

RELEASES / DATES

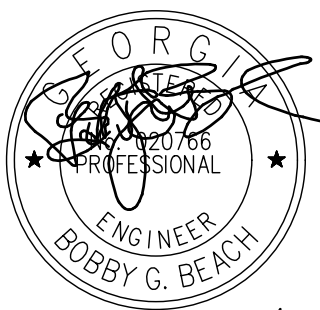
100% Construction Documents	DATE: 6/07/23
DATE:	
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Mulberry Springs Winery  
New Construction  
4527 JM Turk Road  
Flower Branch, GA 30542  
(HALL COUNTY)

PROJECT CONTACT:  
MARK FALC 678-472-6327

ISSUED FOR  
CONSTRUCTION

DRAWN BY: BOB  
REVIEWED BY: J. WREN



06/07/23

HVAC  
NOTES AND  
SCHEDULES

EarthStation  
Architecture & Design, Inc.  
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DATE: 06/07/23 PROJECT NUMBER: ES:A2208  
DRAWING NUMBER

M 2 0 1

MECHANICAL GENERAL NOTES:	
1. PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VISIT PROJECT AND REVIEW EXISTING CONDITIONS. NO ADDITIONAL MONIES WILL BE AWARD FOR "UNFORESEEN PROJECT CONDITIONS" CONTRACTOR SHALL INCLUDE IN HIS BID ALL MONIES REQUIRED FOR THE EXISTING PROJECT CONDITIONS. CONTRACTOR SHALL INFORM ARCHITECT AT TIME OF BID PROJECT CONDITIONS IN WHICH HE HAS DIFFICULTY IN WORKING AROUND.	20. THE OWNER, OPERATOR, ARCHITECTURAL NOR ENGINEER ARE RESPONSIBLE FOR THE CONTRACTOR'S SAFETY PRECAUTIONS, MEANS AND METHODS, WORK TECHNIQUES, CONSTRUCTION SEQUENCE OR PROCEDURES REQUIRED TO COMPLETE THE WORK.
2. REFER TO ALL OTHER DRAWINGS IN THIS PROJECT, INCLUDING TO BUT NOT LIMITED TO THE ARCHITECTURAL, INTERIOR DESIGN, LIGHTING DESIGN, AND ELECTRICAL AND PERFORM ALL SCOPE ITEMS IDENTIFIED WITHIN THOSE DRAWINGS AS IF THEY ARE DIRECTLY INCORPORATED INTO THE MECHANICAL SET.	21. ALL EXTERIOR WALL, AND ROOF PENETRATIONS SHALL BE SEALED WITH WATERPROOFING.
3. FURNISH AND INSTALL ALL NECESSARY LABOR AND MATERIALS FOR A COMPLETE SYSTEM. ANY ITEMS AND MATERIALS OBVIOUSLY NECESSARY FOR A COMPLETE WORKING SYSTEM ALTHOUGH NOT SHOWN WITHIN THESE DOCUMENTS SHALL BE PROVIDED AS PART OF THE INITIAL BID.	22. ALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS OR BARRIERS SHALL BE SEALED WITH FIREPROOFING.
4. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH STATE AND LOCAL REQUIREMENTS.	23. PROVIDE FIRE DAMPERS (FD) IN ALL FIRE RATED WALLS AS IDENTIFIED ON ARCHITECTURALS DRAWINGS. THE RATINGS OF THE FIRE DAMPERS SHALL MEET OR EXCEED THE RATING OF THE WALL IN WHICH IT IS INSTALLED. FIRE DAMPERS SHALL BE UL LISTED AND SHALL BE TYPE B (BLADES OUT OF THE AIR STREAM) OR TYPE C (100% FREE AREA). PROVIDE AND INSTALL DUCT MOUNTED ACCESS PANEL FOR ALL NON-ACCESSIBLE FIRE DAMPERS.
5. OBTAINING PERMIT, INCLUDING LABOR AND FEES SHALL BE PROVIDED AS PART OF THE INITIAL BID.	24. ALL ACCESS PANELS REQUIRED FOR EQUIPMENT MAINTENANCE SHALL BE FIELD COORDINATED WITH ARCHITECT. THESE DRAWINGS SHALL APPROXIMATE LOCATIONS, FINAL LOCATIONS SHALL BE COORDINATED IN THE FIELD.
