



ELECTRICAL NOTES & SYMBOL LEGEND

MEP COMPONENT ANCHORAGE NOTES	
1. 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 2022CBC, SECTIONS 1617A.1.16 THROUGH 1617A.1.20 AND ASCE 7-16 CHAPTER 13, 26 AND 30:	
A. ALL PERMANENT EQUIPMENT AND COMPONENTS.	
B. 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 110/225 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.	
C. 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 OSA.	
2. THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:	
A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.	
B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUND PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.	
3. 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 OSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.	
UL LISTINGS NOTE	
ALL ELECTRICAL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY UNDERWRITER'S LABORATORIES (UL) AND BEAR THEIR LABEL OR LISTED AND CERTIFIED BY A NATIONALLY RECOGNIZED TESTING AUTHORITY.	
ALL EQUIPMENT/DEVICES INSTALLED RECESSED IN FIRE RATED CEILING OR WALLS SHALL BE ENCLOSED WITH AN APPROVED UL LISTED ENCLOSURE CARRYING THE SAME FIRE RATING AS THE CEILING OR WALL.	
DEVICE LOCATION NOTE	
THE LOCATION OF ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATIONS, DETAILS, OR SECTIONS PRIOR TO INSTALLATION. ALL ELECTRICAL DEVICES AND EQUIPMENT SHALL BE RECESSED IN WALLS UNLESS OTHERWISE NOTED. OUTLETS NOT INDICATED ON ARCHITECTURAL ELEVATIONS SHALL BE COORDINATED WITH THE ARCHITECT PRIOR TO ROUGH-IN, UNLESS OTHERWISE NOTED. ELECTRICAL DEVICES SHALL BE MOUNTED PER "ACCESSIBLE DEVICE MOUNTING HEIGHT" DETAIL.	
COORDINATE WITH OTHER TRADES AS TO THE EXACT LOCATION OF THEIR RESPECTIVE EQUIPMENT SUPPLY POWER AND MAKE CONNECTION TO MOTORS AND EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS INDICATED ON THE SINGLE LINE DIAGRAM, ELECTRICAL DRAWINGS, AND DRAWINGS OF OTHER TRADES. REVIEW THE DRAWINGS OF OTHER TRADES FOR CONTROL DIAGRAMS, SIZE AND LOCATION OF EQUIPMENT, DISCONNECT SWITCHES, STARTERS, CONTROLS, AND CONDUIT FOR MECHANICAL AND PLUMBING OPERATIONS SHALL BE PROVIDED THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING MANUFACTURER'S SHOP DRAWINGS PRIOR TO ROUGHING IN ALL CONDUIT TO THIS EQUIPMENT.	

GENERAL NOTES	
1. THE CONTRACTOR SHALL VISIT THE SITE INCLUDING ALL AREAS INDICATED ON THE DRAWINGS. HE SHALL THOROUGHLY FAMILIARIZE HIMSELF WITH THE EXISTING CONDITIONS BY SUBMITTING A BID THAT ACCEPTS THE CONDITIONS UNDER WHICH HE SHALL BE REQUIRED TO PERFORM HIS WORK, AND SHALL COMPLY WITH ALL AUTHORITIES HAVING JURISDICTION, CEC, ALL STATE AND LOCAL CODES AND AMENDMENT	
2. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN A COMPLETE SET OF CONTRACT DOCUMENTS AND ADDENDA (DRAWINGS AND SPECIFICATIONS.) HE SHALL CHECK THE CONTRACT DOCUMENTS OF THE OTHER TRADES AND DETERMINE HIS RESPONSIBILITIES. FAILURE TO DO SO SHALL NOT RELEASE THE CONTRACTOR FROM COMPLETING ALL RESPONSIBLE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.	
3. THE CONTRACTOR SECURE AND PAY FOR ALL PERMITS, FEES, CHARGES, AND INCIDENTAL COSTS NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY STATE, COUNTY AND LOCAL GOVERNMENTAL AGENCIES.	
4. ALL ELECTRICAL WORK REFERENCED HEREIN SHALL BE COORDINATED WITH OTHER TRADES AND SITE CONDITIONS. ANY COSTS TO INSTALL WORK TO ACCOMPLISH SAID COORDINATION WHICH DIFFERS FROM THE WORK AS SHOWN ON THE CONTRACT DOCUMENTS SHALL BE INCURRED BY THE CONTRACTOR. ANY DISCREPANCIES, AMBIGUITIES OR CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT DURING BID TIME FOR CLARIFICATION. ANY SUCH CONFLICTS NOT CLARIFIED PRIOR TO BID SHALL BE SUBJECT TO THE INTERPRETATION OF THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.	
5. PROVIDE TEMPORARY POWER FACILITIES AND CONNECTIONS FOR ALL FEEDERS, BRANCH CIRCUITS, OR SIGNAL AND COMMUNICATIONS SYSTEMS BEING DISCONNECTED TO MAINTAIN SYSTEMS IN OPERATION.	
6. ALL INTERRUPTION OF ELECTRICAL POWER SHALL BE KEPT TO A MINIMUM. HOWEVER, WHEN AN INTERRUPTION IS NECESSARY, THE SHUTDOWN MUST BE COORDINATED WITH THE OWNER AND ENGINEER 14 DAYS PRIOR TO THE OUTAGE, AND OVERTIME PAY SHALL BE INCLUDED IN THE CONTRACTOR'S BID. WORK IN EXISTING SWITCHBOARDS OR PANEL BOARDS SHALL BE COORDINATED WITH THE OWNER PRIOR TO REMOVING ACCESS PANELS OR DOORS.	
7. AFTER ALL REQUIREMENTS OF THE CONTRACT DOCUMENTS HAVE BEEN FULLY COMPLETED, REPRESENTATIVES OF THE OWNERS WILL INSPECT THE WORK. THE CONTRACTOR SHALL PROVIDE COMPETENT PERSONNEL TO DEMONSTRATE THE OPERATION OF ANY ITEM OR SYSTEM TO THE FULL SATISFACTION OF EACH REPRESENTATIVE. FINAL ACCEPTANCE OF THE WORK WILL BE MADE BY THE OWNER AFTER RECEIPT OF APPROVAL AND RECOMMENDATION OF ACCEPTANCE FROM EACH REPRESENTATIVE.	
8. FURNISH A ONE-YEAR WRITTEN GUARANTEE OF MATERIALS AND WORKMANSHIP FROM THE DATE OF PUNCH LIST COMPLETION.	
9. ALL FINAL CONNECTIONS TO OWNER-FURNISHED EQUIPMENT SHALL BE MADE BY THE CONTRACTOR.	
10. THE EXACT METHOD AND LOCATION OF CONDUIT PENETRATION AND OPENINGS IN CONCRETE OR MASONRY WALLS, GRADE BEAMS, FLOORS, OR STRUCTURAL STEEL MEMBERS SHALL BE AS DIRECTED BY THE STRUCTURAL ENGINEER. PERFORM CORING, SAW CUTTING, PATCHING, AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY TO PENETRATE. OPENINGS SHALL BE SEaled IN AN APPROVED METHOD TO MEET THE FIRE RATING OF THE PARTICULAR WALL, FLOOR, OR CEILING. THE EXACT METHOD AND LOCATION OF CONDUIT PENETRATIONS AND OPENINGS IN CONCRETE WALLS OR FLOORS SHALL BE UL APPROVED.	
11. FINAL CONNECTIONS TO VIBRATING EQUIPMENT AND AT SEISMIC SEPARATIONS SHALL BE FLEXIBLE STEEL CONDUIT IN DRY INTERIOR LOCATIONS, AND LIQUID-TIGHT FLEXIBLE STEEL CONDUIT IN AREAS EXPOSED TO WEATHER, DAMP LOCATIONS, CONNECTIONS TO TRANSFORMER ENCLOSURES, AND FINAL CONNECTIONS TO MOTORS.	
12. EQUIPMENT, OUTLETS, LIGHTING FIXTURES, CONDUIT, WIRE, AND CONNECTION METHODS IN HVAC AIR PLENUMS SHALL BE APPROVED FOR USE IN PLENUMS AND SHALL CONFORM TO THE CALIFORNIA ELECTRICAL CODE.	
13. ROUTE EXPOSED CONDUIT AND CONDUIT ABOVE ACCESSIBLE CEILING SPACES PARALLEL AND PERPENDICULAR TO WALLS AND ADJACENT PIPING. ARRANGE CONDUIT TO MAINTAIN HEADROOM AND TO PRESENT A NEAT APPEARANCE.	
14. CONDUIT SHALL NOT BE INSTALLED IN ANY FLOOR SLAB. CONDUIT SHALL BE INSTALLED CONCEALED IN THE CEILING SPACE, CONCEALED WALLS, OR 24" MINIMUM BELOW THE CEILING UNLESS NOTED OTHERWISE.	
15. LOCATE ELECTRICAL EQUIPMENT AND BOXES IN ACCESSIBLE CEILING SPACE OR PROVIDE AN ACCESS PANEL FOR INACCESSIBLE CEILING SYSTEMS. ACCESS DOORS SHALL BE A MINIMUM DIMENSION OF 24" X 24" ACCESS DOOR LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.	
16. COORDINATE REQUIRED ACCESS DOORS IN NON-ACCESSIBLE CEILINGS TO SUIT FIELD CONDITIONS. THE EXACT SIZES AND PHYSICAL LOCATIONS SHALL SUIT ACCESSIBILITY AND CONSTRUCTION CONDITIONS. ACCESS DOORS SHALL BE PROVIDED IN OTHER SECTIONS OF THE SPECIFICATIONS. ACCESS DOORS SHALL HAVE A FIRE RATING EQUAL TO THE CEILING ASSEMBLY IN WHICH THEY ARE INSTALLED.	
17. WHENEVER A DISCREPANCY OF ANY SYSTEM AND/OR EQUIPMENT ARISES ON THE CONTRACT DOCUMENTS OR SPECIFICATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ALL MATERIAL AND SERVICES REQUIRED BY THE STRICTEST CONDITIONS NOTED ON THE DRAWINGS OR SPECIFICATIONS TO ENSURE COMPLETE AND OPERABLE SYSTEMS AS REQUIRED BY THE OWNER AND ARCHITECTURAL ENGINEER.	
18. STRAIGHT FEEDER BRANCH CIRCUIT AND CONDUIT RUNS SHALL BE PROVIDED WITH SUFFICIENT PULL BOXES OR JUNCTION BOXES TO LIMIT THE MAXIMUM LENGTH OF ANY SINGLE CABLE PULL TO 100 FEET. PULL BOXES SHALL BE SIZED PER CODE OR AS INDICATED ON DRAWINGS.	
19. PANEL SCHEDULES SHALL BE REVISED TO REFLECT FINAL ROOM NAMES AND NUMBERS USING THE OWNER'S ROOM NAMES AND NUMBERS DESIGNATIONS. CONTRACTOR TO PROVIDE FINAL PANEL SCHEDULE TO EEOB AT COMPLETION OF PROJECT.	
20. WHERE OUTLETS OCCUR AT TACKABLE WALL PANELS OR OTHER WALL FINISHES, PROVIDE EXTENSION RINGS AS REQUIRED SO THAT NO SPACE WILL EXIST BETWEEN DEVICE PLATE AND BACKBOX PER CALIFORNIA ELECTRICAL CODE 314.20. SEE ARCHITECTURAL ELEVATIONS FOR WALL FINISHES AND LOCATIONS.	
21. COORDINATE LOCATIONS OF ALL SEISMIC SEPARATIONS.	
22. ALL 120V POWER REQUIRED FOR THE FUNCTIONALITY OF ALL LOW VOLTAGE / TECHNOLOGY SYSTEMS SHALL BE A DEDICATED CIRCUIT AND ON EMERGENCY POWER WHEN AVAILABLE. CABLING CONTRACTOR SHALL COORDINATE ALL 120V POWER REQUIREMENTS AND LOCATIONS WITH ELECTRICAL CONTRACTOR FOR ALL EQUIPMENT.	
23. 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.	
24. CONTRACTOR SHALL PROVIDE AND INSTALL ALL SLEEVES REQUIRED TO INSTALL COMMUNICATION CABLING THROUGH RATED WALLS. ALL TECHNOLOGY SYSTEM CONDUIT SLEEVES SHALL HAVE PROTECTIVE BUSHINGS ON BOTH ENDS, BE DEDICATED FOR TECHNOLOGY SYSTEMS ONLY AND SHALL NOT SHARE WITH ANY OTHER USING TRADES.	
25. CONTRACTOR SHALL MAINTAIN WALL RATING WITH PROPER FIRE BLOCKING METHODS.	
26. ALL CONDUCTORS SHALL BE UL LISTED, COPPER #12 MINIMUM SIZE, TYPE THINWALL THERMOPLASTIC, 600 VOLT, 75 DEGREES CELSIUS WET AND 90 DEGREES CELSIUS DRY, UNLESS NOTED OTHERWISE.	
27. ALL CABLEING 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.	
28. 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.	
29. COORDINATE MOUNTING HEIGHTS AND DETAILS OF ALL OUTLETS (POWER, SIGNAL, ETC.) WITH ARCHITECTURAL CASEWORK DRAWINGS PRIOR TO DIVISION 26 ROUGH-IN. PROVIDE COORDINATION DRAWINGS IN ACCORDANCE WITH DIVISION 26 SPECIFICATIONS WHERE CONFLICTS EXIST. OBTAIN APPROVAL FROM ARCHITECT BEFORE ELECTRICAL ROUGH-IN WHEN CONFLICTS ARISE.	
30. REFER TO MECHANICAL DRAWINGS FOR EXACT LOCATION OF ALL HVAC AND PLUMBING EQUIPMENT.	
31. CIRCUITING:	
A. BRANCH CIRCUITING IS SCHEMATIC IN NATURE AND IS INTENDED TO INDICATE CIRCUIT LOADING AND CONTROL, NOT METHODS OF INSTALLATION. REFER TO SPECIFICATIONS FOR METHODS OF INSTALLATION AND MATERIALS, INCLUDING WHETHER OR NOT BX IS ALLOWED AND WHETHER "THROUGH-FUTURE" OR OCTOPLUS (EMT WITH FLEXIBLE WHIPS) TYPE LIGHTING BRANCH CIRCUITING IS REQUIRED.	
B. WHERE WIRE SIZE AND CONDUIT SIZE IS NOT INDICATED ON THE DRAWINGS AND/OR PANEL SCHEDULES, REFER TO SPECIFICATIONS FOR MINIMUM SIZE REQUIRED.	
C. BRANCH CIRCUITS ON THE DRAWINGS ARE GENERALLY NOT SHOWN GROUPED IN SINGLE RACEWAYS. HOWEVER, GROUPING IS ALLOWED UNDER CERTAIN CONDITIONS. REFER TO DIVISION 26 SPECIFICATIONS UNDER SECTION ENTITLED "ELECTRICAL WIRING" FOR REQUIREMENTS.	
D. THE DRAWINGS GENERALLY INDICATE QUANTITY OF CONDUCTORS ON BRANCH CIRCUIT HOW RUNS ONLY. ELSEWHERE WITHIN CIRCUITS, PROVIDE QUANTITY OF CONDUCTORS AS NEEDED TO ACCOMPLISH CIRCUITING AND SWITCHING REQUIREMENTS SHOWN.	
32. WHEN REMOVING EXISTING ELECTRICAL WORK WHERE OTHER ITEMS REMAIN ON THE SAME CIRCUIT, THE CONTRACTOR SHALL TAKE WHATEVER STEPS ARE NECESSARY TO MAINTAIN CIRCUIT CONTINUITY.	
33. ALL ITEMS NOTED TO BE REMOVED ARE TO REMAIN THE PROPERTY OF THE OWNER; HOWEVER, CONTRACTOR SHALL REMOVE FROM JOB SITE ALL MATERIAL NOT RETAINED BY OWNER.	
34. FIELD VERIFY CONDITION OF, AND MODIFICATIONS AND ADDITIONS TO, ALL EXISTING ELECTRICAL FIXTURES, PANELS, WIRING, ETC.	
35. CONTRACTOR SHALL FIELD VERIFY EXISTING BRANCH CIRCUIT LOADING WHEN MAKING MODIFICATIONS AND/OR ADDITIONS TO THAT CIRCUIT. IF NEW WORK WOULD OVERLOAD EXISTING CIRCUIT, CONTRACTOR SHALL LOCATE ANOTHER EXISTING CIRCUIT (THE CLOSEST), WHICH WOULD NOT BE OVERLOADED UPON ADDING NEW LOAD, AND SHALL THE NEW LOAD INTO THAT CIRCUIT.	
36. CONTRACTOR TO REFER TO ARCHITECTURAL PHASING PLANS AND HAVE A GOOD UNDERSTANDING OF SCOPE OF PROJECT PRIOR TO COMMENCEMENT OF WORK.	
37. LUMINAIRE SUPPORT IN SUSPENDED CEILINGS:	
A. PROVIDE MEANS OF SUPPORT FOR LUMINAIRES PER NEC 410-16. T BAR CLIPS SHALL BE INSTALLED ON THE LUMINAIRE AND SHALL BE SECURED TO THE INVERTED CEILING TEES SO THAT THE LUMINAIRE IS SECURELY FASTENED TO THE CEILING SYSTEM FRAMING MEMBERS.	
B. CEILING TILES SHALL NOT BEAR THE WEIGHT OF LUMINAIRES. SURFACE MOUNT LUMINAIRES, RECESSED DOWNLIGHTS, LIGHT TRACK, EXIT SIGN, ETC. SHALL BE SUPPORTED BY PROPER FRAMES OR OTHER ATTACHMENT TO MAIN CEILING SYSTEM GRID OR BUILDING STRUCTURE ABOVE CEILING.	
C. LUMINAIRES SHALL BE CENTERED IN CEILING TILE.	
D. LUMINAIRE SHALL HAVE FLANGE OR TRIM RING FOR CLOSURE OF CEILING CUTOUT OR OPENING.	
E. FIRE-RATED CEILING ASSEMBLY: FOR LUMINAIRES TO BE FLUSH-MOUNTED INTO A FIRE-RATED CEILING OR SURFACE MOUNTED TO A FIRE-RATED CEILING, INSTALL WITH INDEPENDENT, SECURE SUPPORT RACEWAY, CABLE ASSEMBLIES, BOXES AND FITTINGS LOCATED ABOVE A FIRE-RATED FLOOR/CEILING OR ROOF CEILING ASSEMBLY SHALL NOT BE SECURED TO, OR SUPPORTED BY, THE CEILING ASSEMBLY INCLUDING THE CEILING SUPPORT WIRES. PROVIDE AN INDEPENDENT MEANS OF SECURE SUPPORT. INDEPENDENT SUPPORT WIRES SHALL BE DISTINGUISHABLE BY COLOR, TAGGING, OR OTHER EFFECTIVE MEANS FROM THOSE THAT ARE PART OF THE FIRE-RATED DESIGN.	
38. CONTRACTOR SHALL FIELD VERIFY ANY EXISTING UNDERGROUND PIPING, WIRING OR OTHER FACILITIES PRIOR TO TRENCHING, AND SHALL BE RESPONSIBLE FOR ANY DAMAGE CAUSED BY INSTALLATION OF NEW WORK.	

