GENERAL NOTES

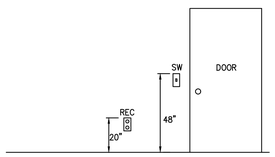
1. ALL ELECTRICAL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE 2020 VERSION OF THE NATIONAL ELECTRICAL CODE AND ALL OTHER LOCAL CODES, LAWS, AND ORDINANCES. WHERE ONE CODE DIFFERS FROM ANOTHER, THE STRICTER OF THE TWO SHALL APPLY.
2. IT IS THE DUTY OF THE ELECTRICAL CONTRACTOR TO BE FAMILIAR WITH THE CONSTRUCTION DETAILS OF THE BUILDING. THE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE ELECTRICAL SYSTEM WITH ALL OTHER TRADES AND SHALL COMPLETE THE ELECTRICAL INSTALLATION AS SOON AS CONDITIONS WILL ALLOW.
3. ALL WORK SHALL BE DONE IN A NEAT, QUALITY MANNER WITH ALL WIRING AND RACEWAYS CONCEALED.
4. ALL ELECTRICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC IN NATURE. THE ELECTRICAL CONTRACTOR SHALL CLOSELY COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES WORKING ON THE PREMISES.
5. ELECTRICAL CONTRACTOR SHALL CONTACT THE ARCHITECT AFTER INSTALLATION OF ALL SWITCH, RECEPTACLE, TELEPHONE, TELEVISION, AND LIGHTING BOXES FOR AN ON-SITE REVIEW BEFORE ANY WIRING IS INSTALLED OR WALL SURFACES ARE COMPLETE. THE ARCHITECT MAY, AT THIS POINT, MAKE ADJUSTMENTS TO THE BOX LOCATIONS AS DESIRED.
6. WHERE CONDUIT AND WIRING HAS NOT BEEN SHOWN ON THE DRAWINGS THE ARRANGEMENT AND ROUTING OF LIGHTING AND RECEPTACLE BRANCH CIRCUITS WILL BE AT THE CONTRACTOR'S DISCRETION IN ACCORDANCE WITH GENERALLY ACCEPTED GOOD PRACTICE, N.E.C. REQUIREMENTS AND THE FOLLOWING LIMITATIONS:

   A. SIZE BRANCH CIRCUIT CONDUCTORS WITHIN THE FOLLOWING MAXIMUM LENGTH LIMITS: (MEASURE TO THE CENTER OF THE LOAD FOR LIGHTING CIRCUITS AND THE MOST REMOTE OUTLET FOR RECEPTACLE CIRCUITS)

	#12	#10	#8	#6
120V., 20A.	85'	110'	165'	270'
277V., 20A.	160'	250'	390'	600'

7. THIS PROJECT TO MEET NFPA 72 AND ADA REQUIREMENTS REGARDING MOUNTING HEIGHTS OF ELECTRICAL DEVICES.
8. RECESSED LIGHTING FIXTURES MUST HAVE 1/2" CLEARANCE FROM COMBUSTIBLE MATERIALS AND 3" CLEARANCE FROM INSTALLATION OR IC RATED PER ARTICLE 410.116 (A) 1 AND 2 AND 410.116 (B) OF THE 2020 NEC.
9. DURING CONSTRUCTION OPERATIONS, THE ELECTRICAL CONTRACTOR SHALL FAITHFULLY MAKE A RECORD OF ALL APPROVED CHANGES FROM THE CONTRACT DRAWINGS, INCLUDING ACCURATE DIMENSIONS WHERE APPLICABLE, AND SHALL ALSO RECORD ACCURATE DIMENSIONS LOCATING ALL BELOW-GRADE OUTSIDE ELECTRICAL UTILITES (WHETHER CHANGED OR NOT) WITH REFERENCE TO PERMANENT ABOVE-GRADE OBJECTS.

   AT THE COMPLETION OF THE WORK ALL SUCH CHANGES SHALL BE RECORDED NEATLY IN RED INK BY THE ELECTRICAL CONTRACTOR ON AN UNUSED SET OF THE ELECTRICAL CONTRACT DRAWNGS SUPPLIED BY THE ARCHITECT. THE RED LINE CHANGES SHALL BE REVIEWED AND APPROVED BY THE ENGINEER AND THE COMPLETED RECORD PRINTS RETURNED TO THE ARCHITECT.
10. MINIMUM SIZE CONDUIT FOR 20A CIRCUITS IS 3/4" CONDUIT FOR METALLIC AND PVC CONDUIT.
11. ALL PRE-WIRED EQUIPMENT MUST BE LISTED AND LABELED BY AN APPROVED TESTING AGENCY PER ARTICLE 110.3 (A AND B) OF THE 2020 NEC.
12. THE TERMINATION PROVISIONS OF EQUIPMENT MUST BE USED IN DETERMINING THE AMPACITIES OF CONDUCTORS BASED ON TABLE 310.16 REGARDLESS OF THE INSTALLATION RATING OF THE CONDUCTORS PER ARTICLE 110.14 (C) 1 AND 2 OF THE 2020 NEC.
13. FLASH PROTECTION WARNING LABELS REQUIRED ON SWITCHBOARDS, PANEL BOARDS, AND MOTOR CONTROL CENTERS PER ARTICLE 110.16 OF THE 2020 NEC.
14. SPACES ABOUT ELECTRICAL EQUIPMENT MUST MEET 110.26 (A THROUGH F) ARTICLE 2020 NEC.
15. RACEWAYS AND CABLES INSTALLED ABOVE SUSPENDED CEILING REQUIRED TO HAVE INDEPENDENT SUPPORT WIRES. CEILINGS GRID WIRES CANNOT BE USED TO SUPPORT RACEWAY AND CABLES UNLESS CEILING GRID IS RATED FOR SUPPORT PER ARTICLE 300.11 OF THE 2020 NEC.
16. TYPE NM, NMC AND NMS CABLES CANNOT BE USED ABOVE SUSPENDED CEILINGS PER ARTICLE 334.12 OF THE 2020 NEC.
17. FLEXIBLE CORDS CANNOT BE USED AS A SUBSTITUTE FOR FIXED WIRE OR CONCEALED ABOVE SUSPENDED CEILING PER ARTICLE 400.12 (1) AND (5) PER THE 2020 NEC.
18. INDIVIDUAL UNIT EQUIPMENT USED FOR EXIT SIGNS AND EMERGENCY LIGHTS THAT USES A RECHARGEABLE BATTERY MUST BE SUPPLIED BY THE CIRCUIT THAT SUPPLIES THE NORMAL LIGHTING FOR THAT AREA PER ARTICLE 700.12 (F) AND 700.17 OF THE 2020 NEC.



