

GENERAL NOTES

1. THE FOLLOWING GENERAL NOTES ARE APPLICABLE AS STATED BELOW, EXCEPT WHERE SPECIFICALLY INDICATED AND NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION REQUIREMENTS AND SCOPE OF WORK.
2. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH THE 2022 CALIFORNIA CODE OF REGULATIONS. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NONCOMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHERE IN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS, A CONSTRUCTION CHANGE DOCUMENT (CCD) OR SET OF PLANS AND SPECIFICATIONS, DETAILING AND THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY THE DSA BEFORE PROCEEDING WITH THE WORK. SECTION 4-317, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, C.C.R.).
3. WORKMANSHIP AND ALL EQUIPMENT/MATERIALS SHALL CONFORM TO 2022 CALIFORNIA CODE REGULATIONS (CCR), TITLE 24 C.C.R., SPECIFICATIONS AND DETAILS FURNISHED BY THE CONTRACT DRAWINGS. WORKMANSHIP AND MATERIALS NOT IN CONFORMANCE WITH THE CONTRACT DRAWINGS AND SPECIFICATIONS ARE SUBJECT TO REMOVAL AND/OR REPLACEMENT AT CONTRACTOR'S EXPENSE.
4. BEFORE SUBMITTING THE BID PROPOSAL, VISIT THE JOB SITE AND FULLY ACQUAINT WITH THE EXISTING JOB CONDITIONS, VERIFY EXISTING AND NEW REQUIREMENT, WHETHER SHOWN ON DRAWINGS OR NOT, BUT REQUIRED FOR PROVIDING A COMPLETE AND OPERABLE, WITHOUT ADDITIONAL COST TO THE DISTRICT.
5. AFTER AWARD OF THE CONTRACT, THE CONTRACTOR SHALL SUBMIT TO THE ARCHITECT/ENGINEER FOR APPROVAL, ELECTRONIC DOCUMENTS (PDF) OF ALL REQUIRED SHOP DRAWINGS, BROCHURES AND OTHER SATISFACTORY DESCRIPTIONS INDICATING MANUFACTURER, CATALOG NUMBER, DIMENSIONS AND PERFORMANCE OF THE EQUIPMENT. ALL WORK SHALL NOT BE STARTED UNTIL DETAILED DESIGN DOCUMENTS AND SPECIFICATION, INCLUDING ALL APPROVALS OF SHOP DRAWINGS SUBMITTALS HAVE BEEN APPROVED BY ARCHITECT/ENGINEER OF THE PROJECT.
6. IRRELEVANT INFORMATION ON DRAWINGS AND DATA SHEETS SHALL BE COMPLETELY MARKED OUT LEAVING ONLY DATA THAT PERTAINS TO THE ITEMS SUBMITTED FOR APPROVAL. EQUIPMENT SHALL NOT BE DELIVERED TO THE SITE UNTIL SHOP DRAWINGS HAVE BEEN APPROVED. APPROVAL OF THE SHOP DRAWINGS DOES NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY TO CONFORM TO THE PLANS AND SPECIFICATIONS WORK OF RESPONSIBILITY FOR SATISFACTORY PERFORMANCE OF EQUIPMENT.
7. A STAMPED SET OF APPROVED DESIGN DOCUMENTS SHALL BE ON THE JOB SITE AND USED FOR INSTALLATION.
8. ANY DISCREPANCIES BETWEEN THESE DRAWINGS AND ACTUAL FIELD CONDITIONS MUST BE REPORTED TO THE ARCHITECT/ENGINEER OF THE PROJECT, ANY DEVIATIONS FROM THESE PLANS NECESSITATED BY FIELD CONDITIONS MUST BE APPROVED BY THE ARCHITECT/ENGINEER OF THE PROJECT AND DOCUMENTED ON THE FINAL "AS-BUILT" DRAWINGS.
9. EQUIPMENT AND DEVICE LOCATIONS, ELEVATIONS, RISER DIAGRAMS, CONTROLS WIRING DIAGRAMS, SCHEMATICS, AND DETAILS SHOWN ON PLANS ARE CONCEPTUAL. ONLY THEY ILLUSTRATE THE FUNCTIONAL RELATIONSHIPS BETWEEN SYSTEM COMPONENTS AND THE PROJECT'S DESIGN INTENT. THE CONTRACTOR SHALL INSTALL DEVICES AS SITE CONDITIONS AND IOR APPROVAL PERMIT.
10. THE LOCATIONS OF EXISTING UTILITIES WHERE SHOWN ON THE DRAWINGS ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE DISTRICT. THE ARCHITECT/ENGINEER OR THEIR REPRESENTATIVES, DETERMINE THE EXACT LOCATION, DEPTH, INVERT ELEVATIONS, POINT OF CONNECTIONS AND PROPER CROSS BEFORE CONNECTING WORK. FIELD VERIFY AND CORRECT AS REQUIRED.
11. OCCUPANTS OF THE EXISTING BUILDING SHALL NOT BE INCONVENIENCED. DUE TO CONTRACTORS WORK DEBRIS, ETC. ENTRANCES AND CORRIDORS SHALL BE PROTECTED AND KEPT FREE OF OBSTRUCTIONS. THE DISTRICT SHALL BE NOTIFIED IN ADVANCE OF TIME DELIVERY OF EQUIPMENT IN ORDER TO AVOID INTERFERENCE WITH THE NORMAL ACTIVITY OF THE BUILDING.
12. AFTER AWARD OF CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE PROTECTION OF ALL EXISTING STRUCTURES (BOTH EXTERIOR AND INTERIOR) WITHIN AND ADJOINING WORK AREA. ANY EXISTING STRUCTURES AND/OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED AND/OR REPLACED WITH MATERIALS, WORKMANSHIP, FIXTURES OR EQUIPMENT TEMPORARILY REMOVED SHALL BE RE-ERECTED OR INSTALLED IN AN APPROVED MANNER. THE CONTRACTOR SHALL SUBMIT ALL PROPOSED PROTECTION METHODS TO THE CONSTRUCTION MANAGER FOR REVIEW AND SHALL RECEIVE WRITTEN APPROVAL, PRIOR TO THEIR USE.
13. WHEN CONTRACTOR HAS BEEN AWARDED THE CONTRACT, IT IS HIS RESPONSIBILITY TO SECURE THE AREAS SO NO UNAUTHORIZED PERSONNEL OR STUDENTS GAIN ACCESS TO THE PROJECT AREA OR THE CONTRACTORS STAGING AREA.
14. THE CONTRACTOR SHALL FURNISH ALL LABOR, SUPERVISION, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, WAREHOUSING AND ANY OTHER SERVICES REQUIRED TO COMPLETE THE PROJECT IN A TIMELY AND EFFICIENT MANNER.
15. ALL WORK IS TO BE COMPLETED ON REGULAR HOURS AS DIRECTED BY THE DISTRICT.
16. CONTRACTOR TO COMPLY WITH ALL APPLICABLE SAFETY LAWS (OSHA, CAL OSHA ETC.). IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT ALL APPLICABLE SAFETY LAWS ARE STRICTLY ENFORCED AND TO MAINTAIN A SAFE CONSTRUCTION PROJECT.
17. ERECT AND MAINTAIN SUITABLE BARRIERS, PROTECTIVE DEVICES, LIGHTS AND WARNING SIGNS WHERE REQUIRED FOR THE PROTECTION OF THE PUBLIC AND EMPLOYEES. ENTRANCE TO ROOMS AND OTHER GUARDED LOCATIONS THAT CONTAIN LIVE PARTS SHALL BE MARKED WITH A CONSPICUOUS WARNING SIGN FORBIDDING UNQUALIFIED PERSONS TO ENTER.
