

ELECTRICAL ABBREVIATIONS

A	AMPERES OR AMP METER
AC	ALTERNATING CURRENT
AF	AMP FRAME
AFB	ABOVE FINISHED CEILING
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CAPACITY
ALT	ALTERNATE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ARCH	ARCHITECTURAL
AT	AMP TRIP
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAGE
BFC	BELOW FINISHED CEILING
BFG	BELOW FINISHED GRADE
C	CELSIUS; COIL
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION SYSTEM
CD/CD4	CANDELA
CLG	CEILING
COAX	COAXIAL CABLE
CONTR	CONTRACTOR
CT	CURRENT TRANSFORMER
CTV	CABLE TELEVISION
CU	COPPER
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ECB	ENCLOSED CIRCUIT BREAKER
EF	EXHAUST FAN
EGC	EQUIPMENT GROUNDING CONDUCTOR
ELEC	ELECTRICAL
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
EPO	EMERGENCY POWER OFF
ETR	EXISTING TO REMAIN
EWG	ELECTRIC WATER COOLER
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINATION CABINET
FFE	FINISHED FLOOR ELEVATION
FL	FLOOR
FLA	FULL LOAD AMPS
FLC	FLEXIBLE LIQUIDTIGHT CONDUIT
FLEX	FLEXIBLE
FMC	FLEXIBLE METAL CONDUIT
FT	FEET; FOOT
FU	FUSE
GA	GAUGE; GAGE
GB	GROUND BUS
GC	GENERAL CONTRACTOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GFI	GROUND FAULT (CIRCUIT) INTERRUPTER
GFCI	
GND	GROUND
HD	HEAVY DUTY
HQA	HANDS-OFF-AUTOMATIC
HP	HORSEPOWER
HVAC	HEATING, VENTILATING & AIR CONDITIONING
HZ	HERTZ
IG	ISOLATED GROUND
IMC	INTERMEDIATE METAL CONDUIT
JB	JUNCTION BOX
KV	KILOVOLT
KVA	KILOVOLT AMPERE
KW	KILOWATT
KWH	KILOWATT HOUR
LED	LIGHT EMITTING DIODE
LRA	LOCKED ROTOR AMPS
LS	LIFE SAFETY
LTS	LIGHTING
M	MOTOR; METERING
MC	METAL CLAD
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MCP	MOTOR CONTROL PROTECTOR
MCS	MOLDED CASE SWITCH
MH	MANHOLE
MIN	MINIMUM
MLO	MAIN LUG ONLY
N	NEUTRAL
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NF	NON-FUSED
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTACT
NL	NIGHT LIGHT
NO	NORMALLY OPEN; NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OL	OVERLOAD
P	POLE
PB	PULL BOX
PC	PHOTOCELL
PF	POWER FACTOR
PH	PHASE
PNL	PANEL
PT	POINT; POTENTIAL TRANSFORMER
PUN	PER UNIT NAMEPLATE
PVC	POLYVINYL CHLORIDE (CONDUIT)
RD	ROUND

ELECTRICAL ABBREVIATIONS

REV	REVISION
RLA	RATED LOAD AMPS
RMC	RIGID METAL CONDUIT
SN	SOLID NEUTRAL
SNAC	SIGNAL NOTIFICATION APPLIANCE CIRCUIT
SP	SURGE PROTECTED
SPD	SURGE PROTECTED DEVICE
SPDT	SINGLE POLE DOUBLE THROW
SPEC	SPECIFICATION
SPST	SINGLE POLE SINGLE THROW
SO	SQUARE
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TBB	TELEPHONE BACK BOARD
TELEC	TELECOMMUNICATIONS
OM	
TEMP	TEMPERATURE
THD	TOTAL HARMONIC DISTORTION
TV	TELEVISION
TYP	TYPICAL
UL	UNDERWRITERS LABORATORIES INC.
UNO	UNLESS NOTED OTHERWISE
V	VOLTAGE; VOLT
VAC	VOLTS ALTERNATING CURRENT
VDC	VOLTS DIRECT CURRENT
VFD	VARIABLE FREQUENCY DRIVE
VOL	VOLUME
W	WIRE
W	WITH
WG	WIREGUARD
WP	WEATHERPROOF
EM	EMERGENCY
XP	EXPLOSION PROOF
Z	IMPEDANCE
ø	ROUND; DIAMETER; PHASE

ELECTRICAL SYMBOLS

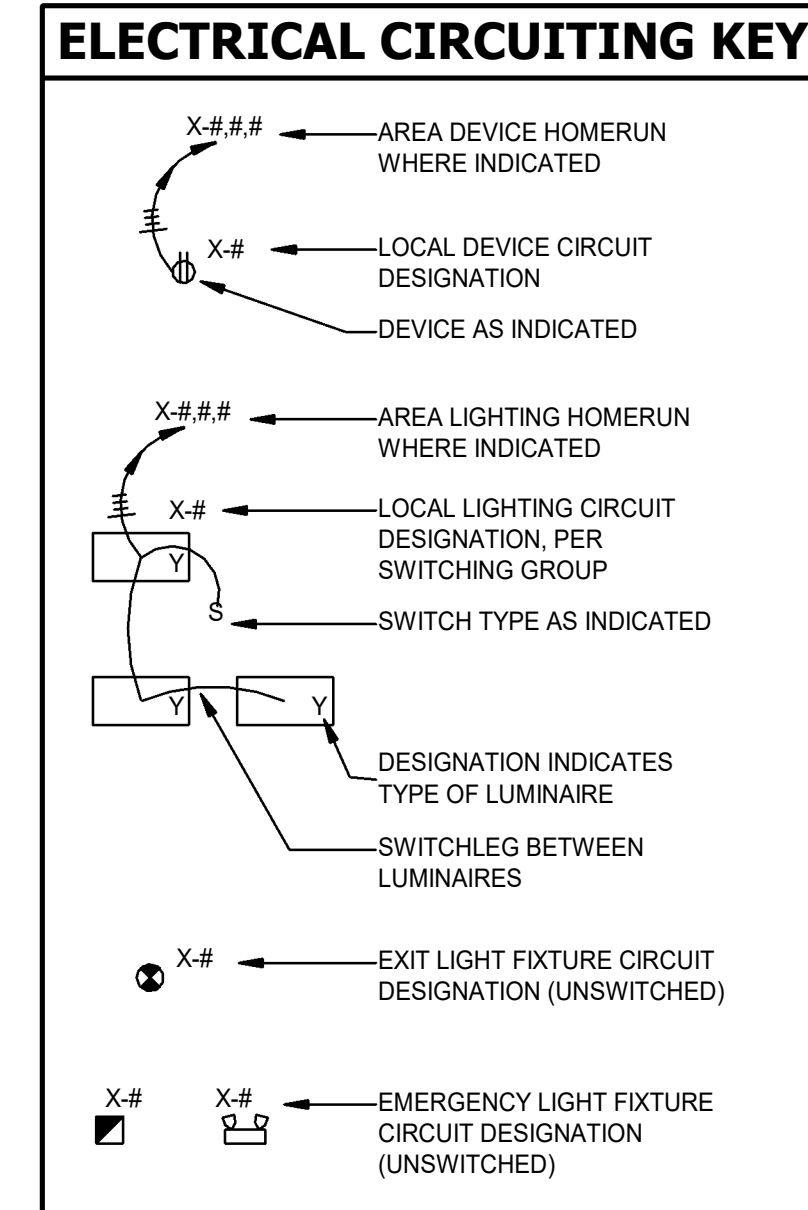
	WALL MTD LIGHTING FIXTURE AND OUTLET
	PENDANT LIGHTING FIXTURE AND OUTLET
	DOWNLIGHT LIGHTING FIXTURE AND OUTLET
	WALL MTD LIGHTING FIXTURE AND OUTLET
	PENDENT MOUNTED STRIP FIXTURE
	CEILING MTD LIGHTING FIXTURE AND OUTLET
	WALL MTD EXIT SIGN AND OUTLET, SINGLE FACE, ARROW INDICATES DIRECTION.
	CEILING MTD EXIT SIGN AND OUTLET, DUAL FACE, ARROWS INDICATE DIRECTION.
	EMERGENCY LIGHT BATTERY PACK - TWO HEAD UNIT.
	CEILING MOUNTED EMERGENCY BATTERY LIGHT
	EMERGENCY LIGHT REMOTE HEAD
	GROUND MOUNTED FLOODLIGHT AND OUTLET
	AREA LUMINAIR AND STANDARD
	FLUSH MTD TOGGLE SWITCH, SPST, 20A, 120/277V
	FLUSH MTD TOGGLE SWITCH, DPST, 20A, 120/277V
	FLUSH MTD 3-WAY TOGGLE SWITCH, 20A, 120/277V
	FLUSH MTD 4-WAY TOGGLE SWITCH, 20A, 120/277V
	FLUSH MTD DIMMER SWITCH, 20A, 120/277V
	FLUSH MTD KEY SWITCH, 20A, 120/277V
	FLUSH MTD OCCUPANCY SENSOR SWITCH, 20A, 120/277V
	FLUSH MTD LIGHTED HANDLE TOGGLE SWITCH, SPST, 20A, 120V, LIGHT ON WITH OPEN SWITCH
	FLUSH MTD TOGGLE SWITCH WITH PILOT LIGHT, LIGHT ON WITH CLOSED SWITCH.
	TIMER SWITCH
	CEILING MTD INFRA-RED OCCUPANCY SENSOR SWITCH
	CEILING MTD ULTRASONIC OCCUPANCY SENSOR SWITCH
	CEILING MTD DUAL TECHNOLOGY (IR, U) OCCUPANCY SENSOR SWITCH
	PHOTOCCELL
	FLUSH MTD DUPLEX RECEPTACLE, 20A, 125V, 3W
	FLUSH MTD DUPLEX GFCI RECEPTACLE, 20A, 125V, 3W
	FLUSH MTD DUPLEX RECEPTACLE WITH DUPLEX USB OUTLETS, 20A, 125V, 3W
	FLUSH MTD SINGLE RECEPTACLE, 20A, 125V, 3W
	FLUSH MTD QUADRUPLEX RECEPTACLE, 20A, 125V, 3W
	FLUSH MTD DUPLEX RECEPTACLE, 20A, 125V, 3W, SPLIT WIRED WITH TOP OUTLET SWITCHED.
	FLUSH MTD DUPLEX RECEPTACLE, 20A, 125V, 3W, INSTALLED VERTICALLY 4" ABOVE BACKSPASH OR COUNTERTOP IF NO BACKSPASH EXISTS.
	FLUSH MTD QUADRUPLEX RECEPTACLE, 20A, 125V, 3W, INSTALLED VERTICALLY 4" ABOVE BACKSPASH OR COUNTERTOP IF NO BACKSPASH EXISTS.
	WALL MOUNTED POWER DEVICE
	FLOOR BOX WITH DEVICE(S), REFER TO SCHEDULES FOR MARK
	WALL MTD TELECOM OUTLET, REFER TO SCHEDULES FOR MARK
	CEILING MTD RECEPTACLE AND OUTLET, 20A, 125V
	CEILING MTD TELECOM OUTLET, REFER TO SCHEDULES FOR MARK
	CEILING MTD DUPLEX RECEPTACLE & TELECOM OUTLET, REFER TO SCHEDULES FOR MARK
	CEILING MTD PUBLIC ADDRESS SPEAKER
	FLUSH MTD VOLUME CONTROL FOR SPEAKER
	WALL MTD TELEVISION ANTENNA/ELECTRICAL OUTLET, REFER TO SCHEDULES FOR MARK
	(WiFi) WIRELESS ACCESS POINT.
	PANELBOARD, 250V LEVEL
	PANELBOARD, 600V LEVEL
	HOMERUN: ARROW HEADS INDICATE NUMBER OF CIRCUITS, LETTERS AND NUMBERS DESIGNATE PANEL, AND CIRCUITS, SHORT TICK MARKS INDICATE NUMBER OF CURRENT CARRYING PHASE CONDUCTORS, LONG TICK MARK(S) INDICATE NEUTRAL(S), GROUNDING CONDUCTORS REQUIRED BY SPECIFICATIONS ARE NOT SHOWN, CONDUCTOR SIZES SPECIFIED ON THE PANEL SCHEDULES ARE MANDATORY FOR THE ENTIRE CIRCUIT EXCEPT WHERE SPECIFICATIONS REQUIRE A SIZE INCREASE FOR VOLTAGE DROP.
	SURFACE METAL RACEWAY WITH DEVICES, LETTER DESIGNATES TYPE
	PENDANT MTD, PLUG-IN BUS DUCT WITH PLUG-IN CIRCUIT BREAKER OR FUSIBLE SWITCH AND TAP BOX, DUCT AND SWITCH RATING AS NOTED.
	TOP #, DEVICE MAXIMUM RATING OR FRAME SIZE
	BOTTOM #, FUSE SIZE OR DEVICE SETTING
	DISCONNECT SWITCH
	COMBINATION DISCONNECT SWITCH AND MAGNETIC MOTOR STARTER, SEE SCHEDULE OR NOTE
	FLUSH MTD MANUAL MOTOR STARTER SWITCH WITHOUT OVERLOAD HEATERS
	MAGNETIC MOTOR STARTER
	3 POLE CIRCUIT BREAKER IN ENCLOSURE, # INDICATES CB RATING.
	VARIABLE FREQUENCY DRIVE CONTROLLER, 40" AFF, PROVIDED BY HVAC OR PLUMBING CONTRACTOR AND WIRED BY ELECTRICAL CONTRACTOR
	MAGNETIC CONTACTOR, SIZE PER SCHEDULE
	JUNCTION, PULL, TAP OR OUTLET BOX (CODE SIZE)
	TIME CLOCK
	MAGNETIC RELAY, SIZE PER SCHEDULE

ELECTRICAL SYMBOLS

	FLUSH MOUNTED MUSHROOM HEAD PUSH BUTTON
	FLUSH MOUNTED PUSH BUTTON
	SUPPLEMENTAL GROUND BAR
	GROUND PER NEC
	ELECTRICAL DEMAND METER
	SURGE PROTECTION DEVICE
	WALL MTD FIRE ALARM PULL STATION
	SMOKE DETECTOR, CEILING MTD
	SMOKE DETECTOR FOR ELEVATOR RECALL, CEILING MTD
	SMOKE DETECTOR WITH SOUNDER BASE, CEILING MTD
	SMOKE DETECTOR, CEILING MTD, MULTI SENSOR
	CEILING MTD REMOTE ALARM INDICATOR LAMP
	CARBON MONOXIDE DETECTOR
	SMOKE DETECTOR, DUCT MTD (WITH RAIL)
	HEAT DETECTOR, CEILING MTD
	SMOKE DETECTOR, WALL MTD
	SMOKE DETECTOR WITH SOUNDER BASE, WALL MTD
	WALL MTD HEAT DETECTOR
	WALL MTD REMOTE ALARM INDICATOR LAMP (RAIL)
	WALL MTD HORN TYPE AUDIO/VISUAL APPLIANCE
	WALL MTD SPEAKER TYPE AUDIO/VISUAL APPLIANCE
	WALL MTD CHIME TYPE AUDIO/VISUAL APPLIANCE
	CEILING MTD HORN TYPE AUDIO/VISUAL ALARM APPLIANCE
	CEILING MTD SPEAKER TYPE AUDIO/VISUAL ALARM APPLIANCE
	CEILING MTD CHIME TYPE AUDIO/VISUAL ALARM APPLIANCE
	CEILING MTD FIRE ALARM VISUAL DEVICE
	DOOR HOLDER
	FIRE ALARM MONITOR MODULE
	FLOW SWITCH FIRE ALARM CONNECTION, SWITCH PROVIDED BY OTHERS
	TAMPER SWITCH FIRE ALARM CONNECTION, SWITCH PROVIDED BY OTHERS
	POST INDICATOR VALVE FIRE ALARM CONNECTION, VALVE PROVIDED BY OTHERS
	FIRE ALARM TEMPERATURE SENSOR
	FIRE ALARM CONTROL MODULE OR RELAY
	CEILING MTD FIRE ALARM SPEAKER
	CLOCK
	FIRE ALARM BELL; # INDICATED DIAMETER IN INCHES
	LINEAR BEAM TRANSMITTER
	LINEAR BEAM RECEIVER
	FIRE ALARM WALL MTD SPEAKER
	FIREMAN'S 2-WAY TELEPHONE
	FIRE ALARM ISOLATION MODULE
	FIRE ALARM ASPIRATION SMOKE DETECTOR
	DIGITAL ALARM COMMUNICATIONS TRANSMITTER
	FIRE ALARM ANNUNCIATOR PANEL
	FIRE ALARM CONTROL PANEL
	FIRE ALARM TERMINAL CABINET
	SUPPLEMENTAL NOTIFICATION APPLIANCE CABINET
	DOOR CONTROL ID TAG
	SECURITY SYSTEM KEYPAD, 42" AFF
	ACCESS CONTROL CARD READER
	SECURITY PANIC BUTTON
	CCTV SECURITY CAMERA WITH FIXED MOUNT
	CCTV SECURITY CAMERA WITH PTZ FEATURES
	CCTV DOME SECURITY CAMERA WITH 360 FEATURES
	EMERGENCY TELEPHONE
	MASTER RESCUE ASSISTANCE STATION
	RESCUE ASSISTANCE STATION
	RESCUE ASSISTANCE LIGHT
	CORD REEL
	NEW WORK
	EXISTING TO REMAIN
	EXISTING TO BE DEMOLISHED

ELECTRICAL GENERAL NOTES

- ALL SYMBOLS AND ABBREVIATIONS MAY NOT BE UTILIZED FOR THIS PROJECT.
- SYMBOLS NOT SHOWN ON THIS ELECTRICAL SYMBOL LEGEND ARE IDENTIFIED ON THE DRAWINGS WHERE THEY OCCUR.
- UNLESS OTHERWISE INDICATED IN THE SPECIFICATIONS OR ON THE DRAWINGS, MOUNTING HEIGHT OF DEVICES IS TO BE THE CENTERLINE OF THE DEVICE.
- UNLESS OTHERWISE INDICATED, SWITCHES AND SIMILAR DEVICES ARE TO BE LOCATED 42" AFF; RECEPTACLES ARE TO BE VERTICALLY MOUNTED AT 18" AFF WITH THE GROUNDING TERMINAL ON THE BOTTOM.
- TELEPHONE & DATA OUTLETS ARE TO BE MOUNTED AT 18" AFF UNLESS OTHERWISE INDICATED. "W" INDICATES MOUNTING AT 42" AFF; "C" INDICATES MOUNTING ABOVE/COUNTERTOP WITH ALIGNMENT AND HEIGHT AS INDICATED FOR RECEPTACLES SIMILARLY MOUNTED.
- FIRE ALARM PULL STATIONS ARE TO BE VERTICALLY MOUNTED AT 42" AFF.
- FIRE ALARM INDICATING APPLIANCES SHALL BE 15 Cg RATING, UNLESS NOTED OTHERWISE ON THE PLANS.
- FIRE ALARM INDICATING APPLIANCES ARE TO BE MOUNTED WITH THE LOWER EDGE OF THE VISUAL ELEMENT AT 6'-8" AFF OR 6" BFC, WHICHEVER IS LOWER. WHERE DUCTWORK, CONDUIT, OR OTHER OBSTRUCTIONS BLOCK DIRECT VIEW OF APPLIANCE, MOUNT 6" BELOW SUCH OBSTRUCTIONS.
- CEILING MOUNTED SMOKE DETECTORS ARE SHOWN IN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH CEILING FEATURES. WALL MOUNTED SMOKE DETECTORS ARE TO BE MOUNTED 10" BELOW FINISHED CEILING TO THE CENTER OF DEVICE AND A MINIMUM OF 12" FROM ADJACENT WALLS OR OTHER OBSTRUCTIONS.
- COORDINATE SMOKE DETECTOR AND HEAT DETECTOR LOCATIONS WITH HVAC SUPPLY AND RETURN GRILLES. MAINTAIN 5'-0" CLEARANCE BETWEEN EDGE OF SUPPLY GRILL AND EDGE OF SMOKE DETECTOR.
- UPPER CASE LETTER (OR LETTER/NUMBER COMBINATION) ADJACENT TO FIXTURE OR SWITCH DESIGNATES TYPE. SEE FIXTURE SCHEDULE FOR DETAILS.
- LOWER CASE LETTER ADJACENT TO FIXTURE OR SWITCH DESIGNATES CONTROL RELATIONSHIP.
- NUMBER ADJACENT TO FIXTURE, SWITCH, OR RECEPTACLE DESIGNATES CIRCUIT CONNECTION, SINGLE DIAGONAL LINE ACROSS A FIXTURE INDICATES FIXTURE IS UNSWITCHED FOR 24 HOUR OPERATION.



