MARK TWAIN ELEMENTARY SCHOOL

LYNWOOD UNIFIED SCHOOL DISTRICT
LYNWOOD, CALIFORNIA

GENERAL NOTES

----- GENERAL NOTES -----

1. ENTIRE INSTALLATION SHALL CONFORM TO THE REQUIREMENTS OF THE 2025 CALIFORNIA MECHANICAL CODE, 2025 CALIFORNIA BUILDING CODE, AND ALL OTHER APPLICABLE CODES AND REGULATIONS, INCLUDING 2025 BUILDING ENERGY EFFICIENCY STANDARDS DIVISION T-24.

2. 2025 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE INCLUDING THE APPLICABLE MANDATORY MEASURES:

   - 5.201.1 CALIFORNIA ENERGY CODE. FOR THE PURPOSES OF MANDATORY ENERGY EFFICIENCY STANDARDS IN THIS CODE, THE CALIFORNIA ENERGY COMMISSION WILL CONTINUE TO ADOPT MANDATORY STANDARDS.

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

   - 5.504.5.3.1 FILTERS. IN MECHANICALLY VENTILATED BUILDINGS, PROVIDE REGULARLY OCCUPIED AREAS OF THE BUILDING WITH AIR FILTRATION MEDIA FOR OUTSIDE AND RETURN AIR PRIOR TO OCCUPANCY THAT PROVIDES AT LEAST A MINIMUM EFFICIENCY REPORTING VALUE (MERV) OF 8. MERV 8 FILTERS SHALL BE INSTALLED PRIOR TO OCCUPANCY AND RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL. EXCEPTIONS:
     -A. AN ASHRAE 10-PERCENT TO 30-PERCENT EFFICIENCY FILTER SHALL BE PERMITTED FOR AN HVAC UNIT MEETING THE 2022 CALIFORNIA ENERGY CODE HAVING 60,000 BTU/H OR LESS CAPACITY PER FAN COIL. IF THE ENERGY USE OF THE AIR DELIVERY SYSTEM IS 0.4 W/CFM OR LESS AT THE DESIGN AIR FLOW.
     -B. EXISTING MECHANICAL EQUIPMENT.

   - 5.506.1 OUTSIDE AIR DELIVERY. FOR MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS, MEET THE MINIMUM REQUIREMENTS OF SECTION 121 (REQUIREMENTS FOR VENTILATION) OF THE 2025 CALIFORNIA ENERGY CODE, OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT, AND DIVISION 1, CHAPTER 4 OF CCR, TITLE 8.

   - 5.508.1 OZONE DEPLETION AND GREENHOUSE GAS REDUCTIONS. INSTALL HVAC AND REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT SHALL COMPLY WITH 5.508.1.1 AND 5.508.1.2.

   - 5.508.1.1 CHLOROFLUOROCARBONS (CFCS). INSTALL HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN CFCS.

   - 5.508.1.2 HALONS. INSTALL HVAC, REFRIGERATION AND FIRE SUPPRESSION EQUIPMENT THAT DO NOT CONTAIN HALONS.

   - ADHESIVES, SEALANTS AND CAULKS SHALL MEET CALGREEN REQUIREMENTS.

   - INSTALLER AND SPECIAL INSPECTORS SHALL MEET ALL QUALIFICATIONS LISTED IN SECTION 702 OF THE 2025 CALIFORNIA GREEN BUILDING STANDARDS CODE.

3. COORDINATE ENTIRE INSTALLATION OF THE HVAC SYSTEM WITH THE WORK OF ALL OTHER TRADES PRIOR TO ANY FABRICATION OR INSTALLATION. PROVIDE ALL FITTINGS, OFFSETS, AND TRANSITIONS AS REQUIRED FOR A COMPLETE WORKABLE INSTALLATION. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ITEMS TO BE PROVIDED BY OTHER TRADES WHERE MENTIONED IN THE CONTRACT DOCUMENTS PRIOR TO BID - NO EXCEPTIONS.

4. CONTRACTOR SHALL NOTIFY OWNER AND ENGINEER OF CONSTRUCTION PHASING PRIOR TO START OF CONSTRUCTION, REMOVAL, AND/OR REPLACEMENT OF ANY EQUIPMENT. CONTRACTOR SHALL RECEIVE PERMISSION IN WRITING PRIOR TO THE START OF ANY WORK DURING ANY PHASE FOR WORK SHOWN HEREIN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT WORK AND ARRANGE HIS WORK IN A MANNER THAT WILL CAUSE MINIMAL INTERFERENCE WITH DAILY FUNCTIONS WITHIN THE FACILITY. ANY EXPECTED DOWNTIME SHALL BE COORDINATED WITH THE OWNER.

5. THE OWNER ACKNOWLEDGES THAT THE DESIGN PROFESSIONAL'S PLANS ARE INSTRUMENTS OF PROFESSIONAL SERVICE. NEVERTHELESS, THE PLANS PREPARED UNDER THIS AGREEMENT SHALL BECOME THE PROPERTY OF THE OWNER UPON COMPLETION OF THE WORK. THE OWNER AGREES TO HOLD HARMLESS AND INDEMNIFY THE DESIGN PROFESSIONAL AGAINST ALL DAMAGES, CLAIMS AND LOSSES, INCLUDING DEFENSE COSTS, ARISING OUT OF ANY RESCUE OF THE PLANS WITHOUT THE WRITTEN AUTHORIZATION OF THE DESIGN PROFESSIONAL.

6. ALL DIMENSIONS SHOWN ON THESE PLANS ARE APPROXIMATE. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS PRIOR TO COMMENCING WORK.

7. PRIOR TO OCCUPANCY, THE ENTIRE H.V.A.C. SYSTEMS SHALL BE BALANCED IN ACCORDANCE WITH (AABC) ASSOCIATED AIR BALANCE COUNCIL STANDARDS BY AN INDEPENDENT AIR BALANCE CONTRACTOR. CERTIFICATION SHALL BE PROVIDED BY THE CONTRACTOR FOR AIR AND HYDRONIC AS APPLICABLE. SYSTEMS SHALL BE BALANCED AS INDICATED ON PLANS INCLUDING FRESH AIR VENTILATION. WHERE THERE IS A CONFLICT WITH THE MECHANICAL PLANS, THE AIR BALANCE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO BALANCING OF SYSTEM. IF NOT THE AIR BALANCE CONTRACTOR SHALL BEAR ALL COSTS INCURRED FOR WORK THAT MUST BE RE-BALANCED DUE TO CONFLICTS ON CONTRACT DOCUMENTS. CONTRACTOR SHALL PROVIDE THREE COPIES OF THE AIR BALANCE REPORT TO THE ENGINEER FOR APPROVAL.

8. FOR INACCESSIBLE AREAS THE CONTRACTOR SHALL PROVIDE ACCESS PANELS FOR ALL DAMPERS, EQUIPMENT, SMOKE DETECTORS, AND CONTROL DEVICES. THESE PANELS SHALL MATCH THE RATING OF THE WALL AND/OR CEILING THAT THEY ARE LOCATED IN. MINIMUM ACCESS PANEL SIZES SHALL BE AS FOLLOWS:

   1) HAND ACCESS: 12"x12"

   2) BODY ACCESS: 30"x30" MIN. WHERE A LARGER ACCESS SIZE IS REQUIRED DUE TO INSTALLATION CONSTRAINTS, THE CONTRACTOR SHALL DO SO AT NO ADDITIONAL COST AND SHALL NOTIFY THE ARCHITECT AND ENGINEER OF DEVIATIONS PRIOR TO INSTALLATION.

9. COORDINATE THE LOCATION OF ALL ROOF MOUNTED EQUIPMENT WITH THE MECHANICAL PLANS PRIOR TO ANY INSTALLATION.

10. ALL EQUIPMENT, ACCESSORIES, AND RELATED PIPING SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL FITTINGS, TRANSITIONS, DAMPERS, VALVES, AND OTHER DEVICES REQUIRED FOR A COMPLETE WORKABLE INSTALLATION.

11. MAINTENANCE LABEL SHALL BE AFFIXED TO ALL MECHANICAL EQUIPMENT AND A MAINTENANCE MANUAL SHALL BE PROVIDED FOR THE OWNER'S USE.

12. PROVIDE MERV 13 EFFICIENCY THROWAWAY FILTERS FOR ALL AIR CONDITIONING UNITS. SEE EQUIPMENT SCHEDULE AND SPECIFICATIONS FOR TYPE. SIZES SHALL BE AS RECOMMENDED BY THE MANUFACTURER, UNLESS OTHERWISE SPECIFIED.

13. AIR FILTERS SHALL BE STATE FIRE MARSHALL APPROVED AND LISTED. PREFORMED FILTERS HAVING COMBUSTIBLE FRAMING SHALL BE TESTED AS A COMPLETE ASSEMBLY. AIR FILTERS SHALL BE ACCESSIBLE FOR CLEANING OR REPLACEMENT.

14. ALL EQUIPMENT WITH MOVING PARTS SHALL BE PROVIDED WITH FLEXIBLE DUCT AND PIPE CONNECTIONS.

15. ALL EQUIPMENT SHALL BE LABELED AS TO THE SPACE IT SERVES.

16. ALL HVAC EQUIPMENT SHALL BE CERTIFIED BY THE CALIFORNIA ENERGY COMMISSION TO COMPLY WITH LATEST EFFICIENCY STANDARDS.

17. PROVIDE MANUAL VOLUME DAMPERS AND BACKDRAFT DAMPERS FOR FRESH AIR INTAKES ON ALL AIR HANDLING EQUIPMENT AND EXHAUST FANS SERVING CONDITIONED SPACES. EXCEPTION: EQUIPMENT WITH FACTORY ECONOMIZERS. DAMPERS SITUATED ON THE ROOF SHALL BE SECURED AFTER BALANCING, TO AVOID THE POSSIBILITY OF ADJUSTMENT.

18. ALL AIR HANDLING EQUIPMENT SERVING CONDITIONED SPACES SHALL PROVIDE CONTINUOUS FRESH AIR TO SPACES IN OCCUPIED MODE.

19. CONTRACTOR SHALL VERIFY ALL CLEARANCES AND AVAILABLE SPACE FOR DUCTWORK PRIOR TO ORDERING AND/OR FABRICATING MATERIAL.

20. CONTRACTOR TO SUBMIT ALL EQUIPMENT, DUCTWORK, AIR DISTRIBUTION DEVICES, AND OTHER ACCESSORIES TO THE ENGINEER FOR APPROVAL PRIOR TO ANY ORDERING OF SUCH ITEMS.

21. CONTRACTOR SHALL BE RESPONSIBLE FOR START UP OF EQUIPMENT.

22. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER 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.

