

Replace Platform Lighting and Sound

GAITHERSBURG MIDDLE SCHOOL

2 TEACHERS WAY, GAITHERSBURG, MD 20877

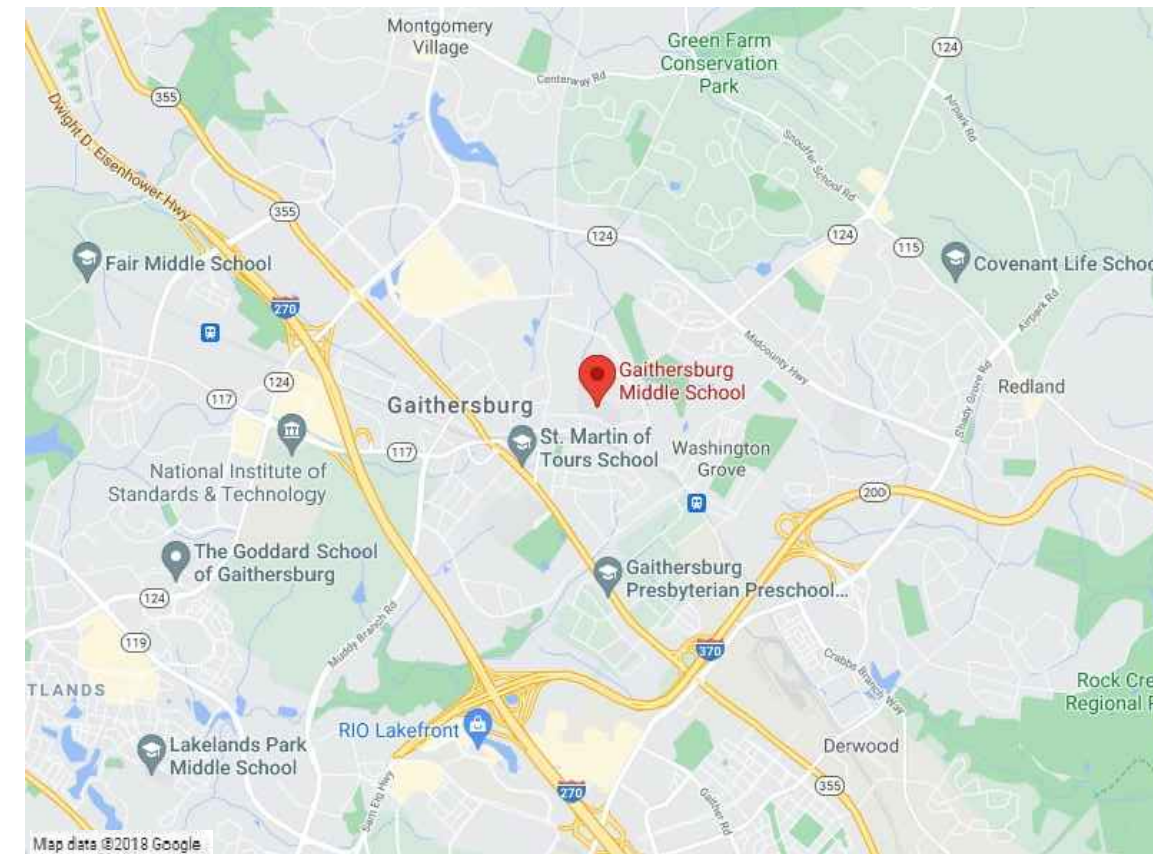
Montgomery County Public Schools

MECHANICAL AND ELECTRICAL ENGINEERS

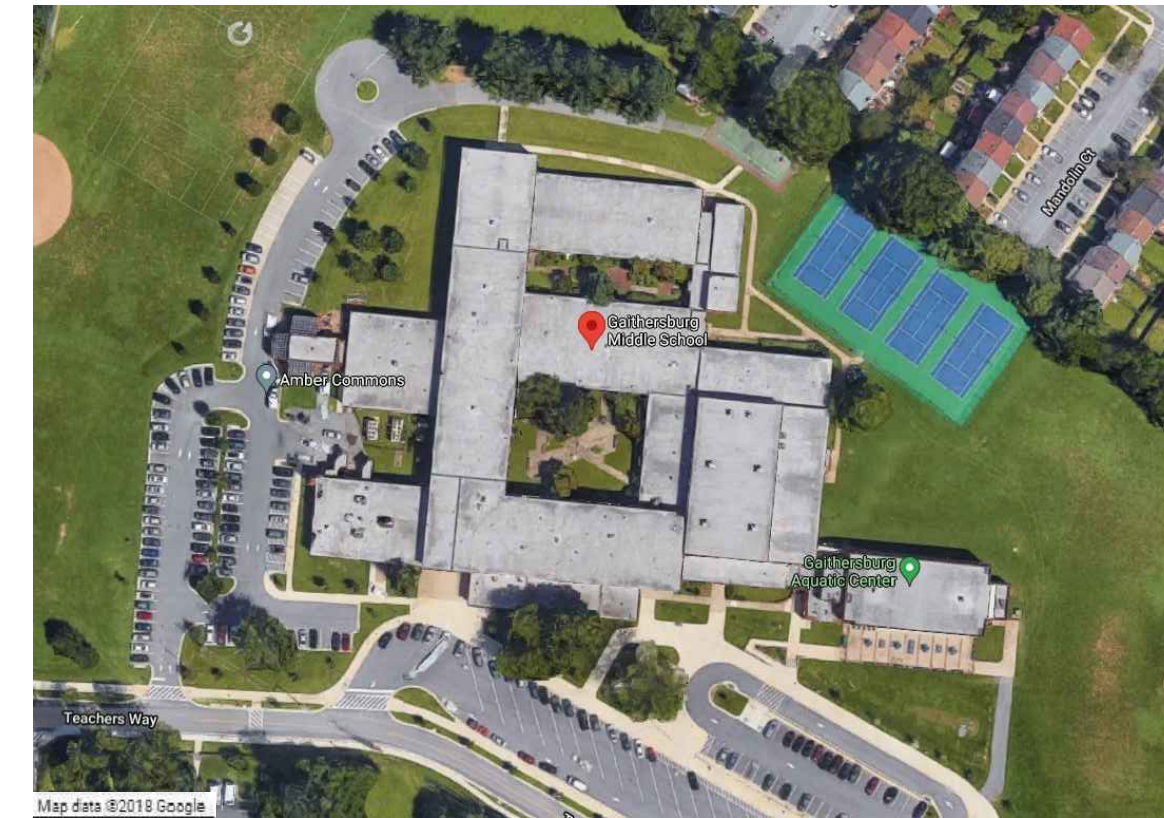
JAMES POSEY ASSOCIATES, INC.
 11155 RED RUN BOULEVARD, SUITE 310
 BALTIMORE, MARYLAND 21117
 PHONE: 410.265.6100

