

Generator and Electrical Equipment Replacement

SPRINGBROOK HIGH SCHOOL

201 VALLEY BROOK DRIVE, SILVER SPRING, MD 20904

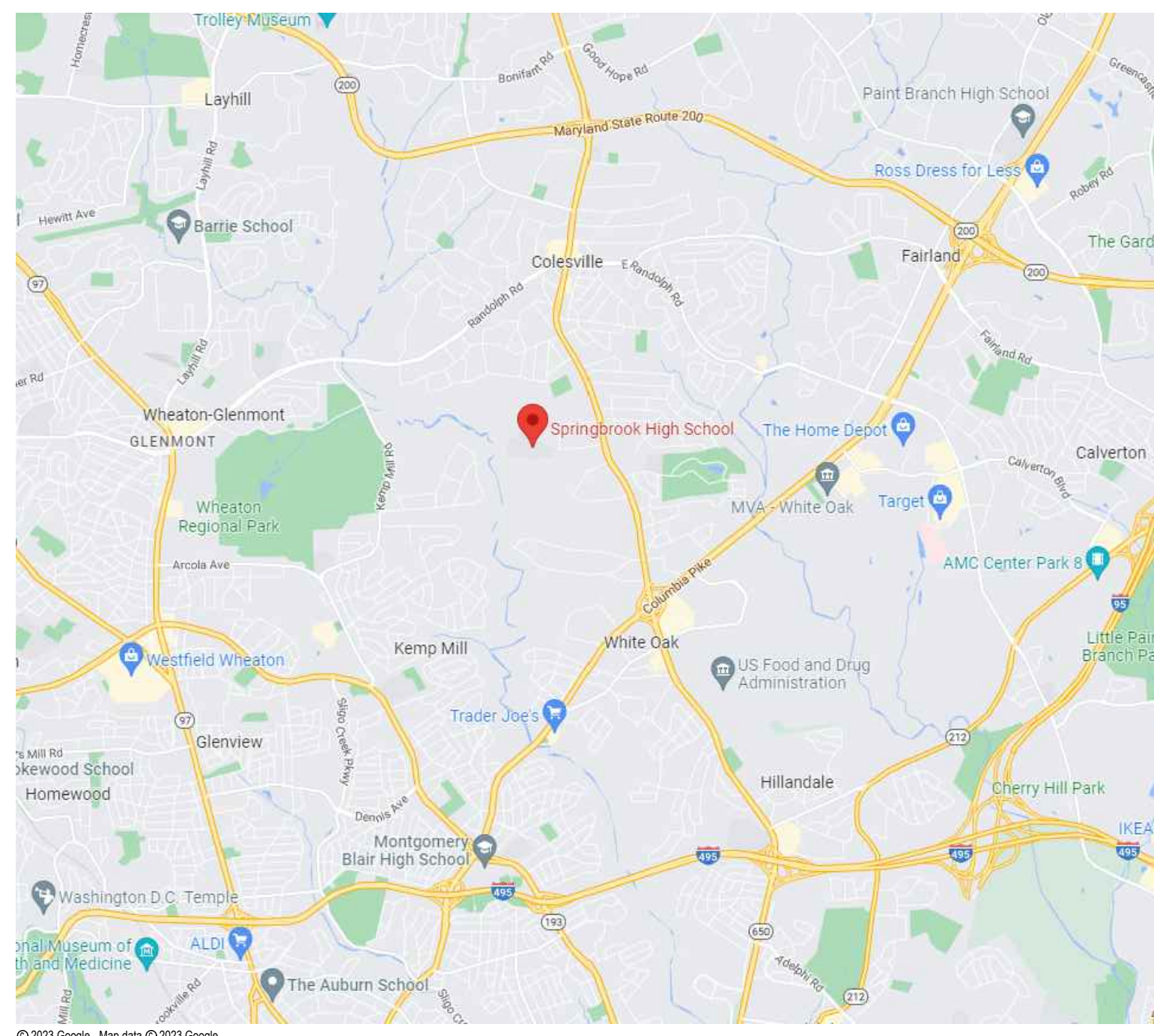
Montgomery County Public Schools

MECHANICAL AND ELECTRICAL ENGINEERS

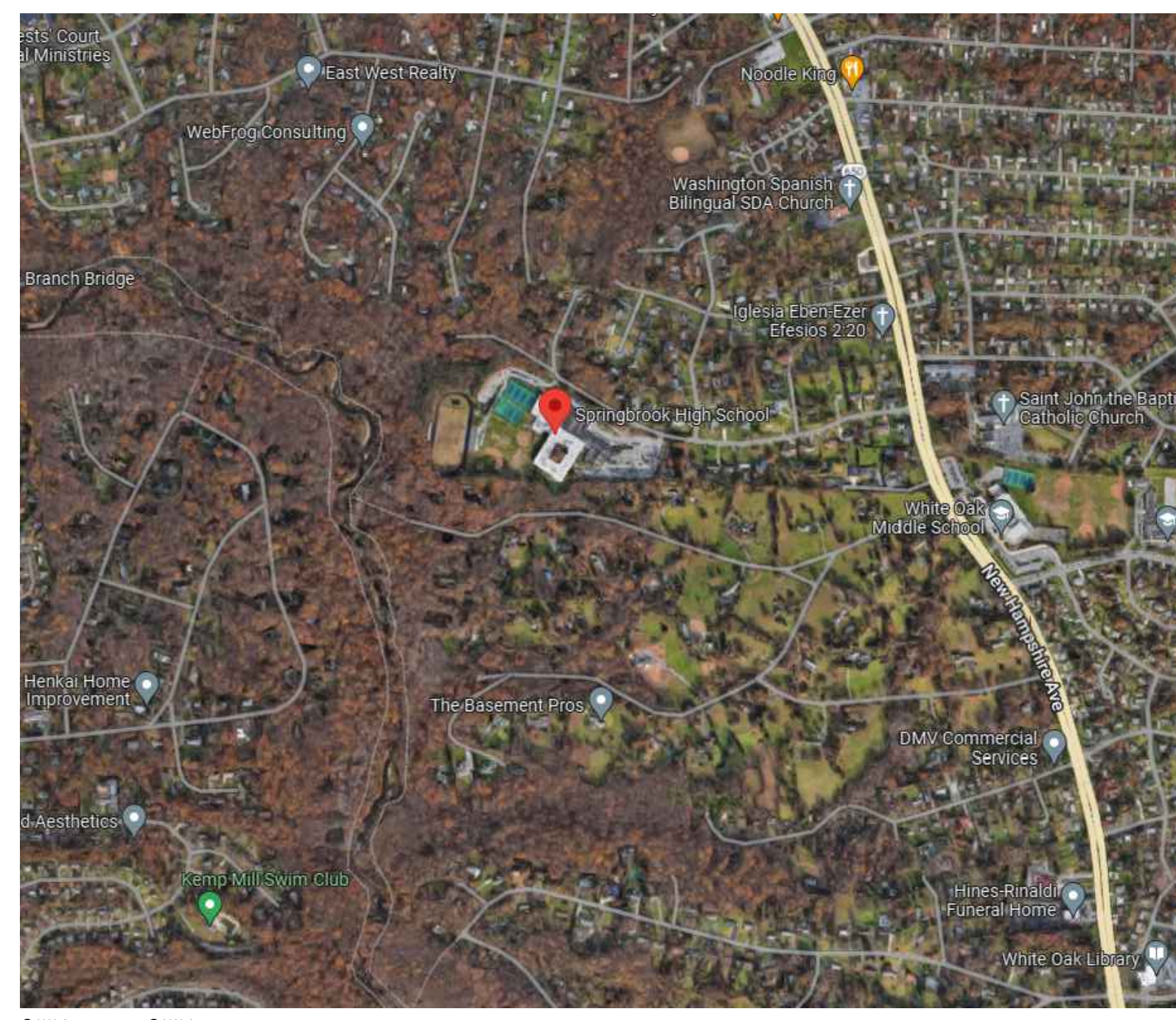
JAMES POSEY ASSOCIATES, INC.
11155 RED RUN BOULEVARD, SUITE 310
BALTIMORE, MARYLAND 21117
PHONE: 410.265.6100

GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
SPRINGBROOK HIGH SCHOOL
201 VALLEY BROOK DRIVE
SILVER SPRING, MD 20904
MONTGOMERY COUNTY PUBLIC SCHOOLS

VICINITY PLAN



AERIAL SITE PLAN

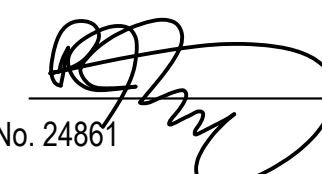


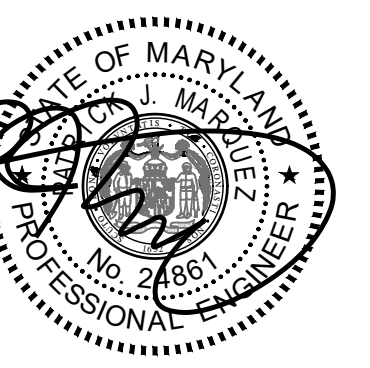
DRAWING INDEX

- T-1 TITLE SHEET
- CIVIL**
 - C0.01 COVER SHEET
 - C2.01 SITE PLAN
 - C2.11 DETAILS
- MECHANICAL**
 - M-1 DIAGRAMS, SYMBOLS AND ABBREVIATIONS
 - M-2 PART PLAN - FIRST FLOOR DEMOLITION
 - M-3 PART PLANS - FIRST FLOOR AND MEZZANINE DEMOLITION
 - M-4 PART PLAN - FIRST FLOOR NEW WORK
- ELECTRICAL**
 - E-0 SYMBOLS LIST, ABBREVIATIONS, DIAGRAMS, AND DETAILS
 - E-1 REFERENCE PLAN - LOWER LEVEL AND FIRST FLOOR
 - E-2 REFERENCE PLAN - SECOND AND THIRD FLOORS
 - E-3 PART FLOOR PLANS - DEMOLITION AND NEW WORK
 - E-4 PART FLOOR PLANS - DEMOLITION AND NEW WORK
 - E-5 PART FLOOR PLANS - DEMOLITION AND NEW WORK
 - E-6 PART FLOOR PLANS - DEMOLITION AND NEW WORK
 - E-7 PART FLOOR PLANS - DEMOLITION AND NEW WORK
 - E-8 PART FLOOR PLANS - DEMOLITION AND NEW WORK
 - E-9 POWER RISER DIAGRAMS
 - E-10 SCHEDULES

PROFESSIONAL CERTIFICATION

These contract documents for Springbrook High 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 State of Maryland.

06/20/23 (Date) 
Maryland Professional Engineer Registration No. 24861



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: 02-24-2024.

APPLICABLE CODES & STANDARDS

- 2018 IBC: INTERNATIONAL BUILDING CODE
- 2018 IMC: INTERNATIONAL MECHANICAL CODE
- 2018 IPC: INTERNATIONAL PLUMBING CODE WITH WSSC AMENDMENTS
- ASHRAE 90.1: ENERGY STANDARD FOR BUILDINGS EXCEPT LOW RISE RESIDENTIAL BUILDINGS.
- NEC 2017: NATIONAL ELECTRICAL CODE
- ASHRAE 2017-2020 HANDBOOKS.



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

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 GENERATOR.
 - * 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 AND PROPANE FUEL TANK.
 - * 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 INTERCOMMUNICATIONS/PUBLIC ADDRESS SYSTEM TO THE 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 ON DRAWINGS.
- THE SCOPE OF WORK INDICATED ON THIS SHEET IS INTENDED AS A BRIEF SUMMARY FOR GENERAL INFORMATION 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.

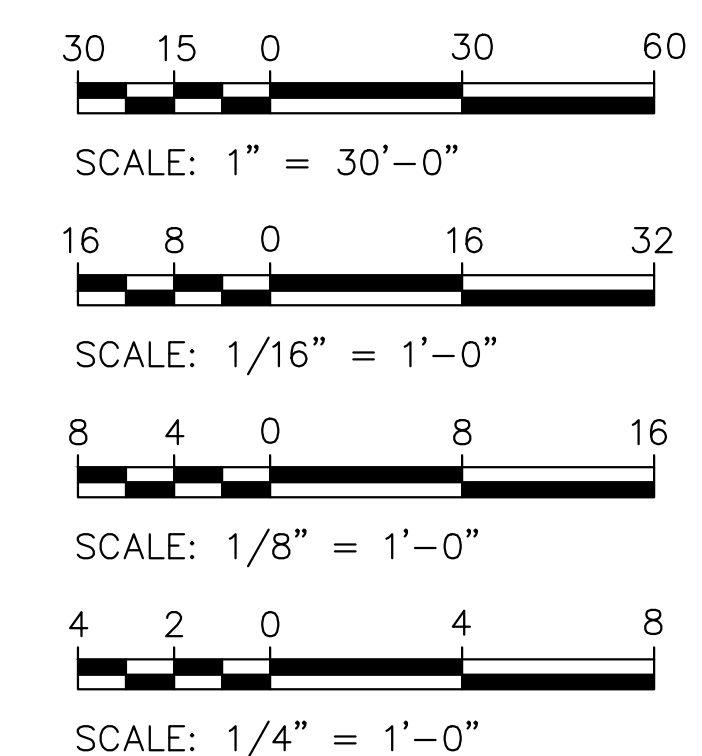
BOARD OF EDUCATION

DR. MONIFA B. MCKNIGHT	SUPERINTENDENT
GARY MOSESMAN	DIRECTOR I, DIVISION OF DESIGN & CONSTRUCTION
MS. BRENDA WOLFF	DISTRICT 5
MS. KARLA SILVESTRE	PRESIDENT / AT-LARGE
MS. GRACE RIVERA-OVEN	DISTRICT 1
MRS. SHEBRA L. EVANS	VICE PRESIDENT / DISTRICT 4
MS. LYNNE HARRIS	AT-LARGE
MS. JULIE YANG	DISTRICT 3
MRS. REBECCA SMONDROWSKI	DISTRICT 2
MR. ARVIN KIM	STUDENT MEMBER

CODE ANALYSIS

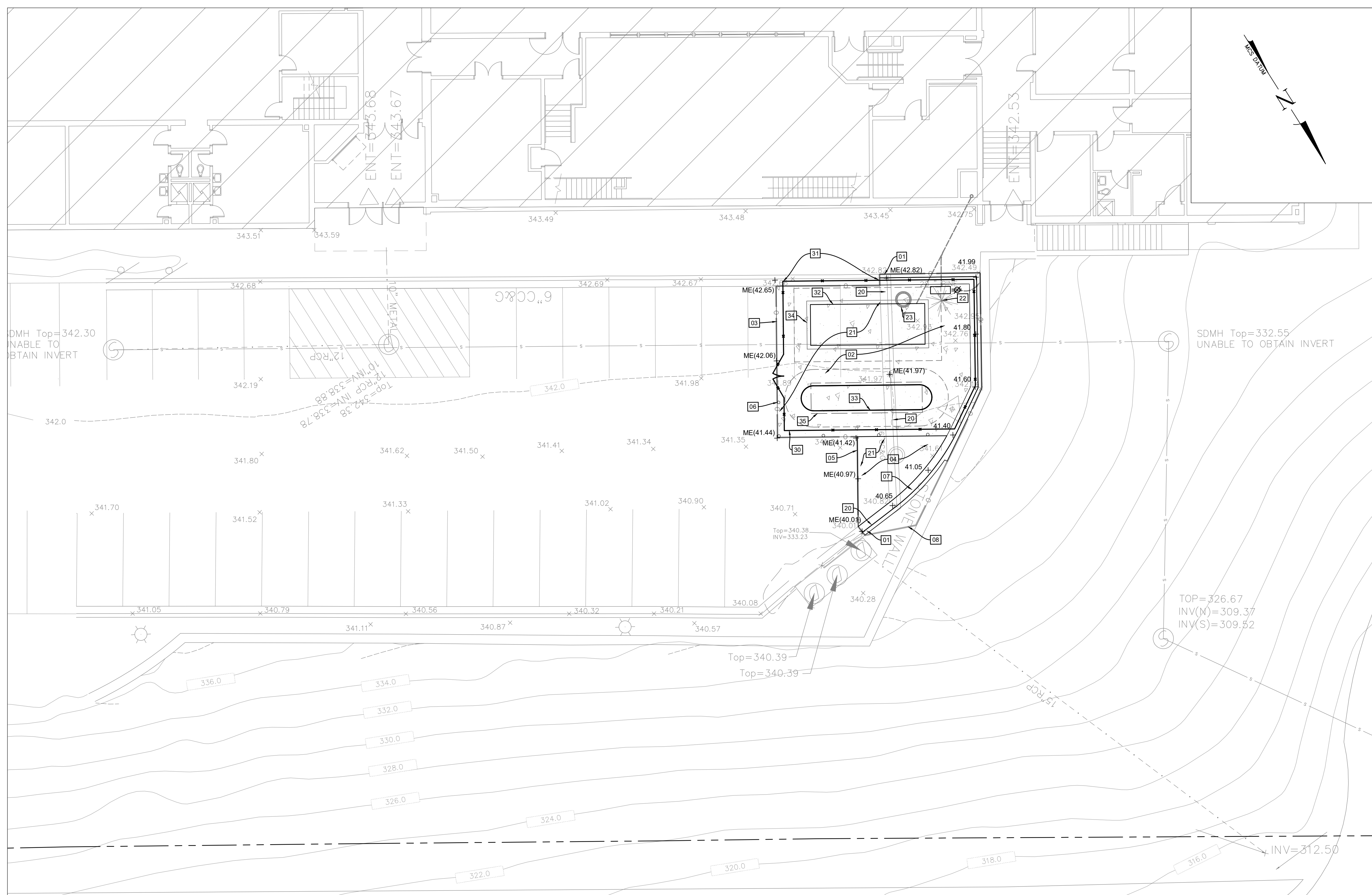
CODE ANALYSIS (FROM INTERNATIONAL BUILDING CODE/2018)		
	EXISTING BLDG	PROPOSED ALTERATION
IBC OCCUPANCY CLASSIFICATION	E	THE SCOPE OF THIS WORK IS TO REPLACE EXISTING GENERATOR AND REVISE NORMAL LIGHTING CIRCUITS IN TOILET ROOMS, BOILER ROOM AND ELEC ROOM TO EMERGENCY LIGHTING.
TYPE OF CONSTRUCTION	IIB	THERE IS NO INCREASE IN FLOOR AREA, NO SITE CHANGES, NO CHANGE IN CLASSIFICATION OR TYPE OF CONSTRUCTION.
NUMBER OF STORIES ABOVE GRADE	3	
HIGH RISE (Y/N)	N	
FIRE ALARM (Y/N)	Y	
FULLY SPRINKLERED (Y/N)	Y	
TOTAL BUILDING FLOOR AREA	305,006 SF	

GRAPHIC SCALES



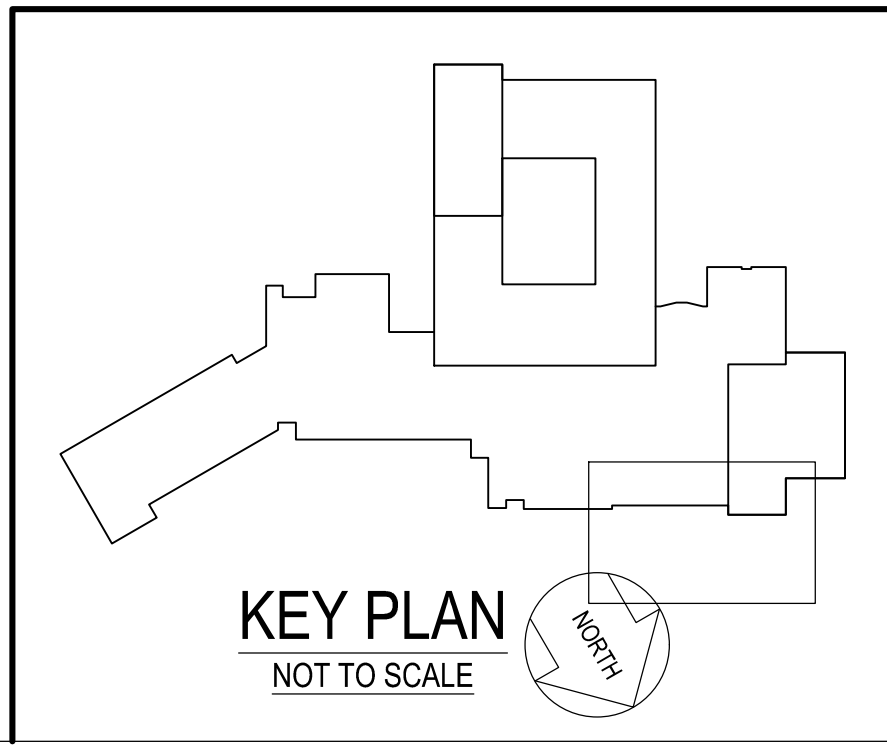
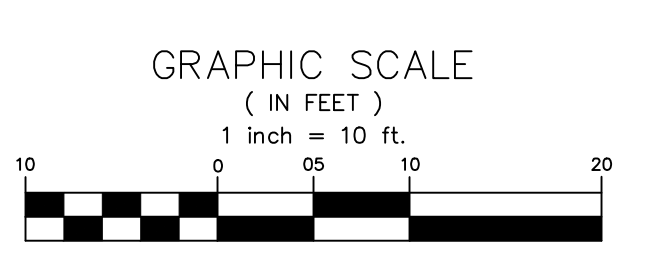
CAUTION: EXCEPT WHERE DIMENSIONS ARE INDICATED, GRAPHIC SCALE MUST BE USED.

Tag	Description	Date
	BID SET	06/20/23
PSC No.		
Scale	AS NOTED	
Project No.	7753-22	
Date	JUNE 20, 2023	
Drawing Title	TITLE SHEET	
Sheet No.	T-1	



KEY NOTES

- 01 NEW CURB & GUTTER (TYPICAL) - 1/C2.11
- 02 NEW CONCRETE PAVEMENT SECTION - 2/C2.11, 3/C2.11, 4/C2.11
- 03 NEW CONCRETE PAVING EDGE OF SLAB (TYPICAL) - 3/C2.11
- 04 NEW ASPHALT PAVEMENT SECTION - 5/C2.11
- 05 EXISTING PAVEMENT TIE IN - 7/C2.11
- 06 NEW UTILITY BOLLARD - 6/C2.11
- 07 40' RADIUS AT FACE OF CURB
- 08 LIMIT OF DISTURBANCE
- 20 EXISTING CURB AND GUTTER TO BE REMOVED
- 21 REMOVE ASPHALT TO BASE COURSE LAYER
- 22 EXISTING PINE TREE TO BE REMOVED
- 23 EXISTING GARBAGE BIN TO BE SALVAGED AND RELOCATED PER MCPS
- 30 NEW CHAIN LINK FENCE - SEE MEP
- 31 SURFACE MOUNT CHAIN LINK FENCE TO EXISTING CURB AND GUTTER.
- 32 NEW GENERATOR - SEE MEP
- 33 NEW 2,000 GAL ABOVE GROUND PROPANE TANK - SEE MEP
- 34 FLAT CONCRETE PAD FOR MOUNTING GENERATOR. SEE MEP
- 35 FLAT CONCRETE PAD FOR MOUNTING PROPANE TANK - SEE MEP



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 201 VALLEY BROOK DRIVE
 SILVER SPRING, MD 20904
 MONTGOMERY COUNTY PUBLIC SCHOOLS

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, Lic. No. 16905 Exp. Date: 04/21/2024



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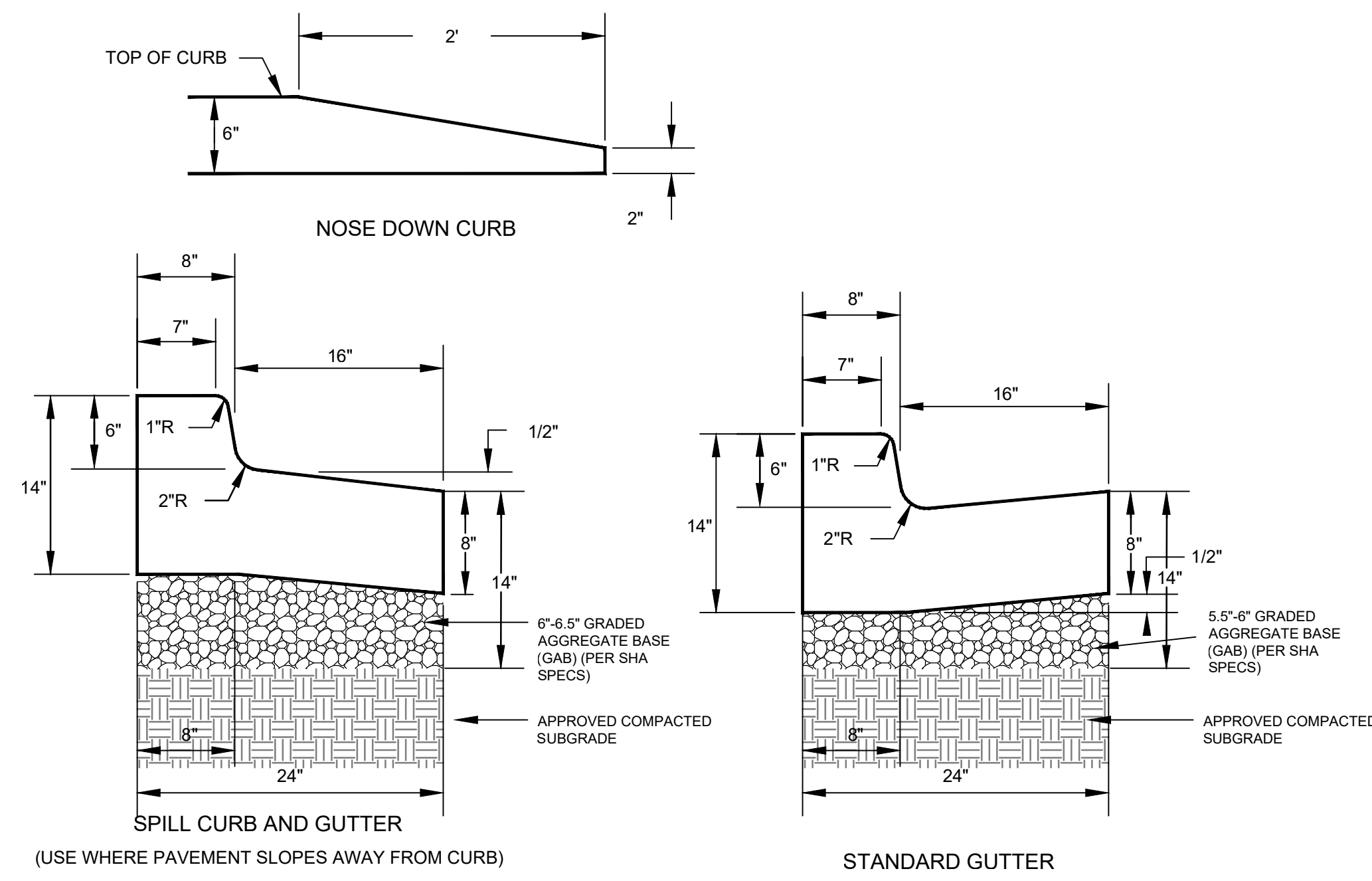
TAX MAP J0663 JW58C 21NE01
 5TH ELECTION DISTRICT MONTGOMERY COUNTY MARYLAND,
 LOT 7, BLOCK A, LOTS 11 THRU 26, BLK 1, SPRINGBROOK,
 EST.

PLAN PREPARED BY:
MHG
 CIVIL ENGINEERING
 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 LAND PLANNING
 9220 Wightman Road, Suite 120
 Montgomery Village, MD 20886
 Phone: 301.670.0840
 www.mhga.com

Tag	Description	Date
	BID SET	06/20/23

PSC No	
Scale	1" = 10'
Project No	7753-22
Date	JUNE 20, 2023
Drawing Title	SITE PLAN

Sheet No:
C2.01

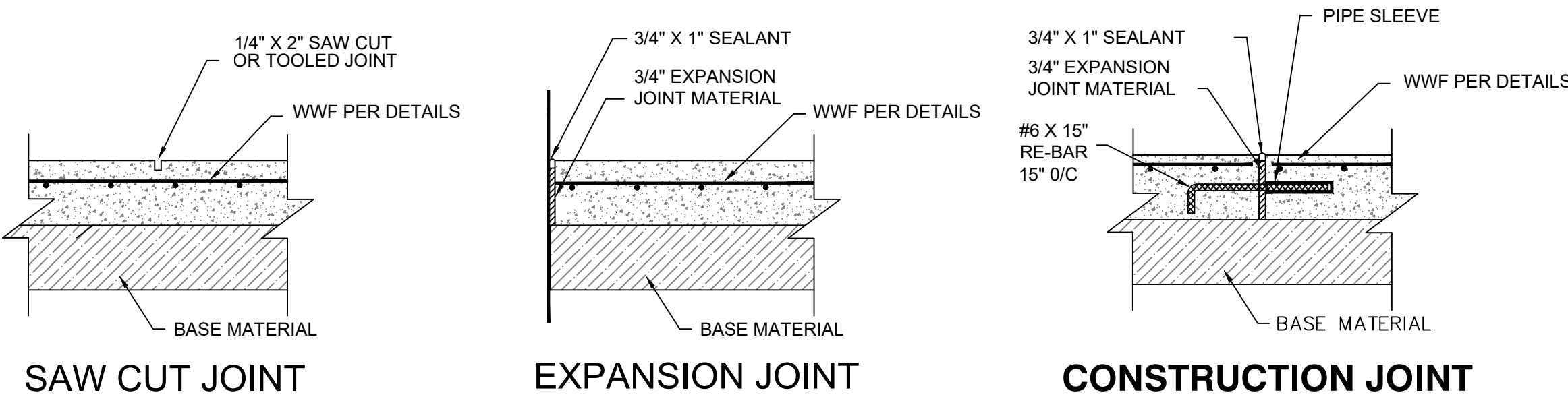


1 6" CONCRETE CURB AND GUTTER DETAILS

C2.11 NTS

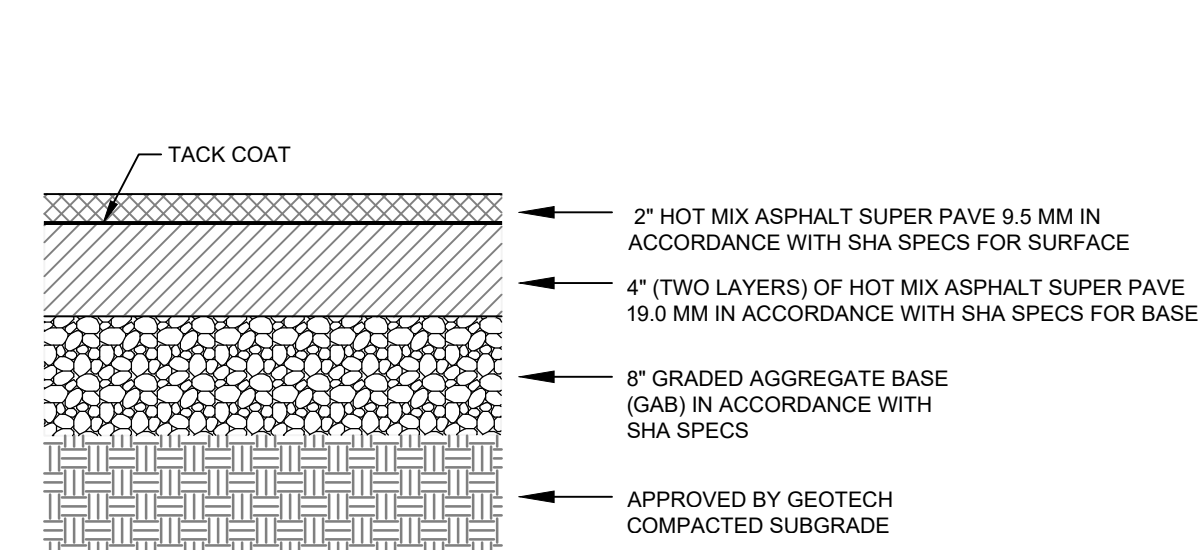
GENERAL NOTES

- USE SHA CONCRETE MIX #6 (4500 PSI).
- IN AREAS WHERE GUTTER ADJOINS CONCRETE PAVEMENT, PROVIDE 3/4" x 1 1/2" DOWEL RODS AT 12" O.C.
- PROVIDE COMPACTED AGGREGATE FILL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
- REFER TO MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR MATERIALS AND METHODS OF CONSTRUCTION.
- PROVIDE SMOOTH TRANSITION FROM STANDARD GUTTER TO SPILL GUTTER IN LOCATIONS SHOWN ON DRAWINGS AND IN ANY LOCATIONS WHERE PAVEMENT GRADING SLOPES AWAY FROM THE CURB.
- PROVIDE SMOOTH TRANSITION TO DERESSED CURBS AS NEEDED.
- AT LOCATIONS OF THE IN-TO EXISTING CURB, REPLACE CURB TO THE NEAREST JOINT.
- THE STANDARD DISTANCE BETWEEN JOINTS SHALL BE TEN FEET MAXIMUM & MINIMUM DISTANCES SHALL BE 13 FEET AND 5 FEET RESPECTIVELY. IN AREAS WHERE GUTTER ADJOINS CONCRETE PAVEMENT, JOINTS SHALL BE FORMED IN LINE WITH THE TRANSVERSE JOINTS IN PAVEMENT.
- EXPANSION JOINT MATERIAL SHALL BE 1/2" INCH PREFORMED CORK, TRIMMED AND SEALED WITH NON-STAINING TWO COMPONENT POLYSULFIDE OR POLYURETHANE ELASTOMETRIC TYPE SEALANT, COMPLYING WITH ASTM-C920. ALL OTHER JOINTS SHALL BE SEALED ACROSS THE ENTIRE JOINT PORTION AND UP THE FACE OF CURB.
- THE CURB AND GUTTER SECTION SHOWN IS NOT BASED ON A GEOTECHNICAL REPORT. THE CONTRACTOR MUST HAVE THE SOIL TESTED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER IS TO VERIFY THE ADEQUACY OF THE SECTION BASED ON THE SOIL TEST RESULTS AND THE PROPOSED USES.
- THE SUBBASE IS TO BE PREPARED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND RECOMMENDATIONS BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE SUBBASE IS TO BE TESTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER AFTER THE GRADING OPERATIONS ARE COMPLETE AND PRIOR TO CURB AND GUTTER CONSTRUCTION. THE GEOTECHNICAL ENGINEER IS TO PROVIDE WRITTEN CONFIRMATION TO THE OWNER AND CONTRACTOR THAT THE SUBBASE HAS BEEN PREPARED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND THAT THE PAVEMENT SECTION SHOWN HEREON IS SUITABLE FOR THE PROPOSED USE(S).



4 CONCRETE PAVING - JOINT DETAILS

C2.11 NTS



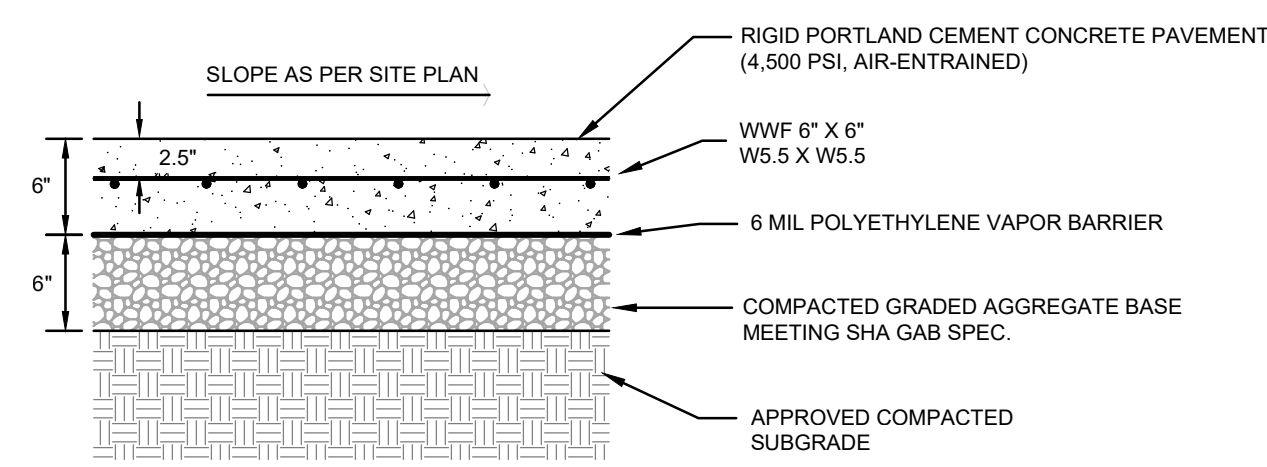
THE ASPHALT PAVING SECTION SHOWN IS THE MONTGOMERY COUNTY PUBLIC SCHOOLS - DIVISION OF CONSTRUCTION STANDARD & IS NOT BASED ON A GEOTECHNICAL REPORT. THE CONTRACTOR MUST HAVE THE SOIL TESTED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER IS TO VERIFY THE ADEQUACY OF THE SECTION BASED ON THE SOIL TEST RESULTS AND THE PROPOSED USES.

MACRIS, HENDRICKS, & GLASCOCK, P.A. MAKES NO GUARANTEE OR WARRANTY EITHER ASSUMED OR IMPLIED AS TO THE SUITABILITY OF THESE PAVING SECTIONS AND ASSUMES NO LIABILITY IN PROVIDING THE PAVING SECTIONS SHOWN ABOVE ON OUR DRAWINGS. THESE PAVING SECTIONS ARE PLACED HERE SOLELY FOR THE CONVENIENCE OF THE OWNER AND THE CONTRACTOR.

