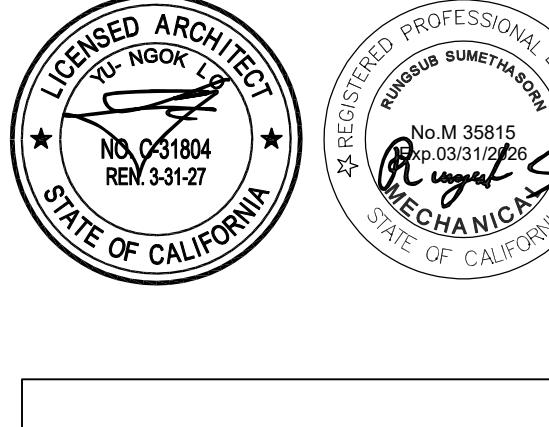


REV	DESCRIPTION	DATE
DWG_V1		04/25/25
DWG_V2		07/15/25
DWG_V3		10/07/25



multidisciplinary collaborative
MDC Engineers, Inc.

5101 La Palma Ave., Suite 205
Anaheim, CA 92806
Tel: (714) 746-2444
Fax: (714) 746-6463



SCIENCE LAB RENOVATION AT

GAREY HIGH SCHOOL
321 W. LEXINGTON AVE.
POMONA, CA 91766

POMONA UNIFIED
SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

MECHANICAL
NOTES AND
SYMBOLS LIST

PIPING	
SYMBOL	DESCRIPTION
—	DIRECTION OF SLOPE
—>	DIRECTION OF FLOW
—○—	PIPE UP
—○—	PIPE DOWN
—○—	PIPE UP/PIPE RISE
—○—	TOP CONNECTION - BRANCH LINE
—○—	BOTTOM CONNECTION-BRANCH LINE
—○—	TEE UP
—○—	TEE DOWN
—○—	PIPE SIZE (DIAMETER IN INCHES)

GENERAL	
SYMBOL	DESCRIPTION
—(N)	NEW WORK
—(E)	EXISTING WORK TO REMAIN
—(X)	EXISTING WORK TO BE REMOVED
RTD	EQUIPMENT IDENTIFICATION
—○—	POINT OF CONNECTION (POC) / POINT OF DISCONNECTION (POD)
—○—	UNION
—○—	BALL VALVE
—○—	CHECK VALVE
—○—	SHUT-OFF VALVE
—○—	AUTOMATIC SHUT-OFF VALVE
—○—	3-WAY VALVE
—○—	FLAME ARRESTOR
—○—	RECTANGULAR OR ROUND SUPPLY DIFFUSER OR REGISTER (SEE SCHEDULE). NAMEPLATE UNLESS INDICATED OTHERWISE. EXAMPLE: 12X12A-100 REFERS TO TAG A WITH 12"X12" NECK AND 100 CFM OR 10-200 REFER TO TAG B WITH 10" ROUND NECK AND 200 CFM
—○—	RECTANGULAR OR ROUND EXHAUST GRILLE OR REGISTER (SEE SCHEDULE)
—○—	LINEAR SLOT DIFFUSER (SEE SCHEDULE FOR NUMBER OF SLOTS). 2-WAY THROW UNLESS INDICATED OTHERWISE. EXAMPLE: 10-48-SN-250 REFERS TO 10" ROUND NECK, 48 SLOT LENGTH, TAG SN AND 250 CFM
NECK SIZE-TAG-CFM	NECK SIZE-TAG-CFM
NECK SIZE-TAG-CFM	NECK SIZE-TAG-CFM
NECK SIZE-TAG-CFM	NECK SIZE-TAG-CFM
NECK SIZE-LENGTH-TAG-CFM	NECK SIZE-LENGTH-TAG-CFM
—○—	VOLUME DAMPER
—○—	RECTANGULAR DUCT SIZE (WIDTH x DEPTH x INCHES)
—○—	ROUND DUCT SIZE (DIAMETER IN INCHES)
—○—	WALL SUPPLY GRILLE OR REGISTER (SEE SCHEDULE)
—○—	WALL RETURN GRILLE OR REGISTER (SEE SCHEDULE)
—○—	VOLUME DAMPER
—○—	FIRE, SMOKE OR FIRE/SMOKE DAMPER

CONTROLS	
SYMBOL	DESCRIPTION
—	THERMOSTAT OR THERMOMETER
—○—	TIMER SWITCH
—○—	CARBON DIOXIDE SENSOR
DSD	DUCT SMOKE DETECTOR

GENERAL SYMBOLS	
1A	NUMBERED NOTE FOR SHEET WHERE SHOWN
E1.0	DETAIL DESIGNATION FOR ITEM & DRAWING NUMBER

MECHANICAL CALGREEN CODES

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

5.504.3 COVERAGE OF DUCT OPENINGS AND PROTECTION OF MECHANICAL EQUIPMENT DURING CONSTRUCTION AT THE TIME OF ROUGH INSTALLATION AND DURING STAGING 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 AGENCEY TO REDUCE THE AMOUNT OF DUST, WATER AND DEBRIS WHICH MAY ENTER THE SYSTEM.

5.504.3.3 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 (MER) OF 13. MERV 13 FILTERS SHALL BE INSTALLED IN ALL MECHANICALLY VENTILATED SPACES. SEE RECOMMENDATIONS FOR MAINTENANCE WITH FILTERS OF THE SAME VALUE SHALL BE INCLUDED IN THE OPERATION AND MAINTENANCE MANUAL.

5.504.5.1 LABELING: INSTALLED FILTERS SHALL BE CLEARLY LABELED BY THE MANUFACTURER INDICATING THE MER RATING.

5.505.1 INDOOR MOISTURE CONTROL: BATHS SHALL MEET OR EXCEED THE PROVISIONS OF CALIFORNIA BUILDING CODE, CCR, TITLE 24, PART 2, SECTIONS 1202 (VENTILATION) AND CHAPTER 14 (EXTERIOR WALLS). FOR ADDITIONAL MEASURES SEE SECTION 5.40.2 OF THIS CODE.

5.506.1 OUTDOOR AIR DELIVERY: FOR MECHANICALLY OR NATURALLY VENTILATED SPACES IN BUILDINGS, MEET THE MINIMUM REQUIREMENTS OF SECTION 120.1 (REQUIREMENTS FOR VENTILATION) OF THE CALIFORNIA ENERGY CODE, OR THE APPLICABLE LOCAL CODE, WHICHEVER IS MORE STRINGENT, AND DIVISION 1, CHAPTER 4 OF CCR, TITLE 24.

TESTING NOTES

1. THE CALIFORNIA ENERGY CODE SECTION 15-103 REQUIRES ACCEPTANCE TESTING ON ALL NEWLY INSTALLED LIGHTING CONTROLS, MECHANICAL SYSTEMS, ENVELOPES, AND PROCESS EQUIPMENT AFTER INSTALLATION AND BEFORE PROJECT COMPLETION. AN ACCEPTANCE TEST IS A FUNCTIONAL PERFORMANCE TEST TO HELP ENSURE THAT NEWLY INSTALLED EQUIPMENT IS OPERATING AND IN COMPLIANCE WITH THE ENERGY CODE.

2. MECHANICAL SYSTEM ACCEPTANCE TESTS MUST BE PERFORMED BY A CERTIFIED MECHANICAL ATT FOR PROJECTS SUBMITTED ON OR AFTER OCTOBER 1, 2021.

3. ENVELOPE AND PROCESS EQUIPMENT ACCEPTANCE TESTS SHALL BE PERFORMED BY THE INSTALLING CONTRACTOR, ACCEPTABLE TO ENGINEER/ARCHITECT OF RECORD AND THE OWNER'S AGENT.

4. A LISTING OF CERTIFIED ATT CAN BE FOUND AT: <https://www.energy.ca.gov/programs-and-topics/programs/acceptance-test-technician-certification-provider-program/acceptance>

5. THE ACCEPTANCE TESTING PROCEDURES MUST BE REPEATED, AND DEFICIENCIES MUST BE CORRECTED BY THE BUILDER OR INSTALLING CONTRACTOR UNTIL THE CONSTRUCTION/INSTALLATION OF THE SPECIFIED SYSTEMS CONFORM AND PASS THE REQUIRED ACCEPTANCE CRITERIA.

6. PROJECT INSPECTORS WILL COLLECT THE FORMS TO CONFIRM THAT THE REQUIRED ACCEPTANCE TESTS HAVE BEEN COMPLETED.

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

APPLICABLE CODES AS OF JANUARY 1, 2023

TITLE 24 C.C.R., PART 1 2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE.

TITLE 24 C.C.R., PART 2 2022 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS

TITLE 24 C.C.R., PART 3 2022 CALIFORNIA ELECTRICAL CODE (CEC)

2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 4 2022 CALIFORNIA MECHANICAL CODE (CMC)

2022 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 5 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 6 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 13 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 14 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 15 2022 CALIFORNIA REFERENCED STANDARDS CODE

TITLE 19 C.C.R., PART 1 2022 CALIFORNIA PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

TITLE 19 C.C.R., PART 2 2022 CALIFORNIA ENERGY CODE

TITLE 19 C.C.R., PART 3 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 11 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 12 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 16 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 17 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 18 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 19 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 20 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 21 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 22 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 23 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 24 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 25 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 26 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 27 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 28 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 29 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 30 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

TITLE 24 C.C.R., PART 31 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 32 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 33 2022 CALIFORNIA FIRE CODE (CFC)

2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL

TITLE 24 C.C.R., PART 34 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN)

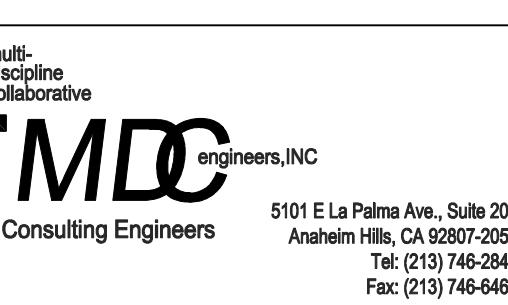
TITLE 24 C.C.R., PART 35 2022 CALIFORNIA PLUMBING CODE (CP)

2023 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO)

TITLE 24 C.C.R., PART 36 2022 CALIFORNIA ENERGY CODE

TITLE 24 C.C.R., PART 37 2022 CALIFORNIA FIRE CODE (CFC)

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



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

POMONA UNIFIED
SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

MECHANICAL
SITE PLAN

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

Sheet

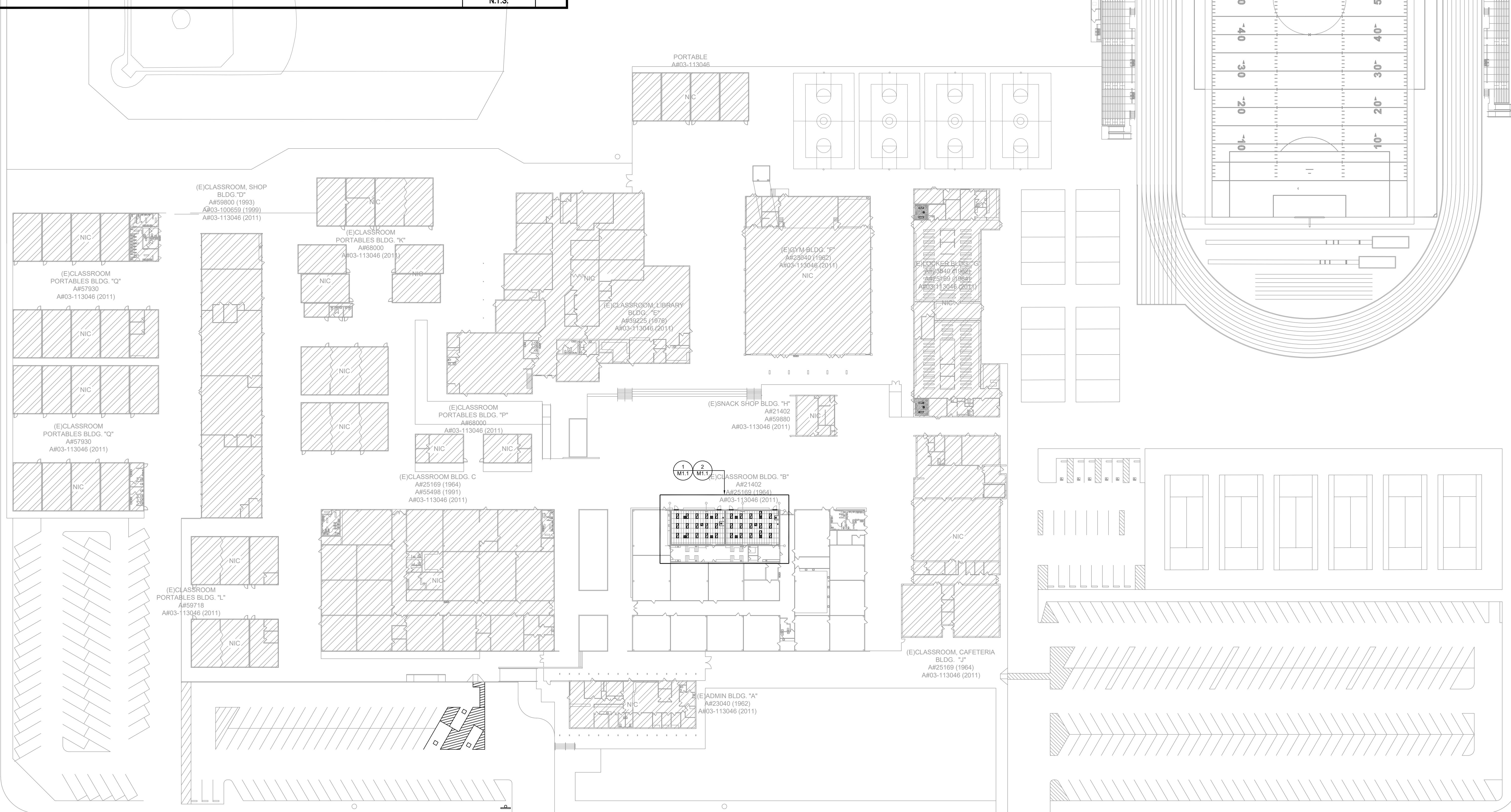
M1.0



VICINITY MAP

SCALE
N.T.S.

