Generator and Electrical Equipment Replacement ROCK VIEW EINENIARY SCHOOL

> 3901 DENFELD AVENUE, KENSINGTON, MD 20895 Montgomery County Public Schools

11155 RED RUN BOULEVARD, SUITE 310 BALTIMORE, MARYLAND 21117 PHONE: 410.265.6100

# Regional Park WYNGATE

VICINITY PLAN

# AERIAL SITE PLAN

## BOARD OF EDUCATION

SUPERINTENDENT

STUDENT MEMBER

DR. THOMAS W. TAYLOR

MR. PRANEEL SUVARNA

ASSISTANT DIRECTOR, MS. SHIHO C. SHIBASAKI OFFICE OF FACILITIES MANAGEMENT PRESIDENT / AT-LARGE MS. KARLA SILVESTRE VICE PRESIDENT / AT-LARGE MS. LYNNE HARRIS MS. BRENDA WOLFF DISTRICT 5 DISTRICT 1 MS. GRACE RIVERA-OVEN MRS. SHEBRA L. EVANS DISTRICT 4 DISTRICT 3 MS. JULIE YANG DISTRICT 2 MRS. REBECCA SMONDROWSKI

CODE ANALYSIS

CODE ANALYSIS (FROM INTERNATIONAL BUILDING CODE/2018)											
	EXISTING BLDG	PROPOSED ALTERATION									
IBC OCCUPANCY CLASSIFICATION	Е	THE SCOPE OF THIS WORK IS									
TYPE OF CONSTRUCTION	IIB	TO REPLACE EXISTING GENERATOR AND REVISE									
NUMBER OF STORIES ABOVE GRADE	1	NORMAL LIGHTING CIRCUITS IN TOILET ROOMS, BOILER									
HIGH RISE (Y/N)	N	ROOM AND ELEC ROOM TO  - EMERGENCY LIGHTING.									
FIRE ALARM (Y/N)	Y	THERE IS NO INCREASE IN									
FULLY SPRINKLERED (Y/N)	Y	☐ FLOOR AREA, NO SITE ☐ CHANGES, NO CHANGE IN									
TOTAL BUILDING FLOOR AREA	91,977 SF	CLASSIFICATION OR TYPE OF CONSTRUCTION.									

## DRAWING INDEX

## **MECHANICA**

TITLE SHEET

DIAGRAMS, SYMBOLS AND ABBREVIATIONS PART FIRST FLOOR PLAN - AREA A - DEMOLITION AND NEW WORK

## **ELECTRICAL**

SYMBOLS LIST, ABBREVIATIONS, DETAILS AND DIAGRAMS PART FIRST FLOOR PLAN - AREA A - DEMOLITION PART FIRST FLOOR PLAN - AREA B - DEMOLITION PART FIRST FLOOR PLAN - AREA C - DEMOLITION PART FIRST FLOOR PLAN - AREA D - DEMOLITION PART SECOND FLOOR PLAN - DEMOLITION PART FIRST FLOOR PLAN - AREA A - NEW WORK PART FIRST FLOOR PLAN - AREA B - NEW WORK PART FIRST FLOOR PLAN - AREA C $\,$  - NEW WORK PART FIRST FLOOR PLAN - AREA D - NEW WORK PART SECOND FLOOR PLAN - NEW WORK POWER RISER DIAGRAMS E-13 SCHEDULES

## SCOPE OF WORK

SCOPE OF WORK GENERALLY CONSISTS OF THE FOLLOWING OVER TWO PHASES. PHASE 1 SHALL CONSIST OF THE FOLLOWING

- PROVIDE CONDUITS AND RACEWAYS FOR NEW DEVICES AND CONNECTIONS TO EXISTING EQUIPMENT. FINAL CONNECTIONS TO NEW DEVICES AND EXISTING EQUIPMENT SHALL BE PERFORMED DURING THE SECOND SUMMER.
- PROVIDE NEW CONCRETE PAD FOR NEW GENERATOR.
- CONNECT LIGHTING FIXTURES IN TOILET ROOMS ON NORMAL CIRCUITS TO EXISTING EMERGENCY LIGHTING CIRCUITS, WHERE INDICATED ON DRAWINGS

PROJECT SCOPE SHALL INCLUDE THE WORK FOR PHASE 2

- PROVIDE NEW GENERATOR AND ASSOCIATED EQUIPMENT.
- CONNECT EXISTING BOILERS AND ASSOCIATED PUMPS TO THE NEW STANDBY PANELBOARD.
- CONNECT EXISTING KITCHEN REFRIGERATION EQUIPMENT TO NEW STANDBY PANELBOARD.
- CONNECT EXISTING MAIN TELECOM ROOM RECEPTACLES TO THE NEW STANDBY PANELBOARD.
- CONNECT NORMAL LIGHTING FIXTURES IN THE MAIN MECHANICAL ROOM/BOILER ROOM AND MAIN ELECTRICAL ROOM TO THE NEW EMERGENCY PANELBOARD.
- CONNECT LIGHTING FIXTURES IN TOILET ROOMS ON NORMAL CIRCUITS TO THE NEW EMERGENCY PANELBOARD. WHERE INDICATED

THE SCOPE OF WORK INDICATED ON THIS SHEET IS INTENDED AS A BRIEF SUMMARY FOR GENERAL INFORMATIONAL PURPOSES ONLY, AND DOES NOT NECESSARILY INCLUDE ALL OF THE WORK REQUIRED. THE CONTRACTOR SHALL PROVIDE MATERIALS AND LABOR AS REQUIRED TO COMPLETE THE WORK AS INDICATED IN THE CONTRACT DOCUMENTS.

# PROFESSIONAL CERTIFICATION

These contract documents for Rock View Elementary School were prepared under my supervision and to the best of my knowledge, information, and belief, they comply with the relevant building codes of the



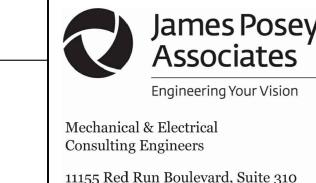
## APPLICABLE CODES & STANDARDS

INTERNATIONAL BUILDING CODE INTERNATIONAL MECHANICAL CODE

INTERNATIONAL PLUMBING CODE WITH WSSC AMENDMENTS

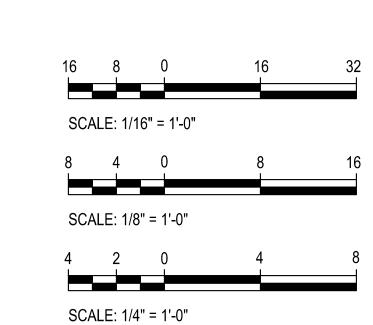
ENERGY STANDARD FOR BUILDINGS EXCEPT LOW RISE RESIDENTIAL BUILDINGS

NATIONAL ELECTRICAL CODE ASHRAE 2017-2020 HANDBOOKS



11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

## GRAPHIC SCALES



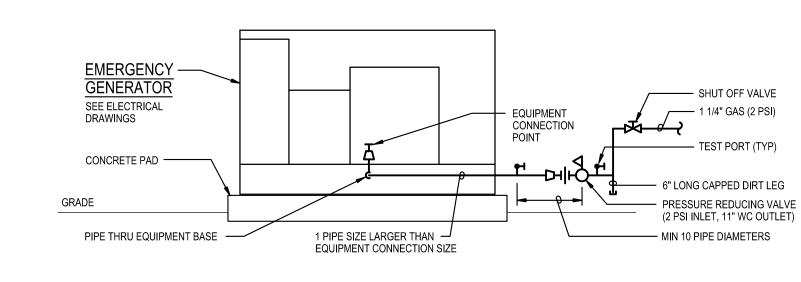
CAUTION: EXCEPT WHERE DIMENSIONS ARE INDICATED,

GRAPHIC SCALE MUST BE USED.

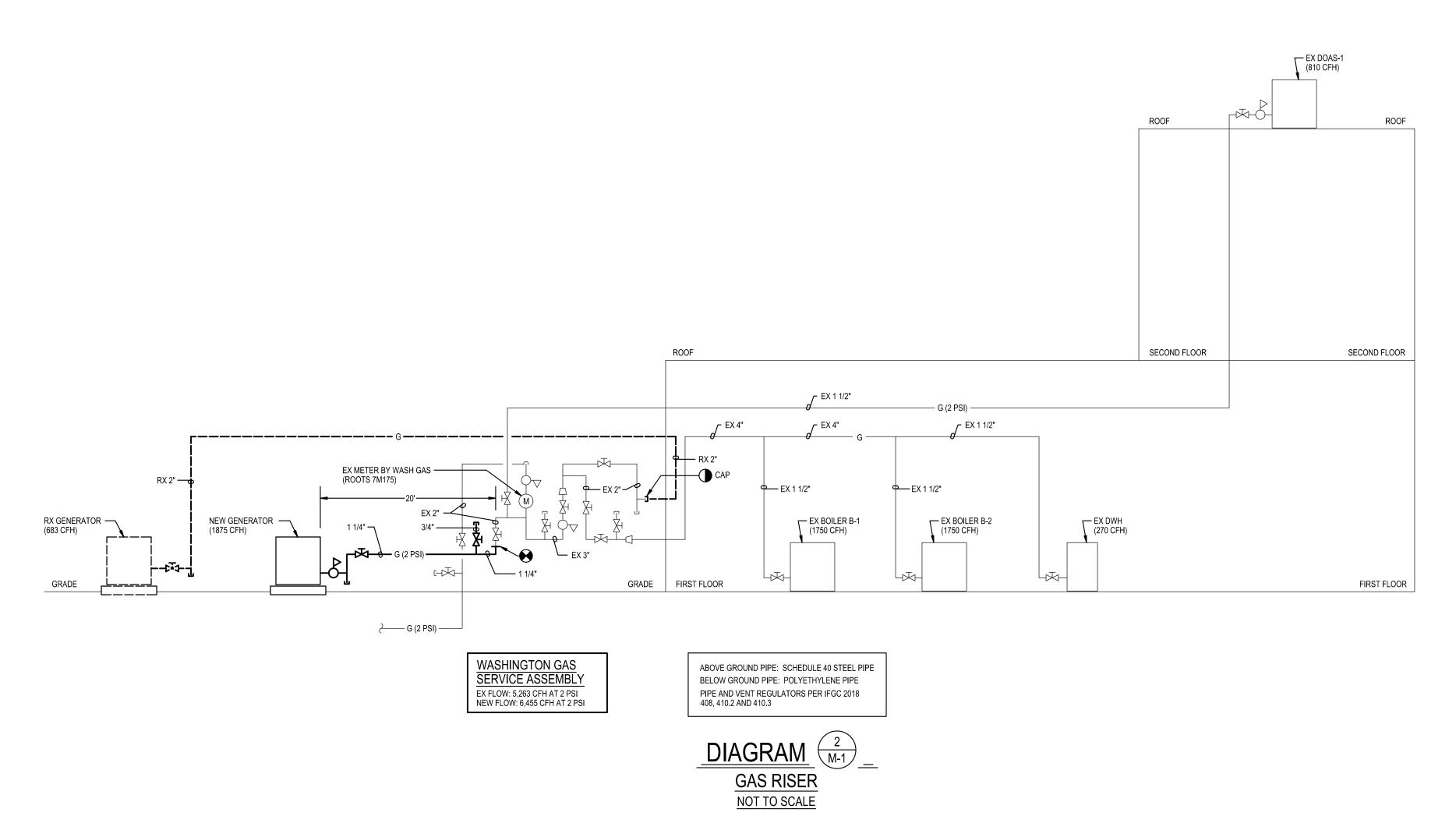
Tag	ı	Description	Date							
		BID SET	09/25/							
PSC No										
Scale		AS NOTED								
Project N	<b>l</b> o	7910-23								
Date		SEPTEMBER 25	ER 25, 2024							
Drawing	Title	Title								
$ $ $\pm$ 1 $\pm$	TITI E QUEET									

