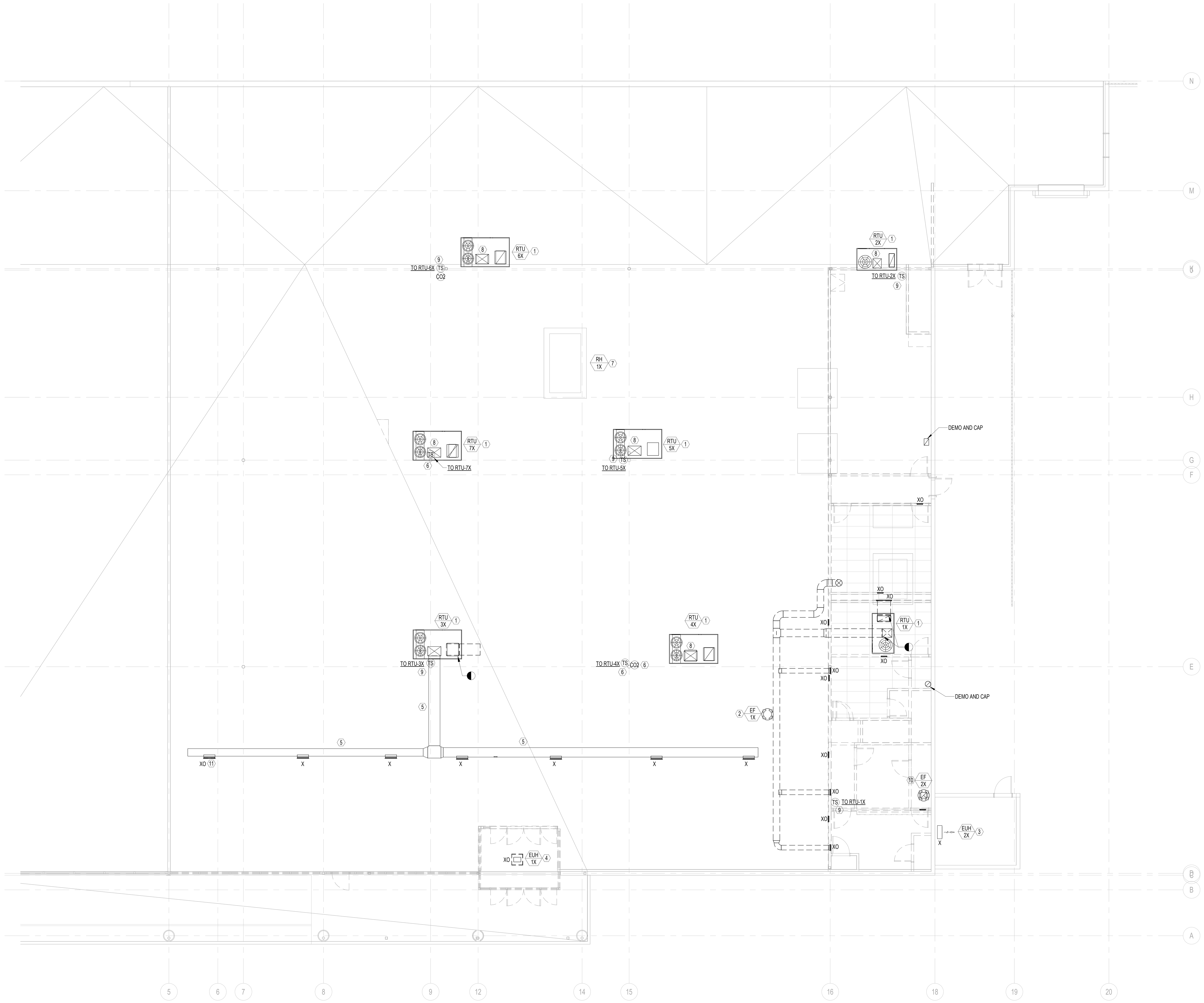


1 MD-100 FIRST FLOOR DEMOLITION PLAN

SCALE: 1/8" = 1'-0"

MECHANICAL

N

MECHANICAL GENERAL DEMO NOTES

1. FOR EQUIPMENT TAGGED AS XRR, REFER TO CORRESPONDING MECHANICAL PLAN SHEET FOR FINAL LOCATION.
2. ALL UNUSED DUCTWORK SHALL BE CAPPED BACK TO MAIN.
3. ALL UNUSED EQUIPMENT, HANGERS, DUCTS, SUPPORTS, PIPES, AND WIRING SHALL BE DISCONNECTED, PROPERLY DISPOSED OF, AND REMOVED BACK TO SOURCE.
4. ALL RESULTING UNUSED OPENINGS IN WALLS, FLOORS, AND CEILINGS DUE TO DEMOLITION SHALL BE PATCHED TO MATCH EXISTING CORRESPONDING MATERIAL.
5. ALL UNUSED PIPING TO BE CAPPED BACK TO MAIN.
6. THE LOCATION OF EQUIPMENT SHOWN ON THE DRAWINGS IS BASED ON SITE OBSERVATIONS AND THE BEST AVAILABLE INFORMATION AT THE TIME OF DRAWING PREPARATION AND SOME DISCREPANCIES MAY EXIST. VERIFY EXACT LOCATIONS OF EQUIPMENT TO BE REMOVED IN THE FIELD AND REQUEST CLARIFICATION FROM THE ENGINEER WHEN LOCATION OR EXISTANCE DIFFERS FROM PLANS.

MECHANICAL DEMO KEY NOTES

1. EXISTING ROOFTOP UNIT AND ASSOCIATED GAS PIPING TO REMAIN AND BE RE-USED. BALANCE AS PER SCHEDULE. CONTRACTOR TO VERIFY LOCATION IN FIELD AND ADJUST DUCTWORK AS NECESSARY FOR COMPLETE INSTALLATION. PROVIDE ROUTINE MAINTENANCE INCLUDING BUT NOT LIMITED TO, CHANGING FILTERS & BELTS, RECHARGING REFRIGERANT, ETC.
2. EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO BE DEMOLISHED. CAP ROOF CURB FOR WEATHER TIGHT SEAL. EXHAUST DUCTWORK TO BE DEMO'D BACK TO ROOF AND CAPPED.
3. EXISTING UNIT HEATER TO REMAIN AND BE RE-USED.
4. EXISTING MECHANICAL EQUIPMENT ALONG WITH ASSOCIATED APPURTENANCE TO BE DEMOLISHED.
5. EXISTING DUCTWORK TO BE RE-USED WHEREVER POSSIBLE. SEE M-100 FOR NEW DUCTWORK LAYOUT.
6. EXISTING SENSOR TO REMAIN AND BE RE-USED.
7. EXISTING RELIEF HOOD TO BE ABANDONED IN PLACE. DUCTWORK TO BE DEMO'D BACK TO ROOF AND CAPPED.
8. EXISTING CONCENTRIC DIFFUSER TO BE DEMOLISHED.
9. EXISTING SENSOR TO REMAIN AND BE RE-LOCATED. REFER TO SHEET M-100 FOR NEW LOCATION. EXTEND/ADJUST WIRING AS NECESSARY.
10. EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO BE DEMOLISHED. RE-USE THE EXISTING CURB FOR NEW EXHAUST FAN AND PROVIDE ADAPTIVE CURB AS NEEDED.
11. EXISTING SUPPLY GRILLE TO BE DEMOLISHED. CAP DUCTWORK BACK AT MAIN.

MECHANICAL ABBREVIATIONS	
X	EXISTING TO REMAIN
XO	EXISTING TO BE DEMOLISHED
XRR	EXISTING TO BE RELOCATED
XR	EXISTING RELOCATED
N	NEW

CUTTING, PATCHING, AND REPAIRING OF WALL/FLOOR/CEILING/ROOF ASSEMBLIES MAY BE NECESSARY FOR INSTALLATION OF NEW WORK. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REVIEW DEMO DRAWINGS PRIOR TO SUBMITTING BID.

CLIENT STORE NUMBER:

#235

CLIENT INFORMATION:

REI CO-OP

ARCHITECT INFORMATION:

CALLISONRTKL

Legal Entity
Building Name
Street Address
City, State Zip

XXX-XXXXXX.XX

CONSULTANT INFORMATION:

rtm engineering consultants

3120 139th Avenue Southeast, Suite 500 Bellevue, WA 98005
T: 847.713.1006 · www.rtmec.com

PROJECT INFORMATION:

REI-GLENWOOD SPRINGS

3200 SOUTH GLEN AVENUE
GLENWOOD SPRINGS,
CO, 81601

SIGNATURE/SEAL:

COLORADO LICENSED
DAVID K. PILUSKI
PE.0043682
PROFESSIONAL ENGINEER

DRAWING ISSUANCE LOG:

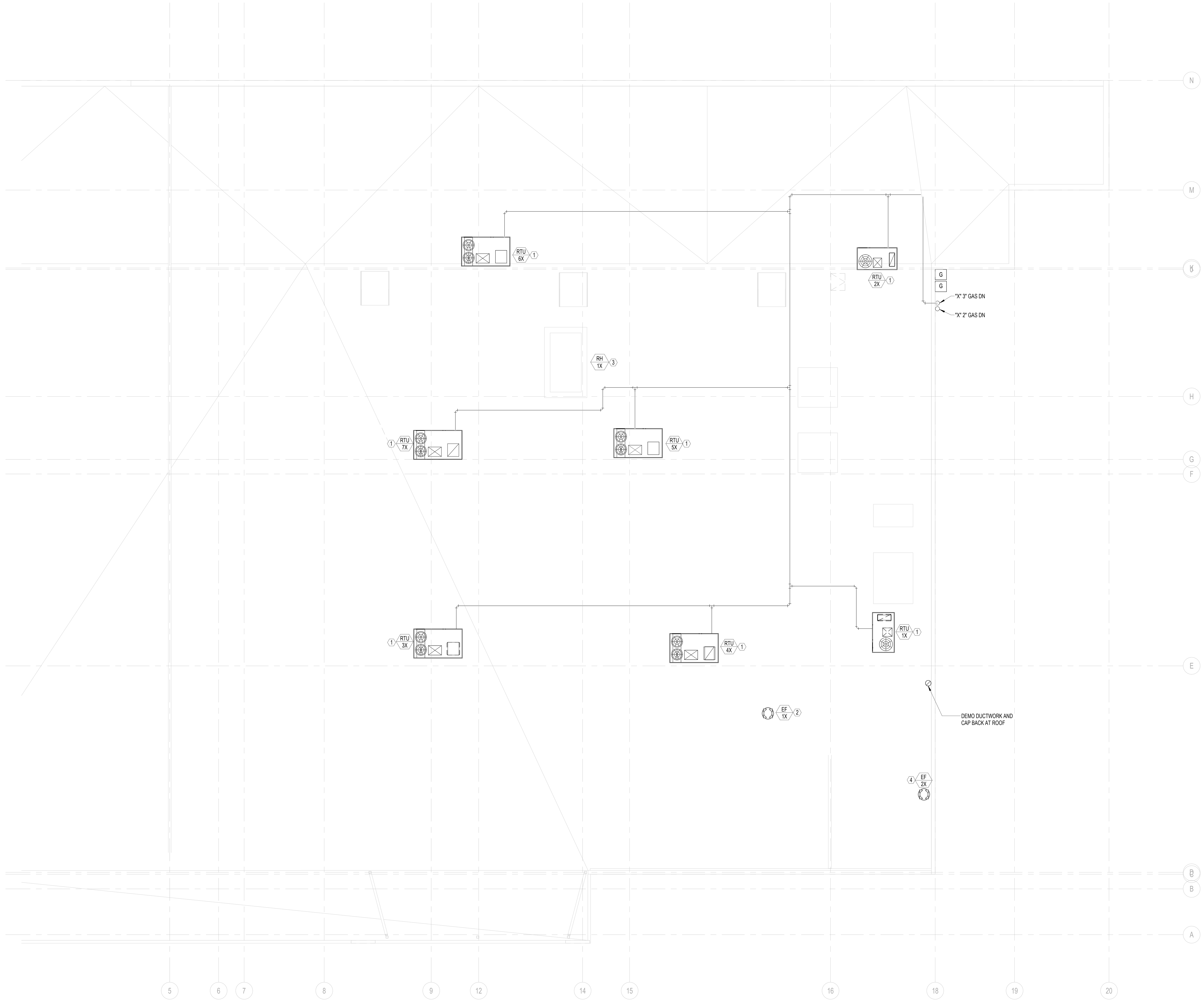
REV	DATE	DESCRIPTION
	11/08/2021	BID SET

SHEET TITLE:

1ST FLOOR DEMOLITION PLAN - MECHANICAL

SHEET NUMBER:

MD-100



1
MD-101
DEMO ROOF PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"
MECHANICAL

MECHANICAL GENERAL DEMO NOTES

1. FOR EQUIPMENT TAGGED AS XRR, REFER TO CORRESPONDING MECHANICAL PLAN SHEET FOR FINAL LOCATION.
2. ALL UNUSED DUCTWORK SHALL BE CAPPED BACK TO MAIN.
3. ALL UNUSED EQUIPMENT, HANGERS, DUCTS, SUPPORTS, PIPES, AND WIRING SHALL BE DISCONNECTED, PROPERLY DISPOSED OF, AND REMOVED BACK TO SOURCE.
4. ALL RESULTING UNUSED OPENINGS IN WALLS, FLOORS, AND CEILINGS DUE TO DEMOLITION SHALL BE PATCHED TO MATCH EXISTING CORRESPONDING MATERIAL.
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6. THE LOCATION OF EQUIPMENT SHOWN ON THE DRAWINGS IS BASED ON SITE OBSERVATIONS AND THE BEST AVAILABLE INFORMATION AT THE TIME OF DRAWING PREPARATION AND SOME DISCREPANCIES MAY EXIST. VERIFY EXACT LOCATIONS OF EQUIPMENT TO BE REMOVED IN THE FIELD AND REQUEST CLARIFICATION FROM THE ENGINEER WHEN LOCATION OR EXISTANCE DIFFERS FROM PLANS.

