

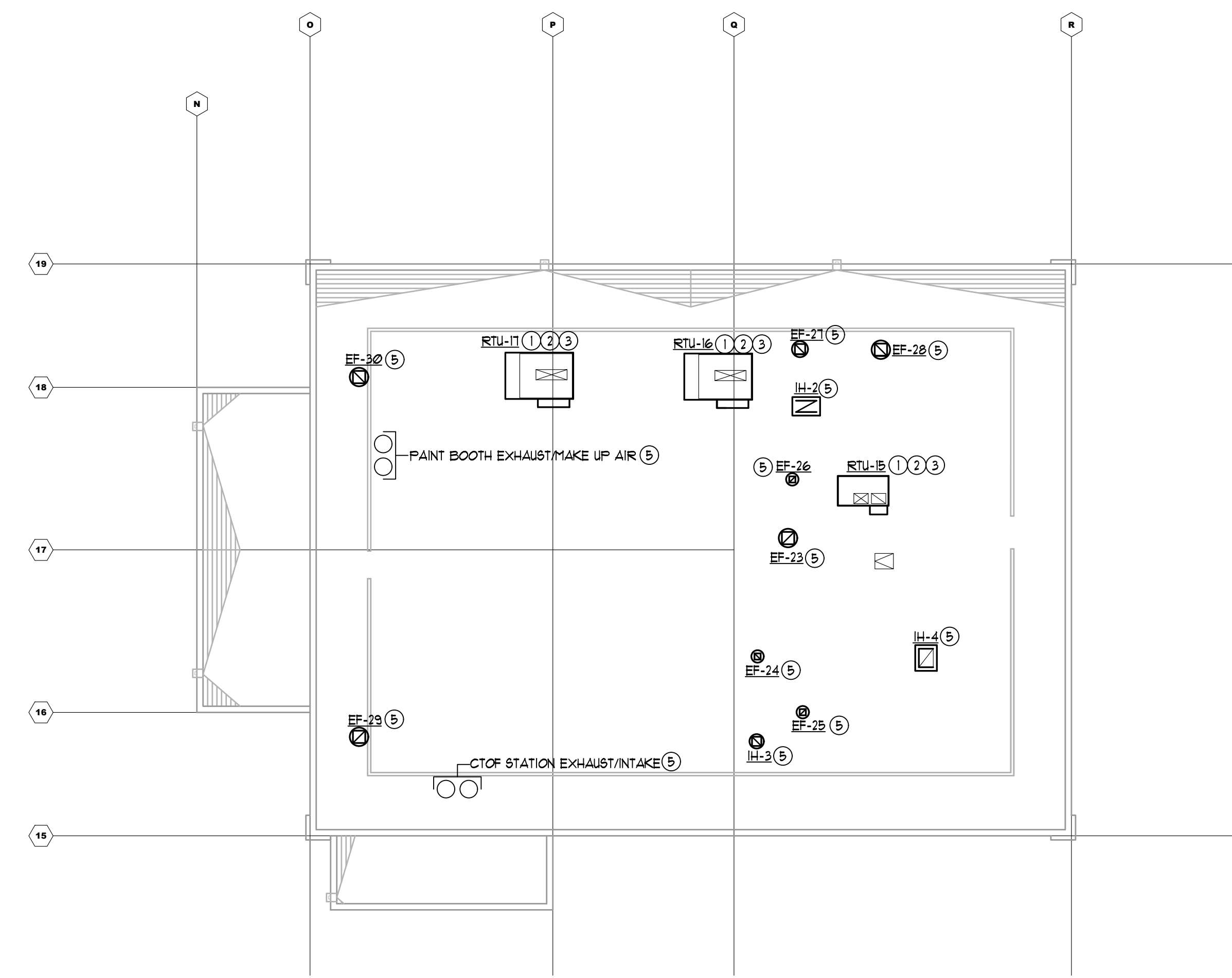
AM. CERRA, JR. P.E.
 1827 POWERS FERRY ROAD
 BLDG # 18, SUITE # 100
 ATLANTA, GEORGIA 30339
 770.980.0581

20241.01

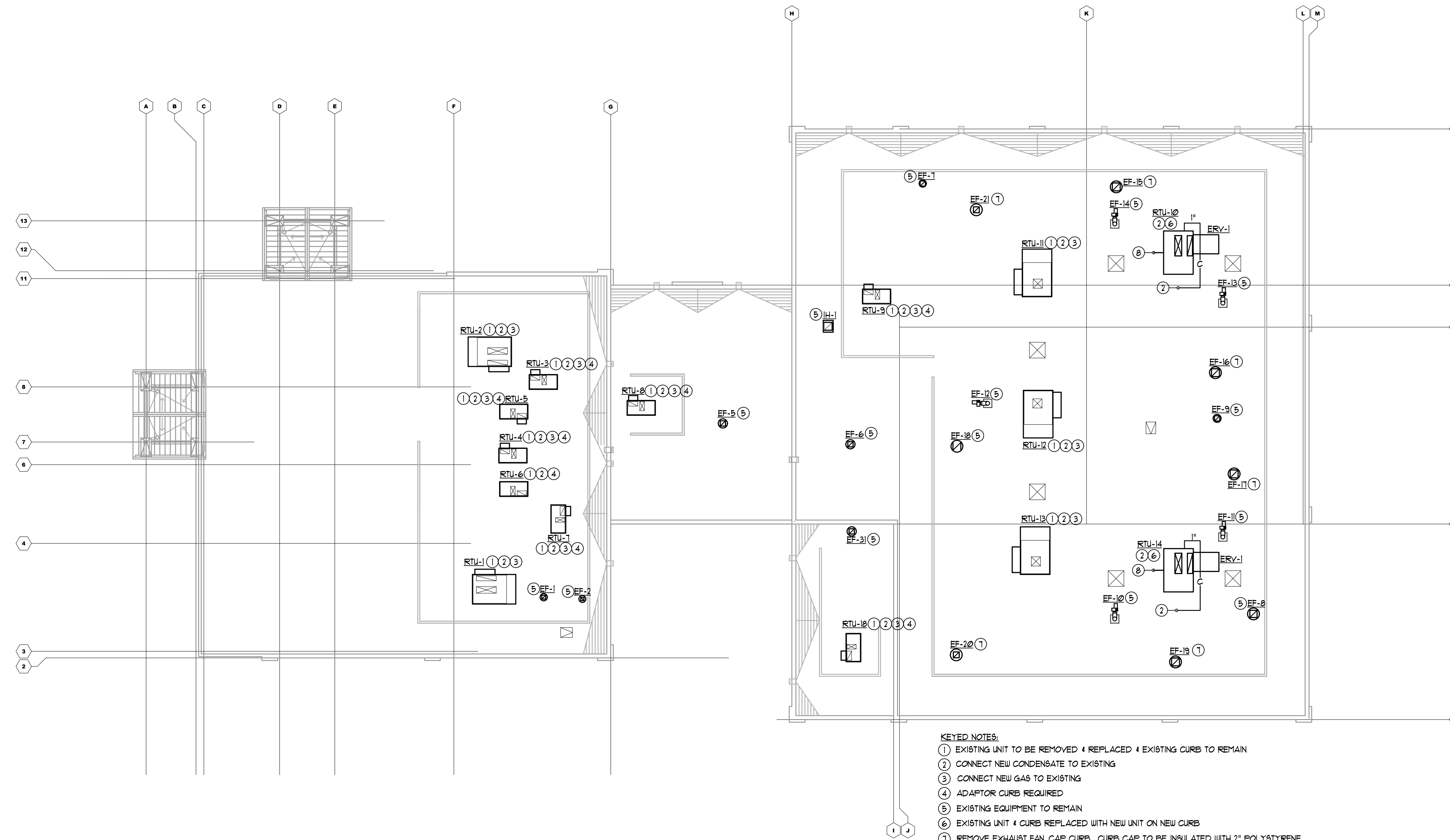


1/20/21

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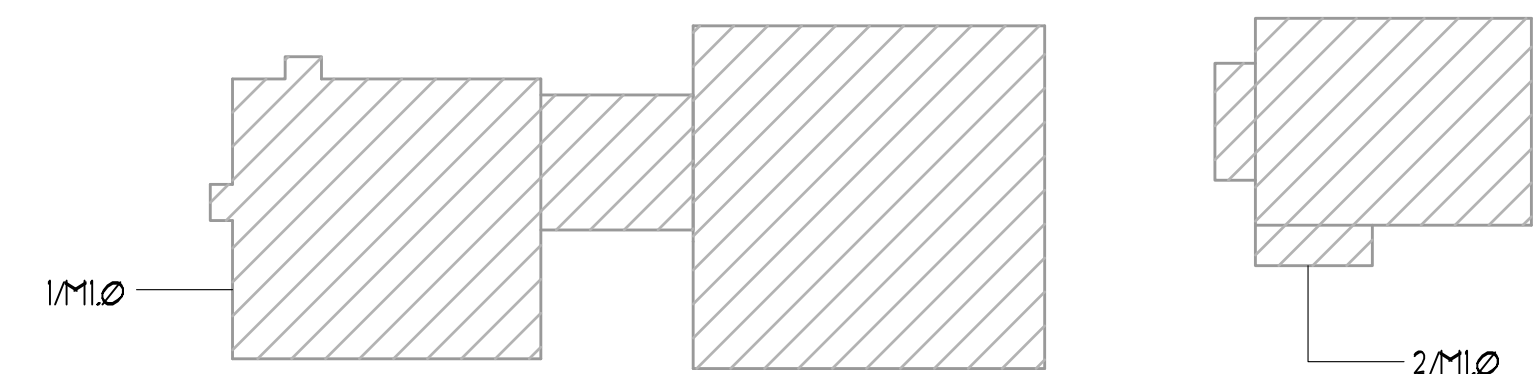


