

PRINT DATE: 4/24/2026 8:05:26 AM

SEQUENCE OF OPERATION

OCCUPIED MODE

THE OA AUTOMATIC CONTROL DAMPER SHALL OPEN AND THE INDOOR FAN AND THE INTERLOCKED REST ROOM EXHAUST FANS SHALL REMAIN ENERGIZED DURING ALL OCCUPIED HOURS.

COOLING

A CALL FOR COOLING FROM THE SPACE THERMOSTAT SHALL ENERGIZE THE REFRIGERATION CIRCUIT(S) AS DICTATED BY THE HEAT PUMP UNITS INTERNAL CONTROLS. THE REFRIGERATION CIRCUIT(S) SHALL BE DE-ENERGIZED WHEN THE SPACE TEMPERATURE REQUIREMENT HAS BEEN MET.

HEATING

A CALL FOR HEATING FROM THE SPACE THERMOSTAT SHALL ENERGIZE THE REFRIGERATION CIRCUIT(S) IN REVERSE MODE AS DICTATED BY THE HEAT PUMP UNITS INTERNAL CONTROLS. THE REFRIGERATION CIRCUIT SHALL BE DE-ENERGIZED WHEN THE SPACE TEMPERATURE REQUIREMENT HAS BEEN MET.

IF THE SPACE HEATING REQUIREMENT CAN NOT BE MET USING THE REVERSE CYCLE ALONE, THE ELECTRIC HEATER WILL BE ENERGIZED AND CONTROLLED BY THE HEAT PUMP UNITS INTERNAL CONTROLS TO PROVIDE SUPPLEMENTAL HEAT. THE ELECTRIC HEATER AND THE REFRIGERATION CIRCUITS SHALL BE DE-ENERGIZED WHEN THE SPACE TEMPERATURE REQUIREMENT HAS BEEN MET.

UNOCCUPIED MODE

WHEN THE SPACE IS UNOCCUPIED, THE INDOOR FAN SHALL BE ENERGIZED ONLY WHEN THE REFRIGERATION CIRCUIT(S) OR ELECTRIC HEATER IS ENERGIZED. THE INTERLOCKED REST ROOM EXHAUST FANS SHALL REMAIN DE-ENERGIZED AND THE OA AUTOMATIC CONTROL DAMPER SHALL REMAIN CLOSED.

GENERAL NOTES

- THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR AND OTHER TRADES ALL REQUIRED OPENINGS IN WALLS, FOUNDATIONS, FLOORS, AND ROOFS.
- ALL OUTSIDE AIR INLETS SHALL BE LOCATED A MINIMUM OF 10 FEET FROM ANY EXHAUST AIR OUTLET OR PLUMBING VENT STACK. COORDINATE WITH THE PLUMBING AND THE GENERAL CONTRACTORS IN THE FIELD.
- THE MECHANICAL CONTRACTOR SHALL VERIFY ALL MECHANICAL EQUIPMENT LOCATIONS AND BE RESPONSIBLE FOR ALL RELATED CLEARANCES IN THE FIELD. PROVIDE ADEQUATE MAINTENANCE CLEARANCE AROUND EACH PIECE OF EQUIPMENT PER THE MANUFACTURER'S RECOMMENDATIONS. PROVIDE CLEARANCE IN FRONT OF ALL ELECTRICAL PANELS AND OTHER ELECTRICAL EQUIPMENT PER THE NATIONAL ELECTRICAL CODE REQUIREMENTS. COORDINATE WITH THE ELECTRICAL AND GENERAL CONTRACTORS IN THE FIELD. COORDINATE THE EXACT LOCATION OF ALL OUTDOOR UNITS IN THE FIELD WITH THE OWNER AND ARCHITECT.
- PROVIDE WATER PROOF SEALING OF ALL PIPE AND DUCT PENETRATIONS OF EXTERIOR WALLS, FLOORS, AND/OR ROOF.

DUCTWORK & INSULATION NOTES

- ALL SUPPLY, RETURN, EXHAUST, AND OUTSIDE AIR DUCTWORK SHALL BE LOW PRESSURE RECTANGULAR OR ROUND GALVANIZED METAL AS INDICATED. SMACNA STATIC PRESSURE CLASS 1" W.G., SEAL CLASS B, EXTERNALLY INSULATED WITH 2" THICK DUCT WRAP WITH A MINIMUM INSTALLED R-VALUE OF 6.0. EXHAUST AIR DUCTWORK MAY BE UNINSULATED.
- AVOID ROUTING DUCTWORK OVER LIGHTS WHEREVER POSSIBLE. WHERE DUCTWORK MUST BE ROUTED OVER LIGHTS, MAINTAIN A 2" CLEARANCE BETWEEN DUCT INSULATION AND TOP OF LIGHTS.
- ALL DUCTWORK WALL PENETRATIONS SHALL BE SEALED AIR TIGHT REGARDLESS WALL FIRE RATING STATUS.

HVAC LEGEND

	RECTANGULAR DUCTWORK. SIZES SHOWN ARE INSIDE CLEAR DIMENSIONS. SEE 'DUCTWORK AND INSULATION NOTES' ON THIS SHEET.		CEILING DIFFUSER. 24"x24" SQUARE CONE FACE. ROUND NECK SIZE AND AIR FLOW AS INDICATED. DIRECTION OF THROW AS INDICATED BY ARROWS. TITUS MODEL TMS OR APPROVED EQUIVALENT. SEE 'SQUARE CEILING DIFFUSER MOUNTING DETAIL' ON SHEET M002.
	ROUND METAL SNAP-LOCK DUCTWORK. SIZES INDICATED ARE INSIDE CLEAR DIMENSIONS. SEE 'DUCTWORK AND INSULATION NOTES' ON THIS SHEET.		CEILING REGISTER. CURVED BLADE. RECTANGULAR NECK SIZE AND AIR FLOW AS INDICATED. DIRECTION OF THROW AS INDICATED BY ARROWS. PROVIDE WITH AN OPPOSED BLADE VOLUME CONTROL DAMPER OPERABLE FROM THE FACE OF THE REGISTER. TITUS MODEL 250 OR APPROVED EQUIVALENT.
	LONG RADIUS (RADIUS IS MINIMUM 1-1/2 TIMES THE DUCT DIAMETER) ELBOW IN ROUND OR RECTANGULAR DUCTWORK. PROVIDE FOR ALL ROUND DUCT AND FOR ALL RECTANGULAR DUCT DUCT 12" OR LESS IN THE TURNING DIRECTION.		SIDEWALL REGISTER. RECTANGULAR NECK SIZE AND AIR FLOW AS INDICATED. DIRECTION OF THROW AS INDICATED BY ARROW. PROVIDE WITH ADJUSTABLE AIR EXTRACTOR OPERABLE FROM THE FACE OF THE REGISTER. CONSTRUCTED FROM ALUMINUM TITUS MODEL 300FS OR APPROVED EQUAL.
	SQUARE THROAT ELBOW IN RECTANGULAR DUCTWORK WITH DOUBLE WALL TURNING VANES.		LINEAR DIFFUSER (ACTIVE SECTION). 48" LONG LINEAR DIFFUSER WITH A SINGLE 1-1/2" SLOT AND FACTORY-SUPPLIED FIBERGLASS0 PLENUM. ROUND INLET SIZED AS INDICATED. INSULATE ENTIRE PLENUM SAME AS SUPPLY AIR DUCTWORK. TITUS "FLOWBAR" MODEL FL-10 WITH "JetThrow" PATTERN CONTROLLER. PROVIDE WITH BORDER TYPE FOR INSTALLATION IN A 48"x48" LAY-IN CEILING.
	RECTANGULAR BRANCH DUCT TAKE-OFF FROM RECTANGULAR MAIN DUCT. TAKE-OFF SHALL BE MADE WITH A 45° COLLAR.		RETURN AIR GRILLE. LOUVERED FACE WITH FIXED LOUVERS PARALLEL TO THE LONG DIMENSION, SPACED AT 1/2" AND SET AT A 35° DEFLECTION, TITUS MODEL 355RL OR APPROVED EQUIVALENT. PROVIDE WITH AN EXTENDED PANEL WHEN INSTALLED IN A CEILING GRID.
	ROUND BRANCH DUCT TAKE-OFF FROM RECTANGULAR MAIN DUCT. BRANCH DUCT SHALL BE FLEXIBLE ROUND DUCT OR ROUND METAL SNAPLOCK AS INDICATED. ROUND DUCT TAKE-OFF SHALL BE MADE WITH 45° SIDE TAKE-OFF FITTING WITH MANUAL VOLUME DAMPER. SEE 'ROUND DUCT TAKE-OFF MOUNTING DETAIL' ON SHEET M002.		UNDERCUT DOOR 1" TO ALLOW AIR FLOW IN THE DIRECTION INDICATED.
	MANUAL VOLUME DAMPER (MVD) OR AUTOMATIC CONTROL DAMPER (ACD) IN RECTANGULAR DUCT. PROVIDE OPPOSED BLADE TYPE WITH LOCKING QUADRANT REGULATOR. ACD SHALL BE LOW VOLTAGE AND WIRED BY THE MECHANICAL CONTRACTOR.		SUPPLY AND OUTSIDE AIR FLOW.
	RECTANGULAR TO ROUND DUCT TRANSITION.		RETURN AND EXHAUST AIR FLOW.
	FLEXIBLE DUCT CONNECTOR		PROGRAMMABLE THERMOSTAT AND HUMIDISTAT. MOUNT AT 60" A.F.F. SEE SEQUENCE OF OPERATION ON THIS SHEET.
	ROUND DUCT IN SECTION		AIR HANDLER AND HEAT PUMP UNIT. DX SPLIT-SYSTEM INDOOR AND OUTDOOR UNITS. SEE SCHEDULE ON THIS SHEET AND 'AIR HANDLER INSTALLATION DETAIL' ON SHEET M002.
	RECTANGULAR SUPPLY OR OUTSIDE AIR DUCTWORK IN SECTION		ROOFTOP UNIT. PACKAGED HEAT PUMP ELECTRIC HEAT. SEE SCHEDULE ON THIS SHEET AND 'PACKAGED ROOFTOP UNIT INSTALLATION DETAIL' ON SHEET M002.
	RECTANGULAR RETURN OR EXHAUST AIR DUCTWORK IN SECTION		EXHAUST FAN. SEE SCHEDULE ON THIS SHEET AND 'CEILING EXHAUST FAN INSTALLATION DETAIL' ON SHEET M002.
	CONNECTION OF NEW TO EXISTING.		EXISTING