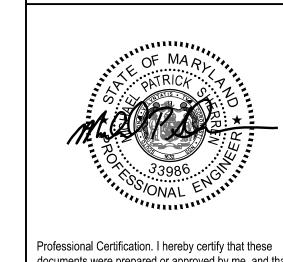
| IIILE SHEET

#### MECHANICAL SYMBOLS AND ABBREVIATIONS ø INDICATES DIAMETER —— G —— LOW PRESSURE GAS PIPE A/D ACCESS DOOR — G (2 PSI) — MEDIUM PRESSURE GAS PIPE AAV AUTOMATIC AIR VENT E--- PIPE CAP OR PLUG ABV ABOVE ——|—— UNION AFF ABOVE FINISHED FLOOR SHUT-OFF VALVE BLDG BUILDING BLW BELOW ———— SOLENOID VALVE BTUH BRITISH THERMAL UNITS PER HOUR CFH CUBIC FEET PER HOUR PRESSURE REDUCING / REGULATING VALVE CFM CUBIC FEET PER MINUTE ——M—— METER CLG CEILING GAUGE COCK / TEST PORT CONC CONCRETE CW DOMESTIC COLD WATER PIPE ———— CONCENTRIC REDUCER DIAMETER ECCENTRIC REDUCER EXHAUST AIR FLOW DIRECTION ARROW ETR EXISTING TO REMAIN STRAINER EX EXISTING EXH EXHAUST POINT OF CONNECTION, NEW TO EXISTING FL FLOOR FT FEET DEMOLITION WORK TERMINATION POINT GAS PIPE SYMBOL FOR SPECIFIC NOTE. NOTE APPLIES TO DRAWING ON WHICH IT OCCURS. GALV GALVANIZED IN INCH, INCHES MAX MAXIMUM $\frac{3}{M1}$ DETAIL OR DIAGRAM NO. 3 SHOWN ON MBH THOUSAND BTU'S PER HOUR DRAWING M1 MCPS MONTGOMERY COUNTY PUBLICK SCHOOLS MECH MECHANICAL MFR MANUFACTURER MINIMUM NORMALLY CLOSED NOT IN CONTRACT NORMALLY OPEN OUTDOOR AIR POUNDS PER SQUARE INCH REMOVE EXISTING RX TYP TYPICAL UON UNLESS OTHERWISE NOTED









PLACEMENT

EQUIPMENT

AND

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 33986, Expiration date 01-16-2025.



Mechanical & Electrical
Consulting Engineers

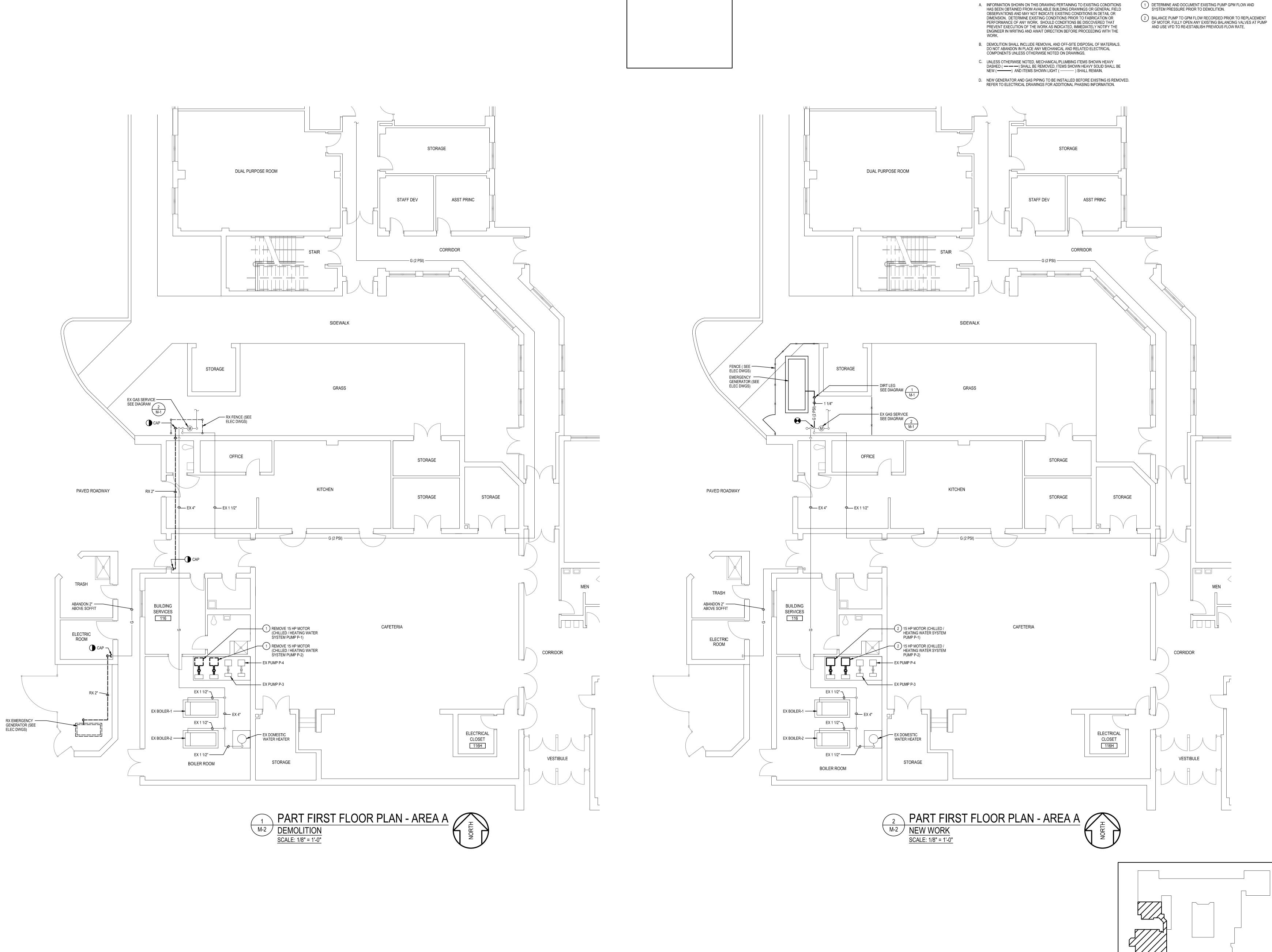
11155 Red Run Boulevard, Su
Baltimore Maryland 21117

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Tag	ı	Description	Date
		BID SET	09/25/24
PSC No			
Scale		AS NOTED	
Project N	No	7910-23	
Date		SEPTEMBER 25	5, 2024

Drawing Title
DIAGRAMS, SYMBOLS
AND ABBREVIATIONS

R A



SPECIFIC NOTES:

**GENERAL NOTES**:

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 33986, Expiration date 01-16-2025.



Mechanical & Electrical **Consulting Engineers** 11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100

jamesposey.com

Description 09/25/24 BID SET

SEPTEMBER 25, 2024

Drawing Title PART FIRST FLOOR PLAN AREA A - DEMOLITION AND NEW WORK

KEY PLAN

NOT TO SCALE

SCALE: 1/8" = 1'-0"

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



**Consulting Engineers** 

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Description BID SET 09/25/24

SEPTEMBER 25, 2024 Drawing Title

SYMBOLS LIST, ABBREVIATIONS, DETAILS AND DIAGRAMS

AC N

**GENERAL** DENOTES REFERENCE TO SPECIFIC NOTE ON DRAWING. HOMERUN TO PANELBOARD. NUMBER OF HASH MARKS INDICATES NUMBER OF WIRES PLUS GROUND WIRE. REFER TO PANEL SCHEDULES FOR CONDUCTOR SIZES. PROVIDE GROUND WIRES IN CONDUITS. - DETAIL, DIAGRAM OR PLAN NUMBER HOMERUN TO PANELBOARD, RUN BELOW GRADE. REFER TO PANEL SCHEDULES FOR -DRAWING NUMBER WHERE DETAIL, DIAGRAM OR PLAN IS LOCATED. CONDUCTOR SIZES. PROVIDE GROUND WIRES IN CONDUITS. DETAIL, DIAGRAM OR PLAN REFERENCE: DETAIL, DIAGRAM OR PLAN NUMBER/DRAWING NUMBER WIRING IN CONDUIT RUN CONCEALED IN CEILING SPACE ABOVE CEILINGS AND EXPOSED IN OPEN CEILINGS, UNLESS OTHERWISE NOTED. WIRING IN CONDUIT DESIGNATED WITH "EM" DENOTE EMERGENCY LIGHTING CIRCUIT. PROVIDE GROUND WIRES IN CONDUITS. NOTES: WIRING IN CONDUIT CONTINUED. A. PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT. JUNCTION BOX WITH BLANK COVER PLATE. B. THE EXISTING FACILITY WILL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE USER TO MINIMIZE ELECTRIC PANELBOARD (120/208V), SURFACE MOUNTED. DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORK HOURS. EQUIPMENT CABINET AS NOTED. VARIABLE FREQUENCY DRIVE. **DEMOLITION** ENCLOSED CIRCUIT BREAKER. DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT, UNLESS OTHERWISE NOTED. ENCLOSED SWITCH (DISCONNECT/SAFETY SWITCH) IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED. MOUNT 5'-6" ABOVE FLOOR TO TOP OF ENCLOSURE, UNLESS OTHERWISE DISCONNECT AND REMOVE EXISTING HOMERUN WIRING IN CONDUIT BACK TO SOURCE. NOTED. RATING AND FUSING AS INDICATED. DISCONNECT AND REMOVE EXISTING PANELBOARD OR CABINET AS INDICATED. MOTOR CONNECTION. DISCONNECT EXISTING EQUIPMENT CONNECTION. HARD-WIRED ELECTRICAL CONNECTION. CONNECT TO EQUIPMENT AS NOTED. DISCONNECT EXISTING MOTOR CONNECTION. SURGE PROTECTIVE DEVICE IN NEMA TYPE 1 ENCLOSURE, UNLESS OTHERWISE NOTED. DISCONNECT AND REMOVE EXISTING MOTOR STARTER. DUPLEX RECEPTACLE (NEMA 5-20R), TAMPER-RESISTANT, ON GENERATOR STANDBY POWER CIRCUIT, SURFACE WALL-MOUNTED 16" ABOVE FLOOR TO BOTTOM OF BOX. DISCONNECT AND REMOVE EXISTING DUPLEX OR DOUBLE-DUPLEX (QUAD) RECEPTACLE. DUPLEX RECEPTACLE (NEMA 5-20R), GFCI-TYPE, WEATHER-RESISTANT-TYPE, WITH WHILE-IN-USE WEATHERPROOF COVER ON GENERATOR STANDBY POWER CIRCUIT, SURFACE WALL-MOUNTED 16" ABOVE FLOOR TO BOTTOM OF BOX. **EXISTING** DOUBLE-DUPLEX (QUADRUPLEX) RECEPTACLE (NEMA 5-20R) ON GENERATOR STANDBY POWER CIRCUIT, TAMPER-RESISTANT. MOUNTING AS INDICATED ON FLOOR PLANS.