TYPICAL DEVICE MOUNTING HEIGHT
SCALE: NONE

POWER LEGEND

- 20A, 125V, 2P, NEMA 5-20R DUPLEX RECEPTACLE
- QUADRAPLEX OUTLET,(2 DUPLEX OUTLETS IN 2 GANG BOX WITH 2 GANG COVER PLATE
- 20A, 125V, 2P, 3W, NEMA 5-20R DUPLEX RECEPTACLE MOUNT 6" ABOVE COUNTER TO BOTTOM OF OUTLET BOX.
- FED-SPEC GRADE USB CHARGER INTEGRAL TO TAMPER-RESISTANT DUPLEX RECEPTACLE MOUNTED IN SINGLE GANG DEVICE BOX. MOUNT 20"AFF UNLESS NOTED OTHERWISE. PROVIDE WIREMOLD #TR5262USB-FINISH OR APPROVED EQUAL.
- TYPICAL DATA/COMM OUTLET DOUBLE GANG OUTLET BOX WITH SINGLE GANG MUD RING. ROUTE 3/4 INCH CONDUIT TO ABOVE CEILING SPACE. PROVIDE PULL STRING. COMMUNICATIONS CONTRACTOR TO PROVIDE FACE PLATE, WIRING, AND FINAL CONNECTIONS. EACH DATA SYMBOL DENOTES QTY (2) DATA DROPS PER LOCATION.
- G — ADJACENT TO RECEPTACLE DENOTES GROUND FAULT INTERUPTER OUTLET, (FEED THRU TYPE).
- WP — ADJACENT TO RECEPTACLE INDICATES WEATHERPROOF IN-USE TYPE COVER.
- WR — ADJACENT TO RECEPTACLE INDICATES WEATHER RESISTANT TYPE RECEPTACLE.
- J — JUNCTION BOX
- LIGHTING OR RECEPTACLE PANEL BOARD.
- 30A/3P — DISCONNECT SWITCH.
- 30A/F/3P/3R — FUSED DISCONNECT SWITCH.
- FWE — DISCONNECT FURNISHED WITH EQUIPMENT
- SM — MOTOR RATED SWITCH, CONTINUOUS CURRENT RATED, QUANITY OF POLES AS REQUIRED
- EF — EXHAUST FAN.
- M 2HP — SEE MECHANICAL DWGS. FOR FAN SPECIFICATIONS. MOTOR, HORSEPOWER AS SHOWN.
- B-25 — "HOME-RUN" TO PANEL BOARD.

ADDITIONAL PROJECT NOTES:

1. THE SCOPE OF THIS PROJECT IS TO REPLACE EXISTING FLUORESCENT FIXTURES WITH HIGH EFFICIENCY LED LIGHTING FIXTURES.
2. ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR REMOVING EXISTING FIXTURES AND INSTALLING NEW LED FIXTURES.
3. COORDINATE PROJECT WORKING HOURS WITH SPARTANBURG COMMUNITY COLLEGE.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	LAMP	MANUFACTURER PART #	KELVIN	VOLTAGE	WATTAGE	MOUNTING	COMMENTS
A1	2'X4' LED SELECTABLE LUMEN FLAT PANEL FIXTURE (5,500 LUMENS)	LED	ILP LIGHTING CATALOG #VPAN24-33L/44L/55L-U-CCTS METALUX LIGHTING CATALOG #24CGTS-L3C3 ELITE LIGHTING CATALOG #24-FPL-BL-4000L/5000L/6000L-DIM-MVOLT-35/40/50-85	3500K	277	50	RECESSED MOUNTED	
A2	2'X4' LED SELECTABLE LUMEN FLAT PANEL FIXTURE (4,400 LUMENS)	LED	ILP LIGHTING CATALOG #VPAN24-33L/44L/55L-U-CCTS METALUX LIGHTING CATALOG #24CGTS-L3C3 ELITE LIGHTING CATALOG #24-FPL-BL-4000L/5000L/6000L-DIM-MVOLT-35/40/50-85	3500K	277	39	RECESSED MOUNTED	
A3	2'X4' LED SELECTABLE LUMEN FLAT PANEL FIXTURE (7,600 LUMENS)	LED	ILP LIGHTING CATALOG #VPAN24-50L/65L/80L-U-CCTS METALUX LIGHTING CATALOG #24CGTX-80HE-L835 ELITE LIGHTING CATALOG #24-FPL-BL-6000L/7000L/8000L-DIM-MVOLT-35/40/50-85	3500K	277	69	RECESSED MOUNTED	
A4	2'X4' LED SELECTABLE LUMEN SURFACE MOUNTED FLAT PANEL FIXTURE (4,400 LUMENS)	LED	ILP LIGHTING CATALOG #VPAN24-50L/65L/80L-U-CCTS-SM METALUX LIGHTING CATALOG #24CGTS-L3C3-CGTSURF24 ELITE LIGHTING CATALOG #24-FPL-BL-4000L/5000L/6000L-DIM-MVOLT-35/40/50-85-24-FPL1-LED-SMK	3500K	277	39	SURFACE MOUNTED	
B1	8' LED SURFACE MOUNTED STRIP FIXTURE (12,000 LUMENS)	LED	ILP LIGHTING CATALOG #VS8-12L-U-40-FRL METALUX LIGHTING CATALOG #8T-SNX-120SL-LW-UNV-L840-CD1 COLUMBIA LIGHTING CATALOG #MPS8-40HL-CW-EDU	4000K	277	91	SURFACE MOUNTED	
B2	8' LED PENDANT MOUNTED STRIP FIXTURE (12,000 LUMENS)	LED	ILP LIGHTING CATALOG #VS8-12L-U-40-FRL-AC5Y METALUX LIGHTING CATALOG #8T-SNX-120SL-LW-UNV-L840-CD1-Y-TOGGLE-10-2PK-U COLUMBIA LIGHTING CATALOG #MPS8-40HL-CW-EDU-CBL-HB-120-6Y-PAD	4000K	277	91	PENDANT MOUNTED	
C1E	4' LED WALL MOUNTED STRIP FIXTURE WITH BATTERY BACKUP	LED	DYNAMICS LIGHTING CATALOG #BASE-4-6LM-840-U10-SM-CA-E10-GAR	4000K	277	42	WALL MOUNTED BELOW CANOPY	
C2E	8' LED WALL MOUNTED STRIP FIXTURE WITH BATTERY BACKUP	LED	DYNAMICS LIGHTING CATALOG #BASE-8-12LM-840-U10-SM-CA-E10-GAR	4000K	277	83	WALL MOUNTED BELOW CANOPY	
D	4' LED SURFACE MOUNTED STRIP FIXTURE (6,000 LUMENS)	LED	ILP LIGHTING CATALOG #VS4-6L-U-40-FRL METALUX LIGHTING CATALOG #4-SNX-60SL-LW-UNV-L840-CD1 COLUMBIA LIGHTING CATALOG #MPS4-40HL-CW-EDU	4000K	277	44	SURFACE MOUNTED	
EM1	HIGH OUTPUT LED DUAL HEAD WITH BATTERY BACKUP	LED	LIGHTALARMS LIGHTING CATALOG #LCA-2RHL-ID EMERGI-LITE LIGHTING CATALOG #EL-2RHL-AD SURE-LITES LIGHTING CATALOG #SELHP-100-LIFePO		277	3	SURFACE MOUNTED	
EX1	THERMOPLASTIC LED EXIT SIGN WITH BATTERY BACKUP	LED	LIGHTALARMS LIGHTING CATALOG #QLXN500RN EMERGI-LITE LIGHTING CATALOG #ELXN400RN SURE-LITES LIGHTING CATALOG #APX7R		277	3	SURFACE MOUNTED	
EX2	THERMOPLASTIC LED EXIT SIGN WITH HEADS AND BATTERY BACKUP	LED	LIGHTALARMS LIGHTING CATALOG #UQLX500R-2LED EMERGI-LITE LIGHTING CATALOG #ELXN400R-2SQL SURE-LITES LIGHTING CATALOG #APCH7RSQ		277	3	SURFACE MOUNTED	
EX3	THERMOPLASTIC LED EXIT SIGN WITH HEADS AND HIGH OUTPUT BATTERY TO POWER REMOTE HEAD FIXTURE ER BELOW	LED	LIGHTALARMS LIGHTING CATALOG #UQLXN500R-2LED-R EMERGI-LITE LIGHTING CATALOG #ELXN400R-2LED-R SURE-LITES LIGHTING CATALOG #APCH7RSQ		277	3	SURFACE MOUNTED	
EX4	TWO SIDED THERMOPLASTIC LED EXIT SIGN WITH BATTERY BACKUP	LED	LIGHTALARMS LIGHTING CATALOG #QLXN500RN EMERGI-LITE LIGHTING CATALOG #ELXN400RN SURE-LITES LIGHTING CATALOG #APX7R		277	3	SURFACE MOUNTED	
ER	2-LAMP WEATHERPROOF REMOTE HEAD POWERED BY EXIT SIGN "EX3" ABOVE	LED	LIGHTALARMS LIGHTING CATALOG #ELF652D/LED-WP EMERGI-LITE LIGHTING CATALOG #EF44D-LED-WP SURE-LITES LIGHTING CATALOG #APWR2		6V	3	SURFACE MOUNTED	
F	1'X2' LED HIGHBAY (30,000 LUMENS)	LED	ILP LIGHTING CATALOG #EVT-30L-U-40-FRL-HB-36-18Y-PAD GE CURRENT LIGHTING CATALOG #ABV4-0-30-48-WD-QV-41-W METALUX LIGHTING CATALOG #OHB-30SE-W-UNV-L840-CD-U-Y-TOGGLE-LENGTH-2PK	4000K	120/277	220	PENDANT MOUNTED	