6. DRAWINGS ARE GENERALLY DIAGRAMMATIC AND DO NOT NECESSARILY SHOW FITTINGS AND OTHER SMALL ITEMS REQUIRED FOR A COMPLETE INSTALLATION. INSTALL DUCTWORK, EQUIPMENT AND CONTROLS IN A MANNER TO MINIMIZE NOISE. PROVIDE APPROPRIATE MAINTENANCE CLEARANCE IN THE SPACE ALLOCATED.	25. AT EACH BRANCH TAKEOFF, PROVIDE MANUAL VOLUME DAMPERS FOR BALANCING. FOR EACH DIFFUSER TAKEOFF, PROVIDE ADJUSTABLE SPIN-IN CONNECTION.
7. MATERIALS AND LABOR SHALL BE WARRENTEEDED FOR ONE YEAR AFTER TAKEOVER.	26. PROVIDE DUCT LINER FOR THE FIRST TEN FEET OF SUPPLY AND THE LAST 10 FEET OF RETURN DUCTWORK FROM THE HVAC EQUIPMENT. THE REMAINING DUCTWORK SHALL BE WRAPPED WITH INSULATION.
8. ALL DUCTWORK SHALL BE INSTALLED IN ACCORDANCE WITH SMACNA GUIDELINES, LATEST EDITIONS.	27. ALL THERMOSTATS SHALL BE PROGRAMMABLE AND HAVE A 4 DEGREE DEADBAND.
9. PRIOR TO ORDERING ANY EQUIPMENT, THIS CONTRACTOR SHALL PROVIDE COORDINATION TO THE ELECTRICAL SUBCONTRACTOR AND STRUCTURAL REQUIREMENTS TO THE GENERAL CONTRACTOR. ANY COSTS DIFFERENCES WILL BE WORKED THROUGH THE GENERAL CONTRACTOR AT THIS TIME. PROVIDE TO THE ELECTRICAL SUBCONTRACTOR THE PHASE, AMPERAGE AND VOLTAGE OR EACH PIECE OF EQUIPMENT PRIOR TO ORDERING.	28. INSTALL SMOKE DETECTOR IN THE SUPPLY AIR SYSTEM FOR ALL UNITS WITH CAPACITY GREATER THAN 2000 CFM. THE SMOKE DETECTOR SHALL BE INSTALLED DOWNSTREAM OF ANY FILTERS, FAN MOTOTS, OUTDOOR AIR CONNECTIONS AND UPSTREAM OF ANY BRANCH CONNECTIONS.
10. CONTRACTOR SHALL REFER TO THE ELECTRICAL DRAWINGS, LIGHTING DESIGN DRAWINGS AND THE REFLECTED CEILING PLAN (RCP) WHEN INSTALLING THE CEILING DIFFUSERS AND RETURN GRILLS.	29. ALL MATERIAL INSTALLED WITHIN A RETURN AIR PLENUM SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 AND A SMOKE DEVELOPED INDEX OF NOT MORE THAN 50.
11. COORDINATE WITH THE ELECTRICAL SUBCONTRACTOR IN REGARDS TO DISCONNECTS, BREAKERS, POWER WIRING, MOTOR CONTROL DEVICES, MECHANICAL CONTRACTOR SHALL PROVIDE STARTERS, TRANSFORMERS, ETC AND COORDINATE THE INSTALLATION WITH THE ELECTRICAL SUBCONTRACTOR.	30. ALL WIRING INSTALLED WITHIN THE PLENUM SHALL BE PLENUM RATED OR INSTALLED WITHIN CONDUIT.
12. PROVIDE UL LISTED, HEAVY DUTY FIBERGLAS CONNECTOR AT FAN, AIRHANDLERS, FAN COIL UNITS, ROOFTOP UNITS AND OTHER MECHANICAL EQUIPMENT WHERE THEY CONNECT TO SHEET METAL DUCTWORK. THE FIBERGLAS CONNECTOR SHALL BE INSTALLED WITH APPROPRIATE LENGTH TO ALLOW FOR VIBRATION AND NOISE TRANSMISSION.	31. ALL EQUIPMENT INSTALLED ABOVE THE CEILING SHALL BE ACCESSIBLE. CONTRACTOR SHALL SUPPLY ACCESS PANELS IN CEILING OR WALL AND SHALL COORDINATE WITH ARCHITECT FOR PROPER LOCATION. ACCESS PANELS IN CEILING SHALL BE A MINIMUM OF 24"x24" WITH HINGES. ACCESS PANELS SHALL HAVE SAME FIRE RATING AS CEILING IN WHICH THEY ARE INSTALLED.