ELECTRICAL ABBREVIATIONS	
ABBREVIATION	DESCRIPTION
A OR AMP	AMPERES
ABV	ABOVE
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISH GRADE
AIC	ELECTRICAL INTERRUPTING CAPACITY
AL	ALUMINUM
AS	DISCONNECT SWITCH SIZE RATING
ATS	AUTOMATIC TRANSFER SWITCH
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
B.S.	BARE STRANDED
BKBD	BUSBAR
BKR	BREAKER
BLDG	BUILDING
CB	CIRCUIT BREAKER
CBT	CIRCUIT
CL	CENTER LINE
CLG	CEILING
COL	COLUMN
CU	COPPER
DIS	DISCONNECT
DWG	DRAWING
EA	EACH
ELEC	ELECTRICAL
EMH	ELECTRICAL MANHOLE
EMT	ELECTRICAL METALLIC TUBING
EOP	EMERGENCY POWER OFF
EQ	EQUIPMENT
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FF	FINISHED FLOOR
FLA	FULL LOAD AMPS
FL	FIBER OPTIC
FEET	FEET
GFI	GROUND FAULT INTERRUPTER
GFR	GROUND FAULT RELAY
GND	GROUND
HP	HORSEPOWER
HTR	HEATER
HY	HIGH VOLTAGE
ISC	SHORT CIRCUIT CURRENT
KMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT-AMPERES
KW	KILOWATT
LF	LINEAR FEET
LIS	LOAD INTERRUPTER SWITCH
LOC	LOCATION
LTG	LIGHTING
SHEET OR DETAIL REFERENCE	
- NUMBER ON TOP INDICATES DETAIL NUMBER	
- NUMBER ON BOTTOM INDICATES SHEET NUMBER	
MECHANICAL EQUIPMENT CALLOUT	
SEE MECHANICAL PLANS FOR EXACT LOCATION AND REQUIREMENTS	
KEY NOTE	
CIRCUITING	
ARROW INDICATES HOME RUN. LONGER TICK(S) INDICATE NEUTRAL WIRE(S), SHORTER STRAIGHT TICK(S) INDICATE PHASE WIRE(S), SLANTED SHORTER TICK(S) INDICATE SWITCH LEG(S), DOT(S) INDICATE GROUNDING CONDUCTOR(S), DASHED WIRING (LONG-SHORT-LONG DASHES) INDICATES WIRING BELOW SLAB OR GRADE, DASHED WIRING (SERIES OF SHORT DASHES) INDICATES EXISTING WIRING, SLASH THROUGH ARROW INDICATES PARTIAL CIRCUIT, "D" ON HOME RUN ARROW INDICATES DEDICATED CIRCUIT.	
PROVIDE A SEPARATE NEUTRAL FOR EACH PHASE CONDUCTOR FOR ENTIRE LENGTH OF CIRCUIT FROM PANEL TO OUTLET, COUNT EACH NEUTRAL AS CURRENT-CARRYING AND GROUP A MAXIMUM OF SIX THINWALL CONDUCTORS IN A SINGLE RACEWAY; GROUNDING CONDUCTOR IS NOT COUNTED.	
MOUNTING OVER OBSTRUCTION DETAIL	
1. UNOBSTRUCTED, WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE SIDE REACH IS UNOBSTRUCTED, THE HIGH SIDE REACH SHALL BE 48 INCHES MAX. AND THE LOW SIDE REACH SHALL BE 15 INCHES MIN ABOVE THE FINISH FLOOR OR GROUND.	
1.1. EXCEPTION: AN OBSTRUCTION SHALL BE PERMITTED BETWEEN THE CLEAR FLOOR OR GROUND SPACE AND THE ELEMENT WHERE THE DEPTH OF THE OBSTRUCTION IS 10 INCHES MAX.	
2. OBSTRUCTED HIGH REACH: WHERE A CLEAR FLOOR OR GROUND SPACE ALLOWS A PARALLEL APPROACH TO AN ELEMENT AND THE HIGH SIDE REACH IS OVER AN OBSTRUCTION, THE HEIGHT OF THE OBSTRUCTION SHALL BE 34 INCHES MAX. AND THE DEPTH OF THE OBSTRUCTION SHALL BE 24 INCHES MAX. THE HIGH SIDE REACH SHALL BE 48 INCHES MAX FOR A REACH DEPTH OF 10 INCHES MAX. WHERE THE REACH DEPTH EXCEEDS 10 INCHES, THE HIGH SIDE REACH SHALL BE 46 INCHES MAX FOR A REACH DEPTH OF 24 INCHES MAX.	
3. OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.	
NOTES: FORWARD REACH	
1. UNOBSTRUCTED: WHERE A FORWARD REACH IS UNOBSTRUCTED, THE HIGH FORWARD REACH SHALL BE 48 INCHES MAX. AND THE LOW FORWARD REACH SHALL BE 15 INCHES MIN ABOVE THE FINISH FLOOR OR GROUND.	
2. OBSTRUCTED REACH: WHERE A CLEAR FLOOR OR GROUND SPACE THAT ALLOWS A FORWARD REACH IS OVER AN OBSTRUCTION, THE CLEAR SPACE SHALL EXTEND BENEATH THE ELEMENT FOR A DISTANCE NOT LESS THAN THE REQUIRED REACH DEPTH. THE OBSTRUCTION, AND THE DEPTH OF THE OBSTRUCTION SHALL BE 26 INCHES MAX. THE HIGH FORWARD REACH SHALL BE 44 INCHES MAX FOR A DEPTH OF 25 INCHES MAX.	
3. OPERATION: OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 POUNDS MAX.	
UNOBSTRUCTED SIDE REACH	
2022 CBC 110-306.1.1	
OBSTRUCTED SIDE REACH	
2022 CBC 110-306.1.2	
UNOBSTRUCTED FORWARD REACH	
2022 CBC 110-306.2.1	
OBSTRUCTED FORWARD REACH	
2022 CBC 110-306.2.2	

