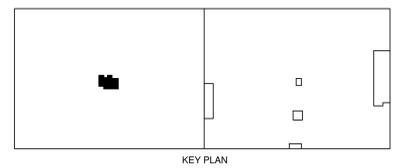


1 ENLARGED BREAKROOM AND RESTROOM PLUMBING PLAN
1/4" = 1'-0"

FIXTURE CONNECTION SCHEDULE
(NOTE: CONNECTIONS ARE TYPICAL UNLESS NOTED OTHERWISE ON DWG.)

FIXTURE	COLD WATER	HOT WATER	DRAIN	VENT
WC WATER CLOSET	1"	----	4"	2"
UR URINAL	3/4"	----	2"	1 1/2"
L LAVATORY	1/2"	1/2"	2"	1 1/2"
S SINK	1/2"	1/2"	2"	1 1/2"
EWC ELEC WATER COOLER	1/2"	----	2"	1 1/2"
CO CLEANOUT	----	----	4"	----
FD FLOOR DRAIN	----	----	4"	----
WH WATER HEATER	3/4"	----	----	----
SS SERVICE SINK	1/2"	1/2"	3"	1 1/2"
WF WASH FOUNTAIN	1"	1"	2"	1 1/2"

SS _____
SANITARY VENT - - - - -

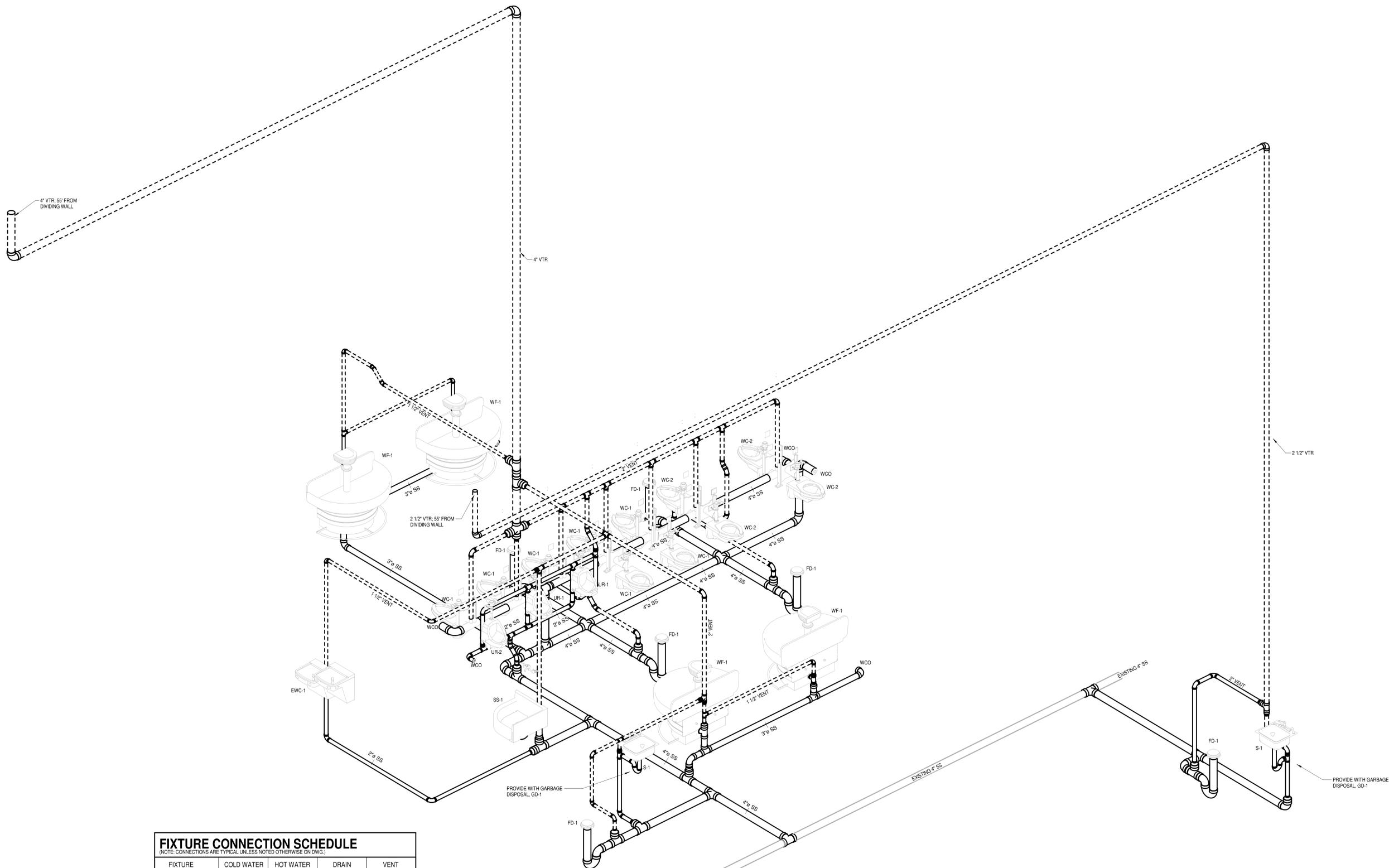


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SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR ROSS DISTRIBUTION CENTER SHAFTER, CALIFORNIA	PROJECT NUMBER	19034
DRAWN	A/E	PM		SHEET NUMBER	2M-2.1
BR	JAR	Approver		PLOT DATE	9/27/2019 10:44:28 AM
SHEET TITLE			ENLARGED UNDERGROUND PLUMBING PLAN		

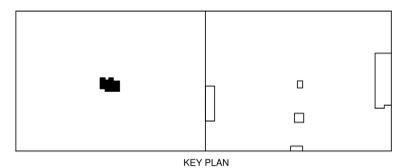


FIXTURE CONNECTION SCHEDULE
(NOTE: CONNECTIONS ARE TYPICAL UNLESS NOTED OTHERWISE ON DWG.)

FIXTURE	COLD WATER	HOT WATER	DRAIN	VENT
WC WATER CLOSET	1"	----	4"	2"
UR URINAL	3/4"	----	2"	1 1/2"
L LAVATORY	1/2"	1/2"	2"	1 1/2"
S SINK	1/2"	1/2"	2"	1 1/2"
EWC ELEC WATER COOLER	1/2"	----	2"	1 1/2"
CO CLEANOUT	----	----	4"	----
FD FLOOR DRAIN	----	----	4"	----
WH WATER HEATER	3/4"	----	----	----
SS SERVICE SINK	1/2"	1/2"	3"	1 1/2"
WF WASH FOUNTAIN	1"	1"	2"	1 1/2"

SANITARY RISER

SS _____
SANITARY VENT - - - - -



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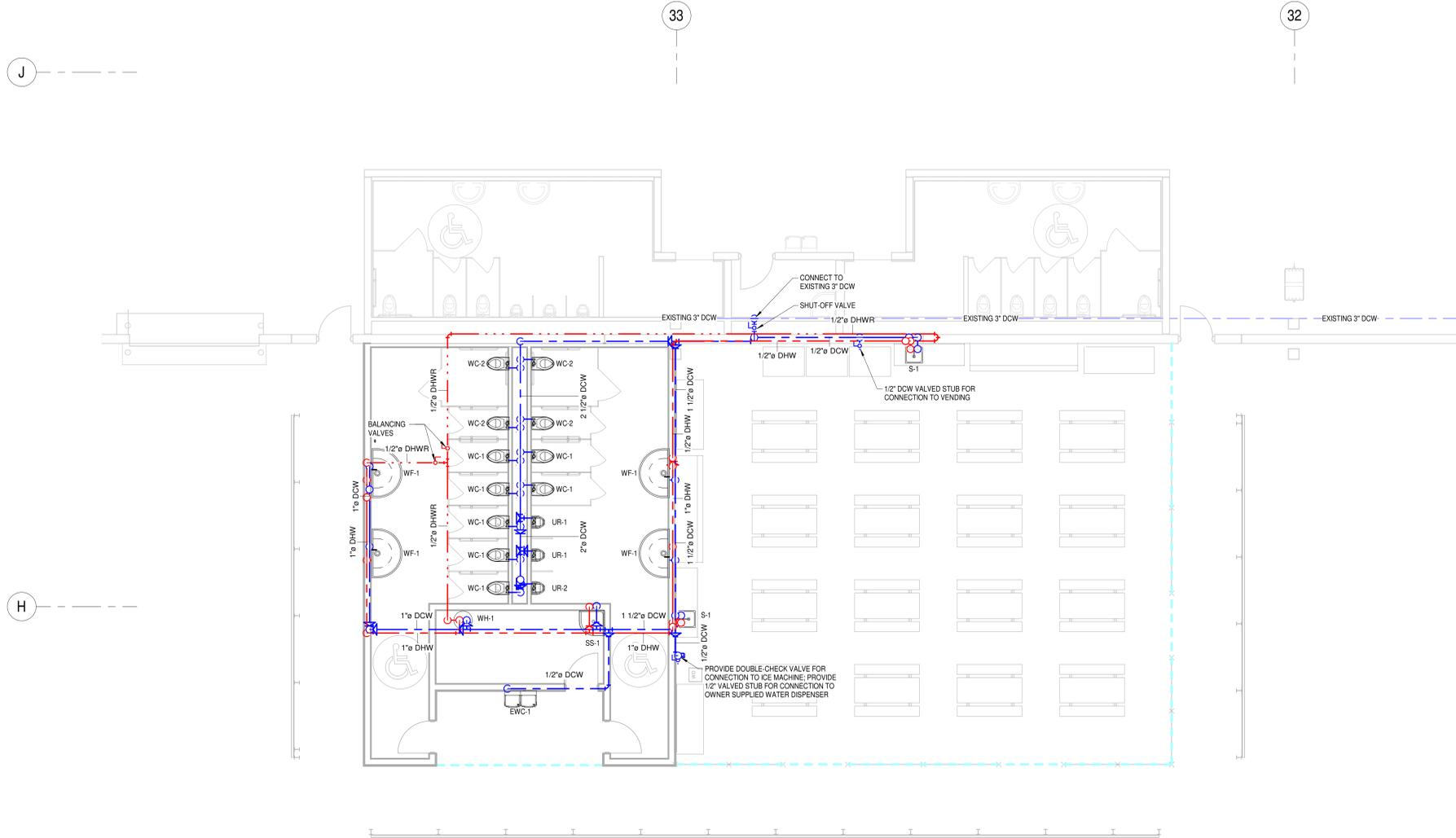
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SCALE	As Indicated
DRAWN	A/E PM
BR	JAR PW

PROJECT FACILITY RENOVATION FOR
ROSS DISTRIBUTION CENTER
SHAFTER, CALIFORNIA

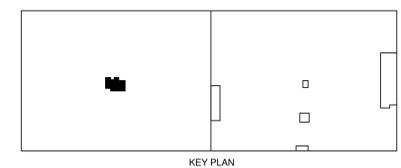
SHEET TITLE
SANITARY RISER

PROJECT NUMBER	19034
SHEET NUMBER	2M-2.2
PLOT DATE	9/27/2019 10:44:30 AM



1 ENLARGED BREAKROOM AND RESTROOM OVERHEAD PLUMBING PLAN
 3/16" = 1'-0"

FIXTURE CONNECTION SCHEDULE				
(NOTE: CONNECTIONS ARE TYPICAL UNLESS NOTED OTHERWISE ON DWG.)				
FIXTURE	COLD WATER	HOT WATER	DRAIN	VENT
WC	1"	----	4"	2"
UR	3/4"	----	2"	1 1/2"
L	1/2"	1/2"	2"	1 1/2"
S	1/2"	1/2"	2"	1 1/2"
EWC	1/2"	----	2"	1 1/2"
CO	----	----	4"	----
FD	----	----	4"	----
WH	3/4"	----	----	----
SS	1/2"	1/2"	3"	1 1/2"
WF	3/4"	3/4"	2"	1-1/2"

