OF MANUFACTURERS' SPECIFICATION SHEETS FOR ALL EQUIPMENT AND DEVICES INDICATED.</li> <li>E. VOLTAGE DROP CALCULATIONS INCLUDE THE FOLLOWING INFORMATION FOR THE WORST CASE:</li> <li>1. PONT-TO-POINT OR OHMS LAW CACULATIONS.</li> <li>3. VOLTAGE DROP PERCENT (NOT TO EXCEED MANUFACTURERS' REQUIREMENTS).</li> <li>a. NOTE: IF VOLTAGE DROP PERCED MANUFACTURERS' REQUIREMENTS).</li> <li>a. NOTE: IF VOLTAGE DROP PERCED MANUFACTURERS' REQUIREMENTS).</li> <li>a. NOTE: IF VOLTAGE DROP PERCED MANUFACTURERS' REQUIREMENTS).</li> <li>b. VOLTAGE DROP PERCED MONST CASE CALCULATION.</li> <li>F. BATTERY TYPE(S). MAPS HOURS AND LOAD CALCULATIONS.</li> <li>NOURAL OPERATION: 100% OF APPLICABLE DEVICES FOR 34 HOURS = CONTROL. PANEL AMPS PLUS LIST OF AMPS PER DEVICE WHICH DRAW POWER FROM THE PANEL DURING STANDBY POWER I.E.:</li> <li>a. ZOME MODULES</li> <li>b. DETECTORS</li> <li>c. OTHER DEVICES (IDENTIFY)</li> <li>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.:</li> <li>a. ZOME MODULES</li> <li>b. SIGNAL MODULES</li> <li>c. DIFFERTORS</li> <li>d. SIGNAL DEVICES (IDENTIFY)</li> <li>NORMAL OPERATION + ALARM OPERATION</li> <li>TOTAL AMP HOURS REQUIRED.</li> <li>TOTAL AMP HOURS REQUIRED.</li> </ul>				CALIFORNIA STATE FIRE MARSHAL.				



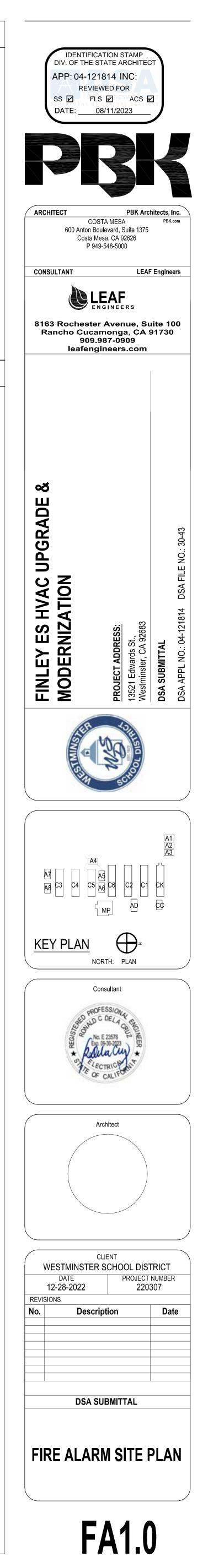
		SHEEKSKOONE/HEFEOO	
INIT. LOOP Z	2 CONDUCTOR #16 FPL TWISTED/ SHIELDED WEST PENN #D991	2 CONDUCTOR #16 FPLP SHIELDED WEST PENN #AQ-294	INIT. LOOP Z
SBUS B	4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	4 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	SBUS B
VBUS C	2 CONDUCTOR #18 TWISTED SHIELDED PAIR CABLE	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 CK 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

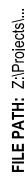
ALL WIRE MODEL NUMBERS ARE WEST PENN. EQUIVALENT BY OTHER MANUFACTURER IS ACCEPTABLE.