SYMBOLS SHOWN ON LEGEND MAY NOT APPEAR ON DRAWINGS

ELECTRICAL DEVICES & EQUIPMENT	
⌚	JUNCTION BOX
⚡	20A MOTOR-RATED TOGGLE SWITCH
⊕	20A-125V DUPLEX RECEPTACLE
⊕	20A-125V GROUND FAULT CIRCUIT INTERRUPTER RECEPTACLE
⊕	20A-125V DUPLEX RECEPTACLE MOUNTED ABOVE COUNTER TOP
⊕	20A-125V CONTROLLED PLUG-LOAD DUPLEX RECEPTACLE
⊕	20A-125V ISOLATED GROUND TYPE DUPLEX RECEPTACLE
⊕	20A-125V DUPLEX TAMPER RESISTANT RECEPTACLE WITH (2) USB CHARGING PORTS
⊕	20A-125V FOURPLEX RECEPTACLE (SAME SYMBOLOLOGY TYPES AS DUPLEX RECEPTACLE)
⊕	SPECIAL PURPOSE SINGLE POWER RECEPTACLE, RATED AS INDICATED (IF NO RATING INDICATED, RECEPTACLE RATING SHALL MATCH BRANCH CIRCUIT OVERCURRENT PROTECTIVE DEVICE AND SHALL MEET REQUIREMENTS OF EQUIPMENT BEING CONNECTED)
⊕	20A-125V FLUSH FLOOR DUPLEX RECEPTACLE
⊕	20A-125V CEILING MOUNTED DUPLEX RECEPTACLE
⊕	BELL
⊕	EMERGENCY POWER OFF (EPO)
⊕	PUSHBUTTON
⊕	DISCONNECT SWITCH: DISCONNECT SWITCHES SHALL BE 30NF3 UON. NF = NON-FUSIBLE. NEMA 1 ENCLOSURE. PROVIDE FUSED BUSWAY PLUG WHEN SWITCH IS INDICATED ON BUSWAY.
⊕	TRANSFORMER
⊕	PANELBOARD
⊕	SWITCHBOARD OR DISTRIBUTION PANELBOARD
⊕	PHOTOVOLTAIC SOLAR PANEL
SINGLE LINE DIAGRAM	
L1A	PANELBOARD
⊕	AUTOMATIC TRANSFER SWITCH
⊕	CIRCUIT BREAKER (FUSED TYPE)
⊕	CIRCUIT BREAKER
⊕	GROUND FAULT CIRCUIT BREAKER
⊕	METER
⊕	TRANSFORMER
⊕	COMBINATION MOTOR-STARTER
⊕	DISCONNECT SWITCH W/COMBINATION MOTOR-STARTER
⊕	DISCONNECT SWITCH - FUSED
⊕	DISCONNECT SWITCH
RENOVATION WORK	
EXISTING WORK SHALL BE SHOWN LIGHT - NEW WORK SHALL BE SHOWN DARK	
⊕	EXISTING TO REMAIN
⊕	EXISTING SHALL BE DEMOLISHED AND REMOVED.
⊕	EQUIPMENT WITH "ER" ADJACENT IS RELOCATED EQUIPMENT SHOWN IN NEW LOCATION.
LIGHTING CONTROLS	
EXISTING WORK SHALL BE SHOWN LIGHT - NEW WORK SHALL BE SHOWN DARK	
MANUFACTURER - LIGHT	
\$	WALL SWITCH - #NPD0MA
TYPES LISTED BELOW:	
P	PILOT
3	THREE-WAY
4	FOUR-WAY
WP	WEATHERPROOF
\$	DIMMER WALL SWITCH - #NPD0MA-DX
\$	WALL OCCUPANCY SENSOR - #NWSXA-PDT
\$	LOW VOLTAGE WALL OCCUPANCY SENSOR WITH DIMMING (2-BUTTON) - #NPD0MA-2S-DX
\$	LOW VOLTAGE WALL SCENE CONTROL SWITCH WITH DIMMING (4-BUTTON) - #NPD0MA-4S-DX
\$	KEYED WALL SWITCH - #NPD0MA-KEY
⊕	LOW VOLTAGE OCCUPANCY SENSOR - #NPM-PDT-10-RJB
⊕	LOW VOLTAGE RESTROOM OCCUPANCY SENSOR - #NPM-PDT-9-RJB
⊕	LOW VOLTAGE CORRIDOR OCCUPANCY SENSOR - #NPM-10-RJB
⊕	LOW VOLTAGE OCCUPANCY SENSOR (HIGH CEILING) - #NPM-6-RJB
⊕	DAYLIGHT HARVESTING PHOTOCELL DIMMING SENSOR - #NMC-ADCC-DZ-RJB
⊕	LOW VOLTAGE OCCUPANCY SENSOR & PHOTOCELL DIMMING SENSOR - #NMC-PDT-10-RJB
UTILITY PENETRATION NOTE	
UTILITY PENETRATIONS OF ANY KIND IN FIRE AND SMOKE PARTITIONS AND CEILING ASSEMBLIES SHALL BE FIRESTOPPED. FIRESTOPPING SHALL BE WITH AN APPROVED UL LISTED SYSTEM OR MATERIAL. STEEL ELECTRICAL OUTLET BOXES WHICH DO NOT EXCEED 16 SQUARE INCHES IN AREA, NEED NOT BE PROTECTED IN ONE-HOUR OR TWO-HOUR FIRE RATED WALLS, PARTITIONS, CEILING, OR AREASEPARATION UNLESS THEY:	
1. OCCUR ON OPPOSITE SIDES OF THE WALL WITHIN 24 INCH HORIZONTAL DISTANCE OF ONE ANOTHER IN THIS CASE, ONLY ONE OUTLET BOX NEEDS TO BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL OR DETAIL TO CORRECT THIS CONDITION.	
2. OCCUR IN COMBINATION WITH OUTLET BOXES OF ANY SIZE SUCH THAT THE AGGREGATE AREA OF UNPROTECTED OUTLET BOXES EXCEEDS 100 SQUARE INCHES IN ANY 100 SQUARE FEET OF WALL AREA IN THIS CASE, ONLY A SUFFICIENT NUMBER OF OUTLET BOXES NEED TO BE PROTECTED BY AN APPROVED MATERIAL OR DETAIL TO DECREASE THE AGGREGATE AREA OF UNPROTECTED UTILITY BOXES TO LESS THAN 100 SQUARE FEET OF WALL.	
STEEL ELECTRICAL OUTLET BOXES WHICH EXCEED 16 SQUARE INCHES IN AREA, AND ALL OTHER STEEL UTILITY OUTLET BOXES REGARDLESS OF SIZE, SHALL BE PROTECTED BY AN APPROVED FIRESTOP MATERIAL AS LISTED OR EQUAL.	
FIRESTOPPING MATERIAL: MPP-1 MOLDABLE PUTTY PADS	
3M CONTRACTOR PRODUCTS MINNEAPOLIS, MN 3M TEST REPORT NO. 1167 DATED AUGUST 21, 1987	
FLAMESAFE FSP 4077 FIRESTOP PUTTY COATINGS INTERNATIONAL PROTECTIVE COATINGS OAKHURST, NJ	
FSP FIRESTOP PUTTY PADS HEVI-DUTY NELSON PRODUCTS TULSA, OK	
STEEL UTILITY BOXES WHICH EXCEED 100 SQUARE INCHES IN AREA SHALL BE PROTECTED BY ENCASEMENT.	
UTILITY AND ELECTRICAL OUTLETS OR BOXES SHALL BE SECURELY FASTENED TO THE STUD FRAMING OF THE WALL, PARTITION OR CEILING ASSEMBLY. THE OPENING IN THE GYPSUM BOARD FACING SHALL BE CUT SO THAT THE CLEARANCE BETWEEN THE BOX AND THE GYPSUM BOARD DOES NOT EXCEED 1/8 INCH IN SMOKE WALLS OR PARTITIONS. THE 1/8 INCH CLEARANCE SHALL BE FILLED WITH AN APPROVED FIRE-RATED SEALANT.	
DIAGRAMMATIC NOTE	
DRAWINGS ARE DIAGRAMMATIC AND DO NOT INDICATE DETAILED CONDUIT ROUTING OR LENGTHS REQUIRED FOR COMPLETE INSTALLATION. ROUTING OF RACEWAYS SHALL BE AT THE OPTION OF THE CONTRACTOR BUT SHALL BE IN STRICT COMPLIANCE WITH STRUCTURAL REQUIREMENTS, CONTRACT DOCUMENTS AND SPECS UNLESS OTHERWISE NOTED. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES. DO NOT SCALE THE ELECTRICAL DRAWINGS FOR LOCATIONS ANY ELECTRICAL ARCHITECTURAL, STRUCTURAL AND/OR MECHANICAL ITEMS OR FEATURES. REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR FEATURES. REFER TO ARCHITECTURAL AND STRUCTURAL CONTRACT DOCUMENTS FOR DIMENSIONS.	
STRUCTURAL NOTE	
UNLESS SPECIFICALLY SHOWN ON THESE PLANS, STRUCTURAL MEMBERS SHALL NOT BE CUT, DRILLED, OR NOTCHED WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THE STRUCTURAL ENGINEER AND THE DIVISION OF THE STATE ARCHITECT.	

ELECTRICAL SHEET INDEX

E0.00	ELECTRICAL LEGEND, NOTES, & SHEET INDEX
E0.01	ELECTRICAL SITE PLAN - DEMOLITION
E0.11	ELECTRICAL DEMOLITION PLANS
E0.12	ELECTRICAL DEMOLITION PLANS
E0.01	ELECTRICAL DEMOLITION PLANS
E0.11	ELECTRICAL RENOVATION PLANS
E1.02	ELECTRICAL RENOVATION PLANS
E5.01	SINGLE LINE DIAGRAM & SCHEDULES

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR:
DATE: 03/17/2026

ARCHITECT
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P-949-546-5000

CONSULTANT
LEAF Engineers
leafengineers.com

8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909-887-0905
leafengineers.com

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPEMENT
DSA APPL NO.: ##-####
DSA FILE NO.: 30-43

WESTMINSTER SCHOOL DISTRICT
EST. 1962

CONSULTANT
Schroeder ES HVAC Upgrade & Modernization

KEY PLAN
NORTH: PLAN

CONSULTANT
REGISTERED PROFESSIONAL ENGINEER
STATE OF CALIFORNIA
No. E-19817
Exp. 3/31/2027

ARCHITECT
LICENSED ARCHITECT
Yong Yoo
No. 31162
Exp. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 09-30-2025 PROJECT NUMBER 04-124418