*THE SUBBASE IS TO BE PREPARED IN STRICT ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND RECOMMENDATIONS BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE SUBBASE IS TO BE TESTED BY A PROFESSIONAL GEOTECHNICAL ENGINEER AFTER THE GRADING OPERATIONS ARE COMPLETE AND PRIOR TO PAVEMENT CONSTRUCTION. THE GEOTECHNICAL ENGINEER IS TO PROVIDE WRITTEN CONFIRMATION TO THE OWNER AND CONTRACTOR THAT THE SUBBASE HAS BEEN PREPARED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND THAT THE PAVEMENT SECTION SHOWN HEREON IS SUITABLE FOR THE PROPOSED USE(S).

5 MCPs STANDARD ASPHALT PAVING SECTION

C2.11 NTS



CONTROL JOINTS (12-15' O.C.):
 1/4" x 1 1/2" SAW CUT OR TOOLED WITH SEALANT

EXPANSION/CONSTRUCTION JOINTS (36-45' O.C.):
 3/4" x 1 1/2" DOWELS 1/2" O.C. W/ 3/4" I.D. x 8" PLASTIC PIPE SLEEVE
 3/4" PREFORMED EXPANSION JOINT FILLER WITH 1/2" x 1" SEALANT

ISOLATION JOINTS:
 3/4" PREFORMED EXPANSION JOINT FILLER WITH 1/2" x 1" SEALANT
 REFER TO CURB & GUTTER DETAILS FOR TREATMENT ALONG GUTTER

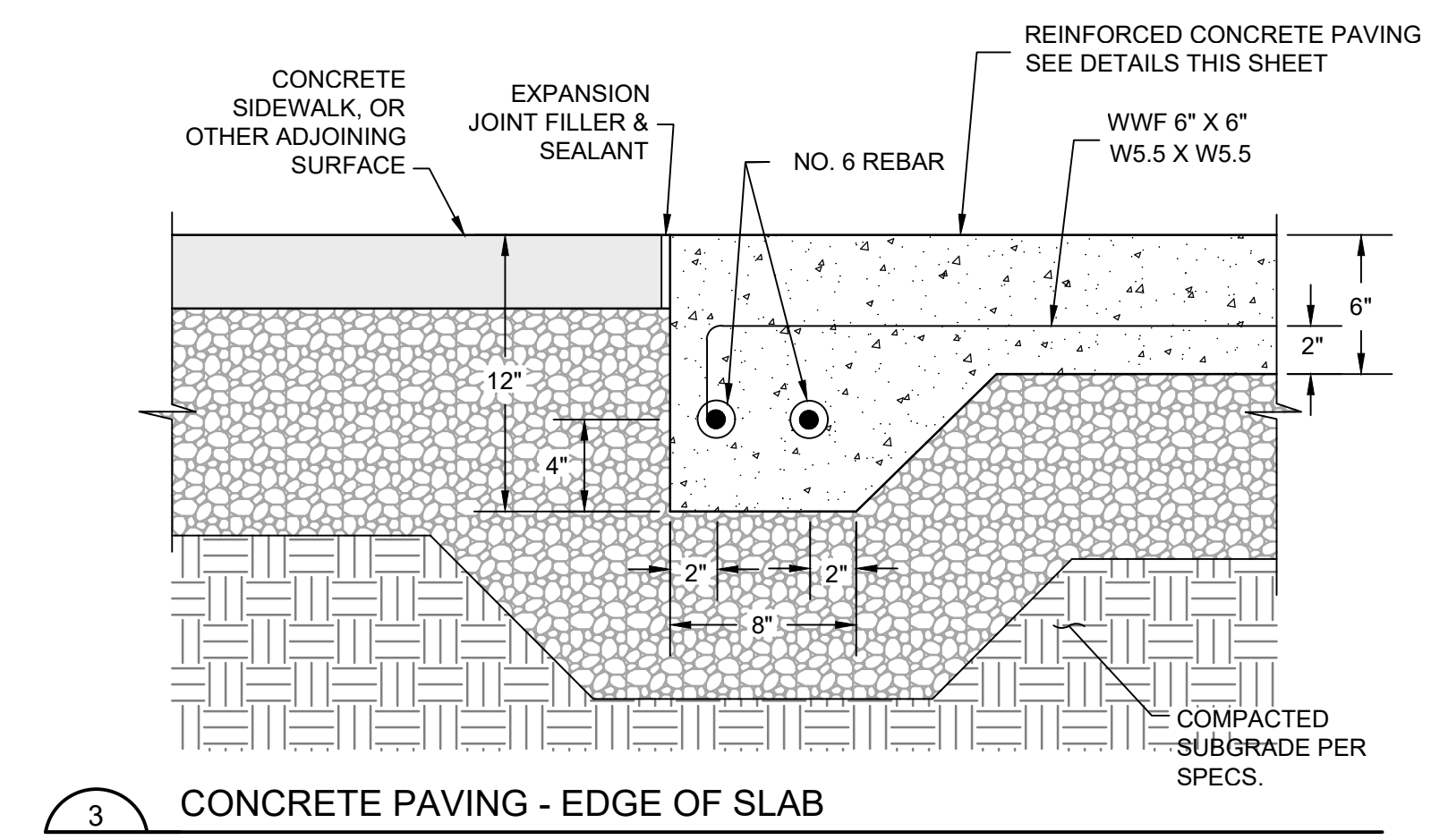
THE CONCRETE PAVING SECTION SHOWN IS NOT BASED ON A GEOTECHNICAL REPORT. THE CONTRACTOR MUST HAVE THE SOIL TESTED AT THE TIME OF CONSTRUCTION BY A PROFESSIONAL GEOTECHNICAL ENGINEER. THE GEOTECHNICAL ENGINEER IS TO VERIFY THE ADEQUACY OF THE SECTION BASED ON THE SOIL TEST RESULTS AND THE PROPOSED USES.

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2 MCPs STD. CONCRETE PAVING SECTION

C2.11 NTS 1. REFER TO 4/C2.11 FOR CONCRETE PAVING JOINT DETAILS.



3 CONCRETE PAVING - EDGE OF SLAB

C2.11 NTS

CONCRETE PAVING SPECIFICATIONS:

ALL CONCRETE PAVING WORK NOT SHOWN OR SPECIFIED SHALL COMPLY WITH THE LATEST EDITION OF SHA STANDARD SPECIFICATIONS, SECTION 520.

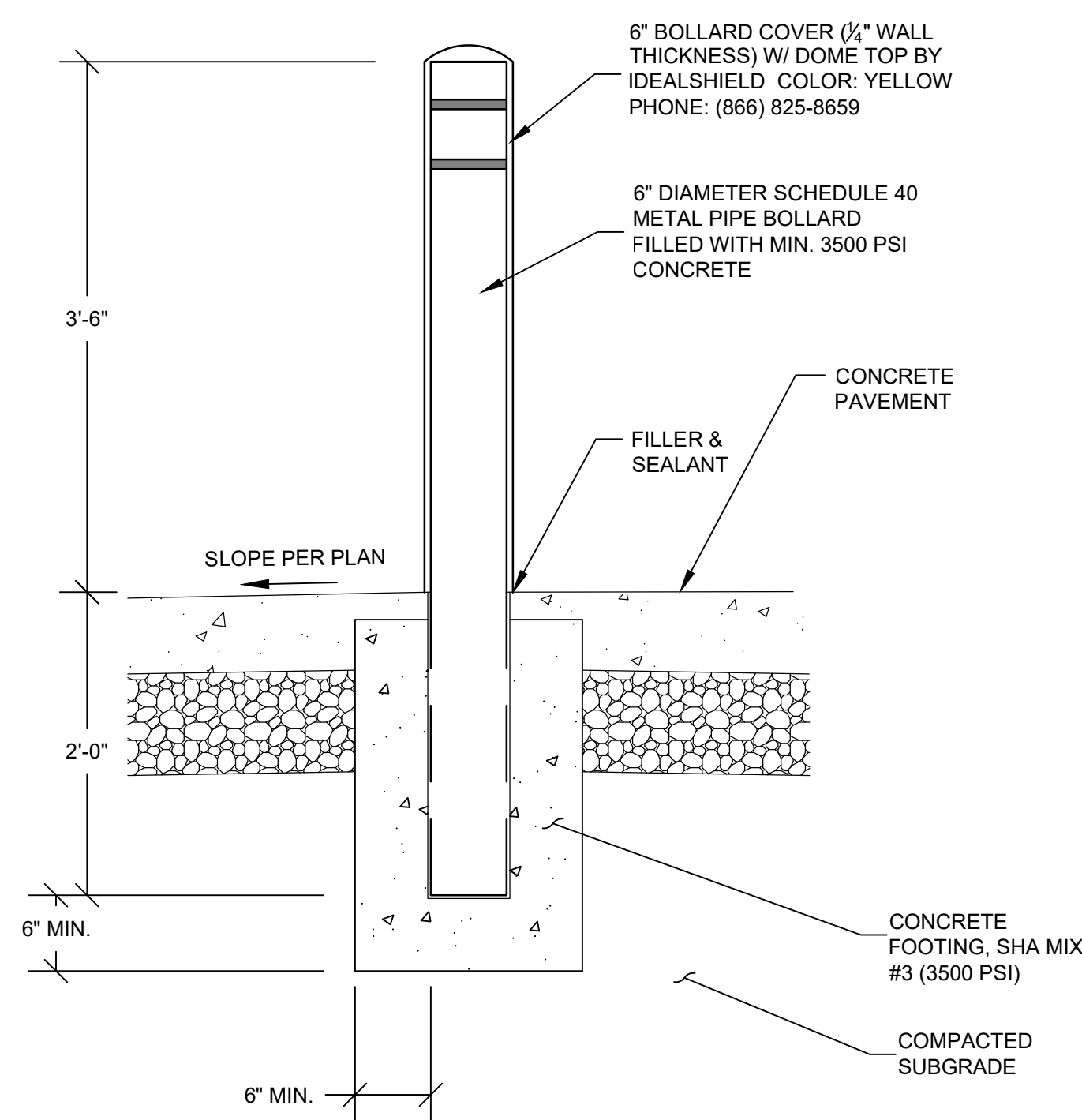
RIGID PORTLAND CEMENT CONCRETE, Fc=4,500 PSI, AIR ENTRAINED

FINAL SURFACE FINISH

AFTER THE CONCRETE HAS BEEN FLOATED AND THE SURFACE CORRECTED, IT SHALL BE FINISHED BY DRAGGING THE SURFACE IN A LONGITUDINAL DIRECTION WITH BURLAP. THIS DRAG SHALL BE WORKED WITH A LONGITUDINAL MOTION, CARE BEING USED NOT TO PERMIT THE EDGES TO DIG INTO THE SURFACE OF THE CONCRETE OR TO WORK THE CROWN OUT OF THE PAVEMENT.

AFTER THE WATER SHEEN HAS PRACTICALLY DISAPPEARED, BUT PRIOR TO ANY INITIAL SET, THE SURFACE SHALL BE GIVEN THE FINAL FINISH BY BROOMING. THE BROOM SHALL BE MOVED FROM ONE SIDE OF THE PAVEMENT TO THE OTHER WITHOUT INTERRUPTION. THE TRAVEL OF THE BROOM SHALL OVERLAP A SMALL AMOUNT. THE BROOMING SHALL BE PERPENDICULAR TO THE CENTER LINE OF THE PAVEMENT AND SO EXECUTED THAT THE CORRUGATIONS THUS PRODUCED WILL BE OF UNIFORM CHARACTER AND WIDTH AND NOT MORE THAN 1/8 INCH IN DEPTH. WITH THE RESULTING SURFACE FREE FROM OBJECTIONABLE DEPRESSIONS OR PROJECTIONS THAT MIGHT BE FORMED BY IMPROPER HANDLING. THE BROOMING MUST BE COMPLETED BEFORE THE EDGES OF THE PAVEMENT AND JOINTS ARE ROUNDED.

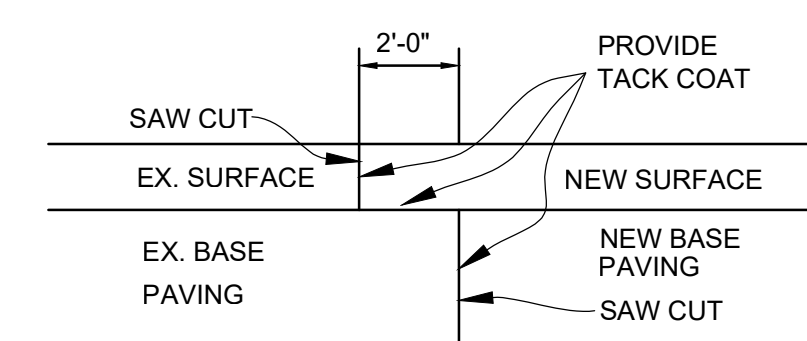
THE SURFACE OF THE PAVEMENT ADJACENT TO ALL CURBS, I.E., IN THE FLOW LINE OF THE GUTTER, SHALL BE TROWELED AND FINISHED WITH HAIR BROOMS.



6 UTILITY BOLLARD

C2.11 NTS

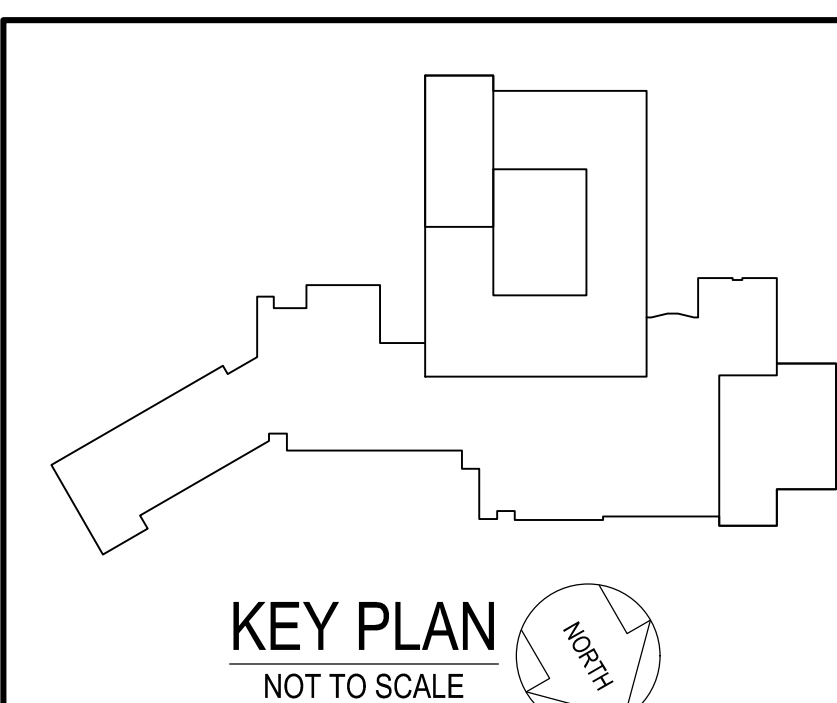
- NOTES:
- BOLLARDS TO BE PAINTED TRAFFIC YELLOW PER MDOT-SHA STANDARDS



IN PAVEMENT TIE-IN OR WIDENING AREAS, OVERLAP EX. BASE PAVING WITH NEW SURFACE PAVING AS SHOWN ABOVE.

7 EXISTING PAVEMENT TIE-IN DETAIL

C2.11 NTS



KEY PLAN
NOT TO SCALE

GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
SPRINGBROOK HIGH SCHOOL
 201 VALLEY BROOK DRIVE
 SILVER SPRING, MD 20904
 MONTGOMERY COUNTY PUBLIC SCHOOLS

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, Lic. No. 16905 Exp. Date: 04/21/2024

James Posey Associates
 Engineering Your Vision
 Mechanical & Electrical Consulting Engineers
 11155 Red Run Boulevard, Suite 310
 Baltimore, Maryland 21117
 tel 410-265-6100
 jamesposey.com

TAX MAP J0663 JWSSC 21HE01
 5TH ELECTION DISTRICT MONTGOMERY COUNTY MARYLAND
 LOT 7 BLOCK A LOT 11 TRILL 26 BLK 1, SPRINGBROOK, EST.

PLAN PREPARED BY:
MHG
 CIVIL ENGINEERING
 LAND SURVEYING
 LANDSCAPE ARCHITECTURE
 LAND PLANNING
 9220 Wightman Road, Suite 120
 Montgomery Village, MD 20886
 Phone: 301.670.0840
 www.mhga.com

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PSC No	
Scale	NTS
Project No	7753-22
Date	JUNE 20, 2023
Drawing Title	DETAILS

Sheet No:	
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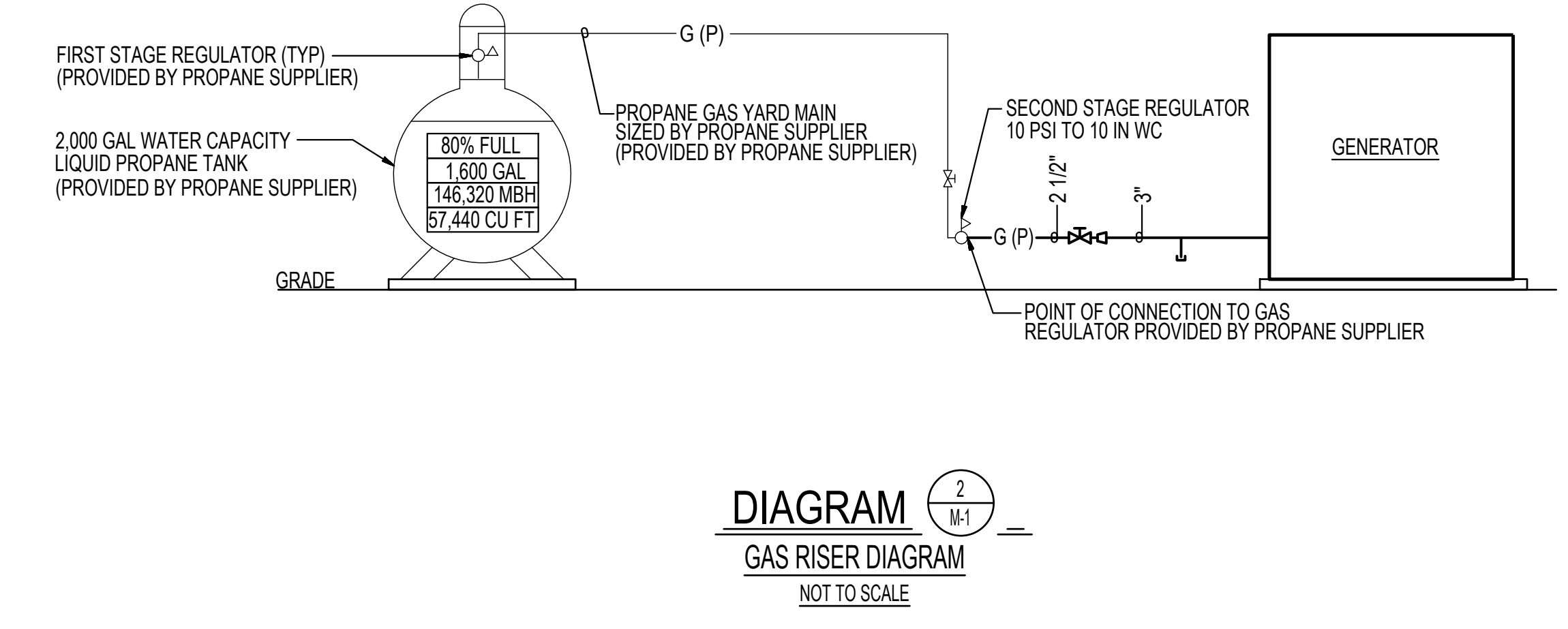
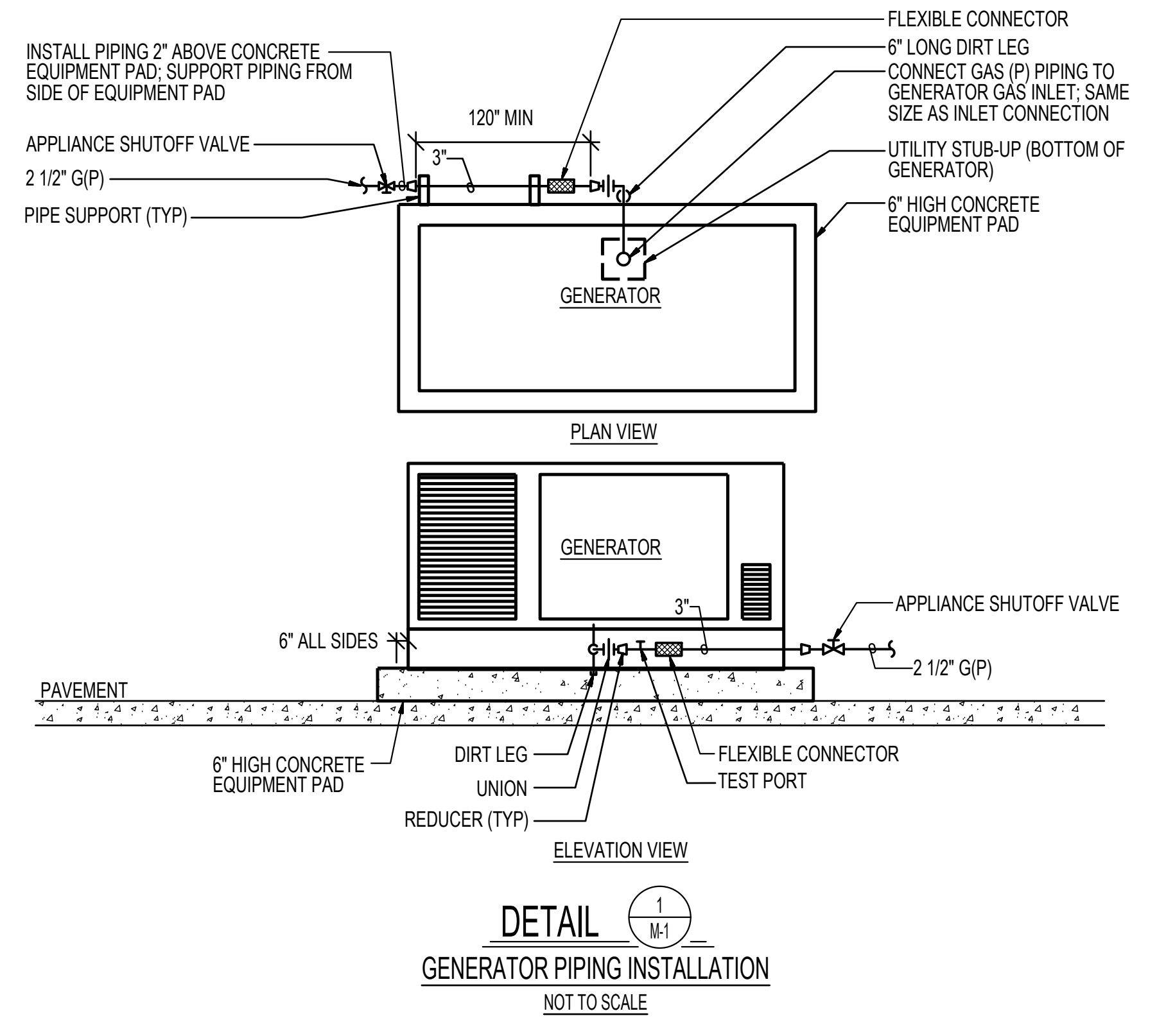
C2.11

MECHANICAL SYMBOLS AND ABBREVIATIONS

— G —	LOW PRESSURE GAS PIPE	∅	INDICATES DIAMETER
— G (2 PSI) —	MEDIUM PRESSURE GAS PIPE	A/D	ACCESS DOOR
— G(P) —	PROPANE GAS PIPE	AAV	AUTOMATIC AIR VENT
—	PIPE CAP OR PLUG	ABV	ABOVE
—	UNION	AFF	ABOVE FINISHED FLOOR
—	SHUT-OFF VALVE	BLDG	BUILDING
—	SOLENOID VALVE	BLW	BELOW
—	PRESSURE REDUCING / REGULATING VALVE	BTUH	BRITISH THERMAL UNITS PER HOUR
— (M) —	METER	CFH	CUBIC FEET PER HOUR
—	GAUGE COCK / TEST PORT	CFM	CUBIC FEET PER MINUTE
—	CONCENTRIC REDUCER	CLG	CEILING
—	ECCENTRIC REDUCER	CONC	CONCRETE
—	FLOW DIRECTION ARROW	CW	DOMESTIC COLD WATER PIPE
—	STRAINER	DIA	DIAMETER
●	POINT OF CONNECTION, NEW TO EXISTING	EA	EXHAUST AIR
⊙	DEMOLITION WORK TERMINATION POINT	ETR	EXISTING TO REMAIN
①	SYMBOL FOR SPECIFIC NOTE, NOTE APPLIES TO DRAWING ON WHICH IT OCCURS.	EX	EXISTING
③	DETAIL OR DIAGRAM NO. 3 SHOWN ON DRAWING M1	EXH	EXHAUST
		FL	FLOOR
		FT	FEET
		G	GAS PIPE
		GALV	GALVANIZED
		IN	INCH, INCHES
		MAX	MAXIMUM
		MBH	THOUSAND BTU'S PER HOUR
		MCPS	MONTGOMERY COUNTY PUBLIC SCHOOLS
		MECH	MECHANICAL
		MFR	MANUFACTURER
		MIN	MINIMUM
		NC	NORMALLY CLOSED
		NIC	NOT IN CONTRACT
		NO	NORMALLY OPEN
		OA	OUTDOOR AIR
		PSI	POUNDS PER SQUARE INCH
		RX	REMOVE EXISTING
		TYP	TYPICAL
		UON	UNLESS OTHERWISE NOTED

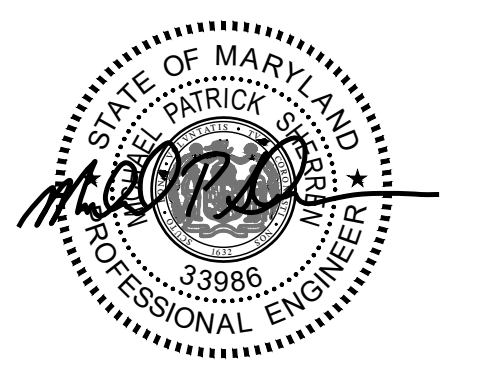
GAS PIPE SIZING SCHEDULE					
DESIG	MIN GAS PRESSURE (IN WC)	MAX GAS PRESSURE (IN WC)	INPUT (MBH)	INPUT (CFH)	NOTES
GENERATOR	7	11	2755	1095	1,2,3

NOTES:
 1. GAS PIPING SIZED PER THE IFGC 2018, CHAPTER 4 GAS PIPING INSTALLATIONS SECTION 402.4.1 LONGEST LENGTH METHOD AND TABLE 402.4(28).
 2. POINT OF DELIVERY TO THE FURTHEST APPLIANCE ON THE PIPING DISTRIBUTION SYSTEM IS 80 FEET.
 3. PIPING SIZED ON A TOTAL PRESSURE LOSS OF 0.5 IN WATER COLUMN.



- NOTES:
- SITE CONTRACTOR IS RESPONSIBLE FOR EXCAVATION OF SITE AS REQUIRED TO INSTALL PROPANE TANK AND ALL ACCESSORIES INCLUDING YARD SERVICE MAIN.
 - SITE CONTRACTOR SHALL COORDINATE WITH GENERAL CONTRACTOR AND PROPANE TANK SUPPLIER THE REQUIREMENTS FOR EXCAVATION.
 - YARD SERVICE MAIN SHALL BE BURIED MINIMUM 12" BELOW GRADE AT NON-TRAFFIC AREAS AND 18" BELOW GRADE AT TRAFFIC AREAS.

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 SILVER SPRING, MD 20904
 MONTGOMERY COUNTY PUBLIC SCHOOLS

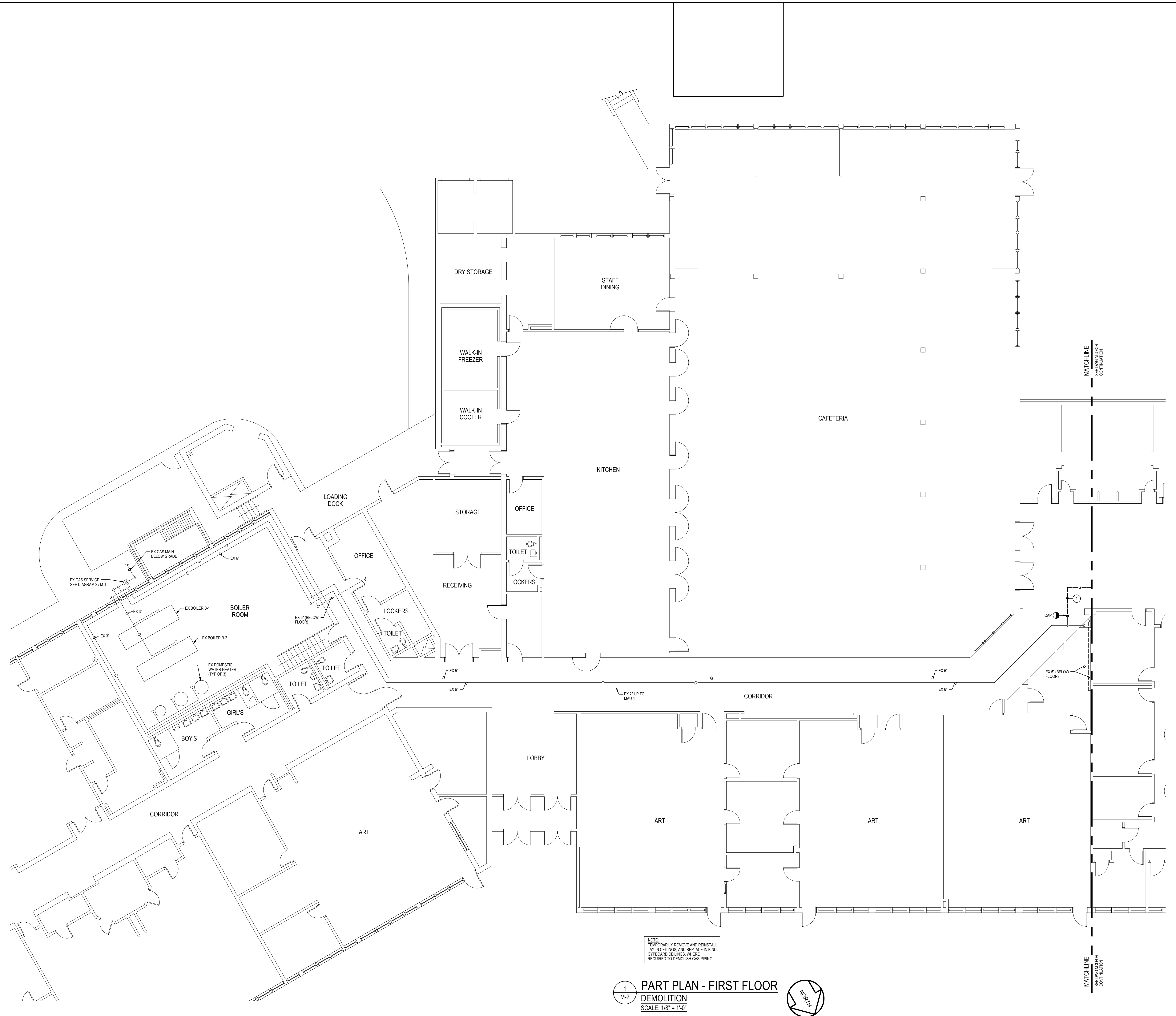


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 Expiration date: 01-16-2025.

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 tel 410-265-6100
 jamesposey.com

Tag	Description	Date
	BID SET	06/20/23
PSC No		
Scale	AS NOTED	
Project No	7753-22	
Date	JUNE 20, 2023	
Drawing Title	DIAGRAMS, SYMBOLS AND ABBREVIATIONS	

Sheet No:
M-1

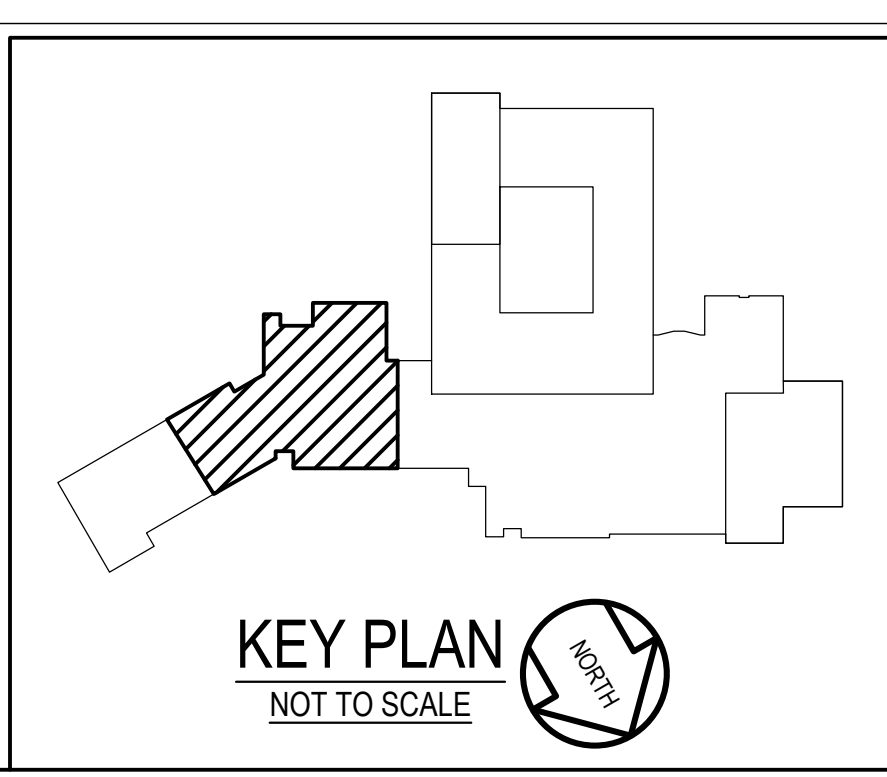
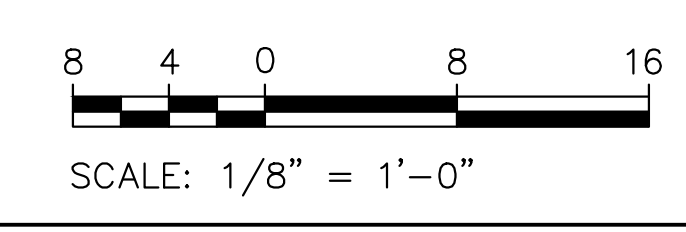


- GENERAL NOTES:**
- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE 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. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY MECHANICAL AND RELATED ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
 - C. UNLESS OTHERWISE NOTED, MECHANICAL/PLUMBING ITEMS SHOWN HEAVY DASHED (---) SHALL BE REMOVED AND MECHANICAL/PLUMBING ITEMS SHOWN LIGHT SOLID (—) SHALL REMAIN.
 - D. NEW GENERATOR AND GAS PIPING TO BE INSTALLED BEFORE EXISTING IS REMOVED. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL PHASING INFORMATION.
- SPECIFIC NOTES:**
- 1. EX 4" NATURAL GAS PIPING. CONTRACTOR TO CONFIRM THAT 4" NATURAL GAS PIPING DOES NOT SERVE OTHER FIXTURES OR APPLIANCES. IF DISCOVERED, CONTRACTOR IS TO INFORM ENGINEER BY SUBMITTING AN RFI AND AWAIT FURTHER INSTRUCTION BEFORE CONTINUING WORK ON NATURAL GAS PIPING.

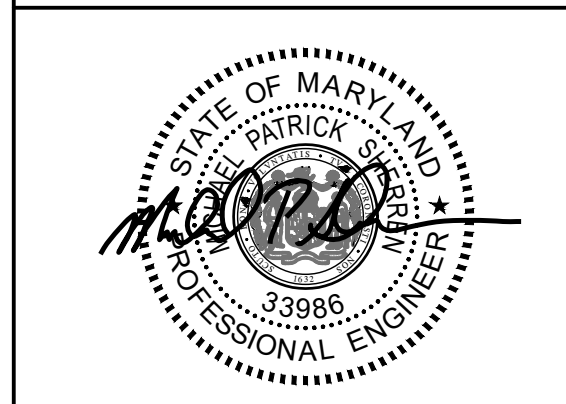
NOTE:
TEMPORARILY REMOVE AND REINSTALL LAY-IN CEILINGS AND REPLACE IN KIND GYPSOBOARD CEILINGS WHERE REQUIRED TO DEMOLISH GAS PIPING.