FAN SCHEDULE

MARK	TYPE	DRIVE	SERVICE	LOCATION	CONTROL	INTERLOCK	PERFORMANCE DATA				ELECTRICAL DATA				REMARKS
							AIR FLOW (CFM)	EXTERNAL STATIC PRESSURE (INCHES H ₂ O)	MAXIMUM RPM	MAXIMUM SONES	MAXIMUM POWER	VOLTS	PHASE	HERTZ	
EF-1-6	CEF	DD	EA	REST ROOM	CONTINUOUS	LIGHTS	70	0.38	730	2.0	40 WATTS	115	1	60	(4)X(5)X(6)

FAN NOTES

- CEF - CEILING EXHAUST FAN
- DD - DIRECT DRIVE
- EA - EXHAUST AIR
- PROVIDE FAN WITH A SPEED CONTROLLER FOR AIR FLOW BALANCING. MOUNT CONTROLLER WITHIN FAN HOUSING.
- PROVIDE FAN WITH INTEGRAL DISCONNECT.
- BASIS OF DESIGN - GREENHECK MODEL SP-B110 OR APPROVED EQUIVALENT.

SPLIT SYSTEM AIR TO AIR HEAT PUMP UNIT SCHEDULE

SPLIT SYSTEM AIR TO AIR HEAT PUMP UNIT SCHEDULE																											
MARK	INDOOR UNIT (AH)															OUTDOOR UNIT (HPU)						AHRI COOLING DATA (7)		AHRI HEATING DATA (7)		REMARKS	
	FAN DATA				AUXILIARY HEATER DATA				FILTER DATA			ELECTRICAL DATA				COMPRESSOR QUANTITY	ELECTRICAL DATA				MINIMUM TOTAL NET CAPACITY (BTU/HR)	MINIMUM SEER2 (8)	MINIMUM HIGH TEMP. AHRI RATING @ 47°Fdb				
	TOTAL AIR (CFM)	OUTSIDE AIR (CFM)	EXTERNAL STATIC PRESSURE (INCHES H ₂ O)	FULL LOAD AMPS	TYPE	TOTAL KW (3)	CONTROL STAGES	KW PER STAGE (4)	MAXIMUM FACE VELOCITY (FPM)	TYPE	THICK	MINIMUM CIRCUIT AMPACITY	MAXIMUM OVERCURRENT PROTECTION	VOLTS	PHASE		HERTZ	MINIMUM CIRCUIT AMPACITY	MAXIMUM OVERCURRENT PROTECTION	VOLTS			PHASE	HERTZ	CAPACITY (BTU/HR)		HSPF2 (8)
AH & HPU-1	1,900	155	0.6 (1)	6.0	(2)	7.68	1	7.68	500	(5)	1"	48 (6)	50 (6)	230	1	60	1	11	15	460	3	60	53,500	14.3	35,850	7.5	(9)(10)(11)(12)(13)(14)

SPLIT SYSTEM HEAT PUMP UNIT NOTES

- DOES NOT INCLUDE AIR PRESSURE DROP THROUGH FILTER OR ELECTRIC RESISTANCE HEATER.
- ELECTRIC RESISTANCE.
- NOMINAL HEATER SIZE, AS RATED AT 240V.
- AS RATED AT THE ACTUAL VOLTAGE AVAILABLE (240V).
- IF NOT INTEGRAL TO OR SUPPLIED WITH THE AIR HANDLER, PROVIDE A REMOTE FILTER HOUSING TO ACCOMMODATE APPROPRIATELY SIZED MERV 8 DISPOSABLE FILTER.
- RATED AT THE VOLTAGE INDICATED AND INCLUDES SCHEDULED AUXILIARY ELECTRIC HEATER.
- AHRI 210/240-2023 STANDARD CONDITIONS FOR MATCHED SYSTEM.
- SEER2 - SEASONAL ENERGY EFFICIENCY RATIO 2. HSPF2 - HEATING SEASON PERFORMANCE FACTOR 2.
- REFRIGERANT PIPING SIZE, ROUTING, AND CONFIGURATION SHALL BE AS RECOMMENDED BY MANUFACTURER OF HEAT PUMP UNIT. INSULATE ENTIRE SUCTION LINE WITH MINIMUM 3/4" THICK UNICELLULAR INSULATION.
- PROVIDE EACH COMPRESSOR WITH ANTI-SHORT CYCLE CONTROLS AND TIME DELAY ON COMPRESSOR RESTART.
- CONDENSATE PIPING SHALL BE 1" PVC OR COPPER. TRAP AT INDOOR UNIT PER MANUFACTURER'S RECOMMENDATIONS AND ROUTE TO POINT INDICATED. CONSTRUCT TRAP OUT OF TEES WITH A CAP ON EACH TEE. SEE 'CONDENSATE DRAIN DETAIL' ON SHEET M002.
- ROUTE REFRIGERANT AND CONDENSATE PIPING TO ALLOW CONVENIENT ACCESS TO INDOOR UNIT FOR MAINTENANCE. ALLOW A MINIMUM OF 36" CLEARANCE IN FRONT OF ALL ACCESS PANELS.
- PROVIDE OUTDOOR UNIT WITH LOUVERED OR PVC COATED COIL GUARDS.
- BASIS OF DESIGN - TRANE MODEL 5TWA060A4 HEAT PUMP (OUTDOOR) UNIT AND MODEL 5TEM4D06AC41 AIR HANDLER (INDOOR UNIT) OR APPROVED EQUIVALENTS.

PACKAGED AIR TO AIR HEAT PUMP UNIT SCHEDULE

PACKAGED AIR TO AIR HEAT PUMP UNIT SCHEDULE																							
MARK	EVAPORATOR SECTION										CONDENSER SECTION				AHRI COOLING DATA (5)		AHRI HEATING DATA (5)		ELECTRIC DATA			REMARKS	
	FAN DATA				ELECTRIC HEATER DATA			FILTER DATA			COMPRESSOR DATA		CONDENSER FAN DATA		MINIMUM TOTAL NET CAPACITY (BTU/HR)	MINIMUM EFFICIENCY (6)	MINIMUM HIGH TEMP. AHRI RATING @ 47°Fdb		VOLTS	PHASE	HERTZ		
	TOTAL AIR (CFM)	OUTSIDE AIR (CFM)	EXTERNAL STATIC PRESSURE (INCHES H ₂ O)	MINIMUM POWER	TOTAL KW (2)	CONTROL STAGES	KW PER STAGE (3)	MAXIMUM FACE VELOCITY (FPM)	TYPE	THICK	QUANTITY	MAXIMUM RATED LOAD AMPS EACH	QUANTITY	MAXIMUM FULL LOAD AMPS EACH			CAPACITY (BTU/HR)	EFFICIENCY (6)					
RTU-1	2,140	155	0.6 (1)	3 hp	9.0	1	9.0	160	(4)	2"	2	7.0/4.2	1	1.5	74,110	16.3 IEER	71,600	3.7 COP _H	460	3	60	(7)(8)(9)(10)	
RTU-2	3,400	290	0.6 (1)	4.2 hp	18.0	2	9.0	250	(4)	2"	2	13.7/5.9	1	3.0	115,020	16.1 IEER	108,250	3.57 COP _H	460	3	60	(7)(8)(9)(11)	
RTU-3	2,040	155	0.6 (1)	3 hp	9.0	1	9.0	160	(4)	2"	2	7.0/4.2	1	1.5	73,540	16.3 IEER	71,600	3.7 COP _H	460	3	60	(7)(8)(9)(10)	

PACKAGED AIR CONDITIONING UNIT NOTES

- DOES NOT INCLUDE AIR PRESSURE DROP THROUGH FILTER.
- 'NOMINAL' - AS RATED AT 480V.
- 'ACTUAL' - AS RATED AT THE VOLTAGE AVAILABLE (480V).
- MERV 8 DISPOSABLE.
- AT AHRI (AIR CONDITIONING HEATING REFRIGERATION INSTITUTE) STANDARD CONDITIONS.
- IEER - INTEGRATED ENERGY EFFICIENCY RATIO COP_H - COEFFICIENT OF PERFORMANCE, HEATING
- CONDENSATE PIPING SHALL BE 1" PVC. TRAP AT UNIT AND ROUTE POINT INDICATED. CONSTRUCT TRAP OUT OF TEES WITH A CAP ON EACH TEE. SEE 'CONDENSATE DRAIN DETAIL' ON SHEET M002.
- PROVIDE EACH COMPRESSOR WITH ANTI-SHORT CYCLE CONTROLS AND TIME DELAY ON COMPRESSOR RESTART.
- DOWNFLOW PACKAGED HEAT PUMP UNIT. PROVIDE WITH AUXILIARY ELECTRIC HEAT. STANDARD ECONOMIZER, SMOKE DETECTOR IN THE SUPPLY AIR, THROUGH-THE- BASE ELECTRICAL, UNIT MOUNTED DISCONNECT, AND POWERED CONVENIENCE OUTLET.
- BASIS OF DESIGN - TRANE MODEL WHK072A4S0C OR APPROVED EQUIVALENT.
- BASIS OF DESIGN - TRANE MODEL WHK120A4S0G OR APPROVED EQUIVALENT.