MECHANICAL DEMO KEY NOTES

1. EXISTING ROOFTOP UNIT AND ASSOCIATED GAS PIPING TO REMAIN AND BE RE-USED. BALANCE AS PER SCHEDULE. CONTRACTOR TO VERIFY LOCATION IN FIELD AND ADJUST DUCTWORK AS NECESSARY FOR COMPLETE INSTALLATION. PROVIDE ROUTINE MAINTENANCE INCLUDING BUT NOT LIMITED TO, CHANGING FILTERS & BELTS, RECHARGING REFRIGERANT, ETC.
2. EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO BE DEMOLISHED. CAP ROOF CURB FOR WEATHER TIGHT SEAL. EXHAUST DUCTWORK TO BE DEMO'D BACK TO ROOF AND CAPPED.
3. EXISTING RELIEF HOOD TO BE ABANDONED IN PLACE. DUCTWORK TO BE DEMO'D BACK TO ROOF AND CAPPED.
4. EXISTING EXHAUST FAN AND ASSOCIATED DUCTWORK TO BE DEMOLISHED. RE-USE THE EXISTING CURB FOR NEW EXHAUST FAN AND PROVIDE ADAPTIVE CURB AS NEEDED.

MECHANICAL ABBREVIATIONS	
X	EXISTING TO REMAIN
XO	EXISTING TO BE DEMOLISHED
XRR	EXISTING TO BE RELOCATED
XR	EXISTING RELOCATED
N	NEW

CUTTING, PATCHING, AND REPAIRING OF WALL/FLOOR/CEILING/ROOF ASSEMBLIES MAY BE NECESSARY FOR INSTALLATION OF NEW WORK. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REVIEW DEMO DRAWINGS PRIOR TO SUBMITTING BID.

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CLIENT INFORMATION:
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CONSULTANT INFORMATION:
rtm engineering consultants
3120 139th Avenue Southeast, Suite 500 Bellevue, WA 98005
T: 847.713.1006 : www.rtmec.com

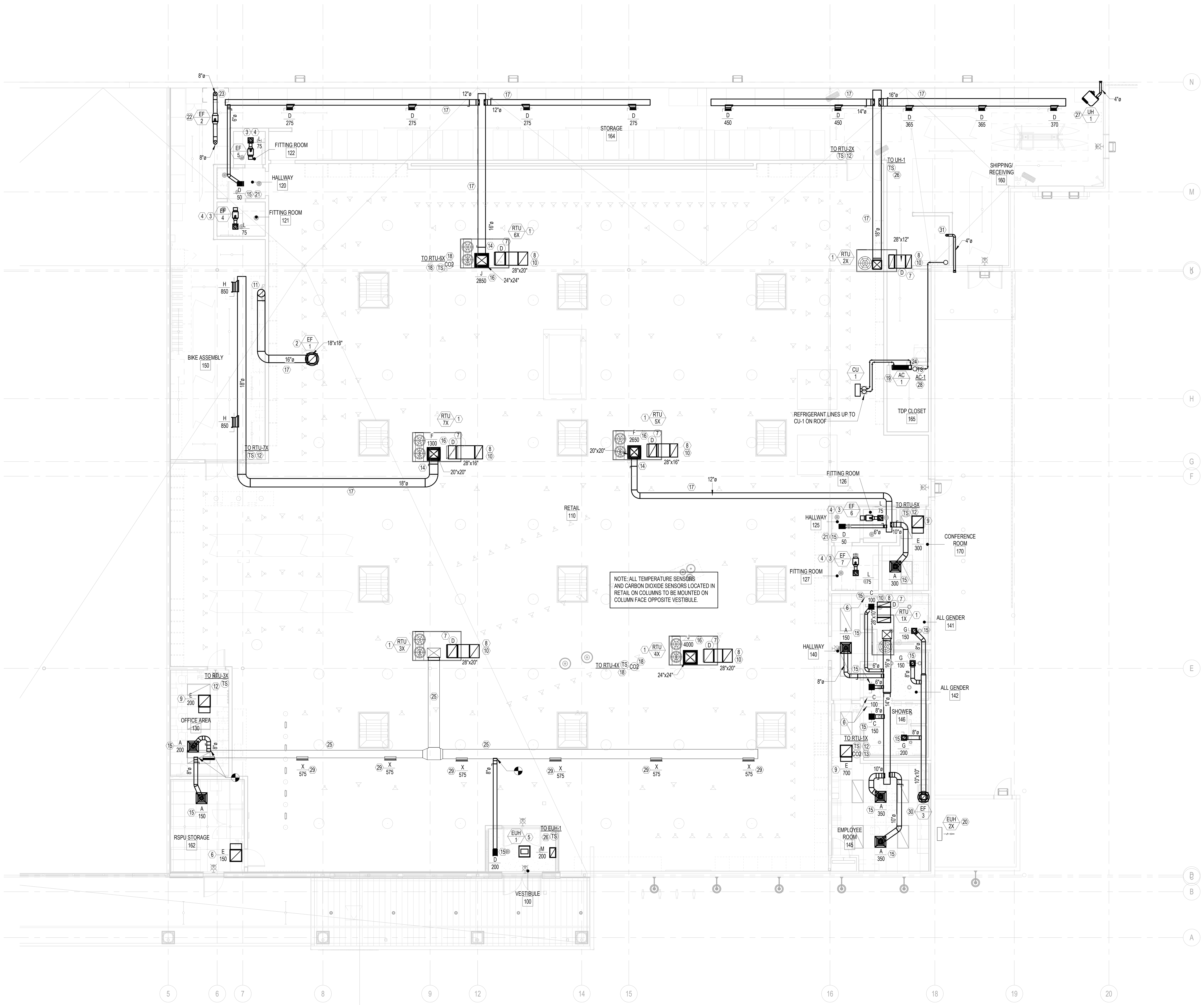
PROJECT INFORMATION:
REI-GLENWOOD SPRINGS
3200 SOUTH GLEN AVENUE
GLENWOOD SPRINGS,
CO, 81601

SIGNATURE/SEAL:
COLORADO LICENSED PROFESSIONAL ENGINEER
PE.0043682

DRAWING ISSUANCE LOG
REV DATE DESCRIPTION

SHEET TITLE:
DEMO ROOF PLAN - MECHANICAL

SHEET NUMBER:
MD-101



1 M-100 1ST FLOOR PLAN - MECHANICAL
SCALE: 1/8" = 1'-0"
MECHANICAL

MECHANICAL GENERAL NOTES

1. CONTRACTORS AND SUB-CONTRACTORS SHALL CAREFULLY REVIEW THE CONSTRUCTION DOCUMENTS. INFORMATION REGARDING THE COMPLETE WORK IS DISPERSED THROUGHOUT THE DOCUMENT SET AND CANNOT BE ACCURATELY DETERMINED WITHOUT REFERENCE TO THE COMPLETE DOCUMENT SET.
2. COORDINATE WITH THE WORK OF OTHER SECTIONS, EQUIPMENT FURNISHED BY OTHERS, REQUIREMENTS OF THE OWNER, AND WITH THE CONSTRAINTS OF THE EXISTING CONDITIONS OF THE PROJECT SITE. PROVIDE DUCT RISES AND DROPS AS REQUIRED FOR FIELD INSTALLATION AND TRADE COORDINATION. NOTIFY ARCHITECT OF ANY DISCREPANCIES BEFORE STARTING WORK.
3. DRAWINGS FOR HVAC WORK ARE DIAGRAMMATIC, SHOWING THE GENERAL LOCATION, TYPE, LAYOUT, AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENT. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS. REFER TO MANUFACTURER'S STANDARD INSTALLATION DRAWINGS FOR EQUIPMENT CONNECTIONS AND INSTALLATION REQUIREMENTS. PROVIDE DUCTWORK, CONNECTIONS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY FOR A COMPLETE SYSTEM.
4. ALL WORK SHALL COMPLY WITH STATE AND LOCAL CODE REQUIREMENTS AS APPROVED AND AMENDED BY THE GOVERNING CITY. PURCHASE ALL PERMITS ASSOCIATED WITH THE WORK. OBTAIN ALL INSPECTIONS REQUIRED BY CODE.
5. EXHAUST OUTLETS SHALL BE LOCATED A MINIMUM OF 15'-0" FROM ANY OUTSIDE AIR INTAKES.
6. PROVIDE LABEL ON EACH ROOFTOP UNIT WHICH CLEARLY STATES "RTU-#A". UNIT NUMBER SHALL MATCH NUMBER SHOWN ON PLAN. TEXT SHALL BE 4" HELV. MED.
7. THE LOCATION OF EQUIPMENT SHOWN ON THE DRAWINGS IS BASED ON SITE OBSERVATIONS AND THE BEST AVAILABLE INFORMATION AT THE TIME OF DRAWING PREPARATION AND SOME DISCREPANCIES MAY EXIST. VERIFY EXACT LOCATIONS OF EQUIPMENT TO BE REMOVED IN THE FIELD AND REQUEST CLARIFICATION FROM THE ENGINEER WHEN LOCATION OR EXISTANCE DIFFERS FROM PLANS.
8. INSTALL ALL METAL DUCT SUPPORTS AND SPACING ON THE PLANS IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS.

MECHANICAL KEY NOTES

1 EXISTING ROOFTOP UNIT AND ASSOCIATED GAS PIPING TO REMAIN AND BE RE-USED. BALANCE AS PER SCHEDULE. CONTRACTOR TO VERIFY LOCATION IN FIELD AND ADJUST DUCTWORK AS NECESSARY FOR COMPLETE INSTALLATION. PROVIDE ROUTINE MAINTENANCE INCLUDING BUT NOT LIMITED TO, CHANGING FILTERS & BELTS, RECHARGING REFRIGERANT, ETC.

2 PROVIDE ROOF MOUNTED EXHAUST FAN ON FACTORY FABRICATED ROOF CURB. REFER TO DETAIL 2/M-300.

3 PROVIDE INLINE EXHAUST FAN. SUPPORT FAN FROM STRUCTURE ABOVE WITH STEEL CHANNEL AND THREADED ROD WITH VIBRATION ISOLATORS. PROVIDE FLEXIBLE CONNECTORS ON THE INLET AND DISCHARGE DUCT CONNECTIONS. DISCHARGE DUCT TO HAVE ACOUSTICAL LINER (INSTALLED PER DETAIL 11/M-300) AND TERMINATE WITH OPEN ENDED DUCT. REFER TO DETAIL 5/M-300.

4 TERMINATE EXHAUST GRILLE AT 10'-7" A.F.F. COORDINATE WITH STRUCTURAL FRAMING.

5 PROVIDE RECESSED CEILING MOUNTED UNIT HEATER. MOUNTER HEATER IN CEILING PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

6 UNDERCUT DOOR 1".

7 DUCT MOUNTED SMOKE DETECTOR FURNISHED BY FIRE ALARM CONTRACTOR AND INSTALLED IN DUCT BY MECHANICAL CONTRACTOR. INTERLOCK WIRING BETWEEN FIRE ALARM SYSTEM RELAY AND UNIT SHUTDOWN CONTACT SHALL BE PROVIDED BY MECHANICAL CONTRACTOR. ALL OTHER WIRING BY FIRE ALARM CONTRACTOR. UPON DETECTION OF SMOKE, UNIT SHALL SHUT DOWN UPON SIGNAL FROM FIRE ALARM SYSTEM.

8 PROVIDE RETURN AIR BOOT WITH ACOUSTICAL DUCT LINER. LINER SHALL BE 1" THICK 3 PCF DENSITY, LONG TEXTILE TYPE FIBER, WITH SURFACE CLEANABLE PER NAIMA DUCT CLEANING GUIDELINES. INSTALL LINER IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARDS. LAMINATE LINER TO INTERNAL SURFACES OF DUCT IN ACCORDANCE WITH LINER MANUFACTURER'S INSTRUCTIONS, AND FASTEN WITH MECHANICAL FASTENERS.

9 REFER TO DETAIL 11/M-300.

10 ELBOW END OF RETURN AIR DUCT UP. PROVIDE ONE DUCT DEPTH BETWEEN DECK AND OPENING. REFER TO DETAIL 3/M-300

11 REFER TO DETAILS 1/M-300 AND 7/M-300

12 RELOCATED TEMPERATURE SENSOR. ADJUST CONTROL WIRING AS NECESSARY FOR NEW LOCATION.

13 INSTALL CO2 SENSOR COMPATIBLE WITH NOVAR SYSTEM. MOUNT SENSOR AT 60" AFF.

14 USE 60° SHOE TAP FOR DUCT CONNECTION.

15 PROVIDE RIGID DUCTWORK ALL THE WAY TO DIFFUSER. REFER TO DETAIL 6/M-300.

16 BALANCE DROP BOX DIFFUSER TO CFM INDICATED IN ROOFTOP UNIT SCHEDULE MINUS THE BRACH TAKE-OFF CFM'S.

17 MOUNT TOP OF DUCTWORK TIGHT TO BOTTOM OF JOISTS.

18 EXISTING TEMPERATURE SENSOR TO REMAIN AND BE RE-USED.

19 NEW SPLIT SYSTEM. ROUTE DX PIPING UP TO ASSOCIATED CU-1 ON ROOF. COORDINATE WITH PLUMBING CONTRACTOR FOR CONDENSATE ROUTING AND CONDENSATE PUMP. MOUNT INDOOR UNIT ON WALL (BOTTOM AT 8'-6" AFF). REFER TO DETAIL 8/M-300 FOR MORE INFORMATION.