ELECTRICAL SYMBOLS AND ABBREVIATIONS

**POWER** 

FIRE DETECTION AND ALARM

**ABBREVIATIONS** 

RE-PROGRAM FIRE ALARM CONTROL PANEL AS REQUIRED.

AMPERES INTERRUPTING CAPACITY

FIRE ALARM ANNUNCIATOR PANEL

GROUND FAULT CIRCUIT INTERRUPTER

MONTGOMERY COUNTY PUBLIC SCHOOLS

FIRE ALARM CONTROL PANEL

AUTOMATIC TRANSFER SWITCH

**CURRENT TRANSFORMERS** 

DISCONNECT EXISTING

**EXISTING TO REMAIN** 

**CONDUIT** 

ELECTRICAL

**EMERGENCY** 

HORSEPOWER

LIGHTING

KILOVOLT-AMPERES

CIRCUIT BREAKER

MONITOR MODULES. PROVIDE FIRE ALARM WIRING IN CONDUIT AND CONNECT MONITOR

MODULES TO EXISTING FIRE DETECTION AND ALARM SYSTEM FOR "GENERATOR RUN" AND

MULTI-PURPOSE ROOM

NATIONAL ELECTRICAL

POLYVINYL CHLORIDE

POLE(S) OR PUMP

PUBLIC ADDRESS

RECEPTACLE

REFRIGERATOR

ROOFTOP UNIT

REMOVE EXISTING

MANUFATURERS ASSOCIATION

POUNDS PER SQUARE INCH

SURGE PROTECTIVE DEVICE

VARIABLE FREQUENCY DRIVE

NEUTRAL

PHASE

ROOM

STORAGE

VOLT(S)

WIRE(S)

PVC

RM

SPD

"GENERATOR FAULT". MAKE CONNECTIONS NECESSARY FOR COMPLETE INSTALLATION.

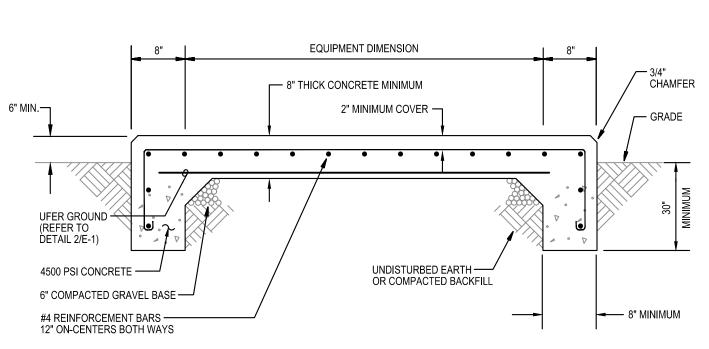
EXISTING TO REMAIN CEILING OUTLET AND LIGHTING FIXTURE. -lackbox -la OR PREVIOUSLY ON NORMAL POWER CIRCUIT AND CHANGED TO GENERATOR POWER CIRCUIT. EXISTING TO REMAIN SINGLE POLE OR 3-WAY WALL MOUNTED SWITCH. EXISTING TO REMAIN MANUAL MOTOR STARTER SWITCH. EXISTING UTILITY TRANSFORMER TO REMAIN. EXISTING TO REMAIN 120/208V PANELBOARD, SURFACE OR RECESS MOUNTED. EXISTING TO REMAIN WIRING IN CONDUIT. EXISTING TO REMAIN WIRING IN CONDUIT CONTINUED. EXISTING TO REMAIN MOTOR CONNECTION.

EXISTING EQUIPMENT CONNECTION TO BE RECONNECTED WHERE INDICATED.

EXISTING TO REMAIN ENCLOSED SWITCH (DISCONNECT/SAFETY SWITCH). EXISTING TO REMAIN MOTOR STARTER.

EXISTING TO REMAIN DUPLEX RECEPTACLE ON GENERATOR POWER. EXISTING TO REMAIN QUADRUPLEX (DOUBLE-DUPLEX) RECEPTACLE ON GENERATOR POWER.

EXISTING EMERGENCY OFF PUSHBUTTON STATION TO REMAIN.



**EMERGENCY AND STANDBY POWER** 150KW, 120/208 VOLTS, 3-PHASE, 4-WIRE NATURAL GAS GENERATOR LOCATED OUTDOORS NEXT TO LOADING DOCK AND

METALLIC WARNING TAPE

COMPACTED CLEAN

PVC SCHEDULE 40

8 DETAIL

FINISHED GRADE

3"

3000 PSI WITH PEA GRAVEL -

NOT TO SCALE

CONCRETE ENCASING CONDUITS

BATTERY CHARGER, BLOCK HEATER, CONTROL CIRCUITS, AND GROUND

NOT TO SCALE

DIRECTLY-BURIED CONDUIT

WARNING TAPE

GENERATOR DUCTBANK

GENERATOR DOCKING STATION

FOR CONNECTIONS TO A TEMPORARY PORTABLE GENERATOR

CONFIGURE TEMPORARY PORTABLE GENERATOR WITH

GENERATOR NEUTRAL CONNECTED TO GENERATOR GROUND.

GENERATOR SHALL BE A SEPARATELY DERIVED SYSTEM.

MECHANICALLY FASTEN SIGN TO FRONT OF GENERATOR DOCKING STATION

PLACARD AT GENERATOR DOCKING STATION

NOT TO SCALE

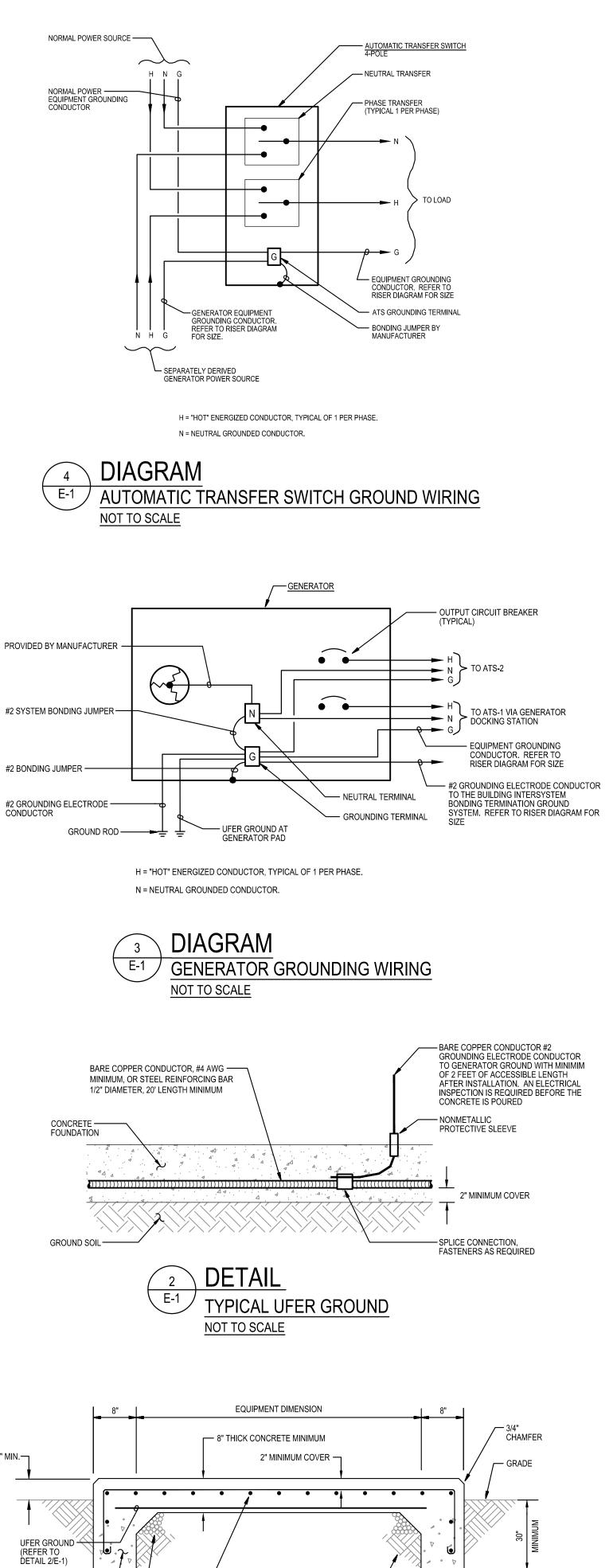
12" BELOW FINISHED GRADE

GENERATOR PVC CONDUIT

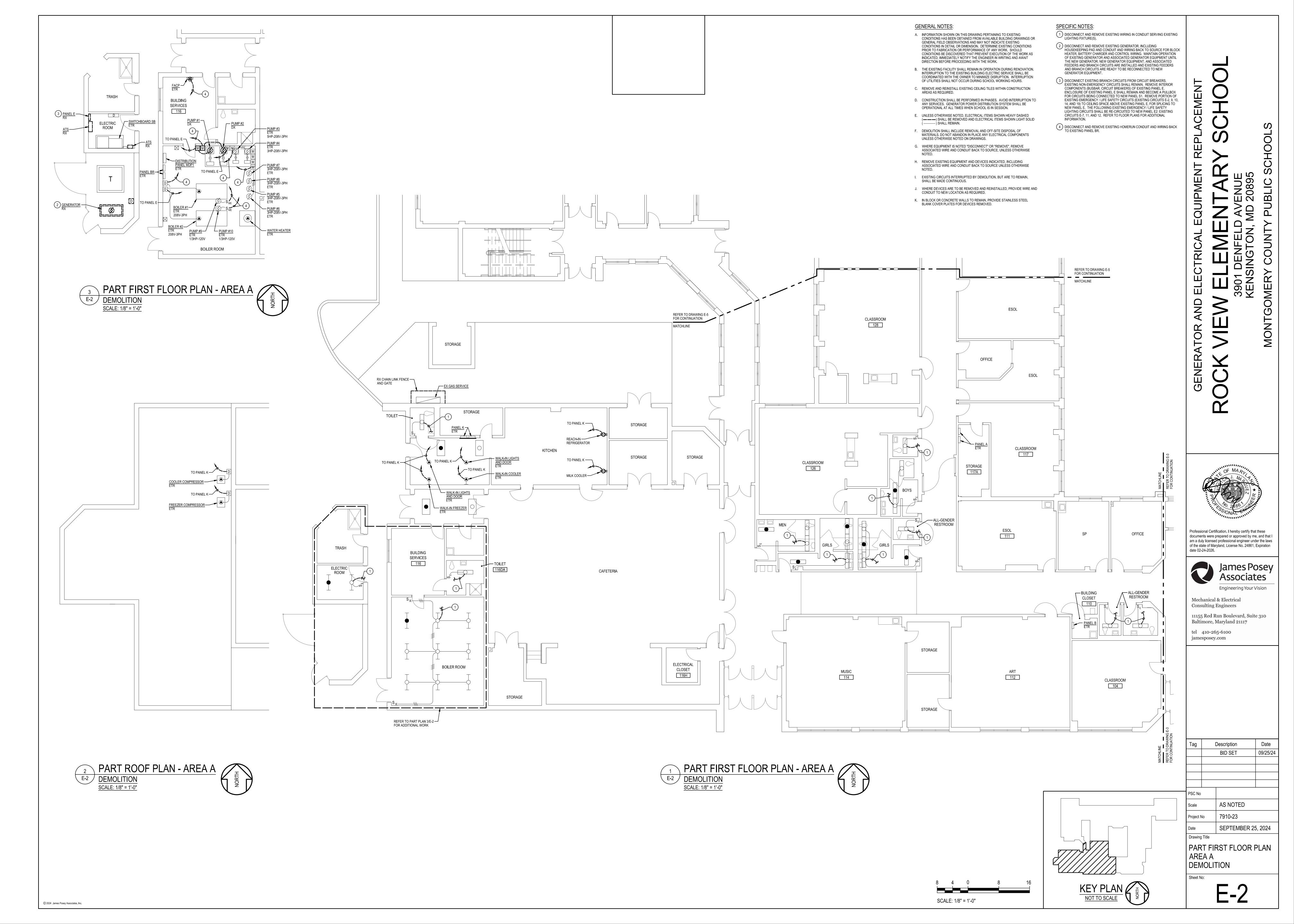
(SIZE AS REQUIRED)