1
M-2

PART PLAN - FIRST FLOOR
DEMOLITION
SCALE: 1/8" = 1'-0"



GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
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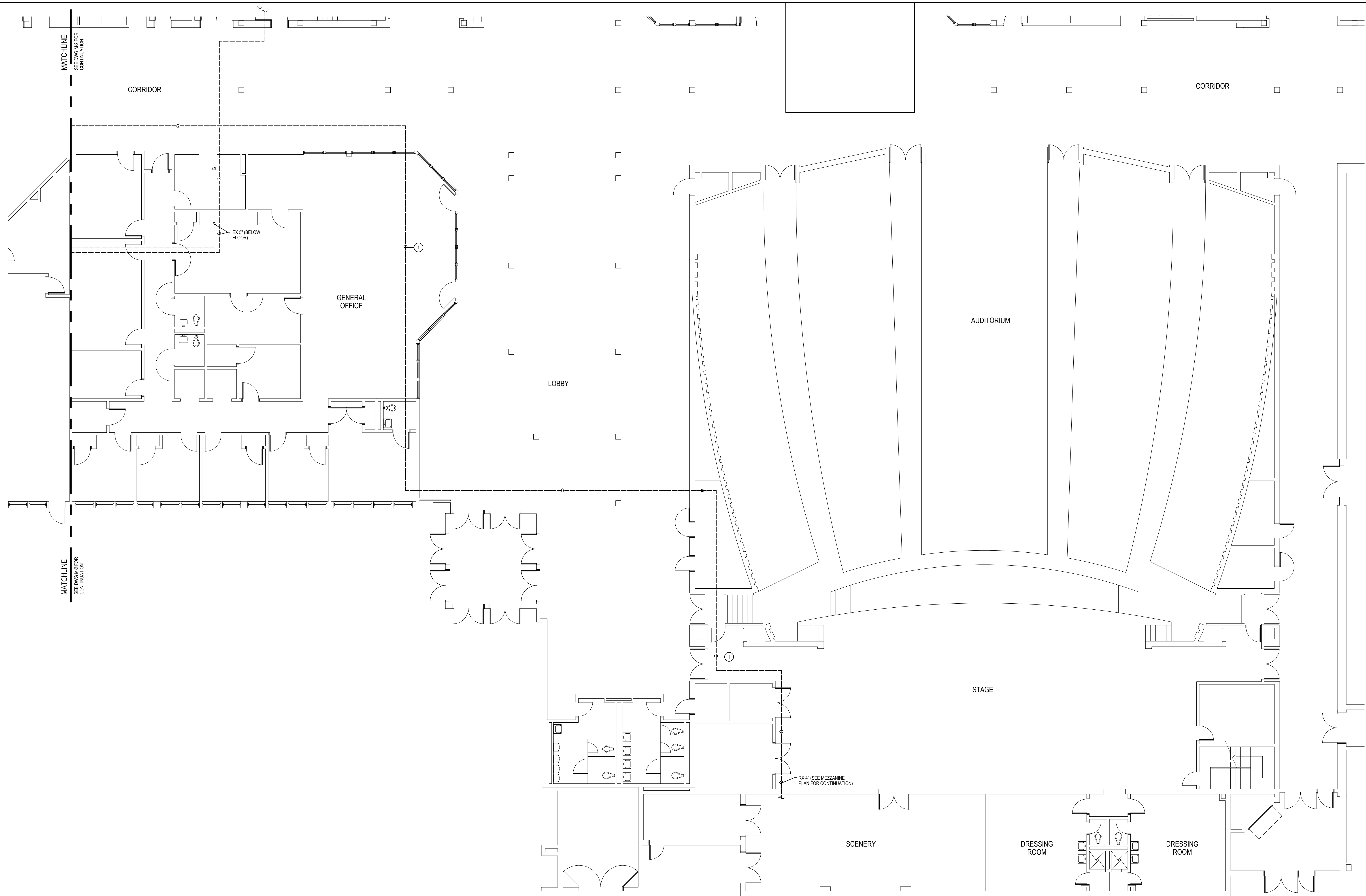
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PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023
Drawing Title	PART PLAN - FIRST FLOOR DEMOLITION

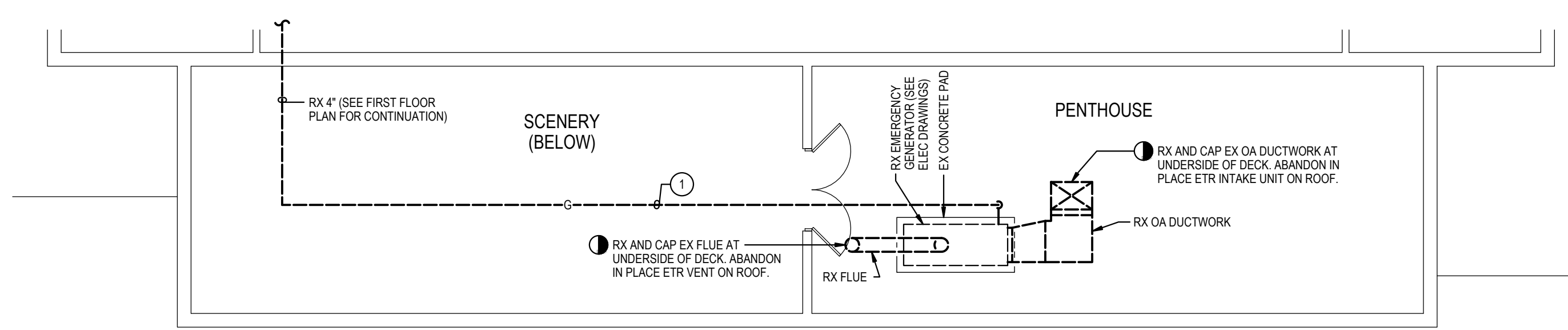
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M-2



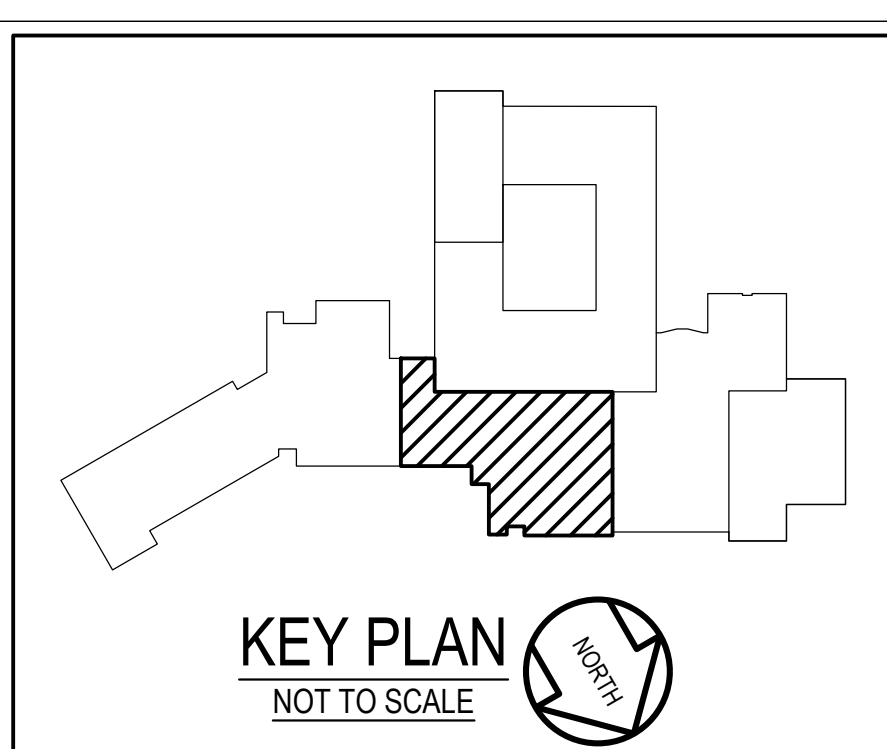
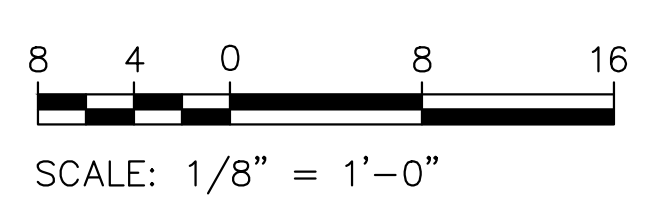
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 - B. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY MECHANICAL AND RELATED ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
 - C. UNLESS OTHERWISE NOTED, MECHANICAL/PLUMBING ITEMS SHOWN HEAVY DASHED (---) SHALL BE REMOVED AND MECHANICAL/PLUMBING ITEMS SHOWN LIGHT SOLID (—) SHALL REMAIN.
 - D. NEW GENERATOR AND GAS PIPING TO BE INSTALLED BEFORE EXISTING IS REMOVED. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL PHASING INFORMATION.
- SPECIFIC NOTES:**
- ① RX 4" NATURAL GAS PIPING. CONTRACTOR TO CONFIRM THAT 4" NATURAL GAS PIPING DOES NOT SERVE OTHER FIXTURES OR APPLIANCES. IF DISCOVERED, CONTRACTOR IS TO INFORM ENGINEER BY SUBMITTING AN RFI AND AWAIT FURTHER INSTRUCTION BEFORE CONTINUING WORK ON NATURAL GAS PIPING.

NOTE:
TEMPORARILY REMOVE AND REINSTALL LAY-IN CEILINGS AND REPLACE IN KIND CYBERBOARD CEILINGS, WHERE REQUIRED TO DEMOLISH GAS PIPING.

1
M-3
PART PLAN - FIRST FLOOR
DEMOLITION
SCALE: 1/8" = 1'-0"



2
M-3
PART PLAN - MEZZANINE
DEMOLITION
SCALE: 1/8" = 1'-0"



GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
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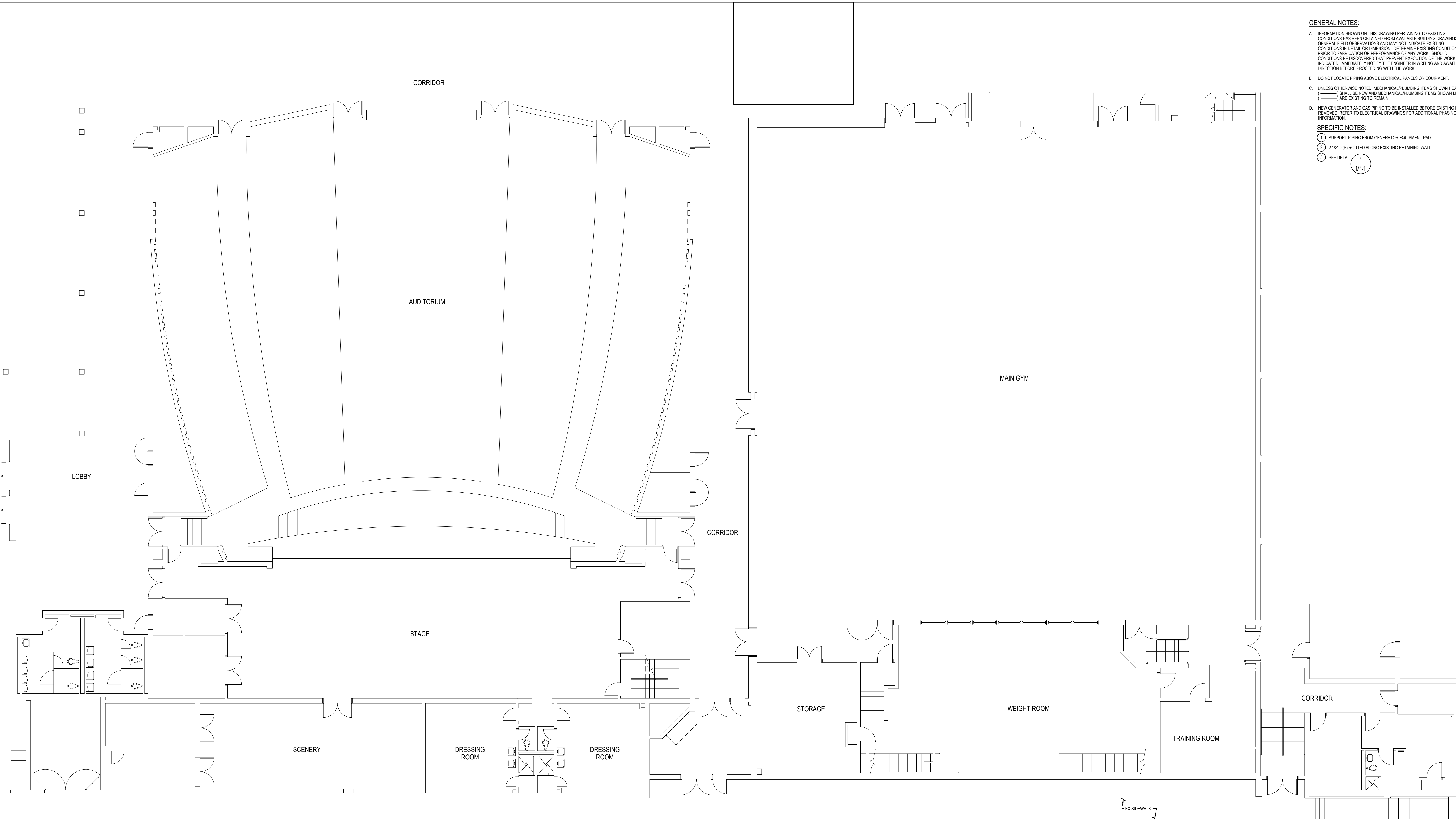
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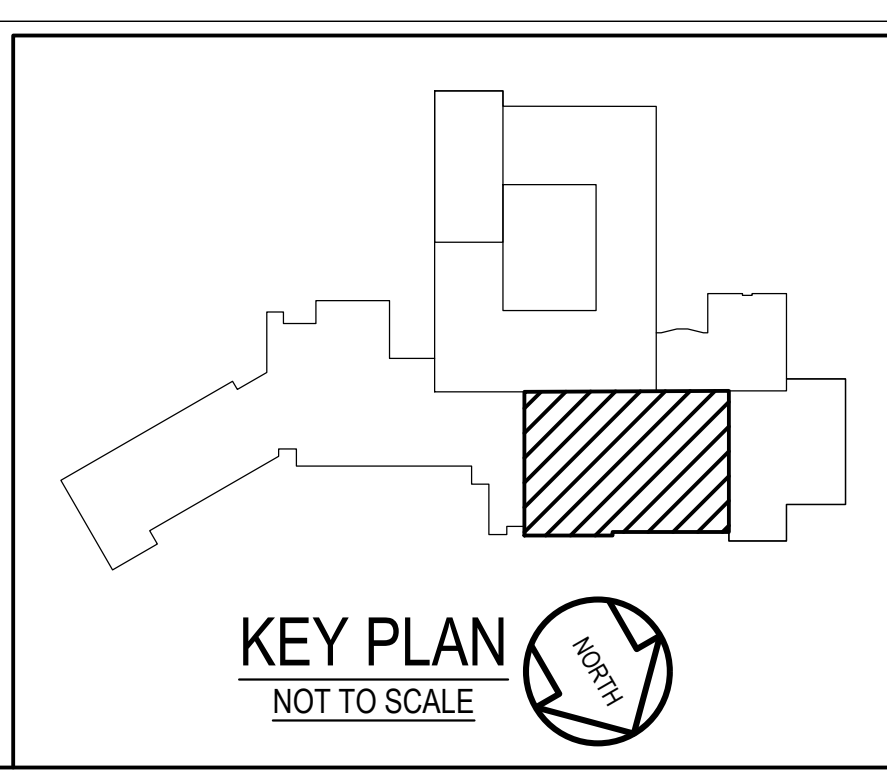
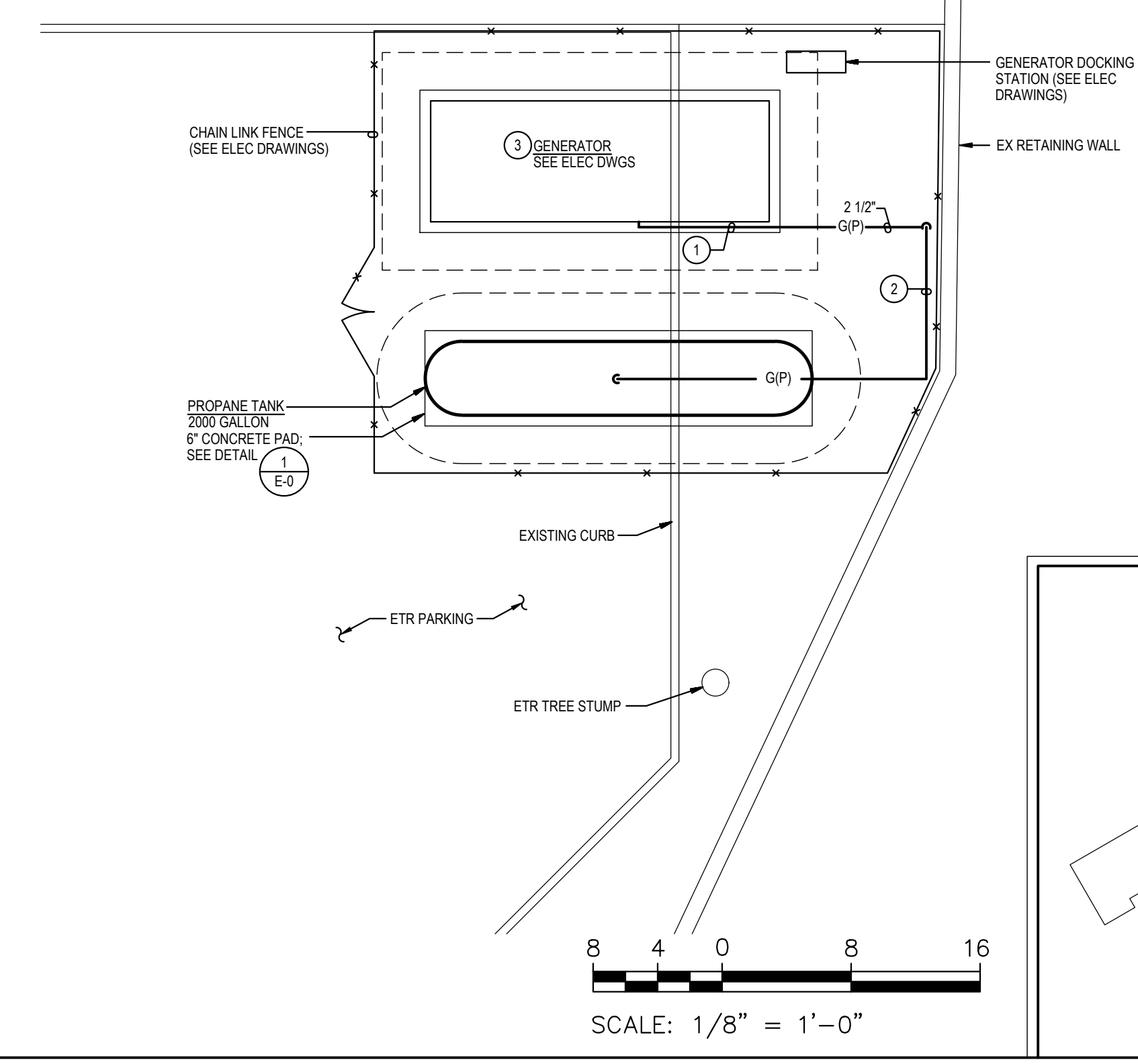
Drawing Title
PART PLANS - FIRST FLOOR AND MEZZANINE DEMOLITION

Sheet No:
M-3

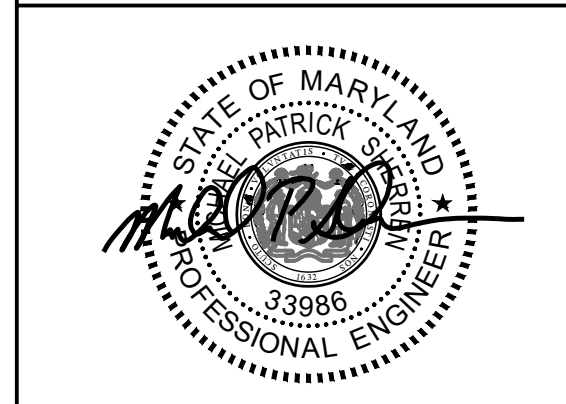


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 - B. DO NOT LOCATE PIPING ABOVE ELECTRICAL PANELS OR EQUIPMENT.
 - C. UNLESS OTHERWISE NOTED, MECHANICAL/PLUMBING ITEMS SHOWN HEAVY SHALL BE NEW AND MECHANICAL/PLUMBING ITEMS SHOWN LIGHT ARE EXISTING TO REMAIN.
 - D. NEW GENERATOR AND GAS PIPING TO BE INSTALLED BEFORE EXISTING IS REMOVED. REFER TO ELECTRICAL DRAWINGS FOR ADDITIONAL PHASING INFORMATION.
- SPECIFIC NOTES:**
- 1 SUPPORT PIPING FROM GENERATOR EQUIPMENT PAD.
 - 2 2 1/2" G/P/ ROUTED ALONG EXISTING RETAINING WALL.
 - 3 SEE DETAIL 1

1 M-4 PART PLAN - FIRST FLOOR
NEW WORK
SCALE: 1/8" = 1'-0"



GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
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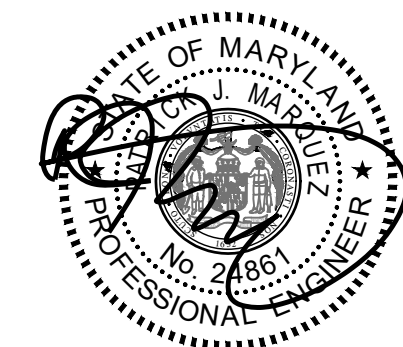
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Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023
Drawing Title	PART PLAN - FIRST FLOOR NEW WORK

Sheet No: **M-4**

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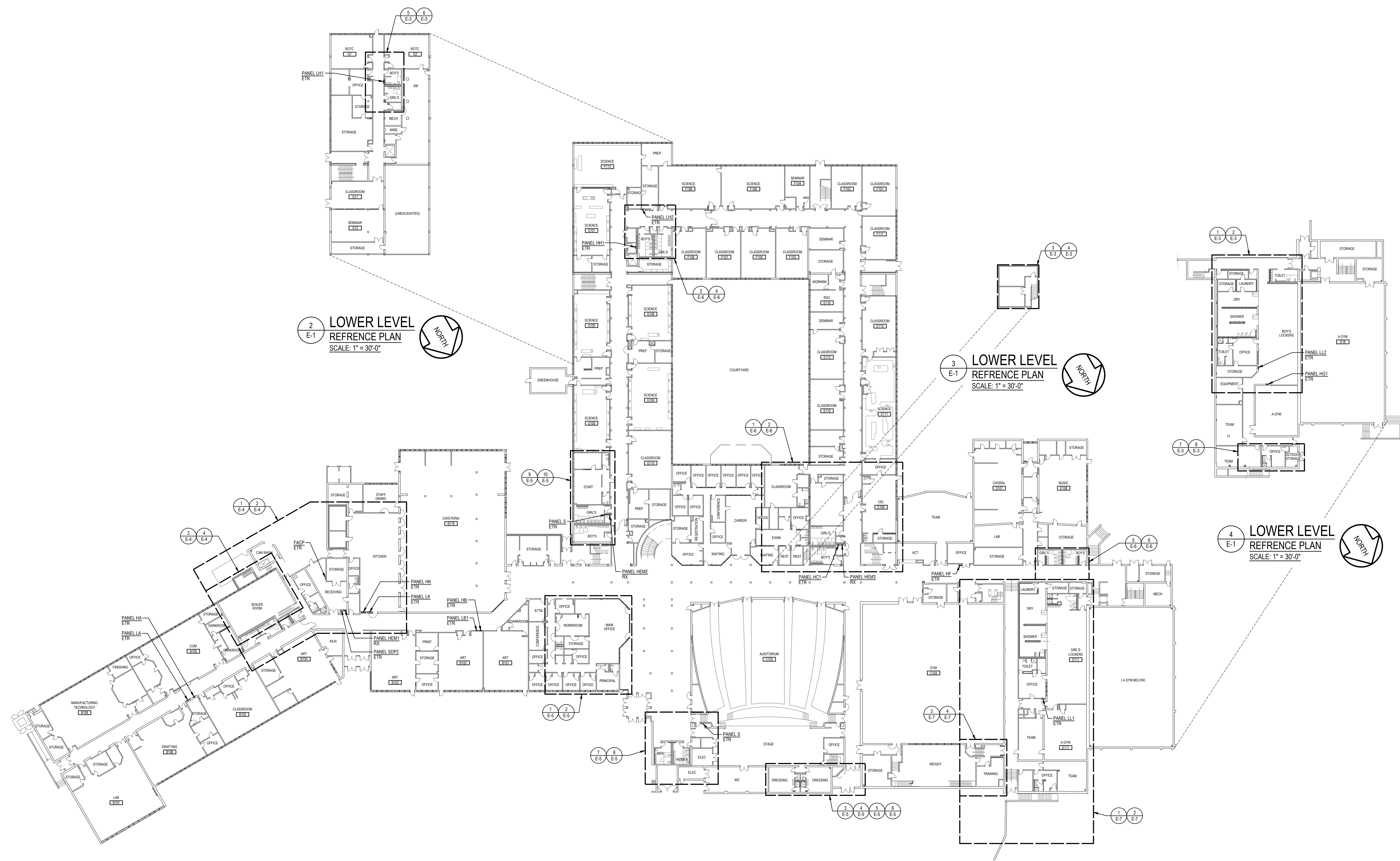
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PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023

Drawing Title
**REFERENCE PLAN
 LOWER LEVEL AND
 FIRST FLOOR**

Sheet No:
E-1

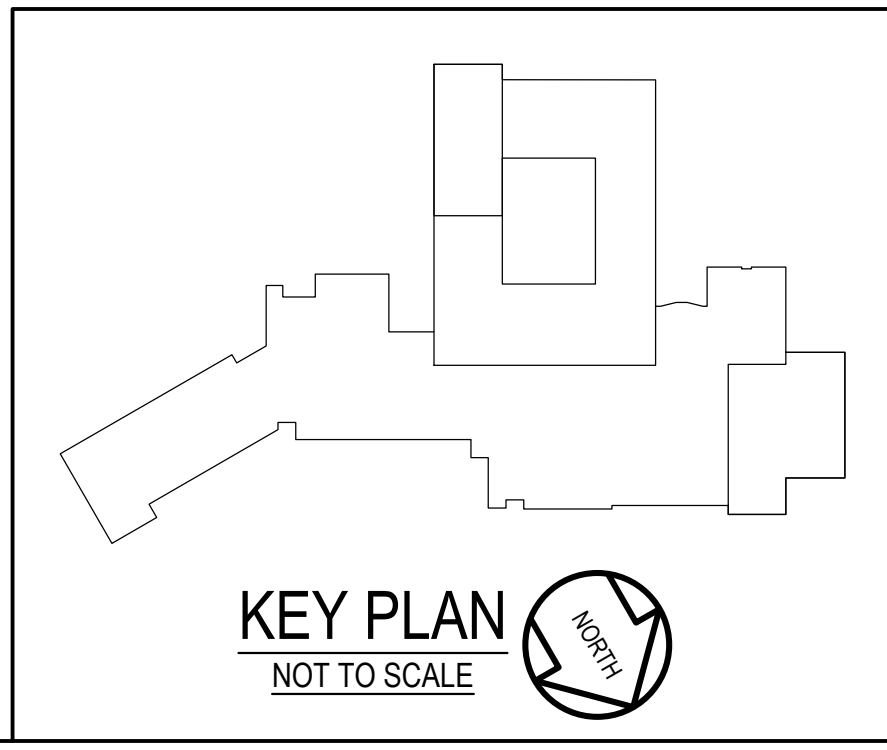
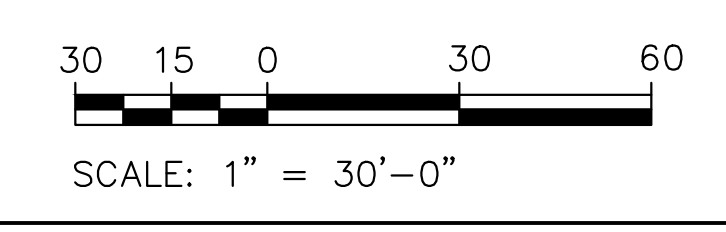


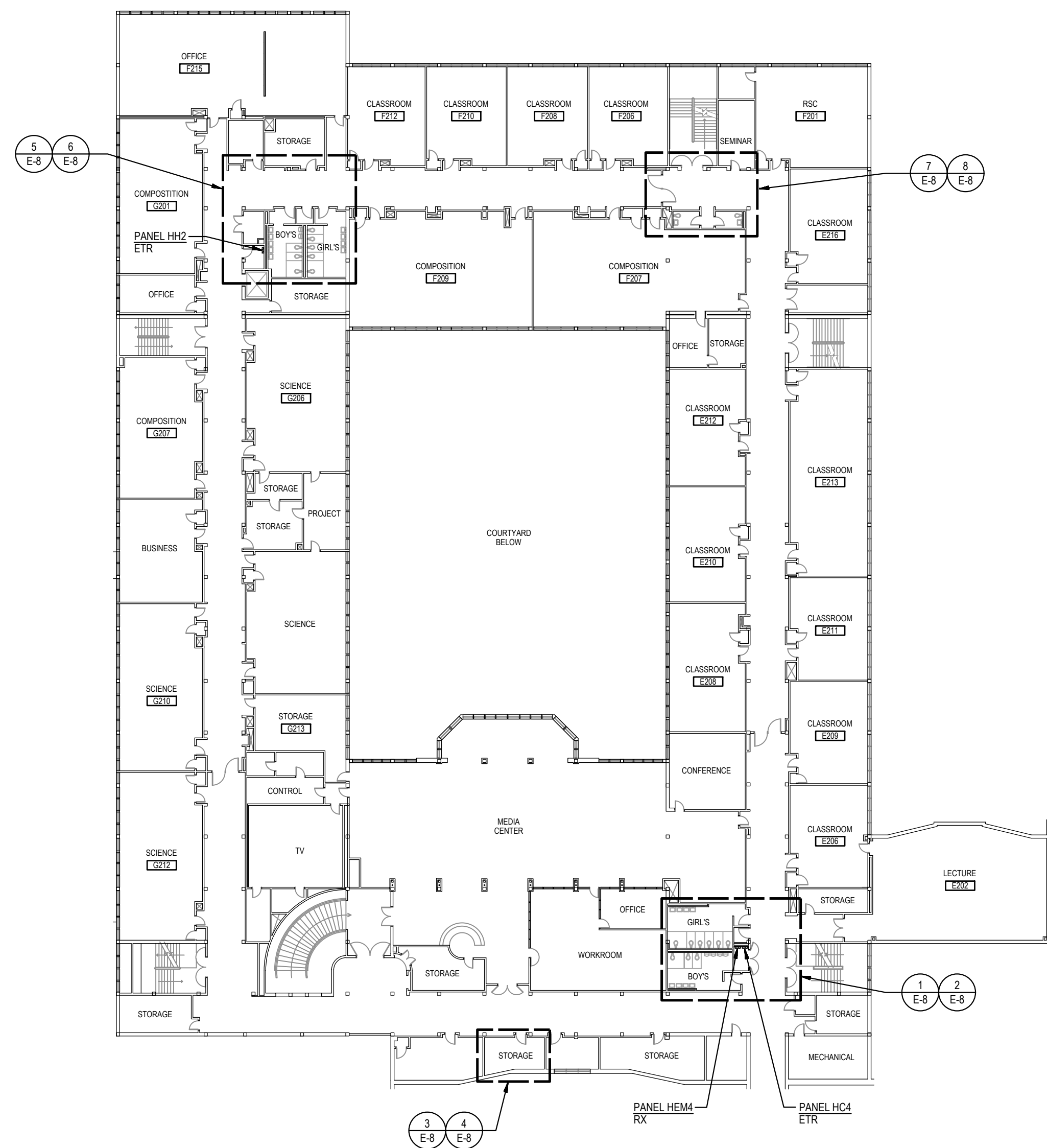
2 LOWER LEVEL REFERENCE PLAN
 SCALE: 1" = 30'-0"
 NORTH

3 LOWER LEVEL REFERENCE PLAN
 SCALE: 1" = 30'-0"
 NORTH

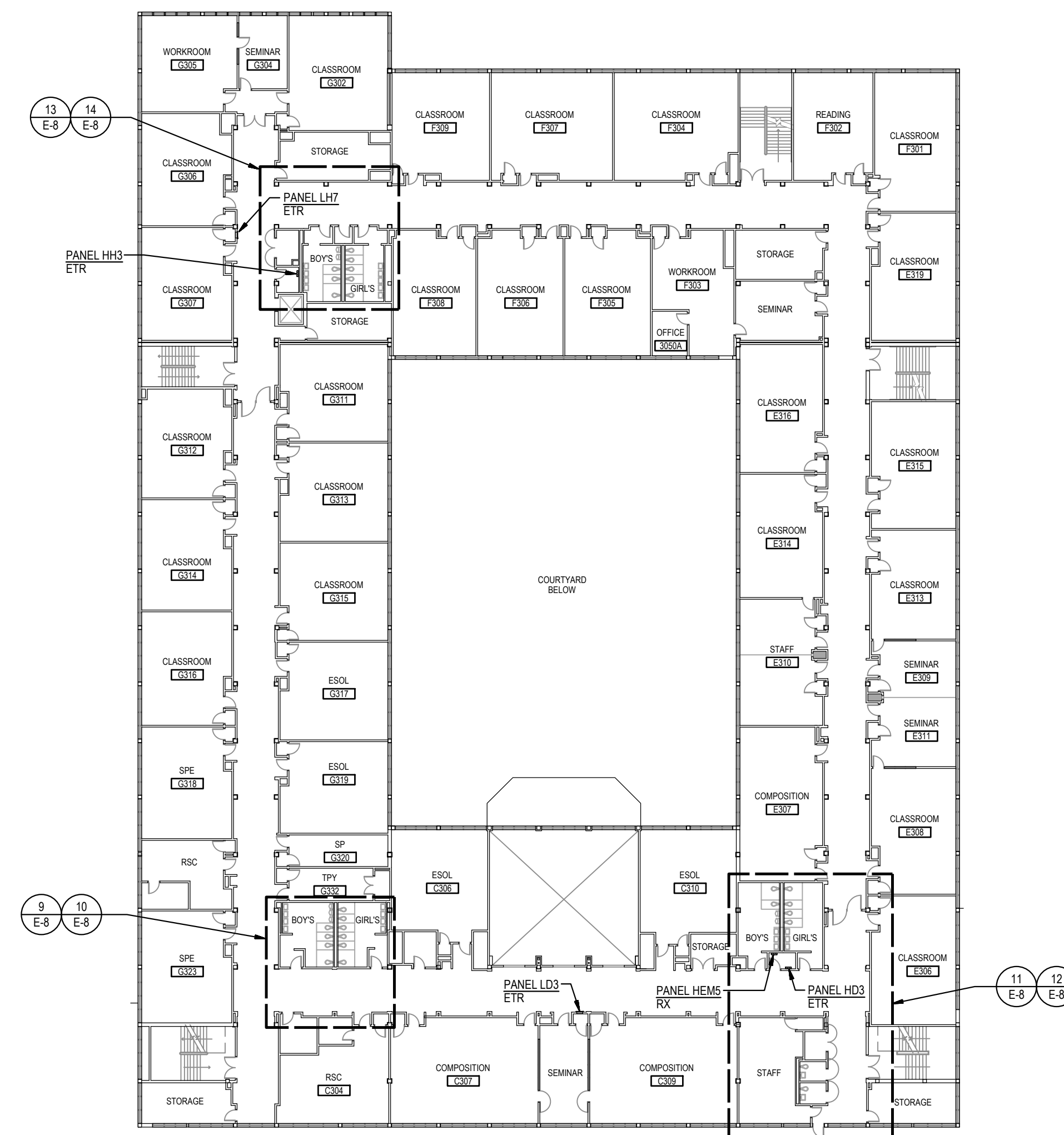
4 LOWER LEVEL REFERENCE PLAN
 SCALE: 1" = 30'-0"
 NORTH

1 FIRST FLOOR REFERENCE PLAN
 SCALE: 1" = 30'-0"
 NORTH

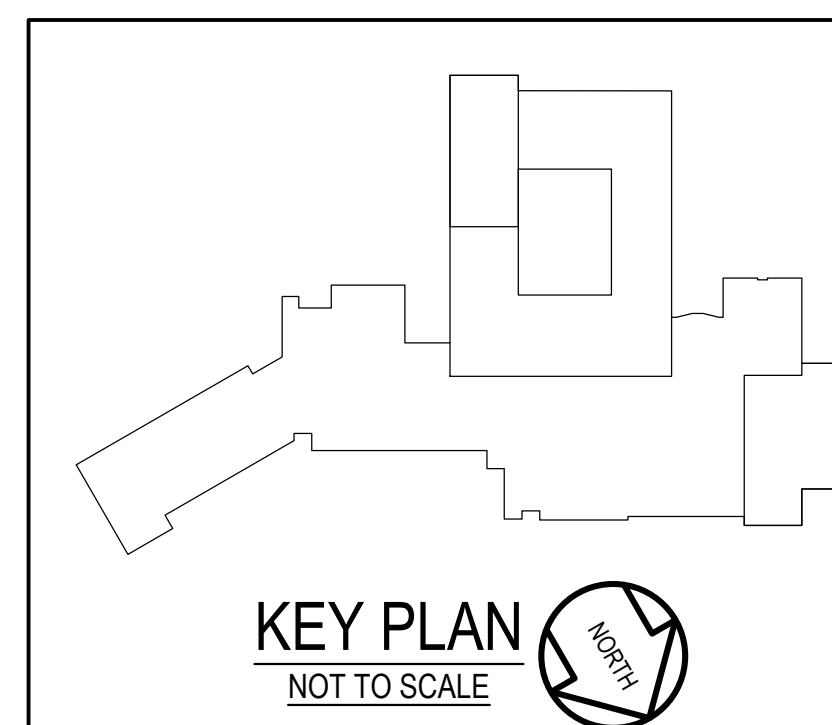
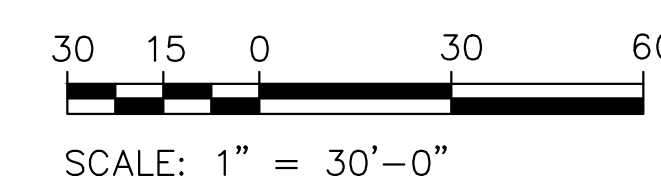




1 SECOND FLOOR REFERENCE PLAN SCALE: 1" = 30'-0"



2 THIRD FLOOR REFERENCE PLAN SCALE: 1" = 30'-0"



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Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023

