LITTLE
DIVERSIFIED ARCHITECTURAL CONSULTING

Addendum 001

TO:	**Bidders**
FROM:	Little Diversified Architectural Consulting 410 Blackwell Street, Suite 10 Durham, NC 27701
DATE:	April 16, 2026
PROJECT:	UNC Pembroke RTU Replacements Pembroke, NC 28372
PROJECT NO:	Little Job Number: 5822131900 SCO Number: 24-28674-01A
ADDENDUM NO:	001

Addendum:

The attention of the contractor(s) is called to the following clarifications, additions, and changes in plans and specifications regarding the project referenced above. It shall be the responsibility of the contractor(s) to include these clarifications, additions, and changes to the Procurement Documents dated **February 20th, 2026.**

Addendum: Clarification Items

General Clarifications:

1. Attention is called to the licensing requirements under the Notice to Bidders section in the State of North Carolina Standard Form of Informal Contract and General Conditions. All electrical work to be by or under the supervision of a licensed electrician.
2. Contractor is responsible for all required curb adaptors.

Project Manual: None

Drawings:

1. Drawings were revised to show LP gas piping on the Field House instead of Natural gas based on conversations with owner.
2. The existing RTUs had UV lights added to them with a separate power connection fed through the roof up to the RTUs. The existing power connection shall be capped and sealed watertight and abandoned in place. The new units will be "UV light ready", but UV lights will not be installed as part of this project. Units need to have adequate space in the cooling coil section to allow for UV lights and their mounting hardware to be installed in the future.
3. Hot gas reheat can either be modulating or staged.

RFI: None

Attachments

- Drawings

  M001 - MECHANICAL GENERAL NOTES & LEGEND
  MD111 – MECHANICAL ROOF DEMOLITON PLAN – FIELD HOUSE
  M111 – MECHANICAL ROOF PLAN – FIELD HOUSE
  M401 – FUEL GAS RISER DIAGRAMS

END OF ADDENDUM

STATE OF NORTH CAROLINA
STANDARD FORM OF INFORMAL CONTRACT
AND GENERAL CONDITIONS

FOR

UNC Pembroke
RTU Replacements; Bob Caton Fieldhouse and Auxiliary Services Facility
Pembroke, North Carolina 28372
SCO ID # 24-28674-01A

SCOPE OF WORK

Replacement of RTU Numbers 3, 4, & 5 and added ventilation on the Bob Caton Fieldhouse and the replacement of RTU's 1, 3, and 8 on the Auxiliary Services Facility building, along with associated work.

NOTICE TO BIDDERS

Sealed bids for this work will be received by mail:

University of North Carolina at Pembroke
Planning Design & Construction ATTN: Mrs. Amanda Spayd
1 University Drive
Pembroke, NC 28372
(910) 775-4576

Sealed bids hand delivered for this work will be received at:

Pinchbeck Maintenance Building A
Conference Room 141
128A Facilities Drive
Pembroke, NC 28372
(910) 775-4576

up to **3:00 PM**, on Thursday, April 23, 2026, and immediately thereafter publicly opened and read aloud. Complete plans and specification and contract documents can be obtained from

LITTLE DIVERSIVIED ARCHITECTURAL CONSULTING
410 BLACKWELL STREET, SUITE 10
DURHAM, NORTH CAROLINA, 27701
(919) 474-2500

Contractors are hereby notified that they must have proper license under the State laws governing their respective trades and that North Carolina General Statute 87 will be observed in receiving and awarding contracts. Contractors must have the appropriate valid license from the North Carolina State Board of Examiners of Plumbing, Heating and Fire Sprinkler Contractors, and for electrical work from the North Carolina State Board of Examiners of Electrical Contractors.

No bid may be withdrawn after the opening of bids for a period of 30 days. The Owner reserves the right to reject any or all bids and waive informalities. Bids shall be made only on the BID/ACEPTANCE form provided herein with all blank spaces for bids properly filled in and all signatures properly executed.

Please note on the envelope – **Bid : Attn***:* Matt Greene, c/o Mrs. Amanda Spayd, Planning Design & Construction

UNC Pembroke RTU Replacements; Bob Caton Fieldhouse and Auxiliary Services Facility
April 23, 2026

(Contractor)
(License Number)

A pre-bid conference will be held April 9, 2026 at 2:00 pm in the Pinchbeck Facilities Building, Room 141, address 128 A Facilities Drive, Pembroke, NC 28372.

BID/ACCEPTANCE FORM

for

UNC Pembroke RTU Replacements; Bob Caton Fieldhouse and Auxiliary Services Facility

SCO ID # 24-28674-01A

Replacement of RTU Numbers 3, 4, & 5 and added ventilation on the Bob Caton Fieldhouse and the replacement of RTU's 1, 3, and 8 on the Auxiliary Services Facility building, along with associated work at UNC Pembroke, Pembroke, NC 28372

We are in receipt of Addendum _____1 _____2 _____3 _____4

The undersigned, as bidder, proposes and agrees if this bid is accepted to contract with the State of North Carolina through the University of North Carolina, Pembroke for the furnishing of all materials, equipment, and labor necessary to complete the construction of the work described in these documents in full and complete accordance with plans, specifications, and contract documents, and to the full and entire satisfaction of the State of North Carolina and the University of North Carolina, Pembroke for the sum of:

BASE BID: Dollars $

Alternate #	Add/Deduct	Alternate bid price	Accepted (*OWNER INITIALS ON EACH LINE INDICATES ACCEPTANCE OF ALTERNATE*)
1			
2			
3			
4			
5			
6			
7			
8			

UNIT PRICES

Unit prices quoted and accepted shall apply throughout the life of the contract, except as otherwise specifically noted. Unit prices shall be applied, as appropriate, to compute the total value of changes in the base bid quantity of the work all in accordance with the contract documents.

GENERAL CONTRACT:

Description	Units	
No. 01: Roof repair at Caton Fieldhouse.	100 S.F.	Unit Price ($)_____
No. 02: Roof repair at Auxiliary Services Building.	100 S.F.	Unit Price ($)_____
No. 03: Fuel gas piping replacement.	40 L.F	Unit Price ($)_____

No. 04: Duct repair. 40 L.F. Unit Price ($)_____

Respectively submitted this _____day of_____20____

_____

(Contractor's Name)

Federal ID#:_____ By:_____

Witness:_____ Title:_____
(*Owner, partner, corp. Pres. Or Vice President)*

_____ Address:_____
(Proprietorship or Partnership)

Attest: *(corporation)* Email Address:_____

(***Corporate Seal***)

By:_____ License #:_____

Title:_____
(Corporation, Secretary./Ass't Secretary.)