GAITHERSBURG MIDDLE SCHOOL
 REPLACE PLATFORM PERFORMANCE LIGHTING AND SOUND
 2 TEACHERS WAY
 GAITHERSBURG, MD 20877
 MONTGOMERY COUNTY PUBLIC SCHOOLS

VICINITY PLAN



AERIAL SITE PLAN



DRAWING INDEX

- T001 TITLE SHEET
- ELECTRICAL**
- E001 SYMBOLS LIST, ABBREVIATIONS, AND DETAILS
 - ED101 FIRST FLOOR PLAN - AREA B - ELECTRICAL - DEMOLITION
 - E101 FIRST FLOOR PLAN - AREA B - LIGHTING AND POWER - NEW WORK
 - E102 FIRST FLOOR PLAN - AREA B - SYSTEMS - NEW WORK

PROFESSIONAL CERTIFICATION

These contract documents for Gaithersburg Middle 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.

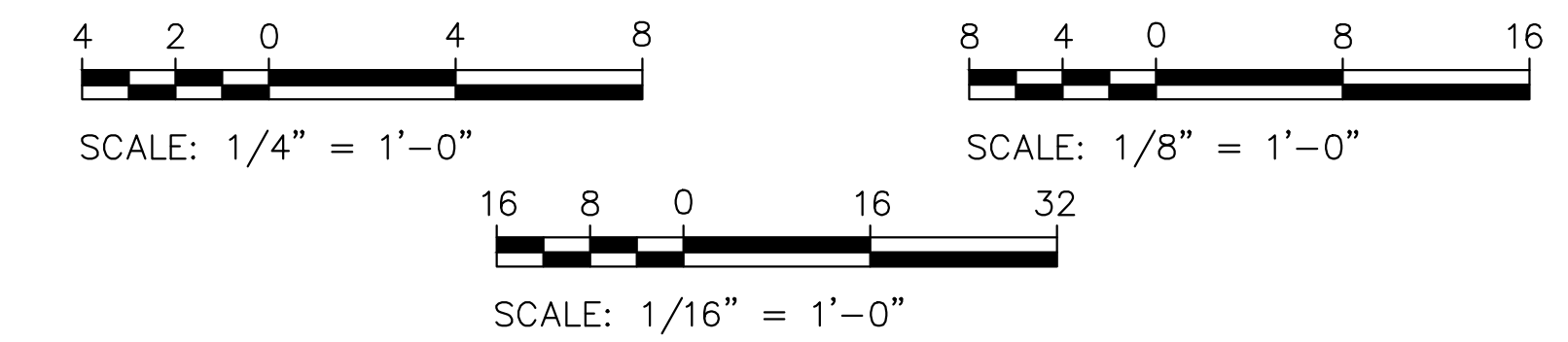
06/20/2023 (Date)

Maryland Professional Engineer Registration No. 24861

APPLICABLE CODES & STANDARDS

- 2018 IBC: INTERNATIONAL BUILDING CODE
- ASHRAE 90.1: ENERGY STANDARD FOR BUILDINGS EXCEPT LOW RISE RESIDENTIAL BUILDINGS.
- NEC 2017 NATIONAL ELECTRICAL CODE
- ASHRAE 2017-2020 HANDBOOKS.

GRAPHIC SCALES



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



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Tag	Description	Date
	BID DOCUMENTS	06/20/23

BOARD OF EDUCATION

DR. MONIFA B. MCKNIGHT	SUPERINTENDENT
GARY MOSESMAN	DIRECTOR I, DIVISION OF DESIGN & CONSTRUCTION
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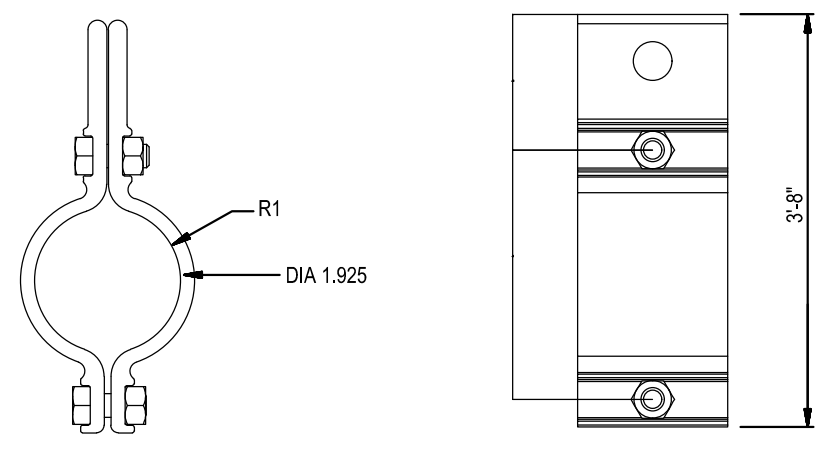
CODE ANALYSIS

CODE ANALYSIS (FROM INTERNATIONAL BUILDING CODE/2018)		
	EXISTING BLDG	PROPOSED ALTERATION
IBC OCCUPANCY CLASSIFICATION	E	THE SCOPE OF THIS WORK IS TO REPLACE STAGE PLATFORM LIGHTING AND SOUND SYSTEM
TYPE OF CONSTRUCTION	IIB	
NUMBER OF STORIES ABOVE GRADE	2	
HIGH RISE (Y/N)	N	
FIRE ALARM (Y/N)	Y	
FULLY SPRINKLERED (Y/N)	Y	
TOTAL BUILDING FLOOR AREA	157,694 SF	

