

July 2, 2025

Brooks County High School Field House HVAC upgrades.

GOMEZ MENDEZ SAENZ, INC.
1150 PAREDES LINE RD.
BROWNSVILLE, TEXAS 78526
(956) 546-0110



ADDENDUM NO. 1

A. PURPOSE AND INTENT

This addendum is issued for the purpose of modifying the plans and specifications for the *Brooks County High School Field House HVAC upgrades*.

This addendum shall become part of the contract, and all CONTRACTORS shall be bound by its content. All aspects of the specifications and drawings not covered herein shall remain the same. The General Conditions and the Special Conditions of the specifications shall govern all parts of the work and apply in full force to this Addendum.

B. SCOPE

I. MEP:

1. Refer to attached MEP Supplemental Information. (11 Pages)

End of Addendum 1



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ADDENDUM NO. 1

DATE: July 02, 2025
Project: Falfurrias HS Fieldhouse HVAC Upgrades
Project #: 25v50
To: David Monreal, GMS

A: PURPOSE OF INTENT:

This addendum is issued for the purpose of modifying the plans for the project referenced above. This addendum shall become part of the contract and all contractors shall be bound by its content. All aspects of the specifications and drawings not covered herein shall remain the same. The General Conditions and the Special Conditions of the specifications shall govern all parts of the work and apply in full force to this addendum.

B: SCOPE

I. Drawings

1. Sheet ME1.0:
 - a. Revised Mechanical and Electrical General Notes. See attached data sheet.
2. Sheet ME2.1:
 - a. Revised Building M and Building L Mechanical and Electrical demolition plan. See attached sheet.
3. Sheet ME2.2:
 - a. Revised Building M and Building L Mechanical and Electrical demolition plan. See attached sheet.
4. Sheet ME2.3:
 - a. Revised Building M and Building L Mechanical and Electrical demolition roof plan. See attached sheet.



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5. Sheet ME3.1:
 - a. Revised Building M and Building L Mechanical and Electrical renovation floor plan. See attached sheet.
6. Sheet ME3.2:
 - a. Revised Building M and Building L Mechanical and Electrical renovation floor plan. See attached sheet.
7. Sheet ME3.3:
 - a. Revised Building M and Building L Mechanical renovation roof plan. See attached sheet.
8. Sheet ME4.0:
 - a. Revised Building L, M and Central Plant Chilled Water Schematic Diagram. See attached sheet.
9. Sheet ME5.0:
 - a. Revised Mechanical and Electrical equipment and connection schedules. See attached sheet.

Please let us know if you have any questions,

Thank you,

Gerardo Juarez

1. ALL ELECTRICAL WORK SHALL BE UNDER THE MASTER ELECTRICIAN WHO PULLED THE PERMIT AND HIS JOURNEYMAN ELECTRICIANS.
2. PERFORM ALL WORK PER ADOPTED N.E.C. AND APPLICABLE STATE STANDARDS, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
3. UNLESS NOTED OTHERWISE, MINIMUM POWER CIRCUIT IS TO BE #12 THIN WITH #12 GROUND IN 1/2" CONDUIT, WITH THE EXCEPTION THAT ANY CIRCUIT LONGER THAN 100 FEET SHALL BE MINIMUM #10 AWG WITH #10 GROUND WIRE. CIRCUITS LONGER THAN 200 FEET SHALL BE MINIMUM #8 AWG WITH #10 GROUND WIRE MINIMUM.
4. ALL EXISTING ID NAMETAGS AND CIRCUIT IDENTIFICATION MUST BE REVISED TO REFLECT CURRENT CONDITIONS FOR ALL EQUIPMENT WHICH IS NEW, REPLACED, OR DEMOLISHED. REMOVE ID NAMETAGS FOR DEMOLISHED EQUIPMENT. REMOVING NAME TAGS FROM EXISTING EQUIPMENT IS NOT REQUIRED IF REPLACEMENT EQUIPMENT HAS DIFFERENT NAME. PROVIDE NEW NAMETAGS FOR ALL NEW EQUIPMENT. CIRCUIT BREAKER BREAKERS FOR PANELS IN ELECTRICAL WORK TACKS PLACE ARE TO BE REPLACED WITH NEW DIRECTORIES WHICH LIST EXISTING CIRCUITS AND NEW. ALL UNUSED CIRCUITS ARE TO BE MARKED AS "SPARE" IN THE DIRECTORIES. DIRECTORIES ARE TO BE COMPUTER GENERATED, NO HAND WRITTEN DIRECTORIES ARE ACCEPTABLE.
5. HAND-WRITTEN CIRCUIT BREAKER DIRECTORIES WILL NOT BE ACCEPTED. DIRECTORIES MUST BE COMPUTER GENERATED AND PRINTED TO REFLECT FINAL NAME AND CIRCUITS.
6. MARK ALL J-BOXES WITH INDELIBLE INK, INDICATING POWER CIRCUITRY INFORMATION. LABEL ABOVE EQUIPMENT ITEMS PER SPECIFICATIONS.
7. ALL EXTERIOR RACEWAYS SHALL BE RIGID GALVANIZED.
8. UNDER NO CIRCUMSTANCES SHALL MORE THAN THREE CIRCUITS SHARE THE SAME NEUTRAL, AND SUCH CIRCUITS MUST BE SEPARATE PHASE.
9. SINCE ELECTRICAL CHARACTERISTIC OF EQUIPMENT (SUCH AS HORSEPOWER, KW, AMPERAGE, VOLTAGE, ETC.) SUBMITTED MAY DIFFER FROM THOSE SPECIFIED IN CONTRACT, THE CONTRACTOR SHALL COORDINATE WITH MECHANICAL AND OTHER CONTRACTORS, TO ENSURE COMPATIBILITY BETWEEN ELECTRICAL AND MECHANICAL EQUIPMENT SIZES AND TYPES OF ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
10. USE LONG-SWEEPS ELBOWS FOR ALL CHANGES IN DIRECTION ON CONDUIT RUNS.
11. ALL INTERIOR RACEWAYS SHALL BE EMT.
12. FIELD VERIFY PROJECT SITE EXISTING CONDITIONS AND ELEVATIONS PRIOR TO BEGINNING ANY WORK.
13. PHASING AND SEQUENCE OF CONSTRUCTION SHALL BE PER DRAWINGS AND SPECIFICATIONS.
14. ALL MATERIALS AND LABOR, WHETHER SPECIFICALLY INDICATED ON PLANS OR NOT, WHICH ARE NECESSARY FOR THE PROPER INSTALLATION AND FUNCTION OF THE SYSTEM SHALL BE FURNISHED BY THIS CONTRACTOR. INCLUDE ALL COSTS OF CHANGES, IF/AS REQUIRED IN BID PROPOSAL.
15. ELECTRICAL WIRING SHALL NOT BE SPLICED BELOW GRADE.
16. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES ASSOCIATED WITH PROJECT, INCLUDING FEES FOR INSPECTIONS, APPLICATIONS, AND PROVISION OF NEW SERVICES.
17. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.
18. COORDINATE ALL WORK WITH OTHER TRADES, COORDINATE SCHEDULE OF WORK WITH ALL SUB-CONTRACTORS TO ACHIEVE SMOOTH FLOW OF CONSTRUCTION.
19. SEAL AROUND ELECTRICAL RACEWAYS AT ALL WALLS AND WALL LOUVER PENETRATIONS WITH FIREPROOF CHASING, RE-SPICES, PROVIDE FLASHING AROUND PENETRATION, BOTH INSIDE AND OUTSIDE, TO PROVIDE FINISHED LOOK.
20. CONTRACTOR SHALL REVIEW COMPLETE DOCUMENTS PRIOR TO SUBMITTAL OF PROPOSAL, TO GAIN COMPLETE UNDERSTANDING OF PROJECT SCOPE, WORK BY OTHERS, AND ELECTRICAL WORK ASSOCIATED WITH OTHER DISCIPLINES.
21. MAINTAIN MAINTENANCE RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
22. AFFIX ID TAGS TO ALL DIVISION 26 EQUIPMENT.
23. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
24. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION, CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
25. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
26. SLEEVE ALL EXTERIOR WALL PENETRATIONS.
27. DEPROGRAM, DISCONNECT AND RECONNECT AND REPROGRAM EXISTING H.V.A.C. DUCT SMOKE DETECTORS, WIRING AND CONTROLS. PROVIDE NEW IF NOT IN WORKING ORDER.
28. PRIOR TO ANY DEMOLITION, CONTRACTOR SHALL CONDUCT A DETAILED WALKTHROUGH OF EXISTING CONDITIONS AND COMPARE AGAINST DEMOLITION DRAWINGS. CONTRACTOR SHALL REQUEST CLARIFICATION AS TO THE REMOVAL OF ANY ELECTRICAL COMPONENTS FOUND IN THE FIELD THAT ARE NOT SPECIFICALLY NOTED TO BE DEMOLISHED.
29. THE DESIGN INTENT IS TO REUSE TO EXTENT POSSIBLE EXISTING ELECTRICAL AND MECHANICAL SYSTEMS INCLUDING CIRCUIT BREAKERS, WIRING AND CONDUITS, SAFETY AND OTHER HARD WROD INTERLOCKS, ETC. EXISTING SYSTEMS TO BE REUSED SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION. SEE PLANS.
30. PROVIDE ADDITIONAL SPARE MATERIALS DESCRIBED BELOW. PROVIDE PROTECTIVE COVERING FOR STORAGE & IDENTIFIED WITH LABELS DEMOLITION CONTENTS. INCLUDE THE INSTALLATION COST, FITTINGS AND SUPPORTS IN THE BASE BID PROPOSAL:
A. 250 LINEAR FEET - 1/2"MT - 3#12 & #10
B. 250 LIO LINEAR FEET - 1/4"MT - #10 & #10G
C. 250 LINEAR FEET - 1"MT - 3#4 & #6G

1. SEAL ALL OPENINGS AND ENSURE THAT INSTALLATION IS WEATHER-TIGHT. PROVIDE REQUIRED FLASHING FOR ALL ROOF PENETRATIONS AND SEAMLESS INSTALLATION.
2. UNLESS OTHERWISE NOTED, PROVIDE CORNER CONCENTRATE DRAIN UNITS WITH P-TRAPS, EXTEND TO NEARBY COMMUNAL DRAIN RECEPTOR.
3. PROVIDE NEWLY COMING WORK AS SPECIFIED, CONTROLS INCLUDE, UNITARY CONTROLLERS AND MICRO-ANALOG, ANALOG, DIGITAL, RANGE THERMOSTATS, AND DISCHARGE AIR TEMPERATURE SENSORS, RH AND CO2 SENSORS, MOTORIZED OUTSIDE AND RETURN AIR DAMPERS AND RELATED PROGRAMMING SEQUENCES. COORDINATE ROUGH-INS FOR WALL MOUNTED SENSORS (1" MIN).
4. AFTER ABOVE CEILING WORK IS COMPLETE, REINSTALL CEILING SYSTEMS, COMPONENTS, AND CEILING DEPENDENT TO ORIGINAL CONDITION.
5. TEST & BALANCE TO COORDINATE MINIMUM AND MAXIMUM OUTSIDE AIR DAMPER SETTINGS WITH CONTROLS & ENGINEER.
6. PROVIDE ALLOTMENT FOR MULTIPLE DAMPER SETTINGS IN SOME CASES.
7. CONTRACTOR SHALL COORDINATE TAB ACTIVITIES WITH TAB CONTRACTOR.

1. ALL DEMOLITION WORK SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE CODES INCLUDING THOSE PUBLISHED BY OSHA.
2. PROVIDE ALL DEMOLITION WORK REQUIRED FOR THE REMOVAL OF MECHANICAL EQUIPMENT AND ASSOCIATED DEVICES. PROVIDE A COMPLETE AND OPERABLE SYSTEM UPON COMPLETION OF THE PROJECT.
3. ALL EXISTING EQUIPMENT REMOVED DURING CONSTRUCTION, THAT IS NOT TO BE REUSED, SHALL BE REMOVED FROM THE JOB SITE AND PROPERLY RETURNED TO THE OWNER, IF DESIRED BY OWNER.
4. CONTRACTOR SHALL NOT DAMAGE STRUCTURAL INTEGRITY OF BUILDING ELEMENTS WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE ENGINEER. CONTRACTOR SHALL GIVE 14 DAYS NOTICE PRIOR TO COMPROMISING INTEGRITY OF STRUCTURAL BEAMS, IN WORK ASSOCIATED WITH BOTH DEMOLITION AND INSTALLATION.
5. OWNER MAY WISH TO KEEP DEMOLISHED EQUIPMENT AND MATERIALS. COORDINATE OWNER, DISPOSE OF EQUIPMENT AND MATERIALS THAT OWNER DOES NOT RETAIN.
6. COORDINATE CUTTING AND PATCHING OF ARCHITECTURAL ELEMENTS LIKE WALLS, FLOORS, ROOFS WITH OWNER/ARCHITECT/ENGINEER. PATCH UNUSED ROOF AND WALL PENETRATIONS, AND FINISH TO MATCH EXISTING ARCHITECTURAL ELEMENTS.

