Z:\~Project Directories\10300-10399\10397 - Ark Welcome Center - Williamstown KY\~Construction Documents\10397-M100-MECHANICAL-FLOOR-PLAN.dwg-EBS. Plot Date/Time: May 30, 2024-10:36am - By: r.twehues
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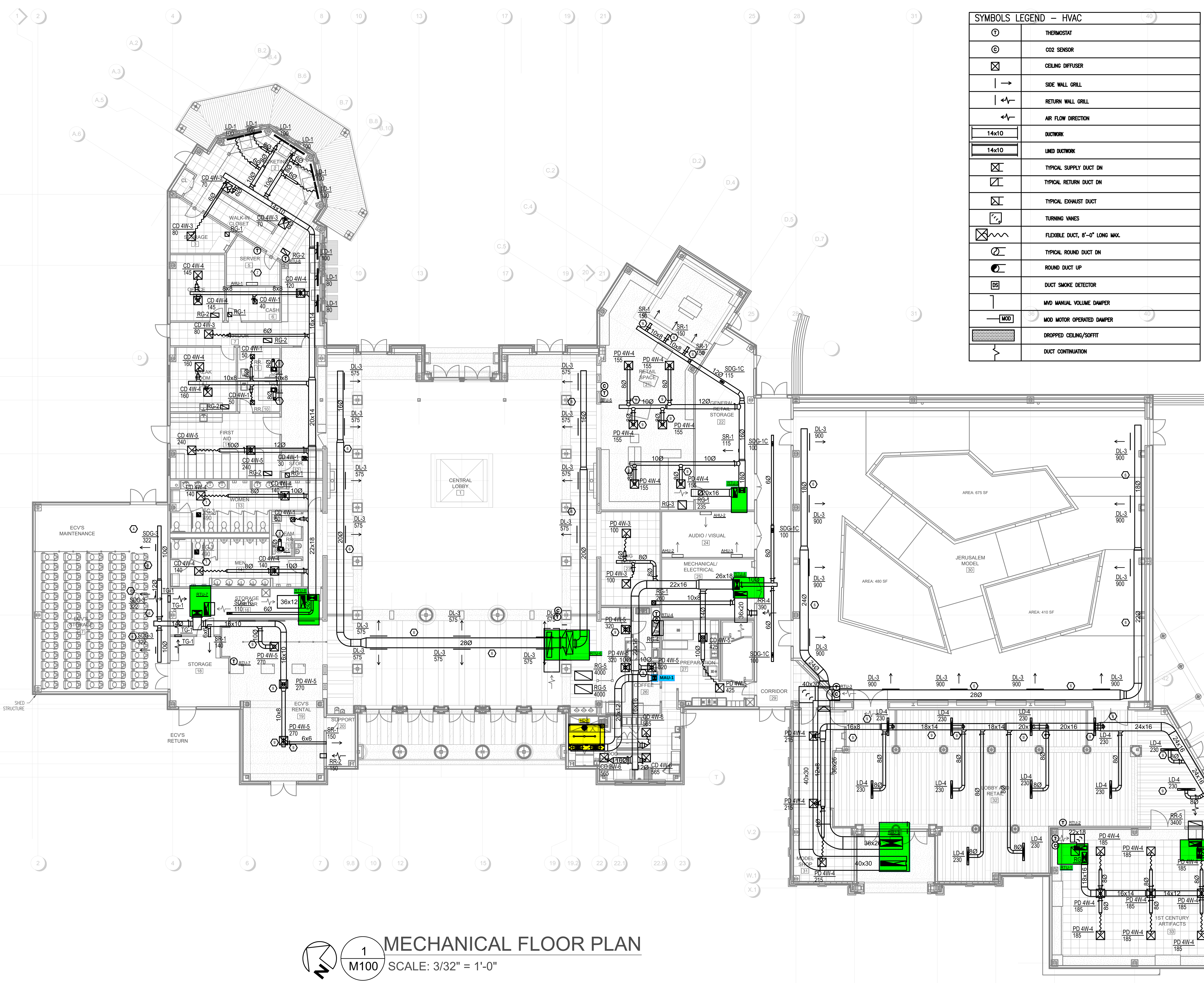

SYMBOLS LEGEND – HVAC

Symbol	Description
Ⓣ	THERMOSTAT
Ⓒ	CO2 SENSOR
	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
14x10	DUCTWORK
14x10	LINED DUCTWORK
	TYPICAL SUPPLY DUCT DN
	TYPICAL RETURN DUCT DN
	TYPICAL EXHAUST DUCT
	TURNING VANES
	FLEXIBLE DUCT, 8'-0" LONG MAX.
	TYPICAL ROUND DUCT DN
	ROUND DUCT UP
DS	DUCT SMOKE DETECTOR
	MVD MANUAL VOLUME DAMPER
MOD	MOD MOTOR OPERATED DAMPER
	DROPPED CEILING/SOFFIT
	DUCT CONTINUATION

MECHANICAL SCOPE OF WORK

PROVIDE RTUS, DUCTWORK, AIR DEVICES AND EXHAUST FANS FOR NEW WELCOME CENTER.