2 FQC ROOF PLAN - HVAC
 SCALE: 1/16" = 1'-0"



- KEYED NOTES:**
- ① EXISTING UNIT TO BE REMOVED & REPLACED & EXISTING CURB TO REMAIN
 - ② CONNECT NEW CONDENSATE TO EXISTING
 - ③ CONNECT NEW GAS TO EXISTING
 - ④ ADAPTOR CURB REQUIRED
 - ⑤ EXISTING EQUIPMENT TO REMAIN
 - ⑥ EXISTING UNIT & CURB REPLACED WITH NEW UNIT ON NEW CURB
 - ⑦ REMOVE EXHAUST FAN CAP CURB. CURB CAP TO BE INSULATED WITH 2" POLYSTYRENE
 - ⑧ GAS PIPE ON THRU ROOF. SEE I/M21 FOR CONTINUATION

1 ROOF PLAN - HVAC
 SCALE: 1/16" = 1'-0"



KEY PLAN

RELEASED FOR CONSTRUCTION

APPROVAL

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

CARMAX
 THE AUTO SUPERSTORE
CARMAX THE AUTO SUPERSTORE WEST COAST, INC.
 18000 AUTOMATION
 10000 GREEN PARKWAY, RICHMOND, VA 23238
STORE NO. 7159
4300 MCHENRY AVE.
MODESTO, CALIFORNIA

PROJECT NO	20241
DATE	20 JAN 2021
SHEET TITLE	ROOF PLANS - HVAC
SHEET NO	M1.0



1/20/21

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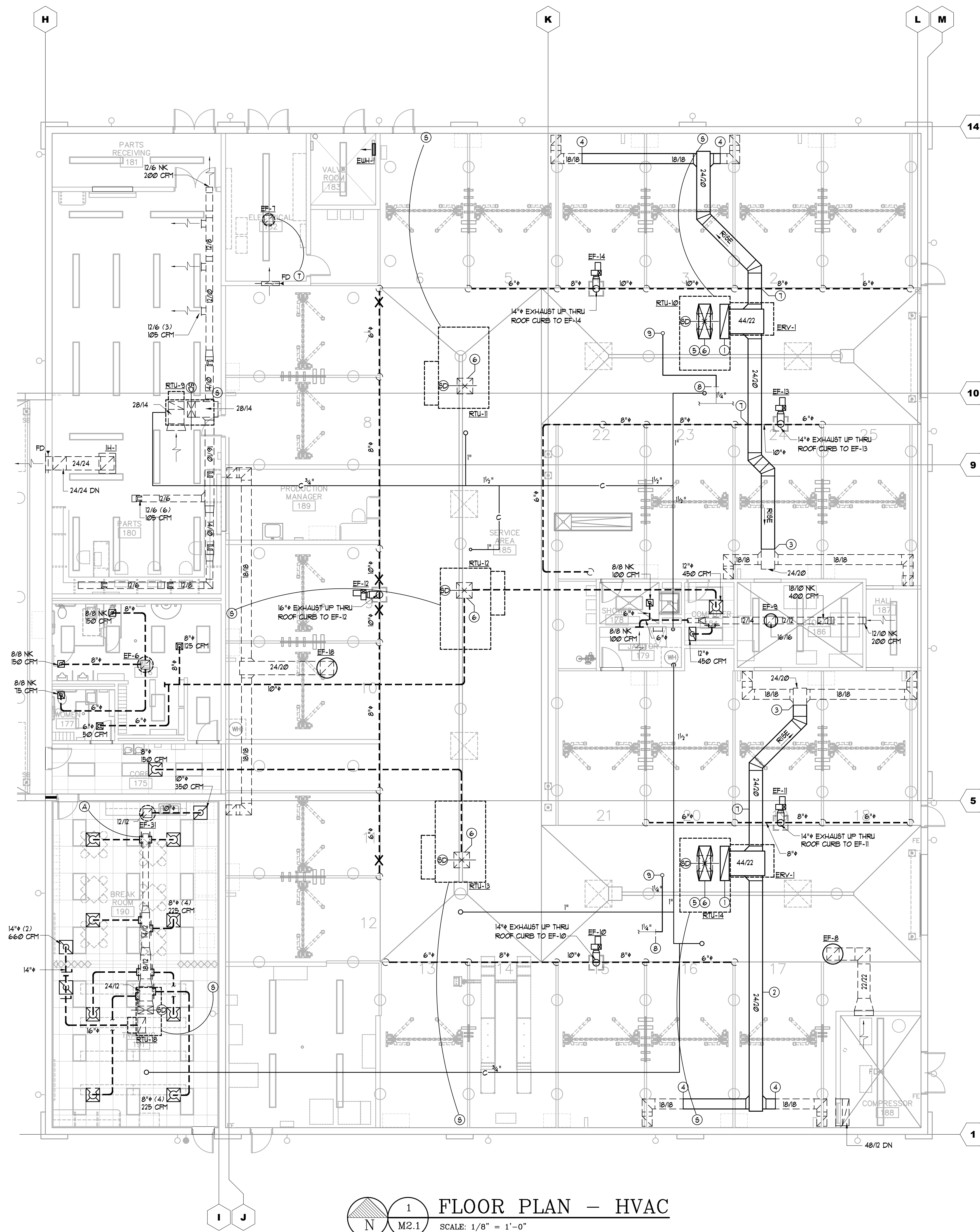
SERVICE AREA AIR BALANCE			
ITEM	SERVES	O.A.	EXHAUST
RTU-10 (ERV)	SERVICE	6000	5600 (LOW)
RTU-11 (BP)	SERVICE	6000	
RTU-12 (BP)	SERVICE	6000	
RTU-13 (BP)	SERVICE	6000	
RTU-14 (ERV)	SERVICE	6000	5600 (LOW)
EF-6	TOILET		400
EF-7	CO EXHAUST		1200
EF-8	COMP ROOM		3500
EF-9	DETAIL STOR.		1250
EF-10	CO EXHAUST		1500
EF-11	CO EXHAUST		1200
EF-12	CO EXHAUST		1800
EF-13	CO EXHAUST		1500
EF-14	CO EXHAUST		1800
EF-15	LOW EXH		3400 (LOW)
TOTAL		30000	28750

MINIMUM 1 CFM/SF EXHAUST AT THE FLOOR FOR EXEMPTION TO CLASS I DIVISION II PER NEC SERVICE NET AREA 14,300 SF
 TOTAL EXHAUST FROM ERV'S AND EF-15:
 215600' + 3400' + 14600 CFM

MINIMUM EXHAUST PER 2019 CALIFORNIA MECHANICAL CODE FOR REPAIR GARAGES PER TABLE 403.1.1 IS 15 CFM/SF
 MINIMUM EXHAUST = 15(14,300)
 MINIMUM EXHAUST = 21450 CFM

KEYED NOTES

- 1 FLENUM FULL SIZE OF UNIT CONNECTION
- 2 HOLD DUCT HIGH @ BOTTOM OF BAR JOIST
- 3 CONNECT NEW 24/20 TO EXISTING 18/18
- 4 CONNECT NEW 18/18 TO EXISTING 18/18
- 5 EXISTING SUPPLY FLENUM 4 REGISTERS TO REMOVED PRIOR TO CURB REMOVAL AND REUSED AT NEW RTU
- 6 EXISTING SUPPLY FLENUM 4 REGISTERS TO REMAIN. CLEAN ALL REGISTERS & REPLACE DAMAGED REGISTERS WITH NEW
- 7 NEW EXHAUST DUCT UNDER EXISTING CARBON MONOXIDE EXHAUST DUCT
- 8 CONNECT NEW GAS PIPE TO EXISTING
- 9 GAS PIPE UP THRU ROOF. SEE 9/14/20 FOR DETAIL