20 EXISTING UNIT HEATER TO REMAIN AND BE RE-USED.

21 MOUNT BOTTOM OF SUPPLY DIFFUSER AT 10'-7" A.F.F. COORDINATE WITH STRUCTURAL FRAMING.

22 PROVIDE INLINE EXHAUST FAN. SUPPORT FAN FROM STRUCTURE ABOVE WITH STEEL CHANNEL AND THREADED ROD WITH VIBRATION ISOLATORS. MOUNT BOTTOM OF FAN AT 12'-0" ABOVE FINISHED FLOOR. PROVIDE FLEXIBLE CONNECTORS ON THE INLET AND DISCHARGE DUCT CONNECTIONS. TRANSITION FROM FAN DISCHARGE TO DUCT SIZE SHOWN AND EXTEND UP THRU ROOF TO JACK, STORM COLLAR, AND ALL-WEATHER CAP. REFER TO DETAIL 5/M-300.

23 CONNECT DUCT TO OWNER FURNISHED ROPE CUTTER.

24 CONDENSATE DRAIN LINE FROM AC-1. PROVIDE WITH CONDENSATE PUMP AND ROUTE 3/4" CONDENSATE DRAIN TO NEAREST SERVICE SINK. COORDINATE WITH MECHANICAL CONTRACTOR FOR INSTALLATION. CONDENSATE LINE TO DROP DOWN INTO WALL AND DISCHARGE INTO SERVICE SINK WITH AIR GAP.

25 EXISTING DUCTWORK TO REMAIN AND BE RE-USED.

26 INSTALL BAS TEMPERATURE SENSOR AT 60" AFF.

27 PROVIDE GAS FIRED UNIT HEATER AND SUSPEND HEATER FROM STRUCTURE ABOVE WITH STEEL CHANNEL AND ALL-THREAD ROD. MOUNT BOTTOM OF UNIT HEATER AT 10'-0" AFF. PROVIDE VENT WITH SIDEWALL VENT TERMINATION KIT AND INSTALL IN ACCORDANCE WITH UNIT HEATER MANUFACTURER'S INSTRUCTIONS. TERMINATE VENT PER CODE, AND A MINIMUM OF 10'-0" ABOVE GRADE.

28 THERMOSTAT TO BE SET TO 72 DEGREES F; CONNECT TO NOVAR TO ALLOW FOR MONITORING.

29 BALANCE EXISTING DIFFUSER/GRILLE TO PLAN SPECIFICED CFM.

30 PROVIDE NEW ROOF MOUNTED EXHAUST FAN ON EXISTING ROOF CURB. PROVIDE ADAPTICE CURB AS NECESSARY.

31 FURNISH AND INSTALL 4" VENT DUCTWORK FROM DRYER THRU SIDEWALL. INSTALL AND TERMINATE VENT PER MANUFACTURER'S INSTALLATION INSTRUCTIONS.

CLIENT STORE NUMBER:
#235

CLIENT INFORMATION:

ARCHITECT INFORMATION:
CALLISONRTKL
Legal Entity
Building Name
Street Address
City, State Zip
XXX-XXXXXX.XX

CONSULTANT INFORMATION:
rtm engineering consultants
3120 139th Avenue Southeast, Suite 500 Bellevue, WA 98005
T: 847.713.1006 : www.rtmec.com

PROJECT INFORMATION:
REI-GLENWOOD SPRINGS
3200 SOUTH GLEN AVENUE
GLENWOOD SPRINGS,
CO, 81601

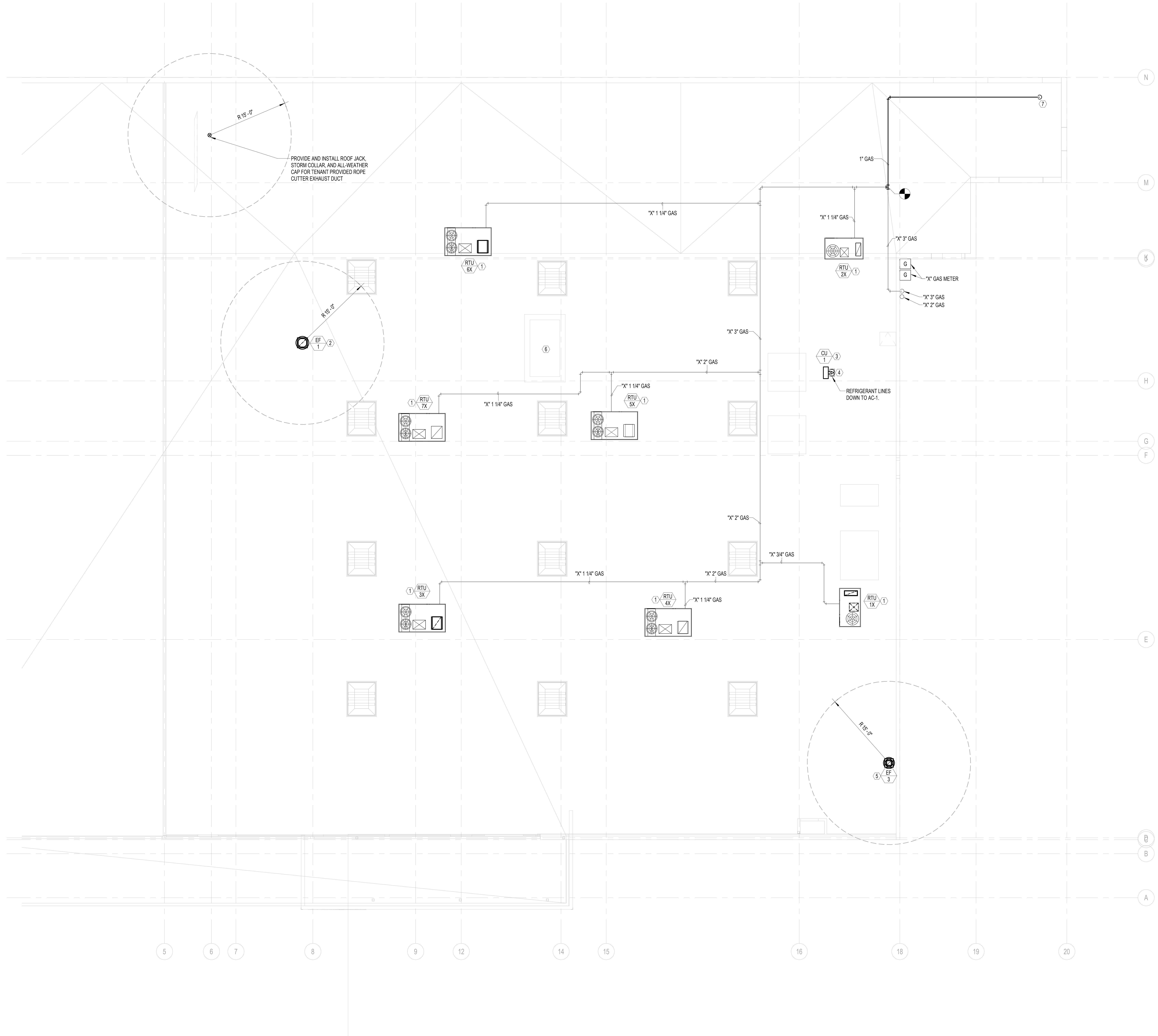
SIGNATURE/SEAL:
COLORADO LICENSED DAVID K. PILUSKI PE.0043682 PROFESSIONAL ENGINEER

DRAWING ISSUANCE LOG:

REV	DATE	DESCRIPTION
	11/08/2021	BID SET

SHEET TITLE:
FLOOR PLAN - MECHANICAL

SHEET NUMBER:
M-100



1 M-101 ROOF PLAN - MECHANICAL

SCALE: 1/8" = 1'-0"

MECHANICAL

MECHANICAL GENERAL NOTES

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5. EXHAUST OUTLETS SHALL BE LOCATED A MINIMUM OF 15'-0" FROM ANY OUTSIDE AIR INTAKES.
6. PROVIDE LABEL ON EACH ROOFTOP UNIT WHICH CLEARLY STATES "RTU-#A". UNIT NUMBER SHALL MATCH NUMBER SHOWN ON PLAN. TEXT SHALL BE 4" HELV. MED.
7. THE LOCATION OF EQUIPMENT SHOWN ON THE DRAWINGS IS BASED ON SITE OBSERVATIONS AND THE BEST AVAILABLE INFORMATION AT THE TIME OF DRAWING PREPARATION AND SOME DISCREPANCIES MAY EXIST. VERIFY EXACT LOCATIONS OF EQUIPMENT TO BE REMOVED IN THE FIELD AND REQUEST CLARIFICATION FROM THE ENGINEER WHEN LOCATION OR EXISTANCE DIFFERS FROM PLANS.
8. INSTALL ALL METAL DUCTS SUPPORTS AND SPACING ON THE PLANS IN ACCORDANCE WITH SMACNA HVAC DUCT CONSTRUCTION STANDARDS.

MECHANICAL KEY NOTES

1. EXISTING ROOFTOP UNIT AND ASSOCIATED GAS PIPING TO REMAIN AND BE RE-USED. BALANCE AS PER SCHEDULE. CONTRACTOR TO VERIFY LOCATION IN FIELD AND ADJUST DUCTWORK AS NECESSARY FOR COMPLETE INSTALLATION. PROVIDE ROUTINE MAINTENANCE INCLUDING BUT NOT LIMITED TO, CHANGING FILTERS & BELTS, RECHARGING REFRIGERANT, ETC.
2. PROVIDE ROOF MOUNTED EXHAUST FAN ON FACTORY FABRICATED ROOF CURB. REFER TO DETAIL 2/M-300.
3. PROVIDE CODE APPROVED ROOFTOP STAND SIZED BY MANUFACTURER FOR ROOFTOP EQUIPMENT. INSTALL PER MANUFACTURER'S INSTRUCTION.
4. LIQUID/SUCTION LINES DOWN TO AC UNITS. PROVIDE ROOF PENETRATIONS AND BOOT (MODEL TO BE PATE PCC-3 OR SIMILAR).
5. PROVIDE NEW ROOF MOUNTED EXHAUST FAN ON EXISTING ROOF CURB. PROVIDE ADAPTIVE CURB AS NEEDED.
6. EXISTING RELIEF HOOD TO BE ABANDONED IN PLACE. DUCTWORK TO BE DEMO'D BACK TO ROOF AND CAPPED.
7. ROUTE 1" GAS DOWN BELOW ROOF TO CONNECT TO UNIT HEATER.

CLIENT STORE NUMBER

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CLIENT INFORMATION

REI CO-OP

ARCHITECT INFORMATION

CALLISONRTKL

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XXX-XXXXXX.XX

CONSULTANT INFORMATION

rtm engineering consultants

PROJECT INFORMATION

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GLENWOOD SPRINGS,
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SIGNATURE/SEAL

COLORADO LICENSED DAVID K. PILIPSKI PE.0043682 PROFESSIONAL ENGINEER

DRAWING ISSUANCE LOG

REV	DATE	DESCRIPTION
	11/08/2021	BID SET

SHEET TITLE

ROOF PLAN - MECHANICAL

SHEET NUMBER

M-101

VENTILATION SCHEDULE

ROOM NUMBER	ROOM NAME	OCCUPANCY CLASSIFICATION	ZONE FLOOR AREA	ZONE POPULATION	2015 INTERNATIONAL MECHANICAL CODE: PEOPLE OUTDOOR AIR RATE	AREA OUTDOOR AIR RATE	BREATHING ZONE OUTDOOR AIRFLOW	E.A. CFM	ACTUAL: SUPPLY CFM	OA CFM	EXHAUST/ TRANSFER CFM	EQUIPMENT: SUPPLY FAN	EXHAUST/ TRANSFER FAN
100	VESTIBULE	N.R.	100.0	0	0.0	0.00	0.0	0	200	40	0	RTU-3X	-
110	RETAIL**	SALES	13845.0	208	7.5	0.12	3219.0	0	14250	3277.5	0	RTU-3X,4X,5X,6X,7X	-
120	HALLWAY*	CORRIDOR	55.0	0	0.0	0.06	3.3	0	50	10	-	RTU-6X	-
121	FITTING ROOM*	DRESSING ROOMS	60.0	1	0.0	0.00	0.0	15	0	0	75	-	EF-4
122	FITTING ROOM*	DRESSING ROOMS	40.0	1	0.0	0.00	0.0	10	0	0	75	-	EF-5
125	HALLWAY*	CORRIDOR	60.0	0	0.0	0.06	3.6	0	50	10	0	RTU-5X	-
126,127	FITTING ROOM*	DRESSING ROOMS	75.0	1	0.0	0.00	0.0	19	0	0	75	-	EF-6, EF-7
130	OFFICE AREA	OFFICE SPACE	210.0	4	5.0	0.06	32.6	0	200	40	35	RTU-3X	-
170	CONFERENCE	CONFERENCE RM	140.0	6	5.0	0.06	38.4	0	300	60	135	RTU-5X	-
140	HALLWAY	CORRIDOR	160.0	0	0.0	0.06	9.6	0	150	15	-	RTU-1X	-
141	ALL GENDER	TOILET ROOM	110.0	1	0.0	0.00	0.0	70	100	10	150	RTU-1X	EF-3
142	ALL GENDER	TOILET ROOM	110.0	1	0.0	0.00	0.0	70	100	10	150	RTU-1X	EF-3
145	EMPLOYEE ROOM**	OFFICE SPACE	360.0	8	5.0	0.06	61.6	0	700	70	0	RTU-1X	-
146	SHOWER	SHOWER	115.0	1	0.0	0.00	0.0	50	150	15	200	RTU-1X	EF-3
150	BIKE ASSEMBLY	STORAGE ROOMS	890.0	2	0.0	0.12	106.8	0	1700	340	1400	RTU-7X	EF-1
160	SHIPPING/RECEIVING	STORAGE ROOMS	1125.0	2	0.0	0.12	135.0	0	1100	220	0	RTU-2X	-
164	STORAGE	STORAGE ROOMS	1600.0	4	0.0	0.12	192.0	0	2000	400	130	RTU-2X, 6X	EF-2
162	RSPU*	STORAGE ROOMS	230.0	0	0.0	0.12	27.6	0	150	30	0	RTU-3X	-
165	TDP CLOSET	N.R.	95.0	0	0.0	0.00	0.0	0	500	0	0	AC-1	-
TOTAL			19380.0	0.0	-	-	3829.5	233.8	21700.0	4547.5	2425.0		