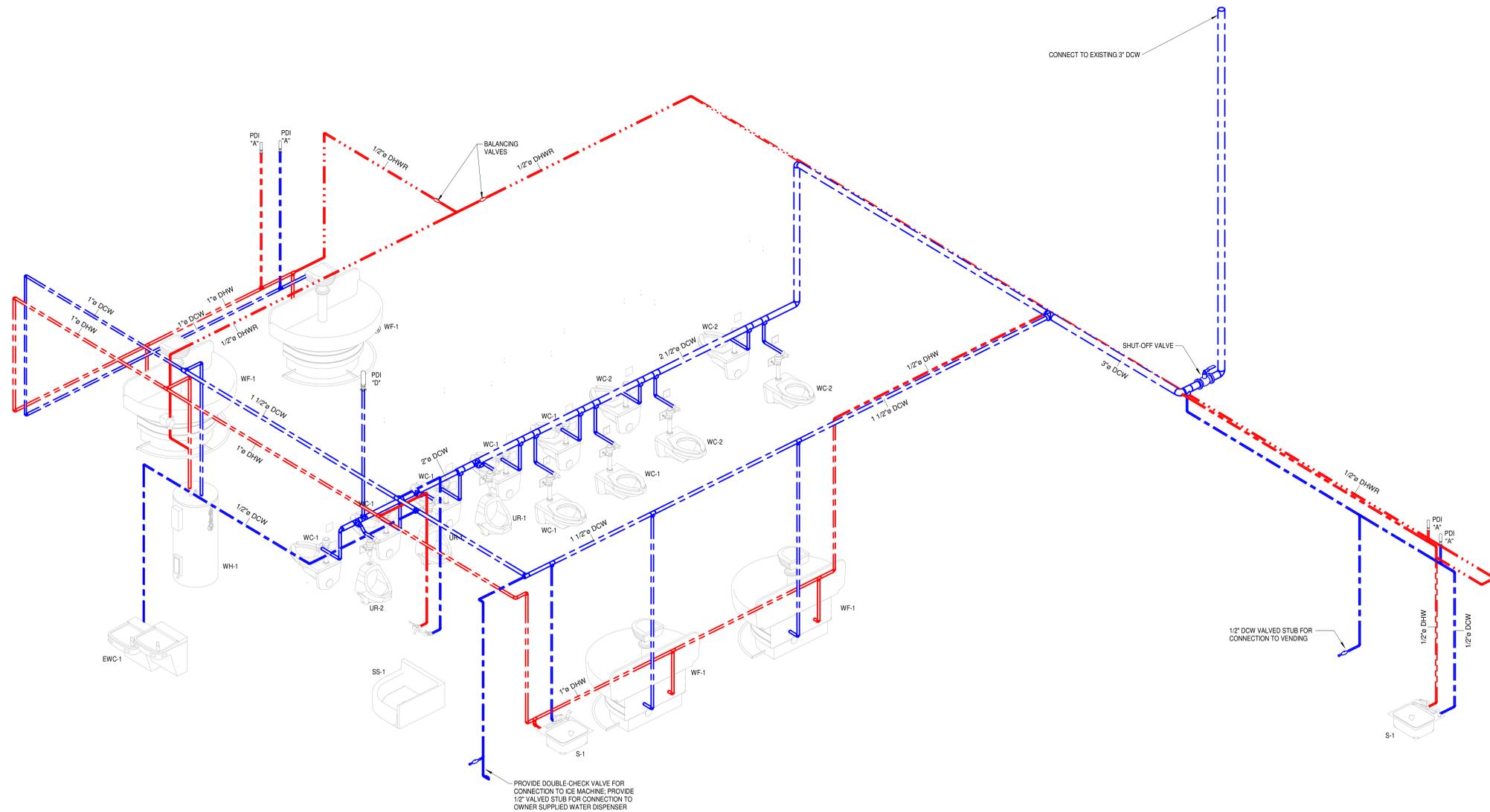


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SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR ROSS DISTRIBUTION CENTER SHAFTER, CALIFORNIA	PROJECT NUMBER	19034
DRAWN	A/E	PM		SHEET NUMBER	2M-3.1
BR	JAR	PW		PLOT DATE	9/27/2019 10:44:31 AM
SHEET TITLE			ENLARGED OVERHEAD PLUMBING PLAN		



DOMESTIC RISER

FIXTURE CONNECTION SCHEDULE
(NOTE: CONNECTIONS ARE TYPICAL UNLESS NOTED OTHERWISE ON DWG.)

FIXTURE	COLD WATER	HOT WATER	DRAIN	VENT
WC WATER CLOSET	1"	---	4"	2"
UR URINAL	3/4"	---	2"	1 1/2"
L LAVATORY	1/2"	1/2"	2"	1 1/2"
S SINK	1/2"	1/2"	2"	1 1/2"
EWC ELEC WATER COOLER	1/2"	---	2"	1 1/2"
CO CLEANOUT	---	---	4"	---
FD FLOOR DRAIN	---	---	4"	---
WH WATER HEATER	3/4"	---	---	---
SS SERVICE SINK	1/2"	1/2"	3"	1 1/2"
WF WASH FOUNTAIN	1"	1"	2"	1 1/2"

DOMESTIC COLD WATER -----
 DOMESTIC HOT WATER -----
 DOMESTIC HOT WATER RETURN -----



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SCALE	As Indicated
DRAWN	A/E PM
BR	JAR PW

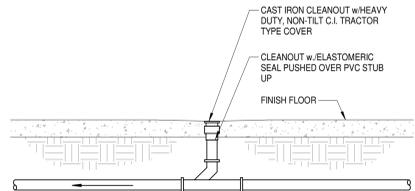
PROJECT FACILITY RENOVATION FOR
ROSS DISTRIBUTION CENTER
 SHAFTER, CALIFORNIA
 SHEET TITLE **DOMESTIC RISER**

PROJECT NUMBER 19034
 SHEET NUMBER **2M-3.2**
 PLOT DATE 9/27/2019 10:44:33 AM

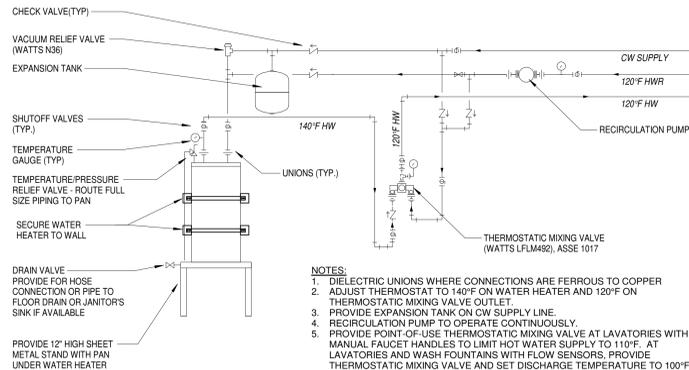
Warning: It is a violation of the law for any person, unless acting under the direction of a licensed architect/engineer, to alter an arch in any way.

PLUMBING NOTES

- PVC PIPE (ASTM D2685) FOR UNDERGROUND SANITARY SEWER ABOVE GROUND SANITARY - NO HUB IN PLENUM SPACE AND PVC OTHER AREAS.
 - USE 1/8" FT. SLOPE ON UNDERGROUND SANITARY SEWER LINE (OR TO INVERTS SHOW ON DRAWINGS).
 - ALL FLOOR DRAINS TO BE PROVIDED WITH DEEP SEAL TRAPS.
 - PROVIDE CLEAN OUTS AT CHANGE IN DIRECTION AND EVERY 50' IN HORIZONTAL RUNS FOR 4" AND SMALLER DIAMETERS. CLEAN-OUT REQUIRED OUTSIDE BUILDING.
 - COPPER TYPE "L" (ASTM B88) OR GALVANIZED STEEL SCHEDULE 40 (ASTM A53) PIPING FOR OVERHEAD WATER DISTRIBUTION.
 - INSTALL WATER HAMMER ARRESTORS AT END OF PIPE RUNS OR AS SHOWN ON DRAWINGS. ARRESTOR SHOULD BE ABOVE CEILING FOR EASY ACCESS FOR SERVICING.
 - INSULATE DOMESTIC WATER LINES WITH FIBERGLASS PER SPECIFICATIONS - COLD WATER 1/2" THICK AND HOT WATER 1" THICK.
- 8 SYMBOLS:**
- | | | | |
|-----|------|-----|---------------------------|
| --- | DCW | --- | DOMESTIC COLD WATER |
| --- | DHW | --- | DOMESTIC HOT WATER |
| --- | DHWR | --- | DOMESTIC HOT WATER RETURN |
| --- | SS | --- | SANITARY SEWER |
| --- | CD | --- | CONDENSATE DRAIN |
| ○ | | | BALL VALVE |
- DOMESTIC WATER PIPING SHOW ON PLANS TO RUN CONCEALED ABOVE SUSPENDED CEILINGS OR JUST BELOW ROOF JOISTS THRU GRIDERS IN AREAS WITHOUT SUSPENDED CEILINGS.
 - COORDINATE ALL PIPE ROUTING WITH WORK DETAILED ON ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DRAWINGS.
 - PROVIDE ACCESSIBLE STOPS IN PIPING CONNECTIONS TO ALL PLUMBING FIXTURES.
 - HOLD EXPOSED VERTICAL PIPING TIGHT TO WALLS AND COLUMNS. PROVIDE OFFSETS AROUND STRUCTURAL MEMBERS WHERE REQUIRED.
 - PROVIDE U-TRAP SAME SIZE AS HVAC UNIT CONDENSATE DRAIN AND ROUTE CONDENSATE PIPING AS SHOWN ON DRAWINGS.

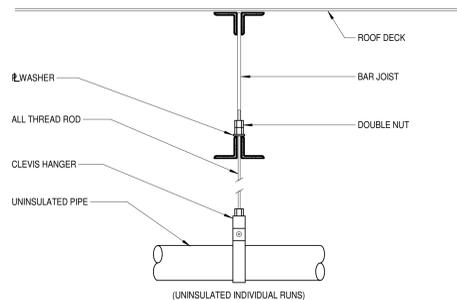


DETAIL OF PLANT CLEANOUT

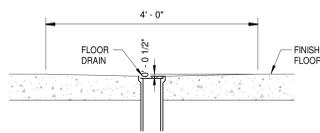


- NOTES:**
- DIELECTRIC UNIONS WHERE CONNECTIONS ARE FERROUS TO COPPER
 - ADJUST THERMOSTAT TO 140°F ON WATER HEATER AND 120°F ON THERMOSTATIC MIXING VALVE OUTLET
 - PROVIDE EXPANSION TANK ON CW SUPPLY LINE.
 - RECIRCULATION PUMP TO OPERATE CONTINUOUSLY
 - PROVIDE POINT-OF-USE THERMOSTATIC MIXING VALVE AT LAVATORIES WITH MANUAL FAUCET HANDLES TO LIMIT HOT WATER SUPPLY TO 110°F. AT LAVATORIES AND WASH FOUNTAINS WITH FLOW SENSORS. PROVIDE THERMOSTATIC MIXING VALVE AND SET DISCHARGE TEMPERATURE TO 100°F.