ACCEPTED by the STATE OF NORTH CAROLINA

through the

_____
UNC PEMBROKE

Total amount of accepted by the owner, included base bid and bid alternates:_____

BY:_____TITLE:_____

Date: _____

DUCT & PIPING NOTES

1. RUN ALL CONCEALED HORIZONTAL PIPING AND DUCTWORK ABOVE CEILING, TIGHT TO STRUCTURE UNLESS OTHERWISE NOTED. RUN ALL EXPOSED PIPING AND DUCTWORK AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED.
2. DUCTWORK SIZES ARE SHEET METAL DIMENSIONS. PIPE SIZES ARE NOMINAL DIAMETERS.
3. PROVIDE ESCUTCHEON PLATES WHERE DUCTS OR PIPES PENETRATE ASSEMBLIES IN FINISHED AREAS EXPOSED TO VIEW. ESCUTCHEONS FOR DUCTS SHALL BE CONSTRUCTED OF THE SAME MATERIAL AS DUCT. PIPE ESCUTCHEONS SHALL BE CHROME-PLATED BRASS. PIPE, CONDUIT AND DUCT OPENINGS THROUGH ASSEMBLIES AROUND MECHANICAL ROOMS SHALL BE PACKED WITH MINERAL WOOL AND SEALED.
4. LOCATE ALL CONTROL DEVICES (TEMPERATURE, PRESSURE, AND FLOW MEASURING, ETC.)IN ACCESSIBLE LOCATIONS WITH STRAIGHT SECTION OF PIPE OR DUCT UPSTREAM AND DOWNSTREAM AS REQUIRED BY THE MANUFACTURER FOR GOOD ACCURACY.
5. PENETRATIONS THROUGH RATED ASSEMBLIES (DUCTWORK, PIPING, ETC.) SHALL BE PROTECTED WITH A U.L. LISTED PENETRATION DETAIL. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR VERIFYING CONDITIONS IN FIELD AND SUBMITTING A U.L. DETAIL FOR APPROVAL OF THE ARCHITECT AND ENGINEER OF RECORD.
6. CONCEALED DUCTWORK SHALL BE INSULATED USING EXTERIOR DUCT WRAP INSULATION. WRAPPED INSULATION SHALL BE 2 INCH THICK GLASS FIBER FLEXIBLE DUCT INSULATION, 0.75 POUND DENSITY WITH U.L. APPROVED FSK JACKET. SECURE WITH ADHESIVE APPLIED DIRECTLY TO THE DUCT IN 4 INCH WIDE STRIPS AROUND THE DUCT ON 12 INCH CENTERS AND TAPE ALL JOINTS. WHERE REQUIRED, ACOUSTICAL DUCT LINING SHALL BE 1-1/2 INCH THICK RIGID DUCTBOARD AND SHALL COMPLY WITH FIRE CLASSIFICATION REQUIREMENTS OF NFPA 90A AND 90B. ADHERE LINER TO DUCT WITH FIRE RESISTANT ADHESIVE AND WELDED PIN TYPE MECHANICAL FASTENERS AS INDICATED IN SMACNA STANDARDS
7. FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5 FEET, AND SHALL ONLY BE INSTALLED IN CONCEALED SPACES.
8. ALL DUCT PENETRATIONS OF WALLS SHALL BE MADE WITH RIGID METAL DUCTS. FLEXIBLE DUCT PENETRATIONS OF WALLS ARE NOT ACCEPTABLE
9. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS UNLESS OTHERWISE NOTED. WHERE SQUARE ELBOWS ARE SHOWN, OR WHERE FIELD CONDITIONS PREVENT USE OF RADIUS ELBOWS, INSTALL AIRFOIL TYPE TURNING VANES IN ACCORDANCE WITH SMACNA STANDARDS.
10. PROVIDE LOCKING OPPOSED BLADE MANUAL VOLUME DAMPERS WHERE INDICATED ON THE DUCT PLANS, AT SUPPLY, RETURN, AND EXHAUST BRANCH DUCTS, AND IN EACH RUNOUT TO AIR TERMINALS, UNLESS DAMPER IS SPECIFIED AT TERMINAL. BRANCH DUCT DAMPERS SHALL BE AS CLOSE TO MAIN TRUNK DUCT AS POSSIBLE. VOLUME DAMPERS ABOVE INACCESSIBLE CEILINGS SHALL BE PROVIDED WITH REMOTE CABLE CONTROLS WITH ALL NECESSARY HARDWARE, TERMINATING 3" ACCESS PORT WITH FINAL LOCATION COORDINATED IN FIELD BY ARCHITECT.
11. PROVIDE PIANO-HINGED DUCT ACCESS DOORS AT ALL DUCT ACCESSORIES (MOTOR OPERATED DAMPERS, FIRE DAMPERS, ETC.) REQUIRING MAINTENANCE AND SERVICE, AND WHERE REQUIRED FOR OPERATION, ADJUSTMENT, AND MAINTENANCE OF MECHANICAL EQUIPMENT. WHERE ACCESS DOORS ARE LOCATED ABOVE AN INACCESSIBLE CEILING, PROVIDE AN ACCESS DOOR IN THE CEILING. PROVIDE RATED ACCESS PANELS AS REQUIRED TO MAINTAIN ASSEMBLY RATING
12. BEFORE FABRICATING DUCTWORK, THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE LOCATION AND SIZE WITH ALL OTHER TRADES.
13. EXTEND CONDENSATE DRAIN PIPING TO NEAREST DRAIN UNLESS OTHERWISE NOTED. ALL CONDENSATE PIPING SHALL BE TRAPPED AND PITCHED AT A MINIMUM OF 1/8" PER LINEAR FOOT TOWARDS THE DRAIN.
14. PROVIDE UNIONS OR FLANGES AT EACH PIECE OF EQUIPMENT, AT BYPASS CONNECTIONS, AND IN PIPING RUNS OF 50 FEET OR LONGER TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.

EXISTING CONDITIONS & DEMOLITION

1. THE CONTRACTOR IS RESPONSIBLE FOR VISITING THE SITE AND THOROUGHLY INSPECTING THE SCOPE OF WORK. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT THE SCOPE OF WORK REPRESENTED ON THE DRAWINGS CAN BE INSTALLED AS INDICATED.
2. EXISTING SYSTEM(S) AND EQUIPMENT INFORMATION IS BASED UPON INITIAL SITE ASSESSMENT AND RECORD DOCUMENTS. PERFORMANCE AND LOCATIONS SHOWN ON DOCUMENTS IS NOTED FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND MAY NOT REFLECT EXISTING FIELD CONDITIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING EXISTING CONDITIONS AND PERFORMANCE WITHIN THE SCOPE OF WORK. IF SIGNIFICANT DISCREPANCIES OR DEFICIENCIES ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER OF RECORD.
3. ALL EQUIPMENT REMOVED FROM THE BUILDING DURING DEMOLITION SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED.
4. EQUIPMENT, SYSTEMS, AND ACCESSORIES SHALL BE CLEANED AS REQUIRED PRIOR TO ISSUANCE OF CERTIFICATE OF OCCUPANCY. REPLACE FILTERS, STRAINERS, ETC. UPON COMPLETION OF SYSTEM CLEANING.
5. THE APPROXIMATE LOCATION OF EXISTING UTILITIES IS SHOWN FOR COORDINATION ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES PRIOR TO BEGINNING WORK.
6. EXISTING MECHANICAL EQUIPMENT AND DUCTWORK SHOWN ON PLANS IS SCHEMATIC AND MAY NOT NECESSARILY REPRESENT EXACT LOCATIONS. IF THE CONTRACTOR DISCOVERS MAJOR DISCREPANCIES BETWEEN PLANS AND FIELD CONDITIONS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT AND ENGINEER OF RECORD.
7. PROVIDE A PRE-DEMOLITION BALANCING REPORT OF ALL SYSTEMS OR DEVICES AFFECTED BY THIS SCOPE OF WORK IN ORDER TO ESTABLISH BASELINE SYSTEM PERFORMANCE. SUBMIT REPORT FOR REVIEW AT COMPLETION OF THIS TESTING.

