ADDENDUM 03

Issue Date: January 29, 2026

Project Information

Client: Abla Griffin Partnership
Project Name: Westmoore HS Comp Gym – RTU Replacement
Project Location: OKC, OK
Owner: Moore Public Schools
Engineer: Salas O'Brien, LLC

Project No. 2550-01871-00

To Prospective Bidders

- This Addendum forms a part of the Contract Documents and modifies the Bidding Documents dated November 13, 2025, (and previous Addenda), with amendments and additions noted below.
- This Addendum consists of (2) pages and (5) attachments.
    - Index of Attachments
        - M000
        - MD201
        - M201
        - M601
        - M602
- Acknowledge receipt of this Addendum in the space provided on the Bid Form. Failure to do so may disqualify Bidder.

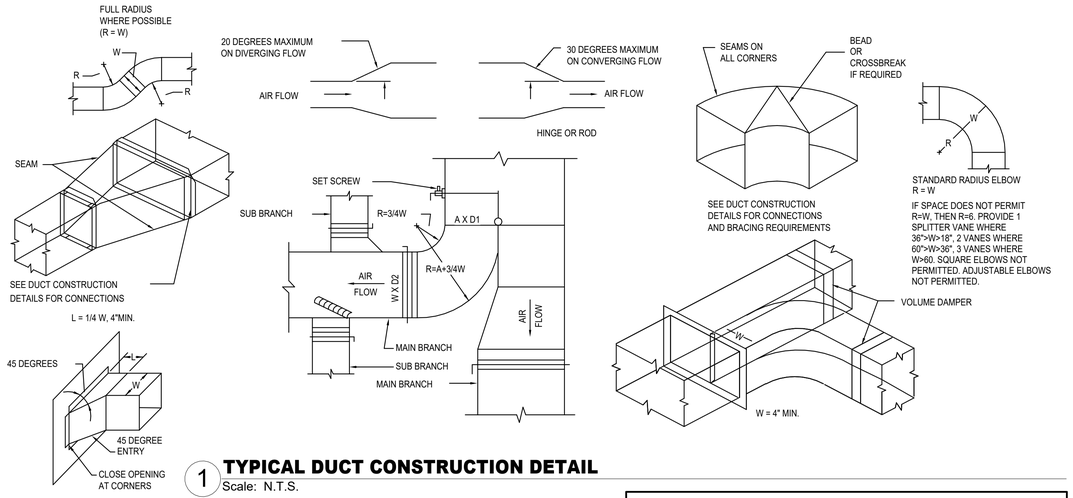
CHANGES TO THE DRAWINGS

Revisions have been made to the following drawings and are issued in the form of full-size plans. Edits are indicated by a revision delta and a cloud surrounding the affected portion of the drawing.

- M000 – MECHANICAL TITLE SHEET
    - Refer to clouds and deltas on plan.
- MD201 – MECHANICAL DEMOLITION ROOF PLAN
    - Refer to clouds and deltas on plan.

- M201 – MECHANICAL ROOF PLAN
  - Refer to clouds and deltas on plan.
- M601 – MECHANICAL DETAILS AND SCHEDULES
  - Refer to clouds and deltas on plan.
- M602 – MECHANICAL DETAILS AND SCHEDULES
  - Refer to clouds and deltas on plan.

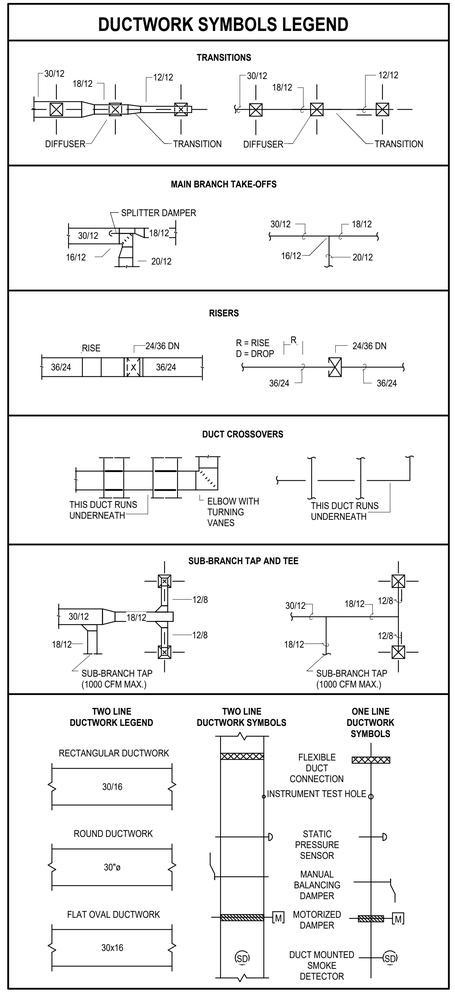
END OF ADDENDUM [03]



1 TYPICAL DUCT CONSTRUCTION DETAIL

Scale: N.T.S.

DUCTWORK SYMBOLS LEGEND



MECHANICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION (DISREGARD ITEMS NOT SHOWN ON PLANS)
GENERAL	
#	KEY NOTE TAG
1	REVISION TAG
	NEW EQUIPMENT
EQUIP-1	EQUIPMENT TAG
DUCTWORK	
	SUPPLY AIR DUCTWORK
	RETURN AIR AND OUTSIDE AIR DUCTWORK
	EXHAUST AIR DUCTWORK
	FLEXIBLE DUCTWORK
	SUPPLY AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	RETURN AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	EXHAUST AIR DUCTWORK THROUGH HORIZONTAL PARTITION
	ROUND DUCTWORK
	FIRE DAMPER (VERTICAL)
	FIRE DAMPER (HORIZONTAL)
S	SMOKE DAMPER (VERTICAL)
S	SMOKE DAMPER (HORIZONTAL)
F/S	COMBINATION FIRE & SMOKE DAMPER (VERTICAL)
F/S	COMBINATION FIRE & SMOKE DAMPER (HORIZONTAL)
	MANUAL BALANCING DAMPER (SEE DAMPER SCHEDULE)
M	MOTORIZED DAMPER (SEE DAMPER SCHEDULE)
SENSORS	
T	THERMOSTAT AND TEMPERATURE SENSOR
H	HUMIDISTAT
SD	SMOKE DETECTOR
HD	HEAT DETECTOR
AIR DEVICES	
	GRILLE SIZE TAG (REFER TO GRILLE SIZE LEGEND)
	SUPPLY AIR GRILLE WITH FOUR-WAY THROW
	SUPPLY AIR GRILLE WITH THREE-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY THROW
	SUPPLY AIR GRILLE WITH TWO-WAY CORNER THROW
	SUPPLY AIR GRILLE WITH ONE-WAY THROW
	RETURN AIR GRILLE
	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
	SUPPLY AIR SIDEWALL GRILLE
	RETURN AIR SIDEWALL GRILLE
20X12	RETURN AIR OPENING ABOVE CEILING
RENOVATIONS	
	POINT OF CONNECTION FROM NEW TO EXISTING
	ITEM TO REMAIN
	ITEM TO BE REMOVED