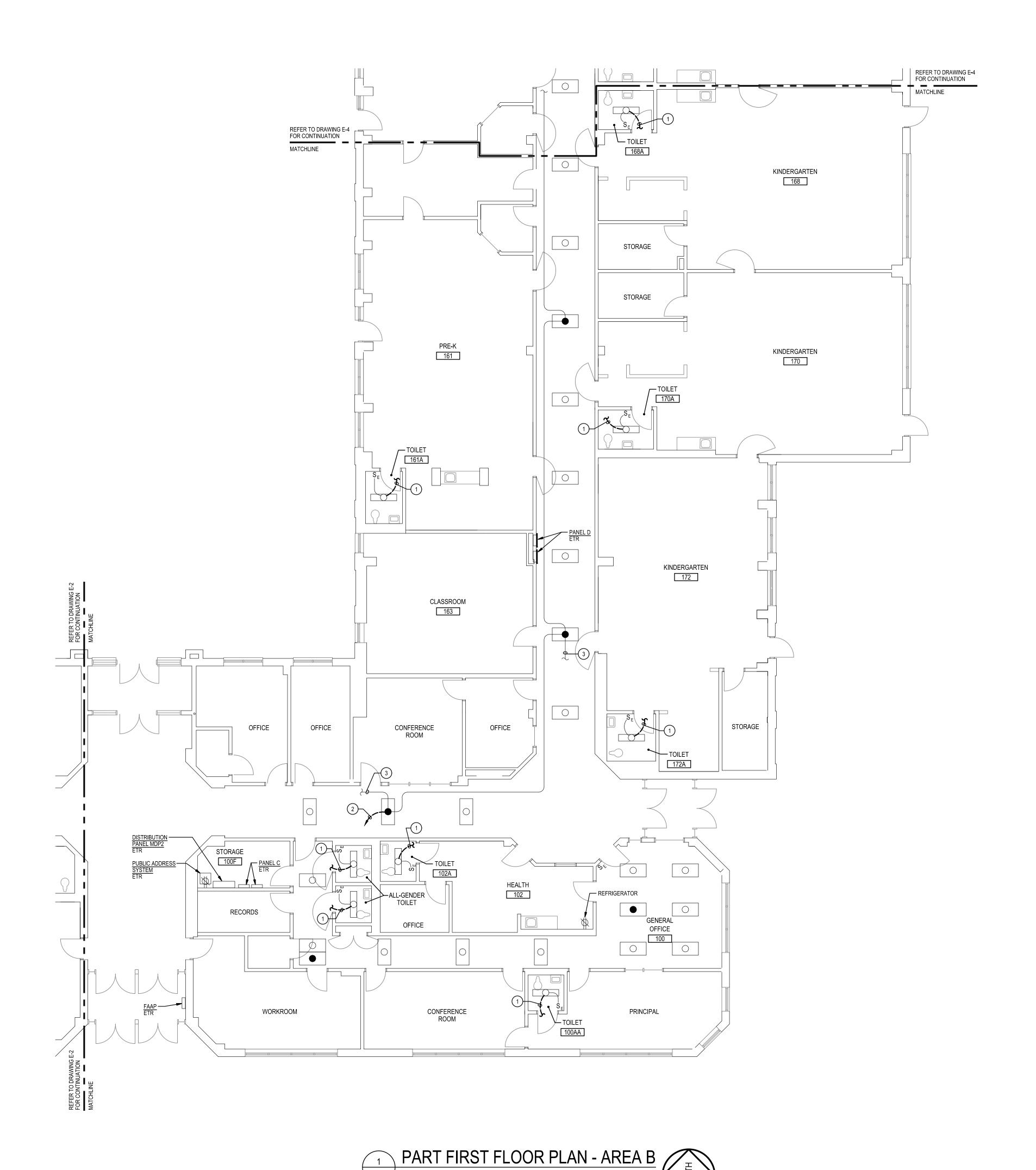
MECHANICALLY FASTEN SIGN TO FRONT OF MAIN SWITCHBOARD

PLACARD AT MAIN SERVICE



GENERATOR CONCRETE PAD NOT TO SCALE





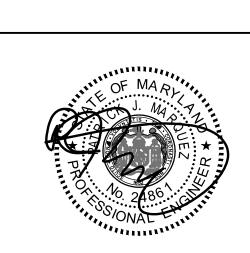
E-3 <u>DEMOLITION</u> SCALE: 1/8" = 1'-0"

#### **GENERAL NOTES:**

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
- D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.
- E. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (———) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID ( — ) SHALL REMAIN.
- F. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
- G. WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE, UNLESS OTHERWISE NOTED.
- H. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE
- I. EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS. J. WHERE DEVICES ARE TO BE REMOVED AND REINSTALLED, PROVIDE WIRE AND
- CONDUIT TO NEW LOCATION AS REQUIRED. K. IN BLOCK OR CONCRETE WALLS TO REMAIN, PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR DEVICES REMOVED.

#### SPECIFIC NOTES:

- 1) DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT SERVING EXISTING LIGHTING FIXTURES.
- DISCONNECT AND REMOVE EXISTING HOMERUN CONDUIT AND WIRING BACK TO EXISTING PANEL E, SERVING SECTION 2 LIGHTING ON GENERATOR POWER. EXISTING EMERGENCY LIGHTING CIRCUIT SHALL BE RE-CIRCUITED TO NEW PANEL E2. REFER TO DRAWING E-9 FOR HOMERUN TO PANEL E2.
- (3) EXISTING EMERGENCY LIGHTING CIRCUIT TO EXIT SIGNS.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical **Consulting Engineers** 

jamesposey.com

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100

Description **BID SET** 09/25/24

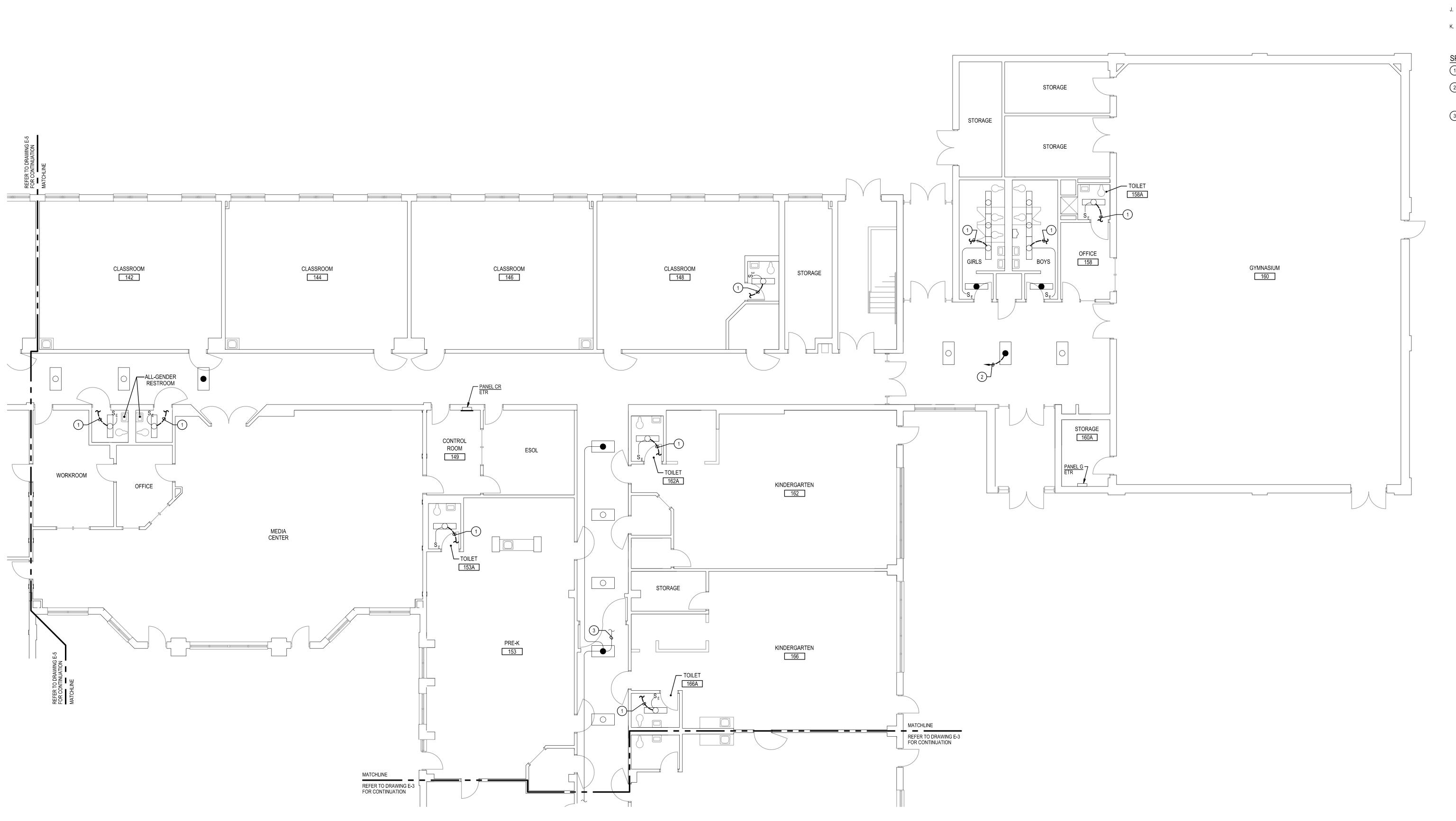
SEPTEMBER 25, 2024

Drawing Title PART FIRST FLOOR PLAN AREA B DEMOLITION

KEY PLAN

NOT TO SCALE

SCALE: 1/8" = 1'-0"



## GENERAL NOTES:

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- DIRECTION BEFORE PROCEEDING WITH THE WORK.

  B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.

  C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
- D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.
- E. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (———) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (———) SHALL REMAIN.
- F. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
- G. WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE, UNLESS OTHERWISE NOTED.
- REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE NOTED.

   EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN.
- I. EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS.
   J. WHERE DEVICES ARE TO BE REMOVED AND REINSTALLED, PROVIDE WIRE AND
- CONDUIT TO NEW LOCATION AS REQUIRED.

