

FIRE RATED WALLS

1 HR RATED

GENERAL NOTES:

- A. PROVIDE BALANCING DAMPERS ON ALL LOW PRESSURE SUPPLY, RETURN AND EXHAUST BRANCH DUCTS AND RUNOUTS. ALL BALANCING DAMPERS SHALL BE EASILY ACCESSIBLE AND IDENTIFIED WITH FLAG OR ORANGE PAINT.
- B. ALL DUCT DIMENSIONS ARE INSIDE CLEAR.
- C. IN HARD CEILING PROVIDE BALANCING DAMPER WITH 30 INCHES OF DIFFUSER GRILLE. PROVIDE ACCESSORY ALUMINUM MOUNT FRAME / PLASTER FRAME FOR HARD CEILING THAT ALLOWS DIFFUSER WITH FLEX CONNECTION TO BE LIFTED OUT OF FRAME TO ACCESS CEILING SPACE.
- D. BRANCH RUNOUTS TO DIFFUSERS SHALL BE THE SIZE LISTED ON THE GRILLE/DIFFUSER SCHEDULE, UNLESS OTHERWISE NOTED.

KEYED NOTES:

- ① INSTALL UNIT ABOVE DOOR. PROVIDE CONDENSATE TRAP AND 3/4" CONDENSATE PIPE. ROUTE TO MOP SINK IN CUSTODIAN ROOM 604. TERMINATE WITH AIR GAP.
- ② INSTALL REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS. ROUTE LINES FROM OUTDOOR CONDENSING UNIT TO ASSOCIATED INDOOR DUCTLESS UNIT.

pdc

Progressive Design Collaborative, Ltd.

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License# C-0183  
PROJECT #23015

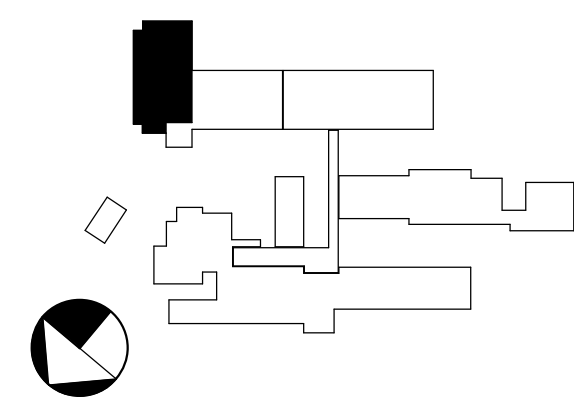
COOPER ACADEMY  
A & R

PROJECT TITLE

"CLIENT'S PROJECT" # - XXX



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3. DO NOT SCALE OFF DIMENSIONS.

REVISIONS		
NO.	DATE	DESCRIPTION
2	02/26/2024	ADDENDUM 02

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PROJECT PHASE

2307

BOOMERANG DESIGN PROJECT NUMBER

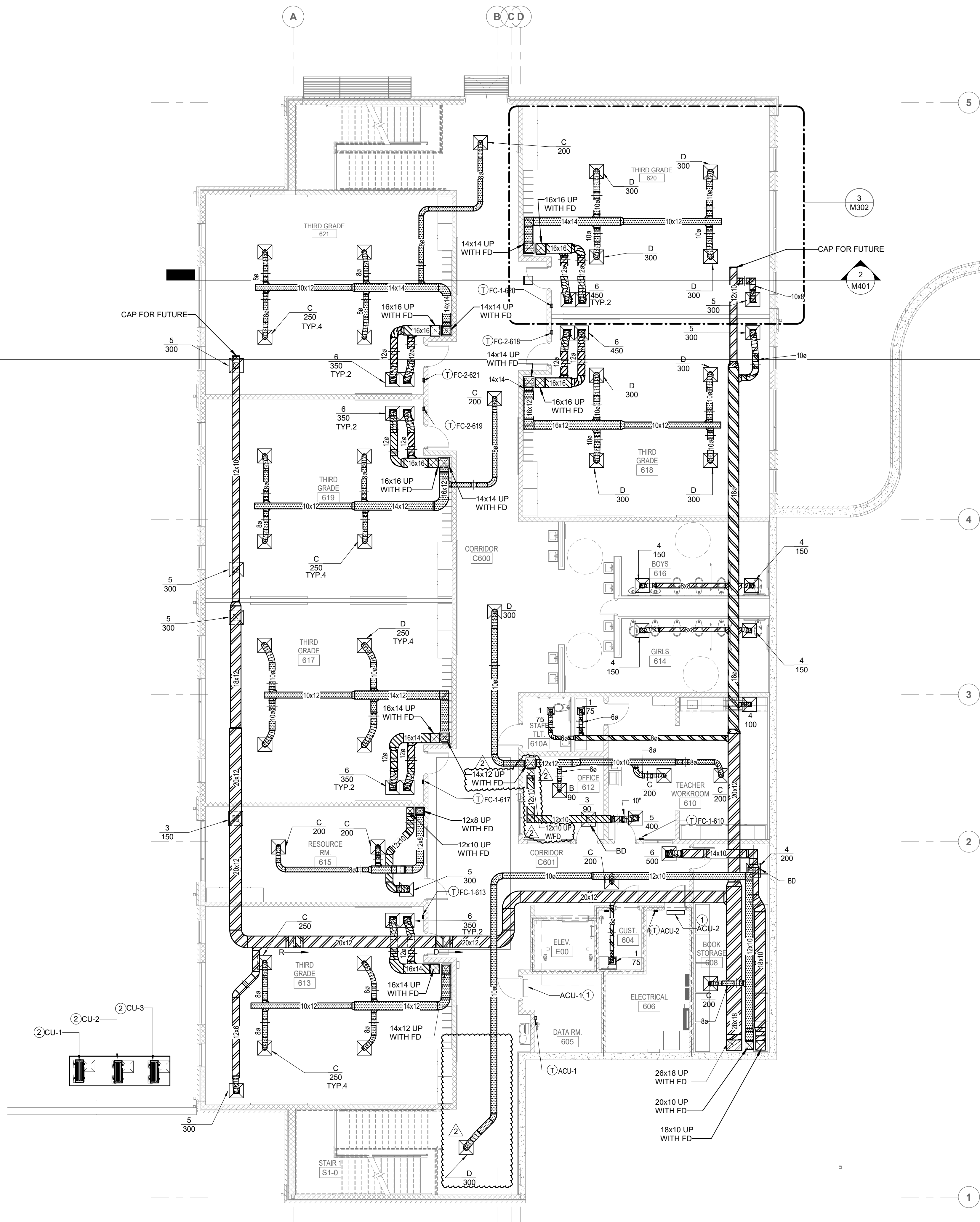
02.07.2024

DRAWING RELEASE DATE

GROUND FLOOR  
DUCTWORK PLAN  
SHEET TITLE

M101

SHEET



2/26/2024 4:03:28 PM

FIRE RATED WALLS

1 HR RATED

**GENERAL NOTES:**

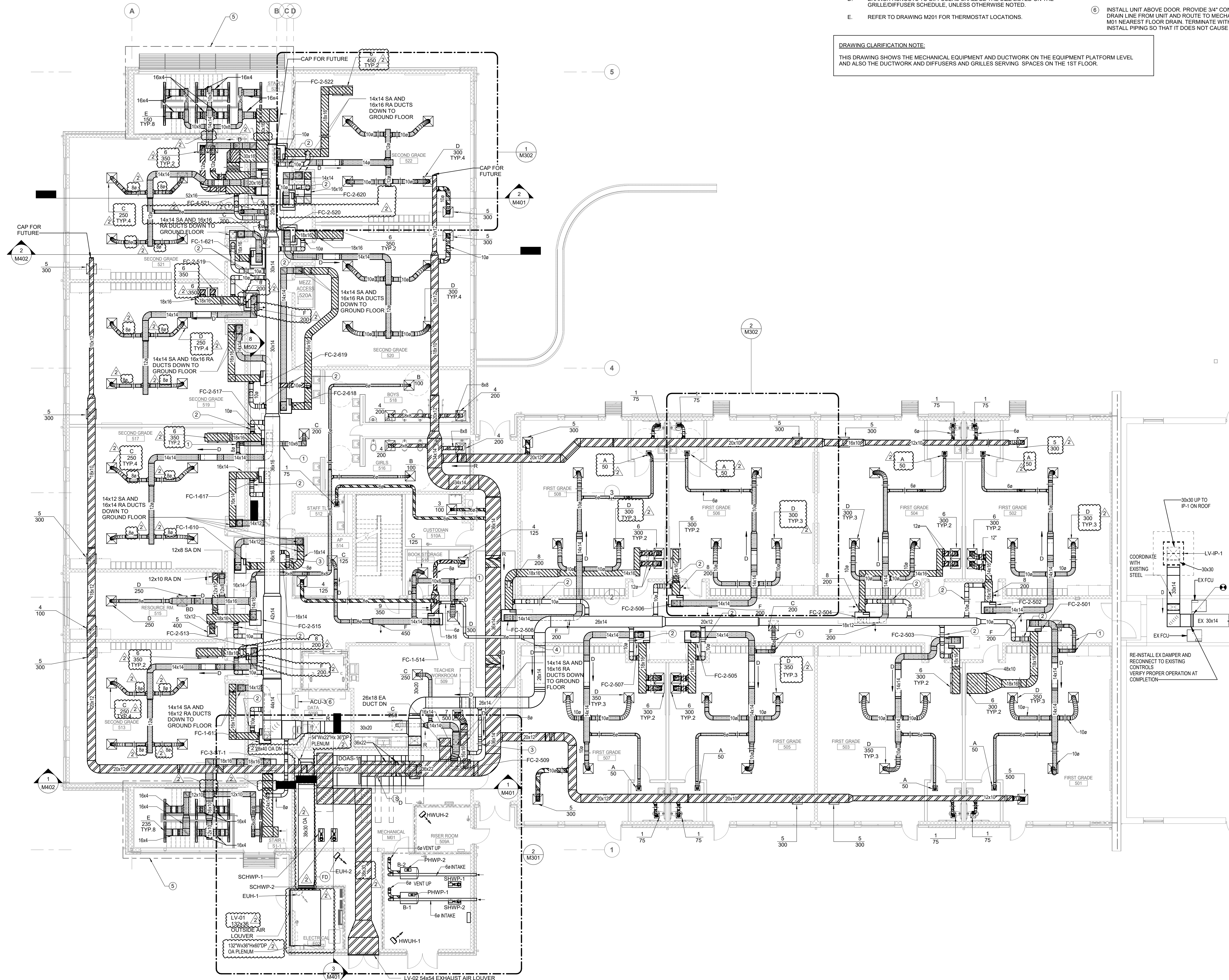
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- ALL DUCT DIMENSIONS ARE INSIDE CLEAR.
- IN HARD CEILING PROVIDE BALANCING DAMPER WITH 30 INCHES OF DIFFUSER GRILLE. PROVIDE ACCESSORY ALUMINUM MOUNT FRAME / PLASTER FRAME FOR HARD CEILING THAT ALLOWS DIFFUSER WITH FLEX CONNECTION TO BE LIFTED OUT OF FRAME TO ACCESS CEILING SPACE.
- BRANCH RUNOUTS TO DIFFUSERS SHALL BE THE SIZE LISTED ON THE GRILLE/DIFFUSER SCHEDULE, UNLESS OTHERWISE NOTED.
- REFER TO DRAWING M201 FOR THERMOSTAT LOCATIONS.

**KEYNOTES:**

- DROP DOWN AND RUN DUCTWORK SERVING SUPPLY DIFFUSER IN THE CEILING, BELOW EQUIPMENT PLATFORM FLOOR.
- BALANCE OA TO 300 CFM.
- BALANCE OA TO 100 CFM.
- BALANCE TO 75 CFM.
- DUCTWORK WITHIN THE STAIRWELL AREA SHALL HAVE PAINT GRIP FINISH TO BE PAINTED FLAT BLACK.
- INSTALL UNIT ABOVE DOOR. PROVIDE 3/4" CONDENSATE DRAIN LINE FROM UNIT AND ROUTE TO MECHANICAL ROOM M01 NEAREST FLOOR DRAIN. TERMINATE WITH AIR GAP. INSTALL PIPING SO THAT IT DOES NOT CAUSE A TRIP HAZARD.

**DRAWING CLARIFICATION NOTE:**

THIS DRAWING SHOWS THE MECHANICAL EQUIPMENT AND DUCTWORK ON THE EQUIPMENT PLATFORM LEVEL AND ALSO THE DUCTWORK AND DIFFUSERS AND GRILLES SERVING SPACES ON THE 1ST FLOOR.



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**02.07.2024**

DRAWING RELEASE DATE

**FIRST FLOOR AND  
EQUIPMENT  
PLATFORM  
DUCTWORK PLAN**

SHEET TITLE

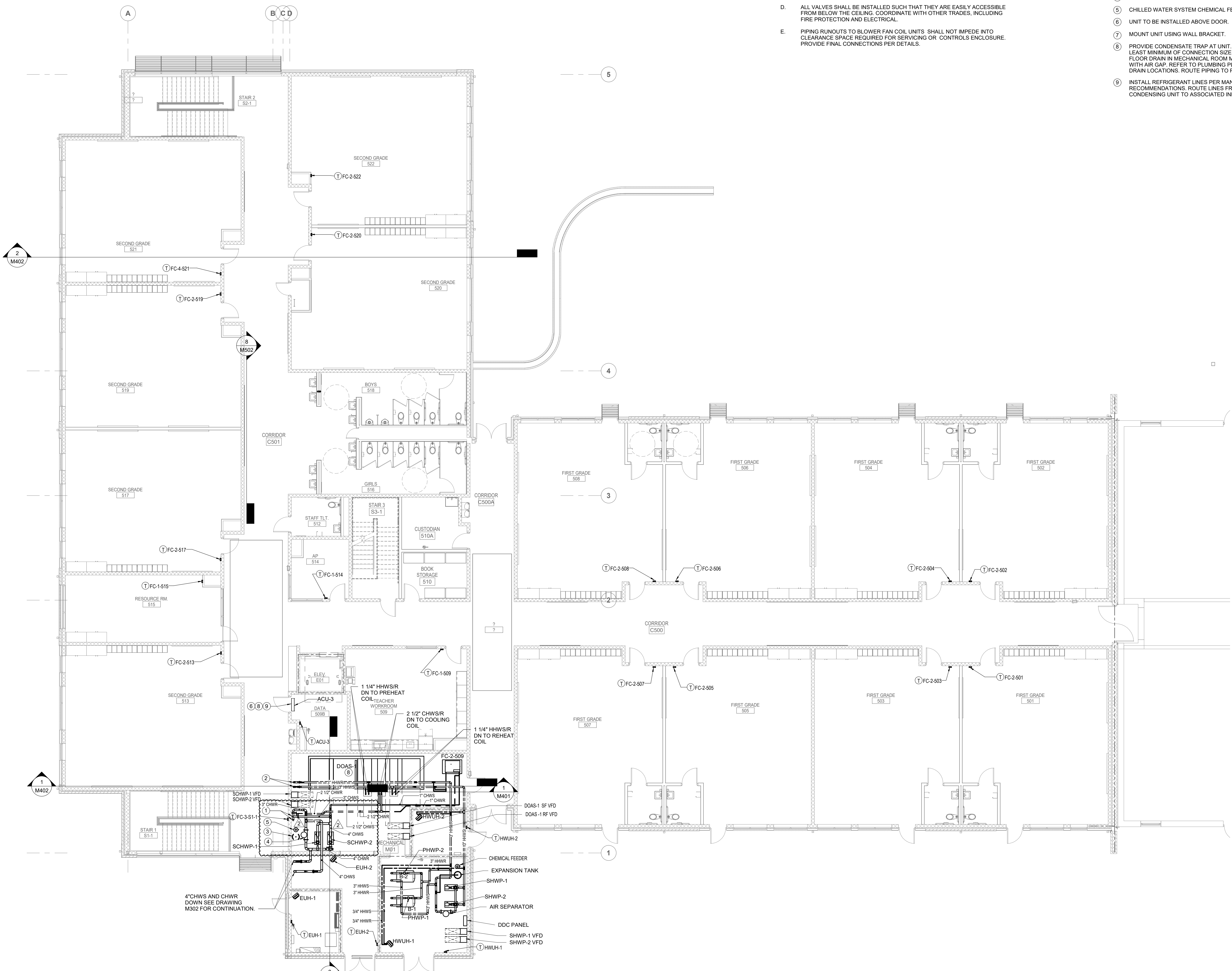
**M102**

SHEET



2/26/2024 4:03:31 PM

1 FIRST FLOOR PIPING PLAN  
0 10 20  
1/8" = 1'-0"

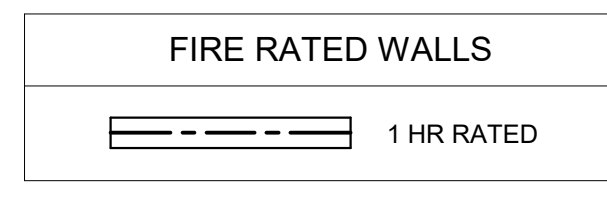


GENERAL NOTES:

- A. THERMOSTATS IN PUBLIC AND COMMON AREAS OTHER THAN CORRIDORS SHALL BE NOT HAVE LCD SCREEN BUT SHALL HAVE OVERRIDE BUTTON.
- B. MECHANICAL AND BAS CONTRACTORS SHALL REVIEW THE FINAL CASEWORK AND FFE DRAWINGS AND IDENTIFY POTENTIAL CONFLICTS WITH THERMOSTAT AND SENSOR LOCATIONS PRIOR TO ROUGH-IN. NOTIFY ARCHITECT AND ENGINEER OF CONFLICTS AND DISCREPANCIES.
- C. ALL THERMOSTATS, SENSORS, AND USER CONTROLS SHALL BE MOUNTED AT 48\"/>

KEYNOTES:

1. CHWS AND CHWR UP. SEE DRAWING M202 FOR CONTINUATION.
2. CHWS AND HHWR UP. SEE DRAWING M202 FOR CONTINUATION.
3. CHILLED WATER SYSTEM EXPANSION TANK
4. CHILLED WATER SYSTEM AIR SEPARATOR
5. CHILLED WATER SYSTEM CHEMICAL FEEDER
6. UNIT TO BE INSTALLED ABOVE DOOR.
7. MOUNT UNIT USING WALL BRACKET.
8. PROVIDE CONDENSATE TRAP AT UNIT. SIZE SHALL BE AT LEAST MINIMUM OF CONNECTION SIZE. EXTEND TO NEAREST FLOOR DRAIN IN MECHANICAL ROOM M01, AND TERMINATE WITH AIR GAP. REFER TO PLUMBING PLANS FOR FLOOR DRAIN LOCATIONS. ROUTE PIPING TO PREVENT TRIP HAZARD.
9. INSTALL REFRIGERANT LINES PER MANUFACTURERS RECOMMENDATIONS. ROUTE LINES FROM OUTDOOR CONDENSING UNIT TO ASSOCIATED INDOOR DUCTLESS UNIT.



**boomerang DESIGN**  
rethink, repurpose, results

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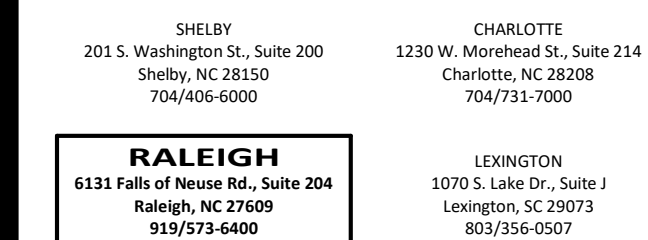
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**2307**  
BOOMERANG DESIGN PROJECT NUMBER  
**02.07.2024**  
DRAWING RELEASE DATE

**FIRST FLOOR PIPING  
PLAN**  
SHEET TITLE  
**M201**  
SHEET



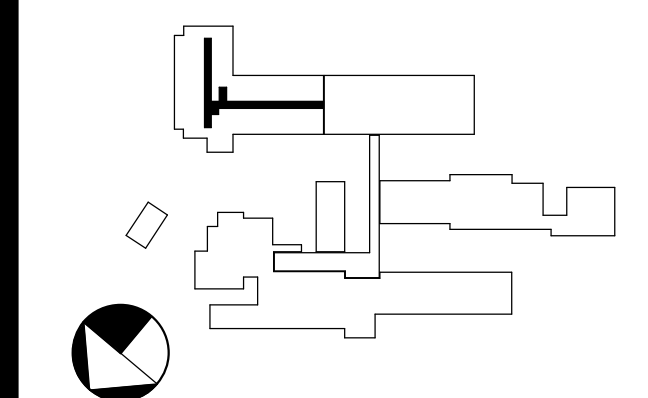
# COOPER ACADEMY

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PROJECT TITLE

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PROJECT PHASE

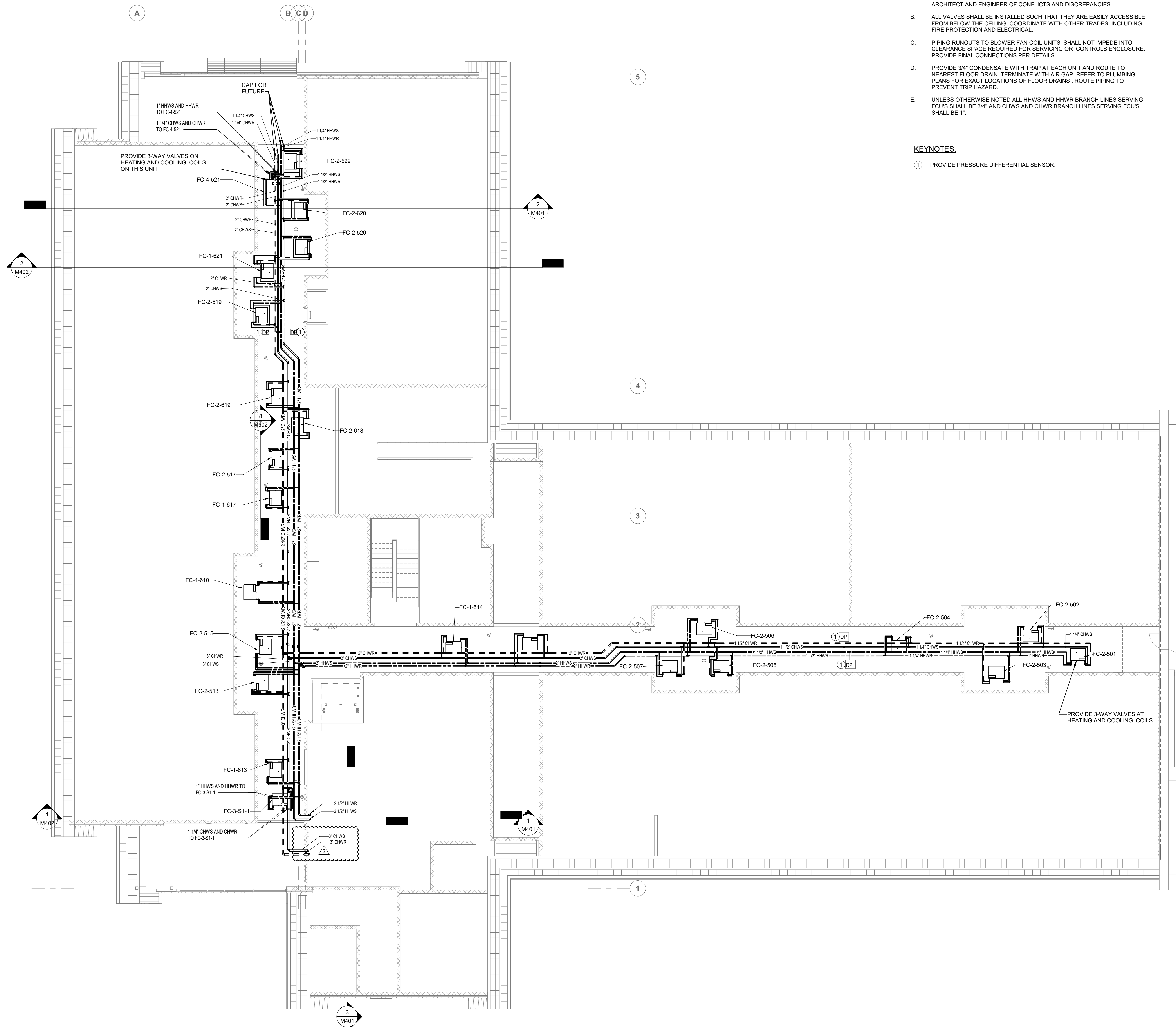
**2307**  
BOOMERANG DESIGN PROJECT NUMBER

**02.07.2024**  
DRAWING RELEASE DATE

# M202

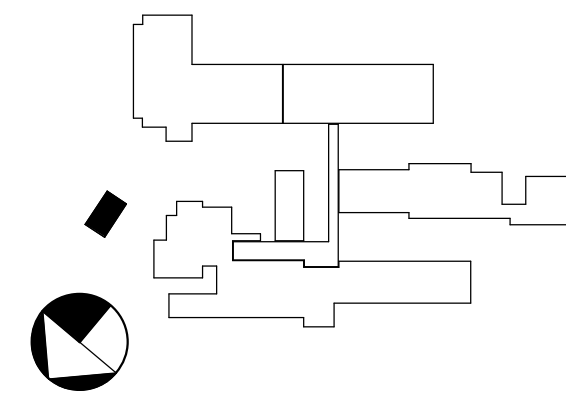
- A. MECHANICAL AND BAS CONTRACTORS SHALL REVIEW THE FINAL CASEWORK AND FFE DRAWINGS AND IDENTIFY POTENTIAL CONFLICTS WITH THE THERMOSTAT AND BAS CONTRACTORS. REPORT TO ROUGH-IN NOTIFY ARCHITECT AND ENGINEER OF CONFLICTS AND DISCREPANCIES.
- B. ALL VALVES SHALL BE INSTALLED SUCH THAT THEY ARE EASILY ACCESSIBLE FROM BELOW THE CEILING. COORDINATE WITH OTHER TRADES, INCLUDING FIRE PROTECTION AND ELECTRICAL.
- C. PIPING RUNOUTS TO BLOWER FAN COIL UNITS SHALL NOT IMPEDE INTO CLEARANCE SPACE REQUIRED FOR SERVICING OR CONTROLS ENCLOSURE PROVIDE FINAL COORDINATIONS FOR DETAILS.
- D. PROVIDE 3/4" CONDENSATE WITH TRAP AT EACH UNIT AND ROUTE TO NEAREST FLOOR DRAIN. TERMINATE WITH AIR GAP. REFER TO PLUMBING PLANS FOR EXACT LOCATIONS OF FLOOR DRAINS. ROUTE PIPING TO PREVENT TRIP HAZARD.
- E. UNLESS OTHERWISE NOTED ALL HHWS AND HHWR BRANCH LINES SERVING FOCUS SHALL BE 3/4" AND CHWR AND CHWR BRANCH LINES SERVING FOCUS SHALL BE 1".

① PROVIDE PRESSURE DIFFERENTIAL SENSOR.



**1 MEZZANING PIPING PLAN**

2/26/2024 4:03:34 PM



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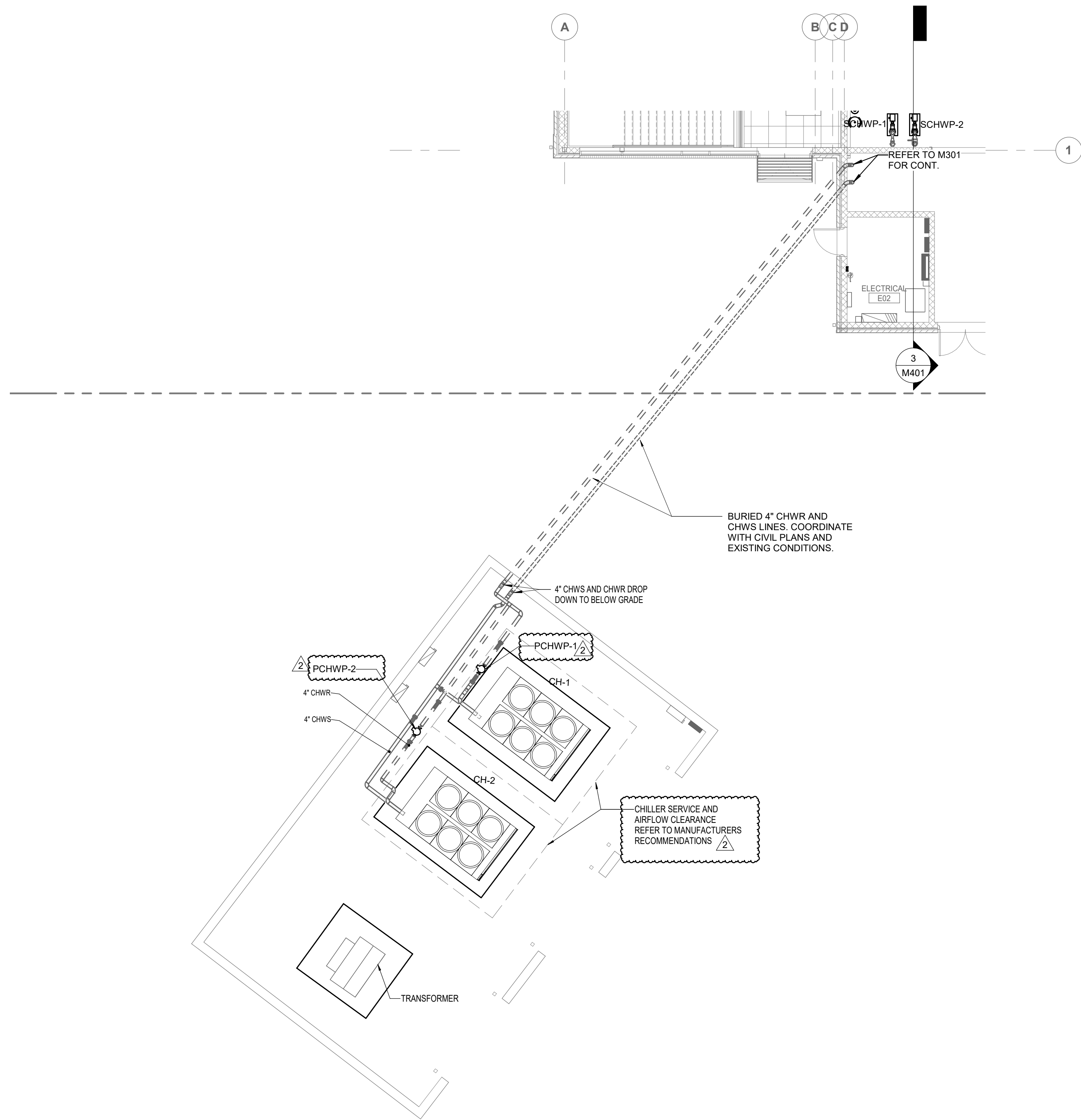
DRAWING RELEASE DATE