ABBREVIATIONS

A	AMP
ADD	ADDENDUM
ADJ	ADJUSTABLE
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLER UNIT
AI	ANALOG INPUT
ALT	ALTERNATE
AO	ANALOG OUTPUT
APPRX	APPROXIMATE
ARCH	ARCHITECT, ARCHITECTURAL
BDD	BACK DRAFT DAMPER
BLDG	BUILDING
BTUH	BRITISH THERMAL UNIT PER HOUR
C	CENTER
CD	CEILING DIFFUSER
CFM	CUBIC FEET PER MINUTE
CO	CLEAN OUT
COND	CONDENSATE
CONT	CONTINUOUS
COP	COEFFICIENT OF PERFORMANCE
DB	DRY BULB
DET	DETAIL
DG	DOOR GRILLE
DI	DIGITAL INPUT
DIA/Ø	DIAMETER
DIM	DIMENSION
DN	DOWN
DO	DIGITAL OUTPUT
DWG	DRAWING
EA	EXHAUST AIR
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
EER	ENERGY EFFICIENCY RATIO
EF	EXHAUST FAN
EG	EXHAUST GRILLE
ELEC	ELECTRICAL
ERV	ENERGY RECOVERY VENTILATOR
ESP	EXTERNAL STATIC PRESSURE
EWT	ENTERING WATER TEMPERATURE
EXIST	EXISTING
FA	FRESH AIR
FPM	FEET PER MINUTE
FT	FOOT (FEET)
GA	GAUGE/GAGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GPM	GALLONS PER MINUTE
GYP	GYPSUM
HORIZ	HORIZONTAL
HP	HORSEPOWER
HT	HEIGHT
I/O	INPUT/OUTPUT
IN	INCH
LAT	LEAVING AIR TEMPERATURE
LB	POUND
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	1000 BTU PER HOUR
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPS
MECH	MECHANICAL
MIN	MINIMUM
MFR	MANUFACTURER
NTS	NOT TO SCALE
OA	OUTSIDE AIR
OC	ON CENTER
P	PUMP
PC	PLUMBING CONTRACTOR
PLBG	PLUMBING
PSI	POUNDS PER SQUARE INCH
QTY	QUANTITY
RA	RETURN AIR
REQD	REQUIRED
REV	REVERSE OR REVISION
RG	RETURN AIR GRILLE
RPM	REVOLUTIONS PER MINUTE
RTU	ROOF TOP UNIT
SA	SUPPLY AIR
SQFT	SQUARE FEET
SG	SUPPLY GRILLE
SP	STATIC PRESSURE
SPEC	SPECIFICATIONS
SS	STAINLESS STEEL
T&B	TEST AND BALANCE
TEMP	TEMPERATURE OR TEMPORARY
TG	TRANSFER GRILLE
TYP	TYPICAL
V	VOLT
VAR	VARIABLE OR VARIES
VEL	VELOCITY
VFD	VARIABLE FREQUENCY DRIVE
VTR	VENT THRU ROOF
W/	WITH
W/IN	WITHIN
W/O	WITH OUT
WB	WET BULB
WC	WATER COLUMN (INCHES OF)
WT	WEIGHT

GENERAL MECHANICAL NOTES

1. ALL WORK SHALL BE IN COMPLIANCE WITH STATE AND LOCAL CODES.
2. THE CONTRACTOR SHALL PAY FOR ALL FEES, PERMITS, LICENSES, ETC., NECESSARY FOR PROPER COMPLETION OF THE WORK.
3. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
4. VERIFY ALL EXISTING CONDITIONS. NOTIFY ENGINEER OF ANY CONFLICTS BETWEEN CONTRACT DRAWINGS AND ACTUAL CONDITIONS.
5. EXISTING UTILITIES TO BE ABANDONED SHALL BE PROPERLY DISCONNECTED AND CAPPED AS REQUIRED BY CODE OR LOCAL ORDINANCE.
6. THESE DRAWINGS ARE DIAGRAMMATIC AND SHALL NOT BE SCALED. ADDITIONAL DATA SHALL BE FROM THE ENGINEER THROUGH WRITTEN CLARIFICATION ONLY. VERIFY ALL EXISTING CONDITIONS, ELEVATIONS, AND DIMENSIONS BEFORE PROCEEDING WITH ANY PORTION OF ANY WORK. THE CONTRACTOR SHALL PROVIDE ALL OFFSETS AND TRANSITIONS REQUIRED TO MEET EXISTING CONDITIONS.
7. THE CONTRACTOR SHALL PERFORM WORK IN A SKILLED AND PROFESSIONAL MANNER.
8. ALL CONTRACTORS ARE RESPONSIBLE TO FIELD COORDINATE WORK SCHEDULE WITH OWNER REPRESENTATIVE.
9. THE CONTRACTOR SHALL WORK AND COORDINATE WITH THE OTHER TRADES.
10. ALL EQUIPMENT SHALL BE NEW AND IN UNDAMAGED CONDITION. ANY EQUIPMENT FOUND DEFECTIVE SHALL BE IMMEDIATELY REMOVED FROM THE PROJECT.
11. PROVIDE 3 COPIES OF AN OPERATION AND MAINTENANCE MANUAL FOR ALL MAJOR EQUIPMENT REQUIRING SERVICE. MAJOR EQUIPMENT INCLUDES BUT IS NOT LIMITED TO COILS, FANS, AND CONTROL WIRING DIAGRAMS. EACH PIECE OF EQUIPMENT SHALL STATE THE CONTRACT DATE AND THE NAME, ADDRESS AND PHONE NUMBER FOR THE PRIME CONTRACTOR, SUBCONTRACTOR PERFORMING THE INSTALLATION, AND THE LOCAL VENDOR FOR SPARE PARTS. THE MANUALS SHALL CONTAIN MAINTENANCE INSTRUCTIONS REQUIRED FOR THE INSTALLED EQUIPMENT. MANUALS SHALL BE BOUND IN A THREE RING HARD COVER BINDER. O & M MANUALS SHALL BE SUBMITTED TO THE OWNER PRIOR TO FINAL WALK THROUGH OF THE PROJECT.
12. PROVIDE 8 HOURS OF OWNER TRAINING FOR THE INSTALLED EQUIPMENT. TRAINING SHALL BE HELD ONLY AFTER ALL OF THE EQUIPMENT IS INSTALLED AND PROPER OPERATION IS VERIFIED.
13. CONTRACTOR SHALL SUBMIT A CERTIFIED REPORT INDICATING SYSTEM PERFORMANCE INCLUDING, BUT NOT LIMITED TO, VOLTAGE AND AMPERAGE MEASUREMENTS OF ALL EQUIPMENT GREATER THAN 1/3 H.P. WATER BALANCE MEASUREMENTS OF EACH COIL AND PUMP. AIR BALANCE MEASUREMENTS OF OUTSIDE AIR DELIVERY, AIR HANDLING UNIT SUPPLY, SUPPLY DIFFUSERS, EXHAUST AND RETURN GRILLES. AIR BALANCE SHALL BE WITHIN 10% OF DESIGN CONDITIONS. THE REPORT CERTIFICATION SHALL BE AS FOLLOWS:

    I (name) of (company) CERTIFY THAT ALL MEASUREMENTS, FIGURES AND STATEMENTS INDICATED IN THIS REPORT WERE TAKEN BY ME OR UNDER MY SUPERVISION AND ARE ACCURATE AS OF (date). DESIGN FLOWS WERE BASED UPON PLANS DATED (xx/xx/xx).