REFERENCE PLAN SECOND AND THIRD FLOORS

Sheet No: **E-2**

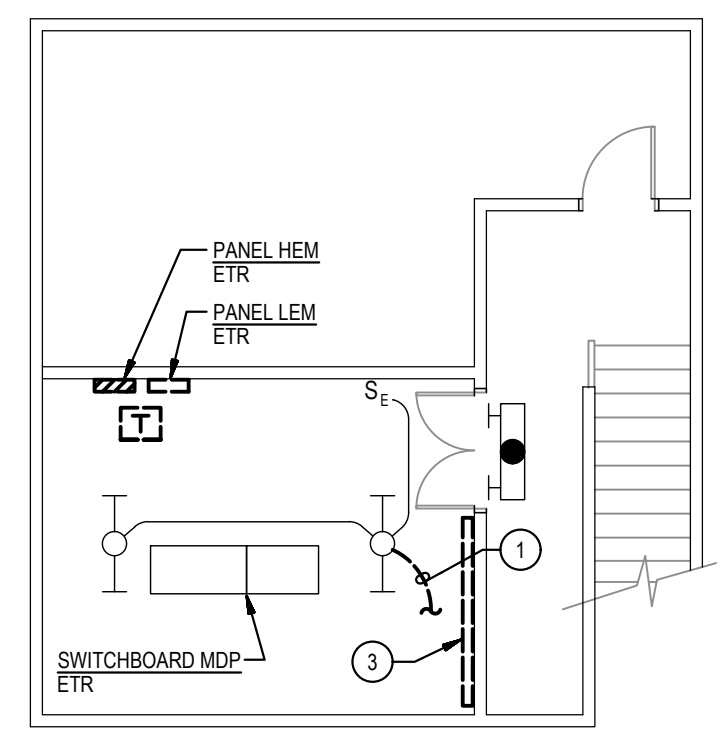
GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
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GENERAL NOTES:

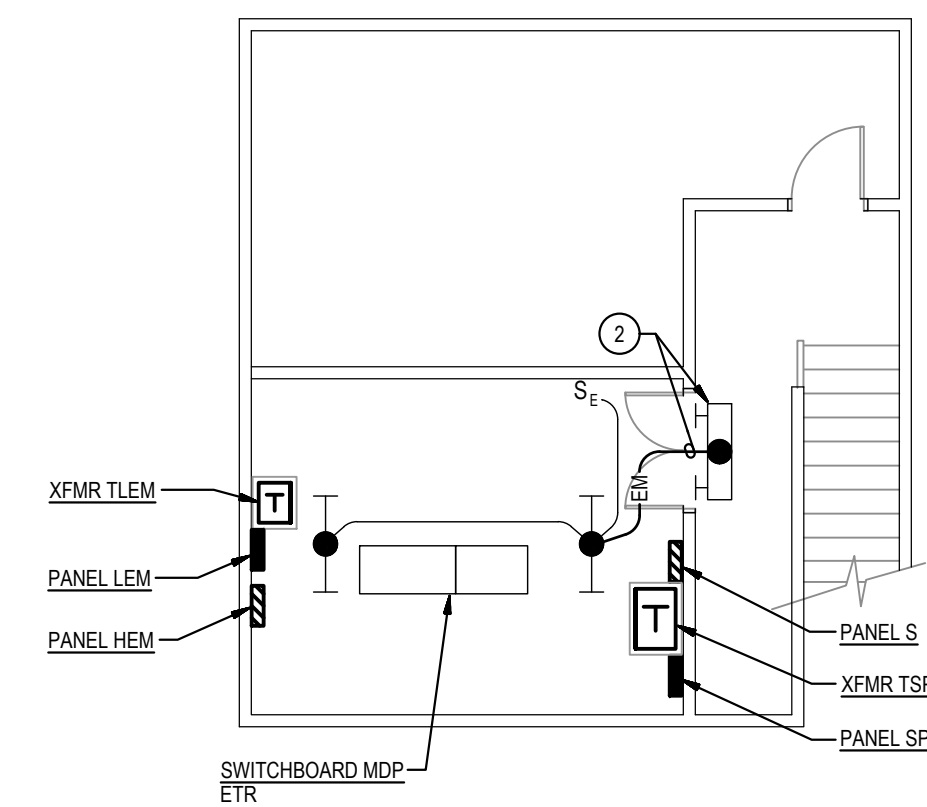
- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD 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 NOTED.
- 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:

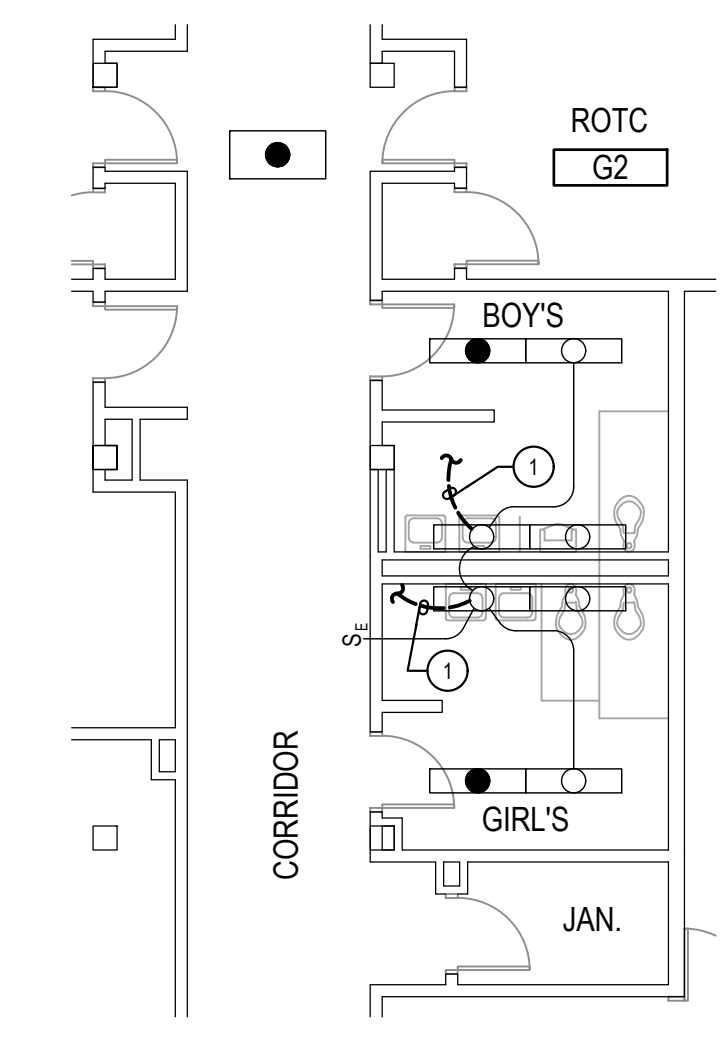
- 1 DISCONNECT AND REMOVE EXISTING CONDUIT AND WIRING SERVING EXISTING LIGHTING FIXTURE(S).
- 2 PROVIDE 2 #12 - #12 GROUND IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
- 3 REMOVE EXISTING ABANDONED CONDUIT AS NEEDED, TO ALLOW FOR NEW WORK PANELS TO BE INSTALLED. THERE ARE APPROXIMATELY (2) 3/4", (1) 1", (1) 1 1/2", AND (1) 2" EMPTY CONDUITS AT THIS LOCATION.



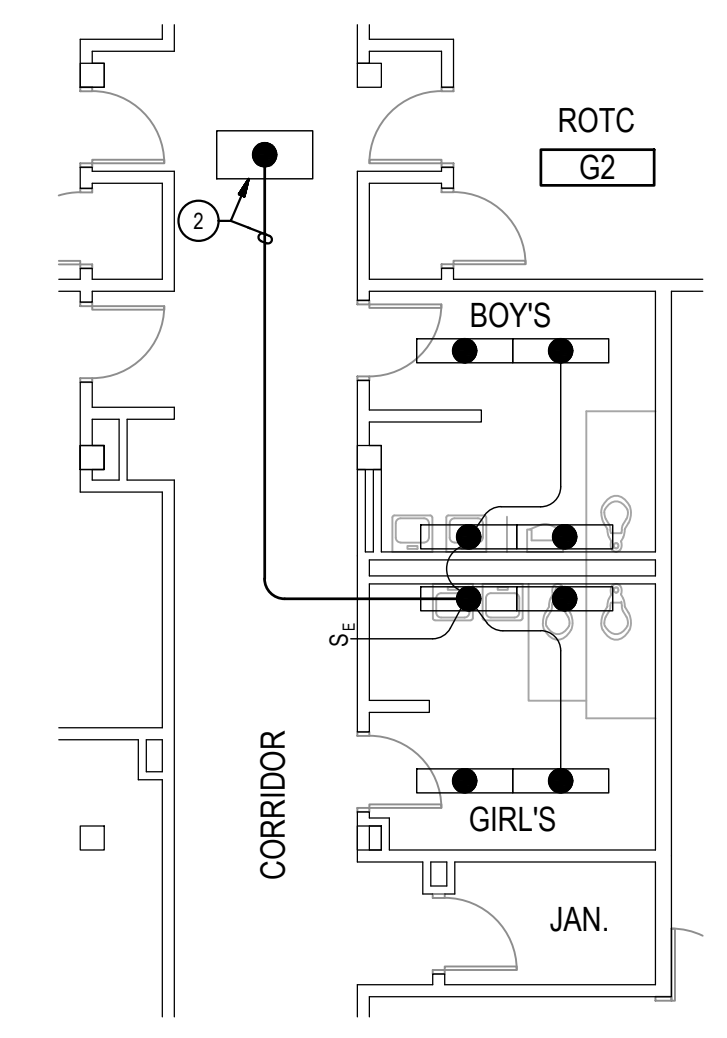
3 PART PLAN - LOWER LEVEL
 E-3 DEMOLITION
 SCALE: 1/8" = 1'-0"



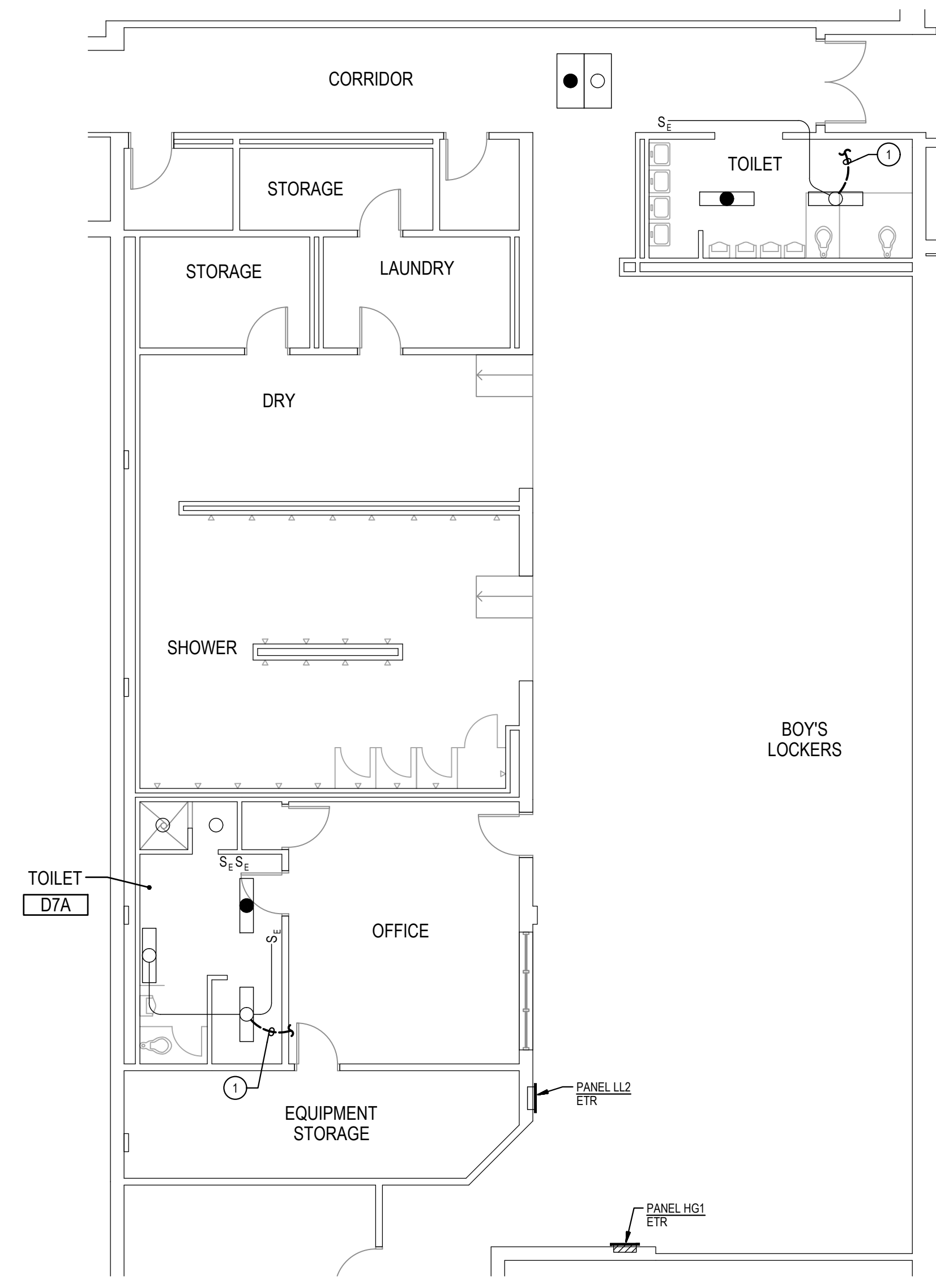
4 PART PLAN - LOWER LEVEL
 E-3 NEW WORK
 SCALE: 1/8" = 1'-0"



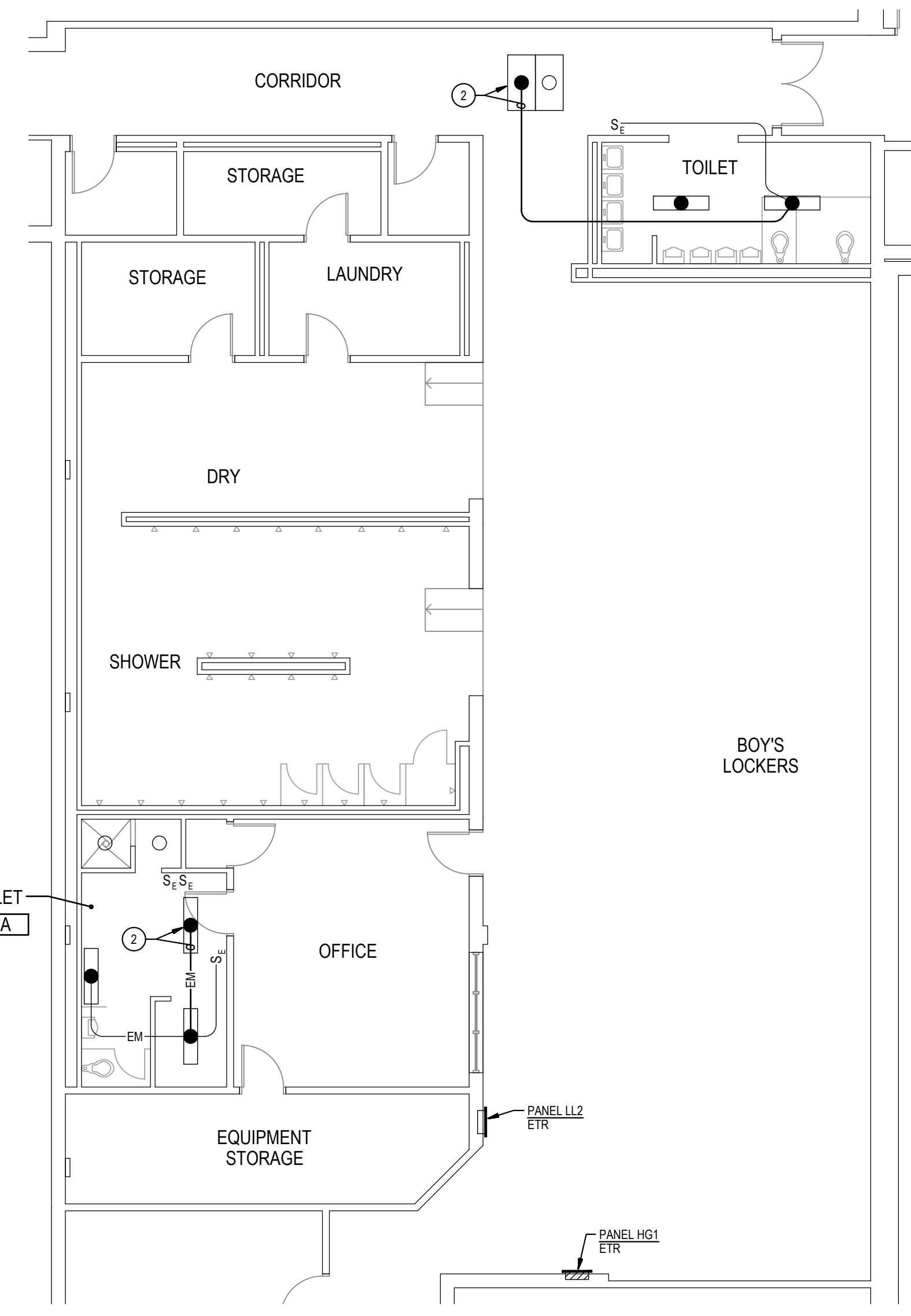
5 PART PLAN - LOWER LEVEL
 E-3 DEMOLITION
 SCALE: 1/8" = 1'-0"



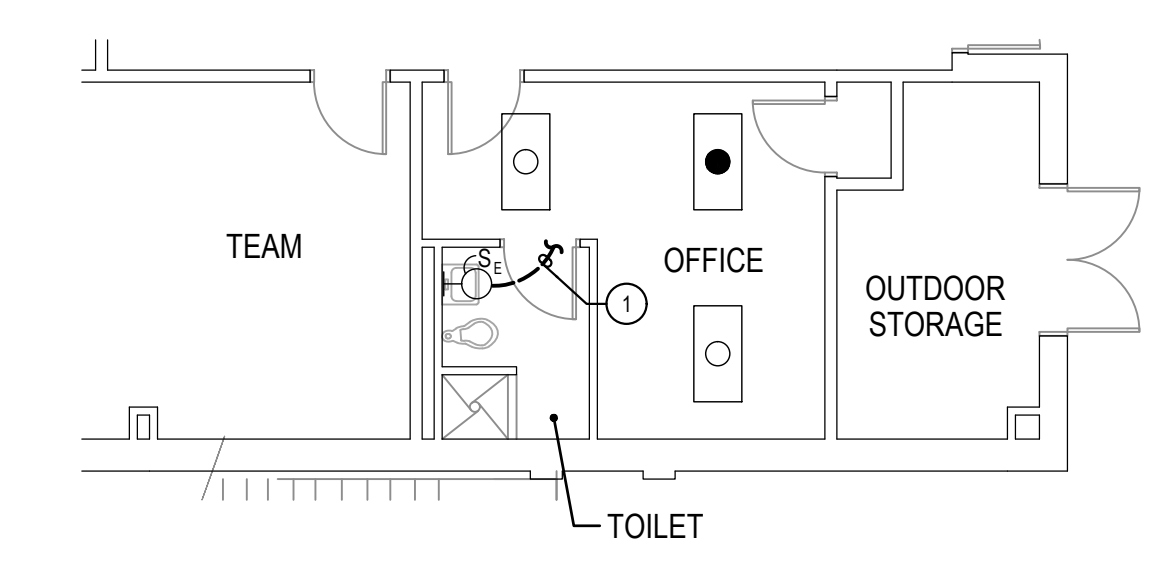
6 PART PLAN - LOWER LEVEL
 E-3 NEW WORK
 SCALE: 1/8" = 1'-0"



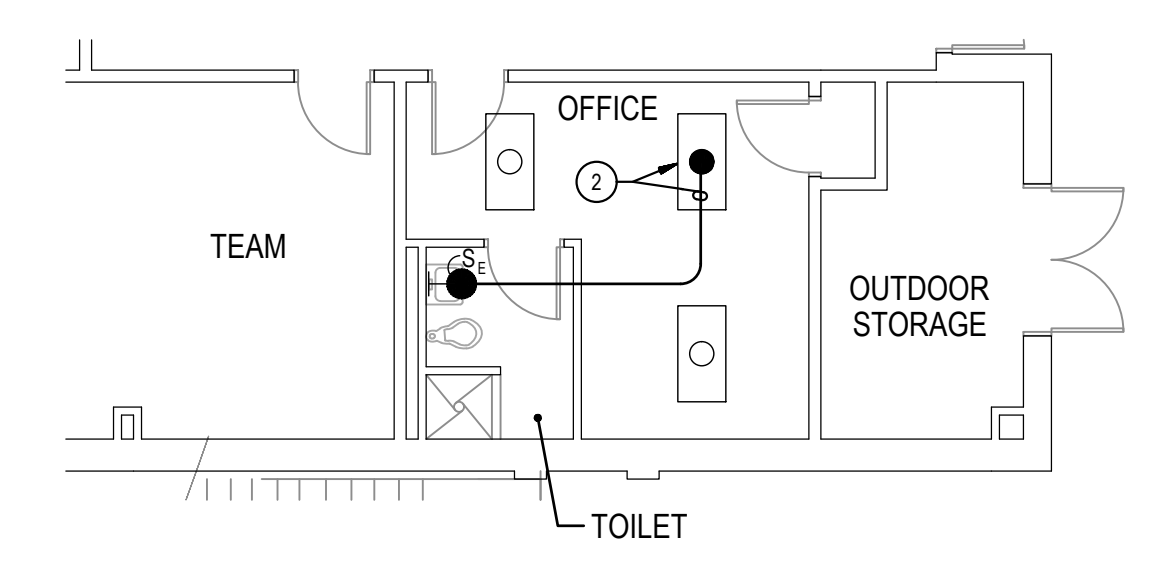
1 PART PLAN - LOWER LEVEL
 E-3 DEMOLITION
 SCALE: 1/8" = 1'-0"



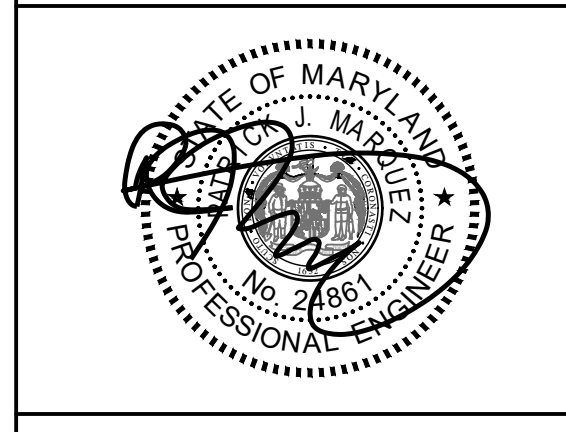
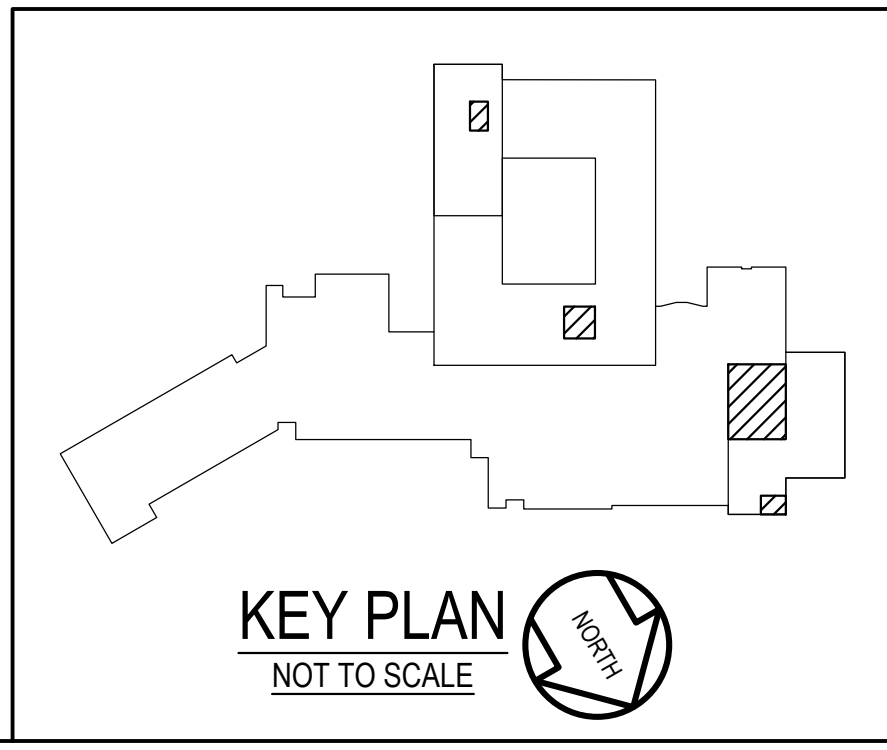
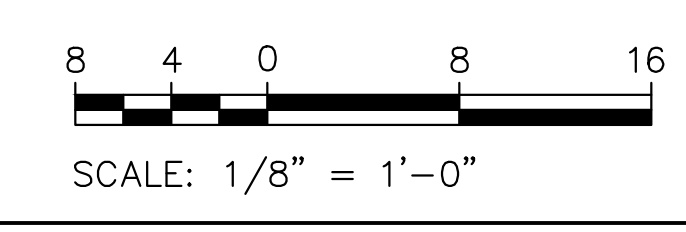
2 PART PLAN - LOWER LEVEL
 E-3 NEW WORK
 SCALE: 1/8" = 1'-0"



7 PART PLAN - LOWER LEVEL
 E-3 DEMOLITION
 SCALE: 1/8" = 1'-0"



8 PART PLAN - LOWER LEVEL
 E-3 NEW WORK
 SCALE: 1/8" = 1'-0"



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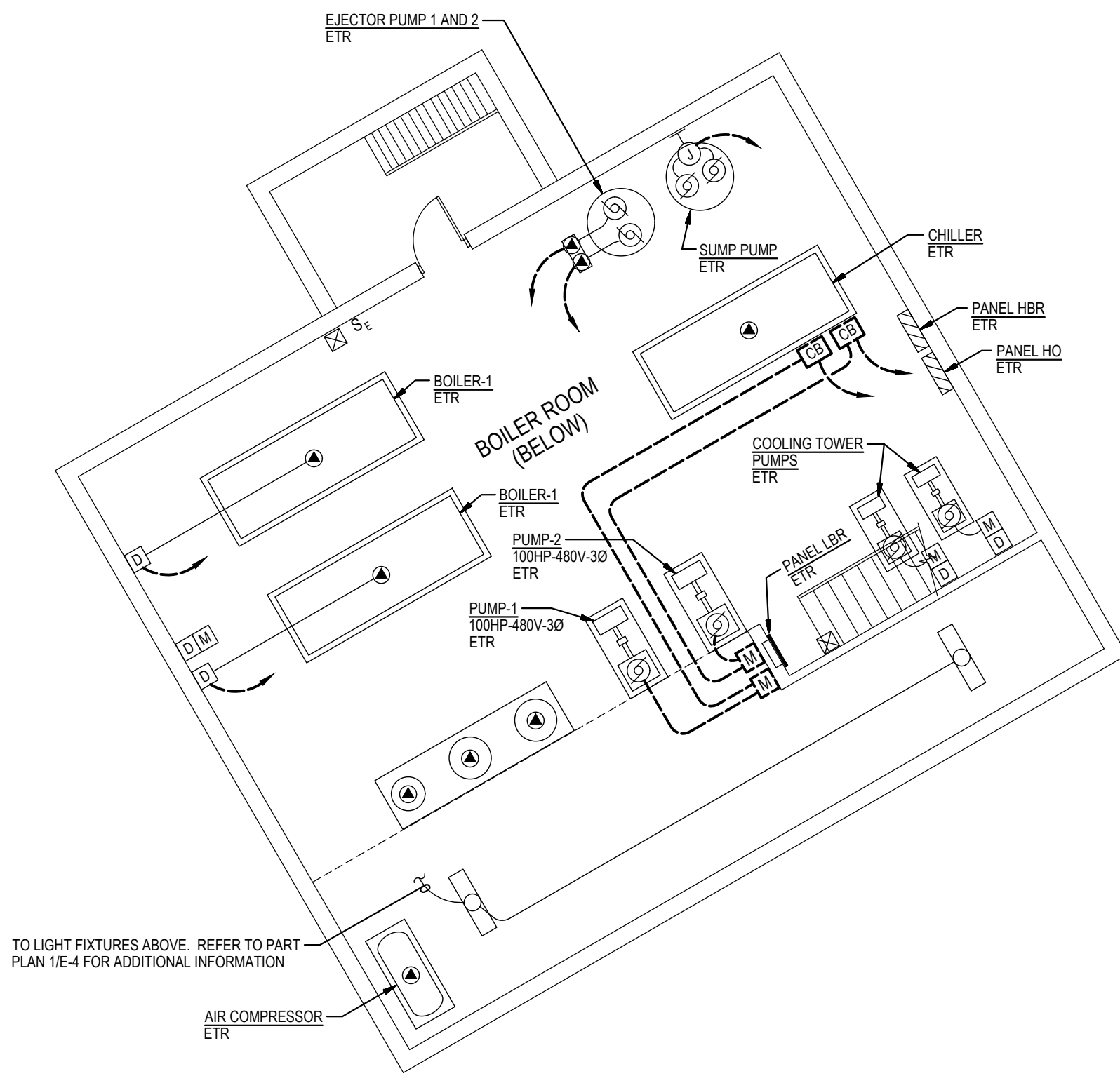
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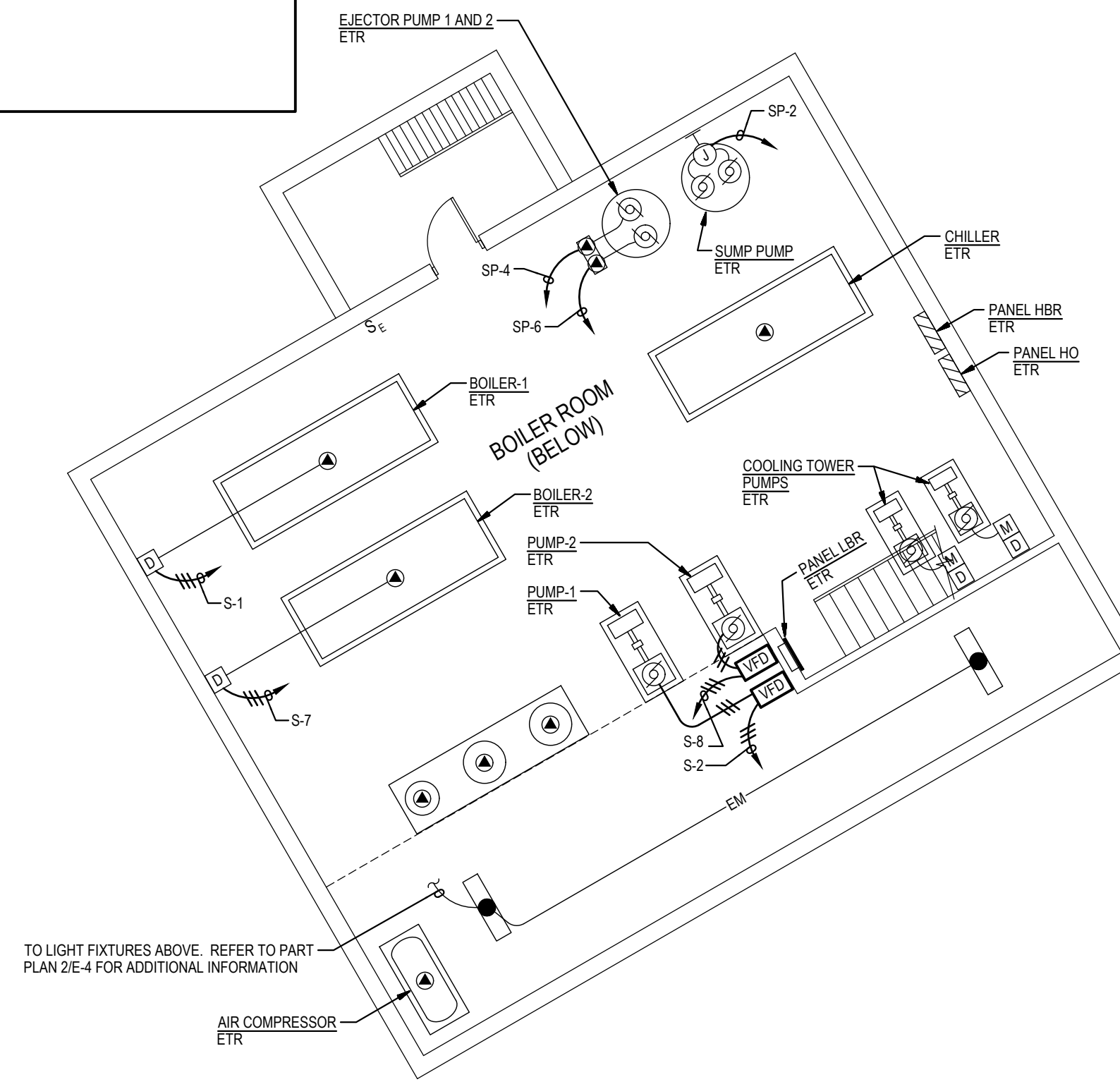
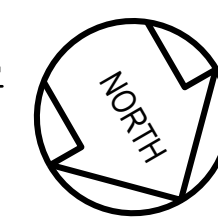
PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023

Drawing Title
**PART FLOOR PLANS
 DEMOLITION AND
 NEW WORK**

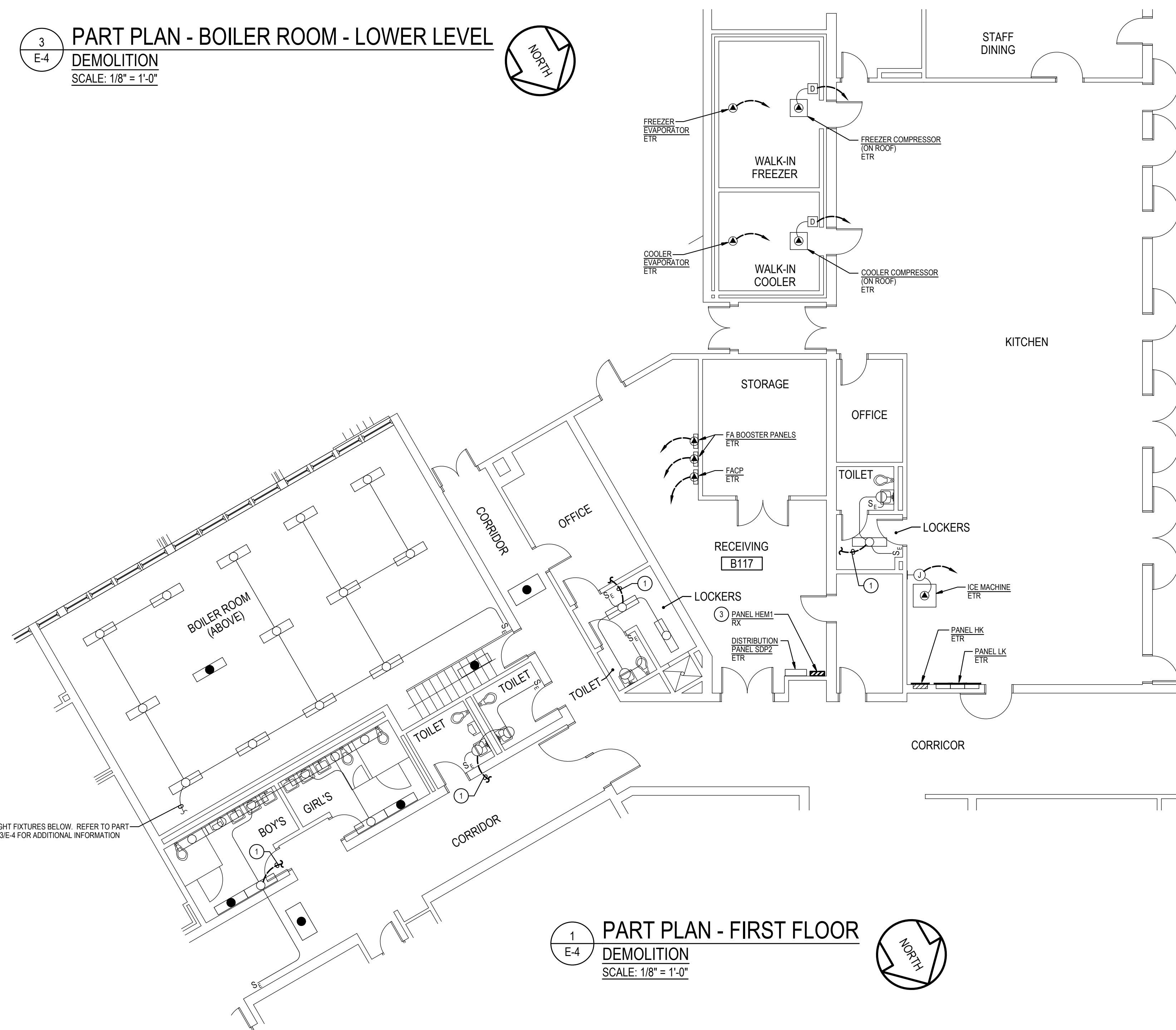
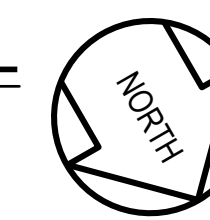
Sheet No:
E-3