GENERAL NOTES

1. GENERAL NOTES ON THIS DRAWING ARE APPLICABLE TO EACH MECHANICAL DRAWING OF THIS SET. NOTES SPECIFIC TO INDIVIDUAL MECHANICAL DRAWINGS WILL BE SHOWN ON THE RESPECTIVE MECHANICAL DRAWING.
2. THE CONTRACTOR SHALL PROVIDE A COMPLETE HVAC SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A COMPLETE AND FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPURTENANCES CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED OUT. ALL WORK SHALL BE GUARANTEED IN WRITING AGAINST DEFECTIVE WORKMANSHIP AND MATERIALS FOR A PERIOD OF ONE YEAR FROM TURN OVER TO OWNER.
3. ENTIRE INSTALLATION, INCLUDING MATERIALS, EQUIPMENT, AND WORKMANSHIP, SHALL CONFORM WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS OF MUNICIPAL, STATE AND FEDERAL AUTHORITIES.
4. ALL WORK SHALL CONFORM TO APPLICABLE ASHRAE, NFPA, AND SMACNA STANDARDS AND OTHER REGULATORY BODIES HAVING JURISDICTION OVER THE CLASS OF WORK. ALL MATERIALS AND EQUIPMENT SHALL HAVE APPROPRIATE STAMPS/SEALS OF AHRI, ASME, U.L., AND ASTM.
5. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS, AND SERVICES RELATED TO INSTALLATION OF THE WORK. THE CONTRACTOR SHALL MAKE TESTS FOR ACCEPTANCE AND APPROVAL AS REQUIRED BY CODE AND THE REQUIREMENTS OF APPLICABLE REGULATORY AGENCIES. REQUIRED TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE UNLESS OTHERWISE WAIVED IN WRITING.
6. THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL MECHANICAL WORK WITH ALL OTHER TRADES IN ORDER TO RESOLVE ANY CONFLICT THAT MIGHT ARISE IN THE FIELD.
7. EQUIPMENT OF DIFFERING CHARACTERISTICS MAY BE PROVIDED IF SUCH PROPOSED ALTERNATE EQUIPMENT IS SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND OWNER'S REPRESENTATIVE IN WRITING. THE MECHANICAL CONTRACTOR SHALL RESPONSIBLE FOR COORDINATING WITH ALL IMPACTED TRADES, AND ANY SUBSEQUENT COSTS OF THE ALTERNATE EQUIPMENT SHALL BE PROVIDE AT NO COST TO THE OWNER.
8. NO EQUIPMENT, PIPING, OR DUCTWORK SHALL BE INSTALLED OVER ANY ELECTRICAL EQUIPMENT OR ELECTRICAL SERVICE SPACE.
9. LAYOUT OF PIPING AND DUCTWORK IS DIAGRAMMATIC IN NATURE. MECHANICAL CONTRACTOR SHALL ALLOW FOR RISES, DROPS AND OFFSETS AS REQUIRED FOR PROPER INSTALLATION, OPERATION, AND MAINTENANCE. INSTALL MECHANICAL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR/REPLACEMENT OF COMPONENTS, INCLUDING ACCESS TO UNIT PANELS, CONTROLS, VALVING, ETC. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH A MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS. PIPING AND DUCTWORK SHALL NOT INTERFERE WITH FILTER ACCESS.
10. PROVIDE VIBRATION ISOLATION AS REQUIRED FOR MECHANICAL EQUIPMENT TO PREVENT TRANSMISSION OF VIBRATION TO BUILDING STRUCTURE AND SYSTEMS. PROVIDE FLEXIBLE CONNECTIONS IN ALL DUCTWORK AND PIPING SYSTEMS CONNECTED TO MECHANICAL EQUIPMENT WHICH REQUIRE VIBRATION ISOLATION. FLEXIBLE CONNECTIONS SHALL BE PROVIDED AT THE POINT OF CONNECTION TO THE EQUIPMENT UNLESS OTHERWISE INDICATED.
11. PROVIDE ALL CONTROL DEVICES, SUCH AS TEMPERATURE SENSORS, RELAYS, PRESSURE SWITCHES WHICH ARE ASSOCIATED WITH MECHANICAL EQUIPMENT AND ASSOCIATED CONTROL WIRING FROM STARTER TO THE CONTROL DEVICE. ALL CONTROL DEVICES SHALL BE POWERED AND OPERATED BY LOW VOLTAGE POWER (<24V) UNLESS OTHERWISE NOTED.
12. EXCEPT IN EQUIPMENT ROOMS, ALL CONTROL WIRING SHALL BE RUN CONCEALED. ALL CONTROL WIRING SHALL BE PLENUM RATED AND ROUTED IN CONDUIT. J-HOOKS ARE AN ACCEPTABLE ALTERNATE METHOD TO CONDUIT WITH WRITTEN APPROVAL BY OWNER. CONTROL WIRING SHALL NOT BE ROUTED WITHOUT CONDUIT OR J-HOOKS
13. TESTING, ADJUSTING, AND BALANCING AGENCY SHALL BE A MEMBER OF THE ASSOCIATED AIR BALANCE COUNCIL (AABC) OR THE NATIONAL ENVIRONMENTAL BALANCING BUREAU (NEBB). TESTING, ADJUSTING, AND BALANCING SHALL BE PERFORMED IN ACCORDANCE WITH THE AABC STANDARDS.
14. ALL PENETRATIONS THROUGH THE BUILDING ENVELOPE SHALL BE COORDINATED IN THE FIELD BY THE GENERAL CONTRACTOR. ROOF MOUNTED EQUIPMENT SHALL BE INSTALLED ON PREFABRICATED CURBS OR RAILS, WITH ROOF PATCHED AND FLASHED TO PREVENT MOISTURE INTRUSION.