14. DUCT MATERIAL SHALL BE GALVANIZED OR ALUMINUM CONSTRUCTION IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARD 2005 FOR THE PRESSURE AND SEAL CLASS LISTED IN DUCTWORK/INSULATION SCHEDULE.
15. DUCT SIZES LISTED ON PLANS ARE THE REQUIRED CLEAR INTERIOR DIMENSIONS.
16. SUPPLY AND RETURN BRANCH DUCTS MAY BE INSULATED FLEX DUCT IF THE RUN IS LESS THAN 5 FEET IN LENGTH. ANY LENGTHS OVER 5 FEET SHALL BE RIGID DUCTWORK, DUCT SHALL BE THE SAME SIZE AS THE LISTED DIFFUSER THROAT UNLESS NOTED OTHERWISE.
17. PROVIDE VOLUME CONTROL DAMPERS WHERE INDICATED AND AT ALL TAKEOFFS, BOTH SUPPLY AND RETURN SYSTEMS, AND MAJOR DUCT RUNS. DAMPERS SHALL BE FACTORY-FABRICATED WITH ZINC-PLATED, DIE-CAST CONTROL HARDWARE. CONTROL HARDWARE SHALL INCLUDE HEAVY GAUGE DIAL AND HANDLE WITH ELEVATED PLATFORM FOR INSULATED DUCT MOUNTING.
18. PROVIDE TURNING VANES IN ALL RECTANGULAR ELBOWS CONFORMING TO SMACNA DUCT CONSTRUCTION STANDARD 2005 FIG. 4-2 TYPE RE-3 WITH STANDARD RADIUS. WHERE SPACE PERMITS, PROVIDE RADIUSED ELBOWS IN ACCORDANCE WITH FIGURES 4-2, TYPE RE-1.
19. ALL RECTANGULAR MAIN TO RECTANGULAR BRANCH CONNECTIONS, BOTH CONVERGING AND DIVERGING CONFIGURATIONS, SHALL HAVE A 45 DEG. ENTRY TAP CONSTRUCTED IN ACCORDANCE WITH SMACNA DUCT CONSTRUCTION STANDARD 2005 FIG. 4-6.
20. DIFFUSER PATTERN 4-WAY UNLESS OTHERWISE INDICATED. PROVIDE FIBERGLASS DUCT INSULATION WITH VAPOR BARRIER AS SCHEDULED UNLESS NOTED OTHERWISE.
21. MECHANICAL CONTRACTOR TO REPAIR ANY DAMAGE DONE TO THE FIRE PROOFING WHILE INSTALLING THE MECHANICAL TRADES. SEAL ALL PENETRATIONS THROUGH RATED STRUCTURES WITH UL LISTED FIRE SEAL DESIGNED FOR THE SPECIFIED APPLICATION.
22. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE PUBLIC AND ADJACENT PROPERTIES FROM DAMAGE THROUGHOUT CONSTRUCTION.
23. THE CONTRACTOR SHALL GUARANTEE ALL WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION OR AS OTHERWISE REQUIRED IN THE SPECIFICATIONS.
24. MECHANICAL CONTRACTOR TO INCLUDE THE TEST AND BALANCE, AND ANY PERMIT FEES IN THEIR BID.
25. MECHANICAL CONTRACTOR SHALL VERIFY ALL ROOFTOP EQUIPMENT WEIGHTS, SIZES, LOCATIONS AND OPENINGS REQUIRED AND SHALL COORDINATE ANY CHANGES WITH THE ARCHITECT.
26. UPON PROJECT COMPLETION, RECORD (AS-BUILT) DRAWINGS SHALL BE PROVIDED BY THE CONTRACTOR TO THE BUILDING OWNER. ALL CHANGES MADE TO EQUIPMENT, DUCTWORK, AND GENERAL DESIGN SHALL BE NOTED ON THE DRAWINGS. PROVIDE IN PDF FORMAT OR PRINTED SET AT THE OWNER'S REQUEST.

MECHANICAL SHEET INDEX

AGP
the Abla Griffin Partnership L.L.C.
313 S. E. 5th Street
MOORE, OK. 73160
405.735.3477
AGP@theAGP.net
www.theAGP.net

