SOILS & SITE	
SOILS INVESTIGATION REQUIRED? (IBC 1803.2)	☐ no ☒ yes
SOILS CLASSIFICATION	
Seismic Site Class (IBC 1613.5.2)	D
Classify Soil of Materials (UCS System) (IBC 1803.5.1)	SM,SC
Allowable Footing Bearing Pressure	2000 psf
MINIMUM DESIGN SOIL BEARING LOAD (IBC Table 1806.2)	N/A psf
COMPACTION	
Subgrade (ASTM D698, ASTM D1557) or (AASHTO only for paving & roads)	95 %
Base (ASTM D698, ASTM D1557) or (AASHTO only for paving & roads)	95 %
Other (ASTM D698, ASTM D1557) or (AASHTO only for paving & roads)	95 %
MINIMUM DESIGN SOIL LATERAL LOAD (IBC 1610.1)	N/A psf
FOOTINGS	
Undisturbed footings	☐ no ☒ yes
Compacted Fill Material (IBC 1804.5)	☐ no ☐ yes
ELEVATIONS	
Elevation of Water Table	N/A MSL
Elevation of lowest footing	490.50 MSL
Elevation of lowest floor or basement	493.50 MSL

STRUCTURAL DESIGN INFORMATION, BUILDING		
WIND LOADS	Analytic Procedure (ASCE 7 or IBC 1609.6)	ASCE 7
	Basic Wind Speed, MPH (3 sec gust IBC Fig 1609)	V_{ult} = 120
	Exposure Category	C
	Wind Importance Factor (ASCE 7 Table 6.1)	I_w = 1.15
	Internal Pressure Coefficient (ASCE 7)	GC_{pi} = +/- 0.18
	External Pressure Coefficient (ASCE 7)	GC_p = +0.8, -0.5
SEISMIC LOADS	Seismic Importance Factor (ASCE 7)	I = 1.25
	Soil Class (IBC 1613.5.2)	D
	Mapped Spectral Response Accelerations	S_s = 0.337
		S_1 = 0.133
	Design Spectral Response Acceleration Parameters	S_{DS} = 0.343
		S_{D1} = 0.193
	Seismic Use Group (ASCE 7 and Seismic Occupancy Category IBC)	III
	Seismic Design Category (IBC Tables 1613.5.6(1) & 1613.5.6(2))	C
	Basic Seismic Force Resisting System	Special reinforced masonry shear walls
	Design Base Shear	260 KIPS
	Seismic Response Coefficient(s) ASCE 7	C_s = 0.086
	Response Modification Factor(s) ASCE 7	R = 5.0
	Analysis Procedure	ELFP

Summary of data from approved ASHRAE 90.1 compliance sheets.

MECHANICAL INFORMATION		
GENERAL INFORMATION		
Building Location	Aiken, SC	
Climate Zone	3A	
Outdoor Design Temperature	Summer	95 deg F DB
		76 deg F WB
	Winter	21 deg F DB
		deg F WB
Indoor Design Temperature	Summer	72 deg F DB
		50 % RH
	Winter	70 deg F DB
		50 % RH
OUTSIDE AIR 5275 cfm		
Occupied Minimum Outside Air	8.6 cfm per person	
CO2 Demand Management	☒ no ☐ yes	
Supervised Control System	☐ no ☒ yes	
MECHANICAL SYSTEMS, SERVICE SYSTEMS & EQUIPMENT		
Briefly describe mechanical system: Packaged DX VAV systems with VAV boxes with electric heat. Water source heat pump units with reheat coil. Rooftop and inline exhaust fans for general exhaust and pressurization.		

The Designer(s) of Record shall determine the material and/or work on the project requiring Special Inspections. The Special Inspection requirements shall be based on Section 1704 of the 2006 International Building Code. Any deviations from the requirements of Section 1704 must be approved by OSF. Per IBC Chapter 16 and ASCE 7 – This information may be shown on initial Structural Sheet of the drawings or on Sheet with other code information. List floor design loads on structural plans.

STATEMENT OF SPECIAL INSPECTIONS				
MATERIAL	TYPE OF INSPECTION	FREQUENCY	SPECIFICATION REFERENCE	INSPECTION BY
Soils	Compaction, Bearing, Fill Materials	Periodic	IBC 1705.6	
Foundations	Compaction, Reinforcing, Bearing	Periodic	IBC 1705.3	
Concrete	Mix Design, Slump, Strength Reinforcing	Periodic	IBC 1705.3	
Structural Masonry	Materials, Grout, Mortar, Reinforcing	Periodic	IBC 1705.4	
Steel	Materials, Joists, Shear Connectors	Periodic	IBC 1705.2	
Light Gauge Framing	Materials, Connections	Periodic	IBC 1705.2	
Seismic Resistance	Masonry Walls, Roof and Floor Deck	Periodic	IBC 1705.12	
Wind Resistance	Masonry Walls, Roof and Floor Deck	Periodic	IBC 1705.11	

*See specification section 01 41 50 "Special Inspections" for detailed information regarding special inspections.