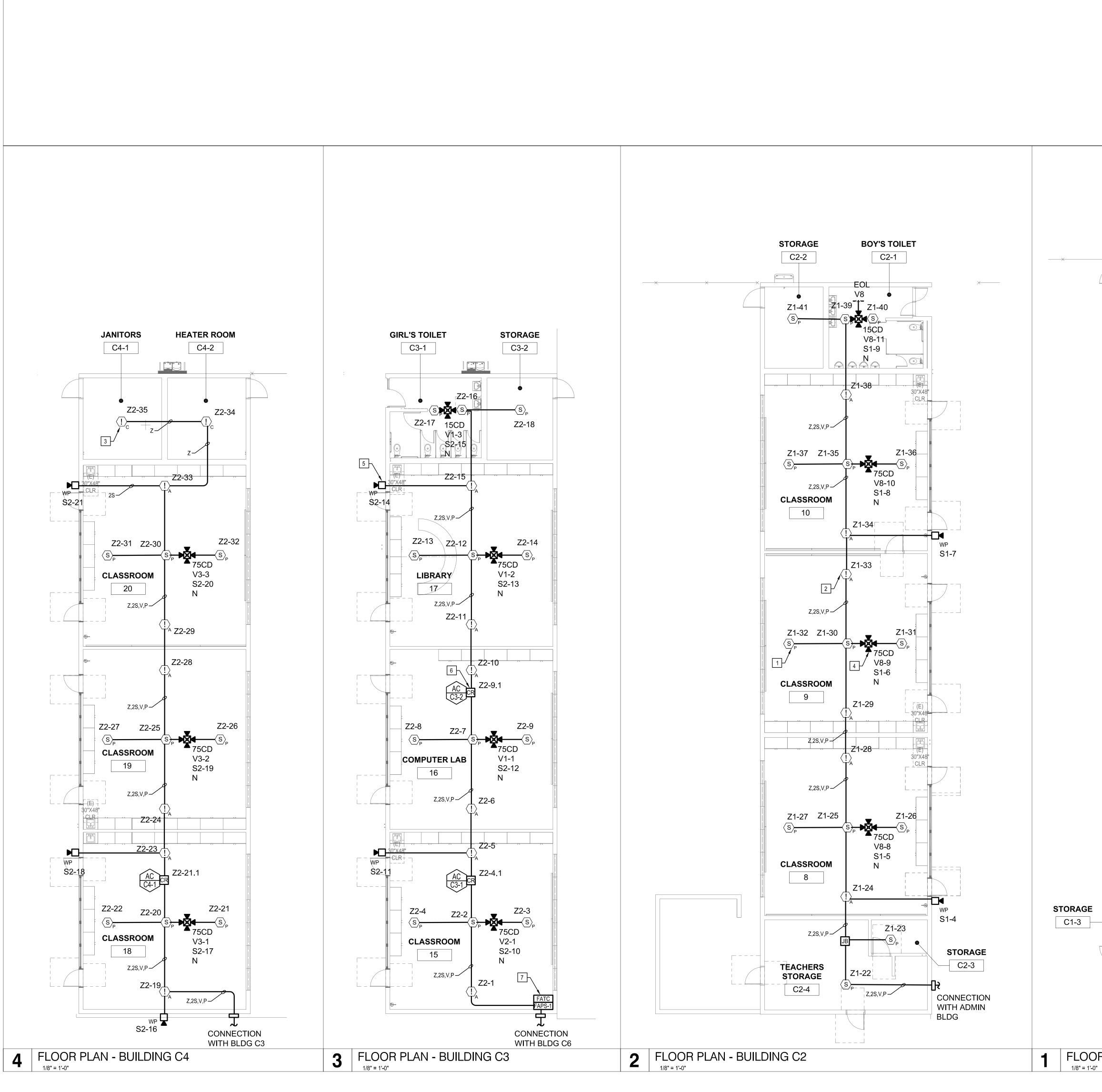




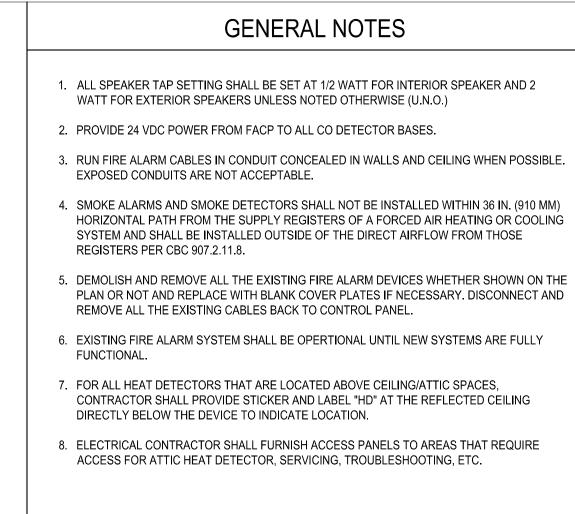
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	<ul> <li>PROVIDE (2) 2" UNDERGROUND CONDUIT (PVC, SCHEDULE 40, 24" BELOW GRADE),ONE CONDUIT IS FOR SPARE AND FIRE ALARM CABLE AS INDICATED. BACK FILL TO MATCH EXISTING SURFACES. RUN CONDUIT IN DIRT/PLANNER AREA AS MUCH AS POSSIBLE.</li> <li>PROVIDE CONCRETE UNDERGROUND PULL BOXES AS 11" X 17" X 18" DEEP ON A 6" DEEP GRAVEL BASE.</li> </ul>
	<ul> <li>PROVIDE NEMA 3R WEATHERPROOF PULLBOX 18"X18"X6" FOR FIRE-ALARM.</li> <li>SEE DETAIL 3/ SHEET FA6.1.</li> <li>NEW FIRE ALARM POWER SUPPLY AND TERMINAL CABINET AS SHOWN.</li> <li>SEE DETAIL 9/ SHEET FA6.1.</li> </ul>
NORTH	