13. DUCTWORK SHALL BE GALVANIZED SHEET METAL IN ACCORDANCE WITH SMACNA GUIDELINES.	32. EACH PIECE OF EQUIPMENT SHALL BE PERMANENTLY LABELED WITH A NAMEPLATE OF SUFFICIENT SIZE TO CLEARLY INDICATE THE EQUIPMENT DESIGNATION IN ACCORDANCE WITH THE DRAWINGS (IE PIU-1, RTU-1, ETC.). NAMEPLATES TO BE IBAKED ENAMEL OR ALUMINUM WITH STAMPED LETTERS.
14. ROUND FLEXIBLE CONNECTORS SHALL BE PROVIDED BETWEEN MAIN DUCT AND DIFFUSERS. PROVIDE THERMAFLEX PRO SERIES. UTILIZE SPIN-IN CONNECTORS WITH SCOOP AND ADJUSTABLE DAMPER FOR AIR CONTROL.	33. EACH DUCT OR PIPE WHICH PENETRATES ANY FIRE OR SMOKE PARTITION SHALL HAVE THE WALL OPENING SEALED WITH HILTI FIRE STOP TO PREVENT THE SPREAD OF SMOKE.
15. FLEXIBLE DUCTWORK SHALL BE INSTALLED FREE OF KINKS AND SHALL BE LIMITED TO 8'-0" IN LENGTH. DIAMETER SHALL BE THE SAME AS THE DIFFUSER NECK.	34. ANY EXISTING WALL, FLOOR, OR CEILING SURFACE DISTURBED DURING THE COURSE OF CONSTRUCTION, SHALL BE REPAIRED TO LIKE NEW OR PREVIOUS CONDITION TO THE SATISFACTION OF THE ARCHITECT.
16. ALL PORTIONS OF DUCTWORK VISIBLE THROUGH DIFFUSER AND RETURN GRILL OPENINGS SHALL BE PAINTED FLAT BLACK. ALL PORTIONS EXPOSED IN AREAS WITHOUT CEILING SHALL BE PAINTED PER THE ARCHITECTURAL DRAWINGS.	35. RECORD DRAWINGS:  THE CONTRACTOR SHALL MAINTAIN ON A DAILY BASIS AT THE PROJECT SITE A COMPLETE SET OF "RECORD DRAWINGS", REFLECTING AN ACCURATE DIMENSIONAL RECORD OF ALL BURIED OR CONCEALED WORK. THE "RECORD DRAWINGS" SHALL BE MARKED TO SHOW THE PRECISE LOCATION OF CONCEALED WORK, AND EQUIPMENT INCLUDING CONCEALED OR EMBEDDED PIPING AND VALVES AND ALL CHANGES AND DEVIATIONS FROM THE CONTRACT DOCUMENTS. THIS REQUIREMENT SHALL NOT BE CONSTRUED AS AUTHORIZATION FOR THE CONTRACTOR TO MAKE CHANGES WORK WITHOUT APPROVAL FROM THE ARCHITECT.
17. CONTRACTOR SHALL FIELD VERIFY SPACE REQUIREMENTS FOR DUCTWORK PRIOR TO MANUFACTURING. ADJUSTMENTS TO DUCT SIZES IS ACCEPTABLE AS LONG AS THE FOLLOWING FRICTION FACTORS ARE MAINTAINED:  SUPPLY: 0.08"/100FT RETURN: 0.06"/100FT.	THE "RECORD DRAWINGS" SHALL BE CLEARLY MARKED WITH "RECORD DRAWINGS" INDICATED IN THE LOWER RIGHT CORNER OF THE DRAWINGS.
18. ALL THERMOSTATS UNLESS OTHERWISE NOTED SHALL BE INSTALLED AT THE SAME HEIGHT AS THE EXISTING THERMOSTATS.	36. UPON THE COMPLETION OF THE HVAC SYSTEM INSTALLATION, PROVIDE A COMPLETE TEST AND BALANCE. THE TEST AND BALANCE SHALL MEASURE AIR FLOWS FOR EACH PIECE OF EQUIPMENT, DIFFUSER AND RETURN GRILL. SUBMIT TO ARCHITECT TEST AND BALANCE PLAN THREE DAYS PRIOR TO INTENDED START DATE.
19. ALL DUCT DIMENSIONS SHOWN IN THIS SET REFERS TO CLEAR INSIDE DIMENSION. IF DUCTWORK IS LINED, INTERIOR SHEET METAL SIZE SHALL BE INCREASED TO ACCOUNT FOR THE LINEAR THICKNESS.	