MECHANICAL YARD  
PLAN

SHEET TITLE

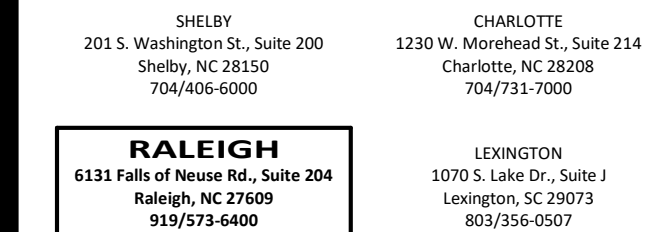
M203

SHEET



1 MECHANICAL YARD PLAN  
0 4 8 16'  
1/8" = 1'-0"





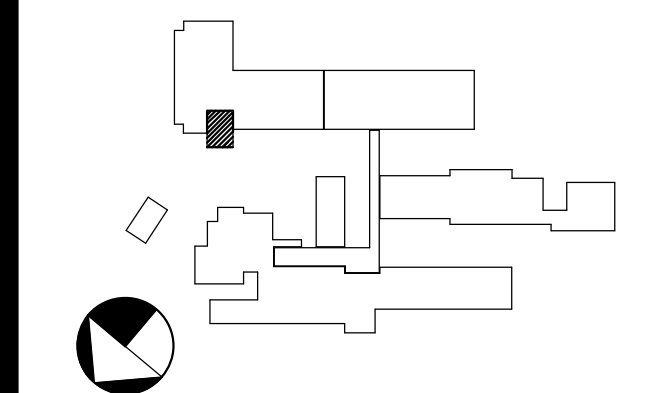
# COOPER ACADEMY


## A & R

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PROJECT TITLE

"CLIENT'S PROJECT" # - XXX



REVISIONS 		
NO.	DATE	DESCRIPTION
2	02/26/2024	ADDENDUM 02

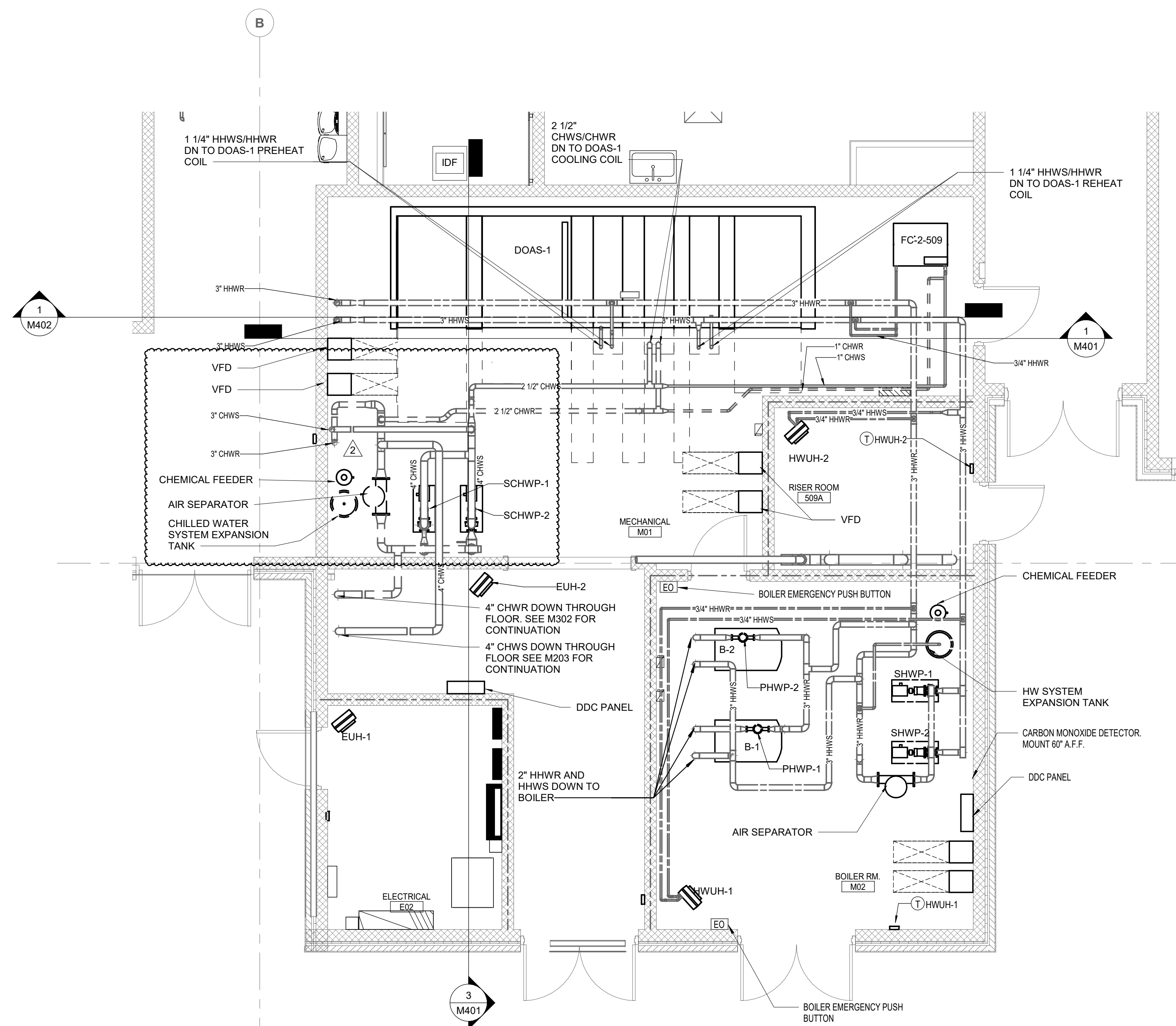
ENLARGED PLANS

SHEET TITLE

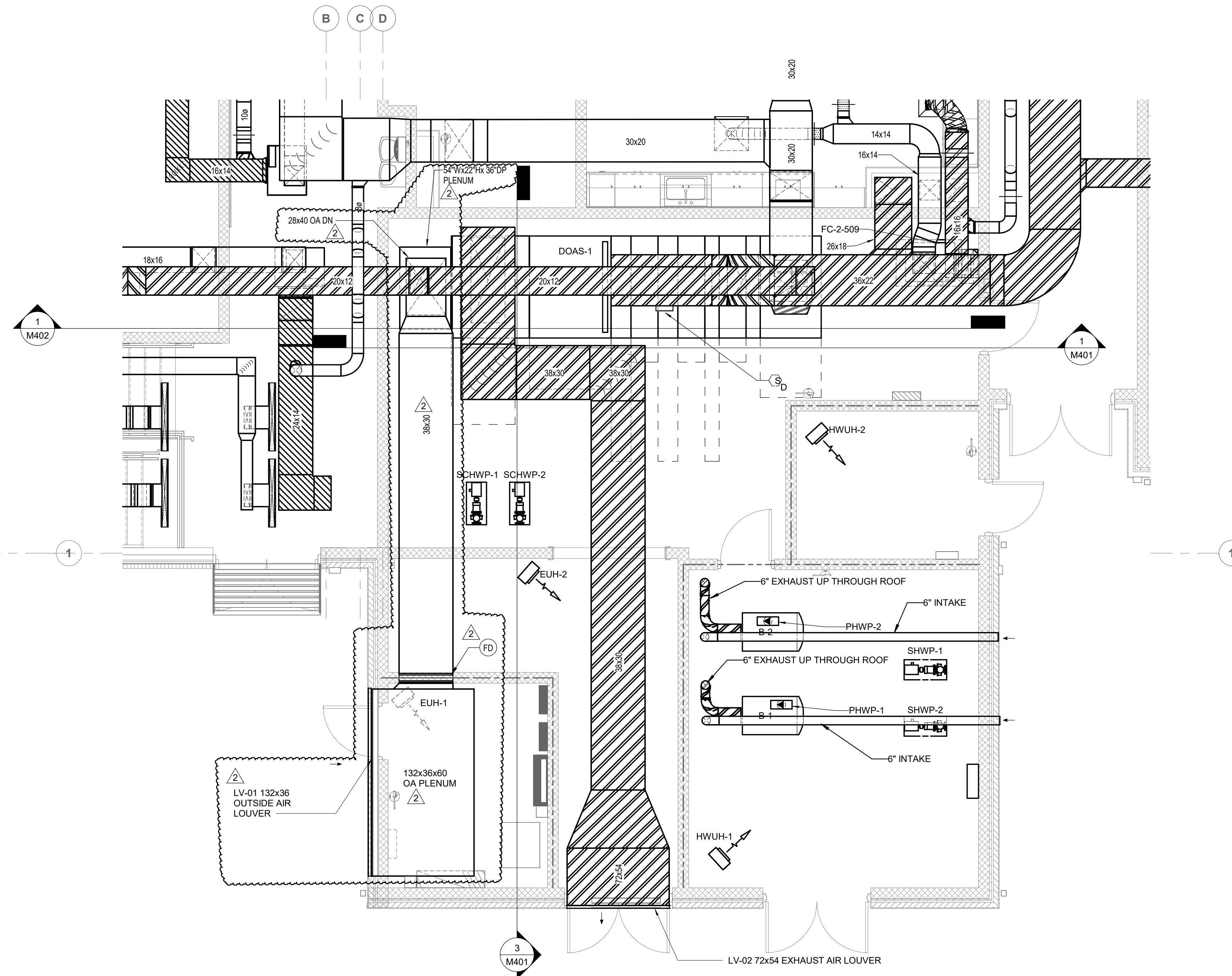
**M301**

SHEET

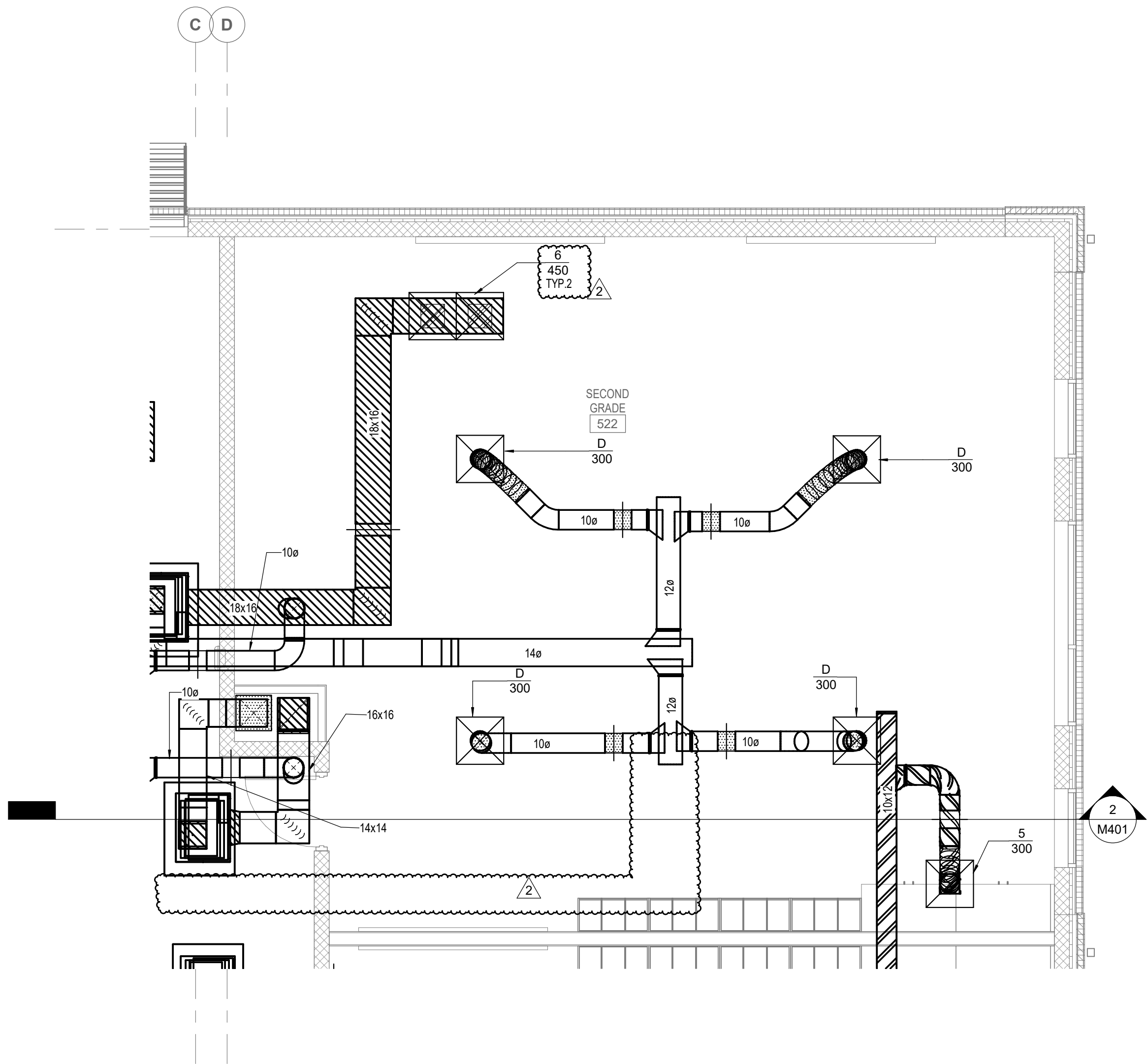
- A. ALL PIPING AND DUCTWORK SHALL BE INSTALLED TO ALLOW FOR MAXIMUM HEAD HEIGHT.
- B. CONDENSATE AND RELIEF VALVE PIPING SHALL BE INSTALLED TO ALLOW FOR MAXIMUM HEAD HEIGHT.
- C. REFER TO ARCHITECTURAL ELEVATIONS FOR LOUVER HEIGHT, LOCATION, AND FRAMING DETAIL.
- D. INSTALL AIRFLOW MONITORING STATION IN OUTSIDE AIR DUCT. MAINTAIN STRAIGHT RUN OF DUCT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- E. REFER TO PLANS FOR DIFFERENTIAL PRESSURE SENSOR LOCATIONS.
- F. TERMINATE CONDENSATE AT FLOOR DRAIN.