2



NORTH

REFERENCE NOTES

- 1D DEMOLISH AND DISPOSE OF EXISTING SUPPLY AIR DIFFUSER, AS SHOWN.
- 1 EXISTING HVAC SYSTEM. EXTEND FLEXIBLE DUCT FROM EXISTING METAL SUPPLY DUCTS TO CONNECT NEW SUPPLY AIR DIFFUSER (PROVIDE TRANSITIONS AS NEEDED). RE-BALANCE THE ENTIRE AIR DISTRIBUTION SYSTEM TO ACHIEVE THE MAXIMUM CFM (CUBIC FEET PER MINUTE) REQUIRED FOR THE REMODEL PLAN. TEST, ADJUST, AND BALANCE THE SYSTEM TO ENSURE IT DELIVERS THE SPECIFIED CFM.
- 2D REMOVE AND DISPOSE OF THE EXISTING FUME HOOD AND EXHAUST DUCT. PATCH EXISTING ROOF PENETRATION PER ROOFING REQUIREMENT.
- 2 PROVIDE NEW FUME HOOD, INSTALLED PER MANUFACTURE INSTALLATION REQUIREMENT. PROVIDE 12"Ø DUCT (WITH A COLLAR AND NECESSARY TRANSITIONS) TO CONNECT THE FUME HOOD TO THE EXHAUST DUCT THROUGH THE ROOF. PROVIDE ROUND BACK STATIC VENT WITH CURB MOUNT FLANGE (ROOFVENTS # RBV-12-C4-CMF) 12" DIAMETER 4" TALL COLLAR WITH ROOF CURB (ROOFVENTS # RC-12-H6). COORDINATE ROOF PENETRATION AND ROOF PATCHING WITH ROOFING COMPANY (GARLAND) TO MAINTAIN ROOF WARRANTY. REFER TO THE PLUMBING AND ELECTRICAL DRAWINGS FOR REQUIREMENTS.
- 3 EXISTING EXHAUST FAN TO REMAIN, EXTEND AND RECONNECT EXISTING DUCTS TO NEW CEILING RETURN DIFFUSER LOCATION, REPLACE EXISTING RETURN DIFFUSER WITH NEW.
- 4 EXISTING THERMOSTAT TO BE RELOCATED TO NEW WALL (+48" AFF) WITH EXTENSION BOX. RECONNECT AND EXTEND CONDUIT AND WIRING AS REQUIRED.

IDENTIFICATION STAMP				
V. OF THE STATE ARCHITECT				
PP: 03-125098 INC:				
REVIEWED FOR				
<input checked="" type="checkbox"/>	FLS	<input checked="" type="checkbox"/>	ACS	<input checked="" type="checkbox"/>
THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES				
DATE: <u>10/31/2025</u>				



Ynl Architects
architecture | interior

SCIENCE LAB RENOVATION AT

POMONA UNIFIED
SCHOOL DISTRICT

MECHANICAL FLOOR PLAN

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

M1.1

(E)CLASSROOM BLDG. "B"

A#21402

#25169 (1964)

03-113046 (2011)

(E)HVAC SYSTEM

A#03-21402 (1961)

SCIENCE LAB [B112] & [B113] BUILDING "B" - MECHANICAL DEMOLITION FLOOR PLAN

SCALE	1
1/4" = 1'-0"	

III) CLASSROOM BLDG. "B"

A#21402

A#25169 (1964)

A#03-113046 (2011)

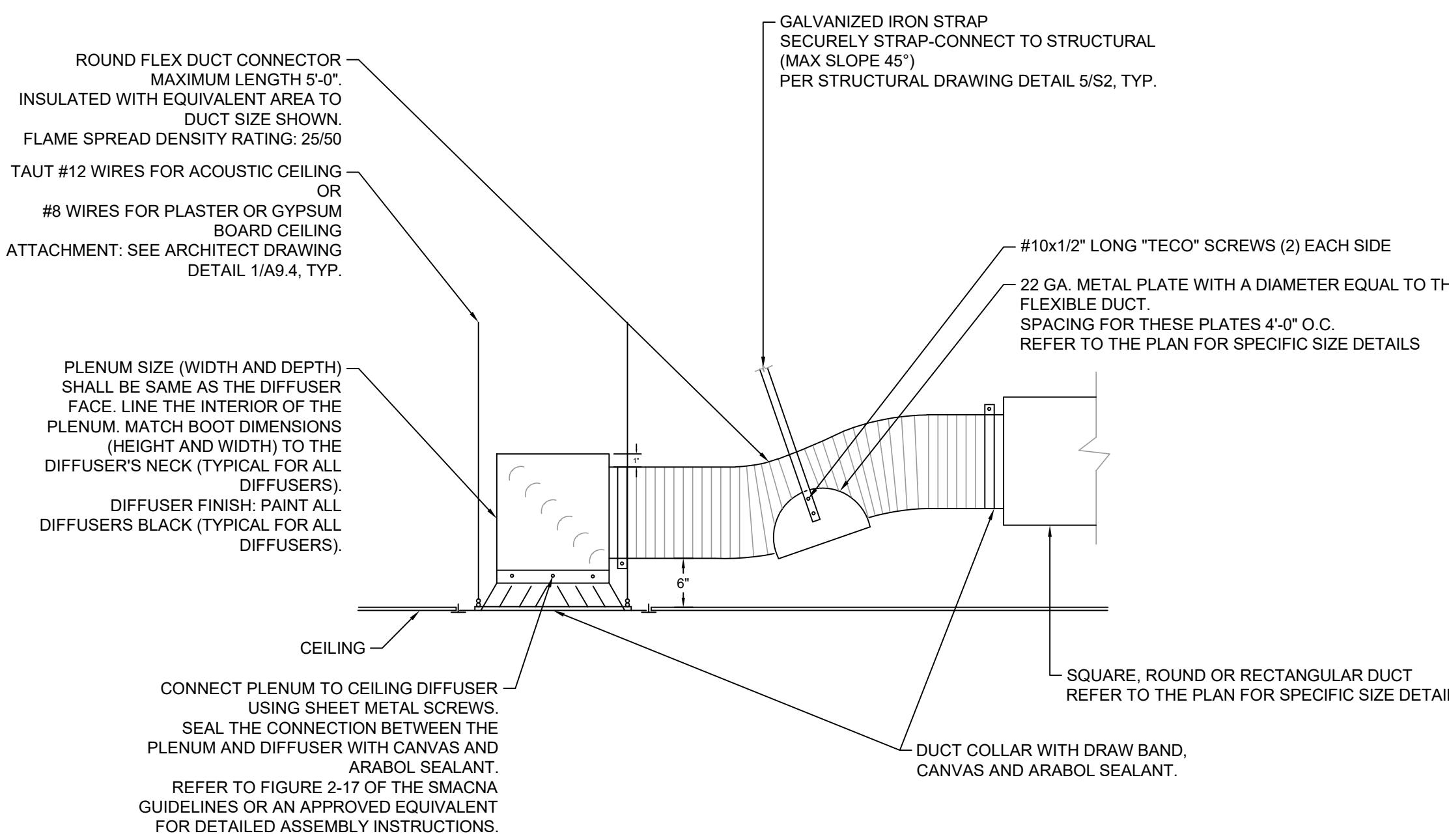
(E)HVAC SYSTEM

A#03-21402 (1961)

SCIENCE LAB [B112] & [B113] BUILDING "B" - MECHANICAL FLOOR PLAN

SCALE	2
1/4" = 1'-0"	

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



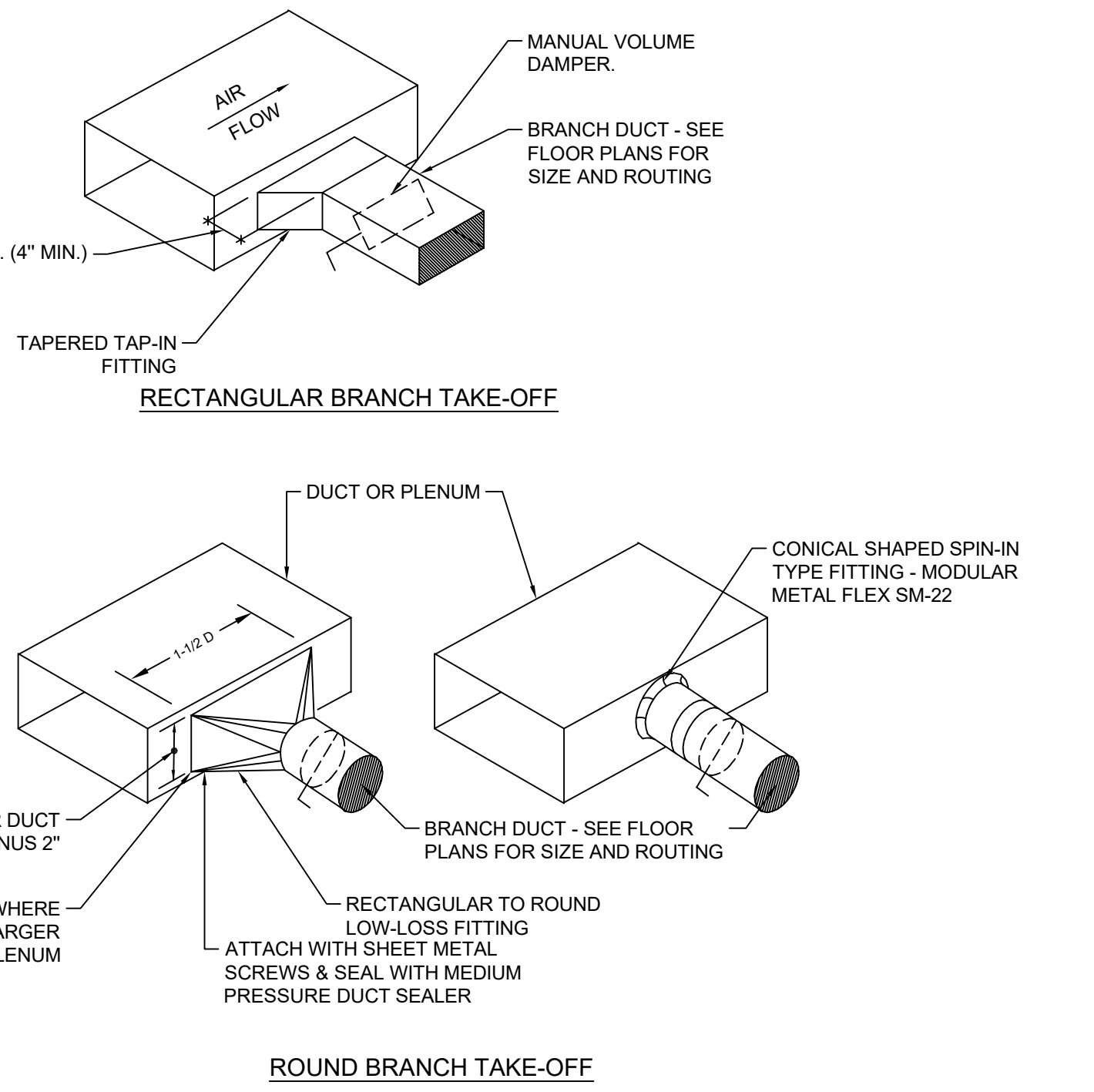
NOTE:
1. CONNECTIONS FOR RETURN, TRANSFER, AND EXHAUST CEILING GRILLES/REGISTERS ARE TYPICAL.
2. FLEXIBLE DUCT SHALL BE USED FOR ACCESSIBLE CEILINGS ONLY. FLEXIBLE DUCT ABOVE NON-ACCESSIBLE CEILINGS IS NOT ACCEPTABLE.