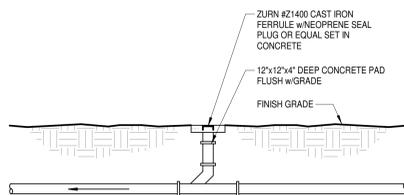
ELECTRIC WATER HEATER DETAIL



TYP. UNINSULATED PIPE HANGER



FLOOR DRAIN DEPRESSION



DETAIL OF GRADE CLEANOUTS

ELECTRIC WATER HEATER SCHEDULE																	
MARK	MFG & MODEL	STORAGE (GAL.)	ELECTRICAL			RECOVERY (GPH)	DIMS. (D x H)	OP. WT. (LBS)	RECIRC. PUMP						EXPANSION TANK		
			KW	VOLT	PH.				MFG & MODEL	GPM	HEAD (FT)	WATTS	RPM	VOLTS	PH.	MFG & MODEL	SIZE (GAL.)
WH-1	A.O. SMITH - DEN-40	40	4.5/4.5	460	3	41	20.5' x 45.125'	447	BELL & GOSSETT NBF-8S	1	8	39	2,800	115	1	A.O. SMITH - PMC-2	2

- NOTES:**
- RECIRCULATION PUMPS - SHALL BE ALL BRONZE CONSTRUCTION. PUMPS TO RUN CONTINUOUS.
 - ALL WATER HEATERS TO ME SIMULTANEOUS OPERATION UNLESS OTHER WISE NOTED.
 - WH-12 IS NON-SIMULTANEOUS OPERATION.



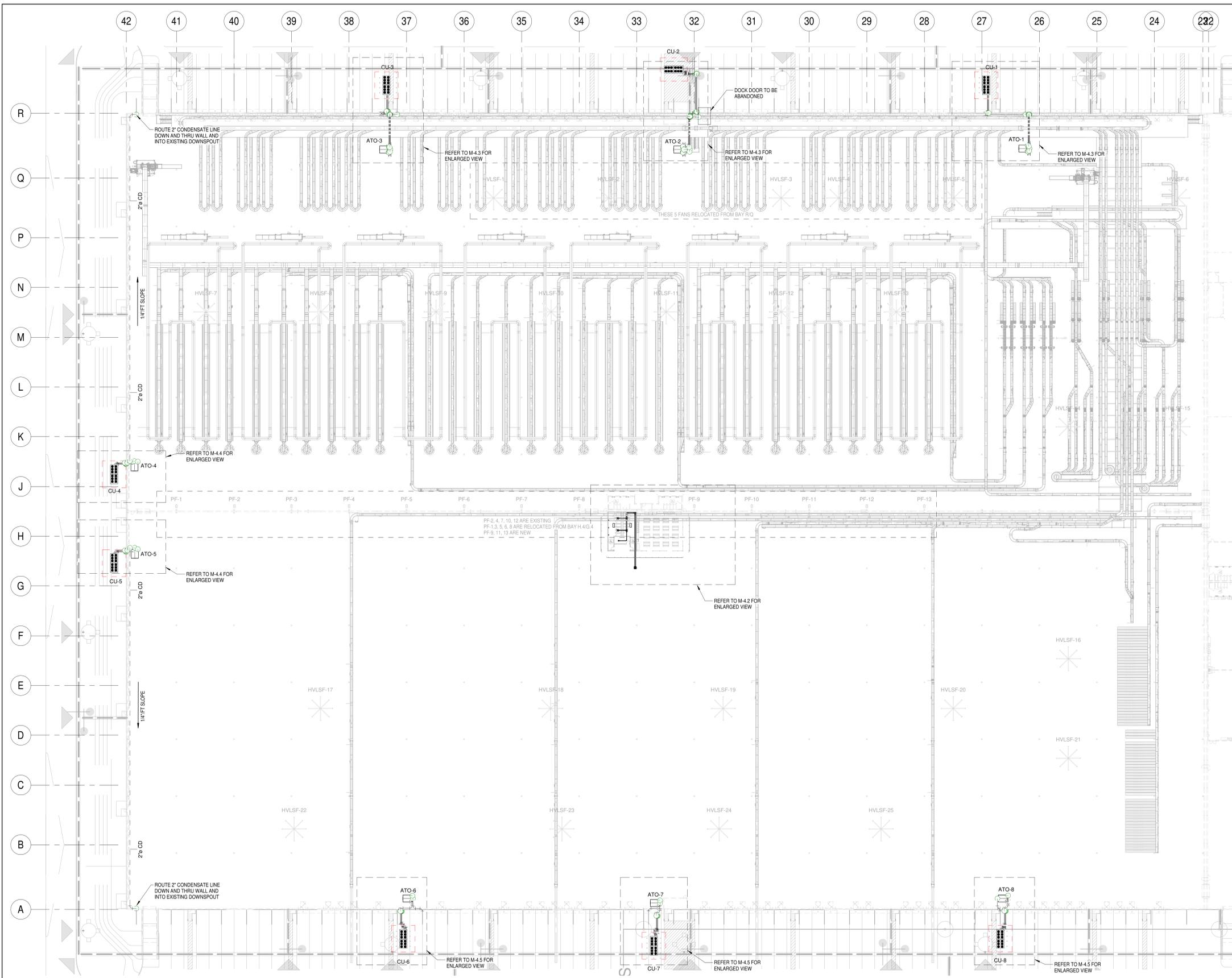
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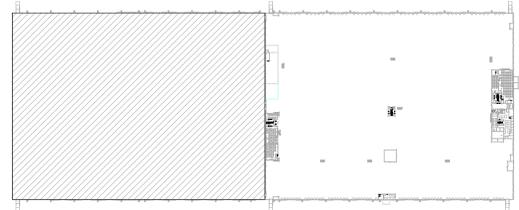
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SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR ROSS DISTRIBUTION CENTER SHAFTER, CALIFORNIA	PROJECT NUMBER	19034
DRAWN	A/E	PM		SHEET NUMBER	2M-3.3
BR	JAR	PW		PLOT DATE	9/27/2019 10:44:34 AM
SHEET TITLE			PLUMBING NOTES AND DETAILS		



HVAC BASIS OF HVAC DESIGN:
 SUMMER DESIGN TEMPERATURE: 103.1°F DB/71.1°F WB @ 4% ASHRAE DESIGN DATA
 WINTER DESIGN TEMPERATURE: 32.2°F DB @ 9% ASHRAE DESIGN DATA
SPACE CONDITIONS:
 HOTEL AREAS: 78°F (COOLING) / 60°F (HEATING)



1 HVAC PLAN
 1" = 40'-0"



No.	Date	Description
A	08/07/19	ISSUE FOR PERMIT
B	09/11/19	ISSUE FOR PRICING
C	09/27/19	ISSUE FOR PERMIT

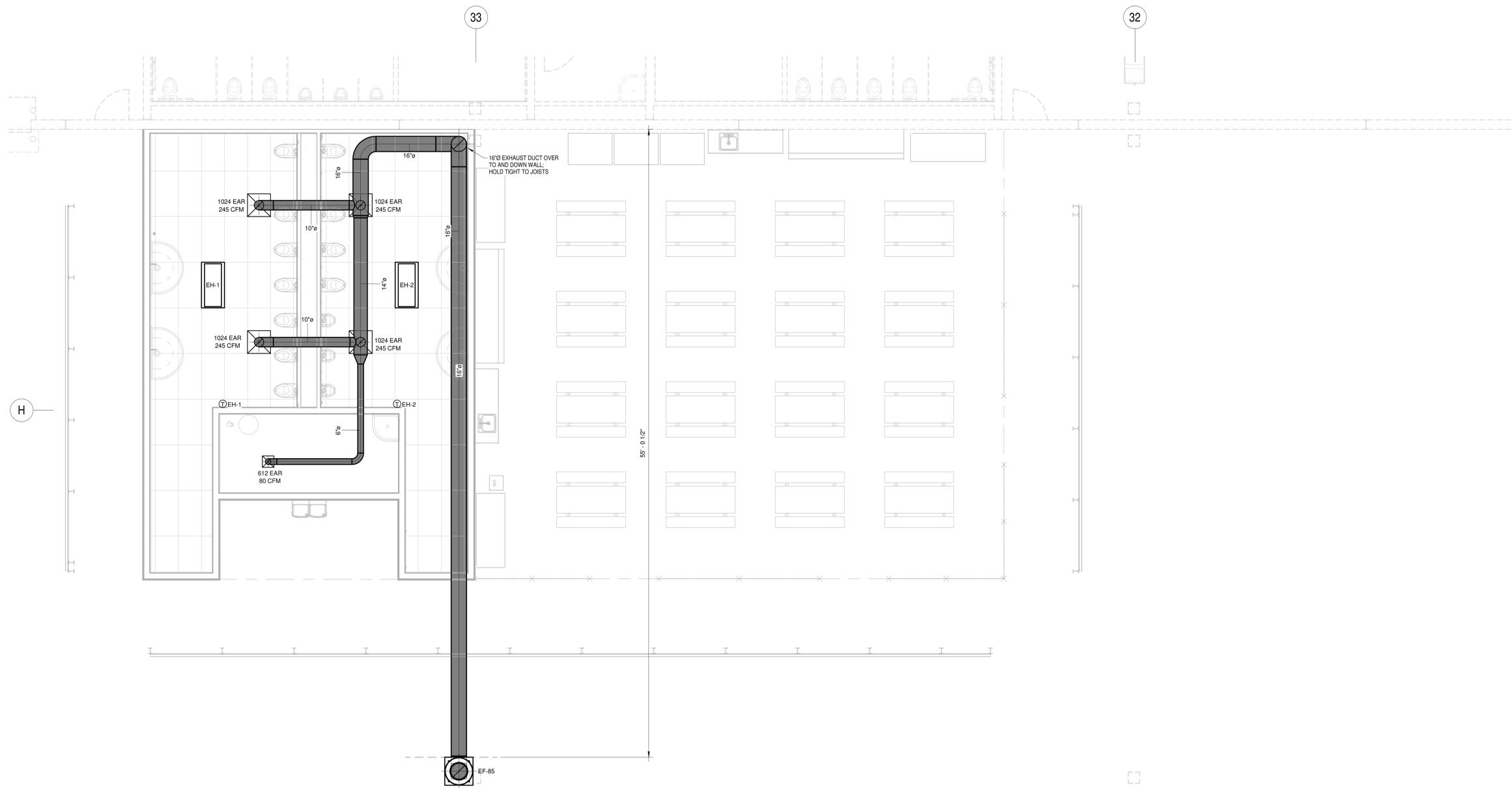
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SCALE	As Indicated
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SHEET TITLE	JAR JAR PW

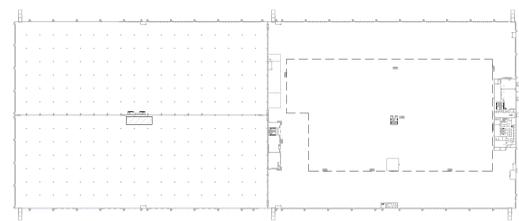
PROJECT FACILITY RENOVATION FOR
ROSS DISTRIBUTION CENTER
 SHAFTER, CALIFORNIA
 HVAC PLAN

PROJECT NUMBER 19034
 SHEET NUMBER **2M-4.1**
 PLOT DATE 9/27/2019 10:45:45 AM



HVAC BASIS OF HVAC DESIGN:
 SUMMER DESIGN TEMPERATURE: 103.1°F DB/71.1°F WB(0.4% ASHRAE DESIGN DATA)
 WINTER DESIGN TEMPERATURE: 32.2°F DB (9.6% ASHRAE DESIGN DATA)
 SPACE CONDITIONS:
 BATHROOM AREAS: CODE EXHAUST / 60°F (HEATING)