ELECTRICAL DRAWING LIST	
NO.	TITLE
E001	STANDARDS, SYMBOLS & ABBREVIATIONS
E002	SITE PLAN
E111	PLANS - RESTROOM BUILDING
E112	PLANS - TRAINING TOWER
E113	PLANS - TRAINING TOWER
E114	PLANS - TRAINING TOWER
E301	ELECTRICAL DETAILS
E401	PANEL SCHEDULES
E501	LIGHTING FIXTURE SCHEDULE
E511	TELECOMMUNICATIONS SYSTEMS
E601	ELECTRICAL DISTRIBUTION SYSTEM

GENERAL SYMBOLS

	PLAN OR DETAIL NUMBER
	SHEET NUMBER
	ELEVATION LETTER SHOWN ON SHEET NUMBER
	SECTION NUMBER SHOWN ON SHEET NUMBER
	DIMENSION LINE
	DETAIL NUMBER WITH SHEET NO.
	COLUMN NUMBER OR LETTER
	DRAWING REVISION NUMBER
	KEYED NOTE NUMBER
	CONNECT TO EXISTING
	REMOVE TO THIS POINT
	NORTH ARROW

APPENDIX B
2018 BUILDING CODE SUMMARY
FOR ALL COMMERCIAL PROJECTS

ELECTRICAL DESIGN

ELECTRICAL SUMMARY

Method of Compliance:	
Energy Code:	<input checked="" type="checkbox"/> Prescriptive <input type="checkbox"/> Performance
ASHRAE 90.1:	<input type="checkbox"/> Prescriptive <input type="checkbox"/> Performance
Lighting schedule (each fixture type)	
lamp type required in fixture	See fixture Schedule on Drawing Sheet
number of lamps in fixture	
ballast type used in the fixture	
number of ballasts in fixture	
total wattage per fixture	1,237 VA vs. 3,523 VA
total interior wattage specified vs. allowed: (whole building or space by space)	
total exterior wattage specified vs. allowed:	5,487 VA vs. 6,408 VA
Additional Efficiency Package Options (When using the 2018 NCECC; not required for ASHRAE 90.1)	
<input type="checkbox"/> C406.2 More Efficient Mechanical Equipment	
<input type="checkbox"/> C406.3 Reduced Lighting Power Density	
<input type="checkbox"/> C406.4 Enhanced Digital Lighting Controls	
<input type="checkbox"/> C406.5 On-Site Renewable Energy	
<input type="checkbox"/> C406.6 Dedicated Outdoor Air System	
<input type="checkbox"/> C406.7 Reduced Energy Use in Service Water Heating	



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WAKE TECHNICAL COMMUNITY COLLEGE
5345 ROLESVILLE RD, WENDELL, NC 27591
NCCCS NO. 2303



03/14/2025

NO.	REVISION	DATE

JOB NUMBER
22-086
DATE ISSUED
03/14/2025
PROJECT STATUS
ISSUE FOR CONSTRUCTION
SHEET

STANDARDS, SYMBOLS & ABBREVIATIONS

E001



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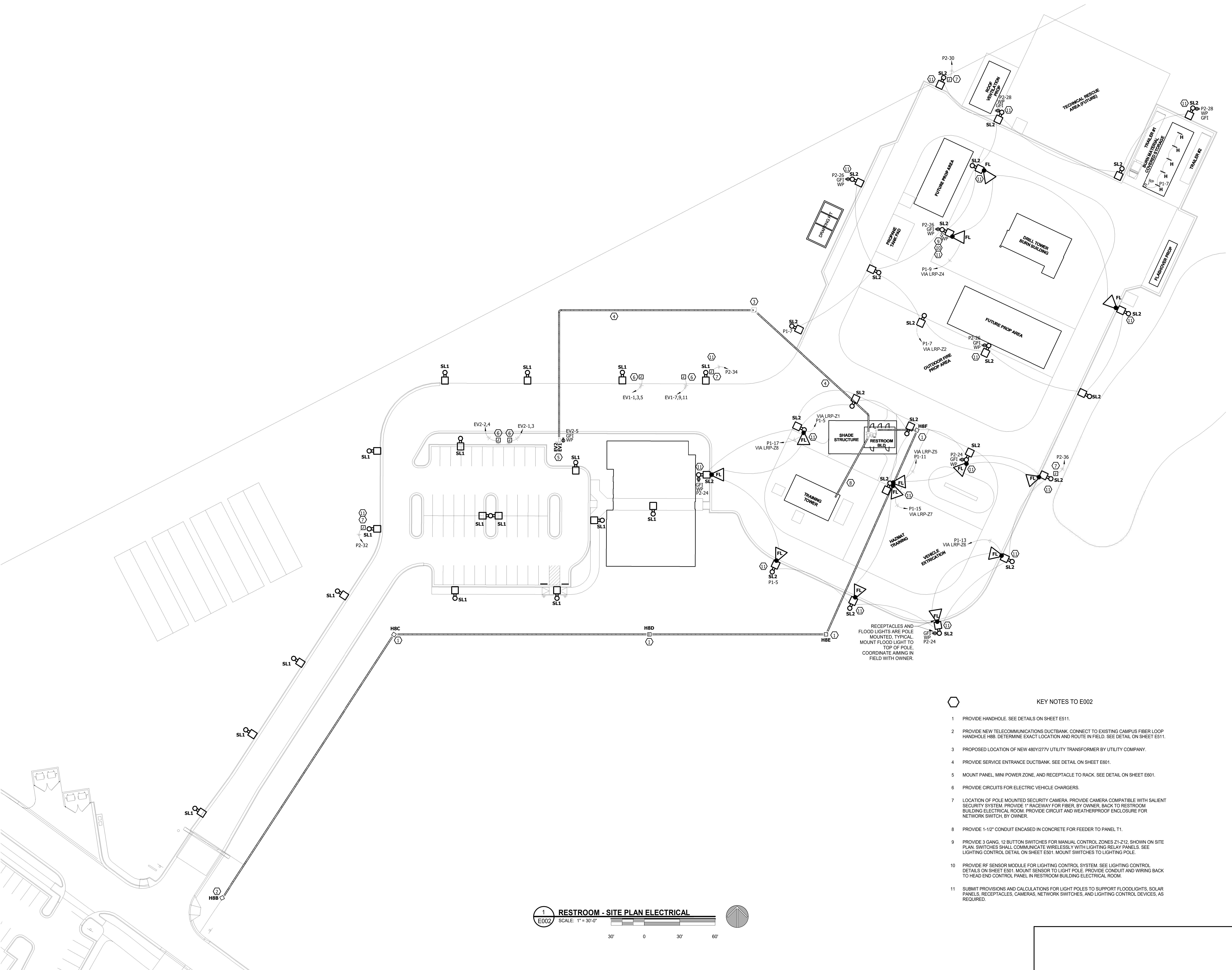


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SITE PLAN

E002



KEY NOTES TO E002

1. PROVIDE HANDHOLE. SEE DETAILS ON SHEET E511.
2. PROVIDE NEW TELECOMMUNICATIONS DUCTBANK. CONNECT TO EXISTING CAMPUS FIBER LOOP HANDHOLE HBB. DETERMINE EXACT LOCATION AND ROUTE IN FIELD. SEE DETAIL ON SHEET E511.
3. PROPOSED LOCATION OF NEW 480Y/277V UTILITY TRANSFORMER BY UTILITY COMPANY.
4. PROVIDE SERVICE ENTRANCE DUCTBANK. SEE DETAIL ON SHEET E501.
5. MOUNT PANEL, MINI POWER ZONE, AND RECEPTACLE TO RACK. SEE DETAIL ON SHEET E501.
6. PROVIDE CIRCUITS FOR ELECTRIC VEHICLE CHARGERS.
7. LOCATION OF POLE MOUNTED SECURITY CAMERA. PROVIDE CAMERA COMPATIBLE WITH SALIENT SECURITY SYSTEM. PROVIDE 1" RACEWAY FOR FIBER, BY OWNER, BACK TO RESTROOM BUILDING ELECTRICAL ROOM. PROVIDE CIRCUIT AND WEATHERPROOF ENCLOSURE FOR NETWORK SWITCH, BY OWNER.
8. PROVIDE 1-1/2" CONDUIT ENCASED IN CONCRETE FOR FEEDER TO PANEL T1.
9. PROVIDE 3 GANG, 12 BUTTON SWITCHES FOR MANUAL CONTROL ZONES Z1-Z12. SHOWN ON SITE PLAN. SWITCHES SHALL COMMUNICATE WIRELESSLY WITH LIGHTING RELAY PANELS. SEE LIGHTING CONTROL DETAIL ON SHEET E501. MOUNT SWITCHES TO LIGHTING POLE.
10. PROVIDE RF SENSOR MODULE FOR LIGHTING CONTROL SYSTEM. SEE LIGHTING CONTROL DETAILS ON SHEET E501. MOUNT SENSOR TO LIGHT POLE. PROVIDE CONDUIT AND WIRING BACK TO HEAD END CONTROL PANEL IN RESTROOM BUILDING ELECTRICAL ROOM.
11. SUBMIT PROVISIONS AND CALCULATIONS FOR LIGHT POLES TO SUPPORT FLOODLIGHTS, SOLAR PANELS, RECEPTACLES, CAMERAS, NETWORK SWITCHES, AND LIGHTING CONTROL DEVICES, AS REQUIRED.

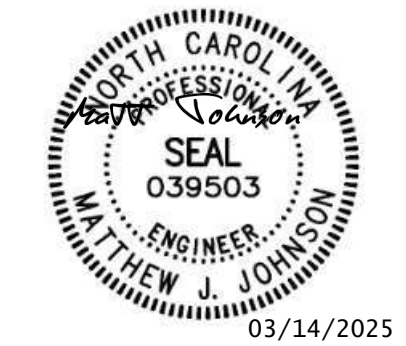


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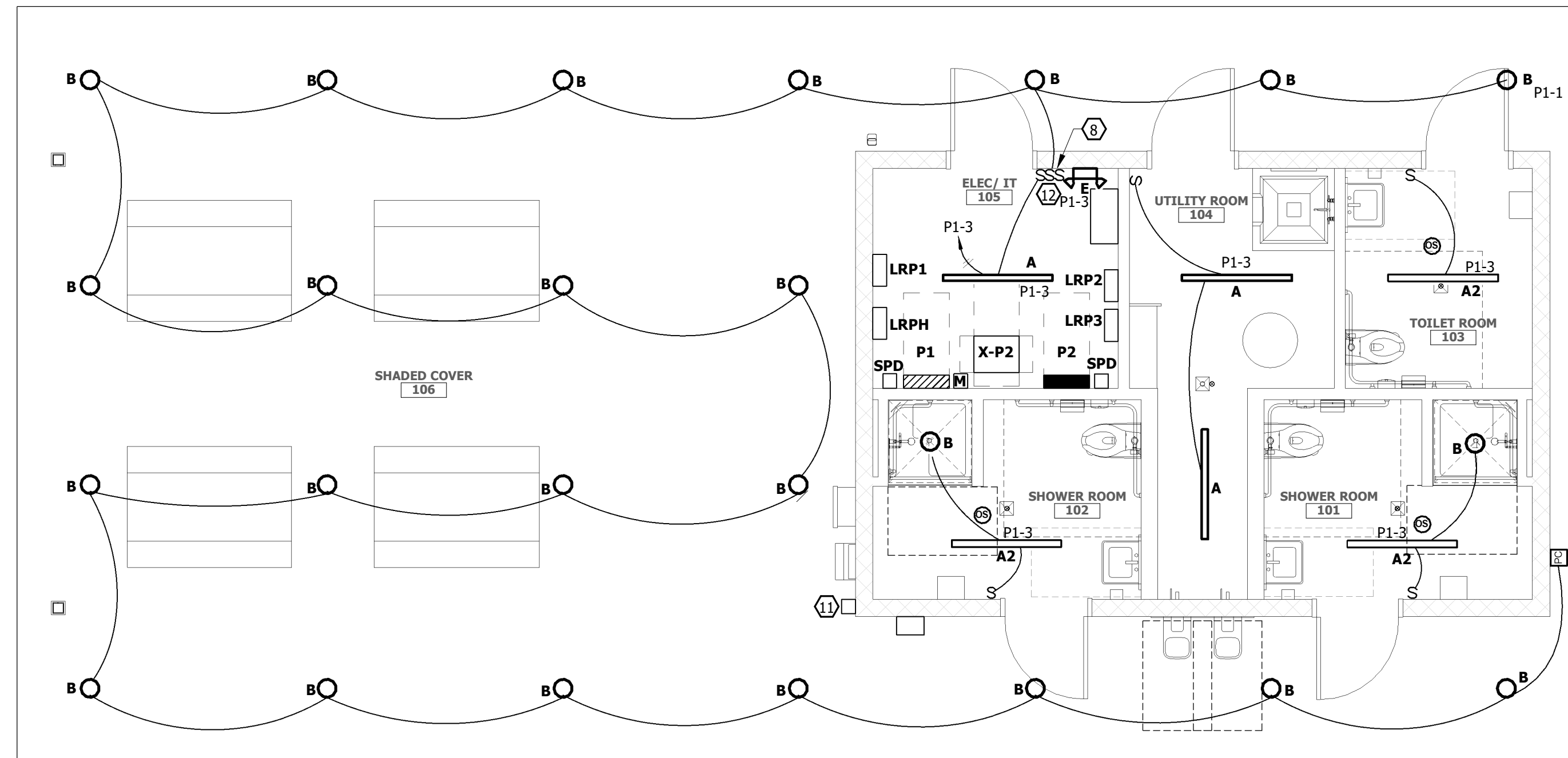
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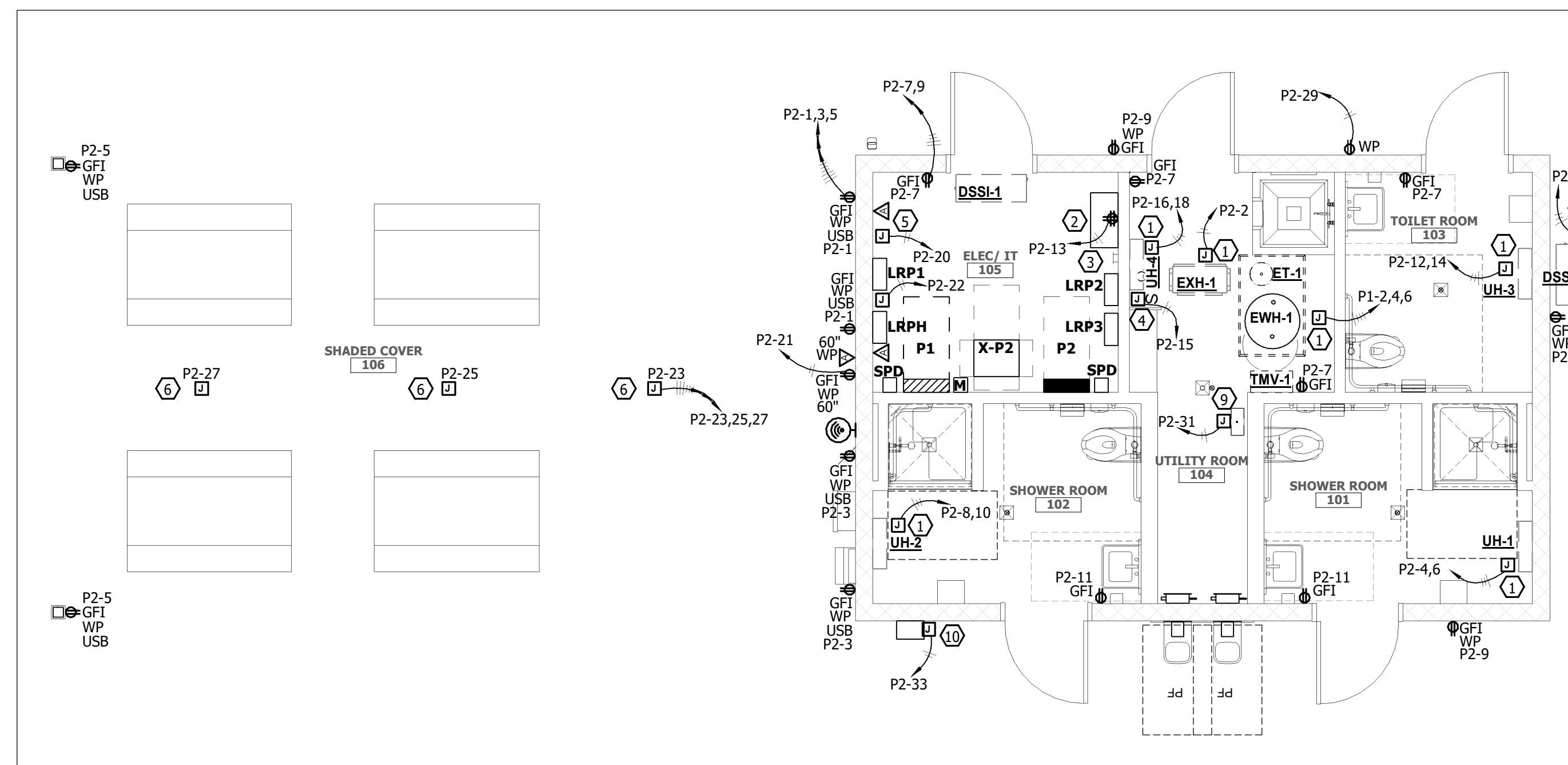


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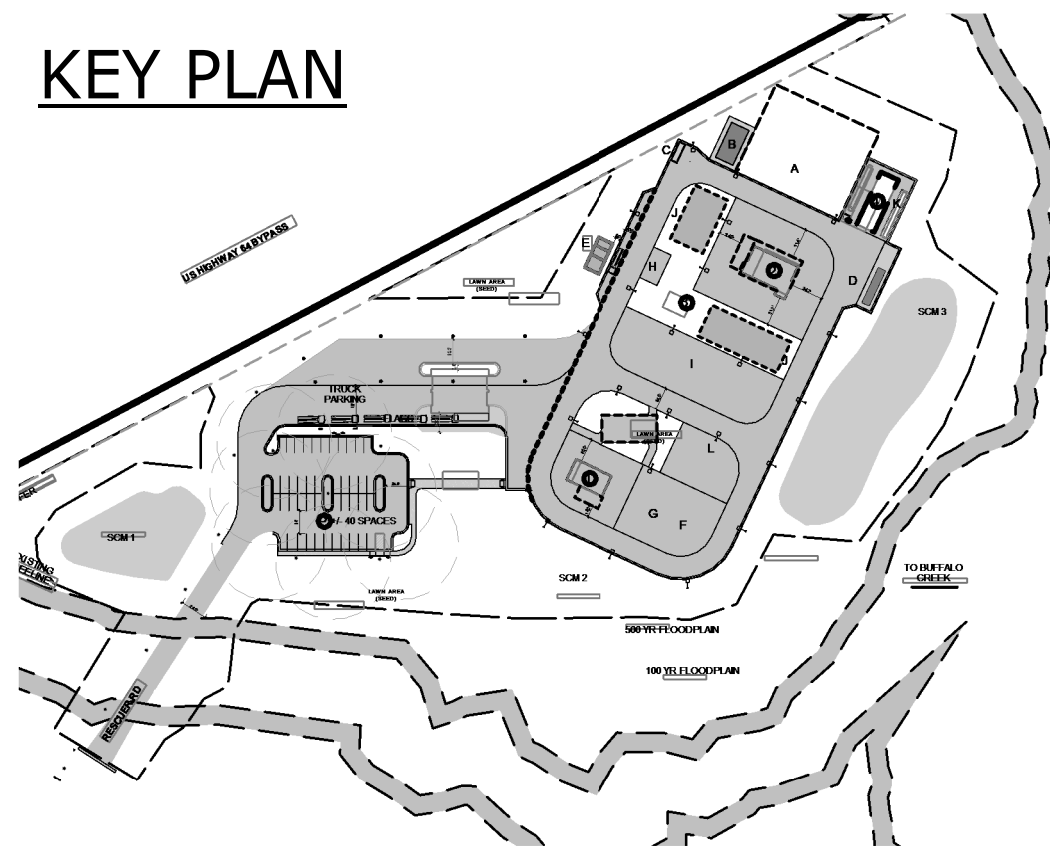
2 FLOOR PLAN - RESTROOM/SHADE STRUCTURE - LIGHTING
E111 SCALE: 1/4" = 1'-0"



1 FLOOR PLAN - RESTROOM/SHADE STRUCTURE - POWER
E111 SCALE: 1/4" = 1'-0"

- KEY NOTES TO E111**
- 1 CONNECT CIRCUIT TO DISCONNECTING MEANS OF EQUIPMENT PROVIDED BY OTHER TRADES.
 - 2 PROVIDE WALL MOUNTED TELECOMMUNICATIONS EQUIPMENT RACK. SEE DETAILS ON SHEET E511.
 - 3 PROVIDE WALL MOUNTED GROUND BUS. SEE DETAIL ON SHEET E601.
 - 4 PROVIDE LINE SIDE WIRING AND CONDUIT TO WALL MOUNTED SWITCH FOR PLUMBING VALVE TRANSFORMER. COORDINATE EXACT LOCATIONS AND CONNECTIONS WITH DIVISION 22.
 - 5 PROVIDE CIRCUIT AND DATA FOR BAS PANEL. CONFIRM EXACT LOCATION WITH MECHANICAL CONTRACTOR.
 - 6 PROVIDE CIRCUIT FOR CEILING FANS BY OWNER. COORDINATE EXACT LOCATION AND CONNECTIONS WITH OWNER.
 - 7 PROVIDE 2000 WATT, WEATHERPROOF PHOTOCELL FOR OUTDOOR LIGHTING CONTROL. MOUNT AT 10' AFG AWAY FROM ARTIFICIAL LIGHT SOURCES.
 - 8 PROVIDE 3 GANG, 12 BUTTON WALL SWITCHES FOR MANUAL CONTROL ZONES Z1-Z12, SHOWN ON SITE PLAN. SWITCHES SHALL COMMUNICATE WIRELESSLY WITH LIGHTING RELAY PANELS. SEE LIGHTING CONTROL DETAIL ON SHEET E501.
 - 9 CONNECT CIRCUIT TO ELECTRIC TRAP PRIMER BY PLUMBING.
 - 10 PROVIDE CIRCUIT FOR WALL MOUNTED AED DEVICE BY OWNER. COORDINATE CONNECTIONS WITH EQUIPMENT VENDOR.
 - 11 PROVIDE RF SENSOR MODULE FOR LIGHTING CONTROL SYSTEM. SEE LIGHTING CONTROL DETAILS ON SHEET E501.
 - 12 PROVIDE MANUAL SWITCH FOR CONTROL OF EXTERIOR LIGHTING IN SERIES WITH PHOTOCELL.