CEILING DIFFUSER INSTALLATION

SCALE

NOT TO SCALE

1



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

BRANCH DUCT TAKE-OFF DETAIL

SCALE

N.T.S.

2



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

POMONA UNIFIED
SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

MECHANICAL
DETAILS

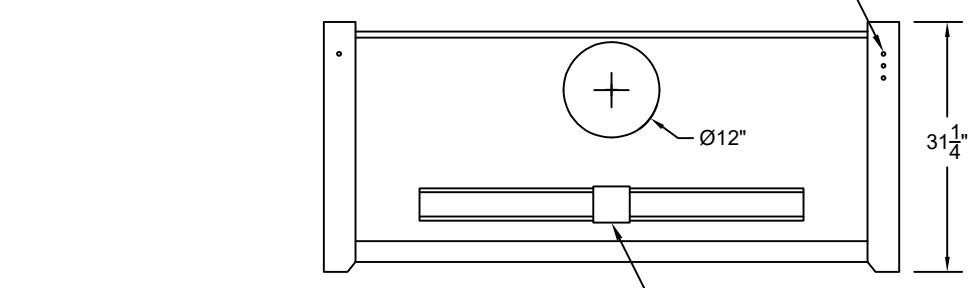
FUME HOOD				
13.33 SQ. FT.	75 FPM	100 FPM	125 FPM	150 FPM
CFM	1000	1335	1665	2000

S.P. LOSS

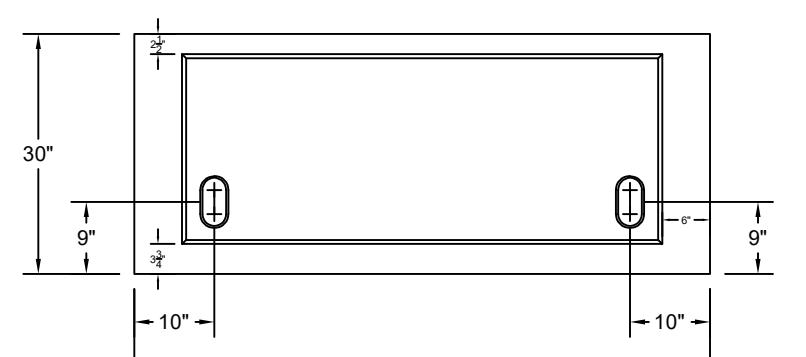
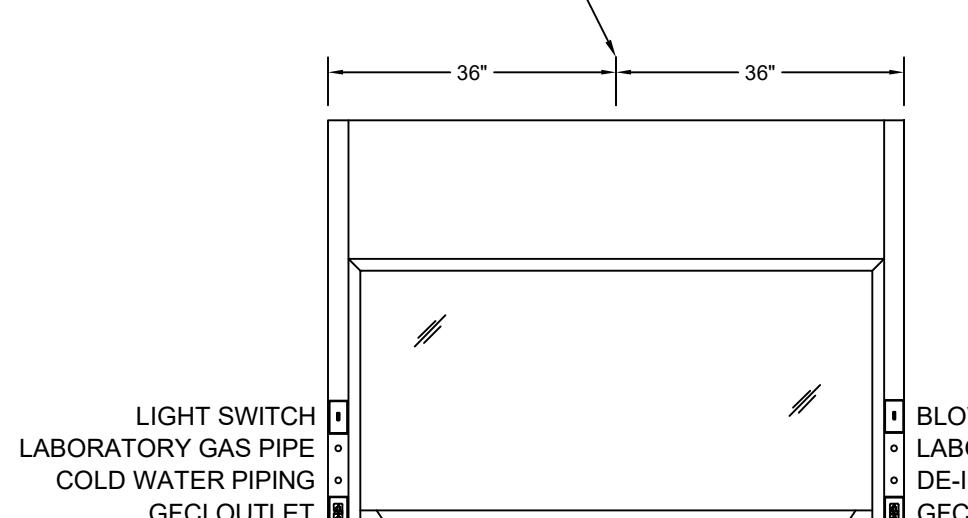
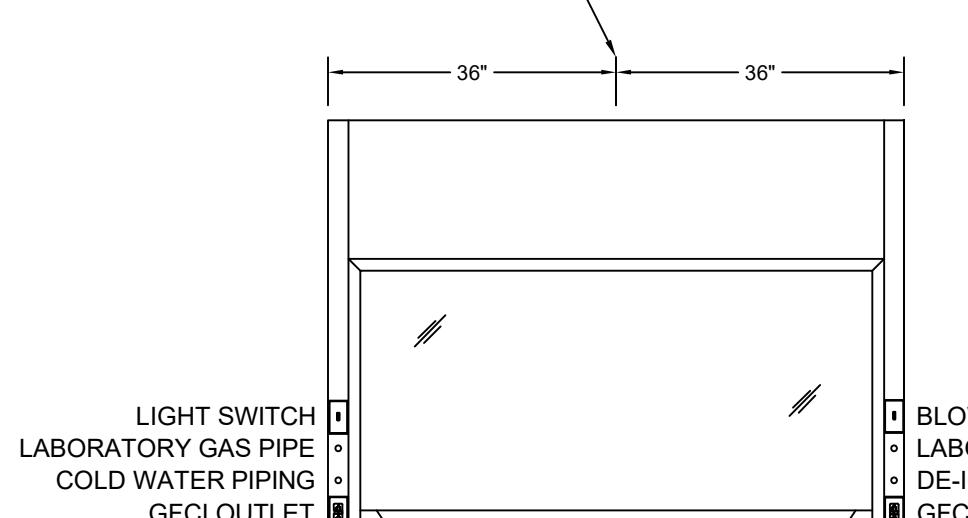
0.32 0.40 0.50 0.62

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

PLUMBING SERVICE CONNECTION AT TOP OF HOOD



CENTER LINE OF DUCT COLLAR



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.

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

M4.1

SCALE
N.T.S.

9

FUME HOOD DETAIL

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

APPLICABLE CODES AS OF JANUARY 1, 2023

TITLE 24 C.C.R., PART 19: 2022 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE.
 (2021 INTERNATIONAL BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)

TITLE 24 C.C.R., PART 20: 2022 CALIFORNIA ELECTRICAL CODE (CEC)
 (2020 INTERNATIONAL ELECTRICAL CODE OF THE NATIONAL ELECTRICAL CODE COUNCIL, NFPA)

TITLE 24 C.C.R., PART 24: 2022 CALIFORNIA MECHANICAL CODE (CMC)
 (2021 UNIFORM MECHANICAL CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)

TITLE 24 C.C.R., PART 25: 2022 CALIFORNIA PLUMBING CODE (CPC)
 (2021 UNIFORM PLUMBING CODE OF THE INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS, IAPMO)

TITLE 24 C.C.R., PART 26: 2022 CALIFORNIA FIRE CODE (CFC)
 (2021 INTERNATIONAL FIRE CODE OF THE INTERNATIONAL CODE COUNCIL, WITH CALIFORNIA AMENDMENTS)

TITLE 24 C.C.R., PART 27: 2022 CALIFORNIA EXISTING BUILDING CODE (CEBC)
 (2021 INTERNATIONAL EXISTING BUILDING CODE OF THE INTERNATIONAL CODE COUNCIL, WITH AMENDMENTS)

TITLE 24 C.C.R., PART 28: 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE (CALGREEN CODE)
 (2020 CALIFORNIA GREEN BUILDING STANDARDS CODE, WITH CALIFORNIA AMENDMENTS)

TITLE 19 - C.C.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 (SM) 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:

5.303.6 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.

LEGEND

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

PLUMBING NOTES

NOTE: THIS DOCUMENT FORMS A PART OF THE SPECIFICATIONS AND SHALL BE CONSIDERED THE SAME AS IF ATTACHED THERETO.

- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND AUTHORITIES HAVING JURISDICTION, AND THE LISTED CALIFORNIA CODE OF REGULATIONS (C.C.R.)
- BEFORE STARTING ANY WORK, VERIFY THE SIZE AND TERMINATION OF PIPING AND SUITABLE PROPER ROUTES OF PIPING TO CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE.
- DRAWINGS INDICATE THE SIZE AND TERMINATION OF PIPING AND SUITABLE PROPER ROUTES OF PIPING TO CONFORM TO THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE AND THE CALIFORNIA GREEN BUILDING STANDARDS CODE.
- THE CONTRACTOR SHALL INSTALL PIPING IN SUCH A MANNER AS TO CONFORM TO THE STRUCTURE, AVOID OBSTRUCTIONS, PRESERVE HEADROOM, KEEP OPENINGS AND PASSAGeways CLEAR, AND MAKE ALL EQUIPMENT REQUIRING INSPECTION, MAINTENANCE, AND REPAIR ACCESSIBLE WITHOUT FURTHER INSPECTIONS OR ADDITIONAL WORK.
- THE WORK OF THIS PROJECT INVOLVES THE REPLACEMENT OF EXISTING WASTE PIPING ABOVE GROUND AS INDICATED ON THE DRAWINGS. VISIT THE JOB SITE TO DETERMINE THE EXTENT OF WORK REQUIRED BY THE CONSTRUCTION ACTIVITIES. THE DRAWINGS FOR THESE AREAS SHOW THE CHANGES TO BE MADE, RELOCATE, REARRANGE, RELOCATE, REMOVE EXISTING PIPING AND RELATED APPURTENANCES AS REQUIRED TO ACCOMMODATE THE CHANGES AND ADDITIONS SHOWN.
- THE ALTERATION OF THE EXISTING CALIFORNIA SANITARY WASTE PIPING TO NEW PVC SCHEDULE 80 PIPING IS TO BE PRE-ARRANGED WITH THE CONTRACTOR.
- UNLESS OTHERWISE NOTED, EXISTING PIPING AND RELATED APPURTENANCES BEING REMOVED SHALL BE DISPOSED OF OFF-SITE AT THE CONTRACTOR'S EXPENSE.

7. ALL WORK THAT INVOLVES "SHUT-DOWN" OF EXISTING UTILITIES ON PORTIONS THEREOF SHOULD BE DONE AT SUCH TIMES THAT WILL CAUSE THE LEAST INCONVENIENCE TO THE DISTRICTS ACTIVITIES. THE EXACT TIME AND LENGTH OF "SHUT-DOWN" SHALL BE PRE-ARRANGED WITH THE DISTRICT AND SCHOOL SITE AT LEAST 72 HOURS IN ADVANCE OF THE REQUIRED SHUT-DOWN.

8. ALL EXISTING PLUMBING PIPING SYSTEMS SHALL BE RELOCATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE "SMACNA" GUIDELINES FOR SEISMIC RESTRAINTS OF MECHANICAL AND PLUMBING PIPING SYSTEMS.

9. EXPOSED HOT WATER SUPPLY PIPE, TRAP, AND DRAIN AT "ACC" OR "D-A" LOCATIONS WITH HOT WATER SHALL BE ISOLATED.

10. RELOCATED PLUMBING PIPING SYSTEMS SHALL BE SHOWN ON DRAWINGS WITHOUT PRIOR APPROVAL FROM THE DISTRICT AND ENGINEER.

11. AESTHETICS ARE A VERY IMPORTANT COMPONENT OF THIS PROJECT. INSTALLATION OF PLUMBING WORK SHALL BE OF THE HIGHEST QUALITY AND CRAFTSMANSHIP POSSIBLE.

12. RELOCATED PLUMBING PIPING THAT IS EXPOSED OR WILL BE EXPOSED DURING THE DEMOLITION AND NEW PIPING INSTALLATION. COORDINATE AND VERIFY (E) PIPING PRIOR TO REMOVAL.

13. ALL BRANCH PIPING THAT WILL BE REMOVED SHALL BE CAPEO TO THE NEAREST ACTIVE TEES.

14. ALL EXISTING PLUMBING PIPING SYSTEMS SHALL BE RELOCATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CALIFORNIA PLUMBING CODE.

15. AFTER AWARD OF CONTRACT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADEQUATE PROTECTION OF ALL EXISTING STRUCTURES (BOTH EXTERIOR AND INTERIOR) WHILE AND DURING THE WORK AREA, ANY EXISTING STRUCTURES AND/OR IMPROVEMENTS DAMAGED DURING CONSTRUCTION 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 THE USE.