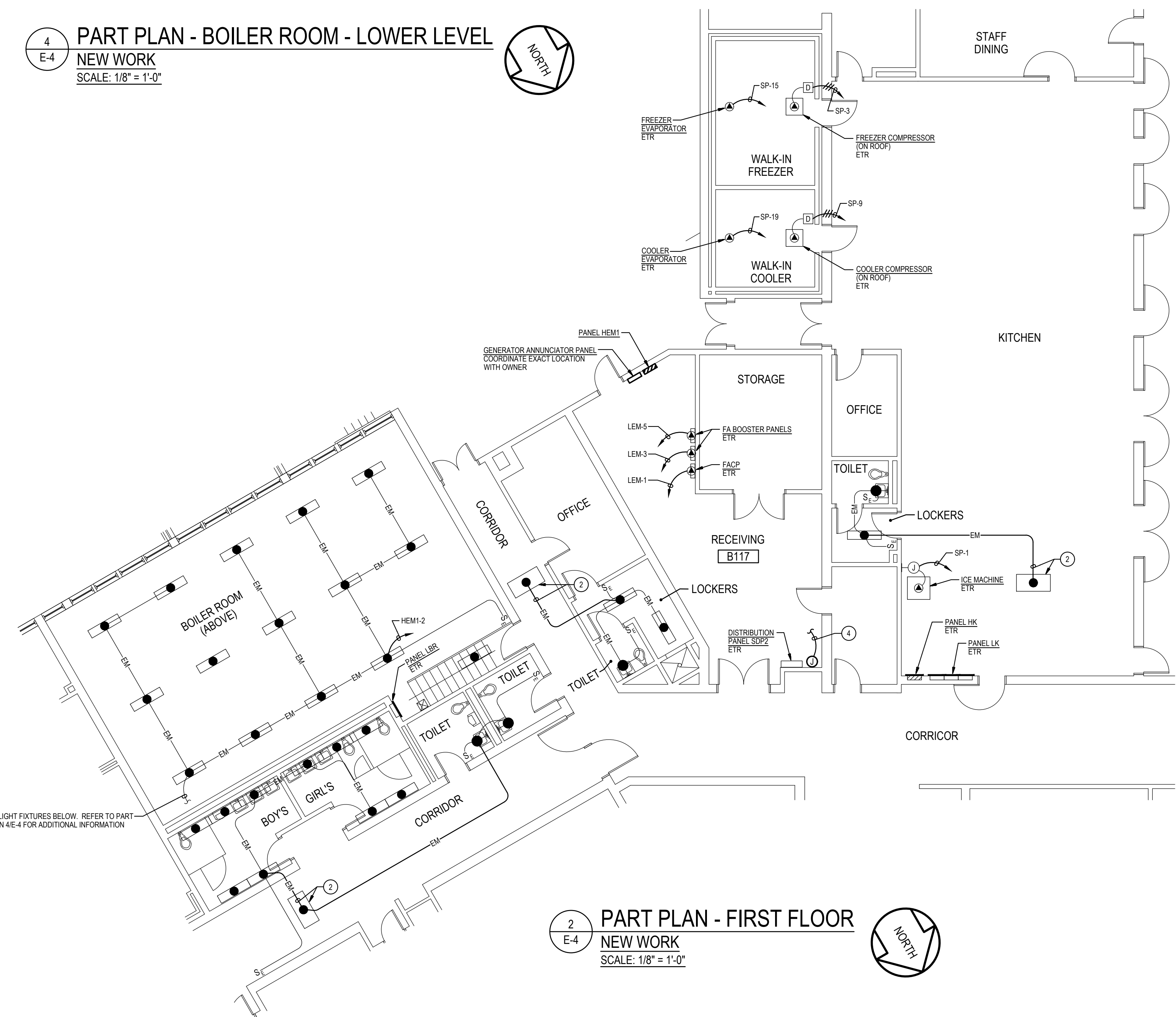
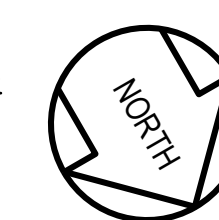
3 PART PLAN - BOILER ROOM - LOWER LEVEL
E-4 DEMOLITION
SCALE: 1/8" = 1'-0"



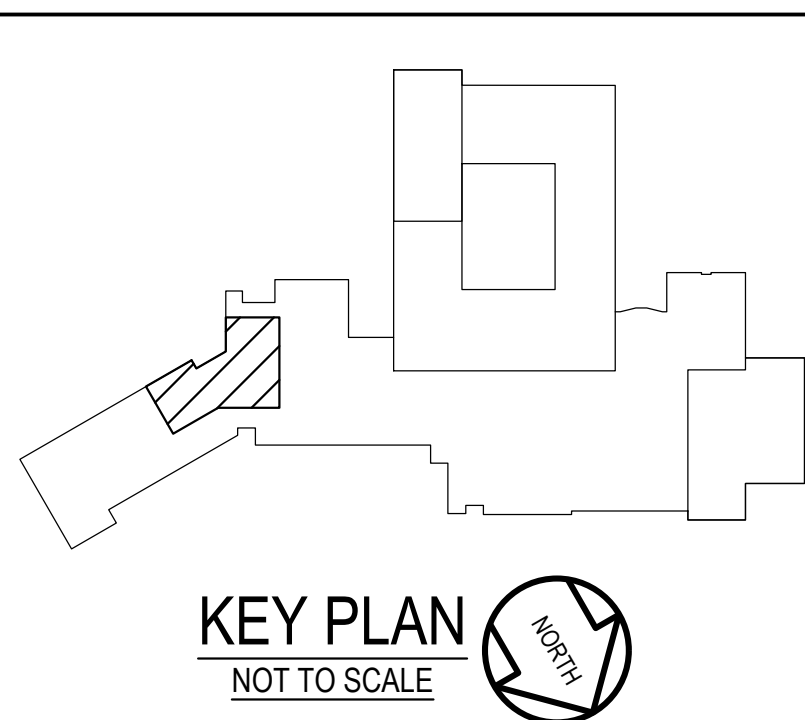
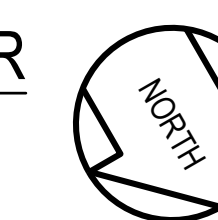
4 PART PLAN - BOILER ROOM - LOWER LEVEL
E-4 NEW WORK
SCALE: 1/8" = 1'-0"



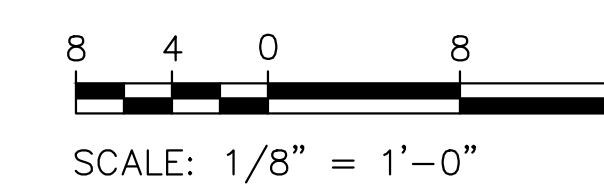
1 PART PLAN - FIRST FLOOR
E-4 DEMOLITION
SCALE: 1/8" = 1'-0"



2 PART PLAN - FIRST FLOOR
E-4 NEW WORK
SCALE: 1/8" = 1'-0"

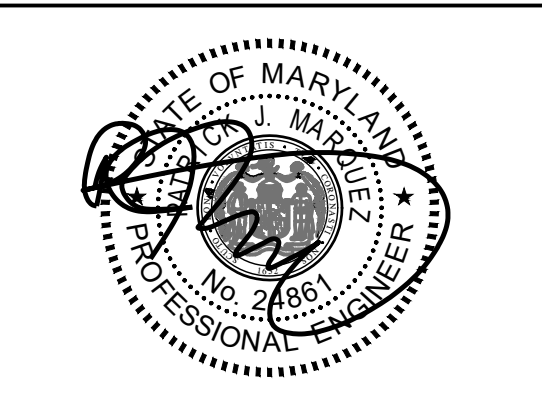


KEY PLAN
NOT TO SCALE



- GENERAL NOTES:**
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 - 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.
 - REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
 - 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.
 - UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED (---) SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID (___) SHALL REMAIN.
 - DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
 - 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, SHALL BE MADE CONTIGUOUS.
 - WHERE DEVICES ARE TO BE REMOVED AND REINSTALLED, PROVIDE WIRE AND CONDUIT TO NEW LOCATION AS REQUIRED.
 - 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 FIXTURE(S).
 - PROVIDE 2 #12 #12 GROUND IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
 - REMOVE PORTION OF EXISTING CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE FOR SPLICING TO NEW PANEL. REFER TO NEW WORK PART PLAN FOR ADDITIONAL INFORMATION.
 - EXTEND EXISTING LIGHTING CIRCUITS TO NEW PANEL HEM1. REFER TO PANEL SCHEDULE ON DRAWING E-10 FOR ADDITIONAL INFORMATION.

GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
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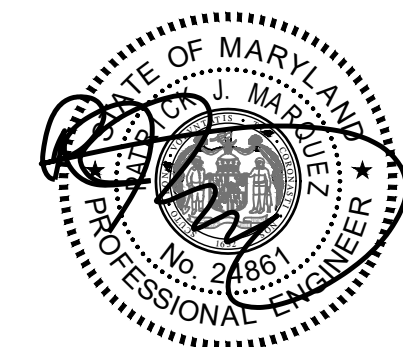
Professional Certification
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Expiration date: 02-24-2024.

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Tag	Description	Date
	BID SET	06/20/23

PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023
Drawing Title	PART FLOOR PLANS DEMOLITION AND NEW WORK
Sheet No.	E-4

GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
SPRINGBROOK HIGH SCHOOL
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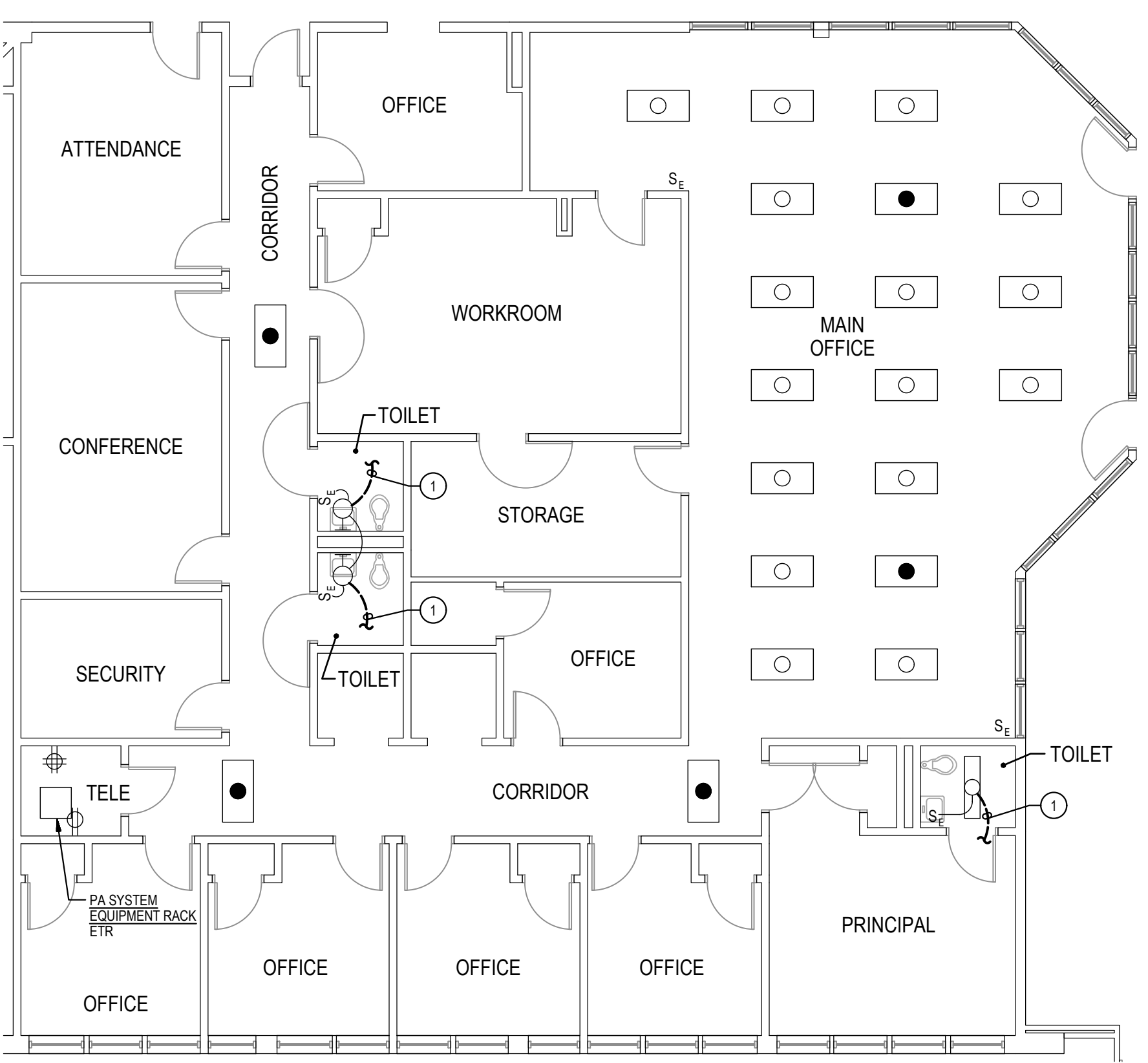
Tag	Description	Date
	BID SET	06/20/23

PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023
Drawing Title	PART FLOOR PLANS DEMOLITION AND NEW WORK
Sheet No.	E-5

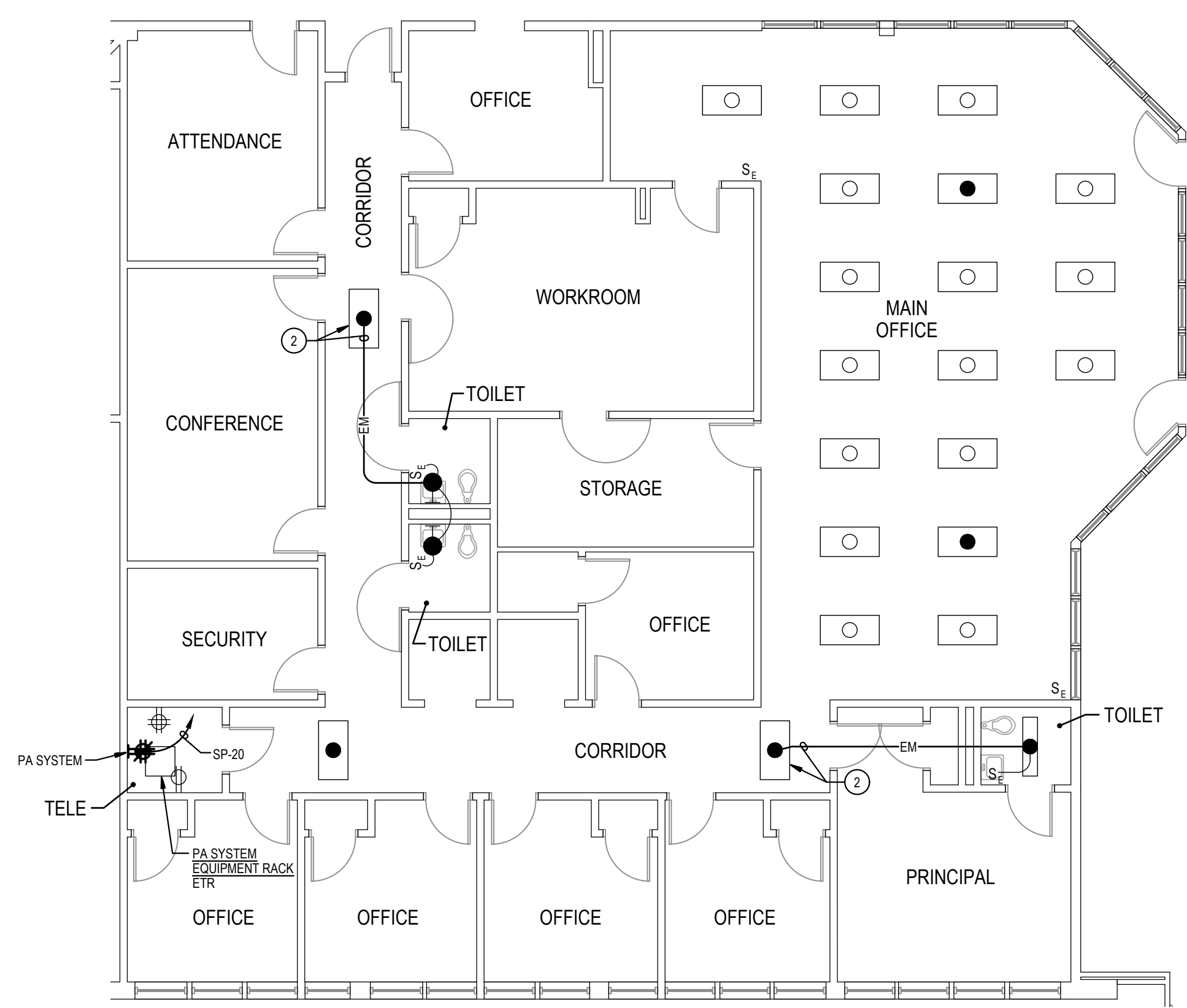
- GENERAL NOTES:**
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 - THE EXISTING FACILITY SHALL REMAIN IN OPERATION DURING RENOVATION. INTERRUPTION TO THE EXISTING BUILDING ELECTRICAL SERVICE SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORKING HOURS.
 - REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
 - 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.
 - UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID SHALL REMAIN.

- GENERAL NOTES (CONTINUED):**
- DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
 - 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, SHALL BE MADE CONTINUOUS.
 - WHERE DEVICES ARE TO BE REMOVED AND REINSTALLED, PROVIDE WIRE AND CONDUIT TO NEW LOCATION AS REQUIRED.
 - IN BLOCK OR CONCRETE WALLS TO REMAIN, PROVIDE STAINLESS STEEL BLANK COVER PLATES FOR DEVICES REMOVED.

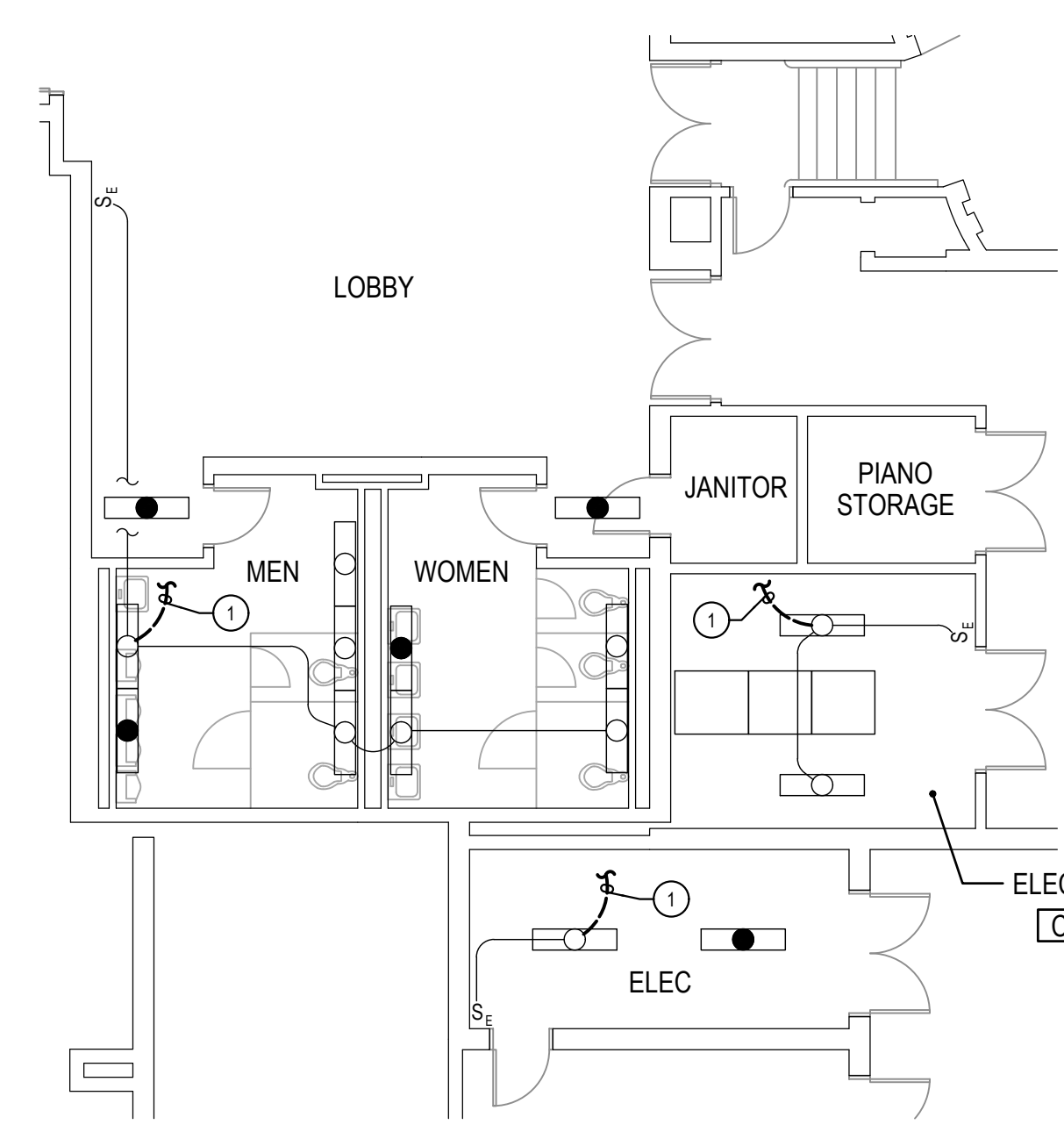
- SPECIFIC NOTES:**
- DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT SERVING EXISTING LIGHTING FIXTURE(S)
 - PROVIDE #12 - #12 GROUND IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
 - REMOVE PORTION OF EXISTING CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE FOR SPACING TO NEW PANEL. REFER TO NEW WORK PART PLAN FOR ADDITIONAL INFORMATION.
 - EXTEND EXISTING LIGHTING CIRCUITS TO NEW PANEL, HEMZ. REFER TO PANEL SCHEDULE ON DRAWING E-19 FOR ADDITIONAL INFORMATION.
 - DISCONNECT AND REMOVE EXISTING GENERATOR INCLUDING BLOCK HEATER, BATTERY CHARGER, AND CONTROLS. EXISTING HOUSEKEEPING PAD TO REMAIN.



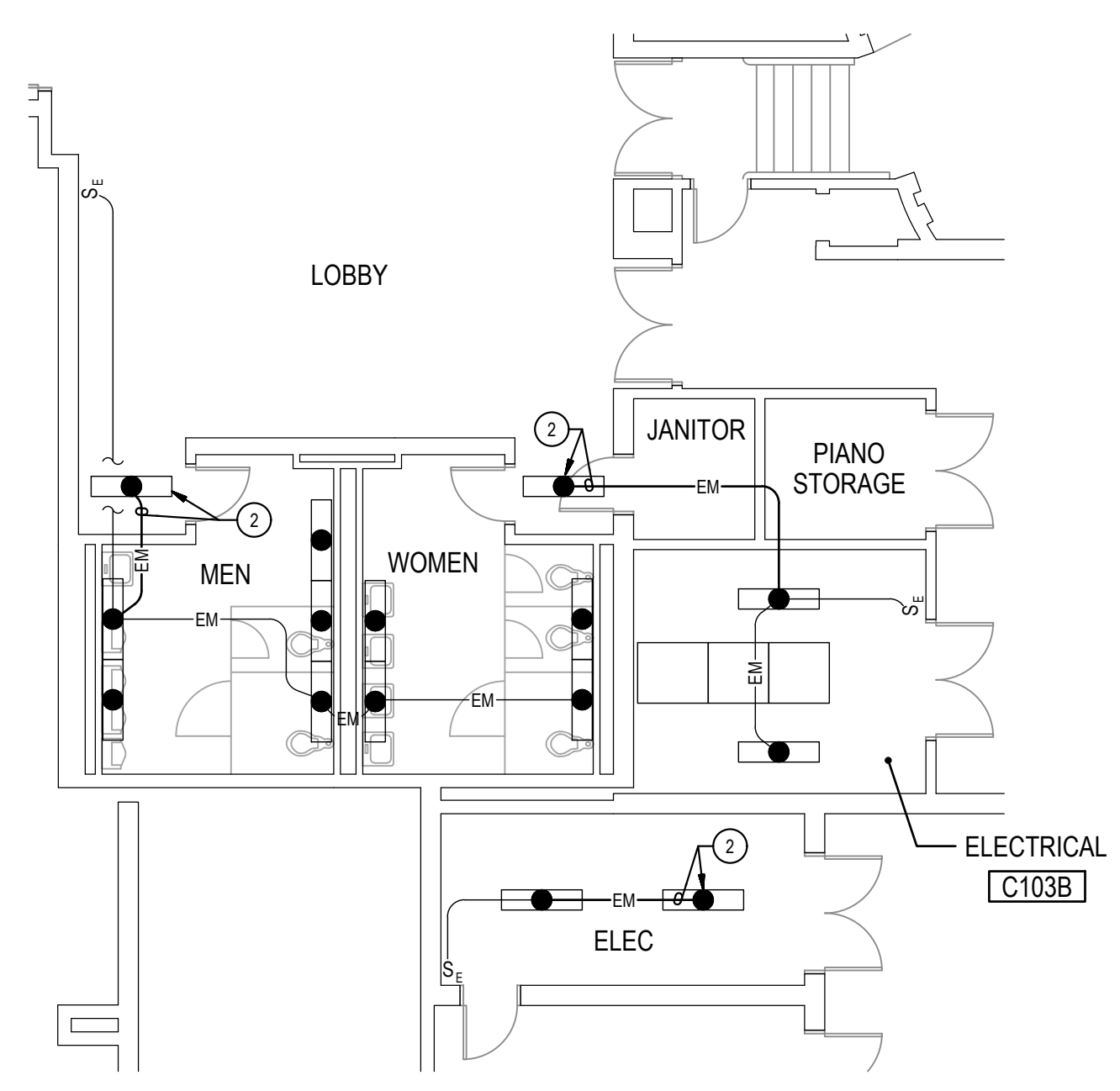
1 PART PLAN - FIRST FLOOR
 DEMOLITION
 SCALE: 1/8" = 1'-0"



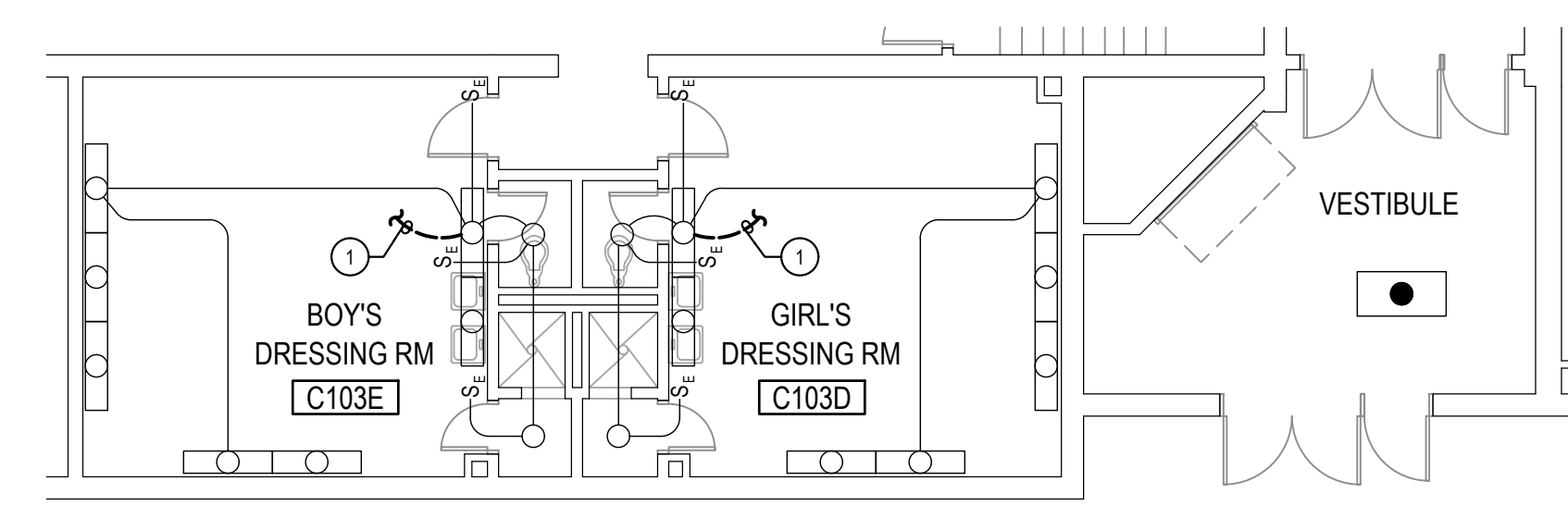
2 PART PLAN - FIRST FLOOR
 NEW WORK
 SCALE: 1/8" = 1'-0"



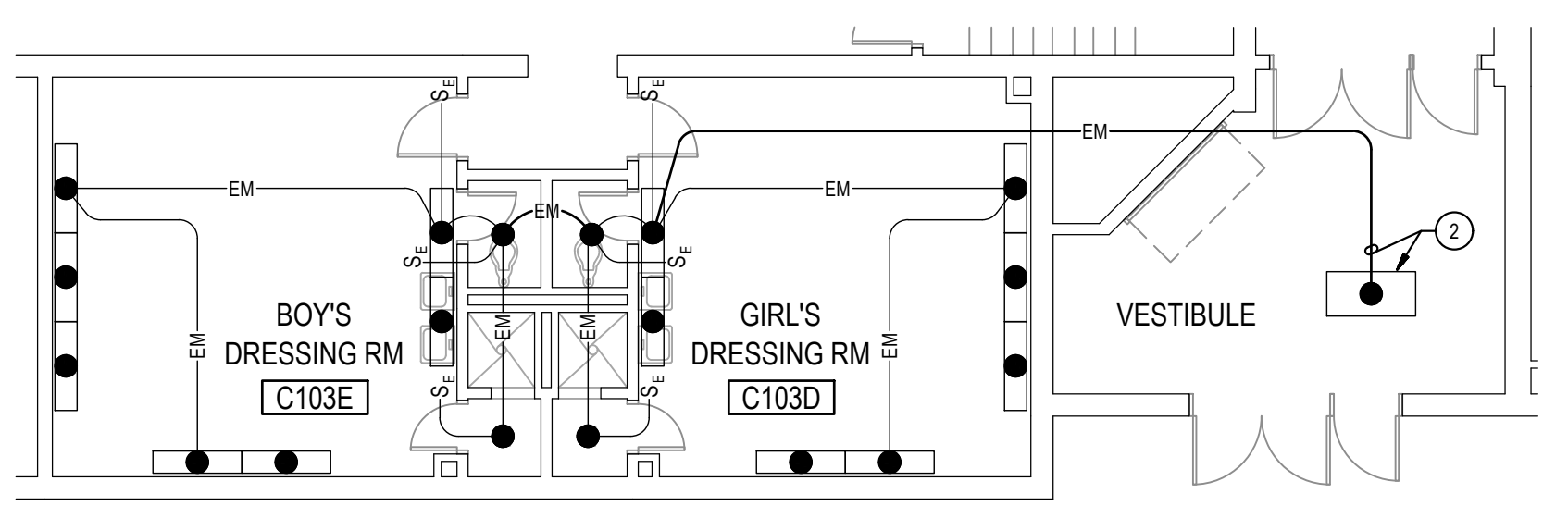
7 PART PLAN - FIRST FLOOR
 DEMOLITION
 SCALE: 1/8" = 1'-0"



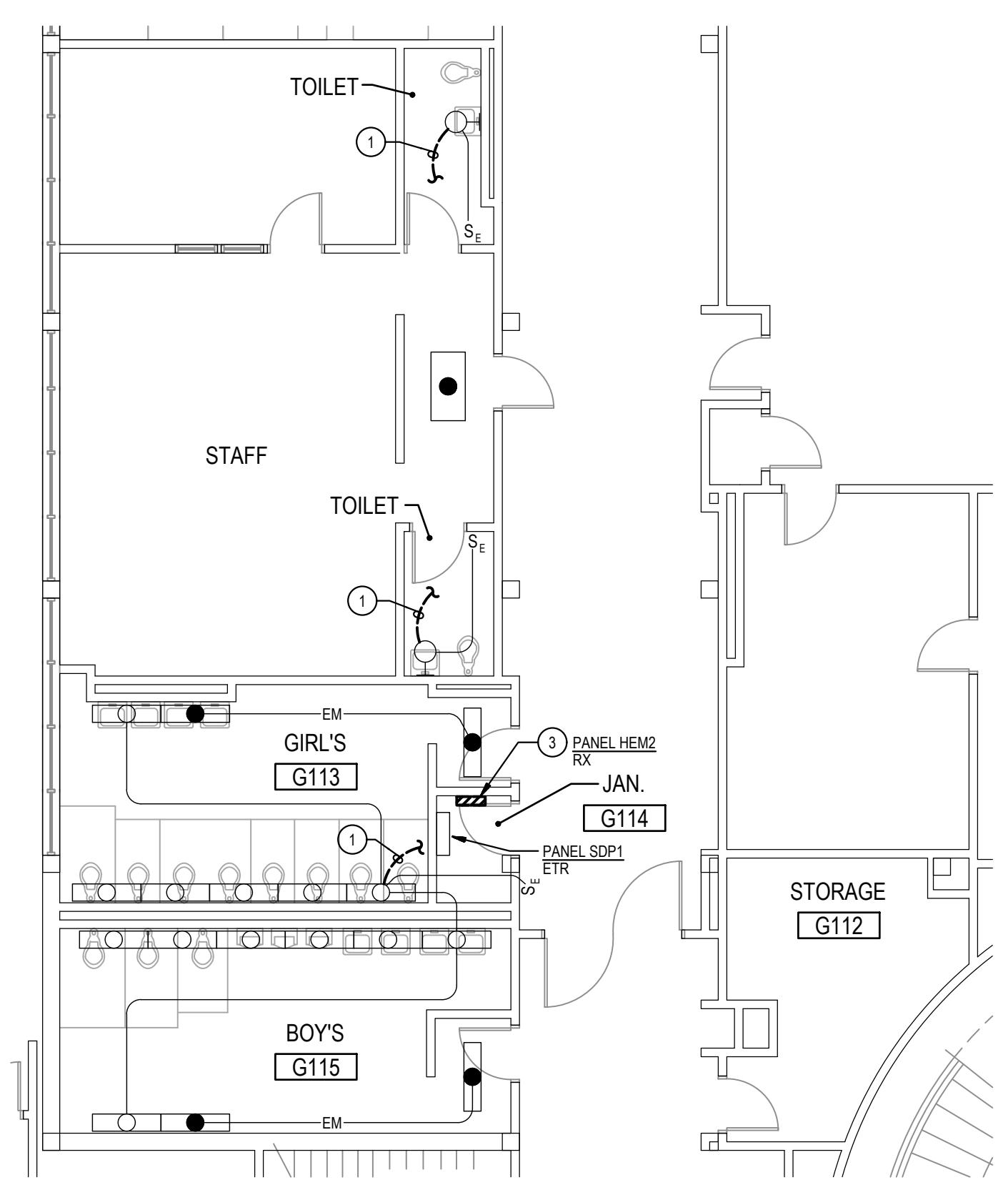
8 PART PLAN - FIRST FLOOR
 NEW WORK
 SCALE: 1/8" = 1'-0"



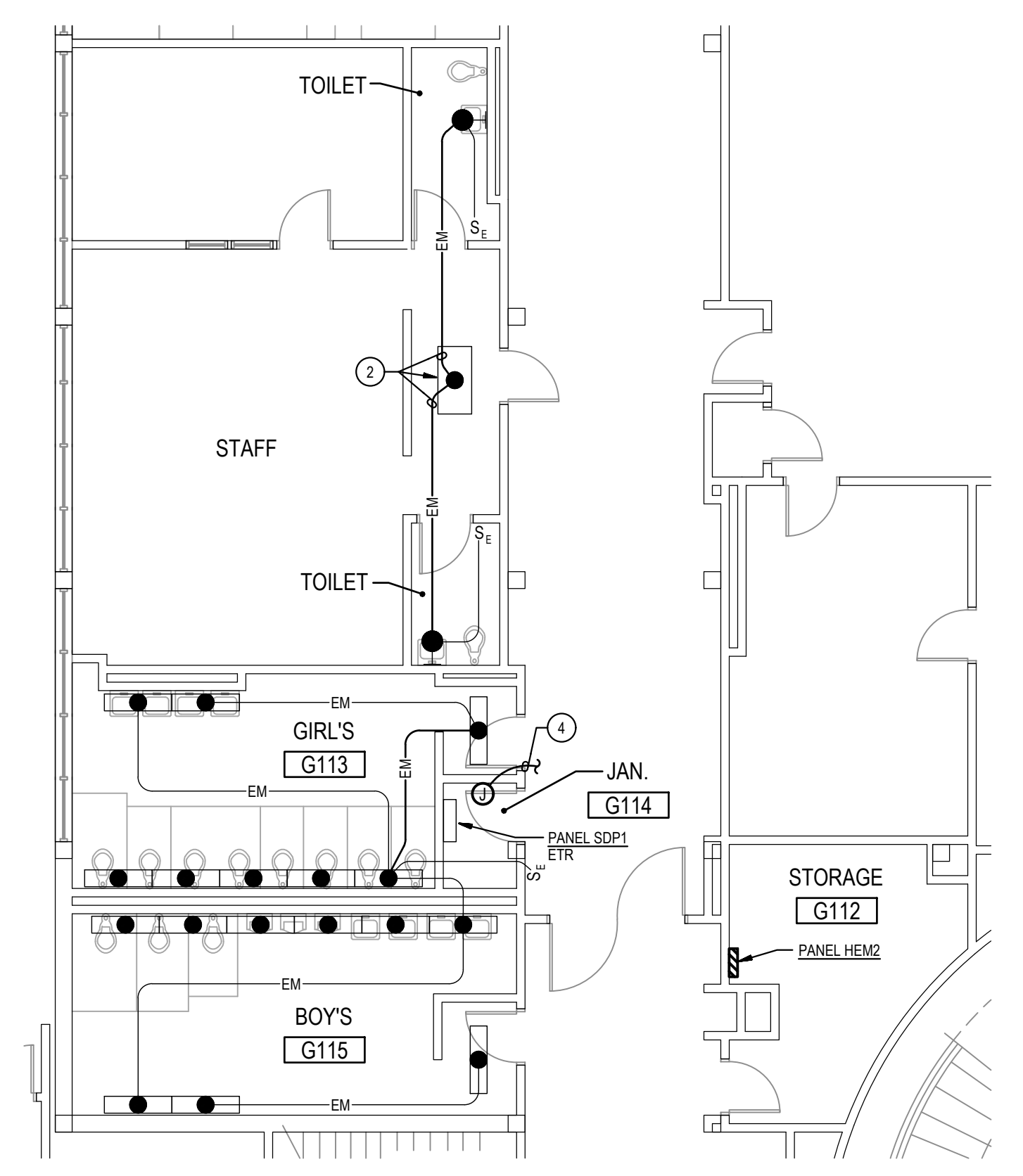
3 PART PLAN - FIRST FLOOR
 DEMOLITION
 SCALE: 1/8" = 1'-0"



