

ROCK HILL SCHOOLS
YORK COUNTY SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL
250 NEELY STORE ROAD
ROCK HILL, SC 29730

HVAC REPLACEMENT
PROJECT # 22158
2023-04-19

Project Engineer:
JEB

Drawn By:
JEB

Revisions:

No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date

This drawing and the design shown are the property of:
Buford Goff & Associates.
The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.

SOUTH CAROLINA
BUFORD
GOFF &
ASSOCIATES, INC.
No. 000022
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 26527
4/9/2023
JONATHAN BURKETT

SITE MAP

CONSULTANTS

GENERAL CONSTRUCTION - MECHANICAL - ELECTRICAL
BUFORD GOFF & ASSOCIATES, INC.
1331 ELMWOOD AVENUE, SUITE 200
COLUMBIA, SOUTH CAROLINA 29201
TEL: (803) 254-6302
FAX: (803) 771-6142

CODE ANALYSIS

1. SOUTH CAROLINA EXISTING BUILDING CODE (SCEBC): 2021
2. SOUTH CAROLINA BUILDING CODE (SCBC): 2021
3. SOUTH CAROLINA FIRE CODE (SCFC): 2021
4. SOUTH CAROLINA MECHANICAL CODE (SCMC): 2021
5. SOUTH CAROLINA PLUMBING CODE (SCPC): 2021
6. NATIONAL ELECTRIC CODE (NEC) WITH SC MODIFICATIONS: 2020
7. INTERNATIONAL ENERGY CONSERVATION CODE (IECC) WITH SC MODIFICATIONS: 2009
8. SEISMIC & WIND DESIGN CRITERIA: CATEGORY C, RISK CATEGORY III, WIND SPEED 120 MPH

DRAWING INDEX

<u>CODE COMPLIANCE</u>	
G001	BUILDING CODE ANALYSIS FORM F-3
<u>GENERAL CONSTRUCTION</u>	
GC101	PARTIAL FLOOR PLAN - GENERAL CONSTRUCTION PLAN
<u>MECHANICAL</u>	
M100	OVERALL FLOOR PLAN - HVAC
M101	PARTIAL FLOOR PLAN - AREA A - HVAC DEMOLITION
M102	MULTI-PURPOSE ROOM FLOOR PLAN AND ROOF PLAN - HVAC DEMOLITION
M103	PARTIAL FLOOR PLAN - AREA A - HVAC RENOVATION
M104	MULTI-PURPOSE ROOM FLOOR PLAN AND ROOF PLAN - HVAC RENOVATION
M300	HVAC NOTES, SCHEDULES, AND LEGENDS
M400	HVAC DETAILS
<u>ELECTRICAL</u>	
E101	PARTIAL FLOOR PLAN AREA A - ELECTRICAL HVAC RENOVATION
E102	PARTIAL FLOOR PLAN - ELECTRICAL HVAC RENOVATION

ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT
COVER SHEET

Buford
Goff
& Associates, Inc.
Engineers & Planners
1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

Sheet Number:
CS

Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS

FORM F3 - BUILDING CODE ANALYSIS

DATE: 02/03/2023

SUBMITTAL:

☐ SCHEMATIC

☐ DESIGN DEVELOPMENT

☒ CONSTRUCTION DOCUMENT

SC CODE EDITION:

2021

ICC CODE EDITION:

2021

ICC A117.1 EDITION:

2017

OSF GUIDE EDITION:

2020

OTHER CODES/STANDARDS & EDITIONS:

PROJECT DESCRIPTION:
REPLACEMENT OF PACKAGED HEAT PUMPS.

BASIC BUILDING CODE INFORMATION						
DESIGNATED AREAS OF BUILDING	BUILDING CODE	AREA 1	AREA 2	AREA 3	AREA 4	AREA 5
	—	<input type="checkbox"/> SCBC <input checked="" type="checkbox"/> SCEBC	<input type="checkbox"/> SCBC <input checked="" type="checkbox"/> SCEBC	<input type="checkbox"/> SCBC <input type="checkbox"/> SCEBC	<input type="checkbox"/> SCBC <input type="checkbox"/> SCEBC	<input type="checkbox"/> SCBC <input type="checkbox"/> SCEBC
CONSTRUCTION CLASSIFICATION TYPE	SECTION 602	IIB (ASSUMED)	IIB (ASSUMED)	—	—	—
OCCUPANCY GROUP (INDICATE ALL)	SECTION 302	E	E	—	—	—
MOST RESTRICTIVE OCCUPANCY GROUP	TABLES 504.3, 504.4 & 506.2	E	E	—	—	—
DOES BUILDING REQUIRE INCIDENTAL USE AREA SEPARATION?	TABLE 509	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES BUILDING HAVE ACCESSORY OCCUPANCY(IES)?	TABLE 508.2	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
WHAT IS THE AGGREGATE SQUARE FOOTAGE OF THE ACCESSORY OCCUPANCY(IES)?	TABLE 508.2	N/A	N/A	—	—	—
WHAT PERCENT OF THE STORY IS THE AGGREGATE OF THE ACCESSORY OCCUPANCY(IES)?	TABLE 508.2	N/A	N/A	—	—	—
MIXED OCCUPANCY	SECTION 508	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NONSEPARATED <input type="checkbox"/> SEPARATED	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NONSEPARATED <input type="checkbox"/> SEPARATED	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NONSEPARATED <input type="checkbox"/> SEPARATED	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NONSEPARATED <input type="checkbox"/> SEPARATED	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NONSEPARATED <input type="checkbox"/> SEPARATED

EXISTING BUILDING CODE INFORMATION [SCEBC]			
DESIGNATED AREAS OF BUILDING	AREA 1	AREA 2	AREA 3
METHOD OF COMPLIANCE: (CHECK ONLY ON OPTION AND ALL ITEMS THAT APPLY UNDER THAT OPTION.)	<input type="checkbox"/> OPTION 1: PRESCRIPTIVE COMPLIANCE METHOD (CH. 3,5) <input type="checkbox"/> ALTERATION <input type="checkbox"/> ADDITION <input type="checkbox"/> CHANGE OF OCCUPANCY <input type="checkbox"/> HISTORIC BUILDING	<input type="checkbox"/> OPTION 1: PRESCRIPTIVE COMPLIANCE METHOD (CH. 3,5) <input type="checkbox"/> ALTERATION <input type="checkbox"/> ADDITION <input type="checkbox"/> CHANGE OF OCCUPANCY <input type="checkbox"/> HISTORIC BUILDING	<input type="checkbox"/> OPTION 1: PRESCRIPTIVE COMPLIANCE METHOD (CH. 3,5) <input type="checkbox"/> ALTERATION <input type="checkbox"/> ADDITION <input type="checkbox"/> CHANGE OF OCCUPANCY <input type="checkbox"/> HISTORIC BUILDING
	<input checked="" type="checkbox"/> OPTION 2: WORK AREA COMPLIANCE METHOD (CH. 3, 6–12) <input checked="" type="checkbox"/> ALTERATION LEVEL 1 <input type="checkbox"/> ALTERATION LEVEL 2 <input type="checkbox"/> ALTERATION LEVEL 3 <input type="checkbox"/> CHANGE OF OCCUPANCY <input type="checkbox"/> ADDITIONS <input type="checkbox"/> HISTORIC BUILDING AGGREGATE AREA OF BUILDING: N/A SF WORK AREA: N/A SF	<input checked="" type="checkbox"/> OPTION 2: WORK AREA COMPLIANCE METHOD (CH. 3, 6–12) <input checked="" type="checkbox"/> ALTERATION LEVEL 1 <input type="checkbox"/> ALTERATION LEVEL 2 <input type="checkbox"/> ALTERATION LEVEL 3 <input type="checkbox"/> CHANGE OF OCCUPANCY <input type="checkbox"/> ADDITIONS <input type="checkbox"/> HISTORIC BUILDING AGGREGATE AREA OF BUILDING: SF WORK AREA: SF	<input type="checkbox"/> OPTION 2: WORK AREA COMPLIANCE METHOD (CH. 3, 6–12) <input type="checkbox"/> ALTERATION LEVEL 1 <input type="checkbox"/> ALTERATION LEVEL 2 <input type="checkbox"/> ALTERATION LEVEL 3 <input type="checkbox"/> CHANGE OF OCCUPANCY <input type="checkbox"/> ADDITIONS <input type="checkbox"/> HISTORIC BUILDING AGGREGATE AREA OF BUILDING: SF WORK AREA: SF
	<input type="checkbox"/> OPTION 3: PERFORMANCE COMPLIANCE METHOD (CH. 3, 13)	<input type="checkbox"/> OPTION 3: PERFORMANCE COMPLIANCE METHOD (CH. 3, 13)	<input type="checkbox"/> OPTION 3: PERFORMANCE COMPLIANCE METHOD (CH. 3, 13)
ORIGINAL BUILDING CODE AND EDITION APPLICABLE AT THE TIME OF CONSTRUCTION:	1982 STANDARD BUILDING CODE	1997 STANDARD BUILDING CODE	
EXISTING SPRINKLER SYSTEM?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
EXISTING FIRE ALARM SYSTEM?	<input type="checkbox"/> MANUAL <input checked="" type="checkbox"/> AUTO	<input type="checkbox"/> MANUAL <input checked="" type="checkbox"/> AUTO	<input type="checkbox"/> MANUAL <input type="checkbox"/> AUTO
SEISMIC EVALUATION REQUIRED?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input type="checkbox"/> YES <input type="checkbox"/> NO
CHANGE OF OCCUPANCY:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO EXISTING OCCUPANCY CLASS(S) NEW OCCUPANCY CLASSIFICATION(S)	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO EXISTING OCCUPANCY CLASS(S) NEW OCCUPANCY CLASSIFICATION(S)	<input type="checkbox"/> YES <input type="checkbox"/> NO EXISTING OCCUPANCY CLASS(S) NEW OCCUPANCY CLASSIFICATION(S)
HISTORIC BUILDING:	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PRESERVATION <input type="checkbox"/> REHABILITATION <input type="checkbox"/> RESTORATION <input type="checkbox"/> RECONSTRUCTION	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PRESERVATION <input type="checkbox"/> REHABILITATION <input type="checkbox"/> RESTORATION <input type="checkbox"/> RECONSTRUCTION	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> PRESERVATION <input type="checkbox"/> REHABILITATION <input type="checkbox"/> RESTORATION <input type="checkbox"/> RECONSTRUCTION

MECHANICAL INFORMATION

GENERAL INFORMATION

BUILDING LOCATION

ROCK HILL, SOUTH CAROLINA

CLIMATE ZONE

3A

OUTDOOR DESIGN TEMPERATURE

SUMMER

95 DEG. F DF
74 DEG. F WB

WINTER

19 DEG. F DF
N/A DEG. F WB

INDOOR DESIGN TEMPERATURE

SUMMER

75 DEG. F DF
50 % RH

WINTER

70 DEG. F DF
N/A % RH

OUTSIDE AIR

OCCUPIED MINIMUM OUTSIDE AIR

N/A

CO2 DEMAND MANAGEMENT

☒ NO ☐ YES

SUPERVISED CONTROL SYSTEM

☐ NO ☒ YES

MECHANICAL SYSTEMS, SERVICE SYSTEMS & EQUIPMENT

REPLACEMENT OF PACKAGED HEAT PUMPS.

STRUCTURAL DESIGN INFORMATION, BUILDING		
WIND LOADS	ANALYSIS PROCEDURE (ASCE 7 OR IBC 1609.6)	ASCE 7–16
	BASIC WIND SPEED, MPS (3 SEC GUST IBC FIG 1609)	V _{3s} = 120
	EXPOSURE CATEGORY	B
	WIND IMPORTANCE FACTOR (ASCE 7 TABLE 6.1)	I _w =1.15
	INTERNAL PRESSURE COEFFICIENT (ASCE 7)	GC _{pi} = N/A
SEISMIC LOADS	EXTERNAL PRESSURE COEFFICIENT (ASCE 7)	GC _p = N/A
	SEISMIC IMPORTANCE FACTOR (ASCE 7)	I = 1.25
	SOIL CLASS (IBC 1613.5.2)	D
	MAPPED SPECTRAL RESPONSE ACCELERATIONS	S _s = 0.239 S ₁ = 0.09
	DESIGN SPECTRAL RESPONSE ACCELERATION PARAMETERS	S _{DS} = 0.255 S _{DI} = 0.144
	SEISMIC USE GROUP (ASCE 7 AND SEISMIC OCCUPANCY CATEGORY IBC)	III
	SEISMIC DESIGN CATEGORY (IBC TABLES 1613.5.6(1) & 16.13.5.6.(2))	C
	BASIC SEISMIC FORCE RESISTING SYSTEM	N/A
	DESIGN BASE SHEAR	N/A KIPS
	SEISMIC RESPONSE COEFFICIENT(S) ASCE 7	C _s = N/A
	RESPONSE MODIFICATION FACTOR(S) ASCE 7	R =N/A
	ANALYSIS PROCEDURE	N/A

ELECTRICAL INFORMATION

N/A, EXISTING SERVICES

SERVICE TRANSFORMER

☐ BY UTILITY

N/A KVA PRIMARY

☐ BY DISTRICT

N/A VOLTAGE/PHASE

ELECTRICAL SERVICE INFORMATION

SERVICE VOLTAGE/PHASE

N/A AMPERES

SERVICE ENTRANCE CONDUCTOR SIZE

N/A QTY PER PHASE

TOTAL CONNECTED LOAD

N/A KVA

ESTIMATED MAXIMUM DEMAND

N/A KVA

AVAILABLE FAULT CURRENT IN SYMMETRICAL AMPERES

N/A

INTERRUPTING CAPACITY OF SERVICE OVERCURRENT DEVICE

N/A

GROUNDING ELECTRODE SYSTEM COMPONENTS (NEC 250)

EMERGENCY SERVICE INFORMATION

N/A

EMERGENCY GENERATOR

☐ NO ☐ YES

N/A KVA

FUEL

N/A VOLTAGE/PHASE

EXIT/EMERGENCY LIGHTS BACKUP POWER

☐ INTEGRAL BATTERY

☐ GENERATOR

FIRE ALARM SYSTEM

☐ MANUAL

☐ ADDRESSABLE

☐ AUTOMATIC

☐ CLASS A

☐ CLASS B

LIGHTNING PROTECTION PROVIDED

☐ NO ☐ YES

Project Engineer:

JEB

Drawn By:

JEB

Revisions:

No. _____ Date _____

No. _____ Date _____

No. _____ Date _____

No. _____ Date _____

No. _____ Date _____

No. _____ Date _____

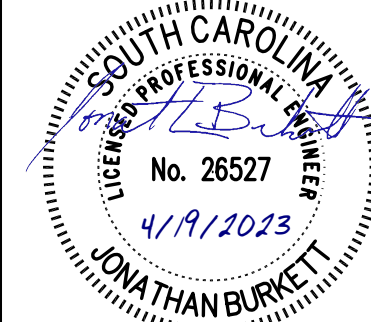
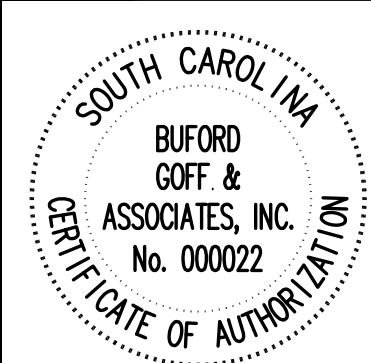
No. _____ Date _____

No. _____ Date _____

This drawing and the design shown are the property of:

Buford Goff & Associates.