1 ENLARGED BREAKROOM AND RESTROOM HVAC PLAN
 1/4" = 1'-0"

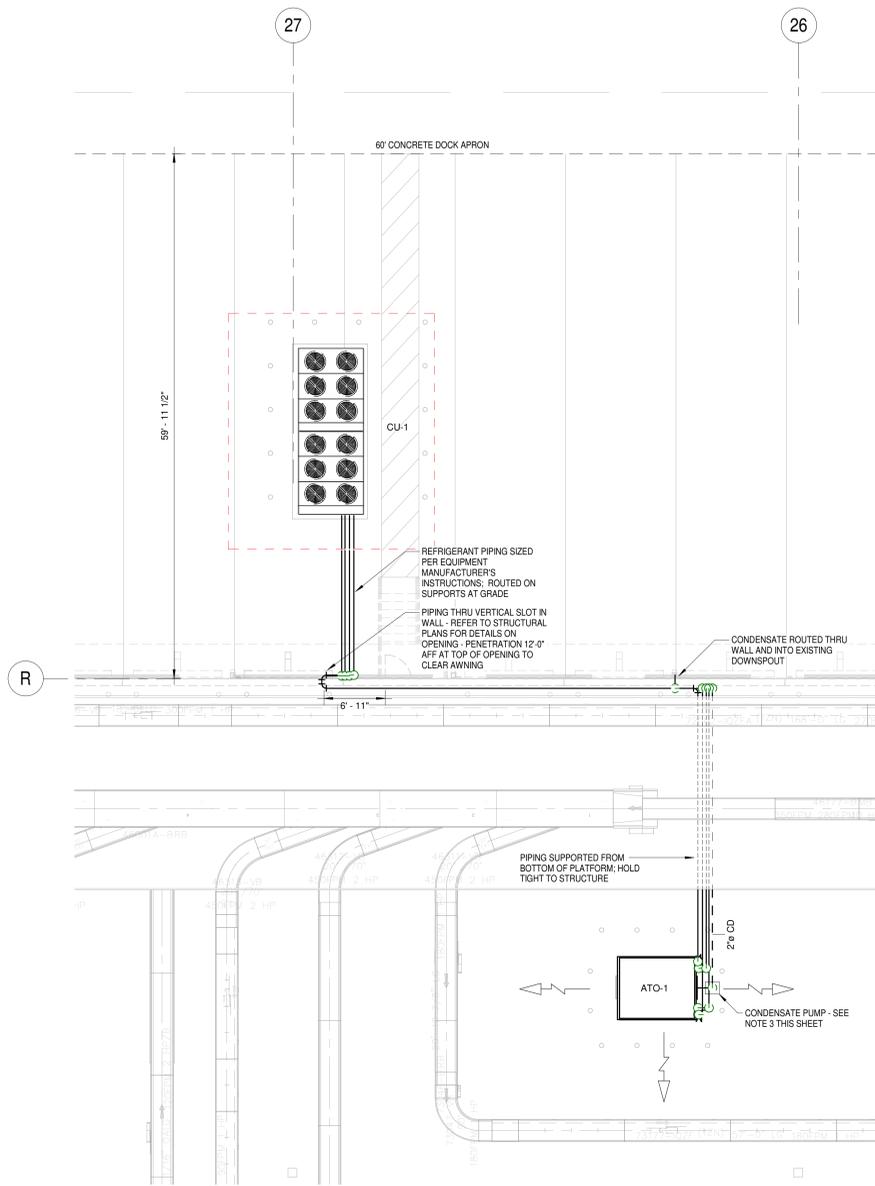


No.	Date	Description
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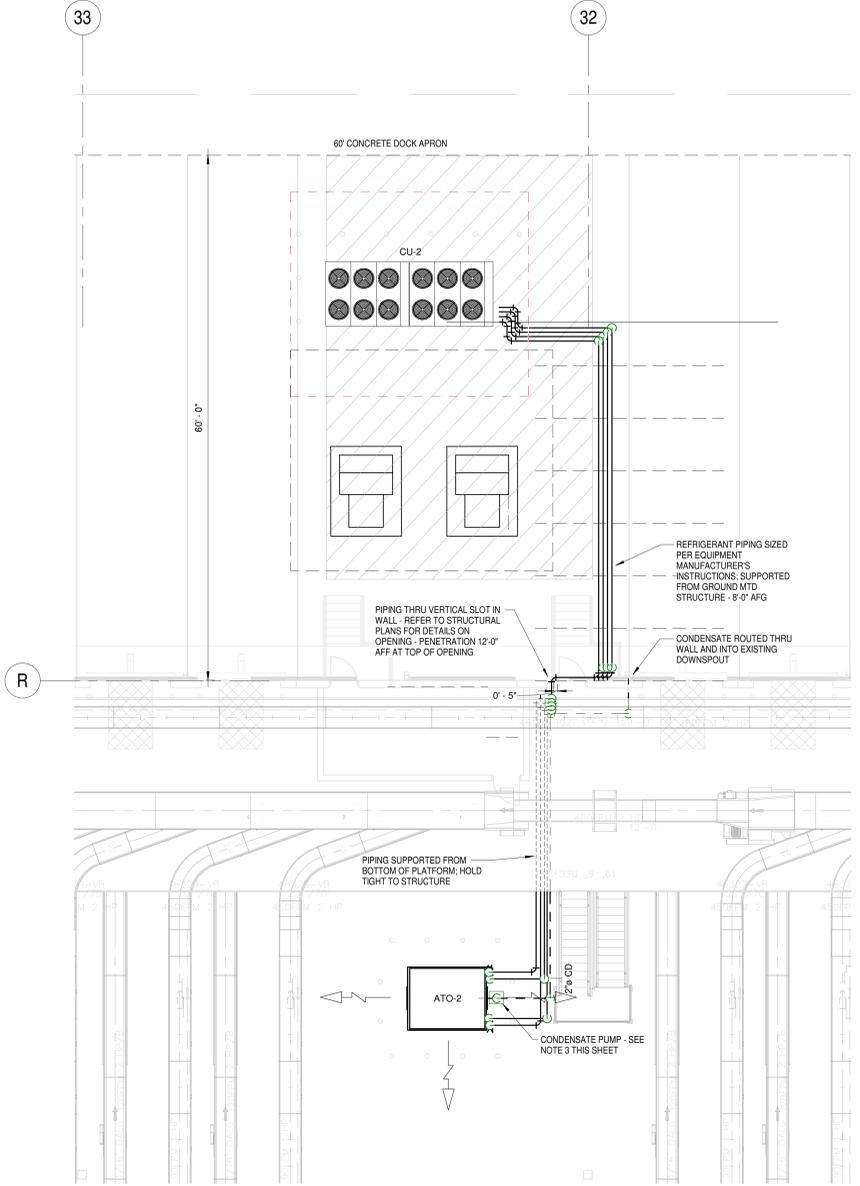
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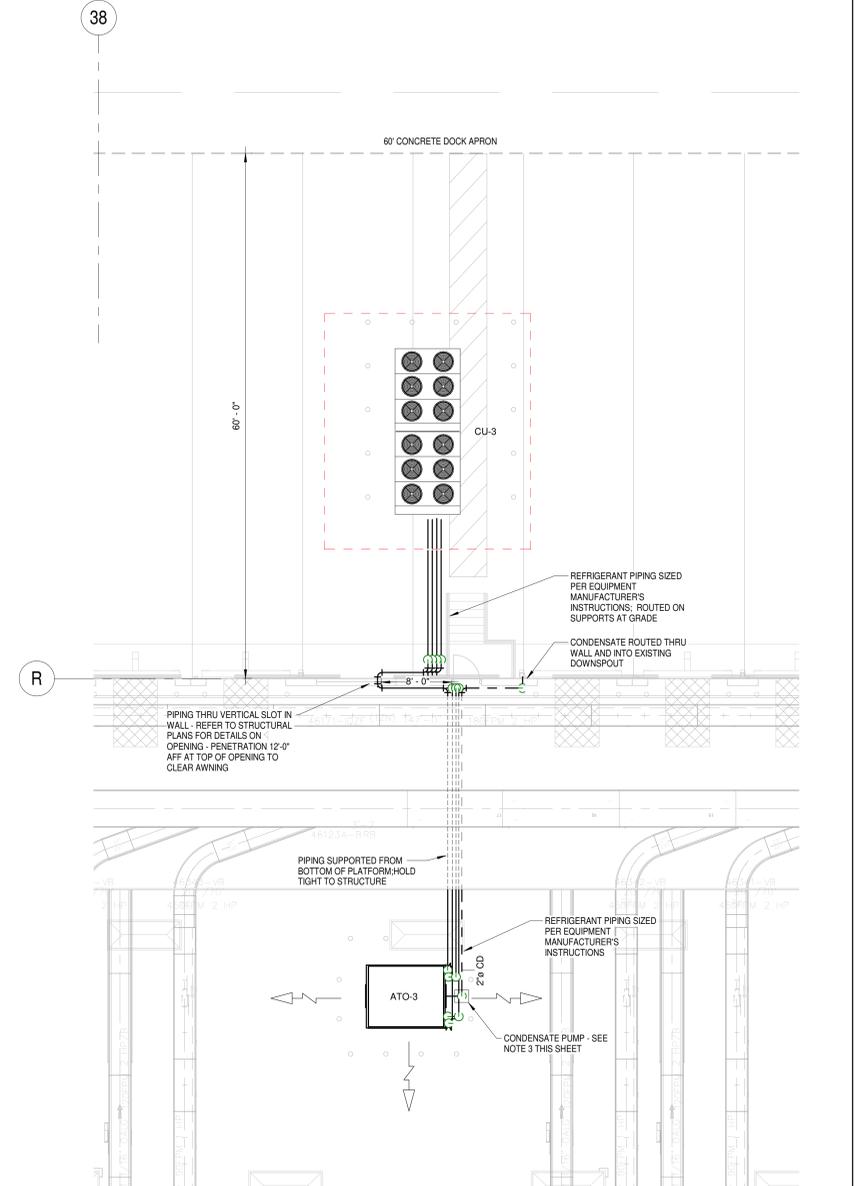
SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR	PROJECT NUMBER	19034
DRAWN	A/E	PM	ROSS DISTRIBUTION CENTER	SHEET NUMBER	2M-4.2
BR	JAR	PW	SHAFTER, CALIFORNIA	PLOT DATE	9/27/2019 10:45:51 AM
SHEET TITLE			ENLARGED BREAKROOM AND RESTROOM HVAC PLAN		



1 ENLARGED ATO NORTH 1
1/8" = 1'-0"



2 ENLARGED ATO NORTH 2
1/8" = 1'-0"

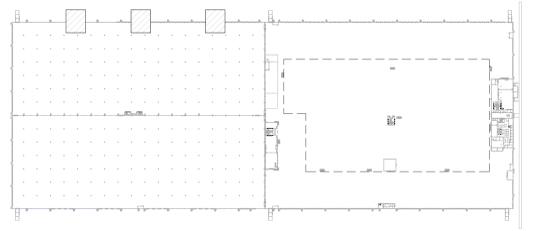


3 ENLARGED ATO NORTH 3
1/8" = 1'-0"

NOTES:

- PROVIDE 2 REFRIGERANT CIRCUITS PER 130 TON ATO. INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE SUPPORTS AT GRADE FOR PIPING. PROVIDE HOLES IN EXISTING WALLS FOR REFRIGERANT PIPING TO PASS THRU WITH WEATHER TIGHT SEAL.
- EXTERNAL REFRIGERANT PIPING SUCTION LINE TO BE INSULATED WITH 1" THICK RIGID POLYISO AND 3/4" ARMAFLEX ON THE LIQUID LINE (BOTH WITH ALUMINUM JACKETING). INTERNAL REFRIGERANT PIPING SUCTION LINE SHALL BE INSULATED WITH 1" THICK FLEXIBLE UNICELLULAR INSULATION AND LIQUID LINE SHALL BE INSULATED WITH 3/4" THICK FLEXIBLE UNICELLULAR INSULATION.
- CONDENSATE FROM ATO-1,2,3 TO BE PUMPED TO NEAREST CUTTER DOWNSPOUT USING HARTPELL M# ASK-460, 6 GPM @ 40' HEAD, 1/2 HP, 460V/30 AND 1.5" TYPE L COPPER WITH 1" THICK FIBERGLASS INSULATION WITH ASJ (INTERNAL PIPING).