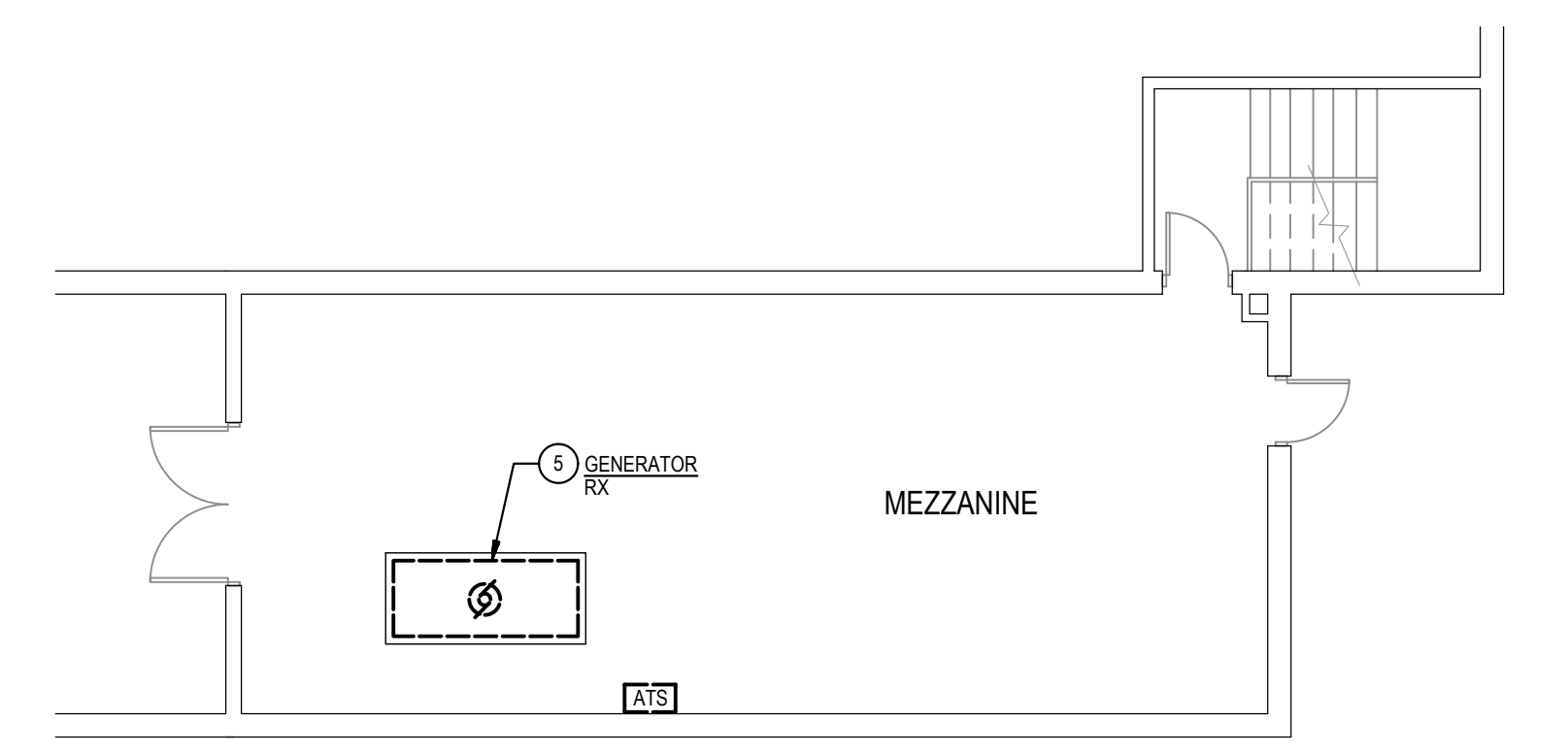
4 PART PLAN - FIRST FLOOR
 NEW WORK
 SCALE: 1/8" = 1'-0"



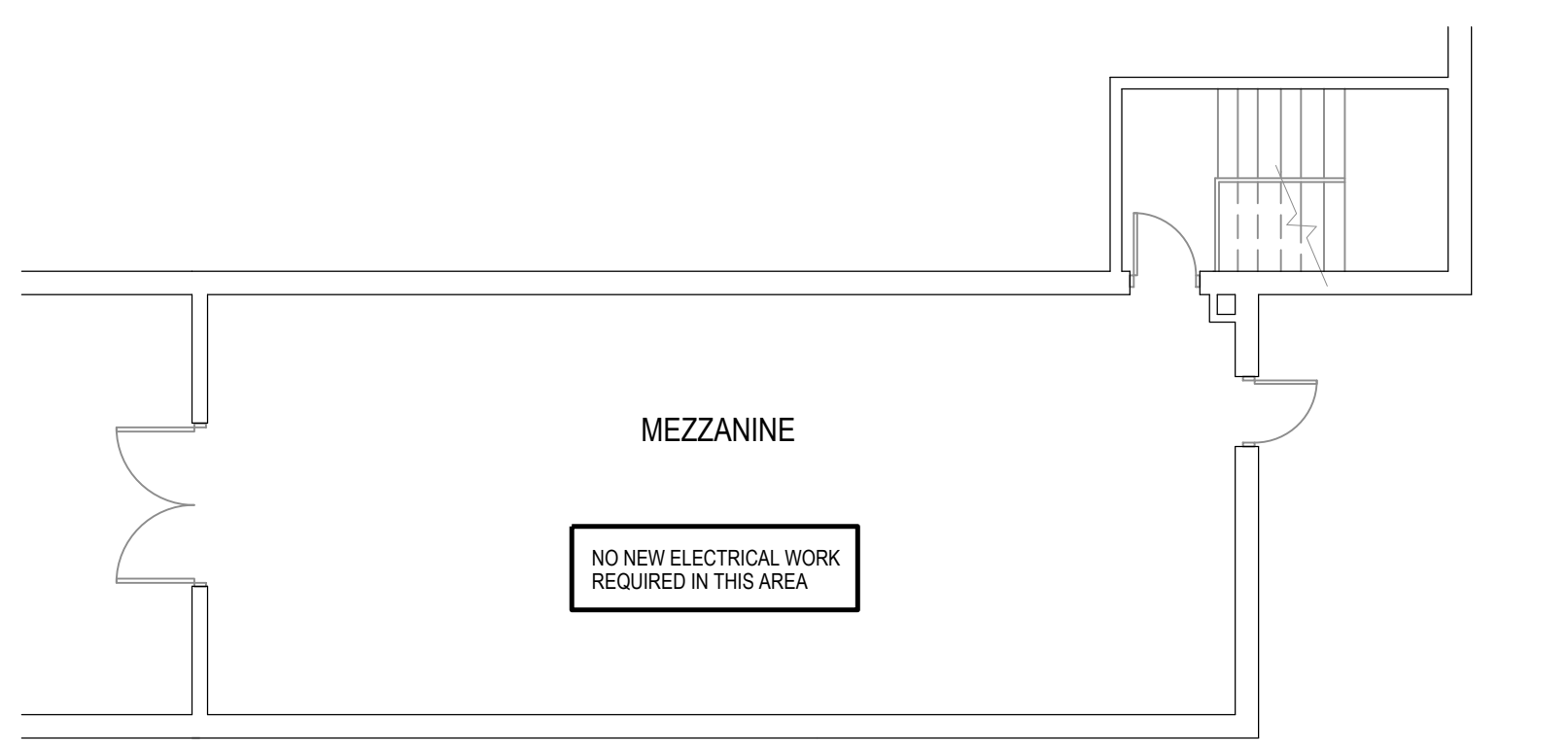
9 PART PLAN - FIRST FLOOR
 DEMOLITION
 SCALE: 1/8" = 1'-0"



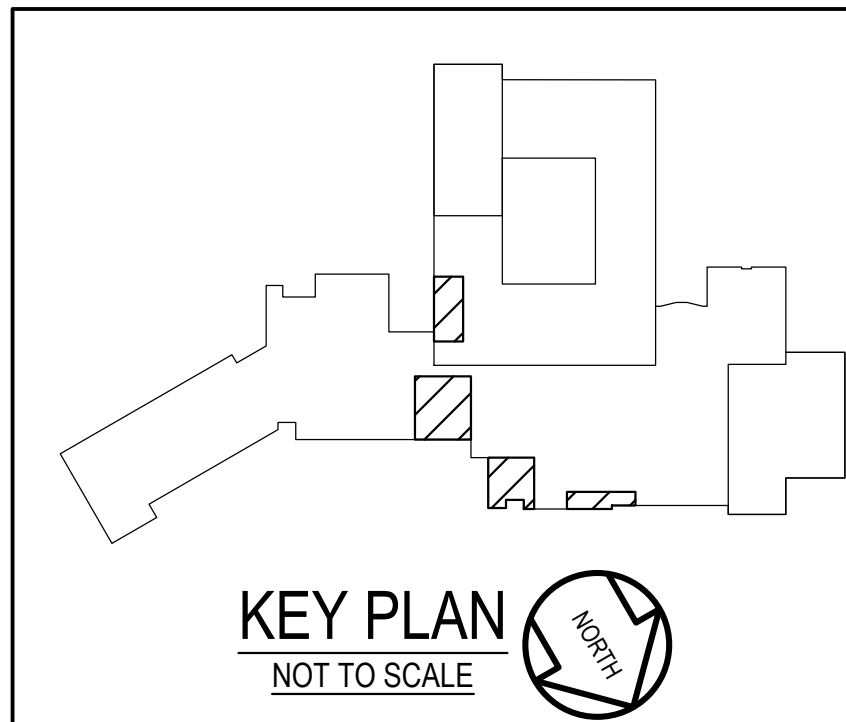
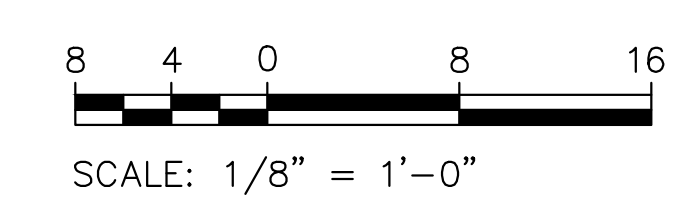
10 PART PLAN - FIRST FLOOR
 NEW WORK
 SCALE: 1/8" = 1'-0"

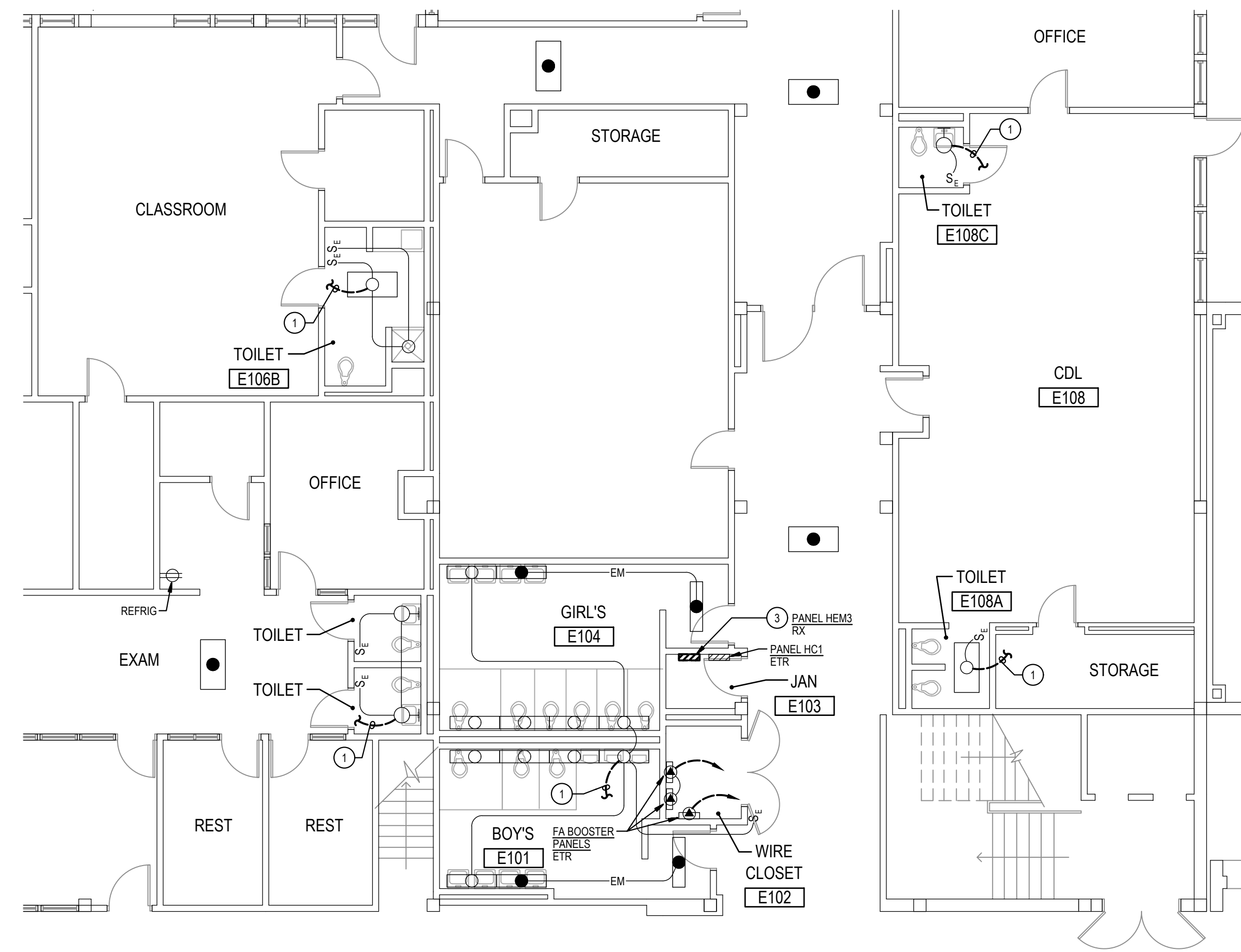


5 PART PLAN - MEZZANINE (ABOVE DRESSING)
 DEMOLITION
 SCALE: 1/8" = 1'-0"

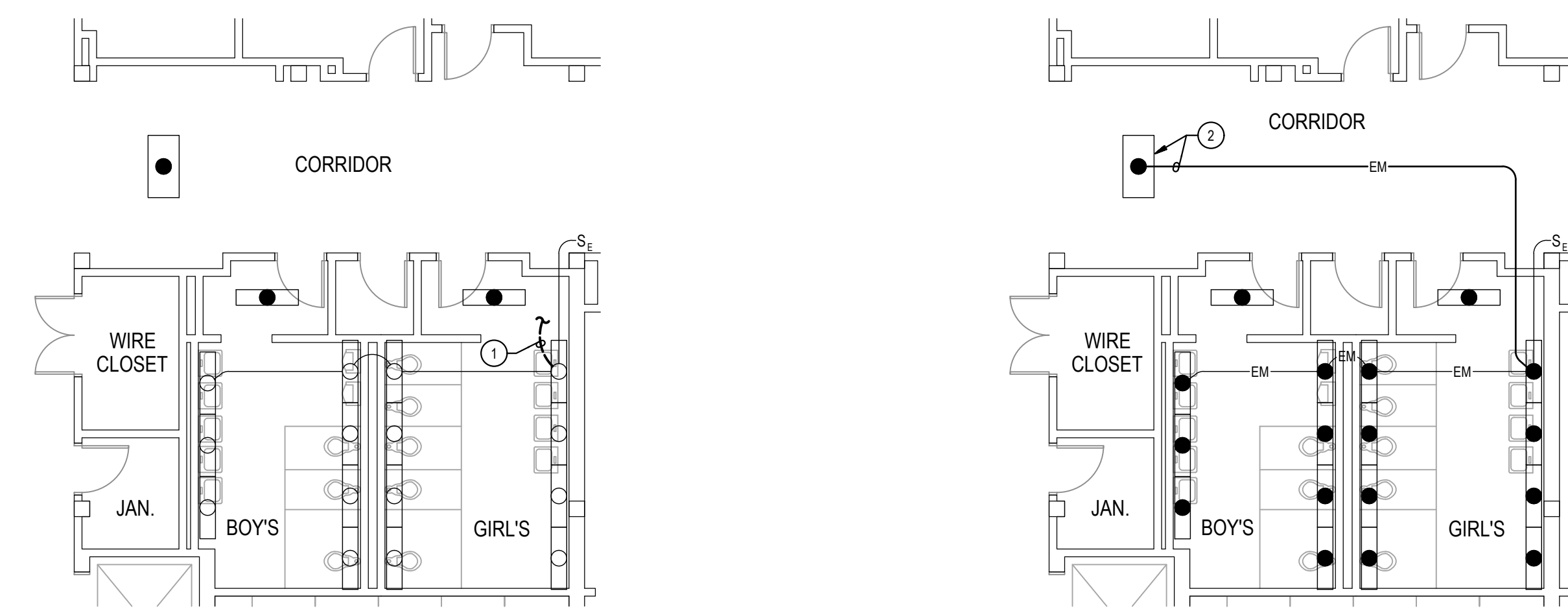


6 PART PLAN - MEZZANINE (ABOVE DRESSING)
 NEW WORK
 SCALE: 1/8" = 1'-0"



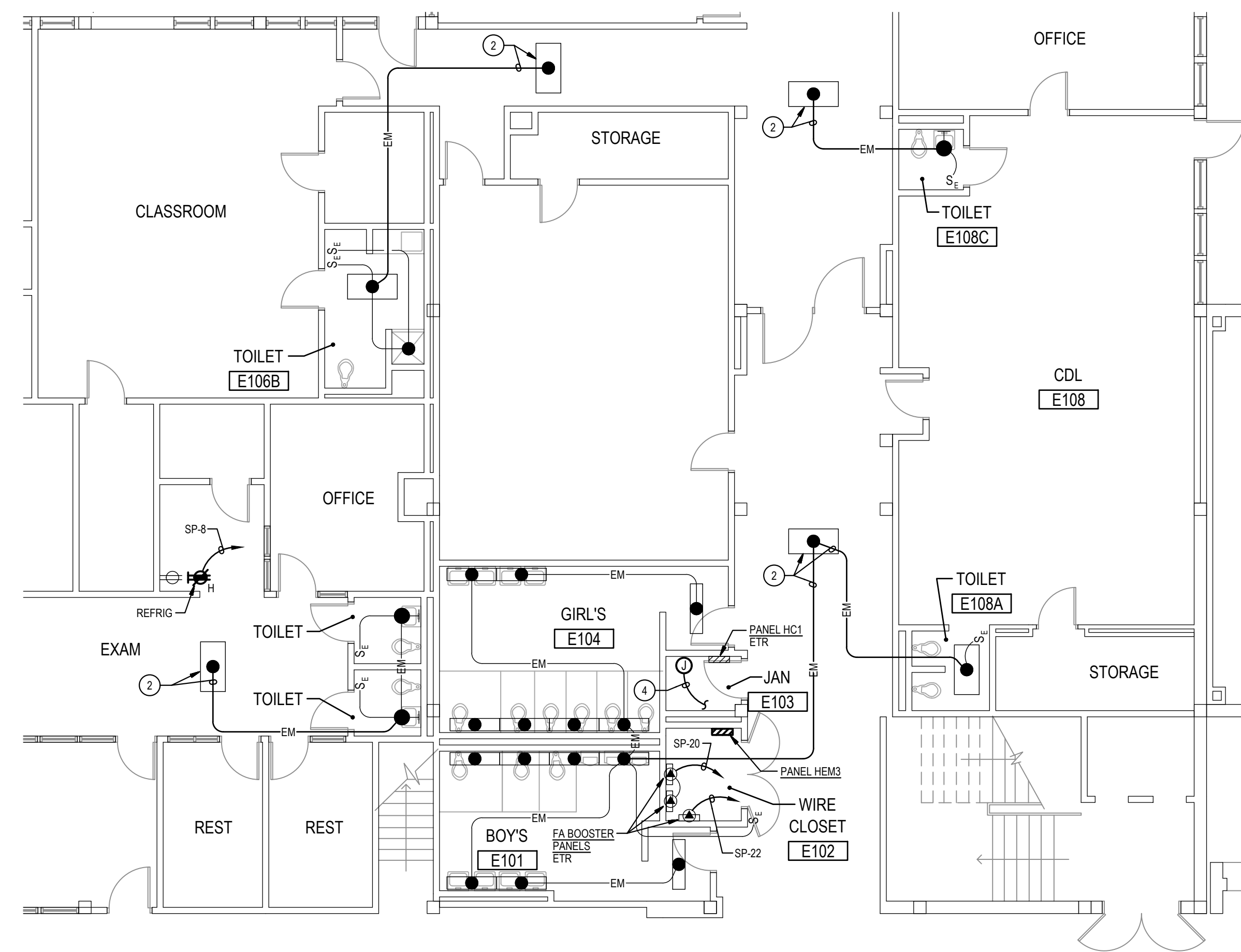


1
E-6
PART PLAN - FIRST FLOOR
DEMOLITION
SCALE: 1/8" = 1'-0"

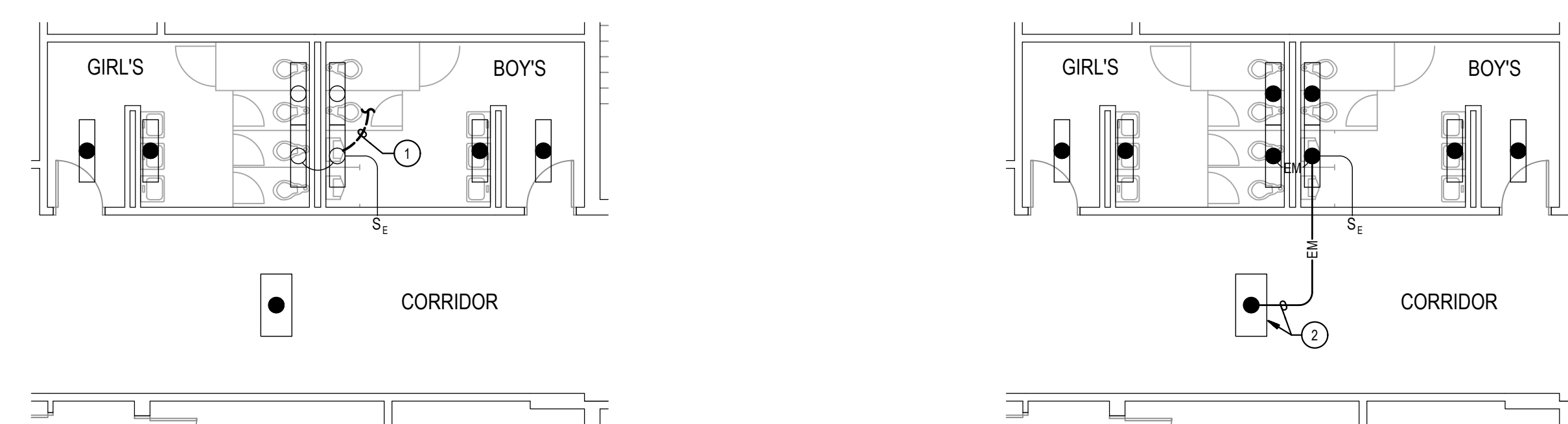


3
E-6
PART PLAN - FIRST FLOOR
DEMOLITION
SCALE: 1/8" = 1'-0"

4
E-6
PART PLAN - FIRST FLOOR
NEW WORK
SCALE: 1/8" = 1'-0"



2
E-6
PART PLAN - FIRST FLOOR
NEW WORK
SCALE: 1/8" = 1'-0"



5
E-6
PART PLAN - FIRST FLOOR
DEMOLITION
SCALE: 1/8" = 1'-0"

6
E-6
PART PLAN - FIRST FLOOR
NEW WORK
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

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- C. REMOVE AND REINSTALL EXISTING CEILING TILES WITHIN CONSTRUCTION AREAS AS REQUIRED.
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- 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.
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- H. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE UNLESS OTHERWISE NOTED.
- 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 FIXTURE(S).
- 2. PROVIDE 2#12-#12G IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
- 3. REMOVE PORTION OF EXISTING CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE FOR SPACING TO NEW PANEL. REFER TO NEW WORK PART PLAN FOR ADDITIONAL INFORMATION.
- 4. EXTEND EXISTING LIGHTING CIRCUITS TO NEW PANEL HEMS. REFER TO PANEL SCHEDULE ON DRAWING E-10 FOR ADDITIONAL INFORMATION.

GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
SPRINGBROOK HIGH SCHOOL
 201 VALLEY BROOK DRIVE
 SILVER SPRING, MD 20904
 MONTGOMERY COUNTY PUBLIC SCHOOLS



Professional Certification
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 Engineering Your Vision

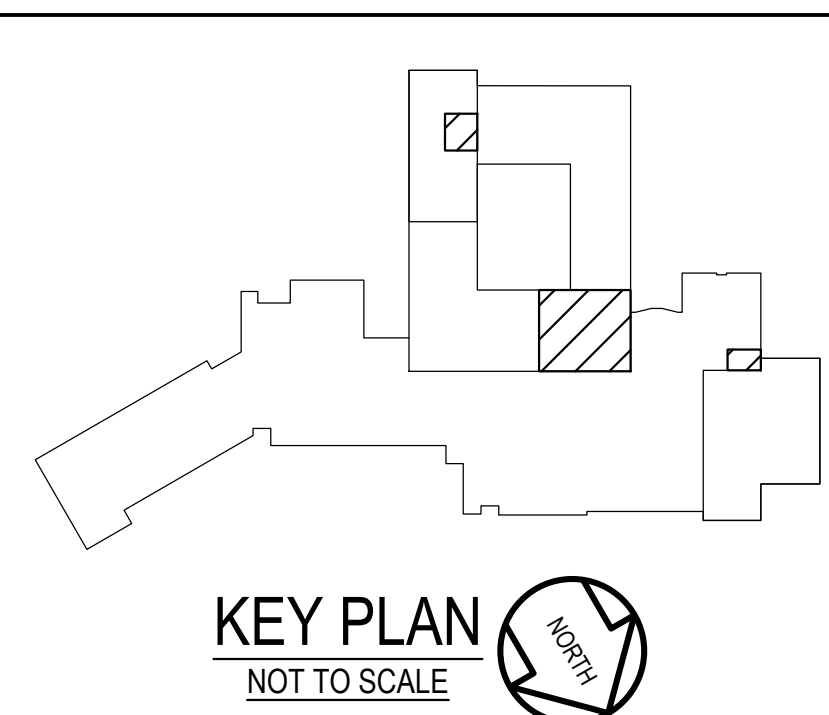
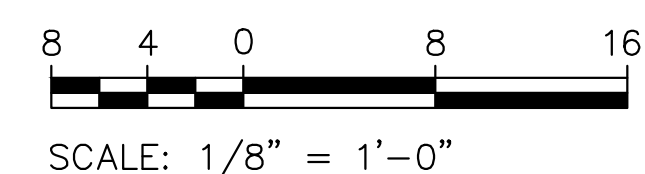
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 tel 410-265-6100
 jamesposey.com

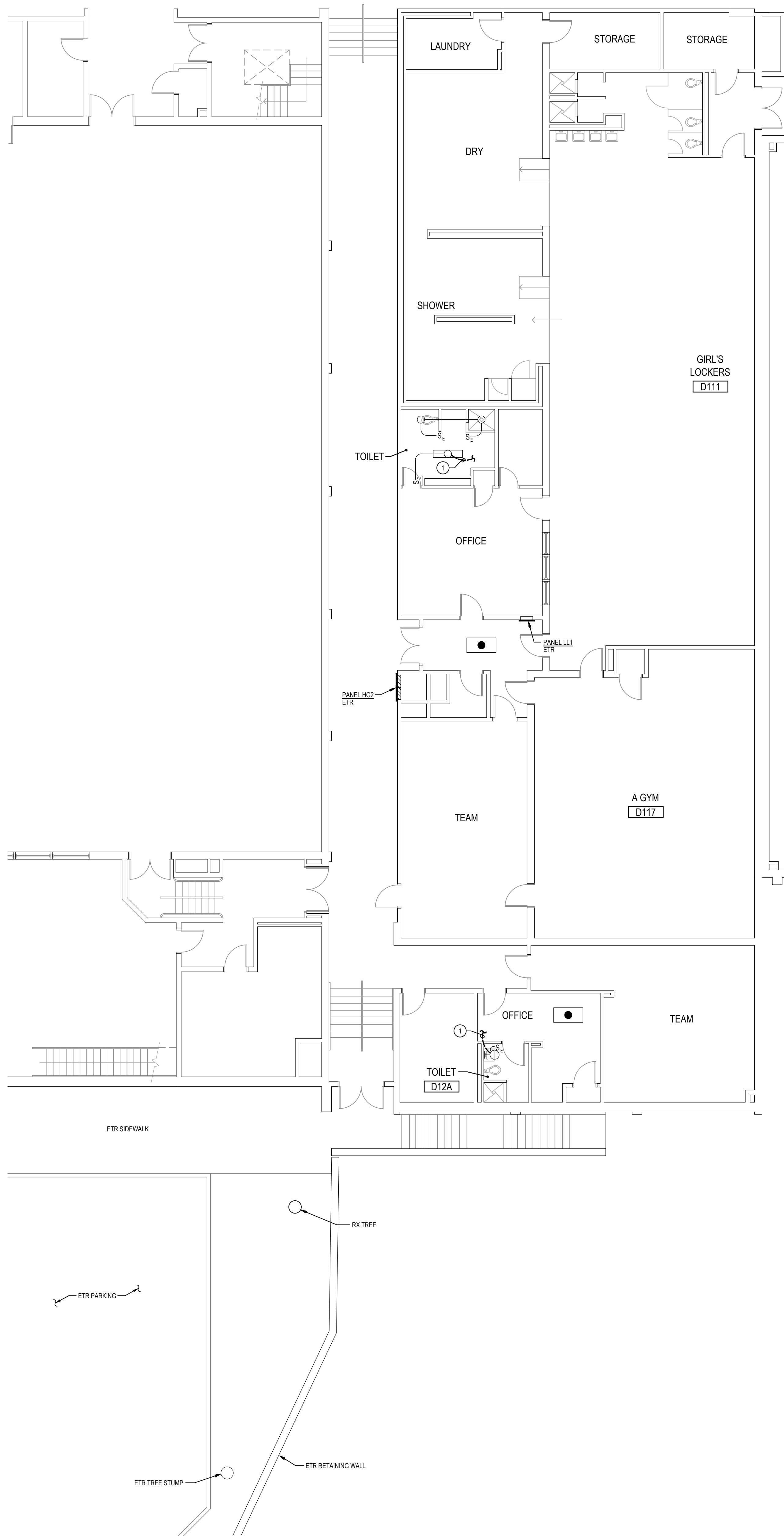
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PSC No.	
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Project No.	7753-22
Date	JUNE 20, 2023

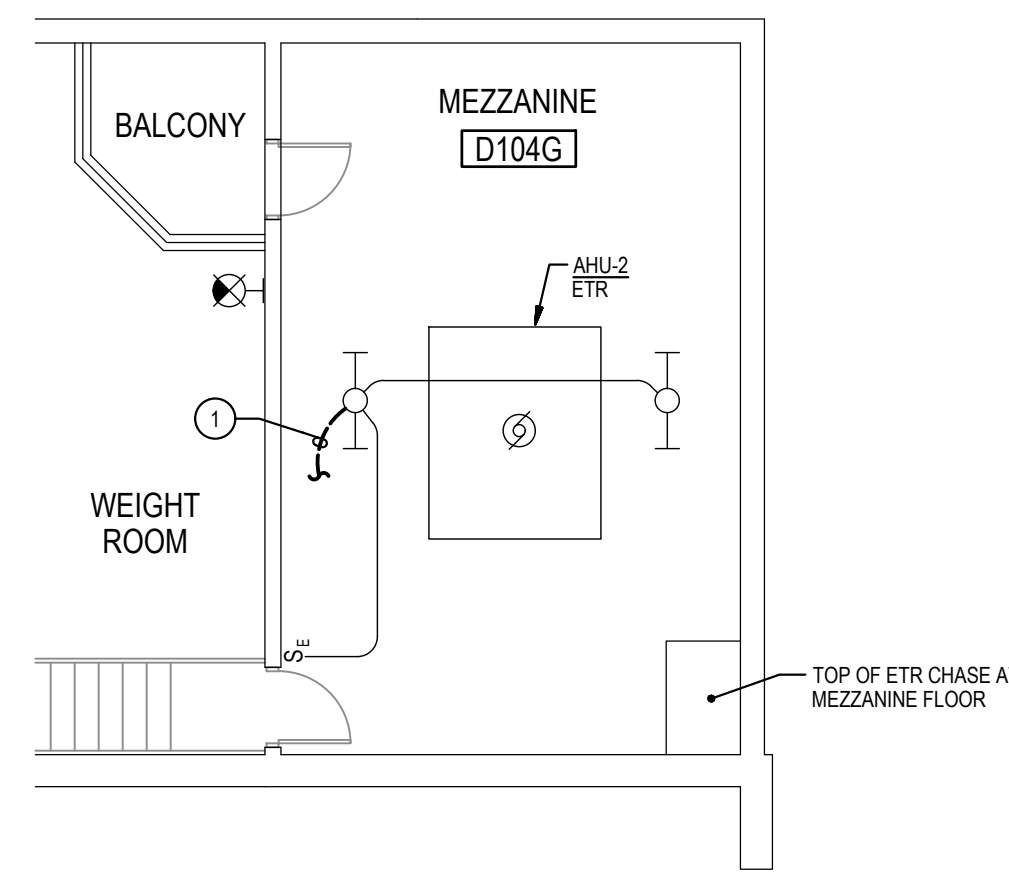
Drawing Title
PART FLOOR PLANS
 DEMOLITION AND
 NEW WORK

Sheet No:
E-6

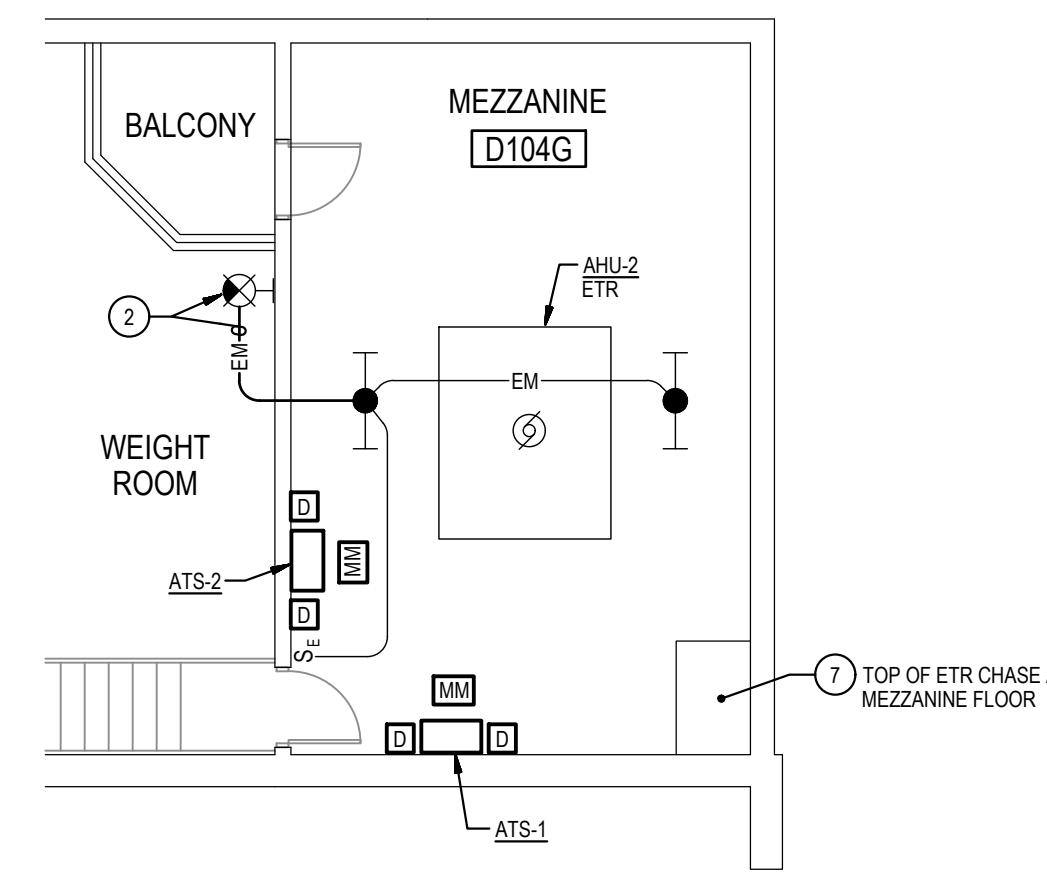




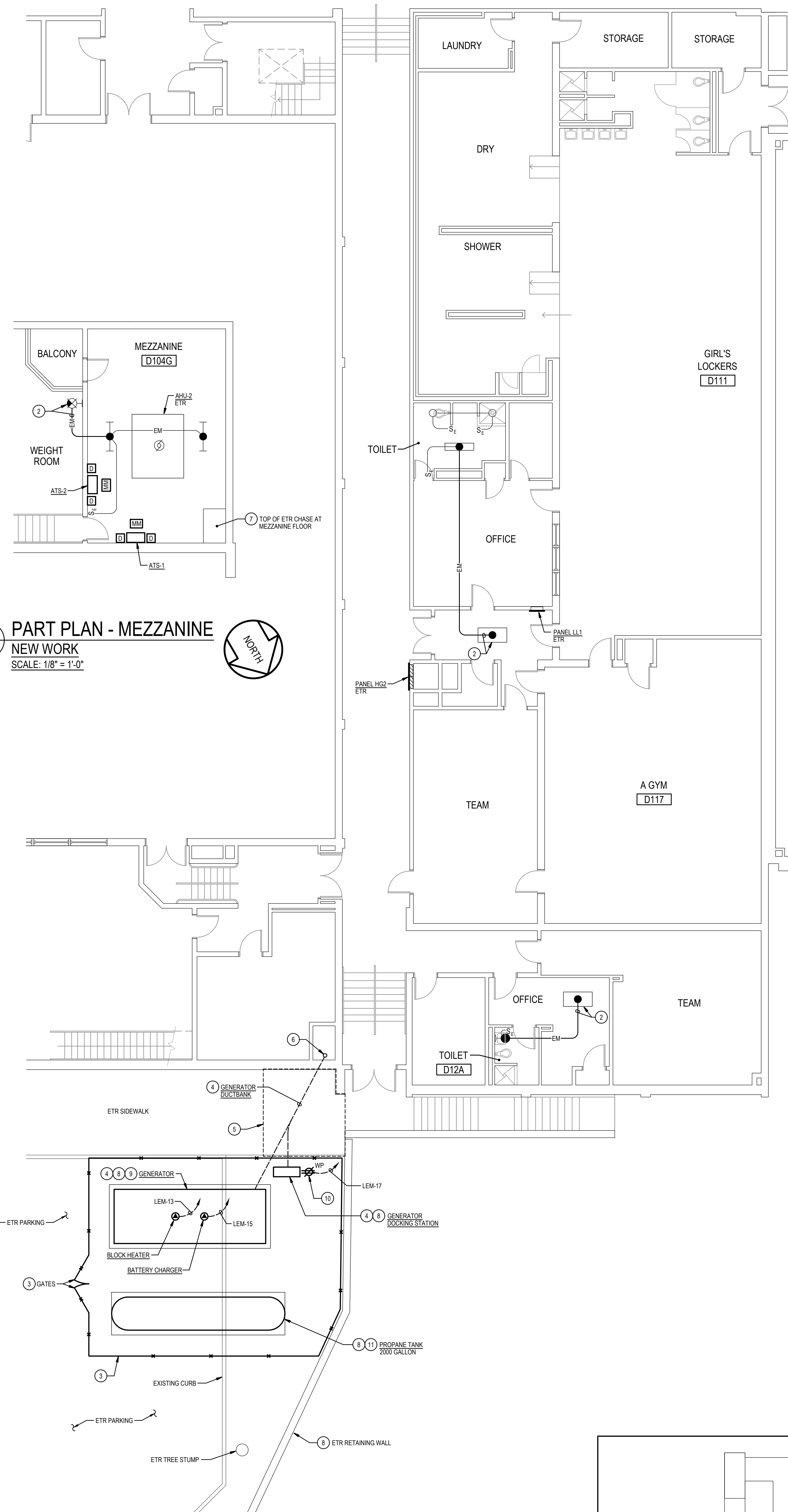
1 PART PLAN - FIRST FLOOR
DEMOLITION
 SCALE: 1/8" = 1'-0"