23. CONTRACTOR TO BALANCE THE AIRFLOW FOR THE HVAC UNITS AND ALSO CHECK PROPER OPERATION OF THE ECONOMIZER/ POWER EXHAUST TO MAINTAIN 0.02 INCHES MAXIMUM DIFFERENTIAL PRESSURE AT EACH DOOR TO MEET THE ADA REQUIREMENTS FOR DOOR OPENING/CLOSURE OF NO MORE THAN 5 POUNDS. CONTRACTOR TO MAKE NECESSARY ADJUSTMENTS TO MEET THESE REQUIREMENTS

24. THE HVAC UNITS ARE OWNER-FURNISHED AND CONTRACTOR-INSTALLED (OFCI) AND ARE CURRENTLY STORED AT TWO LOCATIONS: - 2850 EAST DEL AMO BOULEVARD, CARSON, CALIFORNIA 90221 THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ALL HANDLING, LOADING, TRANSPORTATION, DELIVERY, UNLOADING, STAGING, AND INSTALLATION OF THE EQUIPMENT AT THE PROJECT SITE.

25. CONTRACTOR SHALL USE ONLY THOSE ENTRANCES AND PARKING FACILITIES ASSIGNED BY THE BUILDING OWNER FOR SITE ACCESS. ALL MATERIAL DELIVERIES SHALL BE SCHEDULED TO MINIMIZE DISRUPTIONS TO THE BUILDING OCCUPANTS.

26. WORK SHALL BE CARRIED OUT IN A MANNER THAT WILL NOT IMPOSE AVOIDABLE HARDSHIP, DANGER, OR INCONVENIENCE TO THE PUBLIC OR STAFF. WORK SHALL BE PLANNED TO MINIMIZE SHUTDOWN TIME OF ANY SERVICE.

27. CONTRACTOR SHALL DISPOSE OF ALL ITEMS. NO LEFTOVER TRASH OR DEBRIS SHALL REMAIN ON SITE. SITE SHALL BE LEFT CLEAN AND FREE OF ALL DEBRIS AT THE END OF EACH WORKDAY.

28. SAFETY DURING CONSTRUCTION SHALL COMPLY WITH CALIFORNIA FIRE CODE (CFC) CHAPTER 33.

29. CONTRACTOR SHALL CLEAN AND SANITIZE ALL EXISTING SUPPLY AND RETURN DUCTWORK CONNECTED TO THE REPLACED HVAC EQUIPMENT PRIOR TO SYSTEM STARTUP, INCLUDING LINED DUCTWORK TO REMAIN PER SPECIFICATIONS SECTION 23-01-30.51. PRIOR TO BID AND BEFORE COMMENCEMENT OF ANY WORK ALL EXISTING DUCTWORK TO REMAIN SHALL BE CONFIRMED ON SITE.

----- CONTROLS -----

1. CONTROL SCHEMATICS ARE FOR SEQUENCE ONLY. REFER TO ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ALL ELECTRICAL DEVICES REQUIRED.

2. ALL LINE VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT. ALL LINE VOLTAGE CONDUIT AND WIRING, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR AS INDICATED ON THE ELECTRICAL DRAWINGS OR SPECIFIED IN THE ELECTRICAL SECTION OF THE SPECIFICATIONS. ALL ELECTRICAL WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS OF ALL GOVERNING BODIES HAVING JURISDICTION THEREOF.

3. ALL LOW VOLTAGE CONDUIT AND WIRING AS APPLICABLE, INCLUDING FINAL CONNECTIONS, SHALL BE FURNISHED AND INSTALLED BY THE MECHANICAL CONTRACTOR AS INDICATED ON THE MECHANICAL DRAWINGS.

   A1) ALL LOW VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT.

   A2) ALL LOW VOLTAGE WIRING SHALL BE PLENUM - RATED.

   B) MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE FOLLOWING:

   1) FURNISH AND INSTALL ALL DEVICES, WIRING, AND TERMINATIONS REQUIRED FOR A COMPLETE AND FUNCTIONAL INSTALLATION.

   2) COORDINATE ALL WORK AND REQUIREMENTS WITH OTHER TRADES INCLUDING GENERAL, MECHANICAL, AND ELECTRICAL CONTRACTORS PRIOR TO BID.

   3) CONTRACTOR SHALL FOLLOW ALL SUBMITTAL REQUIREMENTS PER DRAWINGS.

4. CONTRACTOR SHALL BE RESPONSIBLE FOR ORDERING AIR CONDITIONING EQUIPMENT WITH THRU-THE-BASE POWER, CONTROL, AND GAS CONNECTIONS. VERIFY ALL CONNECTION LOCATIONS WITH UNIT MANUFACTURER AND COORDINATE WITH OTHER TRADES AS NECESSARY.

5. ELECTRICAL CONTRACTOR SHALL PROVIDE REQUIRED RELAY ACCESSORIES FOR CONNECTION OF 120 VOLT 1 PHASE VENTILATION EQUIPMENT TO 277 VOLT 1 PHASE LIGHTING AS APPLICABLE.

6. ALL THERMOSTATS SHALL HAVE LOCKABLE COVERS (WHERE INDICATED ON PLANS) AND SHALL BE OF THE ELECTRONIC, PROGRAMMABLE, AUTOMATIC CHANGEOVER TYPE TO SEQUENCE HEATING OR COOLING. SET POINT RANGE SHALL BE 10 DEGREES F. BETWEEN FULL HEATING AND COOLING. THEY SHALL HAVE CAPABILITY OF TERMINATING ALL HEATING AT A TEMPERATURE NO MORE THAN 70 DEGREES F., AND COOLING AT A TEMPERATURE NOT LESS THAN 78 DEGREES F. ADJUSTABLE TEMPERATURE DIFFERENTIAL SHALL BE 1- 1/2 DEGREES F. CONTROL LIMITS SHALL BE FROM 55 DEGREES F. TO 85 DEGREES F. MOUNT AT 48 INCHES ABOVE FLOOR OR AS REQUIRED BY LOCAL AUTHORITIES OR HANDICAP CODES.

   NOTES: 1) THERMOSTATS THAT ARE PART OF AN ENERGY MANAGEMENT SYSTEM SHALL FOLLOW CONTROL SPECIFICATIONS AND DRAWING REQUIREMENTS.

   2) SHOULD THE LOCATION OF THE THERMOSTAT NOT MEET THE ADA HEIGHT REQUIREMENTS DUE TO OBSTRUCTIONS, THEN AN ALTERNATE LOCATION SHALL BE PROPOSED OR REQUESTED BY THE CONTRACTOR THAT SHALL BE APPROVED BY THE ENGINEER AND ARCHITECT.

7. CONTROLS CONTRACTOR AND AIR BALANCE CONTRACTOR SHALL COORDINATE WORK AND PERFORM NECESSARY TASKS AS REQUIRED TO OBTAIN AIR AND WATER FLOW QUANTITIES FOR SYSTEMS SHOWN HEREIN.

8. CONTROLS SHALL BE PROVIDED TO PROVIDE THE MINIMUM RATE OF OUTDOOR AIR REQUIRED BY THE STATE ENERGY REGULATIONS.

----- AIR DISTRIBUTION -----

1. MANUAL VOLUME DAMPERS SHALL BE PROVIDED IN ALL DUCT BRANCHES TO INDIVIDUAL DIFFUSERS, GRILLES, AND REGISTERS, AS WELL AS FRESH AIR INTAKE DUCTS. DAMPERS SHALL BE LOCATED AT THE BRANCH DUCT LOCATIONS. THE MECHANICAL CONTRACTOR SHALL COORDINATE LOCATIONS OF DAMPERS WITH THE AIR BALANCE CONTRACTOR PRIOR TO BID, SO THEY ARE ACCESSIBLE PRIOR TO INSTALLATION. IN LOCATIONS WHERE THESE DAMPERS ARE INACCESSIBLE, CABLE OPERATED ADJUSTMENT CONTROLS SHALL BE PROVIDED AT NO ADDITIONAL COST. OPPOSED BLADE DAMPERS SHALL NOT BE PERMITTED UNLESS NOTED OTHERWISE.

----- ROOFING -----

1. CONTRACTOR TO REMOVE (E) ROOFING AS REQUIRED AND RE-ROOF OVER NEW EQUIPMENT PAD WITH MEMBRANE TO MATCH (E). NEW ROOF MEMBRANE TO TIE INTO (E) MEMBRANE PER DISTRICT.

2. CONTRACTOR SHALL COORDINATE AND MAINTAIN THE ROOF WARRANTY WITH THE CURRENT MANUFACTURER'S WARRANTY PROVIDER FOR THIS BUILDING.

LEGEND

SYMBOL	ABBR.	DESCRIPTION
	-	SUPPLY AIR RISER
	-	RETURN AIR RISER
	-	EXHAUST AIR RISER
	SAG	SUPPLY AIR GRILLE
	RAG	RETURN AIR GRILLE
	EAG	EXHAUST AIR GRILLE
	SWR	SIDEWALL REGISTER
	(L)	LINED DUCTWORK
	-	FLEXIBLE CONNECTION
	FC	FLEXIBLE CONNECTION
	-	NEW DUCT (SEE PLAN)
	-	EXISTING DUCT (SEE PLAN)
	-	DEMO DUCT (SEE PLAN)
	MVD	MANUAL VOLUME DAMPER
	BDD	BACKDRAFT DAMPER
SF	SFD	SMOKE / FIRE DAMPER
F	FD	FIRE DAMPER
	DL	DOOR LOUVER
U.C.	UC	UNDERCUT DOOR 3/4"
RS	RS	REFRIGERANT SUCTION LINE
RL	RL	REFRIGERANT LIQUID LINE
CD	CD	CONDENSATE DRAIN
	S.D.	SMOKE DETECTOR
	P.O.C.	POINT OF CONNECTION
T	T-STAT	THERMOSTAT
H	H	HUMIDISTAT
TS	TS	TEMPERATURE SENSOR
OS	OS	OVERRIDE SWITCH
PD	PD	PRESSURE DIFFERENTIAL SWITCH
S	S	SWITCH
	O.C.	ON CENTER
	HWR	HOT-WATER RETURN
	HWS	HOT-WATER SUPPLY
	I.D.	INSIDE DIAMETER
	O.D.	OUTSIDE DIAMETER
	W/	WITH
	S/M	SHEET METAL
	S/S	STAINLESS STEEL
	G.C.	GENERAL CONTRACTOR
	VTR	VENT THRU ROOF
	EMS	ENERGY MANAGEMENT SYSTEM
	OBD	OPPOSED BLADE DAMPER
	FSC	FAN SPEED CONTROL
E	E	ITEMS FURNISHED AND INSTALLED BY ELECTRICAL CONTRACTOR AS SPECIFIED ON THE ELECTRICAL CONTRACT DOCUMENTS
M	M	ITEMS FURNISHED AND INSTALLED BY MECHANICAL CONTRACTOR AS SPECIFIED ON THE MECHANICAL CONTRACT DOCUMENTS
EM	EM	ITEMS FURNISHED BY ELECTRICAL CONTRACTOR AND INSTALLED BY MECHANICAL CONTRACTOR.
ME	ME	ITEMS FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
	C.C.	CONTROLS CONTRACTOR
	CBD	COUNTER-BALANCE DAMPER
DS	D.S.	DOOR SWITCH

SHOP DRAWINGS NOTES

CONTRACTOR SHALL SUBMIT A COMPLETE SET OF SHOP DRAWINGS 14 DAYS AFTER OFFICIAL PROJECT START DATE. INCLUSIVE OF ALL TRADE (MECHANICAL, PLUMBING, ELECTRICAL, ETC.) TO SCALE (MIN. 1/4"=1'-0") PRIOR TO FABRICATION AND OR INSTALLATION OF ANY AND OR ALL HVAC COMPONENTS, SYSTEM AND EQUIPMENT. SHOP DRAWINGS SHALL BE SUBMITTED AS A SINGLE ALL INCLUSIVE PACKAGE DIGITALLY (AUTOCAD 2014). AT A MINIMUM 4 HARD COPY SETS ARE TO BE SUBMITTED TO THE ENGINEER FOR REVIEW. INCOMPLETE AND UNCOORDINATED SUBMITTALS SHALL BE REJECTED UPON RECEIPT.