HVAC BASIS OF HVAC DESIGN:
 SUMMER DESIGN TEMPERATURE: 103.1°F DB/71.1°F WB @ 4% ASHRAE DESIGN DATA
 WINTER DESIGN TEMPERATURE: 32.2°F DB @ 98% ASHRAE DESIGN DATA
 SPACE CONDITIONS:
 HOTEL AREAS: 78°F (COOLING) / 60°F (HEATING)



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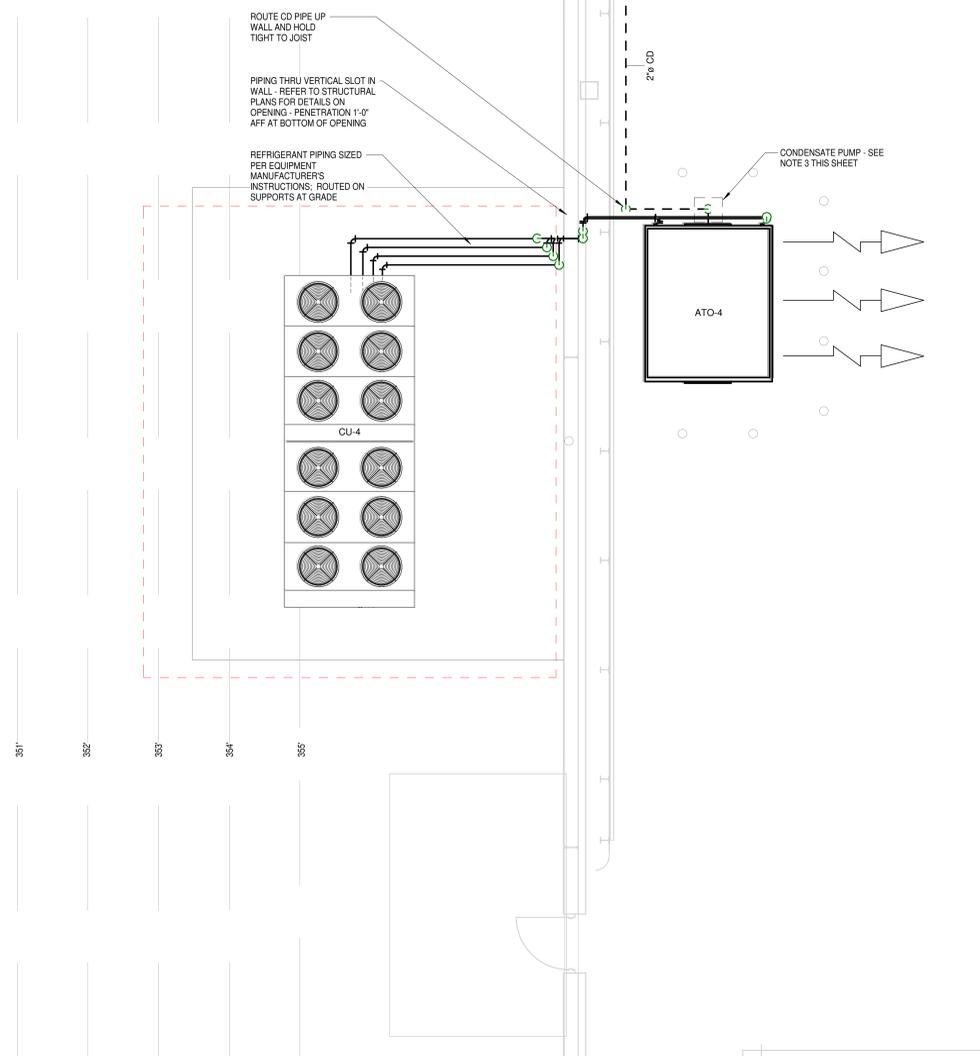
SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR	PROJECT NUMBER	19034
DRAWN	A/E	PM	ROSS DISTRIBUTION CENTER	SHEET NUMBER	2M-4.3
BR	JAR	PW	SHAFTER, CALIFORNIA	PLOT DATE	9/27/2019 10:46:49 AM
SHEET TITLE			ENLARGED HVAC PLANS NORTH		

K

J.6

42

SEE M-4.1 FOR CONTINUATION



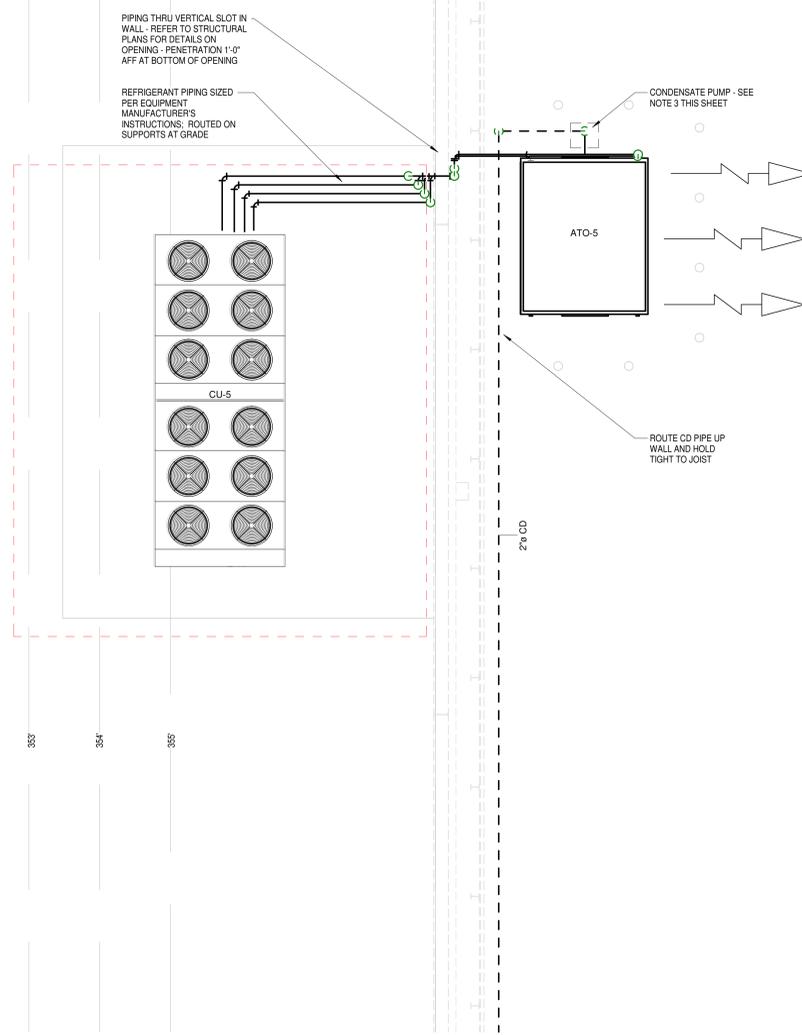
1 ENLARGED ATO AREA WEST 1
1/4" = 1'-0"

H

G

42

SEE M-4.1 FOR CONTINUATION



2 ENLARGED ATO AREA WEST 2
1/4" = 1'-0"

HVAC BASIS OF HVAC DESIGN:
 SUMMER DESIGN TEMPERATURE: 103.1°F DB/71.1°F WB @ 4% ASHRAE DESIGN DATA
 WINTER DESIGN TEMPERATURE: 32.2°F DB @ 98% ASHRAE DESIGN DATA

SPACE CONDITIONS:
 HOTEL AREAS: 78°F (COOLING) / 60°F (HEATING)

NOTES:

1. PROVIDE 2 REFRIGERANT CIRCUITS PER 130 TON ATO. INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE SUPPORTS AT GRADE FOR PIPING. PROVIDE HOLES IN EXISTING WALLS FOR REFRIGERANT PIPING TO PASS THRU WITH WEATHER TIGHT SEAL.
2. EXTERNAL REFRIGERANT PIPING SUCTION LINE TO BE INSULATED WITH 1" THICK RIGID POLYISO AND 3/4" ARMAFLEX ON THE LIQUID LINE (BOTH WITH ALUMINUM JACKETING). INTERNAL REFRIGERANT PIPING SUCTION LINE SHALL BE INSULATED WITH 1" THICK FLEXIBLE UNICELLULAR INSULATION AND LIQUID LINE SHALL BE INSULATED WITH 3/4" THICK FLEXIBLE UNICELLULAR INSULATION.
3. CONDENSATE FROM ATO-4 AND 5 TO BE PUMPED TO NEAREST GUTTER DOWNSPOUT USING HARTELL M# ASX-480, 6 GPM @ 40' HEAD, 1/2 HP, 460V/3Ø AND 1.5" TYPE L COPPER WITH 1" THICK FIBERGLASS INSULATION WITH ASJ (INTERNAL PIPING).



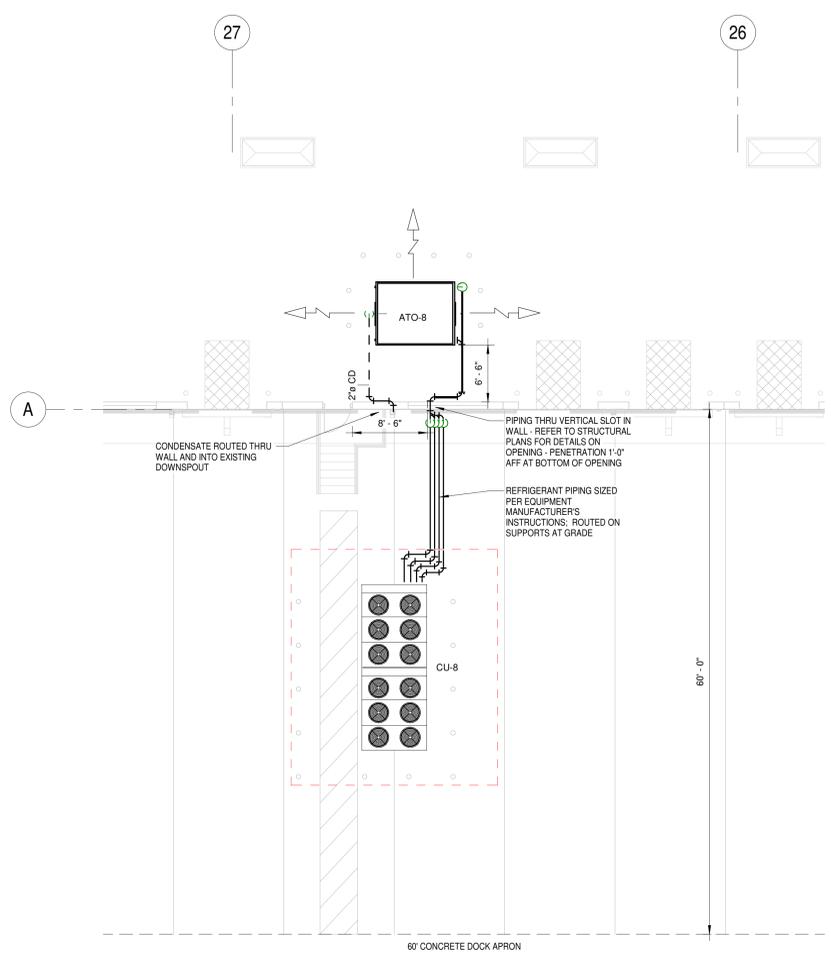
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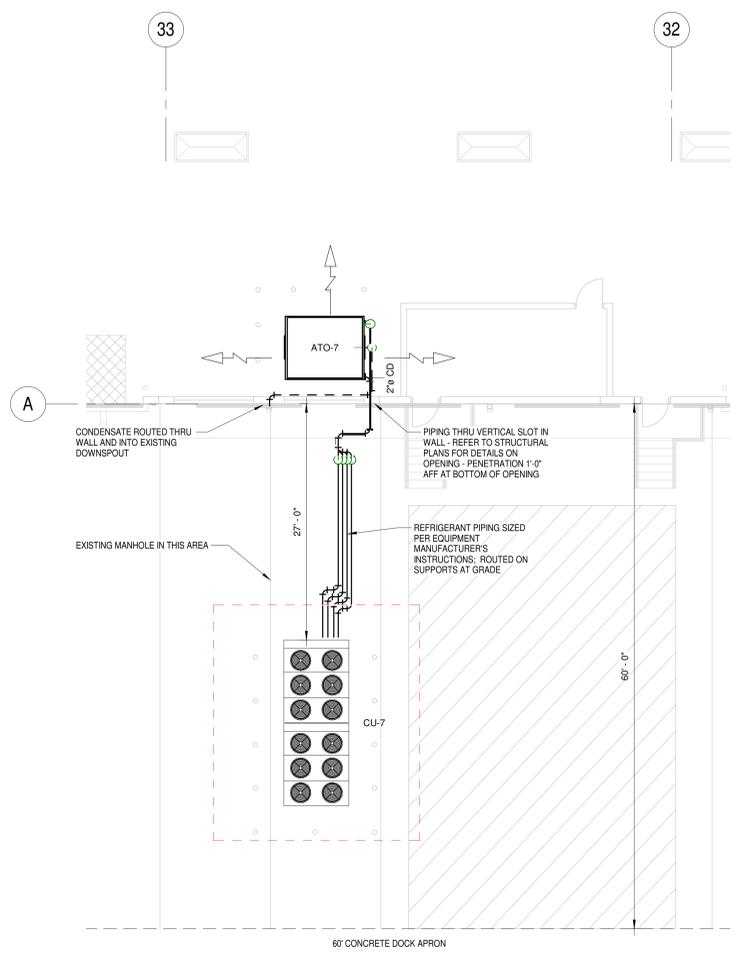
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SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR ROSS DISTRIBUTION CENTER SHAFTER, CALIFORNIA	PROJECT NUMBER	19034
DRAWN	A/E	PM		SHEET NUMBER	2M-4.4
BR	JAR	PW		PLOT DATE	9/27/2019 10:47:09 AM
SHEET TITLE			ENLARGED HVAC PLANS WEST		