KEY PLAN



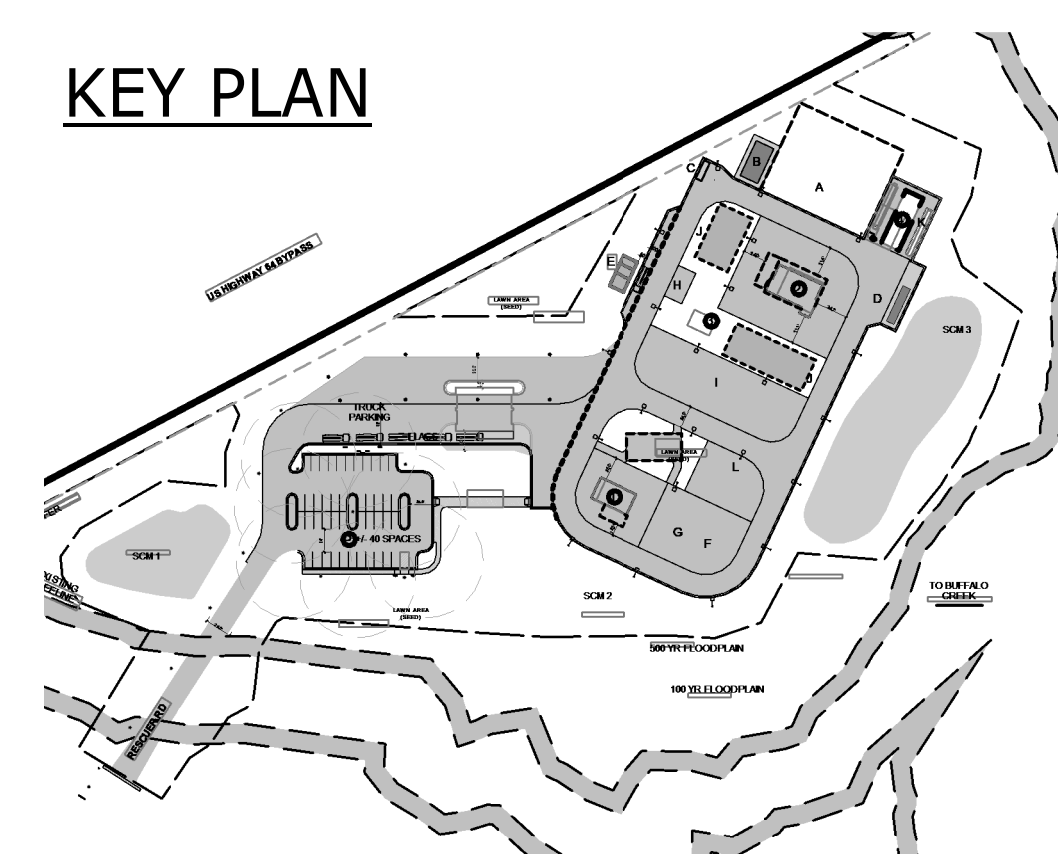
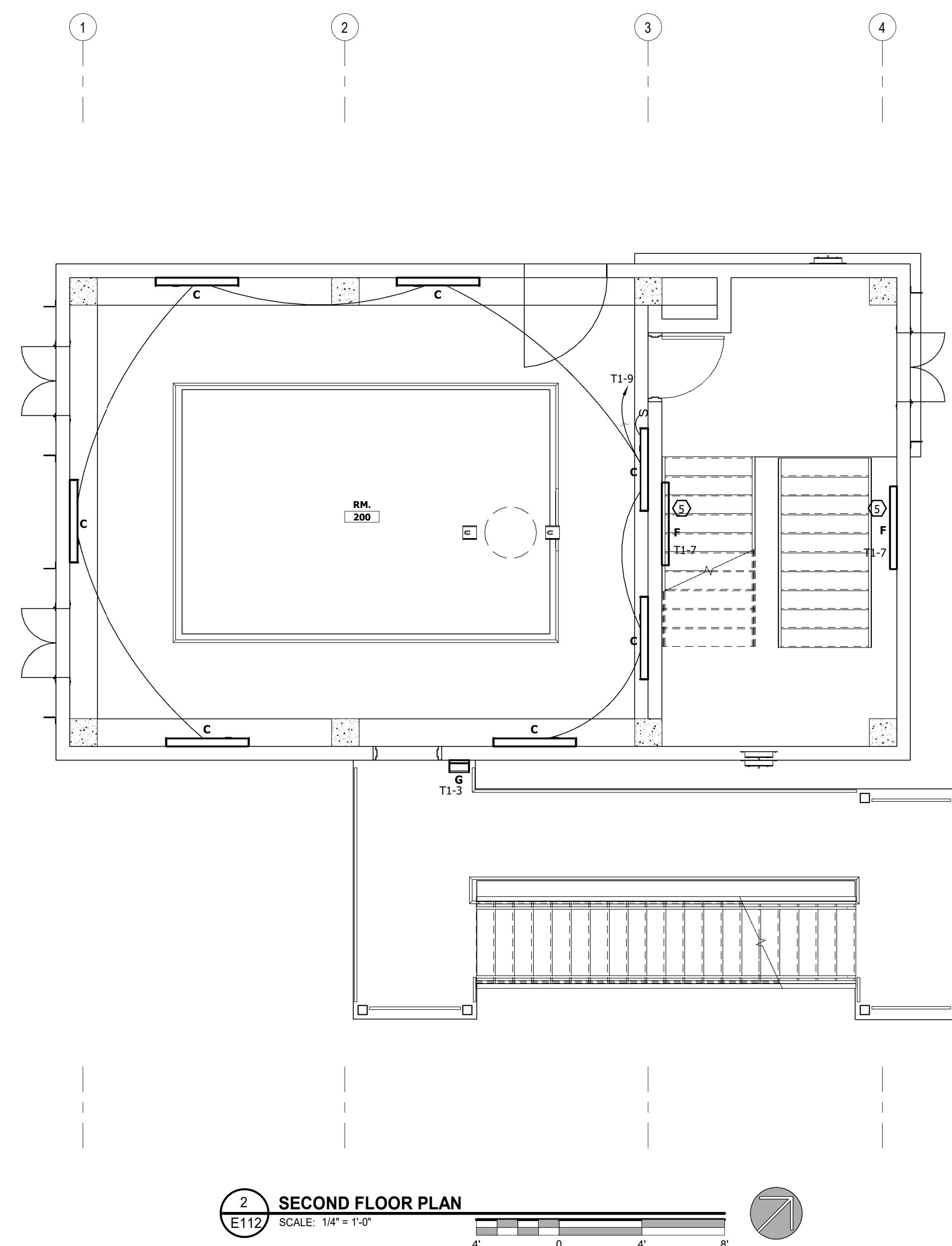
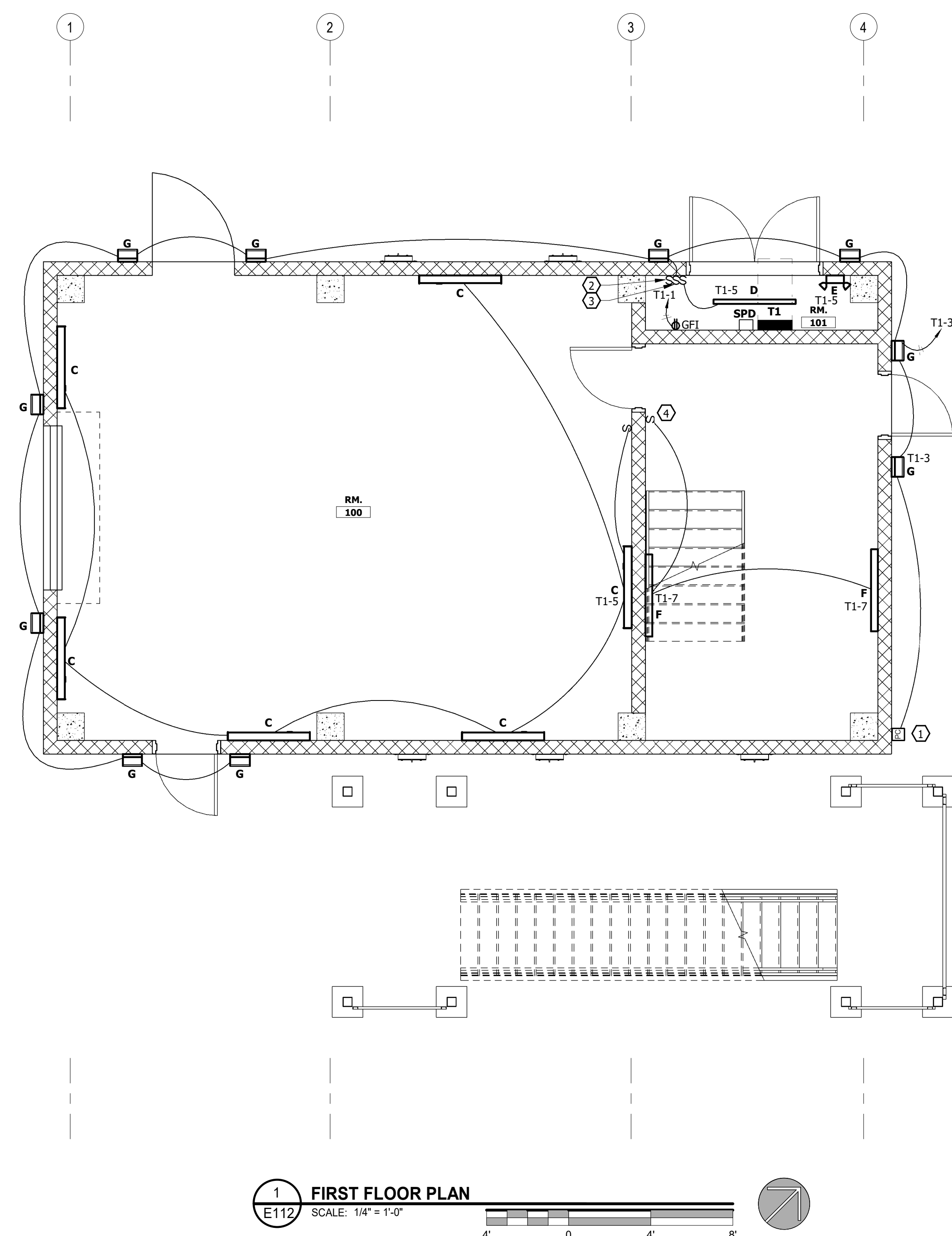
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SHEET
PLANS - RESTROOM BUILDING

E111

KEY NOTES TO E112

- 1 PROVIDE 2000 WATT, WEATHERPROOF PHOTOCELL FOR OUTDOOR LIGHTING CONTROL. MOUNT AT 10' AFG AWAY FROM ARTIFICIAL LIGHT SOURCES.
- 2 PROVIDE 3 GANG, 12 BUTTON WALL SWITCHES FOR MANUAL CONTROL ZONES Z1-Z12. SHOWN ON SITE PLAN. SWITCHES SHALL COMMUNICATE WIRELESSLY WITH LIGHTING RELAY PANELS. SEE LIGHTING CONTROL DETAIL ON SHEET ES01.
- 3 PROVIDE MANUAL SWITCH FOR CONTROL OF EXTERIOR LIGHTING IN SERIES WITH PHOTOCELL.
- 4 SWITCH SHALL CONTROL ALL STAIR LIGHTINGS.
- 5 STAIR LIGHTS SHALL BE CONTROLLED BY SWITCH SHOWN ON FIRST FLOOR PLAN.



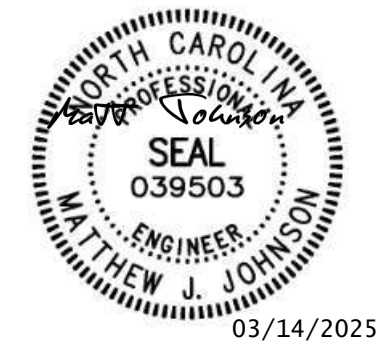


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WTCC EWS - FIRE & RESCUE TRAINING CENTER
WAKE TECHNICAL COMMUNITY COLLEGE
5345 ROLESVILLE RD, WENDELL, NC 27591
NCCCS NO. 2303



03/14/2025

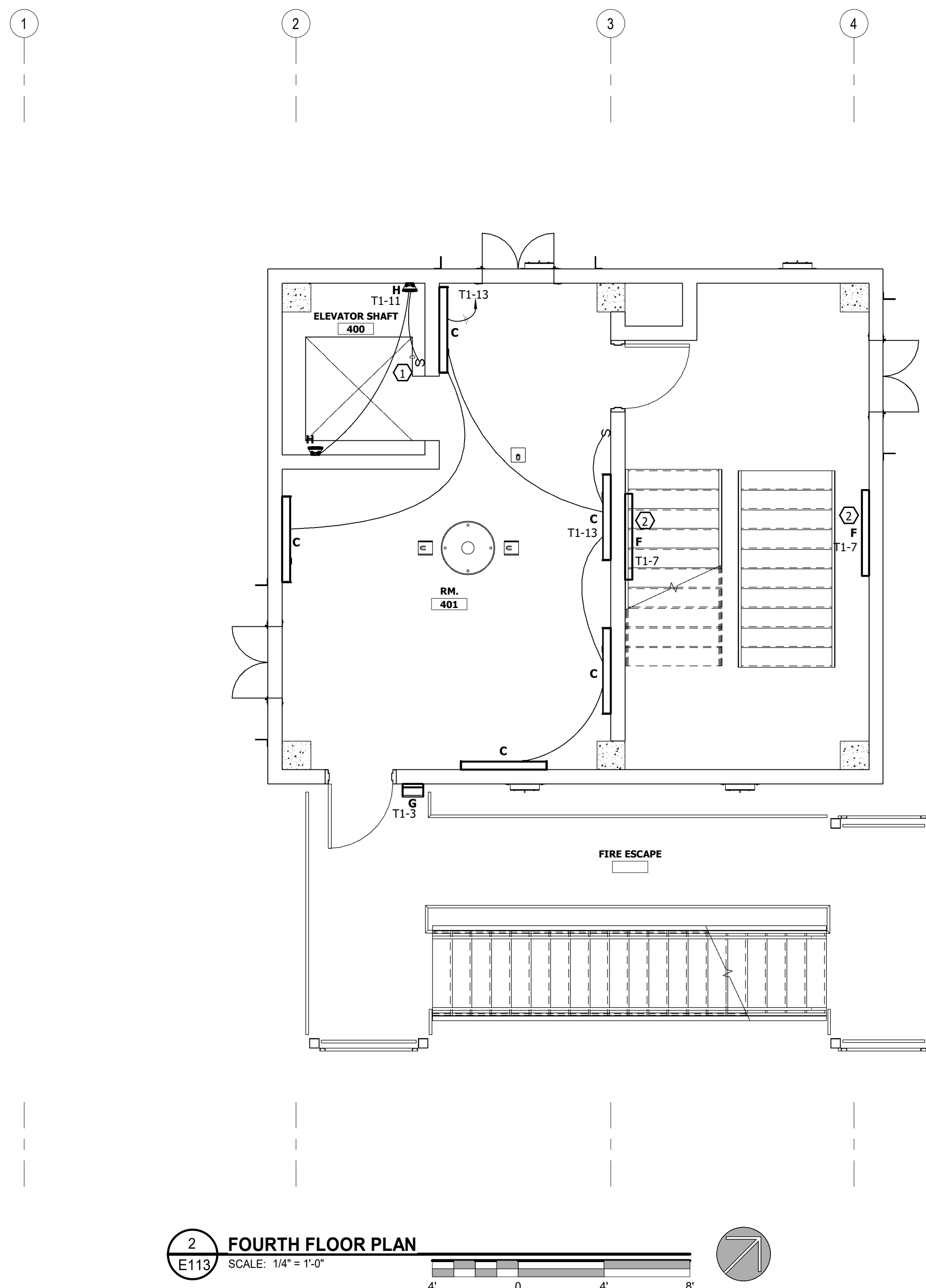
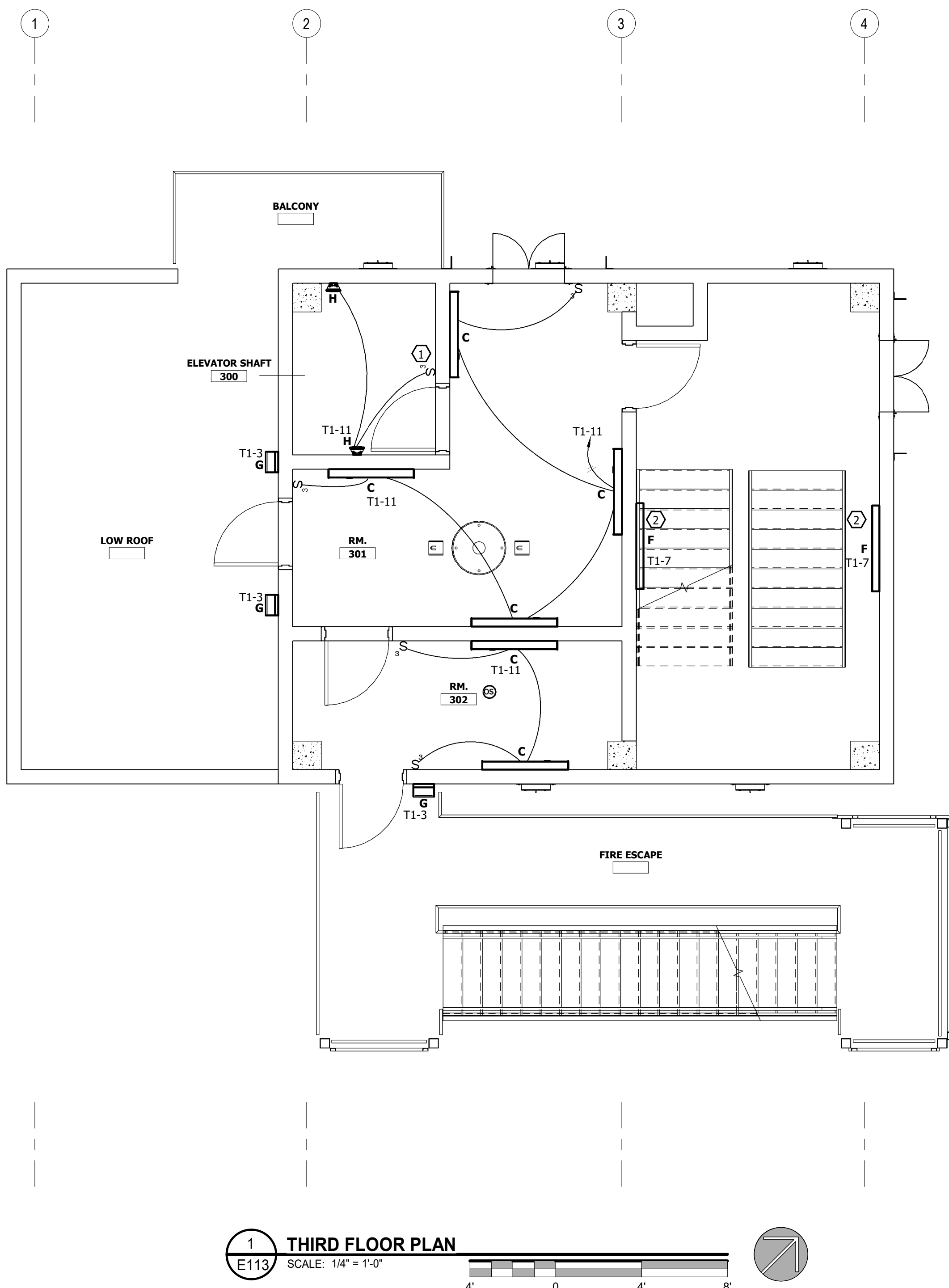
NO.	REVISION	DATE

JOB NUMBER
22-086
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PROJECT STATUS
ISSUE FOR CONSTRUCTION
SHEET
PLANS - TRAINING TOWER

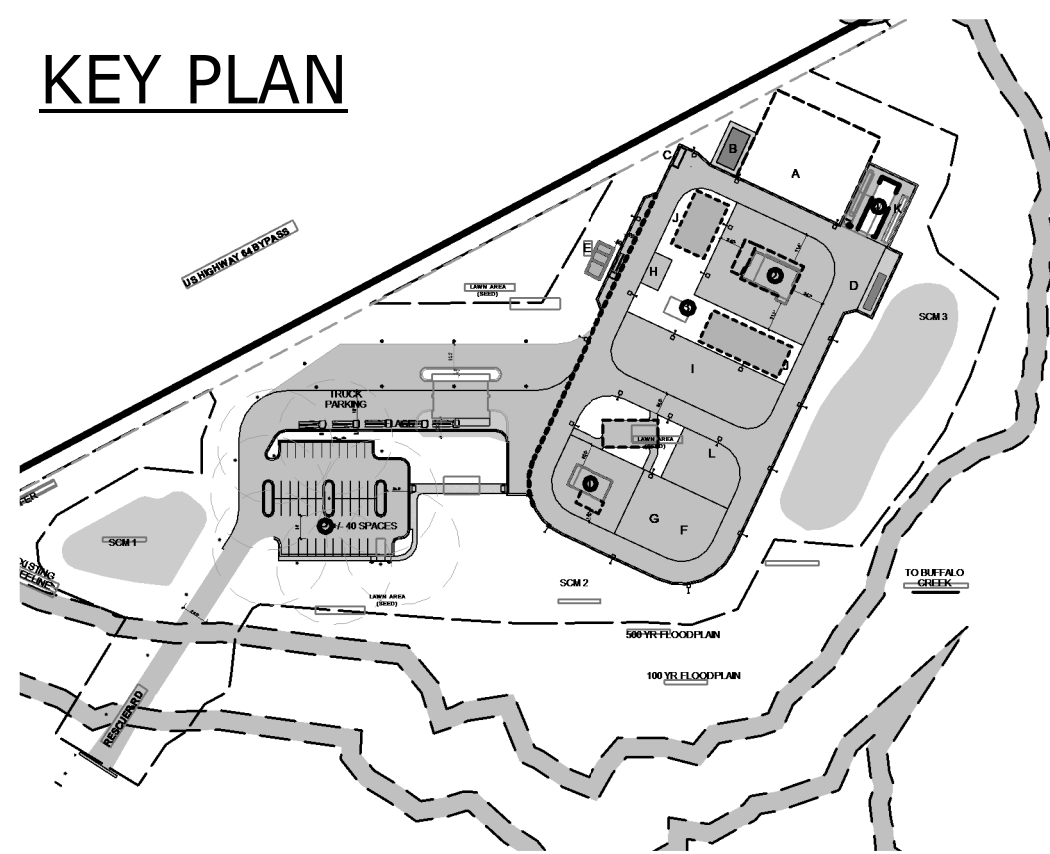
E113

KEY NOTES TO E113

- 1 SHAFT LIGHT FIXTURES SHALL BE CONTROLLED TOGETHER BY THREE WAY SWITCHES ON EITHER LEVEL.
- 2 STAIR LIGHTS SHALL BE CONTROLLED BY SWITCH SHOWN ON FIRST FLOOR PLAN.



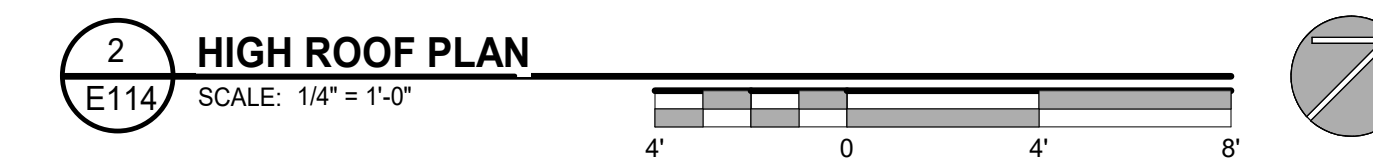
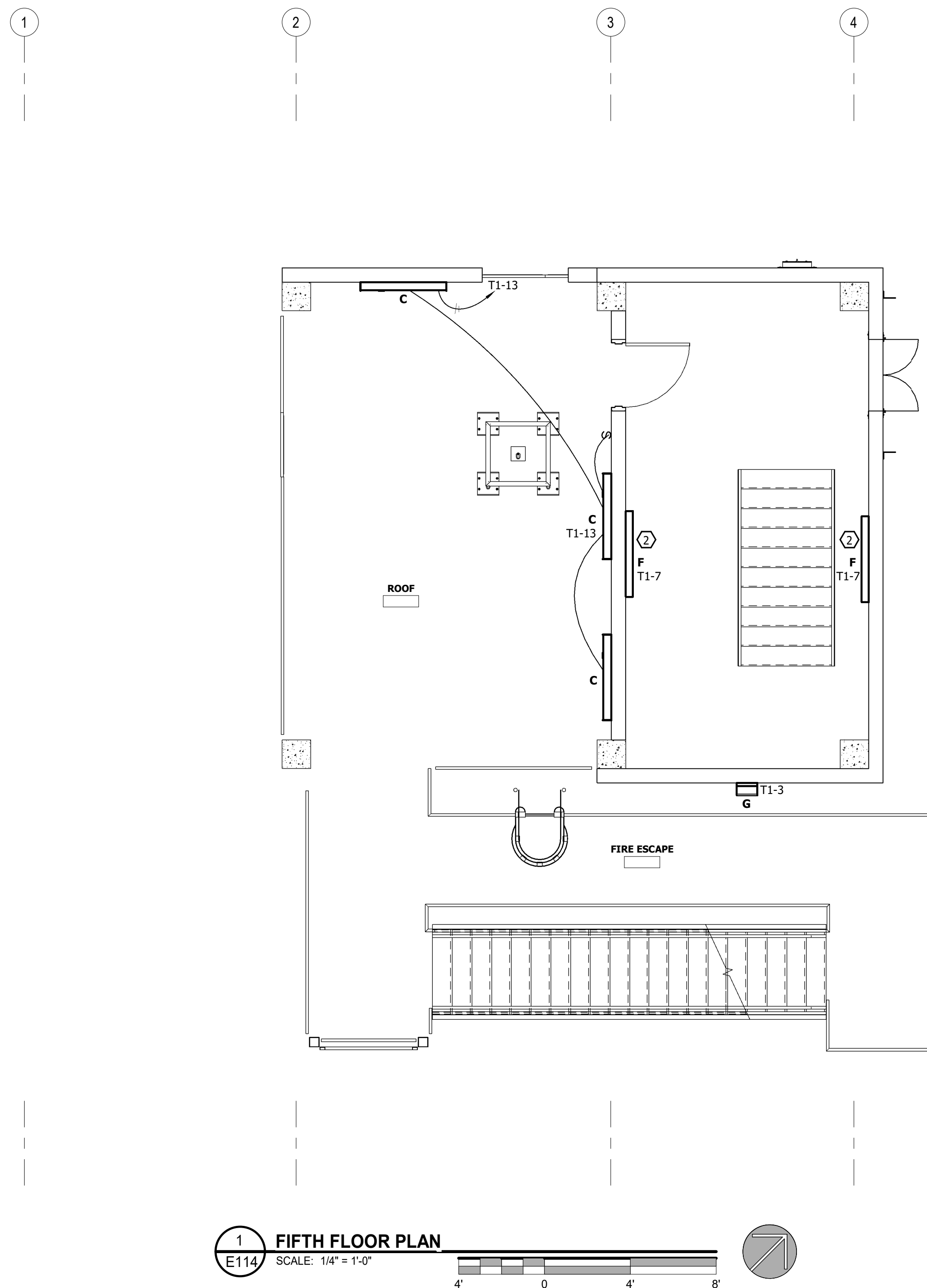
KEY PLAN



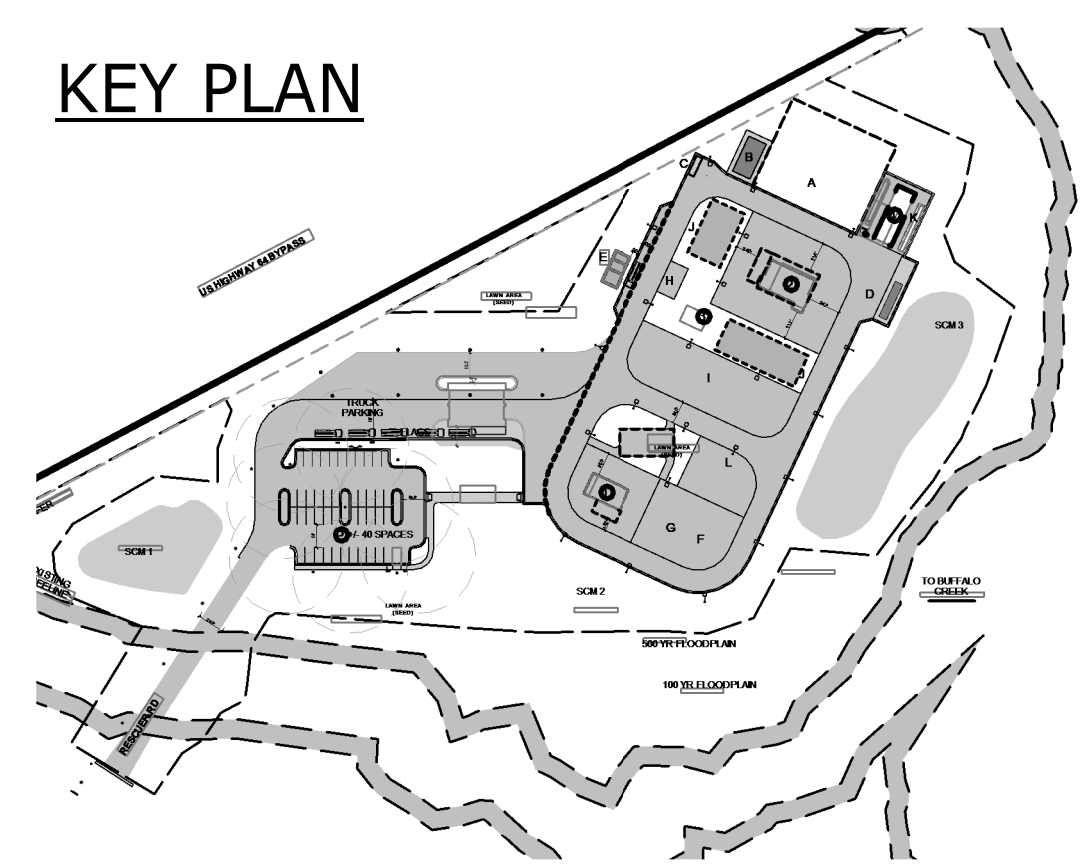


KEY NOTES TO E114

- 1 MOUNT LIGHT FIXTURES HORIZONTALLY TO TOP OF GUARD RAIL. PROVIDE MOUNTING HARDWARE AS REQUIRED. LIGHT FIXTURES SHALL BE CONTROLLED VIA PHOTOCELL ON FIRST FLOOR AND SWITCH IN ELECTRICAL ROOM TYPICAL FOR ALL.
- 2 STAIR LIGHTS SHALL BE CONTROLLED BY SWITCH SHOWN ON FIRST FLOOR PLAN.