APPLICABLE CODES

2025 BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1 TITLE 24 C.C.R.
2025 CALIFORNIA BUILDING CODE (CBC). PART 2, TITLE 24 C.C.R.
2025 CALIFORNIA ELECTRICAL CODE (CEC). PART 3, TITLE 24 C.C.R. (2014 NEC)
2025 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
2025 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
2025 CALIFORNIA ENERGY CODE , PART 6, TITLE 24 C.C.R.
2025 CALIFORNIA FIRE CODE , PART 9, TITLE 24 C.C.R.
2025 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
2025 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN), PART 11, TITLE 24 C.C.R.

TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS.
AMERICAN WITH DISABILITY ACT.

PARTIAL LIST OF APPLICABLE STANDARDS.

NFPA 13	AUTOMATIC SPRINKLER SYSTEM. 2025 EDITION.
NFPA 24	PRIVATE FIRE MAINS (INCLUDED IN 2022 NFPA 13) 2025 EDITION.
NFPA 72	NATIONAL FIRE ALARM CODE (CALIFORNIA AMENDED) 2025 EDITION. (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")

REFERENCE CODE SECTION FOR NFPA STANDARDS - 2025 CBC (SFM) CHPT. 35

NOT IN SCOPE OF WORK

EQUIPMENT
THE PROJECT DOES NOT INVOLVE BUILDING E, BUILDING B, NORTH BUILDING, AND SOUTH BUILDING.

MECHANICAL SHEET INDEX

M-0.1	MECHANICAL GENERAL NOTES AND LEGEND
M-0.2	MECHANICAL SCHEDULES
M-0.3	MECHANICAL DETIALS
M-1.0	MECHANICAL OVERALL SITE AERIAL PLAN
M-2.1	MECHANICAL BUILDINGS - A - F & G

PROJECT SCOPE - LIKE FOR LIKE

- REPLACE EQUIPMENT AS SHOWN ON EQUIPMENT SCHEDULES. COORDINATE WITH DISTRICT FOR PRE-PURCHASED EQUIPMENT SUBMITTALS. WORK INCLUDES THE ELECTRICAL AND PLUMBING COMPONENTS NECESSARY TO ACCOMMODATE THE ADDED EQUIPMENT. CONTRACTOR SHALL CLEAN ALL AIR DEVICES TO REMAIN PER SPECIFICATIONS.
- SUMMARY OF QUALITIES LISTED BELOW (NOTE: EQUIPMENT SCHEDULE LIST HAS PRECEDENCE)

SUMMARY

BLDG A, MAIN OFFICE (SEE SCHEDULE & PLANS):
REPLACE EXISTING ROOFTOP PACKAGED UNIT A-1. (TOTAL: 1 UNIT)

BLDG F (SEE SCHEDULE & PLANS):
REPLACE EXISTING ROOFTOP PACKAGED UNITS F-1 TO F-4. (TOTAL: 4 UNITS)

BLDG G (SEE SCHEDULE & PLANS):
REPLACE EXISTING ROOFTOP PACKAGED UNITS G-1 TO G-3. (TOTAL: 3 UNIT)

CONTROLS

1. ALL UNITS SHALL BE PROVIDED WITH NEW THERMOSTAT.

PRE-READ AND POST-READ AIR BALANCE TABS
CONTRACTOR TO DO PRE-READ AND POST-READ TAB AIR BALANCE FOR TOTAL SUPPLY, TOTAL RETURN, TOTAL OSA & PROVIDE REPORT TO DISTRICT & ENGINEER. ENGINEER WILL THEN PROVIDE FINAL VALUES FOR NEW UNITS FOR TAB CONTRACTOR TO BALANCE TO.

EXISTING PARTS
EXISTING ROOF CURB TO REMAIN. FOR DAMAGED ROOF CURB REPLACEMENT, CONTRACTOR TO PROVIDE UNIT COST FOR CURB REPLACEMENT AND ASSOCIATED ROOFING.

DISTRICT SHALL HAVE DISTRICT SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL EQUIPMENT TO BE REMOVED. CONTRACTOR SHALL VERIFY ALL SUCH ITEMS WITH
DISTRICT PRIOR TO REMOVAL. ALL ITEMS NOT REFUSED BY
DISTRICT SHALL BE REMOVED INTACT AND FULLY FUNCTIONAL BY
CONTRACTOR AND RETURNED TO DISTRICT. ALL ITEMS REFUSED BY
DISTRICT SHALL BE PROPERLY DISPOSED OF BY CONTRACTOR.

CONTRACTOR TO COORDINATE WITH DISTRICT FOR EXISTING PARTS PRIOR TO REMOVAL AND DISPOSAL HVAC UNITS

oed optimum energy design
Consulting Engineers
5200 E. La Palma Ave
Anaheim, CA 92807
Telephone (714) 693-2277

STAMP

REGISTERED PROFESSIONAL ENGINEER ABBY "BARRETT" No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

PROJECT NAME:

MARK TWAIN ELEMENTARY SCHOOL
12315 THROSON AVE,
LYNWOOD, CA 90262

No.	Rev. Date	Description
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△		
△		
△		

JOB NO: 501-26-0015
DATE: 03/02/2026
DRAWN: VZ
CHECK: ZF
ARCHITECT:
ENGINEER: OED

CONSULTANT

STAMP

SHEET DESCRIPTION:
MECHANICAL GENERAL NOTES & LEGEND

SHEET NO:
M-0.1

(E) AC UNIT & (N) HEAT PUMP UNIT MODEL # REFERENCES

BUILDING NO. PER SCHEDULE TAG	BLDG NAME DISTRICT SITE PLAN	TAG	NOMINAL TONNAGE	MODEL NO. (EXISTING EQUIPMENT)	WEIGHT (EXISTING UNIT)	VOLT/PHASE/HZ	MANUFACTURER	MODEL NO. (NEW EQUIPMENT)	DUCT CONNECTION CONFIGURATION
A	MAIN OFFICE	M-1	4	50HJQ005---601	500	460/3/60	CARRIER	50FCQA05A2M6-3A0A0	DOWNSHOT
F	BLDG F	F-1	4	50LJQ005-641	500	460/3/60	CARRIER	50FCQA05A2M6-3A0A0	DOWNSHOT
		F-2	3	50LJQ004-641	490	460/3/60	CARRIER	50FCQA04A2M6-3A0A0	DOWNSHOT
		F-3	4	50LJQ005-641	500	460/3/60	CARRIER	50FCQA05A2M6-3A0A0	DOWNSHOT
		F-4	4	50LJQ005-641	500	460/3/60	CARRIER	50FCQA05A2M6-3A0A0	DOWNSHOT
G	BLDG G	G-1	4	50LJQ005-641	500	460/3/60	CARRIER	50FCQA05A2M6-3A0A0	DOWNSHOT
		G-2	3	50LJQ004-641	490	460/3/60	CARRIER	50FCQA04A2M6-3A0A0	DOWNSHOT
		G-3	3	50LJQ004-641	490	460/3/60	CARRIER	50FCQA04A2M6-3A0A0	DOWNSHOT

1. SEE ABOVE - "(E) AC UNIT & (N) HEAT PUMP UNIT MODEL # REFERENCES".

MARK TWAIN ELEMENTARY SCHOOL - PACKAGED ROOFTOP HEAT PUMP UNIT SCHEDULE

TAG	MFR & MODEL #	TONS	COOLING CAPACITY		ARI EER/ SEER	MIXED AIR TEMP DB/WB (°F)	HEATING (MBTU)	SUPPLY FAN					ELECTRICAL						OPERATING WEIGHT (LBS)			REMARKS
			TOTAL(MBTU)	SENS(MBTU)				SA (CFM)	OSA(CFM)	ESP	RPM	BHP	V	PH	HZ	FLA	MCA	MOCP	UNIT	ECON.	TOTAL WEIGHT	
M-1	CARRIER 50FCQA05A2M6-3A0A0	4	49.92	37.82	-/14.30	80/67	46.10	1600	★	1.00	1958	.81	460	3	60	2.5	11	15	488	59	547	1,2,3,4,5,6,7,8
F-1	CARRIER 50FCQA04A2M6-3A0A0	4	49.92	37.82	-/14.30	80/67	46.10	1600	★	1.00	1958	.81	460	3	60	2.5	11	15	488	59	547	1,2,3,4,5,6,7,8
F-2	CARRIER 50FCQA05A2M6-3A0A0	3	36.98	27.93	-/14.30	80/67	34.10	1200	★	1.00	1946	.54	460	3	60	2	10	15	482	59	541	1,2,3,4,5,6,7,8
F-3	CARRIER 50FCQA05A2M6-3A0A0	4	49.92	37.82	-/14.30	80/67	46.10	1600	★	1.00	1958	.81	460	3	60	2.5	11	15	488	59	547	1,2,3,4,5,6,7,8
F-4	CARRIER 50FCQA05A2M6-3A0A0	4	49.92	37.82	-/14.30	80/67	46.10	1600	★	1.00	1958	.81	460	3	60	2.5	11	15	488	59	547	1,2,3,4,5,6,7,8
G-1	CARRIER 50FCQA05A2M6-3A0A0	4	49.92	37.82	-/14.30	80/67	46.10	1600	★	1.00	1958	.81	460	3	60	2.5	11	15	488	59	547	1,2,3,4,5,6,7,8
G-2	CARRIER 50FCQA04A2M6-3A0A0	3	36.98	27.93	-/14.30	80/67	34.10	1200	★	1.00	1946	.54	460	3	60	2	10	15	482	59	541	1,2,3,4,5,6,7,8
G-3	CARRIER 50FCQA04A2M6-3A0A0	3	36.98	27.93	-/14.30	80/67	34.10	1200	★	1.00	1946	.54	460	3	60	2	10	15	482	59	541	1,2,3,4,5,6,7,8