1 FLOOR PLAN - HVAC
 SCALE: 1/8" = 1'-0"

RELEASED FOR CONSTRUCTION

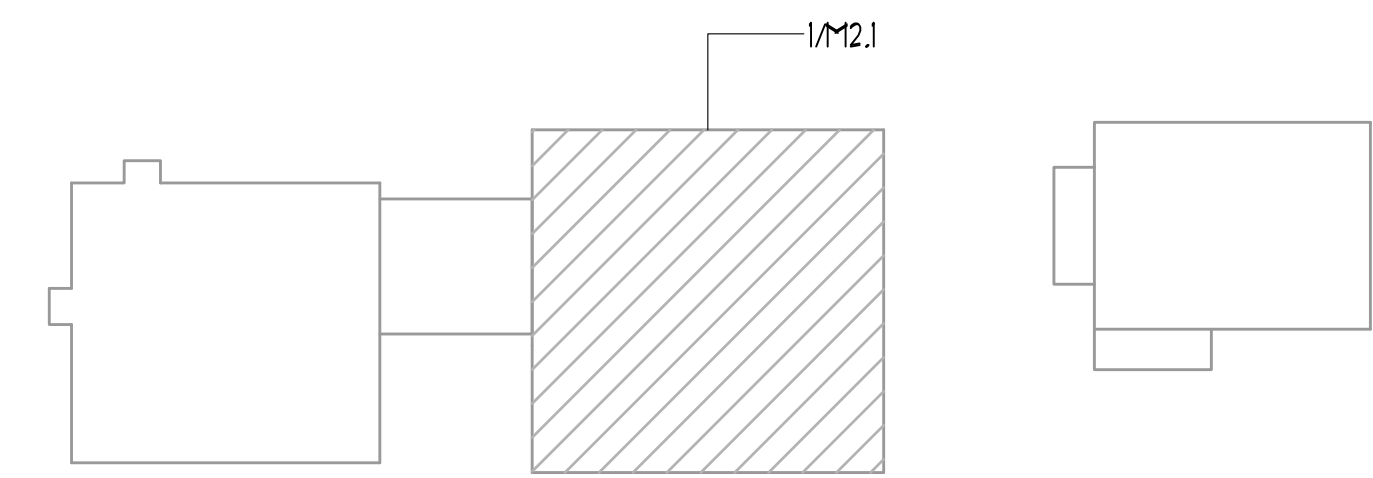
APPROVAL

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

CARMAX
 THE AUTO SUPERSTORE
 CARMAX THE AUTO SUPERSTORE WEST COAST, INC.
 18000 HUNTERS GREEN PARKWAY, RICHMOND, VA 23238
 STORE NO. 7159
 4300 MCHENRY AVE.
 MODESTO, CALIFORNIA

PROJECT NO	20241
DATE	20 JAN 2021
SHEET TITLE	FLOOR PLAN - HVAC
SHEET NO	M2.1



KEY PLAN

HVAC GENERAL NOTES

- ALL CONTROL WIRING SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST EDITION OF NFPA 70. ALL WIRING SHALL BE CONCEALED.
- CONTRACTOR SHALL INSTALL ALL ROOF CURBS FOR ROOFTOP UNITS LEVEL TO HORIZON AT (4) CORNERS.
- AIR TEST AND BALANCE REQUIRED BY INDEPENDENT T4B CONTRACTOR, AABC OR NEBS CERTIFIED. SEE TEST AND BALANCE SCOPE ON THIS SHEET. SUBMIT REPORT TO ENGINEER FOR REVIEW.
- EXISTING SMOKE DETECTORS TO REMAIN AND BE REUSED.
- LENNOX START UP TECH SHALL PROGRAM THE PRODIGY BOARDS IN ALL NEW RTU'S. PRODIGY BOARDS SHALL BE PROGRAMMED PRIOR TO CSUSA RECOMMISSIONING THE NOVAR SYSTEM.
- CONTRACTOR SHALL PROVIDE CLEAN FILTERS IN ROOFTOP UNITS PRIOR TO AIR BALANCE AND AGAIN PRIOR TO OWNER ACCEPTANCE.
- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL BUILDING CODES. ALL EQUIPMENT AND MATERIALS CAPABLE OF BEING UL LABELED OR LISTED SHALL BEAR THE UL LABEL.
- CONTRACTOR SHALL PROVIDE A GASKET BETWEEN BASE OF ROOF MOUNTED FANS AND ROOF CURBS TO PROVIDE AN AIRTIGHT JOINT.
- PROVIDE MISCELLANEOUS STEEL AND/OR WOOD BLOCKING AND SUPPORT AT ROOF CURBS AND OPENINGS AS REQUIRED TO SUPPORT ROOF AND EQUIPMENT. SPECIFIC REQUIREMENTS SHALL BE VERIFIED WITH STRUCTURAL ENGINEER AND APPROVED EQUIPMENT DRAWINGS PRIOR TO PLACEMENT.
- NEW SUPPLY AND EXHAUST DUCT SHALL BE 20 IN PRESSURE CLASS.
- NEW DUCT SHALL HAVE PAINT GRIP FINISH AND BE EITHER GALVANNEALED OR MILL PHOSPHATIZED.
- ANY NEW SUPPLY DUCT SHALL BE INTERNALLY INSULATED WITH 1" DUCT LINER EQUAL TO OENS CORNING ACCOSITEX 15 LB DENSITY R4.9.
- NEW EXHAUST DUCT TO ERV'S IS NOT REQUIRED TO BE INSULATED.

ROOFTOP UNIT NOTES

- CARMAX AUTO SUPERSTORE, LLC HAS A NATIONAL ACCOUNT WITH LENNOX INDUSTRIES, INC. FOR PRICING AND DELIVERY OF PACKAGED ROOFTOP UNITS IN ACCORDANCE WITH THE FOLLOWING. NO SUBSTITUTIONS WILL BE ALLOWED.
 - ROOFTOP UNITS SHALL BE AS SCHEDULED.
 - THE ELECTRICAL PACKAGE SHALL INCLUDE:
 - UNIT DISCONNECT (INSTALLED AND WIRED)
 - BOTTOM GAS/POWER ENTRY
 - STANDARD LOW AMBIENT CONTROL
 - DUAL DRY GFCI TYPE OUTLETS (TO BE FIELD WIRED)
 - GLOBAL DRY BUILD ECONOMIZERS (IF AN POWERED EXHAUST (1ST AND LARGER UNLESS NOTED OTHERWISE)
 - GLOBAL DRY BUILD ECONOMIZERS (BAROMETRIC RELIEF (6T AND 5" SMALLER)
 - STAINLESS STEEL HEAT EXCHANGER AND FRESH AIR TEMPERING FOR BYPASS UNITS AND ERV UNITS

- THE LENNOX NATIONAL ACCOUNT CONTACT IS:

RON JOHNSON
104-671-2626

- HVAC EQUIPMENT PERFORMANCE CHECK (EPC)

UPON COMPLETION OF THE HVAC INSTALLATION AND STARTUP, THE OWNER'S SERVICE CONSULTANT, AT THE OWNER'S EXPENSE, IS TO INSPECT THE JOB AND PREPARE AN EPC. THIS EPC WILL AID THE CONTRACTOR IN CHECKING EACH MACHINE FOR PROPER OPERATION, CHECKING THE CONTROL PANEL AND ADJUSTING CONTROLS AS NECESSARY.

THE OWNER'S SERVICE CONSULTANT:
COMFORT SYSTEMS
ATTN: VALERIE BEDEL
P: 317-246-9181
valerie@csusa.com

ALL PROBLEMS DISCOVERED WITH THE EQUIPMENT OR ITS INSTALLATION (EXCLUDING NOVAR INSTALLATION) SHALL BE CORRECTED BY THE HVAC SUBCONTRACTOR IN ACCORDANCE WITH THE OWNER'S SERVICE CONSULTANT.

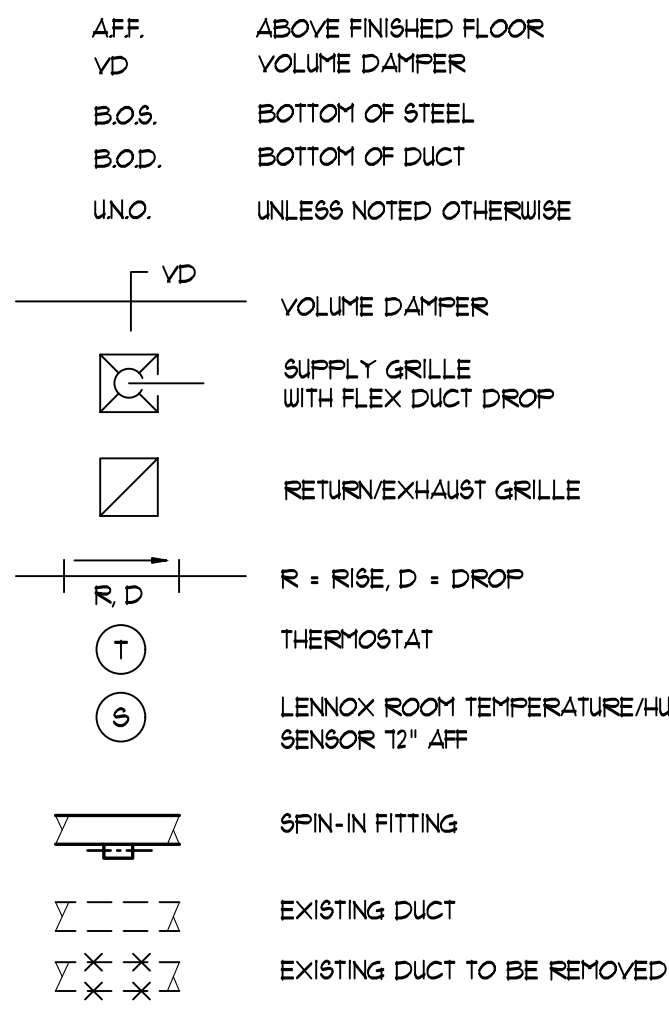
AFTER ALL PROBLEMS HAVE BEEN CORRECTED, CARMAX AUTO SUPERSTORE, LLC SHALL VERIFY ALL EQUIPMENT IS OPERATING PROPERLY THROUGH THE NOVAR CONTROLLERS.