KEY PLAN



03/14/2025

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E114



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NCCCS NO. 2303

GENERAL NOTES:

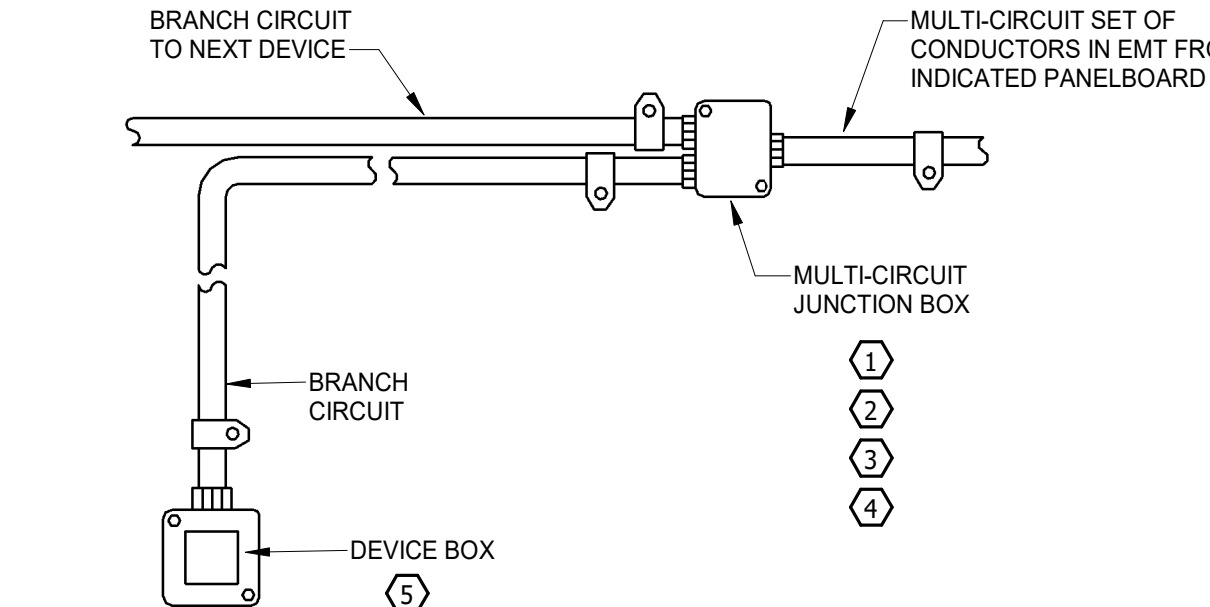
1. INSTALL NEW LABELS ON ALL PROJECT EQUIPMENT (PANELBOARDS, ENCLOSED BREAKERS, DISCONNECTS, TRANSFORMERS).
2. CONSTRUCT LABELS FROM 2 COLOR PLASTIC LAMINATE. DIMENSIONS ARE 5" WIDE X 1 1/2" HIGH. TEXT HEIGHT IS 3/16". EXCEPT AS NOTED OTHERWISE.
3. LABEL COLORS ARE TO BE SELECTED FROM THE FOLLOWING CHOICES:
NORMAL SYSTEM 208Y/120V OR 240/120V: BLUE BACKGROUND/WHITE LETTER
NORMAL SYSTEM 480Y/277V: BLACK BACKGROUND/WHITE LETTERS
4. SECURE TO TOP CENTER OF EQUIPMENT COVER WITH #4-40 STAINLESS STEEL SCREWS WITH MATCHING NUTS AND LOCKWASHERS. USE OF ADHESIVES TO SECURE LABEL TO EQUIPMENT IS NOT ACCEPTABLE.

KEYED NOTES:

1. INSERT EQUIPMENT DESIGNATION WHERE X'S ARE INDICATED.
2. INSERT VOLTAGE WHERE X'S ARE INDICATED. POSSIBLE VOLTAGES ARE:
"480Y/277"
"208Y/120"
"240/120"
"480: 208Y/120"
"480: 240/120"
3. INSERT SUPPLY SOURCE DESIGNATION HERE.
4. INSERT SUPPLY SYSTEM WHERE X'S ARE INDICATED. POSSIBLE CHOICES ARE:
"NORMAL POWER"
5. ADD THIS LABEL AT SERVICE EQUIPMENT, PANELBOARDS, MECHANICAL SYSTEM MOTOR CONTROLLERS (VARIABLE DRIVE UNITS).
6. INSERT VALUE INDICATED ON PROJECT ELECTRICAL DRAWINGS.
7. INSERT DATE OF PROJECT DRAWING BID SET.

8 EQUIPMENT LABEL

SCALE: NTS

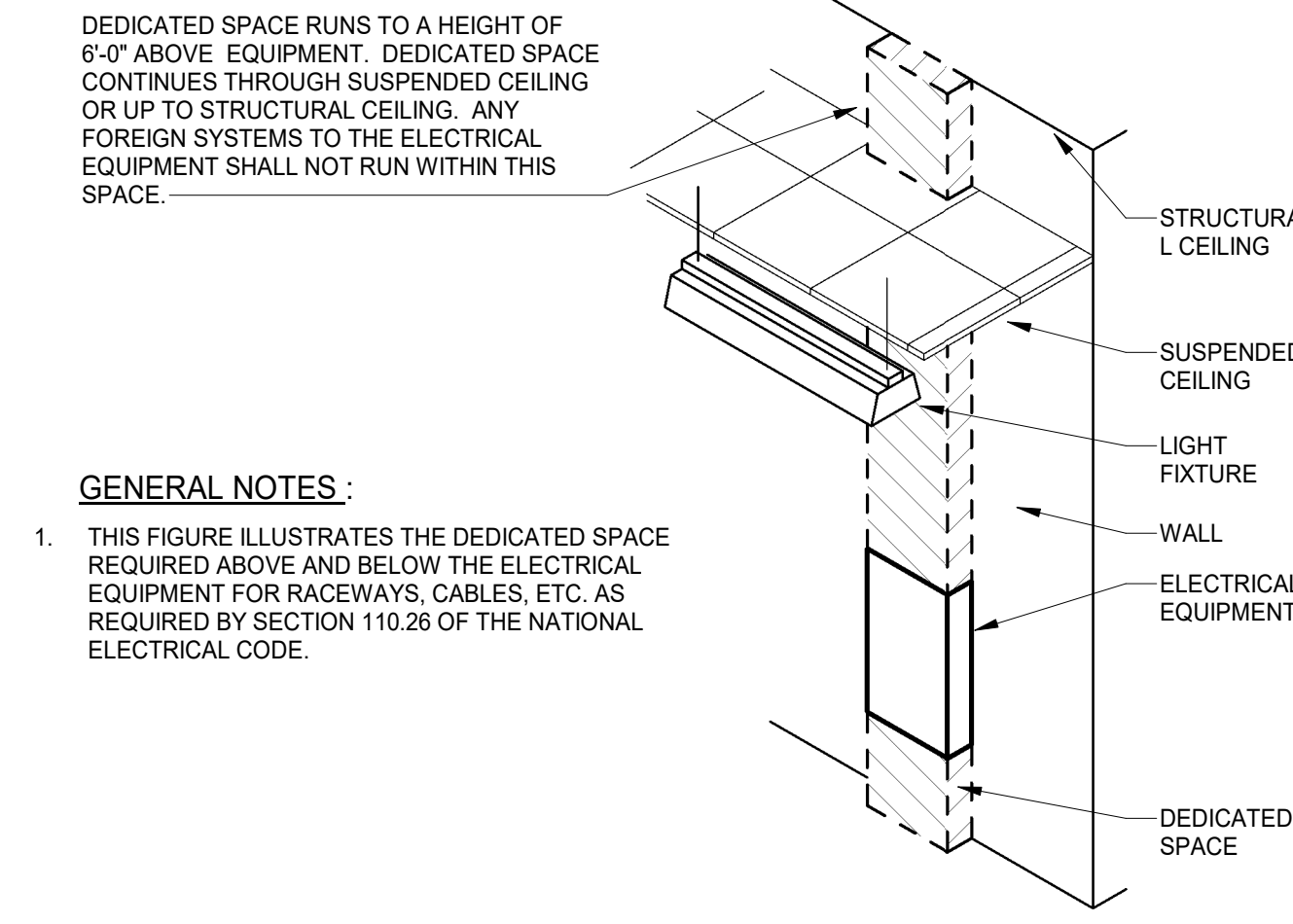


KEYED NOTES:

1. PROVIDE DEDICATED NEUTRAL CONDUCTOR WITH EACH PHASE CONDUCTOR.
2. LABEL EACH PHASE CONDUCTOR AND MATING NEUTRAL CONDUCTOR AT ALL BOX LOCATIONS FOR IDENTIFICATION.
3. BOND GROUND CONDUCTOR TO ALL BOXES.
4. MULTI-CIRCUIT JUNCTION BOXES SHALL NOT BE USED FOR DEVICE LOCATIONS.
5. DEVICE BOX SHALL NOT BE USED FOR MULTI-CIRCUIT DISTRIBUTION.

9 MULTI-CIRCUIT HOMERUN WIRING DETAIL

SCALE: NTS



GENERAL NOTES:

1. THIS FIGURE ILLUSTRATES THE DEDICATED SPACE REQUIRED ABOVE AND BELOW THE ELECTRICAL EQUIPMENT FOR RACEWAYS, CABLES, ETC. AS REQUIRED BY SECTION 110.26 OF THE NATIONAL ELECTRICAL CODE.

5 DEDICATED SPACE FOR ELECTRICAL EQUIPMENT

SCALE: NTS

NOMINAL VOLTAGE TO GROUND	CONDITION 1	CONDITION 2	CONDITION 3
0-150	3	3	3
151-600	3	3 1/2	4

WHERE THE CONDITIONS ARE AS FOLLOWS:

1. EXPOSED LIVE PARTS ON ONE SIDE AND NO LIVE OR UNGROUNDED PARTS ON THE OTHER SIDE OF THE WORKING SPACE, OR EXPOSED LIVE PARTS ON BOTH SIDES EFFECTIVELY GUARDED BY SUITABLE WOOD OR OTHER INSULATING MATERIALS. INSULATED WIRE OR INSULATED BUSBARS OPERATING AT NOT OVER 300V SHALL NOT BE CONSIDERED LIVE PARTS.
2. EXPOSED LIVE PARTS ON ONE SIDE AND GROUNDED PARTS ON THE OTHER SIDE.
3. EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORK SPACE (NOT GUARDED AS PROVIDED IN CONDITION 1) WITH THE OPERATOR BETWEEN.

GENERAL NOTES:

1. THIS FIGURE ILLUSTRATES THE WORKING SPACE IN FRONT OF ELECTRICAL EQUIPMENT AS REQUIRED BY SECTION 110.26 OF THE NATIONAL ELECTRICAL CODE.

6 WORKING CLEARANCES FOR ELECTRICAL EQUIPMENT

SCALE: NTS

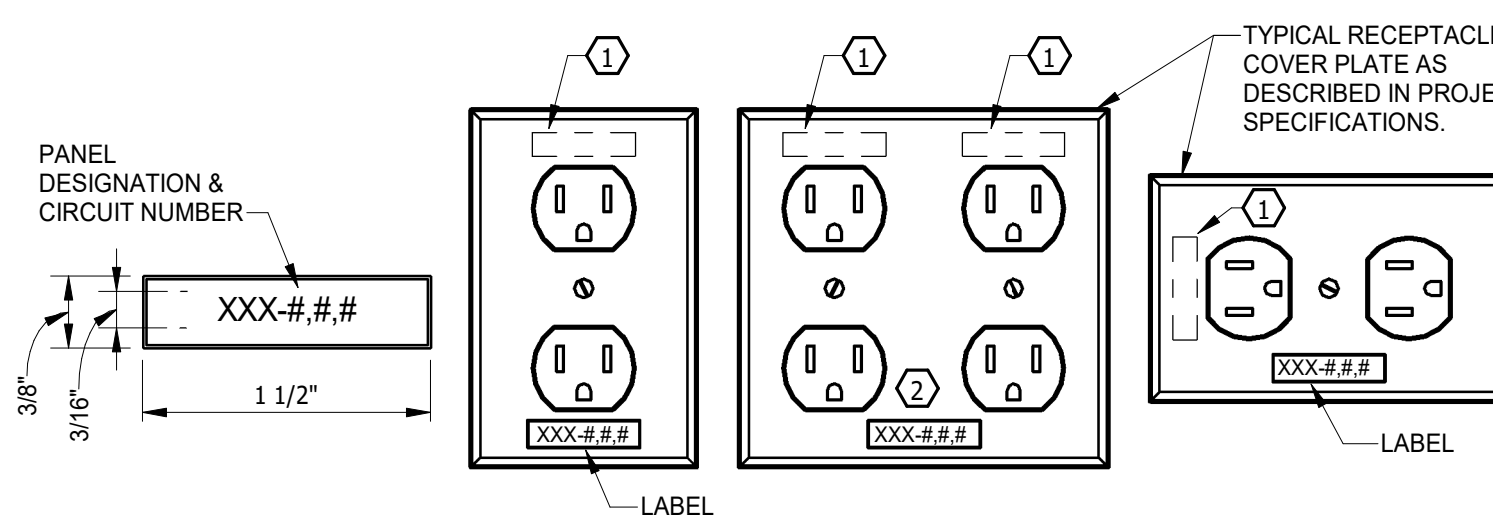


FIG. 1 - LABEL DIMENSIONS

FIG. 2 - LABEL LOCATION ON DEVICE PLATE

KEYED NOTES:

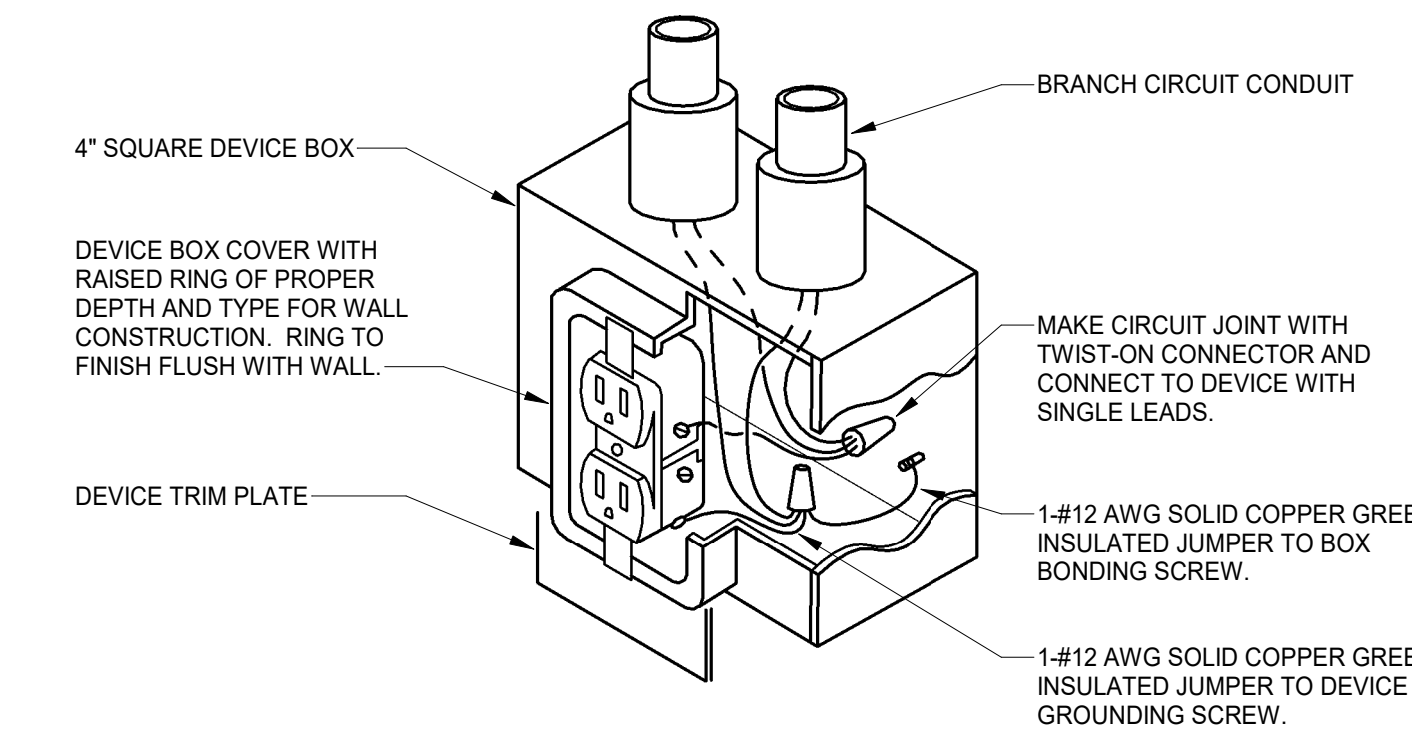
1. WRITE PANEL DESIGNATION NUMBER ON DEVICE YOKE WITH A FINE TIP, PERMANENT MARKER AS AN AID TO PROPER FACEPLATE LOCATION. ALL MARKING ON DEVICES MUST BE COVERED BY FACEPLATE.
2. FOR DUPLEX RECEPTACLES CENTER LABEL IF BOTH DEVICES ARE SUPPLIED BY THE SAME CIRCUIT. IF DEVICES ARE SUPPLIED BY DIFFERENT CIRCUITS PROVIDE A LABEL BELOW EACH RECEPTACLE.

GENERAL NOTES:

1. LABELS ARE TO BE MACHINE PRODUCED USING A THERMAL TRANSFER PROCESS WITH DIMENSIONS AS SHOWN ABOVE. LABELS ARE TO BE SUITABLE FOR EITHER INDOOR OR OUTDOOR USE.
2. LABEL COLOR TO BE CLEAR WITH BLACK LETTERING.
3. LABELS ARE TO BE ATTACHED AS INDICATED ABOVE TO ALL PROJECT RECEPTACLE COVER PLATES.