3 PART PLAN - MEZZANINE
DEMOLITION
 SCALE: 1/8" = 1'-0"



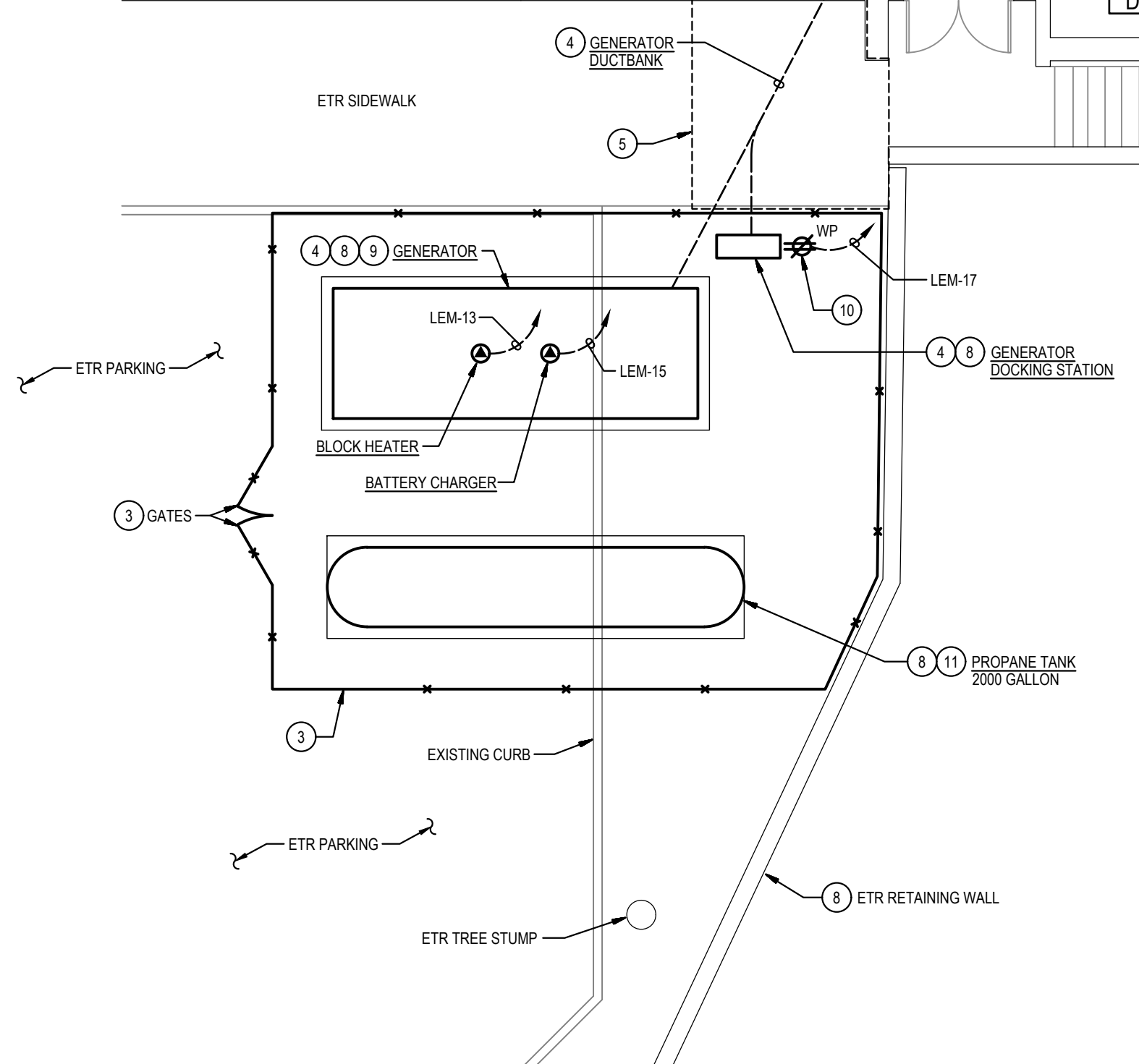
4 PART PLAN - MEZZANINE
NEW WORK
 SCALE: 1/8" = 1'-0"



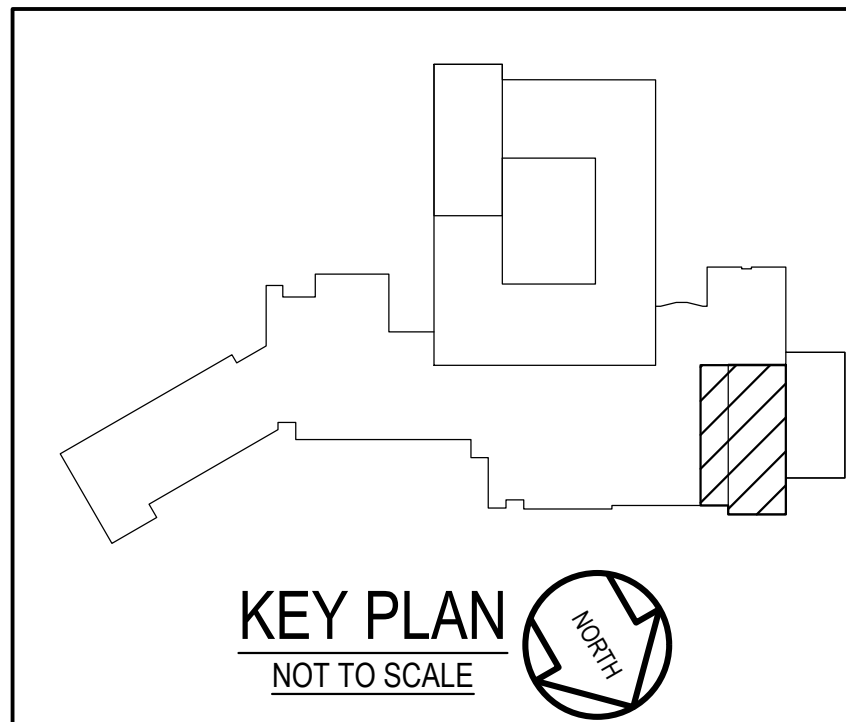
2 PART PLAN - FIRST FLOOR
NEW WORK
 SCALE: 1/8" = 1'-0"

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 - 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 FIXTURE(S).
 - PROVIDE 2#12x#20 IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
 - PROVIDE 8'-0" TALL CHAIN LINK FENCE WITH 8'-0" WIDE OPENING AND TWO 4'-0" WIDE GATES.
 - REFER TO POWER RISER DIAGRAM 2E-6 FOR CONNECTIONS, DUCTBANK SIZES, AND ADDITIONAL INFORMATION ON ELECTRICAL EQUIPMENT AS NOTED.
 - CUT AND PATCH EXISTING CONCRETE SIDEWALK AS NEEDED FOR INSTALLATION OF GENERATOR DUCTBANK.
 - ROUTE CONDUITS UP THRU EXISTING CHASE TO MEZZANINE ABOVE. REFER TO PART PLAN 4E-7 FOR ADDITIONAL INFORMATION.
 - ADJUST EXISTING FLOOR GRATE TO ALLOW ROUTING OF GENERATOR CONDUITS THRU GRATE.
 - MAINTAIN A MINIMUM CLEARANCE OF 5'-6" FROM NEAREST SIDE OF RETAINING WALL TO EQUIPMENT, INCLUDING HOUSEKEEPING PADS.
 - LOCATE GENERATOR SO THAT EXHAUST IS DIRECTED AWAY FROM BUILDING.
 - INSTALL RECEPTACLE ON STEEL CHANNEL SUPPORT OF GENERATOR DOCKING STATION.
 - COORDINATE PROPANE TANK SIZING WITH FUEL PROVIDER.



8 4 0 8 16
 SCALE: 1/8" = 1'-0"



GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
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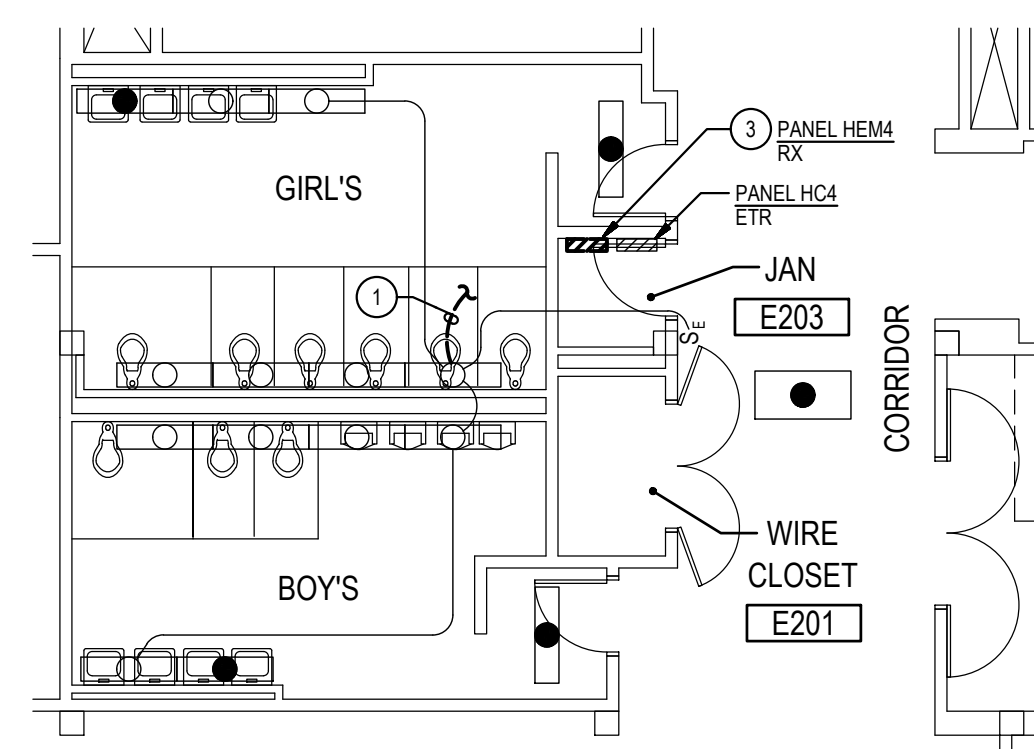
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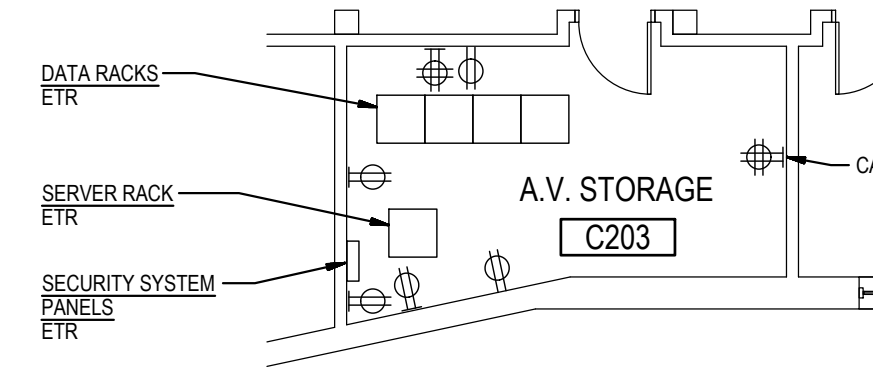
PSC No.
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 Project No. 7753-22
 Date JUNE 20, 2023

Drawing Title
PART FLOOR PLANS
DEMOLITION AND
NEW WORK

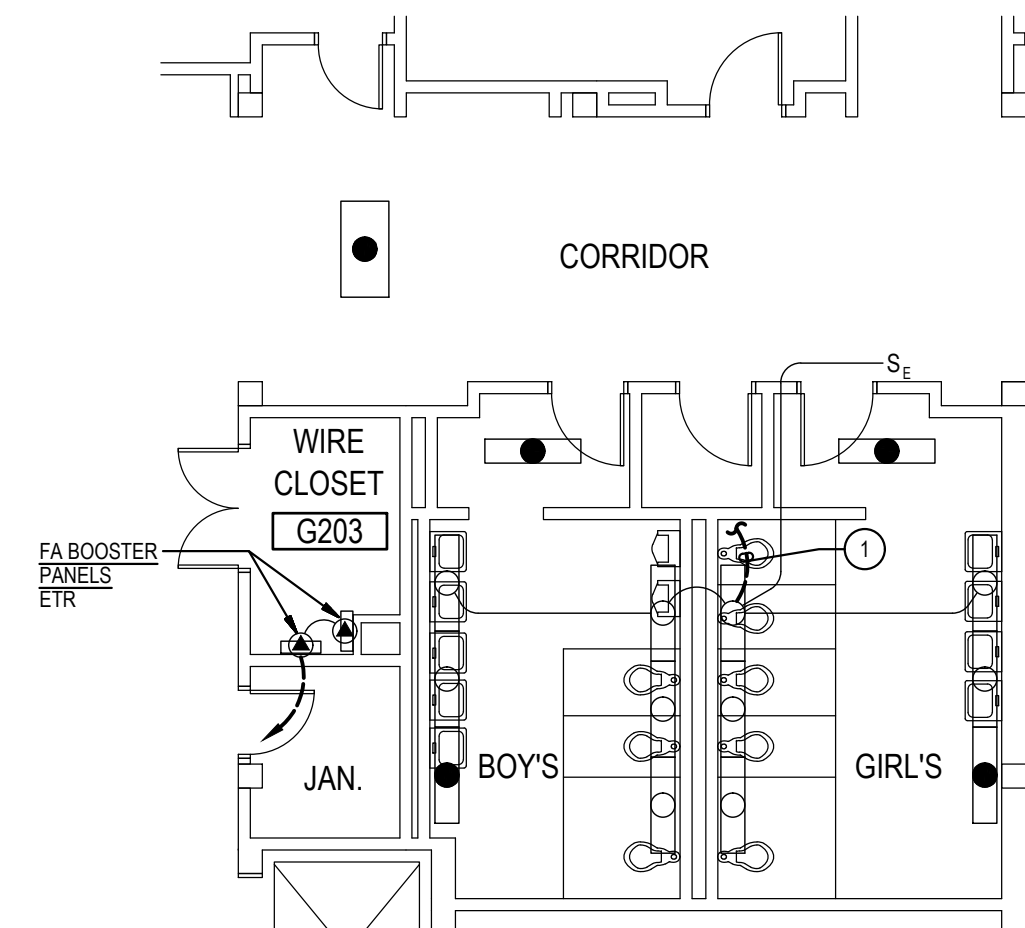
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E-7



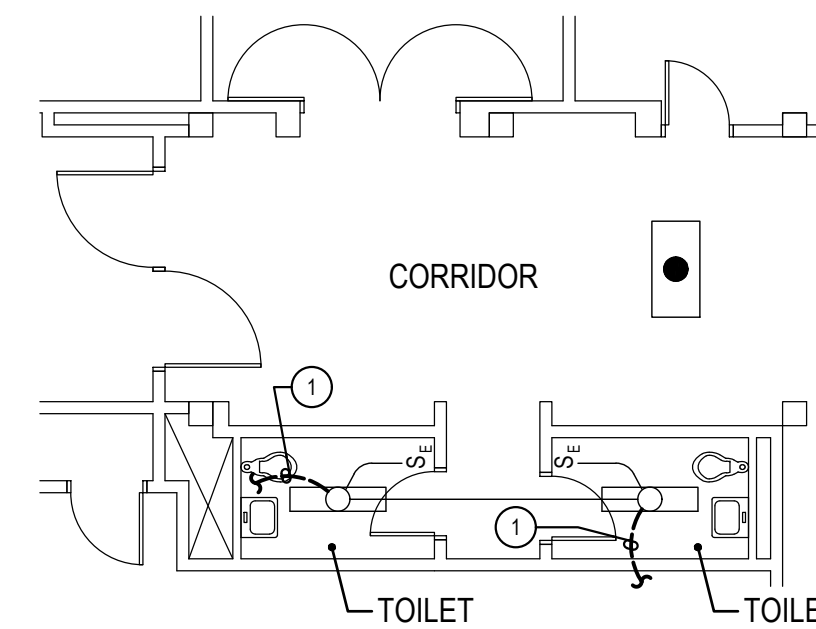
1 PART PLAN - SECOND FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



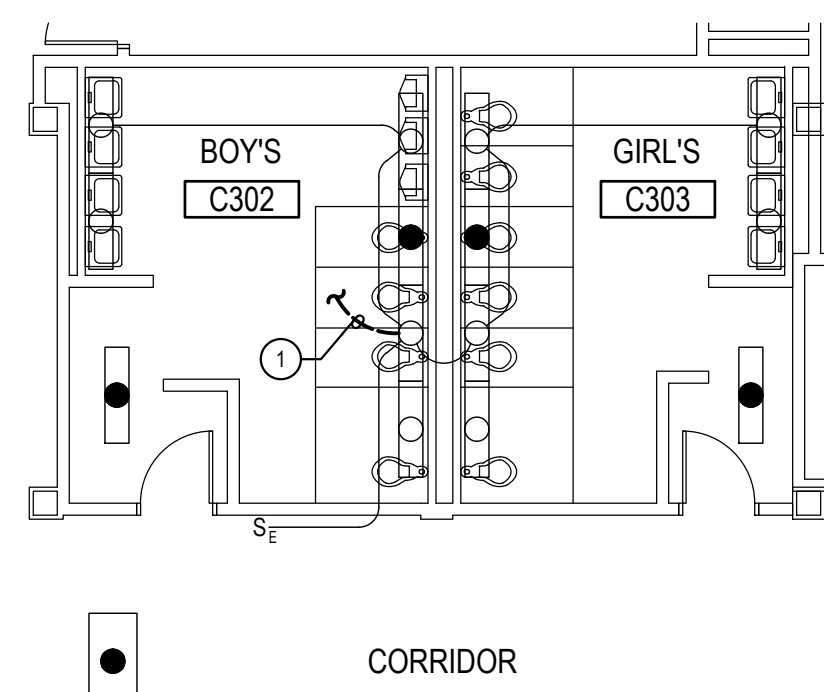
3 PART PLAN - SECOND FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



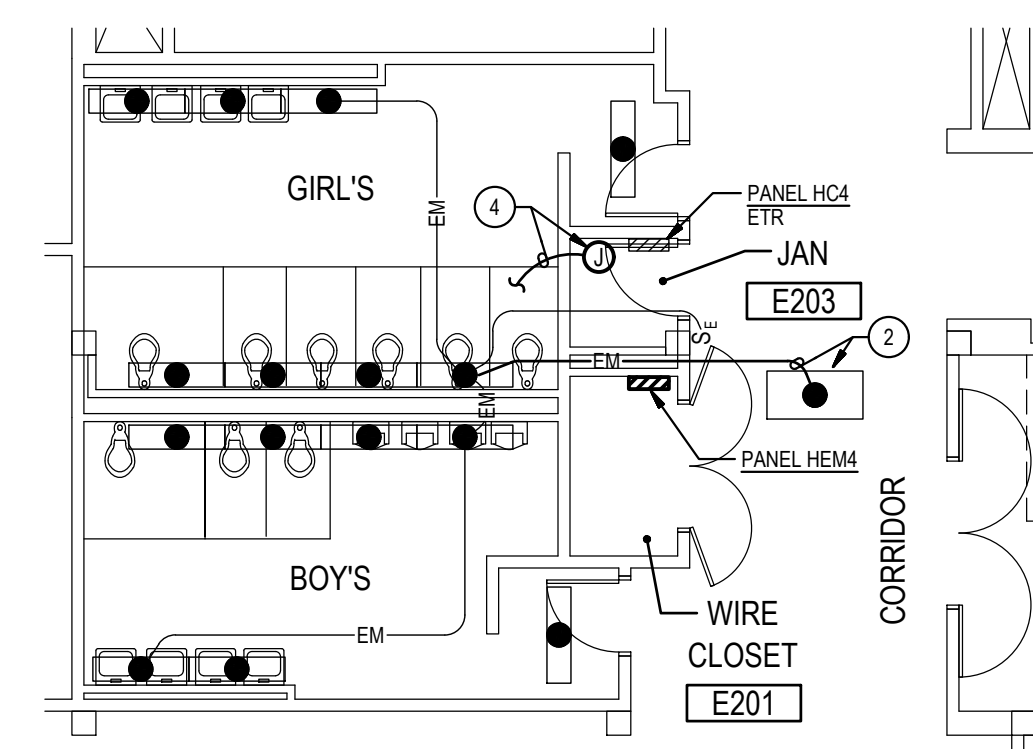
5 PART PLAN - SECOND FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



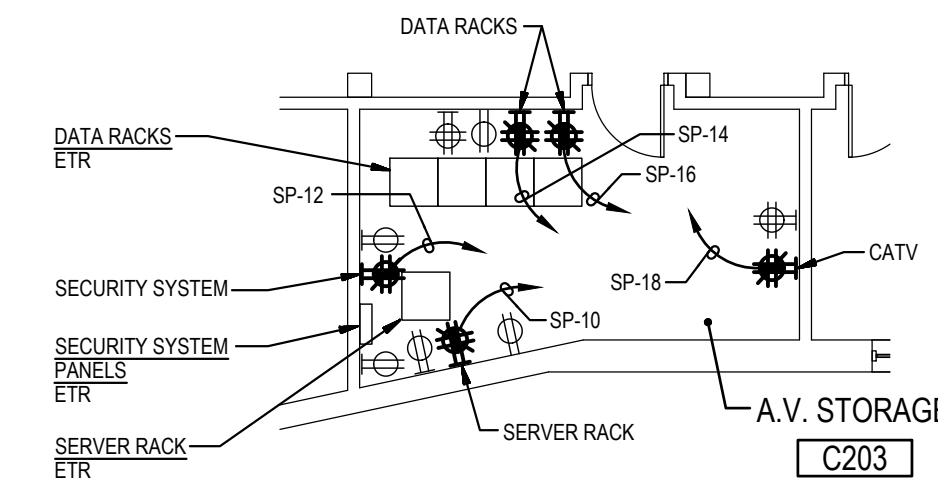
7 PART PLAN - SECOND FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



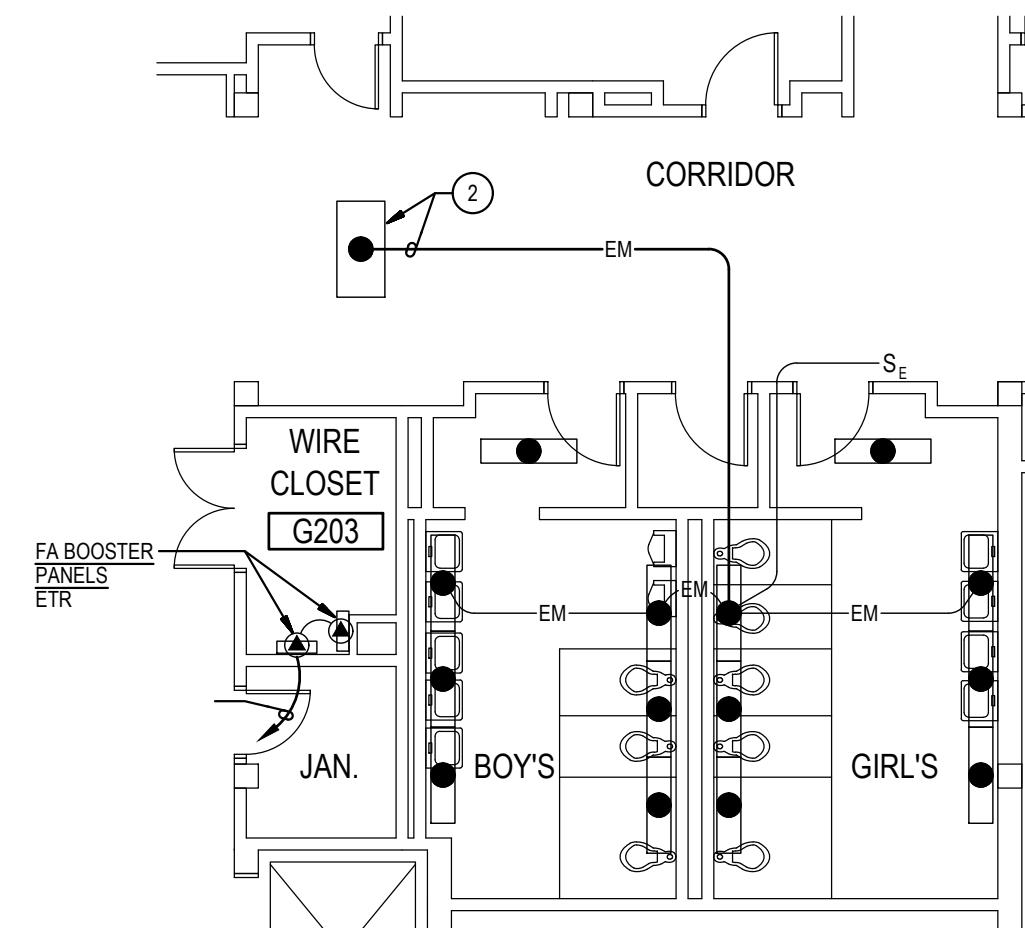
9 PART PLAN - THIRD FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



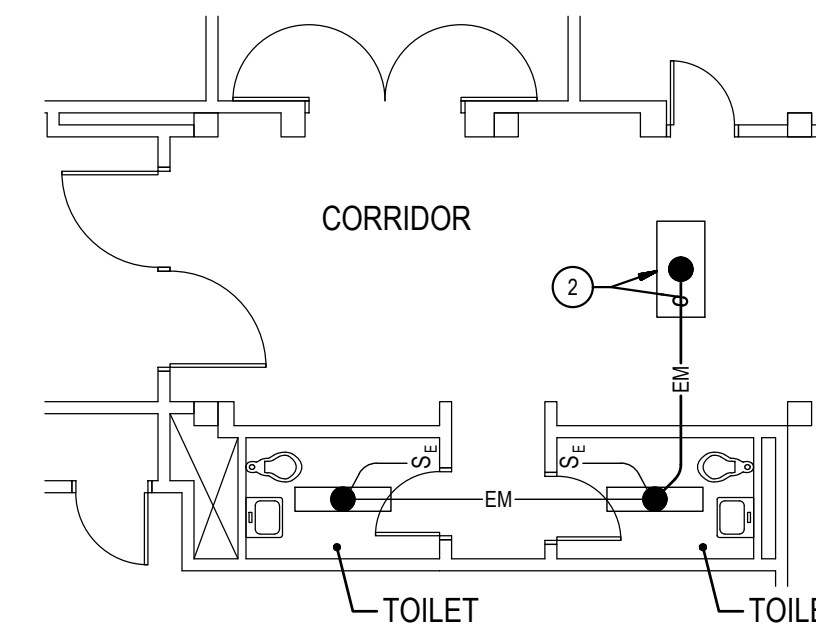
2 PART PLAN - SECOND FLOOR
E-8 NEW WORK
SCALE: 1/8" = 1'-0"



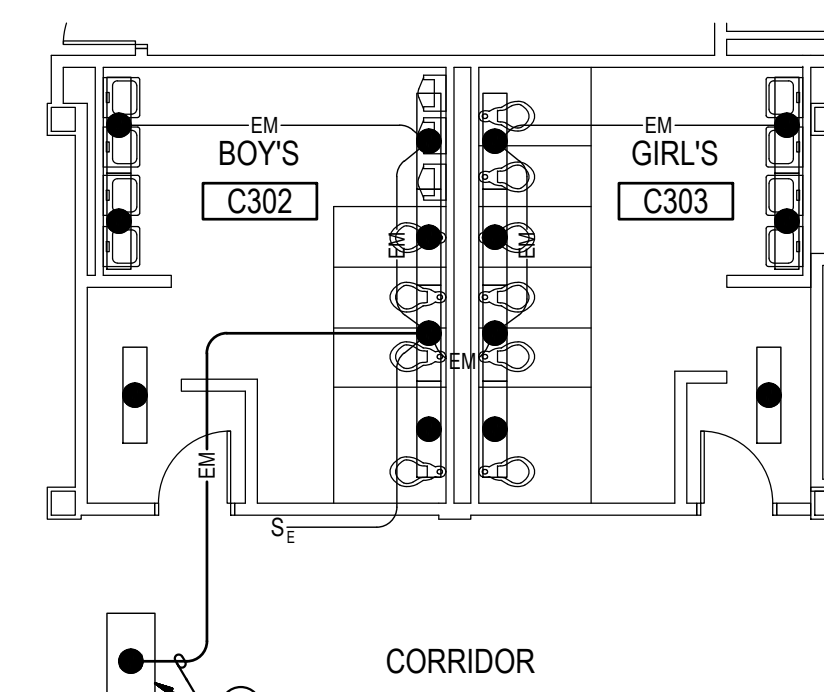
4 PART PLAN - SECOND FLOOR
E-8 NEW WORK
SCALE: 1/8" = 1'-0"



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



8 PART PLAN - SECOND FLOOR
E-8 NEW WORK
SCALE: 1/8" = 1'-0"



10 PART PLAN - THIRD FLOOR
E-8 NEW WORK
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

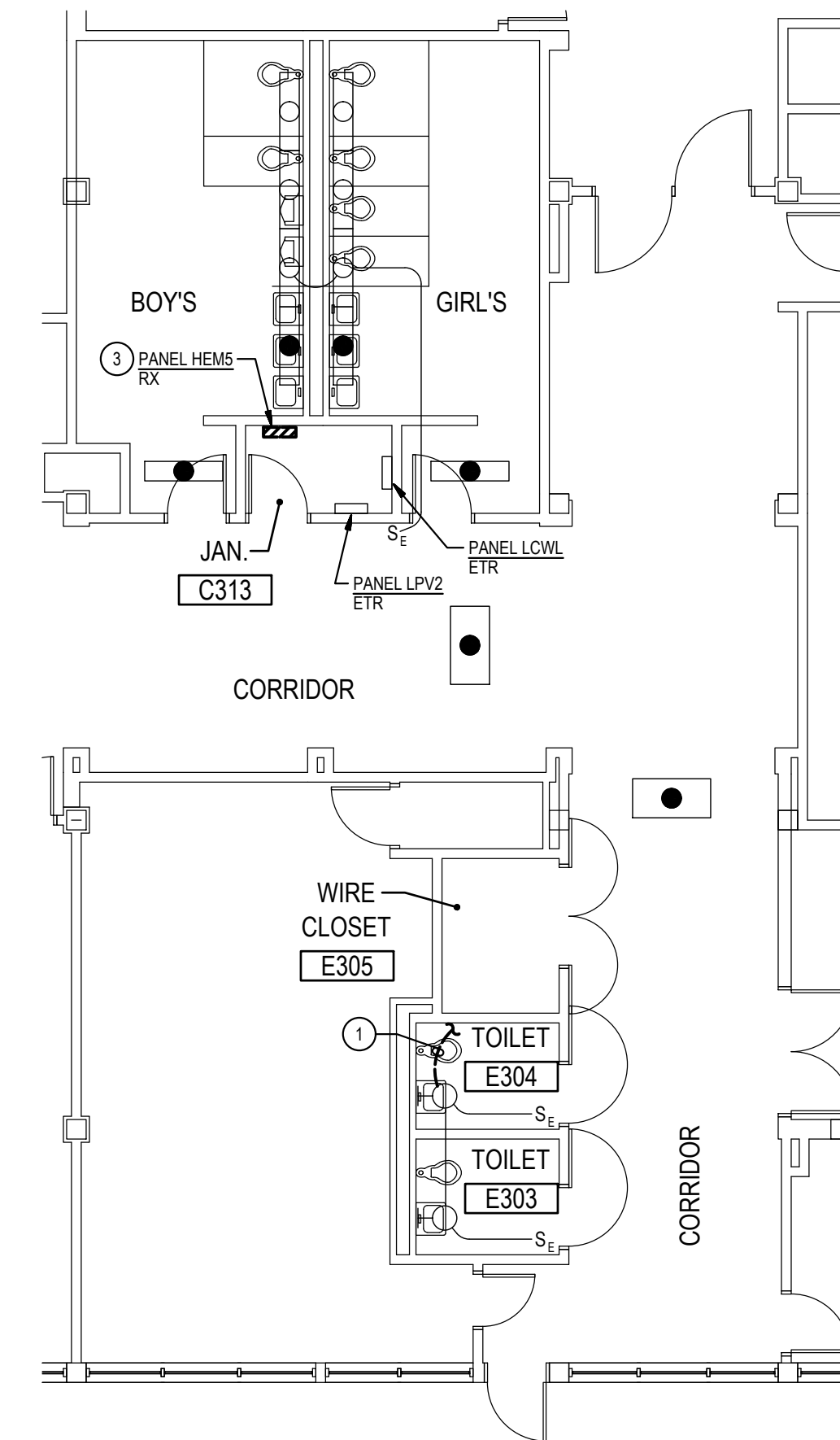
- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD 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.
- E. UNLESS OTHERWISE NOTED, ELECTRICAL ITEMS SHOWN HEAVY DASHED SHALL BE REMOVED AND ELECTRICAL ITEMS SHOWN LIGHT SOLID SHALL REMAIN.