CEDAR CREEK
CIVIL

KFC ENGINEERING
STRUCTURAL

SALAS O'BRIEN
MECHANICAL / ELECTRICAL

KF
drawn by

DMG
checked by

NOVEMBER 2025
date

REVISIONS

Δ	DESCRIPTION	DATE
2	ADD 03	01/29/26

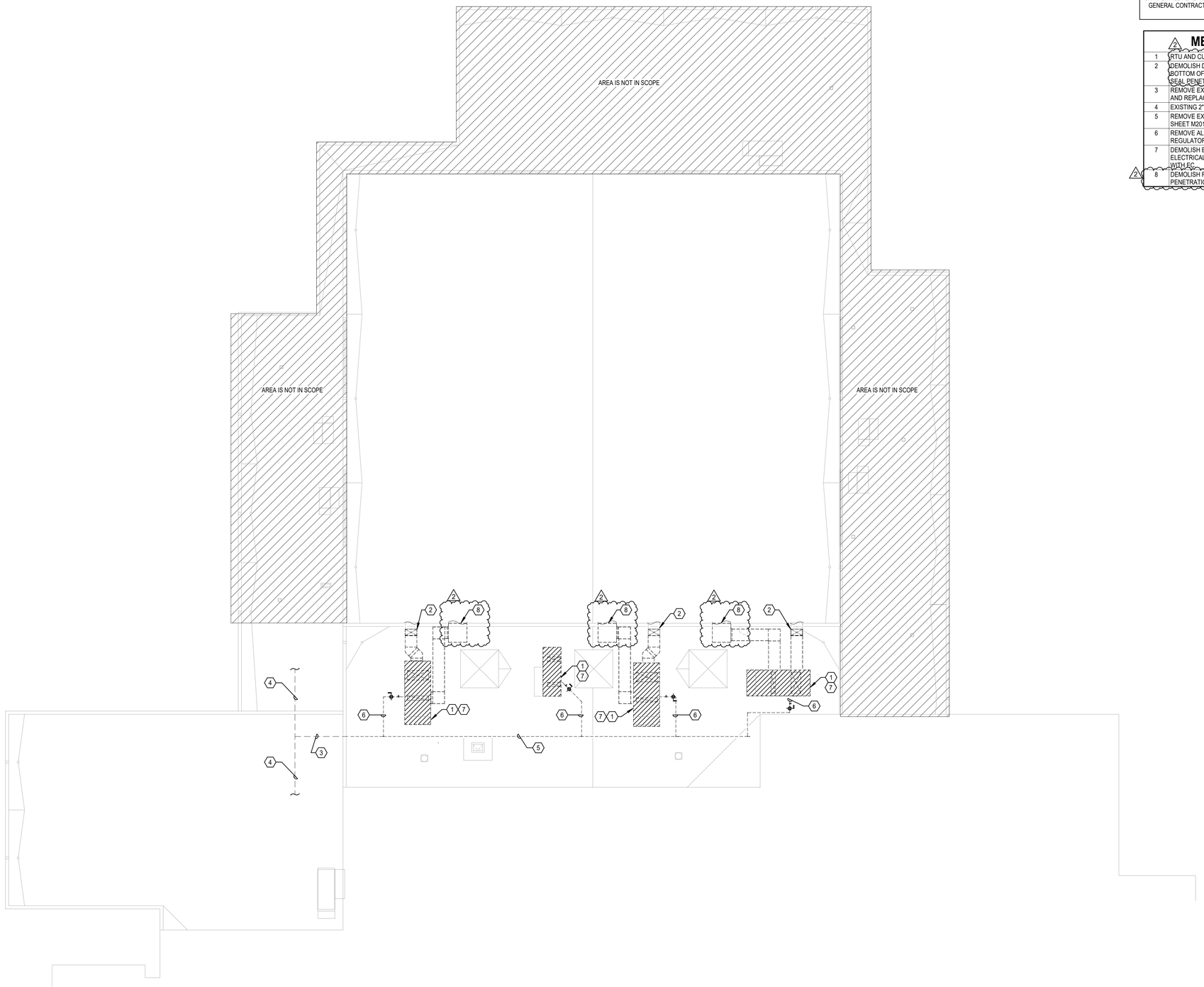
MOORE PUBLIC SCHOOLS

WESTMOORE HIGH SCHOOL 2025 ARENA HVAC

sheet no:

M000

Salas O'Brien
Oklahoma City
2900 S. Telephone Road, Suite 120
Moore, OK 73160
CA#: 7058 Expiration Date: 06/30/2027
Salas O'Brien Project Number: 2550-01871-00



N

1 **MECHANICAL DEMOLITION ROOF PLAN**
Scale: 1/16" = 1'-0"

GENERAL DEMOLITION NOTES

1. PROVIDE OWNER WITH FIRST RIGHT OF REFUSAL ON ALL DEMO'D EQUIPMENT.
2. DISPOSE OF ALL DEMO'D EQUIPMENT THAT IS NOT BEING RETAINED IN A LEGAL MANNER.
3. PATCH ALL PENETRATIONS THAT ARE NOT BEING REUSED. COORDINATE WITH GENERAL CONTRACTOR.

MECHANICAL KEYED NOTES

1	RTU AND CURB TO BE DEMOLISHED. COORDINATE WITH G.C. AND ARCHITECT.
2	DEMOLISH DUCTWORK FROM CURB TO VERTICAL DUCT MINIMUM 6FT FROM BOTTOM OF DECK OR NEAREST JOINT WHICHEVER IS HIGHER. PATCH AND SEAL PENETRATION UNTIL NEW CONNECTION IS MADE.
3	REMOVE EXISTING 1 1/2" NATURAL GAS LINE IN CEILING SPACE BELOW ROOF AND REPLACE WITH 2" GAS PIPE AND CONNECT TO EXISTING 2" OR LARGER.
4	EXISTING 2" NATURAL GAS LINE IN CEILING SPACE BELOW ROOF.
5	REMOVE EXISTING GAS PIPE AND REPLACE WITH NEW GAS PIPE. REFER TO SHEET M201 FOR NEW SIZES.
6	REMOVE ALL GAS PIPING FROM ROOFTOP UNIT AND ALL PRESSURE REGULATORS AND SHUT-OFF VALVES.
7	DEMOLISH EXISTING CONDENSATE LINE. COORDINATE DEMOLITION OF ELECTRICAL CONNECTIONS AND DISCONNECT AND THERMOSTAT AND WIRING WITH EC.
8	DEMOLISH RETURN DUCTWORK FROM RTU TO INTERIOR RETURN GRILLE. WALL PENETRATION TO BE REUSED IN NEW SCOPE OF WORK.

AGP
the Abla Griffin Partnership L.L.C.