1. GENERAL: THE BROOKS COUNTY JOE FAULSTICH HS FIELD HOUSE HVAC UPGRADES CONSISTS OF THE FOLLOWING: PROVIDE ALL MATERIALS AND LABOR ASSOCIATED WITH COMPLETE OPERATIONAL ELECTRICAL DISTRIBUTION SYSTEM. MAJOR ITEMS OF WORK INCLUDE, BUT ARE NOT LIMITED TO:

- (a) ELECTRICAL SERVICE: REMAIN AS IS WITH MODIFICATIONS.
- (b) AIR HANDLING: DISCONNECT EXISTING UNIT TO BE REMOVED AND REPLACED WITH NEW UNIT.
- (c) POWER SYSTEMS: CONNECT NEW H.V.A.C. EQUIPMENT.
- (d) FIRE ALARM SYSTEM: EXPAND/MODIFY EQUIPMENT EXISTING AN ADDRESSABLE CONTROL PANEL TO ABSORB NEW DUCT SMOKE DETECTORS.
- (e) POWER AND DATA COMMUNICATIONS: PROVIDE CABLES AND CONNECTORS TO SERVE NEW HVAC DDC PANELS.

1. PERFORM ALL WORK PER LATEST VERSION OF INTERNATIONAL CODES; APPLICABLE STATE AND LOCAL CODES AND ORDINANCES, UNLESS DRAWINGS OR SPECIFICATIONS HAVE MORE STRINGENT REQUIREMENTS.
2. NOTIFY ENGINEER OF ANY ASPECTS OF DESIGN WHICH ARE THOUGHT TO BE IN NONCOMPLIANCE WITH APPLICABLE CODES.

COORDINATE SCHEDULES AND PROJECT COMPLETION DATES WITH OWNER. PERFORM WORK IN CLOSE COORDINATION WITH OWNER. REFER TO SUMMARY OF WORK AND BID FORM FOR SUBSTANTIAL COMPLIANCE DATES.

COORDINATE WORK AMONG ALL DISCIPLINES. IT IS NOT THE INTENT OF THESE DOCUMENTS TO DICTATE WHO MUST DO THE WORK. ALL WORK SHOWN IS THE RESPONSIBILITY OF THE (PRIME) CONTRACTOR.

PROVIDE LIGHTED SAFETY BARRIERS AROUND WORK AREAS AT ALL TIMES.

WORK TO BE DONE UNDER ALLOWANCES BECOMES AN INTEGRAL PART OF THE WORK AND THE RESPONSIBILITY OF THE CONTRACTOR ONCE THE ALLOWANCE IS APPROVED.

COORDINATE WITH OWNER AND ENGINEER FOR ANY DISRUPTION IN UTILITY SERVICES, PARTICULARLY THOSE THAT MIGHT AFFECT OTHER BUILDINGS ON CAMPUS.

CONTRACTOR SHALL NOT PROCEED WITH ANY WORK INVOLVING A CHANGE IN PROJECT SCOPE OR COST WITHOUT FIRST HAVING OBTAINED ENGINEER'S APPROVAL IN WRITING. UNLESS ENGINEER HAS AGREED TO SUCH CHANGE PRIOR TO IT BEING DONE, AND HAS AGREED THAT AN INCREASE IN COST ASSOCIATED WITH SUCH CHANGE IS WARRANTED; CONTRACTOR WILL NOT BE REIMBURSED FOR SUCH CHANGE.

OWNER'S EQUIPMENT, MATERIALS, FURNISHINGS, CARPETS, AND INTERIOR SURFACES ARE TO BE PROTECTED FROM DUST ACCUMULATION AND DAMAGE, AND MUST BE THOROUGHLY CLEANED PRIOR TO SUBSTANTIAL COMPLETION. CARPETS ARE TO BE PROTECTED WITH HEAVY DUTY PLASTIC SHEETING. REFER TO SPECIFICATIONS SECTION 01700 EXECUTION REQUIREMENTS FOR FURTHER DETAIL.

MAINTAIN PROJECT SITE FREE OF WASTE MATERIALS AND DEBRIS, AND CLEAN SITE AT END OF EACH WORK DAY TO GREATEST EXTENT POSSIBLE.

SUBMISSION OF PROPOSAL IS CONSIDERED AN ACKNOWLEDGEMENT THAT CONTRACTOR VISITED SITE, VERIFIED ALL EXISTING CONDITIONS, AND INCLUDED ANY MODIFICATIONS TO EXISTING AND NEW WORK REQUIRED FOR INSTALLATION OF A COMPLETE AND OPERATIONAL SYSTEM.

TIME OR MONEY ALLOWANCES WILL NOT BE MADE TO ACCOMMODATE CONDITIONS THAT COULD HAVE BEEN VERIFIED PRIOR TO SUBMITTING PROPOSAL.

A	AMPS	EL	EXHAUST LOUVER	NO	NORMALLY OPEN
ACCU	AIR COOLED CONDENSING UNIT	EMS	ENERGY MANAGEMENT SYSTEM	NTS	NOT TO SCALE
ACT	ACTUATOR	ENT.	ENTERING	OA	OUTSIDE AIR
AFF	ABOVE FINISHED FLOOR	EXT.	EXTERNAL OR EXTERIOR	PH	PHASE
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT	RA	RETURN AIR
B.	BOTTOM	FD	FIRE DAMPER	RAG/RG	RETURN AIR GRILLE
BAS	BUILDING AUTOMATION SYSTEM	FM	FLOW METER	RD	ROOF DRAIN
BOP	BOTTOM OF PIPE	FS	FLOW SWITCH	RM.	ROOM
BOTT.	BOTTOM	FPI	FINS PER INCH	RPZ	REDUCED PRESSURE ZONE
C.	CONDUIT OR COMMON	G.	GROUND	SA	SUPPLY AIR
CHR	CHILLED WATER RETURN	GA.	GAGE	SD	SUPPLY AIR DIFFUSER
CHS	CHILLED WATER SUPPLY	GALV.	GALVANIZED	SL	SUPPLY LOUVER
CHW	CHILLED WATER	GPW	GALLONS PER MINUTE	SS	STAINLESS STEEL
CHWP	CHILLED WATER PUMP	GRND.	GROUND	SZ	SINGLE ZONE
CLG.	CEILING OR COOLING	HB	HOSE BIBB	TAB	TESTING & BALANCING
COMB.	COMBINATION	HP	HORSEPOWER	TG	TRANSFER AIR GRILLE
CONC.	CONCRETE	HS	HUMIDITY SENSOR	T.O.L.	TOP OF LOUVER
COND.	CONDUIT	HVAC	HEATING, VENTILATION, & AIR CONDITIONING	TS	TEMPERATURE SENSOR
CU.	COPPER			TSTAT	THERMOSTAT
CW	CITY WATER	LVS.	LEAVING	UG	UNDERGROUND
DDC	DIRECT DIGITAL CONTROLS	MECH	MECHANICAL	UNO	UNLESS OTHERWISE NOTED
DMPR.	DAMPER	MOT. STRTR.	MOTOR STARTER	V	VOLTS
DISC.	DISCONNECT	MS	MOTOR STARTER	VAV	VARIABLE AIR VOLUME
EAC/EG	EXHAUST AIR GRILLE	MZ	MULTI-ZONE	VFD	VARIABLE FREQUENCY DRIVE
EF	EXHAUST FAN	NC	NORMALLY CLOSED	W	WIRE

1. CONTRACTOR SHALL COOPERATE AND COORDINATE WORK ACTIVITIES WITH DDC CONTROLS CONTRACTOR TO ENSURE SMOOTH TROUBLE-FREE INSTALLATION.
2. WHERE NOT SPECIFICALLY INDICATED ON PLANS, DDC CONTRACTOR IS RESPONSIBLE FOR ALL CONTROL RELAYS AND CONTACTORS, POWER TO DDC PANELS, AND OTHER CONTROL ELEMENTS. ALTHOUGH DDC CONTRACTOR MAY COORDINATE WITH OTHER TRADES TO PROVIDE MISCELLANEOUS ELECTRICAL WORK, THE FINAL RESPONSIBILITY FOR ACHIEVEMENT OF CONTROL SEQUENCES LIES WITH DDC CONTRACTOR.
3. ON THE GRAPHIC PAGES FOR ALL EQUIPMENT AND/OR MONITORED DEVICES (SUCH AS SENSORS - METER, DAMPERS, ETC.) GIVE A CLEAR, GRAPHICAL INDICATION AS TO WHETHER EQUIPMENT OR DEVICE HAS BEEN PLACED IN MANUAL OPERATION, OVERRIDING AUTOMATIC OPERATION. (FOR EXAMPLE, PLACE AN "M" NEXT TO EQUIPMENT HAS BEEN PLACED IN MANUAL OPERATION.)
4. REFER TO OPERATING SEQUENCE IN SPECIFICATIONS FOR ALARMS AND SEQUENCES REQUIRED.
5. ALL REFERENCES TO CONTROLLED / MONITORED POINTS AND/OR GRAPHICS WHICH ARE ON A CURRENT CONTROL SYSTEM AND WHICH WILL BE REMOVED DURING COURSE OF CONSTRUCTION OF THIS PROJECT, MUST BE COMPLETELY REMOVED FROM CONTROL SYSTEM SOFTWARE. CONTROL SYSTEM WIRING AND CONTROLLERS TO SUCH POINTS MUST BE REMOVED AS WELL.
6. PROVIDE FULL COLOR GRAPHICS OF NEW SYSTEMS.
7. INTEGRATE NEW CONTROLS WITH OWNER'S EXISTING COS ON SITE.
8. PROVIDE WEB-SERVER. SEE SPECIFICATIONS.
9. RECOMMENDED DIVISION OF RESPONSIBILITIES BETWEEN SUB-CONTRACTORS IS AS FOLLOWS:
 - a. WITH OWNER COORDINATE ETHERNET CONNECTION FOR DDC SYSTEM. CONTRACTOR TO EXTEND ETHERNET FROM OWNER DESIGNATED LOCATION TO NEW DDC PANELS.
 - b. DDC CONTRACTOR SHALL COORDINATE CONTROL WIRING BETWEEN CONTROL PANELS AND UNITARY CONTROLLERS. PROVIDE MEANS TO SUPPORT WIRING (H-HOOKS). DO NOT SUPPORT WIRING FROM EXISTING DATA OR FIRE ALARM WIRING SUPPORTS.
 - c. WITH ELECTRICAL SUB CONTRACTOR, CONTRACTOR COORDINATOR COORDINATES 120V POWER WIRING AND CONDUIT TO NEW CONTROLLERS (AND CIRCUIT BREAKERS, IF NO SPARES EXIST).
 - d. CONTROLS CONTRACTOR TO COORDINATE OUTSIDE AND RETURN AIR DAMPERS WITH AHU MANUFACTURER.
10. CONTRACTOR IS RESPONSIBLE FOR:
 - * DAMPER AND VALVE ACTUATORS
 - * ADJUSTABLE RANGE THERMOSTATS, RH, CO2 SENSING DEVICES
 - * EQUIPMENT CONTROLLERS, SOFTWARE, PROGRAMMING.
 - * ALL NETWORK CONTROL PANELS, DDC CONTROLLERS, AND SOFTWARE, AND PROGRAMMING.
 - * WIRING AND CONDUIT FOR CONTROL AND MONITORING DEVICES
 - * CONTROL RELAYS
 - * SHOP DRAWINGS PER SPECIFICATIONS
 - * SYSTEM CHECK OUT, OWNER TRAINING, DDC SYSTEM WARRANTY WORK