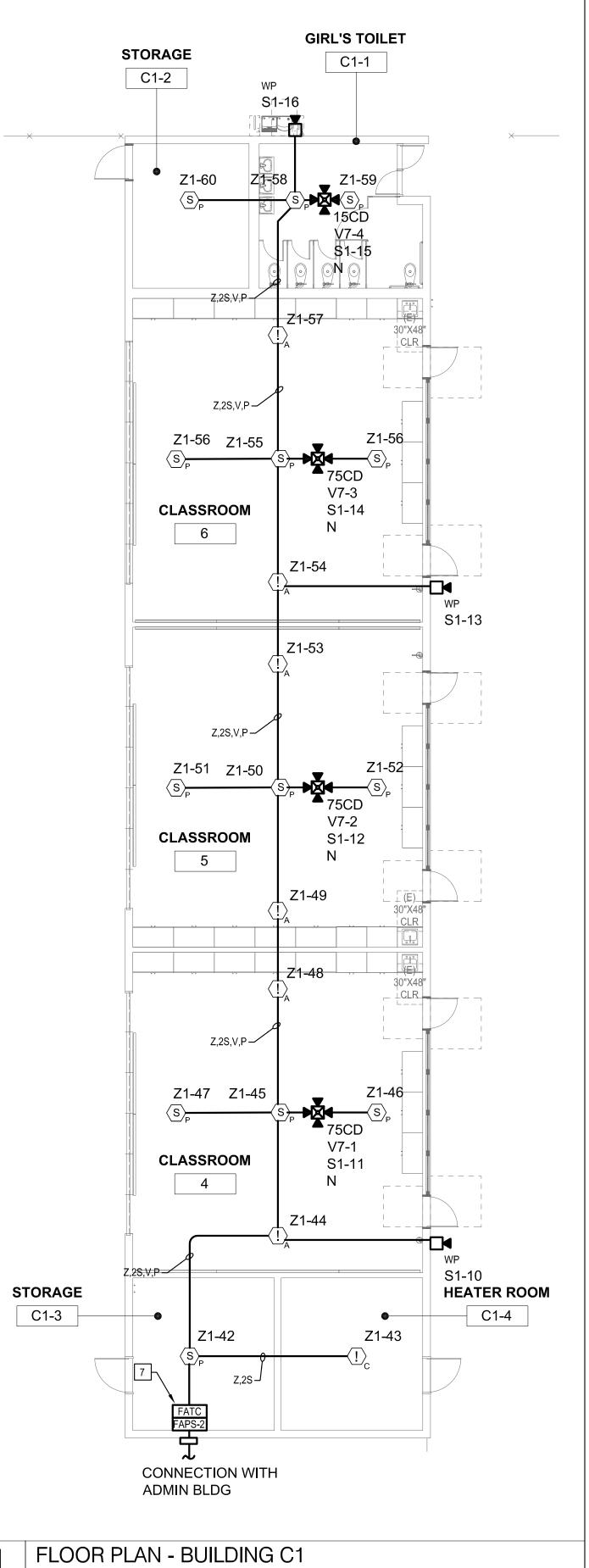




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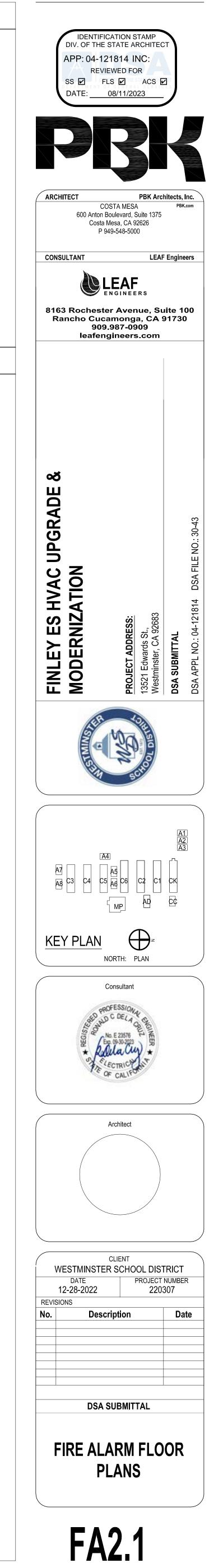