18. ALL WORK THAT INVOLVES "SHUT-DOWN" OF EXISTING UTILITIES OR PORTIONS THEREOF, SHALL BE DONE AT SUCH TIMES THAT WILL CAUSE THE LEAST INCONVENIENCE. THE DISTRICTS SHALL BE NOTIFIED IN ADVANCE OF THE TIME AND LENGTH OF "SHUT-DOWN" SHALL BE APPROVED BY DISTRICT WITH WRITTEN NOTICE AT LEAST 7 DAYS IN ADVANCE OF THE REQUIRED SHUT-DOWN.
19. THE CONTRACTOR SHALL COOPERATE WITH THE DISTRICT TO THE FULLEST EXTENT IN PROVIDING TRAFFIC CONTROL DURING COURSE OF CONSTRUCTION SO AS TO PROVIDE A MAXIMUM PROTECTION FOR STUDENTS AND DISTRICT PERSONNEL. ALL EMPLOYEES ON THE PROJECT WORK SHALL PARK THEIR PRIVATE VEHICLES IN THE AREA DESIGNATED BY THE DISTRICT.
20. THE CONTRACTOR SHALL EXERCISE MAXIMUM DUST AND NOISE CONTROL EFFORTS TO KEEP AT A MINIMUM THE NUISANCE OF DUST AND CONSTRUCTION NOISE FROM THE CONSTRUCTION CONTRACTOR SHALL PROVIDE THE DISTRICT WITH A WRITTEN SCHEDULE OF WORK WHICH IS TO BE COORDINATED AND APPROVED BY THE DISTRICT PROJECT MANAGER, PRIOR TO THE START OF CONSTRUCTION.
21. THE DISTRICT SHALL BE NOTIFIED IN ADVANCE OF TIMES OF EQUIPMENT OR MATERIALS DELIVERED IN ORDER TO AVOID INTERFERENCE WITH THE NORMAL ACTIVITY ON THE DISTRICT PREMISES.
22. THE WORK AREA SHALL BE CLEANED DAILY AND ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF BY THE CONTRACTOR AT LEGAL DUMP. AT CONCLUSION OF PROJECT CONTRACTOR SHALL LEAVE WORK AREA AND SITE, BROOM CLEAN AND GENERALLY IN SAME CONDITION AS PRIOR TO THIS CONSTRUCTION WORK.
23. PROTECT-IN PLACE AND CARE FOR LAWNS SHRUBS, ETC. IN THE CONSTRUCTION AREAS DURING CONSTRUCTION PERIOD. REPLACE ALL DAMAGED ITEMS AT NO COST TO DISTRICT.
24. AT NO TIME DURING THE WORK UNDER THE CONTRACT SHALL THE CONTRACTOR PLACE, OR CAUSE TO BE PLACED, ANY MATERIAL OR EQUIPMENT ETC. AT A LOCATION THAT WOULD IMPED OR IMPAIR ACCESS TO OR FROM THE PRESENT FACILITIES.
25. IF ASBESTOS/LDAS IS ENCOUNTERED IT SHALL BE IMMEDIATELY REPORTED TO THE DISTRICT. CONTRACTOR SHALL NOT CONTINUE THEIR WORK WHERE ANY HAZARDOUS MATERIALS ARE ENCOUNTERED DURING CONSTRUCTION. REMOVAL AND ABATEMENT OF SUCH ENCOUNTERED SHALL BE PROVIDED BY DISTRICT. DISTRICT SHALL PROVIDE SPOAT ABATEMENT WHERE IDENTIFIED BY CONTRACTOR.
26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING STRUCTURES AT THE WORK AREA FROM WEATHER AND OTHER INCREMENT CONDITIONS. ANY DAMAGE INCURRED DUE TO FAILURE BY THE CONTRACTOR TO PROPERLY PROTECT SUCH WORK SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
27. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED AND OR DEMOLISHED MATERIAL, WASTE AND DEBRIS CAUSED BY THE NEW WORK. THIS MATERIAL SHALL BE REMOVED FROM THE DISTRICT PROPERTY AND TAKEN TO A LEGALLY OPERATED DISPOSAL SITE. THE CONTRACTOR SHALL KEEP ALL PARTS OF THE BUILDING AND SITE FREE FROM ANY ACCUMULATIONS OF RUBBISH OR WASTE MATERIALS CAUSED BY HIS WORKMEN AND SHALL REMOVE SUCH ACCUMULATIONS FROM THE BUILDING, SITE AND PROPERTY. JOB SITE SHALL BE CLEANED AT THE END OF EACH WORKING DAY.
28. THE SEISMIC ANCHORAGE OF MECHANICAL AND ELECTRICAL EQUIPMENT SHALL CONFORM TO ASCE 7-05 SECTION 13.3.1 AND TABLE 13.6.1. ANCHORAGE DETAILS FOR WALL/FLOOR MOUNTED EQUIPMENT SHALL BE SHOWN ON PLANS.
29. CONTRACTOR TO PROVIDE ALL NECESSARY COMPONENTS WHETHER SHOWN OR NOT ON THE DRAWINGS OR SPECIFIED ON THE CONTRACT TO MAKE THE SYSTEM FUNCTIONAL/OPERATIVE AND ACCEPTABLE TO ALL CONCERNED AUTHORITIES.
30. THE CONTRACTOR SHALL ADJUST/AND INSTALL ALL EQUIPMENT, DEVICES AND CONTROLS TO MAXIMIZE PERFORMANCE AND TO MINIMIZE FAILURE OF THE SYSTEM.
31. UPON COMPLETION OF THE INSTALLATION OF THE SYSTEM, INSTALLING CONTRACTOR SHALL SUBMIT STATEMENT OF COMPLIANCE AND REQUEST FINAL INSPECTION. A SATISFACTORY TEST OF THE ENTIRE SYSTEM SHALL BE MADE IN THE PRESENCE OF A DSA PROJECT INSPECTOR.
32. DSA, I.O.R., ARCHITECT/ENGINEER AND SCHOOL DISTRICT SHALL BE NOTIFIED A MINIMUM OF 48 HR. PRIOR TO THE FINAL INSPECTION AND/OR TESTING.
33. INDIVIDUAL ITEMS OF WORK ARE DETAILED IN THE VARIOUS SECTIONS OF THIS SCOPE OF WORK. THE ATTACHED DRAWINGS AND THE NOTES AND LEGENDS ON THE DRAWING, THE CONTRACTOR IS RESPONSIBLE TO COMPLETE THE REQUIREMENTS FOUND IN ANY OF THE ABOVE.
34. THE CONTRACTOR SHALL PROVIDE A RECORD OF COMPLETION ("AS-BUILT" DRAWINGS) UPON COMPLETION OF CONSTRUCTION, INCLUDING TESTING OF ALL EQUIPMENT, DEVICES, CONTROLS, AND ENSURING THE ENTIRE SYSTEM IS OPERATIONAL AND PROGRAMMED. A COPY OF THIS COMPLETED RECORD ("AS-BUILT" DRAWINGS) SHALL BE SUBMITTED TO THE IOR, ARCHITECT/ENGINEER, AND DISTRICT FOR FINAL ACCEPTANCE.
35. NOTIFY THE SUPPLIER OF ANY MISSING OR BROKEN PARTS OR ANY MISSING OR BROKEN FIXTURES AT LEAST FOURTEEN (14) DAYS PRIOR TO JOB COMPLETION. EQUIPMENT INSTALLED WITHOUT APPROVAL THEREOF SHALL BE DONE AT THE RISK OF THE CONTRACTOR AND THE COST OF REMOVAL OF SUCH EQUIPMENT OR RELATED WORK WHICH IS JUDGED UNSATISFACTORY FOR ANY REASON SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
36. CONTRACTOR SHALL WARRANTY MATERIALS AND INSTALLATION FROM THE DATE OF CONTRACT COMPLETION. PER CONTRACT REQUIREMENTS.