PROJECT ISSUES:

CONCEPT SKETCHES	2025-05-05
SCHEMATIC DESIGN	2026-04-10
REVISED PLAN	2026-05-18
DESIGN DEVELOPMENT	2026-06-26
CONSTRUCTION DOCUMENTS	2026-09-15

PROJECT TEAM:

CIVIL ENGINEER	CHOCTAW ENGINEERING
ARCHITECTURAL	B&A ARCHITECTURAL GROUP
INTERIOR DESIGNER	B&A ARCHITECTURAL GROUP
STRUCTURAL ENGINEER	AMI CONSULTING LLC
MECHANICAL	DAY CONSULTING
PLUMBING	DAY CONSULTING
ELECTRICAL	JOHNSON ENGINEERING

PROJECT: FIRST BAPTIST CHURCH OF FORT WALTON BEACH

FORT WALTON BEACH FLORIDA

**-PRELIMINARY -
NOT FOR
CONSTRUCTION**

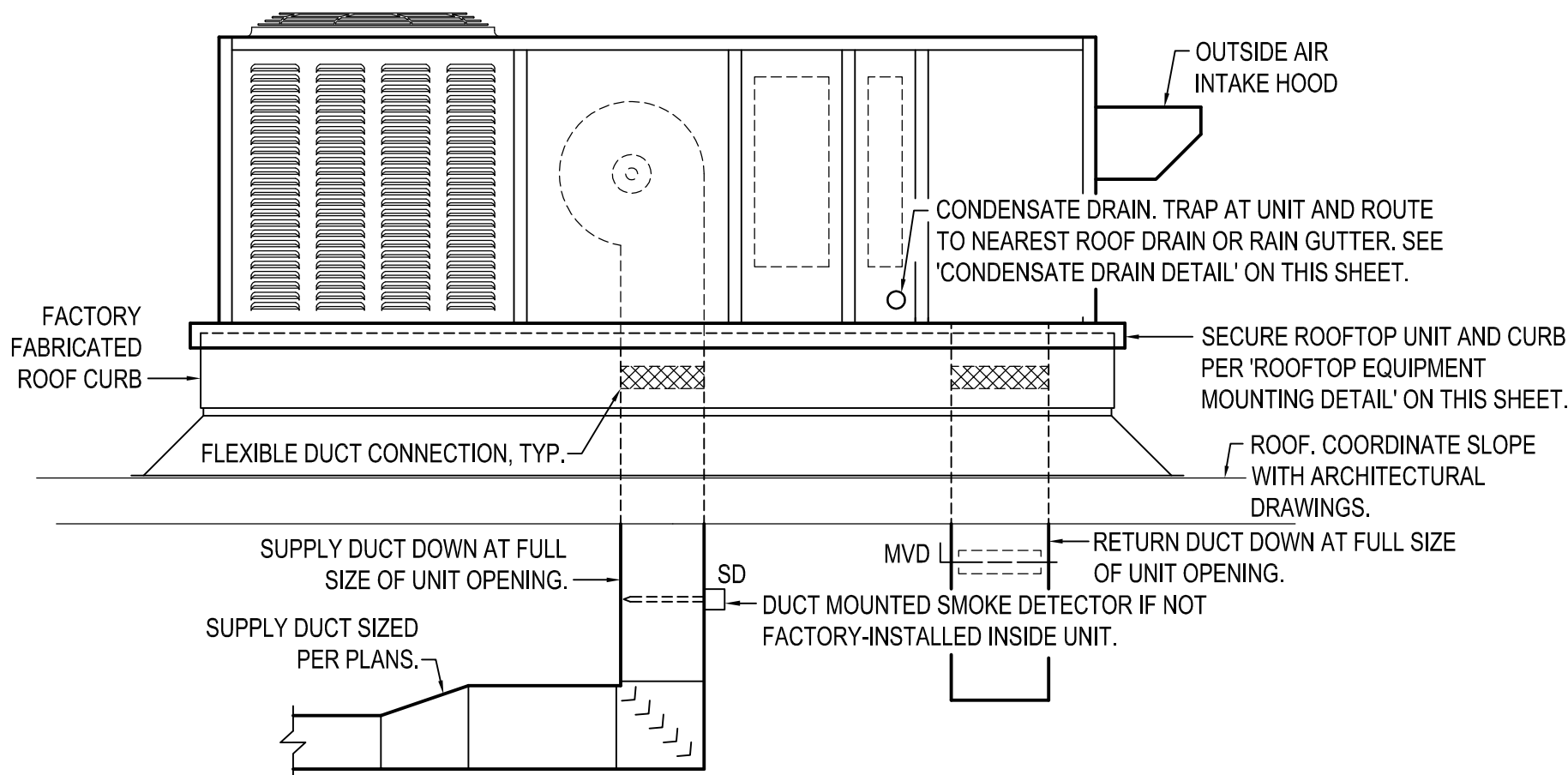
PROJECT NO. : 25034
SHEET TITLE:

HVAC LEGEND,
SCHEDULES, AND NOTES

SHEET NUMBER:

M001

PRINT DATE: 4/24/2026 8:05:26 AM



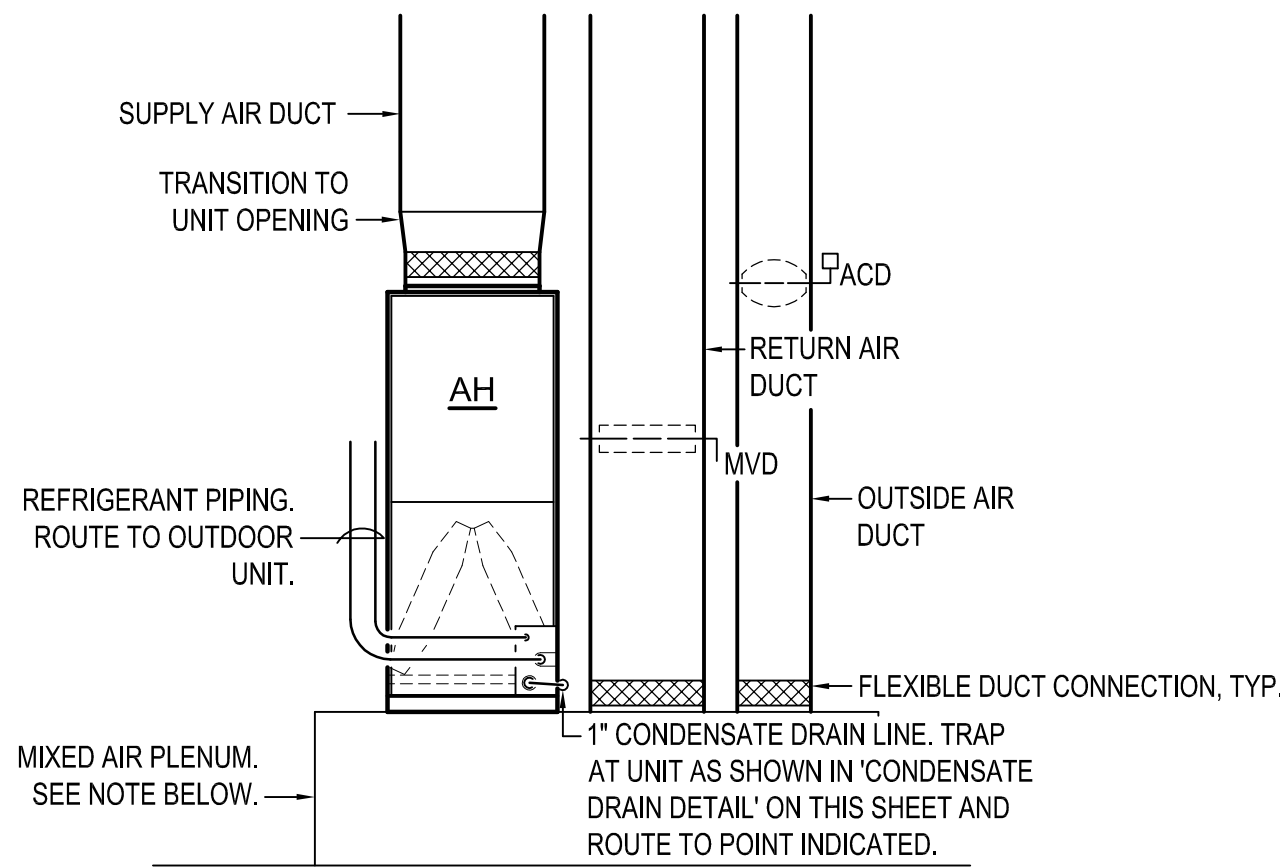
NOTES:
MECHANICAL CONTRACTOR COORDINATE ROOF CURB INSTALLATION, LOCATION, AND SIZE OF ROOF OPENINGS REQUIRED BY ACTUAL EQUIPMENT INSTALLED WITH THE GENERAL CONTRACTOR IN THE FIELD. THE EXISTING CURB MUST BE REMOVED. NO CURB ADAPTORS WILL BE ALLOWED.