CODES & STANDARDS REFERENCED

- 2015 KENTUCKY MECHANICAL CODE
- 2018 KENTUCKY BUILDING CODE
- 2012 IECC

HVAC DESIGN CONDITIONS

COOLING	HEATING
OUTDOOR: 93 DB / 75 WB	OUTDOOR: 0 DB
INDOOR: 72	INDOOR: 70

GENERAL NOTES

A. FOR FULL SCHEDULES, SPECIFICATIONS, AND COMPLETE LISTING SEE DETAIL SHEETS.

B. COORDINATE ROUTING OF ALL WORK WITH OTHER TRADES.

C. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER CONNECTIONS TO ALL MECHANICAL EQUIPMENT.

D. INSTALL ALL EQUIPMENT PER MANUFACTURER'S REQUIREMENTS. MAINTAIN ALL CODE RECOMMENDED CLEARANCES FOR ACCESS AND MAINTENANCE.

E. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONS, AND FINAL CEILING DIFFUSER LOCATIONS.

F. MAINTAIN ALL CODE REQUIRED SERVICE CLEARANCES. FOLLOW CLEARANCE TO COMBUSTIBLE DISTANCE PER MANUFACTURER'S INSTRUCTIONS.

G. PROVIDE BACKDRAFT DAMPERS FOR ALL EXHAUST SYSTEMS AND EITHER LOUVER, BRICK VENT, OR CAPS AT ALL EXTERIOR BUILDING PENETRATIONS.

H. ROUTE ALL AIR CONDITIONER CONDENSATE TO NEARBY FLOOR DRAIN. PROVIDE MINIMUM SLOPE OF 1/8 " PER FOOT. SIZE CONDENSATE PER SECTION 307.2.2 OF THE KENTUCKY MECHANICAL CODE.

I. ANY EQUIPMENT THAT IS SUBSTITUTED SHALL FIT IN THE SPACE PROVIDED WITH ADEQUATE ROOM FOR SERVICING, INCLUDING SUBSTITUTE EQUIPMENT NAMED IN THE SPECIFICATIONS. SUBMIT A 1/4" SCALE DRAWING OF ALL EQUIPMENT SUBSTITUTED FOR APPROVAL PRIOR TO INSTALLATION, INCLUDING, BUT NOT LIMITED TO, STRUCTURAL AND ARCHITECTURAL IMPACT, CLEARANCE REQUIREMENTS AND UTILITY REQUIREMENTS. IT IS THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR TO COORDINATE ALL NEW ELECTRICAL AND PLUMBING REQUIREMENTS WITH THE ELECTRICAL AND PLUMBING CONTRACTORS.

J. MAINTAIN CODE REQUIRED CLEARANCE TO COMBUSTIBLES FOR ALL GAS-FIRED EQUIPMENT.

K. MATERIALS WITHIN PLENUMS SHALL BE NONCOMBUSTIBLE OR SHALL BE LISTED AND LABELED AS HAVING A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50 WHEN TESTED IN ACCORDANCE WITH ASTM E 84 OR UL 723.

KEYED SHEET NOTES

1. DUCT EXHAUST UP THROUGH ROOF WITH RAIN-PROOF CAP.
2. PROVIDE AND INSTALL NEW RTU AND ALL ASSOCIATED WIRING, INFRASTRUCTURE, AND ACCESSORIES PER MANUFACTURING REQUIREMENTS/RECOMMENDATIONS. COORDINATE FINAL LOCATIONS WITH STRUCTURAL.
3. RTU UNIT TO BE MOUNTED ON THE ROOF OF THE EXISTING ROOF. PROVIDE AND INSTALL NEW 14" ROOF CURBS UNDER NEW ROOFTOP UNITS.
4. INSTALL SIDE-WALL AIR DEVICE 30° DOWN FORM CENTER-LINE OF DUCT.
5. NOT USED.
6. EXPOSED SPIRAL DUCTWORK TO BE DOUBLE WALL INSULATED.
7. ROUTE 3/4" CONDENSATE DRAIN LINE TO NEAREST FLOOR DRAIN. SLOPE PIPE A MINIMUM OF 1/8 " PER FOOT AWAY FROM UNIT.
8. ROUTE LINE SET FROM OUTDOOR UNIT TO INDOOR AIR HANDLER. ALL PIPING SHALL BE CONCEALED IN FINISHED AREA. SIZE PER MANUFACTURES RECOMMENDATIONS.
9. PROVIDE MANUAL VOLUME DAMPER WITH CABLE ADJUSTMENT EQUAL TO MAT RT SERIES. MOUNT DAMPER ADJUSTMENT IN THE FACE OF THE DIFFUSER.
10. CONNECT AUTOMATIC TRANSFER SWITCH FROM GENERATOR TO TRANE TRACER SYSTEM.