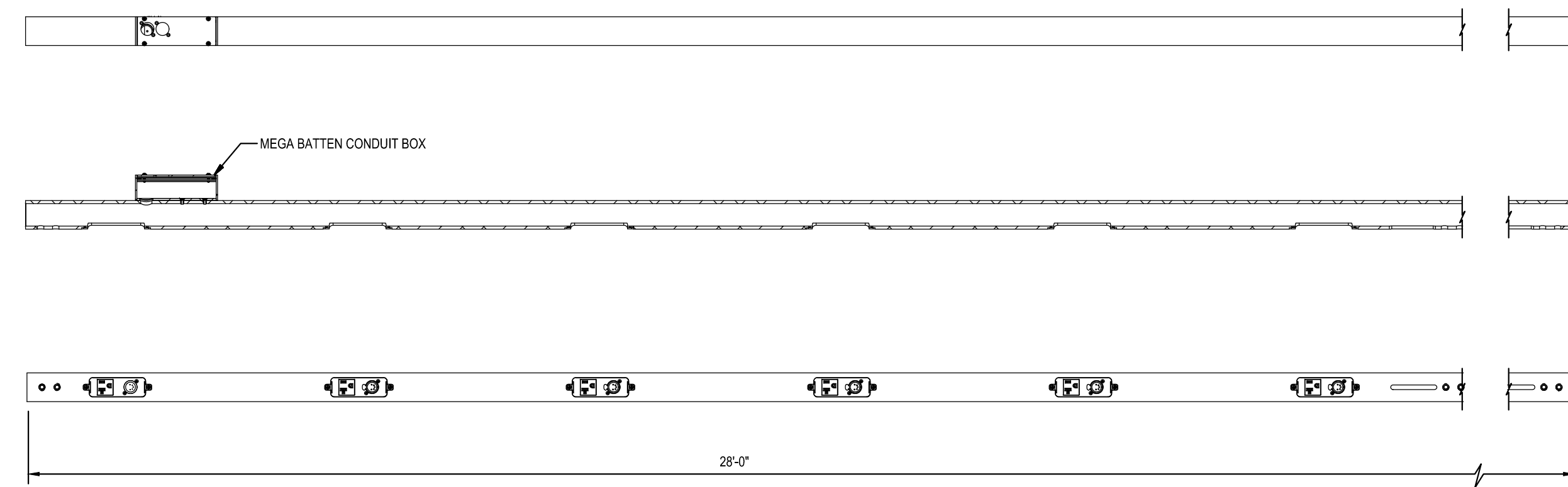
BASE BID SCOPE OF WORK

- BASE BID SCOPE OF WORK GENERALLY CONSISTS OF THE FOLLOWING:
- REMOVE EXISTING STAGE WORK LIGHTS AND STAGE THEATRICAL LIGHTS AND DIMMING RACK.
 - REMOVE EXISTING GYM SOUND SYSTEM AND REPLACE WITH NEW.
 - PROVIDE A NEW DIMMING RACK, THEATRICAL LIGHTING AND STAGE WORK LIGHTS.
- 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.

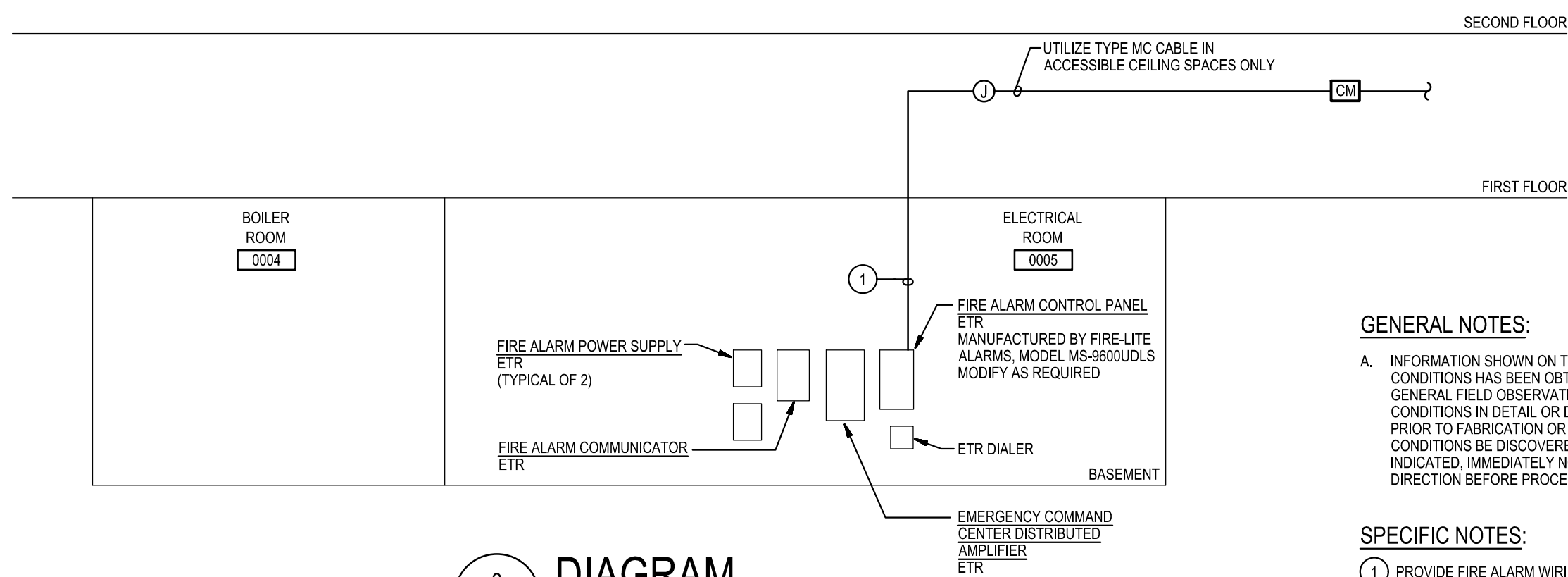
Drawn	VBP	
Designed	VBP	
Checked	VBP	
Approved	PJM	
Scale	AS NOTED	
Project No.	7787-23	
Date	JUNE 20, 2023	
Drawing Title	TITLE SHEET	
Sheet No.	T001	



1
E001
DETAIL
MEGA BATTEN CLAMP HANGER
NOT TO SCALE



2
E001
DETAIL
MEGA BATTEN
NOT TO SCALE



3
E001
DIAGRAM
PART FIRE DETECTION AND
ALARM SYSTEM RISER
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.

SPECIFIC NOTES:

1. PROVIDE FIRE ALARM WIRING IN EMT CONDUIT. WIRING SHOWN IS DIAGRAMMATIC. PROVIDE WIRING AS RECOMMENDED BY FIRE ALARM SYSTEM MANUFACTURER. PROVIDE QUANTITIES AS REQUIRED TO SERVE DEVICES INDICATED ON DRAWINGS.