REMARK:

1. PROVIDE HAIL GUARD.
   PROVIDE MERV-13 FILTER FOR ROOF TOP HEAT PUMP UNIT.
2. INSTALL NEW ROOF TOP HEAT PUMP UNIT PER MANUFACTURER GUIDELINES.
3. PROVIDE PERMANENT LABEL FOR EACH HEAT PUMP UNIT BY CONTRACTOR. LABEL IDENTIFICATION SHALL BE PER DISTRICT DIRECTION
4. ELECTROMECHANICAL CONTROLS WITH NEW CARRIER SYSTEMVU CONTROLLER. NEW OSA & FAN STATUS SENSOR & CONNECTION TO NEW UNIT. NEW VENTSTAR THERMOSTAT.
5. PROVIDE 100% DRY BULB ECONOMIZER. ULTRA LOW LEAK ECONOMIZER ORIENTATION TO MATCH EXISTING. ADJUSTABLE DRY BULB SENSOR BELIMO. PAINTED RAIN HOOD WITH ALUMINUM FILTER 100% BAROMETRIC RELIEF.
6. PROVIDE CONDENSATE DRAIN FOR UNIT WITH CPVC SCHEDULE 8 AND PAINTED UV.
7. UNITS ARE PRE-PURCHASED BY DISTRICT. OBTAIN SUBMITTALS FROM DISTRICT/OWNER.
8. PROVIDE NEW SEISMIC CLIPS TO EXISTING CURB.

NOTE:

1. PROVIDE MERV 13 FILTER FOR ALL HP UNITS.
2. SEE ABOVE - "MARK TWAIN ELEMENTARY SCHOOL - PACKAGED ROOFTOP HEAT PUMP UNIT SCHEDULE" FOR EQUIPMENT TAG NUMBER.
3. INSTALL NEW ROOF TOP HEAT PUMP UNIT PER MANUFACTURER GUIDELINES.
4. CONTRACTOR TO CONNECT ALL NEW UNITS TO EXISTING CARRIER SYSTEMVU SYSTEM.
5. SEE ABOVE - "MARK TWAIN ELEMENTARY SCHOOL - PACKAGED ROOFTOP HEAT PUMP UNIT SCHEDULE" FOR ELECTRICAL INFORMATION AND ACCESSORIES.
6. EXISTING ROOF CURB TO REMAIN. FOR DAMAGED ROOF CURB REPLACEMENT, CONTRACTOR TO PROVIDE UNIT COST FOR CURB REPLACEMENT AND ASSOCIATED ROOFING.

★ CONTRACTOR TO MEASURE EXISTING OUTSIDE AIR PRIOR TO REMOVAL OF UNIT & SUBMIT TO ENGINEER FOR REVIEW & SHALL MAKE ALL NECESSARY ADJUSTMENTS PER ENGINEER COMMENTS.

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REGISTERED PROFESSIONAL ENGINEER ABBY "BAKEVIEW" No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

PROJECT NAME:

MARK TWAIN ELEMENTARY SCHOOL
(LIKE FOR LIKE)
LYNWOOD UNIFIED SCHOOL DISTRICT
LYNWOOD, CALIFORNIA

No.	Rev. Date	Description
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△		
△		
△		

JOB NO: 501-26-0015
DATE: 03/02/2026
DRAWN: VZ
CHECK: ZF
ARCHITECT:
ENGINEER: OED

CONSULTANT

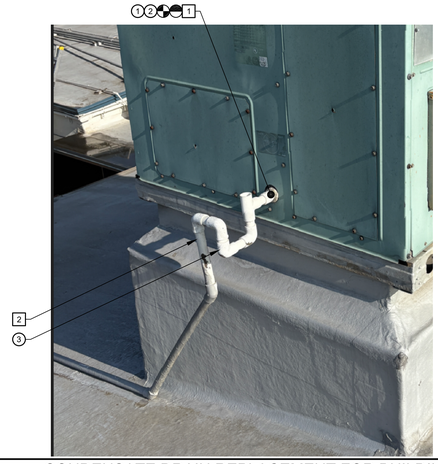
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SHEET DESCRIPTION:

MECHANICAL SCHEDULES

SHEET NO:

M-0.2



CONDENSATE DRAIN REPLACEMENT FOR BUILDING A, F AND G MECHANICAL UNITS — SCALE NONE — 4

CONSTRUCTION GENERAL NOTES:

1. ALL CONDENSATE DRAIN PIPING TO SLOPE AT 1% MIN.
2. FIELD VERIFY CONDENSATE DRAIN POINT OF DISCHARGES TO AN APPROVED RECEPTOR WITH A 1-1/2" AIR GAP MINIMUM.
3. ALL FIXTURES, EQUIPMENT, PIPING AND MATERIALS SHALL BE LISTED.

DEMOLITION KEYNOTES:

1 POINT OF DISCONNECTION FOR CONDENSATE DRAIN AT (E) MECH. UNIT ON ROOF. TYPICAL FOR 4 MECH. UNITS.

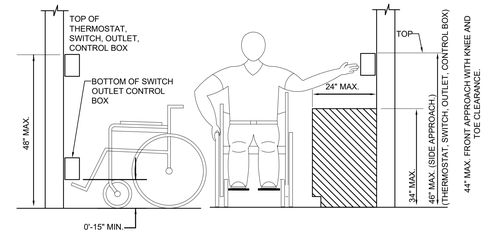
2 REMOVE EXISTING P-TRAP AND ALL CONDENSATE DRAIN PIPING ON ROOF.

CONSTRUCTION KEYNOTES:

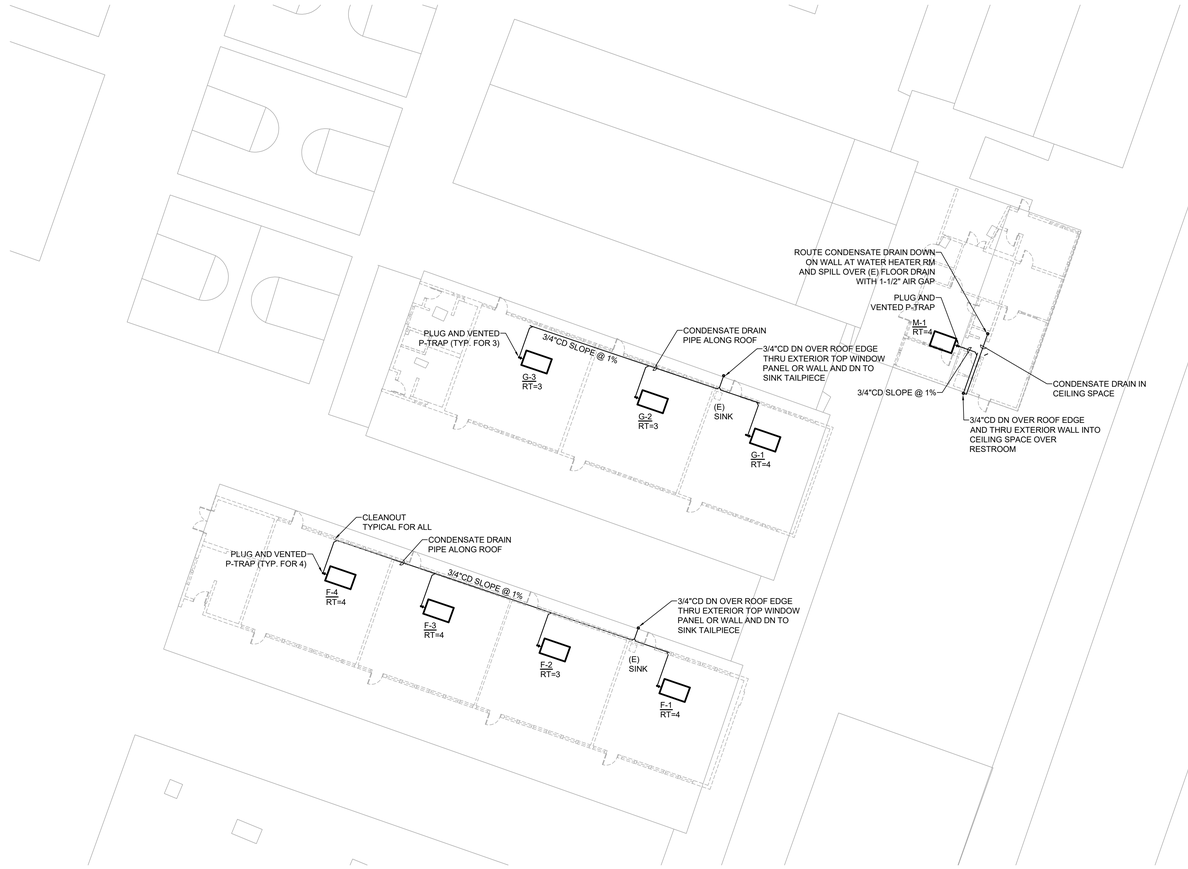
1 POINT OF CONNECTION AT NEW MECH. UNIT ON ROOF. TYPICAL FOR 4 MECH. UNITS.