16. ALL EXISTING PLUMBING PIPING SYSTEMS SHALL BE SHOWN ON DRAWINGS WITHOUT PRIOR APPROVAL FROM THE DISTRICT AND ENGINEER.

17. THE LOCATIONS OF EXISTING AND NEW UNDERGROUND UTILITIES, WHERE SHOWN ON THE DRAWINGS, ARE APPROXIMATE AND HAVE NOT BEEN IDENTIFIED AS TO EXACT LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE EXACT LOCATION OF THESE UTILITIES, POINTS OF CONNECTIONS AND PROPER SLOPES BEFORE CONDUCTING WORK. FIELD VERIFICATION AND COORDINATION AS REQUIRED, AND DAMAGE TO EXISTING UNDERGROUND UTILITIES SHALL BE REPAIRED AND RESTORED TO THE ORIGINAL CONDITION IMMEDIATELY WITHOUT INTERRUPTION TO THE OPERATION OF PLUMBING SYSTEMS.

18. OCCUPANTS OF THE EXISTING BUILDING SHALL NOT BE INCONVENIENCED DUE TO THE CONTRACTOR'S WORK DEBRIS, ETC. ENTRANCES AND CORRIDORS SHALL BE PROTECTED AND KEPT FREE OF OBSTRUCTIONS. THE OWNER SHALL BE NOTIFIED IN ADVANCE OF THE TIME OF DELIVERY OF EQUIPMENT TO AVOID INTERRUPTIONS.

19. UPON COMPLETION OF THE PROJECT, THE CONTRACTOR SHALL PROVIDE THE OWNER WITH WRITTEN CERTIFICATION THAT ALL MATERIALS USED ON THIS PROJECT ARE ASBESTOS-FREE.

20. PLUMBING PIPING SYSTEMS SHALL BE CAULKED TO ALL NEW WATER PIPING PASSING THROUGH THE SLAB ON GRADE AND WALLS.

21. THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH A WRITTEN SCHEDULE OF THE PROJECT PRIOR TO THE START OF CONSTRUCTION.

22. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE SECURITY OF THE EXISTING PLUMBING SYSTEMS, OR THE EXISTING PLUMBING SYSTEMS SHALL NOT BE SECURED BY THE CONTRACTOR.

23. WHEN THE CONTRACTOR HAS BEEN AWARDED THE CONTRACT, THE CONTRACTOR SHALL PROVIDE THE DISTRICT WITH WRITTEN CERTIFICATION THAT STUDENTS CAN ACCESS TO THE PROJECT AREA OR THE CONTRACTOR'S STAGING AREA.

24. 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.

25. THE DISTRICT SHALL BE NOTIFIED IN ADVANCE OF TIMES OF EQUIPMENT OR MATERIALS DELIVERY TO AVOID INTERFERENCE WITH NORMAL ACTIVITY ON THE SITE.

27. 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.

28. PROVIDED PAVING SHALL BE REMOVED AND RELOCATED AS SHOWN ON DRAWINGS OR AS REQUIRED BY THE CONTRACTOR.

29. AT NO TIME DURING THE WORK, UNLESS THE CONTRACTOR SHALL THE CONTRACTOR OR, OR CAUSE TO BE PLACED ANY MATERIAL OR EQUIPMENT ETC. AT A LOCATION WHICH COULD BE CONSIDERED AS A HAZARD TO THE CONTRACTOR OR THE CONTRACTOR'S STAFF.

30. IF ASBESTOS-LEAD 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 BE NOTIFIED IN ADVANCE OF THE EXACT LOCATION OF THE ENCOUNTERED MATERIAL.

31. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING STRUCTURES AT THE WORK AREA FROM WEATHER AND OTHER INCLEMENT CONDITIONS. ANY DAMAGE INCURRED DUE TO FAILURE BY THE CONTRACTOR TO PROPERLY PROTECT SUCH WORK SHALL BE REPAIRED BY CONTRACTOR.

32. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED AND DEMOLISHED MATERIAL, WASTE AND DEBRIS CAUSED BY THE NEW WORK. THIS MATERIAL SHALL BE REMOVED BY THE CONTRACTOR OR PROVIDED BY THE CONTRACTOR AS A SEPARATE DISPOSED SITE.

33. CONTRACTOR SHALL NOT CAUSE DAMAGE OR IMPAIRMENT TO EXISTING OR NEW OR EXISTING STRUCTURAL ELEMENTS TO BE DONE ONLY WHEN APPROVED AND ACCEPTED BY THE DISTRICT & ENGINEER WITH THE APPROVAL OF DSA REPRESENTATIVE.

34. THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING STRUCTURES AT THE WORK AREA FROM WEATHER AND OTHER INCLEMENT CONDITIONS. ANY DAMAGE INCURRED DUE TO FAILURE BY THE CONTRACTOR TO PROPERLY PROTECT SUCH WORK SHALL BE REPAIRED BY CONTRACTOR.

35. ALL BRACING OF DUCTS AND PIPING SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES AS APPROVED BY DSA. WHERE BRACING DETAILS ARE NOT SHOWN ON DRAWINGS OR IN THE GUIDELINES, THE FIELD INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF ARCHITECT, STRUCTURAL ENGINEER AND DSA OR ENGINEER.

36. A COPY OF THE GUIDELINES PUBLISHED BY SMACNA AND APPROVED BY DSA SHALL BE PROVIDED BY CONTRACTOR AND KEPT ON JOB SITE AT ALL TIMES.

GENERAL SYMBOLS

NUMBERED NOTE FOR SHEET WHERE SHOWN

DETAIL DESIGNATION FOR ITEM & DRAWING NUMBER

ABBREVIATION

ABS	-ACRYLONITRILE - BUTADIENE - STYRENE	(E)	-EXISTING TO BE REPLACED
ACC	-ACCESSIBLE	(F)	-FLOOR DRAIN
AF	-ACCESSORY FIXTURE FLOOR	(F)	-FLOOR FIXTURE CABINET
AP	-ACCESS PANEL	(F)	-FLOOR
BEL	-BELOW	(F)	-FIXTURE UNIT
BFR	-BRAZED FLUORIDE	(F)	-FLUID
CFH	-CUBIC FEET PER HOUR	(G)	-GALLONS PER MINUTE
CI	-CAST IRON	(GRD)	-GRADE
CLG	-COLD	(H)	-HEADER BIBB
CONN	-CONNECT/CONNECTION	(H)	-HEADER
CONT	-CONTINUATION	(IE)	-INVERT ELEVATION
DA	-DEAULATED ACCESS	(IE)	-MINIMUM ELEVATION
DN	-DOWN	(IP)	-PIPE
DE	-DRINKING FOUNTAIN	(MB)	-MINIMUM BIBB
DWG	-DRAWINGS	(MTD)	-MOUNTED
EF	-EXHAUST FAN	(O)	-ON CENTER EACH WAY
		(REQD)	-RELOCATE AS SHOWN
			(+X-Y)- MOUNTING HEIGHT TO CENTER OF DEVICE

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.1.8 THROUGH 1617A.1.26 AND ASCE 7-16 CHAPTERS 12, 26 AND 30:

1. ALL PERMANENT EQUIPMENT AND COMPONENTS.

2. TEMPORARY MOVING EQUIPMENT WHICH 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 RECEP TABLES HAVING A FLEXIBLE CABLE.

3. TEMPORARY EQUIPMENT 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.

4. 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 RESTING ON THE ADJACENT FLOOR OR ROOF LEVEL 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 REGARDING THE CHARGES AND LIABILITY, EXCEPT AS PROVIDED IN THE CONTRACT. THE PROJECT INSPECTOR WILL VERIFY THAT ALL COMPONENTS AND EQUIPMENT HAVE BEEN ANCHORED IN ACCORDANCE WITH ABOVE REQUIREMENTS.

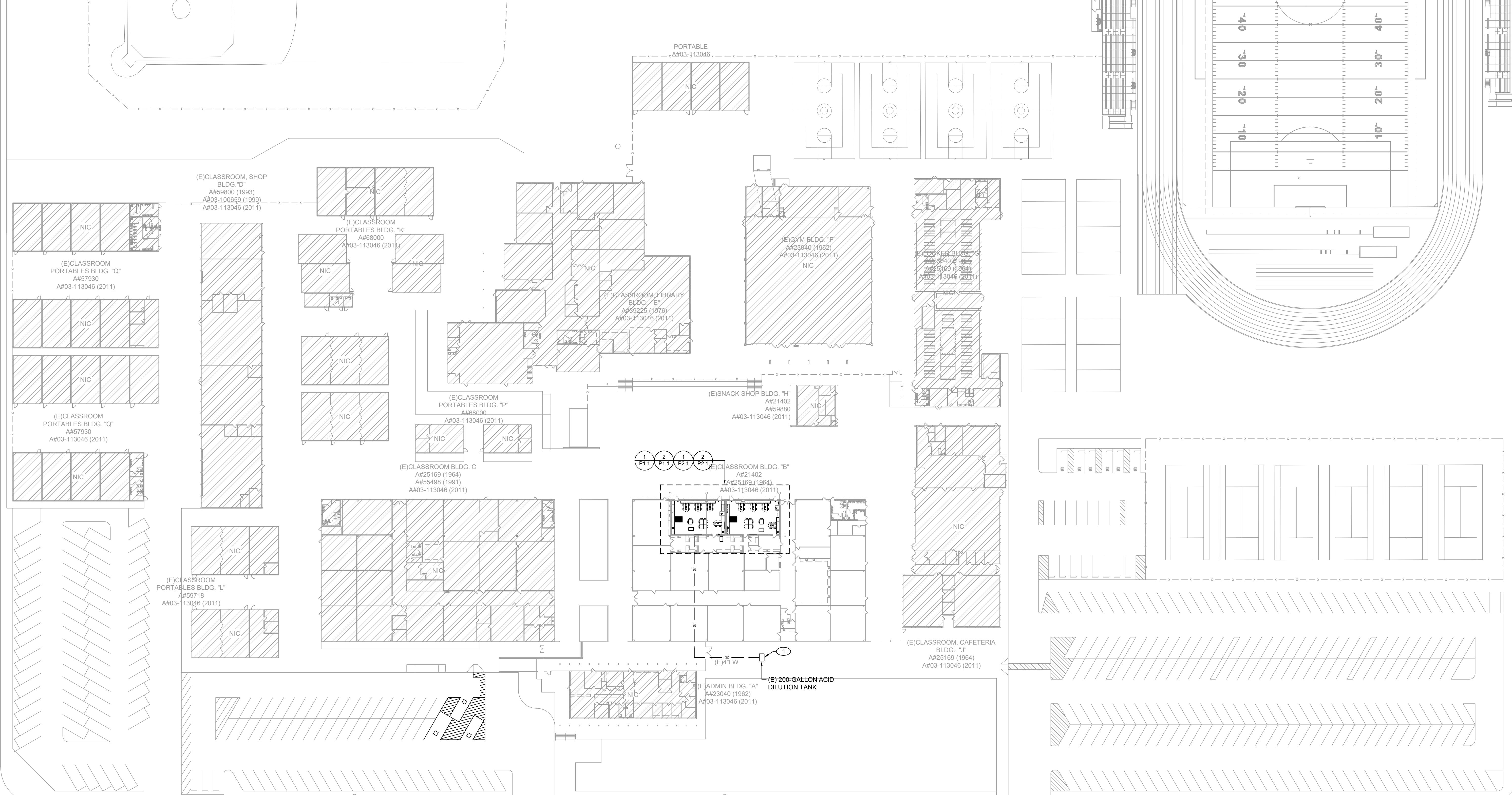
PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTES

PIPING, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-16 SECTION 13.4 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.1.28