313 S. E. 5th Street
MOORE, OK. 73160
405.735.3477
AGP@theAGP.net
www.theAGP.net

CEDAR CREEK
CIVIL

KFC ENGINEERING
STRUCTURAL

SALAS O'BRIEN
MECHANICAL / ELECTRICAL

STATE OF OKLAHOMA PROFESSIONAL ENGINEER
Dwayne McDonald
M 30822
01/29/26

KF
drawn by

DMG
checked by

NOVEMBER 2025
date

REVISIONS

Δ	DESCRIPTION	DATE
2	ADD 03	01/29/26

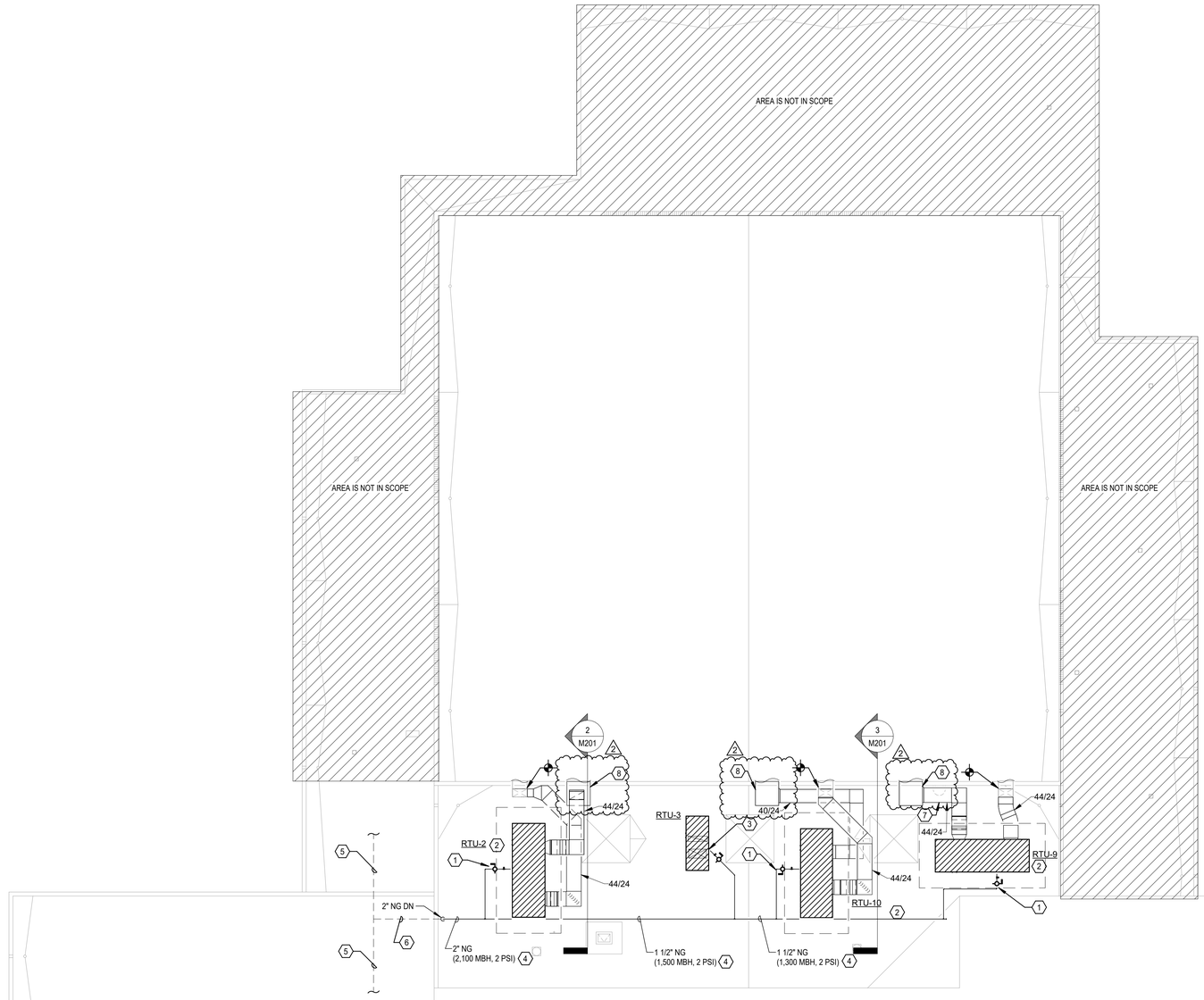
MOORE PUBLIC SCHOOLS

WESTMOORE HIGH SCHOOL 2025
ARENA HVAC

sheet no:

MD201

Salas O'Brien
Oklahoma City
2900 S. Telephone Road, Suite 120
Moore, OK 73160
CA#: 7058 Expiration Date: 06/30/2027
Salas O'Brien Project Number: 2550-01871-00



N

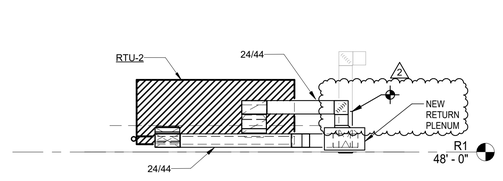
1 MECHANICAL ROOF PLAN
Scale: 1/16" = 1'-0"

GENERAL NOTES

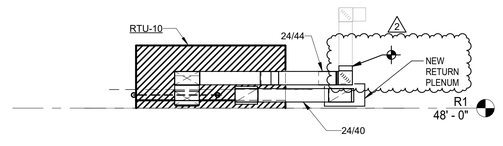
1. COORDINATE WORK WITH ALL TRADES ON SITE.
2. COORDINATE THE EXACT LOCATION AND WEIGHT OF UNITS WITH STRUCTURAL ENGINEER AND ARCHITECT PRIOR TO INSTALLATION OF CURB.
3. ALL ABOVE GRADE EXTERIOR NATURAL GAS PIPE SHALL BE CLEANED AND DEGREASED PRIOR TO BEING PRIMED THEN PAINTED YELLOW WITH WEATHER RESISTANT ZINC RICH PAINT.
4. ALL GAS PIPE SHALL COMPLY WITH IFGC. BRANCH LINES SHALL TAP OFF TOP OF GAS MAINS AND INSTALL SHUT-OFF VALVE ON BRANCH LINE.
5. PIPE IDENTIFICATION SHALL BE THE WORDS "NATURAL GAS" IN BLACK LETTERS AT 5 FOOT INTERVALS USING PLASTIC PIPE MARKERS OR STENCILED PAINTED LETTERS.
6. ROUTE DUCTWORK TO MAXIMIZE SERVICE CLEARANCES FOR RTU. REFER TO MANUFACTURER'S REQUIREMENTS FOR EXACT CLEARANCES.
7. ROUTE ALL RTU CONDENSATE LINES TO NEAREST ROOF DRAIN WITH COPPER PIPE PAINTED BLACK.
8. EXTERIOR DUCTWORK SHALL BE CROSS CUT AND CONSTRUCTED TO PREVENT WATER POOLING ON THE TOP OF DUCTWORK.
9. RESEAL ALL JOINTS ON EXISTING DUCTWORK THAT NEW DUCT IS CONNECTING TO. (2)

MECHANICAL KEYED NOTES

1	PC SHALL INSTALL NEW 1 1/4" GAS (600 MBH, 2 PSI) LINE TO NEW ROOFTOP UNIT WITH PRESSURE REGULATOR, SHUT-OFF VALVE, DIRT LEG, UNION AND FINAL UNIT CONNECTION. COORDINATE WITH MC.
2	NEW RTU TO REPLACE EXISTING. MOUNT RTU ON NEW MANUFACTURER'S CURB. PROVIDE NEW CONDENSATE PIPE IN ACCORDANCE WITH DETAILS AND SPECIFICATIONS. (2)
3	PC SHALL INSTALL NEW 1" GAS (300 MBH, 2 PSI) LINE TO NEW ROOFTOP UNIT WITH PRESSURE REGULATOR, SHUT-OFF VALVE, DIRT LEG, UNION AND FINAL UNIT CONNECTION. COORDINATE WITH MC.
4	REMOVE EXISTING GAS PIPE AND REPLACE WITH NEW SIZE AS NOTED. PROVIDE ROOF PIPE SUPPORTS ON NATURAL GAS LINE.
5	EXISTING 2" NATURAL GAS LINE IN CEILING SPACE BELOW ROOF.
6	REMOVE EXISTING 1 1/2" NATURAL GAS LINE IN CEILING SPACE BELOW ROOF AND REPLACE WITH 2" GAS PIPE AND CONNECT TO EXISTING 2" OR LARGER.
7	ROUTE RETURN DUCTWORK SUCH THAT TOP OF DUCT IS BELOW 48" ABOVE FINISHED ROOF.
8	PROVIDE NEW RETURN PLENUM. SIZE PLENUM THE SAME SIZE AS EXSITING OPENING AND CONNECT TO RETURN GRILLE ON INSIDE WALL. (2)