PRIOR TO PERFORMANCE OF THE EPC, THE CONTRACTOR SHALL HAVE SET AND CONNECTED ALL COMPONENTS COMPLETED THE POWER WIRING, CONNECTED ALL PIPING, REMOVED ALL SHIPPING BLOCKS, COMPLETED THE STARTUP OF ALL UNITS AND FURNISHED THE PRE-EPC CHECKLIST TO THE OWNER'S SERVICE CONSULTANT.

THE EPC INCLUDES A FULL WRITTEN REPORT. COPIES WILL BE SENT TO THE GENERAL CONTRACTOR AND CARMAX AUTO SUPERSTORE, LLC. COPIES OF THE EPC SHALL BE INCORPORATED IN TO THE O & M MANUALS BY THE GENERAL CONTRACTOR.

- RTU AIR FILTERS SHALL BE CAMEL FARR AEROPLEAT III (PLEATED, 2" THICK FIBER 13, OR EQUAL, MARK FILTERS WITH INSTALLATION DATE.
- THE PACKAGE COMPONENTS WILL BE CLEARLY LABELED (IN LEGIBLE FONT) ON THE EXTERIOR OF ALL BOXES OR CRATES.
- SUBMIT RTU SUBMITTALS IN PDF OR MSWORD FORMAT TO THE ENGINEER FOR APPROVAL.

HVAC LEGEND



PIPING GENERAL NOTES

- ANY NEW GAS PIPING SHALL BE ASTM A-100, SCHEDULE 40, BLACK STEEL WITH 80 LB. MALLEABLE IRON SCREWED FITTINGS.
- ANY NEW EXTERIOR GAS PIPE SHALL BE PAINTED WITH RUST PROHIBITIVE PAINT.

CONTROLS SCOPE OF WORK:

EXISTING RTU'S ARE ON LOGIC ONE BUS, SAVVY COMMUNICATIONS TO COM ALL RTU'S WITH ETH 20515 I/O IS BY THE INTEGRATED IOM IN THE SAVVY.

- ALL NEW RTU'S WILL BE BACNET.
- THE GENERAL CONTRACTOR SHALL RETAIN COMFORT SYSTEMS USA (CSUSA) TO FURNISH AND INSTALL CONTROLS AS INDICATED BELOW. THE CONTACT AT CSUSA IS: VALERIE BEDEL, 317-246-9181
- PROVIDE PRE-CONSTRUCTION SCREEN SHOTS FROM NOVAR EMS MONITORING TO INCLUDE UNIT STATUS, MODULE COMMUNICATIONS STATUS AND ACTIVE ALARMS.
- NOT USED
- CONNECT NEW RTU'S W/PRODIGY BOARDS TO BACNET COMMUNICATION.
- FOR NEW RTU'S REPLACE RTU NOVAR TEMPERATURE SENSORS WITH LENNOX SENSORS.
- REPLACE/UPGRADE SAVVY 31 WITH OPIUS XCM105 PANEL. SAME BASE PLATE, MINIMAL RE-WIRING REQUIRED.
- CONNECT BACNET NETWORK AS REQUIRED.
- TURN OVER SAVVY 31 PANEL AND ETH'S TO CARMAX FOR FUTURE SERVICE CALL INVENTORY SHIP TO COMFORT SYSTEMS USA, ATTN VALERIE BEDEL, CARMAX EMS ACCOUNT CO-ORDINATOR
- UPDATE SOFTWARE PER NEW CARMAX TEMPLATE
- COMMISSION EMS SYSTEM
- PROVIDE POST CONSTRUCTION SCREEN SHOTS FROM NOVAR EMS MONITORING TO INCLUDE UNIT STATUS, MODULE COMMUNICATIONS STATUS AND ACTIVE ALARMS.
- LENNOX/CARMAX RTU SET UP SHEET IS TO BE COMPLETED UPON UNIT STARTUP. A COMPLETED SHEET IS TO BE LEFT IN EACH NEW RTU AND A COPY SUBMITTED WITH CLOSE OUT DOCUMENTATION FOR EACH NEW RTU.
- FURNISH AND INSTALL ADDITIONAL CONTROL WIRE FOR CO2 SENSORS AND UNITS WITH HUMIDITROL.
- ALL CONTROL COMMUNICATIONS BUS AND SENSOR WIRING NEW AND EXISTING, IS PART OF THE CONTROLS CONTRACTOR SCOPE OF WORK. REPLACE ANY DAMAGED WIRE.

TEST & BALANCE SCOPE					
MARK	TOTAL AIR ACROSS COIL	OUTSIDE AIR	BYPASS AIR	SUPPLY AIR TO REGISTERS	OTHER
RTU-1 THRU 9, 15, 4 18	AS SCHEDULED	AS SCHEDULED	--	--	
RTU-11, 12, 4 13	10000	6000	1000	6000	RTU-11: 4 REGISTERS @ 1500 CFM EACH RTU-12: 4 REGISTERS @ 1500 CFM EACH, 3 DIFFUSERS AS SHOWN ON I/P 2 RTU-13: 4 REGISTERS @ 1465 CFM EACH # 1 @ 1500 CFM
RTU-16 4 17	1300	6300	1000	6300	RTU-16: 4 REGISTERS @ 1250 CFM EACH, 2 REGISTERS @ 550 CFM EACH # 1 DIFFUSER @ 2000 CFM RTU-17: 5 REGISTERS @ 1260 CFM EACH
RTU-10 4 14	6000	--	--	6000	4 REGISTERS @ 1500 CFM EACH
ERV-1	--	6000	--	--	5000 CFM EXHAUST (RTU-10 4 14)
EF-10	--	--	--	--	2 @ 1000 CFM

SUGGESTED TEST & BALANCE PROCEDURE FOR BYPASS UNITS:

- RTU-11 THRU 13
- CLOSE BYPASS DAMPER & MAKE AIR QTY 10000 CFM.
 - GRADUALLY OPEN BYPASS DAMPER UNTIL OUTSIDE AIR IS 6000 CFM. THIS MEANS 1000 CFM IS BEING BYPASSED IN THE CURB.
 - OUTSIDE AIR SHOULD EQUAL SUPPLY AIR TO THE REGISTERS
 - TEST AND BALANCE CONTRACTOR TO NOTIFY COMFORT SYSTEMS AND INCLUDE IN T4B REPORT REGARDING MINIMUM POSITION OF OUTSIDE AIR DAMPER. SEE RTU NOTES FOR CONTACT INFO.

- RTU-16 4 17
- CLOSE BYPASS DAMPER & MAKE AIR QTY 1300 CFM.
 - GRADUALLY OPEN BYPASS DAMPER UNTIL OUTSIDE AIR IS 6300 CFM. THIS MEANS 1000 CFM IS BEING BYPASSED IN THE CURB.
 - OUTSIDE AIR SHOULD EQUAL SUPPLY AIR TO THE REGISTERS
 - TEST AND BALANCE CONTRACTOR TO NOTIFY COMFORT SYSTEMS AND INCLUDE IN T4B REPORT REGARDING MINIMUM POSITION OF OUTSIDE AIR DAMPER. SEE RTU NOTES FOR CONTACT INFO.

EXISTING ROOFTOP UNIT SCHEDULE

(SHOWN FOR REFERENCE ONLY)