VICINITY MAP

SCALE
N.T.S. 2

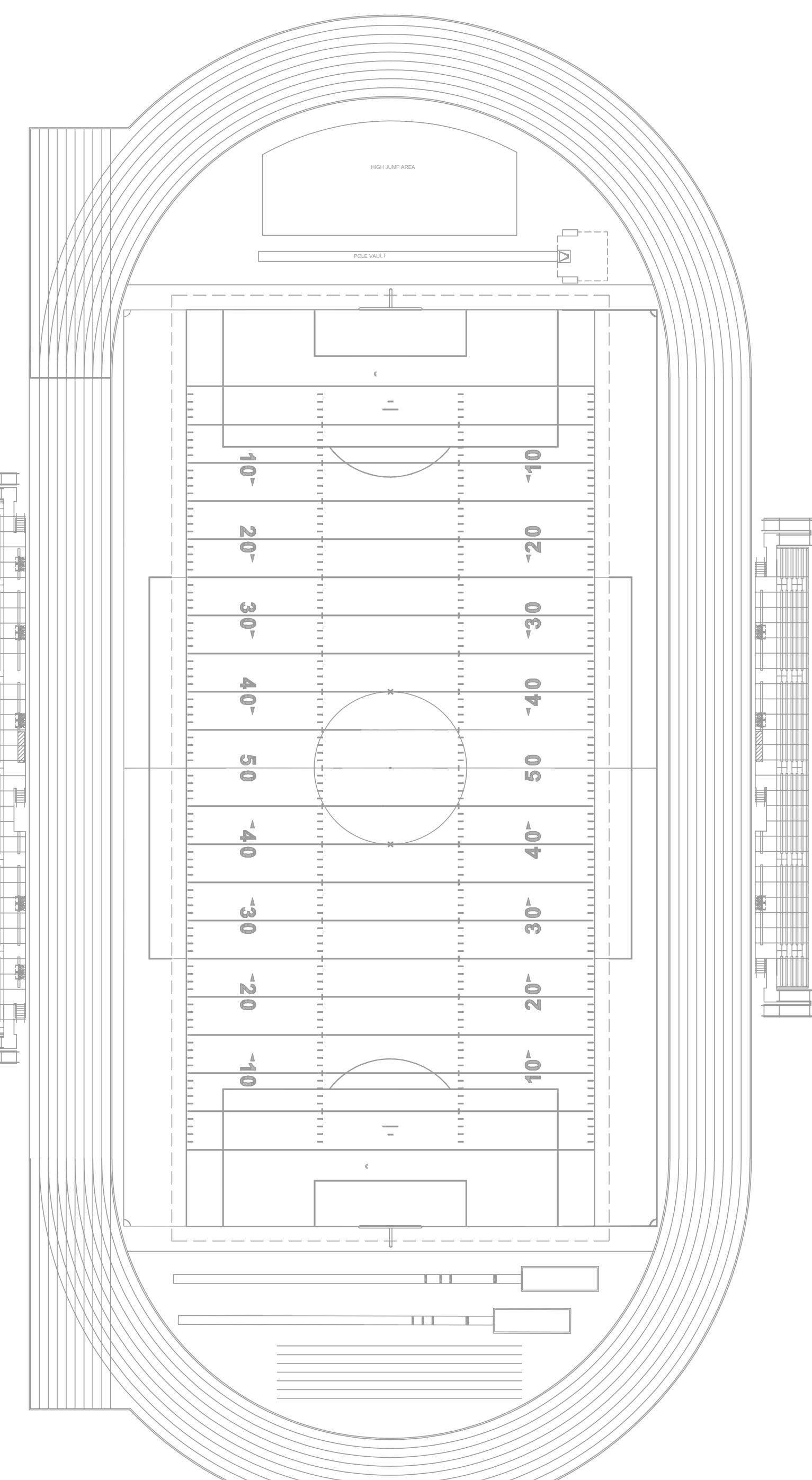


PLUMBING SITE PLAN

SCALE
1" = 40'-0"

REFERENCE
NORTH

1



GENERAL NOTES

- DEMOLISH AND REMOVE EXISTING ITEMS, MATERIALS, AND FINISHES AS NEEDED FOR THE NEW WORK.
- THE EXISTING CONDITIONS INDICATED IN THESE DRAWINGS ARE BASED ON AVAILABLE RECORDS PROVIDED BY THE CONTRACTOR. THESE DRAWINGS ARE NOT BEING PROVIDED AS AN ACCURATE OR COMPLETE. THE ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS, INCLUDING THE EXISTING PLUMBING, DRAIN, VENT, AND AIR CONNECTIONS, POC (POINT OF CONNECTION) LOCATIONS, INVERT ELEVATIONS, AND FIXTURE LOCATIONS, BEFORE DEMOLITION AND CONSTRUCTION BEGIN. EXISTING FIXTURES, PIPING, AND FOOTINGS SHOWN ARE FOR DEMOLITION ONLY.
- AFTER DEMOLITION OF PLUMBING PIPING INDICATED, ALL REMAINING EXISTING PLUMBING SHALL BE THOROUGHLY FLUSHED AND CLEANED PRIOR TO NEW PLUMBING PIPING INSTALLED FROM POC TO DRAIN, VENT, AND AIR CONNECTIONS.
- ALL EXISTING PLUMBING FIXTURES AND ASSOCIATED WASTE, VENT, AND HOT/COLD WATER PIPING SHALL BE REMOVED AND DISPOSED OF BACK TO THE POC AT THE EXISTING WALL, AND CAPPED. ALL REMAINING EXISTING PLUMBING PIPING SHALL BE DISPOSED OF AS INDICATED.
- THE CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION AND NOTIFY THE CONSTRUCTION MANAGER OF ANY DISCREPANCIES ENCOUNTERED.
- PAINT/FINISH THE EXISTING WALLS TO MATCH THE NEW WALL FINISH. PAINT/FINISH THE ENTIRE WALL TO MATCH THE EXISTING ADJACENT WALL FINISH. RESTORE ALL FINISHES AS REQUIRED.
- EXPOSED PLUMBING PIPING SHALL BE REINFORCED TO PREVENT DAMAGE TO EXISTING EQUIPMENT, PIPING, CONDUITS, CASEWORK, ETC. NOT RELATED TO THIS PROJECT.
- RECONNECT ALL EXISTING CW, WASTE, AND VENT PIPES FROM OTHER PLUMBING FIXTURES OUTSIDE OF THE CLASSROOMS TO THE NEW PIPES INSIDE THE CLASSROOMS.

REFERENCE NOTES

- (1) (E) 200-GALLON ACID DILUTION TANK
 - FLUSH ALL PIPING FROM THE LAB PLUMBING P.O.C. TO THE ACID NEUTRALIZING TANK, DRAIN, AND REMOVE ALL DEBRIS.
 - CLEAN THE EXISTING TANK SURFACES.
 - INSTALL NEW PIPE FITTINGS AT THE TANK FOR THE INLET, VENTS, AND DRAIN.
 - PROVIDE A NEW 42" O.D. TANK LID AND HARDWARE TO MATCH THE EXISTING TANK LID.
 - REINFORCE THE EXISTING TANK LID AND PLATE TO MATCH THE NEW HARDWARE. FIELD VERIFY AND MEASURE EXISTING COVER PLATE SIZES BEFORE FABRICATION.
 - PROVIDE LIMESTONE TO THE 200-GALLON ACID NEUTRALIZING TANK AT A RATE OF 13.4 LBS/GALON.

Ynl Architects
architecture | interior

multidisciplinary collaborative
MDC engineers,inc
Consulting Engineers

5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92707-2506
Tel: (714) 770-3344
Fax: (714) 770-8463



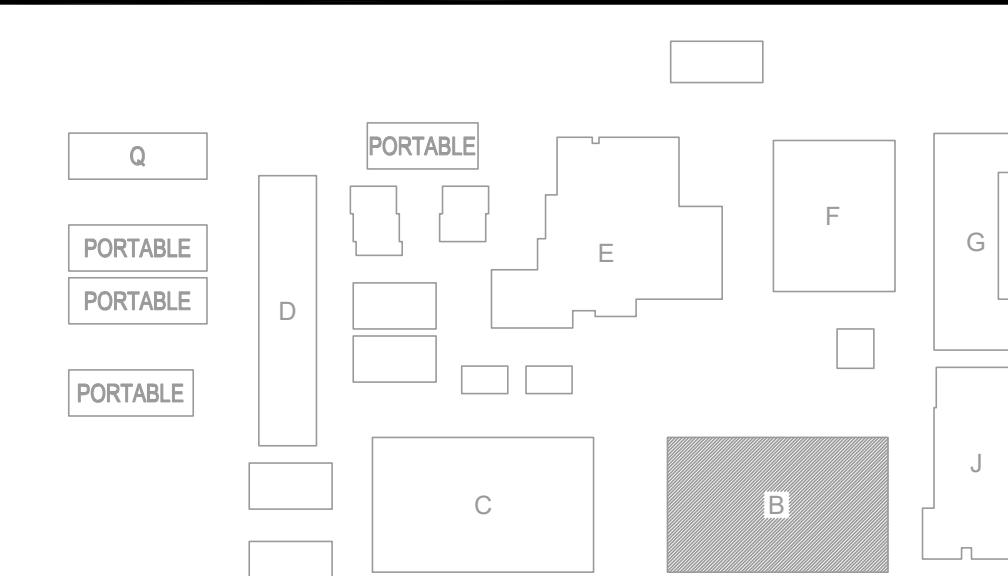
SCIENCE LAB
RENOVATION
AT
GAREY HIGH SCHOOL
321 W. LEXINGTON AVE.
POMONA, CA 91766