SYMBOL	ABBR.	DESCRIPTION
ROUND / RECTANGULAR / OVAL	SA	SUPPLY AIR DUCT TURNING UP
		SUPPLY AIR DUCT TURNING DOWN
	RA	RETURN AIR DUCT TURNING UP
		RETURN AIR DUCT TURNING DOWN
12x10		RECTANGULAR DUCT
12ø		ROUND DUCT
12/10		OVAL DUCT
	FSD	CLASS 1 COMBINATION FIRE & SMOKE DAMPER WITH DUCT ACCESS DOOR AND DUCT MOUNTED ACTUATOR. REFER TO ELECTRICAL PLANS FOR POWER REQUIREMENTS.
	SD	CLASS 1 SMOKE DAMPER WITH DUCT ACCESS DOOR AND DUCT MOUNTED ACTUATOR. REFER TO ELECTRICAL PLANS FOR POWER REQUIREMENTS.
	FD	DYNAMIC TYPE B OR TYPE C FIRE DAMPER WITH DUCT ACCESS DOOR. COORDINATE DAMPER RATING WITH ARCHITECTURAL WALL SCHEDULE.
	MD	CLASS 1 MOTORIZED DAMPER. REFER TO ELECTRICAL PLANS FOR POWER REQUIREMENTS.
	BD	LOCKING MANUAL OPPOSED BLADE BALANCING DAMPER
		MITERED ELBOW WITH TURNING VANES.
		MITERED ELBOW WITHOUT TURNING VANES AND WITH LINER.
		RADIUS DUCT ELBOW. RADIUS ELBOWS SHALL BE 1.5W/1.5D ELBOWS UNLESS OTHERWISE NOTED.
		DEMOLITION WORK
		EXISTING CONDITIONS
		NEW CONSTRUCTION
		CONNECT TO EXISTING
		LIMIT OF DEMOLITION
	H	HUMIDISTAT/HUMIDITY SENSOR
	DP	DIFFERENTIAL PRESSURE SENSOR
	SD	DUCT SMOKE DETECTOR (COORDINATE WITH ELECTRICAL CONTRACTOR)
	SP	STATIC PRESSURE SENSOR
	T	THERMOSTAT/TEMPERATURE SENSOR

SYMBOL	ABBR.	DESCRIPTION
CD	CD	COOLING COIL CONDENSATE DRAIN
G	G	GAS PIPING
		FLOW DIRECTION
		2-WAY CONTROL VALVE
		3-WAY CONTROL VALVE
		AUTOMATIC AIR VENT
		AUTOMATIC FLOW CONTROL VALVE
		BALL VALVE
		BUTTERFLY VALVE
		CAPPED PIPE
		CHECK VALVE
		FLANGED CONNECTION
		FLEXIBLE CONNECTION
		FLEXIBLE PIPING
		FLOW METER
		GAS COCK
		GATE VALVE
		GLOBE VALVE
		MANUAL AIR VENT
		METERED BALANCING VALVE W/PRESSURE TAPS
		PIPE SLEEVE
		PRESSURE GAUGE WITH GAUGE COCK
		PRESSURE REDUCING VALVE
		PRESSURE RELIEF VALVE
		P/T PLUG
		SQUARE HEAD COCK
		STRAINER
		STRAINER WITH BLOW DOWN VALVE AND HOSE END CONNECTION
		THERMOMETER

DX & GAS PACKAGED ROOF TOP UNIT SCHEDULE

MARK	SUPPLY FAN: PEAK AIRFLOW	SUPPLY FAN: MINIMUM VENTILATION AIRFLOW	SUPPLY FAN: ESP	SUPPLY FAN: INDIVIDUAL MOTOR SIZE	NUMBER	DX COOLING COIL: AIRSIDE: TOTAL CAPACITY	AIRSIDE: SENSIBLE CAPACITY	AIRSIDE: LEAVING AIR DB	AIRSIDE: LEAVING AIR WB	COMPRESSOR: REFFRIGERANT	COMPRESSOR: EER	HEATING COIL: AIR SIDE: TOTAL CAPACITY	AIR SIDE: ENTERING (DB)	AIR SIDE: LEAVING (DB)	FURNACE: GAS INPUT	FURNACE: STAGES	FURNACE: FUEL	FURNACE: % AFUE	AIR FILTRATION: FINAL FILTER: EFFICIENCY	AIR FILTRATION: FINAL FILTER: TYPE	ELECTRICAL DATA: VOLTAGE	ELECTRICAL DATA: PHASE	WEIGHT	MANUFACTURER	MODEL
RTU-AS-1	4500 CFM	1100 CFM	1.10 in-wg	3.0 hp	2	156,240.0 Btu/h	115,320.0 Btu/h	56 °F	55 °F	R-454b	12.6	121,500.0 Btu/h	59 °F	84 °F	150,000.0 Btu/h	10	NATURAL GAS	81	MERV 13	2" PLEATED	460 V	3	2292.00 lb	TRANE	YHK150
RTU-AS-3	5400 CFM	1100 CFM	1.20 in-wg	3.0 hp	2	184,490.0 Btu/h	137,290.0 Btu/h	56 °F	55 °F	R-454b	12.2	202,500.0 Btu/h	59 °F	93 °F	250,000.0 Btu/h	10	NATURAL GAS	81	MERV 13	2" PLEATED	460 V	3	2292.00 lb	TRANE	YHK180
RTU-AS-8	5000 CFM	860 CFM	1.00 in-wg	3.0 hp	2	156,240.0 Btu/h	115,320.0 Btu/h	56 °F	55 °F	R-454b	12.6	110,200.0 Btu/h	59 °F	84 °F	150,000.0 Btu/h	10	NATURAL GAS	81	MERV 13	2" PLEATED	460 V	3	2292.00 lb	TRANE	YHK150
RTU-FH-3	6000 CFM	2000 CFM	1.50 in-wg	3.0 hp	2	186,800.0 Btu/h	144,700.0 Btu/h	57 °F	56 °F	R-454b	12.2	259,200.0 Btu/h	59 °F	99 °F	320,000.0 Btu/h	10	LP GAS	81	MERV 13	2" PLEATED	208 V	3	2328.00 lb	TRANE	YHK180
RTU-FH-4	6000 CFM	2400 CFM	1.50 in-wg	3.0 hp	2	186,800.0 Btu/h	144,700.0 Btu/h	57 °F	56 °F	R-454b	12.2	259,200.0 Btu/h	59 °F	99 °F	320,000.0 Btu/h	10	LP GAS	81	MERV 13	2" PLEATED	208 V	3	2328.00 lb	TRANE	YHK180
RTU-FH-5	8000 CFM	2400 CFM	1.50 in-wg	3.0 hp	2	249,030.0 Btu/h	186,780.0 Btu/h	58 °F	57 °F	R-454b	10.8	324,000.0 Btu/h	59 °F	96 °F	400,000.0 Btu/h	10	LP GAS	81	MERV 13	2" PLEATED	208 V	3	2446.00 lb	TRANE	YHK240

NOTES:

1. INSTALL NEW RTU ON EXISTING RTU ROOF CURB. PROVIDE ROOF CURB ADAPTER AS NECESSARY.
2. PROVIDE WITH THE FOLLOWING MANUFACTURER'S OPTIONS:
   - SINGLE POINT POWER.
   - A2L LEAK DETECTION SYSTEM AND ALARM. 3
   - MODULATING HOT GAS REHEAT FOR STAGED HOT GAS REHEAT FOR DEHUMIDIFICATION CONTROL.
   - LOW LEAK DB ECONOMIZER WITH BAROMETRIC RELIEF.
   - HINGED ACCESS DOORS.
3. UNITS SHALL BE UV LIGHT READY FOR FUTURE INSTALLATION OF UV-C PURIFICATION SYSTEM. ENSURE ADEQUATE SPACE IS PROVIDED IN COOLING COIL SECTION TO INSTALL UV LIGHT COMPONENTS INCLUDING UV LAMPS, BRACKETS, AND WIRING. 3
4. ALTERNATIVE No. G-7 - PROVIDE HAIL GUARD ON CONDENSER COILS.