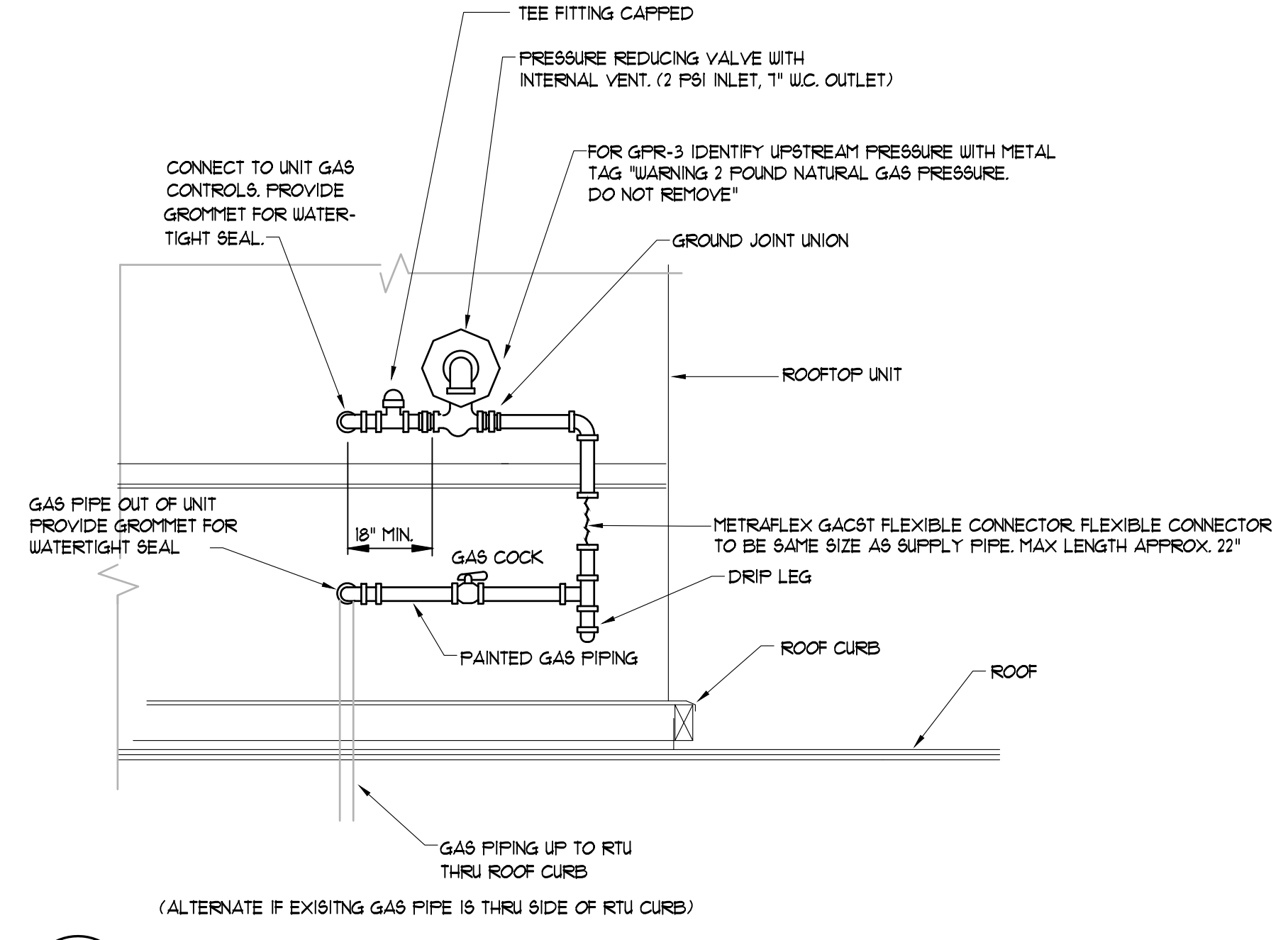
MARK	ZONE	EER	THERM EFF	VOLT/PH	FAN DATA				COOLING DATA			GAS DATA		MIN. O/A CFM	MODEL	WEIGHT	REMARKS ①	
					CFM	TOT IN UC	ESP IN UC	HP	EAT DB/AB	TOT MBH	SENSIBLE MBH	INPUT MBH	OUTPUT MBH					
RTU-1	SHOOROOM	11.8	80%	480/3	6750	1025	.8	5.0	11.1/63.5	182.6	155.6	260	208	650	LENNOX	LGC180H	2900	
RTU-2	SHOOROOM	11.8	80%	480/3	6750	1025	.8	5.0	11.1/63.5	182.6	155.6	260	208	650	LENNOX	LGC180H	2900	
RTU-3	CUSTOMER	11.2	80%	480/3	1300	.63	.6	1.5	19.1/63.9	39.1	33.5	78	62.4	200	LENNOX	LGA042H	900	
RTU-4	BUSINESS	11.0	80%	480/3	2050	.63	.6	1.5	20.2/64.3	58.1	51.3	78	62.4	200	LENNOX	LGA060H	900	
RTU-5	BUYERS	11.3	80%	480/3	1500	.63	.6	1.5	21.2/64.1	45.8	31.3	78	62.4	200	LENNOX	LGA048H	900	
RTU-6	DATA/PBX	11.2	80%	480/3	960	.63	.6	1.5	75/67.1	34	23.8	-	-	-	LENNOX	LCA036H	900	
RTU-7	BREAK/CONF	11.2	80%	480/3	1300	.63	.6	1.5	13.8/63.8	45.1	36.2	78	62.4	200	LENNOX	LGA048H	900	
RTU-8	SERVICE WRITER	11.3	80%	480/3	1700	.72	.6	1.5	17.6/63.4	47	39.8	78	62.4	180	LENNOX	LGA048H	900	
RTU-9	PARTS	11.3	80%	480/3	1200	.63	.6	1.5	28.7/66.5	47.1	43.5	78	62.4	270	LENNOX	LGA048H	900	
RTU-10	SERVICE AREA	10.2	80%	480/3	1000	1.04	.8	5.0	96.7/69.2	281	281	470	376	6000	LENNOX	LGA300H	4300	②③
RTU-11	SERVICE AREA	10.2	80%	480/3	1000	1.04	.8	5.0	96.7/69.2	281	281	470	376	6000	LENNOX	LGA300H	4300	②③
RTU-12	SERVICE AREA	10.2	80%	480/3	1000	1.04	.8	5.0	96.7/69.2	281	281	470	376	6000	LENNOX	LGA300H	4300	②③
RTU-13	SERVICE AREA	10.2	80%	480/3	1000	1.04	.8	5.0	96.7/69.2	281	281	470	376	6000	LENNOX	LGA300H	4300	②③
RTU-14	SERVICE AREA	10.2	80%	480/3	1000	1.04	.8	5.0	96.7/69.2	281	281	470	376	6000	LENNOX	LGA300H	4300	②③
RTU-15	FQC	11.0	80%	480/3	3200	.86	.6	2.0	28.2/66.1	117	112	130	104	900	LENNOX	LGA120H	1600	
RTU-16	PAINT AREA	10.2	80%	480/3	7300	1.04	.8	5.0	96.7/69.2	281	281	470	376	6300	LENNOX	LGA300H	4300	③④
RTU-17	PAINT AREA	10.2	80%	480/3	7300	1.04	.8	5.0	96.7/69.2	281	281	470	376	6300	LENNOX	LGA300H	4300	③④
RTU-18	BREAK/TRAIN	11.0	80%	480/3	1800	.72	.62	1.5	22.9/65.6	59.4	56.5	78	62.4	480	LENNOX	LGA060H	900	

- PROVIDE WITH FACTORY INSTALLED NOVAR CONTROL MODULE. LGA UNIT SERIES (MODEL 2051)
- BY-PASS CURB AND BY-PASS MIXING BOX
- BY-PASS CURB AND BY-PASS MIXING BOX
- BY-PASS 1000 CFM, 6000 CFM TO SPACE