POMONA UNIFIED
SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

BUILDING SITE PLAN SYMBOLS LIST

■ EXISTING BUILDING AS PART OF THIS DSA APPLICATION
NIC EXISTING BUILDING NOT PART OF THIS DSA APPLICATION

KEY PLAN

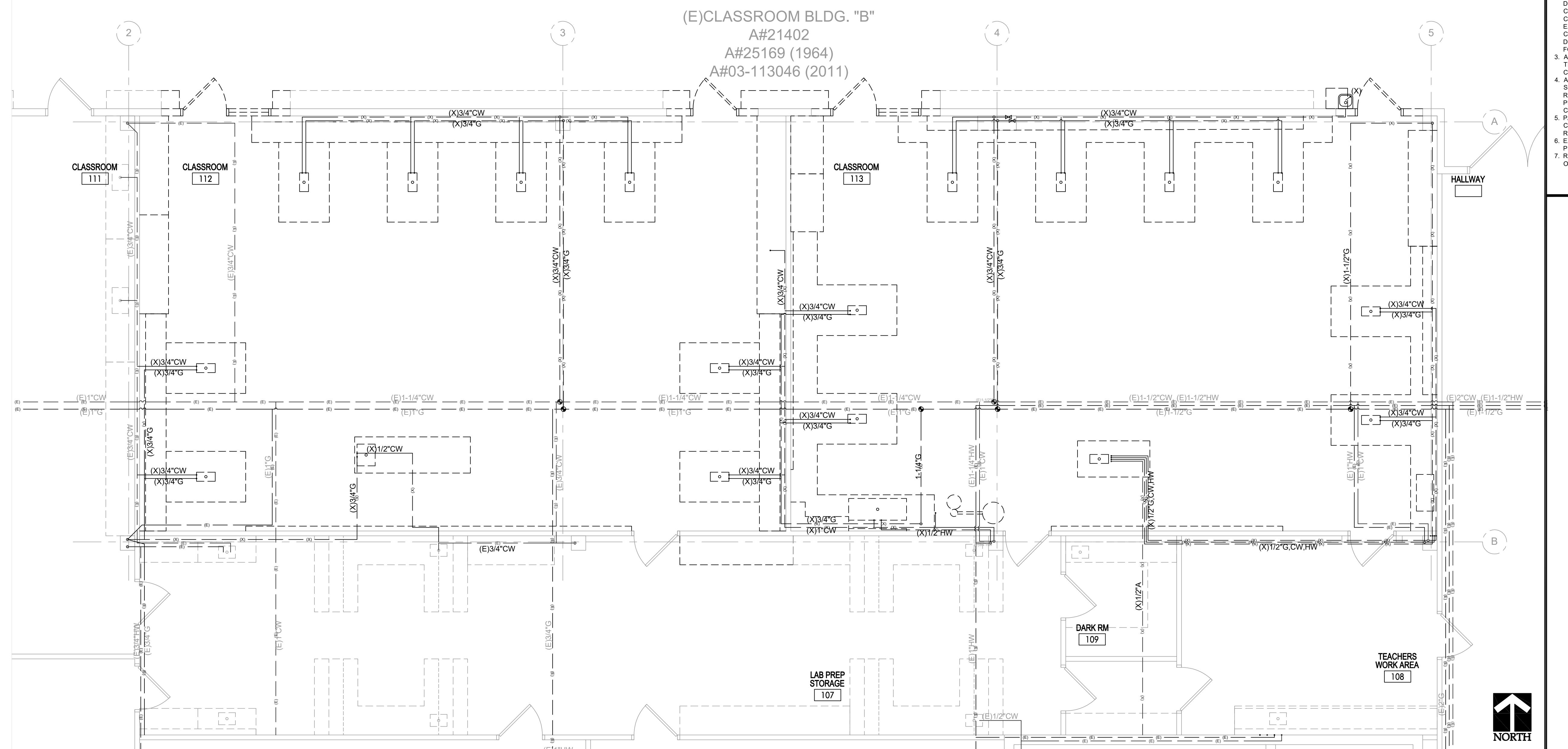


DATE 10/07/2025
DSA # 03-125098
FILE NO. 19-H20
SHEET

PLUMBING
SITE PLAN

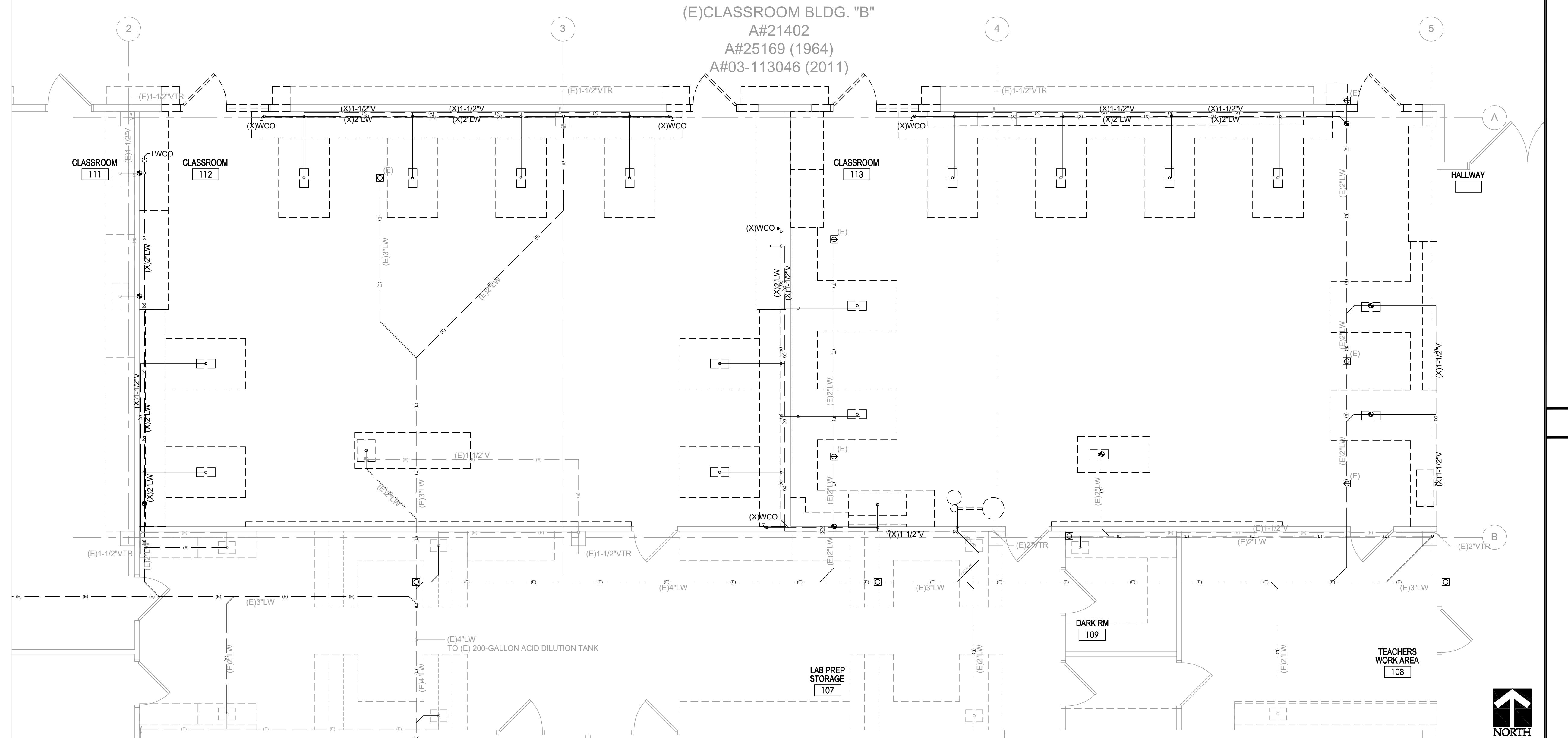
P1.0

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125098 INC:
REVIEWED FOR
SS FLS ACS
DATE: 10/31/2025



SCIENCE LAB [B112] & [B113] BUILDING "B" - PLUMBING DEMOLITION PLAN - CW & G

SCALE	1
$1/4" = 1'-0"$	



SCIENCE LAB [B112] & [B113] BUILDING "B" - PLUMBING DEMOLITION PLAN - W & V

SCALE
1/4" = 1'-0" 2

GENERAL NOTES

ELISH AND REMOVE EXISTING ITEMS, MATERIALS, AND FINISHES AS NEEDED FOR THE NEW
K.

EXISTING CONDITIONS INDICATED ON THESE DRAWINGS ARE BASED ON AVAILABLE RECORD
WINGS AND LIMITED FIELD VISUAL VERIFICATION, AND MAY NOT BE ENTIRELY ACCURATE OR
COMPLETE. THE ARCHITECT/ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. THE
TRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING CONDITIONS, INCLUDING THE
T LOCATIONS OF EXISTING WASTE, VENT, AND COLD/HOT WATER PIPES, THE POINT OF
NNECTION (POC), PIPING LOCATIONS, INVERT ELEVATIONS, AND FIXTURE LOCATIONS, BEFORE
ELITION AND CONSTRUCTION BEGIN. EXISTING FIXTURES, PIPING, AND FOOTINGS SHOWN ARE
REFERENCE ONLY.

UR DEMOLITION OF PLUMBING PIPING INDICATED, ALL REMAINING EXISTING PLUMBING SHALL BE
ROUGHLY FLUSHED AND CLEANED PRIOR TO NEW PLUMBING PIPING INSTALLED FROM POC TO
NOUTS. CONFIRM WITH DISTRICT EXTENT OF CLEANING REQUIRED FOR THIS PROJECT.

EXISTING PLUMBING FIXTURES AND ASSOCIATED WASTE, VENT, AND HOT/COLD WATER PIPING
L BE REMOVED AND DISPOSED OF BACK TO THE POC AT THE EXISTING WALL, AND CAPPED. ALL
IRED ACCESSORIES, AS SHOWN IN THE FIXTURE/PIPE MATERIAL SCHEDULE, SHALL BE
VIDED. THE CONTRACTOR SHALL EXERCISE CAUTION DURING DEMOLITION AND NOTIFY THE
STRUCTION MANAGER OF ANY DISCREPANCIES ENCOUNTERED.

H AND FILL ANY OPENINGS RESULTING FROM DEMOLITION TO MATCH EXISTING/NEW
STRUCTION. PAINT/FINISH THE ENTIRE WALL TO MATCH THE EXISTING ADJACENT WALL FINISH.
ORE ALL FINISHES AS REQUIRED.

CISE EXTREME CARE DURING DEMOLITION TO PREVENT DAMAGE TO EXISTING EQUIPMENT,
G, CONDUITS, CASEWORK, ETC., NOT RELATED TO THIS PROJECT.

CONNECT ALL EXISTING CW, WASTE, AND VENT PIPES FROM OTHER PLUMBING FIXTURES OUTSIDE
HE CLASSROOMS TO THE NEW PIPES INSIDE THE CLASSROOMS.

DENTIFICATION STAMP OF THE STATE ARCHITECT	
P: 03-125098 INC:	
REVIEWED FOR	
<input checked="" type="checkbox"/> FLS <input checked="" type="checkbox"/> THE STATE ARCHITECT ENT OF CENTRAL SERVICES	
ACS <input checked="" type="checkbox"/>	
TE:	10/31/2025

Ynl Architects
architecture | interior design



SCIENCE LAB RENOVATION AT

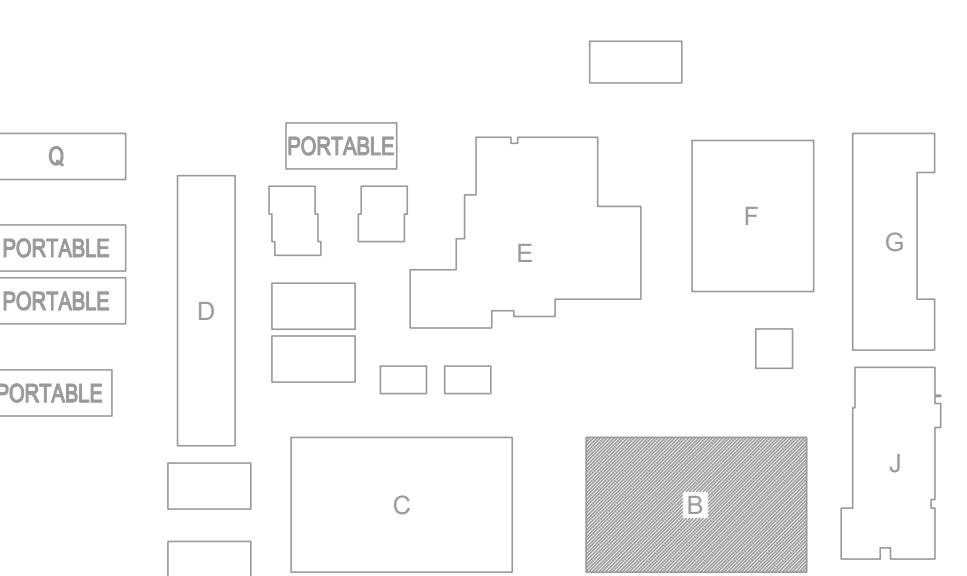
GAREY HIGH SCHOOL
321 W. LEXINGTON AVE.
POMONA, CA 91766