DPS ELECTRONIC STAMP

ELECTRICAL SYMBOLS AND ABBREVIATIONS

ABBREVIATIONS	GENERAL	POWER
<p>A, AMP AMPERE(S) AF ABOVE FLOOR AIC AMPERES INTERRUPTING CAPACITY C CONDUIT CR CLASSROOM DWG DRAWING DX DISCONNECT EXISTING ETR EXISTING TO REMAIN FA FIRE ALARM FACP FIRE ALARM CONTROL PANEL G GROUND, GFCI (RECEPTACLES) GFCI GROUND FAULT CIRCUIT INTERRUPTER MCPS MONTGOMERY COUNTY PUBLIC SCHOOLS MIN MINIMUM REC RECEPTACLE RGS RIGID GALVANIZED STEEL RM ROOM STOR STORAGE UON UNLESS OTHERWISE NOTED V VOLT(S) W WATT(S) OR WIRE(S) Ø PHASE & AND</p>	<p>○ DENOTES REFERENCE TO SPECIFIC NOTE ON DRAWING. ○ DETAIL, DIAGRAM, OR PLAN NUMBER ○ DRAWING NUMBER WHERE DETAIL, DIAGRAM, OR PLAN IS LOCATED. 1/E001 DETAIL REFERENCE: DETAIL, DIAGRAM, OR PLAN NUMBER/DRAWING NUMBER</p> <p>NOTES: A. PROVIDE DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT. 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 DISRUPTION. INTERRUPTION OF UTILITIES SHALL NOT OCCUR DURING SCHOOL WORK HOURS. C. MOUNTING HEIGHTS ARE TO CENTERLINE OF WIRING DEVICES, UNLESS OTHERWISE INDICATED.</p>	<p>⊕ HARD-WIRED ELECTRICAL CONNECTION. CONNECT TO EQUIPMENT AS NOTED. ⊕ DOUBLE-DUPLEX (QUAD) RECEPTACLE (NEMA 5-20R), WALL MOUNTED 18" ABOVE FLOOR TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED.</p>
		<p>LIGHTING AND CONTROLS</p> <p>○ CEILING OUTLET AND LUMINAIRE (LIGHTING FIXTURE), TYPE AS DESIGNATED. ○ WALL OUTLET AND LUMINAIRE (LIGHTING FIXTURE), TYPE AS DESIGNATED. ○ LUMINAIRE (LIGHTING FIXTURE) ON GENERATOR CIRCUIT. LOWERCASE LETTER OR NUMBER WITH LOWERCASE LETTER, WHERE INDICATED, DESIGNATES LUMINAIRES CONTROLLED IN A ZONE. △ THEATRICAL LIGHT FIXTURE MOUNTED TO PIPE BATTEN. S SINGLE-POLE LINE-VOLTAGE TOGGLE SWITCH, MOUNTED 48" ABOVE FLOOR TO TOP OF BOX, UNLESS OTHERWISE NOTED. GTD GENERATOR TRANSFER DEVICE. GTD CONNECTOR STRIP WITH PIPE BATTEN AND THEATRICAL LIGHTS.</p>
	<p>EXISTING</p> <p>— ETR ELECTRIC PANELBOARD (120/208V), SURFACE OR RECESSED MOUNTED. — ETR BOX OR CABINET AS NOTED, SURFACE OR RECESSED MOUNTED AS INDICATED. ⊕ ETR DUPLEX RECEPTACLE S₃ ETR THREE-WAY LINE-VOLTAGE TOGGLE SWITCH. ○ ETR STRIP LIGHT ON EMERGENCY LIGHTING CIRCUIT ○ ETR STRIP LIGHT ON NORMAL LIGHTING CIRCUIT ○ ETR 2X4 LIGHT FIXTURE ON EMERGENCY LIGHTING CIRCUIT. ○ ETR GYMNASIUM LIGHTING FIXTURE ○ ETR CALL SWITCH ⊕ ETR WALL SPEAKER ○ ETR HOMERUN TO PANELBOARD</p>	<p>SOUND SYSTEM</p> <p>○ PERFORMANCE LOUDSPEAKER FOR GYMNASIUM / CAFETERIA LOCAL SOUND SYSTEMS, WALL MOUNTED 13'-0" ABOVE FLOOR, UNLESS OTHERWISE NOTED. S_{3.5} SOUND REINFORCEMENT SYSTEM MICROPHONE OUTLET: PROVIDE SINGLE-GANG OUTLET BOX (MINIMUM 2-1/2" DEEP), SURFACE WALL MOUNTED 18" ABOVE FLOOR TO BOTTOM OF BOX, UNLESS OTHERWISE NOTED, WITH ONE XLR MICROPHONE JACK AND 3/4" CONDUIT FROM BOX TO ACCESSIBLE CEILING SPACE. "3.5" DESIGNATION INDICATES MICROPHONE OUTLET WITH 3.5 MM STEREO JACK. ○ PENDANT-MOUNTED HANGING MICROPHONE.</p>
	<p>DEMOLITION</p> <p>— DISCONNECT AND REMOVE EXISTING FEEDER OR BRANCH CIRCUIT AS INDICATED. --- DISCONNECT AND REMOVE EXISTING CONDUIT AND WIRING. ⊕ DISCONNECT EXISTING EQUIPMENT CONNECTION AS INDICATED. ○ DISCONNECT AND REMOVE EXISTING FLUORESCENT STRIP LIGHT. △ DISCONNECT AND REMOVE EXISTING CONNECTOR STRIP, PIPE BATTEN, AND THEATRICAL LIGHTS. ⊕ DISCONNECT AND REMOVE EXISTING WALL MOUNTED SPEAKER.</p>	<p>FIRE DETECTION AND ALARM</p> <p>⊕ CONTROL MODULE.</p>
	<p>WIRING</p> <p>### HOMERUN TO PANELBOARD. NUMBER OF ARROW HEADS INDICATES NUMBER OF CIRCUITS. NUMBER OF HASH MARKS INDICATES NUMBER OF CONDUCTORS. WHERE NO HASH MARKS APPEAR, PROVIDE TWO (2) CONDUCTORS PLUS GROUND. REFER TO PANEL SCHEDULES FOR CONDUCTOR SIZES. PROVIDE GROUND WIRES IN CONDUITS. — WIRING IN CONDUIT RUN EXPOSED IN OPEN CEILINGS AND ON EXISTING WALLS, UNLESS OTHERWISE NOTED. PROVIDE GROUND WIRES IN CONDUITS. --- WIRING IN CONDUIT RUN BELOW FLOOR UNDER PLATFORM. PROVIDE GROUND WIRES IN CONDUIT.</p>	