2 RTU-2 DUCTWORK SECTION
Scale: 3/32" = 1'-0"



3 RTU-10 DUCTWORK SECTION
Scale: 3/32" = 1'-0"

AGP
the Abla Griffin Partnership L.L.C.
313 S. E. 5th Street
MOORE, OK. 73160
405.735.3477
AGP@theAGP.net
www.theAGP.net

CEDAR CREEK
CIVIL

KFC ENGINEERING
STRUCTURAL

SALAS O'BRIEN
MECHANICAL / ELECTRICAL

KF
drawn by

DMG
checked by

NOVEMBER 2025
date

REVISIONS

Δ	DESCRIPTION	DATE
2	ADD 03	01/29/26

MOORE PUBLIC SCHOOLS

WESTMOORE HIGH SCHOOL 2025
ARENA HVAC

sheet no:

M201

Salas O'Brien
Oklahoma City
2900 S. Telephone Road, Suite 120
Moore, OK 73160
CA#: 7058 Expiration Date: 06/30/2027
Salas O'Brien Project Number: 2550-01871-00

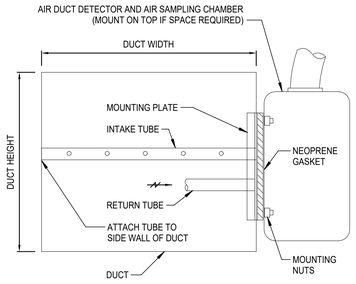
PACKAGED ROOFTOP UNIT - GAS HEAT NON CALC

MARK	SUPPLY CFM	FAN						ENERGY RECOVERY PERFORMANCE						COOLING								HEATING					BASIS OF DESIGN				WEIGHT (LBS)	REMARKS
		OUTSIDE AIR CFM	EXT.STATIC PRESSURE (IN. W.C.)	HORSE POWER	CURRENT CHAR V	P	F	SUMMER OA AIR DB/WB (°F)	SUMMER LAT DB/WB (°F)	SUMMER CAPACITY REDUCTION (BTUH)	WINTER OA DB/WB (°F)	WINTER LAT DB/WB (°F)	WINTER CAPACITY REDUCTION (BTUH)	AIR TEMPERATURE (°F) EAT DB	EAT WB WET BULB	LAT DB	LAT WB	AMBIENT TEMP	TOTAL CAPACITY (BTU)	SENSIBLE CAPACITY (BTU)	STAGES	MINIMUM EER/ SEER	ENTERING AIR TEMP.(°F)	LAT (°F)	INPUT (BTUH)	OUTPUT (BTUH)	STAGES (HEAT)	AFUE %	MANUFACTURER	MODEL	MCA	MOCP		
RTU-2	10,500	5,100	1.00	5.0	480	3	60	99.5 / 77.7	78.6 / 65.3	259,631	11.4 / 8.6	62.7 / 49.8	282,444	76.7	63.8	53 °F	53 °F	100 °F	340000	258000	SZVAV	9.8	67	110 °F	600000	486000	16:1 TURNDOWN	90	VALENT	VXE-312-74C-30I-0-J2	77	110	8100	1-10,12-15
RTU-3	6,000	3,540	1.00	5.0	480	3	60	99.5 / 77.7	80.7 / 67.2	156,605	11.4 / 8.6	56.8 / 45.7	173,545	78.0	65.0	54 °F	54 °F	100 °F	195000	146000	SZVAV	10.8	63	100 °F	300000	243000	12:1 TURNDOWN	80	VALENT	VXE-212-52B-15I-J-G2	41	60	4300	1-9,11-15
RTU-9	10,500	5,100	1.00	5.0	480	3	60	99.5 / 77.7	78.6 / 65.3	259,631	11.4 / 8.6	62.7 / 49.8	282,444	76.7	63.8	53 °F	53 °F	100 °F	340000	258000	SZVAV	9.8	67	110 °F	600000	486000	16:1 TURNDOWN	90	VALENT	VXE-312-74C-30I-0-J2	77	110	8100	1-10,12-15
RTU-10	10,000	5,100	1.00	5.0	480	3	60	99.5 / 77.7	78.6 / 65.3	259,631	11.4 / 8.6	62.7 / 49.8	282,444	76.8	63.9	54 °F	54 °F	100 °F	270000	225000	SZVAV	9.8	67	110 °F	600000	486000	16:1 TURNDOWN	90	VALENT	VXE-312-74C-25I-0-J2	63	80	8100	1-10,12-15

GENERAL NOTES:
1. EXTERNAL STATIC PRESSURE INCLUDES LOSSES DUE TO DUCTWORK, AIR DEVICES, DAMPERS, AND DUCT MOUNTED HOT WATER COILS WHERE APPLICABLE. DIRTY FILTER AND UNIT CASING MUST BE ADDED TO EXTERNAL STATIC PRESSURE TO OBTAIN TOTAL PRESSURE LOSS. INCREASE HORSEPOWER AS REQUIRED TO MEET YOUR TOTAL PRESSURE LOSS. COORDINATE WITH ELECTRICIAN.
2. MAINTAIN MINIMUM CLEARANCE FOR COIL PULL AS RECOMMENDED BY UNIT MANUFACTURER. MAINTAIN MINIMUM CLEARANCE AS REQUIRED TO OPEN ACCESS AND CONTROL DOORS ON UNIT FOR SERVICE, MAINTENANCE, AND INSPECTION. MAINTAIN MINIMUM ELECTRICAL CLEARANCE AS REQUIRED BY NEC.