*SERVED BY ADJACENT SPACE SUPPLY
**SPACE MONITORED BY CO2 SENSOR

AIR DEVICE SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	NECK SIZE (L"XW")	FACE SIZE (L"XW")	FRAME TYPE	FINISH	NOISE CRITERIA LEVEL	ACCESSORIES	NOTES
A	PRICE	SCD	SQUARE CONE DIFFUSER	PER PLAN	24"X24"	LAY-IN	WHITE	<30	SB	-
C	PRICE	SCD	SQUARE CONE DIFFUSER	PER PLAN	12"X12"	SURFACE	WHITE	<30	OBD, TRM	-
D	PRICE	520D	SUPPLY REGISTER	12"X8"	14"X10"	SURFACE	WHITE	<30	OBD, TRM	-
E	PRICE	80	EGGCRATE GRILLE	22"X22"	24"X24"	LAY-IN	WHITE	<30	-	-
F	AES INDUSTRIES INC	ADB-1-7-4	DROP BOX DIFFUSER	19"X19"	28"X28"	-	WHITE	<35	DDG	-
G	PRICE	80	EGGCRATE GRILLE	10"X10"	12"X12"	SURFACE	WHITE	<20	OBD, STR, TRM	-
H	PRICE	SDGE	SPIRAL DUCT GRILLE	18"X8"	20"X10"	DUCT MOUNT	-	<30	ASD	1,2
J	AES INDUSTRIES INC	ADB-1-10-4	DROP BOX DIFFUSER	24"X24"	30"X30"	-	WHITE	<35	DDG	-
L	PRICE	610Z	LOUVERED RETURN GRILLE	10"x10"	12"x12"	SURFACE	WHITE	<30	OBD, TRM	-
M	PRICE	80	EGGCRATE GRILLE	22"X10"	24"X12"	SURFACE	WHITE	<30	TRM	-

ACCESSORIES:
ASD-AIR SCOOP DAMPER, DDG-DOUBLE DEFLECTION GRILLES, OBD-OPPOSED BLADE DAMPER, SB- SECTORIZING BAFFLE FOR OTHER THAN 4-WAY THROW, STR- SQUARE TO ROUND TRANSITION, TRM-RAPID MOUNT SHEETROCK FRAME

NOTES:
1. PROVIDE WITH DOUBLE DEFLECTION CORE.
2. ADJUST FRONT BLADES TO BLOW 30 DEG FROM CENTER-LINE OF GRILLE AND REAR BLADES TO BLOW AIR 22 DEG DOWNWARD FROM HORIZONTAL

ELECTRIC HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	AIR FLOW (CFM)	ELECTRIC HEAT: INPUT (WATTS)	OUTPUT (BTU/HR)	ELECTRICAL: VOLTS/Ø/HZ	MCA (AMPS)	MOCP (AMPS)	NOTES
EUH-1	QMARK	CDF-548	RECESSED CEILING	300	4,000	13,700	208/1/60	19.2	-	1-3

NOTES:
1. FURNISH WITH TEMPERATURE SENSOR COMPATIBLE WITH NOVAR SYSTEM. UNIT SHALL BE CONTROLLED THROUGH NOVAR CONTROL SYSTEM.
2. PROVIDE WITH INTEGRAL DISCONNECT SWITCH.
3. PROVIDE WITH RECESSED MOUNTING ENCLOSURE.

MECHANICAL SYMBOLS LEGEND

ABBREVIATIONS:

AFF	ABOVE FINISHED FLOOR
BOD	BOTTOM OF DUCT
BTU	BRITISH THERMAL UNIT
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
EAT	ENTERING AIR TEMPERATURE
ESP	EXTERNAL STATIC PRESSURE
FOB	FLAT ON BOTTOM
HZ	FREQUENCY
NC	NOISE CRITERIA
PSI	POUNDS PER SQUARE INCH
RTU	ROOFTOP UNIT
TYP	TYPICAL
WC	WATER COLUMN
WB	WET BULB

GRILLES/DIFFUSERS:

- SUPPLY DIFFUSER
- SUPPLY DIFFUSER WITH 3-WAY THROW
- SUPPLY DIFFUSER WITH 2-WAY THROW
- SIDEWALL MOUNTED SUPPLY REGISTER
- RETURN GRILLE
- EXHAUST GRILLE
- DROP BOX DIFFUSER

EQUIPMENT:

- ROOF MOUNTED EXHAUST FAN
- IN-LINE CABINET FAN
- ROOFTOP UNIT
- RECESSED CEILING UNIT HEATER
- UNIT HEATER
- TS TEMPERATURE SENSOR
- T THERMOSTAT
- CO2 CARBON DIOXIDE SENSOR
- D DUCT SMOKE DETECTOR

DOUBLE LINE DUCT SYMBOLS:

- NEW SHEET METAL DUCTWORK
- SUPPLY OR OUTSIDE AIR DUCT
- RETURN AIR DUCT
- EXHAUST AIR DUCT
- DUCTWORK TRANSITION
- DUCTWORK TRANSITION - RECTANGULAR TO ROUND
- SUPPLY DUCT ELBOW UP OR DOWN
- RETURN DUCT ELBOW UP OR DOWN
- EXHAUST DUCT ELBOW UP OR DOWN
- DUCT ELBOW WITH FIXED TURNING VANES
- DUCT BRANCH TAKE-OFF
- ROUND SPIN-IN WITH DAMPER
- SQUARE TO ROUND TAP WITH DAMPER
- FLEXIBLE DUCT CONNECTION
- VD VOLUME DAMPER
- BD BACKDRAFT DAMPER
- FLEXIBLE DUCTWORK

GENERAL REFERENCES/NOTATIONS:

- # NOTE DESIGNATION
- # REVISION DESIGNATION
- TYPE # MECHANICAL EQUIPMENT DESIGNATION
- TAG / CFM DIFFUSER DESIGNATION AND CFM

SYMBOLS LEGEND NOTES:
1. REFER TO SPECIFICATIONS AND PLAN NOTES FOR DETAILED DESCRIPTION OF ALL DEVICES SHOWN IN THIS SCHEDULE.
2. PROJECT MAY NOT USE EVERY SYMBOL OR DEVICE INDICATED ON THIS LEGEND.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	DRIVE TYPE	PERFORMANCE: AIR FLOW (CFM)	EXT. STATIC (IN W.C.)	FAN SPEED (RPM)	ELECTRICAL: VOLTS/Ø/HZ	FAN MOTOR HP	FAN MOTOR WATTS	ACCESSORIES	APPROX. WEIGHT (LBS)	SERVES	NOTES
EF-1	GREENHECK	GB-141-3	DOWNBLAST	BELT	1,400	0.5	1,054	120/1/60	1/3	-	BD, BS,DS, RC	85	SHOP	1,2,6
EF-2	FANTECH	FR-110	INLINE	DIRECT	130	0.4	2,900	120/1/60	-	80	BD, DS, BS	7	ROPECUTTER	1
EF-3	GREENHECK	G-090-VG	DOWNBLAST	DIRECT	500	0.3	1,725	120/1/60	1/10	-	BD, BS,DS, RC, SC	40	RESTROOMS/SHOWER	4,5,7
EF-4,-5,-6,-7	GREENHECK	SQ-60-VG	INLINE	DIRECT	75	0.15	1,184	120/1/60	1/10	-	BD, DS	35	FITTING ROOMS	3

ACCESSORIES:
BS-BIRD SCREEN, BD-BACKDRAFT DAMPER, DS-DISCONNECT SWITCH, RC-ROOF CURB, SC-SPEED CONTROLLER

NOTES:
1. FAN SHALL BE CONTROLLED THROUGH THE SWITCH. ELECTRICAL CONTRACTOR TO WIRE.
2. PROVIDE WITH EXPLOSION PROOF MOTOR AND ALUMINUM RUB RING.
3. FAN SHALL BE CONTROLLED THROUGH THE OCCUPANCY SENSOR. ELECRICAL CONTRACTOR TO WIRE.
4. PROVIDE NEMA 3R DISCONNECT SWITCH.
5. FAN TO BE CONTROLLED VIA TIME-CLOCK.
6. PROVIDE WITH 14" HIGH MANUFACTURER RECOMMENDED ROOF CURB.
7. PROVIDE WITH ADAPTIVE CURB AS NEEDED.

MINI - SPLIT SYSTEM AIR CONDITIONER SCHEDULE

MANUFACTURER	AREA SERVED	TONS	REFRIGERANT	COOLING CAPACITY (BTU/HR): TOTAL	SEER	HEATING CAPACITY: BTU/HR	COP	INDOOR UNIT: TAG	MODEL	ENTERING AIR DB/WB	CFM	WEIGHT	V/PH	MCA	MOCP	OUTDOOR AIR COOLED CONDENSING UNIT: TAG	MODEL	WEIGHT	V/PH	MCA	MOCP	REMARKS
DAIKIN	TDP CLOSET 165	1.5	R-410A	18,000	17	20,000	3	AC-1	FAQ18TAVJU	80/67	500	31	208/1	0.5	15	CU-1	RZQ18TAVJU	175	208/1	16.5	20	1-10

REMARKS:
1. CONTRACTOR TO PROVIDE SERVICE DISCONNECT SWITCH.
2. PROVIDE FACTORY START UP AND COMPLETE WRITTEN REPORT.
3. MOUNT OUTDOOR UNIT ON ROOF PER MANUFACTURER'S INSTRUCTIONS. PROVIDE SOLID CONCRETE PAD OR PLATFORM.
4. MOUNT INDOOR UNIT ON WALL PER MANUFACTURER'S INSTRUCTIONS. PROVIDE MOUNTING SUPPORTS AS NEEDED.
5. MAINTAIN MANUFACTURER'S MINIMUM INSTALLATION CLEARANCES.
6. CONTROL WIRING PER MANUFACTURER'S INSTRUCTIONS.
7. PROVIDE DX LIQUID AND SUCTION REFRIGERANT PIPING SIZED FOR ACTUAL FIELD CONDITIONS AND MANUFACTURER'S RECOMMENDATION.
8. PROVIDE WITH MANUFACTURER'S CONDENSATE PUMP KIT.
9. PROVIDE WITH BRC1E73 CONTROLLER AND BACNET INTERFACE.
10. PROVIDE WITH WIND BAFFLE.

GAS FIRED UNIT HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	AIR FLOW (CFM)	VENT SIZE (IN)	HEATER: FUEL	INPUT (BTU/HR)	OUTPUT (BTU/HR)	ELECTRICAL: VOLTS/Ø/HZ	MOTOR HP	APPROX. WEIGHT (LBS)	ACCESSORIES
UH-1	REZNOR	UDAP125	V3 SERIES	1,555	4	NATURAL GAS	120,000	100,000	120/1/60	1/4	100	EI,PV,DC

ACCESSORIES:
EI-ELECTRIC IGNITION, PV-POWER VENT, DC-DDC CONTROL

NOTES:
1. FURNISH WITH TEMPERATURE SENSOR COMPATIBLE WITH NOVAR SYSTEM. UNIT SHALL BE CONTROLLED THROUGH NOVAR CONTROL SYSTEM.

EXISTING PACKAGE ROOFTOP UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	OA FLOW (CFM)	AIR FLOW (CFM)	AMBIENT OAT (°F)	SEER	EER	EXTERNAL STATIC (IN W.C.)	DX COOLING COIL: EAT (*FDB/WB)	TOTAL (BTU/HR)	SENSIBLE (BTU/HR)	GAS HEAT: FUEL	INPUT (BTU/HR)	OUTPUT (BTU/HR)	EFF %	ELECTRICAL: VOLTS/Ø/HZ	MOTOR HP	UNIT MCA	MOCP AMPS	APPROX. WEIGHT (LBS)	NOTES
RTU-1X	LENNOX	LGH036H4EM1G	120	1,200	95	17	12.5	1.2	80.0/67.0	35,200	-	NATURAL GAS	105,000	84,000	80	460/3/60	1.0	12	15	-	ALL
RTU-2X	LENNOX	LGH060H4EH1G	400	2,000	95	17	12.7	1.2	80.0/67.0	60,000	-	NATURAL GAS	150,000	120,000	80	460/3/60	0.5	19	25	-	ALL
RTU-3X, 4X, 6X	LENNOX	LGH120H4BH2G	920	4,000	95	-	12	1.6	80.0/67.0	118,000	-	NATURAL GAS	240,000	192,000	80	460/3/60	3	27	30	-	ALL
RTU-5X, 7X	LENNOX	LGH092H4BH1G	690	3,000	95	-	12.5	1.6	80.0/67.0	90,000	-	NATURAL GAS	240,000	192,000	80	460/3/60	2	22	25	-	ALL

REMARKS:
1.MECHANICAL CONTRACTOR TO NOTIFY ENGINEER ON RECORD OF ANY DISCREPANCIES.
2. EXISTING UNIT SHALL BE BALANCED AS PER SCHEDULE. CONTRACTOR SHALL FULLY INSPECT AND SERVICE THE UNIT. PROVIDE ROUTINE MAINTENANCE INCLUDING BUT NOT LIMITED TO, CHANGING FILTERS & BELTS, RECHARGING REFRIGERANT, ETC.