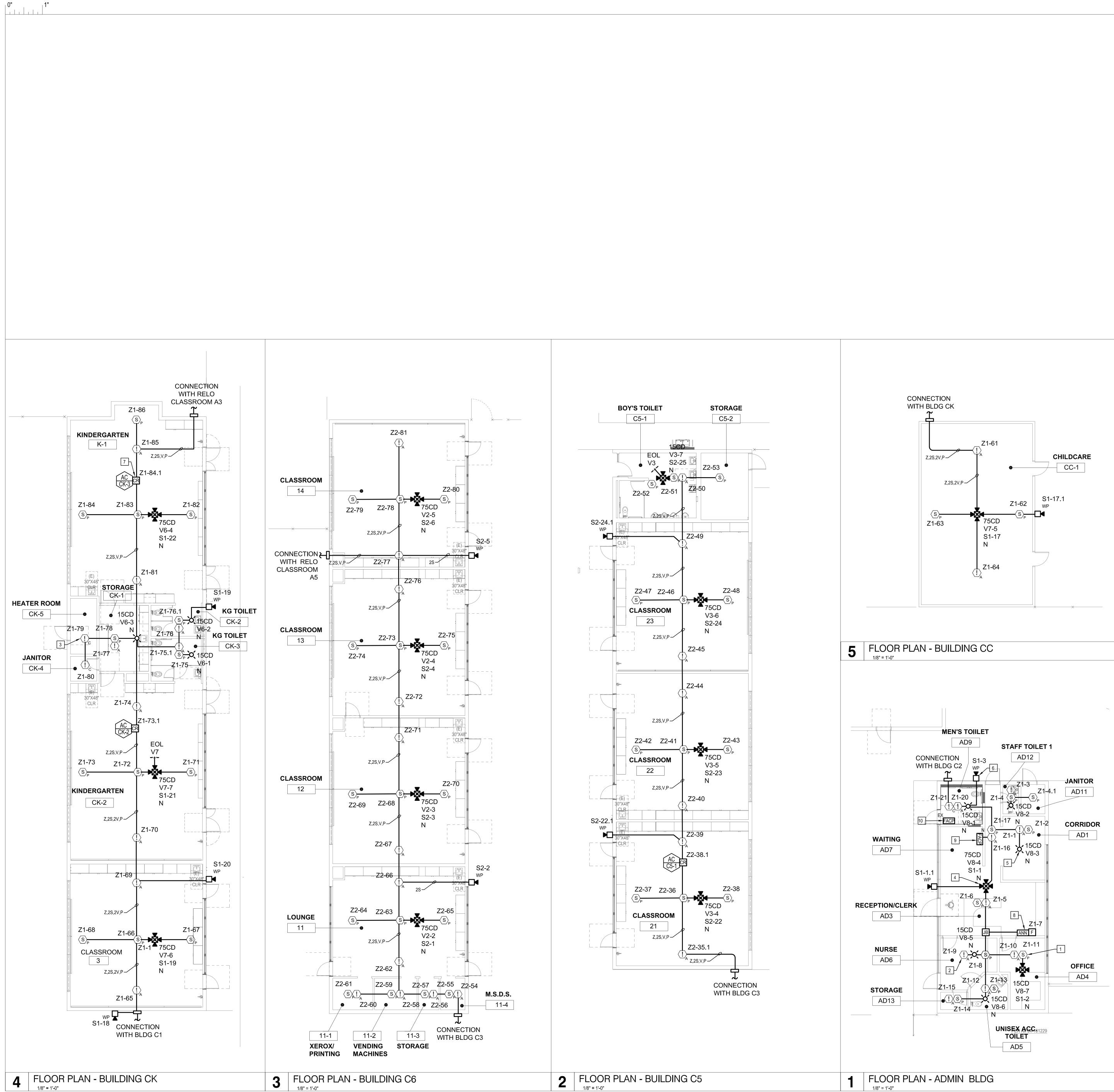
### **KEY NOTES**



NORTH

PROVIDE FIRE ALARM ADDRESSABLE SMOKE DETECTOR AS SHOWN (TYP).
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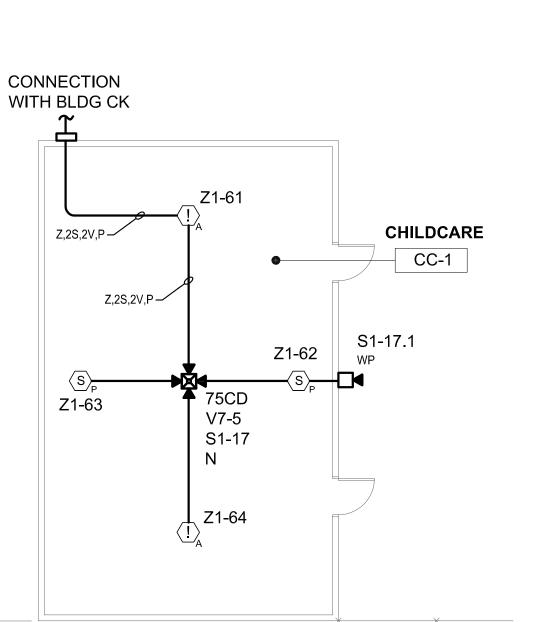




## GENERAL NOTES

- 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. PROVIDE 24 VDC POWER FROM FACP TO ALL CO DETECTOR BASES.
- 3. RUN FIRE ALARM CABLES IN CONDUIT CONCEALED IN WALLS AND CEILING WHEN POSSIBLE. EXPOSED CONDUITS ARE NOT ACCEPTABLE.
- 4. 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.
- 5. 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.
- 6. EXISTING FIRE ALARM SYSTEM SHALL BE OPERTIONAL UNTIL NEW SYSTEMS ARE FULLY FUNCTIONAL.
- 7. 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.
- 8. ELECTRICAL CONTRACTOR SHALL FURNISH ACCESS PANELS TO AREAS THAT REQUIRE ACCESS FOR ATTIC HEAT DETECTOR, SERVICING, TROUBLESHOOTING, ETC.