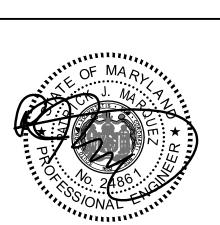
  K. IN BLOCK OR CONCRETE WALLS TO REMAIN, PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR DEVICES REMOVED.

#### SPECIFIC NOTES:

- 1) DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT SERVING EXISTING LIGHTING FIXTURES.
- DISCONNECT AND REMOVE EXISTING HOMERUN CONDUIT AND WIRING BACK TO EXISTING PANEL E, SERVING GYMNASIUM ADDITION LIGHTING ON GENERATOR POWER. EXISTING EMERGENCY LIGHTING CIRCUIT SHALL BE RE-CIRCUITED TO NEW PANEL E2.
- 3 EXISTING EMERGENCY LIGHTING CIRCUIT TO EXIT SIGNS.

AND ELECTRICAL EC

ROCK VIEW ELEMENTAR 3901 DENFELD AVENUE



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical Consulting Engineers

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Tag Description Date
BID SET 09/25/24

PSC No
Scale AS NOTED

AS NOTED

ale AS NOTED

oject No 7910-23

te SEPTEMBER 25, 2024

rawing Title

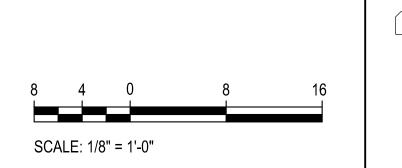
PART FIRST FLOOR PLAN AREA C DEMOLITION

E-4

PART FIRST FLOOR PLAN - AREA C

DEMOLITION
SCALE: 1/8" = 1'-0"

© 2024 James Posey Associates, Inc.



KEY PLAN

NOT TO SCALE

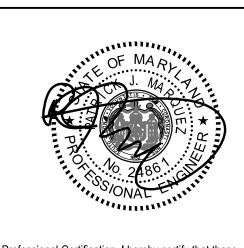




## **GENERAL NOTES**:

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
- D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION. E. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (———) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID
- F. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
- G. WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE, UNLESS OTHERWISE NOTED.
- H. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE
- I. EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS.
- J. WHERE DEVICES ARE TO BE REMOVED AND REINSTALLED, PROVIDE WIRE AND CONDUIT TO NEW LOCATION AS REQUIRED.
- K. IN BLOCK OR CONCRETE WALLS TO REMAIN, PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR DEVICES REMOVED.

- DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT SERVING EXISTING LIGHTING FIXTURES.
- 2) DISCONNECT AND REMOVE PORTION OF EXISTING THREE 1P-20A EMERGENCY LIGHTING CIRCUITS TO CEILING SPACE ABOVE FOR SPLICING.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical **Consulting Engineers** 

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Tag	Description	Date
	BID SET	09/25/2

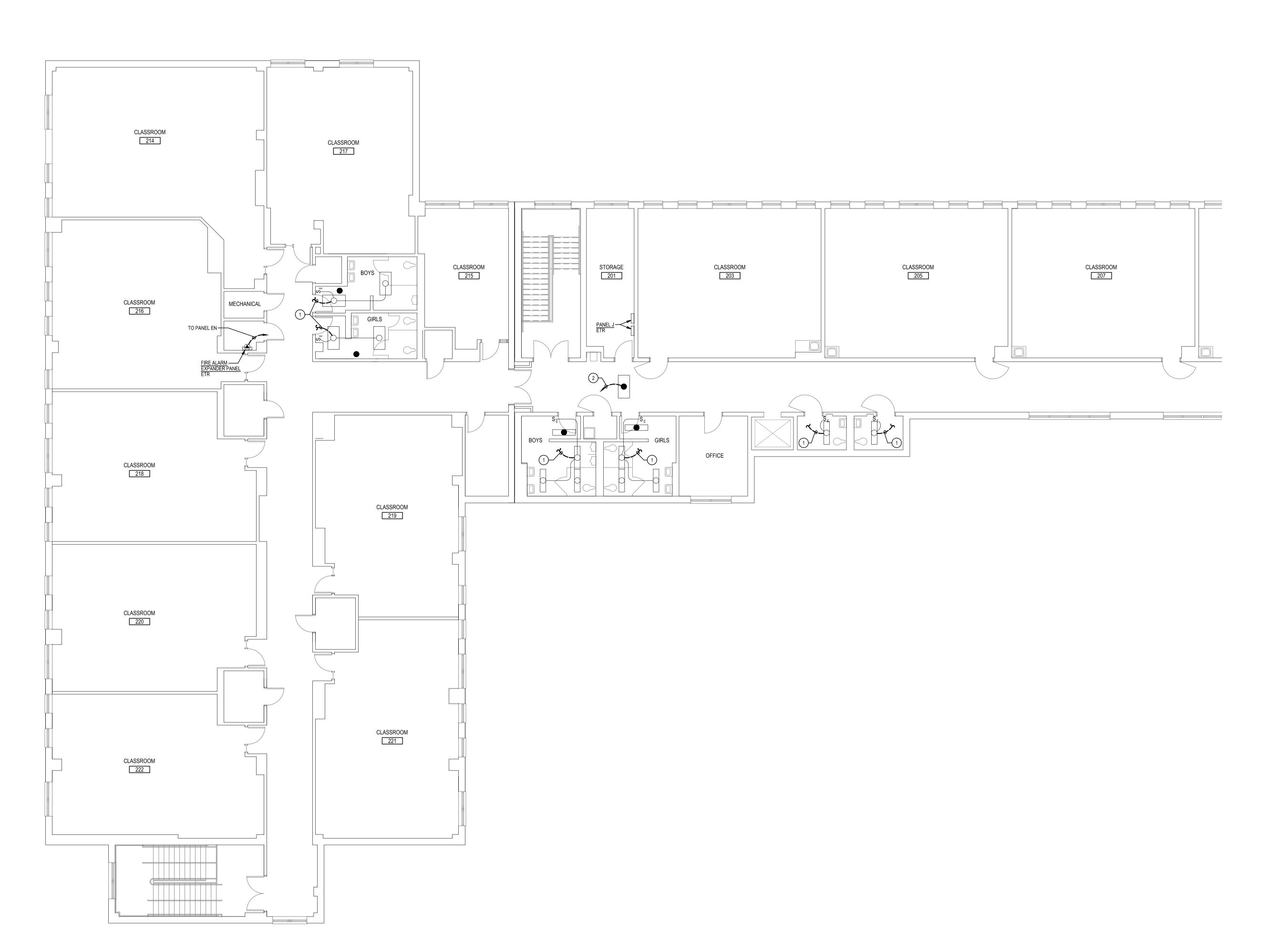
SEPTEMBER 25, 2024

Drawing Title PART FIRST FLOOR PLAN AREA D DEMOLITION

SCALE: 1/8" = 1'-0"

KEY PLAN

NOT TO SCALE



PART SECOND FLOOR PLAN E-6 DEMOLITION SCALE: 1/8" = 1'-0"

© 2024 James Posey Associates, Inc.



- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION REFORE PROCEEDING WITH THE WORK
  - B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.

  - E. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (———) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID
  - G. WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE, UNLESS OTHERWISE

DIRECTION BEFORE PROCEEDING WITH THE WORK.

C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.

D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.

(———) SHALL REMAIN.

F. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.

H. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE

I. EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS.

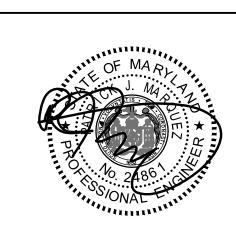
J. WHERE DEVICES ARE TO BE REMOVED AND REINSTALLED, PROVIDE WIRE AND CONDUIT TO NEW LOCATION AS REQUIRED.

K. IN BLOCK OR CONCRETE WALLS TO REMAIN, PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR DEVICES REMOVED.

#### SPECIFIC NOTES:

DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT SERVING EXISTING LIGHTING FIXTURES.

DISCONNECT AND REMOVE EXISTING HOMERUN CONDUIT AND WIRING BACK TO EXISTING PANEL E, SERVING SECOND FLOOR LIGHTING ON GENERATOR



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical

tel 410-265-6100 jamesposey.com

**Consulting Engineers** 11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117

Tag	Description	Date
	BID SET	09/25/24

Project No

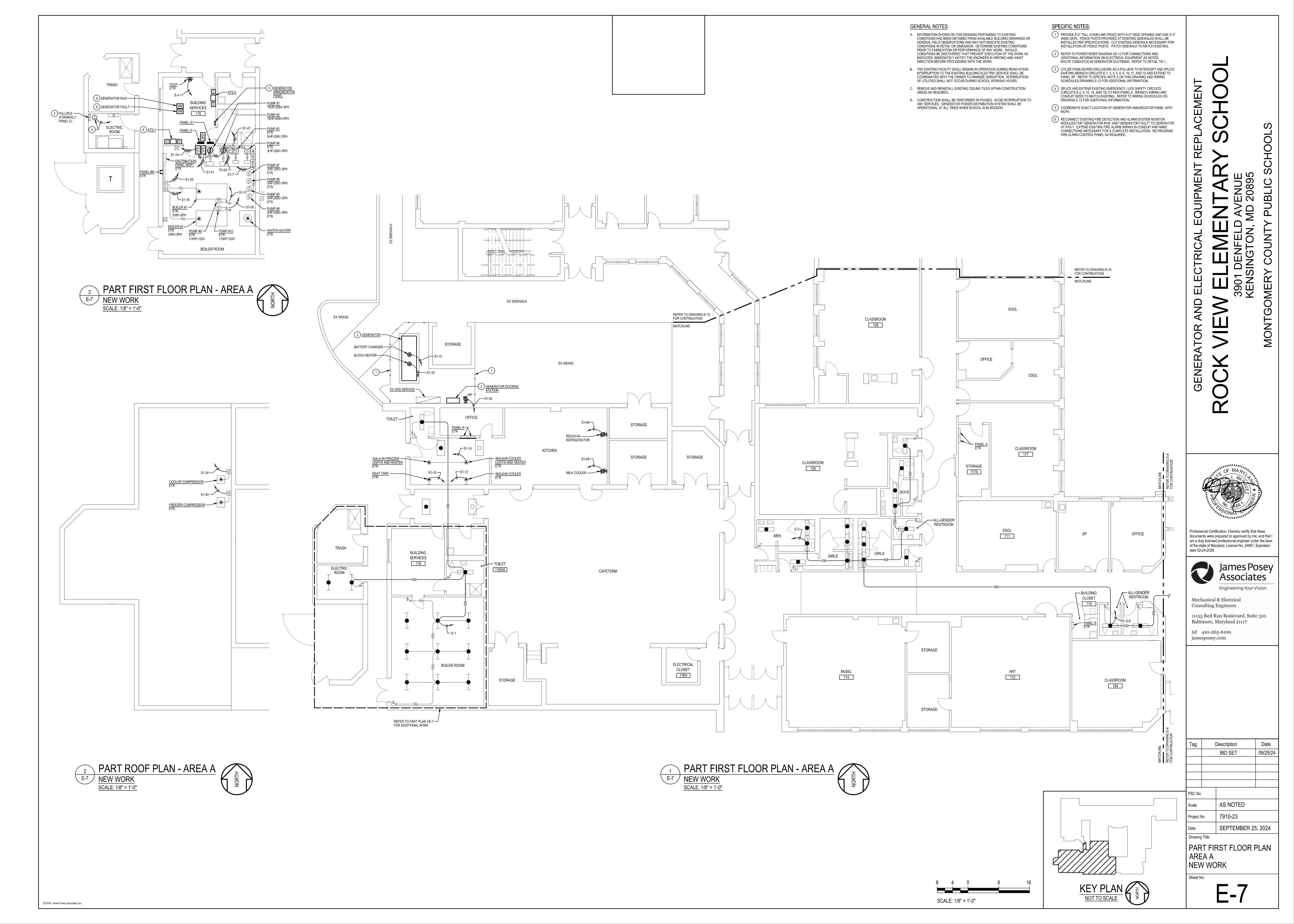
SEPTEMBER 25, 2024

PART SECOND FLOOR PLAN DEMOLITION



SCALE: 1/8" = 1'-0"





PART FIRST FLOOR PLAN - AREA B

NEW WORK

SCALE: 1/8" = 1'-0"

## **GENERAL NOTES**:

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED. D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.