DUCT NOTES

1. GENERAL:
- 1.1. INSTALL ALL DUCTWORK ACCORDING TO SMACNA AND ASHRAE STANDARDS.
- 1.2. COORDINATE WITH OTHER TRADES TO INSTALL NEW DUCTWORK AS SHOWN ON DRAWINGS.
- 1.3. SEAL ALL DUCT JOINTS WITH WATER-BASED, HIGH-PRESSURE DUCT SEALANT TO MINIMIZE LEAKAGE (MAXIMUM 2% LEAKAGE ALLOWED).
- 1.4. ALL MATERIALS INSIDE DUCTS OR PLUMBING MUST HAVE A FLAME SPREAD INDEX OF 25 OR LESS AND A SMOKE-DEVELOPED INDEX OF 50 OR LESS AS TESTED BY ASTM E84 (NFPA 255).
2. DUCT MATERIAL AND CONSTRUCTION:
- 2.1. EXTEND FLEXIBLE DUCT FROM EXISTING METAL DUCTS TO CONNECT NEW SUPPLY AIR DIFFUSER (PROVIDE TRANSITION CONNECTIONS AS NEEDED). ALL FLEX DUCT WORK TO COMPLY WITH UMIC STANDARDS.
- 2.2. RE-BALANCE THE ENTIRE AIR DISTRIBUTION SYSTEM, TEST, ADJUST, AND BALANCE (TAB) THE SYSTEM TO ACHIEVE CFM AS SHOWN ON PLAN.
3. DUCT SIZING AND FITTINGS:
- 3.1. DUCT SIZES SHOWN ON DRAWINGS, DIMENSIONS AND SHAPES CAN BE ADJUSTED TO AVOID CONFLICTS AND MAINTAIN CLEARANCES.
4. PROHIBITED MATERIALS:
- 4.1. ALUMINUM FLEXIBLE DUCT AND "KOD" DUCTWORK ARE NOT ALLOWED.
5. ADDITIONAL REQUIREMENTS:
- 5.1. FINAL CONNECTIONS TO CEILING DIFFUSERS MUST BE ACOUSTICAL TYPE FLEXIBLE DUCT (CASCO SILENT FLEX II) NOT EXCEEDING 72 INCHES IN LENGTH.
- 5.2. PROVIDE MANUAL VOLUME DAMPERS, AS REQUIRED.

DIFFUSERS, REGISTERS, AND GRILLES NOTES

1. NEW EQUIPMENT: INSTALL NEW AIR DISTRIBUTION EQUIPMENT ACCORDING TO THE MODELS, SIZES, AND CAPACITIES INDICATED ON THE DRAWINGS.
2. EXISTING EQUIPMENT REMOVAL: REMOVE FROM THE SITE ALL EXISTING CEILING DIFFUSERS, RETURN GRILLES, AND OTHER AIR DISTRIBUTION DEVICES SCHEDULED FOR REMOVAL DURING THE SCOPE OF THIS PROJECT.
3. VOLUME DAMPERS:
- 3.1. INSTALL VOLUME DAMPERS IN ALL LOCATIONS INDICATED ON THE DRAWINGS AND ANYWHERE ELSE NECESSARY TO PROPERLY BALANCE THE AIRFLOW FROM EACH DIFFUSER/GRILLE.
- 3.2. FOR DAMPERS LOCATED ABOVE INACCESSIBLE CEILINGS, USE EXTENDED REGULATORS WITH CONCEALED COVER PLATES FOR OPERATION.
4. CEILING COORDINATION: COORDINATE THE INSTALLATION OF ALL SUPPLY DIFFUSERS AND RETURN GRILLES WITH THE CEILING GRID, LIGHTS, SPRINKLER HEADS, SEISMIC BRACING, TELEPHONE EQUIPMENT, HEAT SENSORS, AND OTHER BUILDING ELEMENTS TO AVOID CONFLICTS.
5. DIFFUSER SIZES: CEILING DIFFUSER SIZES SHOWN ON THE DRAWINGS INDICATE NECK SIZES. PROVIDE FRAMES AS NECESSARY TO MATCH THE MOUNTING SURFACE.

DEMOLITION NOTES

1. REVIEW AND VERIFICATION:
- 1.1. BEFORE BIDDING AND COMMENCING DEMOLITION, THOROUGHLY REVIEW THE CONSTRUCTION DOCUMENTS, WORKING DRAWINGS, AND FIELD VERIFY ALL EXISTING CONDITIONS. THIS INCLUDES INVESTIGATING QUESTIONABLE WORK RELATED TO DISCONNECTING OR REMOVING EXISTING EQUIPMENT SHOWN FOR DEMOLITION. COORDINATE THIS INFORMATION WITH THE CONSTRUCTION SCHEDULE.
- 1.2. THESE DRAWINGS INDICATE EXISTING CONDITIONS WHICH WERE TAKEN FROM RECORD DRAWINGS/FIELD VISUAL VERIFICATIONS. THE ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF THESE CONDITIONS. THE CONTRACTOR SHALL VERIFY AND INVESTIGATE ALL EXISTING FIELD CONDITIONS AND EXERCISE CAUTION IN THE DEMOLITION PROCESS, AND PROMPTLY NOTIFY THE CONSTRUCTION MANAGER IF ANY DISCREPANCIES ENCOUNTERED.
2. DEMOLITION COORDINATION AND COMPONENTS:
- 2.1. COORDINATE ALL DEMOLITION ACTIVITIES WITH NEW CONSTRUCTION REQUIREMENTS TO ENSURE THE NEWLY INSTALLED SYSTEMS COMPLETE AND FUNCTIONAL.
3. EXISTING DUCTWORK:
- 3.1. PERFORM CLEANING AND REPAIRS ON EXISTING DUCTS, INCLUDING SEALING LEAKS AND INSTALLING NEW LINERS AS SPECIFIED. UTILIZE EXISTING DUCTWORK AS SHOWN ON THE PLANS FOR ESTIMATING CLEANING COSTS AND AIR BALANCING.
- 3.2. TEST, ADJUST, AND AIR BALANCE ALL SUPPLY AND EXHAUST REGISTERS WITHIN THE DESIGNATED AREA. SUBMIT A TAB REPORT TO THE DISTRICT REPRESENTATIVE FOR APPROVAL.
- 3.3. IF ANY DIFFUSER FAILS TO ACHIEVE DESIGN CFM WITHIN 10% TOLERANCE AFTER AIR BALANCING, INSPECT EXISTING DUCTS FOR AIR LEAKAGE. PERFORM NECESSARY REPAIRS OR REPLACEMENTS TO REDUCE LEAKAGE AND ACHIEVE THE DESIRED CFM TOLERANCE.
4. IMPLEMENT DUST PROTECTION MEASURES THROUGHOUT CONSTRUCTION:
- 4.1. COVER ALL DUCT AND AIR DISTRIBUTION COMPONENT OPENINGS WITH METHODS APPROVED BY DISTRICT.