ELECTRICAL INFORMATION		
SERVICE TRANSFORMER	☒ By Utility	
	☐ By District	KVA Priority
		Voltage/Phase
ELECTRICAL SERVICE INFORMATION		
Service Voltage/Phase 120/208 3 Phase	3000 Amperes	
Service Entrance Conductor Size 500 kcmil	8 Qty per Phase	
Total Connected Load	788 KVA	
Estimated Maximum Demand	350 KVA	
Available Fault Current in Symmetrical Amperes	55 KA	
Interrupting Capacity of Service Overcurrent Device		
GROUNDING ELECTRODE SYSTEM COMPONENTS (NEC 250)	Driven Ground Rod	
EMERGENCY SERVICE INFORMATION		
Emergency Generator	☐ no ☒ yes	37.5 KVA
		120/208 3 Phase Voltage/Phase
	Fuel	Diesel
Exit/Emergency Lights Backup Power		☐ Integral Battery
		☒ Generator
Fire Alarm System	☒ Manual	☒ Addressable
	☒ Automatic	☐ Class A
		☒ Class B
LIGHTNING PROTECTION PROVIDED	☒ no ☐ yes	

Summary of data from approved ASHRAE 90.1 compliance sheets.

DESIGN-RELATED CONSTRUCTION PERMITS/APPROVALS

The following is a list of permits and standards applicable to state construction projects. This is not intended to be a complete list and a permit or standard not listed here may still be applicable.

Agencies and A/Es should use this as a check list for each project by indicating the status of each required permit in the space provided. Include dates of submitted and/or approvals/anticipated approvals. This form may be submitted to OSE when this information is requested; however, it is required. If used, it must show only those permits relative to the project.

TYPE OF DEVELOPMENT	SC LAW / REGULATION	WHERE TO OBTAIN PERMIT/APPROVAL	STATUS
Air pollutant discharge	48-1-100; R61-62.1	SCDHEC – Air Quality Control	N/A
Ambulatory surgical facilities	R61-91	SCDHEC – Health Facilities Construction	N/A
Asbestos abatement	R61-86.1	SCDHEC – Air Quality Control	Contractor
Building construction, Zoning	6-7-10; 6-9-10	Local Authority	Pending
Community residential care facilities	R61-84	SCDHEC – Health Facilities Construction	N/A
Construction in critical coastal areas	48-39-10, 130, 190	SCDHEC – OCRM	N/A
Construction in navigable waters	49-1-16	SCDHEC – Water Pollution Control	N/A
Dams and reservoirs	49-11-200; R72-1, 2, 3	SCDHEC – Water Pollution Control	N/A
Demolition of Real Property	R61-86.1	SCDHEC – Air Quality Control	N/A
Design Review Board (BAR), SC Dept Archives & History, etc.)	Various local	Various local	N/A
Educational facilities (K - 12)	59-23-210	SC Dept. of Ed. – Office of School Facilities	Pending
Elevators	41-16-90	SC Department of LLR	N/A
Fire Department (Local)	Various local	Servicing Fire Department	Pending
Fire Protection Sprinkler	40-10	State Fire Marshal	Pending
Fire suppression systems	R71-8301	State Fire Marshal	Pending
Floodplains, construction in	OSE Manual Chpt 5	Office of State Engineer	N/A
Food service establishments	R61-25	SCDHEC – Local County Health Dept.	N/A
Historical building rehabilitation	R12-125	Archives and History, Local Authority	N/A
Hospitals & infirmaries	R61-16	SCDHEC – Health Facilities Construction	N/A
Road encroachment, local	57-7-60	Local City or County Authority	Pending
Road encroachment, state	57-5-1080	Local SCDOT Maintenance Office	Pending
Sanitary sewer, treatment & disposal	R61-56, 57	SCDHEC – Domestic Wastewater	Pending
Storm water discharge, erosion and sediment control	R61-9; R72-100-108	SCDHEC – Water Pollution Control; State Engineer; Local Authority	Pending
Swimming areas, natural public	R61-50	SCDHEC – Water Supply Construction	N/A
Swimming pools, public	R61-51	SCDHEC – Water Supply Construction	N/A
Underground storage tanks	R61-92	SCDHEC – Groundwater Protection	N/A
Waste discharge (sewage, industrial waste, etc.)	48-1-100, 110; R61-9	SCDHEC – Water Pollution Control	N/A
Water supply	44-55-40; R61-57, 58	SCDHEC – Water Supply Construction	N/A
Wells, Underground injection	R61-71, 87	SCDHEC – Groundwater Protection	N/A