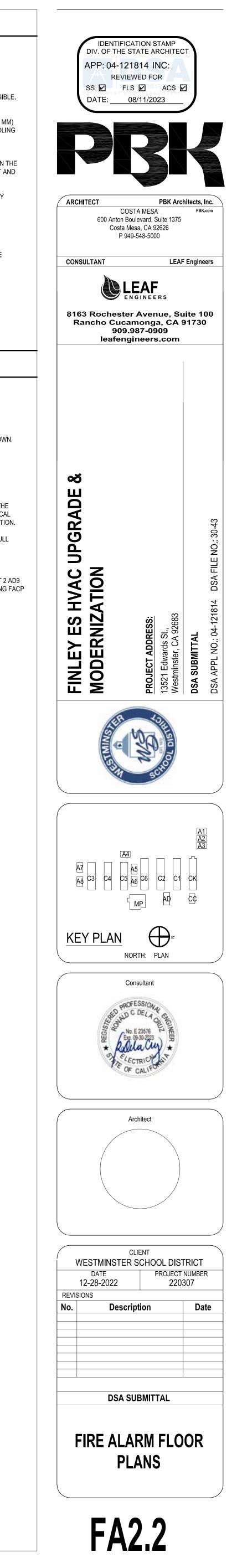
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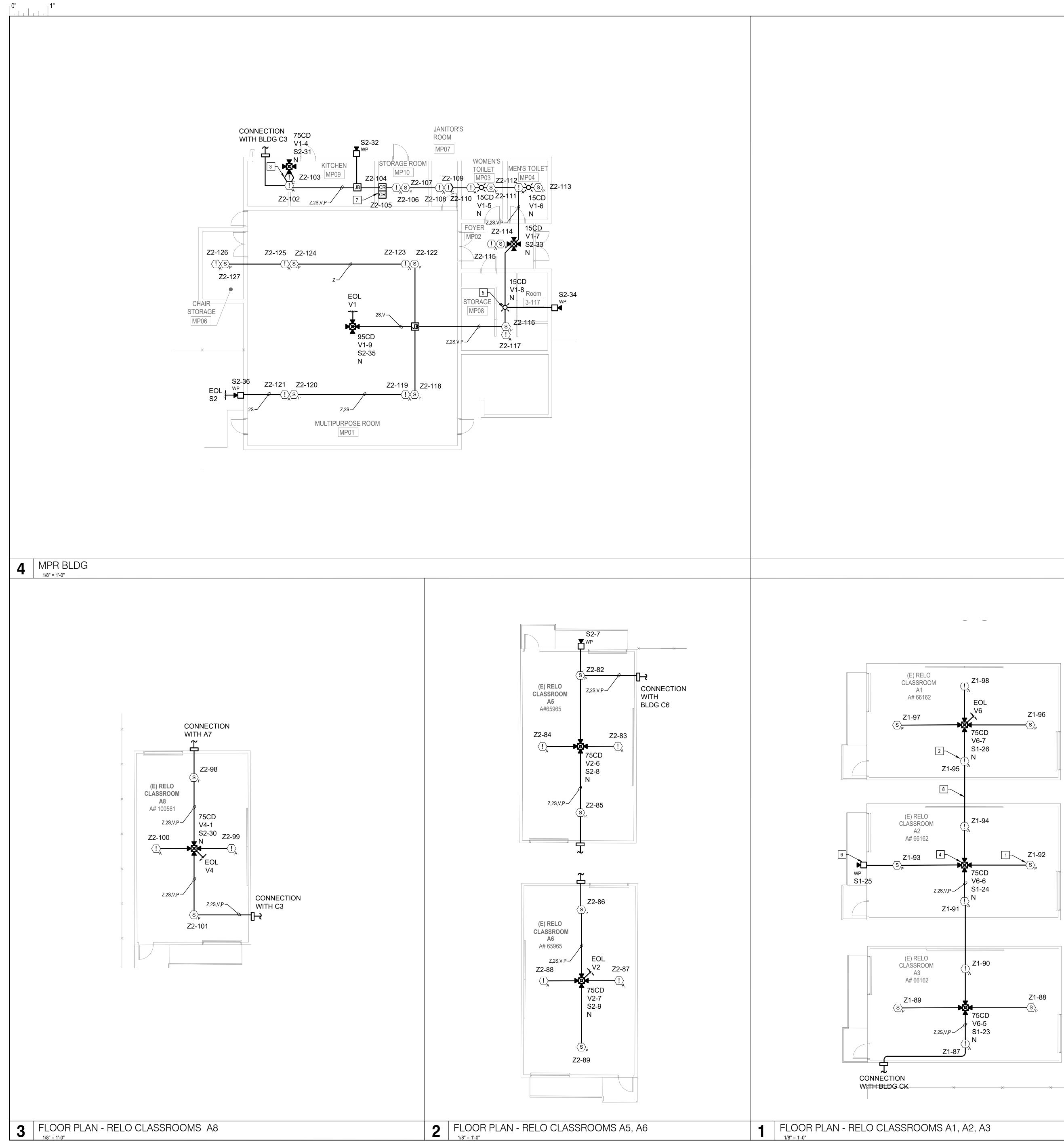