1. FIELD VERIFY ALL CONDITIONS AND MEASURE DIMENSIONS WITHIN THE BUILDING PRIOR TO ORDERING EQUIPMENT AND/OR PROCEEDING WITH INSTALLATION.
2. ALL EQUIPMENT SHALL BE FACTORY TESTED, AND CONTRACTOR SHALL VERIFY THEIR CONDITION PRIOR TO INSTALLATION. CONTRACTOR IS RESPONSIBLE FOR EQUIPMENT DAMAGED DURING MOVING AND INSTALLATION.
3. EQUIPMENT FOUND DEFECTIVE PRIOR TO FINAL ACCEPTANCE SHALL BE REPLACED AT NO COST TO OWNER.
4. MAINTAIN NEC AND MANUFACTURER RECOMMENDED CLEARANCE AROUND ALL EQUIPMENT.
5. COMPLETELY WEATHERPROOF ALL EQUIPMENT, DUCTS, PIPES AND OTHER DEVICES AND MATERIALS INSTALLED OUTSIDE THE BUILDING, IN MECHANICAL YARD, OR OTHERWISE EXPOSED TO WEATHER. AS A MINIMUM, WEATHERPROOFING SHALL INCLUDE, BUT IS NOT LIMITED TO THE FOLLOWING: JACKETING FOR INSULATION, DOUBLE WALL DUCTWORK, VALVES AND ACCESSORIES RATED FOR OUTDOOR SERVICE, ELECTRICAL ENCLOSURES NEMA 4X-SS. PROVIDE ELECTRICAL HEAT TRACING FOR EQUIPMENTS SUSCEPTIBLE TO FREEZING.
6. AFFIX IT TAGS TO ALL MECHANICAL EQUIPMENT.
7. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH ELECTRICAL CONTRACTOR REGARDING EQUIPMENT SIZES AND TYPES ELECTRICAL INTERFACE EQUIPMENT REQUIRED.
8. DUE TO VARIATIONS IN EQUIPMENT CHARACTERISTICS BY DIFFERENT EQUIPMENT SUPPLIERS, MECHANICAL EQUIPMENT ULTIMATELY PROVIDED MAY DIFFER IN HORSEPOWER OR AMPERAGE REQUIREMENTS FROM THAT SPECIFIED IN THESE DRAWINGS. COORDINATE WITH GENERAL CONTRACTOR PRIOR TO BIDDING, AND PRIOR TO SUBMITTALS AND ORDERING EQUIPMENT, TO ENSURE THAT EQUIPMENT ELECTRICAL REQUIREMENTS ARE CONVERTED TO ELECTRICAL CONTRACTOR. IT IS SOLELY CONTRACTOR'S RESPONSIBILITY TO ENSURE COMPATIBILITY ISSUES ARE COORDINATED.
9. PROVIDE MECHANICAL, PLUMBING AND ELECTRICAL WORK REQUIRED FOR A COMPLETE AND OPERATIONAL INSTALLATION. PROVIDE MISCELLANEOUS DUCTWORK MODIFICATIONS TO ACCOMMODATE NEW WORK, REWIRE EXISTING SFAVES, SMOKE DETECTORS, ETC.

1. DUCTWORK SHALL BE GALVANIZED STEEL. SIZES SHOWN ARE INSIDE CLEAR DIMENSION.
2. WRAP ALL OUTSIDE AIR SUPPLY, RETURN DUCTWORK UNLESS NOTED OTHERWISE. INTERNALLY LINE FIRST 10' OF SUPPLY AND RETURN DUCTWORK. INTERNALLY LINE LAST 10' OF EXHAUST DUCTWORK.
3. CONSTRUCT AND LEAKAGE TEST ALL DUCTWORK BASED ON SMACNA REQUIREMENTS. COORDINATE PRESSURE CLASSES WITH EQUIPMENT SCHEDULES.
4. PROVIDE TURNING VANES IN ALL ELBOWS.
5. PROVIDE DUCTWORK MODIFICATION AND TRANSITION PIECES PER SMACNA RECOMMENDATION, AND AS REQUIRED TO ACCOMMODATE NEW UNITS. IF APPLICABLE, SEAL DUCT-LINER ON EXISTING DUCTWORK. SUBMIT FOR LOOSE INSULATION TO THE AIR STREAM. EXTEND EXISTING INSULATION ON NEW DUCT 12" PAST THE CONNECTION POINT OF THE NEW AND OLD DUCTWORK.

1. FIBERGLASS INSULATION MAY NOT BE USED ON ANY COLD SURFACES; ONLY CLOSED CELL INSULATION IS ACCEPTABLE.
2. PROVIDE INSULATION ON ALL SURFACES CAPABLE OF CREATING CONDENSATION.
3. INSULATION ON DUCT SHALL BE PROPERLY TAPED AND MASTICS MUST BE APPLIED ON SEAMS AND JOINTS AND AT ENDS ADJACENT TO DUCT FLANGES AND FITTINGS. FOR DUCT SIDES WITH DIMENSIONS LARGER THAN 18 INCHES, APPLY ADDITIONAL PINS AND CLIPS TO HOLD INSULATION TIGHTLY AGAINST SURFACE AT CROSS BRACING.

1. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS AND FEES.
2. OBTAIN APPROVAL FROM CITY FIRE DEPARTMENT AND BUILDING AND SAFETY DEPARTMENT PRIOR TO INSTALLATION OF ANY FIRE RELATED ITEMS.
3. WITH PERMITTING OFFICER, OWNER AND ENGINEER, COORDINATE PRESSURE TESTS, INSPECTIONS AND APPROVAL FOR ALL SYSTEMS.

12x12	DUCT SIZE: FIRST FIGURE IS SIDE SHOWN		THERMOSTAT
(12x12)	BELOW DUCT SIZE: FIRST FIGURE IS SIDE SHOWN		SPACE HUMIDITY SENSOR
	DIRECTION OF FLOW-RETURN		DUCT HUMIDITY SENSOR
	DIRECTION OF FLOW-SUPPLY		SPACE CARBON DIOXIDE SENSOR
			STATIC PRESSURE SENSOR
			DUCT CARBON DIOXIDE SENSOR
	FIRE DAMPER		
	FLEXIBLE DUCT		CHILLED WATER RETURN
	EXHAUST AIR GRILLE		CHILLED WATER SUPPLY
			CONDENSATE PIPING
	RETURN AIR/TRANSFER AIR GRILLE		BUTTERFLY VALVE
	SUPPLY AIR DIFFUSER		MANUAL VALVE
	SIDE TAP WITH DAMPER		AUTOMATIC VALVE 2 WAYS
	BACKDRAFT DAMPER		AUTOMATIC VALVE 3 WAYS
	AUTO-FLOW REGULATOR		CHECK VALVE
	DRAIN VALVE		PRESSURE GAUGE & COCK
	BALL VALVE		TEMPERATURE SENSOR
			THERMOMETER WELL

[illegible]

GMS ARCHITECTS
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BROOKS COUNTY ISD
FALFURRIAS HS FIELD HOUSE HVAC UPGRADES

FALFURRIAS, TX.



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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date:	06/10/2025
Scale:	As Noted
Project Architect:	David Monreal, AIA
Drawn By:	B.B.
Job No.	25v50
Sheet:	

ME10

ME10

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FALFURRIAS, TX.



ME2 1

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FALFURRIAS, TX.



ME2 2



KEYPLAN



ME2.2

No.	REVISIONS	BY
1	07/02/2025	ETHOS



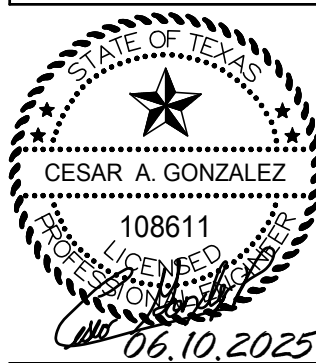
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BROOKS COUNTY ISD

FALFURRIAS HS FIELD HOUSE HVAC UPGRADES

FALFURRIAS, TX.



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Interior Designers

Date: 06/10/2025
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: B.B.
Job No: 25x50
Sheet:

ME2.3

DEMOLITION
MECHANICAL KEYED NOTES:

1

DEMOLISH EXISTING ROOF MOUNTED EXHAUST FAN AS SHOWN.

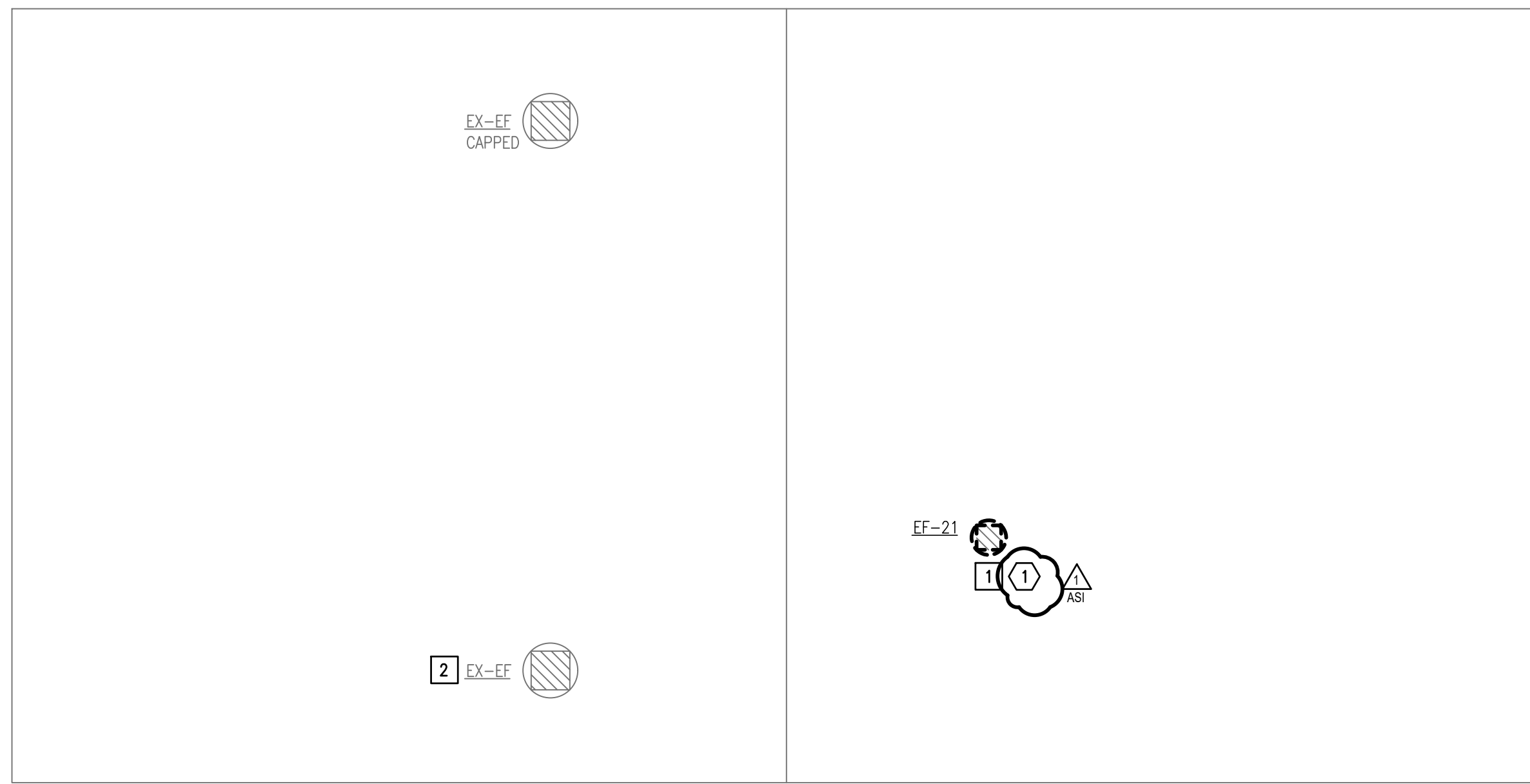
2

EXISTING EXHAUST FAN TO BE TURNED OFF AND REMAIN OFF AT ELECTRICAL PANEL / ELECTRICAL DISCONNECT.