MECHANICAL NOTES

- NOTE: THIS DOCUMENT FORMS A PART OF THE SPECIFICATIONS AND SHALL BE CONSIDERED THE SAME AS IF ATTACHED THERETO.
1. THE DRAWINGS ARE DIAGRAMMATIC IN NATURE AND INDICATE THE LOCATION OF EQUIPMENT AND DEVICES AND THE ARRANGEMENT OF THE REQUIRED INSTALLATION. THE DRAWINGS SHALL BE FOLLOWED AS CLOSELY AS PROPER COORDINATION WITH THE EXISTING FIELD CONDITIONS AND SPACE WILL PERMIT. SIMPLY INSTALLATION WHEREVER POSSIBLE BUT SUBJECT TO APPROVAL OF THE DSA FOR VISUAL AND STRUCTURAL REASONS. THE DRAWINGS DO NOT SHOW NECESSARY OFFSETS, BENDS AND OBSTRUCTIONS. THE DRAWINGS ARE NOT INTENDED TO BE SCALED AND THE CONTRACTOR SHALL REFER TO THE GENERAL, DIMENSIONED CONSTRUCTION DRAWINGS FOR DIMENSIONS AND EXACT LOCATIONS.
2. WHERE APPLICABLE, THERMOSTATS SHALL BE ABLE TO:
- A. MAINTAIN SPACE TEMPERATURE SET POINTS FROM 55 DEGREES TO 85 DEGREES.
- B. TERMINATE ALL HEATING AT 70 DEGREES OR LESS AND ALL COOLING AT 78 DEGREES OR MORE.
3. CONTRACTOR SHALL PROVIDE CONSTRUCTION FILTERS AT RETURN AIR OPENINGS DURING CONSTRUCTION.
4. ALL PIPING AND DUCTWORK SHALL FREELY PASS THROUGH ALL WALLS AND FLOORS WITHOUT RIGID CONNECTIONS. PENETRATION POINTS SHALL BE SLEEVED TO ALLOW PASSAGE OF PIPING OR DUCTWORK AND MAINTAIN 3/4" TO 1 1/4" CLEARANCE AROUND THE OUTSIDE SURFACES. THIS CLEARANCE SHALL BE TIGHTLY PACKED WITH ONE POUND DENSITY GLASS FIBER AND CALKED ARTISHT WITH NON-HARDENING SEALANT AFTER INSTALLATION OF PIPING OR DUCTWORK.
5. PIPING SHALL BE COMPLETE WITH PIPE FITTINGS, VALVES, COUPLING, STRAINERS, HANGER RODS, HANGERS, SUPPORTS, GUIDES, SLEEVES AND ACCESSORIES IN CONFORMANCE WITH THE LATEST PROVIDED FITTINGS FOR CHANGE IN PIPE SIZE CODES AND ASME, ANSI, ASTI AND MSS STANDARDS. AND FOR FINAL CONNECTION AT EQUIPMENT, AS REQUIRED.
6. ALL DISCONNECTED MEANS ARE TO BE LABELED WITH PHENOLIC LABELS. LABELS SHALL BE WHITE LETTERING ON BLACK BACKGROUNDS.
7. IDENTIFY ALL NEW MECHANICAL EQUIPMENT WITH NAMEPLATES PERMANENTLY ENGRAVED WITH 1/2 INCH HIGH WHITE LETTERS ON A BLACK BACKGROUND. IDENTIFY EQUIPMENT WITH SYMBOLS SHOWN ON THE PLANS.
8. PROVIDE FLASHING AND COUNTER FLASHING FOR ALL PENETRATIONS THROUGH WALLS OR ROOF TO MAKE WATERPROOF INSTALLATION.
9. CONDENSATE PIPING SHALL BE TYPE L OR M TUBING WITH WROUGHT COPPER FITTINGS. PRIMARY DRAIN PAN SHALL BE PROVIDED WITH COOLING COIL AND EXTEND BEYOND THE LEAVING SIDE OF THE COIL AND UNDERNEATH THE COOLING COIL CONNECTIONS. PROVIDE SECONDARY DRAIN PIPE FOR EQUIPMENT ABOVE CEILINGS AND ROUTE TO VISIBLE LOCATION ABOVE AN EXTERIOR WINDOW.
10. SUPPORT ALL PIPING SO THAT IT IS FIRMLY HELD IN PLACE BY APPROVED IRON HANGERS AND SUPPORTS, IN ACCORDANCE WITH RECOMMENDATIONS OF AMERICAN PIPE FITTERS ASSOCIATION AND PIPE HANGER INSTITUTE.
11. MOTOR STARTERS, WHERE REQUIRED, SHALL BE PROVIDED BY MECHANICAL CONTRACTOR AND INSTALLED BY ELECTRICAL CONTRACTOR.
12. THERMOSTATS SHALL BE MOUNTED AT 4'-0" ABOVE FINISHED FLOOR. EACH THERMOSTAT SHALL BE LABELED TO INDICATE THE ASSOCIATED HVAC UNIT(S). LABELS SHALL BE DYNO STICKER LABELS WITH A LEGIBLE FONT SIZE. HAND-WRITTEN LABELS ARE NOT ACCEPTABLE. THERMOSTATS SHALL BE PROGRAMMABLE WITH SETUP, SETBACK, AND TIME/CLOCK FUNCTIONS BY THE EQUIPMENT MANUFACTURER OR APPROVED EQUAL. THE SUPPLY FAN SHALL OPERATE CONTINUOUSLY DURING OCCUPIED HOURS.
13. ALLOW RELOCATION OF DEVICES (VFDs, ELECTRICAL DISCONNECTS, CONTROL PANELS, AND EQUIPMENT) WITHIN THE SAME GENERAL AREA IF OBSTRUCTIONS (STRUCTURAL ELEMENTS, PIPING, CONDUITS) PREVENT INSTALLATION IN THE EXACT LOCATIONS SHOWN ON THE PLANS. RELOCATED DEVICES MUST COMPLY WITH REQUIRED WORKSPACES, CODE CLEARANCES, AND MAINTAINABILITY ACCESS.
14. HVAC SYSTEM AND CONTROLS (COMPLYING WITH ONE OF THE FOLLOWING STANDARDS):
- A. ASHRAE NATIONAL STANDARDS FOR TOTAL SYSTEM BALANCE (6TH EDITION)
- B. ACCA MANUAL B
- C. ASHRAE'S STANDARD 111-2008
- D. NEBS STANDARDS FOR TESTING, ADJUSTMENT, AND BALANCING OF ENVIRONMENTAL SYSTEM (7TH EDITION)
- E. SMACNA HVAC TESTING, ADJUSTING, AND BALANCING
15. A FINAL REPORT FOR THE TESTING AND ADJUSTING OF ALL NEW SYSTEMS SHALL BE COMPLETED AND PROVIDED TO THE FIELD INSPECTOR PRIOR TO FINAL APPROVAL. THIS REPORT SHALL BE SIGNED BY THE INDIVIDUAL RESPONSIBLE FOR PERFORMING THESE SERVICES.
17. AN OPERATION AND SYSTEM MANUAL SHALL BE PROVIDED TO THE FIELD INSPECTOR AT THE TIME OF FINAL INSPECTION.
18. CONTRACTOR SHALL TEST THE HVAC SYSTEMS AND CONTROLS, INCLUDING, BUT NOT LIMITED TO OPERATION, TEMPERATURE, POWER CURRENT, FLOW, AND MAKE ADJUSTMENTS AS REQUIRED AND REQUIRED BY MANUFACTURER TO ENSURE PROPER OPERATION.

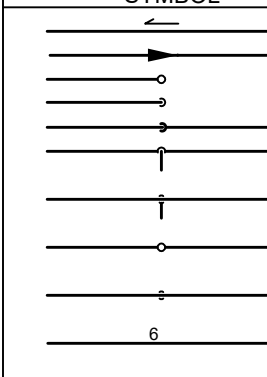
MEP COMPONENT ANCHORAGE NOTES

- MEP COMPONENT ANCHORAGE NOTE
- ALL MECHANICAL, PLUMBING, AND ELECTRICAL COMPONENTS SHALL BE ANCHORED AND INSTALLED PER THE DETAILS ON THE DSA APPROVED CONSTRUCTION DOCUMENTS.
- THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1.18 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 13, 26 AND 30:
1. ALL PERMANENT EQUIPMENT AND COMPONENTS
2. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT THAT IS PERMANENTLY ATTACHED (E.G. HARD WIRED) TO THE BUILDING UTILITY SERVICES SUCH AS ELECTRICITY, GAS OR WATER. PERMANENTLY ATTACHED SHALL INCLUDE ALL ELECTRICAL CONNECTIONS EXCEPT PLUGS FOR 110/220 VOLT RECEPTACLES HAVING A FLEXIBLE CABLE.
3. TEMPORARY, MOVABLE OR MOBILE EQUIPMENT WHICH IS HEAVIER THAN 400 POUNDS OR HAS A CENTER OF MASS LOCATED 4 FEET OR MORE ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT IS REQUIRED TO BE RESTRAINED IN A MANNER APPROVED BY DSA.
- THE FOLLOWING MECHANICAL AND ELECTRICAL COMPONENTS SHALL BE POSITIVELY ATTACHED TO THE STRUCTURE BUT NEED NOT DEMONSTRATE DESIGN COMPLIANCE WITH THE REFERENCES NOTED ABOVE. THESE COMPONENTS SHALL HAVE FLEXIBLE CONNECTIONS PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT. FLEXIBLE CONNECTIONS MUST ALLOW MOVEMENT IN BOTH TRANSVERSE AND LONGITUDINAL DIRECTIONS.
- A. COMPONENTS WEIGHING LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL, THAT DIRECTLY SUPPORT THE COMPONENT.
- B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.
- THE ANCHORAGE OF ALL MECHANICAL, ELECTRICAL AND PLUMBING COMPONENTS SHALL BE SUBJECT TO THE APPROVAL OF THE DESIGN PROFESSIONAL. IN GENERAL, RESPONSIBLE CHARGE OR STRUCTURAL ENGINEER DELEGATED RESPONSIBILITY AND ACCEPTANCE BY DSA. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

- PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE
- PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTIONS 13.6.5, 13.6.6, 13.6.7, 13.6.8 AND 2022 CBC SECTIONS 1617A.1.24, 1617A.1.25 AND 1617A.1.26.
- THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., HCAI DPM 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 SYSTEMS (E):
- ☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
- ☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAI (DSHP) PRE-APPROVAL (DPM #) . AS NOTED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.
- DO NOT MIX SEISMIC BRACING DETAILS FROM DIFFERENT OPMs UNLESS SPECIFICALLY SHOWN ON DRAWINGS AND APPROVED BY DSA.