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8	NEW FIRE ALARM REMOTE ANNUNCIATOR AS SHOWN AND FIRE ALARM MANUAL PULL STATION RIGHT NEXT TO THE ANNUNCIATOR.
9	PROVIDE NEW VOICE EVAC FIRE ALARM CONTROL PANEL AS SHOWN.
10	LOCATION OF EXISTING FIRE ALARM CONTROL PANEL (A#04-100880). STAFF TOILET 2 AD REMODEL TO BE DONE AT THE LAST PHASE OF CONSTRUCTION TO ALLOW EXISTING FA

TO BE OPERATIONAL UNTIL REPLACED WITH THE NEW FACP.



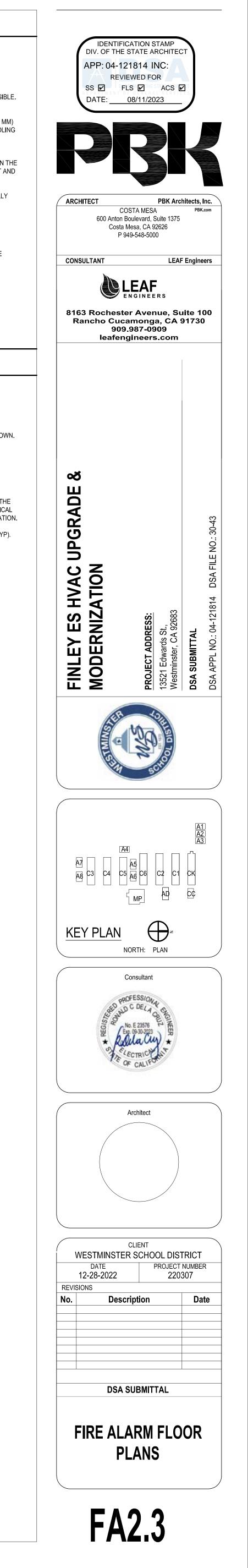




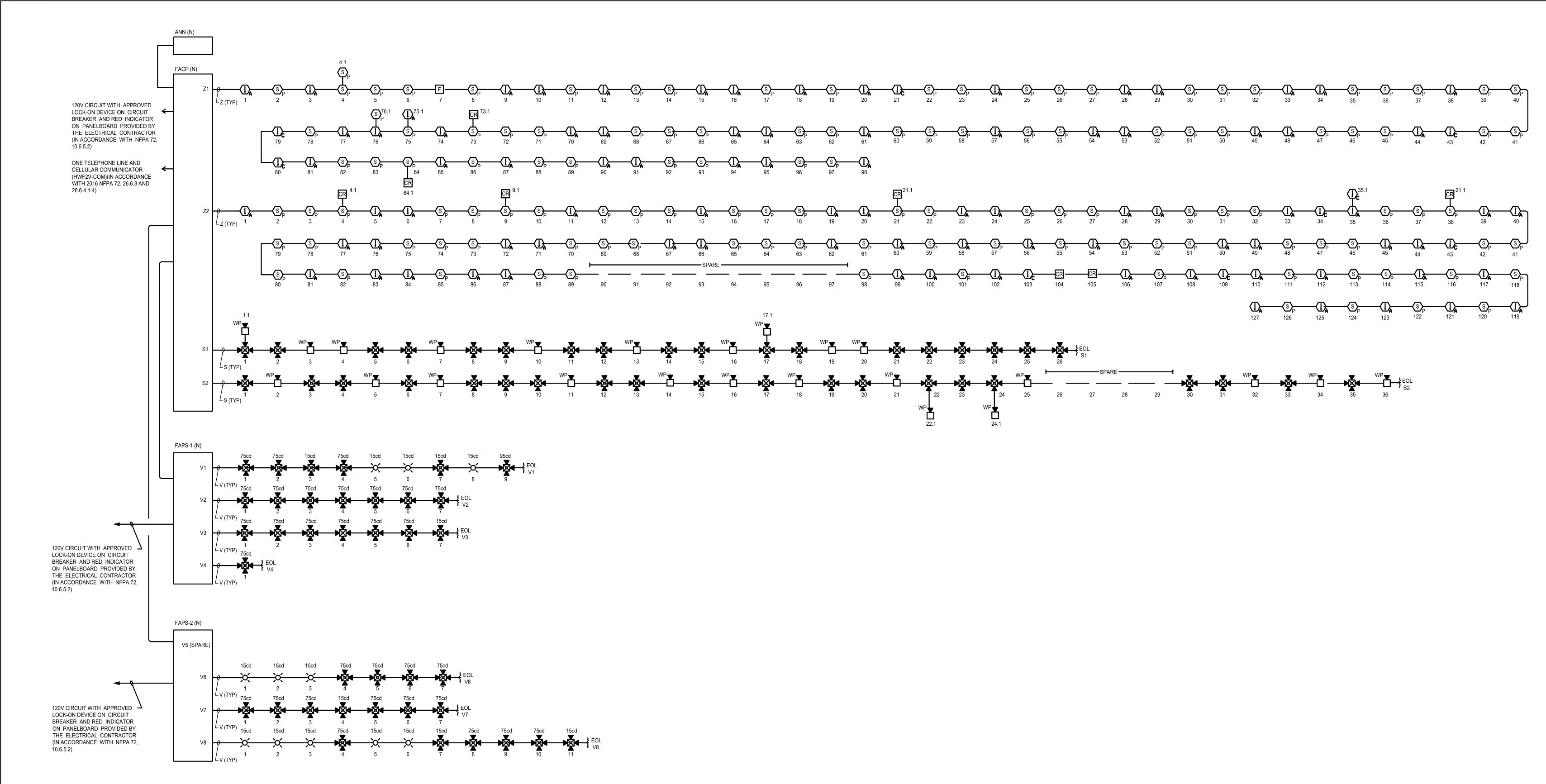
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8 PROVIDE 2" CONDUIT FLEXIBLE LIQUID TIGHT SLEEVE AT ATTIC SPACE HEIGHT (TYP).