DEMOLITION
ELECTRICAL KEYED NOTES:

1

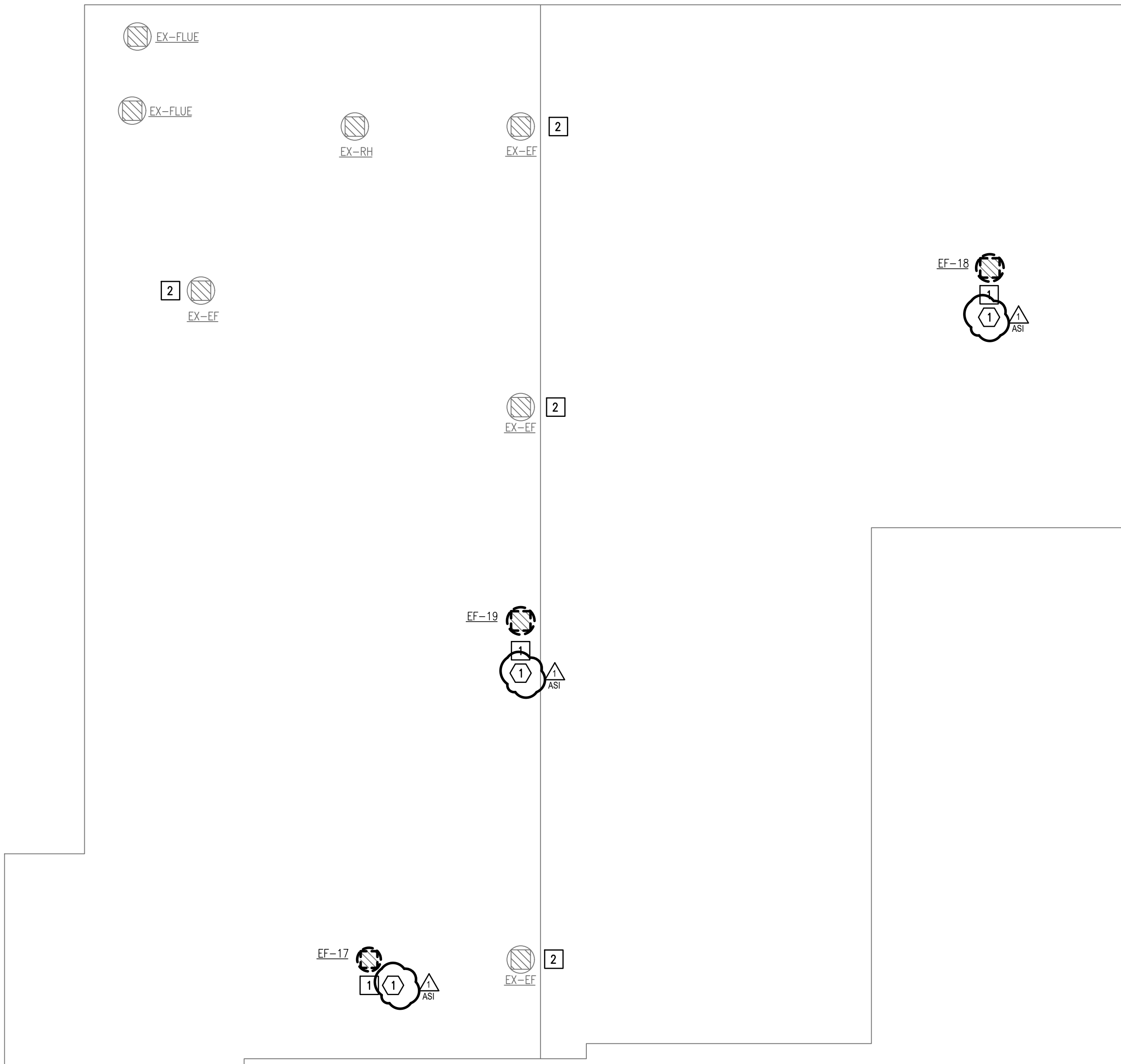
DISCONNECT EXISTING HVAC EQUIPMENT TO BE REPLACED. SEE EQUIPMENT CONNECTION SCHEDULE.



01 BASE BID
BUILDING M
MECHANICAL DEMOLITION ROOF PLAN
SCALE: 1/8" = 1'-0"



NORTH

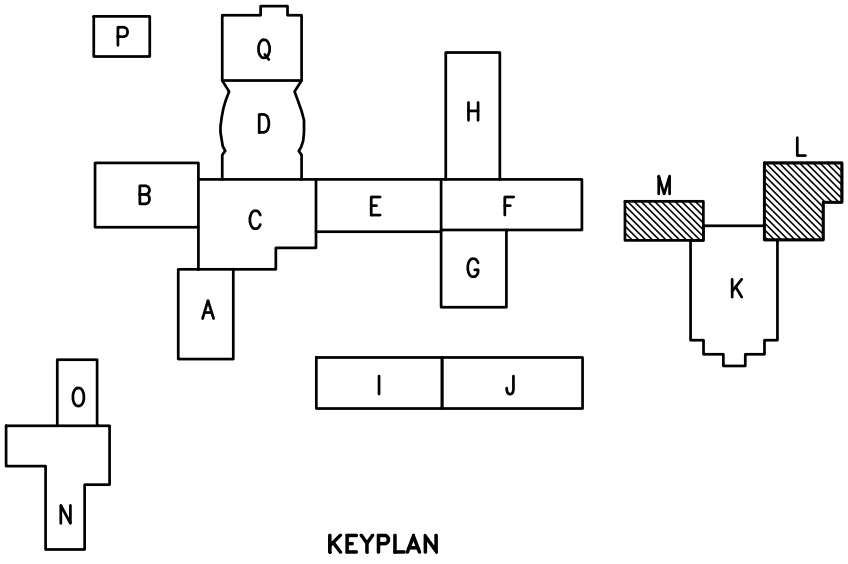


02 BASE BID
BUILDING L
MECHANICAL DEMOLITION ROOF PLAN
SCALE: 1/8" = 1'-0"



NORTH

LEGEND	
	EQUIPMENT TO BE DEMOLISHED



1128 SOUTH COMMERCE ST.
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PHONE: 361-234-3435
TEXAS REGISTERED

MECHANICAL GENERAL NOTES:

- PRIOR TO LABELING EQUIPMENT, COORDINATE DESIGNATION AND IDENTIFICATION WITH OWNER AND BUILDING AUTOMATION SYSTEM.
- ALL PIPING WELDS MUST BE WIRE-BRUSHED AND PAINTED A MINIMUM OF 12" ON EITHER SIDE OF WELD PRIOR TO INSULATION.
- AT LOWEST POINT IN PIPING ENTERING CHILLER BARRELS, PROVIDE 6" LONG DRAIN NIPPLES AND BALL VALVES FOR DRAINING NEW CHILLER.
- INSULATE PER SPECIFICATIONS ALL PIPING, VALVES, FITTINGS, PUMP BODIES AND COLD SURFACES THAT ARE CAPABLE OF GENERATING CONDENSATION. FIBERGLASS INSULATION WILL NOT BE ALLOWED.
- PRIOR TO INSTALLATION OF EQUIPMENT, VERIFY THAT MANUFACTURER RECOMMENDED AND CODE REQUIRED CLEARANCES ARE AVAILABLE.
- INSTALL PIPES AND DUCTS AS HIGH AS POSSIBLE TO ALLOW MAXIMUM POSSIBLE HEADROOM. MIN. 10' A.F.F. OR AS HIGH AS POSSIBLE.
- PROVIDE REFRIGERANT SIGNAGE, AND EMERGENCY CONTROLS AS PER SPECIFICATIONS AND AS PER REQUIREMENTS OF INTERNATIONAL MECHANICAL AND FIRE CODES.
- PROVIDE P/T TEST PORT WITHIN 6 INCHES OF EVERY PRESSURE GAGE AND THERMOWELL. SEE PIPING SCHEMATIC FOR LOCATIONS.
- REFER TO HYDRONIC PIPING SCHEMATICS FOR DETAILS AND PIPE SIZES.
- PROVIDE PIPE STANCHION SUPPORTS AT SPECIFIED INTERVALS, CLOSE TO ELBOWS AND VALVES. PROVIDE CONCRETE PADS AS REQUIRED. RE: STRUCTURAL.
- FOR ALL PIPING SUPPORTS LOCATED OUTDOORS, PROVIDE THE FOLLOWING:
 - POLYAMIDE PRIME COAT OF DEVOE PAINTS, DEVYAN 201.
 - INTERMEDIATE TOP COAT OF DEVOE PAINTS, DEVYAN 224HS.
 - TOP COAT OF DEVOE PAINTS, DEVYTHANE 379.

MECHANICAL KEYED NOTES:

- PROVIDE NEW SUSPENDED CHW AHU AS SCHEDULED. ORIENT CWRU AS INDICATED TO OPTIMIZE DUCTWORK. CONNECT TO EXISTING DUCTWORK AS SHOWN.
- CONNECT NEW DUCTWORK INTO EXISTING DUCTWORK AT THIS APPROXIMATE LOCATION.
- DUCTWORK ROUTING SHOWN IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS. (TYPICAL)
- SLEEVE ALL PENETRATIONS PER SPECIFICATIONS. SEAL AROUND PIPING WITH FIRE PROOF CAULKING. PROVIDE ESCUTCHION PLATES AND FLASHING AROUND PENETRATION BOTH INSIDE AND OUTSIDE TO PROVIDE FINISHED LOOK.
- PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS. PROVIDE BALANCING DAMPER.
- ROUTE TRAPPED COPPER CONDENSATE PIPING TO DRYWELL.
- PROVIDE EXHAUST DUCT DOWN FROM ROOF AT THIS APPROXIMATE LOCATION. PROVIDE DUCT TRANSITIONS, FITTINGS, AND ACCESSORIES. PROVIDE BALANCING DAMPER.
- RE-BALANCE EXISTING DIFFUSER / GRILLE TO CFM VALUE SHOWN. (TYPICAL)
- REFER TO SPECIFICATIONS FOR DDC CONTROLS AND SEQUENCES OF OPERATION. MOUNT DDC PANELS AT THIS APPROXIMATE LOCATION. PROVIDE A DEDICATED DDC PANEL FOR EVERY HYDRONIC AIR HANDLING UNIT. FIELD VERIFY EXISTING CONDITIONS AND AVAILABLE WALL SPACE PRIOR TO ORDERING DDC PANELS. COORDINATE WITH GENERAL CONTRACTOR.
- PROVIDE DRY-WELL TO SERVE CONDENSATE LINES.
- CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS (TYPICAL).
- PROVIDE ALUMINUM METAL JACKETING FOR ALL CHW PIPING EXPOSED OUTDOORS. SEE SPECIFICATIONS.
- PROVIDE HYDRONIC PIPING WITH AUTOMATIC ISOLATION VALVES, THERMOWELLS, PRESSURE GAUGES, THERMOMETERS, FLOW SWITCHES, MANUAL VALVES, ETC. PROVIDE PIPING SPECIALTIES SUCH AS AIR SEPARATOR, EXPANSION TANK, MAKE-UP WATER, CHEMICAL POT FEEDER, ETC. SEE PIPING SCHEMATIC AND ASSOCIATED DETAILS.
- PROVIDE AIR SEPARATOR, EXPANSION TANK AND CHEMICAL POT FEEDER. INSTALL ON 4" HOUSEKEEPING CONCRETE PADS PROVIDED BY STRUCTURAL. PADS SHALL BE 6" LARGER ON ALL SIDES FOR ALL EQUIPMENT EXCEPT CHILLERS. REFER TO STRUCTURAL DRAWINGS.

MECHANICAL KEYED NOTES:

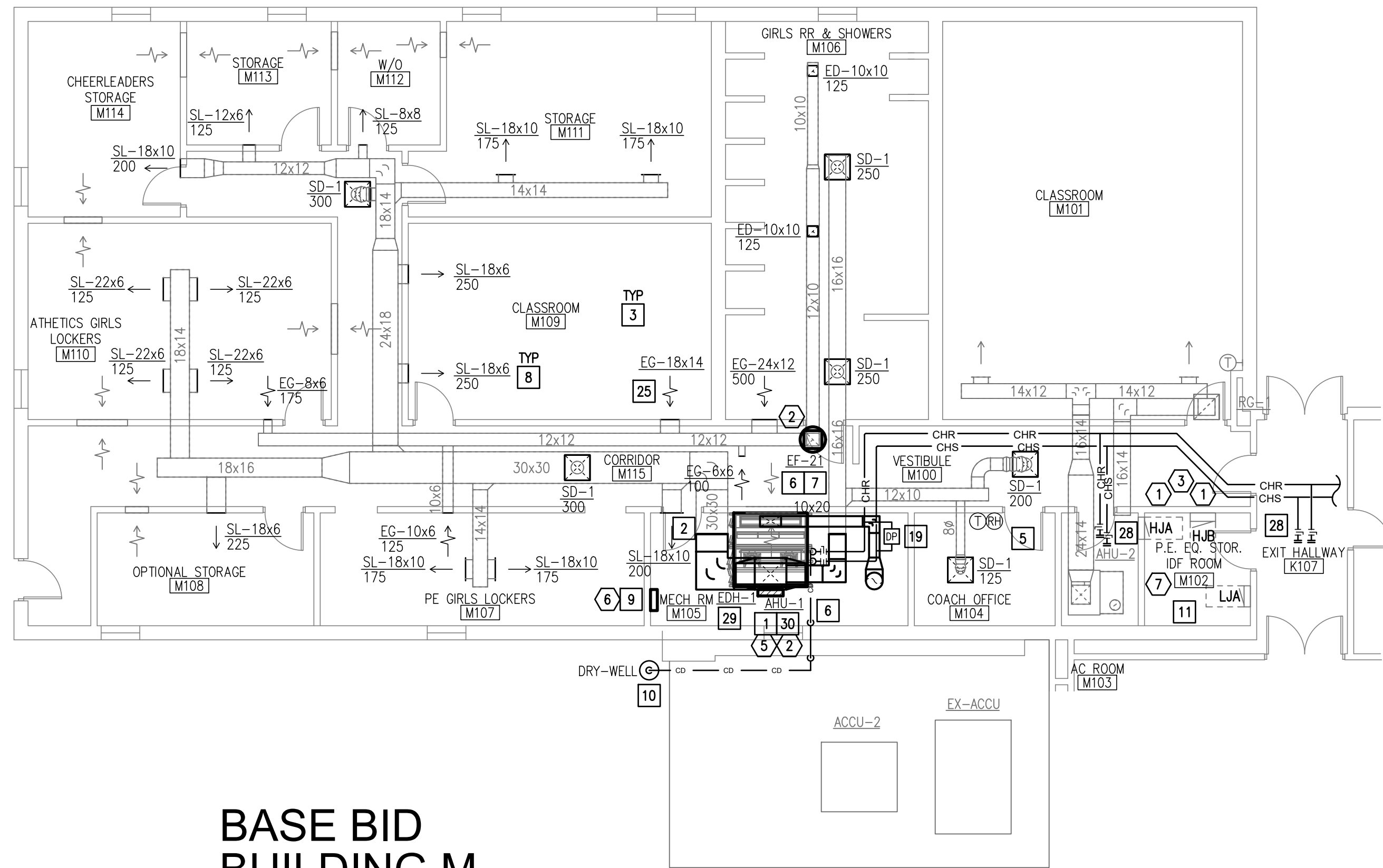
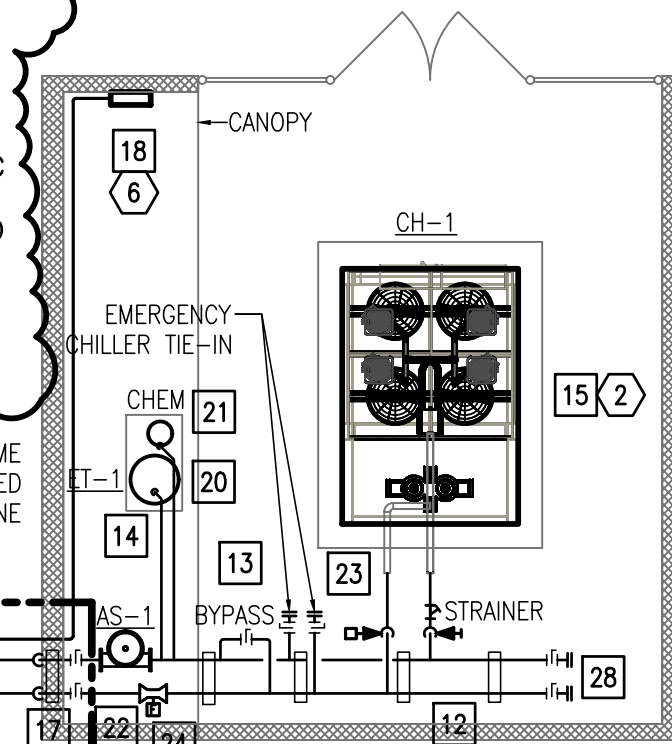
- PROVIDE CHILLER AS SCHEDULED. INSTALL CHILLER ON 6" HOUSEKEEPING CONCRETE PAD PROVIDED BY STRUCTURAL. PAD SHALL BE 12" LARGER ON ALL SIDES FOR CHILLERS. REFER TO STRUCTURAL DRAWINGS.
- PIPE SUPPORTS AND STANCHIONS SHALL BE HOT DIPPED GALVANIZED AND PAINTED. BASE PLATE SHALL BE INSTALLED ON A 4" CONCRETE PAD. (TYPICAL)
- PROVIDE ISOLATION VALVES TO SERVE CENTRAL PLANT.
- LOCATE CHILLER DDC PANEL AT THIS APPROXIMATE LOCATION. REFER TO SPECIFICATIONS FOR DDC CONTROLS AND SEQUENCES OF OPERATION.
- PROVIDE NEW DP SENSOR AS SHOWN. CENTRAL PLANT EQUIPMENT SHALL BE CONTROLLED BY CRITICAL DP SENSOR. RETAIN A TAG CONTRACTOR TO VERIFY DP SETPOINTS POST INSTALLATION.
- PROVIDE MAKE-UP WATER LINE 1" TO SERVE EXPANSION TANK. CONNECT TO BACKFLOW PREVENTER AND PRESSURE RELIEF VALVE. REFER TO "MAKE-UP DETAIL" ON DETAIL SHEET. COORDINATE WITH PLUMBING.
- COORDINATE WITH WATER TREATMENT COMPANY TO ACHIEVE SPECIFIED WATER CONDITIONING. PROVIDE NEW FILTRATION SYSTEM AND DYE IN CHILLED WATER. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
- PIPING UNDER CANOPY SHALL BE SUPPORTED FROM GROUND WITH PIPE SUPPORTS (NOT SHOWN FOR CLARITY). PROVIDE PIPE SUPPORTS AS PER SPECIFICATIONS. SUBMIT SHOP DRAWINGS WITH PIPE SUPPORT LOCATIONS FOR APPROVAL.
- PROVIDE CONNECTIONS FOR EMERGENCY CHILLER TIE-IN.
- PROVIDE FLOW METER AS PER SCHEMATICS AND SPECIFICATIONS. INSTALL AS PER MANUFACTURER RECOMMENDATIONS.
- FULLY CLOSED DAMPER OR CAP GRILLE TO PREVENT AIRFLOW THROUGH EXISTING GRILLE.
- PROVIDE NEW GRILLE AS SCHEDULED.
- PROVIDE ELECTRIC DUCT HEATER AT UNIT DISCHARGE OR AFTER 48" OF STRAIGHT DUCT AS SCHEDULED.
- PROVIDE BLIND FLANGE VALVES FOR FUTURE EXPANSION.
- PROVIDE NEW 6" HOUSEKEEPING CONCRETE PAD PER DETAIL TO INSTALL NEW EQUIPMENT ON. PAD SHALL BE MINIMUM 6" LARGER THAN EQUIPMENT FOOTPRINT ON ALL SIDES.
- PROVIDE UNDERGROUND CHILLED WATER PIPING AS PER SPECIFICATIONS.

PLUMBING KEYED NOTES:

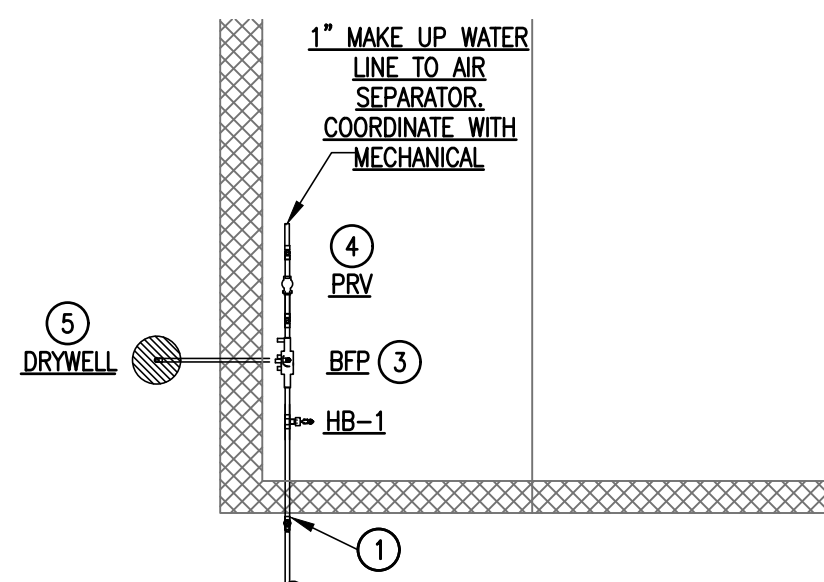
- PROVIDE 1" CLOSED-CELL INSULATION WITH METAL JACKET ON EXPOSED PIPING. PENETRATE EXTERIOR WALL AS LOW AS POSSIBLE. TURN DOWN TO UNDERGROUND.
- PROVIDE 1" MAKE UP WATER LINE. CONNECT TO BACKFLOW PREVENTER AND PRESSURE RELIEF VALVE. REFER TO "MAKE-UP DETAIL" ON DETAIL SHEET.
- PROVIDE A BACKFLOW PREVENTER (BFP) WILKINS MODEL #975XL2 OR APPROVED EQUAL. INSTALL MOUNTED ON SUPPORTS IN WATER LINE SERVING MAKE-UP WATER. PROVIDE A MINIMUM OF 3' CLEARANCE IN FRONT OF BFP FOR TESTING AND SERVICE. PROVIDE DRAIN RECEPTOR UNDER BFP AND RUN COOPER LINE TO NEARBY DRY WELL. SEE ASSOCIATED DETAIL ON DETAIL SHEET FOR CONCRETE PIPE SUPPORT AND BFP.
- PROVIDE A PRESSURE REDUCING VALVE (PRV) WATTS SERIES LFUSB OR APPROVED EQUAL. REFER TO ASSOCIATE DETAIL ON DETAILS SHEET.
- PROVIDE DRYWELL TO SERVE BACK-FLOW PREVENTER DRAIN LINE. SEE ASSOCIATED DETAIL ON DETAIL SHEET.
- BRANCH OFF WITH A COPPER TYPE K 1-1/4" DOMESTIC COLD WATER PIPING FROM EXISTING DOMESTIC WATER SYSTEM AT THIS APPROXIMATE LOCATION TO SERVE NEW CHILLER MAKE-UP WATER LINE. FIELD VERIFY EXACT LOCATION AND EXISTING CONDITIONS.
- PROVIDE HOSE BIBB ZURN #195 EXPOSED TYPE. MILD CLIMATE. ANTICONTAMINATION WALL FAUCET WITH 3/4" MALE HOSE CONNECTION AND ANTI-SIPHON VACUUM BREAKER. COORDINATE MOUNTING HEIGHT WITH OWNER PRIOR INSTALLATION -TYPICAL.
- PROVIDE BRONZE ISOLATION BALL VALVE WITH THREADED ENDS, EQUAL TO NIBCO OR AN APPROVED EQUAL. PROVIDE VALVE IDENTIFICATION TAGS AS PER SPECIFICATIONS. (TYPICAL)

ELECTRICAL KEYED NOTES:

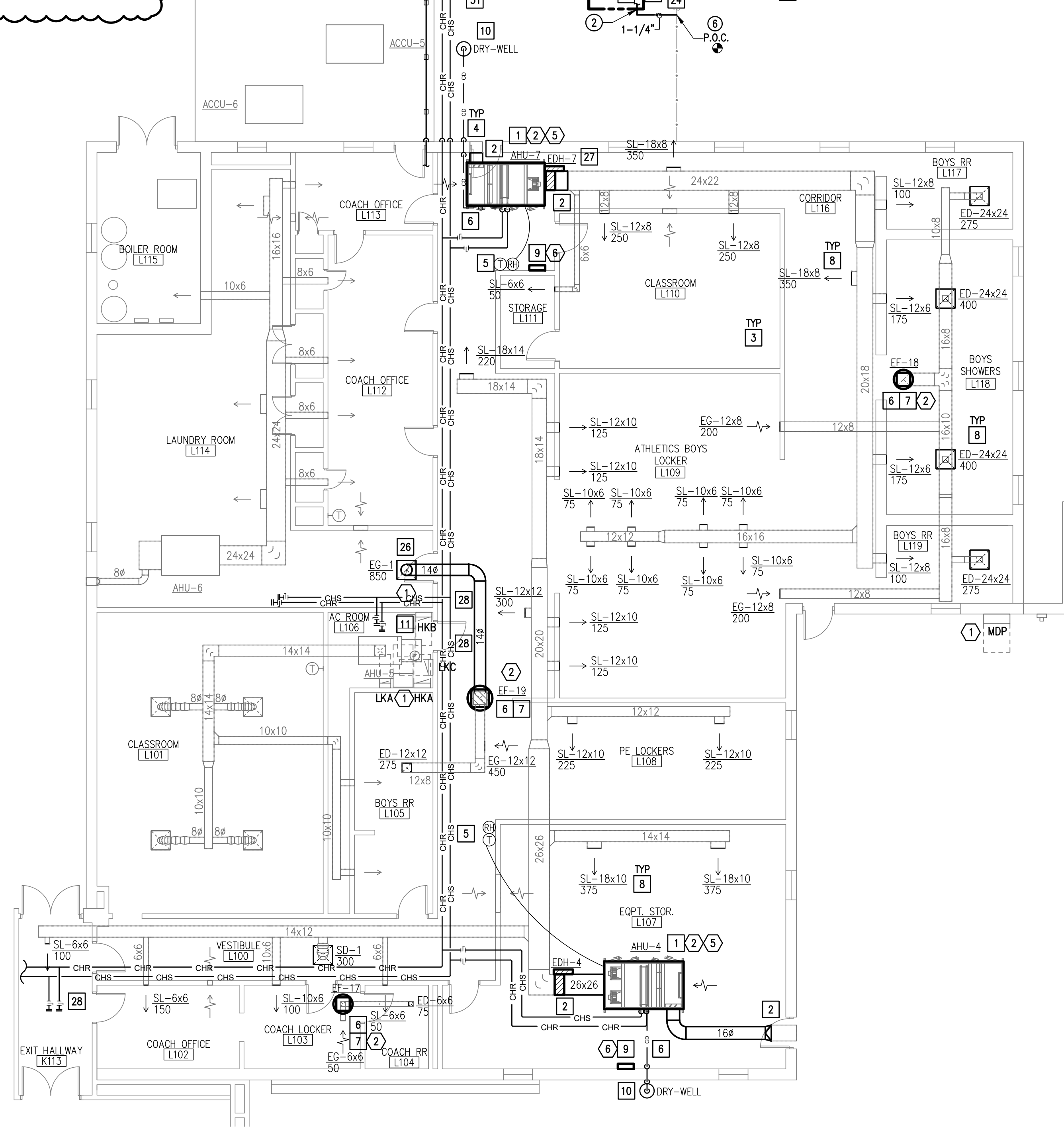
- APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
- CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
- APPROXIMATE LOCATION OF EXISTING SILENT KNIGHT FIRE ALARM POWER SUPPLY IN ELECTRICAL ROOM.
- APPROXIMATE LOCATION OF EXISTING SILENT KNIGHT 6520 FIRE ALARM CONTROL PANEL LOCATED IN EXISTING HIGH SCHOOL RECEPTIONIST AREA "C". SEE KEY PLAN.
- PROVIDE NEW FIRE ALARM DUCT DETECTOR WITH SHUNT TRIP RELAY AND REMOTE TEST SWITCH.
- CONNECT DDC TO AN EXISTING 20A/1P SPARE BREAKER IN PANELBOARD "LKC". BRANCH CIRCUIT: 1/2" - 2#12 & #12G. ALL DDC PANELS TO SHARE THE SAME CIRCUIT. PROVIDE A 1" RACEWAY WITH CAT6 CABLEING FROM DDC TO EXISTING IDF RACK AND PROVIDE END TO END CONNECTIVITY. CAT6 CABLEING AND RACEWAY TO BE DUSTY CHANGED TO EACH DDC. ROUTE RACEWAY ALONG THE SAME ROUTE AS THE HVAC CHILLER LINES.
- APPROXIMATE LOCATION OF EXISTING DATA RACK.



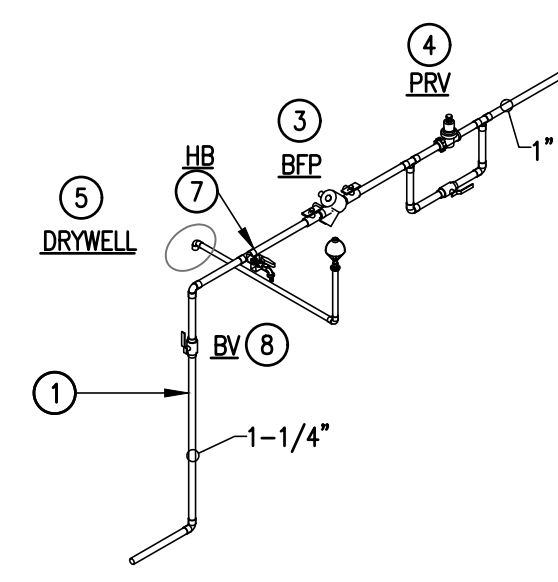
01 BASE BID BUILDING M MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



03 ENLARGED MAKE-UP WATER LINE
SCALE: NOT TO SCALE

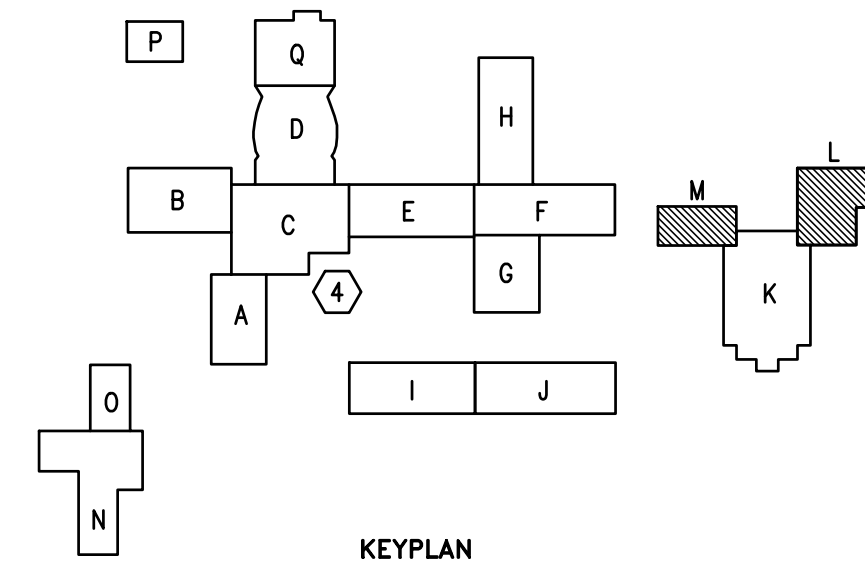


02 BASE BID BUILDING L MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



04 MAKE-UP WATER LINE ISOMETRIC VIEW
SCALE: NOT TO SCALE

LEGEND	
	NEW EQUIPMENT
	NEW T-STAT
	NEW CHW PIPING
	EXISTING DIFFUSER/GRILLE TO BE RE-BALANCED UNLESS OTHERWISE NOTED



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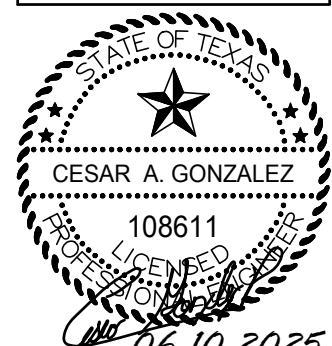
No.	REVISIONS	BY
1	07/02/2025	ETHOS



1150 Paredes Line Rd.
Brownsville TX 78526
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BROOKS COUNTY ISD FALFURRIAS HS FIELD HOUSE HVAC UPGRADES

FALFURRIAS, TX.



06.10.2025
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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 06/10/2025
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: B.B.
Job No.: 25x50
Sheet:

ME3.1

ASB

MECHANICAL GENERAL NOTES:

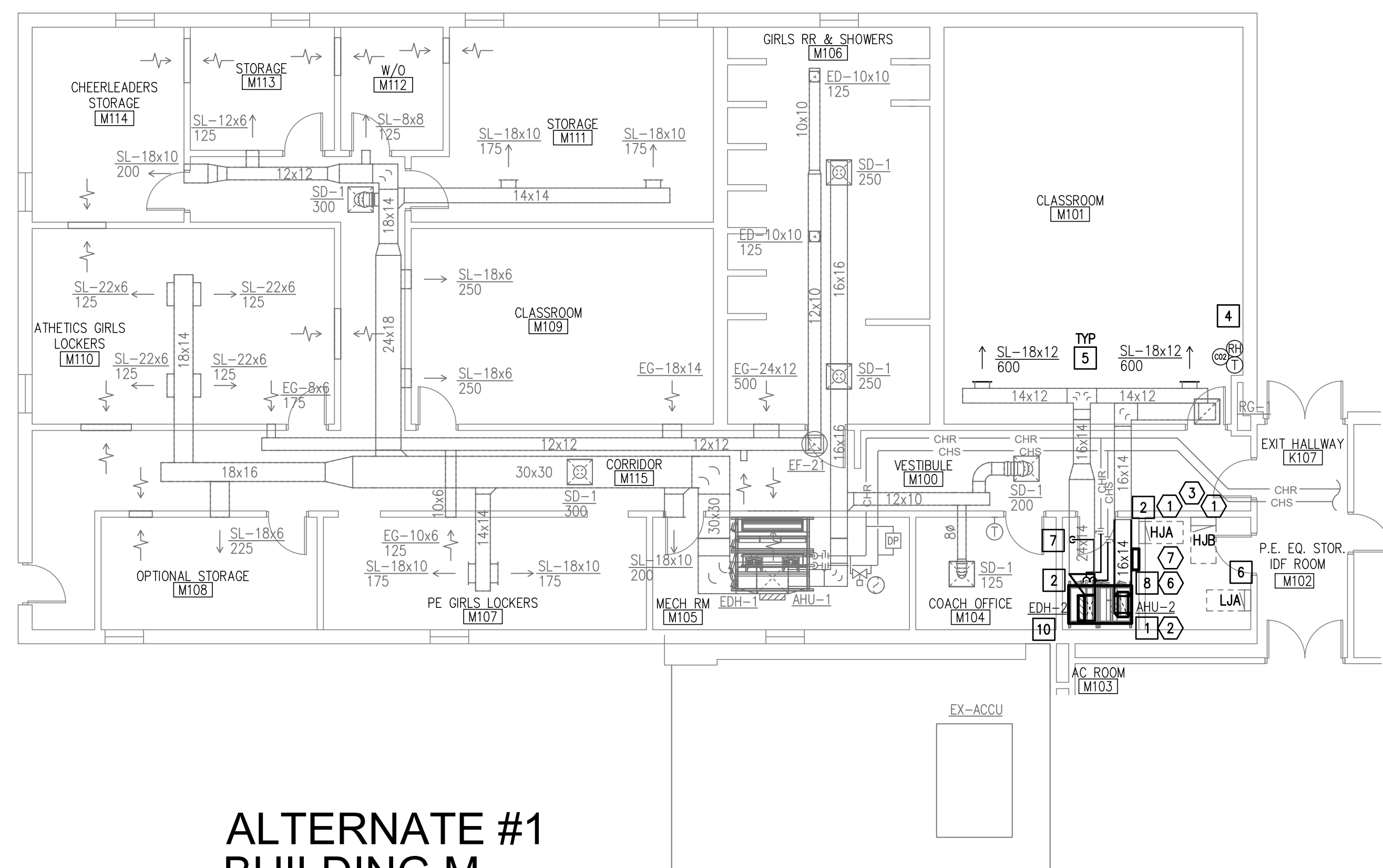
- MECHANICAL PLANS WERE DEVELOPED DURING ONGOING MECHANICAL RENOVATIONS. CONTRACTOR SHALL CONTACT ETHOS ENGINEERING TO SCHEDULE A SITE VISIT PRIOR TO COMMENCING WITH CONSTRUCTION WORK. ETHOS ENGINEERING MAY ISSUE REVISED CONSTRUCTION DRAWINGS BASED ON SUCH FIELD VERIFICATION.