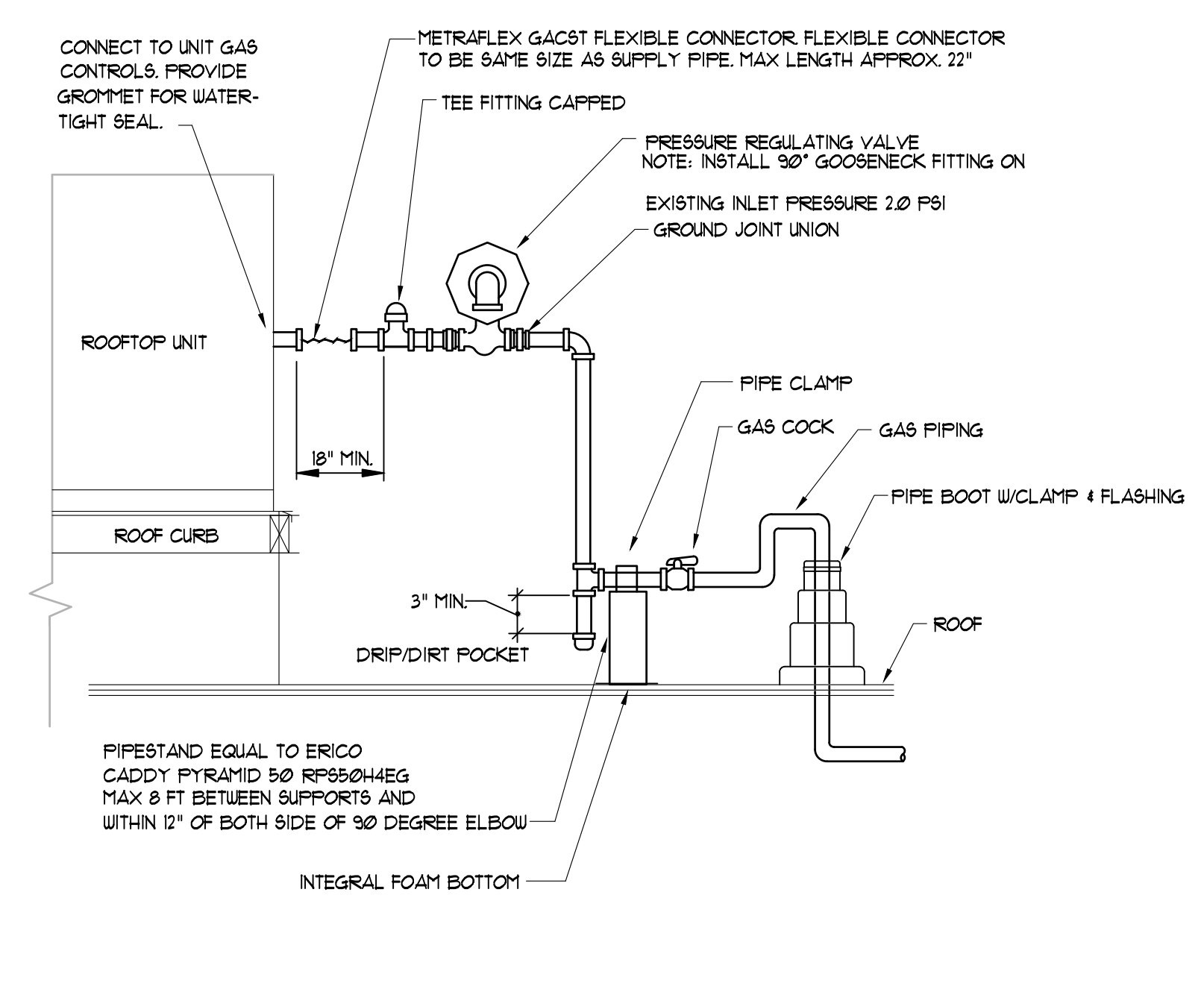
ROOFTOP UNIT SCHEDULE

MARK	ZONE	EER	VOLT/PH	FAN DATA				COOLING DATA ③			GAS DATA		MIN. O/A CFM	MODEL ①	WEIGHT	REMARKS ②④⑤⑥⑦⑧⑨⑩⑪	
				CFM	TOT IN UC	ESP IN UC	HP	EAT DB/AB	TOT SENSIBLE MBH	INPUT MBH	OUTPUT MBH						
RTU-1	SHOOROOM	12.0	480/3	6750	11	200	5.0	--	--	--	260	208	650	LENNOX	LGH180H4M	2650	(14)(11)
RTU-2	SHOOROOM	12.0	480/3	6750	11	200	5.0	--	--	--	260	208	650	LENNOX	LGH180H4M	2650	(14)(11)
RTU-3	CUSTOMER	12.8	480/3	1300	.75	60	3/4	--	--	--	65	52	200	LENNOX	LGH048H4E	1000	(12)(8)
RTU-4	BUSINESS	12.7	480/3	2050	.82	60	1.0	--	--	--	65	52	200	LENNOX	LGH060H4E	1100	(12)(8)
RTU-5	BUYERS	12.8	480/3	1500	.75	60	3/4	--	--	--	65	52	200	LENNOX	LGH048H4E	1000	(12)(8)
RTU-6	DATA/PBX	12.5	480/3	960	1.03	60	1/2	--	--	--	--	--	-	LENNOX	LCH036H4E	800	(12)
RTU-7	BREAK/CONF	12.8	480/3	1300	.75	60	3/4	--	--	--	65	52	200	LENNOX	LGH048H4E	1000	(11)(12)(8)
RTU-8	SERVICE WRITER	12.8	480/3	1700	.75	60	3/4	--	--	--	65	52	180	LENNOX	LGH048H4E	1000	(12)(8)
RTU-9	PARTS	12.8	480/3	1200	.75	60	3/4	--	--	--	65	52	270	LENNOX	LGH048H4E	1000	(12)(8)
RTU-10	SERVICE AREA (ERV)	12.0	480/3	6000	1.3	1.0	5.0	26/65	217	204	360	288	6000	LENNOX	LGH240H4E	2600	(20) (3) (8) (10) (13) (14) (16)
RTU-11	SERVICE AREA (BP)	11.6	480/3	1000	1.4	1.0	5.0	97/69	292	292	480	384	6000	LENNOX	LGH300H4E	4500	(3) (5) (7) (8) (10) (14)
RTU-12	SERVICE AREA (BP)	11.6	480/3	1000	1.4	1.0	5.0	97/69	292	292	480	384	6000	LENNOX	LGH300H4E	4500	(3) (5) (7) (8) (10) (14)
RTU-13	SERVICE AREA (BP)	11.6	480/3	1000	1.4	1.0	5.0	97/69	292	292	480	384	6000	LENNOX	LGH300H4E	4500	(3) (5) (7) (8) (10) (14)
RTU-14	SERVICE AREA (ERV)	12.0	480/3	6000	1.3	1.0	5.0	26/65	217	204	360	288	6000	LENNOX	LGH240H4E	2600	(20) (3) (8) (10) (13) (14) (16)
RTU-15	FQC	12.0	480/3	3200	1.03	60	2.0	--	--	--	130	108	900	LENNOX	LGH120H4E	1600	(6) (14) (16)
RTU-16	PAINT AREA (BP)	11.6	480/3	7300	1.4	1.0	5.0	97/69	295	295	480	384	6300	LENNOX	LGH300H4E	4500	(3) (7) (8) (10) (14) (16)
RTU-17	PAINT AREA (BP)	11.6	480/3	7300	1.4	1.0	5.0	97/69	295	295	480	384	6300	LENNOX	LGH300H4E	4500	(3) (7) (8) (10) (14) (16)
RTU-18	BREAK/TRAIN	12.1	480/3	1800	.80	60	1.0	--	--	--	65	52	480	LENNOX	LGH060H4E	1100	(12)(8) (11)

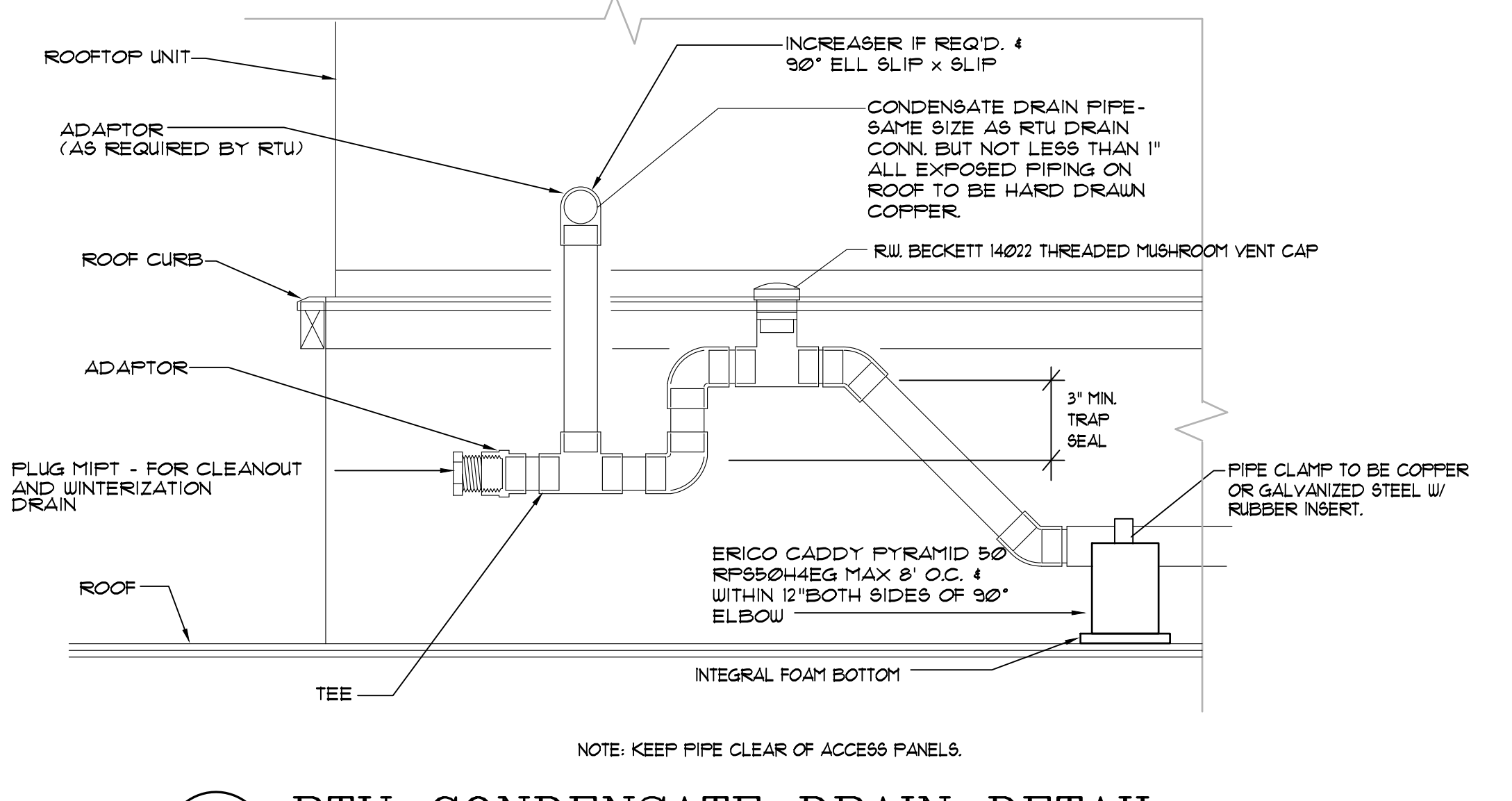
- ONLY ACCEPTABLE MANUFACTURER IS LENNOX. SEE "ROOFTOP UNIT NOTES"
- FIELD ADJUST SUPPLY FAN RPM TO PROVIDE AIR QUANTITIES AS SCHEDULED ABOVE. INSTALL FIELD-SUPPLIED MOTOR AND/OR DRIVE AS REQ'D
- INSTALL F.A.T. DISCHARGE AIR TEMPERATURE SENSOR. SHIPPED LOOSE IN RTU CABINET, INSTALL SENSOR IN SUPPLY IN SUPPLY DUCT APPROX 3FT BELOW ROOF DECK. SEE DETAIL 6/M4.0
- BACNET CONTROL, NEW TEMP SENSOR
- BY-PASS 1000 CFM IN CURB, 6000 CFM TO SPACE
- RETURN AIR ADAPTER PLATE
- REUSE EXISTING BY-PASS CURB, NEW MIXING BOX
- FRESH AIR TEMPERING, 100% OUTSIDE AIR
- 105°F CONDENSER AIR
- MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONNECTION OF WIRING HARNESS SHIPPED LOOSE IN RTU THAT ARE ASSOCIATED WITH OUTSIDE AIR DAMPER. THIS WILL INCLUDE CONTROL INTERLOCK WIRING FOR ERV'S AND OUTSIDE AIR DAMPER OPERATIONS FOR UNITS WITH BY-PASS CURBS & MIXING BOXES
- PROVIDE WITH DEMAND VENTILATION, CO2 SENSOR, MODULATING OUTSIDE AIR DAMPER, OUTSIDE AIR DAMPER CLOSED, ON A CALL FOR VENTILATION, OUTSIDE AIR DAMPER STARTS TO OPEN AT 700 PPM AND AT 1000 PPM MOVES TO 1/2 OPEN TO GIVE OUTSIDE AIR QUANTITY AS INDICATED IN SCHEDULE ABOVE. INSTALL CO2 SENSOR ADJACENT TO TEMP SENSOR
- ADAPTER CURB
- PROVIDE WITH 24" CLIP-LOCK CURB
- 2 STAGE HEAT
- PROVIDE WITH SEISMIC CURB CLIPS. SEE DETAIL 6/M4.0
- PROVIDE WITH ENERGY RECOVERY WHEEL. SEE SCHEDULE THIS SHEET.
- GLOBAL ECONOMIZER WITH POWERED EXHAUST
- GLOBAL ECONOMIZER WITH BAROMETRIC RELIEF
- BY-PASS 1000 CFM IN CURB, 6300 CFM TO SPACE
- DOES NOT INCLUDE WEIGHT OF ERV. SEE ERV SCHEDULE BELOW FOR ERV WEIGHT
- DRAIN PAN OVERFLOW SWITCH MODEL Z