SPECIFIC NOTES: EXISTING EMERGENCY LIGHTING CIRCUIT TO EXIT SIGNS.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical **Consulting Engineers** 

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Description **BID SET** 09/25/24

SEPTEMBER 25, 2024

Drawing Title PART FIRST FLOOR PLAN AREA B NEW WORK

SCALE: 1/8" = 1'-0"

KEY PLAN

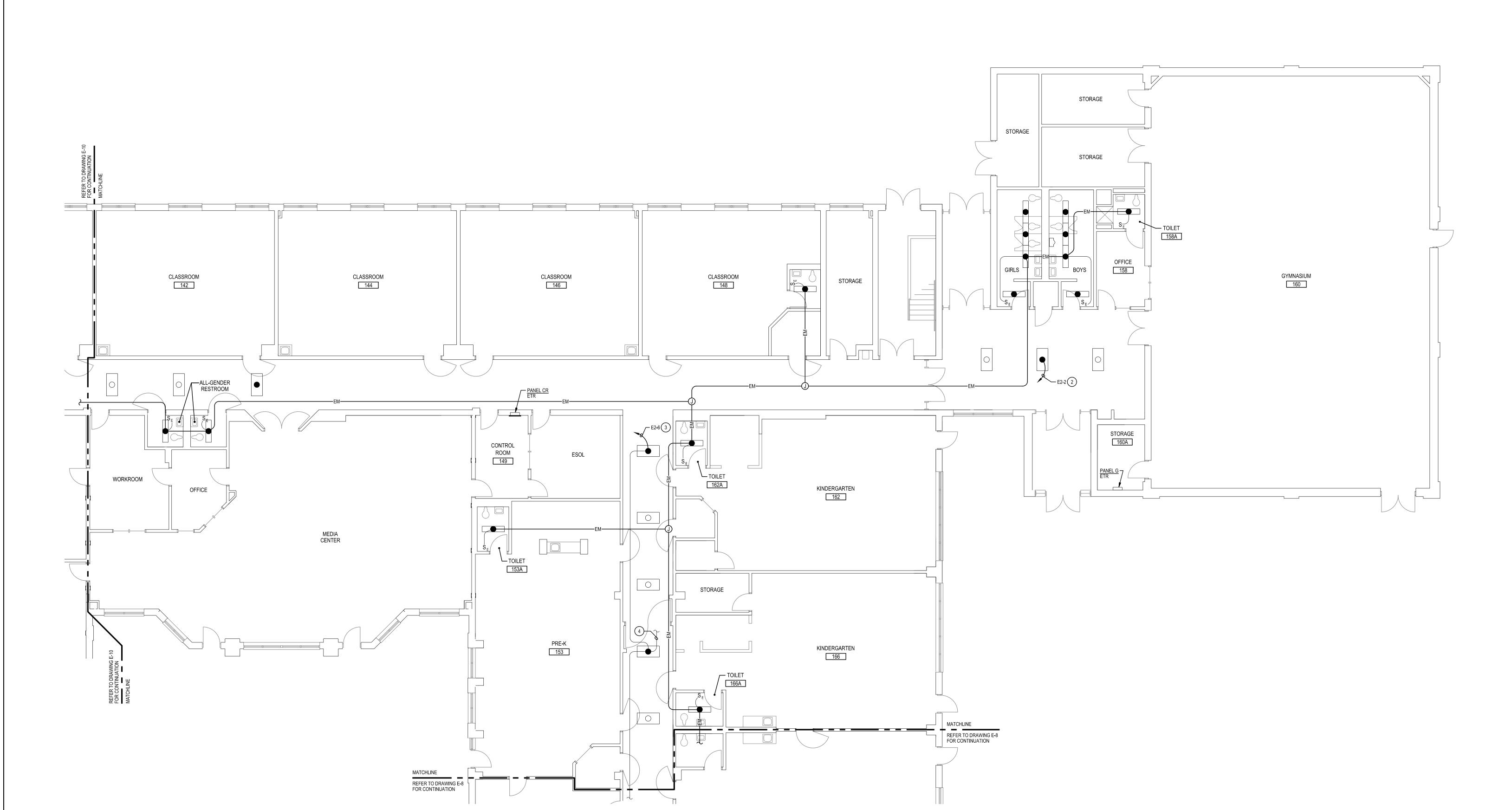
NOT TO SCALE

# **GENERAL NOTES**:

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED. D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.

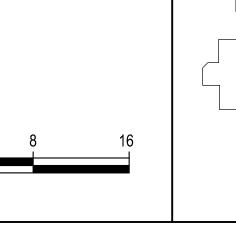
#### SPECIFIC NOTES:

- PROVIDE 2 #12 + #12 GROUND IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
- 2 PROVIDE CONNECTION OF EXISTING GYMNASIUM LIGHTING, ON GENERATOR POWER, TO NEW PANEL AS INDICATED. 3 PROVIDE CONNECTION OF EXISTING SECTION 2 LIGHTING, ON GENERATOR POWER, TO NEW PANEL AS INDICATED.
- 4) EXISTING EMERGENCY LIGHTING CIRCUIT TO EXIT SIGNS.

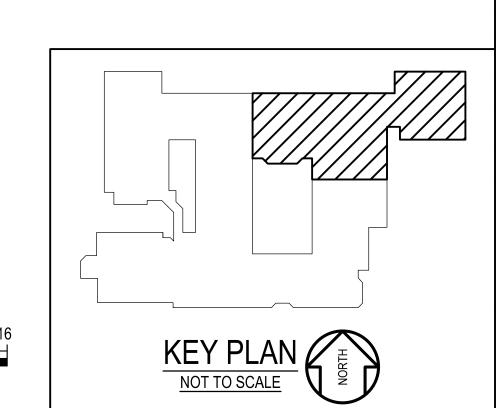


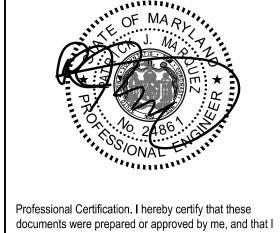
© 2024 James Posey Associates, Inc.



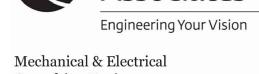


SCALE: 1/8" = 1'-0"





am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026. James Posey Associates



**Consulting Engineers** 

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

**BID SET** 09/25/24 SEPTEMBER 25, 2024

Description

PART FIRST FLOOR PLAN AREA C NEW WORK



PART FIRST FLOOR PLAN - AREA D

E-10 NEW WORK
SCALE: 1/8" = 1'-0"

© 2024 James Posey Associates, Inc.

## **GENERAL NOTES**:

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
- D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.

#### SPECIFIC NOTES:

- 1 PROVIDE 2 #12 + #12 GROUND IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
- 2) SPLICE EXISTING LIGHTING CIRCUITS DISCONNECTED FROM EXISTING PANEL EN.

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical Consulting Engineers

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Description **BID SET** 09/25/24

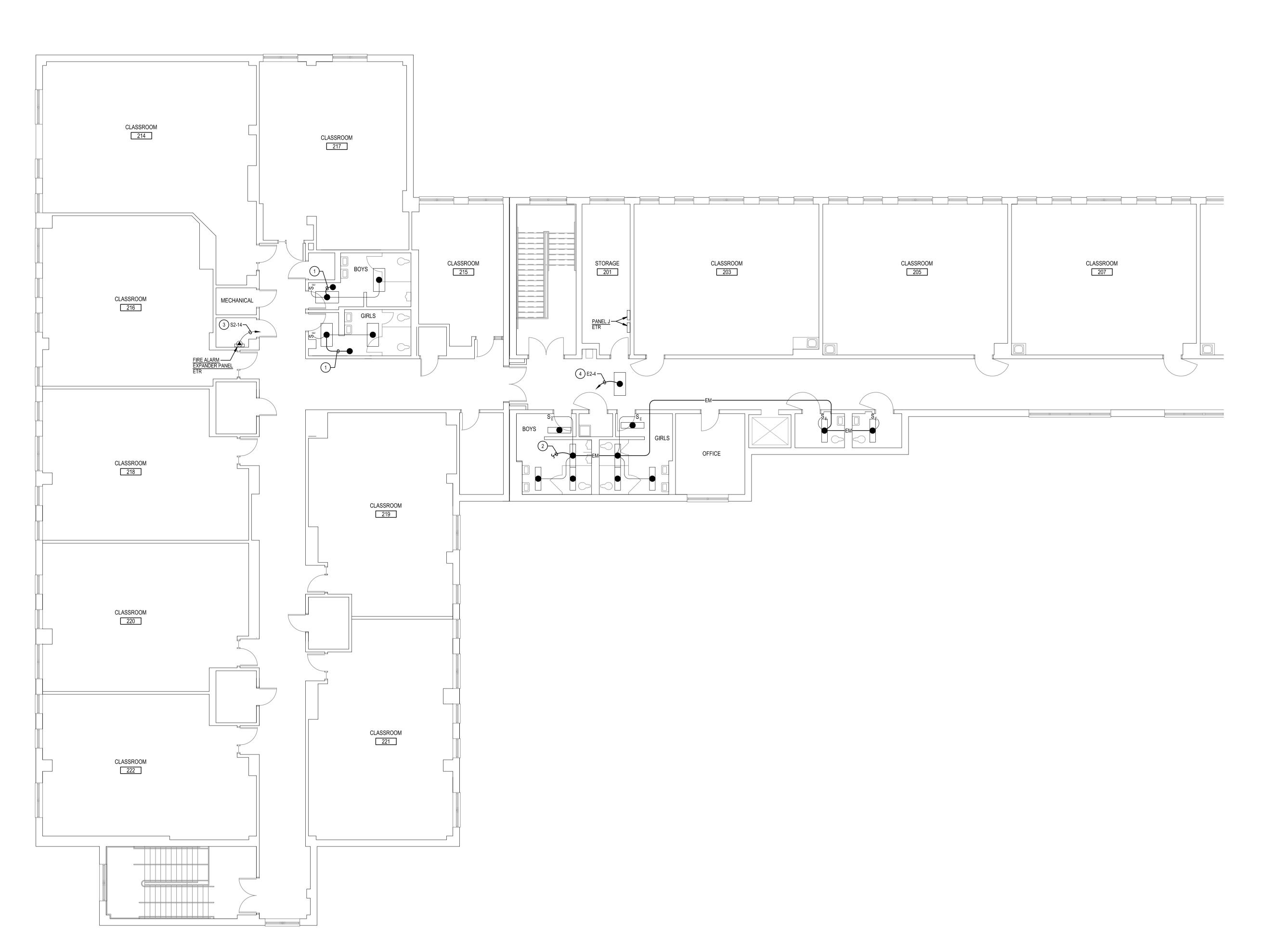
SEPTEMBER 25, 2024

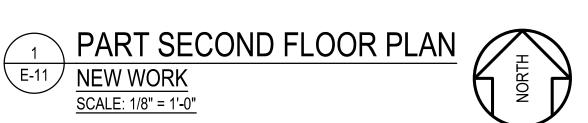
Drawing Title PART FIRST FLOOR PLAN AREA D NEW WORK

KEY PLAN

NOT TO SCALE

SCALE: 1/8" = 1'-0"







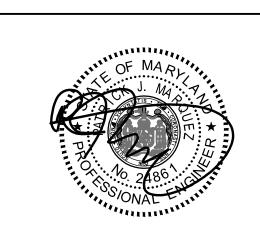
- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.