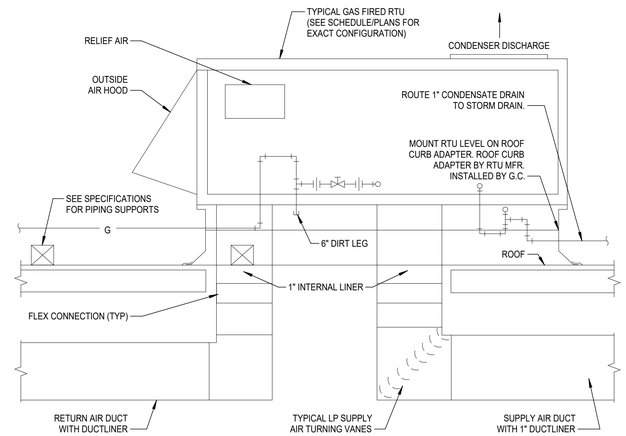
REMARKS:
1. PROVIDE UNIT WITH DISCONNECT SWITCH, HAIL GUARD, AND LOW LEAK OUTSIDE AND RETURN AIR DAMPERS.
2. PROVIDE UNIT WITH DUCT SMOKE DETECTOR IN RETURN DUCTWORK.
3. PROVIDE UNIT WITH UNPOWERED FACTORY MOUNTED GFCI RECEPTACLE FOR ELECTRICIAN TO WIRE TO SEPARATE CIRCUIT. COORDINATE WITH EC. (1)
4. PROVIDE WITH FACTORY ROOF CURB SO THAT BOTTOM OF ROOFTOP UNIT IS 12" ABOVE FINISHED ROOF. (2)
5. PROVIDE UNIT WITH LOW AMBIENT CONTROL.
6. PROVIDE UNIT WITH TEMPERATURE AND HUMIDITY SENSOR AND BMS PROTOCOL. REPLACE EXISTING THERMOSTATS WITH NEW. (1)
7. PROVIDE A WATER LEVEL SENSING DEVICE (FLOW SWITCH) IN THE PRIMARY DRAIN PAN. THIS DEVICE SHALL SHUT OFF THE APPLIANCE IN THE EVENT THE PRIMARY DRAIN LINE BECOMES RESTRICTED.
8. PROVIDE LOW LEAK ENTHALPY ECONOMIZER WITH POWERED EXHAUST.
9. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR ALL ELECTRICAL COSTS ASSOCIATED WITH ANY ALTERNATE UNIT IS PROVIDED WITH GREATER ELECTRICAL CHARACTERISTICS THAN SHOWN.
10. UNIT SHALL HAVE HORIZONTAL SUPPLY AND RETURN DUCT CONNECTIONS.
11. UNIT SHALL HAVE DOWN SUPPLY AND RETURN DUCT CONNECTIONS.
12. PROVIDE HGRH.
13. PROVIDE TERMINAL STRIP CONTROL FOR CONTROLS CONTRACTOR.
14. UNIT SHALL HAVE MINIMUM 2 IN. R-16 FOAM INSULATION.
15. ENERGY RECOVERY WHEEL SHALL BE POLYMER MATERIAL WITH SILICA GEL DESICCANT.

(1)

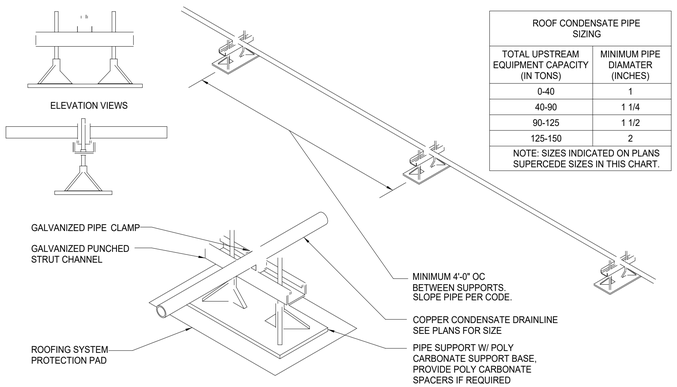


(2) NOTES:
1. SMOKE DETECTOR PROVIDED BY FACTORY, WIRED BY ELECTRICAL CONTRACTOR, AND MOUNTED BY MECHANICAL CONTRACTOR. MC IS RESPONSIBLE FOR HIRING FIRE ALARM CONTRACTOR TO CONNECT DETECTORS INTO BUILDING ALARM SYSTEM.
2. INSTALL IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. PROVIDE ACCESS DOOR AT SAMPLING TUBES.
4. THE TUBE SHALL BE INSTALLED PARALLEL TO LONG DIMENSION OF DUCT.
5. PRODUCT SHALL BE UL268A LISTED FOR DUCT MOUNTED SMOKE
6. DETECTORS, OR UL268A FOR ALL OTHER SMOKE DETECTOR TYPES.
7. EC SHALL TEST ACCORDING TO UL AND CODES IN THE PRESENCE OF CODE AUTHORITY.

3 SMOKE DETECTOR MOUNTING DETAIL
Scale: N.T.S.

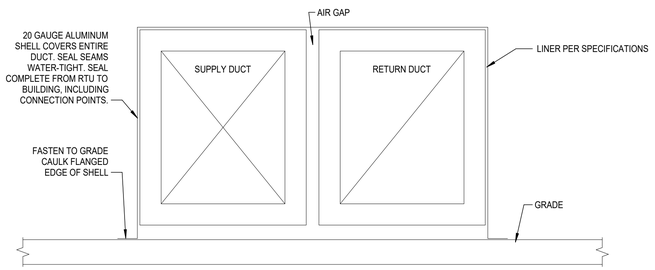


2 TYP. ROOF TOP UNIT GAS FIRED DETAIL
Scale: N.T.S.

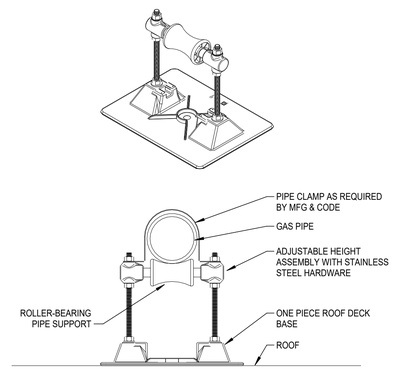


ROOF CONDENSATE PIPE SIZING	
TOTAL UPSTREAM EQUIPMENT CAPACITY (IN TONS)	MINIMUM PIPE DIAMATER (INCHES)
0-40	1
40-90	1 1/4
90-125	1 1/2
125-150	2
NOTE: SIZES INDICATED ON PLANS SUPERCEDE SIZES IN THIS CHART.	

1 ROOF CONDENSATE SUPPORT DETAIL
Scale: N.T.S.

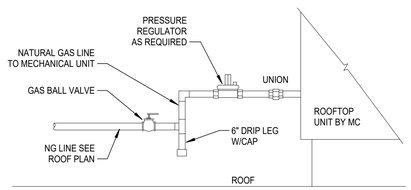


6 EXTERIOR DUCT COVERING DETAIL
Scale: N.T.S.



5 ROOF PIPE SUPPORT DETAIL
Scale: N.T.S.

NOTES:
1. PROVIDE GAS REGULATOR VENT PROTECTOR. INSTALL REGULATOR PER MANUFACTURER'S RECOMMENDATIONS.
2. COORDINATE DISTANCE BETWEEN PRESSURE REGULATOR AND GAS-FIRED EQUIPMENT WITH EQUIPMENT MANUFACTURER. COORDINATE FINAL CONNECTION TO UNIT WITH MC.
3. PROVIDE ROOF PIPE SUPPORTS FOR NATURAL GAS PIPING.
4. PIPING ABOVE GRADE SHALL BE SCHEDULE 40 BLACK IRON. REFER TO SPECIFICATIONS FOR PAINTING PIPING YELLOW.



4 RTU GAS CONNECTION DETAIL
Scale: N.T.S.

AGP
the Abla Griffin Partnership L.L.C.