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMP	DESIGN CRITERIA	MAXIMUM WATTAGE	BASIS-OF-DESIGN		LISTED EQUALS (NOTE A)	VOLT	MOUNTING	NOTES
					MANUFACTURER	CATALOG NO.				
A	4" LED LENSED SUSPENDED STRIP LIGHT STEEL HOUSING, WHITE FINISH, INTEGRAL 0-10V DIMMING DRIVER	LED	7000 LM 3500K	36 W	LITHONIA (CLX SERIES)	CLX-L48-7000LM-MVOLT-35K-80CRI	H.E. WILLIAMS (75R SERIES) COLUMBIA (MPS SERIES) METALUX (SNLEDD)	120	PENDANT 14'-0" ABOVE FLOOR	1
B	VAPORPROOF LUMINAIRE WITH BLACK FINISH, BLUE GLASS GLOBE, AND 0-10V DIMMING DRIVER	LED	1145 LM 3500K	11W	CANLET	03-12WLED-F-OG-BLUE GLOBE	BASELITE CORP. SFM1 SERIES BARN LIGHT ELEC. (BLE-W SERIES) BOCK VMB SERIES	120	WALL 8'-0" ABOVE FLOOR	
TL01	COLOR SOURCE SPOT V THEATRICAL LIGHT. REFER TO SPECIFICATION SECTION 26 5561.									
TL02	COLOR SOURCE PAR THEATRICAL LIGHT. REFER TO SPECIFICATION SECTION 26 5561.									
TL03	COLOR SOURCE CYC THEATRICAL LIGHT. REFER TO SPECIFICATION SECTION 26 5561.									

GENERAL NOTES:
A. LISTED EQUALS: MANUFACTURERS FOUND TO OFFER PRODUCTS SIMILAR TO THE BASIS-OF-DESIGN PRODUCT, INCLUDING PERFORMANCE, APPEARANCE, AND QUALITY. LISTED EQUALS MUST COMPLY WITH MINIMUM PERFORMANCE CRITERIA LISTED. ADDITIONAL DOCUMENTATION AND CALCULATIONS DEMONSTRATING COMPLIANCE SHOULD BE MADE AVAILABLE UPON REQUEST.
B. LIGHTING FIXTURES SHALL BE PROVIDED WITH 3500K COLOR TEMPERATURE, WITHIN +/- 100K, AND WITHIN THREE MACADAM ELLIPSES. CRI SHALL BE 80 OR GREATER, UNLESS OTHERWISE NOTED IN SCHEDULE ABOVE.

SPECIFIC NOTES:
1. COORDINATE EXACT LOCATIONS OF PLATFORM WORK LIGHTS WITH LOCATIONS OF CURTAINS AND THEATRICAL LIGHTING.

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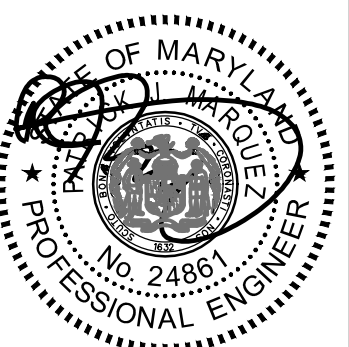


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Scale: AS NOTED
Project No: 7787-23
Date: JUNE 20, 2023