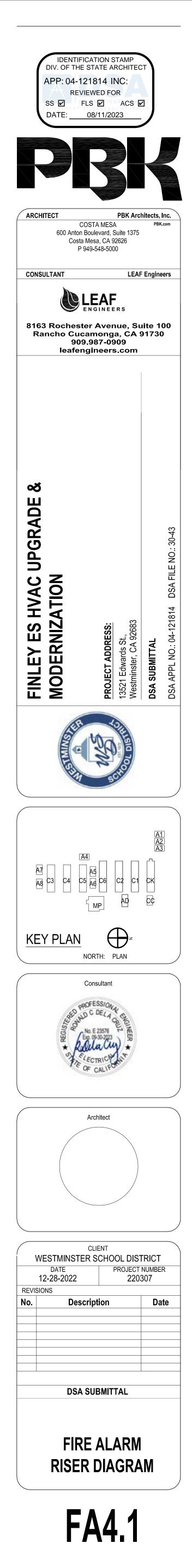




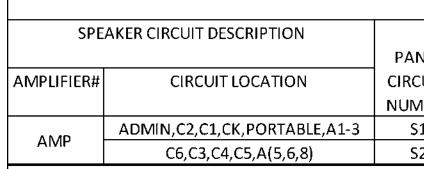




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FACP	BATTERY CALCULATION S FACP WITH VOICE EVAC LOCATION: ADMIN	HEET			
		UNIT	TOTAL	UNIT	TOTAL
		STANDBY	STANDBY	ALARM	ALARM
QUANTITY		CURRENT(A)	CURRENT(A)	CURRENT(A)	CURRENT(A)
1	MAIN BOARD	0.08100	0.08100	0.15000	0.15000
1	SUPPLEMENT BOARD	0.08100	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	0.05000	0.05000	0.05000	0.05000
1	DIGITAL COMMUNICATOR (DACT-E3)	0.01800	0.01800	0.01800	0.01800
1	ANNUNCIATOR	0.20000	0.20000	0.20000	0.20000
1	AMPLIFIER KIT	0.10300	0.10300	0.14000	0.14000
1	FIRE PHONE CARD	0.05300	0.05300	0.07500	0.07500
1	AMPLIFIER CARD	0.05200	0.05200	0.31500	0.31500
122	SMOKE DETECTOR	0.00020	0.02428	0.00200	0.24400
96	HEAT DETECTOR	0.00020	0.01910	0.00200	0.19200
1	PULL STATION	0.00000	0.00000	0.00300	0.00300
8	RELAY MODULE	0.00000	0.00000	0.00650	0.05200
	SUB TOTAL		0.781		1.771
	STANDBY CURRENT x 24 Hrs. (AH)		18.753	АН	
	ALARM CURRENT x 15 MINUTES (AH)		0.443	AH	
	TOTAL (AH)		19.196	АН	
	25% DERATING		4.799	АН	
	TOTAL DEMAND (AH)		23.995	AH	
	BATTERY REQUIRED		55	АН	