GENERAL NOTES

A. REFERENCE SHEET G1.11 FOR ADDITIONAL OSF FORM F-3 TABLES.

B. REFERENCE SHEET G2.00 FOR BUILDING AREA KEY PLAN. **AREA 3 IS NOT INCLUDED IN THE SCOPE OF THIS PROJECT. ONLY LIMITED SCOPE WILL OCCUR IN THIS AREA, INCLUDING FIRE ALARM UPGRADES.**

C. PER OSF, DRINKING FOUNTAINS ARE ONLY REQUIRED FOR INCREASES IN OCCUPANCY FROM THE EXSITING BUILDING.

D. **THE SITE AND EXISTING BUILDING(S) WILL BE OCCUPIED DURING CONSTRUCTION.**

Provide a table for each structure.

PLUMBING INFORMATION		
WATER SYSTEM		
Service Line Size	3 Inches	
Distribution Design Criteria (IPC Table 604.3)	241 Fixture Units	
Maximum Flow Rate (IPC Table 604.4)	100 GPM	
Backflow	Location	Riser room
	Type	RP backflow preventer
Test Pressure	125 psi	
SANITARY SEWER SYSTEM		
Service Line Size	6 Inches	
Drainage Design Criteria (IPC Tables 709.1 and 709.2)	185 Fixture Units	
Maximum Flow Rate	16500 GPD	
Slope (IPC Table 704.1)	0.125 Inches/ft	
MINIMUM PLUMBING FIXTURES REQUIRED/PROVIDED (IPC Section 403 & Table 403.1)		
For structures with multiple building areas and/or occupancy groups, show calculations for shared fixtures. Expand table as needed.		
Applicable area(s)	N/A	
Most restrictive area	N/A	
Fixture count required	N/A	

CODE-REQUIRED BUILDING FIXTURE COUNTS		
Water Closets	Male Required	12.49
	Male WC Provided	12
	Male Urinal Provided	5
	Female Required	14.74
	Female Provided	17
Lavatories	Male Required	11.49
	Male Provided	14
	Female Required	11.49
	Female Provided	14
Showers	Male Required	N/A
	Male Provided	N/A
	Female Required	N/A
	Female Provided	N/A
Drinking Fountains	Required	10.94
	Provided	16
Unisex toilet	Required	0
	Provided	9
Service Sink	Required	1
	Provided	6
Others (list)	Required	N/A
	Provided	N/A

*See "Plumbing Counts" attachment for detailed plumbing fixture calculations.

ENERGY INFORMATION		
INSULATION		
Roof	Cavity	N/A
	Continuous	25 R
Walls	Cavity	N/A
	Continuous	15 R
Underslab		N/A R
GLAZING (each type)		
Window to wall ratio	North	20 %
	East	11 %
	South	26 %
	West	25 [illegible]
Glass Type	U Factor	[illegible]
	SHG	[illegible]

FIRE SERVICE INFORMATION		
Service Line Size		6 Inches
Fire Department Connection	Location	Exterior - Freestanding
Backflow	Location	Inside Riser Room
	Type	Reduced-Pressure-Backflow-Preventer
Fire Hydrant Flow Test	Date	12/12/2018
	Flow	1,900 GPM
	Residual	40 PSI
	Static	70 PSI

Order Plans @ WWW.LDILine.com

GMC
1219 Wayne Street
Columbia, SC 29201
T 803.766.1235
GMCNETWORK.COM

STATE OF SOUTH CAROLINA GOODWYN, MILLS & CAWOOD, INC GREENVILLE, SC REGISTERED ARCHITECT

STATE OF SOUTH CAROLINA MARC W. WARREN COLUMBIA, SC REGISTERED ARCHITECT 10.24.19

ISSUE	DATE
BID DOCUMENTS	10.24.19

DRAWN BY: MJW
CHECKED BY: MWW

MILLBROOK ELEMENTARY SCHOOL - ADDITION AND RENOVATIONS
255 E PINE LOG RD, AIKEN, SC 29803
GMC # ACOL180004

OSF F-3 CODE TABLES

G1.11

10/29/2019 4:21:39 AM