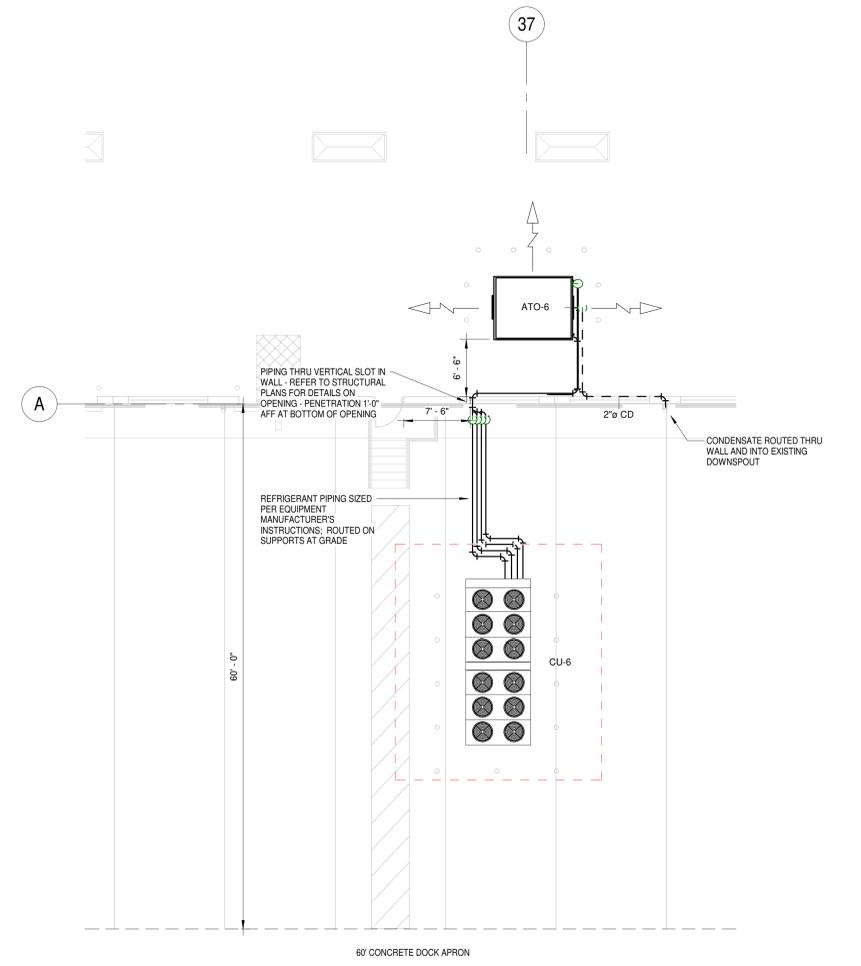
Warning: It is a violation of the law for any person, unless acting under the direction of a licensed architect/engineer, to alter an arch in any way.



1 ENLARGED ATO SOUTH 1
1/8" = 1'-0"



2 ENLARGED ATO SOUTH 2
1/8" = 1'-0"

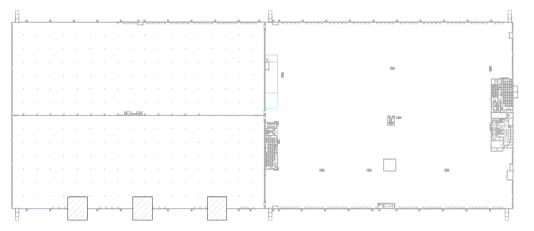


3 ENLARGED ATO SOUTH 3
1/8" = 1'-0"

HVAC BASIS OF HVAC DESIGN:
SUMMER DESIGN TEMPERATURE: 103.1°F DB/71.1°F WB @ 4% ASHRAE DESIGN DATA
WINTER DESIGN TEMPERATURE: 32.2°F DB @ 98% ASHRAE DESIGN DATA

SPACE CONDITIONS:
HOTEL AREAS: 78°F (COOLING) / 60°F (HEATING)

- NOTES:**
1. PROVIDE 2 REFRIGERANT CIRCUITS PER 130 TON. INSTALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE SUPPORTS AT GRADE FOR PIPING. PROVIDE HOLES IN EXISTING WALLS FOR REFRIGERANT PIPING TO PASS THRU WITH WEATHER TIGHT SEAL.
 2. EXTERNAL REFRIGERANT PIPING SUCTION LINE TO BE INSULATED WITH 1" THICK RIGID POLYISO AND 3/4" ARMAFLEX ON THE LIQUID LINE (BOTH WITH ALUMINUM JACKETING). INTERNAL REFRIGERANT PIPING SUCTION LINE SHALL BE INSULATED WITH 1" THICK FLEXIBLE UNICELLULAR INSULATION AND LIQUID LINE SHALL BE INSULATED WITH 3/4" THICK FLEXIBLE UNICELLULAR INSULATION.
 3. CONDENSATE FROM ATO 6, 7 & 8 TO BE GRAVITY DRAINED TO WALL, DOWN AND OUT THRU WALL AND ROUTED INTO EXISTING ROOF DRAIN DOWNSPOUT. PROVIDE HOLES IN EXISTING WALLS FOR CONDENSATE PIPING TO PASS THRU WITH WEATHER TIGHT SEAL.



No.	Date	Description
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SCALE	As Indicated
DRAWN	A/E PM
BR	JAR PW

PROJECT
ROSS DISTRIBUTION CENTER
SHAFTER, CALIFORNIA

ENLARGED HVAC PLANS SOUTH

PROJECT NUMBER
19034
SHEET NUMBER
2M-4.5
PLOT DATE
9/27/2019 10:48:03 AM

ATO SCHEDULE											
MARK	TYPE	AIR FLOW DATA			COOLING DATA			ELECTRICAL DATA		GENERAL DATA	
		TOTAL SUPPLY CFM	O.S.A. CFM	EXT. SP. (W/C)	O.S.A. AMB. (°F)	TOTAL HEAT (BTUH)	SENS. HEAT (BTUH)	EVAP. FAN MOTOR	UNIT VOLTAGE	WEIGHT (#)	MODEL AND REMARKS
ATO-1 THRU 8	DX COOLING ONLY	50,000	--	--	103	1,560,000	1,248,000	25 HP	480V/3Ø	--	M/C ATO-50 AIR TURN-OVER UNIT - PROCESSING AREA

- SCREENED DISCHARGE PLENUM - 3 SIDES ON ATO-1, 2, 3, 6, 7 AND 8 AND 1 SIDES ON ATO-4 AND 5. UNITS TO BE 28" TALL.
- SMOKE DETECTOR IN SUPPLY AND RETURN CASING
- THERMOSTAT TO BE CONNECTED TO EXISTING BUILDING MANAGEMENT SYSTEM
- EVAPORATOR FANS WITH VFD.
- ATO EQUIPMENT TO BE RATED FOR SEISMIC FORCES WITH A 1.5 IMPORTANCE FACTOR. SUBMITTAL TO BE PROVIDED WITH STRUCTURAL/SEISMIC CALCULATIONS STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF CALIFORNIA.
- INTEGRAL DISCONNECT, POWERED CONVENIENCE RECEPTACLE FROM LINE SIDE OF DISCONNECT. DISCONNECT AND RECEPTACLE LOCATED AT 4'-0" AFF.

CONDENSING UNIT SCHEDULE											
MARK	CAPACITY (BTUH)	COND. AMB. (°F)	CONNECTIONS		ELECTRICAL DATA				WEIGHT (#)	MODEL AND REMARKS	
			SUCT.	LIQ.	COMP. MOTOR	COND. FAN MOTOR	UNIT VOLTAGE	MCA			MOCF
CU-1 THRU 8	1,656,740	103	2-5/8 (x 2)	1-1/8 (x 2)	37.2 RLA (x 6)	1.8 FLA (x 12)	480V/3Ø	255	300	7500	TRANE M/RALUD124B ATO CONDENSING UNIT - PROCESSING AREA

- NOTES:
- SUPPLY WITH MANUFACTURER RECOMMENDED REFRIGERANT SPECIALTIES (REFRIGERANT/SUCTION TEMPS, ETC). CONTACT TRANE - MEMPHIS, TN OFFICE (ANDREW OPPENHEIM (901) 348-2830) FOR DETAILS.
 - VERIFY LIQUID/SUCTION LINE SIZES WITH EQUIP MANUFACTURER
 - SUPPLY WITH FACTORY MOUNTED NON-FUSED DISCONNECTS.
 - MATCH CU COOLING CAPACITY WITH ATO CAPACITY - ACCOUNT FOR ALL PRESSURE LOSSES IN INTERCONNECTING PIPING