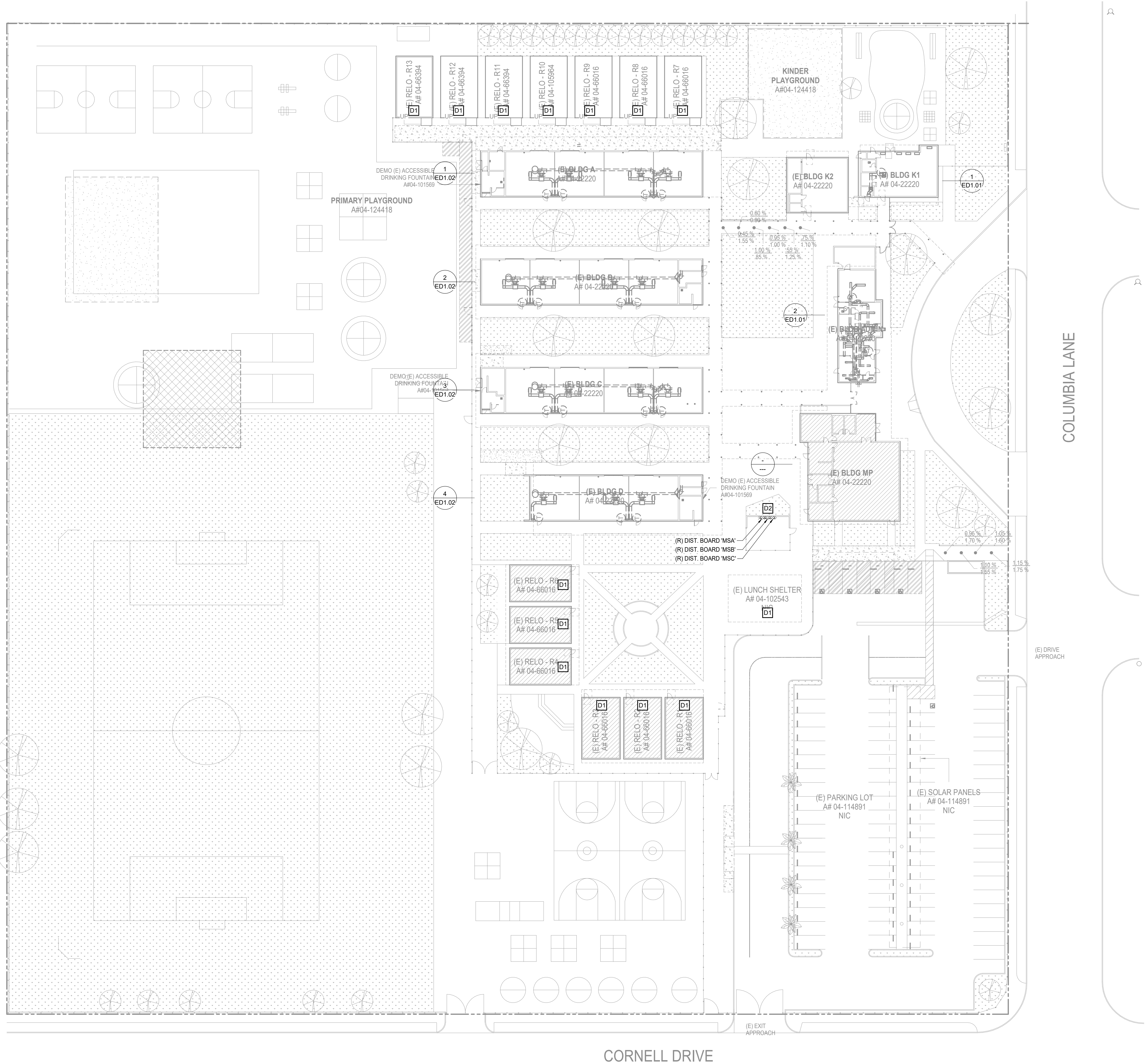
REVISIONS
No. Description Date

100% DESIGN DEVELOPEMENT

ELECTRICAL LEGEND, NOTES, & SHEET INDEX

E0.00

This document is for plan review only



GENERAL NOTES

- COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.
- COORDINATE WITH CAMPUS REPRESENTATIVE TO PROVIDE ACCESSIBLE LOCATION FOR SEPARATION, COLLECTION AND STORAGE OF DEMOLISHED MATERIALS FOR RECYCLING AND DISPOSAL.
- ALL OUTAGES TO EXISTING ELECTRICAL AND SIGNAL SERVICES SHALL BE SCHEDULED IN ADVANCE WITH THE OWNER.

KEY NOTES

- D1 BUILDING NOT IN SCOPE.
D2 REFER TO SINGLE LINE DIAGRAM FOR FURTHER INFORMATION FOR SCOPE OF WORK.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC.
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 03/17/2026

PBK
ARCHITECT
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92805
P:949-546-5000

CONSULTANT
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909-857-0909
leafengineers.com

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPMENT
DSA APP. NO. ##-#### DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT
EST. 1952

KEY PLAN
NORTH: PLAN

CONSULTANT
REGISTERED PROFESSIONAL ENGINEER
STEFEN C. MUSEY
No. E-19817
Exp. 3/31/2027
STATE OF CALIFORNIA
ELECTRICIAN

ARCHITECT
Yong Yoo
No. C-31162
Exp. 12-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 09-30-2025 PROJECT NUMBER 04-124418

REVISIONS
No. Description Date

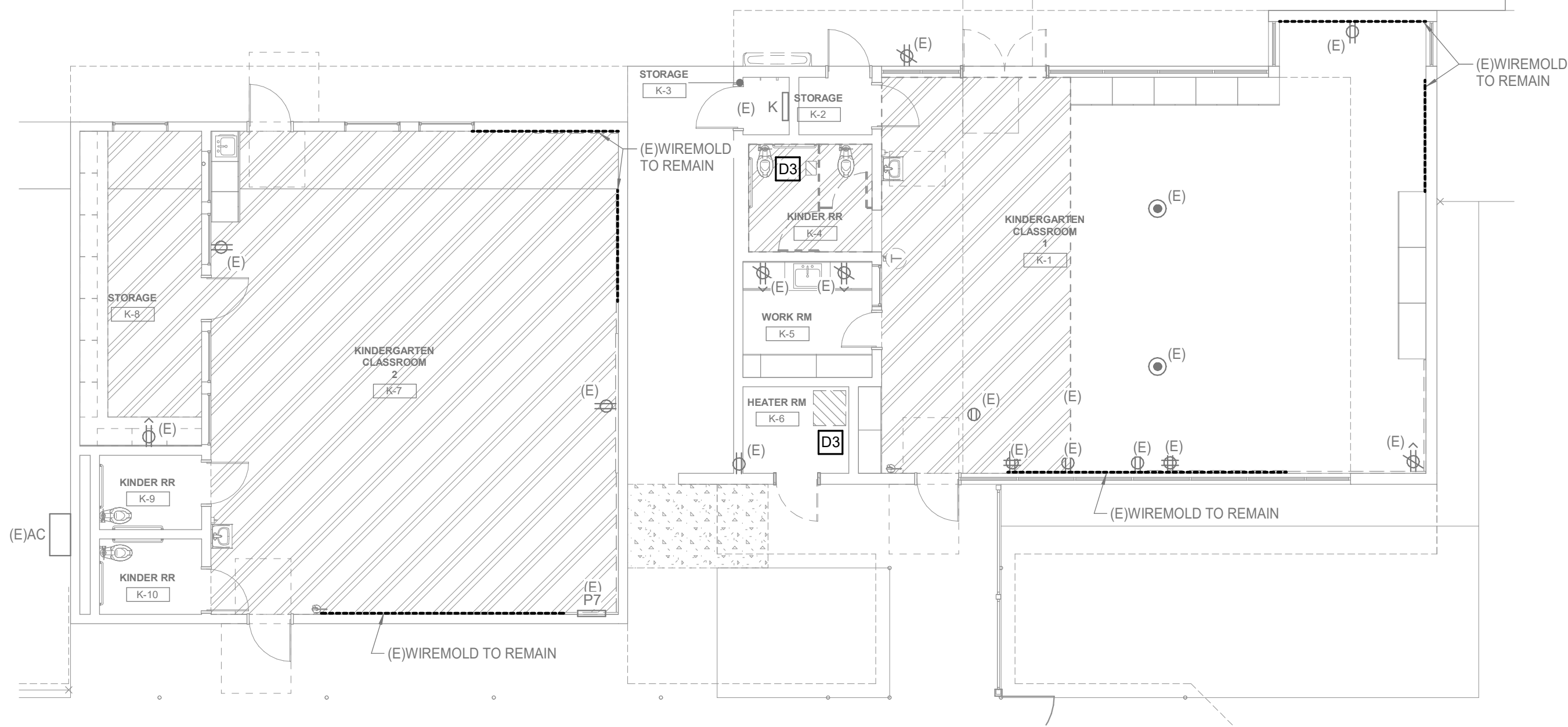
100% DESIGN DEVELOPMENT

ELECTRICAL SITE PLAN
- DEMOLITION

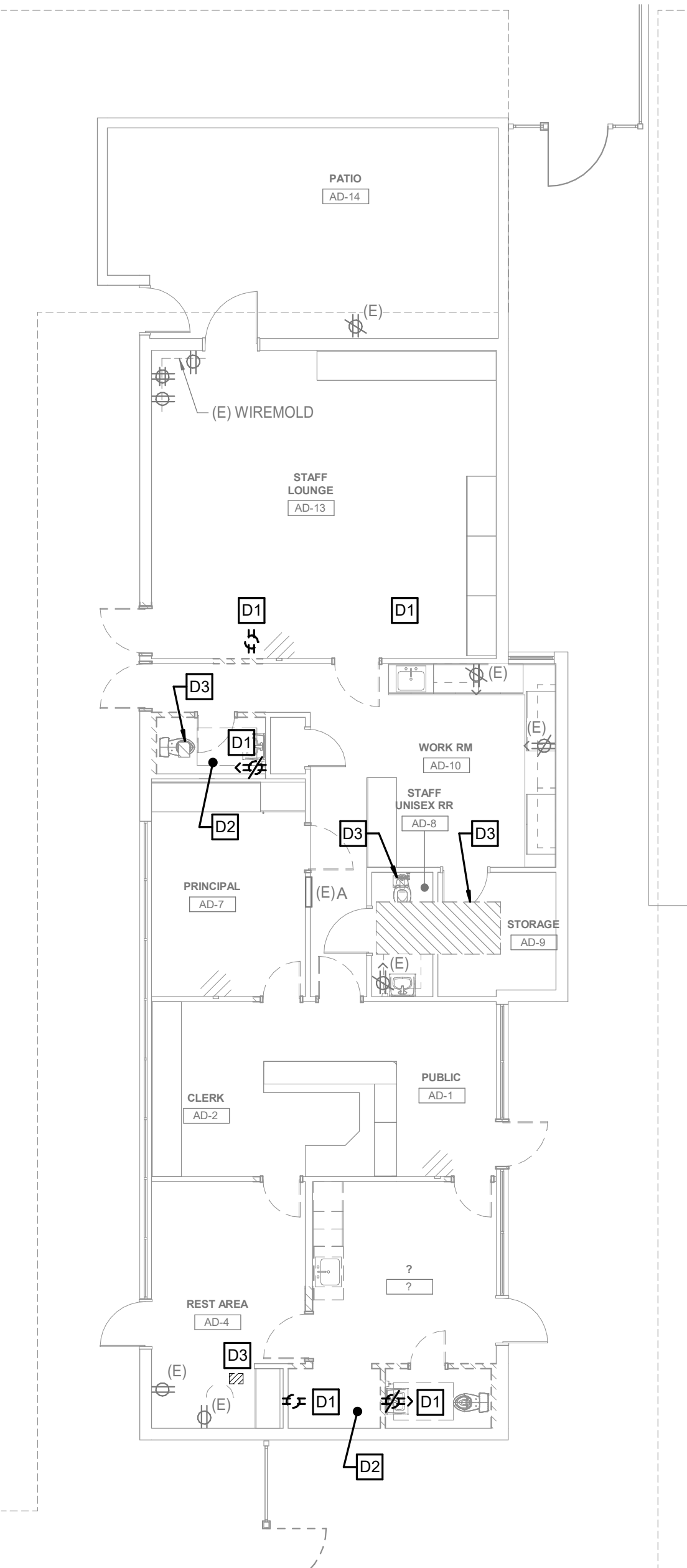
ED0.01

This document is for plan review only

0' 1'



1 KINDERGARTEN - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"



2 ADMIN - ELECTRICAL DEMOLITION PLAN
1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. ALL EQUIPMENT/DEVICES AND OTHER SALVAGEABLE MATERIALS TO BE STORED OR DISPOSED OF AS DIRECTED BY THE BUILDING OWNER.
2. TO MINIMIZE DOWNTIME, CONTRACTOR SHALL COORDINATE SHUTDOWN OF EXISTING EQUIPMENT SERVED BY THE HOT WATER SYSTEM WITH CAMPUS REPRESENTATIVE.
3. POWER/DATA OUTLETS IN AREA OF WORK WHICH ARE NOT GOING TO BE DEMOLISHED/REMOVED SHALL BE PROTECTED IN-PLACE.
4. CAREFULLY PROTECT ALL EQUIPMENT, UTILITY LINES AND MATERIALS. WHEN WORKING ON FINISHED SURFACES RESTORE TO THE ORIGINAL CONDITION ALL SURFACES WHICH ARE DAMAGED BECAUSE OF THE INSTALLATION OF THIS WORK.
5. REMOVE ALL ABANDONED WIRES BACK TO PANEL BOARD. LABEL CIRCUIT BREAKER AS SPARE.
6. ELECTRICAL CONTRACTOR TO LABEL RECEPTACLE AND JUNCTION BOXES WITH CORRESPONDING PANEL NAME AND CIRCUIT.
7. PROVIDE AND/OR REPLACE MISSING OR DAMAGED OUTLET COVER PLATES OF EXISTING OUTLETS TO REMAIN.

DEMOLITION KEY NOTES

- D1 DISCONNECT AND REMOVE ELECTRICAL DEVICE. MAINTAIN EXISTING CIRCUITRY TO ANY OTHER ELECTRICAL COMPONENTS ASSOCIATED WITH CIRCUIT.
- D2 DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES AND LIGHTING CONTROLS IN THIS SPACE. MAINTAIN EXISTING CIRCUITRY TO ANY OTHER ELECTRICAL COMPONENTS ASSOCIATED WITH CIRCUIT.
- D3 DISCONNECT AND REMOVE EXISTING MECHANICAL EQUIPMENT, ALONG WITH ASSOCIATED DOWNSTREAM COMPONENTS. CIRCUIT(S) SHALL BECOME SPARE BACK AT SOURCE.