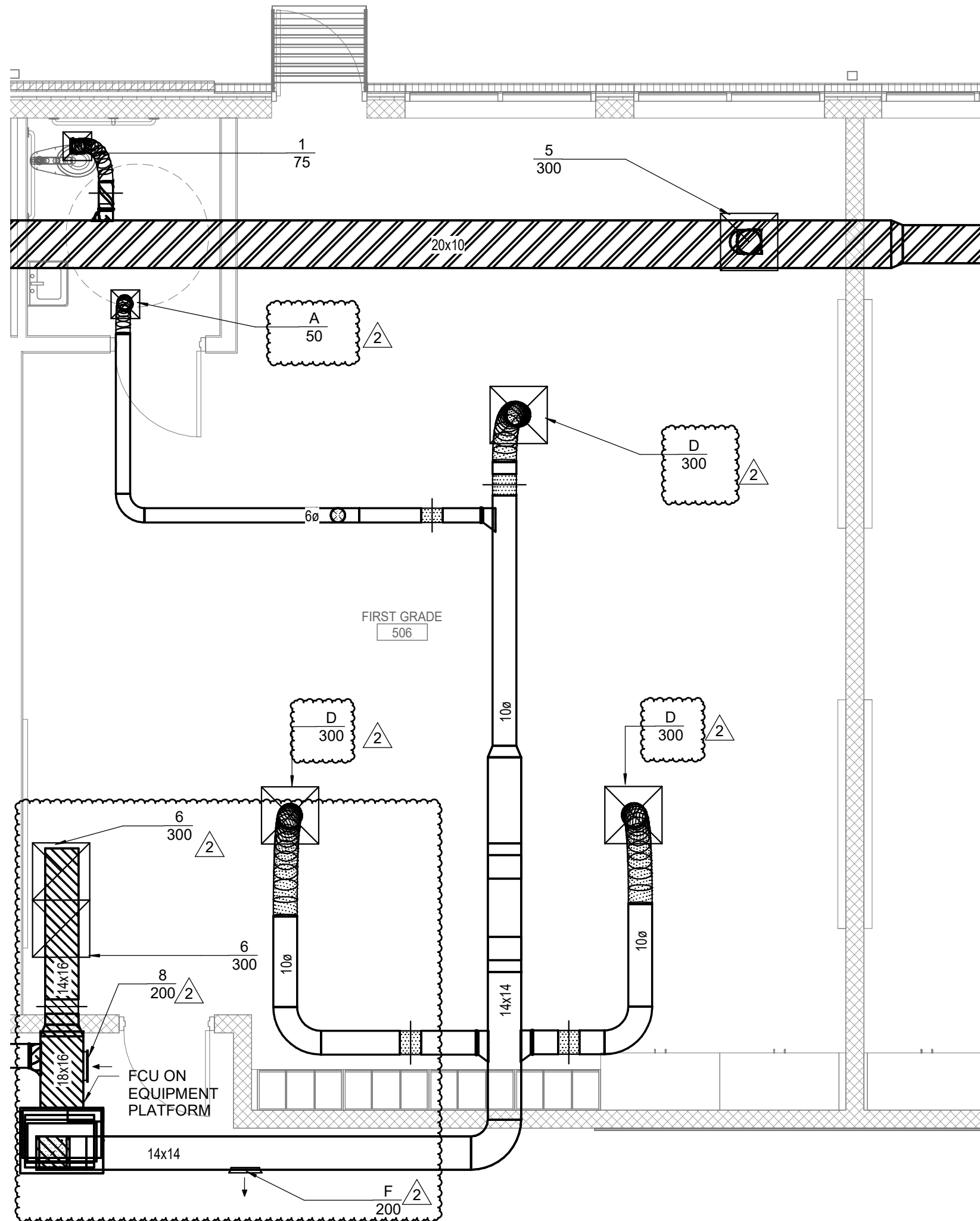
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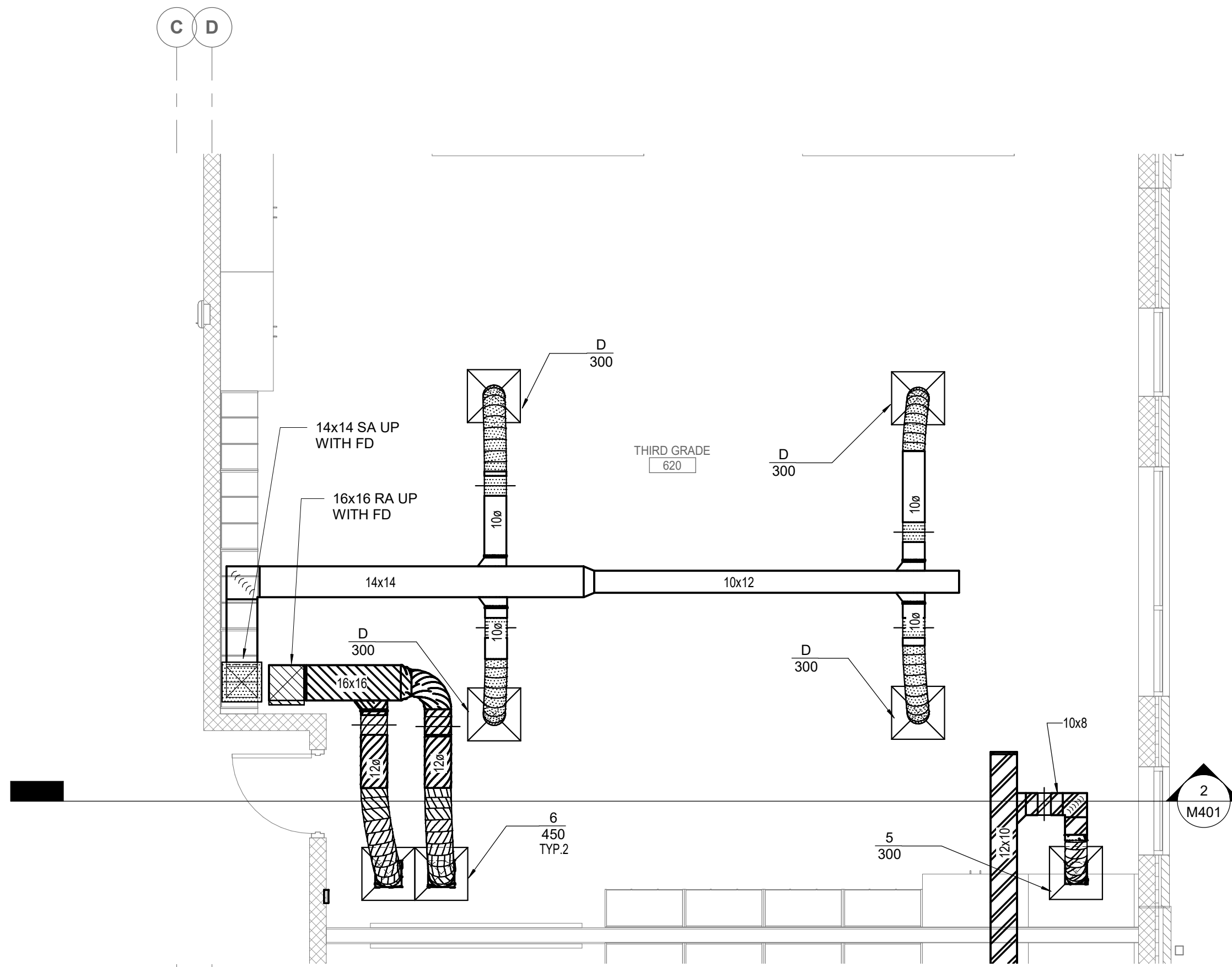
2 FIRST FLOOR MECHANICAL ROOM - DUCTWORK



1 FIRST FLOOR PLAN - DUCTWORK - TYPICAL SECOND GRADE CLASSROOM



2 FIRST FLOOR PLAN - DUCTWORK - TYPICAL FIRST GRADE CLASSROOM



3 GROUND FLOOR PLAN - DUCTWORK - TYPICAL THIRD GRADE CLASSROOM

FIRE RATED WALLS  
1 HR RATED



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201 S. Washington St., Suite 200  
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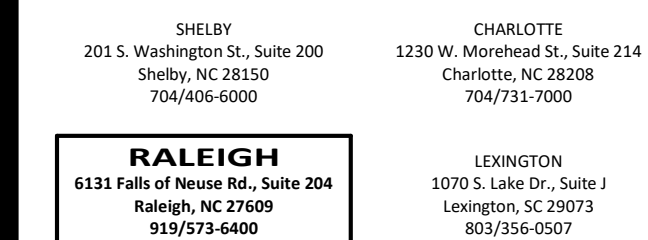
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**ENLARGED PLANS**

SHEET TITLE

**M302**

SHEET



PROJECT TITLE

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SHEET



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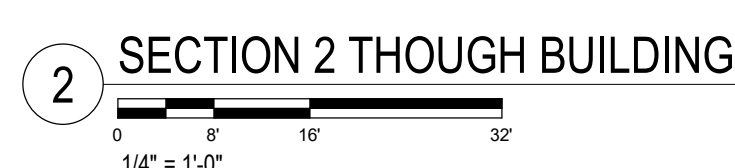
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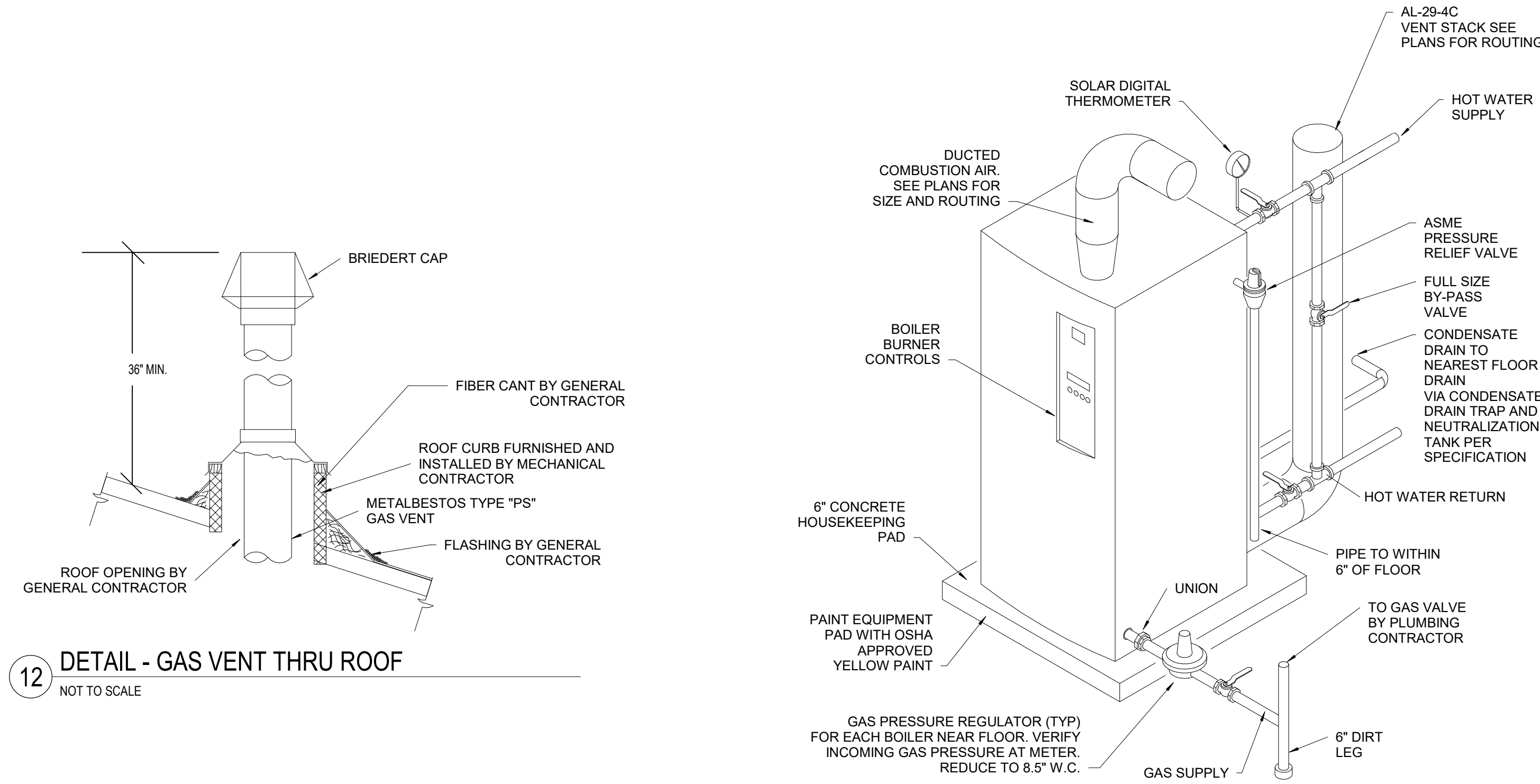
SECTIONS