2 PROVIDE NEW 3/4"CD CONNECTION TO NEW MECH. UNIT ON ROOF. SEE MECH. DRAWINGS FOR MECH. UNIT LOCATION.

3 PROVIDE NEW 3/4"CD PLUG & VENTED P-TRAP. SEE DETAIL NUMBER FOR ON THIS SHEET.



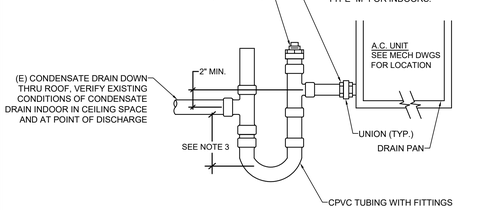
ADA CONTROL DEVICE MOUNTING HEIGHT DETAIL — SCALE NONE — 3



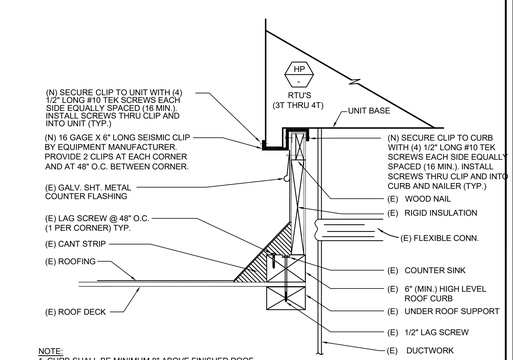
SITE / ROOF - CONDENSATE DRAIN REPLACEMENT FOR BUILDING A, F AND G MECHANICAL UNITS — SCALE NONE — 5

NOTES:

1. ALL CONDENSATE DRAIN LINES WITHIN BUILDING SHALL BE INSULATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 22 00 00, PLUMBING SPECIFICATIONS.
2. SEE DETAIL DRAWING FOR DESCRIPTION OF P-TARP REPLACEMENT AND SIZES.
3. TRAP DEPTH SHALL BE EQUAL TO THE A/C UNIT TOTAL STATIC PRESSURE PLUS 1-INCH BUT NOT LESS THAN 2-INCHES.
4. INSTALL PER PIPE MATERIAL SCHEDULE 80 CPVC FOR OUTDOORS AND COPPER TYPE "M" FOR INDOORS.



CONDENSATE TRAP DETAIL — SCALE NONE — 2



NOTE:
1. CURB SHALL BE MINIMUM 8" ABOVE FINISHED ROOF.
2. COORDINATE WITH EOR FOR FIELD CHANGES OR ANY DISCREPANCIES OCCUR BETWEEN THIS DETAIL AND EXISTING CONDITIONS.

ROOFTOP HP UNIT MOUNTING W/ (E) CURB — SCALE NONE — 1

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REGISTERED PROFESSIONAL ENGINEER ABBY "BAKEVIEW" MECHANICAL No. M29253 Exp. 6/30/27 STATE OF CALIFORNIA

PROJECT NAME:

MARK TWAIN ELEMENTARY SCHOOL
12315 THROSON AVE,
LYNWOOD, CA 90262

No.	Rev. Date	Description

JOB NO:	501-26-0015
DATE:	03/02/2026
DRAWN:	VZ
CHECK:	ZF
ARCHITECT:	
ENGINEER:	OED

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SHEET DESCRIPTION:

MECHANICAL DETAILS

SHEET NO:

M-0.3



OVERALL - SITE AERIAL PLAN - SEE BLDG. NAME - DISTRICT SITE PLAN

SCALE NONE

1

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REGISTERED PROFESSIONAL ENGINEER ROBERT "BAKEWELL" No. M29253 Exp. 6/30/27 MECHANICAL STATE OF CALIFORNIA

PROJECT NAME:

MARK TWAIN ELEMENTARY SCHOOL
(LIKE FOR LIKE)
LYNWOOD UNIFIED SCHOOL DISTRICT
LYNWOOD, CALIFORNIA

No.	Rev. Date	Description
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2		
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4		

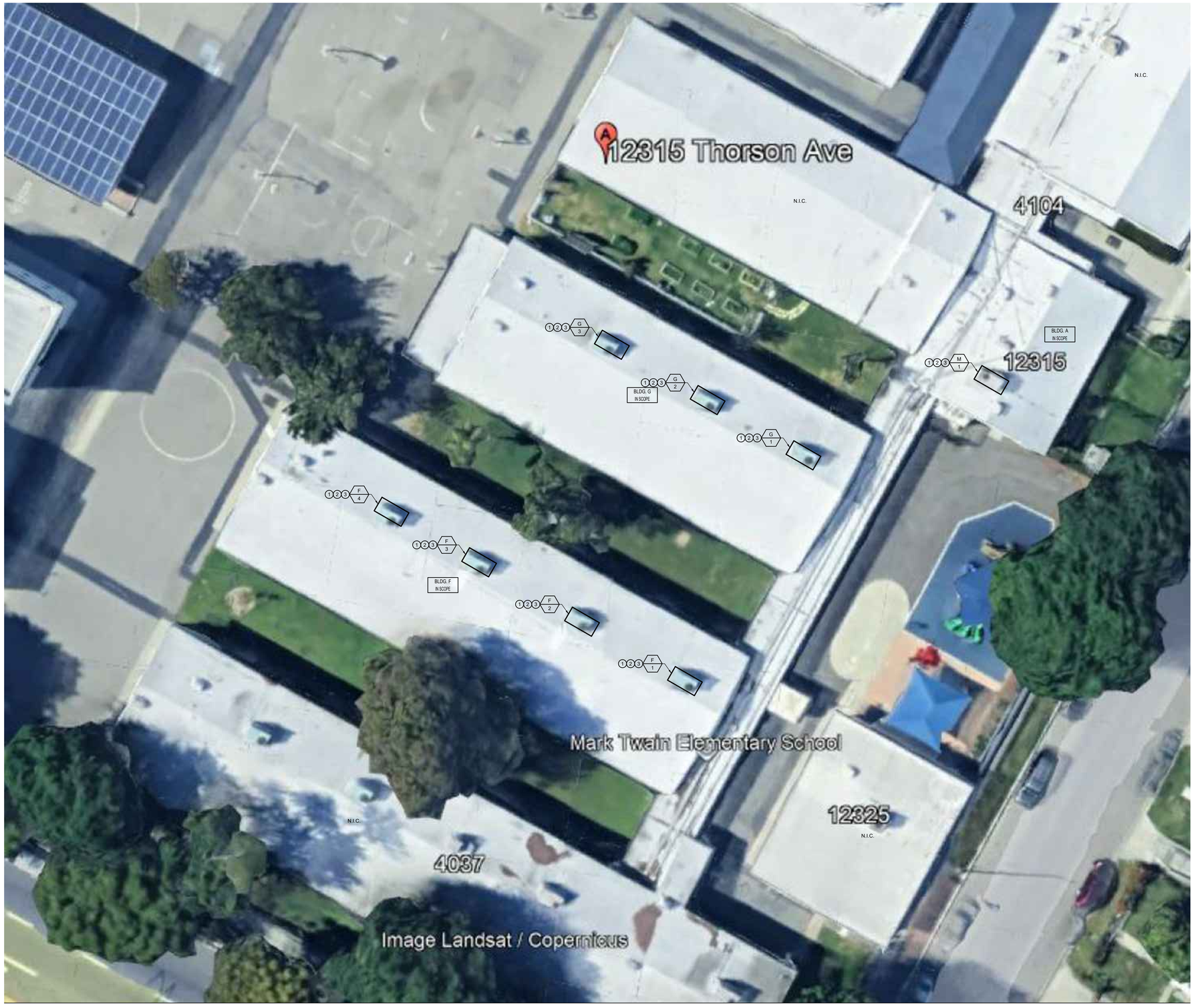
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ARCHITECT:	
ENGINEER:	OED

CONSULTANT

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SHEET DESCRIPTION:
MECHANICAL
OVERALL
SITE AERIAL
PLAN

SHEET NO:
M-1.0



CONSTRUCTION KEY NOTES:

1. REPLACE EQUIPMENT AS SHOWN ON EQUIPMENT SCHEDULES. COORDINATE WITH DISTRICT FOR PRE-PURCHASED EQUIPMENT SUBMITTALS. RE-USE EXISTING ROOF OPENING. RECONNECT TO EXISTING DUCTWORK AND AIR DISTRIBUTION TO NEW DUCT DROP AND PROVIDE DUCT TRANSITION AS REQUIRED.
2. ELECTRONIC PROGRAMMABLE T-STAT/SENSOR. MOUNT AT 48" A.F.F. REPLACE AT EXISTING THERMOSTAT LOCATION. COORDINATE FINAL LOCATION WITH DISTRICT.
3. CONTRACTOR TO DO PRE-READ AND POST-READ TAB AIR BALANCE FOR TOTAL SUPPLY, TOTAL RETURN, TOTAL OSA & PROVIDE REPORT TO DISTRICT & ENGINEER WILL THEN PROVIDE FINAL VALUES FOR NEW UNITS FOR TAB CONTRACTOR TO BALANCE TO.

DEMOLITION NOTES:

1. CONTRACTOR SHALL VISIT THE JOB SITE AND VERIFY THE SCOPE OF DEMOLITION WORK. DEMOLITION IS INDICATED AS A CONVENIENCE FOR THE CONTRACTOR AND MAY NOT INDICATE THE FULL SCOPE OF DEMOLITION REQUIRED TO COMPLETE THE NEW WORK.
2. ELECTRICAL CONTRACTOR SHALL DISCONNECT POWER FROM MECHANICAL EQUIPMENT TO BE RE-USED AS REQUIRED. CONTRACTOR SHALL RECONNECT POWER TO ALL MECHANICAL EQUIPMENT BEING RE-USED REQUIRED.
3. PRIOR TO ANY WORK BEING DONE CONTRACTOR SHALL MAKE A CAREFUL EVALUATION OF THE EXISTING CONDITIONS AND VERIFY ALL METHODS OF REMOVAL AND INSTALLATION OF MECHANICAL EQUIPMENT.
4. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH THE WORK OF ALL OTHER TRADES.
5. CONTRACTOR SHALL CLEAN ALL AIR DEVICES TO REMAIN PER SPECIFICATIONS.
6. ALL EXISTING LOUVERS THAT ARE BEING RE-USED SHALL BE CLEANED, PAINTED AND BIRD SCREENS SHALL BE REPLACED.
7. CONTRACTOR SHALL CLEAN ALL EXISTING DUCTWORK INCLUDING LINED DUCTWORK TO REMAIN PER SPECIFICATIONS. PRIOR TO BID AND BEFORE COMMENCEMENT OF ANY WORK ALL EXISTING DUCTWORK TO REMAIN SHALL BE CONFIRMED ON SITE.
8. ANY VENTS, CONDUIT, & GAS LINES LOCATED ON THE ROOF THAT ARE NOT SHOWN ON THIS SHEET AND/OR NOT EXPLICITLY INDICATED TO BE DEMOLISHED, SHALL REMAIN AND BE PROTECTED IN PLACE. CONTRACTOR TO FIELD VERIFY EXISTING ROOF CONDITIONS, AND TAKE MEASURES TO DEMOLISH ONLY THE ITEMS INDICATED.
9. CONTRACTOR SHALL INCLUDE IN THE SCOPE OF WORK ALL WORK REQUIRED TO PATCH, FINISH, MATCH, AND BLEND NEW SURFACES TO EXISTING AS IMPACTED BY THE AREAS OF NEW WORK.