ALTERNATE No. G-8 DX & GAS PACKAGED ROOF TOP UNIT SCHEDULE

MARK	SUPPLY FAN: PEAK AIRFLOW	SUPPLY FAN: MINIMUM VENTILATION AIRFLOW	SUPPLY FAN: ESP	SUPPLY FAN: INDIVIDUAL MOTOR SIZE	NUMBER	DX COOLING COIL: AIRSIDE: TOTAL CAPACITY	AIRSIDE: SENSIBLE CAPACITY	AIRSIDE: LEAVING AIR DB	AIRSIDE: LEAVING AIR WB	COMPRESSOR: REFFRIGERANT	COMPRESSOR: EER	HEATING COIL: AIR SIDE: TOTAL CAPACITY	AIR SIDE: ENTERING (DB)	AIR SIDE: LEAVING (DB)	FURNACE: GAS INPUT	FURNACE: STAGES	FURNACE: FUEL	FURNACE: % AFUE	AIR FILTRATION: FINAL FILTER: EFFICIENCY	AIR FILTRATION: FINAL FILTER: TYPE	ELECTRICAL DATA: VOLTAGE	ELECTRICAL DATA: PHASE	WEIGHT	MANUFACTURER	MODEL
(E)RTU-AS-6	4000 CFM	460 CFM	1.00 in-wg	3.0 hp	1	117,000.0 Btu/h	100,000.0 Btu/h	55 °F	54 °F	R-454b	11.6	127,640.0 Btu/h	59 °F	110 °F	150,000.0 Btu/h	10	NATURAL GAS	81	MERV 13	2" PLEATED	460 V	3	1217.00 lb	TRANE	YHK120

NOTES:

1. INSTALL NEW RTU ON EXISTING RTU ROOF CURB. PROVIDE ROOF CURB ADAPTER AS NECESSARY.
2. PROVIDE WITH THE FOLLOWING MANUFACTURER'S OPTIONS:
   - SINGLE POINT POWER.
   - A2L LEAK DETECTION SYSTEM AND ALARM
   - MODULATING HOT GAS REHEAT FOR DEHUMIDIFICATION CONTROL.
   - LOW LEAK DB ECONOMIZER WITH BAROMETRIC RELIEF.
   - HINGED ACCESS DOORS.
3. UNITS SHALL BE UV LIGHT READY FOR FUTURE INSTALLATION OF UV-C PURIFICATION SYSTEM.
4. ALTERNATIVE No. G-9 - PROVIDE HAIL GUARD ON CONDENSER COILS.

BUILDING HVAC FANS

Mark	TYPE	MOUNTING	FAN CHARACTERISTICS: AIRFOW	AIR SPEED	ESP	SONES	MOTOR HP	ELECTRICAL DATA: VOLTAGE	PHASE	FREQUENCY	MANUFACTURER	MODEL	NOTES
EF-FH-1	DIRECT DRIVE	SIDEWALL	3450 CFM	1,725 ft/min	1.50 in-wg	26	2 hp	208 V	3	60 Hz	GREENHECK	CUE-160-A	ALL

NOTES:

1. INTERLOCK FAN TO RUN CONTINUOUSLY WHEN RTU-FH-4 IS OPERATIONAL.
2. PROVIDE MANUFACTURER'S WALL MOUNTING KIT, FUSED DISCONNECT, COUNTER-BALANCED BACKDRAFT DAMPER, SPEED CONTROLLER, AND CONTROL SYSTEM INTEGRATION CARD.

DIFFUSERS, REGISTERS, & GRILLES SCHEDULE

MARK	SERVICE	AIR PERFORMANCE: MINIMUM FLOW	MAXIMUM FLOW	PRESSURE DROP	THROW AT 100 FPM	SOUND RATING (NC)	CONSTRUCTION: MOUNTING	FACE TYPE	NECK SIZE	FACE SIZE	MATERIAL	COLOR	MANUFACTURER	MODEL	NOTES
A8	SUPPLY	140 CFM	245 CFM	0.06 in-wg	4' - 0"	15	SURFACE	SQUARE PLAQUE	8"ø	24"x24"	ALUMINUM	WHITE	PRICE	ASPD	ALL
A10	SUPPLY	220 CFM	380 CFM	0.09 in-wg	6' - 0"	18	SURFACE	SQUARE PLAQUE	10"ø	24"x24"	ALUMINUM	WHITE	PRICE	ASPD	ALL
C10	SUPPLY	220 CFM	380 CFM	0.06 in-wg	6' - 0"	17	SURFACE	SQUARE CONE	10"ø	24"x24"	ALUMINUM	WHITE	PRICE	ASCD	
T12	RETURN	0 CFM	550 CFM	0.13 in-wg	0"	21	SURFACE	SQUARE PLAQUE	12"ø	24"x24"	ALUMINUM	WHITE	PRICE	ASPD	ALL
V10	EXHAUST	0 CFM	380 CFM	0.09 in-wg	0"	18	SURFACE	SQUARE PLAQUE	10"ø	24"x24"	ALUMINUM	WHITE	PRICE	ASPD	ALL
NOTES: 2	EXHAUST	0 CFM	550 CFM	0.13 in-wg	0"	21	SURFACE	SQUARE PLAQUE	12"ø	24"x24"	ALUMINUM	WHITE	PRICE	ASPD	ALL

1. COORDINATE AIR DISTRIBUTION LOCATIONS WITH EXISTING CONDITIONS.
2. AIR DISTRIBUTION WITH BAKED ENAMEL FINISH.
3. SURFACE MOUNTED AIR DISTRIBUTION DEVICES SHALL BE MOUNTED WITHOUT VISIBLE FASTENERS.
4. AIR DEVICES INSTALLED IN INACCESSIBLE CEILINGS SHALL BE PROVIDED WITH FACE ACCESSIBLE BALANCING DAMPER AND REMOTE DAMPER ACTUATOR.