SHEET TITLE

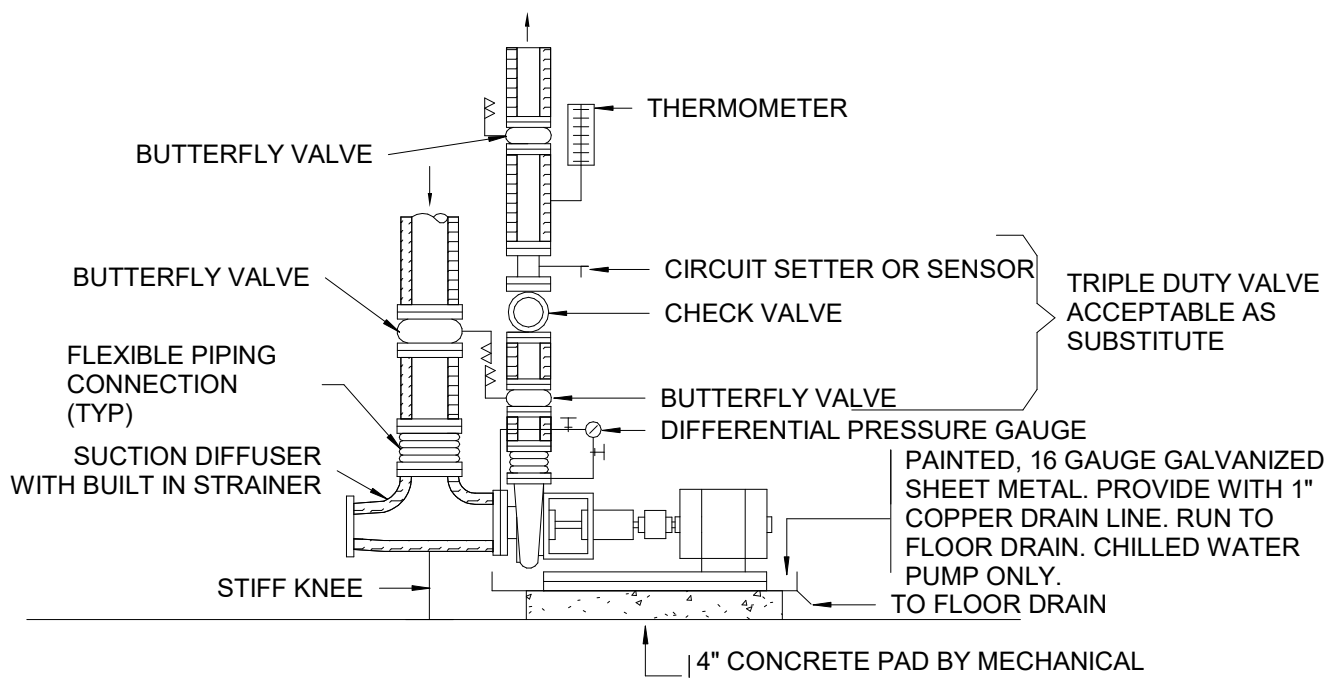
M402

SHEET

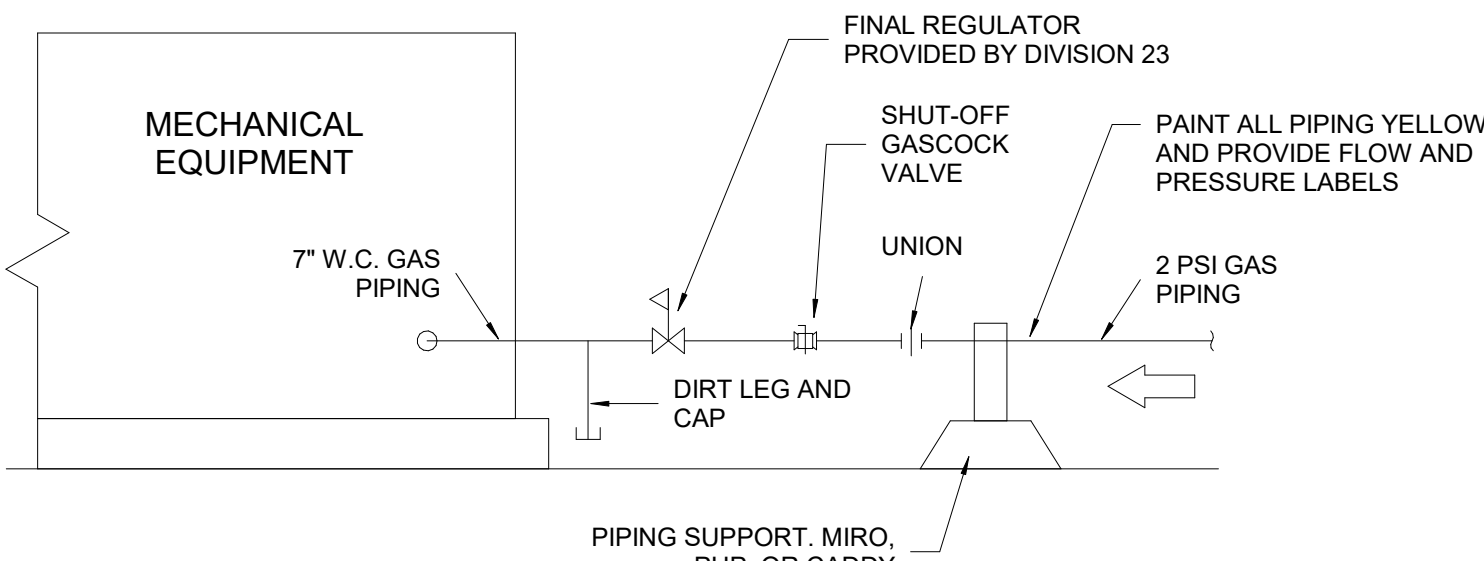




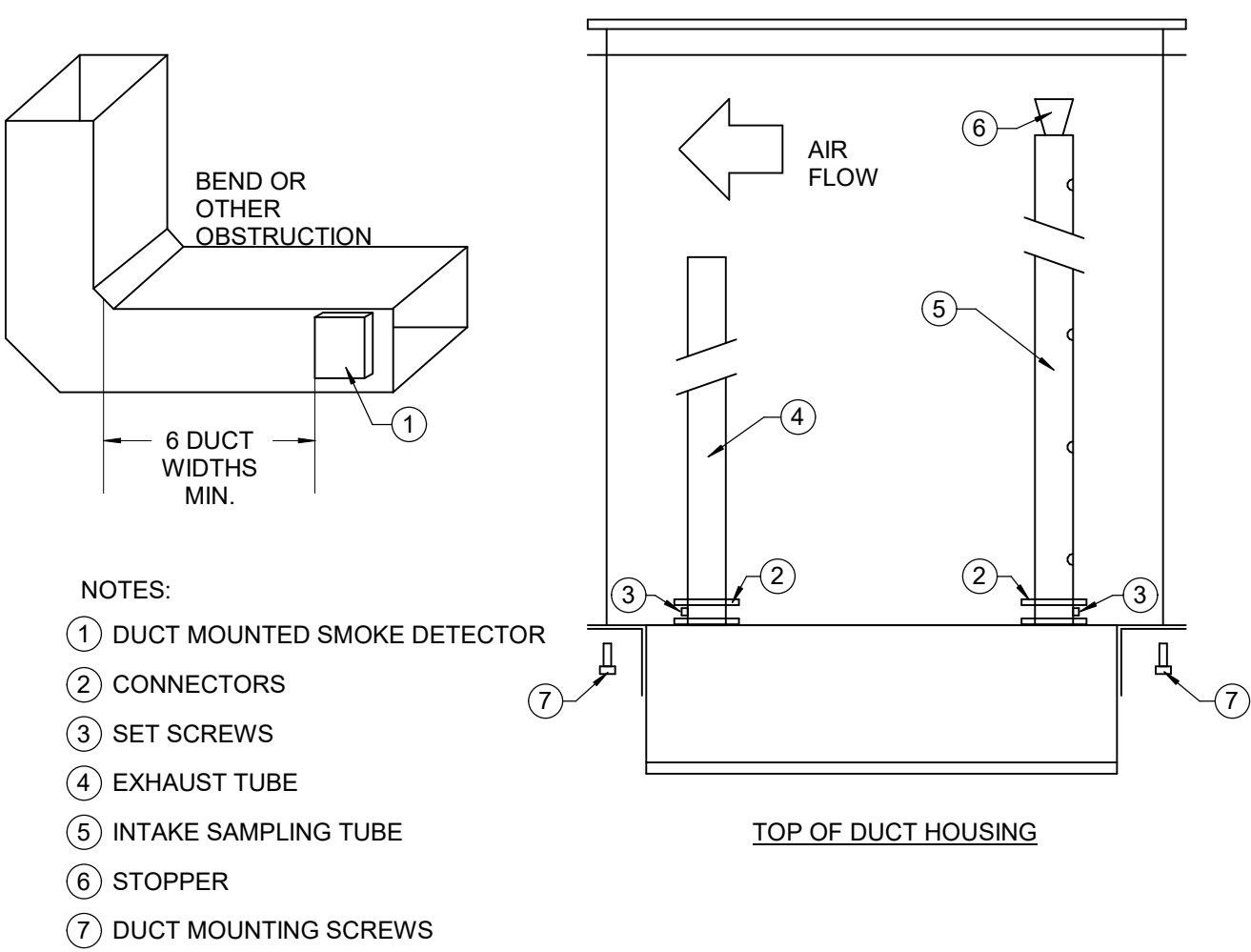
12 DETAIL - GAS VENT THRU ROOF  
NOT TO SCALE



13 DETAIL - BASE MOUNTED END SUCTION PUMP  
NOT TO SCALE

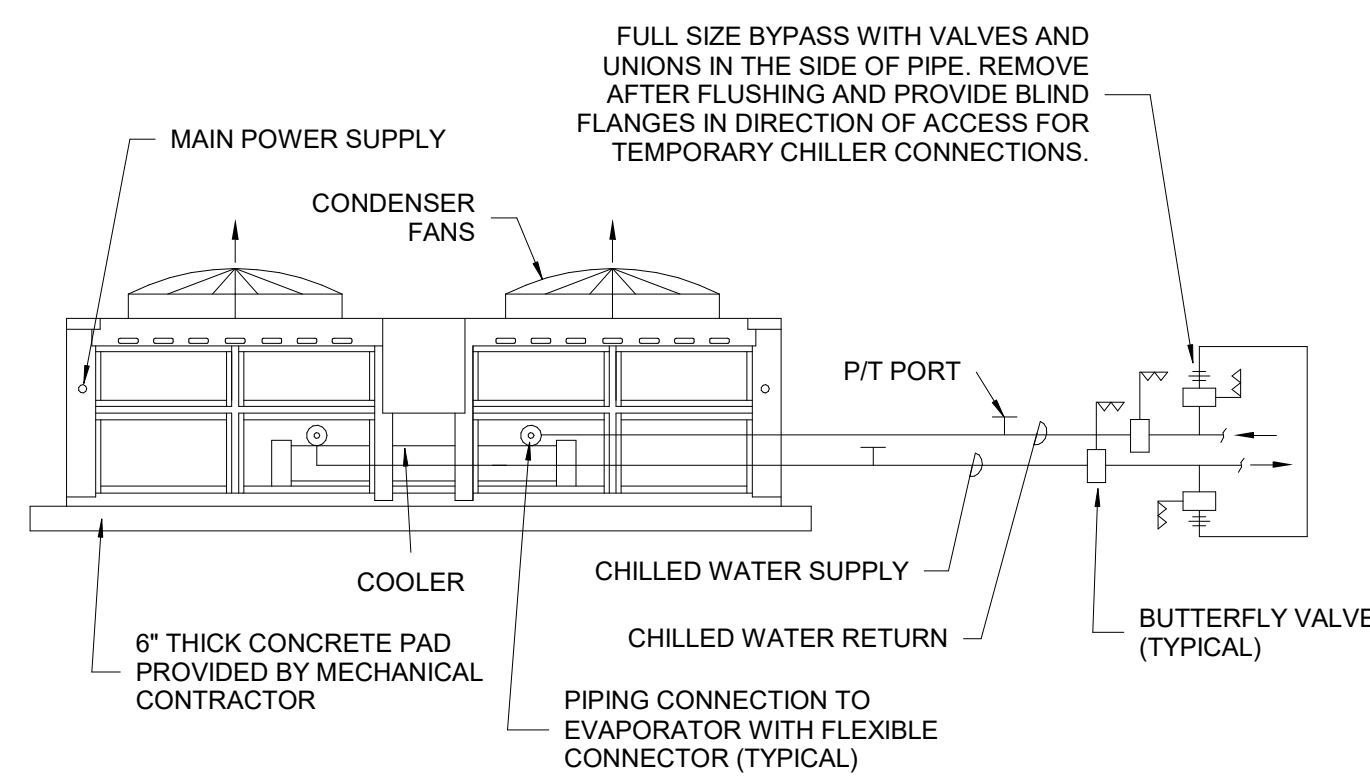


14 DETAIL - TYPICAL GAS CONNECTION  
NOT TO SCALE



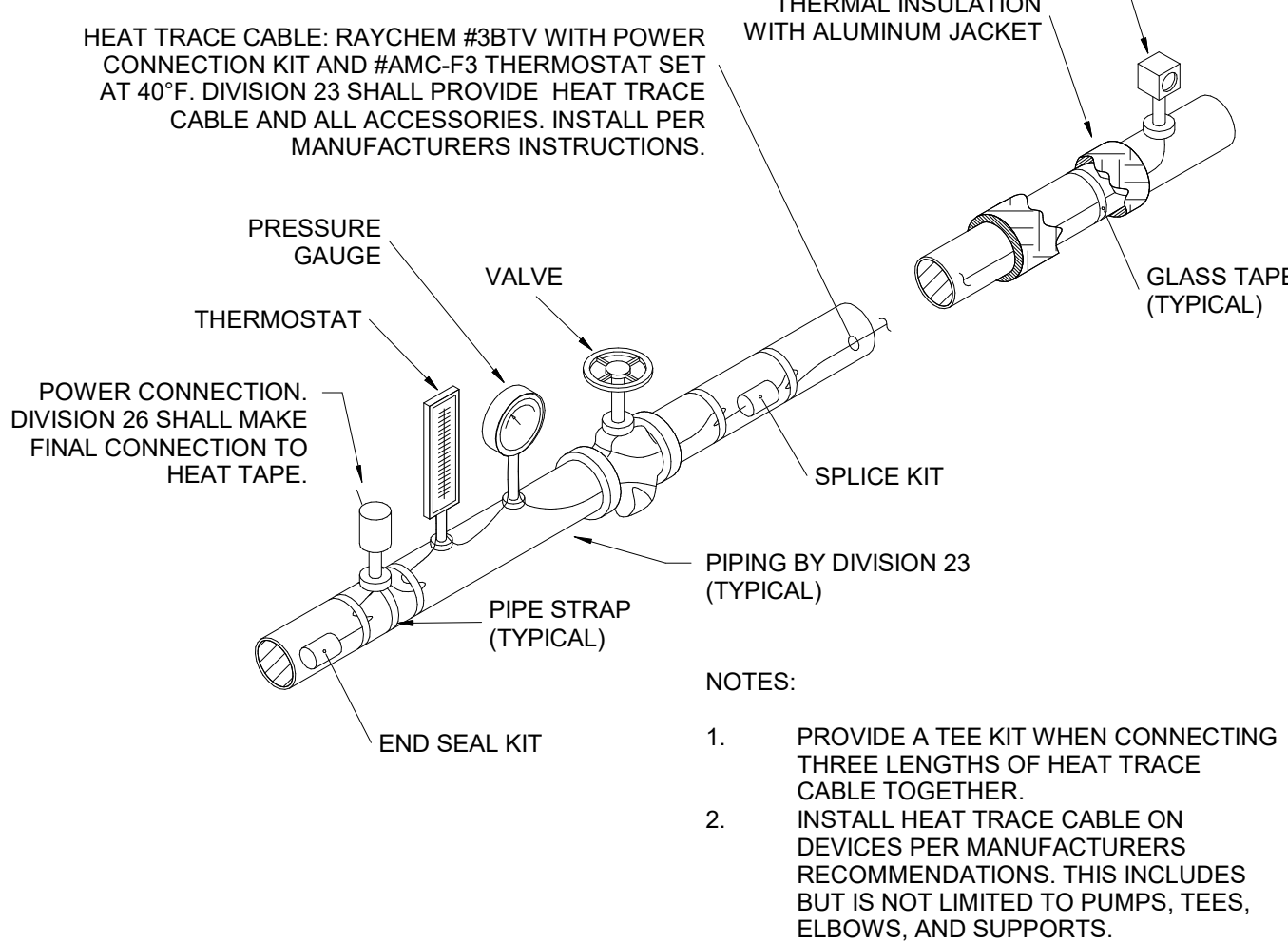
15 DUCT SMOKE DETECTOR DETAIL  
NOT TO SCALE