  C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
- D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.

#### SPECIFIC NOTES:

- PROVIDE 2 #12 + #12 GROUND IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
- 2 PROVIDE 2 #12 + #12 GROUND IN 3/4" CONDUIT AND CONNECT TO EMERGENCY LIGHTING CIRCUIT E-3, ALSO SERVING FIRST FLOOR TOILET ROOMS BELOW.
- EXISTING CIRCUIT TO REMAIN. PROVIDE UPDATED CIRCUIT LABEL ON FRONT COVER OF FIRE ALARM EXPANDER PANEL.
- PROVIDE CONNECTION OF EXISTING SECOND FLOOR LIGHTING, ON GENERATOR POWER, TO NEW PANEL AS INDICATED.

GENERATOR AND ELECTRICAL EQUIPMENT REPLA



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical

jamesposey.com

Consulting Engineers

11155 Red Run Boulevard, Suite 310
Baltimore, Maryland 21117

tel 410-265-6100

PSC No	
Scale	
Project N	(
Date	

PSC No
Scale AS NOTED
Project No 7910-23
Date SEPTEMBER 25, 2024

Description

BID SET

09/25/24

Drawing Title

PART SECOND FLOOR
PLAN
NEW WORK



E-1

# SECOND FLOOR TO CHILLER — 4#3/0+#6G-2"C --- 4#6+#10G-1"C 120/208V-3PH-4W FIRST FLOOR FIRST FLOOR (<del>p</del>) (<u>p</u>) GENERATOR DUCTBANK— REFER TO DETAIL 7/E-1 POWER RISER DIAGRAM

NOT TO SCALE

© 2024 James Posey Associates, Inc.

#### **GENERAL NOTES:**

- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD CONDITIONS BE DISCOVERED THAT PREVENT EXECUTION OF THE WORK AS INDICATED, IMMEDIATELY NOTIFY THE ENGINEER IN WRITING AND AWAIT DIRECTION BEFORE PROCEEDING WITH THE WORK.
- B. THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRIC SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
- D. CONSTRUCTION SHALL BE PERFORMED IN PHASES. AVOID INTERRUPTION TO ANY SERVICES. GENERATOR POWER DISTRIBUTION SYSTEM SHALL BE OPERATIONAL AT ALL TIMES WHEN SCHOOL IS IN SESSION.
- E. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (———) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID ( — ) SHALL REMAIN.
- F. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
- G. WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE, UNLESS OTHERWISE H. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING
- I. EXISTING CIRCUITS INTERRUPTED BY DEMOLITION, BUT ARE TO REMAIN, SHALL BE MADE CONTINUOUS.

#### SPECIFIC NOTES:

- 1 PROVIDE TYPE 10 GENERATOR, PER NFPA 110. THE GENERATOR SHALL BE ABLE TO PROVIDE GENERATOR POWER TO THE SCHOOL WITHIN 10 SECONDS AFTER A UTILITY POWER OUTAGE.
- PROVIDE GENERATOR CONCRETE PAD. REFER TO DETAIL 1/E-1 FOR ADDITIONAL INFORMATION.
- (3) REFER TO DIAGRAM 3/E-1 FOR GENERATOR GROUNDING.
- PROVIDE GENERATOR CONTROL WIRING IN CONDUIT BETWEEN GENERATOR CONTROL PANEL AND ASSOCIATED AUTOMATIC TRANSFER SWITCHES. MAKE CONNECTIONS NECESSARY FOR COMPLETE INSTALLATION. GENERATOR CONTROL MURINIO CHARLES AS DEPOCATION AND METALLIFICATION OF THE PROPERTY OF THE PROPE CONTROL WIRING SHALL BE AS PER GENERATOR MANUFACTURER'S RECOMMENDATIONS.
- (5) PROVIDE WIRING IN CONDUIT FROM GENERATOR CONTROL PANEL TO GENERATOR REMOTE ALARM ANNUNCIATOR PANEL. WIRING SHALL BE AS PER GENERATOR MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE 3P-300A ELECTRONIC TRIP CIRCUIT BREAKER TO SERVE GENERATOR EMERGENCY (LIFE SAFETY) LOADS. MOUNT CIRCUIT BREAKER WITHIN GENERATOR ENCLOSURE AND MAKE CONNECTIONS. COORDINATE LOCATION OF CIRCUIT BREAKER WITH GENERATOR MANUFACTURER.
- 7 PROVIDE 3P-200A CIRCUIT BREAKER TO SERVE GENERATOR STANDBY LOADS.
  MOUNT CIRCUIT BREAKER WITHIN GENERATOR ENCLOSURE AND MAKE
  CONNECTIONS. COORDINATE LOCATION OF CIRCUIT BREAKER WITH
  GENERATOR MANUFACTURER.
- 8 PROVIDE 4 #300 + #2 GROUND IN 2 1/2" CONDUIT BETWEEN 3P-300A ELECTRONIC TRIP CIRCUIT BREAKER AT GENERATOR SERVING EMERGENCY (LIFE SAFETY) LOADS AND GENERATOR DOCKING STATION, SIZED FOR LOAD BANK CONNECTION.
- 9 PROVIDE 300A GENERATOR DOCKING STATION IN NEMA TYPE 3R ENCLOSURE, EQUAL TO TRYSTAR DBDS-5 WITH TWO 3P-60A CIRCUIT BREAKERS, KIRK KEY INTERLOCKED, FOR CONNECTIONS TO ATS-1 AND PORTABLE MOBILE GENERATOR. FEEDER FOR LOAD BANK CONNECTION SHALL BE SIZED FOR 300A. PROVIDE SIGN ON FRONT OF GENERATOR DOCKING STATION TO READ AS FOLLOWS "SERVING EMERGENCY TRANSFER SWITCH (ATS-1) IN BUILDING SERVICES, 120/208V, 3-PHASE, 4-WIRE".
- PROVIDE 4 #6 + #8 GROUND IN 2" CONDUIT. REFER TO DETAIL 7/E-1 FOR GENERATOR DUCTBANK.
- (11) PROVIDE 4 #3/0 + #2 GROUND IN 2" CONDUIT. REFER TO DETAIL 7/E-1 FOR GENERATOR DUCTBANK.
- PROVIDE 4P-60A AUTOMATIC TRANSFER SWITCH (ATS) TO SERVE EMERGENCY (LIFE SAFETY) LOADS. ATS SHALL HAVE A MINIMUM UL 1008 WITHSTAND AND CLOSING OF 65K AIC. PROVIDE NAMEPLATE ON FRONT OF ATS TO READ "EMERGENCY ATS".
- PROVIDE 4P-200A AUTOMATIC TRANSFER SWITCH (ATS) TO SERVE STAND-BY LOADS. ATS SHALL HAVE A MINIMUM UL 1008 WITHSTAND AND CLOSING RATING OF 65K AIC. PROVIDE NAMEPLATE ON FRONT OF ATS TO READ "STANDBY ATS".
- PROVIDE 3P-60A-600V NON-FUSED ENCLOSED SWITCH WITH NEUTRAL KIT IN NEMA TYPE 1 ENCLOSURE TO SERVE GENERATOR EMERGENCY / LIFE SAFETY LOADS. PROVIDE 3P-200A-600V NON-FUSED ENCLOSED SWITCH WITH NEUTRAL KIT IN NEMA TYPE 1 ENCLOSURE TO SERVE GENERATOR STAND-BY LOADS.
- PROVIDE 3P-60A-600V FUSED ENCLOSED SWITCH WITH NEUTRAL IN NEMA TYPE 1 ENCLOSURE. PROVIDE WITH 60A CURRENT-LIMITING FUSES.
- PROVIDE 3P-200A-600V FUSED ENCLOSED SWITCH WITH NEUTRAL IN NEMA TYPE 1 ENCLOSURE. PROVIDE WITH 200A CURRENT-LIMITING FUSES.
- (18) CHANGE PANEL DESIGNATION. PROVIDE NEW PANEL LABEL INDICATING "PANEL S2". EXISTING SWITCHBOARD HAS (6) MAIN CIRCUIT BREAKERS. PROVIDE CONNECTION TO EXISTING 3P-200A MAIN CIRCUIT BREAKER, PREVIOUSLY SERVING EXISTING PANEL E.
- EXISTING PANEL MDP1 IS BY GENERAL ELECTRIC, SPECTRA SERIES.
  DISCONNECT AND REMOVE EXISTING 3P-70A CIRCUIT BREAKER SERVING
  PANEL EN, MADE SPARE DURING DEMOLITION WORK. PROVIDE 3P-60A
  CIRCUIT BREAKER IN ITS PLACE. TYPE AND AIC RATING OF CIRCUIT BREAKER TO MATCH EXISTING.
- (21) REFER TO SPECIFIC NOTE 3/E-2 FOR ADDITIONAL INFORMATION. (22) REFER TO SPECIFIC NOTE 3/E-7 FOR ADDITIONAL INFORMATION.



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical **Consulting Engineers** 

11155 Red Run Boulevard, Suite 310 Baltimore, Maryland 21117 tel 410-265-6100 jamesposey.com

Tag	1	Description	Date		
		BID SET	09/25/24		
		<u> </u>			
PSC No					
Scale		AS NOTED			
Project N	<b>l</b> o	7910-23			
Date		SEPTEMBER 25	5, 2024		

POWER RISER DIAGRAMS

TES: PROVIDE FUSIBLE BRANCH CIRCUIT P

(2) PROVIDE BREAKER TIE FOR LIGHTING CIRCUITS E-13 AND E-15, TO MATCH EXISTING.

(1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.

(2) INTERCEPT & SPLICE EXISTING BRANCH CIRCUIT ABOVE PANELBOARD ENCLOSURE, PREVIOUSLY PANEL E. MATCH EXISTING WRING AND CONDUIT AND EXTEND WIRING AND CONDUIT FROM NEW PANEL E TO EXISTING BRANCH CIRCUIT CONDUIT AND WIRING, UNLESS OTHERWISE NOTED.

(3) FEEDER IS SIZED FOR VOLTAGE DROP.