HVAC SEQUENCE OF OPERATION

PROVIDE ALL NECESSARY SENSORS, DAMPER ACTUATORS, CONTROL TRANSFORMERS WITH SECONDARY OVERLOAD PROTECTION, WIRING AND CONDUIT TO COMMUNICATE NECESSARY POINTS TO THE NOVAR CONTROLLER TO ACCOMPLISH THE FOLLOWING SEQUENCE OF OPERATION:

OCCUPIED MODE:

THE NOVAR CONTROLLER SHALL BE SET TO DETERMINE OCCUPIED AND UNOCCUPIED HOURS OF OPERATION. HOURS TO BE COORDINATED WITH OWNER.

THE SUPPLY FAN SHALL RUN CONTINUOUSLY AND THE OUTSIDE AIR DAMPER SHALL OPEN TO THE MINIMUM POSITION TO DELIVER THE SCHEDULED QUANTITY OF VENTILATION AIR. REFER TO DEMAND CONTROL VENTILATION BOX FOR CO2 CONTROL INFORMATION.

COOLING:

UPON A SIGNAL FROM THE NOVAR CONTROLLER, IF SPACE TEMPERATURE RISES 2 DEGREES OR MORE ABOVE SET POINT, FIRST STAGE OF COOLING SHALL BE ENERGIZED. IF TEMPERATURE CONTINUES TO RISE AN ADDITIONAL 1 DEGREE OR MORE, ADDITIONAL STAGES OF COOLING (WHERE APPLICABLE) SHALL BE ACTIVATED AS REQUIRED TO SATISFY COOLING DEMAND. WHEN TEMPERATURE FALLS 2 DEGREES BELOW SET POINT, COMPRESSOR(S) SHALL BE DE-ENERGIZED. FOR UNITS WITH MULTI-STAGE AIR VOLUME SUPPLY FANS AND MULTIPLE COMPRESSORS, THE FAN SPEED SHALL BE STAGED ALONG WITH THE COOLING SUCH THAT WHEN ALL COMPRESSORS ARE ENERGIZED, THE SUPPLY FAN IS AT FULL SPEED. FOR SINGLE COMPRESSOR UNITS, THE FAN SPEED SHALL BE STAGED ALONG WITH THE COOLING SUCH THAT WHEN COMPRESSOR IS ENERGIZED IN SECOND STAGE COOLING, THE SUPPLY FAN IS AT FULL SPEED.

ECONOMIZER:

WHEN THE OUTSIDE AIR ENTHALPY IS BELOW THE INDOOR ENTHALPY, CONTROLLER SHALL SIGNAL ECONOMIZER TO MODULATE BETWEEN ITS MINIMUM SET POINT AND FULL OPEN TO MAINTAIN A 55 DEGREE MIXED AIR TEMPERATURE. IF THE OUTDOOR TEMPERATURE IS ABOVE THE COMPRESSOR LOCKOUT THERMOSTAT SETTING, THE FIRST STAGE OF MECHANICAL COOLING SHALL BE ENABLED AS THE SECOND STAGE OF COOLING. THE DIFFERENTIAL ECONOMIZER'S HIGH LIMIT SHUT OFF SHALL BE SET WHEN THE OUTSIDE AIR ENTHALPY EXCEEDS THE INDOOR AIR ENTHALPY.

HEATING:

UPON A SIGNAL FROM THE NOVAR CONTROLLER, WHEN SPACE TEMPERATURE FALLS 2 DEGREES OR MORE BELOW SET POINT, FIRST STAGE OF GAS HEAT SHALL BE ACTIVATED. IF SPACE TEMPERATURE CONTINUES TO FALL AN ADDITIONAL 1 DEGREE, SECOND STAGE OF GAS HEAT SHALL BE ACTIVATED. WHEN TEMPERATURE RISES 2 DEGREES ABOVE SPACE SET POINT, GAS HEAT SHALL BE SHUT OFF. FOR UNITS WITH MULTI-STAGE AIR VOLUME SUPPLY FANS THE FAN SHALL OPERATE AT FULL SPEED DURING HEATING.

UNOCCUPIED MODE:

COOLING:

UPON SIGNAL FROM THE NOVAR CONTROLLER, THE FAN SHALL BE DE-ENERGIZED AND OUTSIDE AIR DAMPER SHALL CLOSE. IF SPACE TEMPERATURE RISES 2 DEGREES OR MORE ABOVE SET POINT, FIRST STAGE OF COOLING SHALL BE ENERGIZED. IF TEMPERATURE CONTINUES TO RISE AN ADDITIONAL 1 DEGREE OR MORE, ADDITIONAL STAGES OF COOLING (WHERE APPLICABLE) SHALL BE ACTIVATED AS REQUIRED TO SATISFY COOLING DEMAND. WHEN TEMPERATURE FALLS 2 DEGREES BELOW SET POINT, COMPRESSOR(S) SHALL BE DE-ENERGIZED AND THE SUPPLY FAN SHUT OFF. FOR UNITS WITH MULTI-STAGE AIR VOLUME SUPPLY FANS AND MULTIPLE COMPRESSORS, THE FAN SPEED SHALL BE STAGED ALONG WITH THE COOLING SUCH THAT WHEN ALL COMPRESSORS ARE ENERGIZED, THE SUPPLY FAN IS AT FULL SPEED. FOR SINGLE COMPRESSOR UNITS, THE FAN SPEED SHALL BE STAGED ALONG WITH THE COOLING SUCH THAT WHEN COMPRESSOR IS ENERGIZED IN SECOND STAGE COOLING, THE SUPPLY FAN IS AT FULL SPEED.

HEATING:

UPON A SIGNAL FROM THE NOVAR CONTROLLER, THE FAN SHALL BE DE-ENERGIZED AND OUTSIDE AIR DAMPER SHALL CLOSE. WHEN SPACE TEMPERATURE DROPS 2 DEGREES OR MORE BELOW UNOCCUPIED SET POINT, OUTSIDE AIR DAMPER SHALL REMAIN CLOSED, FAN SHALL BE ACTIVATED AND FIRST STAGE OF GAS HEAT SHALL BE ACTIVATED. IF SPACE TEMPERATURE CONTINUES TO DROP AN ADDITIONAL 1 DEGREE, SECOND STAGE OF GAS HEAT SHALL BE ACTIVATED. WHEN SPACE TEMPERATURE RISES 2 DEGREES ABOVE SET POINT, GAS HEAT SHALL BE SHUT OFF. FAN SHALL RUN AN ADDITIONAL 2 MINUTES AFTER GAS HEAT SHUTS DOWN THEN FAN SHALL SHUT OFF.

WINTER MORNING WARM-UP:

UPON SIGNAL FROM THE NOVAR CONTROLLER, 1 HOUR PRIOR TO THE SPACE BEING OCCUPIED, THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED AND THE ROOFTOP UNITS SHALL OPERATE IN HEATING MODE TO RAISE, AND THEN MAINTAIN, EACH SPACE TEMPERATURE AT 70 DEGREES F.

OCCUPIED COOLING SET POINT: 74 DEGREES
OCCUPIED HEATING SET POINT: 67 DEGREES
UNOCCUPIED COOLING SET POINT: 85 DEGREES
UNOCCUPIED HEATING SET POINT: 55 DEGREES

A SMOKE DETECTOR SHALL DE-ENERGIZE THE ROOFTOP UNIT FANS AND CLOSE THE OUTSIDE AIR DAMPER IN BOTH THE OCCUPIED AND UNOCCUPIED MODES WHENEVER SMOKE IS SENSED BY SMOKE DETECTORS.

DEMAND CONTROL VENTILATION

DEMAND CONTROL VENTILATION SYSTEM SHALL OPERATE DURING ALL OCCUPIED HOURS.

OCCUPIED OPERATION:

CO2 SENSORS SHALL MEASURE CO2 LEVEL OF ROOM AIR. THERE SHALL BE TWO SPACE CO2 SENSORS PER STORE. ONE SENSOR SHALL BE LOCATED IN EMPLOYEE ROOM TO CONTROL EMPLOYEE ROOM HVAC UNIT AND ONE SENSOR SHALL BE LOCATED ON SALES FLOOR TO CONTROL ALL HAVE UNITS SERVING SALES FLOOR. REFER TO MECHANICAL PLAN FOR LOCATIONS. SPACE CO2 SENSORS SHALL SEND A SIGNAL TO NOVAR CONTROL SYSTEM UPON REACHING C02 LEVEL OF 1000 PPM WHICH WILL SIGNAL HVAC UNIT CONTROLLER(S) TO MODULATE OUTDOOR AIR DAMPER FROM A MINIMUM VENTILATION RATE OF 0 TO THE CODE REQUIRED MINIMUM OUTSIDE AIR CFM LISTED IN ROOFTOP UNIT SCHEDULE.

ECONOMIZER MODE SHALL OVERRIDE THE DEMAND CONTROL VENTILATION ALGORITHM TO MODULATE DAMPERS OPEN TO REQUIRED ECONOMIZER DAMPER POSITION.

UNOCCUPIED OPERATION:

WHEN BUILDING IS UNOCCUPIED, THE DEMAND CONTROL VENTILATION SYSTEM SHALL BE DISABLED, AND ALL ROOFTOP UNIT OUTSIDE AIR DAMPERS SHALL REMAIN CLOSED.

CLIENT STORE NUMBER:
#235

CLIENT INFORMATION
REI co-op

ARCHITECT INFORMATION
CALLISONRTKL
Legal Entity
Building Name
Street Address
City, State Zip
XXX-XXXXXX.XX