Drawing Title
SYMBOLS LIST
ABBREVIATIONS AND
DETAILS

Sheet No:
E001

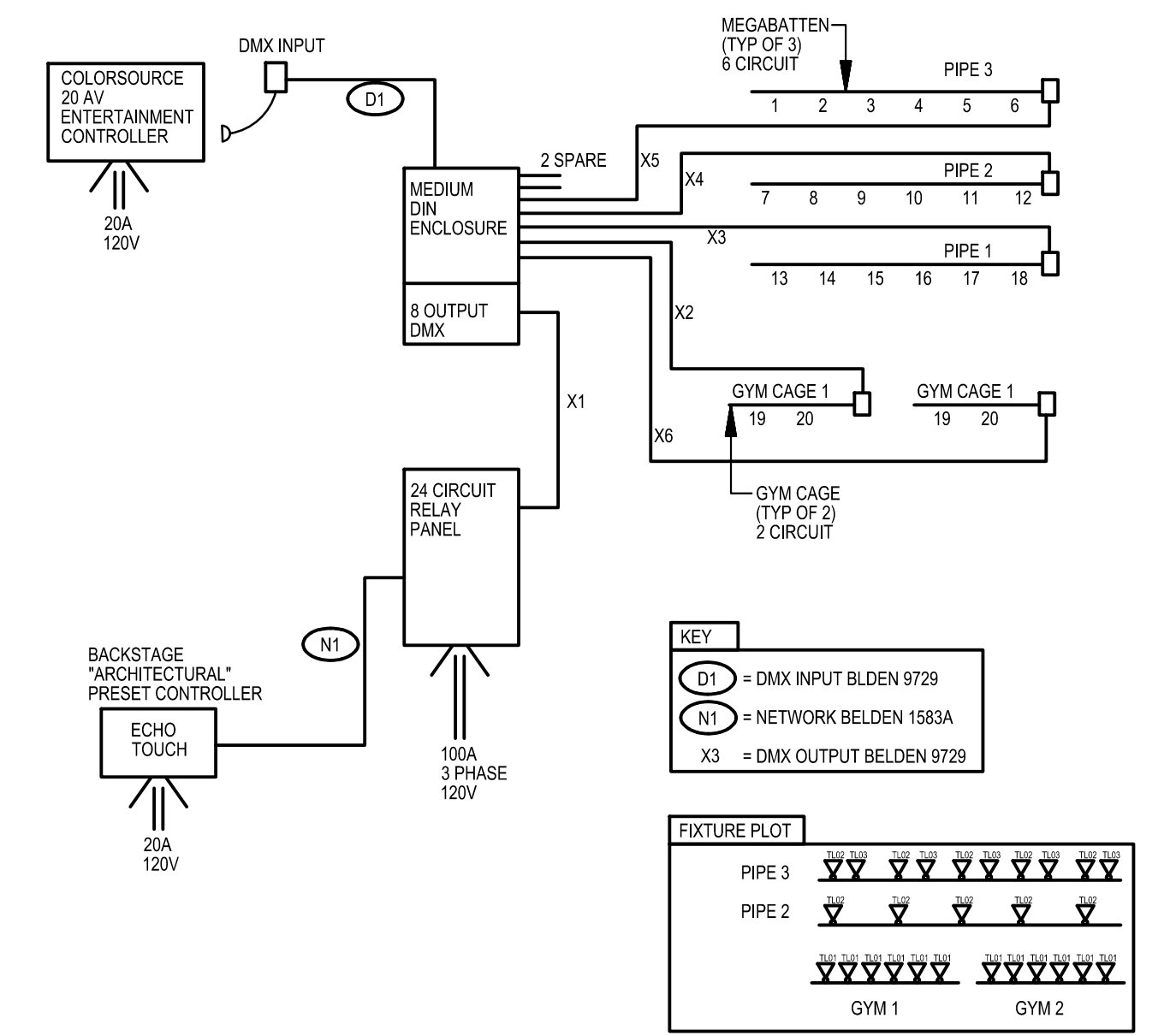
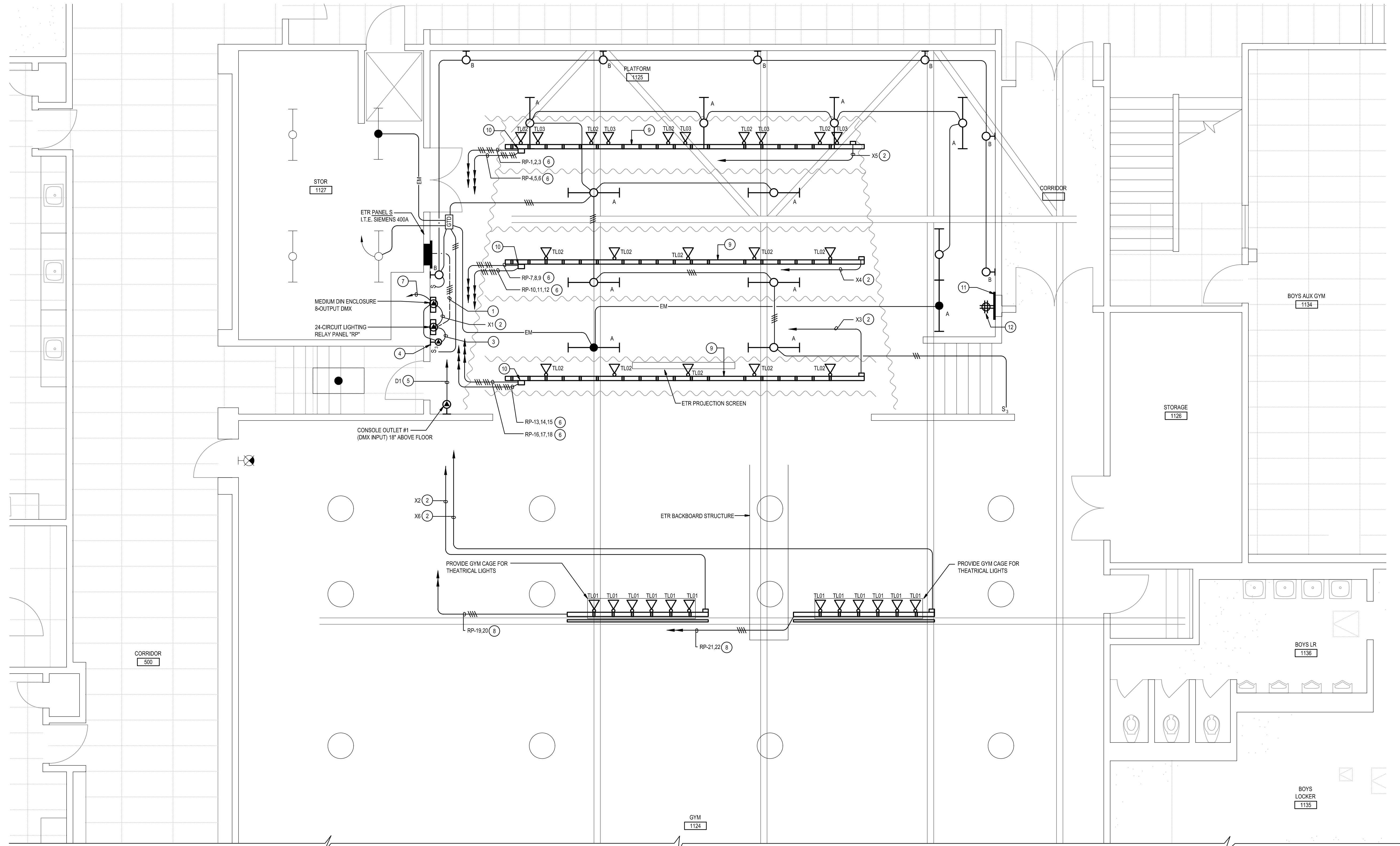
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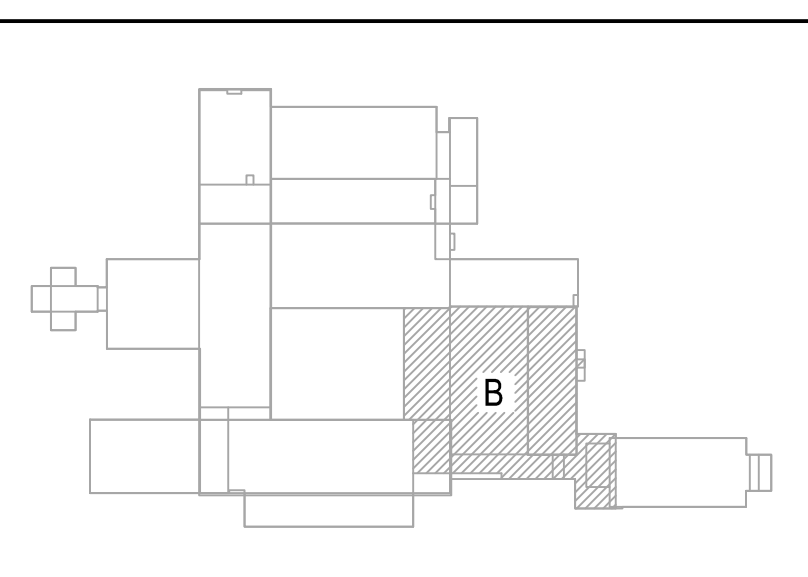
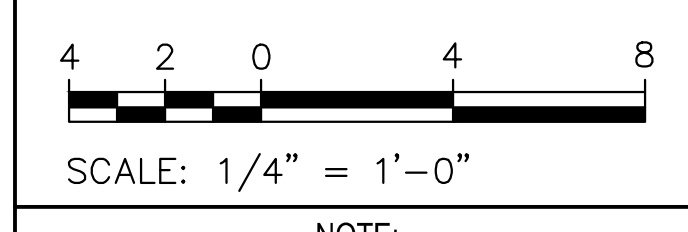
SPECIFIC NOTES:

- 1 REMOVE 3P-125A CIRCUIT BREAKER AND PROVIDE 3P-100A CIRCUIT BREAKER IN EXISTING PANEL 5. PROVIDE 4 #2 + #1 GROUND IN EXISTING CONDUIT TO BELOW STAGE. CONNECT TO EXISTING CONDUIT BELOW STAGE AND PROVIDE NEW 2" CONDUIT TO RELAY PANEL RP.
- 2 PROVIDE DMX OUTPUT CABLE BELDEN 1983A IN 3/4" CONDUIT TO MEDIUM DIN ENCLOSURE.
- 3 PROVIDE NETWORK CABLE BELDEN 1983A IN 3/4" CONDUIT TO RELAY PANEL RP.
- 4 PROVIDE BACKSTAGE "ARCHITECTURAL" PRESET CONTROLLER (ECHO TOUCH) MOUNTED 48" ABOVE FLOOR.
- 5 PROVIDE DMX INPUT CABLE BELDEN 9729 IN 3/4" CONDUIT TO MEDIUM DIN ENCLOSURE.
- 6 PROVIDE 6 #12 + #12 GROUND IN 3/4" CONDUIT TO RELAY PANEL RP.
- 7 PROVIDE 2 #12 + #12 GROUND IN 3/4" CONDUIT AND CONNECT TO 1P-20A CIRCUIT BREAKER IN RELAY PANEL RP.
- 8 PROVIDE 4 #12 + #12 GROUND IN 3/4" CONDUIT TO RELAY PANEL RP.
- 9 PROVIDE 6-CIRCUIT MEGA BATTEN WITH PIPE BATTEN MOUNTED TO EXISTING STRUCTURAL STEEL.
- 10 PROVIDE MEGA BATTEN CONDUIT BOX.
- 11 UTILIZE EXISTING SOUND RACK RECESSED ENCLOSURE.
- 12 PROVIDE QUAD RECEPTACLE IN EXISTING SOUND RACK ENCLOSURE AND CONNECT TO EXISTING SOUND SYSTEM 120V CIRCUIT.



1 DIAGRAM
E101 THEATRE DIMMING SYSTEM
NOT TO SCALE

A FIRST FLOOR PLAN - AREA B
E101 LIGHTING AND POWER - NEW WORK
SCALE: 1/4"=1'-0"



KEY PLAN
NOT TO SCALE

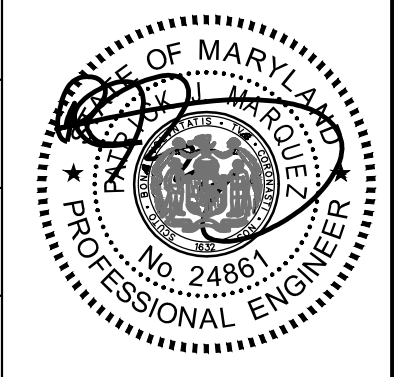
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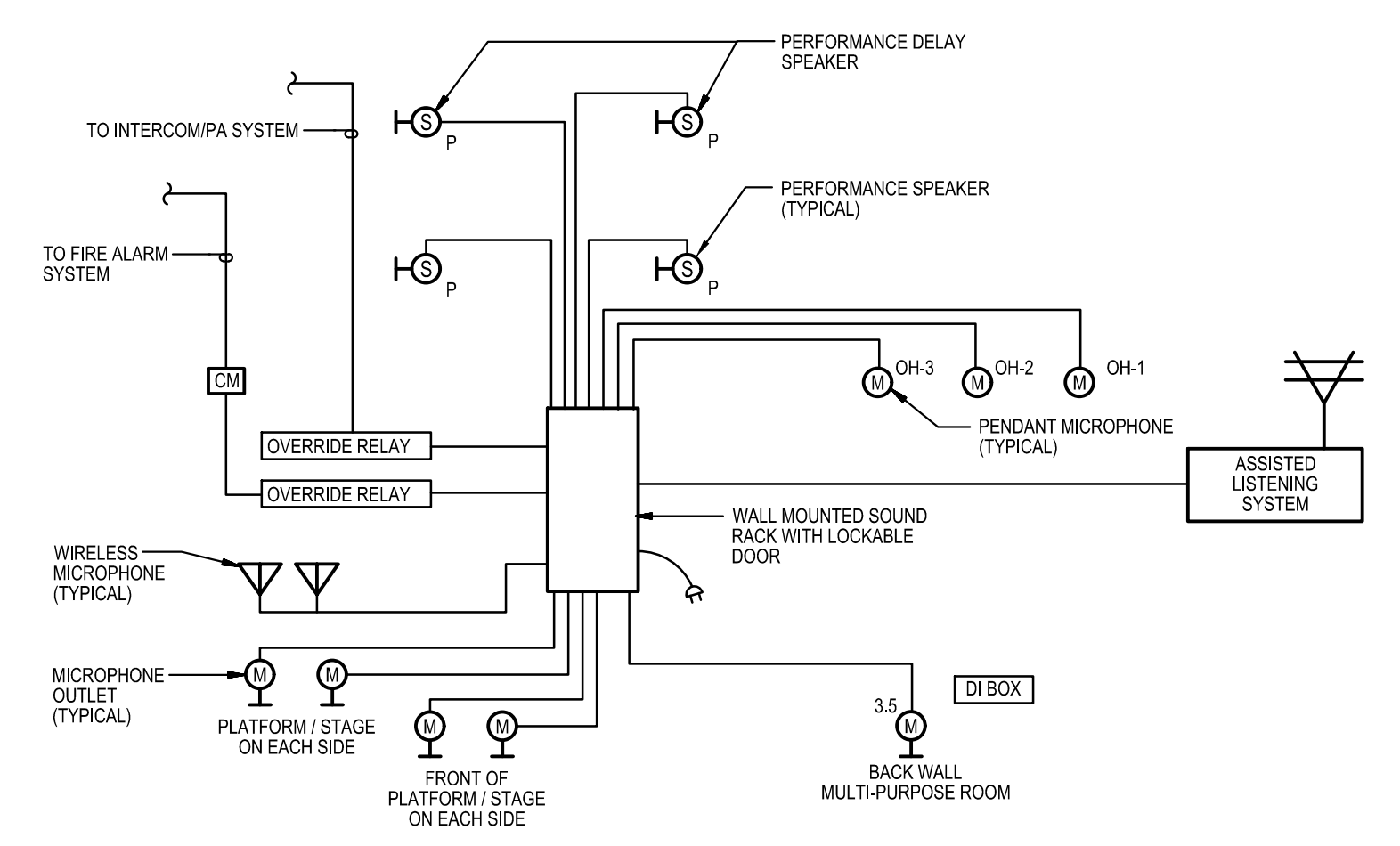
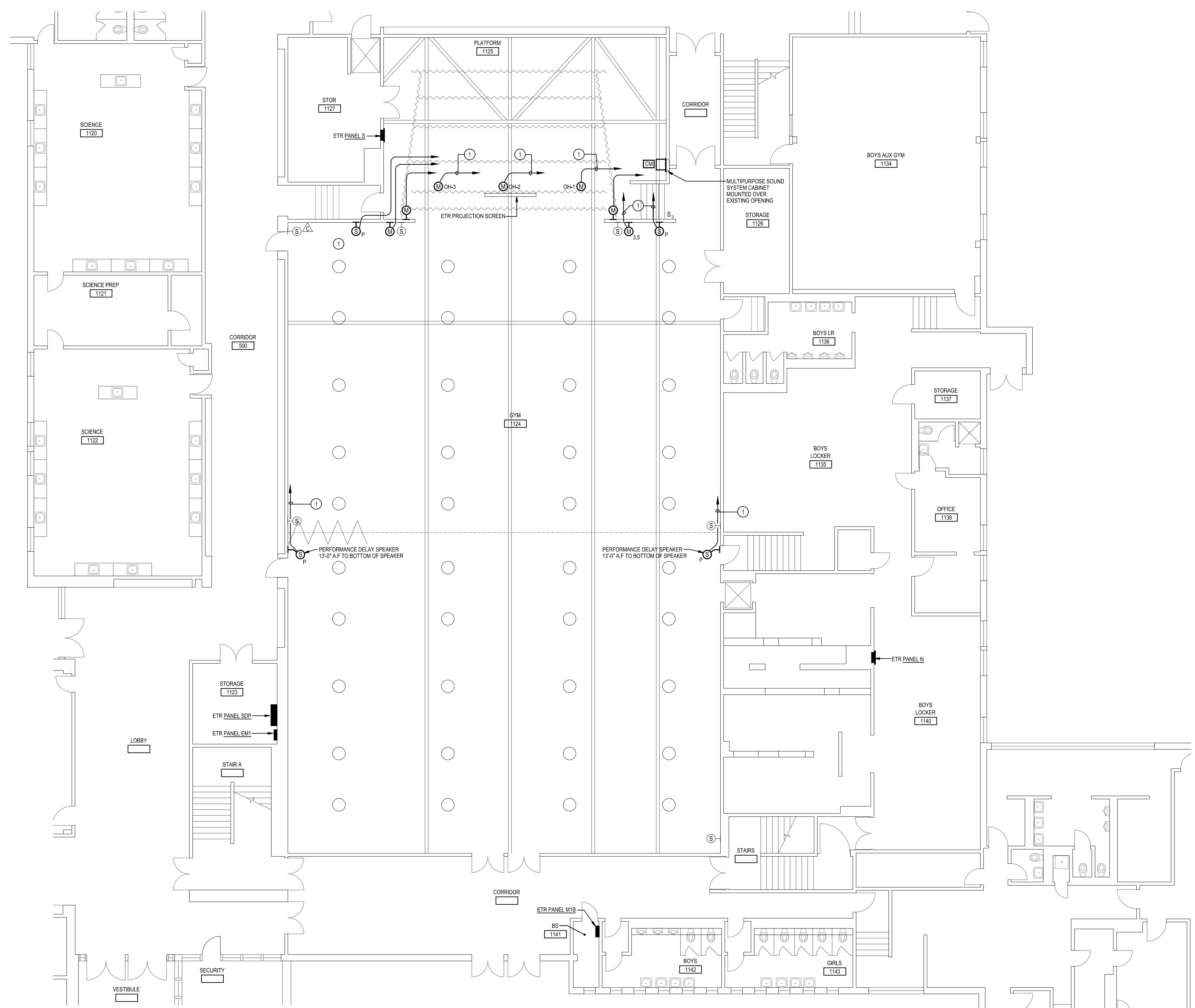
Drawing Title
FIRST FLOOR PLAN - AREA B - LIGHTING AND POWER - NEW WORK