NOTES:
1. COORDINATE LED COLOR TEMPERATURE WITH OWNER PRIOR TO PURCHASING AND INSTALLING.
2. COORDINATE FINISHES WITH OWNER PRIOR TO PURCHASING AND INSTALLING.
3. COORDINATE MOUNTING HEIGHT WITH OWNER PRIOR TO PURCHASING AND INSTALLING.
4. LIGHTING FIXTURES MANUFACTURER SHALL BE PROVIDED AS SPECIFIED, UNLESS PRE-APPROVED DURING BIDDING BY THE OWNER/ENGINEER.
5. VERIFY VOLTAGE REQUIREMENTS WITH RESPECT TO FLOOR PLAN CIRCUITING AND PANEL SCHEDULES.

General Provisions

1. All Electrical work shall be executed in accordance with the 2020 version of the National Electrical Code and all other local codes, laws, and ordinances. Where one code differs from another, the stricter of the two shall apply.
2. It is the duty of the Electrical contractor to be familiar with the construction details of the building. The contractor shall coordinate the installation of the electrical system with all other trades and shall complete the electrical installation as soon as conditions will allow.
3. Payment of all fees, permits, and licenses required to complete the electrical installation shall be the responsibility of the electrical contractor.
4. All work shall be done in a neat, quality manner with all wiring and raceways concealed.
5. All electrical work shall be warranted by the electrical contractor for one (1) year from the date of acceptance by the owner or his designated representative.
6. All electrical drawings are generally diagrammatic in nature. The electrical contractor shall closely coordinate all electrical work will all other trades working on the premises.
7. Electrical contractor shall submit five (5) sets of catalog cuts, brochures, or other technical data for all equipment furnished under this contract to the architect for his review.
8. All requests for prior approval shall be submitted to the engineer no later than ten (10) days prior to the bid date unless noted as "approved equal" in a written addendum. All manufactures shall be specified herein or as shown on the contract documents.
9. See general notes, schedules, and legends on the electrical drawing set for any additional requirements to the contract.
10. All electrical panelboards and lighting equipment shall be restrained per seismic requirements of the appropriate building code in effect.

Electrical Raceways

1. Conduit is to be installed between cabinets and boxes with no more than four (4) 90 degree bends. Conduit is to be securely fastened in place with straps, hangers and steel supports as required. Conduit is not to be fastened or supported from the ceiling grid or supporting wires. Conduit ends shall be reamed and conduit shall be thoroughly cleaned before installation. Openings in conduit shall be plugged or properly covered.
2. Terminals on switches and outlets shall not be used to "feed through" to the next switch or outlet. The removal of a receptacle or fixture or any other device fed from a box shall not interfere with conductor continuity.
3. Conduit shall be furnished as shown on the electrical drawings. Approved types are heavy wall rigid steel hot dipped galvanized above grade with compression type fittings and connections. All runs shall be continuous with all joints and connections pulled tight. Conduit shall be required in and under all slabs and in masonry walls. PVC conduit may be used underground or under slabs. Minimum conduit size shall be 3/4".
4. Contractor shall install a nylon pull string in any empty conduit.
5. Contractor to include an equipment grounding conductor in each conduit. Conductor size to be determined by National Electrical Code requirements.

Grounding

1. All metallic conduit, supports, cabinets, panelboards, and other electrical system components shall be permanently grounded per the National Electrical Code. All grounding devices and clamps shall be of the type approved specifically for grounding use. All circuits shall include a grounding conductor sized per National Electrical Code requirements.

Demolition

1. Protect existing electrical equipment and installations indicated to remain. if damaged or disturbed in the course of work, remove damaged portions and install new products of equal capacity, quality, and functionality.
2. Remove demolished material from project site.
3. remove, store, clean, reinstall, reconnect, and make operational components indicated for relocation.

Conductors

1. Conductors shall be soft-annealed 98 % copper. All conductors larger than #8 AWG shall be stranded. Minimum size conductor shall be #12 AWG unless otherwise specified. No aluminum conductors will be permitted. Type THHN shall not be used underground, outside, at service entrances or in wet locations. All insulation shall be rated at 600 volts.