CONSULTANT INFORMATION
rtm engineering consultants

PROJECT INFORMATION
REI-GLENWOOD SPRINGS
3200 SOUTH GLEN AVENUE
GLENWOOD SPRINGS,
CO, 81601

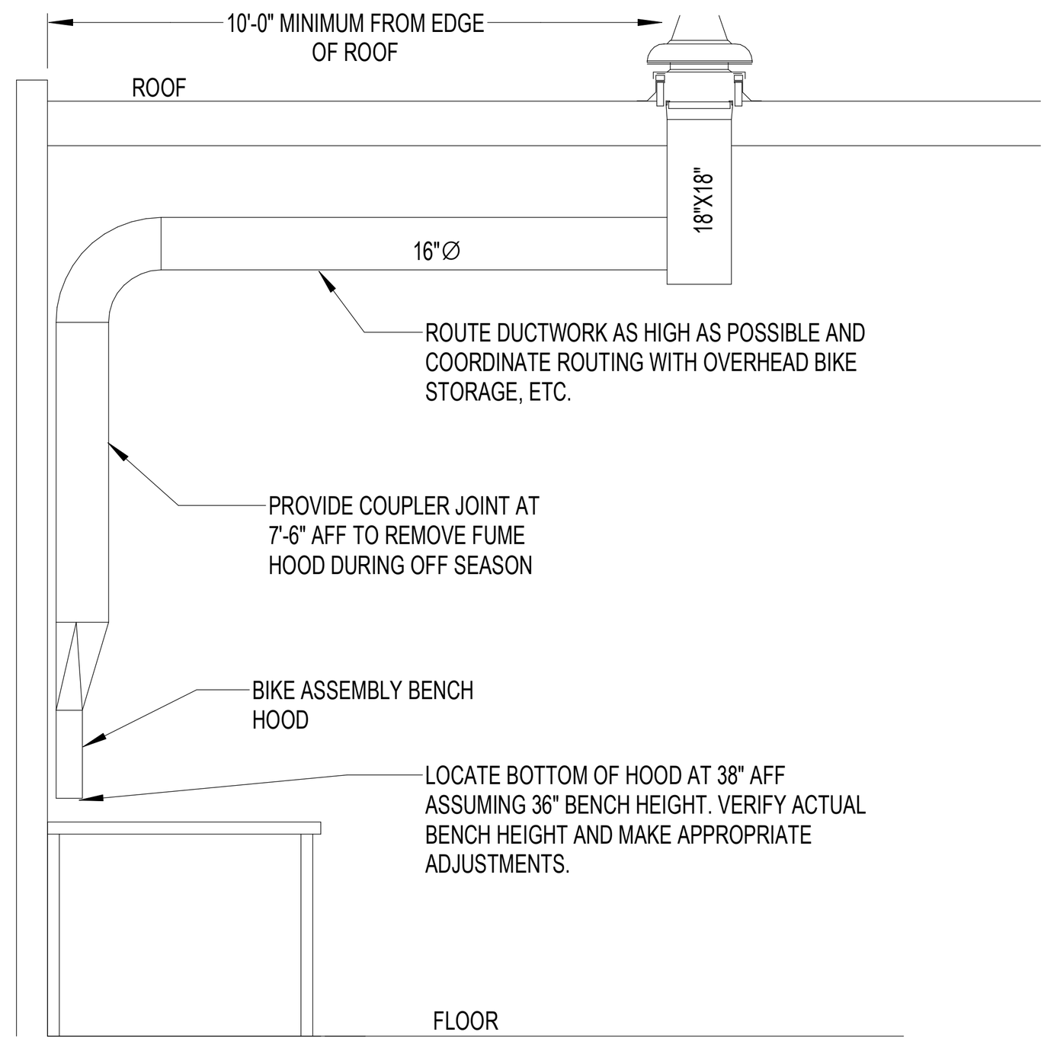
SIGNATURE/SEAL
COLORADO LICENSED PROFESSIONAL ENGINEER PE.0043682

DRAWING ISSUANCE LOG

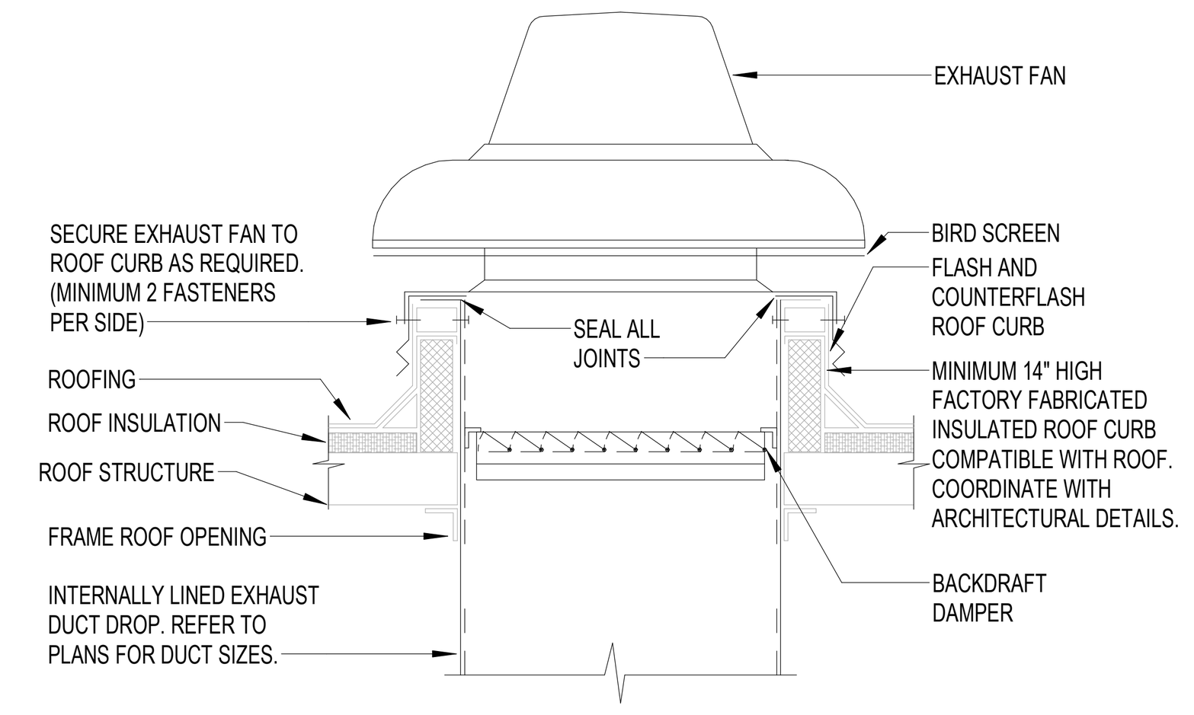
REV	DATE	DESCRIPTION
	11/08/2021	BID SET

SHEET TITLE
MECHANICAL SYMBOLS, NOTES, & SCHEDULES

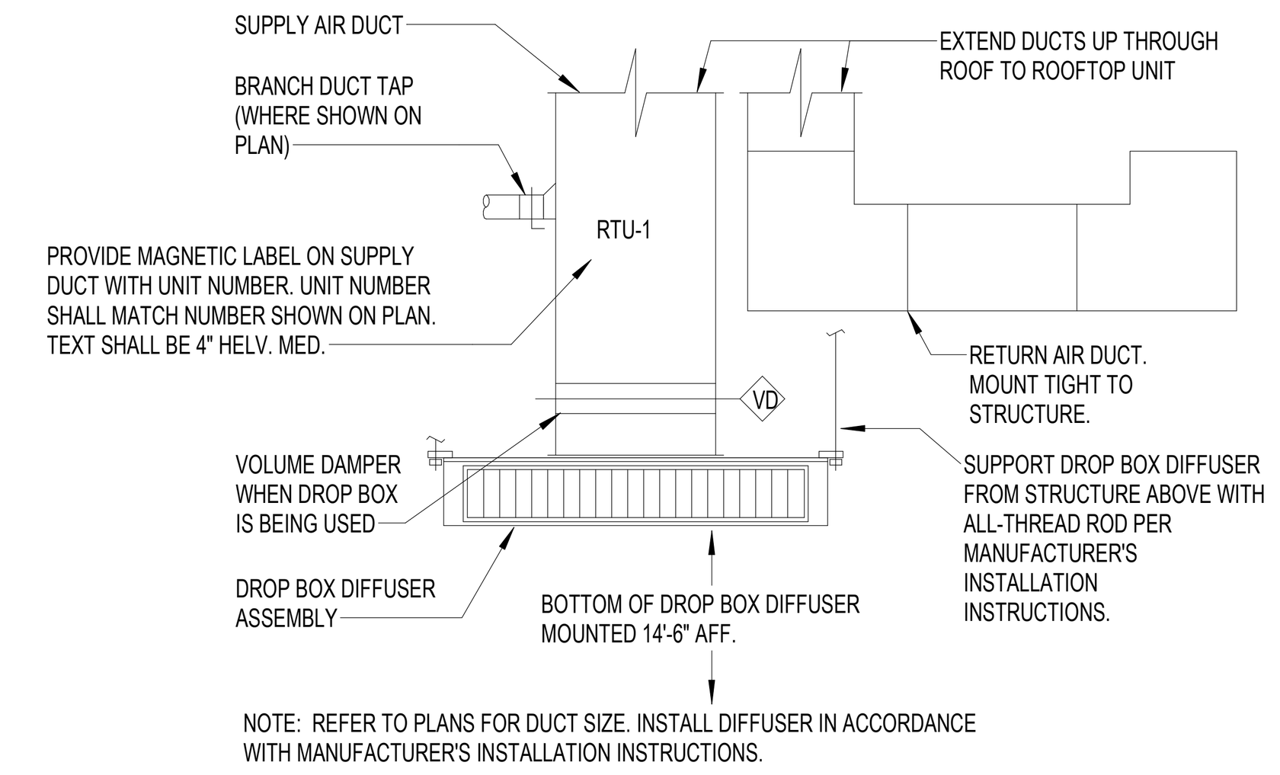
SHEET NUMBER
M-200



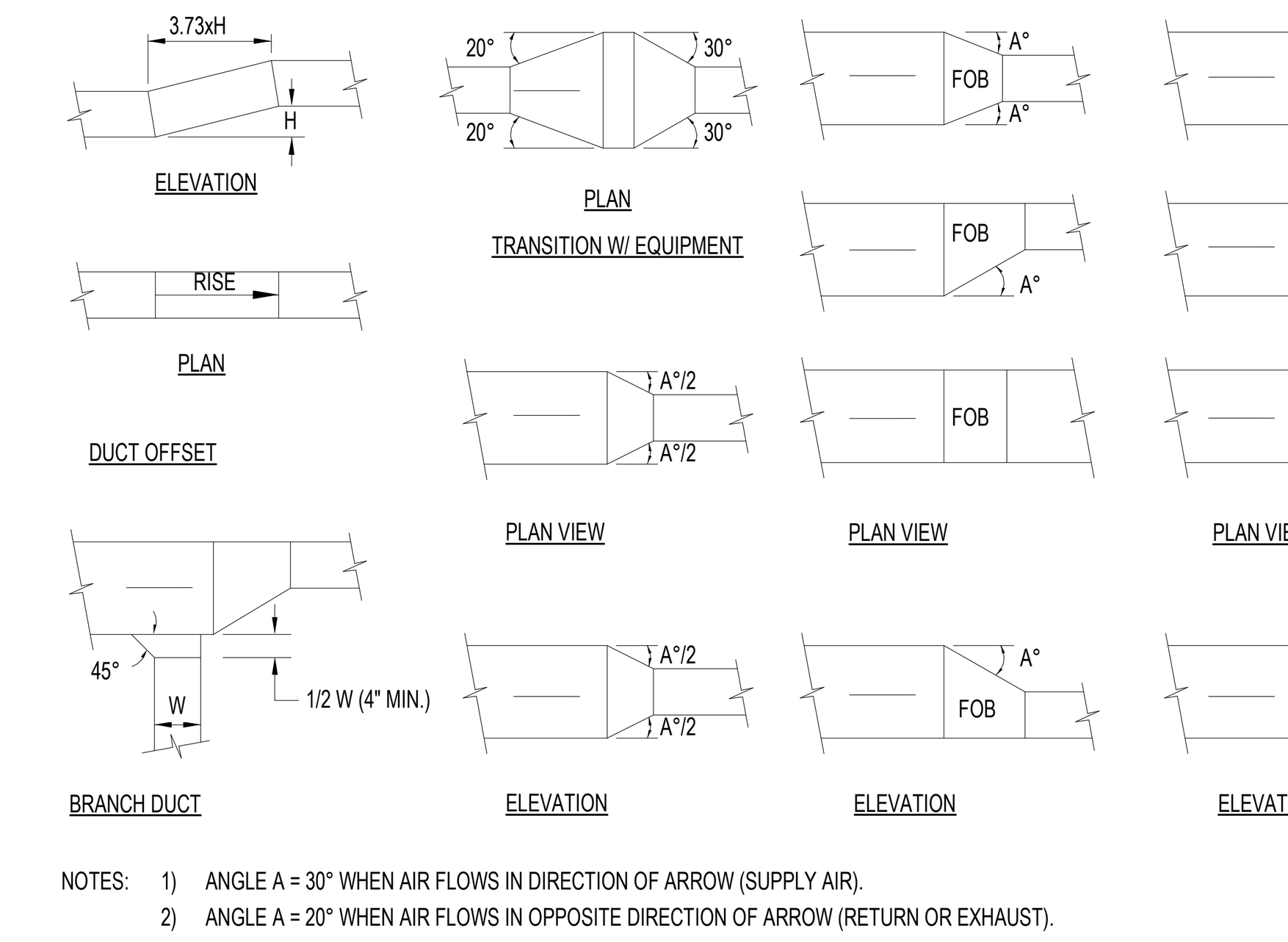
1 M-300 **BIKE ASSEMBLY EXHAUST**
NO SCALE — MECHANICAL



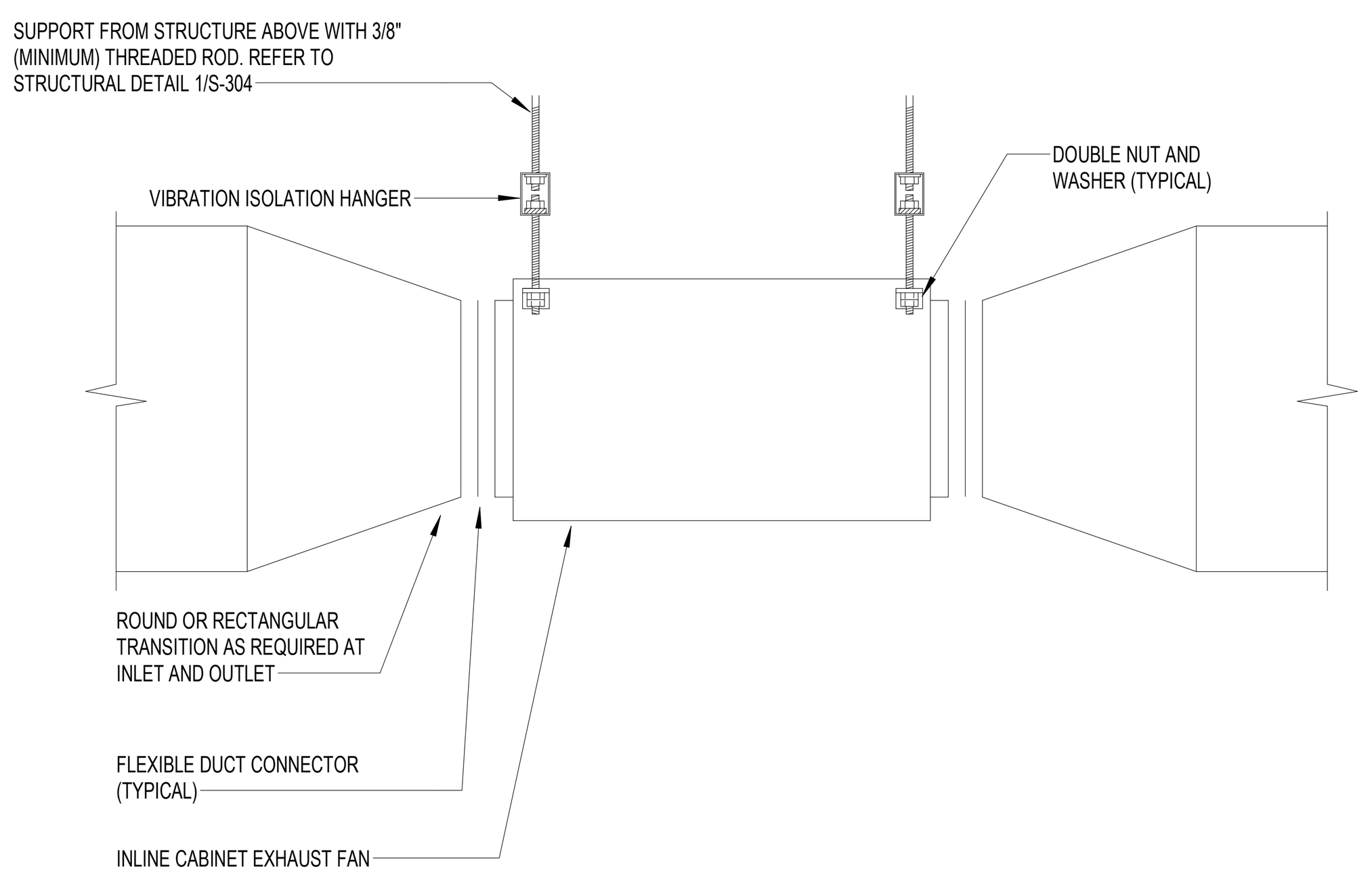
2 M-300 **ROOF MOUNTED EXHAUST FAN**
NO SCALE — MECHANICAL