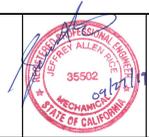
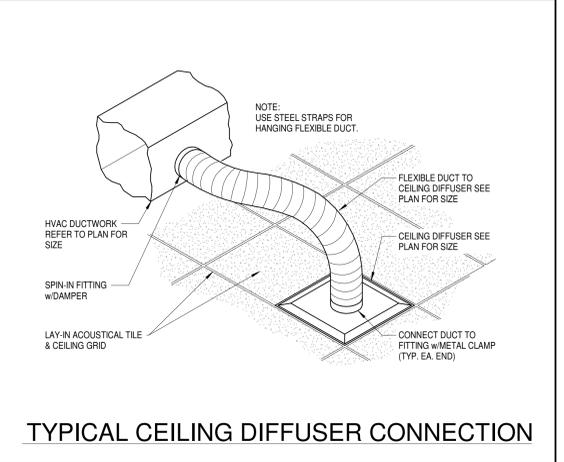
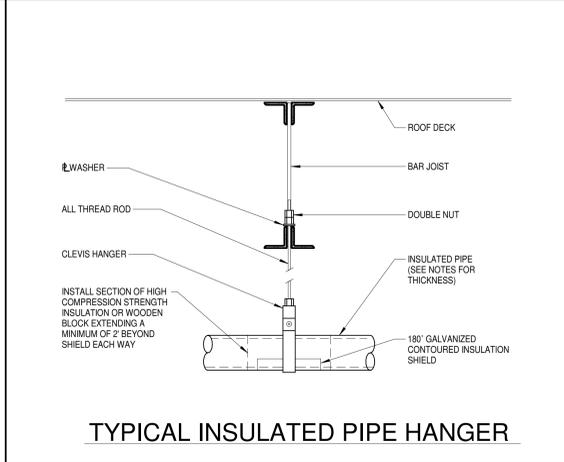
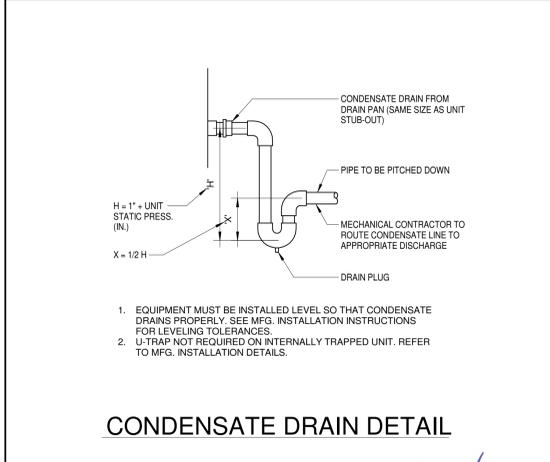
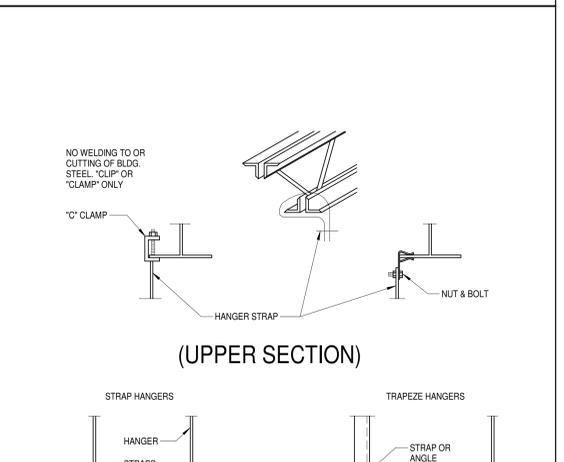
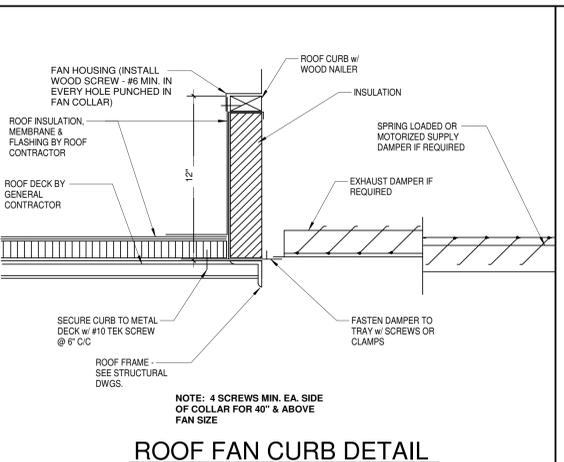
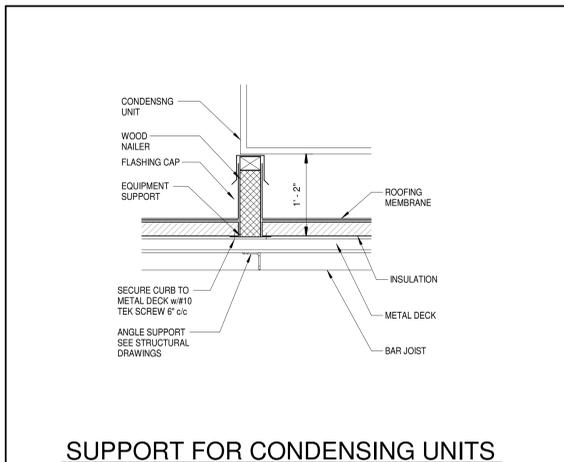
FAN SCHEDULE											
MARK	TYPE	DRIVE	CFM	S.P. (W/C)	MAX RPM	MAX SONES	ELECTRICAL	DAMPER SIZE (IN.)	ROOF/WALL OPENING (IN.)	WEIGHT (#)	MODEL AND REMARKS
EF-85	CENTRIF. EXHAUST	DIRECT	1200	0.5	1140	8.7	1/4 HP 120V/1Ø	12X12	14.5X14.5	65	GREENHECK G-133-B RR EXHAUST

ELECTRIC HEATER SCHEDULE					
MARK	TYPE	HEAT INPUT (KW)	CFM	ELECTRICAL	MODEL AND REMARKS
EH-1, 2	CEILING RADIANT	0.5	N/A	120V/1Ø	MARKEL MODEL 4RCH2A1 REMOTE RR

PROVIDE EH-1, 2 WITH SINGLE POLE LINE VOLTAGE THERMOSTAT.

HVAC DRAWING NOTES:

- DUCT DIMENSIONS GIVEN IN PLAN VIEW ARE WIDTH x HEIGHT.
- DUCTING FROM EXHAUST GRILLE TO FAN SAME AS DAMPER.
- CEILING DIFFUSER SIZING EXAMPLE:
1024CD = 10" DIAMETER COLLAR, 24x24 DIFFUSER, CEILING DIFFUSER
- VERIFY ROOF AND WALL OPENING SIZES WITH EQUIPMENT MANUFACTURER.
- UNDERCUT DOORS 3/4" AND/OR PROVIDE AIR CONDITIONING DOOR GRILLE IN OFFICE REST ROOMS AND JANITOR'S CLOSET.
- LOCATE UNIT THERMOSTATS ON WALL AT 8'-0" ABOVE FLOOR.
- REFER TO ARCHITECTURAL DRAWINGS FOR ROOF FRAMING DETAILS.
- COORDINATE WITH ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR WIRING OF HVAC UNIT FIRE PROTECTION DETECTOR REQUIREMENTS. MECHANICAL CONTRACTOR TO FURNISH AND MOUNT AHU DUCT SMOKE DETECTORS WITHOUT FIRE ALARM SYSTEM. ELECTRICAL CONTRACTOR TO FURNISH MECHANICAL MOUNT DUCT DETECTORS WITH FIRE ALARM SYSTEM.
- COORDINATE WITH ELECTRICAL CONTRACTOR TO ASSURE REST ROOM EXHAUST FAN IS INTERLOCKED WITH LIGHTS - LIGHTS OFF/FAN OFF.
- ASSURE ROOF CURBS ARE LEVEL (MANUFACTURER'S TOLERANCES) FOR PROPER CONDENSATE DRAINAGE.
- ASSURE PROPER CLEARANCES FOR SERVICING AND ACCESS TO HVAC EQUIPMENT ARE PROVIDED.
- SYMBOLS: RAG OR EAG - RETURN OR EXHAUST AIR GRILLE
RAR OR EAR - RETURN OR EXHAUST AIR REGISTER
|○| BALL VALVE
⊕ THERMOSTAT
--- CD --- CONDENSATE PIPING
- VERIFY SPLIT SYSTEM REFRIGERANT LINE SIZES WITH EQUIPMENT MANUFACTURER.
- SEISMIC BRACING FOR ALL PIPING, DUCTWORK, ROOFTOP EQUIPMENT SHALL BE INSTALLED WITH A 1.5 IMPORTANCE FACTOR. THIS BUILDING IS NOT CLASSIFIED AS AN ESSENTIAL FACILITY
- ALL HVAC EQUIPMENT LABELED WITH MARK # AND REMARKS TO IDENTIFY AREA SERVED AS REQUIRED BY CALIFORNIA MECHANICAL CODE.

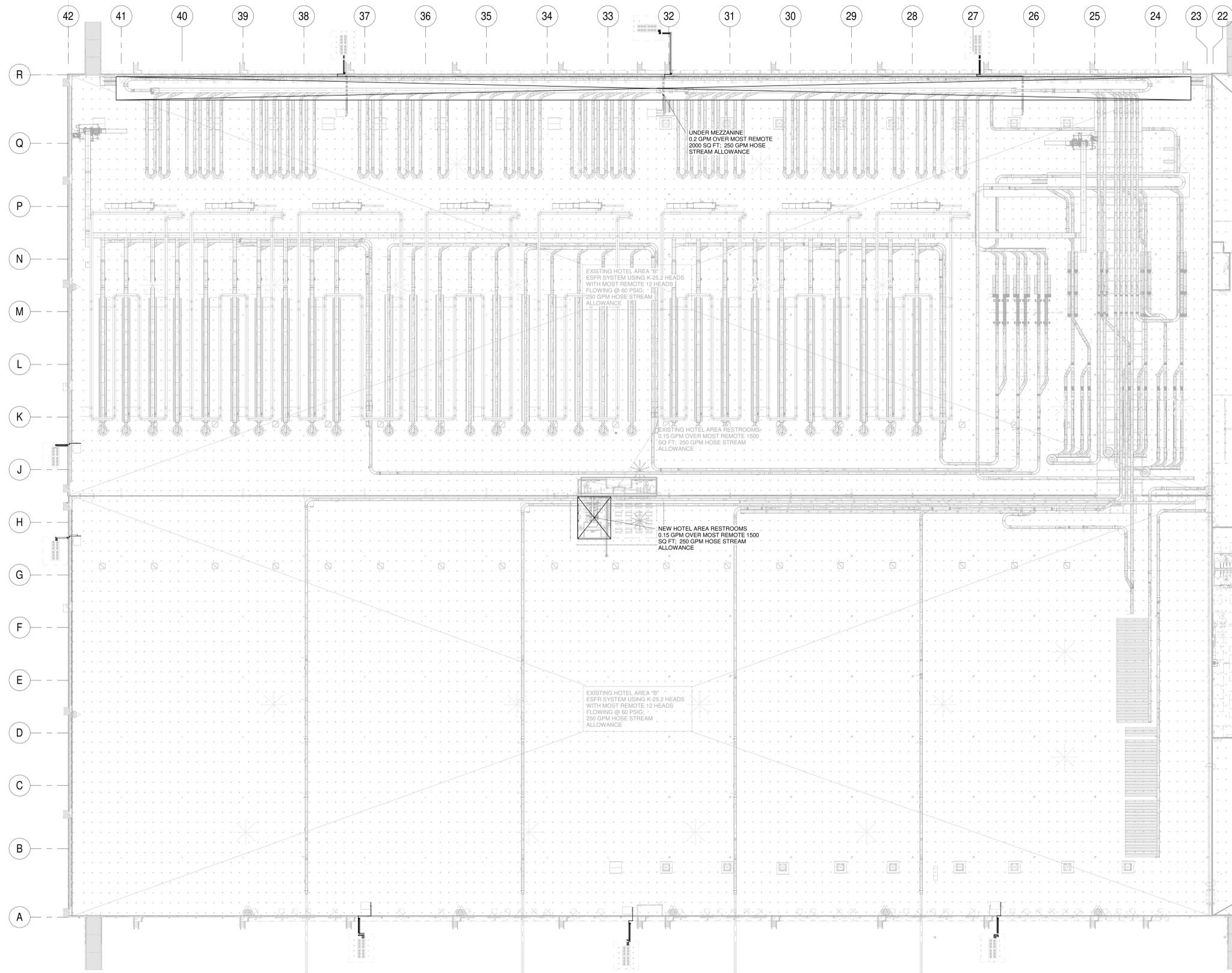


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SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR	PROJECT NUMBER	19034
DRAWN	A/E PM	ROSS DISTRIBUTION CENTER		SHEET NUMBER	2M-4.6
BR	JAR PW	SHAFTER, CALIFORNIA		PLOT DATE	9/27/2019 10:48:03 AM
SHEET TITLE			HVAC SCHEDULES AND DETAILS		