9 DETAIL - BOILER  
NOT TO SCALE

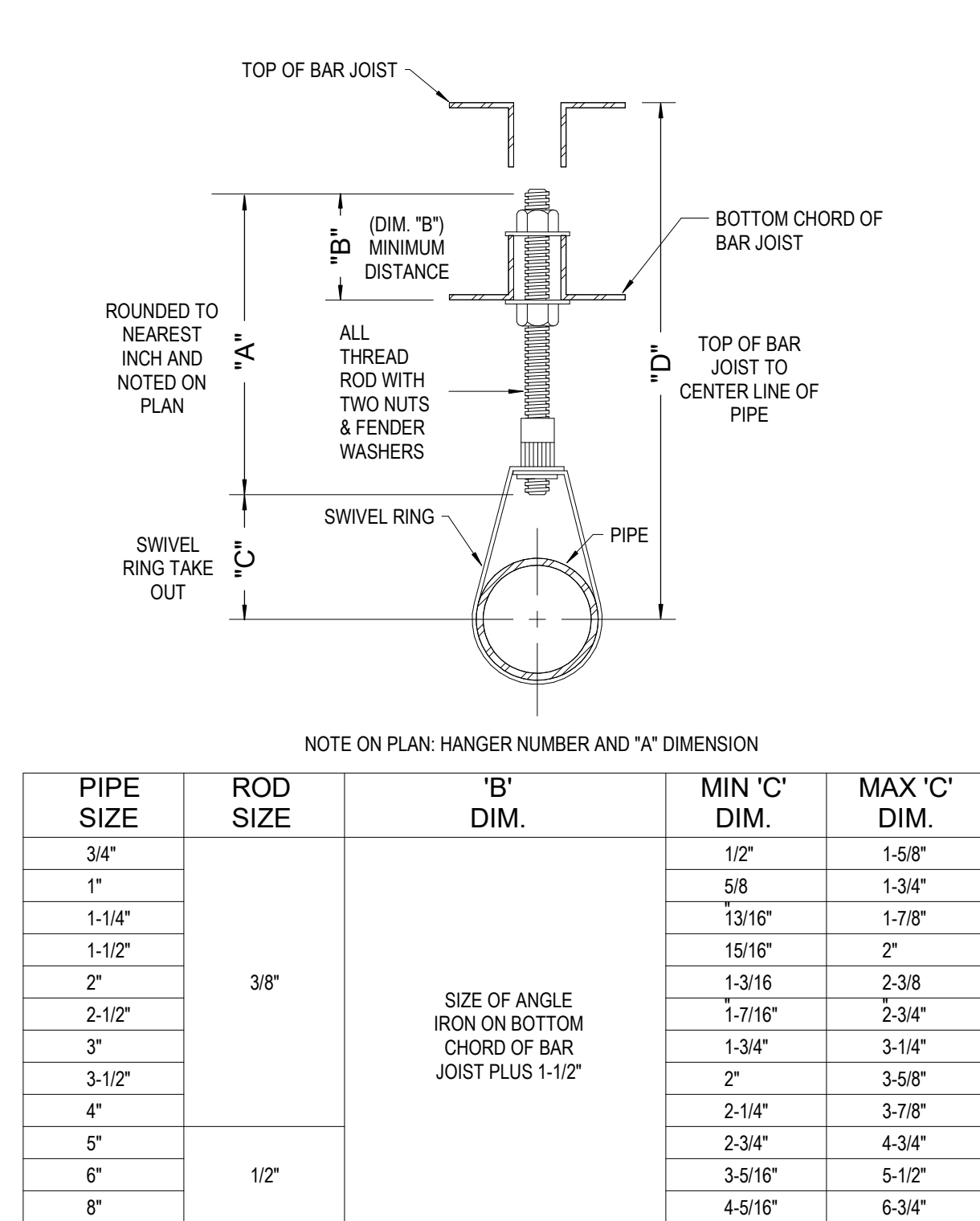


10 DETAIL - PACKAGED AIR COOLED CHILLER  
NOT TO SCALE

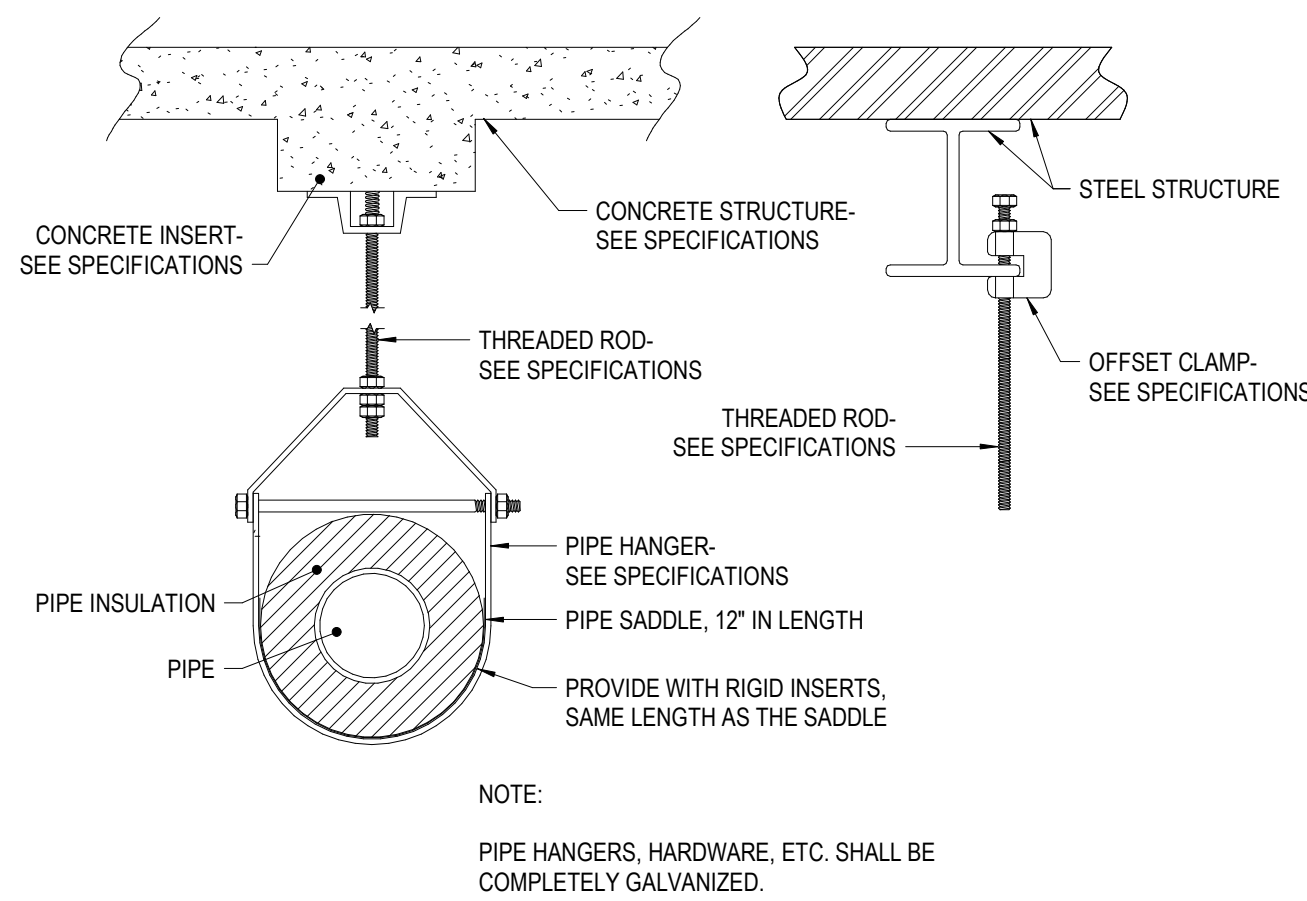
HEAT TRACE CABLE SIZING CHART		
PIPE SIZE	MIN. WATTS PER FOOT	
3/4" - 2 1/2"	4	
3" - 4"	5	
5" - 8"	7	