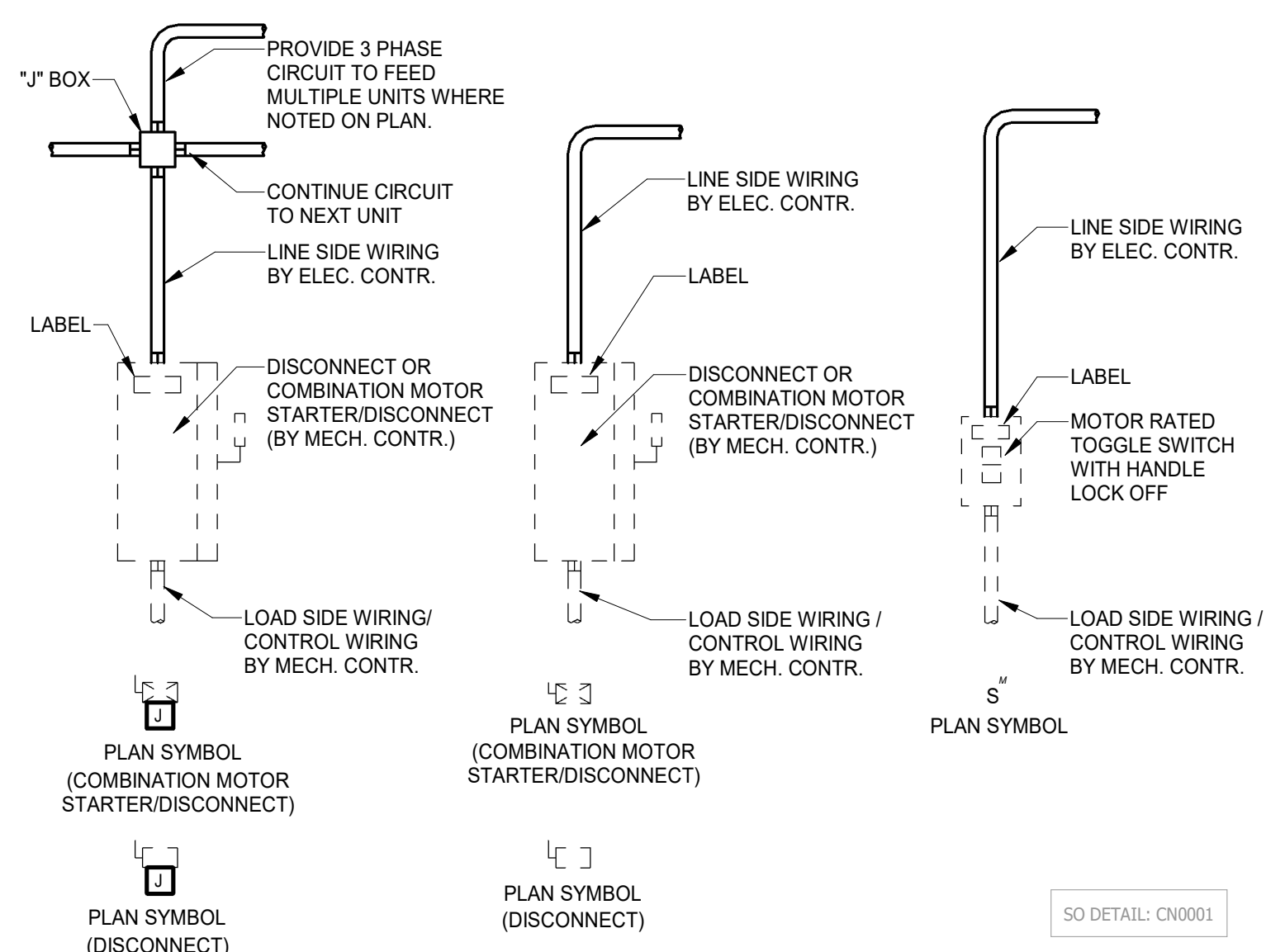
7 DEVICE LABELS

SCALE: NTS



4 RECEPTACLE GROUNDING DETAIL

SCALE: NTS

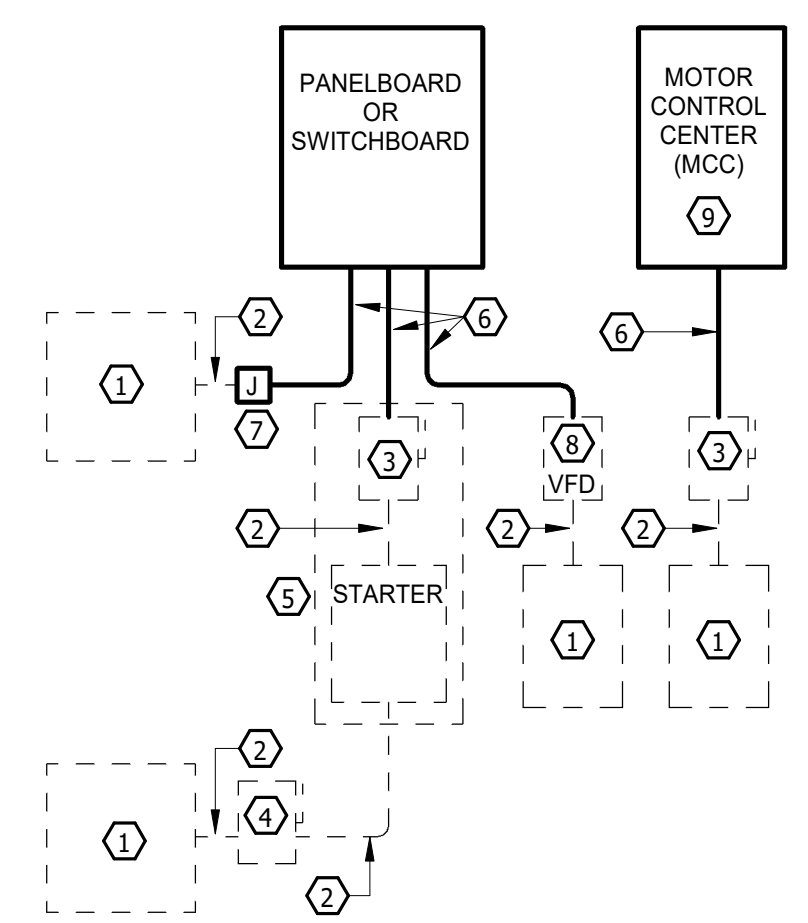


1 MECHANICAL UNIT WIRING DETAILS

SCALE: NTS

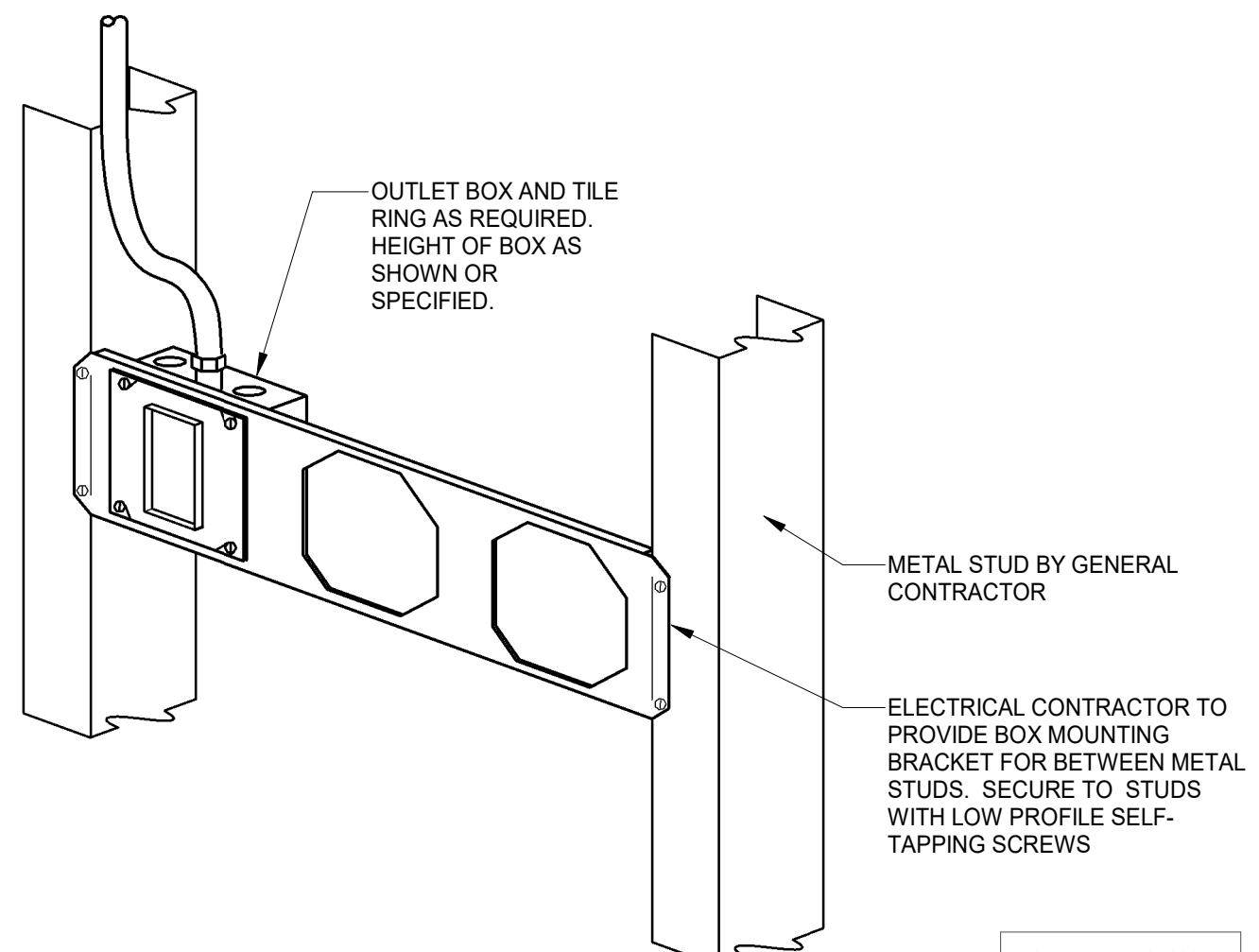
KEYED NOTES:

1. EQUIPMENT PROVIDED AND INSTALLED BY OTHER CONTRACTOR. CONTRACTOR SHALL MAKE ALL FINAL CONNECTIONS, START UP AND TEST EQUIPMENT.
2. CONDUIT & WIRING BY OTHER CONTRACTOR PROVIDING EQUIPMENT.
3. DISCONNECT PROVIDED AND INSTALLED BY CONTRACTOR PROVIDING EQUIPMENT.
4. IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY CONTRACTOR PROVIDING EQUIPMENT.
5. A COMBINATION STARTER MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER. A COMBINATION STARTER SHALL BE PROVIDED AND INSTALLED BY THE OTHER CONTRACTOR PROVIDING THE EQUIPMENT.
6. FEEDER AND CONDUIT BY ELECTRICAL CONTRACTOR. SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES TO OTHER EQUIPMENT. TERMINATE FEEDER AT LINE SIDE OF DISCONNECTING MEANS.
7. JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT IF NO STARTER IS REQUIRED. INSTALL JUNCTION BOX ADJACENT TO THE EQUIPMENT AND PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. MOTOR RATED DISCONNECT SHALL BE PROVIDED BY CONTRACTOR PROVIDING EQUIPMENT WHERE REQUIRED BY CODE.
8. VARIABLE FREQUENCY DRIVE (VFD) PROVIDED AND INSTALLED BY OTHER CONTRACTOR PROVIDING EQUIPMENT. VFD IS SUPPLIED WITH INTEGRAL DISCONNECTING MEANS.
9. FOR PROJECTS UTILIZING A MOTOR CONTROL CENTER (MCC), THE STARTER, CIRCUIT BREAKER OR VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.



2 MECHANICAL UNIT WIRING DETAILS

SCALE: NTS



3 OUTLET BOX SUPPORT

SCALE: NTS

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E301

PANEL ID: EV1		VOLTAGE: 480Y/277		SERVICE EQUIP: Yes		MOUNTING: RACK MOUNTED								
SOURCE: UTILITY		AMPS: 600		PANEL AIC: 10,000		TYPE: BOLT ON - NEMA 3R								
LOCATION: SITE		MAIN: MCB		CALC SCC: 5,379		APPROX. DIM: 20"W X 5.75"D X 50"H								
LOAD	NO O T E	COND	Phase, Neu, Grd Size	PO L E	BKR CKT	A	B	C	CKT BKR	Phase, Neu, Grd Size	PO L E	COND	NO O T E	LOAD
EV APPARATUS CHARGER		3	3-#250, 1-#250, 1-#4	3	250	1 55400 --	55400 --		2 -- 1	--	--	--	SPACE	
					5			55400 --	4 -- 1	--	--	--	SPACE	
					7	55400 --			6 -- 1	--	--	--	SPACE	
EV APPARATUS CHARGER		3	3-#250, 1-#250, 1-#4	3	250	9	55400 --	55400 --	8 -- 1	--	--	--	SPACE	
					11			55400 --	10 -- 1	--	--	--	SPACE	
					13	4220 --			12 -- 1	--	--	--	SPACE	
					15				14 -- 1	--	--	--	SPACE	
EV2		3/4	3-#10, 1-#10, 1-#10	3	30	15	4220 --	4220 --	16 -- 1	--	--	--	SPACE	
					17			4220 --	18 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	19	--	--	--	20 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	21	--	--	--	22 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	23	--	--	--	24 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	25	--	--	--	26 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	27	--	--	--	28 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	29	--	--	--	30 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	31	--	--	--	32 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	33	--	--	--	34 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	35	--	--	--	36 -- 1	--	--	--	SPACE	
SPACE	--	--	--	1	37	--	0	--	38	--	--	--	SPACE	
SPACE	--	--	--	1	39	--	--	0	39	--	--	--	SPACE	
SPACE	--	--	--	1	41	--	--	--	40	--	--	--	SPACE	
						115020 VA 415 A		115020 VA 415 A						
								115020 VA 415 A						
Load Classification		Connected Load		Demand Factor		Estimated Demand		Panel Totals						
Power		345060 VA		100.00%		345060 VA		CONNECTED LOAD 345060 VA						
								DEMAND LOAD 345060 VA						
								AVG. CONNECTED CURRENT 415 A						
								AVG. DEMAND CURRENT 415 A						
NOTES:														

PANEL ID: EV2		VOLTAGE: 120/240				SERVICE EQUIP: No				MOUNTING: RACK MOUNTED									
SOURCE: EV1		AMPS: 100				PANEL AIC: 18,000				TYPE: BOLT ON - MINI POWER ZONE									
LOCATION: SITE		MAIN: MCB				CALC SCC: 4,167				APPROX. DIM: 21"W X 13.5"D X 43"H									
LOAD	NO TE	COND	Phase, Neu, Grd Size	PO LE	BKR	CKT	A		B		CKT	BKR	PO LE	Phase, Neu, Grd Size	COND	NO TE	LOAD		
EV CHARGER		1	2-#8, 1-#8, 1-#10	2	40	1	3120	3120			2	4	40	2	2-#8, 1-#8, 1-#10	1	EV CHARGER		
REC		3/4	1-#12, 1-#12, 1-#12	1	20	5	180	0		3120	3120	6	20	1	--	--	SPARE		
SPD		3/4	3-#10, 1-#10, 1-#10	2	30	7			0	0	8	20	1		--	--	SPARE		
						9	0	0			10	20	1		--	--	SPARE		
6420 VA 54 A 6260 VA 52 A																			
Load Classification				Connected Load				Demand Factor				Estimated Demand				Panel Totals			
Power				12480 VA				100.00%				12480 VA				CONNECTED LOAD 12660 VA			
REC				180 VA				100.00%				180 VA				DEMAND LOAD 12660 VA			
																AVG. CONNECTED CURRENT 53 A			
																AVG. DEMAND CURRENT 53 A			
NOTES:																			

PANEL ID: P1		VOLTAGE: 480Y/277		SERVICE EQUIP: Yes		MOUNTING: SURFACE								
SOURCE: UTILITY		AMPS: 225		PANEL AIC: 22,000		TYPE: BOLT ON								
LOCATION: ELEC/ IT 105		MAIN: MCB		CALC SCC: 10,837		APPROX. DIM: 20"W X 5.75"D X 50"H								
LOAD	NO TE	COND	Phase, Neu, Grd Size	PO LE	BKR CKT	A	B	C	CKT BKR	Phase, Neu, Grd Size	PO LE	COND	NO TE	LOAD
LIGHTING EXTERIOR		3/4	1-#12, 1-#12, 1-#12	1	20	1 616 4067			2					
LIGHTING INTERIOR		3/4	1-#12, 1-#12, 1-#12	1	20	3	272 4067		4 25 3	3-#10, 1-#10, 1-#10	3/4			WH-1
SITE LIGHTING		1	1-#10, 1-#10, 1-#10	1	20	5		1144 4067	6 -- 1	--	--	--	--	SPACE
SITE LIGHTING		1	1-#10, 1-#10, 1-#10	1	20	7 1517 --			8 -- 1	--	--	--	--	SPACE
SITE LIGHTING		1	1-#12, 1-#12, 1-#12	1	20	9	180 --		10 -- 1	--	--	--	--	SPACE
SITE LIGHTING		1	1-#12, 1-#12, 1-#12	1	20	11		180 --	12 -- 1	--	--	--	--	SPACE
SITE LIGHTING		1	1-#12, 1-#12, 1-#12	1	20	13 120 --			14 -- 1	--	--	--	--	SPACE
SITE LIGHTING		1	1-#12, 1-#12, 1-#12	1	20	15	120 --		16 -- 1	--	--	--	--	SPACE
SITE LIGHTING		1	1-#12, 1-#12, 1-#12	1	20	17		180 --	18 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	19	0 --			20 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	21	0 --		0 --	22 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	23	0 --		0 --	24 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	25	0 --		0 --	26 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	27	0 --		0 --	28 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	29	0 --		0 --	30 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	31	0 --		0 --	32 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	33	0 --		0 --	34 -- 1	--	--	--	--	SPACE
SPARE	--	--	--	1	35	0 --		0 --	36 -- 1	--	--	--	--	SPACE
X-P2						37 8326 0		8162 0	38					
						39			40 30 3	3-#10, 1-#10, 1-#10	3/4	SPD		
						41			42					
Load Classification		14640 VA 54 A		12795 VA 46 A		14415 VA 53 A		Panel Totals						
Other		Connected Load		Demand Factor		Estimated Demand								
		0 VA		0.00%		0 VA								
Power		30264 VA		100.00%		30264 VA		CONNECTED LOAD 41841 VA						
REC		5680 VA		100.00%		5680 VA		DEMAND LOAD 43516 VA						
Lighting		5150 VA		125.00%		6445 VA		AVG. CONNECTED CURRENT 59 A						
Lighting - Exterior		780 VA		125.00%		975 VA		AVG. DEMAND CURRENT 52 A						
NOTES:														

PANEL ID: P2		VOLTAGE: 208Y/120		SERVICE EQUIP: No		MOUNTING: Surface													
SOURCE: X-P2		AMPS: 100		PANEL AIC: 10,000		TYPE: BOLT ON													
LOCATION: ELEC/ IT 105		MAIN: MCB		CALC SCC: 2,265		APPROX. DIM: 20"W X 5.75"D X 50"H													
LOAD	NO	TE	COND	Phase, Neu, Grd Size	PO	LE	BKR	CKT	A	B	C	CKT	BKR	LE	COND	NO	TE	LOAD	
REC 106	3/4		1-#12, 1-#12, 1-#12	1	20	1	360	1176				2	20	1	1-#12, 1-#12, 1-#12	3/4		EXH-1	
REC 106	--		1-#12, 1-#12, 1-#12	1	20	3			360	1500		4	25	2	2-#10, 1-#10, 1-#10	3/4		UH-1	
REC 103, 104, 105	3/4		1-#12, 1-#12, 1-#12	1	20	7	720	1500				8							
REC EXT	--		1-#12, 1-#12, 1-#12	1	20	9			540	1500		10		25	2	2-#10, 1-#10, 1-#10	3/4	UH-2	
REC 101, 102, 104	--		1-#12, 1-#12, 1-#12	1	20	11					360	1000	14		20	2	2-#12, 1-#12, 1-#12	3/4	UH-3
REC ELEC/ IT 105	3/4		1-#12, 1-#12, 1-#12	1	20	13	180	1000				14							
RESTROOM VALVES	3/4		1-#12, 1-#12, 1-#12	1	20	15			200	1650		16	25	2	2-#10, 1-#10, 1-#10	3/4		UH-4	
DSO-1	3/4		2-#10, 1-#10, 1-#10	2	30	17			1144	1650	18								
REC - FUTURE TV	3/4		1-#12, 1-#12, 1-#12	1	20	21			180	200		20	20	1	1-#12, 1-#12, 1-#12	3/4		BAS ELEC/ IT 105	
CEILING FAN	3/4		1-#12, 1-#12, 1-#12	1	20	23					500	540	24	20	1	1-#12, 1-#12, 1-#12	1		SITE REC
CEILING FAN	--		1-#12, 1-#12, 1-#12	1	20	25		500 540											
CEILING FAN	--		1-#12, 1-#12, 1-#12	1	20	27			500	360		28	20	1	1-#10, 1-#10, 1-#10	1		SITE REC	
ICE FREEZER	2	3/4	1-#12, 1-#12, 1-#12	1	20	29					1000	200	30	20	1	1-#12, 1-#12, 1-#12	1		SITE SECURITY CAMERA
TRAP PRIMER	3/4		1-#12, 1-#12, 1-#12	1	20	31	200	200					32	20	1	1-#12, 1-#12, 1-#12	1		SITE SECURITY CAMERA
AED CABINET	3/4		1-#12, 1-#12, 1-#12	1	20	33			200	200		34	20	1	1-#12, 1-#12, 1-#12	1		SITE SECURITY CAMERA	
SPARE	--	--	--	1	20	35					0	200	36	20	1	1-#12, 1-#12, 1-#12	1		SITE SECURITY CAMERA
SPARE	--	--	--	1	20	37		0	0	38			38	20	1	--	--	--	SPARE
SPARE	--	--	--	1	20	39			0	0			40	20	1	--	--	--	SPARE
SPARE	--	--	--	1	20	41					0	0	42	20	1	--	--	--	SPARE
SPARE	--	--	--	1	20	43		0					44	20	1	--	--	--	SPARE
SPARE	--	--	--	1	20	45			0	0			46	20	1	--	--	--	SPARE
SPARE	--	--	--	1	20	47							48	20	1	--	--	--	SPARE
T1	1	1-12	3-#1, 1-#1, 1-#8	3	100	51			48	612	0		50						
						53					772	0	52	30	3	3-#10, 1-#10, 1-#10	3/4		SPD
									8326 VA		8162 VA		8862 VA						
									70 A		68 A		71 A						
Load Classification									Connected Load		Demand Factor		Estimated Demand						Panel Totals
Power									18064 VA		100.00%		18064 VA						
REC									5680 VA		100.00%		5680 VA						CONNECTED LOAD: 26390 VA
Lighting									1680 VA		125.00%		2010 VA						DEMAND LOAD: 35752 VA
															</				



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NCCCS NO. 2303



03/14/2025

NO.	REVISION	DATE

JOB NUMBER
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PROJECT STATUS
ISSUE FOR CONSTRUCTION
SHEET
LIGHTING FIXTURE SCHEDULE

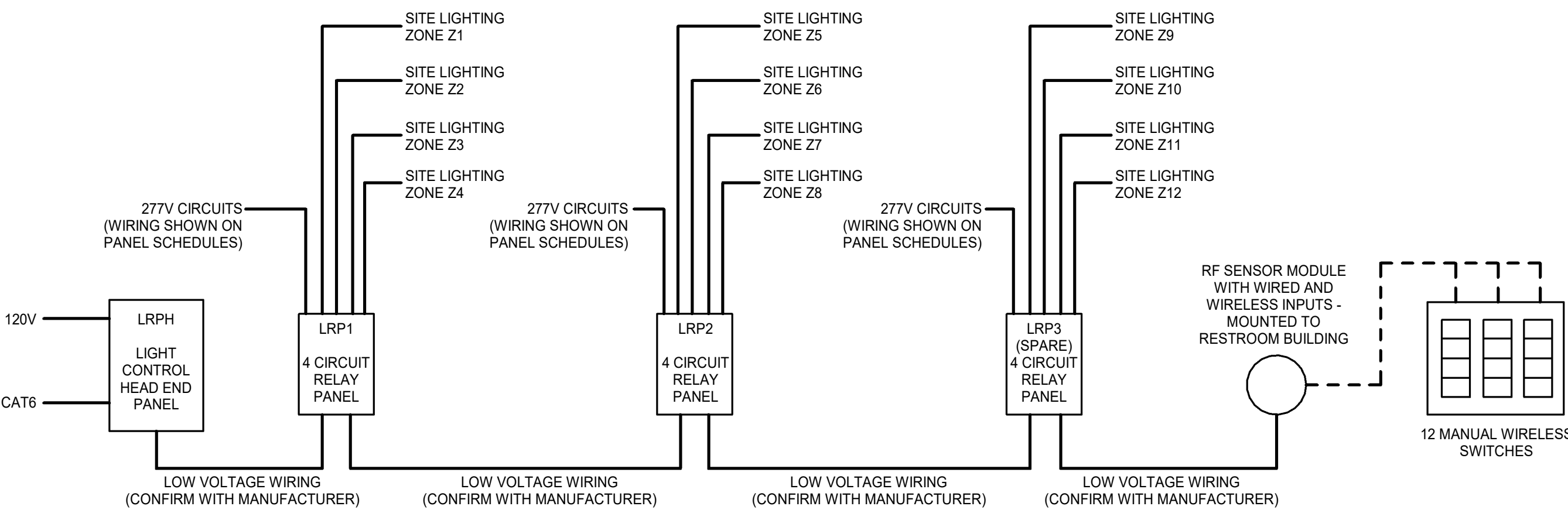
E501

LIGHTING FIXTURE SCHEDULE									
TYPE MARK	DESCRIPTION	MOUNTING	LUMENS	VOLTAGE	WATTAGE	CONTROL	FIXTURE MEETING SPECIFICATION	COMMENTS	IMAGE
A	LINEAR NARROW APERTURE PENDANT	PENDANT	500 LM/FT	120/277	9 VA/FOOT	0-10V	FINELITE HP4 CORONET L33 PMG ES4	COLOR AS SELECTED BY ARCHITECT	
A2	SURFACE MOUNTED LINEAR LED	SURFACE	500 LM/FT	120/277	9 VA/FOOT	0-10V	FINELITE HP4 CORONET L33 PMG ES4		
B	6" RECESSED DOWNLIGHT	RECESSED	2000	120/277	23 VA	0-10 V	HE WILLIAMS RDR ELITE HH6 RAYON RB06-FN	CLEAR DIFFUSE. PROVIDE WET LOCATION RATED FIXTURE	
C	4" LONG CORNER MOUNTED LED	SURFACE, CORNER MOUNT	8000	120/277	80 VA	0-10V	ADVANTAGE LIGHTING LCF-4-40-8L-SH16-TG-J1 LEVITON CRC-3519	PROVIDE IP65 RATED FIXTURE WITH STAINLESS STEEL HOUSING AND TWO TEMPERED GLASS LENSES	
D	LED LINEAR STRIP	PENDANT	5000	120/277	40 VA	0-10V	JADEMAR JSTRE ELITE OC4-LED LITHONIA CLX	COLOR AS SELECTED BY ARCHITECT	
E	WALL MOUNT EMERGENCY LIGHTING UNIT	WALL	1100	120/277	5 VA	N/A	MAXILUME ELM-LED-803 CARPENTER CEM MULE SO-40 COMPASS CU2		
F	WALL MOUNTED STAIR LIGHT	SURFACE, WALL	5000	120/277	40 VA	0-10V	JADEMAR JSTRE ELITE OC4-LED LITHONIA CLX	PROVIDE INTEGRAL OCCUPANCY SENSOR	
FL	EXTERIOR POLE MOUNT WIDE FLOOD LIGHT	POLE	8000	120/277	60 VA	ON/OFF	NLS NV-F2 JADEMAR JFL-PS RAYON T348LED	PROVIDE WIDE DISTRIBUTION. MOUNT TO POLE WITH SL1 FIXTURES	
G	EXTERIOR ARCHITECTURAL WALL SCONCE	SURFACE, WALL	3000	120/277	23 VA	PHOTOCELL	JADEMAR JWP NLS NV-W LITHONIA WST	COLOR AS SELECTED BY ARCHITECT.	
H	ROUGH SERVICE VAPOR PROOF LED	SURFACE, WALL	4000	120/277	33 VA	0-10V	JADEMAR JSD-VP ELITE OWS-LED LITHONIA VAP		
SL1	HIGH OUTPUT SOLAR ASSEMBLY SITE LIGHT POLE	POLE	11,135	SOLAR	N/A	INTEGRAL PHOTOCELL	PREFERRED BRAND ALTERNATE: SONARAY SR-3080-D	25' ALUMINUM POLE. 4000K COLOR FIXTURE SHALL BE UL LISTED AND LABELED. CONFIGURE FOR 4 HOURS @ 100%. SUBMIT CALCULATIONS AND PROVISIONS FOR MOUNTING FLOODLIGHTS, RECEPTACLES, CAMERAS, NETWORK SWITCHES, SOLAR PANELS, OR LIGHTING CONTROL DEVICES TO POLES.	
SL2	ARCHITECTURAL OUTDOOR AREA LIGHT	POLE	11,336	277	104 VA	ON/OFF	NLS NV-1 RAYON T348LED LITHONIA DSX1	25' ALUMINUM POLE. 4000K COLOR FIXTURE SHALL BE UL LISTED AND LABELED. SUBMIT CALCULATIONS AND PROVISIONS FOR MOUNTING FLOODLIGHTS, RECEPTACLES, CAMERAS, NETWORK SWITCHES, OR LIGHTING CONTROL DEVICES TO POLES.	