The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT

BUILDING CODE ANALYSIS FORM F-3

Project

Sheet Title

Buford
& Associates, Inc.
Engineers & Planners

1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

Sheet Number:

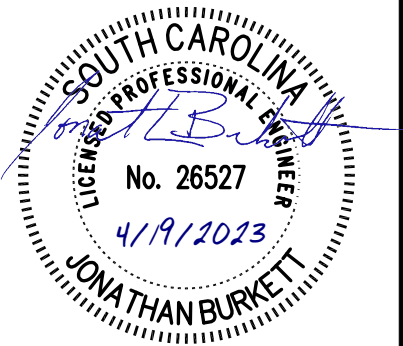
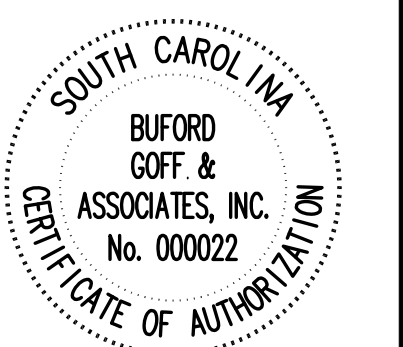
G001

Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS

1. CONTRACTOR TO DEMOLISH EXISTING PAD AND PROVIDE NEW CONCRETE PAD. NEW PAD TO BE SIZED AS INDICATED OR AT MINIMUM 6" LARGER THAN THE EQUIPMENT (WHICHEVER IS GREATER). NEW PAD TO BE MIN 6" ABOVE GRADE IN ALL DIRECTIONS. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND UNIT DIMENSIONS PRIOR TO POURING. SEE CONCRETE PAD DETAIL.
2. CONTRACTOR TO REMOVE EXISTING WALL COVERING TO ACCESS ELECTRICAL AND MAKE ANY NECESSARY DUCT CONNECTIONS. REINSTATE COVERING AFTER WORK IS COMPLETE. GAUZY ALL EDGES AND PENETRATIONS. COVER AND SECURE THE OPENING UNTIL THE COVERING IS REINSTALLED.

[illegible]

This drawing and the design shown are the property of:
Buford Goff & Associates.
The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT

PARTIAL FLOOR PLAN - GENERAL CONSTRUCTION PLAN

refers

2000

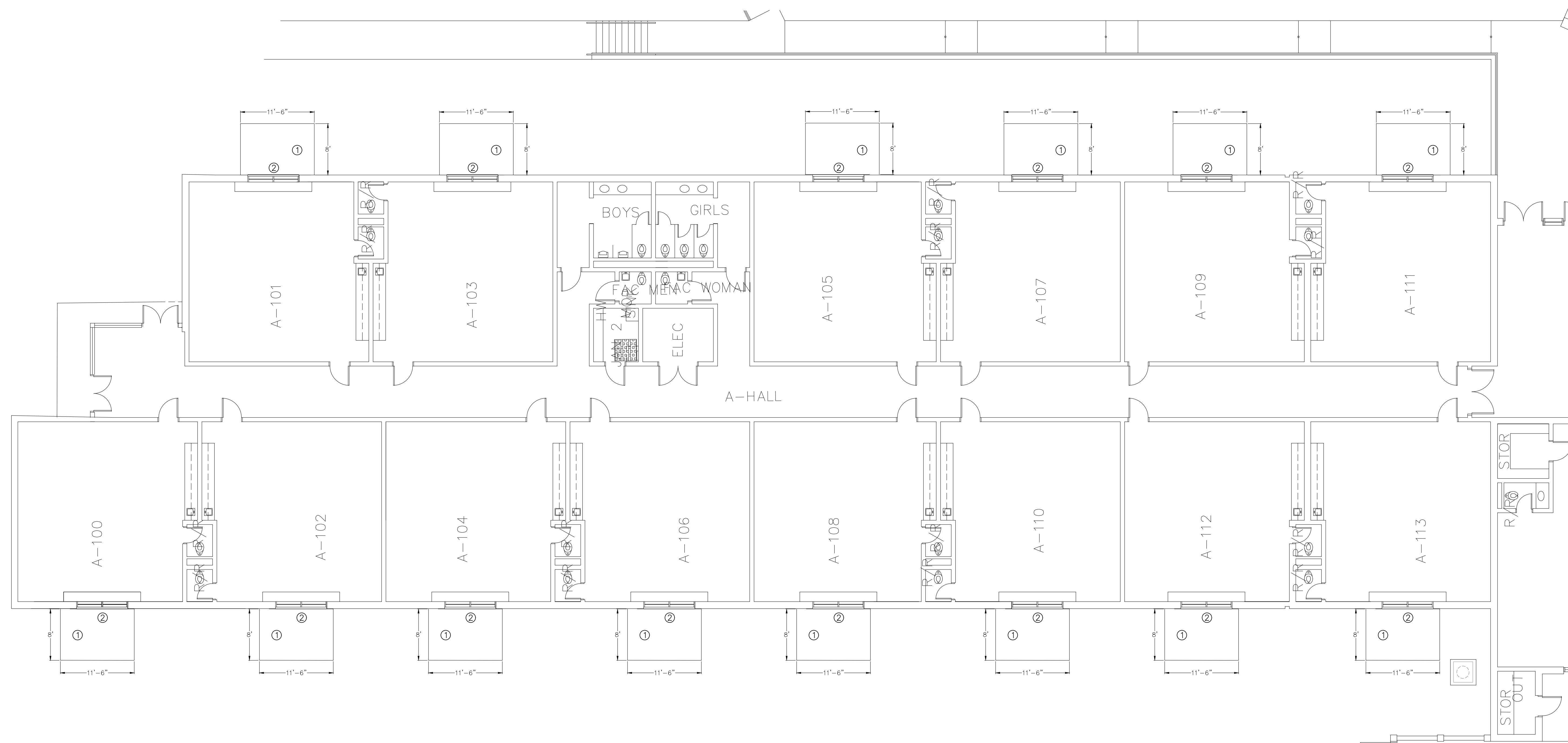
Buford
 **Goff**
& Associates, Inc.
Engineers & Planners

1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

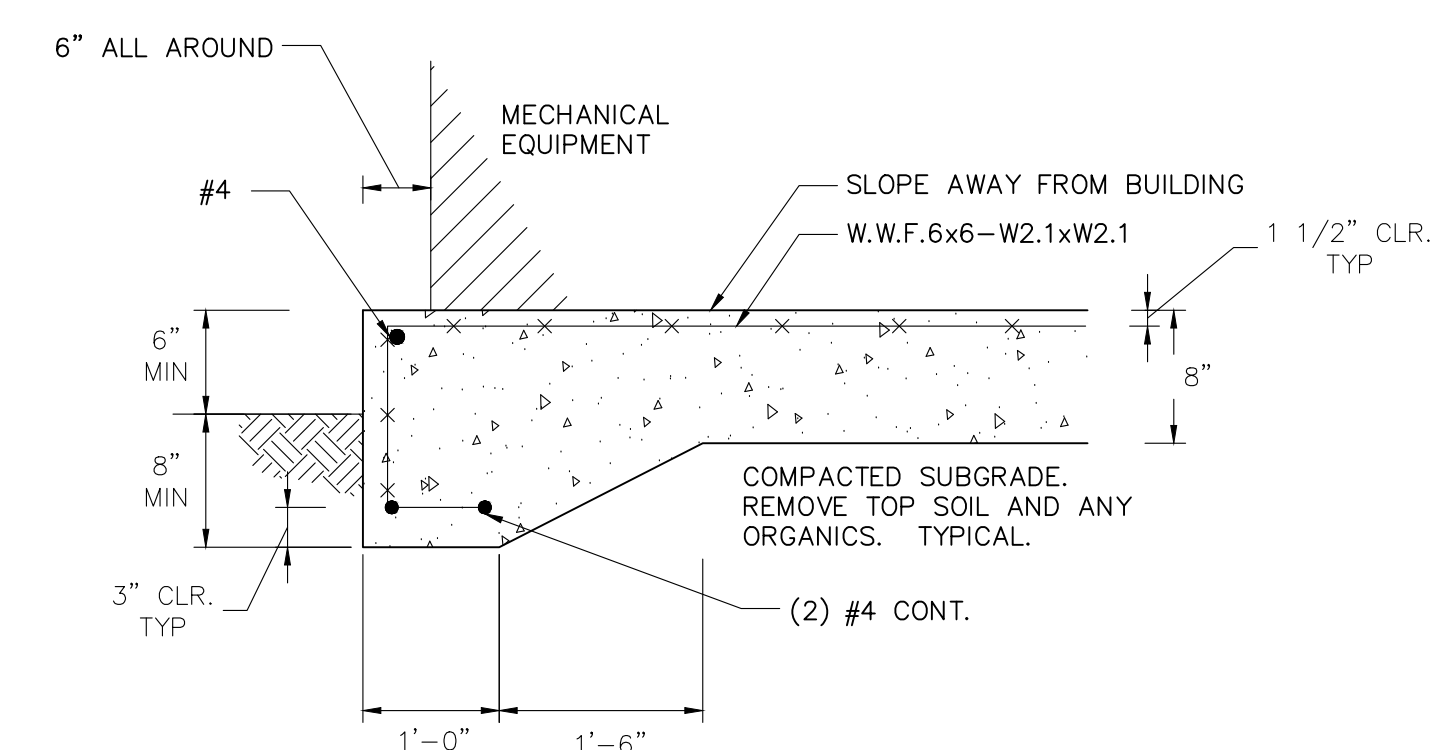
Sheet Number:

GC101

Date: 04-19-2023
Scale: As Noted
GA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS



1 PARTIAL FLOOR PLAN AREA A - GENERAL CONSTRUCTION PLAN
M101 SCALE: 1/8" = 1'-0"

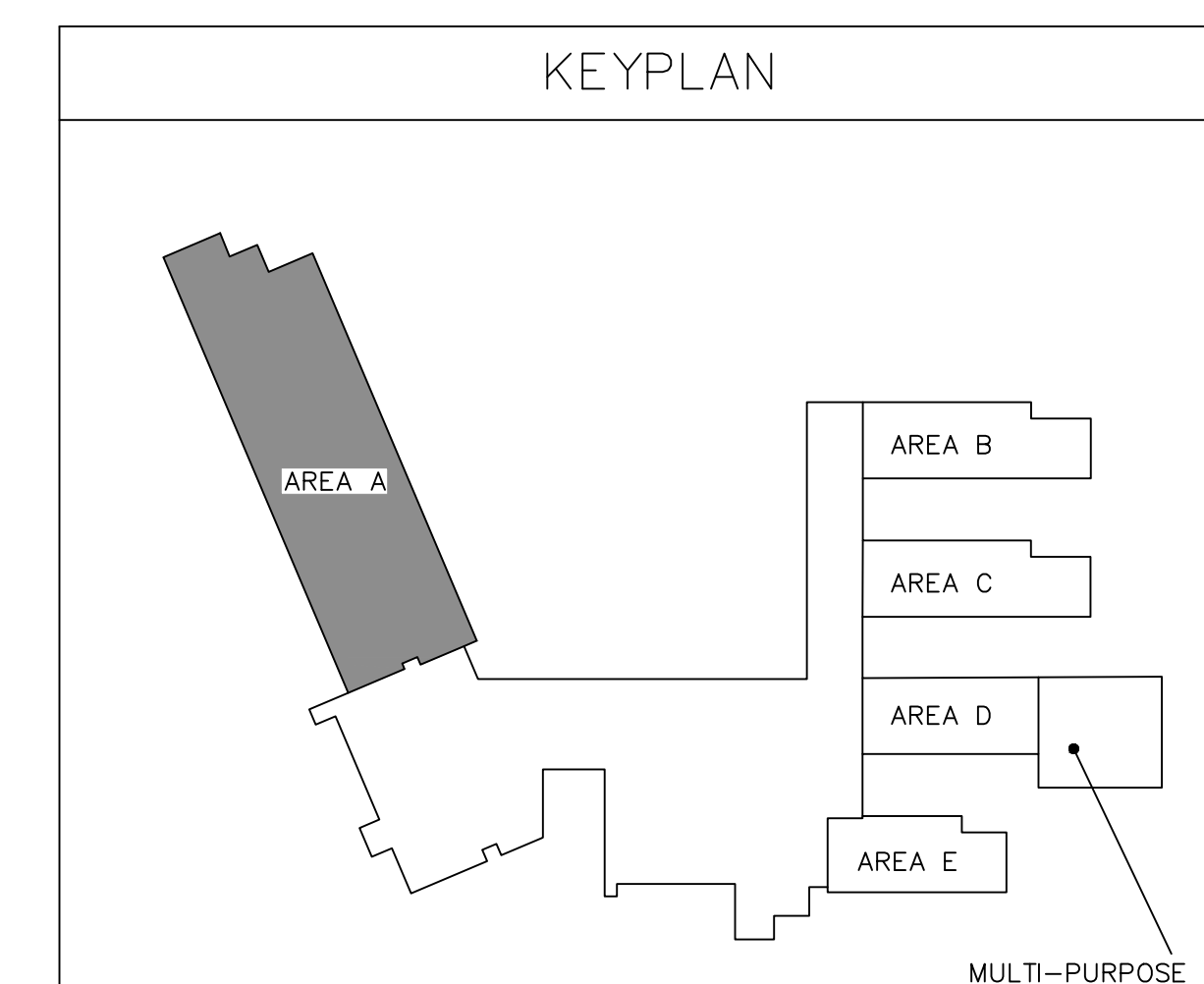


NOTES:

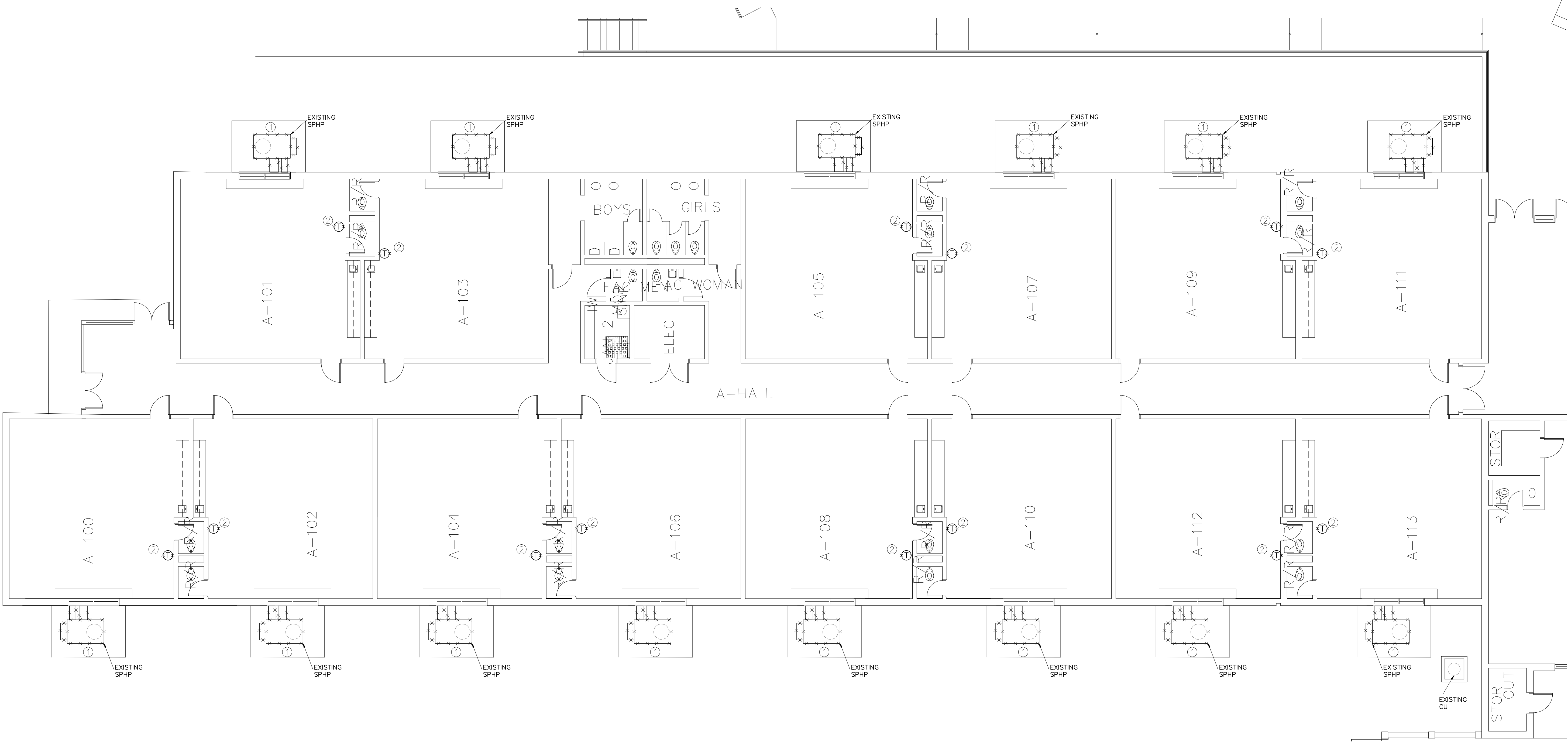
1. EXTEND THE TOE FOOTING DEPTH TO ENSURE LEVEL PAD AND EQUIPMENT AND ADJUST FOR GRADES.

EQUIPMENT PAD DETAIL

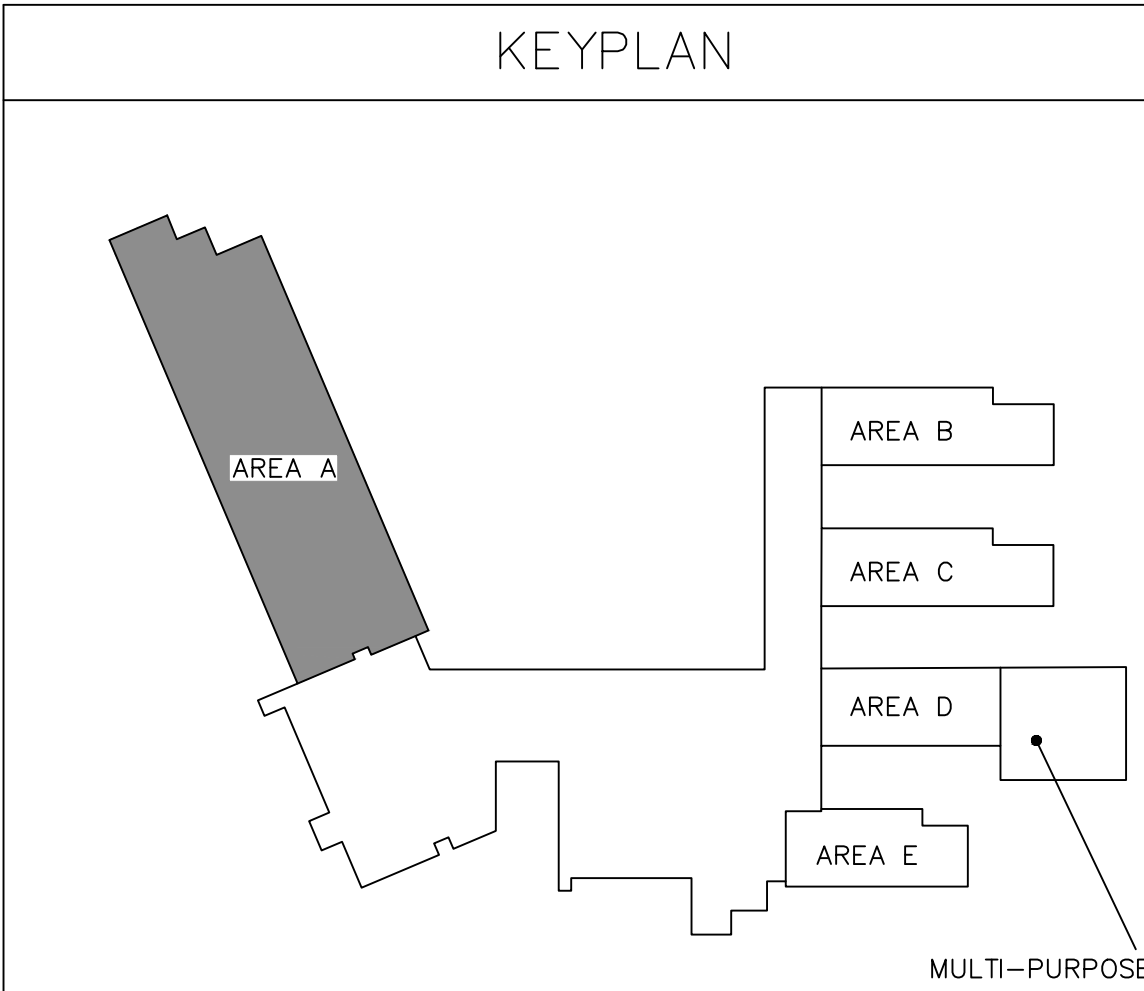
NOT TO SCALE



TEST AND BALANCE	⌘ HVAC DEMOLITION KEY NOTES
1. PRIOR TO DEMOLITION MEASURE SPHP SUPPLY AND RETURN AIR FLOW. 2. SUBMIT PREDEMOLITION TEST AND BALANCE REPORT TO ENGINEER FOR REVIEW.	1. DEMOLISH EXISTING PACKAGED UNITS ON GRADE. DEMOLISH DUCTWORK BACK TO EXISTING WALL. DEMOLISH UTILITIES AS REQUIRED TO INSTALL THE NEW UNITS. EXISTING PADS TO REMAIN. 2. DEMOLISH EXISTING T-STAT. REUSE WIREMOLD IF POSSIBLE.



1 PARTIAL FLOOR PLAN AREA A - HVAC DEMOLITION
SCALE: 1/8" = 1'-0"

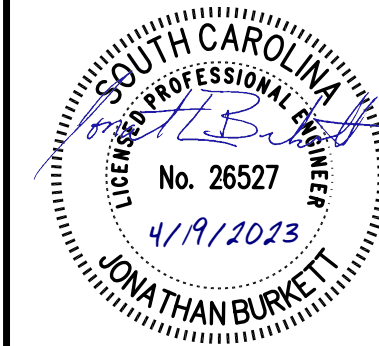


Project Engineer:	JEB
Drawn By:	JEB
Revisions:	
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____

This drawing and the design shown are the property of:

Buford Goff & Associates.

The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT

PARTIAL FLOOR PLAN - AREA A - HVAC DEMOLITION

Project

Sheet Title

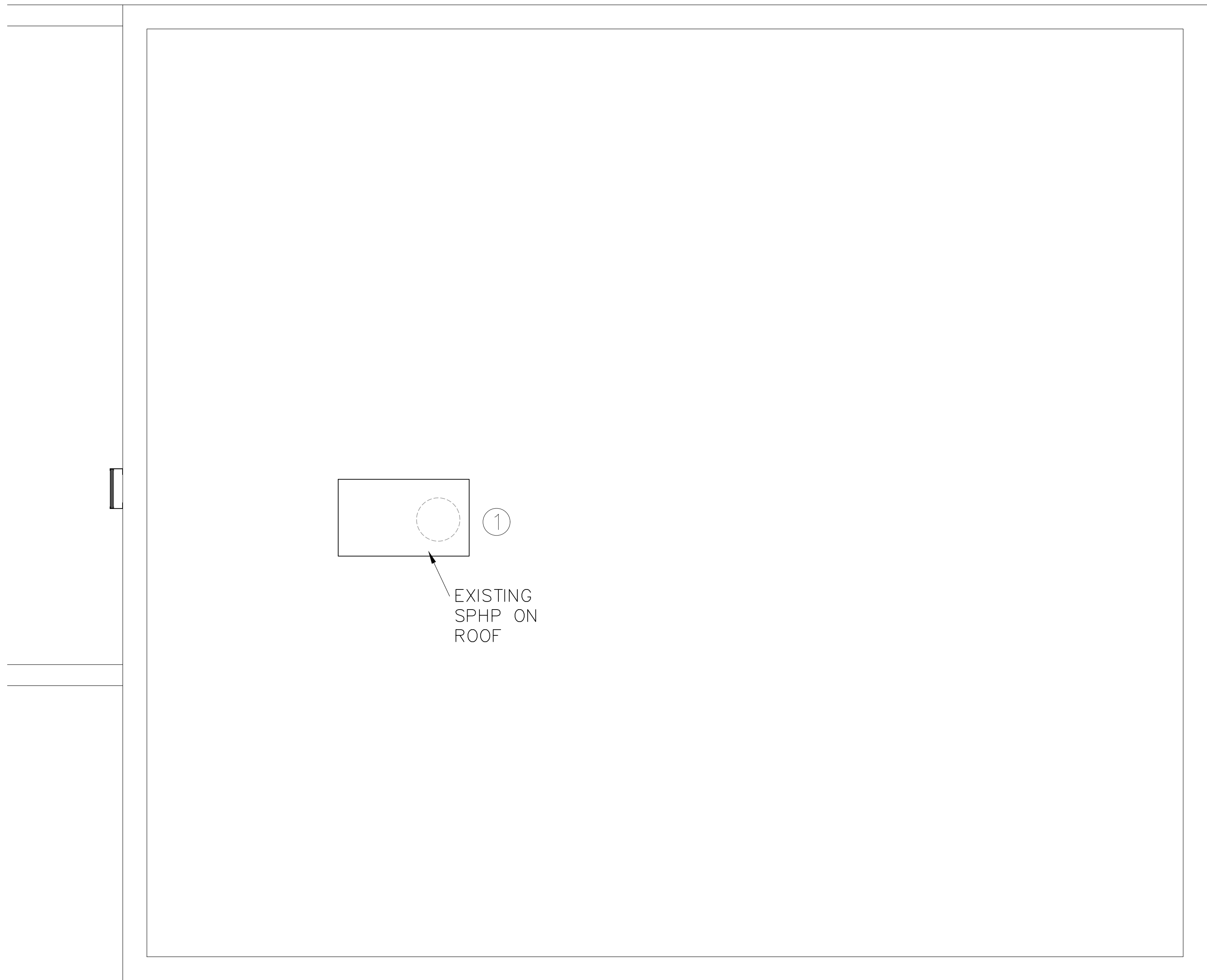
**Buford
& Associates, Inc.**
Engineers & Planners

1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

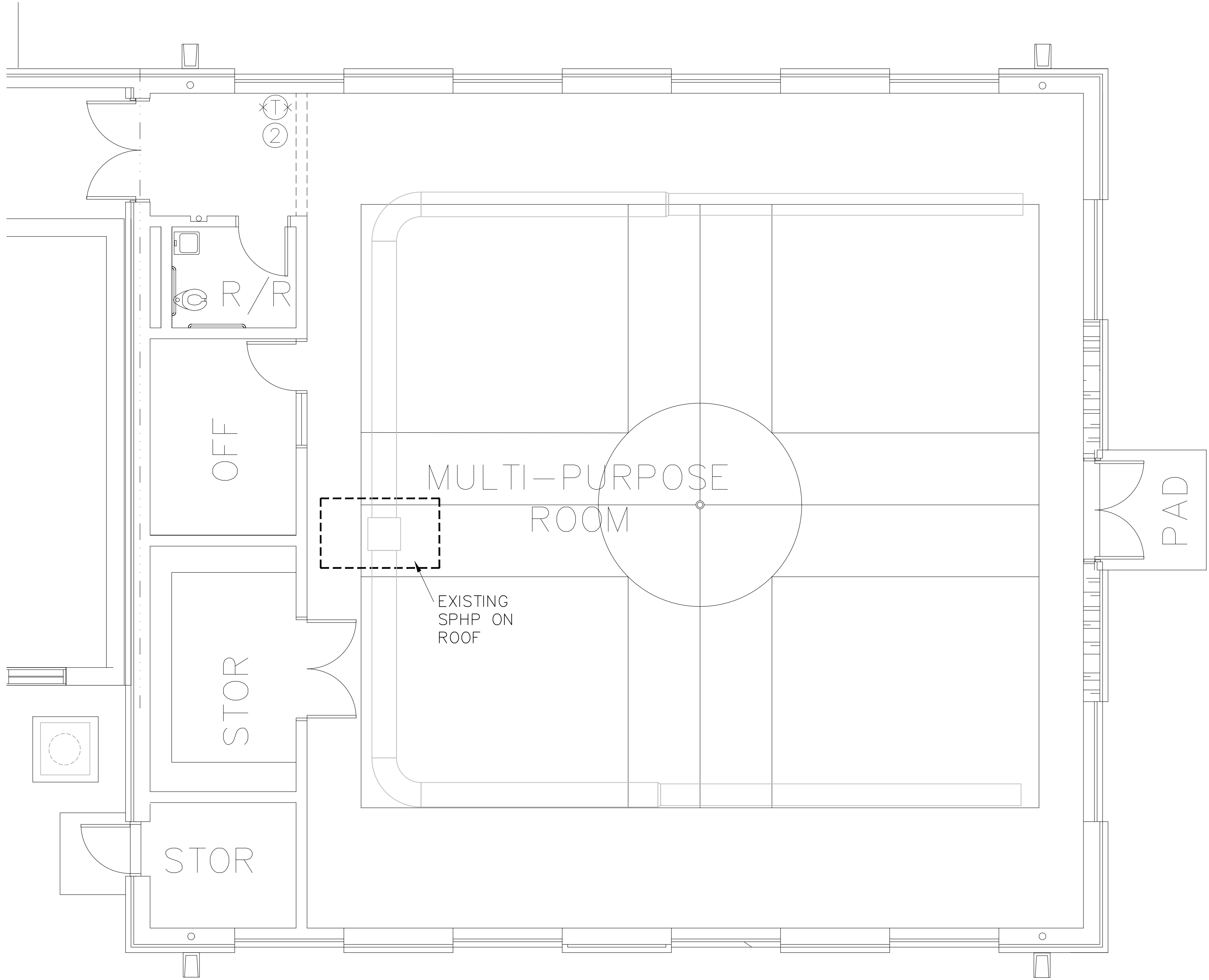
Sheet Number:

M101

Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS



2 PARTIAL ROOF PLAN - HVAC DEMOLITION
SCALE: 1/8" = 1'-0"



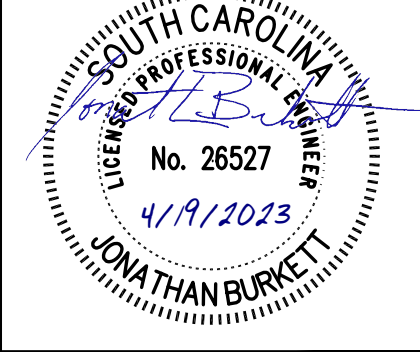
1 PARTIAL FLOOR PLAN - HVAC RENOVATION
SCALE: 1/8" = 1'-0"

TEST AND BALANCE
1. PRIOR TO DEMOLITION MEASURE EXISTING SPHP SUPPLY AND RETURN AIR AIRFLOW. 2. SUBMIT PREDEMOLITION TEST AND BALANCE REPORT TO ENGINEER FOR REVIEW.