AIR CONDITIONING UNIT SCHEDULE											
FAN COIL UNIT						CONDENSING UNIT					
MARK	AIRFLOW (CFM)	OA CFM	ESP (WG)	FAN H.P.	HEATING (kW)	MODEL NO. CARRIER	MARK	MBH COOLING @95F TOTAL	MBH COOLING SENSIBLE	MODEL NO. CARRIER	EER/SEER (MIN)
FCU-1.3	1600	200	0.5	3/4	10 kW	FV4CNB006	CU-1.3	46.0	34.8	24ACC648	16.00 SEER

- ① ROUTE CONDENSATE TO BUILDING EXTERIOR TURN DOWN SO CONDENSATE SPILLS INTO GRASSED AREA 18" ABOVE FINISHED GRADE. PROVIDE CONDENSATE PUMP.

FAN SCHEDULE						
MARK	CFM	S.P. WG	HP	TYPE	BASIS OF DESIGN	LOCATION/SERVICE
EF-1.3	75	0.125	18 WATTS	DIRECT	GREENHECK SP-B80	RESTROOMS

- COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO PLACING ORDER.
- ① INTERLOCK WITH TOILET ROOM LIGHT SWITCH

AIR DISTRIBUTION SCHEDULE						
MARK	TYPE	SIZE IN INCHES		FINISH	O.B.D.	BASIS OF DESIGN
		NECK	FACE			
A	SUPPLY	10"	24"x12"	③	NO	TITUS 300RL ①②④
B	SUPPLY	8"	24"x12"	③	NO	TITUS 300RL ①②④
C	SUPPLY	6"	12"x8"	③	NO	TITUS 300RL ①②④
D	SUPPLY	N/A	18"x10"	③	NO	TITUS 300RL ①②④
E	RETURN	18"	24"x24"	③	NO	TITUS 350RL ①④
F	RETURN	N/A	24"x24"	③	NO	TITUS 350RL ①

- ① INSIDE OF DIFFER/GRILL VISIBLE FROM FLOOR SHALL BE PAINTED BLACK.
- ② DIFFUSERS SHALL DISCHARGE 30" DOWNWARD.
- ③ GRILL SHALL BE PAINTED TO MATCH DUCT IN WHICH IT IS INSTALLED.
- ④ GRILL SHALL BE INSTALLED IN FLOOR OF UPPER LEVEL. DUCTWORK BELOW.



COMcheck Software Version 4.1.5.5

Mechanical Compliance Certificate

Project Information

Energy Code: 2015 IECC

Project Title: Mulberry Springs Winery

Location: Flowerly Branch, Georgia

Climate Zone: 4a

Project Type: New Construction

Construction Site: 4527 JM Turk Road  
Flowerly Branch, GA 30542

Owner/Agent:

Designer/Contractor:

Additional Efficiency Package(s)

Credits: 1.0 Required 1.0 Proposed

Reduced Lighting Power, 1.0 credit

Mechanical Systems List

Quantity	System Type & Description
3	HVAC System 1 (Single Zone): Heating: 1 each - Central Furnace, Electric, Capacity = 34 kBtu/h No minimum efficiency requirement applies Cooling: 1 each - Split System, Capacity = 46 kBtu/h, Air-Cooled Condenser, No Economizer, Economizer exception: None Proposed Efficiency = 16.00 SEER, Required Efficiency: 13.00 SEER Fan System: FAN SYSTEM 1 - Compliance (Motor nameplate HP method) : Passes
	Fans: FAN 1 Supply, Constant Volume, 1600 CFM, 0.8 motor nameplate hp, 0.0 fan efficiency grade

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2015 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Bobby G. Beach - PE

Signature

05/31/2023

Date

Bobby G. Beach - PE  
Signature

05/31/2023  
Date