PROVIDE UNIT WITH A CONDENSATE TRAP ASSEMBLY THAT INCORPORATES AN ELECTRIC OVERFLOW CUT OFF SWITCH ON THE PRIMARY CONDENSATE DRAIN. TRAP ASSEMBLY AND CUT OFF SWITCH SHALL BE EZ TRAP MODEL EZT-2 OR APPROVED EQUIVALENT.

PROVIDE UNIT WITH A WATER-LEVEL MONITORING DEVICE ON THE SECONDARY/AUXILIARY CONDENSATE DRAIN FOR COMPLIANCE WITH 2023 FLORIDA MECHANICAL CODE, PARAGRAPH 307.2.3.1.

PACKAGED ROOFTOP UNIT INSTALLATION DETAIL

NOT TO SCALE

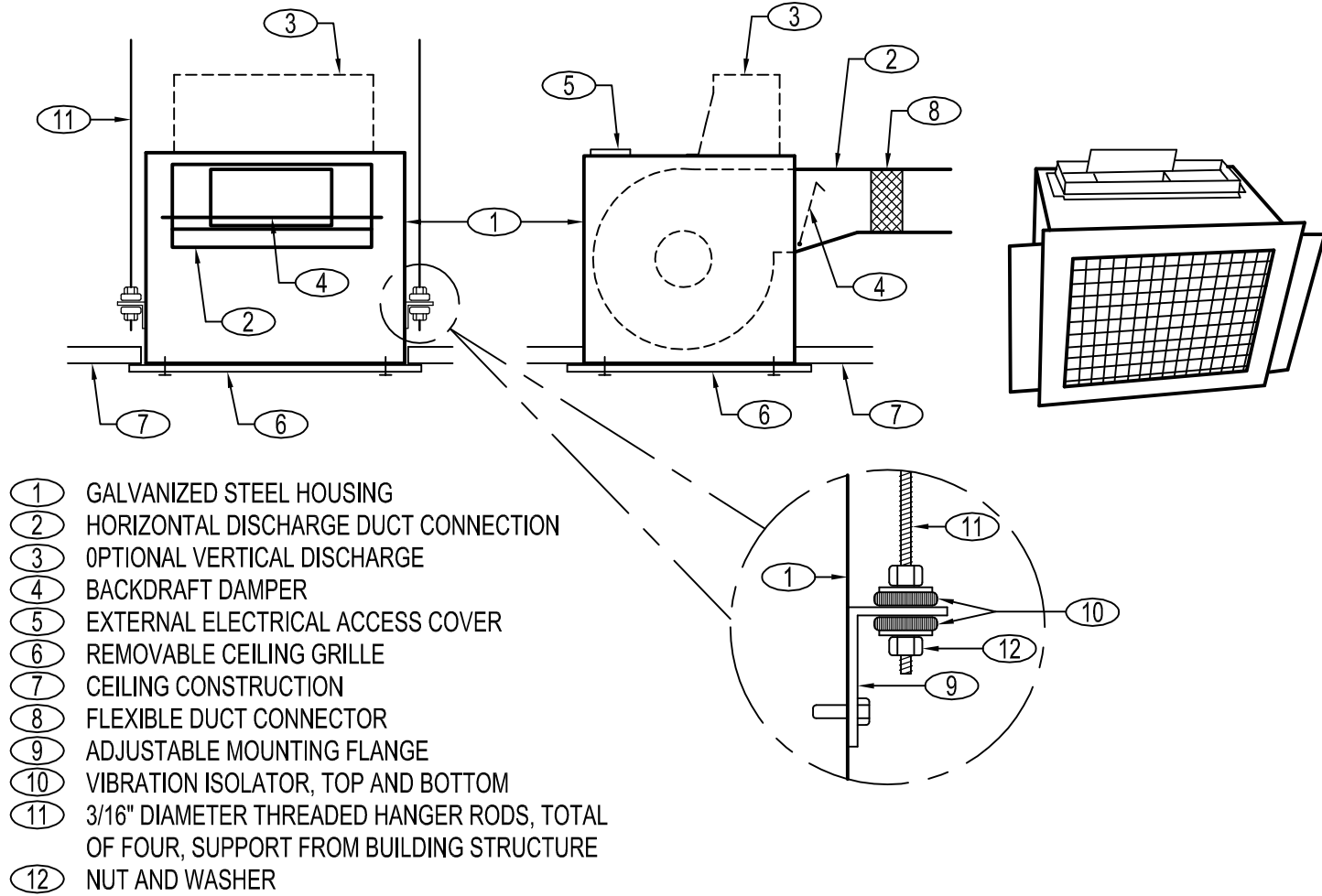


MIXED AIR PLENUM NOTE:
INDOOR UNIT SHALL BE INSTALLED ON A 24" TALL MIXED AIR PLENUM. CONSTRUCT PLENUM OUT OF 2x4s WITH ALL SIDES COVERED WITH 5/8" TYPE "X" GYPSUM WALL BOARD. TOP OF PLENUM SHALL BE 3/4" CDX PLYWOOD. SEAL ALL JOINTS AIR TIGHT WITH SILICONE BASED ACRYLIC LATEX CAULKING. INTERNALLY INSULATE ENTIRE PLENUM WITH 1-1/2" RIGID DUCT INSULATION WITH A MINIMUM INSTALLED R-VALUE OF 6.0. ENSURE ALL WOOD INSIDE PLENUM IS COMPLETELY COVERED WITH INSULATION OR METAL TAPE. NO DRAINS, PVC PIPING OR COMBUSTIBLE MATERIALS ARE ALLOWED TO BE EXPOSED INSIDE THE PLENUM.

CONDENSATE DRAIN NOTE:
PROVIDE UNIT WITH A CONDENSATE TRAP ASSEMBLY THAT INCORPORATES AN ELECTRIC OVERFLOW CUT OFF SWITCH.