NOTES:
 FM INSURER:
 HLVS FANS TO BE SHUT-OFF GLOBALLY UPON THE DETECTION OF FIRE WATER FLOW.
 MAIN FIRE PANEL AND PRINTER LOCATED IN CCTV ROOM (ADMIN OFFICE).
 SPRINKLER RISER
 WATER SUPPLY FLOW TEST RESULTS (ZACHARY AVENUE WS NO FANUCCHI WAY):
 FLOW 1,060 GPM
 STATIC PRESSURE 52 PSIG
 RESIDUAL PRESSURE 45 PSIG
 2500 GPM @ 150 PSI DIESEL FIRE PUMP AND 2500 GPM @ 150 PSI ELECTRIC BOOSTER PUMP TAKING SUCTION FROM TANK.
 PROVIDE DOUBLE CHECK VALVE JUST INSIDE FIRE PUMP ROOM
 ALL OVERHEAD PIPING LARGER THAN 8" MUST BE SUPPORTED FROM MORE THAN ONE ROOF JOIST - COORDINATE WITH STRUCTURAL ENGINEER.

1 SPRINKLER REQUIREMENT PLAN
 1" = 40'-0"



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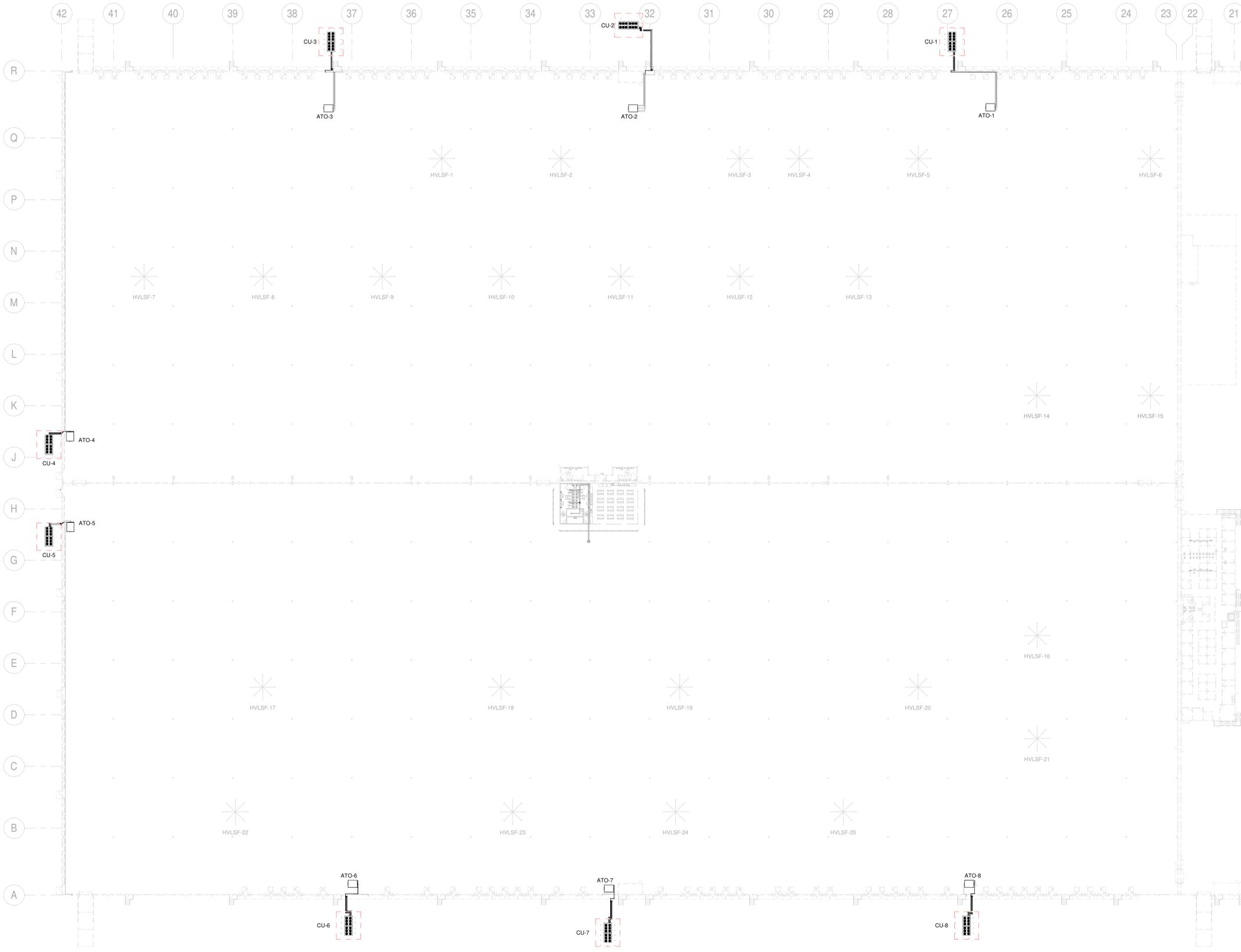
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SCALE As Indicated
 DRAWN A/E PM
 BR JAR PW
 SHEET TITLE
FACILITY FIRE PROTECTION SPRINKLER REQUIREMENT PLAN

PROJECT
FACILITY RENOVATION FOR ROSS DISTRIBUTION CENTER
 SHAFTER, CALIFORNIA

PROJECT NUMBER 19034
 SHEET NUMBER **2M-5.1**
 PLOT DATE 9/27/2019 10:49:08 AM



1. ATO-1-8, CU-1-8 (ELECTRONIC CONTROL SYSTEM)
 - VIA MANUFACTURER PROVIDED BACNET INTERFACE CARD
 - 1.1. POINTS (RTUS) -
 - SUPPLY FAN START/STOP
 - SUPPLY FAN (DP SWITCH) OPERATION
 - COOLING STAGES
 - DISCHARGE AIR TEMPERATURE
 - SPACE TEMPERATURE
 - RETURN AIR TEMPERATURE
 - FILTER STATUS
 - OPERATION HOURS
 - GLOBAL OUTSIDE AIR TEMPERATURE STATUS
 - GLOBAL OUTSIDE AIR HUMIDITY STATUS
 - (REFER TO M-4.1 FOR SENSOR LOCATIONS)
 - EF-19 AND 38 TO OPERATE CONTINUOUSLY DURING COOLING MODE FOR CODE REQUIRED
 - VENTILATION; EXISTING EF/SPS TO OPERATE AS "ECONOMIZER"; BUT DO NOT ALLOW EF/SPS TO OPERATE WHEN ANY OF ATO/CU ARE OPERATING.
 2. HVLSF-1 THRU -25
 - VIA BMS PROVIDED BACNET INTERFACE CARD TO BE FIELD INSTALLED
 - 2.1. POINTS -
 - FANS CONTROLLED IN 6 ZONES: HVLSF-1-5; HVLSF-6-10; HVLSF-11-15; HVLSF-16-20; HVLSF-21-25
 - FAN ON/OFF
 - FAN SPEED
 - PROVIDE OWNER ADJUSTABLE SCHEDULE FOR EACH ZONE
 3. ELECTRICAL LIGHTING CONTROL PANELS (REFER TO ELECTRICAL PLANS)
 - VIA MANUFACTURER PROVIDED BACNET INTERFACE CARD (ELECTRICAL CONTRACTOR)
 - 3.1. POINTS -
 - ALLOW ON/OFF OPERATION
 - STATUS
 - PROVIDE OWNER ADJUSTABLE SCHEDULE FOR EACH INTERIOR PANEL
 - PROVIDE OWNER ADJUSTABLE SCHEDULE FOR EACH EXTERIOR PANEL WITH GLOBAL PHOTO CELL OVERRIDE (PROVIDED AND INSTALLED BY BMS CONTRACTOR)
 4. INSTALLATION RESPONSIBILITIES
 - ELECTRICAL CONTRACTOR
 - POWER WIRING TO HVLSF, ATO & CUS
 - CONDUIT TO ATO SENSORS
 - RESTROOM EXHAUST FAN OPERATION THRU OCCUPANCY SENSORS
 - SMOKE DETECTOR SHUTDOWN OF ATO ON SENSING EMERGENCY CONDITION
 - MECHANICAL CONTRACTOR
 - PROVIDE HVAC EQUIPMENT SPACE TEMPERATURE SENSORS THRU EQUIPMENT MANUFACTURER
 - BMS CONTRACTOR
 - INSTALLATION WIRING TO ALL CONTROL SENSORS
 - ALL PROCESSING ATO'S ON ADJUSTABLE SCHEDULE SHOULD BE ADJUSTABLE BY OWNER.
 - PROVIDE FOR "RANDOM START" TO MINIMIZE PEAK DEMAND.
 - PROVIDE FOR OWNER ADJUSTABLE LOAD SHEDDING DURING PEAK HOURS; ENABLE/DISABLE DEMAND LIMITING BY REDUCING COOLING STAGES IN ATO'S AND ALLOWING SPACE TEMPERATURE TO RISE TO OWNER ADJUSTABLE SETTINGS.
 - LOAD SHEDDING ALSO TO BE AUTOMATICALLY ENABLED BASED ON OUTSIDE NOTIFICATION OF PEAK TIME (UTILITY COMPANY) WITH MANUAL OVERRIDE.
 - PROVIDE FOR OWNER ADJUSTABLE NIGHT AND WEEKEND HVAC SETBACK.
 - OWNER TO HAVE ABILITY TO CHANGE SETTINGS ON ATO, HVLSF AND OTHER GROUPINGS GLOBALLY, AS WELL AS BY GROUPING AND INDIVIDUALLY.
- GENERAL**
- BMS SYSTEM TO BE NEXREV.
 - BMS SYSTEM TO PROVIDE NOTIFICATION VIA EMAIL AND TEXT MESSAGE FOR OWNER DESIGNATED FAULTS OR ALARMS. OWNER TO HAVE ABILITY TO EASILY MODIFY WHO RECEIVES SPECIFIC ALERTS.
 - ALL BACNET INTERFACE COMMUNICATION CARDS TO BE BACNET "CERTIFIED" WITH "BTL" SEAL.
 - BMS CONTRACTOR TO PROVIDE WEB-BASED INTERFACE FOR ACCESS TO BMS SYSTEM.
 - BMS CONTROL PANEL(S) TO BE LOCATED IN AREAS SHOWN ON THIS PLAN (2 OPTIONS INDICATED).
 - ALL POINTS INDICATED SHALL BE DISPLAYED ON BMS GRAPHICS.

1 BMS CONNECTION PLAN
1" = 40'-0"



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SCALE	As Indicated	PROJECT	FACILITY RENOVATION FOR ROSS DISTRIBUTION CENTER SHAFTER, CALIFORNIA	PROJECT NUMBER	19034
DRAWN	A/E	PM	BMS CONNECTION PLAN	SHEET NUMBER	2M-6.1
BR	JAR	PW		PLOT DATE	9/27/2019 10:49:18 AM