POMONA, CA 91766

POMONA UNIFIED SCHOOL DISTRICT

800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

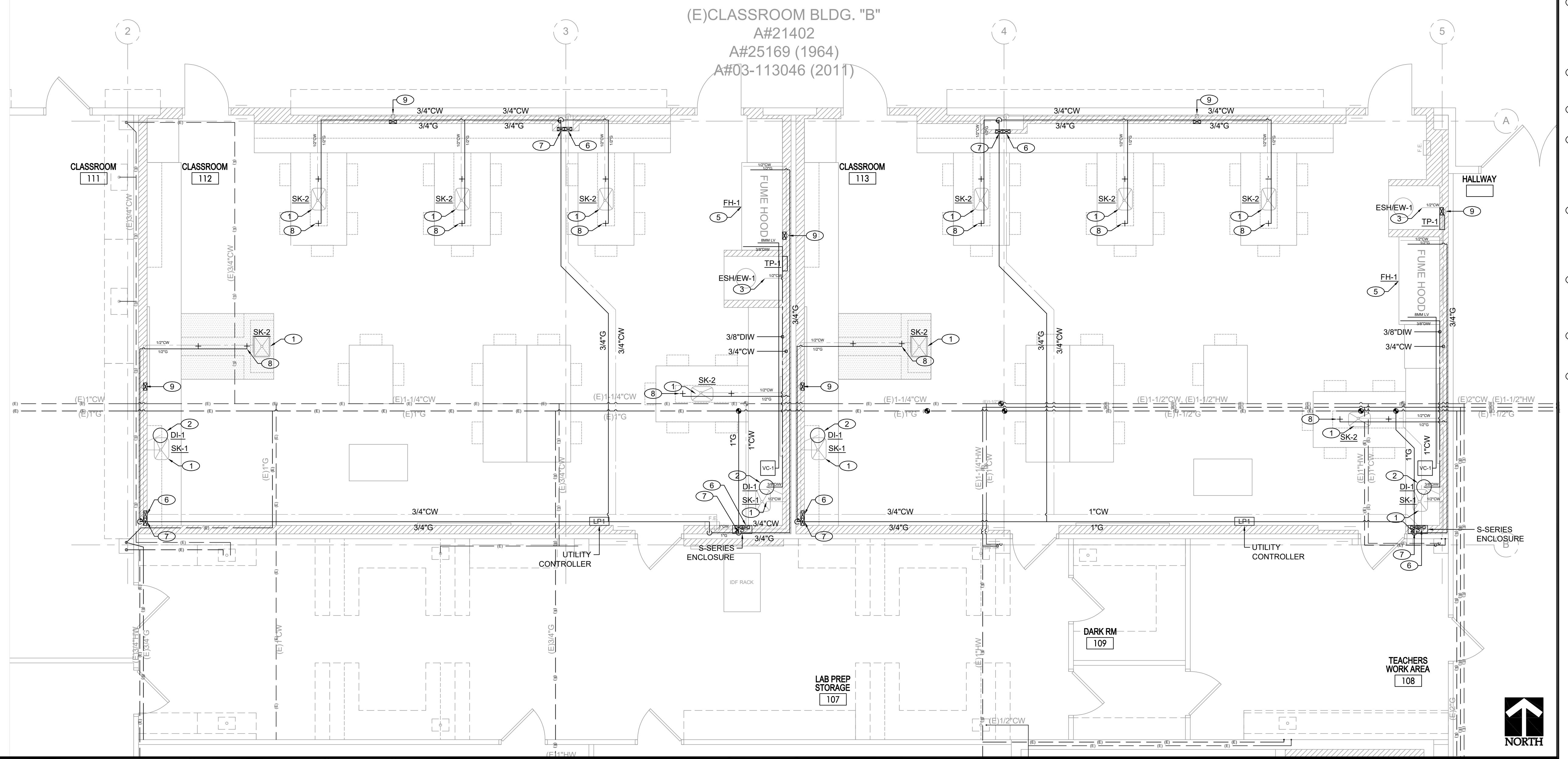
KEY PLAN



PLUMBING DEMOLITION FLOOR PLAN

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

P1.1

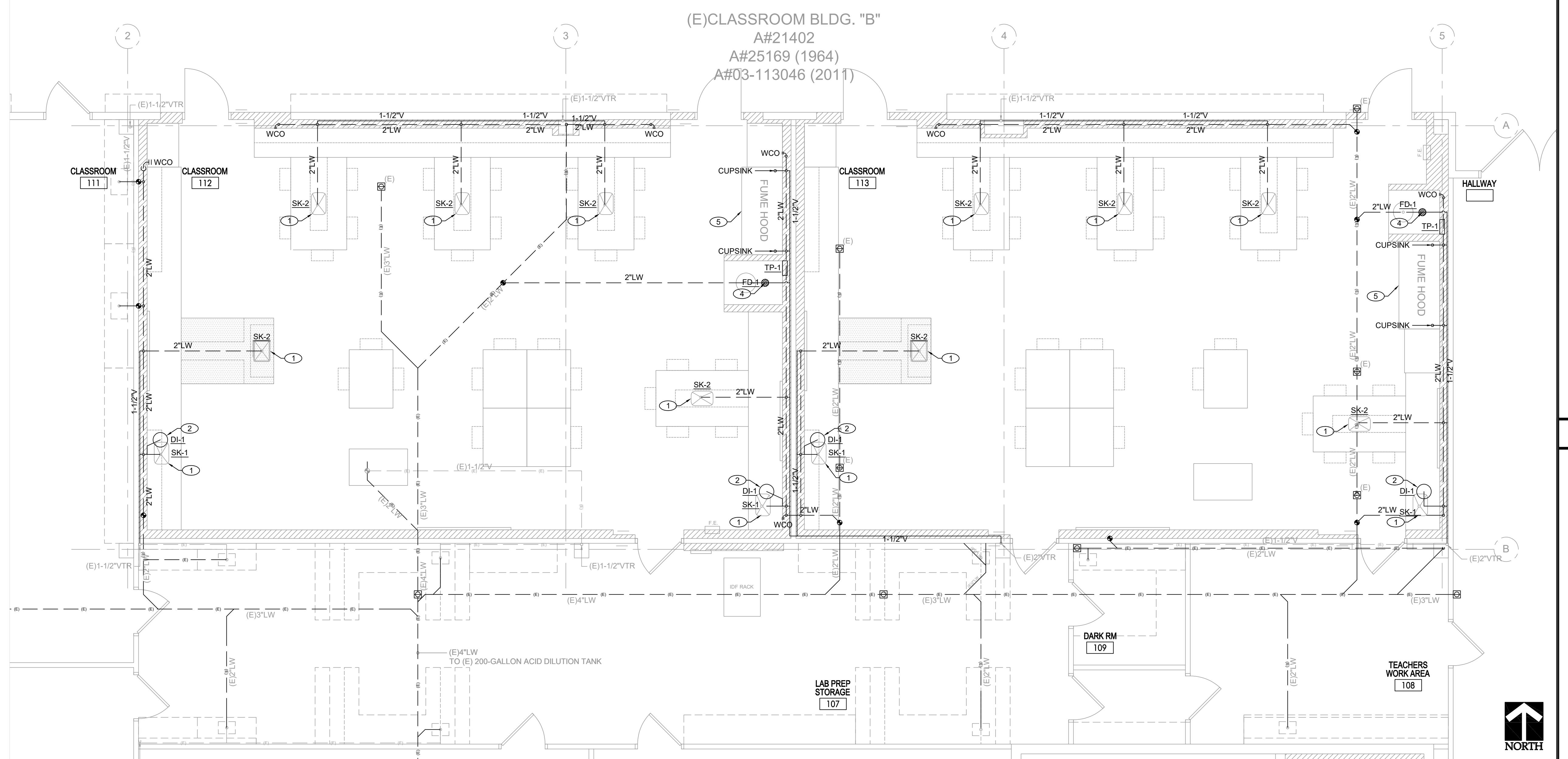


REFERENCE NOTES

- ① PROVIDE EPOXY RESIN SINK WITH FAUCET. EXTEND 1/2" CW, 2'LW AND 1-1/2"V TO SINK. PROVIDE IN-ANGLE STOPS AND SUPPLIES TO FAUCET.
- ② PROVIDE 150 GPM RODI-IONIZATION SYSTEM. US WATER SYSTEMS # 200-RO-DI-100. UNDER SINK. COORDINATE WITH MANUFACTURER PRIOR TO INSTALLATION.
- ③ WASTE WATER SADDLE VALVE IS CONNECTED TO THE DRAIN TO REMOVE REJECT WATER FROM THE RODI SYSTEM.
- ④ FEED LINE HAS A SINGLE STOP VALVE IS CONNECTED TO THE COLD WATER LINE TO SUPPLY WATER TO THE RODI SYSTEM.
- ⑤ PROVIDE EMERGENCY SHOWER/EYES WASH. EXTEND 1-1/2"V PIPE TO (E) 1-1/4" CW ABOVE PROVIDE AN EMERGENCY SHOWER MONITORING UNIT TO RECOGNIZE FLOW AT THE EMERGENCY SHOWER. UPON FLOW, CONTROLLER SHALL INTEGRATE WITH CONTROLLER AND SET SYSTEM IN PANIC STATE. (SEE WIRING DIAGRAM #E4.3)
- ⑥ PROVIDE LINE SIZE SOV (NIBCO T-4064-4LF LEAD FREE BALL VALVE) ON CW VERTICAL RISER AT 48" AFF WITH WALL ACCESS PANEL (COORDINATE EXACT LOCATION WITH ARCHITECTURAL ELEVATION). PROVIDE UNION DOWNSTREAM OF BALL. BALL VALVE AND UNION SHALL BE DIRECTIONAL. (SEE WIRING DIAGRAM #E4.3)
- ⑦ PROVIDE HOSE (GOOSENECK/NOZZLE/GAS TURRET CONNECTIONS FOR DI WATER, VACUUM, COLD WATER, AND GAS INSIDE BOTH SIDES OF THE FUME HOOD. THE DI WATER GOOSENECK SHALL BE INTEGRATED WITH THE FUME HOOD. COLD WATER GOOSENECK REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR REQUIREMENTS.
- ⑧ PROVIDE LINE SIZE SOV (NIBCO T-4064-4LF LEAD FREE BALL VALVE) ON CW VERTICAL RISER AT 48" AFF WITH WALL ACCESS PANEL (COORDINATE EXACT LOCATION WITH ARCHITECTURAL ELEVATION). GAS VALVE SHALL BE DIRECTIONAL. (SEE WIRING DIAGRAM #E4.3)
- ⑨ RUN LABORATORY GAS (LG) CORRUGATED STAINLESS STEEL TUBING WITHIN THE CASEWORK, EXTENDING IT THROUGH A COUNTERTOP OPENING TO CONNECT TO GAS TURRETS. PROVIDE A 1/2" GAS LINE TO A DECK-MOUNTED LABORATORY TURRET WITH TWO VALVES AT 180° (CHICAGO #810-1990CAGM OR EQUAL) ON THE COUNTERTOP.
- ⑩ PROVIDE WATER HAMMER ARRESTER AND SOV WITH WALL ACCESS PANEL.

Ynl Architects
architecture | interior

multidisciplinary collaborative
MDC engineers,inc
Consulting Engineers
5101 E La Palma Ave., Suite 205
Anaheim Hills, CA 92707-2506
Tel: (714) 770-5344
Fax: (714) 770-5463



KEY PLAN

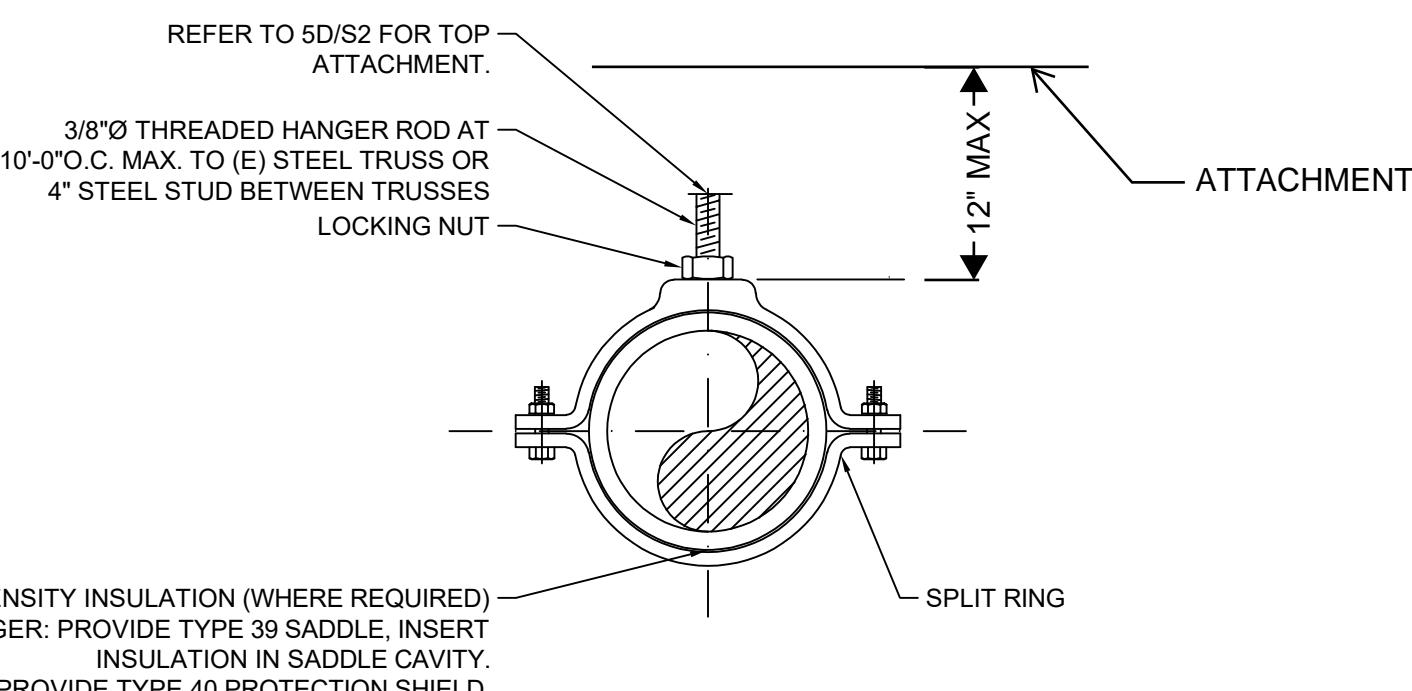
DATE	10/07/2025
DSA #	# 03-125098
FILE NO.	19-H20