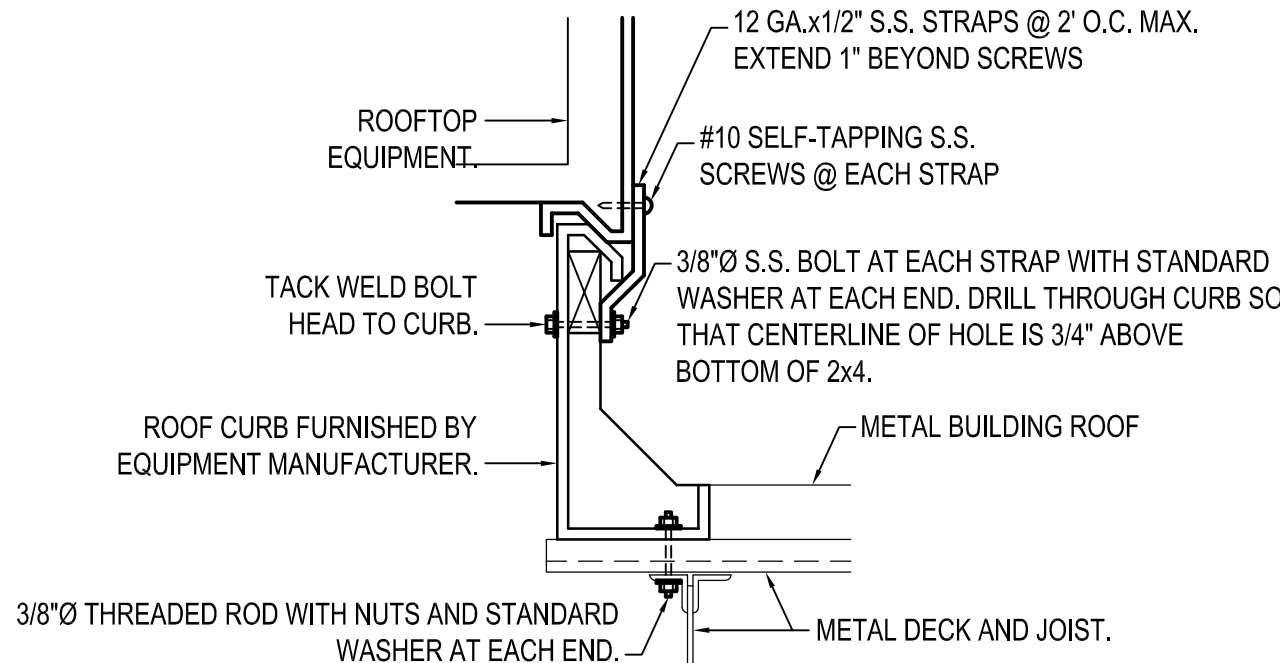
AIR HANDLER INSTALLATION DETAIL

NOT TO SCALE



CEILING EXHAUST FAN INSTALLATION DETAIL

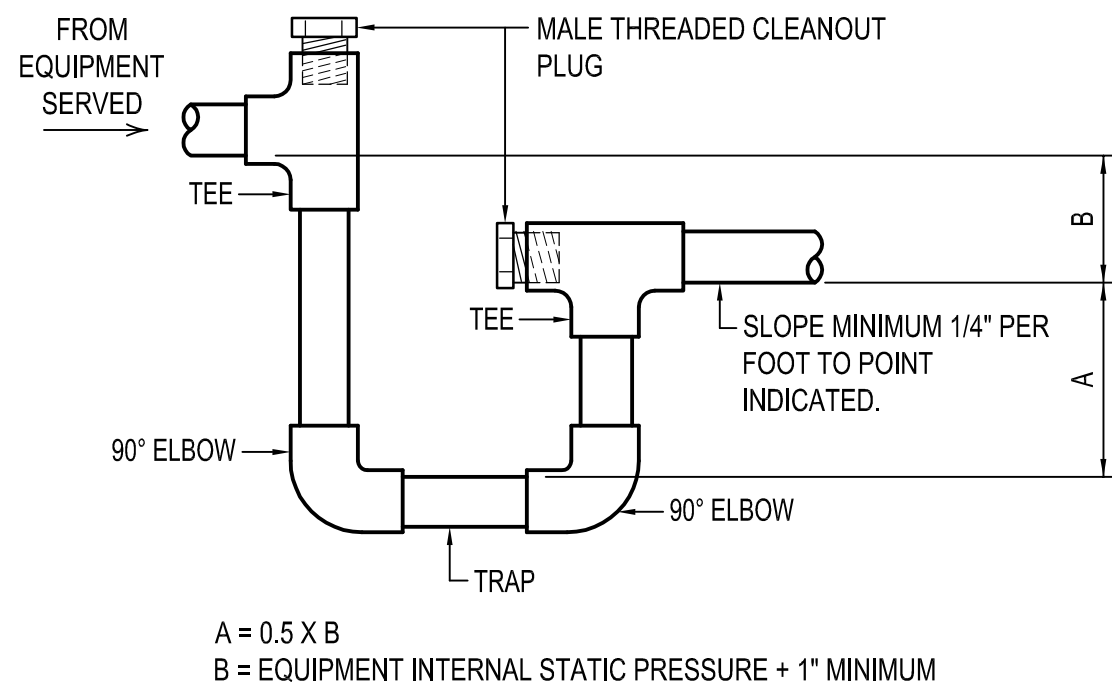
NOT TO SCALE



NOTE:
THIS DETAIL IS A SUGGESTION. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INSTALL ALL ROOFTOP EQUIPMENT SO THAT IT IS SECURED TO THE ROOF PER THE MANUFACTURER'S RECOMMENDATIONS AND IN SUCH A WAY AS TO BE IN COMPLIANCE WITH THE 2020 FLORIDA MECHANICAL CODE, PARAGRAPH 301.15.

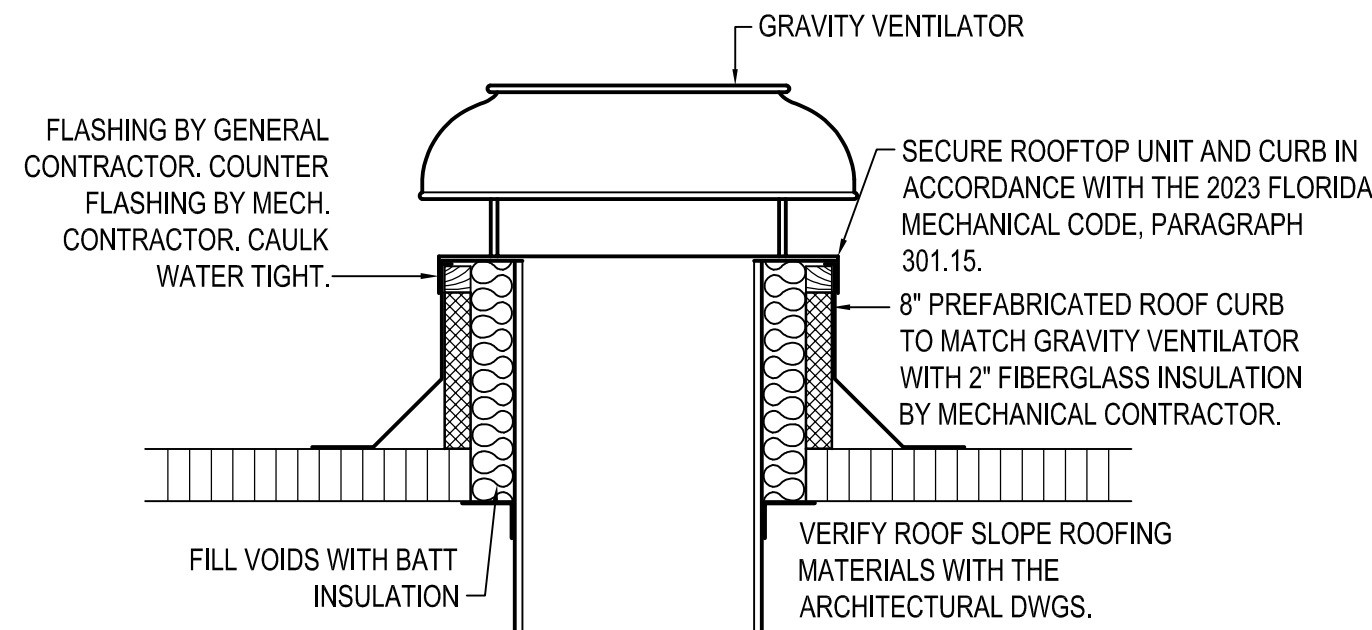
ROOFTOP EQUIPMENT MOUNTING DETAIL

NOT TO SCALE



CONDENSATE DRAIN DETAIL

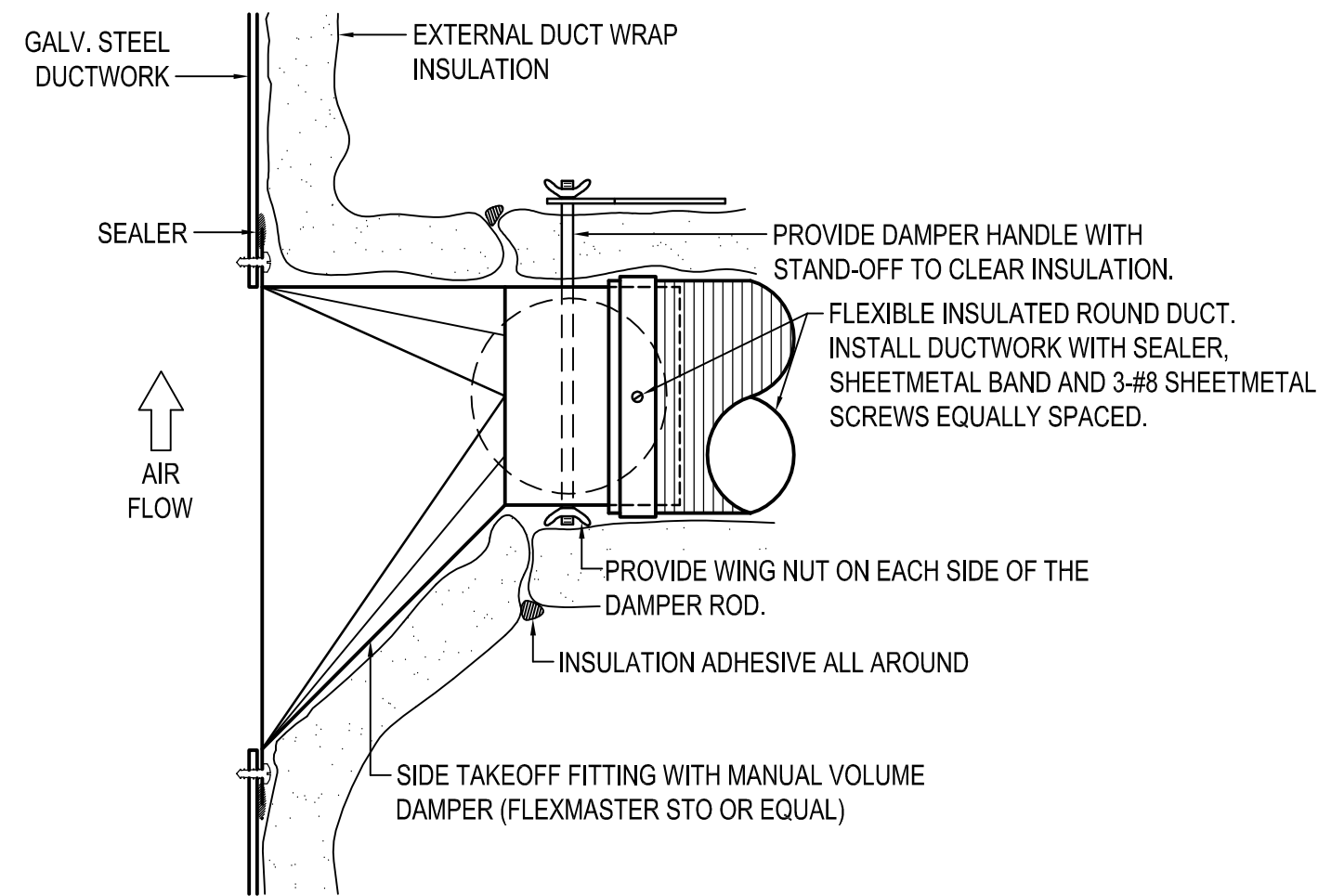
NOT TO SCALE



NOTES:
1. MECHANICAL CONTRACTOR SHALL COORDINATE LOCATION AND SIZE OF ROOF OPENINGS WITH GENERAL CONTRACTOR. ALL OUTSIDE AIR INTAKES SHALL BE MINIMUM 10 FEET FROM ANY EXHAUST AIR OUTLET OR PLUMBING VENT.
2. PREFABRICATED ROOF CURB FURNISHED BY MECHANICAL CONTRACTOR AND INSTALLED BY ROOFING CONTRACTOR.
3. ALL ROOFTOP EQUIPMENT SHALL BE SECURED TO THE ROOF PER THE MANUFACTURER'S RECOMMENDATIONS AND IN COMPLIANCE WITH THE 2023 FLORIDA MECHANICAL CODE, PARAGRAPH 301.15.