MECHANICAL SYMBOLS LIST

SYMBOL



PIPING

DIRECTION OF FLOW

PIPE

PIPE

PIPE

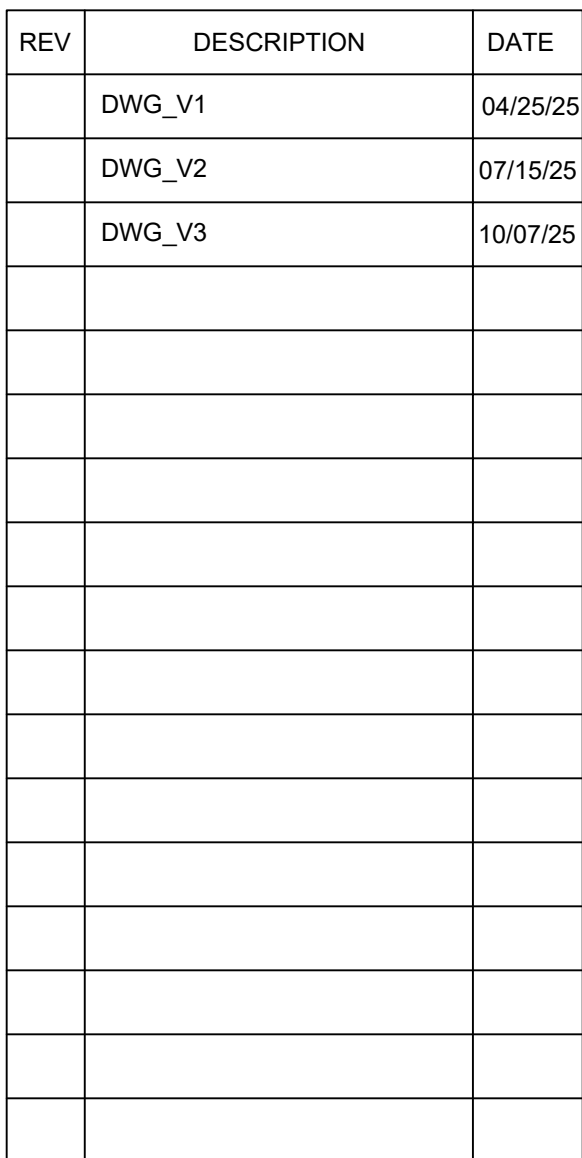
TOP CONNECTION - BRANCH LINE

BOTTOM CONNECTION-BRANCH LINE

TEE DOWN

PIPE SIZE (DIAMETER IN INCHES)

SYMBOL

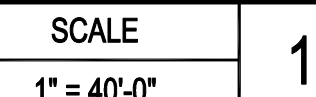


POMONA UNIFIED
SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

DATE	10/07/2025
CGA #	A# 03-125098 FILE NO. 19-H20

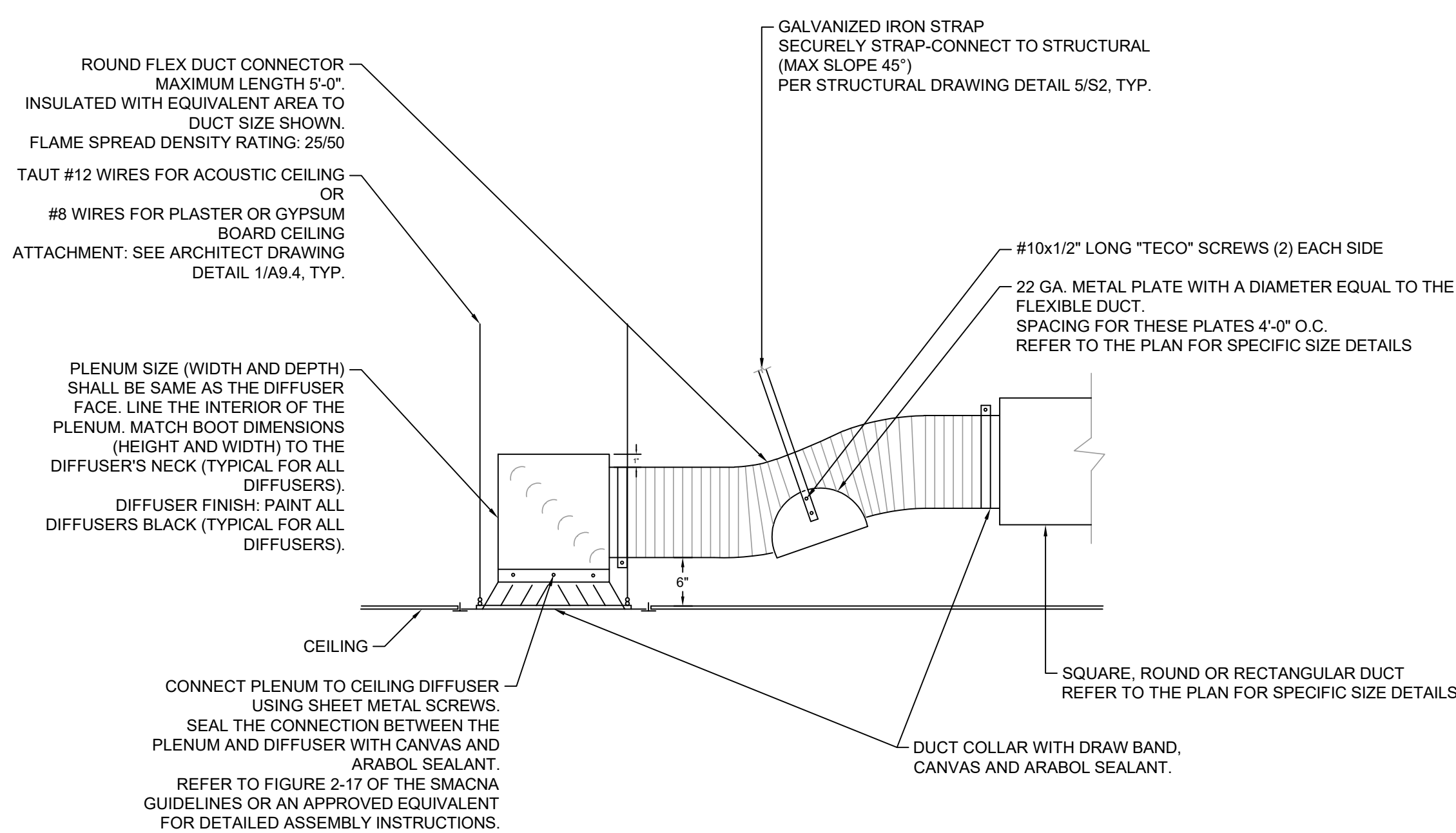
DATE	10/07/2025
CGA #	A# 03-125098 FILE NO. 19-H20