HVAC DEMOLITION KEY NOTES
1. DEMOLISH EXISTING SPHP ON ROOF. VIBRATION ISOLATION CURB TO REMAIN. 2. DEMOLISH EXISTING T-STAT. REUSE WIREMOLD IF POSSIBLE.
KEYPLAN

Project Engineer:	JEB
Drawn By:	JEB
Revisions:	
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____
No. _____	Date _____

This drawing and the design shown are the property of:
Buford Goff & Associates.
The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



Project	Sheet Title
ROCK HILL SCHOOL DISTRICT 3 LESSLIE ELEMENTARY SCHOOL HVAC REPLACEMENT	MULTI-PURPOSE ROOM FLOOR PLAN AND ROOF PLAN - HVAC DEMOLITION
Buford & Associates, Inc. Engineers & Planners 1331 Elmwood Ave. Suite 200 Columbia, SC 29201 Phone: (803) 254 - 6302	
Sheet Number:	M102
Date: 04-19-2023 Scale: As Noted BGA PROJECT NUMBER: 22158 CONSTRUCTION DOCUMENTS	

HVAC RENOVATION KEY NOTES

1. INSTALL NEW SPHP ON NEW ELEVATED PADS.
2. DUAL WALL SUPPLY AND RETURN DUCTWORK ON THE EXTERIOR. CONNECT DUCTWORK TO EXISTING DUCTWORK
3. ROUTE CONDENSATE DRAIN LINE TO DRYWELL. SEE DETAIL.
4. PROVIDE NEW T-STAT IN SAME LOCATION AS EXISTING. FIELD VERIFY EXACT LOCATION.

Project Engineer:

JEB

Drawn By:

JEB

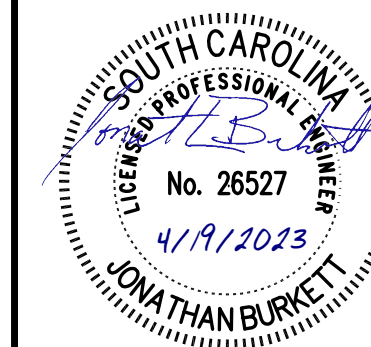
Revisions:

No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date

This drawing and the design shown are the property of:

Buford Goff & Associates.

The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT

PARTIAL FLOOR PLAN - AREA A - HVAC RENOVATION

Project

Sheet Title

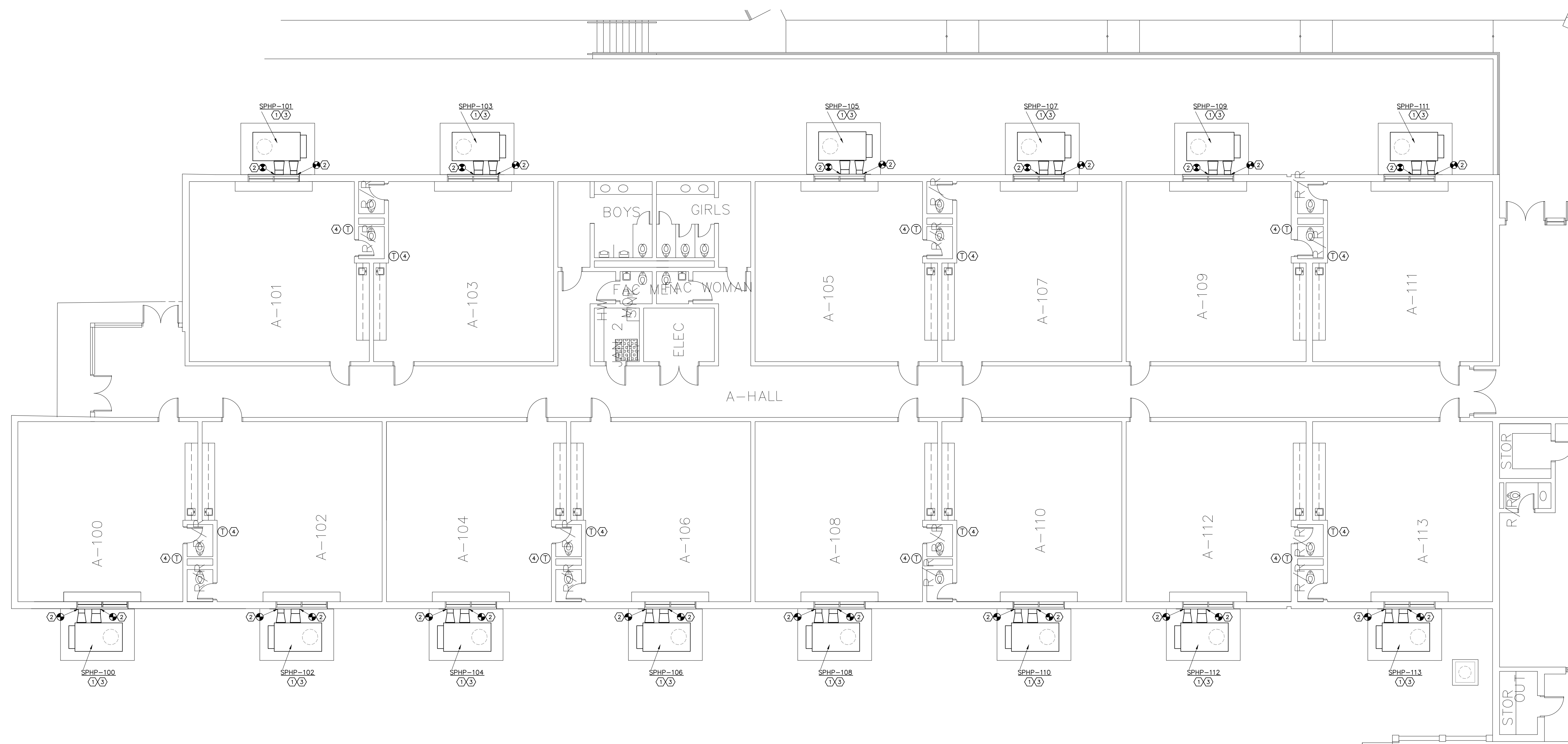
**Buford
& Associates, Inc.**
Engineers & Planners

1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254-6302

Sheet Number:

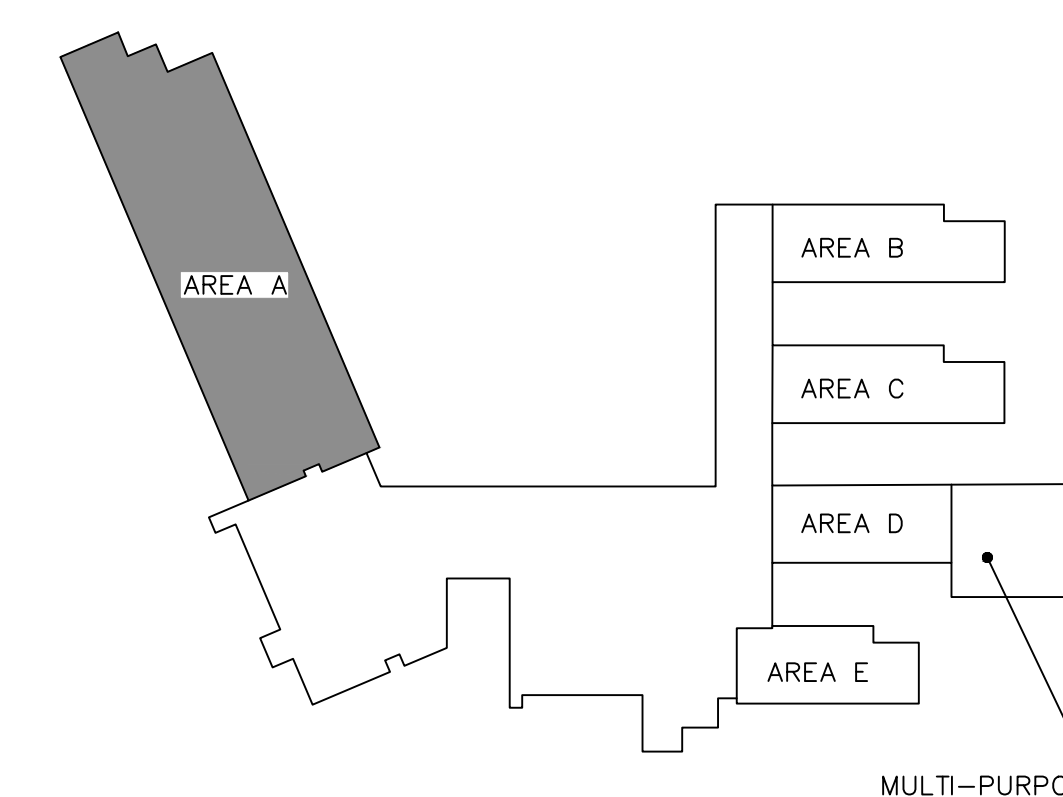
M103

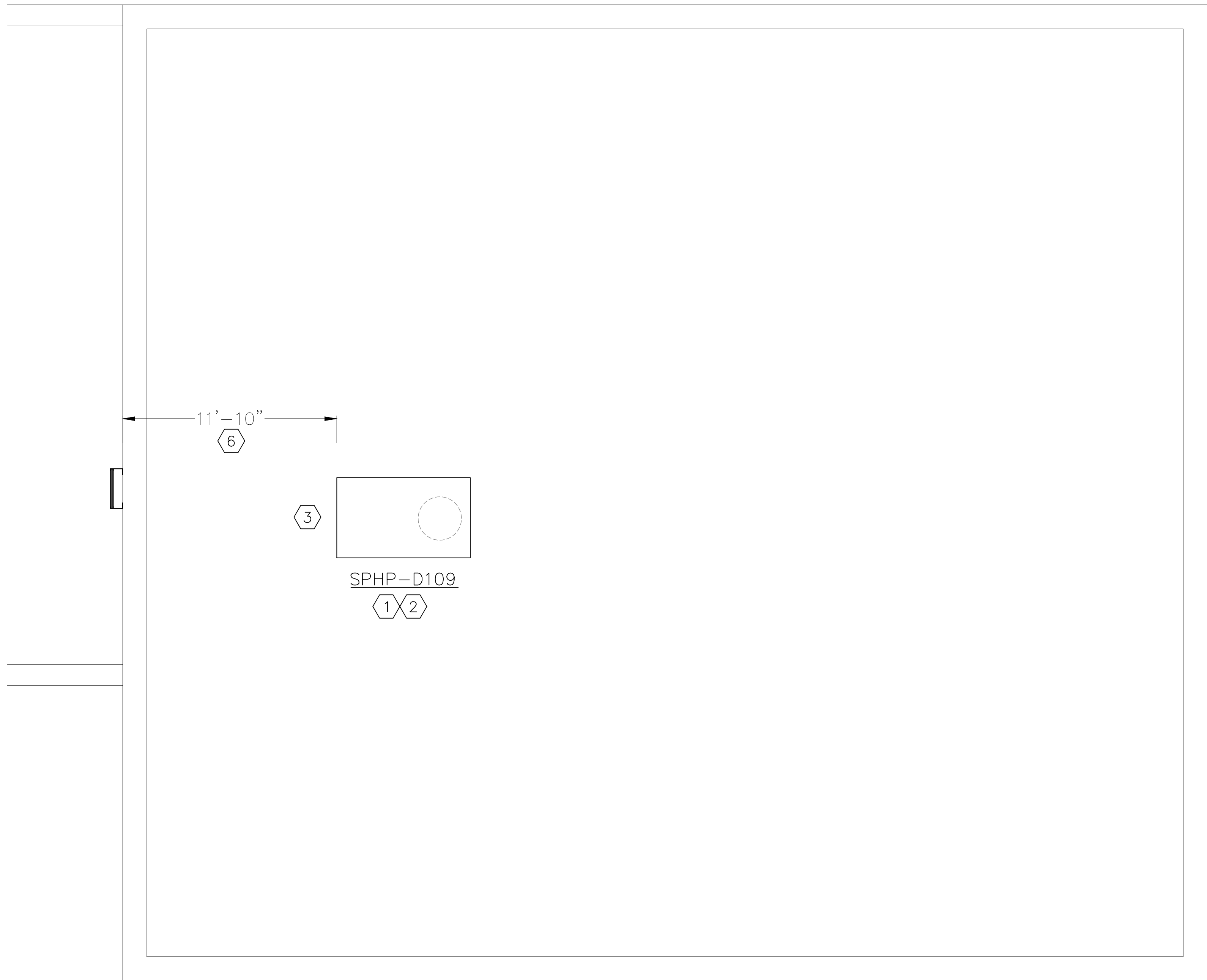
Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS



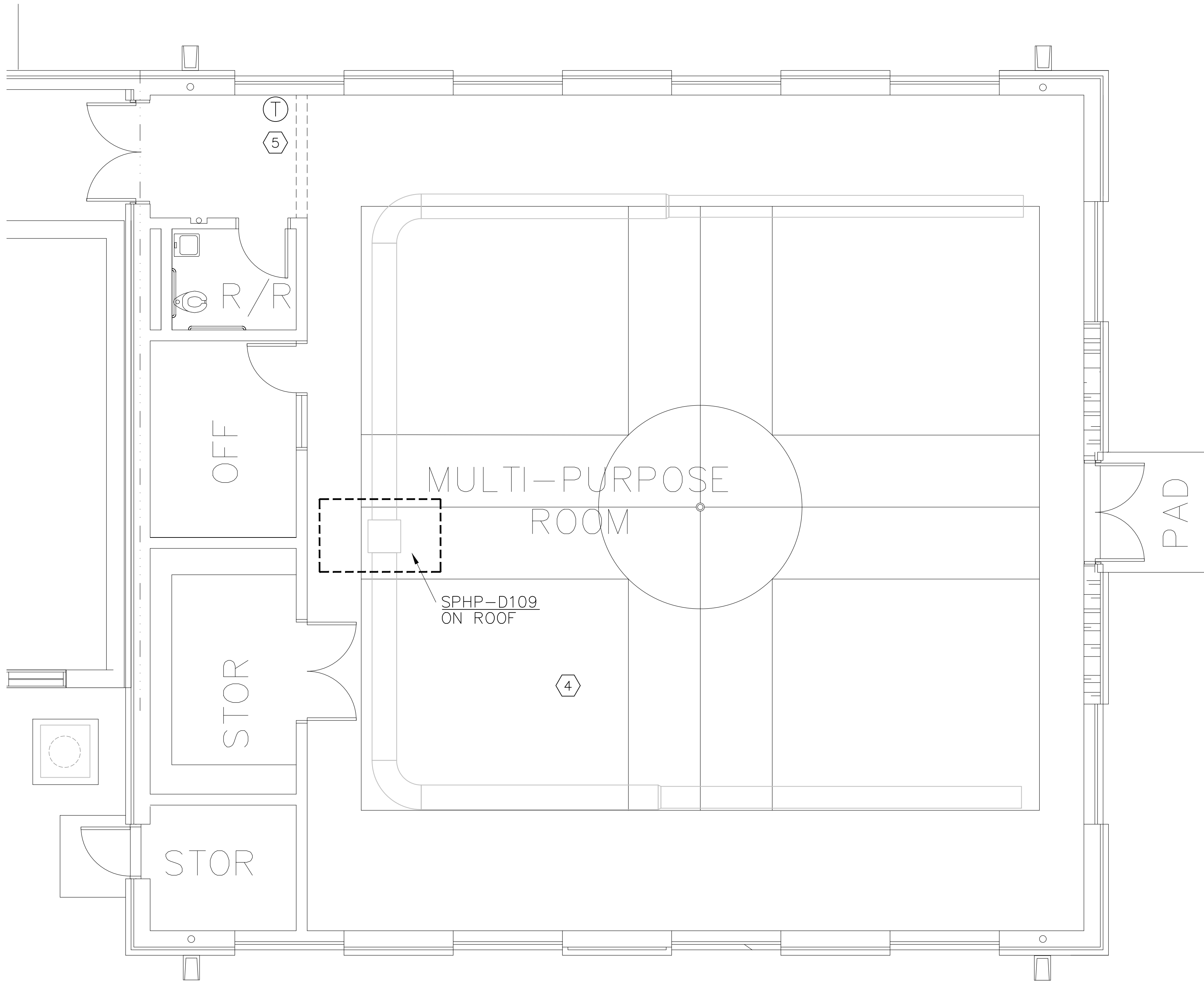
1
M103 PARTIAL FLOOR PLAN AREA A - HVAC RENOVATION
SCALE: 1/8" = 1'-0"

KEYPLAN





2 PARTIAL ROOF PLAN - HVAC RENOVATION
SCALE: 1/8" = 1'-0"

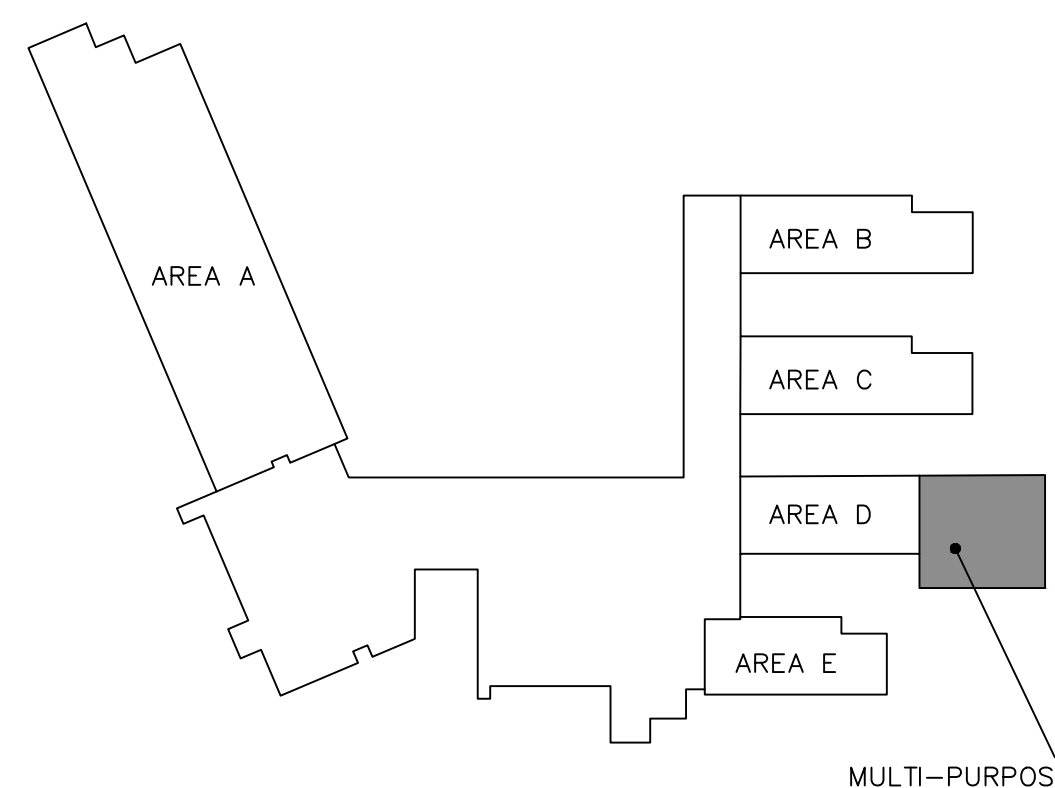


1 PARTIAL FLOOR PLAN - HVAC RENOVATION
SCALE: 1/8" = 1'-0"

HVAC RENOVATION KEY NOTES

1. INSTALL NEW SPHP-D109 ON EXISTING VIBRATION ISOLATION CURB. PROVIDE ADAPTER CURB AS REQUIRED. RECONNECT SUPPLY AND RETURN DUCTWORK TO EXISTING.
2. ROUTE CONDENSATE TO NEAREST ROOF DRAIN.
3. OUTSIDE AIR INTAKE. NO VENTS OR EXHAUST WITHIN 10 FEET.
4. CONTRACTOR TO REBALANCE EXISTING DUCTWORK TO PREDEMOLITION CFMS.
5. PROVIDE NEW T-STAT IN SAME LOCATION AS EXISTING. FIELD VERIFY EXACT LOCATION.
6. LOCATE UNIT NO CLOSER THAN 11' TO THE EDGE OF THE ROOF. COORDINATE WITH ADAPTER CURB MANUFACTURER.

KEYPLAN



Project Engineer:	
JEB	
Drawn By:	
JEB	
Revisions:	
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date

This drawing and the design shown are the property of:

Buford Goff & Associates.

The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT

MULTI-PURPOSE ROOM FLOOR PLAN AND ROOF PLAN - HVAC RENOVATION

Project

Sheet Title

Buford
& Associates, Inc.
Engineers & Planners

1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

Sheet Number:

M104

Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS

MECHANICAL GENERAL NOTES	
1.	DO NOT SCALE DRAWINGS. (SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS)(FIELD VERIFY EXISTING CONDITIONS) OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
2.	EXTEND ALL DRAIN LINES TO NEAREST GUTTER ON ROOF OR AS INDICATED ON PLANS. CONDENSATE DRAINS SHALL BE TRAPPED. ROUTE TO MINIMIZE TRIPPING HAZARD. PROVIDE CLEANOUTS AT ALL CHANGES OF DIRECTION GREATER THAN 90 DEGREES.
3.	ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS, AND PARTITIONS EXCEPT WHERE PROHIBITED BY FIRE CODES.
4.	LOCATE ALL THERMOSTATS, HUMIDISTATS AND SWITCHES 48"(TO TOP OF DEVICE) ABOVE FINISH FLOOR.
5.	ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS. HANGERS SHALL BE ADJACENT TO ELBOWS AND AT EQUIPMENT TO PREVENT WEIGHT OF PIPING BEING PLACED ON THE EQUIPMENT. SUPPORT DETAILS SHALL BE SUBMITTED TO THE MECHANICAL ENGINEER.
6.	ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
7.	AIR DISTRIBUTION SYSTEMS WITH MORE THAN ONE BRANCH, OR MULTIPLE OUTLETS ON A BRANCH, SHALL HAVE VOLUME DAMPERS TO BALANCE AIR FLOWS. SPIN IN FITTINGS ARE PERMITTED FOR CONNECTING FLEX DUCT TO BRANCH OR TRUNK DUCTS WHERE FLEX DUCTS ARE INDICATED. IF FLEX DUCT CANNOT BE CONNECTED WITH A SPIN IN, A HARD DUCTED TAKEOFF MUST BE PROVIDED.
8.	45 DEGREE TAKEOFFS SHALL BE USED ON ALL HARD DUCTED SUPPLY BRANCHES.
9.	ALL PIPING, DUCTS, VENTS, ETC. EXTENDING THRU EXTERIOR WALLS AND ROOFS SHALL BE FLASHED AND COUNTERFLASHED.
10.	PROVIDE ALL TRANSITIONS REQUIRED FOR INSTALLATION OF DUCT, DUCT HEATERS, AIR VOLUME CONTROLLERS, AIR HANDLING UNITS, FANS, AND ALL OTHER EQUIPMENT AND APPURTENANCES.
11.	PROVIDE INSULATED BLANK-OFF PANEL FOR ALL UNUSED PORTION OF LOUVER (WHICH HAVE MECHANICAL DUCT CONNECTIONS)
12.	ALL TRANSFER DUCTS SHALL BE LINED WITH ONE INCH ACOUSTICAL LINER.
13.	ALL DUCTS SERVING THE THEATRE, STAGE, 2ND STAGE AND LOBBY SHALL BE LINED WITH 2 INCH ACOUSTICAL LINER.
14.	ALL DUCT IS GALVANIZED SHEETMETAL EXCEPT AS NOTED.
15.	DUCT SIZES ARE CLEAR INSIDE DIMENSIONS.
16.	INTAKES FOR AIR HANDLING EQUIPMENT SHALL BE A MINIMUM OF FIFTEEN FEET AWAY FROM ANY EXHAUST OR VENT.
17.	AIR DISTRIBUTION UNITS SHALL HAVE TRIM REQUIRED FOR FINISHED SERVICE.
18.	ALL EQUIPMENT SHALL MEET THE PROJECT'S SEISMIC DESIGN AND WIND LOAD REQUIREMENTS.

S3951

SEISMIC AND WIND DESIGN CRITERIA			
SEISMIC DESIGN			
SEISMIC DESIGN CATEGORY (SDC): C			
RISK CATEGORY: III			
SPECTRAL RESPONSE COEFFICIENTS Sds: 0.255; Sd1: 0.144			
WIND DESIGN			
BASIC WIND SPEED: 120 MPH			
EXPOSURE CATEGORY: C			
RISK CATEGORY: III			

DUCT PRESSURE CLASSIFICATION			
DUCT	SYSTEM	PRESSURE	STATIC PRESSURE CLASS ("WG)
RETURN DUCT	ALL SYSTEM RETURNS	NEG	-2"
SUPPLY DUCT	ALL SYSTEM SUPPLY	POS	+2"

S3958

MECHANICAL SYMBOL LEGEND	
	SUPPLY OR OUTSIDE AIR GRILLE
	RETURN AIR GRILLE
	EXHAUST AIR GRILLE
	DUCT TURNED TO
	DUCT TURNED AWAY
	DUCT CAPPED
	EQUIPMENT LOCATED ON ROOF
	INSIDE DUCT DIMENSION
	OPPOSED BLADE VOLUME DAMPER
	FIRE DAMPER (FUSIBLE LINK)
	120V POWER IN J-BOX
	MOTORIZED DAMPER
	CONCEALED REGULATOR
	POUNDS (OR NUMBER)
	FIRE ALARM CONTROL PANEL
	10" 10" ROUND DUCT (INSIDE DIM)
	BACS-1 BUILDING AUTOMATION CONTROL SYSTEM NO. 1
	S SWITCH
	T THERMOSTAT/SENSOR
	H HUMIDISTAT/HUMIDITY SENSOR
	FLEX CONNECTION (DUCT)
	FILTER SECTION
	DUCT SMOKE DETECTORS
	CONTROL WIRING
	ACCESS DOOR
	CLEANOUT
	AIR DISTRIBUTION (OTHER SYMBOLS SIM.)
	LS LIGHT SWITCH
	CO ₂ CO ₂ SENSOR

S3950

MECHANICAL ABBREVIATIONS			
ABV	ABOVE	IN	INCHES
AFF	ABOVE FINISH FLOOR	MOD	MOTOR OPERATED DAMPER
AFMS-1	AIRFLOW MEASURING STATION NO.1	MPS	MEDIUM PRESSURE STEAM (16 PSI TO 30 PSI)
BACS	BUILDING AUTOMATION CONTROL SYSTEM	NO	NORMALLY OPEN
BHP	BRAKE HORSE POWER	NC	NORMALLY CLOSED
BOD	BOTTOM OF DUCT	OC	ON CENTER
BOP	BOTTOM OF PIPE	ODAC-1	OUTDOOR AIR CONDITIONING UNIT NO.1
CEF-1	CEILING EXHAUST FAN NO. 1	ODHP-1	OUTDOOR HEAT PUMP NO.1
CFM	CUBIC FEET PER MINUTE	ODP	OPEN DRIP PROOF
CLG	CEILING	PD	PRESSURE DROP
CO	CLEAN OUT	PFD	PIPE TO FLOOR DRAIN
D	DRAIN	PH	PHASE
EF-1	EXHAUST FAN NO.1	REF.	REFRIGERANT LINES
EFF	EFFICIENCY	SF	SQUARE FOOT
ELECT	ELECTRICAL	SP	STATIC PRESSURE SENSOR
ESP	EXTERNAL STATIC PRESSURE	SPAC-1	SINGLE PACKAGE AIR CONDITIONING UNIT NO.1
EUH-1	ELECTRIC UNIT HEATER NO.1	T-1	TERMINAL UNIT NO. 1
EWH-1	ELECTRIC WALL HEATER NO.1	TA	THROW AWAY (FILTER)
EXT	EXTERNAL	TC	TIME CONTROL
FPS	FEET PER SECOND	TD	TRANSFER DUCT
FT	FEET	TEAO	TOTALLY ENCLOSED AIR OVER
FLR	FLOOR	TEFC	TOTALLY ENCLOSED FAN COOLED
HP	HORSE POWER	UNO	UNLESS NOTES OTHERWISE
IDAC-1	INDOOR AIR CONDITIONING UNIT NO.1	VFD	VARIABLE FREQUENCY DRIVE
IDHP-1	INDOOR HEAT PUMP NO.1	VEL	VELOCITY
		VOLT	VOLTAGE
		WMHP-1	WALL MOUNTED HEAT PUMP NO. 1
		2POS	TWO POSITION