FIXTURE SCHEDULE NOTES:

- THIS FIXTURE SCHEDULE IDENTIFIES A FIXTURE THAT MEETS THE SPECIFIED PERFORMANCE REQUIREMENTS AND A LEVEL OF QUALITY REQUIRED FOR THE PROJECT. **MANUFACTURER'S NAMES AND FIXTURE SERIES/MODELS IN SCHEDULE ARE NOT A BRAND NAME SPECIFICATION.** EQUIVALENT FIXTURES BY MANUFACTURERS OTHER THAN THOSE LISTED MAY BE SUBMITTED FOR THIS PROJECT.
- PROVIDE LED DRIVERS SUITABLE FOR FULL RANGE DIMMING, INTEGRAL SURGE PROTECTION, CURRENT TOTAL HARMONIC DISTORTION (THD) OF <20% AND A POWER FACTOR >0.90. IN ADDITION, DRIVERS MUST BE RF SUPPRESSED FOR MINIMUM INJECTION OF FEEDBACK INTO SUPPLY LINES. MAXIMUM CURRENT THD AND MINIMUM POWER FACTOR MUST BE SUBMITTED AS A PART OF THE FIXTURE SUBMITTAL DATA.
- UNLESS OTHERWISE INDICATED, PROVIDE SINGLE DRIVER PER FIXTURE.
- PROVIDE MOUNTING FRAME AND RELATED ACCESSORIES FOR ALL FIXTURES AS REQUIRED TO MATCH CEILING CONSTRUCTION. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT CEILING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR MODIFICATION OF FIXTURE SCHEDULE MANUFACTURER'S PART NUMBERS FOR PURPOSES OF MATCHING CEILING CONSTRUCTION.
- PROVIDE DIMMING DRIVERS WHERE DIMMING CONTROLS ARE INDICATED ON THE PLANS.
- ALL FIXTURES TO HAVE A COLOR TEMPERATURE OF 4000K UNLESS NOTED OTHERWISE.
- UNLESS NOTED OTHERWISE, ALL FIXTURES SHALL INCLUDE INTEGRAL DRIVER.
- ALL FIXTURES SHALL BE UL OR THIRD PARTY LISTED AS COMPLETE ASSEMBLY.
- FOR LIGHT FIXTURES HAVING LINEAR VISUAL FEATURES (IE: CENTER BASKET, LOUVERS, ETC), COORDINATE AND ALIGN COMPONENTS IN A SIMILAR DIRECTION CONSISTENTLY ACROSS THE BUILDING SPACES.

SO DETAIL: IN0011 LED



PROVIDE A LIGHTING CONTROL RELAY SYSTEM, LUTRON ATHENA OR APPROVED EQUAL.

PROVIDE ALL WIRING AS REQUIRED BY MANUFACTURER. SEE RESTROOM BUILDING FLOOR PLAN FOR EQUIPMENT LOCATIONS. SEE SITE PLAN FOR LIGHTING FIXTURE LOCATIONS AND CONTROL ZONES. SEE PANEL SCHEDULES FOR CIRCUIT WIRING AND CONDUIT SIZES.

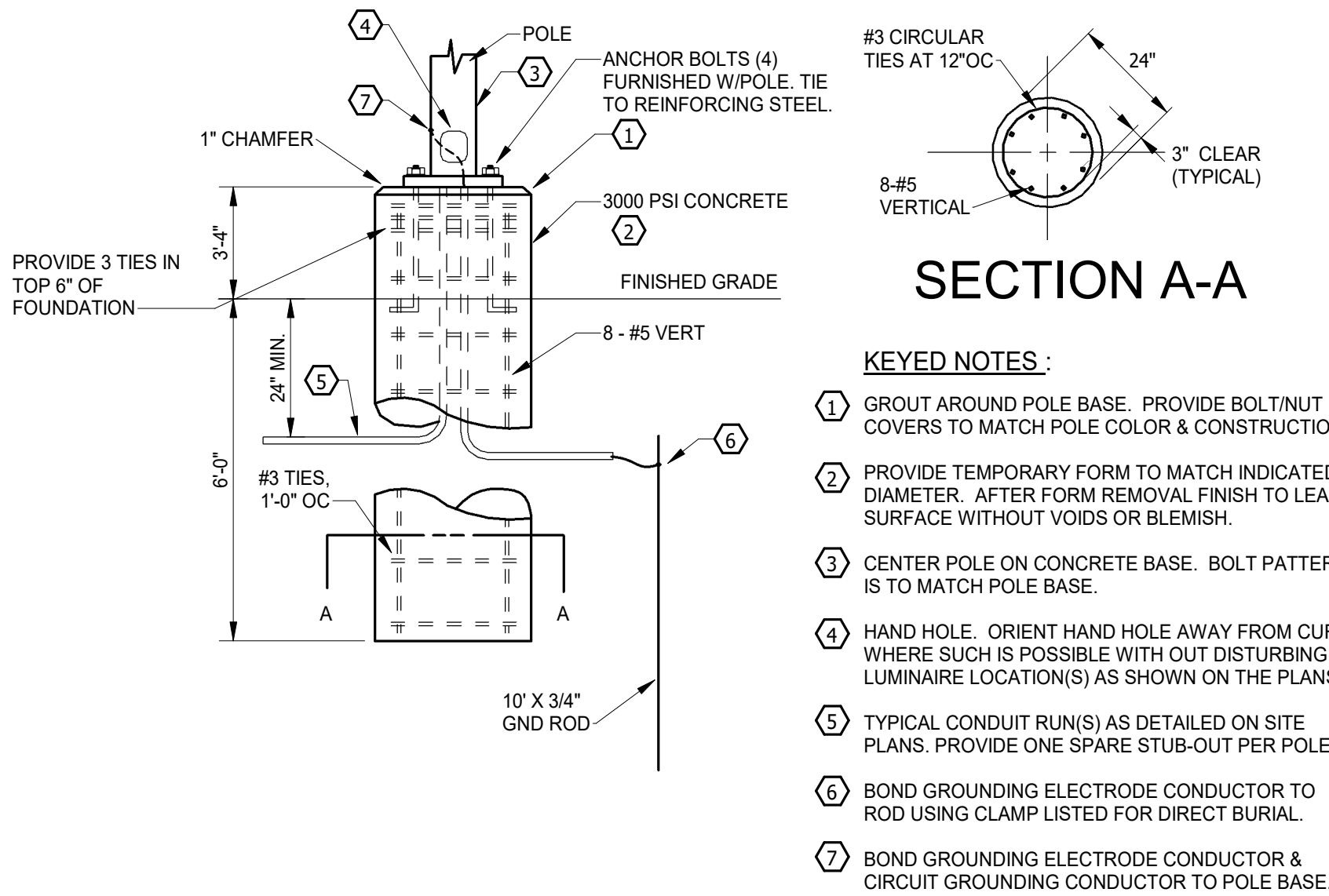
SYSTEM SHALL BE CAPABLE OF CONTROLLING UP TO 12 LIGHTING CIRCUITS. HEAD END PANEL SHALL BE PROGRAMMABLE FOR TIME OF DAY SETTINGS, OWNER SELECTED SCENE CONTROLS, AND AUTOMATIC SHUTOFF.

SYSTEM SHALL HAVE WIRELESS SWITCHES FOR MANUAL CONTROL OF EACH ZONE. SWITCHES WILL BE LOCATED IN RESTROOM BUILDING ELECTRICAL ROOM, TRAINING TOWER ELECTRICAL ROOM, AND LIGHT POLE ON SITE.

SYSTEM SHALL HAVE PHONE APP CAPABILITY FOR OWNER TO MANUALLY CONTROL THE LIGHTING REMOTELY.

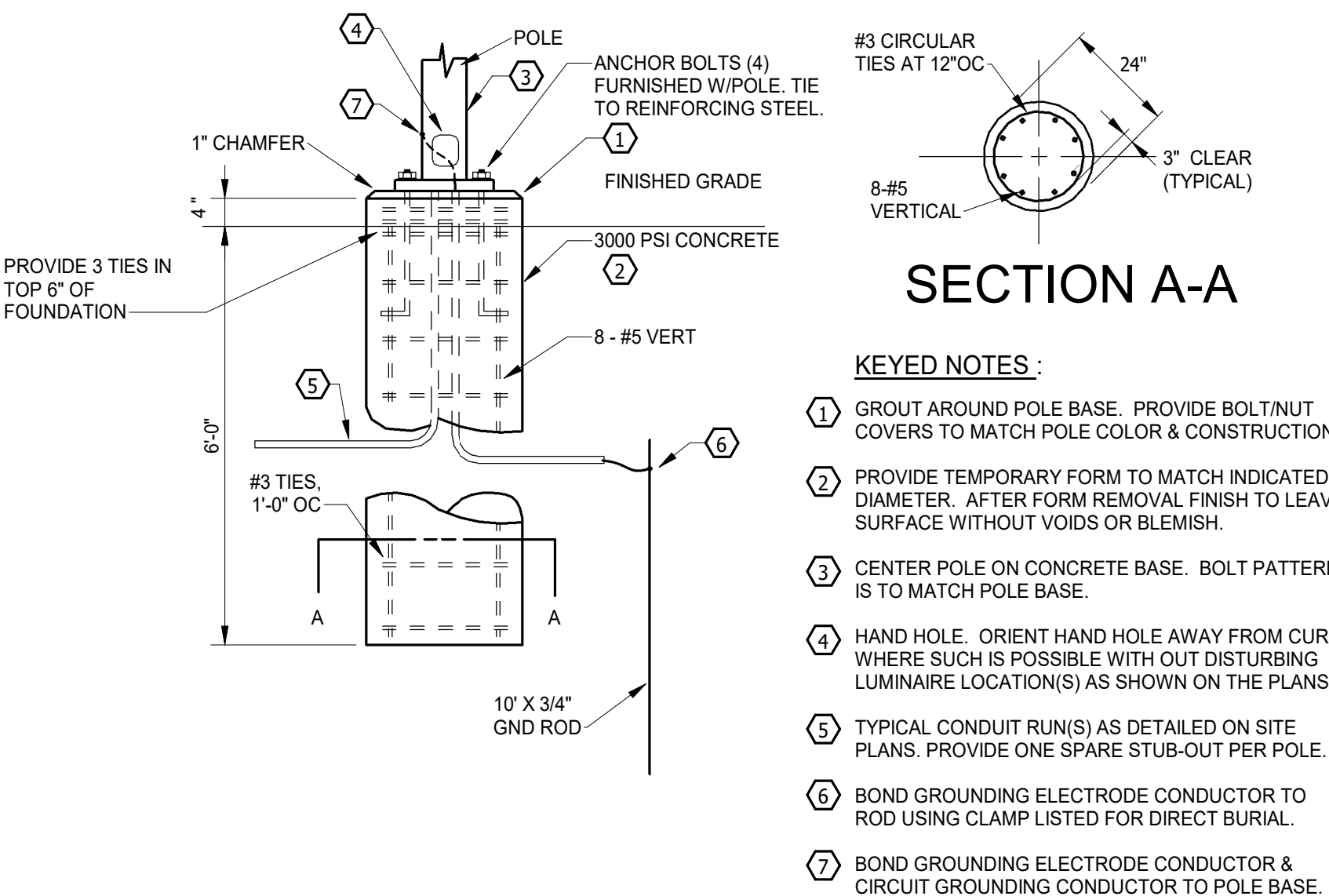
1 LIGHTING CONTROL RELAY PANEL

SCALE: NTS



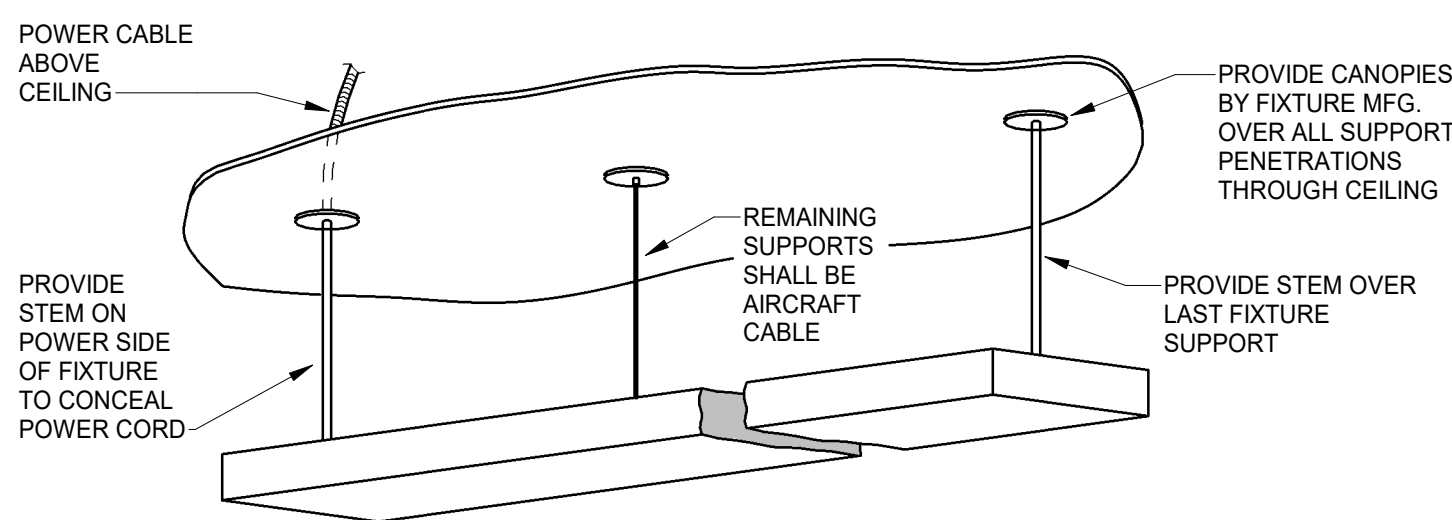
2 LIGHT POLE BASE DETAIL (ON PAVEMENT)

SCALE: NTS



3 LIGHT POLE BASE DETAIL (ON RAISED LANDSCAPE AREA)

SCALE: NTS



GENERAL NOTES:

- FIXTURE STYLE AND NUMBER OF REQUIRED SUPPORTS WILL VARY BY FIXTURE TYPE.
- REFER TO MANUFACTURER'S SUPPLIED MOUNTING INSTRUCTIONS FOR EXACT REQUIREMENTS.

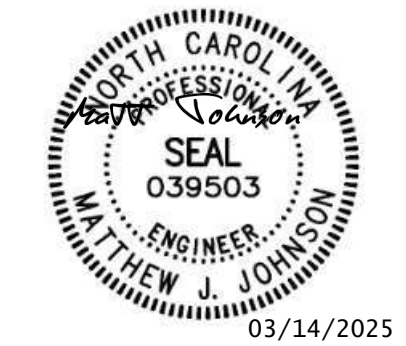
SO DETAIL: GE0022

4 TYPICAL LINEAR FIXTURE INSTALLATION

SCALE: NTS

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TELECOMMUNICATION
SYSTEMS

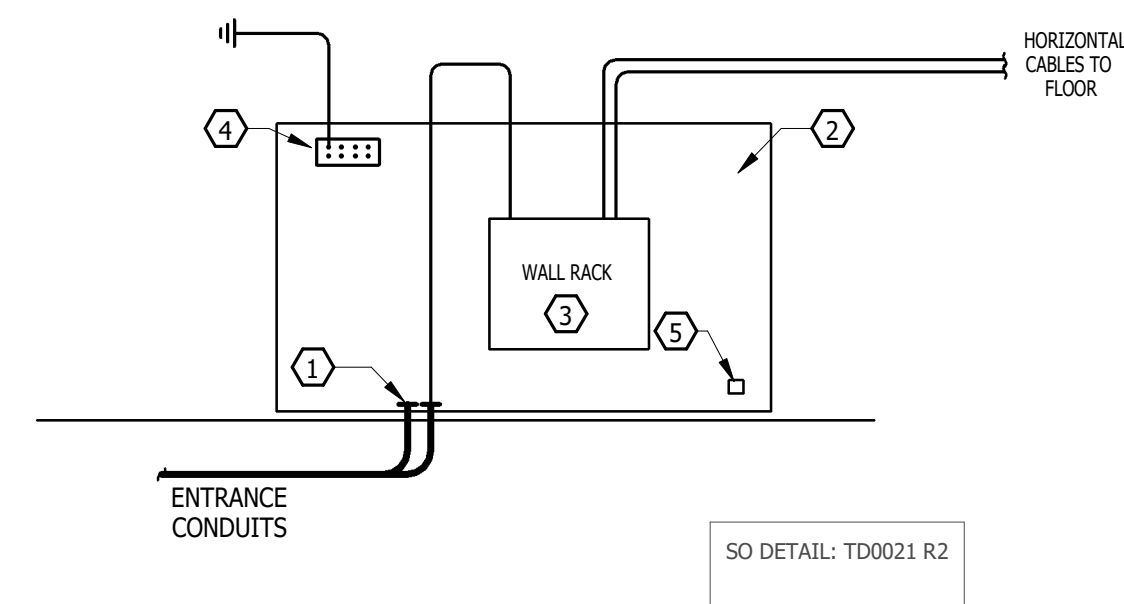
E511

GENERAL NOTES:

- ACTIVE ELECTRONICS AND PATCH CORDS ARE PROVIDED AND INSTALLED BY OWNER.
- FIRE SEAL ALL FLOOR PENETRATIONS.

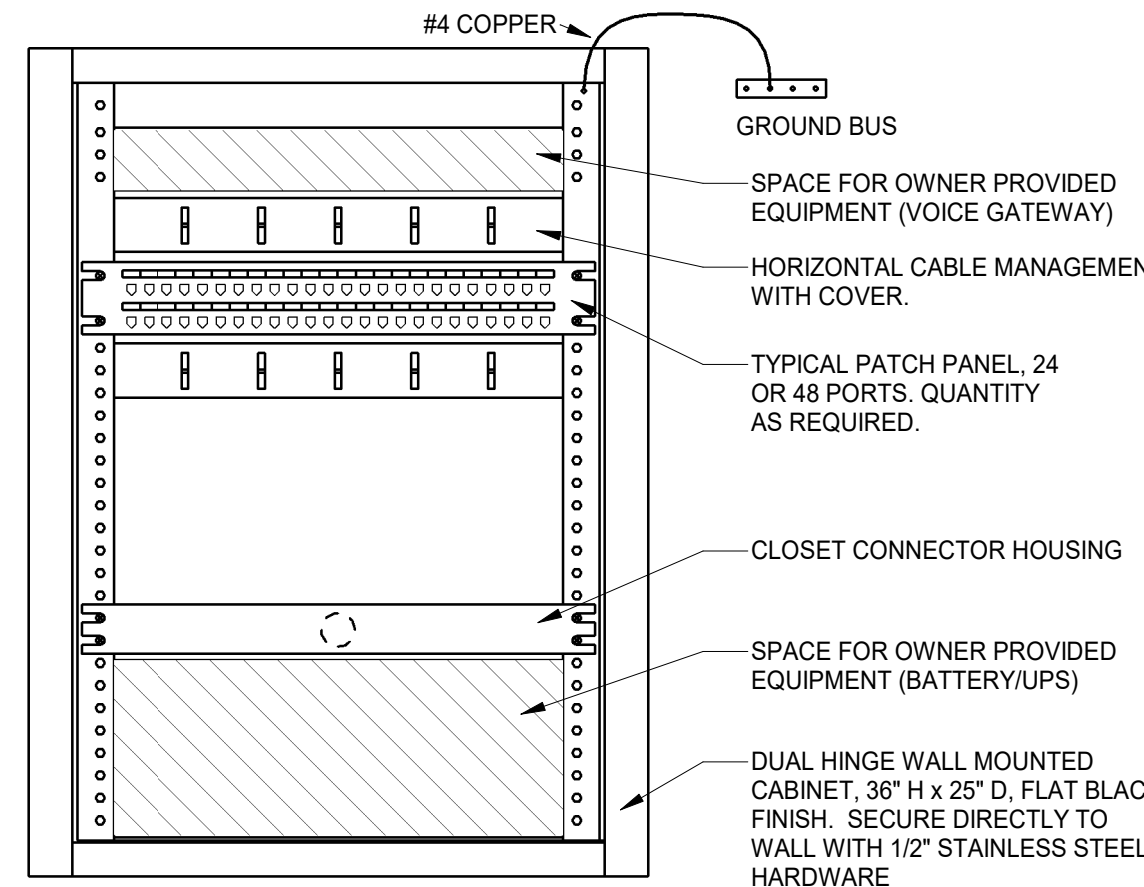
KEYED NOTES:

- TELECOM SERVICE ENTRANCE CONDUITS, STUB CONDUITS UP 4" AFF AND BUSH. PROVIDE CAP DURING CONSTRUCTION. SEAL ENDS OF ALL CONDUITS AFTER INSTALLATION OF CABLES.
- PROVIDE 3/4" THICK FIRE RETARDANT PLYWOOD BACKBOARD FROM FLOOR TO 8'-0" AFF ON WALL. PAINT PLYWOOD WHITE, LEAVING RATING LABELS VISIBLE FOR INSPECTIONS.
- WALL MOUNTED TELECOMMUNICATIONS EQUIPMENT RACK. FIBER HOUSING AND CABLE MANAGEMENT BY ELECTRICAL CONTRACTOR. ELECTRONIC COMPONENTS BY OWNER.
- WALL MOUNTED GROUND BUS PER PROJECT DETAIL WITH #3 GROUND TO EFFECTIVELY GROUNDED STRUCTURAL STEEL.
- PROVIDE QUADRUPEX RECEPTACLES AT 24" AFF. REFER TO FLOOR PLANS FOR CIRCUITRY.