GENERAL CONSTRUCTION NOTES

1. CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES AS NECESSARY PRIOR TO INSTALLATION.
2. BEFORE BIDDING ON THIS WORK, THE CONTRACTOR SHALL MAKE A CAREFUL EXAMINATION OF THE PREMISES, EXISTING EQUIPMENT AND SERVICES. HE SHALL DETERMINE IN ADVANCE, THE METHODS OF INSTALLING AND CONNECTING THE NEW EQUIPMENT, DUCTWORK, AND PIPING THE MEANS TO BE PROVIDED FOR GETTING THE EQUIPMENT AND MATERIALS INTO PLACE AND SHALL MAKE HIMSELF THOROUGHLY FAMILIAR WITH ALL OF THE REQUIREMENTS OF THE PROJECT. FAILURE TO VISIT THE SITE WILL IN NO WAY RELIEVE THE CONTRACTOR OF THE NECESSITY OF FURNISHING ANY MATERIAL OR PERFORMING ANY WORK THAT MAY BE REQUIRED TO COMPLETE THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICATIONS. THIS ADDITIONAL WORK SHALL BE PERFORMED WITHOUT ADDITIONAL COST TO THE OWNER.
3. BEFORE COMMENCEMENT OF WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATIONS AND DIMENSIONS OF ALL EXISTING EQUIPMENT AND ELECTRICAL SERVICES IN THE AREA OF CONSTRUCTION AND NOTIFY THE ENGINEER OR ANY DISCREPANCIES.
4. PATCH AND REPAIR EXISTING SURFACES AS REQUIRED TO FACILITATE DEMOLITION AND/OR PERFORMANCE OF THE NEW WORK. ALL NEW WORK SHALL MATCH IN KIND, QUALITY AND FINISH U.O.N.
5. CONTRACTOR SHALL MINIMIZE IMPACT TO EXISTING GLU-UP & T-BAR CEILING TILES AND IMPLEMENT MEASURES TO MITIGATE DAMAGE TO THE EXISTING CEILING SYSTEM. THE CONTRACTOR SHALL REPAIR AND REPLACE ALL TILES DAMAGED DURING CONSTRUCTION.

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STAMP

REGISTERED PROFESSIONAL ENGINEER
ROBERT BAKEMEIER
No. M29253
Exp. 6/30/27
MECHANICAL
STATE OF CALIFORNIA

PROJECT NAME:

MARK TWAIN ELEMENTARY SCHOOL
(LIKE FOR LIKE)
LYNWOOD UNIFIED SCHOOL DISTRICT
LYNWOOD, CALIFORNIA

No.	Rev. Date	Description

JOB NO:	501-26-0015
DATE:	03/02/2026
DRAWN:	VZ
CHECK:	ZF
ARCHITECT:	
ENGINEER:	OED

CONSULTANT

STAMP

SHEET DESCRIPTION:

MECHANICAL
BUILDINGS
A - F & G

SHEET NO:

M-2.1

GENERAL NOTES

1. THIS CONTRACTOR SHALL SUPPLY POWER TO AND MAKE CONNECTION TO ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS AS SHOWN ON THE MECHANICAL DRAWINGS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW THE MECHANICAL DRAWINGS FOR DUCTS, LINES AND EQUIPMENT.

2. ALL COMMUNICATIONS WORK SHALL BE COORDINATED WITH THE COMMUNICATION SYSTEMS EQUIPMENT MANUFACTURER AND THE SCHOOL DISTRICT MAINTENANCE DEPARTMENT PRIOR TO ROUGH-IN AND INSTALLATION OF ANY AND ALL COMMUNICATION SYSTEM DEVICES AND RELATED CONDUIT AND WIRE.

3. THE CONTRACTOR SHALL SECURE AND PAY FOR PERMITS AND FEES NECESSARY FOR EXECUTION AND COMPLETION OF ELECTRICAL WORK, INCLUDING ALL CHARGES BY THE LOCAL GOVERNMENT AGENCIES AND THE UTILITY COMPANIES.

4. UNLESS OTHERWISE NOTED, MOUNTING HEIGHTS INDICATED ON ELECTRICAL OUTLETS ARE FROM FINISHED FLOOR TO CENTER OF OUTLETS.

5. NO CONDUIT SHALL BE RUN HORIZONTALLY IN CONCRETE FLOOR SLABS.

6. ALL FINAL CONNECTIONS TO CONTRACTOR-FURNISHED EQUIPMENT SHALL BE MADE BY THIS CONTRACTOR.

7. MEP COMPONENT ANCHORAGE NOTE

   ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS. THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2025 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:

   1. ALL PERMANENT EQUIPMENT AND COMPONENTS.
   2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. "PERMANENTLY ATTACHED" SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
   3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.

   THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS:

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

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

   PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

   PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2025 CBC, SECTIONS 1617A.1.24, 1617A.1.25, AND 1617A.1.26.

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

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

   MP☐MD☐PP☐E☒ - OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECTS SPECIFIC NOTES AND DETAILS.

   MP☐MD☐PP☐E☐ - OPTION 2: SHALL COMPLY WITH HCAI PRE-APPROVAL (OPM *) *_____

8. SHUT DOWN OF EXISTING ELECTRICAL SYSTEMS SERVING THE REST OF THE SCHOOL WILL NOT BE ALLOWED UNLESS SCHEDULED WITH THE C.M. AND THE DISTRICT.

9. THIS CONTRACTOR SHALL COORDINATE ALL LINE AND LOW VOLTAGE COMPONENTS AND WIRING TYPES, TO MATCH EXISTING SYSTEMS, WITH THE SCHOOL DISTRICT PRIOR TO BID AND INCLUDE ALL COSTS FOR A COMPLETE OPERABLE SYSTEM EXPANSION.

10. ALL EXPOSED CONDUIT SHALL BE PAINTED TO MATCH SURFACE IT IS ATTACHED TO. COLOR TO BE SELECTED BY THE OWNER.

11. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER 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.

12. IDENTIFICATION NAME PLATES FOR PANELS AND SWITCHBOARDS/DISTRIBUTION PANEL FEEDER CIRCUIT BREAKERS SHALL MATCH THE NOMENCLATURE PROVIDED BY THE OWNER AT THE END OF THE CONTRACT.

13. ALL EXTERIOR MOUNTED EQUIPMENT SHALL BE WEATHERPROOF AND PROVIDED IN A WEATHERPROOF ENCLOSURE.

14. INSTALL RACEWAY SYSTEMS AS FOLLOWS:

   A. RIGID GALVANIZED STEEL IN ALL OUTDOOR LOCATIONS AND IN INDOOR LOCATIONS WHERE SUBJECT TO PHYSICAL DAMAGE.

   B. I.M.C. OR E.M.T. IN ALL INDOOR AREAS.

   C. FLEXIBLE METAL CONDUIT FOR FINAL CONNECTIONS TO LIGHT FIXTURES, MOTORS, VIBRATING ELECTRICAL EQUIPMENT AND HORIZONTAL RUNS IN WOOD STUD WALLS.

   D. PVC CONDUIT FOR UNDERGROUND RUNS. USE 20 MIL PVC TAPED RIGID STEEL RISER ELBOWS AND RISERS FOR CONDUIT STUB-UPS.

   E. USE COMPRESSION TYPE FITTINGS FOR ALL METALLIC CONDUIT.

   F. 1" CONDUIT MINIMUM FOR UNDERGROUND INSTALLATIONS.

15. ALL NEW WIRING SHALL BE COPPER 75 DEGREE.

16. PROVIDE THE OWNER AND THIS ENGINEER WITH ONE SET OF ELECTRICAL "AS-BUILTS" AT THE COMPLETION OF JOB.

17. CONDUIT ROUTING INDICATED ON THESE PLANS IS DIAGRAMMATIC. ACTUAL ROUTING OF CONDUITS SHALL BE COORDINATED IN THE FIELD TO AVOID INTERFERENCE WITH OTHER UTILITIES AND TRADES. THE CONTRACTOR SHALL INSTALL ALL CONDUIT, JUNCTION/PULL BOXES, ETC., AS REQUIRED FOR A COMPLETE SYSTEM IN FULL COMPLIANCE WITH ALL APPLICABLE CODES.

18. ALL WIRING AND ELECTRICAL EQUIPMENT INSTALLED FOR MECHANICAL EQUIPMENT SHALL BE IN ACCORDANCE WITH THESE DRAWINGS AND THE WIRING DIAGRAMS OF THE MECHANICAL DRAWINGS.

19. THE CONTRACTOR SHALL STRATEGICALLY LOCATE JUNCTION BOXES AND PULL BOXES, ETC., IN ACCESSIBLE CEILING SPACES. PROVIDE ACCESS PANELS WHERE JUNCTION/PULL BOXES ARE LOCATED IN INACCESSIBLE CEILING SPACES. COORDINATE LOCATION OF REQUIRED ACCESS PANELS PRIOR TO ROUGH-IN.

20. ELECTRICAL CONTRACTOR SHALL PERFORM ALL WORK IN STRICT ACCORDANCE WITH GOVERNING CODES.

21. ALL EQUIPMENT SHALL BE NEW AND BEAR A "UL" LABEL - U.O.N.

22. COMPLETE ELECTRICAL INSTALLATION SHALL BE GUARANTEED IN WRITING FOR A PERIOD OF (1) YEAR - U.O.N.

23. ELECTRICAL CONTRACTOR SHALL VISIT SITE PRIOR TO BID DATE, TO VERIFY ALL EXISTING CONDITIONS TO BE ENCOUNTERED IN THE INSTALLATION OF ALL NEW EQUIPMENT, FIXTURES DEVICES, FEEDERS, ETC. EXACT INSTALLATION METHOD AND REQUIREMENTS SHALL BE VERIFIED AND DETERMINED PRIOR TO BID DATE. CONTRACTORS SHALL IMMEDIATELY NOTIFY THIS ENGINEER OF ANY REQUIRED MODIFICATIONS WHICH ARE NOT SHOWN ON THESE DRAWINGS. SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS AND WORK TO BE PERFORMED.

24. ALL ELECTRICAL EQUIPMENT CHARACTERISTICS, LOCATIONS, AND CONNECTION REQUIREMENTS SHALL BE VERIFIED PRIOR TO ANY ROUGH-IN WORK.

25. ALL POWER AND LIGHTING BRANCH CIRCUITS SHALL BE INSTALLED WITH A #12 GREEN GROUND WIRE U.O.N. THE COMPLETE ELECTRICAL SYSTEM SHALL BE GROUNDED IN ACCORDANCE WITH ARTICAL 250 OF THE CALIFORNIA ELECTRICAL CODE (CEC).

26. IT SHALL BE THIS CONTRACTOR'S RESPONSIBILITY TO DO ALL CORING, CUTTING, PATCHING AND REFINISHING OF WALLS AND SURFACES WHEREVER IT IS NECESSARY FOR HIM TO PENETRATE FOR HIS WORK. ALL OPENINGS MADE SHALL BE SEALED TO MEET THE RATED INTEGRITY OF THE PARTICULAR WALL, FLOOR OR CEILING.