Not for permitting or construction

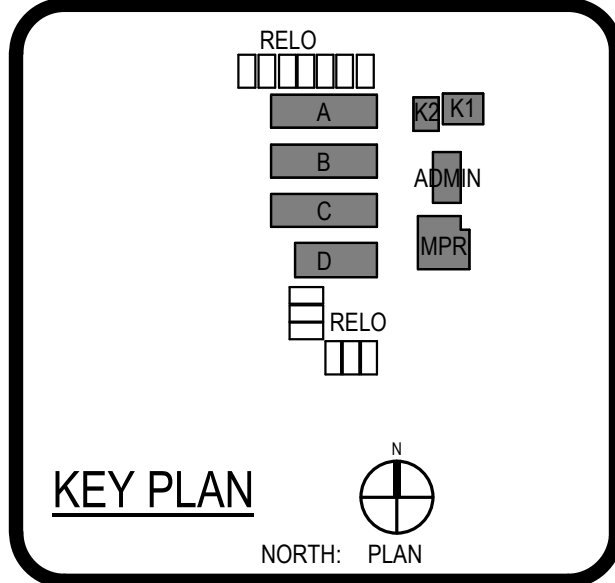
ARCHITECT
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P:949-546-5000

CONSULTANT
LEAF ENGINEERS
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909-857-0909
leafengineers.com

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPMENT
DSA APPL NO. ##-#### DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT
EST. 1952



CLIENT		
WESTMINSTER SCHOOL DISTRICT		
DATE	PROJECT NUMBER	
09-30-2025	04-124418	
REVISIONS		
No.	Description	Date
100% DESIGN DEVELOPMENT		
ELECTRICAL DEMOLITION PLANS		

This document is for plan review only



1. BRANCH CIRCUITS SHALL BE 3"4C - 2H/2 & 1#1/2G, UNLESS OTHERWISE NOTED.
2. COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS FOR MISC. SPECIFIED EQUIPMENT PRIOR TO ROUGH-IN.
3. COORDINATE INSTALLATION REQUIREMENTS WITH MECHANICAL DRAWINGS FOR SPECIFIED MECHANICAL EQUIPMENT AND DEVICES PRIOR TO ROUGH-IN.
4. MAINTAIN CODE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT.
5. COORDINATE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES WITH CAMPUS REPRESENTATIVE PRIOR TO ROUGH-IN.
6. SEE DETAILS ON SHEET E6.01 FOR ELECTRICAL DETAILS.
7. FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE EARTHING AND NOT INDICATED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPLEX OUTLET, A DEDICATED CIRCUIT WITH 2#12, 1#1/2G 3"4C, WITH HOMERUN TO NEAREST 120/208V PANEL.
8. PROVIDE 1-1/4" SEALANT FOR ALL (N) WALL PENETRATIONS.

This document is for plan review only

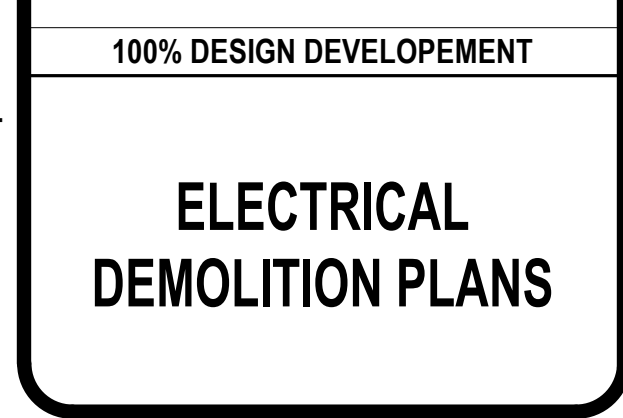
 **LEAF**
ENGINEERS

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

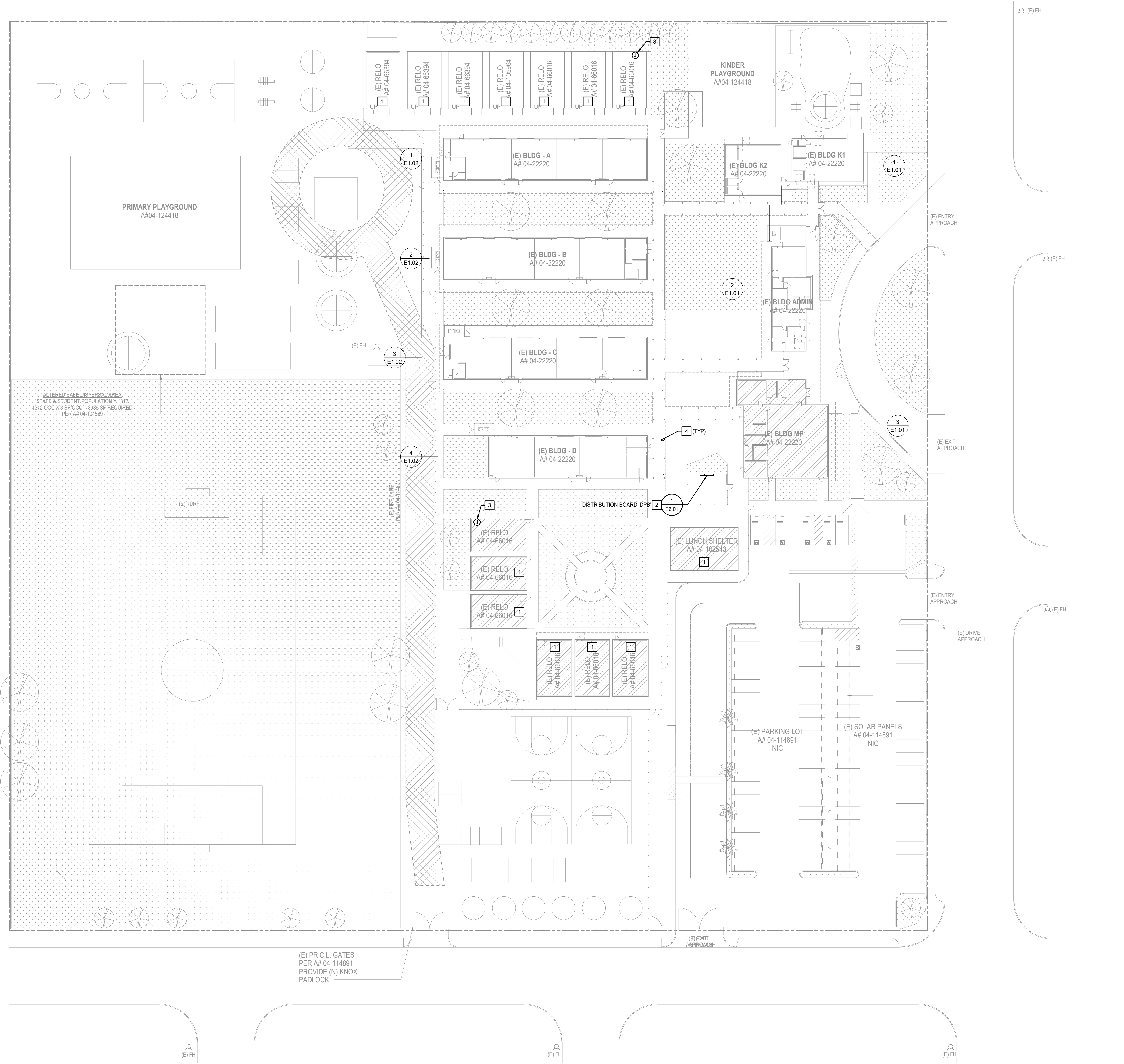
PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647

100% DESIGN DEVELOPMENT

DSA APPL NO.: ##-##-##



ED1.02



GENERAL NOTES

- 1. COORDINATE ROUTING FOR ALL UNDERGROUND ELECTRICAL BRANCH CIRCUITS AND FEEDERS WITH OTHER DISCIPLINES PRIOR TO TRENCHING.
- 2. UNLESS NOTED OTHERWISE ALL UNDERGROUND CONDUIT SHOWN ON THIS PLAN TO BE MINIMUM 1" IN SIZE.
- 3. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UTILITIES CAUSED BY INSTALLATION OF NEW WORK.

KEY NOTES

- 1. BUILDING NOT IN SCOPE.
- 2. REFER TO SINGLE LINE DIAGRAM FOR FURTHER INFORMATION FOR SCOPE OF WORK.
- 3. PROVIDE CONNECTION FOR FIRE ALARM POWER SUPPLY AND AMPLIFIER. CONNECT TO PANEL SERVING THIS PORTABLE. PROVIDE RED LOCK-ON CIRCUIT BREAKER.
- 4. FEEDER(S) SHALL BE ROUTED ALONG ROOF. BACK DOWN WALL TO MECHANICAL EQUIPMENT DISCONNECT. REFER TO FEEDER(S) SIZE(S) IN ELECTRICAL EQUIPMENT CONNECTION SCHEDULES ON SHEETS E2.01 & E2.02.

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC.
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 03/17/2026

PBK
ARCHITECT
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92805
P:949-546-5000

CONSULTANT
LEAF Engineers
leafengineers.com

PROJECT ADDRESS:
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909-857-0909
leafengineers.com

WESTMINSTER SCHOOL DISTRICT
EST. 1912

KEY PLAN
NORTH: PLAN

CONSULTANT
REGISTERED PROFESSIONAL ENGINEER
STEVEN C. MUSEY
No. E-19817
Exp. 3/31/2027
STATE OF CALIFORNIA

ARCHITECT
LICENSED ARCHITECT
Yong Yoo
No. C-31162
Exp. 12-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE: 09-30-2025 PROJECT NUMBER: 04-124418