☐ EXISTING BUILDING AS PART OF THIS DSA APPLICATION

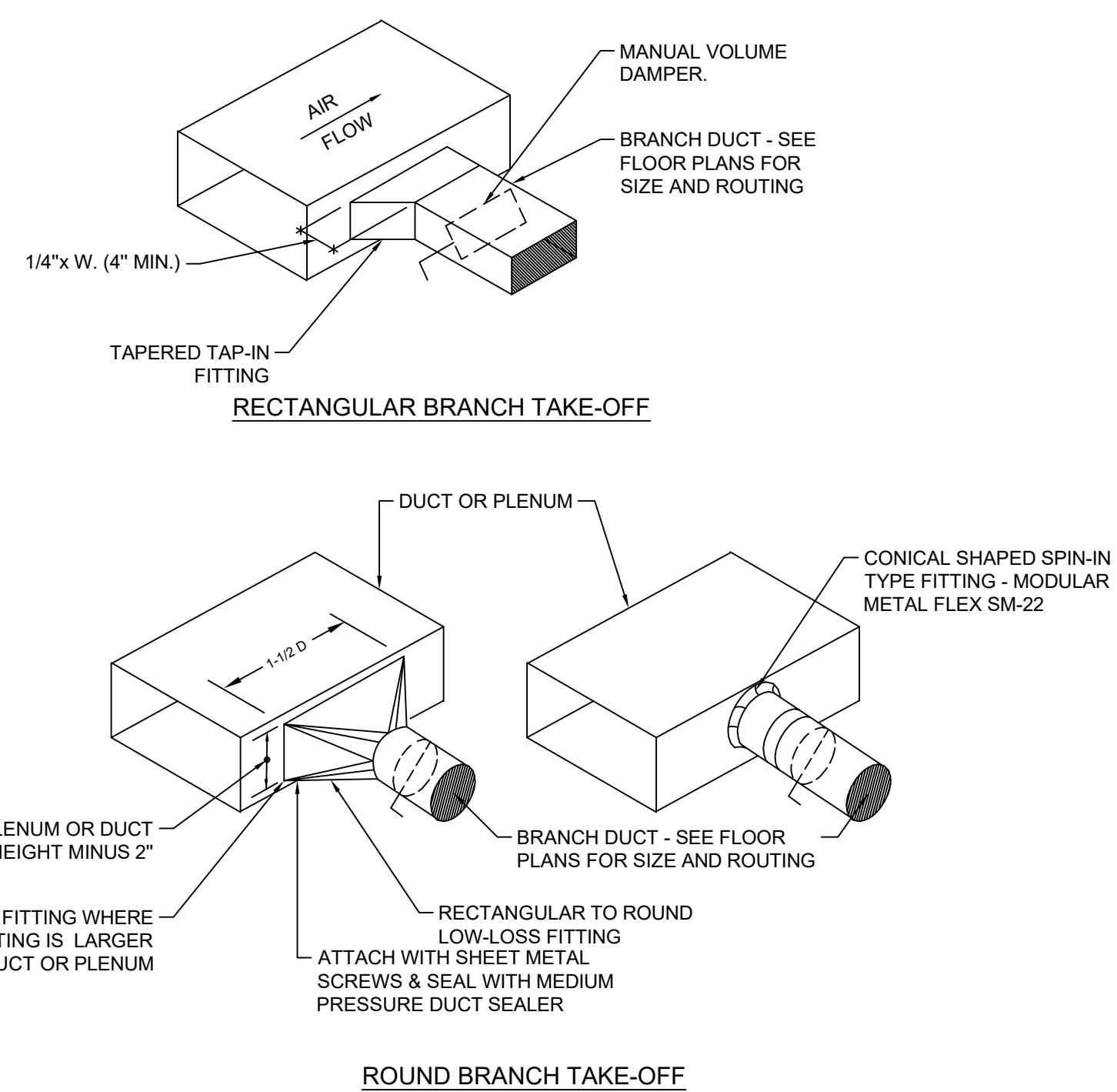
☒ EXISTING BUILDING NOT PART OF THIS DSA APPLICATION

A floor plan diagram of a room. The room contains several furniture items labeled with letters A through J. The items are: A (Sofa), B (Coffee Table), C (Dining Table), D (Chair), E (Side Table), F (Lamp), G (Plant), H (Rug), I (Bookshelf), and J (Desk). The items are arranged in a way that suggests a functional living and dining area. The sofa (A) is positioned against the bottom wall. The coffee table (B) is in front of it. The dining table (C) is to the left of the sofa. The chair (D) is to the left of the dining table. The side table (E) is to the right of the chair. The lamp (F) is to the right of the side table. The plant (G) is to the right of the lamp. The rug (H) is in the center of the room. The bookshelf (I) is against the top wall. The desk (J) is against the right wall.



NOTE:

1. CONNECTIONS FOR RETURN, TRANSFER, AND EXHAUST CEILING GRILLES/REGISTERS ARE TYPICAL.
2. FLEXIBLE DUCT SHALL BE USED FOR ACCESSIBLE CEILINGS ONLY. FLEXIBLE DUCT ABOVE NON-ACCESSIBLE CEILINGS IS NOT ACCEPTABLE.



NOTE

1. MAKE ALL CONNECTIONS SECURE ACCORDING TO THE PRESSURE CLASS RATING SPECIFIED.
2. THIS DRAWING DEPICTS A ROUND DUCT TAKE-OFF.

CEILING DIFFUSER INSTALLATION

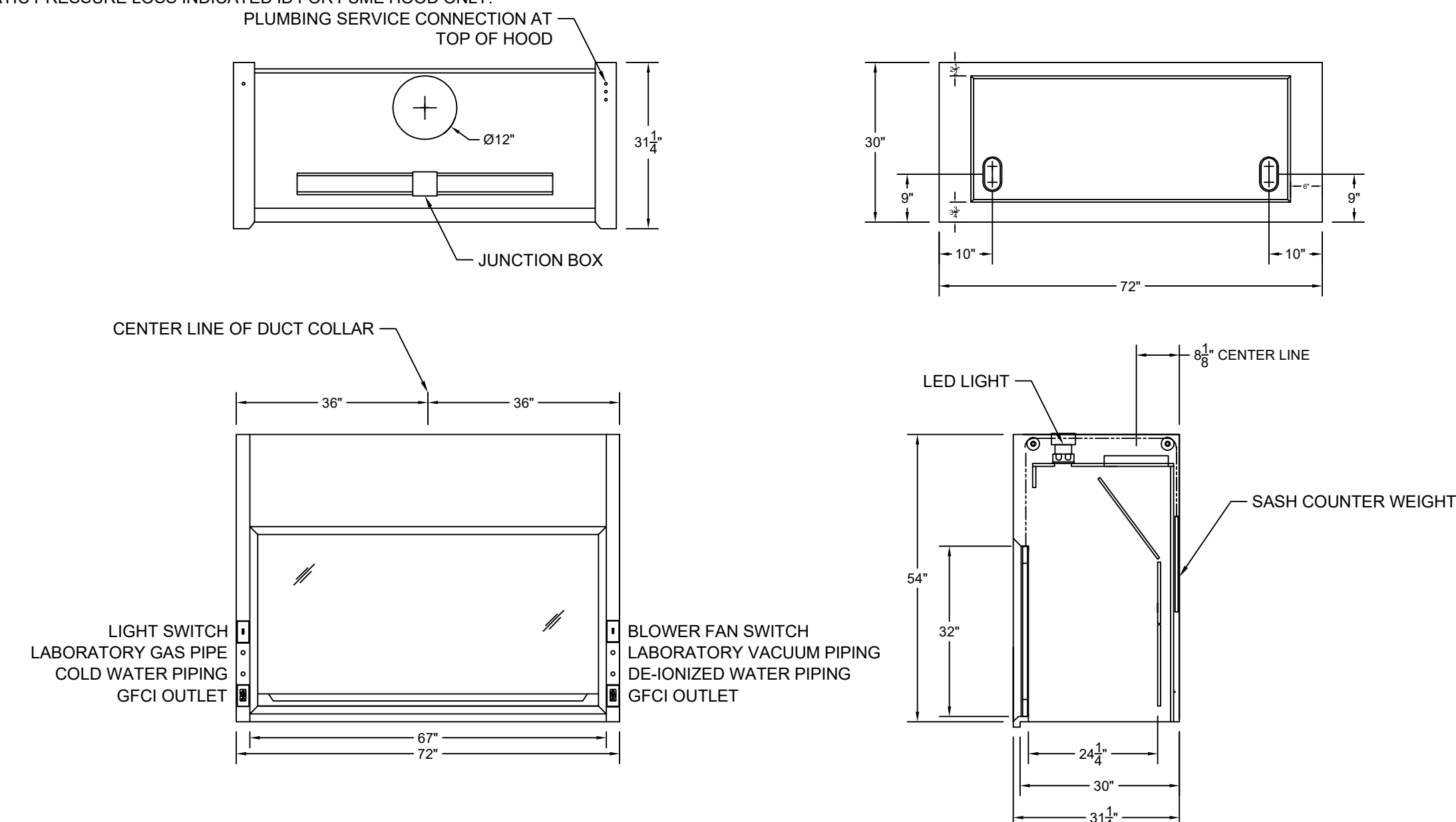
SCALE	1
NOT TO SCALE	

BRANCH DUCT TAKE-OFF DETAIL

SCALE	2
N.T.S.	