PLUMBING FLOOR PLAN

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

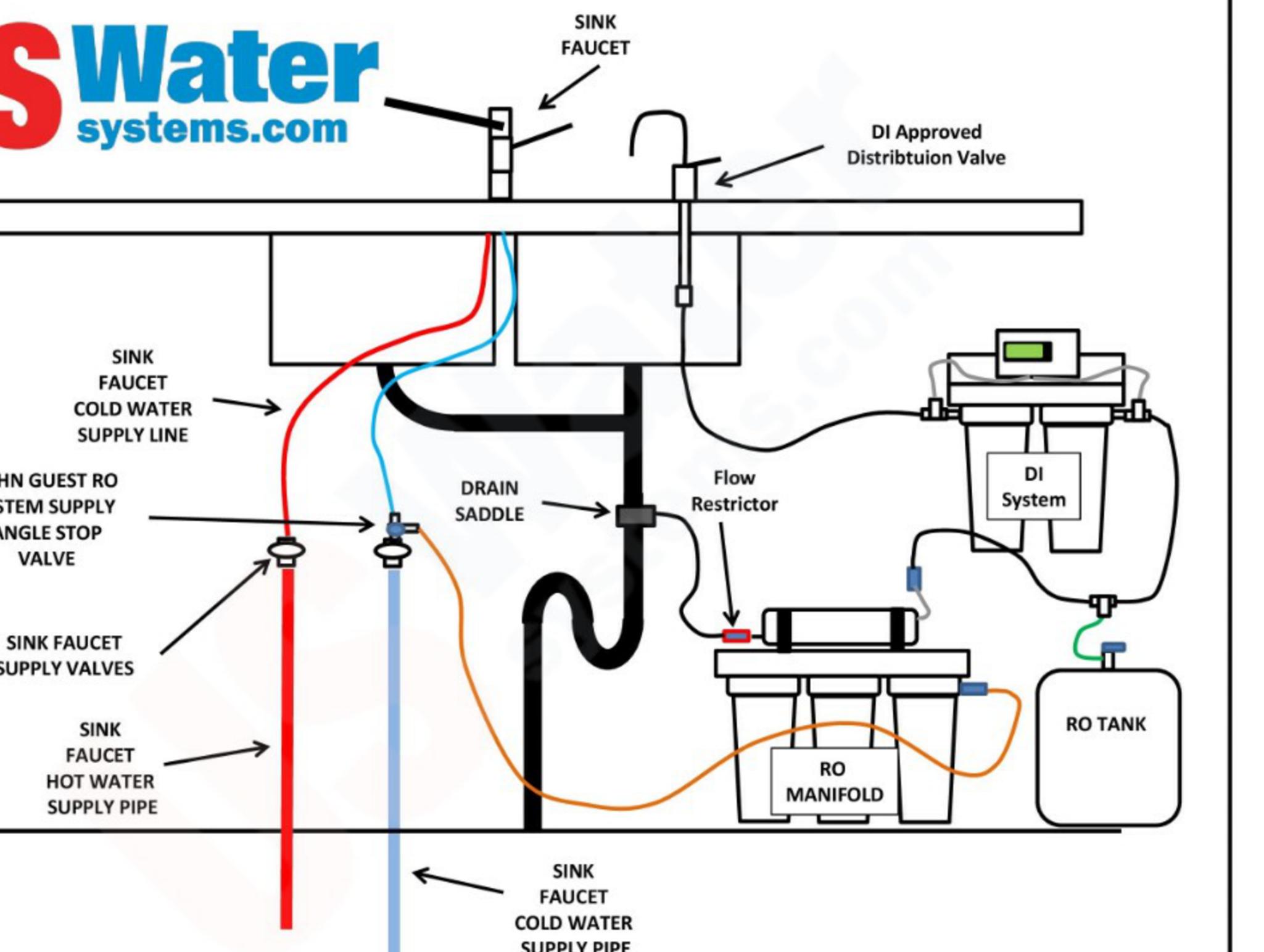
IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 03-125098 INC:
REVIEWED FOR
SS FLS ACS
DATE: 10/31/2025

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



NOTE:
1. MAX OPERATION WEIGHT 18.8 LBS AT EACH SUPPORT.
1.1. THE APPROXIMATE WEIGHT OF 1" GAS PIPING (BLACK STEEL PIPE) IS 1.68 LBS/FT.
1.2. THE APPROXIMATE WEIGHT OF 1" WATER PIPING (COPPER OR PE L. WITH WATER) IS 1 LBS/FT.
2. SPECIFY 1/2" DIAMETER FOR ALL PIPING. INSULATION IS NOT INCLUDED.
3. UTILIZE GALVANIZED STEEL FOR STRAPS. RODS USED FOR SUPPORT CAN BE EITHER UNCOATED OR GALVANIZED STEEL.
4. REFER TO STRUCTURAL DETAIL 5/S2 FOR BRACING CONNECTION TO STRUCTURE

USWater
systems.com



US Water Systems 5 Stage RO with 2 Stage DI Water System Flow Schematic No Scale C. Dietz November 8, 2016

PIPING SUPPORT

SCALE
NOT TO SCALE

1

RO/DI WATER SYSTEM DETAIL

SCALE
N.T.S.

2

FUME HOOD PIPING CONNECTION

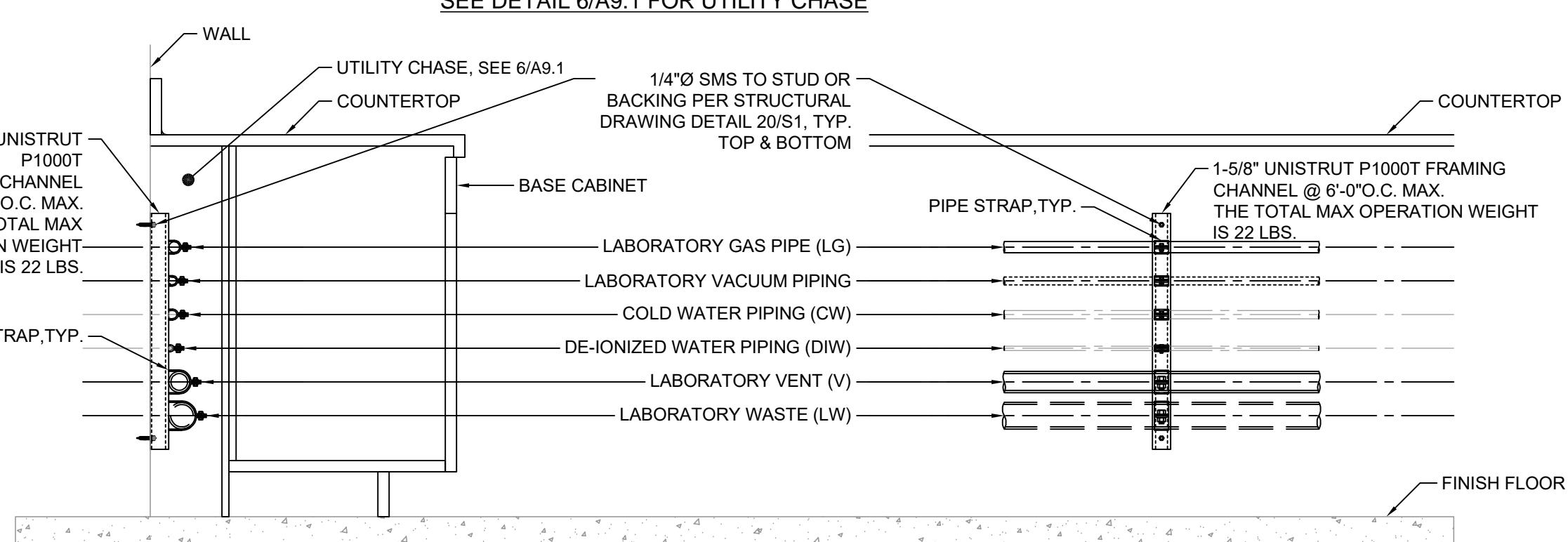
SCALE
N.T.S.

3

PIPE MATERIAL SCHEDULE				
SERVICE	LOCATION	MATERIALS	O.D.	WEIGHT
LABORATORY GAS (LG)	ABOVE GROUND, UTILITY CHASE/INSIDE CASEWORK	CORRUGATED STAINLESS STEEL TUBING	1/2"O.D. - 0.76"O.D. 3/4"O.D. - 0.98"O.D.	1/2"LG - 0.094 LBS/FT. 3/4"LG - 0.123 LBS/FT.
LABORATORY VACUUM (LV)	ABOVE GROUND, INSIDE BUILDING	RUBBER VACUUM TUBING PTFE DN 8 MM (20686001)	8mm - 10mm (0.71"O.D.)	8MM - 0.032 LBS/FT
DOMESTIC COLD WATER (CW)	ABOVE GROUND, INSIDE BUILDING	SEAMLESS COPPER TYPE L, HARD DRAWN.	3/4"CW - 0.875"O.D. 1"CW - 1.125"O.D.	3/4"CW - 0.664 LBS/FT 1"CW - 1 LBS/FT, PIPE FILLED WITH WATER
DE-IONIZED WATER (DIW)	ABOVE GROUND, INSIDE BUILDING	LLDPE (LINEAR LOW DENSITY POLYETHYLENE) PIPE (ASTM D-1693, FDA, NSF)	3/8"DIW - 3/8"O.D.	3/8"DIW - 0.1 LBS/FT PIPE FILLED WITH WATER
LABORATORY WASTE (LW) ACID WASTE AND VENT PIPING	ABOVE GROUND, INSIDE BUILDING	POLYVINYLDIENE FLUORIDE (PVDF) PIPE	1-1/2"V - 1.9"O.D. 2"V - 2.375"O.D.	1-1/2"V - 0.888 LBS/FT 2"V - 1.19 LBS/FT

SEE DETAIL 6/A9.1 FOR UTILITY CHASE

THE TOTAL MAX OPERATION WEIGHT IS 3.635 LBS/FT.
REFER TO 6/A9.1 FOR TYPICAL UTILITY CHASE DETAIL.



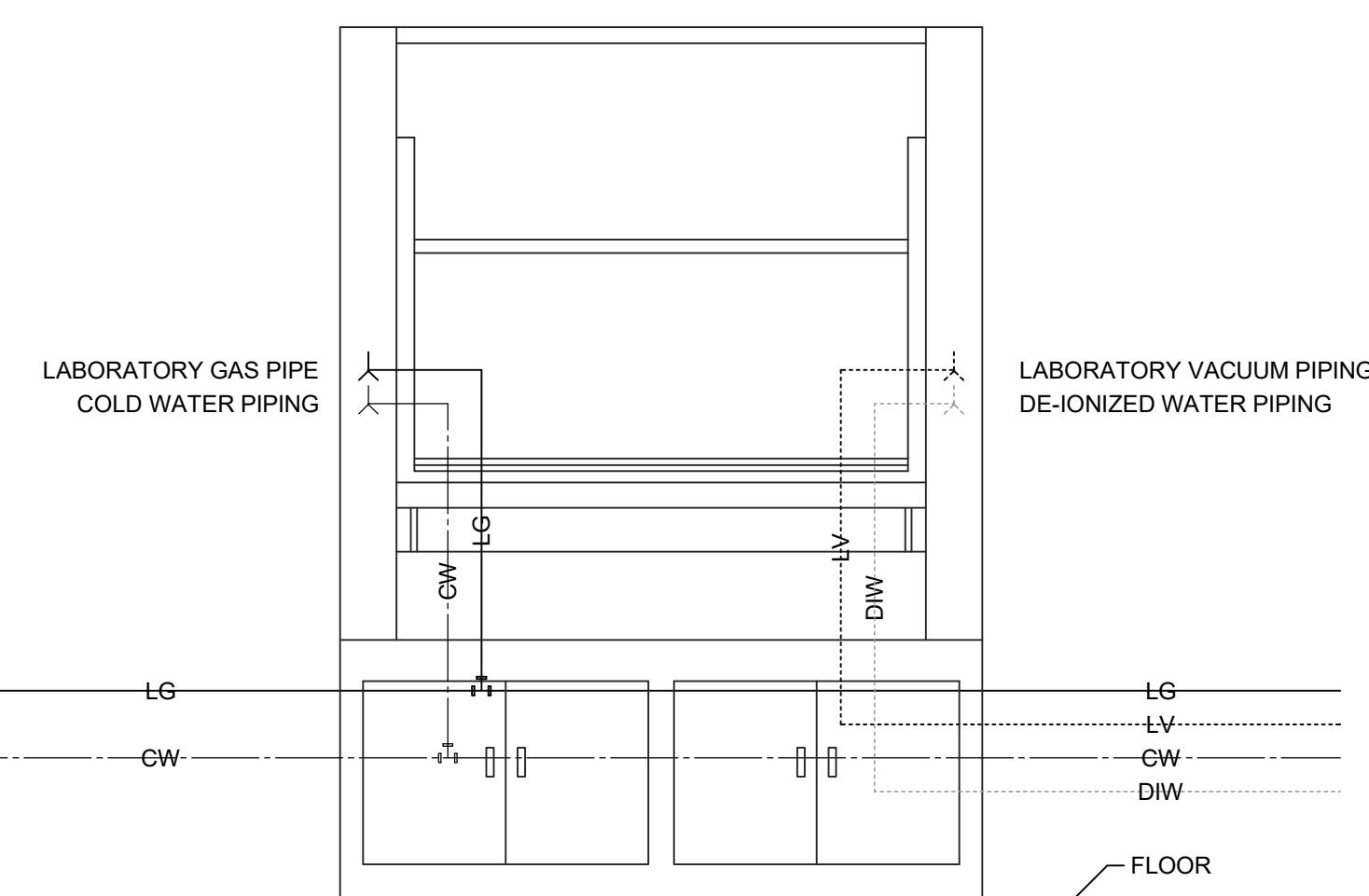
SECTION

ELEVATION

LABORATORY UTILITY CHASE ARRANGEMENT DETAIL

SCALE
N.T.S.

4



YnL Architects
architecture | interior

multidisciplinary
MDC engineers,INC
Consulting Engineers 5101 E La Palma Ave., Suite 205
Anaheim, CA 92805
Tel: (714) 746-2944
Fax: (714) 746-6463



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

POMONA UNIFIED
SCHOOL DISTRICT
800 S. GAREY AVENUE
POMONA, CALIFORNIA 91766

ELECTRICAL
DETAILS

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

SHEET

P4.1