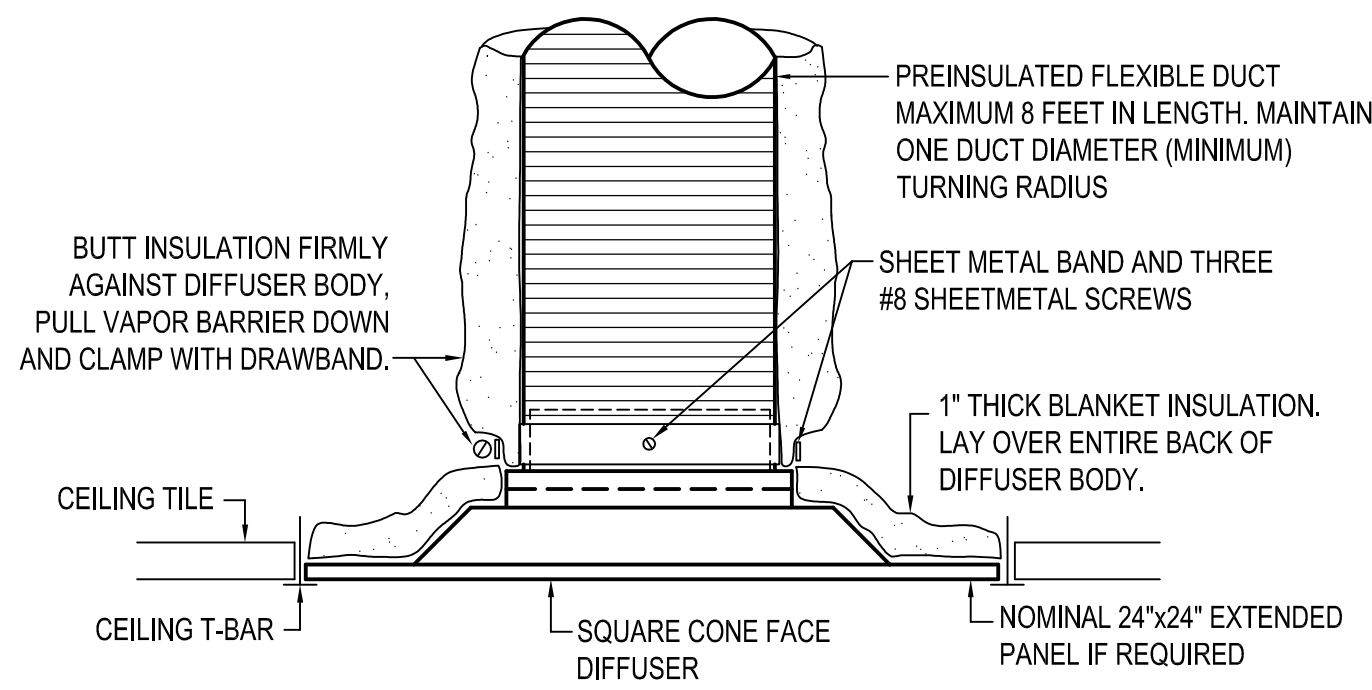
ROOFTOP OUTSIDE AIR INTAKE INSTALLATION DETAIL

NOT TO SCALE



ROUND DUCT TAKE-OFF MOUNTING DETAIL

NOT TO SCALE



SQUARE CEILING DIFFUSER INSTALLATION DETAIL

NOT TO SCALE

DE

Day Engineering, LLC

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PROJECT ISSUES:

CONCEPT SKETCHES	2025-05-05
SCHEMATIC DESIGN	2026-04-10
REVISED PLAN	2026-05-18
DESIGN DEVELOPMENT	2026-06-26
CONSTRUCTION DOCUMENTS	2026-09-15

PROJECT TEAM:

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CHOCTAW ENGINEERING
ARCHITECTURAL
B&A ARCHITECTURAL GROUP
INTERIOR DESIGNER
B&A ARCHITECTURAL GROUP
STRUCTURAL ENGINEER
AMI CONSULTING LLC
MECHANICAL
DAY CONSULTING
PLUMBING
DAY CONSULTING
ELECTRICAL
JOHNSON ENGINEERING

PROJECT:

**FIRST BAPTIST CHURCH
OF FORT WALTON
BEACH**

**FORT WALTON BEACH
FLORIDA**

**-PRELIMINARY -
NOT FOR
CONSTRUCTION**

PROJECT NO. : 25034
SHEET TITLE:
HVAC DETAILS

SHEET NUMBER:

M002

CONSTRUCTION DOCUMENTS



CONCEPT SKETCHES	2025-05-05
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CIVIL ENGINEER
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B&A ARCHITECTURAL GROUP
INTERIOR DESIGNER
B&A ARCHITECTURAL GROUP
STRUCTURAL ENGINEER
AMI CONSULTING LLC
MECHANICAL
DAY CONSULTING
PLUMBING
DAY CONSULTING
ELECTRICAL
JOHNSON ENGINEERING

PROJECT:
**FIRST BAPTIST CHURCH
OF FORT WALTON
BEACH**

**FORT WALTON BEACH
FLORIDA**

**-PRELIMINARY-
NOT FOR
CONSTRUCTION**

PROJECT NO.: 25034
SHEET TITLE:
HVAC FIRST FLOOR PLAN

M101

CONSTRUCTION DOCUMENTS



CONCEPT SKETCHES	2025-05-05
SCHEMATIC DESIGN	2026-04-10
REVISED PLAN	2026-05-18
DESIGN DEVELOPMENT	2026-06-20
CONSTRUCTION DOCUMENTS	2026-09-15

CIVIL ENGINEER
CHOCTAW ENGINEERING
ARCHITECTURAL
B&A ARCHITECTURAL GROUP
INTERIOR DESIGNER
B&A ARCHITECTURAL GROUP
STRUCTURAL ENGINEER
AMI CONSULTING LLC
MECHANICAL
DAY CONSULTING
PLUMBING
DAY CONSULTING
ELECTRICAL
JOHNSON ENGINEERING

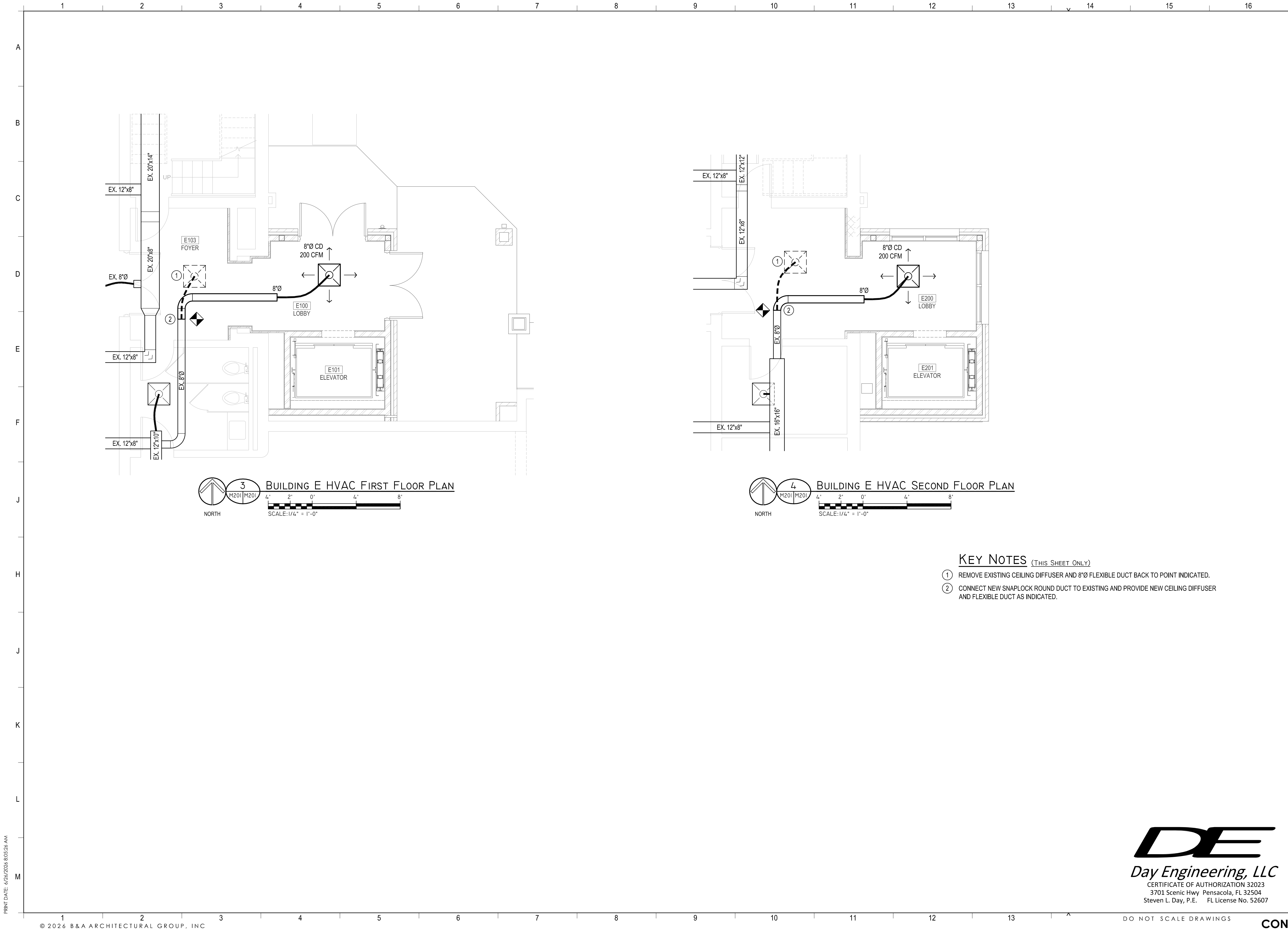
**FORT WALTON BEACH
FLORIDA**

**-PRELIMINARY-
NOT FOR
CONSTRUCTION**

PROJECT NO.: 25034
SHEET TITLE:
HVAC SECOND FLOOR PLAN

SHEET NUMBER:
M102

CONSTRUCTION DOCUMENTS



PROJECT ISSUES:	
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INTERIOR DESIGNER	B&A ARCHITECTURAL GROUP
STRUCTURAL ENGINEER	AMI CONSULTING LLC
MECHANICAL	DAY CONSULTING
PLUMBING	DAY CONSULTING
ELECTRICAL	JOHNSON ENGINEERING