1 M100 MECHANICAL FLOOR PLAN

SCALE: 3/32" = 1'-0"

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Bachman's HVAC Solutions

ROD BACHMAN
PRESIDENT

ISSUANCES

DATE	NO.	DESCRIPTION
05/30/2024	1	PERMIT

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SCOTT SEVERT STILKEY
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WELCOME CENTER AND JERUSALEM BUILDING

WILLIAMSTOWN, KY

DRAWN BY	CHECKED BY
RTT	SSS

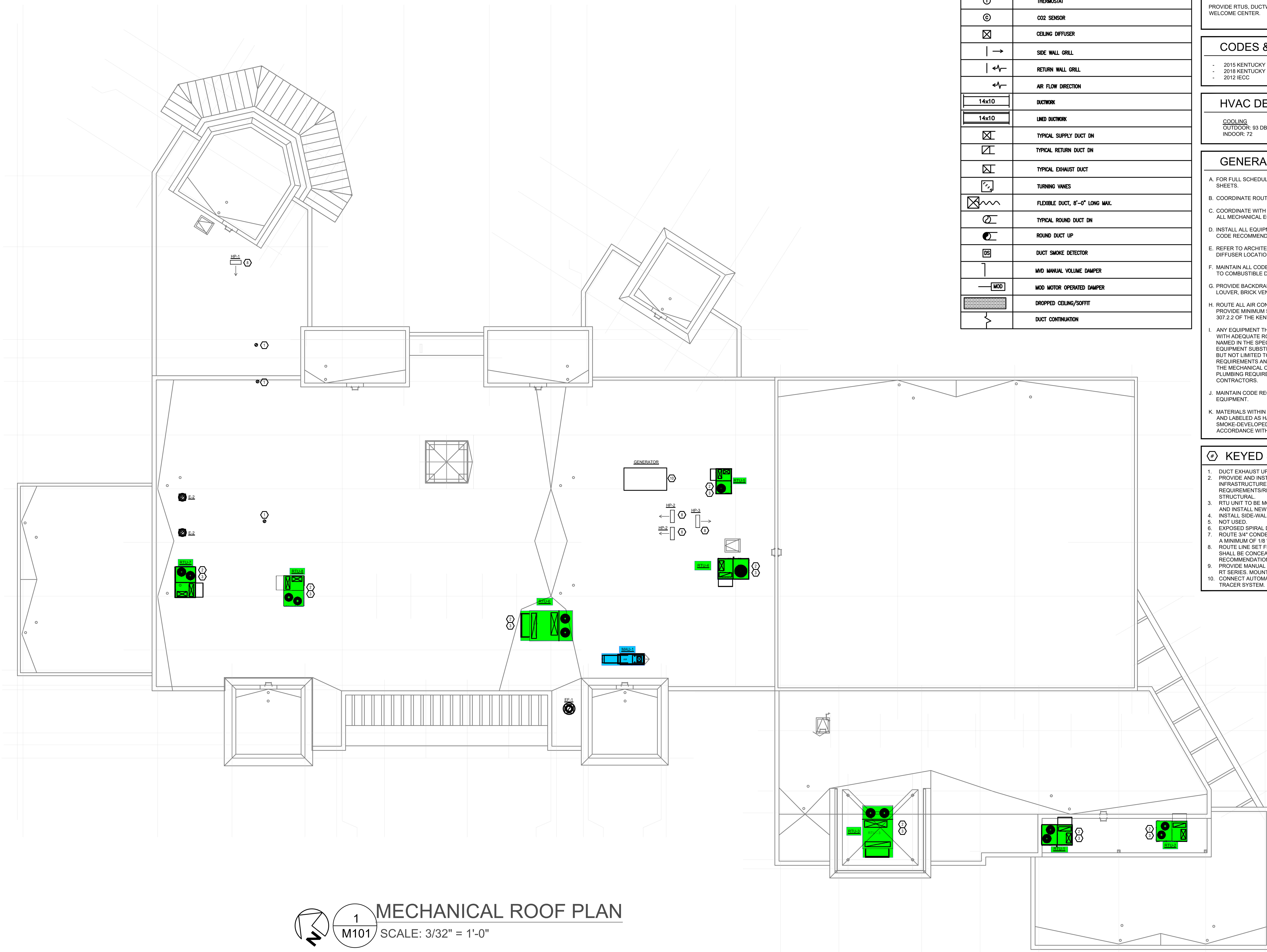
PROJECT NO.: 23-0895

SCALE: AS NOTED

DATE: 05-30-2024

DRAWING TITLE
MECHANICAL FLOOR PLAN

SHEET NO.
M100



MECHANICAL ROOF PLAN

1 / M101 — SCALE: 3/32" = 1'-0"

SYMBOLS LEGEND – HVAC

Symbol	Description
(T)	THERMOSTAT
(C)	CO2 SENSOR
⊠	CEILING DIFFUSER
	SIDE WALL GRILL
	RETURN WALL GRILL
	AIR FLOW DIRECTION
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WELCOME CENTER AND JERUSALEM BUILDING

WILLIAMSTOWN, KY

DRAWN BY	CHECKED BY
RPG	SSS

PROJECT NO.: 23-0895

SCALE: AS NOTED

DATE: 05-30-2024

DRAWING TITLE: MECHANICAL ROOF PLAN

SHEET NO. M101

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