S3956

SINGLE PACKAGE HEAT PUMP UNIT SCHEDULE																															
AIR CONDITIONER #	EST * SP(a)	CFM		FANS				COMPRESSOR		ELECTRIC HEAT		COOLING COIL CAPACITY								HEATING COIL CAP		MAX. WEIGHT #	ELECTRIC			MANUFACTURER AND MODEL		REMARKS			
				OUTDOOR		INDOOR						MBH (NET)		OUTDOOR DB T	ENT AIR		LVG AIR		EER(b)	ENT T	34 F		MCA	MOCP	VOLT/PH						
		TOT	OA	FLA	NO	BHP	HP	NO	RLA	KW	VOLT/PH	TOT	SENS		DB	WB	DB	WB			MBH								COP		
SPHP-A100	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A101	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A102	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A103	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A104	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A105	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A106	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A107	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A108	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A109	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A110	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A111	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A112	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-A113	1.0	1280	150	0.8	1	0.62	1.5	1	6.4	12	480/3	45.9	32.8	95	80.0	67.1	56.9	55.6	13.0	47	42.7	3.6	700	29	30	480/3	TRANE WHC048		23456789101213		
SPHP-D109	1.0	3000	600	1.6	1	1.26	2.75	2	7.6/6.3	18	480/3	99.8	72.4	95	79.0	66.6	55.1	55.0	12.0	47	90.1	--	1300	49	50	480/3	TRANE WHC102		123456789101112		
* INCLUDES DUCT, GRILLES, AND LOADED FILTERS (a) INCHES WG (b) ARI CONDITIONS																															
① ADAPTER CURB ③ SINGLE POINT POWER ⑤ STAGED ELECTRIC HEAT ⑦ BACnet COMMUNICATION CARD ⑨ DIRECT DRIVE FAN MOTOR ⑪ UNPOWERED CONVENIENCE OUTLET ⑬ HORIZONTAL DISCHARGE																															
② LOW AMBIENT ④ 2 STAGE COMPRESSOR ⑥ HOT GAS REHEAT TO 72 DEG. ⑧ LOW LEAK INSULATED OA DAMPER ⑩ FACTORY CIRCUIT BREAKER (WITH OVERCURRENT PROTECTION) ⑫ HAIL GUARD																															

Project Engineer:
JEB

Drawn By:
JEB

Revisions:

No.	Date	
No.	Date	
No.	Date	
No.	Date	
No.	Date	
No.	Date	
No.	Date	
No.	Date	

This drawing and the design shown are the property of:

Buford Goff & Associates.

The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.

SOUTH CAROLINA
BUFORD GOFF & ASSOCIATES, INC.
No. 000022
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
LICENSED PROFESSIONAL ENGINEER
No. 26527
4/19/2023
JONATHAN BURKE, P.E.

ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT
HVAC NOTES, SCHEDULES AND LEGENDS

Project

Sheet Title

Buford Goff & Associates, Inc.
Engineers & Planners

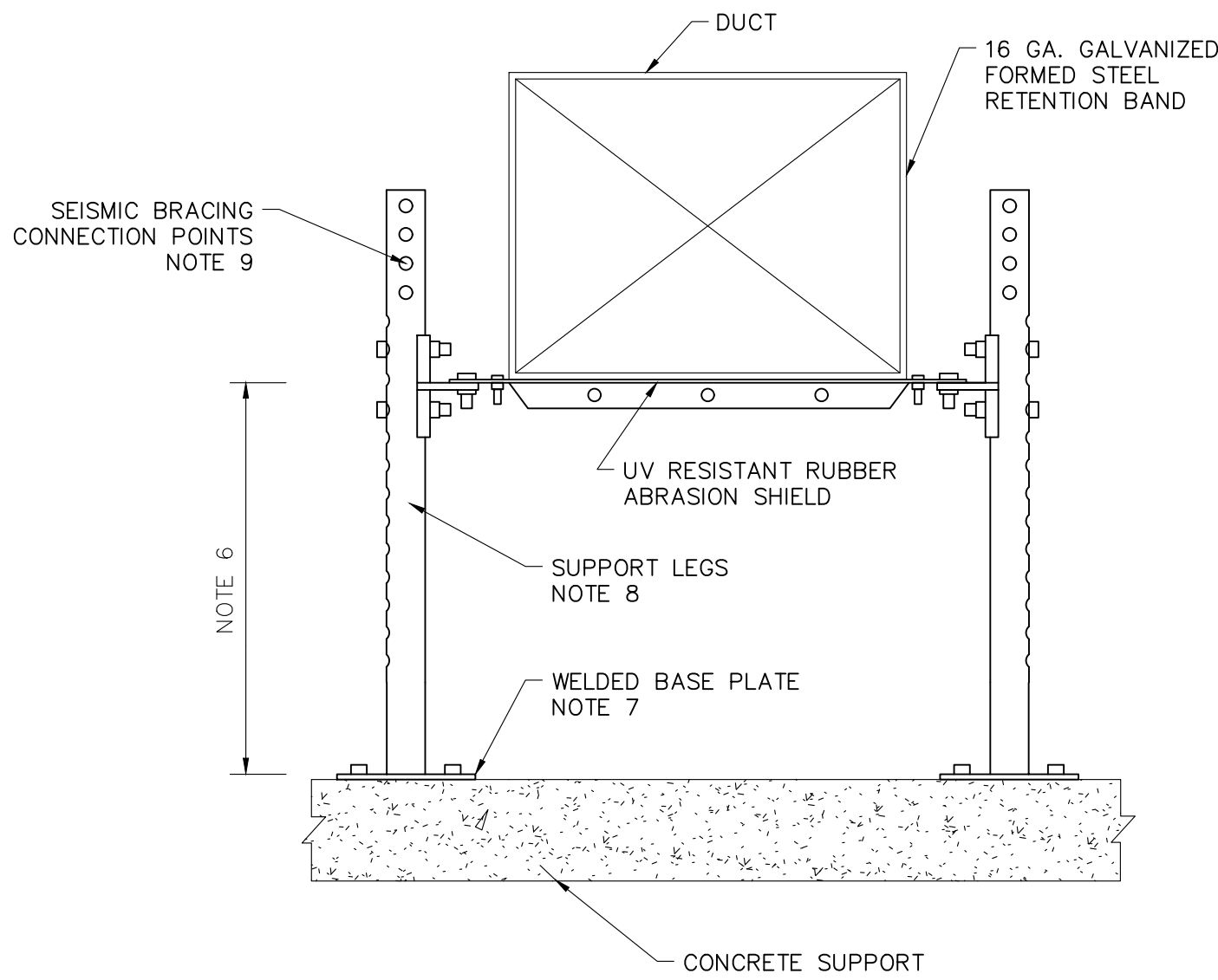
1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

Sheet Number:

M300

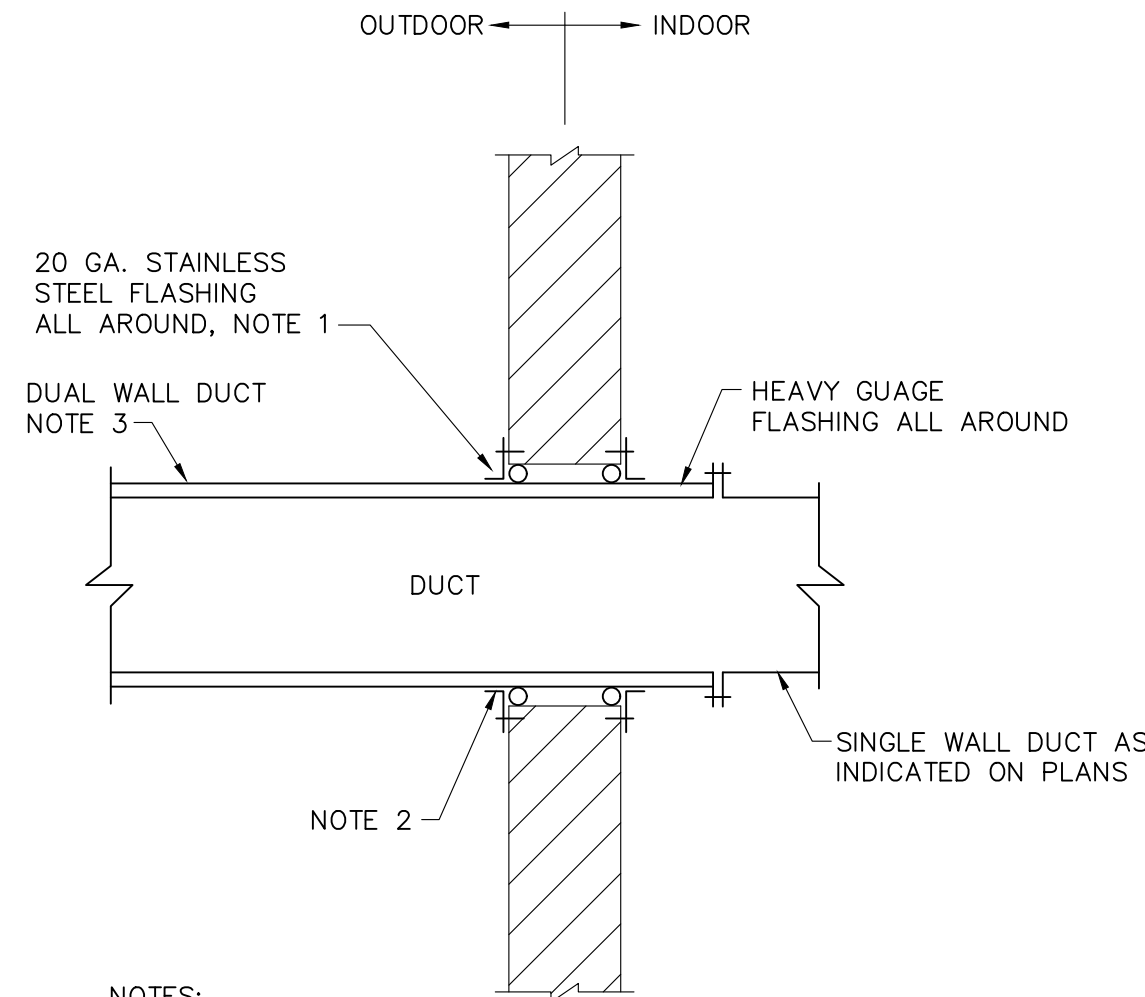
Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158

CONSTRUCTION DOCUMENTS



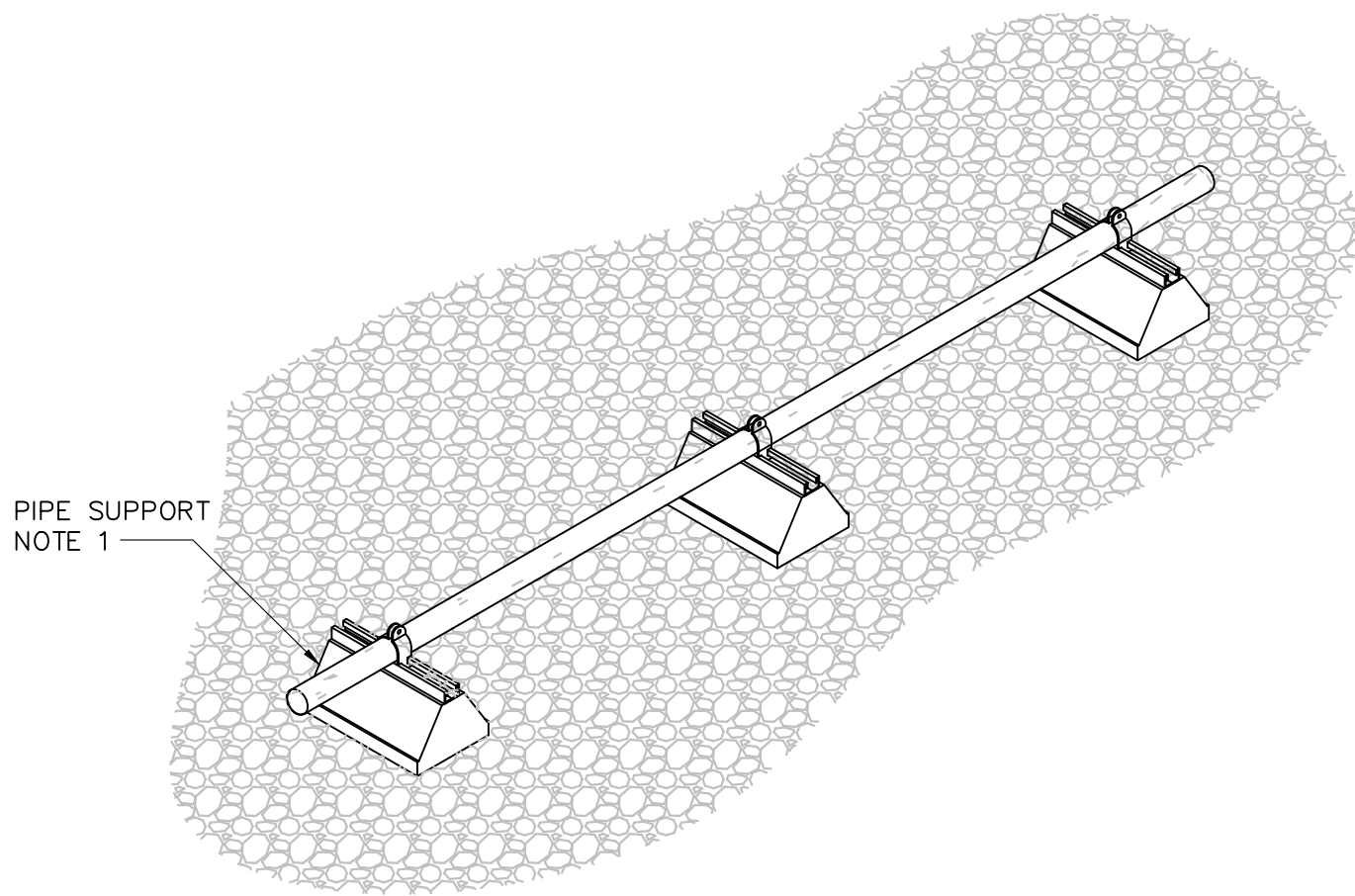
- NOTES:
1. PROVIDE PRE-ENGINEERED GRADE MOUNTED DUCT SUPPORT SYSTEM. SYSTEM SHALL BE SIZED FOR THE PROPER DUCT DIMENSIONS, WEIGHTS, AND SEISMIC/WIND LOADS. MECHANICAL SUPPORT SYSTEMS, INC. NO. 101-G OR APPROVED EQUAL.
 2. RUN INSULATION AND JACKETING CONTINUOUSLY THROUGH SUPPORTS.
 3. ALL STRUCTURAL SUPPORTS AND ACCESSORIES SHALL BE HOT DIPPED GALVANIZED.
 4. SEE PLAN FOR SPACING OF SUPPORTS. WHERE SPACING IS NOT SHOWN PROVIDE SUPPORTS A MINIMUM EVERY 8 FEET.
 5. OPTIONAL UNDER PIPE RACK SUPPORT RACK MAY BE USED TO SUPPORT PIPING AS REQUIRED.
 6. ADJUST HEIGHT AS REQUIRED FOR INSTALLATION. MIN 12" AFS.
 7. ATTACH BASE PLATES TO CONCRETE SUPPORT PER THE SEISMIC/WIND SUBMITTAL.
 8. SCHEDULE 40 PIPE OR UNISTRUT SUPPORT LEGS. LEGS SHALL ALLOW ADJUSTMENT IN INCREMENTS OF 3/4".
 9. PROVIDE SEISMIC BRACING WHEN REQUIRED FOR THE SEISMIC OR WIND LOADING CONDITIONS.