SO DETAIL: TD0021 R2

1 TELECOMMUNICATIONS RISER
SCALE: NTS



GENERAL NOTES:

- INDICATED ARRANGEMENT IS TYPICAL FOR NEW WALL MOUNTED RACK.
- ALL CONNECTIONS BY CONTRACTOR TO 110 BLOCKS AT BACK OF PATCH PANELS. PATCH CORDS AND ACTIVE COMPONENTS PROVIDED AND INSTALLED BY THE OWNER.

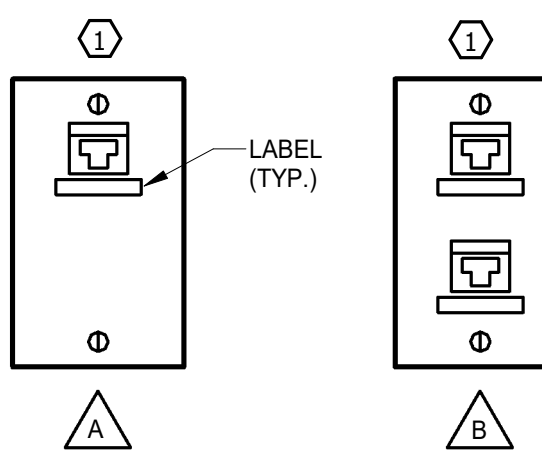
5 WALL MOUNTED DISTIBUTION RACK ELEVATION
SCALE: NTS

- KEYED NOTES:
- ROUTE SPECIFIED CABLE(S) TO DISTRIBUTION EQUIPMENT AND TERMINATE.
 - PROVIDE SPECIFIED CABLES TO LOCATION OF WIRELESS ACCESS POINT INDICATED ON PLANS. TERMINATE EACH CABLE AT ACCESS POINT END WITH RJ45 FITTING AND LEAVE 20" OF SERVICE LOOP-IN CABLE SUPPORTED ABOVE CEILING LEVEL.

GENERAL NOTES:

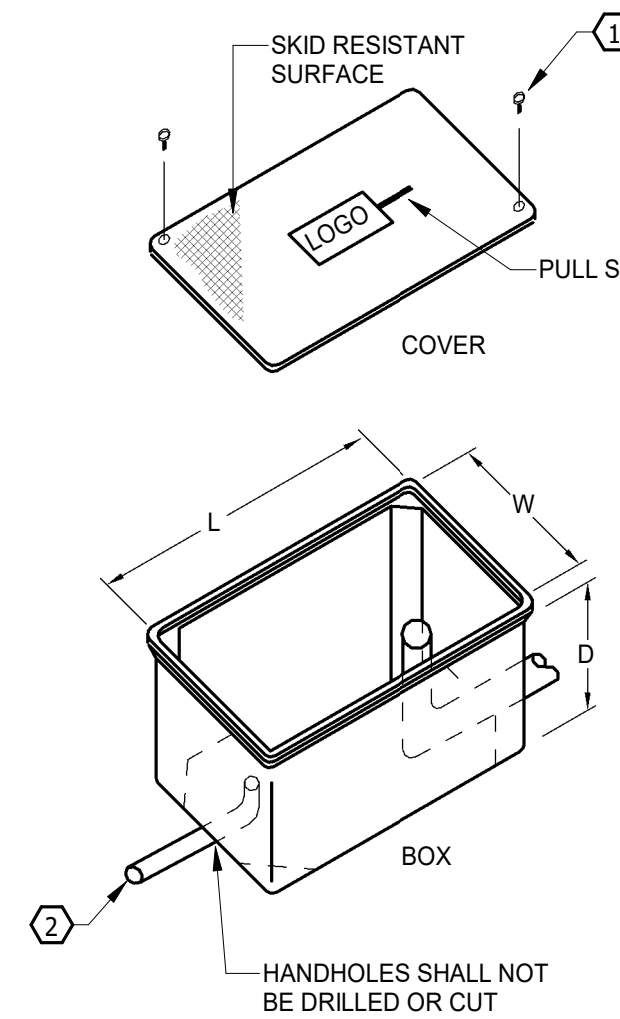
- ALL CAT. 6 CABLES TO BE TERMINATED ON DEDICATED CAT. 6A MODULAR PATCH PANEL.

TELECOMMUNICATIONS OUTLET SCHEDULE			
SYMBOL	PORTS	FUNCTION	CABLE
	1	DATA	(1) CAT. 6
	2	DATA/DATA	(2) CAT. 6
	2	DATA/DATA	(2) CAT. 6A



TELECOMMUNICATIONS OUTLET SCHEDULE			
SYMBOL	PORTS	FUNCTION	CABLE
	1	DATA	(1) CAT. 6
	2	DATA/DATA	(2) CAT. 6
	2	DATA/DATA	(2) CAT. 6A

2 TYPICAL TELECOM OUTLET SCHEDULE
SCALE: NTS



GENERAL NOTES:

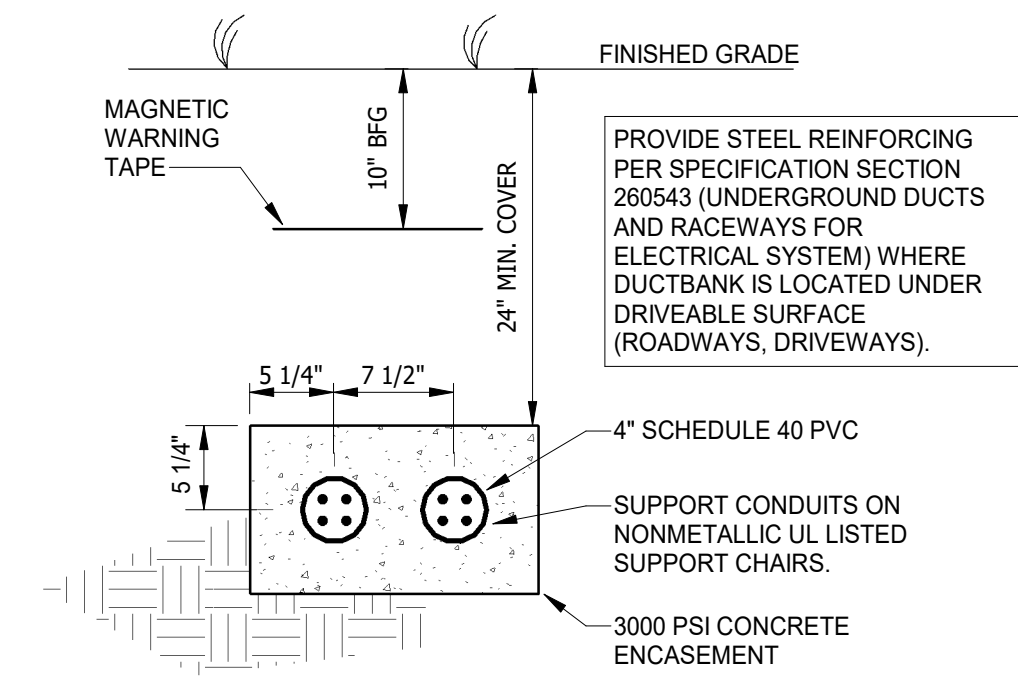
- HEAVY WEAWE FIBERGLASS; BOX HAS OPEN BASE. PROVIDE GRAVEL FILL 12" DEEP BELOW BOX.
- BOX DIMENSION IS 24" LONG x 24" WIDE x 11-11/16" DEEP.
- PROVIDE BOX COVER LOGO, AS APPLICABLE.
- BOX COVERS SHALL BE A HEAVY DUTY DESIGN, CAPABLE OF WITHSTANDING A LOAD OF 15,000 LBS. OVER A 10" SQUARE AREA.
- SEE UNDERGROUND ENCLOSURE INSTALLATION DETAIL.

KEYED NOTES:

- PROVIDE TAMPER RESISTANT STAINLESS STEEL COVER HOLD-DOWN BOLTS.
- TYPICAL CONDUIT ENTRY. CONDUIT SHALL ENTER BOX FROM THE BOTTOM AND EXTEND UP 6" INTO BOX.

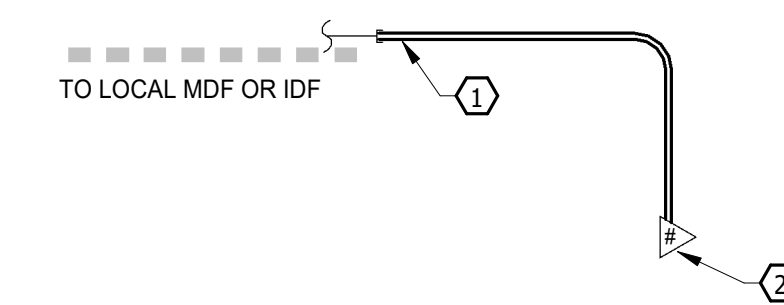
6 TYPICAL UNDERGROUND ENCLOSURE
SCALE: NTS

SO DETAIL: OC0012



SO DETAIL: OC0001 R1

3 TELECOM DUCT BANK SECTION
SCALE: NTS

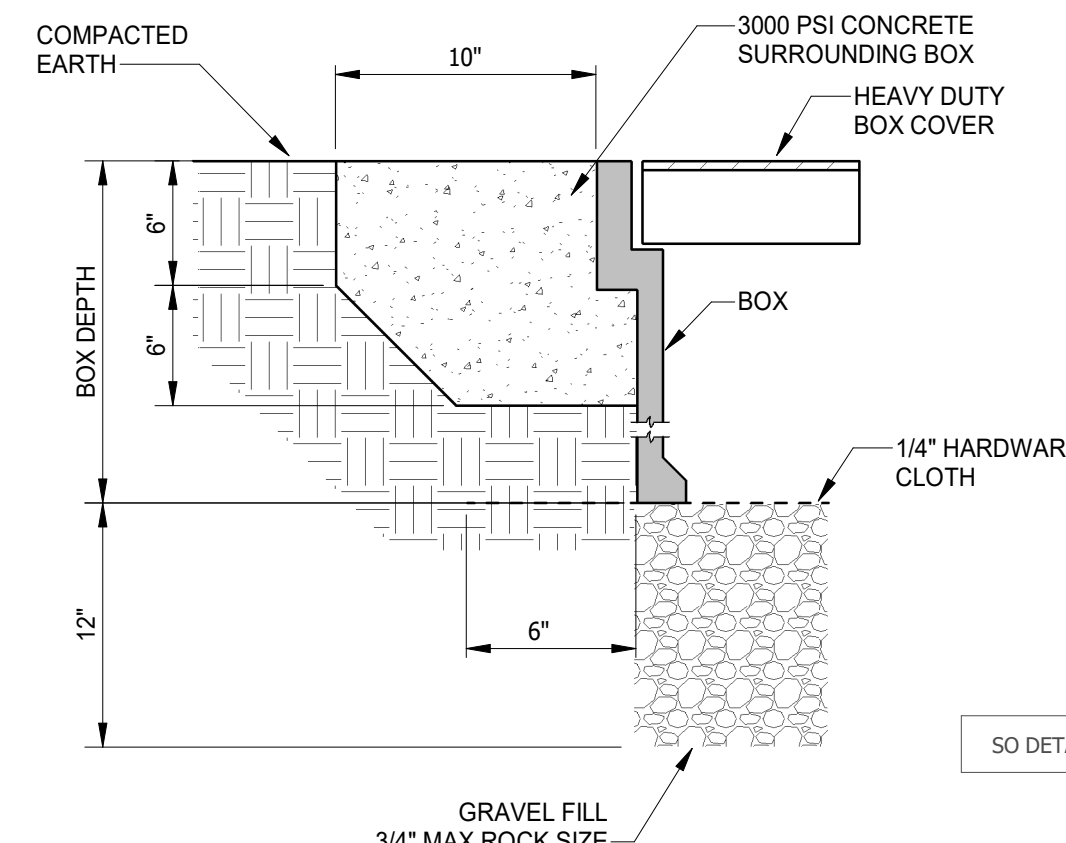


KEYED NOTES:

- 1" CONDUIT TO ELECTRICAL ROOM ABOVE WALL MOUNTED DISTRIBUTION RACK. BUSH ENDS OF PIPE.
- REFER TO TELECOMMUNICATIONS OUTLET SCHEDULE.

SW DETAIL: TD0003 R1

4 TYPICAL TELECOM OUTLET
SCALE: NTS



SO DETAIL: OC0011

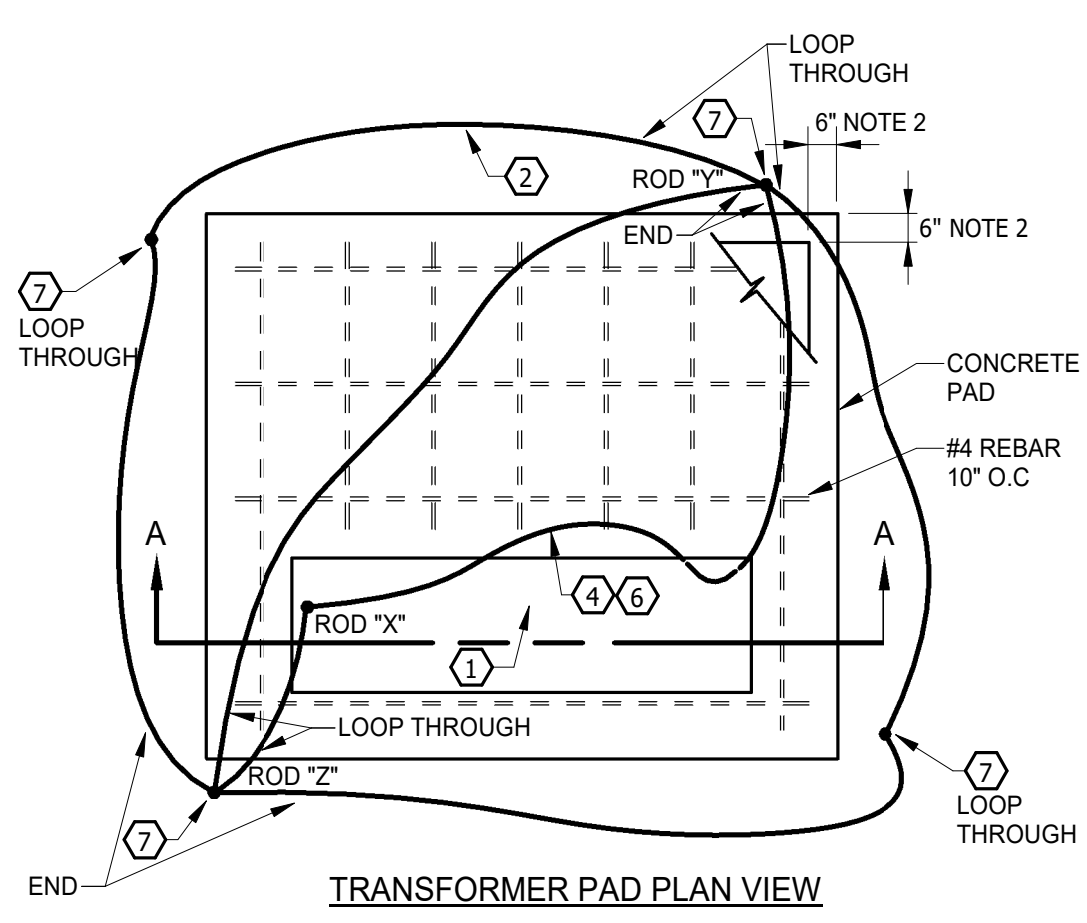
7 UNDERGROUND ENCLOSURE INSTALLATION
SCALE: NTS

GENERAL NOTES:

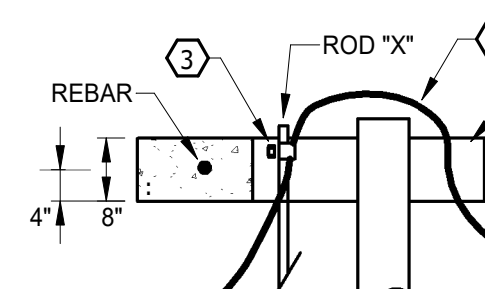
- CONSTRUCT MOUNTING PAD FROM 3,000 PSI CONCRETE, FORMED IN PLACE.
- PAD DIMENSIONS ARE 6" LARGER IN EACH DIRECTION THAN EQUIPMENT TO BE SUPPORTED. COORDINATE EQUIPMENT AND PAD DIMENSIONS WITH THE UTILITY CO. PADS ARE TO BE 8" THICK UNLESS OTHERWISE SPECIFIED.
- SECURE EQUIPMENT TO PAD USING DRILLED IN PLACE 5/8" DIA. ANCHOR BOLTS. PROVIDE MOUNTING AS RECOMMENDED BY THE UTILITY CO. A MINIMUM OF 4 ANCHORS ARE REQUIRED FOR PAD MOUNTED EQUIPMENT.
- GROUND ROD CLAMP DETAIL IS TYPICAL FOR ALL GROUND RODS.

KEY NOTES:

- TYPICAL OPENING IN PAD FOR CONDUIT ENTRY. COORDINATE EXACT SIZE AND LOCATION WITH EQUIPMENT TO BE SUPPORTED AND UNDERGROUND CONDUIT REQUIRED.
- #4 SOLID BARE COPPER CONTINUOUS GROUNDING LOOP.
- GROUND ROD CLAMP LISTED FOR DIRECT BURIAL.
- TYPICAL EXPOSED LOOP FOR CABLE & EQUIPMENT CONNECTIONS.
- CONDUIT ENTRY. TOP END OF CONDUIT SHOULD EXTEND 2" ABOVE EQUIPMENT PAD.
- #3/0 BARE COPPER GROUND CONDUCTOR. THIS CONDUCTOR IS CONTINUOUS FROM ROD "Y" THROUGH ROD "X", THEN ROD "Z" THEN BACK TO ROD "Y".
- TOP OF ROD IS TO BE A MINIMUM OF 24" BELOW FINISHED GRADE. LOOP TO BE BURIED WITH 30" COVER.



TRANSFORMER PAD PLAN VIEW



SECTION A-A

9 TRANSFORMER PAD AND GROUNDING SYSTEM

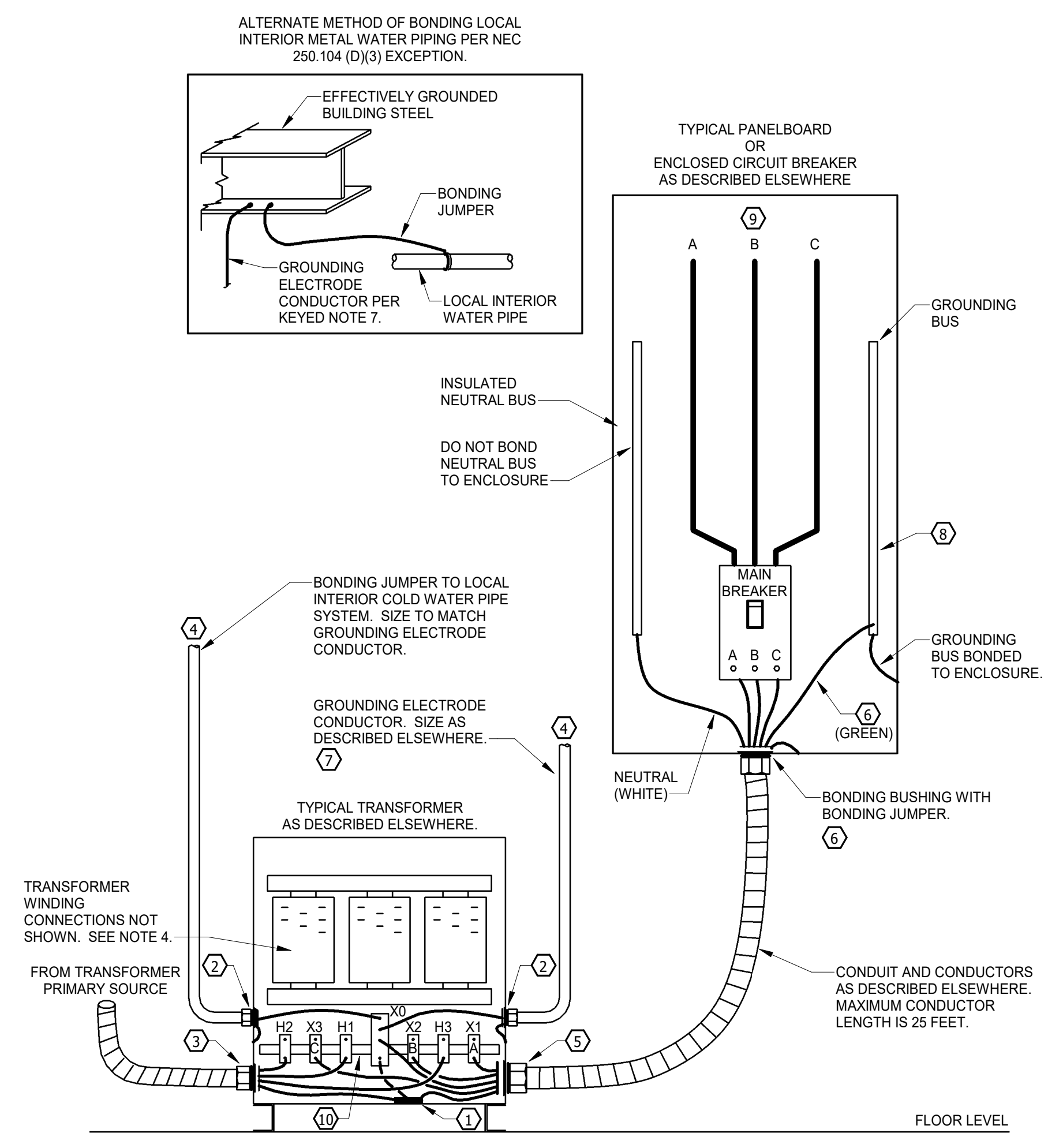
SCALE: NTS

GENERAL NOTES:

- ADJUST TRANSFORMER TAPS TO PROVIDE NOMINAL SECONDARY VOLTAGE UNDER NORMAL TRANSFORMER LOAD CONDITIONS.
- CONNECT TRANSFORMER SECONDARY TERMINALS TO OBTAIN A-B-C CLOCKWISE ROTATION AT THE PANELBOARD BUS. TRANSFORMER TERMINAL CONNECTIONS ARE TYPICAL. EXACT TERMINAL LOCATION MAY VARY WITH TRANSFORMER STYLE OR MANUFACTURER.
- ALL CONNECTIONS TO TRANSFORMER OR PANELBOARD ENCLOSURES SHALL BE MADE WITH LISTED 75° C. TERMINALS. ALL TERMINALS SHALL BE BOLTED TO THE ENCLOSURE WITH SCREWS, LOCK WASHERS, AND NUTS. REMOVE ALL PAINT FROM ENCLOSURE SURFACES PRIOR TO MAKING TERMINATIONS. FURNISHED TERMINALS MAY BE USED IN LIEU OF CONTRACTOR INSTALLED LUGS.
- THREE PHASE TRANSFORMER IS SHOWN. GROUNDING FOR SINGLE PHASE TRANSFORMERS IS IDENTICAL.
- HOUSEKEEPING PAD BELOW TRANSFORMER NOT SHOWN.