REVISIONS
No. Description Date

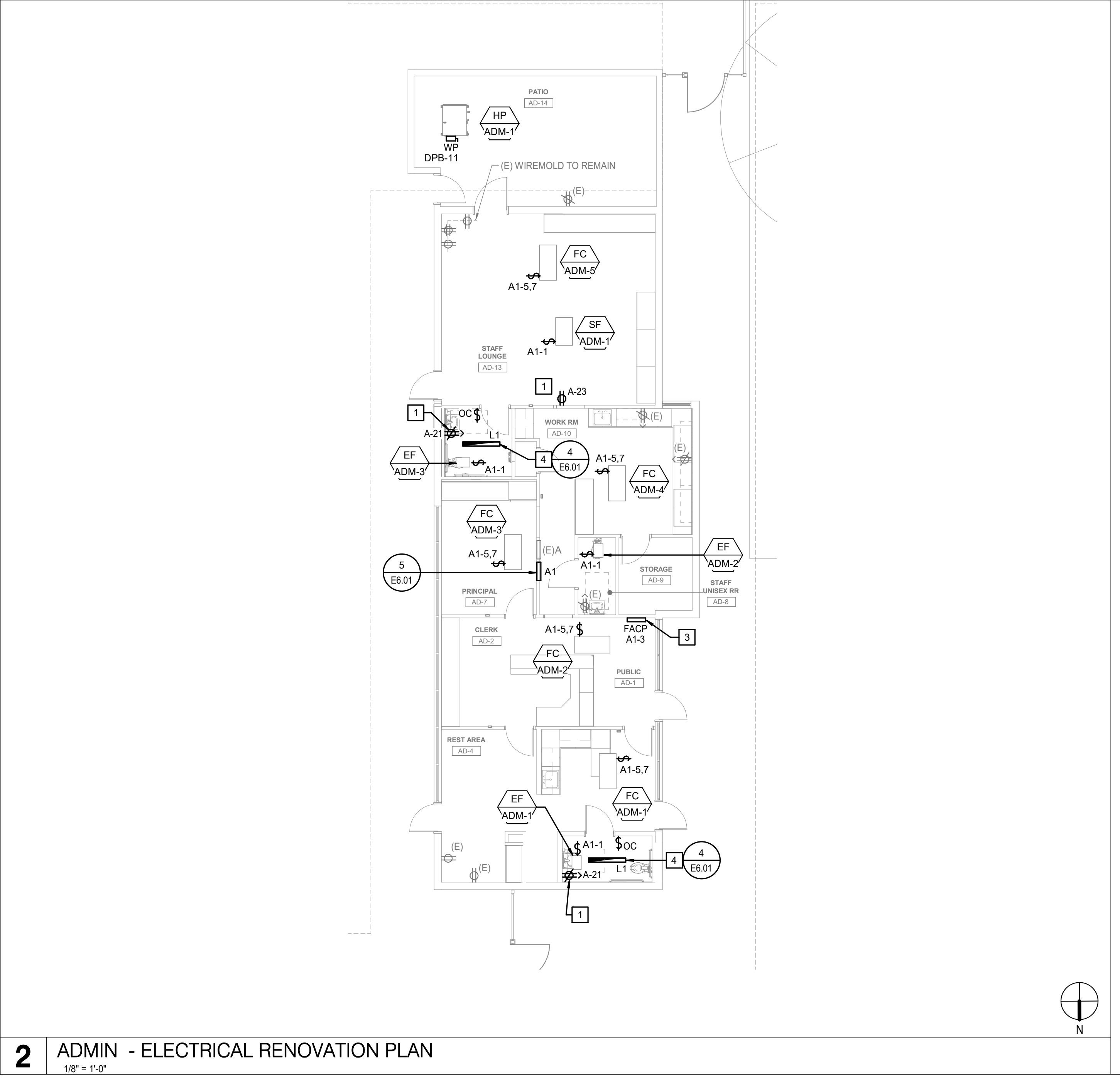
100% DESIGN DEVELOPMENT

ELECTRICAL SITE PLAN

100% DESIGN DEVELOPMENT

ELECTRICAL SITE PLAN

E0.01

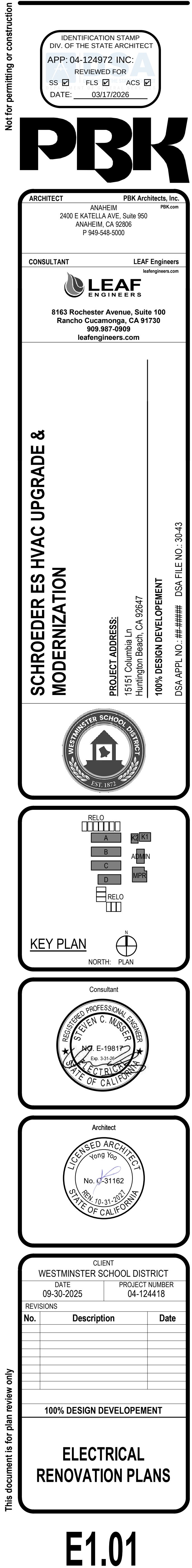


GENERAL NOTES

1. BRANCH CIRCUITS SHALL BE 3/4" C - 2#12 & 1#12G, UNLESS OTHERWISE NOTED.
2. COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS FOR MISC. SPECIFIED EQUIPMENT PRIOR TO ROUGH-IN.
3. COORDINATE INSTALLATION REQUIREMENTS WITH MECHANICAL DRAWINGS FOR SPECIFIED MECHANICAL EQUIPMENT AND DEVICES PRIOR TO ROUGH-IN.
4. MAINTAIN CODE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT.
5. COORDINATE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES WITH CAMPUS REPRESENTATIVE PRIOR TO ROUGH-IN.
6. SEE DETAILS ON SHEET E6.01 FOR ELECTRICAL DETAILS.
7. FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND NOT IDENTIFIED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPLEX OUTLET, A DEDICATED CIRCUIT WITH 2#12, 1#12G, 3/4" C, WITH HOMERUN TO NEAREST 120/208V PANEL.
8. PROVIDE 1-HOUR SEALANT FOR ALL (N) WALL PENETRATIONS.

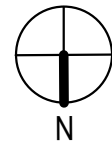
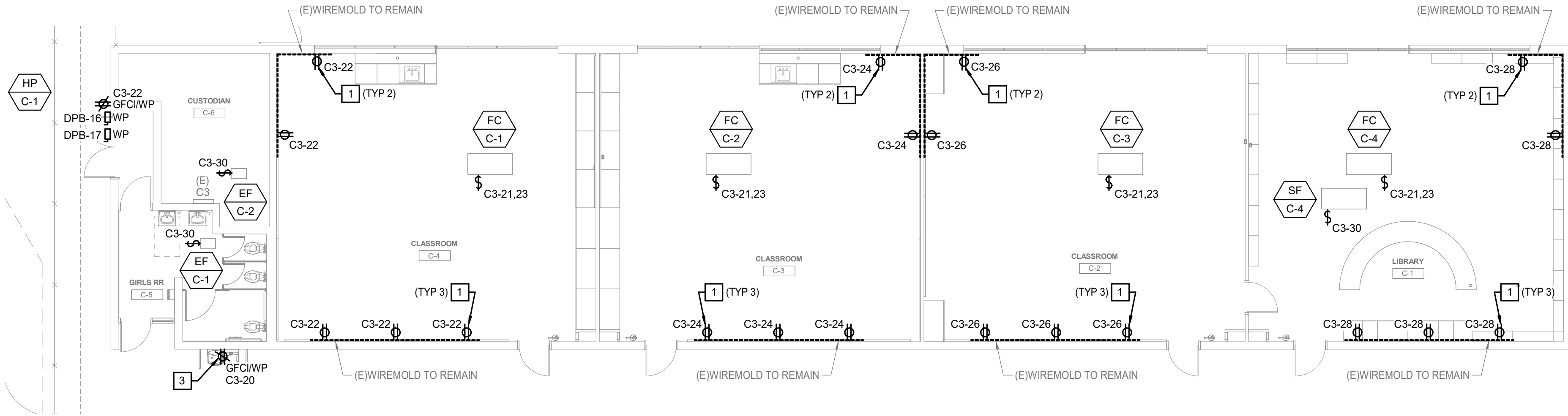
KEY NOTES

- 1 CONNECT NEW DEVICE TO EXISTING CIRCUIT INDICATED.
- 2 PROVIDE NEW ELECTRICAL DEVICE IN EXISTING WIREMOLD.
- 3 PROVIDE CONNECTION FOR FACP. PROVIDE RED LOCK-ON CIRCUIT BREAKER AT POWER SOURCE.
- 4 UTILIZE EXISTING LIGHTING CIRCUIT IN THIS SPACE TO RECONNECT TO NEW LIGHT FIXTURE.
- 5 PROVIDE CONNECTION FOR FIRE ALARM POWER SUPPLY AND AMPLIFIER.



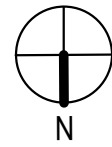
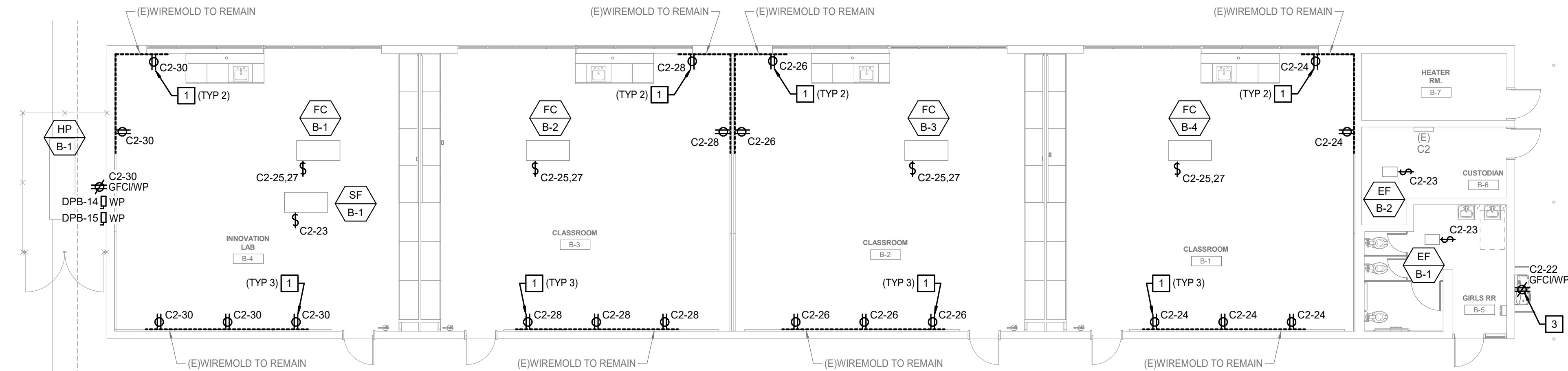
4 BLDG D - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



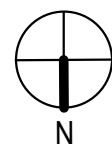
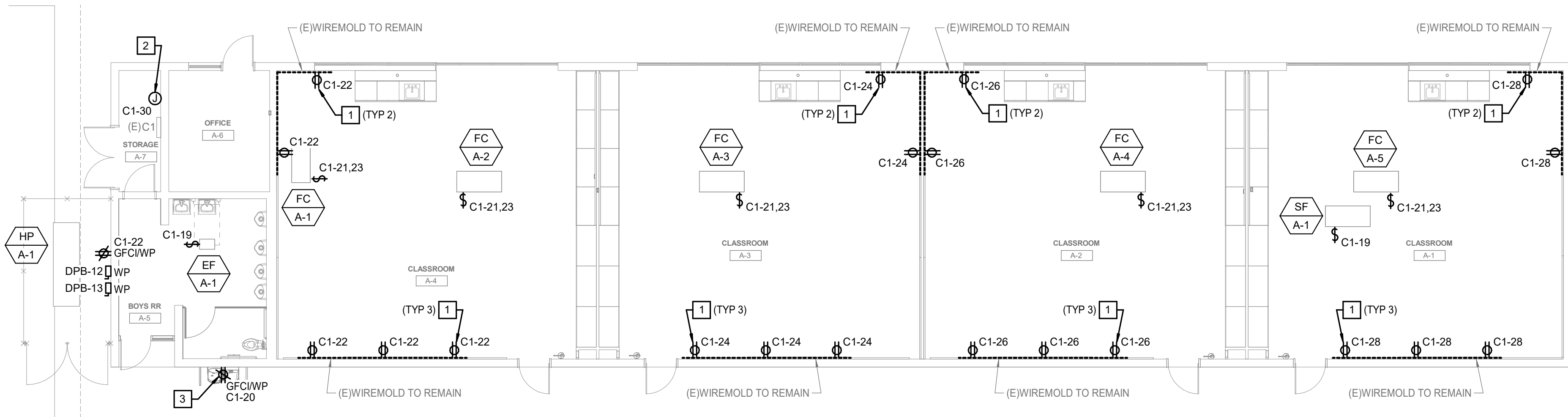
3 BLDG C - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



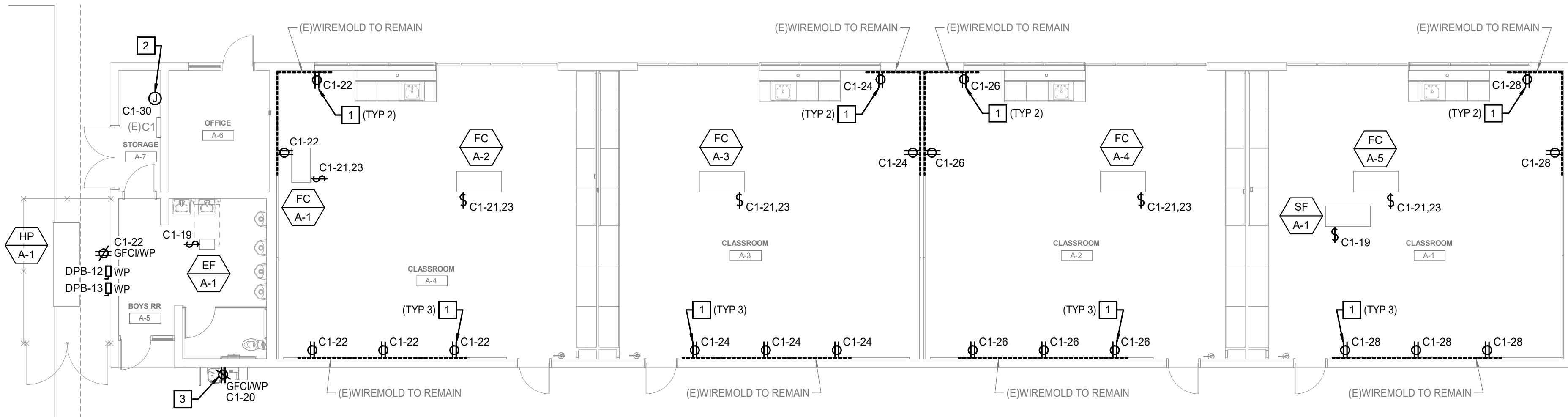
2 BLDG B - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



1 BLDG A - ELECTRICAL RENOVATION PLAN

1/8" = 1'-0"



ELECTRICAL CONNECTION SCHEDULE

EQUIPMENT ID	EQUIPMENT VOLTAGE	DISCONNECT SIZE (AMPS, FUSE, POLES)	BRANCH CIRCUIT SIZE	NEMA-3R
EF A-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF B-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF B-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF C-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF C-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF D-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
EF D-2	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
FC A-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC A-5	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC B-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC C-4	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC D-1	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC D-2	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
FC D-3	208V	20A2P MRTS	3/4"C - 3#12 & 1#12G	No
HP A-1	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP A-2	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP B-1	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP B-2	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP C-1	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP C-2	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP D-1	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
HP D-2	208V	60/45/3	1-1/2"C - 3#1 & 1#8G	Yes
SF A-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
SF B-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
SF C-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No
SF D-1	120V	20A MRTS	3/4"C - 2#12 & 1#12G	No

GENERAL NOTES

- BRANCH CIRCUITS SHALL BE 3/4"C - 2#12 & 1#12G, UNLESS OTHERWISE NOTED.
- COORDINATE LOCATION AND INSTALLATION REQUIREMENTS PER MANUFACTURER'S RECOMMENDATIONS FOR MISC. SPECIFIED EQUIPMENT PRIOR TO ROUGH-IN.
- COORDINATE INSTALLATION REQUIREMENTS WITH MECHANICAL DRAWINGS FOR SPECIFIED MECHANICAL EQUIPMENT AND DEVICES PRIOR TO ROUGH-IN.
- MAINTAIN CODE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT.
- COORDINATE MOUNTING HEIGHTS FOR ELECTRICAL DEVICES WITH CAMPUS REPRESENTATIVE PRIOR TO ROUGH-IN.
- SEE DETAILS ON SHEET E6.01 FOR ELECTRICAL DETAILS.
- FOR EQUIPMENT OR DEVICES SHOWN ON ARCHITECTURAL DRAWINGS THAT REQUIRE POWER AND NOT IDENTIFIED ON ELECTRICAL PLANS, ASSUME AT A MINIMUM A DUPLEX OUTLET, A DEDICATED CIRCUIT WITH 2#12, 1#12G, 3/4"C, WITH HOMERUN TO NEAREST 120/208V PANEL.
- PROVIDE 1-HOUR SEALANT FOR ALL (N) WALL PENETRATIONS.