MECHANICAL KEYED NOTES:

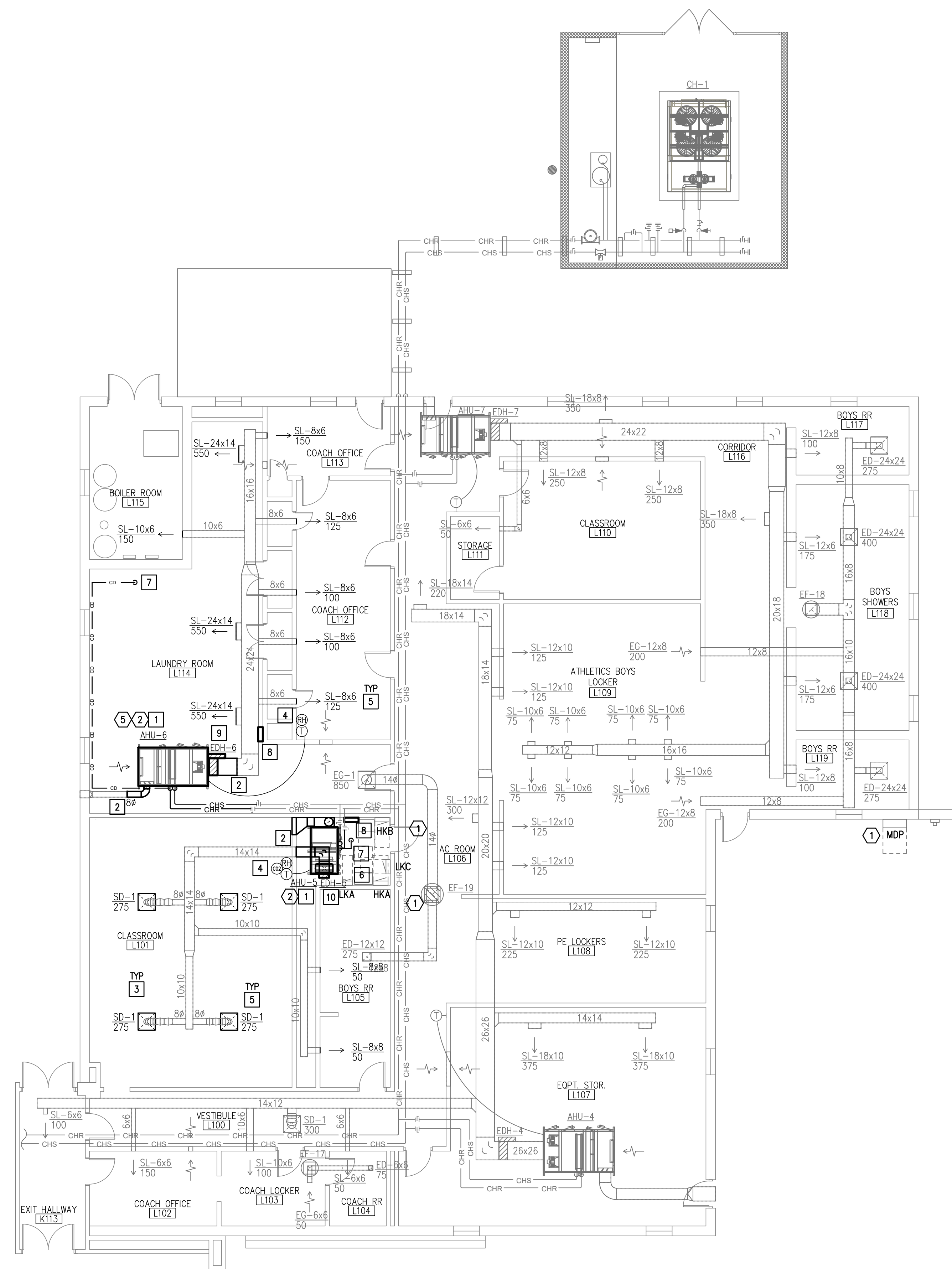
- PROVIDE NEW SUSPENDED CHW AHU AS SCHEDULED. ORIENT CHWRTU AS INDICATED TO OPTIMIZE DUCTWORK. CONNECT TO EXISTING DUCTWORK AS SHOWN.
- CONNECT NEW DUCTWORK INTO EXISTING DUCTWORK AT THIS APPROXIMATE LOCATION.
- DUCTWORK ROUTING SHOWN IS DIAGRAMMATIC IN NATURE. FIELD-VERIFY STRUCTURE AND SPACE AVAILABILITY PRIOR TO SUBMITTING SHOP DRAWINGS. COORDINATE WITH ARCHITECT AND ENGINEER IN CASE OF CONFLICTS. (TYPICAL)
- PROVIDE THERMOSTAT, RH, AND CO2 SENSORS WHERE INDICATED. INSTALL 48" A.F.F. COORDINATE WITH ARCHITECT AND OWNER TO MEET ADA REQUIREMENTS. PROVIDE CLEAR LOCKING COVER FOR ALL SENSORS.
- RE-BALANCE EXISTING DIFFUSER / GRILLE TO CFM VALUE SHOWN. (TYPICAL)
- CLEARANCE FOR ELECTRICAL PANELS. DO NOT ROUTE PIPING OVER THIS AREA. REFER TO ELECTRICAL PLANS FOR EXACT LOCATION OF ELECTRICAL ROOMS (TYPICAL).
- ROUTE TRAPPED COPPER CONDENSATE PIPING TO EXISTING FLOOR DRAIN IN THIS APPROXIMATE LOCATION.
- REFER TO SPECIFICATIONS FOR DDC CONTROLS AND SEQUENCES OF OPERATION. MOUNT DDC PANELS AT THIS APPROXIMATE LOCATION. PROVIDE A DEDICATED DDC PANEL FOR EVERY HYDRONIC AIR HANDLING UNIT. FIELD VERIFY EXISTING CONDITIONS AND AVAILABLE WALL SPACE PRIOR TO ORDERING DDC PANELS. COORDINATE WITH GENERAL CONTRACTOR.
- PROVIDE ELECTRIC DUCT HEATER AT UNIT DISCHARGE OR AFTER 48" OF STRAIGHT DUCT AS SCHEDULED.
- PROVIDE ELECTRIC DUCT HEATER AT UNIT DISCHARGE IN VERTICAL DUCT RISE AS SCHEDULED.

ELECTRICAL KEYED NOTES:

- APPROXIMATE LOCATION OF EXISTING PANELBOARD SERVING NEW HVAC EQUIPMENT.
- CONNECT NEW HVAC EQUIPMENT. SEE EQUIPMENT CONNECTION SCHEDULE.
- APPROXIMATE LOCATION OF EXISTING SILENT KNIGHT FIRE ALARM POWER SUPPLY IN ELECTRICAL ROOM.
- APPROXIMATE LOCATION OF EXISTING SILENT KNIGHT 6820 FIRE ALARM CONTROL PANEL LOCATED IN EXISTING HIGH SCHOOL RECEPTIONIST AREA "C". SEE KEY PLAN.
- PROVIDE NEW FIRE ALARM DUCT DETECTOR WITH SHUNT TRIP RELAY AND REMOTE TEST SWITCH.
- CONNECT DDC TO AN EXISTING 20A/1P SPARE BREAKER IN PANELBOARD "LKC". BRANCH CIRCUIT: 1/2" - 2#12 & #12G. ALL DDC PANELS TO SHARE THE SAME CIRCUIT. PROVIDE A 1" RACEWAY WITH CAT6 CABLEING FROM DDC TO EXISTING OF RACK AND PROVIDE END TO END CONNECTIVITY. DATE CABLEING AND RACEWAY TO BE DATED CHANGED TO EACH DDC. ROUTE RACEWAY ALONG THE SAME ROUTE AS THE HVAC CHILLER LINES.
- APPROXIMATE LOCATION OF EXISTING DATA RACK.



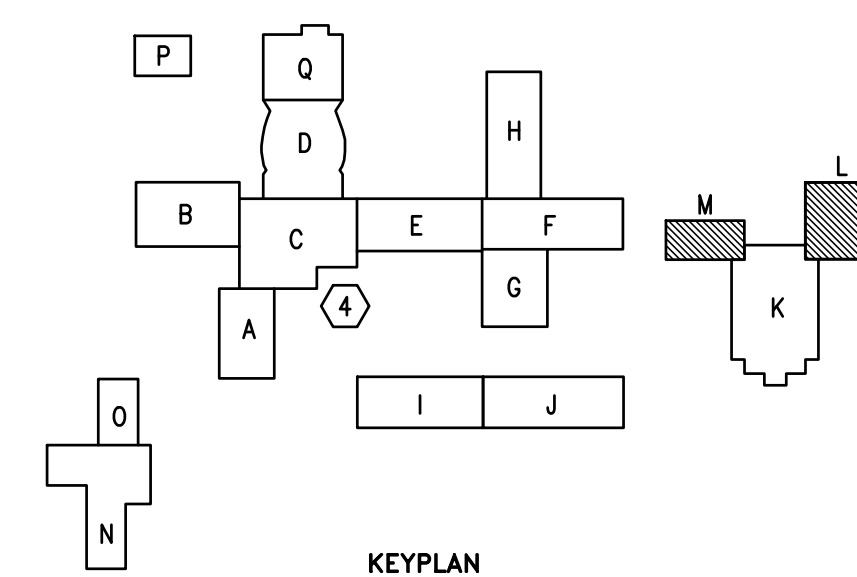
01
ALTERNATE #1
BUILDING M
MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



02
ALTERNATE #1
BUILDING L
MECHANICAL FLOOR PLAN
SCALE: 1/8" = 1'-0"



LEGEND	
	NEW EQUIPMENT
	NEW T-STAT
	NEW CHW PIPING
	EXISTING DIFFUSER/GRILLE TO BE RE-BALANCED UNLESS OTHERWISE NOTED



1128 SOUTH COMMERCE ST.
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TEXAS REGISTERED

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Brownsville TX 78526
(956) 546-0110
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BROOKS COUNTY ISD FALFURRIAS HS FIELD HOUSE HVAC UPGRADES

FALFURRIAS, TX.



06.10.2025
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Gomez Mendez Saenz Inc.
Architects-Planners
Interior Designers

Date: 06/10/2025
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: B.B.
Job No: 25-050
Sheet:

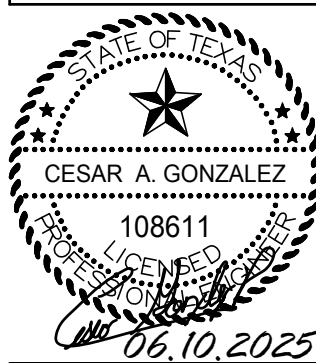
ME3.2

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BROOKS COUNTY ISD
FALFURRIAS HS FIELD HOUSE HVAC UPGRADES

FALFURRIAS, TX.



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Architects-Planners
Interior Designers
Date: 06/10/2025
Scale: As Noted
Project Architect: David Monreal, AIA
Drawn By: B.B.
Job No: 25u50
Sheet:

ME3.3

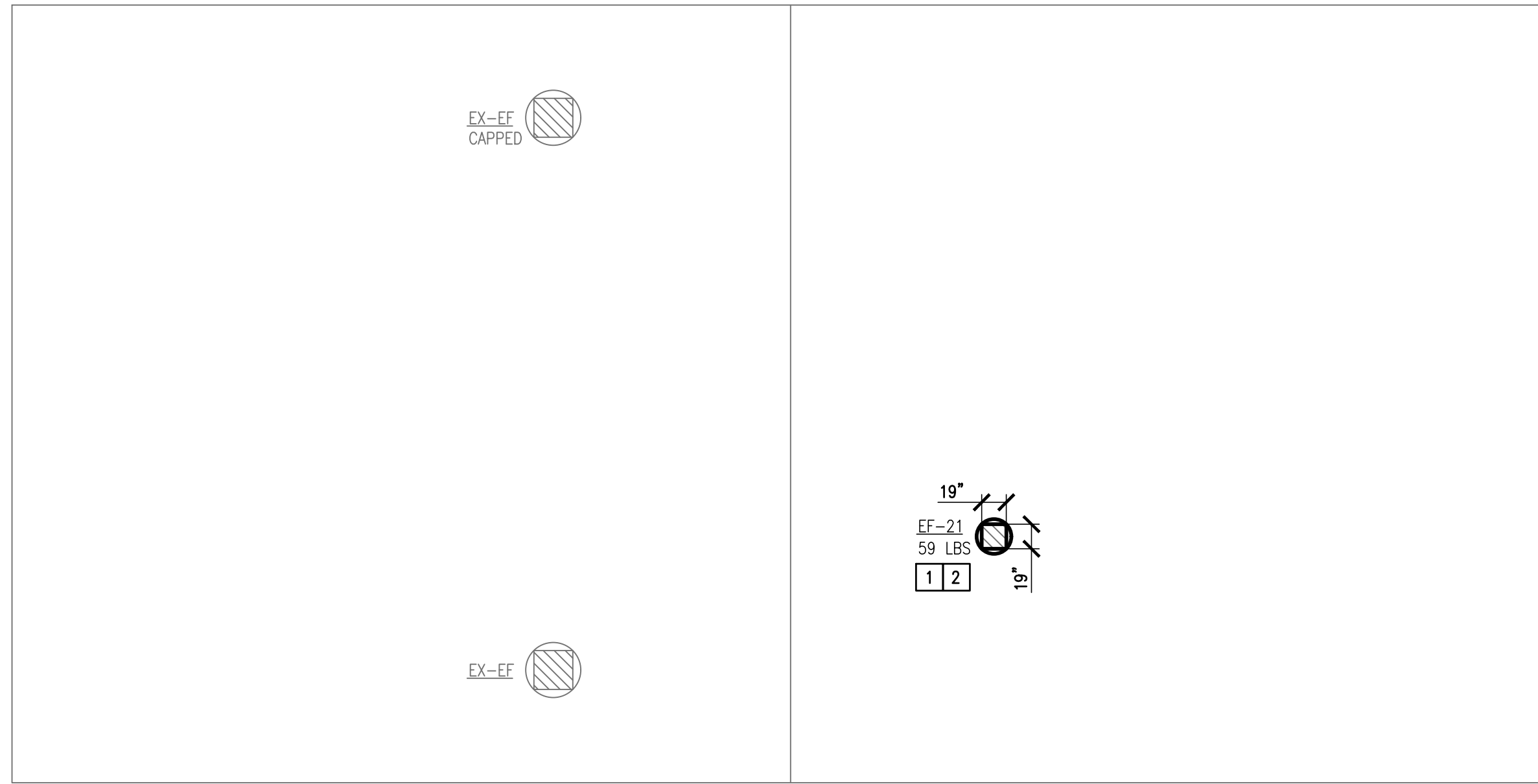
MECHANICAL KEYED NOTES:

1

PROVIDE ROOF MOUNTED EXHAUST FAN AS SCHEDULED. ATTACH FAN AND ASSOCIATED CURB TO EXISTING STRUCTURE. ATTACHMENTS SHALL BE CAPABLE OF WITHSTANDING THE PROJECT'S WIND PRESSURES. SEE ASSOCIATED DETAIL ON DETAIL SHEET. PROVIDE ALL NECESSARY ROOFING WORK TO SEAL AND FLASH ROOF PENETRATION. COORDINATE WITH ROOFING CONTRACTOR.