FUME HOOD				
13.33 SQ. FT.	75 FPM	100 FPM	125 FPM	150 FPM
CFM	1000	1335	1665	2000
S.P. LOSS	0.32	0.40	0.50	0.62

CFM'S RATING ARE FOR UPPER SASH RAISED AND LOWER SASH CLOSED
STATIC PRESSURE LOSS INDICATED ID FOR FUME HOOD ONLY.



NOTE:
THE FUME HOOD RESTS ON THE BASE CABINET AND COUNTER TOP.
PROVIDE ANCHORAGE THROUGH STRUCTURAL FLANGES OF HOOD TO BACKING PER STRUCTURAL DRAWING DETAIL 3/A9.1.

FUME HOOD DETAIL

SCALE	S
N.T.S.	

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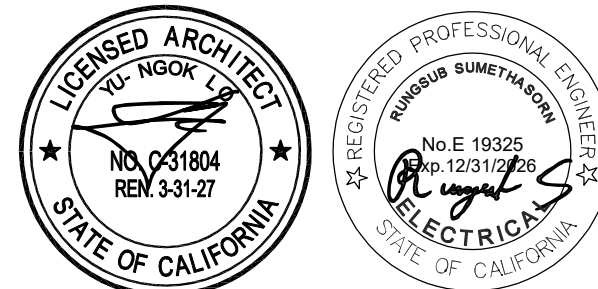
Ynl Architects
architecture | interior

multi-discipline collaborative

MDC engineers, INC

Consulting Engineers

5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92807-2056
Tel: (213) 746-2844
Fax: (213) 746-6463



SCIENCE LAB
RENOVATION
AT
GAREY HIGH SCHOOL
321 W. LEXINGTON AVE.
POMONA, CA 91766

POMONA UNIFIED
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POMONA, CALIFORNIA 91768

MECHANICAL DETAILS

DATE	10/07/2025
CGA #	A# 03-125098 FILE NO. 19-H20
SHEET	

M4.1

LIST OF CALIFORNIA CODE OF REGULATIONS (C.C.R.)

LEGEND

PLUMBING NOTES

APPLICABLE CODES AS OF JANUARY 1, 2023

TITLE 24 C.C.P.R.	PART1	2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE
TITLE 24 C.C.P.R.	PART2	2022 CALIFORNIA BUILDING CODE (CBC)
TITLE 24 C.C.P.R.	PART10	2022 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS
TITLE 24 C.C.P.R.	PART3	2022 CALIFORNIA ELECTRICAL CODE (CEC)
TITLE 24 C.C.P.R.	PART7	2022 NATIONAL FIRE PROTECTION ASSOCIATION, NFPA
TITLE 24 C.C.P.R.	PART8	2022 CALIFORNIA MECHANICAL CODE (CMC)
TITLE 24 C.C.P.R.	PART9	2022 CALIFORNIA CODE OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO
TITLE 24 C.C.P.R.	PART5	2022 CALIFORNIA PLUMBING CODE (CPC)
TITLE 24 C.C.P.R.	PART6	2022 INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO
TITLE 24 C.C.P.R.	PART8	2022 CALIFORNIA ENERGY CODE
TITLE 24 C.C.P.R.	PART0	2022 CALIFORNIA FIRE CODE (FCF)
TITLE 24 C.C.P.R.	PART0	2022 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL
TITLE 24 C.C.P.R.	PART10	2022 CALIFORNIA EXISTING BUILDING CODE
TITLE 24 C.C.P.R.	PART10	2021 INTERNATIONAL EXISTING BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH AMENDMENTS
TITLE 24 C.C.P.R.	PART11	2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE)
TITLE 24 C.C.P.R.	PART12	2022 CALIFORNIA REFERENCED STANDARDS CODE
TITLE 19	C.C.P.R.	PUBLIC SAFETY, STATE FIRE MARSHAL, REGULATIONS.

PARTIAL LIST OF APPLICABLE STANDARDS

NFPA 14 STANDPIPE AND HOSE SYSTEMS (CA AMENDED) 2019 EDITION

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

SEE CALIFORNIA BUILDING CODE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO THE NFPA STANDARDS.

MECHANICAL CALGREEN CODES

ENTIRE INSTALLATION SHALL COMPLY WITH THE 2022 CALIFORNIA GREEN BUILDING STANDARDS (CALGREEN) CODE INCLUDING THE FOLLOWING APPLICABLE MANDATORY MEASURES:

5.303 & STANDARDS FOR PLUMBING FIXTURES AND FITTINGS. PLUMBING FIXTURES AND FITTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE CALIFORNIA PLUMBING CODE, AND SHALL MEET THE APPLICABLE STANDARDS REFERENCED IN TABLE 1701.1 OF THE CALIFORNIA PLUMBING CODE AND IN CHAPTER 6.

VACUUM CHEMISTRY PUMPING SCHEDULE																
UNIT TAG	SERVICE	MAKE	MODEL NUMBER	LOCATION	DIMENSION (L x W x H)	MAX. PUMPING SPEED 60 HZ (CFM)	ULTIMATE VACUUM	NUMBER OF HEADS	NUMBER OF STAGES	VACUUM CONTROLLER	Max. outlet pressure (psia)	Inlet connection	Outlet connection	VOLT/PH/Hz	RATED MOTOR POWER	WEIGHT
VC-1	LAB CLASSROOM	VARIO	PC 3001	COUNTERTOP	11.93" x 12.05" x 15.75"	1.18 CFM	2.0 mbar / 1.5 torr	4	3	VACU-SELEC T	1.1 bar	Hose nozzle DN 6-10 mm	Hose nozzle DN 6-10 mm	120/1/60	0.16 kW	8.2 kg
NOTES																
1. PROVIDED WITH RUBBER VACUUM TUBING DN 8 MM (20686001) 2. VOL AK-A - ADA FUME HOOD VALVE 3. VOL A-5/C19 - TURREY FOR INSIDE FUME HOOD																

SYMBOL	ABBR.	DESCRIPTION
	W	SANITARY WASTE PIPING BEL. FLR.
	W	SANITARY WASTE PIPING ABV. FLR.
	V	VENT PIPING
	CW	COLD WATER PIPING
	HW	HOT WATER PIPING
	HWR	HOT WATER RETURN PIPING
	ICW	INDUSTRIAL COLD WATER PIPING
	IHW	INDUSTRIAL HOT WATER PIPING
	CHW	CHILLER WATER SUPPLY PIPING
	CHWR	CHILLER WATER RETURN PIPING
	DIW	DE-IONIZED WATER PIPING
	LA	LABORATORY COMPRESSED AIR PIPE
	LG	LABORATORY GAS PIPE
	LV	LABORATORY VACUUM PIPING
	LW	LABORATORY WASTE PIPING
	PLUG	PLUG
	POC	POINT OF CONNECTION
	UP	PIPING UP
	DN	PIPING DOWN
	FLOOR CLEANOUT	FLOOR CLEANOUT IN YARD BOX
	WCO	WALL CLEANOUT
	G	GAS PIPING
	U.	UNION
	B.V.	BALL VALVE
	C.V.	CHECK VALVE
	SOV	SHUT-OFF VALVE
	3V	3-WAY VENT VALVE
	FLEX.	FLEXIBLE CONNECTION
	GC	GAS COCK
	TP	TRAP PRIMER LINE
	SD	STORM DRAIN PIPING