Sheet No:
E101

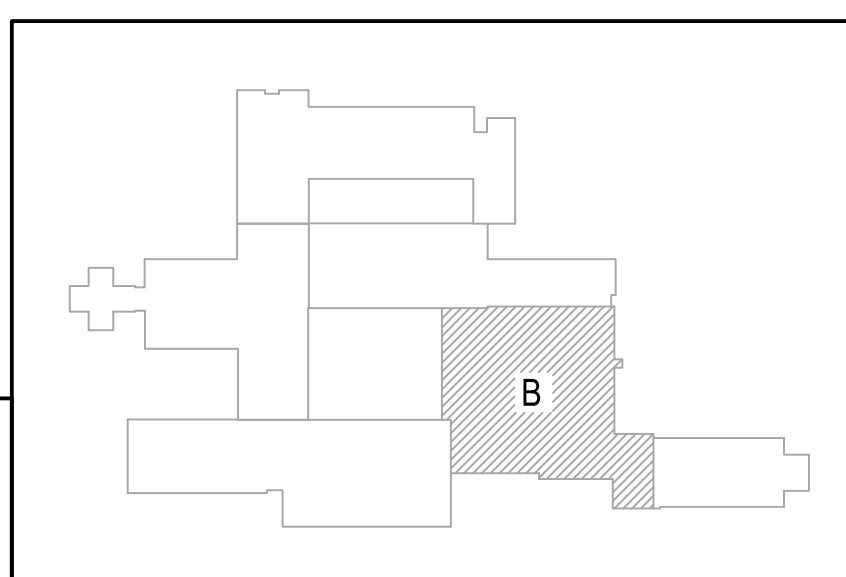
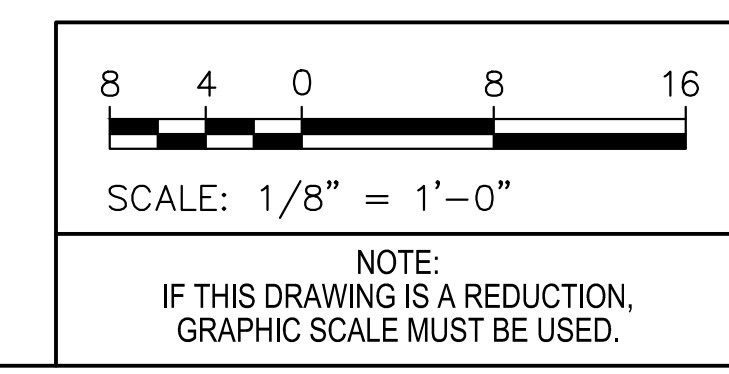
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SPECIFIC NOTES:
 1. PROVIDE CONNECTION IN CONDUIT TO MULTIPURPOSE ROOM SOUND SYSTEM CABINET. REFER TO DIAGRAM 1E102.



A
E102
FIRST FLOOR PLAN - AREA B
SYSTEMS - NEW WORK
 SCALE: 1/8"=1'-0"



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FIRST FLOOR PLAN - AREA B - SYSTEMS - NEW WORK

Sheet No:
E102