KEY NOTES

- PROVIDE NEW ELECTRICAL DEVICE IN EXISTING WIREFOLD.
- PROVIDE CONNECTION FOR FIRE ALARM POWER SUPPLY AND AMPLIFIER.
- PROVIDE CONNECTION FOR DRINKING FOUNTAIN.

Not for permitting or construction

This document is for plan review only

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 03/17/2026

PBK

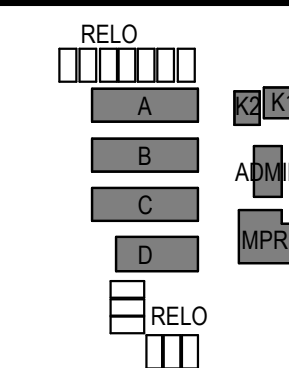
ARCHITECT PBK Architects, Inc.
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P:949-546-5000

CONSULTANT LEAF Engineers
leafengineers.com

8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.367.0909
leafengineers.com

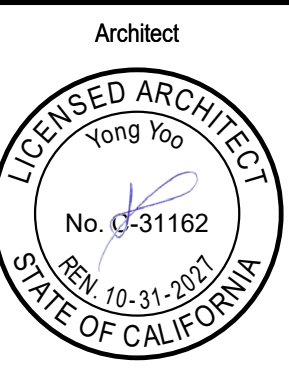
SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647
100% DESIGN DEVELOPMENT
DSA APPL NO. ##4#### DSA FILE NO. 304-3



KEY PLAN

NORTH: PLAN

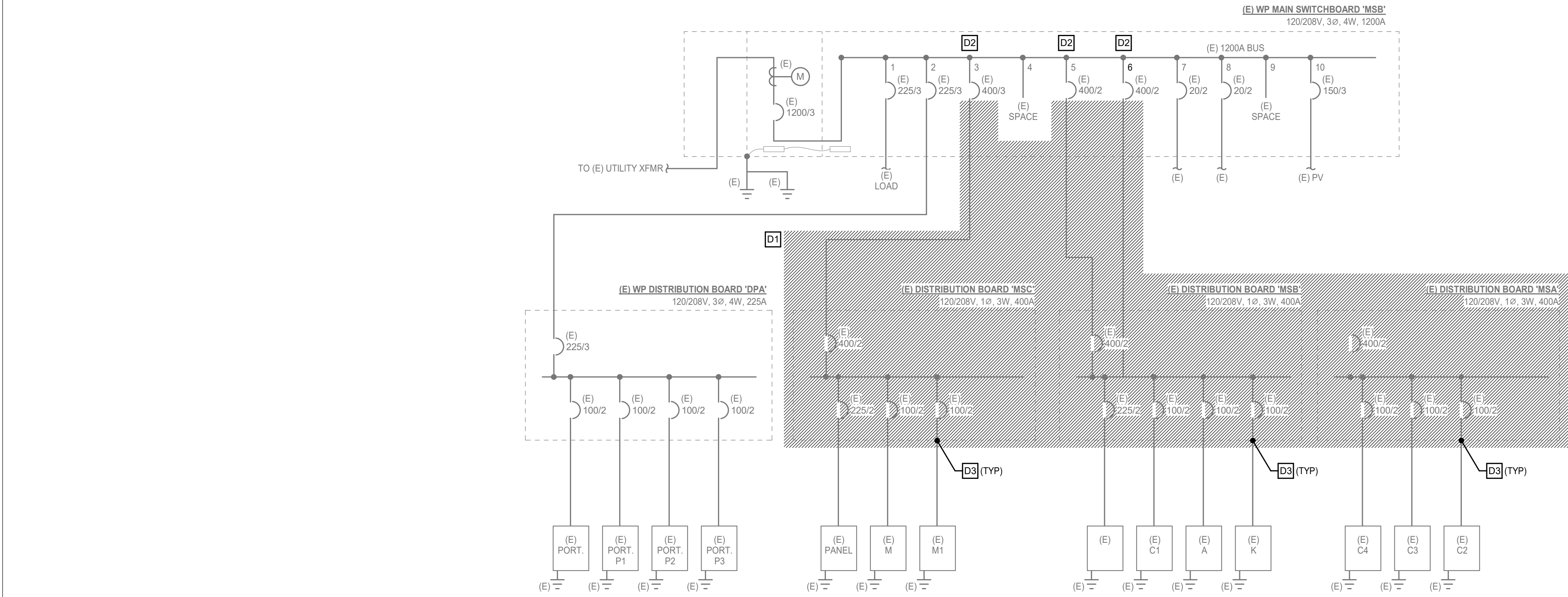


REVISIONS		
No.	Description	Date

100% DESIGN DEVELOPEMENT

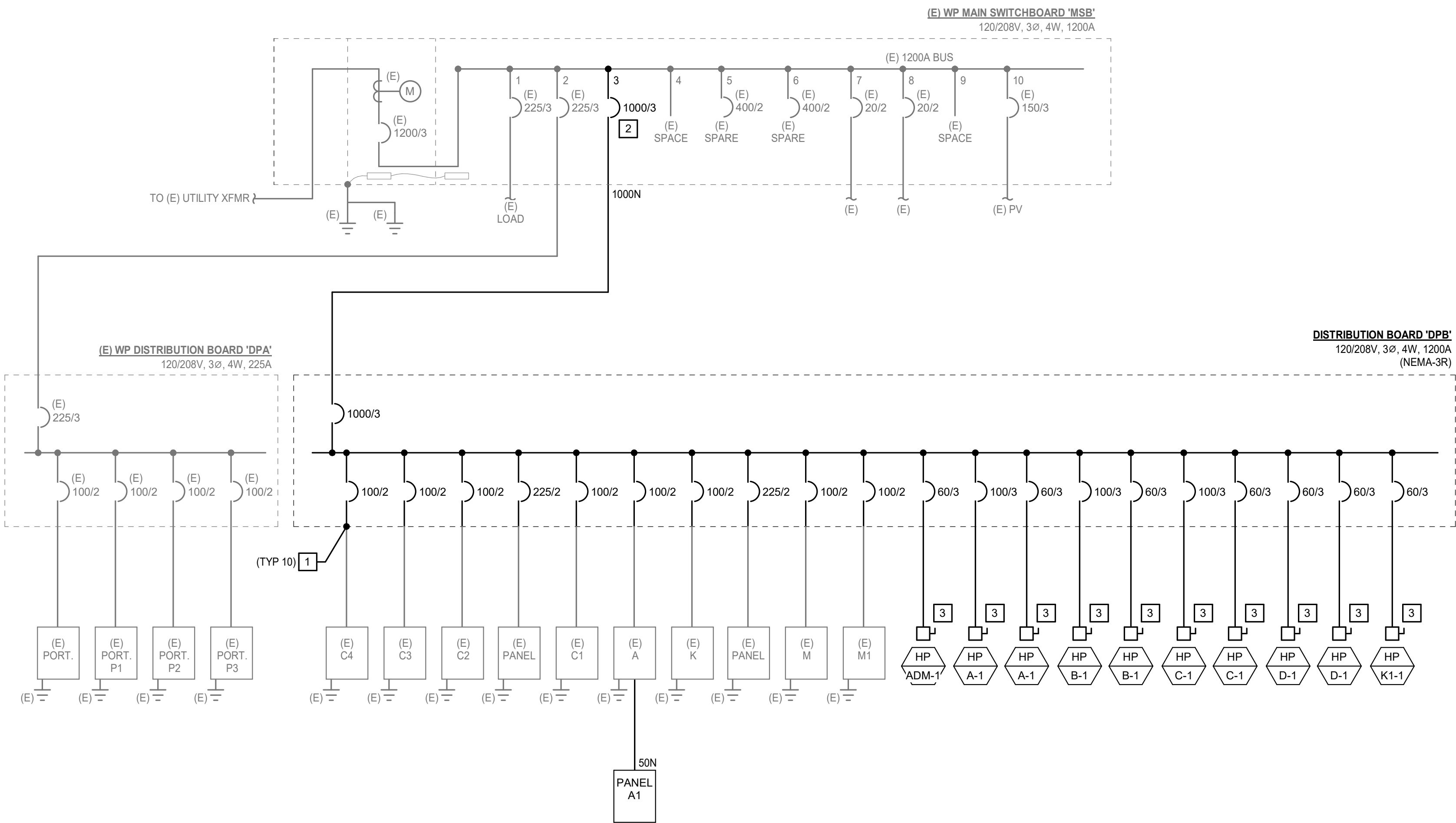
ELECTRICAL RENOVATION PLANS

E1.02



1 SINGLE LINE DIAGRAM - DEMOLITION

NOT TO SCALE



2 SINGLE LINE DIAGRAM - RENOVATION

NOT TO SCALE

DEMOLITION KEY NOTES

- [D1] DEMOLISH AND REMOVE EXISTING FEEDERS AND EQUIPMENT INDICATED.
[D2] EXISTING CIRCUIT BREAKER SHALL REMAIN AS SPARE IN RENOVATION PHASE, U.N.O.
[D3] CAP EXISTING FEEDERS FOR RECONNECTION IN RENOVATION PHASE.

KEY NOTES

- [1] EXTEND EXISTING FEEDER(S) TO NEW EQUIPMENT SHOWN.
[2] REPLACE EXISTING CIRCUIT BREAKER WITH NEW, SIZE INDICATED, MANUFACTURER AND AIC RATING TO MATCH EXISTING.
[3] REFER TO EQUIPMENT CONNECTION SCHEDULE POWER PLANS FOR DISCONNECT AND FEEDER SIZE.

FEEDER SCHEDULE

TAG NUMBER	CONDUCTOR QUANTITY AND SIZE	CONDUIT SIZE	SETS
30N	4#10, 1#10G	1"	1
50N	4#6, 1#10G	1"	1
60N	4#6, 1#10G	1"	1
100	3#1, 1#6G	1 1/2"	1
100N	4#1, 1#6G	1 1/2"	1
125	3#1, 1#6G	1 1/2"	1
125N	4#1, 1#6G	2"	1
150	3#1/0, 1#6G	1 1/2"	1
150N	4#1/0, 1#6G	2"	1
175	3#2/0, 1#6G	2"	1
175N	4#2/0, 1#6G	2"	1
200	3#3/0, 1#6G	2"	1
200N	4#3/0, 1#6G	2"	1
225	3#4/0, 1#4G	2"	1
225N	4#4/0, 1#4G	2 1/2"	1
250	3#250, 1#4G	2 1/2"	1
250N	4#250, 1#4G	3"	1
300	3#350, 1#4G	3"	1
300N	4#350, 1#4G	3"	1
400	3#3/0, 1#3G	2"	2
400N	4#3/0, 1#3G	2"	2
400S	4#500	3 1/2"	1
600	3#350, 1#1G	3"	2
600N	4#350, 1#1G	3"	2
600S	4#350	3"	2
800	3#500, 1#10G	3"	2
800N	4#500, 1#10G	3 1/2"	2
800S	4#500	3 1/2"	2
1000	3#400, 1#20G	3"	3
1000N	4#400, 1#20G	3"	3
1000S	4#400	3"	3
1200	3#350, 1#30G	3"	4
1200N	4#350, 1#30G	3"	4
1200S	4#350	3"	4
1600S	4#400	3"	5
2000S	4#400	3"	6
2500S	4#500	3 1/2"	7
3000S	4#500	3 1/2"	8
4000S	4#500	3 1/2"	11