27. ALL WORK SHOWN ON THESE DRAWINGS SHALL BE CONSIDERED NEW UNLESS OTHERWISE NOTED.

DEMOLITION NOTES

1. ALL ELECTRICAL EQUIPMENT, OUTLETS, DEVICES, ETC., THAT ARE MARKED FOR DELETION SHALL BE REMOVED COMPLETELY, INCLUDING CONDUIT AND WIRES BACK TO THE LAST REMAINING FIXTURE, OUTLET, DEVICE, SERVING PANEL, ETC.

2. WHERE EXISTING OUTLET/DEVICES TO REMAIN ARE FED BY OUTLETS BEING REMOVED BY WORK UNDER THIS CONTRACT, THE CONTRACTOR SHALL ROUTE NEW CONDUIT, WIRE, ETC., AS REQUIRED TO MAINTAIN THE SUBJECT OUTLETS IN OPERATION.

3. THE ELECTRICAL CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO REMOVAL OF EXISTING ELECTRICAL/LOW VOLTAGE EQUIPMENT AND TURN OVER REMOVED EQUIPMENT THAT THE OWNER REQUESTS. IN AS-FOUND CONDITION. EQUIPMENT THAT IS TO BE TURNED OVER SHALL BE BOXED AND TAGGED TO IDENTIFY THE SPECIFIC EQUIPMENT.

4. IT SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR TO MAINTAIN CONTINUITY OF ALL ELECTRICAL AND COMMUNICATION SYSTEMS, EQUIPMENT, ETC., REMAINING IN OPERATION. MAINTAINING CONTINUITY SHALL CONSIST OF RE-ROUTING CONDUIT, WIRE, ETC., AS REQUIRED TO MAINTAIN THE SUBJECT SERVICES IN OPERATION.

5. REFER TO GENERAL NOTES, THIS SHEET, FOR ADDITIONAL REQUIREMENTS.

6. UNLESS SPECIFICALLY SHOWN ON THESE PLANS NO STRUCTURAL MEMBER 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.

REFERENCES & ABBREVIATIONS

⊖	DETAIL REFERENCE	MCB	MAIN CIRCUIT BREAKER
1	KEYNOTE REFERENCE	FLA	FULL LOAD AMPS
AFF.	ABOVE FINISH FLOOR	C.	CONDUIT
U.O.N.	UNLESS OTHERWISE NOTED	V.	VOLTS
C.O.	CONDUIT ONLY W/PULL ROPE	A	AMPS
WP	WEATHER PROOF	GFI	GROUND FAULT INTERRUPTER
CU.	COPPER	GND	GROUND
M.L.O.	MAIN LUGS ONLY	V.L.	VERIFY LOCATION
E or (E)	EXISTING TO REMAIN	A.C.	ABOVE COUNTER
E.Q.	EQUAL	N.L.	NIGHT LIGHT
		EM.	EMERGENCY

APPLICABLE CODES

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LAWS AND REGULATIONS, AND THE REQUIREMENTS OF THE CALIFORNIA CODE OF REGULATIONS (C.C.R.), TITLE 24, INCLUSIVE OF:

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

2025 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 CCR

2025 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 CCR

2025 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 CCR

2025 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 CCR

2025 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2025 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24 CCR

2025 CALIFORNIA EXISTING BUILDING CODE (CEBC), PART 10, TITLE 24 CCR

2025 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN), PART 11, TITLE 24 CCR

2025 CALIFORNIA REFERENCED STANDARDS CODE, PART 12 TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

APPLICABLE STANDARDS

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

SYMBOL LIST

———	CONDUIT RUN, CONCEALED IN CEILING, WALLS OR UNDER FLOOR 3/4" MIN. IN CEILING OR WALLS, 1"C. MINIMUM FOR UNDERGROUND / UNDER FLOOR.
———●	CONDUIT TURNED DOWN.
———○	CONDUIT TURNED UP.
— — —	CONDUIT RUN UNDERGROUND, 1"C. MINIMUM. PROVIDE SIZE PER PLAN.
#10	CROSS LINES ON CONDUIT RUNS INDICATE NUMBER OF #12 WIRES CONTAINED THEREIN. TWO #12 ARE TO BE PROVIDED WHEN CROSS LINES ARE NOT SHOWN. NUMERALS ADJACENT TO CROSS LINES ON CONDUIT RUNS INDICATE SIZE OF CONDUCTORS IN LIEU OF #12. PROVIDE CONDUIT SIZE AS REQUIRED TO ACCOMMODATE THE WIRE SIZE TO BE CONTAINED THEREIN.
B–1,3	CONDUIT HOME RUN TO PANELBOARD. LETTER AND NUMERALS INDICATES ELECTRICAL PANEL AND CIRCUIT NUMBER.
WP	WEATHERPROOF.
AT	CIRCUIT BREAKER AMPERE TRIP RATING (SINGLE LINE DIAGRAM).
AC / 1	HVAC EQUIPMENT DESIGNATION. SEE MECHANICAL PLANS.
1	NOTE IDENTIFICATION SYMBOL.
T	THERMOSTAT, MOUNTED AT +48" A.F.F. TO TOP OF BOX. SEE MECHANICAL.
S	FAN CONTROLLER MOUNTED AT +48" A.F.F. TO TOP OF BOX. SEE MECHANICAL.
— E —	EXISTING CONDUIT AND CONDUCTORS TO REMAIN IN PLACE.
(E)	EXISTING EQUIPMENT TO REMAIN IN OPERATION.
(N)	NEW EQUIPMENT.
(R)	EXISTING EQUIPMENT TO BE DISCONNECTED AND REMOVED. REMOVE ALL EXISTING CONDUIT AND FEEDERS FROM EQUIPMENT MARKED TO BE REMOVED ALL THE WAY BACK TO THE SERVING PANEL UNLESS OTHERWISE NOTED.

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STAMP

REGISTERED PROFESSIONAL ENGINEER
LARRY F. BANKS
No. M29253
Exp. 6/30/27
MECHANICAL
STATE OF CALIFORNIA

PROJECT NAME:

MARK TWAIN ELEMENTARY SCHOOL
(LIKE FOR LIKE)
LYNWOOD UNIFIED SCHOOL DISTRICT
LYNWOOD, CALIFORNIA

No.	Rev. Date	Description
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JOB NO:	501-26-0015
DATE:	03/02/2026
DRAWN:	CBF
CHECK:	LMF
ARCHITECT:	
ENGINEER:	OED

CONSULTANT

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REGISTERED PROFESSIONAL ENGINEER
ROLAND E. SOTO
No. E17229
6/30/26
ELECTRICAL
STATE OF CALIFORNIA

SHEET DESCRIPTION:
GENERAL NOTES AND SYMBOL LIST

SHEET NO:
E-0.1



CONSTRUCTION NOTES:

1. REFER TO GENERAL NOTES AND DEMOLITION NOTES, DRAWING E-0.1, FOR ADDITIONAL REQUIREMENTS.
2. ALL CIRCUITS SERVING THE REMODEL AREA, WHETHER IDENTIFIED ON PLAN OR NOT, SHALL BE TRACED AND IDENTIFIED PRIOR TO START OF THE DEMOLITION PHASE. CIRCUITS AFFECTED BY THE REMODEL THAT SERVE AREAS OF THE BUILDING THAT ARE NOT A PART OF THE REMODEL SHALL BE MAINTAINED IN OPERATION DURING THE CONSTRUCTION PHASE. INTERRUPTION OF SERVICE WILL NOT BE ALLOWED.

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LYNWOOD, CALIFORNIA

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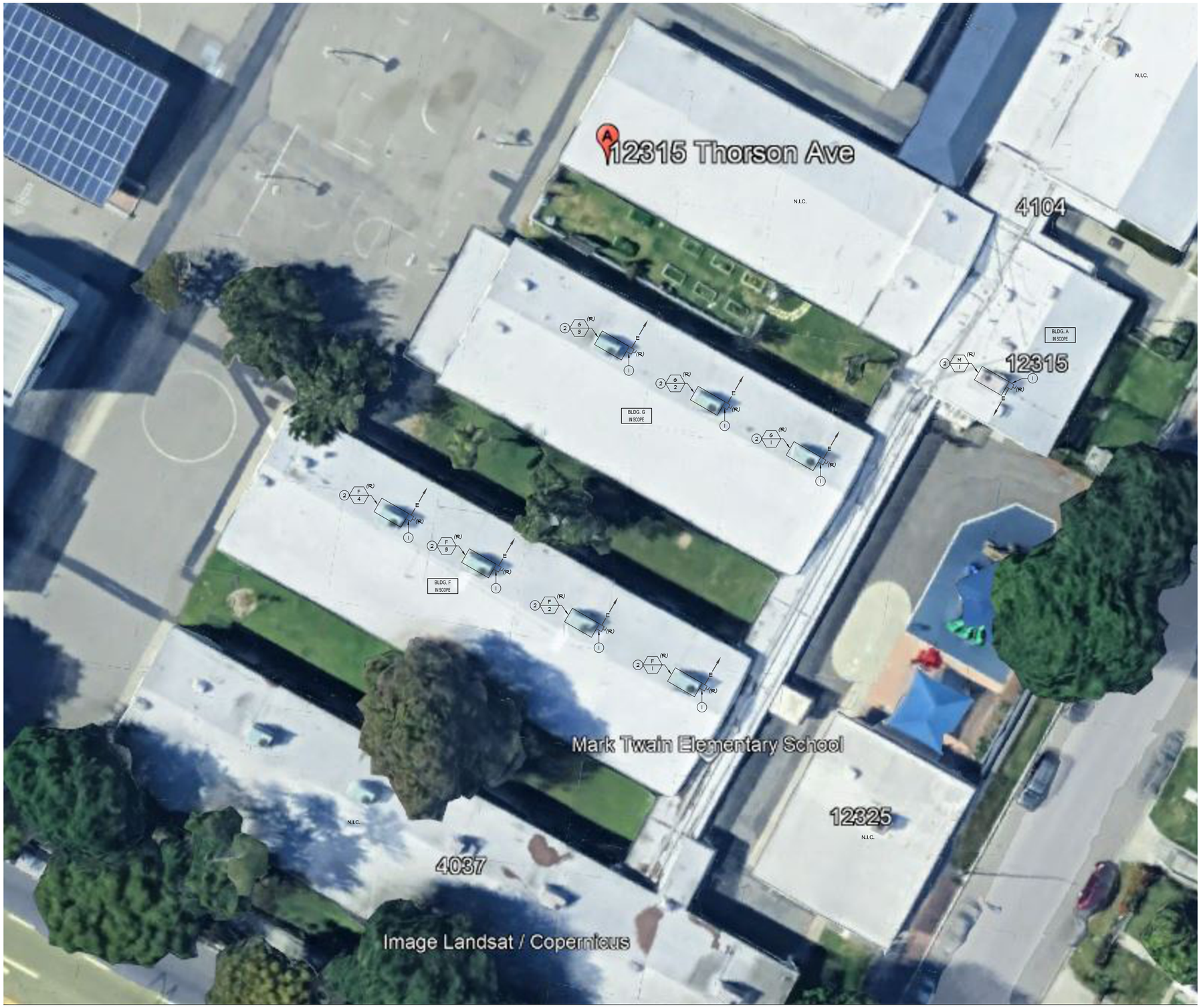
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6/30/26
ELECTRICAL
STATE OF CALIFORNIA