2018 Appendix B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN & SUMMARY

Mechanical Systems, Service Systems and Equipment

METHOD OF COMPLIANCE:
- [x] No Change to Existing Systems
- [ ] Prescriptive
- [ ] Performance
- [ ] Energy Cost Budget

Weather Station: FAYETTEVILLE, NC
Thermal Zone: 3A

Exterior Design Conditions:
summer dry bulb: 94 °F — summer wet bulb: 74 °F
winter dry bulb: 17 °F

Interior Design Conditions:
summer dry bulb: 75 °F
winter dry bulb: 70 °F
relative humidity: 45-60%

Building Cooling Load:

Building Heating Load:

Mechanical Spacing Conditioning System:
Unitary:
description of unit:
cooling output:
cooling efficiency:
heating output:
heating efficiency:
Chiller:
Chiller output:
Oversizing reason:
Boiler:
Boiler output:
Oversizing reason:

List equipment efficiencies:
Cooling Efficiency:
Heating Efficiency:

Mechanical system motors:
Motor horsepower:
Number of phases:
Minimum efficiency:
Motor type:
Number of poles:

EXISTING MECHANICAL SYSTEM

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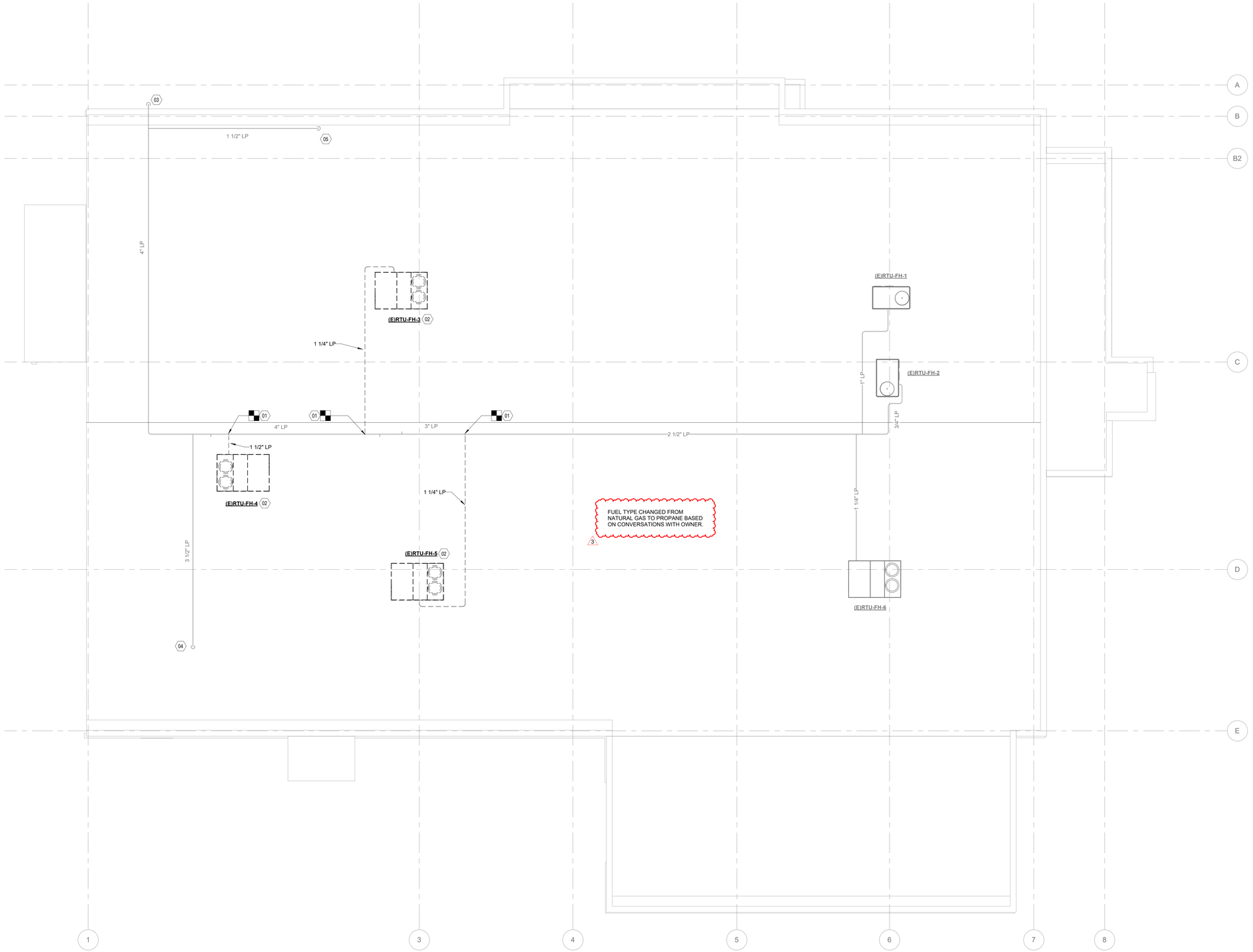
NORTH CAROLINA SEAL 053045 ENGINEER ELIZABETH A GORNEY 4/17/2026

ISSUE FOR: CONSTRUCTION DOCUMENTS
ISSUE DATE: 2.20.2026

REVISIONS

NO.	REASON	DATE
3	ADDENDUM #1	4/17/2026

PROJECT TEAM
PRINCIPAL IN CHARGE: ERVIN KULENICA
PROJECT MANAGER: DOUGLAS FREEMAN
DESIGN TEAM: E.GORNEY
PROJECT NAME: SCO ID 24-28674-01A UNCP RTU Replacements
Bob Caton Field House - Chevelle Rd, Pembroke, NC 28372
Auxiliary Services Facility - 270 Faculty Row, Pembroke, NC 28372
PROJECT NO.: 5822131900
SHEET TITLE: MECHANICAL GENERAL NOTES & LEGEND
SHEET NUMBER: M001



1A MD111 MECHANICAL ROOF DEMOLITION PLAN - BOB CANTON FIELDHOUSE

1/8" = 1'-0"

KEY NOTES

01 REMOVE GAS PIPING AND ACCESSORIES AND CAP AT MAIN.

02 EXISTING ROOFTOP UNIT SHALL BE DEMOLISHED. EXISTING CURB SHALL REMAIN FOR RE-USE WITH NEW UNIT.

03 EXISTING GAS PIPING DOWN TO EXISTING BURRIED PROPANE GAS TANKS. 3

04 EXISTING GAS PIPING DOWN THROUGH ROOF TO EXISTING WATER HEATERS

05 EXISTING GAS PIPING DOWN THROUGH ROOF TO EXISTING DRYERS

GENERAL SHEET NOTES

1. COORDINATE WORK WITH EXISTING FIELD CONDITIONS.
2. PROTECT ROOF OPENINGS AFTER REMOVAL OF THE ROOFTOP UNITS PRIOR TO INSTALLATION OF REPLACEMENT UNITS.
3. GAS PIPING EXISTING TO REMAIN IN PLACE UNLESS NOTED OTHERWISE. REPAINT PIPING TO PREVENT CORROSION.