313 S. E. 5th Street
MOORE, OK. 73160
405.735.3477
AGP@theAGP.net
www.theAGP.net

CEDAR CREEK
CIVIL

KFC ENGINEERING
STRUCTURAL

SALAS O'BRIEN
MECHANICAL / ELECTRICAL

KF
drawn by

DMG
checked by

NOVEMBER 2025
date

REVISIONS

Δ	DESCRIPTION	DATE
1	ADD 01	01/13/26
2	ADD 03	01/29/26

MOORE PUBLIC SCHOOLS

WESTMOORE HIGH SCHOOL 2025
ARENA HVAC

sheet no:

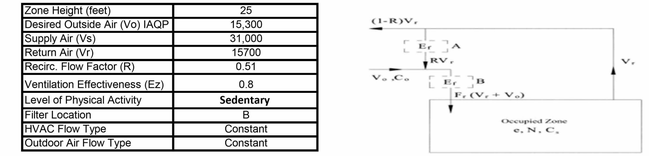
M601

Salas O'Brien
Oklahoma City
2900 S. Telephone Road, Suite 120
Moore, OK 73160
CA#: 7058 Expiration Date: 06/30/2027
Salas O'Brien Project Number: 2550-01871-00

ASHRAE 62.1 INDOOR AIR QUALITY CALCULATION TABLE

Zone Tag	Facility Type	Zone Use	Zone Floor Area (square ft) Az	Zone Max Occupancy Pz	Table 6.1 OA per Occupant Rp	Table 6.1 cfm/ft2 Ra	Pz * Rp Pz * Rp	Az * Ra Az * Ra	Table 6.2 Ventilation Effectiveness Ez	Outdoor Air to Zone (CFM) with Ez correction (Vbz/Ez)
Westmoore HS Gym	Educational Facilities	Multi-use Assembly	13,100.0	3,697.0	7.5	0.06	27728	786	0.8	35642 OA required per VRP

Zone Height (feet)	25
Desired Outside Air (Vo) IAQP	15,300
Supply Air (Vs)	31,000
Return Air (Vr)	15700
Recirc. Flow Factor (R)	0.51
Ventilation Effectiveness (Ez)	0.8
Level of Physical Activity	**Sedentary**
Filter Location	B
HVAC Flow Type	Constant
Outdoor Air Flow Type	Constant



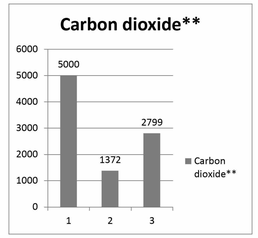
Air Changes Per Hour	5.7	VRP OA CFM per person	9.6
Outside Air Per VRP	35642 CFM	IAQ OA CFM per person	4.1
Outside Air Per IAQ	15300 CFM		
Outside Air Savings	20342 CFM	Winter Heating Savings	
OA Summer Drybulb	104.0	OA Winter Design DB (F)	45
OA Summer Wetbulb	76.0	Supply Air DB Setpoint (F)	110
Coil Leaving Air Drybulb (F)	53.0	MBH Saved Winter	1434.6
Coil Leaving Air Wetbulb (F	53.0	KW Saved Winter	420.4
OA MBH Saved Summer*	1587.1		
OA Tons Saved Summer*	132.3		

*OA = Outside Air
***OSHA, NIOSH & WHO most conservative values us
http://www.cdc.gov/niosh/npg/npgsyn-a.html

Indoor Contaminants Generated By People & From Outdoors	Maximum Threshold Value (PPM)	Steady State Using the VRP* (Prescribed OA) Plasma Off	Steady State Using the IAQ Method (Reduced OA) Plasma On	Is Steady State Level Acceptable at Reduced OA Levels?	Contaminant Generation Rate (PPM)	Filtration Effectiveness	Cognizant Authority***
Acetaldehyde	100.0	0.01113	0.00373	Yes	0.00032	50%	OSHA
Acetone	250.0	0.00182	0.00128	Yes	0.00433	50%	NIOSH
Ammonia	25.00	0.02015	0.02894	Yes	0.14210	50%	NIOSH
Benzene	1.0000	0.00252	0.00086	Yes	0.00015	50%	OSHA
2- Butanone (MEK)	200.0	0.00022	0.00021	Yes	0.00088	50%	NIOSH
Carbon dioxide**	5000	1372	2799	Yes	292	0%	NIOSH
Chloroform	2.0000	0.00011	0.00004	Yes	0.00003	50%	NIOSH
Dioxane	100.0	0.00000	0.00000	Yes	0.00000	50%	OSHA
Hydrogen Sulfide	10.0	0.00000	0.00000	Yes	0.00000	50%	NIOSH
Methane	NA	1.68094	1.68094	Yes	0.00000	0%	NA
Methanol	200.0	0.00000	0.00000	Yes	0.00000	0%	NIOSH
Methylene Chloride	25.0	0.00080	0.00039	Yes	0.00080	50%	OSHA
Propane	1000.0	0.00998	0.00998	Yes	0.00000	0%	NIOSH
Tetrachloroethane	5.0000	0.00000	0.00000	Yes	0.00000	50%	OSHA
Tetrachloroethylene	100.0000	0.00037	0.00012	Yes	0.00001	50%	OSHA
Toluene	100.0000	0.00534	0.00180	Yes	0.00021	50%	NIOSH
1,1,1 - Trichloroethane	350.0000	0.00078	0.00032	Yes	0.00038	50%	NIOSH
Xylene	100.0000	0.00230	0.00076	Yes	0.00000	50%	OSHA

Building materials and furnishings assumed to have no VOCs and off-gassing is complete

Is IAQ acceptable at reduce outside air levels?	**Yes**



1 = ASHRAE & NIOSH C02 Limit
2 = C02 Level at Ventilation Rate OA Flow Rate
3 = C02 Level at IAQ Procedure OA Flow Rate

**Carbon dioxide has been provided for reference only for gathering demand control ventilation (DCV) setpoints. The National Research Council was commissioned by the US Navy to prove C02 is not a contaminant of concern when using air purification to control the other contaminants of concern, as found on submarines.

AGP
the Abla Griffin Partnership L.L.C.

313 S. E. 5th Street
MOORE, OK. 73160
405.735.3477
AGP@theAGP.net
www.theAGP.net

CEDAR CREEK
CIVIL

KFC ENGINEERING
STRUCTURAL

SALAS O'BRIEN
MECHANICAL / ELECTRICAL

KF
drawn by

DMG
checked by

NOVEMBER 2025
date

REVISIONS

Δ	DESCRIPTION	DATE
2	ADD 03	01/29/26

MOORE PUBLIC SCHOOLS

WESTMOORE HIGH SCHOOL 2025
ARENA HVAC

sheet no:

2 M602

Salas O'Brien
Oklahoma City
2900 S. Telephone Road, Suite 120
Moore, OK 73160
CA#: 7058 Expiration Date: 06/30/2027
Salas O'Brien Project Number: 2550-01871-00