The following insulation types are permitted:

#10 AWG and smaller - THW,THWN,THW
#8 AWG to #4/0 AWG -THW, THHN
Over 4/0 AWG - THW
Service Entrance - USE, RHW
Wire through fluorescent fixture or within 3' of heating equipment - THHN

Conductors shall be color coded as follows:

	208/120 Volt Y	480/277 Volt Y
Phase A	Black	Brown
Phase B	Red	Orange
Phase C	Blue	Yellow
Neutral	White	Gray
Ground	Green	Green

Distribution

1. Electrical power service voltage shall be as noted on the drawings. Size of the electrical service conductors shall be as shown on the riser diagram. All service connections and grounding detail shall be per the National Electrical Code article 250 and shall be inspected before covering.
2. Contractor shall comply with the 2020 National Electrical Code and all laws that apply to electrical installations.
3. All material used on the project shall be new and conform to Underwriters Laboratories (UL) standards.
4. Contractor to verify voltage drops and A.I.C. ratings for all equipment connected and verify the size of all electrical system breakers, conduit, wire size, etc.

Lighting Equipment

1. Lighting fixtures shall be of the type shown in the lighting fixture schedule.
2. Exit lamps shall be provided at all exterior doors. All emergency and exit lights shall have self-contained battery back-up systems, or be of the type for use with emergency generator system if specified.

Devices and Boxes

1. All outlet, lighting, and switch boxes shall be pressed steel where used in overhead and concealed areas. Receptacles and switches in exposed areas shall be installed in ferrous alloy or cast aluminum boxes with appropriate sheet steel covers.
2. Local switches shall be quiet toggle type, Hubbell #1221 or approved equal (single pole) or Hubbell #1223 or approved equal (3-way) and shall be rated for 120/277 Volts. Duplex receptacles shall be Hubbell #5352 or approved equal, three wire grounding type with ground installed.
3. All wall switches shall be 20 Ampere, silent type with cover plate.
4. Unless otherwise indicated , all lighting switches shall be flush mounted 44" above finished floor or 7" above finished countertop.
5. All switch and receptacle cover plates to be brushed stainless steel unless otherwise specified by architect. Consult with architect before purchasing cover plates.

Cleaning and Protection

1. On completion of installation, including outlets, fittings and devices, inspect exposed finish. Remove burrs, dirt, paint spots and construction debris.
2. Protect equipment and installations and maintain conditions to ensure that coatings, finishes, and cabinets are without damage or deterioration at time of substantial completion.

REV	DATE	DESCRIPTION	DWN	CKD	APP
0	03-15-2024	ISSUED FOR PERMITTING AND CONSTRUCTION	BY	RM	HPB

MATRIX ENGINEERING INC. No. C01034 CERTIFICATE OF AUTHORIZATION

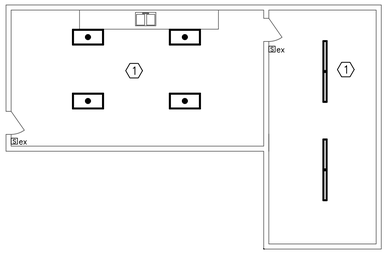
SOUTH CAROLINA PROFESSIONAL ENGINEER No. 9801 JAMES H. BURNS
03-15-2024

SPARTANBURG COMMUNITY COLLEGE
BMW TRAINING CENTER
LIGHTING RENOVATION
CLIENT, NAME, LOCATION & DESCRIPTION
SOUTH CAROLINA
DUNCAN

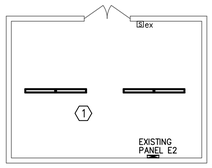
MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET 29302
SPARTANBURG, SOUTH CAROLINA
(864)583-6274 www.matrixei.com

GENERAL NOTES, LEGEND, LIGHT FIXTURE SCHEDULE, ELECTRICAL SPECIFICATIONS & COMCHECK

SCALE	NONE
DWG NO.	E-1.0
DATE	03-15-2024
FILE NAME	E-1.0.dwg
PROJECT NO.	2024-057
REV	0



DEMOLITION PLAN (MEZZANINE LEVEL)
SCALE: 1/8"=1'-0"



DEMOLITION PLAN (WELDING LAB MEZZANINE LEVEL)
SCALE: 1/8"=1'-0"

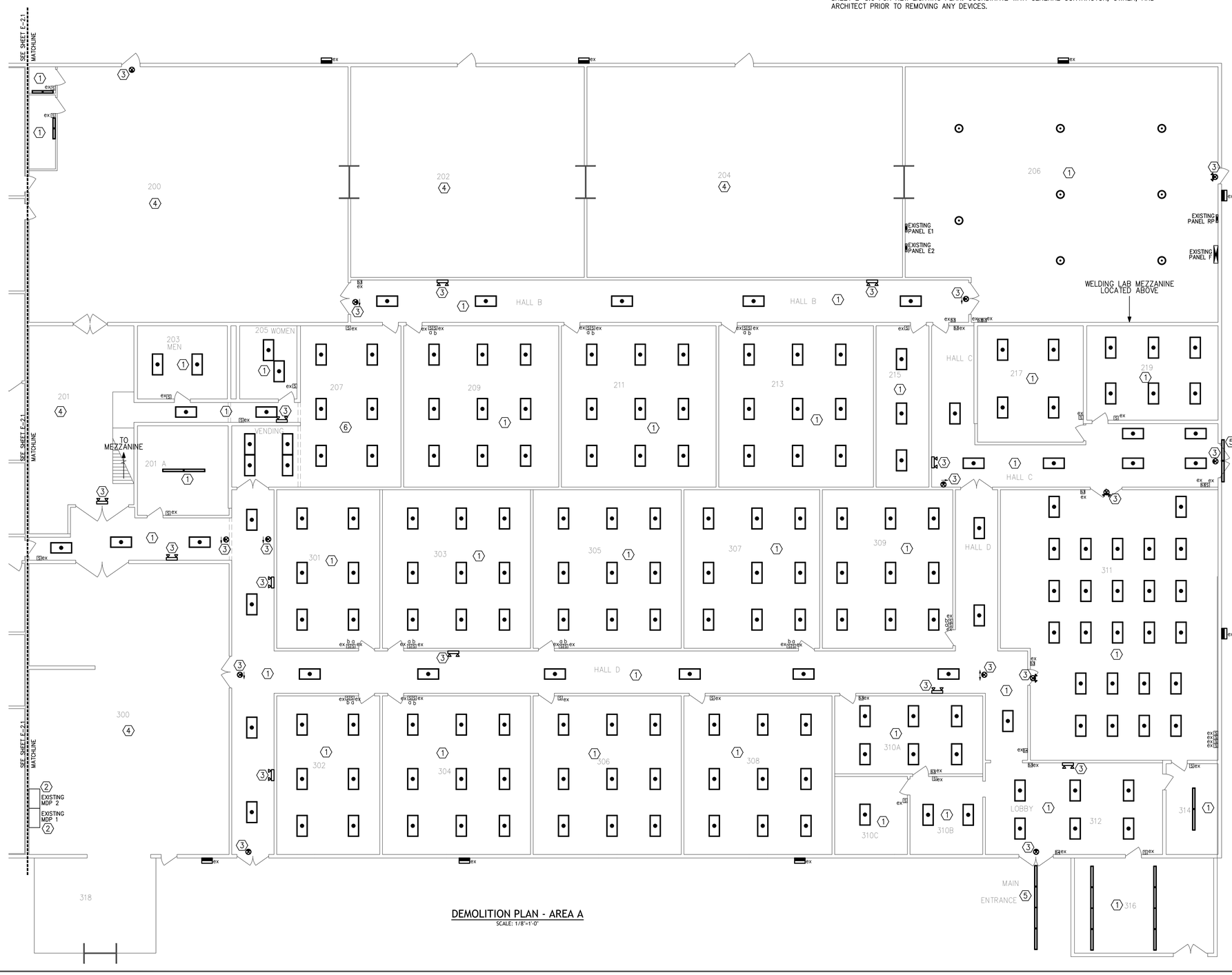
KEYED DEMOLITION PLAN NOTES:

1. DENOTES EXISTING LIGHTING IN AREA TO BE REMOVED AND REPLACED WITH NEW. ELECTRICAL CONTRACTOR TO PREPARE EXISTING LIGHTING CIRCUIT TO BE RECONNECTED TO NEW LIGHTING AS INDICATED ON SHEET E–3.0. SEE SHEET E–3.0 FOR NEW LIGHTING LAYOUT.
2. DENOTES EXISTING ELECTRICAL SWITCHBOARD TO REMAIN.
3. DENOTES EXISTING EMERGENCY EXIT SIGN/FIXTURE TO BE REMOVED AND REPLACED WITH NEW. PREPARE EXISTING CIRCUIT TO BE WIRED TO NEW EXIT SIGN/EMERGENCY FIXTURE. SEE SHEET E–3.0 FOR NEW FIXTURE DESIGNATION. EXIT SIGN AND EMERGENCY DUAL HEADS CONTAIN NUMBER WRITTEN IN PERMANENT MARKER. ELECTRICAL CONTRACTOR TO MAKE RECORD OF NUMBER AND APPLY THIS NUMBER TO NEW SIGNAGE. SEE IMAGE BELOW FOR EXAMPLE.
4. DENOTES EXISTING AREA WHERE NO WORK TO BE DONE.
5. DENOTES EXISTING EXTERIOR FIXTURE TO BE REMOVED AND REPLACED WITH NEW. ELECTRICAL CONTRACTOR TO PREPARE EXISTING LIGHTING CIRCUIT TO BE RECONNECTED TO NEW LIGHTING FIXTURE AS INDICATED ON SHEET E–3.0. SEE SHEET E–3.0 FOR NEW LIGHTING LAYOUT.
6. DENOTES EXISTING GYPSUM BOARD CEILING TO REMAIN AND BE PAINTED. ELECTRICAL CONTRACTOR TO REMOVE EXISTING SURFACE MOUNTED LIGHT FIXTURES AND INSTALL NEW LED FIXTURES. ELECTRICAL CONTRACTOR TO PROVIDE NEW LIGHT FIXTURES PER FIXTURE SCHEDULE, CONNECT NEW LIGHT FIXTURES TO EXISTING LIGHTING CIRCUITS AND CONTROLS, UNLESS NOTED OTHERWISE. ALL DEVICES TO BE REINSTALLED IN SAME LOCATION, IF DEVICES CANNOT BE INSTALLED IN SAME LOCATION, INSTALL DEVICES AS CLOSE AS POSSIBLE TO ORIGINAL LOCATION. ALL DEVICES TO BE OPERATIONAL AT THE COMPLETION OF CONSTRUCTION. SEE SHEET E–3.0 FOR NEW LIGHTING PLAN. COORDINATE WITH GENERAL CONTRACTOR, OWNER, AND ARCHITECT PRIOR TO REMOVING ANY DEVICES.

GENERAL DEMOLITION PLAN NOTES:

1. "ex" ADJACENT TO DEVICE DENOTES EXISTING DEVICE TO REMAIN.
2. ELECTRICAL CONTRACTOR TO COORDINATE ALL DEMOLITION WITH GENERAL CONTRACTOR.
3. ELECTRICAL CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO DE–ENERGIZE AND "MAKE–SAFE" ALL ELECTRICAL IN AREA TO BE RENOVATED AND/OR DEMOLISHED BEFORE WORK BEGINS.
4. THE CONTRACTOR SHALL SURVEY THE ELECTRICAL SYSTEMS IN THE AREA WHERE WORK IS TO BE DONE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL ACCOMPLISH THE ELECTRICAL DEMOLITION IN A MANNER THAT SHALL NOT AFFECT THE OPERATION OF THE ELECTRICAL SYSTEMS IN OTHER AREAS OF THE BUILDING THAT ARE OUTSIDE THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
5. PRIOR TO THE START OF DEMOLITION THE CONTRACTOR SHALL SURVEY THE EXTENTS OF THE AREA IN THIS PROJECT AND VERIFY ALL FIXTURES AND DEVICES THAT WILL BE REMOVED AS PART OF THE DEMOLITION.
6. ELECTRICAL CONTRACTOR TO REMOVE ALL WIRE AND CONDUIT NO LONGER IN USE.
7. ELECTRICAL CONTRACTOR TO PROVIDE COVER PLATES ON EXISTING JUNCTION BOXES ABOVE CEILING
8. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY EXISTING CEILING TILES DAMAGED BY THIS PROJECT. COORDINATE WITH OWNER FOR CEILING TILE REPLACEMENT MANUFACTURER AND TYPE AS REQUIRED.
9. REMOVE FIXTURES IN SUCH A WAY TO NOT DAMAGE ANY ADJACENT MATERIALS. CONTRACTOR SHALL PROVIDE ADEQUATE BRACING OF EXISTING CONSTRUCTION AS REQUIRED TO PERFORM THE PRESCRIBED WORK.
10. A MEETING SHALL BE HELD, PRIOR TO THE COMMENCEMENT OF DEMOLITION WORK, BETWEEN THE ELECTRICAL CONTRACTOR AND OWNER TO COORDINATE WITH REMOVAL OR MATERIALS IN A MANNER THAN WILL AFFECT THE OWNERS ONGOING OPERATIONS THE LEAST.
11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT EXISTING SURFACES AND FINISHES TO REMAIN IN THE AREAS RENOVATED AND ALONG THE ROUTES OF WASTE REMOVAL. DAMAGE TO SUCH SURFACES SHALL BE REPAIRED TO AN EXISTING CONDITION STATUS BY THE GENERAL CONTRACTOR.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING PORTIONS OF THE BUILDING TO REMAIN. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING PORTIONS OF THE BUILDING TO REMAIN, WHICH ARE CAUSED BY THE CONTRACTOR, OR CONTRACTORS TEAM.
13. ALL METAL DEMOLISHED TO BE RECYCLED WITH BILL OF LADING TO BE GIVEN TO OWNER.