2

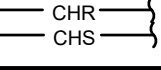
CONTRACTOR SHALL FIELD VERIFY EXISTING OPENINGS AND REPORT THIS INFORMATION TO ETHOS ENGINEERING. DO NOT ORDER NEW EXHAUST FANS OR ENLARGE EXHAUST FAN OPENINGS UNTIL ETHOS ENGINEERING HAS ISSUED A CONFIRMED DIRECTIVE.

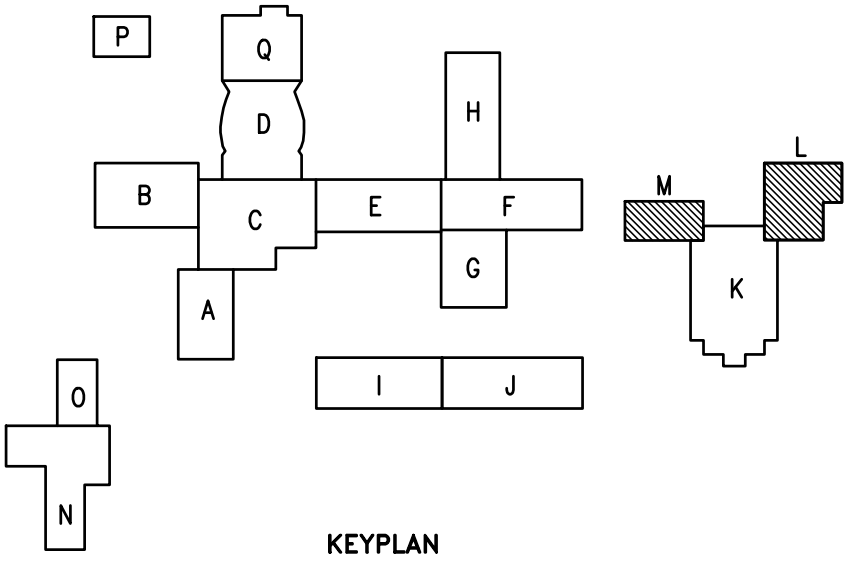


01 **BASE BID
BUILDING M
MECHANICAL ROOF PLAN**
SCALE: 1/8" = 1'-0" 



02 **BASE BID
BUILDING L
MECHANICAL ROOF PLAN**
SCALE: 1/8" = 1'-0" 

LEGEND	
	NEW EQUIPMENT
	NEW T-STAT
	NEW CHW PIPING



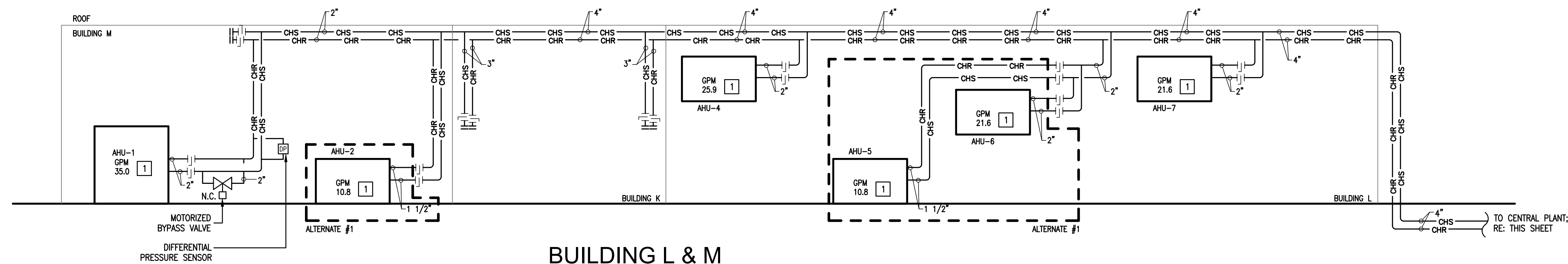

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HARLINGEN, TX
PHONE: 361-204-3435
TEXAS REGISTERED

MECHANICAL KEYED NOTES:

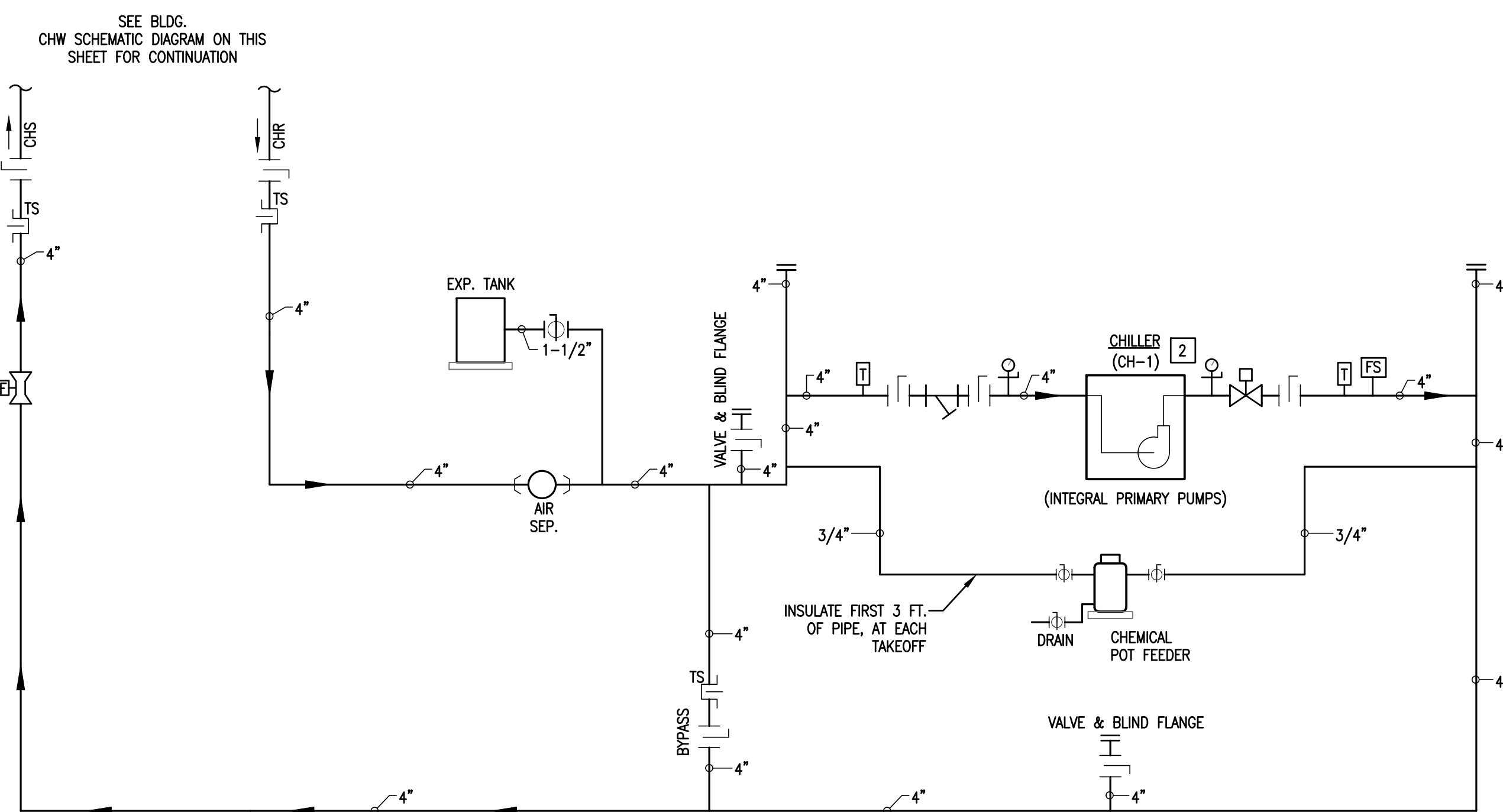
- 1 PROVIDE 3-WAY CONTROL VALVE AT AHU. REFER TO CHILLED WATER COIL CONNECTION SCHEMATIC WITH 3-WAY VALVE ON DETAIL SHEET.
- 2 REFER TO CHILLER PIPING CONNECTION DETAIL ON DETAIL SHEET.

GENERAL NOTES:

1. ALL PIPING WELDS MUST BE WIRE-BRUSHED AND PAINTED A MINIMUM OF 12" ON EITHER SIDE OF WELD PRIOR TO INSULATION.
2. CLEAN AND PREPARE SURFACE OF CHILLED WATER PIPING BEFORE INSULATING. APPLY CORROSION COATING TO ALL PIPING. REFER TO SPECIFICATIONS FOR MORE INFORMATION.
3. INSULATE PER SPECIFICATIONS ALL PIPING, VALVES, FITTINGS, PUMP BODIES AND COLD SURFACES THAT ARE CAPABLE OF GENERATING CONDENSATION. FIBERGLASS INSULATION WILL NOT BE ALLOWED.
4. PRIOR TO INSTALLATION OF EQUIPMENT, VERIFY THAT MANUFACTURER RECOMMENDED AND CODE REQUIRED CLEARANCES ARE AVAILABLE.
5. INSTALL PIPES AND DUCTS AS HIGH AS POSSIBLE TO ALLOW MAXIMUM POSSIBLE HEADROOM. MIN. 9' AFF.
6. PROVIDE P/T TEST PORT WITHIN 6 INCHES OF EVERY PRESSURE GAGE AND THERMOWELL. SEE PIPING SCHEMATIC FOR LOCATIONS.
7. REFER TO HYDRONIC PIPING SCHEMATICS FOR DETAILS.
8. FOR ALL PIPING SUPPORTS LOCATED OUTDOORS, PROVIDE THE FOLLOWING:
A) POLYAMIDE PRIME COAT OF DEVOE PAINTS, DEVTRAN 201.
B) INTERMEDIATE TOP COAT OF DEVOE PAINTS, DEVTRAN 224HS.
C) TOP COAT OF DEVOE PAINTS, DEVTRAN 379.
9. GPM'S ARE SHOWN FOR VERIFICATION PURPOSE ONLY. DO NOT USE THIS DATA FOR TAB. IN CASE OF CONFLICT, OR IF FLOW DATA DO NOT MATCH WITH THOSE FOR SCHEDULED EQUIPMENT, USE LARGER OF THE TWO.
10. REFER TO SPECIFICATIONS FOR CONTROL COMPONENTS, DEVICES, AND SENSORS TO BE COORDINATED WITH MECHANICAL WORK.
11. AT LOWEST POINT IN PIPING ENTERING CHILLER BARRELS, PROVIDE 6" LONG DRAIN NIPPLES AND BALL VALVES FOR DRAINING CHILLER.
12. MINIMUM PIPE SIZE SHALL BE 1".



01 CHILLED WATER SCHEMATIC DIAGRAM
SCALE: NOT TO SCALE



02 CHILLED WATER SCHEMATIC DIAGRAM
SCALE: NOT TO SCALE

LEGEND:

AS	AIR SEPARATOR		BALL VALVE		NEW EQUIPMENT
	AUTOMATIC VALVE	M	WATER METER		NEW PIPING
	MANUAL VALVE		BLIND FLANGE	TS	THERMOWELL FOR DDC TEMPERATURE SENSOR
	STRAINER		PUMP	FS	FLOW SWITCH
	FLOW METER		PUMP WITH VFD		CHECK VALVE
PSD	PUMP SUCTION DIFFUSER		PRESSURE GAUGE		THERMOMETER