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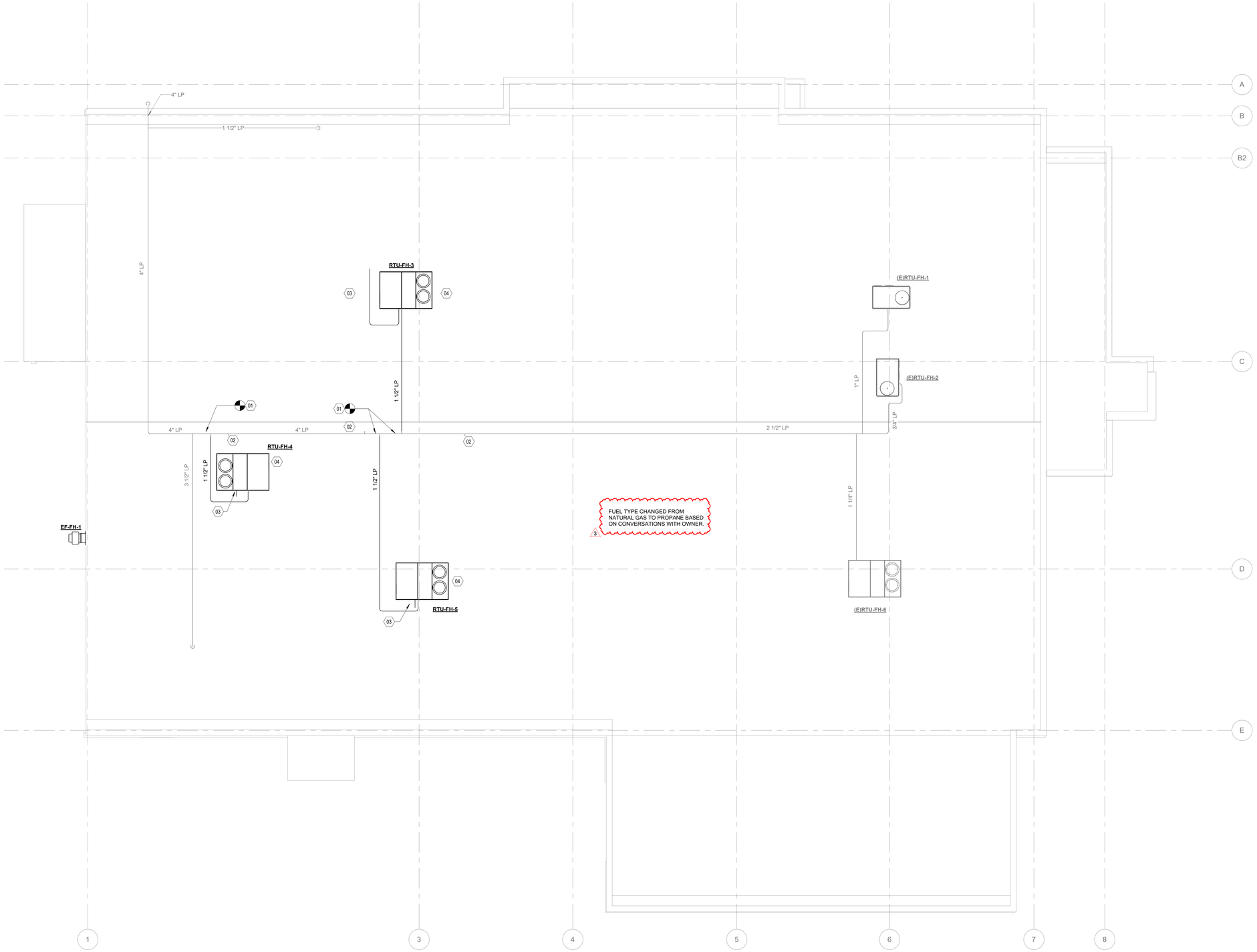
PROJECT NO.: 5822131900

SHEET TITLE: MECHANICAL ROOF DEMOLITION PLAN - FIELD HOUSE

SHEET NUMBER: MD111



1A / M111 MECHANICAL ROOF PLAN - BOB CANTON FIELDHOUSE

1/8" = 1'-0"

KEY NOTES

01 CONNECT NEW GAS PIPING TO EXISTING AT LOCATION SHOWN.

02 CAP EXISTING GAS TAP.

03 ROUTE CONDENSATE DRAIN PIPING TO STANDING SEAM ROOF SECTION WITH CLEAR PATH TO ROOF GUTTER.

04 INSTALL NEW RTU ON EXISTING ROOF CURB. PROVIDE ADAPTER AS NECESSARY.

GENERAL SHEET NOTES

1. PROVIDE BALANCING DAMPERS ON ALL BRANCH RUNOUTS TO DIFFUSERS.
2. RUNOUTS AND FLEX DUCTS SHALL BE SIZED TO MATCH DIFFUSER NECK SIZE.
3. PROVIDE SMACNA DUCT FITTINGS AS REQUIRED TO TRANSITION SUPPLY AND RETURN DUCTWORK TO ROOFTOP UNITS.

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PROJECT MANAGER
DOUGLAS FREEMAN
DESIGN TEAM
E.GORNEY

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PROJECT NO.
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SHEET TITLE
MECHANICAL ROOF PLAN - FIELDHOUSE

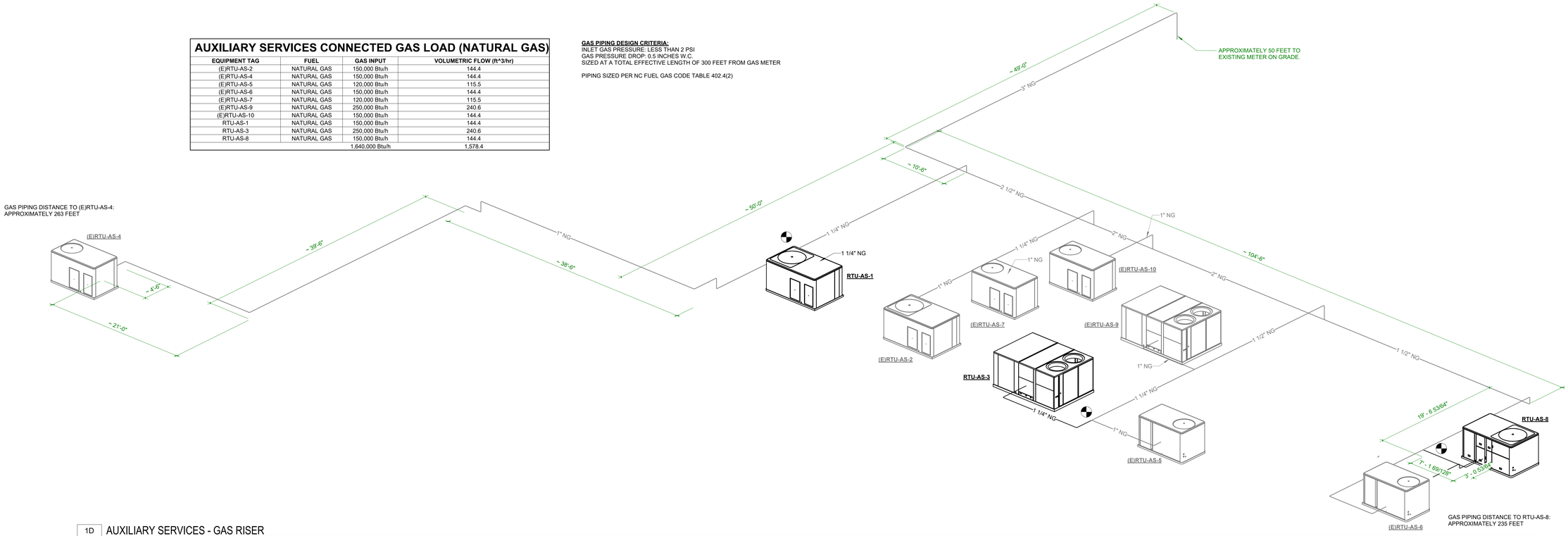
SHEET NUMBER
M111

AUXILIARY SERVICES CONNECTED GAS LOAD (NATURAL GAS)