EXISTING EMERGENCY FIXTURE PHOTO (NOTE 3)
NO SCALE



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

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

REV	DATE	DESCRIPTION	BY	CKD	APP
0	03–15–2024	ISSUED FOR PERMITTING AND CONSTRUCTION	BY	RM	HPB

SOUTH CAROLINA PROFESSIONAL ENGINEER
MATRIX ENGINEERING INC.
No. C01034
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA PROFESSIONAL ENGINEER
No. 38011
HARRISON P. BUNN
03–15–2024

CLIENT NAME, LOCATION & DESCRIPTION
SPARTANBURG COMMUNITY COLLEGE
BMW TRAINING CENTER
LIGHTING RENOVATION
DUNCAN SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
SPARTANBURG, SOUTH CAROLINA 29302
(864)583–6274 www.matrixeI.com

AREA A (CLASS AND SHOPS)
DEMOLITION PLAN

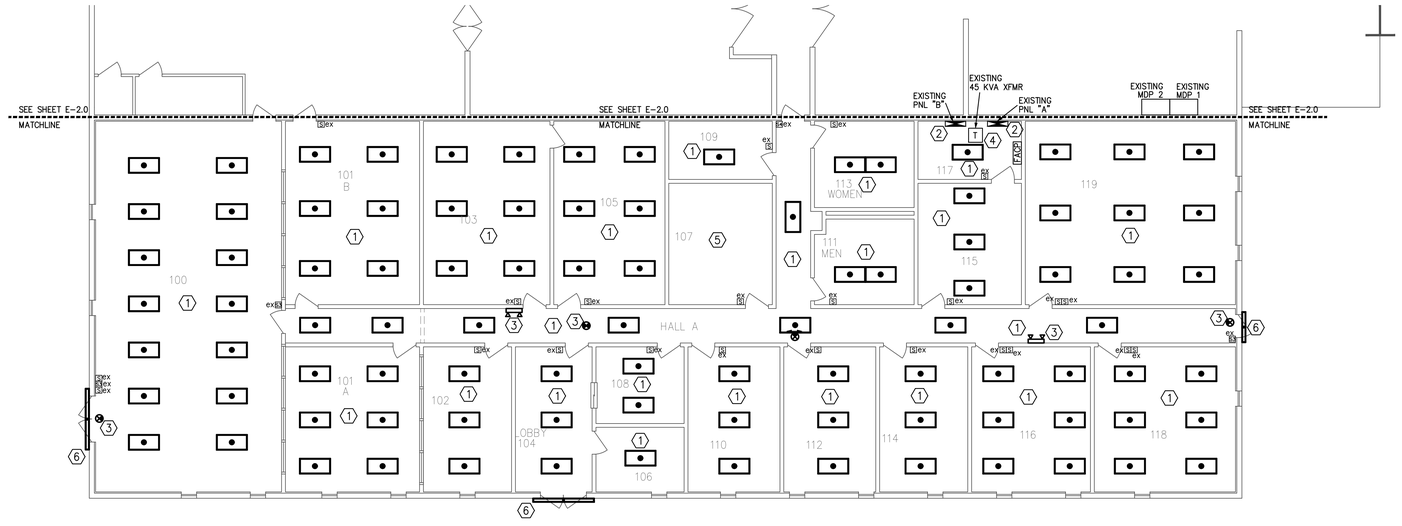
SCALE	AS NOTED	DWG NO	E–2.0
DATE	03–15–2024		
FILE NAME	E–2.0.dwg	PROJECT NO. 2024–057	REV 0

KEYED DEMOLITION PLAN NOTES:

1. DENOTES EXISTING LIGHTING IN AREA TO BE REMOVED AND REPLACED WITH NEW. ELECTRICAL CONTRACTOR TO PREPARE EXISTING LIGHTING CIRCUIT TO BE RECONNECTED TO NEW LIGHTING AS INDICATED ON SHEET E-3.1. SEE SHEET E-3.1 FOR NEW LIGHTING LAYOUT.
2. DENOTES EXISTING ELECTRICAL PANELBOARD TO REMAIN.
3. DENOTES EXISTING EMERGENCY EXIT SIGN/FIXTURE TO BE REMOVED AND REPLACED WITH NEW. PREPARE EXISTING CIRCUIT TO BE WIRED TO NEW EXIT SIGN/EMERGENCY FIXTURE. SEE SHEET E-3.1 FOR NEW LIGHTING PLAN.
4. DENOTES EXISTING ELECTRICAL TRANSFORMER TO REMAIN.
5. DENOTES EXISTING AREA WHERE NO WORK TO BE DONE.
6. DENOTES EXISTING EXTERIOR FIXTURE TO BE REMOVED AND REPLACED WITH NEW. ELECTRICAL CONTRACTOR TO PREPARE EXISTING LIGHTING CIRCUIT TO BE RECONNECTED TO NEW LIGHTING FIXTURE AS INDICATED ON SHEET E-3.1. SEE SHEET E-3.1 FOR NEW LIGHTING LAYOUT.

GENERAL DEMOLITION PLAN NOTES:

1. "ex" ADJACENT TO DEVICE DENOTES EXISTING DEVICE TO REMAIN.
2. ELECTRICAL CONTRACTOR TO COORDINATE ALL DEMOLITION WITH GENERAL CONTRACTOR.
3. ELECTRICAL CONTRACTOR TO COORDINATE WITH GENERAL CONTRACTOR TO DE-ENERGIZE AND "MAKE-SAFE" ALL ELECTRICAL IN AREA TO BE RENOVATED AND/OR DEMOLISHED BEFORE WORK BEGINS.
4. THE CONTRACTOR SHALL SURVEY THE ELECTRICAL SYSTEMS IN THE AREA WHERE WORK IS TO BE DONE PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL ACCOMPLISH THE ELECTRICAL DEMOLITION IN A MANNER THAT SHALL NOT AFFECT THE OPERATION OF THE ELECTRICAL SYSTEMS IN OTHER AREAS OF THE BUILDING THAT ARE OUTSIDE THE LIMITS OF CONSTRUCTION FOR THIS PROJECT.
5. PRIOR TO THE START OF DEMOLITION THE CONTRACTOR SHALL SURVEY THE EXTENTS OF THE AREA IN THIS PROJECT AND VERIFY ALL FIXTURES AND DEVICES THAT WILL BE REMOVED AS PART OF THE DEMOLITION.
6. ELECTRICAL CONTRACTOR TO REMOVE ALL WIRE AND CONDUIT NO LONGER IN USE.
7. ELECTRICAL CONTRACTOR TO PROVIDE COVER PLATES ON EXISTING JUNCTION BOXES ABOVE CEILING
8. CONTRACTOR IS RESPONSIBLE FOR REPLACING ANY EXISTING CEILING TILES DAMAGED BY THIS PROJECT. COORDINATE WITH OWNER FOR CEILING TILE REPLACEMENT MANUFACTURER AND TYPE AS REQUIRED.
9. REMOVE FIXTURES IN SUCH A WAY TO NOT DAMAGE ANY ADJACENT MATERIALS. CONTRACTOR SHALL PROVIDE ADEQUATE BRACING OF EXISTING CONSTRUCTION AS REQUIRED TO PERFORM THE PRESCRIBED WORK.
10. A MEETING SHALL BE HELD, PRIOR TO THE COMMENCEMENT OF DEMOLITION WORK, BETWEEN THE ELECTRICAL CONTRACTOR AND OWNER TO COORDINATE WITH REMOVAL OR MATERIALS IN A MANNER THAN WILL AFFECT THE OWNERS ONGOING OPERATIONS THE LEAST.
11. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT EXISTING SURFACES AND FINISHES TO REMAIN IN THE AREAS RENOVATED AND ALONG THE ROUTES OF WASTE REMOVAL. DAMAGE TO SUCH SURFACES SHALL BE REPAIRED TO AN EXISTING CONDITION STATUS BY THE GENERAL CONTRACTOR.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING PORTIONS OF THE BUILDING TO REMAIN. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL DAMAGES TO THE EXISTING PORTIONS OF THE BUILDING TO REMAIN, WHICH ARE CAUSED BY THE CONTRACTOR, OR CONTRACTORS TEAM.
13. ALL METAL DEMOLISHED TO BE RECYCLED WITH BILL OF LADING TO BE GIVEN TO OWNER.