OUTDOOR DUCT SUPPORTS
NOT TO SCALE



- NOTES:
1. PROVIDE CAULKING BEHIND ANGLE.
 2. PROVIDE SEALANT BETWEEN DUCT AND WALL ALL AROUND.
 3. SEE SPECIFICATIONS.

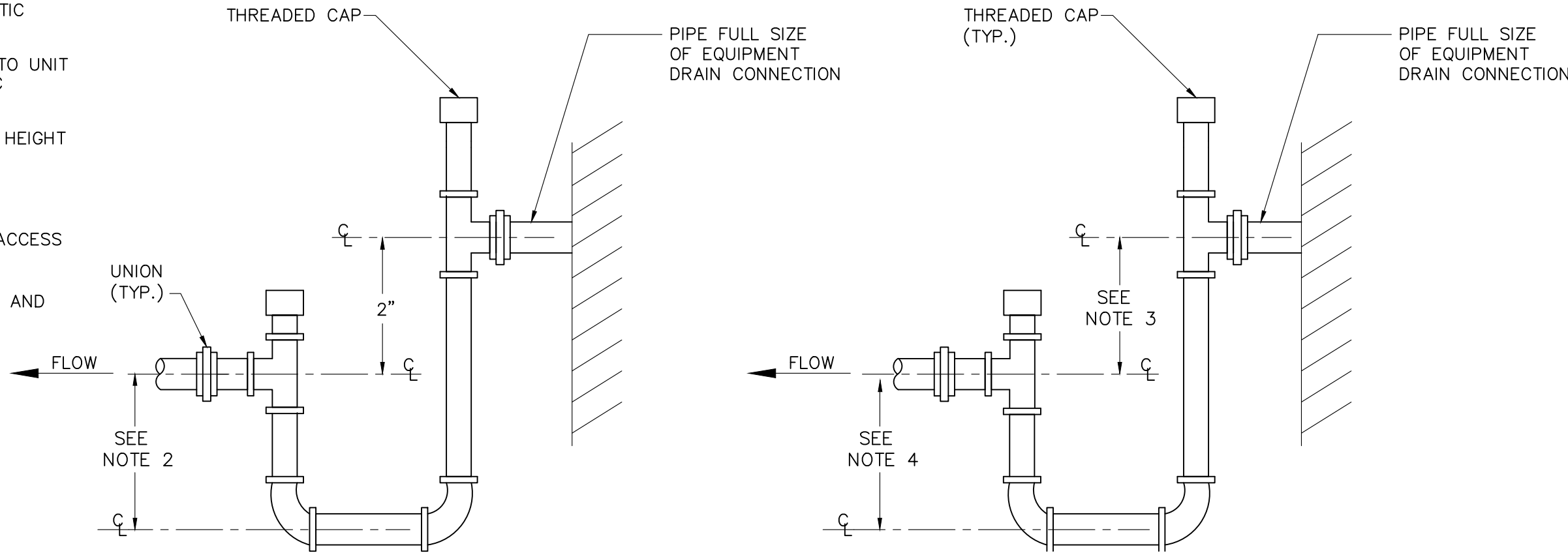
DUAL WALL DUCT THROUGH EXTERIOR WALL DETAIL
NOT TO SCALE



- NOTES:
1. PROVIDE SUPPORT 4 FT ON CENTER.
 2. SUPPORTS SHALL BE MIFAB CE OR APPROVED EQUAL. SUPPORT SHALL BE CONSTRUCTED OF UV RESISTANT RUBBER OR POLYCARBONATE WITH TWO STAINLESS STEEL TREADED RODS WITH A 14 GAUGE STAINLESS STEEL CHANNEL SUPPORT.
 3. PROVIDE A HEAVY BED OF ROOFING TAR OR MASTIC ACCEPTABLE TO ROOFING CONTRACTOR TO SET THE SUPPORTS ON.
 4. ADJUST PIPE SUPPORT FOR GRAVITY FLOW OF CONDENSATE DRAIN LINES.

EQUIPMENT DRAIN PIPE SUPPORT ON ROOF DETAIL
3179C NOT TO SCALE 5/10

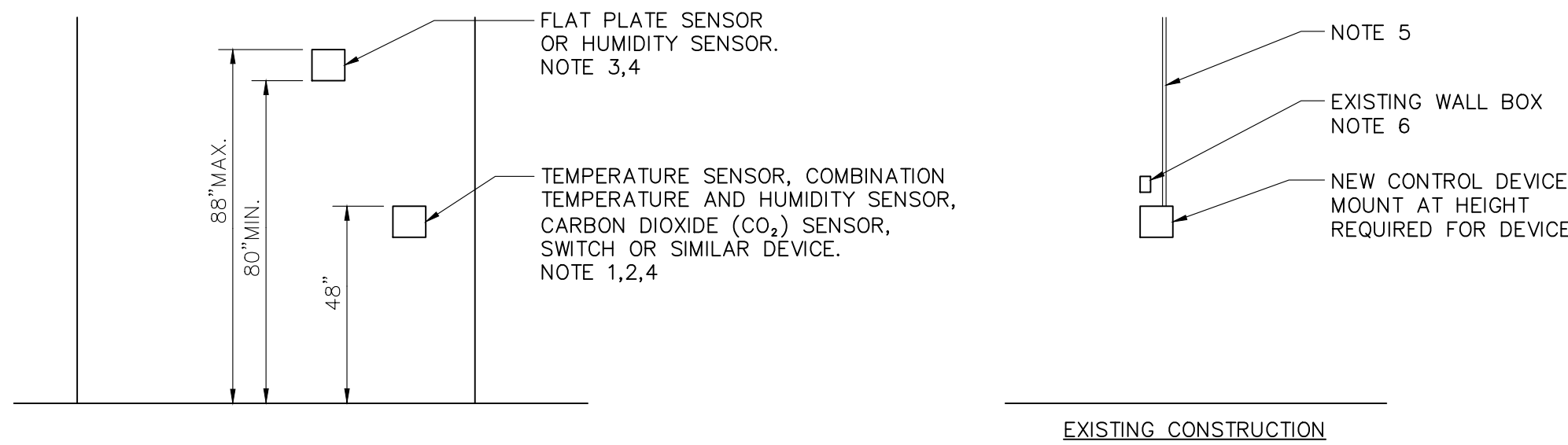
- NOTES:
1. LOCATE TRAPS SO AS TO BE ACCESSIBLE FOR CLEANING.
 2. HEIGHT SHALL BE EQUAL TO UNIT MAXIMUM TOTAL STATIC PRESSURE PLUS 1/2"
 3. HEIGHT SHALL BE EQUAL TO UNIT MAXIMUM NEGATIVE STATIC PRESSURE PLUS 1"
 4. HEIGHT SHALL BE 1/2 OF HEIGHT INSTALLED IN NOTE 3
 5. PIPE TO NEAREST DRAIN.
 6. TRAP SHALL NOT BLOCK ACCESS TO EQUIPMENT.
 7. PROVIDE UNIONS AT INLET AND OUTLET OF TRAP.
 8. DRAIN LINE SHALL BE 3/4" MIN OR UNIT CONNECTION SIZE, WHICHEVER IS LARGER.



BLOW THRU DRAIN

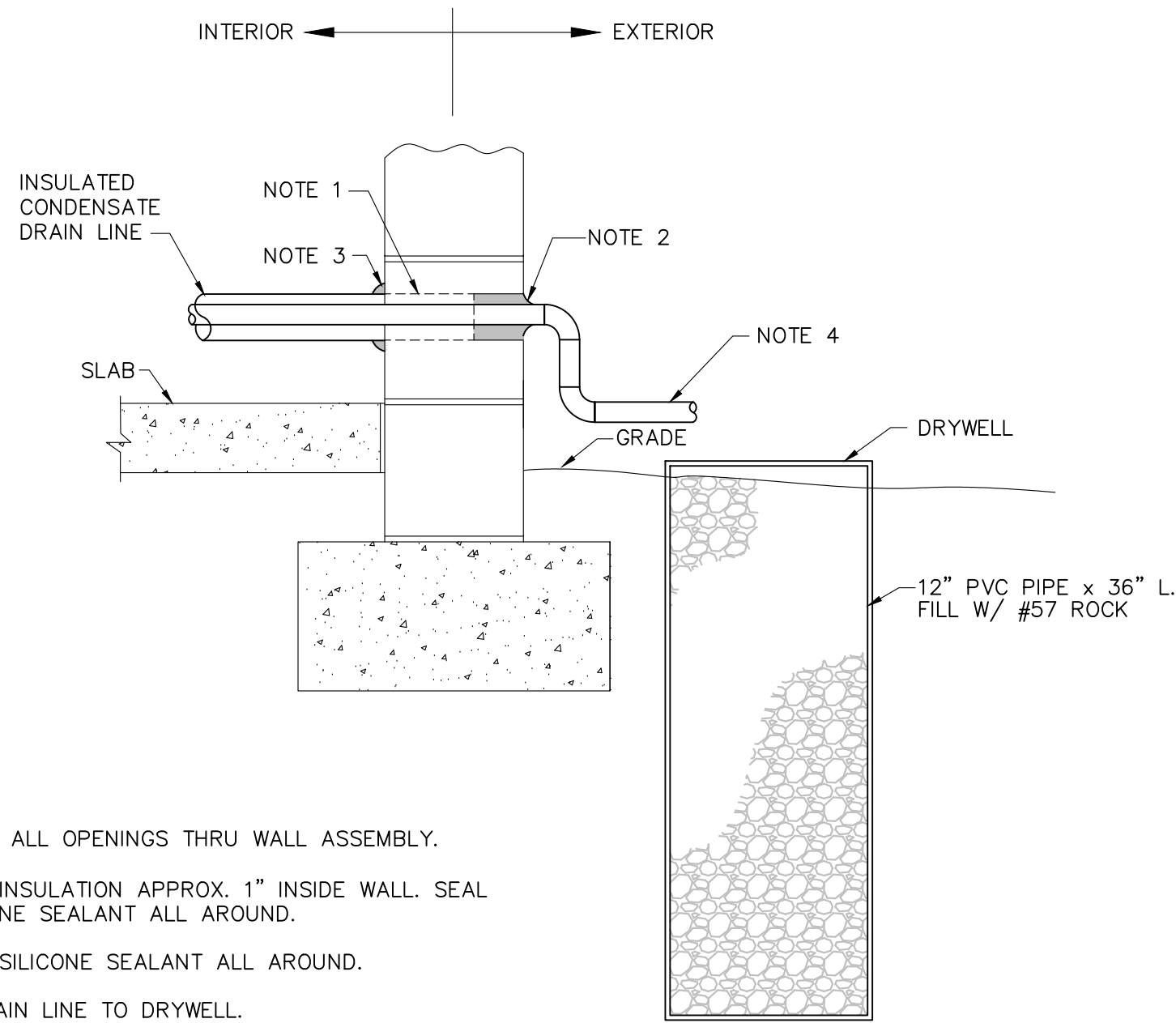
DRAW THRU DRAIN

EQUIPMENT CONDENSATE DRAIN DETAIL
3179B NOT TO SCALE 3/16



- NOTES:
1. DEVICES THAT REQUIRE ACCESS BY BUILDING OCCUPANTS OTHER THAN MAINTENANCE PERSONNEL.
 2. 44" TO TOP OF DEVICE WHEN OBSTACLE (SHELVING, COUNTER, ETC.) IN FRONT OF DEVICE.
 3. DEVICES THAT DO NOT REQUIRE ACCESS BY BUILDING OCCUPANTS OTHER THAN MAINTENANCE PERSONNEL.
 4. HEIGHT SHALL BE AS INDICATED UNLESS A DEVICE IS SPECIFICALLY REQUIRED TO BE LOCATED AT ANOTHER HEIGHT TO PERFORM ITS INTENDED FUNCTION.
 5. PROVIDE WIRE MOLD WHERE PERMITTED ON EXISTING WALL WHERE CONTROLS CANNOT BE INSTALLED IN THE WALL.
 6. PROVIDE OVERSIZED STAINLESS STEEL COVER PLATE IF BOX IS NOT REUSED.

DEVICE MOUNTING HEIGHT
3714 NOT TO SCALE 2/18



- NOTES:
1. CORE DRILL ALL OPENINGS THRU WALL ASSEMBLY.
 2. STOP PIPE INSULATION APPROX. 1" INSIDE WALL. SEAL WITH SILICONE SEALANT ALL AROUND.
 3. SEAL WITH SILICONE SEALANT ALL AROUND.
 4. EXTEND DRAIN LINE TO DRYWELL.

DRYWELL DETAIL - TYPE 2
3184B NOT TO SCALE 12/19

Project Engineer:
JEB

Drawn By:
JEB

Revisions:
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____

This drawing and the design shown are the property of:

Buford Goff & Associates.

The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.

SOUTH CAROLINA

BUFORD GOFF & ASSOCIATES, INC.

000022

CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA

REGISTERED PROFESSIONAL ENGINEER

No. 26527

4/19/2013

JONATHAN BURKE, P.E.

Project
ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT

Sheet Title
HVAC DETAILS

Buford

Goff

& Associates, Inc.