11 HEAT TRACE CABLE  
NOT TO SCALE

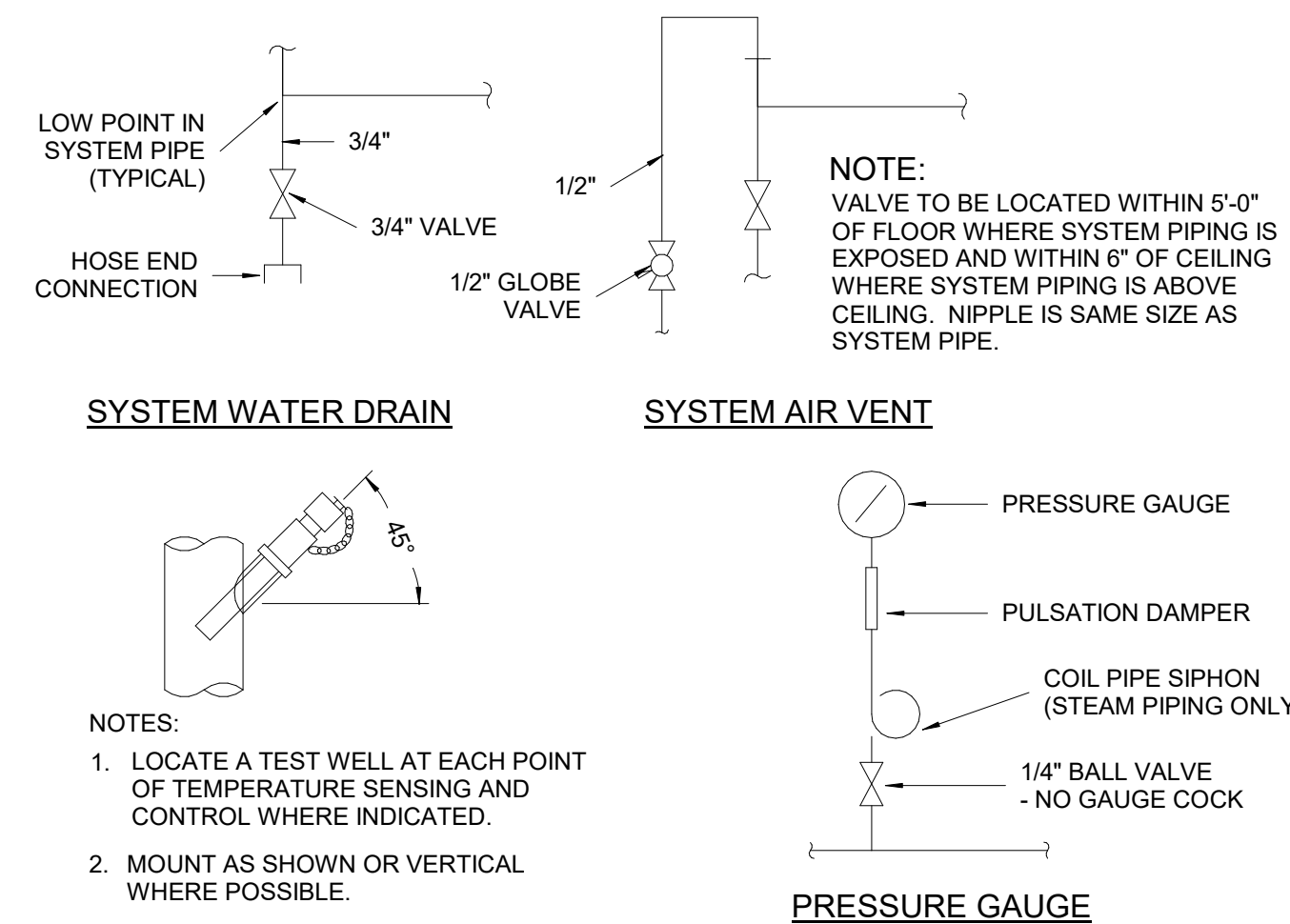


5 HANGERS  
NOT TO SCALE



1 DETAIL - VERTICAL TANK INSTALLATION WITH AIR SEPARATOR  
NOT TO SCALE

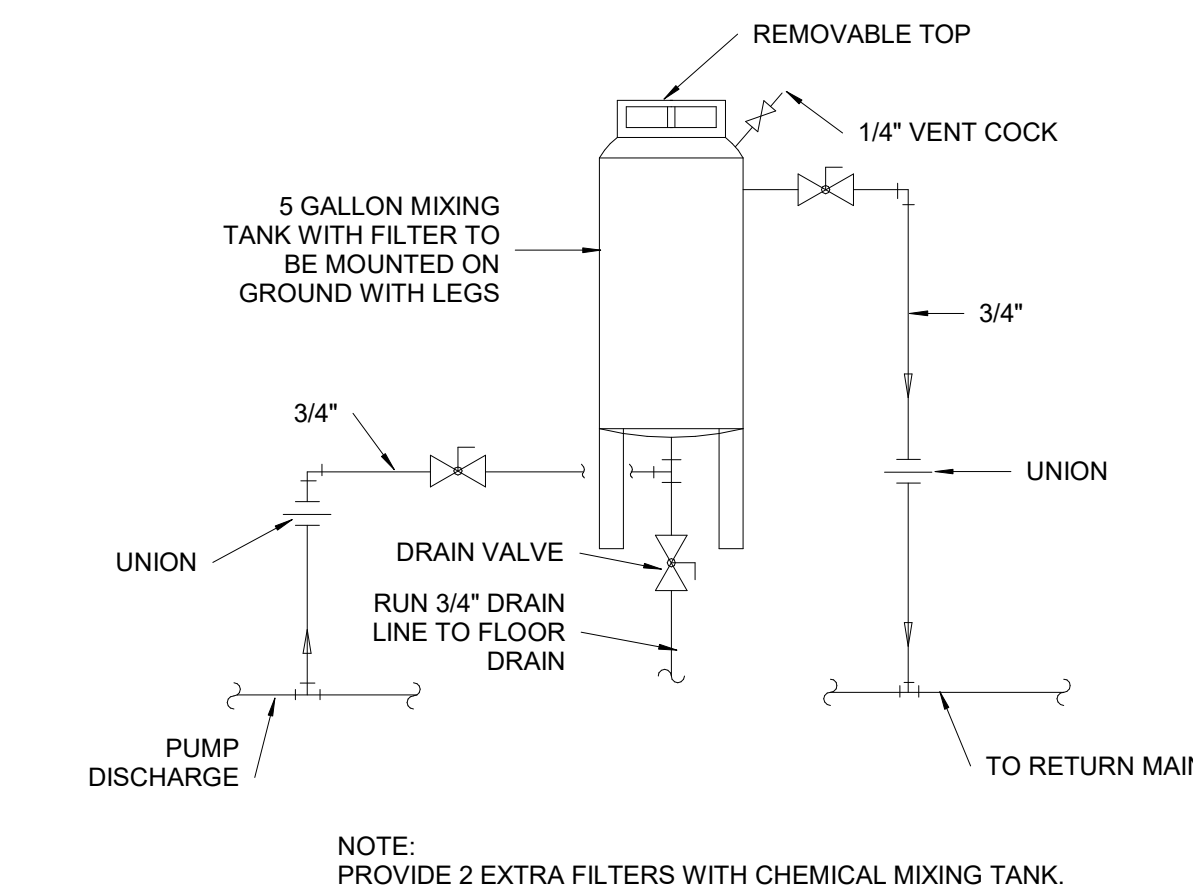
6 HANGERS  
NOT TO SCALE



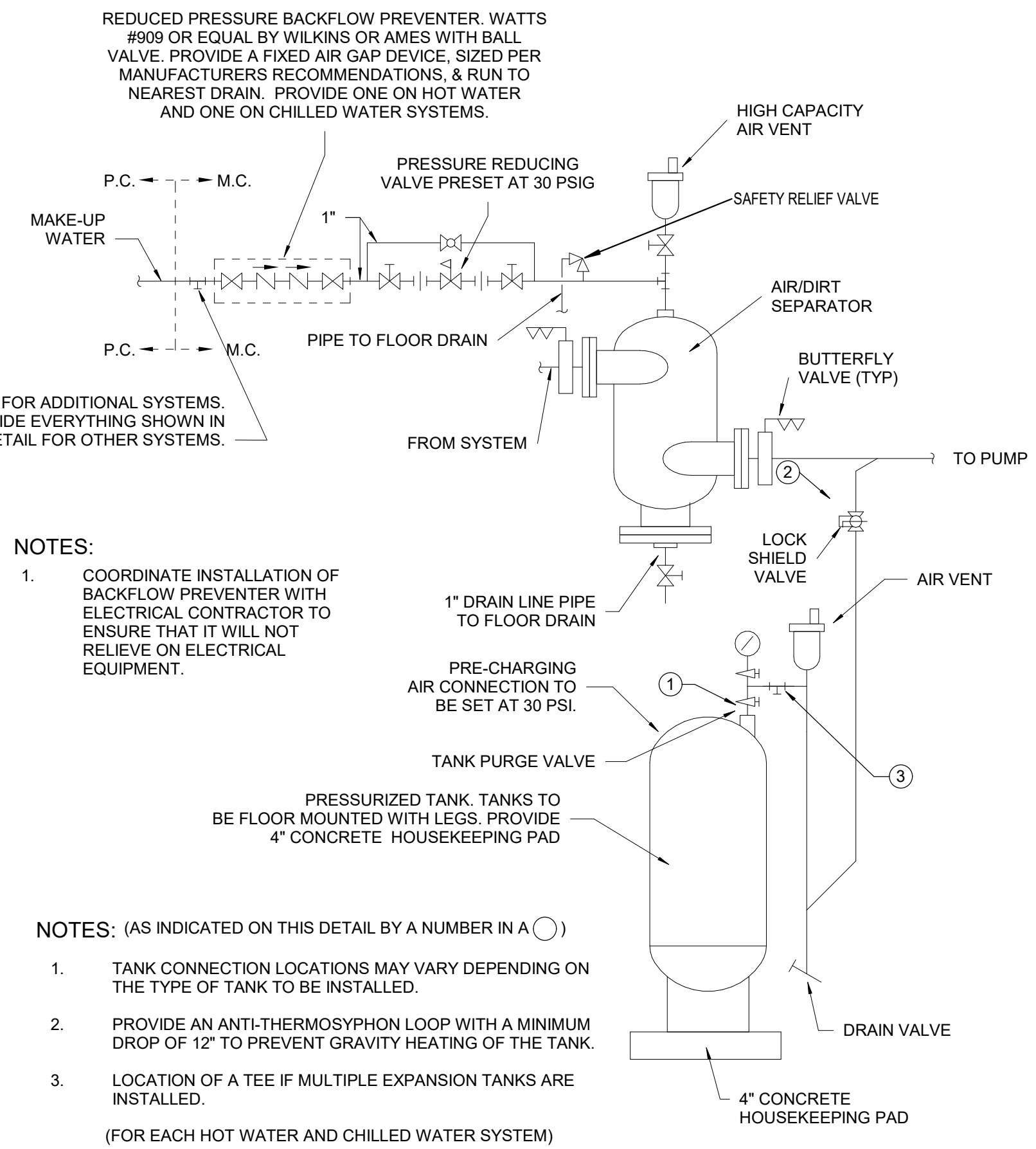
SYSTEM WATER DRAIN

SYSTEM AIR VENT

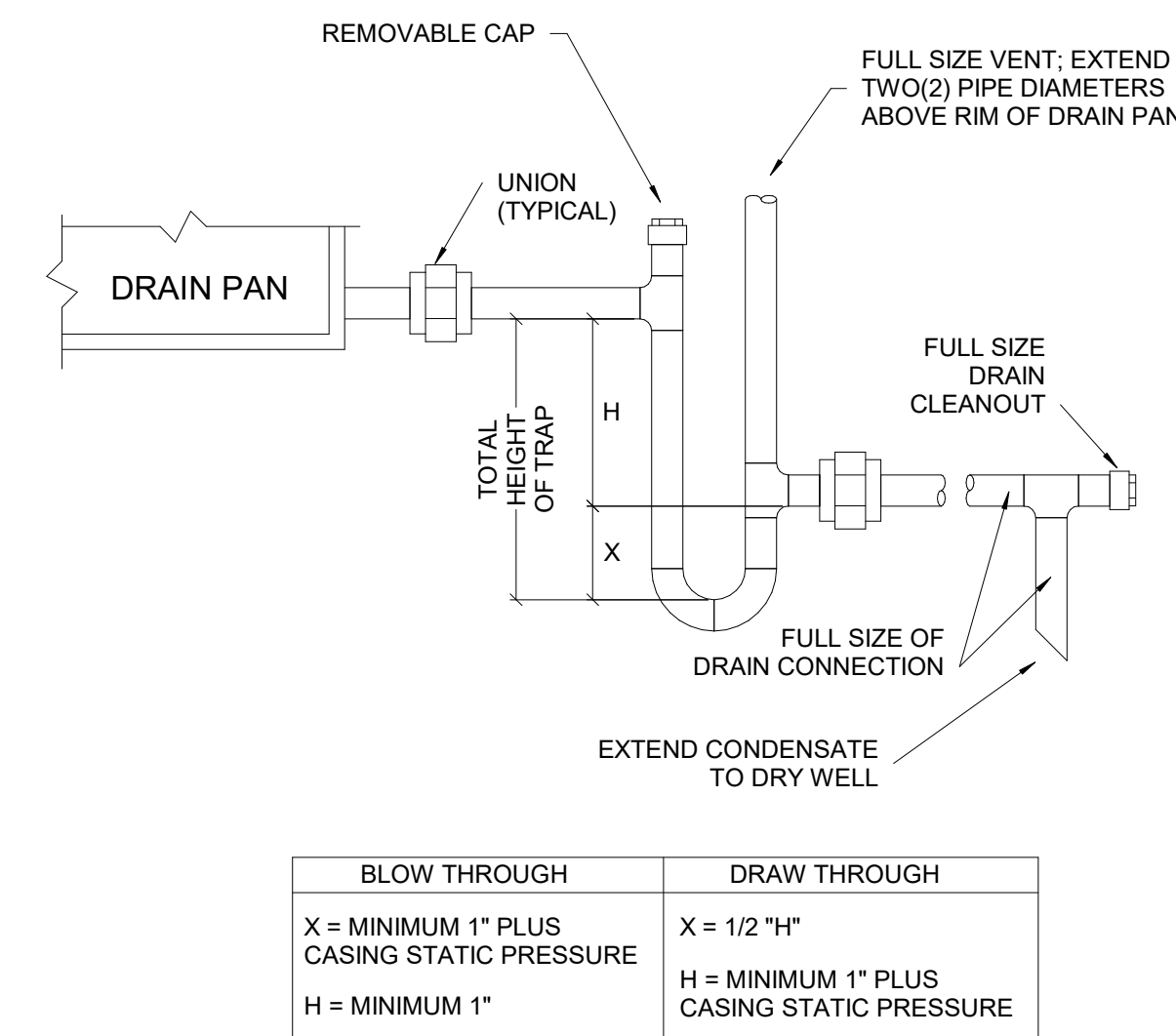
7 DETAIL - MISC. HYDRONIC ACCESSORIES  
NOT TO SCALE



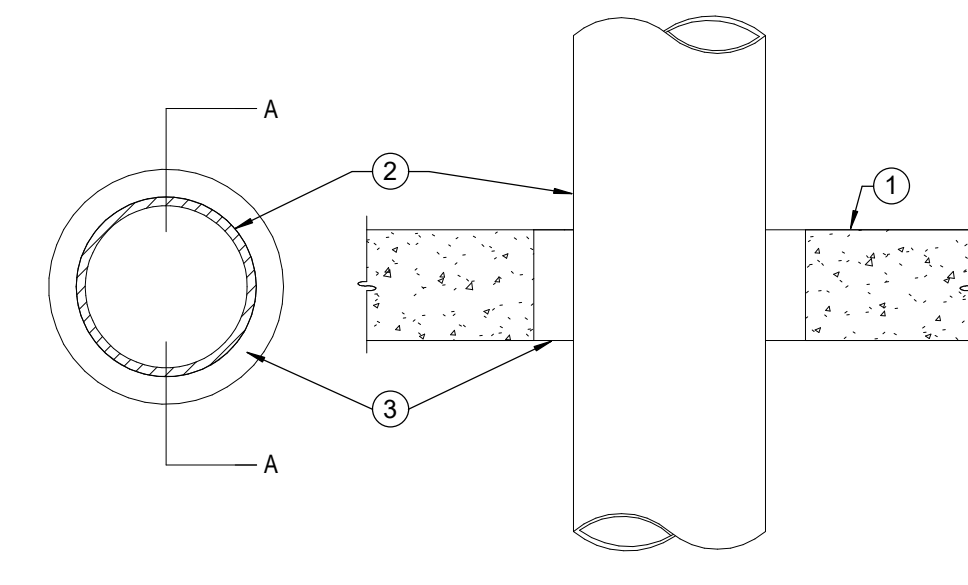
8 DETAIL - CHEMICAL FEED  
NOT TO SCALE



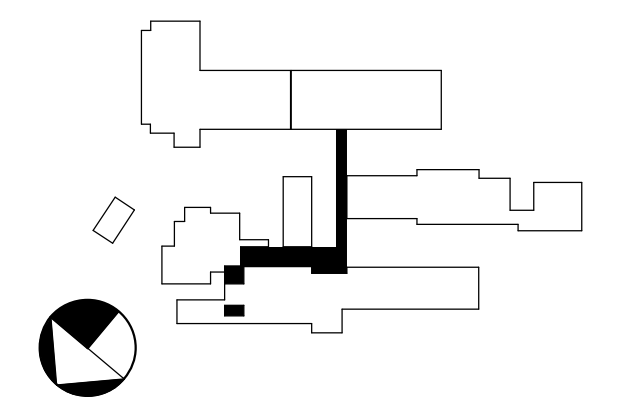
2 DETAIL - EXTERIOR EQUIPMENT PAD  
NOT TO SCALE



3 DETAIL - CONDENSATE DRAIN DETAIL  
NOT TO SCALE



4 NON-RATED WALL PIPE PENETRATION  
NOT TO SCALE



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02.07.2024

DRAWING RELEASE DATE

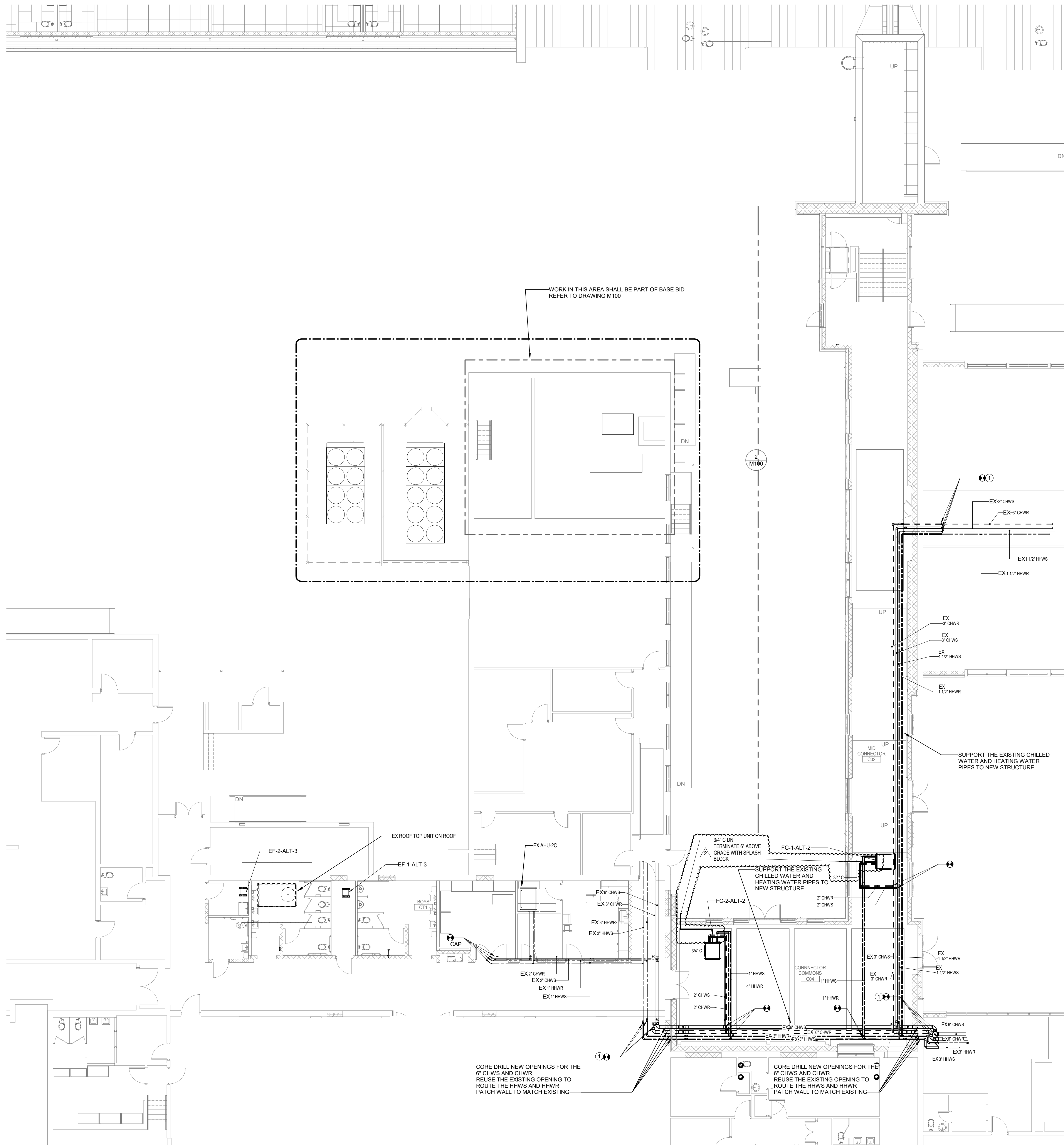
ALT. 2 CONNECTOR &  
ALT. 3 CORRIDOR  
RENOVATION - PIPING  
PLAN  
SHEET TITLE

M702

SHEET

KEYNOTES:

- EXISTING CHWS, CHWR, HHWS AND HHWR TO BE RECONNECTED AND POINTS OF CONNECTION INDICATED. PROVIDE PERMANENT SUPPORT OF THE EXISTING PIPES IN THE CONNECTOR COMMONS AND MID CONNECTOR AREAS.