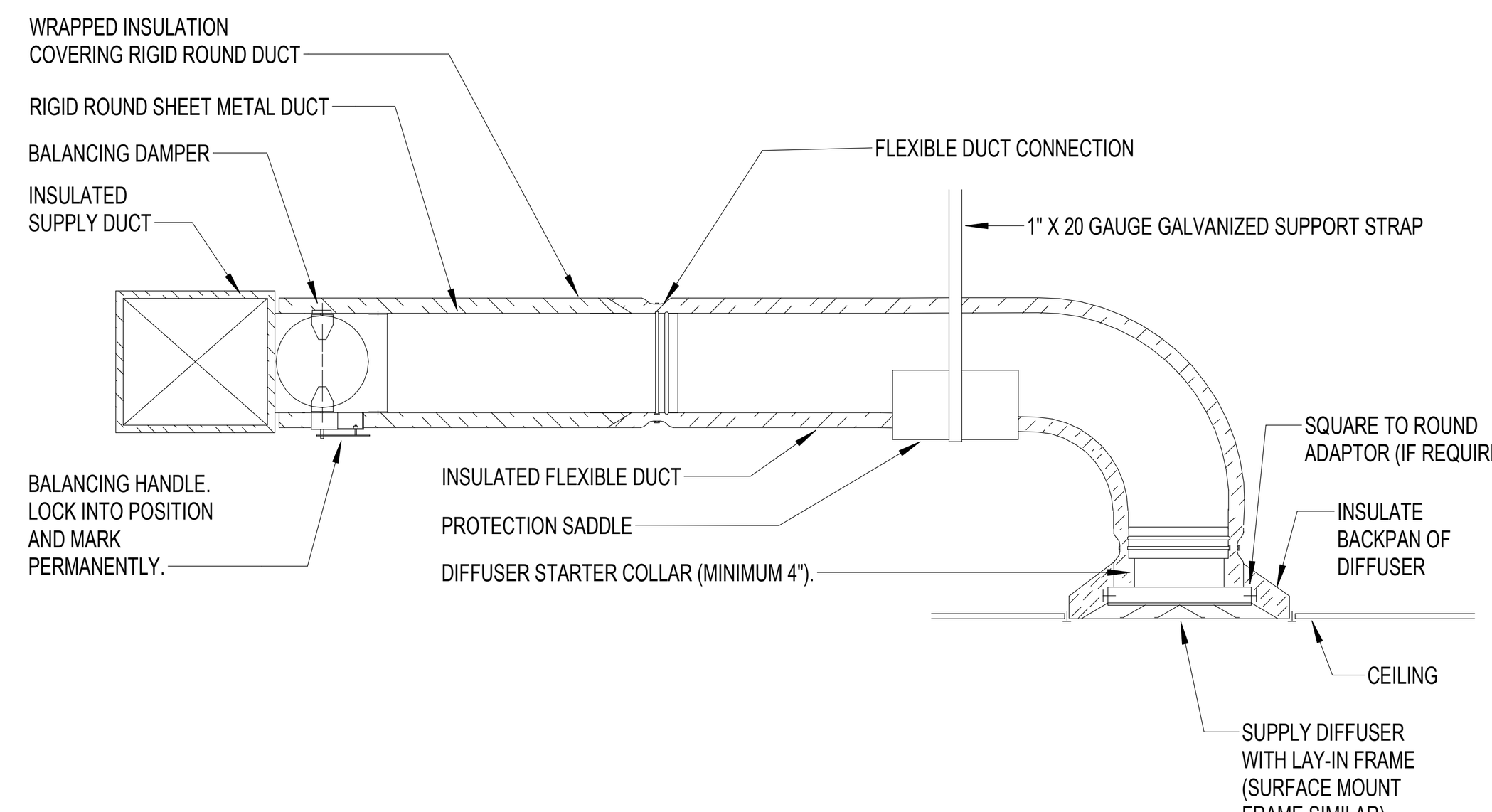
3 M-300 **DROP BOX DIFFUSER**
NO SCALE — MECHANICAL



4 M-300 **LOW VELOCITY DUCT FITTINGS**
NO SCALE — MECHANICAL

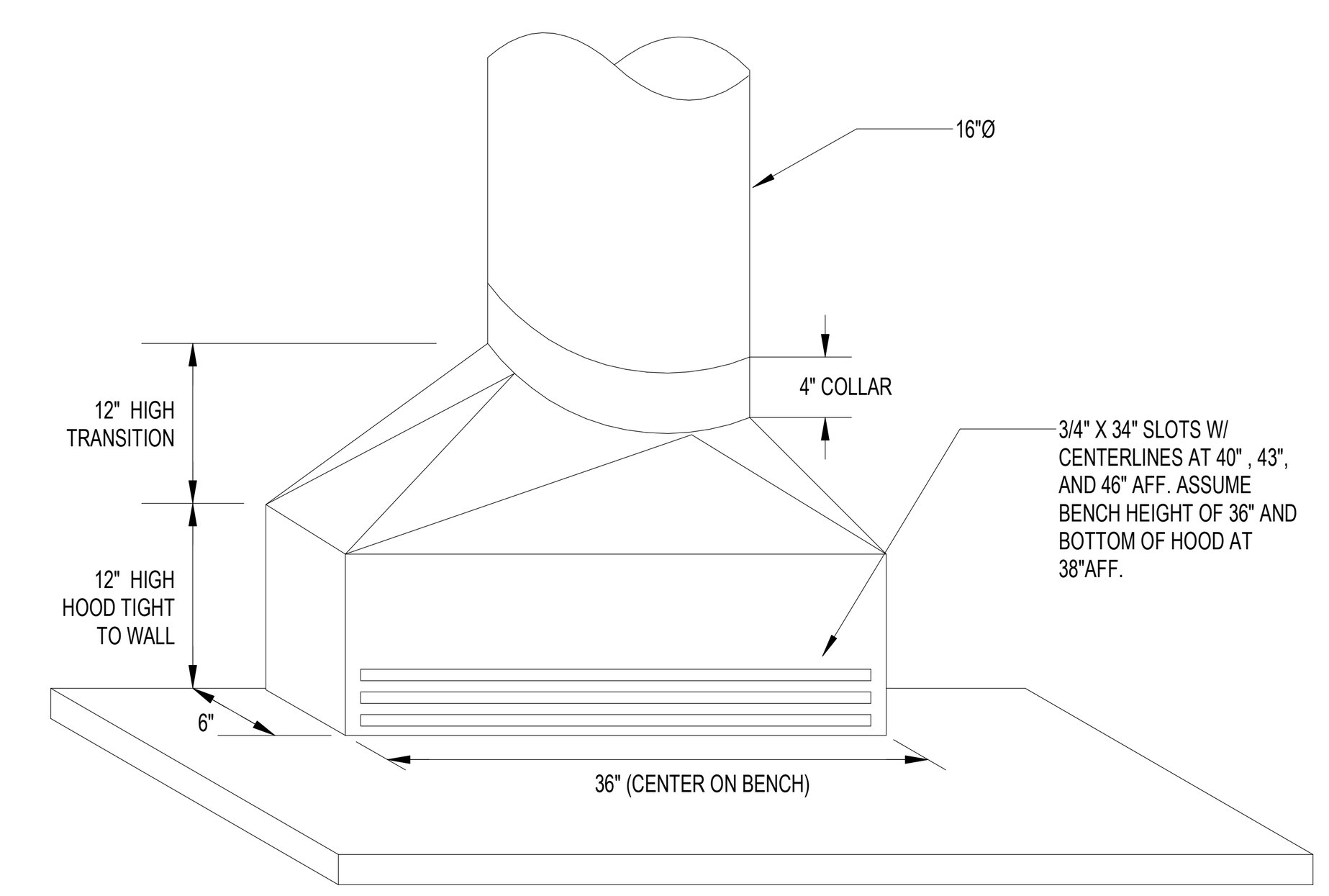


5 M-300 **INLINE CABINET FAN**
NO SCALE — MECHANICAL

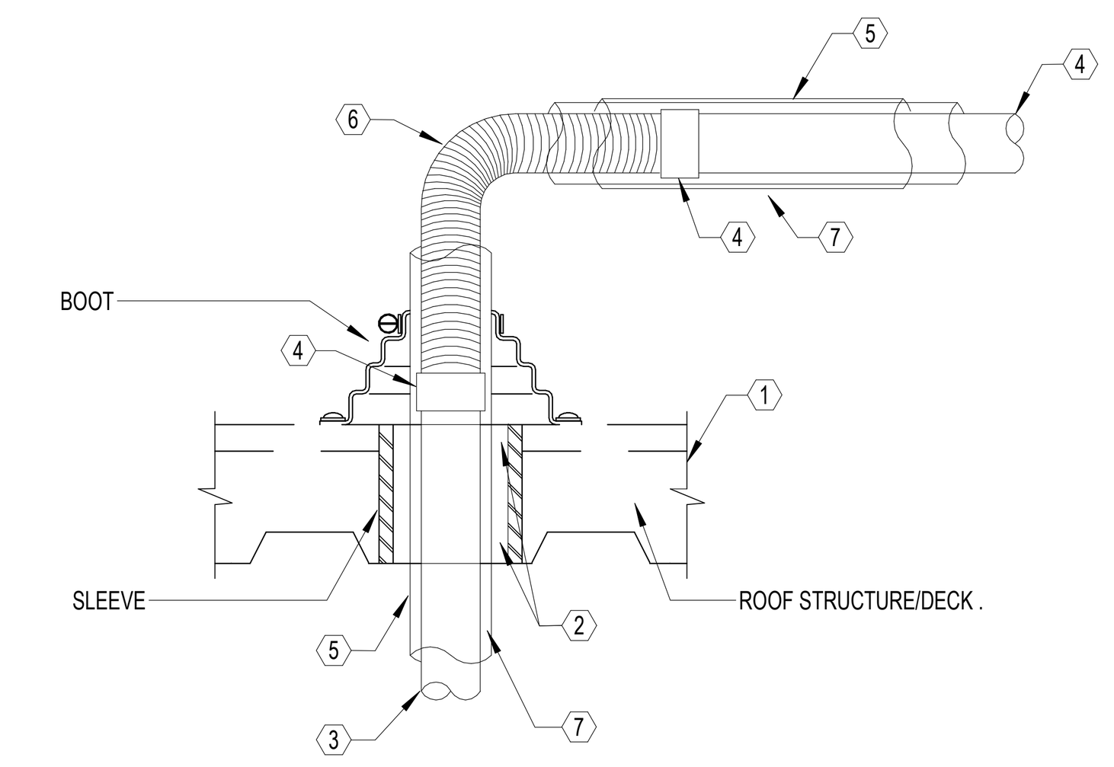


NOTES:
1) PROVIDE AT FLEXIBLE DUCT CONNECTION METAL OR "PANDUIT" DRAWBAND ON THE INTERIOR FLEXIBLE DUCT HELIX. SECURE THE INSULATION OVER THE DRAW BAND WITH AN ADDITIONAL DRAWBAND.
2) PROVIDE BEADING ON ROUND METAL DUCT 12" OR LARGER IN DIAMETER.
3) PROVIDE MINIMUM 4" COLLARS FOR ATTACHMENT OF THE FLEXIBLE DUCT TO ROUND DUCT, DAMPERS AND DIFFUSERS.
4) BAND RIGID ROUND DUCT INSULATION TO DUCT AND PROVIDE TAPE FOR INSULATION OVERLAP.