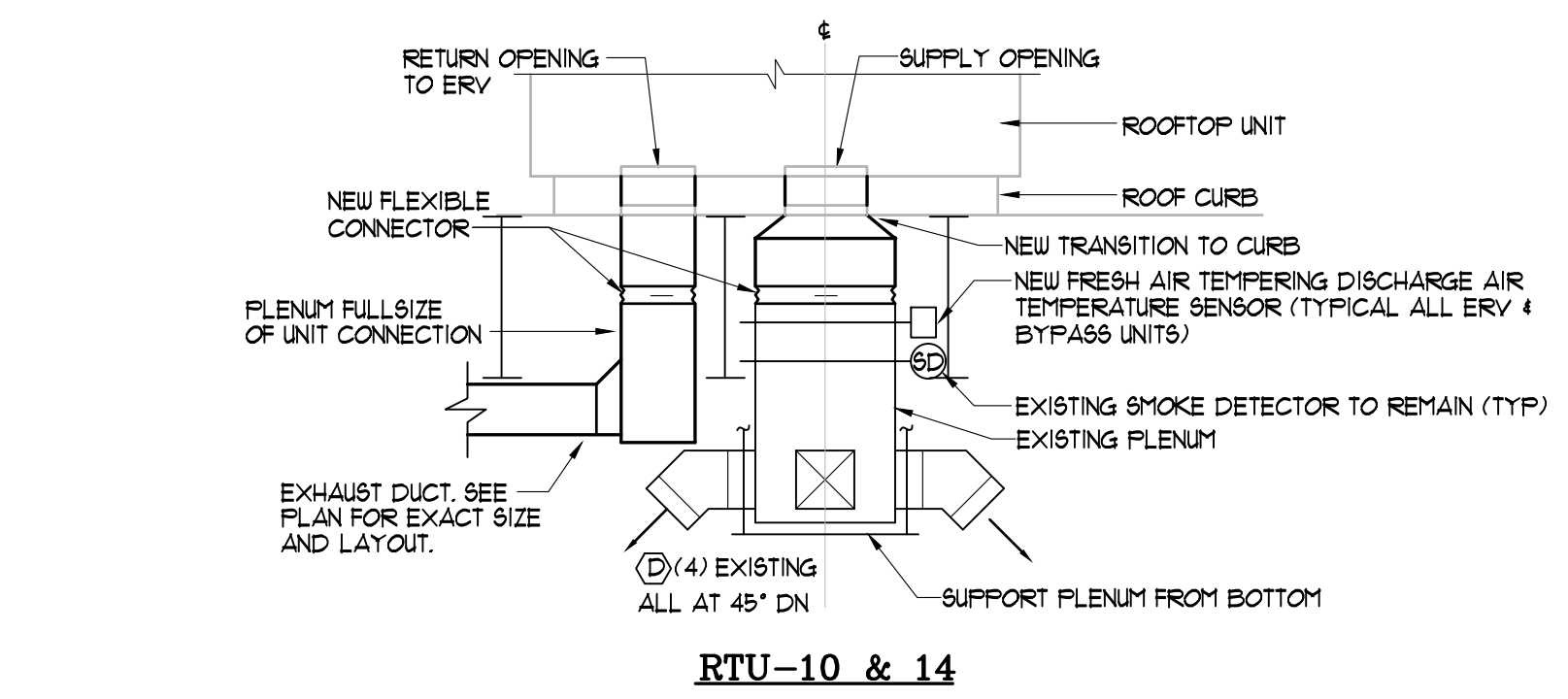
5 RTU GAS CONNECTION DETAIL
M4.0 NOT TO SCALE



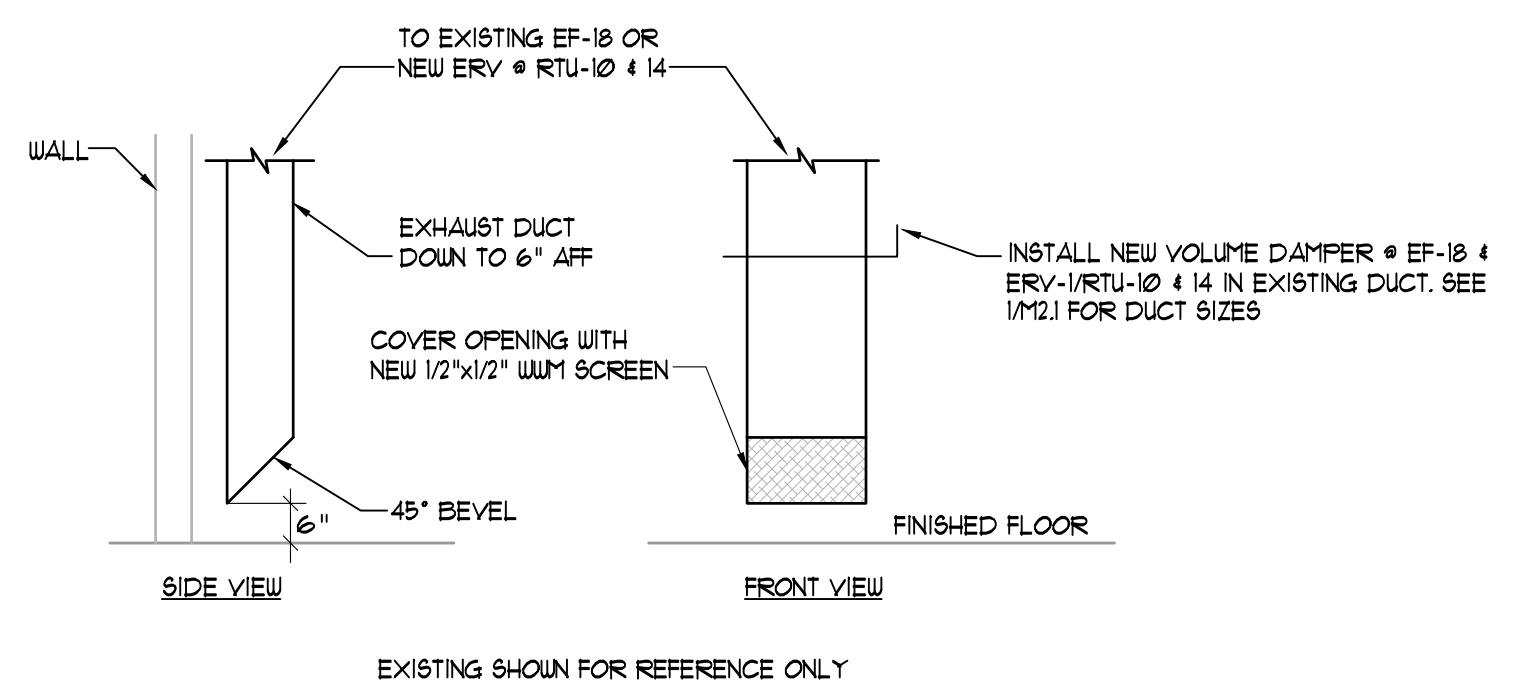
1 RTU GAS CONNECTION DETAIL
M4.0 NOT TO SCALE