Engineers & Planners

1331 Elmwood Ave.

Suite 200

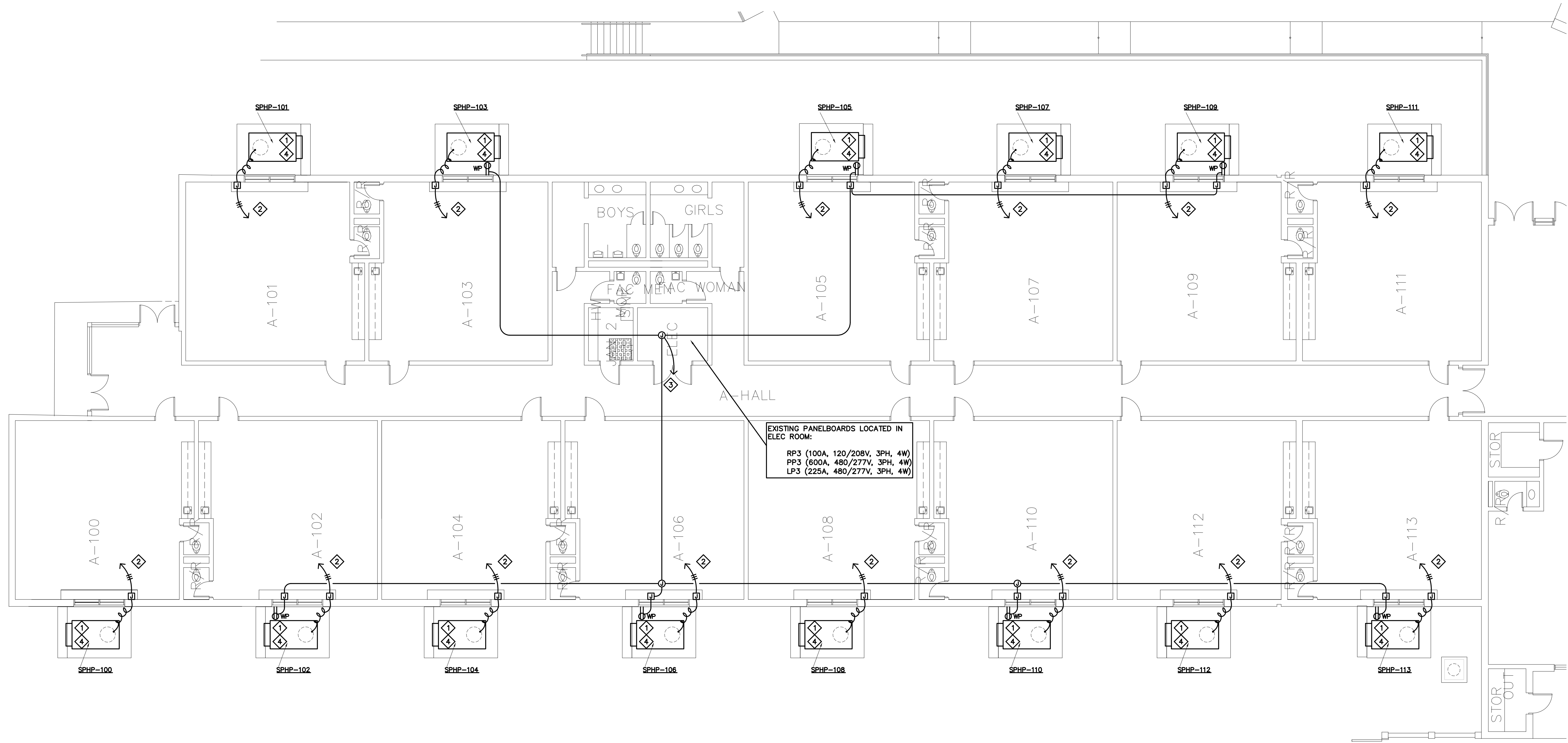
Columbia, SC 29201

Phone: (803) 254 - 6302

Sheet Number:
M400

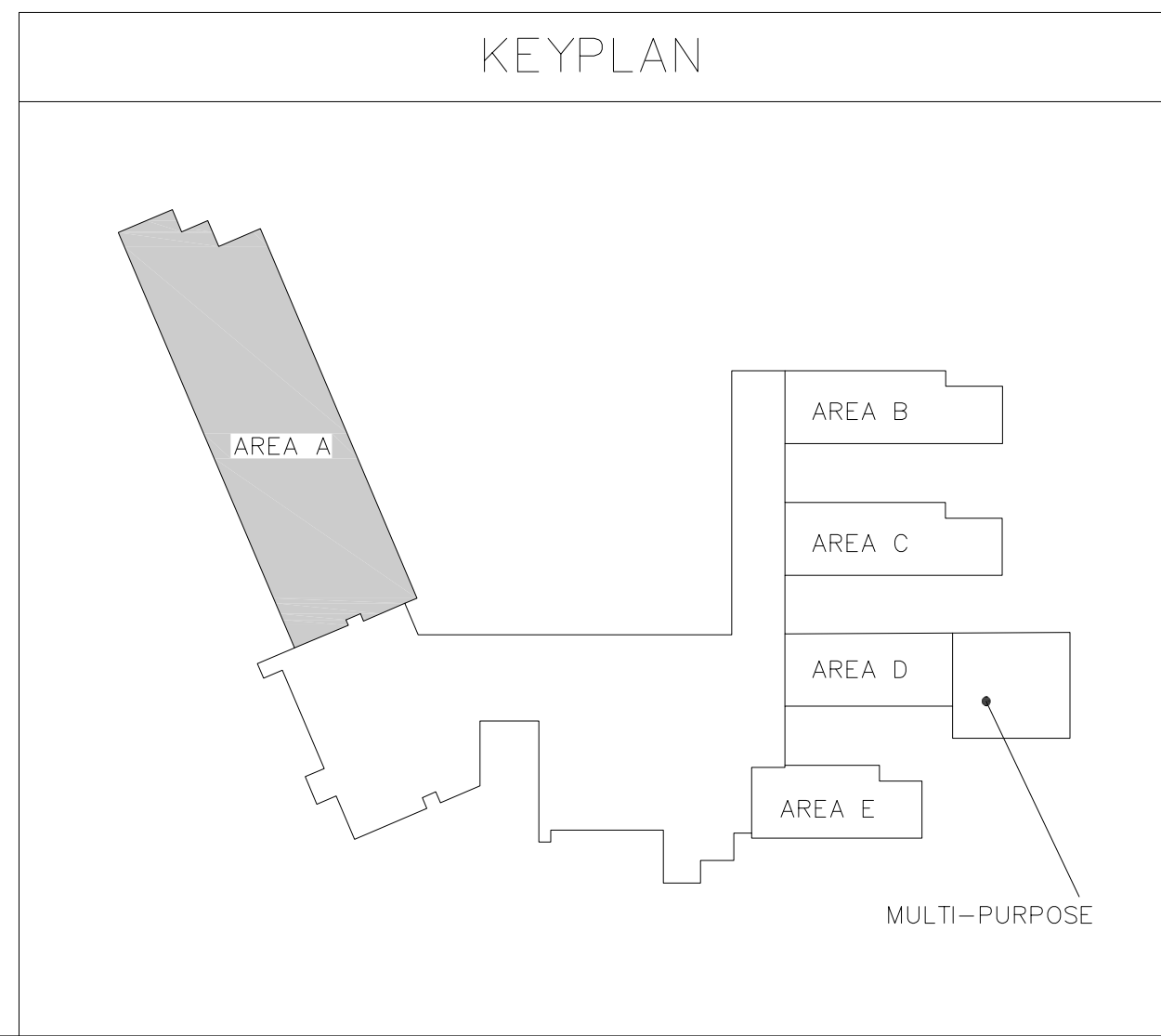
Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS

ELECTRICAL GENERAL NOTES:	ELECTRICAL RENOVATION KEYNOTES
1. PROVIDE SURFACE MOUNTED METAL BACKBOX FOR EACH WP RECEPTACLE SHOWN. MOUNT RECEPTACLES ON EXISTING REMOVABLE PANEL.	⬠ ELECTRICAL DEMOLITION WORK: DISCONNECT EXISTING 30A, 480V, 3PH BRANCH CIRCUIT. REMOVE EXISTING FLEX CONDUIT.
	⬠ EXTEND EXISTING BRANCH CIRCUIT (3#10, #10GND) FROM EXISTING 480V PANELBOARD RP2 OR LP3 TO NEW HVAC UNIT. REUSE EXISTING 30A, 3P CIRCUIT BREAKER IN PANELBOARD. PROVIDE NEW TYPED PANELBOARD INDEX.
	⬠ PROVIDE NEW 20A, 120V BRANCH CIRCUIT (2#12, #12GND, 3/4" C.) FROM EXISTING 120/208V PANELBOARD RP3. PROVIDE NEW 20A, 1P CIRCUIT BREAKER IN PANELBOARD. PROVIDE NEW TYPED PANELBOARD INDEX.
	⬠ PROVIDE NEW WATER-TIGHT FLEX CONNECTION FROM EXISTING INTERIOR J-BOX. UNIT MOUNTED LOCAL DISCONNECT PROVIDED WITH HEAT PUMP.



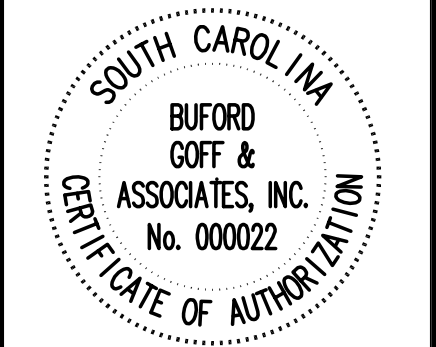
EXISTING PANELBOARDS LOCATED IN ELEC ROOM:
RP3 (100A, 120/208V, 3PH, 4W)
PP3 (600A, 480/277V, 3PH, 4W)
LP3 (225A, 480/277V, 3PH, 4W)

1
E101 PARTIAL FLOOR PLAN AREA A - ELECTRICAL HVAC RENOVATION
SCALE: 1/8" = 1'-0"



Project Engineer:	ECW
Drawn By:	GMC
Revisions:	
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date
No.	Date

This drawing and the design shown are the property of:
Buford Goff & Associates.
The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.



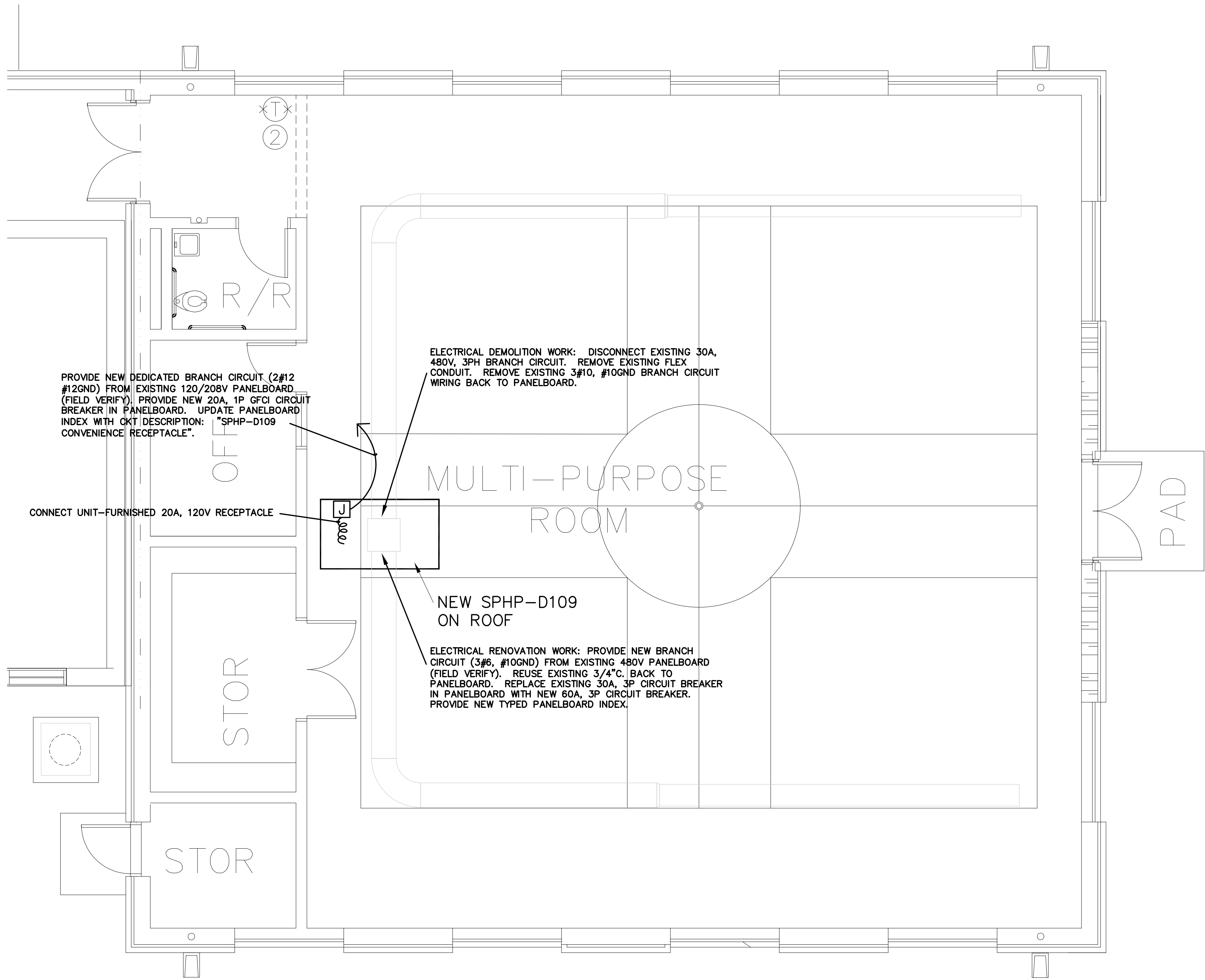
ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT
PARTIAL FLOOR PLAN AREA A - ELECTRICAL HVAC RENOVATION

Project Sheet Title

Buford Goff
& Associates, Inc.
Engineers & Planners
1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

Sheet Number:
E101

Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS



1
E102 PARTIAL FLOOR PLAN - ELECTRICAL HVAC RENOVATION
SCALE: 1/8" = 1'-0"

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	20A, 125V, GFCI WET LOCATION DUPLEX RECEPTACLE. PROVIDE CAST WEATHER-PROOF, METAL BACKBOX.
	JUNCTION BOX, SIZE PER NEC UNLESS SIZE NOTED
	CONDUIT RUN OVERHEAD
AFF	ABOVE FINISHED FLOOR
C.	CONDUIT
CB	CIRCUIT BREAKER
	KEYNOTE LABEL
	EQUIPMENT CONDUIT/CIRCUIT CONNECTION
	SEALTIGHT FLEX CONNECTION TO MOTOR LOAD
SYMBOL LEGEND NOTES:	
1. FOR MECHANICAL EQUIPMENT SHOWN TO BE DEMOLISHED, REMOVAL OF MECHANICAL EQUIPMENT IS UNDER DIVISION 23 SCOPE. DIVISION 26 SCOPE SHALL INCLUDE DISCONNECTION AND REMOVAL OF ELECTRICAL SERVICE TO MECHANICAL EQUIPMENT. SEE SPECIFICATION 260502 FOR MORE DETAILED SCOPE OF DEMOLITION WORK.	

Project Engineer:
ECW

Drawn By:
GMC

Revisions:
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____
No. _____ Date _____

This drawing and the design shown are the property of:
Buford Goff & Associates.
The reproduction, copying or other use of this drawing without their written consent is prohibited and any infringement will be subject to legal action.

SOUTH CAROLINA
BUFORD
GOFF &
ASSOCIATES, INC.
No. 000022
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
REGISTERED PROFESSIONAL
No. 17063
4/19/23
EDWARD C. WEAVER JR.

Project
ROCK HILL SCHOOL DISTRICT 3
LESSLIE ELEMENTARY SCHOOL HVAC
REPLACEMENT
PARTIAL FLOOR PLAN - ELECTRICAL HVAC RENOVATION

Sheet Title

Buford
Goff
& Associates, Inc.
Engineers & Planners

1331 Elmwood Ave.
Suite 200
Columbia, SC 29201
Phone: (803) 254 - 6302

Sheet Number:
E102

Date: 04-19-2023
Scale: As Noted
BGA PROJECT NUMBER: 22158
CONSTRUCTION DOCUMENTS