1 ALT. 2 CONNECTOR ADDITION & ALT. 3 CORRIDOR RENOVATION - PIPING

1/8" = 1'-0"





2/26/2024 4:03:53 PM

UNIT HEATER SCHEDULE

MARK	TYPE	CAPACITY (MBH)	EAT (°F)	LAT (°F)	FAN DATA		COIL DATA		MOUNTING HEIGHT FT.	ELECTRICAL		REMARKS		
					CFM	THROW FT.	WATTS	GPM		EWT (°F)	LWT (°F)		V	PH
HWHU-1	HORZ.	24.8	60	90	580	29	25	2	140	110	10	120	1	1
HWHU-2	HORZ.	24.8	60	90	580	29	25	2	140	110	10	120	1	1

REMARKS:

1. PROVIDE WITH WALL MOUNTED THERMOSTAT

GENERAL NOTES:

A. DESIGN BASED ON TRANE MODEL UHS-A25.

B. ACCEPTABLE MAKES: REFER TO SPECIFICATIONS

ELECTRIC UNIT HEATER SCHEDULE

MARK	MAKE - MODEL	MBH	KW	EAT (°F)	LAT (°F)	FAN DATA		ELECTRICAL		MT. HEIGHT	REMARKS	
						TYPE	CFM	THROW	V			PH
EUH-1	TRANE UHEC-07	25	7.5	60	85	HORZ	700	10FT	480	3	9 FT	1,2,3
EUH-2	TRANE UHEC-07	25	7.5	60	85	HORZ	700	10FT	480	3	9 FT	1,2,3

REMARKS:

1. PROVIDE WITH THERMAL OVERLOAD PROTECTION

2. PROVIDE WITH WALL MOUNTED THERMOSTAT

3. MOUNT ON WALL USING WALL BRACKETS.

GENERAL NOTES:

A. ACCEPTABLE MANUFACTURERS: REZNOR, MARKEL, BERKO OR AS SPECIFIED.

B. FOR UNITS WITH NON-INTEGRAL THERMOSTATS, PROVIDE 24V TRANSFORMER AND LOW-VOLTAGE THERMOSTAT.

FAN SCHEDULE - ALTERNATE 3

MARK	MANUFACTURER	MODEL	CFM	ESP	WATTS	BHP	RPM	SONES	ELECTRICAL		WEIGHT	REMARKS
									V	PH		
EF-1-ALT-3	GREENHECK	CSP-A900	675	.5	318	.09	746	.3	120	1	60	1,2,3,4,5,6,7
EF-2-ALT-3	GREENHECK	CSP-A200	150	.3	78	.04	697	.3	120	1	40	1,2,3,4,5,6,8

GENERAL NOTES:

A. PROVIDE ALL DUCT TRANSITIONS FOR FANS.

B. ALL FANS TO BE U.L. LISTED.

C. PROVIDE WITH UNIT MOUNTED DISCONNECT.

D. PROVIDE OVERLOAD PROTECTION FOR ALL FANS, COORDINATE WITH DIVISION 26.

E. PROVIDE SPEED CONTROLLERS FOR ALL DIRECT DRIVE FANS.

REMARKS:

1. CONTROL FAN WITH DDC SYSTEM.

2. PROVIDE SWITCH, NEMA-1 INDOORS, NEMA 3R OUTDOORS, TOGGLE, MOUNTED AND WIRED.

3. PROVIDE GRAVITY OPERATED DAMPER.

4. PROVIDE VIBRATION ISOLATION KIT.

5. PROVIDE PREMIUM EFFICIENCY MOTOR AND SHAFT GROUNDING RING.

6. FAN SHALL RUN CONTINUOUSLY.

7. PROVIDE WITH 24x8 BRICK VENT

8. PROVIDE WITH 12X8 BRICK VENT

AIR DISTRIBUTION SCHEDULE

MARK	MANUFACTURER	MODEL	PURPOSE	MIN CFM	MAX CFM	FACE SIZE in.	INLET SIZE in.	REMARKS
1	PRICE	530	EXH/RETURN	30	100	12x12	6	1,2,3,4
3	PRICE	530	EXH/RETURN	30	100	24x24	6	1,2,3,4
4	PRICE	530	EXH/RETURN	105	195	24x24	8	1,2,3,4
5	PRICE	530	EXH/RETURN	200	380	24x24	10	1,2,3,4
6	PRICE	530	EXH/RETURN	390	420	24x24	12	1,2,3,4
7	PRICE	530	EXH/RETURN	425	500	24x24	14	1,2,3,4
8	PRICE	530	EXH/RETURN	150	200	14x8	12x6	1,2,3,4,6
9	PRICE	530	EXH/RETURN	150	240	16x8	14x6	1,2,3,4
10	PRICE	530	EXHAUST	200	380	16x10	14x8	1 - ALTERNATE 3
A	PRICE	SCD	SUPPLY	30	100	12x12	6	1,2,3
B	PRICE	SCD	SUPPLY	30	100	24x24	6	1,2,3
C	PRICE	SCD	SUPPLY	105	250	24x24	8	1,2,3
D	PRICE	SCD	SUPPLY	250	400	24x24	10	1,2,3
E	PRICE	SCD	SUPPLY	150	260	4x4x8	8	5
F	PRICE	SCD	SUPPLY	200	450	22x8	20x6	1,8

GENERAL NOTES:

A. NOTE: AIR TERMINAL MARK "2" IS NOT USED.

B. EQUIVALENTS BY TITUS, KRUEGER, CARNES, TUTTLE AND BAILEY, NAILOR, OR AS LISTED IN SPECIFICATIONS

C. PROVIDE VOLUME DAMPERS AT TAKE-OFF FOR EACH GRILLE

D. THE PRICE MODELS SCHEDULED HERE ARE BASIS OF DESIGN, INCLUDING GENERATED NOISE. PROPOSED SUBSTITUTIONS WILL BE JUDGED BY THOSE CRITERIA ALSO

E. WHERE LOCATED IN HARD CEILINGS, PROVIDE ALUMINUM MOUNT FRAME/PLASTER FRAME FOR HARD CEILING THAT ALLOWS DIFFUSER/GRILLE WITH FLEX CONNECTION TO BE LIFTED OUT OF FRAME TO ACCESS CEILING SPACE. TYPICAL OF ALL HARD CEILING LOCATIONS. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN

F. FOR SIDE WALL GRILLES, PROVIDE REMOTE CABLE OPERATED, GEAR DRIVEN BALANCING DAMPER OPERABLE FROM FACE OF DIFFUSER

REMARKS:

1. PROVIDE WITH OFF-WHITE ENAMEL FINISH

2. PROVIDE WITH TRIM TO MATCH CEILING TYPE. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR CEILINGS. PROVIDE PLASTER FRAME IN HARD CEILINGS

3. PROVIDE DIFFUSER/GRILLE WITH ROUND NECK OR PROVIDE SQUARE TO ROUND TRANSITION

4. ALL CEILING MOUNTED RETURN GRILLES SHALL BE FULL FACED. NO LAY-IN PANELS ALLOWED

5. DIFFUSER TO BE PROVIDED WITH BLACK FINISH AND PROVIDE WITH INSULATED PLENUM

6. PROVIDE WITH 1/2" SPACING DOUBLE DEFLECTION AND STEEL DAMPER

PUMP SCHEDULE

MARK	LOCATION	MANUFACTURER	SERIES	MODEL	GPM	HEAD (FT)	EFF. %	HP	IMP (IN)	RPM	V	PH
CHWPP-1A	EXISTING BLDG	TACO	BASE	F14007D	360	35	79	7.5	6.4	1760	208	3
CHWPP-1B	EXISTING BLDG	TACO	BASE	F13007D	253	35	79	5	6.15	1760	208	3
CHWPS-2	EXISTING BLDG	TACO	BASE	F12009D	150	55	73	5	7.75	1760	208	3
CHWPS-3	EXISTING BLDG	TACO	BASE	F12009D	150	55	73	5	7.75	1760	208	3
CHWPS-4	EXISTING BLDG	TACO	BASE	F12009D	150	55	73	5	7.75	1760	208	3
PCHWP-1	ADDITION	TACO	INLINE	SKS-3007D	157	45	77	5	7.25	1760	208	3
PCHWP-2	ADDITION	TACO	INLINE	SKS-3007D	157	45	77	5	7.25	1760	208	3
PHWP-1	ADDITION	TACO	INLINE	SKS-3007D	96	30	79	3	6.1	1760	208	3
PHWP-2	ADDITION	TACO	INLINE	SKS-3007D	96	30	79	3	6.1	1760	208	3
SCHWP-1	ADDITION	TACO	BASE	F12009D	155	80	72	5	4.33	1760	480	3
SCHWP-2	ADDITION	TACO	BASE	F12009D	155	80	72	5	4.33	1760	480	3
SHWP-1	ADDITION	TACO	BASE	F12009D	110	65	66	3	8.6	1760	480	3
SHWP-2	ADDITION	TACO	BASE	F12009D	110	65	66	3	8.6	1760	480	3

GENERAL NOTES:

A. ALL PUMPS SHALL HAVE NON-OVERLOADING INVERTER DUTY MOTORS WITH AEGIS SHAFT GROUNDING RING

B. PROVIDE PRIMARY PUMPS WITH SUCTION DIFFUSER AND TRIPLE DUTY VALVE

C. PROVIDE SECONDARY PUMPS WITH SUCTION DIFFUSER, CHECK VALVE, AND SHUT OFF VALVES.

D. EQUIVALENTS: BELL AND GOSSET, ARMSTRONG, OR AS LISTED IN SPECIFICATIONS

E. CONTROLS CONTRACTOR SHALL PROVIDE VFDs FOR ALL SECONDARY PUMPS AND ALL PRIMARY PUMPS.

F. BASE MOUNTED PUMPS SHALL BE END SUCTION TYPE

G. SCHWP-1 AND SCHWP-2 ARE DESIGNED FOR LEAD/STANDBY OPERATION FOR BUILDING CHILLED WATER SYSTEM.

H. SHWP-1 AND SHWP-2 ARE DESIGNED FOR LEAD/STANDBY OPERATION FOR BUILDING HOT WATER SYSTEM.

I. PROVIDE PUMP STAND FOR ALL FLOOR MOUNTED INLINE PUMPS. VIBROACOUSTICS OR EQUIVALENT.

LOUVER AND PENTHOUSE SCHEDULE

MARK	MANUFACTURER	MODEL	PURPOSE	DESCRIPTION	CFM	LENGTH	WIDTH	HEIGHT	MIN. FREE	MAX. FPM	REMARKS
LV-01	GREENHECK	EDD-401	INTAKE	DOAS-1 OUTSIDE AIR	8000	132	---	36	16.22	500	2
LV-02	GREENHECK	EDD-401	EXHAUST	DOAS-1 EXHAUST AIR	8555	132	---	36	17.98	500	2
LV-03	GREENHECK	EDD-401	INTAKE	FC-1-ALT-2	100	12	---	12	.21	500	
LV-04	GREENHECK	EDD-401	INTAKE	FC-2-ALT-2	100	12	---	12	.21	500	
LV-IP-1	GREENHECK	FGI	INTAKE	SERVES EXISTING ELEMENTARY WING	2775	30	30	19	6.25	425	1

GENERAL NOTES:

A. REFER TO ARCHITECTURAL DRAWINGS FOR ELEVATIONS, AND FRAMING DETAILS. FREE AREA AND PRESSURE DROP REQUIREMENTS ARE LISTED ABOVE.

B. LOUVERS SHALL BE AMCA 500 CERTIFIED

REMARKS:

1. PROVIDE WITH 14" HIGH ON THE SHORT SIDE, SLOPED ROOF CURB TO MATCH 3/12 ROOF PITCH

2. PROVIDE TWO (2) 66"x36" LOUVERS TO MAKE UP THE FULL SIZE AS SCHEDULED. PROVIDE WITH SUPPORTED MULLION.

DUCTLESS SPLIT UNIT (INDOOR) SCHEDULE

MARK	MAKE	MODEL	SUPPLY CFM	TOTAL COOLING (BTUH)	SENSIBLE COOLING (BTUH)	ELECTRICAL			REMARKS	
						V	PH	EER		
ACU-1	DAIKIN	MSY-GL12NA	320	12000	9240	208	1	13	23.1	1,2,3
ACU-2	DAIKIN	MSY-GL12NA	320	12000	9240	208	1	13	23.1	1,2,3
ACU-3	DAIKIN	MSY-GL12NA	320	12000	9240	208	1	13	23.1	1,2,3

REMARKS:

1. PROVIDE WITH HARDWIRED LOW VOLTAGE THERMOSTAT

2. PROVIDE INTERCONNECTION REFRIGERANT PIPING AND ELECTRICAL POWER KIT

3. PROVIDE WITH CONDENSATE PUMP

GENERAL NOTES:

A. MODEL NUMBERS ARE BASED ON MITSUBISHI EQUIPMENT. EQUIVALENTS BY SAMSUNG, DAIKIN, LG, OR AS LISTED IN THE SPECIFICATIONS

B. UNITS SHALL BE TESTED PER AHRI 1230

C. PROVIDE OPTIONAL WIND Baffle FOR ALL UNITS FOR LOW AMBIENT COOLING DOWN TO 0 DEG. F

D. POWER AND LOW VOLTAGE WIRING AND CONDUIT INTERCONNECTING INDOOR AND OUTDOOR UNITS SHALL BE BY DIVISION 23

DUCTLESS SPLIT UNIT (OUTDOOR) SCHEDULE

MARK	MAKE	MODEL	TOTAL COOLING (BTUH)	SENSIBLE COOLING (BTUH)	EER	FAN QTY/FLA	ELECTRICAL			MOCP
							V	PH	MCA	
CU-1	MITSUBISHI	MUY-GL12NA	12000	9240	13	1	208	1	7	15
CU-2	MITSUBISHI	MUY-GL12NA	12000	9240	13	1	208	1	7	15
CU-3	MITSUBISHI	MUY-GL12NA	12000	9240	13	1	208	1	7	15

GENERAL NOTES:

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C. PROVIDE OPTIONAL WIND Baffle FOR ALL UNITS FOR LOW AMBIENT COOLING DOWN TO 0 DEG. F

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PUMP SCHEDULE

MARK	LOCATION	MANUFACTURER	SERIES	MODEL	GPM	HEAD (FT)	EFF. %	HP	IMP (IN)	RPM	V	PH
CHWPP-1A	EXISTING BLDG	TACO	BASE	F14007D	360	35	79	7.5	6.4	1760	208	3
CHWPP-1B	EXISTING BLDG	TACO	BASE	F13007D	253	35	79	5	6.15	1760	208	3
CHWPS-2	EXISTING BLDG	TACO	BASE	F12009D	150	55	73	5	7.75	1760	208	3
CHWPS-3	EXISTING BLDG	TACO	BASE	F12009D	150	55	73	5	7.75	1760	208	3
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PCHWP-1	ADDITION	TACO	INLINE	SKS-3007D	157	45	77	5	7.25	1760	208	3
PCHWP-2	ADDITION	TACO	INLINE	SKS-3007D	157	45	77	5	7.25	1760	208	3
PHWP-1	ADDITION	TACO	INLINE	SKS-3007D	96	30	79	3	6.1	1760	208	3
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SHWP-1	ADDITION	TACO	BASE	F12009D	110	65	66	3	8.6	1760	480	3
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GENERAL NOTES:

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C. PROVIDE SECONDARY PUMPS WITH SUCTION DIFFUSER, CHECK VALVE, AND SHUT OFF VALVES.

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LV-04	GREENHECK	EDD-401	INTAKE	FC-2-ALT-2	100	12	---	12	.21	500	
LV-IP-1	GREENHECK	FGI	INTAKE	SERVES EXISTING ELEMENTARY WING	2775	30	30	19	6.25	425	1

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REMARKS:

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2. PROVIDE TWO (2) 66"x36" LOUVERS TO MAKE UP THE FULL SIZE AS SCHEDULED. PROVIDE WITH SUPPORTED MULLION.

boomerang

DESIGN

rethink, repurpose, results

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PROJECT #23015

COOPER ACADEMY

A & R

PROJECT TITLE

"CLIENT'S PROJECT" # - XXX

02/26/2024

SCAMPBELL@PDCENGINEERS.COM

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2. MATERIALS, DIMENSIONS AND ALL OTHER CONDITIONS WHICH ARE NOT OTHERWISE SPECIFIED ON THIS DRAWING SHALL BE CONSIDERED AS HAVING THE SAME MEANING AS SIMILARLY INDICATED CONDITIONS WHICH ARE MORE FULLY DEFINED ELSEWHERE ON THIS PROJECT OR OTHER DRAWINGS OF THIS PROJECT.

3. DO NOT SCALE OFF DIMENSIONS.

REVISIONS

NO.	DATE	DESCRIPTION
2	02/26/2024	ADDENDUM 02

BID SET

PROJECT PHASE

2307

BOOMERANG DESIGN PROJECT NUMBER

02.07.2024

DRAWING RELEASE DATE

MECHANICAL SCHEDULES

SHEET TITLE

M802

SHEET