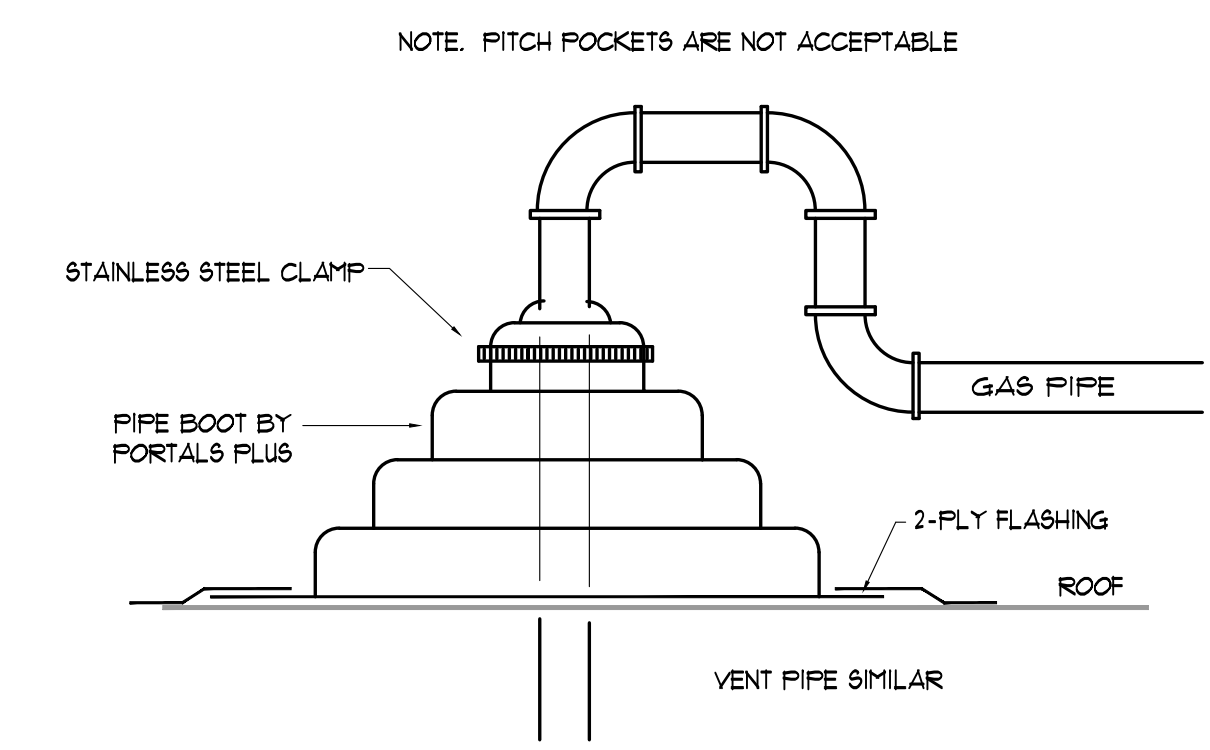
2 RTU CONDENSATE DRAIN DETAIL
M4.0 NOT TO SCALE



6 RTU DUCT DROP DETAIL
M4.0 NOT TO SCALE



7 EXHAUST DUCT
M4.0 NOT TO SCALE



9 PIPE THRU ROOF
M4.0 NOT TO SCALE

RUSKIN ROOFTOP SYSTEMS

SPECIFICATION DATA FOR LENNOX LGA / LCA 156 - 360 LHA 180-240

RRS MODEL: 50-307-33 BYPASS MIXING BOX

Features:
1. Heavy gauge construction.
2. Color coordinated with the unit.
3. Fully insulated with 1" fiberglass insulation 1.5 lb. density.
4. Access doors on both sides.
5. Factory wired and tested.
6. Low risk obstructed dampers.
7. Mixing Box must be sealed weather tight to RTU in field during installation.

1" SERIES UNIT
ROOF CURB
SUPPLY AIR DAMPER
MIXING BOX SUPPORT
BYPASS MIXING BOX (BMB)

RRS PART#	LENNOX UNIT#	A	B	C	NET WEIGHT
50-307-32	LGA/LCA 156-360	89 1/2"	50"	30 1/2"	550
50-307-33	LGA/LCA 300H-360	81 1/2"	53 1/2"	30"	600

FOR PRICES SEE: FORM LK-CM-101
MAY 10, 2010 FORM LKMB32 SUPERSEDES 18 02 16

1625 Diplomat Drive, Carrollton, Texas 75006-6848 Phone (972) 247-7447 (800) 952-4822 Fax (972) 243-0940

3 MIXING BOX DETAIL
M4.0 NOT TO SCALE

ROOFTOP SYSTEMS, INC.

SPECIFICATION DATA FOR CARMAX LGA / LCA 156 - 360 LHA 180-240

RSI MODEL: 50-275-32 ROOF CURB W/ BYPASS MIXING BOX SUPPORT

Features:
1. Roof curb is built to NRCA standards.
2. Roof curb is constructed of 16 gauge G90 steel.
3. Curb and mixing box support ships completely welded in one piece.
4. Full perimeter 2 x 4 wood nailer.
5. Supply plenum completely insulated and assembled.
6. Net weight of curb is 650 lbs.

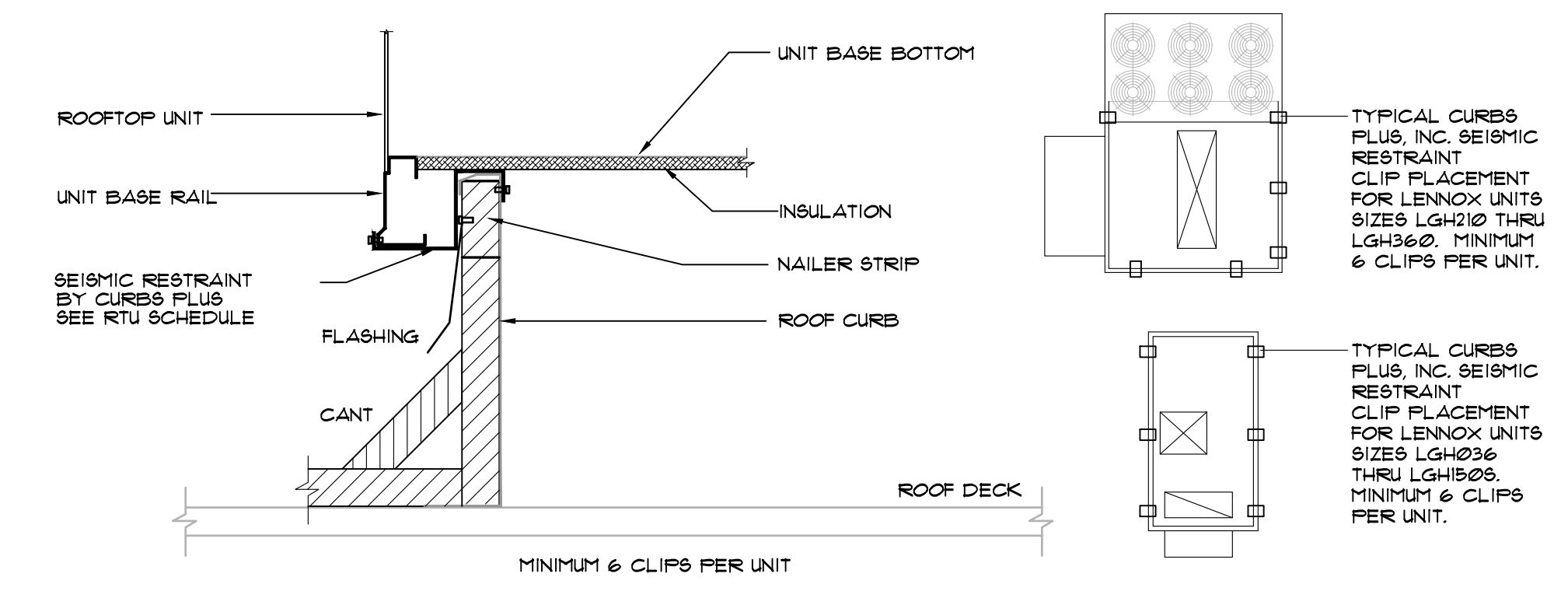
86 1/2"
27 1/2"
102 1/2"
54"
21"
81 1/2"
36 1/2"
18"
10"
SUPPLY OPENING
MIXING BOX SUPPORT

NOTE: BYPASS CURBS ARE EXISTING TO REMAIN. SHOWN FOR GENERAL INFORMATION ONLY.

FOR PRICES SEE: FORM LK-CM-101
SEPTEMBER 27, 2006 FORM LKCMHRS32 SUPERSEDES 12 04 16

2465 Motter Lane, Carrollton, Texas 75006-6510 Phone (972) 247-7447 (800) 952-4822 Fax (972) 243-0940

4 BYPASS CURB DETAIL
M4.0 NOT TO SCALE



8 RTU SEISMIC RESTRAINT - DETAIL
M4.0 NOT TO SCALE

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RELEASED FOR CONSTRUCTION

APPROVAL

REVISIONS

REV. NO.	DATE	DESCRIPTION	BY

CARMAX
THE AUTO SUPERSTORE
CARMAX THE AUTO SUPERSTORE WEST COAST, INC.
18000 GREEN CREEK PARKWAY, RICHMOND, VA 23238
STORE NO. 7159
4300 MCHENRY AVE.
MODESTO, CALIFORNIA

PROJECT NO	20241
DATE	20 JAN 2021
SHEET TITLE	DETAILS - HVAC