EQUIPMENT TAG	FUEL	GAS INPUT	VOLUMETRIC FLOW (ft^3/hr)
(E)RTU-AS-2	NATURAL GAS	150,000 Btu/h	144.4
(E)RTU-AS-4	NATURAL GAS	150,000 Btu/h	144.4
(E)RTU-AS-5	NATURAL GAS	120,000 Btu/h	115.5
(E)RTU-AS-6	NATURAL GAS	150,000 Btu/h	144.4
(E)RTU-AS-7	NATURAL GAS	120,000 Btu/h	115.5
(E)RTU-AS-9	NATURAL GAS	250,000 Btu/h	240.6
(E)RTU-AS-10	NATURAL GAS	150,000 Btu/h	144.4
RTU-AS-1	NATURAL GAS	150,000 Btu/h	144.4
RTU-AS-3	NATURAL GAS	250,000 Btu/h	240.6
RTU-AS-8	NATURAL GAS	150,000 Btu/h	144.4
		1,640,000 Btu/h	1,578.4

GAS PIPING DESIGN CRITERIA:
INLET GAS PRESSURE: LESS THAN 2 PSI
GAS PRESSURE DROP: 0.5 INCHES W.C.
SIZED AT A TOTAL EFFECTIVE LENGTH OF 300 FEET FROM GAS METER

PIPING SIZED PER NC FUEL GAS CODE TABLE 402.4(2)



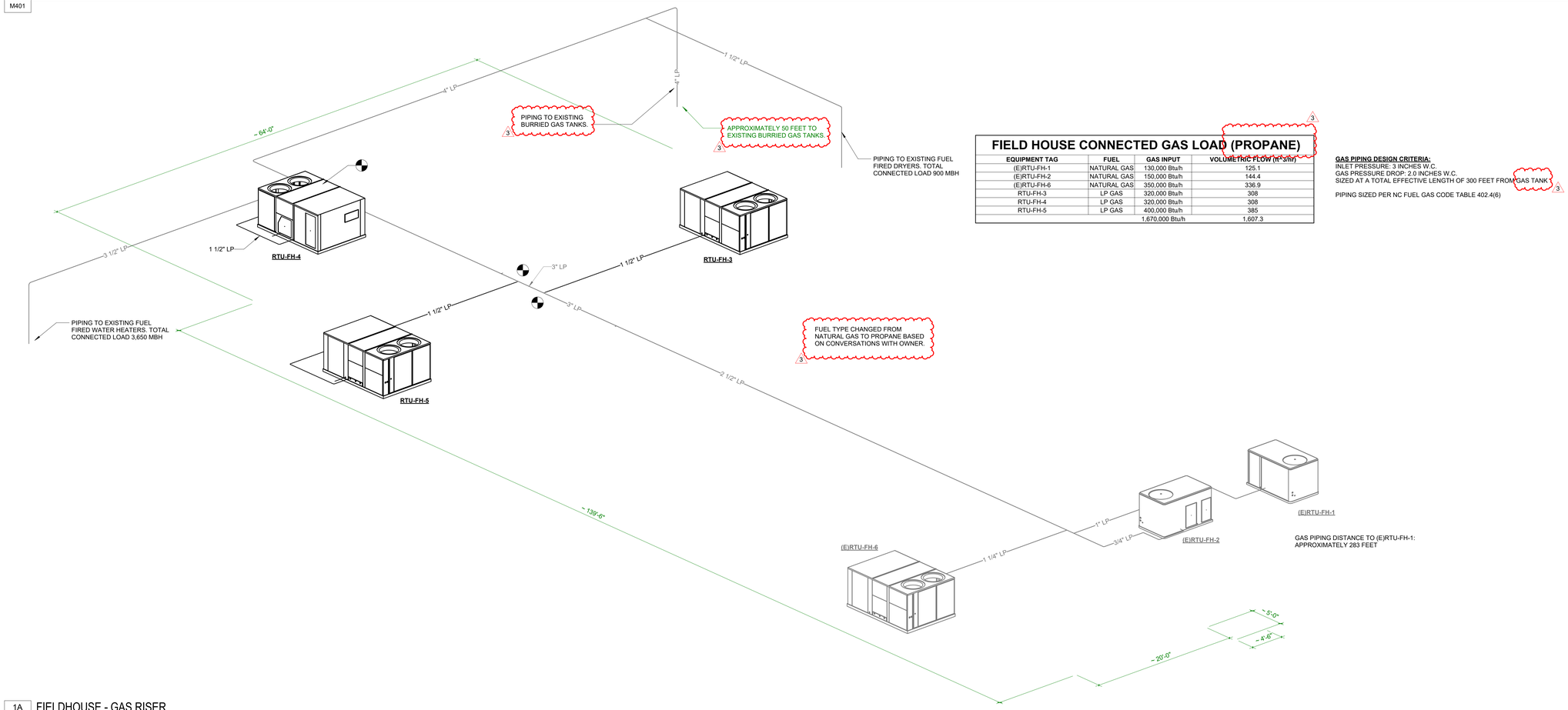
1D M401 AUXILIARY SERVICES - GAS RISER

FIELD HOUSE CONNECTED GAS LOAD (PROPANE) 3

EQUIPMENT TAG	FUEL	GAS INPUT	VOLUMETRIC FLOW (ft^3/hr)
(E)RTU-FH-1	NATURAL GAS	130,000 Btu/h	125.1
(E)RTU-FH-2	NATURAL GAS	150,000 Btu/h	144.4
(E)RTU-FH-6	NATURAL GAS	350,000 Btu/h	336.9
RTU-FH-3	LP GAS	320,000 Btu/h	308
RTU-FH-4	LP GAS	320,000 Btu/h	308
RTU-FH-5	LP GAS	400,000 Btu/h	385
		1,670,000 Btu/h	1,607.3

GAS PIPING DESIGN CRITERIA: 3
INLET PRESSURE: 3 INCHES W.C.
GAS PRESSURE DROP: 2.0 INCHES W.C.
SIZED AT A TOTAL EFFECTIVE LENGTH OF 300 FEET FROM GAS TANK 3

PIPING SIZED PER NC FUEL GAS CODE TABLE 402.4(6)



1A M401 FIELDHOUSE - GAS RISER

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SHEET TITLE
FUEL GAS RISER DIAGRAMS

SHEET NUMBER
M401