DEMOLITION PLAN - AREA B

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

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

REV	DATE	DESCRIPTION	DWN	CKD	APP
0	03-15-2024	ISSUED FOR PERMITTING AND CONSTRUCTION	BY	RM	HPB

SOUTH CAROLINA
MATRIX ENGINEERING INC.
No. C01034
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA
PROFESSIONAL ENGINEER
No. 9801
ANTHONY BUNN
03-15-2024

CLIENT NAME, LOCATION & DESCRIPTION

SPARTANBURG COMMUNITY COLLEGE
BMW TRAINING CENTER
LIGHTING RENOVATION
DUNCAN SOUTH CAROLINA

MATRIX ENGINEERING, INC.
912 SOUTH PINE STREET
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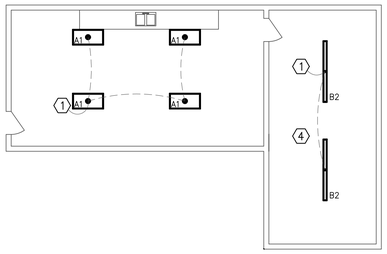
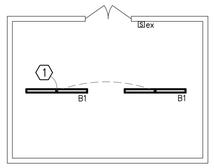
(864)583-6274 www.matrixeI.com

AREA B (ELECTRICAL OFFICE)
DEMOLITION PLAN

SCALE	AS NOTED	DWG NO	E-2.1
DATE	03-15-2024		
FILE NAME	E-2.1.dwg	PROJECT NO	2024-057
REV	0		



LIGHTING PLAN (MEZZANINE LEVEL)
SCALE: 1/8"=1'-0"



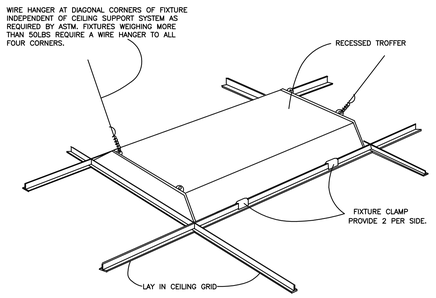
LIGHTING PLAN (WELDING LAB 206 MEZZANINE LEVEL)
SCALE: 1/8"=1'-0"

GENERAL LIGHTING PLAN NOTES:

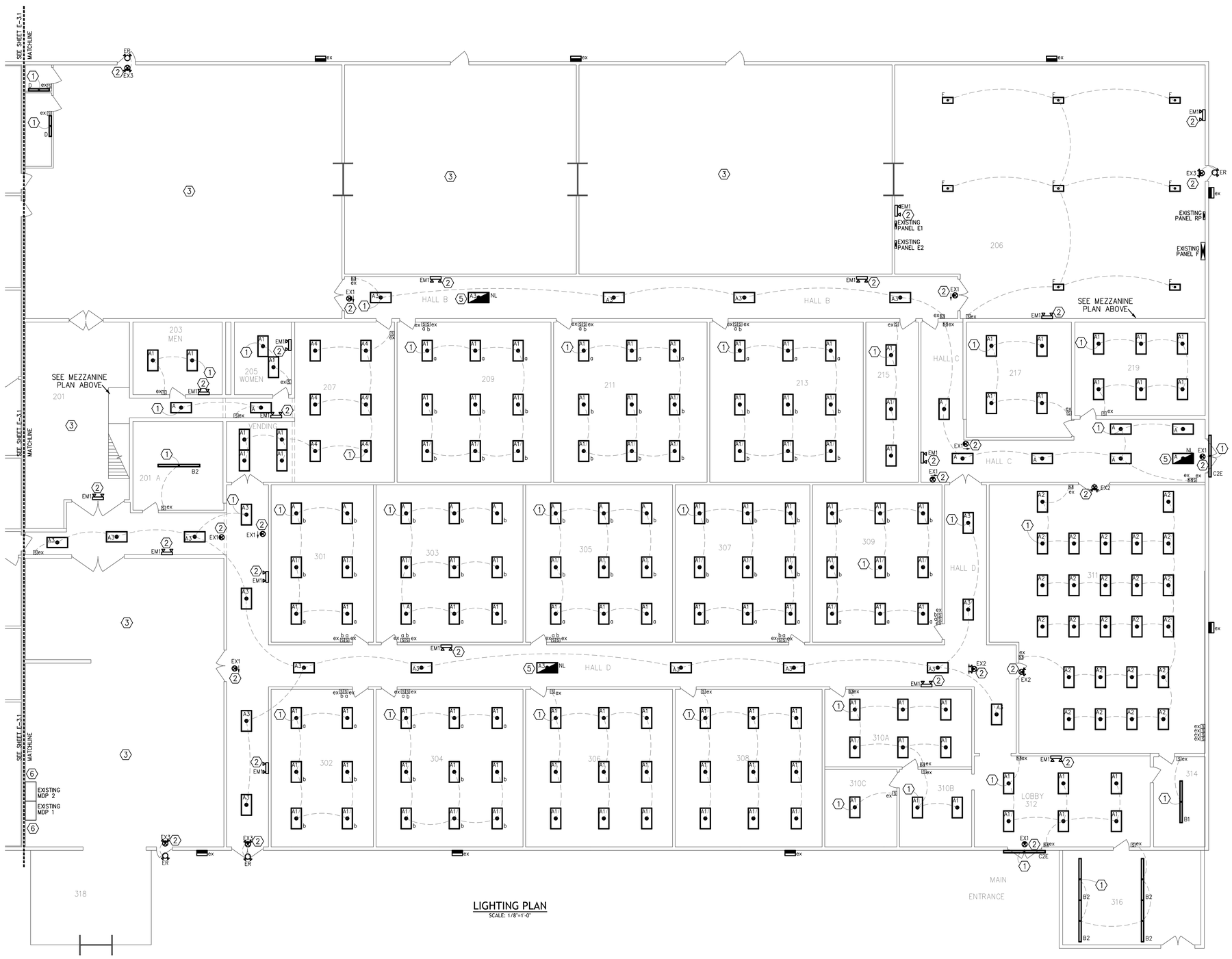
1. ALL LIGHT FIXTURES SHALL MEET SEISMIC REQUIREMENTS OF ASCE 7.
2. ALL LAY-IN LIGHT FIXTURES SHALL HAVE 12 GAUGE WIRE HANGERS PLACED ON DIAGONAL CORNERS ATTACHED DIRECTLY TO BUILDING STRUCTURE. ANY RECESSSED LIGHT FIXTURE WEIGHING MORE THAN 50 LBS SHALL BE SUPPORTED FROM ALL FOUR CORNERS.
3. LOWERCASE LETTER ADJACENT TO FIXTURE DENOTES SWITCH DESIGNATION.
4. PANELS SHOWN ON THIS DRAWING ARE EXISTING TO REMAIN. SHOWN FOR REFERENCE ONLY.
5. "ex" DENOTES EXISTING LIGHTING FIXTURE/DEVICE TO REMAIN.
6. HALF SHADED LIGHT FIXTURES WITH AN "NL" BESIDE THEM DENOTES NIGHT LIGHT. WIRE FIXTURE "HOT" (UNSWITCHED).
7. WIRE ALL BATTERY BACKED UP EXIST SIGNS AND EMERGENCY EGRESS DUAL HEAD FIXTURES "HOT" AHEAD OF ANY SWITCHING DEVICES.
8. PROVIDE UNSWITCHED "HOT" WIRE TO ALL EMERGENCY AND EXIT FIXTURES FOR BATTERY CHARGING.