6 M-300 **DIFFUSER CONNECTION**
NO SCALE — MECHANICAL

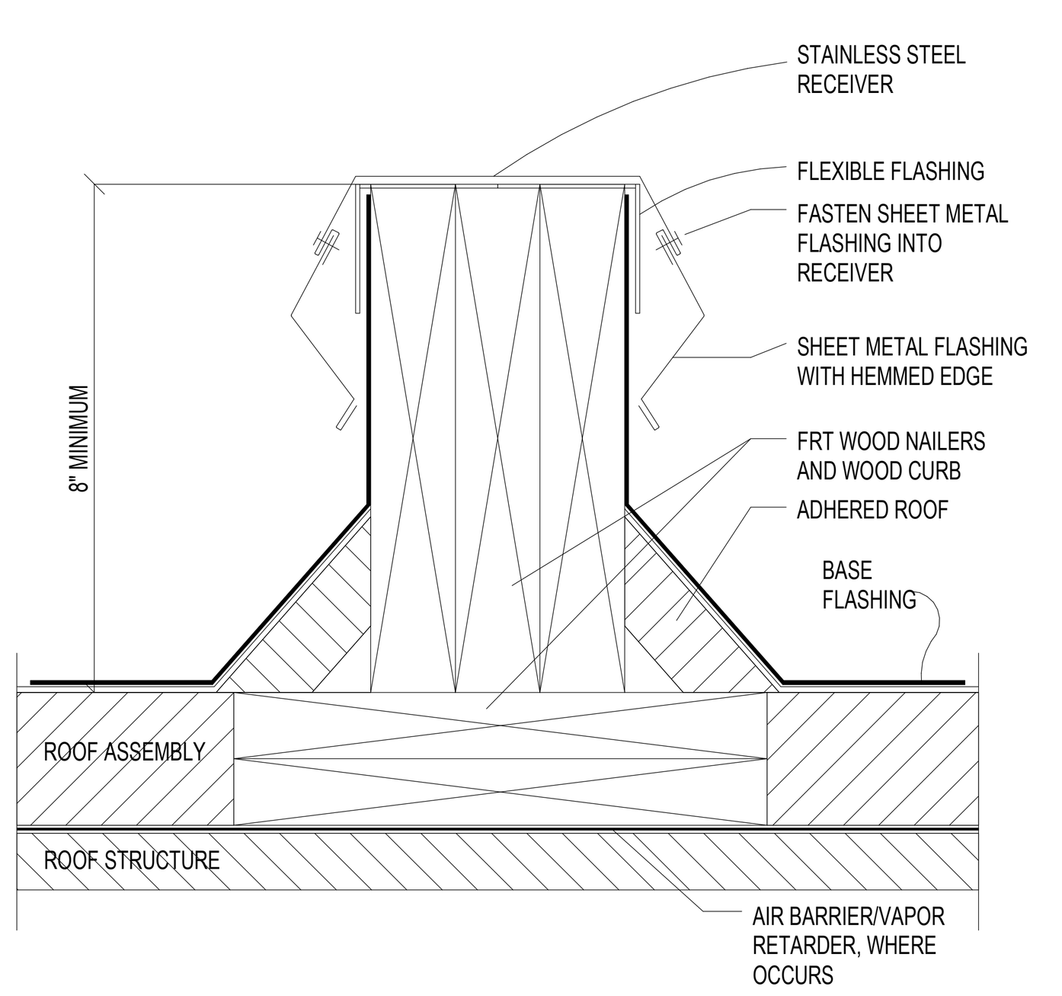


7 M-300 **BIKE ASSEMBLY BENCH CURB**
NO SCALE — MECHANICAL

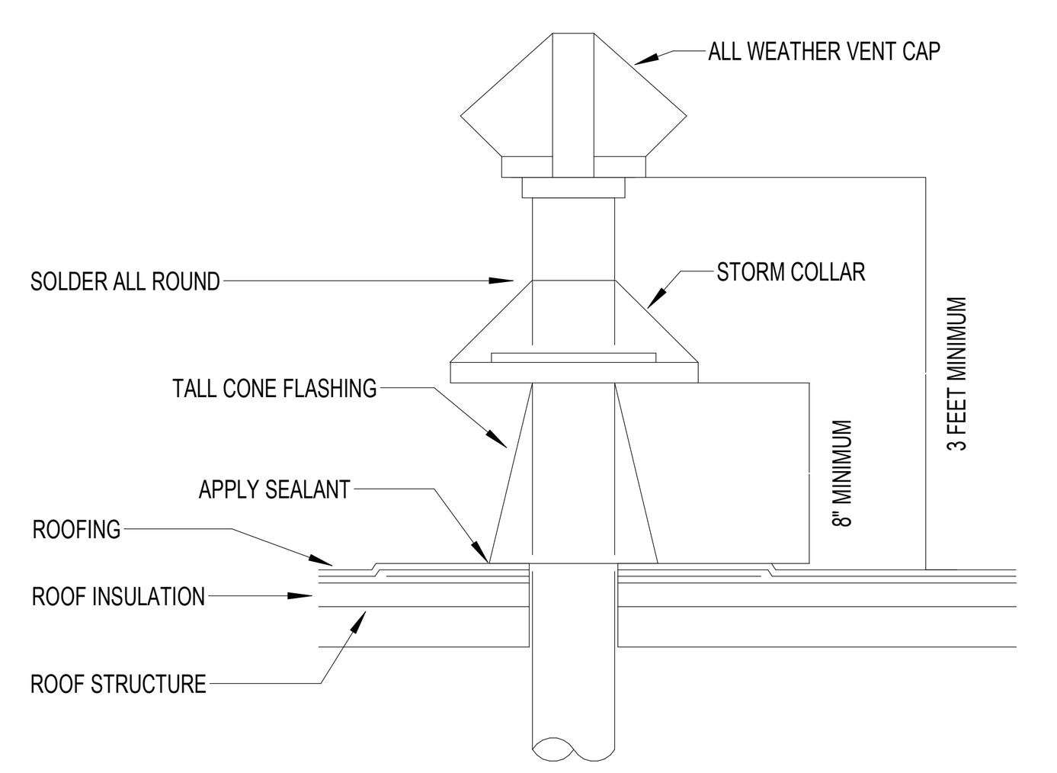


1 INSULATION AND BUILT UP ROOFING.
2 SEAL PENETRATION GAS-TIGHT WITH INSULATION AND FLEXIBLE SEALANT COMPATIBLE WITH PIPE MATERIAL.
3 STANDARD PIPE MATERIAL FOR REFRIGERANT LINES, SUPPORT PIPE AWAY FROM BUILDING.
4 SUITABLE ADAPTING COUPLING TO CONNECT COPPER REFRIGERANT LINE TO HOSE SECTION.
5 PIPE INSULATION SHALL BE CONTINUOUS THRU BOUNDARY SURFACE (ROOF) AND BEYOND.
6 NON-METAL HIGH PRESSURE HOSE SECTION. HOSE SECTION AND ABOVE ROOF PIPING SHALL BE COVERED W/ INSULATION AND BANDED ALUMINUM PIPE JACKET.
7 PIPE SUPPORT POINT. ENSURE HOSE DOES NOT CARRY ANY PIPE LOAD FROM REFRIGERANT LINES, SEE NOTE 3.

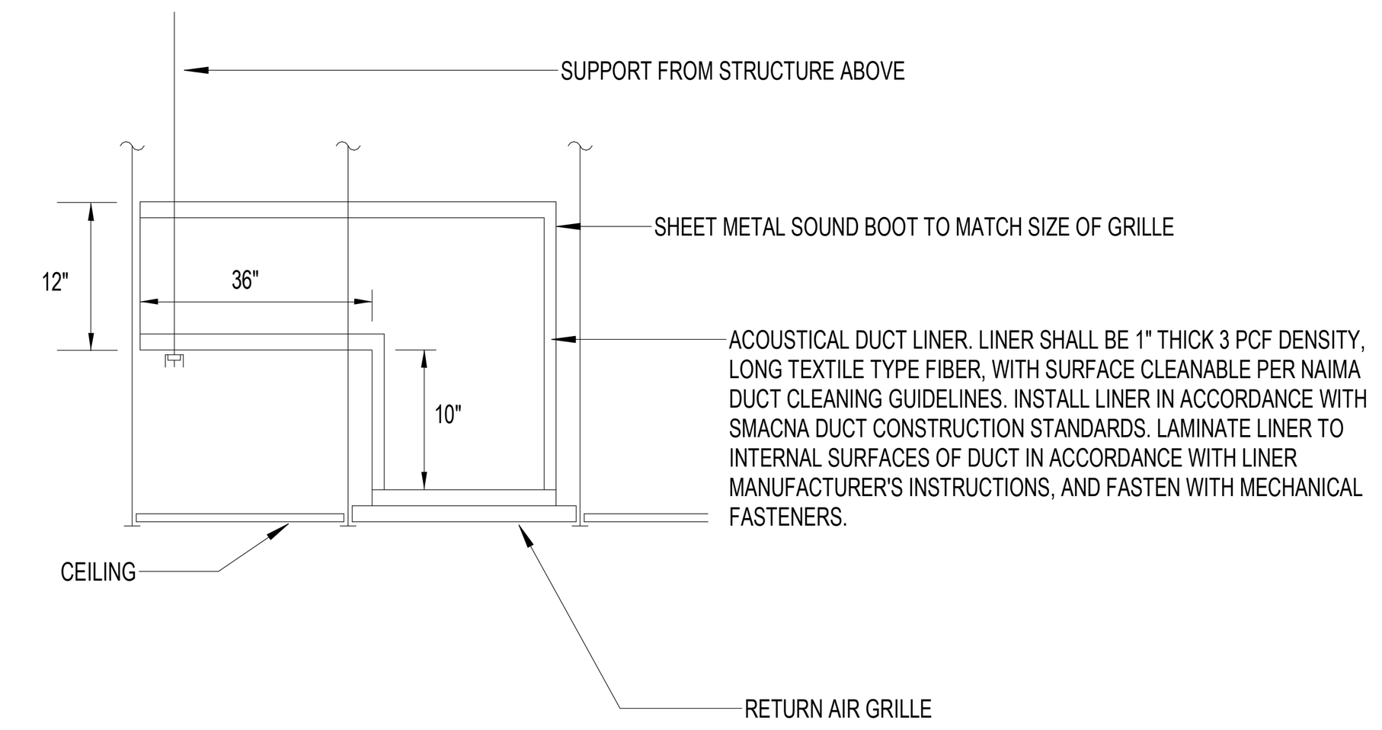
8 M-300 **REFRIGERANT LINE DETAIL**
NO SCALE — MECHANICAL



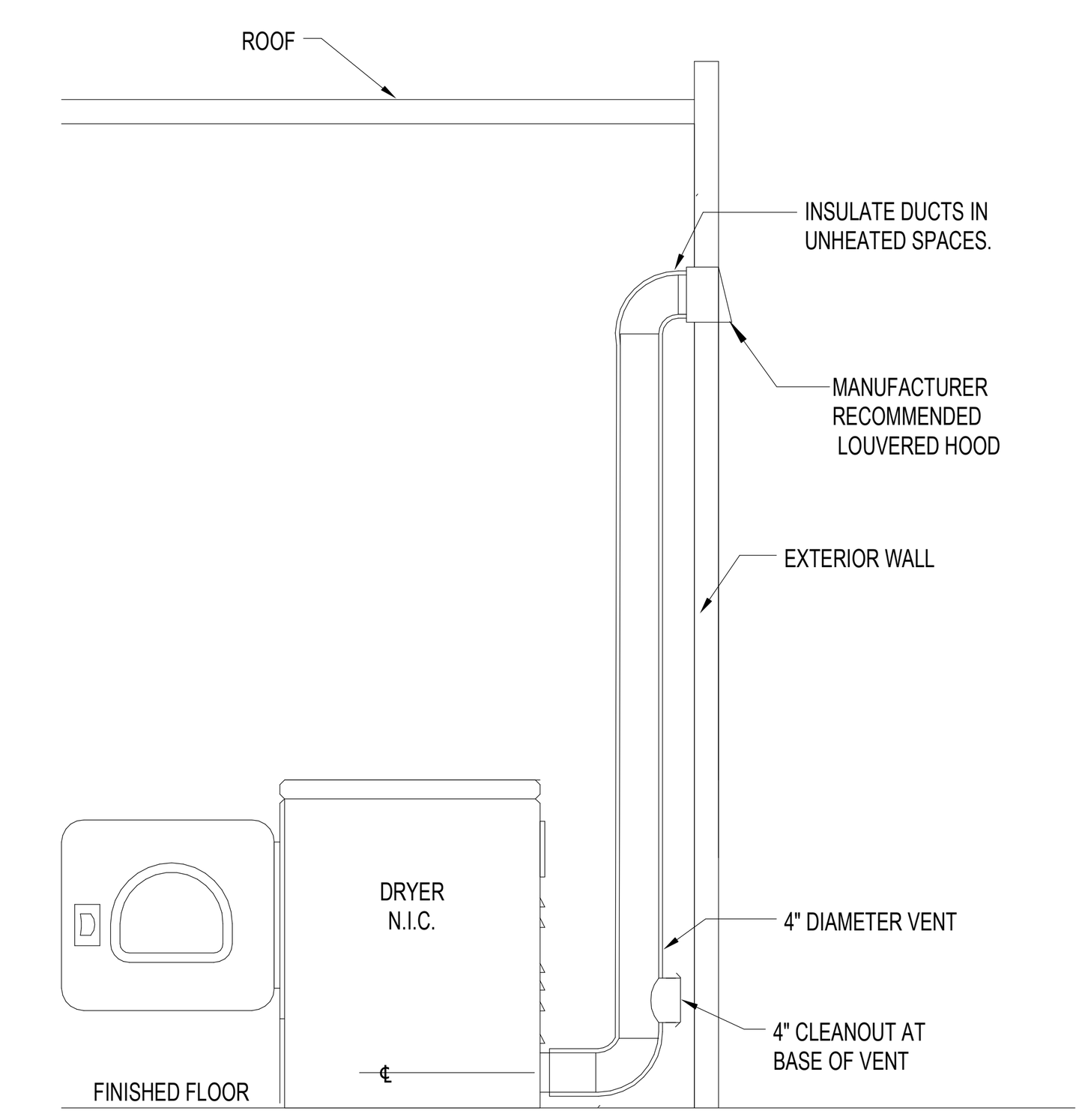
9 M-300 **CONDENSING UNIT CURB**
NO SCALE — MECHANICAL



10 M-300 **DUCT THRU ROOF**
NO SCALE — MECHANICAL



11 M-300 **RETURN GRILLE SOUND BOOT**
NO SCALE — MECHANICAL



NOTES:
1. DRYER VENT DUCTWORK SHALL BE RIGID METAL.
2. TERMINATE AND INSTALL VENT PER MANUFACTURER RECOMMENDATIONS.
3. VENT TO BE SIZED FOR ACTUAL FIELD CONDITIONS AND PER MANUFACTURER RECOMMENDATIONS.
4. USE CLAMPS TO SEAL ALL JOINTS.
5. PROVIDE VENT WITH BACKDRAFT DAMPER.

12 M-300 **DRYER VENTILATION SCHEDULE 2**
NO SCALE — MECHANICAL

CLIENT STORE NUMBER
#235

CLIENT INFORMATION
REI CO-OP

ARCHITECT INFORMATION
CALLISONRTKL
Legal Entity
Building Name
Street Address
City, State Zip
XXX-XXXXXX.XX

CONSULTANT INFORMATION
rtm engineering consultants

PROJECT INFORMATION
REI-GLENWOOD SPRINGS
3200 SOUTH GLEN AVENUE
GLENWOOD SPRINGS, CO, 81601

SIGNATURE/SEAL
COLORADO LICENSED PROFESSIONAL ENGINEER — DAVID K. PILIPSKI — PE.0043682

DRAWING ISSUANCE LOG

REV	DATE	DESCRIPTION
	11/08/2021	BID SET

SHEET TITLE
MECHANICAL DETAILS

SHEET NUMBER
M-300