GENERAL SYMBOLS

NUMBERED NOTE FOR SHEET WHERE SHOWN

DETAIL DESIGNATION FOR ITEM & DRAWING NUMBER

ABBREVIATION

ABS	ACRYLONITRILE-BUTADIENE-STYRENE	(E) EXISTING	(E) NEW
ABO	ABOVE	(E) EXISTING TO BE REPLACED	(E) NOT IN CONTRACT
ACC	ACCESSIBLE	FLR FLOOR DRAIN	(E) NOT TO SCALE
ACF	ACCESSIBLE FLOOR	FLR EXISTING GRESS CABINET	(E) RELOCATED
AP	ACCESS PANEL	FLR FLOOR UNIT	(E) SATIN STAINLESS STEEL
BEL	BELOW	FLR FLUSH VALVE	(E) TYPICAL
BEH	BEHIND	FLR GALLONS PER MINUTE	(E) WEATHERPROOF CONSTRUCTION
CF	CUBIC FEET PER HOUR	GRD GRADE	(E) WEATHERIGHT CONSTRUCTION
CH	CAST IRON	HPM HOSE BIBB	(E) W/STRAINED CLOTH
CLG	CULVERT	HRD HARDWARE	(E) YARD BOB
CON	CONNECTION/CONNECTION	HTC INVERT ELEVATION	(E) EXISTING TO BE REMOVED
CONT	CONTINUATION	MT MOUNTING	(XR) REMOVED RELOCATE (AS SHOWN)
CS	DISABLED ACCESS	MT (TO BOTTOM OF FLTURE)	(+/-) YB - MOVING RELOCATE (TO CENTER OF DEVICE)
DN	DOWN	MOU MOUNTING	
DF	DRAINAGE FOUNTAIN	OCEW ON CENTER EACH WAY	
DWG	DRAWINGS	REQD REQUIRED	
EXP	EXHAUST FAN		

MEP COMPONENT ANCHORAGE NOTES

MEP COMPONENT ANCHORAGE NOTE

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

- THE FOLLOWING COMPONENTS SHALL BE ANCHORED OR BRACED TO MEET THE FORCE AND DISPLACEMENT REQUIREMENTS PRESCRIBED IN THE 2022 CBC SECTIONS 1617A.1, 18 THROUGH 1617A.1.26 AND ASSE 7-16 CHAPTERS 13, 26 AND 30.
1. PERMANENT, NON-REMOVABLE 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
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. AIR HANDLING UNITS, COILS, AND FILTERS THAT WEIGH LESS THAN 400 POUNDS AND HAVE A CENTER OF MASS LOCATED 4 FEET OR LESS ABOVE THE ADJACENT FLOOR OR ROOF LEVEL THAT DIRECTLY SUPPORT THE COMPONENT.

B. COMPONENTS WEIGHING LESS THAN 20 POUNDS, OR IN THE CASE OF DISTRIBUTED SYSTEMS, LESS THAN 5 POUNDS PER FOOT, WHICH ARE SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A WALL.

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

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE

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

THE METHOD OF SHOWING BRACING AND ATTACHMENTS TO THE STRUCTURE FOR THE IDENTIFIED DISTRIBUTION SYSTEM ARE AS NOTED BELOW. WHEN BRACING AND ATTACHMENTS ARE BASED ON A PREAPPROVED INSTALLATION GUIDE (E.G., 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 SYSTEMS (E):

☒ OPTION 1: DETAILED ON THE APPROVED DRAWINGS WITH PROJECT SPECIFIC NOTES AND DETAILS.
☐ OPTION 2: SHALL COMPLY WITH THE APPLICABLE HCAI (OSHPD) PRE-APPROVAL (OPM #) # , AS INCLUDED IN THESE DRAWINGS WITH PROJECT-SPECIFIC NOTES AND DETAILS.

DO NOT MIX SEISMIC BRACING DETAILS FROM DIFFERENT OPM'S UNLESS SPECIFICALLY SHOWN ON DRAWINGS AND APPROVED BY DSA.

EXISTING CONDITIONS

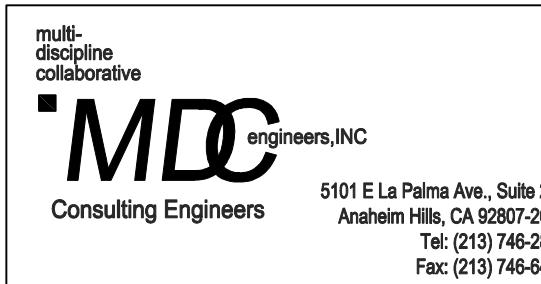
- THE INFORMATION ON THESE DRAWINGS WAS OBTAINED FROM THE BEST SOURCES AVAILABLE BUT IT IS NOT TO BE ASSUMED CORRECT IN ALL ASPECTS. THE CONTRACTOR SHALL VERIFY IN THE FIELD ALL EXISTING CONDITIONS. INFORM THE ARCHITECT AND DISTRICT'S REPRESENTATIVE OF ANY DISCREPANCIES, CONFLICTS PRIOR TO COMMENCING WORK. DO NOT PROCEED WITHOUT APPROVAL BY THE DISTRICT'S REPRESENTATIVE, FOR ANY CHANGES, IF REQUIRED. THE CONTRACTOR IS ADVISED THAT THIS IS AN ALTERATION TO AN EXISTING STRUCTURE AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTING CONDITIONS.
- CONTRACTOR SHALL VISIT THE SITE TO SUBMITTAL OF BID & FAMILIARIZE HIMSELF W/ EXISTING CONDITIONS. SUBMITTAL OF BID SHALL BE ONLY AFTER CONTRACTOR HAS VISITED THE SITE. CONTRACTOR SHALL IDENTIFY ALL DISCREPANCIES FOUND AND INDICATE ON HIS BID THE CORRESPONDING COST IMPLICATIONS, IF ANY.

SHEET INDEX

P0.1	PLUMBING NOTES AND SYMBOLS LIST		
P1.0	PLUMBING SITE PLAN		
P1.1	PLUMBING DEMOLITION FLOOR PLAN		
P2.1	PLUMBING FLOOR PLAN		
P4.1	PLUMBING DETAILS		

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APP: 03-125098 INC:
REVIEWED FOR
SS ☒ FLS ☒ ACS ☒
DATE: 10/31/2025

REV	DESCRIPTION	DATE
	DWG_V1	04/25/25
	DWG_V2	07/15/25
	DWG_V3	10/07/25



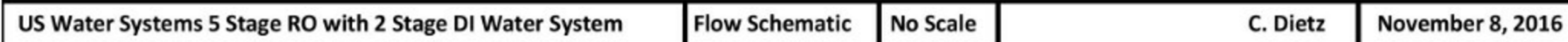
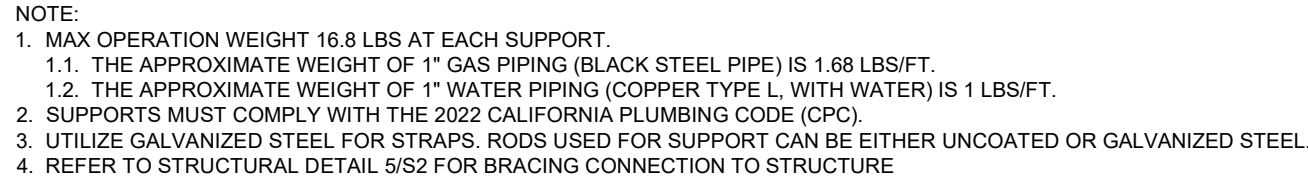
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SCHOOL DISTRICT

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PLUMBING NOTES AND SYMBOLS LIST

DATE	10/07/2025
CGA #	A# 03-125098 FILE NO. 19-H20
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POMONA UNIFIED
SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

DATE	10/07/2025
CSA #	A# 03-125098 FILE NO. 19-H20

P4.1

THE TOTAL MAX OPERATION WEIGHT IS 3.835 LBS/FT.
REFER TO 6/A9.1 FOR TYPICAL UTILITY CHASE DETAIL



SCALE	4
N.T.S.	

SCALE	2
N.T.S.	

LABORATORY UTILITY CHASE ARRANGEMENT DETAIL

SCALE	4
N.T.S.	