GENERAL NOTES (CONTINUED):

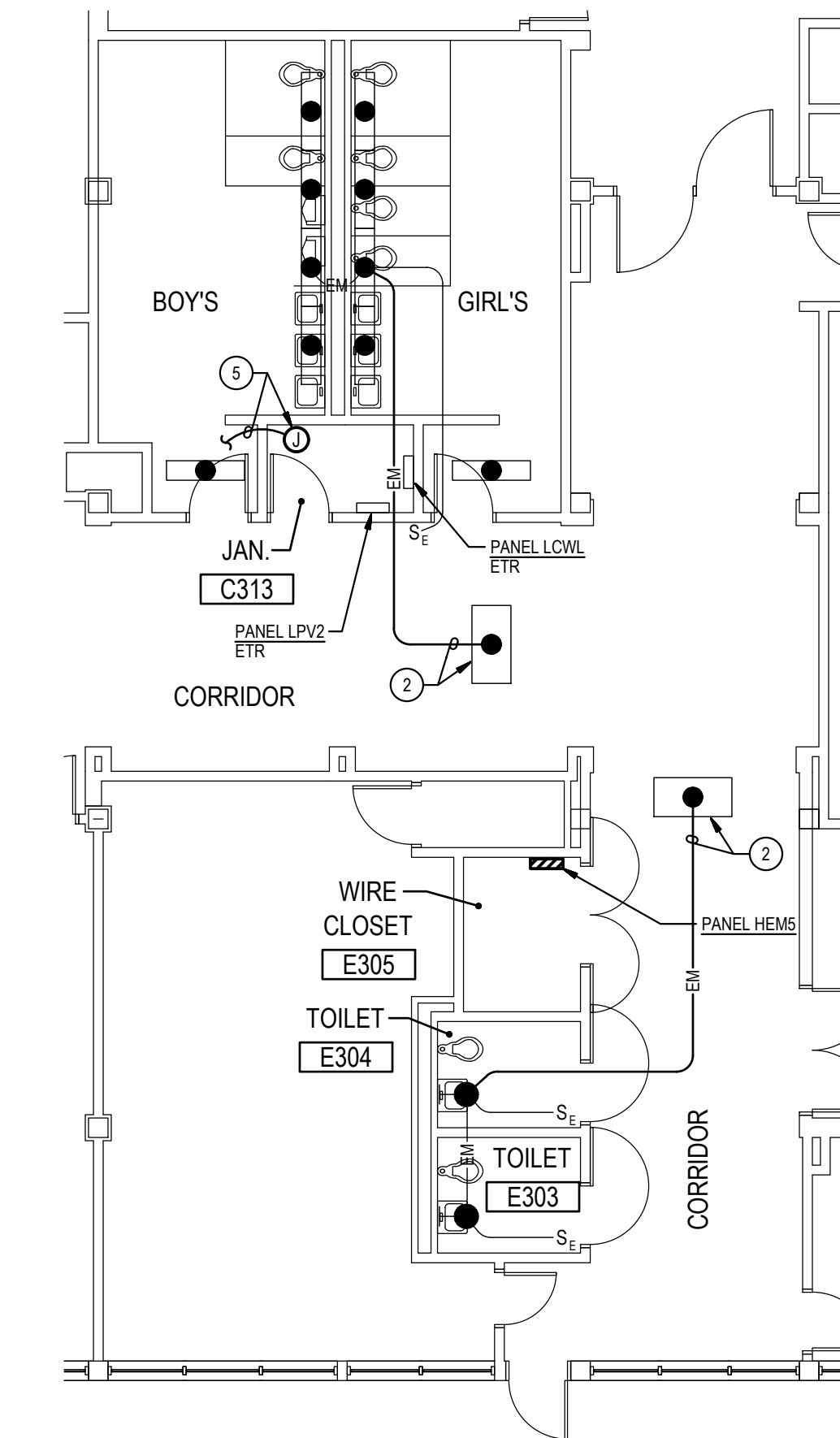
- F. DEMOLITION SHALL INCLUDE REMOVAL AND OFF-SITE DISPOSAL OF MATERIALS. DO NOT ABANDON IN PLACE ANY ELECTRICAL COMPONENTS UNLESS OTHERWISE NOTED ON DRAWINGS.
- G. WHERE EQUIPMENT IS NOTED "DISCONNECT" OR "REMOVE", REMOVE ASSOCIATED WIRE AND CONDUIT BACK TO SOURCE, UNLESS OTHERWISE NOTED.
- H. REMOVE EXISTING EQUIPMENT AND DEVICES INDICATED, INCLUDING ASSOCIATED WIRE AND CONDUIT TO SOURCE, UNLESS OTHERWISE NOTED.
- 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:

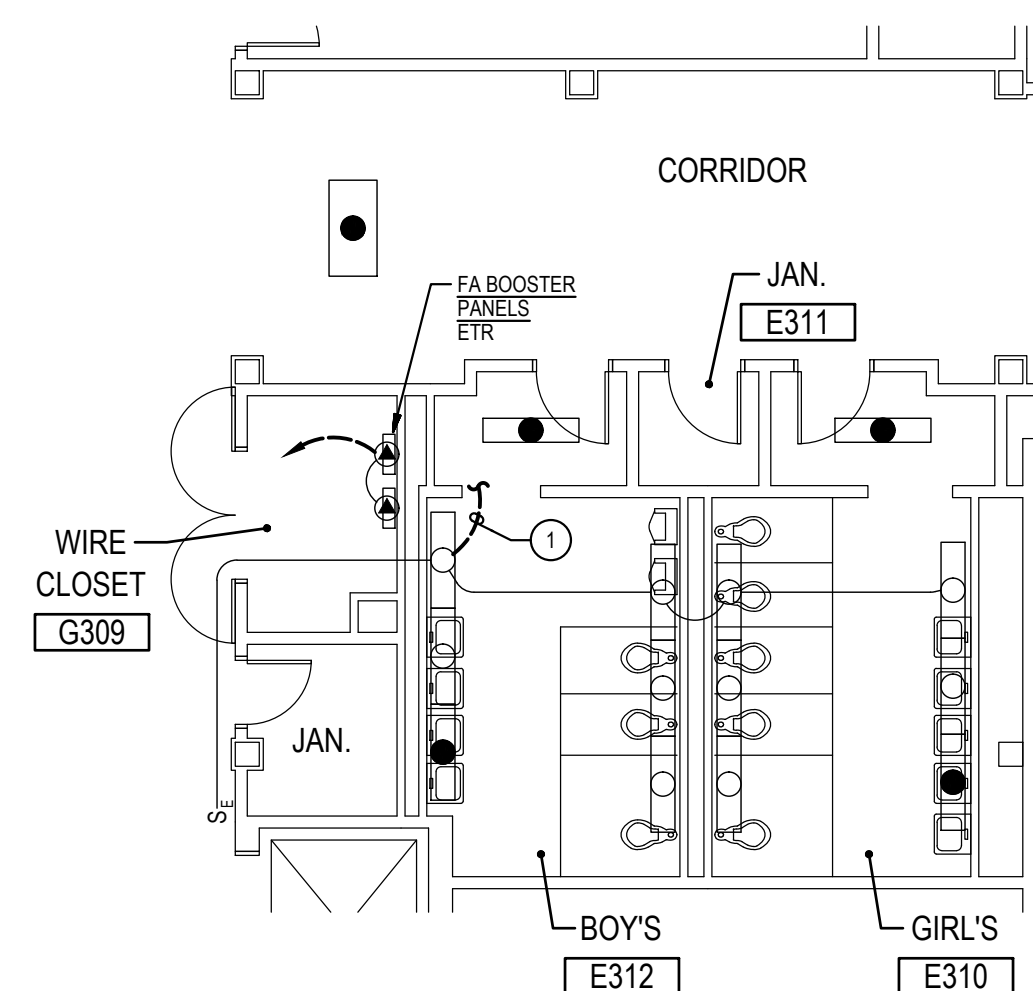
- 1. DISCONNECT AND REMOVE EXISTING WIRING IN CONDUIT SERVING EXISTING LIGHTING FIXTURE(S).
- 2. PROVIDE #12-#12S IN 3/4" CONDUIT AND CONNECT TO NEAREST EXISTING UNSWITCHED EMERGENCY LIGHTING CIRCUIT.
- 3. REMOVE PORTION OF EXISTING CONDUIT AND WIRING BACK TO ACCESSIBLE CEILING SPACE FOR SP-LINKS TO NEW PANEL. REFER TO NEW WORK PART PLAN FOR ADDITIONAL INFORMATION.
- 4. EXTEND EXISTING LIGHTING CIRCUITS TO NEW PANEL. REFER TO PANEL SCHEDULE ON DRAWING E-10 FOR ADDITIONAL INFORMATION.
- 5. EXTEND EXISTING LIGHTING CIRCUITS TO NEW PANEL. REFER TO PANEL SCHEDULE ON DRAWING E-10 FOR ADDITIONAL INFORMATION.



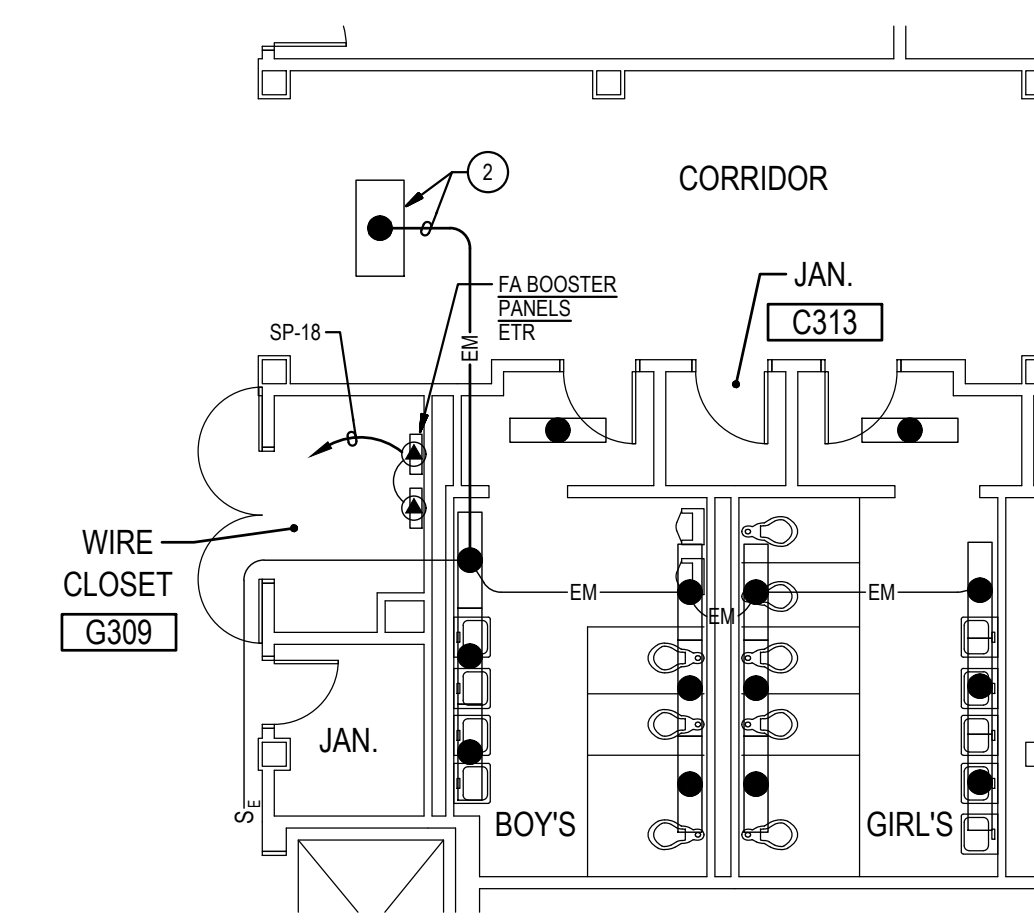
11 PART PLAN - THIRD FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



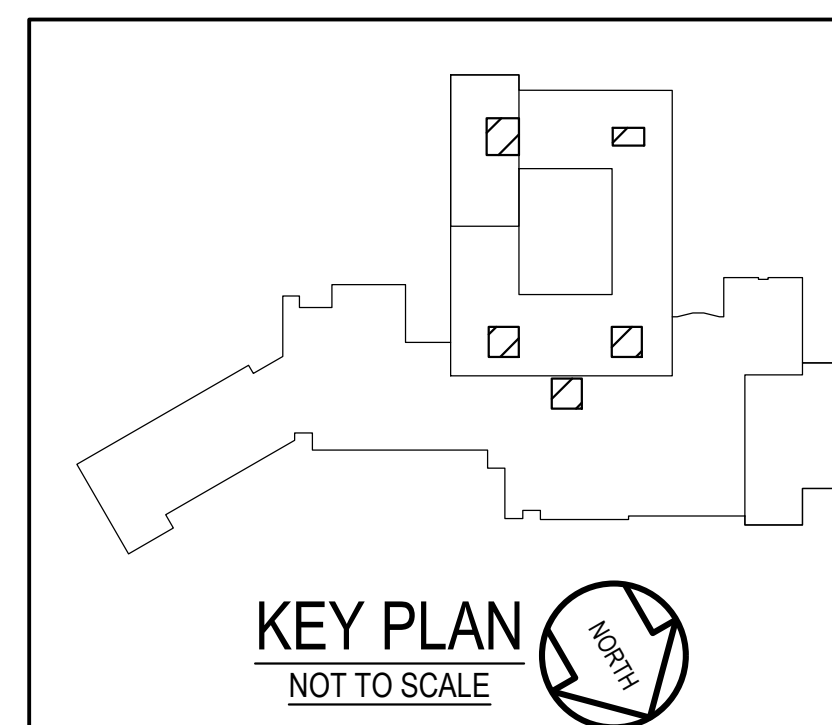
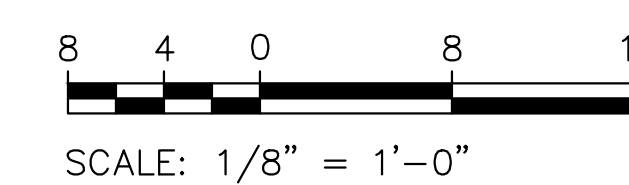
12 PART PLAN - THIRD FLOOR
E-8 NEW WORK
SCALE: 1/8" = 1'-0"



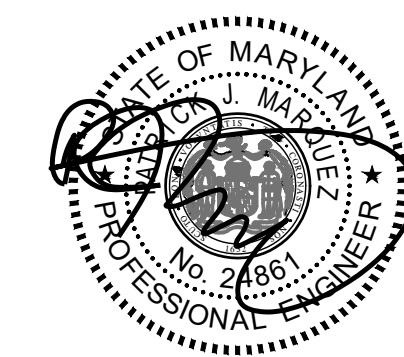
13 PART PLAN - THIRD FLOOR
E-8 DEMOLITION
SCALE: 1/8" = 1'-0"



14 PART PLAN - THIRD FLOOR
E-8 NEW WORK
SCALE: 1/8" = 1'-0"



GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
SPRINGBROOK HIGH SCHOOL
201 VALLEY BROOK DRIVE
SILVER SPRING, MD 20904
MONTGOMERY COUNTY PUBLIC SCHOOLS



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: 02-24-2024.

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Tag	Description	Date
	BID SET	06/20/23

PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023

Drawing Title
PART FLOOR PLANS DEMOLITION AND NEW WORK

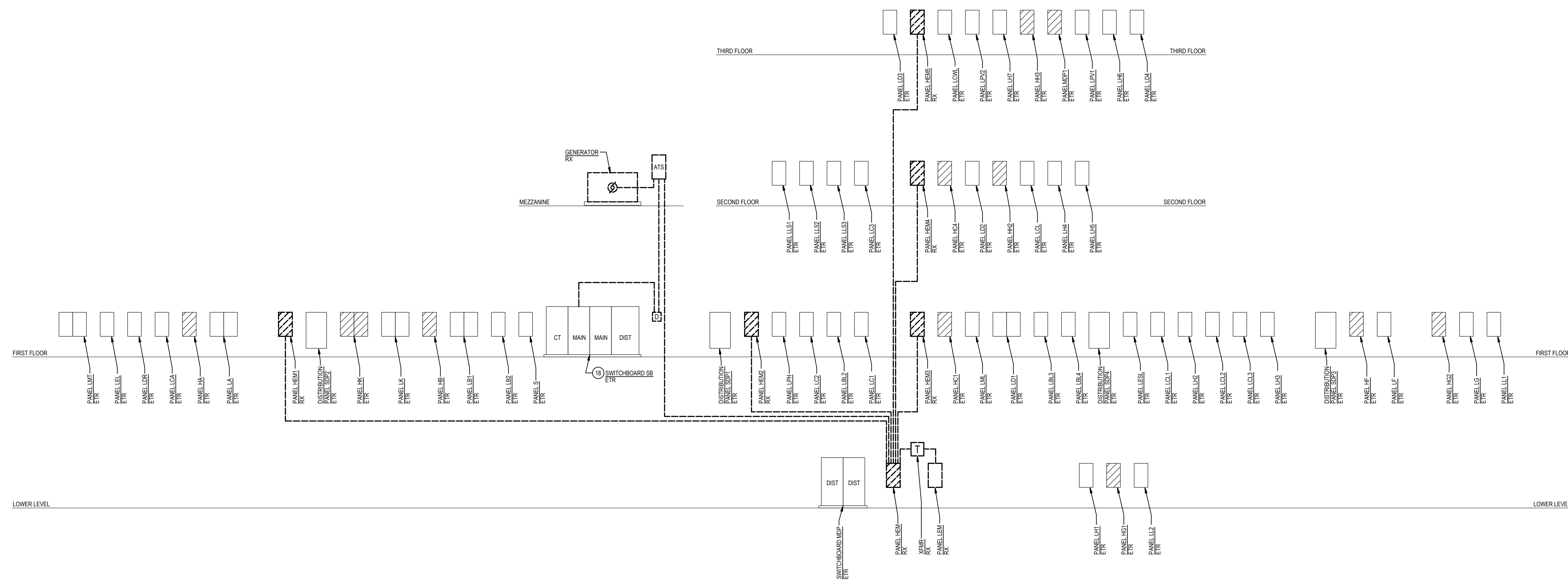
Sheet No:
E-8

GENERAL NOTES:

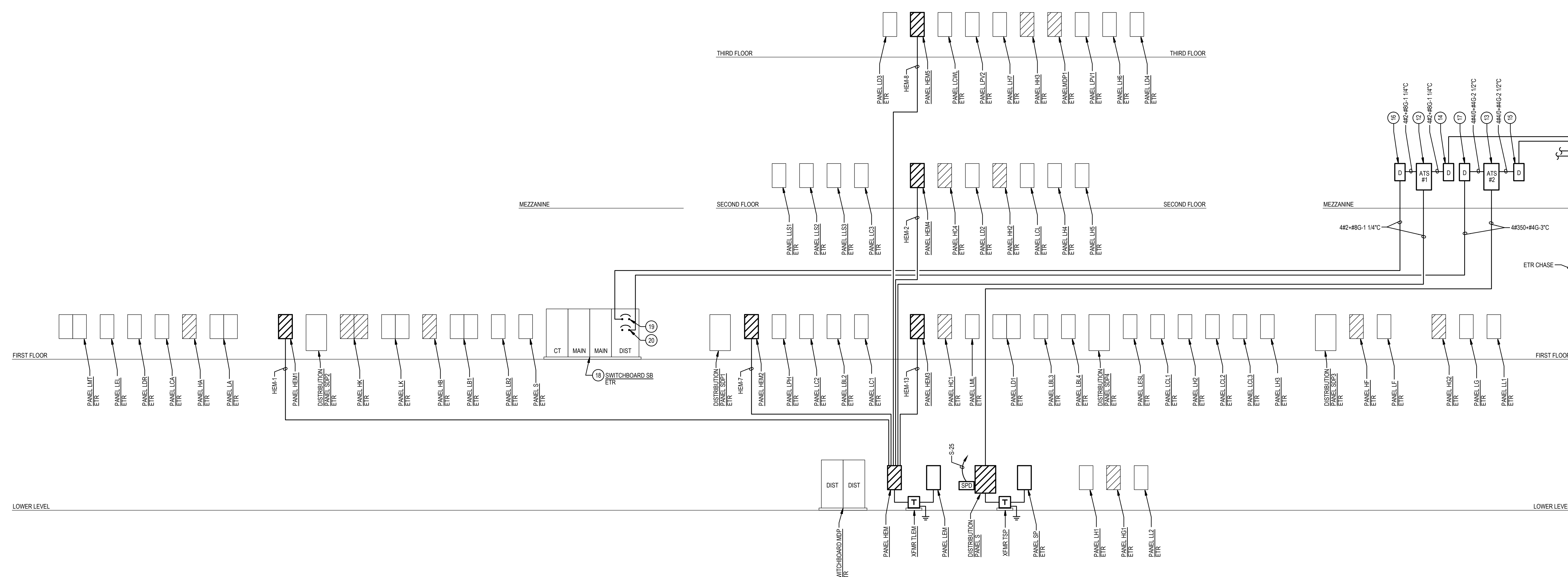
- A. INFORMATION SHOWN ON THIS DRAWING PERTAINING TO EXISTING CONDITIONS HAS BEEN OBTAINED FROM AVAILABLE BUILDING DRAWINGS OR GENERAL FIELD OBSERVATIONS AND MAY NOT INDICATE EXISTING CONDITIONS IN DETAIL OR DIMENSION. DETERMINE EXISTING CONDITIONS PRIOR TO FABRICATION OR PERFORMANCE OF ANY WORK. SHOULD 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 TO NEW LOCATION AS REQUIRED.
- 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 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.
- 2 PROVIDE GENERATOR CONCRETE PAD. REFER TO DETAIL 1E-0 FOR ADDITIONAL INFORMATION.
- 3 REFER TO DIAGRAM 3E-0 FOR GENERATOR GROUNDING.
- 4 PROVIDE GENERATOR CONTROL WIRING IN CONDUIT BETWEEN GENERATOR CONTROL PANEL AND ASSOCIATED AUTOMATIC TRANSFER SWITCHES. MAKE CONNECTIONS NECESSARY FOR COMPLETE INSTALLATION. GENERATOR CONTROL WIRING SHALL BE AS PER GENERATOR MANUFACTURERS RECOMMENDATIONS.
- 5 PROVIDE WIRING IN CONDUIT FROM GENERATOR CONTROL PANEL TO GENERATOR REMOTE ALARM INDICATOR PANEL. WIRING SHALL BE AS PER GENERATOR MANUFACTURERS RECOMMENDATIONS.
- 6 PROVIDE 3P-400A 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-300A 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 #00 + #3 GROUND IN 3" CONDUIT BETWEEN 3P-400A ELECTRONIC TRIP CIRCUIT BREAKER AT GENERATOR SERVING EMERGENCY LIFE SAFETY LOADS AND GENERATOR DOCKING STATION, SIZED FOR LOAD BANK CONNECTION.
- 9 PROVIDE 400A GENERATOR DOCKING STATION IN NEMA TYPE 3R ENCLOSURE, EQUAL TO TRISTAR DEVS-5 WITH 3P-100A CIRCUIT BREAKERS, KIRK KEY INTERLOCKED. FOR CONNECTIONS TO ATS-1 AND PORTABLE MOBILE GENERATOR, FEEDERS FOR LOAD BANK CONNECTION SHALL BE SIZED FOR 400A. PROVIDE SIGN ON FRONT OF GENERATOR DOCKING STATION TO READ AS FOLLOWS: SERVING EMERGENCY TRANSFER SWITCH (ATS-1) IN MEZZANINE ABOVE WEIGHT LIFTING ROOM, Z77480V, 3-PHASE, 4-WIRE.
- 10 PROVIDE 4 #2 + #8 GROUND IN 1 1/4" CONDUIT.
- 11 PROVIDE 4 #30 + #4 GROUND IN 3" CONDUIT.
- 12 PROVIDE 4P-100A AUTOMATIC TRANSFER SWITCH (ATS) TO SERVE EMERGENCY LIFE SAFETY LOADS. ATS SHALL HAVE A MINIMUM UL 1008 WITHSTAND AND CLOSING RATING OF 65K AIC. PROVIDE NAMEPLATE ON FRONT OF ATS TO READ "EMERGENCY ATS".
- 13 PROVIDE 4P-300A AUTOMATIC TRANSFER SWITCH (ATS) TO SERVE STANDBY 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".
- 14 PROVIDE 3P-100A-600V NON-FUSED ENCLOSED SWITCH WITH NEUTRAL KIT IN NEMA TYPE 1 ENCLOSURE TO SERVE GENERATOR EMERGENCY LIFE SAFETY LOADS.
- 15 PROVIDE 3P-400A-600V NON-FUSED ENCLOSED SWITCH WITH NEUTRAL KIT IN NEMA TYPE 1 ENCLOSURE TO SERVE GENERATOR STANDBY LOADS.
- 16 PROVIDE 3P-100A-600V FUSED ENCLOSED SWITCH WITH NEUTRAL KIT IN NEMA TYPE 1 ENCLOSURE. PROVIDE WITH 100A CURRENT LIMITING FUSES.
- 17 PROVIDE 3P-400A-600V FUSED ENCLOSED SWITCH WITH NEUTRAL KIT IN NEMA TYPE 1 ENCLOSURE. PROVIDE WITH 300A CURRENT LIMITING FUSES.
- 18 EXISTING SWITCHBOARD SB IS BY SQUARE D, GED POWER STYLE SWITCHBOARD, RATED AT Z77480 VOLT, 3-PHASE, 4-WIRE WITH 3000A BUS, 1000A MAIN SERVICE BOLTED PRESSURE SWITCH, AND 3000A MAIN SERVICE BOX TIED PRESSURE SWITCH.
- 19 PROVIDE 3P-100A CIRCUIT BREAKER IN AVAILABLE SPACE IN EXISTING SWITCHBOARD SN. TYPE AND AIC RATING OF CIRCUIT BREAKER TO MATCH EXISTING.
- 20 PROVIDE 3P-300A CIRCUIT BREAKER IN AVAILABLE SPACE IN EXISTING SWITCHBOARD SN. TYPE AND AIC RATING OF CIRCUIT BREAKER TO MATCH EXISTING.

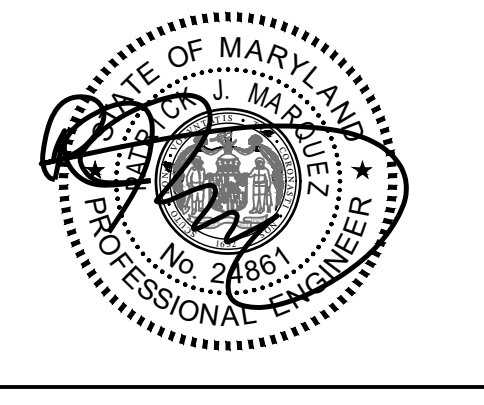


1 POWER RISER DIAGRAM
E-9
DEMOLITION
NOT TO SCALE



2 POWER RISER DIAGRAM
E-9
NEW WORK
NOT TO SCALE

GENERATOR AND ELECTRICAL EQUIPMENT REPLACEMENT
SPRINGBROOK HIGH SCHOOL
 201 VALLEY BROOK DRIVE
 SILVER SPRING, MD 20904
MONTGOMERY COUNTY PUBLIC SCHOOLS



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: 02-24-2024.

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Engineering Your Vision

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jamesposey.com

Tag	Description	Date
	BID SET	06/20/23

PSC No.	
Scale	AS NOTED
Project No.	7753-22
Date	JUNE 20, 2023

Drawing Title
POWER RISER DIAGRAMS

Sheet No:
E-9

SCHEDULE OF TRANSFORMERS							
TRANSFORMER DESIG	LOCATION	PRIMARY FEEDER	SECONDARY TAP WIRING & CONDUIT (NOTE A)	GROUNDING ELECTRODE CONDUCTOR	EQUIPMENT SERVED	NOTES	
T5M	15	LOWER LEVEL ELEC	HEM-38	4 #8 - #8G - 1" C	#8	PANEL LEM	1
T5P	45	LOWER LEVEL ELEC	S-26	4 #10 - #6G - 2" C	#6	PANEL SP	2

TRANSFORMER GENERAL NOTES:
 A. TRANSFORMER SECONDARY TAP CONDUCTORS INDICATED REFLECT PHASE, NEUTRAL (IN WYE CONFIGURATION), AND SUPPLY VOLTAGE BONDING JUMPER (SBJ) IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC) ARTICLES 450, 242.21, AND 250.30.
 B. TRANSFORMER SHALL HAVE 480 VOLT 3 PHASE DELTA PRIMARY AND 120/208 VOLT 3 PHASE WYE SECONDARY.
 TRANSFORMER SPECIFIC NOTES:
 1. PROVIDE WALL MOUNT BRACKETS FOR MOUNTING ON MASONRY WALL.
 2. PROVIDE ON 4" HIGH HOUSEKEEPING PAD.

WIRING SCHEDULE: PANEL HEM														
277 / 480 VOLTS		3 PHASE 4 WIRE			125 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	PANEL HEM1	4#8+	3	40	3.0	2.1			2	2	PANEL HEM4	4#8+	3	40
- 3		#10G-3/4"			2.0	2.8			- 4			#10G-3/4"		
- 5					2.6	3.6			- 6					
7	PANEL HEM2	4#8+	3	40	9.0	2.9			8	8	PANEL HEM5	4#8+	3	40
- 9		#10G-3/4"			5.6	2.5			- 10			#10G-3/4"		
- 11					5.7	0.0			- 12					
13	PANEL HEM3	4#8+	3	40	5.0				14	14	SPARE		1	20
- 15		#10G-3/4"			1.0				- 16		SPARE		1	20
- 17					2.5				- 18		SPARE		1	20
- 19	SPACE AND PROVISIONS	-	1	-	-	-	-	-	20	20	SPACE AND PROVISIONS	-	1	-
- 21	SPACE AND PROVISIONS	-	1	-	-	-	-	-	22	22	SPACE AND PROVISIONS	-	1	-
- 23	SPACE AND PROVISIONS	-	1	-	-	-	-	-	24	24	SPACE AND PROVISIONS	-	1	-
- 25	SPACE AND PROVISIONS	-	1	-	-	-	-	-	26	26	SPACE AND PROVISIONS	-	1	-
- 27	SPACE AND PROVISIONS	-	1	-	-	-	-	-	28	28	SPACE AND PROVISIONS	-	1	-
- 29	SPACE AND PROVISIONS	-	1	-	-	-	-	-	30	30	SPACE AND PROVISIONS	-	1	-
- 31	SPACE AND PROVISIONS	-	1	-	-	-	-	-	32	32	SPACE AND PROVISIONS	-	1	-
- 33	SPACE AND PROVISIONS	-	1	-	-	-	-	-	34	34	SPACE AND PROVISIONS	-	1	-
- 35	SPACE AND PROVISIONS	-	1	-	-	-	-	-	36	36	SPACE AND PROVISIONS	-	1	-
- 37	SPACE AND PROVISIONS	-	1	-	-	-	-	-	38	38	PANEL LEM	#10G-3/4"	3	30
- 39	SPACE AND PROVISIONS	-	1	-	-	-	-	-	40	40	(VIA XFMR TLEM)			
- 41	SPACE AND PROVISIONS	-	1	-	-	-	-	-	42	42				

CONNECTED LOAD = 50.3 KVA
 DEMAND LOAD = 50.3 KVA
 MIN AIC RATING = 42,000 AMPS SYMMETRICAL
 MAIN FUSE 100 AMPS
 LOCATION ELEC RM

NOTES:
 (1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.
 (2) PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE.

WIRING SCHEDULE: PANEL HEM1														
277 / 480 VOLTS		3 PHASE 4 WIRE			125 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	EXIT / EM LTS	#10-3/4"	1	20	2.0	1.0			2	2	LTS - BOLER RM	#10-3/4"	1	20
3	EXIT / EM LTS	#10-3/4"	1	20					4	4	SPARE		1	20
5	EXIT / EM LTS	#10-3/4"	1	20			2.6		6	6	SPARE		1	20
7	SPARE		1	20					8	8	SPARE		1	20
9	SPARE		1	20					10	10	SPARE		1	20
11	SPARE		1	20					12	12	SPARE		1	20
- 13	SPACE AND PROVISIONS	-	1	-	-	-	-	-	14	14	SPACE AND PROVISIONS	-	1	-
- 15	SPACE AND PROVISIONS	-	1	-	-	-	-	-	16	16	SPACE AND PROVISIONS	-	1	-
- 17	SPACE AND PROVISIONS	-	1	-	-	-	-	-	18	18	SPACE AND PROVISIONS	-	1	-

CONNECTED LOAD = 7.6 KVA
 DEMAND LOAD = 7.6 KVA
 MIN AIC RATING = 14,000 AMPS SYMMETRICAL
 MAIN BREAKER 40 AMPS
 LOCATION RECEIVING B117

NOTES:
 (1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.
 (2) PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE.

WIRING SCHEDULE: PANEL HEM5														
277 / 480 VOLTS		3 PHASE 4 WIRE			125 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	CORRIDOR EXIT / EM LTS	#10-3/4"	1	20	2.9	2.5			2	2	SPARE		1	20
3	CORRIDOR EXIT / EM LTS	#10-3/4"	1	20					4	4	SPARE		1	20
5	SPARE		1	20					6	6	SPARE		1	20
7	SPARE		1	20					8	8	SPARE		1	20
9	SPARE		1	20					10	10	SPARE		1	20
11	SPARE		1	20					12	12	SPARE		1	20
- 13	SPACE AND PROVISIONS	-	1	-	-	-	-	-	14	14	SPACE AND PROVISIONS	-	1	-
- 15	SPACE AND PROVISIONS	-	1	-	-	-	-	-	16	16	SPACE AND PROVISIONS	-	1	-
- 17	SPACE AND PROVISIONS	-	1	-	-	-	-	-	18	18	SPACE AND PROVISIONS	-	1	-

CONNECTED LOAD = 5.4 KVA
 DEMAND LOAD = 5.4 KVA
 MIN AIC RATING = 14,000 AMPS SYMMETRICAL
 MAIN BREAKER 40 AMPS
 LOCATION WIRE CLOS E305

NOTES:
 (1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.
 (2) PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE.

WIRING SCHEDULE: PANEL HEM2														
277 / 480 VOLTS		3 PHASE 4 WIRE			125 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	EXIT / EM LTS	#10-3/4"	1	20	3.0				2	2	SPARE		1	20
3	OUTSIDE LTS	#10-3/4"	1	20		2.8	2.8		4	4	OUTSIDE LTS	#10-3/4"	1	20
5	EXIT / EM LTS	#10-3/4"	1	20				4.1	6	6	EXIT / EM LTS	#10-3/4"	1	20
7	EXIT / EM LTS	#10-3/4"	1	20	3.9	2.1			8	8	EXIT / EM LTS	#10-3/4"	1	20
9	SPARE		1	20					10	10	SPARE		1	20
11	SPARE		1	20					12	12	SPARE		1	20
- 13	SPACE AND PROVISIONS	-	1	-	-	-	-	-	14	14	SPACE AND PROVISIONS	-	1	-
- 15	SPACE AND PROVISIONS	-	1	-	-	-	-	-	16	16	SPACE AND PROVISIONS	-	1	-
- 17	SPACE AND PROVISIONS	-	1	-	-	-	-	-	18	18	SPACE AND PROVISIONS	-	1	-

CONNECTED LOAD = 20.3 KVA
 DEMAND LOAD = 20.3 KVA
 MIN AIC RATING = 14,000 AMPS SYMMETRICAL
 MAIN BREAKER 40 AMPS
 LOCATION STORAGE G112

NOTES:
 (1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.
 (2) PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE.

WIRING SCHEDULE: PANEL LEM														
120 / 208 VOLTS		3 PHASE 4 WIRE			100 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	FA CP	#8-3/4"	1	20	0.2	0.2			2	2	ADDUO- GYM	#8-3/4"	1	20
3	FA PANELS	#8-3/4"	1	20		0.2	0.2		4	4	AUDIO-CHILD DEVELOPMENT	#8-3/4"	1	20
5	FA PANELS	#8-3/4"	1	20			0.2	0.2	6	6	REC - WORKROOM	#8-3/4"	1	20
7	GREENHOUSE	#8-3/4"	1	20	0.6				8	8	TUNNEL LIGHTS	#8-3/4"	1	20
9	GREENHOUSE	#8-3/4"	1	20		0.2	0.2		10	10	FA PANELS	#8-3/4"	1	20
11	GREENHOUSE	#8-3/4"	1	20			0.2	0.2	12	12	FA PANELS	#8-3/4"	1	20
13	GEN BLOCK HEATER	#8-3/4"	1	20	0.5	0.2			14	14	FA PANELS	#8-3/4"	1	20
15	GEN BATTERY CHARGER	#8-3/4"	1	20		0.5	0.2		16	16	FA PANELS	#8-3/4"	1	20
17	RECEPT-GENERATOR YARD	#8-3/4"	1	20			0.2	0.2	18	18	FA PANELS	#8-3/4"	1	20
19	SPARE		1	20			0.2		20	20	FA PANELS	#8-3/4"	1	20
21	SPARE		1	20			0.2		22	22	FA PANELS	#8-3/4"	1	20
23	SPARE		1	20					24	24	SPARE		1	20
25	SPARE		1	20					26	26	SPARE		1	20
27	SPARE		1	20					28	28	SPARE		1	20
29	SPARE		1	20					30	30	SPARE		1	20

CONNECTED LOAD = 5.0 KVA
 DEMAND LOAD = 5.0 KVA
 MIN AIC RATING = 10,000 AMPS SYMMETRICAL
 MAIN BREAKER 50 AMPS
 LOCATION ELEC RM

NOTES:
 (1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.
 (2) PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE.

WIRING SCHEDULE: PANEL HEM3														
277 / 480 VOLTS		3 PHASE 4 WIRE			125 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	EXIT / EM LTS	#10-3/4"	1	20	3.2	1.8			2	2	EXIT / EM LTS	#10-3/4"	1	20
3	OUTSIDE LTS	#10-3/4"	1	20		1.0			4	4	OUTSIDE LTS	#10-3/4"	1	20
5	SPARE		1	20			2.5		6	6	EXIT / EM LTS	#10-3/4"	1	20
7	SPARE		1	20					8	8	SPARE		1	20
9	SPARE		1	20					10	10	SPARE		1	20
11	SPARE		1	20					12	12	SPARE		1	20
- 13	SPACE AND PROVISIONS	-	1	-	-	-	-	-	14	14	SPACE AND PROVISIONS	-	1	-
- 15	SPACE AND PROVISIONS	-	1	-	-	-	-	-	16	16	SPACE AND PROVISIONS	-	1	-
- 17	SPACE AND PROVISIONS	-	1	-	-	-	-	-	18	18	SPACE AND PROVISIONS	-	1	-

CONNECTED LOAD = 8.5 KVA
 DEMAND LOAD = 8.5 KVA
 MIN AIC RATING = 14,000 AMPS SYMMETRICAL
 MAIN BREAKER 40 AMPS
 LOCATION WIRE CLOS E102

NOTES:
 (1) PROVIDE FUSIBLE BRANCH CIRCUIT PANELBOARD.
 (2) PROVIDE PANELBOARD WITH INTEGRAL SURGE PROTECTIVE DEVICE.

WIRING SCHEDULE: DISTRIBUTION PANEL S														
277 / 480 VOLTS		3 PHASE 4 WIRE			600 AMP BUS			SURFACE MOUNTED						
CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	KVA/Ø	CR-POLE CUT	DESCRIPTION	WIRE/CONDUIT	BREAKER POLE/AMP	CR-POLE CUT	DESCRIPTION	BREAKER POLE/AMP			
1	BOLER-1	#12G-3/4"	3	15	1.0	32.9			2	2	PUMP-1	#3/3+2"	3	250
- 3									- 4		#6G-2"			
- 5									- 6					
7	BOLER-2	#12G-3/4"	3	15	1.0	32.9			8	8	PUMP-2	#3/3+2"	3	250
- 9									- 10		#6G-2"			
- 11									- 12					