ELEC. SERVICE LOAD SUMMARY

LOAD DESCRIPTION	ESTIMATED DEMAND KVA
EXISTING PEAK DEMAND OVER THE PAST 12 MONTHS	77
125% OF PEAK DEMAND	96
RENOVATIONS - ADDED LOAD	
NEWLY ADDED ESTIMATED DEMAND	0
ESTIMATED TOTAL BUILDING DEMAND LOAD =	96 267A @ 208V

Not for permitting or construction

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 04-124972 INC:
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 03/17/2026

PBK
ARCHITECT
ANAHEIM
2400 E KATELLA AVE, Suite 950
ANAHEIM, CA 92806
P 949-546-5000
PBK.com

CONSULTANT
LEAF ENGINEERS
leafengineers.com
8163 Rochester Avenue, Suite 100
Rancho Cucamonga, CA 91730
909.867.0909
leafengineers.com

SCHROEDER ES HVAC UPGRADE & MODERNIZATION

PROJECT ADDRESS:
15151 Columbia Ln
Huntington Beach, CA 92647
100% DESIGN DEVELOPMENT
DSA APPL NO. ##-#### DSA FILE NO. 30-43

WESTMINSTER SCHOOL DISTRICT
EST. 1952

KEY PLAN
NORTH: PLAN

STEVEN C. MOSER
REGISTERED PROFESSIONAL ENGINEER
No. E-19817
Exp. 3/31/2027
STATE OF CALIFORNIA

Yong Yoo
LICENSED ARCHITECT
No. C-31162
Exp. 10-31-2027
STATE OF CALIFORNIA

CLIENT
WESTMINSTER SCHOOL DISTRICT
DATE 09-30-2025 PROJECT NUMBER 04-124418
REVISIONS

No.	Description	Date

100% DESIGN DEVELOPEMENT
SINGLE LINE DIAGRAM & SCHEDULES

E5.01

(E) Branch Panel: K

LOCATI... Existing		NEUTRAL BUS: Yes				VOLTAGE: 120/208V, 1PH, 3W			
		NEUTRAL RATING: 100%				MAIN BUS: 100A			
		GROUND BUS: Yes				MLO: 100A			
		MOUNTING: Existing				AIC RATING: Existing			
CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO		
1	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	2		
3	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	4	
5	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	6		
7	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	8	
9	EXISTING LOAD	20 A 2 --	0	0	-- 1	20 A EXISTING LOAD	10		
11	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	12	
13	EXISTING LOAD	20 A 1 --	0	360	1	20 A RECEPTS - CLASSROOM/EXTERIOR	14		
15	EXISTING LOAD	20 A 1 --			1	20 A # FIRE ALARM EQUIPMENT	16		
17	SPARE	20 A 1 --	0	100	-- 1	20 A EXHAUST FAN	18		
19	SPARE	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	20	
21	SPARE	20 A 1 --	0	0	-- 2	20 A EXISTING LOAD	22		
23	SPARE	20 A 1 --		0	0	-- 2	20 A EXISTING LOAD	24	
25	SPARE	20 A 1 --	0	--	-- 1	SPACE	26		
27	SPARE	20 A 1 --		0	--	-- 1	SPACE	28	
29	SPARE	20 A 1 --	0	--	-- 1	SPACE	30		

LEGEND:

** 6 mA GROUND FAULT CIRCUIT BREAKER
*30 mA GROUND FAULT CIRCUIT BREAKER
RED LOCK-ON CIRCUIT BREAKER HANDLE
ST - SHUNT TRIP

CONNECTED LOAD BY PHASE (VA)		CONNECTED KVA	
A:	460	5	AMPS
B:	500	DEMAND	AMPS
		5	AMPS

REMARKS:

(E) Branch Panel: M

LOCATI... Existing		NEUTRAL BUS: Yes						VOLTAGE: 120/208V, 1PH, 3W					
		NEUTRAL RATING: 100%						MAIN BUS: 100A					
		GROUND BUS: Yes						MLO: 100A					
		MOUNTING: Existing						AIC RATING: Existing					
CIR NO	Circuit Description	Breaker Amps/ Poles	A			B			Breaker Amps/ Poles	Circuit Description			CIR NO
1	EXISTING LOAD	20 A 1 --	--	0	0				-- 1	20 A	EXISTING LOAD	2	
3	EXISTING LOAD	20 A 1 --					0	0	-- 1	20 A	EXISTING LOAD	4	
5	EXISTING LOAD	20 A 1 --	--	0	500				-- 1	20 A	#FIRE ALARM EQUIPMENT	6	
7	EXISTING LOAD	20 A 1 --						0	0	-- 1	20 A	SPARE	8
9	EXISTING LOAD	20 A 1 --	--	0	0				-- 1	20 A	EXISTING LOAD	10	
11	EXISTING LOAD	20 A 1 --					0	0	-- 1	20 A	EXISTING LOAD	12	
13	EXISTING LOAD	20 A 1 --	--	0	0				-- 1	20 A	SPARE	14	
15	EXISTING LOAD	20 A 1 --					0	0	-- 1	20 A	SPARE	16	
17	SPARE	20 A 1 --	--	0	0				-- 1	20 A	SPARE	18	
19	SPARE	20 A 1 --						0	0	-- 1	20 A	SPARE	20
21	SPARE	20 A 1 --	--	0	0				-- 1	20 A	SPARE	22	
23	SPARE	20 A 1 --						0	0	-- 1	20 A	SPARE	24
25	SPARE	20 A 1 --	--	0	0				-- 1	20 A	SPARE	26	
27	SPARE	20 A 1 --					0	0	-- 1	20 A	SPARE	28	
29	SPARE	20 A 1 --	--	0	0				-- 1	20 A	SPARE	30	

LEGEND:

** 6 mA GROUND FAULT CIRCUIT BREAKER
*30 mA GROUND FAULT CIRCUIT BREAKER
RED LOCK-ON CIRCUIT BREAKER HANDLE
ST - SHUNT TRIP

CONNECTED LOAD BY PHASE (VA)		CONNECTED KVA	
A:	500	2	AMPS
B:	0	DEMAND	AMPS
		2	AMPS

REMARKS:

(E) Branch Panel: C1

LOCATI... Existing		NEUTRAL BUS: Yes				VOLTAGE: 120/208V, 1PH, 3W			
		NEUTRAL RATING: 100%				MAIN BUS: 100A			
		GROUND BUS: Yes				MLO: 100A			
		MOUNTING: Existing				AIC RATING: Existing			
CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO		
1	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	2		
3	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	4	
5	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	6		
7	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	8	
9	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	10		
11	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	12	
13	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	14		
15	EXISTING LOAD	20 A 1 --		0	0	-- 2	20 A EXISTING LOAD	16	
17	EXISTING LOAD	20 A 1 --	0	0	-- 2	20 A EXISTING LOAD	18		
19	EXHAUST/SUPPLY FAN	20 A 1			1	20 A DRINKING FOUNTAIN	20		
21	CLASSROOM FAN COILS	20 A 2	37	1080	1	20 A RECEPTS - CLASSROOM/EXTERIOR	22		
23	SPARE	20 A 1 --	0	900	-- 1	20 A RECEPTS - CLASSROOM	24		
25	SPARE	20 A 1 --		0	900	-- 1	20 A RECEPTS - CLASSROOM	26	
27	SPARE	20 A 1 --		0	900	-- 1	20 A RECEPTS - CLASSROOM	28	
29	SPARE	20 A 1 --	0	500	-- 1	20 A #FIRE ALARM EQUIPMENT	30		

LEGEND:

** 6 mA GROUND FAULT CIRCUIT BREAKER
*30 mA GROUND FAULT CIRCUIT BREAKER
RED LOCK-ON CIRCUIT BREAKER HANDLE
ST - SHUNT TRIP

CONNECTED LOAD BY PHASE (VA)		CONNECTED KVA	
A:	2517	5628	KVA
B:	3112	27	AMPS
		DEMAND	AMPS
		27	AMPS

REMARKS:

(E) Branch Panel: A

LOCATI... Existing		NEUTRAL BUS: Yes				VOLTAGE: 120/208V, 1PH, 3W			
		NEUTRAL RATING: 100%				MAIN BUS: 100A			
		GROUND BUS: Yes				MLO: 100A			
		MOUNTING: Existing				AIC RATING: Existing			
CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO		
1	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	2		
3	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	4	
5	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	6		
7	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	8	
9	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	10		
11	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	12	
13	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	14		
15	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	16	
17	EXISTING LOAD	20 A 2 --		0	0	-- 1	20 A EXISTING LOAD	18	
19	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	20	
21	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	22		
23	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	24	
25	EXISTING LOAD	20 A 2 --	0	10935	2	50 A SUBPANEL 'A1'	26		
27	EXISTING LOAD	20 A 1 --		0	325	-- 1	20 A EXISTING LOAD	28	
29	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A SPARE	30		

LEGEND:

** 6 mA GROUND FAULT CIRCUIT BREAKER
*30 mA GROUND FAULT CIRCUIT BREAKER
RED LOCK-ON CIRCUIT BREAKER HANDLE
ST - SHUNT TRIP

CONNECTED LOAD BY PHASE (VA)		CONNECTED KVA	
A:	10935	11260	KVA
B:	325	54	AMPS
		DEMAND	AMPS
		54	AMPS

REMARKS:

Branch Panel: A1

LOCATI... Existing		NEUTRAL BUS: Yes				VOLTAGE: 120/208V, 1PH, 3W			
		NEUTRAL RATING: 100%				MAIN BUS: 50 A			
		GROUND BUS: Yes				MLO: 50 A			
		MOUNTING: RECESSED				AIC RATING: 10,000			
CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO		
1	EXHAUST/SUPPLY FANS	20 A 1	10610				2		
3	#FACP	20 A 1 --		0			4		
5	CLASSROOM FAN COILS	20 A 2	325				6		
7	SPACE	-- 1 --	-- --	325	-- 1 --	SPACE	8		
9	SPACE	-- 1 --	-- --	-- --	-- 1 --	SPACE	10		
11	SPACE	-- 1 --	-- --	-- --	-- 1 --	SPACE	12		
13	SPACE	-- 1 --	-- --	-- --	-- 1 --	SPACE	14		
15	SPACE	-- 1 --	-- --	-- --	-- 1 --	SPACE	16		
17	SPACE	-- 1 --	-- --	-- --	-- 1 --	SPACE	18		

LEGEND:

** 6 mA GROUND FAULT CIRCUIT BREAKER
*30 mA GROUND FAULT CIRCUIT BREAKER
#RED LOCK-ON CIRCUIT BREAKER HANDLE
ST - SHUNT TRIP

CONNECTED LOAD BY PHASE (VA)		CONNECTED KVA	
A:	10935	11260	KVA
B:	325	54	AMPS
		DEMAND	AMPS
		54	AMPS

REMARKS:

(E) Branch Panel: C2

LOCATI... Existing		NEUTRAL BUS: Yes				VOLTAGE: 120/208V, 1PH, 3W			
		NEUTRAL RATING: 100%				MAIN BUS: 100A			
		GROUND BUS: Yes				MLO: 100A			
		MOUNTING: Existing				AIC RATING: Existing			
CIR NO	Circuit Description	Breaker Amps/ Poles	A	B	Breaker Amps/ Poles	Circuit Description	CIR NO		
1	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	2		
3	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	4	
5	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	6		
7	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	8	
9	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	10		
11	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	12	
13	EXISTING LOAD	20 A 1 --	0	0	-- 2	20 A EXISTING LOAD	14		
15	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	16	
17	EXISTING LOAD	20 A 1 --	0	0	-- 1	20 A EXISTING LOAD	18		
19	EXISTING LOAD	20 A 1 --		0	0	-- 1	20 A EXISTING LOAD	20	
21	EXISTING LOAD	20 A 1 --	0	180	-- 1	20 A DRINKING FOUNTAIN	22		
23	EXHAUST/SUPPLY FANS	20 A 1			1	20 A RECEPTS - CLASSROOM	24		
25	CLASSROOM FAN COILS	20 A 2	1038	900	-- 1	20 A RECEPTS - CLASSROOM	26		
27	SPARE	20 A 1 --		1038	900	-- 1	20 A RECEPTS - CLASSROOM	28	
29	SPARE	20 A 1 --	0	1080	-- 1	20 A RECEPTS - CLASSROOM/EXTERIOR	30		

LEGEND:

** 6 mA GROUND FAULT CIRCUIT BREAKER
*30 mA GROUND FAULT CIRCUIT BREAKER
LOCK-ON CIRCUIT BREAKER HANDLE
ST - SHUNT TRIP

CONNECTED LOAD BY PHASE (VA)		CONNECTED KVA	
A:	3198	7113	KVA
B:	3915	34	AMPS
		DEMAND	AMPS
		34	AMPS

REMARKS:

(E) Branch Panel: C3

|--|