PROJECT:
**FIRST BAPTIST CHURCH
OF FORT WALTON
BEACH**

**FORT WALTON BEACH
FLORIDA**

**-PRELIMINARY -
NOT FOR
CONSTRUCTION**

PROJECT NO. : 25034
SHEET TITLE:
BLDG E HVAC PLANS

SHEET NUMBER:
M201

DE
Day Engineering, LLC
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Steven L. Day, P.E. FL License No. 52607

DO NOT SCALE DRAWINGS

CONSTRUCTION DOCUMENTS

PRINT DATE: 4/24/2026 8:05:26 AM

HEATING WATER BOILER SCHEDULE																	
MARK	BOILER RATINGS					BURNER DATA							HOT WATER DATA				REMARKS
	MAXIMUM INPUT (BTU/HR)	MINIMUM GROSS OUTPUT (BTU/HR)	MINIMUM EFFICIENCY	DESIGN PRESSURE (PSIG)	OPERATING PRESSURE (PSIG)	TYPE ②	FUEL ③	FIRING RATE (CFH)	COMBUSTION CONTROL ④	ELECTRICAL DATA			MAXIMUM CONTINUOUS GPM	°F ENT.	°F LVG.	MAX. PRESSURE DROP (FT H ₂ O)	
										VOLTS	PHASE	HERTZ					
B-1	1,500,000	1,317,000	87.8% ①	160	60	FA	NG	1,500	MODULATING	120	1	60	90	140	160	5.0	⑤

HEATING WATER BOILER SCHEDULE NOTES

- 1

STEADY STATE THERMAL EFFICIENCY AT HIGH FIRE WITH 140°F ENTERING WATER TEMPERATURE.
- 2
- FA - FAN ASSISTED COMBUSTION

3

NG - NATURAL GAS.

4

5

BASIS OF DESIGN - FULTON ENDURA EXE-1500 OR APPROVED EQUIVALENT.

PUMP SCHEDULE										
MARK	SERVICE	TYPE	PERFORMANCE DATA				ELECTRICAL DATA			
			CAPACITY (GPM)	TOTAL HEAD (FT H ₂ O)	MINIMUM EFFICIENCY	MAXIMUM SPEED (RPM)	MOTOR HP	VOLTS	PHASE	HERTZ
HWP-1 & 2	HEATING WATER	(1)	90	90	66%	1,760	5.0	208	3	60

PUMP SCHEDULE NOTES

- 1

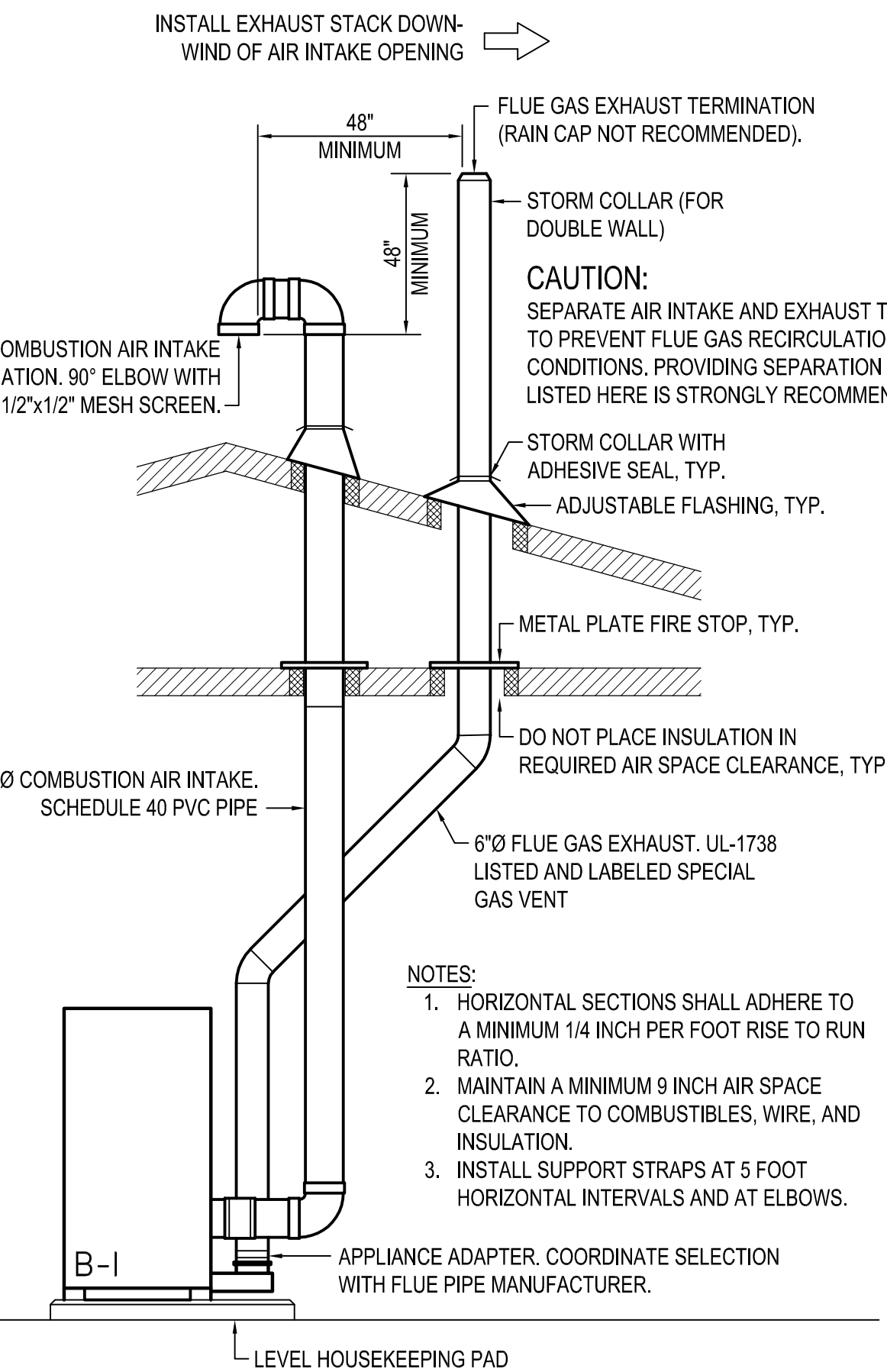
CLOSE-COUPLED, INLINE
- 2
- CONSTANT SPEED

3

BASIS OF DESIGN - TACO MODEL KV2009D OR APPROVED EQUIVALENT.