		120 / 208 VOLTS	3 PHAS	SE 4	4 WIF	RE			100	AA C	1PB	US		SURFACE MO	DUNTED		
CIR- CUIT	POLE	DESCRIPTION	WRE/ CONDUIT		JSE AMP			KV <i>A</i> B	A/Ø Ø	C	CØ		POLE	DESCRIPTION	WIRE/ CONDUIT	FU POLE	JSE AN
1	1	LTG TOILETS NORTH	#12-3/4"C	1	20	1.5	0.6					2	2	EM LTG GYM	#10-3/4"C	1	20
3	3	LTG 2ND FLOOR ADDITION (2)	#10-3/4"C	1	20			0.9	1.1			4	4	EM LTG 2ND FLOOR	#12-3/4"C	1	20
5	5	LTG 1ST FLOOR ADDITION (2)	#10-3/4"C	1	20					1.4	1.4	6	6	EM LTG SECTION 2	#8-3/4"C	1	2
	7	SPARE		1	20								8	SPARE		1	2
	9	SPARE		1	20								10	SPARE		1	20
	11	SPARE		1	20								12	SPARE		1	2
13	13	SURGE PROTECTIVE DEVICE	4#8+	3	30	-	-					-	14	SPACE AND PROVISIONS	-	1	-
~	15		#8G-					-	1			-	16	SPACE AND PROVISIONS	-	1	-
-	17		3/4"C							-	-	-	18	SPACE AND PROVISIONS	-	1	-
		CONNECTED LOAD =	6.9	KVA		1.5 2	0.6 .1	0.9	1.1 .0	1.4	1.4 .8						
		DEMAND LOAD =	6.9	KVA										MAIN FUSE	30	AMPS	3
		MIN AIC RATING =	10,000	AMPS	SYMN	/IETRIC	CAL							LOCATION	STORAGE	E 137	_

		120 / 208 VOLTS	3 PHA	SE 4	1 WIF	RE			22	5 AN	1PB	US		SURFACE M	OUNTED	j	
	POLE	DESCRIPTION	WRE/		AKER		~		N/Ø		~	CIR-	POLE	DESCRIPTION	WIRE/		AKE
<u> </u>	1	REC HEALTH RM COUNTER (2)	(NOTE 2)	POLE 1	20	0.4	Ø _	В	Ø		Ø	CUIT	2	SPARE	CONDUIT	POLE 1	= AIV
3	3	REC HEALTH RM REFRIG (2)	(NOTE 2)	1	20	0.4		0.5	0.4			4	4	REC SECURITY (2)	(NOTE 2)	<del>  '</del>	20
5	5	REC PA CONSOLE (2)	(NOTE 2)	1	20			0.0	0.4	0.5	0.4	6	6	REC SECURITY (2)	(NOTE 2)	1	20
7	7	PUMP #6	3#12+	3	20	1.3	0.4			0.0	0.1	8	8	REC TELE HEAD-END (2)	(NOTE 2)	1	20
-	9	1	#12G-			1.0	0.1	1.3				Ť	10	SPARE (2)	(110122)	1	20
-	11	-	3/4"C							1.3	1.0	12	12	WALK-IN COOLER FAN	#12-3/4"C	1	20
	13	SPARE		1	20		1.0					14	14	WALK-INS LTG, HEATER	#12-3/4"C	1	20
15	15	SMOKE DAMPER (2)	(NOTE 2)	1	20			0.1	1.0			16	16	FREEZER HEAT TAPE (3)	#12-3/4"C	1	20
17	17	RTU#1 ELEC HEATER (2)	(NOTE 2)	1	20					1.5	5.5	18	18	PUMP #1	3#3+	3	90
19	19	BOILER #1	3#12+	3	20	0.3	5.5					-	20		#8G-		
-	21		#12G-					0.3	5.5			-	22		1 1/4"C		
-	23		3/4"C							0.3	1.2	24	24	PUMP #3	3#8+	3	40
25	25	BOILER #2	3#12+	3	20	0.3	1.2					-	26		#10G-		
-	27		#12G-					0.3	1.2			-	28		3/4"C		
' <u>=</u>	29	]	3/4"C							0.3			30	SPARE		1	20
31	31	BATTERY CHARGER	#10-1"C	1	20	0.5	0.4					32	32	OUTSIDE STORAGE SHED (2)	(NOTE 2)	1	20
33	33	BLOCK HEATER	#10-1"C	1	20			1.5	1.0			34	34	COOLER COMPRESSOR	3#12+	3	20
35	35	REC BY GENERATOR	#10-3/4"C	1	20					0.2	1.0	-	36		#12G-		
37	37	PUMP#9	#12-3/4"C	1	20	0.9	1.0					-	38		3/4"C		
39	39	PUMP#10	#12-3/4"C	1	20			0.9	1.5			40	40	FREEZER COMPRESSOR	3#10+	3	30
41	41	PUMP#2	3#3+	3	90					5.5	1.5	-	42		#10G-		
-	43		#8G-			5.5	1.5					-	44		3/4"C		
-	45		1 1/4"C					5.5	1.0			46	46	REC - REACH-IN REFRIG (1)	#12-3/4"C	1	20
47	47	PUMP#4	3#12+	3	20					1.2	0.5	48	48	REC - MILK COOLER (1)	#12-3/4"C	1	20
-	49		#12G-			1.2	1.7					50	50	PANEL S2	4#6+	3	50
-	51		3/4"C					1.2	1.0			-	52		#10G-		
	53	SPARE		3	20						0.5	-	54		1"C		
-	55												56	SPARE		1	20
-	57												58	SPARE		1	20
	59	SPARE		2	20								60	SPARE		1	20
-	61						-					-	62	SPACE AND PROVISIONS	-	1	-
	63	SPARE		1	20				-			-	64	SPACE AND PROVISIONS	-	1	-
	65	SPARE		1	20						5	-	66	SPACE AND PROVISIONS	-	1	-
ē	67	SPACE AND PROVISIONS	-	1	-	-1	-					-	68	SPACE AND PROVISIONS	-	1	
-	69	SPACE AND PROVISIONS	-	1	-			-	-			-	70	SPACE AND PROVISIONS	-	1	-
-	71	SPACE AND PROVISIONS	-	1	-					-	-	-	72	SPACE AND PROVISIONS	=	1	-
		CONNECTED LOAD =	69.7	_KVA			12.7 3.1	11.6 24			11.6 2.4			MAIN BREAKER	R200	_AMP	S
		DEMAND LOAD =	49.6	_KVA													
		MIN AIC RATING =	42,000	AMPS	SYMM	/IETRI	CAL							LOCATION	STORA	GE	

(2) INTERCEPT & SPLICE EXISTING BRANCH CIRCUIT AT PANELBOARD ENCLOSURE, PREVIOUSLY PANEL E, TO BE USED AS A PULL BOX. MATCH

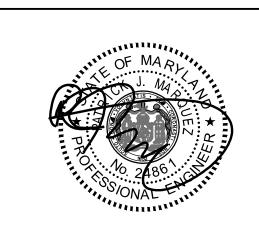
EXISTING WRING AND CONDUIT AND EXTEND WIRING AND CONDUIT FROM NEW PANEL E TO PANELBOARD ENCLOSURE.

(1) PROVIDE GFCI-TYPE CIRCUIT BREAKER FOR PERSONNEL PROTECTION (6 mA).

(3) PROVIDE GFCI-TYPE CIRCUIT BREAKER FOR EQUIPMENT PROTECTION (30 mA).

4. PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTION DEVICE.

	WIRING SCHEDULE: EXISTING PANEL S2																
		120 / 208 VOLTS	3 PHAS	SE 4	I WIF	RE			100	NA C	IP B	US		SURFACE MO	DUNTED		
CIR- CUIT	POLE	DESCRIPTION	WIRE/ CONDUIT	BRE/ POLE	AKER AMP	A	Ø		(/Ø Ø	С	Ø	CIR- CUIT	POLE	DESCRIPTION	WIRE/ BREAKE		TOTAL CONTRACTOR
1	1	REC - SERVER RACK - 139 (3)	#10-3/4"C	1	20	1.0	ľ					•	2	SPACE AND PROVISIONS	-	1	20
3	3	REC - DATA RACK - 139 (3)	#10-3/4"C	1	20			0.5	-			-	4	SPACE AND PROVISIONS	-	1	20
5	5	REC - DATA RACK - 139 (3)	#10-3/4"C	1	20					0.5	-	-	6	SPACE AND PROVISIONS	-	1	20
7	7	REC - 139 (3)	#10-3/4"C	1	20	0.5	115					) <del>-</del>	8	SPACE AND PROVISIONS	-	1	20
9	9	REC - 139 (3)	#10-3/4"C	1	20			0.5	ī			-	10	SPACE AND PROVISIONS	-	1	20
-	11	SPACE AND PROVISIONS	-	1	-						-		12	SPACE AND PROVISIONS	-	1	20
	13	SPARE (2)		1	20		0.2					14	14	FACP	#12-3/4"C	1	20
	15	SPARE (2)		1	20				-			-	16	SPACE AND PROVISIONS	-	1	1-1
-	17	SPACE AND PROVISIONS	1=	1	-					-	-	-	18	SPACE AND PROVISIONS	-	1	1-
-	19	SPACE AND PROVISIONS	-	1		-	-					-	20	SPACE AND PROVISIONS	-	1	-
1-	21	SPACE AND PROVISIONS	-	1	-			-	-			T-	22	SPACE AND PROVISIONS	-	1	-
-	23	SPACE AND PROVISIONS	-	1	-					-	-	-	24	SPACE AND PROVISIONS	-	1	-
-	25	SPACE AND PROVISIONS	-	1	-	,-,	-					-	26	SPACE AND PROVISIONS	-	1	-
j-	27	SPACE AND PROVISIONS	-	1	-11			-	-			]-	28	SPACE AND PROVISIONS	-	1	-
j-	29	SPACE AND PROVISIONS	-	1	-11					-	-	-	30	SPACE AND PROVISIONS	-	1	-
		CONNECTED LOAD =	3.2	KVA		1.5 1	-	1.0		0.5	0.0 5						
		DEMAND LOAD =	3.2	KVA										MAIN BREAKER	50	_AMPS	ĵ.
		MIN AIC RATING =	ETR	AMPS	SYMM	1ETRIC	CAL							LOCATION	ELEC R	RM.	-
	GENE A.	ERAL NOTES: LOADS INDICATED IN <i>ITALICS</i> A	RE EXISTING	TO RE	MAIN									EXISTING DEMAND LOAD =	0 KVA		
		LOADS INDICATED IN BOLD ARE												ADDED DEMAND LOAD =			
														TOTAL DEMAND LOAD =	11	_	
	NOTE	<u>:S</u> :												PANEL CAPACITY=	14.4 KVA		
	1.	— ETR PANELBOARD MANUFACTU	JRED BY GE,	TYPE	A-SER	IES II.	FED F	ROM	70A C	IRCUI	BRE	AKER	IN EX	ISTING PANEL MDP1.			
	(2)	EXISTING CIRCUIT BREAKER MA	DE SPARE D	URING	DEMO	OLITIO	N WO	RK.									
	(3)	PROVIDE 1P-20A CIRCUIT BREA	KER IN AVAIL	ABLE	SPAC	EASI	NDICA	TED.	TYPE	AND A	IC RA	TING	OF CI	RCUIT BREAKER TO MATCH EXIS	TING.		



Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the state of Maryland, License No. 24861, Expiration date 02-24-2026.



Mechanical & Electrical
Consulting Engineers

Consulting Engineers

11155 Red Run Boulevard, Suite 310
Baltimore, Maryland 21117

tel 410-265-6100
jamesposey.com

	Tag	I	Date					
			BID SET	09/25/2				
	PSC No							
	Scale		AS NOTED					
	Project N	Ю	7910-23					
	Date		SEPTEMBER 25, 2024					

Drawing Title
SCHEDULES

heet No:

E-13