SHEET DESCRIPTION:
OVERALL
SITE PLAN

SHEET NO:
E-1.0



PLAN NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING HVAC UNIT AND DISCONNECT SWITCH ONLY. CONTRACTOR SHALL UTILIZE EXISTING CONDUIT AND CONDUCTORS FOR CONNECTION OF NEW HVAC UNIT AND NEW DISCONNECT SWITCH. REFER TO REMODEL PLAN FOR ADDITIONAL REQUIREMENTS.
2. IF EXISTING FIRE ALARM DUCT DETECTOR IS PRESENT, CONTRACTOR SHALL DISCONNECT EXISTING DUCT DETECTOR ONLY AND PRESERVE DEVICE AND CABLES / CONDUCTORS FOR RECONNECTION DURING REMODEL WORK. EXISTING CONDUIT, CABLES / CONDUCTORS SHALL BE USED TO ENERGIZE / RECONNECT THE EXISTING DUCT DETECTOR TO THE EXISTING FIRE ALARM SYSTEM. REFER TO REMODEL PLAN FOR ADDITIONAL REQUIREMENTS.

CONSTRUCTION NOTES:

1. REFER TO GENERAL NOTES AND DEMOLITION NOTES, DRAWING E-0.1, FOR ADDITIONAL REQUIREMENTS.
2. ALL CIRCUITS SERVING THE REMODEL AREA, WHETHER IDENTIFIED ON PLAN OR NOT, SHALL BE TRACED AND IDENTIFIED PRIOR TO START OF THE DEMOLITION PHASE. CIRCUITS AFFECTED BY THE REMODEL THAT SERVE AREAS OF THE BUILDING THAT ARE NOT A PART OF THE REMODEL SHALL BE MAINTAINED IN OPERATION DURING THE CONSTRUCTION PHASE. INTERRUPTION OF SERVICE WILL NOT BE ALLOWED.
3. ELECTRICAL CONTRACTOR SHALL DISCONNECT POWER FROM MECHANICAL EQUIPMENT TO BE REMOVED, RELOCATED, RE-USED AND/OR REPLACED AS REQUIRED. CONTRACTOR SHALL RECONNECT POWER TO ALL MECHANICAL EQUIPMENT BEING RE-USED AND/OR RELOCATED AS REQUIRED. REFER TO MECHANICAL DRAWINGS FOR ALL EQUIPMENT TO BE REMOVED, RELOCATED, RE-USED AND/OR REPLACED.

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MARK TWAIN ELEMENTARY SCHOOL
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LYNWOOD UNIFIED SCHOOL DISTRICT
LYNWOOD, CALIFORNIA

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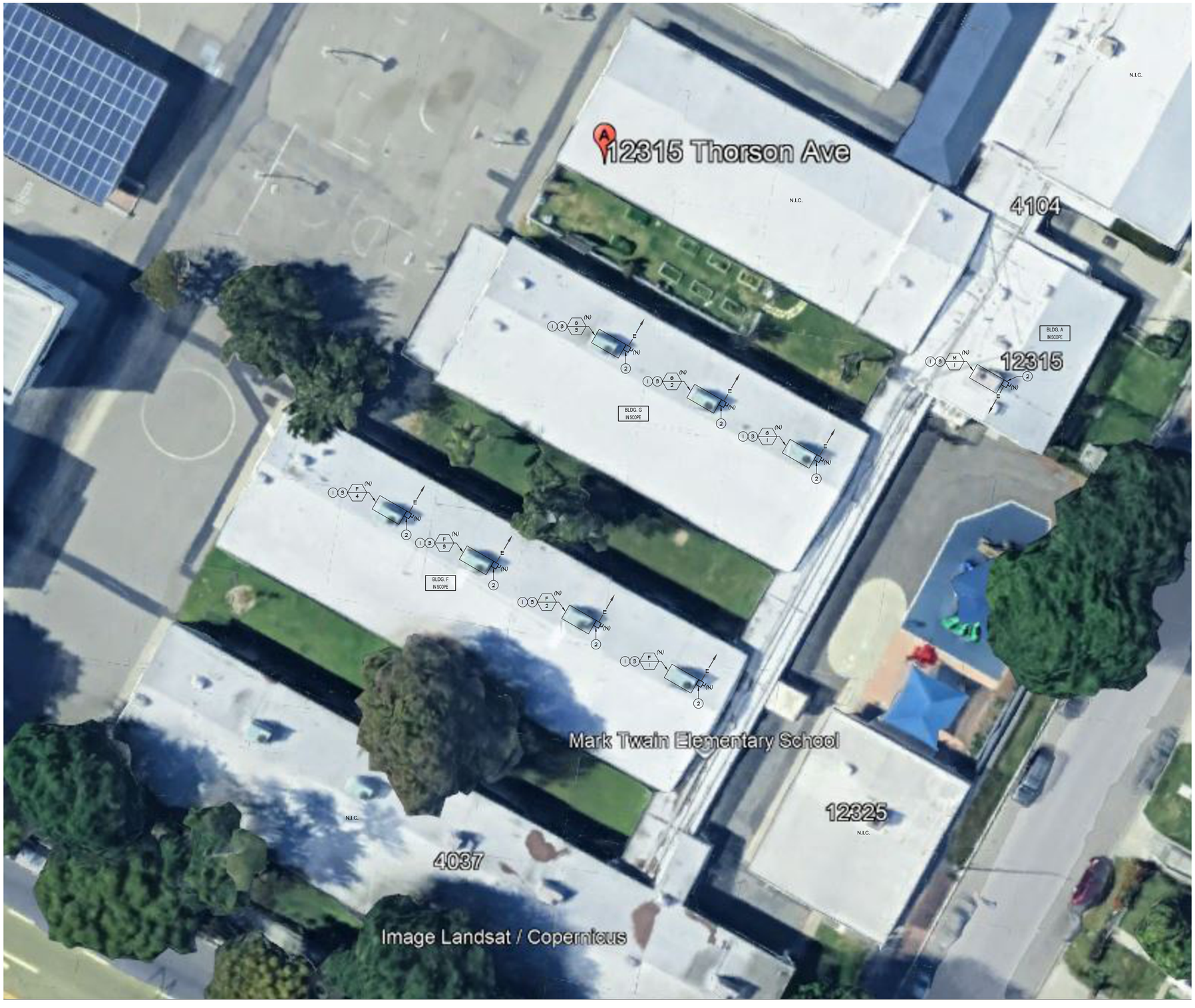
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6/30/26
ELECTRICAL
STATE OF CALIFORNIA

SHEET DESCRIPTION:
BUILDINGS
A / F / G
DEMOLITION
ROOF PLAN

SHEET NO:
ED-2.1



PLAN NOTES:

1. NEW HVAC UNIT AND NEW DISCONNECT SWITCH AT REMOVED HVAC UNIT AND DISCONNECT SWITCH. CONTRACTOR SHALL CONNECT NEW HVAC UNIT TO THE EXISTING CONDUCTORS PREVIOUSLY FEEDING THE REMOVED HVAC UNIT. CONTRACTOR SHALL PROVIDE AND EXTEND NEW CONDUIT / CONDUCTORS AS REQUIRED TO ENSURE A FULLY OPERABLE HVAC UNIT UPON COMPLETION OF INSTALLATION. REFER TO DEMOLITION PLAN FOR ADDITIONAL REQUIREMENTS.
2. NEW DISCONNECT SWITCH AND NEW FUSES SHALL BE SIZED TO MATCH REMOVED DISCONNECT SWITCH AND REMOVED FUSE SIZE. NEW DISCONNECT SWITCH SHALL BE NEMA 3R TYPE.
3. IF EXISTING FIRE ALARM DUCT DETECTOR IS PRESENT, CONTRACTOR SHALL RECONNECT THE EXISTING DUCT DETECTOR TO THE EXISTING FIRE ALARM SYSTEM. CONTRACTOR SHALL PROVIDE AND EXTEND NEW CONDUIT, CABLES / CONDUCTORS AS REQUIRED TO ENSURE FULLY OPERABLE DUCT DETECTOR UPON COMPLETION OF RECONNECTION AND REMODEL WORK. IN ADDITION, IF REQUIRED, CONTRACTOR SHALL PROVIDE ALL FIRE ALARM SYSTEM PROGRAMMING IN ORDER TO HAVE A FULLY OPERABLE DUCT DETECTOR UPON COMPLETION OF WORK. REFER TO DEMOLITION PLAN FOR ADDITIONAL REQUIREMENTS.

CONSTRUCTION NOTES:

1. REFER TO GENERAL NOTES AND DEMOLITION NOTES, DRAWING E-0.1, FOR ADDITIONAL REQUIREMENTS.
2. ALL CIRCUITS SERVING THE REMODEL AREA, WHETHER IDENTIFIED ON PLAN OR NOT, SHALL BE TRACED AND IDENTIFIED PRIOR TO START OF THE DEMOLITION PHASE. CIRCUITS AFFECTED BY THE REMODEL THAT SERVE AREAS OF THE BUILDING THAT ARE NOT A PART OF THE REMODEL SHALL BE MAINTAINED IN OPERATION DURING THE CONSTRUCTION PHASE. INTERRUPTION OF SERVICE WILL NOT BE ALLOWED.
3. CONTRACTOR SHALL UPDATE PANEL DIRECTORY AT ALL EXISTING DISTRIBUTION BOARDS AND BRANCH CIRCUIT PANELS FOR ALL REMOVED AND ADDED HVAC EQUIPMENT WITHIN THE SCOPE OF WORK. PANEL DIRECTORY SHALL BE TYPED AND EQUIPMENT NAMES SHALL MATCH THESE DRAWINGS.

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6/30/26
Electrical
STATE OF CALIFORNIA

SHEET DESCRIPTION:
BUILDINGS
A / F / G
REMODEL
ROOF PLAN

SHEET NO:
E-2.1