KEYED LIGHTING PLAN NOTES:

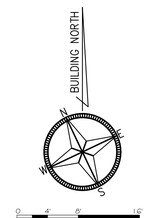
1. DENOTE NEW LIGHTING TO BE WIRED TO EXISTING LIGHTING CIRCUIT WITH EXISTING LIGHTING CONTROLS TO REMAIN.
2. DENOTES NEW EMERGENCY FIXTURE TO BE WIRED UNSWITCHED AND "HOT" TO EXISTING AREA LIGHTING CIRCUIT.
3. DENOTES AREA WHERE EXISTING LIGHTING TO REMAIN.
4. COORDINATE MOUNTING OF NEW FIXTURES WITH EXISTING DUCTWORK.
5. DENOTES NEW FIXTURE WIRED "HOT" (UNSWITCHED) AS NIGHTLIGHT.
6. DENOTES EXISTING ELECTRICAL SWITCHBOARD TO REMAIN.



TYPICAL RECESSED FIXTURE MOUNTING DETAIL
NO SCALE



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



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SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEERING
MATRIX ENGINEERING INC.
No. C01034
CERTIFICATE OF AUTHORIZATION

SOUTH CAROLINA LICENSED PROFESSIONAL ENGINEERING
No. 9001
HUNTER P. BUNN
03-15-2024

CLIENT NAME / LOCATION & DESCRIPTION
SPARTANBURG COMMUNITY COLLEGE
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AREA A (CLASS AND SHOPS)
LIGHTING PLAN

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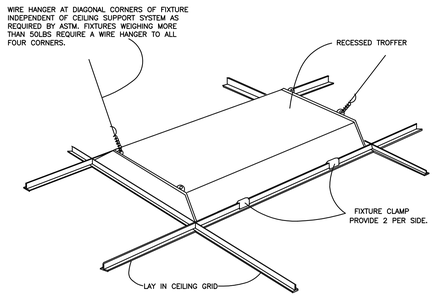

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KEYED LIGHTING PLAN NOTES:

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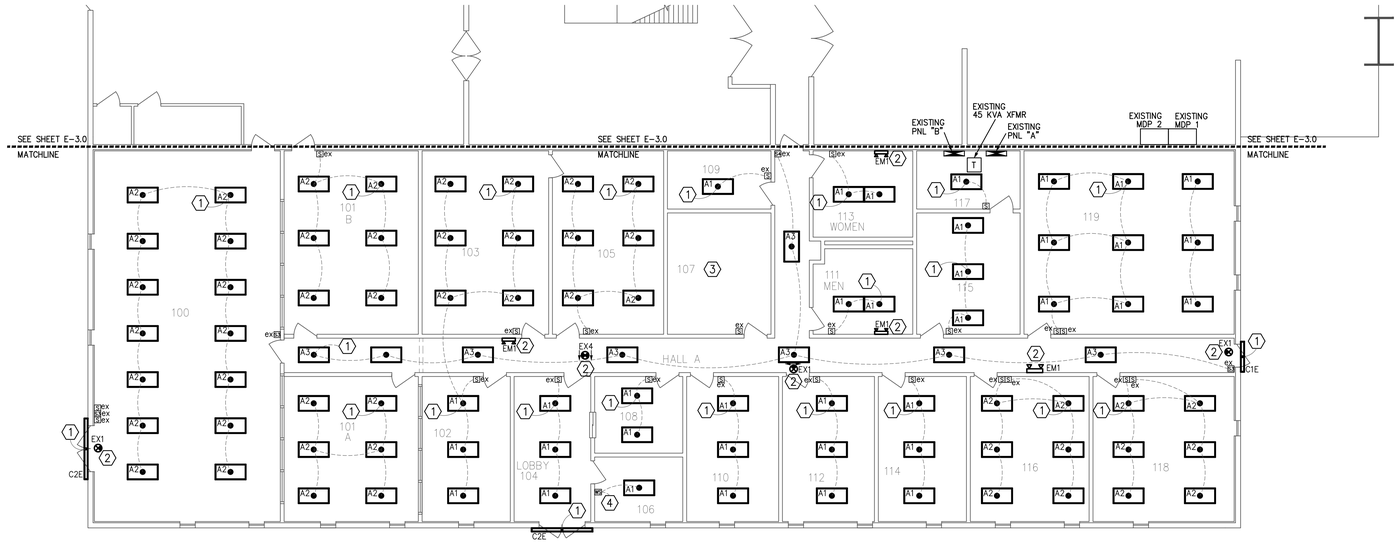
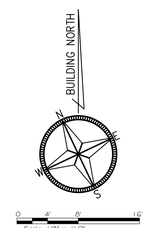
2. DENOTES NEW EMERGENCY FIXTURE TO BE WIRED UNSWITCHED AND "HOT" TO EXISTING AREA LIGHTING CIRCUIT.
3. DENOTES AREA TO REMAIN WHERE EXISTING LIGHTING TO REMAIN.
4. DENOTES NEW WALL MOUNTED OCCUPANCY SENSOR TO CONTROL NEW LIGHTING FIXTURE IN ROOM. ELECTRICAL CONTRACTOR TO WIRE NEW CONTROLS TO EXISTING LIGHTING CIRCUIT IN ROOM. WALL MOUNTED OCCUPANCY SENSOR TO BE HUBBELL CONTROLS SOLUTIONS CATALOG #LHMTS1-COLOR OR EQUAL.



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

WS WALL MOUNTED OCCUPANCY SENSOR
HUBBELL CONTROL SOLUTIONS
CATALOG #LHMTS1-COLOR



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03-15-2024

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AREA B (ELECTRICAL OFFICE)
LIGHTING PLAN

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