STROBES WORST CASE VOLTAGE DROP													
		CEILING STROBE				CEILING SPEAKER/STROBE			TOTAL	TOTAL	TOTAL	TOTAL	
PANEL	CIRCUIT	15cd	30cd	75cd	95cd	15cd	30cd	75cd	95cd	CURRENT	DISTANCE	VOLTAGE	DEVICES
NAME	NUMBER	0.071	0.096	0.153	0.176	0.071	0.096	0.153	0.176	(AMPS)	(FEET)	DROP (%)	
FAPS-1	V1	3				2		3	1	0.990	425	5.80%	9
	V2							7		1.071	510	7.53%	7
	V3					1		6		0.989	550	7.50%	7
	V4							1		0.153	200	0.42%	1
TOTAL		3	0	0	0	3	0	17	1				
	V5 (spare)									0.000	0	0.00%	0
	V6	4						4		0.896	377	4.66%	8
FAPS-2	V7					1		6		0.989	520	7.09%	7
	V8	5				2		4		1.109	410	6.27%	11
T	OTAL	9	0	0	0	3	0	14	0				

SPE	SPEAKER CIRCUIT LOAD CALCULATION								MFG. REC. I	MAXIMUM LOS	S IS: -0.5dB
	WIRE         CIRCUIT         APPLIANCES QUANTITIES / TAP VALUES         TOTAL         ESTIMATED								MAXIMUM	TOTAL	
PANEL	GAUGE	VOLTAGE	SPEAKER	SPEAKER	SPEAKER	SPEAKER	CIRCUIT	CIRCUIT	ACTUAL	ALLOWABLE	CIRCUIT
IRCUIT	(18, 16, 14	(25 OR	TAPPED AT	TAPPED AT	TAPPED AT	TAPPED AT	LOAD	LENGTH	WIRE/LOSS	CKT, LENGTH	RESISTANCE
UMBER	12)	70 VRMS)	0.25 WATTS	0.5 WATTS	1 WATTS	2 WATTS	(WATT)	(FEET)	(dB)	(FEET)	(OHMS)
<b>\$1</b>	14 AWG	70		18		10	29.00	900	-0.25	1,630	4.64
S2	14 AWG	70		20		14	38.00	1000	-0.36	1,260	5.15
						TOTAL	67.00				

### BATTERY CAPACITY CALCULATION SHEET FAPS-1

	LOCATION: C3				
		Unit	Total	Unit	Total
		Standby	Standby	Alarm	Alarm
QUANTITY	Description	Current(A)	Current(A)	Current(A)	Current(A)
1	NAC TRIP	0.075	0.075	0.175	0.175
3	15cd ceiling strobes	0.000	0.000	0.071	0.213
3	15cd ceiling speaker/strobe	0.000	0.000	0.071	0.213
19	75cd ceiling speaker/strobe	0.000	0.000	0.153	2.907
1	95cd ceiling speaker/strobe	0.000	0.000	0.176	0.176
	Sub Total		0.075		3.684
	A - Battery Backup - Standby (Hour)	24			
	B - Battery Backup (minutes)	15			
	C - Allowable Error (%)	25			
	D - Total Standby Backup (Amp-Hour)	1.800			
	E - Total Alarm Backup (Amp-Hour)	0.921			
	F - Allowable Error (C x (D + E))	0.680			
	Total Amp-Hour Required (D + E + F)	3.401			
	Battery Submitted	7 Amp-Hour			

	BATTERY CAPACITY CALCUL FAPS-2 LOCATION: C1	ATION SH	IEET		
		Unit	Total	Unit	Total
		Standby	Standby	Alarm	Alarm
QUANTITY	Description	Current(A)	Current(A)	Current(A)	Current(A)
1	NAC TRIP	0.075	0.075	0.175	0.175
9	15cd ceiling strobes	0.000	0.000	0.060	0.540
3	15cd ceiling speaker/strobe	0.000	0.000	0.071	0.213
12	75cd ceiling speaker/strobe	0.000	0.000	0.153	1.836
	Sub Total		0.075		2.764
	A - Battery Backup - Standby (Hour)	24			
	B - Battery Backup (minutes)	15			
	C - Allowable Error (%)	25			
	D - Total Standby Backup (Amp-Hour)	1.800			
	E - Total Alarm Backup (Amp-Hour)	0.691			
	F - Allowable Error (C x (D + E))	0.623			
	Total Amp-Hour Required (D + E + F)	3.114			
	Battery Submitted	7 Amp-Hour			

	BATTERY CALCULATION	SHEET			
	LOCATION: ADMIN. BUILDING				
		UNIT	TOTAL	UNIT	TOTAL
		STANDBY	STANDBY	ALARM	ALARM
QUANTITY		CURRENT(A)	CURRENT(A)	CURRENT(A)	CURRENT(A
1	50 WATT AMPLIFIER	0.110	0.110	0.5810	0.581
38	SPEAKER (1/2 W)	0.000	0.000	0.0071	0.269
24	WP SPEAKER (2W)	0.000	0.000	0.0283	0.679
	SUB TOTAL		0.110	)	1.53
	STANDBY CURRENT x 24 Hrs. (AH)		2.640	AH	
	ALARM CURRENT x 15 MINUTES (AH)		0.383	AH	
	TOTAL (AH)		3.023	АН	
	25% DERATING		0.756	ан	
	TOTAL DEMAND (AH)		3.778	SAH	
	BATTERY REQUIRED		7	' AH	