KEYED NOTES:

- PROVIDE BONDING JUMPER TO PANELBOARD BY PASSING JUMPER THROUGH GROUND BAR SECURED TO TRANSFORMER ENCLOSURE. BAR SHALL NOT CONCEAL VENTILATION PROVISIONS IN ENCLOSURE.
- USE A BONDING BUSHING AND JUMPER AT THIS CONDUIT TERMINATION. JUMPER SHOULD BE THE SAME SIZE AS THE GROUNDING CONDUCTOR CONTAINED IN THE CONDUIT.
- CONDUCTORS TO TRANSFORMER PRIMARY ARE PHASE CONDUCTORS AND A GROUNDING CONDUCTOR. THESE CONDUCTORS ARE DESCRIBED ELSEWHERE. NO BONDING BUSHING IS REQUIRED AT THIS CONDUIT TERMINATION.
- USE A BONDING HUB AT THE TERMINATION OF THIS GROUNDING CONDUCTOR CONDUIT RUN TO PHYSICALLY AND ELECTRICALLY CONNECT THE RACEWAY AND GROUND TO THE ELECTRODE. ELECTRICAL CONNECTION ALONE IS NOT ACCEPTABLE.
- NO BONDING BUSHING IS REQUIRED AT THIS END OF PANELBOARD FEEDER.
- DETERMINE THE SIZE OF THIS BONDING JUMPER FROM NEC TABLE 250.66 WITH TABLE ENTRY BASED ON THE SIZE OF THE CONDUCTORS SUPPLYING THE PANELBOARD.
- EXTEND GROUNDING ELECTRODE CONDUCTOR TO EFFECTIVELY GROUND BUILDING STEEL OR METAL WATER PIPE WITHIN 5 FEET FROM POINT OF ENTRANCE INTO BUILDING.
- GROUNDING BUS IS GENERALLY ATTACHED DIRECTLY TO PANELBOARD ENCLOSURE. IN THE ABSENCE OF SUCH A LISTED ATTACHMENT SIZE BONDING JUMPER AS DESCRIBED IN KEYED NOTE 6 ABOVE.
- PANELBOARD OR ENCLOSED CIRCUIT BREAKER.
- PROVIDE OVERSIZED NEUTRAL TERMINAL AS REQUIRED TO ACCOMMODATE BONDING CONNECTIONS.



10 TYPICAL TRANSFORMER BONDING

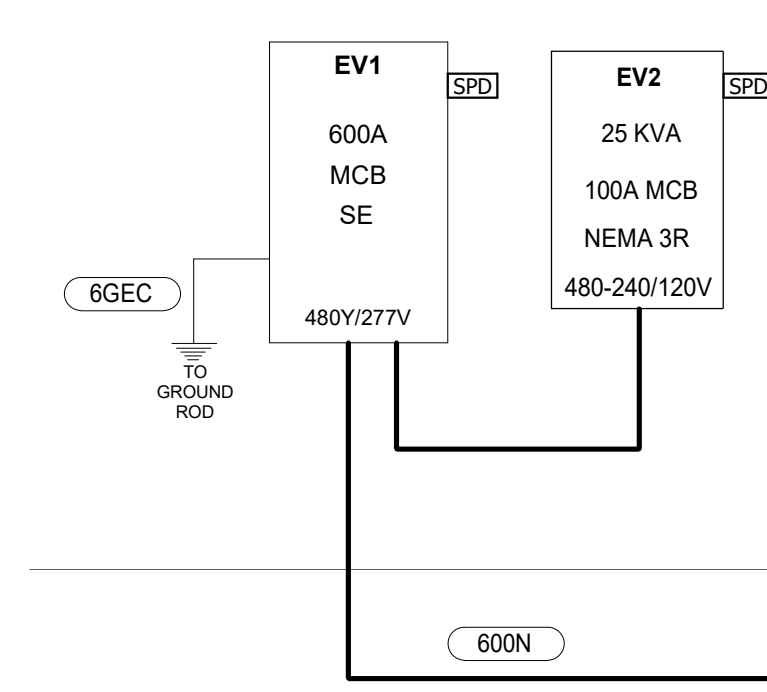
SCALE: NTS

ELECTRICAL TRANSFORMER SCHEDULE

NAME	SIZE	SUPPLY FROM	VOLTAGE	Primary Feeder Size	SECONDARY FEEDER	Grounding Electrode	IMPEDANCE	ROOM NAME	ROOM NUMBER
X-P2	30 KVA	P1	480/208Y/120	3-#6 PHASE & 1-#10 GND IN 1" C.	3-#3 PHASE, 1-#3 NEU, & 1-#8 BONDING JUMPER IN 1 1/4" C.	1-#6 IN 1/2" RMC	3.5%-5.8%	ELEC/IT	105

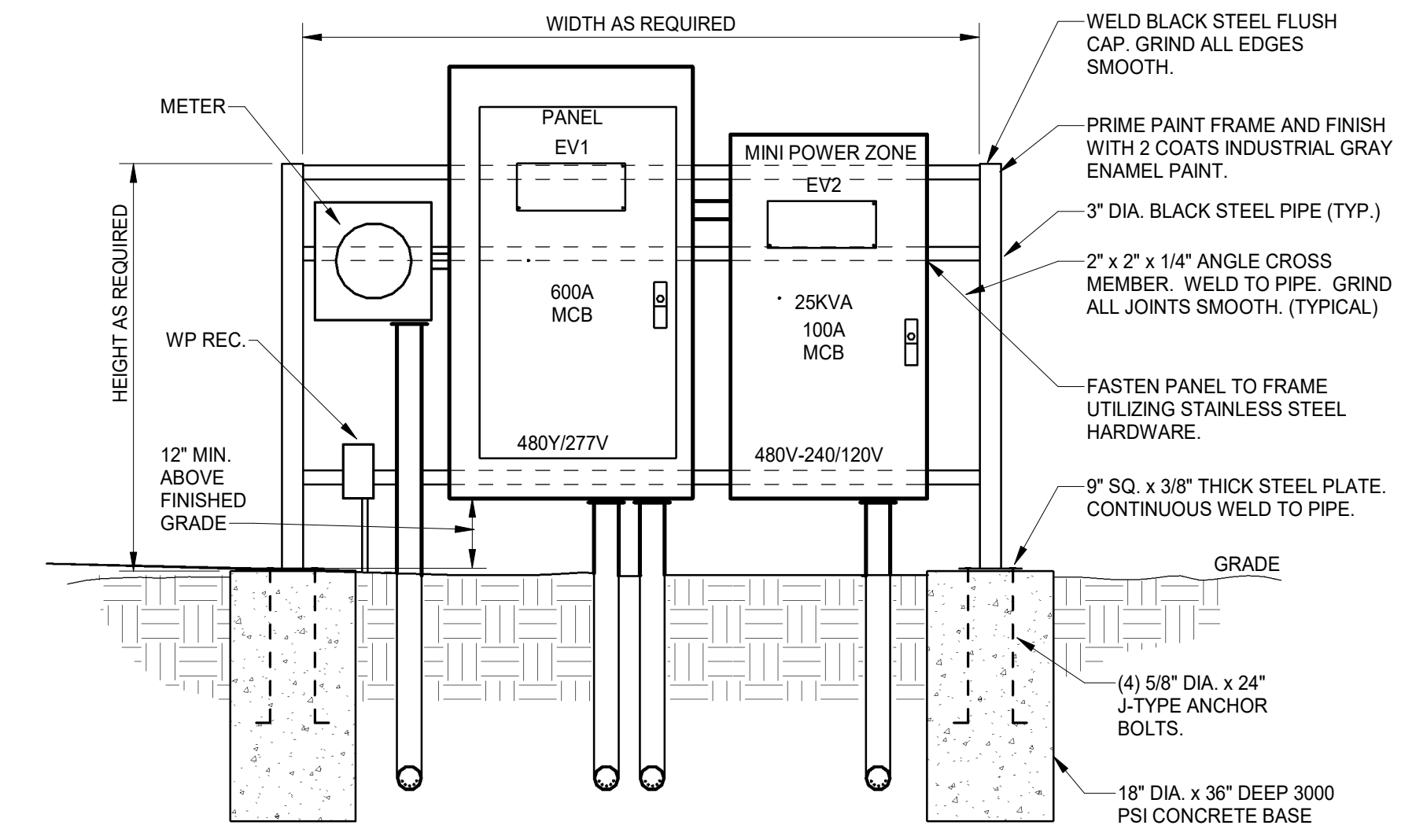
GENERAL NOTES TO POWER RISERS:

- PROVIDE 4" (NOMINAL) THICK, 3000 PSI CONCRETE EQUIPMENT PAD FOR ALL FLOOR MOUNTED GEAR AND TRANSFORMERS. FINISH SMOOTH AND CHAMFER EDGES.
- COORDINATE LOCATIONS FOR ALL DRY TYPE TRANSFORMERS TO PROVIDE NEC MANDATED WORKING CLEARANCES AND PROVIDE CLEARANCES FROM WALLS AS RECOMMENDED BY PRODUCT MANUFACTURER TO PROMOTE AIR CIRCULATION (6" MIN.).



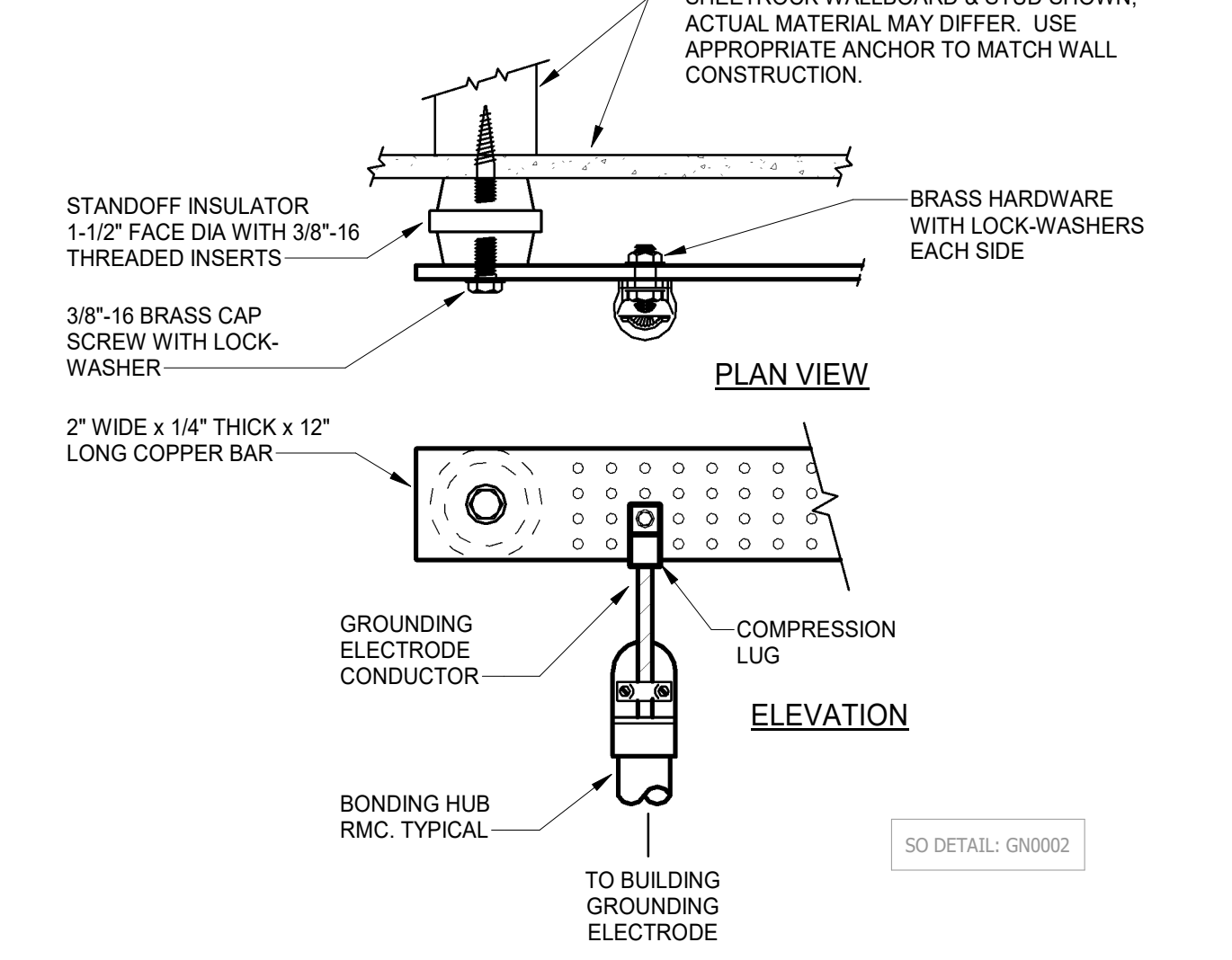
11 ELECTRICAL DISTRIBUTION RISER

SCALE: NTS



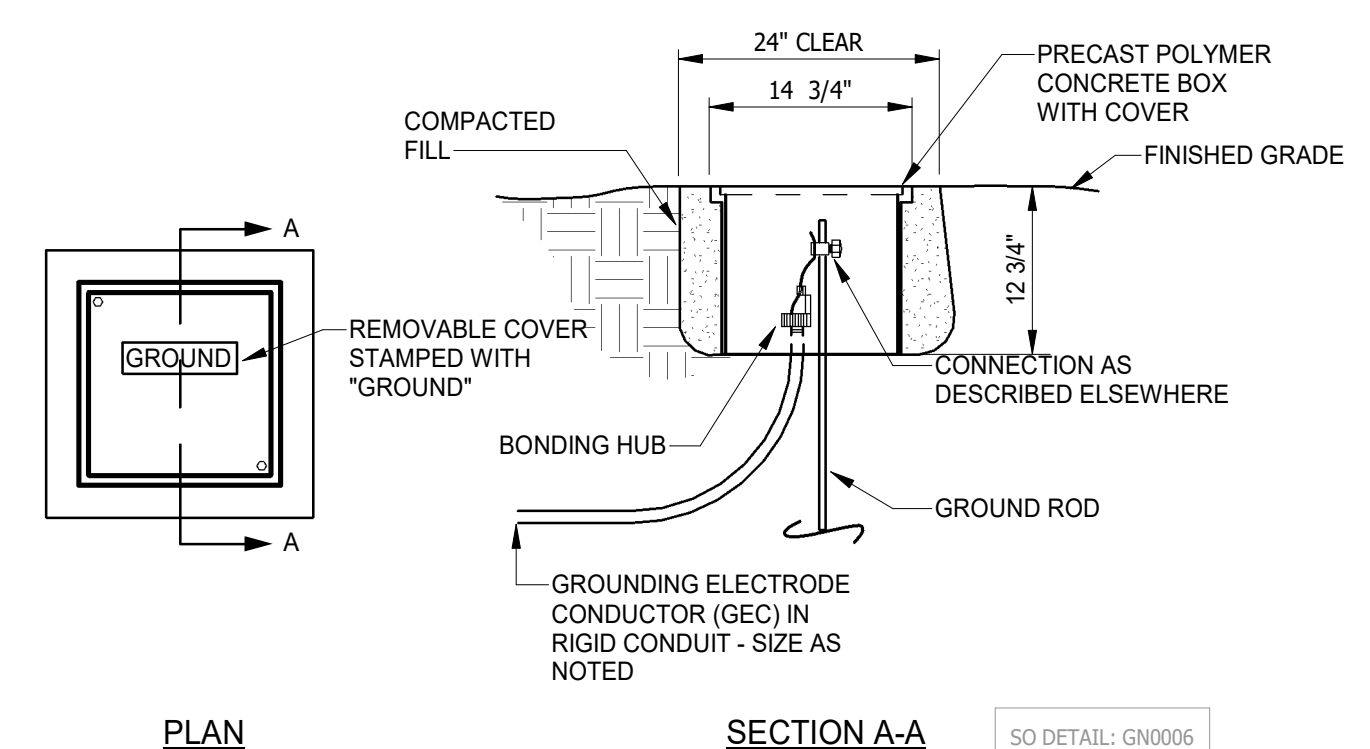
5 PANEL RACK DETAIL

SCALE: NTS



1 GROUNDING BUS DETAIL

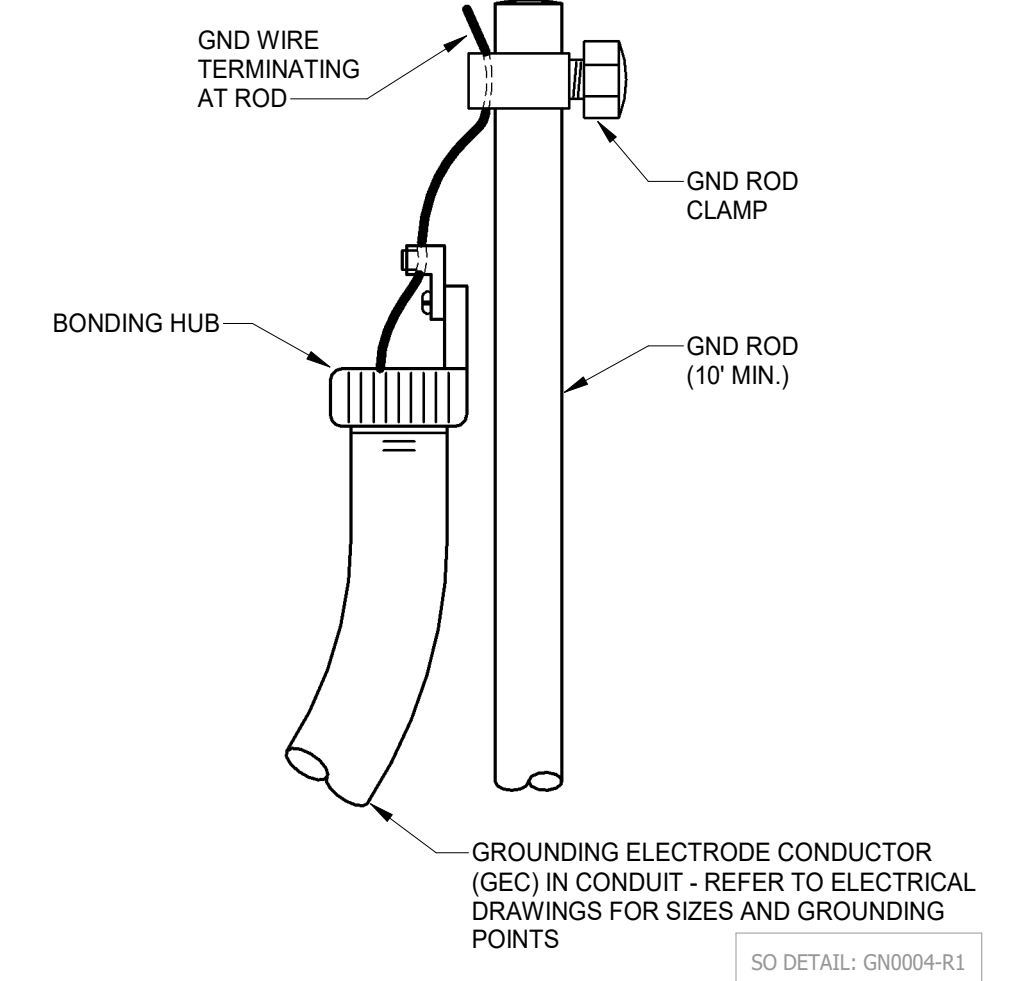
SCALE: NTS



2 GROUND ROD ENCLOSURE

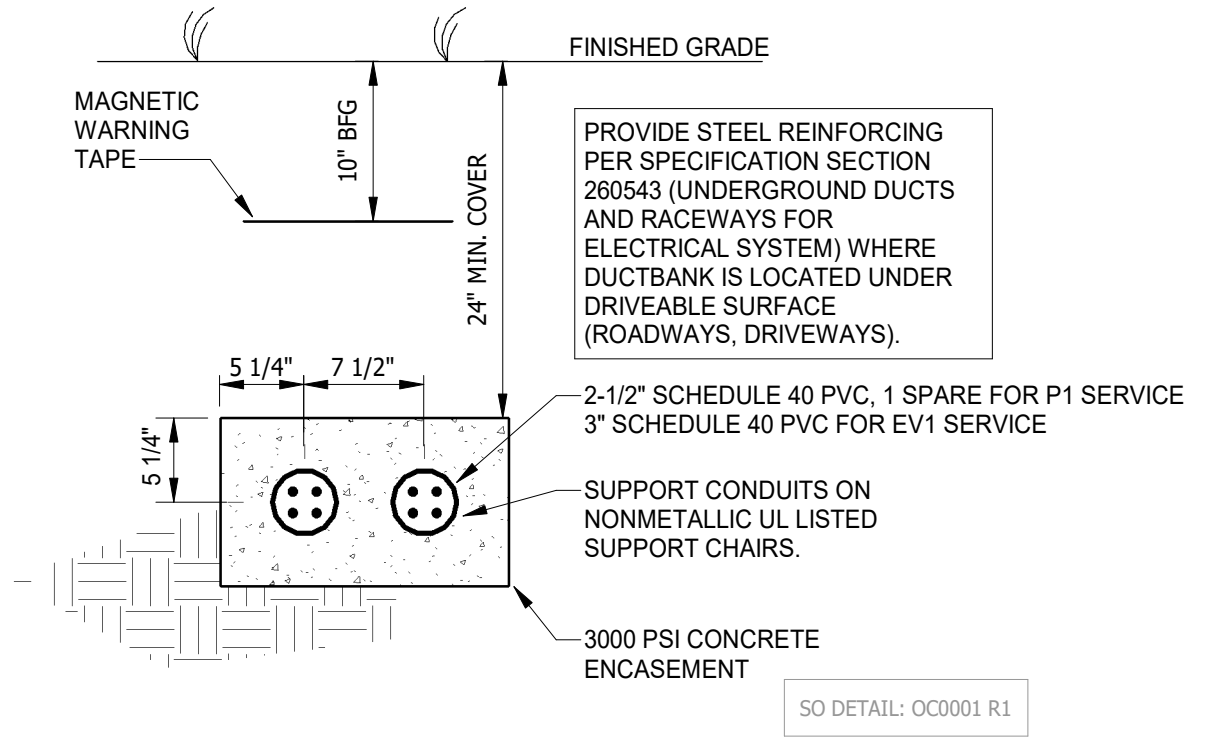
SCALE: NTS

- WARNING**
- FIELD VERIFY EXACT LOCATION OF ALL UNDERGROUND UTILITIES BEFORE DRIVING GROUND RODS.
 - DO NOT USE POWER ASSISTED TOOLS TO DRIVE GROUND RODS.



3 GROUND ROD CONNECTIONS

SCALE: NTS



4 FEEDER DUCT BANK SECTION

SCALE: NTS

NOTES TO FEEDER SCHEDULE:

- ALL AMPACITIES ARE BASED ON 75° C. RATING. CONTRACTOR IS RESPONSIBLE FOR THE MODIFICATION OF CONDUCTOR SIZES AS NECESSARY TO MEET THE REQUIREMENTS OF NEC 110-14(C) WHERE TERMINATIONS ARE NOT LISTED AND LABELED FOR USE AT 75° C. THIS REQUIREMENT APPLIES TO TERMINATIONS IN BOTH NEW EQUIPMENT AND IN EXISTING EQUIPMENT TO WHICH TERMINATIONS ARE MADE AS A PART OF THIS PROJECT.
- DESIGNATION "C" IN THE ABOVE TABLE REFERS TO "CONDUIT". SEE SPECIFICATIONS FOR EXACT TYPE OF RACEWAY REQUIRED. TYPE OF RACEWAY, UNLESS INDICATED IN TABLE OR ELSEWHERE IN THE DRAWINGS, IS TO BE DETERMINED BY USE CONDITIONS.
- PROVIDE A BONDING BUSHING AT THE EQUIPMENT END OF THIS CONDUIT RUN AND A BONDING HUB AT THE CONNECTION TO THE GROUNDING ELECTRODE.

Mark	Ampacity	Description
225N	230A	3-#4/0 PHASE & 1-#4/0 NEU IN 2 1/2" C.
600N	620A	2 PARALLEL RUNS, EACH OF 3-350 kcmil PHASE & 1-350 kcmil NEU IN 3" C.
6GEC	N/A	GROUNDING ELECTRODE CONDUCTOR. 1-#6 IN 1/2" RMC. SEE NOTE 3.
2GEC	N/A	GROUNDING ELECTRODE CONDUCTOR. 1-#2 IN 1/2" RMC. SEE NOTE 3.



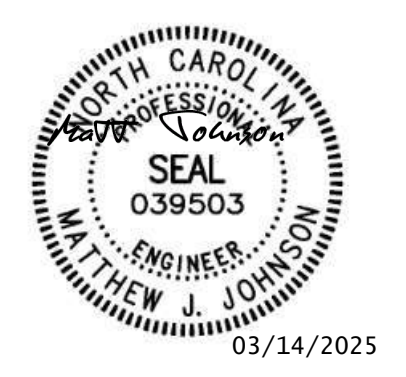
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