PIPING LEGEND

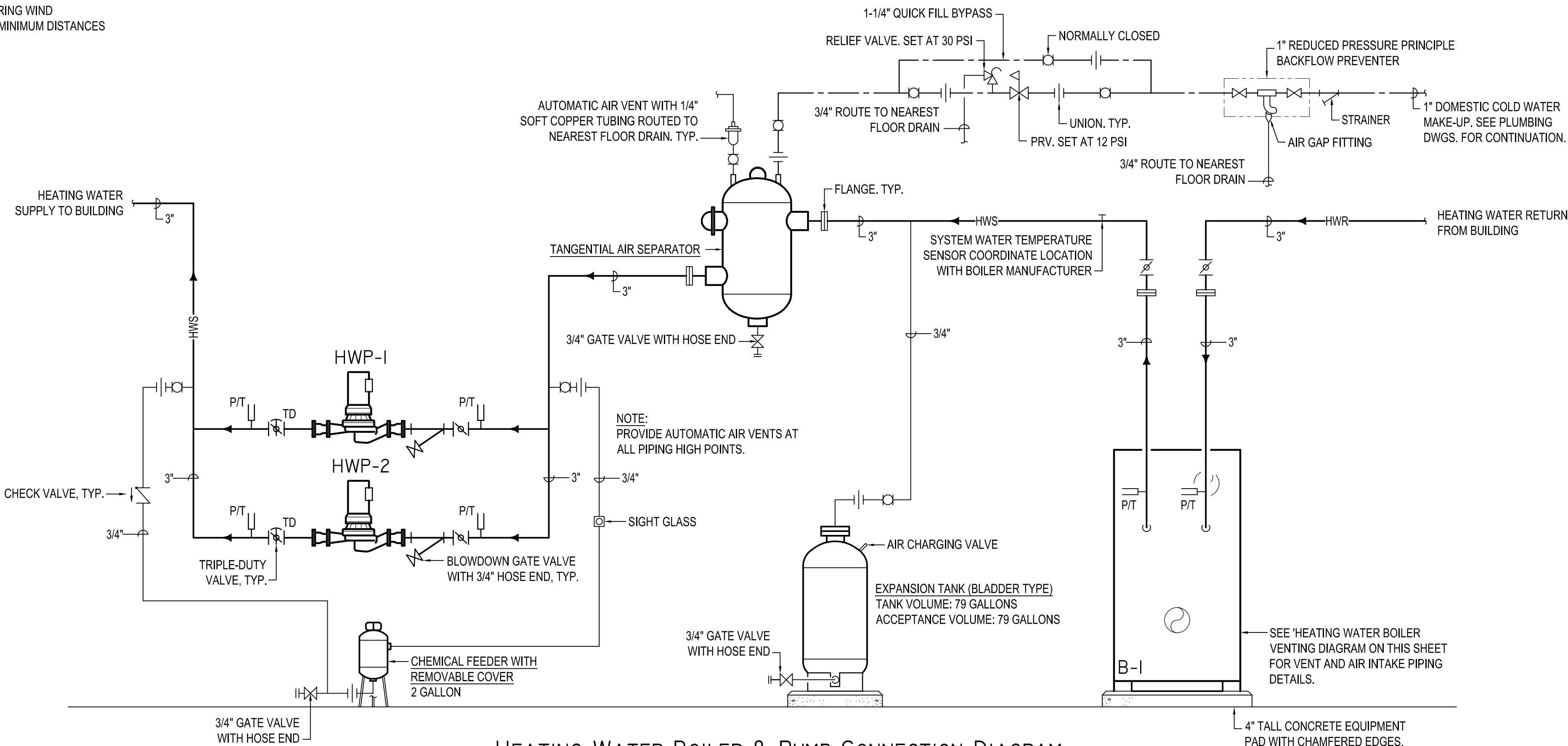
- NEW PIPING OR EQUIPMENT
- EXISTING PIPING OR EQUIPMENT TO REMAIN
- EXISTING PIPING OR EQUIPMENT TO BE REMOVED
- ELBOW TURN UP
- ELBOW TURN DOWN
- CONNECTION, BOTTOM
- CONNECTION, TOP
- PIPE REDUCER OR INCREASER
- BUTTERFLY VALVE
- BALL VALVE
- DIRECTION OF WATER FLOW
- UNION
- HWS HEATING WATER SUPPLY PIPING
- HWR HEATING WATER RETURN PIPING
- COMBINATION PRESSURE AND TEMPERATURE TEST PLUG WITH EXTENDED NECK AND CAP
- A.F.F. ABOVE FINISHED FLOOR
- EX. EXISTING
- CONNECTION OF NEW TO EXISTING



GENERAL NOTE:
PROVIDE FLUE GAS EXHAUST AND COMBUSTION AIR INTAKE PIPING MATERIALS AS RECOMMENDED BY THE BOILER MANUFACTURER. INSTALL BOILER, FLUE EXHAUST, AND COMBUSTION AIR INTAKE PIPING IN STRICT ACCORDANCE WITH ALL BOILER MANUFACTURER'S RECOMMENDATIONS. MAINTAIN ALL REQUIRED CLEARANCES-TO-COMBUSTIBLES AND MAINTENANCE CLEARANCES AS RECOMMENDED. THIS DETAIL IS BASED ON THE BASIS-OF-DESIGN MANUFACTURER'S RECOMMENDATIONS.

BOILER VENT PIPE NOTE:
VENT PIPE SHALL BE AL29-4C STAINLESS STEEL AND LISTED FOR USE WITH CATEGORY IV GAS BURNING HEATERS. PIPE JOINTS SHALL BE POSITIVELY SEALED AND VENT PIPE SHALL SLOPE TOWARD THE HEATER BEING VENTED AT NOT LESS THAN 1/4" PER FOOT. INSULATE VENT PIPE THAT IS INSIDE THE BUILDING WITH MINIMUM 1" THICK FIBERGLASS PIPE INSULATION WITH A WHITE ALL-SERVICE JACKET. INSTALL VENT PIPE IN STRICT ACCORDANCE WITH THE BOILER MANUFACTURER'S RECOMMENDATIONS.

HEATING WATER BOILER VENTING DIAGRAM
NOT TO SCALE



HEATING WATER BOILER & PUMP CONNECTION DIAGRAM
NOT TO SCALE

DE
Day Engineering, LLC
CERTIFICATE OF AUTHORIZATION 32023
3701 Scenic Hwy Pensacola, FL 32504
Steven L. Day, P.E. FL License No. 52607

PROJECT ISSUES:

CONCEPT SKETCHES	2025-05-05
SCHEMATIC DESIGN	2026-04-10
REVISED PLAN	2026-05-18
DESIGN DEVELOPMENT	2026-06-26
CONSTRUCTION DOCUMENTS	2026-09-15

PROJECT TEAM:

CIVIL ENGINEER
CHOCTAW ENGINEERING
ARCHITECTURAL
B&A ARCHITECTURAL GROUP
INTERIOR DESIGNER
B&A ARCHITECTURAL GROUP
STRUCTURAL ENGINEER
AMI CONSULTING LLC
MECHANICAL
DAY CONSULTING
PLUMBING
DAY CONSULTING
ELECTRICAL
JOHNSON ENGINEERING

PROJECT:
FIRST BAPTIST CHURCH
OF FORT WALTON
BEACH

FORT WALTON BEACH
FLORIDA

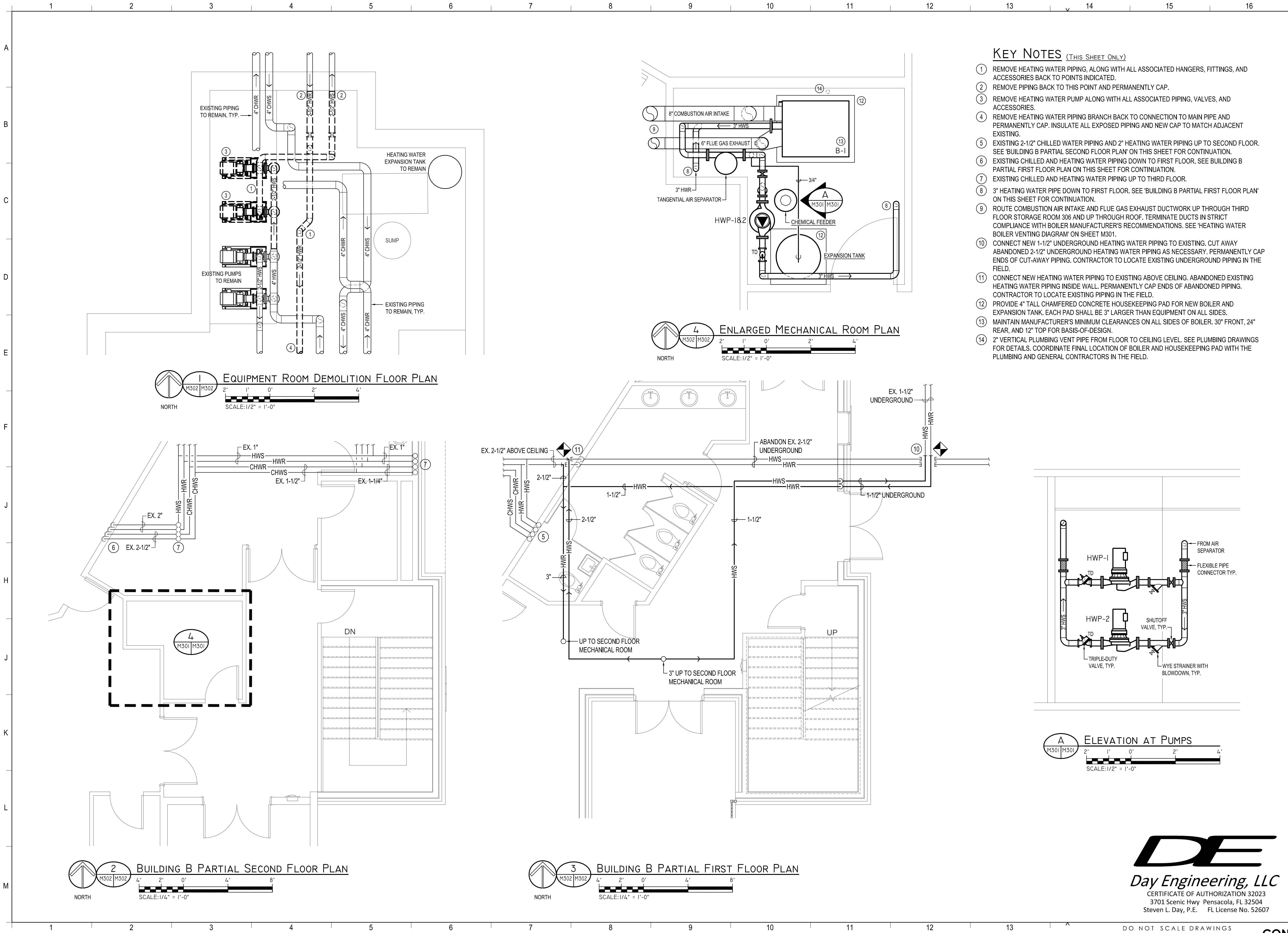
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PROJECT NO. : 25034
SHEET TITLE:
NEW HYDRONIC BOILER

SHEET NUMBER:

M301

PRINT DATE: 4/24/2026 8:05:26 AM



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MECHANICAL	DAY CONSULTING
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PROJECT:
**FIRST BAPTIST CHURCH
OF FORT WALTON
BEACH**

**FORT WALTON BEACH
FLORIDA**

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M302